

# Step-By-Step EPA CDX Upload Instructions for Nonroad Engine Manufacturers

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Compliance and Innovative Strategies Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency

# Overview

The Verify system provides a Web interface to the EPA and California Air Resources Board (CARB). Using this interface, authorized users are able to create, edit, save, load, and validate their data for submittal to EPA, once their CDX accounts have been established. Below is the CDX site link for Nonroad Confirmatory Testing for Small Spark-Ignition (SI) and Compression-Ignition (CI) Engines (<http://www.epa.gov/otaq/cert/eng-cert/confirmatory/index.htm>).

## Step 1. Establish a Manufacturer Code and CDX User Account

This document provides step-by-step guidance to lead you through the necessary steps for using the Environmental Protection Agency (EPA) Verify compliance information system to submit your engine test data for the National Vehicle and Fuel Emissions Laboratory (NVFEL) engine testing program. To send documents to EPA you must first do the following:

1. Request an [EPA Manufacturer Code](#).
2. Create [CDX user accounts](#) for everyone that will be submitting data to EPA.

Once you have your EPA manufacturer code and CDX user accounts you must complete the [Small SI Confirmatory Test Engine Information](#) for a Spark-Ignition engine or the [CI Confirmatory Test Engine Information](#) for a Compression-Ignition engine.

The screenshot shows a web browser window displaying the EPA's Nonroad Confirmatory Testing page. The page title is "Heavy Trucks, Buses, and Engines" and the URL is "http://www.epa.gov/otaq/cert/eng-cert/confirmatory/index.htm". The page content includes a search bar, a "Verify Compliance Information System" section, and a "Test Engine" section with a list of steps for testing engines. The "Test Engine" section lists five steps: 1. Identify which engine you will send to EPA. 2. You are allowed to test the engine at your facility prior to shipment. 3. For information on shipping schedules, contact Bruce Sdunek at 734-214-4733 or e-mail sdunek.bruce@epa.gov. 4. For questions regarding engine test set-up, contact Maria Peralta at 734-214-4301 or e-mail peralta.maria@epa.gov. 5. Ship the engine in c/o Maria Peralta to: EPA's National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, Michigan 48105. The "Test Data" section is partially visible at the bottom.

Nonroad Confirmatory Testing | Heavy Trucks, Buses, and Engines | US EPA - Windows Internet Explorer

U.S. ENVIRONMENTAL PROTECTION AGENCY

**Heavy Trucks, Buses, and Engines**

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You are here: EPA Home » Transportation and Air Quality » On-road Vehicles and Engines » Engine Certification Data Nonroad Confirmatory Testing

**Nonroad Confirmatory Testing for Small Spark-Ignition (SI) and Compression-Ignition (CI) Engines**

Below are the steps for nonroad confirmatory testing for small spark-ignition (SI) and nonroad compression-ignition (CI) engines at EPA's National Vehicle and Fuel Emissions Laboratory (NVFEL). Upon receipt of a test order from EPA, please follow the steps below as you prepare to respond.

**Test Engine**

1. Identify which engine you will send to EPA.
2. You are allowed to test the engine at your facility prior to shipment.
3. For information on shipping schedules, contact [Bruce Sdunek](#) at 734-214-4733 or e-mail [sdunek.bruce@epa.gov](mailto:sdunek.bruce@epa.gov).
4. For questions regarding engine test set-up, contact [Maria Peralta](#) at 734-214-4301 or e-mail [peralta.maria@epa.gov](mailto:peralta.maria@epa.gov).
5. Ship the engine in c/o Maria Peralta to:

EPA's National Vehicle and Fuel Emissions Laboratory  
2565 Plymouth Road  
Ann Arbor, Michigan 48105

