GT

TUNED for the TRAIL

Owner's Manual

Part #40440

BULLY DOG®

940-783-9914 | www.bullydog.com

Doc. 40440-99 v1.1

CONTENTS

ABOUT THE GT FOR JEEP (GT-J)

Preview of Basic Installation Steps

1. Update the GT. **This step is very important!!!** See page 22 for more information.

2. Physically install the GT. See page 30 for more information.

3. Install the tune to your vehicle. See page 35 for more information.

**IMPORTANT NOTE: You MUST uninstall your Bully Dog engine tune before taking your vehicle in for ANY type of service.
There are also other important times to uninstall the tune. Please see page 43 for more information.**

See pages 4-6 for a complete list and description of the items included with your GT for Jeep.

Tuning Information

SETTING	PEAK HORSEPOWER	PEAK TORQUE	OCTANE
High Octane	up to 35	Up to 40	91+ octane
Regular	15-20	15-20	85+ octane
Stock	Stock	Stock	OEM Spec.

IMPORTANT NOTE: The only gas tunes available are based on the octane of the fuel that you are running. Failure to comply with fuel octane requirements can result in engine damage. If you change the octane of fuel that you are running, you will need to change the tune installed on your vehicle – see page 47 for more information.

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VEHICLE APPLICATIONS

This vehicle application list is current for software version 1.1.4.2
Check the product page at www.bullydog.com to check for new applications.

JEEP	
WRANGLER JK	**GRAND CHEROKEE**
3.8L '07-'11	4.7L V8 '08-'09
3.6L '12-'13	5.7L V8 Hemi '06-'13
COMMANDER	6.1L V8 Hemi '06-'10 SRT 8
4.7L V8 Hemi '08-'09	
5.7L V8 Hemi '06-'10	

Your GT package should include the following items:

1. The GT Head Unit
Part Number: 40440-1
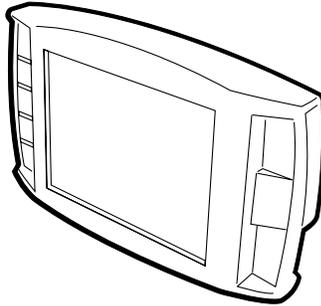
2. OBDII Adapter Plug
Part Number: 40400-105
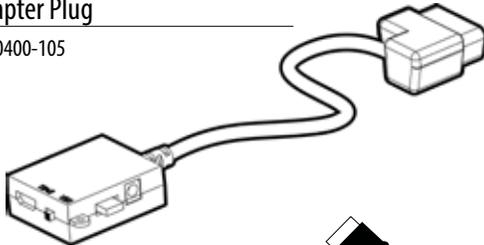
3. HDMI Cable
Part Number: 40400-100
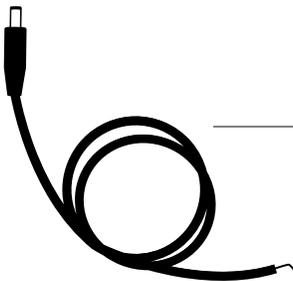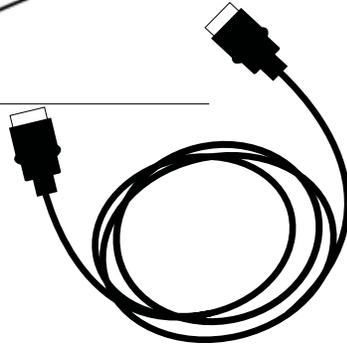
4. Power Wire
Part Number: 40400-101

4. Mini USB
Part Number: 40400-103
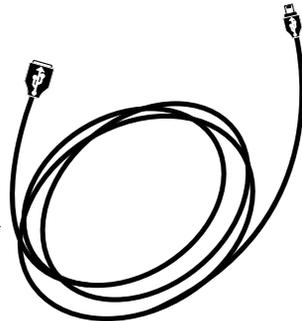
5. Fuse Tap

6. Fuse Spade

7. Micro SD Card
Part Number: 40410-10
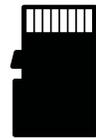
8. Micro SD Card Reader
Part Number: 40410-10

8. Windshield Mount
Part Number: 40400-102
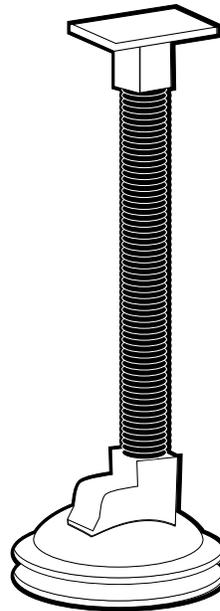
You may also want to have the items listed below available when you are installing the GT:

Tools Needed	Extra Parts (Optional)
• Fuse Puller • Voltage Meter (optional)	• Battery Charger • Alternative Mounting Solution (See page 33 for more information.)

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PARTS DESCRIPTION

The GT Head Unit

The main component of the Gauge Tuner is the head unit. It has the screen and the buttons that allow you to access all of the functions and features of the tuner.
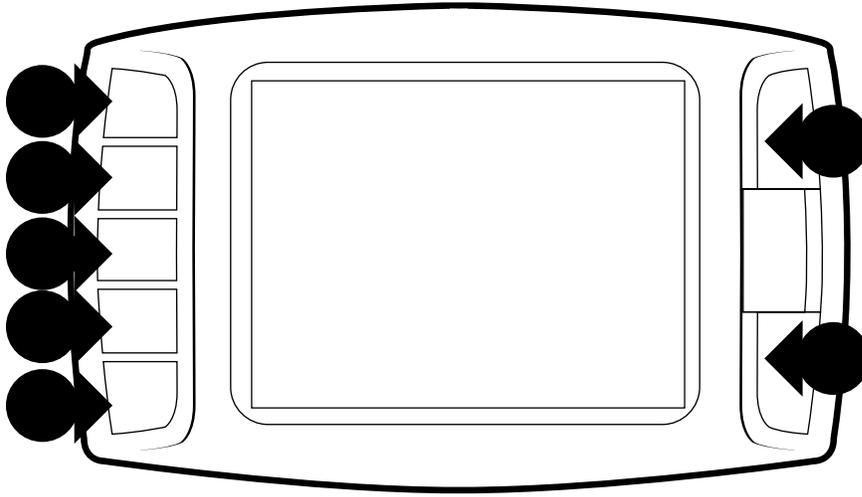
GT Front Side:

The GT has seven capacitive touch buttons. Capacitive touch is a button style that is sensitive to the presence of your finger. Capacitive buttons do not need to be pushed, only touched to activate. The front of the GT head unit features a 2.4" LCD screen.

GT Back Side:

1. T-Slot Mount Socket, which allows you to use the GT with different mounting options.
2. HDMI port
3. Micro SD card port
4. Mini-USB port

PARTS DESCRIPTION

GT for Jeep
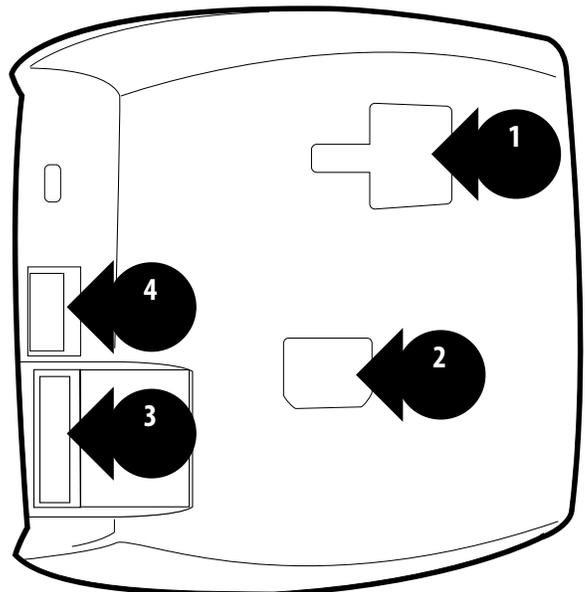
The OBDII Adapter Plug

The GT assembly connects to your vehicle through the diagnostic port, which is located under the dash on the driver's side. The OBDII Adapter Plug connects to the diagnostic port on your vehicle and has a connection for the HDMI cable that plugs into the back of the GT Head Unit. The illustration and numbered list below contain more information about the other parts of this important piece of the GT assembly.
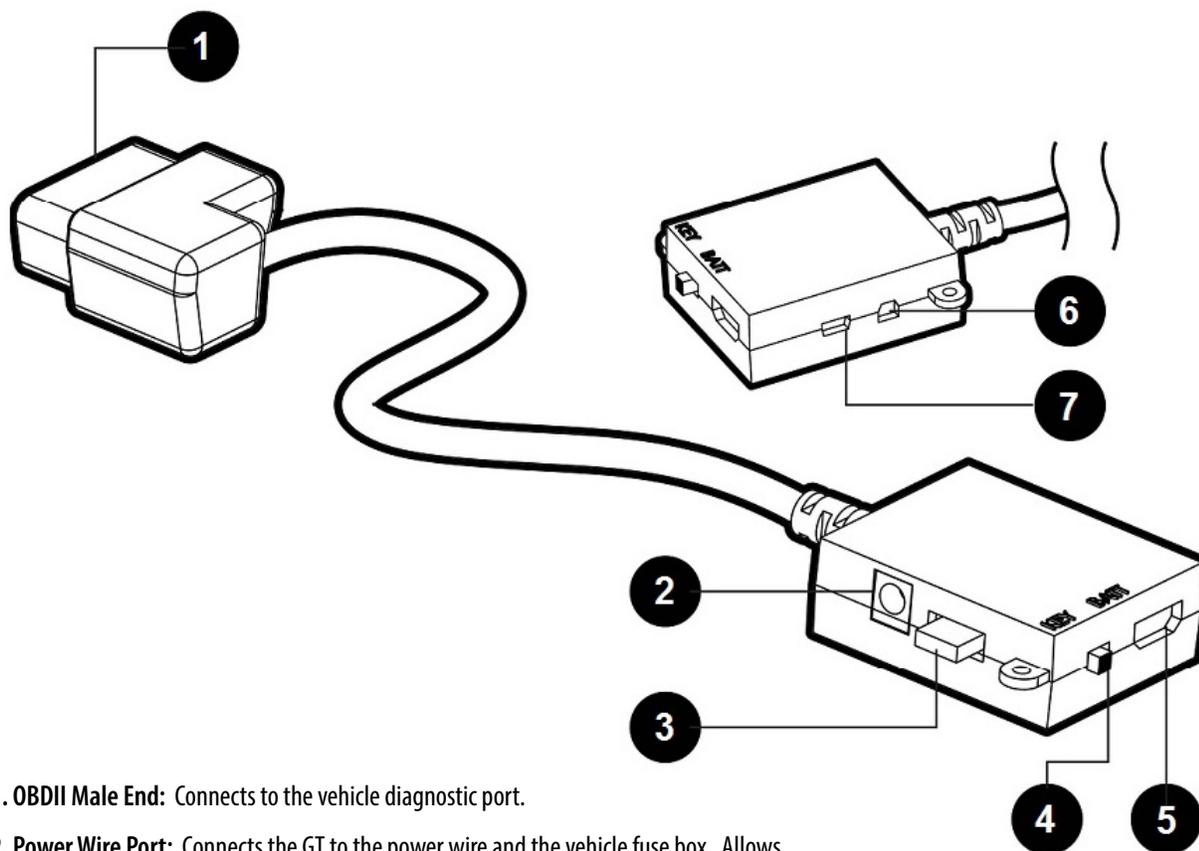
1. OBDII Male End: Connects to the vehicle diagnostic port.

2. Power Wire Port: Connects the GT to the power wire and the vehicle fuse box. Allows the GT to turn on and off with the key.

3. Fuse: The adapter plug fuse protects the GT from being damaged by unexpected power surges.

4. Power Switch: Changes the active power source of the GT.
The two options are: 1) KEY: this pulls energy from the fuse box through the power wire and allows the GT to automatically turn on and off based on the vehicle's ignition key position; and 2) BATT: This provides continuous battery power to the GT directly through the vehicle's diagnostic port.

5. HDMI Port: Connects the OBDII adapter plug to the GT Head Unit.

6. Pyrometer/Sensor Docking Station Port: Connects the GT to optional sensors including pyrometers or the Bully Dog Sensor Docking Station.

7. Future Peripherals: Not currently in use – may be used to connect additional devices in the future

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BUTTON NAVIGATION

FUNCTION 1: Press the top left button to enter the Main Menu, also use this button to exit menus.

gauge **GT** tuner

▶ Menu

Wasted Energy:

Decel   0   Accel

Speed
0 MPH

Driving Efficiency:

Low   High

RPM
0 RPM

Average MPG	Gallons	Grade
_	0.0	_

Load
0 %

ECON TIP: Econ Goal

Set a more achievable
fuel economy goal.

Coolant
0 °F

BULLY DOG
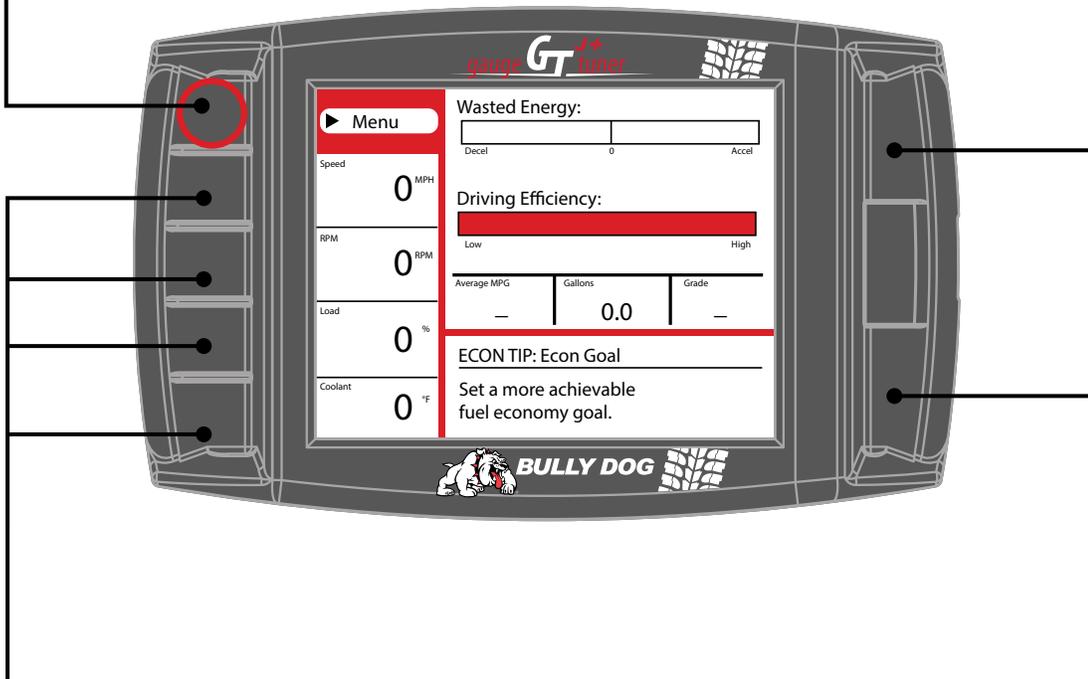
FUNCTION 2: Press any of the four buttons on the left side of the GT adjacent to one of the vehicle parameters on the screen will display that parameter in the large gauge area.

FUNCTION 5: Use these buttons to scroll up and down when GT is in a menu screen.

FUNCTION 3: Continuously hold any of the four buttons to change the Large Gauge style on the Main Screen; there are four different style options.

NOTE: The GT buttons are Capacitive Touch. This means that a light touch is all that is needed to choose different options. You do not need to push hard or get the buttons to move down or in for the GT to work for you.

THE MAIN SCREEN

This picture of the GT Main Screen has the Driving Coach selected for the Large Gauge option. You can change which gauge is featured in the upper right corner of the main screen by holding down one of the buttons on the left side of the GT until the gauge type that you want is shown.

