# E.A.5.

# EDGE ACCESSORY SYSTEM INSTALLATION INSTRUCTIONS



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



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# IMPORTANT NOTES

Please take the time to thoroughly review all of the information outlined in this manual. Taking the time to understand how this product works and how to properly operate it 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 Standard Time. Thank you again for your business and enjoy your new product.

IMPORTANT: Read through these instructions completely so that you understand each step prior to installation. Refer to the CS/CTS User Manual for Safety and Warranty information.

#### SAFETY TERMS

Installation Instructions

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.



# ABOUT THE EAS

Congratulations on purchasing the Edge Accessory System (EAS) for all your future Accessory needs.

The CS and CTS devices are equipped with an expandable accessories port which interfaces with the EAS.

With the EAS Expandable option you can add multiple accessories to the CS or CTS using a daisy-chain-style connection system. The non-expandable options allows you to monitor a single EGT probe.

NOTE: It is necessary for your CS or CTS device to be powered up so that it can recognize that you have installed an EAS device. This will need to be done prior to using MyStyle® to configure settings. See MyStyle® section for more information.

# "DAISY CHAINING" THE EAS

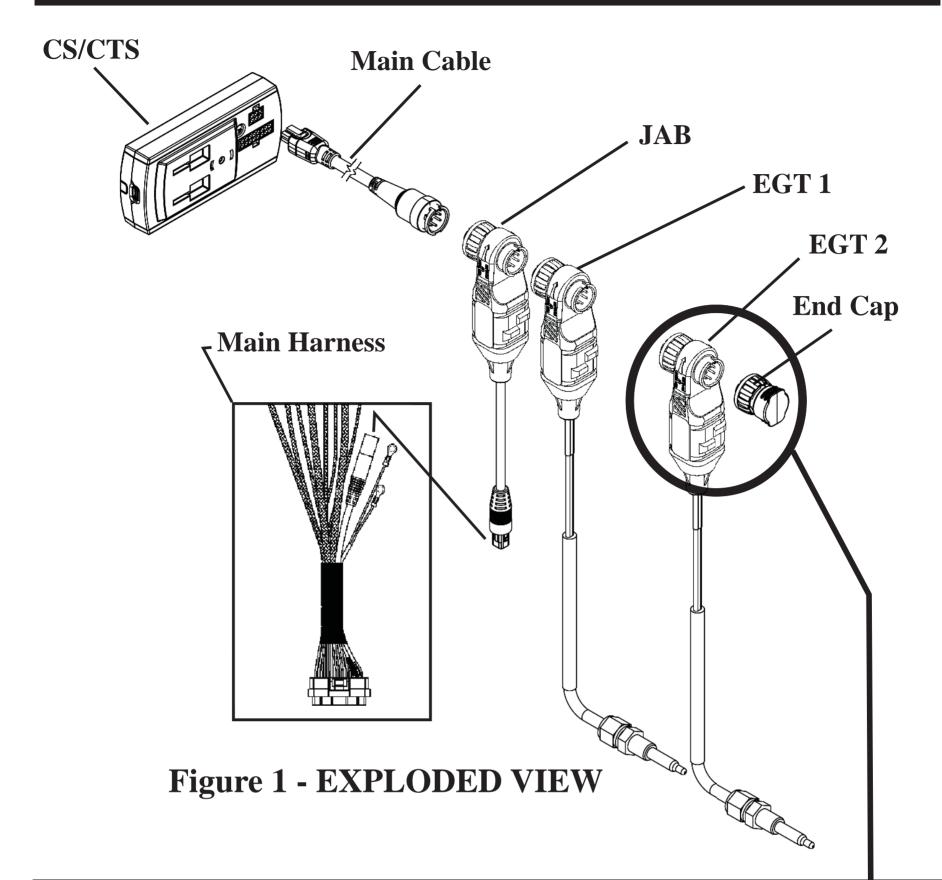
In Figure 1, two EGT probes plus one JAB (Used in conjunction with our Juice Product) device are chained together. This allows the user to control the Juice module and read Engine Exhaust temperatures in more than one area of the vehicle.

NOTE: (Juice Owners Only) There will never be a need for more than one JAB (Juice Attitude Bridge) since only one Juice can be used at a time.

NOTE: Always use the End Cap in any EAS Expandable assembly.



# EAS - EXPANDABLE OPTION



# **MAIN EAS CONNECTION**

The following instructions are universal to all EAS connections. Whether it be an End Cap to an EGT Probe, or an EGT Probe to a JAB Device. The connectors are all the same on each component.

1) Refer to Figure 2. Notice that the connectors are in line prior to inserting one into the other. (In this case, the End Cap is going to be inserted into an EGT Probe.)

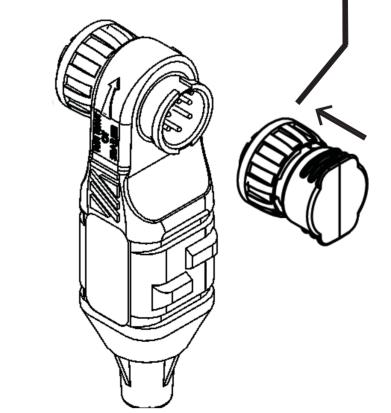
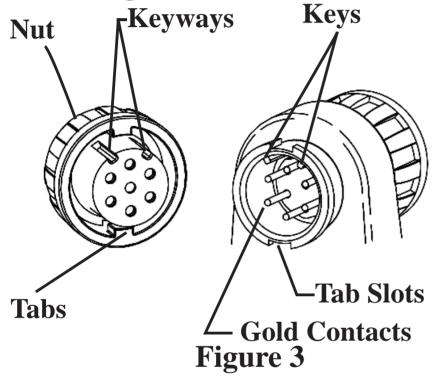


Figure 2 - CAPASSEMBLY

- 2) Refer to Figure 3. The connectors are **Keyed** which means that they can only be plugged in one way.
- 3) Locate the two **Key Features** on each connector you are plugging together.

CAUTION: DO NOT apply too much pressure during step 4. Gold contacts may bend during twisting.



- 4) Insert the connector (contains **Nut**) into it's mating connector. You will notice that you may have to lightly twist the two connectors in order for the two key features to find one another.
- 5) Once the connectors are mated, lightly push the two connectors together and twist the nut. You will feel the **Tabs** pass through the **Tab Slots**.

NOTE: Twisting the nut allows the internal tabs inside the nut

to find the Tab Slots on the mating connector. (Figure 3)

6) To tighten, twist the nut according to the molded-in labels near the connectors.

NOTE: Turn until you feel the tabs snap/lock into place. You will know it is in place when you feel it engage, and cannot easily undo the nut.

7) Check each connection to make sure all nuts are in place before moving to the next set of instructions.

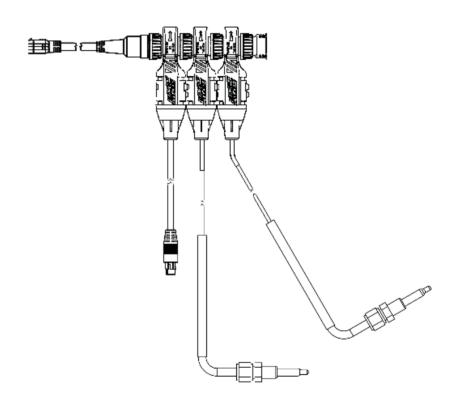


Figure 4 - ASSEMBLED EAS

Installation Instructions

# JUICE TO ATTITUDE CONNECTIONS

The JAB (Juice to Attitude Bridge) allows you to connect your Edge Juice Module to your CS or CTS device. This allows your CS or CTS to communicate with and control your Juice Module. Your CS/CTS will use the device to talk to your Juice.

