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Air

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STUDY OF CONTROL STRATEGIES FOR IN-USE HEAVY  
DUTY VEHICLES

APPENDIX III

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Recorded Test Data

STUDY OF CONTROL STRATEGIES FOR IN-USE HEAVY DUTY VEHICLES

Environmental Protection Agency Contract Number 68-01-4319

Submitted by

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Bureau of Science & Technology

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Region II publication No. 902/4-81-001 c

APPENDIX III

TABLES OF CODES

TEST CODES

NYQ	New York City Quick Driving Cycle
C39, C39H	New York City Traffic Driving Cycles

PCV VALVE/AIR FILTER CONDITION CODES

0 Missing  
1 New  
2 Good  
3 Fair  
4 Poor  
5 Not Applicable

TRANSMISSION CODE

A/M	Automatic/Manual
Digit	Number of Forward Gears

ANALYZER INSTRUMENT CODES

2 SCOTT  
4 SUN  
5 OLSON-HORIBA

## RESULTS OF INSPECTION/MAINTENANCE TESTS

Measurements from 181 pairs of Inspection/Maintenance test sets are given. The Appendix contains printouts of records on the TEST DATA TAPE discussed in Appendix I. Each page gives the measurements made during the "before tune up" and "after tune up" test sets on a single vehicle. Appendix I should be consulted before using the printouts.

The Vehicle Data section of the printout gives the gross vehicle weight in pounds, the make and model, the model year, the type of transmission (see Transmission Code Table) and the engine displacement in cubic inches. Also given are the vehicle's chassis serial number, the license number and the owner's vehicle identification number.

The Tune Up Data section of the printout gives the values of engine parameters measured before and after tune up and a list of parts replaced. Comments by the mechanic are also included. The engine parameters are the idle r.p.m., the dwell angle in degrees, the timing in degrees before or after top dead center, the spark plug gap and the condition of the PCV valve and air filter (see PCV/Air Filter Code Table). Also printed are measurements of carbon monoxide and hydrocarbon levels in the exhaust and the air/fuel ratio at idle. Values of carbon monoxide and hydrocarbons levels and air/fuel ratio at an engine speed of 2500 r.p.m. were also recorded during tune up (see Appendix I) but are not given in the printout.

The Test Results section of the printout shows the results recorded in the "before tune up" and "after tune up" test sets. The test set number is printed above the data allowing comparison with the set records on the TEST DATA TAPE if desired. Measured values of hydrocarbons, carbon monoxide, oxides of nitrogen and fuel economy in miles per gallon are given for the New York Quick and the C39 or C39H driving cycles. In most cases two independent tests were run for each cycle and the average of the two tests is also given.

The percent changes in pollutant levels and fuel economy defined as:

$$100 \times \frac{\text{average level after tune up} - \text{average level before tune up}}{\text{average level before tune up}}$$

are given. Results of the Clayton\* Keymode Test are also given. Any comments on the tests by the operating personnel are given.

For reference, the values of dynamometer setting, meteorological parameters and instruments used in the Keymode Test (see Instrument Code Table) are given.

\*Clayton Manufacturing Corp., El Monte, California.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: CHEVROLET MODEL: P30 MODEL YR.: 69 TRANS. CODE:A3 DISPLACEMENT: 307  
SERIAL NO.: PE329T816425 LICENSE NO.: 30775E OWNER'S ID.: T49  
TUNE UP DATA.

DATE OF TUNE UP 12/16/75 ODOMETER READING 13862 HOUR METER READING 532.5  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 29  
IDLE CO(%) 2.3 TIMING 2BTDC  
IDLE HC(PPM) 180 GAP(INCH) .036  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.7  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 29  
IDLE CO(%) 0.9 TIMING 2BTDC  
IDLE HC(PPM) 120 GAP(INCH) .036  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.8

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2093 TEST DATE 12/16/75  
DYNAMOMETER INERTIA/POWER SETTINGS: 8500 LB/27. H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 6.54 92.51 13.08 7.4 30.05 74. 30.  
TEST 2 6.12 80.40 13.86 7.6 30.05 74.5 31.  
AVERAGE( 6.33)( 86.46)(13.47)( 7.5)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39  
TEST 1 12.36 255.4 11.20 4.9 30.06 74. 30.  
TEST 2 13.85 258.6 11.72 4.8 30.06 74.5 31.  
AVERAGE(13.11)( 257.00)(11.46)( 4.9)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 3400/ 200 2.6/ 2.6  
2500 R.P.M. 1300/ 75 0.4/ 0.4  
LOW CRUISE SPEED 30 M.P.H. 2500/ 150 0.2/ 0.2  
HIGH CRUISE SPEED 40 M.P.H. 3000/ 200 0.4/ 0.4  
MOTORING 20000/ 2000 2.7/ 2.5  
11 INCH VACUUM \*\*\*\* R.P.M.\*\*\*\*/\*\*\*\* \*\*\*\*/\*\*\*\*  
\*\* INCH VACUUM \*\*\*\* R.P.M.\*\*\*\*/\*\*\*\* \*\*\*\*/\*\*\*\*

COMMENT KEY MODE: TRANS OVERHEATED-TEST ABORTED

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
SMV TEST SERIES NO. 2095 TEST DATE 12/17/75  
8500 LB/27. H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
6.77 73.42 14.81 7.3 30.29 74.5 32.  
7.01 74.25 15.55 7.1 30.29 76. 31.  
( 6.89)( 72.84)(15.18)( 7.2)  
+ 8.8% -11.6% +12.7% - 4.0%

TEST:C39  
11.56 221.1 11.89 4.9 30.27 74. 30.  
12.38 224.2 11.59 4.9 30.26 75.5 32.  
(11.97)( 222.65)(11.74)( 4.9)  
- 8.7% -13.4% + 2.4% + 1.0%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 2500/ 150 1.4/ 1.4  
2500 R.P.M. 1300/ 75 0.4/ 0.5  
30 M.P.H. 1500/ 75 0.2/ 0.2  
40 M.P.H. 1750/ 100 0.3/ 0.3  
\*\*\*\*\*/\*\*\*\*\* \*\*\*\*/\*\*\*\*  
\*\*\*\* R.P.M.\*\*\*\*/\*\*\*\* \*\*\*\*/\*\*\*\*  
\*\* IN. \*\*\*\* R.P.M.\*\*\*\*/\*\*\*\* \*\*\*\*/\*\*\*\*

COMMENT KEY MODE: TRANS OVERHEATING-TEST NOT RUN

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 14,000 MAKE: GMC MODEL: 3500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 292  
SERIAL NO.: PS342TZ51954 LICENSE NO.: 5651HY OWNER'S ID.: 5210  
TUNE UP DATA.

DATE OF TUNE UP 1/ 6/76 ODOMETER READING 58346 HOUR METER READING \*\*\*\*\*

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	640	DWELL	28	IDLE R.P.M.	550	DWELL	31
IDLE CO(%)	0.1	TIMING	4BTDC	IDLE CO(%)	0.1	TIMING	0BTDC
IDLE HC(PPM)	700	GAP(INCH)	.040	IDLE HC(PPM)	540	GAP(INCH)	.035
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2104 TEST DATE 1/ 5/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/34.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2105 TEST DATE 1/ 6/76  
1 000 LB/34.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 55.09 367.40 7.96 5.2 30.43 67.0 14.0  
TEST 2 53.71 322.22 8.56 5.3 30.43 71.0 15.0  
AVERAGE(54.40)( 348.15)( 8.26)( 5.3)

99.06 513.10 2.65 4.6 30.56 70.5 17.0  
77.12 461.70 3.37 4.8 30.56 70.5 17.0  
(38.09)( 487.40)( 3.01)( 4.7)  
+61.9% +40.0% -63.6% -10.5%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1 105.20 321.80 12.68 3.9 30.43 68.5 15.0  
TEST 2 96.17 332.70 11.51 4.0 30.44 69.5 15.0  
AVERAGE( 0.69)( 327.25)(12.10)( 4.0)

114.40 382.70 7.59 3.7 30.56 71.0 19.0  
98.58 368.10 9.34 3.8 30.56 71.5 18.0  
( 6.49)( 375.40)( 8.47)( 3.8)  
+ 5.8% +14.7% -30.0% - 5.1%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	1500/12000	0.1/ 0.1
2500 R.P.M.	200/ 2500	0.1/ 0.1
LOW CRUISE SPEED 30 M.P.H.	50/ 400	0.1/ 0.1
HIGH CRUISE SPEED 50 M.P.H.	125/ 2000	1.0/ 0.9
MOTURING	1900/20000	0.5/ 0.6
11 INCH VACUUM 2000 R.P.M.	75/ 800	0.1/ 0.1
3 INCH VACUUM 2000 R.P.M.	100/ 1500	3.5/ 3.6

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	1200/10000	0.1/ 0.1
100/ 800	100/ 800	0.1/ 0.1
30 M.P.H.	35/ 400	0.1/ 0.1
50 M.P.H.	50/ 700	0.5/ 0.5
	1800/15000	0.5/ 0.6
2000 R.P.M.	50/ 600	0.1/ 0.1
** 2000 R.P.M.	75/ 1100	0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: CHEVROLET MODEL: 50 MODEL YR.: 69 TRANS. CODE:A6 DISPLACEMENT: 292  
SERIAL NO.: TS539P825859 LICENSE NO.: 5362JA OWNER'S ID.: 5302  
TUNE UP DATA.

DATE OF TUNE UP 1/ 7/76 ODOMETER READING 25631 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 680 DWELL 34  
IDLE CO(%) 8.0 TIMING 23BTDC  
IDLE HC(PPM) 2000 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 34  
IDLE CO(%) 1.0 TIMING 48TDC  
IDLE HC(PPM) 300 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED DISTRIBUTOR, PLUGS, COIL AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2107 TEST DATE 1/ 7/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/25.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 131.80 571.90 12.92 3.3 30.25 69.0 25.0  
TEST 2 127.00 606.70 12.18 3.2 30.25 68.5 24.0  
AVERAGE(29.40)( 589.30)(12.55)( 3.3)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1 180.60 589.00 22.73 2.7 30.22 68.0 23.0  
TEST 2 177.20 595.30 22.03 2.8 30.21 68.0 25.0  
AVERAGE(78.90)( 592.15)(22.38)( 2.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 2000/22000 8.8/ 8.6  
2500 R.P.M. 2000/24000 0.3/ 0.3  
LOW CRUISE SPEED 20 M.P.H. 2000/16000 0.2/ 0.2  
HIGH CRUISE SPEED 35 M.P.H. 2000/17000 5.5/ 5.0  
MOTORING 2000/26000 3.0/ 2.8  
11 INCH VACUUM 2500 R.P.M. 2000/14000 0.2/ 0.2  
3 INCH VACUUM 2500 R.P.M. 2000/17000 6.0/ 5.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2108 TEST DATE 1/ 8/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/25.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 10.16 167.60 19.43 5.1 29.81 67.5 29.0  
TEST 2 8.99 154.60 21.02 5.1 29.81 69.0 29.0  
( 9.58)( 161.10)(20.23)( 5.1)  
-92.6% -72.7% +61.2% +56.9%

TEST 1 17.41 205.50 19.81 3.9 29.81 68.0 27.0  
TEST 2 17.53 253.50 20.16 3.9 29.81 69.0 27.0  
(17.47)( 229.50)(19.99)( 3.9)  
-90.2% -61.2% -10.7% +41.8%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
250/ 3000 0.8/ 0.7  
100/ 1200 0.3/ 0.3  
20 M.P.H. 125/ 1800 0.2/ 0.2  
35 M.P.H. 50/ 400 0.2/ 0.2  
900/ 8000 1.5/ 1.3  
2500 R.P.M. 75/ 600 0.2/ 0.2  
6 IN. 2500 R.P.M. 75/ 500 0.2/ 0.2

COMMENT KEY MODE: AUTO. TRANS. STAYED IN 2 GEAR SUCH THAT DYNO COULD NOT LOAD ENGINE TO LESS THAN 6 IN. HG.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: GMC MODEL: 8500 MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV606324 LICENSE NO.: 13031E OWNER'S ID.: 26D0 8  
TUNE UP DATA.

DATE OF TUNE UP 1/13/76 ODOMETER READING 14436 HOUR METER READING 1952.3

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 620 DWELL 40  
IDLE CO(%) 1.5 TIMING 5ATDC  
IDLE HC(PPM) 70 GAP(INCH) .038  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 530 DWELL 33  
IDLE CO(%) 0.6 TIMING 5BTDC  
IDLE HC(PPM) 70 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, POINTS, CAP AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2110 TEST DATE 1/12/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/48.0 H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ

TEST 1	10.54	233.10	19.25	4.1	30.06	69.5	26.0
TEST 2	11.28	295.20	15.82	4.0	30.06	70.5	25.0
AVERAGE(10.91)	(264.15)	(17.54)	(4.1)				

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1	16.27	320.50	22.10	3.0	30.06	69.5	26.0
TEST 2	18.61	396.70	16.42	3.2	30.06	70.0	25.0
AVERAGE(17.44)	(358.60)	(19.26)	(3.1)				

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	100/*****	1.6/****
2500 R.P.M.	100/*****	4.8/****
LOW CRUISE SPEED 20 M.P.H.	150/*****	3.6/****
HIGH CRUISE SPEED 35 M.P.H.	75/*****	1.2/****
MOTORS	700/*****	0.8/****
11 INCH VACUUM 2000 R.P.M.	75/*****	3.5/****
3 INCH VACUUM 1600 R.P.M.	75/*****	1.5/****

COMMENT KEY MODE: LAB ANALYZER WAS INOPERATIVE.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2115 TEST DATE 1/14/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/48.0 H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST 1	12.84	219.20	19.38	4.3	29.91	72.5	25.0
TEST 2	13.39	262.70	16.64	4.2	29.91	74.5	25.0
AVERAGE(13.12)	(240.95)	(18.01)	(4.3)				
CHANGE IN AVERAGE	+20.2%	-3.9%	+2.7%	+4.9%			

TEST 1	22.54	304.70	21.05	3.2	29.90	72.5	25.0
TEST 2	20.48	377.00	19.33	3.1	29.90	73.0	26.0
AVERAGE(21.51)	(340.85)	(20.19)	(3.2)				
CHANGE IN AVERAGE	+23.3%	-4.9%	+4.8%	+1.6%			

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

125/*****	0.4/****
100/*****	4.3/****
20 M.P.H. 175/*****	2.8/****
35 M.P.H. 100/*****	0.8/****
1200/*****	0.6/****
2000 R.P.M. 150/*****	4.2/****
** 1600 R.P.M. 150/*****	1.3/****

COMMENT KEY MODE: LAB ANALYZER WAS INOPERATIVE.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 14,000 MAKE: GMC MODEL: 3500 MODEL YR.: 74 TRANS. CODE:M4 DISPLACEMENT: 350  
SERIAL NO.: TPY324V503248 LICENSE NO.: 6742HY OWNER'S ID.: 5344

TUNE UP DATA.

DATE OF TUNE UP 1/13/76 ODOMETER READING 9076 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 900 DWELL 30  
IDLE CO(%) 3.4 TIMING 4BTDC  
IDLE HC(PPM) 120 GAP(INCH) .042  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 30  
IDLE CO(%) 1.8 TIMING 4BTDC  
IDLE HC(PPM) 140 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.6

COMMENT: NEW PLUGS, CAP, WIRE SET, CAP, POINTS, CONDENSER' ROTOR AND COIL

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2111 TEST DATE 1/12/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/34.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2113 TEST DATE 1/13/76  
1 000 LB/34.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYO  
TEST 1 13.08 240.30 8.79 6.0 30.08 70.5 26.0  
TEST 2 12.90 249.70 8.31 6.0 30.09 73.0 26.0  
AVERAGE(12.99)( 245.00)( 8.55)( 6.0)

12.70 159.00 11.31 6.5 30.25 73.0 32.0  
12.11 174.20 10.39 6.5 30.24 74.0 32.0  
(12.41)( 166.60)(10.85)( 6.5)

CHANGE IN AVERAGE AFTER TUNE UP

- 4.5% -32.0% +26.9% + 8.3%

TEST:C39  
TEST 1 22.71 376.00 9.49 3.9 30.11 70.5 25.0  
TEST 2 20.14 362.40 9.13 4.0 30.11 72.5 25.0  
AVERAGE(21.43)( 369.20)( 9.31)( 4.0)

20.75 194.20 11.32 4.8 30.24 74.0 34.0  
24.92 260.20 9.89 4.6 30.23 75.0 35.0  
(22.84)( 227.20)(10.61)( 4.7)

CHANGE IN AVERAGE AFTER TUNE UP

+ 6.6% -38.5% +13.9% +19.0%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 110/\*\*\*\*\* 3.4/\*\*\*\*  
2500 R.P.M. 30/\*\*\*\*\* 0.2/\*\*\*\*  
LOW CRUISE SPEED 30 M.P.H. 125/\*\*\*\*\* 0.2/\*\*\*\*  
HIGH CRUISE SPEED 50 M.P.H. 100/\*\*\*\*\* 1.5/\*\*\*\*  
MOTORING 600/\*\*\*\*\* 4.8/\*\*\*\*  
11 INCH VACUUM 2500 R.P.M. 100/\*\*\*\*\* 0.7/\*\*\*\*  
3 INCH VACUUM 2500 R.P.M. 125/\*\*\*\*\* 4.2/\*\*\*\*

150/\*\*\*\*\* 1.4/\*\*\*\*  
50/\*\*\*\*\* 0.1/\*\*\*\*  
30 M.P.H. 125/\*\*\*\*\* 0.1/\*\*\*\*  
50 M.P.H. 75/\*\*\*\*\* 1.2/\*\*\*\*  
1800/\*\*\*\*\* 2.6/\*\*\*\*  
2500 R.P.M. 150/\*\*\*\*\* 0.1/\*\*\*\*  
\*\* 2500 R.P.M. 125/\*\*\*\*\* 1.6/\*\*\*\*

COMMENT KEY MODE: SCOTT INSTRUMENTS INOPERATIVE

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 32,500 MAKE: GMC MODEL: 6500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 351  
 SERIAL NO.: TM60AZ130739 LICENSE NO.: 5674HY OWNER'S ID.: 5419  
 TUNE UP DATA.

----- DATE OF TUNE UP 1/14/76 ODOMETER READING 6678 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 550 DWELL 35 IDLE R.P.M. 550 DWELL 31  
 IDLE CO(%) 5.6 TIMING 6BTDC IDLE CO(%) 1.2 TIMING 10BTDC  
 IDLE HC(PPM) 180 GAP(INCH) .035 IDLE HC(PPM) 150 GAP(INCH) .035  
 PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.1 IDLE AIR/FUEL 13.4

COMMENT: REPLACED DISTRIBUTOR VAC. ADVANCE CHAMBER, BREAKER PLATE, POINTS, CONDENSER, ROTOR, WIRE SET AND CAP.

TEST RESULTS

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 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
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 BMV TEST SERIES NO. 2114 TEST DATE 1/14/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/44.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 18.11 346.30 24.19 4.1 29.85 70.5 26.0  
 TEST 2 27.27 554.50 18.24 3.7 29.85 70.5 26.0  
 AVERAGE(22.69)( 450.40)(21.22)( 3.9)

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2117 TEST DATE 1/15/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/44.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 18.02 317.10 27.61 4.0 30.25 70.5 19.0  
 TEST 2 19.35 398.90 25.11 3.9 30.25 70.0 20.0  
 AVERAGE(18.69)( 358.00)(26.36)( 4.0)

CHANGE IN AVERAGE AFTER TUNE UP

-17.7% -20.5% +24.3% + 1.3%

TEST:C39  
 TEST 1 57.17 767.80 16.45 2.8 29.90 71.5 27.0  
 TEST 2 58.55 859.40 13.31 2.7 29.91 72.5 27.0  
 AVERAGE(57.86)( 813.60)(14.88)( 2.8)

TEST:C39  
 TEST 1 37.53 347.90 30.67 3.4 30.25 70.5 19.0  
 TEST 2 43.46 442.70 26.39 3.3 30.25 69.5 19.0  
 AVERAGE(40.50)( 395.30)(28.53)( 3.4)

CHANGE IN AVERAGE AFTER TUNE UP

-30.0% -51.4% +91.7% +21.8%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER )  
 IDLE 250/\*\*\*\*\* 7.4/\*\*\*\*  
 2500 R.P.M. 175/\*\*\*\*\* 2.5/\*\*\*\*  
 LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* 0.4/\*\*\*\*  
 HIGH CRUISE SPEED 29 M.P.H. 175/\*\*\*\*\* 3.8/\*\*\*\*  
 MOTORING 2000/\*\*\*\*\* 6.0/\*\*\*\*  
 11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 1.2/\*\*\*\*  
 7 INCH VACUUM 2000 R.P.M. 140/\*\*\*\*\* 0.4/\*\*\*\*

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 125/ 1600 0.3/ 0.3  
 125/ 2000 2.1/ 2.2  
 20 M.P.H. 125/ 1800 0.2/ 0.2  
 29 M.P.H. 175/ 2300 3.6/ 3.5  
 1700/10000 1.0/ 0.9  
 2000 R.P.M. 125/ 1600 0.2/ 0.2  
 4 IN. 1900 R.P.M. 175/ 1900 0.8/ 0.7

COMMENT KEY MODE: LAB ANALYZER WAS INOPERATIVE.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB23110 LICENSE NO.: 31466E OWNER'S ID.: 25G184  
TUNE UP DATA.

DATE OF TUNE UP 1/15/76 ODOMETER READING 12131 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 570 DWELL 33  
IDLE CO(%) 10.0 TIMING 5BTDC  
IDLE HC(PPM) 390 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 31  
IDLE CO(%) 3.4 TIMING 5BTDC  
IDLE HC(PPM) 220 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, POINTS, ROTOR, CAP AND WIRES.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****															
BMV TEST SERIES NO. 2116				TEST DATE 1/14/76				BMV TEST SERIES NO. 2118				TEST DATE 1/15/76											
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/54.0 H.P. AT 30 MPH								13500 LB/54.0 H.P. AT 30 MPH															
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID									
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)									
TEST:NYQ																							
TEST 1	19.00	313.40	29.08	3.4	29.98	71.5	23.0	13.24	203.00	30.15	3.5	30.25	71.5	18.0									
TEST 2	18.84	320.70	29.58	3.4	29.99	72.5	23.0	13.0R	201.10	29.96	3.6	30.25	73.0	20.0									
AVERAGE	(18.92)	(317.05)	(29.33)	(3.4)				(13.16)	(202.05)	(30.06)	(3.6)												
CHANGE IN AVERAGE AFTER TUNE UP								-20.1% -20.3% + 2.5% + 4.4%															
TEST:C39																							
TEST 1	42.08	591.40	30.93	2.4	30.00	70.5	21.0	28.24	348.60	27.85	3.0	30.25	71.5	18.0									
TEST 2	41.00	593.50	31.49	2.5	30.00	71.0	22.0	27.05	333.50	30.56	2.9	30.25	72.0	19.0									
AVERAGE	(41.54)	(592.45)	(31.21)	(2.5)				(27.65)	(341.05)	(29.21)	(3.0)												
CHANGE IN AVERAGE AFTER TUNE UP								-33.4% -42.4% - 6.4% +20.4%															
TEST:KEY MODE				ENGINE SPEED				HC(PPM)				CO(%)											
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)								(READING FROM ANALYZER 5/READING FROM ANALYZER 2)															
IDLE				400/11000				10.0/10.0				475/ 5000				3.0/ 3.0							
2500 R.P.M.				100/ 1500				1.6/ 1.7				75/ 1000				0.6/ 0.6							
LOW CRUISE SPEED 20 M.P.H.				75/ 1500				1.9/ 1.9				20 M.P.H.				100/ 1200				0.9/ 0.8			
HIGH CRUISE SPEED 35 M.P.H.				50/ 900				1.6/ 1.6				35 M.P.H.				75/ 1100				1.2/ 1.1			
MOTORING				2000/30000				2.5/ 2.4				2 00/20000				3.7/ 3.4							
11 INCH VACUUM 2000 R.P.M.				100/ 1400				0.6/ 0.6				2000 R.P.M.				125/ 1500				0.2/ 0.2			
3 INCH VACUUM 2000 R.P.M.				100/ 1500				1.5/ 1.6				** 2000 R.P.M.				100/ 1600				3.6/ 3.2			

COMMENT KEY MODE: THESE DATA ARE QUESTIONABLE DUE TO INCORRECT VACUUM SOURCE CONNECTION.  
KEY MODE DATA WAS QUESTIONABLE DUE TO INCORRECT VACUUM CONNECTION.

COMMENT KEY MODE: VACUUM WAS NOT MEASURED. LOADS WERE SET BY ADJUSTING DYNO TO APPROX. HP LEVELS OF KEY MODE IN TEST 2116

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,200 MAKE: I-H MODEL: 1610A MODEL YR.: 73 TRANS. CODE:A4 DISPLACEMENT: 345  
SERIAL NO.: 226611CO87470 LICENSE NO.: 9475JA OWNER'S ID.: 5470  
TUNE UP DATA.

DATE OF TUNE UP 1/16/76 ODOMETER READING 22204 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 28 IDLE R.P.M. 700 DWELL 28  
IDLE CO(%) 1.0 TIMING 0BTDC IDLE CO(%) 1.1 TIMING 0BTDC  
IDLE HC(PPM) 120 GAP(INCH) .037 IDLE HC(PPM) 110 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.5 IDLE AIR/FUEL 13.5  
COMMENT: NO NEW PARTS WERE NEEDED.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****															
BMV TEST SERIES NO. 2120				TEST DATE 1/19/76				BMV TEST SERIES NO. 2121				TEST DATE 1/19/76											
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27. H.P. AT 30 MPH								DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27. H.P. AT 30 MPH															
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID									
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)									
TEST:NYQ								TEST:NYQ															
TEST 1	5.03	64.21	20.07	4.2	30.66	68.0	13.0	6.17	74.92	19.89	4.0	30.61	70.5	16.0									
TEST 2	5.90	74.59	20.18	4.2	30.66	72.0	14.0	5.64	72.38	18.95	4.2	30.61	72.0	17.0									
AVERAGE	(5.98)	(69.40)	(20.13)	(4.2)				(5.91)	(73.65)	(19.42)	(4.1)												
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP															
TEST:C39								TEST:C39															
TEST 1	9.38	90.00	23.84	3.0	30.66	69.0	16.0	9.31	89.98	21.18	3.2	30.61	69.0	15.0									
TEST 2	7.99	94.00	23.41	2.9	30.66	69.0	15.0	9.52	99.45	24.12	2.9	30.60	72.0	15.0									
AVERAGE	(8.69)	(92.00)	(23.63)	(3.0)				(9.42)	(94.72)	(22.65)	(3.1)												
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP															
TEST:KEY MODE								TEST:KEY MODE															
ENGINE SPEED				HC(PPM)				CO(%)				HC(PPM)				CO(%)							
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)																							
IDLE				100/ 1600				1.0/ 1.0				125/ 1900				1.2/ 1.2							
2500 R.P.M.				25/ 300				0.3/ 0.3				25/ 400				0.2/ 0.2							
LOW CRUISE SPEED 25 M.P.H.				75/ 1300				0.6/ 0.6				25 M.P.H.				50/ 1000				0.6/ 0.5			
HIGH CRUISE SPEED 40 M.P.H.				25/ 1000				0.8/ 0.7				39 M.P.H.				50/ 1000				0.8/ 0.8			
MOTORING				100/ 1500				0.6/ 0.5								50/ 600				0.4/ 0.3			
11 INCH VACUUM 2500 R.P.M.				50/ 1200				0.8/ 0.7				2500 R.P.M.				75/ 1300				0.8/ 0.7			
3 INCH VACUUM 2500 R.P.M.				50/ 1300				1.0/ 0.9				** 2500 R.P.M.				75/ 1400				1.3/ 1.2			

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 23,000 MAKE: FORD MODEL: F700 MODEL YR.: 71 TRANS. CODE:A4 DISPLACEMENT: 361  
SERIAL NO.: F70EVL10035 LICENSE NO.: 6769HY OWNER'S ID.: 5522  
TUNE UP DATA.

----- DATE OF TUNE UP 1/21/76 ODOMETER READING 15598 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 26 IDLE R.P.M. 600 DWELL 27  
IDLE CO(%) 4.8 TIMING 5BTDC IDLE CO(%) 3.2 TIMING 6BTDC  
IDLE HC(PPM) 220 GAP(INCH) .046 IDLE HC(PPM) 160 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.3 IDLE AIR/FUEL 13.5

COMMENT: PARTS REPLACED PLUGS, POINTS, CONDENSER ROTOR AND CAP

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2122 TEST DATE 1/20/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/33.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 20.44 325.50 17.43 4.1 30.33 68.0 21.0  
TEST 2 21.45 352.70 15.71 4.2 30.33 68.5 22.0  
AVERAGE(20.95)( 339.10)(16.57)( 4.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39  
TEST 1 50.75 466.80 16.65 3.1 30.32 66.5 22.0  
TEST 2 61.27 493.80 17.19 3.1 30.30 66.5 22.0  
AVERAGE(56.01)( 480.30)(16.92)( 3.1)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 3300/ 250 4.2/ 4.3  
2500 R.P.M. 1800/ 110 1.6/ 1.6  
LOW CRUISE SPEED 25 M.P.H. 2300/ 150 2.4/ 2.4  
HIGH CRUISE SPEED 40 M.P.H. 1700/ 100 3.9/ 4.0  
MOTORING 45000/ 2000 7.0/ 7.0  
11 INCH VACUUM 2000 R.P.M. 2800/ 175 2.8/ 2.8  
3 INCH VACUUM 2000 R.P.M. 2200/ 125 3.5/ 3.6

COMMENT KEY MODE: MOTORING HC 45000 PPM, CO 7.0%, 11 IN.HG. HC 2800 PPM CO 2.8% 3 IN HG. HC 2200 PPM, CO 3.5%

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2123 TEST DATE 1/21/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/33.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
19.91 394.00 14.37 3.8 29.90 69.0 29.0  
(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

43.94 533.60 16.56 2.8 29.90 71.0 29.0  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
3300/ 225 2.7/ 2.8  
2400/ 125 1.9/ 1.9  
25 M.P.H. 3200/ 200 3.1/ 3.0  
40 M.P.H. 1700/ 75 3.3/ 3.5  
40 00/ 2000 5.9/ 6.0  
2000 R.P.M. 3 00/ 175 3.4/ 3.4  
4 IN. 1800 R.P.M. 2800/ 150 3.4/ 3.4

COMMENT NYQ TEST 1: ENGINE IDLE SPEED WAS INCREASED FROM 500 TO 600 RPM TO HELP PRECLUDE STALLING  
COMMENT KEY MODE: MOTORING HC 4000 PPM CO 5.9%, 11 IN.HG. HC 3000 PPM CO 3.4% 3 IN.HG. HC 2800 PPM CO 3.4-%

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 44,000 MAKE: I-H MODEL: 1910A MODEL YR.: 73 TRANS. CODE:A4 DISPLACEMENT: 501  
SERIAL NO.: 22791DCA10506 LICENSE NO.: 20701E OWNER'S ID.: 09A018  
TUNE UP DATA.

----- DATE OF TUNE UP 1/22/76 ODOMETER READING 0524 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 610 DWELL 33 IDLE R.P.M. 550 DWELL 31  
IDLE CO(%) 3.0 TIMING 5BTDC IDLE CO(%) 3.2 TIMING 5BTDC  
IDLE HC(PPM) 200 GAP(INCH) .030 IDLE HC(PPM) 225 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: NEW POINTS AND PLUG WIRE SET

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2124 TEST DATE 1/21/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/50.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 14.46 292.50 31.03 3.0 29.80 73.0 32.0  
TEST 2 10.14 275.00 30.05 3.2 29.80 74.5 31.0  
AVERAGE(12.30)( 283.75)(30.54)( 3.1)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39  
TEST 1 21.39 481.20 30.72 2.4 29.78 71.0 31.0  
TEST 2 18.75 418.80 30.71 2.6 29.77 72.5 31.0  
AVERAGE(20.07)( 450.00)(30.72)( 2.5)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 2200/ 110 3.1/ 3.0  
2500 R.P.M. 1000/ 50 1.3/ 1.2  
LOW CRUISE SPEED 20 M.P.H. 1600/ 75 1.6/ 1.5  
HIGH CRUISE SPEED 35 M.P.H. 1500/ 75 2.2/ 2.1  
MOTORING 15000/ 1300 4.3/ 4.0  
11 INCH VACUUM 2000 R.P.M. 800/ 50 0.4/ 0.4  
3 INCH VACUUM 2000 R.P.M. 1400/ 60 2.4/ 2.3

COMMENT KEY MODE: MOTORING HC 15000 PPM CO 4.3%, 11 IN.HG. HC - 800 PPM CO 0.4% 3 IN.HG. HC 1400 PPM CO 2.4%

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2126 TEST DATE 1/22/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/50.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 10.55 250.90 32.09 3.1 29.75 68.0 13.0  
TEST 2 9.77 255.00 31.25 3.2 29.75 69.0 15.0  
AVERAGE(10.16)( 253.05)(31.67)( 3.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
-17.4% -10.7% + 3.7% + 3.2%

TEST:C39  
TEST 1 26.13 466.80 32.62 2.5 29.76 68.5 12.0  
TEST 2 18.85 388.30 35.11 2.5 29.76 68.5 12.0  
AVERAGE(22.49)( 427.55)(33.87)( 2.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
+12.1% - 5.0% +10.3% + 0.0%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 4900/ 375 2.7/ 2.7  
2500 R.P.M. 3300/ 250 1.0/ 1.1  
LOW CRUISE SPEED 20 M.P.H. 5200/ 390 1.2/ 1.1  
HIGH CRUISE SPEED 35 M.P.H. 6 00/ 500 1.2/ 1.2  
MOTORING 16 00/ 1400 3.6/ 3.5  
2000 R.P.M. 2600/ 200 0.3/ 0.3  
\*\* 2000 R.P.M. 2500/ 175 2.1/ 2.2

COMMENT KEY MODE: MOTORING HC 16000 PPM CO 3.6%, 11 - IN.HG. HC 2600 PPM CO 0.3% 3 IN.HG. HC 2500 PPM CO 2.1 - %

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: GMC MODEL: 3500 MODEL YR.: 68 TRANS. CODE:M4 DISPLACEMENT: 292  
SERIAL NO.: PS30PPB79123 LICENSE NO.: 2705JA OWNER'S ID.: 4172  
TUNE UP DATA.

DATE OF TUNE UP 1/28/76 ODOMETER READING 27985 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 760 DWELL 34 IDLE R.P.M. 700 DWELL 34  
IDLE CO(%) 7.7 TIMING 12BTDC IDLE CO(%) 1.0 TIMING 0BTDC  
IDLE HC(PPM) 210 GAP(INCH) .040 IDLE HC(PPM) 210 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 12.7 IDLE AIR/FUEL 13.6

COMMENT: NEW DISTRIBUTOR, PLUGS,

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2127 TEST DATE 1/27/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 17.15 185.60 9.03 7.7 30.21 74.0 62.0  
TEST 2 17.15 185.60 9.03 7.7 30.21 74.0 62.0  
AVERAGE(16.28)( 184.25)( 8.84)( 7.7)

TEST:C39  
TEST 1 56.96 307.80 8.49 5.2 30.21 73.0 61.0  
TEST 2 37.78 281.60 7.79 5.7 30.21 74.5 61.0  
AVERAGE(47.37)( 294.70)( 8.14)( 5.5)

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 5100/ 250 5.6/ 5.8  
2500 R.P.M. 600/ 50 0.1/ 0.1  
LOW CRUISE SPEED 30 M.P.H. 3000/ 175 0.1/ 0.1  
HIGH CRUISE SPEED 50 M.P.H. 2000/ 100 1.2/ 1.2  
MOTORING 22000/ 2000 4.4/ 4.4  
11 INCH VACUUM 2000 R.P.M. 800/ 50 0.1/ 0.1  
3 INCH VACUUM 2100 R.P.M. 2500/ 150 4.7/ 4.8

COMMENT KEY MODE: MOTORING HC 22000 PPM CO 4.4%, 11 IN.HG. HC - 800 PPM CO 0.1% 3 IN.HG. HC 2500 PPM CO 4.7%

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2130 TEST DATE 1/30/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 33.62 238.10 8.31 7.3 29.88 69.0 16.0  
TEST 2 31.95 256.90 6.90 7.3 29.88 69.0 18.0  
AVERAGE(32.79)( 247.50)( 7.61)( 7.3)  
CHANGE IN AVERAGE AFTER TUNE UP -1.1% -134.3% -14.0% -5.2%

TEST:C39  
TEST 1 90.45 322.90 6.99 4.7 29.88 69.0 16.0  
TEST 2 74.21 308.70 8.19 4.8 29.88 70.0 18.0  
AVERAGE(82.33)( 315.80)( 7.59)( 4.8)  
CHANGE IN AVERAGE AFTER TUNE UP +73.8% + 7.2% - 6.8% -12.8%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 15 00/ 1000 7.9/ 8.2  
2500 R.P.M. 5500/ 425 0.4/ 0.4  
30 M.P.H. 4 00/ 275 0.2/ 0.2  
50 M.P.H. 2500/ 125 0.6/ 0.7  
MOTORING 60 00/ 2000 0.6/ 0.6  
2000 R.P.M. 8 00/ 700 0.2/ 0.2  
\*\* 2100 R.P.M. 5500/ 275 2.0/ 2.0

GENERAL COMMENT: AFTER TUNE UP, FUEL ECONOMY AND CO-2 RESULTS ARE QUESTIONABLE DUE TO ERRATIC CO2 METER.  
COMMENT C39 TEST 1: ENGINE STALLED 4 TIMES  
COMMENT KEY MODE: MOTORING HC 6000J PPM CO 0.6%, 11 - IN.HG. HC 8000 PPM CO 0.2% 3 IN.HG. HC 5500 PPM CO 2.0-%

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: GMC MODEL: 3500 MODEL YR.: 73 TRANS. CODE:M4 DISPLACEMENT: 292  
SERIAL NO.: TPT323V504747 LICENSE NO.: 8182GH OWNER'S ID.: 4308  
TUNE UP DATA.

----- DATE OF TUNE UP 1/29/76 ODOMETER READING 7375 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 810 DWELL 28 IDLE R.P.M. 600 DWELL 31  
IDLE CO(%) 0.1 TIMING 15BTDC IDLE CO(%) 1.0 TIMING 8BTDC  
IDLE HC(PPM) 2000 GAP(INCH) . IDLE HC(PPM) 65 GAP(INCH) .035  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: NEW POINTS, PLUGS, WIRE SET, ROTOR,CAP.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2128 TEST DATE 1/28/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 21.63 43.27 12.38 9.0 29.90 68.5 28.0  
TEST 2 22.16 44.73 11.48 9.1 29.91 68.5 28.0  
AVERAGE(21.90)( 44.00)(11.00)( 9.1)

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 52.31 72.04 15.41 5.6 29.94 67.5 26.0  
TEST 2 50.93 71.09 14.45 5.8 29.94 68.5 26.0  
AVERAGE(51.62)( 71.57)(14.93)( 5.7)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 15000/ 2000 0.1/ 0.1  
2500 R.P.M. 6500/ 600 0.4/ 0.4  
LOW CRUISE SPEED 30 M.P.H. 1400/ 125 0.3/ 0.3  
HIGH CRUISE SPEED 50 M.P.H. 900/ 75 0.3/ 0.3  
MOTORING 13000/ 1800 0.4/ 0.4  
11 INCH VACUUM 2500 R.P.M. 1800/ 125 0.2/ 0.2  
4 INCH VACUUM 2500 R.P.M. 2000/ 150 0.3/ 0.3

GENERAL COMMENT: BEFORE TUNE UP RUBBER CAP ON INTAKE MANIFOLD WAS CRACKED' CAUSING LEAN MISFIRE.  
COMMENT KEY MODE: MOTORING HC 13000 PPM CO 0.4%' 11 IN-HG. HC - 1800 PPM CO 0.2%' 3 IN.HG. HC 2000 PPM CO 0.3%

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2129 TEST DATE 1/30/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
7.57 109.70 6.24 8.6 29.88 67.5 15.0  
9.92 165.30 3.90 7.9 29.88 68.0 16.0  
( 8.75)( 137.50)( 5.07)( 8.3)  
-60.1% +12.5% -57.5% - 8.8%

CHANGE IN AVERAGE AFTER TUNE UP  
26.51 231.90 5.84 5.4 29.87 68.5 15.0  
17.00 189.90 7.01 5.5 29.87 69.0 16.0  
(21.76)( 210.90)( 6.43)( 5.5)  
-57.9% +94.7% -57.0% - 4.4%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 1800/ 125 1.2/ 1.2  
2500 R.P.M. 2 00/ 100 2.7/ 2.8  
30 M.P.H. 800/ 75 0.7/ 0.7  
50 M.P.H. 800/ 75 1.3/ 1.3  
MOTORING 20 00/ 2000 1.0/ 1.1  
2500 R.P.M. 2 00/ 125 0.3/ 0.4  
\*\* 2500 R.P.M. 600/ 50 0.8/ 0.9

COMMENT KEY MODE: MOTORING HC 2000 PPM CO 1.0%' 11 - IN.HG. HC 2000 PPM CO 0.3%' 3 IN.HG. HC 600 PPM CO 0.8%

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 34,000 MAKE: DODGE MODEL: M800 MODEL YR.: 71 TRANS. CODE:A6 DISPLACEMENT: 413  
 SERIAL NO.: M81HY1T301223 LICENSE NO.: 1969JA OWNER'S ID.: 6201  
 TUNE UP DATA.

----- DATE OF TUNE UP 2/ 5/76 ODOMETER READING 17091 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 520 DWELL 34  
 IDLE CO(%) 10.0 TIMING 6BTDC  
 IDLE HC(PPM) 1400 GAP(INCH) .042  
 PCV CODE 2 AF CODE 3  
 IDLE AIR/FUEL 11.5  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 32  
 IDLE CO(%) 0.6 TIMING 5BTDC  
 IDLE HC(PPM) 140 GAP(INCH) .035  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.9

COMMENT: REPLACED PLUGS, POINTS AND CONDENSER.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2132 TEST DATE 2/ 4/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/15.0 H.P. AT 20 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 29.74 281.20 27.11 4.4 30.20 68.5 26.0  
 TEST 2 31.42 284.60 27.22 4.3 30.20 70.0 27.0  
 AVERAGE(30.58)( 282.90)(27.17)( 4.4)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2133 TEST DATE 2/ 5/76  
 13500 LB/15.0 H.P. AT 20 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 8.87 91.62 35.26 4.3 30.47 68.5 17.0  
 TEST 2 6.90 101.20 32.65 4.6 30.47 69.5 17.0  
 AVERAGE( 7.70)( 90.41)(33.96)( 4.5)

CHANGE IN AVERAGE AFTER TUNE UP

-14.7% -65.9% +25.0% + 2.3%

TEST:C39  
 TEST 1 86.75 606.60 45.93 2.4 30.20 68.0 27.0  
 TEST 2 94.56 615.80 44.53 2.4 30.20 70.5 26.0  
 AVERAGE(90.66)( 611.20)(45.23)( 2.4)

TEST:C39  
 TEST 1 22.23 235.70 48.02 2.7 30.47 69.5 17.0  
 TEST 2 24.02 292.80 45.50 2.7 30.47 69.5 17.0  
 AVERAGE( 23.13)( 264.25)(46.76)( 2.7)

CHANGE IN AVERAGE AFTER TUNE UP

-74.5% -56.8% + 3.4% +12.5%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 1500/27000 10.0/10.0  
 2500 R.P.M. 175/ 3300 5.0/ 4.7  
 LOW CRUISE SPEED 10 M.P.H. 200/ 3500 4.5/ 4.3  
 HIGH CRUISE SPEED 20 M.P.H. 125/ 1900 1.1/ 1.0  
 MOTORING 2000/38000 6.0/ 5.9  
 11 INCH VACUUM 2000 R.P.M. 75/ 1200 0.3/ 0.3  
 7 INCH VACUUM 2000 R.P.M. 50/ 900 0.2/ 0.2

ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 100/ 1400 1.0/ 0.9  
 50/ 800 0.9/ 0.8  
 10 M.P.H. 60/ 1100 0.8/ 0.8  
 20 M.P.H. 60/ 1000 0.6/ 0.5  
 1500/17000 1.5/ 1.7  
 2000 R.P.M. 75/ 1000 0.3/ 0.3  
 \*\* 2000 R.P.M. 50/ 600 0.2/ 0.2

GENERAL COMMENT: BEFORE TUNE UP ENGINE WAS SO WEAK THAT IT COULD PULL ONLY 25 MPH MAX.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 25,500 MAKE: FORD MODEL: F700 MODEL YR.: 71 TRANS. CODE:M5 DISPLACEMENT: 361  
 SERIAL NO.: F75EVJ25931 LICENSE NO.: 5937LA OWNER'S ID.: 6399  
 TUNE UP DATA.

----- DATE OF TUNE UP 2/ 9/76 ODOMETER READING 11862 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 640 DWELL 26 IDLE R.P.M. 600 DWELL 26  
 IDLE CO(%) 1.1 TIMING 13BTDC IDLE CO(%) 2.2 TIMING 6BTDC  
 IDLE HC(PPM) 750 GAP(INCH) .030 IDLE HC(PPM) 340 GAP(INCH) .030  
 PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: NEW POINTS, PLUGS

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2134 TEST DATE 2/ 6/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/33.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 12.71 145.00 24.42 5.0 30.12 71.5 21.0  
 TEST 2 38.36 167.10 23.53 5.0 30.12 72.5 21.0  
 AVERAGE(40.54)( 158.35)(23.98)( 5.0)

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 59.12 174.40 34.41 3.7 30.11 70.0 20.0  
 TEST 2 62.27 191.00 34.11 3.7 30.06 71.5 21.0  
 AVERAGE(60.70)( 182.70)(34.26)( 3.7)

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 4500/ 375 1.1/ 1.1  
 2500 R.P.M. 2500/ 175 0.6/ 0.6  
 LOW CRUISE SPEED 25 M.P.H. 5000/ 450 0.4/ 0.4  
 HIGH CRUISE SPEED 40 M.P.H. 2000/ 150 0.2/ 0.2  
 MOTORING 40000/ 2000 4.4/ 4.6  
 11 INCH VACUUM 2500 R.P.M. 5500/ 500 0.8/ 0.8  
 3 INCH VACUUM 2500 R.P.M. 3800/ 225 0.2/ 0.2

COMMENT KEY MODE: MOTORING HC 40000 PPM CO 4.4%' 11 IN-HG. HC - 5500 PPM CO 0.8% 3 IN.HG. HC 3800 PPM CO 0.2%

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2135 TEST DATE 2/ 9/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/33.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 31.19 174.60 18.01 5.1 30.07 75.5 24.0  
 TEST 2 30.89 185.50 17.13 5.1 30.07 76.5 24.0  
 AVERAGE(31.04)( 180.05)(17.57)( 5.1)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -22.4% +13.7% -25.7% + 2.0%

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 48.31 192.10 24.31 3.9 30.07 74.5 22.0  
 TEST 2 50.93 241.70 23.52 3.7 30.07 75.0 23.0  
 AVERAGE(49.62)( 216.90)(23.92)( 3.8)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -18.2% +18.7% -30.2% + 2.7%

COMMENT KEY MODE: MOTORING HC 42000 PPM CO 5.0%' 11 IN-HG. HC 5500 PPM CO 0.5% 3 IN.HG. HC 3500 PPM CO 0.2- %

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
 SERIAL NO.: THM8BZV510690 LICENSE NO.: 25924A OWNER'S ID.: 25E150  
 TUNE UP DATA.

----- DATE OF TUNE UP 2/26/76 ODOMETER READING 15485 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 760 DWELL 31 IDLE R.P.M. 550 DWELL 31  
 IDLE CO(%) 0.2 TIMING 10BTDC IDLE CO(%) 0.2 TIMING 8BTDC  
 IDLE HC(PPM) 100 GAP(INCH) .080 IDLE HC(PPM) 30 GAP(INCH) .035  
 PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 1  
 IDLE AIR/FUEL 14.0 IDLE AIR/FUEL 13.8

COMMENT: NEW PLUGS, POINTS, CONDENSER, ROTOR, CAP, WIRE SET, VACUUM ADVANCE CHAMBER

TEST RESULTS

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2142 TEST DATE 2/25/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/52.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 10.44 82.81 64.23 3.2 30.27 79.5 35.0  
 TEST 2 7.33 103.40 66.87 3.0 30.27 80.5 36.0  
 AVERAGE( 8.89)( 93.11)(65.55)( 3.1)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 16.78 178.60 66.01 2.5 30.27 77.5 34.0  
 TEST 2 17.59 249.90 63.66 2.4 30.27 78.5 35.0  
 AVERAGE(17.19)( 214.25)(64.84)( 2.5)

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2144 TEST DATE 3/ 1/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/52.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 8.20 67.71 41.18 3.2 30.18 67.0 36.0  
 TEST 2 7.49 78.32 39.49 3.4 30.18 67.5 36.0  
 AVERAGE( 7.85)( 73.02)(40.34)( 3.3)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 13.63 131.00 42.36 2.8 30.18 68.5 37.0  
 TEST 2 12.72 163.80 44.28 2.7 30.18 70.0 37.0  
 AVERAGE(13.18)( 147.40)(43.32)( 2.8)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 1700/ 125 0.2/ 0.2  
 2500 R.P.M. 1000/ 75 1.1/ 1.2  
 LOW CRUISE SPEED 20 M.P.H. 1400/ 100 0.2/ 0.2  
 HIGH CRUISE SPEED 35 M.P.H. 900/ 75 0.5/ 0.5  
 MOTORING 17000/ 1600 2.0/ 2.0  
 11 INCH VACUUM 2000 R.P.M. 1200/ 100 0.2/ 0.2  
 3 INCH VACUUM 2000 R.P.M. 1400/ 125 0.5/ 0.6

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2144 TEST DATE 3/ 1/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/52.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 8.20 67.71 41.18 3.2 30.18 67.0 36.0  
 TEST 2 7.49 78.32 39.49 3.4 30.18 67.5 36.0  
 AVERAGE( 7.85)( 73.02)(40.34)( 3.3)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 13.63 131.00 42.36 2.8 30.18 68.5 37.0  
 TEST 2 12.72 163.80 44.28 2.7 30.18 70.0 37.0  
 AVERAGE(13.18)( 147.40)(43.32)( 2.8)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 900/ 75 0.1/ 0.1  
 2500 R.P.M. 900/ 75 0.7/ 0.7  
 20 M.P.H. 1 00/ 75 0.1/ 0.1  
 35 M.P.H. 1300/ 100 0.5/ 0.5  
 MOTORING 11 00/ 1200 0.9/ 1.0  
 2000 R.P.M. 900/ 75 0.2/ 0.2  
 \*\* 2000 R.P.M. 1 00/ 75 0.6/ 0.6

COMMENT KEY MODE: MOTORING HC 17000 PPM CO 2.0%, 11 IN.HG. HC -  
 1200 PPM CO 0.2% 3 IN.HG. HC 1400 PPM CO 0.5%

COMMENT KEY MODE: MOTORING HC 1100 PPM CO 0.9%, 11 -  
 IN.HG. HC 900 PPM CO 0.2% 3 IN.HG. HC 1000 PPM CO 0.6%

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: CHEVROLET MODEL: C50 MODEL YR.: 69 TRANS. CODE:A6 DISPLACEMENT: 292  
SERIAL NO.: CS539P869784 LICENSE NO.: 7946HZ OWNER'S ID.: 5724  
TUNE UP DATA.

DATE OF TUNE UP 3/ 2/76 ODOMETER READING 27388 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 640 DWELL 33 IDLE R.P.M. 550 DWELL 33  
IDLE CO(%) 9.0 TIMING ATDC IDLE CO(%) 3.4 TIMING ATDC  
IDLE HC(PPM) 400 GAP(INCH) IDLE HC(PPM) 170 GAP(INCH) .035  
PCV CODE 2 AF CODE 0 PCV CODE 2 AF CODE 0  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: NEW PLUGS, WIRE SET, POINTS, ROTOR. TIMING COULD NOT BE CHECKED BECAUSE VIBRATION DAMPER HAD TURNED ON PULLEY.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2145 TEST DATE 3/ 1/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 16.22 294.90 21.06 5.6 30.20 70.0 29.0  
TEST 2 17.45 308.70 21.26 5.6 30.20 69.0 29.0  
AVERAGE(16.84)( 301.80)(21.16)( 5.6)

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 27.70 428.30 30.01 3.7 30.20 67.0 28.0  
TEST 2 28.09 448.00 30.48 3.8 30.20 69.5 29.0  
AVERAGE(27.90)( 438.15)(30.25)( 3.8)

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 10000/ 500 9.7/10.0  
2500 R.P.M. 15000/ 1800 0.9/ 0.9  
LOW CRUISE SPEED 20 M.P.H. 2000/ 175 0.2/ 0.2  
HIGH CRUISE SPEED 30 M.P.H. 1400/ 125 0.4/ 0.8  
MOTORING 36000/ 2000 5.6/ 5.9  
11 INCH VACUUM 2000 R.P.M. 3200/ 250 0.2/ 0.1  
3 INCH VACUUM 2000 R.P.M. 3100/ 250 3.5/ 3.4

GENERAL COMMENT: BEFORE TUNE UP, VEHICLE WAS TESTED WITHOUT ENGINE AIR CLEANER.  
COMMENT KEY MODE: MOTORING HC 36000 PPM CO 5.6% 11 IN.HG. HC - 3200 PPM CO 0.2% 3 IN.HG. HC 3100 PPM CO 3.5%

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2146 TEST DATE 3/ 2/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 10.13 193.30 12.16 6.0 30.30 65.5 35.0  
TEST 2 9.92 209.20 13.21 5.0 30.30 71.0 37.0  
AVERAGE(10.01)( 200.75)(12.69)( 6.0)  
-40.5% -33.5% -40.1% + 6.3%  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 15.63 255.50 19.99 4.0 30.30 71.0 35.0  
TEST 2 15.82 267.30 20.98 4.0 30.30 71.5 36.0  
AVERAGE(15.73)( 261.40)(20.49)( 4.0)  
-43.6% -40.3% -32.3% + 6.7%

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 3800/ 225 4.5/ 4.8  
2500 R.P.M. 300/ 200 0.5/ 0.4  
20 M.P.H. 1700/ 150 0.1/ 0.1  
30 M.P.H. 900/ 75 0.1/ 0.1  
MOTORING 2500/ 2000 3.2/ 3.0  
2000 R.P.M. 1500/ 125 0.2/ 0.2  
\*\* 2000 R.P.M. 2200/ 150 3.6/ 3.8

COMMENT KEY MODE: MOTORING HC 2500 PPM CO 3.2% 11 IN.HG. HC 1500 PPM CO 0.2% 3 IN.HG. HC 2300 PPM CO 3.6%

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB23366 LICENSE NO.: 31470E OWNER'S ID.: 25G192  
TUNE UP DATA.

DATE OF TUNE UP 3/ 9/76 ODOMETER READING 13688 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 650 DWELL 29  
IDLE CO(%) 7.5 TIMING 3BTDC  
IDLE HC(PPM) 200 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 550 DWELL 31  
IDLE CO(%) 2.1 TIMING 5BTDC  
IDLE HC(PPM) 200 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.5

COMMENT: REPLACED PLUGS, POINTS AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2152 TEST DATE 3/ 5/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.05 200.00 22.95 3.7 29.96 77.5 73.0  
TEST 2 13.43 247.00 22.13 3.8 29.96 77.0 71.0  
AVERAGE(16.04)( 243.10)(22.54)( 3.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1 29.48 462.30 26.37 2.7 29.95 79.0 72.0  
TEST 2 32.89 476.10 25.82 2.7 29.95 76.5 67.0  
AVERAGE(31.19)( 469.20)(26.10)( 2.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE \*\*\*\*\*/ 3000 4.8/ 5.3  
2500 R.P.M. \*\*\*\*\*/ 1200 0.7/ 0.8  
LOW CRUISE SPEED 20 M.P.H. \*\*\*\*\*/ 2800 0.9/ 1.0  
HIGH CRUISE SPEED 35 M.P.H. \*\*\*\*\*/ 2000 0.4/ 0.4  
MOTORING \*\*\*\*\*/24000 2.5/ 2.7  
11 INCH VACUUM 2000 R.P.M.\*\*\*\*\*/ 1200 0.3/ 0.3  
3 INCH VACUUM 2000 R.P.M.\*\*\*\*\*/ 1200 1.2/ 1.1

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2156 TEST DATE 3/ 9/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 11.38 159.00 23.50 4.0 30.15 70.0 24.0  
TEST 2 11.93 170.50 23.32 3.9 30.15 70.5 24.0  
AVERAGE(13.46)( 164.75)(23.41)( 4.0)  
-16.1% -32.2% + 3.9% + 5.3%

TEST 1 21.50 293.80 29.22 2.9 30.13 69.0 25.0  
TEST 2 22.12 301.60 29.11 2.8 30.13 57.0 24.0  
AVERAGE(21.81)( 297.70)(29.17)( 2.9)  
-30.1% -36.6% +11.8% + 5.6%

HC(PPM) CO(%)

(READING FROM ANALYZER 4/READING FROM ANALYZER 2)

125/ 2000 2.2/ 2.1  
40/ 600 0.4/ 0.4  
20 M.P.H. 100/ 1500 0.8/ 0.8  
35 M.P.H. 40/ 600 0.4/ 0.4  
2 00/25000 3.2/ 3.3  
2000 R.P.M. 60/ 1000 0.3/ 0.3  
\*\* 2000 R.P.M. 60/ 1200 1.1/ 1.1

COMMENT KEY MODE: GARAGE HC METER WAS INOPERATIVE.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV513583 LICENSE NO.: 25957A OWNER'S ID.: 25E183  
TUNE UP DATA.

DATE OF TUNE UP 3/24/76 ODOMETER READING 38594 HOUR METER READING 8590.0

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 500 DWELL 29  
IDLE CO(%) 0.1 TIMING 0BTDC  
IDLE HC(PPM) 1000 GAP(INCH)  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 525 DWELL 31  
IDLE CO(%) 0.2 TIMING 8BTDC  
IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL

COMMENT: NEW PLUGS, WIRE SET, POINTS, CAP, ROTOR, COIL, PCV VALUE

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2164 TEST DATE 3/24/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2165 TEST DATE 3/26/76  
13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 18.19 56.73 27.86 4.3 30.42 70.5 38.0  
TEST 2 18.41 57.51 28.13 4.3 30.42 71.5 40.0  
AVERAGE(18.30)( 57.12)(28.00)( 4.3)

11.46 76.57 33.92 4.4 30.16 72.5 25.0  
10.20 71.91 36.19 4.3 30.16 74.5 25.0  
(10.83)( 74.24)(35.06)( 4.4)

CHANGE IN AVERAGE AFTER TUNE UP

-40.8% +30.0% +25.2% + 1.2%

TEST:C39

TEST 1 43.53 111.70 33.05 3.2 30.41 71.0 39.0  
TEST 2 41.37 110.50 34.45 3.2 30.40 71.5 38.0  
AVERAGE(42.45)( 111.10)(33.75)( 3.2)

20.84 133.20 42.96 3.1 30.16 73.5 25.0  
19.54 143.80 43.31 3.1 30.16 74.0 25.0  
(20.19)( 138.50)(43.14)( 3.1)

CHANGE IN AVERAGE AFTER TUNE UP

-52.4% +24.7% +27.8% - 3.1%

TEST:KEY MODE

ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 4500/ 600 0.1/ 0.1  
2500 R.P.M. 7500/ 1050 0.4/ 0.4  
LOW CRUISE SPEED 20 M.P.H. 3000/ 350 0.3/ 0.3  
HIGH CRUISE SPEED 35 M.P.H. 600/ 50 0.1/ 0.1  
MOTORING 12000/ 1800 0.1/ 0.1  
11 INCH VACUUM 2000 R.P.M. 2000/ 150 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 1000/ 75 0.1/ 0.1

HC(PPM) CO(%)  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
1400/ 100 0.1/ 0.1  
1300/ 75 1.8/ 1.7  
20 M.P.H. 1400/ 100 0.3/ 0.3  
35 M.P.H. 900/ 75 0.1 / 0.1  
10 00/ 1600 0.6/ 0.6  
2000 R.P.M. 700/ 50 0.2/ 0.2  
\*\* 2000 R.P.M. 600/ 50 0.1/ 0.2

COMMENT KEY MODE: MOTORING HC 12000 PPM CO 0.1% 11 IN.HG. HC 2-000 PPM CO 0.2% 3 IN.HG. HC 1000 PPM CO 0.1%

COMMENT KEY MODE: MOTORING HC 1000 PPM CO 0.6% 11 I-N.HG. HC 700 PPM CO 0.2% 3 IN.HG. HC 600 PPM CO 0.1%

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB23593 LICENSE NO.: 31473E OWNER'S ID.: 25G193  
TUNE UP DATA.

DATE OF TUNE UP 4/ 2/76 ODOMETER READING 15964 HOUR METER READING 4289.3

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 570 DWELL 35  
IDLE CO(%) 3.5 TIMING 14BTDC  
IDLE HC(PPM) 820 GAP(INCH) .037  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.0

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 33  
IDLE CO(%) 1.4 TIMING 5BTDC  
IDLE HC(PPM) 210 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, WIRE SET, CAP, ROTOR, POINTS AND CONDENSER.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2167 TEST DATE 4/ 1/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2168 TEST DATE 4/ 5/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 25.14 274.80 30.31 3.6 29.78 69.5 47.0  
TEST 2 20.35 278.40 29.32 3.6 29.78 71.0 49.0  
AVERAGE(22.75)( 276.60)(29.82)( 3.6)

13.19 211.30 21.38 3.9 29.89 67.0 18.0  
11.60 204.90 22.91 3.9 29.89 68.0 18.0  
(12.14)( 208.10)(22.10)( 3.9)  
-45.3% -24.8% -25.9% + 6.9%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1 43.27 432.30 33.64 2.8 29.78 67.5 45.0  
TEST 2 45.52 444.60 31.35 2.9 29.79 70.0 45.0  
AVERAGE(44.40)( 438.45)(32.50)( 2.9)

39.11 310.90 31.35 2.8 29.89 67.0 18.0  
34.88 362.50 29.96 2.7 29.88 67.0 18.0  
(37.00)( 336.70)(30.66)( 2.8)  
-16.7% -23.2% - 5.7% - 3.5%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 350/ 4500 3.9/ 4.0  
2500 R.P.M. 100/ 1600 0.9/ 0.8  
LOW CRUISE SPEED 20 M.P.H. 250/ 3200 1.3/ 1.3  
HIGH CRUISE SPEED 35 M.P.H. 100/ 1500 0.7/ 0.7  
MOTORING 2000/30000 3.0/ 3.2  
11 INCH VACUUM 2000 R.P.M. 175/ 2400 0.6/ 0.5  
3 INCH VACUUM 2000 R.P.M. 150/ 2200 1.5/ 1.5

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
200/ 2500 1.7/ 1.6  
75/ 1000 0.5/ 0.5  
20 M.P.H. 200/ 2500 1.0/ 1.1  
35 M.P.H. 100/ 1100 0.4/ 0.4  
2.00/27000 3.0/ 3.2  
2000 R.P.M. 100/ 1300 0.4/ 0.3  
\*\* 2000 R.P.M. 100/ 1500 1.3/ 1.2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: GMC MODEL: 8500 MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: FHMBZV60G334 LICENSE NO.: 19503E OWNER'S ID.: 26D066  
TUNE UP DATA.

DATE OF TUNE UP 4/ 7/76 ODOMETER READING 14542 HOUR METER READING 1877.8

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	670	DWELL	20	IDLE R.P.M.	550	DWELL	31
IDLE CO(%)	0.2	TIMING	28BTDC	IDLE CO(%)	0.2	TIMING	88TDC
IDLE HC(PPM)	1500	GAP(INCH)	.035	IDLE HC(PPM)	200	GAP(INCH)	.035
PCV CODE	4	AF CODE	2	PCV CODE	1	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED WIRE SET, PLUGS, CAP AND DISTR. INCLUDING POINTS, ROTOR AND VACUUM ADVANCE-RETARD CHAMBER.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2169 TEST DATE 4/ 6/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/20.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2172 TEST DATE 4/ 9/76  
13500 LB/20.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.01 50.20 35.09 4.6 29.89 73.0 26.0  
TEST 2 13.32 56.65 34.78 4.5 29.89 74.5 27.0  
AVERAGE(13.98)( 52.97)(34.94)( 4.6)

TEST 1 3.80 50.98 26.71 4.2 30.15 69.5 20.0  
TEST 2 7.65 63.87 26.57 4.2 30.15 70.5 21.0  
( 8.23)( 57.43)(26.64)( 4.2)

CHANGE IN AVERAGE AFTER TUNE UP

-41.0% + 9.4% -22.7% - 7.7%

TEST:C39

TEST 1 28.50 96.98 45.37 3.3 29.89 73.5 27.0  
TEST 2 23.56 112.40 41.80 3.2 29.89 75.0 27.0  
AVERAGE(26.03)( 104.69)(43.59)( 3.3)

TEST 1 14.64 113.60 32.01 3.0 30.15 68.0 21.0  
TEST 2 14.51 142.30 32.18 2.9 30.15 71.0 20.0  
(14.58)( 127.95)(32.10)( 3.0)

CHANGE IN AVERAGE AFTER TUNE UP

-44.0% +22.2% -26.4% - 9.2%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 650/ 5000 0.1/ 0.1  
2500 R.P.M. 250/ 2800 1.1/ 1.0  
LOW CRUISE SPEED 20 M.P.H. 225/ 2500 0.8/ 0.7  
HIGH CRUISE SPEED 35 M.P.H. 250/ 2700 0.1/ 0.1  
MOTORING 1000/10000 0.2/ 0.2  
11 INCH VACUUM 2000 R.P.M. 125/ 1600 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 150/ 2000 0.9/ 0.8

75/ 900 0.1/ 0.1  
50/ 800 1.5/ 1.4  
20 M.P.H. 100/ 1400 1.0/ 1.0  
35 M.P.H. 75/ 900 0.1/ 0.1  
450/ 6000 0.1/ 0.1  
2000 R.P.M. 50/ 600 0.1/ 0.1  
\*\* 2000 R.P.M. 75/ 800 0.7/ 0.6

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 39,850 MAKE: GMC MODEL: 8500 MODEL YR.: 68 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BD034828 LICENSE NO.: 15557E OWNER'S ID.: 287016  
TUNE UP DATA.

DATE OF TUNE UP 4/13/76 ODOMETER READING 43300 HOUR METER READING 6642.3  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 33 IDLE R.P.M. 525 DWELL 32  
IDLE CO(%) 5.8 TIMING 5BTDC IDLE CO(%) 2.5 TIMING 10BTDC  
IDLE HC(PPM) 135 GAP(INCH) .060 IDLE HC(PPM) 250 GAP(INCH) .035  
PCV CODE 4 AF CODE 4 PCV CODE 3 AF CODE 1  
IDLE AIR/FUEL IDLE AIR/FUEL 1  
COMMENT: REPLACED PLUGS, WIRE SET, POINTS, ROTOR, CAP AND IDLE STOP SOLENOID TO REDUCE DIESELING.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2173 TEST DATE 4/13/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TFST 1 9.41 211.30 32.36 3.3 30.23 69.5 19.0  
TEST 2 9.77 217.60 35.47 3.3 30.23 70.5 19.0  
AVERAGE( 9.59)( 211.45)(32.32)( 3.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 23.63 509.30 36.92 2.3 30.22 69.5 19.0  
TEST 2 23.13 556.80 38.18 2.3 30.21 71.0 20.0  
AVERAGE(23.38)( 533.05)(37.55)( 2.3)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2178 TEST DATE 4/16/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
11.34 94.31 32.31 4.2 30.18 78.0 42.0  
10.54 124.60 31.64 4.2 30.18 78.5 43.0  
(10.94)( 109.46)(31.98)( 4.2)  
+14.1% -49.0% - 5.7% +27.3%  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
24.86 192.00 33.82 3.2 30.18 80.5 44.0  
22.28 251.10 34.97 3.1 30.18 80.5 44.0  
(23.57)( 221.55)(34.40)( 3.2)  
+ 0.8% -58.4% - 8.4% +37.0%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/ 2700 6.4/ 6.4  
2500 R.P.M. 125/ 2500 4.6/ 4.7  
LOW CRUISE SPEED 20 M.P.H. 200/ 2900 1.9/ 2.0  
HIGH CRUISE SPEED 35 M.P.H. 100/ 1100 0.2/ 0.2  
MOTORING 2000/30000 6.5/ 6.2  
11 INCH VACUUM 2000 R.P.M. 100/ 1600 0.8/ 0.8  
7 INCH VACUUM 2000 R.P.M. 50/ 900 0.4/ 0.4

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/ 1500 1.0/ 1.0  
125/ 2300 3.8/ 3.9  
20 M.P.H. 175/ 2700 2.5/ 2.5  
35 M.P.H. 60/ 1000 0.3/ 0.2  
1300/14000 1.0/ 1.0  
2000 R.P.M. 125/ 2100 0.6/ 0.6  
\*\* 2000 R.P.M. 100/ 1700 0.8/ 0.8

COMMENT KEY MODE: TRANSMISSION WOULD NOT ALLOW ENGINE LOAD OF - LESS THAN 7 IN. HG IT DOWNSHIFTED.

COMMENT KEY MODE: TRANSMISSION DOWNSHIFT PROBLEM

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: P50BVH80718 LICENSE NO.: 7949LA OWNER'S ID.: 19899  
 TUNE UP DATA.

----- DATE OF TUNE UP 4/15/76 ODOMETER READING 25190 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 680 DWELL 39  
 IDLE CO(%) 3.8 TIMING 6BTDC  
 IDLE HC(PPM) 120 GAP(INCH) .034  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.0  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 39  
 IDLE CO(%) 1.0 TIMING 6BTDC  
 IDLE HC(PPM) 100 GAP(INCH) .034  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.8

COMMENT: REPLACED DISTR. VACUUM CHAMBER, POINTS, CONDENSER AND ROTOR.

TEST RESULTS

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2176 TEST DATE 4/15/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 4.82 41.60 6.87 8.6 30.23 78.0 28.0  
 TEST 2 4.71 43.67 7.33 8.4 30.23 78.0 28.0  
 AVERAGE( 4.77)( 42.64)( 7.10)( 8.5)  
 CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39  
 TEST 1 12.19 89.19 7.17 5.2 30.23 78.0 30.0  
 TEST 2 11.21 88.44 8.74 5.1 30.23 79.5 31.0  
 AVERAGE(11.70)( 88.82)( 7.96)( 5.2)  
 CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 125/ 2000 3.5/ 3.6  
 2500 R.P.M. 50/ 1000 1.4/ 1.5  
 LOW CRUISE SPEED 25 M.P.H. 100/ 1400 0.1/ 0.1  
 HIGH CRUISE SPEED 40 M.P.H. 25/ 300 0.1/ 0.1  
 MOTORING 2000/18000 1.5/ 1.5  
 11 INCH VACUUM 2500 R.P.M. 50/ 500 0.1/ 0.1  
 3 INCH VACUUM 2000 R.P.M. 30/ 500 0.2/ 0.2

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2179 TEST DATE 4/16/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 6.22 20.69 17.32 8.3 30.18 77.0 40.0  
 TEST 2 4.40 20.00 20.77 7.0 30.14 77.5 38.0  
 AVERAGE( 5.31)( 20.35)(19.05)( 8.1)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 +11.4% -52.3% +68.2% - 4.7%

TEST:C39  
 TEST 1 12.55 36.25 20.62 5.5 30.18 76.0 39.0  
 TEST 2 12.35 38.10 22.21 5.5 30.18 77.5 38.0  
 AVERAGE(12.45)( 37.18)(21.42)( 5.5)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 + 6.4% -58.1% +69.2% + 6.8%

-----  
 HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 150/ 1700 0.7/ 0.6  
 30/ 400 0.3/ 0.3  
 25 M.P.H. 75/ 900 0.1/ 0.1  
 40 M.P.H. 50/ 600 0.1/ 0.1  
 1600/15000 0.5/ 0.5  
 2500 R.P.M. 50/ 600 0.1/ 0.1  
 \*\* 2000 R.P.M. 40/ 500 0.2/ 0.2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: P50BVK15849 LICENSE NO.: 6307LA OWNER'S ID.: 10715  
 TUNE UP DATA.

DATE OF TUNE UP 4/20/76 ODOMETER READING 23110 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 550 DWELL 36  
 IDLE CO(%) 7.5 TIMING 7ATDC  
 IDLE HC(PPM) 160 GAP(INCH) .034  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 12.6  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 36  
 IDLE CO(%) 1.5 TIMING 6BTDC  
 IDLE HC(PPM) 200 GAP(INCH) .034  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.6

COMMENT: REPLACED POINTS, CONDENSER AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2181 TEST DATE 4/19/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 11.05 310.40 2.67 6.2 30.08 84.5 77.0  
 TEST 2 10.86 305.40 3.25 6.1 30.08 85.0 78.0  
 AVERAGE(11.05)( 310.40)( 2.96)( 6.2)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2184 TEST DATE 4/21/76  
 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 8.59 111.25 10.14 7.8 30.05 78.5 43.0  
 TEST 2 8.09 117.10 9.98 7.9 30.05 78.0 42.0  
 AVERAGE(8.59)( 111.25)( 10.14)( 7.8)

CHANGE IN AVERAGE AFTER TUNE UP

-22.2% -64.2% +42.4% +26.8%

TEST:C39  
 TEST 1 25.30 342.90 6.53 4.0 30.08 85.0 78.0  
 TEST 2 24.05 429.90 5.05 4.0 30.07 85.0 78.0  
 AVERAGE(24.68)( 386.40)( 5.79)( 4.0)

TEST:C39  
 TEST 1 16.12 115.80 12.84 5.2 30.06 78.0 42.0  
 TEST 2 14.47 152.30 13.85 4.8 30.07 79.0 42.0  
 AVERAGE(15.30)( 134.05)( 13.35)( 5.0)

CHANGE IN AVERAGE AFTER TUNE UP

-38.0% -65.3% +30.5% +25.0%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 75/ 1700 4.8/ 4.9  
 2500 R.P.M. 60/ 1500 1.6/ 1.8  
 LOW CRUISE SPEED 25 M.P.H. 25/ 500 0.1/ 0.1  
 HIGH CRUISE SPEED 40 M.P.H. 50/ 600 0.1/ 0.1  
 MOTORING 2000/35000 4.0/ 4.2  
 11 INCH VACUUM 2500 R.P.M. 25/ 300 0.1/ 0.1  
 3 INCH VACUUM 2500 R.P.M. 25/ 200 0.2/ 0.2

ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 150/ 1500 0.7/ 0.7  
 2500 R.P.M. 75/ 1200 0.6/ 0.6  
 25 M.P.H. 125/ 1800 0.1/ 0.1  
 40 M.P.H. 60/ 800 0.2/ 0.2  
 1300/16000 0.6/ 0.6  
 2500 R.P.M. 50/ 800 0.2/ 0.2  
 \*\* 2500 R.P.M. 30/ 400 0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
 SERIAL NO.: HM81BZ141282 LICENSE NO.: 13397E OWNER'S ID.: 25D116  
 TUNE UP DATA.

DATE OF TUNE UP 4/21/76 ODOMETER READING 45590 HOUR METER READING 6606.9

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 510 DWELL 42  
 IDLE CO(%) 2.8 TIMING 1ATDC  
 IDLE HC(PPM) 120 GAP(INCH) .055  
 PCV CODE 0 AF CODE 4  
 IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 525 DWELL 32  
 IDLE CO(%) 2.4 TIMING 10BTDC  
 IDLE HC(PPM) 140 GAP(INCH) .035  
 PCV CODE 1 AF CODE 1  
 IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, WIRE SET, CAP, ROTOR, POINTS, FUEL FILTER AND FUEL PUMP. CHOKE CONTROL CABLE WAS RECONNECTED TO CARB, -  
 CARB MOUNTING BOLTS WERE TIGHTENED. VACUUM RETARD CHAMBER WAS RECONNECTED TO CARB WITH NEW HOSE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2182 TEST DATE 4/20/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2187 TEST DATE 4/22/76  
 13500 LB/21.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 15.01 197.60 22.61 4.4 30.04 88.0 71.0  
 TEST 2  
 AVERAGE(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*)

10.46 65.13 28.32 4.9 30.07 73.5 72.0  
 11.79 70.70 27.66 5.0 30.07 74.0 71.0  
 (11.13)( 71.92)(27.99)( 5.0)  
 \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1 38.37 457.40 23.42 3.1 30.04 88.0 71.0  
 TEST 2 \*\*\*\*\*  
 AVERAGE(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*)

17.12 152.20 29.13 3.7 30.07 74.5 73.0  
 17.42 186.70 28.19 3.6 30.07 76.0 75.0  
 (17.27)( 169.45)(28.66)( 3.7)  
 \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 125/ 2200 3.7/ 3.8  
 2500 R.P.M. 50/ 1000 2.3/ 2.4  
 LOW CRUISE SPEED 20 M.P.H. 100/ 1600 1.5/ 1.5  
 HIGH CRUISE SPEED 35 M.P.H. 25/ 300 0.1/ 0.1  
 MOTORING 1000/11000 0.2/ 0.2  
 11 INCH VACUUM 2000 R.P.M. 75/ 1200 0.3/ 0.3  
 3 INCH VACUUM 2000 R.P.M. 75/ 1300 1.0/ 1.1

75/ 1000 0.5/ 0.5  
 75/ 1000 2.2/ 2.3  
 20 M.P.H. 150/ 2300 1.7/ 1.7  
 35 M.P.H. 60/ 900 0.2/ 0.2  
 1300/14000 0.4/ 0.4  
 2000 R.P.M. 75/ 1200 0.3/ 0.2  
 6 IN. 2000 R.P.M. 40/ 500 0.2/ 0.2

COMMENT KEY MODE: ENGINE WAS W.O.T. AT 6 IN. HG.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
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 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: P50BVK15837 LICENSE NO.: 6297LA OWNER'S ID.: 10704  
 TUNE UP DATA.

----- DATE OF TUNE UP 4/23/76 ODOMETER READING 23768 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 750 DWELL 27  
 IDLE CO(%) 4.8 TIMING 14BTDC  
 IDLE HC(PPM) 220 GAP(INCH) .034  
 PCV CODE 3 AF CODE 2  
 IDLE AIR/FUEL 12.9  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 36  
 IDLE CO(%) 2.5 TIMING 0BTDC  
 IDLE HC(PPM) 110 GAP(INCH) .034  
 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 13.4

COMMENT: REPLACED POINTS, CONDENSER, ROTOR AND PCV VALVE.

TEST RESULTS

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 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2188 TEST DATE 4/22/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 11.77 121.80 12.02 8.5 30.00 78.0 79.0  
 TEST 2 11.43 132.00 12.76 8.2 30.00 78.5 78.0  
 AVERAGE(11.60)( 126.90)(12.39)( 8.4)

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2190 TEST DATE 4/23/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 11.51 138.30 9.79 8.3 29.97 83.5 38.0  
 TEST 2 11.72 132.00 10.67 8.4 29.97 84.0 37.0  
 AVERAGE(11.62)( 135.15)(10.23)( 8.4)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39  
 TEST 1 19.88 137.80 15.97 5.7 29.98 76.0 75.0  
 TEST 2 16.72 156.80 15.92 5.7 29.97 77.0 74.0  
 AVERAGE(18.30)( 147.30)(15.95)( 5.7)

TEST:C39  
 TEST 1 20.85 139.70 14.13 5.5 29.97 83.0 36.0  
 TEST 2 17.62 165.80 14.26 5.5 29.97 84.5 38.0  
 AVERAGE(19.24)( 152.75)(14.20)( 5.5)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 150/ 2700 3.0/ 3.4  
 2500 R.P.M. 1900/15000 0.2/ 0.2  
 LOW CRUISE SPEED 25 M.P.H. 125/ 1400 0.1/ 0.1  
 HIGH CRUISE SPEED 40 M.P.H. 75/ 900 0.1/ 0.1  
 MOTORING 2000/30000 2.5/ 2.8  
 11 INCH VACUUM 2500 R.P.M. 125/ 2100 0.1/ 0.1  
 3 INCH VACUUM 2500 R.P.M. 60/ 1000 0.3/ 0.3

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 190/ 2500 2.6/ 3.0  
 2500 R.P.M. 60/ 1000 0.6/ 0.6  
 25 M.P.H. 100/ 1200 0.1/ 0.1  
 40 M.P.H. 75/ 900 0.1/ 0.1  
 MOTORING 2000/35000 1.0/ 1.1  
 2500 R.P.M. 100/ 1800 0.1/ 0.1  
 \*\* 2500 R.P.M. 50/ 700 0.8/ 0.8

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ153874 LICENSE NO.: 13666E OWNER'S ID.: 250369  
TUNE UP DATA.

DATE OF TUNE UP 4/26/76 ODOMETER READING 32826 HOUR METER READING 5261.6

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	730	DWELL	29	IDLE R.P.M.	525	DWELL	31
IDLE CO(%)	3.2	TIMING	15BTDC	IDLE CO(%)	0.2	TIMING	10BTDC
IDLE HC(PPM)	90	GAP(INCH)	.045	IDLE HC(PPM)	70	GAP(INCH)	.035
PCV CODE	0	AF CODE	4	PCV CODE	0	AF CODE	1
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, CONDENSER, PLUGS, CAP, WIRE SET AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2191 TEST DATE 4/26/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2193 TEST DATE 4/27/76  
13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 3.47 28.88 33.47 3.7 29.61 66.5 40.0  
TEST 2 3.55 28.88 37.34 3.8 29.61 68.5 41.0  
AVERAGE( 4.01)( 29.87)(36.41)( 3.8)

7.28 21.47 24.38 4.3 29.95 69.0 29.0  
6.72 22.16 23.95 4.5 29.95 71.0 29.0  
( 7.00)( 21.82)(24.17)( 4.4)

CHANGE IN AVERAGE AFTER TUNE UP

+34.8% -27.0% -30.6% +17.3%

TEST:C39

TEST 1 8.25 66.92 54.79 2.4 29.61 63.5 39.0  
TEST 2 8.74 87.54 59.33 2.5 29.62 63.5 39.0  
AVERAGE( 8.50)( 77.23)(57.06)( 2.5)

11.70 50.09 32.61 3.1 29.95 68.0 27.0  
11.21 47.49 36.10 3.2 29.95 70.0 27.0  
(11.46)( 48.79)(34.36)( 3.2)

CHANGE IN AVERAGE AFTER TUNE UP

+34.8% -36.8% -39.8% +28.6%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	75/ 1100	0.1/ 0.1
2500 R.P.M.	30/ 500	0.1/ 0.1
LOW CRUISE SPEED 20 M.P.H.	60/ 900	0.1/ 0.1
HIGH CRUISE SPEED 35 M.P.H.	50/ 800	0.1/ 0.1
MOTORING	1600/15000	1.7/ 1.7
11 INCH VACUUM 2000 R.P.M.	60/ 900	0.1/ 0.1
3 INCH VACUUM 2000 R.P.M.	60/ 900	0.2/ 0.2

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	75/ 1000	0.1/ 0.1
20 M.P.H.	30/ 400	0.1/ 0.1
35 M.P.H.	75/ 1000	0.1/ 0.1
35 M.P.H.	60/ 900	0.2/ 0.2
	1300/15000	0.3/ 0.3
2000 R.P.M.	75/ 1000	0.1/ 0.1
** 2000 R.P.M.	50/ 800	0.3/ 0.3

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: GMC MODEL: 8500 MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV602900 LICENSE NO.: 13174E OWNER'S ID.: 26D024  
TUNE UP DATA.

----- DATE OF TUNE UP 4/29/76 ODOMETER READING 13509 HOUR METER READING 2163.2  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 640 DWELL 28  
IDLE CO(%) 9.2 TIMING 18BTDC  
IDLE HC(PPM) 220 GAP(INCH) .040  
PCV CODE .3 AF CODE 4  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 540 DWELL 33  
IDLE CO(%) 0.4 TIMING 10BTDC  
IDLE HC(PPM) 70 GAP(INCH) .035  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, WIRE SET, CAP, AND ROTOR. REPAIRED AXIAL PLAY IN THROTTLE SHAFT WHICH CORRECTED THE PROBLEMOF - IDLE SPEED AND A-F MIXTURE VARIATIONS,

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2195				TEST DATE 4/29/76				BMV TEST SERIES NO. 2199				TEST DATE 5/ 5/76			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/20.0 H.P. AT 30 MPH								13500 LB/20.0 H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NVQ								TEST:NVQ							
TEST 1	6.44	95.03	36.11	3.9	30.07	69.0	34.0	9.49	93.76	25.35	4.6	30.25	71.5	46.0	
TEST 2	5.75	91.15	32.13	3.9	30.07	71.0	35.0	8.92	84.36	24.59	4.6	30.25	71.5	46.0	
AVERAGE	( 6.10)	( 93.09)	(37.15)	( 3.9)				( 9.21)	( 89.06)	(24.97)	( 4.6)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
TEST:C39								TEST:C39							
TEST 1	18.31	223.50	38.80	2.9	30.09	71.0	35.0	18.56	179.70	29.11	3.2	30.25	72.5	49.0	
TEST 2	18.84	274.90	41.92	2.9	30.09	70.0	35.0	13.55	183.90	30.68	3.1	30.25	72.5	49.0	
AVERAGE	(18.58)	( 249.20)	(40.36)	( 2.9)				(16.06)	(181.80)	(29.90)	( 3.2)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
TEST:KEY MODE								TEST:KEY MODE							
ENGINE SPEED								ENGINE SPEED							
				HC(PPM)		CO(%)						HC(PPM)		CO(%)	
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)															
IDLE				200/ 3200		5.8/ 5.8		IDLE				150/ 2500		0.6/ 0.6	
2500 R.P.M.				75/ 1500		2.3/ 2.4		2500 R.P.M.				125/ 2200		2.2/ 2.4	
LOW CRUISE SPEED 20 M.P.H.				125/ 1800		0.4/ 0.4		LOW CRUISE SPEED 20 M.P.H.				300/ 4000		2.0/ 2.0	
HIGH CRUISE SPEED 35 M.P.H.				175/ 2200		0.2/ 0.2		HIGH CRUISE SPEED 35 M.P.H.				375/ 4500		0.1/ 0.1	
MOTORING				2000/27000		4.2/ 4.0		MOTORING				900/10000		0.2/ 0.2	
11 INCH VACUUM 2000 R.P.M.				75/ 1300		0.3/ 0.3		11 INCH VACUUM 2000 R.P.M.				100/ 1400		0.2/ 0.2	
3 INCH VACUUM 2000 R.P.M.				100/ 1900		1.2/ 1.3		3 INCH VACUUM 2000 R.P.M.				75/ 1200		0.9/ 0.8	

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 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: P505 MODEL YR.: 74 TRANS. CODE:M5 DISPLACEMENT: 300  
 SERIAL NO.: P50BVT68370 LICENSE NO.: 7733LR OWNER'S ID.: 43834

TUNE UP DATA.

----- DATE OF TUNE UP 4/30/76 ODOMETER READING 5327 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 38 IDLE R.P.M. 600 DWELL 38  
 IDLE CO(%) 6.5 TIMING 21BTDC IDLE CO(%) 1.6 TIMING 10BTDC  
 IDLE HC(PPM) 1000 GAP(INCH) .032 IDLE HC(PPM) 300 GAP(INCH) .032  
 PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 12.8 IDLE AIR/FUEL 13.9

COMMENT: REPLACED POINTS, CONDENSER, ROTOR AND COIL.

TEST RESULTS

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 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2196 TEST DATE 4/29/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 17.57 106.30 15.35 8.4 30.09 72.5 34.0  
 TEST 2 17.75 124.60 14.99 8.0 30.09 72.5 33.0  
 AVERAGE(17.66)( 115.45)(15.17)( 8.2)

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2197 TEST DATE 4/30/76  
 11500 LB/23.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 9.04 118.70 8.59 7.9 30.14 77.0 29.0  
 8.42 128.50 8.88 7.8 30.14 77.0 29.0  
 ( 8.23)( 128.00)( 8.74)( 7.8)

CHANGE IN AVERAGE AFTER TUNE UP

-47.7% + 7.1% -42.4% - 5.5%

TEST:C39  
 TEST 1 36.36 153.20 21.94 5.4 30.09 74.5 33.0  
 TEST 2 34.84 174.60 22.26 5.1 30.09 75.5 34.0  
 AVERAGE(35.60)( 163.90)(22.10)( 5.3)

20.60 113.60 13.35 5.1 30.14 77.5 29.0  
 17.92 144.10 13.70 4.9 30.14 77.5 29.0  
 (19.26)( 128.85)(13.53)( 5.0)

CHANGE IN AVERAGE AFTER TUNE UP

-45.9% -21.4% -38.8% - 4.8%

TEST:KEY MODE  
 ENGINE SPEED

-----  
 HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 900/10000 5.8/ 5.6  
 2500 R.P.M. 1100/10000 0.2/ 0.2  
 LOW CRUISE SPEED 25 M.P.H. 125/ 1300 0.1/ 0.1  
 HIGH CRUISE SPEED 40 M.P.H. 70/ 800 0.1/ 0.1  
 MOTORING 2000/28000 3.2/ 3.2  
 11 INCH VACUUM 2500 R.P.M. 150/ 2000 0.1/ 0.1  
 3 INCH VACUUM 2500 R.P.M. 125/ 2700 4.0/ 4.0

-----  
 HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 150/ 2300 1.9/ 2.0  
 40/ 500 0.1/ 0.1  
 25 M.P.H. 50/ 700 0.1/ 0.1  
 40 M.P.H. 75/ 900 0.1/ 0.1  
 2000/22000 1.0/ 1.0  
 2500 R.P.M. 75/ 1000 0.1/ 0.1  
 \*\* 2500 R.P.M. 75/ 1000 4.2/ 4.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ140424 LICENSE NO.: 13433E OWNER'S ID.: 25D092  
TUNE UP DATA.

