

## CorkSport Gauges

Oil Pressure, Oil Temperature, Coolant Temperature  
& Boost Pressure



### This Package should contain:

1. One - Complete Gauge Kit (Oil P, Oil T, Coolant T or Boost)
  - i. One - Electronic Analog Gauge
  - ii. One - Power Wire
  - iii. One - Daisy Chain Wire
  - iv. One - Mount Housing
  - v. One - Mount Housing Hardware
  - vi. One - Double Sided Sticky Tape
  - vii. One - Glare Shield
  - viii. One - Sensor
  - ix. One - Sensor Wire
  - x. Sensor Accessories

# CorkSport Gauges

Oil Pressure, Oil Temperature, Coolant Temperature,  
and/or Boost Pressure



Keep an eye on your engine parameters with the CorkSport Oil Pressure, Oil Temperature, Coolant Temperature, and Boost Pressure gauges. The gauges have a 2% accuracy with Peak Recall, Limit Alarms, and Multi Color Display Features to customize for your specific vehicle.

Let us know your thoughts about the CorkSport Gauges by submitting a review at: <https://corksport.com/mazdaspeed-boost-gauge.html>

## Pre-Installation Notes:



If installing on a Mazdaspeed use of a 2010-2013 Mazdaspeed 3 oil filter housing and oil filter plate is suggested. The housing and gasket can be purchased from you local Mazda dealer. Part #: L311-14-311A & LF02-14-342. These instructions do not show the housing or oil filter plate installation.



Make sure your vehicle is completely cooled down prior to starting installation. If you are going to work on your car within an hour or two of having driven it, use a fan to cool off the car.



These instructions were written for reference only and the use of a factory service manual is recommended.



How our instructions work: To best cover all of our customers experience levels, we have included a table of contents/order of operations along with step-by-step instructions.



These in car installations are intended for general application installation. Vehicle specific images and instructions are not included.

## Materials and Time:



### General Info.

Part #: GEN-9-341-10  
Time Est: 2-4 Hours  
Wrench Rating: 3/5

### Suggested Items (not included) :

Gen2 Oil Filter Housing P#: L311-14-311A  
Oil Filter Housing Gasket P#: LF02-14-342  
"Add-a-Fuse" ATM Mini QTY=4  
CorkSport Oil Filter Sandwich Plate



### Tooling List

12mm Wrench/3/8" Socket  
14mm Wrench  
22mm Wrench  
3/8" Torque Wrench  
2mm Allen Wrench  
3mm Allen Wrench  
Wire Strippers  
Wire Cutters  
Oil Rags/Paper Towels  
Oil Resistant Thread Sealant  
Voltmeter  
10-15ft of 18-20awg Coated Wire (having four various colors may be helpful)  
Electrical Tape  
Small Zip Ties  
18-20awg Butt Crimp Connections  
18-20awg Eyelet Crimp Connections



### Parts List

1. One - Electronic Analog Gauge
2. One - Power Wire
3. One - Daisy Chain Wire
4. One - Mount Housing
5. One - Mount Housing Hardware
6. One - Double Sided Sticky Tape
7. One - Glare Shield
8. One - Sensor
9. One - Sensor Wire
10. Sensor Accessories

Need Help With Your Installation?  
Call (360) 260-CORK

## Order of Operations & Table of Contents



### Parts Identification

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### Installation

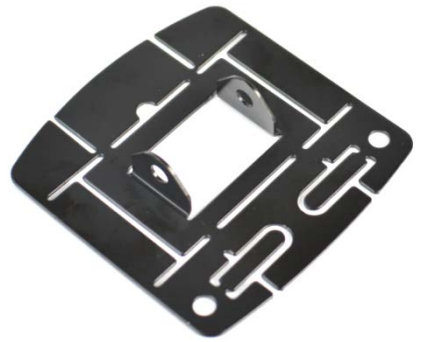
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1. General Parts Identification