**Test Data**

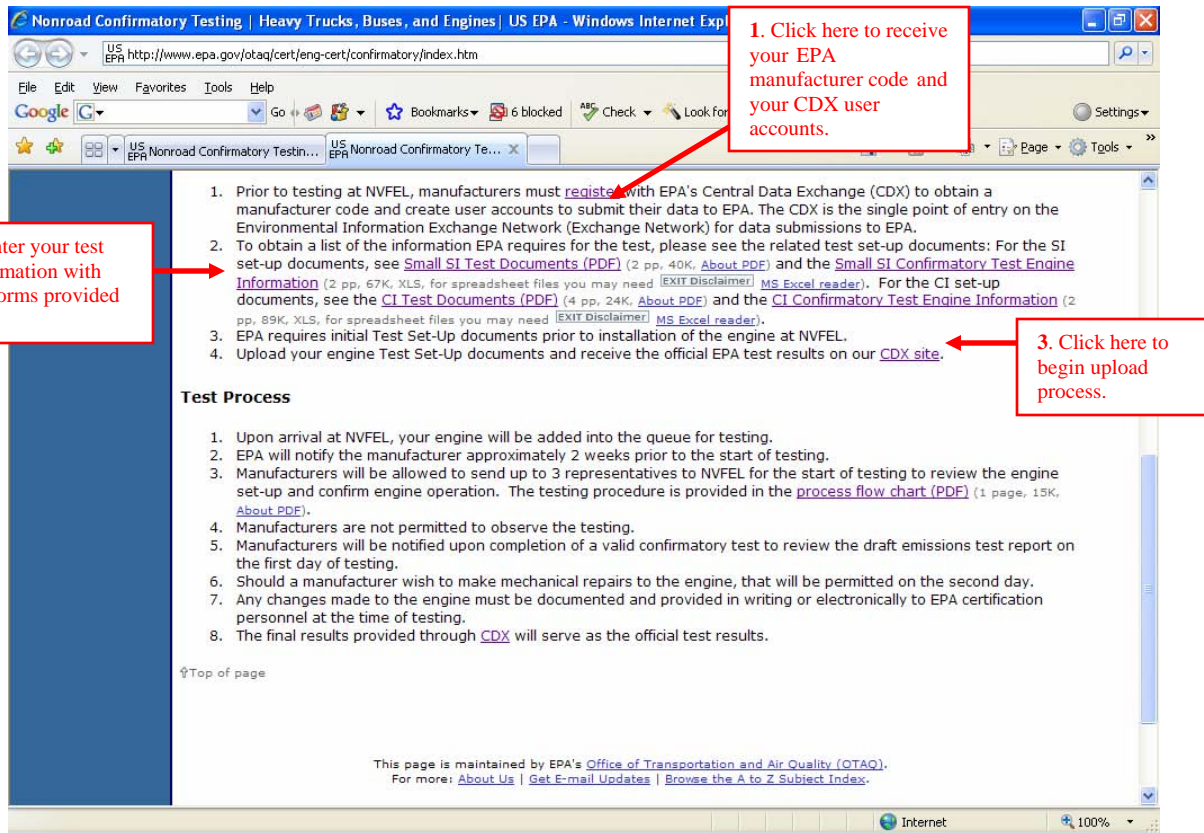
**Verify Compliance Information System**

Verify: EPA's Engine and Vehicle Compliance Information System is now online. [Learn more about Verify.](#)

**Search for Documents**

Search the Document Index System (DIS) database to find:

- Advisory Circulars
- Applications for Certification
- Certificates of Conformity
- Certificate Summary
- Information Reports
- Manufacturer Guidance Letters
- Verify System Documentation



## Step 2. Fill out Your Test Setup Data Form

Once you have established an EPA manufacturer code and a CDX user account you should begin to enter your test setup data in the provided Smart Spreadsheet (please see 2 above).