The following are instructions on how to connect the JAB to the Juice module.

1) Unplug your old Attitude from your Juice module. To do this lightly lift up the small tab with a small screw driver and lightly pull the connectors apart. (Figure 5)

NOTE: Be careful not to damage the lock during un-install.

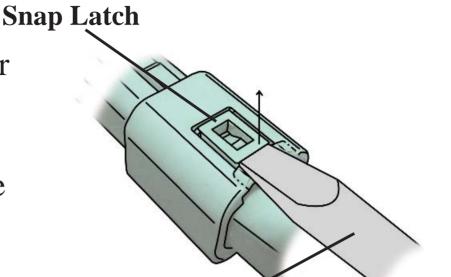


Figure 5 - ATTITUDE DIS-CONNECT

**Screw Driver** 

- 2) Remove your old Attitude from the vehicle.
- 3) Locate the connector at the end of the JAB and plug it into the corresponding Juice connector.

# **EGT CONNECTIONS**

EGT stands for Exhaust Gas Temperature. EGT Sensors are offered on all 3 of our product platforms:

\*On the Juice it can be added as a second EGT sensor (besides the probe that directly connects to the Juice itself).

\*On the Evolutions it is recommended that it be used with vehicles running diesel engines due to their potential of getting extremely hot. \*On the Insight, it can be used to monitor everyday vehicle temperatures as well as those vehicles that are pushed to their limits.

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 parking brake is set.

**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.

# **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

# FITTING INSTALLATION

- 1) Obtain a 1/8" National Pipe Tap (NPT) available from your hardware store.
- 2) Drill a 21/64" (5/16" optional) hole through the exhaust manifold wall.

- 3) Use the pipe tap to cut the threads in accordance to the pipe tap manufacturer's instructions and recommendations.
- 4) Remove the fitting from the Thermocouple end and install by tightening the tapered thread end into the manifold.

(Figure 6)

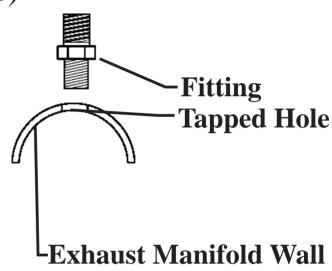


Figure 6 - INSTALL FITTING

5) Tighten the fitting so that it is securely seated.

#### PROBE INSTALLATION

1) Install the probe into the fitting, and tighten the top nut of the fitting just tight enough to keep the probe firmly mounted. (Figure 7)

NOTE: Ideally the tip of the fitting would be less than or flush with the inside of the exhaust *flow path.* (Figure 7)



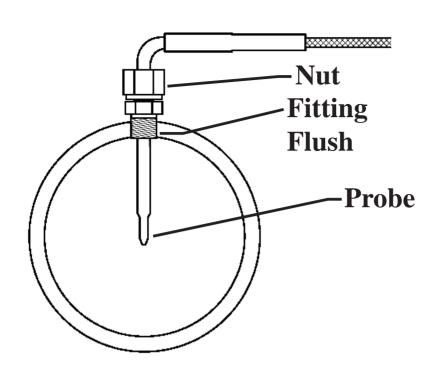


Figure 7 - PROBE INSTALL

2) Make sure that the probe cable is positioned to allow best path and no bending when routing to the fire wall.

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. (Figure 8)

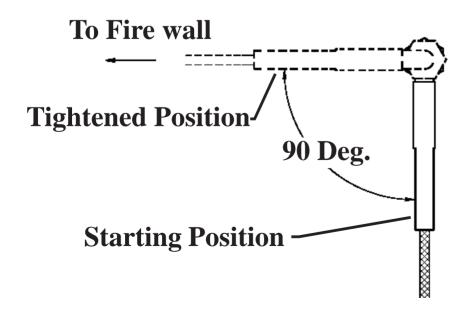


Figure 8 - 90 DEGREE

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 9)

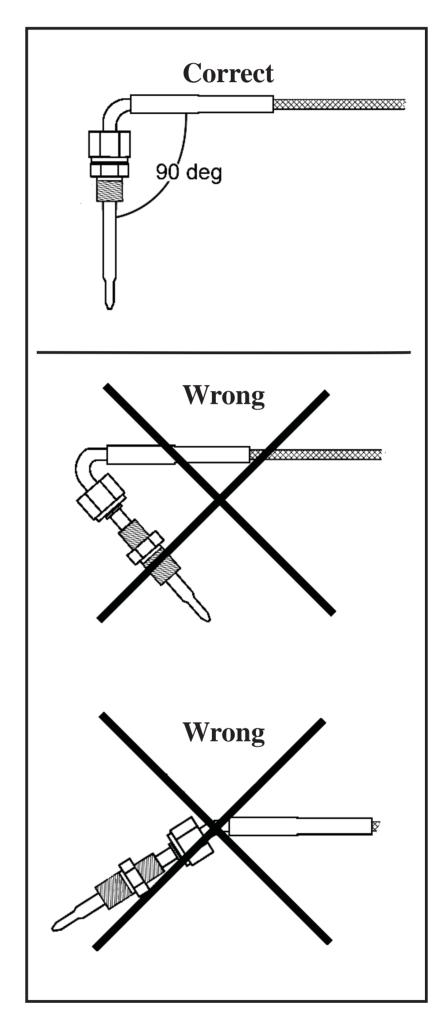


Figure 9- DO NOT BEND

# **UNIVERSAL SENSOR INPUT CONNECTIONS**

The Universal Sensor Input
Device gives you the ability
to monitor a variety of sensor
output readings using your CS
or CTS device. In addition, you
will be able to enter and modify
sensor data using Edge's MyStyle® software.

This device allows you to connect up to two sensors at one time. However, if another device is purchased, you can "Daisy Chain" them to read multiple sensors.

This section explains how to install the following sensors:

- (1) Temperature sensors (also known as a thermistor)
- (2) Pressure sensor.

However, sensors other than what is described, can also be used.

Figure 10 shows the Universal Sensor Input Device and the Adapters that come in the kit. The adapter wires are 8 feet long, and have non terminated wire ends that can be modified to meet the needs of any specific sensor installation. How these adapters are used

will be explained in more detail under the UNIVERSAL INSTALLATION section on page 14.

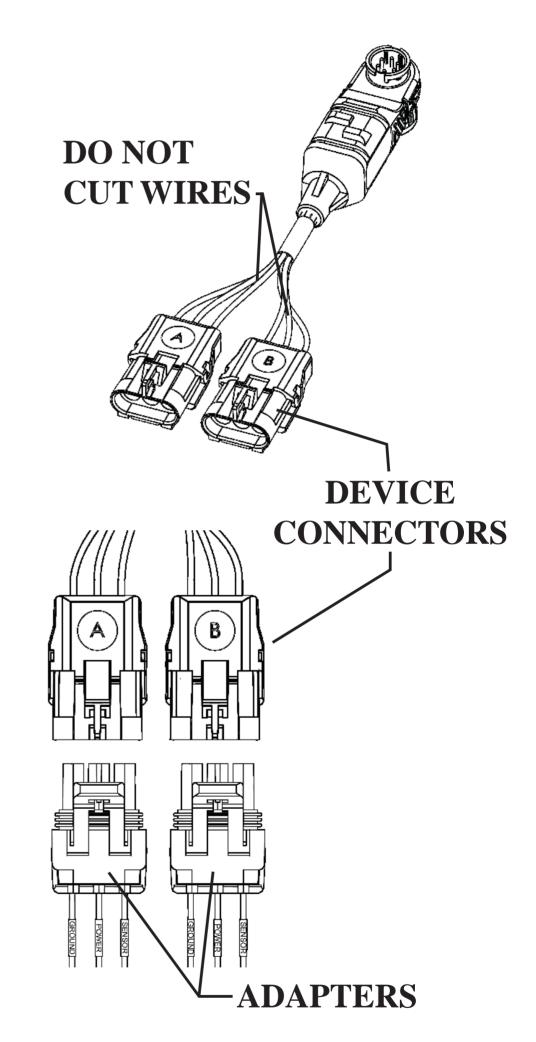


Figure 10



Installation Instructions

#### **EDGE SENSOR INSTALLATION**

This section gives step-by-step instructions on how to install either the Edge Temperature Sensor and/or the Edge Pressure Sensors.

