

INSTALLATION MANUAL



Vehicle Application	Part#
DYNO DOMINATOR '03-'04 Ford Power Stroke	41065
DYNO DOMINATOR w/OutLook '03-'04 Ford Power Stroke	41076
RAPID POWER '03-'04 Ford Power Stroke	41068
RAPID POWER w/OutLook '03-'04 Ford Power Stroke	41078



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TROUBLESHOOTING:

If you have questions during the installation of this product, please visit www.bullydog.com/Product_Updates.php. The latest version of these instructions can be found at the same location. Please review the Troubleshooting section on page 24 before calling technical support to cover most common issues. Technical support is available by calling 866-bullydog (866-285-5936).

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INTRODUCTION

Welcome to the world of increased power, performance and economy brought to you by the leader in performance, Bully Dog Technologies. This set of instructions outlines how to install and operate both the Ford Rapid Power and Ford Dyno Dominator line. These performance modules now mount inside the cab of the vehicle. This change helps protect the electronics within the module from heat and moisture. The new mounting location inside the cab is on the driver side of the vehicle up against the fire wall.

Note: This instruction set and the module included are made exclusively for the 6.0L Ford Power Stroke '03 through '04. This module will not work on any other vehicle other the stated make, model and year.

IMPORTANT: Performance modules must always be removed before taking the vehicle in for any kind of service as it may interfere with diagnostic tools.

BILL OF MATERIALS

1. Module 2. Module Harness 3. Flip Switch (If Applicable) 4. Velcro Pad & Zip Ties 5. Outlook Monitor with Main Harness (If Applicable) 6. Pyrometer Probe (If Applicable) 7. Pillar Pod Mount (If Applicable) 8. Windshield Mount (If Applicable) 9. Universal Gauge Harness (If Applicable)

TOOLS NEEDED

Flat Head Screw Driver
Phillips Screw Driver
Electric Drill
5/16" Drill Bit
1/8" Pipe Tap
9/16" Wrench
5/8" Wrench
5/16" Wrench or Socket



HARNESS DESCRIPTION



DOMINATOR Module (#1)

MODULE: The module, page 2 #1, will be either the Dyno Dominator module or the Rapid Power Module. Coming out of the module are two cables. On the short cable is a 12 pin connector that will plug into the Module harness. The second set of cables is made up of a seven pin, green connector. This connector will either plug into the Flip Switch or into the Universal Gauge Harness that will connect to the Outlook Monitor harness. You do not need to use the pink connector with the flip switch, but will it plug into the Universal Gauge Harness when installing with the OutLook Monitor.

MODULE HARNESS: The Module harness, page 2 #2, includes five connectors. The white 12 pin connector plugs directly to the cable connected to the module. The two red plugs will plug into the ECU. The two black plastic plugs with the gold pins will plug into the black stock plugs underneath the power steering fluid reservoir.





FLIP SWITCH: The Flip Switch, page 2 #3, is used if the **Outlook Monitor** is not being used. On one end is a three position switch. On the other end is a green connector that plugs into the Module.



OUTLOOK MAIN HARNESS: The Outlook monitor main harness, page 2 #5, has an Outlook monitor on one end and a green connector on the other. It also has a pink connector to connect to the Universal Gauge Harness. The Outlook Main harness also has two sets of thermocouple wires labeled Pyro 1 and Pyro 2, which can connect to two different pyrometers.

PYROMETER PROBE: The Pyrometer Probe, page #2 #6, Is a steel braided cable with a pyrometer probe tip on one end and red and yellow wire connections on the opposite end.



UNIVERSAL GAUGE HARNESS: The Outlook Universal Gauge Harness, page 2 #10, is made up of a green connector and pink shell connectors on both ends. The Outlook Universal Gauge Harness is clearly labeled on both ends as to which harness it is supposed to be plugged into.



MODULE WITH FLIP SWITCH OVERVIEW (Firewall Grommet) (to stock ECU Plugs) Module Harness Module



Introduction

PRELIMINARY INSTALLATION STEPS

IMPORTANT: These steps are performed with all part #s. In these steps you will disconnect power and then locate and disconnect the existing harness from the ECU.

- 1. Make sure that the ignition is off and the key is removed.
- 2. Remove the driver side battery by following the 4 easy steps below.
 - a. Remove the battery cables with an 5/16" wrench or socket.
 - b. Remove the battery cover by unsnapping it from the sides of the battery.

c. Using an 5/16" wrench or socket, take out the battery wedge and then completely remove the battery wedge.

- d. Completely remove the battery from the engine bay.
- 3. Locate the three large plugs connected to your ECU located just over the fender well. **In particular, identify the two plugs closest to the cab of the vehicle.**
- 4. Unplug the two harnesses closest to cab from the ECU by carefully pressing down on the release button and pushing the release lever towards the engine as you simultaneously pull the harness plug out of the ECU.

