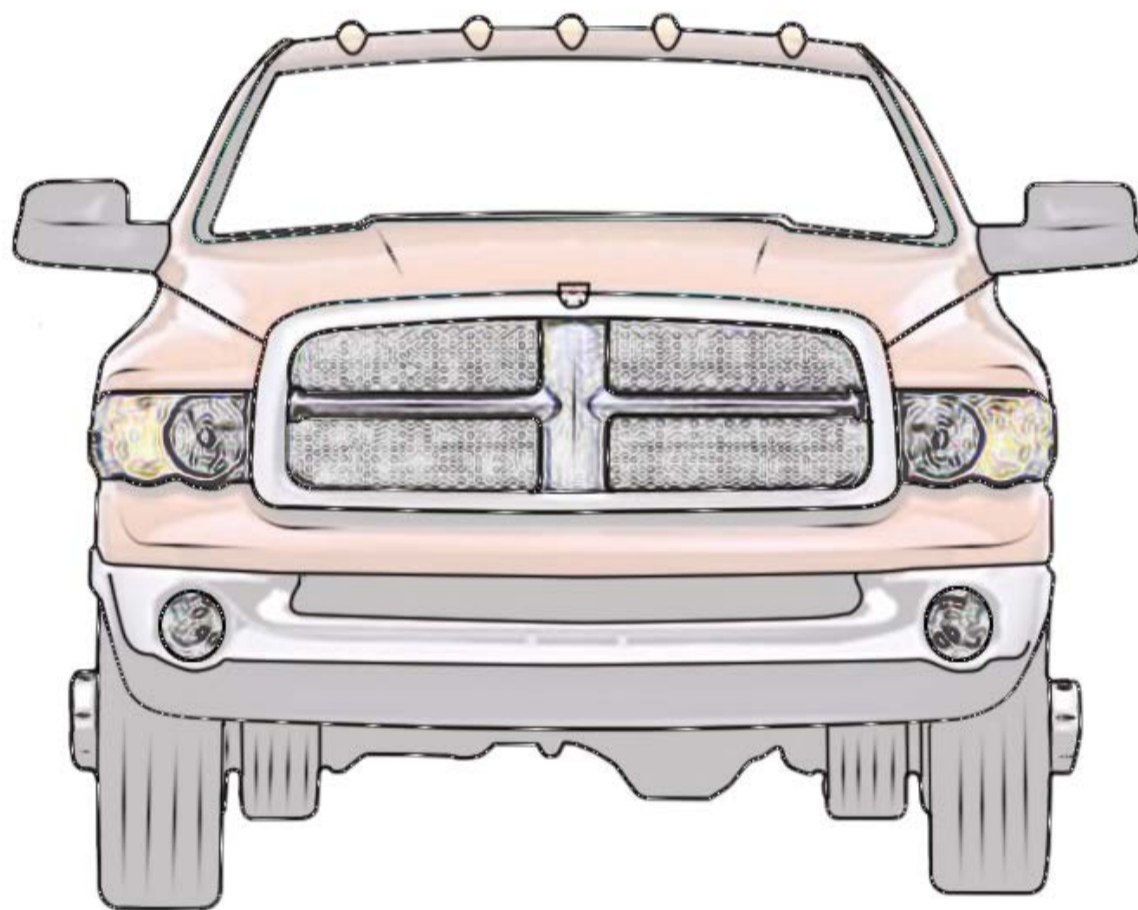


JUICE ATTITUDE

DODGE JUICE **INSTALLATION INSTRUCTIONS**



****READ IMPORTANT SAFETY INFORMATION IN THIS MANUAL****

EDGE
PRODUCTS

TABLE OF CONTENTS

INTRODUCTION 4

 PRODUCT REGISTRATION 4

 IMPORTANT NOTES 5

 ABOUT THE JUICE 6

INSTALLATION 8

 1998.5 - 2002 5.9L (24V) 8

 CONNECTING TO CONSTANT POWER 9

 CONNECTING TO GROUND 10

 CONNECTING TO KEY-ON POWER 10

 CONNECTING TO MAP SENSOR 11

 CONNECTING TO DATA LINK 11

 CONNECTING TO INJECTION PUMP 12

 BOOST ELBOW INSTALLATION 13

 “LIFT PUMP” FUEL PRESSURE SENSOR INSTALL 14

 FUEL SYSTEM BLEEDING INSTRUCTIONS 15

 CONNECTING TO TRANSMISSION (AUTOMATIC) 16

 CONNECTING TO TRANSMISSION (STANDARD) 17

 2003 - 2004 5.9L (CR) 18

 CONNECTING TO POWER 19

 CONNECTING TO GROUND 20

 CONNECTING TO INJECTORS 20

 CONNECTING TO MAP SENSOR 21

 CONNECTING TO DATA LINK 21

 CONNECTING TO FUEL PRESSURE SENSOR 22

 BOOST ELBOW INSTALLATION (OPTIONAL) 22

 2004.5 - 2005 5.9L (600) 23

 CONNECTING TO POWER 24

 CONNECTING TO TURBO TIMER 25

 2006 - 2011 5.9L & 6.7L 26

 CONNECTING TO POWER 27

 CONNECTING TO GROUND 29

 CONNECTING TO INJECTORS 29

 CONNECTING TO MAP SENSOR (2006 - 2007 5.9L ONLY) 30

 CONNECTING TO DATA LINK 30

 CONNECTING TO THE TURBO TIMER 31

 2007.5-2011 6.7L (RACING) 33

 DPF EGT SENSOR INSTALLATION 34

 EGR “SPOOFER” INSTALLATION 35

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

EGT PROBE INSTALLATION.....36
 TAPPING AND PROBE INSTALLATION..... 36
 CONNECTING THE PROBE TO JUICE 38
JAB INSTALLATION39
 1998.5 TO 2011 - JAB INSTALLATION 39
 2006-2011 OBDII CONNECTION 41
JUICE MODULE INSTALLATION 41
 FINAL JUICE MODULE INSTALLATION 41
 MOUNTING AND SECURING THE JUICE 42
FINAL INSPECTION.....42
OPERATING INSTRUCTIONS..... 43
 USING THE JUICE43
APPENDIX 44
 ENGINE COMPARTMENT(REFERENCE)44
 1998.5 - 2002 44
 2003-2005 45
 2006 - 2011 46

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

PRODUCT REGISTRATION

PLEASE take the time to register your product on line at [edge-products.com](http://www.edge-products.com). Follow the instructions at link: http://www.edge-products.com/product_registration.php

BENEFITS OF PRODUCT REGISTRATION

- Your Safety** - Registering your product allows us to know exactly which product you have and provide important product updates to you that improve the quality and/or safety of the product.
- Enhanced Features** - Almost all Edge products are easily updated via the internet. We are constantly adding new features and improvements to our product that we know you will want to enjoy.
- Confirmation of Ownership** - Provides a record in case of product loss, theft, or required warranty work. When you call us for support our team will already have much of the information they need to help you.
- Improved Product Development** - Helps us better understand you (our customer) and design products that meet your needs.
- Special Offers** - Allows us to inform you about special offers on accessories and/or new products that fit your vehicle and enhance your driving experience.

IMPORTANT NOTES

1. If you have used another tuner/programmer on your truck, you will need to program your truck back to stock before using the Attitude or Juice.

Failure to return to stock may result in PCM failure or engine damage.

2. Programming your vehicle may expose existing defects in your vehicle's PCM that could disable your vehicle. It is advised that you do not program your vehicle in remote location in case of vehicle failure.

3. All Edge modules and programmers are built to operate with OEM calibrations. When you take your vehicle to a service center they may, by your request or otherwise, update your vehicle's calibrations. Therefore it is important that you return your vehicle to stock before taking it in for service. Edge updates its active products (i.e. those currently being manufactured) to work effectively with updated OEM calibrations. However, this process can take some time as Edge is not always made aware of calibration changes made by the OEM. In the case of discontinued products, Edge cannot ensure that your unit will work effectively if you take your vehicle to a dealership and you are given, by your request or otherwise, a new calibration.

4. For specific information regarding horsepower, torque, and other features available for this product:

- (1) Go to www.edgeproducts.com
- (2) Type the part number of your product in the "KEYWORD/PART# SEARCH" and press enter.
- (3) Click the link under "Description"
- (4) Scroll down to the "DOWNLOAD VEHICLE SPECIFIC HORSEPOWER, TORQUE, AND FEATURES CHART" link and click on it.
- (5) Find the information that is specific to your make and model.

A B O U T T H E J U I C E

Congratulations on purchasing the Edge Juice/Attitude system for the Dodge Cummins Diesel®.

The Juice/Attitude system features an intelligent module (Juice) that acts as an add-on Engine Control Module (ECM) for the Cummins Diesel® Engine. This module is controlled and customized in the cab of your truck by the Attitude monitor/controller.

This system offers many cutting-edge, additional features not available with the factory setup. Since the Juice Module is an add-on ECM, it uses data from your truck's computer or engine control module (ECM), and then enhances the factory settings to optimize your truck's performance. This product offers a wide variety of amazing performance and safety features that can ensure you get the driving experience you desire without damaging your truck. Please take the time to thoroughly review all of the features and product options outlined in this manual. Taking the time to understand how this product works and how to properly operate this product will ensure that you have an extraordinary and safe driving experience. If we can be of any assistance to help you get the most from your product please call us at 888-360-3343. We are open Monday through Friday from 8am to 5pm Mountain Time.

IMPORTANT: Read all Safety, Warranty, and Installation Instructions in this manual and the CS/CTS User Guide before installing this product. Read through these instructions completely so that you understand each step prior to installation.

SAFETY TERMS

Throughout this User Guide (hereafter noted as User Manual or Manual) you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words **WARNING** or **CAUTION**.



WARNING indicates a condition that may cause serious injury or death to you, your passengers or others nearby. Pay careful attention to these Warning messages, and always comply with them. They could save a life.

CAUTION indicates a condition that could cause damage to your vehicle. It is important to install and operate your **EDGE** product in conformance with instructions in this Manual. Caution alerts you to particularly important things that will keep your vehicle operating properly.

1998.5 - 2002

5.9L (24V)

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

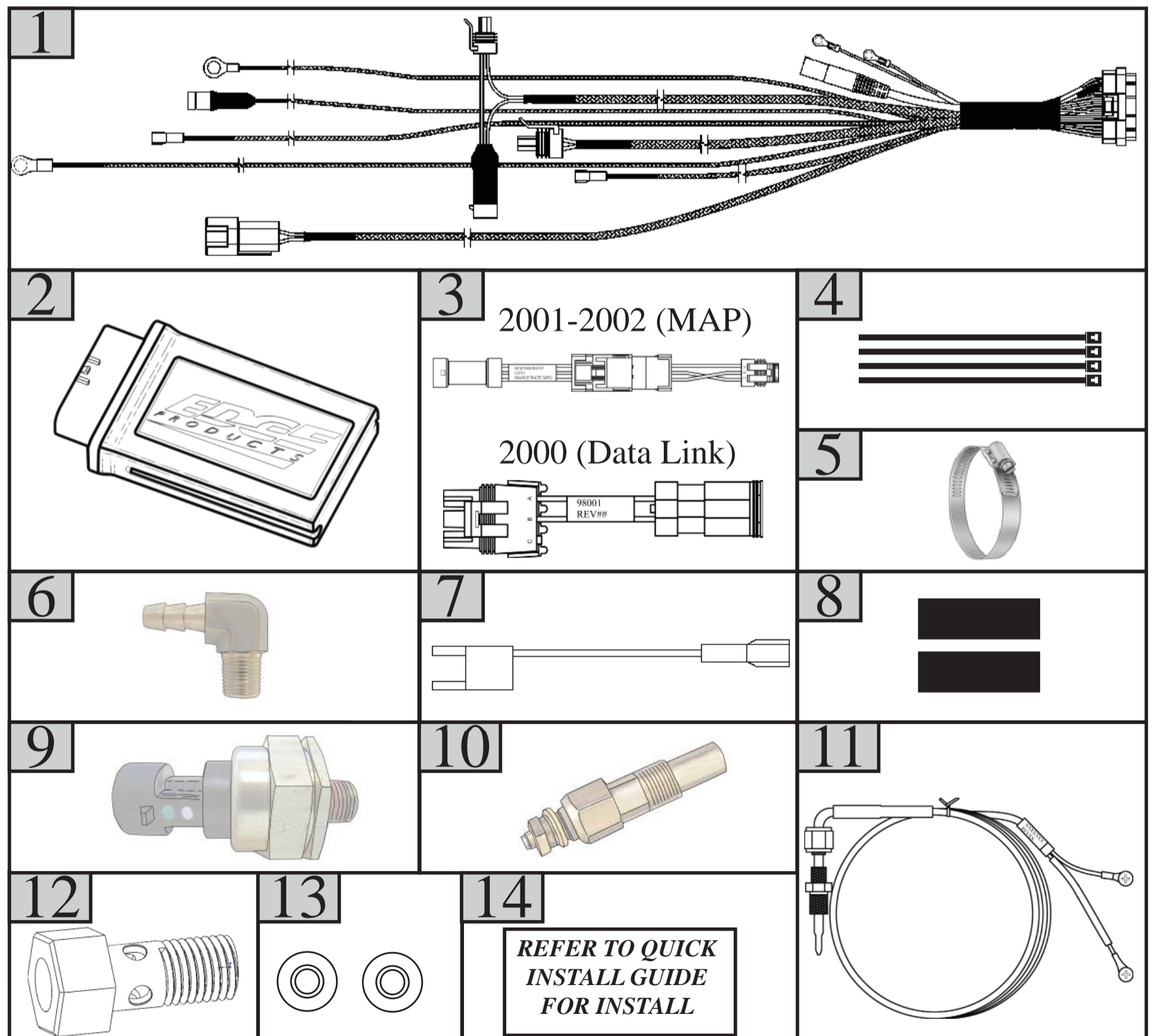
Supplied Items

Qty

- ① Main Wiring Harness.....(1)
- ② Edge Juice Module.....(1)
- ③ Adapters.....(1)
- ④ Zip Ties(10)
- ⑤ Hose Clamp.....(1)
- ⑥ Brass Fitting.....(1)
- ⑦ Leaded Fuse Link.....(2)
- ⑧ Velcro Strips.....(2)
- ⑨ Fuel Pressure Sensor.....(1)
- ⑩ Temperature Sensor.....(1)
- ⑪ EGT Probe.....(1)
- ⑫ Banjo Bolt.....(1)
- ⑬ Washer.....(2)
- ⑭ CS/CTS Kit.....(1)

Required Tools

- Knife
- 2 to 3 ft of wire (fishing)
- Needle nose pliers
- Phillips screwdriver
- Flat tip screwdriver
- 3/8" Drive Torque Wrench
- 1/2" Wrench
- 3/8" Drive Ratchet
- 1/4" Socket
- 5/16" Socket
- 7/16" Deep Well Socket
- 10mm Socket
- 13mm Socket
- 1/8" NPT Tap
- 5/16" or 21/64" Drill Bit



Note: Depending on your year of truck, you may not need everything provided.

Harness Connection Guide

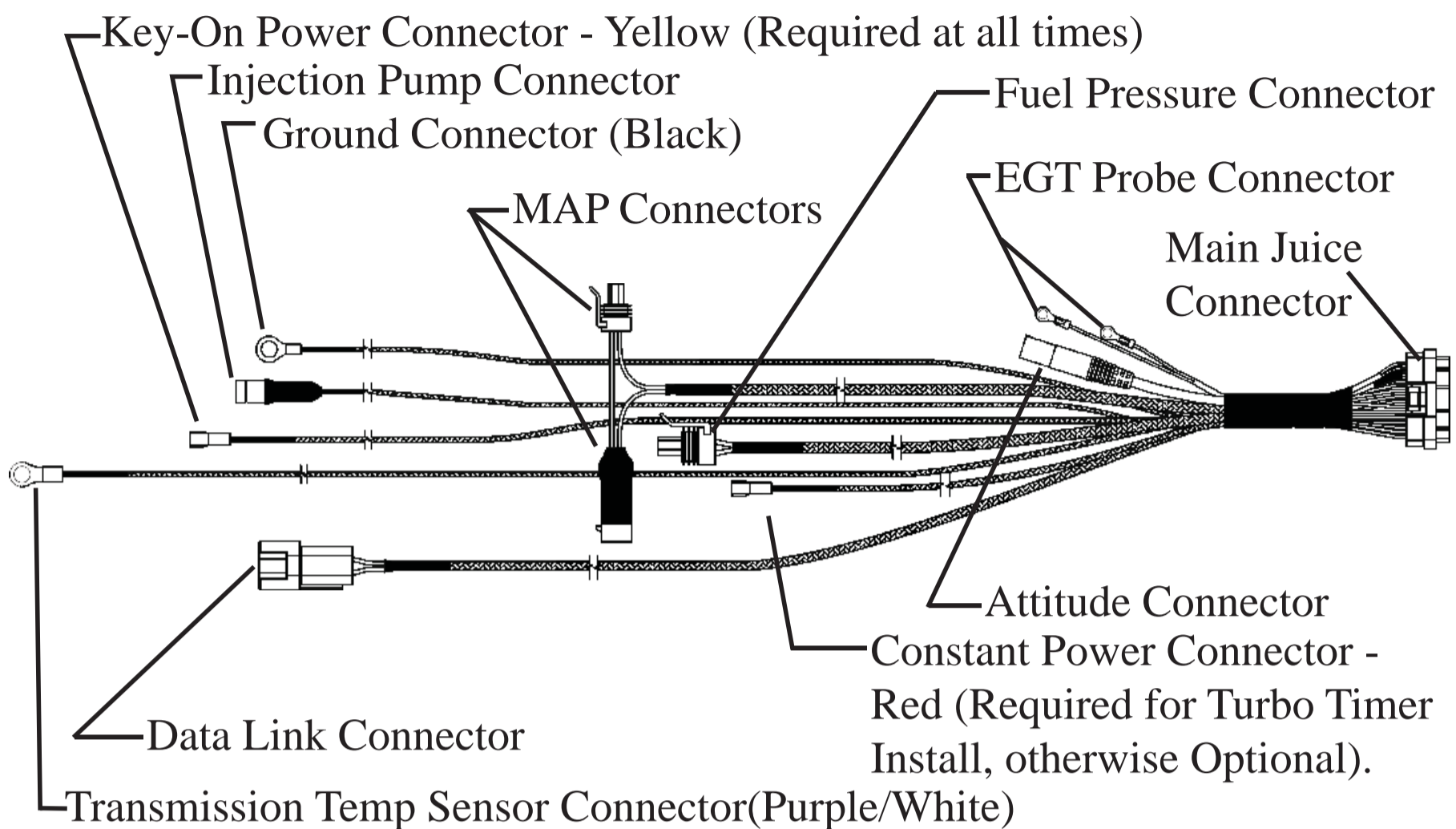


Figure 1 - (Data Link and MAP connectors may vary from this view depending on your vehicle year. If this is the case, you will need to use the supplied adapters.)

CONNECTING TO CONSTANT POWER

(Required for proper Turbo-Timer functionality)

1. Using the ½" wrench, loosen both negative battery cables.
2. Remove cables from the battery posts and set aside.
3. Locate and remove the 10 Amp "A/C Clutch" fuse from inside the engine compartment fuse panel.
4. Insert the Leaded Fuse link (see Figure 2). The leg with the wire soldered to it needs to plug into the "HOT" side of the fuse location. Orient the fuse exactly as shown in Figure 3 on the following page.

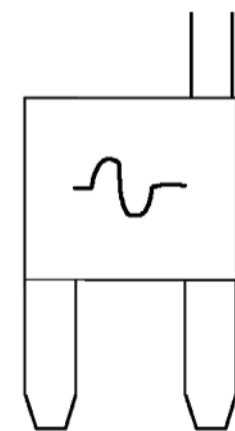


Figure 2

5. From the main harness, connect the Red Constant Power Connector to the installed Fuse Link (Figure 3)



WARNING An electrical charge or battery acid can burn you. Battery gas can explode or ignite. Take care when working around the battery. Follow instructions in the vehicle owner's manual for disconnecting and reconnecting a battery.

NOTE: DO NOT reconnect battery until installation is complete. Connecting power may cause fault code in the ECM.

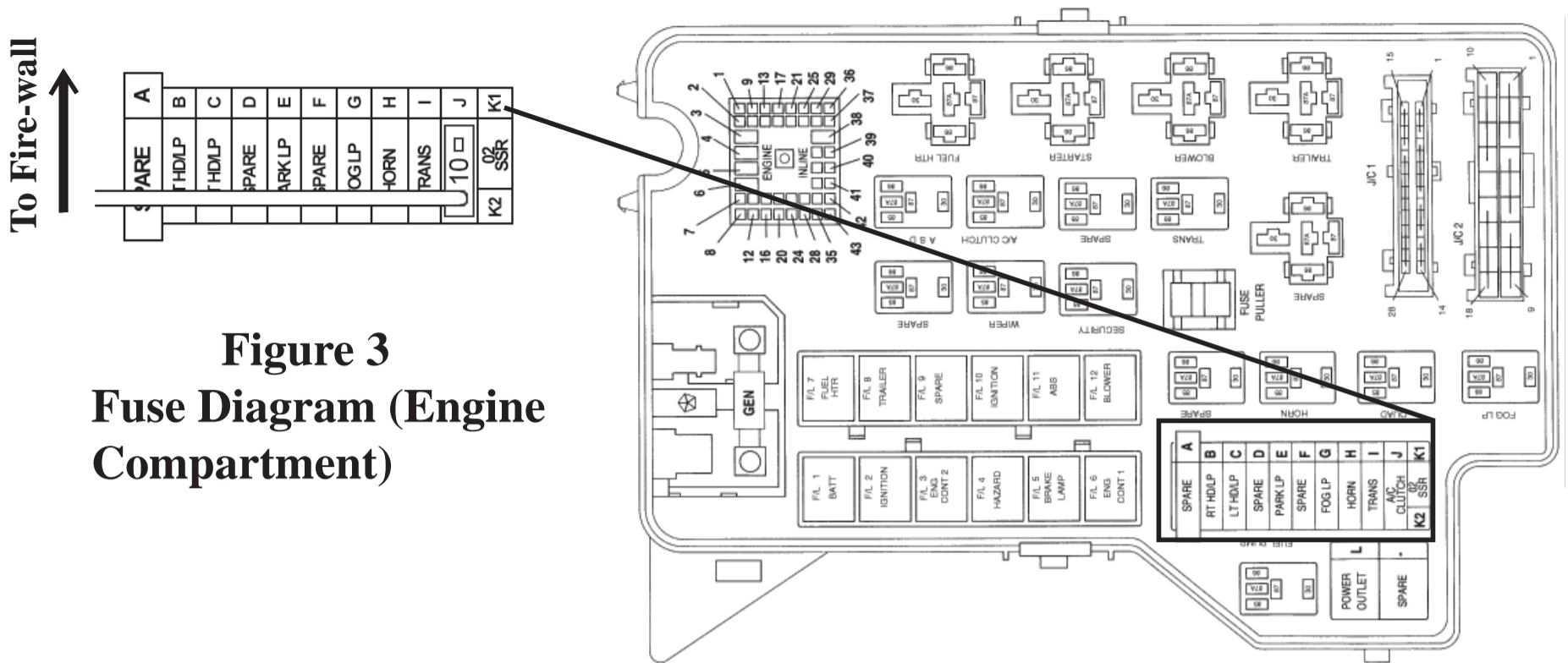


Figure 3
Fuse Diagram (Engine Compartment)

CONNECTING TO GROUND

1. Connect the Ground Connector to the NEGATIVE side of the battery.

CONNECTING TO KEY-ON POWER

1. Cut a 1/2" slit in the fire wall grommet.

NOTE: Automatics - easy access is the clutch hole grommet located to the left of the fire wall brake hole. **Manuals or Automatics-** Use the large vehicle wiring harness grommet on the fire wall.

2. Route the Yellow Key-On Connection from the engine compartment to inside the cab through the cut hole from step 1.
3. Locate and remove Fuse 9 (10 Amp) from inside the driver side fuse panel.
4. Insert the Leaded Fuse link (see Figure 2). The leg with the wire soldered to it needs to plug into the "HOT" side of the fuse location. Orient the fuse exactly as shown in Figure 4 below.
5. Connect the Yellow Key-On (routed in step 2) to the installed Fuse Link.

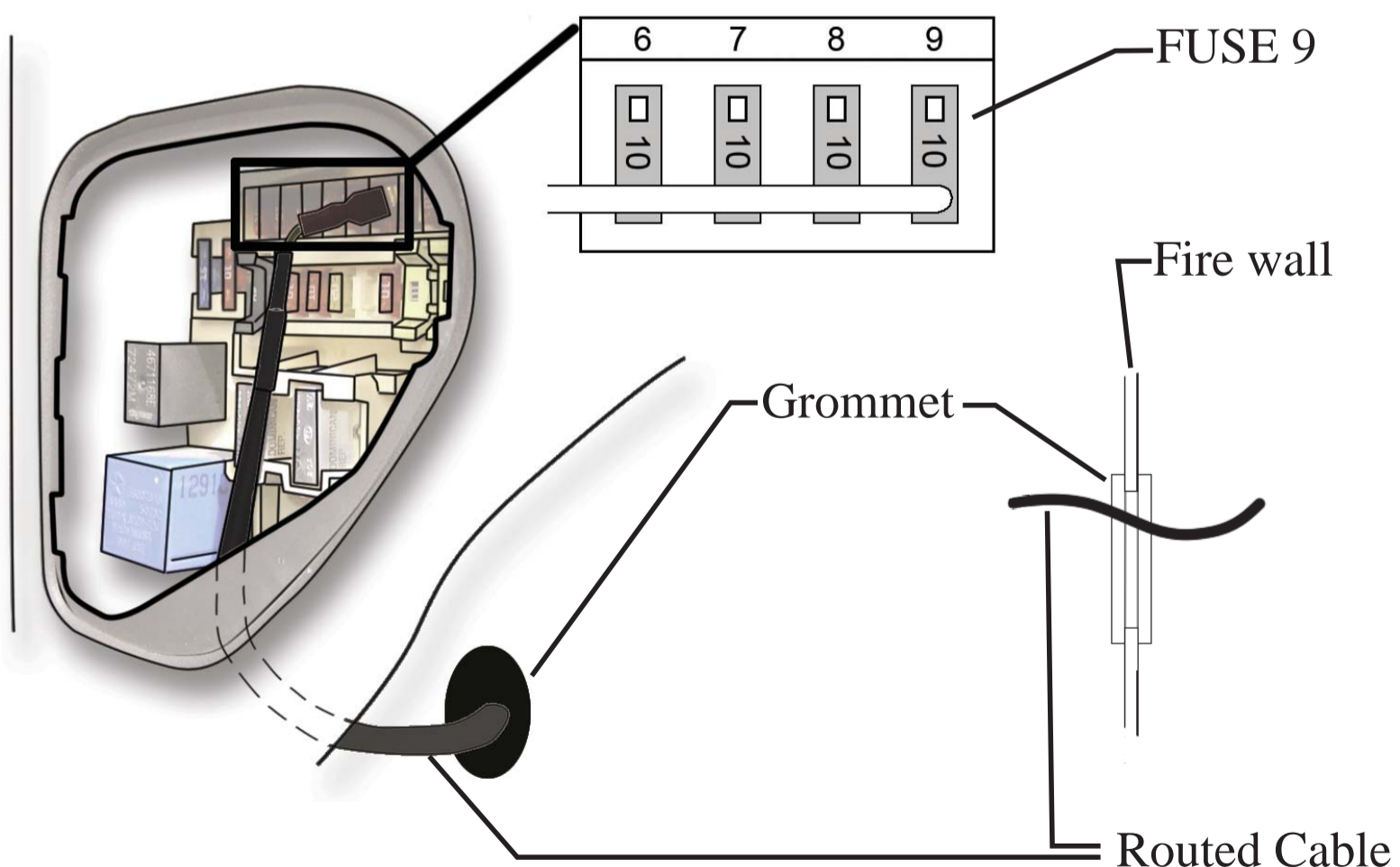


Figure 4 - Driver Side Fuse Panel

CONNECTING TO MAP SENSOR

1. Disconnect the stock wiring harness from the boost sensor located at the rear of the fuel filter housing (Near the top of and on the engine block). See Figure 5
2. Plug the Edge harness MAP connectors in between the truck MAP sensor and the truck MAP sensor cable. (Figure 6)

NOTE: The MAP sensor 'T' shown in Figure 6 is for the 1998.5 - 2000 Juice. The 2001 and 2002 harnesses have different sensor connectors, but in the same location. Refer to Figure 5 for truck connector locations.

