

Thank you for purchasing our PIVOT STEPPING GAUGE SERIES.  
Please read these instructions carefully before installing or using this meter.

**SG-OT/OTG Features**

- Microcomputer controlled stepping motor drive provides highly precise display of oil temperature.
- Includes highly precise oil temperature sensor.
- One-touch hold peak function to view highest temperature.
- Includes U-shaped brace and easy-to-install stand allows freedom in installation.
- White LED Illumination (SG-OT). Blue LED Permeating Illumination (SG-OTG).

**[Opening Demo]**

By turning the key switch on, the needle will move in a fixed pattern. (searching for the origin)

**CONTENTS**


**PART NAMES AND OPERATIONS**

**<FRONT>**

**[SG-OT]**

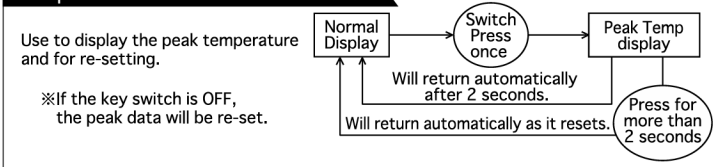
● Display Range 50~150°C  
● Lamp  
● OT=White LED Illumination  
● OTG=Blue LED Permeating Illumination  
● Linkage to Small Lamps  
● Brightness Control Function

Peak Switch

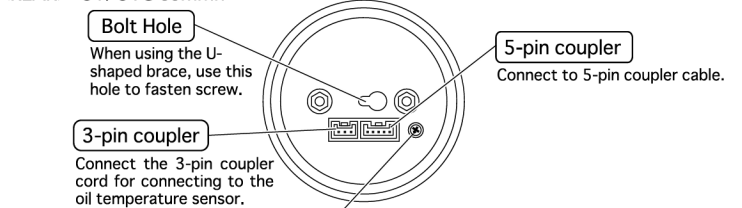
**[SG-OTG]**

Peak Switch

**The operation method of a PEAK SWITCH**



**<REAR> OT/OTG commn**



**Meter Brightness Setting Adjustor**

Set meter brightness with the small lamps ON.  
Bright ◀ 16 steps ▶ Dark

The adjustor goes around with no notches.

◀If you wish to adjust several meters to match>  
① Decide the brightness you wish to make the standard, check how many steps away that is from the brightest (or darkest) setting.  
② Adjust other meters to match the number of steps away from brightest (or darkest).

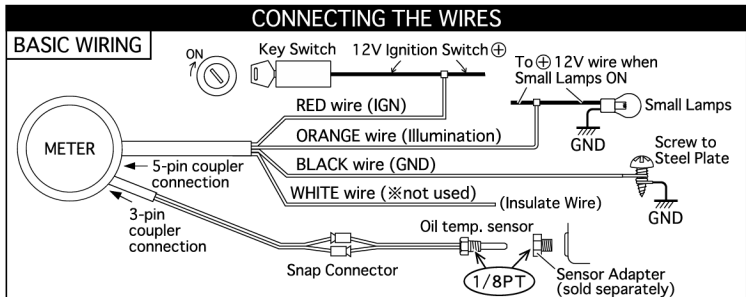
Adjust by turning with a narrowly pointed ⊕ screwdriver, being careful not to push too hard.

**Troubleshooting** ※Please make the following checks before seeking repair.

Trouble	Possible Causes	Possible Solutions
The opening demo does not work with key switched ON.	●Contact failure of RED wire(IG⊕12V). ●Contact failure of BLACK wire(GND).	Check the wire connections or conditions.
The oil temp display does not change.	●Contact failure of 2-pin coupler cable from oil temperature sensor. ●Contact failure of 3-pin coupler.	Check the wire connections or conditions.
Even with the small lamps ON, the meter light does not come on.	Contact failure of ORANGE wire (Small lamps ON⊕12V).	Check the wire connections or conditions.
The illumination color is slightly different from other meters.	This is due to a variance in the LED and is not a malfunction. Please be aware that we cannot perfectly match the color.	Turn the adjustment switch to the left to adjust the brightness.
The needle stops at the key OFF position.	This is a characteristic of the stepping motor and is not a failure or breakdown. If after the opening demo with the key ON, the oil temp display reads correctly (under 50°C the display reads 50°C) the meter is working properly.	