-WARNING- The release lever is fragile; use little force to avoid breakage.



5. Once disconnected from the ECU, run the stock black plastic male plugs underneath the power steering reservoir into the open area behind the reservoir. Doing so will allow for the plugs on the module harness to go in place of the stock plugs.

MODULE HARNESS INSTALLATION

IMPORTANT: These steps are performed with all part numbers. In these steps you will connect the Module Harness into both the ECU and the stock harness connectors. You will also run the 12 pin connector on the module harness through the fire wall into the cab.



- 1. Disconnect the module (pg. 2, #1) from the module harness, (pg. 2, #2) if it has not already been disconnected.
- 2. Connect the two black plastic plugs with the red pin holes into the ECU as shown below. The plugs are slightly different. The rear plug that is closest to the cab has tracks that are completely on the outside edge as shown.



- 3. Feed the module harness under the power steering reservoir and plug the two black plastic plugs on the module harness into the stock connectors that were plugged into the ECU.
- 4. On the drivers side of the engine bay, locate a hole in the area approximately where the brake would hit the floor ,where a large harness runs through the fire wall. Run the 12 pin connector through that hole and into the cab of the vehicle.



MODULE INSTALLATION

IMPORTANT: These steps are performed with all part numbers. In these steps you will mount the module inside of the cab.

- Take the module inside the cab and connect the white 12 pin connectors together from the module harness that you just ran through the fire wall and the connector coming off of the module itself.
- 2. Mount the module behind the brake onto the fire wall just to the left of the steering shaft using the Velcro that was included in the package. Use the included zip ties to secure any lose wires away from moving parts.
- 3. Reconnect battery and battery cover using 5/16" wrench or socket.

START CHECK: Now that the module harness is completely attached, you can complete a start check. If all connectors are secure, you should now be able to start the vehicle. If the vehicle does not start, recheck all connections to ensure that they are secure. If the vehicle does not start, please review the troubleshooting section on page 23 or visit http://www.bullydog.com/Product_Updates.php before calling technical support to cover the most common issues.



Troubleshooting

INSTALLING AND OPERATING THE FLIP SWITCH

IMPORTANT: Skip these steps if you are installing the Outlook Monitor with either part #s 41076 or 41078.

- 1. Connect the flip switch provided to the module via the green connector coming out from the top of the module.
- Now mount the switch in a location that gives you convenient access to the switch when driving. You may drill a hole in your lower dash for the quickest and cleanest mounting area.



OPERATING THE IN CAB SWITCH:

This module comes with a flip switch which allows for on the fly power adjustments. This means that the module can be adjusted between the power levels under any driving conditions. The diagram to the right illustrates where the different power levels are located on the switch. Towards the thread groove is the stock power position.





Froubleshooting

In these steps you will install the Outlook Main Harness using the Universal Gauge Harness to connect to the Module.

IMPORTANT: Skip these steps if you installed the Flip Switch with either part #s 41065 or 41068.





down and underneath the dash on the driver's side.

1. For a clean install, first peel-back the weather stripping next to the dash on the driver's side door.

2. Set the OutLook Monitor up on the driver's side dash and run the OutLook wires down behind the dash to conceal the wiring. Remove the side dash panel to assist in running the wiring. Reinstall the side dash panel and the weather stripping.

3. Run the end of the OutLook main harness

4. Connect the Outlook Main Harness to the Universal Gauge Harness. The green connector on the Outlook Main Harness will connect to the green connector on the Universal Gauge Harness, and the pink connector on the Outlook Main

Harness connects to the pink connector on the Universal Gauge Harness. Make the connection on the side of the Universal Gauge Harness marked "Vehicle Monitor".

WARNING: Follow Labels Carefully, the Universal Gauge Harness must be plugged in correctly to prevent product failure.

5. Connect the other end of the Universal Gauge Harness marked "Module End" to the Module. Again, green connectors plug into green and pink connectors into pink.



6. Go inside the cab of the vehicle to test the install before going any further. Turn the ignition to the run position: at this point the OutLook should light up and display a vehicle selection screen. If the screen does not light, up please refer to the Trouble Shooting section on page 23.

7. Using zip ties provided, secure all wiring to ensure that wiring is safe from extreme heat and moving parts. Be sure to save some zip ties for the Pyrometer Probe or Probes.

INSTALLING THE PYROMETER PROBE:

IMPORTANT: Skip these steps if you installed the Flip Switch with either part #s 41065 or #41068.

