

# **INSTALLATION MANUAL**



Vehicle Application	OutLook Part#	OutLook Combo#
'03-'05 Dodge 5.9L Cummins	40266	42500
'06 Dodge 5.9L Cummins	40166	41500
'03-'07 Ford 6.0 L Power Stroke	40166	41500
'01-'05 GM 6.6L Duramax	40366	43500
'06 GM 6.6L Duramax	40166	41500





#### **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 25 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

You have just purchased the most technologically advanced vehicle monitor available for diesel pickups manufactured by Bully Dog Technologies. The OutLook monitor comes with more user friendly features than any other vehicle monitor in the market place. The OutLook monitor also comes with free technical support, just call: 1-866-285-5936.

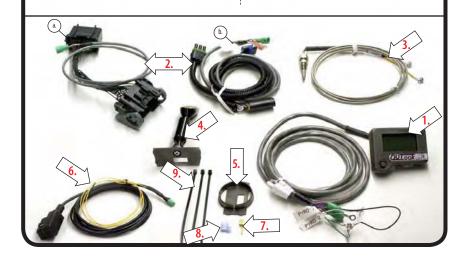
This instruction set outlines how to install and operate the OutLook monitor on '03-'07 6.0L Ford Power Stroke, '03-'06 5.9L Dodge Cummins and '01-'06 6.6L GM Duramax diesel pickups.

#### **BILL OF MATERIALS**

- 1. OutLook Monitor with Main Harness
  - 2. OutLook Sub-harness a '01-'05 GM, b '03-'05 Dodge
    - 3. Pyrometer Probe
    - 4. Windshield Mount
    - 5. Pillar Pod Mount
  - 6. OBD II Connector & Harness
    - 7. Fuse Jack
    - 8. 90° Connector
      - 9. Zip Ties

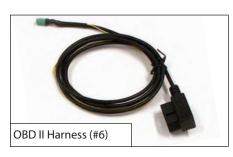
#### **TOOLS NEEDED**

- Flat Head Screw Driver
  - Phillips Screw Driver
  - Wire Strippers
    - Electric Drill
    - 5/16" Drill Bit
    - 1/8" Pipe Tap
    - 9/16" Wrench
    - 5/8" Wrench
    - Electrical Tape



Note: Included with this product are at least three individual wiring harnesses. Please see the name, pictures, and descriptions of each of the harnesses below. The instructions for your truck in this manual will refer to the different harnesses by name.

**OBD II HARNESS:** The OBD II Harness, page 2 #6, has green a plug with female pins and male shell, which connects to the OutLook Main harness that has male pins and female shell. In addition to the green plug on the OBD II Harness, the yellow wire which is the Power Wire for the Outlook monitor. On the opposite end of the OBD II Harness is the OBD II connector, a rectangular plug in appearance from which the OBD II Harness is named.



**OUTLOOK MAIN HARNESS:** The OutLook monitor main harness, page 2 #1, has an OutLook monitor on one end and two green connectors, one with female pins and male shell and one with male pins with a female shell, at the other end. Of the green connectors on the Outlook Main harness, the one with the male pins and female shell connects to the OBD II Harness as described above. The second green connector, the one with the female pins and male shell,



connects to a Sub-Harness if your truck uses one. Also on the same end as the two green connectors, the OutLook Main harness has two sets of thermocouple wires labeled Pyro 1 and Pyro 2, which can connect to two different pyrometers. Finally, on the OutLook Main harness is a single black wire. This black wire comes from the factory connected to the Pyro 2 connections and is used as a ground for unused pyrometer probe wires on the OutLook Main harness.

**PYROMETER PROBE:** The Pyrometer Probe, page 2 #3, is a steel braded cable with a pyrometer probe tip on one end and red and yellow wire connections on the opposite end.



**IMPORTANT:** The optional harnesses shown below are for use with 'the 01-'05 GM & '03-'05 Dodge OutLooks.

#### '01-'05 GM OUTLOOK SUB-HARNESS: The

'01-'05 GM OutLook Sub-Harness, page 2 #2a, is included only in the vehicle applications specifically produced for the '01-'05 GM Trucks. On the '01-'05 GM Sub-Harness are two rectangular connecters identical to the ones found on top of the drivers side of the engine. These two rectangular connectors are used to connect to the engine communications network to the OutLook and still complete the other signal paths to the Engine Control Unit. On the other end of the '01-



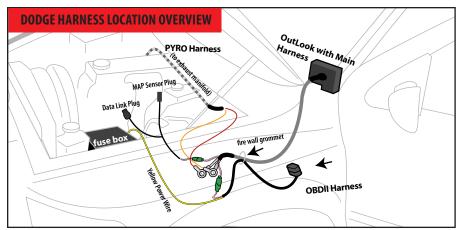
'05 GM Sub-Harness is a green plug which has male pins and female shell that is used to connect OutLook Main Harness with the female pins and male shell.

