



# **BULLY DOG**

**#1 IN PERFORMANCE**

## **INSTALLATION MANUAL**



**CAT 3126 ,C7and C9engines**

<b>Applications</b>	<b>Rapid Power Part #</b>
3126 '98-'03	40630
C7 '98-'05	40630
C9 '98-'05	40630



**POWER**



**FUEL-ECONOMY ECONOMY**

## INTRODUCTION

You have just purchased the most technologically advanced tractor module available for the CAT engines series 3126, C7 and C9. The Rapid Power module is the safest and longest lasting module on the market.

***This instruction set outlines how to install and operate the Rapid Power module on All 3126, C7 and C9 engines that are within the specified years and harness types.***

Always remember to remove the module before taking it in for any kind of service as the module may interfere.

Bully Dog recommends installing a pyrometer gauge to monitor exhaust gas temperature when using any product to increase horsepower.

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## Parts Description:

The product is made up of two different parts, the module box, and cable.



### Contents:

1. Rapid Power Module with Wiring Harness
2. Zip Ties

**THE MODULE BOX:** The module box contains the electronics that will help the engine to produce more horsepower. It is very important that this module is mounted away from all moving or hot parts. The box should be placed in an area protected from dirt and moisture.



**THE MODULE BOX**

**THE CABLE:** This cable allows the Rapid Power Module to connect to the engine. At the end of the wiring harness are four plugs, two male and two female plugs. These plugs will connect directly to the engine and wiring harness requiring no modification of the engine. The shortest cable is the MAP sensor and the longest one is the ICP Sensor plug

### MAP SENSOR PLUGS



Female Plug

Male Plug

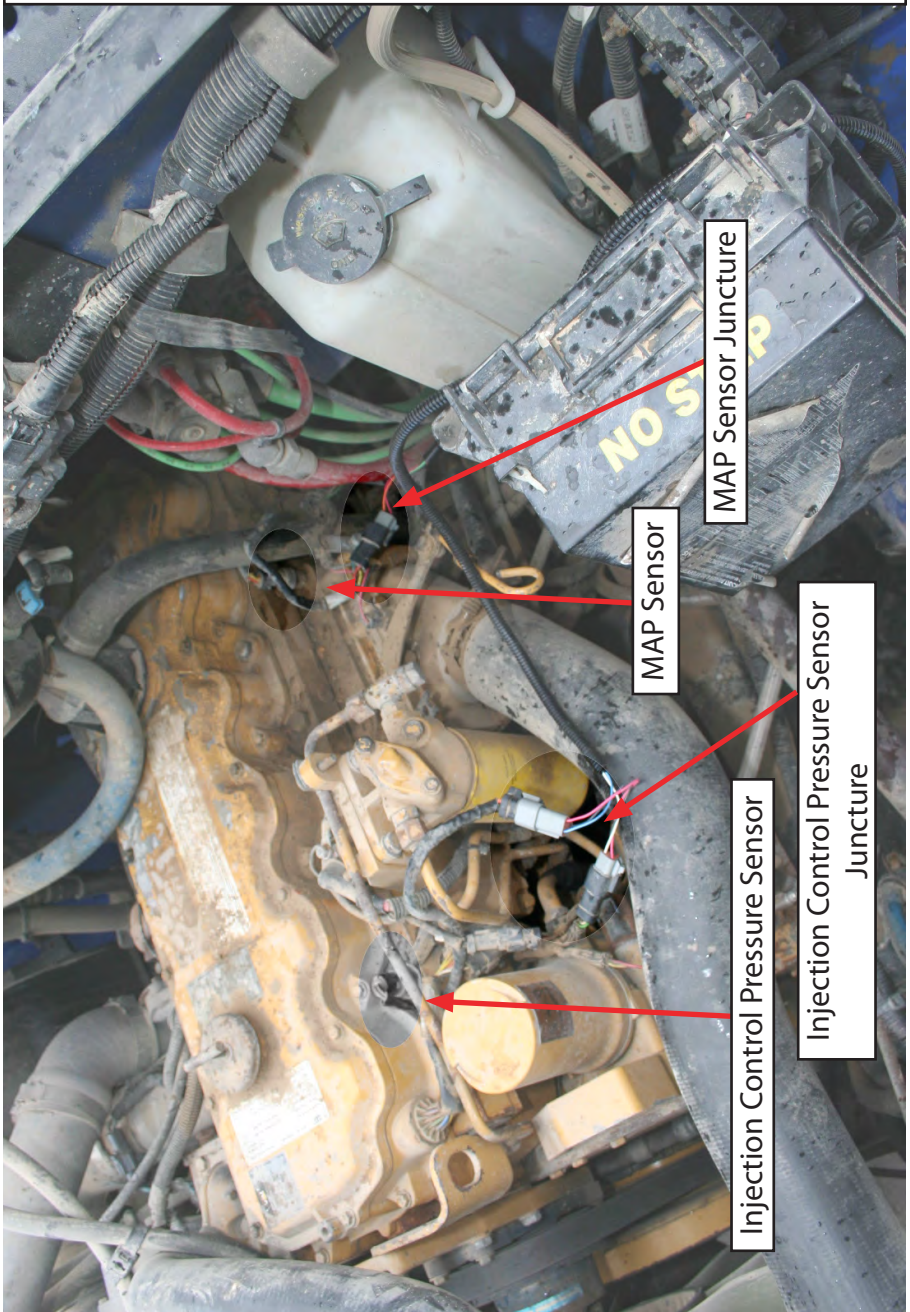
### INJECTION CONTROL PRESSURE (ICP) SENSOR PLUGS