# TEMPERATURE SENSOR PARTS INCLUDED:

- (1) Temperature Sensor
- (1) Temperature Wire Harness

# **REQUIRED TOOLS:**

- -3/8" socket/wrench
- -1/2" socket/wrench
- -1/8"-27 NPT Thread Tap
- -21/64" Drill bit
- -Drill
- -Thread Sealing Compound

# PRESSURE SENSORS

#### PARTS INCLUDED:

- (1) Pressure Sensor
- (1) Pressure Wire Harness

### **REQUIRED TOOLS:**

- -13mm Wrench/Socket
- -1/8"-27 NPT Thread Tap
- -21/64" Drill bit
- -Drill
- -Thread Sealing Compound

NOTE: Edge has provided adapters that are specific to the temperature and pressure sensors. The two non-terminated wire adapters (Shown in Fig-

ure 10) included in the main kit are not needed at this time. They can be set aside for any future sensor installations.

NOTE: First install the Main EAS Cable Assembly according to the instructions located on pages 5 and 6 then continue with the following steps.

Both sensor installs require a hole to be drilled and tapped. Follow these instructions to properly create the hole:

1) Find the best location for the sensor. Figure 11 (on the next page) gives a basic example of the temperature sensor being installed to the side plate of a manual transmission. This location is ideal for this particular install because the plate can easily be removed, modified, and reinstalled without getting any metal filings inside the transmission.)

NOTE: The wall of the object you will be drilling into needs to be thick enough to properly capture the sensor's threads.



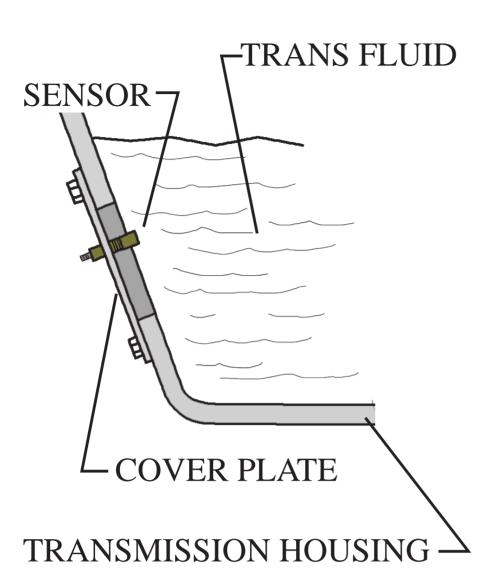
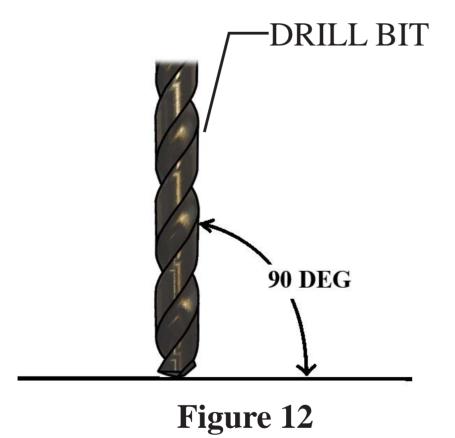


Figure 11

2) Use the 21/64" drill bit to drill a hole perpendicular to the face you are drilling into.



3) Tap the hole using the 1/8" NPT pipe tap. See Figure 13.

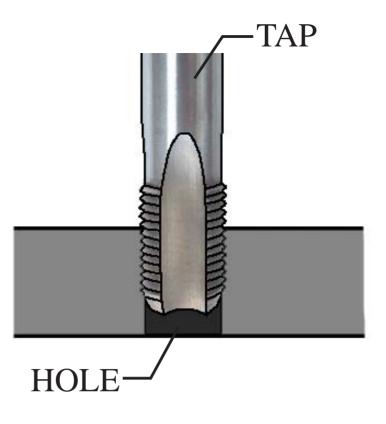


Figure 13

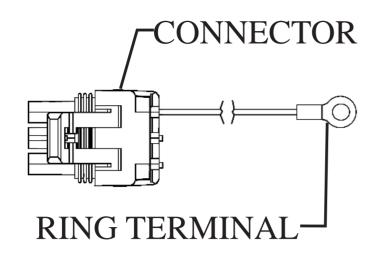
- 4) Clean the area in and around the tapped hole and make sure it is free of burrs and metal fragments.
- 5) Apply a thread sealing compound to the sensor threads, and insert it into the tapped hole. Use the 1/2" wrench (Temp) or the 13mm wrench (Pressure) to tighten until snug. (Do not over tighten. Avoid stripping the threads.)

#### INSTALL THE ADAPTER

Now that the Universal Sensor Input Device and the Temperature/Pressure sensors are secured, the Harness Adapter can be added to connect the two.

# Temperature sensor adapter:

1) Locate the Temperature Adapter Harness included with the sensor. See Figure 14. Installation Inst



# Figure 14

2) Remove the hardware from the end of the mounted sensor as shown in Figure 15.

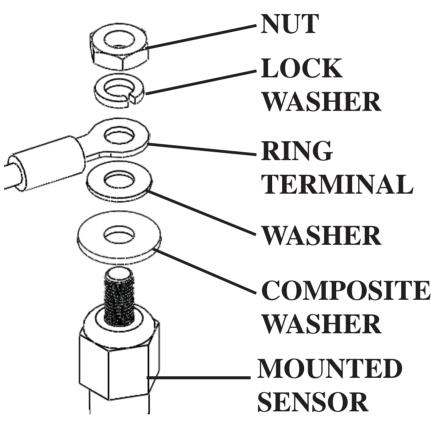


Figure 15

- 3) Replace the hardware, including the Adapter's ring terminal, in the order according to Figure 15.
- 4) Tighten the nut using the 3/8" wrench or socket. (Do not over tighten).
- 5) Route the remaining connector and wire to the Universal Sensor Input Device. See Figure 16.

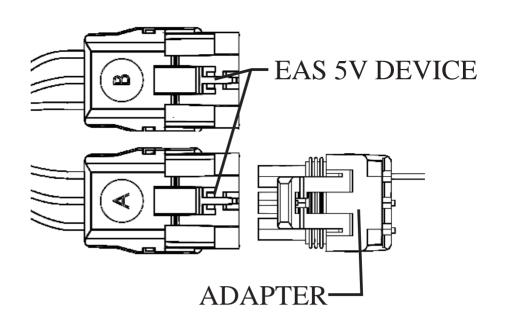
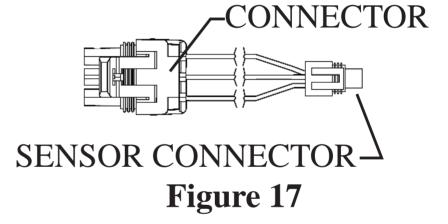


Figure 16

6) Plug the adapter connector into one of the device connectors.