- If you are requesting testing for a Spark Ignition engine please click the link to “Small SI test Documents” and the link to Small SI Confirmatory Test Engine Information”. (See Smart Sheet page in Appendix 1)
- If you are requesting testing for a compression-ignition engine please click the link to “CI Test Documents” and “CI Confirmatory Test Engine Information”. (See Smart Sheet page in Appendix 1)

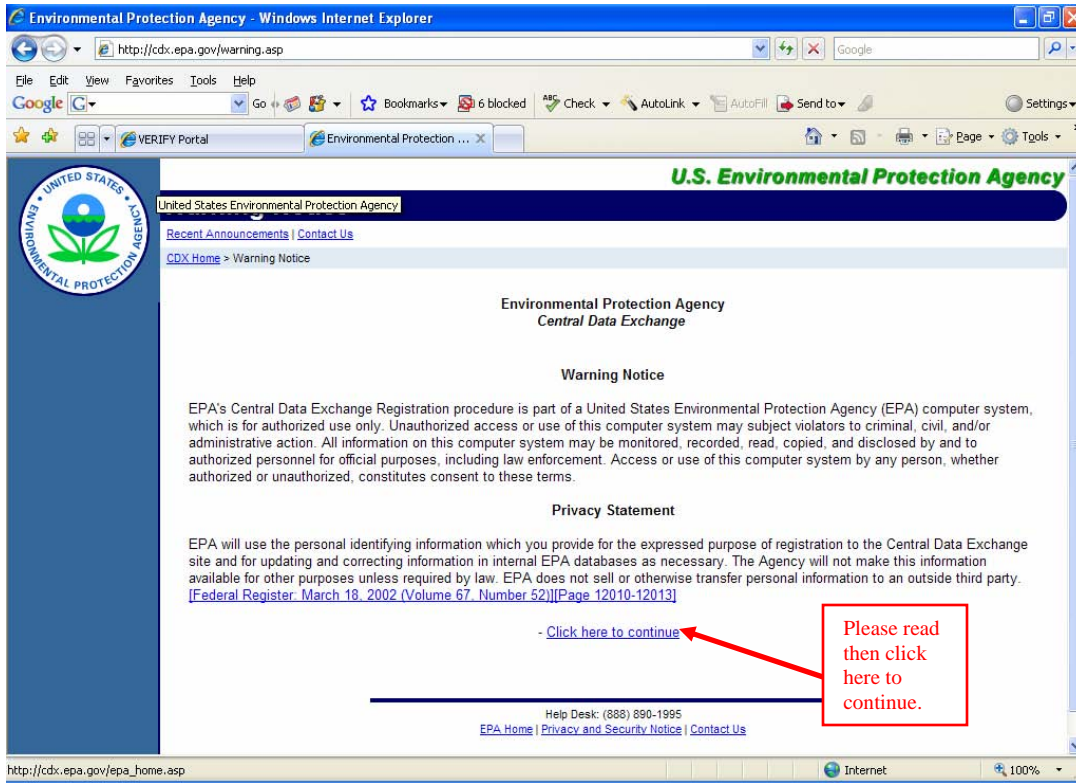
Please fill in the appropriate information in your spreadsheet.