Female Plug

Male Plug

# Caterpillar Plug Location Diagram 3126



MAP Sensor Junctionure

MAP Sensor

Injection Control Pressure Sensor Junctionure

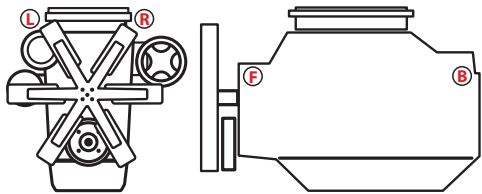
Injection Control Pressure Sensor



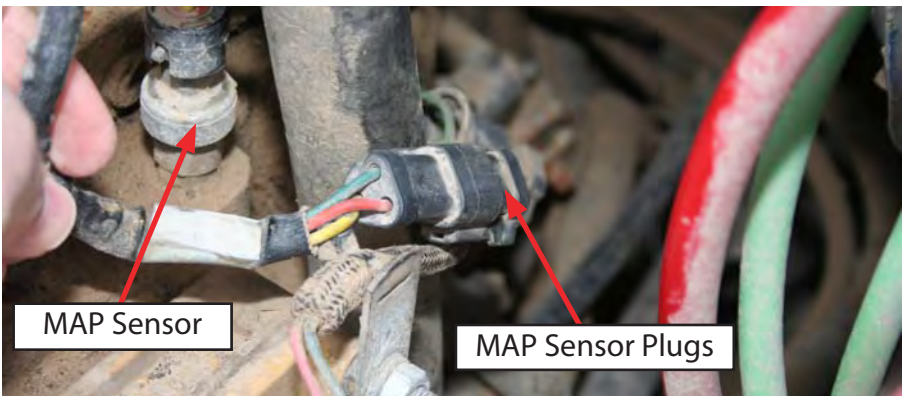
1. Open the engine compartment or remove the engine cover, make sure that the engine is fully accessible so that plugs can be reached and the module can be mounted to a safe place within the engine bay.



2. Locate the MAP Sensor plug near the back of the engine on the right side of the engine and near the rear of the engine. Reference this map sensor when following step 3.



3. Locate Map sensor plugs: From the map sensor plug follow the wire harness coming out of the Map sensor to a set of harness plugs. This is the plug set that the Bully Dog Map sensor plugs will intersect. Disconnect those map sensor plugs from one another.

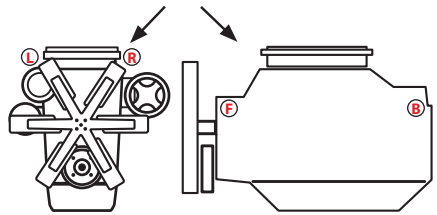


4. Plug the male OEM MAP sensor plug into the female Module MAP sensor plug.
5. Plug the female OEM MAP sensor plug in the male Module MAP sensor plug.