DATE OF TUNE UP 5/ 7/76 ODOMETER READING \*\*\*\*\* HOUR METER READING 2178.8

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	580	DWELL	33	IDLE R.P.M.	530	DWELL	31
IDLE CO(%)	6.4	TIMING	8BTDC	IDLE CO(%)	1.0	TIMING	10BTDC
IDLE HC(PPM)	180	GAP(INCH)		IDLE HC(PPM)	130	GAP(INCH)	.035
PCV CODE	3	AF CODE	2	PCV CODE	3	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, ROTOR, PLUGS, CONDENSER, WIRE SET AND DISTR. CAP.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2202 TEST DATE 5/ 6/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 3.53 100.50 30.57 4.5 30.16 80.0 66.0  
TEST 2 8.85 118.60 34.50 4.7 30.16 80.5 68.0  
AVERAGE( 9.40)( 113.55)(32.54)( 4.6)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39

TEST 1 20.66 301.00 38.90 3.0 30.16 81.0 65.0  
TEST 2 20.19 347.20 42.83 3.0 30.16 81.5 66.0  
AVERAGE(20.43)( 324.10)(40.87)( 3.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	175/ 2200	4.3/ 4.4
2500 R.P.M.	100/ 1600	1.7/ 1.8
LOW CRUISE SPEED 20 M.P.H.	150/ 1800	0.3/ 0.3
HIGH CRUISE SPEED 35 M.P.H.	75/ 1000	0.2/ 0.2
MOTURING	2000/25000	5.0/ 4.9
11 INCH VACUUM 2000 R.P.M.	75/ 1000	0.3/ 0.3
6 INCH VACUUM 2000 R.P.M.	50/ 800	0.2/ 0.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2206 TEST DATE 5/10/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 13.77 32.14 32.76 4.4 30.14 76.5 38.0  
TEST 2 20.20 32.73 36.97 4.1 30.14 77.5 39.0  
AVERAGE( 16.99)( 32.44)(34.87)( 4.3)

CHANGE IN AVERAGE AFTER TUNE UP  
+20.0% -71.6% + 7.2% - 7.6%

TEST 1 30.29 75.30 39.22 3.2 30.14 77.0 38.0  
TEST 2 23.91 117.40 45.90 2.9 30.14 77.5 39.0  
AVERAGE( 27.10)( 96.35)(42.56)( 3.1)

CHANGE IN AVERAGE AFTER TUNE UP  
+32.7% -70.3% + 4.1% + 1.7%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

	100/ 1800	0.4/ 0.4
	75/ 1700	1.6/ 1.6
20 M.P.H.	135/ 2200	0.5/ 0.5
35 M.P.H.	125/ 2300	1.0/ 1.0
	*****	*****
2000 R.P.M.	75/ 1400	0.2/ 0.2
** 2000 R.P.M.	75/ 1400	0.2/ 0.2

GENERAL COMMENT: AFTER TUNE UP, CHOKE AND FAST IDLE CAM WERE NOT WORKING PROPERLY, CAUSING ERRATIC IDLE SPEED.

COMMENT KEY MODE: CARB. CHOKE PLATE WAS STICKING. VEHICLE WOULD NOT PERFORM MOTURING.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 26,000 MAKE: WHITE MODEL: 3200H MODEL YR.: 69 TRANS. CODE:A6 DISPLACEMENT: 400  
 SERIAL NO.: BE001A717607 LICENSE NO.: 2869HZ OWNER'S ID.: 6362  
 TUNE UP DATA.

----- DATE OF TUNE UP 5/11/76 ODOMETER READING 27284 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 900 DWELL 35  
 IDLE CO(%) 2.0 TIMING 18BTDC  
 IDLE HC(PPM) 80 GAP(INCH) .035  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.0  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 35  
 IDLE CO(%) 1.2 TIMING 6BTDC  
 IDLE HC(PPM) 180 GAP(INCH) .025  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.4  
 COMMENT: DISTRIB HOLLEY 6427.

----- TEST RESULTS -----

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2207 TEST DATE 5/10/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/18. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 19.53 472.1 13.03 3.7 30.14 78.5 45.  
 TEST 2 17.24 458.6 10.84 3.8 30.14 79.5 46.  
 AVERAGE(18.39)( 465.35)(11.34)( 3.8)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 39.21 628.5 17.74 2.7 30.14 78.5 45.  
 TEST 2 35.74 655.3 17.26 2.7 30.14 80.5 46.  
 AVERAGE(37.48)( 641.90)(17.50)( 2.7)

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 2500/ 150 3.7/ 3.6  
 2500 R.P.M. 2200/ 100 3.8/ 3.7  
 LOW CRUISE SPEED 20 M.P.H. 2600/ 160 3.1/ 3.0  
 HIGH CRUISE SPEED 35 M.P.H. 2300/ 125 3.0/ 2.9  
 MOTORING 30000/ 2000 5.4/ 5.5  
 11 INCH VACUUM 2000 R.P.M. 3700/ 225 3.8/ 3.7  
 3 INCH VACUUM 2000 R.P.M. 2000/ 100 2.0/ 1.9

COMMENT NYQ TEST 1: CO2-IR INSTRUMENT EXHIBITED SPAN DRIFT. VEHICLE EXHAUST MANIFOLD HAD A SMALL LEAK.

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2209 TEST DATE 5/12/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/18. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 15.92 401.1 7.08 3.9 29.89 71. 43.  
 TEST 2 13.31 428.6 6.77 3.8 29.89 71.5 42.  
 AVERAGE(14.62)( 414.85)( 6.93)( 3.9)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 36.11 506.2 10.82 2.8 29.89 70.5 40.  
 TEST 2 32.34 506.6 9.87 2.9 29.89 69.5 39.  
 AVERAGE(34.23)( 506.40)(10.35)( 2.9)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 2300/ 150 1.5/ 1.5  
 2500 R.P.M. 1700/ 75 3.2/ 3.2  
 20 M.P.H. 2 00/ 125 3.2/ 3.2  
 35 M.P.H. 1800/ 100 2.7/ 2.9  
 MOTORING 27 00/ 2000 3.1/ 3.0  
 2000 R.P.M. 2600/ 150 3.1/ 3.0  
 \*\* 2000 R.P.M. 1800/ 75 1.9/ 1.8

COMMENT NYQ TEST 1: CO2-IR INSTRUMENT EXHIBITED SPAN DRIFT.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: I-H MODEL: AM150M MODEL YR.: 60 TRANS. CODE:M4 DISPLACEMENT:  
 SERIAL NO.: AM150M247690 LICENSE NO.: 7648LA OWNER'S ID.: 55467  
 TUNE UP DATA.

DATE OF TUNE UP 5/12/76 ODOMETER READING 11514 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 31 IDLE R.P.M. 550 DWELL 32  
 IDLE CO(%) 5.0 TIMING 16BTDC IDLE CO(%) 1.2 TIMING 4BTDC  
 IDLE HC(PPM) 800 GAP(INCH) .035 IDLE HC(PPM) 300 GAP(INCH) .030  
 PCV CODE 5 AF CODE 4 PCV CODE 5 AF CODE 1  
 IDLE AIR/FUEL 13.2 IDLE AIR/FUEL 13.7

COMMENT: REPLACED SPARK PLUGS

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2210 TEST DATE 5/12/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 19.33 174.00 3.76 10.3 29.89 73.0 36.0  
 TEST 2 16.23 166.80 3.14 10.8 29.89 72.5 37.0  
 AVERAGE(17.78)( 170.40)( 3.45)(10.6)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2212 TEST DATE 5/13/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 10.07 102.00 3.77 12.0 30.28 74.0 34.0  
 TEST 2 9.91 93.03 3.91 12.6 30.27 74.5 35.0  
 AVERAGE(10.00)( 97.52)( 3.84)(12.3)

CHANGE IN AVERAGE AFTER TUNE UP

-57.0% -42.6% +11.3% +16.6%

TEST:C39  
 TEST 1 30.67 267.70 3.35 7.1 29.89 73.0 36.0  
 TEST 2 26.71 271.90 3.57 7.0 29.89 72.5 34.0  
 AVERAGE(28.69)( 269.80)( 3.46)( 7.1)

TEST:C39  
 TEST 1 21.53 137.10 3.88 8.1 30.27 73.5 35.0  
 TEST 2 17.16 145.20 4.25 8.4 30.27 74.5 35.0  
 AVERAGE(19.35)( 141.15)( 4.07)( 8.3)

CHANGE IN AVERAGE AFTER TUNE UP

-32.6% -47.7% +17.5% +17.0%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 425/ 7000 6.8/ 6.8  
 2500 R.P.M. 300/ 4500 1.9/ 2.1  
 LOW CRUISE SPEED 30 M.P.H. 375/ 5000 2.7/ 2.7  
 HIGH CRUISE SPEED 45 M.P.H. 300/ 4500 1.8/ 2.0  
 MOTORING 2000/30000 3.7/ 3.6  
 11 INCH VACUUM 2500 R.P.M. 250/ 4000 1.6/ 1.8  
 4 INCH VACUUM 2500 R.P.M. 250/ 4000 6.0/ 5.9

HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 300/ 4000 0.7/ 0.7  
 150/ 2700 1.9/ 2.0  
 30 M.P.H. 250/ 3200 1.3/ 1.3  
 45 M.P.H. 125/ 2000 1.4/ 1.4  
 2000/23000 0.6/ 0.9  
 2500 R.P.M. 150/ 2700 1.3/ 1.3  
 \*\* 2500 R.P.M. 175/ 3400 5.0/ 5.1

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ142213 LICENSE NO.: 13391E OWNER'S ID.: 25D141  
TUNE UP DATA.

DATE OF TUNE UP 5/13/76 ODOMETER READING 39777 HOUR METER READING 5743.1

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	550	DWELL	33	IDLE R.P.M.	525	DWELL	31
IDLE CO(%)	10.0	TIMING	5BTDC	IDLE CO(%)	0.4	TIMING	10BTDC
IDLE HC(PPM)	400	GAP(INCH)		IDLE HC(PPM)	130	GAP(INCH)	.035
PCV CODE	2	AF CODE	3	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, PLUGS, WIRE SET, ROTOR, DISTR. CAP AND VACUUM ADVANCE CHAMBER.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2211 TEST DATE 5/12/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2213 TEST DATE 5/13/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.48 167.80 25.39 4.0 29.93 73.5 35.0  
TEST 2 13.48 167.80 25.39 4.0 29.93 74.5 35.0  
AVERAGE(14.08)( 170.40)(26.91)( 4.0)

TEST 1 10.44 51.17 33.20 4.5 30.27 75.0 43.0  
TEST 2 9.93 47.14 33.71 4.5 30.27 76.0 43.0  
(10.19)( 49.16)(33.46)( 4.5)

CHANGE IN AVERAGE AFTER TUNE UP

-27.7% -71.2% +24.3% +13.9%

TEST:C39

TEST 1 30.78 384.50 32.01 2.9 29.95 73.0 34.0  
TEST 2 27.90 398.00 32.40 2.9 29.95 73.0 34.0  
AVERAGE(29.34)( 391.25)(32.21)( 2.9)

TEST 1 18.16 104.90 39.90 3.2 30.27 71.5 44.0  
TEST 2 16.25 115.30 41.72 3.3 30.27 73.0 46.0  
(17.21)( 110.10)(40.81)( 3.3)

CHANGE IN AVERAGE AFTER TUNE UP

-41.4% -71.9% +26.7% +12.1%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 300/ 5000 7.3/ 7.5  
2500 R.P.M. 100/ 1800 1.8/ 2.0  
LOW CRUISE SPEED 20 M.P.H. 250/ 3200 1.7/ 1.8  
HIGH CRUISE SPEED 35 M.P.H. 100/ 1400 0.2/ 0.2  
MOTORING 2000/35000 4.0/ 4.0  
11 INCH VACUUM 2000 R.P.M. 125/ 2000 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 150/ 2300 0.9/ 0.9

\*\* 2000 R.P.M. 100/ 1500 0.2/ 0.2  
2000 R.P.M. 125/ 1900 0.7/ 0.7

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
 SERIAL NO.: 81131CGB23149 LICENSE NO.: 12146E OWNER'S ID.: 25G080  
 TUNE UP DATA.

----- DATE OF TUNE UP 5/20/76 ODOMETER READING 22151 HOUR METER READING 95.0  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 28  
 IDLE CO(%) 10.0 TIMING 12BTDC  
 IDLE HC(PPM) 410 GAP(INCH)  
 PCV CODE 2 AF CODE 4  
 IDLE AIR/FUEL  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 625 DWELL 31  
 IDLE CO(%) 3.6 TIMING 5BTDC  
 IDLE HC(PPM) 400 GAP(INCH) .035  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL  
 COMMENT: REPLACED POINTS, PLUGS AND ROTOR.

----- TEST RESULTS -----

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2215 TEST DATE 5/19/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 27.51 432.20 20.33 3.6 29.61 65.5 29.0  
 TEST 2 27.34 452.60 18.98 3.6 29.61 69.0 30.0  
 AVERAGE(27.43)( 442.40)(19.33)( 3.6)

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39  
 TEST 1 70.31 648.10 28.48 2.6 29.61 66.0 28.0  
 TEST 2 74.87 698.10 26.14 2.5 29.61 67.0 28.0  
 AVERAGE(72.59)( 673.10)(27.31)( 2.6)

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 350/ 6000 9.0/ 9.3  
 2500 R.P.M. 150/ 2800 3.5/ 3.7  
 LOW CRUISE SPEED 20 M.P.H. 225/ 3300 3.3/ 3.5  
 HIGH CRUISE SPEED 35 M.P.H. 100/ 1400 1.4/ 1.5  
 MOTORING 2000/38000 4.0/ 4.0  
 11 INCH VACUUM 2000 R.P.M. 225/ 3500 2.2/ 2.4  
 3 INCH VACUUM 2000 R.P.M. 150/ 2500 1.8/ 1.9

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2217 TEST DATE 5/21/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 16.24 385.70 20.05 3.8 29.83 74.5 73.0  
 TEST 2 17.58 386.10 20.07 3.8 29.83 74.5 73.0  
 AVERAGE(16.91)( 385.90)(20.06)( 3.8)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -38.3% -12.8% + 2.1% + 5.6%

TEST:C39  
 TEST 1 45.34 501.90 25.49 2.8 29.83 76.5 72.0  
 TEST 2 40.97 528.00 22.96 2.8 29.81 76.5 72.0  
 AVERAGE(43.16)( 514.95)(24.23)( 2.8)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -40.5% -23.5% -11.3% + 9.8%

-----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 375/ 4000 4.0/ 4.0  
 2500 R.P.M. 125/ 2500 3.5/ 4.0  
 20 M.P.H. 200/ 3000 3.6/ 3.6  
 35 M.P.H. 100/ 1800 1.8/ 1.8  
 2000 R.P.M. 2 00/30000 3.0/ 3.1  
 2000 R.P.M. 175/ 2800 2.2/ 2.4  
 \*\* 2000 R.P.M. 100/ 1800 1.6/ 1.7

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB23608 LICENSE NO.: 12177E OWNER'S ID.: 25G090  
TUNE UP DATA.

DATE OF TUNE UP 5/25/76 ODOMETER READING 20721 HOUR METER READING 3258.0  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 24  
IDLE CO(%) 10.0 TIMING 12BTDC  
IDLE HC(PPM) 240 GAP(INCH) .040  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 625 DWELL 31  
IDLE CO(%) 3.4 TIMING 5BTDC  
IDLE HC(PPM) 140 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, PLUGS AND DISTR. CAP,

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2218				TEST DATE 5/25/76				BMV TEST SERIES NO. 2219				TEST DATE 5/26/76			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH								13500 LB/22.0 H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ															
TEST 1	29.72	153.10	38.25	4.0	29.99	71.0	43.0	14.59	72.47	32.24	3.7	30.14	67.0	40.0	
TEST 2	30.57	141.00	37.93	4.2	29.99	72.0	44.0	11.20	70.88	32.83	3.8	30.14	67.5	41.0	
AVERAGE(30.15)	(147.05)	(38.09)	(4.1)					(12.03)	(73.13)	(33.04)	(3.8)				
CHANGE IN AVERAGE AFTER TUNE UP								-57.1% -50.2% -13.3% -8.5%							
TEST:C39															
TEST 1	58.93	351.80	31.74	3.3	29.99	70.5	42.0	25.71	148.80	33.47	2.9	30.14	67.0	40.0	
TEST 2	63.92	368.10	35.52	3.2	29.99	71.5	42.0	23.20	138.40	34.05	2.9	30.14	68.0	40.0	
AVERAGE(61.43)	(359.95)	(33.63)	(3.3)					(24.46)	(143.60)	(33.76)	(2.9)				
CHANGE IN AVERAGE AFTER TUNE UP								-60.2% -60.1% +0.4% -10.8%							
TEST:KEY MODE															
ENGINE SPEED															
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)								(READING FROM ANALYZER 5/READING FROM ANALYZER 2)							
IDLE								IDLE							
2500 R.P.M.								2500 R.P.M.							
LOW CRUISE SPEED 20 M.P.H.								20 M.P.H.							
HIGH CRUISE SPEED 35 M.P.H.								35 M.P.H.							
MOTORING								MOTORING							
11 INCH VACUUM 2000 R.P.M.								2000 R.P.M.							
3 INCH VACUUM 2000 R.P.M.								2000 R.P.M.							

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 26,000 MAKE: WHITE MODEL: 3200H MODEL YR.: 69 TRANS. CODE:A6 DISPLACEMENT: 400  
SERIAL NO.: BE001A717581 LICENSE NO.: 8828JA OWNER'S ID.: 6349  
TUNE UP DATA.

----- DATE OF TUNE UP 5/27/76 ODOMETER READING 22612 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 960 DWELL 29 IDLE R.P.M. 600 DWELL 31  
IDLE CO(%) 9.1 TIMING 20BTDC IDLE CO(%) 1.5 TIMING 6BTDC  
IDLE HC(PPM) 290 GAP(INCH) .035 IDLE HC(PPM) 250 GAP(INCH) .025  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: ID-BE1001A-717581. IDLE SPEED STOP NOT CONSISTANT. WORN SHAFT.

TEST RESULTS

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\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2220 TEST DATE 5/26/76 BMV TEST SERIES NO. 2222 TEST DATE 5/27/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/18. H.P. AT 30 MPH DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/18. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB) (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 10.13 688.0 4.23 3.6 30.14 73. 42.  
TEST 2 14.81 674.4 4.53 3.7 30.14 72.5 43.  
AVERAGE(15.55)( 681.45)( 4.38)( 3.7)  
CHANGE IN AVERAGE AFTER TUNE UP -54.4% -20.1% +12.0% +17.8%  
TEST:C39  
TEST 1 26.77 891.5 7.62 2.6 30.14 71. 41.  
TEST 2 27.2 916.9 8.17 2.5 30.14 71. 41.  
AVERAGE(26.99)( 904.20)( 7.90)( 2.6)  
CHANGE IN AVERAGE AFTER TUNE UP + 4.7% -81.4% +18.4% +31.4%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/ 4000 6.9/ 6.8  
2500 R.P.M. 150/ 3000 6.4/ 6.3  
LOW CRUISE SPEED 20 M.P.H. 200/ 3300 5.1/ 5.1  
HIGH CRUISE SPEED 35 M.P.H. 175/ 3000 6.0/ 5.9  
MOTORING 2000/30000 6.0/ 5.9  
11 INCH VACUUM 2000 R.P.M. 175/ 3200 6.1/ 6.0  
3 INCH VACUUM 2000 R.P.M. 150/ 2900 5.8/ 5.8

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
150/ 1900 .1/ .1  
25/ 500 .1/ .1  
20 M.P.H. 800/ 800 .1/ .1  
35 M.P.H. 50/ 800 .1/ .1  
600/10000 .2/ .2  
2000 R.P.M. 25/ 500 .1/ .1  
\*\* 2000 R.P.M. 20/ 400 .1/ .1

COMMENT C39 TEST 2: ENGINE STALLED 3 TIMES.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: GMC MODEL: 7500 MODEL YR.: 68 TRANS. CODE:A6 DISPLACEMENT: 351  
 SERIAL NO.: TM70VD025176 LICENSE NO.: 8444LR OWNER'S ID.: 6303

TUNE UP DATA.

----- DATE OF TUNE UP 6/ 9/76 ODOMETER READING 43105 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 1400 DWELL 27 IDLE R.P.M. 600 DWELL 32  
 IDLE CO(%) 9.6 TIMING 39BTDC IDLE CO(%) 3.2 TIMING 10BTDC  
 IDLE HC(PPM) 800 GAP(INCH) .038 IDLE HC(PPM) 230 GAP(INCH) .035  
 PCV CODE AF CODE 3 PCV CODE AF CODE 3  
 IDLE AIR/FUEL IDLE AIR/FUEL  
 COMMENT: BEFORE TUNE-UP AT 600RPM.CO-10%.HC-1800PPM. CHOKE CABLE IS FOULTY AND CANNOT BE OPERATED. REPLACED PLUGS, POINTS.

TEST RESULTS

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2228 TEST DATE 6/ 8/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 16.16 602.2 23.22 3.4 30.03 85.5 77.  
 TEST 2 14.11 582.7 22.46 3.4 30.03 87. 78.  
 AVERAGE(15.14)(592.45)(22.34)(3.4)  
 CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39  
 TEST 1 31.84 1040. 20.93 2.3 30.03 86. 77.  
 TEST 2 30.35 1080. 21.15 2.2 30.03 88. 79.  
 AVERAGE(31.10)(1060.00)(21.04)(2.3)  
 CHANGE IN AVERAGE AFTER TUNE UP

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	300/ 4300	8.8/ 8.2
2500 R.P.M.	700/ 8000	8.2/ 7.7
LOW CRUISE SPEED 20 M.P.H.	225/ 3500	8.5/ 7.9
HIGH CRUISE SPEED 35 M.P.H.	125/ 2400	4.2/ 4.0
MOTORING	500/10000	9.0/ 9.0
11 INCH VACUUM 2000 R.P.M.	175/ 3000	6.5/ 6.3
3 INCH VACUUM 2000 R.P.M.	250/ 3800	6.0/ 5.0

COMMENT KEY MODE: ERRATIC CARB.AT 3 HG VACUUM.

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2234 TEST DATE 6/10/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 8.72 53.43 37.88 4.9 30.05 87.5 85.  
 TEST 2 8.08 50.79 39.34 5.0 30.05 88. 84.  
 AVERAGE(8.40)(52.11)(38.61)(5.0)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -44.5% -91.2% +69.0% +45.6%

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	250/ 3200	2.3/ 2.0
2500 R.P.M.	1251/ 1700	1.3 / 1.3
20 M.P.H.	150/ 2100	.8/ .7
35 M.P.H.	125/ 1600	.1/ .1
MOTORING	1200/11000	1.5/ 1.6
2000 R.P.M.	100/ 1500	.2/ .2
5 IN. 2000 R.P.M.	75/ 900	.1/ .1

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: P500 MODEL YR.: 74 TRANS. CODE:MS DISPLACEMENT: 300  
SERIAL NO.: P50BVT30437 LICENSE NO.: 6199HB OWNER'S ID.: 43424  
TUNE UP DATA.

DATE OF TUNE UP 6/14/76 ODOMETER READING 9259 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 38 IDLE R.P.M. 655 DWELL 33  
IDLE CO(%) 10.0 TIMING 8BTDC IDLE CO(%) 2.3 TIMING 10BTDC  
IDLE HC(PPM) 440 GAP(INCH) PCV CODE 1 AF CODE 1  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, FUEL FILTER AND CRANKCASE BREATHER.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2235 TEST DATE 6/10/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 12.37 125.40 12.23 7.5 30.05 92.5 88.0  
TEST 2 13.02 132.20 12.60 7.6 30.05 92.5 88.0  
AVERAGE(12.70)(128.80)(12.42)(7.6)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 23.26 208.50 13.57 5.3 30.05 92.5 88.0  
TEST 2 25.32 231.00 13.89 5.2 30.05 92.5 88.0  
AVERAGE(24.29)(219.75)(13.73)(5.3)  
CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2242 TEST DATE 6/15/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 8.52 40.32 14.20 8.5 30.15 83.0 106.0  
TEST 2 9.63 39.57 14.36 8.3 30.15 83.5 105.0  
AVERAGE(9.08)(39.95)(14.28)(8.4)  
CHANGE IN AVERAGE AFTER TUNE UP  
-22.5% -69.2% +15.0% +11.3%  
TEST:C39  
TEST 1 18.64 73.03 17.31 5.6 30.15 83.5 105.0  
TEST 2 19.14 62.40 21.01 5.4 30.13 84.5 107.0  
AVERAGE(18.89)(67.72)(19.16)(5.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
-22.2% -69.2% +39.5% + 4.8%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/ 4800 6.8/ 6.5  
2500 R.P.M. 50/ 800 0.1/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 125/ 1900 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 75/ 1400 0.1/ 0.1  
MOTORING 2000/30000 4.4/ 4.5  
11 INCH VACUUM 2000 R.P.M. 125/ 2100 0.1/ 0.1  
5 INCH VACUUM 2000 R.P.M. 75/ 1000 0.2/ 0.2

HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 300/ 3700 1.8/ 1.8  
25 M.P.H. 50/ 900 0.1/ 0.1  
40 M.P.H. 150/ 2100 0.1/ 0.1  
75/ 1400 0.1/ 0.1  
2000 R.P.M. 200/22000 1.5/ 1.6  
3 IN. 2000 R.P.M. 75/ 1300 0.1/ 0.1

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
 SERIAL NO.: HM81BZ161644 LICENSE NO.: 13737E OWNER'S ID.: 26B012  
 TUNE UP DATA.

DATE OF TUNE UP 6/17/76 ODOMETER READING 14401 HOUR METER READING 0.3  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 780 DWELL 26 IDLE R.P.M. 560 DWELL 33  
 IDLE CO(%) 0.2 TIMING 16BTDC IDLE CO(%) 0.3 TIMING 10BTDC  
 IDLE HC(PPM) 40 GAP(INCH) IDLE HC(PPM) 40 GAP(INCH) .035  
 PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL IDLE AIR/FUEL  
 COMMENT: REPLACED CONDENSER, POINTS, VACUUM ADVANCE AND RETARD CHAMBERS AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2243 TEST DATE 6/16/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/19.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 10.03 170.00 23.36 4.4 30.03 90.5 103.0  
 TEST 2 10.04 212.40 21.34 4.5 30.03 90.5 103.0  
 AVERAGE(10.55)( 194.50)(23.35)( 4.5)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 + 6.9% + 1.5% +11.0% + 1.1%  
 TEST:C39  
 TEST 1 14.38 216.50 35.63 3.2 30.03 90.5 103.0  
 TEST 2 12.98 270.60 27.17 3.2 30.03 90.0 104.0  
 AVERAGE(13.68)( 243.55)(31.40)( 3.2)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 +31.5% + 8.3% + 8.5% - 1.6%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 150/ 3000 0.1/ 0.1  
 2500 R.P.M. 100/ 2800 0.7/ 0.7  
 LOW CRUISE SPEED 20 M.P.H. 225/ 3800 0.2/ 0.2  
 HIGH CRUISE SPEED 35 M.P.H. 300/ 4500 0.6/ 0.6  
 MOTORING 1200/ 9000 0.3/ 0.3  
 11 INCH VACUUM 2000 R.P.M. 125/ 2500 0.7/ 0.8  
 3 INCH VACUUM 2000 R.P.M. 125/ 2500 4.0/ 4.1  
 HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 150/ 3700 0.7/ 0.7  
 75/ 3200 1.4/ 1.4  
 20 M.P.H. 175/ 4000 0.3/ 0.3  
 35 M.P.H. 175/ 4000 0.9/ 0.9  
 1000/11000 0.5/ 0.5  
 2000 R.P.M. 125/ 2700 0.9/ 0.9  
 \*\* 2000 R.P.M. 125/ 2700 4.0/ 3.9

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: FORD MODEL: P350 MODEL YR.: 59 TRANS. CODE:M4 DISPLACEMENT: 240  
SERIAL NO.: P35J9H20928 LICENSE NO.: 8070LA OWNER'S ID.: 47718  
TUNE UP DATA.

----- DATE OF TUNE UP 6/21/76 ODOMETER READING 32984 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 660 DWELL 39 IDLE R.P.M. 600 DWELL 39  
IDLE CO(%) 9.6 TIMING 17BTDC IDLE CO(%) 0.2 TIMING 4BTDC  
IDLE HC(PPM) 1700 GAP(INCH) .037 IDLE HC(PPM) 250 GAP(INCH) .035  
PCV CODE 5 AF CODE 0 PCV CODE 5 AF CODE 0  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, ROTOR, COIL AND PLUGS.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2246 TEST DATE 6/17/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 21.53 166.50 1.22 12.0 30.11 85.5 102.0  
TEST 2 21.49 177.60 1.23 11.2 30.11 86.0 104.0  
AVERAGE(21.51)( 172.03)( 1.23)(11.6)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 40.38 246.30 2.31 7.3 30.10 85.0 97.0  
TEST 2 39.69 255.30 2.81 7.1 30.10 86.0 98.0  
AVERAGE(40.04)( 250.80)( 2.56)( 7.2)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 2000/20000 6.8/ 6.7  
2500 R.P.M. 375/ 5000 3.2/ 3.2  
LOW CRUISE SPEED 30 M.P.H. 400/ 5500 2.8/ 2.8  
HIGH CRUISE SPEED 45 M.P.H. 250/ 4000 2.8/ 2.8  
MOTORING 2000/46000 5.0/ 5.0  
11 INCH VACUUM 2000 R.P.M. 500/ 7400 3.1/ 3.1  
3 INCH VACUUM 2000 R.P.M. 600/10000 9.1/ 8.8

COMMENT NYQ TEST 1: ENGINE STALLED TWICE.  
COMMENT C39 TEST 1: ENGINE STALLED ONCE.  
COMMENT KEY MODE: ENGINE WAS W.O.T. AT 3 IN. VAC.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2253 TEST DATE 6/23/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 13.79 166.80 1.00 10.1 30.27 87.0 109.0  
TEST 2 12.40 174.50 1.00 10.2 30.27 87.0 109.0  
AVERAGE(13.10)( 170.65)( 1.00)(10.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 21.23 222.90 1.59 6.5 30.27 87.0 109.0  
TEST 2 18.79 234.40 1.58 6.4 30.27 87.5 108.0  
AVERAGE(20.01)( 228.65)( 1.59)( 6.5)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 2000/20000 0.1/ 0.1  
2500 R.P.M. 150/ 2200 3.0/ 3.1  
LOW CRUISE SPEED 30 M.P.H. 100/ 2000 2.9/ 2.9  
HIGH CRUISE SPEED 45 M.P.H. 175/ 3500 2.0/ 2.1  
MOTORING 125/ 3000 1.0/ 1.0  
2000 R.P.M. 200/20000 2.8/ 2.8  
2000 R.P.M. 225/ 4400 8.6/ 8.4  
\*\* 2000 R.P.M. 300/ 5000

COMMENT C39 TEST 1: ENGINE STALLED ONCE.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV510520 LICENSE NO.: 25930A OWNER'S ID.: 25E156  
TUNE UP DATA.

----- DATE OF TUNE UP 6/22/76 ODOMETER READING 18166 HOUR METER READING 7070.2  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 780 DWELL 24  
IDLE CO(%) 0.2 TIMING 18BTDC  
IDLE HC(PPM) 80 GAP(INCH)  
PCV CODE 4 AF CODE 2  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 530 DWELL 32  
IDLE CO(%) 0.1 TIMING 8810C  
IDLE HC(PPM) 25 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 0  
COMMENT: REPLACED POINTS, CONDENSER, COIL, WIRE SET, PLUGS, ROTOR AND CAP. CARB AND INTAKE MANIFOLD BOLTS WERE TIGHTENED TO CORRECT VACUUM LEAKS. DISTR. VAC. RETARD WAS RECONNECTED.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2248 TEST DATE 6/21/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 7.14 53.58 51.34 4.0 30.15 84.5 107.0  
TEST 2 6.55 63.07 53.68 4.0 30.15 85.0 109.0  
AVERAGE( 6.85)( 58.33)(52.51)( 4.0)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39  
TEST 1 14.24 96.46 56.90 3.1 30.15 85.5 108.0  
TEST 2 11.72 122.90 54.45 3.1 30.15 85.5 108.0  
AVERAGE(12.98)( 109.68)(55.68)( 3.1)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/ 1100 0.1/ 0.1  
2500 R.P.M. 75/ 1100 0.9/ 0.9  
LOW CRUISE SPEED 20 M.P.H. 100/ 1400 0.2/ 0.2  
HIGH CRUISE SPEED 35 M.P.H. 75/ 1100 0.1/ 0.1  
MOTORING 1700/12000 0.4/ 0.4  
11 INCH VACUUM 2000 R.P.M. 100/ 1500 0.2/ 0.2  
6 INCH VACUUM 2000 R.P.M. 25/ 800 0.1/ 0.1  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2255 TEST DATE 6/25/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 8.42 115.50 35.91 3.4 29.85 86.5 107.0  
TEST 2 7.92 129.00 36.36 3.5 29.95 87.5 108.0  
AVERAGE( 8.00)( 120.25)(36.14)( 3.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
+17.7% + 6.2% -31.2% -13.8%  
TEST:C39  
TEST 1 14.22 238.90 41.37 2.5 29.95 86.5 104.0  
TEST 2 13.53 275.70 37.24 2.5 29.93 87.0 103.0  
AVERAGE(13.88)( 257.30)(39.31)( 2.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
+ 6.9% +34.6% -29.4% -19.4%  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 25/ 500 0.1/ 0.1  
20 M.P.H. 50/ 1000 0.9/ 0.8  
35 M.P.H. 50/ 900 0.2/ 0.2  
25 M.P.H. 25/ 500 0.1/ 0.1  
700/ 5000 0.2/ 0.2  
2000 R.P.M. 40/ 800 0.3/ 0.3  
4 IN. 2000 R.P.M. 75/ 1300 2.3/ 2.2

COMMENT KEY MODE: TRANSMISSION WOULD NOT ALLOW ENGINE LOAD LESS THAN 6 IN.HG. IT DOWNSHIFTED.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV512404 LICENSE NO.: 25929A OWNER'S ID.: 25E155  
TUNE UP DATA.

DATE OF TUNE UP 6/29/76 ODOMETER READING 27773 HOUR METER READING 7465.7

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 835 DWELL 24  
IDLE CO(%) 4.2 TIMING 27BTDC  
IDLE HC(PPM) 230 GAP(INCH)  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 530 DWELL 31  
IDLE CO(%) 0.1 TIMING 8BTDC  
IDLE HC(PPM) 45 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 1

COMMENT: REPLACED POINTS, ROTOR, CAP, WIRE SET, PLUGS, VAC. ADVANCE-RETARD CHAMBER AND HOSE FROM RETARD CHAMBER TO CARB.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2256 TEST DATE 6/28/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2258 TEST DATE 6/30/76  
13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 10.10 102.00 54.59 3.6 30.15 93.0 84.0  
TEST 2 10.50 142.80 49.23 3.8 30.15 93.0 84.0  
AVERAGE(10.80)( 137.95)(51.91)( 3.7)

TEST 1 8.83 69.37 37.78 3.4 29.92 84.0 114.0  
TEST 2 8.55 74.47 40.50 3.5 29.92 84.5 116.0  
( 8.69)( 71.92)(39.14)( 3.5)

CHANGE IN AVERAGE AFTER TUNE UP

-10.5% -47.8% -24.6% - 6.8%

TEST:C39

TEST 1 29.28 294.30 67.79 2.6 30.15 92.5 85.0  
TEST 2 29.24 360.20 64.01 2.6 30.15 92.5 85.0  
AVERAGE(29.26)( 327.25)(65.90)( 2.6)

TEST 1 18.12 168.20 48.13 2.5 29.92 84.0 117.0  
TEST 2 16.29 178.20 50.47 2.5 29.92 85.0 118.0  
(17.21)( 173.20)(49.30)( 2.5)

CHANGE IN AVERAGE AFTER TUNE UP

-41.2% -47.1% -25.2% - 3.8%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 200/ 2900 5.2/ 5.0  
2500 R.P.M. 100/ 1500 3.2/ 3.2  
LOW CRUISE SPEED 20 M.P.H. 100/ 1600 1.4/ 1.4  
HIGH CRUISE SPEED 35 M.P.H. 75/ 800 0.2/ 0.2  
MOTORING 300/ 4500 5.5/ 5.4  
11 INCH VACUUM 2000 R.P.M. 75/ 1000 0.3/ 0.3  
\*\* INCH VACUUM \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*\*/\*\*\*\*

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

75/ 1100 0.1/ 0.1  
50/ 1000 2.3/ 2.3  
20 M.P.H. 75/ 1200 1.0/ 1.1  
35 M.P.H. 50/ 700 0.1/ 0.1  
600/ 8000 0.1/ 0.1  
2000 R.P.M. 50/ 800 0.2/ 0.2  
\*\* IN. \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*\*/\*\*\*\*

COMMENT KEY MODE: TRANSMISSION WOULD NOT ALLOW ENGINE LOAD LESS THAN 10 IN.HG, IT DOWNSHIFTED.

COMMENT KEY MODE: TRANSMISSION PROBLEMS.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVP50124 LICENSE NO.: 7112LA OWNER'S ID.: 16944  
TUNE UP DATA.

----- DATE OF TUNE UP 7/ 8/76 ODOMETER READING 20767 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 560 DWELL 33 IDLE R.P.M. 600 DWELL 35  
IDLE CO(%) 5.5 TIMING 14BTDC IDLE CO(%) 0.8 TIMING 6BTDC  
IDLE HC(PPM) 280 GAP(INCH) .040 IDLE HC(PPM) 140 GAP(INCH) .034  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.7 IDLE AIR/FUEL 14.0

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP AND PLUG WIRE SET,

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2260 TEST DATE 7/ 7/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 19.88 162.10 17.07 6.6 30.14 81.5 109.0  
TEST 2 16.89 191.40 17.95 6.3 30.14 82.0 111.0  
AVERAGE(18.39)( 170.75)(17.51)( 6.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
TEST:C39H  
TEST 1 29.88 223.00 25.54 4.5 30.14 82.0 111.0  
TEST 2 29.29 270.60 24.88 4.4 30.14 82.0 111.0  
AVERAGE(29.59)( 246.80)(25.21)( 4.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 325/ 6000 6.1/ 5.8  
2500 R.P.M. 100/ 1900 0.9/ 0.8  
LOW CRUISE SPEED 25 M.P.H. 175/ 2600 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 75/ 900 0.1/ 0.1  
MOTORING 2000/32000 2.5/ 2.7  
11 INCH VACUUM 2000 R.P.M. 175/ 2800 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 100/ 2000 0.1/ 0.1  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2263 TEST DATE 7/ 9/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
13.92 101.60 19.29 7.3 30.16 86.0 88.0  
(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%  
-----  
25.58 132.00 14.61 4.5 30.15 85.5 88.0  
18.77 119.90 14.58 5.0 30.16 86.5 87.0  
(22.18)( 125.95)(14.60)( 4.8)  
-25.0% -49.0% -42.1% + 6.7%

\*\*

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV512757 LICENSE NO.: 25931A OWNER'S ID.: 25E157  
TUNE UP DATA.

DATE OF TUNE UP 7/13/76 ODOMETER READING 19960 HOUR METER READING 6820.3  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 1000 DWELL 31  
IDLE CO(%) 4.4 TIMING 12BTDC  
IDLE HC(PPM) 150 GAP(INCH) .060  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 510 DWELL 32  
IDLE CO(%) 0.2 TIMING 5BTDC  
IDLE HC(PPM) 85 GAP(INCH) .040  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 1  
COMMENT: REPLACED POINTS, CONDENSER, PLUGS, CAP, WIRE SET AND ROTOR. ORIGINAL CARB COULD NOT BE ADJUSTED FOR IDLE SPEED AND A-F MIXTURE SO IT WAS REPLACED WITH REBUILT ONE OF THE SAME TYPE. VACUUM RETARD HOSE WAS RECONNECTED. ENGINE CARRIED LABEL CALLING - FOR 500 RMP IDLE, 5 DEG. BTDC TIMING AND .040 IN. PLUG GAP.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****						
BMV TEST SERIES NO. 2264				TEST DATE 7/13/76				BMV TEST SERIES NO. 2267				TEST DATE 7/15/76		
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH								13500 LB/21.0 H.P. AT 30 MPH						
HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)		HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)
TEST:NYQ														
TEST 1	9.26	152.10	30.39	3.7	29.63	77.0	69.0	12.00	77.71	32.74	4.0	29.90	84.0	72.0
TEST 2	8.97	158.90	31.69	3.6	29.63	78.0	69.0	11.12	81.19	31.71	4.1	29.90	84.0	72.0
AVERAGE	(9.12)	(155.50)	(31.04)	(3.7)				(12.01)	(79.45)	(32.23)	(4.1)			
CHANGE IN AVERAGE AFTER TUNE UP								+31.8% -48.9% + 3.8% +11.0%						
TEST:C39H														
TEST 1	27.49	302.90	37.24	2.6	29.62	77.5	68.0	25.38	145.80	36.27	3.1	29.90	84.5	71.0
TEST 2	26.35	331.70	36.71	2.6	29.62	78.0	67.0	27.20	193.30	38.15	2.9	29.90	86.5	70.0
AVERAGE	(26.92)	(317.30)	(36.98)	(2.6)				(26.29)	(169.55)	(37.21)	(3.0)			
CHANGE IN AVERAGE AFTER TUNE UP								- 2.3% -46.6% + 0.6% +15.4%						
TEST:KEY MODE														
ENGINE SPEED				HC(PPM)		CO(%)		HC(PPM)				CO(%)		
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)								(READING FROM ANALYZER 5/READING FROM ANALYZER 2)						
IDLE				175/*****		5.0/ 4.9		100/ 1600				0.1/ 0.1		
2500 R.P.M.				75/*****		1.4/ 1.5		75/ 1000				2.6/ 2.6		
LOW CRUISE SPEED 20 M.P.H.				125/*****		1.0/ 0.9		20 M.P.H. 125/ 1900				1.0/ 1.0		
HIGH CRUISE SPEED 35 M.P.H.				100/*****		0.1/ 0.1		35 M.P.H. 75/ 900				0.2/ 0.2		
MOTORING				1400/*****		4.8/ 4.8		1000/12000				0.3/ 0.3		
11 INCH VACUUM 2000 R.P.M.				50/*****		0.3/ 0.3		2000 R.P.M. 75/ 1000				0.3/ 0.2		
3 INCH VACUUM 2000 R.P.M.				100/*****		1.1/ 1.0		2000 R.P.M. 50/ 800				0.2/ 0.2		

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVP50122 LICENSE NO.: 1027JA OWNER'S ID.: 16952  
TUNE UP DATA.

DATE OF TUNE UP 7/28/76 ODOMETER READING 18265 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 900 DWELL 30  
IDLE CO(%) 3.8 TIMING 14BTDC  
IDLE HC(PPM) 70 GAP(INCH) .040  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL 12.8

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 35  
IDLE CO(%) 1.8 TIMING 6BTDC  
IDLE HC(PPM) 100 GAP(INCH) .034  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 13.8

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, PCV VALVE, PLUGS. CAP, PLUG WIRE SET AND VACUUM ADVANCE UNIT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2268 TEST DATE 7/19/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 7.08 101.25 10.41 9.7 30.25 87.5 69.0  
TEST 2 6.55 102.40 10.57 9.9 30.25 88.0 68.0  
AVERAGE( 7.08)( 101.25)(10.49)( 9.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 12.37 152.10 11.41 6.6 30.25 88.0 68.0  
TEST 2 12.23 171.50 10.96 6.5 30.25 90.0 68.0  
AVERAGE(12.30)( 161.80)(11.19)( 6.6)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 100/ 1900 3.5/ 3.6  
2500 R.P.M. 25/ 500 0.4/ 0.4  
LOW CRUISE SPEED 25 M.P.H. 50/ 900 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 25/ 400 0.1/ 0.1  
MOTORING 1000/15000 2.6/ 2.7  
11 INCH VACUUM 2000 R.P.M. 50/ 800 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 25/ 600 0.2/ 0.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2274 TEST DATE 7/28/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 5.16 34.61 11.81 11.3 29.98 85.5 75.0  
TEST 2 5.85 34.67 12.00 11.6 29.98 87.0 78.0  
AVERAGE( 6.01)( 34.64)(11.91)(11.5)  
-15.1% -65.8% +12.5% +16.8%

11.97 81.70 22.83 5.3 29.99 88.0 69.0

(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 100/ 1300 1.7/ 1.7  
200/ 2700 1.2/ 1.2  
25 M.P.H. 50/ 700 0.2/ 0.2  
40 M.P.H. 75/ 900 0.1/ 0.1  
1600/15000 1.2/ 1.2  
2000 R.P.M. 50/ 700 0.2/ 0.2  
\*\* 2000 R.P.M. 25/ 500 0.1/ 0.1

GENERAL COMMENT: AFTER TUNE UP SCOTT 1 CO-IR ANALYZER WAS USED.  
COMMENT C39 TEST 2: TEST WAS INVALID DUE TO DRIVER AID OR DYNO MALFUNCTION,

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BV516691 LICENSE NO.: 25933A OWNER'S ID.: 25E159  
TUNE UP DATA.

DATE OF TUNE UP 7/20/76 ODOMETER READING 25413 HOUR METER READING 6995.3

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	500	DWELL	27	IDLE R.P.M.	535	DWELL	33
IDLE CO(%)	6.2	TIMING	6BTDC	IDLE CO(%)	1.5	TIMING	5BTDC
IDLE HC(PPM)	150	GAP(INCH)	.040	IDLE HC(PPM)	100	GAP(INCH)	.035
PCV CODE	2	AF CODE	4	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL				IDLE AIR/FUEL	1		

COMMENT: REPLACED POINTS, PLUGS, ROTOR, CAP, COIL, AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2269 TEST DATE 7/19/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2270 TEST DATE 7/21/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 11.68 167.90 37.85 3.4 30.25 91.5 67.0  
TEST 2 10.25 186.80 32.88 3.7 30.25 93.5 67.0  
AVERAGE(10.97)( 177.35)(25.37)( 3.6)

TEST 1 10.91 135.80 32.67 3.7 30.15 83.5 94.0  
TEST 2 10.12 142.70 31.33 3.8 30.15 85.0 94.0  
(10.52)( 133.25)(32.00)( 3.8)

CHANGE IN AVERAGE AFTER TUNE UP

- 4.1% -21.5% - 9.5% + 5.6%

TEST:C39H

TEST 1 17.98 335.10 42.24 2.6 30.25 94.5 68.0  
TEST 2 18.24 369.60 34.95 2.7 30.25 93.5 65.0  
AVERAGE(18.11)( 352.35)(38.60)( 2.7)

TEST 1 20.43 260.10 38.11 2.6 30.15 85.5 96.0  
TEST 2 18.30 280.50 36.30 2.7 30.15 86.0 96.0  
(19.37)( 270.30)(37.21)( 2.7)

CHANGE IN AVERAGE AFTER TUNE UP

+ 6.9% -23.3% - 3.6% + 0.0%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	125/ 1800	3.7/ 3.7
2500 R.P.M.	100/ 1500	4.6/ 4.4
LOW CRUISE SPEED 20 M.P.H.	150/ 2000	2.9/ 2.6
HIGH CRUISE SPEED 35 M.P.H.	75/ 600	0.3/ 0.3
MOTORING	1300/15000	2.2/ 2.1
11 INCH VACUUM 2000 R.P.M.	100/ 1500	0.8/ 0.7
** INCH VACUUM **** R.P.M.*****/*****	*****/****	*****/****

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	75/ 1000	2.5/ 2.6
2500 R.P.M.	100/ 1500	3.7/ 3.6
20 M.P.H.	125/ 2000	2.2/ 2.2
35 M.P.H.	25/ 700	0.2/ 0.2
MOTORING	900/12000	2.1/ 2.0
2000 R.P.M.	75/ 1000	0.9/ 1.0
** IN. **** R.P.M.*****/*****	*****/****	*****/****

COMMENT KEY MODE: TRANSMISSION WOULD NOT ALLOW STEADY ENGINE L-OAD DUE TO ERRATIC UP AND DOWNSHIFTING.

COMMENT KEY MODE: TRANSMISSION SHIFT PROBLEMS.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV507944 LICENSE NO.: 25934A OWNER'S ID.: 25E160  
TUNE UP DATA.

DATE OF TUNE UP 7/26/76 ODOMETER READING 26415 HOUR METER READING 7008.6

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 630 DWELL 33  
IDLE CO(%) 8.5 TIMING 0BTDC  
IDLE HC(PPM) 50 GAP(INCH) .060  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 32  
IDLE CO(%) 0.7 TIMING 0BTDC  
IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 1

COMMENT: REPLACED POINTS, PLUGS, ROTOR, CAP, WIRE SET AND VACUUM HOSES.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2272 TEST DATE 7/26/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2276 TEST DATE 7/30/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 24.18 526.50 9.84 3.4 30.15 79.5 50.0  
TEST 2 19.68 486.00 8.64 3.7 30.15 81.5 50.0  
AVERAGE(21.93)( 506.25)( 9.24)( 3.6)

TEST 1 15.19 304.40 20.91 3.9 29.90 83.5 112.0  
TEST 2 14.90 304.30 17.74 4.1 29.90 84.0 111.0  
AVERAGE(15.06)( 304.25)(19.33)( 4.0)

CHANGE IN AVERAGE AFTER TUNE UP

31.3% -39.9% + 9.1% +12.7%

TEST:C39H

TEST 1 35.94 746.50 12.14 2.6 30.15 81.0 49.0  
TEST 2 35.97 747.20 12.58 2.5 30.15 83.0 50.0  
AVERAGE(35.96)( 746.85)(12.36)( 2.6)

TEST 1 20.30 406.70 21.56 3.0 29.90 84.0 111.0  
TEST 2 18.64 425.90 17.21 3.1 29.90 85.0 112.0  
AVERAGE(19.47)( 416.30)(19.39)( 3.1)

CHANGE IN AVERAGE AFTER TUNE UP

-45.8% -44.3% +56.8% +19.6%

TEST:KEY MODE

ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 200/ 3500 7.8/ 7.6  
2500 R.P.M. 150/ 2800 6.2/ 6.0  
LOW CRUISE SPEED 20 M.P.H. 200/ 3700 5.0/ 4.9  
HIGH CRUISE SPEED 35 M.P.H. 175/ 3000 3.9/ 3.8  
MOTORING 2000/32000 3.0/ 3.2  
11 INCH VACUUM 2000 R.P.M. 175/ 3500 4.8/ 4.7  
3 INCH VACUUM 2000 R.P.M. 150/ 2800 2.7/ 2.9

ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/ 1800 1.3/ 1.3  
2000 R.P.M. 200/ 4000 6.0/ 5.9  
20 M.P.H. 225/ 4000 4.8/ 4.7  
35 M.P.H. 175/ 3500 4.6/ 4.5  
2000 R.P.M. 200/24000 5.0/ 4.9  
2000 R.P.M. 175/ 3500 4.6/ 4.5  
\*\* 2000 R.P.M. 125/ 2500 1.8/ 1.8

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 14,000 MAKE: GMC MODEL: 3500 MODEL YR.: 69 TRANS. CODE:M4 DISPLACEMENT: 292  
SERIAL NO.: PS30PTA17273 LICENSE NO.: 7902HZ OWNER'S ID.: 5355  
TUNE UP DATA.

DATE OF TUNE UP 7/29/76				ODDOMETER READING 22409				HOUR METER READING *****			
***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****			
IDLE R.P.M.	790	DWELL	37					IDLE R.P.M.	700	DWELL	31
IDLE CO(%)	2.6	TIMING	55BTDC					IDLE CO(%)	1.8	TIMING	ATDC
IDLE HC(PPM)	270	GAP(INCH)	.035					IDLE HC(PPM)	115	GAP(INCH)	.035
PCV CODE	2	AF CODE	2					PCV CODE	2	AF CODE	2
IDLE AIR/FUEL								IDLE AIR/FUEL			

COMMENT: REBUILT ENGINE.TIMING MARKS USELESS. REPLACED DISTRIBUTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2273 TEST DATE 7/26/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 9500 LB/19. H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2275 TEST DATE 7/29/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 9500 LB/19. H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 14.15 139.1 21.68 6.6 30.15 87. 50.  
TEST 2 14.3 139.1 23.69 6.7 30.15 86.5 51.  
AVERAGE(14.73)( 149.85)(22.69)( 6.7)

TEST 1 9.10 108.30 16.04 7.7 30.01 82. 114.  
TEST 2 8.59 101.6 15.22 8.3 30.01 83. 115.  
( 9.10)( 108.30)(15.63)( 8.0)  
-29.2% -27.7% -31.1% +20.3%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 58.99 226.7 31.17 4.1 30.15 86. 49.  
TEST 2 50.63 234.1 30.61 4.2 30.15 86. 49.  
AVERAGE(54.81)( 230.40)(30.89)( 4.2)

TEST 1 23.74 215.2 13.7 5.6 30.01 82.5 119.  
TEST 2 21.26 221.9 14.84 5.5 30.01 83. 118.  
(22.50)( 218.55)(14.27)( 5.6)  
-58.9% - 5.1% -53.8% +33.7%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

	HC(PPM)	CO(%)
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)		
IDLE	6500/ 500	5.2/ 5.4
2500 R.P.M.	14000/ 2000	.2/ .2
LOW CRUISE SPEED 25 M.P.H.	2100/ 175	.1/ .1
HIGH CRUISE SPEED 40 M.P.H.	1500/ 125	.1/ .1
MOTURING	22000/ 2000	3.5/ 3.5
11 INCH VACUUM 2000 R.P.M.	2300/ 175	.1/ .1
3 INCH VACUUM 2000 R.P.M.	2100/ 125	.6/ .6

	HC(PPM)	CO(%)
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)		
	3800/ 250	5.2/ 5.4
	2500/ 225	.3/ .3
25 M.P.H.	2800/ 200	.5/ .5
40 M.P.H.	1100/ 75	.1/ .1
	22 00/ 2000	3.1/ 3.1
2000 R.P.M.	1800/ 100	.1/ .1
** 2000 R.P.M.	2200/ 125	1.8/ 1.8

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: FORD MODEL: C600 MODEL YR.: 62 TRANS. CODE:M4 DISPLACEMENT: 261  
 SERIAL NO.: C608U311238 LICENSE NO.: 5957LA OWNER'S ID.: 5613  
 TUNE UP DATA.

----- DATE OF TUNE UP 8/ 5/76 ODOMETER READING \*\*\*\*\* HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 1150 DWELL 40 IDLE R.P.M. 500 DWELL  
 IDLE CO(%) 9.3 TIMING 23BTDC IDLE CO(%) .2 TIMING ATDC  
 IDLE HC(PPM) 490 GAP(INCH) .042 IDLE HC(PPM) 90 GAP(INCH)  
 PCV CODE 2 AF CODE 2 PCV CODE AF CODE.  
 IDLE AIR/FUEL IDLE AIR/FUEL  
 COMMENT: VEHICLE HAD PERFORATED DIAPHRAM IN VACUUM ADVANCE UNIT.UNABLE TO LOCATE UNIT DUE TO AGE OF VEHICLE.PLUGGED VACUUM LEAK  
 AT DIAPHRAM HOSE.ADJUST CARBORATOR MIXTURE-SPEED-RETEST.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2278 TEST DATE 8/ 4/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/11. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
 TEST 1 25.74 402.5 1.37 6.4 30.32 80.5 70.  
 TEST 2 19.91 371.1 1.43 6.7 30.32 81. 72.  
 AVERAGE(22.83)( 388.30)( 1.40)( 6.6)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39H  
 TEST 1 32.25 536.3 2.09 4.5 30.31 81.5 71.  
 TEST 2 36.5 587.8 2.00 4.2 30.31 83. 76.  
 AVERAGE(34.38)( 562.05)( 2.05)( 4.4)

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 6800/ 400 6.5/ 6.8  
 2500 R.P.M. 2500/ 125 2.6/ 2.5  
 LOW CRUISE SPEED 20 M.P.H. 4000/ 275 2.6/ 2.6  
 HIGH CRUISE SPEED 35 M.P.H. 4600/ 300 8.1/ 8.8  
 MOTORING 25000/ 2000 6.1/ 6.4  
 11 INCH VACUUM 2000 R.P.M. 5000/ 350 8.3/ 8.8  
 5 INCH VACUUM 1700 R.P.M. 4200/ 250 6.2/ 6.7

COMMENT NYQ TEST 2: ENGINE STALLED ONCE.  
 COMMENT C39 TEST 2: ENGINE STALLED ONCE.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2281 TEST DATE 8/ 6/76  
 13500 LB/11. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

12.37 418.0 .56 6.5 30.08 90. 98.  
 13.81 450.1 .56 6.1 30.08 90. 98.  
 (13.09)( 438.05)( 0.56)( 6.3)  
 -42.7% +12.8% -60.0% - 3.8%  
 25.65 505.4 .95 4.4 30.08 90. 98.  
 \*\*\*\*\*  
 (\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
 \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE 1 00/ 75 .1/ .1  
 900/ 50 3.1/ 3.0  
 20 M.P.H. 3 00/ 150 3.6/ 3.1  
 31 M.P.H. 3800/ 175 5.8/ 6.0  
 10 00/ 1000 .6/ .5  
 2000 R.P.M. 3 00/ 150 9.4/ 9.3  
 \*\* 1700 R.P.M. 3 00/ 150 7.4/ 7.5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: P50BVH80701 LICENSE NO.: 7956LA OWNER'S ID.: 19892  
 TUNE UP DATA.

----- DATE OF TUNE UP 8/ 6/76 ODOMETER READING 31768 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 500 DWELL 30 IDLE R.P.M. 600 DWELL 37  
 IDLE CO(%) 8.2 TIMING 5BTDC IDLE CO(%) 1.5 TIMING 5BTDC  
 IDLE HC(PPM) 350 GAP(INCH) .034 IDLE HC(PPM) 200 GAP(INCH) .032  
 PCV CODE 4 AF CODE 4 PCV CODE 1 AF CODE 1  
 IDLE AIR/FUEL 12.4 IDLE AIR/FUEL 13.9  
 COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP WIRE SET, CARBURETOR AND VACUUM ADVANCE UNIT.

TEST RESULTS

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2280 TEST DATE 8/ 6/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 7.75 62.38 11.56 8.2 30.08 84.5 90.0  
 TEST 2 8.51 65.02 12.09 8.0 30.08 85.5 91.0  
 AVERAGE( 8.13)( 63.70)(11.83)( 8.1)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39H  
 TEST 1 19.78 130.90 12.81 5.2 30.08 85.5 91.0  
 TEST 2 19.92 145.80 14.36 5.3 30.08 87.0 91.0  
 AVERAGE(19.85)( 138.35)(13.59)( 5.3)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2284 TEST DATE 8/11/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 8.33 39.00 13.13 7.7 30.25 84.5 82.0  
 TEST 2 8.13 42.41 13.48 7.6 30.25 84.5 82.0  
 AVERAGE( 8.23)( 40.71)(13.31)( 7.7)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 : 1.2% -30.1% +12.5% - 5.6%  
 TEST:C39H  
 TEST 1 22.02 72.08 16.44 4.9 30.25 84.5 84.0  
 TEST 2 16.22 73.01 17.72 5.1 30.25 85.5 85.0  
 AVERAGE(19.12)( 72.55)(17.08)( 5.0)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 - 3.7% -47.6% +25.7% - 4.8%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%) HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2) (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 300/ 6500 7.5/ 7.1 280/ 3800 1.4/ 1.4  
 2500 R.P.M. 50/ 600 0.1/ 0.1 75/ 1300 0.8/ 0.7  
 LOW CRUISE SPEED 25 M.P.H. 75/ 900 0.1/ 0.1 25 M.P.H. 200/ 2800 0.5/ 0.5  
 HIGH CRUISE SPEED 40 M.P.H. 25/ 300 0.1/ 0.1 40 M.P.H. 100/ 1500 0.1/ 0.1  
 MOTORING 2000/25000 3.8/ 3.6 1600/15000 1.0/ 1.2  
 11 INCH VACUUM 2000 R.P.M. 75/ 1200 0.1/ 0.1 2000 R.P.M. 125/ 1900 0.1/ 0.1  
 3 INCH VACUUM 2000 R.P.M. 50/ 800 0.1/ 0.1 \*\* 2000 R.P.M. 50/ 1000 0.3/ 0.3

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV507711 LICENSE NO.: 25935A OWNER'S ID.: 25E161

TUNE UP DATA.

DATE OF TUNE UP 8/11/76 ODOMETER READING 29612 HOUR METER READING 7052.9

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	665	DWELL	38	IDLE R.P.M.	525	DWELL	31
IDLE CO(%)	7.6	TIMING	7BTDC	IDLE CO(%)	2.0	TIMING	8BTDC
IDLE HC(PPM)	195	GAP(INCH)	.060	IDLE HC(PPM)	110	GAP(INCH)	.035
PCV CODE	2	AF CODE	3	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, PLUGS, CAP, ROTOR, WIRE SET AND HOSES FOR VACUUM ADVANCE AND RETARD. VAC. RETARD CHAMBER WAS RECONNECTED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2282 TEST DATE 8/ 9/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH

HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)
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BMV TEST SERIES NO. 2285 TEST DATE 8/13/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH

HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)
--------------	--------------	---------------	-----	------------------	-------------	------------------

TEST:NYC  
TEST 1 13.71 154.60 26.57 4.6 30.08 77.0 111.0  
TEST 2 11.39 163.00 26.09 4.6 30.08 77.5 112.0  
AVERAGE(12.55)(158.80)(26.33)(4.6)

TEST:NYC  
TEST 1 11.26 77.04 27.08 4.8 30.08 82.0 108.0  
TEST 2 9.77 83.92 25.31 5.1 30.08 83.0 110.0  
AVERAGE(10.52)(80.48)(26.20)(5.0)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 23.99 288.90 27.68 3.3 30.08 76.5 111.0  
TEST 2 23.35 295.70 30.23 3.3 30.08 76.5 111.0  
AVERAGE(23.67)(292.30)(28.96)(3.3)

TEST:C39H  
TEST 1 19.86 128.80 31.14 3.6 30.08 83.0 110.0  
TEST 2 17.59 135.40 32.56 3.6 30.08 83.5 108.0  
AVERAGE(18.73)(132.10)(31.85)(3.6)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	175/ 3200	5.8/ 5.6
2500 R.P.M.	75/ 1300	1.7/ 1.8
LOW CRUISE SPEED 20 M.P.H.	125/ 1800	0.2/ 0.2
HIGH CRUISE SPEED 35 M.P.H.	50/ 800	0.2/ 0.2
MOTURING	2000/27000	5.0/ 5.3
11 INCH VACUUM 2000 R.P.M.	75/ 1200	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	100/ 1500	1.7/ 1.8

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	125/ 2000	1.9/ 1.9
2500 R.P.M.	75/ 1500	2.1/ 2.1
20 M.P.H.	150/ 2300	1.3/ 1.3
35 M.P.H.	75/ 1000	0.3/ 0.3
MOTURING	1800/17000	1.0/ 1.0
2000 R.P.M.	100/ 1500	0.2/ 0.2
** 2000 R.P.M.	125/ 2000	1.5/ 1.4

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: CHEVROLET MODEL: 60 MODEL YR.: 69 TRANS. CODE:A6 DISPLACEMENT: 366  
SERIAL NO.: TE639P804042 LICENSE NO.: 6722HY OWNER'S ID.: 6325  
TUNE UP DATA.

DATE OF TUNE UP 8/12/76				ODOMETER READING 18962				HOUR METER READING *****			
***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****			
IDLE R.P.M.	660	DWELL	32	IDLE R.P.M.	540	DWELL	32	IDLE CO(%)	1.2	TIMING	6BTDC
IDLE CO(%)	6.4	TIMING	6BTDC	IDLE HC(PPM)	220	GAP(INCH)	.036	PCV CODE	3	AF CODE	2
IDLE HC(PPM)	300	GAP(INCH)	.036	IDLE AIR/FUEL							
PCV CODE	4	AF CODE	2								

COMMENT: VEHICLE APPEARS TO BE EQUIPPED WITH IMPROPER DISTRIBUTOR. TEST INDICATED CARBURETION PROBLEMS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2283 TEST DATE 8/11/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2287 TEST DATE 8/16/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 12.68 293.3 10.68 4.1 30.25 80. 86.  
TEST 2 12.02 317.3 11.39 3.9 30.25 80. 86.  
AVERAGE(12.35)( 305.30)(11.04)( 4.0)

TEST 1 13.6 216.4 10.85 4.6 30.07 85. 71.  
TEST 2 12.31 230.0 11.15 4.5 30.07 85.5 70.  
(12.96)( 223.20)(11.00)( 4.6)

CHANGE IN AVERAGE AFTER TUNE UP

+ 4.9% -26.9% - 0.3% +13.8%

TEST:C39H

TEST 1 22.04 459.0 12.0 2.9 30.25 81.0 87.0  
TEST 2 21.47 474.6 12.01 2.8 30.25 81.5 87.0  
AVERAGE(21.76)( 466.80)(12.01)( 2.9)

TEST 1 22.24 324.5 12.8 3.2 30.07 85. 68.  
TEST 2 20.26 321.0 11.92 3.3 30.07 87. 70.  
(21.25)( 322.75)(12.36)( 3.3)

CHANGE IN AVERAGE AFTER TUNE UP

- 2.3% -30.9% + 3.0% +14.0%

TEST:KEY MODE

ENGINE SPEED		HC(PPM)	CO(%)
	(READING FROM ANALYZER 2/READING FROM ANALYZER 5)		
IDLE		2400/ 175	3.5/ 3.5
2500 R.P.M.		2000/ 100	3.0/ 3.0
LOW CRUISE SPEED 20 M.P.H.		1900/ 100	3.0/ 3.0
HIGH CRUISE SPEED 35 M.P.H.		2100/ 125	2.9/ 3.0
MOTORING		11000/ 1200	2.4/ 2.5
11 INCH VACUUM 2000 R.P.M.		2200/ 125	3.0/ 3.0
3 INCH VACUUM 2000 R.P.M.		2500/ 150	2.1/ 2.1

	HC(PPM)	CO(%)
	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)	
	175/*****	.7/****
	75/*****	2.8/****
20 M.P.H.	125/*****	2.8/****
35 M.P.H.	100/*****	2.3/****
	****/*****	****/****
**** R.P.M.	****/*****	****/****
** IN. **** R.P.M.	****/*****	****/****

COMMENT KEY MODE: NO VACUUM MODE FOR 2287.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: P508VK72245 LICENSE NO.: 6343LA OWNER'S ID.: 11338  
 TUNE UP DATA.

DATE OF TUNE UP 8/19/76 ODOMETER READING 24937 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 560 DWELL 37 IDLE R.P.M. 600 DWELL 34  
 IDLE CO(%) 7.8 TIMING ATDC IDLE CO(%) 1.3 TIMING ATDC  
 IDLE HC(PPM) 350 GAP(INCH) .040 IDLE HC(PPM) 200 GAP(INCH) .034  
 PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
 IDLE AIR/FUEL IDLE AIR/FUEL  
 COMMENT: REPLACED POINTS, CAP, PLUGS AND VACUUM ADVANCE UNIT. ENGINE HAD NO TIMING MARK, IGN. TIMING WAS SET FOR LOWEST HC READING AT 19 IN. VAC, AT IDLE,

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2290				TEST DATE 8/19/76				BMV TEST SERIES NO. 2292				TEST DATE 8/23/76			
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH								11000 LB/22.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ															
TEST 1	9.94	74.51	11.01	7.3	30.36	78.5	48.0	8.04	60.03	11.91	6.9	30.03	92.0	89.0	
TEST 2	9.81	86.24	10.33	7.5	30.36	78.5	48.0	7.91	50.03	13.39	7.2	30.03	92.5	88.0	
AVERAGE	(9.88)	(80.38)	(10.67)	(7.4)				(7.90)	(55.00)	(12.65)	(7.1)				
CHANGE IN AVERAGE AFTER TUNE UP								-19.2% -30.3% +18.6% - 4.7%							
TEST:C39H															
TEST 1	22.45	119.20	13.56	5.0	30.36	79.0	51.0	18.28	78.37	16.32	4.9	30.03	92.0	86.0	
TEST 2	17.08	135.80	13.58	4.8	30.36	79.0	51.0	15.69	92.18	17.23	5.0	30.03	93.5	86.0	
AVERAGE	(19.77)	(127.50)	(13.57)	(4.9)				(16.99)	(85.28)	(16.78)	(5.0)				
CHANGE IN AVERAGE AFTER TUNE UP								-14.1% -33.1% +23.6% + 1.0%							
TEST:KEY MODE		HC(PPM)		CO(%)		HC(PPM)		CO(%)		HC(PPM)		CO(%)			
ENGINE SPEED															
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)															
IDLE		275/	5000	5.7/	5.6					175/	3000	1.6/	1.5		
2500 R.P.M.		50/	800	0.1/	0.1					50/	800	0.3/	0.3		
LOW CRUISE SPEED	25 M.P.H.	100/	1800	0.2/	0.2			25 M.P.H.		125/	1900	0.2/	0.2		
HIGH CRUISE SPEED	40 M.P.H.	50/	800	0.2/	0.2			40 M.P.H.		35/	500	0.2/	0.2		
MOTORING		2000/	30000	3.5/	3.5					200/	17000	1.8/	2.0		
11 INCH VACUUM	2000 R.P.M.	125/	2100	0.2/	0.2			2000 R.P.M.		75/	1000	0.2/	0.2		
3 INCH VACUUM	2000 R.P.M.	75/	1500	0.2/	0.2			** 2000 R.P.M.		50/	700	0.1/	0.1		

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: GMC MODEL: 6500 MODEL YR.: 73 TRANS. CODE:A4 DISPLACEMENT: 366  
 SERIAL NO.: TTE66TV595434 LICENSE NO.: 7350LA OWNER'S ID.: 6513  
 TUNE UP DATA.

DATE OF TUNE UP 8/31/76 ODOMETER READING 20375 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 450 DWELL 34  
 IDLE CO(%) 8.0 TIMING 0BTDC  
 IDLE HC(PPM) 500 GAP(INCH) .04  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.5

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 550 DWELL 29  
 IDLE CO(%) 1.0 TIMING 8BTDC  
 IDLE HC(PPM) 210 GAP(INCH) .035  
 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 14.0

COMMENT: REPLACED DIAPH ASSY 8-153. HAD TO CLEAN MAIN FLOAT CHAMBER + ADJUST BOTH FLOAT SETTINGS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2293 TEST DATE 8/26/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27. H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2297 TEST DATE 9/ 2/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27. H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 17.66 405.6 2.92 4.5 30.22 84.5 116.  
 TEST 2 16.69 405.6 2.92 4.5 30.22 85. 118.  
 AVERAGE(17.18)( 405.60)( 2.87)( 4.5)

13.85 324.0 7.53 4.5 30.15 77.5 87.  
 13.85 378.0 7.25 4.3 30.15 78. 89.  
 (13.85)( 351.00)( 7.39)( 4.4)  
 -19.4% -13.5% +57.5% - 2.2%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:039H

TEST 1 34.51 603.1 3.63 3.0 30.22 85.5 118.  
 TEST 2 35.92 666.6 3.35 2.9 30.22 86. 117.  
 AVERAGE(35.22)( 634.85)( 3.49)( 3.0)

23.68 404.7 9.03 3.4 30.15 76. 87.  
 24.51 373.7 10.04 3.4 30.15 76. 90.  
 (24.10)( 389.20)( 9.54)( 3.4)  
 -31.6% -38.7% +73.2% +15.3%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 2/READING FROM ANALYZER 5)

IDLE 5200/ 350 6.0/ 6.2  
 2500 R.P.M. 1500/ 75 1.6/ 1.6  
 LOW CRUISE SPEED 25 M.P.H. 2300/ 150 1.2/ 1.1  
 HIGH CRUISE SPEED 40 M.P.H. 2000/ 125 3.3/ 3.4  
 MOTORING 27000/ 2000 5.6/ 5.5  
 11 INCH VACUUM 2000 R.P.M. 2200/ 125 2.3/ 2.2  
 3 INCH VACUUM 2000 R.P.M. 2500/ 150 4.0/ 4.0

HC(PPM) CO(%)

(READING FROM ANALYZER 2/READING FROM ANALYZER 5)

2200/ 175 .6/ .6  
 900/ 50 1.0/ 1.0  
 25 M.P.H. 1800/ 125 .8/ .9  
 40 M.P.H. 1500/ 100 1.1/ 1.0  
 14 00/ 1800 1.2/ 1.4  
 2000 R.P.M. 1700/ 100 .8/ .9  
 \*\* 2000 R.P.M. 2000/ 150 3.3/ 3.3

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 478  
SERIAL NO.: 88001FGB18086 LICENSE NO.: 21703E OWNER'S ID.: 25H173

TUNE UP DATA.

DATE OF TUNE UP 8/26/76 ODOMETER READING 0635 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 575 DWELL  
IDLE CO(%) 2.7 TIMING ATDC  
IDLE HC(PPM) 1700 GAP(INCH)  
PCV CODE AF CODE  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 625 DWELL  
IDLE CO(%) 0.6 TIMING ATDC  
IDLE HC(PPM) 140 GAP(INCH) .035  
PCV CODE AF CODE  
IDLE AIR/FUEL

COMMENT: REPLACED ONE SPARK PLUG AND ITS WIRE END CLIP. ADJUSTED IDLE MIXTURE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2294 TEST DATE 8/26/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2296 TEST DATE 8/27/76  
13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYO

TEST 1 91.19 240.70 21.60 3.4 30.22 88.0 116.0  
TEST 2 82.88 219.60 24.06 3.6 30.22 89.0 118.0  
AVERAGE(87.04)( 230.15)(22.83)( 3.5)

12.43 148.10 25.94 3.6 30.19 81.5 121.0  
9.98 136.60 26.56 3.9 30.19 81.0 116.0  
(11.21)( 142.35)(26.25)( 3.8)  
-87.1% -38.1% +15.0% + 7.1%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 127.10 345.90 23.89 2.7 30.22 88.5 116.0  
TEST 2 136.70 411.10 23.05 2.6 30.22 90.0 119.0  
AVERAGE(131.90)( 378.50)(23.47)( 2.7)

18.11 264.40 25.85 2.9 30.19 83.0 115.0  
19.81 305.40 25.60 2.9 30.19 82.5 113.0  
(18.96)( 284.90)(25.73)( 2.9)  
-85.6% -24.7% + 9.6% + 9.4%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	1400/12000	2.8/ 2.9
2500 R.P.M.	1200/11000	0.6/ 0.6
LOW CRUISE SPEED 20 M.P.H.	1050/ 9500	0.3/ 0.3
HIGH CRUISE SPEED 35 M.P.H.	1200/11000	0.3/ 0.3
MOTORING	1400/17000	2.0/ 2.0
11 INCH VACUUM 2000 R.P.M.	1100/10000	0.3/ 0.3
3 INCH VACUUM 2000 R.P.M.	1300/12000	1.4/ 1.3

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	200/ 2700	2.0/ 2.1
	30/ 600	0.4/ 0.4
20 M.P.H.	50/ 900	0.3/ 0.3
35 M.P.H.	50/ 900	0.2/ 0.2
	1.00/10000	3.5/ 3.3
2000 R.P.M.	50/ 900	0.2/ 0.2
** 2000 R.P.M.	75/ 1200	0.3/ 0.3

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB21832 LICENSE NO.: 29301E OWNER'S ID.: 25G055  
TUNE UP DATA.

DATE OF TUNE UP 9/ 8/76 ODOMETER READING 17049 HOUR METER READING 4208.9

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 580 DWELL 31  
IDLE CO(%) 8.0 TIMING 7BTDC  
IDLE HC(PPM) 180 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 570 DWELL 33  
IDLE CO(%) 3.4 TIMING 6BTDC  
IDLE HC(PPM) 250 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.1

COMMENT: REPLACED POINTS, PLUGS, WIRE SET, ROTOR, DISTR. CAP AND DISTR. PRIMARY WIRE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2298 TEST DATE 9/ 2/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 15.96 242.00 29.98 3.4 30.15 75.0 89.0  
TEST 2 15.06 250.70 24.89 3.9 30.15 75.0 89.0  
AVERAGE(15.51)( 246.35)(27.44)( 3.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 31.72 374.40 33.74 2.8 30.15 74.5 88.0  
TEST 2 28.84 434.10 32.51 2.8 30.15 75.0 87.0  
AVERAGE(30.28)( 404.25)(33.13)( 2.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 225/ 4000 6.9/ 6.8  
2500 R.P.M. 50/ 900 0.3/ 0.3  
LOW CRUISE SPEED 20 M.P.H. 100/ 1300 0.5/ 0.5  
HIGH CRUISE SPEED 33 M.P.H. 25/ 400 0.1/ 0.1  
MOTORING 2000/24000 3.0/ 3.1  
11 INCH VACUUM 2000 R.P.M. 75/ 1000 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 50/ 800 0.7/ 0.7

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2301 TEST DATE 9/10/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

11.13 123.00 30.63 3.9 29.90 79.0 110.0  
11.66 171.20 26.93 4.1 29.89 79.5 109.0  
(11.40)( 147.10)(29.78)( 4.0)  
-26.5% -40.2% + 4.9% + 9.6%

21.72 244.80 30.12 3.0 29.87 80.0 108.0  
23.23 277.70 29.60 3.1 29.86 79.5 112.0  
(22.48)( 261.25)(29.86)( 3.1)  
-25.8% -35.4% - 9.9% + 8.9%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

200/ 3200 3.9/ 4.0  
50/ 900 0.2/ 0.2  
20 M.P.H. 75/ 1300 0.4/ 0.4  
30 M.P.H. 25/ 500 0.1/ 0.1  
2 00/20000 3.5/ 3.7  
2000 R.P.M. 50/ 900 0.1/ 0.1  
5 IN. 2000 R.P.M. 50/ 900 0.7/ 0.7

COMMENT KEY MODE: TRANSMISSION SLIPPAGE PROBABLY ACCOUNTED FOR DIFFERENCES IN KEY MODE HI-CRUISE SPEED AND IN LO-VAC MODE

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: FORD MODEL: P350 MODEL YR.: 59 TRANS. CODE:M4 DISPLACEMENT: 240  
SERIAL NO.: P35J9H20931 LICENSE NO.: 8683LA OWNER'S ID.: 47704

TUNE UP DATA.

DATE OF TUNE UP 9/14/76 ODOMETER READING 41081 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 800 DWELL 38  
IDLE CO(%) 8.8 TIMING 18BTDC  
IDLE HC(PPM) 800 GAP(INCH) .037  
PCV CODE 5 AF CODE 2  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 610 DWELL 37  
IDLE CO(%) 3.1 TIMING 6BTDC  
IDLE HC(PPM) 280 GAP(INCH) .030  
PCV CODE 5 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED POINTS, ROTOR, CAP, WIRE SET AND PLUGS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2300 TEST DATE 9/10/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 14.04 104.10 10.53 10.9 29.91 78.0 100.0  
TEST 2 15.15 108.60 10.87 10.6 29.91 78.0 100.0  
AVERAGE(15.05)( 106.35)(10.75)(10.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:U39H

TEST 1 32.58 190.00 9.54 8.1 29.91 78.5 102.0  
TEST 2 29.21 190.00 9.70 8.1 29.91 78.5 105.0  
AVERAGE(30.90)( 190.00)( 9.62)( 8.1)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 700/ 7000 8.0/ 8.1  
2500 R.P.M. 850/ 8000 1.8/ 2.0  
LOW CRUISE SPEED 25 M.P.H. 300/ 3800 1.5/ 1.5  
HIGH CRUISE SPEED 40 M.P.H. 175/ 2000 0.9/ 0.9  
MOTORING 2000/40000 5.0/ 4.9  
11 INCH VACUUM 2000 R.P.M. 325/ 4000 1.6/ 1.6  
3 INCH VACUUM 2000 R.P.M. 250/ 3200 0.6/ 0.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2302 TEST DATE 9/15/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 10.41 71.18 6.42 11.2 30.28 79.0 82.0  
TEST 2 10.38 74.38 6.10 11.2 30.28 79.0 82.0  
AVERAGE(10.41)( 72.78)( 6.26)(11.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST 1 20.82 132.60 6.49 8.1 30.28 78.5 81.0  
TEST 2 20.20 138.50 7.40 7.8 30.28 79.0 78.0  
AVERAGE(20.51)( 135.55)( 6.95)( 8.0)

CHANGE IN AVERAGE AFTER TUNE UP

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 300/ 4800 4.6/ 4.5  
25 M.P.H. 125/ 1800 1.5/ 1.7  
40 M.P.H. 250/ 3500 0.7/ 0.7  
40 M.P.H. 100/ 1400 0.6/ 0.6  
2000 R.P.M. 2 00/32000 3.6/ 3.5  
2000 R.P.M. 225/ 3100 1.0/ 1.0  
\*\* 2000 R.P.M. 150/ 2000 0.4/ 0.3

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THMSBZV512198 LICENSE NO.: 25937A OWNER'S ID.: 25E163  
TUNE UP DATA.

----- DATE OF TUNE UP 9/23/76 ODOMETER READING 34324 HOUR METER READING 7040.6 -----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 520 DWELL 28  
IDLE CO(%) 8.9 TIMING 5BTDC  
IDLE HC(PPM) 200 GAP(INCH) .047  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL 12.8  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 33  
IDLE CO(%) 0.5 TIMING 10BTDC  
IDLE HC(PPM) 30 GAP(INCH) .040  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 14.0  
COMMENT: REPLACED POINTS, ROTOR AND PLUGS. CARB WAS MISSING PARTS ON THE THROTTLE SHAFT WHICH CAUSED VARYING IDLE SPEED. THIS WAS CORRECTED.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2303				TEST DATE 9/15/76				BMV TEST SERIES NO. 2311				TEST DATE 9/24/76			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH								DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST: NYQ								TEST: NYQ							
TEST 1	11.45	150.80	28.83	4.2	30.29	82.0	75.0	11.77	86.29	26.64	4.4	30.20	72.0	32.0	
TEST 2	9.67	155.50	27.94	4.2	30.29	82.0	75.0	10.29	72.08	26.07	4.5	30.20	74.5	31.0	
AVERAGE(10.56)( 153.15)(28.39)( 4.2)								(11.03)( 79.19)(26.36)( 4.5)							
CHANGE IN AVERAGE AFTER TUNE UP								+ 4.5% -48.3% - 7.2% + 6.0%							
TEST: C39H								TEST: C39H							
TEST 1	20.69	291.20	33.21	3.0	30.29	82.0	75.0	19.43	100.60	32.21	3.3	30.20	74.5	31.0	
TEST 2	15.78	310.30	35.22	2.8	30.29	82.5	77.0	16.44	119.70	31.60	3.3	30.20	75.0	30.0	
AVERAGE(18.24)( 300.75)(34.22)( 2.9)								(17.94)( 110.15)(31.91)( 3.3)							
CHANGE IN AVERAGE AFTER TUNE UP								- 1.6% -63.4% - 6.8% +13.8%							
TEST: KEY MODE								TEST: KEY MODE							
ENGINE SPEED								ENGINE SPEED							
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)								(READING FROM ANALYZER 5/READING FROM ANALYZER 2)							
IDLE								IDLE							
2500 R.P.M.								2500 R.P.M.							
LOW CRUISE SPEED 20 M.P.H.								LOW CRUISE SPEED 20 M.P.H.							
HIGH CRUISE SPEED 30 M.P.H.								HIGH CRUISE SPEED 30 M.P.H.							
MOTORING								MOTORING							
11 INCH VACUUM 2000 R.P.M.								11 INCH VACUUM 2000 R.P.M.							
3 INCH VACUUM 2000 R.P.M.								3 INCH VACUUM 2000 R.P.M.							

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 22,000 MAKE: DODGE MODEL: D600 MODEL YR.: 61 TRANS. CODE:M4 DISPLACEMENT: 318  
SERIAL NO.: 1681116448 LICENSE NO.: 6610HY OWNER'S ID.: 6910  
TUNE UP DATA.

----- DATE OF TUNE UP 9/16/76 ODOMETER READING 82118 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 640 DWELL 23 IDLE R.P.M. 560 DWELL 20  
IDLE CO(%) 10.0 TIMING ATDC IDLE CO(%) 1.2 TIMING ATDC  
IDLE HC(PPM) 2000 GAP(INCH) .045 IDLE HC(PPM) 150 GAP(INCH) .035  
PCV CODE 5 AF CODE 2 PCV CODE 5 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED DISTRIBUTOR, CARB., PLUGS, WIRE SET AND COIL. ENGINE HAD NO TIMING MARKS. IGN. TIMING WAS SET BY HC AND MANIF-  
OLD VAC. READINGS.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2304 TEST DATE 9/16/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/15.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 129.60 472.30 2.50 4.7 30.24 79.5 98.0  
TEST 2 127.20 426.40 2.13 5.0 30.24 79.5 98.0  
AVERAGE(28.40)( 449.35)( 2.32)( 4.9)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2312 TEST DATE 9/28/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/15.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 25.34 291.90 3.16 5.1 29.90 69.5 54.0  
TEST 2 22.60 210.70 2.17 5.2 29.90 70.0 55.0  
AVERAGE(24.52)( 303.80)( 2.67)( 5.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
-80.9% -32.4% +15.1% + 6.2%  
-----  
TEST:C39H  
TEST 1 178.20 521.70 4.82 3.7 30.24 79.5 98.0  
TEST 2 \*\*\*\*\*  
AVERAGE(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*)  
CHANGE IN AVERAGE AFTER TUNE UP  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 2000/30000 8.2/ 7.9  
2500 R.P.M. 2000/21000 6.8/ 6.4  
LOW CRUISE SPEED 20 M.P.H. 2000/17000 5.4/ 5.2  
HIGH CRUISE SPEED 30 M.P.H. 2000/17000 3.8/ 4.0  
MOTORING 2000/60000 5.0/ 4.4  
11 INCH VACUUM 2000 R.P.M. 2000/20000 3.4/ 3.3  
3 INCH VACUUM 2000 R.P.M. 2000/20000 10.0/10.0  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 125/ 1700 0.9/ 0.9  
2000 R.P.M. 175/ 3500 3.5/ 3.6  
20 M.P.H. 225/ 3800 2.2/ 2.2  
30 M.P.H. 75/ 1000 0.6/ 0.6  
2000 R.P.M. 2 00/35000 5.0/ 4.9  
2000 R.P.M. 300/ 4500 0.3/ 0.3  
\*\* 2000 R.P.M. 275/ 4000 7.5/ 7.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ140147 LICENSE NO.: 13423E OWNER'S ID.: 25D082  
TUNE UP DATA.

----- DATE OF TUNE UP 9/24/76 ODOMETER READING 35031 HOUR METER READING 1993.7 -----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 580 DWELL 29 IDLE R.P.M. 550 DWELL 32  
IDLE CO(%) 5.0 TIMING 20BTDC IDLE CO(%) 0.3 TIMING 10BTDC  
IDLE HC(PPM) 200 GAP(INCH) .038 IDLE HC(PPM) 60 GAP(INCH) .038  
PCV CODE 2 AF CODE 0 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.4 IDLE AIR/FUEL 14.0

COMMENT: REPLACED VACUUM ADVANCE AND RETARD CHAMBERS , POINTS AND ROTOR.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2305 TEST DATE 9/16/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYO  
TEST 1 11.15 240.00 23.60 4.6 30.24 77.5 96.0  
TEST 2 13.18 265.10 20.37 4.7 30.24 78.0 97.0  
AVERAGE(12.17)( 252.55)(21.99)( 4.7)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 19.44 383.60 24.80 3.3 30.24 77.5 98.0  
TEST 2 19.13 406.50 25.26 3.2 30.24 77.5 98.0  
AVERAGE(19.29)( 395.05)(25.03)( 3.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 150/ 2300 3.5/ 3.4  
2500 R.P.M. 50/ 900 0.6/ 0.6  
LOW CRUISE SPEED 20 M.P.H. 125/ 1800 0.5/ 0.5  
HIGH CRUISE SPEED 30 M.P.H. 125/ 1800 1.9/ 2.0  
MOTORING 2000/20000 3.3/ 3.1  
11 INCH VACUUM 2000 R.P.M. 175/ 2500 2.4/ 2.4  
5 INCH VACUUM 2000 R.P.M. 125/ 2000 2.4/ 2.4  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2320 TEST DATE 9/30/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
8.73 81.29 29.92 4.1 29.96 71.5 50.0  
7.30 66.51 27.77 4.5 29.96 71.0 51.0  
( 8.02)( 73.90)(28.85)( 4.3)  
-34.1% -70.7% +31.2% - 7.5%  
10.02 116.80 29.61 3.3 29.95 70.0 55.0  
10.13 114.20 29.02 3.4 29.95 70.0 55.0  
(10.08)( 115.50)(29.32)( 3.4)  
-47.8% -70.8% +17.1% + 3.1%  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
50/ 1000 0.3/ 0.3  
30/ 700 0.5/ 0.5  
20 M.P.H. 75/ 1200 0.3/ 0.2  
30 M.P.H. 100/ 1500 0.5/ 0.5  
900/10000 0.5/ 0.5  
2000 R.P.M. 75/ 1300 0.5/ 0.5  
\*\* 2000 R.P.M. 50/ 1000 0.2/ 0.2

COMMENT KEY MODE: ENGINE WAS W.O.T. AT 5 IN. HG.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: P500 MODEL YR.: 72 TRANS. CODE:M5 DISPLACEMENT: 300  
SERIAL NO.: P50BVP55340 LICENSE NO.: 7980LA OWNER'S ID.: 18056  
TUNE UP DATA.