# Pressure sensor adapter:

1) Locate the adapter cable included with the sensor. See Figure 17.



2) Plug the small round connector into the pressure sensor. See Figure 18

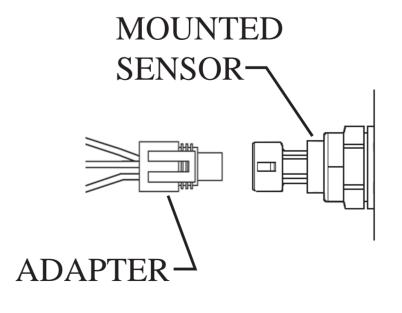


Figure 18



- 3) Route the remaining connector and wire to the Universal Sensor Input Device.
- 4) Plug the adapter connector into one of the device connectors. (See Figure 16 pg.13)

#### UNIVERSAL INSTALLATION

This section explains how to install sensors that are not sold by Edge Products. Keep in mind that this section is generalized, and does not give exact information on how to install the sensor itself. You will however, be instructed on how to connect a particular type of sensor to the Universal Sensor Input Device via the adapter cables included in main kit.

## PARTS INCLUDED:

- (1) Universal Input Device
- (2) Adapter Harnesses
- (1) Zip-tie Packet

## TYPICAL SENSORS

There are 3 basic types of sensors. The sensors you will be monitoring may come with 1, 2, or 3 connections that will need to be connected to a particular adapter wire.

Each adapter wire is labeled and color coded. See Figure 19

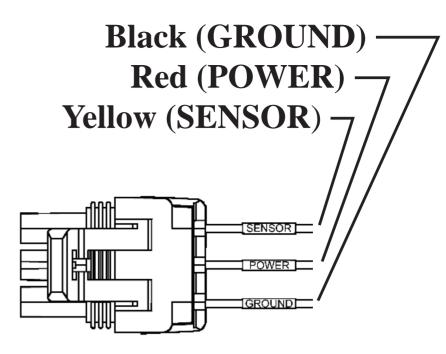


Figure 19

NOTE: The adapter wire ends are blunt cut. It is up to the user to find the best method of connecting the wire ends to the sensor. We suggest using off the shelf hardware such as bullet, spade, or butt style connectors.

#### **INSTALLATION STEPS**

NOTE: First install the Main EAS Cable Assembly according to the instructions located on pages 5 and 6 then continue with the following steps.

- 1) Find the best location for the sensor. Install the sensor accordingly.
- 2) Locate one of the 3 Pin adapters. (Figure 20)

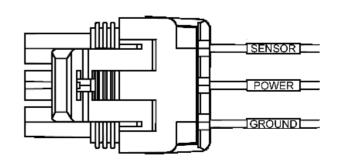


Figure 20

3)Coil unused wire:

Single wire install-coil both the BLACK and RED wires on the adapter.

**Double wire install**-coil only the RED since the BLACK and YELLOW wires are needed.

4) Connect the wires:

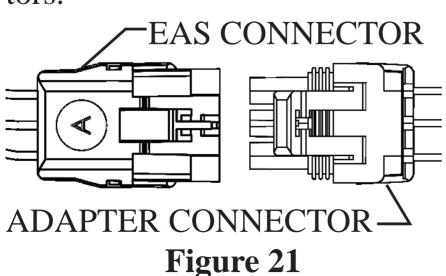
Single wire install-connect the YELLOW wire lead to the proper location on the sensor.

Double wire install-connect the YELLOW wire to the sensor output signal, and the BLACK wire to the ground signal.

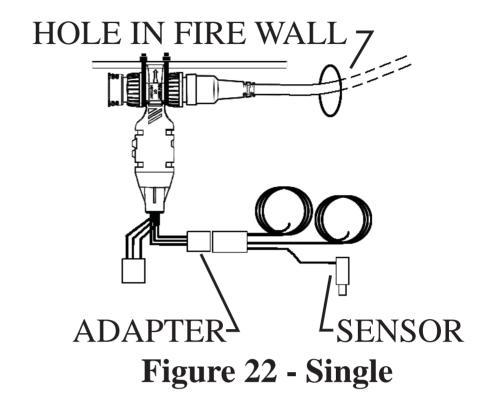
Triple wire install-connect the

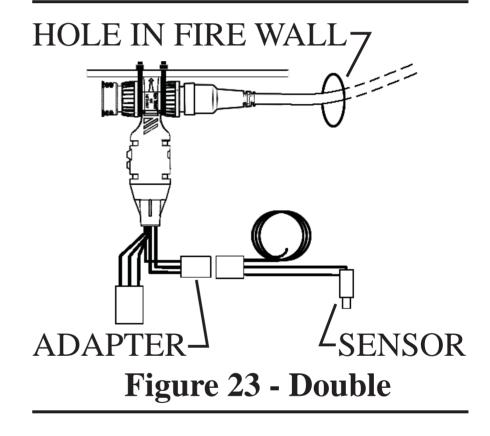
Triple wire install-connect the YELLOW wire to the sensor output signal, the BLACK wire to the ground signal, and the RED wire to the 5V reference signal.

- 5) Double check all connections to ensure that they are making good contact. If possible, use a multi-meter to check continuity.
- 6) Plug the adapter connector into one of the device connectors.



The final assembly of each type of installation should resemble one of the following Figures (22-24).





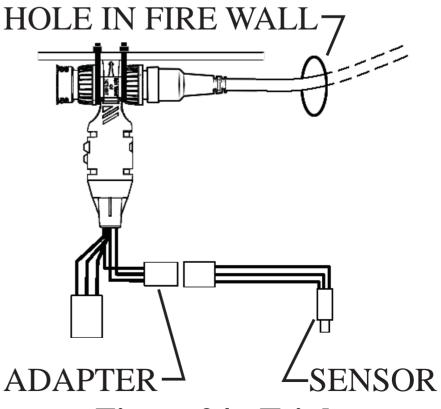


Figure 24 - Triple



7) If you haven't done so already, plug the 6 pin cable into its mating connector on the back of the CS or CTS. Figure 25

NOTE: The OBDII cable also needs to be attached in order for the CS or CTS to power up.

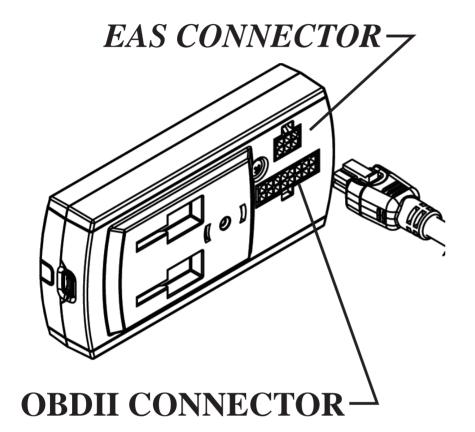


Figure 25

8) Turn the key-on in your vehicle. Follow all on-screen instructions until the main gauge screen is displayed.

NOTE: It is necessary for your CS or CTS device to be powered up so that it can recognize that you have installed an EAS device. This will need to be done prior to using MyStyle® to configure settings. See My-Style® section for more information.