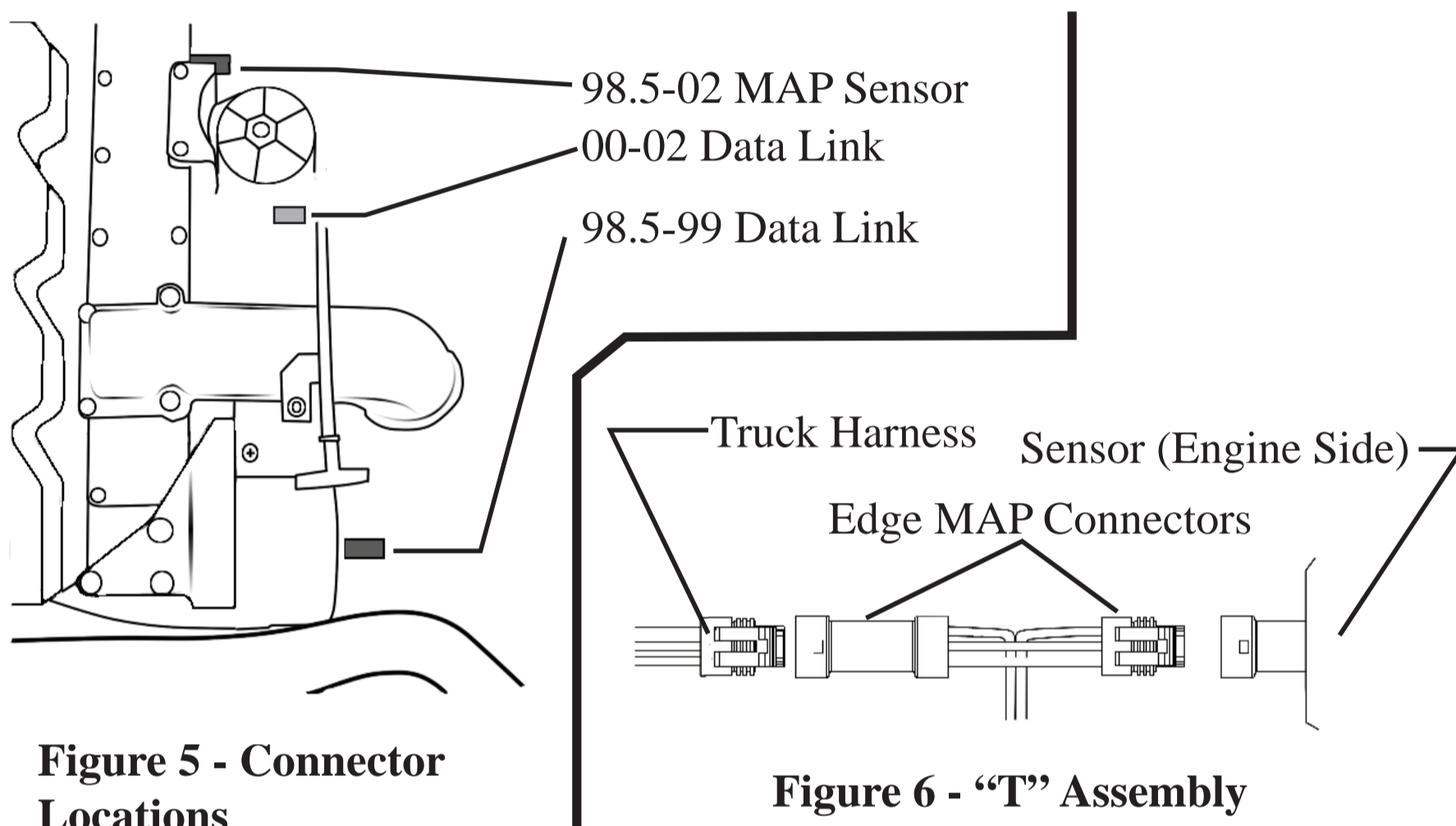


Figure 5 - Connector Locations

Figure 6 - "T" Assembly

CONNECTING TO DATA LINK

1. Locate the Data link connectors:
 - 1998.5 - 1999: The triangle shaped connector is located on the driver's side of the engine in the wiring harness near the power steering pump.
 - 2000 - 2002: The three pronged flat connector is located on top of the fuel lift pump that is located on the driver's side of the engine directly below the MAP sensor. (The 2000 must use the 2000 Data link Adapter.)

NOTE: On some 2001 trucks the Data Link connector can be located on the driver's side of the engine in the wiring harness near the power steering pump.

2. Replace the protective plug on the truck Data Link with the Juice harness Data Link Connector. (Refer to Figure 5 above)

CONNECTING TO INJECTION PUMP

NOTE: Although attaching the Juice cable to the VP 44 pump control wire is optional; not tapping into the VP 44 pump prevents the Juice module from increasing the output of the Cummins engine to it's full potential and will result in limited horsepower and torque gains. In order to control the pump more directly, the Juice module needs to be electrically attached to the VP 44 pump. In order to attach the module to the VP 44 pump, the control wire must be pierced with the Posi-Tap® wire provided on the Juice harness.

The following figures 7-9 show how to connect the Juice to the Bosch VP 44 high pressure pump and how and where to attach the Posi-Tap® connection. Figure 8 is a Bosch VP 44 pump that has been removed from a truck. This is the same pump used on Cummins engines for model year trucks from 1998.5 to 2002.

1. Unbolt and remove the casting that attaches to the Throttle Position Sensor (TPS) housing to expose the fuel pump and the associated control wire. (Figure 7)
2. Using a sharp knife or razor, carefully slice back the insulation that covers both pump wires contained in wire bundle number one (see figure 8).
3. Locate the TOP injection pump wire identified in Figures 8 & 9.

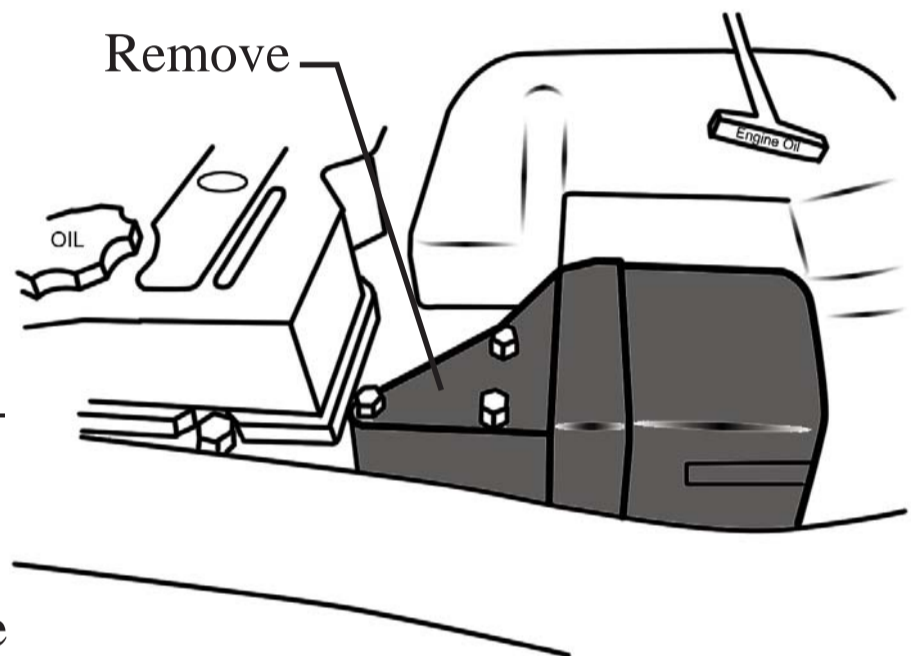


Figure 7 - Throttle Position Housing

NOTE: This will be the wire on the top, closest to the engine block when the pump is installed on the truck.

4. Unscrew the “top” of the Posi-Tap® and place the wire to be tapped in the slot provided in the cap.

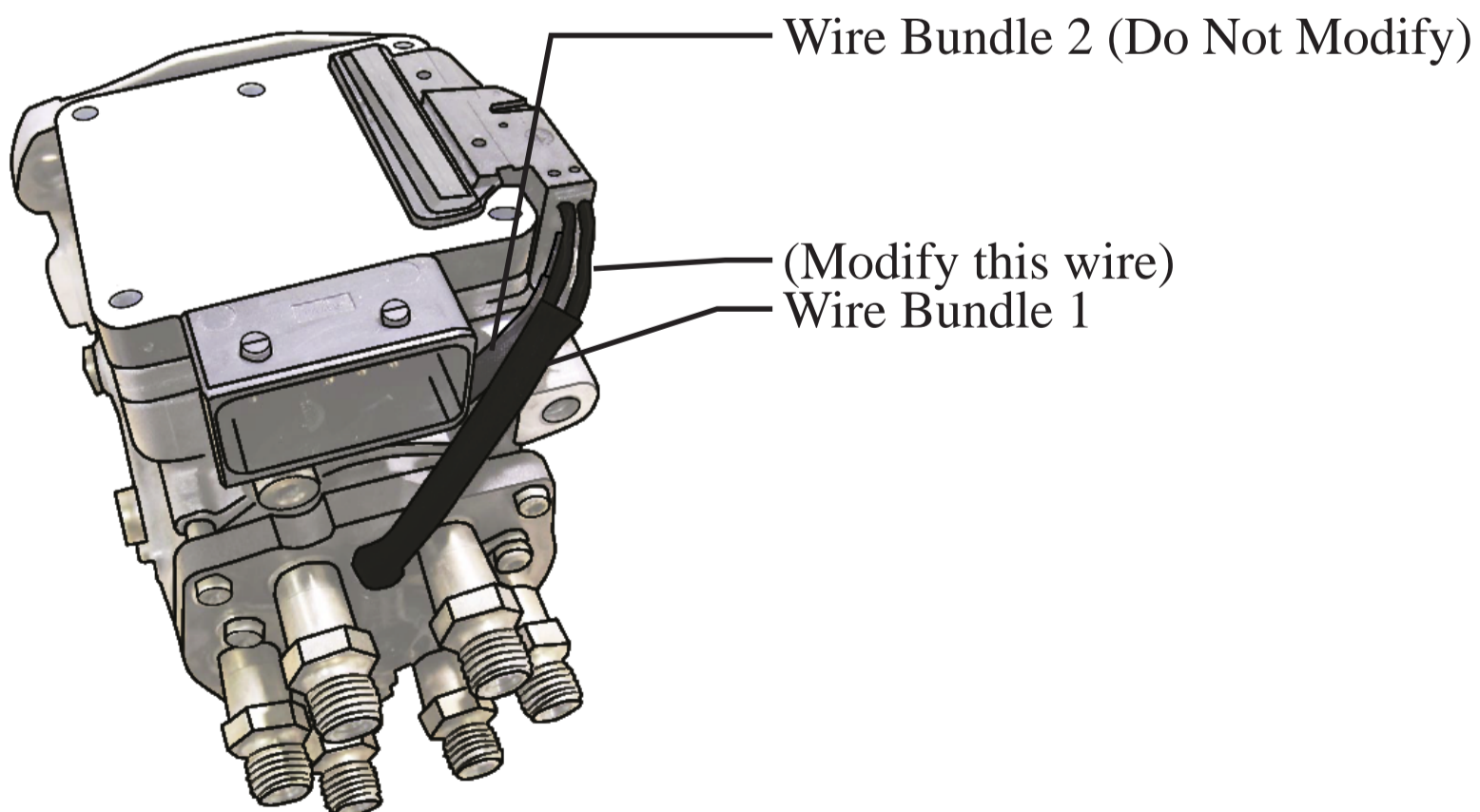


Figure 8 - VP44 Fuel Pump

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

5. Place a single drop of RTV Silicone Sealer in the CAP of the Posi-Tap®. There should be enough silicone sealer so that when the cap is installed on the Posi-Tap® body some of the sealer is pushed out around the edges of the wire. The sealer provides a water tight seal in and around the connection.

6. Pre-twist the body of the Posi-Tap® counter clockwise with about seven full turns before twisting on to cap. (See figure 9)

NOTE: *This will pre-load the wire so that when the body of the Posi-Tap® is installed on the cap, the wire will not remain twisted in the wire harness.*

7. Twist harness onto cap until tight.

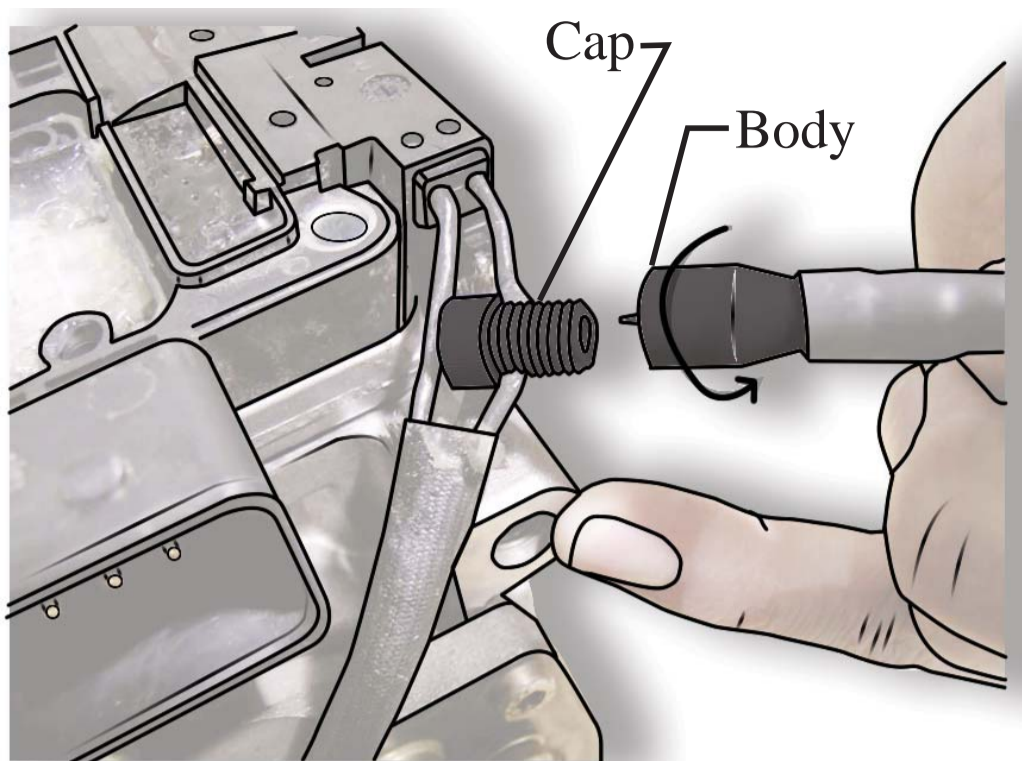


Figure 9 - PosiTap® Pre-Twist

BOOST ELBOW INSTALLATION

NOTE: *On some vehicles, there is a solid line and cannot be replaced with a brass elbow.*

1. Using the 5/16" socket, loosen the two clamps securing the air induction hose to the air filter housing and the turbo inlet.
2. Remove the hose and set it aside.
3. Using the pliers, remove the crimp style clamp from the hose on the brass fitting located on the now exposed lower front side of the turbocharger.
4. Remove the hose from the brass fitting and dispose of the crimp style clamp.
5. Using the 7/16" wrench, unscrew the stock brass fitting out of the turbocharger housing.
6. Using the 7/16" wrench, install the supplied brass fitting. Tighten while being careful not to over-tighten.
7. Slip the supplied hose clamp onto the stock hose then install the stock hose onto the supplied brass fitting and tighten the hose clamp with the 1/4" socket.
8. Reinstall the stock air hose onto the air filter housing and turbocharger inlet.
9. Using the 5/16" socket, tighten both clamps securely.

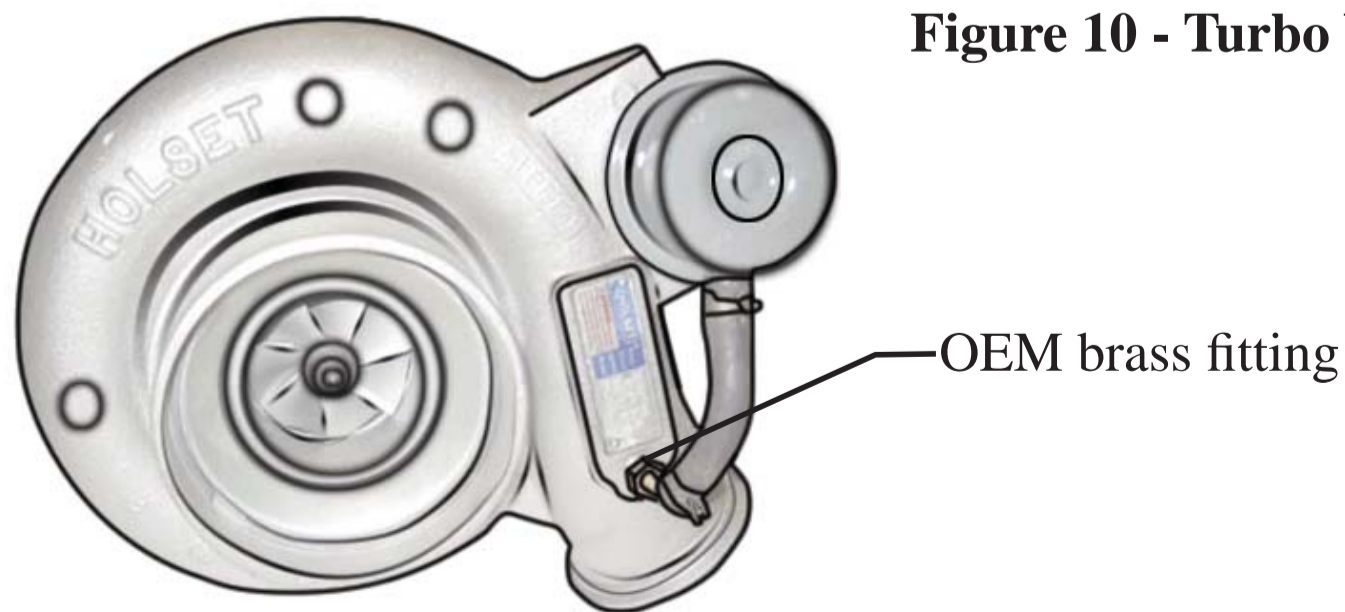


Figure 10 - Turbo View

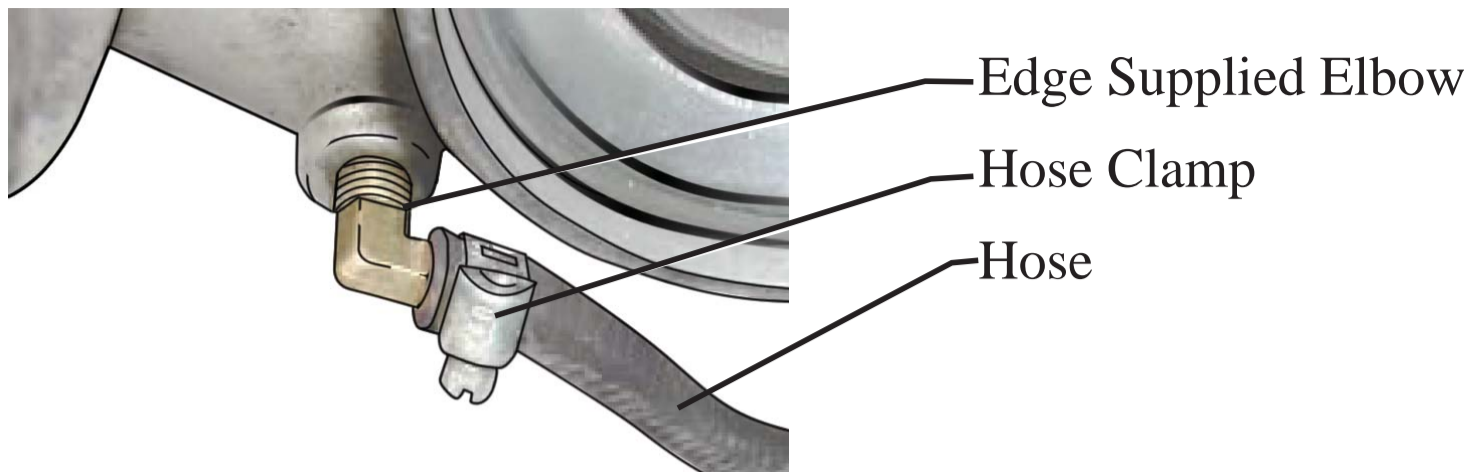


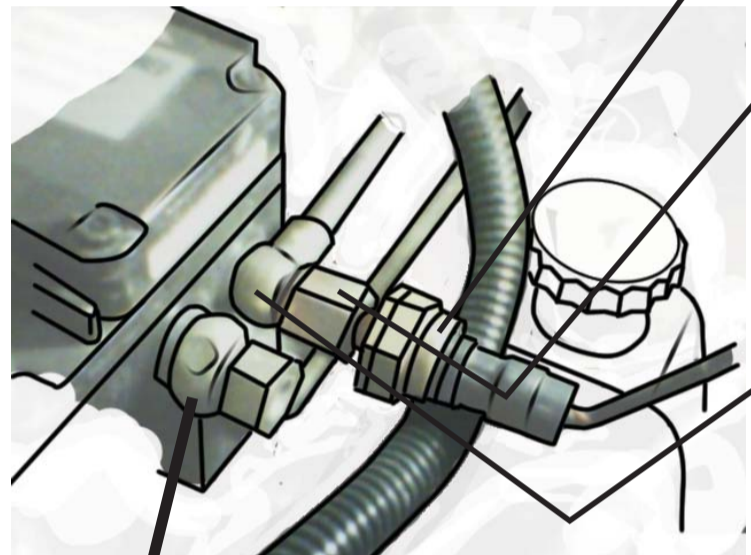
Figure 11 - Installed Boost Elbow

“LIFT PUMP” FUEL PRESSURE SENSOR INSTALL

CAUTION: *If you lack experience or tools to bleed the fuel system take the truck to an experienced mechanic for installation of the fuel pressure sensor!*

CAUTION: *The fuel that is pumped to the injectors also acts as a lubricant for the Bosch VP-44 high pressure pump. A loss of fuel pressure to the high pressure pump may result in permanent damage to the high pressure pump.*

Figure 12 - VP44



1. Thread fuel pressure sensor into the supplied banjo bolt.
2. Remove the stock banjo bolt from the injector pump supply line located on the VP44 with the pre-installed neoprene washer and fuel pressure sensor. (Figure 14)
3. Tighten bolt to the appropriate torque specifications (18 ft-lbs)



Figure 13

CAUTION: *When the Fuel Supply Line is removed, fuel can drain out of the VP 44 pump, and air can enter the line and/or pump. In order to minimize the amount of air that is let into the fuel system, pre-install the fuel pressure sensor onto the supplied banjo bolt before removing the stock banjo bolt from the pump. Tighten the sensor into the banjo bolt until it is snug.*

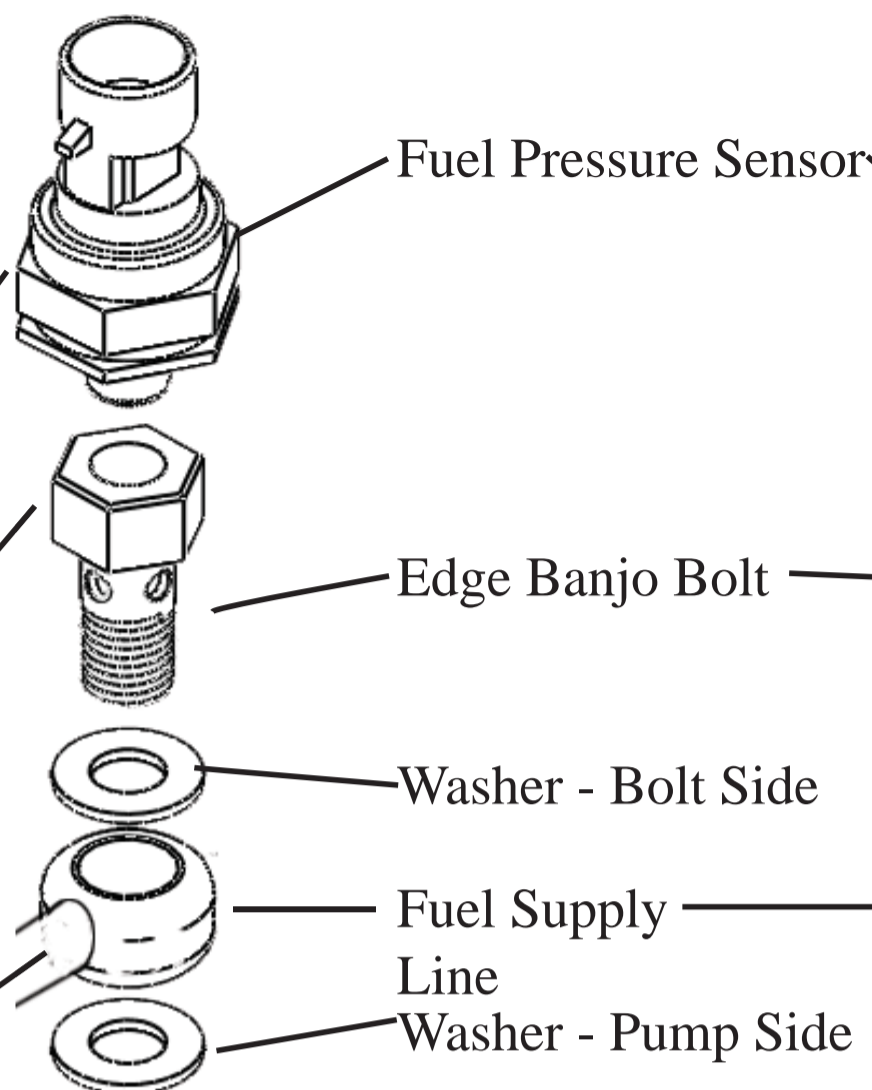


Figure 14



Figure 15- Fuel Filter Method (1999 Only)

NOTE: Fuel Filter Housing (Optional placement of Banjo bolt for 1999 Trucks only).

