

Part #40417 Document #40417-99 v2.0





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PHYSICAL INSTALLATION

MANUAL OVERVIEW

This product is a combination of previous gas tuners sold by Bully Dog. To make a more expedient product for our dealers and a more efficient product for end users, we have combined all previous gas tuners into one amazing unit. Since particular tuners support a wider feature set but are for the most part the same in operation, make sure that as you go through this instruction manual, you READ CAREFULLY the sections that are intended for you when directed to do so.

Example: when you get to the physical install, follow the section devoted to your vehicle make whether it is Toyota®, Jeep® or other.

There are a few different sections in this manual that are different according to the make of the vehicle you are tuning. You will see directions and headings guiding you to the appropriate section when this is the case.

IMPORTANT NOTE:

YOU MUST UNINSTALL YOUR BULLY DOG ENGINE TUNE BEFORE TAKING YOUR VEHICLE IN FOR ANY TYPE OF SERVICE.

Alterations made to the OEM configuration of a vehicle may violate the Clean Air Act if such alterations bypass, defeat, or render inoperative Elements of Design installed on a vehicle in compliance with the Clean Air Act. Users who alter Derive's products in any way are required to make their own individual determination that the altered products do not violate the Clean Air Act.

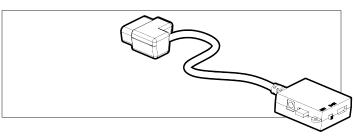
This device is not legal for sale or use in California on pollution controlled vehicles.

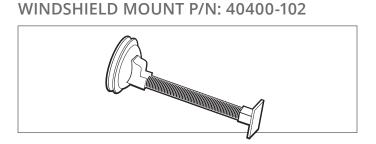


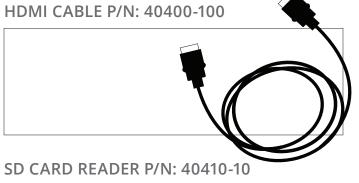
PARTS CHECKLIST

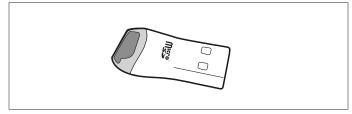
The following is a list of the items that should be included in the GT Gas packaging. If you are missing any of the items please contact technical support at bullydog.com/support.

GT DEVICE P/N: 40415-1 **OBDII ADAPTER PLUG P/N: 40400-105**



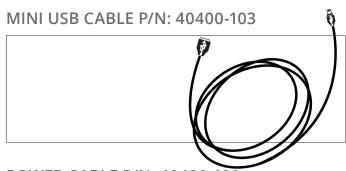




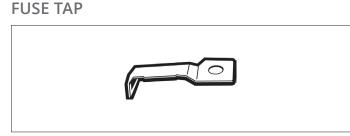




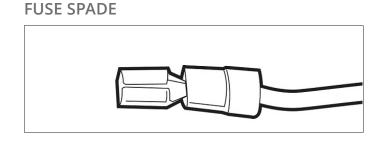








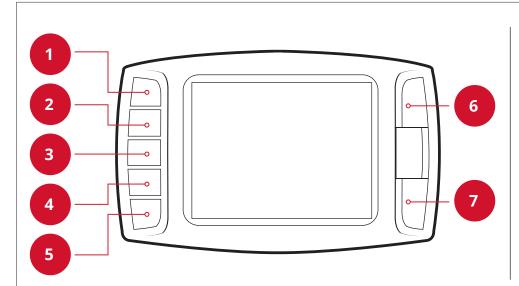




GT GAS Part# 40417

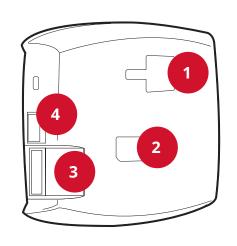
PARTS DESCRIPTION - GT DEVICE

The main component of the GT Gas is the device itself. The GT has the screen and the buttons that allow you to access all of the functions and features of the device.



GT Gas Front Side:

The GT Gas 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 Gas features a 2.4" LCD color screen.



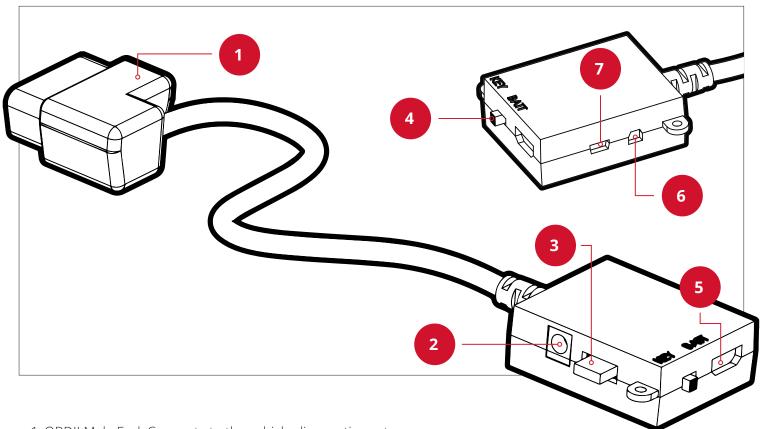
GT Gas Back Side:

- 1. T-Slot Mount Socket allows you to use the GT Gas with different mounting options.
- 2. HDMI port connects the GT Gas and the OBDII Adapter Plug with the HDMI Cable
- 3. Micro SD card port for use with the SD Card.
- 4. Mini-USB port allows the GT Gas to be connected to a computer.



PARTS DESCRIPTION - OBDII ADAPTER PLUG

The OBDII 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 Gas Head Unit. The illustration and numbered list below contain more information about the other parts of this important piece of the GT Gas assembly.



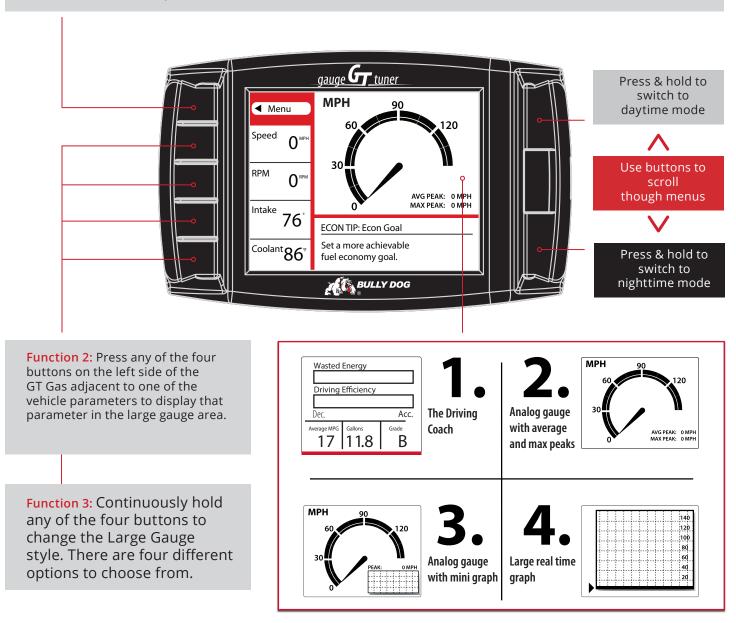
- 1. OBDII Male End: Connects to the vehicle diagnostic port.
- 2. Power Wire Port: Connects the GT Gas to the power wire and the vehicle fuse box. Allows the GT Gas to turn on and off with the key.
- 3. Fuse: The adapter plug fuse protects the GT Gas from being damaged by unexpected power surges.
- 4. Power Switch: Changes the active power source of the GT Gas.

 The two options are: 1) KEY: this pulls energy from the fuse box through the power wire and allows the GT Gas 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 Gas directly through the vehicle's diagnostic port.
- 5. HDMI Port: Connects the OBDII adapter plug to the GT Gas Head Unit.
- 6. Pyrometer/Sensor Docking Station Port: Connects the GT Gas 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.

BUTTON NAVIGATION

The illustration below outlines the basic functions of each of the seven buttons that help make up the GT Gas.

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



AVAILABLE OPTIONS - ALL MODELS

In general these options are presented in the order they appear on the Main Menu but there are some menus that change according to the specific vehicle. If options are missing in your Main Menu, update your GT Gas.