Your Universal Sensor hardware installation is complete.

NOTE: You may have noticed that there is a sticker on each of the Universal Sensor Connectors. The letters on the stickers, either A or B lets you know which sensor you have plugged into. Do not remove them. Refer to the Mystyle section of this manual for more information.

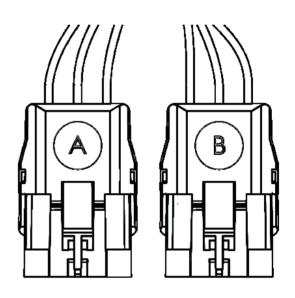


Figure 26



#### TURBO TIMER "COOL DOWN" CONNECTIONS

The EAS Turbo "Cool Down" Timer device keeps the engine running according to the CS or CTS device settings. This allows the engine to properly cool down before it is shut off. This section shows how to properly install the EAS Turbo Timer device hardware.

For more information on how to configure the "Turbo Cool Down" feature using the CS or CTS, refer to the CS/CTS User Guide under the "ACCESSORY OPTIONS" menu.

#### PARTS INCLUDED

The following may or may not be included in your kit. Refer to Figures 27-29

PART	<u>OTY</u>
EAS Main Device	1
-End Cap	1
-Main Cable	1
ATM Fuse Adapters	3
ATC Fuse Adapters	3
Dodge Adapter(06-09)	1
Dodge Adapter(2010-11)	1

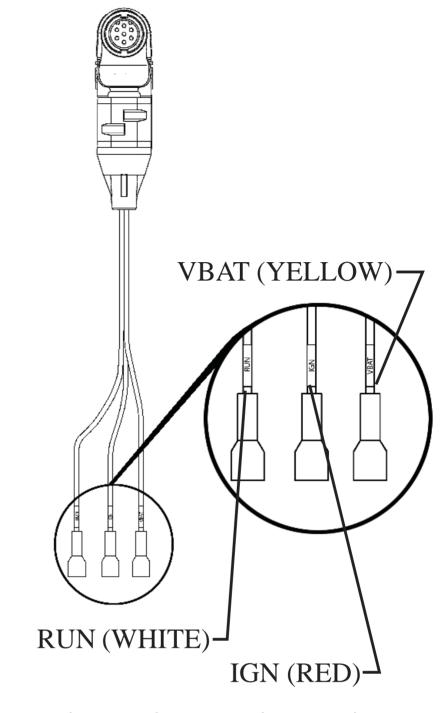


Figure 27 - Main Device



Figure 28 - ATM (Mini) Fuse



Figure 28A - ATC Fuse

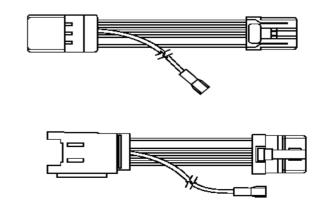


Figure 29 - Dodge Adapters



#### TRUCK-SPECIFIC INSTRUCTIONS

NOTE: First install the Main EAS Cable Assembly according to the instructions located on pages 5 and 6 then continue with the following.

#### **FUSE BOX LOCATIONS**

Refer to Figure 30. There are 3 possible fuse box locations. This of course depends on your vehicle:

- -Under the Hood
- -On the Side Panel
- -Under Steering Column

#### **FUSE ORIENTATION**

Each Fuse Adapter needs to be oriented within the fuse box a certain way.

Look at the fuse adapters provided in your kit. The side of the fuse with the wire coming out will be inserted into the "Hot" side of the fuse location.

These locations are listed in Figures 31-33 under the "Orientation" column as Top, Bottom, Front, Right, ect. These correspond to the directional labels in Figure 30.

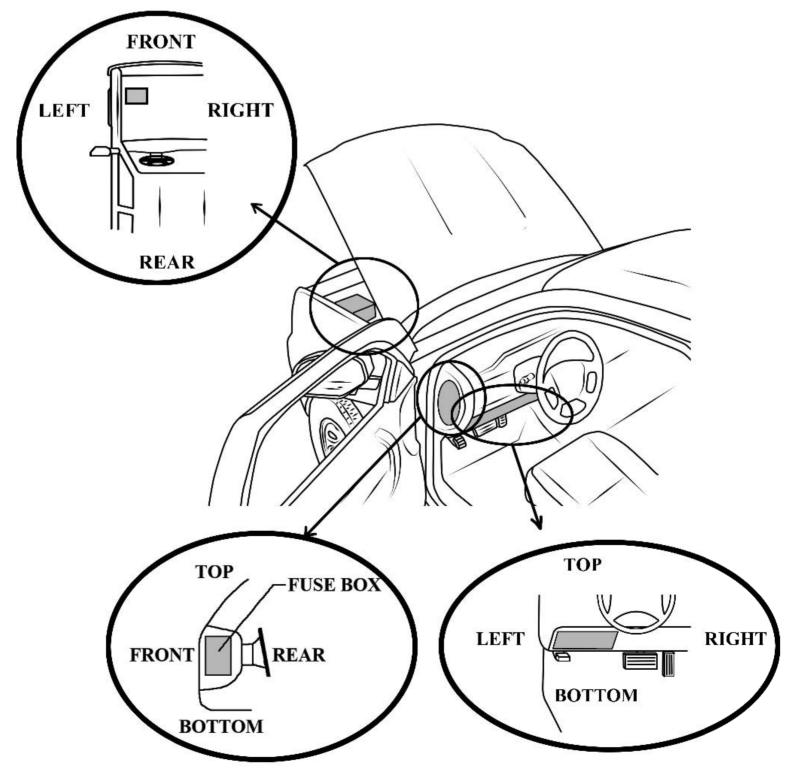


Figure 30 - Fuse Box Locations and Orientation

#### **FUSE #1 INSTALLATION**

- 1) Locate the YELLOW wire labeled "VBAT" on the Main Turbo Timer device and route it to the appropriate fuse box location according to the information in Figure 31.
- 2) Remove the fuse listed in Figure 31 and replace it with the appropriate fuse adapter. (Keep in mind the orientation.)
- 3) Plug the end of the Fuse adapter into the YELLOW "VBAT" line you had routed in step 1.

(NOTE: Make sure that all wires are routed within the fuse box to avoid the fuse box lid.)

4) Find the best location for the wire to come out of the fuse box and minimize possible crushing when the lid is closed.

You are now ready to install the second fuse if applicable.

TRUCK YEAR	FUSE BOX	FUSE (amps)	ORIENTATION
GM			
2001-2002	Under Hood	TBC (10amp)	Rear
2003-2007	Under Hood	TBC BATT (10amp)	Rear
2007.5-2011	Under Hood	IPC (10amp)	Rear
FORD			
1994-1997	Steering Column	16 (15amp)	Bottom
1999-2001	Steering Column	4 (10amp)	Left
2002-2003	Steering Column	10 (10amp)	Left
2004-2007	Steering Column	2 (10amp)	Left
2008-2010	Under Hood	30 (10amp)	Front
2011	Under Hood	46 (10amp)	Left
DODGE			
1998.5-2002	Under Hood	A/C CLUTCH (10amp)	Front
2003-2005	Under Hood	16 (10amp)	Rear
2006-2009	Under Hood	23 (10amp)	Left
2010	Under Hood	M26 (10amp)	Front
2011	Under Hood	M27 (10amp)	Right

Figure 31 - Fuse 1 Location and Orientation



#### **FUSE #2 INSTALLATION**

- 1) Locate the RED wire labeled "IGN" on the Main Turbo
  Timer device and route it to the appropriate fuse box location according to the information in Figure 32.
- 2) Remove the fuse listed in Figure 32 and replace it with the appropriate fuse adapter. (Keep in mind the orientation.)