Menu button: press to enter the Main Menu.

gauge GT tuner

▶ Menu

Speed
0 MPH

RPM
0 RPM

Load
0 %

Coolant
0 °F

Wasted Energy:

Decel   0   Accel

Driving Efficiency:

Low   High

Average MPG	Gallons	Grade
–	0.0	–

ECON TIP: Econ Goal

Set a more achievable
fuel economy goal.

BULLY DOG
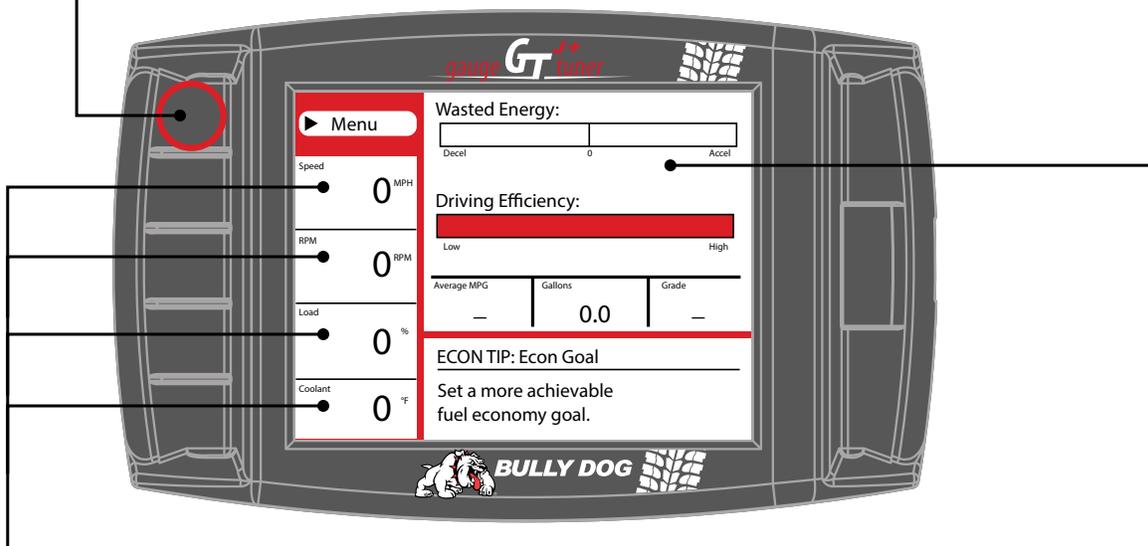
Vehicle parameters:
For information about changing which parameters are displayed on the Main Screen, see pages 9-10.

Large Gauge Area

0   Instant Economy   100

Dec.   0   Acc.

Report Card:
B

1.
The Driving Coach

2.
Analog gauge with average and max peaks

MPH   90
60   120
30
0
AVG PEAK: 0 MPH
MAX PEAK: 0 MPH

3.
Analog gauge with mini graph

MPH   90
60   120
30
0
PEAK: 0 MPH

4.
Large real time graph

140
120
100
80
60
40
20

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USING THE GT FOR JEEP

These options are presented in the order they appear on the Main Menu. If options are missing in your Main Menu, you should update your GT. See pages 22-29 for more information on updating your GT.

Change Vehicle

This option allows you to choose the type of vehicle that the GT will be used with. If the tune has already been installed, the Change Vehicle option cannot be used. Pages 45 and 43 have more information about checking to see if the tune is already installed and, if so, how to uninstall the tune.

Install Download

This option allows you to install the tune to the engine computer in your vehicle. If the tune is already installed, this option will allow you to return to stock (basically uninstall the tune) or change certain settings that can only be changed by writing a new tune to the ECM. Pages 35-42 and 43-45 have more information about installing the tune and returning to stock.

Gauge Setup

This option will allow you to change which gauges are being displayed on the main gauge screen. Definitions for each type of gauge option available are listed on the next page.

Changing the Information on the General Display

1. Choose Gauge Setup from the Main Menu.

2. Press the button on the left side of the GT to highlight the gauge slot you would like to change.

3. Use the buttons on the right side of the GT to scroll through the different functions and highlight the one you want shown on the General Display.

4. When you are done, use the top left button to go back to the Main Menu and General Display.
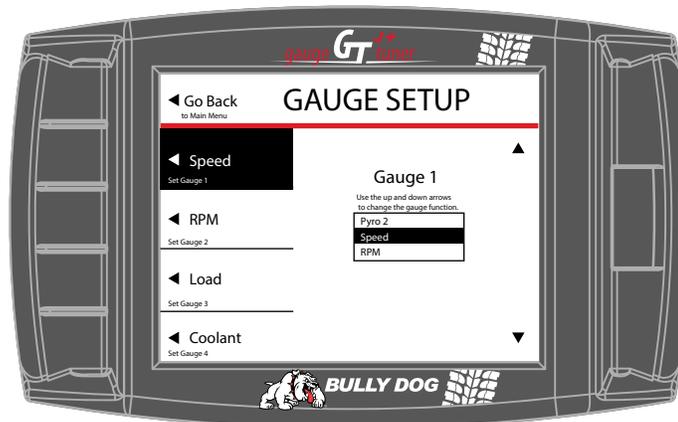
NOTE: All of the gauge types may not be available through your vehicle's diagnostic port (OBDII port). This fact is out of the control of Bully Dog; however, Bully Dog offers a range of add-on automotive sensors and sensor interface equipment. Contact Bully Dog or a Bully Dog dealer to learn more.

Gauge Setup (continued)

Pyro 1 & 2

Both pyro 1 and pyro 2 measure exhaust gas temperature. The only difference between them is the location of the temperature sensor. Used for defuel level settings, which protect the engine from heat damage.

Availability and location of factory installed pyrometers vary according to vehicle make and year. All '07.5 and newer diesel pickups that are equipped with OEM diesel particulate filters also include factory installed pyrometer sensors. For all other vehicles, pyrometer kits are available for purchase from www.bullydog.com. Bully Dog and factory OEM sensors are the only pyrometers which will work with the GT.

Speed

This option shows the current vehicle speed.

Monitoring this information can help you ensure that the speed displayed on the GT and the vehicle speedometer match the actual vehicle speed. Other important numbers, like the odometer and fuel efficiency, are based on this information.

RPM

This option shows the number of revolutions per minute of the engine.

This will help you protect your vehicle and improve performance by watching and ensuring that the RPMs stay within a certain range.

Coolant Temperature

This option shows the coolant temperature.
Used in defuel settings to prevent damage to the engine.
Not available on all vehicles.

Throttle Position

This option shows the throttle position measurement – it is displayed as the percent open.
Used by the Driving Coach to indicate where changes can be made to driving habits to maximize fuel efficiency.

Intake Temperature

This option shows the intake air temperature.
Air temperature affects combustion temperature and engine performance. Adding a Bully Dog Rapid Flow Intake (RFI) closed air system will lower this temperature, improve performance, and increase horse power. The Gauge Tuner (GT) is designed to work with the RFI to get the most out of your engine.

Transmission Temp

This option shows the transmission temperature.
Used in defuel settings to prevent damage to the transmission.
Not available on all vehicles.

Load

This option shows a real-time measurement of the work that the truck is doing.

Timing

This option shows a real-time reading of the timing position as the truck is running.

MAF

This option displays information from the Mass Airflow Sensor. Used by the Engine Control Module (ECM) to determine how much air is going into the engine. The ECM then sends the correct amount of fuel for optimum engine performance.

Fuel Econ.

This option displays a real-time measurement of the vehicle's fuel economy, shown in miles per gallon.
Determine when your fuel efficiency peaks or dies to improve your driving habits and your bottom line when visiting the pump.

Fuel Flow

This option displays the amount of fuel being used at any given time; it is shown as a percentage.
Not available on all vehicles.

Barometer

Current atmospheric pressure.

Injection Pulse Width (IPW)

The time the injector stays open for each injection event; usually displayed in milliseconds (ms).

Battery Voltage

This option shows the current vehicle speed.
Monitoring this information can help you ensure that the speed displayed on the GT and the vehicle speedometer match the actual vehicle speed. Other important numbers, like the odometer and fuel efficiency, are based on this information.

Additional features listed on the next page.

Gauge Setup (continued)

A/F Ratio 1 & 2

This gauge option shows the ratio of air to fuel. The GT will use this information to ensure that your engine is using the correct ratio to completely burn all of the fuel being used and maximize performance and efficiency.

Only available on Bully Dog Sensor Docking Station part number 40385.

AUX 1, 2 & 3

This gauge option shows the information from sensors connected to the *0-5V* auxiliary inputs on the Bully Dog Sensor Docking Station.

AUX Temp

This gauge option shows the information returned to the Sensor Docking Station by an optional temperature sensor. The port for this sensor is marked as *5V out*.

Frequency

This gauge option shows the information from a pulsing type of sensor, like an on-board speed sensor or another optional sensor that operates on the 0-5kHz 5V pulse range. The port on the Bully Dog Sensor Docking Station for this gauge option is marked as *FN*.

Performance Testing

This feature offers drag racers the ability to complete the 1/4 Mile and 0-100 KPH performance tests.

You can also download saved tests from your GT to your computer and analyze it using the Bully Dog Performance Testing Software. The software is available by free download from www.bullydog.com. See page 43 for more information about the Performance Testing Software.

There are two different styles available for both tests. The GT will show different test screens based on the style of test that is currently selected in the Performance Testing Setup Menu.

Speed Sensitive Performance Test

Once this test is begun, the GT will show instructions to the user to first bring the vehicle to a stop. Once the vehicle is at zero miles per hour, the test is ready. The test will automatically start once the vehicle begins to move.

Race Tree Performance Test

Before initiating the Race Tree style performance test it is important that the vehicle should already be at a complete stop. Once the test is begun, the GT will display a classic race tree on the screen. As soon as the lights on the tree turn green, the GT will begin to record the vehicle's time. In this style of test, the GT will not wait for the vehicle to start moving before it starts recording performance data.

1/4 Mile Performance Test

This option will test the vehicle's performance until the vehicle has traveled 1/4 mile.

- View Test Results

View the results for the last performance test that was run.

- Save Previous Test to SD Card

Save the results of the last run to the SD card in the GT. All runs that are saved to the SD Card can be transferred to your computer using our Performance Testing Analysis Software. For more information on our Performance Testing Analysis software, see page 41 or visit our website: www.bullydog.com

- Fastest Times

View the results for the quickest 1/4 mile ever recorded.

0-100 KPH Test.

This option will test the vehicle's performance until the vehicle has reached a speed of 100 kilometers per hour, which is about the same speed as 62 miles per hour.

Set User Options

Set Background Theme
Change the display colors on your GT.

Adjust Backlight
Change the brightness for both the day and the night operating modes of the GT.

To change between night and day mode, hold both the right buttons (the up and down buttons) while you are in the general gauge display.

Set Animation Preferences
Turn the Wave Effect on or off. This effect creates a ripple on the screen whenever you press a button.

English/Metric Units
Switch between miles/kilometers and gallons/liters.

Reset to Default
Change the user preferences back to the original Bully Dog default settings. This option does not change other GT features to default settings.

Driving Coach Setup

The Driving Coach is a special feature designed to be your fuel economy dashboard and information center. It provides real-time visual and audio feedback about driving efficiency and where energy is being lost. The driving coach will help you understand the optimal conditions for your particular vehicle through real-time observation, giving you the power to maximize your vehicle's fuel economy.

Two hidden bonuses of driving more efficiently are: saving money on fuel and helping the environment!

Before the Driving Coach can give you accurate information, it is important to make sure that the GT is showing the correct speed. In the sections below, you will find specific instructions for using the Driving Coach to become the best driver you can be.

Set Economy Goal
This option will allow you to select a fuel economy goal. The Driving Coach will use the economy goal to calculate your driving grade.

It is very important to select an economy goal that is realistic for both your vehicle and the kind of driving you will be doing. If you will be driving mainly in the city or on the highway, choose a goal that is very close to the advertised fuel efficiency for your vehicle in that type of environment. If you will be doing a mixture, choose an economy goal between the advertised city and highway mileage for your car.

Reset Average Economy
This option will clear the values stored in the GT for the average fuel economy, the number of gallons used, and the grade in the Driving Coach.

Adjust Acceleration
This option will allow you to select the GT sensitivity for the acceleration and deceleration for your vehicle.

Coach Sound Setup
This option will allow you to turn the Driving Coach sounds on or off.

Showing/Hiding the Driving Coach
The driving coach is always running, even if you choose not to have the information displayed. You can show or hide the driving coach on the Main Display by holding one of the four bottom left buttons until the display cycles through to the gauge style that you want.

Driving Coach Setup *(continued)*

Checking Speedometer Accuracy

First: Change the Gauge Setup to have the Speed displayed on the main display screen. See page 8 for more information about changing the information displayed on the main display screen.

Next: Go to a safe place with little to no traffic where you can perform a speed test. Make sure the speed limit is at least 60 mph. Here are two different ways to find out your vehicle's actual speed:

Method 1: GPS

1. Use a GPS device to compare your actual speed and the speed displayed on the Bully Dog.

2. Calculate the Percent Difference by using this formula:

$$\text{Percent difference} = \frac{\text{GT speed - GPS Speed}}{\text{GPS Speed}}$$

Example 1: A GPS device reads 65 mph and the GT reads 62 mph for one single moment.

$$\text{Step 1. Percent difference} = \frac{62 - 65}{65}$$

$$\text{Step 2. Percent difference} = \frac{-3}{65}$$

Step 3. Percent difference = .046 or 4.6% then round up 5%

Method 2: Stopwatch

1. Use a Stop Watch to measure how long it takes to travel one mile while traveling at 60 mph according to the GT.

   Accelerate up to a speed of 60 mph (as shown on the GT)
   While traveling at that constant speed, record the amount of time in seconds that it takes to travel exactly one mile.
   *Use highway mile markers to ensure that your one mile measurement is correct.

2. Record the time.

3. Calculate the Percent Difference.

   If it takes 60 seconds to travel one mile at 60 mph, then the GT is accurately reading your vehicle speed.

   If it takes 2 seconds more or less than 60 seconds to travel one mile, then use the formula to the right to calculate the Percent Difference.

   Once you have calculated the Percent Difference, you can use that information to adjust the speed display as described below

To calculate the percent difference use this formula:

$$\text{Percent difference} = \frac{\text{Recorded Time - 60 seconds}}{60 \text{ seconds}}$$

Example 1: Using a stop watch the actual time it took to drive one mile while traveling at 60 mph according to the GT was 63 seconds.

$$\text{Step 1. Percent difference} = \frac{63 - 60}{60}$$

$$\text{Step 2. Percent difference} = \frac{3}{60}$$

Step 3. Percent difference = .05 or 5.0%

Adjusting the Speed Display

1. Use one of the methods described in the previous section to determine the exact percentage difference between the GT and your actual speed.

2. Choose the opposite percentage in the Adjust Speed Display menu.

   For example, if the difference between your actual speed and the speed displayed on the GT was 5%, you should choose -5% (negative five percent).

Driving Coach Setup *(continued)*

Checking Average Fuel Economy

It is important to check the accuracy of the average economy readout on the GT at least once every changing season. There are many reasons to check and adjust the average fuel economy, here is one example: The fuel delivered to gas stations during the winter contains an average of 1.3% less energy than the fuel delivered in warmer seasons. That means that the same amount of liquid is going into the tank, but it is 1.3% less effective, on average. There are many similar factors that affect your fuel efficiency that you cannot control and the GT cannot sense or adjust for. That is why it is important to adjust the fuel economy of the GT every once in a while.

To adjust the Average Fuel Economy displayed by the GT, follow these steps:

1. Go to the gas station and get a full tank of gas.

2. Reset both of the following gauges before driving away from the gas station:
   - The Average Economy on your GT.
   - The trip odometer on your vehicle.