Change Vehicle

This option allows you to choose the type of vehicle that the GT Gas will be used with. If the tune has already been installed, the Change Vehicle option cannot be used. Read the "Show Settings" section in this manual for more information about checking to see if the tune is already installed and, if so, how to uninstall the tune.

Install Download

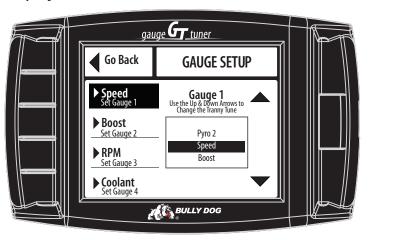
This option allows you to install the tune to the engine computer in your vehicle. If the tune is already installed, this option will allow you to return to stock (basically uninstall the tune) or change certain settings that can only be changed by writing a new tune to the ECM. Read the "Uninstalling - Returning to Stock" section in this manual for more information about the download options 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 Main Menu.
- 2. Press the button on the left side of the GT Gas to highlight the gauge slot you would like to change.
- 3. Use the buttons on the right side of the GT Gas to scroll through the different functions and highlight the desired one on the General Display.
- 4. When done, use the top left button to go back to the Main Menu.



Note: All of the gauge types may not be available through your vehicle's diagnostic port (OBDII port).

Bully Dog offers a range of add-on automotive sensors and a sensor docking station.

Contact our Technical Support team at: bullydog.com/support for more information.

Gauge Options

The gauge options listed below will vary from one vehicle to another and not all options will be available for each vehicle covered by the GT Gas.

Pyro 1 & 2 (may require Sensor Docking Station)

Pyro 1 & pyro 2 measure exhaust gas temperature. The only difference is the location of the temperature sensor. Used for warning level settings, which help protect the engine from heat damage. Availability and location of OEM pyrometers vary according to vehicle make and year. For all other vehicles, pyrometer kits are available for purchase from bully dog. Bully Dog and factory OEM sensors are the only pyrometers which will work with the GT Gas. If pyro 1 & 2 are unavailable through the OEM, go through the Sensor Docking Station.

Speed

This option shows the current vehicle speed. Monitoring this information can help you ensure that the speed displayed on the GT Gas 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.

Transmission Temp

Displays the transmission temperature. Also used in defuel settings to prevent damage to the transmission from excessive heat.

Load

Real-time measurement of the load that the engine is under during use.

Timing

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

MAF

This option displays information from the Mass Airflow Sensor. Used by the Engine Control Module (ECM) to optimize the engine performance.

Fuel Econ.

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; shown in a percentage.

Boost (Turbo equipped vehicles only)

Current turbo boost pressure in PSI.

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 battery voltage.

Additional features listed on the next page.



Additional Gauge Options

The following gauge options are provided to allow the GT Gas to monitor additional sensors that are only available with the Bully Dog Sensor Docking Station.

A/F Ratio 1 & 2

This gauge option shows the ratio of air to fuel. The GT Gas 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.

User Options - Setting & Resetting

These options allow the user to customize their GT Gas to their own liking increasing the usability.

Set Color Theme

Change the display colors on your GT Gas.

Adjust Back-light

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

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.

Go Back to Main Menu Scolor Theme Setup Backlight Setup Animation Setup US/Metric Units Reset to Default

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 Gas features to default settings.

Resetting Average Economy

This option resets the saved values on the GT Gas for average fuel economy, the number of gallons used, and the fuel efficiency grade displayed by the Driving Coach.

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 Gas to your computer and analyze it using the Bully Dog Performance Testing Software. The software is available by free download from www.bullydog.com.

There are two different styles available for both tests. The GT Gas 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 Gas 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

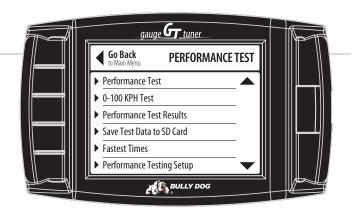
Before initiating the Race Tree style performance test it is important that the vehicle should already be at a complete stop. Once the test is begun, the GT Gas will display a classic race tree on the screen. As soon as the lights on the tree turn green, the GT Gas will begin to record the vehicle's time. In this style of test, the GT Gas 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 Gas. 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.



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.

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.

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 Gas for the average fuel economy, the number of gallons used, and the grade in the Driving Coach.

Sensitivity

This option will allow you to select the GT Gas sensitivity for the acceleration and deceleration in the Driving Coach; this affects the driving grade assigned by the Driving Coach.

Low Setting: city driving and beginners in any driving circumstances.

Med Setting: rural for beginners and some city driving for more advanced.

High Setting: rural Driving only.

Coach Sound Setup

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











Driving Coach Setup - Checking Speedometer Accuracy

Change the Gauge Setup to have the Speed displayed on the main display screen. See page 6 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.

Comparing GPS & GT Gas speeds

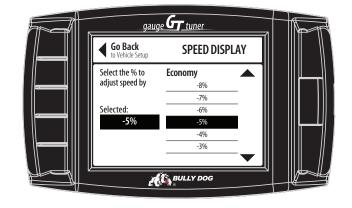
Use a GPS device or GPS APP to compare your actual speed and the speed displayed on the GT Gas. Calculate the Percent Difference by using the formula below:

Example: the GPS reads 65MPH and the GT Gas displays 62 MPH what is the percentage difference?			
STEP 1:	Calculate the difference in MPH (subtract one value form the other) ignore any negative sign	65 - 62 = 3	
STEP 2:	Calculate the average MPH (add the values, then divide by 2)	(65 + 62) = 127/2 = 63.5	
STEP 3:	Divide the difference by the average	3/63.5=.0472	
STEP 4:	Convert that to a percentage (by multiplying by 100 and adding a "%" sign)	0.47×100 = 4.7%	

Adjusting the Speed Display

Using the method described above to determine the exact percentage difference between the GT Gas and your actual speed you will need to 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 Gas was 5%, you should choose -5% (negative five percent).





Driving Coach Setup - Checking Average Fuel Economy

It is important to check the accuracy of the average economy readout on the GT Gas 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 Gas cannot sense or adjust for. That is why it is important to adjust the fuel economy of the GT Gas every once in a while.

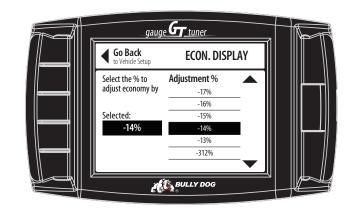
To adjust the Average Fuel Economy displayed by the GT Gas, follow these steps:

- 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 Gas.
 - The trip odometer on your vehicle.
- 3. Drive the vehicle for an entire tank (or two)
- 4.Calculate your vehicle's average fuel economy by hand using the following equation:

Manually (Calculate Average MPG	Divide the miles driven by the gallons needed to	top off the tank	
Example: Manually Calculated Average MPG is 24 & the GT Gas displays 21MPG what is the percentage difference?				
STEP 1:	Calculate the difference in	MPG (subtract one value form the other) ignore any negative sign	24 - 21 = 3	
STEP 2:	Calculate the average MPG (add the values, then divide by 2) (24 + 21) = 24/2 =			
STEP 3:	Divide the difference by the average		3/12=.25	
STEP 4:	Convert that to a percentage (by multiplying by 100 and adding a "%" sign)		0.25×100 = 2.5%	

Adjust the Average Fuel Economy

Go to the Main Menu and choose Vehicle Setup, then choose Adjust Economy Display. From there use the buttons on the right to move up and down the percentages. Finally choose the 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%.



GT GAS Part# 40417 ____

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

Select your vehicle weight. Access this option if you do not have a stock gross vehicle weight.

Select Pyro Source

Choose either factory installed or Bully Dog pyrometers.

(Only available on 2007.5 and newer vehicles that come equipped with a factory pyrometer)

Set Warning Levels

Set the temperature level at which the GT Gas 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 Gas.

GT Gas can monitor		
Pyrometer #1 Temperature level	Engine Coolant Temperature level	
Pyrometer #2 Temperature level	Transmission Temperature level	

Adjust Economy Display

Change the miles per gallon shown by the GT Gas. This setting should be changed if the GT Gas is showing incorrect fuel mileage.

Adjust Speed Display

Change the vehicle speed shown by the GT Gas. This setting should be changed if the GT Gas is showing an incorrect vehicle speed.