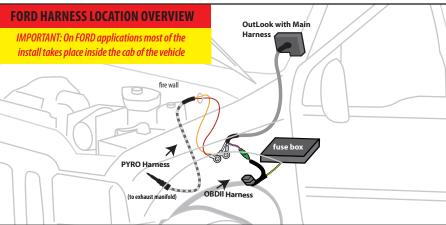
#### '03-'05 DODGE OUTLOOK SUB-HARNESS: The

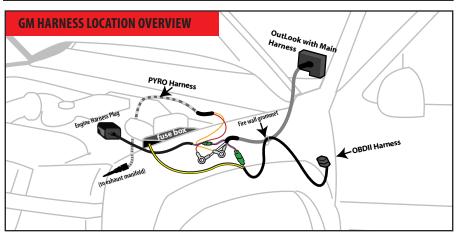
'03-'05 Dodge OutLook Sub-Harness, page 2 #2b, is included only in the vehicle applications specifically produced for the '03-'05 Dodge Trucks. On the '03-'05 Dodge OutLook Sub-Harness are three connectors used for communications of signals from the engine to the single green connector with male pins and female shell to the OutLook Main harness green connector that has the female pins and male shell. The first engine connection, a three wire connector, has a green seal with female pins and a male shell used for connecting to the Data Link Plug. The second set



of connectors, blue seal with four wire connections, are actually mates of each other and used to connect to the Manifold Absolute Pressure (MAP) sensor.







#### INSTALLING THE '01-'05 GM SUB-HARNESS

IMPORTANT: Skip these steps if your vehicle is not a '01-'05 GM

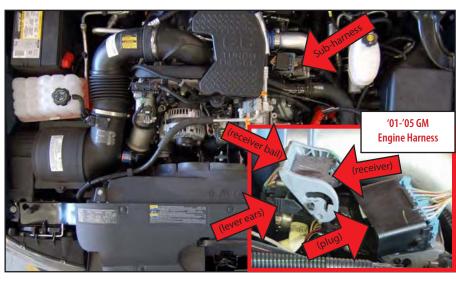
In this step you will connect the GM Engine Harness to '01-'05 GM Sub-Harness, page 2 #2a.

#### **GM ENGINE HARNESS PLUG:**

1. On the drivers' side top of the engine, disconnect the stock GM Engine Harness from its receiver. To disconnect, gently press the lever ears in and pull back on the grey bail. The plug should slide out smooth and easily with the bail shown in the disconnected position as shown below.



Connect the Sub-Harness plug and the GM Engine Harness receiver and close the bail on the GM Harness receiver. If this is done correctly, the Sub-Harness plug will be pulled into the GM Engine Harness receiver when the bail is closed.



Connect the Sub-Harness receiver and the GM Engine Harness plug and close the bail on the Sub-Harness receiver. If this is done correctly, the GM Engine Harness plug will be pulled into the Sub-Harness receiver when the bail is closed.

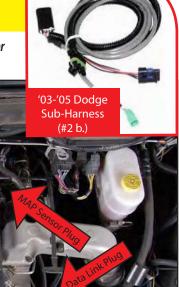
#### PLACEMENT OF '01-'05 GM SUB-HARNESS:

 Run the green connector on the end of the Sub-Harness over to the back corner of the engine bay on the drivers' side and let it sit while installing the other harnesses.

#### **INSTALLING THE '03-'05 DODGE SUB-HARNESS**

IMPORTANT: Skip these steps if your vehicle is not a '03-'05 Dodge Cummins

In this step you will connect the Data Link and the MAP Sensor plugs to '03-'05 Dodge Sub-Harness, page 2 #2b.





- 1. Locate the stock Data Link Plug which is half way down the side of the engine on the driver's side. Remove the stock Data Link retainer, which is covered with the retainer, from the stock Data Link Plug. Remove the retainer from the stock data link plug and store in a safe place. You may need to replace it when taking the vehicle in for service.
- 2. Plug the Bully Dog Data Link Plug (that is attached to the sub harness) into the truck's data plug receiver. Press the two plugs together until they snap into place.