In this section of the manual you will drill and tap the Pyrometer Probe in the exhaust, either Pre-turbo or Post-turbo, and then connect the Pyrometer Probe wires to the OutLook Main harness. Exhaust Gas Temperatures indicate how hot the motor is getting and can be used to set safety de-fueling parameters (see operating instructions "Set Pyrometer de-fuel Level").



Post-turbo vs. Pre-turbo: You must decide between mounting the Pyro Probe either Post-turbo or Pre-turbo. The difference in location determines what temperatures will read on your OutLook. Pre-turbo mounting is generally recommended because it provides more accurate EGT readings and on the Ford Power Stroke it is a much easier install.

It is recommended that you mount both a Pre-turbo and a Post-turbo Pyrometer Probe if a vehicle is running more than 100 horsepower over Stock. On the OutLook display screen, Pyro 1 temps are constantly shown in the bottom left quadrant (If you mount Pyro 1 in a Post-turbo location, the numbers in that quadrant will represent Post-turbo).

Whether you mount Post-turbo or Pre-turbo you need to monitor your temperatures; know what is safe and when to back off. Use the Pyrometer Calibration Procedure on page 23 to figure out what your safety limits are.

INSTALLATION

IMPORTANT: At least one Pyrometer Probe is required for OutLook installation.

PRE-TURBO MOUNT:

- 1. Drill a 5/16" hole into the Exhaust Manifold where all the exhaust runners of the manifold come together just before the turbo exhaust inlet. Then tap the hole with a 1/8" pipe tap and mount the Pyrometer probe in the hole. Use a 9/16" wrench to tighten the probe holder or tube fitting to the down tube. Then tighten the Pyro Probe Cap to the holder using a 5/8" wrench.
- Run the Pyro Cable up to engine bay so the end meets the end of the OutLook Main harness and use zip ties to secure the line.
- 3. Connect the Pyrometer to the OutLook Main harness: if you want Pre-turbo temperatures displayed in the bottom left quadrant on the OutLook screen, connect the Pre-turbo Pyrometer connectors to Pyro 1 connectors on the OutLook Main Harness. Connect the shorter wire from the Pyrometer to the longer wire on the OutLook Main harness labeled Pyro 1 using a 5/16" wrench and a Phillips screw driver. Connect the longer wire from the Pyrometer to the shorter wire coming off the OutLook Main harness labeled Pyro 1. Pyro 1 wires should be connected as follows, Pink to Red and Brown to Yellow.





- 4. If a second Pyro is not used, then tape the remaining Pyro 2 wires up. This will ensure that there is no electrical interference
 - between the Pyro connections. To further protect the connections, wrap all of the Pyrometer connections in electrical tape. Pyro 2 wires should be connected as follows, Red to Purple and Yellow to Gray.

WARNING: If any debris such as drill bits, metal shavings, spews etc. drops inside the manifold, we advise disassembly of the turbo to remove the debris.

TOOL TIP, PRE-TURBO MOUNT

When drilling into the exhaust manifold, metal spews, shavings, and broken drill bits can fall inside. This can be hazardous to your turbo when the engine starts. Try doing four things to avoid this possible problem: One, use a high quality twist bit and a slow speed drill, about 500-800 rpm; Two, start with a small pilot bit about 1/8", then use the full 5/16" bit after the smaller one has punched through; Three, grease your drill bit in addition to the normal lubricant, this will catch flying spews as they are cut; Four, just prior to punching through into the inside of the manifold, start the engine and build up exhaust pressure on the inside of the manifold instead of letting them fall inside).

OUTLOOK INSTALLATION

IMPORTANT: At least one Pyrometer Probe is required for OutLook installation. The postturbo mount is much difficult to do that the pre-turbo mount and is not recommended for the novice mechanic.

POST-TURBO MOUNT:

1. Find a location on the exhaust pipe that is 3-6" downstream from the turbo charger output. This may require removing the down pipe in order to drill the hole. Then drill a 5/16" hole and run a 1/8" pipe tap into the hole. Mount the Pyrometer Probe in the threaded hole using a 9/16" wrench to tighten the probe holder or tube fitting to the down tube. Then tighten the Pyro Probe Cap to the holder using a 5/8" wrench.

2. Run the Pyro Cable along the brim of the engine bay so the end meets the end of the OutLook Main Harness and use zip ties to secure the pyro line. On the Ford Power Stroke it is easier if you run the pyro cable through the fire wall from the engine bay.

3. Connect the pyrometer end to the Outlook Main Harness. If you want Post-turbo temperatures displayed in the bottom left quadrant on the OutLook screen, connect the Post-turbo connectors to the Pyro 1 connectors on the OutLook Main Harness. Connect the shorter wire from the Pyrometer to the longer wire on the OutLook Main Harness labeled Pyro 1 using a 5/16" wrench and a Phillips screw driver. Connect the longer wire from the Pyrometer to the shorter wire coming off the OutLook Main Harness labeled Pyro 1.