FUEL SYSTEM BLEEDING INSTRUCTIONS

CAUTION: IT IS CRITICAL THAT THE AIR INTRODUCED INTO THE FUEL LINE BE REMOVED FOR THE FUEL SYSTEM TO OPERATE PROPERLY.

NOTE: Use this bleeding procedure at the end of the installation. Trying to bleed the fuel system half way through the installation could cause a check engine light.

1. In order to remove the air from the system, loosen BUT DO NOT REMOVE the overflow valve banjo fitting that connects to the return line.
2. Place a shop rag or towel around the banjo fitting to catch excess fuel.
3. Turn the ignition key to CRANK position and quickly release the key to the ON position.

NOTE: DO NOT START THE ENGINE! The fuel lift pump will operate for up to 25 seconds.

4. Once this procedure is complete, tighten the return line banjo fitting to 24 Nm (18 ft-lbs.) torque.
5. Attempt to start the engine. **NOTE:** The engine may be very noisy or run erratic for a few minutes. Keep an eye on the fuel pressure as displayed on the

Attitude. If the pressure drops below 4 psi, or the engine quits running, re-bleed the fuel system. If the engine still does not start, remove and check the fuel filter. If the filter is dirty or damaged, replace the filter.

CAUTION:

- Do not engage the starter motor for more than 30 seconds – Allow two minutes between cranking intervals.
- Although it is rare, on occasions the LIFT pump may fail to prime after the banjo bolt has been replaced signifying a possibility of a worn pump. In this rare instance the LIFT pump should be replaced.

6. Reinstall the throttle bracket onto the fuel injection pump using the three bolts. Torque these bolt to 18 ft-lbs using a torque wrench and 13mm socket.

CONNECTING TO TRANSMISSION (AUTOMATIC)

1. Unbolt the stock plug from passenger side rear of the transmission using a 7/16 inch (11mm) wrench (see Figure 17).

NOTE: A small amount of transmission fluid will leak from the outlet.

2. Apply Teflon tape to the threads of the transmission temperature sensor.
3. Using a 1/2 inch wrench, thread the Edge supplied transmission oil temp sensor (see parts list) and connect the cable using the supplied nut.
4. From the top of the engine, route the transmission temperature sensor along the factory wiring harness and over the top of the transmission and secure with supplied wire ties.

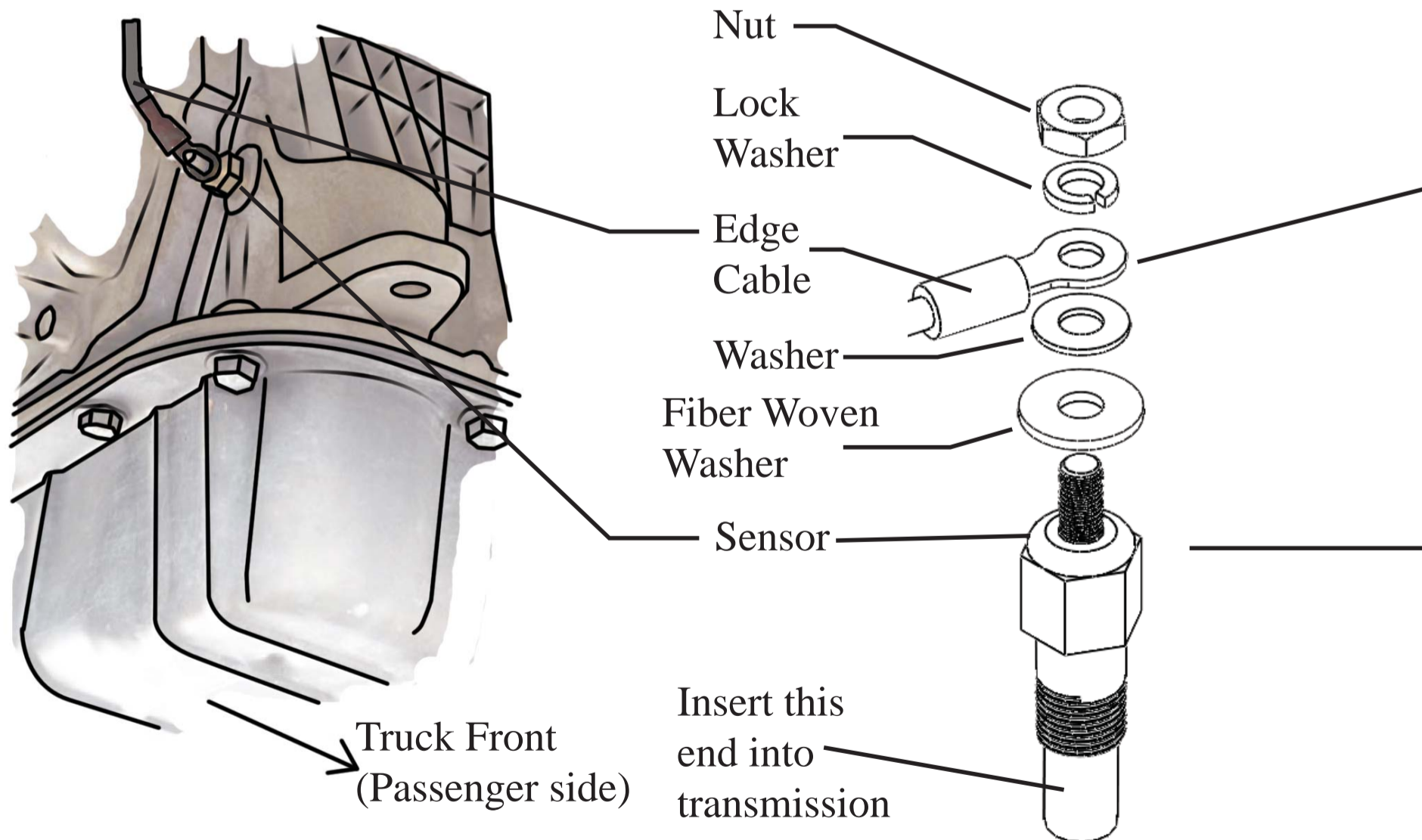


Figure 16 - Automatic Transmission

Figure 17- Sensor Assembly
Refers to Fig 16 & 18

CONNECTING TO TRANSMISSION (STANDARD)

NOTE: When the Power Take-Off (PTO) plate is removed ALL of the gear lube from the transmission will drain out – Ensure that you have the CORRECT replacement oil prior to removing the PTO plate. See the Dodge service manual for replacement gear lube type.

1. Using a 14 mm wrench, remove the lowest bolt on the PTO cover plate and drain the transmission fluid.
2. Unbolt the remaining five bolts to the PTO cover plate and remove it completely.
3. Using a 5/16" or 21/64" drill bit, drill a hole in the PTO cover plate in the location shown in figure 18.
4. Using a 1/8" NPT tap, thread the hole in the PTO cover plate.
5. Apply Teflon tape or pipe thread sealant to the transmission temperature sensor and thread it into the PTO cover plate.
6. Clean the surface of the PTO cover plate and transmission . Apply an automotive gasket silicone to the plate surface that will come in contact with the transmission.
7. Re-attach the plate cover to the transmission and connect the sensor cable to the sensor.
8. Refill the transmission with fluid.

NOTE: YOUR JUICE MODULE INSTALLATION IS NOT COMPLETE. REFER TO THE "EGT PROBE INSTALLATION" SECTION TO CONTINUE.

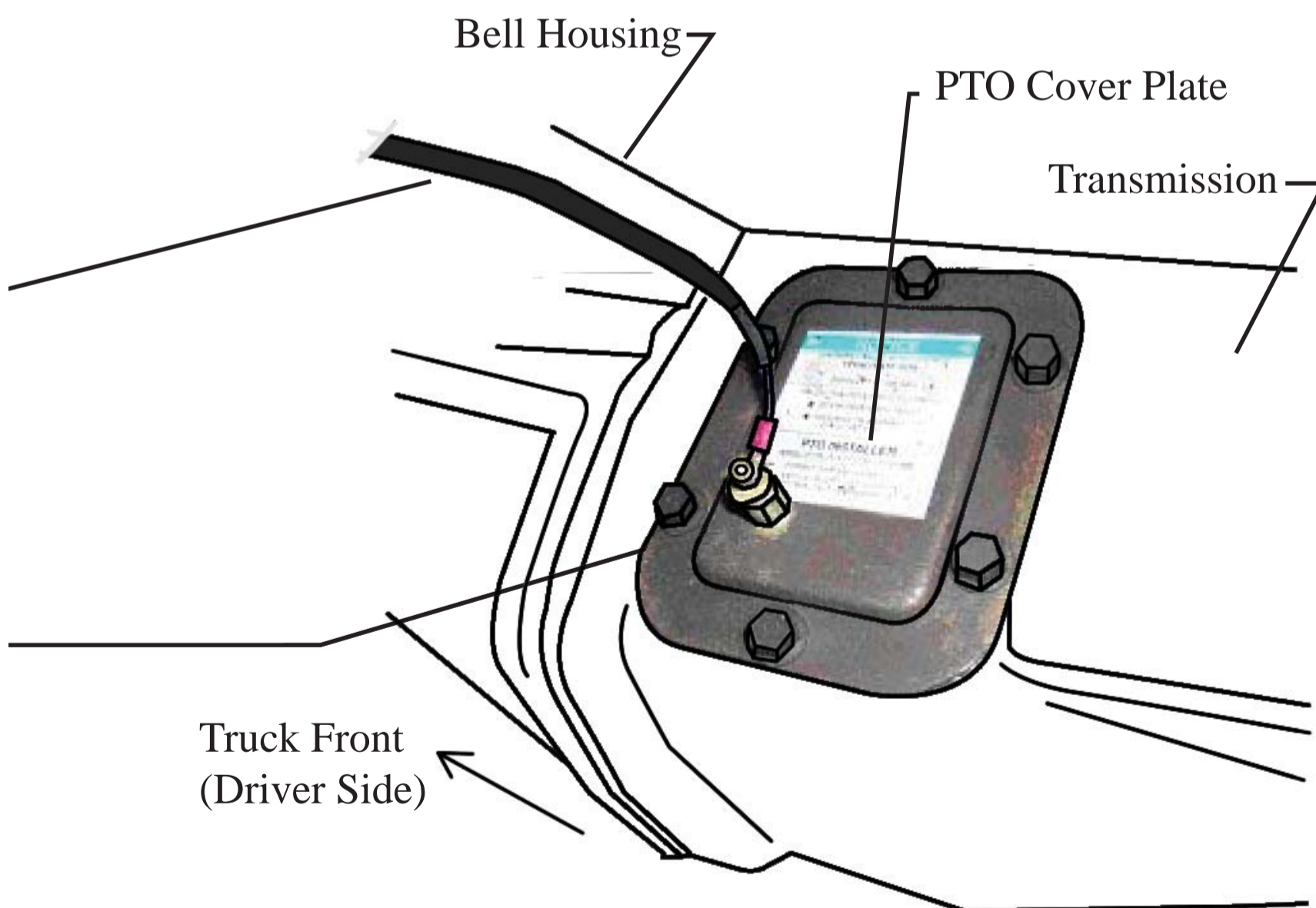


Figure 18 - Manual Transmission (Driver Side)

2003 - 2004

5.9L (CR)

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

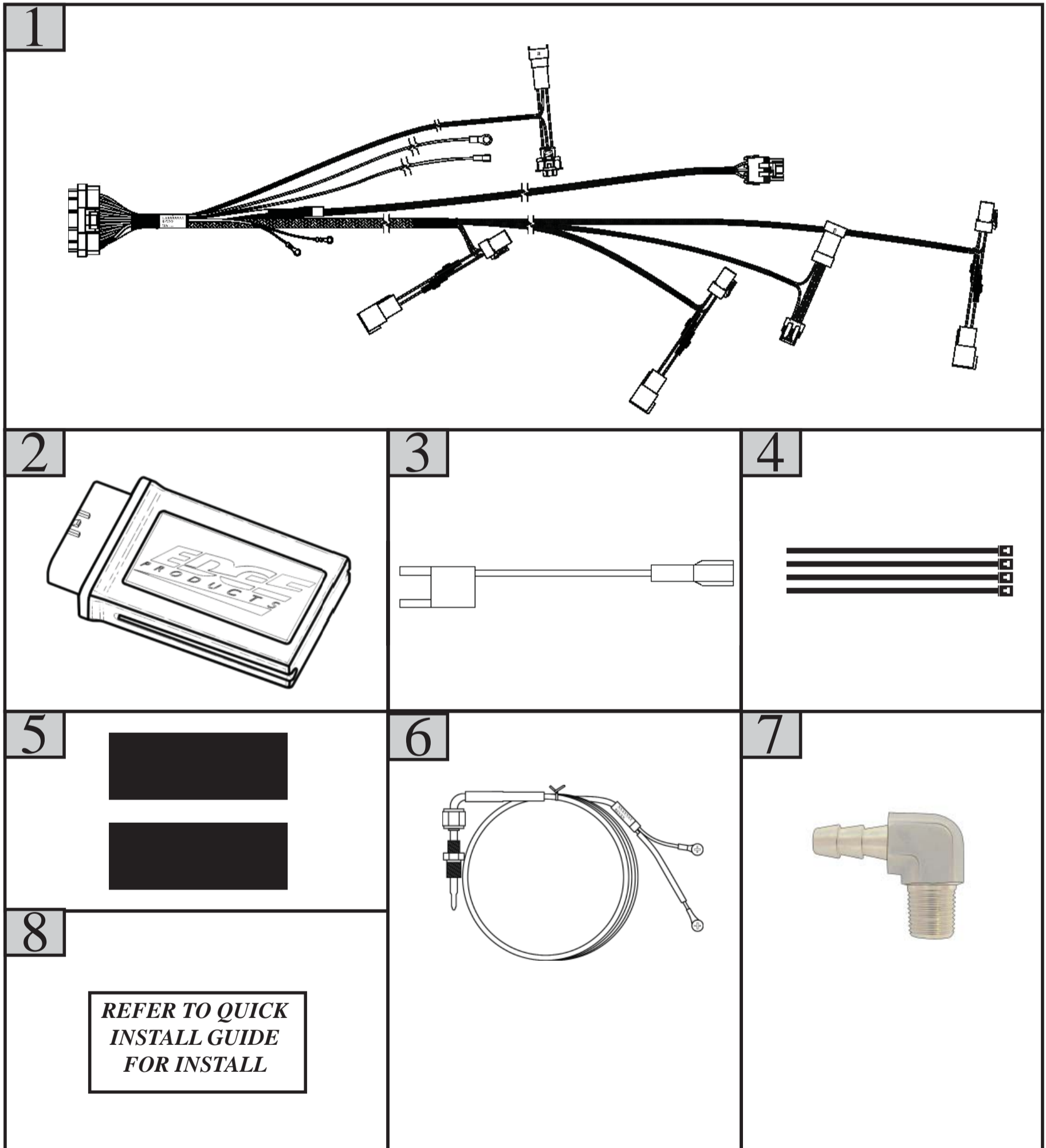
Supplied Items

Qty

- ① Main Wiring Harness.....(1)
- ② Edge Juice Module.....(1)
- ③ Leaded Fuse Link.....(1)
- ④ Zip Ties(10)
- ⑤ Velcro Strips.....(2)
- ⑥ EGT Probe.....(1)
- ⑦ Brass Fitting.....(1)
- ⑧ CS/CTS Kit.....(1)

Required Tools

- 3/8" Drive Ratchet
- 10mm Socket
- 5/16" Socket
- 1/2" Wrench
- 7/16" Wrench



Note: Depending on your year of truck, you may not need everything provided.

Harness Connection Guide

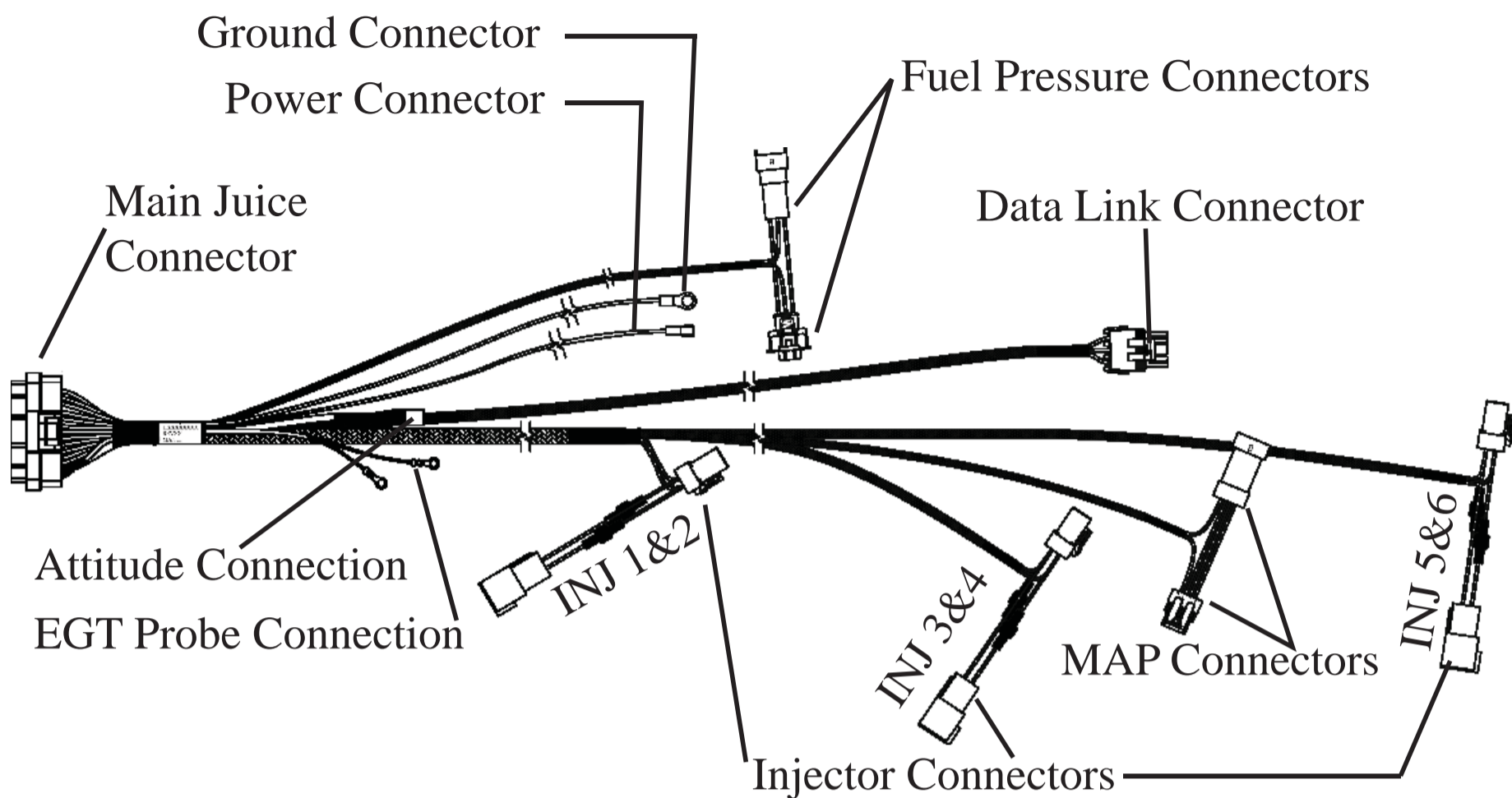
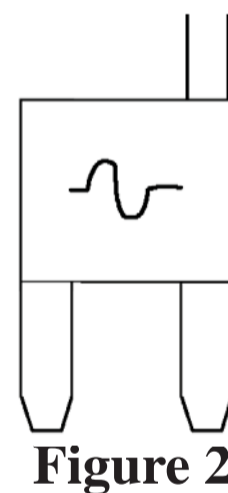


Figure 1 - Main Wiring Harness

CONNECTING TO POWER

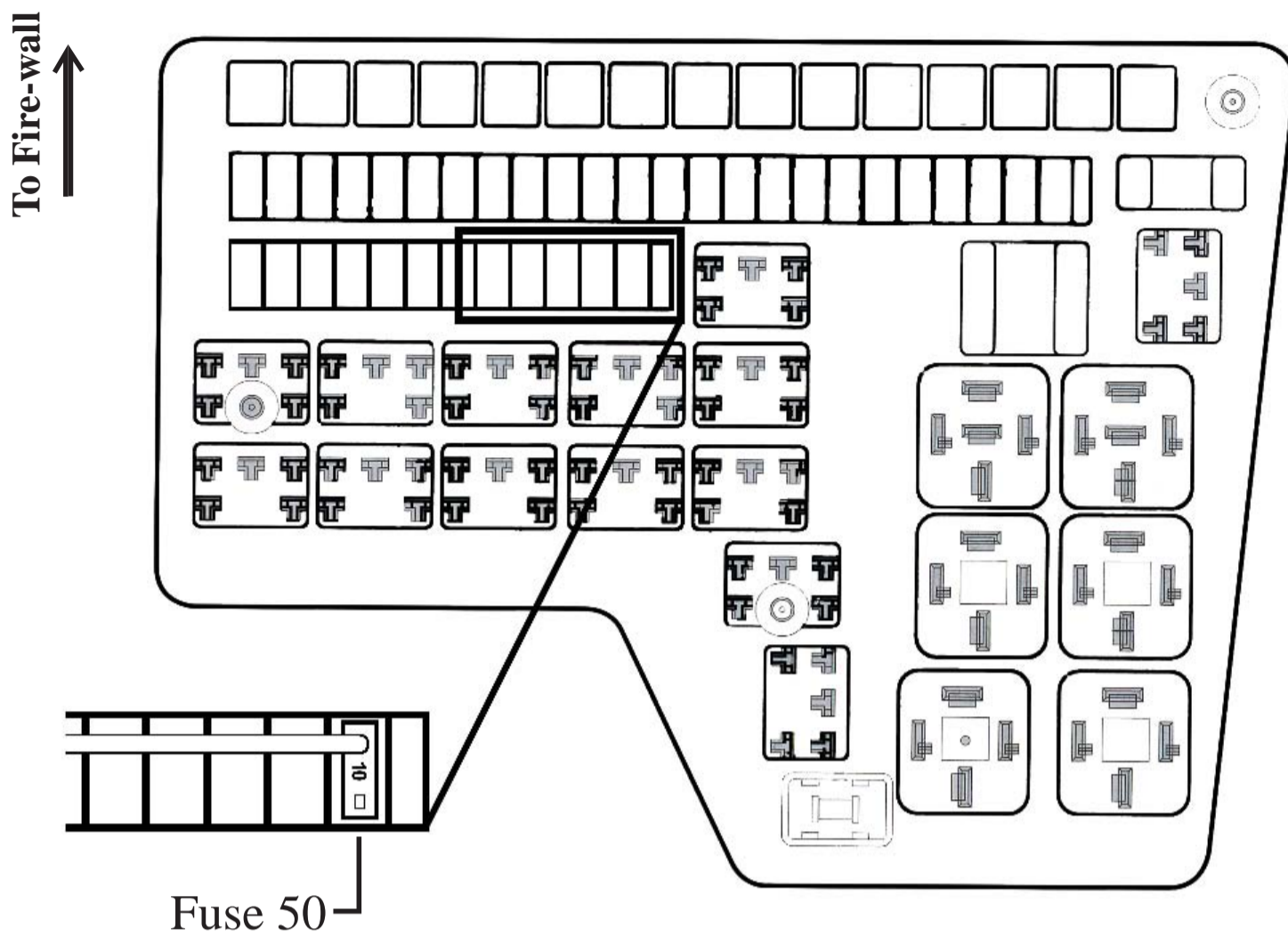
1. Using the 1/2" wrench, loosen both negative battery cables.
2. Remove cables from the battery posts and set aside.
3. Locate and remove Fuse 50 (10 Amp) from inside the engine compartment fuse panel.
4. Insert the Leaded Fuse Link (see Figure 2). The leg with the wire soldered to it needs to plug into the "HOT" side of the fuse location. Orient the fuse exactly as shown in Figure 3 on the following page.
5. From the main harness, connect the Red Power Connector to the installed Fuse Link (Figure 3)



WARNING An electrical charge or battery acid can burn you. Battery gas can explode or ignite. Take care when working around the battery. Follow instructions in the vehicle owner's manual for disconnecting and reconnecting a battery.

NOTE: DO NOT reconnect battery until installation is complete. Connecting power may cause fault code in the ECM.

Figure 3 - Fuse Box



CONNECTING TO GROUND

1. Connect the ground to the vehicle by removing the 10mm bolt from the driver side fender, above the battery.
2. Add the black ground connector with the round terminal to the wires already on the bolt.
3. Replace and tighten the bolt. (See Figure 4)

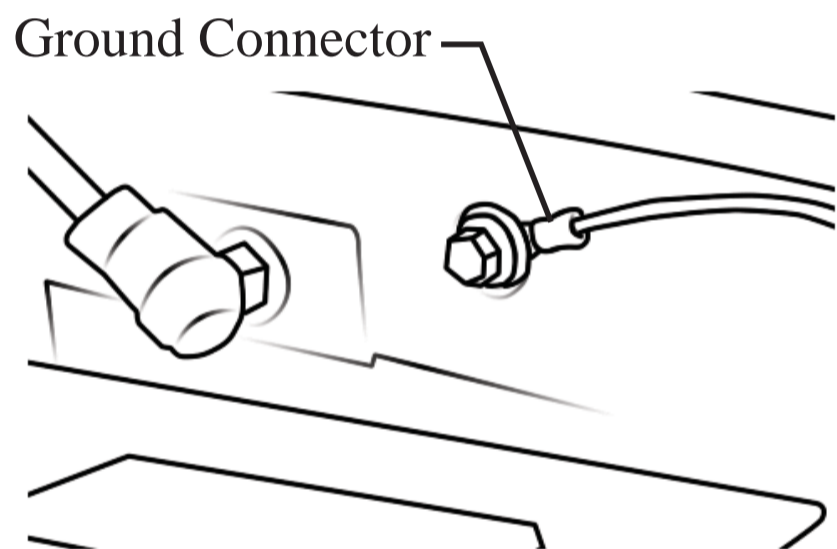


Figure 4 - Ground Connections

CONNECTING TO INJECTORS

1. Disconnect all 3 stock injector connectors by squeezing the tab on the top of each connector. (Figure 6 for locations)
2. Gently insert the Juice 'T' Injector Connectors between the stock connectors, and lock in place. (Figure 5) **NOTE: Match Edge Harness connectors to the proper injector set according to the wire colors described in Figure 6.**

CAUTION: When inserting connector bodies. If the connector does not slide smoothly, remove the connector, inspect the pins, and retry installation.