Mounting Plate

Glare Shield



Mounting Hardware



Mount Housing



Power Wire



One Sided Foam Tape



Daisy Chain Wire

Double Sided Foam Tape



2. Boost Gauge Specific Parts Identification

Boost Gauge



Hose T-Connection



Pressure Sensor



Hose



Sensor Wire



In-Line Filter



**3. Oil Temperature Gauge Specific Parts Identification**



Sensor Wire

Oil T. Gauge



Temp Sensor



**4. Oil Pressure Gauge Specific Parts Identification**



Sensor Wire

Oil P. Gauge



Temp Sensor



**5. Coolant Temperature Gauge Specific Parts Identification**



Sensor Wire



Coolant T. Gauge



Temp Sensor

## 6. General Mounting

- a) **Assemble the mounting plate and the mount housing** with the provided hardware, shown in **Figure 6a**. Use a 3mm allen wrench to tighten the hardware.
- b) **If desired, install the glare shield onto the gauge.** Seen in Figure 5b.

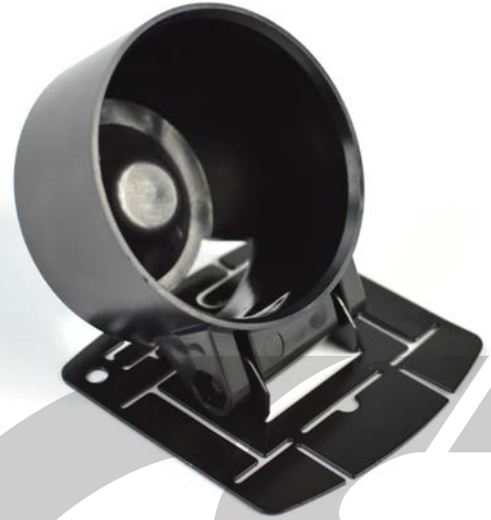


Figure 6a



Figure 6b

- c) **With or without the glare shield,** apply the one sided foam tape to the circumference of the gauge as shown in **Figure 6b**.

- d) **Install the gauge into the housing** as shown in **Figure 6c**. Be careful to not pull off the foam tape while installing. The foam tape is intended to provide a firm fitment in the housing.
- e) **Determine ideal location for the gauge in the vehicle.** The gauge can be removed from the housing for wire installation.



Figure 6c



## 7. Gauge Wiring Installation

The following steps show how to connect the wiring to the gauge and how to setup the display color.

- a) Once the wiring is routed from power and ground sources, the gauges can be hooked up.
- b) **Figure 7a** shows how to connect power to the White and Orange wires found in the Power Wire provided with the gauge. Follow this guide to setup the back light color for day and night time driving.
- c) **Figure 7b** shows how to connect the provided wiring to the gauge.
- d) If using only one gauge: The Daisy Chain Wire will not be used. The Power Wire will only be connected as shown in **Figure 7b**.

