



BULLY DOG

HEAVY DUTY GT

Part# 46500



PHYSICAL INSTALLATION

REMEMBER TO UPDATE!

Always update the Gauge Tuner before installing on a vehicle using our Update Agent internet update software. Visit: http://www.bullydog.com/domains/update_agent/HDagent/setup.exe to download the Update Agent and get installation instructions for the Update Agent. The diagram below shows just how easy it is to update any of our electronic products.

3.

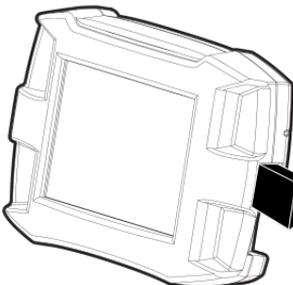
Use the Update Agent to update the Gauge Tuner software before installation on any vehicle. This will ensure that the Gauge Tuner has the latest programming available from Bully Dog.



2.

Plug the USB cable into a PC that has the Bully Dog Internet Update software: The Update Agent.

1.



Plug in the Gauge Tuner to the USB Cable. SD card must be installed in the Gauge Tuner.

INTRODUCTION

Physically installing the Gauge Tuner is a simple and strait forward process, we have created custom plugs and a great mounting solution to make sure your experience is strait forward.

The installation doesn't require any additional tools that what is in the package, but should you choose to run the cable harness behind or underneath some of the vehicle trim then that trim may need to be removed using the proper tools.

Technical assistance is available during normal business hours 8 am - 5 pm Mountain time by calling our direct technical support line: 940-783-9915.

To get our operation instructions or update instructions, visit the product page for the Gauge Tuner and download the pdf. <http://bigrig.bullydog.com/product.php?ID=27>

The Gauge Tuner works on Heavy Duty Semi Truck applications. For the latest application information go to: http://bigrig.bullydog.com/HDGT_QR.php or scan the QR code below with your smart phone.



PHYSICAL INSTALLATION

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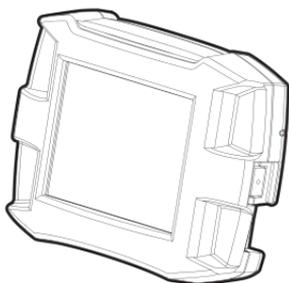
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SECTION 1: Parts Included

The list below includes the major parts included in your Heavy Duty Gauge Tuner package.