4. If a second Pyro is not used, then connect the remaining Pyro 2 wires to the long black ground wire that is sticking out from the Main Harness using the existing hardware. This will ensure that there is no electrical interference between the Pyro connections. To further protect the connections, wrap all of the Pyrometer connections in electrical tape.

TOOL TIP POST-TURBO MOUNT

When drilling into the exhaust pipe broken drill bits can fall inside. Since it is after the turbo and so no damage will be done to it, thankfully. Generally you still try to have as clean a drill hole as possible. To avoid this possible problem use a high quality twist bit and a slow speed drill, about 500-800 rpm and start with a small pilot bit about 1/8".







Pyro Calibration/Trans re-learn

OUTLOOK INSTALLATION

OUTLOOK MONITOR MOUNTING INSTRUCTIONS

Bully Dog offers three different options for mounting the OutLook monitor, each location option places the OutLook monitor in an easily accessed viewing area for the driver.

WINDSHIELD MOUNT:

- Locate the windshield mount included with the OutLook monitor. This windshield mount does not come with mounting glue that will stick metal to glass. This glue can be found at any hardware store.
- 2. Place glue onto the window mount piece with the OutLook Monitor Holder detached from the windshield mount piece.
- 3. Hold the windshield mount piece on the windshield just to the left of the steering wheel for one minute.
- 4. Let the glue set up as instructed by glue packaging and then slide the OutLook Monitor Holder onto the window mount with the OutLook monitor attached.





OutLook Pillar Pod Mount (#7)



PILLAR POD MOUNTING:

1. Locate the OutLook pod mount circle that is included with the OutLook monitor and attach the OutLook monitor to the pod mount circle by running the OutLook Main harness through the rectangular hole in the circle and snapping the back onto the OutLook.

Follow the instructions for installing the single pillar pod mount that are included in the pillar mount package.

3. Run the OutLook Main harness wires down through the hole in the pillar mount system and connect the OutLook to the other harnesses.

4. Finally, slide the pod mount circle with the OutLook attached into the pillar mount hole.

OutLook Pillar Pod

This custom pillar pod is a perfect fit for your OutLook and can be painted to match your truck's interior. Instructions for this mount come with the pod. This section of the manual describes how to use the joystick to navigate menus and control power levels. Also included are descriptions of each of the menus and sub menus, as well as showing how to do a performance test.

NAVIGATION/JOYSTICK OPERATION

The joystick moves in four directions: up, down, left, and right. The descriptions below provide an explanation of what each direction is used for while navigating the menus and selecting display options.

UP AND DOWN: There are two main uses of the joystick up and down direction: One, scroll up and down in the general display to control the vehicle power level. Scroll between Stock, 25%, 50%, 75% and 100%. If using the OutLook with a Triple Dog Downloader, your settings will be Stock, Towing, Performance and Extreme. Also, use the up and down directions to scroll between menu items while in the main menu or any of the sub menus.



RIGHT: Pressing right will take you from the general display into the main menu. See the list of menu items on the next page. Pressing right will also select menu items and navigate to sub-menus.

LEFT: Pressing left will take you from the main menu back into the general display. It is also used to reset any performance test.

USING THE OUTLOOK / SELECTING THE CORRECT VEHICLE

Choose Your Vehicle		
03-07 6.0L Ford w/ BD Mod		
03-07 6.0L Ford w/ other		
99.5-03 7.3L Ford w/ other		
01-05 GM w /BD Module only		
01-05 GM w / other or Stock		
03-05 Dodge w/ BD Module		
03-05 Dodge w / other		

The first time you use the OutLook Monitor it will automatically display the Vehicle Selection Screen. The screen example below shows what the vehicle selection screen looks like on the OutLook. It is extremely important that you select the correct vehicle application, because the OutLook will not work correctly if it is not.

The different screen options describe different vehicle scenarios. Re-

fer to the vehicle selection details on the following page for clarification on when each option should be used. The option details correspond with the screen options top to bottom.

OPERATING INSTRUCTIONS

VEHICLE SELECTION DETAILS:

The list below provides a description of vehicle type and product compatibility . Use this list to help correctly select vehicle and product type. The OutLook will not work properly if you have selected the wrong vehicle and product combination.

On-the-fly power adjustments and set de-fuel levels are activated on selections highlighted in red

• '03-'04 6.0L FORD W/BULLY DOG MODULE:

Used if you have a '03-'07 6.0L Ford Power Stroke along with a Bully Dog Rapid Power or Dyno Dominator plug-in module, a Power Pup Downloader, or Stock.