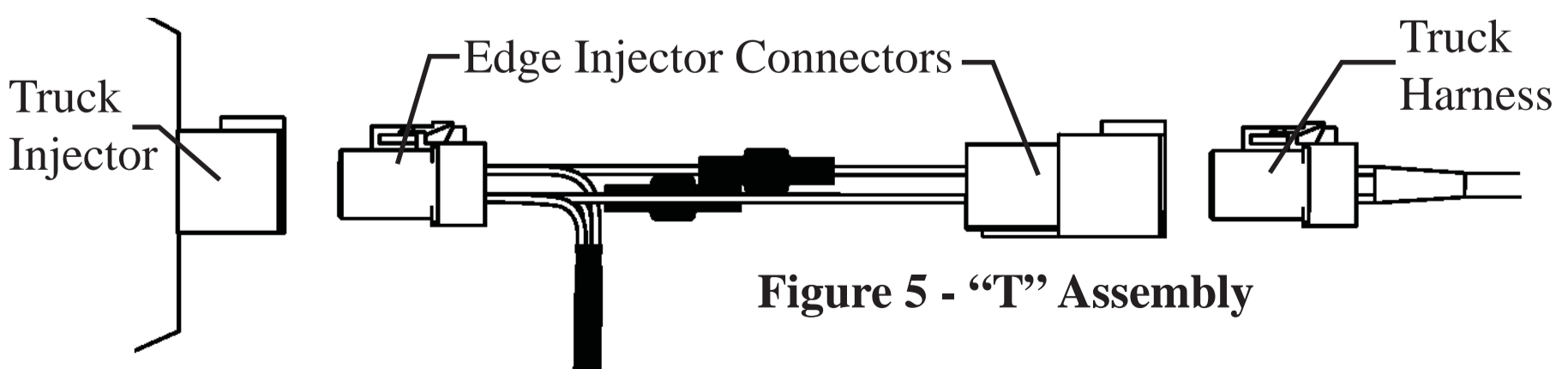


Figure 5 - "T" Assembly

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

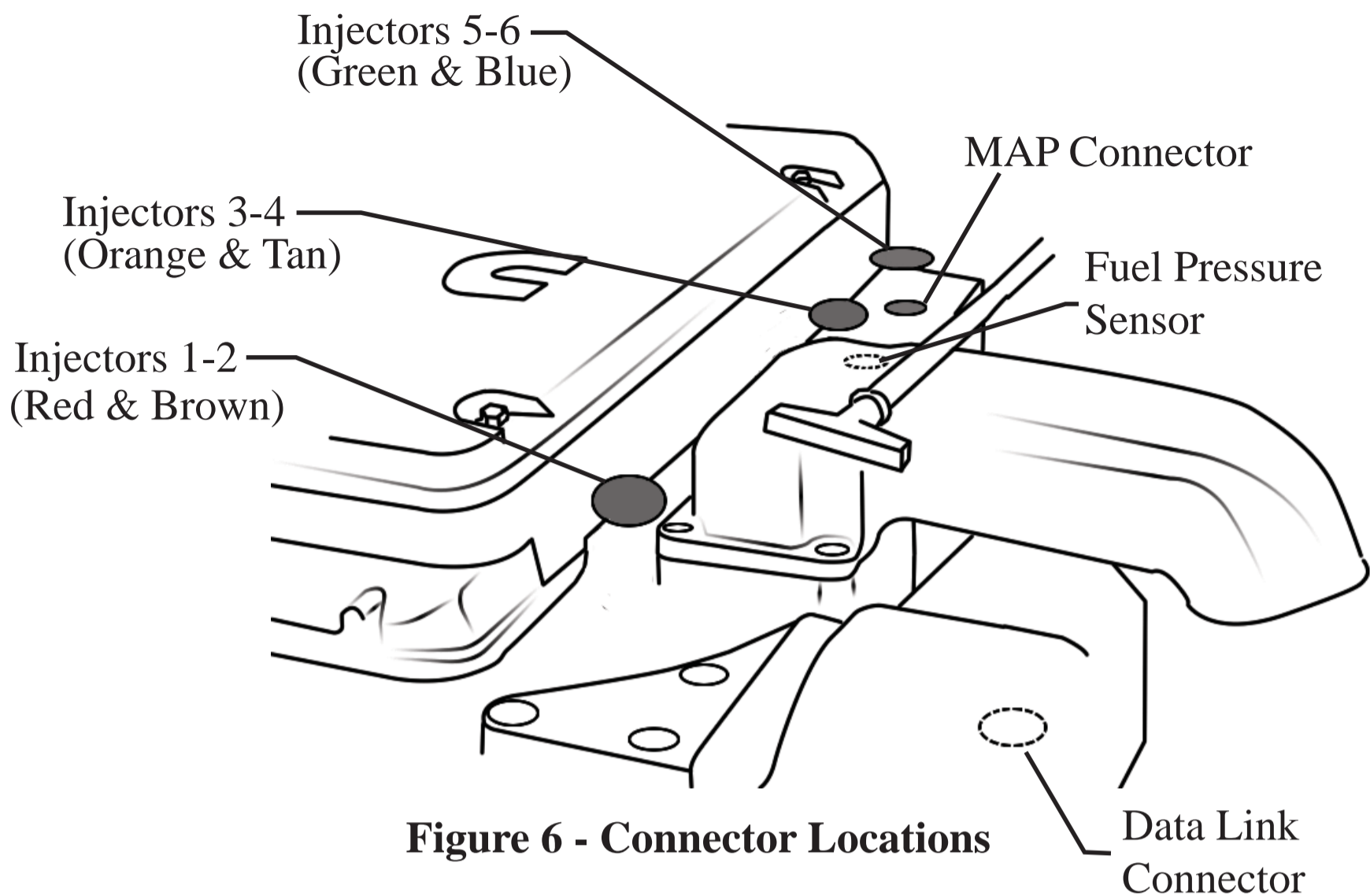


Figure 6 - Connector Locations

CONNECTING TO MAP SENSOR

1. Locate MAP connector. (Figure 6)
2. Remove vehicle MAP sensor connector and connect the Edge Harness MAP connector "T" (see Figure 7) in between the vehicle harness and the sensor itself.

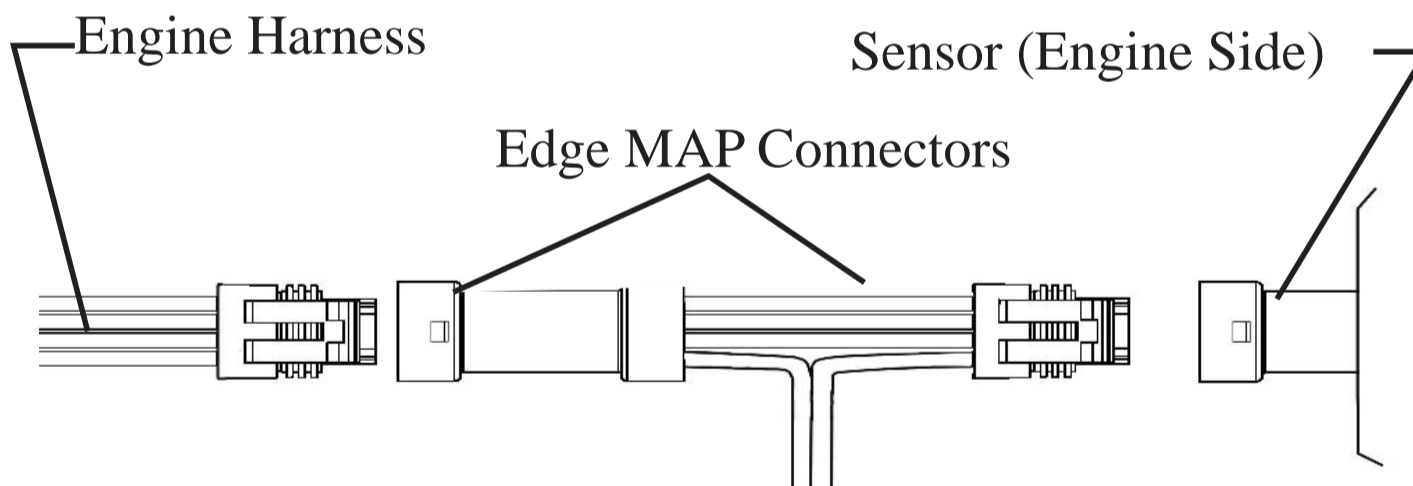


Figure 7 - "T" Assembly

CONNECTING TO DATA LINK

1. Locate Data Link connector. (Figure 6)
2. Remove vehicle Data Link connector and connect the Edge Harness Data Link connector into the Truck Data Link Connector. (Towards bottom of Engine)

NOTE: *The data link may come from the factory with a dummy plug in it. If so, remove the dummy plug, and connect the Edge data link connector into the socket. Save the dummy plug for use if the Juice must be removed for vehicle service.*

CONNECTING TO FUEL PRESSURE SENSOR

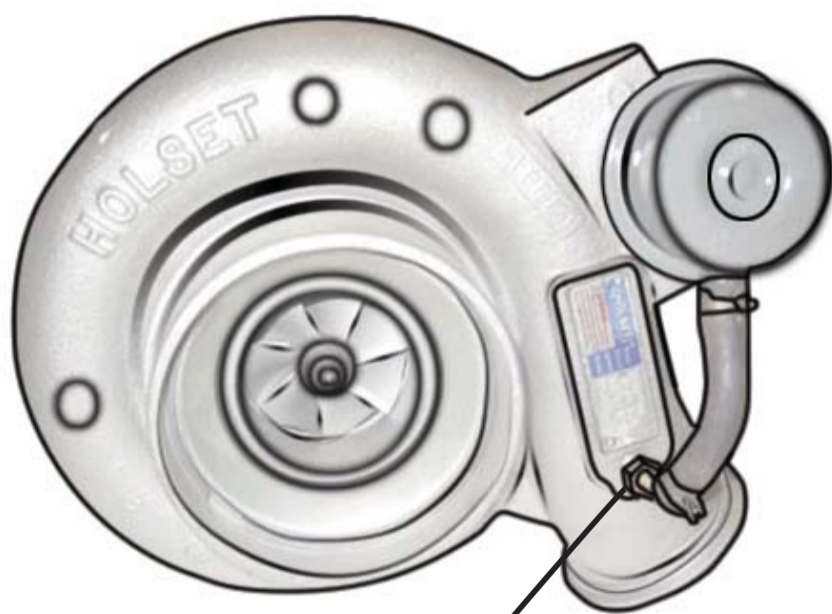
1. Locate Fuel Pressure Sensor connector. (Figure 6)
2. Remove vehicle Fuel Pressure Sensor connector and connect the Edge Harness Fuel pressure sensor connector "T" in between the vehicle harness and the sensor itself. (Similar to Figure 7 on previous page)

BOOST ELBOW INSTALLATION (OPTIONAL)

1. Using the 5/16" socket, loosen the two clamps securing the air induction hose to the air filter housing and the turbo inlet. (Figure 8)
2. Remove the hose and set it aside.
3. Using the pliers, remove the crimp style clamp from the hose on the brass fitting located on the now exposed lower front side of the turbocharger.
4. Remove the hose from the brass fitting and dispose of the crimp style clamp.
5. Using the 7/16" wrench, unscrew the stock brass fitting out of the turbocharger housing.
6. Using the 7/16" wrench, install the supplied brass fitting. Tighten while being careful not to over-tighten. (Figure 9)
7. Slip the supplied hose clamp onto the stock hose, install the stock hose onto the supplied brass fitting and tighten the hose clamp with the 1/4" socket.
8. Reinstall the stock air hose onto the air filter housing and turbocharger inlet.
9. Using the 5/16" socket, tighten both clamps securely.

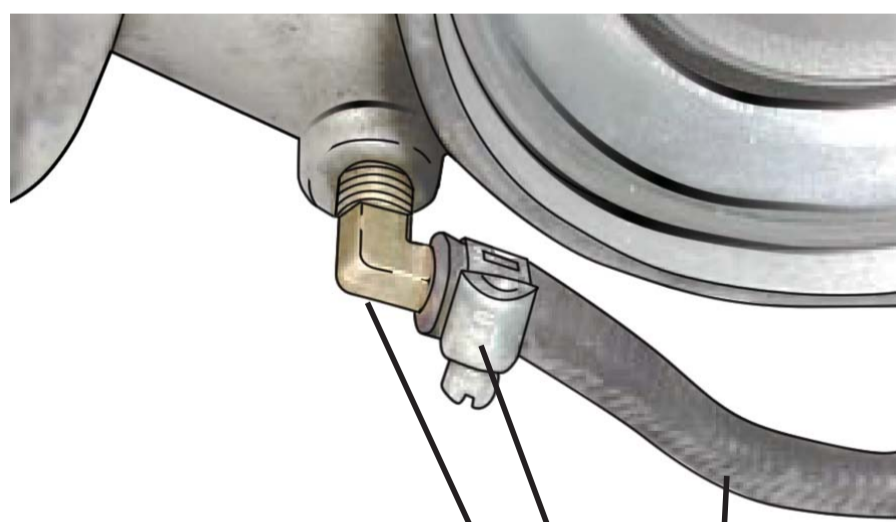
NOTE: YOUR JUICE MODULE INSTALLATION IS NOT COMPLETE. REFER TO THE "EGT PROBE INSTALLATION" SECTION TO CONTINUE.

Figure 8 - Turbo View



OEM brass fitting

Figure 9 - Installed Boost Elbow



Edge Supplied Elbow

Hose Clamp

Hose

2004.5 - 2005 5.9L (600)

Supplied Items

Qty

- ① Main Wiring Harness.....(1)
- ② Edge Juice Module.....(1)
- ③ Leaded Fuse Link.....(3)
- ④ Zip Ties(10)
- ⑤ Velcro Strips.....(2)
- ⑥ EGT Probe.....(1)
- ⑦ CS/CTS Kit.....(1)

Required Tools

- 3/8" Drive Ratchet
- 10mm Socket
- 5/16" Socket
- 1/2" Wrench
- 7/16" Wrench

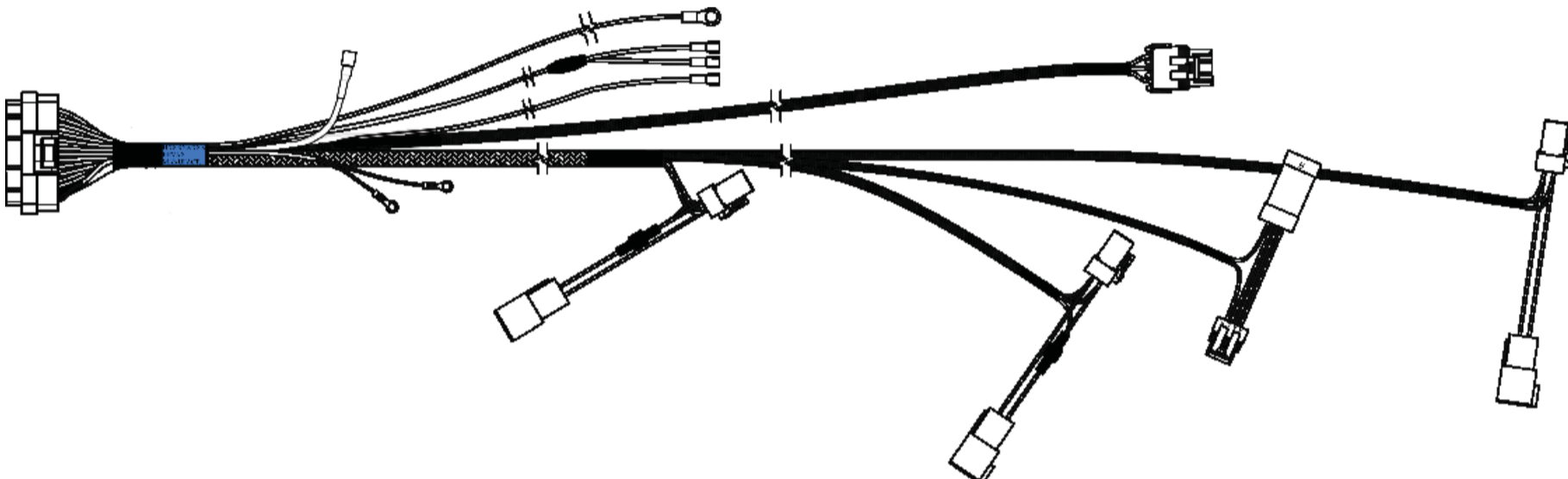
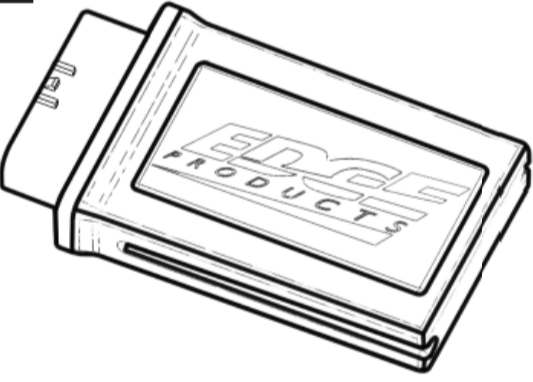
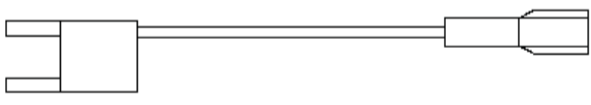


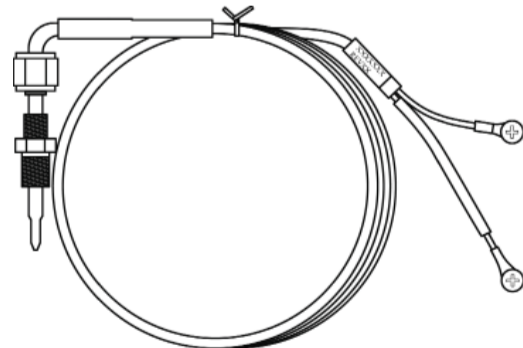
1			
2		3	
5		4	
6			
7			
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">REFER TO QUICK INSTALL GUIDE FOR INSTALL</div>			

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

Note: Depending on your year of truck, you may not need everything provided.

Harness Connection Guide

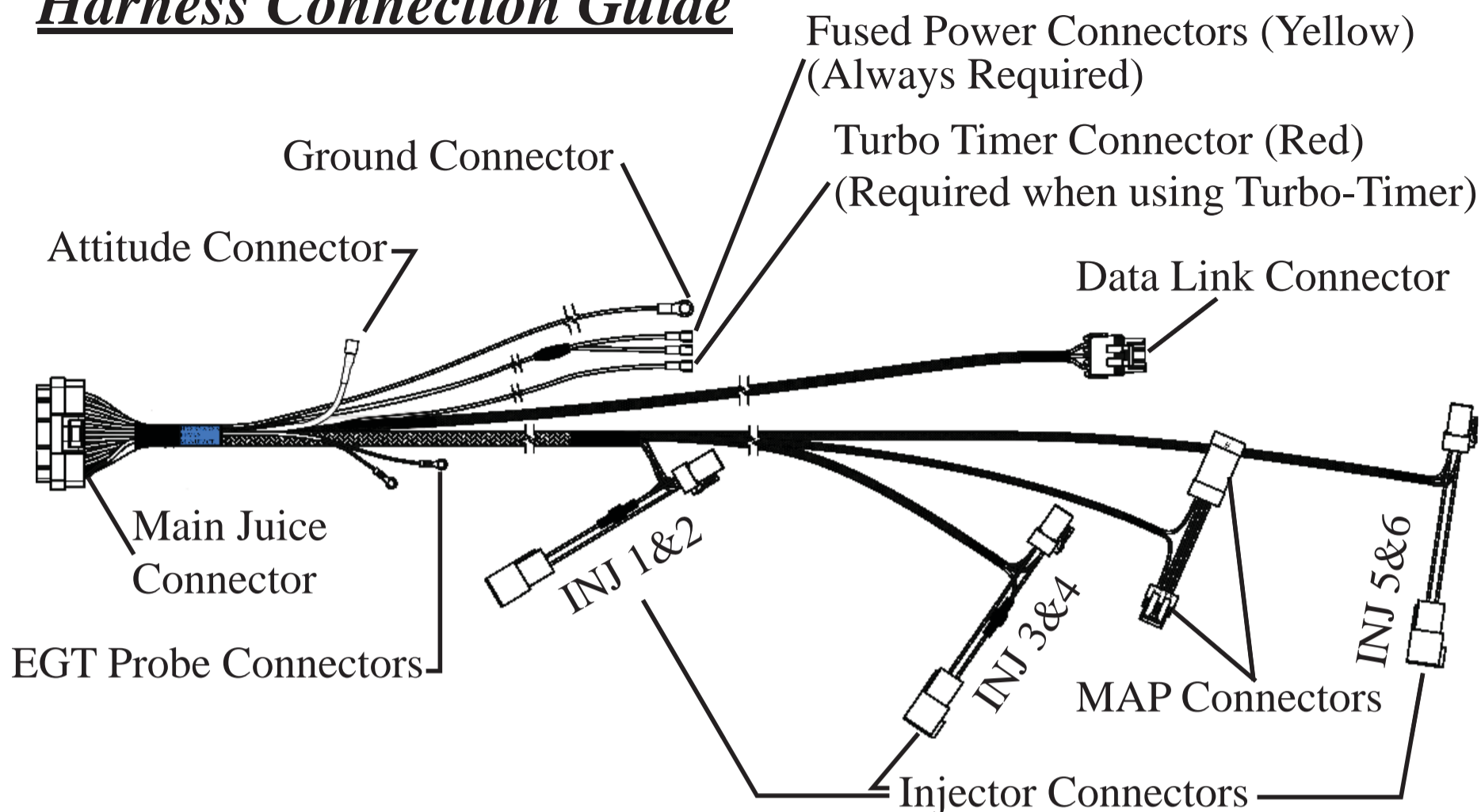


Figure 1 - 2004.5 - 2005

Follow all steps in the previous install section: “2003-2004 5.9L (CR)” in order to install your MAP Connectors, Injector Connectors, and the Data Link Connectors. Once complete, follow the rest of the steps in this section: “2004.5 - 2005 5.9L (600)” to finish the installation.

CONNECTING TO POWER

1. Using the 1/2” wrench, loosen both negative battery cables.
2. Remove cables from the battery posts and set aside.
3. Locate and remove Fuses 28 and 35 (10 Amp) from inside the engine compartment fuse panel.
4. Insert the Leaded Fuse Links (see Figure 2). The leg with the wire soldered to it needs to plug into the “HOT” side of the fuse location. Orient the fuse exactly as shown in Figure 3 on the following page.
5. From the main harness, connect the Yellow Power Connectors to the installed Fuse Links (Figure 3)

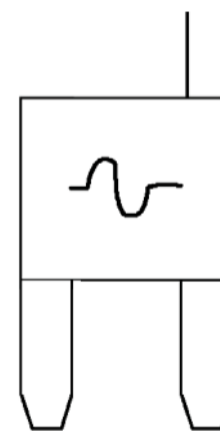


Figure 2



WARNING An electrical charge or battery acid can burn you. Battery gas can explode or ignite. Take care when working around the battery. Follow instructions in the vehicle owner’s manual for disconnecting and reconnecting a battery.

NOTE: DO NOT reconnect battery until installation is complete. Connecting power may cause fault code in the ECM.

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

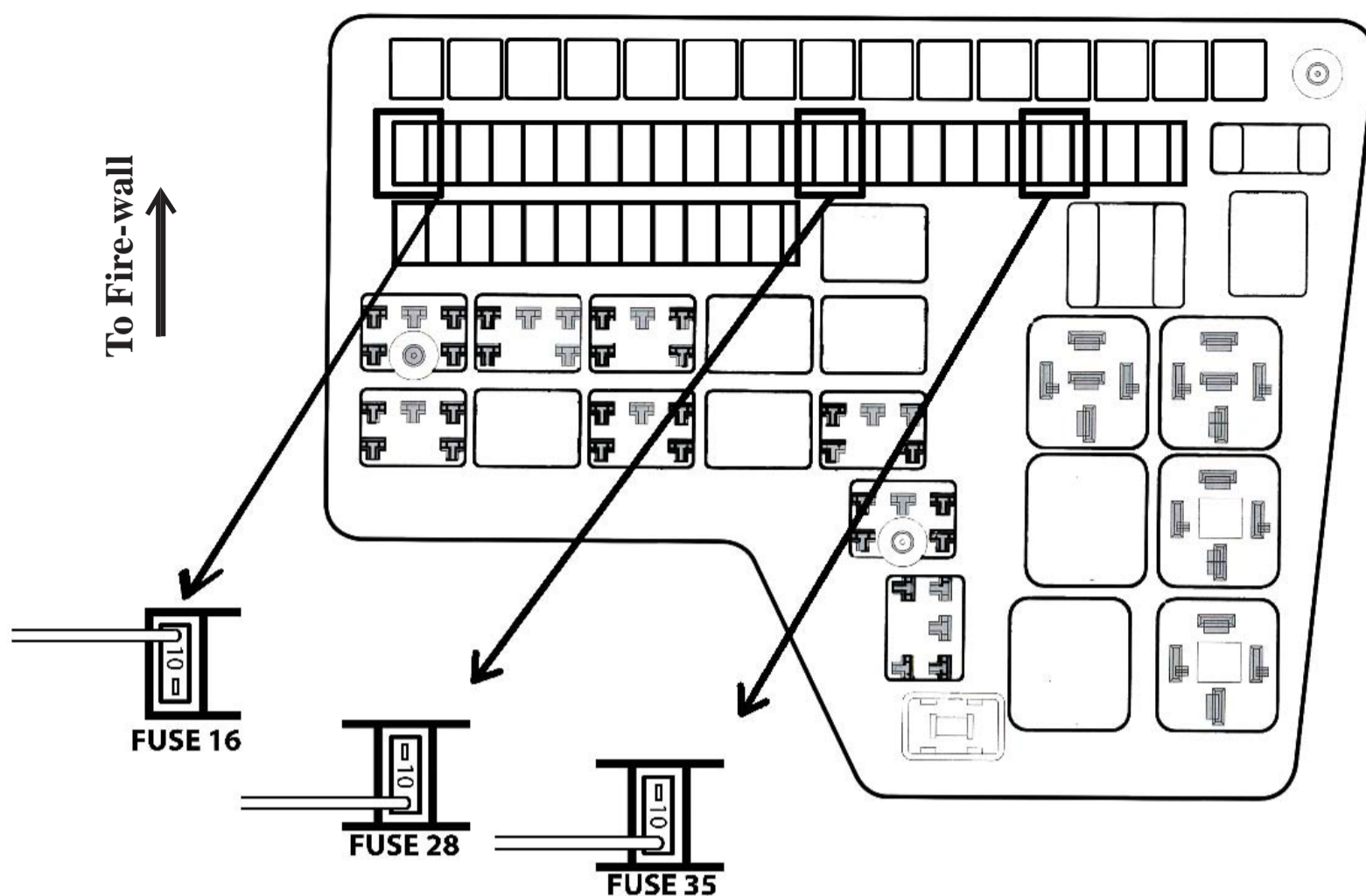


Figure 3 - Fuse Tap Locations

CONNECTING TO TURBO TIMER

1. Locate and remove Fuse 16 (10 Amp) from inside the engine compartment fuse panel.
4. Insert the Leaded Fuse Link (see Figure 2). The leg with the wire soldered to it needs to plug into the “HOT” side of the fuse location. Orient the fuse exactly as shown in Figure 3 above.
5. From the main harness, connect the Red Turbo Timer Connector to the installed Fuse Link (Figure 3)

NOTE: YOUR JUICE MODULE INSTALLATION IS NOT COMPLETE. REFER TO THE “EGT PROBE INSTALLATION” SECTION TO CONTINUE.

