

MINI MAXX V1 INSTALLATION INSTRUCTIONS

Installation Guide

Read the complete guide before beginning. Keep removed hardware organized, follow all safety precautions, and verify all connections before operating the vehicle.



Revision Date These instructions are current as of 04/02/13. Revisions may apply, and are available at

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TROUBLESHOOTING: Please read and understand all installation instructions before proceeding with the installation. If you have questions during the installation of this product, please call H&S Performance support at 1-888-628-1730

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Bill of Materials

The list below includes by name the major parts included in your Mini Maxx package.

1. Mini Maxx • Micro SD Card (in Mini Maxx)
2. Mini Maxx Power Cable
3. OBD II Adapter
4. Windshield Mount
5. Mini USB Cable
6. HDMI Cable
7. USB Adapter

1.

2.



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3. 4.

5.

6.



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7.

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Parts description

This section describes each of the parts in the Bill of Materials, the descriptions provide a physical set of attributes and a purpose for each part. The parts descriptions also list everything that is included in each assembly.

The Mini Maxx Head Unit The main component is the Mini Maxx Head Unit. The Head Unit is the interface in which you control vehicle performance parameters. It is also the brains that will save

vehicle activity and defuel a vehicle. Notice that the head unit has: seven total buttons, five on the left side and two on the right, a large color screen, and an electronic plug for docking on the back. Note that this is the last piece that you will install.



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Note: Mini Maxx includes a micro SD card inserted in the side of the Head Unit.



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Power Cable The Power cable connects the OBD II Adaptor Plug to the vehicle fuse box to supply power to the Mini Maxx. It is optional to use as there are two ways to power up your Mini Maxx

1. (Recommended) Use this power cable and wire it to the designated location specified later in this manual.
2. The OBD II port provides constant 12V+ power, so your Mini Maxx can power off of the OBD II port alone. But in this situation the Mini Maxx will not turn on and off with the ignition. There is a switch on the OBD II adapter plug in order to turn the Mini Maxx on and off.

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OBD II Adapter Plug The OBD II Adapter is a communication hub for the Mini Maxx. The OBD II Adaptor plugs directly into the vehicle OBD II port. Notice the OBD II Adaptor has many ports to support various other functions of the Mini Maxx.



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Universal Windshield Mount This universal windshield mount is used to install the Mini Maxx firmly onto the windshield, it is a suction cup mount that will work on any vehicle windshield. Check our web site for other mounting options, the Mini Maxx is adaptable to a range of other mounting styles.

H&S Also offers custom vehicle specific solutions. See

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PARTS DESCRIPTION CONTINUED

Mini USB Cable Use this cable to connect your Mini Maxx to your personal computer to install software updates. Visit in the downloads section for product updates. Please find your product application and follow the posted instructions there to update your Mini Maxx.



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HDMI Cable The HDMI Cable connects the Mini Maxx to the OBD II Adapter Plug and acts as the main line of communication for the Mini Maxx.



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USB to Micro SD Adapter The USB to Micro SD Adapter is what you will use to update your Mini Maxx. You will take the Micro SD card out of the Mini Maxx and insert it into the adapter, then insert the adapter into your personal computer.



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Installation Overview

The installation overview illustrates a totally installed and functional Mini Maxx system. This overview is meant to help reference the general location of installed parts and pieces of the Mini Maxx. Notice that there are different overview diagrams. Use the correct diagram for your truck. For more complete wiring diagrams and instructions, please see vehicle specific features starting on page 27.

most applications

Mini Maxx & Windshield Mount

Fire wall grommet

Fuse Box

Power Cable (Optional)

OBD II Adapter Plug

OBD II Port

FORD POWER STROKE '08-'10

MINI MAXX & Windshield mount

HDMI Cable

OBD II Port OBD II Adapter Plug

Power Wire (Optional. To purple ignition wire under dash)

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INSTALLATION CONTINUED

Mini Maxx Installation Instructions

Section 1: Mounting the mini maxx

In this section you will decide where to mount the Mini Maxx Cradle, so you are essentially choosing the location for the Mini Maxx inside the vehicle cab. First, decide which mounting style you will choose for the Mini Maxx; we offer two different styles of mounting:

1. Windshield mounting
2. Custom Pod mounting (Refer to the instructions included with your custom pod)

Windshield Mounting 1. Locate the T-shaped mount socket on the back side of the Mini Maxx.

2. Notice that the top of the universal mount will fit into T-shaped socket and slide forward to secure the Mini Maxx to the mount.

3. With the Mini Maxx connected to the mount use the windshield mount to secure the Mini Maxx to the windshield. Be sure that the position of the Mini Maxx does not obstruct the view of the road or distract the driver from their primary responsibility, which is driving responsibly.

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Section 2: OBD II Adapter plug

This step involves locating the vehicle's OBD II port and then simply plugging the OBD II Adapter Plug into the OBD II port.

1. As the illustration below shows, OBD II ports are always located somewhere under the driver's side dash. The OBD II port is a male receiver that will have the same shape as the end of the OBD II Adaptor plug.
2. Once the OBD II port is located, then simply plug the OBD II Adaptor plug into the OBD II port.

Possible OBDII Port Locations (location may vary)

OBD II Adapter plug diagram

1. OBD II Male end: this is the part of the adapter plug that plugs into the vehicle OBD II port.
2. Main harness port: the main harness will plug into the Mini Maxx and into this port during installation.
3. Power wire port: the power wire will run from this port to the vehicle fuse box during installation. Plug into the Mini Maxx and into this port during installation.
4. Power supply switch: use this switch to change power from battery power to keyed power for a powered supply for the Mini Maxx.
5. Four pin usb: This port is used if an H&S pyrometer kit is purchased for the Mini Maxx.
6. Five pin usb
7. Adapter plug fuse

KEY BATT

Note: On some vehicles it is recommended to move the OBD II port to a safer location. Because the Mini Maxx will remain plugged in, the adapter can be kicked/bumped and broken. Please move your OBD II connection to a safer location if you feel it is in a position that may allow it to get damaged.

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Section 3: Installing the Power Wire (*Optional)

*The OBD II port provides constant 12V+ power, so your Mini Maxx can power off of the OBD II port alone. But in this situation the Mini Maxx will not turn on and off with the ignition. There is a switch on the OBD II adapter plug in order to turn the Mini Maxx on and off. In this section you will run the Power Wire coming from the Mini Maxx Cradle to the vehicle fuse box and connect it to the fuse locations specified below. The fuse location for the Power Wire is different on each vehicle application. CONNECTING THE POWER WIRE:

1. Route wire to location shown in pictures found in the Vehicle Specific Sections starting on page 27
2. Remove the fuse, indicated in the pictures, and insert the fuse jack. Make sure that the fuse jack is placed on the dead side of the fuse to ensure that the Mini Maxx is protected by the fuse. Use a volt meter to verify the dead side of the fuse. With the fuse pulled and the truck powered on but not

started, the volt meter should read 0 volts on the fuse jack to ground. Problems that can occur if the incorrect fuse is used for this connection: the power may stay on continuously even with the key off; or, the Mini Maxx can receive power at the incorrect time of the power-on/starting cycle of the vehicle.

3. Run the power wire through the fire wall before preparing the Power Wire. Prepare the Power Wire by stripping the end of the wire about 1/4". Connect the blue 90° connector to the end of the Power Wire using crimping pliers.

4. Connect the Power Wire to the fuse jack, place the fuse back into the slot, and close the fuse box.

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INSTALLATION CONTINUED

Section 4: Run Mini maxx hdmi cable

In this section you will connect the Mini Maxx HDMI cable to the OBD II Adaptor plug and then run the other end of the HDMI cable up the side of the vehicle dash and connect it to the back of the Mini Maxx.

1. Plug one end of the HDMI cable into the Main Harness port on the OBD II adapter plug.
2. Run the other end of the HDMI cable up through the vehicle dash on the drivers side so that the end of the cable emerges from the dash near the vehicle A-pillar. It may be necessary to temporarily remove the vehicle weather stripping and dash panel to achieve an installation where the HDMI cable cannot be seen.
3. Plug the HDMI cable into the back side of the Mini Maxx, make sure that there is enough slack in the cable to accommodate mounting the Mini Maxx to the windshield.