4. Drive the vehicle for an entire tank (or two)
5. Calculate your vehicle's average fuel economy by hand using the following equation:

> • NOTE: If the speedometer on the vehicle is not accurate, then the odometer will also be incorrect. You will need to be able to calculate the exact number of miles driven before your next refill.

$$\text{Calculated Average Economy} = \frac{\text{miles driven}}{\text{gallons used to fill the tank back up}}$$

$$\text{Percent difference} = \frac{\text{GT Average Economy - Calculated Average Economy}}{\text{Calculated Average Economy}}$$

Example 1: Assume the GT Average Economy is 24 mpg and the Calculated Economy is 21.

Step 1. Percent difference = $\frac{24 - 21}{21}$

Step 2. Percent difference = $\frac{3}{21}$

Step 3. Percent difference = .142 or 14.2% round down to 14%

6. Use the equation below to calculate the Percent Difference between the average fuel economy that you have calculated and the average fuel economy that is displayed by your GT.

Adjust the Average Fuel Economy

Follow the steps listed below to change the average fuel economy that is displayed by the GT:

1. Go to the Main Menu
2. Choose Vehicle Setup
3. Choose Adjust Economy Display
4. Use the buttons on the right to move up and down the percentages
5. Choose a percent value that is the opposite sign of the Percent Difference that you calculated using the equation above.
   - For example, if you determine that the Percent Difference is 14%, you should choose -14%.

Vehicle Settings

Set Engine Size

This is automatically determined when you choose your vehicle make and year during installation of the tune. You would only need to access this option if you do not have a stock engine displacement size.

Set Vehicle Weight

This is automatically determined when you choose your vehicle make and year during installation of the tune. You would only need to access this option if you do not have a stock gross vehicle weight.

Select Pyro Source

Choose either factory installed or Bully Dog pyrometers.

Set Warning Levels

Set the temperature level at which the GT will provide a warning to help you protect your engine from heat damage.

It is also possible to turn each of these settings completely off. This is appropriate if the sensor for that setting is not available or if you do not wish to have that setting monitored by the GT.

Pyro 1 Temperature Level

Pyro 2 Temperature Level

Engine Coolant Temp Level

Boost Level
Turn this setting off or add a Bully Dog boost sensor if your vehicle does not have a factory turbo boost.

Transmission Temperature
Turn this setting off or add a Bully Dog boost sensor if your vehicle does not have a factory transmission temperature sensor.

Startup Coolant Temp Level
This option was included to ensure that the vehicle is warmed up properly before the GT tuning options that provide additional power are available to be used.

Adjust Economy Display

Change the miles per gallon shown by the GT.

This setting should be changed if the GT is showing incorrect fuel mileage. See page 14 for more information about how to do this.

Adjust Speed Display

Change the vehicle speed shown by the GT.

This setting should be changed if the GT is showing an incorrect vehicle speed. See page 13 for more information on how to do this.

Special Functions

Engine Fan

Turn the engine fan off for water crossings or run it in high speed mode at any temp.

NOTE: The coolant temperature light will not indicate if the vehicle begins to overheat when the fan is disabled.

```
◄ Go Back        ENGINE FAN
  to Options Menu

Select Engine Fan Level

DISABLED

ON

STOCK
```
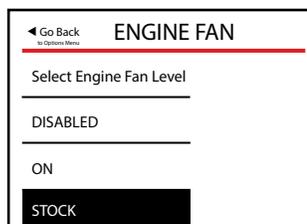
Idle Adjust

Set the engine speed (in RPMs) to increase the voltage and provide additional power to the winch.

(This feature does not take effect until the GT for Jeep is at the Main Screen.)

NOTE: This feature only works in park or neutral. It will automatically turn off as soon as the vehicle is put into gear. It will automatically turn back on the next time the vehicle is put into park or neutral.

```
◄ Go Back        IDLE ADJUST
  to Options Menu   Change Option Preferences
                        OPTIONS
The selected option value:   500      ▲
     Idle Adjust             600
displayed in the box below.  700
    Selected                 800
    800 RPM                  900
    ENABLED                 1000
                            1100
    DISABLED                1200      ▼
```
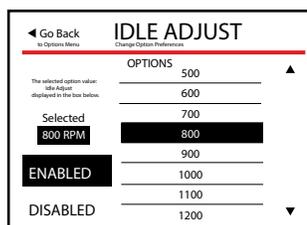
Tire Pressure Limit -- Tire Pressure Monitoring System (TPMS)

Eliminate the dash light so the tires can be aired down for increased traction.

GT for Jeep Setting: Chance the stock preset value to a number between 10 and 60 PSI. Once the setting is changed, the stock TPMS system will still allow for a + or - 6 PSI variation, so the tire pressure could be reduced to as low as 4 PSI.

(The sensors in the tires and the value on a manual pressure tester will not necessarily match.)

(This feature does not take effect until the GT for Jeep is at the Main Screen.)

```
◄ Go Back        TIRE PRESSURE
  to Options Menu   Change Option Preferences
                        OPTIONS
The selected option value:    10      ▲
   Tire Pressure Limit        12
displayed in the box below.   14
    Selected                  16
    16   PSI                  18
    ENABLED                   20
                              22
    DISABLED                  24      ▼
```
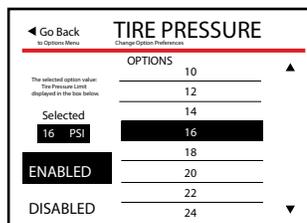
Electronic Sway Bar -- Sway Bar Disconnect

Rubicon Only

Disconnect the sway bars in 4WD-Low, 4WD-Hi and 2WD up to 30 mph. To use this feature, choose **Enable** and return to the Main Screen, then press the sway bar button on the vehicle dash.

- At 30 mph and above, the sway bar will automatically reconnect.
- If the vehicle returns to a speed lower than 30 mph, the sway bar will automatically disconnect (if the dash button is still activated).

```
◄ Go Back        SWAY BAR
  to Options Menu   Change Option Preferences

Select Sway Bar

DISENGAGED

STOCK
```

BULLY DOG
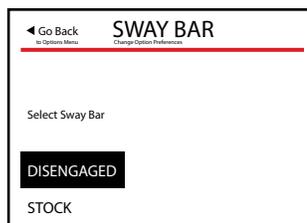
Accessory Delay

Control how long accessory items will remain on after the engine has been turned off and the doors remain closed. Accessory items include the radio, cigarette lighter, etc.

```
◀ Go Back          ACCESSORIES
  to Options Menu     Change Option Preferences

                     OPTIONS
                              0              ▲
The selected option value:
    Accessory Delay          30
displayed in the box below.
                             60
    Selected
  90    sec                  90
                            120
  ENABLED                   150
                            180
  DISABLED                  210            ▼
```

Headlight Delay

Set the amount of time that the headlights remain on after the engine has turned off.

```
◀ Go Back          HEADLIGHTS
  to Options Menu     Change Option Preferences

                     OPTIONS
                              0              ▲
The selected option value:
    Headlight Delay          5
displayed in the box below.
                             10
    Selected
  15    sec                  15
                             20
  ENABLED                    25
                             30
  DISABLED                   35            ▼
```
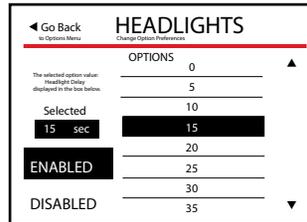
Horn Chirp on Lock

The vehicle horn will sound each time the doors are locked by a remote control unit while this feature is enabled.

```
◀ Go Back          HORN CHIRP
  to Options Menu     Change Option Preferences


The selected option value:
    Horn Chirp on Lock
displayed in the box below.

    Selected
  ENABLED

  ENABLED

  DISABLED
```

Optical Flash on Lock

The hazard lights will flash each time the doors are locked by a remote control unit when this feature is enabled.

```
◀ Go Back          OPTICAL FLASH
  to Options Menu     Change Option Preferences


The selected option value:
    Optical Flash on Lock
displayed in the box below.

    Selected
  ENABLED

  ENABLED

  DISABLED
```
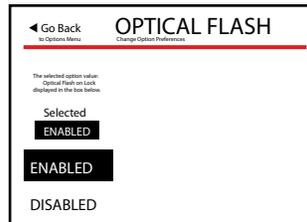
Auto Door Lock

The vehicle will automatically lock all the doors when it reaches a speed of 15 mph.

```
◀ Go Back          AUTO LOCK
  to Options Menu     Change Option Preferences


The selected option value:
    Auto Door Lock
displayed in the box below.

    Selected
  ENABLED

  ENABLED

  DISABLED
```

Unlock Driver Door

When this stock feature is disabled by the GT for Jeep, all of the vehicle doors will unlock with one button press on a remote door lock unit.

◄ Go Back
to Options Menu

DRIVER DOOR
Change Option Preferences

The selected option value:
Unlock Driver Door
displayed in the box below.

Selected
ENABLED

ENABLED

DISABLED

Seatbelt Reminder

Use the GT for Jeep to turn off the seat belt reminder chime.

◄ Go Back
to Options Menu

SEATBELT
Change Option Preferences

The selected option value:
Seatbelt Reminder
displayed in the box below:

Selected
ENABLED

ENABLED

DISABLED
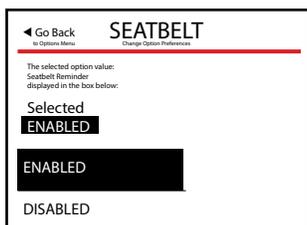
Axle Lockers

Rubicon Only

Increase traction by engaging the axle lockers in 2WD, 4WD-Hi and 4WD-Low up to 30 mph.

To use this feature, choose **Enable** and return to the Main Screen, then press the locker button on the dash once for front and twice for front and rear.

- The front locker will automatically unlock above 30 mph.
- The rear locker will automatically unlock above 30 mph.
- Both lockers will automatically reengage (lock) if the vehicle returns to acceptable speeds and the system is still activated.

◄ Go Back
to Options Menu

AXLE LOCKERS

Select Axle to Lock

BOTH

REAR
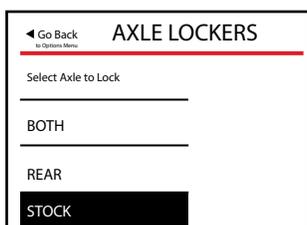
STOCK

Traction Control

Completely disable the vehicle's Traction Control by choosing **Disable**.

- After re-enabling traction control (reverting back to stock settings) the dash light may stay lit until the key is cycled.

◄ Go Back
to Options Menu

TRACTION
Change Option Preferences

The selected option value:
Traction Control
displayed in the box below.

Selected
ENABLED

ENABLED

DISABLED

BULLY DOG®
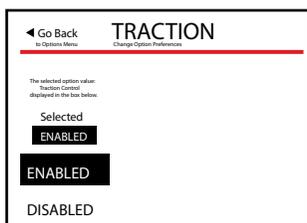
Speed Limiter

Change the top speed that the car will reach before the engine automatically limits the power needed to go faster

```
◄ ENTER          SPEED LIMITER
──────────────────────────────────────
Set Speed Limiter                    ▲
By Using The                        Up
Up and Down Arrows


            [ 112   MPH ]
              (45 to 200)           Down
                                      ▼
```
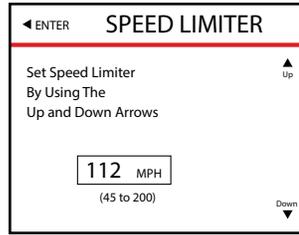
Tire Size

Correct the speedometer (and fuel efficiency calculations) if you have changed your tire size from stock.

```
◄ ENTER            TIRE SIZE
──────────────────────────────────────
Set Speed Limiter                    ▲
By Using The                        Up
Up and Down Arrows


            [ 30.0 INCHES ]
              (23.0 to 45.0)         Down
                                      ▼
```
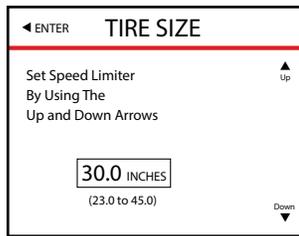
Axle Ratio

Correct the vehicle speedometer (and fuel efficiency calculations) if you have changed the gear ratio on your vehicle.
If no gear ratio modications have been made to the vehicle, then choose the stock setting when the tuner prompts you to choose a gear ratio. This will ensure that no modifications are made to the stock program.

```
◄ ENTER           AXLE RATIO
──────────────────────────────────────
Set Axle Ratio                       ▲
By Using The                        Up
Up and Down Arrows


            [ 2.00   :1 ]
              (2.00 to 8.00)         Down
                                      ▼
```
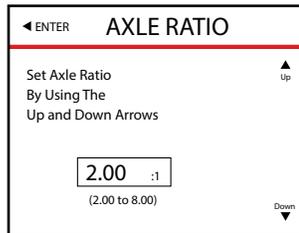
MDS (4-cylinder mode)

Enabling the Multiple Displacement System (MDS) initiates a fuel saving 4-cylinder engine mode and disables additional engine cylinders.

```
► ENTER            MDS
──────────────────────────────────────
 Select MDS Setting


 ──────────────────────
 Disabled
 ──────────────────────
 Enabled
```
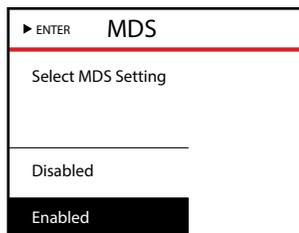
Transmission Shift Points
Change the RPMs at which an automatic transmission will change gears.

```
▶ ENTER    1-2 SHIFT

Set 1-2 Shift Points          ▲
By using the                  Up
Up and down arrows


         5600  RPM
         (5400 to 5750)      Down
                              ▼
```

```
▶ ENTER    2-3 SHIFT

Set 2-3 Shift Points          ▲
By using the                  Up
Up and down arrows


         5600  RPM
         (5400 to 5750)      Down
                              ▼
```

Rev Limiter
Regulate the highest RPM that an engine can reach before the engine is electronically limited.
Increasing the RPM limit is recommended only for racing purposes. One of the most important ways to protect your engine from damage is to keep the RPMs from going too high.

```
◀ ENTER    D REV LIMITER

Set Drive Rev Limiter         ▲
By Using The                  Up
Up and Down Arrows


         6600 RPM
         (5500 to 6700)      Down
                              ▼
```

```
◀ ENTER    N REV LIMITER

Set Neutral Rev Limiter       ▲
By Using The                  Up
Up and Down Arrows


         4000 RPM
         (2000 to 6700)      Down
                              ▼
```

Diagnostics

This option reads the Diagnostic Trouble Codes (DTCs) from your vehicle engine. You can also erase these codes from here.
To look up the DTC codes, the following website is very helpful: http://engine-codes.com/
You can also search for more information about DTC codes online using your favorite search engine.

IMPORTANT NOTE: Most DTCs indicate a problem with the engine, not with the tune or the tuner itself. If you want to know if a DTC is being caused by the GT or not, unin-stall the tune and drive your vehicle for about one week. If the DTC comes back, there is a problem with the vehicle and you should take it to a trusted mechanic. If the DTC doesn't come back, reinstall the tune and test drive for another week – if the DTC comes back while the tune is reinstalled, contact technical support. Be sure to have your tuner, vehicle, and a computer with internet access available when contacting technical support. See page 65 for more information about contacting technical support.

Show Settings

The Show Settings screen will show you information about your vehicle, the GT, and your current vehicle settings. This screen will also indicate if the GT tune is currently installed or not installed on a vehicle.

Uninstall GT

This option will allow you to uninstall the tune from your vehicle. This process is very similar to installing the tune, so be sure to take the same precautions listed on pages 35-36.

You can find more information about uninstalling the download on pages 43-45.

Update GT Software

This option will update the software on the GT itself from the files on the Micro SD card. This is an important final step to the update process. See pages 22-29 for more information about updating your GT.