- 3) Plug the end of the Fuse adapter into the RED "IGN" line you had routed in step 1.
- 4) Find the best location for the wire to come out of the fuse box and minimize possible crushing when the lid is closed.

You are now ready to install the third fuse if applicable.

TRUCK YEAR	<b>FUSE BOX</b>	FUSE(amps)	ORIENTATION
GM	GM		
2001-2007	Under Hood	IGN E (10amp)	Rear
2007.5-2011	Under Hood	MISC ING (10amp)	Rear
FORD			
1994-1997	Steering Column	17 (10amp)	Top
1999-2001	Steering Column	19 (10amp)	Right
2002-2007	Steering Column	45 (10amp)	Bottom
2008-2010	Under Hood	77 (10amp)	Front
2011	Under Hood	52 (10amp)	Left
DODGE			
1998.5-2002	Side Panel	9 (10amp)	Bottom
2003-2005	Under Hood	28 (10amp)	Front
2006-2011 Refer to "DODGE ADAPTER INSTALL" Section			

Figure 32 - Fuse 2 Location and Orientation

#### **FUSE #3 INSTALLATION**

- 1) Locate the WHITE wire labeled "RUN" on the Main Turbo Timer device and route it to the appropriate fuse box location according to the information in Figure 33.
- 2) Remove the fuse listed in Figure 33 and replace it with the appropriate fuse adapter.

- (Keep in mind the orientation.)
- 3) Plug the end of the Fuse adapter into the WHITE "RUN" line you had routed in step 1.
- 4) Find the best location for the wire to come out of the fuse box and minimize possible crushing when the lid is closed.



TRUCK YEAR	<b>FUSE BOX</b>	FUSE(#/NAME)	ORIENTATION
GM			
2001-2005	Side Panel	BRAKE (10amp)	Rear
2006-2007	Side Panel	BRK (10amp)	Rear
2007.5-2011	FUSE #3 Not needed for these trucks		
FORD			
1994-1997	Steering Column	18 (10amp)	Bottom
1999-2001	Steering Column	24 (10amp)	Left
2002-2003	Steering Column	26 (10amp)	Right
2003-2007	Steering Column	28 (10amp)	Right
2008-2011	FUSE #3 Not needed for these trucks		
DODGE			
1998.5-2002	FUSE #3 Not needed for these trucks		
2003-2005	Under Hood	35 (10amp)	Front
2006-2011	FUSE #3 Not needed	for these trucks	

Figure 33 - Fuse 3 Locations and Orientation

#### **DODGE ADAPTER INSTALL**

The 2006-2011 Dodge trucks require a "Y" style adapter that plugs in between the ignition module and the ignition harness. There are two types of adapters. Each is specific to a certain set of years.

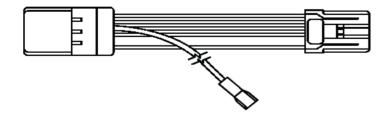


Figure 34 - (2006-2009 Trucks)

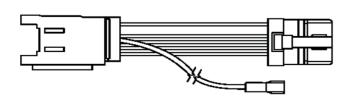


Figure 35 - (2010-2011 Trucks)

1) Locate the Dodge Adapter cables provided in the box. (see Figures 34 and 35)

- 2) Locate the RED wire labeled "IGN" on the main device and route it through the fire wall into the cab.
- 3) Connect the Dodge Adapter to the routed "IGN" wire connector.
- 4) Locate the key position connectors under the dash. The 2006-2009 are up and inside the steering column. The 2010-2011 are behind the key/ignition module.
- 5) Connect the Dodge adapter in between the truck connectors. The 2006-2009 will be an in-line cable coming from the steering column.



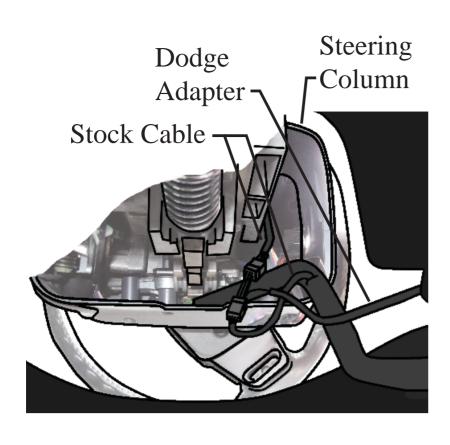


Figure 36 - Looking up from brake pedal (2006-2009)

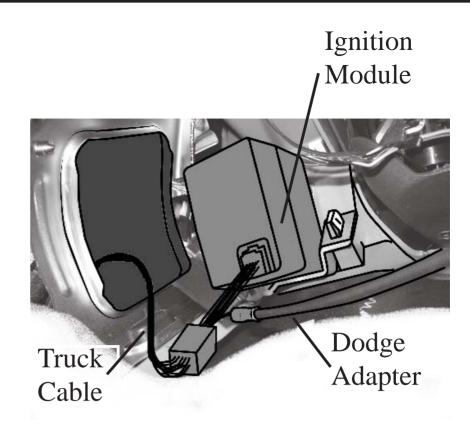


Figure 37 - Looking up from brake pedal (2010-2011)

#### **GENERIC INSTALLATIONS**

For installation on vehicles not outlined previously:

#### VBAT CONNECTION

The YELLOW VBAT connector should be connected to constant battery power. This could be done by connecting to the battery itself or any fuse that has constant power.

WARNING: DO NOT use fuses that are for the AIR BAG/Supplement Restraint System.

#### **IGN CONNECTION**

The RED "IGN" connector needs to be connected to the RUN-START circuit of the vehicle. This circuit has power when the key is in the run position and in the start-crank position. We recommend using a wiring schematic of your vehicle to find this but you can also use a meter or test light to find the circuit.

#### **RUN CONNECTION**

The WHITE "RUN" connector may or may not be necessary. The RUN connector is used to power modules that would other wise generate codes if not powered while the turbo timer keeps the vehicle running. Typically these modules are connected to the RUN circuit of the vehicle. This circuit has power when the key is in the run position and only in the run position. Again we recommend using a wiring schematic of your vehicle to find this but you can also use a meter or test light to find the circuit.

NOTE: If codes are set during or after using the turbo timer, the circuit that was touched with RUN is the wrong circuit.



# EAS - STANDARD EGT

The non-expandable accessory system (Standard EGT Probe) provides a single sensor allowing the user to monitor only one EGT parameter.

NOTE: The EGT sensor can not be chained and if you wish to add expandable capability, you will need to purchase a new expandable EGT.

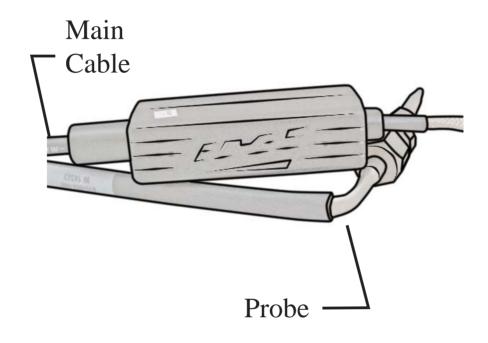


Figure 38 - STANDARD

# FITTING AND PROBE INSTALLATION

These installations are similar to the Expandable probe installation. Refer to "FITTING INSTALLATION" and "PROBE INSTALLATION" sections under the "EGT CONNECTION" section for proper install instructions.