Special Functions

The same special functions are not available for all vehicles. These options cannot be adjusted on-the-fly. This means that they are set when you install the tune. The only way to change these settings is to start the Install Download process and choose Change Settings when you are prompted by the GT Gas.

Special Functions available on GM vehicles

Camshaft Variation Relearn

The crankshaft sensor on GMC vehicles is synced to the powertrain control module, or PCM. When the crank sensor is replaced, it must be resynced to the PCM. The Camshaft Variation relearn special function resets the positional information in the PCM's memory and replaces it with updated information from the new crankshaft sensor.

Reset Oil Life

Reset the engine oil life reminder light with this special feature on the GT Gas.

Reset Transmission Oil Life

Reset the transmission oil life reminder light with this special feature on the GT Gas.

Idle Learn Reset

Your vehicle's engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected, a new battery installed or a tune is loaded, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance.

Special Functions available on Ford/Lincoln vehicles

Daytime Running Lights

This adjusts the sensitivity of the daytime running lights.

TPMS

This adjusts the sensitivity of the lights.

Relearn Vehicle Data

This will light the headlight for a time after the doors are closed with the ignition switch turned ON and the light control switch is at HEAD or AUTO and the headlight is ON.

Smart Unlock Configuration

This function changes the time between when the doors are closed and the lights go off when the light control switch is at HEAD or AUTO, and the headlight is on.

Transmission Adapt. Learn (resume, stop, hold)

This function changes the time between when the doors are closed and the lights go off when the light control switch is at HEAD or AUTO, and the headlight is on.

Police Mode

This function changes the time between when the doors are closed and the lights go off when the light control switch is at HEAD or AUTO, and the headlight is on.

Special Functions

The same special functions are not available for all vehicles. These options cannot be adjusted on-the-fly. This means that they are set when you install the tune. The only way to change these settings is to start the Install Download process and choose Change Settings when you are prompted by the GT Gas.

Special Functions available on select Toyota vehicles

DISPLAY AND LIGHTING

Display Ex Off

This changes the brightness when canceling the lights for the indicator light of the combination meter, A/C indicator light and clock.

Display Ex On

This changes the brightness when dimming the indicator light of the combination meter, A/C indicator light & clock.

Foot Light

This sets the time the Outer Foot Light is on.

Interior Lighting

This will turn the interior light on when the ignition switch is turned from "ACC" to "LOCK". This will also turn on the interior light, ignition light and step light on when the door is unlocked by the door key cylinder.

Light Sensitivity

This adjusts the sensitivity of the lights .

Light Auto OFF

This will light the headlight for a time after the doors are closed with the ignition switch turned ON and the light control switch is at HEAD or AUTO and the headlight is ON.

Light Time On

This function changes the time between when the doors are closed and the lights go off when the light control switch is at HEAD or AUTO, and the headlight is on.

DOOR LOCK FUNCTIONS

Auto Lock

Doors on the vehicle lock automatically after the vehicle reaches a certain speed.

Wireless Auto Lock on Shift

This locks the door when the lever shifts out of the P range.

Auto Unlock on Shift

This unlocks the door when the lever is shifted into the P range with the ignition ON.

Unlock All Doors on Shift

This unlocks every door but the driver door when the driver door is opened after the ignition is switched off after a certain time.

KEY CYLINDER FUNCTIONS

Power Windows

This makes the driver window (and all windows, depending on vehicle grade) and sunroof close if the driver window control is held closed. If the driver door window control is held open, the driver's door window (and all the windows, depending on vehicle grade) and the sunroof will open.

Two Turns Open All Doors

This unlocks only the driver door when the key UNLOCK button is pushed twice. When this setting is switched OFF, the key UNLOCK button will unlock all the doors.

Sunroof Operation

This will open the sliding roof if the door switch is held to UNLOCK and the ignition switch is OFF. This will also close the sliding roof if the door switch is held to LOCK and the ignition switch is OFF.

Sunroof Action

This selects the opening direction of the sliding roof when holding the driver side door key unlocked for a certain time when the ignition switch is OFF.

KEY FOB FUNCTIONS

Wireless Control

This is used to turn the wireless door lock ON or OFF.

Horn Chirp on Lock

Turns the wireless buzzer response function ON or OFF.

Open Door Warning

If a door is open when vehicle is being locked by the wireless door lock, a buzzer will sound.

Panic Function

The "ON" setting will enable the Theft Deterrent System by pressing and holding the Panic Button. Use the Lock Button if the Panic Button is unavailable.

Wireless Auto Lock

Automatically locks doors after they are unlocked with the wireless key.

Wireless Auto Lock Time

This will change the amount of time from unlocking the door(s) with the wireless key to re-locking them automatically.

Optical Flash on Lock

This is used to turn ON or OFF the hazard answer back of the wireless door lock.



Special Functions (Select Jeep®, Dodge® & Chrysler® vehicles)

The same special functions are not available for all vehicles. These options cannot be adjusted on-the-fly. This means that they are set when you install the tune. The only way to change these settings is to start the Install Download process and choose Change Settings when you are prompted by the GT Gas.

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.

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 Gas 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.

Tire Pressure Limit – Tire Pressure Monitoring System (TPMS)

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

GT Gas 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 Gas is at the Main Screen.)

Headlight Delay

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

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.

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.

Auto Door Lock

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

Unlock Driver Door

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

Seatbelt Reminder

Use the GT Gas to turn off the seat belt reminder chime.

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. and 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.

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.

Tire Size

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

Axle Ratio

Correct the vehicle speedometer (and fuel efficiency calculations) if you have changed the gear ratio on your vehicle. If no gear ratio modification 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.

MDS (4-cylinder mode)

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

Transmission Shift Points

Change the RPMs at which an automatic transmission will change gears.

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.

Special Functions (for Hemi® engines only)

The same special functions are not available for all vehicles. These options cannot be adjusted on-the-fly. This means that they are set when you install the tune. The only way to change these settings is to start the Install Download process and choose Change Settings when you are prompted by the GT Gas.

Tire Pressure Limit

Change or disable Tire Pressure Monitoring System (TPMS).

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.

Headlight Delay

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

Daytime Lights

Disable or enable daytime running lights.

Fog Lights W/High

Run the fog lights and the high beams at the same time.

Optical Flash on Lock

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

Auto Door Lock

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

Unlock Driver Door

Disable this option to unlock all doors with one button press on a remote key less entry unit.

Delay Lock

Set the amount of time the vehicle will delay before locking the doors with a remote key less entry system when this option is enabled.

Horn Chirp Length

Set the length of the horn chirp when the lock button is pressed on a remote key less entry unit when this option is enabled.

Auto High Beams

Enable or disable the Auto High Beams vehicle feature.

Seatbelt Reminder

Use the GT Gas to turn off the seat belt reminder chime.

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.

Headlights with Wipers

Disable the "Headlights On With Wipers" vehicle feature.

Vehicle must be equipped with "Automatic Headlights"

Headlights on Unlock

Turn on the headlights by pressing the unlock button on a remote key less entry unit while this feature is enabled.

One Press to Unlock

Unlock all doors with a single button press (on a remote key less entry unit) when this option is enabled.

Reset Adaptives

Reset engine parameters that are calculated over time.

Headlight Approach Timer

Adjust the length of time the lights remain on when a vehicle is unlocked using the remote control unit.



Special Functions (for Hemi® engines only)

The same special functions are not available for all vehicles. These options cannot be adjusted on-the-fly. This means that they are set when you install the tune. The only way to change these settings is to start the Install Download process and choose Change Settings when you are prompted by the GT Gas.

Tire Pressure Limit

Change / disable Tire Pressure Monitoring System (TPMS).

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.

Headlight Delay

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Daytime Lights

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

Traction Control

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

Headlights with Wipers

Disable the "Headlights On With Wipers" vehicle feature.

Vehicle must be equipped with "Automatic Headlights"

Headlights on Unlock

Turn on the headlights by pressing the unlock button on a remote key less entry unit when enabled.

One Press to Unlock

Unlock all doors with a single button press (on a remote key less entry unit) when enabled.

Reset Adaptives

Reset engine parameters calculated over time.