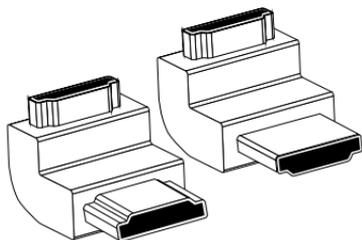
THE GAUGE TUNER HEAD UNIT



MAIN WIRE HARNESS



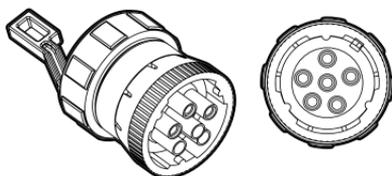
RIGHT ANGLE HDMI ADAPTERS



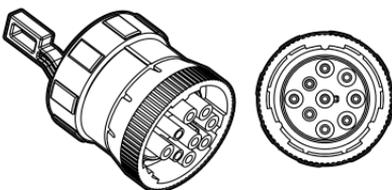
MICRO SD CARD



6 PIN DATA PLUG



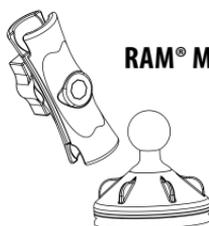
9 PIN DATA PLUG



MINI USB CABLE



RAM® MOUNTING SYSTEM



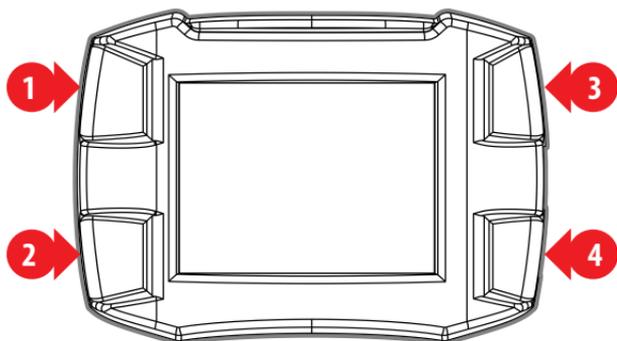
SECTION 2: Parts Description

This section describes each of the parts in the Parts List, each description provides a physical set of attributes and a purpose for each part.

THE GAUGE TUNER HEAD UNIT:

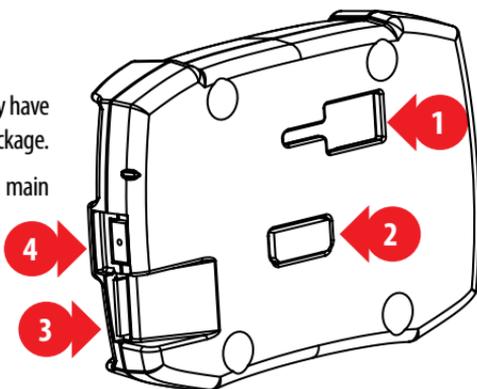
The Head Unit is the interface through which all operating functions take place.

Gauge Tuner Front Side: The Gauge Tuner has four capacitive touch buttons. Capacitive touch buttons are 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 Gauge Tuner interface features a 2.4" LCD screen.



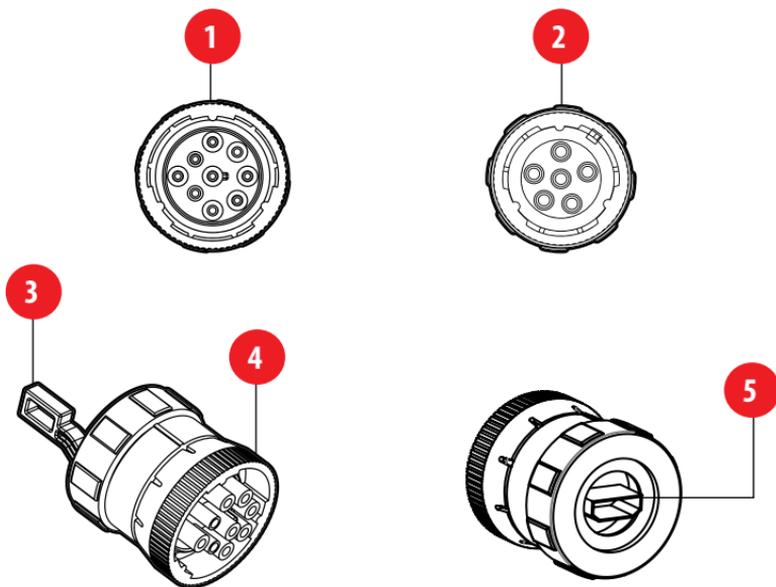
Gauge Tuner Parts (Back side):

1. T-slot Mount Socket, the product will already have the RAM Mount adapter attached in the package.
2. Main harness port, electronic port for the main harness with HDMI style plugs ends.
3. Micro SD Card Slot
4. Mini USB port



6 AND 9 PIN DATA PLUGS:

The 6 Pin and 9 Pin data plugs are very easy to differentiate. Simply count the number of pins on the front of the plug to determine whether the plug is a 6 or a 9 pin. The diagram below shows off the important parts of each Plug.