MAP w/ Rapid Power connected



6. Locate the ICP Sensor: like with the MAP sensor plug, locate the ICP sensor and then follow the connected wire harness to the plug set and disconnect that plug set in preparation to tie in the Bully Dog harness. The Injection Control Pressure sensor is located on the right side of the engine near the front.



Injection Control Pressure Sensor



Injection Control Pressure Sensor Plug Set

7. Plug the male OEM ICP sensor plug into the female Module ICP sensor plug.
8. Plug the female OEM ICP sensor plug into the male Module ICP sensor plug.



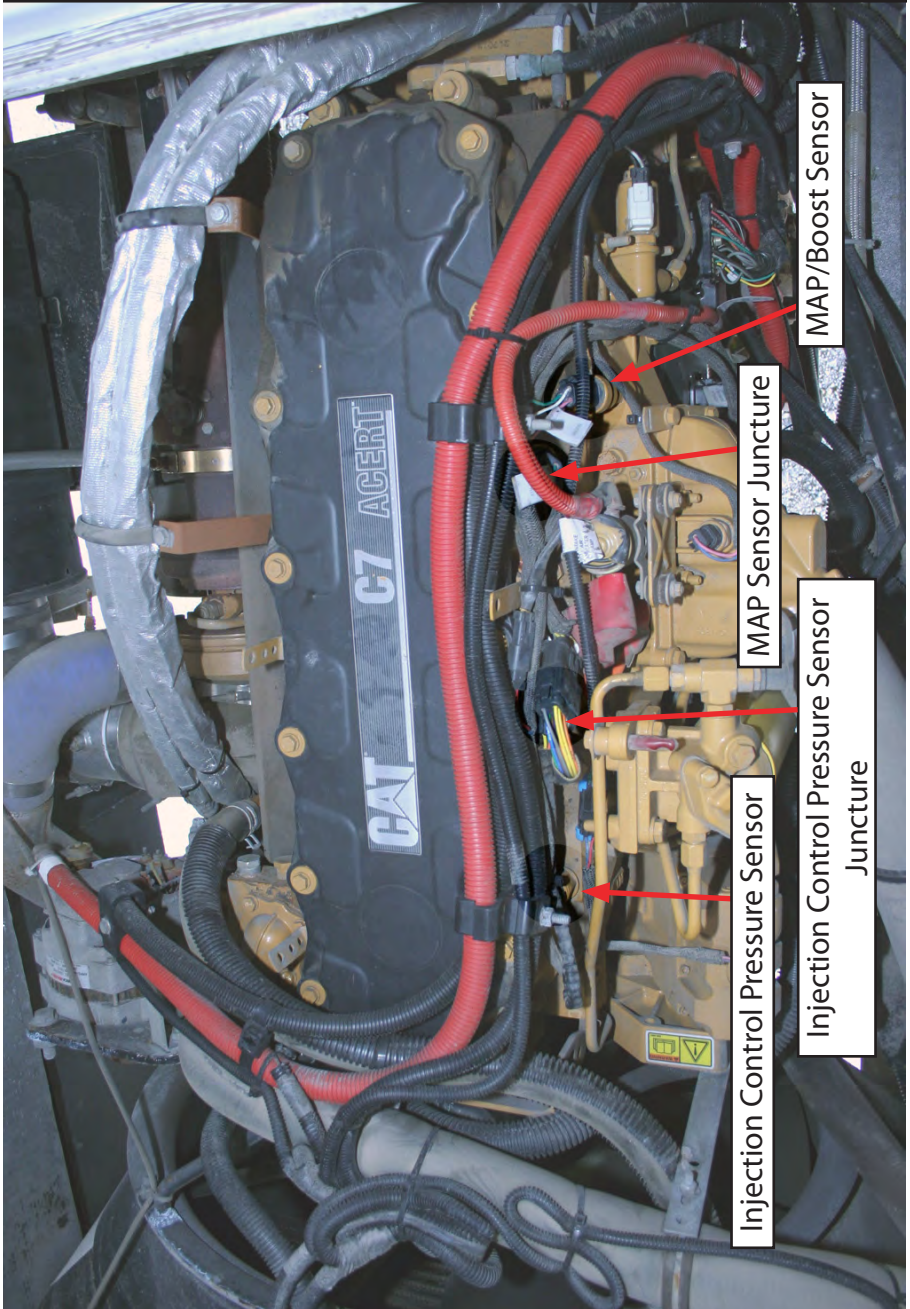
9. Mount and secure the Rapid Power module in a location that is away from extreme heat and moving parts. Use the zip ties included with the package to secure all of the wiring and the module itself.