• **'99.5-'03 7.3L FORDW/ BULLY DOG DOWNLOADER, COMPETITOR'S PRODUCT OR STOCK:** USED IF YOU HAVE A '99.5-'03 7.3L FORD POWER STROKE WITH A POWER PUP DOWNLOADER, 6 POSI-TION CHIP OR A COMPETITOR'S PRODUCT OR STOCK.

•'01 Used

L

• '01-'05 GM W/BULLY DOG MODULE ONLY:

Used if you have a '01-'05 6.6L GM Duramax along with a Bully Dog Rapid Power or Dyno Dominator Plug-In Module.

• **'01-'05 GM W/ BULLY DOG DOWNLOADER, COMPETITOR'S PRODUCT OR STOCK:** Used if you have a '01-'05 6.6L GM Duramax along with a competitor's product, a Bully Dog downloader, or Stock.

• '06 DODGE W/POWER PUP DOWNLOADER OR STOCK:

Used if you have a '06 Dodge Cummins in combination with a Power Pup Downloader or Stock.

•'03-'05 DODGE W/BULLY DOG DOWNLOADER, TORQUE DOG, COMPETITOR'S PRODUCT OR STOCK :

Used if you have a '03-'05 dodge Cummins with a competitors product, a Bully Dog Downloader, a Bully Dog Torque Dog, or Stock.

GENERAL DISPLAY

Once you have selected a vehicle upon initial use, the OutLook will then bring up the general display screen. Below is an example of the general display screen. It has four quadrants which display vehicle diagnostics and performance tests. It also has a power bar which displays the percent of power being used by the vehicle from a performance upgrade.



Main Menu	
Adj Speedmtr to Tire Size	
Set Top Left Display	
Set Bottom Right Display] -
Set Pyro De-fuel level	
View Last Ten Readings	
View All-time Highs	
View Current Settings	
View Peak Values	
Clear Saved Peaks	
Vehicle Selection Screen	

MAIN MENU ITEMS

All of the items listed in this selection can be accessed on the OutLook Monitor by pressing right while in the general display.

Adj Speedmtr to Tire Size	
28.00 inches	
28.25 inches	
28.50 inches]
28.75 inches	
29.00 inches	
29.25 inches	
29.50 inches	V

ADJUST OUTLOOK SPEEDOMETER TO TIRE SIZE:

Oversized aftermarket tires will throw off the OEM speedometer reading making it difficult to tell how fast you are really going. This feature will allow you to program in your exact tire size (28" up to 44") and view an accurate speed reading on the OutLook screen in miles per hour.

IMPORTANT: This Tire size calibrations will not be accurate if adjustments have already been made with a Triple Dog Downloader or other speed-o recalibration methods.

OPERATING INSTRUCTIONS

NOTE: OutLook Display Options are found on page s 21-22

MAIN MENU ITEMS

SET TOP LEFT DISPLAY: Select this to enter a sub-menu with a list of OutLook Display Options that you select to view in the top left display quadrant of the OutLook Screen. All of the OutLook Display Options are listed in this instruction set with options specific to this make, model, and year of vehicle.

SET TOP RIGHT DISPLAY: Select this to enter a sub-menu with a list of OutLook Display Options that you can select to view in the top right display quadrant of the OutLook Screen. All of the OutLook Display Options are listed in this instruction set with option specific to this make, model, and year of vehicle.

SET BOTTOM RIGHT DISPLAY: Select this to enter a sub-menu with a list of OutLook Display Options that you can select to view in the bottom right display quadrant of the OutLook screen. All of the OutLook Display Options are listed in this instruction set with options specific to this make, model, and year of vehicle.

The chart below depicts the features available for display in the Top Left, Top Right, and Bottom Right Quadrants of the OutLook General Display Screen.

NOTE: The BOTTOM LEFT DISPLAY quadrant always displays Pyro #1, this quadrant item cannot be changed.

FEATURES	FORD
On The Fly Adjustability	Х
Pyrometer Probe Defuel	Х
Boost Pressure	X
Dual Pyrometer Probe (2)	X
Accurate Speed Display (MPH)	X
Engine RPMs	Х
Intake Temperature	X
Barometer	X
Battery Voltage	X
Injection control pressure	X
Injection pulse width	X
Horsepower and torque	X
0-60 times (MPH)	X
1/4 Mile time	Х
peak boost	X
peak pyro	Х
peak horsepower	X
peak torque	X
fastest 0-60	Х
fastest 1/4 mile	Х

MAIN MENU ITEMS

SET PYROMETER PROBE DE-FUEL LEVEL: With this menu option a list of temperatures ranging from 900°F up to 1700°F is presented. Based upon where you have installed the Pyrometer Probe (see installing the Pyro Instructions), you will use this option to select the highest temperature you ever want your exhaust gas to reach when de-fueling. We recommend that you use our

Pyrometer Probe Calibration Procedure to find out what your Pyrometer Probe de-fuel level will be. Once a de-fuel level is put in place, if the Exhaust Gas Temperatures (EGT's) reach a level greater than or equal to the set level, the OutLook will automatically lower the horsepower and, in turn, bring EGT's back down to a safe level. This feature has been designed to save the integrity of an engine by preventing unsafe engine temperatures.