IMPORTANT WARRANTY INFORMATION

Vehicle Warranty

You can access information about your vehicle warranty and your rights as an owner to use aftermarket products without voiding the warranty at the following SEMA (Specialty Equipment Market Association) website:
http://www.bipac.net/page.asp?content=warranty&g=semaga

GT Warranty

A new GT is covered for one year after the date of purchase. This warranty covers repairs for factory defects; it does not cover accidental damage or reset services. See page 47 for more information about GT resets and the required fee. For pricing information and assistance in having a damaged GT unit repaired, contact technical support. See page 55 for more information about contacting technical support.

You can find more specific warranty information at the following page on the Bully Dog website:
http://www.bullydog.com/warranty.php

UPDATING THE GT
OVERVIEW

FAQs about Updating

Why do I have to update my GT?

Because it's very important! These are just some of the reasons:

1. Vehicle manufacturers regularly change the part numbers and other information that the GT needs to know in order to communicate effectively with your engine computer. If the GT doesn't have updated information, it may not work correctly with your vehicle. Bully Dog releases updates when necessary to keep up with any changes that vehicle manufacturers make and give our customers the best support possible.

2. Our technical support team gathers information about any problems experienced by customers and works with the engineers to fix them as soon as possible. If these fixes can help other people avoid similar problems, our engineers include them in the updates that we release for everybody. One of the most important troubleshooting steps we take when someone encounters a problem is to make sure they have the most recently released software version. This often immediately fixes the problem!

3. Bully Dog engineers are constantly working to expand the features and vehicles that the GT is able to support. Once a new vehicle or option is unlocked, they make sure it is available to everyone by including it in the updated software version.

Do I have to update my brand new GT?

Yes! There is no way to know how long your particular GT may have been waiting on the shelf for you.

How often should I update?

Updates are released regularly, so you should check for them at least four times a year. A good rule of thumb is to check once every three months.

It is also a good idea to update the GT if you have uninstalled the tune for any reason, like taking your vehicle in for service.   This will help you avoid any problems during the reinstall if the engine computer has been flashed and has new part numbers (this is very common, even for a routine vehicle service).

What is included in updates?

Updated part numbers and other information from vehicle manufacturers, tested fixes for problems customers may encounter, and any additional features or vehicles that our engineers have unlocked.

How can I tell which software version I currently have?

1. Go to the Main Menu.

2. Choose the Show Settings option.

The software version is listed under System Info, next to Version. It is labeled SW.

How can I use the Update Agent to check for updates?

Start the Update Agent application and connect the Micro SD card to your computer using the card reader that came with your GT. If you have an older model of GT and did not receive a card reader, you can purchase one online at www.bullydog.com. There are also many local retailers who carry card readers that are capable of supporting the Micro SD card format.

The Update Agent should automatically recognize the Bully Dog device, check the current software, and let you know if an update is available.

See page 28 if your SD card is not automatically recognized by the Update Agent.

UPDATING THE GT

Basic Steps to Update (Short Version)

You can find a more detailed description of this process on page 24.

1. Run the Update Agent.

2. Connect the Micro SD card to your computer.

3. Choose the vehicle application and let the Agent search.

4. Click the Update button.

5. When the Update is finished, put the Micro SD card in the GT.

6. Update the GT from the SD card by choosing Update GT Software on the Main Menu.

What You Need to Update the GT

1. A computer with internet access.

• Currently, it is most convenient to update if you have a Microsoft Windows computer.

• If the only computer that you have access to is an Apple, you can find information for how to use this type of computer to update on page 29.

2. A way to connect the Micro SD card to the computer.

There are two different options:

• A Micro SD card reader to connect it directly to the computer.

• A USB cable to connect the GT to the computer (with the Micro SD card installed in the GT).

Note: Do not try to connect use the HDMI cable or the OBDII adapter plug to update the GT.
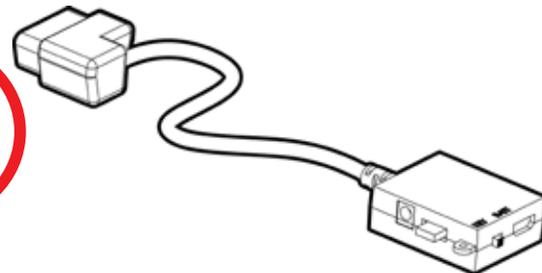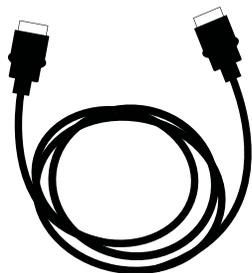
UPDATING THE GT
(DETAILED STEPS FOR WINDOWS)

The following instructions are intended for Microsoft Windows computers.
Please see page 29 for Apple computer instructions.

Uninstall the tune from your vehicle

1. If the tune is not yet installed, skip to step 2.

2. For information about uninstalling the tune, see pages 43-45.

3. For information about checking to see if the tune is installed, see page 45.

Connect your Micro SD card to a computer with internet access

1. Connect the Micro SD card using a card reader.

OR

2. Connect the GT with the Micro SD card installed by using a USB cable. Do not use the HDMI cable or the OBDII adapter plug to update the GT.

3. Download and install the Update Agent application.

• If it is already installed, skip to step 5. You can see if it is already installed by checking your Start Menu under All Programs. The Update Agent will be listed under the Bully Dog Technologies folder:

Windows XP
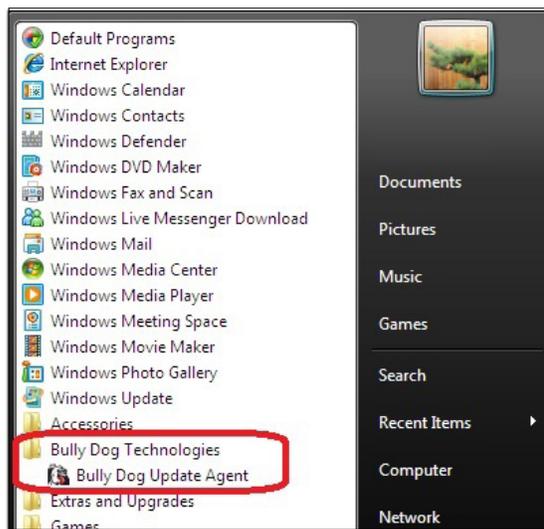
Windows Vista
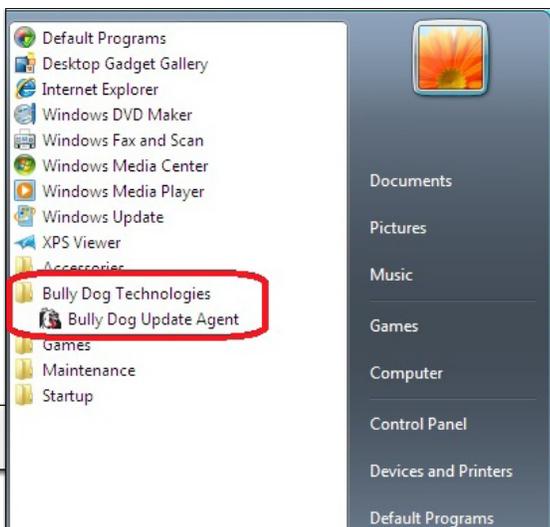
Windows 7

Note: If you don't have the Update Agent installed see the next page for details on how to download and install it from the internet.

24

UPDATING THE GT
(DETAILED STEPS FOR WINDOWS)

The following instructions are intended for Microsoft Windows computers.

4. You can download the installation file at *http://www.bullydog.com/update_agent.php*

HOW TO INSTALL THE UPDATE AGENT:

1. Click here to download the Update Agent.
2. Save file to a known location on your computer.
3. Run program and let agent install.
4. To find agent, click Start Menu > All Programs > Bully Dog Technologies
5. Plug unit in and go through new hardware wizard.

• Save the file first, then run it. (If you try to run the file without saving, your computer will generate an error message.).

File Download - Security Warning

Do you want to run or save this file?

    Name: setup.exe
    Type: Application, 388 KB
    From: www.bullydog.com

    [Run]   [Save]   [Cancel]

While files from the Interne
potentially harm your comp
run or save this software. Y

• If you get pop-up messages asking for permission to install, click the buttons to let your computer finish installing the Update Agent.

Internet Explorer - Security Warning

The publisher could not be verified. Are you sure you want to run this software?

    Name: setup.exe
    Publisher: **Unknown Publisher**

    [Run]   [Don't Run]

This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust. How can I decide what software to run?

Application Install - Security Warning

Publisher cannot be verified.
Are you sure you want to install this application?

    Name: **Bully Dog Update Agent**
    From: **www.bullydogupdateagent.info**
    Publisher: **Unknown Publisher**

    [Install]   [Don't Install]

While applications from the Internet can be useful, they can potentially harm your computer. If you do not trust the source, do not install this software. More Information...

UPDATING THE GT
(DETAILED STEPS FOR WINDOWS)

5. Run the application.

• If you have just installed it, the Agent may already be running.

   - You can show the Update Agent by right-clicking the icon in the system tray at the bottom right corner of your screen, and then clicking **Show Agent**.
   - Or you can stop the previous instance of the Update Agent and open a new one – either option is a winner.

• If you have already installed the application in the past, it should be listed under Bully Dog Technologies in your computer's list of All Programs. Just double-click the Update Agent icon in that folder to let it start.

6. Let the Update Agent search and download available update files.
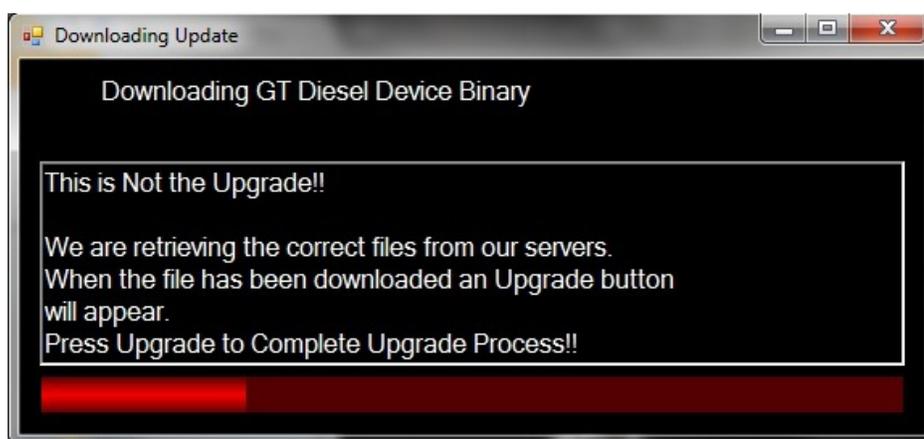
7. Click the Update Button and let it write the update to the SD card.

UPDATING THE GT
(DETAILED STEPS FOR WINDOWS)

8. NOTE: This step varies depending on how you have connected the Bully Dog to your computer.

  • If you have the Micro SD card connected to the computer:

- Disconnect it from the computer and put it in the GT.
- Then turn the GT on by connecting it to a computer or to a vehicle and turning the key to the Run position.

• If you have the GT connected to the computer:
  - Press the second key from the top on the left side to get out of USB mode.

    OR

  - Disconnect the GT from the computer, plug it in to your vehicle, and turn the key to the Run position.

9. Go to the Main Menu on your GT.

10. Go to the bottom of the menu and choose Update GT Software.

  • If the Update GT Software option is not available on the Main Menu:

   - Choose Update GT Firmware.

    OR

   - Scroll to the top and choose Change Vehicle, then select your vehicle from the list.

11. Confirm that you want to load the file.

12. Let the GT load the file and reboot. Do not disconnect it or turn it off during this part of the process.

The GT has now been updated!

TROUBLESHOOTING UPDATING PROBLEMS

The Update Agent Won't Install
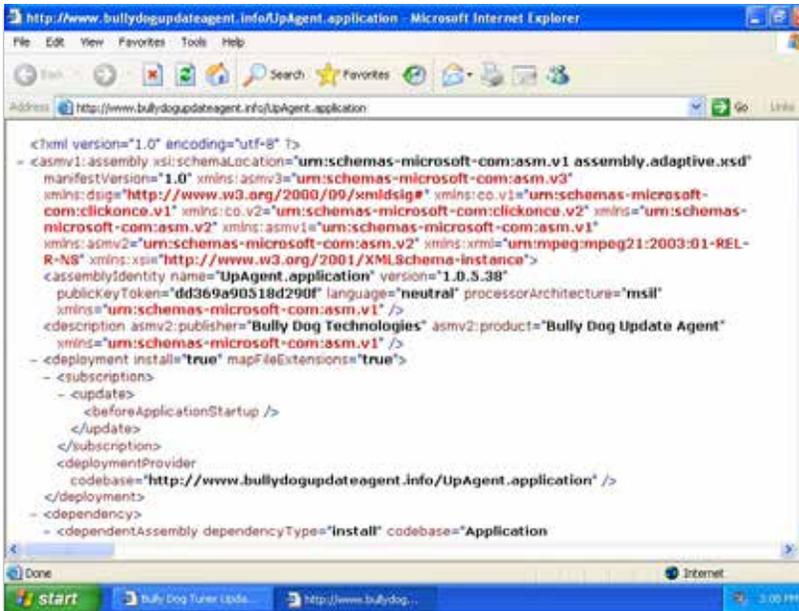
Q. Why does my computer open a window full of weird symbols when I try to install the Update Agent?

A. Your computer is not up to date and you need to run Windows Update first. See pages 48-54 for more information about running Windows Update.

The Update Agent Won't Recognize my Micro SD card

Q. Why isn't the Update Agent recognizing that the Micro SD card is connected to my computer?

A. The SD card is missing an important file. You can get the file and fix the problem by following these steps:

1. Go to the Bully Dog website.

2. Click on the link for the Update Agent page.

3. Click on the GT Gas card file link.

4. Find the downloaded file on your computer and copy it to your SD card.
   • Your computer will most likely not be able to open this file. This is not a problem; all you need to do is copy the file to the SD card.
   • The name of the file is GTGIDF.bin

5. Restart the Update Agent application and it should recognize the SD card.

UPDATING YOUR GT
(DETAILED STEPS FOR APPLE)

1. Return your vehicle to stock. See pages 43-45 for detailed instructions on this process.

2. Connect your Micro SD card to your computer.
    • Connect the Micro SD card using a card reader.
    OR
    • Connect the GT with the Micro SD card installed by using a USB cable. Do not use the HDMI cable to update the GT.

3. Format your Micro SD card to the FAT file system.

4. Go to the Bully Dog website and click on the link for Update Agent.
    • There are two locations for this link:
    • Under Quick Links, on the lower right side of the home page
    • Under Download, in the black toolbar on the upper right side of the home page.

5. At the bottom of the page, under the heading for MACINTOSH USERS ONLY, click the link for GT Gas. This will allow you to download the zipped file labeled GTGFiles.zip.

6. Find where your computer saved the file (it will most likely be in your Downloads folder).

7. Extract all the files in the GTGFiles.zip file.

8. Copy the contents of the extracted file directly onto your SD card.

9. Install the Micro SD card in your GT unit.

10. Connect your GT unit to your vehicle.

11. Choose the Update GT Software option from the Main Menu.
    • If the Update GT Software option is not available:
   - Choose Update GT Firmware.
    OR
   - Scroll to the top of the Main Menu and choose Change Vehicle, then choose your vehicle from the list.

12. Confirm that you want the GT to load the file.

13. Let the GT finish loading the file and rebooting – be sure not to disconnect it or interrupt power in any other way during this part of the process.

The GT has now been updated!

PHYSICAL INSTALLATION

Be sure to check the list and description of included parts on pages 4-6.

Brief Preview

This is a quick list of the basic installation steps. You can find more specific information about each step in the next section.