Mini Maxx

Power Cable HDMI Cable

OBD II Plug

Almost Done! You need to install the download now. Read the next section for Install Download procedure.

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Mini Maxx OPERATING INSTRUCTIONS

These operating instructions are split into sections:

- Section 1: Button Navigation
- Section 2: Install Download
- Section 3: Exploring the Main Screen
- Section 4: Exploring the Menu System
- Section 5: Vehicle Setup

- Section 6: Other Mini Maxx Features
- Section 7: Vehicle Specific Features
- Section 8: Unplugging the Head Unit

Section 1: BUTTON NAVIGATION

Press the top left button to enter the Main Menu, also use this button to exit menus.

Speed MPH

Press any of the four buttons on the left to select items on the screen that are adjacent to the button position.

In general these buttons work as up and down buttons, they may also be used to select items on the screen adjacent to these buttons.

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Section 2: Install Download

The Install Download option is used to install tuning onto a vehicle, or return a vehicle to stock.

1. Press Menu: To get into the Mini Maxx main menu.
2. Select Install Download: You may have to "Arrow Down" or "Arrow Up" to find this option.
3. Install a download onto a stock vehicle: If the vehicle is stock and you enter the install download menu, simply follow the screen prompts to install a download on the vehicle. This is the point in which you may come across the tire size calibration menu, and the vehicle speed limiter menu

Download H&S Tuning: This option will install the H&S Performance tuning to your truck. Custom tuning options can be downloaded from H&S or may be available as options during the installation process.

Import/Export MCC Tuning: This option will allow import or export of MCC software tuning files. Some vehicle may not have this option. See

Return to stock (OEM tune): This option will return the vehicle to its factory software level and unlock the H&S device. This is highly recommended if taking the vehicle in for service or maintenance..

NOTE: Returning to stock is required in order to install your tuner on another vehicle.

Go Back DOWNLOAD MENU

(RESET)



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Download H&S Tuning

Import/Export MCC Tuning

Return to Stock (OEM Tune)

This Mini Maxx screen shot shows what you will see if a download has already been entered into a vehicle.

Before installing the download: • Make sure that the Mini Maxx is properly plugged in. • Make sure that the harness is properly installed. • The vehicle battery is fully charged. • The vehicle is warmed up to operating temperature.

THE micro SD CARD MUST BE INSERTED IN THE SIDE OF THE Mini Maxx TO Download to a vehicle.

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Mini Maxx OPERATION CONTINUED

Section 3: exploring the main screen

The Main Screen is where you view all of the vehicle activity. In this section you will learn how to navigate the Main Screen and learn about all of the different parts of the Main Screen.

Main screen navigation Below are descriptions of how all of the Mini Maxx buttons work and what they do while in the Main Screen. The buttons perform different functions while in a menu or submenu.

Press the top left button to enter the Main Menu, also use this button to exit menus.

Menu MPH



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Speed

MPH

RPM

RPM

Throttle

X

Power Level Setting not available until download is installed.

Coolant

°F

Press any of the four buttons on the left that coincide with the four vehicle parameters to display that particular vehicle parameter on the large gauge in the upper right side of the screen. Hold a button down to view the different graph types for the large gauge.

Power Level Up Power Level Down Use the power level buttons to control power levels on-the-fly only while in the main screen

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Main screen Parts description This section will describe all of the different parts of the Main Screen.

The black bar: The black bar highlights the title of one of the four displayed vehicle parameters to indicate that vehicle parameter is also being displayed on the large gauge.

Menu button: press to enter the main menu.

Large Gauge

Menu MPH



Installation reference - page 17

Speed

MPH

RPM

RPM

Throttle

X

Power Level Setting not available until download is installed.

Coolant

°F

Vehicle parameters: To change which vehicle parameter is displayed in the large gauge area simply press one of the four buttons next the preferred vehicle parameter.

By pressing and holding the button next to your displayed gauge, you can change the display style in the large gauge area.

Power level text: Displays which power level is active, whether it be: Stock, Tow, Street, or Hot.

Note: This will not be active if the Download has not been installed.

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Mini Maxx OPERATION CONTINUED

Section 4: exploring the menu system

The diagram below shows all of the Main Menu items and explains the Main Menu navigation.

This button is used to enter into the Main Menu from the main screen. While in any of the menus this button works as a back button.

Navigation through the main menu: Use the large Up Down Buttons to page up and page down through all the Main Menu options.

Go Back MAIN MENU to Main Screen



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Install Download

Gauge Set Up

Set User Options

Set Defuel Levels

Adjust Tire Size

Diagnostics

Show Settings

Update Firmware

These buttons are used to enter into the sub menus from the main menu and may also be used to select additional items when in the sub menus.

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INSTRUCTIONS CONTINUED

Section 5: Vehicle Setup

This section describes various non-vehicle specific features of the Mini Maxx

Defueling Parameters Set up defueling parameters based on a number of different vehicle parameters. In this menu you can also turn vehicle parameters off. The defueling parameters available are vehicle specific, so not all defueling parameters are available for every make and model.

Go Back DEFUEL MENU

to Main Menu



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Pyro 1 Temperature Level

Setting: 600°F

Pyro 2 Temperature Level

Setting: 1250°F

Engine Coolant Temp Level

Setting: 210°F

Boost Level

Setting: 23PSI

Transmission Temperature

Setting: 260°F

Oil Temperature

Setting: 210°F

Press to enter set up menu for defuel items.

Use the Up Down Buttons to scroll up and down through the different sub menu items.

Current setting are displayed in Defuel Menu

Default Defueling Settings

Here is a list of all of the defueling capabilities for the Mini Maxx. All defueling options can be activated at the same time, all can be turned off, or a mix of on and off. Each defueling option is adjusted individually to be on or off and set to a particular defueling temperature.

Pyro 1 Temperature Level 1450°F

Pyro 2 Temperature Level OFF

Engine Coolant Temp Hot 210°F

Engine Coolant Temp Cold (cold start protection) OFF

Boost Level OFF

Transmission Temp Level OFF

Oil Temperature OFF

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Set Defuel Levels When entering a setup menu for any of the defuel options the menu will have a list of defuel levels to select from based on that specific defuel parameter. The selected value is displayed on the left, to select a defuel level you need only highlight the amount and then exit the setup menu. To turn any particular defuel parameter off press the bottom left button.

Go Back PYRO1 to Defuel Menu Set Deful Level



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Defueling Levels

up

The selected Defuel value for PYRO 1 is displayed in the box below: Selected 1400° F

1250

1300

1350

1400

1450

DEFUEL ON

1500

1550

down

1600

DEFUEL OFF

Use the large Up Down Buttons to scroll up and down through the different sub menu items. Use this button to turn the defueling on.

Go Back PYRO1 to Defuel Menu Set Deful Level



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The selected defuel value for PYRO 1 is displayed in the box below: Selected

OFF

DEFUEL ON

DEFUEL OFF

Use this button to turn the defueling off.

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Section 6: Other Mini Maxx Features

This section describes all the customizing features of the Mini Maxx.

Gauge Setup Enter to change the vehicle parameters displayed on the four gauge locations in the Main Screen. This is also where you can see all of the most up-to-date vehicle parameters available to your vehicle make and model after running an internet upgrade.

Selecting a vehicle parameter to display in a particular location is done by highlighting the gauge location and then highlighting the desired vehicle parameter.

Once the correct vehicle parameter for a gauge location has been highlighted, you do not need to press another button to select that vehicle parameter. Simply highlighting the vehicle parameter makes it active in that location.

Notice that upon entering the gauge setup menu that, Set Gauge 1, is highlighted in black. When a gauge location is selected it is highlighted in black on the left and it also appears above the vehicle parameter selection box.

Go Back GAUGE SETUP

to Main Menu



Installation reference - page 21

Set Gauge 1 Speed

Gauge 1

Use the Up and Down Arrows to Change the Gauge Function

Set Gauge 2

RPM

Pyro 2 Speed

Set Gauge 3

Boost

Throttle

Set Gauge 4

Coolant

Use the large Up Down Buttons to highlight a particular vehicle parameter for any of the gauge locations.