2006 - 2011

5.9L & 6.7L

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

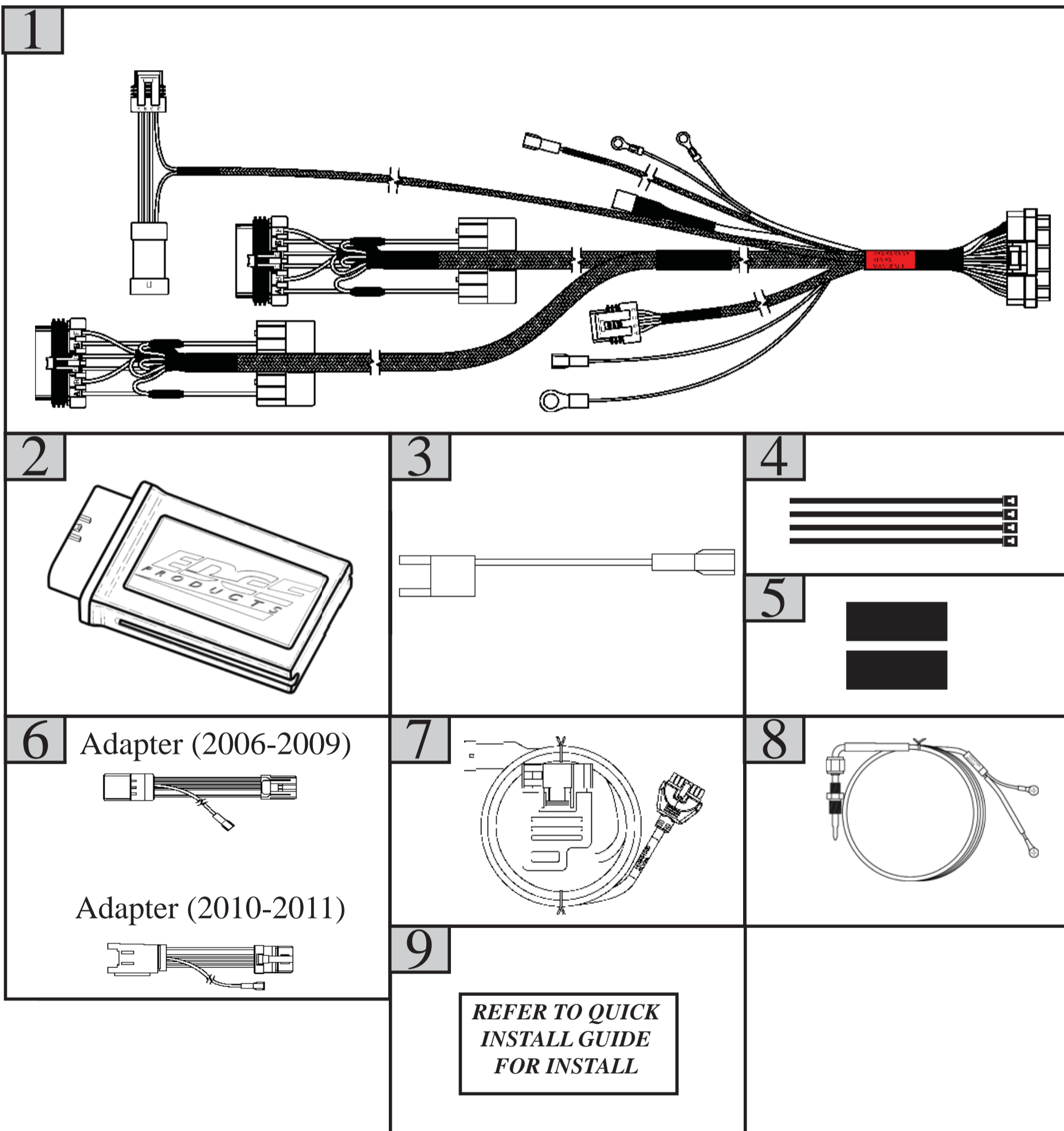
Supplied Items

Qty

- ① Main Wiring Harness.....(1)
- ② Edge Juice Module.....(1)
- ③ Leaded Fuse Link.....(1)
- ④ Zip Ties(10)
- ⑤ Velcro Strips.....(2)
- ⑥ Turbo Timer Adapters.....(2)
- ⑦ DATA/OBDII Cable.....(1)
- ⑧ EGT Probe.....(1)
- ⑨ CS/CTS Kit.....(1)

Required Tools

- 3/8" Drive Ratchet
- 10mm Socket



Note: Depending on your year of truck, you may not need everything provided.

Harness Connection Guide

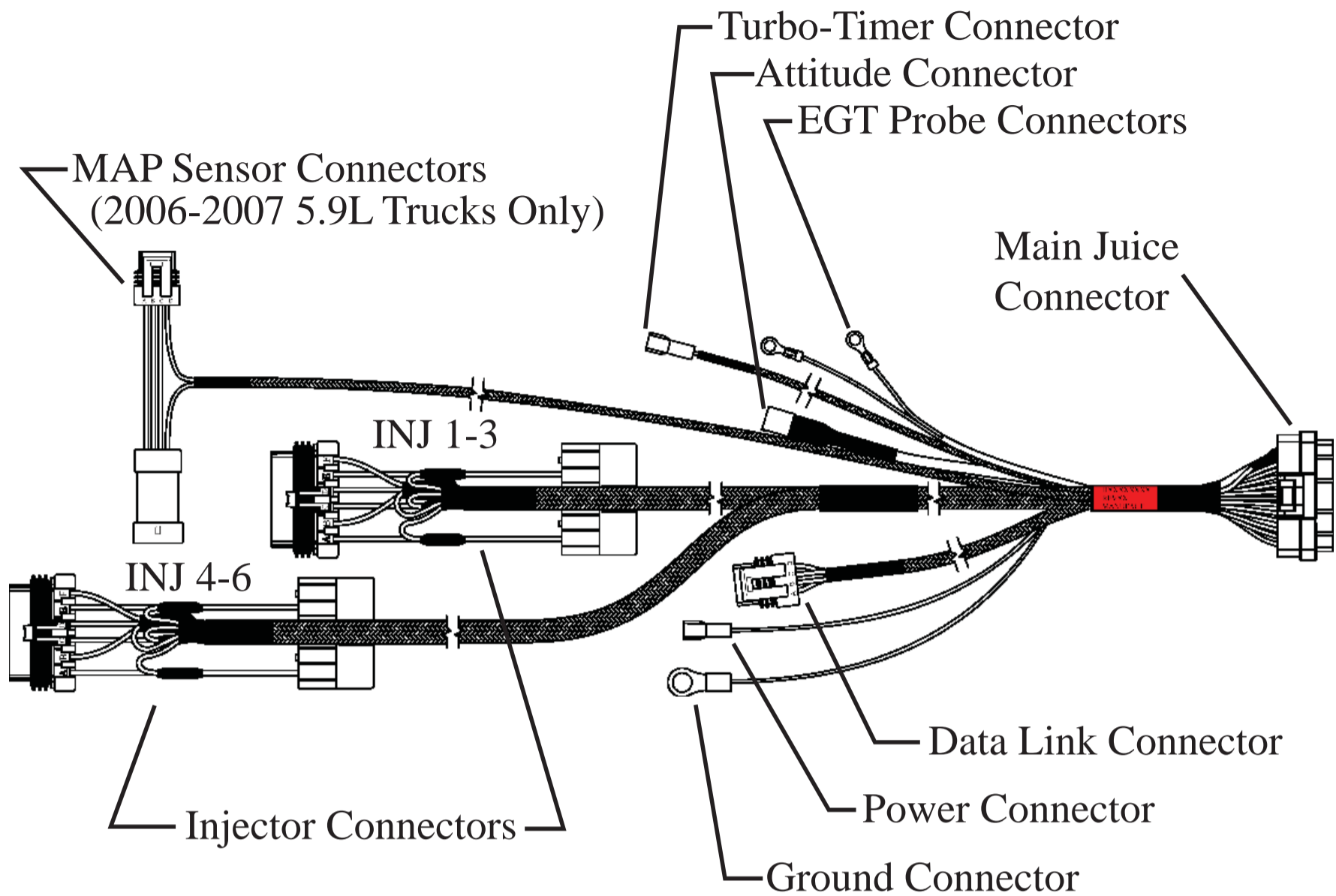


Figure 1

CONNECTING TO POWER

1. Using the 1/2" wrench, loosen both negative battery cables.
2. Remove cables from the battery posts and set aside.
3. Locate and remove the following fuses:
 - 06-09 Trucks - Fuse 28
 - 2010 Trucks - Fuse M52
 - 2011 Trucks - Fuse M33
4. Insert the Leaded Fuse Links (see Figure 2). The leg with the wire soldered to it needs to plug into the "HOT" side of the fuse location. Orient the fuse exactly as shown in Figures 3A,3B, and 3C on the following page.
5. From the main harness, connect the Red Power Connector to the installed Fuse Link (Figure 3)

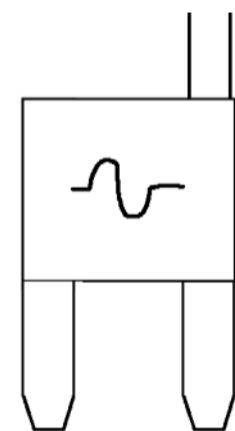


Figure 2



WARNING An electrical charge or battery acid can burn you. Battery gas can explode or ignite. Take care when working around the battery. Follow instructions in the vehicle owner's manual for disconnecting and reconnecting a battery.

NOTE: DO NOT reconnect battery until installation is complete. Connecting power may cause fault code in the ECM.

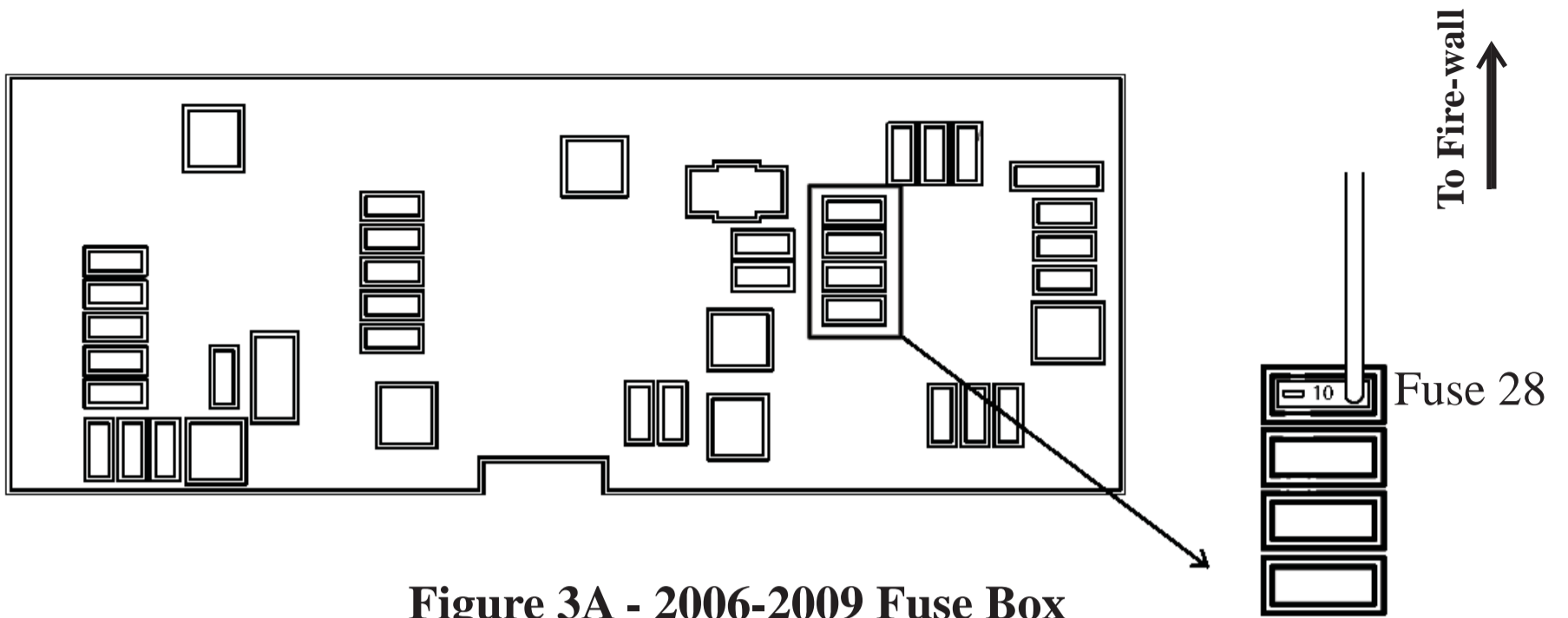


Figure 3A - 2006-2009 Fuse Box

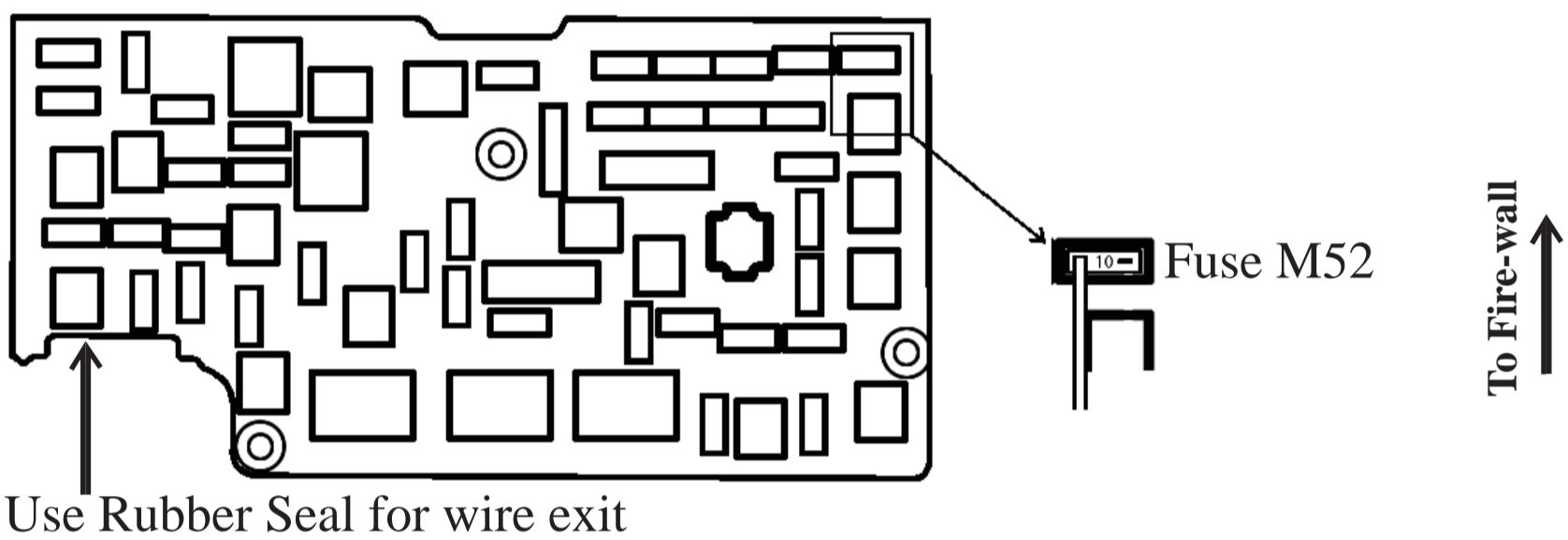


Figure 3B - 2010 Fuse Box

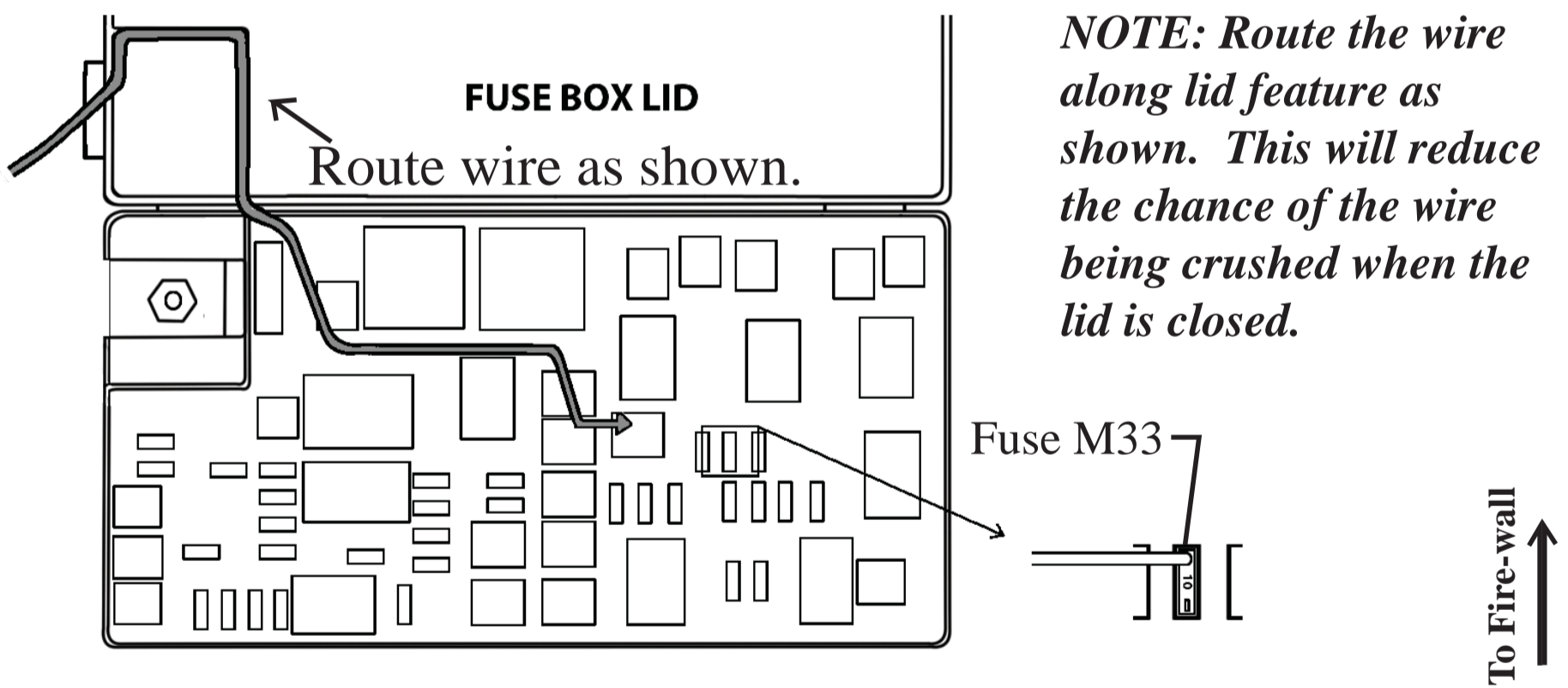


Figure 3C - 2011 Fuse Box

CONNECTING TO GROUND

1. Connect the ground to the vehicle by removing the 10mm bolt from the fender, above the battery.
2. Add the black ground wire (see Figure 1) with the round terminal to the wires already on the bolt.
3. Replace and tighten the bolt. (See Figure 4)

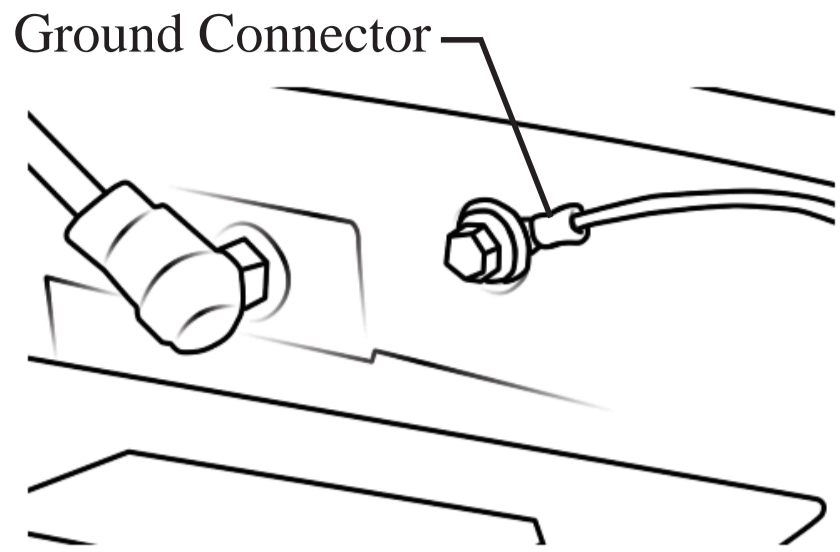


Figure 4 - Ground Connections

CONNECTING TO INJECTORS

1. Locate the two stock injector connectors. (Figure 6)
2. Remove vehicle Injector Connectors and connect the Edge Harness Injector connector "T" in between the vehicle harness and the sensor itself. (Figure 5)

NOTE: *Injector Connectors with injectors 1, 2, & 3 has Orange/White, Red/White and Brown/White wires and a shorter cable length. The connector for injectors 4, 5, & 6 has Blue/White, Green/White, and Tan/White wires and a longer cable length.*

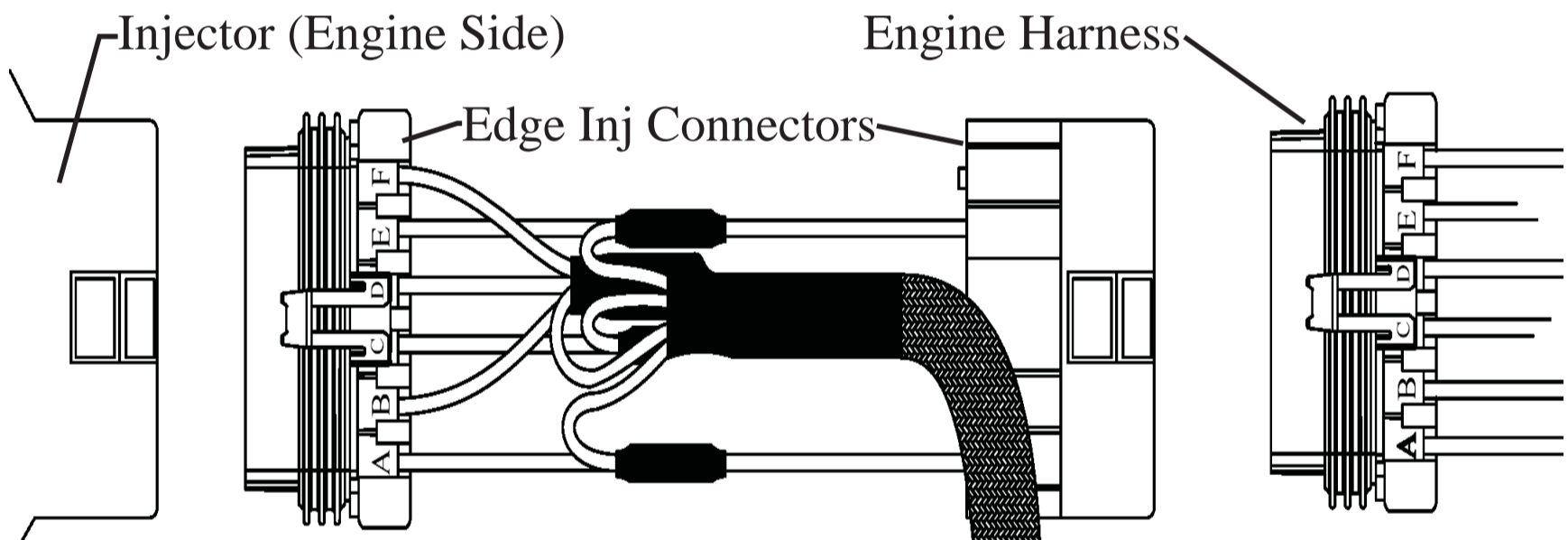


Figure 5 - Injectors

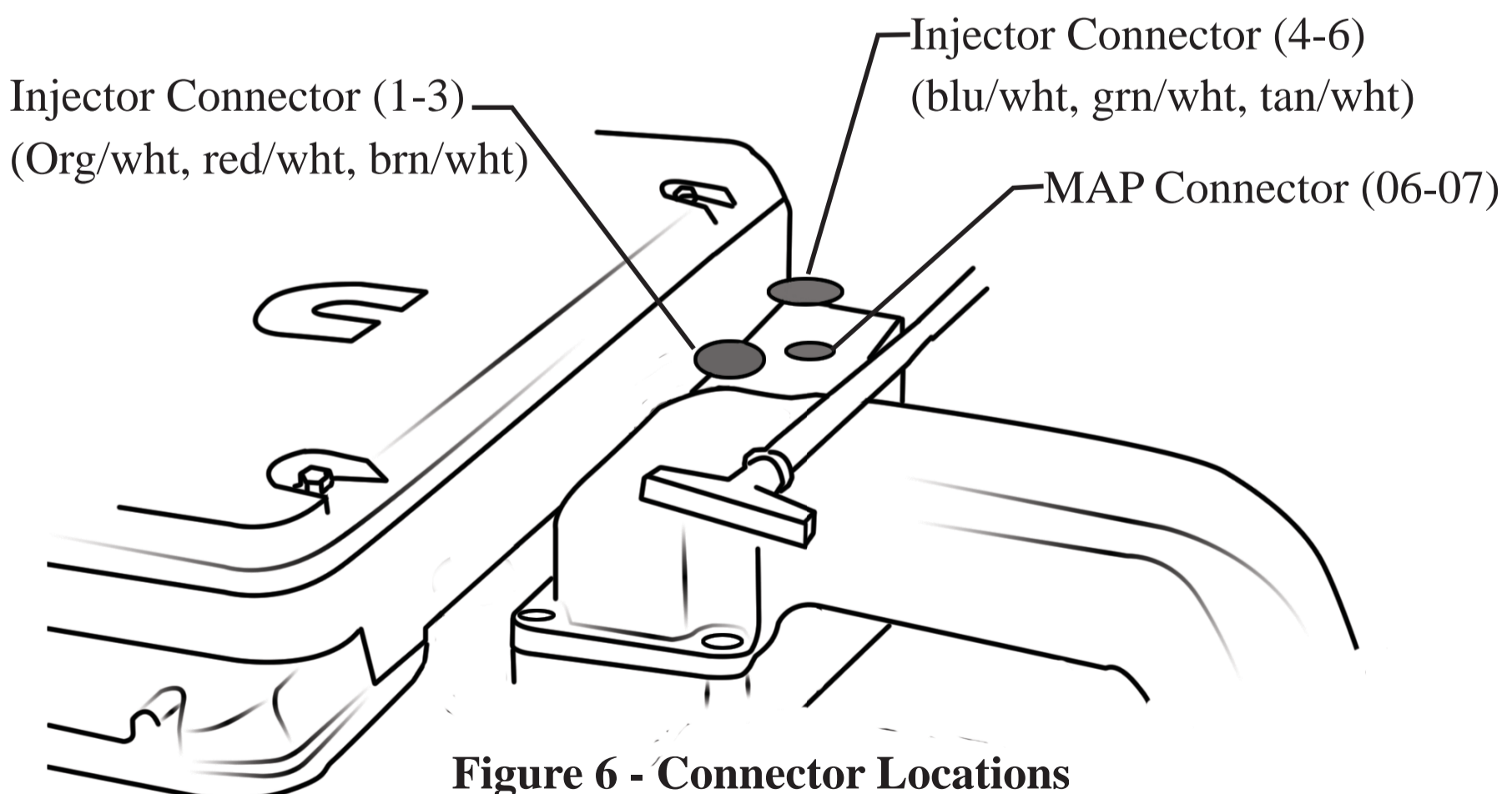


Figure 6 - Connector Locations

CONNECTING TO MAP SENSOR (2006 - 2007 5.9L ONLY)

1. Locate MAP connector. (Figure 6)
2. Remove vehicle MAP sensor connector and connect the Edge Harness MAP connector “T” (see Figure 7) in between the vehicle harness and the sensor itself.