1. Connect the OBDII adapter plug to the port under the dash.

2. Plug in the power cable to the fuse box and connect it to the adapter plug.

3. Run the HDMI cable under the dash.

4. Mount and connect the GT.

The illustration below shows how to install the power wire if there is no fuse box available inside the cab of the vehicle. If a fuse box is available inside the cab, there is no need to run the power wire through the firewall into the engine bay.

GT & Windshield Mount

Fire wall grommet

Fuse Box

Power Wire

OBDII Adapter Plug
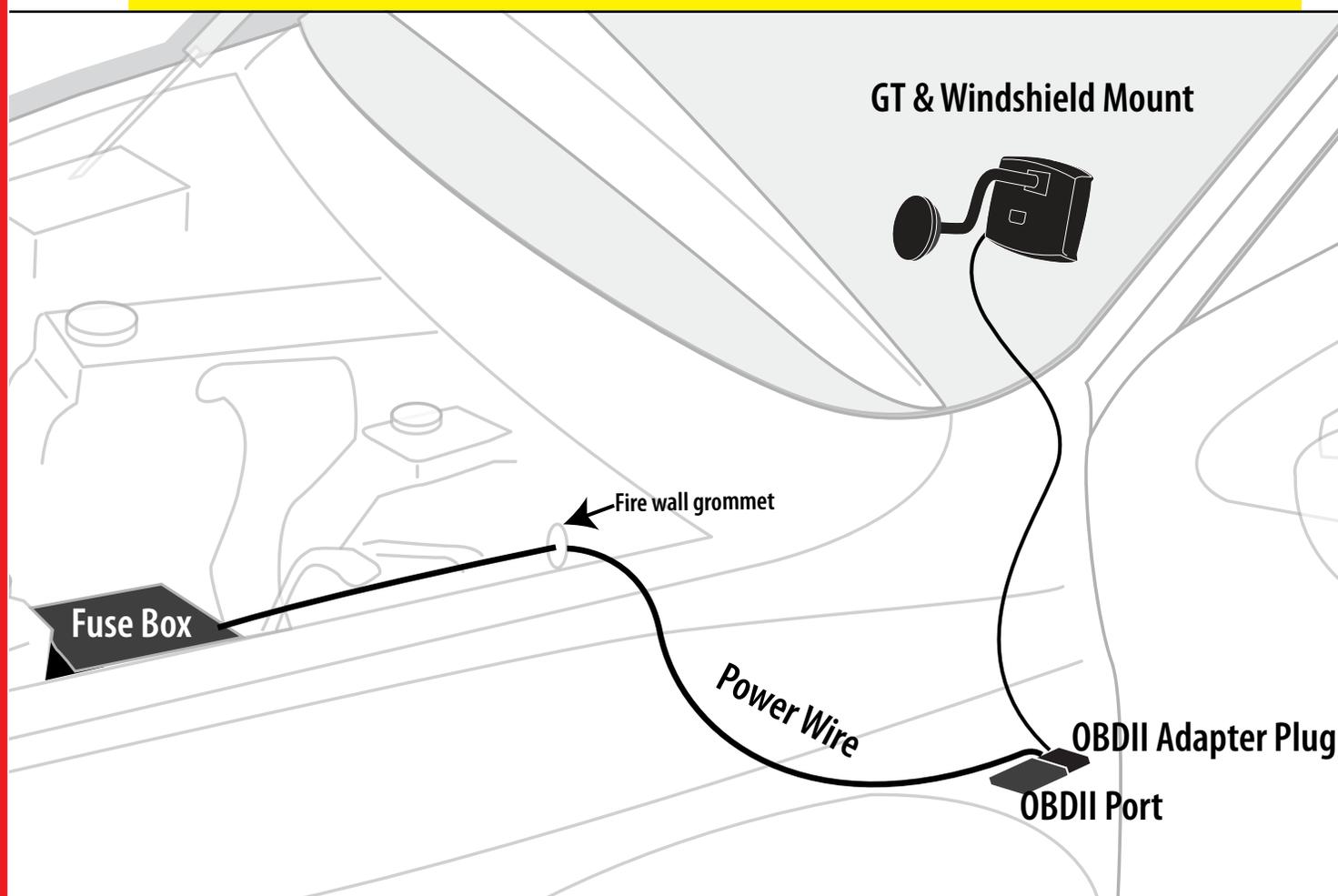
OBDII Port

PHYSICAL INSTALLATION

Detailed Instructions

1. **Connect The OBDII Adapter Plug to the OBDII Port. See page 6 for a detailed description of the different parts of the OBDII adapter plug.**

   • Find the OBDII port in your vehicle. As shown in the illustration, the specific location of the port can vary between different vehicles, but it is always somewhere under the driver's side dash. The OBDII port will have the same shape as the end of the adapter plug.

   • Once you have found the port, simply connect the adapter plug to it.
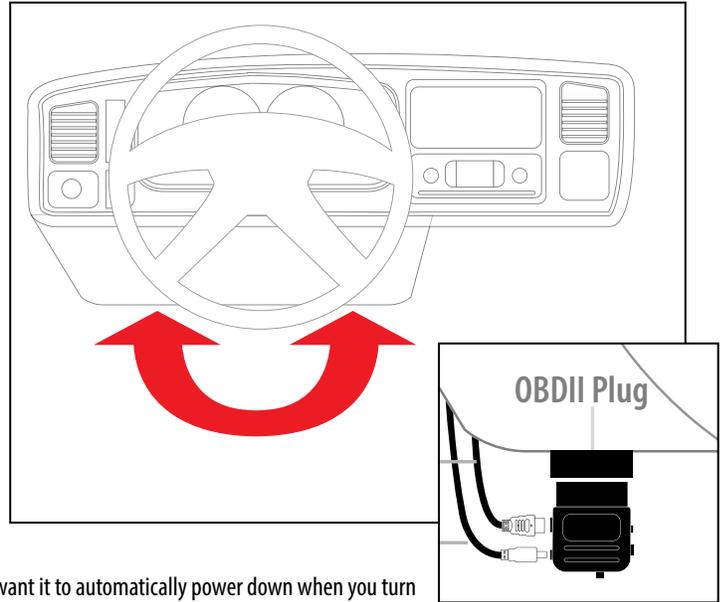
2. **Connect The Power Cable. The power cable is not really optional if you want to enjoy the originally designed functions of the GT. It is only optional under one of the following circumstances:**

   You do **not** want to keep the GT permanently installed and plan on disconnecting it when you are not actively using the unit.

   You **want** the GT to remain on at all times, regardless of the effect that this could have on your car battery

   You prefer physically switching the GT on and off and do not want it to automatically power down when you turn the key to the off position.

OBDII Plug

Otherwise, in order for the GT to work as originally designed, it is very important for the power cable to be installed as described below:

   1. Locate an ignition fuse.

      • An ignition fuse is one that is controlled by the position of the key.

      • Sometimes we call this a "key-on" or "key-off" fuse.

      • The fuse that controls the front windshield wiper is usually perfect, but any fuse that turns off when the key is turned off will work just fine.

      • Every vehicle is different. There is no way to provide wiring diagrams for all vehicles. You will be able to find the information for your vehicle in the owner's manual or online.

      • Some vehicles have a fuse box inside the cab. If your vehicle does not have a fuse box inside the cab, you will need to locate the fire wall and connect the power cable to the fuse box under the hood.

   2. Connect the power cable to the fuse.

      • You may have received a fuse tap with your GT. See below for an illustration and instructions on using the fuse tap to install the power cable.

      • You can also simply put the power cable into the fuse box along with the fuse that is normally installed in that location. See the diagram and picture for more information.

      • If you did not receive a fuse tap, but prefer to use one to install your power cable, you can purchase one at your local auto parts store. Be sure to ask for installation instructions if none are included with the fuse tap.
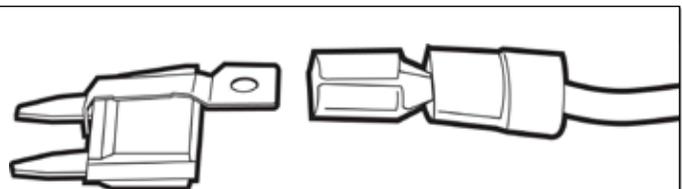
Using the Fuse Tap and Spade

   1. Find and pull the fuse that you are going to use to insert the GT Power Cable.

   2. Slip the fuse tap over the prong on the fuse.

   3. Fit the spade over the fuse tap and crimp them together with pliers.

   4. Put the tapped fuse back into the fuse box.

PHYSICAL INSTALLATION

Detailed Instructions (Continued)

3. Run the HDMI cable under the dash.

This step helps you install the HDMI cable in a way that is discreet, stylish, and that helps to protect the GT

    1. Plug one end of the HDMI cable into the port on the OBDII adapter plug.

    2. Run the middle of the cable up through the dash on the driver's side so that the end of the cable comes out near the A-pillar.

      • It may be necessary to temporarily remove the weather stripping and dash panel to successfully hide the HDMI cable under the dash.

    3. Make sure that there is enough slack in the cable to connect the GT when it is in the mount.

4. Connect and Mount the GT

    1. Install the mount that you have chosen. If you are using the Universal Windshield Mount included with the GT, see the installation instructions in the next section.

    2. Connect the HDMI cable to the GT.

    3. Secure the GT to the mount.

Using the Universal Windshield Mount

IMPORTANT NOTE: Safety is your first and most important responsibility as a driver. Safety is also your first and most important concern when placing your GT. Make sure the GT does not create blind spots or distract the driver.

1. Locate the T-shaped socket on the back of the GT.

2. Place the square top of the Universal Windshield Mount into the square part of the T-shaped socket on the GT.

3. Slide to the left to secure the GT to the mount.

4. Place the suction cup against the windshield and use the lever to secure the mount to the windshield.

You will find information about alternative mounting options on the following pages.
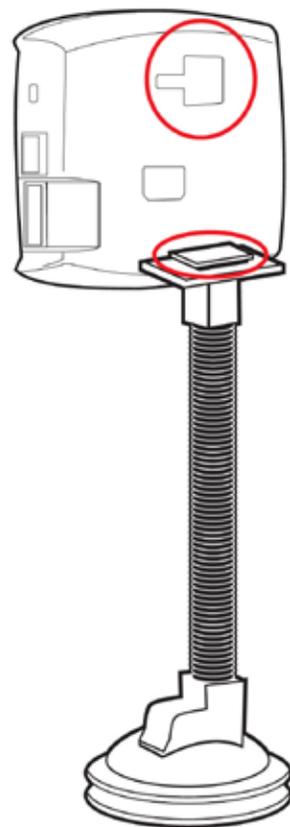
BULLY DOG ®

ADDITIONAL MOUNTING OPTIONS

Bully Dog has created alternative mounting solutions which will allow you to mount your GT in even more convenient locations.

RAM Mirror-Mate

Part Numbers: 31600 and 33600

The RAM Mirror-Mate mounting kit will allow you to mount your GT directly beneath your rearview mirror. This heavy-duty mounting solution provides easy and intuitive access to your GT without blocking the driver's view.

You can find more information about the Mirror Mate by clicking the link below:

http://www.bullydog.com/product_listing.php?prodlist=RAM%20Mounts

RAM Suction Cup Mounting Kit

Part Number: 30600

This kit is the best suction cup mount on the market. The amazing holding power will allow you to mount your GT to multiple surface materials in any vehicle – which means that you can try different places and find the best place for your GT to be at any time.

You can find more information about the RAM Suction Cup Mounting Kit by clicking the link below:

http://www.bullydog.com/product_listing.php?prodlist=RAM%20Mounts

Pillar Mount Gauge Pods

Bully Dog also offers gauge pods, which will allow you to mount the GT on the pillar of your vehicle.

The gauge pods are vehicle specific, so you will need to get the part number that matches your vehicle make and year.

Visit our website at http://www.bullydog.com/product_listing.php?prodlist=Gauge%20Pods for more information.

NOTES

INSTALLING THE TUNE

In order to enjoy additional horsepower and other advantages of tuning your vehicle, you need to use the Install Download feature.

The process is basically the same when you are installing, changing settings, or returning to stock.

Important Preparation Steps

Choosing an Appropriate Time and Place to Install

Do NOT install if you will need to use the vehicle to get somewhere soon.

DO set aside at least an hour for this part of installation.
Under optimal circumstances the installation can be completed in less than 30 minutes.
If you encounter any problems, you will need at least an hour to resolve the problem.

D**o NOT** install if the vehicle is in a remote location.

DO make sure that you have access to a phone and a computer with internet access.
DO update the GT online by using the Update Agent before you try to install.
You might need to connect to a computer to get special files from technical support if you encounter problems during the install.

Do NOT install if you do not have a way to contact technical support.

DO make sure that you can contact Bully Dog technical support.
Technical support is open Monday-Friday, 8 a.m. – 5 p.m., Mountain Standard Time.
If you decide to install on Friday evening and encounter problems, you might not be able to use your vehicle until you are able to contact technical support on Monday.

See page 55 for more information about contacting technical support.

Managing Other Electronics

DO turn off all factory installed electronics inside the vehicle. This includes:

Headlights, heater, air conditioning, stereo, DVD players, etc.
Failing to turn off all electronics can prevent a successful download.

DO disconnect additional electrical appliances. Remove any chargers or electrical devices connected to:

Cigarette lighters, USB ports, or other types of electrical outlets in the vehicle

DO disconnect any other aftermarket electronic device. This includes:

Trailer brakes, stereo, alarm, CB, remote start, DPF delete, Sirius/XM satellite radio, etc.

Any electrical device that was installed after the vehicle was released from the factory.

Disconnect these items from the fuse box, or other power connection. You do not have to completely physically uninstall them; just make sure they are not getting power.

INSTALLING THE TUNE

Important Preparation Steps (Continued)

Make SURE that the Battery is Charged

DO make sure that your batteries are fully charged before beginning any download.

It is a good idea to have a battery charger ready to connect to your vehicle if the batteries begin to lose their charge while you are installing the download.

Make SURE the Tuner is Ready

DO complete an online update with the Bully Dog Update Agent.

This is a free application available on the Bully Dog website.

This requires a computer with internet access.

See pages 22-29 for instructions on updating the GT.

DO make sure that the tune has not already been installed.

1. Go to the Main Menu on the GT.

2. Choose the Show Settings option.

3. Check what is showing next to Download

If the GT shows Installed

- Connect the GT to the original vehicle and uninstall the tune.

- If this cannot be done, contact technical support for a reset – there is a mandatory fee for this service. See page 47 for more information.

If the GT shows Not Installed you can continue with your preparations to install the download to your vehicle.

If the GT shows Recovery, contact technical support for further assistance. See page 55 for more information about contacting technical support.