To highlight a different gauge location press the selection button that coincides with that gauge location. So to select gauge location 1, press the second button down on the left hand side of the Mini Maxx. To select the 4th gauge location press the bottom button or the 5th button down on the left side.

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Adjust Backlight

Highlight screen and use the up and down buttons to adjust the lighting to your preference.

Use these buttons to adjust the backlight brightness level.

Go Back BACKLIGHTING to User Opts



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Screen

Brightness 100% Screen Backlight

Select 0 to 100% using and to set desired light level

0 50 100

Use this button select the 'Screen' option.

Change Background Color

Use the up and down buttons to select a background color. The Mini Maxx background will preview each color background as you scroll up and down through the color options. When the preferred color is highlighted, exit the color menu to select the color.

Go Back COLOR SETUP to User Opts



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Background

Black Background

Use the up and down arrows to change the gauge function

HSBlue Bluelight

Use the large Up Down Buttons to scroll up and down through the color options.

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performance testing

This sub menu allows you to run 1/4 mile and 0-60 MPH performance testing on your vehicle. You must accept the on screen disclaimer before entering the Performance Testing menu.

Go Back PERF TEST

to Main Menu



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1/4 Mile Performance Test

0-60 MPH Performance Test

Configure Test Settings

- 1/4 Mile performance test

When selecting Start Test make sure that you are completely stopped. The testing will begin when vehicle reads speed. The testing will automatically stop when you have reached 1/4 mile. Test results and fastest times will be stored and viewable at any time.

- 0-60 MPH performance test

When selecting Start Test make sure that you are completely stopped. The testing will begin when vehicle reads speed. The testing will automatically stop when you have reached 60 MPH. Test results will appear on screen.

Note: If running aftermarket tires or gearing, your speedometer must be calibrated correctly for performance test- ing to yeild accurate results.

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Diagnostics This function allows you to check vehicle diagnostics codes. Some models you will have an option to check Engine or Transmission diagnostics. Please select the desired module. Upon entering this menu, the Mini Maxx will automatically begin to check the vehicle for DTCs and it will then display those DTCs on the Mini Maxx screen. Once it displays the DTCs value and description on the screen it will allow you to erase the DTCs from the vehicle.

DTC Diagnostic Trouble Codes



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Establishing communication with the vehicle

If no DTCs are displayed you can simply press the Go Back button to return to the main menu. For a complete list of DTC descriptions, please visit the Tech section of our website

Go Back DTC to Main Menu Diagnostic Trouble Codes



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There are no DTCs Detected

THE micro SD CARD MUST BE INSERTED IN THE SIDE OF THE Mini Maxx TO Read and erase dtcs

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Reset to Default Setting

To reset the Mini Maxx to H&S Performance factory settings press the up button to select yes, to keep current settings back out of this menu by pressing the go back button or by pressing the down button to select no.

Go Back GO TO DEFAULT to user opts



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yes

Selecting YES will reset user preferences to factory set values.

Are you sure you want to do this at this time? (for YES)

no

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Show Settings

The Show Settings Menu will allow you to see vehicle information and also defuel settings. See the diagram below to see everything that is listed in this menu. On Cummins and Powerstroke trucks, the Part# and Transmission# will be needed for updating the Mini Maxx.

Go Back SETTINGS to Main Menu



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Vehicle: 08-10 Ford 6.4L VIN: 123456789101112131415 ECM P/N: TCM P/N: Serial#: N/A MEM-C216
HW-1.3b Version: SW-1.03.0 TV-6.4.20 6.4 Power Stroke

Tune Status: Installed

Application: '08-'10 Ford 6.4L PowerStroke

Defuel Info:

Pyro 1: 1450 °F Pyro 2: OFF Hot Coolant: 220 °F Cold Coolant: OFF Boost: OFF Trans Temp: OFF Oil Temp: OFF Fuel: ULSD

T.V. # This number is the Tuning Version. It will change as H&S updates the tuner software. To see the latest tuner version on your Mini Maxx go to "Show Settings" and scroll down.

micro SD Card The Micro SD card should only be taken out of the Mini Maxx to perform internet upgrades. It is the primary means of performing internet upgrades for the Mini Maxx.

In case a Micro SD Card is lost or broken, a new Micro SD Card can be purchased from H&S Performance.

web updates Remove the Micro SD from your Mini Maxx. Connect your Micro SD to your personal computer with the included Micro SD to USB adapter to install software updates. Visit in the downloads section for product updates. Please find your product application and follow the posted instructions there to update your Mini Maxx.

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Section 7: USA / ulsd calibration vehicle specific features

2006 - 2007 5.9L DODGE Cummins USA / ULSD Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The current Power Level will be saved even if the Mini Maxx is unplugged.

Power Levels

Stock... .. 0 HP

Tow... .. 60 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings.

Street... .. 120 HP

Performance... .. 200 HP

Low Boost Fueling This option allows for adjustment of the amount of fuel injected under low boost conditions. There are 5 different settings for Low Boost Fueling:

0 - Lowest Fueling 1 - Low Fueling 2 - Medium Fueling (Default) 3 - Moderate Fueling 4 - High Fueling

Note: The low boost fueling adjustment will affect ALL power levels. This option can only be adjusted during the Install Download process.

Injection Timing This option allows for the adjustment of the maximum allowed injection timing. There are 5 different settings for the Injection Timing:

0 - 18 degrees 1 - 24 degrees 2 - 26 degrees (Default) 3 - 28 degrees 4 - 32 degrees

Note: The injection timing adjustment will affect ALL power levels. This option can only be adjusted during the Install Download process.

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2006 - 2007 5.9L Dodge Cummins Specific Features Continued >>

Speed Limiter This option allows for the adjustment of the factory speed limiter. Most 5.9L Cummins trucks have a 106 MPH speed limiter from the factory. The limiter can be adjusted from 50 MPH to 200 MPH. This option can only be adjusted during the Install Download process.

Rev Limiter This option allows for the adjustment of the factory rev limiter. Most 5.9L Cummins trucks have a 3500 RPM rev limiter from the factory. The limiter can be adjusted from 3000 RPM to 5000 RPM. This option can only be adjusted during the Install Download process.

Torque Management (Automatic Transmission Only) This option allows for the disabling of the vehicles torque management for those equipped with automatic transmissions. This is recommended for those running standalone aftermarket TCM/transmission packages but will also slightly improve throttle response on a stock truck.

Note: By turning the torque management OFF, the PRNDL display will be lost as well as the reverse lights.

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed

tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. The tire size can be adjusted from 24" to 42". This option only takes a few seconds to change and can be adjusted at any time from the Tire Size Calibration menu.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:

2006-2007 5.9L - FUSE NUMBER 30 Always tap into the cold side of the fuse. On the 2006 - 2007 5.9L Cummins, the cold side is towards the drivers side of the vehicle.



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Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

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Overdrive Transmission Software Did you know that your H&S tuning device also has the capability of tuning your transmission? If your 5.9L Cummins is equipped with the 48RFE automatic transmission, you may want to check out our Overdrive Transmission Software. Custom tailored to mate with H&S engine tuning, the 5.9L Overdrive software includes modified torque converter lock/unlock strategies that will command the TC to lock in 3rd gear under wide open throttle and hold it locked through 4th gear. Light throttle torque converter strategies have also been changed to lock-up sooner, keeping more power directed to the road instead of wasted in heat and friction. Shift points are modified to take advantage of the available horsepower and torque output. On a 2006 Cummins with a stock 48RFE, we have seen 0.2 to 0.3 second quicker 1/4 mile times JUST from the addition of the H&S Overdrive tuning! An additional unlock fee may apply, see

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit If you unplug your head unit your truck will remain at the last known power level you had it set to.

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2007.5 - 2009 6.7L dodge Cummins USA / ULSD Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The unit cannot be unplugged otherwise the Power Level will default to Stock.

Power Levels

Stock... .. 0 HP

Tow.. .. 40 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different rat-

Street.. .. 80 HP

Performance. . . 120 HP

Speed Limiter This option allows for the adjustment of the factory speed limiter. Most 6.7L Cummins trucks have a 106 MPH speed limiter from the factory. The limiter can be adjusted from 20 MPH to 200 MPH. This option can only be adjusted during the Install Download process.