Headlight Approach Timer

Adjust the length of time the lights remain on when a vehicle is unlocked using the remote control unit.

Diagnostics

This sub menu allows you to check vehicle Diagnostic Trouble Codes (DTCS). Upon entering this menu, the GT Gas will automatically begin to check the vehicle for DTCs and it will then display those DTCs on the Watchdog screen. Once it displays the DTCs value and description on the screen it will allow you to erase the DTCs from the vehicle.



Special Note: The vehicle key must at least be in the "ON," position, some vehicles may require that the engine is running.

If no DTCs are displayed you can simply press the Go Back button to return to the main menu. If DTCs do appear on the screen the GT Gas will provide a DTC code value and a description. At that point the DTCs can be written down and then cleared from the vehicle computer. To look up the DTC codes, the following website is very helpful: http://engine-codes.com.



Show Settings

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

Uninstall GT

This option will allow you to uninstall the tune from your vehicle and return it to stock settings.

Update GT Software

This option will update the software on the GT Gas itself from the files on the Micro SD card. This is an important final step to the update process.





UPDATING THE GT GAS

We strongly recommend that users select their vehicle (if exact vehicle is unavailable, then select a similar one) BEFORE updating with the Update Agent.

Why do I have to update the GT Gas

- 1. Vehicle manufacturers regularly change the part numbers and other information that the GT Gas needs to know in order to communicate effectively with your engine computer. If the GT Gas 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 Gas 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 Gas?

Yes, there is no way to know how long your particular GT Gas 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 Gas 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 **Software**.

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

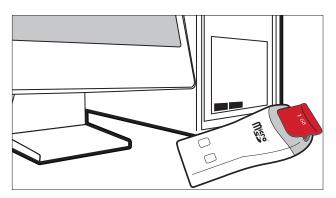
Start the Update Agent application and connect the Micro SD card to your computer using the card reader that came with your GT Gas. The Update Agent should automatically recognize the Bully Dog device, check the current software, and let you know if an update is available.

UPDATING THE GT GAS

Installing the Bully Dog Update Agent software- Windows® OS

ALL SOFTWARE INCLUDING THE UPDATE AGENT IS NOT MAC COMPATIBLE. A WINDOWS-BASED PC WILL BE REQUIRED.

- 1. Go to: bullydog.com and click on the "Support" tab at the top of the page.
- 2. Locate and click the "Software" option and then click on "Light Duty Update Agent, Device Updater, and Livelink Downloads". You will see "Bully Dog Update Agent (Updater for GT devices)". Click to begin downloading and installing on your computer.
- 3. Wait for the program to download, then double click and "Run" the BullyDogDeviceUpdater.exe file if it does not open automatically.
- 4. Follow the on-screen instructions to complete the installation of the software.



Connecting the micro SD card

- 1. The SD card is located in a paper envelope, which is located in an envelope inside the product packaging.
- 2. Insert the memory card into the included card reader.
- 3. Insert the card reader with memory card to a USB port on the computer.

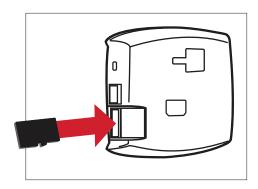
If the computer does not read the SD card, try a different USB port. If that does not work, retry this step with the SD card plugged into the GT Gas that is referred to in the next step.

Installing the memory card in the GT Gas.

- 1. Remove the card reader from the computer.
- 2. Remove the memory card from the card reader and insert the memory card into the GT.

Connecting the GT Gas to computer

- 1. Connect the GT Gas to the computer with the included USB cable.
- 2. Press the second button from the top on the left side of the GT.
- 3. The GT may display "Initializing Communication" on the Main Screen. This normal and will not change while the GT is connected to the computer; there no need to wait for the message to disappear to complete the update.

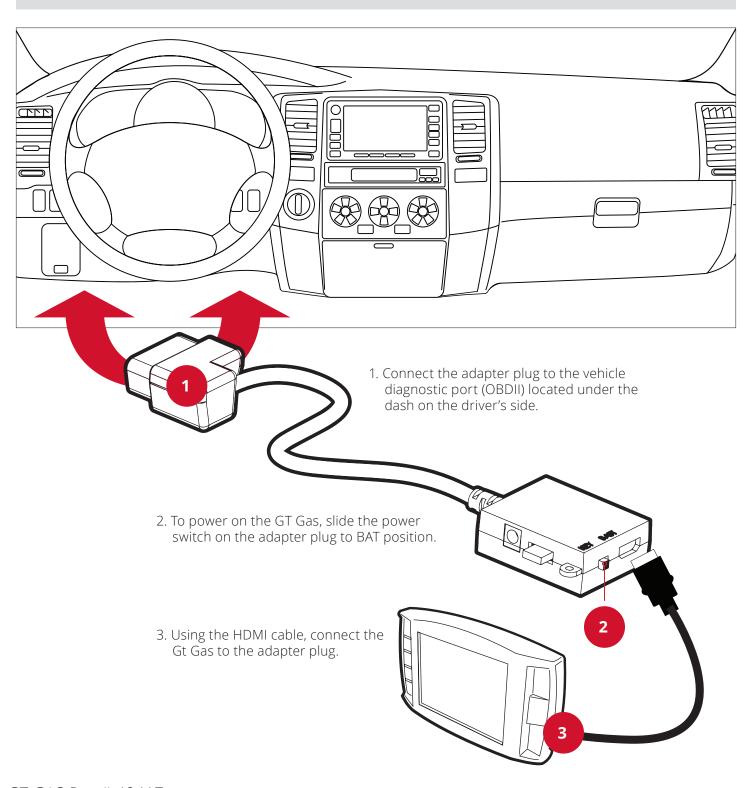




PHYSICAL INSTALLATION

Quick Installation

Complete physical installation is not required to install the tune to your vehicle. To use features like automatic (ignition-controlled) power on/off and the Driving Coach, complete installation is recommended.



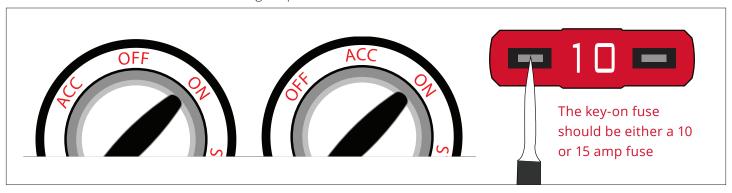
GT GAS Part# 40417 _____

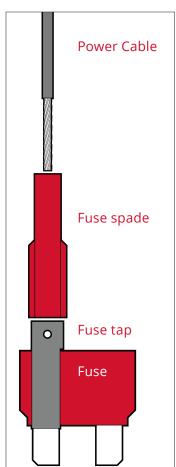
PHYSICAL INSTALLATION

Complete Installation – key-on fuse.

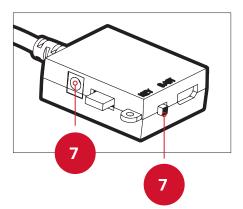
Steps below will enable the vehicle key position to control the power state (on/off) of the GT; if you do not want the GT to automatically power on and off according to the key position, skip these steps.

- 1. Use a 12 volt test light or your vehicle owner's manual to locate the fuse. Note, the fuse only has power when the key is in the "on" (or "run") position.
- 2. Remove the fuse and locate the un-powered (accessory) side of the fuse socket.
- 3. With the key on the "run" (or "on") position, insert the probe of a 12 volt test light into each side of the fuse socket. Mark the side that does not light up.





- 4. Connect the power cable to the fuse box.
- 5. Crimp the fuse spade onto the power wire and slide the fuse tap over one metal prong of the fuse.
- 6. Slide the fuse spade over the fuse tap and then put the tapped fuse back in the fuse box; make sure that the tapped side of the fuse is placed in the un-powered (accessory) side of the fuse socket. The black ground wire inside the power cable is not required.



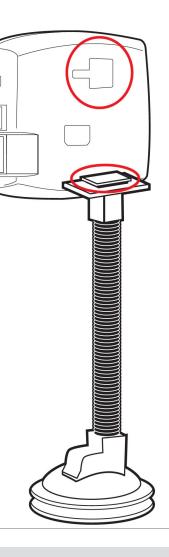
- 7. Connect the power cable to the adapter plug and then slide switch to KEY.
- 8. Run the HDMI cable under the dash or weather stripping. This is discreet, stylish and will help protect the GT.