INSTALLING THE TUNE

1. Turn the key to the "on" (or "run") position.
   ‣ Do NOT start the engine.

2. Choose **Change Vehicle** from the Main Menu.
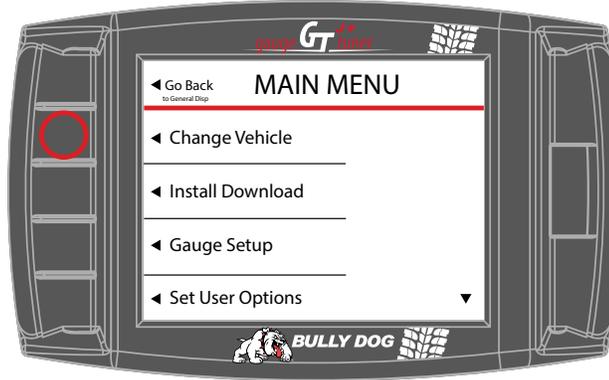
3. Select the vehicle model, engine and year.
   ‣ The GT will load files and restart.
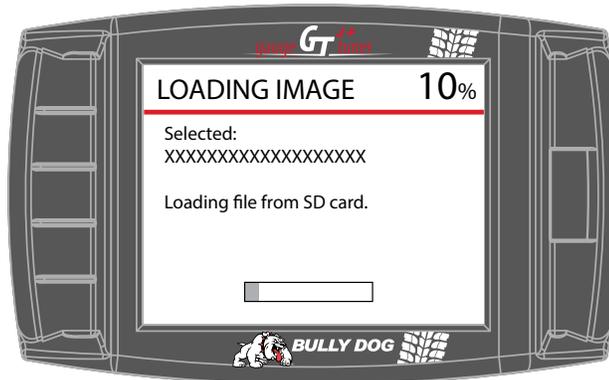
4. Choose **Install Download** from the Main Menu.
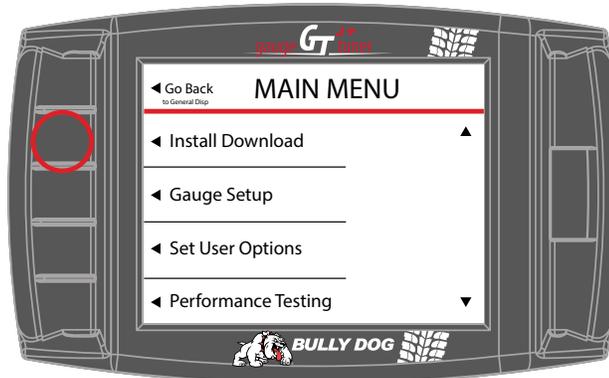
5. Verify the vehicle type.

  ‣ Press **YES** to continue.

6. Read the disclaimer and press **AGREE** to continue.
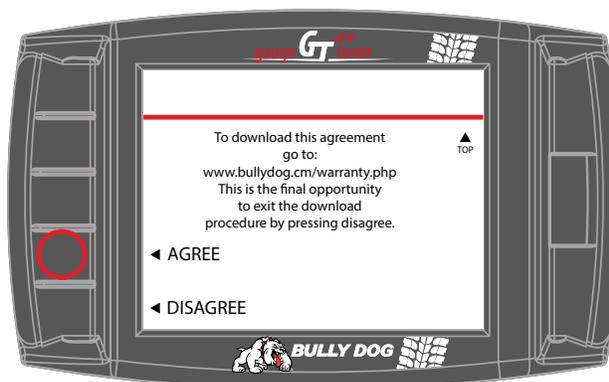
7. Read the battery disclaimer and press **CONTINUE**.

8. The GT will retrieve vehicle data.
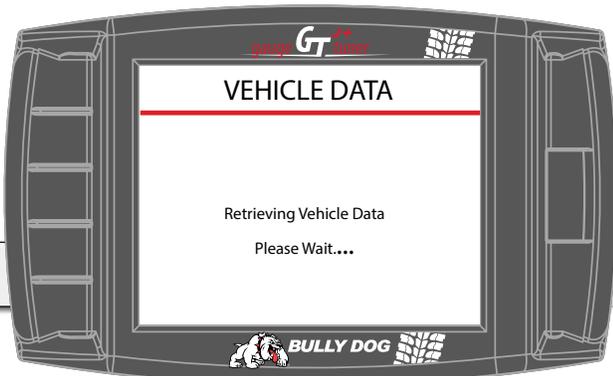
9. The GT will display code 262.
    ‣ If the GT does not display code 262, skip to step 20.

CODE 262

◄ EXIT

VEHICLE DATA. Vehicle Data has been successfully retrieved. Please disconnect GT and go to the update agent to continue the download process. Contact Technical Support if Problem continues. www.bullydog.com 866-285-5936
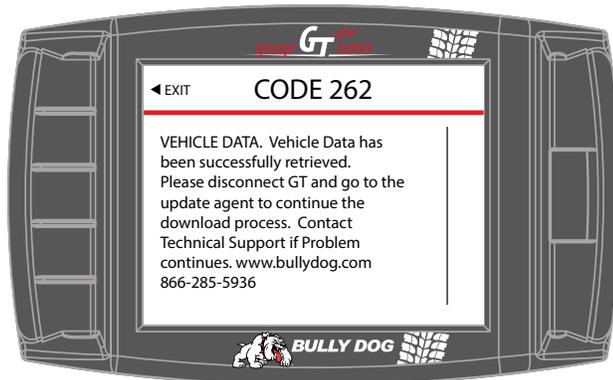
BULLY DOG

10. Remove the microSD memory card from the GT.

Steps 11-13 must be completed outside the vehicle on a computer with Internet access.

11. Open the Bully Dog Update Agent app.
    ‣ www.BullyDog.com/updateagent.php

12. Connect the microSD memory card to the computer.
    ‣ Use the included card reader and a USB port on the computer.

13. The Update Agent will display a progress bar as it gathers files.
    ‣ When the Update Agent displays a message that the process is complete, click OK.

Steps 14-23 must be completed with/inside the vehicle.

14. Reinstall the microSD memory card in the GT.
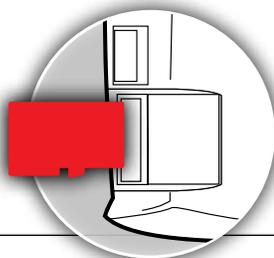
15. Choose **Install Download** from the Main Menu.

16. Read the disclaimer and press **AGREE**.

17. Read the battery disclaimer and press **CONTINUE**.

18. The GT will begin the initial download.
    ‣ This will take several minutes.
    ‣ Do not interrupt the GT.
    ‣ Follow the onscreen instructions.
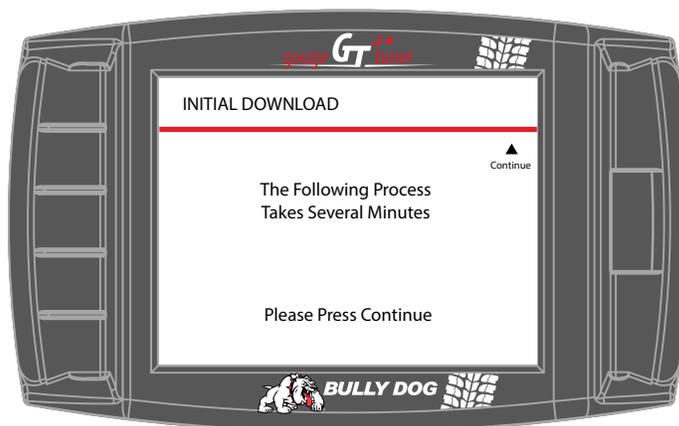
19. Once the GT has completed the initial download, skip to step 21.

20. The GT will read the engine files.
    ‣ This will take several minutes.
    ‣ Do not interrupt the GT.
    ‣ Follow the onscreen instructions.
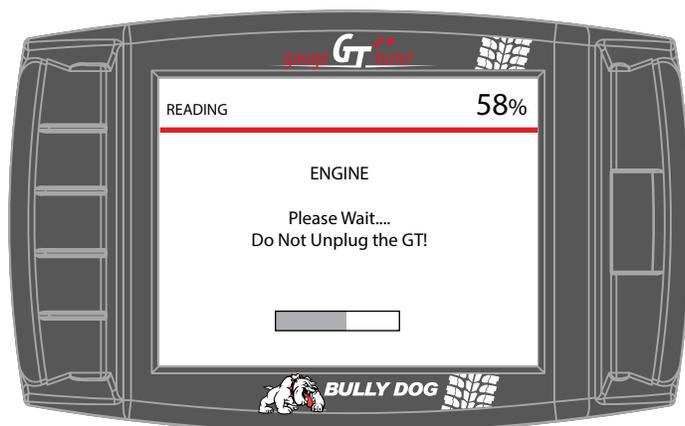
21. The GT will prompt you to specify the following tuning features:

- ‣ Power Level
- ‣ Drive Rev. Limiter
- ‣ Neutral Rev. Limiter
- ‣ Speed Limiter
- ‣ MDS (if available)

- ‣ Adjust WOT Shift Points (if available, automatic transmissions only)
- ‣ Tire Size
- ‣ Axle Ratio

For more information about the GT for Jeep Special Functions, see page 16.

22. The GT will build and download the tuning file.
- ‣ Do not interrupt the GT.

BUILDING FILE   24%

TUNE
Please Wait....

XXXXXXXXX

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DOWNLOADING   54%

TUNE

Part 2
Please Wait....
Do Not Unplug GT!

0   50   100

BULLY DOG
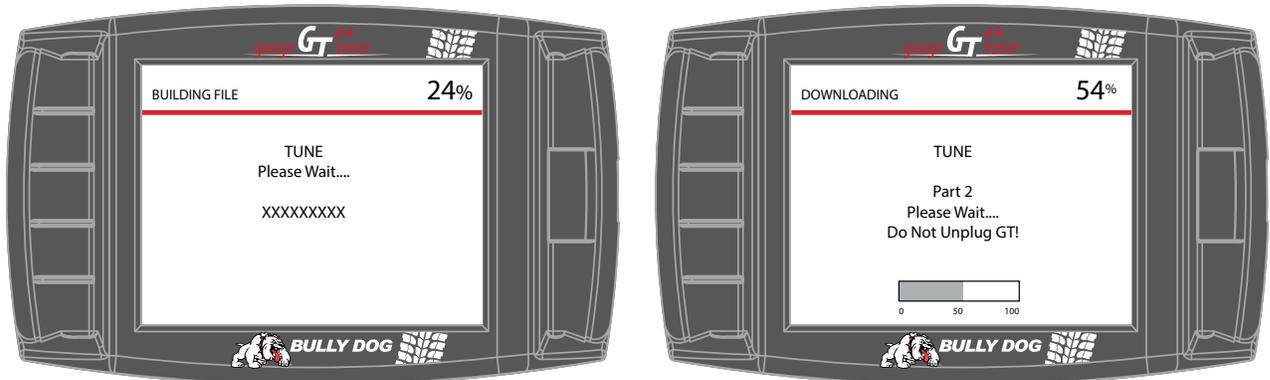
23. When the GT has finished installing the tuning file, the download is complete!
- ‣ Slide the switch on the adapter plug to "KEY"

Troubleshooting Installation Problems

Error During Installation

1. Make note of the code number and all information displayed on the screen.

2. Disconnect and update your GT. See page pages 22-29 for instructions.

3. Make sure that you have disconnected all aftermarket electronics and completed all of the important preparation steps. See pages 35-36 for more information.

4. Try to install the download again.

5. If the error occurs again, contact technical support. See page 55 for more information about contacting technical support.

This troubleshooting procedure applies to all errors, including the following code numbers: 0, 141, 325 (on a 2011 Duramax), 358, 393

Gets Stuck on "Turn Key to Run"

1. Make sure that the key is turned as far as possible without turning the engine on.

2. Turn the key to the Off position, then turn it back to the On position.

3. Jiggle the key.

4. Disconnect the GT.

5. Update if this has not already been done. See pages 22-29 for more information.

6. Reconnect the GT.

7. Make sure that all aftermarket electronics are disconnected from the vehicle.

8. Try installing a battery charger to maintain voltage. (This step can solve many problems, even if your battery is new and fully charged). See page 36 for more information.

9. Try to install the download again.

10. If the error occurs again, contact technical support. See page 55 for more information about contacting technical support.

GT Freezes in the Middle of the Download.

Try installing a battery charger to maintain voltage. (This step can solve many problems, even if your battery is new and fully charged). See page 36 for more information.

UNINSTALLING - RETURNING TO STOCK

What does this mean?

"Uninstalling the tune" and "returning to stock" are different ways to describe the same thing: writing the original (stock) information to the engine computer so it uses the settings that it used before you installed your GT. Doing this also sends a signal to the GT to let it know that it is no longer installed on a vehicle, which will allow you to install the tune at a later time. The GT will not allow you to install if the tune has already been installed on a vehicle.

When to Return to Stock

You should return to stock in ALL of the following situations:

- EVERY TIME you take your vehicle in for any type of service. It is a very common practice for the engine computer to be "flashed" (re-programmed) during all types of service, even routine maintenance. If the tune from the GT still installed when the engine computer is flashed, it can cause problems when you want to use your GT in the future. See page 45 for more information.
- If you want to install the GT on a different vehicle. For instance

  If you have a second vehicle and want to try the GT on it. The GT can only be used on one vehicle at a time.

  If you want to let a friend try the GT.

  If you have decided to sell the GT to someone else.
- If the battery is having problems and could possibly go dead. Make sure to connect a battery charger while returning to stock to prevent any complications that can be caused by interrupting the GT while it is returning your vehicle to stock. See page 36 for more informa-tion.
- If you need to disconnect the battery for any reason.

> **IMPORTANT NOTE: If you do not return your vehicle to stock, you may have to call in to technical support to have your GT reset. There is a mandatory fee for this service. See pages 47 and 55 for more information about the reset fee and contacting technical support.**

UNINSTALLING - RETURNING TO STOCK

How to Return to Stock

There are two ways to return your vehicle to stock.

IMPORTANT NOTE: Both methods are very similar to installing the tune to your vehicle, so you should make the same preparations and take the same precautions. This means choosing a good time and place, making sure the battery is charged, pulling fuses (if necessary), disconnecting aftermarket electronics, etc.

See pages 35-36 for more information.

IMPORTANT NOTE: There are certain times when disconnecting or interrupting power to the GT can interfere with the engine computer programming process. If the engine write is interrupted, the programming on your engine computer can be corrupted. This can cause your vehicle not to start and possibly even require the ECM to be replaced.

This illustration is an example of one of the times during the uninstallation when it is vital that the power is not interrupted and the tuner is not disconnected from the vehicle.

gauge **GT** tuner
DOWNLOADING 18%
STOCK
Part 2
Please Wait....
Do Not Unplug GT!
0 50 100
BULLY DOG
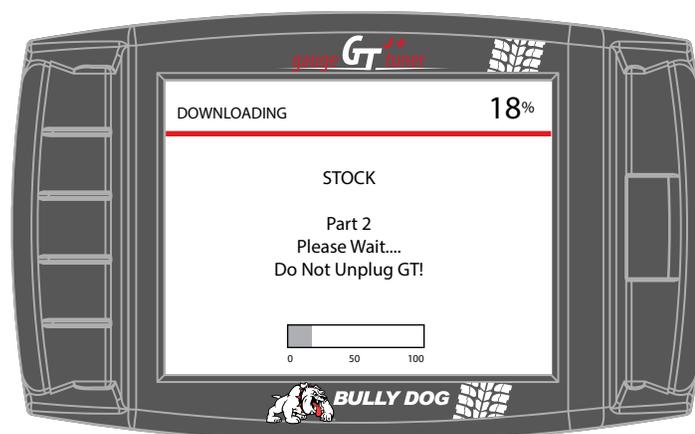
Note: There may be times when our technical support team will instruct you to disconnect the tuner even though the screen tells you not to unplug.

Uninstall Download
1. Choose the Uninstall Download option from the Main Menu.
2. Follow the instructions shown on the GT screen.
3. When the GT gives you a message that the tune has been removed, disconnect the GT from your vehicle.
4. Check to make sure the tune has been removed from your vehicle. See page 43 for instructions on how to do this.
5. Test your vehicle to make sure that it starts. If not, see the troubleshooting FAQ on page 56.

   If this option is not listed on the Main Menu, use the option described on the next page.

Install Download > Return to Stock
1. Choose the Install Download option from the Main Menu.
2. Follow the instructions shown on the GT screen.
3. Choose "Return to Stock" when the GT gives you the option between "Change Settings" or "Return to Stock".
4. Follow the instructions shown on the GT screen.
5. Check to make sure the tune has been removed from your vehicle. See page 45 for instructions on how to do this.
6. Test your vehicle to make sure that it starts. If not, see the troubleshooting FAQ on page 56.

BULLY DOG

UNINSTALLING - RETURNING TO STOCK

What if I Don't Return to Stock?