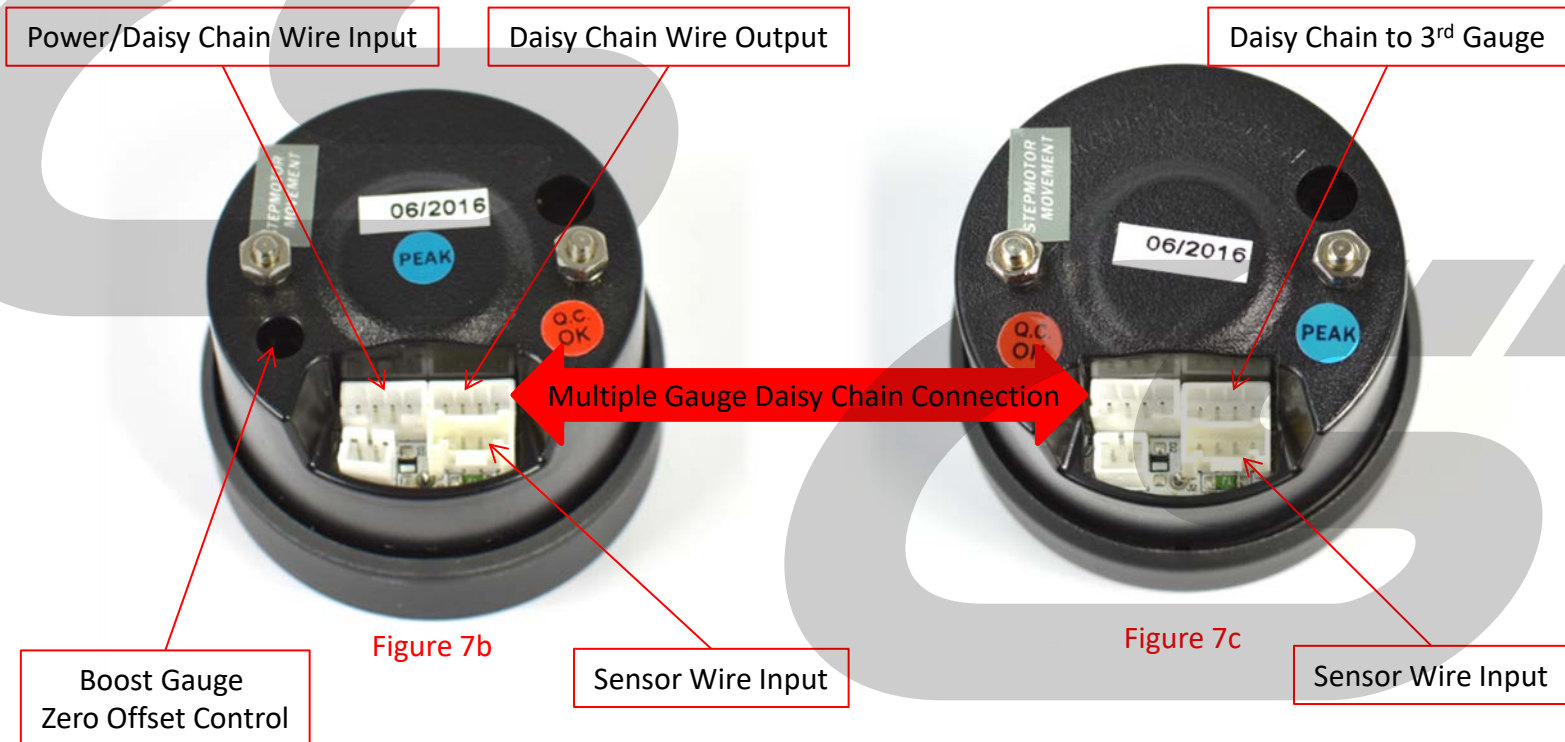
Gauge Face Lighting Diagram		
Day Time	Night Time	Power Wire Setup
White	White	White Wire - Connect to Acc. Power Circuit Orange Wire - Do Not Connect
Amber	Amber	White Wire - Do Not Connect Orange Wire - Connect to Acc. Power Circuit
White	Amber	White Wire - Connect to Acc. Power Circuit Orange Wire - Connect to Running Light Circuit
Amber	White	White Wire - Connect to Running Light Circuit Orange Wire - Connect to Acc. Power Circuit

Figure 7a

- e) If using more than one gauge: Connect the Power Wire to one gauge in the Input location. Use the Daisy Chain Wire to connect the to the next gauge as shown in Figures 6b & 6c.
- f) With this setup you do not have to run power wires to each gauge separately.



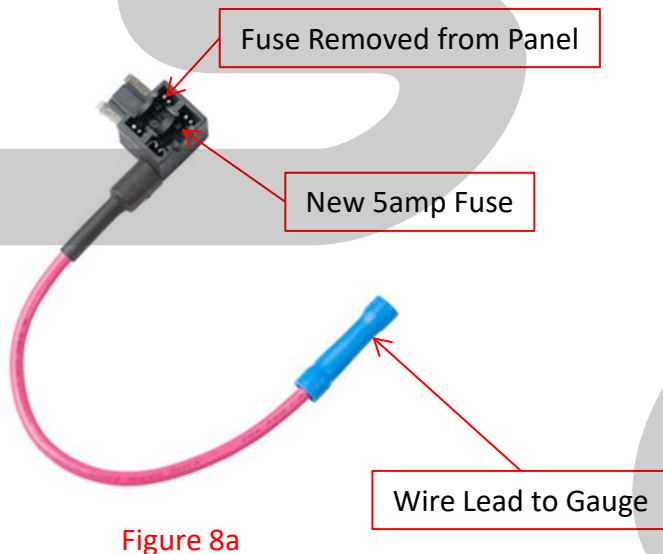
**Figure 7b:** The boost gauge needle may not arrive to you at the correct zero (KOEO) position. Use a 2mm allen wrench to adjust the needle zero (KOEO) position as shown in **Figure 7b**. Turn the allen wrench CW or CCW to adjust.