DATE OF TUNE UP 9/29/76 ODOMETER READING 16765 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 690 DWELL 23  
IDLE CO(%) 9.5 TIMING 14BTDC  
IDLE HC(PPM) 700 GAP(INCH) .042  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL 12.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 37  
IDLE CO(%) 1.5 TIMING 6BTDC  
IDLE HC(PPM) 180 GAP(INCH) .034  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.8

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, PLUGS, PCV BREATHER FILTER AND PUT IN REBUILT DISTRIBUTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2313 TEST DATE 9/28/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 17.80 83.96 18.07 7.9 29.93 72.5 51.0  
TEST 2 15.84 85.83 18.75 8.1 29.93 73.0 50.0  
AVERAGE(16.82)( 84.90)(18.41)( 8.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 30.60 194.60 15.73 5.5 29.93 72.0 50.0  
TEST 2 36.62 197.30 19.90 5.3 29.93 73.0 50.0  
AVERAGE(33.61)( 195.95)(17.82)( 5.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	500/12000	8.2/ 8.1
2500 R.P.M.	2000/20000	0.3/ 0.3
LOW CRUISE SPEED 25 M.P.H.	225/ 3000	0.1/ 0.1
HIGH CRUISE SPEED 40 M.P.H.	200/ 2800	0.1/ 0.1
MOTORING	2000/33000	4.8/ 4.7
11 INCH VACUUM 2000 R.P.M.	275/ 4000	0.1/ 0.1
3 INCH VACUUM 2000 R.P.M.	175/ 2900	0.1/ 0.1

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2321 TEST DATE 10/ 1/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

10.05 39.48 11.65 8.1 29.93 67.0 66.0  
9.85 42.82 13.83 7.8 29.93 67.5 67.0  
( 9.95)( 41.15)(12.74)( 8.0)  
-40.8% -51.5% -30.8% - 0.6%

29.03 111.40 9.69 5.3 29.93 67.0 66.0  
15.87 101.10 13.22 5.4 29.93 67.0 66.0  
(22.45)( 106.25)(11.46)( 5.4)  
-33.2% -45.8% -35.7% - 0.9%

HC(PPM) CO(%)

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	175/ 2500	2.7/ 2.7
2500 R.P.M.	75/ 1500	0.9/ 0.8
25 M.P.H.	150/ 1800	0.2/ 0.2
40 M.P.H.	100/ 1400	0.1/ 0.1
MOTORING	2 00/25000	1.7/ 1.8
2000 R.P.M.	175/ 2300	0.1/ 0.1
2000 R.P.M.	100/ 1600	0.1/ 0.1

\*\*

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB22370 LICENSE NO.: 29311E OWNER'S ID.: 25G059  
TUNE UP DATA.

DATE OF TUNE UP 9/30/76 ODOMETER READING 18389 HOUR METER READING 4437.5  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 560 DWELL 33  
IDLE CO(%) 6.2 TIMING 1BTDC  
IDLE HC(PPM) 150 GAP(INCH) .045  
PCV CODE 3 AF CODE 3  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 570 DWELL 31  
IDLE CO(%) 4.0 TIMING EDTDC  
IDLE HC(PPM) 200 GAP(INCH) .030  
PCV CODE 3 AF CODE 2  
IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, CONDENSER, PLUGS, WIRE SET , CAP AND ROTOR. NEWLY REBUILT CARB REPLACED ORIGINAL.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2319 TEST DATE 9/30/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 16.92 333.20 19.35 3.7 29.95 69.0 48.0  
TEST 2 13.55 326.50 18.86 3.7 29.95 69.0 46.0  
AVERAGE(15.24)( 329.85)(19.11)( 3.7)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2322 TEST DATE 10/ 1/76  
13500 LB/22.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
13.88 252.10 23.52 3.9 29.93 69.5 71.0  
11.57 251.70 22.78 4.0 29.93 70.5 72.0  
(12.73)( 251.90)(23.15)( 4.0)  
-16.5% -22.6% +21.2% + 6.8%

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 20.18 517.20 20.29 2.8 29.95 69.0 48.0  
TEST 2 15.52 517.20 19.09 2.7 29.95 68.5 49.0  
AVERAGE(17.85)( 517.20)(19.69)( 2.8)  
CHANGE IN AVERAGE AFTER TUNE UP

18.21 295.40 21.85 3.3 29.93 70.5 72.0  
18.49 310.10 21.20 3.3 29.93 70.5 72.0  
(18.35)( 302.75)(21.53)( 3.3)  
+ 2.8% -41.5% + 9.3% +20.0%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/ 3300 6.4/ 6.2  
2500 R.P.M. 75/ 1800 2.5/ 2.6  
LOW CRUISE SPEED 20 M.P.H. 150/ 2700 3.2/ 3.0  
HIGH CRUISE SPEED 30 M.P.H. 175/ 3100 1.3/ 1.4  
MOTORING 2000/27000 3.6/ 4.0  
11 INCH VACUUM 2000 R.P.M. 150/ 2500 1.0/ 1.2  
3 INCH VACUUM 2000 R.P.M. 125/ 2200 1.7/ 1.8

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
300/ 3800 1.8/ 1.8  
50/ 800 0.4/ 0.4  
20 M.P.H. 50/ 800 0.4/ 0.4  
30 M.P.H. 50/ 800 0.4/ 0.4  
2000/27000 2.0/ 1.9  
2000 R.P.M. 100/ 1500 1.0/ 1.0  
\*\* 2000 R.P.M. 150/ 2500 3.0/ 3.0

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: GMC MODEL: 8500 MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV602761 LICENSE NO.: 18937E OWNER'S ID.: 26D055  
TUNE UP DATA.

DATE OF TUNE UP 10/11/76 ODOMETER READING 15738 HOUR METER READING 2051.2

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	920	DWELL	30	IDLE R.P.M.	600	DWELL	33
IDLE CO(%)	4.1	TIMING	20BTDC	IDLE CO(%)	0.2	TIMING	10BTDC
IDLE HC(PPM)	110	GAP(INCH)	.060	IDLE HC(PPM)	20	GAP(INCH)	.035
PCV CODE	2	AF CODE	4	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL	13.2			IDLE AIR/FUEL	14.0		

COMMENT: REPLACED PLUGS, POINTS, CONDENSER, ROTOR, CAP AND WIRE SET,

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2326 TEST DATE 10/ 5/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/18.0 H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

BMV TEST SERIES NO. 2333 TEST DATE 10/15/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/18.0 H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ  
TEST 1 8.39 128.50 32.42 5.1 30.21 68.5 55.0  
TEST 2 7.62 130.50 32.95 5.1 30.21 69.0 56.0  
AVERAGE( 8.01)( 129.50)(32.69)( 5.1)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:NYQ  
TEST 1 9.67 54.61 30.72 4.6 29.91 78.5 35.0  
TEST 2 9.84 51.26 31.58 4.7 29.91 80.5 36.0  
AVERAGE( 9.76)( 52.94)(31.15)( 4.7)  
CHANGE IN AVERAGE AFTER TUNE UP  
+21.9% -59.1% - 4.7% - 8.8%

TEST:CS9H  
TEST 1 15.35 244.90 40.08 3.7 30.21 67.5 57.0  
TEST 2 13.43 253.40 42.90 3.5 30.21 70.5 58.0  
AVERAGE(14.39)( 249.15)(41.49)( 3.6)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:CS9H  
TEST 1 17.16 111.90 30.38 3.2 29.91 79.0 36.0  
TEST 2 15.92 115.70 35.65 3.3 29.91 81.0 37.0  
AVERAGE(16.54)( 113.80)(36.02)( 3.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
+14.9% -54.3% -13.2% - 9.7%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	125/ 2000	4.5/ 4.4
2500 R.P.M.	250/ 3000	0.4/ 0.4
LOW CRUISE SPEED 20 M.P.H.	75/ 1000	0.2/ 0.2
HIGH CRUISE SPEED 30 M.P.H.	75/ 1000	0.3/ 0.3
MOTURING	1200/17000	3.6/ 3.5
11 INCH VACUUM 2000 R.P.M.	75/ 1000	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	75/ 1000	0.2/ 0.2

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	75/*****	0.1/****
	75/*****	2.6/****
20 M.P.H.	125/*****	1.9/****
30 M.P.H.	75/*****	0.4/****
	800/*****	0.3/****
2000 R.P.M.	50/*****	0.2/****
** 2000 R.P.M.	50/*****	0.2/****

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 25,000 MAKE: GMC MODEL: 7500 MODEL YR.: 70 TRANS. CODE:M5 DISPLACEMENT: 401  
SERIAL NO.: HM70AZ125371 LICENSE NO.: XDA13L OWNER'S ID.: 7791  
TUNE UP DATA.

----- DATE OF TUNE UP 10/15/76 ODOMETER READING 58727 HOUR METER READING 1359.  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 560 DWELL 33  
IDLE CO(%) 3.8 TIMING 15BTDC  
IDLE HC(PPM) 260 GAP(INCH) .035  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL 13.2  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 33  
IDLE CO(%) 0.8 TIMING 10BTDC  
IDLE HC(PPM) 50 GAP(INCH) .035  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 14.0

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2328 TEST DATE 10/12/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 22.23 181.5 19.99 5.4 30.33 66.5 36.  
TEST 2 18.55 187.0 20.28 5.5 30.33 65.5 36.  
AVERAGE(20.39)( 184.25)(20.14)( 5.5)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 32.25 248.3 20.46 4.4 30.30 68. 38.  
TEST 2 30.45 263.4 21.33 4.3 30.30 68. 38.  
AVERAGE(31.35)( 255.85)(20.90)( 4.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 250/\*\*\*\*\* 3.8/\*\*\*\*  
2500 R.P.M. 525/\*\*\*\*\* 0.7/\*\*\*\*  
LOW CRUISE SPEED 20 M.P.H. 175/\*\*\*\*\* 0.5/\*\*\*\*  
HIGH CRUISE SPEED 30 M.P.H. 125/\*\*\*\*\* 1.5/\*\*\*\*  
MOTORING 2000/\*\*\*\*\* 2.8/\*\*\*\*  
11 INCH VACUUM 2000 R.P.M. 225/\*\*\*\*\* 1.6/\*\*\*\*  
3 INCH VACUUM 2000 R.P.M. 200/\*\*\*\*\* 2.9/\*\*\*\*

COMMENT NYQ TEST 1: CVS FILTER CART LEAK  
COMMENT KEY MODE: SCOTT INSTRUMENTS INOPERATIVE

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2330 TEST DATE 10/14/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 20.46 169.3 14.19 5.1 29.69 69. 34.  
TEST 2 15.52 151.5 15.73 5.3 29.70 70.5 34.  
AVERAGE(17.99)( 160.40)(14.96)( 5.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 34.54 193.1 16.65 4.1 29.70 68.5 32.  
TEST 2 25.20 177.9 13.62 4.6 29.70 71. 33.  
AVERAGE(29.87)( 185.50)(15.14)( 4.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/\*\*\*\*\* 0.3/\*\*\*\*  
2500 R.P.M. 50/\*\*\*\*\* 0.5/\*\*\*\*  
20 M.P.H. 100/\*\*\*\*\* 0.5/\*\*\*\*  
30 M.P.H. 125/\*\*\*\*\* 1.5/\*\*\*\*  
MOTORING 1200/\*\*\*\*\* 0.3/\*\*\*\*  
2000 R.P.M. 150/\*\*\*\*\* 1.5/\*\*\*\*  
\*\* 2000 R.P.M. 100/\*\*\*\*\* 2.2/\*\*\*\*

COMMENT NYQ TEST 1: CVS FILTER CART LEAK  
COMMENT KEY MODE: SCOT INSTRUMENTS INOPERATIVE

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BLG52255 LICENSE NO.: 7935LA OWNER'S ID.: 19542  
TUNE UP DATA.

----- DATE OF TUNE UP 10/25/76 ODOMETER READING 37059 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 800 DWELL 37 IDLE R.P.M. 800 DWELL 37  
IDLE CO(%) 5.3 TIMING 148TDC IDLE CO(%) 2.0 TIMING 68TDC  
IDLE HC(PPM) 160 GAP(INCH) .031 IDLE HC(PPM) 200 GAP(INCH) .031  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.1 IDLE AIR/FUEL 13.9  
COMMENT: REPLACED POINTS, ROTOR, COIL, WIRE SET AND VACUUM ADVANCE CHAMBER. REPAIRED CARB, LINKAGE, SET FLOAT LEVEL.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2332				TEST DATE 10/15/76				BMV TEST SERIES NO. 2340				TEST DATE 10/28/76			
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH								11000 LB/22.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN:HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN:HG)	(F)	(GR/LB)	
TEST:NYQ								TEST:NYQ							
TEST 1	8.24	64.96	16.93	7.4	29.91	70.5	32.0	7.65	52.94	14.79	7.5	30.37	70.5	25.0	
TEST 2	5.90	66.98	16.28	7.9	29.91	71.5	32.0	6.03	44.10	15.19	7.8	30.37	74.0	25.0	
AVERAGE	(7.07)	(65.97)	(16.61)	(7.7)				(6.84)	(48.52)	(14.99)	(7.7)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
								- 3.3%	-26.5%	- 9.7%	+ 0.0%				
TEST:C39H								TEST:C39H							
TEST 1	14.88	139.30	17.97	4.8	29.91	72.0	31.0	16.00	53.42	18.14	5.2	30.36	70.0	25.0	
TEST 2	12.87	141.00	18.04	4.9	29.91	73.0	32.0	10.14	45.56	18.24	5.3	30.36	66.5	20.0	
AVERAGE	(13.88)	(140.15)	(18.01)	(4.9)				(13.07)	(49.49)	(18.19)	(5.3)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
								- 5.8%	-64.7%	+ 1.0%	+ 8.2%				
TEST:KEY MODE		HC(PPM)		CO(%)		HC(PPM)		CO(%)		HC(PPM)		CO(%)			
ENGINE SPEED															
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)															
IDLE		350/*****		6.5/****		125/ 1800		1.8/ 1.7							
2500 R.P.M.		75/*****		0.6/****		75/ 1000		0.7/ 0.6							
LOW CRUISE SPEED 25 M.P.H.		75/*****		0.1/****		25 M.P.H. 75/ 1000		0.2/ 0.2							
HIGH CRUISE SPEED 40 M.P.H.		50/*****		0.1/****		40 M.P.H. 75/ 1000		0.2/ 0.2							
MOTORING		2000/*****		2.3/****		2000/15000		1.7/ 1.6							
11 INCH VACUUM 2000 R.P.M.		125/*****		0.3/****		2000 R.P.M. 125/ 2000		0.2/ 0.2							
3 INCH VACUUM 2000 R.P.M.		125/*****		2.0/****		2000 R.P.M. 75/ 1000		0.2/ 0.2							

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 27,500 MAKE: CHEVROLET MODEL: C60 MODEL YR.: 70 TRANS. CODE:M5 DISPLACEMENT: 366  
SERIAL NO.: CE630P179343 LICENSE NO.: 704526 OWNER'S ID.: 704526  
TUNE UP DATA.

----- DATE OF TUNE UP 11/ 4/76 ODOMETER READING 38262 HOUR METER READING 593.1  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 570 DWELL 27 IDLE R.P.M. 500 DWELL 30  
IDLE CO(%) 1.0 TIMING 7BTDC IDLE CO(%) 0.3 TIMING 6BTDC  
IDLE HC(PPM) 40 GAP(INCH) .041 IDLE HC(PPM) 10 GAP(INCH) .035  
PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.8 IDLE AIR/FUEL 13.9

COMMENT: NEW AIRFILT POINTS PLUGS-ADJUST FLOAT LEVEL

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2343 TEST DATE 11/ 3/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (MPG) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYO  
TEST 1 27.12 121.0 10.63 5.2 30.19 69. 27.  
TEST 2 18.71 117.9 8.51 5.3 30.18 69. 27.  
AVERAGE(22.92)( 119.45)( 9.57)( 5.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
TEST:C39H  
TEST 1 45.39 155.3 13.03 3.9 30.17 68.5 26.  
TEST 2 37.61 157.8 11.30 4.0 30.17 70. 25.  
AVERAGE(41.50)( 156.55)(12.17)( 4.0)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
IDLE 700/ 60 0.8/ 0.9  
2500 R.P.M. 300/ 25 0.3/ 0.3  
LOW CRUISE SPEED 20 M.P.H. 600/ 50 0.5/ 0.5  
HIGH CRUISE SPEED 30 M.P.H. 600/ 50 0.6/ 0.6  
MOTORING 11000/ 1200 0.3/ 0.3  
11 INCH VACUUM 2000 R.P.M. 1200/ 100 0.6/ 0.7  
3 INCH VACUUM 2000 R.P.M. 1000/ 75 0.8/ 0.9  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2348 TEST DATE 11/ 8/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (MPG) (IN.HG) (F) (GR/LB)  
-----  
20.93 113.9 11.49 5.1 29.94 72. 20.  
18.06 110.3 11.20 5.2 29.94 73. 22.  
(19.50)( 112.10)(11.35)( 5.2)  
-14.9% - 6.2% +18.5% - 1.9%  
-----  
40.36 125.1 13.84 4.1 29.94 71.5 21.  
37.64 135.0 13.28 3.9 29.93 72. 20.  
(39.00)( 130.05)(13.56)( 4.0)  
- 6.0% -16.9% +11.5% + 1.3%  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
1 00/ 75 0.3/ 0.3  
500/ 35 500/ 35  
20 M.P.H. 1 00/ 75 0.3/ 0.3  
30 M.P.H. 1 00/ 75 0.5/ 0.5  
13 00/ 1500 0.3/ 0.3  
2000 R.P.M. 1500/ 100 0.6/ 0.6  
\*\* 2000 R.P.M. 1 00/ 75 0.9/ 0.9

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV516714 LICENSE NO.: 25951A OWNER'S ID.: 25E177  
TUNE UP DATA.

----- DATE OF TUNE UP 11/ 4/76 ODOMETER READING 39213 HOUR METER READING 7827.6 -----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 790 DWELL 28 IDLE R.P.M. 525 DWELL 31  
IDLE CO(%) .2 TIMING 17BTDC IDLE CO(%) .2 TIMING 8BTDC  
IDLE HC(PPM) 80 GAP(INCH) .040 IDLE HC(PPM) 40 GAP(INCH) .035  
PCV CODE 3 AF CODE 4 PCV CODE 3 AF CODE 1  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED VACUUM ADVANCE UNIT, AIR CLEANER, SPARK PLUGS, POINTS, WIRES, CAP AND ROTOR.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2344 TEST DATE 11/ 3/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST: NYQ  
TEST 1 6.75 40.17 41.28 3.9 30.16 73. 34.0  
TEST 2 5.88 33.41 44.71 4.0 30.15 74. 34.0  
AVERAGE( 6.32)( 36.79)(43.00)( 4.0)  
CHANGE IN AVERAGE AFTER TUNE UP  
+29.5% -16.2% -27.6% - 1.3%  
TEST: C39H  
TEST 1 12.17 59.86 48.81 2.9 30.15 74. 36.0  
TEST 2 11.73 66.16 51.85 3.0 30.15 74. 38.0  
AVERAGE(11.95)( 63.01)(50.33)( 3.0)  
CHANGE IN AVERAGE AFTER TUNE UP  
+12.3% -12.6% -26.0% + 0.0%

TEST: KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/ 1000 .1/ .1  
2500 R.P.M. 50/ 800 .9/ .8  
LOW CRUISE SPEED 20 M.P.H. 125/ 1500 .2/ .2  
HIGH CRUISE SPEED 30 M.P.H. 100/ 1200 .2/ .2  
MOTORING 800/ 9000 .2/ .2  
11 INCH VACUUM 2000 R.P.M. 75/ 1000 .3/ .3  
5 INCH VACUUM 2000 R.P.M. 50/ 800 .2/ .2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
50/ 600 .1/ .2  
40/ 500 .5/ .5  
20 M.P.H. 100/ 1200 .2/ .2  
30 M.P.H. 65/ 900 .2/ .2  
1000/ 9500 .2/ .2  
2000 R.P.M. 50/ 600 .2/ .2  
6 IN. 2300 R.P.M. 25/ 300 .2/ .2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: DODGE MODEL: PW200 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 318  
 SERIAL NO.: E238E1S349673 LICENSE NO.: 714192 OWNER'S ID.: 714192  
 TUNE UP DATA.

DATE OF TUNE UP 11/ 8/76 ODOMETER READING 93064 HOUR METER READING 1073.1  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 640 DWELL 26 IDLE CO(%) 0.2 TIMING 2BTDC IDLE HC(PPM) 500 GAP(INCH) .035 PCV CODE 2 AF CODE 2 IDLE AIR/FUEL 13.8  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 20 IDLE CO(%) 0.5 TIMING 5BTDC IDLE HC(PPM) 100 GAP(INCH) .035 PCV CODE 2 AF CODE 2 IDLE AIR/FUEL 14.0  
 COMMENT: NEW WIRE ROTOR CAP POINTS CONDENSER

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2347				TEST DATE 11/ 5/76				BMV TEST SERIES NO. 2351				TEST DATE 11/ 9/76			
DYNAMOMETER INERTIA/POWER SETTINGS: 6500 LB/14. H.P. AT 40 MPH								DYNAMOMETER INERTIA/POWER SETTINGS: 6500 LB/14. H.P. AT 40 MPH							
HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)		HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)	
TEST:NYQ								TEST:NYQ							
TEST 1	9.61	67.63	3.98	10.3	29.88	63.5	34.	6.77	54.73	5.78	10.3	30.12	68.5	17.	
TEST 2	8.58	58.46	4.15	10.5	29.88	62.5	33.	7.07	57.96	5.00	10.5	30.12	68.5	17.	
AVERAGE	( 9.10)	( 63.05)	( 4.07)	(10.4)				( 6.92)	( 56.35)	( 5.69)	(10.4)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
TEST:C39H								TEST:C39H							
TEST 1	14.42	80.89	4.46	6.5	29.88	67.5	33.	12.10	82.41	7.13	6.3	30.12	68.5	17.	
TEST 2	13.67	72.33	4.83	7.0	29.88	68.	34.	13.36	71.20	7.71	6.9	30.12	69.	18.	
AVERAGE	(14.05)	( 76.61)	( 4.65)	( 6.8)				(12.73)	( 76.81)	( 7.42)	( 6.6)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
TEST:KEY MODE								TEST:KEY MODE							
ENGINE SPEED								ENGINE SPEED							
				HC(PPM)		CO(%)						HC(PPM)		CO(%)	
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)								(READING FROM ANALYZER 2/READING FROM ANALYZER 5)							
IDLE		2000/	175	0.2/	0.2			2100/	175	0.3/	0.3				
2500 R.P.M.		800/	50	0.2/	0.2			700/	50	0.2/	0.2				
LOW CRUISE SPEED	25 M.P.H.	1200/	100	0.1/	0.1			25 M.P.H.	1700/	125	0.2/	0.2			
HIGH CRUISE SPEED	40 M.P.H.	1200/	100	0.5/	0.5			40 M.P.H.	1 00/	75	0.2/	0.2			
MOTDRING		27000/	1800	0.8/	0.8			30 00/	1500	0.5/	0.5				
11 INCH VACUUM	2000 R.P.M.	1800/	150	0.2/	0.2			2000 R.P.M.	4 00/	275	0.2/	0.2			
3 INCH VACUUM	2000 R.P.M.	2800/	200	3.4/	3.4			** 2000 R.P.M.	3500/	250	3.4/	3.6			

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
 SERIAL NO.: 81131CGB22474 LICENSE NO.: 12196E OWNER'S ID.: 25G089  
 TUNE UP DATA.

DATE OF TUNE UP 11/16/76 ODOMETER READING 22510 HOUR METER READING 3224.0

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	525	DWELL	27	IDLE R.P.M.	600	DWELL	31
IDLE CO(%)	5.0	TIMING	27BTDC	IDLE CO(%)	1.2	TIMING	5BTDC
IDLE HC (PPM)	1500	GAP(INCH)	.038	IDLE HC (PPM)	300	GAP(INCH)	.030
PCV CODE	4.	AF CODE	3	PCV CODE	1	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED DISTRUTOR, PLUGS, WIRES AND CAP.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2354 TEST DATE 11/12/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22. H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST: NYO

TEST 1	20.64	122.5	41.95	4.0	30.23	70.	21.0
TEST 2	15.78	124.4	42.64	4.1	30.23	73.	20.0
AVERAGE(18.21)	(123.45)	(42.30)	(4.1)				

TEST: C39H

TEST 1	41.55	225.3	46.03	3.2	30.23	65.5	17.0
TEST 2	35.77	240.5	40.12	3.4	30.23	66.	18.0
AVERAGE(38.66)	(232.90)	(43.08)	(3.3)				

TEST: KEY MODE

ENGINE SPEED	HC (PPM)	CO (%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	950/ 8250	3.5/ 3.8
2500 R.P.M.	200/ 2500	.7/ .6
LOW CRUISE SPEED 20 M.P.H.	125/ 1800	.8/ .8
HIGH CRUISE SPEED 30 M.P.H.	50/ 800	.3/ .3
MOTORING	2000/25000	2.5/ 2.5
11 INCH VACUUM 2000 R.P.M.	175/ 2200	.4/ .4
5 INCH VACUUM 1700 R.P.M.	125/ 1700	.3/ .3

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2356 TEST DATE 11/19/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22. H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST: NYO

TEST 1	7.65	100.4	24.84	3.9	29.63	72.5	23.0
TEST 2	7.10	108.9	24.64	4.0	29.62	71.5	21.0
AVERAGE(7.38)	(104.65)	(24.74)	(4.0)				

TEST: C39H

TEST 1	16.01	245.1	30.04	2.8	29.61	73.	22.0
TEST 2	16.14	259.6	27.76	2.8	29.61	73.5	21.0
AVERAGE(16.08)	(252.35)	(28.90)	(2.8)				

TEST: KEY MODE

ENGINE SPEED	HC (PPM)	CO (%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	425/ 4500	.9/ 1.0
2500 R.P.M.	50/ 800	.7/ .6
20 M.P.H.	50/ 800	1.1/ 1.2
30 M.P.H.	25/ 300	.2/ .3
MOTORING	800/10000	.5/ .5
2000 R.P.M.	50/ 800	.3/ .3
4 IN. 1700 R.P.M.	60/ 1000	.8/ .8

CHANGE IN AVERAGE AFTER TUNE UP

-39.5% -15.2% -41.5% - 2.5%

CHANGE IN AVERAGE AFTER TUNE UP

-58.4% + 8.4% -32.9% -15.2%

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: CHEVROLET MODEL: 50  
SERIAL NO.: CS537T136279 LICENSE NO.: 2730JA  
TUNE UP DATA.

MODEL YR.: 67 TRANS. CODE:A6 DISPLACEMENT: 292  
OWNER'S ID.: 5162

DATE OF TUNE UP 12/30/76 ODOMETER READING 15908 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 34  
IDLE CO(%) 10.0 TIMING ATDC  
IDLE HC(PPM) 400 GAP(INCH) .038  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 11.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 620 DWELL 31  
IDLE CO(%) 1.2 TIMING 4BTDC  
IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: TIMING ADJUSTED BY OBSERVATING OF HC EMISSIONS AT 2500 RPM AND IDLE VACUUM. VIBRATION, DAMPER-PULLEY DEFECTIVESO TIMING WAS INACCURATE. REPLACED PLUGS,WIRES,CAP,POINTS AND COIL.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2358 TEST DATE 11/24/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/12. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.26 194.4 13.9 7.4 30.12 67.5 20.  
TEST 2 13.3 182.7 15.4 7.4 30.12 68. 20.  
AVERAGE(13.28)( 188.55)(14.65)( 7.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 25.52 327.1 21.27 4.8 30.12 67.5 19.  
TEST 2 22.73 357.5 22.09 4.7 30.12 69.5 19.  
AVERAGE(24.13)( 342.30)(21.68)( 4.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)		
IDLE	8500/ 400	10.0/10.0
2500 R.P.M.	22000/ 2000	.3/ .4
LOW CRUISE SPEED 20 M.P.H.	2700/ 200	1.5/ 1.5
HIGH CRUISE SPEED 30 M.P.H.	1250/ 110	.3/ .3
MOTDRING	40000/ 2000	5.5/ 5.5
11 INCH VACUUM 2000 R.P.M.	3800/ 225	.3/ .3
6 INCH VACUUM 1500 R.P.M.	3800/ 225	5.9/ 5.8

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2363 TEST DATE 12/ 1/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/12. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

6.69 201.3 11.21 5.7 30.47 71. 17.  
6.04 204.6 12.12 5.7 30.47 71.5 18.  
( 6.37)( 202.95)(11.67)( 5.7)  
-52.1% + 7.6% -20.4% -23.0%

10.11 301.8 11. 4.0 30.47 70. 16.  
9.66 343.6 9.89 4.0 30.47 62. 13.  
( 9.89)( 322.70)(10.45)( 4.0)  
-59.0% - 5.7% -51.8% -15.8%

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 2/READING FROM ANALYZER 5)		
IDLE	900/ 50	.8/ .7
2500 R.P.M.	22500/ 2000	.6/ .6
20 M.P.H.	1500/ 100	.3/ .3
30 M.P.H.	1 00/ 60	.3/ .3
15 00/ 1400		1.1/ 1.0
2000 R.P.M.	1200/ 75	.5/ .4
1500 R.P.M.	1800/ 100	5.8/ 6.0

COMMENT NYQ TEST 1: VEHICLE COULD NOT FOLLOW DRIVING CYCLES.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV512350 LICENSE NO.: 25938A OWNER'S ID.: 25E164  
TUNE UP DATA.

DATE OF TUNE UP 11/29/76 ODOMETER READING 44742 HOUR METER READING 8303.1

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 690 DWELL 30  
IDLE CO(%) 5.2 TIMING 8BTDC  
IDLE HC(PPM) 185 GAP(INCH) .050  
PCV CODE 4 AF CODE 1  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 23  
IDLE CO(%) 2.8 TIMING 8BTDC  
IDLE HC(PPM) 400 GAP(INCH) .035  
PCV CODE 4 AF CODE 1  
IDLE AIR/FUEL

COMMENT: REPLACED DISTRIBUTOR, PLUGS, WIRES, CAP, ROTOR AND VACUUM ADVANCE UNIT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2360 TEST DATE 11/24/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2364 TEST DATE 12/ 1/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 13.51 136.5 27.00 4.2 30.11 70. 18.0  
TEST 2 9.89 143.1 26.53 4.4 30.11 70. 18.0  
AVERAGE(11.70)( 139.80)(26.77)( 4.3)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:NYQ  
TEST 1 7.18 86.6 20.94 4.5 30.44 71.5 18.0  
TEST 2 6.76 96.8 20.24 4.6 30.44 71.5 18.0  
AVERAGE(6.97)( 91.70)(20.59)( 4.6)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 21.80 294.9 30.71 3.1 30.11 70.5 19.0  
TEST 2 23.00 329.4 30.84 3.0 30.11 71. 18.0  
AVERAGE(22.40)( 312.15)(30.78)( 3.1)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 13.48 180.4 23.61 3.4 30.44 70. 16.0  
TEST 2 13.14 199.2 22.84 3.4 30.44 71. 17.0  
AVERAGE(13.31)( 189.80)(23.23)( 3.4)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 150/ 2500 4.3/ 4.2  
2500 R.P.M. 75/ 1200 1.5/ 1.6  
LOW CRUISE SPEED 20 M.P.H. 75/ 1200 .5/ .5  
HIGH CRUISE SPEED 30 M.P.H. 60/ 900 .2/ .2  
MOTORING 800/15000 5.0/ 4.6  
11 INCH VACUUM 2000 R.P.M. 50/ 800 .2/ .2  
3 INCH VACUUM 2000 R.P.M. 75/ 1200 1.3/ 1.2

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 125/ 1700 1.9/ 1.8  
2500 R.P.M. 25/ 400 .3/ .3  
20 M.P.H. 30/ 500 .3/ .3  
30 M.P.H. 30/ 500 .1/ .1  
MOTORING 1000/10000 1.3/ 1.4  
2000 R.P.M. 30/ 500 .1/ .1  
4 IN. 2000 R.P.M. 75/ 1200 1.4/ 1.3

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: C600 MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 330  
SERIAL NO.: C60DVC88220 LICENSE NO.: 9523NL OWNER'S ID.: 5927  
TUNE UP DATA.

DATE OF TUNE UP	12/ 9/76	ODOMETER READING	0567	HR METER READING	*****
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****		
IDLE R.P.M.	550	DWELL	27	IDLE R.P.M.	DWELL
IDLE CO(%)	0.5	TIMING	7BTDC	IDLE CO(%)	TIMING ATDC
IDLE HC(PPM)	210	GAP(INCH)	.030	IDLE HC(PPM)	GAP(INCH)
PCV CODE	2	AF CODE	2	PCV CODE	AF CODE
IDLE AIR/FUEL	13.7			IDLE AIR/FUEL	

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2367 TEST DATE 12/ 7/76  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
 TEST 1 10.09 199.10 16.95 4.7 29.65 72.0 63.0  
 TEST 2 9.00 225.40 14.94 4.7 29.65 72.5 64.0  
 AVERAGE( 9.55)( 212.25)(15.95)( 4.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	200/ 2500	0.3/ 0.3
2500 R.P.M.	50/ 1000	0.8/ 0.7
LOW CRUISE SPEED 25 M.P.H.	100/ 1700	0.8/ 0.7
HIGH CRUISE SPEED 40 M.P.H.	75/ 1500	0.2/ 0.2
MOTORING	1500/10000	0.3/ 0.3
11 INCH VACUUM 2000 R.P.M.	75/ 1500	0.6/ 0.6
3 INCH VACUUM 2000 R.P.M.	100/ 1900	2.5/ 2.4

GENERAL COMMENT: ENGINE WAS WITHIN SPECS. AND WAS NOT TUNED UP,

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 9999 TEST DATE 99/99/99  
 LB/ H.P. AT MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*)  
 \*\*\*\*\*% \*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

	HC(PPM)	CO(%)
(READING FROM ANALYZER /READING FROM ANALYZER )		
	*****/*****	*****/****
	*****/*****	*****/****
** M.P.H.	*****/*****	*****/****
** M.P.H.	*****/*****	*****/****
	*****/*****	*****/****
**** R.P.M.	*****/*****	*****/****
** IN. **** R.P.M.	*****/*****	*****/****

GENERAL COMMENT: AFTER TUNE UP SET 9999 IS A DUMMY. THE VEHICLE WAS RECEIVED IN TUNED UP CONDITION.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: C600 MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 330  
SERIAL NO.: C60DVC88221 LICENSE NO.: 9524NL OWNER'S ID.: 5928  
TUNE UP DATA.

----- DATE OF TUNE UP 12/15/76 ODOMETER READING 0578 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 30 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE CO(%) 0.1 TIMING 2BTDC IDLE R.P.M. 550 DWELL 30  
IDLE HC(PPM) 700 GAP(INCH) .030 IDLE CO(%) 0.8 TIMING 2BTDC  
PCV CODE 2 AF CODE 2 IDLE HC(PPM) 150 GAP(INCH) .030  
IDLE AIR/FUEL 13.8 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.9

COMMENT: IDLE MIX HAD TO BE RICHENED TO REALIZE LOW HC LEVELS AND DRIVEABILITY.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****								
BMV TEST SERIES NO. 2370				TEST DATE 12/13/76				BMV TEST SERIES NO. 2373				TEST DATE 12/14/76				
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH								13500 LB/27.0 H.P. AT 40 MPH								
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID		
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		
TEST:NYQ																
TEST 1	10.42	141.50	15.44	4.8	30.14	67.0	11.0	8.27	164.60	18.55	4.4	30.43	68.5	14.0		
TEST 2	8.83	87.42	19.17	4.7	30.15	67.5	12.0	8.02	160.50	19.24	4.5	30.42	69.5	15.0		
AVERAGE	(9.63)	(114.46)	(17.31)	(4.8)				(8.15)	(167.25)	(18.90)	(4.5)					
					CHANGE IN AVERAGE AFTER TUNE UP											
								-10.4%	+45.5%	+9.2%	-6.3%					
TEST:C39H																
TEST 1	24.07	192.20	14.22	3.9	30.16	67.5	12.0	16.18	260.00	20.93	3.2	30.42	68.5	14.0		
TEST 2	21.58	198.40	20.52	3.4	30.16	67.0	11.0	15.48	308.10	19.38	3.2	30.42	68.5	15.0		
AVERAGE	(22.83)	(195.30)	(17.37)	(3.7)				(15.83)	(284.05)	(20.16)	(3.2)					
					CHANGE IN AVERAGE AFTER TUNE UP											
								-30.6%	+45.4%	+16.0%	-12.3%					

ENGINE SPEED	HC(PPM)	CO(%)	HC(PPM)	CO(%)
	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		(READING FROM ANALYZER 5/READING FROM ANALYZER 2)	
IDLE	400/*****	0.1/ 0.1	100/*****	0.3/ 0.3
2500 R.P.M.	50/*****	0.5/ 0.5	50/*****	0.7/ 0.6
LOW CRUISE SPEED 25 M.P.H.	50/*****	0.5/ 0.5	25 M.P.H.	75/*****
HIGH CRUISE SPEED 40 M.P.H.	50/*****	0.3/ 0.3	40 M.P.H.	50/*****
MOTORING	700/*****	0.1/ 0.1	1400/*****	0.3/ 0.3
11 INCH VACUUM 2000 R.P.M.	75/*****	0.6/ 0.6	2000 R.P.M.	75/*****
4 INCH VACUUM 2000 R.P.M.	50/*****	0.2/ 0.2	** 2000 R.P.M.	75/*****

GENERAL COMMENT: BEFORE TUNE UP, ENGINE STALLED MANY TIMES DURING ALL CYCLES AND WOULD NOT IDLE SMOOTHLY.  
COMMENT KEY MODE: HC ANALYZER WAS NOT WORKING.

COMMENT KEY MODE: HC FID WAS NOT WORKING

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV510071 LICENSE NO.: 25945A OWNER'S ID.: 25E171  
TUNE UP DATA.

DATE OF TUNE UP 12/20/76 ODOMETER READING 19293 HOUR METER READING 4437.5  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 26  
IDLE CO(%) .3 TIMING 17BTDC  
IDLE HC(PPM) 900 GAP(INCH) .037  
PCV CODE 4 AF CODE 3  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 31  
IDLE CO(%) 1.2 TIMING 8BTDC  
IDLE HC(PPM) 130 GAP(INCH) .035  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL  
COMMENT: REPLACED CARBURETOR, GOVERNOR, COIL, POINTS PLUGS, CAP, ROTOR AND TRANSMISSION THROTTLE CABLE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2371 TEST DATE 12/13/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST: NYQ  
TEST 1 13.03 55.55 37.44 4.4 30.24 65. 9.  
TEST 2 12.87 57.24 38.13 4.5 30.25 65. 9.  
AVERAGE(13.75)( 56.55)(37.79)( 4.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST: C39H  
TEST 1 27.44 98.37 40.42 3.3 30.26 63. 9.  
TEST 2 22.00 112.3 40.56 3.3 30.28 64. 10.  
AVERAGE(24.72)( 105.34)(40.49)( 3.3)  
CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2380 TEST DATE 12/28/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST: NYQ  
TEST 1 11.53 119.9 23.54 4.4 29.56 68.5 22.  
TEST 2 10.57 127.0 24.04 4.4 29.56 68.5 22.  
AVERAGE(11.20)( 123.45)(23.79)( 4.4)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST: C39H  
TEST 1 24.02 224.0 26.42 3.2 29.56 67.5 20.  
TEST 2 22.82 281.0 25.41 3.1 29.56 68. 21.  
AVERAGE(23.42)( 252.50)(25.92)( 3.2)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST: KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 550/\*\*\*\*\* .2/ .1  
2500 R.P.M. 100/\*\*\*\*\* .6/ .6  
LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* .3/ .3  
HIGH CRUISE SPEED 30 M.P.H. 150/\*\*\*\*\* .1/ .1  
MOTORING 1200/\*\*\*\*\* .3/ .3  
11 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* .2/ .2  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* .7/ .6

HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 1.2/ 1.2  
100/\*\*\*\*\* 3.0/ 3.0  
20 M.P.H. 125/\*\*\*\*\* 1.2/ 1.2  
30 M.P.H. 100/\*\*\*\*\* .2/ .2  
100/\*\*\*\*\* .7/ .8  
2000 R.P.M. 100/\*\*\*\*\* .4/ .4  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 1.4/ 1.3

GENERAL COMMENT: AFTER TUNE-UP, REBUILT CARBURETOR AND TRANSMISSION TO CARBURETOR LINKAGE DISCONNECTED.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV512799 LICENSE NO.: 20155E OWNER'S ID.: 25E165  
TUNE UP DATA.

----- DATE OF TUNE UP 12/16/76 ODOMETER READING 88767 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 825 DWELL 31 IDLE R.P.M. 550 DWELL 32  
IDLE CO(%) .2 TIMING 20BTDC IDLE CO(%) .5 TIMING 10BTDC  
IDLE HC(PPM) 1075 GAP(INCH) .040 IDLE HC(PPM) 40 GAP(INCH) .035  
PCV CODE 3 AF CODE 4 PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 13.0 IDLE AIR/FUEL 13.9

COMMENT: REPLACED POINTS,CONDENSER,ROTOR,CAP,WIRES AND SPARK PLUGS

----- TEST RESULTS -----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

-----  
BMV TEST SERIES NO. 2372 TEST DATE 12/14/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 11.83 64.5 34.76 4.3 30.52 68.5 14.  
TEST 2 10.16 61.1 35.06 4.4 30.52 70. 15.  
AVERAGE(11.00)( 62.80)(34.91)( 4.4)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 20.47 93.6 39.68 3.2 30.52 69. 14.  
TEST 2 14.84 98.8 39.23 3.2 30.52 69. 14.  
AVERAGE(17.66)( 96.20)(39.46)( 3.2)

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 550/\*\*\*\*\* .2/ .1  
2500 R.P.M. 100/\*\*\*\*\* .8/ .8  
LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* .1/ .1  
HIGH CRUISE SPEED 30 M.P.H. 200/\*\*\*\*\* .1/ .1  
MOTORING 1400/\*\*\*\*\* .2/ .2  
11 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* .1/ .1  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* .7/ .6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

-----  
BMV TEST SERIES NO. 2375 TEST DATE 12/21/76  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

7.84 96.6 23.31 4.4 29.44 64. 14.  
6.54 108.4 25.31 4.4 29.44 67. 14.  
( 7.19)( 100.50)(24.31)( 4.4)  
-34.6% +63.2% -30.4% + 1.1%  
13.78 156.1 27.04 3.3 29.44 68. 15.  
11.05 183.1 27.11 3.3 29.44 69. 16.  
(12.42)( 169.60)(27.08)( 3.3)  
-29.7% +76.3% -31.4% + 3.1%

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
60/\*\*\*\*\* .1/ .1  
50/\*\*\*\*\* .6/ .6  
20 M.P.H. 125/\*\*\*\*\* .4/ .4  
30 M.P.H. 100/\*\*\*\*\* .1/ .1  
1100/\*\*\*\*\* .2/ .2  
2000 R.P.M. 50/\*\*\*\*\* .2/ .2  
\*\* 2000 R.P.M. 75/\*\*\*\*\* .9/ .8

GENERAL COMMENT: AFTER TUNE-UP,TRANS.-CARB CABLE DISCONNECTED.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV511541 LICENSE NO.: 25944A OWNER'S ID.: 25E170  
TUNE UP DATA.

DATE OF TUNE UP 1/ 3/77 ODOMETER READING 39966 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 33 IDLE R.P.M. 570 DWELL 32  
IDLE CO(%) .1 TIMING 25BTDC IDLE CO(%) .3 TIMING 25BTDC  
IDLE HC(PPM) 2000 GAP(INCH) PCV CODE 2 AF CODE 2  
PCV CODE 4 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED COIL, POINTS, CAP, ROTOR, PLUGS AND WIRES.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2384 TEST DATE 1/ 3/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 127.2 130.8 24.20 3.9 30.20 67. 18.  
TEST 2 128.1 151.0 23.94 3.9 30.20 68. 18.  
AVERAGE(27.65)( 140.90)(24.07)( 3.9)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 176.5 163.1 29.55 3.1 30.20 67.5 17.  
TEST 2 179.5 219.9 26.04 2.9 30.20 69. 18.  
AVERAGE(78.00)( 191.50)(27.80)( 3.0)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 2000/\*\*\*\*\* .1/ .1  
2500 R.P.M. 2000/\*\*\*\*\* 1.4/ 1.3  
LOW CRUISE SPEED 20 M.P.H. 2000/\*\*\*\*\* .4/ .3  
HIGH CRUISE SPEED 30 M.P.H. 1950/\*\*\*\*\* .1/ .1  
MOTORING 2000/\*\*\*\*\* .2/ .2  
11 INCH VACUUM 2000 R.P.M. 2000/\*\*\*\*\* .2/ .2  
3 INCH VACUUM 2000 R.P.M. 2000/\*\*\*\*\* 2.2/ 2.1

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2386 TEST DATE 1/ 6/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 9.44 154.2 19.14 4.1 30.15 70. 16.  
TEST 2 9.78 178.9 18.42 4.1 30.15 70. 18.  
AVERAGE(9.61)( 167.05)(18.78)( 4.1)  
CHANGE IN AVERAGE AFTER TUNE UP  
-22.5% +16.0% -22.0% + 5.1%

TEST:C39H  
TEST 1 14.39 215.6 20.33 3.1 30.15 69.5 19.  
TEST 2 17.22 285.1 19.20 3.1 30.15 70.5 19.  
AVERAGE(15.81)( 250.35)(19.77)( 3.1)  
CHANGE IN AVERAGE AFTER TUNE UP  
-91.1% +30.7% -28.9% + 3.3%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/\*\*\*\*\* .1/ .1  
2500 R.P.M. 75/\*\*\*\*\* 1.5/ 1.6  
20 M.P.H. 125/\*\*\*\*\* 1.1/ 1.0  
30 M.P.H. 100/\*\*\*\*\* .2/ .2  
MOTORING 900/\*\*\*\*\* .3/ .3  
2000 R.P.M. 75/\*\*\*\*\* .4/ .4  
6 IN. 2000 R.P.M. 125/\*\*\*\*\* 3.4/ 3.3

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV509484 LICENSE NO.: 25943A OWNER'S ID.: 25E169  
TUNE UP DATA.

----- DATE OF TUNE UP 1/ 4/77 ODOMETER READING 33181 HOUR METER READING 8451.5  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 450 DWELL 32  
IDLE CO(%) 9.6 TIMING 0BTDC  
IDLE HC(PPM) 220 GAP(INCH) .060  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL 12.3  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 590 DWELL 31  
IDLE CO(%) .1 TIMING 10BTDC  
IDLE HC(PPM) 60 GAP(INCH) .040  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 14.0  
COMMENT: REPLACED AIR CLEANER,POINTS,CONDENSER,ROTOR ,PLUGS AND VACUUM CHAMBER.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2385				TEST DATE 1/ 3/77				BMV TEST SERIES NO. 2387				TEST DATE 1/ 6/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH								DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ								TEST:NYQ							
TEST 1	22.47	235.9	17.10	4.1	30.20	70.	20.	9.61	45.1	29.79	4.6	30.15	71.5	19.	
TEST 2	22.47	235.9	15.62	4.3	30.20	71.	20.	9.27	47.9	29.04	4.7	30.15	72.	20.	
AVERAGE	(22.13)	(232.45)	(16.36)	(4.2)				(9.61)	(46.50)	(29.42)	(4.7)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
TEST:C39H								TEST:C39H							
TEST 1	46.83	446.8	17.18	3.2	30.20	70.	20.	17.60	106.5	32.03	3.5	30.15	70.5	21.	
TEST 2	46.51	490.6	15.52	3.2	30.20	70.	20.	16.87	134.3	30.79	3.5	30.15	72.	20.	
AVERAGE	(46.67)	(468.70)	(16.35)	(3.2)				(17.24)	(120.40)	(31.41)	(3.5)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
TEST:KEY MODE								TEST:KEY MODE							
ENGINE SPEED	HC(PPM)			CO(%)				ENGINE SPEED	HC(PPM)			CO(%)			
	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			(READING FROM ANALYZER 5/READING FROM ANALYZER 2)					(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			
IDLE	300/*****			8.8/ 9.				IDLE	125/*****			.1/ .1			
2500 R.P.M.	75/*****			2.7/ 2.8				2500 R.P.M.	100/*****			.6/ .6			
LOW CRUISE SPEED 20 M.P.H.	150/*****			2.1/ 2.1				20 M.P.H.	175/*****			.2/ .2			
HIGH CRUISE SPEED 30 M.P.H.	75/*****			.6/ .6				30 M.P.H.	200/*****			.2/ .2			
MOTORING	2000/*****			3.8/ 4.0				MOTORING	1300/*****			.5/ .5			
11 INCH VACUUM 2000 R.P.M.	275/*****			.7/ .6				2000 R.P.M.	125/*****			.2/ .22			
3 INCH VACUUM 2000 R.P.M.	225/*****			1.6/ 1.6				** 2000 R.P.M.	150/*****			.7/ .6			

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ140170 LICENSE NO.: 13426E OWNER'S ID.: 25D085  
TUNE UP DATA.

DATE OF TUNE UP 1/14/77 ODOMETER READING 33311 HOUR METER READING 7923.2

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 1100 DWELL 20  
IDLE CO(%) 6.5 TIMING 15BTDC  
IDLE HC(PPM) 210 GAP(INCH) .042  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL 13.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 32  
IDLE CU(%) .8 TIMING 10BTDC  
IDLE HC(PPM) 60 GAP(INCH) .040  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 14.0

COMMENT: REPLACED POINTS,CONDENSER,ROTOR,CAP,WIRES AND PLUGS

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2388 TEST DATE 1/11/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2392 TEST DATE 1/14/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(C/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 9.07 168.5 28.92 3.8 29.93 63. 13.  
TEST 2 8.87 174.7 30.11 3.9 29.93 65. 14.  
AVERAGE( 8.97)( 171.60)(30.52)( 3.9)  
CHANGE IN AVERAGE AFTER TUNE UP

7.17 35.3 17.47 4.0 30.18 66.5 15.  
7.01 51.5 19.46 4.2 30.18 68. 16.  
( 7.09)( 43.40)(18.47)( 4.1)  
-21.0% -74.7% -37.4% + 6.5%

TEST:C39H  
TEST 1 16.58 361.1 32.58 2.6 29.95 63. 13.  
TEST 2 18.18 432.1 33.00 2.6 29.96 65. 14.  
AVERAGE(17.38)( 396.60)(32.79)( 2.6)  
CHANGE IN AVERAGE AFTER TUNE UP

18.77 109.7 22.79 3.1 30.18 65.5 15.  
18.25 122.4 24.25 3.2 30.17 67.5 15.  
(18.51)( 116.05)(23.52)( 3.2)  
+ 6.5% -70.7% -28.3% +21.2%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 160/\*\*\*\*\* 4.9/ 4.8  
2500 R.P.M. 75/\*\*\*\*\* 1.2/ 1.2  
LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* .8/ .8  
HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* .2/ .2  
MOTCRING 300/\*\*\*\*\* 5.4/ 5.2  
11 INCH VACUUM 2000 R.P.M. 60/\*\*\*\*\* .2/ .2  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* .8/ .8

HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* .4/ .4  
50/\*\*\*\*\* .4/ .4  
20 M.P.H. 100/\*\*\*\*\* .3/ .3  
30 M.P.H. 50/\*\*\*\*\* .1/ .1  
700/\*\*\*\*\* .3/ .3  
2000 R.P.M. 60/\*\*\*\*\* .1/ .1  
\*\* 2000 R.P.M. 75/\*\*\*\*\* .5/ .5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
 SERIAL NO.: THM8BZV516775 LICENSE NO.: 25940A OWNER'S ID.: 25E166  
 TUNE UP DATA.

DATE OF TUNE UP 1/12/77 ODOMETER READING 39368 HOUR METER READING 3488.5  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 670 DWELL 25  
 IDLE CO(%) .2 TIMING 3BTDC  
 IDLE HC(PPM) 50 GAP(INCH) .041  
 PCV CODE 2 AF CODE 1  
 IDLE AIR/FUEL  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 570 DWELL 31  
 IDLE CO(%) .2 TIMING 3BTDC  
 IDLE HC(PPM) 75 GAP(INCH) .035  
 PCV CODE 2 AF CODE 1  
 IDLE AIR/FUEL  
 COMMENT: REPLACED POINTS, PLUGS, AND WIRES

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2389 TEST DATE 1/11/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 7.78 39.9 29.74 4.5 29.99 67. 13.  
 TEST 2 6.71 41.9 29.45 4.6 29.99 67. 14.  
 AVERAGE( 7.25)( 40.90)(29.60)( 4.6)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 TEST:C39H  
 TEST 1 10.66 86.0 32.88 3.5 30.00 65.5 13.  
 TEST 2 11.06 93.4 31.70 3.5 30.01 67. 14.  
 AVERAGE(10.86)( 89.70)(32.29)( 3.5)  
 CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2391 TEST DATE 1/13/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 7.12 39.2 28.55 4.5 30.49 67 13  
 TEST 2 6.57 46.7 28.82 4.6 30.42 68.5 14  
 AVERAGE( 6.95)( 42.95)(28.69)( 4.6)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 - 5.5% + 5.0% - 3.1% + 0.0%  
 TEST:C39H  
 TEST 1 9.72 84.7 32.04 3.5 30.48 67.5 14  
 TEST 2 9.49 101.2 32.77 3.4 30.47 68 15  
 AVERAGE( 9.61)( 92.95)(32.41)( 3.5)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -11.6% + 3.6% + 0.4% - 1.4%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 75/\*\*\*\*\* .1/ .1  
 2500 R.P.M. 30/\*\*\*\*\* .4/ .3  
 LOW CRUISE SPEED 20 M.P.H. 100/\*\*\*\*\* .2/ .2  
 HIGH CRUISE SPEED 30 M.P.H. 100/\*\*\*\*\* .1/ .1  
 MOTORING 1300/\*\*\*\*\* .3/ .3  
 11 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* .2/ .2  
 3 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* .5/ .4

HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 50/\*\*\*\*\* .1/ .1  
 2500 R.P.M. 25/\*\*\*\*\* .3/ .3  
 20 M.P.H. 75/\*\*\*\*\* .2/ .2  
 30 M.P.H. 50/\*\*\*\*\* .2/ .2  
 1200/\*\*\*\*\* .3/ .3  
 2000 R.P.M. 50/\*\*\*\*\* .2/ .1  
 \*\* 2000 R.P.M. 60/\*\*\*\*\* .4/ .4

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: CHEVROLET MODEL: 30  
SERIAL NO.: PS351F650927 LICENSE NO.: 5218GF  
TUNE UP DATA.

MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 250  
OWNER'S ID.: 4073

DATE OF TUNE UP 1/18/77 ODOMETER READING 14423 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 710 DWELL 32  
IDLE CO(%) 2.8 TIMING 4BTDC  
IDLE HC(PPM) 70 GAP(INCH) .038  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 32  
IDLE CO(%) 0.1 TIMING 0BTDC  
IDLE HC(PPM) 45 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL

COMMENT: NEW COIL POINTS PLUGS WIRES ROTOR

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2394 TEST DATE 1/17/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 8.02 77.01 11.35 6.6 29.86 67. 11.  
TEST 2 7.07 78.11 11.73 6.7 29.86 66. 11.  
AVERAGE( 7.54)( 77.73)(11.54)( 6.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:U39H

TEST 1 17.12 145.7 17.16 4.0 29.86 64.5 10.  
TEST 2 14.26 137.1 16.93 4.3 29.86 65.5 10.  
AVERAGE(15.69)( 141.40)(17.05)( 4.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 2/READING FROM ANALYZER 5)

IDLE \*\*\*\*\*/ 100 3.9/ 4.0  
2500 R.P.M. \*\*\*\*\*/ 30 0.3/ 0.3  
LOW CRUISE SPEED 25 M.P.H. \*\*\*\*\*/ 60 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. \*\*\*\*\*/ 50 0.1/ 0.1  
MOTORING \*\*\*\*\*/ 2000 4.0/ 4.2  
11 INCH VACUUM 2000 R.P.M.\*\*\*\*\*/ 50 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M.\*\*\*\*\*/ 50 0.5/ 0.5

COMMENT KEY MODE: SCOTT FID MALFUNCTION

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2395 TEST DATE 1/19/77  
8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

4.02 27.00 7.45 7.6 29.70 66. 13.  
4.61 32.84 7.98 7.3 29.70 67.5 12.  
( 4.47)( 29.92)( 7.72)( 7.5)  
-40.7% -61.5% -33.1% +12.0%

10.84 60.78 8.91 5.2 29.70 65. 11.  
10.73 67.53 9.69 5.3 29.70 66.5 12.  
(10.79)( 64.16)( 9.30)( 5.3)  
-31.3% -54.6% -45.4% +26.5%

HC(PPM) CO(%)

(READING FROM ANALYZER 2/READING FROM ANALYZER 5)

\*\*\*\*\*/ 50 0.3/ 0.3  
\*\*\*\*\*/ 30 0.2/ 0.2  
25 M.P.H. \*\*\*\*\*/ 75 0.2/ 0.2  
40 M.P.H. \*\*\*\*\*/ 25 0.1/ 0.1  
\*\*\*\*\*/ 1500 0.5/ 0.5  
2000 R.P.M.\*\*\*\*\*/ 35 0.1/ 0.1  
\*\* 2000 R.P.M.\*\*\*\*\*/ 50 0.3/ 0.3

COMMENT KEY MODE: SCOTT FID MALFUNCTION

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 70 TRANS. CODE:M5 DISPLACEMENT: 330  
 SERIAL NO.: C61CUG62152 LICENSE NO.: 4140GH OWNER'S IC.: 4202  
 TUNE UP DATA.

DATE OF TUNE UP 1/24/77 ODOMETER READING 40719 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 800 DWELL 30 IDLE R.P.M. 600 DWELL 30  
 IDLE CO(%) 5.5 TIMING 6BTDC IDLE CO(%) 0.6 TIMING 6BTDC  
 IDLE HC(PPM) 150 GAP(INCH) .036 IDLE HC(PPM) 180 GAP(INCH) .030  
 PCV CODE 4 AF CODE 3 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 13.3 IDLE AIR/FUEL 13.9

COMMENT: NEW POINTS COND.CAP ROTOR WIRES PLUGS REBUILT CARB. ENGINE NOT ORIGINAL

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2396 TEST DATE 1/20/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 26.95 247.8 12.80 5.0 29.75 68. 21.  
 TEST 2 28.99 244.7 14.55 5.0 29.75 69. 21.  
 AVERAGE(27.97)( 246.25)(13.68)( 5.0)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2402 TEST DATE 1/26/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13. H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 20.50 198.3 13.49 5.0 29.67 71. 18.  
 TEST 2 22.87 248.3 10.67 5.1 29.67 71. 18.  
 AVERAGE(21.69)( 223.30)(12.08)( 5.1)

CHANGE IN AVERAGE AFTER TUNE UP

-22.5% - 9.3% -11.7% + 1.0%

TEST:C39H  
 TEST 1 47.20 389.7 13.85 3.8 29.75 68. 23.  
 TEST 2 57.49 460.1 12.63 3.6 29.75 68.5 22.  
 AVERAGE(52.35)( 424.90)(13.24)( 3.7)

TEST:C39H  
 TEST 1 35.29 299.6 14.39 3.7 29.67 71.5 19.  
 TEST 2 42.15 330.4 10.78 3.9 29.67 71. 18.  
 AVERAGE(38.72)( 315.00)(12.59)( 3.8)

CHANGE IN AVERAGE AFTER TUNE UP

-26.0% -25.9% - 4.9% + 2.7%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE \*\*\*\*\*/ 150 3.9/ 4.0  
 2500 R.P.M. \*\*\*\*\*/ 100 5.0/ 5.0  
 LOW CRUISE SPEED 20 M.P.H. \*\*\*\*\*/ 125 2.6/ 2.5  
 HIGH CRUISE SPEED 30 M.P.H. \*\*\*\*\*/ 175 4.3/ 4.5  
 MOTORING \*\*\*\*\*/ 2000 4.5/ 4.5  
 11 INCH VACUUM 2000 R.P.M.\*\*\*\*\*/ 200 1.2/ 1.3  
 3 INCH VACUUM 2000 R.P.M.\*\*\*\*\*/ 100 0.3/ 0.3

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 2/READING FROM ANALYZER 5)  
 IDLE \*\*\*\*\*/ 150 1.4/ 1.6  
 2500 R.P.M. \*\*\*\*\*/ 40 0.4/ 0.4  
 20 M.P.H. \*\*\*\*\*/ 75 0.2/ 0.2  
 30 M.P.H. \*\*\*\*\*/ 75 0.2/ 0.2  
 MOTORING \*\*\*\*\*/ 2000 1.0/ 1.0  
 2000 R.P.M.\*\*\*\*\*/ 125 0.2/ 0.2  
 \*\* 2000 R.P.M.\*\*\*\*\*/ 130 3.3/ 3.2

COMMENT KEY MODE: SCOTT FID MALFUNCTION

COMMENT KEY MODE: SCOTT FID MALFUNCTION

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HMB1BZ154452 LICENSE NO.: 13652E OWNER'S ID.: 25D384  
TUNE UP DATA.

DATE OF TUNE UP 1/24/77 ODOMETER READING 22100 HOUR METER READING 8977.1

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 1000 DWELL 28  
IDLE CO(%) 0.6 TIMING 8ATDC  
IDLE HC(PPM) 80 GAP(INCH) .038  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 32  
IDLE CO(%) 0.2 TIMING 10BTDC  
IDLE HC(PPM) 70 GAP(INCH) .035  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL

COMMENT: REPLACED CAP, ROTOR, WIRE SET, PLUGS AND VACUUM RETARD HOSE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2397 TEST DATE 1/20/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 3.74 76.90 23.87 2.9 29.76 70.5 25.  
TEST 2 3.96 105.8 21.84 3.1 29.76 62.5 20.  
AVERAGE( 3.85)( 91.35)(22.86)( 3.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 10.60 214.0 25.29 2.1 29.77 61.5 18.  
TEST 2 12.30 314.1 24.71 2.2 29.77 64. 17.  
AVERAGE(11.45)( 264.05)(25.00)( 2.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 50/\*\*\*\*\* 0.7/ 0.6  
2500 R.P.M. 25/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 20 M.P.H. 25/\*\*\*\*\* 0.3/ 0.3  
HIGH CRUISE SPEED 30 M.P.H. 10/\*\*\*\*\* 0.1/ 0.1  
MOTORING 50/\*\*\*\*\* 0.8/ 0.8  
11 INCH VACUUM 2200 R.P.M. 10/\*\*\*\*\* 0.1/ 0.1  
4 INCH VACUUM 2000 R.P.M. 10/\*\*\*\*\* 0.1/ 0.1

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2403 TEST DATE 1/26/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

9.99 37.2 31.38 3.9 29.67 69. 18.  
9.54 45.5 33.08 4.1 29.67 69.5 19.  
( 9.77)( 41.35)(32.23)( 4.0)  
-52.6% -54.7% -11.0% +33.3%

19.85 117.1 34.06 3.0 29.67 69.5 17.  
17.10 164.3 33.73 3.1 29.67 70.5 18.  
(18.48)( 140.70)(33.90)( 3.1)  
+61.4% -46.7% +35.6% +41.9%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

175/\*\*\*\*\* 0.1/ 0.1  
75/\*\*\*\*\* 0.8/ 0.8  
20 M.P.H. 150/\*\*\*\*\* 1.1/ 1.0  
30 M.P.H. 125/\*\*\*\*\* 0.2/ 0.2  
1100/\*\*\*\*\* 0.2/ 0.2  
2200 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
\*\* IN. \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*\*/\*\*\*\*

COMMENT KEY MODE: TRANSMISSION BEGAN TO SLIP.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 40,000 MAKE: I-H MODEL: 2010A MODEL YR.: 73 TRANS. CODE:A6 DISPLACEMENT: 501  
SERIAL NO.: 81131CGB21272 LICENSE NO.: 12182E OWNER'S ID.: 25G091  
TUNE UP DATA.

DATE OF TUNE UP 1/26/77 ODOMETER READING 29162 HOUR METER READING 4040.2

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	570	DWELL	21	IDLE R.P.M.	550	DWELL	32
IDLE CO(%)	4.0	TIMING	15BTDC	IDLE CO(%)	6.2	TIMING	5BTDC
IDLE HC(PPM)	300	GAP(INCH)	.040	IDLE HC(PPM)	170	GAP(INCH)	.030
PCV CODE	2	AF CODE	3	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, CONDENSER, CAP, ROTOR, WIRE SET, PLUGS, CARBURETOR AND COIL.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2398 TEST DATE 1/24/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/22. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2411 TEST DATE 2/ 2/77  
13500 LB/22. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 8.01 60.7 38.90 4.7 30.21 67. 15.  
TEST 2 8.78 66.8 38.78 4.6 30.21 67.5 17.  
AVERAGE( 8.85)( 61.75)(38.84)( 4.7)  
CHANGE IN AVERAGE AFTER TUNE UP

3.42 93.1 24.29 4.3 30.25 66. 16.  
5.57 91.8 25.09 4.2 30.25 65.5 15.  
( 6.00)( 92.45)(24.69)( 4.3)  
-32.2% +40.7% -36.4% - 8.6%

TEST:C39H  
TEST 1 21.76 163.2 38.13 3.7 30.21 66.5 15.  
TEST 2 17.37 140.5 37.45 4.0 30.21 67. 16.  
AVERAGE(19.57)( 151.85)(37.79)( 3.9)  
CHANGE IN AVERAGE AFTER TUNE UP

15.23 177.6 29.36 3.2 30.26 65. 16.  
13.26 162.1 28.07 3.3 30.26 66.5 15.  
(14.25)( 169.85)(28.72)( 3.3)  
-27.2% +11.9% -24.0% -15.6%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/\*\*\*\*\* 2.4/ 2.4  
2500 R.P.M. 75/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 20 M.P.H. 100/\*\*\*\*\* 0.3/ 0.3  
HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
MOTORING 2000/\*\*\*\*\* 2.7/ 2.6  
11 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.3/ 0.3

HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/\*\*\*\*\* 2.2/ 2.1  
30/\*\*\*\*\* 0.1/ 0.1  
20 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
30 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
1400/\*\*\*\*\* 2.6/ 2.6  
2000 R.P.M. 50/\*\*\*\*\* 0.1/ 0.1  
\*\* 2000 R.P.M. 60/\*\*\*\*\* 1.3/ 1.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ138667 LICENSE NO.: 13458E OWNER'S ID.: 25D047  
TUNE UP DATA.

DATE OF TUNE UP 2/ 7/77 ODOMETER READING 26110 HOUR METER READING 7330.2

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 1400 DWELL 38  
IDLE CO(%) 6.8 TIMING 6BTDC  
IDLE HC(PPM) 130 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 31  
IDLE CO(%) 0.9 TIMING 11BTDC  
IDLE HC(PPM) 90 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS, CHOKE PLATE WAS ORIGINALLY STUCK HALF CLOSED. CHOKE WAS FREED AND LINKAGE ADJUSTED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2414 TEST DATE 2/ 7/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2425 TEST DATE 2/11/77  
13500 LB/20. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYO

TEST 1 12.56 395.20 15.70 3.7 30.15 64.5 13.0  
TEST 2 12.24 395.60 15.20 3.7 30.15 66.0 14.0  
AVERAGE(12.40)( 395.40)(15.95)( 3.7)

13.45 202.00 18.66 4.3 30.25 70.0 27.0  
12.26 222.00 18.13 4.3 30.25 70.0 27.0  
(12.86)( 217.00)(18.40)( 4.3)  
+ 3.7% -45.1% +15.3% +16.2%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 24.48 540.40 19.55 2.7 30.15 65.0 14.0  
TEST 2 22.26 603.20 14.69 2.7 30.15 67.0 14.0  
AVERAGE(23.37)( 571.80)(17.12)( 2.7)

27.87 436.00 12.06 3.3 30.24 70.0 27.0  
26.64 453.20 10.09 3.4 30.23 71.0 29.0  
(27.26)( 444.60)(11.08)( 3.4)  
+16.6% -22.2% -35.3% +24.1%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	160/*****	6.7/ 6.2
2500 R.P.M.	100/*****	6.6/ 6.0
LOW CRUISE SPEED 20 M.P.H.	175/*****	5.5/ 5.2
HIGH CRUISE SPEED 30 M.P.H.	100/*****	1.4/ 1.4
MOTURING	2000/*****	4.5/ 4.3
11 INCH VACUUM 2000 R.P.M.	125/*****	1.5/ 1.4
3 INCH VACUUM 2000 R.P.M.	125/*****	2.8/ 2.7

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	150/*****	1.0/ 1.1
2500 R.P.M.	150/*****	7.1/ 6.9
20 M.P.H.	250/*****	6.0/ 5.7
30 M.P.H.	100/*****	0.8/ 0.8
1 00/*****	1 00/*****	0.5/ 0.5
2000 R.P.M.	125/*****	0.6/ 0.6
** 2000 R.P.M.	150/*****	2.2/ 2.1

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BZV505799 LICENSE NO.: 25956A OWNER'S ID.: 25E182  
TUNE UP DATA.

DATE OF TUNE UP 2/17/77 ODOMETER READING 36155 HOUR METER READING 942.5

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	740	DWELL	29	IDLE R.P.M.	650	DWELL	34
IDLE CO(%)	6.0	TIMING	10BTDC	IDLE CO(%)	0.1	TIMING	8BTDC
IDLE HC(PPM)	300	GAP(INCH)	.060	IDLE HC(PPM)	80	GAP(INCH)	.035
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL	13.1			IDLE AIR/FUEL	13.9		

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS. CARB WAS REBUILT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2419 TEST DATE 2/ 8/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2432 TEST DATE 2/18/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21. H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 18.20 139.9 28.98 4.0 30.40 65.5 15.  
TEST 2 16.16 131.2 29.62 4.1 30.40 66.5 15.  
AVERAGE(17.18)( 135.55)(29.30)( 4.1)

TEST 1 8.71 36.4 27.97 3.9 30.20 67.5 14.  
TEST 2 6.90 37.1 27.49 4.1 30.20 68. 15.  
( 7.90)( 30.75)(27.73)( 4.0)

CHANGE IN AVERAGE AFTER TUNE UP

51.6% -72.9% - 5.4% - 1.2%

TEST:C39H

TEST 1 35.36 275.7 33.99 2.9 30.40 66. 16.  
TEST 2 33.07 305.9 30.80 3.1 30.40 67.5 17.  
AVERAGE(34.22)( 290.80)(32.40)( 3.0)

TEST 1 13.79 84.4 31.80 2.8 30.20 66.5 15.  
TEST 2 10.80 102.1 33.32 2.8 30.20 69.5 14.  
(12.30)( 93.25)(32.56)( 2.8)

CHANGE IN AVERAGE AFTER TUNE UP

-64.1% -67.9% + 0.5% - 6.7%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	300/*****	6.0/ 5.8
2500 R.P.M.	260/*****	0.3/ 0.3
LOW CRUISE SPEED 20 M.P.H.	125/*****	1.1/ 1.1
HIGH CRUISE SPEED 30 M.P.H.	75/*****	0.3/ 0.3
MOTORING	2000/*****	4.9/ 4.8
11 INCH VACUUM 2000 R.P.M.	100/*****	0.3/ 0.3
4 INCH VACUUM 2000 R.P.M.	75/*****	0.2/ 0.2

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	75/*****	0.1/ 0.1
2500 R.P.M.	50/*****	1.3/ 1.3
20 M.P.H.	75/*****	0.4/ 0.4
30 M.P.H.	50/*****	0.2/ 0.2
MOTORING	1200/*****	0.3/ 0.3
2000 R.P.M.	50/*****	0.2/ 0.2
** 2000 R.P.M.	75/*****	0.7/ 0.6

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: FORD MODEL: C750 MODEL YR.: 68 TRANS. CODE:M5 DISPLACEMENT: 391  
SERIAL NO.: C75FUD68075 LICENSE NO.: 5239GF OWNER'S ID.: 9851  
TUNE UP DATA.

----- DATE OF TUNE UP 2/16/77 ODOMETER READING 11655 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 1600 DWELL 31  
IDLE CO(%) 9.4 TIMING 15BTDC  
IDLE HC(PPM) 1000 GAP(INCH)  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 630 DWELL 26  
IDLE CO(%) 0.7 TIMING 9BTDC  
IDLE HC(PPM) 140 GAP(INCH) .034  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL

COMMENT: REPLACED POINTS, PLUGS, ROTOR, CAP, WIRE SET, CONDENSER, CARB. GASKETS AND CARB. NEEDLES.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2420 TEST DATE 2/ 8/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 75.03 224.40 23.54 4.3 30.40 69.0 18.0  
TEST 2 79.09 228.00 25.94 4.1 30.40 70.0 18.0  
AVERAGE(77.36)( 226.20)(24.74)( 4.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 121.60 321.30 29.89 3.2 30.40 69.0 16.0  
TEST 2 127.80 331.20 30.31 3.1 30.40 69.5 17.0  
AVERAGE(24.70)( 326.25)(30.10)( 3.2)

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 1700/\*\*\*\*\* 7.0/ 6.6  
2500 R.P.M. 1700/\*\*\*\*\* 0.9/ 0.8  
LOW CRUISE SPEED 20 M.P.H. 1450/\*\*\*\*\* 0.5/ 0.5  
HIGH CRUISE SPEED 30 M.P.H. 1600/\*\*\*\*\* 0.3/ 0.3  
MOTORING 2000/\*\*\*\*\* 5.2/ 4.7  
11 INCH VACUUM 2000 R.P.M. 750/\*\*\*\*\* 0.3/ 0.3  
3 INCH VACUUM 2000 R.P.M. 400/\*\*\*\*\* 3.4/ 3.3

GENERAL COMMENT: BEFORE TUNE UP, SCOTT NO. 1 FID WAS USED FOR HC ANALYSIS.  
COMMENT KEY MODE: HC ANALYZER WAS NOT WORKING.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2433 TEST DATE 2/23/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 30.63 126.80 16.51 4.6 30.12 66.0 35.0  
TEST 2 31.82 132.90 16.06 4.6 30.12 63.0 35.0  
AVERAGE(31.23)( 129.85)(16.29)( 4.6)  
CHANGE IN AVERAGE AFTER TUNE UP  
-20.0% -42.6% -34.2% + 9.5%  
TEST:C39H  
TEST 1 37.97 153.60 16.56 3.9 30.12 62.5 30.0  
TEST 2 42.49 177.30 17.81 3.5 30.12 64.0 31.0  
AVERAGE(40.23)( 165.45)(17.19)( 3.7)  
CHANGE IN AVERAGE AFTER TUNE UP  
-67.7% -49.3% -42.9% +17.5%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 500/\*\*\*\*\* 1.4/ 1.4  
2500 R.P.M. 125/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 20 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
MOTORING 2000/\*\*\*\*\* 4.5/ 4.0  
2000 R.P.M. 450/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 250/\*\*\*\*\* 2.8/ 2.7

GENERAL COMMENT: AFTER TUNE UP, SCOTT NO. 1 FID WAS USED FOR HC ANALYSIS.  
COMMENT C39 TEST 1: 2 SHIFT POINTS WERE MISSED  
COMMENT KEY MODE: HC ANALYZER WAS NOT WORKING.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BV512804 LICENSE NO.: 25920A OWNER'S ID.: 25E146  
TUNE UP DATA.

DATE OF TUNE UP 2/18/77 ODOMETER READING 6565 HOUR METER READING 5212.3

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	1100	DWELL	19	IDLE R.P.M.	550	DWELL	33
IDLE CO(%)	8.0	TIMING	24BTDC	IDLE CO(%)	0.8	TIMING	8BTDC
IDLE HC(PPM)	2000	GAP(INCH)	.045	IDLE HC(PPM)	80	GAP(INCH)	.035
PCV CODE	4	AF CODE	4	PCV CODE	1	AF CODE	1
IDLE AIR/FUEL	12.9			IDLE AIR/FUEL	13.5		

COMMENT: REPLACED PLUGS, CAP, ROTOR, WIRE SET AND POINTS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2431 TEST DATE 2/18/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1	16.08	200.10	46.70	3.7	30.20	65.5	13.0
TEST 2	17.13	209.00	40.42	4.1	30.20	68.0	15.0
AVERAGE	(16.61)	(204.55)	(43.56)	(3.9)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1	32.89	482.00	47.31	2.7	30.20	66.5	15.0
TEST 2	32.41	513.60	49.86	2.6	30.20	67.5	15.0
AVERAGE	(32.65)	(497.80)	(48.59)	(2.7)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED		HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			
IDLE		400/*****	8.5/ 8.1
2500 R.P.M.		1000/*****	0.7/ 0.7
LOW CRUISE SPEED 20 M.P.H.		200/*****	1.0/ 1.2
HIGH CRUISE SPEED 30 M.P.H.		225/*****	0.5/ 0.5
MOTORING		2000/*****	6.4/ 6.1
11 INCH VACUUM 2000 R.P.M.		175/*****	0.3/ 0.3
8 INCH VACUUM 2000 R.P.M.		100/*****	0.1/ 0.1

GENERAL COMMENT: BEFORE TUNE UP TRANSMISSION SEEMED TO SLIP LESS AS DRIVING CYCLE WENT ON.  
COMMENT KEY MODE: TRANSMISSION WAS SLIPPING.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2436 TEST DATE 2/24/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1	8.63	53.36	25.09	5.0	30.16	66.0	30.0
TEST 2	7.45	49.94	28.57	4.8	30.16	68.5	31.0
AVERAGE	(8.04)	(51.65)	(26.83)	(4.9)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST 1	11.75	137.50	29.02	3.5	30.13	69.0	31.0
TEST 2	12.24	162.60	30.81	3.4	30.13	68.5	29.0
AVERAGE	(12.00)	(150.05)	(29.92)	(3.5)			

CHANGE IN AVERAGE AFTER TUNE UP

ENGINE SPEED		HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			
IDLE		100/ 1600	1.1/ 1.0
2500 R.P.M.		30/ 600	0.5/ 0.5
20 M.P.H.		75/ 1200	0.5/ 0.5
30 M.P.H.		60/ 1000	0.2/ 0.2
MOTORING		700/ 9000	0.3/ 0.3
2000 R.P.M.		75/ 1200	0.3/ 0.3
9 IN. 1800 R.P.M.		40/ 700	0.2/ 0.2

GENERAL COMMENT: AFTER TUNE UP TRANSMISSION WAS SLIPPING.  
COMMENT KEY MODE: TRANSMISSION WAS SLIPPING.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ144683 LICENSE NO.: 13030E OWNER'S ID.: 25D2 1  
TUNE UP DATA.

DATE OF TUNE UP 2/24/77 ODOMETER READING 27171 HOUR METER READING 6552.0

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	780	DWELL	31	IDLE R.P.M.	600	DWELL	31
IDLE CO(%)	0.2	TIMING	24BTDC	IDLE CO(%)	0.2	TIMING	24BTDC
IDLE HC(PPM)	140	GAP(INCH)	.035	IDLE HC(PPM)	40	GAP(INCH)	.035
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL	13.5			IDLE AIR/FUEL	13.7		

COMMENT: REPLACED VACUUM ADVANCE CHAMBER, WIRE SET, CAP, ROTOR, POINTS, VACUUM HOSE AND CARB. GASKETS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2434 TEST DATE 2/23/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1	10.15	65.92	30.27	4.8	30.17	59.0	27.0
TEST 2	9.54	72.07	29.91	4.8	30.17	60.5	26.0
AVERAGE(	9.85)	(69.00)	(30.09)	(4.8)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1	16.92	92.09	34.94	3.7	30.18	59.5	26.0
TEST 2	15.09	98.36	32.96	3.8	30.18	62.5	28.0
AVERAGE(16.01)	(	95.23)	(33.95)	(3.8)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	125/*****	0.2/ 0.2
2500 R.P.M.	50/*****	0.4/ 0.4
LOW CRUISE SPEED 20 M.P.H.	100/*****	0.2/ 0.2
HIGH CRUISE SPEED 30 M.P.H.	100/*****	1.0/ 0.9
MOTORING	1300/*****	0.5/ 0.5
11 INCH VACUUM 2000 R.P.M.	150/*****	0.9/ 1.0
6 INCH VACUUM 1800 R.P.M.	125/*****	0.7/ 0.8

GENERAL COMMENT: BEFORE TUNE UP TRANSMISSION PROBLEMS CAUSED - POOR DRIVEABILITY AT SPEEDS ABOVE 15 MPH.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2437 TEST DATE 2/24/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1	7.00	32.97	26.82	4.8	30.07	65.0	30.0
TEST 2	6.34	30.98	30.27	4.6	30.07	69.0	32.0
AVERAGE(	6.67)	(31.98)	(28.55)	(4.7)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST 1	11.83	74.15	34.39	3.5	30.03	67.5	31.0
TEST 2	9.75	89.04	33.25	3.5	30.02	68.0	32.0
AVERAGE(10.79)	(	81.60)	(33.82)	(3.5)			

CHANGE IN AVERAGE AFTER TUNE UP

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	100/ 1500	0.2/ 0.2
2500 R.P.M.	75/ 1000	0.6/ 0.6
20 M.P.H.	175/ 2500	0.4/ 0.4
30 M.P.H.	175/ 2600	0.2/ 0.2
MOTORING	1400/11000	0.5/ 0.5
2000 R.P.M.	75/ 1200	0.2/ 0.2
** 1800 R.P.M.	60/ 1000	0.2/ 0.2

GENERAL COMMENT: AFTER TUNE UP TRANSMISSION PROBLEMS STILL,

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 66 TRANS. CODE:M5 DISPLACEMENT: 330  
SERIAL NO.: C61CUB24826 LICENSE NO.: 7350GH OWNER'S ID.: 6719

TUNE UP DATA.

DATE OF TUNE UP 2/24/77 ODOMETER READING 43173 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 625 DWELL 32  
IDLE CO(%) 1.0 TIMING 1BTDC  
IDLE HC(PPM) 70 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 590 DWELL 28  
IDLE CO(%) 2.8 TIMING 10BTDC  
IDLE HC(PPM) 400 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, POINTS, ROTOR, CAP, WIRE SET CONDENSER AND CARB. BEFORE TUNE UP HC-CO READINGS ARE QUESTIONABLE DUE TO MALFUNCTIONING ANALYZER.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2435 TEST DATE 2/24/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYC  
TEST 1 27.94 166.60 14.33 5.4 30.19 68.0 30.0  
TEST 2 26.25 158.60 15.04 5.4 30.19 68.5 31.0  
AVERAGE(27.10)(162.60)(14.69)(5.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 34.55 214.30 15.71 4.3 30.18 67.5 31.0  
TEST 2 39.88 188.90 16.16 4.4 30.17 67.0 30.  
AVERAGE(37.22)(201.60)(15.94)(4.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	175/ 2900	1.5/ 1.5
2500 R.P.M.	125/ 2400	1.8/ 1.7
LOW CRUISE SPEED 25 M.P.H.	250/ 3700	1.5/ 1.5
HIGH CRUISE SPEED 40 M.P.H.	200/ 3000	0.5/ 0.5
MOTORING	2000/27000	2.0/ 2.1
11 INCH VACUUM 2000 R.P.M.	275/ 3700	0.5/ 0.5
3 INCH VACUUM 2000 R.P.M.	225/ 3200	2.8/ 2.8

GENERAL COMMENT: BEFORE TUNE UP, DRIVER REPORTED OCCASIONAL MISSED SHIFTS THRUOUT TESTS.

BMV TEST SERIES NO. 2447 TEST DATE 3/ 3/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYC  
TEST 1 35.32 248.60 13.92 5.3 30.35 74.5 20.0  
TEST 2 30.37 237.20 13.40 5.5 30.35 74.5 20.0  
AVERAGE(32.85)(242.90)(13.66)(5.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 39.52 303.20 13.33 4.5 30.35 74.5 20.0  
TEST 2 38.85 267.20 14.65 4.5 30.35 74.5 20.0  
AVERAGE(39.19)(285.20)(13.99)(4.5)

CHANGE IN AVERAGE AFTER TUNE UP

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	300/ 4500	4.2/ 4.1
2500 R.P.M.	150/ 2500	1.7/ 1.7
LOW CRUISE SPEED 25 M.P.H.	250/ 3500	1.3/ 1.3
HIGH CRUISE SPEED 40 M.P.H.	175/ 2700	1.9/ 2.0
MOTORING	2 00/37000	3.8/ 3.7
2000 R.P.M.	325/ 4500	2.7/ 2.7
** 2000 R.P.M.	275/ 4000	4.0/ 3.8

GENERAL COMMENT: AFTER TUNE UP, DRIVER REPORTED OCCASIONAL MISSED SHIFTS THRUOUT TESTS.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 70 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: HM81BZ149927 LICENSE NO.: 13723E OWNER'S ID.: 25D318  
TUNE UP DATA.

DATE OF TUNE UP 3/ 1/77 ODOMETER READING 36356 HOUR METER READING 5386.9

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 640 DWELL 28  
IDLE CO(%) 10.0 TIMING 12BTDC  
IDLE HC(PPM) 850 GAP(INCH) .042  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL 12.3

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 560 DWELL 31  
IDLE CO(%) 0.0 TIMING 8BTDC  
IDLE HC(PPM) 20 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 13.8

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, AND WIRE SET. CARBURETOR AND DISTRIBUTOR WERE REBUILT,

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2440 TEST DATE 2/25/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2448 TEST DATE 3/ 4/77  
13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 42.06 263.70 26.18 4.0 29.56 69.0 31.0  
TEST 2 41.28 260.60 26.99 4.1 29.56 69.5 30.0  
AVERAGE(41.67)( 262.15)(26.59)( 4.1)

9.00 43.38 24.84 4.6 30.28 67.0 36.0  
7.90 48.17 24.68 4.8 30.28 69.5 37.0  
( 8.45)( 45.78)(24.76)( 4.7)

CHANGE IN AVERAGE AFTER TUNE UP

-79.7% -82.5% - 6.9% +16.0%

TEST:C39H

TEST 1 92.54 596.40 26.91 2.8 29.57 68.5 29.0  
TEST 2 93.90 604.00 27.57 2.8 29.57 69.0 31.0  
AVERAGE(93.22)( 600.20)(27.24)( 2.8)

13.49 91.22 24.45 3.6 30.27 68.0 36.0  
10.47 87.35 24.18 3.8 30.27 69.5 37.0  
(11.98)( 89.29)(24.32)( 3.7)

CHANGE IN AVERAGE AFTER TUNE UP

-87.1% -85.1% -10.7% +32.1%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 650/23000 10.0/10.0  
2500 R.P.M. 125/ 2000 1.2/ 1.2  
LOW CRUISE SPEED 20 M.P.H. 225/ 3400 0.8/ 0.8  
HIGH CRUISE SPEED 30 M.P.H. 100/ 1500 0.3/ 0.3  
MOTORING 2000/53000 4.0/ 3.6  
11 INCH VACUUM 2000 R.P.M. 225/ 3500 0.3/ 0.3  
3 INCH VACUUM 2000 R.P.M. 175/ 2700 0.2/ 0.2

\*\* 2000 R.P.M. 75/ 1200 0.5/ 0.5

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THMBBZV516700 LICENSE NO.: 25942A OWNER'S ID.: 25E168  
TUNE UP DATA.

DATE OF TUNE UP 3/ 1/77 ODOMETER READING 30184 HOUR METER READING 9927.2

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	775	DWELL	27	IDLE R.P.M.	500	DWELL	32
IDLE CO(%)	4.6	TIMING	21BTDC	IDLE CO(%)	0.8	TIMING	28TDC
IDLE HC(PPM)	210	GAP(INCH)	.040	IDLE HC(PPM)	90	GAP(INCH)	.035
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, CAP, ROTOR, WIRE SET AND PLUGS. IDLE SPEED DASHPOT WAS REPAIRED AND STICKING THROTTLE PLATE WAS FREED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2443 TEST DATE 2/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

BMV TEST SERIES NO. 2446 TEST DATE 3/ 3/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ  
TEST 1 20.48 348.20 17.74 3.7 29.95 70.5 25.0  
TEST 2 18.01 368.60 15.26 3.9 29.95 71.5 25.0  
AVERAGE(19.25)( 358.40)(16.50)( 3.8)

TEST:NYQ  
TEST 1 14.94 206.50 17.14 4.5 30.35 70.5 19.0  
TEST 2 13.81 210.10 16.84 4.6 30.35 71.5 21.0  
AVERAGE(14.33)( 208.30)(16.99)( 4.6)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 41.94 463.50 22.60 3.0 29.95 69.5 24.0  
TEST 2 37.93 501.60 19.56 3.0 29.95 69.5 23.0  
AVERAGE(39.94)( 482.55)(21.08)( 3.0)

TEST:C39H  
TEST 1 25.51 316.60 18.16 3.3 30.35 70.5 21.0  
TEST 2 23.14 331.30 18.06 3.3 30.35 72.0 20.0  
AVERAGE(24.33)( 323.95)(18.11)( 3.3)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	225/ 3600	3.5/ 3.6
2500 R.P.M.	100/ 1800	2.8/ 2.6
LOW CRUISE SPEED 20 M.P.H.	225/ 3600	3.5/ 3.6
HIGH CRUISE SPEED 30 M.P.H.	125/ 2200	1.9/ 2.0
MOTURING	2000/52000	5.0/ 4.9
11 INCH VACUUM 2000 R.P.M.	275/ 4000	2.2/ 2.3
3 INCH VACUUM 2000 R.P.M.	175/ 3000	0.8/ 0.8

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	100/ 1500	0.5/ 0.6
75/ 1000	2.0/ 2.0	
20 M.P.H.	175/ 2800	3.8/ 3.6
30 M.P.H.	125/ 1800	1.5/ 1.5
	1200/26000	0.8/ 0.7
2000 R.P.M.	125/ 1800	1.2/ 1.2
7 IN. 2000 R.P.M.	75/ 1000	0.6/ 0.6

COMMENT KEY MODE: ENGINE WAS W.O.T. AT 7 IN. HG.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 69 TRANS. CODE:M5 DISPLACEMENT: 330  
 SERIAL NO.: C61CUE24983 LICENSE NO.: 7791GG OWNER'S ID.: 4419  
 TUNE UP DATA.