The default de-fuel level temperature is 1200°F. If you do not have a Pyrometer Probe hooked up to the OutLook, it acts as though your EGT's are below 100°F and this safety feature will not work. Therefore your engine is susceptible to overheating with the addition of performance upgrades.

VIEW LAST 10 READINGS This feature lets you view the last Pyro readings taken per key cycle, the last 10 Pyro readings taken per key cycle, the last 10 boost readings per key cycle, and if the features are available to your vehicle it will show you your last 10 quarter mile runs and 0-60 runs. You can also erase the last ten readings. See Clear Peak Values menu on the following page to erase.

VIEW ALL TIME HIGHS Select this and then choose to see your five all time best 0-60 times and quarter mile times. You can also choose to erase your all time highs to make room for new ones. See Clear Peak Values menu on the following page to erase.

ast	View Last 10 Readings	
ac	Quarter Mile Times	
iys	0-60 Times	•
nd	Peak Boost / Start Cycle	
ina	Peak Pyro / Start Cycle	
our	Clear Top Ten Values	

NOTE: Pyrometer Probe Calibration Procedure is found on page 24

950° 1000°

1050°

1100° 1150°

1200°

Set Pyrometer Probe De-fuel level

View All-time Highs	
Quarter Mile Times	•
0-60 Times	
Clear Top Ten Values	
	7
	\sim

roubleshooting

VIEW CURRENT SETTING: This feature allows you to see how the OutLook has been set up to work with the vehicle. It will display what truck type was selected, what the tire size was set to and what the emergency de-fuel level is set to. This makes it simple to make sure you have these standards set up correctly.

VIEW PEAK VALUES: This feature will show you all of the single all time highs for your vehicle on a single screen.

CLEAR PEAK VALUES: This will enable you to erase the peak values that are saved in the OutLook and displayed when you select the View Peak Values main menu option. Clearing the peak values will free up the OutLook to record new values lower than the previously saved peaks.

VEHICLE SELECTION SCREEN: This is the same screen that appears when the OutLook gets installed for the first time. Use this feature if the wrong setting is set or if the OutLook is transferred to a different brand of vehicle.

CURRENT SETTINGS			
Truck Selected:			
03-04 6.0L Ford w / BD Mod			
Tire Size:			
32 Inches			
Emergency Power Cutoff:			
1250°F			

CURRENT PEAKS		
Boost:	0 PSI	
Pyrometer Probe:	000°F	
Horsepower	0.0 HP	
Torque:	0.0 ft-lbs	
0-60 Time:	0.00 Seconds	
1/4 Mile Time:	0.00 Seconds	

Choose Your Vehicle	
03-04 6.0L Ford w/ BD Mod	
03-04 6.0L Ford w/ other	
99.5-03 7.3L Ford w/ other	
01-05 GM w /BD Module only	
01-05 GM w / other or Stock	
03-05 Dodge w/ BD Module	
03-05 Dodge w / other	

Introduction

Troubleshooting

OUTLOOK DISPLAY OPTIONS

The following is a general list of measurements the OutLook monitor can display. For a specific list of measurements for each make, refer to the chart on page 17. Once you select to display one of the options below, it will be displayed either in the top left, top right, or bottom right quadrant of the OutLook monitor screen. Navigate to these items through the main menu by selecting either top right, bottom right or top left.

BOOST PRESSURE:

A measure of air pressure generated by the turbo that is being forced into the engine cylinder. Knowing the pressure will indicate how much stress is being put on the turbo and the engine itself. On a Stock pickup at high acceleration, a turbo will generate 18 to 40 lbs. of boost depending upon year & make of vehicle.

PYR0 1:

Reads the signal received from the Pyro 1 connection on the OutLook Main harness. This measurement is used to de-fuel the engine based on the Pyrometer Probe Calibration Procedure listed previously in the manual. This measurement is permanently displayed in the bottom left quadrant of the OutLook Screen.

PYRO 2:

Reads the signal received from the Pyro 2 connection on the OutLook Main harness. Use this feature to display EGT measurements from Pyro 2 on the screen.

SPEED:

Vehicle rate of travel in Miles Per Hour. This feature does not change the OEM speedometer.

ENGINE RPM:

Number of Crank Revolutions Per Minute.

