



# BULLY DOG

#1 IN PERFORMANCE

## INSTALLATION MANUAL



## Power Pup

Gas Downloader

Vehicle Application	Power Pup Part#
'04-'08 Ford F-150	41590
'03-'08 Dodge Ram 5.7L Hemi	42590
'99-early '08 GM full sized pickup/SUV	43590





## **TROUBLESHOOTING:**

If you have questions during the installation of this product, please visit [www.bullydog.com/Product\\_Updates.php](http://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 before calling technical support to cover most common issues. Technical support is available by calling 866-bully-dog (866-285-5936).

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## INTRODUCTION

This instruction set covers installation and operations for multiple Power Pup part numbers, notice there is information in this instruction set that does not pertain to your particular vehicle application. Refer to the table of contents to quickly find the information pertaining to your vehicle. This instruction set outlines installation on the following makes of gasoline pickups and SUVs: '04-'08 Ford F-150, GM 4.8L, 5.3L, 5.7L, 6.0L and 8.1L full sized Pickups and SUVs '99- Early '08, and '03-'08 Dodge Ram 1500, 2500 and 3500 5.7L Hemi pickups. Horsepower results and certain features that this downloader offers will vary from vehicle to vehicle. These installation/operating instructions will specify which of the listed features work for one truck or the other.

This is a very simple product to operate; all operations take place inside the cab of the vehicle with the downloader hooked up to the OBD II port. Operating this downloader does not require any mechanical background. Refer to this instruction booklet if at any time the screen prompts do not make sense.

**IMPORTANT:** *It is not recommended that this product be used in conjunction with any other electronic module or downloader that is intended to increase horsepower.*

*A power program must always be removed before taking the vehicle in for any kind of service, as it may interfere with diagnostic tools used by your dealer.*

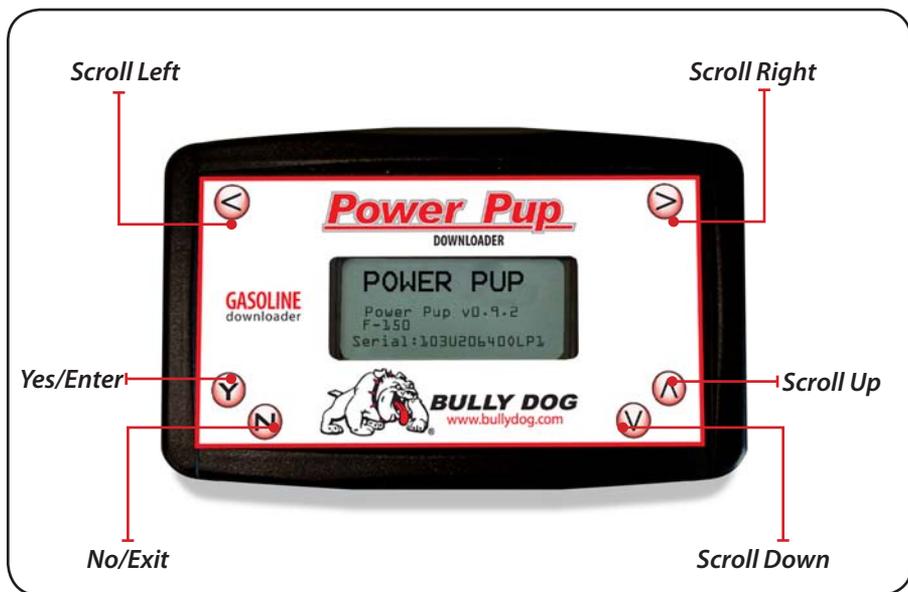
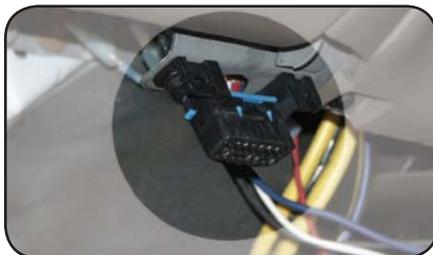
### BILL OF MATERIALS:

1. Downloader
2. OBDII Cable



## OPERATING INSTRUCTIONS:

1. Make sure that your key is in the ignition in the off position before you plug the downloader into the vehicle. The downloader will later prompt you to turn the key to the run position.
2. Connect the OBDII cable that comes with the downloader into the top of the downloader and then into the OBDII port. The OBDII port is the diagnostic port located underneath the steering wheel on the driver side of the vehicle.
- 3: The downloader will light up to display the opening screen. From there simply follow the instructions given to you on the screen. The rest of these instructions cover the main points of operating the downloader, but do not cover screen to screen guidance.



## MAIN MENU OPTIONS

The main menu options gives the user two options to choose from:



**INSTALL DOWNLOAD:** Select this option to begin the download process. Once the download process has begun it will take 15-20 minutes to complete, the process will include selecting desired power level and selecting different parameters in the vehicle specific features.