DATE OF TUNE UP 3/22/77				ODOMETER READING 1830		HOUR METER READING *****	
***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	740	DWELL	24	IDLE R.P.M.	600	DWELL	28
IDLE CO(%)	0.2	TIMING	22BTDC	IDLE CO(%)	0.2	TIMING	12BTDC
IDLE HC(PPM)	1600	GAP(INCH)	.045	IDLE HC(PPM)	150	GAP(INCH)	.030
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL	13.5			IDLE AIR/FUEL	13.9		

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET, VACUUM ADVANCE CHAMBER AND CHAMBER HOSE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2460				TEST DATE 3/21/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	

TEST:NYQ  
 TEST 1 20.27 270.40 12.35 4.9 30.13 62.0 22.0  
 TEST 2 25.41 274.00 12.52 5.0 30.13 63.0 22.0  
 AVERAGE(25.84)( 276.20)(12.44)( 5.0)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2462				TEST DATE 3/22/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	

TEST:NYQ  
 TEST 1 24.33 203.20 11.52 5.2 29.68 66.5 44.0  
 TEST 2 23.85 195.30 12.15 5.2 29.67 67.0 45.0  
 AVERAGE(24.09)( 199.25)(11.84)( 5.2)

CHANGE IN AVERAGE AFTER TUNE UP

- 8.0% -27.0% - 4.0% + 5.1%

TEST:C39H  
 TEST 1 44.25 359.90 16.56 3.5 30.13 63.5 23.0  
 TEST 2 42.96 372.30 14.04 3.7 30.13 63.5 23.0  
 AVERAGE(43.61)( 366.10)(15.30)( 3.6)

TEST:C39H  
 TEST 1 35.05 284.30 11.39 3.9 29.64 66.5 44.0  
 TEST 2 42.06 330.90 11.96 3.7 29.62 67.0 45.0  
 AVERAGE(38.56)( 307.60)(11.68)( 3.8)

CHANGE IN AVERAGE AFTER TUNE UP

-11.6% -16.0% -23.7% + 5.6%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	900/*****	0.2/ 0.2
2500 R.P.M.	225/*****	1.5/ 1.5
LOW CRUISE SPEED 20 M.P.H.	200/*****	1.1/ 1.0
HIGH CRUISE SPEED 30 M.P.H.	175/*****	0.8/ 0.8
MOTORING	2000/*****	0.5/ 0.5
11 INCH VACUUM 2000 R.P.M.	275/*****	1.2/ 1.1
3 INCH VACUUM 2000 R.P.M.	225/*****	4.2/ 4.1

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	475/*****	0.3/ 0.3
2500 R.P.M.	100/*****	0.9/ 0.9
20 M.P.H.	125/*****	0.9/ 0.9
30 M.P.H.	75/*****	0.5/ 0.5
MOTORING	2 00/*****	1.0/ 0.9
2000 R.P.M.	225/*****	2.8/ 2.9
** 2000 R.P.M.	175/*****	3.0/ 3.0

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: F600 MODEL YR.: 73 TRANS. CODE:M5 DISPLACEMENT: 330  
SERIAL NO.: F60DCR55016 LICENSE NO.: 9980GH OWNER'S ID.: 4706  
TUNE UP DATA.

----- DATE OF TUNE UP 3/24/77 ODOMETER READING 35597 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 33 IDLE R.P.M. 650 DWELL 24  
IDLE CO(%) 4.5 TIMING 10BTDC IDLE CO(%) 0.5 TIMING 6BTDC  
IDLE HC(PPM) 1000 GAP(INCH) IDLE HC(PPM) 130 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: REPLACED POINTS, PLUGS, WIRE SET AND DISTR. CAP.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2461 TEST DATE 3/21/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 23.02 63.66 12.09 5.6 30.13 69.0 21.0  
TEST 2 17.20 53.60 15.99 5.6 30.13 72.0 24.0  
AVERAGE(20.11)( 50.32)(14.04)( 5.6)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 27.19 96.56 14.77 4.6 30.13 70.5 22.0  
TEST 2 28.11 93.95 17.31 4.5 30.13 71.5 23.0  
AVERAGE(27.65)( 95.26)(16.04)( 4.6)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 150/\*\*\*\*\* 0.3/ 0.3  
2500 R.P.M. 50/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 20 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 30 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
MOTORING 2000/\*\*\*\*\* 4.5/ 4.3  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2

-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2470 TEST DATE 3/25/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 23.12 59.69 18.19 4.6 29.94 70.0 20.0  
TEST 2 20.02 56.45 18.66 4.9 29.94 68.0 20.0  
AVERAGE(21.57)( 56.07)(18.43)( 4.8)  
CHANGE IN AVERAGE AFTER TUNE UP  
+ 7.3% - 1.0% +31.2% -15.2%

TEST:C39H  
TEST 1 36.61 93.34 22.07 3.6 29.94 64.0 16.0  
TEST 2 33.48 95.76 24.98 3.6 29.94 67.0 18.0  
AVERAGE(35.05)( 94.55)(23.53)( 3.6)  
CHANGE IN AVERAGE AFTER TUNE UP  
+26.7% - 0.7% +46.7% -20.9%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/\*\*\*\*\* 0.6/ 0.6  
2500 R.P.M. 75/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* 0.2/ 0.1  
HIGH CRUISE SPEED 30 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
MOTORING 2000/\*\*\*\*\* 4.2/ 4.1  
11 INCH VACUUM 2000 R.P.M. 200/\*\*\*\*\* 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.2/ 0.2

\*\*

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 330  
SERIAL NO.: C610VL74494 LICENSE NO.: 3014GG OWNER'S ID.: 4274  
TUNE UP DATA.

DATE OF TUNE UP 3/24/77 ODOMETER READING 21395 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 800 DWELL 24  
IDLE CO(%) 4.5 TIMING 6BTDC  
IDLE HC(PPM) 180 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 26  
IDLE CO(%) 0.9 TIMING 6BTDC  
IDLE HC(PPM) 120 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.6

COMMENT: REPLACED OIL. ADJUSTED ACCELERATOR PUMP LINKAGE ON CARB.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2466 TEST DATE 3/23/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 46.29 162.30 18.30 5.2 29.66 66.0 26.0  
TEST 2 40.66 157.50 20.31 5.0 29.66 66.5 27.0  
AVERAGE(43.48)( 159.90)(19.31)( 5.1)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 67.79 225.20 24.40 3.6 29.66 65.0 24.0  
TEST 2 76.97 263.60 25.40 3.5 29.66 66.0 26.0  
AVERAGE(72.38)( 244.40)(24.90)( 3.6)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 225/\*\*\*\*\* 4.1/ 4.0  
2500 R.P.M. 150/\*\*\*\*\* 0.6/ 0.6  
LOW CRUISE SPEED 20 M.P.H. 175/\*\*\*\*\* 0.6/ 0.6  
HIGH CRUISE SPEED 30 M.P.H. 150/\*\*\*\*\* 0.5/ 0.5  
MOTORING 2000/\*\*\*\*\* 6.0/ 5.9  
11 INCH VACUUM 2000 R.P.M. 350/\*\*\*\*\* 0.8/ 0.7  
3 INCH VACUUM 2000 R.P.M. 275/\*\*\*\*\* 1.1/ 1.1

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2469 TEST DATE 3/25/77  
13500 LB/13.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

33.68 116.90 21.37 5.1 29.94 61.5 16.0  
33.38 115.00 22.25 5.1 29.94 63.5 16.0  
(33.53)( 115.95)(21.81)( 5.1)  
-22.9% -27.5% +12.0% + 0.0%

57.50 139.90 25.79 4.0 29.94 63.0 19.0  
59.93 156.10 27.07 3.8 29.94 59.0 19.0  
(58.72)( 148.00)(26.43)( 3.9)  
-18.9% -39.4% + 6.1% + 9.9%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

375/\*\*\*\*\* 0.8/ 0.7  
150/\*\*\*\*\* 0.5/ 0.5  
20 M.P.H. 175/\*\*\*\*\* 0.5/ 0.5  
30 M.P.H. 100/\*\*\*\*\* 0.4/ 0.4  
2000 R.P.M. 200/\*\*\*\*\* 5.0/ 4.9  
2000 R.P.M. 325/\*\*\*\*\* 0.6/ 0.6  
\*\* 2000 R.P.M. 250/\*\*\*\*\* 0.2/ 0.2

GENERAL COMMENT: BEFORE TUNE UP, ENGINE STUMBLER ON ACCELERATION,

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 20,000 MAKE: I-H MODEL: 1600 MODEL YR.: 75 TRANS. CODE:M4 DISPLACEMENT: 345  
SERIAL NO.: D0512EHA42070 LICENSE NO.: 20914E OWNER'S ID.: 4500 1  
TUNE UP DATA.

DATE OF TUNE UP	3/29/77	ODOMETER READING	3270	HOUR METER READING	*****
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****		
IDLE R.P.M.	860	DWELL	33	IDLE R.P.M.	690
IDLE CO(%)	1.0	TIMING	21BTDC	IDLE CO(%)	0.2
IDLE HC(PPM)	225	GAP(INCH)		IDLE HC(PPM)	90
PCV CODE	2	AF CODE	2	PCV CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL	

COMMENT: REPLACED PLUGS, WIRE SET, DISTR. CAP, POINTS AND ROTOR. DISTR. HAD DWELL VARIATION OF 4 DEG. AND WAS LEFT AS FOUND. NEW OR REBUILT DISTR. COULD NOT BE GOTTEN IN SHORT TIME.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2471 TEST DATE 3/29/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH

HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)
TEST:NYQ						
TEST 1	26.55	172.30	14.65	5.3	29.98	72.0 65.0
TEST 2	27.14	179.80	13.61	5.5	29.98	72.0 65.0
AVERAGE(26.85)( 176.05)(14.13)( 5.4)						
CHANGE IN AVERAGE AFTER TUNE UP						
TEST:C39H						
TEST 1	46.88	230.30	17.50	3.9	29.98	73.0 66.0
TEST 2	52.82	273.20	17.18	3.9	29.98	73.5 67.0
AVERAGE(49.85)( 251.75)(17.34)( 3.9)						
CHANGE IN AVERAGE AFTER TUNE UP						

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2476 TEST DATE 4/ 1/77  
13500 LB/27.0 H.P. AT 40 MPH

HC (G/MI)	CO (G/MI)	NOX (G/MI)	MPG	BAROM (IN.HG)	TEMP (F)	HUMID (GR/LB)
TEST:NYQ						
TEST 1	20.50	144.40	11.51	5.1	30.13	69.0 20.0
TEST 2	20.29	141.10	11.34	5.1	30.13	70.0 20.0
(20.40)( 142.75)(11.43)( 5.1)						
-24.0% -10.9% -10.1% - 5.6%						
TEST:C39H						
TEST 1	33.52	185.30	14.26	3.5	30.13	71.0 18.0
TEST 2	33.18	161.20	13.22	3.8	30.13	71.0 17.0
(33.35)( 173.25)(13.74)( 3.7)						
-33.1% -31.2% -20.8% - 6.4%						

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	175/*****	3.2/ 3.3
2500 R.P.M.	125/*****	0.3/ 0.3
LOW CRUISE SPEED 25 M.P.H.	175/*****	0.3/ 0.3
HIGH CRUISE SPEED 40 M.P.H.	125/*****	0.7/ 0.8
MOTURING	2000/*****	6.5/ 6.2
11 INCH VACUUM 2000 R.P.M.	425/*****	0.7/ 0.7
3 INCH VACUUM 2000 R.P.M.	300/*****	1.3/ 1.3

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	100/*****	0.8/ 0.8
2500 R.P.M.	50/*****	0.2/ 0.2
25 M.P.H.	125/*****	0.3/ 0.2
40 M.P.H.	100/*****	0.5/ 0.5
	2 00/*****	4.0/ 3.8
2000 R.P.M.	275/*****	0.6/ 0.6
** 2000 R.P.M.	200/*****	1.0/ 0.9

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: CHEVROLET MODEL: 30 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 250  
SERIAL NO.: PS351J643181 LICENSE NO.: 8547G3 OWNER'S ID.: 4071  
TUNE UP DATA.

----- DATE OF TUNE UP 3/30/77 ODOMETER READING 13112 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 790 DWELL 28 IDLE R.P.M. 550 DWELL 34  
IDLE CO(%) 0.1 TIMING 11BTDC IDLE CO(%) 0.4 TIMING 4BTDC  
IDLE HC(PPM) 1000 GAP(INCH) . IDLE HC(PPM) 140 GAP(INCH) .035  
PCV CODE 3 AF CODE 3 PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: REPLACED DISTRIBUTOR, POINTS, ROTOR, CAP, WIRE SET, AND COIL, LEAKING CARB, VACUUM FITTING WAS CAPPED.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

-----  
BMV TEST SERIES NO. 2472 TEST DATE 3/29/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

-----  
BMV TEST SERIES NO. 2474 TEST DATE 3/31/77  
8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 7.52 71.06 7.18 8.6 29.96 81.5 66.0  
TEST 2 6.93 74.58 7.34 8.5 29.95 81.0 67.0  
AVERAGE( 7.23)( 72.32)( 7.20)( 8.6)

9.36 68.10 8.03 8.7 29.73 71.5 28.0  
8.76 64.52 8.22 9.1 29.73 72.0 28.0  
( 9.06)( 66.31)( 8.13)( 8.9)

CHANGE IN AVERAGE AFTER TUNE UP

+25.4% - 8.9% +11.9% + 4.1%

TEST:C39H

TEST 1 13.62 82.90 8.67 6.1 29.95 80.0 66.0  
TEST 2 11.49 78.61 9.03 6.2 29.95 80.5 65.0  
AVERAGE(12.56)( 80.76)( 8.85)( 6.2)

16.68 76.30 8.70 6.7 29.74 71.0 24.0  
14.85 69.40 9.82 6.5 29.74 71.0 24.0  
(15.77)( 72.85)( 9.26)( 6.6)

CHANGE IN AVERAGE AFTER TUNE UP

+25.6% - 9.8% + 4.6% + 7.3%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 600/\*\*\*\*\* 0.1/ 0.1  
2500 R.P.M. 375/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
MOTORING 1900/\*\*\*\*\* 0.5/ 0.5  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 0.5/ 0.5

\*\* 2000 R.P.M. 175/\*\*\*\*\* 0.2/ 0.2  
2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 68 TRANS. CODE:M5 DISPLACEMENT: 330  
 SERIAL NO.: C61CUD41547 LICENSE NO.: 3553GG OWNER'S ID.: 4780

TUNE UP DATA.

----- DATE OF TUNE UP 4/ 1/77 ODOMETER READING \*\*\*\*\* HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 800 DWELL 30 IDLE R.P.M. 650 DWELL 28  
 IDLE CO(%) 2.2 TIMING 2ATDC IDLE CU(%) 0.8 TIMING 12BTDC  
 IDLE HC(PPM) 2000 GAP(INCH) .038 IDLE HC(PPM) 220 GAP(INCH) .030  
 PCV CODE 3 AF CODE 2 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 13.4 IDLE AIR/FUEL 13.9  
 COMMENT: REPLACED VACUUM ADVANCE CHAMBER, POINTS, CONDENSER, ROTOR, CAP, WIRE SET, PLUGS, INTAKE MANIFOLD GASKETS AND ROCKER ARM COVER GASKETS. REPLACED BENT PUSH ROD. CARB WAS REBUILT. GOVERNOR WAS CLEANED.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2473 TEST DATE 3/31/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 37.81 417.50 4.40 4.3 29.65 76.0 27.0  
 TEST 2 38.83 464.40 3.40 4.2 29.65 77.0 28.0  
 AVERAGE(38.32)( 440.95)( 3.90)( 4.3)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2488 TEST DATE 4/11/77  
 13500 LB/13.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 33.03 251.10 12.89 5.0 30.44 63.0 21.0  
 20.03 291.00 9.79 5.1 30.44 63.0 22.0  
 (24.80)( 271.05)(11.34)( 5.1)

CHANGE IN AVERAGE AFTER TUNE UP

-35.1% -38.5% +90.8% +18.8%

TEST:C39H  
 TEST 1 57.78 333.80 9.95 3.5 29.66 75.5 24.0  
 TEST 2 56.55 371.10 9.62 3.5 29.66 76.5 24.0  
 AVERAGE(57.17)( 352.45)( 9.79)( 3.5)

41.53 347.60 14.81 3.7 30.44 63.5 25.0  
 41.85 351.40 13.85 3.7 30.44 64.0 26.0  
 (41.69)( 349.50)(14.33)( 3.7)

CHANGE IN AVERAGE AFTER TUNE UP

-27.1% - 0.8% +46.4% + 5.7%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 800/\*\*\*\*\* 0.1/ 0.1  
 2500 R.P.M. 450/\*\*\*\*\* 2.2/ 2.1  
 LOW CRUISE SPEED 20 M.P.H. 600/\*\*\*\*\* 2.0/ 2.0  
 HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* 1.5/ 1.5  
 MOTORING 1600/\*\*\*\*\* 0.5/ 0.5  
 11 INCH VACUUM 2000 R.P.M. 650/\*\*\*\*\* 2.6/ 2.6  
 3 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 1.4/ 1.4

HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 240/\*\*\*\*\* 0.2/ 0.2  
 100/\*\*\*\*\* 0.5/ 0.5  
 20 M.P.H. 150/\*\*\*\*\* 0.4/ 0.3  
 30 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
 200/\*\*\*\*\* 2.5/ 2.8  
 2000 R.P.M. 200/\*\*\*\*\* 0.8/ 0.7  
 \*\* 2000 R.P.M. 200/\*\*\*\*\* 3.7/ 3.6

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 63 TRANS. CODE:M5 DISPLACEMENT: 292  
SERIAL NO.: C61CU370469 LICENSE NO.: 5250GF OWNER'S ID.: 6589  
TUNE UP DATA.

----- DATE OF TUNE UP 4/ 6/77 ODOMETER READING 60523 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 800 DWELL 28 IDLE R.P.M. 500 DWELL 27  
IDLE CO(%) 10.0 TIMING 4BTDC IDLE CO(%) 3.2 TIMING 6BTDC  
IDLE HC(PPM) 720 GAP(INCH) IDLE HC(PPM) 640 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, CONDENSER, PLUGS, ROTOR, CAP AND WIRE SET. NEW DISTR. WAS NOT OBTAINABLE DUE TO AGE OF TRUCK. EXISTING DISTR. WAS CLEANED TO ELIMINATE MECH. ADVANCE BINDING.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2481 TEST DATE 4/ 6/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST: C39C  
TEST 1 22.37 209.70 10.77 6.2 29.89 69.0 23.0  
TEST 2 20.69 194.70 13.25 5.6 29.89 69.0 23.0  
AVERAGE(21.53)( 202.20)(12.01)( 5.9)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST: C39H  
TEST 1 35.56 308.00 13.92 4.3 29.89 68.5 22.0  
TEST 2 33.69 336.90 14.47 4.1 29.89 69.0 23.0  
AVERAGE(34.63)( 322.45)(14.20)( 4.2)  
CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2493 TEST DATE 4/14/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST: C39C  
TEST 1 18.72 156.90 21.82 5.8 30.00 78.0 24.0  
TEST 2 17.17 169.30 19.71 6.0 30.00 78.0 24.0  
AVERAGE(17.95)( 163.10)(20.77)( 5.9)  
CHANGE IN AVERAGE AFTER TUNE UP  
-16.7% -19.3% +72.9% + 0.0%  
TEST: C39H  
TEST 1 29.14 195.50 30.12 4.2 30.00 78.0 22.0  
TEST 2 30.05 214.30 29.65 4.3 30.00 79.0 24.0  
AVERAGE(29.60)( 204.90)(29.89)( 4.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
-14.5% -36.5% +10.5% + 1.2%

TEST: KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 275/\*\*\*\*\* 7.7/ 7.4  
2500 R.P.M. 100/\*\*\*\*\* 1.1/ 1.1  
LOW CRUISE SPEED 25 M.P.H. 150/\*\*\*\*\* 0.6/ 0.6  
HIGH CRUISE SPEED 40 M.P.H. 125/\*\*\*\*\* 0.3/ 0.3  
MOTORING 2000/\*\*\*\*\* 5.0/ 4.9  
11 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.6/ 0.6  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.3/ 0.3

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
400/\*\*\*\*\* 4.1/ 4.0  
75/\*\*\*\*\* 0.2/ 0.2  
25 M.P.H. 175/\*\*\*\*\* 0.2/ 0.2  
40 M.P.H. 125/\*\*\*\*\* 0.2/ 0.2  
2000 R.P.M. 200/\*\*\*\*\* 3.5/ 3.6  
2000 R.P.M. 125/\*\*\*\*\* 0.2/ 0.1  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 0.1/ 0.1

GENERAL COMMENT: BEFORE TUNE UP DRIVEABILITY WAS POOR DUE TO - WORN SHIFT LINKAGE.

GENERAL COMMENT: AFTER TUNE UP, SHIFT LINKAGE-DRIVE-ABILITY COMPLICATIONS

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D328B2S609904 LICENSE NO.: 31533E OWNER'S ID.: 290017  
TUNE UP DATA.

----- DATE OF TUNE UP 4/19/77 ODOMETER READING 19917 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 730 DWELL 42 IDLE R.P.M. 700 DWELL 41  
IDLE CO(%) 1.0 TIMING 6BTDC IDLE CO(%) 0.7 TIMING 0BTDC  
IDLE HC(PPM) 150 GAP(INCH) IDLE HC(PPM) 65 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, CONDENSER, WIRE SET AND ROTOR. CARB. WAS REBUILT; VALVE LASH WAS ADJUSTED. LEAKING VACUUM ADVANCE HOSE WAS REPLACED.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2492 TEST DATE 4/14/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 7.39 44.77 15.76 8.0 29.99 73.0 24.0  
TEST 2 7.32 53.78 15.95 8.0 30.00 73.0 24.0  
AVERAGE( 7.36)( 49.28)(15.86)( 8.0)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
TEST:C39H  
TEST 1 12.43 70.05 20.85 5.4 30.00 75.0 27.0  
TEST 2 13.26 85.37 23.94 5.0 30.00 75.5 26.0  
AVERAGE(12.85)( 77.71)(22.40)( 5.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
-----  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/\*\*\*\*\* 2.2/ 2.1  
2500 R.P.M. 50/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 20 M.P.H. 75/\*\*\*\*\* 0.2/ 0.1  
HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* 0.2/ 0.1  
MOTORING 600/\*\*\*\*\* 3.2/ 3.2  
11 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 1.3/ 1.4  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2497 TEST DATE 4/22/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
6.20 35.43 10.20 7.9 30.26 80.5 83.0  
6.35 41.42 9.45 8.4 30.26 81.5 84.0  
( 6.28)( 38.43)( 9.83)( 8.2)  
-14.7% -22.0% -38.0% + 1.9%  
-----  
TEST:C39H  
12.16 37.12 11.23 5.6 30.25 82.5 80.0  
11.35 49.10 13.67 5.0 30.25 83.5 80.0  
(11.76)( 43.11)(12.45)( 5.3)  
- 8.5% -44.5% -44.4% + 1.9%  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
200/\*\*\*\*\* 0.3/ 0.3  
50/\*\*\*\*\* 0.2/ 0.2  
20 M.P.H. 75/\*\*\*\*\* 0.2/ 0.1  
30 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
900/\*\*\*\*\* 0.5/ 0.5  
2000 R.P.M. 50/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 50/\*\*\*\*\* 0.2/ 0.2

GENERAL COMMENT: BEFORE TUNE UP, VEHICLE COULD NOT FOLLOW CYCLES CLOSELY DUE TO ENGINE WEAKNESS.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: F600 MODEL YR.: 65 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F60BE687289 LICENSE NO.: 31381E OWNER'S ID.: 2790 1  
TUNE UP DATA.

----- DATE OF TUNE UP 4/25/77 ODOMETER READING 38684 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 870 DWELL 29 IDLE R.P.M. 550 DWELL 27  
IDLE CO(%) 4.6 TIMING 20BTDC IDLE CO(%) 1.0 TIMING 6BTDC  
IDLE HC(PPM) 250 GAP(INCH) .036 IDLE HC(PPM) 100 GAP(INCH) .032  
PCV CODE 3 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED CAP. WIRE SET, POINTS, CONDENSER, ROTOR, PLUGS AND COIL. ADJUSTED CARB, FLOAT LEVEL.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2498 TEST DATE 4/25/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 22.28 382.10 1.11 6.5 29.74 71.5 48.0  
TEST 2 20.66 362.60 1.21 6.8 29.74 71.5 48.0  
AVERAGE(21.47)( 372.35)( 1.16)( 6.7)

TEST:C39H  
TEST 1 42.57 486.70 1.78 4.8 29.74 71.5 48.0  
TEST 2 35.34 537.50 1.11 4.7 29.74 72.0 50.0  
AVERAGE(38.96)( 512.10)( 1.45)( 4.8)

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 250/\*\*\*\*\* 2.7/ 2.7  
2500 R.P.M. 650/\*\*\*\*\* 9.6/ 9.7  
LOW CRUISE SPEED 25 M.P.H. 400/\*\*\*\*\* 9.4/ 9.2  
HIGH CRUISE SPEED 40 M.P.H. 275/\*\*\*\*\* 9.2/ 8.6  
MOTORING 2000/\*\*\*\*\* 5.0/ 4.8  
11 INCH VACUUM 2000 R.P.M. 400/\*\*\*\*\* 10.0/10.0  
3 INCH VACUUM 2000 R.P.M. 235/\*\*\*\*\* 1.4/ 1.5

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2503 TEST DATE 4/26/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 32.19 177.80 3.69 7.8 29.84 62.0 52.0  
TEST 2 24.70 154.30 3.00 8.0 29.84 60.0 52.0  
AVERAGE(28.45)( 166.05)( 3.80)( 8.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
+32.5% -55.4% +27.2% +22.6%

TEST:C39H  
TEST 1 37.39 163.00 6.15 5.8 29.84 66.0 49.0  
TEST 2  
AVERAGE  
CHANGE IN AVERAGE AFTER TUNE UP  
(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/\*\*\*\*\* 0.3/ 0.3  
2500 R.P.M. 150/\*\*\*\*\* 1.3/ 1.3  
25 M.P.H. 150/\*\*\*\*\* 0.5/ 0.5  
40 M.P.H. 75/\*\*\*\*\* 0.4/ 0.4  
MOTORING 2000/\*\*\*\*\* 2.0/ 2.0  
2000 R.P.M. 225/\*\*\*\*\* 1.3/ 1.3  
\*\* 2000 R.P.M. 700/\*\*\*\*\* 2.2/ 2.3

COMMENT C39 TEST 2: VEHICLE RAN OUT OF FUEL.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,300 MAKE: FORD MODEL: F350 MODEL YR.: 69 TRANS. CODE:A3 DISPLACEMENT: 360  
SERIAL NO.: F35YEF35422 LICENSE NO.: 19003E OWNER'S ID.: 4190 1  
TUNE UP DATA.

----- DATE OF TUNE UP 4/29/77 ODOMETER READING 39420 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 675 DWELL 29  
IDLE CO(%) 6.0 TIMING 8BTDC  
IDLE HC(PPM) 1560 GAP(INCH) .039  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 525 DWELL 30  
IDLE CO(%) 1.0 TIMING 6BTDC  
IDLE HC(PPM) 345 GAP(INCH) .034  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL  
COMMENT: REPLACED RIGHT CYLINDER HEAD, POINTS, COIL, CONDENSER, ROTOR, WIRE SET, CAP. REBUILT ORIGINAL CARB,

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2506 TEST DATE 4/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 7500 LB/16.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 15.07 145.50 8.06 7.2 29.75 72.5 50.0  
TEST 2 15.51 145.50 8.06 7.4 29.75 73.0 48.0  
AVERAGE(15.74)( 143.30)( 8.20)( 7.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 34.75 215.20 9.29 5.1 29.75 73.0 48.0  
TEST 2 34.11 269.10 8.68 5.1 29.75 74.0 48.0  
AVERAGE(34.43)( 242.15)( 8.99)( 5.1)  
CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2521 TEST DATE 5/16/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 7500 LB/16.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 6.07 73.08 8.74 7.6 30.26 74.0 34.0  
TEST 2 5.92 84.20 7.62 7.8 30.26 74.5 35.0  
AVERAGE(6.15)( 78.64)( 8.18)( 7.7)  
CHANGE IN AVERAGE AFTER TUNE UP  
-61.0% -45.1% - 0.2% + 5.5%  
TEST:C39H  
TEST 1 13.42 115.30 10.08 5.3 30.26 73.5 35.0  
TEST 2 12.12 149.10 9.52 5.3 30.26 75.5 36.0  
AVERAGE(12.77)( 132.20)( 9.80)( 5.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
-62.9% -45.4% + 9.1% + 3.9%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 1100/\*\*\*\*\* 3.8/ 3.9  
2500 R.P.M. 1950/\*\*\*\*\* 1.1/ 1.1  
LOW CRUISE SPEED 25 M.P.H. 375/\*\*\*\*\* 0.6/ 0.6  
HIGH CRUISE SPEED 40 M.P.H. 200/\*\*\*\*\* 0.8/ 0.8  
MOTORING 2000/\*\*\*\*\* 7.0/ 6.7  
11 INCH VACUUM 2000 R.P.M. 375/\*\*\*\*\* 0.7/ 0.7  
3 INCH VACUUM 2000 R.P.M. 350/\*\*\*\*\* 7.5/ 7.2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
300/\*\*\*\*\* 1.0/ 1.0  
125/\*\*\*\*\* 0.4/ 0.4  
25 M.P.H. 150/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
2000 R.P.M. 200/\*\*\*\*\* 3.8/ 3.6  
2000 R.P.M. 125/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 175/\*\*\*\*\* 4.4/ 4.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 37,800 MAKE: GMC MODEL: 8500 MODEL YR.: 72 TRANS. CODE:A6 DISPLACEMENT: 478  
SERIAL NO.: THM8BV520959 LICENSE NO.: 32493E OWNER'S ID.: 25E020  
TUNE UP DATA.

DATE OF TUNE UP 5/19/77 ODOMETER READING 26777 HOUR METER READING 8046.8

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	750	DWELL	36	IDLE R.P.M.	600	DWELL	33
IDLE CO(%)	0.8	TIMING	14BTDC	IDLE CO(%)	0.8	TIMING	5BTDC
IDLE HC(PPM)	40	GAP(INCH)	.040	IDLE HC(PPM)	40	GAP(INCH)	.040
PCV CODE	2	AF CODE	3	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL	13.4			IDLE AIR/FUEL	13.5		

COMMENT: REPLACE POINTS, ROTOR, COIL AND VACUUM CHAMBER,

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2511 TEST DATE 5/ 4/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2529 TEST DATE 5/20/77  
13500 LB/21.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1	6.86	70.62	25.92	4.6	30.25	70.0	29.0
TEST 2	6.47	75.42	24.30	4.8	30.25	69.5	28.0
AVERAGE(	6.67)	(73.02)	(25.11)	(4.7)			

12.83	82.44	45.69	3.4	30.18	74.5	70.0
11.76	72.41	43.57	3.8	30.18	76.0	70.0
(12.30)	(77.43)	(44.63)	(3.6)			

CHANGE IN AVERAGE AFTER TUNE UP

+84.5% + 6.0% +77.7% -23.4%

TEST:C39H

TEST 1	13.51	166.80	24.58	3.7	30.25	67.5	28.0
TEST 2	12.53	176.50	23.41	3.8	30.25	69.0	29.0
AVERAGE(13.02)	(171.65)	(24.00)	(3.8)				

20.17	135.80	45.81	3.0	30.18	76.0	70.0
18.42	179.60	39.66	3.1	30.18	77.5	70.0
(19.30)	(157.70)	(42.74)	(3.1)			

CHANGE IN AVERAGE AFTER TUNE UP

+48.2% - 8.1% +78.1% -18.7%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	75/*****	0.9/ 0.9
2500 R.P.M.	40/*****	0.4/ 0.4
LOW CRUISE SPEED 20 M.P.H.	100/*****	0.3/ 0.3
HIGH CRUISE SPEED 30 M.P.H.	75/*****	0.1/ 0.2
MOTURING	600/*****	1.5/ 1.4
11 INCH VACUUM 2000 R.P.M.	50/*****	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	75/*****	1.4/ 1.4

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	75/*****	0.3/ 0.3
2500 R.P.M.	75/*****	0.8/ 0.8
20 M.P.H.	125/*****	0.7/ 0.7
30 M.P.H.	60/*****	0.2/ 0.1
	1600/*****	1.2/ 1.3
2000 R.P.M.	100/*****	0.2/ 0.2
** 2000 R.P.M.	125/*****	1.4/ 1.4

GENERAL COMMENT: AFTER TUNE UP TRANSMISSION SHIFTED DIFFERENTLY FROM FIRST TEST 2911. ENGINE SPEED WAS HIGHER ON AVERAGE FOR THIS TEST,

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 70 TRANS. CODE:M5 DISPLACEMENT: 330  
SERIAL NO.: C61CUG62150 LICENSE NO.: 7378GH OWNER'S ID.: 4308B

TUNE UP DATA.

----- DATE OF TUNE UP 5/13/77 ODOMETER READING 29082 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 28 IDLE R.P.M. 750 DWELL 28  
IDLE CO(%) 5.6 TIMING 6BTDC IDLE CO(%) 0.6 TIMING 12BTDC  
IDLE HC(PPM) 250 GAP(INCH) .045 IDLE HC(PPM) 200 GAP(INCH) .030  
PCV CODE 3 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET, PLUGS, INTAKE MANIFOLD AND ROCKER ARM COVER GASKETS. REBUILT ORIGINAL CARB.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****							***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2512							BMV TEST SERIES NO. 2522							
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH							DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID	HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ							TEST:NYQ							
TEST 1	31.10	296.40	11.71	4.7	30.25	69.0	44.0	20.34	334.80	12.11	4.2	30.26	81.5	32.0
TEST 2	28.11	279.80	13.72	4.6	30.25	69.5	45.0	20.35	318.20	11.94	4.5	30.26	81.5	32.0
AVERAGE	(29.61)	(288.10)	(12.72)	(4.7)				(20.35)	(326.50)	(12.03)	(4.4)			
CHANGE IN AVERAGE AFTER TUNE UP							CHANGE IN AVERAGE AFTER TUNE UP							
	- 0.9%	+13.3%	- 5.4%	- 5.4%										
TEST:C39H							TEST:C39H							
TEST 1	50.49	448.30	13.49	3.3	30.23	68.5	45.0	48.22	398.00	15.03	3.3	30.26	81.5	32.0
TEST 2	50.18	416.60	14.46	3.4	30.23	68.0	46.0	50.77	388.20	14.58	3.4	30.26	82.0	33.0
AVERAGE	(50.34)	(432.45)	(13.98)	(3.4)				(49.50)	(393.10)	(14.81)	(3.4)			
CHANGE IN AVERAGE AFTER TUNE UP							CHANGE IN AVERAGE AFTER TUNE UP							
	- 1.7%	- 9.1%	+ 5.9%	+ 0.0%										
TEST:KEY MODE							TEST:KEY MODE							
ENGINE SPEED	HC(PPM)			CO(%)			HC(PPM)			CO(%)				
	-----			-----			-----			-----				
	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)						(READING FROM ANALYZER 5/READING FROM ANALYZER 2)							
IDLE	325/*****			2.8/ 2.9			550/*****			1.7/ 1.9				
2500 R.P.M.	200/*****			2.5/ 2.5			125/*****			2.7/ 2.8				
LOW CRUISE SPEED 20 M.P.H.	250/*****			1.2/ 1.2			20 M.P.H. 125/*****			0.8/ 0.9				
HIGH CRUISE SPEED 30 M.P.H.	200/*****			1.2/ 1.2			30 M.P.H. 100/*****			0.4/ 0.4				
MOTORING	2000/*****			5.0/ 4.9			200/*****			2.0/ 2.0				
11 INCH VACUUM 2000 R.P.M.	375/*****			0.8/ 0.8			2000 R.P.M. 175/*****			0.7/ 0.7				
3 INCH VACUUM 2000 R.P.M.	300/*****			3.8/ 3.7			** 2000 R.P.M. 200/*****			5.4/ 5.4				

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,200 MAKE: FORD MODEL: C600 MODEL YR.: 75 TRANS. CODE:M5 DISPLACEMENT: 330  
SERIAL NO.: C61DVX25201 LICENSE NO.: 4651KZ OWNER'S ID.: 4595  
TUNE UP DATA.

----- DATE OF TUNE UP 5/19/77 ODOMETER READING 13293 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 760 DWELL 26 IDLE R.P.M. 650 DWELL 25  
IDLE CO(%) 1.3 TIMING 3BTDC IDLE CO(%) 1.4 TIMING 6BTDC  
IDLE HC(PPM) 60 GAP(INCH) IDLE HC(PPM) 80 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, ROTOR, DELAY VALVE

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2527 TEST DATE 5/19/77 BMV TEST SERIES NO. 2531 TEST DATE 5/23/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB) (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 28.00 100.00 11.90 5.0 30.03 72.0 74.0 13.97 207.70 8.78 4.8 30.36 82.5 80.0  
TEST 2 24.30 183.10 10.88 5.2 30.04 72.0 74.0 20.79 213.00 9.00 4.8 30.36 82.5 80.0  
AVERAGE(24.78)( 184.35)(11.42)( 5.1) (19.88)( 210.35)( 8.89)( 4.8)  
CHANGE IN AVERAGE AFTER TUNE UP -10.9% +14.1% -22.2% - 5.9%  
TEST:C39H  
TEST 1 38.96 270.00 12.09 3.7 30.04 71.5 73.0 37.35 294.70 8.70 3.5 30.36 83.0 79.0  
TEST 2 38.00 232.00 11.00 3.9 30.04 71.0 72.0 39.27 313.90 8.62 3.4 30.36 84.5 78.0  
AVERAGE(38.48)( 251.00)(11.55)( 3.8) (38.31)( 304.30)( 8.66)( 3.5)  
CHANGE IN AVERAGE AFTER TUNE UP - 0.4% +21.2% -25.0% - 9.2%  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%) HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2) (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/\*\*\*\*\* 1.5/ 1.4 100/\*\*\*\*\* 1.3/ 1.2  
2500 R.P.M. 50/\*\*\*\*\* 0.2/ 0.2 375/\*\*\*\*\* 0.3/ 0.3  
LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* 0.3/ 0.3 20 M.P.H. 75/\*\*\*\*\* 0.3/ 0.3  
HIGH CRUISE SPEED 30 M.P.H. 50/\*\*\*\*\* 0.3/ 0.3 30 M.P.H. 100/\*\*\*\*\* 0.3/ 0.3  
MOTRING 2000/\*\*\*\*\* 7.0/ 6.5 2 00/\*\*\*\*\* 4.2/ 4.2  
11 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.3/ 0.3 2000 R.P.M. 150/\*\*\*\*\* 0.7/ 0.7  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.8/ 0.7 \*\* 2000 R.P.M. 100/\*\*\*\*\* 1.1/ 1.1

GENERAL COMMENT: AFTER TUNE UP, VACUUM DELAY VALVE - WAS 15 SEC. TYPE INSTEAD OF SPECIFIED 2 SEC. TYPE,

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,700 MAKE: I-H MODEL: 1600 MODEL YR.: 74 TRANS. CODE:A4 DISPLACEMENT: 345  
SERIAL NO.: 10662DHA11289 LICENSE NO.: 28202E OWNER'S ID.: 4160 3  
TUNE UP DATA.

DATE OF TUNE UP 5/18/77 ODOMETER READING 3325 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 770 DWELL 31 IDLE R.P.M. 650 DWELL 31  
IDLE CO(%) 2.2 TIMING 0BTDC IDLE CO(%) 0.5 TIMING 0BTDC  
IDLE HC(PPM) 100 GAP(INCH) .031 IDLE HC(PPM) 50 GAP(INCH) .031  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2528 TEST DATE 5/19/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 4.83 73.58 17.85 4.7 30.07 73.5 72.0  
TFST 2 4.49 76.88 17.43 4.8 30.07 74.0 71.0  
AVERAGE( 4.66)( 75.23)(17.64)( 4.8)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 13.07 122.50 19.87 3.5 30.09 73.5 69.0  
TEST 2 12.80 144.10 20.31 3.6 30.09 73.5 69.0  
AVERAGE(12.94)( 133.30)(20.09)( 3.6)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 125/\*\*\*\*\* 2.4/ 2.3  
2500 R.P.M. 35/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 75/\*\*\*\*\* 0.4/ 0.4  
HIGH CRUISE SPEED 40 M.P.H. 25/\*\*\*\*\* 0.3/ 0.3  
MOTORING 1300/\*\*\*\*\* 2.5/ 2.4  
11 INCH VACUUM 2000 R.P.M. 65/\*\*\*\*\* 0.5/ 0.5  
\*\* INCH VACUUM \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*/\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2532 TEST DATE 5/23/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
4.17 48.37 18.96 4.8 30.36 85.0 92.0  
4.20 55.91 18.27 5.1 30.36 85.0 92.0  
( 4.19)( 52.14)(18.62)( 5.0)  
-10.2% -30.7% + 5.5% + 4.2%

TEST:C39H  
8.20 72.94 20.20 3.6 30.36 84.0 88.0  
7.22 94.50 19.95 3.8 30.36 84.5 90.0  
( 7.71)( 83.72)(20.08)( 3.7)  
-40.4% -37.2% - 0.1% + 4.2%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/\*\*\*\*\* 0.5/ 0.5  
2500 R.P.M. 30/\*\*\*\*\* 0.1/ 0.1  
25 M.P.H. 60/\*\*\*\*\* 0.3/ 0.3  
40 M.P.H. 30/\*\*\*\*\* 0.3/ 0.3  
MOTORING 800/\*\*\*\*\* 0.8/ 0.8  
2000 R.P.M. 60/\*\*\*\*\* 0.4/ 0.4  
\*\* IN. \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*/\*\*\*\*

COMMENT KEY MODE: TRANSMISSION WOULD NOT PERMIT LOADING ENGINE LESS THAN 9 IN. HG.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: F600 MODEL YR.: 67 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F60BEA29238 LICENSE NO.: 31690E OWNER'S ID.: 3300 1  
TUNE UP DATA.

DATE OF TUNE UP 5/27/77 ODOMETER READING 26525 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 900 DWELL 36  
IDLE CO(%) 3.5 TIMING 6BTDC  
IDLE HC(PPM) 300 GAP(INCH) .032  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.4  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 37  
IDLE CO(%) 1.8 TIMING 6BTDC  
IDLE HC(PPM) 450 GAP(INCH) .032  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.6

COMMENT: NO NEW PARTS WERE NEEDED. INTAKE MANIFOLD WAS TIGHTENED DOWN.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2540 TEST DATE 5/26/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/20.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 10.42 250.40 5.03 6.9 29.98 84.5 43.0  
TEST 2 11.32 263.70 4.16 6.9 29.98 84.0 42.0  
AVERAGE(10.87)( 257.05)( 4.60)( 6.9)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2543 TEST DATE 5/31/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/20.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 10.94 209.40 4.65 7.4 30.13 78.0 49.0  
TEST 2 10.92 207.00 4.78 7.4 30.13 79.0 49.0  
AVERAGE(10.92)( 208.20)( 4.72)( 7.4)

CHANGE IN AVERAGE AFTER TUNE UP

+ 0.4% -19.0% + 2.6% + 7.2%

TEST:C39H  
TEST 1 19.20 255.60 7.74 5.2 29.99 84.5 38.0  
TEST 2 19.10 341.00 5.79 4.9 29.99 85.5 37.0  
AVERAGE(19.15)( 298.30)( 6.77)( 5.1)

TEST:C39H  
TEST 1 21.45 189.40 7.74 5.6 30.13 79.5 50.0  
TEST 2 20.19 234.50 6.17 5.5 30.13 78.5 48.0  
AVERAGE(20.82)( 211.95)( 6.96)( 5.6)

CHANGE IN AVERAGE AFTER TUNE UP

+ 8.7% -28.9% + 2.8% + 9.9%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 250/\*\*\*\*\* 3.4/ 3.3  
2500 R.P.M. 75/\*\*\*\*\* 1.4/ 1.4  
LOW CRUISE SPEED 25 M.P.H. 125/\*\*\*\*\* 0.5/ 0.5  
HIGH CRUISE SPEED 40 M.P.H. 75/\*\*\*\*\* 1.4/ 1.4  
MOTORING 2000/\*\*\*\*\* 3.2/ 3.2  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 1.8/ 1.8  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 6.6/ 6.0

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 700/ 7700 1.8/ 1.7  
2500 R.P.M. 100/ 1800 0.7/ 0.7  
25 M.P.H. 125/ 2000 0.3/ 0.3  
40 M.P.H. 75/ 1200 0.8/ 0.8  
MOTORING 2 00/22000 2.0/ 2.0  
2000 R.P.M. 175/ 3000 1.5/ 1.5  
\*\* 2000 R.P.M. 150/ 2800 6.4/ 6.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: I-H MODEL: 1210 MODEL YR.: 73 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 3H2DOCHC12624 LICENSE NO.: 16590E OWNER'S ID.: 3430 7  
TUNE UP DATA.

----- DATE OF TUNE UP 6/ 1/77 ODOMETER READING 14816 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 775 DWELL 33 IDLE R.P.M. 650 DWELL 31  
IDLE CO(%) 5.6 TIMING 4BTDC IDLE CO(%) 0.3 TIMING 0BTDC  
IDLE HC(PPM) 190 GAP(INCH) IDLE HC(PPM) 60 GAP(INCH) .035  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, CONDENSER, CAP. ROTOR, COIL, WIRE SET. ORIGINAL CARB, WAS REBUILT. CARB, GAVE LOWEST HC AND CO WITH IDLE MIX SCREW SEATED. WITH SCREW OFF ITS SEAT, CO WAS OVER 4 PERCENT.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2542				TEST DATE 5/31/77				BMV TEST SERIES NO. 2548				TEST DATE 6/ 3/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH								5500 LB/12.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST 1	4.23	62.13	8.46	10.6	30.13	76.5	51.0	3.91	7.26	7.90	11.4	29.95	71.5	46.0	
TEST 2	3.84	63.46	7.90	11.0	30.13	75.5	55.0	4.13	6.79	7.76	11.8	29.95	73.0	46.0	
AVERAGE	( 4.04 )	( 62.80 )	( 8.18 )	( 10.8 )				( 4.02 )	( 7.03 )	( 7.83 )	( 11.6 )				

CHANGE IN AVERAGE AFTER TUNE UP

- 0.4% -88.8% - 4.3% + 7.4%

TEST:C39H

TEST 1	5.81	160.80	7.08	7.5	30.13	76.5	58.0
TEST 2	5.39	163.60	6.38	7.7	30.13	76.0	56.0
AVERAGE	( 5.60 )	( 162.20 )	( 6.73 )	( 7.6 )			

CHANGE IN AVERAGE AFTER TUNE UP

+65.6% -82.6% - 3.0% +12.5%

TEST:KEY MODE  
ENGINE SPEED

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	175/ 2700	5.2/ 5.0
2500 R.P.M.	50/ 600	0.2/ 0.2
LOW CRUISE SPEED 25 M.P.H.	75/ 1300	0.2/ 0.2
HIGH CRUISE SPEED 40 M.P.H.	35/ 500	0.2/ 0.2
MOTURING	1700/18000	5.5/ 5.2
11 INCH VACUUM 2000 R.P.M.	60/ 800	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	75/ 1200	1.4/ 1.3

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	125/ 1500	0.1/ 0.1
	225/ 1900	0.1/ 0.1
25 M.P.H.	75/ 900	0.1/ 0.1
40 M.P.H.	140/ 1500	0.1/ 0.1
	500/ 6500	0.3/ 0.3
2000 R.P.M.	50/ 600	0.1/ 0.1
** 2000 R.P.M.	75/ 1500	2.3/ 2.2

COMMENT C39 TEST 1: ENGINE STALLED ONCE.  
COMMENT C39 TEST 2: ENGINE STALLED TWICE.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: GMC MODEL: 3500 MODEL YR.: 73 TRANS. CODE:M4 DISPLACEMENT: 350  
SERIAL NO.: TCY333S506774 LICENSE NO.: 4026GF OWNER'S ID.: 3123  
TUNE UP DATA.

----- DATE OF TUNE UP 6/ 1/77 ODOMETER READING 13819 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 670 DWELL 37  
IDLE CO(%) 5.0 TIMING 3BTUC  
IDLE HC(PPM) 210 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.1  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 30  
IDLE CO(%) 1.2 TIMING 4BTDC  
IDLE HC(PPM) 240 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.7  
COMMENT: REPLACED POINTS, CONDENSER AND ROTOR.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2544 TEST DATE 5/31/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8500 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 14.44 163.30 5.89 7.0 30.13 77.5 49.0  
TEST 2 14.51 184.10 5.00 7.1 30.13 79.0 49.0  
AVERAGE(14.48)( 173.70)( 5.45)( 7.1)

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 22.87 223.90 6.44 4.9 30.13 78.0 49.0  
TEST 2 21.37 241.20 5.94 5.0 30.13 78.0 49.0  
AVERAGE(22.12)( 232.55)( 6.19)( 5.0)

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/ 3000 4.5/ 4.2  
2500 R.P.M. 35/ 500 0.1/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 75/ 900 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 50/ 700 0.1/ 0.1  
MOTORING 2000/40000 5.2/ 5.0  
11 INCH VACUUM 2000 R.P.M. 250/ 3300 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 175/ 2700 0.7/ 0.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2550 TEST DATE 6/ 3/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8500 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 12.17 151.10 4.94 7.3 29.99 78.5 31.0  
TEST 2 12.01 157.40 4.46 7.4 30.00 79.5 33.0  
AVERAGE(12.09)( 151.25)( 4.70)( 7.4)  
CHANGE IN AVERAGE AFTER TUNE UP  
-16.5% -11.2% -13.7% + 4.3%

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 19.57 143.00 6.77 5.4 30.00 80.0 35.0  
TEST 2 20.02 164.70 6.06 5.3 30.00 81.0 35.0  
AVERAGE(19.80)( 153.85)( 6.42)( 5.4)  
CHANGE IN AVERAGE AFTER TUNE UP  
-10.5% -33.8% + 3.6% + 8.1%

\*\*

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 160/ 2000 0.9/ 0.9  
25 M.P.H. 35/ 500 0.1/ 0.1  
40 M.P.H. 75/ 900 0.1/ 0.1  
50/ 600 0.1/ 0.1  
2000 R.P.M. 225/ 3000 0.1/ 0.1  
2000 R.P.M. 175/ 2500 2.2/ 2.0

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: DODGE MODEL: D500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 318  
 SERIAL NO.: D51FG0S176710 LICENSE NO.: 31529E OWNER'S ID.: 1250 5  
 TUNE UP DATA.

DATE OF TUNE UP 6/ 3/77 ODOMETER READING 28339 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 740 DWELL 34  
 IDLE CO(%) 0.8 TIMING 4ATDC  
 IDLE HC(PPM) 80 GAP(INCH) .040  
 PCV CODE 4 AF CODE 2  
 IDLE AIR/FUEL 13.7

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 700 DWELL 33  
 IDLE CO(%) 0.2 TIMING 5B1DC  
 IDLE HC(PPM) 60 GAP(INCH) .030  
 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 13.8

COMMENT: REPLACED FUEL PUMP, POINTS, ROTOR, PLUGS, CAP AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2549 TEST DATE 6/ 3/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 17.61 177.40 9.29 5.7 29.98 76.0 43.0  
 TEST 2 16.60 171.90 9.43 5.9 29.98 75.5 42.0  
 AVERAGE(17.11)( 174.65)( 9.36)( 5.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 30.84 179.20 11.36 4.3 29.98 77.0 40.0  
 TEST 2 24.28 166.50 11.78 4.4 29.98 77.0 38.0  
 AVERAGE(27.56)( 172.85)(11.57)( 4.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 50/ 900 1.0/ 0.9  
 2500 R.P.M. 75/ 1200 0.1/ 0.1  
 LOW CRUISE SPEED 20 M.P.H. 125/ 1800 0.2/ 0.2  
 HIGH CRUISE SPEED 30 M.P.H. 75/ 1400 0.2/ 0.2  
 MOTORING 2000/10000 2.0/ 2.0  
 11 INCH VACUUM 2000 R.P.M. 225/ 3000 0.2/ 0.2  
 3 INCH VACUUM 2000 R.P.M. 150/ 2500 3.2/ 3.0

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2551 TEST DATE 6/ 8/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

12.65 143.20 12.48 6.0 29.77 71.5 32.0  
 12.71 133.20 12.84 6.1 29.77 70.5 32.0  
 (12.68)( 130.20)(12.66)( 6.1)  
 -25.0% -20.0% +35.3% + 4.3%

22.59 131.30 14.27 4.6 29.77 71.5 30.0  
 23.98 156.10 14.81 4.4 29.77 71.0 31.0  
 (23.29)( 143.70)(14.54)( 4.5)  
 -15.5% -16.9% +25.7% + 3.4%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

50/ 600 0.4/ 0.4  
 35/ 400 0.1/ 0.1  
 20 M.P.H. 50/ 600 0.1/ 0.1  
 30 M.P.H. 60/ 900 0.2/ 0.2  
 1800/10000 2.0/ 2.2  
 2000 R.P.M. 125/ 2000 0.2/ 0.2  
 \*\* 2000 R.P.M. 100/ 1500 0.6/ 0.6

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: DODGE MODEL: D500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 318  
SERIAL NO.: D51FG0S181325 LICENSE NO.: 315666 OWNER'S ID.: 1250 1  
TUNE UP DATA.

DATE OF TUNE UP 6/ 9/77 ODOMETER READING 7007 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 610 DWELL 30  
IDLE CO(%) 1.3 TIMING 0BTDC  
IDLE HC(PPM) 130 GAP(INCH) .040  
PCV CODE 3 AF CODE 3  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 31  
IDLE CO(%) 3.4 TIMING 5BTDC  
IDLE HC(PPM) 250 GAP(INCH) .030  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP WIRE SET, PLUGS AND COIL.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2552 TEST DATE 6/ 8/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 38.03 107.70 12.92 5.5 29.78 74.0 34.0  
TEST 2 24.25 149.20 14.53 5.4 29.78 74.5 33.0  
AVERAGE(25.15)( 153.45)(13.73)( 5.5)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 52.55 209.10 14.96 3.9 29.78 75.5 34.0  
TEST 2 47.56 198.90 17.35 3.8 29.78 75.5 34.0  
AVERAGE(50.06)( 204.00)(16.16)( 3.9)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 100/ 1500 0.5/ 0.5  
2500 R.P.M. 75/ 1200 0.8/ 0.8  
LOW CRUISE SPEED 20 M.P.H. 125/ 1800 0.2/ 0.2  
HIGH CRUISE SPEED 30 M.P.H. 100/ 1500 0.2/ 0.2  
MOTORING 1850/10000 1.2/ 1.3  
11 INCH VACUUM 2000 R.P.M. 200/ 3200 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 175/ 3000 3.1/ 3.0

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2554 TEST DATE 6/13/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 27.33 164.50 12.83 5.7 30.13 84.5 66.0  
TEST 2 25.52 158.00 12.36 5.9 30.13 85.0 65.0  
AVERAGE(26.43)( 161.25)(12.60)( 5.8)

CHANGE IN AVERAGE AFTER TUNE UP + 5.1% + 5.1% - 0.2% + 6.4%

TEST 1 49.88 226.00 14.49 4.0 30.13 83.5 63.0  
TEST 2 53.67 272.80 14.04 4.0 30.13 85.5 65.0  
AVERAGE(51.78)( 249.40)(14.27)( 4.0)

CHANGE IN AVERAGE AFTER TUNE UP + 3.4% +22.3% -11.7% + 3.9%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

275/ 3700 2.8/ 2.7  
75/ 1000 0.3/ 0.3  
20 M.P.H. 125/ 1500 0.1/ 0.1  
30 M.P.H. 75/ 1000 0.2/ 0.2  
2 00/10000 4.8/ 4.6  
2000 R.P.M. 250/ 3200 0.2/ 0.2  
\*\* 2000 R.P.M. 275/ 3800 3.8/ 3.6

GENERAL COMMENT: AFTER TUNE UP, VACUUM ADVANCE LINE WAS FITTED WITH A DELAY VALVE.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 71 TRANS. CODE:M5 DISPLACEMENT: 330  
 SERIAL NO.: C61CVL94103 LICENSE NO.: 6283GF OWNER'S ID.: 4177  
 TUNE UP DATA.

DATE OF TUNE UP 6/13/77 ODOMETER READING 14711 HOUR METER READING 2267.6  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 29 IDLE CO(%) 2.8 TIMING 10BTDC  
 IDLE HC(PPM) 500 GAP(INCH) .038 PCV CODE 3 AF CODE 3  
 IDLE AIR/FUEL 13.3  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 28 IDLE CO(%) 0.5 TIMING 10BTDC  
 IDLE HC(PPM) 500 GAP(INCH) .038 PCV CODE 1 AF CODE 1  
 IDLE AIR/FUEL 13.6  
 COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS. CARB WAS REBUILT. PLUG IN-AIR PASSAGE TO SPEED GOVERNOR WAS REMOVED THEREBY CORRECTING HIGH CO LEVEL AT 2500 RPM.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2553 TEST DATE 6/13/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 39.54 403.90 5.26 4.5 30.16 81.0 64.0  
 TEST 2 38.71 421.10 3.72 4.8 30.16 82.5 67.0  
 AVERAGE(39.13)( 414.00)( 4.50)( 4.7)  
 CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
 TEST 1 68.33 518.30 6.14 3.5 30.16 81.5 68.0  
 TEST 2 68.09 604.80 4.57 3.4 30.16 81.5 66.0  
 AVERAGE(68.21)( 561.55)( 5.36)( 3.5)  
 CHANGE IN AVERAGE AFTER TUNE UP

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	400/ 5800	3.6/ 3.6
2500 R.P.M.	350/ 5000	9.4/ 8.9
LOW CRUISE SPEED 20 M.P.H.	425/ 6300	8.9/ 8.3
HIGH CRUISE SPEED 30 M.P.H.	250/ 4500	6.4/ 6.3
MOTORING	2000/10000	4.5/ 4.4
11 INCH VACUUM 2000 R.P.M.	500/ 7000	6.7/ 6.3
3 INCH VACUUM 2000 R.P.M.	350/ 5000	4.1/ 4.0

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2558 TEST DATE 6/16/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 32.68 208.40 11.87 4.8 30.22 85.0 42.0  
 TEST 2 26.87 219.00 9.22 4.9 30.22 86.0 40.0  
 AVERAGE(29.78)( 228.70)(10.55)( 4.9)  
 CHANGE IN AVERAGE AFTER TUNE UP

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	500/ 5400	0.2/ 0.2
2500 R.P.M.	150/ 2500	2.2/ 2.1
20 M.P.H.	200/ 3000	1.0/ 1.0
30 M.P.H.	125/ 1800	0.5/ 0.5
MOTORING	2 00/10000	1.5/ 1.4
2000 R.P.M.	375/ 5000	5.6/ 5.2
** 2000 R.P.M.	225/ 4000	4.2/ 4.0

COMMENT C39 TEST 2: ENGINE STALLED ONCE.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: DODGE MODEL: D200 MODEL YR.: 71 TRANS. CODE:A3 DISPLACEMENT: 225  
 SERIAL NO.: D22BB1S361649 LICENSE NO.: 31706E OWNER'S ID.: 282019  
 TUNE UP DATA.

DATE OF TUNE UP	6/16/77	ODOMETER READING	29155	HOUR METER READING	*****		
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****				
IDLE R.P.M.	830	DWELL	45	IDLE R.P.M.	700	DWELL	41
IDLE CO(%)	3.0	TIMING	2BTDC	IDLE CO(%)	0.2	TIMING	UBTDC
IDLE HC(PPM)	160	GAP(INCH)		IDLE HC(PPM)	40	GAP(INCH)	.035
PCV CODE	3	AF CODE	4	PCV CODE	1	AF CODE	1
IDLE AIR/FUEL				IDLE AIR/FUEL	0		

COMMENT: REPLACED POINTS, PLUGS, CONDENSER, CAP, ROTOR, WIRE SET AND VALVE COVER GASKET. VALVE LASH WAS ADJUSTED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2555 TEST DATE 6/15/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

BMV TEST SERIES NO. 2561 TEST DATE 6/20/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ  
 TEST 1 3.36 67.08 8.00 12.3 30.18 77.5 83.0  
 TEST 2 3.29 70.79 7.48 12.6 30.18 78.0 84.0  
 AVERAGE( 3.33)( 68.94)( 7.74)(12.5)

TEST:NYQ  
 TEST 1 3.02 58.66 5.47 12.4 29.88 85.5 62.0  
 TEST 2 2.72 57.38 5.08 12.7 29.88 86.5 63.0  
 AVERAGE( 2.98)( 58.02)( 5.28)(12.6)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
 TEST 1 5.57 103.40 8.67 8.6 30.18 78.0 82.0  
 TEST 2 5.47 122.30 8.87 8.4 30.18 77.5 80.0  
 AVERAGE( 5.52)( 112.85)( 8.77)( 8.5)

TEST:C39H  
 TEST 1 4.59 62.41 6.84 8.7 29.88 86.5 60.0  
 TEST 2 4.33 83.77 6.24 8.6 29.88 87.0 60.0  
 AVERAGE( 4.46)( 73.09)( 6.54)( 8.7)

CHANGE IN AVERAGE AFTER TUNE UP

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)

	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)	
IDLE	150/ 2200	3.7/ 3.7
2500 R.P.M.	50/ 600	0.2/ 0.2
LOW CRUISE SPEED 25 M.P.H.	75/ 1000	0.1/ 0.1
HIGH CRUISE SPEED 40 M.P.H.	65/ 800	0.1/ 0.1
MOTORING	300/ 5000	4.6/ 4.5
11 INCH VACUUM 2000 R.P.M.	75/ 1000	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	100/ 1700	3.1/ 3.0

ENGINE SPEED HC(PPM) CO(%)

	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)	
	75/ 1000	0.6/ 0.6
	35/ 500	0.3/ 0.3
25 M.P.H.	85/ 1200	0.1/ 0.1
40 M.P.H.	60/ 800	0.2/ 0.2
	700/ 8500	0.2/ 0.2
2000 R.P.M.	75/ 1000	0.2/ 0.2
** 2000 R.P.M.	100/ 1500	3.0/ 2.9

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: DODGE MODEL: D200 MODEL YR.: 71 TRANS. CODE:A3 DISPLACEMENT: 225  
SERIAL NO.: D228B1S361408 LICENSE NO.: 31590E OWNER'S ID.: 282022  
TUNE UP DATA.

DATE OF TUNE UP 6/17/77 ODOMETER READING 16287 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 50 IDLE R.P.M. 700 DWELL 42  
IDLE CO(%) 1.5 TIMING 1ATDC IDLE CO(%) 0.3 TIMING 0BTDC  
IDLE HC(PPM) 140 GAP(INCH) PCV CODE 2 AF CODE 4  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: REPLACED POINTS, PLUGS, CONDENSER, CAP, ROTOR AND WIRE SET.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****											
BMV TEST SERIES NO. 2557				TEST DATE 6/16/77				BMV TEST SERIES NO. 2562				TEST DATE 6/20/77							
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH								5500 LB/12.0 H.P. AT 40 MPH											
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID					
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)					
TEST:NYQ																			
TEST 1	3.17	17.00	8.91	11.4	30.20	83.0	50.0	5.05	51.32	7.37	10.8	29.88	89.5	68.0					
TEST 2	4.22	60.10	8.24	11.3	30.20	84.0	50.0	4.36	62.73	6.34	11.3	29.88	88.5	68.0					
AVERAGE	(4.20)	(53.60)	(8.58)	(11.4)				(4.71)	(57.03)	(6.86)	(11.1)								
CHANGE IN AVERAGE AFTER TUNE UP								+12.2% +6.4% -20.1% -2.6%											
TEST:C39H																			
TEST 1	7.46	83.51	9.52	7.9	30.20	83.0	43.0	8.14	96.59	6.36	7.9	29.88	89.0	69.0					
TEST 2	7.58	116.30	8.77	7.7	30.20	84.0	43.0	7.55	124.00	6.10	7.6	29.88	87.5	67.0					
AVERAGE	(7.52)	(99.91)	(9.15)	(7.8)				(7.85)	(110.30)	(6.23)	(7.8)								
CHANGE IN AVERAGE AFTER TUNE UP								+4.3% +10.4% -31.9% -0.6%											
TEST:KEY MODE																			
ENGINE SPEED				HC(PPM)				CO(%)				HC(PPM)				CO(%)			
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)																			
IDLE				175/ 2200				1.7/ 1.7				125/ 1500				1.4/ 1.4			
2500 R.P.M.				60/ 700				0.3/ 0.3				75/ 1000				0.5/ 0.5			
LOW CRUISE SPEED 25 M.P.H.				125/ 1500				0.2/ 0.2				25 M.P.H. 125/ 1500				0.3/ 0.2			
HIGH CRUISE SPEED 40 M.P.H.				100/ 1300				0.2/ 0.2				40 M.P.H. 75/ 1000				0.2/ 0.2			
MOTORING				400/ 6000				2.1/ 2.0				400/ 5500				1.2/ 1.2			
11 INCH VACUUM 2000 R.P.M.				75/ 900				0.3/ 0.3				2000 R.P.M. 75/ 1000				0.3/ 0.3			
3 INCH VACUUM 2000 R.P.M.				100/ 1400				1.5/ 1.4				** 2000 R.P.M. 100/ 1300				1.9/ 1.8			

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: DODGE MODEL: D500 MODEL YR.: 71 TRANS. CODE:M5 DISPLACEMENT: 318  
SERIAL NO.: D51FG1J310170 LICENSE NO.: 8559GF OWNER'S ID.: 4251  
TUNE UP DATA.

DATE OF TUNE UP 6/21/77 ODOMETER READING 27182 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 970 DWELL 28  
IDLE CO(%) 2.5 TIMING 20BTDC  
IDLE HC(PPM) 200 GAP(INCH) .038  
PCV CODE 3 AF CODE 2  
IDLE AIR/FUEL 13.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 700 DWELL 31  
IDLE CO(%) 0.8 TIMING 5BTDC  
IDLE HC(PPM) 75 GAP(INCH) .030  
PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.9

COMMENT: REPLACED POINTS, ROTOR, CAP, WIRE SET, PLUGS AND VACUUM HOSES. ORIGINAL CARB WAS REBUILT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2563 TEST DATE 6/20/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 25.69 232.10 17.04 4.9 29.88 86.5 60.0  
TEST 2 33.16 225.20 16.84 4.9 29.88 87.5 61.0  
AVERAGE(29.43)( 228.65)(16.94)( 4.9)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 46.00 279.30 19.90 3.8 29.88 86.5 60.0  
TEST 2 43.26 285.70 19.60 3.9 29.88 88.0 63.0  
AVERAGE(44.63)( 282.50)(19.75)( 3.9)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 200/ 3300 2.7/ 2.7  
2500 R.P.M. 1450/10000 0.3/ 0.3  
LOW CRUISE SPEED 20 M.P.H. 375/ 4750 0.3/ 0.3  
HIGH CRUISE SPEED 30 M.P.H. 125/ 1500 0.2/ 0.2  
MOTORING 2000/10000 3.6/ 3.4  
11 INCH VACUUM 2000 R.P.M. 225/ 3800 0.8/ 0.8  
3 INCH VACUUM 2000 R.P.M. 200/ 3200 5.3/ 5.1

COMMENT NYQ TEST 2: INVALID DUE TO ENGINE SURGE

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2565 TEST DATE 6/22/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 18.21 133.30 11.69 4.7 30.03 85.5 46.0  
TEST 2 36.68 106.10 10.51 5.2 30.03 85.5 46.0  
AVERAGE(27.45)( 119.70)(11.10)( 5.0)  
CHANGE IN AVERAGE AFTER TUNE UP - 6.7% -47.6% -34.5% + 1.0%

TEST 1 36.30 168.50 14.67 3.7 30.03 85.5 46.0  
TEST 2 54.67 134.80 13.42 4.2 30.03 85.5 46.0  
AVERAGE(45.49)( 151.65)(14.05)( 4.0)  
CHANGE IN AVERAGE AFTER TUNE UP + 1.9% -46.3% -28.9% + 2.6%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 100/ 1300 0.7/ 0.7  
75/ 900 0.2/ 0.1  
20 M.P.H. 100/ 1200 0.2/ 0.2  
30 M.P.H. 75/ 1000 0.2/ 0.2  
2000 R.P.M. 200/10000 1.8/ 1.6  
2000 R.P.M. 75/ 1000 0.4/ 0.4  
\*\* 2000 R.P.M. 75/ 1000 1.8/ 1.7

COMMENT NYQ TEST 2: INVALID DUE ENGINE SURGE  
COMMENT C39 TEST 2: INVALID DUE TO ENGINE SURGE

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: F600 MODEL YR.: 67 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: F60BEA29551 LICENSE NO.: 31561E OWNER'S ID.: 1760 2  
 TUNE UP DATA.

----- DATE OF TUNE UP 6/24/77 ODOMETER READING 13837 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 500 DWELL 45 IDLE R.P.M. 650 DWELL 30  
 IDLE CO(%) 5.8 TIMING 9BTDC IDLE CO(%) 1.0 TIMING 6BTDC  
 IDLE HC(PPM) 300 GAP(INCH) .038 IDLE HC(PPM) 150 GAP(INCH) .030  
 PCV CODE 3 AF CODE 3 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 12.9 IDLE AIR/FUEL 13.9

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS. ORIGINAL CARB WAS REBUILT

TEST RESULTS

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2564 TEST DATE 6/22/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (C/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
 TEST 1 14.03 244.90 8.29 6.4 30.02 84.5 50.0  
 TEST 2 14.77 255.20 6.27 6.8 30.02 85.5 48.0  
 AVERAGE(14.40)( 250.05)( 7.28)( 6.6)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
 TEST 1 24.66 333.80 7.53 5.1 30.02 85.5 48.0  
 TEST 2 26.33 365.00 7.22 5.0 30.02 86.0 47.0  
 AVERAGE(25.50)( 349.40)( 7.38)( 5.1)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 375/ 8500 7.4/ 7.0  
 2500 R.P.M. 200/ 3000 4.2/ 4.2  
 LOW CRUISE SPEED 25 M.P.H. 150/ 2200 2.7/ 2.5  
 HIGH CRUISE SPEED 40 M.P.H. 75/ 1000 1.0/ 1.0  
 MOTORING 2000/10000 3.2/ 3.0  
 11 INCH VACUUM 2000 R.P.M. 200/ 3000 2.1/ 2.2  
 3 INCH VACUUM 2000 R.P.M. 150/ 2200 4.6/ 4.4

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2566 TEST DATE 6/24/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (C/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
 TEST 1 12.11 224.70 6.61 6.5 30.20 82.5 77.0  
 TEST 2 11.09 222.50 6.82 6.5 30.20 82.5 77.0  
 AVERAGE(11.85)( 223.60)( 6.72)( 6.5)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
 TEST 1 24.26 269.40 8.40 4.6 30.20 84.0 77.0  
 TEST 2 21.11 286.80 7.06 4.8 30.20 84.0 75.0  
 AVERAGE(22.69)( 278.10)( 7.73)( 4.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 165/ 2200 1.1/ 1.0  
 2500 R.P.M. 190/ 2500 3.5/ 3.7  
 25 M.P.H. 125/ 1800 2.8/ 2.6  
 40 M.P.H. 75/ 1200 1.5/ 1.5  
 MOTORING 1200/10000 0.9/ 0.9  
 2000 R.P.M. 150/ 2200 2.4/ 2.4  
 \*\* 2000 R.P.M. 125/ 2000 4.6/ 4.5

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: F600 MODEL YR.: 65 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F60BE674709 LICENSE NO.: 31357E OWNER'S ID.: 1750 1  
TUNE UP DATA.

DATE OF TUNE UP 7/ 1/77 ODOMETER READING 36430 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 550 DWELL 26  
IDLE CO(%) 0.2 TIMING 12BTDC  
IDLE HC(PPM) 1400 GAP(INCH) .038  
PCV CODE 3 AF CODE 3  
IDLE AIR/FUEL 13.3

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 550 DWELL 39  
IDLE CO(%) 1.5 TIMING 6BTDC  
IDLE HC(PPM) 300 GAP(INCH) .035  
PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.5

COMMENT: REPLACED PLUGS, WIRE SET, POINTS, CONDENSER, ROTOR AND CAP, GOVERNOR PORT WAS BLOCKED BY CARB GASKET THAT WAS INSTALLED BACKWARDS. NEW GASKET PROPERLY INSTALLED SEEMED TO CURE HIGH CO EMISSION PROBLEM.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2569 TEST DATE 6/30/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TESTING  
TEST 1 25.00 363.10 3.19 6.3 30.00 88.0 68.0  
TEST 2 20.13 402.80 1.64 6.4 30.00 89.0 69.0  
AVERAGE(22.57)( 382.95)( 2.42)( 6.4)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 40.44 580.90 2.32 4.3 30.00 89.0 69.0  
TEST 2 38.46 622.50 1.64 4.3 30.00 90.0 70.0  
AVERAGE(39.45)( 601.70)( 1.98)( 4.3)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 250/ 5000 5.6/ 5.4  
2500 R.P.M. 700/10000 9.4/ 9.3  
LOW CRUISE SPEED 25 M.P.H. 300/ 5700 9.8/ 9.6  
HIGH CRUISE SPEED 40 M.P.H. 175/ 3700 9.6/ 9.3  
MOTORING 2000/10000 4.4/ 4.3  
11 INCH VACUUM 2000 R.P.M. 350/ 6200 10.0/10.0  
3 INCH VACUUM 2000 R.P.M. 250/ 4800 7.1/ 7.0

BMV TEST SERIES NO. 2571 TEST DATE 7/ 5/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TESTING  
TEST 1 14.03 256.00 3.37 7.4 30.11 93.0 99.0  
TEST 2 13.99 276.80 3.57 7.1 30.11 92.5 97.0  
AVERAGE(14.01)( 266.40)( 3.47)( 7.3)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 24.82 271.60 6.74 5.2 30.10 93.0 99.0  
TEST 2 24.38 338.10 4.33 5.1 30.10 93.5 101.0  
AVERAGE(24.60)( 304.85)( 5.54)( 5.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/ 3500 2.3/ 2.2  
2500 R.P.M. 250/ 4000 2.9/ 2.9  
25 M.P.H. 150/ 2000 2.1/ 2.0  
40 M.P.H. 100/ 1300 1.1/ 1.1  
MOTORING 2 00/10000 1.7/ 1.6  
2000 R.P.M. 200/ 3000 2.2/ 2.2  
\*\* 2000 R.P.M. 200/ 3000 7.2/ 6.9

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
 SERIAL NO.: D32BB2S522391 LICENSE NO.: 31591E OWNER'S ID.: 290012  
 TUNE UP DATA.

DATE OF TUNE UP 7/ 5/77 ODOMETER READING 15557 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 710 DWELL 47  
 IDLE CO(%) 2.8 TIMING 39BTDC  
 IDLE HC(PPM) 2000 GAP(INCH) .039  
 PCV CODE 3 AF CODE 3  
 IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. DWELL 42  
 IDLE CO(%) 0.8 TIMING 0BTDC  
 IDLE HC(PPM) 170 GAP(INCH) .035  
 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, POINTS, CONDENSER, ROTOR, CAP AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2570 TEST DATE 7/ 5/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.17 124.00 19.23 8.6 30.11 88.5 103.0  
 TEST 2 12.93 143.60 16.85 8.5 30.11 88.0 98.0  
 AVERAGE(13.05)( 133.80)(18.04)( 8.6)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 31.70 140.90 34.83 5.6 30.11 89.0 99.0  
 TEST 2 32.04 161.90 39.33 5.0 30.11 89.5 102.0  
 AVERAGE(31.87)( 151.40)(37.08)( 5.3)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	1400/10000	4.2/ 4.1
2500 R.P.M.	1500/10000	0.7/ 0.7
LOW CRUISE SPEED 25 M.P.H.	225/ 3000	0.4/ 0.4
HIGH CRUISE SPEED 40 M.P.H.	125/ 1500	0.3/ 0.3
MOTORING	2000/10000	5.2/ 4.6
11 INCH VACUUM 2000 R.P.M.	250/ 3500	0.5/ 0.4
3 INCH VACUUM 2000 R.P.M.	125/ 1500	2.2/ 2.2

COMMENT NYQ TEST 1: ENGINE STALLED ONCE.

COMMENT C39 TEST 1: ENGINE STALLED ONCE.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2573 TEST DATE 7/ 7/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST 1 9.39 106.20 8.11 8.3 29.95 82.0 97.0  
 TEST 2 8.87 114.90 7.45 8.6 29.95 82.0 97.0  
 AVERAGE(9.13)( 110.55)( 7.78)( 8.5)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -30.0% -17.4% -56.9% - 1.2%

TEST 1 18.40 132.00 13.77 4.7 29.95 82.0 97.0  
 TEST 2 17.22 184.20 8.49 5.7 29.95 83.5 97.0  
 AVERAGE(17.81)( 158.10)(11.13)( 5.2)  
 CHANGE IN AVERAGE AFTER TUNE UP  
 -44.1% + 4.4% -70.0% - 1.9%

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	150/ 2000	3.5/ 3.7
2500 R.P.M.	100/ 1500	0.7/ 0.6
25 M.P.H.	150/ 2000	0.4/ 0.4
40 M.P.H.	100/ 1500	0.5/ 0.5
MOTORING	1600/10000	3.5/ 3.4
2000 R.P.M.	100/ 1300	0.5/ 0.5
** 2000 R.P.M.	75/ 1000	1.6/ 1.5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D32BB2S609850 LICENSE NO.: 31530E OWNER'S ID.: 2900 3  
TUNE UP DATA.

----- DATE OF TUNE UP 7/19/77 ODOMETER READING 20863 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 800 DWELL 45  
IDLE CO(%) 1.5 TIMING 5BTDC  
IDLE HC(PPM) 100 GAP(INCH) .035  
PCV CODE 3 AF CODE 2  
IDLE AIR/FUEL 13.7  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 45  
IDLE CO(%) 0.2 TIMING 5BTDC  
IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.9

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND DIST. VACUUM ADVANCE HOSE.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2578								BMV TEST SERIES NO. 2582							
TEST DATE 7/18/77								TEST DATE 7/20/77							
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH								DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ								TEST:NYQ							
TEST 1	8.09	96.49	7.11	10.7	30.14	98.0	91.0	6.56	70.00	8.45	10.5	30.14	91.0	118.0	
TEST 2	8.19	97.70	6.85	10.7	30.14	98.0	91.0	6.37	79.36	7.34	10.6	30.14	90.5	115.0	
AVERAGE	( 8.14)	( 97.10)	( 6.98)	(10.7)				( 6.47)	( 71.68)	( 7.90)	(10.6)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
								-20.6%    -20.1%    +12.1%    - 1.4%							
TEST:C39H								TEST:C39H							
TEST 1	13.43	116.00	9.01	7.6	30.14	98.0	94.0	10.69	69.78	8.41	8.4	30.14	92.5	118.0	
TEST 2	14.31	137.40	8.06	7.5	30.14	97.5	92.0	11.03	99.06	7.73	7.7	30.14	92.5	115.0	
AVERAGE	(13.87)	( 126.70)	( 8.54)	( 7.6)				(10.86)	( 84.42)	( 8.07)	( 8.1)				
CHANGE IN AVERAGE AFTER TUNE UP								CHANGE IN AVERAGE AFTER TUNE UP							
								-21.7%    -33.4%    - 5.4%    + 6.6%							

ENGINE SPEED	HC(PPM)	CO(%)	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)				
IDLE	135/*****	1.9/ 1.9	75/*****	0.2/ 0.2
2500 R.P.M.	75/*****	0.5/ 0.5	50/*****	0.6/ 0.6
LOW CRUISE SPEED 25 M.P.H.	150/*****	0.3/ 0.3	25 M.P.H.	125/*****
HIGH CRUISE SPEED 40 M.P.H.	75/*****	0.2/ 0.2	40 M.P.H.	50/*****
MOTORING	2000/*****	3.8/ 3.6	1400/*****	0.7/ 0.7
11 INCH VACUUM 2000 R.P.M.	125/*****	0.2/ 0.2	2000 R.P.M.	100/*****
3 INCH VACUUM 2000 R.P.M.	100/*****	0.3/ 0.4	** 2000 R.P.M.	125/*****
				1.1/ 1.1

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: F600 MODEL YR.: 67 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: LICENSE NO.: 31559E OWNER'S ID.: 1760 1  
TUNE UP DATA.

DATE OF TUNE UP 7/22/77 ODOMETER READING 25749 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 550 DWELL 40  
IDLE CO(%) 0.2 TIMING 3BTDC  
IDLE HC(PPM) 1200 GAP(INCH)  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.4

\*\*\*\*\*-AFTER-TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 40  
IDLE CO(%) 1.0 TIMING 6BTDC  
IDLE HC(PPM) 400 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.6

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2581 TEST DATE 7/20/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 15.04 127.00 7.00 8.3 30.14 88.5 115.0  
TEST 2 14.19 165.00 6.34 8.1 30.14 88.5 115.0  
AVERAGE(14.72)( 151.10)( 6.87)( 8.2)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 26.82 167.10 9.23 6.0 30.14 89.5 117.0  
TEST 2 26.15 188.50 8.61 6.0 30.14 89.5 117.0  
AVERAGE(26.49)( 177.80)( 8.92)( 6.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 625/\*\*\*\*\* 0.3/ 0.2  
2500 R.P.M. 75/\*\*\*\*\* 1.1/ 1.1  
LOW CRUISE SPEED 25 M.P.H. 125/\*\*\*\*\* 1.3/ 1.2  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.7/ 0.7  
MOTORING 1500/\*\*\*\*\* 0.5/ 0.5  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.8/ 0.8  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 4.2/ 4.0

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2583 TEST DATE 7/25/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

12.00 179.50 6.64 7.7 29.89 82.5 113.0  
13.28 182.10 5.57 7.9 29.89 82.5 113.0  
(13.12)( 180.80)( 6.11)( 7.8)  
-10.8% +10.7% -11.1% - 4.9%

27.41 190.70 8.94 5.6 29.89 80.5 113.0  
25.54 209.60 7.41 5.7 29.89 81.5 115.0  
(26.48)( 200.15)( 8.18)( 5.7)  
+ 0.0% +12.6% - 8.4% - 5.8%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

525/\*\*\*\*\* 0.7/ 0.7  
100/\*\*\*\*\* 1.1/ 1.0  
25 M.P.H. 100/\*\*\*\*\* 1.1/ 1.0  
40 M.P.H. 60/\*\*\*\*\* 0.9/ 0.9  
1400/\*\*\*\*\* 0.6/ 0.6  
2000 R.P.M. 75/\*\*\*\*\* 1.2/ 1.2  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 4.1/ 4.1

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 14,000 MAKE: GMC MODEL: 3500 MODEL YR.: 70 TRANS. CODE:A3 DISPLACEMENT: 350  
SERIAL NO.: CE303FZ62996 LICENSE NO.: 7675GG OWNER'S ID.: 200642  
TUNE UP DATA.

----- DATE OF TUNE UP 7/27/77 ODOMETER READING 16305 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 520 DWELL 30  
IDLE CO(%) 3.5 TIMING 0BTDC  
IDLE HC(PPM) 700 GAP(INCH) .035  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL 13.0  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 28  
IDLE CO(%) 1.8 TIMING 4BTDC  
IDLE HC(PPM) 180 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 13.8  
COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP AND WIRE SET.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2587 TEST DATE 7/27/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/20.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 5.76 131.50 7.78 6.3 30.25 79.0 45.0  
TEST 2 6.17 148.40 6.49 6.8 30.25 80.5 47.0  
AVERAGE( 5.97)( 139.95)( 7.14)( 6.6)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2590 TEST DATE 7/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/20.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 6.69 98.31 12.14 7.2 30.33 77.5 56.0  
TEST 2 6.64 107.50 11.78 7.1 30.33 77.5 56.0  
AVERAGE( 6.67)( 102.91)( 11.96)( 7.2)

CHANGE IN AVERAGE AFTER TUNE UP

+11.7% -26.5% +67.6% + 9.2%

TEST:C39H  
TEST 1 12.50 293.40 7.31 4.4 30.25 81.0 44.0  
TEST 2 11.81 322.50 6.32 4.3 30.25 82.0 45.0  
AVERAGE(12.16)( 307.95)( 6.82)( 4.4)

TEST:C39H  
TEST 1 10.95 270.00 10.88 4.6 30.33 78.5 54.0  
TEST 2 10.41 265.20 10.39 4.6 30.33 78.5 52.0  
AVERAGE( 10.68)( 267.60)( 10.64)( 4.6)

CHANGE IN AVERAGE AFTER TUNE UP

-12.1% -13.1% +56.1% + 5.7%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 300/\*\*\*\*\* 3.4/ 3.4  
2500 R.P.M. 75/\*\*\*\*\* 1.9/ 1.9  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 2.0/ 2.0  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.2/ 0.2  
MOTORING 1800/\*\*\*\*\* 2.7/ 2.7  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.5/ 0.5  
3 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 4.8/ 4.5

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 125/\*\*\*\*\* 2.4/ 2.3  
25 M.P.H. 100/\*\*\*\*\* 1.8/ 1.7  
40 M.P.H. 175/\*\*\*\*\* 2.7/ 2.7  
100/\*\*\*\*\* 0.5/ 0.5  
1300/\*\*\*\*\* 1.9/ 1.9  
2000 R.P.M. 150/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 150/\*\*\*\*\* 3.7/ 3.5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 14,000 MAKE: GMC MODEL: 3500 MODEL YR.: 70 TRANS. CODE:A3 DISPLACEMENT: 350  
SERIAL NO.: CE303FZ62839 LICENSE NO.: 7090GG OWNER'S ID.: 200633  
TUNE UP DATA.

----- DATE OF TUNE UP 7/27/77 ODOMETER READING 17488 HOUR METER READING 500.7  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 550 DWELL 32 IDLE R.P.M. 600 DWELL 28  
IDLE CO(%) 1.8 TIMING 0BTDC IDLE CO(%) 1.2 TIMING 4BTDC  
IDLE HC(PPM) 140 GAP(INCH) .035 IDLE HC(PPM) 110 GAP(INCH) .035  
PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.7 IDLE AIR/FUEL 13.8  
-----

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2589 TEST DATE 7/27/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/20.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 5.95 118.60 10.66 6.9 30.25 84.0 44.0  
TEST 2 5.87 125.40 9.86 7.1 30.25 85.0 44.0  
AVERAGE( 5.91)( 122.00)(10.26)( 7.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H  
TEST 1 9.18 176.30 11.25 5.0 30.25 85.0 44.0  
TEST 2 8.95 188.90 10.73 5.0 30.25 85.0 44.0  
AVERAGE( 9.07)( 182.60)(10.99)( 5.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 150/\*\*\*\*\* 2.1/ 2.0  
2500 R.P.M. 100/\*\*\*\*\* 1.4/ 1.4  
LOW CRUISE SPEED 25 M.P.H. 175/\*\*\*\*\* 1.1/ 1.0  
HIGH CRUISE SPEED 40 M.P.H. 100/\*\*\*\*\* 0.7/ 0.7  
MOTORING 1100/\*\*\*\*\* 1.5/ 1.4  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 1.2/ 1.1  
\*\* INCH VACUUM \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*/\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2592 TEST DATE 7/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 10000 LB/20.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 6.31 82.70 15.45 6.5 30.35 82.5 53.0  
TEST 2 5.27 67.30 15.21 7.1 30.35 83.5 53.0  
AVERAGE( 5.79)( 75.00)(15.33)( 6.8)

CHANGE IN AVERAGE AFTER TUNE UP - 2.2% -32.5% +19.4% - 2.9%

TEST:C39H  
TEST 1 7.74 88.10 16.39 5.1 30.35 82.0 49.0  
TEST 2 7.49 111.90 15.12 5.1 30.35 83.0 50.0  
AVERAGE( 7.62)( 100.00)(15.76)( 5.1)

CHANGE IN AVERAGE AFTER TUNE UP -16.0% -45.2% +43.4% + 2.0%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/\*\*\*\*\* 0.4/ 0.4  
2500 R.P.M. 275/\*\*\*\*\* 1.2/ 1.2  
25 M.P.H. 150/\*\*\*\*\* 0.6/ 0.6  
40 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
MOTORING 1000/\*\*\*\*\* 2.0/ 2.0  
2000 R.P.M. 175/\*\*\*\*\* 0.3/ 0.3  
\*\* IN. \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*/\*\*\*\*

COMMENT KEY MODE: TRANSMISSION WOULD NOT SUPPORT 3 IN HG. LOAD WITHOUT DOWNSHIFTING.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: C600 MODEL YR.: 71 TRANS. CODE:M5 DISPLACEMENT: 330  
SERIAL NO.: C610VL74492 LICENSE NO.: 1280GH OWNER'S ID.: 4662  
TUNE UP DATA.