1. 9 Pin Plug Face

2. 6 Pin Plug Face

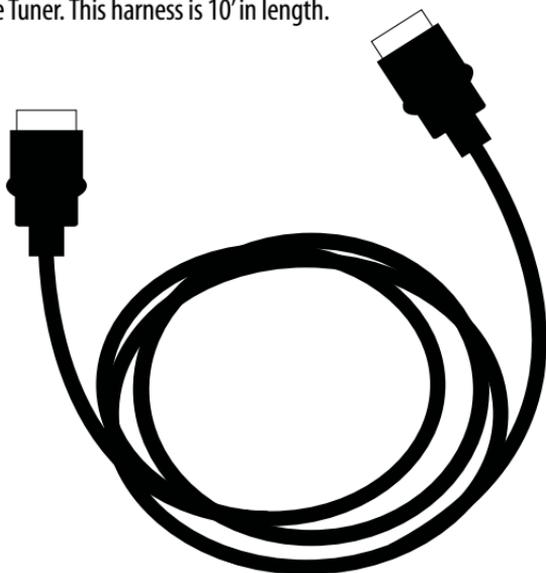
3. Strain Relief: A zip tie can be ran through the strain relief and secured around the main harness that plugs into the back of the data plug. This is meant to prevent the harness from becoming unplugged.

4. Plug lock ring: Each vehicle data port will have a lock ring receiver. This lock ring will secure the data plug to the port when the lock ring and lock ring receiver on the port are properly seated.

5. HDMI style main harness port: The end of the main harness plugs into the this port to support communication between the Gauge Tuner and the vehicle.

GAUGE TUNER MAIN WIRE HARNESS

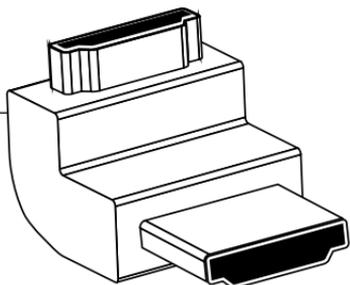
The main harness connects the Gauge Tuner to the vehicle data port and acts as the main line of communication for the Gauge Tuner. This harness is 10' in length.



HDMI RIGHT ANGLE ADAPTERS

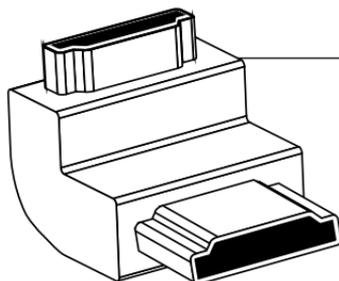
These adapters are included for your convenience and can be used to redirect the HDMI cable coming out of the data plug.

1 270° HDMI Adapter



90° HDMI Adapter

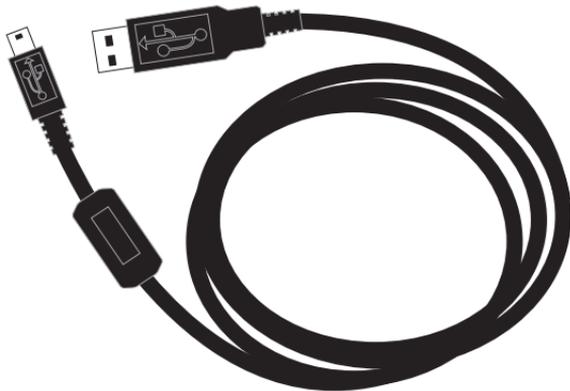
2



MINI USB CABLE

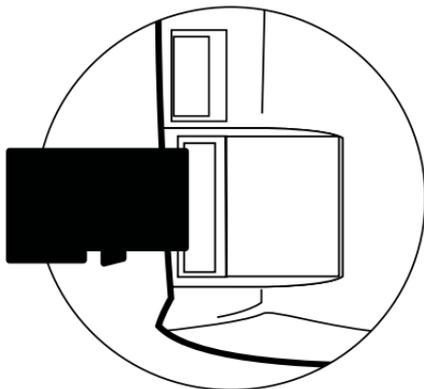
The mini USB cable is a standard off the shelf mini USB cable. It serves two purposes for the Gauge Tuner:

1. Internet Updates
2. Downloading performance tests to a PC from the Gauge Tuner.



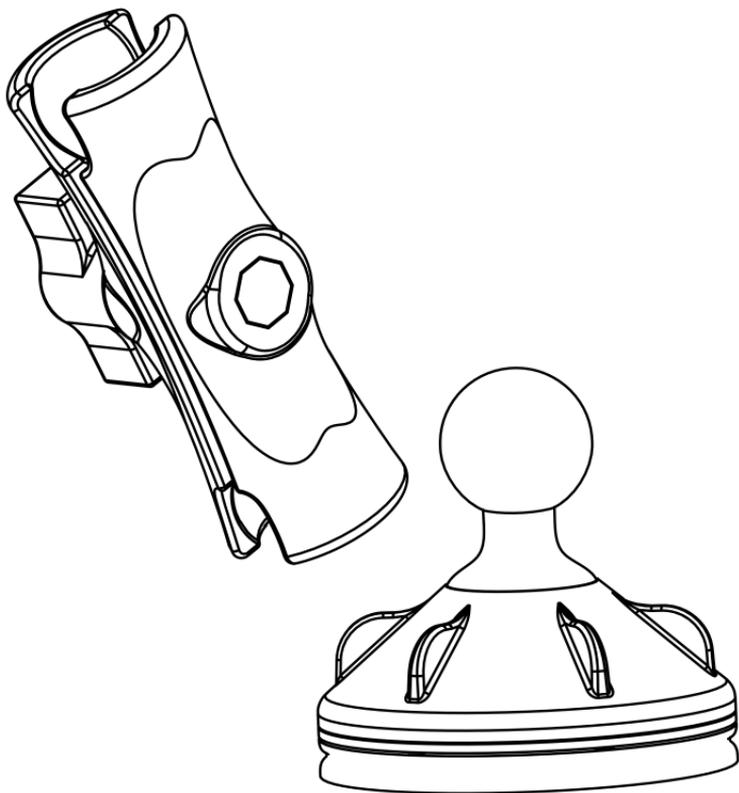
MICRO SD CARD

The Micro SD Card holds all of the electronic files necessary to properly start up the Gauge Tuner, the SD card must be installed into the micro SD card slot on the side of the Gauge Tuner at all times. The micro SD card can be removed to use a high speed card reader during an internet update.



RAM® MOUNTING SYSTEM

This mounting system includes some of RAM Mounts tested and proven mounting concepts along with an adapter that was custom designed specifically for the Gauge Tuner. The 1" ball adapter is interchangeable with dozens of RAM Mounts mounting solutions available through their website.



SECTION 3: Installation Overview

The installation overview diagram below illustrates a properly installed Gauge Tuner. This overview is meant to help reference the general location of installed parts and pieces of the Gauge Tuner. Some tools may be necessary to hide the main cable harness from sight.



SECTION 4: Installation

These installation instructions are split into three easy installation parts or activities. Each part contains a small set of instructions to complete the part. Complete each part in order in which they appear in this section for the easiest installation of this product.

PART 1: LOCATE DATA PORT AND CONNECT THE PLUG

1. The vehicle 6 or 9 pin data port is typically located in three different locations. Begin searching for the data port in these locations:
 - Underneath the dash on the driver's side of the cab or on the lower front part of the dash.
 - Near the back of the drivers seat or under the drivers seat.



The data port depicted above is in a vulnerable position, it will be important to protect the wire on this type of installation.

NOTICE: Some Trucks may have two data ports like the picture above depicts. Use the 9 pin data port to support device communication if this situation is encountered.

2. Once the plug location has been identified, determine whether the port is a 6 or a 9 Pin port, simply count the number of holes on the face of the data port.
3. To plug into the data port first line up the pattern on the face of the data plug to the hole pattern on the data port, then press the plug in and secure the connection by rotating the lock ring on the plug.



These adapters are included for your convenience and can be used to redirect the HDMI cable coming out of the data plug.