# CONNECTING TO THE CS/CTS

# **ROUTING THE MAIN CABLE**

The Main Cables for the Expandable and Non-expandable options must be routed through the vehicle's fire-wall.

1) Locate the rubber grommet on the driver side fire-wall.

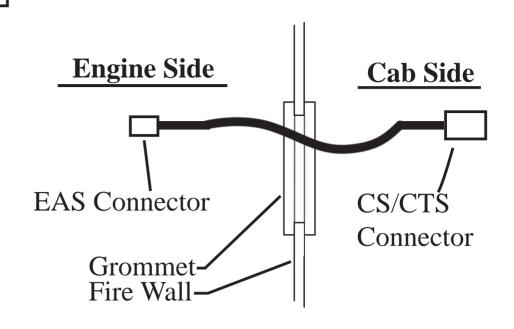


Figure 40 - FIRE WALL

3) Route the cable from below the dash up to the lower left corner of the driver side windshield. (Figure 41)

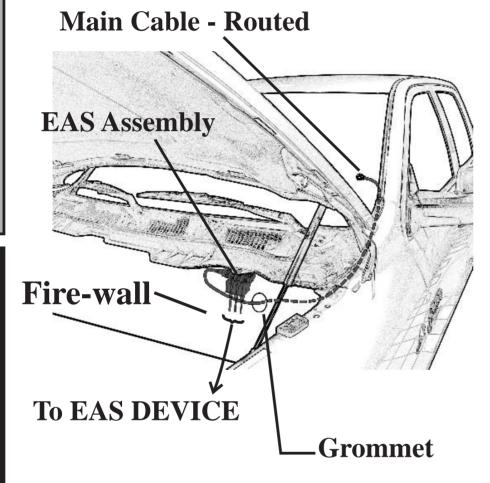


Figure 39 - ENGINE COMPARTMENT VIEW

2) Feed the end of the Main Cable through the rubber grommet. (Figures 39 & 40)

CAUTION: Make sure connector is not damaged during the routing process. The connector lock mechanism is critical and cannot be damaged.

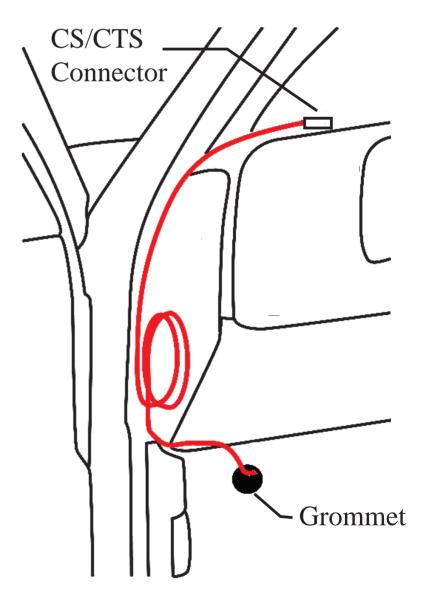


Figure 41 - ROUTING

4) If needed, remove side panels to help see while routing.

5) 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.

6) Plug the CS/CTS Connector into the proper mating connector on the back of the CS/CTS Unit.

NOTE: Depending on your mounting style, refer to the mounting documents below for proper installation:

- (a) Arkon Mount: Quick Install Guide
- (b) POD Mount: POD Install Manual

# SECURING THE EAS

- 1) Using the supplied zip ties, fasten the EAS connectors underneath the overhang which runs across the top of the fire wall. (Figure 42 & 43)
- 3) Use any remaining zip ties to secure loose cable.

**Overhang** 

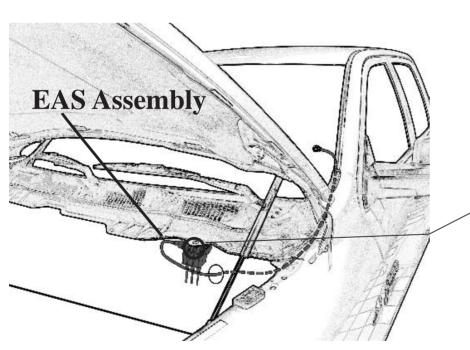


Figure 42 - TRUCK VIEW

2) Keep the EAS assembly close to the driver side. (Figure 13)

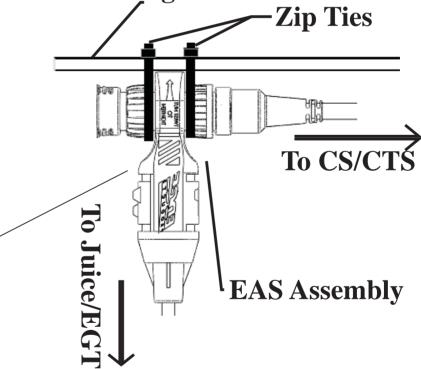
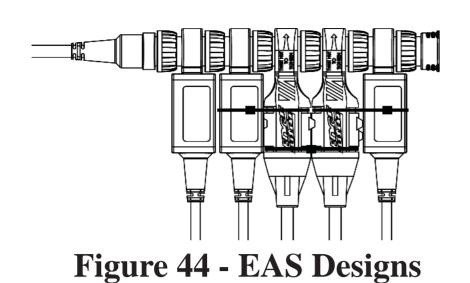


Figure 43

NOTE: There are two body designs for different EAS devices. However, the two different designs are compatible with one another. Refer to Figure 44.





If more than one EAS device is plugged together, use the long zip ties provided in the packet to connect their bodies together as shown in Figure 44. The New body design has two slots that allow the zip ties to be seated.

# FINAL INSPECTION

- 1) Recheck all connections for a properly secure installation. Using the supplied wire ties, secure the wiring cabling to prevent possible heat damage from hot engine surfaces.
- 2) 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 re-check all connections. Make sure all connectors are fastened tightly. If you continue to have problems, contact your dealer or Edge Products, LLC.

Installation Instructions

# USING MYSTYLE - EAS DEVICES

This section explains how to use Edge's MyStyle® software to configure your sensor output data so it can be read and interpreted properly on your CS/CTS device

In order for you to complete the following steps, you will need:

- 1) Access to a computer.
- 2) CS or CTS Device
- 3) USB Cable (See Quick Install Guide)
- 4) MyStyle® Program installed on your computer.

# **STARTING MYSTYLE**

- 1) Remove and unplug your CS or CTS from the truck completely. (Do not leave the OB-DII cable plugged into the CS or CTS while using MyStyle®.)
- 2) Double-Click the MyStyle® Icon located on your desktop to open the program.



- 3) The computer will ask you to "Please connect your device to continue".
- 4) Plug the USB cable into your computer and into to side of your CS or CTS device and set the device aside.

5) The following screen will appear on your computer:



Figure 45

NOTE: Look to the lower right of the screen. There is an option to "Check for updates". It is always good to update each time you open MyStyle®.

- 6) The button in the center of the screen will show that you have plugged in your CS or CTS, and will display your device's serial number.
- 7) Click the button to continue. The following screen will appear:



Figure 46



8) Click the button on the right labeled "Customize EAS Devices". The following screen will appear:



Figure 47

9) Use the scroll bar to scroll down to the different options if more than one is available.

Choose this Icon if you want to rename and change the description of your Edge EGT Probe.

Choose this Icon if you want to change multiple parameters on your EAS



Universal Sensor Input Device.

# UNIVERSAL SENSOR INPUT

Previously in the Universal Sensor hardware install section of this manual, it explained that you will need to pay attention to the letter on the connectors.