**Warning: Do not remove module while engine is running. Shut down machine and then remove module.**



# Caterpillar Plug Location Diagram C7

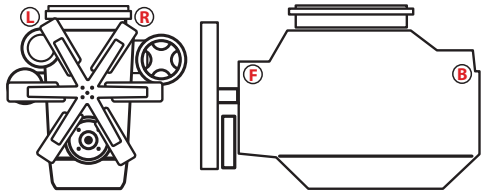




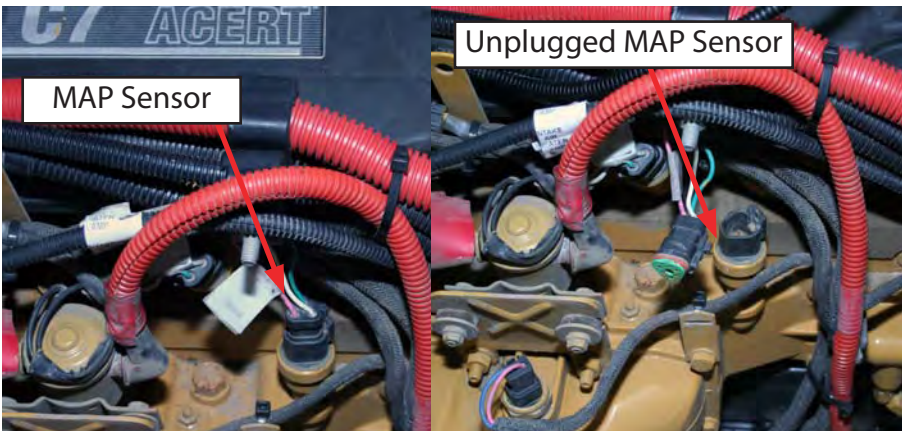
1. Open the engine compartment or remove the engine cover, make sure that the engine is fully accessible so that plugs can be reached and the module can be mounted to a safe place within the engine bay.



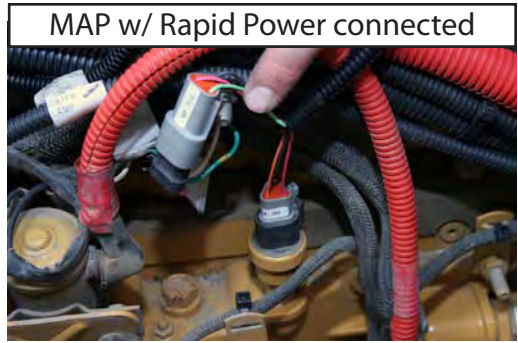
2. Locate the MAP Sensor plug near the back of the engine on the right side of the engine and near the rear of the engine. Reference this map sensor when following step 3.



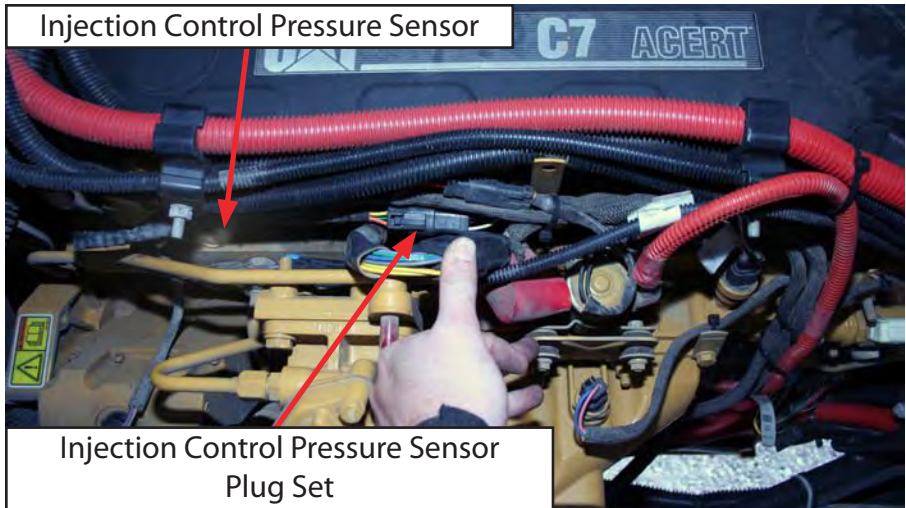
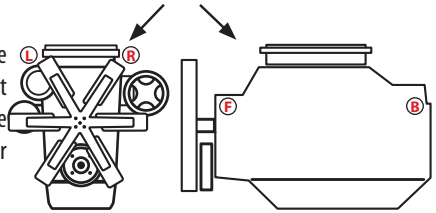
3. Locate Map/Boost sensor plugs: The MAP sensor will have a tag on it with the label "Boost," on it. This is the spot where the Bully Dog MAP sensor plug set ties into the engine. Unplug the MAP sensor once located.