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. The tire size can be adjusted from 25.5" to 45". This option only takes a few seconds to change and can be adjusted at any time from the Tire Pressure Calibration menu.

Special Functions / Features Your H&S tuning device has the capability of Enabling / Disabling factory vehicle features. These features can be found in the Special Functions Menu. Below is a short description of each feature:

TPMS: Enable / Disable the Tire Pressure Monitoring System.

Optical Chirp on Lock: Enable / Disable the parking lights flashing when locking the vehicle.

Horn Chirp on Lock: Enable / Disable the horn chirp when locking the vehicle.

Set Head Lamp Delay: Enable / Disable the head lamp delay.

Accessory Delay: Enable / Disable the shut-off delay of your radio and accessory system after the key has been turned off.

Fog Lights W/High: Enable / Disable the fog lights staying on when high beams are being used.

Daytime Lights: Enable / Disable the daytime running lights.

Seat Belt Minder: Enable / Disable the chime for the drivers seat belt system. This feature will not dis-

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able the seat belt light.

Auto Door Lock: Enable / Disable the automatic door locking when the vehicle reaches certain speeds.

Unlock Driver Door: Enable / Disable unlocking only the driver door when pushing the unlock button the key- fob. When enabled, the unlock button on the key fob will need to be pressed twice in order to unlock all doors.

Idle Up (Auto Only): Enable / Disable the use of the cruise control buttons to control idle RPM. Follow your vehicle owners manual to use this feature

Note: If any special feature is already listed as Enabled but is not functioning correctly, you may need to disable the feature, cycle the key, and re-enable the feature to make it function properly. If it still does not work, your vehicle may not be equipped with the hardware required for the special feature. The previous selection will NOT be saved. If the Special Functions/Features Menu is exited and returned into, it will not display your previous selection. This is normal and the Enable/Disable function is still working properly.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:

FUSE NUMBER 30 Always tap into the cold side of the fuse. On the 2007.5 - 2009 6.7L Cummins, the cold side is towards the drivers side of the vehicle.



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Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

Overdrive Transmission Software Did you know that your H&S tuning device also has the capability of tuning your transmission? If your 6.7L Cummins is equipped with the 68RFE automatic transmission, you may want to check out our Overdrive Transmission Software. Custom tailored to mate with H&S engine tuning, the 6.7L Overdrive software includes boosted line pressures, modified full and part throttle torque converter lock/unlock strategies, adjusted full and part throttle shift points, adjusted full and part throttle shift firmness, modified torque management tables, and much more! All changes are designed to keep more power directed to the road instead of wasted in heat and friction. On our test trucks, we have seen 0.2 to 0.3 second quicker 1/4 mile times JUST from the addition of the H&S Overdrive tuning!

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2007.5 - 2009 6.7L Dodge Cummins Specific Features Continued >>

Overdrive Tuning Options 4-5th gear shift point adjustable up or down. Light to medium throttle, WOT is NOT adjustable.

5 levels: 1 - Lowest 2 - Stock shift point 3 - Medium 4 - Default 5 - Highest

5-6th gear shift point adjustable up or down. Light to medium throttle, WOT is NOT adjustable.

5 levels: 1 - Lowest 2 - Stock shift point 3 - Medium 4 - Default 5 - Highest Line pressure. WARNING, only designed for built transmissions. The factory transmission pump is NOT designed to be run more than 165-170 psi of pressure. Our current overdrive tune sets these values to 170 psi (the pump mechanically will not supply more pressure, and will build excess heat and waste energy). If they have a modified pump, they can use this adjustment to increase clutch holding pressure. We have tested up to 250 psi with great results.

5 levels: 1 - Stock 160 psi 2 - Default 170 psi 3 - 200 psi 4 - 225 psi 5 - 250 psi Shift Firmness. This adjustment will modify the acceleration rate between gear shifts. Making them softer or firmer.

5 levels: 1 - Stock 2 - Light firm 3 - Default 4 - Firm 5 - Most firm Note: An additional unlock fee may apply. *Overdrive Transmission Software is not available on Cab & Chassis models.

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates!

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When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit If you unplug your head unit, your truck will default to the Stock setting within a few drive cycles.

High Sulfur Calibration info found on page 49

2010 - 2012 6.7L Dodge Cummins USA / ULSD Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The unit cannot be unplugged otherwise the Power Level will default to Stock.

2010-2012 Pickup Power Levels

Stock... .. 0 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings.

Tow... .. 40 HP

Street... .. 80 HP

Performance... .. 120 HP

Speed Limiter This option allows for the adjustment of the factory speed limiter. Most 2010 - 2012 6.7L Cummins trucks have a 106 MPH speed limiter from the factory. The limiter can be adjusted from 20 MPH to 200 MPH. This option can only be adjusted during the Install Download process.

2011 Cab & Chassis Power Levels

Stock... .. 0 HP

Torque Management (Manual Transmission Only) This option allows for the disabling of the vehicles torque management for those equipped with manual transmissions. This option increases pedal sensitivity and throttle response when REMOVED.

Tow... .. 20 HP

Street... .. 40 HP

Performance... .. 60 HP

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause

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2010 - 2012 6.7L Dodge Cummins Specific Features Continued >>

the factory speedometer to read lower. The tire size can be adjusted from 25.5" to 45". This option can only be seen/changed after the Download is Installed to the vehicle. This option only takes a few seconds to change and can be adjusted at any time from the Tire Size Calibration menu.

Special Functions / Features Your H&S tuning device has the capability of Enabling / Disabling factory vehicle features. These features can be found in the Special Functions Menu. These features can only be seen/ changed after the Download is Installed to the vehicle. Below is a short description of each feature:

TPMS: Enable / Disable the Tire Pressure Monitoring System. Optical Chirp on Lock: Enable / Disable the parking lights flashing when locking the vehicle. Horn Chirp on Lock: Enable / Disable the horn chirp when locking the vehicle. Set Head Lamp Delay: Enable / Disable the head lamp delay. Accessory Delay: Enable / Disable the shut-off delay of your radio and accessory system after the key has been turned off. Fog Lights W/High: Enable / Disable the fog lights staying on when high beams are being used. Daytime Lights: Enable / Disable the daytime running lights. Seat Belt Minder: Enable / Disable the chime for the drivers seat belt system. This feature will not disable the seat belt light.

Note: If any special feature is already listed as Enabled but is not functioning correctly, you may need to disable the feature, cycle the key, and re-enable the feature to make it function properly. If it still does not work, your vehicle may not be equipped with the hardware required for the special feature. The previous selection will NOT be saved. If the Special Functions/Features Menu is exited and returned into, it will not display your previous selection. This is normal and the Enable/Disable function is still working properly.

Stationary Idle Adjust: The Stationary Idle Adjust Menu will allow you to adjust the idle speed of your vehicle while in Park or Neutral using your H&S tuning device. Choose the desired idle speed and select Set to set the idle speed to the chosen RPM. Idle speed can be adjusted from 700 RPM to 1500 RPM.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:

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2010 6.7L Pickup and 2011 6.7L Cab & Chassis FUSE NUMBER M45 Always tap into the cold side of the fuse. On the 2010 Pickup and 2011 Cab & Chassis, the cold side is towards the front of the vehicle.



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Installation reference - page 35

2011-2012 6.7L Pickup FUSE NUMBER M33 Always tap into the cold side of the fuse. On the 2011 Pickup, the cold side is towards the front of the vehicle.

Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

Overdrive Transmission Software Did you know that your H&S tuning device also has the capability of tuning your transmission? If your 6.7L Cummins is equipped with the 68RFE Automatic Transmission, you may want to check out our Overdrive Transmission Software. Custom tailored to mate with H&S engine tuning, the 6.7L Overdrive software includes boosted line pressures, modified full and part throttle torque converter lock/unlock strategies, adjusted full and part throttle shift points, adjusted full and part throttle shift firmness, modified torque management tables, and much more! All changes are designed to keep more power directed to the road instead of wasted in heat and friction. On our test trucks, we have seen 0.2 to 0.3 second quicker 1/4 mile times JUST from the addition of the H&S Overdrive tuning! An additional unlock fee may apply, see

Video In Motion This feature will allow customers with a factory installed Chrysler 730N DVD/Navigation unit to unlock all features that are normally blocked while driving. Full destination input into the navigation system is now available, even while the vehicle is moving, as well as DVD playback on the front screen. May require additional unlock fee. For more info see </store/dodge-video-in-motion-unlock-code.html>

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

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2010 - 2012 6.7L Dodge Cummins Specific Features Continued >>

Unplugging Head Unit If you unplug your head unit, your truck will default to the Stock setting within a few drive cycles.