PHYSICAL INSTALLATION

Mounting the GT

- 1. After cleaning and drying the windshield, select a safe place to mount the GT. Be sure not to obstruct the driver's view when choosing the location.
- 2. Stretch out the HDMI cable to make sure reach the GT with a small amount of slack.
- 3. Use the T-slot on the back of the GT to attach it to the Universal Windshield Mount (UWM).
- 5. Position the UWM suction cup on the windshield and press the lever on the base of the mount towards the windshield to secure it in place.



Additional Mounting Options



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

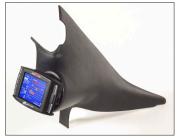
RAM Mirror-Mate part #: 31600 and 33600

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



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 Gas to multiple surface materials in any vehicle – which means that you can try different places and find the best place for your GT Gas to be at any time.



Pillar Mount Gauge Pods

Bully Dog also offers gauge pods, which will allow you to mount the GT Gas 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.

GT GAS Part# 40417

TUNING VFHICLE

PREPARING FOR TUNING INSTALLATION

In order to enjoy additional power 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.

CAUTION! THIS OPTION ACTIVELY REPROGRAMS THE ENGINE COMPUTER IN YOUR VEHICLE

- IF THE PROCESS IS INTERRUPTED YOU MAY HAVE PROBLEMS WHICH COULD PREVENT
YOU FROM USING THE GT GAS OR EVEN BEING ABLE TO DRIVE YOUR VEHICLE FOR A FEW
DAYS. IN ORDER TO HAVE THE BEST INSTALLATION EXPERIENCE POSSIBLE, REVIEW THE
INSTRUCTIONS AND PAY CLOSE ATTENTION TO THE PREPARATION STEPS LISTED BELOW.

Toyota® vehicle requires slightly different preparation steps, skip to that section for those steps

✓ Internet Access

During installation process, you will need to connect the GT to the Internet using a home computer or laptop with a Windows® operating system.

✓ Update the GT Gas

Use the Update Agent to update the GT. See page 21 for those steps

✓ Allow time for initial setup

Make sure you allow up to one hour to complete the tuning installation process.

Check fuses (GM Vehicles Only)

Check the included Check Fuse Card that was included in the GT Gas packaging and remove the appropriate fuses before installing the tune. (Replace the fuses after the download is complete.)

Check your battery

Before installation, ALWAYS ensure that the batteries are fully charged. If you are not sure, connect a battery charger before you begin installing the tune.

✓ Turn electronics OFF

Leaving electronics on may prevent a successful download. Electronics include: headlights, heater, air conditioning, stereo, DVD players, or anything plugged into electrical outlets in the vehicle. Also be sure to disconnect any aftermarket electronic device such as Trailer brakes, stereo, alarm, CB, remote start, Sirius/XM satellite radio, etc.

Make sure tune is intact

Go to the Main Menu on the GT Gas and choose the Show Settings option and check what is showing next to Download

If the GT Gas shows Installed connect the GT Gas to the original vehicle and uninstall the tune. If this cannot be done, contact technical support for a reset – there may be a fee for this service.

If the GT Gas shows "Not Installed" you can continue with your preparations to install the download to your vehicle. If the GT Gas shows "Recovery", contact technical support for further assistance.

IMPORTANT NOTE: It is not recommended to use the GT Gas with any other electronic tuner designed to increase horsepower.



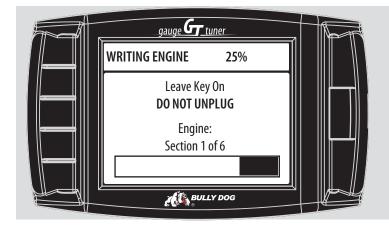
TUNING VFHICLE

INSTALLING THE TUNE - GENERAL INSTRUCTIONS

Toyota®, Jeep® and Hemi® engine vehicles requires slightly different Preparation Steps, continue to the appropriate section to find these preparation steps.

- 1. Turn the key to the "on" (or "run") position. **DO NOT START THE ENGINE.**
- 2. Go to the Main Menu (top left button).
- 3. Choose Install Download.
- 4. Follow the instructions on the GT screen.
- 5. You will be prompted to turn your key to the "off" or "on" position and then press Continue.
- 6. Do NOT start the engine when turning the key to the "run" (or "on") position at any time during the download. You may be prompted to make choices about vehicle-specific settings such as the speed limiter.
- 7. The GT Gas will indicate when it is finished and then reboot to the Main Gauge Display
- 8. After installation, replace any fuses that you may have removed.





IMPORTANT NOTE: There are certain times when disconnecting or interrupting power to the GT Gas 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 is an example of one of the times during the installation when it is vital that the power is not disturbed.

TUNING VEHICLE

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 Gas.
- 3. Make sure that you have disconnected all aftermarket electronics and completed all of the important preparation steps.
- 4. Try to install the download again.
- 5. If the error occurs again, contact technical support.

This troubleshooting procedure applies to all errors, including the following code#s: 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 Gas.
- 5. Update the GT Gas if this has not already been done.
- 6. Reconnect the GT Gas.
- 7. Make sure that all aftermarket electronics are disconnected from the vehicle.
- 8. Pull fuses if necessary for your vehicle.
- 9. Try to install the download again.
- 10. If the error occurs again, contact technical support.

GT GAS FREEZES IN THE MIDDLE OF THE DOWNLOAD.



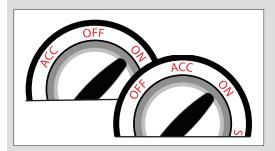
Try connecting a battery charger to maintain voltage. (This step can solve many problems, even if your battery is new and fully charged).



TUNING INSTALLATION

PREPARING FOR TUNING INSTALLATION - TOYOTA VEHICLES ONLY -

KEY CYCLES DISCLAIMER



In all Toyota applications, it is very important that you do not turn the key off and on unless requested by the GT Gas. A key cycle is when you turn the key to the off position, and back to the run position. If at any point the GT stops, read all the information on the screen to see if it is safe to cycle the key. If the screen does not say to cycle the key, do not cycle the key, try to start the truck, or turn the key to the off position until you have called tech support.

✓ Internet Access

During installation process, you will need to connect the GT to the Internet using a home computer or laptop with a Windows® operating system.

✓ Update the GT Gas

Use the Update Agent to update the GT. See page 21 for those steps

✓ Allow time for initial setup

Make sure you allow up to one hour to complete the tuning installation process.

Check fuses (GM Vehicles Only)

Check the included Check Fuse Card that was included in the GT Gas packaging and remove the appropriate fuses before installing the tune. (Replace the fuses after the download is complete.)

Turn electronics OFF

Leaving electronics on may prevent a successful download. Electronics include: headlights, heater, air conditioning, stereo, DVD players, or anything plugged into electrical outlets in the vehicle. Also be sure to disconnect any aftermarket electronic device such as Trailer brakes, stereo, alarm, CB, remote start, Sirius/XM satellite radio, etc.

✓ Make sure tune is intact

Go to the Main Menu on the GT Gas and choose the Show Settings option and check what is showing next to Download

If the GT Gas shows Installed connect the GT Gas to the original vehicle and uninstall the tune. If this cannot be done, contact technical support for a reset – there may be a fee for this service.

If the GT Gas shows "Not Installed" you can continue with your preparations to install the download to your vehicle. If the GT Gas shows "Recovery", contact technical support for further assistance.

<u>Check your battery</u>



Before installation, connect a charger to your battery and leave connected until the tuning process has been completed.

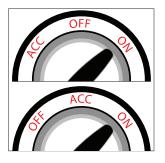
TUNING VEHICLE

INSTALLING THE TUNE - TOYOTA VEHICLES ONLY -

Toyota®, vehicles requires slightly different Tuning steps that are listed below.

1. Turn the key to the "on" (or "run") position.

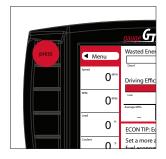
Do NOT start the engine.