INTAKE TEMPERATURE:

Air temperature after it has passed through the air filter & before it has entered the engine turbo.

BAROMETER:

Outside atmospheric pressure.

BATTERY VOLTAGE:

Current measurement of battery volts.

INJECTION CONTROL PRESSURE:

Amount of pressure used to deliver fuel to the engine through the injectors.

INJECTION PULSE WIDTH:

Amount of microseconds that the injectors are engaged to deliver fuel to the engine.

OPERATING INSTRUCTIONS

HORSE POWER AND TORQUE:

Measures engine output to the wheels. Due to all of the factors involved in actual driving, the number calculated by the OutLook may not match those derived from an actual dynamometer.

0-60 TIME IN MPH:

This is a performance test that displays and records how long it takes the vehicle to go from a stand still at zero miles per hour to 60 miles per hour. This is a standard test that automobile manufacturers often use to describe the low end performance of an automobile. To operate this function, simply follow the instructions displayed on the screen in one of the three quadrants chosen to display this performance test. When bad starts occur and the test must be restarted, simply press left on the OutLook Joystick and the performance test will restart itself as well as refresh the screen instructions.

1/4 MILE TIME:

This performance test will display and record how long it takes the vehicle to travel ¼ a mile from a complete stand still and how fast the vehicle was traveling at the exact point of completion. If for some reason the test must be restarted, simply press left on the OutLook Joystick and the performance test will restart itself as well as refresh the screen instructions.

PEAK BOOST PRESSURE:

Highest intake pressure in PSI ever recorded in that vehicle.

PEAK PYRO:

Highest exhaust gas temperature ever reached; with regard to the location of the Pyro, whether the Pyro is installed pre or Post-turbo.

PEAK HORSEPOWER:

Highest horsepower ever reached.

PEAK TORQUE: Highest torque ever reached.

FASTEST 0-60: Best ever 0-60 time.

FASTEST 1/4 MILE TIME:

Best ever quarter mile time.

PYROMETER CALIBRATION PROCEDURE

BEFORE THIS STEP CAN BE COMPLETED, COMPLETELY INSTALL THE OUTLOOK AND ALL OF ITS COMPONENTS.

Important: These steps are performed when using the Outlook Monitor.

- 1. Vehicle must be set to Stock HP/TQ levels-meaning no HP/TQ modifications of any kind (downloader or plug-in modules).
- 2. Engine must be put under full load for as long as possible on the hottest day possible. It is suggested to drive up a hill or pull a trailer.
- 3. During a heavy load pull, record the highest reading.
- 4. Take that reading and add 150° to the high number and that will be your new de-fuel number that you do not want to exceed.

TRANSMISSION RELEARN PROCESS

IMPORTANT: THESE STEPS ARE PERFORMED WITH ALL PART NUMBERS

Warning: You must complete this entire procedure or you may encounter problems with the transmission. By re-calibrating the transmission through the following procedure, the transmission will be able to respond to the additional horsepower.

- 1. Find a long straight road with very little or no traffic.
- 2. Come to a complete stop and put the module on its highest setting.
- 3. Moderate accelerate to 55 mph.
- 4. Allow the vehicle to shift into overdrive and while in overdrive maintain a speed of 55 mph for 15 seconds.
- 5. Then light apply the brake just enough to engage the brake lights, hold brake lights on while maintaining 55 mph for another 15 seconds.
- 6. Then come to a complete stop for 20 seconds.
- 7. Repeat steps 3 6 five additional times.
- 8. Drive normally and enjoy your Bully Dog Performance Module.

Operating Instructions

MODULE TROUBLESHOOTING

CONDITION	POSSIBLE SOURCES	ACTION
Truck not starting	Connection	Make sure the connectors are plugged in securely. Push the connectors all the way in before pushing the latch up if it is not installed that way the latch could break. If the connectors are not tight make sure the middle red part of the connector is pushed in securely, otherwise it could fall out of place and cause problems in hooking up the connector. If the connectors are not plugged in securely, the truck will not start. Make sure that none of the pins are bent inside the connector.
	Hardware Issue	Ensure module is mounted inside the cab. Moisture and heat could cause the module to fail completely or produce intermittent problems
Truck shifting poorly	Transmission needs to relearn	On Page 23 of this instruction set is a transmission relearn procedure. If the truck is not shifting correctly, the trans- mission has not yet adjusted to the increased horsepower being produced by the engine. Follow this procedure to help the transmission relearn.
More black smoke	Programing	To reduce black smoke, set the module at a lower horsepower level.
Feeling no power	Connection	Push the connectors all the way in before pushing the latch up. If not installed correctly the latch could break. If the connectors are not tight make sure that the middle part of the connector is pushed in securely. It could fall out of place and cause problems in hooking up the connector.
Check Engine Light.	Programing	The service engine light could come on at the higher horsepower setting. This is generally because the ECU is seeing an over boost. The over boost is not causing any damage. If you purchased the Outlook Monitor as part of your package, you can check and erase DTC codes.