î î High Sulfur Calibration info found on page 51

2003 - 2007 6.0L ford powerstroke USA / ULSD Calibration Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The current Power Level will be saved even if the Mini Maxx is unplugged.

Power Levels

Stock... 0 HP

Tow... 40 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings.

Street... 80 HP

Performance. . . 120 HP

Speed Limiter This option allows for the removal of the factory speed limiter. Most 6.0L Powerstroke trucks have a 95 MPH speed limiter from the factory. The limiter can be removed completely or left stock (this may change so be sure to visit product updates). This option can only be changed during the Install Download process.

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. Tire size can be adjusted from 25" to 40". This option can only be adjusted during the Install Download process.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:

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FUSE NUMBER 15 Always tap into the cold side of the fuse. On the 2003 - 2007 6.0L Powerstroke, the cold side is towards the driver side of the vehicle.



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Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit If you unplug your head unit your truck will remain at the last known power level you had it set to.

2008 - 2010 6.4L ford powerstroke USA / ULSD Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The current Power Level will be saved even if the Mini Maxx is unplugged.

Power Levels

Stock.. 0 HP

Tow.. 40 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings.

Street.. 80 HP

Performance. . . . 120 HP

Speed Limiter This option allows for the adjustment of the factory speed limiter. Most 6.4L Powerstroke trucks have a 95 MPH speed limiter from the factory. The limiter can be adjusted from 55 MPH to 200 MPH. This option can only be adjusted during the Install Download process.

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the

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2008 - 2010 6.4L Ford Powerstroke Specific Features Continued >>

printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. The tire size can be adjusted from 25" to 60". This option can only be adjusted during the Install Download process.

TPMS Adjustability / Disable Many 2008 - 2010 6.4L Powerstrokes are equipped with a TPMS or Tire Pressure Monitoring System from the factory. This system is designed to alert the driver of a problem with the vehicle's tire pressures but is often a nagging inconvenience for those individuals wanting to run lower pressures or get rid of the TPMS sensors altogether. H&S Performance has a designed solution for those individuals. By using your H&S tuning device and a 6.4L Powerstroke TPMS Adapter (Part #709913), you will have full control of the TPMS. Front and rear tire pressures will be independently adjustable from 0 - 100 PSI as well as the option to Disable the TPMS completely if removing the TPMS sensors from the vehicle. All changes to the TPMS must be done with the 6.4L Powerstroke TPMS Adapter in place and the Adapter must be removed after changes are made to resume normal tuner function.

Transmission Relearn The 5R110 automatic transmission on the 2008 - 2010 6.4L Powerstroke has what is called Adaptive Memory and is constantly learning and adapting to different horsepower levels, temperatures, driving habits, etc. After completing the Install Download process on the 6.4L Powerstroke, the Transmission Adaptive Memory is automatically reset. We highly recommend performing a Transmission Relearn procedure after installing H&S tuning to help the transmission perform correctly with the added horsepower. The 5R110 automatic transmission will eventually learn over time on its own, but the relearn procedure gives a good baseline for the adaptive learning and helps to speed up the learning process. To perform the relearn procedure, please follow these instructions:

When re-training the transmission, ALWAYS follow posted speed limits. Do NOT attempt runs in adverse weather conditions such as snow, ice, rain, wind, or any other conditions that may affect your vehicle's traction or impair your visibility!

1. After H&S tuning is installed, perform each of the following 0-80 MPH runs while in the Performance power level. During this relearn process, you may experience hesitation during shifts, hard shifts, or defuel patterns, all of which are normal:

- 0-80 MPH @ 25% throttle position, then slow down and come to a complete stop.
- 0-80 MPH @ 50% throttle position, then slow down and come to a complete stop.
- 0-80 MPH @ 100% throttle position, then slow down and come to a complete stop.

The Transmission Relearn procedure is complete.

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Note: On any vehicle using 3" or larger lift blocks under the rear leaf pack, it is HIGHLY RECOMMENDED to install traction bars. With any added horsepower, failure to do so may result in harsh shifting and may cause premature transmission and/or driveline damage.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:



Installation reference - page 39

SOLID PURPLE WIRE The SOLID PURPLE wire (capped from the factory) is found under the drivers side dash. This SOLID PURPLE wire is bundled with multiple other capped wires near the OBD-II port.

Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays "hot" during engine cranking.

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit If you unplug your head unit your truck will remain at the last known power level you had it set to.

Î Î High Sulfur Calibration info found on page 53

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2008 - 2010 6.4L Ford Powerstroke Specific Features Continued >>

2011-2013 6.7L ford powerstroke USA / ULSD Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The unit cannot be unplugged otherwise the Power Level will default to Stock.

Power Levels

Stock... .. 0 HP

Tow... .. 40 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different rat-

Street.. .. 80 HP

Performance. . . 120 HP

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. The tire size can be adjusted from 31" to 34" (this may change so be sure to visit This option only takes a few seconds to change and can be adjusted at any time from the Tire Size Calibration menu.

TPMS Adjustability / Disable Many 2011 - 2013 6.7L Powerstrokes are equipped with a TPMS or Tire Pressure Monitoring System from the factory. This system is designed to alert the driver of a problem with the vehicles tire pressures but is often a nagging inconvenience for those individuals wanting to run lower pressures or get rid of the TPMS sensors altogether.

With your H&S tuning device, you have full control of the TPMS. Front and rear tire pressures are independently adjustable from 0-120 PSI as well as the option to disable the TPMS completely if removing the TPMS sensors from the vehicle. This option only takes a few seconds to change and can be adjusted at any time from the Tire Pressure Calibration menu.

Note: TPMS adjustments will not take full effect on a stationary vehicle. Once adjustments have been made, it can take up to 5 miles of driving before changes take effect.

Transmission Tuning Did you know that your H&S tuning device also has the capability of tuning your transmission? Our transmission tuning for the 6R140 automatic transmission is custom tailored to

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mate with H&S engine tuning. Some features include: boosted line pressures, modified full and part throttle lock/unlock strategies, adjusted full and part throttle shift points, adjusted full and part throttle shift firmness, and modified torque management tables. All changes are designed to keep more power directed to the road instead of wasted in heat and friction. On our test trucks, we have seen 0.2 to 0.3 second quicker 1/4 mile times JUST from the addition of H&S transmission tuning! An additional unlock fee may apply, see

Transmission Relearn The 6R140 automatic transmission on the 2011 - 2013 6.7L Powerstroke has what is called Adaptive Memory and is constantly learning and adapting to different horsepower levels, temperatures, driving habits, etc. If you selected to tune the transmission during the Install Download process, the Transmission Adaptive Memory is automatically reset when the download completes. We highly recommend performing a Transmission Relearn procedure after installing H&S transmission tuning to help the transmission perform correctly with the added horsepower. The 6R140 automatic transmission will eventually learn over time on its own, but the relearn procedure gives a good baseline for the adaptive learning and helps to speed up the learning process. To perform the relearn procedure, please follow these instructions:

When re-training the transmission, ALWAYS follow posted speed limits. Do NOT attempt runs in adverse weather conditions such as snow, ice, rain, wind, or any other conditions that may affect your vehicles traction or impair your visibility!

1. After H&S tuning is installed, perform each of the following 0-80 MPH runs while in the Performance power level. During this relearn process, you may experience hesitation during shifts, hard shifts, or defuel patterns, all of which are normal:

- 0-80 MPH @ 25% throttle position, then slow down and come to a complete stop.
- 0-80 MPH @ 50% throttle position, then slow down and come to a complete stop.
- 0-80 MPH @ 100% throttle position, then slow down and come to a complete stop.

The Transmission Relearn procedure is complete.