----- DATE OF TUNE UP 8/ 1/77 ODOMETER READING 31347 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 640 DWELL 25 IDLE R.P.M. 600 DWELL 26  
IDLE CO(%) 7.8 TIMING 11BTDC IDLE CO(%) 2.2 TIMING 6BTDC  
IDLE HC(PPM) 700 GAP(INCH) IDLE HC(PPM) 230 GAP(INCH) .030  
PCV CODE 3 AF CODE 3 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: CARB WAS REBUILT.

TEST RESULTS

----- \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* -----  
BMV TEST SERIES NO. 2594 TEST DATE 7/29/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 62.33 332.60 8.12 4.5 30.29 82.0 33.0  
TEST 2 62.33 332.60 8.12 4.5 30.29 83.5 81.0  
AVERAGE(61.95)( 325.35)( 8.51)( 4.5)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 77.35 486.20 10.44 3.2 30.29 84.0 77.0  
TEST 2 80.25 491.10 8.78 3.3 30.28 83.5 73.0  
AVERAGE(78.80)( 488.65)( 9.61)( 3.3)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 350/\*\*\*\*\* 5.9/ 5.6  
2500 R.P.M. 250/\*\*\*\*\* 3.2/ 3.2  
LOW CRUISE SPEED 20 M.P.H. 200/\*\*\*\*\* 3.2/ 3.2  
HIGH CRUISE SPEED 30 M.P.H. 112/\*\*\*\*\* 2.5/ 2.6  
MOTORING 2000/\*\*\*\*\* 4.5/ 4.3  
11 INCH VACUUM 2000 R.P.M. 575/\*\*\*\*\* 2.8/ 2.8  
3 INCH VACUUM 2000 R.P.M. 425/\*\*\*\*\* 5.3/ 5.1

COMMENT NYQ TEST 1: ENGINE STALLED ONCE.  
COMMENT NYQ TEST 2: ENGINE STALLED ONCE.  
COMMENT C39 TEST 1: ENGINE STALLED TWICE.  
COMMENT C39 TEST 2: ENGINE STALLED ONCE.

----- \*\*\*\*\* AFTER TUNE UP \*\*\*\*\* -----  
BMV TEST SERIES NO. 2597 TEST DATE 8/ 4/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/13.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 13.34 342.90 6.48 4.5 30.20 88.0 110.0  
TEST 2 51.63 362.80 5.82 4.6 30.20 88.0 110.0  
AVERAGE(50.49)( 352.85)( 6.15)( 4.6)  
CHANGE IN AVERAGE AFTER TUNE UP  
-18.5% + 9.5% -27.7% + 1.1%  
TEST:C39H  
TEST 1 94.33 437.00 8.78 3.2 30.20 89.0 108.0  
TEST 2 91.13 459.30 8.89 3.1 30.20 89.0 108.0  
AVERAGE(92.73)( 448.15)( 8.84)( 3.2)  
CHANGE IN AVERAGE AFTER TUNE UP  
+17.7% - 8.3% - 8.1% - 3.1%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE \*\*\*\*\*/\*\*\*\*\* \*\*\*\*\*/\*\*\*\*  
175/\*\*\*\*\* 1.8/ 1.8  
20 M.P.H. 250/\*\*\*\*\* 1.9/ 1.8  
30 M.P.H. 225/\*\*\*\*\* 1.5/ 1.5  
2000 R.P.M. 200/\*\*\*\*\* 1.0/ 0.9  
2000 R.P.M. 650/\*\*\*\*\* 1.5/ 1.5  
\*\* 2000 R.P.M. 425/\*\*\*\*\* 6.0/ 5.8

COMMENT NYQ TEST 1: ENGINE STALLED TWICE.  
COMMENT NYQ TEST 2: ENGINE STALLED ONCE.  
COMMENT C39 TEST 1: ENGINE STALLED FIVE TIMES.  
COMMENT C39 TEST 2: ENGINE STALLED TWICE.  
COMMENT KEY MODE: ENGINE WOULD NOT IDLE; IT WOULD ST-  
ALL AT SPEEDS LESS THAN 1500 RPM.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,700 MAKE: I-H MODEL: 1600 MODEL YR.: 74 TRANS. CODE:A4 DISPLACEMENT: 345  
 SERIAL NO.: 10662DHA11283 LICENSE NO.: 18758E OWNER'S ID.: 4160 2  
 TUNE UP DATA.

DATE OF TUNE UP	8/ 3/77	ODOMETER READING	5768	HOUR METER READING	*****		
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****				
IDLE R.P.M.	900	DWELL	21	IDLE R.P.M.	700	DWELL	25
IDLE CO(%)	1.3	TIMING	15BTDC	IDLE CO(%)	0.8	TIMING	0BTDC
IDLE HC(PPM)	140	GAP(INCH)		IDLE HC(PPM)	125	GAP(INCH)	.030
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED POINTS, PLUGS, CONDENSER, CAP, WIRE SET AND ROTOR.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2601				TEST DATE 8/ 9/77				BMV TEST SERIES NO. 2604				TEST DATE 8/15/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH								12500 LB/24.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ															
TEST 1	6.89	72.12	24.39	5.6	30.05	90.5	97.0	6.93	101.30	20.48	5.4	30.29	93.5	65.0	
TEST 2	7.30	96.96	22.44	5.5	30.05	93.0	99.0	7.12	130.10	18.41	5.5	30.29	93.5	65.0	
AVERAGE	( 7.10)	( 84.54)	(23.12)	( 5.6)				( 7.03)	( 115.70)	(19.45)	( 5.5)				
CHANGE IN AVERAGE AFTER TUNE UP								- 1.0% +36.9% -17.0% - 1.8%							
TEST:C39H															
TEST 1	14.94	116.60	25.55	4.2	30.05	92.5	97.0	15.05	141.50	23.53	4.0	30.29	92.5	64.0	
TEST 2	14.33	154.40	22.69	4.3	30.05	93.0	96.0	16.96	192.50	22.58	3.9	30.29	92.5	64.0	
AVERAGE	(14.64)	( 135.50)	(24.12)	( 4.3)				(16.01)	( 167.00)	(23.06)	( 4.0)				
CHANGE IN AVERAGE AFTER TUNE UP								+ 9.4% +23.2% - 4.4% - 7.1%							
TEST:KEY MODE															
ENGINE SPEED		HC(PPM)		CO(%)				HC(PPM)		CO(%)					
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)								(READING FROM ANALYZER 5/READING FROM ANALYZER 2)							
IDLE		150/*****		2.0/ 2.0				175/*****		2.5/ 2.5					
2500 R.P.M.		60/*****		0.3/ 0.3				50/*****		0.7/ 0.7					
LOW CRUISE SPEED	25 M.P.H.	75/*****		0.5/ 0.5				25 M.P.H.	125/*****	0.9/ 0.8					
HIGH CRUISE SPEED	40 M.P.H.	75/*****		0.6/ 0.6				40 M.P.H.	75/*****	0.6/ 0.5					
MOTORING		1600/*****		1.7/ 1.6					1 00/*****	2.0/ 2.0					
11 INCH VACUUM	2000 R.P.M.	150/*****		1.1/ 1.1				2000 R.P.M.	100/*****	1.2/ 1.2					
3 INCH VACUUM	2000 R.P.M.	125/*****		0.9/ 0.8				** 2000 R.P.M.	75/*****	1.0/ 1.0					

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
 SERIAL NO.: D328B2S522544 LICENSE NO.: 31592E OWNER'S ID.: 290013  
 TUNE UP DATA.

----- DATE OF TUNE UP 8/10/77 ODOMETER READING 28730 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 750 DWELL 49 IDLE R.P.M. 600 DWELL 42  
 IDLE CO(%) 8.0 TIMING 8BTDC IDLE CO(%) 0.4 TIMING 0BTDC  
 IDLE HC(PPM) 200 GAP(INCH) .033 IDLE HC(PPM) 100 GAP(INCH) .035  
 PCV CODE 3 AF CODE 2 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 12.2 IDLE AIR/FUEL 13.9

COMMENT: REPLACED WIRE SET, CAP, ROTOR, POINTS, CONDENSER, PLUGS AND FUEL FILTER.

TEST RESULTS

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2602 TEST DATE 8/ 9/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 13.64 133.90 13.00 8.3 30.06 92.5 94.0  
 TEST 2 14.31 155.80 10.73 8.5 30.06 93.5 98.0  
 AVERAGE(13.98)( 144.85)(11.87)( 8.4)

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMV TEST SERIES NO. 2603 TEST DATE 8/15/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 7.68 76.50 9.83 8.8 30.30 84.0 55.0  
 TEST 2 7.61 91.57 9.05 8.9 30.30 85.5 57.0  
 AVERAGE(7.65)( 84.04)( 9.44)( 8.9)

CHANGE IN AVERAGE AFTER TUNE UP

-15.3% -42.0% -20.4% + 5.4%

TEST:C39H  
 TEST 1 26.19 218.80 11.18 6.8 30.06 92.5 97.0  
 TEST 2 25.13 230.00 10.61 7.0 30.06 93.5 98.0  
 AVERAGE(25.66)( 224.40)(10.90)( 6.9)

TEST:C39H  
 TEST 1 13.21 93.69 9.27 7.5 30.30 85.5 55.0  
 TEST 2 13.53 134.60 7.67 7.5 30.30 86.0 54.0  
 AVERAGE(13.37)( 114.15)( 8.47)( 7.5)

CHANGE IN AVERAGE AFTER TUNE UP

-47.9% -49.1% -22.3% + 8.7%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 325/\*\*\*\*\* 8.6/ 7.9  
 2500 R.P.M. 100/\*\*\*\*\* 0.3/ 0.3  
 LOW CRUISE SPEED 25 M.P.H. 175/\*\*\*\*\* 0.2/ 0.2  
 HIGH CRUISE SPEED 40 M.P.H. 75/\*\*\*\*\* 0.3/ 0.3  
 MOTORING 2000/\*\*\*\*\* 6.0/ 5.9  
 11 INCH VACUUM 2000 R.P.M. 250/\*\*\*\*\* 0.3/ 0.3  
 3 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.6/ 0.6

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 100/\*\*\*\*\* 0.7/ 0.6  
 2500 R.P.M. 50/\*\*\*\*\* 0.3/ 0.3  
 25 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
 40 M.P.H. 50/\*\*\*\*\* 0.3/ 0.3  
 MOTORING 1800/\*\*\*\*\* 2.0/ 2.0  
 2000 R.P.M. 175/\*\*\*\*\* 0.2/ 0.2  
 \*\* 2000 R.P.M. 150/\*\*\*\*\* 0.9/ 0.8

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

I/M-PAGE 124

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: DODGE MODEL: D500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 318  
SERIAL NO.: D51FGOS176342 LICENSE NO.: 31523E OWNER'S ID.: 1250 3  
TUNE UP DATA,

----- DATE OF TUNE UP 8/29/77 ODOMETER READING 19411 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 800 DWELL 17  
IDLE CO(%) 1.0 TIMING 5BTDC  
IDLE HC(PPM) 200 GAP(INCH) .040  
PCV CODE 4 AF CODE 2  
IDLE AIR/FUEL 13.9  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 32  
IDLE CO(%) 0.4 TIMING 5BTDC  
IDLE HC(PPM) 200 GAP(INCH) .030  
PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.9  
COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2611 TEST DATE 8/25/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 77.08 103.46 17.35 5.2 30.21 81.0 46.0  
TEST 2 71.43 103.00 16.47 5.4 30.21 81.5 47.0  
AVERAGE(74.71)(101.23)(16.91)(5.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 146.60 129.00 18.36 3.9 30.21 83.5 49.0  
TEST 2  
AVERAGE(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/\*\*\*\*\* 1.2/ 1.2  
2500 R.P.M. 2000/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 20 M.P.H. 2000/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 30 M.P.H. 2000/\*\*\*\*\* 0.1/ 0.1  
MOTORING 2000/\*\*\*\*\* 10.0/ 9.3  
11 INCH VACUUM 2000 R.P.M. 1850/\*\*\*\*\* 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 225/\*\*\*\*\* 4.3/ 4.0

COMMENT C39 TEST 2: SECOND CITY TRAFFIC CYCLE WAS CANCELLED DUE TO AN ENGINE BACKFIRING PROBLEM THAT COULD HAVE DAMAGED THE CVS INLET SYSTEM.  
COMMENT KEY MODE: MOTORING MODE WAS VERY BRIEF FOR FEAR OF BACKFIRE CAUSED DAMAGE.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2619 TEST DATE 9/ 7/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 16.42 151.60 13.49 6.2 30.20 83.0 62.0  
TEST 2 15.50 149.70 12.66 6.3 30.20 83.0 62.0  
AVERAGE(16.00)(150.65)(13.08)(6.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
-78.6% +48.8% -22.7% +17.9%  
TEST:C39H  
TEST 1 31.81 210.50 17.10 4.3 30.20 83.5 63.0  
TEST 2 30.53 216.60 15.91 4.3 30.20 83.5 63.0  
AVERAGE(31.17)(213.55)(16.51)(4.3)  
CHANGE IN AVERAGE AFTER TUNE UP  
\*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 300/\*\*\*\*\* 1.0/ 1.0  
2500 R.P.M. 75/\*\*\*\*\* 0.3/ 0.3  
20 M.P.H. 200/\*\*\*\*\* 0.7/ 0.6  
30 M.P.H. 175/\*\*\*\*\* 0.2/ 0.2  
MOTORING 1900/\*\*\*\*\* 1.8/ 1.8  
2000 R.P.M. 150/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 150/\*\*\*\*\* 4.8/ 4.5

COMMENT NYQ TEST 1: ENGINE STALLED ONCE.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 20,000 MAKE: I-H MODEL: 1600 MODEL YR.: 75 TRANS. CODE:M4 DISPLACEMENT: 345  
SERIAL NO.: D0512EHA42438 LICENSE NO.: 21086E OWNER'S ID.: 4500 4  
TUNE UP DATA.

----- DATE OF TUNE UP 8/26/77 ODOMETER READING 7115 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 540 DWELL 29  
IDLE CO(%) 2.0 TIMING 2ATDC  
IDLE HC(PPM) 1700 GAP(INCH) .038  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL 13.5  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 675 DWELL 28  
IDLE CO(%) 0.7 TIMING 0BTDC  
IDLE HC(PPM) 80 GAP(INCH) .030  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.8

COMMENT: REPLACED COIL, CAP, ROTOR, CONDENSER, POINTS, PLUGS AND WIRE SET.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2612 TEST DATE 8/25/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/26.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 20.89 123.20 10.68 6.0 30.21 86.5 58.0  
TEST 2 21.06 163.60 8.31 5.9 30.21 86.5 58.0  
AVERAGE(20.98)( 143.40)( 9.50)( 6.0)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2613 TEST DATE 8/29/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/26.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 12.59 125.10 10.11 5.9 30.34 86.5 119.0  
TEST 2 11.82 127.10 9.41 6.1 30.34 86.5 119.0  
AVERAGE(12.21)( 126.10)( 9.76)( 6.0)

CHANGE IN AVERAGE AFTER TUNE UP

-41.8% -12.1% + 2.8% + 0.8%

TEST:C39H  
TEST 1 41.34 155.30 12.42 4.3 30.21 87.0 60.0  
TEST 2 39.08 167.60 11.82 4.4 30.21 87.0 60.0  
AVERAGE(40.21)( 161.45)(12.12)( 4.4)

TEST:C39H  
TEST 1 26.59 158.40 11.63 4.2 30.34 87.5 120.0  
TEST 2 26.25 186.10 10.83 4.2 30.34 87.5 120.0  
AVERAGE(26.42)( 172.25)(11.23)( 4.2)

CHANGE IN AVERAGE AFTER TUNE UP

-34.3% + 6.7% - 7.3% - 3.4%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 1200/\*\*\*\*\* 1.7/ 1.6  
2500 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 125/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 40 M.P.H. 75/\*\*\*\*\* 0.6/ 0.6  
MOTORING 2000/\*\*\*\*\* 2.0/ 2.0  
11 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.7/ 0.6  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 1.5/ 1.4

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 0.5/ 0.5  
35/\*\*\*\*\* 0.2/ 0.1  
25 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
40 M.P.H. 50/\*\*\*\*\* 0.6/ 0.6  
1500/\*\*\*\*\* 1.0/ 1.0  
2000 R.P.M. 125/\*\*\*\*\* 0.7/ 0.6  
\*\* 2000 R.P.M. 100/\*\*\*\*\* 1.5/ 1.5

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 225  
 SERIAL NO.: D328B0S110281 LICENSE NO.: 31560E OWNER'S ID.: 2930 4  
 TUNE UP DATA.

DATE OF TUNE UP 9/ 8/77 ODOMETER READING 32065 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 600 DWELL 41 IDLE R.P.M. 700 DWELL 43  
 IDLE CO(%) 0.5 TIMING 1ATDC IDLE CO(%) 0.4 TIMING 0B1DC  
 IDLE HC(PPM) 1200 GAP(INCH) .041 IDLE HC(PPM) 140 GAP(INCH) .035  
 PCV CODE 3 AF CODE 3 PCV CODE 1 AF CODE 2  
 IDLE AIR/FUEL 13.7 IDLE AIR/FUEL 13.9

COMMENT: REPLACED PLUGS, POINTS, CONDENSER, ROTOR, CAP AND WIRE SET.

TEST RESULTS

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2618				TEST DATE 9/ 7/77				BMV TEST SERIES NO. 2624				TEST DATE 9/20/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 7500 LB/16.0 H.P. AT 40 MPH								7500 LB/16.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ															
TEST 1	43.72	121.60	3.54	10.6	30.20	84.0	72.0	5.77	78.84	5.96	12.4	29.89	71.5	75.0	
TEST 2	46.17	127.80	3.84	10.1	30.20	84.0	72.0	5.22	78.30	6.56	12.0	29.89	71.5	75.0	
AVERAGE	(44.95)	(124.70)	(3.69)	(10.4)				(5.50)	(78.27)	(6.26)	(12.2)				
CHANGE IN AVERAGE AFTER TUNE UP								-07.0% -38.0% +09.6% +17.9%							
TEST:C39H															
TEST 1	69.44	132.00	7.12	7.1	30.20	85.0	71.0	12.40	124.20	8.51	7.7	29.89	72.5	73.0	
TEST 2	67.51	153.60	5.72	7.1	30.20	85.0	71.0	11.55	147.30	7.95	7.7	29.89	72.5	73.0	
AVERAGE	(68.48)	(142.80)	(6.42)	(7.1)				(11.98)	(135.75)	(8.23)	(7.7)				
CHANGE IN AVERAGE AFTER TUNE UP								-82.5% - 4.9% +28.2% + 8.5%							
TEST:KEY MODE															
ENGINE SPEED															
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)								(READING FROM ANALYZER 5/READING FROM ANALYZER 2)							
IDLE	1600/*****			1.1/ 1.1				125/*****	0.8/ 0.8						
2500 R.P.M.	1650/*****			0.7/ 0.6				75/*****	0.7/ 0.7						
LOW CRUISE SPEED 25 M.P.H.	1900/*****			0.4/ 0.4				25 M.P.H.	125/*****			0.5/ 0.5			
HIGH CRUISE SPEED 40 M.P.H.	1650/*****			0.3/ 0.2				40 M.P.H.	75/*****			0.2/ 0.2			
MOTORING	2000/*****			2.0/ 2.0					2 00/*****			4.0/ 3.8			
11 INCH VACUUM 2000 R.P.M.	1900/*****			0.4/ 0.4				2000 R.P.M.	175/*****			0.7/ 0.6			
3 INCH VACUUM 2000 R.P.M.	2000/*****			3.2/ 3.0				** 2000 R.P.M.	150/*****			2.5/ 2.5			

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: DODGE MODEL: D200 MODEL YR.: 71 TRANS. CODE:A3 DISPLACEMENT: 225  
SERIAL NO.: D22BB1S361396 LICENSE NO.: 31589E OWNER'S ID.: 282021  
TUNE UP DATA.

DATE OF TUNE UP 10/ 3/77 ODOMETER READING 26577 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 840 DWELL 45  
IDLE CO(%) 5.8 TIMING 0BTDC  
IDLE HC(PPM) 200 GAP(INCH) .040  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL 12.9  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 43  
IDLE CO(%) 0.4 TIMING 0BTDC  
IDLE HC(PPM) 100 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 14.0  
COMMENT: REPLACED PLUGS, WIRE SET, CAP, ROTOR, POINTS, CONDENSER, VACUUM HOSES, VACUUM ADVANCE LINE WAS CONNECTED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2629 TEST DATE 9/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 5.05 66.00 9.00 10.8 29.81 78.5 61.0  
TEST 2 4.36 61.12 9.02 11.4 29.81 78.5 61.0  
AVERAGE( 4.71)( 88.74)( 9.03)(11.1)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2635 TEST DATE 10/11/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 2.00 23.39 11.31 12.5 30.16 71.0 53.0  
TEST 2 3.05 28.51 10.63 13.1 30.16 71.0 53.0  
AVERAGE( 3.02)( 25.95)(10.97)(12.8)  
-35.9% -70.8% +21.6% +15.3%

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 8.90 171.00 10.38 7.3 29.81 77.5 60.0  
TEST 2 8.56 190.70 9.32 7.4 29.81 77.5 60.0  
AVERAGE( 8.73)( 180.85)( 9.85)( 7.4)

CHANGE IN AVERAGE AFTER TUNE UP  
TEST:C39H  
TEST 1 5.92 58.51 13.89 7.6 30.16 70.5 50.0  
TEST 2 5.07 54.18 13.25 8.3 30.16 70.5 50.0  
AVERAGE( 5.50)( 56.35)(13.57)( 8.0)  
-37.1% -68.8% +37.8% + 8.2%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 225/\*\*\*\*\* 5.5/ 5.1  
2500 R.P.M. 75/\*\*\*\*\* 0.4/ 0.4  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 40 M.P.H. 125/\*\*\*\*\* 0.2/ 0.2  
MOTORING 600/\*\*\*\*\* 7.5/ 6.6  
11 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.3/ 0.3  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 2.4/ 2.2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 0.7/ 0.6  
75/\*\*\*\*\* 0.4/ 0.4  
25 M.P.H. 125/\*\*\*\*\* 0.2/ 0.1  
40 M.P.H. 100/\*\*\*\*\* 0.5/ 0.5  
500/\*\*\*\*\* 3.8/ 3.6  
2000 R.P.M. 100/\*\*\*\*\* 0.3/ 0.3  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 34,000 MAKE: WHITE MODEL: 2300 MODEL YR.: 71 TRANS. CODE:M5 DISPLACEMENT: 400  
SERIAL NO.: BC014DC589991 LICENSE NO.: 9496GG OWNER'S ID.: 6119  
TUNE UP DATA.

DATE OF TUNE UP 10/ 5/77 ODOMETER READING 21071 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 580 DWELL 40  
IDLE CO(%) 5.0 TIMING 1ATDC  
IDLE HC(PPM) 200 GAP(INCH) .040  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.5

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 32  
IDLE CO(%) 0.5 TIMING 6BTDC  
IDLE HC(PPM) 100 GAP(INCH) .025  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 14.0

COMMENT: REPLACED FUEL FILTER, ENTIRE FUEL LINE, POINTS, CONDENSER, ROTOR, FUEL PUMP, PLUGS AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2630 TEST DATE 9/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2636 TEST DATE 10/11/77  
13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 43.88 306.10 9.18 4.4 29.83 76.5 62.0  
TEST 2 38.14 298.30 8.98 4.6 29.83 76.5 62.0  
AVERAGE(41.01)( 302.20)( 9.08)( 4.5)

30.37 168.10 13.11 5.0 30.16 69.5 47.0  
27.89 181.70 12.82 5.1 30.16 69.5 47.0  
(29.13)( 171.90)(12.97)( 5.1)

CHANGE IN AVERAGE AFTER TUNE UP

-29.0% -42.1% +42.8% +12.2%

TEST:C39H

TEST 1 79.01 404.40 10.38 3.1 29.87 75.5 59.0  
TEST 2 75.99 485.80 9.81 3.1 29.87 75.5 59.0  
AVERAGE(77.50)( 445.10)(10.10)( 3.1)

52.39 250.50 14.16 3.7 30.16 68.5 47.0  
48.26 288.20 13.59 3.5 30.16 68.5 47.0  
(50.32)( 269.35)(13.88)( 3.6)

CHANGE IN AVERAGE AFTER TUNE UP

-35.1% -39.5% +37.4% +16.1%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 175/\*\*\*\*\* 4.3/ 4.2  
2500 R.P.M. 175/\*\*\*\*\* 4.1/ 4.1  
LOW CRUISE SPEED 20 M.P.H. 225/\*\*\*\*\* 3.4/ 3.2  
HIGH CRUISE SPEED 30 M.P.H. 150/\*\*\*\*\* 3.1/ 3.0  
MOTORING 2000/\*\*\*\*\* 4.0/ 3.6  
11 INCH VACUUM 2000 R.P.M. 225/\*\*\*\*\* 2.8/ 2.8  
3 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 1.5/ 1.4

175/\*\*\*\*\* 0.6/ 0.6  
150/\*\*\*\*\* 3.0/ 2.9  
20 M.P.H. 125/\*\*\*\*\* 1.3/ 1.3  
30 M.P.H. 175/\*\*\*\*\* 1.9/ 1.8  
450/\*\*\*\*\* 1.5/ 1.5  
2000 R.P.M. 300/\*\*\*\*\* 2.4/ 2.3  
\*\* 2000 R.P.M. 225/\*\*\*\*\* 2.2/ 2.2

COMMENT KEY MODE: CO READINGS WERE ERRATIC AND HARD TO READ AT ALL SPEEDS.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 20,000 MAKE: FORD MODEL: F600 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F61BEH70354 LICENSE NO.: 31580E OWNER'S ID.: 1470 2  
TUNE UP DATA.

DATE OF TUNE UP 10/17/77 ODOMETER READING 11951 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 640 DWELL 44  
IDLE CO(%) 5.1 TIMING 3BTDC  
IDLE HC(PPM) 100 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 38  
IDLE CO(%) 1.2 TIMING 3BTDC  
IDLE HC(PPM) 220 GAP(INCH) .030  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.6

COMMENT: REPLACED WIRE SET, POINTS, CAP, ROTOR AND PLUGS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2644 TEST DATE 10/17/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 7.70 72.61 12.90 8.4 29.39 65.0 37.0  
TEST 2 7.26 83.73 12.24 8.5 29.40 65.0 37.0  
AVERAGE( 7.48)( 78.17)(12.57)( 8.5)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1 15.62 122.10 15.53 5.7 29.42 65.0 41.0  
TEST 2 13.85 124.50 16.22 5.7 29.43 65.0 41.0  
AVERAGE(14.74)( 123.30)(15.88)( 5.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 125/\*\*\*\*\* 4.7/ 4.5  
2500 R.P.M. 75/\*\*\*\*\* 0.3/ 0.3  
LOW CRUISE SPEED 25 M.P.H. 125/\*\*\*\*\* 0.2/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
MOTORING 1500/\*\*\*\*\* 2.5/ 2.3  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.2/ 0.1  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 2.5/ 2.5

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2647 TEST DATE 10/21/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

8.05 25.59 17.84 8.6 30.16 76.0 47.0  
7.43 18.79 20.06 8.5 30.16 76.0 47.0  
( 7.74)( 22.19)(19.95)( 8.6)  
+ 0.5% - 71.0% +50.0% + 1.2%

17.95 42.10 22.92 5.4 30.16 75.0 49.0  
16.05 42.06 22.90 5.7 30.16 75.0 49.0  
(17.00)( 42.08)(22.91)( 5.6)  
+15.4% -65.9% +44.3% - 2.6%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

175/\*\*\*\*\* 1.0/ 1.0  
125/\*\*\*\*\* 0.2/ 0.1  
25 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
1100/\*\*\*\*\* 2.0/ 1.9  
2000 R.P.M. 100/\*\*\*\*\* 0.1/ 0.1  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 2.0/ 1.8

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVK15837 LICENSE NO.: 6297LA OWNER'S ID.: 10704  
TUNE UP DATA.

DATE OF TUNE UP 10/22/77 ODOMETER READING 28408 HOUR METER READING 900.4

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	650	DWELL	26	IDLE R.P.M.	600	DWELL	36
IDLE CO(%)	3.5	TIMING	25BTDC	IDLE CO(%)	1.2	TIMING	6BTDC
IDLE HC(PPM)	700	GAP(INCH)	.035	IDLE HC(PPM)	110	GAP(INCH)	.034
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL	13.2			IDLE AIR/FUEL	13.8		

COMMENT: REPLACED POINTS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2648 TEST DATE 10/21/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ

TEST 1	3.41	55.02	21.80	8.7	30.16	73.0	44.0
TEST 2	6.72	49.17	22.07	9.4	30.16	73.0	44.0
AVERAGE(	7.57)	( 52.25)	(21.94)	( 9.1)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:C39H

TEST 1	21.00	101.90	23.41	6.1	30.16	73.5	43.0
TEST 2	18.83	109.60	25.61	5.9	30.16	73.5	43.0
AVERAGE(19.92)	( 105.75)	(24.51)	( 6.0)				

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

		HC(PPM)	CO(%)
	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	475/*****	5.7/ 5.2	
2500 R.P.M.	2000/*****	0.2/ 0.2	
LOW CRUISE SPEED 25 M.P.H.	125/*****	0.1/ 0.1	
HIGH CRUISE SPEED 40 M.P.H.	150/*****	0.1/ 0.1	
MOTORING	2000/*****	4.3/ 3.9	
11 INCH VACUUM 2000 R.P.M.	275/*****	0.2/ 0.2	
3 INCH VACUUM 2000 R.P.M.	200/*****	0.2/ 0.1	

COMMENT C39 TEST 2: ENGINE STALLED TWICE.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2653 TEST DATE 11/ 4/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST 1	4.43	27.97	11.05	9.4	30.33	71.5	85.0
TEST 2	4.12	28.99	11.88	9.4	30.33	71.5	85.0
AVERAGE(	4.31)	( 28.48)	(11.47)	( 9.4)			

CHANGE IN AVERAGE AFTER TUNE UP

TEST 1	13.68	71.69	11.83	6.1	30.33	71.5	85.0
TEST 2	9.90	53.44	14.08	6.4	30.33	71.5	85.0
AVERAGE(11.79)	( 62.57)	(12.96)	( 6.3)				

CHANGE IN AVERAGE AFTER TUNE UP

		HC(PPM)	CO(%)
	(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	100/*****	1.0/ 1.0	
	75/*****	0.4/ 0.4	
25 M.P.H.	150/*****	0.1/ 0.1	
40 M.P.H.	75/*****	0.1/ 0.1	
	1900/*****	1.5/ 1.3	
2000 R.P.M.	125/*****	0.2/ 0.1	
** 2000 R.P.M.	100/*****	0.1/ 0.1	

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: I-H MODEL: 1210 MODEL YR.: 73 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 3H2D0CHC12336 LICENSE NO.: 16591E OWNER'S ID.: 3430 6  
TUNE UP DATA.

----- DATE OF TUNE UP 11/ 7/77 ODOMETER READING 13489 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 675 DWELL 33 IDLE R.P.M. 600 DWELL 31  
IDLE CO(%) 6.0 TIMING 10BTDC IDLE CO(%) 1.2 TIMING 0BTDC  
IDLE HC(PPM) 250 GAP(INCH) .040 IDLE HC(PPM) 110 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.9 IDLE AIR/FUEL 13.7  
COMMENT: REPLACED CAP, WIRE SET, POINTS, ROTOR, CONDENSER AND PLUGS.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2652 TEST DATE 11/ 4/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 5.07 124.10 7.31 11.0 30.33 76.0 85.0  
TEST 2 4.84 130.20 7.86 11.0 30.33 76.5 87.0  
AVERAGE( 4.96)( 127.15)( 7.59)(11.0)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2655 TEST DATE 11/ 9/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
3.51 49.33 7.10 10.9 30.09 67.5 61.0  
2.93 35.84 6.55 11.7 30.09 68.0 62.0  
( 3.22)( 42.59)( 6.83)(11.3)  
-35.0% -66.5% -10.0% + 2.7%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 250/\*\*\*\*\* 7.9/ 7.1  
2500 R.P.M. 325/\*\*\*\*\* 1.0/ 1.0  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 2.0/ 2.0  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.3/ 0.3  
MOTORING 2000/\*\*\*\*\* 6.0/ 5.4  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 2.1/ 2.0  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 0.9/ 0.9  
100/\*\*\*\*\* 0.7/ 0.7  
25 M.P.H. 100/\*\*\*\*\* 0.4/ 0.4  
40 M.P.H. 50/\*\*\*\*\* 0.2/ 0.2  
1300/\*\*\*\*\* 5.0/ 4.5  
2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 100/\*\*\*\*\* 2.0/ 2.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FGRD MODEL: F600 MODEL YR.: 68 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: F618ED27228 LICENSE NO.: 31568E OWNER'S ID.: 1450 5  
 TUNE UP DATA.

DATE OF TUNE UP 11/ 9/77 ODOMETER READING 19133 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 900 DWELL 41  
 IDLE CO(%) 3.4 TIMING 14BTDC  
 IDLE HC(PPM) 200 GAP(INCH) .038  
 PCV CODE 2 AF CODE 4  
 IDLE AIR/FUEL 13.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 700 DWELL 41  
 IDLE CO(%) 1.0 TIMING 0BTDC  
 IDLE HC(PPM) 150 GAP(INCH) .030  
 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL 13.5

COMMENT: REPLACED PLUGS, WIRE SET, CAP AND ROTOR. CARB. WAS OVERHAULED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2654 TEST DATE 11/ 9/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 12000 LB/23.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 14.06 466.10 1.69 5.7 30.09 68.5 64.0  
 TEST 2 14.22 465.70 1.64 5.6 30.09 69.0 65.0  
 AVERAGE(14.14)( 465.90)( 1.67)( 5.7)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	250/*****	3.4/ 3.3
2500 R.P.M.	1050/*****	8.3/ 7.6
LOW CRUISE SPEED 25 M.P.H.	300/*****	10.0/ 9.6
HIGH CRUISE SPEED 40 M.P.H.	125/*****	8.6/ 7.8
MOTORING	2000/*****	5.2/ 5.1
11 INCH VACUUM 2000 R.P.M.	350/*****	10.0/10.0
4 INCH VACUUM 2000 R.P.M.	275/*****	8.0/ 7.1

COMMENT KEY MODE: ENGINE WAS AT W.O.T. AT 4.5 IN. HG.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2656 TEST DATE 11/10/77  
 12000 LB/23.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

9.86 243.10 4.96 6.8 29.96 70.0 77.0  
 9.34 233.20 5.30 7.0 29.96 70.0 77.0  
 ( 9.60)( 239.15)( 5.13)( 6.9)  
 -22.1% -20.0% : 2.1% +22.1%

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	150/*****	1.4/ 1.3
	225/*****	1.0/ 1.0
25 M.P.H.	100/*****	1.7/ 1.6
40 M.P.H.	75/*****	1.0/ 1.0
	1300/*****	3.0/ 2.8
2000 R.P.M.	200/*****	2.1/ 1.9
** 2000 R.P.M.	150/*****	7.0/ 6.6

COMMENT KEY MODE: ENGINE WAS HELD AT 4.5 IN. HG.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 18,200 MAKE: I-H MODEL: 1600 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 304  
SERIAL NO.: 416060C060696 LICENSE NO.: 31314E OWNER'S ID.: 3230 1  
TUNE UP DATA.

----- DATE OF TUNE UP 11/14/77 ODOMETER READING 11414 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 850 DWELL 28 IDLE R.P.M. 700 DWELL 28  
IDLE CO(%) 7.5 TIMING 6BTDC IDLE CO(%) 1.5 TIMING 0BTDC  
IDLE HC(PPM) 350 GAP(INCH) .028 IDLE HC(PPM) 250 GAP(INCH) .028  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.3 IDLE AIR/FUEL 13.6

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2657 TEST DATE 11/14/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2659 TEST DATE 11/14/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----

TEST:NYQ  
TEST 1 9.44 93.09 13.62 7.7 30.23 69.0 31.0 9.26 59.69 12.12 7.9 30.23 72.0 30.0  
TEST 2 8.02 93.02 13.22 7.8 30.23 71.0 29.0 7.01 57.60 11.42 8.2 30.23 72.5 29.0  
AVERAGE( 9.18)( 93.39)(13.42)( 7.8) CHANGE IN AVERAGE AFTER TUNE UP - 6.5% -37.2% -12.3% + 3.9%

TEST KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 125/\*\*\*\*\* 3.0/ 2.9  
2500 R.P.M. 75/\*\*\*\*\* 0.7/ 0.7  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 0.6/ 0.6  
HIGH CRUISE SPEED 40 M.P.H. 100/\*\*\*\*\* 0.6/ 0.6  
MOTORING 1600/\*\*\*\*\* 4.0/ 3.8  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.5/ 0.4  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.9/ 0.8  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
75/\*\*\*\*\* 0.8/ 0.8  
50/\*\*\*\*\* 0.4/ 0.3  
25 M.P.H. 75/\*\*\*\*\* 0.5/ 0.5  
40 M.P.H. 75/\*\*\*\*\* 0.6/ 0.6  
1900/\*\*\*\*\* 1.5/ 1.4  
2000 R.P.M. 175/\*\*\*\*\* 0.3/ 0.3  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 0.9/ 0.8

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D32BB2S609442 LICENSE NO.: 31598E OWNER'S ID.: 290015  
TUNE UP DATA.

----- DATE OF TUNE UP 11/14/77 ODOMETER READING 10646 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 660 DWELL 47 IDLE R.P.M. 700 DWELL 41  
IDLE CO(%) 0.3 TIMING 5BTDC IDLE CO(%) 0.2 TIMING 0BTDC  
IDLE HC(PPM) 60 GAP(INCH) IDLE HC(PPM) 30 GAP(INCH)  
PCV CODE 0 AF CODE 0 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: AIR CLEANER WAS CLEANED AND INSTALLED. LEAKING BRAKE BOOSTER HOSE WAS REPLACED. FAST IDLE CAM, CHOKE LINKS AND BOLT WE-  
RE REMOVED FROM NEW CARB AND INSTALLED ON ORIGINAL CARB WHICH LACKED THESE ITEMS.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2658 TEST DATE 11/14/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYO  
TEST 1 5.40 61.20 10.55 10.7 30.23 72.0 30.0  
TEST 2 5.45 68.11 10.16 10.9 30.23 72.0 30.0  
AVERAGE( 5.43)( 64.66)(10.36)(10.8)  
CHANGE IN AVERAGE AFTER TUNE UP

-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2662 TEST DATE 11/16/77  
8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
4.67 75.70 7.14 9.9 30.12 73.0 41.0  
4.55 97.71 6.15 9.9 30.12 73.0 41.0  
( 4.61)( 86.71)( 6.65)( 9.9)  
-15.0% +34.1% -35.8% - 8.3%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/\*\*\*\*\* 2.0/ 1.9  
2500 R.P.M. 50/\*\*\*\*\* 0.3/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 60/\*\*\*\*\* 0.2/ 0.2  
MOTORING 600/\*\*\*\*\* 2.0/ 2.1  
11 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 2.1/ 2.0

-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
35/\*\*\*\*\* 0.2/ 0.1  
35/\*\*\*\*\* 0.3/ 0.3  
25 M.P.H. 60/\*\*\*\*\* 0.2/ 0.2  
40 M.P.H. 50/\*\*\*\*\* 0.3/ 0.3  
600/\*\*\*\*\* 0.3/ 0.3  
2000 R.P.M. 60/\*\*\*\*\* 0.3/ 0.2  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 3.0/ 2.9

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,120 MAKE: DODGE MODEL: D200 MODEL YR.: 72 TRANS. CODE:A3 DISPLACEMENT: 225  
SERIAL NO.: D24BB2S607633 LICENSE NO.: 31683E OWNER'S ID.: 2210 2  
TUNE UP DATA.

----- DATE OF TUNE UP 11/15/77 ODOMETER READING 68278 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 800 DWELL 42 IDLE R.P.M. 750 DWELL 42  
IDLE CO(%) 6.3 TIMING 2ATDC IDLE CO(%) 0.8 TIMING 0BTDC  
IDLE HC(PPM) 110 GAP(INCH) .035 IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE .2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 12.9 IDLE AIR/FUEL 14.2  
COMMENT: CARB. ACCEL. PUMP WAS RECONNECTED.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2660 TEST DATE 11/15/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 3.37 85.65 8.33 10.8 30.21 73.0 36.0  
TEST 2 3.51 90.10 8.19 11.0 30.20 74.0 36.0  
AVERAGE( 3.44)( 87.88)( 8.26)(10.9)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2663 TEST DATE 11/16/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 3.43 56.28 8.50 11.5 30.05 68.0 38.0  
TEST 2 2.74 31.27 10.17 11.9 30.05 68.0 38.0  
AVERAGE( 3.09)( 43.78)( 9.34)(11.7)  
-----  
CHANGE IN AVERAGE AFTER TUNE UP -10.0% 30.2% 10.0% + 7.3%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/\*\*\*\*\* 7.2/ 6.5  
2500 R.P.M. 50/\*\*\*\*\* 0.4/ 0.4  
LOW CRUISE SPEED 25 M.P.H. 60/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.2/ 0.2  
MOTORING 1700/\*\*\*\*\* 9.0/ 8.1  
11 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 0.3/ 0.3  
\*\* INCH VACUUM \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*/\*\*\*\*  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 1.5/ 1.4  
50/\*\*\*\*\* 0.3/ 0.3  
25 M.P.H. 60/\*\*\*\*\* 0.2/ 0.2  
40 M.P.H. 50/\*\*\*\*\* 0.2/ 0.2  
1100/\*\*\*\*\* 6.0/ 5.6  
2000 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
\*\* IN. \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*\*/\*\*\*\*

GENERAL COMMENT: BEFORE TUNE UP, TRANS- MISSION SLIPPED AND CAUSED SURGE.  
COMMENT KEY MODE: TRANS. SLIP CAUSED 3 IN. HG. MODE TO BE CANCELLED.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,200 MAKE: FORD MODEL: C600 MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 361  
SERIAL NO.: C61EVC39964 LICENSE NO.: OWNER'S ID.: 801348  
TUNE UP DATA.

----- DATE OF TUNE UP 11/17/77 ODOMETER READING 36269 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 730 DWELL 22 IDLE R.P.M. 650 DWELL 28  
IDLE CO(%) 10.0 TIMING 1BTDC IDLE CO(%) 1.6 TIMING 4BTDC  
IDLE HC(PPM) 2000 GAP(INCH) IDLE HC(PPM) 340 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED DISTRIBUTOR, CARBURETOR, ROTOR AND PLUGS. VACUUM ADVANCE DELAY VALVE HAD BEEN PUT IN BACKWARDS. THIS WAS CORRECTED.

TEST RESULTS

----- \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2661 TEST DATE 11/15/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYO  
TEST 1 36.96 540.00 11.07 3.9 30.18 65.0 33.0  
TEST 2 32.81 567.50 10.38 3.9 30.18 70.5 34.0  
AVERAGE(34.89)( 553.75)(10.73)( 3.9)  
CHANGE IN AVERAGE AFTER TUNE UP  
----- \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2668 TEST DATE 11/18/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
12.11 170.50 19.30 4.8 29.90 69.5 36.0  
11.62 190.60 17.60 4.9 29.90 67.5 33.0  
(11.87)( 180.55)(18.45)( 4.9)  
-66.0% -67.4% +72.0% +24.4%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 425/\*\*\*\*\* 10.0/10.0  
2500 R.P.M. 175/\*\*\*\*\* 6.0/ 5.9  
LOW CRUISE SPEED 25 M.P.H. 275/\*\*\*\*\* 5.5/ 5.2  
HIGH CRUISE SPEED 40 M.P.H. 100/\*\*\*\*\* 3.0/ 2.9  
MOTORING 2000/\*\*\*\*\* 5.5/ 5.4  
11 INCH VACUUM 2000 R.P.M. 200/\*\*\*\*\* 4.6/ 4.5  
3 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 4.7/ 4.6  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
225/\*\*\*\*\* 1.5/ 1.5  
100/\*\*\*\*\* 2.9/ 2.9  
25 M.P.H. 125/\*\*\*\*\* 1.9/ 1.9  
40 M.P.H. 75/\*\*\*\*\* 1.3/ 1.3  
1400/\*\*\*\*\* 2.5/ 2.4  
2000 R.P.M. 150/\*\*\*\*\* 1.8/ 1.7  
\*\* 2000 R.P.M. 100/\*\*\*\*\* 0.7/ 0.7

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: DODGE MODEL: D200 MODEL YR.: 71 TRANS. CODE:A3 DISPLACEMENT: 225  
SERIAL NO.: D228B1S359625 LICENSE NO.: 31564E OWNER'S ID.: 282020  
TUNE UP DATA.

----- DATE OF TUNE UP 11/18/77 ODOMETER READING 14439 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 740 DWELL 47 IDLE R.P.M. 700 DWELL 44  
IDLE CO(%) 7.2 TIMING 0BTDC IDLE CO(%) 0.6 TIMING 0BTDC  
IDLE HC(PPM) 180 GAP(INCH) .035 IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 4 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 12.4 IDLE AIR/FUEL 14.0  
COMMENT: REPLACED WIRE SET AND ROTOR.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2664 TEST DATE 11/16/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 4.00 66.62 8.93 11.8 30.02 73.5 45.0  
TEST 2 3.65 63.40 8.76 12.4 30.02 73.0 46.0  
AVERAGE( 3.83)( 65.01)( 8.85)(12.1)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2669 TEST DATE 11/18/77  
5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
3.30 35.80 9.75 12.0 29.89 68.5 33.0  
2.96 38.95 9.55 12.3 29.89 68.5 33.0  
( 3.13)( 37.38)( 9.65)(12.2)  
-18.2% -42.5% + 9.1% + 0.4%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/\*\*\*\*\* 6.8/ 6.1  
2500 R.P.M. 60/\*\*\*\*\* 0.3/ 0.3  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
MOTORING 2000/\*\*\*\*\* 3.5/ 3.2  
1! INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 2.2/ 2.2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/\*\*\*\*\* 0.9/ 0.9  
40/\*\*\*\*\* 0.2/ 0.2  
25 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 60/\*\*\*\*\* 0.1/ 0.1  
1400/\*\*\*\*\* 3.0/ 2.8  
2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 2.6/ 2.5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D32BB2S528850 LICENSE NO.: 31710E OWNER'S ID.: 290011  
TUNE UP DATA.

----- DATE OF TUNE UP 11/18/77 ODOMETER READING 17561 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 570 DWELL 43 IDLE R.P.M. 700 DWELL 43  
IDLE CO(%) 0.9 TIMING 0BTDC IDLE CO(%) 0.2 TIMING 0BTDC  
IDLE HC(PPM) 100 GAP(INCH) IDLE HC(PPM) 60 GAP(INCH)  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: VACUUM ADVANCE HOSE WAS RECONNECTED.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2667 TEST DATE 11/18/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 6.02 58.51 6.95 10.4 29.90 70.0 35.0  
TEST 2 5.67 60.24 6.62 10.6 29.90 71.0 35.0  
AVERAGE( 5.85)( 59.38)( 6.79)(10.5)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2670 TEST DATE 11/21/77  
8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
4.23 38.60 8.89 11.0 30.44 70.5 54.0  
4.07 33.96 9.00 11.3 30.44 71.0 53.0  
( 4.15)( 36.28)( 8.95)(11.2)  
-----  
CHANGE IN AVERAGE AFTER TUNE UP -22.0% -38.0% +31.9% + 6.2%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/\*\*\*\*\* 2.5/ 2.5  
2500 R.P.M. 50/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
MOTORING 2000/\*\*\*\*\* 5.0/ 4.7  
11 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.5/ 0.5  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
50/\*\*\*\*\* 0.3/ 0.3  
40/\*\*\*\*\* 0.2/ 0.1  
25 M.P.H. 100/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 60/\*\*\*\*\* 0.1/ 0.1  
1200/\*\*\*\*\* 1.0/ 0.9  
2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 0.3/ 0.3

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,200 MAKE: FORD MODEL: C600 MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 361  
 SERIAL NO.: C61EVC14238 LICENSE NO.: OWNER'S ID.: 801425

TUNE UP DATA.

DATE OF TUNE UP 11/21/77 ODOMETER READING 30391 HOUR METER READING \*\*\*\*\*

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	620	DWELL	28	IDLE R.P.M.	650	DWELL	28
IDLE CO(%)	8.0	TIMING	4BTDC	IDLE CO(%)	3.4	TIMING	4BTDC
IDLE HC(PPM)	360	GAP(INCH)	.040	IDLE HC(PPM)	230	GAP(INCH)	.030
PCV CODE	2	AF CODE	4	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL				IDLE AIR/FUEL			

COMMENT: REPLACED PLUGS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2671 TEST DATE 11/21/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

BMV TEST SERIES NO. 2677 TEST DATE 11/23/77  
 13500 LB/27.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ  
 TEST 1 13.28 169.90 16.76 5.2 30.36 71.5 55.0  
 TEST 2 10.63 18.60 16.47 5.4 30.36 71.5 55.0  
 AVERAGE(12.01)( 94.20)(16.62)( 5.3)

7.24 157.60 15.01 5.1 30.28 70.5 48.0  
 7.58 172.70 14.70 5.2 30.28 70.5 46.0  
 ( 7.41)( 165.15)(14.86)( 5.2)  
 -38.3% +75.3% -10.6% - 2.8%

CHANGE IN AVERAGE AFTER TUNE UP

TEST KEY MODE  
 ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	225/*****	5.2/ 4.7
2500 R.P.M.	75/*****	0.9/ 0.9
LOW CRUISE SPEED 25 M.P.H.	150/*****	0.7/ 0.7
HIGH CRUISE SPEED 40 M.P.H.	60/*****	1.0/ 1.0
MOTORING	2000/*****	6.6/ 6.1
11 INCH VACUUM 2000 R.P.M.	150/*****	1.0/ 0.9
3 INCH VACUUM 2000 R.P.M.	100/*****	0.3/ 0.3

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

	150/*****	2.0/ 1.9
	75/*****	1.5/ 1.5
25 M.P.H.	125/*****	1.0/ 1.0
40 M.P.H.	50/*****	1.1/ 1.1
	1900/*****	6.0/ 5.4
2000 R.P.M.	125/*****	1.3/ 1.3
** 2000 R.P.M.	100/*****	0.8/ 0.7

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D328B2S610870 LICENSE NO.: 31597E OWNER'S ID.: 290014  
TUNE UP DATA.

----- DATE OF TUNE UP 11/22/77 ODOMETER READING 11994 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 820 DWELL 44 IDLE R.P.M. 700 DWELL 43  
IDLE CO(%) 5.5 TIMING 5BTDC IDLE CO(%) 1.8 TIMING 0BTDC  
IDLE HC(PPM) 100 GAP(INCH) .038 IDLE HC(PPM) 100 GAP(INCH) .035  
PCV CODE 4 AF CODE 3 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.4 IDLE AIR/FUEL

COMMENT: REPLACED PLUGS, CAP, WIRE SET, POINTS, CONDENSER AND ROTOR.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2672 TEST DATE 11/21/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 8.29 99.78 8.99 10.0 30.32 64.0 50.0  
TEST 2 8.05 106.60 8.33 10.0 30.31 66.0 51.0  
AVERAGE( 8.17)( 103.19)( 8.66)(10.0)

-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2674 TEST DATE 11/22/77  
8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
5.81 73.02 8.98 9.6 30.38 69.5 35.0  
5.53 74.35 8.53 10.0 30.38 70.0 37.0  
( 5.67)( 73.69)( 8.76)( 9.8)  
-30.6% -28.6% + 1.1% - 2.0%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 200/\*\*\*\*\* 6.2/ 5.7  
2500 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 125/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
MOTORING 2000/\*\*\*\*\* 2.0/ 2.0  
11 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 1.0/ 1.0

-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/\*\*\*\*\* 1.7/ 1.6  
60/\*\*\*\*\* 0.2/ 0.2  
25 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
40 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
2000 R.P.M. 200/\*\*\*\*\* 4.5/ 4.5  
2000 R.P.M. 150/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 150/\*\*\*\*\* 2.5/ 2.5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 18,400 MAKE: I-H MODEL: 1600 MODEL YR.: 75 TRANS. CODE:M4 DISPLACEMENT: 345  
SERIAL NO.: D0512EHA42066 LICENSE NO.: 20919E OWNER'S ID.: 4520 1  
TUNE UP DATA.

----- DATE OF TUNE UP 11/23/77 ODOMETER READING 5152 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 28 IDLE R.P.M. 700 DWELL 28  
IDLE CO(%) 0.5 TIMING 08TDC IDLE CO(%) 0.3 TIMING 08TDC  
IDLE HC(PPM) 50 GAP(INCH) .032 IDLE HC(PPM) 30 GAP(INCH) .032  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.5 IDLE AIR/FUEL 13.5

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2673 TEST DATE 11/22/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 9.25 137.70 5.49 5.8 30.39 70.0 39.0  
TEST 2 9.56 152.80 5.22 5.9 30.39 70.5 40.0  
AVERAGE( 9.41)( 145.25)( 5.36)( 5.9)

-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
SMV TEST SERIES NO. 2680 TEST DATE 11/25/77  
11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
8.39 118.60 6.27 6.0 30.07 69.5 35.0  
8.72 140.90 5.55 6.1 30.05 69.0 36.0  
( 8.56)( 129.75)( 5.91)( 6.1)  
- 9.0% -10.7% +10.4% + 3.4%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 50/\*\*\*\*\* 0.4/ 0.4  
2500 R.P.M. 25/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 25/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 4 M.P.H. 35/\*\*\*\*\* 0.5/ 0.5  
MOTORING 1500/\*\*\*\*\* 4.0/ 3.8  
11 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 0.6/ 0.6  
3 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.9/ 0.9

-----  
/ HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
50/\*\*\*\*\* 0.3/ 0.3  
25/\*\*\*\*\* 0.1/ 0.1  
25 M.P.H. 40/\*\*\*\*\* 0.2/ 0.2  
40 M.P.H. 50/\*\*\*\*\* 0.5/ 0.5  
800/\*\*\*\*\* 1.5/ 1.4  
2000 R.P.M. 75/\*\*\*\*\* 0.5/ 0.5  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 0.9/ 0.8

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: FORD MODEL: F350 MODEL YR.: 69 TRANS. CODE:M4 DISPLACEMENT: 240  
 SERIAL NO.: F35ACE26623 LICENSE NO.: 31576E OWNER'S ID.: 1370 4

TUNE-UP DATA.

DATE OF TUNE UP 11/25/77 ODOMETER READING 18047 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 740 DWELL 44  
 IDLE CO(%) 5.8 TIMING 6BTDC  
 IDLE HC(PPM) 280 GAP(INCH) .034  
 PCV CODE 2 AF CODE 4  
 IDLE AIR/FUEL 13.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 39  
 IDLE CO(%) 1.8 TIMING 6BTDC  
 IDLE HC(PPM) 200 GAP(INCH) .034  
 PCV CODE 2 AF CODE 1  
 IDLE AIR/FUEL 13.2

COMMENT: REPLACED WIRE SET. POINTS, CONDENSER AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2678 TEST DATE 11/23/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2681 TEST DATE 11/25/77  
 8000 LB/17.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.40 126.00 7.60 9.0 30.28 67.5 49.0  
 TEST 2 10.47 123.80 7.61 9.5 30.27 68.0 50.0  
 AVERAGE(11.98)( 130.00)( 7.61)( 9.3)

9.05 91.82 8.24 9.9 29.97 69.3 35.0  
 8.13 93.12 7.34 10.7 29.97 70.0 37.0  
 ( 8.74)( 92.47)( 7.79)(10.3)  
 -27.0% -28.9% + 2.4% +11.4%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 675/\*\*\*\*\* 3.0/ 2.9  
 2500 R.P.M. 150/\*\*\*\*\* 0.3/ 0.3  
 LOW CRUISE SPEED 25 M.P.H. 175/\*\*\*\*\* 0.3/ 0.3  
 HIGH CRUISE SPEED 40 M.P.H. 125/\*\*\*\*\* 0.6/ 0.5  
 MOTORING 2000/\*\*\*\*\* 2.5/ 2.5  
 11 INCH VACUUM 2000 R.P.M. 250/\*\*\*\*\* 1.0/ 1.0  
 3 INCH VACUUM 2000 R.P.M. 250/\*\*\*\*\* 5.4/ 4.9

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

650/\*\*\*\*\* 0.8/ 0.8  
 100/\*\*\*\*\* 0.2/ 0.2  
 25 M.P.H. 150/\*\*\*\*\* 0.3/ 0.3  
 40 M.P.H. 150/\*\*\*\*\* 0.5/ 0.5  
 2000 R.P.M. 200/\*\*\*\*\* 1.5/ 1.4  
 2000 R.P.M. 250/\*\*\*\*\* 0.9/ 0.9  
 2000 R.P.M. 225/\*\*\*\*\* 5.2/ 5.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,700 MAKE: I-H MODEL: 1600 MODEL YR.: 74 TRANS. CODE:A4 DISPLACEMENT: 345  
SERIAL NO.: 10662DHA11286 LICENSE NO.: 18760E OWNER'S ID.: 4160 4

TUNE UP DATA.

----- DATE OF TUNE UP 11/28/77 ODOMETER READING 0428 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 27 IDLE R.P.M. 700 DWELL 27  
IDLE CO(%) 1.0 TIMING 0BTDC IDLE CO(%) 0.6 TIMING 0BTDC  
IDLE HC(PPM) 80 GAP(INCH) .030 IDLE HC(PPM) 60 GAP(INCH) .030  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.5 IDLE AIR/FUEL 13.6

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2682 TEST DATE 11/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 4.61 42.19 19.56 5.5 30.22 68.5 35.0  
TEST 2 4.69 45.61 19.11 5.6 30.22 68.5 35.0  
AVERAGE( 4.65)( 43.90)(19.34)( 5.6)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2685 TEST DATE 11/29/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
6.16 33.50 19.05 6.1 30.59 66.5 40.0  
5.49 40.06 20.11 5.9 30.59 67.5 41.0  
( 5.83)( 36.76)(19.58)( 6.0)  
+25.3% -16.2% + 1.3% + 8.1%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/\*\*\*\*\* 0.6/ 0.6  
2500 R.P.M. 35/\*\*\*\*\* 0.1/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 60/\*\*\*\*\* 0.3/ 0.3  
HIGH CRUISE SPEED 40 M.P.H. 60/\*\*\*\*\* 0.2/ 0.2  
MOTORING 1000/\*\*\*\*\* 1.0/ 0.9  
11 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.5/ 0.4  
3 INCH VACUUM 2000 R.P.M. 50/\*\*\*\*\* 0.3/ 0.3

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
75/\*\*\*\*\* 0.3/ 0.3  
35/\*\*\*\*\* 0.2/ 0.1  
25 M.P.H. 75/\*\*\*\*\* 0.3/ 0.2  
40 M.P.H. 35/\*\*\*\*\* 0.2/ 0.2  
1000/\*\*\*\*\* 0.8/ 0.7  
2000 R.P.M. 75/\*\*\*\*\* 0.3/ 0.3  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 0.4/ 0.4

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: I-H MODEL: 1210 MODEL YR.: 73 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 3H2DOCHC11721 LICENSE NO.: 13134E OWNER'S ID.: 3430 5  
TUNE UP DATA.

----- DATE OF TUNE UP 11/29/77 ODOMETER READING 13458 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 38 IDLE R.P.M. 700 DWELL 34  
IDLE CO(%) 1.8 TIMING 0BTDC IDLE CO(%) 0.8 TIMING 0BTDC  
IDLE HC(PPM) 60 GAP(INCH) .042 IDLE HC(PPM) 40 GAP(INCH) .035  
PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.5 IDLE AIR/FUEL 13.6  
COMMENT: REPLACED POINTS. CONDENSER, ROTOR, CAP, WIRE SET AND PLUGS.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2683 TEST DATE 11/28/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 2.12 40.62 5.84 10.5 30.25 68.5 39.0  
TEST 2 2.00 39.19 5.70 11.1 30.25 68.5 39.0  
AVERAGE( 2.06)( 39.91)( 5.77)(10.8)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2688 TEST DATE 12/ 1/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
1.97 49.02 3.38 10.9 29.80 67.5 53.0  
1.75 30.68 3.73 11.9 29.81 68.0 54.0  
( 1.96)( 39.95)( 3.56)(11.4)  
CHANGE IN AVERAGE AFTER TUNE UP -0.7% 0.1% -30.1% + 5.6%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/\*\*\*\*\* 2.0/ 2.0  
2500 R.P.M. 50/\*\*\*\*\* 0.2/ 0.1  
LOW CRUISE SPEED 25 M.P.H. 50/\*\*\*\*\* 0.2/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 60/\*\*\*\*\* 0.2/ 0.1  
MOTORING 2000/\*\*\*\*\* 4.5/ 4.2  
11 INCH VACUUM 8000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 4.3/ 4.3

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
50/\*\*\*\*\* 0.7/ 0.7  
25/\*\*\*\*\* 0.2/ 0.1  
25 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 35/\*\*\*\*\* 0.1/ 0.1  
800/\*\*\*\*\* 3.5/ 3.2  
2000 R.P.M. 75/\*\*\*\*\* 0.1/ 0.1  
\*\* 2000 R.P.M. 100/\*\*\*\*\* 3.2/ 2.9

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 20,200 MAKE: FORD MODEL: F700 MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 361  
SERIAL NO.: F70EVB36717 LICENSE NO.: OWNER'S ID.: 810080  
TUNE UP DATA.

----- DATE OF TUNE UP 11/30/77 ODOMETER READING 20155 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 630 DWELL 31 IDLE R.P.M. 650 DWELL 24  
IDLE CO(%) 10.0 TIMING 28BTDC IDLE CO(%) 0.5 TIMING 5BTDC  
IDLE HC(PPM) 1000 GAP(INCH) . IDLE HC(PPM) 140 GAP(INCH) .030  
PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, ROTOR AND CAP. VACUUM ADVANCE DELAY VALVE WAS DEFECTIVE AND WAS REPLACED BY ONE OF A DIFFERENT DELAY WHEN TH ECORRECT VALVE COULD NOT BE OBTAINED.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2686 TEST DATE 11/29/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYO  
TEST 1 17.67 236.00 24.63 4.7 30.59 66.5 43.0  
TEST 2 14.01 222.40 23.19 5.2 30.59 67.0 42.0  
AVERAGE(15.84)( 229.20)(23.91)( 5.0)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2689 TEST DATE 12/ 1/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
6.07 107.00 15.08 4.7 29.76 68.5 55.0  
5.00 92.59 14.84 4.9 29.75 68.0 54.0  
( 5.54)( 99.80)(14.96)( 4.8)  
-65.1% -56.5% -37.4% - 3.0%  
CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 625/\*\*\*\*\* 10.0/10.0  
2500 R.P.M. 375/\*\*\*\*\* 1.3/ 1.3  
LOW CRUISE SPEED 25 M.P.H. 175/\*\*\*\*\* 1.3/ 1.2  
HIGH CRUISE SPEED 40 M.P.H. 65/\*\*\*\*\* 0.5/ 0.5  
MOTORING 2000/\*\*\*\*\* 1.8/ 1.7  
11 INCH VACUUM 2000 R.P.M. 225/\*\*\*\*\* 0.7/ 0.7  
3 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.7/ 0.6

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
175/\*\*\*\*\* 2.4/ 2.4  
75/\*\*\*\*\* 0.8/ 0.8  
25 M.P.H. 100/\*\*\*\*\* 1.5/ 1.4  
40 M.P.H. 125/\*\*\*\*\* 1.7/ 1.7  
600/ 2 2.5/.420  
2000 R.P.M. 100/\*\*\*\*\* 1.1/ 1.0  
\*\* 2000 R.P.M. 65/\*\*\*\*\* 0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 24,000 MAKE: DODGE MODEL: D500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 318  
SERIAL NO.: D51FG0S178609 LICENSE NO.: 31587E OWNER'S ID.: 1250 2  
TUNE UP DATA.

----- DATE OF TUNE UP 12/ 2/77 ODOMETER READING 14065 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 840 DWELL 28 IDLE R.P.M. 750 DWELL 34  
IDLE CO(%) 8.3 TIMING 24BTDC IDLE CO(%) 1.0 TIMING 2BTDC  
IDLE HC(PPM) 440 GAP(INCH) .044 IDLE HC(PPM) 60 GAP(INCH) .030  
PCV CODE 4 AF CODE 4 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 12.4 IDLE AIR/FUEL 14.0

COMMENT: REPLACED PLUGS. POINTS, CONDENSER, ROIOR AND WIRE SET.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2690 TEST DATE 12/ 2/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 15.36 173.10 24.22 5.6 29.87 69.5 36.0  
TEST 2 14.00 180.60 23.60 5.7 29.87 69.5 37.0  
AVERAGE(14.68)( 176.85)(23.91)( 5.7)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2692 TEST DATE 12/ 6/77  
13500 LB/16.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
16.52 129.70 12.46 6.6 29.36 67.0 40.0  
16.22 132.00 11.04 6.9 29.35 67.0 40.0  
(16.37)( 130.85)(11.75)( 6.8)  
CHANGE IN AVERAGE AFTER TUNE UP +11.5% -26.0% -50.9% +19.5%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 275/\*\*\*\*\* 7.0/ 6.4  
2500 R.P.M. 725/\*\*\*\*\* 2.3/ 2.2  
LOW CRUISE SPEED 20 M.P.H. 150/\*\*\*\*\* 1.8/ 1.7  
HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* 0.3/ 0.3  
MOTORING 2000/\*\*\*\*\* 3.0/ 2.8  
11 INCH VACUUM 2000 R.P.M. 250/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 200/\*\*\*\*\* 4.4/ 4.2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/\*\*\*\*\* 0.5/ 0.5  
250/\*\*\*\*\* 1.3/ 1.3  
20 M.P.H. 100/\*\*\*\*\* 1.8/ 1.8  
30 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
2 00/\*\*\*\*\* 4.0/ 3.8  
2000 R.P.M. 350/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 225/\*\*\*\*\* 4.4/ 4.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,700 MAKE: I-H MODEL: 1600 MODEL YR.: 74 TRANS. CODE:A4 DISPLACEMENT: 345  
 SERIAL NO.: 10662DHA11301 LICENSE NO.: 18756E OWNER'S ID.: 4160 5

TUNE UP DATA.

DATE OF TUNE UP 12/ 8/77				ODOMETER READING 4454				HOUR METER READING *****			
***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****			
IDLE R.P.M.	880	DWELL	33					IDLE R.P.M.	700	DWELL	30
IDLE CO(%)	2.0	TIMING	0BTDC					IDLE CO(%)	0.7	TIMING	0BTDC
IDLE HC(PPM)	80	GAP(INCH)	.035					IDLE HC(PPM)	75	GAP(INCH)	.028
PCV CODE	2	AF CODE	2					PCV CODE	2	AF CODE	2
IDLE AIR/FUEL								IDLE AIR/FUEL			

COMMENT: REPLACED POINTS. PLUGS, WIRE SET, CAP, ROTOR AND VACUUM ADVANCE CHAMBER.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2691 TEST DATE 12/ 6/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH  

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2697 TEST DATE 12/ 9/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 12500 LB/24.0 H.P. AT 40 MPH  

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ

TEST 1	7.20	230.10	10.62	4.6	29.38	67.5	41.0
TEST 2	6.48	224.20	10.11	4.8	29.38	68.0	40.0
AVERAGE	( 6.84)	( 227.15)	(10.37)	( 4.7)			

14.35	224.50	11.13	4.9	29.88	69.0	42.0
13.32	221.20	10.61	5.2	29.88	68.5	43.0
(11.34)	( 222.20)	(10.87)	( 5.1)			
+35.7%	- 1.9%	+ 4.9%	+ 8.5%			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	100/*****	3.8/ 3.7
2500 R.P.M.	75/*****	3.5/ 3.4
LOW CRUISE SPEED 25 M.P.H.	75/*****	3.5/ 3.4
HIGH CRUISE SPEED 40 M.P.H.	50/*****	3.4/ 3.3
MOTORING	500/*****	4.0/ 4.0
11 INCH VACUUM 2000 R.P.M.	100/*****	4.2/ 4.1
3 INCH VACUUM 2000 R.P.M.	35/*****	0.5/ 0.5

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	100/*****	0.8/ 0.8
2500 R.P.M.	75/*****	3.5/ 3.4
25 M.P.H.	125/*****	3.8/ 3.6
40 M.P.H.	100/*****	3.5/ 3.4
MOTORING	500/*****	4.5/ 4.3
2000 R.P.M.	150/*****	3.5/ 3.4
** 2000 R.P.M.	125/*****	4.2/ 4.0

GENERAL COMMENT: AFTER TUNE UP ENGINE SPEED GOVERNO-R WAS MALFUNCTIONING, CAUSING SURGE.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 20,200 MAKE: FORD MODEL: F700 MODEL YR.: 76 TRANS. CODE:A4 DISPLACEMENT: 361  
 SERIAL NO.: F70EVB35621 LICENSE NO.: OWNER'S ID.: 810131

TUNE UP DATA.

----- DATE OF TUNE UP 12/ 7/77 ODOMETER READING 17774 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 31 IDLE R.P.M. 650 DWELL 30  
 IDLE CO(%) 6.8 TIMING 5BTDC IDLE CO(%) 1.2 TIMING 4BTDC  
 IDLE HC(PPM) 500 GAP(INCH) .032 IDLE HC(PPM) 80 GAP(INCH) .032  
 PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
 IDLE AIR/FUEL 12.4 IDLE AIR/FUEL 13.7

COMMENT: REPLACED FUEL FILTER. REPAIRED CARB AIR CLEANER RETAINER STUD.

----- TEST RESULTS -----

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
BMV TEST SERIES NO. 2693				TEST DATE 12/ 6/77				BMV TEST SERIES NO. 2696				TEST DATE 12/ 8/77			
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/27.0 H.P. AT 40 MPH								13500 LB/27.0 H.P. AT 40 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ															
TEST 1	9.64	181.50	16.78	4.6	29.33	67.0	36.0	5.84	130.50	16.65	4.5	30.37	70.5	26.0	
TEST 2	7.90	187.70	17.02	4.8	29.33	66.0	35.0	4.85	109.70	17.66	4.8	30.37	70.0	27.0	
AVERAGE(	8.77)	(184.60)	(16.90)	(4.7)				(5.35)	(120.10)	(17.16)	(4.7)				
								-39.1%	-34.9%	+1.5%	-1.1%				

CHANGE IN AVERAGE AFTER TUNE UP

TESTING MODE

ENGINE SPEED	HC(PPM)	CO(%)	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)				
IDLE	125/*****	1.4/ 1.3	75/*****	0.3/ 0.2
2500 R.P.M.	50/*****	0.5/ 0.4	50/*****	0.2/ 0.2
LOW CRUISE SPEED 25 M.P.H.	125/*****	1.0/ 1.0	25 M.P.H. 75/*****	0.7/ 0.7
HIGH CRUISE SPEED 40 M.P.H.	60/*****	0.4/ 0.4	40 M.P.H. 75/*****	0.3/ 0.3
MOTORS	700/*****	3.2/ 2.9	400/*****	1.5/ 1.3
11 INCH VACUUM 2000 R.P.M.	100/*****	0.6/ 0.6	2000 R.P.M. 75/*****	0.5/ 0.5
5 INCH VACUUM 2000 R.P.M.	75/*****	0.4/ 0.4	** 2000 R.P.M. 75/*****	0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: FORD MODEL: F350 MODEL YR.: 69 TRANS. CODE:M4 DISPLACEMENT: 240  
SERIAL NO.: F35ACE28195 LICENSE NO.: 31574E OWNER'S ID.: 1370 2

TUNE UP DATA.

----- DATE OF TUNE UP 12/ 9/77 ODOMETER READING 18873 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 580 DWELL 39 IDLE R.P.M. 600 DWELL 38  
IDLE CO(%) 0.2 TIMING 12BTDC IDLE CO(%) 1.5 TIMING CSTD  
IDLE HC(PPM) 2000 GAP(INCH) .040 IDLE HC(PPM) 100 GAP(INCH) .034  
PCV CODE 3 AF CODE 3 PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 13.9 IDLE AIR/FUEL 13.9

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP. WIRE SET AND CARB.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2695 TEST DATE 12/ 8/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 65.35 221.70 4.99 7.9 30.37 67.5 28.0  
TEST 2 63.50 225.50 3.85 7.8 30.37 67.5 28.0  
AVERAGE(64.43)( 223.60)( 4.42)( 7.9)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2698 TEST DATE 12/ 9/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
9.97 181.40 3.06 9.1 29.78 66.5 40.0  
9.96 178.00 3.32 9.0 29.78 68.0 40.0  
( 9.97)( 179.70)( 3.19)( 9.1)  
-84.5% -19.6% -27.8% +15.3%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 1800/\*\*\*\*\* 0.2/ 0.2  
2500 R.P.M. 2000/\*\*\*\*\* 5.2/ 4.9  
LOW CRUISE SPEED 25 M.P.H. 1950/\*\*\*\*\* 5.2/ 4.8  
HIGH CRUISE SPEED 40 M.P.H. 1800/\*\*\*\*\* 6.0/ 5.7  
MOTORING 2000/\*\*\*\*\* 4.3/ 4.0  
11 INCH VACUUM 2000 R.P.M. 2000/\*\*\*\*\* 6.5/ 6.0  
3 INCH VACUUM 2000 R.P.M. 2000/\*\*\*\*\* 6.5/ 6.0

-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 3.0/ 2.9  
100/\*\*\*\*\* 1.8/ 1.8  
25 M.P.H. 175/\*\*\*\*\* 2.0/ 1.9  
40 M.P.H. 125/\*\*\*\*\* 2.3/ 2.3  
1400/\*\*\*\*\* 3.6/ 3.5  
2000 R.P.M. 175/\*\*\*\*\* 2.5/ 2.4  
\*\* 2000 R.P.M. 200/\*\*\*\*\* 8.4/ 7.9

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 27,000 MAKE: FORD MODEL: C800 MODEL YR.: 66 TRANS. CODE:M5 DISPLACEMENT: 361  
SERIAL NO.: C80EU767767 LICENSE NO.: 31549E OWNER'S ID.: 1820 1

TUNE UP DATA.

DATE OF TUNE UP 12/13/77 ODOMETER READING 7625 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 27  
IDLE CO(%) 10.0 TIMING 12BTDC  
IDLE HC(PPM) 2000 GAP(INCH) .042  
PCV CODE 4 AF CODE 4  
IDLE AIR/FUEL 11.9

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 600 DWELL 27  
IDLE CO(%) 0.5 TIMING 10BTDC  
IDLE HC(PPM) 100 GAP(INCH) .030  
PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 14.0

COMMENT: REPLACED PLUGS AND ROTOR. CARB WAS REBUILT. COIL POLARITY WAS CORRECTED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2699 TEST DATE 12/12/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/12.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 47.46 207.30 16.56 5.1 30.51 62.0 20.0  
TEST 2 44.90 203.80 15.84 5.4 30.49 63.0 20.0  
AVERAGE(46.18)( 205.55)(16.20)( 5.3)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 4/READING FROM ANALYZER 2)

IDLE 2000/\*\*\*\*\* 10.0/10.0  
2500 R.P.M. 300/\*\*\*\*\* 9.2/ 8.7  
LOW CRUISE SPEED 20 M.P.H. 540/\*\*\*\*\* 10.0/10.0  
HIGH CRUISE SPEED 30 M.P.H. 220/\*\*\*\*\* 3.2/ 2.8  
MOTORING 2000/\*\*\*\*\* 4.2/ 3.6  
11 INCH VACUUM 2000 R.P.M. 300/\*\*\*\*\* 1.3/ 1.2  
3 INCH VACUUM 2000 R.P.M. 200/\*\*\*\*\* 3.5/ 3.0

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2702 TEST DATE 12/16/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/12.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

34.21 147.60 13.43 5.7 30.14 73.5 23.0  
31.48 144.40 12.43 6.2 30.20 70.0 23.0  
(32.85)( 146.00)(12.90)( 6.0)  
-28.9% -29.0% -20.2% +13.3%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

250/\*\*\*\*\* 0.2/ 0.2  
100/\*\*\*\*\* 0.9/ 0.8  
20 M.P.H. 175/\*\*\*\*\* 0.5/ 0.5  
30 M.P.H. 150/\*\*\*\*\* 2.4/ 2.3  
200/\*\*\*\*\* 8.0/ 7.0  
2000 R.P.M. 450/\*\*\*\*\* 2.3/ 2.1  
\*\* 2000 R.P.M. 275/\*\*\*\*\* 1.4/ 1.3

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: I-H MODEL: 1210 MODEL YR.: 73 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 3H2DOCHC12607 LICENSE NO.: 16684E OWNER'S ID.: 343016

TUNE UP DATA.

DATE OF TUNE UP 12/16/77 ODOMETER READING 16937 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE-UP \*\*\*\*\*  
IDLE R.P.M. 740 DWELL 29  
IDLE CO(%) 3.0 TIMING 6BTDC  
IDLE HC(PPM) 100 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 32  
IDLE CO(%) 0.5 TIMING 0BTDC  
IDLE HC(PPM) 40 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 14.2

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2700 TEST DATE 12/15/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2703 TEST DATE 12/16/77  
5500 LB/12.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 2.95 51.30 7.52 11.5 29.85 71.5 33.0  
TEST 2 2.88 61.79 6.60 11.8 29.85 72.0 34.0  
AVERAGE( 2.92)( 56.55)( 7.06)(11.7)

2.75 37.83 7.20 10.6 30.20 74.0 24.0  
1.95 23.05 7.05 11.5 30.20 72.5 25.0  
( 2.35)( 30.44)( 7.13)(11.1)  
-19.4% -46.2% + 0.9% - 5.2%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 150/\*\*\*\*\* 2.9/ 2.8  
2500 R.P.M. 35/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 50/\*\*\*\*\* 0.2/ 0.2  
MOTGRING 1200/\*\*\*\*\* 4.5/ 4.3  
11 INCH VACUUM 2000 R.P.M. 50/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 1.1/ 1.0

HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
75/\*\*\*\*\* 0.2/ 0.2  
35/\*\*\*\*\* 0.2/ 0.2  
25 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 50/\*\*\*\*\* 0.1/ 0.1  
1200/\*\*\*\*\* 3.0/ 2.8  
2000 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 100/\*\*\*\*\* 2.4/ 2.2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319. PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 20,000 MAKE: FORD MODEL: F600 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: F61BEH70355 LICENSE NO.: 31579E OWNER'S ID.: 1470 1  
 TUNE UP DATA.

DATE OF TUNE UP 12/20/77 ODOMETER READING 16766 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 430 DWELL 43 IDLE R.P.M. 600 DWELL 37  
 IDLE CO(%) 7.4 TIMING 68TDC IDLE CO(%) 1.2 TIMING 68TDC  
 IDLE HC(PPM) 800 GAP(INCH) .040 IDLE HC(PPM) 170 GAP(INCH) .030  
 PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 2  
 IDLE AIR/FUEL IDLE AIR/FUEL

COMMENT: REPLACED POINTS AND ROTOR, CARB WAS REPLACED WITH USED ONE OF SAME YEAR AND TYPE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2701 TEST DATE 12/15/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
 TEST 1 10.80 105.00 10.18 9.0 29.89 67.5 24.0  
 TEST 2 9.96 106.90 9.90 9.2 29.89 68.5 24.0  
 AVERAGE(10.38)( 105.95)(10.04)( 9.1)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 325/\*\*\*\*\* 5.9/ 5.4  
 2500 R.P.M. 200/\*\*\*\*\* 3.5/ 3.3  
 LOW CRUISE SPEED 25 M.P.H. 225/\*\*\*\*\* 5.0/ 4.6  
 HIGH CRUISE SPEED 40 M.P.H. 65/\*\*\*\*\* 0.2/ 0.2  
 MOTORING 2000/\*\*\*\*\* 2.7/ 2.7  
 11 INCH VACUUM 2000 R.P.M. 250/\*\*\*\*\* 5.5/ 5.0  
 3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.4/ 0.4

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2709 TEST DATE 12/22/77  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
 TEST 1 6.73 31.49 12.16 9.1 29.99 68.0 18.0  
 TEST 2 5.79 22.05 13.89 9.0 29.99 69.0 18.0  
 AVERAGE(6.26)( 26.77)(13.03)( 9.1)  
 -39.7% -74.7% +29.7% - 0.5%

ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 100/\*\*\*\*\* 0.6/ 0.6  
 2500 R.P.M. 275/\*\*\*\*\* 0.2/ 0.2  
 25 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
 40 M.P.H. 35/\*\*\*\*\* 0.1/ 0.1  
 MOTORING 1100/\*\*\*\*\* 0.3/ 0.3  
 2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2  
 2000 R.P.M. 65/\*\*\*\*\* 0.1/ 0.1

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: I-H MODEL: 200 MODEL YR.: 74 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 4H2A0DHB59433 LICENSE NO.: 18389E OWNER'S ID.: 4090 6  
TUNE UP DATA.

DATE OF TUNE UP 12/20/77				ODDOMETER READING 19305				HOUR METER READING *****			
***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****			
IDLE R.P.M.	580	DWELL	31					IDLE R.P.M.	550	DWELL	31
IDLE CO(%)	5.0	TIMING	10ATDC					IDLE CO(%)	0.2	TIMING	10B1DC
IDLE HC(PPM)	80	GAP(INCH)	.038					IDLE HC(PPM)	40	GAP(INCH)	.035
PCV CODE	4	AF CODE	4					PCV CODE	1	AF CODE	1
IDLE AIR/FUEL	12.9							IDLE AIR/FUEL	13.8		

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP. WIRE SET, PLUGS AND VACUUM HOSE FOR EGR OPERATION.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2704 TEST DATE 12/19/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ

TEST 1	3.81	117.10	3.04	10.5	30.04	69.0	25.0
TEST 2	3.50	114.90	2.92	10.9	30.04	69.0	25.0
AVERAGE	(3.66)	(116.00)	(2.98)	(10.7)			

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2710 TEST DATE 12/22/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

3.27	42.80	3.66	12.8	30.00	67.5	17.0
3.00	41.45	2.95	13.6	30.00	68.5	17.0
(3.18)	(42.13)	(3.31)	(13.2)			
-10.6%	-63.7%	+10.9%	+23.4%			

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	125/*****	5.5/ 5.0
2500 R.P.M.	75/*****	1.7/ 1.7
LOW CRUISE SPEED 25 M.P.H.	50/*****	0.6/ 0.6
HIGH CRUISE SPEED 40 M.P.H.	50/*****	1.2/ 1.1
MOTORING	700/*****	7.2/ 6.5
11 INCH VACUUM 2000 R.P.M.	75/*****	0.9/ 0.8
3 INCH VACUUM 2000 R.P.M.	50/*****	1.4/ 1.3

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	100/*****	0.3/ 0.2
25 M.P.H.	60/*****	0.7/ 0.6
40 M.P.H.	60/*****	0.1/ 0.1
2000 R.P.M.	900/*****	0.5/ 0.5
2000 R.P.M.	100/*****	0.9/ 0.8
** 2000 R.P.M.	75/*****	1.0/ 0.9

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D32BB2S604642 LICENSE NO.: 31599E OWNER'S ID.: 290016  
TUNE UP DATA.

DATE OF TUNE UP 12/20/77 ODOMETER READING 16305 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 480 DWELL 41 IDLE R.P.M. 700 DWELL 41  
IDLE CO(%) 9.0 TIMING 2BTDC IDLE CO(%) 1.0 TIMING 0BTDC  
IDLE HC(PPM) 2000 GAP(INCH) .038 IDLE HC(PPM) 130 GAP(INCH) .035  
PCV CODE 3 AF CODE 4 PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, PLUGS, ROTOR, CAP, WIRE SET, CARB FAST IDLE CAM, STOP SCREW AND CHOKE LINKAGE.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2705 TEST DATE 12/19/77  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 53.02 92.11 10.52 9.1 30.04 69.0 21.0  
TEST 2 59.40 99.68 8.96 9.2 30.04 69.0 23.0  
AVERAGE(59.66)( 90.90)( 9.74)( 9.2)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2711 TEST DATE 12/22/77  
8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
5.70 42.73 9.96 9.7 30.00 69.5 17.0  
5.56 48.22 9.98 9.7 30.00 69.0 18.0  
( 5.63)( 45.48)( 9.97)( 9.7)  
-90.6% -50.0% + 2.4% + 6.0%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 2000/\*\*\*\*\* 9.0/ 7.4  
2500 R.P.M. 2000/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 1950/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 1400/\*\*\*\*\* 0.2/ 0.2  
MOTORING 2000/\*\*\*\*\* 1.2/ 0.9  
11 INCH VACUUM 2000 R.P.M. 2000/\*\*\*\*\* 0.2/ 0.1  
3 INCH VACUUM 2000 R.P.M. 2000/\*\*\*\*\* 1.5/ 1.5

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
125/\*\*\*\*\* 0.6/ 0.6  
60/\*\*\*\*\* 0.2/ 0.2  
25 M.P.H. 100/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 60/\*\*\*\*\* 0.2/ 0.1  
2000 R.P.M. 200/\*\*\*\*\* 5.0/ 4.7  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 0.2/ 0.2  
2000 R.P.M. 125/\*\*\*\*\* 0.6/ 0.5

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 31,000 MAKE: I-H MODEL: 1910A MODEL YR.: 70 TRANS. CODE:M5 DISPLACEMENT: 406  
SERIAL NO.: 707911G429382 LICENSE NO.: 31589E OWNER'S ID.: 1120 4  
TUNE UP DATA.

----- DATE OF TUNE UP 1/ 4/78 ODOMETER READING 15530 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 680 DWELL 32 IDLE R.P.M. 600 DWELL 31  
IDLE CO(%) 10.0 TIMING 10BTDC IDLE CO(%) 1.5 TIMING 5BTDC  
IDLE HC(PPM) 280 GAP(INCH) .029 IDLE HC(PPM) 200 GAP(INCH) .029  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 12.3 IDLE AIR/FUEL 13.6  
COMMENT: REPLACED POINTS AND ROTOR. POWER TAKE OFF DRIVE FOR CRANE CALLS FOR HIGHER THAN STANDARD IDLE SPEED.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2712 TEST DATE 1/ 3/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/17.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 21.08 177.80 16.88 5.1 30.10 66.5 10.0  
TEST 2 21.91 183.20 19.32 4.7 30.10 68.0 11.0  
AVERAGE(21.50)( 180.50)(18.10)( 4.9)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2713 TEST DATE 1/ 5/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 13500 LB/17.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
13.29 83.19 17.44 5.2 30.40 66.5 17.0  
13.14 82.66 16.77 5.3 30.40 67.5 17.0  
(13.22)( 82.93)(17.11)( 5.3)  
-38.5% -54.1% - 5.5% + 7.1%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 250/\*\*\*\*\* 9.8/ 8.9  
2500 R.P.M. 75/\*\*\*\*\* 1.6/ 1.5  
LOW CRUISE SPEED 20 M.P.H. 125/\*\*\*\*\* 1.2/ 1.0  
HIGH CRUISE SPEED 30 M.P.H. 75/\*\*\*\*\* 0.8/ 0.7  
MOTORING 2000/\*\*\*\*\* 4.5/ 4.1  
11 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 0.7/ 0.6  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.3/ 0.3

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
260/\*\*\*\*\* 1.8/ 1.6  
75/\*\*\*\*\* 1.3/ 1.2  
20 M.P.H. 100/\*\*\*\*\* 0.8/ 0.7  
30 M.P.H. 75/\*\*\*\*\* 0.7/ 0.6  
2000 R.P.M. 200/\*\*\*\*\* 2.4/ 2.0  
2000 R.P.M. 125/\*\*\*\*\* 0.6/ 0.5  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 0.3/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,120 MAKE: DODGE MODEL: D200 MODEL YR.: 72 TRANS. CODE:A3 DISPLACEMENT: 225  
SERIAL NO.: D21BB2S607234 LICENSE NO.: 31713E OWNER'S ID.: 2970 1  
TUNE UP DATA.

DATE OF TUNE UP 1/ 5/78				ODOMETER READING 26170				HOUR METER READING *****			
+**** BEFORE TUNE UP +****								***** AFTER TUNE UP *****			
IDLE R.P.M.	830	DWELL	46					IDLE R.P.M.	700	DWELL	42
IDLE CO(%)	3.0	TIMING	1BTDC					IDLE CO(%)	0.8	TIMING	0BTDC
IDLE HC(PPM)	130	GAP(INCH)	.035					IDLE HC(PPM)	70	GAP(INCH)	.035
PCV CODE	2	AF CODE	2					PCV CODE	2	AF CODE	2
IDLE AIR/FUEL								IDLE AIR/FUEL			

COMMENT: REPLACED POINTS AND ROTOR. ADJUSTED VALVE CLEARANCE.