5. Read the disclaimer by holding the lower right button.



2. Go to the Main Menu (top left button).



6. Press AGREE by pressing the lower left button.



3. Choose Install Download.



7. Read the download requirements, press MORE and press CONTINUE.



4. Verify the vehicle type and press YES (top right button).



8. Read the entire Key Cycle disclaimer, pressing MORE to scroll and pressing CONTINUE to accept.





TUNING VEHICLE

INSTALLING THE TUNE - TOYOTA VEHICLES ONLY -

Toyota®, vehicles requires slightly different Tuning steps that are listed below.

9. Read the battery charger screen, press MORE and press CONNECTED when the charger is connected.



13. Read the Tune Selection screen and press CONTINUE.



10. Ensure key is in the RUN or ON position and press CONTINUE.



14. Select tune you want then press enter



Check battery; if voltage is less than 12V, installation can't continue until it's +12.1V

11. Once data is retrieved, turn the key to OFF and press CONTINUE.



Certain vehicles will now ask you to select your Shift Points



12. If the tuning screen below appears, skip to 23. Otherwise continue to 13.



Certain vehicles will now ask you to select your Speed Limit



TUNING VFHICLE

INSTALLING THE TUNE - TOYOTA VEHICLES ONLY -

Toyota®, vehicles requires slightly different Tuning steps that are listed below.

15. Once the Tune has been set up. Up to 3 tunes may be configured. The tunes are labeled in the order that they were created, "A", "B", and "C". Power levels for these tunes can be duplicated.



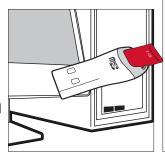
If setting up additional tunes, select YES from the screen above and go back to 14. Otherwise, proceed to the next step.

16. The code (550) at right will display when vehicle data has been successfully retrieved and the GT Gas needs to be connected to the Update Agent.

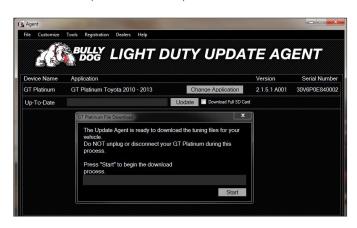


UNPLUG YOUR GT GAS. THE NEXT STEPS
MUST BE COMPLETED **OUTSIDE** THE
VEHICLE ON A COMPUTER WITH
INTERNET ACCESS.

- 17. Open the Bully Dog Update Agent that you previously installed on page 22.
- 18. Remove the SD card from the GT Gas, insert the card into its reader and then insert it all into your PC.



19. Retrieve the tuning files by clicking "START". The Update Agent will display a progress bar. Click OK when the process is complete.



20. Remove the SD card reader from the PC and then remove the SD card from card reader. Finally, insert the card back into the GT Gas.

THE NEXT STEPS MUST BE COMPLETED INSIDE THE VEHICLE.

21. Reconnect the HDMI cable to GT Gas and go Back to STEP 12.



22. Read Tune Selection explanation, tap MORE and press CONTINUE.



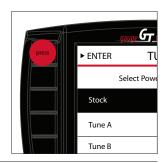


TUNING VFHICLE

INSTALLING THE TUNE - TOYOTA VEHICLES ONLY -

Toyota®, vehicles requires slightly different Tuning steps that are listed below.

23. Select the tune you would like to install and press ENTER.



- 24. The tune chosen will display its selected parameters. If they appear correct, then select YES
- Is The Following s Selected el: Premium ter: Unlimited the Tune Like to Install?

25. Ensure key is in the RUN position and press CONTINUE.





26. Check battery and connect charger if needed. If output is ≤12V, install will not continue until at least 12.1V is available.



- 27. Once at least 12.1V is available, the download will begin. Please wait without turning the key, even if you suspect there is a problem. If you need assistance, call technical support.
- 28. The download is complete. Cycle the key to OFF and press CONTINUE. Drive your vehicle for at least 10 minutes, starting and stopping regularly to allow time for your vehicle to adjust.



TROUBLESHOOTING PROBLEMS

- TOYOTA VEHICLES ONLY -

ERROR DURING INSTALLATION

- 1. DO NOT TOUCH THE KEY UNLESS DISPLAY SCREEN SAYS TO.
- 2. Make note of the code number and all information displayed on the screen.
- 3. Disconnect and update your GT Gas.
- 4. Try to install the download again.
- 5. If the error occurs again, contact tech support.

KEY CYCLES DISCLAIMER

In all Toyota applications, it is very important that you do not turn the key off and on unless requested by the GT Gas. A key cycle is when you turn the key to the off position, and back to the run position. If at any point the GT stops, read all the information on the screen to see if it is safe to cycle the key. If the screen does not say to cycle the key, do not cycle the key, try to start the truck, or turn the key to the off position until you have called tech support.

GT GAS Part# 40417

VFHICIF

PREPARING FOR TUNING INSTALLATION - HEMI ENGINES ONLY -

In order to enjoy additional power 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.

CAUTION! THIS OPTION ACTIVELY REPROGRAMS THE ENGINE COMPUTER IN YOUR VEHICLE

- IF THE PROCESS IS INTERRUPTED YOU MAY HAVE PROBLEMS WHICH COULD PREVENT
YOU FROM USING THE GT GAS OR EVEN BEING ABLE TO DRIVE YOUR VEHICLE FOR A FEW
DAYS. IN ORDER TO HAVE THE BEST INSTALLATION EXPERIENCE POSSIBLE, REVIEW THE
INSTRUCTIONS AND PAY CLOSE ATTENTION TO THE PREPARATION STEPS LISTED BELOW.

✓ Internet Access

During installation process, you will need to connect the GT to the Internet using a home computer or laptop with a Windows® operating system.

✓ Update the GT Gas

Use the Update Agent to update the GT. See page 21 for those steps

✓ Allow time for initial setup

Make sure you allow up to one hour to complete the tuning installation process.

Check fuses (GM Vehicles Only)

Check the included Check Fuse Card that was included in the GT Gas packaging and remove the appropriate fuses before installing the tune. (Replace the fuses after the download is complete.)

Check your battery

Before installation, ALWAYS ensure that the batteries are fully charged. If you are not sure, connect a battery charger before you begin installing the tune.

✓ Turn electronics OFF

Leaving electronics on may prevent a successful download. Electronics include: headlights, heater, air conditioning, stereo, DVD players, or anything plugged into electrical outlets in the vehicle. Also be sure to disconnect any aftermarket electronic device such as Trailer brakes, stereo, alarm, CB, remote start, Sirius/XM satellite radio, etc.

✓ Make sure tune is intact

Go to the Main Menu on the GT Gas and choose the Show Settings option and check what is showing next to Download

If the GT Gas shows Installed connect the GT Gas to the original vehicle and uninstall the tune. If this cannot be done, contact technical support for a reset – there may be a fee for this service.

If the GT Gas shows "Not Installed" you can continue with your preparations to install the download to your vehicle. If the GT Gas shows "Recovery", contact technical support for further assistance.

IMPORTANT NOTE: It is not recommended to use the GT Gas with any other electronic tuner designed to increase horsepower.



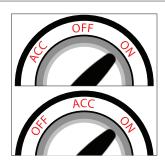
TUNING VEHICLE

INSTALLING THE TUNE - HEMI ENGINES ONLY -

Hemi® engines require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Hemi installation.

1. Turn the key to the "on" (or "run") position.

DON'T START ENGINE.



5. Read the disclaimer by holding the lower right button.



2. Go to the Main Menu.



6. Press AGREE.

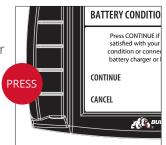


3. Choose Install Download.



7. Read the battery disclaimer and press "CONTINUE".
The GT will now update.

DON'T UNPLUG THE GT!



4. Verify the vehicle type and press YES.



8. Once updated the GT will prompt you to turn the key to the RUN position and press continue.

DON'T START ENGINE.



INSTALLING THE TUNE - HEMI ENGINES ONLY -

Hemi® engines require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Hemi installation.

9. When you see **Code 262**; proceed to the next step. If the GT Gas does not display code 262, skip to Step 13 on the *next page* for *Download Functions* installation.



12. 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.



- 10. Open the Bully Dog Update Agent on your PC.
- 11. Remove the SD card from the GT Gas, insert the card into its reader and then insert it all into your PC.



Return back to step 1 to begin the process again.



INSTALLING THE TUNE - HEMI ENGINES ONLY -

Hemi[®] engines require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Hemi installation.