Note: On any vehicle using 3" or larger lift blocks under the rear leaf pack, it is HIGHLY RECOMMENDED to install traction bars when adding additional horsepower.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position

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2011 - 2012 6.7L Ford Powerstroke Specific Features Continued >>

and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:

WHITE WIRE WITH BLUE STRIPE The white wire with blue stripe (capped from the factory) is found under the drivers side dash. This wire is bundled with multiple other capped wires near the emergency brake lever.



Installation reference - page 42

Note: If your wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit If you unplug your head unit, your truck will default to the Stock setting within a few drive cycles.

High Sulfur Calibration info found on page 55

2007.5-2010 6.6L LMM Duramax USA / ULSD Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The current Power Level will be saved even if the Mini Maxx is unplugged.

Power Levels

Stock.. 0 HP

Tow.. 40 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings.

Street... 80 HP

Performance. . . 120 HP

Speed Limiter This option allows for the adjustment of the factory speed limiter. Most 6.6L LMM Duramax

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trucks have a 98 MPH speed limiter from the factory. The limiter can be adjusted from 50 MPH to 95 MPH or removed completely. This option can only be adjusted during the Install Download process.

Tire Size Calibration This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. The tire size can be adjusted from 25" to 60". This option can only be adjusted during the Install Download process.

Note: On some vehicles, entering a tire size larger than 35" may cause the ABS light to illuminate.

Transmission Reset / Relearn The automatic transmission on the 2007.5 - 2010 6.6L LMM Duramax has what is called Adaptive Memory and is constantly learning and adapting to different horsepower levels, temperatures, driving habits, etc. We highly recommend performing a Transmission Reset / Relearn procedure after installing H&S tuning to help the transmission perform correctly with the added horsepower. The transmission will eventually learn over time on its own, but the relearn procedure gives a good baseline for the adaptive learning and helps to speed up the learning process. To perform the relearn procedure, please follow these instructions:

When re-training the transmission, ALWAYS follow posted speed limits. Do NOT attempt runs in adverse weather conditions such as snow, ice, rain, wind, or any other conditions that may affect your vehicles traction or impair your visibility!

1. After you have installed the H&S tuning, turn the key to the ON position. From the Main Menu, scroll down until you see the Reset Transmission option. Select Reset Transmission and follow the on-screen instructions to reset the transmission adaptive memory.
2. After the transmission reset is complete, it is recommended to perform each of the following 0-80 MPH runs while in the Performance power level:
 - 0-80 MPH @ 25% throttle position, then slow down and come to a complete stop.
 - 0-80 MPH @ 50% throttle position, then slow down and come to a complete stop.
 - 0-80 MPH @ 100% throttle position, then slow down and come to a complete stop.

The Transmission Relearn procedure is complete.

Note: On any vehicle using 3" or larger lift blocks under the rear leaf pack, it is HIGHLY RECOMMENDED to install

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2007.5 - 2010 6.6L LMM Duramax Specific Features Continued >>

traction bars when adding additional horsepower.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and

the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:



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FUSE NUMBER 45 Always tap into the cold side of the fuse. On the 2007.5 - 2010 6.6L LMM Duramax, the cold side is towards the rear of the vehicle.

Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit If you unplug your head unit your truck will remain at the last known power level you had it set to.

î î High Sulfur Calibration info found on page 57

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2011-2013 6.6L LML Duramax USA / ULSD Calibration

Power Levels Power levels are not currently shift-on-the-fly for the 2011 - 2013 6.6L LML Duramax. To adjust the Power Level, select Install Download from the Main Menu and follow the on- screen instructions (this may change so be sure to visit

Power Levels

Tow.. 40 HP

Street.. 80 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings and can be found at

Speed Limiter This option allows for the removal of the factory speed limiter. Most 6.6L LML Duramax trucks have a 98 MPH speed limiter from the factory. The limiter may be removed completely but WILL result in a loss of cruise control and exhaust brake function. (this may change so be for product updates). This option can only be changed during the Install Download process.

Tire Size Calibration (Not currently available for the 2011 - 2013 6.6L LML Duramax. This may change so be sure to visit for product updates). This option allows for the re-calibration of the factory speedometer to adjust for non-stock sized tires. For the most accurate speedometer reading when using non-stock sized tires, it is best to measure the diameter of the tire using a tape measure rather than going by the printed tire size. In addition, using a GPS is a great way to dial in your factory speedometer. Entering a larger tire size will cause the factory speedometer to read higher while entering a smaller tire size will cause the factory speedometer to read lower. This option can only be adjusted during the Install Download process.

Note: On some vehicles, entering a tire size larger than 35" may cause the ABS light to illuminate.

Transmission Reset / Relearn The automatic transmission on the 2011 - 2013 6.6L LML Duramax has what is called Adaptive Memory and is constantly learning and adapting to different horsepower levels, temperatures, driving habits, etc. We highly recommend performing a Transmission Reset / Relearn procedure after installing H&S tuning to help the transmission perform correctly with the added horsepower. The transmission will eventually learn over time on its own, but the relearn procedure gives a good baseline for the adaptive learning and helps to speed up

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2011 - 2013 6.6L LML Duramax Specific Features Continued >>

the learning process. To perform the relearn procedure, please follow these instructions:

When re-training the transmission, ALWAYS follow posted speed limits. Do NOT attempt runs in adverse weather conditions such as snow, ice, rain, wind, or any other conditions that may affect your vehicles traction or impair your visibility!

1. After you have installed the H&S tuning, turn the key to the ON position. From the Main Menu, scroll down until you see the Reset Transmission option. Select Reset Transmission and follow the on-screen instructions to reset the transmission adaptive memory.

2. After the transmission reset is complete, it is recommended to perform each of the following 0-80 MPH runs while in the Performance power level:

- 0-80 MPH @ 25% throttle position, then slow down and come to a complete stop.
- 0-80 MPH @ 50% throttle position, then slow down and come to a complete stop.
- 0-80 MPH @ 100% throttle position, then slow down and come to a complete stop.

The Transmission Relearn procedure is complete.

Note: On any vehicle using 3" or larger lift blocks under the rear leaf pack, it is HIGHLY RECOMMENDED to install traction bars when adding additional horsepower.

Keyed Ignition Source Location Although it is possible to manually power up the Mini Maxx without using a keyed ignition source, it can sometimes create communication issues between the Mini

Maxx and the vehicles ECM. To eliminate these problems, we highly recommend tapping into a 12V keyed ignition source to supply power to the Mini Maxx only when the key is in the ON position and the vehicles ECM is online. Below you will find a commonly used 12V keyed ignition source for your vehicle:

FUSE NUMBER 45 Always tap into the cold side of the fuse. On the 2011 - 2013 6.6L LML Duramax, the cold side is towards the front of the vehicle.



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Note: If your fuse box or wiring looks different than those pictured or if you are not getting 12V ignition power from the pictured source, you may need to find another 12V keyed ignition source using a test light or multimeter. If possible, find one that stays hot during engine cranking.

Maxx Calibration Control Maxx Calibration Control (MCC) is an advanced engine management software tool that enables custom tune editing with your H&S tuning device. With the power to control all aspects of engine

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and transmission management, MCC gives YOU the ability to control how YOUR engine operates! When you have exceeded the limits of conventional tuning and want to unleash the power of a custom tune, look no further than MAXX CALIBRATION CONTROL

Note: Applications may vary by vehicle make and model, please check our website to see if MCC is available for your

Unplugging Head Unit Not shift-on-the-fly so unplugging head unit will not affect power level setting.

High Sulfur Calibration info found on page 58

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Section 8: high sulfur calibration Vehicle specific features

Notice!! The remaining pages in this manual are intended for those running a High Sulfur calibration from H&S Performance. More information can be found at

Notice!! All vehicle specific information prior to this section still applies to those using High Sulfur calibrations. When the High Sulfur calibration is used, the features listed below are ADDITIONAL to all other features contained in this manual.

Disclaimer: Illegal usage of the High Sulfur calibration is NOT allowed by H&S Performance. Any alteration of an H&S device in an attempt to obtain High Sulfur capabilities will be cause for H&S Warranty termination. More information about the design and correct use of the H&S High Sulfur calibration can be found at

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2007.5-2009 6.7L Dodge Cummins High Sulfur Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after installing the Download to the vehicle. The unit cannot be unplugged otherwise the Power Level will default to Stock.