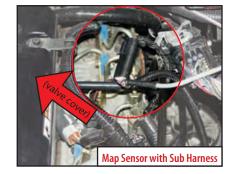




#### **MAP SENSOR PLUG:**

- 1. Unplug the stock MAP Sensor Plug, located about 7 ½" from the fire wall on the driver's side of the valve cover, and plug the Bully Dog MAP Sensor Plug coming off the '03-'05 Dodge Sub-Harness into the stock MAP Sensor Plug receiver until they snap together.
- 2. Plug the stock MAP Sensor Plug into the Bully Dog MAP Sensor Plug receiver on the '03-'05 Dodge Sub-Harness until they snap together.





#### **INSTALLING THE OBD II HARNESS**

IMPORTANT: This step is performed on all vehicles.

In this step you will connect the OBD II plug, page 2 #6, connect the power wire, and run the green connector through the fire wall.

#### **CONNECTING THE OBD II PLUG:**

Plug the OBD II Harness into the OBD II Port located on the bottom side of the dash on the driver's side of the vehicle.

# OBD II Harness (#6)

#### CONNECTING THE YELLOW POWER WIRE:

- 1. Prepare the yellow power wire by stripping the end of the wire about ¼". Connect the blue 90° connector to the end of the Power Wire using crimping pliers. The location may vary depending on vehicle make.
- 2. Locate the fuse box: Ford fuse boxes are located under the dash inside the cab of the vehicle; Dodge & GM fuse boxes are located usually on the drivers side of the inside of the engine bay. Please see your owners manual for more details on fuse box locations. Once inside the fuse box, locate the appropriate fuse depicted in the vehicle-specific pictures below.
- 3. Remove the fuse, indicated in the picture below, and insert the fuse jack. Make sure that the fuse jack is placed on the dead side of the fuse to ensure that the OutLook monitor is protected by the fuse as well. 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 OutLook monitor can receive power at the incorrect time of the power-on/starting cycle of the vehicle.





Yellow Power Wire w/90° connector

4. Connect the yellow power wire to the fuse jack, place the fuse back into the slot, and close the fuse box.







**WARNING**: For the OutLook to function properly, all fuses must be pushed in completely.

#### **GREEN PLUG THROUGH THE FIRE WALL:**

- 1. Run the end of the OBD II Harness with the green plug and the yellow power wire on GM & Dodge trucks, through the fire wall. The yellow power wire will plug into the fuse box inside the cab on the Ford Power Stroke.
- 2. Set the green male connector in the back corner of the engine bay on the driver's side of the vehicle and leave it while hooking up any other harnesses.

#### **INSTALLING THE OUTLOOK MAIN HARNESS**

**IMPORTANT**: This step is performed on all vehicles.

In this step you will run the OutLook Main harness, page 2 #1, plugs and wiring through the fire wall and connect the OutLook Main harness to the OBD II Harness, page 2 #6, and the Sub-Harness, page 2 #2a and #2b (if included for your installation).

**IMPORTANT:** Dodge Owners be sure to cover the positive battery terminal with electrical tape to prevent accidentally shorting out the OutLook during installation.

**IMPORTANT**: See the OutLook mounting options on page 12.



OutLook Main Harness (#1)







- 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 wiring harness through the fire wall into the engine bay. Use the same hole as used with the OBD II Harness. Pull all of the slack from the cab through the fire wall.
- 4. On the inside of the engine compartment, connect the green plug with the female pins and male shell on the end of the OBD II Harness to the green plug male pins and female shell on the OutLook Main harness.
- 5. If you are installing on a '03-'05 Dodge Cummins or a '01-'05 GM Duramax, connect the green Sub-Harness plug, male pins and female shell, to the green OutLook Main harness plug, female pins and male shell.



- 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 25.
- 7. Secure all wiring to ensure that wiring is safe from extreme heat and moving parts using zip ties provided. Be sure save some zip ties for the Pyrometer Probe or Probes.

#### **INSTALLING THE PYROMETER PROBE:**

**IMPORTANT**: This step is performed on all vehicles.

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 Preturbo. 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.

It is recommended that you mount both a Pre-turbo and a Post-turbo Pyrometer Probe if a vehicle is running more than 50 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).

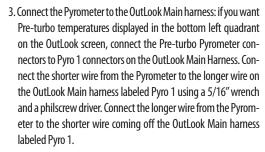
A single Pyrometer Probe is the easiest install, and it is recommended that you install the probe Preturbo on the Ford Power Stroke and GM Duramax, and Post-turbo on the Dodge Cummins.