Here are some common examples:

• If you take your vehicle in for service, they will "flash" the engine computer. Even if you ask them not to, any dealer or shop will do this automatically – it is standard procedure for any vehicle they see and they really can't help themselves from following this ingrained habit. What they are doing is actually writing an updated file over any information that is currently saved in your engine computer. This includes the tune from your GT, so basically the tune is no longer installed and you will not be able to use the power level settings or any other options – but the GT doesn't know that, it still thinks that the tune is saved to your engine computer. Unless you go through the uninstall process with your GT, it will still show as installed and will not allow you reload the tune on your vehicle or on any other vehicle. The only way to resolve this problem is to contact technical support and have the GT reset – there is a mandatory fee for this service. See page 47 for more information about the reset and fee.

• If you sell or trade-in your vehicle you will not be able to install your GT on another one without calling technical support to have the GT reset. See page 47 for more information about the required fee for the reset service.

• If you sell the GT to another person without uninstalling the tune from your vehicle first, they will not be able to use it. You will probably have negative consequences like an upset buyer, having to refund the purchase price or cover the cost of a reset, a negative review, and bad karma. See page 47 for more information about resetting the GT and the mandatory fee.

By now, you may have noticed a pattern: if you do not return your vehicle to stock and something happens to your engine computer, you will need to call and pay the fee in order to have the GT reset. Page 47 has more information about the reset process and the required fee.

How Do I Know if the GT is (Still) Installed?

There are two ways to check if the tune is currently installed:

Main Screen

    1. Look at the lower right corner of the main display screen.

    2. If there is a box that reads "Power level setting not available until download is installed" the tune is not installed.

    • If there is anything else in this part of the main screen, the tune is probably installed. You can double check by using the method described below.

Show Settings Screen

    1. Go to the Main Menu.

    2. Scroll down.

    3. Choose Show Settings.

    4. Check to see what the GT shows next to "Download".

    5. If it shows:

    • Installed – the tune is still loaded on the engine computer.

    • Not Installed – the tune has been uninstalled and the vehicle is returned to stock.

    • Recovery – there is a problem and you should contact technical support. See page 55 for more information.

NOTES

MORE INFORMATION

Changing the Power Level

The power level tunes on the GT gas are based on the octane of the fuel being run in the vehicle. Unlike the GT diesel, this option cannot be changed On The Fly (OTF), because it is impossible to change the type of fuel being used while you are driving.

There are some times when this setting does need to be changed, like when filling the tank with a different octane than previously used before. Complete the following steps to change the power level tune setting:

1. Make the same preparations and take the same precautions as when you initially installed the tune. See pages 34-36 for more information.

2. Choose Install Download from the Main Menu.

3. Follow the onscreen instructions.

4. Choose Change Vehicle Settings when you are prompted to choose between that option and "Return to Stock".

5. Continue following the onscreen instructions until the GT indicates that the process is complete.

> **IMPORTANT NOTE: This option actively reprograms the tune on your vehicle's engine computer. There are certain times when disconnecting or interrupting power to the GT can interfere with the engine computer programming process. If the engine write is interrupted, the programming on your engine computer can be corrupted. This can cause your vehicle not to start and possibly even require the ECM to be replaced.**

The illustration below is an example of one of the times during the installation when it is vital that the power is not interrupted and the tuner is not disconnected from the vehicle:

Reset Fee

Why is This Policy in Place?

In the past, our technical support department has been flooded with people needing to reset their tuners. Because of this, we were not able to support the other people who needed help. The extra calls were coming for two different reasons:

1. Despite our best attempts to educate customers about the importance of uninstalling the tune before selling their vehicle or having it serviced, people did not remember or did not take seriously the requirement of returning their vehicle to stock and were calling in repeatedly.

2. Some dishonest people were installing the tune on multiple vehicles and calling in to have the unit reset in between each tune. The tuners are designed to only be installed on one vehicle at a time.

Once the policy for the reset fee was created, the number of calls to request tuner resets was significantly reduced and we were able to improve our support to everybody.

The reset process is relatively simple and a technician can help you complete the reset over the phone. See page 55 for more information about contacting technical support.
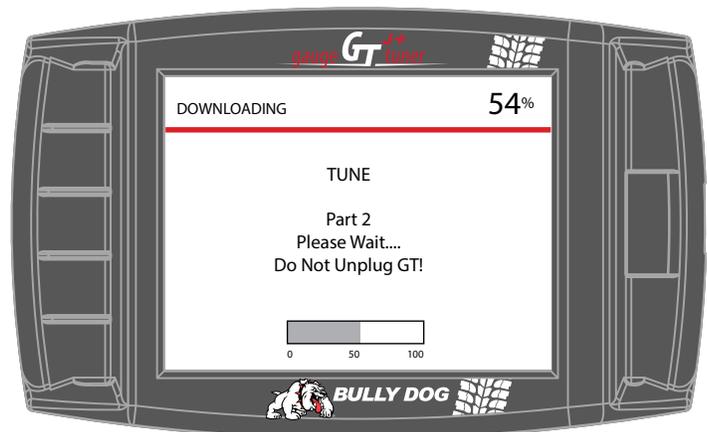
Performance Testing Software

This software allows you to download saved Performance Testing data from your GT (see page 11 for more information) to your computer and display the information as a graph for easy analysis.

You will be able to get graphs and raw Excel data for: speed, RPM, horsepower, and torque. You can print drag racing time slips, save and rename tests, and download up to 20 tests from your GT at one time.

Visit www.bullydog.com/performance_testing.php to download this free software

MORE INFORMATION

Windows Update

Windows XP

    1. Click the **Start** button.

    2. Click **All Programs**

    3. Click **Windows Update**
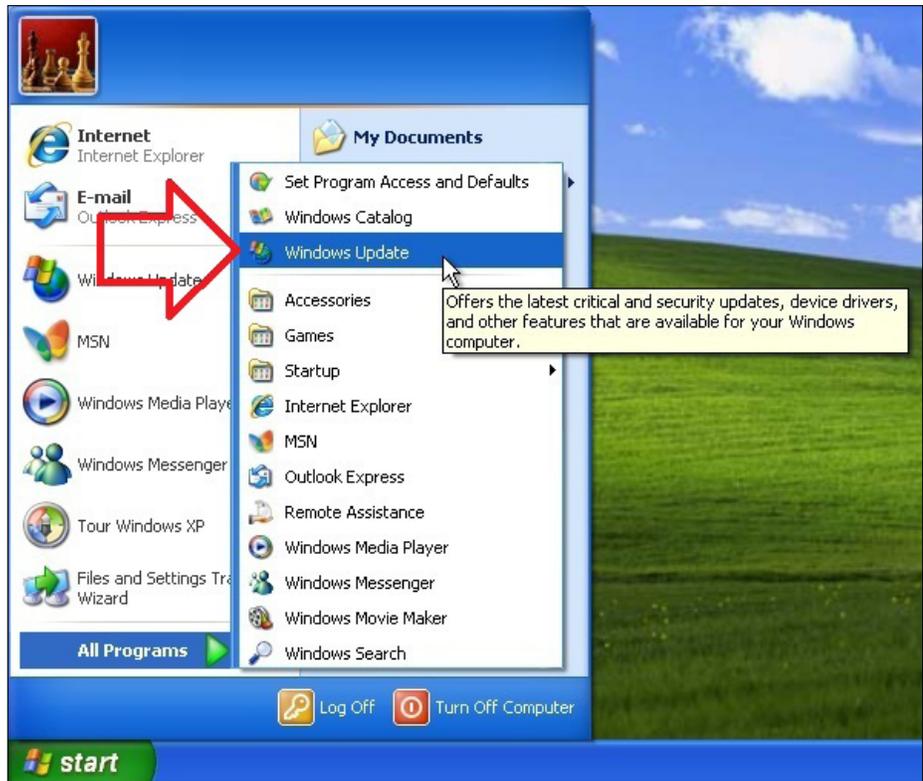
    4. Windows Update will check to see if you have the current version of the updating software:

MORE INFORMATION

Windows Update (continued)

Windows XP

9. At this point, you have two choices:

- • **Express**: Choose this option if you prefer an automatic update and have the time to wait for all of the updates to finish downloading and install-ing. Depending on how many updates are required, this could take several hours. It is also likely that you will have to restart your computer in the middle of the process and may even have to run the Express Update more than once before your computer is completely up to date.

- • **Custom**: Choose this option if you prefer to manually locate and install the update that your computer needs to be able to install and run the Bully Dog Update Agent.

NOTE: Because the Express update is relatively automated and quite time consuming, these instructions will only show you how to update using the Custom option. Either option will work; however, some of the updates completed during the Express update cannot be uninstalled, so you should be sure before choosing that option.

10. Windows will check your computer for updates:

NOTE that this could take several seconds or several minutes

Your computer might generate an Internet Explorer pop up message about information and privacy. Click **Yes**. (You might also want to check the box as shown in the picture to prevent your computer from showing the pop up again.)
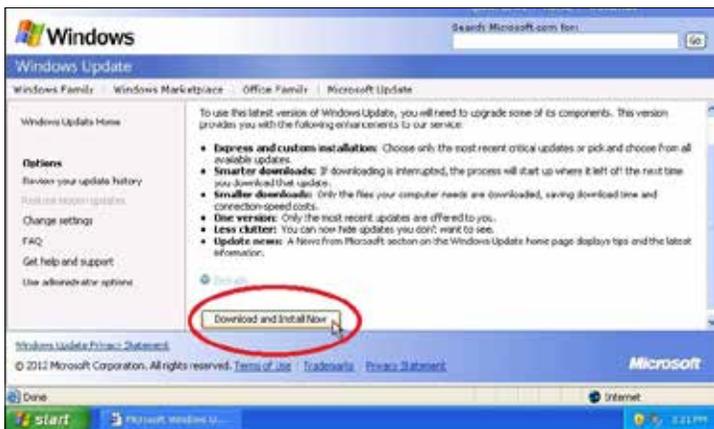
11. Your computer might prompt you to upgrade some com-ponents of Windows Update. If you see the screen below, click **Download and Install Now**, as shown below. If your computer does not display this screen, skip to step 14.

50

Windows Update (continued)

12. Your computer will then download and install the updates for the Windows Update software.
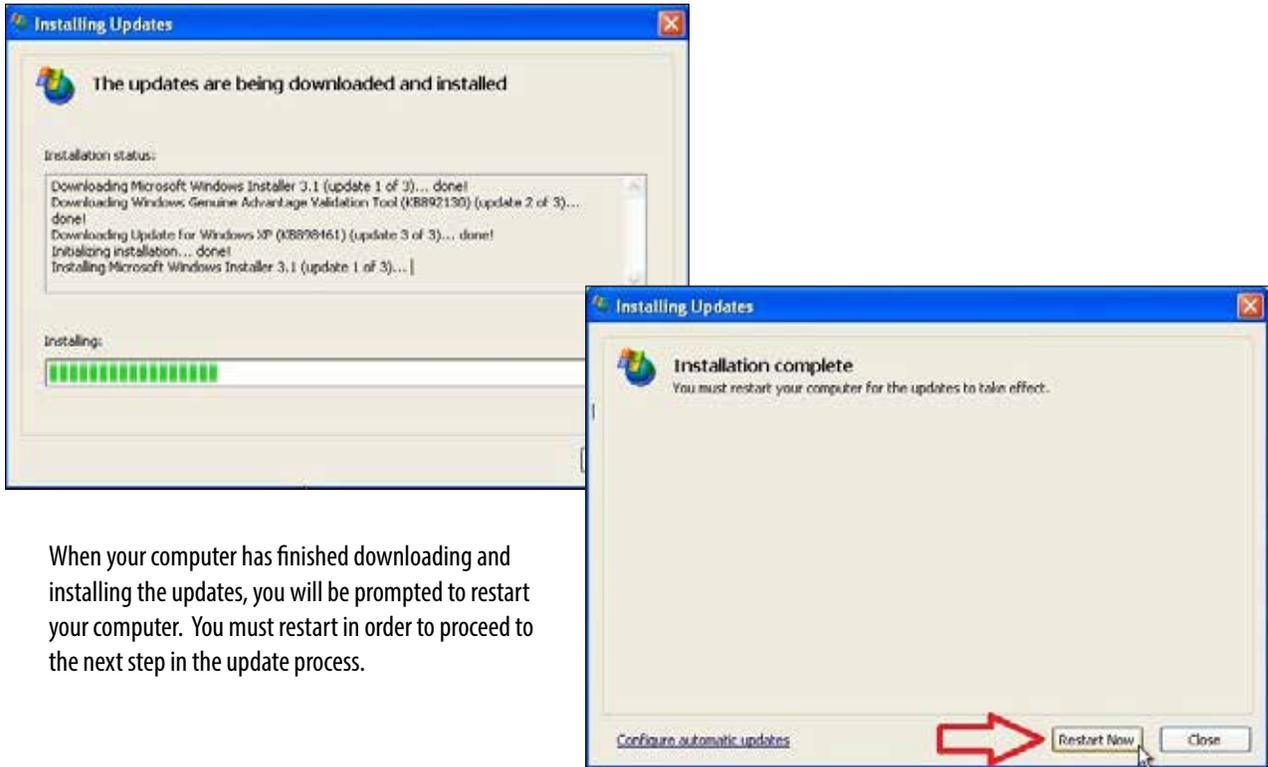
When your computer has finished downloading and installing the updates, you will be prompted to restart your computer. You must restart in order to proceed to the next step in the update process.

13. Once your computer has restarted, repeat steps 1,2,3, and 9 (open Windows Update and click Custom).

MORE INFORMATION

Windows Update (continued)
Windows XP

14. After checking for the latest updates for your computer, Windows Update will display a list of updates that are available. First, scroll down and clear any of the High Priority updates that may already be selected.

15. Once you have cleared the other updates, click on **Software, Optional**.

16. Click the box to select the **Microsoft .NET Framework 3.5 Service Pack 1 and .NET Framework 3.5 Family Update (KB951847) x86**.