Power Levels

Stock.. 0 HP

Tow.. 60 HP

Street.. 120 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings

Performance. . . . 175 HP

Injection Timing This option allows for the adjustment of the maximum allowed injection timing. There are 5 different settings for the Injection Timing:

1 - 24 degrees 2 - 26 degrees 3 - 28 degrees (Default) 4 - 30 degrees 5 - 32 degrees

Note: The injection timing adjustment will affect ALL power levels. This option can only be adjusted during the Install Download process.

Adjustable Throttle Response This option allows for the adjustment of the throttle response. There are 3 different settings for the Throttle Response:

1 - Stock Response 2 - Default Response 3 - High Response

Emissions Selection Most 2007-2009 6.7L Cummins are equipped with an emissions system designed to run Ultra Low Sulfur Diesel (ULSD) Fuel. If you have removed or modified this emissions system (or plan to immediately after installing this device), proper tuning must be installed or the vehicle will not operate correctly. Select REMOVED at this option for a modified emissions system and high sulfur fuel use. Select PRESENT if your emissions system requires ULSD fuel.

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2007.5 - 2009 6.7L Dodge Cummins High Sulfur Calibration Info Continued >>

Exhaust Emissions Equipment When running ULSD tuning, it is required that all sensors located in the exhaust system stay in place and plugged in, otherwise you may experience a Check Engine Light (CEL) and even a loss of power (limp mode).

When running High Sulfur tuning, it is recommended that all sensors located in the factory exhaust system be unplugged from the electrical harnesses. These sensors can also be removed completely with the factory exhaust if desired. On the 2007.5 - 2009 6.7L Cummins, there are usually 3 EGT Sensors, 2 O2 Sensors, and 1 Pressure Sensor.

EGR Emissions Equipment If you are installing H&S High Sulfur tuning, you must unplug the EGR system on your 2007.5 - 2009 6.7L Cummins if not installing an EGR delete. Failing to do so may result in erratic engine operation and loss of power. Please follow these instructions carefully to unplug and disable the EGR system:

1. Locate the EGR Throttle Control Valve Assembly (Fig.1). Assembly is located between the inter-cooler and intake manifold on the drivers side of the engine compartment.
2. Unplug the EGR Throttle Control Valve wiring harness. The harness is LIGHT GRAY in color and is located on the back side of the Throttle Control Valve Assembly. It is not directly visible when looking at the assembly from above. On some vehicles, it may be easier to see and unplug the harness from underneath the vehicle. Note: There is a red locking tab that must be moved sideways on the harness in order for it to be unplugged.
3. Locate the EGR solenoid on top of the intake manifold (Fig.2). It is directly visible when looking at the intake manifold and faces towards the front of the vehicle.
4. Unplug the EGR solenoid wiring harness. The connector is BROWN in color.



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2010-2012 6.7L dodge cummins high sulfur calibration

Power Levels Power Levels can be adjusted on- the-fly at the touch of a button after Installing the Download to the vehicle. The unit cannot be unplugged otherwise the Power Level will default to Stock.

2010-2012 Pickup Power Levels

2011 Cab & Chassis Power Levels

Stock.. 0 HP

Stock... 0 HP

Tow.. 60 HP

Tow.. 25 HP

Street.. 120 HP

Street... 50 HP

Performance. . . 175 HP

Performance. . . . 75 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings and can be found at

Emissions Selection Most 2010-2012 6.7L Cummins are equipped with an emissions system designed to run Ultra Low Sulfur Diesel (ULSD) Fuel. If you have removed or modified this emissions system (or plan to immediately after installing this device), proper tuning must be installed or the vehicle will not operate correctly. Select REMOVED at this option for a modified emissions system and high sulfur fuel use. Select PRESENT if your emissions system requires ULSD fuel.

Exhaust Emissions Equipment When running ULSD tuning, it is required that all sensors located in the exhaust system stay in place and plugged in, otherwise you may experience a Check Engine Light (CEL) and even a loss of power (limp mode).

When running High Sulfur tuning, it is recommended that all sensors located in the factory exhaust system be unplugged from the electrical harnesses. These sensors can also be removed completely with the factory exhaust if desired. On the 2010 - 2012 Pickup, there are usually 3 EGT Sensors, 2 O2 Sensors, and 1 Pressure Sensor.

2011 Cab & Chassis UREA System On the 2011 Cab & Chassis, there is usually an additional NOX sensor as well as a UREA system that needs to be unplugged when running High Sulfur tuning. The UREA system must at least be unplugged but can be completely removed from the vehicle if desired. Failure to unplug the UREA system may result in a check engine light and/or dash messages. Follow these instructions to unplug the UREA system:

1. Locate the wiring harness with the YELLOW sliding lock-tab on the UREA pump assembly. The pump assembly is located near the bottom of the filler neck support.

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2010 - 2012 6.7L Dodge Cummins High Sulfur Calibration Info Continued >>



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2. Slide the yellow lock-tab DOWN to dis-engage the lock and unplug the harness.



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For complete UREA System Removal instructions, visit

EGR Emissions Equipment It is not mandatory to unplug the EGR system when installing High Sulfur tuning. You may still unplug the EGR system if desired, or the EGR system may be left plugged in without any ill effects. The entire EGR system can also be completely removed with an aftermarket EGR Delete Kit when running High Sulfur tuning.

Injection Timing This option allows adjustment of the Injection Timing Calibration tables. There are 5 different settings you can choose from. If you skip this adjustment option, you will be defaulted to level 3

1 - Least Aggressive (Stock Setting) 2 - Less Aggressive 3 - (Default) 4 - More Aggressive 5 - Most Aggressive

Note: The injection timing adjustment will affect ALL power levels. This option can only be adjusted during the Install Download process.

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2008-2010 6.4L Ford Powerstroke High Sulfur Calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The current Power Level will be saved even if the Mini Maxx is unplugged.

Power Levels

Default

Stock.. 0 HP

Tow... 80 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings.

Street... 160 HP

Performance. . . 250 HP

Emissions Selection Most 2008-2010 6.4L Powerstrokes are equipped with an emissions system designed to run Ultra Low Sulfur Diesel (ULSD) Fuel. If you have removed or modified this emissions system (or plan to immediately after installing this device), proper tuning must be installed or the vehicle will not operate correctly. Select REMOVED at this option for a modified emissions system and high sulfur fuel use. Select PRESENT if your emissions system requires ULSD fuel.

Exhaust Emissions Equipment When running ULSD tuning, it is required that all sensors located in the exhaust system stay in place and plugged in, otherwise you may experience a Check Engine Light (CEL) and even a loss of power (limp mode).

When running High Sulfur tuning, it is recommended that all sensors located in the factory exhaust system be unplugged from the electrical harnesses. These sensors can also be removed completely with the factory exhaust if desired. On the 6.4L Powerstroke, there are usually 3 EGT Sensors and 1 Pressure Sensor.

Note: The vehicle will not run with sensors removed unless High Sulfur tuning is installed.

EGR Emissions Equipment When running High Sulfur tuning, it is not required to unplug or block-off the EGR system on your 6.4L Powerstroke to disable it. The EGR system is already disabled in the tuning and will not function under any conditions. If desired, the entire EGR system can be unplugged, blocked-off, or completely removed when running H&S High Sulfur tuning.

Tune Selection This option allows you to pick from 3 tuning options. To change this selection you must repeat the install download process.

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2008 - 2010 6.4L Ford Powerstroke High Sulfur Calibration Info Continued >>

1. Easy Power levels are: stock, 60hp, 120hp, and 175hp
2. Mild Power levels are: stock, 80hp, 160hp, and 250hp
3. Hot Damn 300 Power levels are: 50hp, 125hp, 225hp, 300hp

Shift Schedule This option allows you to change the shift logic of your automatic transmission. There are 2 options. To change these options, you must repeat the install download process.

1. Schedule 1: This option will lock the torque converter in 4th gear under normal driving, and keep it locked through 5th gear. 2. Schedule 2: This option will not lock the torque converter until 5th gear under normal driving.

NOTE: The Easy Power Tuning also has Easy shift schedule. It is NOT adjustable.