4. Plug the male OEM MAP sensor plug into the female Module MAP sensor plug.
5. Plug the female OEM MAP sensor plug in the male Module MAP sensor plug.



6. Locate the ICP Sensor: once located then follow the connected wire harness to the triangle shaped plug set and disconnect that plug set in preparation to tie in the Bully Dog harness. The Injection Control Pressure sensor is located on the right side of the engine near the front.



7. Plug the male OEM ICP sensor plug into the female Module ICP sensor plug.
8. Plug the female OEM ICP sensor plug in the male Module ICP sensor plug.



9. Mount and secure the Rapid Power module in a location that is away from extreme heat and moving parts. Use the zip ties included with the package to secure all of the wiring and the module itself.



**Warning: Do not remove module while engine is running. Shut down machine and then remove module.**

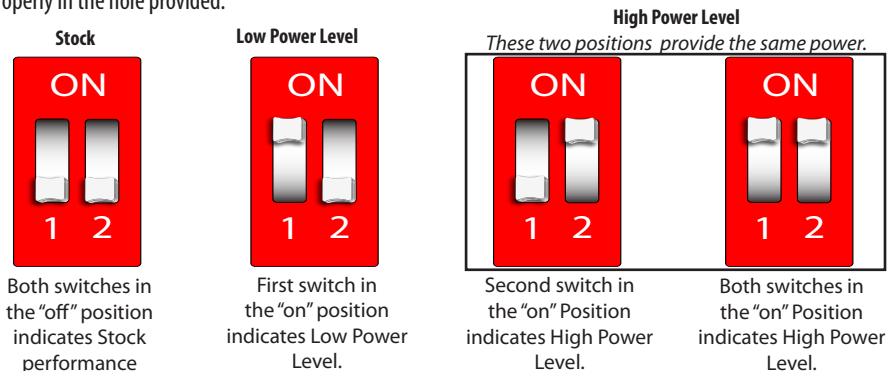


## OPERATING INSTRUCTIONS

### INTERNAL POWER LEVEL SWITCH:

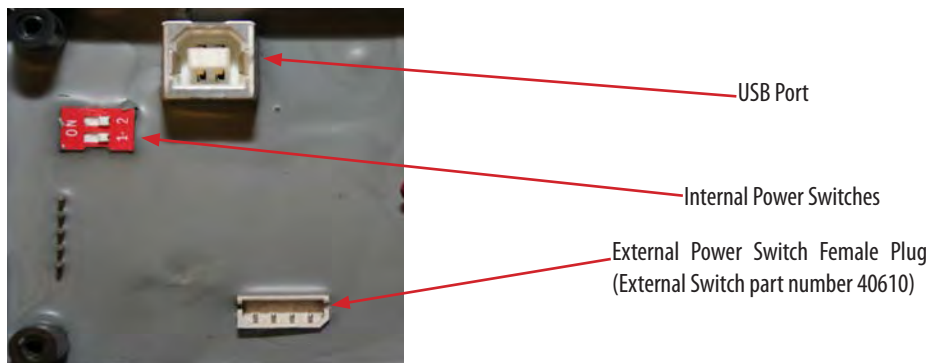
The Rapid Power module has three power settings, Stock, Low Power Level or High Power Level. To select different power levels remove the cover of the module box, locate the red internal power switch, and set the switch to the desired power level per illustrations below.

Be sure to securely fasten the module cover after changing the power level. Make sure the cable exits the box properly in the hole provided.