## Step 3. Log In to CDX to Upload Your Test Setup Data

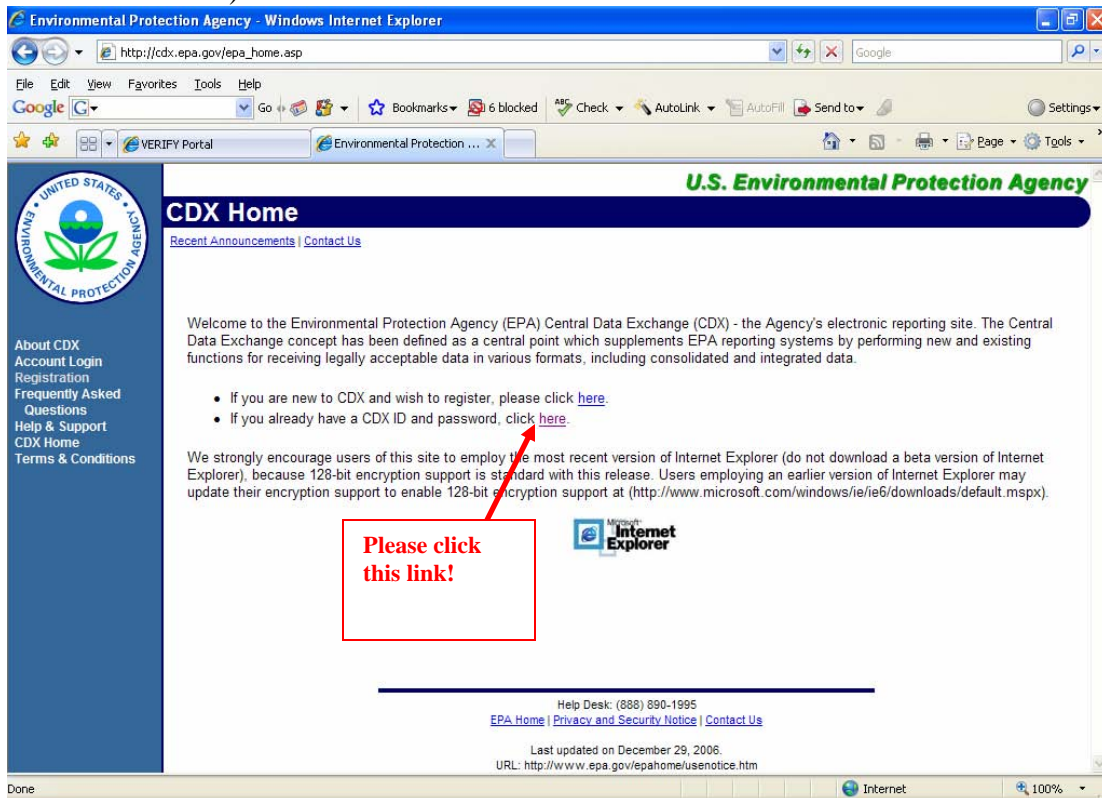
Now that the test information is complete you may send that test setup document to EPA by clicking on the “CDX site” link.

**(Note:** You must have a manufacturer code to do business with EPA and a CDX user account to upload your information. If you do not have an EPA manufacturer code and/or a CDX user account please proceed back to step 1 above and complete your registration).

- a) You will be directed to the page below. Please read the “warning” and “privacy” notices and click the “click here to continue” link. (See below).



- b) At this point manufacturers should have a CDX user account. You should select the link for those that already have a password and CDX user ID. (See below).





- c) You will be directed to this page to enter your CDX User Name and Password. Please enter your User Name and Password to Log-in to your CDX user account.

The screenshot shows the EPA Central Data Exchange Login page in a Windows Internet Explorer browser window. The address bar shows the URL <https://cdx.epa.gov/SSL/cdx/login.asp>. The page has a blue sidebar with links: About CDX, Account Login, Registration, Frequently Asked Questions, Help & Support, CDX Home, and Terms & Conditions. The main content area includes a link for forgotten passwords, a "Central Data Exchange Login" header, a "Warning Notice" about unauthorized access, a "Privacy Statement" regarding data use, and a login form with fields for "User Name:" and "Password:". Below the fields are "LOGIN" and "CLEAR" buttons. A red arrow points from a red-bordered box containing the text "Enter your assigned CDX User Name and Password" to the "User Name:" input field.

- d) You will now be directed to the entry page for My CDX. You can check your inbox for EPA messages and test results. Please select "Verify Upload Supporting Documents" to go to your upload page.