OUTLOOK TROUBLESHOOTING

CONDITION	POSSIBLE SOURCES	ACTION
Outlook will not turn on	Installation/ Connection	Make sure that the fuse jack is securely fastened to the fuse socket.
		Check that the fuse is working properly where the OutLook fuse is plugged into.
		Make sure that the OBD II Harness is properly plugged into the OBD II port.
Will only display Boost & Pyro	Improper Truck Selection	Check and ensure the proper truck is selected. The 7.3 L Ford will only display this information.
		Make sure you have proper connections everywhere. Also, make sure that there is no bent pins in any of the connectors.
Will only display pyrometer	Improper Truck Selection	Check and ensure the proper truck is selected.
		Make sure you have proper connections everywhere. Also, make sure that there is no bent pins in any of the connectors.
Will not adjust horsepower	Improper Truck Selection	Check and ensure the proper truck is selected.
Back light quit working	Loose connection	Contact Technical Support if the OutLook is otherwise functioning normal.
OutLook will not display proper temperature EGTs	Pyrometer Probe Connections Incorrect	Check the orientation of the Pyrometer Probes, long wire to short and short to long, on the Pyro 1 and Pyro 2 wires for the OutLook Main Harness.
		Make sure that the Pyrometer Probe for the Pre-turbo probe is connected to the Pyro 1 wires on the OutLook Main Harness.
Horse power & Torque readings are low	Proper Use	The outlook records horsepower and torque from 1/4 mile times. The vehicle will have to go all the way through the 1/4 mile as fast as possible to get accurate flywheel horsepower numbers.

For more information on an up-to-date troubleshooting guide, please visit: www.bullydog.com/Product_Updates.php

WARRANTY & DISCLAIMER

REMEMBER, THIS IS A PERFORMANCE PRODUCT, USE AT YOUR OWN RISK.

This product is not intended to be used to break the law.

Do not use this product until you have carefully read the following agreement. This agreement sets forth the terms and conditions for the use of this product. The installation of this product indicates that the buyer has read and understands this agreement and accepts the terms and conditions. Never exceed recommended vehicle or tire top speed ratings.

DISCLAIMER OF LIABILITY

Bully Dog Technologies, LLC. Its distributors, jobbers, and dealers (hereafter Seller) shall be in no way responsible for the product's proper use and service. THE BUYER HERBY WAIVES ALL LIABILITY CLAIMS.

The Buyer acknowledges that he is not relying on the Sellers skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof, and the Buyers hereby waivers all remedies or liabilities expressed or implied, arising by law or otherwise, (including without any obligation of the Seller with respect fitness, merchantability and consequential damages) or whether or not occasioned by the Seller's negligence.

The Seller disclaims any warranty and expressly disclaims any liability for personal injury or damages. The Buyer acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the Buyer agrees to indemnify the Seller and to hold the Seller harmless from any claim related to the item of the equipment purchased. Under no circumstances will the Seller be liable for any damages or expenses by reason of use or sale of any such equipment.

The Seller assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt contact the manufacturer.

The Buyer is solely responsible for all warranty issues from the manufacturer.

LIMITATION OF WARRANTY

BULLY DOG TECHNOLOGIES, LLC. (Hereafter "Seller") gives Limited Warranty as to description, quality, merchantability, and fitness for any particular purpose, productiveness, or any other matter of Seller's product sold herewith. The Seller shall be in no way responsible for the products proper use and service and the Buyer hereby waives all rights other than those expressly written herein. This warranty shall not be extended, altered or varied except be a written instrument signed by Seller and Buyer.

The Warranty is Limited to one (1) year from the date of sale and limited solely to the parts contained within the products kit. All products that are in question of Warranty must be returned prepaid to the Seller and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by BULLY DOG TECHNOLOGIES, LLC.

Under no circumstances will the Seller be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product or any other contingent expenses.

Under no circumstances will the Seller be liable for any damage or expenses incurred by reason of the use or sale of any such equipment.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT: THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE TO THE PLACE OF PURCHASE WITHIN TEN (10) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

Bully Dog Technologies, LLC is a team built on integrity that is dedicated to leading the vehicle performance industry with an uncompromising code of ethics demonstrated in the soundness of its employees, excellent customer service and superior products.



See More at: bullydog.com Doc.# BD41002 v1.0.0

For a full listing of Diagnostic Trouble Codes go to: www.bullydog.com/DTC.php