TEST RESULTS

+**** BEFORE TUNE UP +****								***** AFTER TUNE UP *****								
BMV TEST SERIES NO. 2714				TEST DATE 1/ 5/78				BMV TEST SERIES NO. 2715				TEST DATE 1/ 6/78				
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/12.0 H.P. AT 40 MPH								5500 LB/12.0 H.P. AT 40 MPH								
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID		
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		
TEST:NYQ																
TEST 1	3.13	47.98	10.36	10.3	30.40	67.5	17.0	2.76	53.32	6.36	11.4	30.24	70.5	21.0		
TEST 2	2.65	53.36	9.11	10.9	30.40	67.5	17.0	2.48	54.22	6.07	11.5	30.25	70.0	22.0		
AVERAGE(	2.89)	(	50.67)	(	9.74)	(	10.6)	(	2.52)	(	50.77)	(	6.22)	(	11.5)	
CHANGE IN AVERAGE AFTER TUNE UP								- 0.0% + 5.1% -30.2% + 8.0%								

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	125/*****	2.4/ 2.3
2500 R.P.M.	50/*****	0.2/ 0.2
LOW CRUISE SPEED 25 M.P.H.	75/*****	0.1/ 0.1
HIGH CRUISE SPEED 40 M.P.H.	75/*****	0.1/ 0.1
MOTORING	300/*****	5.0/ 4.9
11 INCH VACUUM 2000 R.P.M.	65/*****	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	75/*****	2.3/ 2.1

GENERAL COMMENT: BEFORE TUNE UP, RESULTS ARE QUESTIONABLE DUE TO AUTO. TRANS. SLIPPAGE.

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	100/*****	1.7/ 1.6
	40/*****	0.2/ 0.2
25 M.P.H.	65/*****	0.1/ 0.1
40 M.P.H.	75/*****	0.1/ 0.1
	200/*****	2.2/ 2.0
2000 R.P.M.	50/*****	0.2/ 0.2
** 2000 R.P.M.	75/*****	2.3/ 2.2

GENERAL COMMENT: AFTER TUNE UP, RESULTS ARE QUESTIONABLE DUE TO AUTO. TRANS. SLIPPAGE.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: F600 MODEL YR.: 68 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: F618ED40661 LICENSE NO.: 31692E OWNER'S ID.: 1450 1

TUNE UP DATA.

DATE OF TUNE UP 1/12/78 ODOMETER READING 16922 HOUR METER READING \*\*\*\*\*

***** BEFORE TUNE UP *****				***** AFTER TUNE UP *****			
IDLE R.P.M.	700	DWELL	39	IDLE R.P.M.	700	DWELL	38
IDLE CO(%)	2.8	TIMING	4BTDC	IDLE CO(%)	1.5	TIMING	5BTDC
IDLE HC(PPM)	140	GAP(INCH)	.036	IDLE HC(PPM)	140	GAP(INCH)	.034
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL 13.7				IDLE AIR/FUEL 13.8			

COMMENT: REPLACED PLUGS AND POINTS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2716 TEST DATE 1/11/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 12000 LB/23.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

BMV TEST SERIES NO. 2717 TEST DATE 1/13/78  
 12000 LB/23.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ

TEST 1 13.04 172.60 11.15 6.3 30.22 67.0 13.0  
 TEST 2 12.91 172.60 10.73 6.4 30.22 67.0 13.0  
 AVERAGE(13.08)( 171.50)(10.94)( 6.4)

11.91 155.40 12.34 6.4 30.30 67.0 21.0  
 12.00 162.10 12.15 6.4 30.30 66.0 21.0  
 (11.91)( 158.75)(12.25)( 6.4)  
 - 8.9% - 7.4% +11.9% + 0.8%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE	175/*****	3.4/ 3.2
2500 R.P.M.	100/*****	0.5/ 0.5
LOW CRUISE SPEED 25 M.P.H.	125/*****	0.4/ 0.3
HIGH CRUISE SPEED 40 M.P.H.	75/*****	2.3/ 2.3
MOTORS	1200/*****	2.0/ 1.8
11 INCH VACUUM 2000 R.P.M.	100/*****	0.3/ 0.3
7 INCH VACUUM 2000 R.P.M.	125/*****	2.1/ 2.0

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

	150/*****	1.4/ 1.4
	125/*****	0.5/ 0.4
25 M.P.H.	100/*****	0.4/ 0.4
40 M.P.H.	100/*****	2.3/ 2.2
	1100/*****	1.0/ 0.9
2000 R.P.M.	150/*****	2.9/ 2.7
8 IN. 2000 R.P.M.	125/*****	2.3/ 2.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 21,000 MAKE: FORD MODEL: F600 MODEL YR.: 68 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F61BED40662 LICENSE NO.: 31516E OWNER'S ID.: 1450 4  
TUNE UP DATA.

----- DATE OF TUNE UP 1/18/78 ODOMETER READING 18580 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 39 IDLE R.P.M. 650 DWELL 37  
IDLE CO(%) 4.4 TIMING 0BTDC IDLE CO(%) 1.4 TIMING 5BTDC  
IDLE HC(PPM) 140 GAP(INCH) .038 IDLE HC(PPM) 210 GAP(INCH) .034  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.3 IDLE AIR/FUEL 14.0  
COMMENT: REPLACED PLUGS, WIRE SET, POINTS, ROTOR AND CAP.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2718 TEST DATE 1/18/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 12000 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 11.22 158.60 11.09 6.6 29.90 65.5 25.0  
TEST 2 11.77 174.00 9.97 6.7 29.91 66.0 26.0  
AVERAGE(11.50)( 166.30)(10.53)( 6.7)

-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2719 TEST DATE 1/23/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 12000 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
10.46 117.70 13.32 6.8 30.44 68.5 17.0  
10.38 117.60 13.19 7.0 30.44 69.0 18.0  
(10.42)( 117.65)(13.26)( 6.9)  
- 9.4% -29.3% +25.9% + 3.8%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/\*\*\*\*\* 5.7/ 5.4  
2500 R.P.M. 1600/\*\*\*\*\* 0.7/ 0.6  
LOW CRUISE SPEED 25 M.P.H. 225/\*\*\*\*\* 0.7/ 0.6  
HIGH CRUISE SPEED 40 M.P.H. 60/\*\*\*\*\* 0.5/ 0.5  
MOTORING 2000/\*\*\*\*\* 2.2/ 2.0  
11 INCH VACUUM 2000 R.P.M. 200/\*\*\*\*\* 0.5/ 0.5  
3 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 3.9/ 3.7

-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
285/\*\*\*\*\* 1.4/ 1.3  
75/\*\*\*\*\* 0.6/ 0.5  
25 M.P.H. 100/\*\*\*\*\* 0.5/ 0.4  
40 M.P.H. 65/\*\*\*\*\* 0.4/ 0.4  
1500/\*\*\*\*\* 1.0/ 0.9  
2000 R.P.M. 150/\*\*\*\*\* 0.4/ 0.3  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 3.6/ 3.5

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D32BB2S525028 LICENSE NO.: 31707E OWNER'S ID.: 290018  
TUNE UP DATA.

----- DATE OF TUNE UP 1/25/78 ODOMETER READING 15359 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 53 IDLE R.P.M. 700 DWELL 12  
IDLE CO(%) 0.4 TIMING 5ATDC IDLE CO(%) 0.2 TIMING 0BTDC  
IDLE HC(PPM) 175 GAP(INCH) .035 IDLE HC(PPM) 40 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.8 IDLE AIR/FUEL 14.2  
COMMENT: REPLACED POINTS.

TEST RESULTS

----- \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2720 TEST DATE 1/25/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 5.91 100.50 4.96 9.6 30.02 67.0 32.0  
TEST 2 6.00 91.27 5.31 9.6 30.02 68.0 34.0  
AVERAGE( 5.96)( 95.89)( 5.14)( 9.6)  
CHANGE IN AVERAGE AFTER TUNE UP  
----- \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2721 TEST DATE 1/27/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/17.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
4.28 58.10 8.24 10.3 29.58 62.0 32.0  
4.31 55.68 8.75 10.2 29.58 62.0 31.0  
( 4.30)( 56.89)( 8.50)(10.3)  
-27.9% -40.7% +65.5% + 6.8%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
----- (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 175/\*\*\*\*\* 0.3/ 0.3  
2500 R.P.M. 35/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 75/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 40 M.P.H. 35/\*\*\*\*\* 0.3/ 0.3  
MOTORING 1000/\*\*\*\*\* 1.0/ 0.9  
11 INCH VACUUM 2000 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 2.7/ 2.6  
----- (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/\*\*\*\*\* 0.3/ 0.3  
25 M.P.H. 50/\*\*\*\*\* 0.3/ 0.3  
40 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
2000 R.P.M. 75/\*\*\*\*\* 1.2/ 1.1  
2000 R.P.M. 100/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 0.4/ 0.4

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: FORD MODEL: F600 MODEL YR.: 68 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F60BED43311 LICENSE NO.: 31394E OWNER'S ID.: 1780 2  
TUNE UP DATA.

DATE OF TUNE UP 2/ 1/78 ODOMETER READING 21422 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 540 DWELL 38  
IDLE CO(%) 4.0 TIMING 6BTDC  
IDLE HC(PPM) 250 GAP(INCH) .028  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 550 DWELL 37  
IDLE CO(%) 0.8 TIMING 6BTDC  
IDLE HC(PPM) 180 GAP(INCH) .035  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL

COMMENT: CARBURETOR WAS REBUILT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2725 TEST DATE 2/ 1/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 12000 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 11.11 121.60 10.12 7.8 30.31 67.5 13.0  
TEST 2 11.69 137.90 9.32 7.9 30.31 68.5 15.0  
AVERAGE(11.40)( 129.75)( 9.72)( 7.9)

CHANGE IN AVERAGE AFTER TUNE UP

TEST KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 175/\*\*\*\*\* 4.0/ 3.6  
2500 R.P.M. 125/\*\*\*\*\* 1.1/ 1.0  
LOW CRUISE SPEED 25 M.P.H. 150/\*\*\*\*\* 0.9/ 0.8  
HIGH CRUISE SPEED 40 M.P.H. 75/\*\*\*\*\* 0.3/ 0.3  
MOTURING 2000/\*\*\*\*\* 1.5/ 1.4  
11 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.5/ 0.5  
6 INCH VACUUM 2000 R.P.M. 150/\*\*\*\*\* 3.0/ 3.0

COMMENT KEY MODE: ENGINE WAS W.O.T. AT 6 IN. VAC.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2730 TEST DATE 2/ 6/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 12000 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

8.50 111.30 9.90 7.8 30.01 63.0 22.0  
8.94 129.10 8.40 7.9 29.98 63.5 23.0  
( 8.82)( 120.20)( 9.15)( 7.9)  
-22.7% - 7.4% - 5.9% + 0.0%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

185/\*\*\*\*\* 0.9/ 0.8  
100/\*\*\*\*\* 1.2/ 1.1  
25 M.P.H. 125/\*\*\*\*\* 0.9/ 0.8  
40 M.P.H. 75/\*\*\*\*\* 0.8/ 0.7  
1200/\*\*\*\*\* 0.6/ 0.6  
2000 R.P.M. 175/\*\*\*\*\* 0.7/ 0.6  
5 IN. 2000 R.P.M. 150/\*\*\*\*\* 3.0/ 2.8

COMMENT KEY MODE: ENGINE WAS W.O.T. AT 5 IN. VAC.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA:

GROSS VEHICLE WEIGHT: 6,025 MAKE: JEEP MODEL: CHRKEE MODEL YR.: 77 TRANS. CODE:A3 DISPLACEMENT: 401  
SERIAL NO.: J7A18MZ025056 LICENSE NO.: DKH944 OWNER'S ID.: D7C3 T  
TUNE UP DATA.

----- DATE OF TUNE UP 2/ 7/78 ODOMETER READING 15001 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL IDLE R.P.M. 700 DWELL  
IDLE CO(%) 1.7 TIMING 8BTDC IDLE CO(%) 0.2 TIMING 8BTDC  
IDLE HC(PPM) 50 GAP(INCH) .035 IDLE HC(PPM) 20 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2732 TEST DATE 2/ 7/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 5000 LB/13.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 1.95 60.79 3.15 9.3 29.63 67.0 29.0  
TEST 2 1.82 60.32 3.02 9.5 29.63 68.0 30.0  
AVERAGE( 1.89)( 60.56)( 3.09)( 9.4)

CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2733 TEST DATE 2/ 7/78  
5000 LB/13.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

1.81 24.72 3.72 9.8 29.66 60.0 22.0  
1.73 23.86 3.64 9.9 29.66 63.0 25.0  
( 1.77)( 24.25)( 3.68)( 9.9)

- 6.1% -59.9% +19.3% + 4.8%

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 4/READING FROM ANALYZER 1)		
IDLE	40/ 700	1.9/ 1.8
2500 R.P.M.	20/ 300	0.2/ 0.1
LOW CRUISE SPEED 25 M.P.H.	30/ 500	1.5/ 1.4
HIGH CRUISE SPEED 40 M.P.H.	30/ 500	0.3/ 0.2
MOTORING	100/ 1000	0.8/ 0.8
11 INCH VACUUM 1500 R.P.M.	30/ 500	0.2/ 0.1
** INCH VACUUM **** R.P.M.*****/*****	****/****	****/****

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 4/READING FROM ANALYZER 1)		
IDLE	35/ 600	0.7/ 0.7
2500 R.P.M.	15/ 200	0.1/ 0.1
25 M.P.H.	30/ 500	0.4/ 0.3
40 M.P.H.	30/ 500	0.2/ 0.1
MOTORING	50/ 700	0.2/ 0.2
1500 R.P.M.	30/ 500	0.2/ 0.2
** IN. **** R.P.M.*****/*****	****/****	****/****

COMMENT KEY MODE: DYNO DID NOT HAVE ENOUGH CAPACITY TO LOAD ENGINE BELOW 9 IN. HG. VACUUM

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,200 MAKE: I-H MODEL: 200 MODEL YR.: 74 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 4H2D0DHB49851 LICENSE NO.: 19327E OWNER'S ID.: 4220 7  
TUNE UP DATA.

----- DATE OF TUNE UP 2/14/78 ODOMETER READING 9960 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 580 DWELL 29 IDLE R.P.M. 520 DWELL 31  
IDLE CO(%) 2.2 TIMING 9BTDC IDLE CO(%) 0.7 TIMING 5BTDC  
IDLE HC(PPM) 400 GAP(INCH) .039 IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.6 IDLE AIR/FUEL 13.9

COMMENT: EGR SYSTEM WAS RECONNECTED AS PER STOCK. REPLACED POINTS, ROTOR, CAP, WIRE SET AND PLUGS.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2741 TEST DATE 2/10/78 BMV TEST SERIES NO. 2742 TEST DATE 2/15/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/26.0 H.P. AT 50 MPH DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/26.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB) (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 4.61 28.50 10.69 11.0 30.01 66.0 14.0 2.47 19.33 7.40 12.0 30.16 53.5 15.0  
TEST 2 4.80 29.91 10.06 11.3 30.01 66.0 16.0 2.35 15.13 7.07 12.2 30.16 56.0 14.0  
AVERAGE( 4.71)( 29.21)(10.38)(11.2) ( 2.41)( 17.23)( 7.24)(12.1)

CHANGE IN AVERAGE AFTER TUNE UP -49.8% -44.0% -30.3% + 8.5%

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 460/\*\*\*\*\* 1.9/ 1.8  
2500 R.P.M. 75/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 100/\*\*\*\*\* 0.2/ 0.2  
HIGH CRUISE SPEED 39 M.P.H. 75/\*\*\*\*\* 0.1/ 0.1  
MOTORING 1400/\*\*\*\*\* 1.5/ 1.4  
11 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 100/\*\*\*\*\* 0.3/ 0.3

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/ 1400 0.5/ 0.5  
50/ 600 0.2/ 0.2  
25 M.P.H. 100/ 1400 0.1/ 0.1  
39 M.P.H. 75/ 1200 0.3/ 0.3  
1100/10000 1.5/ 1.4  
2000 R.P.M. 75/ 1000 0.1/ 0.1  
\*\* 2000 R.P.M. 65/ 800 0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D328B2S522633 LICENSE NO.: 31709E OWNER'S ID.: 290010  
TUNE UP DATA.

----- DATE OF TUNE UP 2/17/78 ODOMETER READING 27851 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 770 DWELL 40 IDLE R.P.M. 700 DWELL 41  
IDLE CO(%) 3.2 TIMING 5ATDC IDLE CO(%) 0.8 TIMING 0BTDC  
IDLE HC(PPM) 120 GAP(INCH) .035 IDLE HC(PPM) 100 GAP(INCH) .035  
PCV CODE 3 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.6 IDLE AIR/FUEL 14.4

COMMENT: REPLACED POINTS, ROTOR, CAP, WIRE SET AND VACUUM ADVANCE HOSE.

TEST RESULTS

-----  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2743 TEST DATE 2/16/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/32.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 7.48 107.00 5.20 8.9 30.33 62.5 15.0  
TEST 2 7.60 115.10 4.86 9.0 30.33 62.5 17.0  
AVERAGE( 7.54)( 111.05)( 5.03)( 9.0)  
-----  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2744 TEST DATE 2/17/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/32.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
8.20 92.82 6.32 9.4 30.22 65.5 20.0  
7.80 93.80 6.13 9.6 30.22 67.0 21.0  
( 8.05)( 93.31)( 6.23)( 9.5)  
+ 6.8% -16.0% +23.8% + 6.1%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 125/ 2000 3.6/ 3.4  
2500 R.P.M. 75/ 1200 1.0/ 0.9  
LOW CRUISE SPEED 25 M.P.H. 125/ 1900 0.4/ 0.4  
HIGH CRUISE SPEED 39 M.P.H. 75/ 1200 0.4/ 0.4  
MOTORING 1900/10000 6.0/ 5.7  
11 INCH VACUUM 1900 R.P.M. 100/ 1400 0.5/ 0.5  
3 INCH VACUUM 1900 R.P.M. 75/ 1100 0.7/ 0.6  
-----  
HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/ 1500 1.3/ 1.2  
75/ 1000 0.8/ 0.7  
25 M.P.H. 150/ 2000 0.3/ 0.3  
39 M.P.H. 100/ 1400 0.3/ 0.2  
2 00/10000 3.5/ 3.0  
1900 R.P.M. 125/ 1700 0.4/ 0.4  
\*\* 1900 R.P.M. 100/ 1400 1.1/ 1.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,200 MAKE: I-H MODEL: 200 MODEL YR.: 74 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 4H200DHB49640 LICENSE NO.: 19324E OWNER'S ID.: 4220 8  
TUNE UP DATA.

DATE OF TUNE UP	2/22/78	ODOMETER READING	9855	HOUR METER READING	*****		
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****				
IDLE R.P.M.	550	DWELL	33	IDLE R.P.M.	675	DWELL	32
IDLE CO(%)	10.0	TIMING	0BTDC	IDLE CO(%)	0.5	TIMING	5BTDC
IDLE HC(PPM)	400	GAP(INCH)	.035	IDLE HC(PPM)	80	GAP(INCH)	.035
PCV CODE	2	AF CODE	3	PCV CODE	2	AF CODE	1
IDLE AIR/FUEL	11.5			IDLE AIR/FUEL	13.7		

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP AND WIRE SET. ORIGINAL CARBURETOR WAS REBUILT AND RE-INSTALLED.

***** BEFORE TUNE UP *****								***** AFTER TUNE UP *****							
-----								-----							
BMV TEST SERIES NO. 2745				TEST DATE 2/22/78				BMV TEST SERIES NO. 2751				TEST DATE 2/24/78			
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/26.0 H.P. AT 50 MPH								6000 LB/26.0 H.P. AT 50 MPH							
HC	CO	NOX	MPG	BAROM	TEMP	HUMID		HC	CO	NOX	MPG	BAROM	TEMP	HUMID	
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)		(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)	
TEST:NYQ															
TEST 1	6.10	196.70	2.88	9.5	29.90	64.0	11.0	3.59	60.96	5.75	11.1	29.82	69.0	16.0	
TEST 2	6.65	208.90	2.76	9.6	29.90	64.0	11.0	3.40	67.26	5.25	11.3	29.82	69.5	15.0	
AVERAGE	( 6.38)	( 202.80)	( 2.82)	( 9.6)				( 3.50)	( 64.11)	( 5.51)	(11.2)				
CHANGE IN AVERAGE AFTER TUNE UP								-45.2% -68.4% +95.2% +17.3%							

TEST:KEY MODE  
ENGINE SPEED

		HC(PPM)	CO(%)
-----			
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			
IDLE		275/ 4000	9.0/ 8.3
2500 R.P.M.		150/ 2700	4.6/ 4.3
LOW CRUISE SPEED	25 M.P.H.	225/ 3400	4.2/ 4.1
HIGH CRUISE SPEED	39 M.P.H.	175/ 3000	3.7/ 3.6
MOTORING		1700/10000	8.5/ 7.9
11 INCH VACUUM	2000 R.P.M.	175/ 2800	3.3/ 3.1
3 INCH VACUUM	2000 R.P.M.	75/ 1200	4.0/ 3.8

		HC(PPM)	CO(%)
-----			
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)			
		125/ 1800	0.3/ 0.3
		100/ 1500	2.8/ 2.6
25 M.P.H.		125/ 2000	0.3/ 0.3
39 M.P.H.		150/ 2300	2.9/ 2.7
		1100/10000	4.0/ 3.7
2000 R.P.M.		150/ 2200	3.1/ 2.9
** 2000 R.P.M.		125/ 2000	5.4/ 5.1

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 10,000 MAKE: DODGE MODEL: D300 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 225  
SERIAL NO.: D32BB2S524645 LICENSE NO.: 31708E OWNER'S ID.: 2900 9  
TUNE UP DATA.

----- DATE OF TUNE UP 3/ 1/78 ODOMETER READING 34163 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 720 DWELL 45 IDLE R.P.M. 700 DWELL 42  
IDLE CO(%) 1.0 TIMING 4ATDC IDLE CO(%) 0.4 TIMING 3B100  
IDLE HC(PPM) 80 GAP(INCH) .035 IDLE HC(PPM) 70 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL IDLE AIR/FUEL  
COMMENT: REPLACED POINTS, CAP, ROTOR AND WIRE SET.

TEST RESULTS

----- \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\* -----  
BMV TEST SERIES NO. 2756 TEST DATE 3/ 1/78 BMV TEST SERIES NO. 2762 TEST DATE 3/ 6/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/32.0 H.P. AT 50 MPH DYNAMOMETER INERTIA/POWER SETTINGS: 8000 LB/32.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB) (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 5.04 71.55 7.61 8.9 30.11 65.0 14.0 5.33 60.16 8.70 9.5 30.15 63.0 14.0  
TEST 2 4.92 68.25 7.51 9.6 30.11 66.5 15.0 5.05 54.14 8.34 10.2 30.15 63.0 14.0  
AVERAGE( 4.98)( 69.90)( 7.56)( 9.3) ( 5.19)( 57.15)( 8.52)( 9.9)  
CHANGE IN AVERAGE AFTER TUNE UP - 4.2% - 10.2% - 12.7% + 6.5%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%) HC(PPM) CO(%)  
----- (READING FROM ANALYZER 5/READING FROM ANALYZER 2) (READING FROM ANALYZER 5/READING FROM ANALYZER 2) -----  
IDLE 100/ 1500 1.5/ 1.5 75/ 1300 1.2/ 1.1  
2500 R.P.M. 50/ 700 0.3/ 0.2 50/ 900 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 125/ 1600 0.2/ 0.2 25 M.P.H. 125/ 1700 0.2/ 0.2  
HIGH CRUISE SPEED 39 M.P.H. 75/ 1000 0.2/ 0.2 39 M.P.H. 75/ 1200 0.2/ 0.2  
MOTORING 800/10000 3.5/ 3.4 1600/10000 4.0/ 3.9  
11 INCH VACUUM 2000 R.P.M. 75/ 900 0.3/ 0.3 2000 R.P.M. 75/ 1100 0.3/ 0.2  
3 INCH VACUUM 2000 R.P.M. 75/ 900 0.8/ 0.7 \*\* 2000 R.P.M. 75/ 1100 0.4/ 0.4

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: I-H MODEL: 1600 MODEL YR.: 75 TRANS. CODE:M4 DISPLACEMENT: 345  
SERIAL NO.: D0512EHA42246 LICENSE NO.: 20956E OWNER'S ID.: 4500 6  
TUNE UP DATA.

----- DATE OF TUNE UP 3/ 6/78 ODOMETER READING 14334 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 600 DWELL 35 IDLE R.P.M. 700 DWELL 30  
IDLE CO(%) 3.0 TIMING 0BTDC IDLE CO(%) 0.8 TIMING 0BTDC  
IDLE HC(PPM) 150 GAP(INCH) .039 IDLE HC(PPM) 100 GAP(INCH) .030  
PCV CODE 2 AF CODE 4 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.6 IDLE AIR/FUEL 13.8

COMMENT: REPLACED PLUGS, CAP, ROTOR, WIRE SET. POINTS AND COIL.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2765 TEST DATE 3/ 7/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 13000 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 16.41 140.20 9.43 5.5 30.33 67.0 18.0  
TEST 2 15.90 151.40 9.17 5.7 30.33 68.0 18.0  
AVERAGE(16.16)( 150.35)( 9.30)( 5.6)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2770 TEST DATE 3/13/78  
13000 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
12.07 123.80 9.00 5.8 30.34 72.0 26.0  
12.90 146.10 7.90 5.8 30.34 72.0 26.0  
(12.49)( 134.95)( 8.45)( 5.8)  
-22.7% -10.2% - 9.1% + 3.6%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
-----  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 75/ 1100 2.4/ 2.3  
2500 R.P.M. 40/ 300 0.2/ 0.2  
LOW CRUISE SPEED 20 M.P.H. 60/ 800 0.3/ 0.3  
HIGH CRUISE SPEED 30 M.P.H. 50/ 600 0.3/ 0.3  
MOTORING 2000/10000 2.8/ 2.8  
11 INCH VACUUM 2000 R.P.M. 100/ 1300 0.5/ 0.5  
3 INCH VACUUM 2000 R.P.M. 75/ 1000 1.0/ 1.0

-----  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 50/ 800 0.2/ 0.2  
20 M.P.H. 35/ 400 0.2/ 0.2  
30 M.P.H. 75/ 1000 0.1/ 0.1  
30 M.P.H. 50/ 800 0.3/ 0.3  
2000 R.P.M. 1300/10000 0.5/ 0.5  
2000 R.P.M. 75/ 1000 0.6/ 0.6  
\*\* 2000 R.P.M. 75/ 1100 1.3/ 1.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,120 MAKE: DODGE MODEL: D200 MODEL YR.: 72 TRANS. CODE:A3 DISPLACEMENT: 225  
SERIAL NO.: D218B2S607010 LICENSE NO.: 31714E OWNER'S ID.: 2970 2  
TUNE UP DATA.

DATE OF TUNE UP 3/27/78 ODOMETER READING 42125 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 710 DWELL 42  
IDLE CO(%) 3.0 TIMING 0BTDC  
IDLE HC(PPM) 225 GAP(INCH) .042  
PCV CODE 2 AF CODE 3  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 700 DWELL 41  
IDLE CO(%) 0.2 TIMING 0BTDC  
IDLE HC(PPM) 80 GAP(INCH) .035  
PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL

COMMENT: REPLACED DISTRIBUTOR, PLUGS AND ROTOR. CARB WAS REBUILT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2773 TEST DATE 3/23/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 6500 LB/28.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 5.92 124.60 4.51 10.1 30.25 65.0 21.0  
TEST 2 6.06 144.10 4.19 9.8 30.25 63.5 20.0  
AVERAGE( 5.99)( 134.35)( 4.35)(10.0)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 425/ 5500 1.0/ 0.9  
2500 R.P.M. 175/ 2500 3.7/ 3.5  
LOW CRUISE SPEED 25 M.P.H. 200/ 2800 5.5/ 5.2  
HIGH CRUISE SPEED 39 M.P.H. 125/ 1700 4.1/ 4.0  
MOTORING 500/ 6000 1.0/ 0.9  
11 INCH VACUUM 2000 R.P.M. 100/ 1200 0.9/ 0.8  
3 INCH VACUUM 2000 R.P.M. 125/ 1600 4.0/ 3.7

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2776 TEST DATE 3/31/78  
6500 LB/28.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

5.35 45.18 7.37 11.1 30.16 70.0 22.0  
5.24 49.86 7.56 11.0 30.16 70.0 22.0  
( 5.30)( 47.52)( 7.47)(11.1)  
-11.6% -64.6% +71.6% +11.1%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

760/ 7500 0.1/ 0.1  
100/ 1100 0.3/ 0.3  
25 M.P.H. 75/ 900 0.2/ 0.2  
39 M.P.H. 50/ 700 0.2/ 0.2  
400/ 5000 1.5/ 1.3  
2000 R.P.M. 65/ 600 0.2/ 0.2  
\*\* 2000 R.P.M. 75/ 700 0.8/ 0.7

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
 SERIAL NO.: P50BVH80701 LICENSE NO.: 7956LA OWNER'S ID.: 19892

TUNE UP DATA.

DATE OF TUNE UP 3/28/78 ODOMETER READING 40025 HOUR METER READING 1281.0  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 640 DWELL 43  
 IDLE CO(%) 8.6 TIMING 3BTDC  
 IDLE HC(PPM) 330 GAP(INCH) .  
 PCV CODE 3 AF CODE 4  
 IDLE AIR/FUEL  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 700 DWELL 37  
 IDLE CO(%) 3.0 TIMING 0BTDC  
 IDLE HC(PPM) 115 GAP(INCH) .034  
 PCV CODE 1 AF CODE 1  
 IDLE AIR/FUEL

COMMENT: REPLACED POINTS, PLUGS, CAP, ROTOR AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2774 TEST DATE 3/27/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2777 TEST DATE 3/31/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 5.92 66.82 10.85 10.0 29.74 68.0 52.0  
 TEST 2 6.41 68.11 9.85 10.3 29.74 69.0 52.0  
 AVERAGE( 6.17)( 67.47)(10.35)(10.2)

3.96 32.38 13.55 9.1 30.16 74.0 24.0  
 3.92 38.44 13.41 9.0 30.16 75.0 25.0  
 ( 3.94)( 35.41)(13.48)( 9.1)

CHANGE IN AVERAGE AFTER TUNE UP

-22.1% -47.5% +30.2% -10.8%

TEST:KEY MODE

ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 135/ 2000 6.5/ 6.0  
 2500 R.P.M. 75/ 1100 1.0/ 0.9  
 LOW CRUISE SPEED 25 M.P.H. 125/ 1600 0.5/ 0.5  
 HIGH CRUISE SPEED 39 M.P.H. 35/ 600 0.2/ 0.2  
 MOTORING 1900/10000 4.5/ 4.2  
 11 INCH VACUUM 2000 R.P.M. 65/ 800 0.2/ 0.2  
 3 INCH VACUUM 2000 R.P.M. 25/ 300 0.2/ 0.2

ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 100/ 1200 1.5/ 1.5  
 50/ 600 0.6/ 0.5  
 25 M.P.H. 85/ 1000 0.1/ 0.1  
 39 M.P.H. 50/ 600 0.1/ 0.1  
 1600/10000 1.5/ 1.5  
 2000 R.P.M. 65/ 700 0.1/ 0.1  
 \*\* 2000 R.P.M. 50/ 500 0.3/ 0.3

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 19,500 MAKE: I-H MODEL: 1600 MODEL YR.: 75 TRANS. CODE:M4 DISPLACEMENT: 345  
SERIAL NO.: D0512EHA42147 LICENSE NO.: 21120E OWNER'S ID.: 4500 5  
TUNE UP DATA.

----- DATE OF TUNE UP 4/ 5/78 ODOMETER READING 10516 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 740 DWELL 32 IDLE R.P.M. 700 DWELL 26  
IDLE CO(%) 1.0 TIMING 4BTDC IDLE CO(%) 0.2 TIMING 0BTDC  
IDLE HC(PPM) 1400 GAP(INCH) .030 IDLE HC(PPM) 100 GAP(INCH) .030  
PCV CODE 2 AF CODE 3 PCV CODE 2 AF CODE 1  
IDLE AIR/FUEL 13.7 IDLE AIR/FUEL 13.9  
COMMENT: REPLACED POINTS, ROTOR AND CAP.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2778 TEST DATE 4/ 4/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 13000 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 12.03 93.50 7.32 6.8 30.34 67.5 31.0  
TEST 2 12.41 97.20 8.24 6.3 30.34 67.5 31.0  
AVERAGE(12.25)( 93.50)( 7.78)( 6.6)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2784 TEST DATE 4/11/78  
13000 LB/11.0 H.P. AT 30 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
10.55 129.20 7.42 6.0 29.71 70.5 40.0  
8.81 149.30 6.02 6.1 29.71 70.5 40.0  
( 9.58)( 139.25)( 6.72)( 6.1)  
-21.8% +48.9% -13.6% - 7.6%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 460/ 5000 1.0/ 0.9  
2500 R.P.M. 75/ 900 0.1/ 0.1  
LOW CRUISE SPEED 20 M.P.H. 100/ 1300 0.2/ 0.2  
HIGH CRUISE SPEED 30 M.P.H. 75/ 1000 0.3/ 0.3  
MOTORING 800/ 7000 3.0/ 2.8  
11 INCH VACUUM 2000 R.P.M. 125/ 1500 1.3/ 1.2  
3 INCH VACUUM 2000 R.P.M. 75/ 1000 1.3/ 1.2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
35/ 500 0.3/ 0.2  
25/ 300 0.4/ 0.4  
20 M.P.H. 75/ 1200 0.4/ 0.4  
30 M.P.H. 75/ 1200 0.9/ 0.9  
1600/10000 1.5/ 1.3  
2000 R.P.M. 125/ 1700 1.7/ 1.6  
\*\* 2000 R.P.M. 125/ 1800 4.2/ 3.9

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVH80718 LICENSE NO.: 7949LA OWNER'S ID.: 19899  
TUNE UP DATA.

DATE OF TUNE UP 4/11/78 ODOMETER READING 35324 HOUR METER READING 1315.0

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 850 DWELL 42  
IDLE CO(%) 2.6 TIMING 2BTDC  
IDLE HC(PPM) 60 GAP(INCH) .034  
PCV CODE 3 AF CODE 3  
IDLE AIR/FUEL 13.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 36  
IDLE CO(%) 0.5 TIMING 6BTDC  
IDLE HC(PPM) 30 GAP(INCH) .034  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 14.4

COMMENT: REPLACED POINTS, CONDENSER AND ROTOR. CARB WAS OVERHAULED.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2783 TEST DATE 4/11/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 2.92 64.98 9.87 8.6 29.75 71.0 41.0  
TEST 2 2.85 63.00 10.31 8.4 29.74 71.5 40.0  
AVERAGE( 2.89)( 63.99)(10.09)( 8.5)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 65/ 1100 2.6/ 2.5  
2500 R.P.M. 20/ 100 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 50/ 700 0.1/ 0.1  
HIGH CRUISE SPEED 39 M.P.H. 25/ 300 0.1/ 0.1  
MOTORING 400/ 5500 2.8/ 2.6  
11 INCH VACUUM 2000 R.P.M. 25/ 400 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 50/ 800 0.7/ 0.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2791 TEST DATE 4/18/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

3.86 16.82 11.77 8.5 30.18 70.5 30.0  
3.53 16.85 12.02 8.9 30.18 71.0 31.0  
( 3.70)( 16.84)(11.90)( 8.7)  
+28.1% -73.7% +17.9% + 2.4%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

60/ 600 0.1/ 0.1  
75/ 800 0.1/ 0.1  
25 M.P.H. 75/ 800 0.1/ 0.1  
39 M.P.H. 35/ 400 0.1/ 0.1  
1600/10000 0.5/ 0.5  
2000 R.P.M. 60/ 500 0.2/ 0.1  
\*\* 2000 R.P.M. 50/ 500 0.4/ 0.4

GENERAL COMMENT: BEFORE TUNE UP, VEHICLE HAS BEEN IN USE WITH 1973 MODEL MOTORCRAFT CARB.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
 PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: DODGE MODEL: D200 MODEL YR.: 71 TRANS. CODE:A3 DISPLACEMENT: 225  
 SERIAL NO.: D22BB1S361156 LICENSE NO.: 31655E OWNER'S ID.: 2820 3  
 TUNE UP DATA.

----- DATE OF TUNE UP 4/18/78 ODOMETER READING 30034 HOUR METER READING \*\*\*\*\*  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 740 DWELL 52 IDLE R.P.M. 700 DWELL 41  
 IDLE CO(%) 0.1 TIMING 5ATDC IDLE CO(%) 0.4 TIMING 0BTDC  
 IDLE HC(PPM) 140 GAP(INCH) .039 IDLE HC(PPM) 70 GAP(INCH) .035  
 PCV CODE 3 AF CODE 3 PCV CODE 1 AF CODE 1  
 IDLE AIR/FUEL IDLE AIR/FUEL  
 COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP, WIRE SET, PLUGS AND VACUUM ADVANCE HOSE. A BINDING IN THE MECHANICAL ADVANCE U-  
 NIT WAS CORRECTED, AND THE PROPER ADVANCE WAS OBTAINED.

----- TEST RESULTS -----

-----  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 -----  
 BMW TEST SERIES NO. 2789 TEST DATE 4/18/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/24.0 H.P. AT 50 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 TEST:NYQ  
 TEST 1 2.30 125.20 2.90 8.9 30.18 66.0 25.0  
 TEST 2 1.76 88.65 3.32 9.8 30.18 68.0 25.0  
 AVERAGE( 2.03)( 106.93)( 3.11)( 9.4)

-----  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 -----  
 BMW TEST SERIES NO. 2794 TEST DATE 4/21/78  
 5500 LB/24.0 H.P. AT 50 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 -----  
 2.30 125.20 2.90 8.9 30.18 66.0 25.0  
 2.15 88.65 3.32 9.8 30.18 68.0 25.0  
 ( 2.03)( 106.93)( 3.11)( 9.4)  
 +25.1% -60.6% + 8.5% +35.8%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 75/ 1000 0.3/ 0.2  
 2500 R.P.M. 25/ 300 0.2/ 0.2  
 LOW CRUISE SPEED 25 M.P.H. 35/ 700 0.3/ 0.3  
 HIGH CRUISE SPEED 39 M.P.H. 25/ 400 0.4/ 0.4  
 MOTORING 500/ 6000 0.3/ 0.3  
 11 INCH VACUUM 2000 R.P.M. 25/ 300 0.2/ 0.2  
 \*\* INCH VACUUM 2000 R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*/\*\*\*\*

HC(PPM) CO(%)  
 -----  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 100/ 1200 0.1/ 0.1  
 35/ 600 0.3/ 0.2  
 25 M.P.H. 75/ 1000 0.1/ 0.1  
 39 M.P.H. 50/ 800 0.2/ 0.2  
 800/ 9000 1.8/ 1.7  
 2000 R.P.M. 75/ 1000 0.4/ 0.4  
 \*\* IN. \*\*\*\* R.P.M.\*\*\*\*\*/\*\*\*\*\* \*\*\*\*\*/\*\*\*\*

COMMENT KEY MODE: 3 IN. HG. MODE WAS NOT DONE DUE TO SERIOUS T-  
 RANSMISSION SLIPPAGE.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: CHEVROLET MODEL: CE20 MODEL YR.: 69 TRANS. CODE:A3 DISPLACEMENT: 307  
SERIAL NO.: CE269F872162 LICENSE NO.: 30771E OWNER'S ID.: 1170 9  
TUNE UP DATA.

----- DATE OF TUNE UP 4/18/78 ODOMETER READING 9826 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 660 DWELL 30 IDLE R.P.M. 600 DWELL 30  
IDLE CO(%) 0.6 TIMING 4BTDC IDLE CO(%) 1.0 TIMING 2BTDC  
IDLE HC(PPM) 950 GAP(INCH) .035 IDLE HC(PPM) 800 GAP(INCH) .035  
PCV CODE 2 AF CODE 2 PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.4 IDLE AIR/FUEL 13.6  
COMMENT: REPLACED ONE PLUG, ONE WIRE. CARB WAS REBUILT. ENGINE COULD NOT BE IMPROVED FURTHER DUE TO LOW COMPRESSION IN ONE CYLINDER.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2790 TEST DATE 4/18/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/24.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TESTING  
TEST 1 13.06 45.26 8.06 9.3 30.18 67.5 29.0  
TEST 2 12.74 55.53 7.48 9.3 30.18 68.0 30.0  
AVERAGE(12.90)(50.40)(7.77)(9.3)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2802 TEST DATE 5/ 2/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 5500 LB/24.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
13.76 53.70 7.32 9.4 29.83 74.5 28.0  
14.00 70.67 6.61 9.5 29.83 74.5 29.0  
(13.98)(52.19)(6.97)(9.5)  
CHANGE IN AVERAGE AFTER TUNE UP + 7.6% +23.4% -10.4% + 1.6%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 650/ 7000 0.7/ 0.6  
2500 R.P.M. 425/ 5500 2.0/ 1.9  
LOW CRUISE SPEED 25 M.P.H. 325/ 4200 1.1/ 1.1  
HIGH CRUISE SPEED 39 M.P.H. 175/ 3000 1.2/ 1.1  
MOTORING 600/ 6500 2.5/ 2.4  
11 INCH VACUUM 2000 R.P.M. 225/ 2600 0.7/ 0.6  
3 INCH VACUUM 2000 R.P.M. 275/ 3500 5.5/ 5.0

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
700/ 7200 0.7/ 0.7  
275/ 3800 1.6/ 1.6  
25 M.P.H. 325/ 4000 0.8/ 0.7  
39 M.P.H. 225/ 3400 1.3/ 1.3  
850/ 9000 1.5/ 1.5  
2000 R.P.M. 225/ 3500 1.0/ 0.9  
\*\* 2000 R.P.M. 275/ 3900 5.3/ 5.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: FORD MODEL: P350 MODEL YR.: 59 TRANS. CODE:M4 DISPLACEMENT: 240  
SERIAL NO.: P35J9H20927 LICENSE NO.: 8068LA OWNER'S ID.: 4772  
TUNE UP DATA.

DATE OF TUNE UP 4/26/78 ODOMETER READING 22884 HOUR METER READING 550.8  
 \*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 790 DWELL 37  
 IDLE CO(%) 0.3 TIMING 6BTDC  
 IDLE HC(PPM) 70 GAP(INCH) .040  
 PCV CODE 5 AF CODE 0  
 IDLE AIR/FUEL  
 \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 IDLE R.P.M. 650 DWELL 37  
 IDLE CO(%) 1.1 TIMING 4BTDC  
 IDLE HC(PPM) 120 GAP(INCH) .030  
 PCV CODE 5 AF CODE 0  
 IDLE AIR/FUEL  
 COMMENT: REPLACED POINTS, PLUGS, CAP, ROTOR AND WIRE SET.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2797 TEST DATE 4/25/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 TEST:NYQ  
 TEST 1 4.93 50.71 6.56 13.7 30.12 75.0 31.0  
 TEST 2 4.47 72.94 5.32 13.2 30.12 75.5 32.0  
 AVERAGE( 4.70)( 61.83)( 5.94)(13.5)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
 BMV TEST SERIES NO. 2799 TEST DATE 4/27/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
 HC CO NOX MPG BAROM TEMP HUMID  
 (G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
 6.03 86.49 4.02 13.3 29.95 65.0 31.0  
 5.49 84.26 3.61 13.5 29.95 63.0 33.0  
 ( 5.76)( 85.38)( 3.82)(13.4)

CHANGE IN AVERAGE AFTER TUNE UP

+22.6% +38.1% -35.8% - 0.4%

TEST:KEY MODE  
 ENGINE SPEED HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 IDLE 225/ 2500 0.2/ 0.2  
 2500 R.P.M. 135/ 1800 3.0/ 2.9  
 LOW CRUISE SPEED 25 M.P.H. 175/ 2000 1.5/ 1.5  
 HIGH CRUISE SPEED 39 M.P.H. 125/ 1500 1.7/ 1.6  
 MOTORING 1900/10000 1.0/ 0.9  
 11 INCH VACUUM 2000 R.P.M. 150/ 1600 1.2/ 1.1  
 3 INCH VACUUM 2000 R.P.M. 125/ 1300 5.1/ 4.7

HC(PPM) CO(%)  
 (READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
 125/ 1400 1.1/ 1.0  
 100/ 1300 2.9/ 2.6  
 25 M.P.H. 150/ 1700 1.8/ 1.6  
 39 M.P.H. 150/ 1700 1.3/ 1.2  
 200/10000 2.0/ 2.0  
 2000 R.P.M. 175/ 1900 1.1/ 1.0  
 \*\* 2000 R.P.M. 175/ 2000 6.4/ 6.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 6,700 MAKE: I-H MODEL: 200 MODEL YR.: 74 TRANS. CODE:A3 DISPLACEMENT: 258  
 SERIAL NO.: 4H2AODHB25712 LICENSE NO.: 16680E OWNER'S ID.: 4090 3  
 TUNE UP DATA.

DATE OF TUNE UP	4/28/78	ODOMETER READING	28859	HOUR METER READING	*****
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****		
IDLE R.P.M.	700	DWELL	31	IDLE R.P.M.	DWELL
IDLE CO(%)	0.1	TIMING	0BTDC	IDLE CO(%)	TIMING ATDC
IDLE HC(PPM)	60	GAP(INCH)	.035	IDLE HC(PPM)	GAP(INCH)
PCV CODE	2	AF CODE	2	PCV CODE	AF CODE
IDLE AIR/FUEL				IDLE AIR/FUEL	

COMMENT: ENGINE DID NOT NEED TUNE UP WORK.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2798 TEST DATE 4/27/78  
 DYNAMOMETER INERTIA/POWER SETTINGS: 5000 LB/23.0 H.P. AT 50 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ  
 TEST 1 1.82 8.65 6.70 11.8 29.95 65.0 26.0  
 TEST 2 1.53 6.35 6.82 11.7 29.95 65.0 26.0  
 AVERAGE( 1.68)( 07.50)( 6.76)(11.8)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 9999 TEST DATE 99/99/99

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)(\*\*\*\*\*)  
 \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*% \*\*\*\*\*%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 1/READING FROM ANALYZER 2)		
IDLE	85/ 1100	0.1/ 0.1
2500 R.P.M.	35/ 400	0.1/ 0.1
LOW CRUISE SPEED 25 M.P.H.	35/ 400	0.1/ 0.1
HIGH CRUISE SPEED 39 M.P.H.	50/ 600	0.1/ 0.1
MOTORING	600/ 7000	0.5/ 0.5
11 INCH VACUUM 2000 R.P.M.	35/ 400	0.1/ 0.1
3 INCH VACUUM 2000 R.P.M.	75/ 1100	2.9/ 2.6

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 1/READING FROM ANALYZER 2)		
IDLE	*****/*****	*****/*****
2500 R.P.M.	*****/*****	*****/*****
** M.P.H.	*****/*****	*****/*****
** M.P.H.	*****/*****	*****/*****
**** R.P.M.	*****/*****	*****/*****
** IN. **** R.P.M.	*****/*****	*****/*****

GENERAL COMMENT: AFTER TUNE UP SET 9999 IS A DUMMY. THE VEHICLE WAS RECEIVED IN TUNED UP CONDITION.

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 7,500 MAKE: I-H MODEL: 1210 MODEL YR.: 73 TRANS. CODE:A3 DISPLACEMENT: 258  
SERIAL NO.: 3H2DOCHC12362 LICENSE NO.: 16683E OWNER'S ID.: 343017

TUNE UP DATA.

DATE OF TUNE UP 5/ 3/78 ODOMETER READING 10857 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 800 DWELL 31  
IDLE CO(%) 0.1 TIMING 10BTDC  
IDLE HC(PPM) 400 GAP(INCH) .038  
PCV CODE 3 AF CODE 3  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 700 DWELL 32  
IDLE CO(%) 0.5 TIMING 0BTDC  
IDLE HC(PPM) 120 GAP(INCH) .035  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL 13.9

COMMENT: REPLACED PLUGS, WIRE SET, POINTS, CAP AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2801 TEST DATE 5/ 2/78  
DYNAMOMETER INERTIA/POWER SETTINGS: .5500 LB/24.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 3.56 65.43 6.20 10.5 29.83 67.5 27.0  
TEST 2 4.17 55.76 6.00 11.3 29.83 71.0 29.0  
AVERAGE( 3.87)( 60.60)( 6.10)(10.9)

CHANGE IN AVERAGE AFTER TUNE UP

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2804 TEST DATE 5/ 4/78  
DYNAMOMETER INERTIA/POWER SETTINGS: .5500 LB/24.0 H.P. AT 50 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

2.10 22.97 7.80 10.9 30.03 71.5 21.0  
1.87 16.96 8.15 11.2 30.03 72.5 23.0  
( 1.99)( 19.97)( 7.98)(11.1)  
-48.6% -67.1% +30.7% + 1.4%

TEST:RL7 MODL  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 235/ 2500 0.1/ 0.1  
2500 R.P.M. 175/ 2000 1.0/ 0.9  
LOW CRUISE SPEED 25 M.P.H. 125/ 1600 0.9/ 0.8  
HIGH CRUISE SPEED 39 M.P.H. 100/ 1400 1.5/ 1.4  
MOTORING 1100/10000 1.0/ 0.9  
11 INCH VACUUM 2000 R.P.M. 150/ 1800 1.6/ 1.6  
3 INCH VACUUM 2000 R.P.M. 175/ 2000 5.3/ 5.0

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

75/ 900 0.5/ 0.5  
30/ 300 0.1/ 0.1  
25 M.P.H. 50/ 600 0.1/ 0.1  
39 M.P.H. 50/ 600 0.1/ 0.1  
400/ 5000 2.5/ 2.4  
2000 R.P.M. 50/ 600 0.1/ 0.1  
\*\* 2000 R.P.M. 75/ 1000 2.0/ 1.9

GENERAL COMMENT: BEFORE TUNE UP, THIS VEHICLE'S REGULAR DRIVER STATED IT NEEDED PARTIAL CHOKE TO HELP PREVENT STALLING. THEREFORE, IT WAS TESTED WITH CHOKE PULLED OUT ABOUT 1/4.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 72 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVP50124 LICENSE NO.: 7112LA OWNER'S ID.: 16944  
TUNE UP DATA.

DATE OF TUNE UP 5/ 4/78 ODOMETER READING 28756 HOUR METER READING 1485.1

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 620 DWELL 38  
IDLE CO(%) 8.0 TIMING 16BTDC  
IDLE HC(PPM) 500 GAP(INCH) .051  
PCV CODE 3 AF CODE 2  
IDLE AIR/FUEL 13.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 37  
IDLE CO(%) 1.4 TIMING 6BTDC  
IDLE HC(PPM) 100 GAP(INCH) .034  
PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.8

COMMENT: REPLACED POINTS AND PLUGS.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2806 TEST DATE 5/ 4/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ  
TEST 1 10.64 70.80 14.91 9.7 30.03 70.5 28.0  
TEST 2 9.54 74.18 17.70 9.4 30.03 71.0 29.0  
AVERAGE(10.09)( 72.49)(16.31)( 9.6)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	375/ 7500	8.6/ 7.8
2500 R.P.M.	100/ 1200	0.4/ 0.4
LOW CRUISE SPEED 25 M.P.H.	150/ 1700	0.1/ 0.1
HIGH CRUISE SPEED 40 M.P.H.	100/ 1200	0.1/ 0.1
MOTORING	2000/10000	4.0/ 3.6
11 INCH VACUUM 2000 R.P.M.	125/ 1400	0.1/ 0.1
3 INCH VACUUM 2000 R.P.M.	75/ 800	0.2/ 0.2

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2807 TEST DATE 5/ 8/78  
11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

4.66 18.95 13.15 9.8 30.29 69.5 45.0  
4.49 16.85 14.47 9.6 30.29 70.0 46.0  
( 4.58)( 17.92)(13.81)( 9.7)  
-54.7% -75.3% -15.3% + 1.6%

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	100/ 1200	0.7/ 0.7
	50/ 600	0.2/ 0.2
25 M.P.H.	150/ 1700	0.1/ 0.1
40 M.P.H.	100/ 1200	0.1/ 0.1
	1600/10000	1.0/ 0.9
2000 R.P.M.	75/ 800	0.1/ 0.1
** 2000 R.P.M.	35/ 400	0.2/ 0.2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: F600 MODEL YR.: 67 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: F618EA29447 LICENSE NO.: 19613E OWNER'S ID.: 1600 3  
TUNE UP DATA.

DATE OF TUNE UP	5/ 8/78	ODOMETER READING	30120	HOUR METER READING	*****		
***** BEFORE TUNE UP *****			***** AFTER TUNE UP *****				
IDLE R.P.M.	740	DWELL	40	IDLE R.P.M.	600	DWELL	37
IDLE CO(%)	2.8	TIMING	11BTDC	IDLE CO(%)	1.2	TIMING	0BTDC
IDLE HC(PPM)	140	GAP(INCH)	.036	IDLE HC(PPM)	150	GAP(INCH)	.030
PCV CODE	2	AF CODE	2	PCV CODE	2	AF CODE	2
IDLE AIR/FUEL	13.5			IDLE AIR/FUEL	13.6		

COMMENT: REPLACED CAP, ROTOR, WIRE SET, PLUGS AND POINTS. CARB WAS REBUILT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2808 TEST DATE 5/ 8/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

TEST:NYQ  
TEST 1 9.43 151.30 11.36 7.5 30.29 72.0 43.0  
TEST 2 8.67 159.10 11.53 7.4 30.29 72.0 43.0  
AVERAGE( 9.05)( 155.20)(11.45)( 7.5)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2812 TEST DATE 5/15/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH

HC	CO	NOX	MPG	BAROM	TEMP	HUMID
(G/MI)	(G/MI)	(G/MI)		(IN.HG)	(F)	(GR/LB)

9.29 130.30 10.07 7.8 29.83 67.5 53.0  
9.77 125.10 9.93 7.9 29.94 68.0 54.0  
( 9.03)( 127.70)(10.00)( 7.9)  
- 0.2% -11.7% -12.0% + 5.4%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 350/ 4500 2.8/ 2.6  
2500 R.P.M. 425/ 5000 0.8/ 0.8  
LOW CRUISE SPEED 25 M.P.H. 100/ 1300 0.5/ 0.5  
HIGH CRUISE SPEED 39 M.P.H. 75/ 1000 0.6/ 0.6  
MOTORING 2000/10000 3.0/ 2.8  
11 INCH VACUUM 2000 R.P.M. 150/ 1900 0.8/ 0.8  
3 INCH VACUUM 2000 R.P.M. 125/ 1500 4.2/ 4.0

HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
175/\*\*\*\*\* 0.6/ 0.6  
50/\*\*\*\*\* 0.6/ 0.5  
25 M.P.H. 60/\*\*\*\*\* 0.3/ 0.3  
39 M.P.H. 50/\*\*\*\*\* 0.7/ 0.7  
1700/\*\*\*\*\* 1.0/ 0.9  
2000 R.P.M. 125/\*\*\*\*\* 0.7/ 0.6  
\*\* 2000 R.P.M. 75/\*\*\*\*\* 4.5/ 4.0

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 70 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BLG52255 LICENSE NO.: 7935LA OWNER'S ID.: 19542  
TUNE UP DATA.

----- DATE OF TUNE UP 5/10/78 ODOMETER READING 45919 HOUR METER READING \*\*\*\*\*  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\* \*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 37 IDLE R.P.M. 650 DWELL 37  
IDLE CO(%) 4.0 TIMING 6BTDC IDLE CO(%) 1.4 TIMING 6BTDC  
IDLE HC(PPM) 120 GAP(INCH) .037 IDLE HC(PPM) 80 GAP(INCH) .030  
PCV CODE 3 AF CODE 2 PCV CODE 1 AF CODE 2  
IDLE AIR/FUEL 13.3 IDLE AIR/FUEL 13.7  
COMMENT: REPLACED PLUGS, POINTS AND ROTOR.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2810 TEST DATE 5/10/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
TEST:NYQ  
TEST 1 10.01 43.30 12.52 9.0 29.87 73.0 46.0  
TEST 2 9.64 43.30 12.52 8.9 29.87 74.0 46.0  
AVERAGE(10.93)( 45.84)(11.56)( 9.0)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
-----  
BMV TEST SERIES NO. 2811 TEST DATE 5/12/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
-----  
5.23 26.55 13.62 8.9 30.25 72.0 45.0  
5.49 38.76 13.47 8.9 30.25 72.5 46.0  
( 5.36)( 32.66)(13.55)( 8.9)  
-50.0% -28.8% +17.2% - 0.6%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 150/ 2000 2.7/ 2.6  
2500 R.P.M. 100/ 1300 1.1/ 1.0  
LOW CRUISE SPEED 25 M.P.H. 100/ 1300 0.2/ 0.2  
HIGH CRUISE SPEED 39 M.P.H. 60/ 700 0.2/ 0.2  
MOTORING 1600/10000 1.5/ 1.4  
11 INCH VACUUM 2000 R.P.M. 75/ 900 0.2/ 0.2  
3 INCH VACUUM 2000 R.P.M. 50/ 500 0.2/ 0.2

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
75/ 1000 0.9/ 0.8  
75/ 1100 0.9/ 0.8  
25 M.P.H. 125/ 1400 0.2/ 0.2  
39 M.P.H. 50/ 600 0.2/ 0.2  
1500/10000 0.8/ 0.7  
2000 R.P.M. 75/ 1000 0.2/ 0.2  
\*\* 2000 R.P.M. 35/ 400 0.2/ 0.2

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: FORD MODEL: P350 MODEL YR.: 59 TRANS. CODE:M4 DISPLACEMENT: 240  
SERIAL NO.: P35J9H20931 LICENSE NO.: 8683LA OWNER'S ID.: 47704  
TUNE UP DATA.

DATE OF TUNE UP 5/18/78 ODOMETER READING 47991 HOUR METER READING 870.4

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

IDLE R.P.M. 750 DWELL 36  
IDLE CO(%) 6.0 TIMING 0BTDC  
IDLE HC(PPM) 410 GAP(INCH) .033  
PCV CODE 5 AF CODE 3  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

IDLE R.P.M. 700 DWELL 40  
IDLE CO(%) 1.8 TIMING 6BTDC  
IDLE HC(PPM) 160 GAP(INCH) .030  
PCV CODE 5 AF CODE 2  
IDLE AIR/FUEL

COMMENT: REPLACED POINTS AND ROTOR.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2814 TEST DATE 5/18/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 10.24 78.37 7.13 13.7 30.07 67.5 59.0  
TEST 2 9.21 81.68 7.00 13.9 30.07 67.5 59.0  
AVERAGE( 9.73)( 80.03)( 7.07)(13.8)

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

IDLE 300/\*\*\*\*\* 6.2/ 5.6  
2500 R.P.M. 65/\*\*\*\*\* 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 150/\*\*\*\*\* 0.1/ 0.1  
HIGH CRUISE SPEED 40 M.P.H. 125/\*\*\*\*\* 0.3/ 0.2  
MOTORING 2000/\*\*\*\*\* 5.0/ 4.5  
11 INCH VACUUM 2000 R.P.M. 175/\*\*\*\*\* 0.3/ 0.3  
3 INCH VACUUM 2000 R.P.M. 125/\*\*\*\*\* 3.9/ 3.6

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2815 TEST DATE 5/22/78  
6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

5.41 35.54 6.66 15.3 30.15 80.0 35.0  
5.34 47.11 5.62 15.2 30.15 80.0 35.0  
( 5.38)( 41.33)( 6.24)(15.3)  
-44.7% -48.4% -11.7% +10.5%

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

150/\*\*\*\*\* 2.0/ 1.9  
50/\*\*\*\*\* 0.3/ 0.2  
25 M.P.H. 150/\*\*\*\*\* 0.1/ 0.1  
40 M.P.H. 125/\*\*\*\*\* 0.2/ 0.2  
1500/\*\*\*\*\* 1.0/ 0.9  
2000 R.P.M. 125/\*\*\*\*\* 0.2/ 0.2  
\*\* 2000 R.P.M. 125/\*\*\*\*\* 3.2/ 2.9

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 8,000 MAKE: FORD MODEL: P350 MODEL YR.: 59 TRANS. CODE:M4 DISPLACEMENT: 240  
SERIAL NO.: P35J9H20928 LICENSE NO.: 8070LA OWNER'S ID.: 47718  
TUNE UP DATA.

DATE OF TUNE UP 6/26/78 ODOMETER READING 43859 HOUR METER READING 2458.3

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 830 DWELL 40  
IDLE CO(%) 9.2 TIMING 4BTDC  
IDLE HC(PPM) 500 GAP(INCH) .034  
PCV CODE 5 AF CODE 2  
IDLE AIR/FUEL 12.1

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 39  
IDLE CO(%) 0.5 TIMING 4BTDC  
IDLE HC(PPM) 200 GAP(INCH) .034  
PCV CODE 5 AF CODE 2  
IDLE AIR/FUEL 14.0

COMMENT: REPLACED POINTS, CONDENSER, ROTOR, CAP. WIRE SET. COPPER VACUUM ADVANCE LINE, CARB POWER ENRICHMENT VALVE AND THE PIN - KEYING THE DISTRIBUTOR DRIVE TO THE OIL PUMP SHAFT.

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2818 TEST DATE 6/ 6/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2827 TEST DATE 6/26/78  
6000 LB/13.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.28 177.50 2.40 11.2 30.12 75.5 42.0  
TEST 2 12.59 175.20 2.22 11.5 30.12 75.5 40.0  
AVERAGE(12.94)( 176.35)( 2.31)(11.4)

10.28 141.50 2.00 11.3 30.11 80.5 70.0  
10.29 140.20 1.81 11.4 30.11 80.0 73.0  
(10.28)( 143.00)( 1.91)(11.4)  
-20.5% -18.4% -17.5% + 0.0%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED

HC(PPM) CO(%)

HC(PPM) CO(%)

(READING FROM ANALYZER 5/READING FROM ANALYZER 2)

(READING FROM ANALYZER 4/READING FROM ANALYZER 2)

IDLE 375/\*\*\*\*\* 10.0/10.0  
2500 R.P.M. 200/\*\*\*\*\* 4.1/ 3.8  
LOW CRUISE SPEED 25 M.P.H. 250/\*\*\*\*\* 3.6/ 3.3  
HIGH CRUISE SPEED 40 M.P.H. 225/\*\*\*\*\* 2.7/ 2.5  
MOTORING 2000/\*\*\*\*\* 7.0/ 6.4  
11 INCH VACUUM 2000 R.P.M. 325/\*\*\*\*\* 2.6/ 2.4  
3 INCH VACUUM 2000 R.P.M. 300/\*\*\*\*\* 8.6/ 8.1

\*\* 2000 R.P.M. 300/\*\*\*\*\* 8.4/ 8.1

HEAVY DUTY VEHICLE TESTS PERFORMED BY THE BUREAU OF MOTOR VEHICLE POLLUTION CONTROL, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ON CONTRACT 68-01-4319.  
PROGRAM: HEAVY DUTY VEHICLE INSPECTION/MAINTENANCE STUDY.

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVK72245 LICENSE NO.: 6343LA OWNER'S ID.: 11338  
TUNE UP DATA.

DATE OF TUNE UP 7/13/78 ODOMETER READING 31658 HOUR METER READING \*\*\*\*\*

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 530 DWELL 36  
IDLE CO(%) 9.7 TIMING 10BTDC  
IDLE HC(PPM) 460 GAP(INCH) .032  
PCV CODE 3 AF CODE 3  
IDLE AIR/FUEL

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 850 DWELL 35  
IDLE CO(%) 0.7 TIMING 6BTDC  
IDLE HC(PPM) 90 GAP(INCH) .033  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*

BMV TEST SERIES NO. 2835 TEST DATE 7/12/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

BMV TEST SERIES NO. 2836 TEST DATE 7/14/78  
11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)

TEST:NYQ

TEST 1 13.62 95.63 12.12 8.3 30.17 83.0 52.0  
TEST 2 8.74 77.11 12.94 8.8 30.17 84.0 53.0  
AVERAGE(11.18)( 86.37)(13.03)( 8.6)

3.17 26.59 12.40 8.0 30.15 81.5 81.0  
2.53 25.89 11.68 8.0 30.15 82.0 82.0  
( 2.84)( 26.24)(12.14)( 8.0)  
-74.6% -69.6% - 6.8% - 6.4%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE

ENGINE SPEED	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
IDLE	375/*****	7.3/ 7.3
2500 R.P.M.	100/*****	0.6/ 0.6
LOW CRUISE SPEED 25 M.P.H.	200/*****	0.2/ 0.2
HIGH CRUISE SPEED 40 M.P.H.	75/*****	0.2/ 0.2
MOTORING	2000/*****	4.5/ 4.4
11 INCH VACUUM 2000 R.P.M.	75/*****	0.2/ 0.2
3 INCH VACUUM 2000 R.P.M.	50/*****	0.2/ 0.2

	HC(PPM)	CO(%)
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)		
	140/*****	0.7/ 0.7
	65/*****	0.6/ 0.6
25 M.P.H.	125/*****	0.1/ 0.1
40 M.P.H.	50/*****	0.2/ 0.2
	600/*****	1.5/ 1.6
2000 R.P.M.	35/*****	0.3/ 0.3
** 2000 R.P.M.	25/*****	0.2/ 0.2

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 17,000 MAKE: FORD MODEL: P500 MODEL YR.: 72 TRANS. CODE:M5 DISPLACEMENT: 300  
SERIAL NO.: P50BVP55340 LICENSE NO.: 7980LA OWNER'S ID.: 18056  
TUNE UP DATA.

DATE OF TUNE UP 7/31/78 ODOMETER READING 23426 HOUR METER READING 1087.8  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 510 DWELL 35  
IDLE CO(%) 8.2 TIMING 20BTD  
IDLE HC(PPM) 1100 GAP(INCH)  
PCV CODE 2 AF CODE 4  
IDLE AIR/FUEL  
\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 650 DWELL 35  
IDLE CO(%) 3.2 TIMING 6BTD  
IDLE HC(PPM) 140 GAP(INCH) .034  
PCV CODE 1 AF CODE 1  
IDLE AIR/FUEL  
COMMENT: REPLACED PLUGS, POINTS, CAP, ROTOR AND WIRE SET. CARB WAS DISASSEMBLED AND CLEANED.

----- TEST RESULTS -----

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2839 TEST DATE 7/27/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 10.47 61.49 10.04 10.2 30.02 84.0 105.0  
TEST 2 9.14 61.39 12.70 10.4 30.02 84.5 107.0  
AVERAGE( 9.81)( 61.44)(11.37)(10.3)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2845 TEST DATE 8/ 4/78  
11500 LB/23.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
5.06 37.88 10.43 9.4 30.17 80.5 99.0  
4.58 33.83 11.29 9.6 30.17 80.5 99.0  
( 4.82)( 35.86)(10.86)( 9.5)  
-50.8% -41.6% - 4.5% - 7.8%

CHANGE IN AVERAGE AFTER TUNE UP

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 700/10000 6.8/ 6.8  
2500 R.P.M. 2000/10000 0.3/ 0.3  
LOW CRUISE SPEED 25 M.P.H. 175/ 1900 0.6/ 0.6  
HIGH CRUISE SPEED 40 M.P.H. 50/ 700 0.1/ 0.1  
MOTORING 2000/10000 3.0/ 3.0  
11 INCH VACUUM 2000 R.P.M. 75/ 1000 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 65/ 800 0.1/ 0.1

HC(PPM) CO(%)  
-----  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
100/ 1200 3.0/ 3.0  
125/ 1500 0.9/ 0.9  
25 M.P.H. 125/ 1400 0.4/ 0.4  
40 M.P.H. 50/ 600 0.2/ 0.1  
2000 R.P.M. 2000/10000 1.5/ 1.5  
50/ 600 0.2/ 0.1  
\*\* 2000 R.P.M. 35/ 400 0.2/ 0.1

VEHICLE DATA.

GROSS VEHICLE WEIGHT: 15,000 MAKE: FORD MODEL: P500 MODEL YR.: 71 TRANS. CODE:M4 DISPLACEMENT: 300  
SERIAL NO.: P50BVK15849 LICENSE NO.: 6307LA OWNER'S ID.: 10715  
TUNE UP DATA.

DATE OF TUNE UP 8/ 9/78 ODOMETER READING 32234 HOUR METER READING 1159.9  
\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
IDLE R.P.M. 750 DWELL 39  
IDLE CO(%) 2.8 TIMING 10BTDC  
IDLE HC(PPM) 100 GAP(INCH) .032  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.3  
COMMENT: REPLACED ROTOR.

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
IDLE R.P.M. 700 DWELL 40  
IDLE CO(%) 0.5 TIMING 0BTDC  
IDLE HC(PPM) 60 GAP(INCH) .032  
PCV CODE 2 AF CODE 2  
IDLE AIR/FUEL 13.7

TEST RESULTS

\*\*\*\*\* BEFORE TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2846 TEST DATE 8/ 9/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
TEST:NYQ  
TEST 1 6.10 30.81 13.80 9.1 30.19 87.5 85.0  
TEST 2 5.52 27.41 16.59 9.0 30.18 88.0 84.0  
AVERAGE( 5.81)( 29.11)(15.20)( 9.1)

\*\*\*\*\* AFTER TUNE UP \*\*\*\*\*  
BMV TEST SERIES NO. 2847 TEST DATE 8/11/78  
DYNAMOMETER INERTIA/POWER SETTINGS: 11000 LB/22.0 H.P. AT 40 MPH  
HC CO NOX MPG BAROM TEMP HUMID  
(G/MI) (G/MI) (G/MI) (IN.HG) (F) (GR/LB)  
6.86 21.18 12.00 8.3 30.15 84.5 90.0  
5.42 17.11 11.51 8.5 30.15 84.5 90.0  
( 5.14)( 10.15)(11.76)( 8.4)

CHANGE IN AVERAGE AFTER TUNE UP - 5.7% 34.2% -22.6% - 7.2%

TEST:KEY MODE  
ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
IDLE 100/ 1300 1.4/ 1.3  
2500 R.P.M. 25/ 300 0.2/ 0.2  
LOW CRUISE SPEED 25 M.P.H. 125/ 1500 0.2/ 0.2  
HIGH CRUISE SPEED 40 M.P.H. 50/ 600 0.1/ 0.1  
MOTORING 2000/10000 0.5/ 0.6  
11 INCH VACUUM 2000 R.P.M. 60/ 700 0.1/ 0.1  
3 INCH VACUUM 2000 R.P.M. 35/ 500 0.1/ 0.1

ENGINE SPEED HC(PPM) CO(%)  
(READING FROM ANALYZER 5/READING FROM ANALYZER 2)  
140/ 1700 0.3/ 0.3  
35/ 400 0.2/ 0.2  
25 M.P.H. 125/ 1400 0.2/ 0.2  
40 M.P.H. 35/ 500 0.2/ 0.1  
2 00/10000 0.4/ 0.4  
2000 R.P.M. 50/ 600 0.2/ 0.1  
\*\* 2000 R.P.M. 35/ 400 0.1/ 0.1

## RESULTS OF RETROFIT TESTS

Vehicles in the RETROFIT study were tuned up and tested to measure their "baseline" pollutant emissions and fuel economy. A pollution control device was then installed and the vehicles were again tested. An hour meter was also installed to determine the number of hours of operation of the engine during study. At periodic intervals the vehicles were retested with the control device and, if possible, without the device.

The result presented in the Appendix are formatted printouts of the test set records on the TEST DATA TAPE discussed in Appendix I. Before using the printouts Appendix I should be consulted.

In the printouts each vehicle is identified by its owner's vehicle identification number. The gross vehicle weight in pounds, the make, model, model year, engine displacement in cubic inches and the transmission type code (see Transmission Code Table) are given. Following these data all the RETROFIT test sets for the vehicle are printed in the order in which they were performed.

Measurements from the New York Quick and C39 or C39H driving cycle tests and the Clayton\* Keymode Test are given. The odometer and hour meter readings are listed. Comments by the test personnel are also printed.

Values of ambient atmospheric parameters and engine data were recorded but are not printed. They are available on the TEST DATA TAPE.

\*Clayton Manufacturing Corp., El Monte, California.

\*\*\*\*\*  
 \*  
 \* VEHICLE IDENTIFICATION T49 \*  
 \* WEIGHT 10000 YEAR 69 MAKE CHEVROLET MODEL P30 TRANSMISSION A3 DISPLACEMENT 307 \*  
 \*  
 \*\*\*\*\*

TEST SET 1075 DATE 12/31/73

ID T49

ODOMETER                    HOUR METER    0.0  
 GENERAL COMMENT    UOP CATALYST

TEST TYPE 72H    HC    1.46G/MI    CO    59.89G/MI    NOX 11.78G/MI    M.P.G.    7.6  
 TEST TYPE 72H    HC    1.26G/MI    CO    52.20G/MI    NOX 11.60G/MI    M.P.G.    7.5

KEY MODE TEST-ANALYZER NUMBER 3                    (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE    81    2500 R.P.M.                    30M.P.H.    144    50M.P.H.    72  
 CARBON MONOX-IDLE    0.0    2500 R.P.M.                    30M.P.H.    0.0    50M.P.H.    0.1

TEST SET 1076 DATE 01/02/74

ID T49

ODOMETER                    HOUR METER    0.7  
 GENERAL COMMENT    BASELINE

TEST TYPE 72H    HC    3.23G/MI    CO    68.58G/MI    NOX 12.51G/MI    M.P.G.    8.1  
 TEST TYPE 72H    HC    3.19G/MI    CO    62.84G/MI    NOX 12.70G/MI    M.P.G.    8.0

KEY MODE TEST-ANALYZER NUMBER 3                    (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE    1500    2500 R.P.M.                    30M.P.H.    1380    50M.P.H.    1050  
 CARBON MONOX-IDLE    0.2    2500 R.P.M.                    30M.P.H.    0.9    50M.P.H.    0.5

TEST SET 1245 DATE 03/22/74

ID T49

ODOMETER    6952                    HOUR METER    50.2  
 GENERAL COMMENT    UOP CATALYST

TEST TYPE 72H    HC    1.29G/MI    CO    59.44G/MI    NOX 11.77G/MI    M.P.G.    8.0

KEY MODE TEST-ANALYZER NUMBER 3                    (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE    100    2500 R.P.M.                    30M.P.H.    130    50M.P.H.    60  
 CARBON MONOX-IDLE    0.1    2500 R.P.M.                    30M.P.H.    0.0    50M.P.H.    0.0

TEST SET 1247 DATE 03/22/74

ID T49

ODOMETER    6960                    HOUR METER    50.9  
 GENERAL COMMENT    BASELINE

TEST TYPE 72H    HC    4.81G/MI    CO    93.69G/MI    NOX 12.96G/MI    M.P.G.    8.1

TEST SET 1350 DATE 05/13/74

ID T49

ODOMETER 7260 HOUR METER 78.8  
 GENERAL COMMENT UOP CATALYST

TEST TYPE 72H	HC	1.26G/MI	CO	42.34G/MI	NOX	10.70G/MI	M.P.G.	8.4
TEST TYPE NYQ	HC	1.31G/MI	CO	3.74G/MI	NOX	11.46G/MI	M.P.G.	9.26

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	200	2500 R.P.M.	30M.P.H.	260	50M.P.H.	130
CARBON MONOX-IDLE	0.1	2500 R.P.M.	30M.P.H.	0.0	50M.P.H.	0.0

TEST SET 1355 DATE 5/15/74

ID T49

ODOMETER 7463 HOUR METER 86.3  
 GENERAL COMMENT BASELINE  
 SCOTT 1 FID WAS USED.

TEST TYPE 72H	HC	4.79G/MI	CO	108.50G/MI	NOX	9.94G/MI	M.P.G.	8.6
TEST TYPE NYQ	HC	5.66G/MI	CO	52.78G/MI	NOX	13.67G/MI	M.P.G.	8.0

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	2340	2500 R.P.M.	30M.P.H.	2160	50M.P.H.	1830
CARBON MONOX-IDLE	0.7	2500 R.P.M.	30M.P.H.	0.3	50M.P.H.	0.7

TEST SET 1754 DATE 03/05/75

ID T49

ODOMETER 8342 HOUR METER 146.7  
 GENERAL COMMENT UOP CATALYST

TEST TYPE 72H	HC	1.66G/MI	CO	48.63G/MI	NOX	10.99G/MI	M.P.G.	8.4
TEST TYPE NYQ	HC	1.02G/MI	CO	1.75G/MI	NOX	12.59G/MI	M.P.G.	8.4

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)

HYDROCARBONS-IDLE	75	2500 R.P.M.	75	30M.P.H.	160	50M.P.H.	80
CARBON MONOX-IDLE	100	2500 R.P.M.	50	30M.P.H.	100	50M.P.H.	320

TEST SET 1757 DATE 03/06/75

ID T49

ODOMETER 8359 HOUR METER 148.9  
 GENERAL COMMENT BASELINE

TEST TYPE 72H	HC	5.31G/MI	CO	107.20G/MI	NOX	10.56G/MI	M.P.G.	8.4
TEST TYPE NYQ	HC	5.35G/MI	CO	53.23G/MI	NOX	12.46G/MI	M.P.G.	8.5

KEY MODE TEST-ANALYZER NUMBER 1 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3300	2500 R.P.M.	1500	30M.P.H.	2500	50M.P.H.	1800
CARBON MONOX-IDLE	2.1	2500 R.P.M.	0.6	30M.P.H.	1.1	50M.P.H.	0.9

TEST SET 1792 DATE 04/07/75

ID T49

ODOMETER 8695 HOUR METER 173.5  
 GENERAL COMMENT UOP CATALYST WITH  
 TEMPERATURE SENSITIVE CUT-OFF FOR AIR INJECTION. DIVERTER VALVE  
 MAY HAVE BEEN INOPERATIVE.

TEST TYPE 72H HC 2.07G/MI CO 79.40G/MI NOX 9.40G/MI M.P.G. 8.0  
TEST TYPE NYQ HC 1.09G/MI CO 5.25G/MI NOX 10.35G/MI M.P.G. 8.3

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 2800 2500 R.P.M. 200 30M.P.H. 120 50M.P.H. 150  
CARBON MONOX-IDLE 2.5 2500 R.P.M. 150 30M.P.H. 200 50M.P.H. 450

TEST SET 1793 DATE 04/07/75

ID T49

ODOMETER 8711 HOUR METER 174.4  
GENERAL COMMENT UOP CATALYST WITH NEW  
DIVERTER VALVE ON AIR PUMP.

TEST TYPE 72H HC 1.62G/MI CO 58.01G/MI NOX 8.98G/MI M.P.G. 8.2  
TEST TYPE NYQ HC 1.00G/MI CO 4.32G/MI NOX 10.37G/MI M.P.G. 8.4

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1500 2500 R.P.M. 100 30M.P.H. 160 50M.P.H. 130  
CARBON MONOX-IDLE 0.9 2500 R.P.M. 120 30M.P.H. 220 50M.P.H. 250

TEST SET 1800 DATE 04/10/75

ID T49

ODOMETER 8736 HOUR METER 177.3  
GENERAL COMMENT BASELINE

TEST TYPE 72H HC 4.43G/MI CO 82.83G/MI NOX 11.31G/MI M.P.G. 8.6  
TEST TYPE NYQ HC 1.77G/MI CO 23.94G/MI NOX 12.45G/MI M.P.G. 9.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 2500 R.P.M. 800 30M.P.H. 1500 50M.P.H. 1200  
CARBON MONOX-IDLE 1.2 2500 R.P.M. 0.4 30M.P.H. 0.2 50M.P.H. 1.3

TEST SET 1802 DATE 04/11/75

ID T49

ODOMETER 8754 HOUR METER 178.7  
GENERAL COMMENT UOP CATALYST WITH  
OVERTEMPERATURE CUT-OFF FOR AIR INJECTION RECONNECTED

TEST TYPE 72H HC 1.32G/MI CO 48.43G/MI NOX 9.85G/MI M.P.G. 8.8  
TEST TYPE NYQ HC 1.10G/MI CO 2.36G/MI NOX 11.97G/MI M.P.G. 8.9

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 175 2500 R.P.M. 60 30M.P.H. 160 50M.P.H. 225  
CARBON MONOX-IDLE 150 2500 R.P.M. 75 30M.P.H. 90 50M.P.H. 650

TEST SET 1852 DATE 05/21/75

ID T49

ODOMETER 9677 HOUR METER 229.6  
GENERAL COMMENT UOP CATALYST WITH  
OVERTEMP. CUT-OFF CONNECTED

TEST TYPE 72H HC 2.22G/MI CO 83.16G/MI NOX 11.54G/MI M.P.G. 7.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 350 2500 R.P.M. 100 30M.P.H. 175 50M.P.H. 80  
CARBON MONOX-IDLE 70 2500 R.P.M. 40 30M.P.H. 540 50M.P.H. 650

TEST SET 1853 DATE 05/21/75

ID T49

ODOMETER 9686 HOUR METER 230.5  
GENERAL COMMENT UOP CATALYST WITH  
OVERTEMP. CUT-OFF DISCONNECTED

TEST TYPE 72H HC 1.46G/MI CO 63.84G/MI NOX 11.32G/MI M.P.G. 7.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 450 2500 R.P.M. 150 30M.P.H. 160 50M.P.H. 70  
CARBON MONOX-IDLE 50 2500 R.P.M. 30 30M.P.H. 100 50M.P.H. 440

TEST SET 1854 DATE 05/21/75

ID T49

ODOMETER 9711 HOUR METER 231.6  
GENERAL COMMENT BASELINE

TEST TYPE 72H HC 6.03G/MI CO 120.40G/MI NOX 11.55G/MI M.P.G. 8.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 3000 2500 R.P.M. 1100 30M.P.H. 2100 50M.P.H. 1300  
CARBON MONOX-IDLE 1.0 2500 R.P.M. 0.3 30M.P.H. 0.9 50M.P.H. 1.7

TEST SET 1958 DATE 08/22/75

ID T49

ODOMETER 11670 HOUR METER 357.4  
GENERAL COMMENT UOP CATALYST WITH  
OVERTEMP. CUT-OFF

TEST TYPE 72H HC 9.71G/MI CO 161.90G/MI NOX 9.76G/MI M.P.G. 7.1

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 8000 2500 R.P.M. 1000 30M.P.H. 1200 50M.P.H. 150  
CARBON MONOX-IDLE 6.8 2500 R.P.M. 0.7 30M.P.H. 0.8 50M.P.H. 0.1

TEST SET 1960 DATE 08/26/75

ID T49

ODOMETER 11694 HOUR METER 360.0  
GENERAL COMMENT BASELINE, AFTER TUNE UP

TEST TYPE 72H HC 7.48G/MI CO 129.80G/MI NOX 10.24G/MI M.P.G. 8.1

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 5500 2500 R.P.M. 1100 30M.P.H. 1800 50M.P.H. 1500  
CARBON MONOX-IDLE 1.2 2500 R.P.M. 0.4 30M.P.H. 0.3 50M.P.H. 1.1

## TEST SET 1963 DATE 08/27/75

ID T49

ODOMETER 11726 HOUR METER 362.2  
 GENERAL COMMENT UOP CATALYST WITH  
 OVERTEMP. CUT-OFF

TEST TYPE 72H HC 3.60G/MI CO 119.10G/MI NOX 8.90G/MI M.P.G. 8.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 0400 2500 R.P.M. 200 30M.P.H. 280 50M.P.H. 470  
 CARBON MONOX-IDLE 170 2500 R.P.M. 120 30M.P.H. 140 50M.P.H. 5000

## TEST SET 1970 DATE 09/04/75

ID T49

ODOMETER 11783 HOUR METER 369.4  
 GENERAL COMMENT UOP CATALYST WITH  
 OVERTEMP. CUT-OFF AND DIVERTER VALVE DISCONNECTED.

TEST TYPE 72H HC 0.80G/MI CO 50.31G/MI NOX 9.85G/MI M.P.G. 8.3

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 250 2500 R.P.M. 300 30M.P.H. 150 50M.P.H. 500  
 CARBON MONOX-IDLE 50 2500 R.P.M. 25 30M.P.H. 25 50M.P.H. 250

## TEST SET 2095 DATE 12/17/75

ID T49

ODOMETER 13873 HOUR METER 533.7  
 GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 6.77G/MI CO 73.42G/MI NOX 14.81G/MI M.P.G. 7.3  
 TEST TYPE NYQ HC 7.01G/MI CO 74.25G/MI NOX 15.55G/MI M.P.G. 7.1

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 2500 R.P.M. 1300 30M.P.H. 1500 40M.P.H. 1750  
 CARBON MONOX-IDLE 1.4 2500 R.P.M. 0.4 30M.P.H. 0.2 40M.P.H. 0.3

## TEST SET 2102 DATE 12/22/75

ID T49

ODOMETER 13982 HOUR METER 543.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 9.85G/MI CO 66.98G/MI NOX 13.69G/MI M.P.G. 7.2  
 TEST TYPE NYQ HC 9.06G/MI CO 54.54G/MI NOX 13.24G/MI M.P.G. 7.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2400 2500 R.P.M. 1200 30M.P.H. 1600 40M.P.H. 1400  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 30M.P.H. 0.1 40M.P.H. 0.4

## TEST SET 2438 DATE 02/24/77

ID T49

ODOMETER 19031 HOUR METER 948.1  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 7.29G/MI CO 113.10G/MI NOX 10.66G/MI M.P.G. 7.1  
TEST TYPE C39H HC 11.41G/MI CO 224.30G/MI NOX 11.17G/MI M.P.G. 4.9

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 4500 2500 R.P.M. 2000 25M.P.H. 3800 40M.P.H. 3000  
CARBON MONOX-IDLE 2.8 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2

TEST SET 2439 DATE 02/24/77  
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ID T49  
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ODOMETER 19031 HOUR METER 948.1  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 22.10G/MI CO 139.40G/MI NOX 12.97G/MI M.P.G. 7.1  
TEST TYPE C39H HC 40.52G/MI CO 345.10G/MI NOX 10.48G/MI M.P.G. 4.9

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 20000 2500 R.P.M. 3500 25M.P.H. 4100 40M.P.H. 3000  
CARBON MONOX-IDLE 9.4 2500 R.P.M. 0.3 25M.P.H. 0.1 40M.P.H. 0.2

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 \* VEHICLE IDENTIFICATION 10704 \*  
 \* WEIGHT 15000 YEAR 71 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2190 DATE 04/23/76

ID 10704

ODOMETER 23772

HR METER

GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	11.51G/MI	CO	138.30G/MI	NOX	9.79G/MI	M.P.G.	8.3
TEST TYPE NYQ	HC	11.73G/MI	CO	132.00G/MI	NOX	10.67G/MI	M.P.G.	8.4
TEST TYPE C39	HC	20.85G/MI	CO	139.70G/MI	NOX	14.13G/MI	M.P.G.	5.5
TEST TYPE C39	HC	17.62G/MI	CO	165.80G/MI	NOX	14.26G/MI	M.P.G.	5.5

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	185	2500 R.P.M.	60	25M.P.H.	100	40M.P.H.	100	MTR	2000	11-IN.	3-IN.	50
CARBON MONOX-IDLE	2.6	2500 R.P.M.	0.6	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.0	11-IN.	3-IN.	0.8
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2500	2500 R.P.M.	1000	25M.P.H.	1200	40M.P.H.	1800	MTR	35000	11-IN.	3-IN.	700
CARBON MONOX-IDLE	2.9	2500 R.P.M.	0.6	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.1	11-IN.	3-IN.	0.8

TUNE UP COMMENT A '73 MOTORCRAFT CARB WAS INSTALLED.

TEST SET 2192 DATE 04/26/76

ID 10704

ODOMETER 23795

HR METER 0.8

GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	11.21G/MI	CO	63.07G/MI	NOX	13.11G/MI	M.P.G.	8.2
TEST TYPE NYQ	HC	9.36G/MI	CO	68.35G/MI	NOX	12.19G/MI	M.P.G.	8.4
TEST TYPE C39	HC	17.16G/MI	CO	83.75G/MI	NOX	13.99G/MI	M.P.G.	5.6
TEST TYPE C39	HC	14.74G/MI	CO	99.61G/MI	NOX	14.79G/MI	M.P.G.	5.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	90	2500 R.P.M.	25	25M.P.H.	100	40M.P.H.	60	MTR	2000	11-IN.	3-IN.	50
CARBON MONOX-IDLE	1.5	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.2	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1500	2500 R.P.M.	400	25M.P.H.	1300	40M.P.H.	800	MTR	23000	11-IN.	3-IN.	800
CARBON MONOX-IDLE	1.6	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.3	11-IN.	3-IN.	0.2

TEST SET 2355 DATE 11/19/76

ID 10704

ODOMETER 25591

HR METER 424.2

GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	9.68G/MI	CO	95.42G/MI	NOX	16.53G/MI	M.P.G.	8.1
TEST TYPE NYQ	HC	9.53G/MI	CO	108.80G/MI	NOX	15.32G/MI	M.P.G.	8.1
TEST TYPE C39H	HC	20.25G/MI	CO	138.40G/MI	NOX	15.96G/MI	M.P.G.	5.7
TEST TYPE C39H	HC	19.09G/MI	CO	169.90G/MI	NOX	16.36G/MI	M.P.G.	5.7

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	275	2500 R.P.M.	450	25M.P.H.	150	40M.P.H.	175	MTR	2000	11-IN.	3-IN.	150
CARBON MONOX-IDLE	6.0	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.1	MTR	4.5	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											

HYDROCARBONS-IDLE	5500	2500 R.P.M.	6500	25M.P.H.	2000	40M.P.H.	2800	MTR	35000	11-IN.	3-IN.	2300
CARBON MONOX-IDLE	5.8	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.1	MTR	4.4	11-IN.	3-IN.	0.1

TEST SET 2648 DATE 10/21/77

ID 10704

ODOMETER 28408 HOUR METER 900.3  
 GENERAL COMMENT '73 MOTORCRAFT CARB.,  
 BEFORE TUNE UP

TEST TYPE NYQ	HC	8.41G/MI	CO	55.32G/MI	NOX	21.80G/MI	M.P.G.	8.7
TEST TYPE NYQ	HC	6.72G/MI	CO	49.17G/MI	NOX	22.07G/MI	M.P.G.	9.4
TEST TYPE C39H	HC	21.00G/MI	CO	101.90G/MI	NOX	25.41G/MI	M.P.G.	5.1
TEST TYPE C39H	HC	18.83G/MI	CO	109.60G/MI	NOX	25.61G/MI	M.P.G.	5.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	475	2500 R.P.M.	2000	25M.P.H.	125	40M.P.H.	275	MTR	2000	11-IN.	3-IN.	200
CARBON MONOX-IDLE	5.7	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.2	MTR	4.3	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE	5.2	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.2	MTR	3.9	11-IN.	3-IN.	0.1

TUNE UP COMMENT REPLACED POINTS. IDLE MIXTURE LIMIT CAP  
 HAD BEEN REMOVED.