"A" = Sensor A

"B" = Sensor B

The following describes each feature in Figure 48 (next page). These descriptions apply to both Sensor A and B configurations:

- ① S/N: The serial number of your EAS device.
- **② Gauge Name:** The name that will be displayed on the CS/CTS gauge screen.
- 3 Long Name: The name that is shown in the PID selection menu on the CS/CTS.
- **Description:** Will be displayed in the "More Info" menu on the CS/CTS.
- **S Mapping:** Choose custom or pick from any of the default sensors already provided
- **6** Pull-up Value: This option can only be used in custom mapping.
- **Alert:** The alert allows you to set a maximum or minimum value that will trigger a PID alert.
- **8 Units:** The unit of measurement for your particular sensor. An example would be "psia" for an Absolute Pressure Sensor.
- **9 Input Table:** These tables cannot be edited unless custom mapping has been chosen.



Installation Instructions

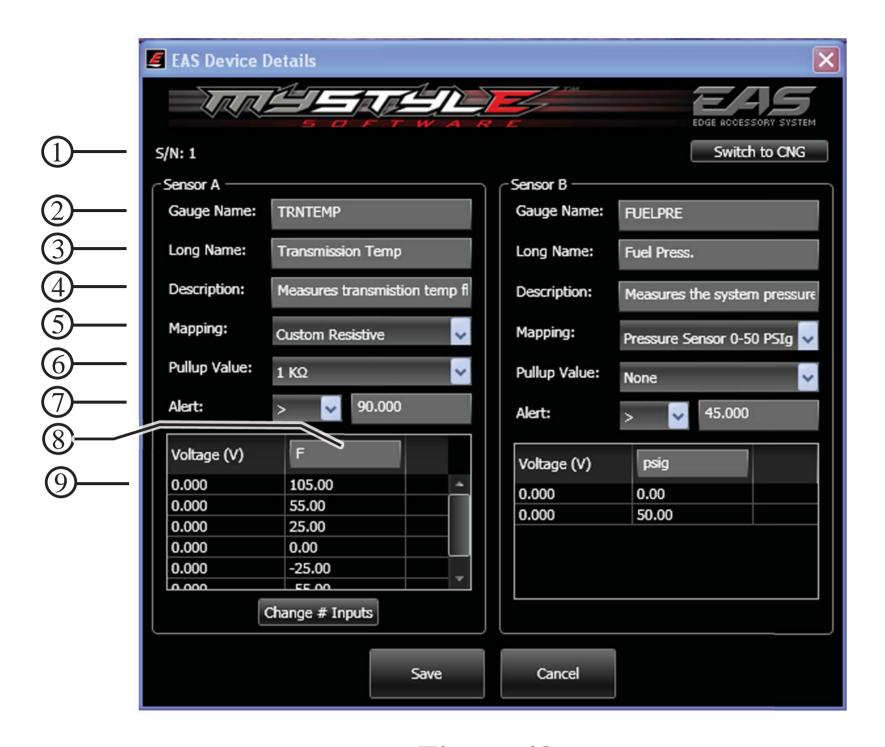


Figure 48

#### **CUSTOM MAPPING**

If you chose to install a sensor that is not called out as a default sensor, you may chose to create custom mapping.

- 1) Choose the custom mapping option according to your type of sensor. The two choices are:
- -Voltage (V)
- -Resistance (ohms)

Most sensors will have data sheets that contain a chart of values that you can use to input into the Mystyle chart.

For example, refer to the chart in Figure 49. In the case of a Temperature Sensor (Thermistor), the chart will have a temperature value (Usually in degrees Celsius) that corresponds to a resistance value.

NOTE: It is important that you label your units properly. For example, if your chart gives you degrees in Celsius, make certain that the Unit of Measure you input matches that value type.



RESISTANCE (Ohms)	TEMP C
96.40	-55
13.03	-25
3.27	0
1.00	25
0.30	55
0.06	105

Figure 49

In this case, you would choose the Resistance (ohms) Custom option.

Another example would be that of a Pressure Sensor. In Figure 50, the chart shows a Pressure value that corresponds to a Voltage Value.

VOLTAGE	PRESSURE
	(KPa)
4.9	0
4.4	10
3.8	20
3.3	30
2.7	40
2.2	50
1.7	60
1.1	70
0.6	80
0.3	90
0.3	100

Figure 50

In this case, you would choose the Voltage (V) Custom option. If your data sheet does not come with a chart, but rather gives you an equation to use, you will need to calculate the input values based on the equation variables.

#### 2) Choose a Pull-up Value.

The values available are 10K ohm, 1K ohm, or None. To help determine which pull-up value to use, refer to the following rule of thumb:

-3 wire sensors: None

-2 or 1 wire sensors: 1K or 10K

If for example your sensor is a single wire Temperature sensor, and is rated as 1K @ 25C, you would want to use a 1K pull-up. You want to match your pullup value as close to the sensor rating as possible.

3) **Set the alert value** according to your specific sensor. Depending on the sensor, the alert value will be either a maximum or a minimum value.

For example, if you have a pressure sensor, and you want the CTS to alert you when the sensor reads greater than or equal to 90 psi, set up the values as shown:



Installation Instructions



#### Figure 51

- 4) Fill in the Unit of Measure value. This will be displayed on the main gauge screen. Only 4 digits are allowed.
- 5) Input the chart data. Most sensors will have data sheets that contain a chart of values that you can input into the Mystyle chart. These will look similar to the charts in Figures 49 and 50 on the previous pages.

For non-linear output sensors, the more data points you can enter, the more accurate your custom mapping will be. When the sensor output is linear, only the maximum and minimum values are needed.

NOTE: You probably noticed the button in the upper right hand corner labeled "Switch to CNG". Edge offers CNG kits for fleet vehicles, which are not yet available to individual users. This allows them to modify a PID that uses temperature and pressure to calculate the fuel level in their CNG tank.

- 7) Click the "Save" button, and you will be directed to the previous screen.
- 8) Click the "Save Configuration" button to upload the changes to your CS/CTS.

# **EGT SENSOR**

If you are modifying an EGT Device, note that you are only allowed to change the names and descriptions.

- 1) Update/change names and description.
- 2) Click the "Save" button, and you will be directed to the previous screen.
- 3) Click the "Save Configuration" button to upload the changes to your CS/CTS.

# **CS/CTS SETUP**

Now that you have modified and saved your Mystyle data, you can setup and display your EGT or Universal Sensor Input PIDs on the CS/CTS device.

- 1) Disconnect your CS/CTS from Mystyle, and reinstall the device in your truck.
- 2) Follow all on-screen instructions until your main gauge screen is displayed.



3)CTS - While viewing the main gauge screen, touch the gauge you would like to modify. CS - While viewing the main gauge screen, press the enter button and select the gauge location you would like to modify.

The image in Figure 52 will appear:

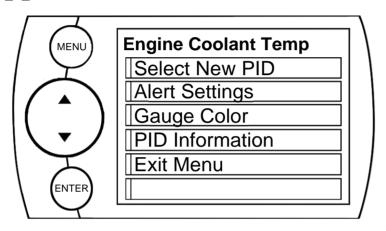


Figure 52

- 4) Select the EAS Device you modified in Mystyle from the "Select New PID" options list.
- 5) Exit the menu and return to the main gauge screen to verify that the new PID is reading correctly.

For more information regarding the functionality of your CS or CTS, refer to the CS/CTS User Guide.

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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.