1. After completing the installation of the module, turn the tractor on to test if the module is working. If the tractor starts then the module is working. If the tractor does not start, check all of the connections on the install to be sure that they are secure and then attempt to start the tractor again.

2. Adjust performance setting to desired level and enjoy.



## INTERNET UPGRADES/UPDATE AGENT

**IMPORTANT:** The information on this page is applicable to all vehicles and tractors.

**INTERNET UPDATE** The Rapid Power Module is internet updatable. To update remove cover from the module and insert a USB cable into the USB port. **Ensure that you have downloaded the Update Agent.** The Update Agent will automatically recognize the module and prompt you to update the module if an update is available. Simply visit Bully Dog's web site [www.bullydog.com/Download\\_Center.php](http://www.bullydog.com/Download_Center.php) to access the Download center to obtain the latest version of the Rapid Power Module.

The most efficient way of keeping up to date with Bully Dog product versions is to use the Update Agent<sup>®</sup>. The Update Agent is a software program developed by Bully Dog Technologies specifically to update Bully Dog products. The Update Agent is easy to use, it can be loaded on any windows based PC running Windows 2003 or newer. The Update Agent is attainable free of charge at the Bully Dog download center or by ordering a CD ROM through a Bully Dog distributor.



## USB Driver Installation (Windows XP only!)

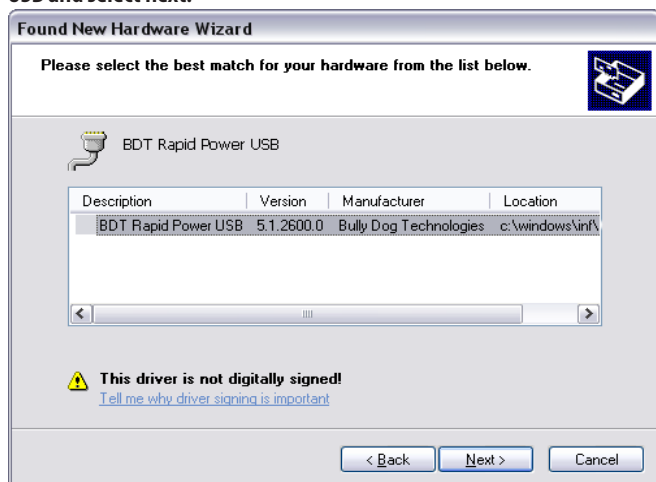
**IMPORTANT:** Install the Update Agent prior to plugging in your module.

Your computer will not recognize the Module until the Driver is installed.

- 1) Remove cover from Rapid Power Module
- 2) Plug Module into PC using a USB cable (Male A end for PC, Male B end for Module: Same type of cable as used for most printers)
- 3) Windows will recognize the Module and attempt to install software.
- 4) If Windows asks if it can connect to Windows Update to search for the software select NO, not at this time. Select Next to continue.
- 5) Select Install Automatically, then press next.



- 6) Windows will ask you to select the software you would like to install. Select BDT Rapid Power USB and select next.

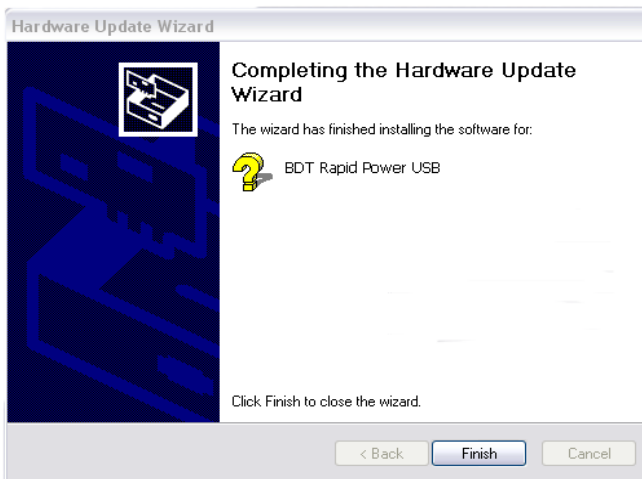




7) Windows will warn that this driver is not signed, but select continue anyway!



8) Allow the driver installation to complete and click FINISH



9) The Update Agent should now recognize the device and allow the update to take place. This could take approximately 30 Seconds or more