TEST SET 2653 DATE 11/04/77

ID 10704

ODOMETER 28424 HOUR METER 903.0  
 GENERAL COMMENT '73 MOTORCRAFT CARB.,  
 AFIER TUNE UP

TEST TYPE NYQ	HC	4.49G/MI	CO	27.97G/MI	NOX	11.05G/MI	M.P.G.	9.4
TEST TYPE NYQ	HC	4.12G/MI	CO	28.99G/MI	NOX	11.88G/MI	M.P.G.	9.4
TEST TYPE C39H	HC	13.68G/MI	CO	71.69G/MI	NOX	11.83G/MI	M.P.G.	6.1
TEST TYPE C39H	HC	9.90G/MI	CO	53.44G/MI	NOX	14.08G/MI	M.P.G.	6.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	100	2500 R.P.M.	75	25M.P.H.	150	40M.P.H.	125	MTR	1900	11-IN.	3-IN.	100
CARBON MONOX-IDLE	1.0	2500 R.P.M.	0.4	25M.P.H.	0.1	40M.P.H.	0.2	MTR	1.5	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE	1.0	2500 R.P.M.	0.4	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.3	11-IN.	3-IN.	0.1

TEST SET 2664 DATE 09/01/78

ID 10704

ODOMETER 32588 HOUR METER 1406.0  
 GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	6.88G/MI	CO	33.54G/MI	NOX	17.89G/MI	M.P.G.	8.3
TEST TYPE NYQ	HC	6.71G/MI	CO	48.40G/MI	NOX	15.60G/MI	M.P.G.	8.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	170	2500 R.P.M.	50	25M.P.H.	100	40M.P.H.	65	MTR	2000	11-IN.	3-IN.	35
CARBON MONOX-IDLE	0.5	2500 R.P.M.	0.3	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.7	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2200	2500 R.P.M.	600	25M.P.H.	1300	40M.P.H.	700	MTR	10000	11-IN.	3-IN.	400
CARBON MONOX-IDLE	0.5	2500 R.P.M.	0.3	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.7	11-IN.	3-IN.	0.1

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 \* VEHICLE IDENTIFICATION 10715 \*  
 \* WEIGHT 15000 YEAR 71 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2184 DATE 04/21/76

ID 10715

ODOMETER 23116 HOUR METER 0.5  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	9.09G/MI	CO	105.40G/MI	NOX	10.29G/MI	M.P.G.	7.7
TEST TYPE NYQ	HC	8.09G/MI	CO	117.10G/MI	NOX	9.98G/MI	M.P.G.	7.9
TEST TYPE C39	HC	16.12G/MI	CO	115.80G/MI	NOX	12.84G/MI	M.P.G.	5.2
TEST TYPE C39	HC	14.47G/MI	CO	152.30G/MI	NOX	13.85G/MI	M.P.G.	4.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	140	2500 R.P.M.	75	25M.P.H.	125	40M.P.H.	50	MTR 1300	11-IN.	3-IN.	30
CARBON MONOX-IDLE	0.7	2500 R.P.M.	0.6	25M.P.H.	0.1	40M.P.H.	0.2	MTR 0.6	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	1500	2500 R.P.M.	1200	25M.P.H.	1800	40M.P.H.	800	MTR 16000	11-IN.	3-IN.	400
CARBON MONOX-IDLE	0.7	2500 R.P.M.	0.6	25M.P.H.	0.1	40M.P.H.	0.2	MTR 0.6	11-IN.	3-IN.	0.2

TUNE UP COMMENT A '73 MOTORCRAFT CARB WAS INSTALLED.

TEST SET 2185 DATE 04/21/76

ID 10715

ODOMETER 23131 HOUR METER 2.3  
 GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	9.14G/MI	CO	83.69G/MI	NOX	10.53G/MI	M.P.G.	8.1
TEST TYPE NYQ	HC	8.68G/MI	CO	94.69G/MI	NOX	9.96G/MI	M.P.G.	8.4
TEST TYPE C39	HC	17.33G/MI	CO	72.76G/MI	NOX	13.05G/MI	M.P.G.	5.6
TEST TYPE C39	HC	14.22G/MI	CO	86.16G/MI	NOX	12.44G/MI	M.P.G.	5.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	300	2500 R.P.M.	100	25M.P.H.	100	40M.P.H.	75	MTR 1400	11-IN.	3-IN.	30
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.2	MTR 0.5	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	2400	2500 R.P.M.	1100	25M.P.H.	1300	40M.P.H.	1300	MTR 15000	11-IN.	3-IN.	700
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.2	MTR 0.5	11-IN.	3-IN.	0.2

TEST SET 2359 DATE 11/24/76

ID 10715

ODOMETER 25276 HOUR METER 277.1  
 GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	5.97G/MI	CO	80.64G/MI	NOX	12.95G/MI	M.P.G.	7.5
TEST TYPE NYQ	HC	5.43G/MI	CO	77.18G/MI	NOX	13.20G/MI	M.P.G.	7.7
TEST TYPE C39H	HC	13.77G/MI	CO	117.20G/MI	NOX	15.36G/MI	M.P.G.	5.2
TEST TYPE C39H	HC	13.30G/MI	CO	122.40G/MI	NOX	16.54G/MI	M.P.G.	5.3

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	125	2500 R.P.M.	50	25M.P.H.	75	40M.P.H.	100	MTR 2000	11-IN.	3-IN.	50
CARBON MONOX-IDLE	5.1	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR 3.2	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										

HYDROCARBONS-IDLE	1800	2500 R.P.M.	700	25M.P.H.	900	40M.P.H.	1700	MTR	25000	11-IN.	3-IN.	700
CARBON MONOX-IDLE	4.9	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	3.3	11-IN.	3-IN.	0.1

TEST SET 2645 DATE 10/17/77

ID 10715

ODOMETER 28806 HOUR METER 729.4  
 GENERAL COMMENT '73 MOTORCRAFT CARB.,  
 QUESTIONABLE RESULTS DUE TO FAILING FUEL PUMP

TEST TYPE NYQ	HC	7.56G/MI	CO	57.42G/MI	NOX	9.16G/MI	M.P.G.	9.1
TEST TYPE NYQ	HC	7.16G/MI	CO	59.33G/MI	NOX	10.81G/MI	M.P.G.	9.3

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	350	2500 R.P.M.	200	25M.P.H.	275	40M.P.H.	350	MTR	2000	11-IN.	3-IN.	250
CARBON MONOX-IDLE	7.0	2500 R.P.M.	0.4	25M.P.H.	0.2	40M.P.H.	0.2	MTR	2.0	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE	6.6	2500 R.P.M.	0.4	25M.P.H.	0.1	40M.P.H.	0.2	MTR	2.0	11-IN.	3-IN.	0.1

TUNE UP COMMENT REPLACED FUEL PUMP, ADJUSTED IDLE SPEED  
 AND IDLE MIX AND INSTALLED NEW LIMIT CAP.

TEST SET 2846 DATE 08/09/78

ID 10715

ODOMETER 32223 HOUR METER 1158.7  
 GENERAL COMMENT '73 MOTORCRAFT CARB.,  
 BEFORE TUNE UP

TEST TYPE NYQ	HC	6.10G/MI	CO	30.81G/MI	NOX	13.80G/MI	M.P.G.	9.1
TEST TYPE NYQ	HC	5.52G/MI	CO	27.41G/MI	NOX	16.59G/MI	M.P.G.	9.0

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	100	2500 R.P.M.	25	25M.P.H.	125	40M.P.H.	60	MTR	2000	11-IN.	3-IN.	35
CARBON MONOX-IDLE	1.4	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.1	MTR	0.6	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1300	2500 R.P.M.	300	25M.P.H.	1500	40M.P.H.	700	MTR	10000	11-IN.	3-IN.	500
CARBON MONOX-IDLE	1.3	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.1	MTR	0.6	11-IN.	3-IN.	0.1

TUNE UP COMMENT REPLACED ROTOR.

TEST SET 2847 DATE 08/11/78

ID 10715

ODOMETER 32240 HOUR METER 1160.6  
 GENERAL COMMENT '73 MOTORCRAFT CARB.,  
 AFTER TUNE UP

TEST TYPE NYQ	HC	6.86G/MI	CO	21.18G/MI	NOX	12.00G/MI	M.P.G.	8.3
TEST TYPE NYQ	HC	5.42G/MI	CO	17.11G/MI	NOX	11.51G/MI	M.P.G.	8.5

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	140	2500 R.P.M.	35	25M.P.H.	125	40M.P.H.	50	MTR	2000	11-IN.	3-IN.	35
CARBON MONOX-IDLE	0.3	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.4	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1600	2500 R.P.M.	400	25M.P.H.	1400	40M.P.H.	600	MTR	10000	11-IN.	3-IN.	400
CARBON MONOX-IDLE	0.3	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.1	MTR	0.4	11-IN.	3-IN.	0.1

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 \* VEHICLE IDENTIFICATION 11338 \*  
 \* WEIGHT 15000 YEAR 71 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2292 DATE 08/23/76

ID 11338

ODOMETER 24937 HOUR METER  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	8.04G/MI	CO	60.03G/MI	NOX	11.91G/MI	M.P.G.	6.9
TEST TYPE NYQ	HC	7.91G/MI	CO	52.03G/MI	NOX	13.39G/MI	M.P.G.	7.2
TEST TYPE C39H	HC	18.28G/MI	CO	78.37G/MI	NOX	16.32G/MI	M.P.G.	4.9
TEST TYPE C39H	HC	15.69G/MI	CO	92.18G/MI	NOX	17.23G/MI	M.P.G.	5.0

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)							
HYDROCARBONS-IDLE 175	2500 R.P.M.	50	25M.P.H.	125	40M.P.H.	75	MTR	2000	11-IN. 3-IN. 50
CARBON MONOX-IDLE 1.6	2500 R.P.M.	0.3	25M.P.H.	0.2	40M.P.H.	0.2	MTR	1.8	11-IN. 3-IN. 0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)							
HYDROCARBONS-IDLE 3000	2500 R.P.M.	800	25M.P.H.	1900	40M.P.H.	1000	MTR	17000	11-IN. 3-IN. 700
CARBON MONOX-IDLE 1.5	2500 R.P.M.	0.3	25M.P.H.	0.2	40M.P.H.	0.2	MTR	2.0	11-IN. 3-IN. 0.1

TEST SET 2295 DATE 08/27/76

ID 11338

ODOMETER 24958 HOUR METER  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	6.89G/MI	CO	50.31G/MI	NOX	9.05G/MI	M.P.G.	6.9
TEST TYPE NYQ	HC	6.72G/MI	CO	60.44G/MI	NOX	9.37G/MI	M.P.G.	6.9
TEST TYPE C39H	HC	18.10G/MI	CO	77.59G/MI	NOX	13.51G/MI	M.P.G.	4.6
TEST TYPE C39H	HC	16.49G/MI	CO	81.97G/MI	NOX	12.47G/MI	M.P.G.	4.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)							
HYDROCARBONS-IDLE 400	2500 R.P.M.	125	25M.P.H.	100	40M.P.H.	50	MTR	900	11-IN. 3-IN. 30
CARBON MONOX-IDLE 0.2	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.1	11-IN. 3-IN. 0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)							
HYDROCARBONS-IDLE 3750	2500 R.P.M.	1800	25M.P.H.	1500	40M.P.H.	900	MTR	8000	11-IN. 3-IN. 600
CARBON MONOX-IDLE 0.2	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.1	11-IN. 3-IN. 0.1

TEST SET 2412 DATE 02/02/77

ID 11338

ODOMETER 26887 HOUR METER  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	12.92G/MI	CO	57.55G/MI	NOX	12.71G/MI	M.P.G.	7.5
TEST TYPE NYQ	HC	10.40G/MI	CO	67.71G/MI	NOX	10.63G/MI	M.P.G.	7.7
TEST TYPE C39H	HC	19.45G/MI	CO	66.31G/MI	NOX	14.43G/MI	M.P.G.	5.1
TEST TYPE C39H	HC	17.34G/MI	CO	68.91G/MI	NOX	13.03G/MI	M.P.G.	5.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)							
HYDROCARBONS-IDLE 500	2500 R.P.M.	100	25M.P.H.	150	40M.P.H.	75	MTR	800	11-IN. 3-IN. 50
CARBON MONOX-IDLE 0.2	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.1	11-IN. 3-IN. 0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)							
HYDROCARBONS-IDLE	2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN. 3-IN.

CARBON MONOX-IDLE 0.2 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2

TEST SET 2413 DATE 02/02/77

ID 11338

ODOMETER 26894

GENERAL COMMENT

DEVICE DISCONNECTED

TEST TYPE NYQ	HC	15.26G/MI	CO	67.77G/MI	NOX	12.66G/MI	M.P.G.	7.5
TEST TYPE NYQ	HC	11.56G/MI	CO	76.55G/MI	NOX	10.45G/MI	M.P.G.	7.8
TEST TYPE C39H	HC	21.58G/MI	CO	105.50G/MI	NOX	12.21G/MI	M.P.G.	5.5
TEST TYPE C39H	HC	18.04G/MI	CO	110.60G/MI	NOX	11.08G/MI	M.P.G.	5.7

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)									
HYDROCARBONS-IDLE 210	2500 R.P.M.	75	25M.P.H.	175	40M.P.H.	150	MTR	2000	11-IN.	3-IN.	100
CARBON MONOX-IDLE 2.4	2500 R.P.M.	0.4	25M.P.H.	0.1	40M.P.H.	0.2	MTR	1.7	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)									
HYDROCARBONS-IDLE	2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE 2.4	2500 R.P.M.	0.4	25M.P.H.	0.1	40M.P.H.	0.2	MTR	1.6	11-IN.	3-IN.	0.2

TEST SET 2607 DATE 08/22/77

ID 11338

ODOMETER 28151

GENERAL COMMENT

ADAKS DEVICE

TEST TYPE NYQ	HC	8.47G/MI	CO	66.29G/MI	NOX	11.81G/MI	M.P.G.	7.6
TEST TYPE C39H	HC	15.66G/MI	CO	71.62G/MI	NOX	18.21G/MI	M.P.G.	5.1

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)									
HYDROCARBONS-IDLE 275	2500 R.P.M.	75	25M.P.H.	75	40M.P.H.	75	MTR	700	11-IN.	3-IN.	50
CARBON MONOX-IDLE 0.2	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.3	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)									
HYDROCARBONS-IDLE	2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE 0.2	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.3	11-IN.	3-IN.	0.2

TEST SET 2608 DATE 08/22/77

ID 11338

ODOMETER 28160

GENERAL COMMENT

DEVICE DISCONNECTED

TEST TYPE NYQ	HC	10.56G/MI	CO	74.96G/MI	NOX	13.90G/MI	M.P.G.	7.1
TEST TYPE C39H	HC	16.31G/MI	CO	144.90G/MI	NOX	17.27G/MI	M.P.G.	5.0

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)									
HYDROCARBONS-IDLE 150	2500 R.P.M.	100	25M.P.H.	75	40M.P.H.	100	MTR	1850	11-IN.	3-IN.	75
CARBON MONOX-IDLE 3.5	2500 R.P.M.	0.7	25M.P.H.	0.2	40M.P.H.	0.2	MTR	2.5	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)									
HYDROCARBONS-IDLE	2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE 3.4	2500 R.P.M.	0.7	25M.P.H.	0.2	40M.P.H.	0.2	MTR	2.4	11-IN.	3-IN.	0.2

TEST SET 2834 DATE 07/12/78

ID 11338

ODOMETER 31642

GENERAL COMMENT

ADAKS DEVICE

TEST TYPE NYQ HC 5.84G/MI CO 28.65G/MI NOX 14.50G/MI M.P.G. 8.6  
 TEST TYPE NYQ HC 5.27G/MI CO 27.95G/MI NOX 14.26G/MI M.P.G. 8.8

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 225 2500 R.P.M. 50 25M.P.H. 200 40M.P.H. 75 MTR 2000 11-IN. 3-IN. 60  
 CARBON MONOX-IDLE 1.3 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.2 MTR 0.3 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 1.4 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.2 MTR 0.3 11-IN. 3-IN. 0.2

TEST SET 2005 DATE 07/12/70

ID 11308

ODOMETER 31650 HOUR METER  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 13.62G/MI CO 95.63G/MI NOX 12.12G/MI M.P.G. 8.3  
 TEST TYPE NYQ HC 8.74G/MI CO 77.11G/MI NOX 13.94G/MI M.P.G. 8.8

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 375 2500 R.P.M. 100 25M.P.H. 200 40M.P.H. 75 MTR 2000 11-IN. 3-IN. 50  
 CARBON MONOX-IDLE 7.3 2500 R.P.M. 0.6 25M.P.H. 0.2 40M.P.H. 0.2 MTR 4.5 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 7.3 2500 R.P.M. 0.6 25M.P.H. 0.2 40M.P.H. 0.2 MTR 4.4 11-IN. 3-IN. 0.2

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 \* VEHICLE IDENTIFICATION 16944 \*  
 \* WEIGHT 15000 YEAR 72 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2263 DATE 07/09/76

ID 16944

ODOMETER 20778 HOUR METER  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ HC 13.92G/MI CO 101.90G/MI NOX 19.29G/MI M.P.G. 7.3  
 TEST TYPE C39H HC 25.58G/MI CO 132.00G/MI NOX 14.61G/MI M.P.G. 4.5

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 120 2500 R.P.M. 60 25M.P.H. 100 40M.P.H. 80 MTR 1000 11-IN. 3-IN. 60  
 CARBON MONOX-IDLE 0.6 2500 R.P.M. 0.5 25M.P.H. 0.1 40M.P.H. 0.2 MTR 0.7 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2100 2500 R.P.M. 1300 25M.P.H. 1300 40M.P.H. 1600 MTR 20000 11-IN. 3-IN. 1000  
 CARBON MONOX-IDLE 0.6 2500 R.P.M. 0.6 25M.P.H. 0.2 40M.P.H. 0.2 MTR 1.3 11-IN. 3-IN. 0.2

TEST SET 2266 DATE 07/15/76

ID 16944

ODOMETER 20919 HOUR METER 0.0  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 19.30G/MI CO 127.20G/MI NOX 15.95G/MI M.P.G. 6.8  
 TEST TYPE C39H HC 26.87G/MI CO 181.30G/MI NOX 24.61G/MI M.P.G. 4.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 260 2500 R.P.M. 50 25M.P.H. 125 40M.P.H. 125 MTR 1000 11-IN. 3-IN. 75  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2

TUNE UP COMMENT ADAKS DEVICE WAS INSTALLED.

TEST SET 2404 DATE 01/28/77

ID 16944

ODOMETER 23283 HOUR METER 492.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 13.09G/MI CO 99.55G/MI NOX 9.29G/MI M.P.G. 8.5  
 TEST TYPE NYQ HC 12.75G/MI CO 119.00G/MI NOX 9.15G/MI M.P.G. 8.5  
 TEST TYPE C39H HC 25.62G/MI CO 100.00G/MI NOX 13.05G/MI M.P.G. 5.7  
 TEST TYPE C39H HC 21.43G/MI CO 110.30G/MI NOX 12.88G/MI M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 160 2500 R.P.M. 50 25M.P.H. 175 40M.P.H. 150 MTR 1100 11-IN. 3-IN. 75  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.3 40M.P.H. 0.2 MTR 0.1 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.3 40M.P.H. 0.2 MTR 0.1 11-IN. 3-IN. 0.2

TEST SET 2405 DATE 01/28/77

ID 16944

ODOMETER 23294 HOUR METER 493.5  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	16.01G/MI	CO	108.10G/MI	NOX	9.47G/MI	M.P.G.	8.1
TEST TYPE NYQ	HC	11.56G/MI	CO	120.00G/MI	NOX	9.67G/MI	M.P.G.	8.6
TEST TYPE C39H	HC	23.58G/MI	CO	130.30G/MI	NOX	11.47G/MI	M.P.G.	5.8
TEST TYPE C39H	HC	18.10G/MI	CO	150.70G/MI	NOX	12.32G/MI	M.P.G.	5.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	125	2500 R.P.M.	75	25M.P.H.	175	40M.P.H.	175	MTR	2000	11-IN.	3-IN.	100
CARBON MONOX-IDLE	2.3	2500 R.P.M.	1.0	25M.P.H.	0.4	40M.P.H.	0.2	MTR	1.2	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE	2.3	2500 R.P.M.	1.0	25M.P.H.	0.4	40M.P.H.	0.2	MTR	1.1	11-IN.	3-IN.	0.2

TEST SET 2579 DATE 07/19/77

ID 16944

ODOMETER 25319 HOUR METER 849.6  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	10.20G/MI	CO	19.24G/MI	NOX	20.47G/MI	M.P.G.	9.4
TEST TYPE C39H	HC	17.42G/MI	CO	39.89G/MI	NOX	24.91G/MI	M.P.G.	6.6

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	225	2500 R.P.M.	75	25M.P.H.	200	40M.P.H.	125	MTR	900	11-IN.	3-IN.	100
CARBON MONOX-IDLE	0.9	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.2	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE	0.9	2500 R.P.M.	0.2	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.2	11-IN.	3-IN.	0.2

TEST SET 2580 DATE 07/19/77

ID 16944

ODOMETER 25325 HOUR METER 850.0  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	13.03G/MI	CO	53.83G/MI	NOX	18.45G/MI	M.P.G.	9.5
TEST TYPE C39H	HC	22.64G/MI	CO	113.10G/MI	NOX	23.47G/MI	M.P.G.	6.7

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	460	2500 R.P.M.	75	25M.P.H.	175	40M.P.H.	175	MTR	2000	11-IN.	3-IN.	125
CARBON MONOX-IDLE	6.6	2500 R.P.M.	0.3	25M.P.H.	0.1	40M.P.H.	0.2	MTR	3.5	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.	3-IN.	
CARBON MONOX-IDLE	6.4	2500 R.P.M.	0.3	25M.P.H.	0.1	40M.P.H.	0.2	MTR	3.4	11-IN.	3-IN.	0.2

TEST SET 2805 DATE 05/04/78

ID 16944

ODOMETER 28730 HOUR METER 1483.2  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	4.92G/MI	CO	15.40G/MI	NOX	16.26G/MI	M.P.G.	9.9
TEST TYPE NYQ	HC	4.75G/MI	CO	15.88G/MI	NOX	17.29G/MI	M.P.G.	10.0

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)		
HYDROCARBONS-IDLE 100 2500 R.P.M.	35 25M.P.H. 125 40M.P.H.	MTR	11-IN.	-IN.
CARBON MONOX-IDLE 0.2 2500 R.P.M.	0.2 25M.P.H. 0.1 40M.P.H.	MTR	11-IN.	-IN.
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)		
HYDROCARBONS-IDLE 1100 2500 R.P.M.	400 25M.P.H. 1500 40M.P.H.	MTR	11-IN.	-IN.
CARBON MONOX-IDLE 0.2 2500 R.P.M.	0.2 25M.P.H. 0.1 40M.P.H.	MTR	11-IN.	-IN.

TFST SET 2806 DATE 05/04/78

ID 16944

ODOMETER 28736 HOUR METER 1484.0  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC 10.64G/MI	CO 70.80G/MI	NOX 14.91G/MI	M.P.G. 9.7
TEST TYPE NYQ	HC 9.54G/MI	CO 74.18G/MI	NOX 17.70G/MI	M.P.G. 9.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)			
HYDROCARBONS-IDLE 375 2500 R.P.M.	100 25M.P.H. 150 40M.P.H. 125 MTR 2000	11-IN.	3-IN.	75	
CARBON MONOX-IDLE 8.6 2500 R.P.M.	0.4 25M.P.H. 0.1 40M.P.H. 0.1 MTR 4.0	11-IN.	3-IN.	0.2	
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)			
HYDROCARBONS-IDLE 7500 2500 R.P.M.	1200 25M.P.H. 1700 40M.P.H. 1400 MTR 10000	11-IN.	3-IN.	800	
CARBON MONOX-IDLE 7.8 2500 R.P.M.	0.4 25M.P.H. 0.1 40M.P.H. 0.1 MTR 3.6	11-IN.	3-IN.	0.2	

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 \* VEHICLE IDENTIFICATION 16952 \*  
 \* WEIGHT 15000 YEAR 72 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2274 DATE 07/28/76

ID 16952

ODOMETER 10267

HOUR METER 0.0

GENERAL COMMENT BASELINE TEST, RESULTS  
 ARE QUESTIONABLE DUE TO DYNO POWER DRIFT.

TEST TYPE NYQ HC 6.16G/MI CO 34.61G/MI NOX 11.81G/MI M.P.G. 11.3  
 TEST TYPE NYQ HC 5.85G/MI CO 34.67G/MI NOX 12.00G/MI M.P.G. 11.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 100 2500 R.P.M. 200 25M.P.H. 50 40M.P.H. 50 MTR 1600 11-IN. 3-IN. 25  
 CARBON MONOX-IDLE 1.7 2500 R.P.M. 1.2 25M.P.H. 0.2 40M.P.H. 0.2 MTR 1.2 11-IN. 3-IN. 0.1  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1300 2500 R.P.M. 2700 25M.P.H. 700 40M.P.H. 700 MTR 15000 11-IN. 3-IN. 500  
 CARBON MONOX-IDLE 1.7 2500 R.P.M. 1.2 25M.P.H. 0.2 40M.P.H. 0.2 MTR 1.2 11-IN. 3-IN. 0.1

TEST SET 2277 DATE 08/02/76

ID 16952

ODOMETER 18286

HOUR METER 1.3

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 8.47G/MI CO 45.62G/MI NOX 12.31G/MI M.P.G. 9.9  
 TEST TYPE NYQ HC 8.16G/MI CO 35.51G/MI NOX 12.76G/MI M.P.G. 10.0

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 200 2500 R.P.M. 350 25M.P.H. 125 40M.P.H. 60 MTR 500 11-IN. 3-IN. 40  
 CARBON MONOX-IDLE 0.5 2500 R.P.M. 0.2 25M.P.H. 0.4 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.1  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 2500 R.P.M. 3000 25M.P.H. 1700 40M.P.H. 1000 MTR 7000 11-IN. 3-IN. 600  
 CARBON MONOX-IDLE 0.4 2500 R.P.M. 0.2 25M.P.H. 0.4 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.1

TEST SET 2452 DATE 03/11/77

ID 16952

ODOMETER 21736

HOUR METER 596.2

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 15.79G/MI CO 15.33G/MI NOX 28.66G/MI M.P.G. 7.7  
 TEST TYPE C39H HC 33.02G/MI CO 28.21G/MI NOX 30.61G/MI M.P.G. 5.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1300 2500 R.P.M. 1500 25M.P.H. 175 40M.P.H. 125 MTR 1400 11-IN. 3-IN. 75  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2

TEST SET 2453 DATE 03/11/77

ID 16952

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ODOMETER 21740      HOUR METER 597.0  
GENERAL COMMENT    DEVICE DISCONNECTED

TEST TYPE NYQ      HC 9.09G/MI      CO 33.64G/MI      NOX 27.81G/MI      M.P.G. 8.0  
TEST TYPE C39H     HC 25.80G/MI      CO 66.19G/MI      NOX 25.63G/MI      M.P.G. 5.7

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 500 2500 R.P.M. 1300 25M.P.H. 175 40M.P.H. 100 MTR 2000 11-IN. 3-IN. 75  
CARBON MONOX-IDLE 2.0 2500 R.P.M. 0.5 25M.P.H. 0.3 40M.P.H. 0.2 MTR 1.2 11-IN. 3-IN. 0.2  
KEY MODE TEST-ANALYZER NUMBER 2      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
CARBON MONOX-IDLE 1.9 2500 R.P.M. 0.5 25M.P.H. 0.3 40M.P.H. 0.2 MTR 1.3 11-IN. 3-IN. 0.2

TEST SET 2584    DATE 07/25/77

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ID 16952  
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ODOMETER 23673      HOUR METER 821.3  
GENERAL COMMENT    ADAKS DEVICE

TEST TYPE NYQ      HC 26.19G/MI      CO 60.11G/MI      NOX 32.21G/MI      M.P.G. 7.7  
TEST TYPE C39H     HC 60.71G/MI      CO 114.90G/MI      NOX 33.70G/MI      M.P.G. 5.7  
COMMENT    ENGINE STALLED 4 TIMES.

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1200 2500 R.P.M. 2000 25M.P.H. 600 40M.P.H. 200 MTR 2000 11-IN. 3-IN. 150  
CARBON MONOX-IDLE 6.4 2500 R.P.M. 0.2 25M.P.H. 0.3 40M.P.H. 0.1 MTR 0.7 11-IN. 3-IN. 0.1  
KEY MODE TEST-ANALYZER NUMBER 2      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
CARBON MONOX-IDLE 6.1 2500 R.P.M. 0.2 25M.P.H. 0.3 40M.P.H. 0.1 MTR 0.7 11-IN. 3-IN. 0.1

TUNE UP COMMENT    ENGINE WOULD NOT RUN WITH DEVICE DISCONNECT

TEST SET 2595    DATE 07/29/77

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ID 16952  
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ODOMETER 23689      HOUR METER 823.1  
GENERAL COMMENT    DEVICE DISCONNECTED,  
AFTER TUNE UP.

TEST TYPE NYQ      HC 11.29G/MI      CO 29.63G/MI      NOX 17.59G/MI      M.P.G. 6.8  
TEST TYPE C39H     HC 15.47G/MI      CO 59.96G/MI      NOX 15.51G/MI      M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 500 2500 R.P.M. 75 25M.P.H. 100 40M.P.H. 75 MTR 1900 11-IN. 3-IN. 50  
CARBON MONOX-IDLE 1.3 2500 R.P.M. 1.3 25M.P.H. 0.4 40M.P.H. 0.2 MTR 0.8 11-IN. 3-IN. 0.2  
KEY MODE TEST-ANALYZER NUMBER      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 R.P.M. M.P.H. M.P.H. MTR 11-IN. -IN.  
CARBON MONOX-IDLE 2500 R.P.M. M.P.H. M.P.H. MTR 11-IN. -IN.

TEST SET 2596    DATE 07/29/77

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ID 16952  
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ODOMETER 23700      HOUR METER 825.0  
GENERAL COMMENT    ADAKS DEVICE

TEST TYPE NYQ      HC 11.29G/MI      CO 28.61G/MI      NOX 14.68G/MI      M.P.G. 7.3  
TEST TYPE C39H     HC 15.26G/MI      CO 38.39G/MI      NOX 16.63G/MI      M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5				(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)								
HYDROCARBONS-IDLE	340	2500	R.P.M.	50	25M.P.H.	75	40M.P.H.	75	MTR	1600	11-IN.	3-IN.	50
CARBON MONOX-IDLE	1.1	2500	R.P.M.	0.3	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.3	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER				(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)								
HYDROCARBONS-IDLE		2500	R.P.M.		M.P.H.		M.P.H.		MTR		11-IN.		-IN.
CARBON MONOX-IDLE		2500	R.P.M.		M.P.H.		M.P.H.		MTR		11-IN.		-IN.

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 \* VEHICLE IDENTIFICATION 18056 \*  
 \* WEIGHT 17000 YEAR 72 MAKE FORD MODEL P500 TRANSMISSION M5 DISPLACEMENT 300 \*  
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TEST SET 2321 DATE 10/01/76

ID 18056

ODOMETER 16767

HOUR METER

GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	10.05G/MI	CO	39.48G/MI	NOX	11.65G/MI	M.P.G.	8.1
TEST TYPE NYQ	HC	9.85G/MI	CO	42.82G/MI	NOX	13.83G/MI	M.P.G.	7.8
TEST TYPE C39H	HC	29.03G/MI	CO	111.40G/MI	NOX	9.69G/MI	M.P.G.	5.3
TEST TYPE C39H	HC	15.87G/MI	CO	101.10G/MI	NOX	13.22G/MI	M.P.G.	5.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)													
HYDROCARBONS-IDLE	175	2500	R.P.M.	75	25M.P.H.	150	40M.P.H.	175	MTR	2000	11-IN.	3-IN.	100
CARBON MONOX-IDLE	2.7	2500	R.P.M.	0.9	25M.P.H.	0.2	40M.P.H.	0.1	MTR	1.7	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)													
HYDROCARBONS-IDLE	2500	2500	R.P.M.	1500	25M.P.H.	1800	40M.P.H.	2300	MTR	25000	11-IN.	3-IN.	1600
CARBON MONOX-IDLE	2.7	2500	R.P.M.	0.8	25M.P.H.	0.2	40M.P.H.	0.1	MTR	1.8	11-IN.	3-IN.	0.1

TEST SET 2325 DATE 10/05/76

ID 18056

ODOMETER 16780

HOUR METER 1.1

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	9.57G/MI	CO	22.15G/MI	NOX	13.72G/MI	M.P.G.	7.7
TEST TYPE NYQ	HC	8.56G/MI	CO	22.81G/MI	NOX	15.16G/MI	M.P.G.	7.5
TEST TYPE C39H	HC	21.61G/MI	CO	46.02G/MI	NOX	12.95G/MI	M.P.G.	5.4
TEST TYPE C39H	HC	16.35G/MI	CO	37.30G/MI	NOX	15.49G/MI	M.P.G.	5.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)													
HYDROCARBONS-IDLE	225	2500	R.P.M.	50	25M.P.H.	100	40M.P.H.	125	MTR	1200	11-IN.	3-IN.	75
CARBON MONOX-IDLE	0.5	2500	R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.1	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)													
HYDROCARBONS-IDLE	2400	2500	R.P.M.	800	25M.P.H.	1200	40M.P.H.	1800	MTR	18000	11-IN.	3-IN.	1000
CARBON MONOX-IDLE	0.4	2500	R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.1	11-IN.	3-IN.	0.1

TEST SET 2463 DATE 03/22/77

ID 18056

ODOMETER 18604

HOUR METER 317.7

GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	8.78G/MI	CO	47.27G/MI	NOX	17.74G/MI	M.P.G.	7.8
TEST TYPE C39H	HC	15.99G/MI	CO	82.16G/MI	NOX	17.24G/MI	M.P.G.	5.7

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)													
HYDROCARBONS-IDLE	75	2500	R.P.M.	75	25M.P.H.	175	40M.P.H.	35					
CARBON MONOX-IDLE	1.8	2500	R.P.M.	1.3	25M.P.H.	1.1	40M.P.H.	0.1					

TEST SET 2464 DATE 03/22/77

ID 18056

ODOMETER 18610

HOUR METER 318.3  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 11.70G/MI CO 30.67G/MI NOX 14.51G/MI M.P.G. 7.5  
TEST TYPE C39H HC 17.89G/MI CO 45.78G/MI NOX 18.68G/MI M.P.G. 5.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 240 2500 R.P.M. 50 25M.P.H. 125 40M.P.H. 25  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 0.2 25M.P.H. 0.5 40M.P.H. 0.1

TEST SET 2838 DATE 07/27/78

ID 18056

ODOMETER 23407

HOUR METER 1085.2  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 10.16G/MI CO 22.31G/MI NOX 11.65G/MI M.P.G. 10.3  
TEST TYPE NYQ HC 9.42G/MI CO 17.94G/MI NOX 13.31G/MI M.P.G. 10.2

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1800 2500 R.P.M. 2000 25M.P.H. 200 40M.P.H. 75 MTR 2000 11-IN. 3-IN. 50  
CARBON MONOX-IDLE 1.3 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.1 MTR 0.2 11-IN. 3-IN. 0.1  
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 10000 2500 R.P.M. 10000 25M.P.H. 2500 40M.P.H. 900 MTR 10000 11-IN. 3-IN. 600  
CARBON MONOX-IDLE 1.3 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.1 MTR 0.2 11-IN. 3-IN. 0.1

TEST SET 2839 DATE 07/27/78

ID 18056

ODOMETER 23412

HOUR METER 1086.9  
GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 10.47G/MI CO 61.49G/MI NOX 10.04G/MI M.P.G. 10.2  
TEST TYPE NYQ HC 9.14G/MI CO 61.39G/MI NOX 12.70G/MI M.P.G. 10.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 700 2500 R.P.M. 2000 25M.P.H. 175 40M.P.H. 75 MTR 2000 11-IN. 3-IN. 65  
CARBON MONOX-IDLE 6.8 2500 R.P.M. 0.3 25M.P.H. 0.6 40M.P.H. 0.1 MTR 3.0 11-IN. 3-IN. 0.1  
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 10000 2500 R.P.M. 10000 25M.P.H. 1900 40M.P.H. 1000 MTR 10000 11-IN. 3-IN. 800  
CARBON MONOX-IDLE 6.8 2500 R.P.M. 0.3 25M.P.H. 0.6 40M.P.H. 0.1 MTR 3.0 11-IN. 3-IN. 0.1

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 \* VEHICLE IDENTIFICATION 19542 \*  
 \* WEIGHT 15000 YEAR 70 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2340 DATE 10/28/76

ID 19542

ODOMETER 37063

HOUR METER  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	7.65G/MI	CO	52.94G/MI	NOX	14.79G/MI	M.P.G.	7.5
TEST TYPE NYQ	HC	6.03G/MI	CO	44.10G/MI	NOX	15.19G/MI	M.P.G.	7.8
TEST TYPE C39H	HC	16.00G/MI	CO	53.42G/MI	NOX	18.14G/MI	M.P.G.	5.2
TEST TYPE C39H	HC	10.14G/MI	CO	45.56G/MI	NOX	18.24G/MI	M.P.G.	5.3

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	125	2500 R.P.M.	75	25M.P.H.	75	40M.P.H.	125	MTR 2000	11-IN.	3-IN.	75
CARBON MONOX-IDLE	1.8	2500 R.P.M.	0.7	25M.P.H.	0.2	40M.P.H.	0.2	MTR 1.7	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	1800	2500 R.P.M.	1000	25M.P.H.	1000	40M.P.H.	2000	MTR 15000	11-IN.	3-IN.	1000
CARBON MONOX-IDLE	1.7	2500 R.P.M.	0.6	25M.P.H.	0.2	40M.P.H.	0.2	MTR 1.6	11-IN.	3-IN.	0.2

TEST SET 2341 DATE 11/03/76

ID 19542

ODOMETER 37085

HOUR METER 0.7  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	7.24G/MI	CO	29.59G/MI	NOX	15.04G/MI	M.P.G.	7.7
TEST TYPE NYQ	HC	8.92G/MI	CO	37.76G/MI	NOX	13.60G/MI	M.P.G.	8.1
TEST TYPE C39H	HC	18.46G/MI	CO	42.80G/MI	NOX	15.30G/MI	M.P.G.	5.0
TEST TYPE C39H	HC	13.70G/MI	CO	40.20G/MI	NOX	17.23G/MI	M.P.G.	5.3

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	350	2500 R.P.M.	50	25M.P.H.	75	40M.P.H.	100	MTR 900	11-IN.	3-IN.	75
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 0.2	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	3250	2500 R.P.M.	800	25M.P.H.	1000	40M.P.H.	1500	MTR 10000	11-IN.	3-IN.	1000
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 0.2	11-IN.	3-IN.	0.1

TEST SET 2456 DATE 03/15/77

ID 19542

ODOMETER 39558

HOUR METER 380.6  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	11.28G/MI	CO	90.59G/MI	NOX	10.17G/MI	M.P.G.	8.2
TEST TYPE C39H	HC	19.98G/MI	CO	135.20G/MI	NOX	12.23G/MI	M.P.G.	5.7

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	150	2500 R.P.M.	75	25M.P.H.	100	40M.P.H.	100	MTR 2000	11-IN.	3-IN.	50
CARBON MONOX-IDLE	3.2	2500 R.P.M.	0.9	25M.P.H.	0.2	40M.P.H.	0.2	MTR 1.7	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	2500	2500 R.P.M.	1.0	25M.P.H.	0.2	40M.P.H.	0.2	MTR 1.7	11-IN.	3-IN.	0.2
CARBON MONOX-IDLE	3.3	2500 R.P.M.	1.0	25M.P.H.	0.2	40M.P.H.	0.2	MTR 1.7	11-IN.	3-IN.	0.2

TEST SET 2457 DATE 03/15/77

ID 19542

ODOMETER 39565 HOUR METER 381.0  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 12.84G/MI CO 49.50G/MI NOX 12.02G/MI M.P.G. 8.1  
TEST TYPE C39H HC 18.28G/MI CO 61.36G/MI NOX 13.19G/MI M.P.G. 5.9

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 240 2500 R.P.M. 50 25M.P.H. 75 40M.P.H. 75 MTR 1000 11-IN. 3-IN. 50  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2  
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 0.2 11-IN. 3-IN. 0.2

TEST SET 2616 DATE 09/01/77

ID 19542

ODOMETER 42455 HOUR METER 652.0  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 9.32G/MI CO 31.49G/MI NOX 24.37G/MI M.P.G. 8.1  
TEST TYPE C39H HC 17.74G/MI CO 44.46G/MI NOX 25.72G/MI M.P.G. 5.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 500 2500 R.P.M. 390 25M.P.H. 125 40M.P.H. 100 MTR 1300 11-IN. 3-IN. 75  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.1 MTR 0.2 11-IN. 3-IN. 0.2  
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.1 MTR 0.2 11-IN. 3-IN. 0.2

TEST SET 2617 DATE 09/01/77

ID 19542

ODOMETER 42462 HOUR METER 653.0  
GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 10.17G/MI CO 62.67G/MI NOX 22.22G/MI M.P.G. 7.9  
TEST TYPE C39H HC 14.76G/MI CO 114.50G/MI NOX 27.11G/MI M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 175 2500 R.P.M. 275 25M.P.H. 125 40M.P.H. 150 MTR 2000 11-IN. 3-IN. 75  
CARBON MONOX-IDLE 4.9 2500 R.P.M. 0.9 25M.P.H. 0.1 40M.P.H. 0.1 MTR 2.6 11-IN. 3-IN. 0.2  
KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
CARBON MONOX-IDLE 4.7 2500 R.P.M. 0.8 25M.P.H. 0.1 40M.P.H. 0.1 MTR 2.4 11-IN. 3-IN. 0.2

TEST SET 2809 DATE 05/10/78

ID 19542

ODOMETER 45899 HOUR METER 1121.8  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 8.38G/MI CO 35.24G/MI NOX 10.97G/MI M.P.G. 9.3  
TEST TYPE NYQ HC 9.37G/MI CO 28.50G/MI NOX 11.49G/MI M.P.G. 9.2

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)								
HYDROCARBONS-IDLE 900	2500 R.P.M.	75	25M.P.H.	100	40M.P.H.	MTR	11-IN.	-IN.	
CARBON MONOX-IDLE 0.7	2500 R.P.M.	0.1	25M.P.H.	0.3	40M.P.H.	MTR	11-IN.	-IN.	
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)								
HYDROCARBONS-IDLE 8000	2500 R.P.M.	1000	25M.P.H.	1400	40M.P.H.	MTR	11-IN.	-IN.	
CARBON MONOX-IDLE 0.7	2500 R.P.M.	0.1	25M.P.H.	0.3	40M.P.H.	MTR	11-IN.	-IN.	

TEST SET 2810 DATE 05/10/78

ID 19542

ODOMETER 45905      HOUR METER 1122.9  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	12.21G/MI	CO	48.37G/MI	NOX	10.59G/MI	M.P.G.	9.0
TEST TYPE NYQ	HC	9.64G/MI	CO	43.30G/MI	NOX	12.52G/MI	M.P.G.	8.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)								
HYDROCARBONS-IDLE 150	2500 R.P.M.	100	25M.P.H.	100	40M.P.H.	MTR	11-IN.	-IN.	
CARBON MONOX-IDLE 2.7	2500 R.P.M.	1.1	25M.P.H.	0.2	40M.P.H.	MTR	11-IN.	-IN.	
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)								
HYDROCARBONS-IDLE 2000	2500 R.P.M.	1300	25M.P.H.	1300	40M.P.H.	MTR	11-IN.	-IN.	
CARBON MONOX-IDLE 2.6	2500 R.P.M.	1.0	25M.P.H.	0.2	40M.P.H.	MTR	11-IN.	-IN.	

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 \* VEHICLE IDENTIFICATION 19892 \*  
 \* WEIGHT 15000 YEAR 70 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2284 DATE 08/11/76

ID 19892

ODOMETER 31770

HOUR METER  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	8.33G/MI	CO	39.00G/MI	NOX	13.13G/MI	M.P.G.	7.7
TEST TYPE NYQ	HC	8.13G/MI	CO	42.41G/MI	NOX	13.48G/MI	M.P.G.	7.6
TEST TYPE C39H	HC	22.02G/MI	CO	72.08G/MI	NOX	16.44G/MI	M.P.G.	4.9
TEST TYPE C39H	HC	16.22G/MI	CO	73.01G/MI	NOX	17.72G/MI	M.P.G.	5.1

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	275	2500 R.P.M.	75	25M.P.H.	200	40M.P.H.	125	MTR	1600	11-IN.	3-IN.	50
CARBON MONOX-IDLE	1.4	2500 R.P.M.	0.8	25M.P.H.	0.5	40M.P.H.	0.1	MTR	1.0	11-IN.	3-IN.	0.3
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	3750	2500 R.P.M.	1300	25M.P.H.	2800	40M.P.H.	1900	MTR	15000	11-IN.	3-IN.	1000
CARBON MONOX-IDLE	1.4	2500 R.P.M.	0.7	25M.P.H.	0.5	40M.P.H.	0.1	MTR	1.1	11-IN.	3-IN.	0.3

TEST SET 2286 DATE 08/13/76

ID 19892

ODOMETER 31789

HOUR METER 1.0  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	9.80G/MI	CO	14.48G/MI	NOX	14.43G/MI	M.P.G.	8.0
TEST TYPE NYQ	HC	8.81G/MI	CO	15.14G/MI	NOX	15.57G/MI	M.P.G.	8.4
TEST TYPE C39H	HC	18.28G/MI	CO	29.58G/MI	NOX	16.07G/MI	M.P.G.	5.5
TEST TYPE C39H	HC	16.06G/MI	CO	27.03G/MI	NOX	18.85G/MI	M.P.G.	5.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	300	2500 R.P.M.	50	25M.P.H.	100	40M.P.H.	75	MTR	700	11-IN.	3-IN.	30
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.2	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	3750	2500 R.P.M.	700	25M.P.H.	1500	40M.P.H.	1000	MTR	6000	11-IN.	3-IN.	500
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.2	11-IN.	3-IN.	0.1

TEST SET 2441 DATE 02/28/77

ID 19892

ODOMETER 34757

HOUR METER 476.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	6.01G/MI	CO	11.46G/MI	NOX	15.33G/MI	M.P.G.	7.3
TEST TYPE C39H	HC	13.14G/MI	CO	21.39G/MI	NOX	19.88G/MI	M.P.G.	4.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	150	2500 R.P.M.	25	25M.P.H.	50	40M.P.H.	50	MTR	1000	11-IN.	3-IN.	30
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.2	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1500	2500 R.P.M.	500	25M.P.H.	800	40M.P.H.	800	MTR	8000	11-IN.	3-IN.	600
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.2	11-IN.	3-IN.	0.1

TEST SET 2442 DATE 02/28/77

ID 19892

ODOMETER 34760 HOUR METER 477.0  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 3.27G/MI CO 44.10G/MI NUX 15.25G/MI M.P.G. 7.7  
 TEST TYPE C39H HC 10.97G/MI CO 92.25G/MI NOX 14.95G/MI M.P.G. 4.9

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 60 2500 R.P.M. 50 25M.P.H. 50 40M.P.H. 50 MTR 1200 11-IN. 3-IN. 25  
 CARBON MONOX-IDLE 2.1 2500 R.P.M. 0.9 25M.P.H. 0.2 40M.P.H. 0.1 MTR 1.8 11-IN. 3-IN. 0.1  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1000 2500 R.P.M. 800 25M.P.H. 800 40M.P.H. 800 MTR 11000 11-IN. 3-IN. 500  
 CARBON MONOX-IDLE 2.2 2500 R.P.M. 0.9 25M.P.H. 0.2 40M.P.H. 0.1 MTR 1.9 11-IN. 3-IN. 0.1

TEST SET 2605 DATE 08/17/77

ID 19892

ODOMETER 36988 HOUR METER 755.8  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 5.81G/MI CO 17.30G/MI NUX 18.78G/MI M.P.G. 8.7  
 TEST TYPE C39H HC 10.79G/MI CO 25.45G/MI NUX 22.57G/MI M.P.G. 5.7

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 50 2500 R.P.M. 35 25M.P.H. 100 40M.P.H. 100 MTR 1200 11-IN. 3-IN. 65  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.1 MTR 0.3 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 25M.P.H. 0.2 40M.P.H. 0.1 MTR 0.3 11-IN. 3-IN. 0.2

TEST SET 2606 DATE 08/17/77

ID 19892

ODOMETER 36995 HOUR METER 756.2  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 5.64G/MI CO 73.48G/MI NUX 18.29G/MI M.P.G. 8.2  
 TEST TYPE C39H HC 12.58G/MI CO 164.00G/MI NUX 14.97G/MI M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 100 2500 R.P.M. 100 25M.P.H. 75 40M.P.H. 100 MTR 2000 11-IN. 3-IN. 75  
 CARBON MONOX-IDLE 5.5 2500 R.P.M. 2.1 25M.P.H. 0.3 40M.P.H. 0.1 MTR 4.5 11-IN. 3-IN. 0.2  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 5.1 2500 R.P.M. 2.0 25M.P.H. 0.3 40M.P.H. 0.1 MTR 4.5 11-IN. 3-IN. 0.2

TEST SET 2774 DATE 03/27/78

ID 19892

ODOMETER 40010 HOUR METER 1279.2  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 5.92G/MI CO 66.82G/MI NOX 10.85G/MI M.P.G. 10.0  
 TEST TYPE NYQ HC 6.41G/MI CO 68.11G/MI NOX 9.85G/MI M.P.G. 10.3

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	135	2500 R.P.M.	75	25M.P.H.	125	40M.P.H.	65	MTR	1900	11-IN.	3-IN.	25
CARBON MONOX-IDLE	6.5	2500 R.P.M.	1.0	25M.P.H.	0.5	40M.P.H.	0.2	MTR	4.5	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2000	2500 R.P.M.	1100	25M.P.H.	1600	40M.P.H.	800	MTR	10000	11-IN.	3-IN.	300
CARBON MONOX-IDLE	6.0	2500 R.P.M.	0.9	25M.P.H.	0.5	40M.P.H.	0.2	MTR	4.2	11-IN.	3-IN.	0.2

TEST SET 2775 DATE 03/27/78

ID 19892

ODOMETER 40019 HOUR METER 1250.0  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	3.99G/MI	CO	16.64G/MI	NOX	7.53G/MI	M.P.G.	9.5
TEST TYPE NYQ	HC	5.06G/MI	CO	9.25G/MI	NOX	10.12G/MI	M.P.G.	10.1

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	35	2500 R.P.M.	25	25M.P.H.	75	40M.P.H.		MTR		11-IN.	-IN.
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.		MTR		11-IN.	-IN.
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	500	2500 R.P.M.	300	25M.P.H.	1000	40M.P.H.		MTR		11-IN.	-IN.
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.		MTR		11-IN.	-IN.

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 \* VEHICLE IDENTIFICATION 19899 \*  
 \* WEIGHT 15000 YEAR 70 MAKE FORD MODEL P500 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 2179 DATE 04/16/76

ID 19899

ODOMETER 25204 HOUR METER 0.0  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	6.22G/MI	CO	29.00G/MI	NOX	17.25G/MI	M.P.G.	8.3
TEST TYPE NYQ	HC	4.40G/MI	CO	20.00G/MI	NOX	20.77G/MI	M.P.G.	7.9
TEST TYPE C39	HC	12.55G/MI	CO	36.25G/MI	NOX	20.62G/MI	M.P.G.	5.5
TEST TYPE C39	HC	12.35G/MI	CO	38.10G/MI	NOX	22.21G/MI	M.P.G.	5.5

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	150	2500 R.P.M.	30	25M.P.H.	75	40M.P.H.	50	MTR	1600	11-IN.	3-IN.	40
CARBON MONOX-IDLE	0.7	2500 R.P.M.	0.3	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.5	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1600	2500 R.P.M.	400	25M.P.H.	900	40M.P.H.	600	MTR	15000	11-IN.	3-IN.	500
CARBON MONOX-IDLE	0.6	2500 R.P.M.	0.3	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.5	11-IN.	3-IN.	0.2

TUNE UP COMMENT A '73 MOTORCRAFT CARB WAS INSTALLED.

TEST SET 2180 DATE 04/16/76

ID 19899

ODOMETER 25215 HOUR METER 0.7  
 GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	6.66G/MI	CO	31.43G/MI	NOX	14.76G/MI	M.P.G.	8.8
TEST TYPE NYQ	HC	6.50G/MI	CO	37.55G/MI	NOX	14.69G/MI	M.P.G.	9.0
TEST TYPE C39	HC	14.25G/MI	CO	37.13G/MI	NOX	16.97G/MI	M.P.G.	5.9
TEST TYPE C39	HC	12.32G/MI	CO	48.76G/MI	NOX	19.85G/MI	M.P.G.	5.5

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	120	2500 R.P.M.	25	25M.P.H.	50	40M.P.H.	50	MTR	1200	11-IN.	3-IN.	40
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.3	11-IN.	3-IN.	0.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1200	2500 R.P.M.	300	25M.P.H.	700	40M.P.H.	800	MTR	14000	11-IN.	3-IN.	700
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.3	11-IN.	3-IN.	0.2

TEST SET 2353 DATE 11/12/76

ID 19899

ODOMETER 28143 HOUR METER 386.1  
 GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	4.36G/MI	CO	18.71G/MI	NOX	13.18G/MI	M.P.G.	8.9
TEST TYPE NYQ	HC	4.08G/MI	CO	17.35G/MI	NOX	14.83G/MI	M.P.G.	8.7
TEST TYPE C39H	HC	13.54G/MI	CO	31.62G/MI	NOX	14.76G/MI	M.P.G.	5.8
TEST TYPE C39H	HC	10.40G/MI	CO	29.86G/MI	NOX	15.93G/MI	M.P.G.	5.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	140	2500 R.P.M.	30	25M.P.H.	50	40M.P.H.	75	MTR	1800	11-IN.	3-IN.	50
CARBON MONOX-IDLE	0.6	2500 R.P.M.	0.1	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.5	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											

HYDROCARBONS-IDLE	1500	2500 R.P.M.	500	25M.P.H.	800	40M.P.H.	1000	MTR	12000	11-IN.	3-IN.	800
CARBON MONOX-IDLE	0.6	2500 R.P.M.	0.1	25M.P.H.	0.2	40M.P.H.	0.2	MTR	0.5	11-IN.	3-IN.	0.1

TUNE UP COMMENT THE VACUUM LINE TO THE BRAKE BOOSTER HAD  
A SMALL LEAK WHICH WAS CORRECTED BY TIGHTENING A CLAMP.

TEST SET 2568 DATE 06/30/77

ID 19899

ODOMETER 31539 HOUR METER 832.1  
GENERAL COMMENT '73 MOTORCRAFT CARB.

TEST TYPE NYQ	HC	5.17G/MI	CO	49.04G/MI	NOX	12.58G/MI	M.P.G.	9.7
TEST TYPE NYQ	HC	4.67G/MI	CO	47.06G/MI	NOX	11.74G/MI	M.P.G.	10.3
TEST TYPE C39H	HC	8.93G/MI	CO	63.98G/MI	NOX	13.07G/MI	M.P.G.	6.9
TEST TYPE C39H	HC	9.15G/MI	CO	70.05G/MI	NOX	14.70G/MI	M.P.G.	6.7

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	75	2500 R.P.M.	50	25M.P.H.	75	40M.P.H.	75	MTR	1600	11-IN.	3-IN.	75
CARBON MONOX-IDLE	2.0	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.2	11-IN.	3-IN.	0.8
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1000	2500 R.P.M.	600	25M.P.H.	1000	40M.P.H.	1000	MTR	10000	11-IN.	3-IN.	1000
CARBON MONOX-IDLE	1.9	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	1.1	11-IN.	3-IN.	0.7

TUNE UP COMMENT THE BOLTS HOLDING THE CARB TO THE INTAKE  
MANIFOLD AND THE INTAKE MANIFOLD TO THE HEAD WERE TIGHTENED.

TEST SET 2783 DATE 04/11/78

ID 19899

ODOMETER 37318 HOUR METER 1314.1  
GENERAL COMMENT '73 MOTORCRAFT CARB.  
BEFORE TUNE UP.

TEST TYPE NYQ	HC	2.92G/MI	CO	64.98G/MI	NOX	9.87G/MI	M.P.G.	8.6
TEST TYPE NYQ	HC	2.85G/MI	CO	63.00G/MI	NOX	10.31G/MI	M.P.G.	8.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	65	2500 R.P.M.	20	25M.P.H.	50	40M.P.H.	25	MTR	400	11-IN.	3-IN.	50
CARBON MONOX-IDLE	2.6	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	2.8	11-IN.	3-IN.	0.7
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	1100	2500 R.P.M.	100	25M.P.H.	700	40M.P.H.	400	MTR	5500	11-IN.	3-IN.	800
CARBON MONOX-IDLE	2.5	2500 R.P.M.	0.2	25M.P.H.	0.1	40M.P.H.	0.1	MTR	2.6	11-IN.	3-IN.	0.6

TUNE UP COMMENT REPLACED POINTS, CONDENSER AND ROTOR.  
CARB WAS REBUILT BECAUSE OF NO RESPONSE TO IDLE MIX SCREW ADJUSTMENT.

TEST SET 2791 DATE 04/18/78

ID 19899

ODOMETER 35326 HOUR METER 1316.2  
GENERAL COMMENT '73 MOTORCRAFT CARB.,  
AFTER TUNE UP

TEST TYPE NYQ	HC	3.86G/MI	CO	16.82G/MI	NOX	11.77G/MI	M.P.G.	8.5
TEST TYPE NYQ	HC	3.53G/MI	CO	16.85G/MI	NOX	12.02G/MI	M.P.G.	8.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	60	2500 R.P.M.	75	25M.P.H.	75	40M.P.H.	60	MTR	1600	11-IN.	3-IN.	50
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.5	11-IN.	3-IN.	0.4
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											

HYDROCARBONS-IDLE	600	2500 R.P.M.	800	25M.P.H.	800	40M.P.H.	500	MTR 10000	11-IN.	3-IN.	500
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 0.5	11-IN.	3-IN.	0.4

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 \* VEHICLE IDENTIFICATION 200630 \*  
 \* WEIGHT 14000 YEAR 70 MAKE GMC MODEL 3500 TRANSMISSION A3 DISPLACEMENT 350 \*  
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TEST SET 1179 DATE 2/26/74

ID 200630

ODOMETER 15081 HOUR METER 0.0  
 GENERAL COMMENT AFTER TUNEUP, SCOTT #1 FID

TEST TYPE NYQ	HC	4.44G/MI	CO	74.00G/MI	NOX	10.26G/MI	M.P.G.	7.6
TEST TYPE NYQ	HC	4.34G/MI	CO	69.27G/MI	NOX	10.26G/MI	M.P.G.	7.6

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 873 2500 R.P.M. 30M.P.H. 1590 50M.P.H. 1320  
 CARBON MONOX-IDLE 0.7 2500 R.P.M. 30M.P.H. 0.6 50M.P.H. 1.5

TEST SET 1181 DATE 2/26/74

ID 200630

ODOMETER 15089 HOUR METER 0.6  
 GENERAL COMMENT ADAKS DEVICE SCOTT #1 FID

TEST TYPE NYQ	HC	6.88G/MI	CO	13.84G/MI	NOX	13.28G/MI	M.P.G.	8.0
TEST TYPE NYQ	HC	7.94G/MI	CO	9.82G/MI	NOX	13.21G/MI	M.P.G.	8.1

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2000 2500 R.P.M. 30M.P.H. 1380 50M.P.H. 1290  
 CARBON MONOX-IDLE 0.2 2500 R.P.M. 30M.P.H. 0.2 50M.P.H. 1.0

TEST SET 1236 DATE 3/20/74

ID 200630

ODOMETER 15372 HOUR METER 41.5  
 GENERAL COMMENT ADAKS DEVICE SCOTT #1 FID

TEST TYPE NYQ	HC	97.11G/MI	CO	77.06G/MI	NOX	5.15G/MI	M.P.G.	6.3
TEST TYPE NYQ	HC	98.81G/MI	CO	72.30G/MI	NOX	5.47G/MI	M.P.G.	6.4

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 20100 2500 R.P.M. 30M.P.H. 30600 50M.P.H. 38700  
 CARBON MONOX-IDLE 0.2 2500 R.P.M. 30M.P.H. 0.2 50M.P.H. 4.0

TEST SET 1240 DATE 3/20/74

ID 200630

ODOMETER 15381 HOUR METER 42.9  
 GENERAL COMMENT ADAKS DEVICE, AFTER TUNEUP, SCOTT #1 FID WAS USED.

TEST TYPE NYQ	HC	6.29G/MI	CO	22.25G/MI	NOX	12.00G/MI	M.P.G.	7.9
TEST TYPE NYQ	HC	6.52G/MI	CO	23.15G/MI	NOX	11.36G/MI	M.P.G.	8.0

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1110 2500 R.P.M. 30M.P.H. 1440 50M.P.H. 1620

CARBON MONOX-IDLE 0.1 2500 R.P.M. 30M.P.H. 0.2 50M.P.H. 1.0

TUNE UP COMMENT PLUGS WIRES CAP AND ROTOR WERE REPLACED.

TEST SET 1416 DATE 6/25/74

ID 200630

ODOMETER 16385

HOUR METER 173.1

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 4.41G/MI CO 21.94G/MI NOX 12.05G/MI M.P.G. 8.5  
TEST TYPE NYQ HC 4.27G/MI CO 25.29G/MI NOX 11.98G/MI M.P.G. 8.2

KEY MODE TEST-ANALYZER NUMBER 1 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1200 2500 R.P.M. 30M.P.H. 2000 50M.P.H. 1700  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 30M.P.H. 0.4 50M.P.H. 1.0

TEST SET 1491 DATE 8/14/74

ID 200630

ODOMETER 16670

HOUR METER 196.2

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 4.53G/MI CO 37.25G/MI NOX 12.76G/MI M.P.G. 7.8  
TEST TYPE NYQ HC 4.65G/MI CO 50.44G/MI NOX 12.59G/MI M.P.G. 7.5

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1170 2500 R.P.M. 30M.P.H. 1830 50M.P.H. 2220  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 30M.P.H. 0.7 50M.P.H. 5.4

TEST SET 1638 DATE 12/ 5/74

ID 200630

ODOMETER 17700

HOUR METER 314.3

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 3.40G/MI CO 33.36G/MI NOX 12.62G/MI M.P.G. 7.7  
TEST TYPE NYQ HC 3.35G/MI CO 32.31G/MI NOX 13.39G/MI M.P.G. 7.6

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 420 2500 R.P.M. 1200 30M.P.H. 1260 50M.P.H. 2000  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 30M.P.H. 0.2 50M.P.H. 3.5

TEST SET 1879 DATE 6/ 3/75

ID 200630

ODOMETER 19811

HOUR METER 622.0

GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 4.95G/MI CO 99.49G/MI NOX 9.75G/MI M.P.G. 7.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2300 2500 R.P.M. 600 30M.P.H. 1600 50M.P.H. 2500  
CARBON MONOX-IDLE 2.3 2500 R.P.M. 0.1 30M.P.H. 0.2 50M.P.H. 3.7

TEST SET 1880 DATE 6/ 3/75

ID 200630

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ODOMETER 19811      HOUR METER 622.0  
                    GENERAL COMMENT BASELINE AS IS

TEST TYPE NYQ      HC 18.33G/MI      CO 159.70G/MI      NOX 8.55G/MI      M.P.G. 7.2  
                    COMMENT ENGINE STALLED ONCE.

KEY MODE TEST-ANALYZER NUMBER 2      (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1000      2500 R.P.M.      3400      30M.P.H.      2000      M.P.H.  
CARBON MONOX-IDLE 8.4      2500 R.P.M.      2.5      30M.P.H.      0.4      M.P.H.

TEST SET 2240      DATE 06/14/76  
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ID 200630  
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ODOMETER 23468      HOUR METER 1224.5  
                    GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ      HC 5.31G/MI      CO 115.30G/MI      NOX 9.92G/MI      M.P.G. 6.4  
TEST TYPE NYQ      HC 5.25G/MI      CO 107.50G/MI      NOX 9.13G/MI      M.P.G. 6.7

KEY MODE TEST-ANALYZER NUMBER 2      (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1000      2500 R.P.M.      1200      30M.P.H.      2000      50M.P.H.      1400  
CARBON MONOX-IDLE 0.3      2500 R.P.M.      0.6      30M.P.H.      0.7      50M.P.H.      0.9

TEST SET 2241      DATE 06/14/76  
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ID 200630  
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ODOMETER              HOUR METER  
                    GENERAL COMMENT BASELINE

TEST TYPE NYQ      HC 6.79G/MI      CO 198.10G/MI      NOX 7.24G/MI      M.P.G. 6.5  
TEST TYPE NYQ      HC 6.45G/MI      CO 212.10G/MI      NOX 7.08G/MI      M.P.G. 6.5

KEY MODE TEST-ANALYZER NUMBER 2      (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 3000      2500 R.P.M.      4200      30M.P.H.      2500      50M.P.H.      2000  
CARBON MONOX-IDLE 5.2      2500 R.P.M.      4.5      30M.P.H.      2.2      50M.P.H.      4.9

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 \* VEHICLE IDENTIFICATION 200633 \*  
 \* WEIGHT 14000 YEAR 70 MAKE GMC MODEL 3500 TRANSMISSION A3 DISPLACEMENT 350 \*  
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TEST SET 1327 DATE 4/30/74

ID 200633

ODOMETER 10216 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE NYQ HC 3.94G/MI CO 31.07G/MI NOX 16.15G/MI M.P.G. 8.0  
 COMMENT SCOTT #1 FID WAS USED.

TEST TYPE NYQ HC 3.58G/MI CO 29.90G/MI NOX 16.55G/MI M.P.G. 8.2  
 COMMENT SCOTT #1 FID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1290 2500 R.P.M. 30M.P.H. 1740 50M.P.H. 1320  
 CARBON MONOX-IDLE 0.6 2500 R.P.M. 30M.P.H. 0.2 50M.P.H. 0.2

TEST SET 1420 DATE 6/27/74

ID 200633

ODOMETER 10668 HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.72G/MI CO 1.07G/MI NOX 14.88G/MI M.P.G. 7.9  
 COMMENT SCOTT HFID WAS USED.

TEST TYPE NYQ HC 0.69G/MI CO 0.93G/MI NOX 14.40G/MI M.P.G. 8.2  
 COMMENT SCOTT HFID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 45 2500 R.P.M. 30M.P.H. 130 50M.P.H. 200  
 CARBON MONOX-IDLE 0.0 2500 R.P.M. 30M.P.H. 0.0 50M.P.H. 0

TEST SET 1513 DATE 8/22/74

ID 200633

ODOMETER 11100 HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.94G/MI CO 1.35G/MI NOX 20.88G/MI M.P.G. 7.6  
 TEST TYPE NYQ HC 0.96G/MI CO 1.40G/MI NOX 20.31G/MI M.P.G. 8.0

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 60 2500 R.P.M. 30M.P.H. 220 50M.P.H. 522  
 CARBON MONOX-IDLE 0.0 2500 R.P.M. 30M.P.H. 0.0 50M.P.H. 1.1

TEST SET 1559 DATE 10/15/74

ID 200633

ODOMETER 11554 HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 1.16G/MI CO 1.34G/MI NOX 15.40G/MI M.P.G. 8.6  
 TEST TYPE NYQ HC 1.08G/MI CO 1.04G/MI NOX 12.88G/MI M.P.G. 9.6

COMMENT TEST WAS INVALID.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 45 2500 R.P.M. 300 30M.P.H. 162 50M.P.H. 585  
CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.0 30M.P.H. 0.0 50M.P.H. 1.0

TEST SET 1740 DATE 2/24/75

ID 200633

ODOMETER 12510 HOUR METER  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.66G/MI CO 1.42G/MI NOX 14.46G/MI M.P.G. 8.1  
TEST TYPE NYQ HC 0.76G/MI CO 2.02G/MI NOX 14.04G/MI M.P.G. 8.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 40 2500 R.P.M. 450 30M.P.H. 150 50M.P.H. 950  
CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.0 30M.P.H. 0.0 50M.P.H. 3.6

TEST SET 2316 DATE 09/28/76

ID 200633

ODOMETER 15715 HOUR METER 0.0  
GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 1.52G/MI CO 11.02G/MI NOX 19.31G/MI M.P.G. 5.9

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 50 2500 R.P.M. 125 30M.P.H. 40 M.P.H.  
CARBON MONOX-IDLE 0.2 2500 R.P.M. 0.1 30M.P.H. 0.1 M.P.H.

TUNE UP COMMENT ONE PLUG WIRE WAS REPLACED BEFORE TESTS.

TEST SET 2317 DATE 09/28/76

ID 200633

ODOMETER HOUR METER  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 7.10G/MI CO 150.40G/MI NOX 19.61G/MI M.P.G. 5.8

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 225 2500 R.P.M. 600 30M.P.H. 100 M.P.H.  
CARBON MONOX-IDLE 7.0 2500 R.P.M. 0.5 30M.P.H. 0.3 M.P.H.

TEST SET 2415 DATE 02/07/77

ID 200633

ODOMETER 16408 HOUR METER 220.6  
GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 22.42G/MI CO 104.90G/MI NOX 8.57G/MI M.P.G. 5.5  
COMMENT RUBBER BOOT FAILED.

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 50 2500 R.P.M. 90 30M.P.H. 120 M.P.H.  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.0 30M.P.H. 0.1 M.P.H.

TEST SET 2416 DATE 02/07/77

ID 200633

ODOMETER

HOUR METER  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 62.66G/MI CO 210.60G/MI NOX 10.15G/MI M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1600 2500 R.P.M. 1650 30M.P.H. 1450 M.P.H.  
CARBON MONOX-IDLE 4.2 2500 R.P.M. 0.9 30M.P.H. 0.2 M.P.H.

TEST SET 2588 DATE 07/27/77

ID 200633

ODOMETER 17473

HOUR METER 498.8  
GENERAL COMMENT UOP CATALYST. VEHICLE  
HAD RECEIVED LEADED FUEL.

TEST TYPE NYQ HC 2.90G/MI CO 35.43G/MI NOX 10.69G/MI M.P.G. 7.0  
TEST TYPE NYQ HC 2.97G/MI CO 45.04G/MI NOX 9.35G/MI M.P.G. 7.2

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 60 2500 R.P.M. 30 25M.P.H. 70 40M.P.H. 50  
CARBON MONOX-IDLE 0.2 2500 R.P.M. 0.1 25M.P.H. 0.2 40M.P.H. 0.2

TEST SET 2589 DATE 07/27/77

ID 200633

ODOMETER 17478

HOUR METER 499.4  
GENERAL COMMENT BASELINE. BEFORE TUNE UP

TEST TYPE NYQ HC 5.95G/MI CO 118.60G/MI NOX 10.66G/MI M.P.G. 6.9  
TEST TYPE NYQ HC 5.87G/MI CO 125.40G/MI NOX 9.86G/MI M.P.G. 7.1

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 150 2500 R.P.M. 100 25M.P.H. 175 40M.P.H. 100  
CARBON MONOX-IDLE 2.1 2500 R.P.M. 1.4 25M.P.H. 1.1 40M.P.H. 0.7

TEST SET 2592 DATE 07/28/77

ID 200633

ODOMETER 17488

HOUR METER  
GENERAL COMMENT BASELINE. AFTER TUNE UP

TEST TYPE NYQ HC 6.31G/MI CO 82.70G/MI NOX 15.45G/MI M.P.G. 6.5  
TEST TYPE NYQ HC 5.27G/MI CO 67.30G/MI NOX 15.21G/MI M.P.G. 7.1

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 100 2500 R.P.M. 275 25M.P.H. 150 40M.P.H. 75  
CARBON MONOX-IDLE 0.4 2500 R.P.M. 1.2 25M.P.H. 0.6 40M.P.H. 0.2

TEST SET 2593 DATE 07/28/77

ID 200633

ODOMETER 17499

HOUR METER

GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ	HC	2.75G/MI	CO	23.36G/MI	NOX	14.69G/MI	M.P.G.	7.3
TEST TYPE NYQ	HC	2.63G/MI	CO	25.67G/MI	NOX	14.61G/MI	M.P.G.	7.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	60	2500 R.P.M.	100	25M.P.H.	90	40M.P.H.	60
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.2	40M.P.H.	0.1

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 \* VEHICLE IDENTIFICATION 200634 \*  
 \* WEIGHT 14000 YEAR 70 MAKE GMC MODEL 3500 TRANSMISSION A3 DISPLACEMENT 350 \*  
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TEST SET 1430 DATE 7/ 8/74

ID 200634

ODOMETER 11785 HOUR METER 0.9  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 1.02G/MI CO 4.45G/MI NOX 14.55G/MI M.P.G. 7.8  
 COMMENT SCOTT HFID WAS USED.

TEST TYPE NYQ HC 1.11G/MI CO 4.54G/MI NOX 14.82G/MI M.P.G. 7.7  
 COMMENT SCOTT HFID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 130 2500 R.P.M. 30M.P.H. 220 50M.P.H. 324  
 CARBON MONOX-IDLE 0.0 2500 R.P.M. 30M.P.H. 0.0 50M.P.H. 0.0

TEST SET 1567 DATE 10/22/74

ID 200634

ODOMETER 12494 HOUR METER 112.0  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.98G/MI CO 2.28G/MI NOX 13.68G/MI M.P.G. 8.0  
 TEST TYPE NYQ HC 0.92G/MI CO 2.67G/MI NOX 13.25G/MI M.P.G. 8.3

KEY MODE TEST-ANALYZER NUMBER 1 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 250 2500 R.P.M. 150 30M.P.H. 375 M.P.H.  
 CARBON MONOX-IDLE 2500 2500 R.P.M. 500 30M.P.H. 100 M.P.H.  
 COMMENT VEHICLE WOULD NOT RUN SMOOTHLY AT 50 MPH.

TEST SET 1744 DATE 2/25/75

ID 200634

ODOMETER 13443 HOUR METER 388.9  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 2.09G/MI CO 4.56G/MI NOX 13.31G/MI M.P.G. 7.3  
 TEST TYPE NYQ HC 1.75G/MI CO 4.70G/MI NOX 12.23G/MI M.P.G. 7.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1000 2500 R.P.M. 300 30M.P.H. 280 50M.P.H. 800  
 CARBON MONOX-IDLE 0.9 2500 R.P.M. 0.1 30M.P.H. 0.1 50M.P.H. 1.8

TEST SET 2323 DATE 10/01/76

ID 200634

ODOMETER 17549 HOUR METER 1276.2  
 GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 1.41G/MI CO 22.25G/MI NOX 13.68G/MI M.P.G. 7.0  
 TEST TYPE NYQ HC 0.93G/MI CO 13.54G/MI NOX 13.97G/MI M.P.G. 7.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 35 2500 R.P.M. 180 30M.P.H. 30 M.P.H.  
CARBON MONOX-IDLE 0.2 2500 R.P.M. 0.1 30M.P.H. 0.1 M.P.H.

TEST SET 2324 DATE 10/01/76

ID 200634

ODOMETER HOUR METER  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 8.00G/MI CO 110.70G/MI NOX 15.31G/MI M.P.G. 7.3  
TEST TYPE NYQ HC 7.54G/MI CO 124.90G/MI NOX 15.22G/MI M.P.G. 7.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 250 2500 R.P.M. 900 30M.P.H. 125 M.P.H.  
CARBON MONOX-IDLE 6.0 2500 R.P.M. 0.7 30M.P.H. 0.5 M.P.H.

TEST SET 2499 DATE 04/25/77

ID 200634

ODOMETER 19142 HOUR METER 1724.7  
GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 21.37G/MI CO 90.11G/MI NOX 5.93G/MI M.P.G. 6.0

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 125 2500 R.P.M. 75 30M.P.H. 150 M.P.H.  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 0.2 30M.P.H. 0.2 M.P.H.

TEST SET 2500 DATE 04/25/77

ID 200634

ODOMETER HOUR METER  
GENERAL COMMENT BASELINE. BEFORE TUNE UP

TEST TYPE NYQ HC 70.22G/MI CO 227.10G/MI NOX 6.89G/MI M.P.G. 5.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1600 2500 R.P.M. 1700 30M.P.H. 1450 M.P.H.  
CARBON MONOX-IDLE 4.5 2500 R.P.M. 2.1 30M.P.H. 0.4 M.P.H.

TUNE UP COMMENT REPLACED POINTS. CONDENSER, ROTOR. CAP  
AND WIRE SET.

TEST SET 2501 DATE 04/26/77

ID 200634

ODOMETER HOUR METER  
GENERAL COMMENT BASELINE. AFTER TUNE UP

TEST TYPE NYQ HC 6.04G/MI CO 68.34G/MI NOX 13.68G/MI M.P.G. 6.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 100 2500 R.P.M. 90 30M.P.H. 120 M.P.H.  
CARBON MONOX-IDLE 0.6 2500 R.P.M. 1.8 30M.P.H. 0.5 M.P.H.

TEST SET 2502 DATE 04/26/77

ID 200634

ODOMETER 19152

HOUR METER 1726.7

GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ

HC

1.02G/MI

CO

12.33G/MI

NOX 11.82G/MI

M.P.G.

6.7

KEY MODE TEST-ANALYZER NUMBER 5

(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE 30 2500 R.P.M. 25 30M.P.H. 40 M.P.H.

CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.0 30M.P.H. 0.1 M.P.H.

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 \* VEHICLE IDENTIFICATION 200637 \*  
 \* WEIGHT 14000 YEAR 70 MAKE GMC MODEL 3500 TRANSMISSION A3 DISPLACEMENT 350 \*  
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TEST SET 1253 DATE 3/26/74

ID 200637

ODOMETER 13906 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE	NYQ	HC	4.00G/MI	CO	43.83G/MI	NOX	14.36G/MI	M.P.G.	7.2
			COMMENT	SCUTT #1 FID WAS USED.					
TEST TYPE	NYQ	HC	3.88G/MI	CO	43.67G/MI	NOX	14.21G/MI	M.P.G.	7.4
			COMMENT	SCUTT #1 FID WAS USED.					

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	990	2500 R.P.M.	30M.P.H.	1590	50M.P.H.	1860
CARBON MONOX-IDLE	0.2	2500 R.P.M.	30M.P.H.	0.4	50M.P.H.	3.5

TEST SET 1258 DATE 3/27/74

ID 200637

ODOMETER 13917 HOUR METER 0.3  
 GENERAL COMMENT ADAKS DEVICE, NOX RESULTS WERE INVALID DUE TO INEFFICIENT NO2 CONVERTER.

TEST TYPE	NYQ	HC	3.84G/MI	CO	20.68G/MI	NOX	13.96G/MI	M.P.G.	7.2
			COMMENT	SCUTT #1 FID WAS USED.					
TEST TYPE	NYQ	HC	3.98G/MI	CO	16.96G/MI	NOX	13.69G/MI	M.P.G.	7.4
			COMMENT	SCUTT #1 FID WAS USED.					

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	612	2500 R.P.M.	30M.P.H.	1470	50M.P.H.	1440
CARBON MONOX-IDLE	0.1	2500 R.P.M.	30M.P.H.	0.4	50M.P.H.	2.7

TEST SET 1368 DATE 5/22/74

ID 200637

ODOMETER 14238 HOUR METER 40.0  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE	NYQ	HC	4.48G/MI	CO	50.87G/MI	NOX	11.13G/MI	M.P.G.	7.9
			COMMENT	SCUTT #1 FID WAS USED.					
TEST TYPE	NYQ	HC	4.24G/MI	CO	30.15G/MI	NOX	12.72G/MI	M.P.G.	8.1
			COMMENT	SCUTT #1 FID WAS USED.					

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	720	2500 R.P.M.	30M.P.H.	1890	50M.P.H.	1770
CARBON MONOX-IDLE	0.1	2500 R.P.M.	30M.P.H.	0.4	50M.P.H.	2.8

TEST SET 1639 DATE 12/ 6/74

ID 200637

ODOMETER 15682 HOUR METER 241.0  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 3.79G/MI CO 27.94G/MI NOX 14.04G/MI M.P.G. 8.0  
TEST TYPE NYQ HC 4.09G/MI CO 25.44G/MI NOX 13.99G/MI M.P.G. 8.2

KEY MODE TEST-ANALYZER NUMBER 1 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1800 2500 R.P.M. 400 30M.P.H. 1700 50M.P.H. 2100  
CARBON MONOX-IDLE 2.3 2500 R.P.M. 0.1 30M.P.H. 0.4 50M.P.H. 3.1

TEST SET 1885 DATE 6/ 4/75

ID 200637

ODOMETER 16905 HOUR METER 515.2  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 6.46G/MI CO 111.30G/MI NOX 9.80G/MI M.P.G. 8.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 7100 2500 R.P.M. 500 30M.P.H. 2000 M.P.H.  
CARBON MONOX-IDLE 7.6 2500 R.P.M. 0.2 30M.P.H. 1.0 M.P.H.

COMMENT VEHICLE WOULD NOT RUN SMOOTHLY AT 50 MPH, AND IT HAD A BAD REAR TIRE.

TEST SET 1886 DATE 6/ 4/75

ID 200637

ODOMETER 16912 HOUR METER 516.0  
GENERAL COMMENT BASELINE, ADAKS PLUGGED.

TEST TYPE NYQ HC 16.42G/MI CO 165.70G/MI NOX 8.85G/MI M.P.G. 7.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 10000 2500 R.P.M. 4200 30M.P.H. 2000 M.P.H.  
CARBON MONOX-IDLE 8.0 2500 R.P.M. 2.9 30M.P.H. 1.3 M.P.H.

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 \* VEHICLE IDENTIFICATION 200640 \*  
 \* WEIGHT 14000 YEAR 70 MAKE GMC MODEL 3500 TRANSMISSION A3 DISPLACEMENT 350 \*  
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TEST SET 1142 DATE 1/31/74

ID 200640

ODOMETER 13755 HOUR METER 0.0  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE NYQ HC 5.09G/MI CO 22.41G/MI NOX 11.57G/MI M.P.G. 7.3  
 COMMENT SCOTT #1 FID WAS USED.  
 TEST TYPE NYQ HC 4.77G/MI CO 73.19G/MI NOX 11.99G/MI M.P.G. 7.5  
 COMMENT SCOTT #1 FID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1050 2500 R.P.M. 20M.P.H. 2460 30M.P.H. 1950  
 CARBON MONOX-IDLE 0.2 2500 R.P.M. 20M.P.H. 1.2 30M.P.H. 0.6

TEST SET 1145 DATE 1/31/74

ID 200640

ODOMETER 13765 HOUR METER 0.8  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 5.20G/MI CO 20.31G/MI NOX 16.33G/MI M.P.G. 7.7  
 COMMENT SCOTT #1 FID WAS USED.  
 TEST TYPE NYQ HC 5.64G/MI CO 22.08G/MI NOX 16.28G/MI M.P.G. 7.7  
 COMMENT SCOTT #1 FID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 822 2500 R.P.M. 20M.P.H. 1800 30M.P.H. 1590  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 20M.P.H. 0.1 30M.P.H. 0.2

TEST SET 1295 DATE 4/12/74

ID 200640

ODOMETER 14365 HOUR METER 147.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 6.90G/MI CO 19.22G/MI NOX 16.65G/MI M.P.G. 7.9  
 COMMENT SCOTT #1 FID WAS USED.  
 TEST TYPE NYQ HC 6.86G/MI CO 13.71G/MI NOX 16.98G/MI M.P.G. 8.0  
 COMMENT SCOTT #1 FID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1200 2500 R.P.M. 30M.P.H. 1770 50M.P.H. 1950  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 30M.P.H. 0.1 50M.P.H. 1.1

TEST SET 1365 DATE 5/21/74

ID 200640

ODOMETER 14619 HOUR METER 195.2  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 5.81G/MI CO 15.04G/MI NOX 15.83G/MI M.P.G. 8.4  
COMMENT SCOTT #1 FID WAS USED.  
TEST TYPE NYQ HC 6.16G/MI CO 15.60G/MI NOX 16.28G/MI M.P.G. 8.1  
COMMENT SCOTT #1 FID WAS USED.

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 765 2500 R.P.M. 30M.P.H. 1980 50M.P.H. 2100  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 30M.P.H. 0.1 50M.P.H. 1.4

TEST SET 1538 DATE 9/24/74

ID 200640

ODOMETER 16522 HOUR METER 483.5  
GENERAL COMMENT ADAKS DEVICE, TEST WAS  
INVALID DUE TO CVS MALFUNCTION,

TEST TYPE NYQ HC 4.67G/MI CO 34.03G/MI NOX 20.67G/MI M.P.G. 6.0  
TEST TYPE NYQ HC 5.03G/MI CO 37.42G/MI NOX 20.32G/MI M.P.G. 6.1

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 870 2500 R.P.M. 540 30M.P.H. 1770 50M.P.H. 2000  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.2 30M.P.H. 0.2 50M.P.H. 1.0

TEST SET 1642 DATE 12/ 9/74

ID 200640

ODOMETER 17690 HOUR METER 686.0  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 5.20G/MI CO 35.41G/MI NOX 19.90G/MI M.P.G. 6.7  
TEST TYPE NYQ HC 5.57G/MI CO 37.38G/MI NOX 19.29G/MI M.P.G. 6.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2100 2500 R.P.M. 1400 30M.P.H. 1800 50M.P.H. 1600  
CARBON MONOX-IDLE 1.5 2500 R.P.M. 0.7 30M.P.H. 0.3 50M.P.H. 1.1

TEST SET 1887 DATE 6/ 5/75

ID 200640

ODOMETER 19262 HOUR METER 1004.7  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 8.30G/MI CO 105.70G/MI NOX 24.79G/MI M.P.G. 5.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1400 2500 R.P.M. 2300 30M.P.H. 2500 50M.P.H. 2300  
CARBON MONOX-IDLE 0.4 2500 R.P.M. 0.5 30M.P.H. 1.1 50M.P.H. 3.1

TEST SET 1888 DATE 6/ 5/75

ID 200640

ODOMETER 19270 HOUR METER 1005.0  
GENERAL COMMENT BASELINE, ADAKS PLUGGED

TEST TYPE NYQ HC 20.45G/MI CO 245.40G/MI NOX 19.36G/MI M.P.G. 5.4  
COMMENT ENGINE STALLED ONCE.

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1000 2500 R.P.M. 7000 30M.P.H. 3400 50M.P.H. 3200  
CARBON MONOX-IDLE 10.0 2500 R.P.M. 4.3 30M.P.H. 2.3 50M.P.H. 2.5

TEST SET 2229 DATE 06/08/76

ID 200640

ODOMETER 22800 HOUR METER 1466.0  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 20.22G/MI CO 209.90G/MI NOX 3.58G/MI M.P.G. 7.5  
TEST TYPE NYQ HC 20.16G/MI CO 278.60G/MI NOX 2.96G/MI M.P.G. 7.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 22000 2500 R.P.M. 12000 30M.P.H. 6000 50M.P.H. 4500  
CARBON MONOX-IDLE 9.3 2500 R.P.M. 5.5 30M.P.H. 4.9 50M.P.H. 3.7

TEST SET 2230 DATE 06/08/76

ID 200640

ODOMETER HOUR METER  
GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 7.30G/MI CO 149.00G/MI NOX 6.02G/MI M.P.G. 8.0  
TEST TYPE NYQ HC 7.08G/MI CO 167.90G/MI NOX 5.25G/MI M.P.G. 7.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2500 2500 R.P.M. 10000 30M.P.H. 3200 50M.P.H. 3200  
CARBON MONOX-IDLE 1.7 2500 R.P.M. 1.4 30M.P.H. 2.3 50M.P.H. 2.9

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 \* VEHICLE IDENTIFICATION 200642 \*  
 \* WEIGHT 14000 YEAR 70 MAKE GMC MODEL 3500 TRANSMISSION A3 DISPLACEMENT 350 \*  
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TEST SET 0919 DATE 10/ 4/73

ID 200642

ODOMETER 9777 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE NYQ	HC	4.81G/MI	CO	43.85G/MI	NOX	13.45G/MI	M.P.G.	3.4
TEST TYPE NYQ	HC	4.63G/MI	CO	41.56G/MI	NOX	12.65G/MI	M.P.G.	8.4

TEST SET 1158 DATE 02/11/74

ID 200642

ODOMETER 10345 HOUR METER 0.1  
 GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ	HC	1.40G/MI	CO	5.34G/MI	NOX	17.68G/MI	M.P.G.	7.1
TEST TYPE NYQ	HC	1.45G/MI	CO	6.22G/MI	NOX	17.17G/MI	M.P.G.	7.2

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	315	2500 R.P.M.	20M.P.H.	490	40M.P.H.	560
CARBON MONOX-IDLE	0.1	2500 R.P.M.	20M.P.H.	0.1	40M.P.H.	1.0

TEST SET 1159 DATE 02/11/74

ID 200642

ODOMETER HOUR METER  
 GENERAL COMMENT BASELINE

TEST TYPE NYQ	HC	3.89G/MI	CO	37.31G/MI	NOX	17.59G/MI	M.P.G.	7.4
TEST TYPE NYQ	HC	3.96G/MI	CO	39.93G/MI	NOX	17.60G/MI	M.P.G.	7.4

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	1020	2500 R.P.M.	20M.P.H.	1600	40M.P.H.	920
CARBON MONOX-IDLE	0.8	2500 R.P.M.	20M.P.H.	0.6	40M.P.H.	0.3

TEST SET 1376 DATE 5/29/74

ID 200642

ODOMETER 10880 HOUR METER 150.3  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	1.87G/MI	CO	15.64G/MI	NOX	13.97G/MI	M.P.G.	7.8
		COMMENT	SCOTT #1 FID WAS USED.					
TEST TYPE NYQ	HC	1.96G/MI	CO	15.87G/MI	NOX	13.99G/MI	M.P.G.	7.8
		COMMENT	SCOTT #1 FID WAS USED.					