The screenshot shows the EPA MyCDX dashboard. The header includes the EPA logo, "MyCDX", and "U.S. Environmental Protection Agency". It also shows "Recent Announcements | Contact Us" and "Logged in as, LIGHTER7". The main content area is titled "Central Data Exchange - MyCDX" and displays user information: "Welcome, Ms. Virlesia Reed", "Last Login: November 29, 2006", "Registered Since: November 2, 2006", and "Recertification Date: November 2, 2006". It also shows "CDX Registration Status: Active" and a notification: "You have 1 new message in your [Inbox](#)". Below this are four buttons: "Change System Password", "Edit Personal Information", "Edit Current Account Profiles", and "Add New Employer Profile". A section titled "Available Account Profiles:" lists three options: "VERIFY: Upload Supporting Documents", "VERIFY: Light-Duty", and "VERIFY: Maintain Manufacturer Information". A red arrow points from a red-bordered box containing the text "You can retrieve EPA messages and test results in your inbox." to the "Inbox" link. Another red arrow points from a red-bordered box containing the text "Click here to go to your upload screen." to the "VERIFY: Upload Supporting Documents" link. At the bottom, it says "You are in an encrypted secure session." and provides a "Help Desk: (800) 890-1995" and links for "EPA Home | Privacy and Security Notice | Contact Us".



About CDX  
MyCDX  
Inbox  
Change Password  
Frequently Asked Questions  
Help & Support  
CDX Home  
Terms & Conditions  
Logout

U.S. Environmental Protection Agency

## Upload EPA Compliance Documents From Manufacturer Workstation

Logged in as, JOHNHENDON, Manufacturer: Environme... - EPA ([Logout](#))

[MyCDX](#) > Upload EPA Compliance Documents

Note:

1. Required fields are marked with \* and cannot be left blank.

Help

3. Select your Compliance Document type here.

4. Is the information Confidential Business?

2. Select the Industry category for your engine.

1. Upload your Smart Sheet here. You can upload additional documents in alternate formats as well!

5. Please include your business information.

6. Review and finalize before completing your upload.

EPA Manufacturer Code *	EPA
Document Path and File Name *	<input type="text"/> Browse...
Path and File Name of Same Document in Alternate Format	<input type="text"/> Browse...
Industry * (CTRL + Click to select multiple values)	Marine Spark Ignited Motorcycles Nonroad Compression Ignition Nonroad Motorcycles and/or ATVs Small Nonroad Spark Ignited
Compliance Document Type * Compliance Document Type, if "Other"	Nonroad Small SI Confirmatory Testing Set-up Document
General Document Type General Document Type, if "Other"	Select
Compliance Document Topic Compliance Document Topic, if "Other"	
Confidentiality Status *	<input type="radio"/> CBI <input type="radio"/> FOIA
Document Applicability *	Select
Does this document apply to one/multiple specific model year(s)? *	<input type="radio"/> Yes <input type="radio"/> No
Model Year (CTRL + Click to select multiple values)	2002 2003 2004
Document Date *	<input type="text"/> select
Title *	<input type="text"/>
Abstract *	<input type="text"/>
Keyword(s) * (CTRL + Click to select multiple values)	Absorber Air cooled Alternative Fuel Alternative Fuel Converter CARB
Are you the document owner?	<input type="radio"/> Yes <input type="radio"/> No
Document Owner Name *	<input type="text"/>
Document Owner Phone *	<input type="text"/>
Document Owner E-Mail *	<input type="text"/>
Comments	<input type="text"/>

Refresh

Review & Finalize

You are in an encrypted secure session.

Help Desk: (888) 890-1995  
[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

URL: <http://www.epa.gov/epahome/usernotice.htm>

19:12

Please follow the step-by-step walk through on the page above.

## Support

There are three support options available for general and technical questions related to Verify:

1. Telephone - Call our toll-free line at (888) 890-1995 and select option 4 for technical questions regarding data or uploading your documents. Select option 5 for help with your CDX registration(i.e. userid/password) questions..
2. E-mail – Send e-mail to [epacdx@csc.com](mailto:epacdx@csc.com) for help with your CDX registration(i.e. userid/password) questions. Send an e-mail to [verifyhelp@csc.com](mailto:verifyhelp@csc.com) technical questions regarding data or uploading your documents.
3. Fax - Assistance with your CDX registration (i.e. userid/password) questions or requests are accepted 24 hours a day at (301) 429-3905. Support personnel will respond to faxed requests Monday - Friday from 8:00 a.m. - 6:00 p.m. (EST).