## 8. General Wiring Installation

### Sourcing Power & Ground Connections:

- a) **Locate the vehicle's fuse panel.** This is typically located under the glove box, behind a kick panel, and/or in the engine bay. Using an interior fuse panel is typically easier for wiring.
- b) **Red Lead from Power Wire:** Locate a fuse/circuit that has 12v power when the key is in both ON and OFF positions (12v constant power). Verify with a voltmeter.
- c) **White /Orange Lead from Power Wire:** Locate a fuse/circuit that has 12v power with the key in the ON position. Verify with a voltmeter.
- d) **White/Orange Lead from Power Wire:** Locate a fuse/circuit that has 12v power when the night time running lights turn on. Verify with a voltmeter.
- e) **Locate mounting point in cabin that bolts directly to metal.** This can be your ground source. Verify with a voltmeter.
- f) **The method to connect to these circuits can vary, however we do have a recommendation.** Shown in [Figure 8a](#), a Low Profile Fuse Adapter can be added to create a secondary circuit. These can be found at any local auto parts store. You will also need to purchase a 5amp fuse for each additional circuit, this is the fuse that protects the gauge itself. If the adapter is not used an in-line fuse must be added to the circuit, example shown in [Figure 8b](#).
- g) **Run 3-4 (depending on display color setup) 18-20awg wires from the gauge mounting location to the fuse panel and ground location.** Use wire cutters, wire strippers, and crimp connections to assemble the wires. Be sure to leave 8-10 inches of extra length at the gauge for easy gauge installation.



**A 5amp fuse is required in-line for all power sources.**



## 9. Sensor Installation

### Oil Pressure and Temperature Sensors:

- If not using an oil filter plate:** Location of oil pressure source and extra fittings required for oil pressure sensor installation. Drilling and tapping of the oil pan is required to install the oil temperature sensor; this may vary depending on make and model.
- If using an oil filter plate:** Install the sensors into any of the NPT port that provides proper clearance when installed in the vehicle, shown in [Figure 9a](#). Check fitment of plate and sensor in the vehicle before next step.
- Torque sensor to 7 in-lbs.**
- Verify the wires are fully seated into the sensor/sensor wire leads.**
- Route the sensor wires in the engine bay and through the firewall.** Choose a location through the firewall that already has a rubber grommet to protect the wires from chaffing. Verify that the wires are not near excessive heat in the engine bay.

### Boost Pressure Sensor:

- Mount the sensor in a location that is protected from excess heat and water.** Verify that this location can be reached by the provided hose and the provided sensor wire.
- Use the provided hose, in-line filter, and T-connection** to connect the sensor to the BPV hose as shown in [Figure 9b](#).
- Route the sensor wires in the engine bay and through the firewall.** Choose a location through the firewall that already has a rubber grommet to protect the wires from chaffing. Verify that the wires are not near excessive heat in the engine bay.