13. The GT Gas will prompt you to select settings for the "Download Functions". Be aware that some functions are not available for every vehicle.

POWER LEVELS

Choose the option that matches the octane of fuel in the gas tank.

Premium: 91+ octane; up to 35 lbs. additional peak horsepower and 40 additional peak torque

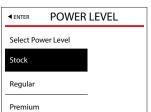
Regular: 85+ octane; 15-20 additional peak horsepower and 15-20 additional peak torque

Stock: Original factory

horsepower settings. (This option

enables the GT Gas Special Functions without changing

engine performance.)



MDS (SELECT VEHICLES)

Enable or disable MDS (4-cylinder mode multi-displacement.)

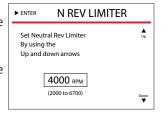


REV LIMITER

Limit how fast (in RPMs) the engine will run.

D REV LIMITER (Drive): Set the maximum engine speed while the vehicle is in gear.

N REV LIMITER (Neutral): Set the maximum engine speed while the vehicle is in Park or Neutral.



TIRE SIZE

Set the tire size; correct the vehicle speedometer if you have changed your tire size from stock.

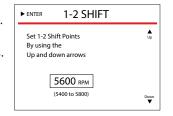


SHIFT POINTS (SELECT VEHICLES)

Change the RPMs at which automatic transmission will change gears.

1-2 SHIFT: Set the shift point between first and second gears. **2-3 SHIFT:** Set the shift point

2-3 SHIFT: Set the shift point between second and third gears.



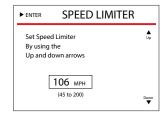
AXLE RATIO

Set the axle ratio; correct the vehicle speedometer if you have changed the gear ratio from stock.



SPEED LIMITER

Change your vehicle's top speed.



Continue the installation on the next page

INSTALLING THE TUNE - HEMI ENGINES ONLY -

Hemi® engines require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Hemi installation.

14. The GT Gas will build the tuning file.



17. Turn the key to "off" and press Continue. The GT Gas will display countdown timers. Follow instructions on the screen.



15. The GT Gas will download the tuning file.

DO NOT DISCONNECT OR INTERRUPT THE GT GAS.



18. The GT Gas will complete the download. Press Continue and wait for the GT Gas to reboot.



16. The GT Gas will prompt you to turn the key to the OFF position.

DO NOT DISCONNECT OR INTERRUPT THE GT GAS.



THIS FINALIZES THE TUNING INSTALL



TROUBLESHOOTING INSTALLATION PROBLEMS- HEMI ENGINES ONLY -

ERROR DURING INSTALLATION

- 1. Make note of the code number and all information displayed on the screen.
- 2. Disconnect and update your GT Gas.
- 3. Make sure that you have disconnected all aftermarket electronics and completed all of the important preparation steps.
- 4. Try to install the download again.
- 5. If the error occurs again, contact 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 Gas.
- 5. Update the GT Gas if this has not already been done.
- 6. Reconnect the GT Gas.
- 7. Make sure that all aftermarket electronics are disconnected from the vehicle.
- 8. Pull fuses if necessary for your vehicle.
- 9. Try installing a battery charger to maintain voltage. (This step can solve many problems, even if your battery is new and fully charged).
- 10. Try to install the download again.
- 11. If the error occurs again, contact technical support.

GT GAS FREEZES IN THE MIDDLE OF THE DOWNLOAD.



Try connecting a battery charger to maintain voltage. (This step can solve many problems, even if your battery is new and fully charged).

PREPARING FOR TUNING INSTALLATION - JEEP VEHICLES ONLY -

In order to enjoy additional power 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.

CAUTION! THIS OPTION ACTIVELY REPROGRAMS THE ENGINE COMPUTER IN YOUR VEHICLE

- IF THE PROCESS IS INTERRUPTED YOU MAY HAVE PROBLEMS WHICH COULD PREVENT
YOU FROM USING THE GT GAS OR EVEN BEING ABLE TO DRIVE YOUR VEHICLE FOR A FEW
DAYS. IN ORDER TO HAVE THE BEST INSTALLATION EXPERIENCE POSSIBLE, REVIEW THE
INSTRUCTIONS AND PAY CLOSE ATTENTION TO THE PREPARATION STEPS LISTED BELOW.

✓ Internet Access

During installation process, you will need to connect the GT to the Internet using a home computer or laptop with a Windows® operating system.

✓ Update the GT Gas

Use the Update Agent to update the GT. See page 21 for those steps

✓ Allow time for initial setup

Make sure you allow up to one hour to complete the tuning installation process.

✓ Check fuses (GM Vehicles Only)

Check the included Check Fuse Card that was included in the GT Gas packaging and remove the appropriate fuses before installing the tune. (Replace the fuses after the download is complete.)

Check your battery

Before installation, ALWAYS ensure that the batteries are fully charged. If you are not sure, connect a battery charger before you begin installing the tune.

✓ Turn electronics OFF

Leaving electronics on may prevent a successful download. Electronics include: headlights, heater, air conditioning, stereo, DVD players, or anything plugged into electrical outlets in the vehicle. Also be sure to disconnect any aftermarket electronic device such as Trailer brakes, stereo, alarm, CB, remote start, Sirius/XM satellite radio, etc.

✓ Make sure tune is intact

Go to the Main Menu on the GT Gas and choose the Show Settings option and check what is showing next to Download

If the GT Gas shows Installed connect the GT Gas to the original vehicle and uninstall the tune. If this cannot be done, contact technical support for a reset – there may be a fee for this service.

If the GT Gas shows "Not Installed" you can continue with your preparations to install the download to your vehicle. If the GT Gas shows "Recovery", contact technical support for further assistance.

IMPORTANT NOTE: It is not recommended to use the GT Gas with any other electronic tuner designed to increase horsepower.

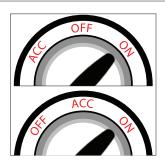


INSTALLING THE TUNE - JEEP VEHICLES ONLY -

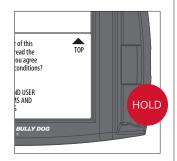
Jeep vehicles require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Jeep installation.

1. Turn the key to the "on" (or "run") position.

DON'T START ENGINE



5. Read the disclaimer by holding the lower right button.



2. Go to the Main Menu.



6. Press AGREE.

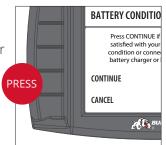


3. Choose Install Download.



7. Read the battery disclaimer and press "CONTINUE". The GT will now update.

DON'T UNPLUG THE GT!



4. Verify the vehicle type and press YES (top right button).



8. Once updated the GT will prompt you to turn the key to the RUN position and press continue.

DON'T START ENGINE



Continue the installation on the next page

INSTALLING THE TUNE - JEEP VEHICLES ONLY -

Jeep vehicles require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Jeep installation.

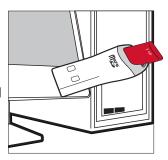
9. When you see **Code 262**; proceed to the next step. If the GT Gas does not display code 262, skip to Step 13 on the *next page* for *Download Functions* installation.



14. Read the disclaimer and press AGREE.



- 10. Open the Bully Dog Update Agent on your PC.
- 11. Remove the SD card from the GT Gas, insert the card into its reader and then insert it all into your PC.



15. Read the battery disclaimer and press CONTINUE.



12. 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.



16. The GT Gas will begin the initial download. This will take several minutes.
DO NOT INTERRUPT THE GT GAS. Follow the onscreen instructions.



13. Choose Install Download from the Main Menu.



17. Once the GT Gas has completed the initial download, skip to step 18.





INSTALLING THE TUNE - JEEP VEHICLES ONLY -

Jeep vehicles require slightly different installation steps than other vehicle applications, the following are the steps you need to follow for Jeep installation.

18. The GT Gas will prompt you to select settings for the "Download Functions". Be aware that some functions are not available for every vehicle.

POWER LEVELS

Choose the option that matches the octane of fuel in the gas tank.

■ FNTER

Stock

Regular

Premium

Select Power Level

Premium: 91+ octane; up to 35 lbs. additional peak horsepower and 40 additional peak torque

Regular: 85+ octane; 15-20 additional peak horsepower and 15-20 additional peak torque

Stock: Original factory

horsepower settings. (This option

enables the GT Gas Special Functions without changing

engine performance.)