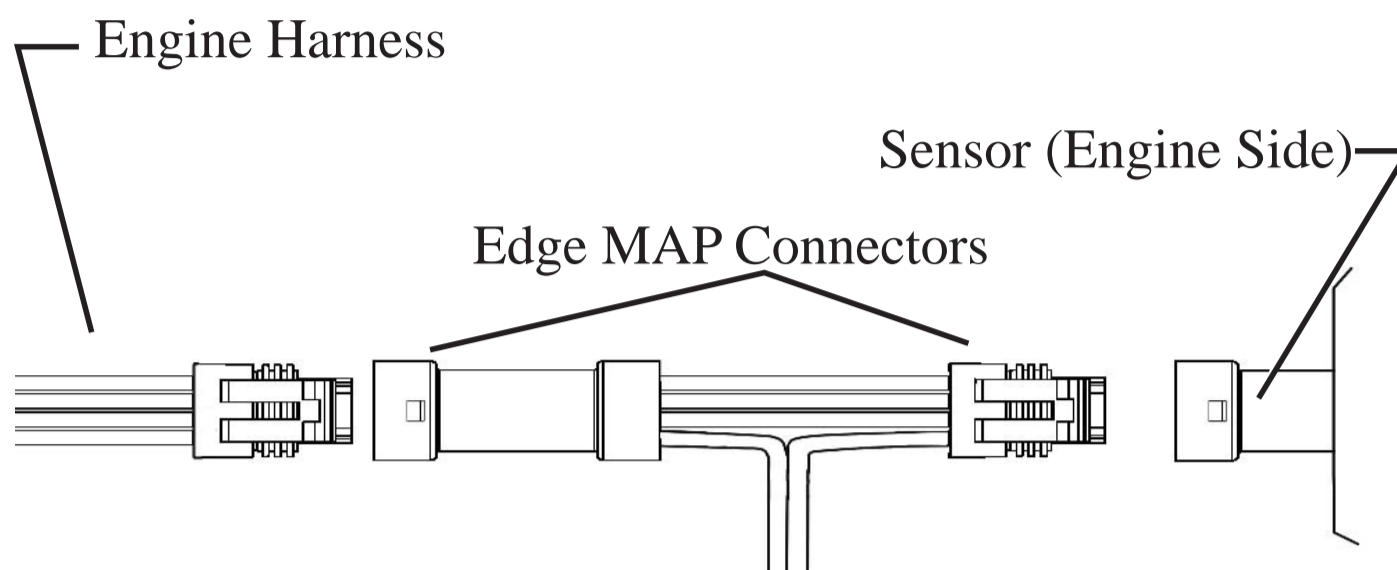


Figure 7 - “T” Assembly

CONNECTING TO DATA LINK

1. Locate the “DATA/OBDII” cable provided in the box from Edge. (see “Supplied Items”) *NOTE: There are 3 different connectors on this one cable. Refer to Figure 8 for more detail.*

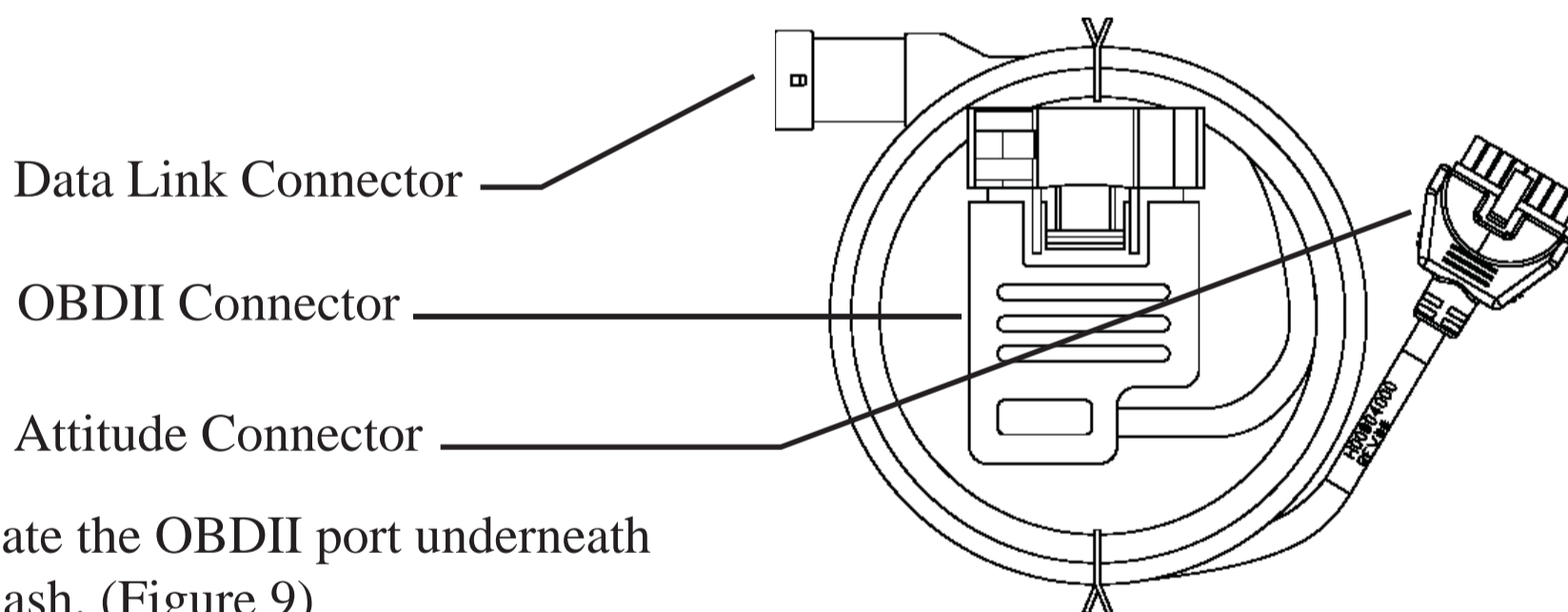


Figure 8 - DATA/OBDII Cable

2. Locate the OBDII port underneath your dash. (Figure 9)
3. Plug the Edge supplied “DATA/OBDII” cable into the OBDII port.
4. Route the “DATA/OBDII” Data Link Connector out the rubber grommet as shown in Figure 10.

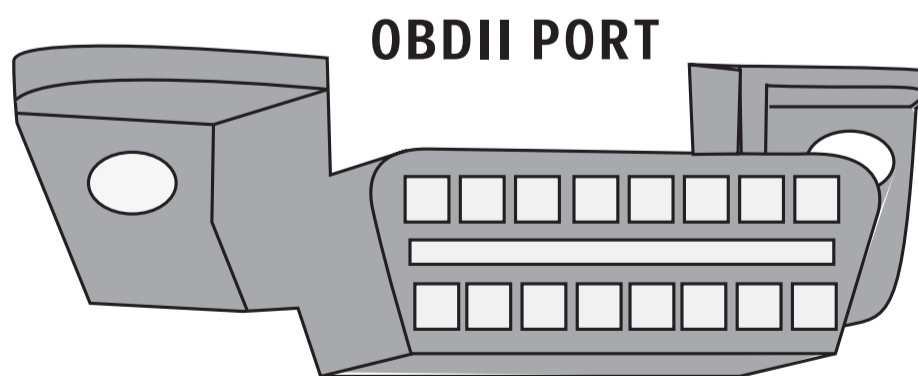


Figure 9

NOTE: The Attitude cable will later be routed and installed.

5. Plug the routed Data Link connector from the “DATA/OBDII” cable into the “Edge Main Harness” Data Link connector under the hood. (Figure 10)

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

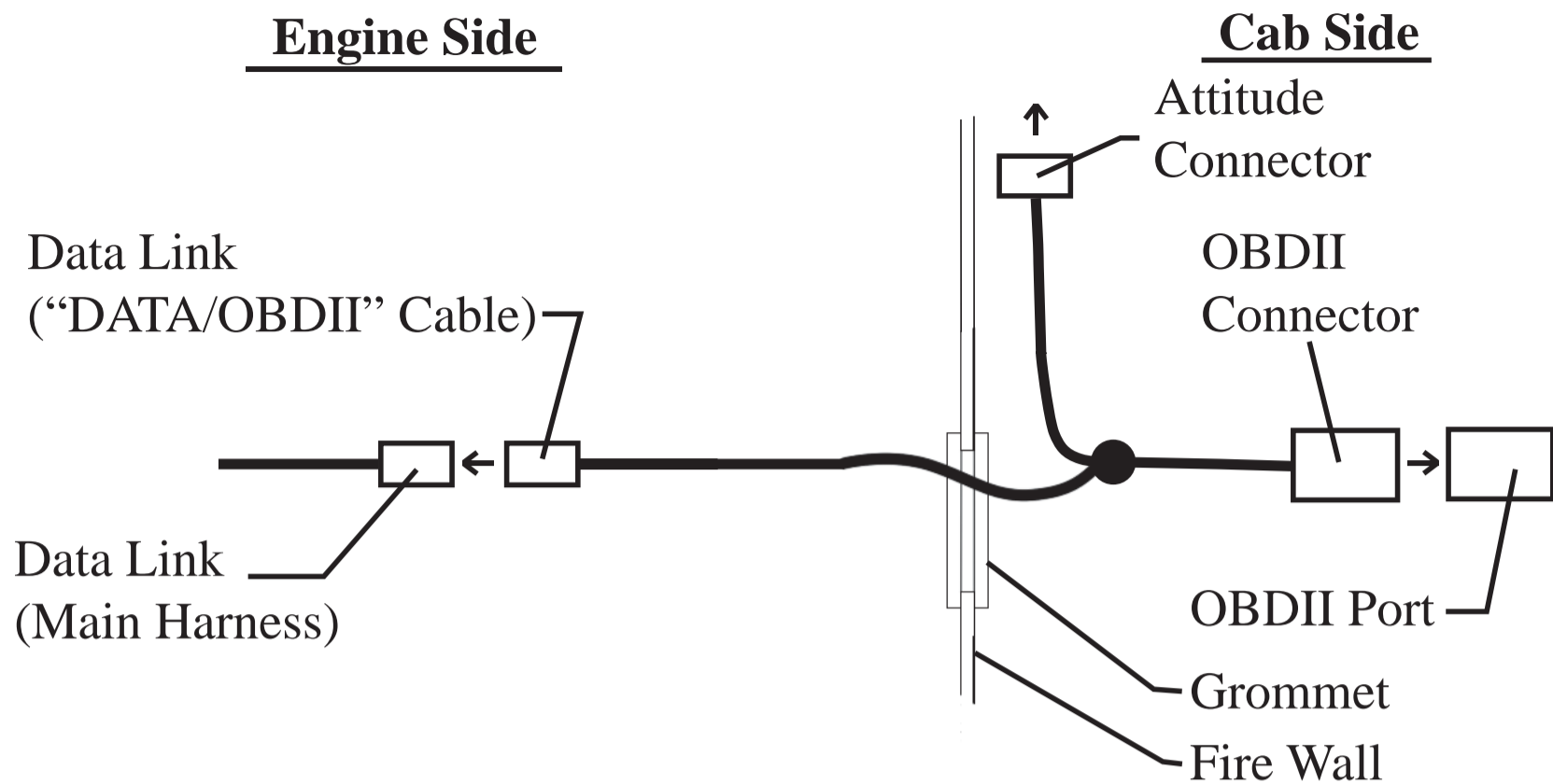


Figure 10 - Routed Data Link

CONNECTING TO THE TURBO TIMER

1. Locate the Turbo Timer cable provided in the box. (see "Supplied Items")
NOTE: There may be 2 different Turbo Timer adapters included in your kit. (See Supplied items at the beginning of this section to determine which adapter will fit your model year.) Find the proper adapter and follow the instructions to properly install it. Once you have determined the connector is correctly installed, you may discard the remaining adapter as you will not need it.
2. Remove panel under steering column. (Figures 11 & 11A)
3. Locate the key position connectors. **The 2006-2009 are up and inside the steering column. The 2010-2011 are behind the key/ignition.**
4. Connect the Turbo Timer (TT) adapter in between the truck connectors. **The 2006-2009 will be an in-line cable coming from the steering column.**
5. Route the Turbo Timer (Main Harness) connector through the fire wall grommet as shown in (Figure 12).
6. Connect the Turbo Timer connector into the Turbo Timer adapter underneath the dash.

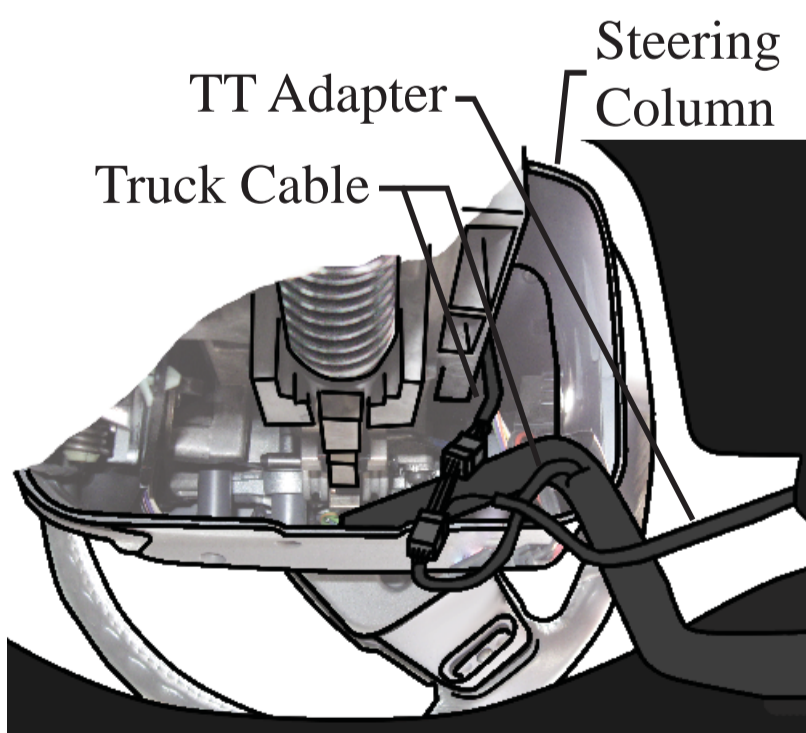


Figure 11 - Looking up from brake pedal (2006-2009)

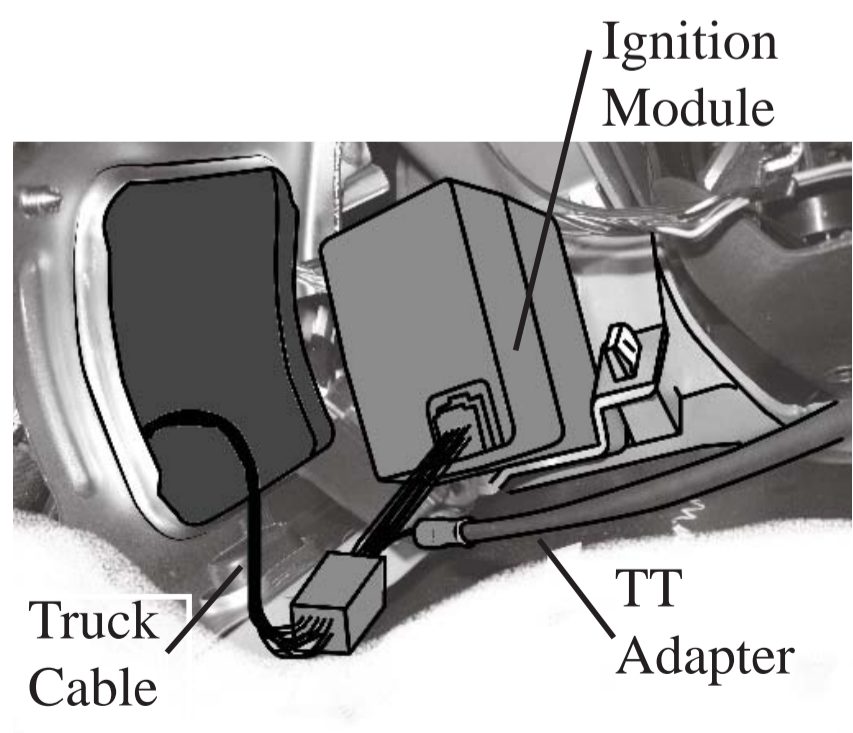


Figure 11A - Looking up from brake pedal (2010-2011)

Engine Side

Cab Side

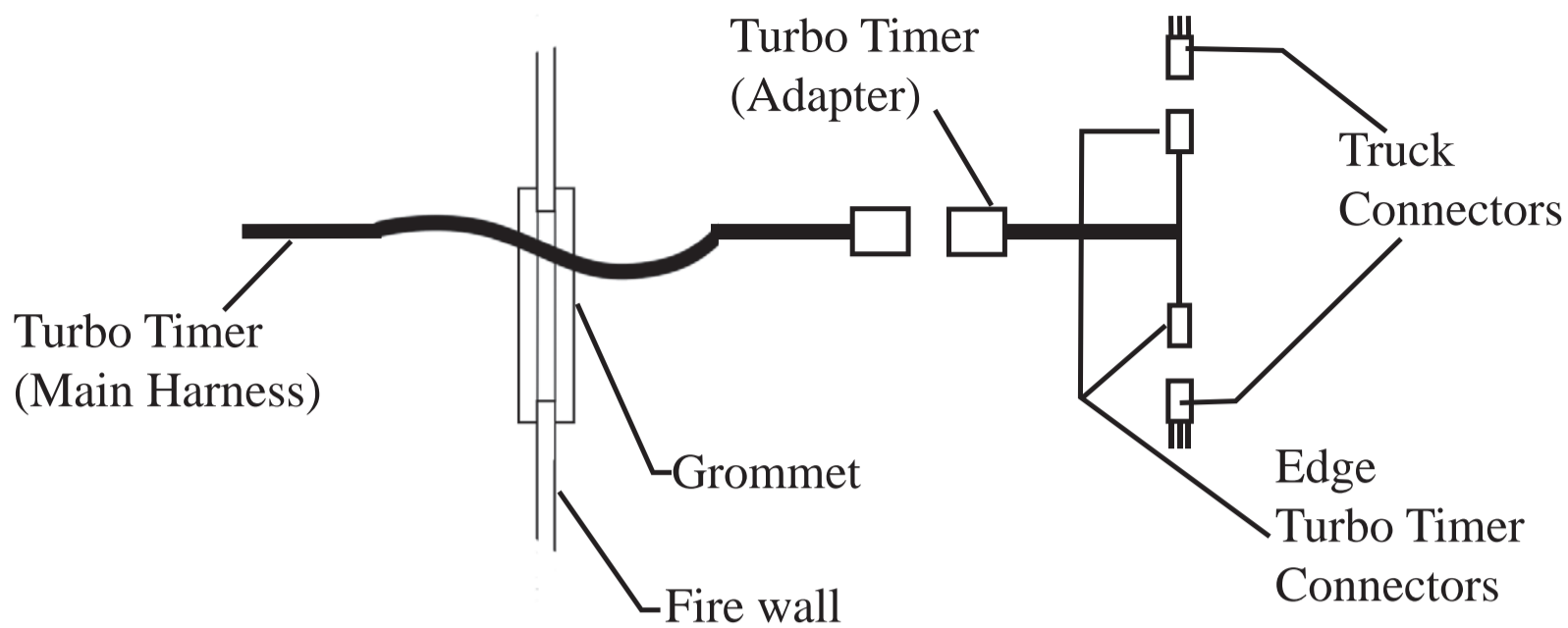


Figure 12 - Routed Turbo Timer

NOTE: Your juice module installation is not complete. Refer to the “EGT PROBE INSTALLATION” section to continue.

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

2007.5 - 2011 6.7L (RACING)

CAUTION: 2010 Dodge trucks that have been manufactured before March 2010 may generate engine fault codes. In order for the Race Juice to work correctly with the DPF off, your truck may need to be updated. Only a Dealer can update your truck's computer so this is important to know before you remove your DPF. To find out which software file your truck has, follow these steps:

1. Have the Edge Racing Disclaimer (www.edgeproductsracing.com) signed with the unlock code ready.
2. If you have already installed your juice module, to retrieve your vehicle's calibration I.D., skip to step 4.
3. Make the following connections to power up the device (NOTE: You will not yet need to permanently install any of these connections):

Connection 1 - On the main juice harness, locate the single red wire and connect it to fuse M53 (fuse box under the hood). See Figure 3B on page 28 of this manual. Use the supplied fuse taps.

Connection 2 - Connect the Juice Module to the Main Harness. See bottom of page 41 of this manual.

Connection 3 - Connect the Green Juice Module Connector to the Green JAB connector. See Figure 2 on page 39 of this manual.

Connection 4 - Make sure the EAS is assembled correctly (see Figure 2 page 39) and then plug the 6 pin connector into the back of the CS/CTS.

Connection 5 - Locate the OBDII connector under the dash, and plug in the supplied OBDII cable. Route the opposite end to the data link connector on the main harness, and plug them together. See Figures 8,9, and 10 on pages 30 & 31 of this manual.

Connection 6 - Plug the other end of the OBDII cable into the back of the CS/CTS. See top of page 41 of this manual.

4. Turn the key to the on position and touch the screen (CTS) or press a button (CS) and the device should power up. If not, check your connections.
5. Enter the MAIN MENU, then the HELP MENU, then choose the VEHICLE INFO option. If AU, AV, or AX is displayed at the end of the chain of numbers, you will need to have your truck updated at the dealer. If you need any help with this please contact tech support: 801-476-3343 or 888-360-3343

NOTE: The installation for the EDGE RACING Juice harness is the same as the 2006 - 2011 Installation instructions. Once the harness components are installed, refer to the "DPF EGT SENSOR INSTALLATION" section.

DPF EGT SENSOR INSTALLATION

NOTE: Most racing is done with modified, free-flowing exhaust systems and disabled regeneration. When removing your DPF (Diesel Particulate Filter), you will need to replace it with a “Delete Pipe” manufactured by an aftermarket supplier such as Flow-Pro.

NOTE: Leave DPF pressure sensors vented to atmosphere.

If you have removed your stock DPF and disconnected the EGT sensor cables, use the sensors included in your kit to replace them. (4) sensors are needed for 2010-2011 trucks and (3) are needed for 2007.5 - 2009 trucks.

NOTE: These new sensors will need to be removed and the sensor cables reattached to the DPF when the DPF hardware is reinstalled.)

NOTE: When using the Race Juice with the DPF removed, the Clear Codes On Startup option needs to be turned On in the Attitude diagnostics menu. Refer to the CS/CTS User Manual for more information.

NOTE: When deleting the DPF it is normal for the following trouble code to be set: DTC P244A - “DPF Differential Too Low” This code may be set, but the engine light will not come on. It is ok to leave the code.

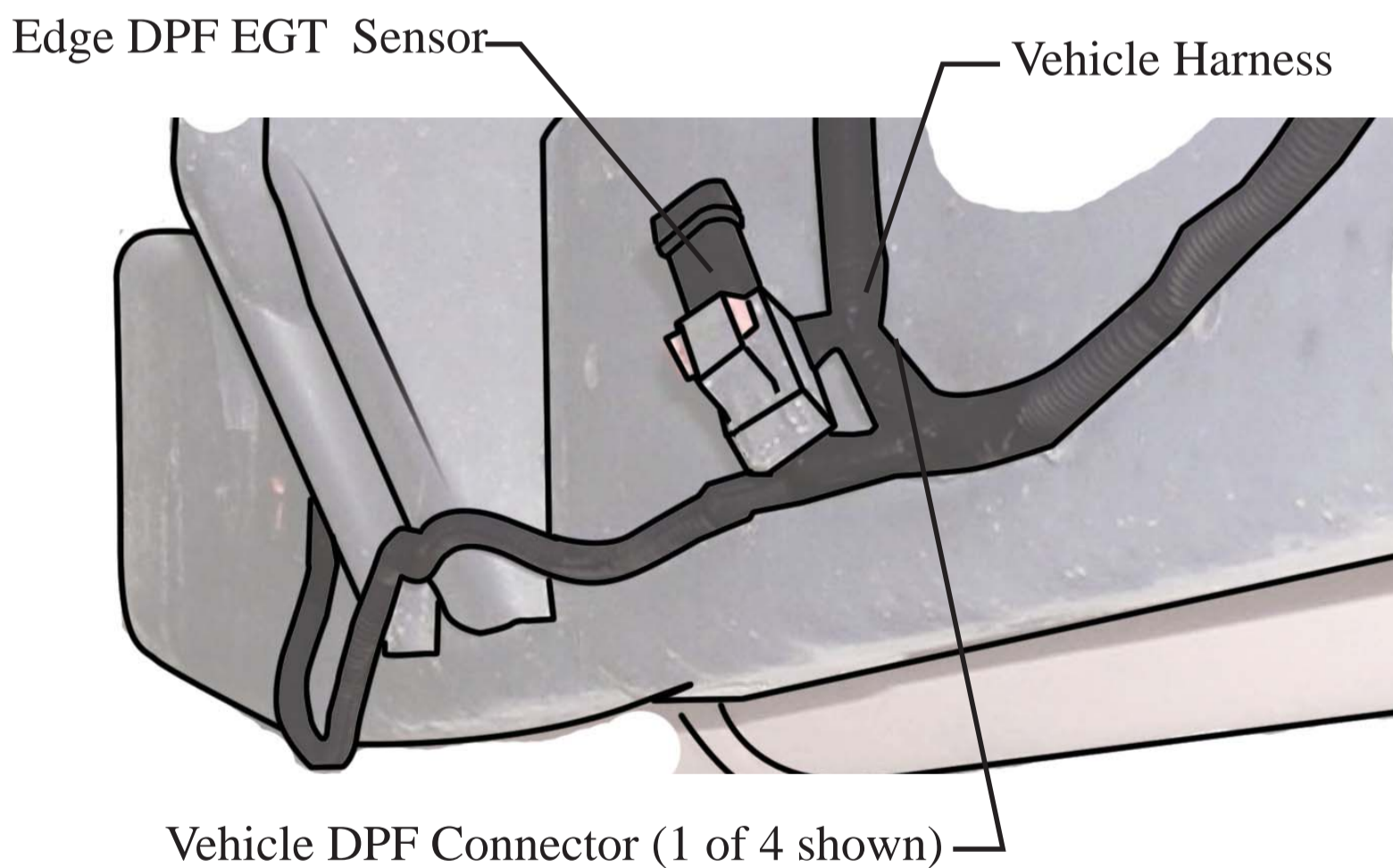


Figure 1 - DPF EGT Sensor Install Example

EGR "SPOOFER" INSTALLATION

If you decide to disable the EGR, you will need to follow these instructions. In order for the Edge Racing Product to work properly on 2010-11 trucks with a disabled EGR, the EGR Sensor needs to be unplugged and replaced with a "spoofer". *(NOTE: For 2007.5-2009 trucks, DO NOT plug the Male "Spoofer" into the engine harness as described.*

However, the female connector may be used to seal and protect the EGR Housing Connector.