**READ DTC'S:** Select this option to view and erase diagnostic trouble codes. A cool feature of this downloader is that you can view and erase diagnostic trouble codes on any '04-'08 Ford F-150 And Gm 4.8L, 5.3L, 5.7L, 6.0L And 8.1L Full Sized Pickups and SUVs '99-early '08, and '03-'08 Dodge Ram 1500, 2500, and 3500 5.7L Hemi pickups even if the downloader is already locked to a vehicle.

Once selected from the main menu, the DTC function will display all diagnostic trouble codes on your vehicle. This function allows you to read and erase trouble codes off of the vehicles ECU. To erase DTCs, simply press "Y" and all DTCs will be erased. If no DTCs are displayed then just unplug the downloader and recycle the key.

## FORD F-150 INSTALLATION

To begin the downloading process select the "install download" option from the main menu and follow the screen prompts.

### ENGINE TUNING (FUEL OCTANE SETTINGS):

This feature determines how much power will be added to the vehicle based on the level of octane in the gasoline that the vehicle will be running. It is important that the correct octane level is selected to achieve optimal efficiency and performance.

Use the **Up and Down arrows** to highlight an option, press **"Y"** to select.

**Premium** – Select this option for maximum performance gains (must run at least 91 rated octane gasoline to use this setting.)

**Regular** – Select this option for medium performance gains, run any grade of fuel with this setting.

**Stock** – Select stock to utilize other Power Pup features without affecting horsepower.



### TRANSMISSION TUNING:

Two different options exist for transmission tuning, choose to accept a Bully Dog Custom transmission tune or to leave transmission tuning stock.

**Firm Tune** - This tune will affect shift firmness and Shift points, it is an optimized tune designed for performance.

**Stock Tune** - Choose this option to utilize the factory shift patterns.

## TRANSMISSION SHIFT POINTS:

This feature allows you to raise or lower the point that the vehicle shifts from first to second gear, second to third gear, and third to fourth gear based on engine rpms. Adjust shift points from 4400 up to 5800 before each gear change in increments of 100 RPMs.



## SPEED LIMITER/SPEED GOVERNOR:

The OEM speed limiter will limit the vehicle to a top speed that is determined by the OEM. This feature enables changing the OEM speedlimiter to a higher point or lower point. By selecting yes to remove the speed limiter you agree that your vehicle has tires, suspension, and any other necessary modifications rated for speeds in excess of 140 mph.

The speed limiter can be adjusted from 40 miles per hour up to 126 mph in increments of 2 mph.



## GM TRUCK & SUV INSTALLATION

To begin the downloading process select the "install download" option from the main menu and follow the screen prompts.

**IMPORTANT:** Voltage irregularities will cause interference which may disrupt a download. Make sure to check off the following before attempting to download with the Power Pup.

- Remove Cell phones from the vehicle
- Pull any aftermarket alarm system fuse
- Make sure vehicle batteries are completely charged
- Close the vehicle door and wait for the dome light to turn off
- Remove any battery powered electronic device from the vehicle.
- Remove the following fuses during the download process.

### **'98-'00 w/5.0/5.7/7.4L Vortec Engines**

Remove these Fuses from the Fuse Box Located Inside the Vehicle (*located near the driver's side dash*)  
#4, #17 & #19

### **'99-'02 GM C/K w/4.8/5.3/6.0/8.1L Engines**

Remove these Fuses from the Fuse Box Located Inside the Vehicle (*located near the driver's side dash*)

- #1 - SEO ING (Special Eq. Options/Ignition)
- #16 - SEO ACCY (Special Eq. Options/Accessories)
- #29 - RDO1 (Radio)
- #30 - RAP2 (Relay Power)

Remove these Fuses from the Fuse Box Located Under the Hood

- #60 - TBC (Body Computer)

### **'03-early '07 GM C/K w/4.8/5.3/6.0/8.1L Engines**

Remove these Fuses from the Fuse Box Located Inside the Vehicle (*located near the driver's side dash*)

- #16 - SEO ACCY (Special Eq. Options/Accessories)
- #17 - TBC 2B (Body Computer)
- #18 - TBC 2C (Body Computer)
- #20 - TBC ACCY (Body Computer)
- #23 - TBC 2A (Body Computer)

Remove these Fuses from the Fuse Box Located Under the Hood

- #16 - TBC BATT (Body Computer)
- #38 - TBC IGN1 (Body Computer)
- #50 - Radio
- #58 - INFO

## ENGINE TUNING (OCTANE SETTING):

This feature determines how much power will be added to the vehicle based on the level of octane in the gasoline that the vehicle will be running. It is important that the correct octane level is selected to achieve optimal efficiency and performance.

Use the Up and Down arrows to highlight an option, press "Y" to select.



**Premium** – Select this option for maximum performance gains (must run at least 91 rated octane gasoline to use this setting.)

**Regular** – Select this option for medium performance gains, run any grade of fuel with this setting.

**Stock** – Select stock to utilize other Power Pup features without affecting horsepower.

## TRANSMISSION TUNING

This Feature will turn up the pressure in the transmission so that shifts feel solid. It also helps reduce transmission slippage under heavy stress.

**Performance:** Pressure is greater than tow and stock. This setting is recommended to be used in combination with, but is certainly not limited to the High Performance Horsepower program.