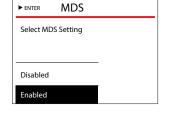
Enable or disable MDS

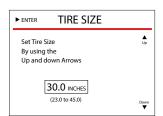
(4-cylinder mode multidisplacement.)

MDS (SELECT VEHICLES)

TIRE SIZE

Set the tire size; correct the vehicle speedometer if you have changed your tire size from stock.



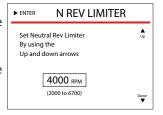


REV LIMITER

Limit how fast (in RPMs) the engine will run.

D REV LIMITER (Drive): Set the maximum engine speed while the vehicle is in gear.

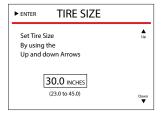
N REV LIMITER (Neutral): Set the maximum engine speed while the vehicle is in Park or Neutral.



POWER LEVEL

AXLE RATIO

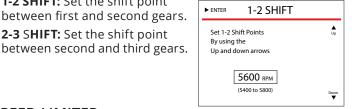
Set the axle ratio: correct the vehicle speedometer if you have changed the gear ratio from stock.



WOT SHIFT POINTS (SELECT VEHICLES)

Change the RPMs at which automatic transmission will change gears.

1-2 SHIFT: Set the shift point between first and second gears. 2-3 SHIFT: Set the shift point



download the tuning file. DO NOT INTERRUPT THE GT GAS.

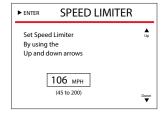
19. The GT Gas will The GT Gas will build and

When the GT Gas has finished installing the tuning file, the download is complete!

Slide the switch on the adapter plug to "KEY"

SPEED LIMITER

Change your vehicle's top speed.



GT GAS Part# 40417

TROUBLESHOOTING INSTALLATION PROBLEMS - JEEP VEHICLES ONLY -

ERROR DURING INSTALLATION

- 1. Make note of the code number and all information displayed on the screen.
- 2. Disconnect and update your GT Gas.
- 3. Make sure that you have disconnected all aftermarket electronics and completed all of the important preparation steps.
- 4. Try to install the download again.
- 5. If the error occurs again, contact 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 Gas.
- 5. Update the GT Gas if this has not already been done.
- 6. Reconnect the GT Gas.
- 7. Make sure that all aftermarket electronics are disconnected from the vehicle.
- 8. Pull fuses if necessary for your vehicle.
- 9. Try to install the download again.
- 10. If the error occurs again, contact technical support.

GT GAS FREEZES IN THE MIDDLE OF THE DOWNLOAD.



Try connecting a battery charger to maintain voltage. (This step can solve many problems, even if your battery is new and fully charged).



UNINSTALLING THE TUNE-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 Gas. Doing this also sends a signal to the GT Gas 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 Gas 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:

✓ Taking a vehicle in for service

It is a very common practice for the engine computer to be "flashed" (reprogrammed) during all types of service, even routine maintenance. If the tune from the GT Gas is still installed when the engine computer is flashed, it can cause problems when you want to use your GT Gas in the future.

✓Installing the GT on a different vehicle

In order to install the GT Gas on a different vehicle you will need to return the vehicle to stock. The GT Gas can only be used on one vehicle at a time.

✓ Battery removal or low battery issues

If you need to disconnect the battery for any reason or 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 Gas while it is returning your vehicle to stock.

IMPORTANT NOTE: If you do not return your vehicle to stock, you may have to call in to technical support to have your GT Gas reset. There may be a fee for this service.

Methods

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.

Method #1 Uninstall Download

- 1. Choose the Uninstall Download option from the Main Menu and follow the instructions shown on the GT Gas.
- 3. When the GT Gas 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 and make sure that it starts. If not, check the troubleshooting FAQ.

If this option is not listed on the Main Menu, use the next method below.

Method #2 Install Download > Return to Stock

- 1. Choose the Install Download option from the Main Menu and follow the instructions shown on-screen.
- 3. Choose "Return to Stock" when the GT Gas gives you the option between "Change Settings" or "Return to Stock".
- 4. Follow the instructions shown on the GT Gas screen.
- 5. Check to make sure the tune has been removed from your vehicle and test your vehicle to make sure that it starts. If not, check the troubleshooting FAQ.

UNINSTALLING THE TUNE-RETURNING TO STOCK

HOW DO I KNOW IF THE GT GAS 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.

Show Settings Screen

- 1. Go to the Main Menu.
- 2. Scroll down.
- 3. Choose Show Settings.
- 4. Check to see what the GT Gas 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.



MORE INFORMATION

CHANGING POWER LEVELS

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:

Make the same preparations and take the same precautions as when you initially installed the tune.

- 1. With the GT Gas powered on choose Install Download from the Main Menu screen.
- 2. Follow the on-screen instructions.
- 3. Choose Change Vehicle Settings when you are prompted to choose between that option and "Return to Stock".
- 4. Continue following the on-screen instructions until the GT indicates that the process is complete.

PYROMETER CALIBRATION

Pyro calibration is a way to find the best temperature to use for the GT Gas temperature warning setting for your vehicle. This will help you prevent heat damage to your engine.

- 1. Return your truck to stock by uninstalling the tune. See pages 45 for more information.
- 2. Find a steep hill with a long road and a high speed limit.
- 3. Wait for a hot day.
- 4. Set up a heavy load on your vehicle.
- 5. Haul the load to the top of the hill.
- 6. Check the pyrometer temperature.
- 7. Add 150°F.
- 8. Change the temperature warning setting under Main Menu > Vehicle Setup > Set Warning Levels.

MORE INFORMATION

FREQUENTLY ASKED QUESTIONS

MY GT GAS 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 Gas turn off?
- A. The power switch on the OBDII adapter plug is in the "wrong" position. If you want the GT Gas 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 <?> 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 Gas encountered a problem when it was writing to the engine computer. Follow these steps to resolve the problem:
 - 1. Return the vehicle to stock. Test to see if the engine starts.
 - 2. Update the GT Gas.
 - 3. Install the download again. Test to see if the engine starts.
 - 4. Contact technical support if the problem persists. See page <?> 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 <?>.
 - 2. Go to the Main Menu on the GT Gas.
 - 3. Scroll down and choose the Show Settings Option.
 - 4. Check what the GT Gas is showing next to Download.
 - Recovery: go to the next step.
 - Installed or Not Installed: Contact technical support.
 - 5. Go back to the Main Menu and Choose the Install Download option
 - 6. Confirm that you want to complete the Recovery.
 - 7. Follow the on-screen instructions.
 - 8. Once the recovery is complete, try to start your vehicle.
 - 9. If your vehicle still will not start, contact technical support for more information.

Note: If the Recovery process completes successfully, your vehicle is returned to stock no further action is required. 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).



MORE INFORMATION

FREQUENTLY ASKED QUESTIONS

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, you may need to update or your vehicle 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. 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.

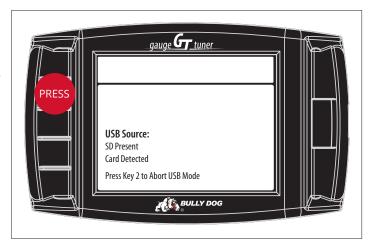
I DON'T FEEL EXTRA POWER

- Q. Why can't I feel the extra horse power?
- 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. Also, if your vehicle has recently been serviced, you might have forgotten to return the vehicle to stock. Also, be sure to check to see if your vehicle was returned to stock.

USB MODE

When you connect your GT Gas to your computer via a USB cable, it enters USB Mode. In order to use the Update Agent, keep the GT Gas in USB Mode.

If you want to use your computer to power the GT Gas and allow you to access some of the GT Gas'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.



IMPORTANT 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 GAS WARRANTY

A new GT Gas 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. For pricing information and assistance in having a damaged GT Gas unit repaired, contact technical support.

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

TECHNICAL SUPPORT HOURS

Monday - Friday

10:30 AM - 6:00 PM EST

* Customer service will be closed from 12:15pm EST to 2:30pm EST on the second Thursday of every month.

Saturday - Sunday (Emergency Support Email only) 10:00 AM - 04:00 PM EST

Emergency Weekend Support: urgentsupport@bullydog.com 407-774-24471 / 866-637-1672