90° HDMI Adapter

270° HDMI Adapter

PART 2: MOUNTING THE GAUGE TUNER

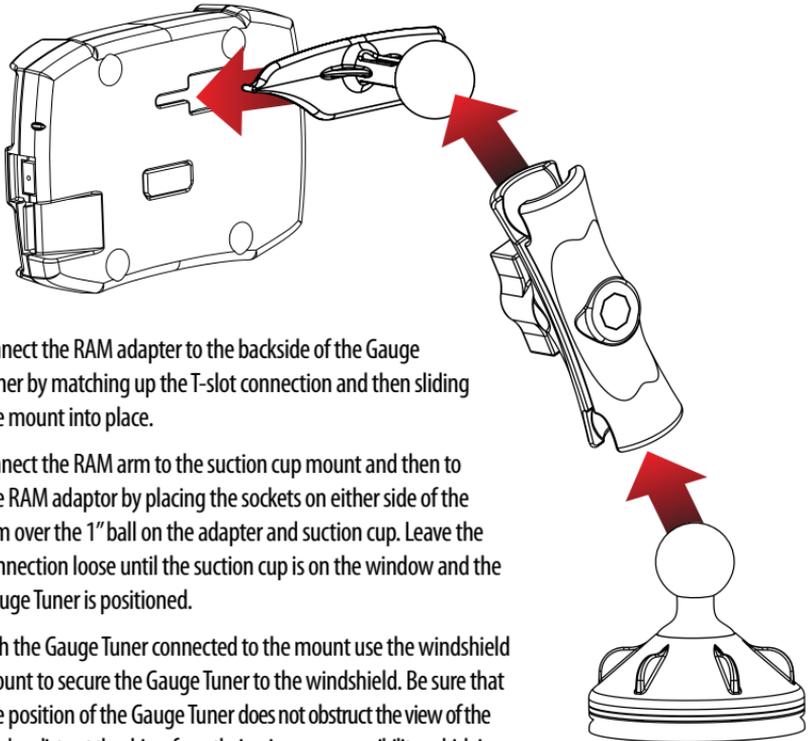
Part 2 involves finding the desired location to mount the GT, assembling the RAM mount, and mounting the GT to the windshield.

Pre Installation:

Hold the Gauge Tuner up to a couple of different viewing locations along the dash and windshield to find an ideal mounting location to fit your preference. This will help plan out the installation of the cable. While picking a location for the Gauge Tuner, consider the length of the cable which is 10'.

Installation:

Once the mounting location has been identified, begin assembling the RAM mount and connect it to the Gauge Tuner.



1. Connect the RAM adapter to the backside of the Gauge Tuner by matching up the T-slot connection and then sliding the mount into place.
2. Connect the RAM arm to the suction cup mount and then to the RAM adaptor by placing the sockets on either side of the arm over the 1" ball on the adapter and suction cup. Leave the connection loose until the suction cup is on the window and the Gauge Tuner is positioned.
3. With the Gauge Tuner connected to the mount use the windshield mount to secure the Gauge Tuner to the windshield. Be sure that the position of the Gauge Tuner does not obstruct the view of the road or distract the driver from their primary responsibility, which is careful driving.

PART 3: RUN GAUGE TUNER MAIN WIRE HARNESS

In this section you will connect the Gauge Tuner Main Harness to the Data Port and then run the other end of the main harness up the side of the vehicle dash and connect it to the back of the Gauge Tuner.

1. Plug one end of the Main Harness into the Main Harness port on the Data Port Plug.
2. Run the other end of the harness up through the vehicle dash on the driver's side so that the end of the harness emerges from the dash near the vehicle A-pillar. It may be necessary to temporarily remove the vehicle weather stripping and dash panel to achieve an installation where the Main Harness cannot be seen when the driver's door is opened.
3. Plug the Main Harness into the back side of the Gauge Tuner, make sure that there is enough slack in the main harness to accommodate mounting the Gauge Tuner.
4. Use the zip ties provided in the package to secure any loose wiring.



Doc.# 46500- Physical Install V1.0

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BULLY DOG

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