**Tow:** Shifts are firmer than stock and less firm than High Performance.

**Stock:** Does not change or modify transmission settings



**IMPORTANT:** When using the high performance or tow mode in conjunction with the tow/haul feature, transmission shifting will be significantly firmer.

## GM TRUCK & SUV INSTALLATION

### TRANSMISSION SHIFT POINTS:

This feature will adjust the point in the RPM range in which the transmission upshifts or downshifts.

**Performance:** Shifts at a higher RPM than Stock and Tow. This setting is recommended to be used in combination with, but is certainly not limited to the High Performance Horsepower Program.

**Tow:** Shifts at a higher RPM than Stock and shifts at a lower RPM than High Performance.

**Stock:** Does not modify shift points



### SPEED LIMITER/SPEED GOVERNOR:

The OEM speed limiter will limit the vehicle to a top speed that is determined by the OEM. This feature enables changing the OEM speedlimiter to a higher point or lower point. By selecting yes to remove the speed limiter you agree that your vehicle has tires, suspension, and any other necessary modifications rated for speeds in excess of 140 mph.

The speed limiter can be adjusted from 50 miles per hour up to 135 mph in increments of 5 mph.



## DODGE RAM 5.7L HEMI INSTALLATION

To begin the downloading process select the "install download" option from the main menu and follow the screen prompts.

### ENGINE TUNING (FUEL OCTANE SETTINGS):

This feature determines how much power will be added to the vehicle based on the level of octane in the gasoline that the vehicle will be running. It is important that the correct octane level is selected to achieve optimal efficiency and performance.

*Use the Up and Down arrows to highlight an option, press "Y" to select.*

**Premium** – Select this option for maximum performance gains (must run at least 91 rated octane gasoline to use this setting.)

**Regular** – Select this option for medium performance gains, run any grade of fuel with this setting.

**Stock** – Select stock to utilize other Power Pup features without affecting horsepower.



## DODGE RAM 5.7L HEMI INSTALLATION

### TRANSMISSION SHIFT POINTS ('04-'08 AUTO ONLY):

This feature allows you to raise or lower the point that the vehicle shifts from first to second gear, and second to third gear based on engine rpms. Adjust shift points from 5600 up to 6300 before each gear change in increments of 20 RPMs.



### SPEED LIMITER/SPEED GOVERNOR:

The OEM speed limiter will limit the vehicle to a top speed that is determined by the OEM. This feature enables changing the OEM speedlimiter to a higher point or lower point. By selecting yes to remove the speed limiter you agree that your vehicle has tires, suspension, and any other necessary modifications rated for speeds in excess of 140 mph.

The speed limiter can be adjusted from 40 miles per hour up to 140 mph in increments of 5 mph.



## RETURN VEHICLE TO STOCK FACTORY SETTINGS

Simply plug the downloader into the OBDII port and wait for it to come to the main menu. In the main menu select **INSTALL DOWNLOADER** and then follow the screen prompts. When the downloader recognizes that there is a tune in the vehicle it will ask if you want to change settings or return to stock, at this point press "N" to return the vehicle to its stock factory settings.



# STOP!

## INTERNET UPGRADES

Make sure to keep a look out for the latest and greatest program features from Bully Dog. Go to [www.bullydog.com](http://www.bullydog.com) and look for the Power Pup Updates link on the home page of our web site. Internet upgrading will require a USB cable, an Internet connection, and Windows XP. Instructions on how to update the Power Pup can be downloaded off of the Power Pup update website.

### BEFORE YOU INSTALL:

1. Go to [bullydog.com](http://bullydog.com) & click the Download Center Link
2. Follow a few quick steps to update this product with the latest software features for your specific truck model and year.

## POWER PUP TROUBLESHOOTING

CONDITION	POSSIBLE SOURCES	ACTION
Downloader says <b>Unknown part #</b>	Installation	If the downloader says <b>Unknown Part Number</b> when you try to install go to the downloader center on <a href="http://www.bullydog.com">www.bullydog.com</a> and get the latest version. If problem continues call tech support.
Downloader doesn't light up when plugged into OBDII	Installation	If the downloader doesn't light up when plugged into the OBDII check the cigarette lighter fuse. More than likely this fuse has blown.
Checksum error during initial install	Installation	Try unplugging the downloader and trying again. If problem continues, go to Bully Dog website and get latest upgrades and try again.
Where is Serial # Located	Location	There is a sticker on the back of the downloader. It is also displayed on the screen when the unit is first plugged in.

For Product Warranty information visit [www.bullydog.com](http://www.bullydog.com)  
For more information on up-to-date troubleshooting guide for the Power Pup, go to  
[www.bullydog.com/Product\\_Updates.php](http://www.bullydog.com/Product_Updates.php)



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***Doc.# BD40010 v2.0.3***

For a full listing of Diagnostic Trouble Codes go to: [www.bullydog.com/DTC.php](http://www.bullydog.com/DTC.php)



***BULLY DOG***

**For Free Technical Support**

**Call: 866-bullydog (866-285-5936)**