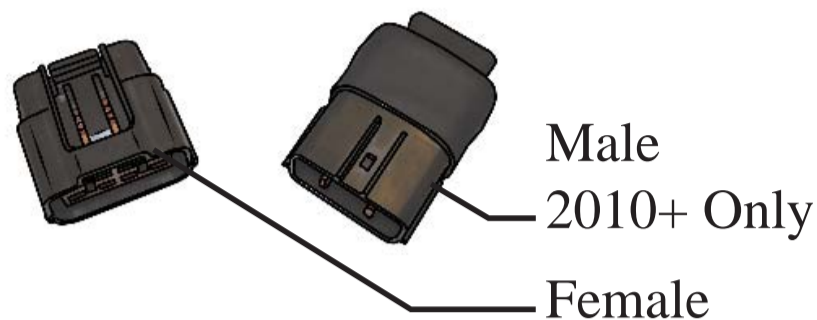


Figure 2

Installation Steps:

1. Locate the EGR Sensor housing underneath the hood. It is located on the driver side.

(See Figure 3)

2. Remove the EGR Sensor Harness by pushing in the connector's locking tab, then pulling the connector away from the EGR housing. (See Figure 3)

3. Plug the "Spoofer" into the EGR Sensor harness (See Figure 4).

4. Plug the Female connector into the EGR housing connector (See Figure 4).

5. Use a zip tie to strap the EGR Sensor Harness to the electrical conduit shown in Figure 4.

NOTE: When using the EGR

"Spoofer" on the 2010-11 trucks, it is normal for the following trouble codes to be set:

-DTC P049D "EGR Control Position..."

-DTC P046C "EGR Position Sensor..."

These codes may be set, but the engine light will not come on. It is ok to leave the codes.

NOTE: If your truck's calibration (see pg. 33 for instructions on how to get calibration) ends in BD on a 2010 or an AJ on a 2011 then you may experience a

"service exhaust system message" while using the EGR "Spoofer" with the Intake Throttle plate removed. This condition is typically experienced if the engine is at normal operating temperatures and is allowed to idle for a couple of minutes. This message can be ignored and will go away by itself on 2010 models and will go away on 2011 models if the DTCs are cleared manually or with the clear codes on startup.

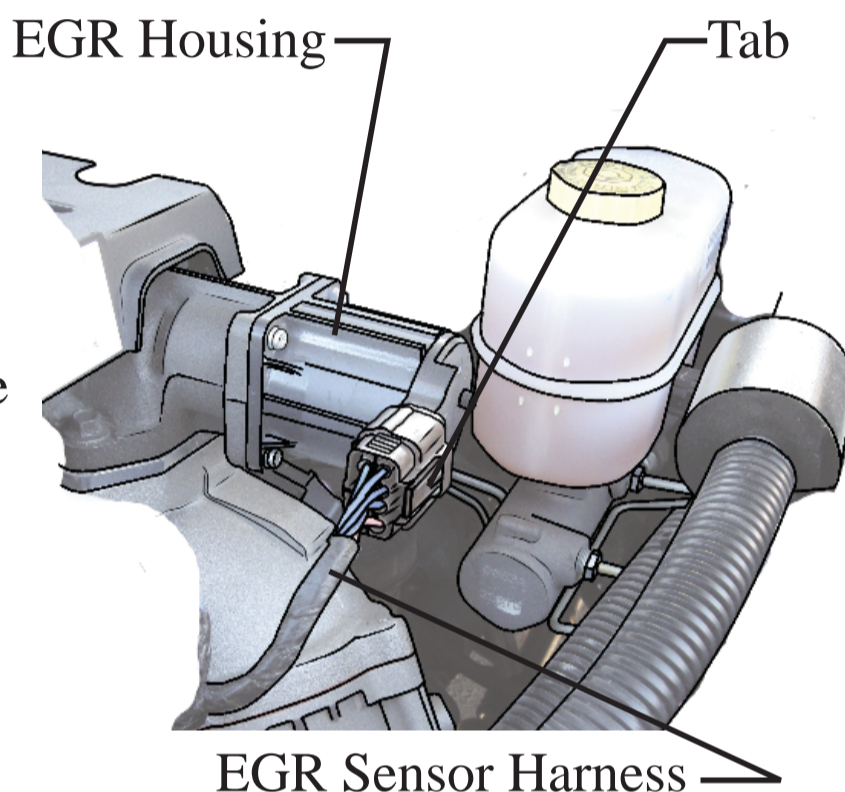


Figure 3 - Remove Harness

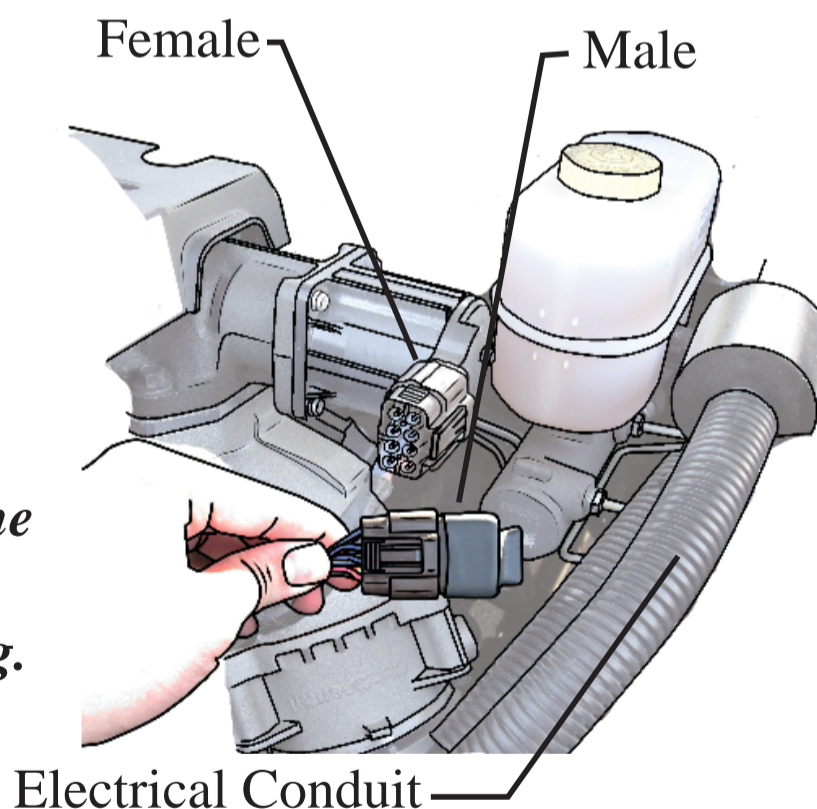


Figure 4 - Remove Harness

EGT PROBE INSTALLATION

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX



WARNING When installing the EGT Thermocouple, wear eye protection and protective clothing to protect from getting metal chips in your eyes. Also, since exhaust manifolds can be very hot, allow the engine to cool before drilling. When working under the vehicle, make sure the park brake is set.

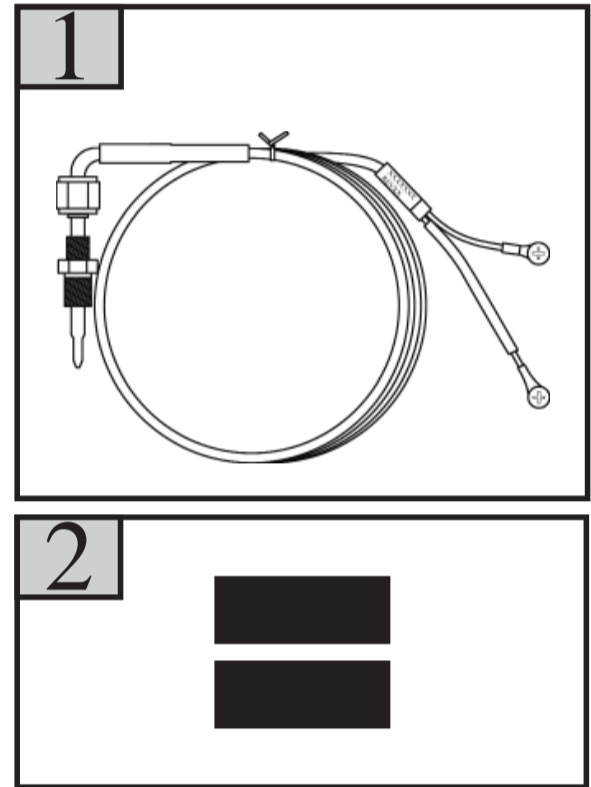
Required Tools

- Drill
- 1/8" drill bit or similar size (for pilot hole)
- 21/64" (best size) or 5/16" drill bit
- 9/16" wrench or socket
- 5/8" open end wrench
- 1/8"-27 NPT Thread Tap
- Phillips screwdriver
- 5/16" or 8mm wrench

Supplied Items

Qty

- ① EGT Probe.....(1)
- ② Shrink Tube.....(2)

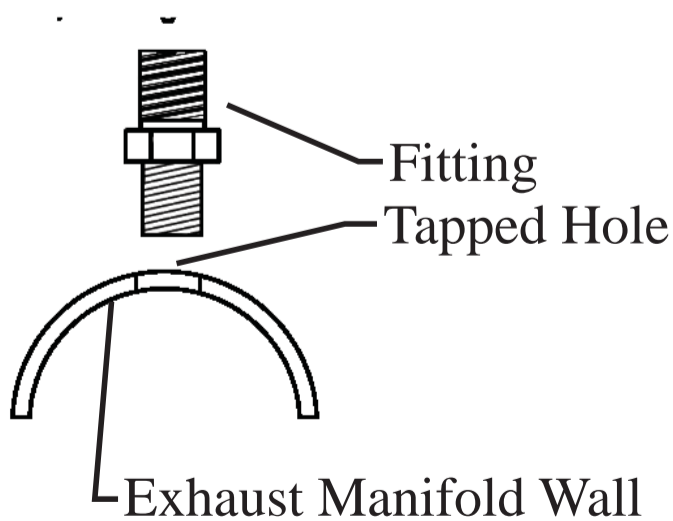


CAUTION: One effective way to avoid metal fragment contamination in your engine manifold is to apply grease in the tip of the drill bit and threads of your tap tool when drilling/tapping the hole in your manifold. Reduce pressure on the drill when the drill breaks through the manifold wall to reduce risk of pushing metal chips into the manifold.

TAPPING AND PROBE INSTALLATION

1. Obtain a 1/8"-27 NPT Thread Tap available from your hardware store.
2. Drill a 21/64" (5/16" optional) hole through the manifold wall.
3. Use the pipe tap to cut the threads in accordance to the pipe tap manufacturer's instructions and recommendations.

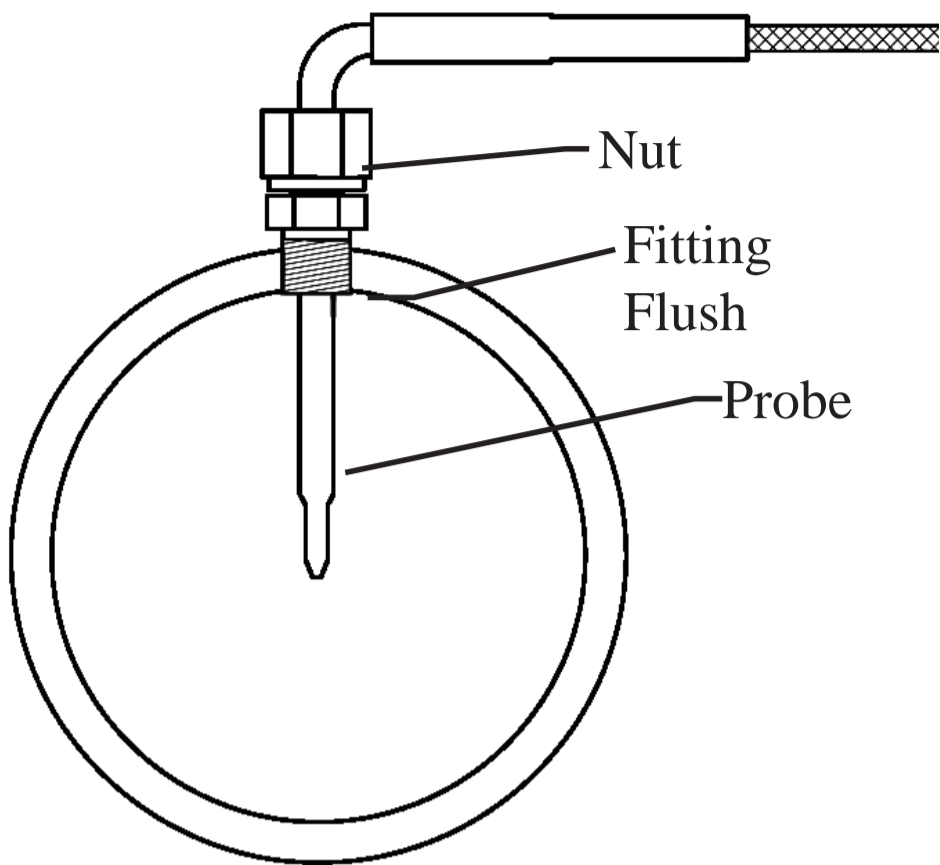
Figure 1 - Fitting Installation



4. Remove the fitting from the Thermocouple and install by tightening the tapered thread end into the manifold. (Figure 1)
5. Tighten the fitting so that it is securely seated.

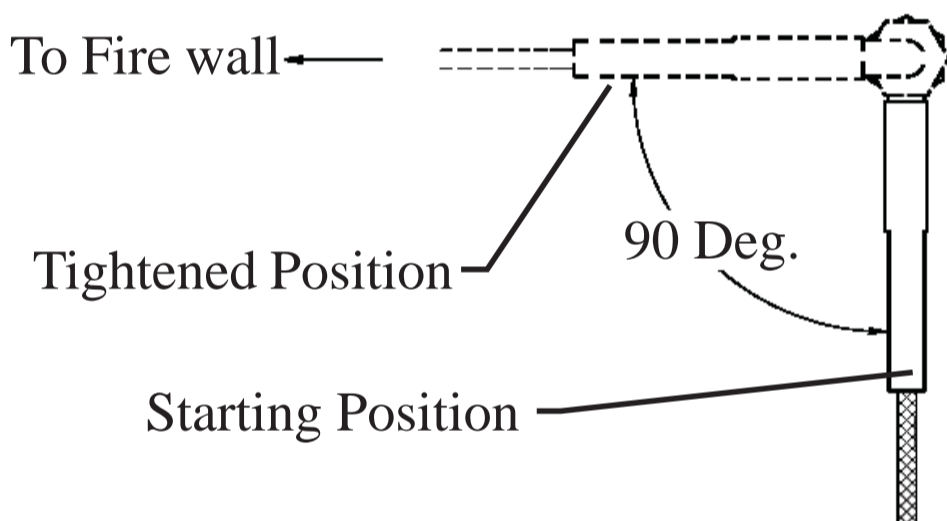
NOTE: Ideally the tip of the fitting would be less than or flush with the inside of the exhaust flow path. (Figure 2)

Figure 2 - Probe Insertion



6. Install the probe into the fitting, and tighten the top nut of the fitting just tight enough to keep the probe firmly mounted. (Figure 2)
7. Make sure that the probe cable is positioned to allow best path and minimal bending for routing to the fire wall.

Figure 3 - 90 Degree



NOTE: The probe will move approximately 90 Deg. clockwise in the direction the nut is tightened. Before fully tightening the nut, make sure the cable starts 90 Degrees from the final resting position. When tightened, the cable will be correctly positioned.

CAUTION: Do not bend the probe after installed. If needed, loosen the probe nut, adjust the probe, and re-tighten. Bending the probe tubing will result in a faulty probe. (Figure 4)

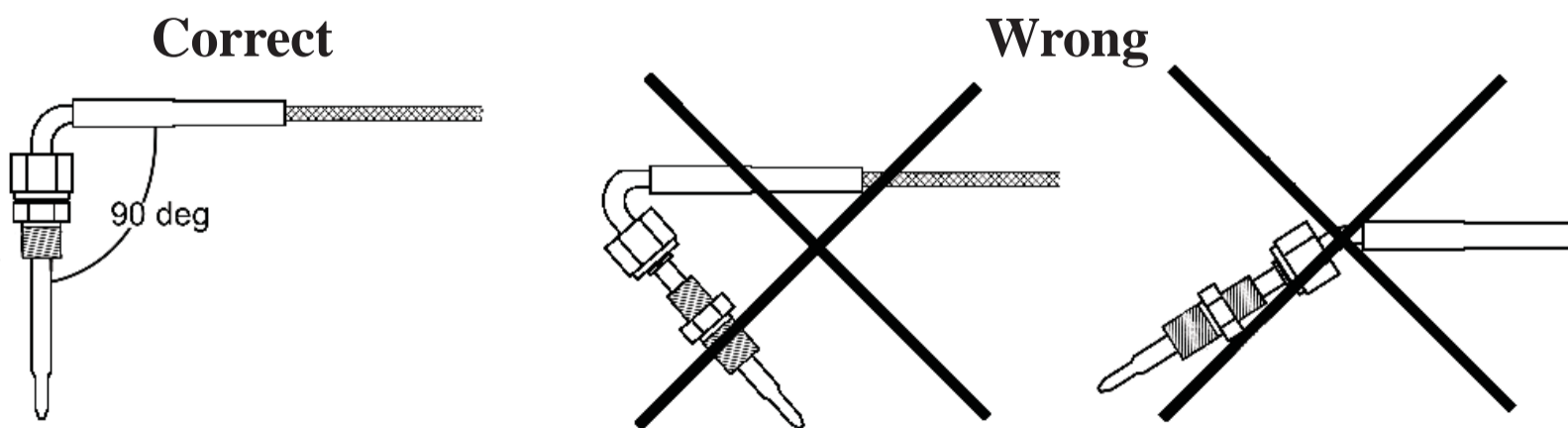


Figure 4 - DO NOT BEND



EGT Location per year range

NOTE: All 3 views are looking from the passenger side.

CONNECTING THE PROBE TO JUICE

1. Slide the shrink tube pieces over the two wires. Later you will slide them over the bolted connections. (Figure 5)

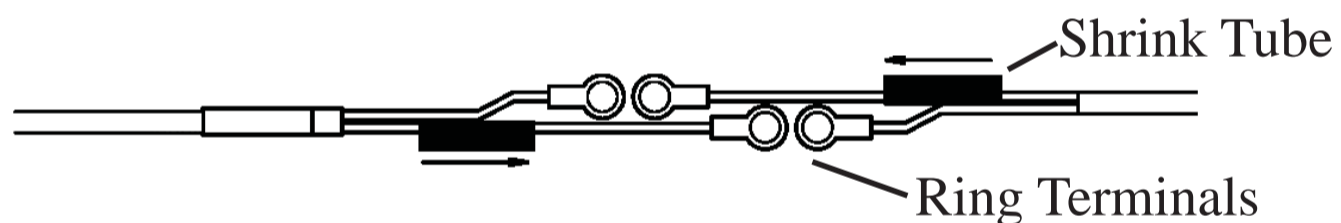


Figure 5 - Shrink Tube

2. Connect the (2) ring terminals to the mating Juice harness terminals using the supplied hardware. Yellow to Yellow. Red to Red. (Figure 6)

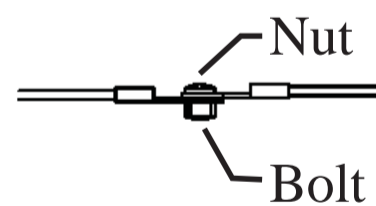


Figure 6 - Hardware Install

3. Tighten the nuts so that each wire is in line with its mating wire.

4. Position the supplied shrink tube over the secure fasteners.

5. Center the connection within the shrink tube. Heat and shrink the tubing over the connections. (Figure 7)

6. Secure the excess cable to the fire wall over hang with supplied zip ties.



Figure 7 - Shrink Tube Final

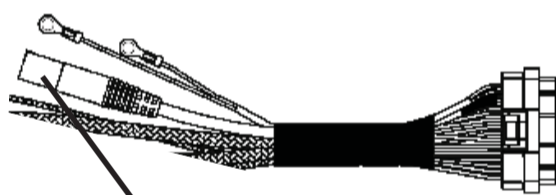
J A B I N S T A L L A T I O N

NOTE: The CS/CTS will not function unless the JAB is properly installed and plugged into both the Juice Module and Attitude Monitor (CS/CTS).

1998.5 TO 2011 - JAB INSTALLATION

1. Locate the green connector on the Juice Harness and plug it into the Green connector on the JAB.
2. Under the hood, connect the 3 EAS components to one another. A “click” will be felt and heard indicating that the connectors are correctly fastened.

Figure 1 - Juice Harness



Green Connectors

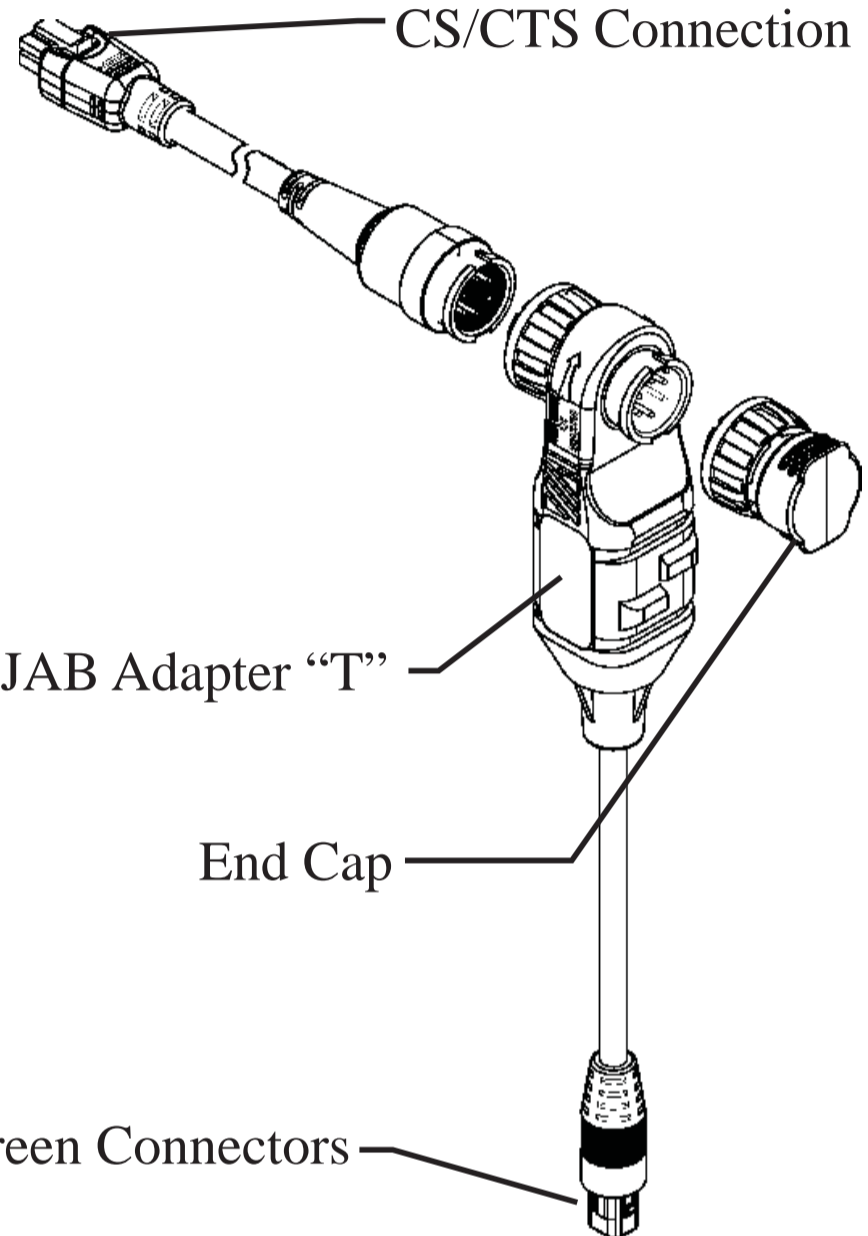


Figure 2 - JAB System

3. Route the CS/CTS Connector and cable through the fire wall grommet. The JAB and Juice Module will remain under the hood. (Figure 3)

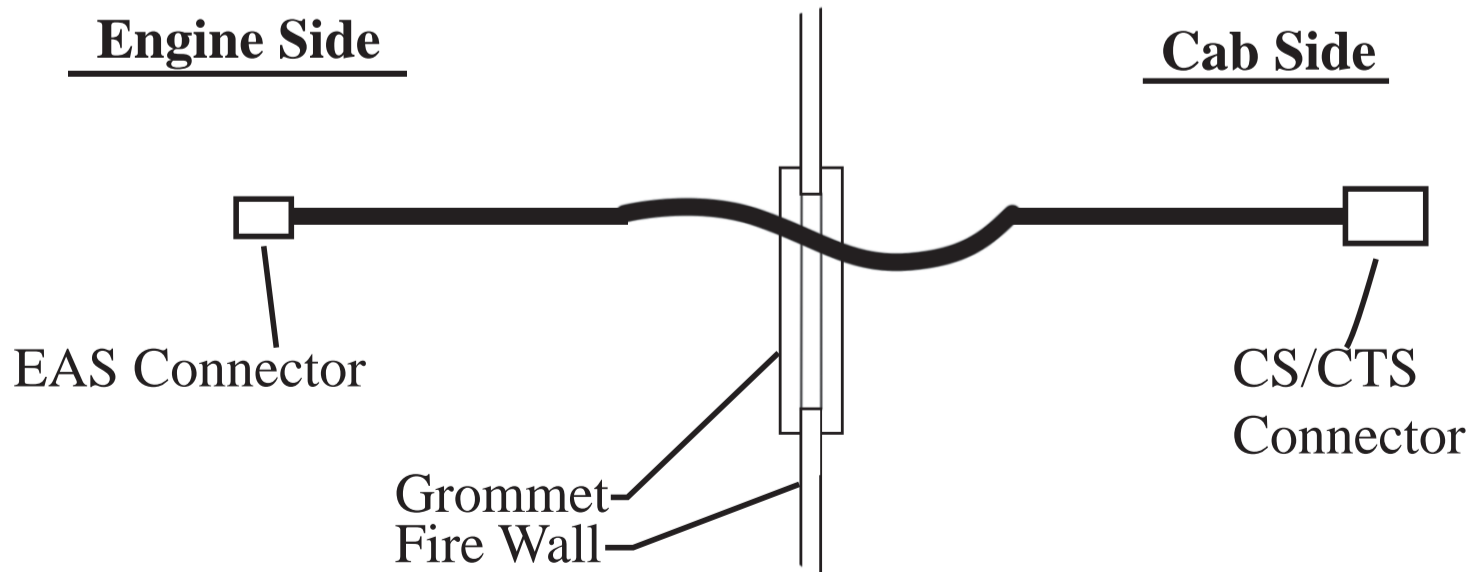


Figure 3 - Fire Wall Routing

6. Route the cable from below the dash up to the lower left corner of the driver side windshield. (Figure 4)
7. If needed, remove side panels to help see while routing.
8. Leave enough length between the dash and the end of the CS/CTS connector for easy CS/CTS install.
NOTE: For a clean look, the cable can be hidden behind the dash plastic and the door frame weather strip.
9. Using the supplied zip ties, fasten the EAS connectors underneath the overhang which runs across the top of the fire wall. (Figure 5)
10. Keep the JAB assembly close to the driver side.