## Appendix 1

### Accessing your test data Smart Spreadsheet

You may access your EPA test data Smart Sheet by clicking on the appropriate test engine link below. Manufacturers on this screen will choose either a Small Spark-Ignition engine manufacturer or a Compression-Ignition engine manufacturer for testing.

**Test Engine**

1. Identify which engine you will send to EPA.
2. You are allowed to test the engine at your facility prior to shipment.
3. For information on shipping schedules, contact [Bruce Sdunek](#) at 734-214-4733 or e-mail [sdunek.bruce@epa.gov](mailto:sdunek.bruce@epa.gov).
4. For questions regarding engine test set-up, contact [Maria Peralta](#) at 734-214-4301 or e-mail [peralta.maria@epa.gov](mailto:peralta.maria@epa.gov).
5. Ship the engine in c/o Maria Peralta to:

EPA's National Vehicle and Fuel Emissions Laboratory  
2565 Plymouth Road  
Ann Arbor, Michigan 48105

**Test Data**

1. Prior to testing at NVFEL, manufacturers must [register](#) with EPA's Central Data Exchange (CDX) to obtain a manufacturer code and create user accounts to submit their data to EPA. The CDX is the single point of entry on the Environmental Information Exchange Network (Exchange Network) for data submissions to EPA.
2. To obtain a list of the information EPA requires for the test, please see the related test set-up documents: For the SI set-up documents, see [Small SI Test Documents \(PDF\)](#) (2 pp, 40K, [About PDF](#)) and the [Small SI Confirmatory Test Engine Information](#) (2 pp, 67K, XLS, for spreadsheet files you may need [EXIT Disclaimer](#) [MS Excel reader](#)). For the CI set-up documents, see the [CI Test Documents \(PDF\)](#) (4 pp, 24K, [About PDF](#)) and the [CI Confirmatory Test Engine Information](#) (2 pp, 89K, XLS, for spreadsheet files you may need [EXIT Disclaimer](#) [MS Excel reader](#)).
3. EPA requires initial Test Set-Up documents prior to installation of the engine at NVFEL.
4. Upload your engine Test Set-Up documents and receive the official EPA test results on our [CDX site](#).

**Test Process**

1. Upon arrival at NVFEL, your engine will be added into the queue for testing.
2. EPA will notify the manufacturer approximately 2 weeks prior to the start of testing.
3. Manufacturers will be allowed to send up to 3 representatives to NVFEL for the start of testing to review the engine set-up and confirm engine operation. The testing procedure is provided in the [process flow chart \(PDF\)](#) (1 page, 15K).

**Search for Documents**

Search the Document Index System (DIS) database to find:

- Advisory Circulars
- Applications for Certification
- Certificates of Conformity
- Certificate Summary
- Information Reports
- Manufacturer Guidance
- Letters
- Verify System
- Documentation

Small S-I Smart Sheet

C-I Smart Sheet

For specific examples see forms below.

## 1. For Spark-Ignition Engines

http://www.epa.gov/otaq/cert/eng-cert/confirmatory/nrsi-confstesteng-info-v080108.xls - Windows Internet Explorer

http://www.epa.gov/otaq/cert/eng-cert/confirmatory/nrsi-confstesteng-info-v080108.xls

File Edit View Insert Format Tools Data Go To Favorites Help

Google G

http://www.epa.gov/otaq/cert/eng-cert/confirmatory...