Shift Point This option will allow you to modify shift points for the 3-4 and 4-5 shifts. There are 3 options to choose from. To change these options, you must repeat the install download process.

1. Low: This option will shift into high gears at the lowest possible road speed. 2. Med: This option is the middle range of shift points 3. High: This option will shift into high gears at the highest possible road speed.

Low Boost Fueling Adjustment This adjustment allows you to limit the amount of fuel delivered based upon turbo boost levels. 0 will have the least smoke output, 5 will have the most. By skipping this feature, the tuning will default to level 2.

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2011-2013 6.7L ford powerstroke high sulfur calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a button after Installing the Download to the vehicle. The unit cannot be unplugged otherwise the Power Level will default to Stock.

Power Levels

Stock... . 0 HP

Tow... . 50 HP

Street... . 100 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different ratings

Performance. . . 150 HP

Emissions Selection Most 2011-2013 6.7L Powerstrokes are equipped with an emissions system designed to run Ultra Low Sulfur Diesel (ULSD) Fuel. If you have removed or modified this emissions system (or plan to immediately after installing this device), proper tuning must be installed or the vehicle will not operate correctly. Select REMOVED at this option for a modified emissions system and high sulfur fuel use. Select PRESENT if your emissions system requires ULSD fuel.

Exhaust Emissions Equipment When running ULSD tuning, it is required that all sensors located in the exhaust system stay in place and plugged in, otherwise you may experience a Check Engine Light (CEL) and even a loss of power (limp mode).

When running High Sulfur tuning, it is recommended that all sensors located in the factory exhaust system be unplugged from the electrical harnesses. These sensors can also be removed completely

with the factory exhaust if desired. On the 6.7L Powerstroke, there are usually 3 EGT Sensors, 1 NOX Sensor, 1 UREA Injector, and 1 Pressure Sensor.

Note: The vehicle will not run with sensors removed unless High Sulfur tuning is installed.

UREA / SCR System On the 2011 - 2013 6.7L Powerstroke, there is a UREA system that can be unplugged or removed completely when running High Sulfur tuning. The UREA system may also be left plugged in with no ill effects.

EGR Emissions Equipment If you are installing H&S High Sulfur tuning, you must unplug the EGR system on your 2011- 2013 6.7L Powerstroke if not installing an EGR delete. Failing to do so may result in damage

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2011 - 2012 6.7L Ford Powerstroke High Sulfur Calibration Info Continued >>

to your EGR parts.

Please follow these instructions carefully to unplug and disable the EGR system:

1. Unplug Orange EGR harness found on top of the EGR cooler assembly. The yellow lock tab must be slid out before the harness can be unplugged.



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2. Unplug the EGR Butterfly Valve located near the radiator fan shroud.



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2007.5-2010 6.6L LMM Duramax high sulfur calibration

Power Levels Power Levels can be adjusted on-the-fly at the touch of a but- ton after Installing the Download to the vehicle. The current Power Level will be saved even if the Mini Maxx is unplugged.

Power Levels

Stock... . 0 HP

Tow.. . 60 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different rat-

Street... . 120 HP

Performance. . . 175 HP

Emissions Selection Most 2007.5-2010 6.6L LMM Duramax's are equipped with an emissions system designed to run Ultra Low Sulfur Diesel (ULSD) Fuel. If you have removed or modified this emissions system (or plan to immediately after installing this device), proper tuning must be installed or the vehicle will not operate correctly. Select REMOVED at this option for a modified emissions system and high sulfur fuel use. Select PRESENT if your emissions system requires ULSD fuel.

Exhaust Emissions Equipment When running ULSD tuning, it is required that all sensors located in the exhaust system stay in place and plugged in, otherwise you may experience a Check Engine Light (CEL) and even a loss of power (limp mode).

When running High Sulfur tuning, it is recommended that all sensors located in the factory exhaust system be unplugged from the electrical harnesses. These sensors can also be removed completely with the factory exhaust if desired. On the 6.6L LMM Duramax, there are usually 3 EGT Sensors and 1 Pressure Sensor.

EGR Emissions Equipment When running H&S High Sulfur tuning, it is not required to unplug or block-off the EGR system on your 6.6L LMM Duramax to disable it. The EGR system is already disabled in the tuning and will not function under any conditions. If desired, the entire EGR system can be unplugged, blocked-off, or completely removed when running H&S High Sulfur tuning.

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2011-2013 6.6L LML Duramax high sulfur calibration

Power Levels Power levels are not currently shift-on-the-fly for the 2011 - 2013 6.6L LML Duramax. To adjust the Power Level, select Install Download from the Main Menu and follow the on- screen instructions (this may change so be sure to visit

Power Levels

Stock.. 0 HP

Tow... 50 HP

Street... 100 HP

Performance. . . 150 HP

Note: The Power Level ratings listed may not be exact for your particular vehicle. The listed ratings apply to the out-of-the-box tuning that H&S tuning devices are shipped with. Any custom downloads may result in different rat-

Emissions Selection Most 2011-2013 6.6L LML Duramax's are equipped with an emissions system designed to run Ultra Low Sulfur Diesel (ULSD) Fuel. If you have removed or modified this emissions system (or plan to immediately after installing this device), proper tuning must be installed or the vehicle will not operate correctly. Select REMOVED at this option for a modified emissions system and high sulfur fuel use. Select PRESENT if your emissions system requires ULSD fuel.

Exhaust Emissions Equipment When running ULSD tuning, it is required that all sensors located in the exhaust system stay in place and plugged in, otherwise you may experience a Check Engine Light (CEL) and even a loss of power (limp mode).

When running High Sulfur tuning, it is required that all sensors located in the factory exhaust system be unplugged from the electrical harnesses EXCEPT FOR THE PRESSURE SENSOR WHICH MUST REMAIN PLUGGED IN. All sensors other than the Pressure Sensor can be removed completely with the factory exhaust if desired. On the 6.6L LML Duramax, there are usually 3 EGT Sensors, 1 NOx Sensor, 1 UREA Injector, and 1 Pressure Sensor.

The DPF Pressure Sensor is located under the bed in front of the axle on the inside of the passenger side frame rail. You may pull the two rubber lines off of the sensor but DO NOT UNPLUG THIS SENSOR! Un- plugging of the Pressure Sensor may result in erratic engine operation and loss of power.



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UREA / SCR System On the 2011 - 2013 6.6L LML Duramax, there is a UREA system that needs to be unplugged when running High Sulfur tuning. The UREA system must at least be unplugged but can be completely removed from the vehicle if desired. Failure to unplug the UREA system may result in a check engine light and/or dash messages, erratic engine operation, and loss of power. Follow these instructions to unplug the UREA system:

1. The urea injector is located between the CAT and DPF above the torsion bar cross member. Unplug the electrical connection and the urea line.



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2. The main urea harness is the large black harness located near the urea injector above the urea tank. Flip the large gray locking tab to disconnect the harness.



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For complete UREA System Removal instructions, visit

EGR Emissions Equipment If you are installing H&S High Sulfur tuning, you must unplug the EGR system on your 6.6L LML Duramax if not installing a complete EGR delete. Failing to do so may result in erratic engine operation and loss of power. Please follow these instructions carefully to unplug and disable the EGR system:

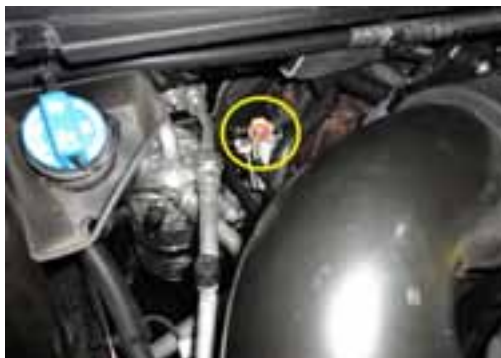
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2011 - 2013 6.6L LML Duramax High Sulfur Calibration Info Continued >>

1. Unplug 3 EGR harnesses - two are brown with a yellow locking tab, one is black with a red locking tab (see pictures for locations).



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To register your product online, visit /register or scan the QR code.

Benefits to registering your product include: • Guarantee full warranty coverage.



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- Monthly Product Updates



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- Monthly Tech Tips
- New Web Site Features
- And More!



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