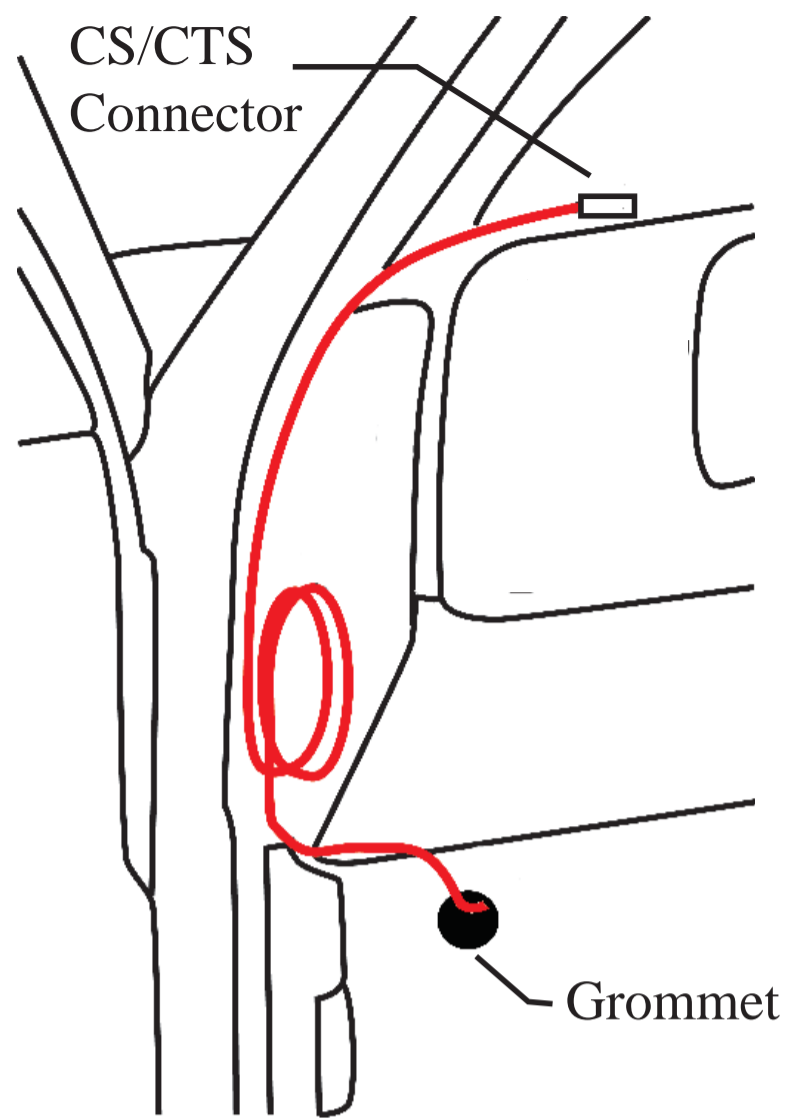


Figure 4 - In Cab Routing

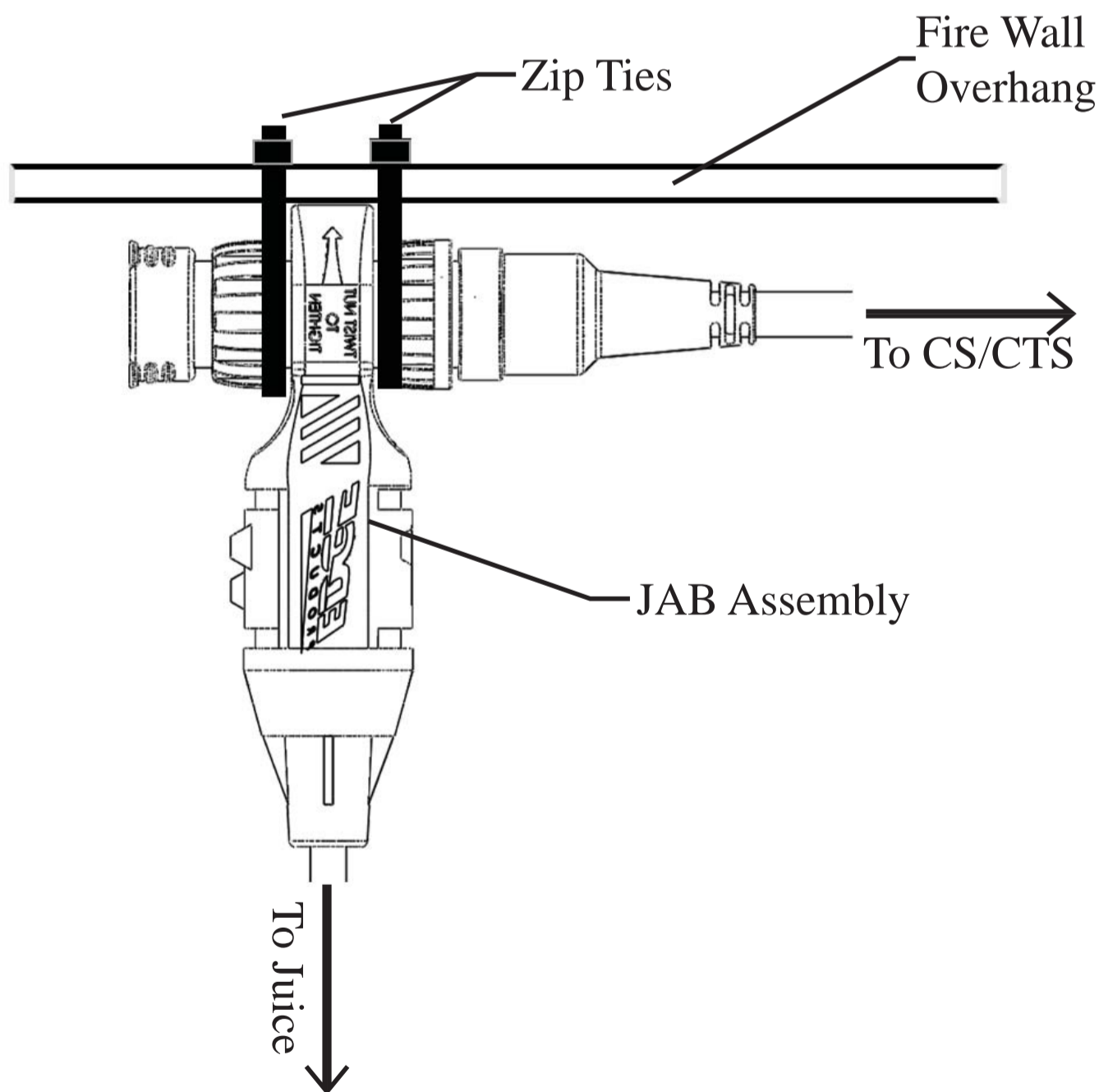


Figure 5 - Securing JAB (Looking from the front of the truck to back)

2006 - 2011 OBDII CONNECTION

1. Locate the remaining Attitude Connector on the already installed DATA/OBDII Cable. (Figure 1)
2. Route the Attitude Connector and remaining cable to the lower left corner of the driver side windshield. (Similar to Figure 4 on previous page) **NOTE: This cable should already be inside the cab and underneath the dash.**
3. Leave enough length between the dash and the end of the CS/CTS connector for easy CS/CTS install.

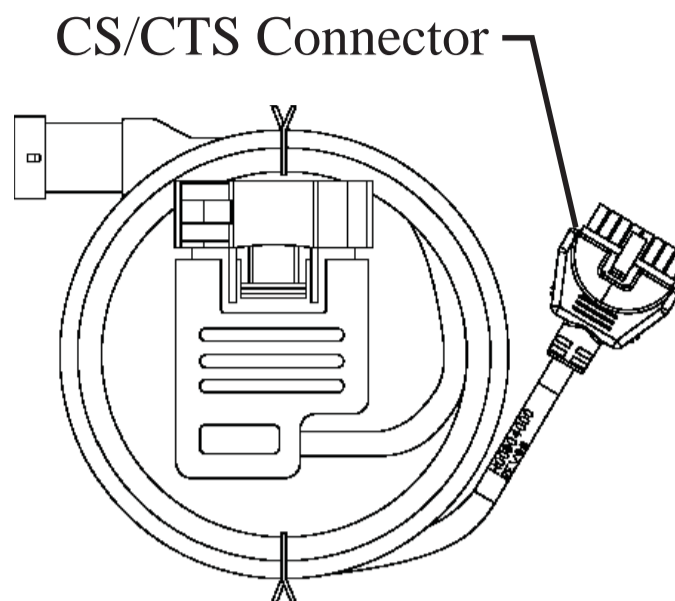


Figure 1 - DATA/OBDII

NOTE: For a clean look, the cable can be hidden behind the dash plastic and the door frame weather strip.

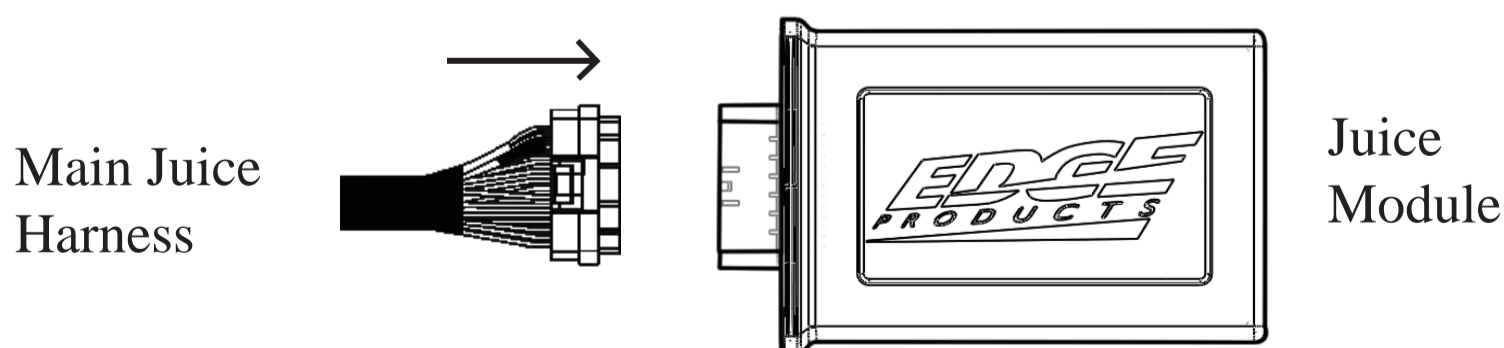
4. Plug the CS/CTS Connector into the proper mating connector on the back of the CS/CTS Unit,
5. Depending on your mounting style, refer to the following for proper installation:
 - (a) Arkon Mount: Quick Install Guide
 - (b) POD Mount: POD Install Manual

JUICE MODULE INSTALLATION

FINAL JUICE MODULE INSTALLATION

1. Plug the “Main Juice Connector” into the “Juice Module” receptacle. (Figure 1)

Figure 1 - Juice Module



MOUNTING AND SECURING THE JUICE

1. Attach one side of each velcro strip to the back side of the Module and to the top side of a flat surface under the hood. (Figure 2) **NOTE: The best place is the top of the fuse box on the driver side. This will secure the Juice module and help keep it away from any moving/hot parts under the hood.**

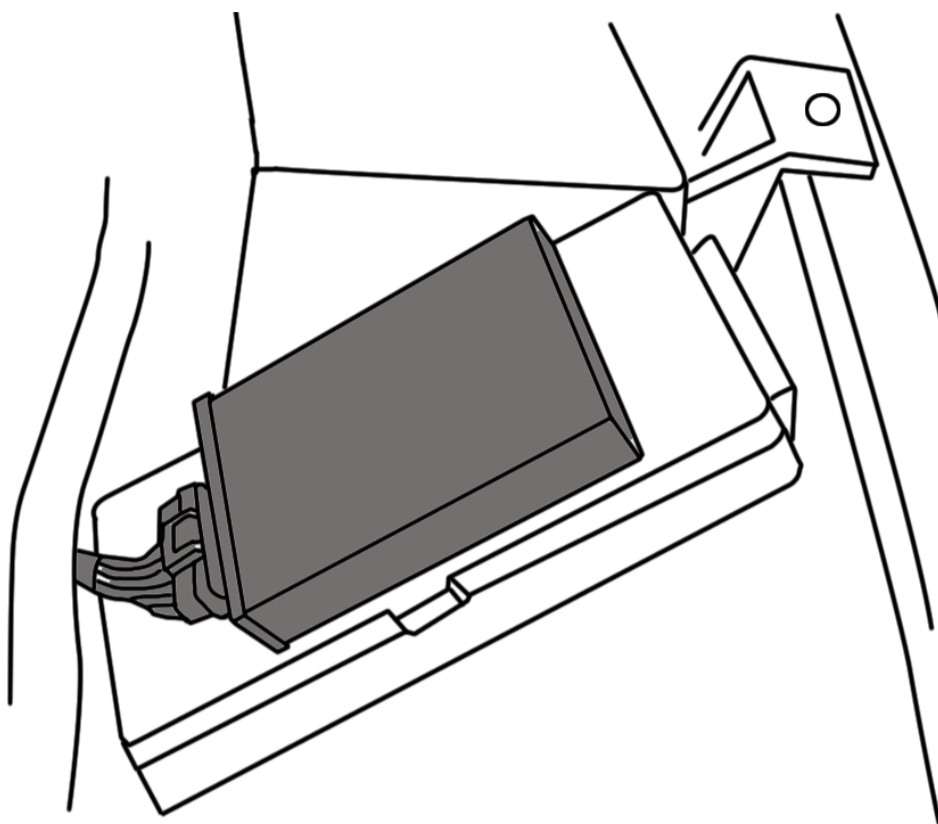


Figure 2 - Juice Module Mounting

FINAL INSPECTION

1. Recheck all connections for a properly secure installation. Using the supplied wire ties, secure the wiring harness and cable to prevent possible heat damage from hot engine surfaces.
2. Reconnect the battery cables.
3. Start the engine. The engine should start and idle like a stock truck. If the engine does not start or run properly, turn off the engine. Remove the keys from the ignition, and check the Juice module connections. Make sure all connectors are fastened tightly. If you continue to have problems, contact your dealer or Edge Products, LLC.

U S I N G T H E J U I C E

Refer to the CS/CTS User Manual for detailed descriptions on how to operate the Attitude Monitor.

EGT's

EGT stands for exhaust gas temperature, and is the single most important indicator of how a diesel engine is performing. Unlike a gasoline motor, a diesel motor will continue to make power as more fuel is added. As more fuel is added, the engine heat will also increase. Please be aware of the limitations of a stock engine.

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

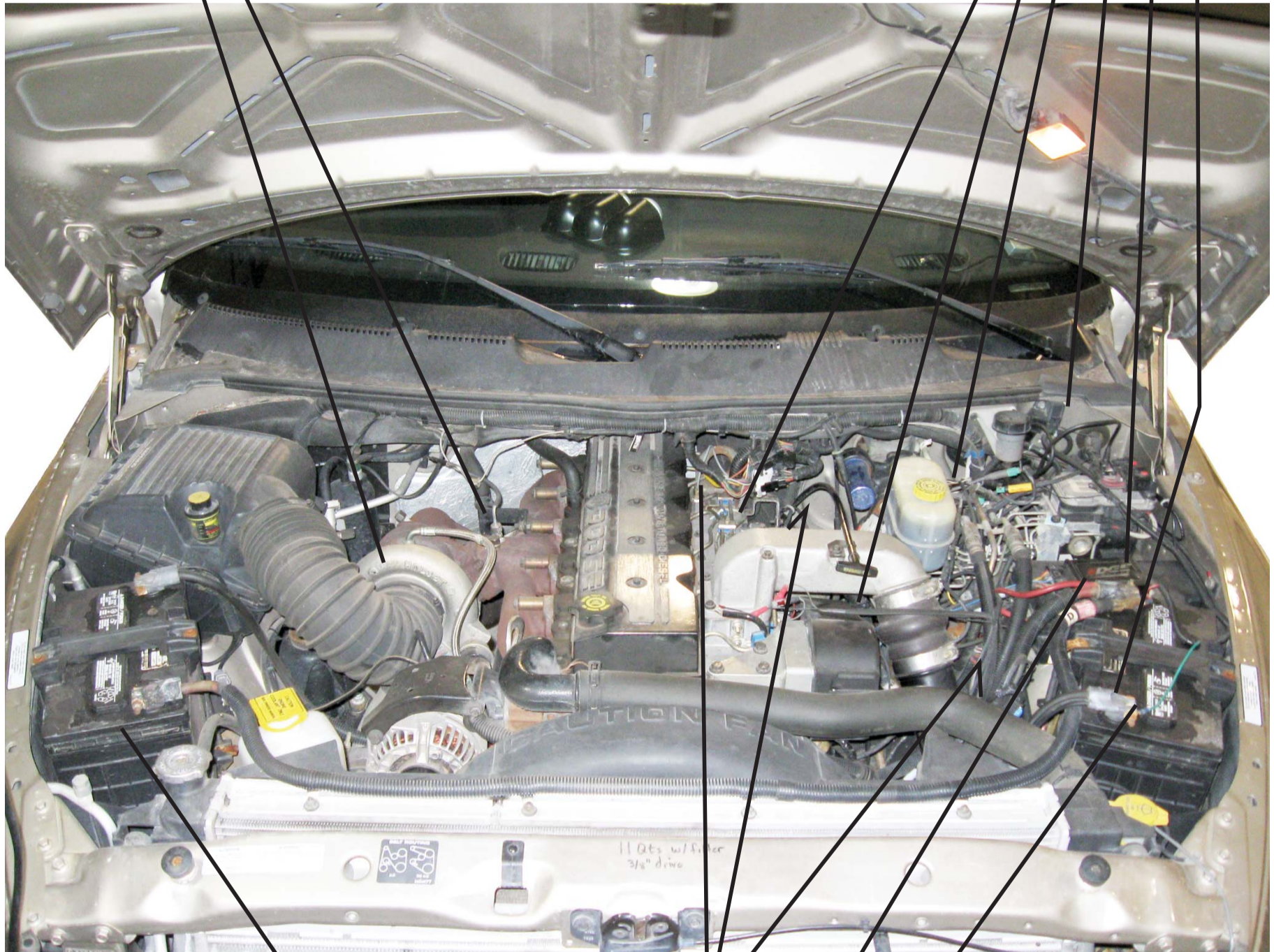
OPERATING INSTRUCTIONS

APPENDIX

ENGINE COMPARTMENT (REFERENCE)

1998.5 - 2002

- Turbo
- EGT Probe Location (Exhaust Manifold)
- Ground Connector Location
- Juice Box Location
- EAS Install Location
- Fire wall Grommets
- VP44 Pump Location
- Fuel Filter Location



Sensor Locations

Fuse Box

Batteries

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

2003-2005

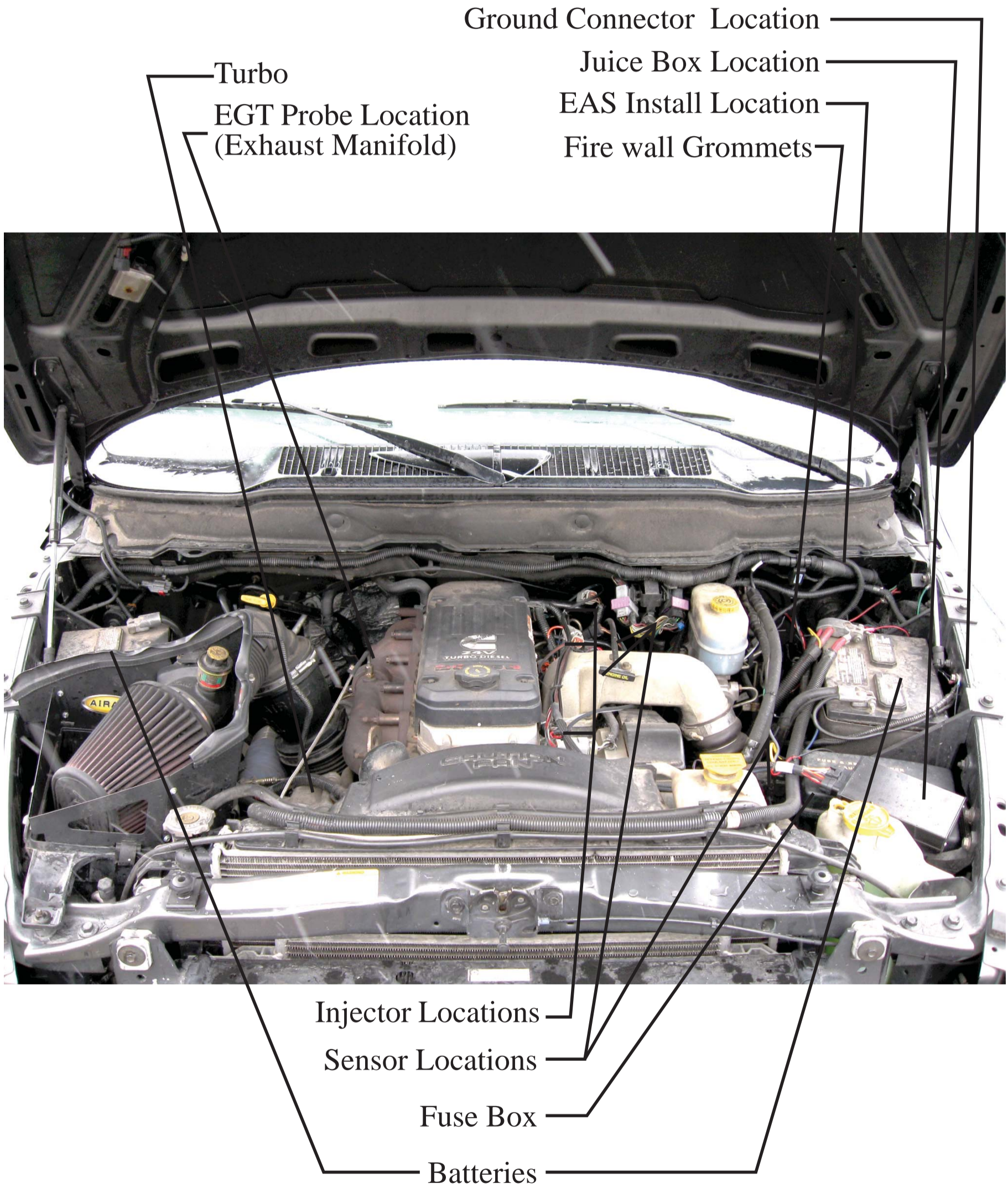
TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX



2006 - 2011

TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

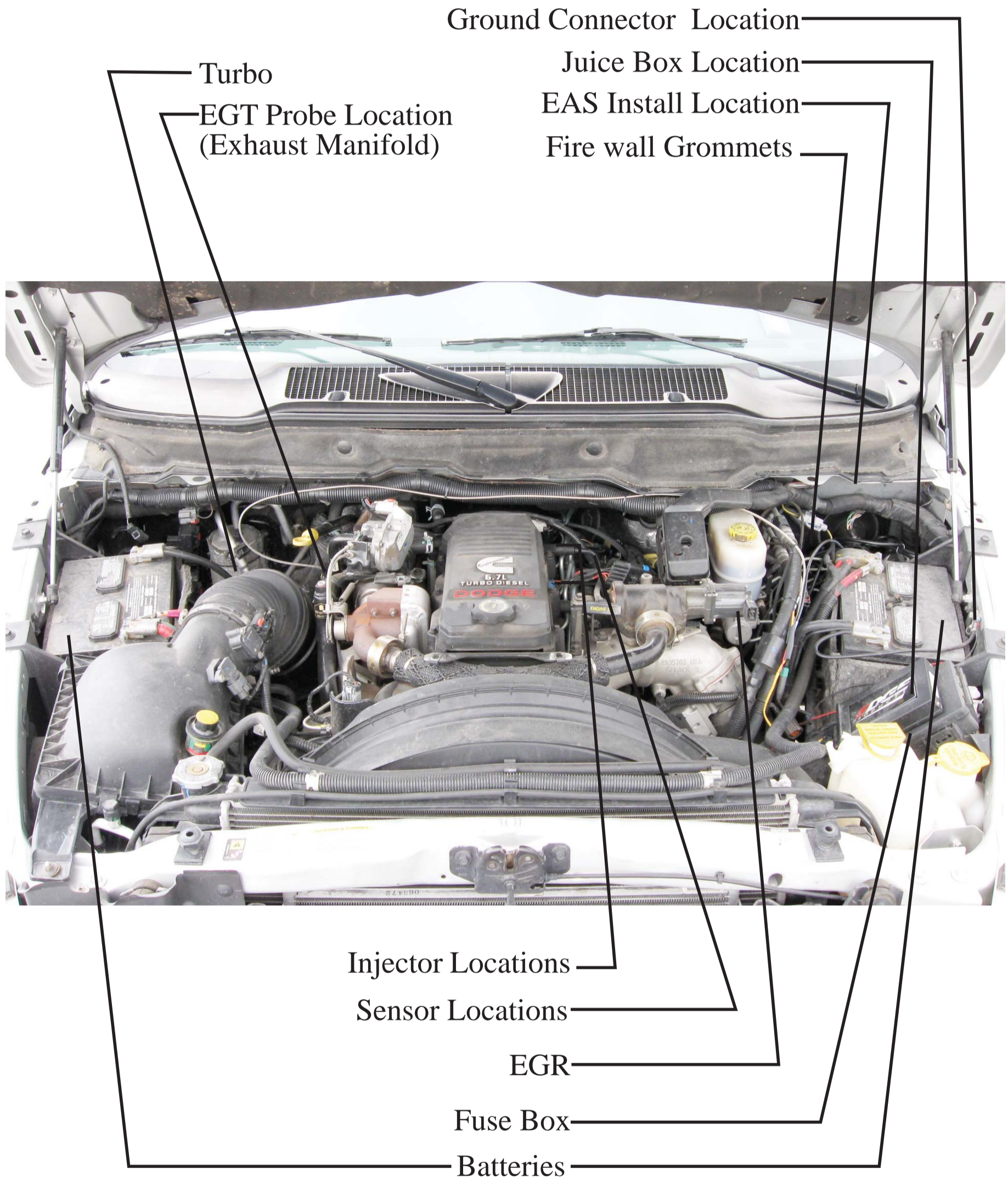


TABLE OF CONTENTS

INTRODUCTION

INSTALLATION

OPERATING INSTRUCTIONS

APPENDIX

COPYRIGHT © 2010 REV 04

For additional questions not found in the user guide call:

Edge Products Technical Support: (888) 360-EDGE (3343) 8:00 am - 5:00 pm MST

**To expedite your support call, please have your Vehicle Information,
Part Number, and Serial Number ready prior to calling Technical Support.**

**The Edge Products information is found on the label located
on the bottom of the device.**