MORE INFORMATION

Windows Update (continued)
Windows XP

17. Once the .NET Framework 3.5 Service Pack is selected, click on **Review and Install Updates.**
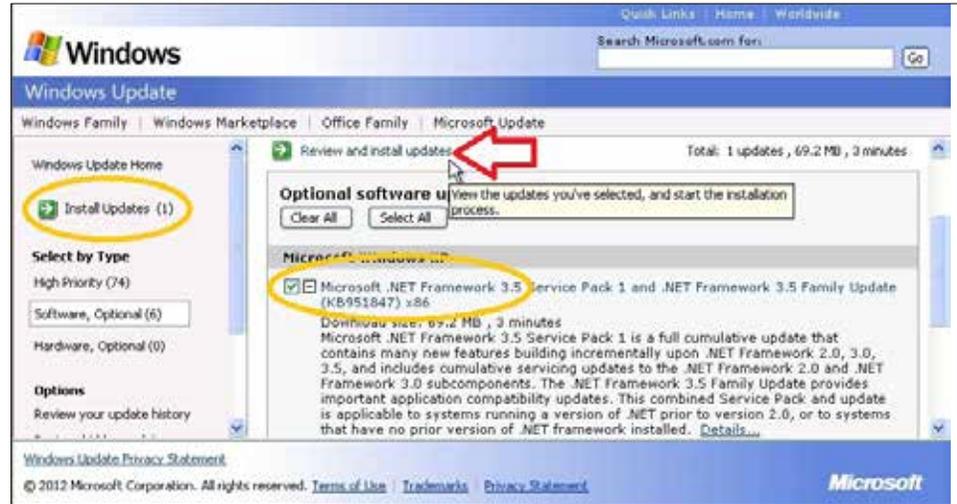
18. Make sure that the .NET Framework is the only update selected, then click **Install Updates.**
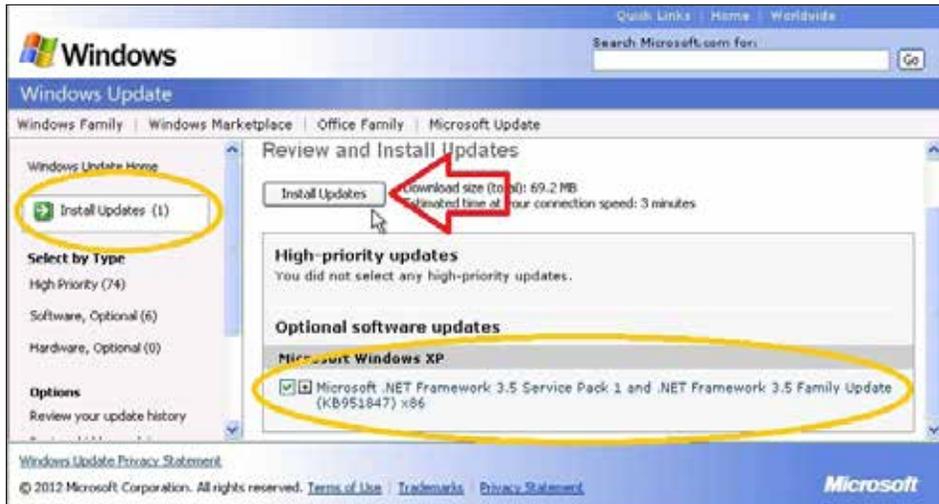
MORE INFORMATION

Windows Update (continued)
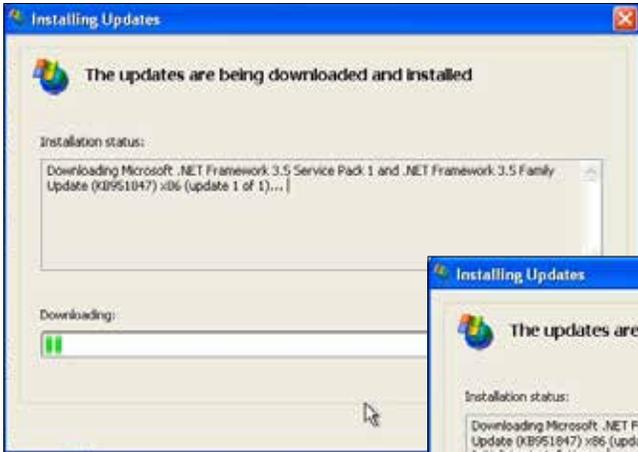
19. Windows will download the .NET Framework 3.5 Service Pack update.

Windows will also automatically initialize the installation of the update. This step could take a few minutes and it might seem like your computer is stuck, but this is normal and your computer will continue the process automatically when it is ready.
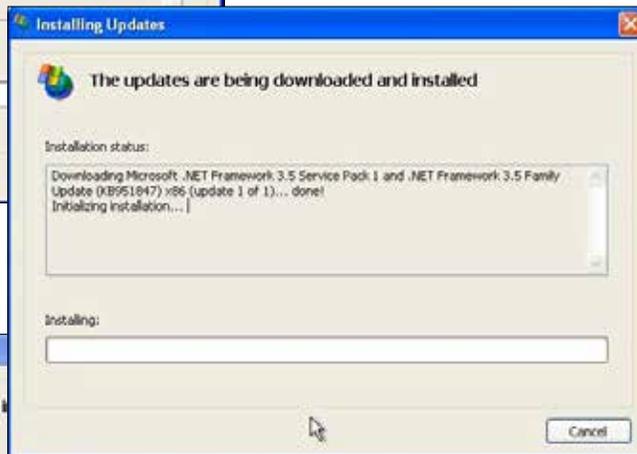
Then, your computer will begin installing the update. Again, this process can take several minutes to get started.

Eventually, your computer will move forward with installing the .NET Framework update.
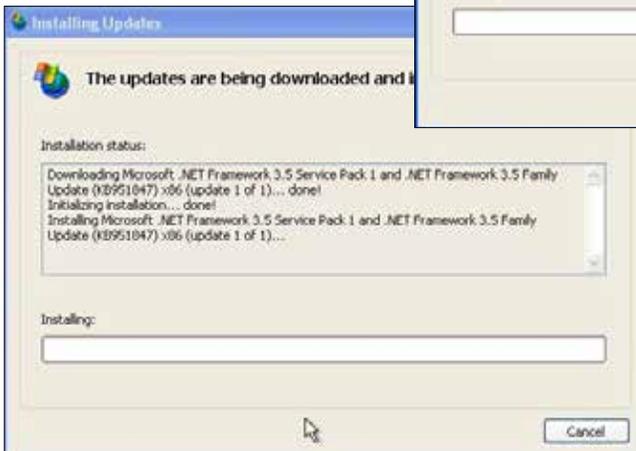
20. Once the .NET installation is complete, click **Restart Now**.

21. Once your computer has restarted, the update process is Complete!

You can now install and run the Bully Dog Update Agent and update your GT.

For more information about updating your GT, see pages 22-28.
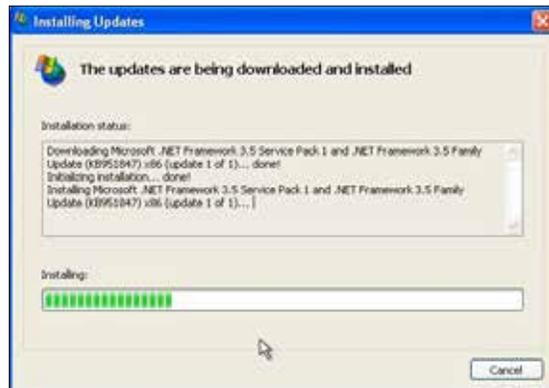
CONTACTING TECHNICAL SUPPORT

Technical Support is open Monday-Friday, 8 a.m. – 5 p.m., Mountain Standard Time.

The phone number to contact technical support is (940)783-9915.

You should have all of the following items available when contacting technical support:

• Your GT tuner

• Your vehicle

• A computer with internet access

USB MODE

When you connect your GT to your computer via a USB cable, it enters USB Mode.

In order to use the Update Agent, keep the GT in USB Mode.

If you want to use your computer to power the GT and allow you to access some of the GT's functions when it is not connected to your vehicle, you can Abort USB Mode. In order to Abort USB Mode, press the second key from the top on the left side, as shown in the picture below:

gauge GT tuner

USB source:
SD PRESENT
Card Detected
USB MODE
Press key 2 to abort USB mode

BULLY DOG
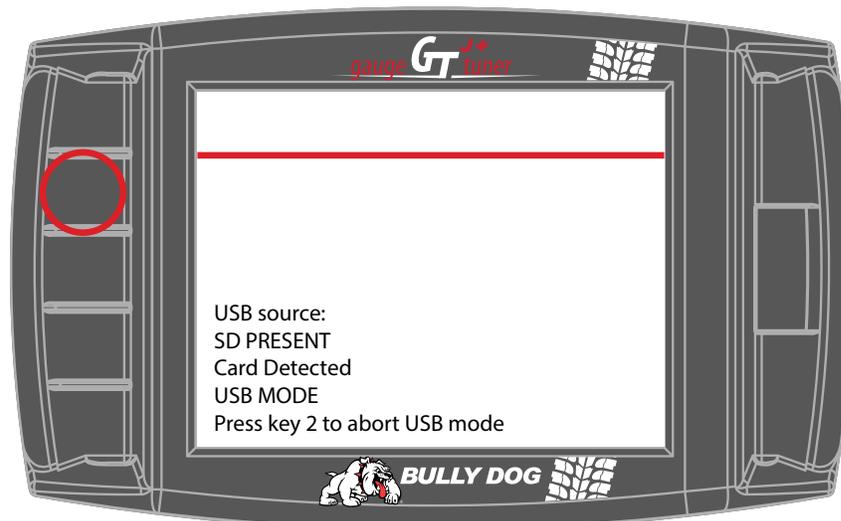
FAQS/TROUBLESHOOTING

My GT Won't Turn Off

Q. I have turned my vehicle off and removed the key – everything else has turned off. Why won't my GT turn off?

A. The power switch on the OBDII adapter plug is in the "wrong" position. If you want the GT to turn on and off along with the rest of your vehicle, you will need to make sure that the power switch is in the "correct" position and that the power cable is installed correctly. See page 31 for more information about installing the power cable.

My Vehicle Won't Start after I installed the Download

Q. My vehicle won't start after I installed the download, what happened and how do I fix this?

A. The GT encountered a problem when it was writing to the engine computer. Follow these steps to resolve the problem:

1. Return the vehicle to stock. See page pages 43-45 for more information about this step. Test to see if the engine starts.

2. Update the GT. See pages 22-29. for more information about this step.

3. Install the download again. Test to see if the engine starts.

4. Contact technical support if the problem persists. See page 55 for more information about contacting technical support.

My Vehicle Won't Start after Returning to Stock

Q. My vehicle won't start after I uninstalled the tune. How do I fix this?

A. Follow these steps to get your truck running with the tune uninstalled:

1. Make sure that you have completed all of the preparation steps on pages 35 .

2. Go to the Main Menu on the GT.

3. Scroll down and choose the Show Settings Option.

4. Check what the GT is showing next to Download.

   • Recovery: go to the next step.

   • Installed or Not Installed: Contact technical support – see page 55 for more information about contacting technical support.

5. Go back to the Main Menu

6. Choose the Install Download option

7. Confirm that you want to complete the Recovery.

8. Follow the onscreen instructions.

9. Once the recovery is complete, try to start your vehicle.

10. If your vehicle still will not start, contact technical support – see page 55 for more information about contacting technical support.

> Note: If the Recovery process completes successfully, your vehicle is returned to stock. You will not need to do another step to uninstall the tune or return the truck to stock. If the Show Setting screen still shows Recovery next to Download, contact technical support to have the unit reset (there will not be a charge to reset from Recovery Mode).

BULLY DOG®

My Vehicle isn't Listed under Change Vehicle

Q. Why isn't my vehicle included in the list under the Change Vehicle option?

A. Chevrolet owners should choose the GMC option that matches the year of their vehicle. If your vehicle is very new or very old, it may not be supported yet.

What Kind of Increased Performance Can I Expect?

Q. How much extra horsepower will my vehicle get? What can I expect for fuel efficiency improvements?

A. See page 2 for information about additional horsepower. Many people do find that the increased horse power helps them get the most mileage out of their fuel as possible. However, since fuel efficiency varies so much between different vehicles and drivers, there is no way to accurately predict fuel mileage increases. To get the best gas mileage possible, make sure to calibrate and use the Driving Coach to improve your driving habits. See pages 12-14 for more information about the Driving Coach.

Crazy Larry

Q. Can I get the Crazy Larry tune on my GT?

A. No. Crazy Larry is no longer available. Due to EPA regulations, it will not be offered again.

I Don't Feel Extra Power

Q. Why can't I feel the extra horse power?

A. A. You may be expecting to feel the same change in horse power on a gas vehicle that our tuners provide for diesel vehicles. The additional horsepower available for a gas vehicle is not as high as it is for diesel vehicles, so you may not be able to feel it the same way as on a diesel; however the additional horsepower will still help the vehicle accelerate and maintain speed. See page 43 for more information about the different power level tunes that are available for gas vehicles.   Also, if your vehicle has recently been serviced, you might have forgotten to return the vehicle to stock. See pages 39-41 for more information on returning to stock. See page 41 for more information on checking to see if your vehicle was returned to stock and what to do if it was not returned to stock.

SENSOR DOCKING STATION

The Bully Dog Sensor Docking Station offers an unparalleled glimpse into the health of your vehicle. This accessory for the GT and Watch Dog product lines makes it easy to install after-market automotive sensors onto a vehicle and then display those sensor values on your GT or Watch Dog. The Sensor Docking Station supports a multitude of different sensor types. including: exhaust temperature sensors, pressure sensors (oil pressure or boost), speed sensors, and temperature sensors (transmission temp, air intake temp).

Sensor Docking Station

Part # 40383

Add ons (not Included)

Pyrometer Probe # 40387

Sensor Dock with Pyrometer

Part # 40384

Add ons (not Included)

Secondary Pyrometer Probe # 40387

Sensor Dock O$_2$ Sensor Capable

Part # 40385

Add ons (not Included)

Pyrometer Probe # 40387
O$_2$ Sensor Part# 40388

Sensor Docking Station Part# 40383 | 40384 | 40385

Sensor Diagram

P1   P2   AN1A   N2   AN3F   +5v

Y+ R- Y+ R- + - + - + - I N   O U T

OXYGEN   PWR
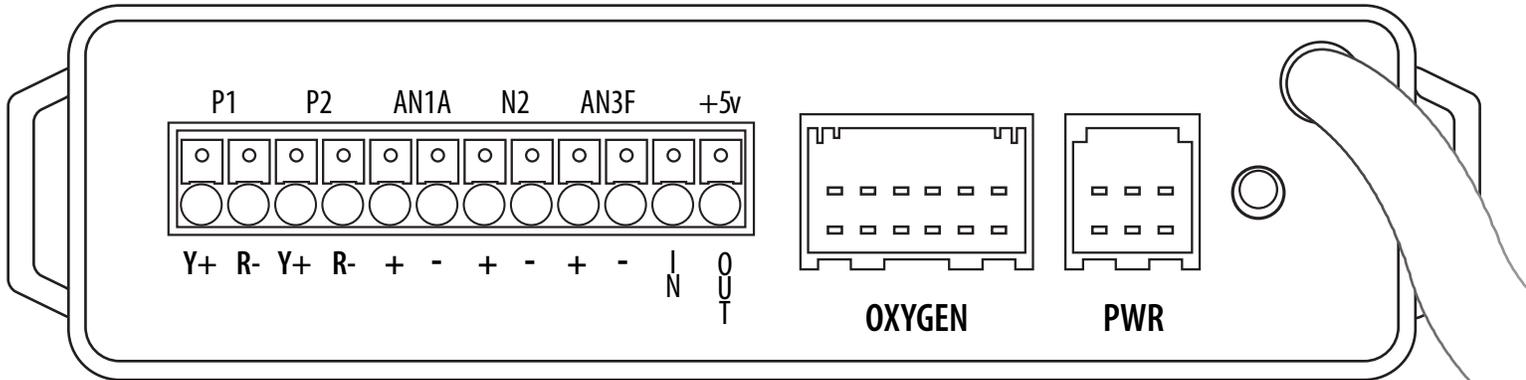
Dock Location Identification Diagram

P1: Pyro location #1

Y+: Positive yellow wire on Bully Dog Pyro

R-: Negative red wire on Bully dog Pyro

P2: Pyro location #2

Y+: Positive yellow wire on Bully Dog Pyro

R-: Negative red wire on Bully Dog Pyro

AN 1: Analog input location 1

+ AN 1: signal wire in from sensor

- AN 1: optional ground

AN 2: Analog input location 2

+ AN 2: signal wire in from sensor

- AN 2: optional ground

AN 3: Analog input location 3

+ AN 3: signal wire in from sensor

- AN 3: optional ground

F/IN: Frequency Signal IN

+5V/ OUT: 5 volt supply/ Signal Out

O_2 Sensor Part # 40385 Only
Bully Dog part number 40385 includes a cable which will connect up to two Bosch oxygen sensors to the Sensor Docking Station.

Typical types of sensors that can be used by the different docks or ports

P1-P2 (pyro 1 and 2)
- Bully Dog Type K Thermocouple

AN 1-AN 3 (Analog 1-32)
- Manifold Pressure
- Oil Pressure
- Barometer
- Other Sensors with Three Wire Five Volt

F IN (Frequency IN)
- Engine RPM
- Vehicle Speed
- Output Shaft Speed
- Other Sensors that Send a Pulse Signal

+5V Out (temperature)
- Transmission Temp
- Oil Temp
- Intake Air Temp
- Ambient Air Temp
- Other Sensors with Two wire Five Volt

Sensor Docking Station

Rapid Flow Cold Air Intakes

T-Shirts and Hats

Pre Filter and Cleaning Kits