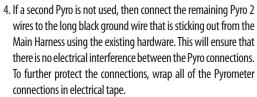
Whether you mount Post-turbo or Pre-turbo you need to monitor your temperatures; know what is safe and when to back off. Use the Pyrometer Calibration Procedure on page 24 to figure out what your safety limits are.

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

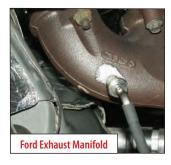
#### **PRE-TURBO MOUNT:**

- 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.
- 2. 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.





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







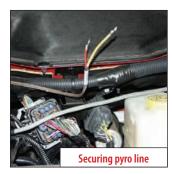
#### **TOOL TIP, PRE-TURBO MOUNT**

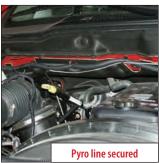
When drilling into the exhaust manifold, metal spews, shavings, and broken drill bits can fall inside. This can be hazardous to your turbo when the engine starts. Try doing four things to avoid this possible problem: One, use a high quality twist bit and a slow speed drill, about 500-800 rpm; Two, start 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 (blows spews outside the manifold instead of letting them fall inside).

#### **POST-TURBO MOUNT:**

- 1. Find a location on the exhaust pipe that is 3-6" downstream from the turbo charger output. 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 & GM Duramax it is easier if you run the pyro cable through the fire wall from the engine bay. On the Dodge Cummins, the cable is not long enough to reach inside the cab so the connection will be made underneath the hood.
- 3. Connect the Pyrometer end to the OutLook Main Harness on the Ford Power Stroke & GM Duramax. 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.

# Dodge 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".



**IMPORTANT**: This step is performed on all vehicles.

#### **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.







#### 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.
- 2. Follow the instructions for installing the single pillar pod mount that are included in the pillar mount package.
- Run the OutLook Main harness wires down through the hole in the pillar mount system and connect the OutLook to the other harnesses.
- 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.

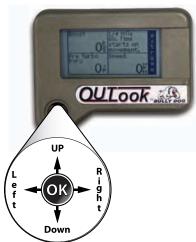
#### **OPERATING INSTRUCTIONS:**

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

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.

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	ı
01-05 GM w /BD Module only	ı
01-05 GM w / other or Stock	l
03-05 Dodge w/ BD Module	
03-05 Dodge w / other	

The different screen options describe different vehicle scenarios. Refer 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.

#### **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-'07 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.

#### • '03-'07 6.0L FORD W/TRIPLE DOG:

Used if you have a '03-'07 6.0L Ford Power Stroke along with Triple Dog Downloader.

#### • '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 competitor's product.

#### • '06 GM DURAMAX W/TRIPLE DOG:

Used if you have a '06 Duramax with a Triple Dog Downloader.

#### • '06 GM DURAMAX W/POWER PUP OR STOCK:

Used if you have a '06 Duramax with a Power Pup Downloader or stock.

#### • '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.

#### • '05 GM W/TRIPLE DOG:

Used if you have a '05 or newer 6.6L GM Duramax along with Triple Dog Downloader.

#### • '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.

#### • '06 DODGE W/TRIPLE DOG DOG:

Used if you have a '06 Dodge Cummins with a Triple Dog Downloader.

#### • '03-'05 DODGE W/BULLY DOG MODULE:

Used if you have a '03-'05 Dodge Cummins with a Bully Dog Rapid Power or Dyno Dominator module.

#### • '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.

#### '03-'05 DODGE W/TRIPLE DOG DOWNLOADER:

Used if you have a '03-'05 Dodge Cummins with a Bully Dog Triple Dog Downloader.

**IMPORTANT:** Skip these steps if your vehicle is not a '06 Dodge Cummins.

#### **SPECIFIC INSTRUCTIONS FOR '06 DODGE CUMMINS:**

When using the OutLook on the '06 Dodge Cummins the first time the OutLook is installed, immediately after the vehicle is selected, the OutLook will undergo a vehicle sequence test. The screens below illustrate exactly what is seen during the test.

#### **SEQUENCE INSTRUCTIONS:**

1. When this first screen appears simply press right on the joystick to continue the sequence test. If you have previously completed the sequence test, then recycle the key. If the screen repeatedly appears, call Bully Dog Technical Support.

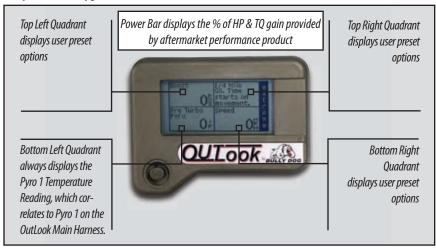


2. On the second sequence test screen simply press right on the Joystick to complete the test. After the test has been completed, then the OutLook will navigate to the General Display Screen.