Figure 9a

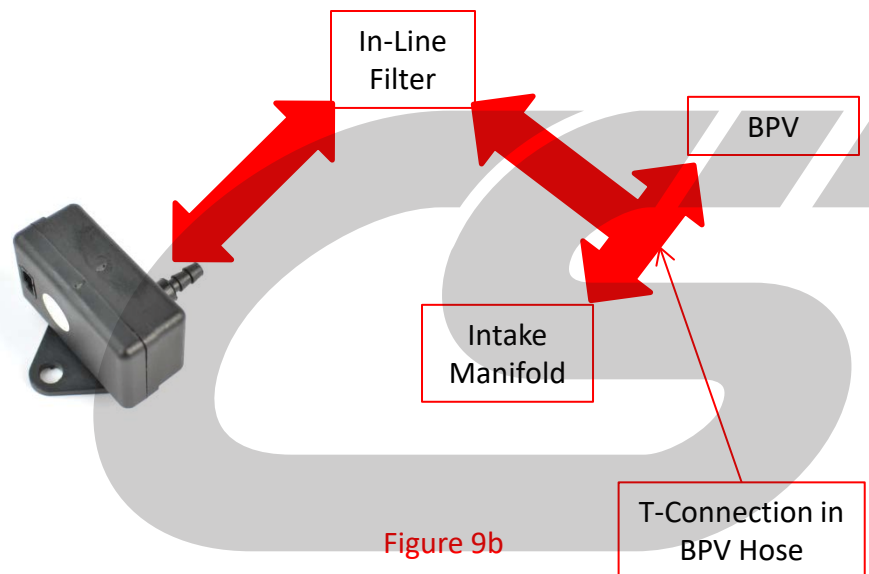


Figure 9b

**9. Sensor Installation (continued)**

**Coolant Temperature Sensor:**

- a) Coolant Temperature pickup location will need to be determined for each individual make and model. Either tie into a hot side coolant line using extra fittings or drill and tap into any hot side coolant passage. Sensor uses 1/8 NPT thread.
- b) Torque sensor to 7 in-lbs.**
- c) **Verify the wires are fully seated into the sensor/sensor wire leads.**
- d) **Route the sensor wires in the engine bay and through the firewall.** Choose a location through the firewall that already has a rubber grommet to protect the wires from chaffing. Verify that the wires are not near excessive heat in the engine bay.

## 10. Gauge Setup & Control

### Set the Limit/Warning Feature:

- Turn ignition to ON position
- Allow gauge starting process to finish
- Press and hold the button down for approximately 5 seconds
- Release button
- Push and hold button to sweep the needle quickly or toggle button to move needle in small increments
- Position needle to desire "limit" point to sound the alarm light
- Release button for 5 second or more to set the "limit"

### Warning Sound Mute/Unmute:

- With the ignition OFF, press and hold button
- Turn the ignition to ON position and wait for the needle to come to resting position
- Release button
- Repeat above steps to Unmute the alarm

### Limit Recall Feature:

- Turn ignition to ON position
- Push button one time to recall peak level
- The blue "limit" light will come on while in recall mode
- The needle will sweep to the highest level attained and remain there approximately 5 seconds.
- To reset peak level: while in peak recall mode, press and hold button

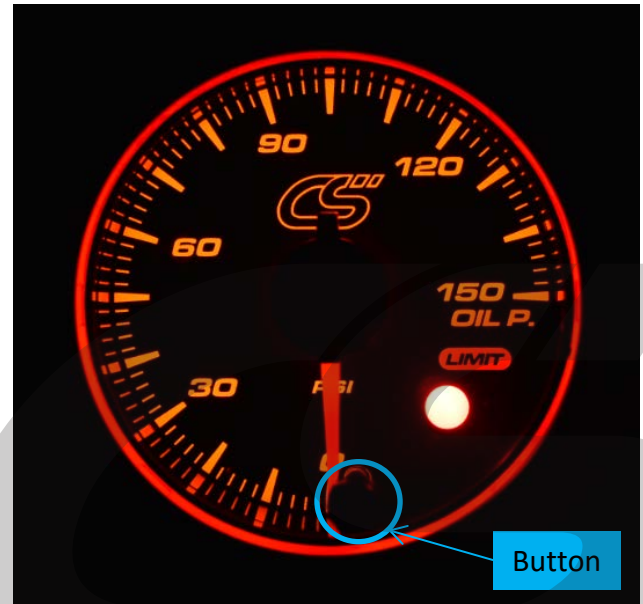


Figure 10a



Figure 10b