C6 SOD

EPA United States Environmental Protection Agency Office of Transportation and Air Quality December 2007

### CFR 90 Non-Road Spark Ignition Confirmatory Testing - Engine Information

EPA Engine Family	7XX xxx	Engine Model	Durango
Manufacturer Code	SOD	Engine Serial Number	95
Engine Manufacturer	Sodoku	Engine Emission Control System	Catalyst
Accumulated Engine Hours (to nearest 10th)	11.0 hours	Idle Speed	600 rpm
Starter Type (electric or pull)	pull	Engine Over-Speed Alarm Point	3900 rpm
Engine Operation (fixed throttle or governor)	fixed	Number of Cylinders	2 cylinders
Governor Type (or none)	none		
Rated Speed - Speed at Max Rated Power	2500 rpm	40 Nm	10.47 kW
Max Torque - Speed & Power @ Max Torq	2600 rpm	40 Nm	10.89 kW
Intermediate Speed and Torque	2125 rpm	50 Nm	
Engine Phase	2	Engine Installation Angle	60 degrees
Displacement	224 cc	Engine Shaft Orientation	<input checked="" type="radio"/> Horizontal <input type="radio"/> Vertical
Engine Class	enter second 1cc/inch 100 to 224 cc	Engine Shaft Diameter	0.5 Inches
Useful Life	enter third 250 hrs	Engine Shaft Length	11 Inches
Test Cycle	enter fourth A	Shaft Key-way Dimensions	2 Inches

All required numeric values are numeric.  
All mandatory values have been entered.

### Engine Cooling Information

MFR will need to supply cooling system for testing liquid cooled engines at NVFEL

Engine Cooling Type (air/liquid) ☐ Air ☒ Liquid Coolant mixture 3 ratio (5:1)

### For Liquid Cooled Engines:

Coolant Supply Temperature Set Point 95 °C Min 95 Max 95 °C

Message \Input/

Unknown Zone

## 2. For Compression-Ignition Engines

http://www.epa.gov/otaq/cert/eng-cert/confirmatory/nrci-confstesteng-info-v071218.xls - Windows Internet Explorer

http://www.epa.gov/otaq/cert/eng-cert/confirmatory/nrci-confstesteng-info-v071218.xls

File Edit View Insert Format Tools Data Go To Favorites Help

Google G

http://www.epa.gov/otaq/cert/eng-cert/confirmatory...

C6 SOD

EPA United States Environmental Protection Agency Office of Transportation and Air Quality December 2007

### Heavy Duty Non-Road Diesel Engine Confirmatory Testing - Engine Information

EPA Engine Family	7XX xxx	Engine Model	Durango
Manufacturer Code	SOD	Engine Serial Number	95
Engine Manufacturer	Sodoku		
Displacement	224 liters	Number of Cylinders	2 cylinders
Rotational Inertia of engine and flywheel	2 kg.m <sup>2</sup>	Minimum Engine Speed	250 rpm
Governor Type	All Speed	Low Idle Speed	800 rpm
Accumulated Engine Hours	55 hours	Governed Speed	2800 rpm
Rated Power - Speed and Torque	1000 rpm	Engine over speed e-stop	3000 rpm
Intermediate Speed and Torque	1000 rpm	1000 Nm	
Maximum Power - Speed and Torque	1000 rpm	1500 Nm	
Maximum Torque - Speed and Torque	1500 rpm	1500 Nm	
Fuel Consumption at Max Torque	30 kg/h		
Fuel Consumption at Max Power	40 kg/h		
Maximum Air Flow	970 kg/h		
Exhaust Pipe Diameter(s)	4 in		
Turbo to Intercooler to Engine pipe diam	4 in		

All required numeric values are numeric.  
All mandatory values have been entered.

The following parameters are set at:

Parameters will be set as close as possible to the setpoints provided but CFR requirements override manufacturer recommended setpoints.

Note: Min. and Max. values are used to set alarm limits within the data acquisition system.

Inlet Air Restriction	Set Point	6 kPa	Min	3	Max	9 kPa
Exhaust Restriction	Set Point	6 kPa	Min	3	Max	9 kPa

The following parameters are set at rated engine speed and load:

Message \SI/

Unknown Zone