#### **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	0
Set Top Left Display	п
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 Set Transmission Defuel Display & Erase DTC's

#### MAIN MENU ITEMS

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

# Adj Speedmtr to Tire Size 28.00 inches 28.25 inches 28.75 inches 29.00 inches 29.25 inches 29.25 inches

#### 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.

#### **MAIN MENU ITEMS**

**NOTE:** OutLook Display Options are found on page s 22-23

**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.

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

**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.

FEATURES	FORD	GM	DODGE
2 - 2			
On The Fly Adjustability	Х	Х	Х
Pyrometer Probe Defuel	Х	Х	Х
Transmission Temperature defuel	Х	'06 only	'06 only
Display and erase DTCs	Х	'06 only	'06 only
Boost Pressure	Х	Х	Х
Dual Pyrometer Probe (2)	Х	Х	Х
Accurate Speed Display (MPH)	Х	Х	Х
Engine RPMs	Х	Х	'06 only
Throttle Position	Х	'06 only	'06 only
Intake Temperature	Х		
Barometer	Х		
Battery Voltage	Х		
Transmission slip percent		'01-'05	
Coolant Temperature		Х	Х
Transmission Temperature	Х	'06 only	'06 only
Injection control pressure	Х	Х	Χ
Injection pulse width	Х		
Horsepower and torque	Х	Х	Х
0-60 times (MPH)	Х	Х	Х
1/4 Mile time	Х	Х	Х
peak boost	Х	Х	Х
peak pyro	Х	Х	Х
peak horsepower	Х	Х	Х
peak torque	Х	Х	Х
fastest 0-60	Х	Х	Х
fastest 1/4 mile	Х	Х	Х

#### **MAIN MENU ITEMS**

**NOTE:** Pyrometer Probe Calibration Procedure is found on page 24

**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

Set Pyrometer Probe De-fuel level	
900°	Γ
950°	Γ
1000°	1
1050°	1
1100°	ĺ
1150°	1
1200°	

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.

SET TRANSMISSION DE-FUEL LEVELS Use this feature to preset an automatic de-fuel level for your vehicle. We recommend setting a de-fuel temperature level of 230°F. The default de-fuel level is set to 180°F.

Set Transmission De-fuel level	
180°	
190°	
200°	1
210°	1
220°	1
230°	1
240°	

**DISPLAY AND ERASE DTC'S** If you see a check engine light come on or the vehicle seems to be running abnormally, you will want to use this feature to see if any Diagnostic Trouble Codes appear. Use this feature to display the codes and also to erase them from the vehicle's computer. If the vehicle has recurring trouble codes, research the origin of the code and consult a tech support expert on how to fix the code. For more information on DTC codes go toFor a full listing of Diagnostic Trouble Codes go to: www.bullydog.com/DTC.php

**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 below to erase.

View Last 10 Readings	
Quarter Mile Times	
0-60 Times	0
Peak Boost / Start Cycle	
Peak Pyro / Start Cycle	
Clear Top Ten Values	
·	

**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 below to erase.

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

#### MAIN MENU ITEMS

**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.

CURRENT SETTINGS
Truck Selected:
03-05 5.9L Dodge w / BD Mod
Tire Size:
32 Inches

Tire Size: 32 Inches Emergency Power Cutoff: 1250°F

CURREN	NT 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

**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.

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	

#### **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.

#### **PYRO 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.

#### THROTTLE POSITION:

Display real-time percentage between idle & full throttle.

#### **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.

#### **COOLANT TEMP:**

Temperature of the vehicle coolant.

**TRANSMISSION SLIP:** Shows the % difference between transmission input shaft speed and output shaft . Tells you in an easy-to-read % how much your transmission is slipping.

#### **OUTLOOK DISPLAY OPTIONS**

#### TRANSMISSION TEMP:

Temperature of vehicle's transmission fluid.

#### 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.

#### **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.

**IMPORTANT**: This step is performed on all vehicles.

#### **PYROMETER CALIBRATION PROCEDURE**

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

- 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.



#### **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 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 up-to-date troubleshooting guide for the OutLook, go to 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 DOGTECHNOLOGIES, 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.

# **UNLEASH THE POWER**

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## See More at: bullydog.com

Doc.# BD40003 v1.0.1

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



For Free Technical Support Call: 866-bullydog (866-285-5936)