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	225	2500 R.P.M.	30M.P.H.	324	50M.P.H.	639
CARBON MONOX-IDLE	0.0	2500 R.P.M.	30M.P.H.	0.0	50M.P.H.	0.2

TEST SET 1569 DATE 10/23/74

ID 200642

ODOMETER 11634

HOUR METER 276.5

GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 2.27G/MI CO 5.53G/MI NOX 14.98G/MI M.P.G. 8.4  
TEST TYPE NYQ HC 2.10G/MI CO 5.84G/MI NOX 15.30G/MI M.P.G. 8.3

KEY MODE TEST-ANALYZER NUMBER 1 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 350 2500 R.P.M. 300 30M.P.H. 370 50M.P.H. 1000  
CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.5 30M.P.H. 0.1 50M.P.H. 2.6

TEST SET 1736 DATE 2/19/75

ID 200642

ODOMETER 12274

HOUR METER 463.0

GENERAL COMMENT UOP CATALYST AND BASELINE

TEST TYPE NYQ HC 1.91G/MI CO 11.50G/MI NOX 12.69G/MI M.P.G. 8.5  
COMMENT UOP CATALYST SYSTEM

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 250 2500 R.P.M. 500 30M.P.H. 300 50M.P.H. 700  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 30M.P.H. 0.1 50M.P.H. 2.3

TUNE UP COMMENT FUEL CONTAINED LEAD CONTAMINANT.

TEST SET 1736 DATE 02/19/75

ID 200642

ODOMETER 12274

HOUR METER 463.0

GENERAL COMMENT BASELINE, CONVERTER  
REPLACEMENT SPOOL DID NOT FIT LEAK TIGHT.

TEST TYPE NYQ HC 3.52G/MI CO 41.95G/MI NOX 13.30G/MI M.P.G. 8.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1100 2500 R.P.M. 1900 30M.P.H. 1200 50M.P.H. 1100  
CARBON MONOX-IDLE 0.7 2500 R.P.M. 1.2 30M.P.H. 0.5 50M.P.H. 2.2

TEST SET 2314 DATE 09/28/76

ID 200642

ODOMETER 14381

HOUR METER 904.6

GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 4.68G/MI CO 19.03G/MI NOX 10.00G/MI M.P.G. 6.5

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 30 2500 R.P.M. 25 30M.P.H. 25 50M.P.H. 20  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 30M.P.H. 0.1 50M.P.H. 0.3

TEST SET 2315 DATE 09/28/76

ID 200642

ODOMETER

HOUR METER

GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 7.66G/MI CO 60.79G/MI NOX 10.19G/MI M.P.G. 6.4

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 150 2500 R.P.M. 50 30M.P.H. 25 M.P.H.  
 CARBON MONOX-IDLE 0.5 2500 R.P.M. 0.2 30M.P.H. 0.2 M.P.H.

TEST SET 2417 DATE 02/07/77

ID 200642

ODOMETER 15139 HOUR METER 1226.8  
 GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 5.12G/MI CO 132.70G/MI NOX 9.50G/MI M.P.G. 6.1

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 160 2500 R.P.M. 50 30M.P.H. 75 M.P.H.  
 CARBON MONOX-IDLE 4.4 2500 R.P.M. 1.0 30M.P.H. 0.3 M.P.H.

TEST SET 2418 DATE 02/07/77

ID 200642

ODOMETER HOUR METER  
 GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 2.36G/MI CO 37.65G/MI NOX 9.46G/MI M.P.G. 6.2

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 40 2500 R.P.M. 20 30M.P.H. 25 M.P.H.  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 30M.P.H. 0.1 M.P.H.

TEST SET 2586 DATE 07/27/77

ID 200642

ODOMETER 16293 HOUR METER 1460.0  
 GENERAL COMMENT UOP CATALYST VEHICLE  
 HAD RECEIVED LEADED FUEL.

TEST TYPE NYQ HC 3.32G/MI CO 44.69G/MI NOX 7.15G/MI M.P.G. 6.6  
 TEST TYPE NYQ HC 3.13G/MI CO 45.11G/MI NOX 6.96G/MI M.P.G. 6.6

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 150 2500 R.P.M. 40 25M.P.H. 40 40M.P.H. 25  
 CARBON MONOX-IDLE 0.4 2500 R.P.M. 0.1 25M.P.H. 0.2 40M.P.H. 0.1

TEST SET 2587 DATE 07/27/77

ID 200642

ODOMETER 16295 HOUR METER 1460.3  
 GENERAL COMMENT BASELINE, BEFORE TUNE UP

TEST TYPE NYQ HC 5.76G/MI CO 131.50G/MI NOX 7.78G/MI M.P.G. 6.3  
 TEST TYPE NYQ HC 6.17G/MI CO 148.40G/MI NOX 6.49G/MI M.P.G. 6.8

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 300 2500 R.P.M. 75 25M.P.H. 100 40M.P.H. 50

CARBON MONOX-IDLE 3.4 2500 R.P.M. 1.9 25M.P.H. 2.0 40M.P.H. 0.2

TUNE UP COMMENT REPLACED POINTS, CONDENSER, ROTOR. CAP  
AND WIRE SET.

TEST SET 2590 DATE 07/28/77

ID 200642

ODOMETER 16310

HR METER

GENERAL COMMENT BASELINE, AFTER TUNE UP

TEST TYPE NYQ HC 6.69G/MI CO 98.31G/MI NOX 12.14G/MI M.P.G. 7.2  
TEST TYPE NYQ HC 6.64G/MI CO 107.50G/MI NOX 11.78G/MI M.P.G. 7.1

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 125 2500 R.P.M. 100 25M.P.H. 175 40M.P.H. 100  
CARBON MONOX-IDLE 2.4 2500 R.P.M. 1.8 25M.P.H. 2.7 40M.P.H. 0.5

TEST SET 2591 DATE 07/28/77

ID 200642

ODOMETER 16322

HR METER

GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 5.34G/MI CO 57.56G/MI NOX 11.58G/MI M.P.G. 7.2  
TEST TYPE NYQ HC 5.04G/MI CO 61.34G/MI NOX 10.87G/MI M.P.G. 7.2

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 90 2500 R.P.M. 40 25M.P.H. 75 40M.P.H. 60  
CARBON MONOX-IDLE 0.2 2500 R.P.M. 0.1 25M.P.H. 0.5 40M.P.H. 0.2

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 \* VEHICLE IDENTIFICATION 25D082 \*  
 \* WEIGHT 37800 YEAR 70 MAKE GMC MODEL 8500 TRANSMISSION A6 DISPLACEMENT 478 \*  
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TEST SET 1174 DATE 2/25/74

ID 25D082

ODOMETER 23393 HOUR METER 6261.6  
 GENERAL COMMENT BASELINE AFTER TUNE UP

TEST TYPE NYQ	HC	4.21G/MI	CO 127.34G/MI	NOX 32.12G/MI	M.P.G.	3.0
		COMMENT	SCOTT #1 FID WAS USED.			
TEST TYPE SAN	HC	14.08G/MI	CO 416.16G/MI	NOX 28.86G/MI	M.P.G.	1.7
		COMMENT	POWER SET: 80 HP AT 30 MPH			

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	2160	2500 R.P.M.	20M.P.H.	378	30M.P.H.	135
CARBON MONOX-IDLE	4.0	2500 R.P.M.	20M.P.H.	0.2	30M.P.H.	0.2

TEST SET 1175 DATE 2/25/74

ID 25D082

ODOMETER 23396 HOUR METER 6261.6  
 GENERAL COMMENT UOP CATALYST SYSTEM WITH  
 NEW PELLETS IN THE CONVERTER, AFTER TUNE UP

TEST TYPE NYQ	HC	0.00G/MI	CO 1.63G/MI	NOX 26.23G/MI	M.P.G.	3.0
		COMMENT	SCOTT #1 FID WAS USED.			
TEST TYPE SAN	HC	0.70G/MI	CO 5.45G/MI	NOX 29.75G/MI	M.P.G.	1.6
		COMMENT	POWER SET: 80 HP AT 30 MPH			

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	9	2500 R.P.M.	20M.P.H.	18	30M.P.H.	45
CARBON MONOX-IDLE	0.0	2500 R.P.M.	20M.P.H.	0.0	30M.P.H.	0.1

TEST SET 1302 DATE 04/16/74

ID 25D082

ODOMETER 24032 HOUR METER 6307.5  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	0.61G/MI	CO 6.54G/MI	NOX 32.38G/MI	M.P.G.	3.3
TEST TYPE NYQ	HC	0.59G/MI	CO 6.77G/MI	NOX 32.35G/MI	M.P.G.	3.4

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	150	2500 R.P.M.	20M.P.H.	70	30M.P.H.	70
CARBON MONOX-IDLE	.0	2500 R.P.M.	20M.P.H.	.0	30M.P.H.	0.1

TEST SET 1303 DATE 4/16/74

ID 25D082

ODOMETER 24038 HOUR METER 6307.6  
 GENERAL COMMENT BASELINE

TEST TYPE NYQ	HC	2.73G/MI	CO 50.05G/MI	NOX 37.90G/MI	M.P.G.	3.4
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COMMENT SCOTT #1 FID WAS USED.  
 TEST TYPE NYQ HC 3.42G/MI CO 58.48G/MI NOX 37.81G/MI M.P.G. 3.4  
 KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1080 2500 R.P.M. 20M.P.H. 225 30M.P.H. 105  
 CARBON MONOX-IDLE 0.6 2500 R.P.M. 20M.P.H. 0.1 30M.P.H. 0.1

TEST SET 1335 DATE 5/ 2/74

ID 25D082

ODOMETER 24180 HOUR METER 6323.8  
 GENERAL COMMENT NEW UOP CATALYTIC  
 CONVERTER AND PELLETS.

TEST TYPE NYQ HC 0.36G/MI CO 1.91G/MI NOX 44.29G/MI M.P.G. 3.5  
 COMMENT SCOTT #1 FID WAS USED.

TEST TYPE NYQ HC 0.37G/MI CO 1.87G/MI NOX 41.61G/MI M.P.G. 3.6 .

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 24 2500 R.P.M. 20M.P.H. 18 30M.P.H. 18  
 CARBON MONOX-IDLE 0.0 2500 R.P.M. 20M.P.H. 0.0 30M.P.H. 0.0

TEST SET 1411 DATE 6/21/74

ID 25D082

ODOMETER 24753 HOUR METER 6383.6  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.53G/MI CO 7.34G/MI NOX 37.90G/MI M.P.G. 3.3  
 COMMENT SCOTT #1 FID WAS USED.

TEST TYPE NYQ HC 0.63G/MI CO 9.10G/MI NOX 39.69G/MI M.P.G. 3.4

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 126 2500 R.P.M. 20M.P.H. 39 30M.P.H. 60  
 CARBON MONOX-IDLE 0.2 2500 R.P.M. 20M.P.H. 0.1 30M.P.H. 0.1

TEST SET 1482 DATE 8/ 7/74

ID 25D082

ODOMETER 25420 HOUR METER 6490.0  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.32G/MI CO 5.22G/MI NOX 32.59G/MI M.P.G. 3.6  
 COMMENT SCOTT HFID WAS USED.

TEST TYPE NYQ HC 0.59G/MI CO 5.71G/MI NOX 32.20G/MI M.P.G. 3.6

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 84 2500 R.P.M. 20M.P.H. 48 30M.P.H. 57  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 20M.P.H. 0.0 30M.P.H. 0.0

TEST SET 1555 DATE 10/10/74

ID 25D082

ODOMETER 26273 HOUR METER 6629.3  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.66G/MI CO 12.12G/MI NOX 26.62G/MI M.P.G. 3.6

TEST TYPE NYQ HC 0.66G/MI CO 8.64G/MI NOX 28.39G/MI M.P.G. 3.6

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 195 2500 R.P.M. 30 20M.P.H. 15 30M.P.H. 30  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 20M.P.H. 0.1 30M.P.H. 0.1

TEST SET 1556 DATE 10/10/74

ID 25D082

ODOMETER 26278 HOUR METER 6629.7  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 3.92G/MI CO 131.00G/MI NOX 27.10G/MI M.P.G. 3.6  
TEST TYPE NYQ HC 3.82G/MI CO 140.80G/MI NOX 28.79G/MI M.P.G. 3.5

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1410 2500 R.P.M. 1050 20M.P.H. 720 30M.P.H. 105  
CARBON MONOX-IDLE 3.7 2500 R.P.M. 2.5 20M.P.H. 0.9 30M.P.H. 0.2

TEST SET 1717 DATE 2/ 5/75

ID 25D082

ODOMETER 27798 HOUR METER 0.3  
GENERAL COMMENT AIR PUMP-ONLY

TEST TYPE NYQ HC 2.87G/MI CO 95.00G/MI NOX 24.89G/MI M.P.G. 4.1  
TEST TYPE NYQ HC 3.39G/MI CO 105.30G/MI NOX 24.25G/MI M.P.G. 4.1

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 800 2500 R.P.M. 70 20M.P.H. 250 30M.P.H. 100  
CARBON MONOX-IDLE 2.8 2500 R.P.M. 0.3 20M.P.H. 0.9 30M.P.H. 0.5

TUNE UP COMMENT CONVERTER HAD LOST ALL PELLETS

TEST SET 1868 DATE 5/29/75

ID 25D082

ODOMETER 29207 HOUR METER 393.8  
GENERAL COMMENT BASELINE AFTER TUNE UP

TEST TYPE NYQ HC 4.62G/MI CO 103.60G/MI NOX 30.41G/MI M.P.G. 3.8  
TEST TYPE NYQ HC 4.71G/MI CO 110.90G/MI NOX 31.49G/MI M.P.G. 3.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1200 2500 R.P.M. 2400 20M.P.H. 1300 30M.P.H. 200  
CARBON MONOX-IDLE 1.2 2500 R.P.M. 4.9 20M.P.H. 1.9 30M.P.H. 0.1

TEST SET 1873 DATE 5/30/75

ID 25D082

ODOMETER 29229 HOUR METER 396.3  
GENERAL COMMENT UOP CATALYST SYSTEM  
OVER TEMPERATURE PROTECTION

TEST TYPE NYQ HC 1.00G/MI CO 41.22G/MI NOX 28.49G/MI M.P.G. 3.7  
TEST TYPE NYQ HC 1.07G/MI CO 37.36G/MI NOX 29.31G/MI M.P.G. 3.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)

HYDROCARBONS-IDLE 120 2500 R.P.M. 10 20M.P.H. 8 30M.P.H. 6  
CARBON MONOX-IDLE 70 2500 R.P.M. 30 20M.P.H. 100 30M.P.H. 100

TEST SET 1875 DATE 5/30/75

ID 25D082

ODOMETER 29235

HOUR METER 397.0

GENERAL COMMENT UOP CATALYST SYSTEM PLAIN

TEST TYPE NYQ HC 0.19G/MI CO 3.04G/MI NOX 31.72G/MI M.P.G. 3.6  
TEST TYPE NYQ HC 0.27G/MI CO 6.43G/MI NOX 31.62G/MI M.P.G. 3.6

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 200 2500 R.P.M. 30 20M.P.H. 8 30M.P.H. 6  
CARBON MONOX-IDLE 100 2500 R.P.M. 50 20M.P.H. 100 30M.P.H. 70

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*           VEHICLE IDENTIFICATION 25E020
*   WEIGHT 37800   YEAR 72   MAKE GMC           MODEL 8500   TRANSMISSION A6   DISPLACEMENT 478
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TEST SET 2529 DATE 05/20/77

ID 25E020

ODOMETER 26777      HOUR METER 8046.9  
 GENERAL COMMENT DA5CLINC

TEST TYPE NYQ	HC	12.83G/MI	CO	62.44G/MI	NOX	45.69G/MI	M.P.G.	3.4
TEST TYPE NYQ	HC	11.76G/MI	CO	72.41G/MI	NOX	43.57G/MI	M.P.G.	3.8

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	75	2500 R.P.M.	75	20M.P.H.	125	30M.P.H.	60
CARBON MONOX-IDLE	0.3	2500 R.P.M.	0.8	20M.P.H.	0.7	30M.P.H.	0.2

TEST SET 2530 DATE 05/20/77

ID 25E020

ODOMETER                      HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	0.75G/MI	CO	3.03G/MI	NOX	43.08G/MI	M.P.G.	3.7
TEST TYPE NYQ	HC	0.66G/MI	CO	5.70G/MI	NOX	43.44G/MI	M.P.G.	3.7

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	15	2500 R.P.M.	20	20M.P.H.	25	30M.P.H.	25
CARBON MONOX-IDLE	0.0	2500 R.P.M.	0.0	20M.P.H.	0.0	30M.P.H.	0.0

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 \* VEHICLE IDENTIFICATION 25E021 \*  
 \* WEIGHT 37800 YEAR 72 MAKE GMC MODEL 8500 TRANSMISSION A6 DISPLACEMENT 478 \*  
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TEST SET 1527 DATE 9/13/74  
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ID 25E021  
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ODOMETER 1979 HOUR METER 2978.0  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	0.59G/MI	CO	2.72G/MI	NOX	33.15G/MI	M.P.G.	1.4
TEST TYPE NYQ	HC	0.51G/MI	CO	2.07G/MI	NOX	33.21G/MI	M.P.G.	4.5

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 60 2500 R.P.M. 33 20M.P.H. 72 30M.P.H. 45  
 CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 20M.P.H. 0.1 30M.P.H. 0.05

TEST SET 1528 DATE 9/13/74  
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ID 25E021  
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ODOMETER 1983 HOUR METER 2978.5  
 GENERAL COMMENT BASELINE, AFTER TUNEUP

TEST TYPE NYQ	HC	4.25G/MI	CO	68.87G/MI	NOX	31.79G/MI	M.P.G.	3.8
TEST TYPE NYQ	HC	4.04G/MI	CO	66.99G/MI	NOX	33.33G/MI	M.P.G.	3.8

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1500 2500 R.P.M. 900 20M.P.H. 800 30M.P.H. 90  
 CARBON MONOX-IDLE 1.0 2500 R.P.M. 1.7 20M.P.H. 0.5 30M.P.H. 0.2

TEST SET 1607 DATE 11/14/74  
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ID 25E021  
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ODOMETER 2681 HOUR METER 3224.8  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	0.84G/MI	CO	4.89G/MI	NOX	22.52G/MI	M.P.G.	3.7
TEST TYPE NYQ	HC	0.44G/MI	CO	3.23G/MI	NOX	24.38G/MI	M.P.G.	3.7

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 36 2500 R.P.M. 120 20M.P.H. 75 30M.P.H. 51  
 CARBON MONOX-IDLE 0 2500 R.P.M. 0 20M.P.H. 0 30M.P.H. 0

TEST SET 1608 DATE 11/14/74  
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ID 25E021  
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ODOMETER 2687 HOUR METER 3225.5  
 GENERAL COMMENT UOP CATALYST, DIVERTER  
 VALVE FITTED TO AIR PUMP.

TEST TYPE NYQ	HC	0.47G/MI	CO	3.04G/MI	NOX	26.61G/MI	M.P.G.	3.7
TEST TYPE NYQ	HC	0.74G/MI	CO	5.26G/MI	NOX	26.24G/MI	M.P.G.	3.7

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 84 2500 R.P.M. 75 20M.P.H. 108 30M.P.H. 84

CARBON MONOX-IDLE 0 2500 R.P.M. 0 20M.P.H. 0 30M.P.H. 0

TEST SET 1723 DATE 2/ 7/75

ID 25E021

ODOMETER 4039 HOUR METER 3700.6  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 0.98G/MI CO 16.57G/MI NOX 24.56G/MI M.P.G. 4.3  
TEST TYPE NYQ HC 1.03G/MI CO 17.04G/MI NOX 24.19G/MI M.P.G. 4.3

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 100 2500 R.P.M. 80 20M.P.H. 70 30M.P.H. 50  
CARBON MONOX-IDLE 680 2500 R.P.M. 300 20M.P.H. 190 30M.P.H. 200

TEST SET 1724 DATE 2/ 7/75

ID 25E021

ODOMETER 4045 HOUR METER 3701.7  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 6.25G/MI CO 127.90G/MI NOX 25.90G/MI M.P.G. 4.3  
TEST TYPE NYQ HC 6.16G/MI CO 127.60G/MI NOX 25.30G/MI M.P.G. 4.3

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2600 2500 R.P.M. 1100 20M.P.H. 1300 30M.P.H. 1300  
CARBON MONOX-IDLE 4.2 2500 R.P.M. 1.8 20M.P.H. 0.4 30M.P.H. 0.8

TEST SET 1816 DATE 4/24/75

ID 25E021

ODOMETER 5744 HOUR METER 4093.8  
GENERAL COMMENT UOP CATALYST SYSTEM, OVER  
TEMPERATURE PROTECTION

TEST TYPE NYQ HC 1.18G/MI CO 46.55G/MI NOX 15.33G/MI M.P.G. 4.2  
TEST TYPE NYQ HC 1.24G/MI CO 47.38G/MI NOX 15.04G/MI M.P.G. 4.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1000 2500 R.P.M. 40 20M.P.H. 25 30M.P.H. 20  
CARBON MONOX-IDLE 3.6 2500 R.P.M. 120 20M.P.H. 130 30M.P.H. 90

TEST SET 1817 DATE 4/25/75

ID 25E021

ODOMETER 5757 HOUR METER 4095.0  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 3.81G/MI CO 62.02G/MI NOX 20.27G/MI M.P.G. 3.9  
TEST TYPE NYQ HC 4.45G/MI CO 66.34G/MI NOX 20.42G/MI M.P.G. 4.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 910 2500 R.P.M. 900 20M.P.H. 360 30M.P.H. 105  
CARBON MONOX-IDLE 0.4 2500 R.P.M. 1.6 20M.P.H. 0.3 30M.P.H. 0.05

TEST SET 1818 DATE 4/25/75

ID 25E021

ODOMETER 5770 HOUR METER 4097.6  
GENERAL COMMENT UOP CATALYST SYSTEM, OVER  
TEMPERATURE PROTECTION

TEST TYPE NYQ HC 1.07G/MI CO 45.63G/MI NOX 15.51G/MI M.P.G. 3.9  
TEST TYPE NYQ HC 1.00G/MI CO 47.05G/MI NOX 15.38G/MI M.P.G. 4.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 200 2500 R.P.M. 50 20M.P.H. 260 27M.P.H. 3  
CARBON MONOX-IDLE 0.2 2500 R.P.M. 0.2 20M.P.H. 1.0 27M.P.H. 75

TEST SET 1819 DATE 4/28/95

ID 25E021

ODOMETER 5780 HOUR METER 4098.3  
GENERAL COMMENT UOP CATALYST SYSTEM  
OVER TEMPERATURE PROTECTION DEVICES DISCONNECTED

TEST TYPE NYQ HC 0.24G/MI CO 5.82G/MI NOX 20.31G/MI M.P.G. 3.8  
TEST TYPE NYQ HC 0.37G/MI CO 5.90G/MI NOX 20.37G/MI M.P.G. 3.9

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 12 2500 R.P.M. 100 20M.P.H. 6 30M.P.H. 20  
CARBON MONOX-IDLE 45 2500 R.P.M. 100 20M.P.H. 80 30M.P.H. 80

TEST SET 1820 DATE 4/28/75

ID 25E021

ODOMETER 5790 HOUR METER 4099.7  
GENERAL COMMENT UOP CATALYST SYSTEM, OVER  
TEMPERATURE PROTECTION DEVICE SET TO CUT OFF AIR AT 1375 DEG. F.

TEST TYPE NYQ HC 0.06G/MI CO 3.70G/MI NOX 18.94G/MI M.P.G. 4.4  
TEST TYPE NYQ HC 0.11G/MI CO 2.96G/MI NOX 20.96G/MI M.P.G. 4.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 16 2500 R.P.M. 18 20M.P.H. 12 30M.P.H. 11  
CARBON MONOX-IDLE 120 2500 R.P.M. 130 20M.P.H. 100 30M.P.H. 75

TEST SET 2097 DATE 12/18/75

ID 25E021

ODOMETER 8909 HOUR METER 4829.7  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 7.48G/MI CO 36.41G/MI NOX 38.87G/MI M.P.G. 3.7  
TEST TYPE NYQ HC 6.75G/MI CO 35.81G/MI NOX 45.44G/MI M.P.G. 3.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1000 2500 R.P.M. 1100 20M.P.H. 300 30M.P.H. 400  
CARBON MONOX-IDLE 0.4 2500 R.P.M. 2.0 20M.P.H. 0.2 30M.P.H. 0.1

TEST SET 2098 DATE 12/18/75

ID 25E021

ODOMETER 8921 HOUR METER 4830.9  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 1.14G/MI CO 22.97G/MI NOX 40.28G/MI M.P.G. 3.3  
TEST TYPE NYQ HC 1.01G/MI CO 24.35G/MI NOX 45.51G/MI M.P.G. 3.4

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 100 2500 R.P.M. 50 20M.P.H. 90 30M.P.H. 150  
CARBON MONOX-IDLE 150 2500 R.P.M. 300 20M.P.H. 170 30M.P.H. 200

TEST SET 2237 DATE 06/11/76

ID 25E021

ODOMETER 12855 HOUR METER 5797.8  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 9.02G/MI CO 52.58G/MI NOX 36.33G/MI M.P.G. 4.3  
TEST TYPE NYQ HC 9.43G/MI CO 72.07G/MI NOX 36.10G/MI M.P.G. 4.4

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1100 2500 R.P.M. 600 20M.P.H. 1000 35M.P.H. 600  
CARBON MONOX-IDLE 1.7 2500 R.P.M. 0.6 20M.P.H. 0.2 35M.P.H. 0.2

TEST SET 2239 DATE 06/14/76

ID 25E021

ODOMETER 12870 HOUR METER 5800.1  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 1.87G/MI CO 11.89G/MI NOX 30.61G/MI M.P.G. 4.6  
TEST TYPE NYQ HC 1.63G/MI CO 14.62G/MI NOX 29.82G/MI M.P.G. 4.6

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 200 2500 R.P.M. 75 20M.P.H. 300 35M.P.H. 50  
CARBON MONOX-IDLE 650 2500 R.P.M. 650 20M.P.H. 1800 35M.P.H. 170

TEST SET 2334 DATE 10/18/76

ID 25E021

ODOMETER 15398 HOUR METER 6337.8  
GENERAL COMMENT UOP CATALYST SYSTEM,  
BEFORE TUNE UP

TEST TYPE NYQ HC 5.36G/MI CO 8.12G/MI NOX 34.47G/MI M.P.G. 4.8  
TEST TYPE NYQ HC 3.75G/MI CO 10.15G/MI NOX 33.25G/MI M.P.G. 5.0

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 210 2500 R.P.M. 175 20M.P.H. 85 30M.P.H. 40  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 20M.P.H. 0.1 30M.P.H. 0.0

TEST SET 2335 DATE 10/18/76

ID 25E021

ODOMETER 15407 HOUR METER 6338.7  
GENERAL COMMENT BASELINE, BEFORE TUNE UP

TEST TYPE NYQ HC 30.00G/MI CO 30.12G/MI NOX 36.49G/MI M.P.G. 4.6

TEST TYPE NYQ HC 30.67G/MI CO 31.47G/MI NOX 36.88G/MI M.P.G. 4.8

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1400 2500 R.P.M. 700 20M.P.H. 275 30M.P.H. 125  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.3 20M.P.H. 0.2 30M.P.H. 0.1

TUNE UP COMMENT REPLACED PLUGS, WIRE SET, INTAKE MANIFOLD  
GASKET AND CARBURETOR,

TEST SET 2336 DATE 10/22/76  
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ID 25E021  
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ODOMETER 15420 HOUR METER 6342.9  
GENERAL COMMENT BASELINE, AFTER TUNE UP

TEST TYPE NYQ HC 8.74G/MI CO 48.64G/MI NOX 23.03G/MI M.P.G. 4.3  
TEST TYPE NYQ HC 6.28G/MI CO 46.59G/MI NOX 24.34G/MI M.P.G. 4.5

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 50 2500 R.P.M. 30 20M.P.H. 75 30M.P.H. 50  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.9 20M.P.H. 0.5 30M.P.H. 0.1

TEST SET 2337 DATE 10/22/76  
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ID 25E021  
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ODOMETER 15433 HOUR METER 6344.4  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 1.06G/MI CO 15.09G/MI NOX 26.23G/MI M.P.G. 4.4  
TEST TYPE NYQ HC 0.95G/MI CO 15.78G/MI NOX 24.56G/MI M.P.G. 4.7

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 25 2500 R.P.M. 20 20M.P.H. 35 30M.P.H. 25  
CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.1 20M.P.H. 0.1 30M.P.H. 0.0

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 \* VEHICLE IDENTIFICATION 25E150 \*  
 \* WEIGHT 37800 YEAR 72 MAKE GMC MODEL 8500 TRANSMISSION A6 DISPLACEMENT 478 \*  
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TEST SET 2148 DATE 03/03/76  
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ID 25E150  
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ODOMETER 15485

hour meter 6670.0

GENERAL COMMENT BASELINE WITH CLEAR AIR  
 INIL DEVICE DISCONNECTED

TEST TYPE NYQ	HC	5.29G/MI	CO	65.78G/MI	NOX	31.78G/MI	M.P.G.	4.1
TEST TYPE C39	HC	8.48G/MI	CO	96.21G/MI	NOX	35.59G/MI	M.P.G.	3.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	400	2500 R.P.M.	400	20M.P.H.	1200	35M.P.H.	700
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.5	20M.P.H.	0.4	35M.P.H.	0.1

TEST SET 2149 DATE 03/03/76  
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ID 25E150  
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ODOMETER 15485

hour meter 6670.0

GENERAL COMMENT CLEAR AIR INTL DEVICE

TEST TYPE NYQ	HC	8.94G/MI	CO	43.44G/MI	NOX	27.64G/MI	M.P.G.	3.9
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 \* VEHICLE IDENTIFICATION 25G190 \*  
 \* WEIGHT 40000 YEAR 73 MAKE 1-H MODEL 2010A TRANSMISSION A6 DISPLACEMENT 501 \*  
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TEST SET 2138 DATE 02/17/76

ID 25G190

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 ODOMETER 14137 HOUR METER  
 GENERAL COMMENT AFIER TUNE UP

TEST TYPE NYQ	HC	26.18G/MI	CO	204.70G/MI	NOX	20.00G/MI	M.P.G.	3.4
TEST TYPE NYQ	HC	42.95G/MI	CO	184.80G/MI	NOX	25.66G/MI	M.P.G.	3.7
		COMMENT ENGINE RAN ROUGHLY.						
TEST TYPE C39	HC	42.50G/MI	CO	420.00G/MI	NOX	32.73G/MI	M.P.G.	2.7
TEST TYPE C39	HC	38.58G/MI	CO	457.70G/MI	NOX	31.00G/MI	M.P.G.	2.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	2500	2500 R.P.M.	1700	20M.P.H.	2500	35M.P.H.	1100
CARBON MONOX-IDLE	2.9	2500 R.P.M.	2.0	20M.P.H.	1.3	35M.P.H.	1.0

TEST SET 2139 DATE 02/18/76

ID 25G190

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 ODOMETER 14155 HOUR METER  
 GENERAL COMMENT 73 HULLEY CARB, ENGINE  
 SPUTTER PROBLEM WORSENER AS TESTS PROCEEDED.

TEST TYPE NYQ	HC	27.27G/MI	CO	219.60G/MI	NOX	26.65G/MI	M.P.G.	3.5
TEST TYPE NYQ	HC	56.14G/MI	CO	183.40G/MI	NOX	30.53G/MI	M.P.G.	3.6
TEST TYPE C39	HC	38.14G/MI	CO	424.60G/MI	NOX	30.25G/MI	M.P.G.	2.6
TEST TYPE C39	HC	49.35G/MI	CO	445.10G/MI	NOX	27.38G/MI	M.P.G.	2.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	2500	2500 R.P.M.	1900	20M.P.H.	1800	35M.P.H.	900
CARBON MONOX-IDLE	2.4	2500 R.P.M.	2.9	20M.P.H.	1.1	35M.P.H.	1.1

TEST SET 2140 DATE 02/19/76

ID 25G190

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 ODOMETER 14174 HOUR METER  
 GENERAL COMMENT 73 HULLEY CARB, NEW  
 IGNITION SYSTEM PARTS

TEST TYPE NYQ	HC	11.50G/MI	CO	271.40G/MI	NOX	24.23G/MI	M.P.G.	3.5
TEST TYPE NYQ	HC	11.27G/MI	CO	272.10G/MI	NOX	24.65G/MI	M.P.G.	3.5
TEST TYPE C39	HC	29.65G/MI	CO	400.90G/MI	NOX	24.22G/MI	M.P.G.	2.7
TEST TYPE C39	HC	26.71G/MI	CO	431.90G/MI	NOX	21.55G/MI	M.P.G.	2.8

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*          VEHICLE IDENTIFICATION 4172
*   WEIGHT 10000   YEAR 68   MAKE GMC           MODEL 3500   TRANSMISSION M4   DISPLACEMENT 292
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TEST SET 2131 DATE 02/02/76

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ID 4172

ODOMETER 28021      HOUR METER  
GENERAL COMMENT 73 ROCHESTER CARB

TEST TYPE NYQ	HC	25.06G/MI	CO	218.10G/MI	NOX	4.77G/MI	M.P.G.	7.0
TEST TYPE NYQ	HC	23.45G/MI	CO	254.20G/MI	NOX	4.57G/MI	M.P.G.	6.7
TEST TYPE C39	HC	70.74G/MI	CO	243.10G/MI	NOX	6.63G/MI	M.P.G.	4.6
TEST TYPE C39	HC	63.21G/MI	CO	258.60G/MI	NOX	8.31G/MI	M.P.G.	4.5

KEY MODE TEST-ANALYZER NUMBER 2      (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3800	2500 R.P.M.	3500	30M.P.H.	3200	50M.P.H.	2500
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.3	30M.P.H.	0.3	50M.P.H.	1.3
COMMENT	MOURING HC 26000 PPM CO 0.6%, 11 IN.HG HC 3800 PPM CO 0.6%						
	3 IN.HG. HC 3100 PPM CO 4.9%						

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 \* VEHICLE IDENTIFICATION 43834 \*  
 \* WEIGHT 17000 YEAR 74 MAKE FORD MODEL P505 TRANSMISSION M5 DISPLACEMENT 300 \*  
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TEST SET 2197 DATE 04/30/76  
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ID 43834  
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ODOMETER 5334 HOUR METER  
 GENERAL COMMENT BASELINE

TEST TYPE NYQ	HC	9.04G/MI	CO	118.70G/MI	NOX	6.59G/MI	M.P.G.	7.9
TEST TYPE NYQ	HC	9.42G/MI	CO	128.50G/MI	NOX	8.88G/MI	M.P.G.	7.6
TEST TYPE C39	HC	20.60G/MI	CO	113.60G/MI	NOX	13.35G/MI	M.P.G.	5.1
TEST TYPE C39	HC	17.92G/MI	CO	144.10G/MI	NOX	13.70G/MI	M.P.G.	4.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	150	2500 R.P.M.	40	25M.P.H.	50	40M.P.H.	75	MTR 2000	11-IN.	3-IN.	75
CARBON MONOX-IDLE	1.9	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 1.0	11-IN.	3-IN.	4.2
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	2300	2500 R.P.M.	500	25M.P.H.	700	40M.P.H.	1000	MTR 22000	11-IN.	3-IN.	1000
CARBON MONOX-IDLE	2.0	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 1.0	11-IN.	3-IN.	4.0

TUNE UP COMMENT ADAKS DEVICE WAS INSTALLED.

TEST SET 2198 DATE 05/04/76  
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ID 43834  
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ODOMETER 5350 HOUR METER 0.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	10.11G/MI	CO	60.59G/MI	NOX	10.30G/MI	M.P.G.	8.2
TEST TYPE NYQ	HC	10.64G/MI	CO	65.50G/MI	NOX	9.35G/MI	M.P.G.	8.5
TEST TYPE C39	HC	22.79G/MI	CO	61.89G/MI	NOX	14.56G/MI	M.P.G.	4.9
TEST TYPE C39	HC	18.31G/MI	CO	90.52G/MI	NOX	14.25G/MI	M.P.G.	4.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	350	2500 R.P.M.	75	25M.P.H.	50	40M.P.H.	60	MTR 800	11-IN.	3-IN.	100
CARBON MONOX-IDLE	0.4	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 0.1	11-IN.	3-IN.	2.8
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	3500	2500 R.P.M.	900	25M.P.H.	700	40M.P.H.	800	MTR 12000	11-IN.	3-IN.	1400
CARBON MONOX-IDLE	0.3	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 0.1	11-IN.	3-IN.	2.6

TEST SET 2382 DATE 12/30/76  
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ID 43834  
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ODOMETER 8688 HOUR METER 337.1  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	7.95G/MI	CO	52.07G/MI	NOX	12.17G/MI	M.P.G.	7.6
TEST TYPE NYQ	HC	7.60G/MI	CO	35.24G/MI	NOX	13.01G/MI	M.P.G.	7.9
TEST TYPE C39H	HC	21.03G/MI	CO	60.91G/MI	NOX	13.06G/MI	M.P.G.	5.7
TEST TYPE C39H	HC	17.43G/MI	CO	87.42G/MI	NOX	11.88G/MI	M.P.G.	5.6

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE	300	2500 R.P.M.	50	25M.P.H.	50	40M.P.H.	75	MTR 700	11-IN.	3-IN.	50
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR 0.1	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)										

HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.		3-IN.
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.1	11-IN.		3-IN. 0.1

TEST SET 2383 DATE 12/30/76

ID 43834

ODOMETER 8699 HOUR METER 337.8  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	10.92G/MI	CO	50.14G/MI	NOX	12.37G/MI	M.P.G.	7.5
TEST TYPE NYQ	HC	8.44G/MI	CO	71.62G/MI	NOX	11.46G/MI	M.P.G.	7.6
TEST TYPE C39H	HC	19.46G/MI	CO	88.36G/MI	NOX	12.85G/MI	M.P.G.	5.8
TEST TYPE C39H	HC	16.03G/MI	CO	90.25G/MI	NOX	12.25G/MI	M.P.G.	5.7

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	125	2500 R.P.M.	25	25M.P.H.	60	40M.P.H.	150	MTR	2000	11-IN.		3-IN. 75
CARBON MONOX-IDLE	2.6	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.8	11-IN.		3-IN. 0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.		3-IN.
CARBON MONOX-IDLE	2.5	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.1	MTR	0.8	11-IN.		3-IN. 0.1

TEST SET 2576 DATE 07/18/77

ID 43834

ODOMETER 11420 HOUR METER 646.7  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC	13.22G/MI	CO	143.80G/MI	NOX	8.90G/MI	M.P.G.	7.2
TEST TYPE C39H	HC	23.01G/MI	CO	222.80G/MI	NOX	12.22G/MI	M.P.G.	5.1

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	210	2500 R.P.M.	75	25M.P.H.	75	40M.P.H.	75	MTR	2000	11-IN.		3-IN. 100
CARBON MONOX-IDLE	7.7	2500 R.P.M.	1.5	25M.P.H.	0.2	40M.P.H.	0.2	MTR	2.4	11-IN.		3-IN. 1.8
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.		3-IN.
CARBON MONOX-IDLE	7.5	2500 R.P.M.	1.5	25M.P.H.	0.2	40M.P.H.	0.2	MTR	2.5	11-IN.		3-IN. 1.8

TUNE UP COMMENT ADAKS DEVICE DISCONNECTED.

TEST SET 2577 DATE 07/18/77

ID 43834

ODOMETER 11428 HOUR METER 647.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	12.87G/MI	CO	109.90G/MI	NOX	9.81G/MI	M.P.G.	7.0
TEST TYPE C39H	HC	16.17G/MI	CO	175.30G/MI	NOX	10.32G/MI	M.P.G.	5.2

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	125	2500 R.P.M.	35	25M.P.H.	50	40M.P.H.	75	MTR	500	11-IN.		3-IN. 75
CARBON MONOX-IDLE	3.9	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.1	11-IN.		3-IN. 1.6
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.		3-IN.
CARBON MONOX-IDLE	3.7	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.1	11-IN.		3-IN. 1.5

TUNE UP COMMENT ADAKS DEVICE.

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 \*  
 \* VEHICLE IDENTIFICATION 47704 \*  
 \* WEIGHT 8000 YEAR 59 MAKE FORD MODEL P350 TRANSMISSION M4 DISPLACEMENT 240 \*  
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TEST SET 2302 DATE 09/15/76

ID 47704

ODOMETER 41071 HOUR METER 0.0  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	10.44G/MI	CO	71.18G/MI	NOX	6.42G/MI	M.P.G.	11.2
TEST TYPE NYQ	HC	10.38G/MI	CO	74.38G/MI	NOX	6.10G/MI	M.P.G.	11.2
TEST TYPE C39H	HC	20.82G/MI	CO	132.60G/MI	NOX	6.49G/MI	M.P.G.	8.1
TEST TYPE C39H	HC	20.20G/MI	CO	138.50G/MI	NOX	7.40G/MI	M.P.G.	7.8

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	300	2500 R.P.M.	125	25M.P.H.	250	40M.P.H.	225	MTR	2000	11-IN.	3-IN.	150
CARBON MONOX-IDLE	4.6	2500 R.P.M.	1.5	25M.P.H.	0.7	40M.P.H.	1.0	MTR	3.6	11-IN.	3-IN.	0.4
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	4800	2500 R.P.M.	1800	25M.P.H.	3500	40M.P.H.	3100	MTR	32000	11-IN.	3-IN.	2000
CARBON MONOX-IDLE	4.5	2500 R.P.M.	1.7	25M.P.H.	0.7	40M.P.H.	1.0	MTR	3.5	11-IN.	3-IN.	0.3

TEST SET 2310 DATE 09/24/76

ID 47704

ODOMETER 41086 HOUR METER 0.7  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	7.63G/MI	CO	27.15G/MI	NOX	7.40G/MI	M.P.G.	11.1
TEST TYPE NYQ	HC	7.29G/MI	CO	29.93G/MI	NOX	7.58G/MI	M.P.G.	10.8
TEST TYPE C39H	HC	17.76G/MI	CO	49.06G/MI	NOX	9.27G/MI	M.P.G.	7.9
TEST TYPE C39H	HC	12.97G/MI	CO	51.69G/MI	NOX	9.23G/MI	M.P.G.	8.2

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	225	2500 R.P.M.	75	25M.P.H.	175	40M.P.H.	200	MTR	1200	11-IN.	3-IN.	150
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.1	25M.P.H.	0.4	40M.P.H.	0.3	MTR	0.2	11-IN.	3-IN.	1.5
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2400	2500 R.P.M.	900	25M.P.H.	2000	40M.P.H.	2800	MTR	20000	11-IN.	3-IN.	2200
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.1	25M.P.H.	0.4	40M.P.H.	0.3	MTR	0.2	11-IN.	3-IN.	1.5

TEST SET 2426 DATE 02/11/77

ID 47704

ODOMETER 42735 HOUR METER 271.2  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ	HC	10.62G/MI	CO	61.40G/MI	NOX	7.12G/MI	M.P.G.	13.0
TEST TYPE C39H	HC	15.31G/MI	CO	120.80G/MI	NOX	7.54G/MI	M.P.G.	9.3

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	225	2500 R.P.M.	50	25M.P.H.	175	40M.P.H.	150	MTR	1500	11-IN.	3-IN.	125
CARBON MONOX-IDLE	5.7	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.3	11-IN.	3-IN.	0.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2500	R.P.M.	25M.P.H.	40M.P.H.	MTR	11-IN.	3-IN.					
CARBON MONOX-IDLE	5.5	2500 R.P.M.	0.1	25M.P.H.	0.1	40M.P.H.	0.2	MTR	0.3	11-IN.	3-IN.	0.1

TEST SET 2427 DATE 02/11/77

ID 47704

ODOMETER 42750 HOUR METER 272.0  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 16.47G/MI CO 84.42G/MI NOX 6.76G/MI M.P.G. 12.6  
 TEST TYPE C39H HC 23.80G/MI CO 161.20G/MI NOX 7.42G/MI M.P.G. 8.8

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 400 2500 R.P.M. 60 25M.P.H. 150 40M.P.H. 300 MTR 2000 11-IN. 3-IN. 175  
 CARBON MONOX-IDLE 8.3 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 4.0 11-IN. 3-IN. 0.1  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 8.0 2500 R.P.M. 0.2 25M.P.H. 0.1 40M.P.H. 0.2 MTR 3.9 11-IN. 3-IN. 0.1

TEST SET 2620 DATE 09/13/77

ID 47704

ODOMETER 45244 HOUR METER 582.5  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 5.74G/MI CO 51.78G/MI NOX 8.25G/MI M.P.G. 13.3  
 TEST TYPE C39H HC 11.06G/MI CO 89.01G/MI NOX 9.02G/MI M.P.G. 9.0

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 175 2500 R.P.M. 75 25M.P.H. 150 40M.P.H. 175 MTR 1200 11-IN. 3-IN. 175  
 CARBON MONOX-IDLE 3.1 2500 R.P.M. 0.2 25M.P.H. 0.3 40M.P.H. 0.2 MTR 0.3 11-IN. 3-IN. 3.8  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 3.0 2500 R.P.M. 0.2 25M.P.H. 0.3 40M.P.H. 0.2 MTR 0.3 11-IN. 3-IN. 3.6

TEST SET 2621 DATE 09/13/77

ID 47704

ODOMETER 45250 HOUR METER 583.2  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ HC 11.59G/MI CO 90.27G/MI NOX 7.50G/MI M.P.G. 12.9  
 TEST TYPE C39H HC 20.59G/MI CO 138.40G/MI NOX 9.85G/MI M.P.G. 8.5

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 425 2500 R.P.M. 100 25M.P.H. 200 40M.P.H. 275 MTR 2000 11-IN. 3-IN. 250  
 CARBON MONOX-IDLE 7.6 2500 R.P.M. 0.3 25M.P.H. 0.3 40M.P.H. 0.2 MTR 4.5 11-IN. 3-IN. 3.6  
 KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 2500 R.P.M. 25M.P.H. 40M.P.H. MTR 11-IN. 3-IN.  
 CARBON MONOX-IDLE 6.8 2500 R.P.M. 0.3 25M.P.H. 0.3 40M.P.H. 0.2 MTR 4.1 11-IN. 3-IN. 3.5

TEST SET 2813 DATE 05/18/78

ID 47704

ODOMETER 47967 HOUR METER 868.8  
 GENERAL COMMENT ADAKS DEVICE

TEST TYPE NYQ HC 5.84G/MI CO 56.64G/MI NOX 6.15G/MI M.P.G. 14.3  
 TEST TYPE NYQ HC 5.39G/MI CO 52.99G/MI NOX 6.86G/MI M.P.G. 14.1

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE 125 2500 R.P.M.	50 25M.P.H.	150 40M.P.H.	125 MTR	900	11-IN.		3-IN.	125				
CARBON MONOX-IDLE 1.6 2500 R.P.M.	0.2 25M.P.H.	0.1 40M.P.H.	0.3 MTR	3.2	11-IN.		3-IN.	3.8				
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE 2500 R.P.M.	25M.P.H.	40M.P.H.	MTR		11-IN.		3-IN.					
CARBON MONOX-IDLE 1.5 2500 R.P.M.	0.2 25M.P.H.	0.1 40M.P.H.	0.3 MTR	2.8	11-IN.		3-IN.	3.6				

TEST SET 2814 DATE 05/18/78

ID 47704

ODOMETER 47977      HOUR METER 869.8  
 GENERAL COMMENT DEVICE DISCONNECTED

TEST TYPE NYQ	HC 10.24G/MI	CO 78.37G/MI	NOX 7.13G/MI	M.P.G. 13.7
TEST TYPE NYQ	HC 9.21G/MI	CO 81.68G/MI	NOX 7.00G/MI	M.P.G. 13.9

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE 300 2500 R.P.M.	65 25M.P.H.	150 40M.P.H.	175 MTR	2000	11-IN.		3-IN.	125				
CARBON MONOX-IDLE 6.2 2500 R.P.M.	0.2 25M.P.H.	0.1 40M.P.H.	0.3 MTR	5.0	11-IN.		3-IN.	3.9				
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M.	CARBON MONOXIDE IN %)										
HYDROCARBONS-IDLE 2500 R.P.M.	25M.P.H.	40M.P.H.	MTR		11-IN.		3-IN.					
CARBON MONOX-IDLE 5.6 2500 R.P.M.	0.2 25M.P.H.	0.1 40M.P.H.	0.3 MTR	4.5	11-IN.		3-IN.	3.6				

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 \* VEHICLE IDENTIFICATION 47720 \*  
 \* WEIGHT 8000 YEAR 59 MAKE FORD MODEL P350 TRANSMISSION M4 DISPLACEMENT 240 \*  
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TEST SET 2223 DATE 06/02/76  
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ID 47720  
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ODOMETER 19853 HOUR METER .  
 GENERAL COMMENT BASELINE TEST

TEST TYPE NYQ	HC	8.70G/MI	CO	86.78G/MI	NOX	4.20G/MI	M.P.G.	12.9
TEST TYPE NYQ	HC	8.53G/MI	CO	90.40G/MI	NOX	3.37G/MI	M.P.G.	13.3
TEST TYPE C39	HC	17.48G/MI	CO	102.20G/MI	NOX	7.21G/MI	M.P.G.	8.3
TEST TYPE C39	HC	18.29G/MI	CO	118.30G/MI	NOX	6.77G/MI	M.P.G.	8.0

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	150	2500 R.P.M.	125	30M.P.H.	250	45M.P.H.	250	MTR	2000	11-IN.	3-IN.	200
CARBON MONOX-IDLE	0.2	2500 R.P.M.	2.1	30M.P.H.	2.5	45M.P.H.	1.5	MTR	0.4	11-IN.	3-IN.	6.0
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2200	2500 R.P.M.	2000	30M.P.H.	3300	45M.P.H.	3400	MTR	21000	11-IN.	3-IN.	3000
CARBON MONOX-IDLE	0.2	2500 R.P.M.	2.1	30M.P.H.	2.5	45M.P.H.	1.5	MTR	0.4	11-IN.	3-IN.	5.9

TEST SET 2226 DATE 06/07/76  
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ID 47720  
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ODOMETER 19867 HOUR METER 0.6  
 GENERAL COMMENT NEW MOTORCRAFT CARB.,  
 THIS UNIT WAS THE ONLY ONE AVAILABLE FOR A TRUCK THIS OLD.

TEST TYPE NYQ	HC	9.39G/MI	CO	85.11G/MI	NOX	3.90G/MI	M.P.G.	12.7
TEST TYPE NYQ	HC	10.17G/MI	CO	96.64G/MI	NOX	3.15G/MI	M.P.G.	12.6
TEST TYPE C39	HC	18.62G/MI	CO	127.60G/MI	NOX	4.33G/MI	M.P.G.	8.3
TEST TYPE C39	HC	15.23G/MI	CO	149.90G/MI	NOX	4.03G/MI	M.P.G.	8.2

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	175	2500 R.P.M.	75	30M.P.H.	175	45M.P.H.	175	MTR	2000	11-IN.	3-IN.	175
CARBON MONOX-IDLE	1.1	2500 R.P.M.	2.5	30M.P.H.	2.5	45M.P.H.	1.1	MTR	1.5	11-IN.	3-IN.	5.0
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	2800	2500 R.P.M.	1900	30M.P.H.	2800	45M.P.H.	3000	MTR	30000	11-IN.	3-IN.	3000
CARBON MONOX-IDLE	1.1	2500 R.P.M.	2.6	30M.P.H.	2.6	45M.P.H.	1.1	MTR	1.6	11-IN.	3-IN.	4.9

TEST SET 2390 DATE 01/13/77  
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ID 47720  
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ODOMETER 20362 HOUR METER 138.2  
 GENERAL COMMENT NEW CARB.

TEST TYPE NYQ	HC	12.02G/MI	CO	129.50G/MI	NOX	3.58G/MI	M.P.G.	12.5
TEST TYPE NYQ	HC	11.91G/MI	CO	125.10G/MI	NOX	3.64G/MI	M.P.G.	12.6
TEST TYPE C39H	HC	20.69G/MI	CO	176.90G/MI	NOX	5.27G/MI	M.P.G.	8.9
TEST TYPE C39H	HC	20.04G/MI	CO	197.90G/MI	NOX	4.85G/MI	M.P.G.	8.5

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	300	2500 R.P.M.	125	25M.P.H.	225	40M.P.H.	325	MTR	2000	11-IN.	3-IN.	275
CARBON MONOX-IDLE	6.4	2500 R.P.M.	2.3	25M.P.H.	1.6	40M.P.H.	1.2	MTR	3.0	11-IN.	3-IN.	5.0
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											

HYDROCARBONS-IDLE		2500 R.P.M.		25M.P.H.		40M.P.H.		MTR		11-IN.		3-IN.
CARBON MONOX-IDLE	6.1	2500 R.P.M.	2.3	25M.P.H.	1.5	40M.P.H.	1.1	MTR	3.1	11-IN.		3-IN. 4.8

TUNE UP COMMENT CARB IDLE MIX WAS LEANED OUT AFTER THE TEST

TEST SET 2572 DATE 07/07/77

ID 47720

ODOMETER 21494      HOUR METER 307.1  
 GENERAL COMMENT NEW CARB.

TEST TYPE NYQ	HC	7.85G/MI	CO	93.97G/MI	NOX	3.84G/MI	M.P.G.	13.7
TEST TYPE NYQ	HC	8.20G/MI	CO	102.30G/MI	NOX	3.02G/MI	M.P.G.	13.8
TEST TYPE C39H	HC	15.32G/MI	CO	115.60G/MI	NOX	6.18G/MI	M.P.G.	9.2
TEST TYPE C39H	HC	14.88G/MI	CO	132.60G/MI	NOX	4.41G/MI	M.P.G.	9.4

KEY MODE TEST-ANALYZER NUMBER 5	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	200	2500 R.P.M.	150	25M.P.H.	225	40M.P.H.	275	MTR	2000	11-IN.		3-IN. 250
CARBON MONOX-IDLE	1.4	2500 R.P.M.	3.3	25M.P.H.	3.3	40M.P.H.	1.3	MTR	2.0	11-IN.		3-IN. 5.1
KEY MODE TEST-ANALYZER NUMBER 2	(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)											
HYDROCARBONS-IDLE	3000	2500 R.P.M.	2000	25M.P.H.	3200	40M.P.H.	4000	MTR	10000	11-IN.		3-IN. 3500
CARBON MONOX-IDLE	1.4	2500 R.P.M.	3.4	25M.P.H.	3.2	40M.P.H.	1.3	MTR	2.0	11-IN.		3-IN. 4.9

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 \* VEHICLE IDENTIFICATION 5302 \*  
 \* WEIGHT 19500 YEAR 69 MAKE CHEVROLET MODEL 50 TRANSMISSION A6 DISPLACEMENT 292 \*  
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TEST SET 2108 DATE 01/08/76  
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ID 5302  
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ODOMETER 25631 HOUR METER  
 GENERAL COMMENT AFIER TUNE UP,BASELINE

TEST TYPE NYQ	HC	10.16G/MI	CO	167.60G/MI	NOX	12.42G/MI	M.P.G.	5.1
TEST TYPE NYQ	HC	8.99G/MI	CO	154.60G/MI	NOX	21.02G/MI	M.P.G.	5.1
TEST TYPE C39	HC	17.41G/MI	CO	205.50G/MI	NOX	19.81G/MI	M.P.G.	3.9
TEST TYPE C39	HC	17.53G/MI	CO	253.50G/MI	NOX	20.16G/MI	M.P.G.	3.9

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	250	2500 R.P.M.	100	20M.P.H.	125	35M.P.H.	75	MTR	900	11-IN.	6-IN.	75
CARBON MONOX-IDLE	0.8	2500 R.P.M.	0.3	20M.P.H.	0.2	35M.P.H.	0.2	MTR	1.5	11-IN.	6-IN.	0.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3000	2500 R.P.M.	1200	20M.P.H.	1800	35M.P.H.	600	MTR	8000	11-IN.	6-IN.	500
CARBON MONOX-IDLE	0.7	2500 R.P.M.	0.3	20M.P.H.	0.2	35M.P.H.	0.2	MTR	1.3	11-IN.	6-IN.	0.2

COMMENT SUCH THAT DYND COULD NOT LOAD ENGINE TO LESS THAN 6 IN. HG.  
 - K 00-2 K - K C13 - K 00-2 K - 9 K C 05 KU& Kq B<3 KD 4 1

TEST SET 2109 DATE 01/09/76  
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ID 5302  
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ODOMETER 25649 HOUR METER  
 GENERAL COMMENT ADAKS DEVICE.BLEED UNDER CARB.

TEST TYPE NYQ	HC	9.67G/MI	CO	139.10G/MI	NOX	21.84G/MI	M.P.G.	4.8
TEST TYPE NYQ	HC	7.26G/MI	CO	131.50G/MI	NOX	22.60G/MI	M.P.G.	4.9

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	1200	2500 R.P.M.	200	20M.P.H.	600	35M.P.H.	200
CARBON MONOX-IDLE	.1	2500 R.P.M.	.1	20M.P.H.	.2	35M.P.H.	.1

TUNE UP COMMENT INSTALLED OF ADAKS PLATE.IDLE UP TO 600N.

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 \* VEHICLE IDENTIFICATION 5419 \*  
 \* WEIGHT 32500 YEAR 70 MAKE GMC MODEL 6500 TRANSMISSION A6 DISPLACEMENT 351 \*  
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TEST SET 2119 DATE 01/16/76  
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 ID 5419  
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ODOMETER 6678

HOUR METER  
 GENERAL COMMENT ECCONO JETS.

TEST TYPE NYQ	HC	13.25G/MI	CO	197.60G/MI	NOX	30.84G/MI	M.P.G.	4.3
		COMMENT	ORIGINAL CARB IDLE MIXTURE					
			SCREWS WERE REPLACED WITH ECCONO-JET NEEDLES.					
TEST TYPE NYQ	HC	15.44G/MI	CO	278.70G/MI	NOX	26.56G/MI	M.P.G.	4.1
TEST TYPE C39	HC	41.90G/MI	CO	534.10G/MI	NOX	24.55G/MI	M.P.G.	3.0
TEST TYPE C39	HC	54.28G/MI	CO	643.60G/MI	NOX	21.66G/MI	M.P.G.	2.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1800 2500 R.P.M. 1100 20M.P.H. 2700 29M.P.H. 2200  
 CARBON MONOX-IDLE .2 2500 R.P.M. .3 20M.P.H. .1 29M.P.H. 3.5

TUNE UP COMMENT ECCONO JETS TYPE 1 INSTALLED APPROX  
 ONE-EIGHTH TURN OFF BOTTOM.

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 \* VEHICLE IDENTIFICATION 5522 \*  
 \* WEIGHT 23000 YEAR 71 MAKE FORD MODEL F700 TRANSMISSION A4 DISPLACEMENT 361 \*  
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TEST SET 2125 DATE 01/22/76  
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ID 5522  
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ODOMETER 15598	HOUR METER					
	GENERAL COMMENT	CLEAR AIR INTL DEVICE				
TEST TYPE NYQ	HC 12.09G/MI	CO 344.40G/MI	NOX 14.09G/MI	M.P.G.	4.0	
	COMMENT	ENGINE STALLED ONCE .				
TEST TYPE NYQ	HC 11.31G/MI	CO 344.70G/MI	NOX 13.68G/MI	M.P.G.	4.0	
	COMMENT	ENGINE STALLED ONCE .				
TEST TYPE C39	HC 24.32G/MI	CO 373.80G/MI	NOX 17.20G/MI	M.P.G.	2.9	
	COMMENT	ENGINE STALLED TWICE.				
TEST TYPE C39	HC 20.85G/MI	CO 395.80G/MI	NOX 17.21G/MI	M.P.G.	2.9	
	COMMENT	ENGINE STALLED ONCE.				

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	1500	2500 R.P.M.	1000	25M.P.H.	2400	40M.P.H.	2300
CARBON MONOX-IDLE	0.5	2500 R.P.M.	0.1	25M.P.H.	1.9	40M.P.H.	4.1
COMMENT	MOTORING HC 3000 PPM CO 0.6%, 11 IN.HG. HC 2500 PPM CO 2.9%						
	3 IN.HG. HC 2000 PPM CO 5.0%						

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 \* VEHICLE IDENTIFICATION 5724 \*  
 \* WEIGHT 19500 YEAR 69 MAKE CHEVROLET MODEL C50 TRANSMISSION A6 DISPLACEMENT 292 \*  
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TEST SET 2146 DATE 03/02/76

ID 5724

ODOMETER 27392 HOUR METER  
 GENERAL COMMENT AFTER TUNE UP, BASELINE

TEST TYPE NYQ	HC	10.13G/MI	CO	193.30G/MI	NOX	12.10G/MI	M.P.G.	5.0
TEST TYPE NYQ	HC	9.89G/MI	CO	208.20G/MI	NOX	13.21G/MI	M.P.G.	5.9
TEST TYPE C39	HC	15.63G/MI	CO	255.50G/MI	NOX	19.99G/MI	M.P.G.	4.0
TEST TYPE C39	HC	15.82G/MI	CO	267.30G/MI	NOX	20.98G/MI	M.P.G.	4.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3800	2500 R.P.M.	3000	20M.P.H.	1700	30M.P.H.	1500	MTR	25000	11-IN.	3-IN.	2200
CARBON MONOX-IDLE	4.5	2500 R.P.M.	0.5	20M.P.H.	0.1	30M.P.H.	0.2	MTR	3.2	11-IN.	3-IN.	3.6

COMMENT MOTORING HC 25000 PPM CO 3.2% 11 IN.HG. HC 1500 PPM CO 0.2%  
 3 IN.HG. HC 2300 PPM CO 3.6%

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	225	2500 R.P.M.	200	20M.P.H.	150	30M.P.H.	125	MTR	2000	11-IN.	3-IN.	150
CARBON MONOX-IDLE	4.8	2500 R.P.M.	0.4	20M.P.H.	0.1	30M.P.H.	0.2	MTR	3.0	11-IN.	3-IN.	3.6

TEST SET 2155 DATE 03/09/76

ID 5724

ODOMETER 27409 HOUR METER  
 GENERAL COMMENT CLEAR AIR INTL DEVICE

TEST TYPE NYQ	HC	10.97G/MI	CO	140.80G/MI	NOX	19.22G/MI	M.P.G.	5.6
TEST TYPE NYQ	HC	10.27G/MI	CO	152.40G/MI	NOX	19.68G/MI	M.P.G.	5.5
TEST TYPE C39	HC	20.19G/MI	CO	211.40G/MI	NOX	26.27G/MI	M.P.G.	3.8
TEST TYPE C39	HC	20.85G/MI	CO	224.60G/MI	NOX	26.27G/MI	M.P.G.	3.8

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	4400	2500 R.P.M.	4500	20M.P.H.	1800	30M.P.H.	1000
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.2	20M.P.H.	0.1	30M.P.H.	0.1

COMMENT MOTORING HC 15000 PPM CO 0.2% 11 IN-HG. HC 1600 PPM CO 0.1%  
 3 IN.HG. HC 1900 PPM CO 1.1%

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 \* VEHICLE IDENTIFICATION 6399 \*  
 \* WEIGHT 25500 YEAR 71 MAKE FORD MODEL F700 TRANSMISSION M5 DISPLACEMENT 361 \*  
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TEST SET 2135 DATE 02/09/76

ID 6399

ODOMETER 11862

HOUR METER

GENERAL COMMENT AFTER TUNE UP, BASELINE

TEST TYPE NYQ	HC	31.19G/MI	CO	174.60G/MI	NOX	18.01G/MI	M.P.G.	5.1
TEST TYPE NYQ	HC	30.89G/MI	CO	185.50G/MI	NOX	17.13G/MI	M.P.G.	5.1
TEST TYPE C39	HC	48.31G/MI	CO	192.10G/MI	NOX	24.31G/MI	M.P.G.	3.9
TEST TYPE C39	HC	50.93G/MI	CO	241.70G/MI	NOX	23.52G/MI	M.P.G.	3.7

KEY MODE TEST-ANALYZER NUMBER 2

(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3600	2500 R.P.M.	1400	25M.P.H.	4100	40M.P.H.	5500	MTR	42000	11-IN.	3-IN.	3500
CARBON MONOX-IDLE	1.4	2500 R.P.M.	0.4	25M.P.H.	0.3	40M.P.H.	0.5	MTR	5.0	11-IN.	3-IN.	0.2
COMMENT MOTORING HC 42000 PPM CO 5.0% 11 IN-HG. HC 5500 PPM CO 0.5%												
3 IN-HG. HC 3500 PPM CO 0.2%												

KEY MODE TEST-ANALYZER NUMBER 5

(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	250	2500 R.P.M.	100	25M.P.H.	375	40M.P.H.	475	MTR	2000	11-IN.	3-IN.	250
CARBON MONOX-IDLE	1.5	2500 R.P.M.	0.5	25M.P.H.	0.3	40M.P.H.	0.5	MTR	5.2	11-IN.	3-IN.	0.2

TEST SET 2136 DATE 02/11/76

ID 6399

ODOMETER 11862

HOUR METER

GENERAL COMMENT CLEAR AIR INTL DEVICE

TEST TYPE NYQ	HC	25.67G/MI	CO	154.50G/MI	NOX	18.74G/MI	M.P.G.	5.3
TEST TYPE NYQ	HC	24.69G/MI	CO	175.10G/MI	NOX	17.83G/MI	M.P.G.	5.2
TEST TYPE C39	HC	38.33G/MI	CO	167.30G/MI	NOX	20.89G/MI	M.P.G.	4.2
TEST TYPE C39	HC	38.65G/MI	CO	195.70G/MI	NOX	20.88G/MI	M.P.G.	4.1

KEY MODE TEST-ANALYZER NUMBER 2

(UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3600	2500 R.P.M.	1100	25M.P.H.	3700	40M.P.H.	2300
CARBON MONOX-IDLE	0.6	2500 R.P.M.	0.2	25M.P.H.	0.3	40M.P.H.	0.6
COMMENT MOTORING HC 20000 PPM CO 0.4% 11 IN-HG. HC 4600 PPM CO 0.7%							
3 IN-HG. HC 2700 PPM CO 0.4%							

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 \* VEHICLE IDENTIFICATION 684352 \*  
 \* WEIGHT 20000 YEAR 68 MAKE FORD MODEL F600 TRANSMISSION M4 DISPLACEMENT 300 \*  
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TEST SET 1616 DATE 11/19/74

ID 684352

ODOMETER 65930 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE	NYQ	HC	8.42G/MI	CO	84.30G/MI	NOX	5.71G/MI	M.P.G.	10.1
TEST TYPE	NYQ	HC	7.92G/MI	CO	82.16G/MI	NOX	5.74G/MI	M.P.G.	10.4

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	3600	2500 R.P.M.	8100	30M.P.H.	1800	50M.P.H.	900
CARBON MONOX-IDLE	2.8	2500 R.P.M.	1.2	30M.P.H.	2.0	50M.P.H.	0.6

TEST SET 1619 DATE 11/20/74

ID 684352

ODOMETER 65949 HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE	NYQ	HC	0.56G/MI	CO	6.48G/MI	NOX	4.57G/MI	M.P.G.	10.2
TEST TYPE	NYQ	HC	0.67G/MI	CO	7.64G/MI	NOX	4.48G/MI	M.P.G.	10.2

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	75	2500 R.P.M.	500	30M.P.H.	84	50M.P.H.	90
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	30M.P.H.	0.1	50M.P.H.	0.0

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 \* VEHICLE IDENTIFICATION 704526 \*  
 \* WEIGHT 27500 YEAR 70 MAKE CHEVROLET MODEL C60 TRANSMISSION M5 DISPLACEMENT 366 \*  
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TEST SET 1634 DATE 12/ 4/74

ID 704526

ODOMETER 23156 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE	NYQ	HC	4.67G/MI	CO	40.87G/MI	NOX	0.93G/MI	M.P.G.	5.7
TEST TYPE	NYQ	HC	4.10G/MI	CO	45.32G/MI	NOX	6.77G/MI	M.P.G.	5.6

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 450 2500 R.P.M. 90 30M.P.H. 114 50M.P.H. 300  
 CARBON MONOX-IDLE 5000 2500 R.P.M. 2000 30M.P.H. 4000 50M.P.H. 9000

TEST SET 1636 DATE 12/ 4/74

ID 704526

ODOMETER 23165 HOUR METER  
 GENERAL COMMENT UOP CATALYTIC CONVERTERS

TEST TYPE	NYQ	HC	1.01G/MI	CO	5.43G/MI	NOX	4.88G/MI	M.P.G.	5.8
TEST TYPE	NYQ	HC	0.96G/MI	CO	4.73G/MI	NOX	4.52G/MI	M.P.G.	6.0

KEY MODE TEST-ANALYZER NUMBER 3 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 30 2500 R.P.M. 15 30M.P.H. 15 50M.P.H. 30  
 CARBON MONOX-IDLE 0 2500 R.P.M. 0 30M.P.H. 0 50M.P.H. 0

TEST SET 1808 DATE 4/16/75

ID 704526

ODOMETER 26410 HOUR METER 138.1  
 GENERAL COMMENT UOP CATALYTIC CONVERTERS

TEST TYPE	NYQ	HC	2.86G/MI	CO	15.32G/MI	NOX	6.24G/MI	M.P.G.	5.6
TEST TYPE	NYQ	HC	2.57G/MI	CO	12.84G/MI	NOX	6.29G/MI	M.P.G.	5.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 110 2500 R.P.M. 80 30M.P.H. 45 50M.P.H. 420  
 CARBON MONOX-IDLE 670 2500 R.P.M. 230 30M.P.H. 350 50M.P.H. 5000

TEST SET 1809 DATE 4/16/75

ID 704526

ODOMETER 26422 HOUR METER 139.3  
 GENERAL COMMENT BASELINE

TEST TYPE	NYQ	HC	5.31G/MI	CO	58.58G/MI	NOX	6.66G/MI	M.P.G.	5.7
TEST TYPE	NYQ	HC	4.95G/MI	CO	59.61G/MI	NOX	6.53G/MI	M.P.G.	5.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 550 2500 R.P.M. 70 30M.P.H. 80 50M.P.H. 400  
 CARBON MONOX-IDLE 1.0 2500 R.P.M. 0.2 30M.P.H. 0.5 50M.P.H. 1.9

TEST SET 2342 DATE 11/03/76

ID 704526

ODOMETER 38250 HOUR METER 591.1  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	13.64G/MI	CO	66.00G/MI	NOX	9.34G/MI	M.P.G.	5.0
TEST TYPE NYQ	HC	11.29G/MI	CO	67.96G/MI	NOX	8.00G/MI	M.P.G.	5.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	35	2500 R.P.M.	25	20M.P.H.	35	30M.P.H.	30
CARBON MONOX-IDLE	0.2	2500 R.P.M.	0.1	20M.P.H.	0.1	30M.P.H.	0.1

TEST SET 2343 DATE 11/03/76

ID 704526

ODOMETER HOUR METER  
 GENERAL COMMENT BASELINE, BEFORE TUNE UP

TEST TYPE NYQ	HC	27.12G/MI	CO	121.00G/MI	NOX	10.63G/MI	M.P.G.	5.2
TEST TYPE NYQ	HC	18.71G/MI	CO	117.90G/MI	NOX	8.51G/MI	M.P.G.	5.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	60	2500 R.P.M.	25	20M.P.H.	50	30M.P.H.	50
CARBON MONOX-IDLE	0.9	2500 R.P.M.	0.3	20M.P.H.	0.5	30M.P.H.	0.6

TEST SET 2348 DATE 11/08/76

ID 704526

ODOMETER 38276 HOUR METER 595.3  
 GENERAL COMMENT BASELINE, AFTER TUNE UP

TEST TYPE NYQ	HC	20.93G/MI	CO	113.90G/MI	NOX	11.49G/MI	M.P.G.	5.1
TEST TYPE NYQ	HC	18.06G/MI	CO	110.30G/MI	NOX	11.20G/MI	M.P.G.	5.2

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	75	2500 R.P.M.	35	20M.P.H.	75	30M.P.H.	75
CARBON MONOX-IDLE	0.3	2500 R.P.M.	0.2	20M.P.H.	0.3	30M.P.H.	0.5

TEST SET 2349 DATE 11/08/76

ID 704526

ODOMETER HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	9.83G/MI	CO	58.65G/MI	NOX	9.33G/MI	M.P.G.	5.3
TEST TYPE NYQ	HC	10.02G/MI	CO	53.27G/MI	NOX	9.46G/MI	M.P.G.	5.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	25	2500 R.P.M.	15	20M.P.H.	20	30M.P.H.	15
CARBON MONOX-IDLE	0.1	2500 R.P.M.	0.1	20M.P.H.	0.1	30M.P.H.	0.1

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 \* VEHICLE IDENTIFICATION 714192 \*  
 \* WEIGHT 08000 YEAR 71 MAKE DODGE MODEL PW200 TRANSMISSION M4 DISPLACEMENT 318 \*  
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TEST SET 1689 DATE 1/13/73  
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ID 714192  
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ODOMETER 59353 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE 72H	HC	4.65G/MI	CO	36.88G/MI	NOX	5.96G/MI	M.P.G.	12.1
TEST TYPE NYQ	HC	5.89G/MI	CO	44.01G/MI	NOX	4.35G/MI	M.P.G.	11.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1000 2500 R.P.M. 800 30M.P.H. 2300 50M.P.H. 1600  
 CARBON MONOX-IDLE 0.3 2500 R.P.M. 0.3 30M.P.H. 0.2 50M.P.H. 0.5

TUNE UP COMMENT NEW CARBURETOR WAS INSTALLED

TEST SET 1691 DATE 1/14/75  
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ID 714192  
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ODOMETER 59380 HOUR METER 0.7  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE 72H	HC	0.72G/MI	CO	2.83G/MI	NOX	4.58G/MI	M.P.G.	11.3
TEST TYPE NYQ	HC	1.23G/MI	CO	4.06G/MI	NOX	1.88G/MI	M.P.G.	10.9

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 50 2500 R.P.M. 30 30M.P.H. 150 50M.P.H. 60  
 CARBON MONOX-IDLE 50 2500 R.P.M. 25 30M.P.H. 50 50M.P.H. 90

TEST SET 1993 DATE 09/25/75  
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ID 714192  
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ODOMETER 73992 HOUR METER 450.0  
 GENERAL COMMENT AIR PUMP ONLY

TEST TYPE 72H	HC	5.76G/MI	CO	40.41G/MI	NOX	5.32G/MI	M.P.G.	12.3
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TEST SET 1995 DATE 09/25/75  
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ID 714192  
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ODOMETER HOUR METER  
 GENERAL COMMENT BASELINE

TEST TYPE 72H	HC	5.55G/MI	CO	39.48G/MI	NOX	5.37G/MI	M.P.G.	12.6
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TEST SET 1997 DATE 09/25/75  
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ID 714192  
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ODOMETER HOUR METER  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE 72H      HC    2.75G/MI      CO    14.11G/MI      NOX   4.96G/MI      M.P.G.   12.3

TEST SET 2346    DATE 11/05/76  
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ID 714192  
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ODOMETER    93028      HOUR METER 1070.2  
GENERAL COMMENT    UOP CATALYST SYSTEM

TEST TYPE 72H      HC    2.41G/MI      CO    15.59G/MI      NOX   5.67G/MI      M.P.G.   11.5

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE    30    2500 R.P.M.      20    25M.P.H.      45    40M.P.H.      40  
CARBON MONOX-IDLE    0.0    2500 R.P.M.      0.    25M.P.H.      0.0    40M.P.H.      0.1

TEST SET 2347    DATE 11/05/76  
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ID 714192  
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ODOMETER      HOUR METER  
GENERAL COMMENT    BASELINE, BEFORE TUNE UP

TEST TYPE 72H      HC    5.70G/MI      CO    35.37G/MI      NOX   5.50G/MI      M.P.G.   11.9

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE    175    2500 R.P.M.      50    25M.P.H.      100    40M.P.H.      100  
CARBON MONOX-IDLE    0.2    2500 R.P.M.      0.2    25M.P.H.      0.1    40M.P.H.      0.5

TEST SET 2351    DATE 11/09/76  
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ID 714192  
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ODOMETER    93081      HOUR METER 1074.9  
GENERAL COMMENT    BASELINE, AFTER TUNE UP

TEST TYPE 72H      HC    5.85G/MI      CO    34.07G/MI      NOX   7.22G/MI      M.P.G.   11.8

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE    175    2500 R.P.M.      50    25M.P.H.      125    40M.P.H.      75  
CARBON MONOX-IDLE    0.3    2500 R.P.M.      0.2    25M.P.H.      0.2    40M.P.H.      0.2

TEST SET 2352    DATE 11/09/76  
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ID 714192  
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ODOMETER      HOUR METER  
GENERAL COMMENT    UOP CATALYST SYSTEM

TEST TYPE 72H      HC    2.13G/MI      CO    10.89G/MI      NOX   7.14G/MI      M.P.G.   11.5

KEY MODE TEST-ANALYZER NUMBER 5      (UNITS-HYDROCARBONS IN P.P.M.    CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE    40    2500 R.P.M.      25    25M.P.H.      45    40M.P.H.      50  
CARBON MONOX-IDLE    0.0    2500 R.P.M.      0.0    25M.P.H.      0.0    40M.P.H.      0.1

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 \* VEHICLE IDENTIFICATION 714398 \*  
 \* WEIGHT 24000 YEAR 71 MAKE DODGE MODEL D500 TRANSMISSION M4 DISPLACEMENT 361 \*  
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TEST SET 1670 DATE 12/23/74  
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ID 714398  
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ODOMETER 27843 HOUR METER  
 GENERAL COMMENT BASELINE, AFTER TUNE-UP

TEST TYPE NYQ	HC	12.59G/MI	CO	62.02G/MI	NUX	10.14G/MI	M.P.G.	7.9
TEST TYPE NYQ	HC	12.77G/MI	CO	62.84G/MI	NUX	10.74G/MI	M.P.G.	7.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 4100 2500 R.P.M. 900 30M.P.H. 2000 50M.P.H. 1200  
 CARBON MONOX-IDLE 2.8 2500 R.P.M. 0.1 30M.P.H. 0.1 50M.P.H. 1.5

TEST SET 1671 DATE 12/23/74  
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ID 714398  
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ODOMETER 27860 HOUR METER 0.0  
 GENERAL COMMENT UOP CATALYST SYSTEM  
 TEST WAS OF QUESTIONABLE VALIDITY.

TEST TYPE NYQ	HC	1.58G/MI	CO	4.74G/MI	NUX	5.10G/MI	M.P.G.	8.2
TEST TYPE NYQ	HC	2.75G/MI	CO	4.54G/MI	NUX	4.73G/MI	M.P.G.	8.5

COMMENT ENGINE STALLED ONCE.

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 250 2500 R.P.M. 230 30M.P.H. 160 50M.P.H. 240  
 CARBON MONOX-IDLE 50 2500 R.P.M. 660 30M.P.H. 70 50M.P.H. 290

TEST SET 1673 DATE 12/24/74  
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ID 714398  
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ODOMETER 27889 HOUR METER 0.0  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	3.29G/MI	CO	5.91G/MI	NUX	8.59G/MI	M.P.G.	7.5
TEST TYPE NYQ	HC	2.23G/MI	CO	4.67G/MI	NUX	8.60G/MI	M.P.G.	7.6

TEST SET 1798 DATE 4/10/75  
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ID 714398  
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ODOMETER 30200 HOUR METER 61.6  
 GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ	HC	3.16G/MI	CO	16.92G/MI	NUX	8.26G/MI	M.P.G.	7.3
TEST TYPE NYQ	HC	2.51G/MI	CO	15.90G/MI	NUX	7.31G/MI	M.P.G.	7.4

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 300 2500 R.P.M. 500 30M.P.H. 100 50M.P.H. 50  
 CARBON MONOX-IDLE 800 2500 R.P.M. 125 30M.P.H. 100 50M.P.H. 2050

TEST SET 1799 DATE 4/10/75

ID 714398

ODOMETER 30204 HOUR METER 62.3  
GENERAL COMMENT BASELINE

TEST TYPE NYQ HC 7.28G/MI CO 81.70G/MI NOX 8.98G/MI M.P.G. 7.5  
TEST TYPE NYQ HC 7.12G/MI CO 90.50G/MI NOX 8.41G/MI M.P.G. 7.5

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 2100 2500 R.P.M. 2500 30M.P.H. 1000 50M.P.H. 1700  
CARBON MONOX-IDLE 1.6 2500 R.P.M. 0.2 30M.P.H. 0.1 50M.P.H. 3.5

TEST SET 1967 DATE 9/ 3/75

ID 714398

ODOMETER 31739 HOUR METER 118.0  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 16.27G/MI CO 59.80G/MI NOX 7.85G/MI M.P.G. 6.2  
TEST TYPE NYQ HC 15.82G/MI CO 55.70G/MI NOX 7.28G/MI M.P.G. 6.2

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
HYDROCARBONS-IDLE 225 2500 R.P.M. 1100 30M.P.H. 250 50M.P.H. 150  
CARBON MONOX-IDLE 460 2500 R.P.M. 150 30M.P.H. 140 50M.P.H. 5000

TEST SET 1968 DATE 9/ 3/75

ID 714398

ODOMETER 31742 HOUR METER 118.3  
GENERAL COMMENT AIR PUMP ONLY  
TEST WAS OF QUESTIONABLE VALIDITY DUE TO DYNO POWER LOSS.

TEST TYPE NYQ HC 31.20G/MI CO 141.40G/MI NOX 5.93G/MI M.P.G. 6.6  
COMMENT ENGINE STALLED TWICE.

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 1300 2500 R.P.M. 4500 30M.P.H. 1500 50M.P.H. 700  
CARBON MONOX-IDLE 0.8 2500 R.P.M. 0.2 30M.P.H. 0.2 50M.P.H. 1.2

TEST SET 2338 DATE 10/28/76

ID 714398

ODOMETER 39483 HOUR METER 344.6  
GENERAL COMMENT UOP CATALYST SYSTEM

TEST TYPE NYQ HC 16.17G/MI CO 60.34G/MI NOX 9.86G/MI M.P.G. 6.0  
TEST TYPE NYQ HC 11.76G/MI CO 56.15G/MI NOX 9.49G/MI M.P.G. 6.0

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 15 2500 R.P.M. 60 20M.P.H. 15 30M.P.H. 20  
CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.0 20M.P.H. 0.0 30M.P.H. 0.0

TEST SET 2339 DATE 10/28/76

ID 714398

ODOMETER

HOUR METER  
GENERAL COMMENT BASELINE

TEST TYPE NYQ	HC	21.22G/MI	CO	196.80G/MI	NOX	9.58G/MI	M.P.G.	6.0
TEST TYPE NYQ	HC	20.59G/MI	CO	194.90G/MI	NOX	9.40G/MI	M.P.G.	6.1

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE	175	2500 R.P.M.	1500	20M.P.H.	125	30M.P.H.	150
CARBON MONOX-IDLE	1.1	2500 R.P.M.	0.2	20M.P.H.	0.2	30M.P.H.	0.2

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 \* VEHICLE IDENTIFICATION 7791 \*  
 \* WEIGHT 25000 YEAR 70 MAKE GMC MODEL 7500 TRANSMISSION M5 DISPLACEMENT 401 \*  
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TEST SET 1711 DATE 01/30/75  
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ID 7791  
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ODOMETER 27061 HOUR METER 961.5  
 GENERAL COMMENT BASELINE. AFTER TUNE UP

TEST TYPE NYQ	HC	11.30G/MI	CO	94.57G/MI	NOX	18.18G/MI	M.P.G.	5.8
TEST TYPE NYQ	HC	11.43G/MI	CO	89.66G/MI	NOX	18.11G/MI	M.P.G.	5.7

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
 HYDROCARBONS-IDLE 1000 2500 R.P.M. 600 30M.P.H. 1600 45M.P.H. 600  
 CARBON MONOX-IDLE 0.7 2500 R.P.M. 0.8 30M.P.H. 1.3 45M.P.H. 0.1

TUNE UP COMMENT REPLACED POINTS, CONDENSER, ROTOR. CAP,  
 WIRE SET. COIL AND VACUUM ADVANCE CHAMBER.

TEST SET 1712 DATE 01/30/75  
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ID 7791  
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ODOMETER 27067 HOUR METER 961.9  
 GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ	HC	1.20G/MI	CO	16.21G/MI	NOX	17.80G/MI	M.P.G.	5.5
TEST TYPE NYQ	HC	1.17G/MI	CO	12.76G/MI	NOX	17.21G/MI	M.P.G.	5.6

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 20 2500 R.P.M. 30 30M.P.H. 40 45M.P.H. 30  
 CARBON MONOX-IDLE 130 2500 R.P.M. 130 30M.P.H. 290 45M.P.H. 80

TEST SET 1901 DATE 06/16/75  
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ID 7791  
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ODOMETER 33665 HOUR METER 1138.5  
 GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ	HC	6.41G/MI	CO	17.11G/MI	NOX	22.61G/MI	M.P.G.	6.1
TEST TYPE NYQ	HC	5.74G/MI	CO	15.61G/MI	NOX	23.03G/MI	M.P.G.	6.0

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN P.P.M.)  
 HYDROCARBONS-IDLE 600 2500 R.P.M. 1100 30M.P.H. 225 45M.P.H. 125  
 CARBON MONOX-IDLE 80 2500 R.P.M. 330 30M.P.H. 350 45M.P.H. 100

TEST SET 1902 DATE 06/16/75  
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ID 7791  
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ODOMETER 33672 HOUR METER 1138.8  
 GENERAL COMMENT BASELINE

TEST TYPE NYQ	HC	18.90G/MI	CO	97.14G/MI	NOX	25.03G/MI	M.P.G.	6.1
TEST TYPE NYQ	HC	18.22G/MI	CO	95.56G/MI	NOX	23.79G/MI	M.P.G.	6.4

KEY MODE TEST-ANALYZER NUMBER 2 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)

HYDROCARBONS-IDLE 9000 2500 R.P.M. 4500 30M.P.H. 1400 45M.P.H. 1000  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 1.3 30M.P.H. 1.1 45M.P.H. 0.1

TEST SET 2327 DATE 10/12/76

ID 7791

ODOMETER 58683

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HOUR METER 1360.0  
GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 6.20G/MI CO 41.15G/MI NOX 18.80G/MI M.P.G. 5.8  
TEST TYPE NYQ HC 5.68G/MI CO 43.19G/MI NOX 18.23G/MI M.P.G. 5.9

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 50 2500 R.P.M. 110 30M.P.H. 60 45M.P.H. 40  
CARBON MONOX-IDLE 0.1 2500 R.P.M. 0.1 30M.P.H. 0.1 45M.P.H. 0.1

TEST SET 2328 DATE 10/12/76

ID 7791

ODOMETER

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HOUR METER  
GENERAL COMMENT BASELINE, BEFORE TUNE UP

TEST TYPE NYQ HC 22.23G/MI CO 181.50G/MI NOX 19.99G/MI M.P.G. 5.4  
TEST TYPE NYQ HC 18.55G/MI CO 187.00G/MI NOX 20.28G/MI M.P.G. 5.5

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 225 2500 R.P.M. 400 30M.P.H. 150 45M.P.H. 75  
CARBON MONOX-IDLE 3.6 2500 R.P.M. 0.7 30M.P.H. 1.2 45M.P.H. 0.3

TEST SET 2330 DATE 10/14/76

ID 7791

ODOMETER 58707

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HOUR METER 1360.0  
GENERAL COMMENT BASELINE, AFTER TUNE UP

TEST TYPE NYQ HC 20.46G/MI CO 169.30G/MI NOX 14.19G/MI M.P.G. 5.1  
TEST TYPE NYQ HC 15.52G/MI CO 151.50G/MI NOX 15.73G/MI M.P.G. 5.3

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 75 2500 R.P.M. 50 30M.P.H. 125 45M.P.H. 50  
CARBON MONOX-IDLE 0.3 2500 R.P.M. 0.5 30M.P.H. 1.5 45M.P.H. 0.3

TEST SET 2331 DATE 10/14/76

ID 7791

ODOMETER 58717

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HOUR METER  
GENERAL COMMENT UOP CATALYST

TEST TYPE NYQ HC 5.76G/MI CO 37.44G/MI NOX 13.50G/MI M.P.G. 5.4  
TEST TYPE NYQ HC 5.09G/MI CO 41.40G/MI NOX 13.09G/MI M.P.G. 5.5

KEY MODE TEST-ANALYZER NUMBER 5 (UNITS-HYDROCARBONS IN P.P.M. CARBON MONOXIDE IN %)  
HYDROCARBONS-IDLE 20 2500 R.P.M. 20 30M.P.H. 30 45M.P.H. 20  
CARBON MONOX-IDLE 0.0 2500 R.P.M. 0.0 30M.P.H. 0.1 45M.P.H. 0.0

**TECHNICAL REPORT DATA**

*(Please read Instructions on the reverse before completing)*

1. REPORT NO. EPA 902/4-81-001 c		2.	3. RECIPIENT'S ACCESSION NO.	
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