**How to use the Wire Connectors** ※ If soldering is possible, please do so.

Use a crushing tool to press the wire connector. If you do not have such a tool, use pliers or such to fold and crush the connector together for a secure contact.  
Loose connections can cause wire to come apart, so please make sure the connection is secure.  
Be sure to insulate and secure with vinyl electrical tape.



**INSTALLATION WARNING**

1. For safety purposes, when working on your car always disconnect the ⊖ battery terminal (re-connect to check for power).
2. Make sure that all wire and snap connectors are firmly connected and insulated.
3. Be careful when laying wires not to cause any electrical shorts or wire breakage.

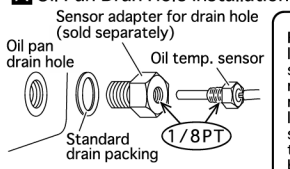
**CONNECTION PROCEDURE**

1. Make sure to properly connect each of the wires from the 5-pin coupler and then connect the 5-pin coupler to the back of the meter.  
RED wire(IGN) = Connect to the wiring that carries (⊕ 12V) when key switch is ON.  
ORANGE wire(Illumination) = Connect to the wiring that carries (⊕ 12V) when the small lamps are ON.  
BLACK wire(GND) = Connect to a screw near the steel plate that carries earth.

**NOTE ABOUT SENSOR**

The white tape around the sensor screw is to prevent leakage; please screw on the adapter as is.

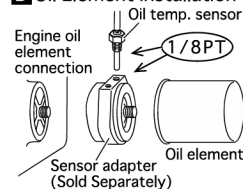
**A Oil Pan Drain Hole installation**



**WARNING**

For cars chassis that are low to the ground or in cases where road conditions may be poor, please do not use this type of installation. It may lead the sensor to bump against the ground and break or be damaged.

**B Oil Element installation**



**INSTALLATION WARNING**

1. Be sure to securely connect the sensor adapter so as to prevent any leakage, and periodically check for leakage.
2. Carefully select the angle of the sensor adapter before you connect the sensor or the wire so as not to cause any sudden or drastic twists or bends.
3. Be careful not to carry out this installation while engine is hot; it may result in burns or injury. Make sure engine has sufficiently cooled down before attempting installation.

3. Use the 3-pin coupler cable to connect the oil temperature sensor to the meter.  
① Pull the 3-pin coupler cable with the male/female wire connector to the engine room by way of a car harness grommet.  
② Make sure to firmly connect the wires coming from the oil temperature sensor to the proper wire connectors.

**NOTE**

Make sure the snap connector is firmly connected. In particular make sure the male side, which is the cover, is firmly inserted and screwed into the female side.

- ③ Use the 3-pin coupler cable to connect the oil temperature sensor to the meter.

**NOTE**

Connecting the 3-pin coupler from the boost, vacuum, oil pressure, exhaust temperature gauge, or G meter will result in damage or a malfunction.

**METER INSTALLATION**

**A Installation with U-shaped Brace**

Fasten from the back of the instrument panel.

1. Fastening the Hexagonal Bolt for Installing the U-shaped Brace  
① Insert the six-sided part of the hexagonal bolt into the hole at the back of the case and slide it to the left.  
② With the bolt locked in place, screw on the hexagonal nut to tighten.  
③ Inside the hole to the left is a bolt lock; position the bolt so as to lock.
2. Installing the Meter  
① Insert the meter into the front side of the panel where you wish to install it.  
② On the rear side, slide the U-shaped brace onto the hexagonal bolt and securely fasten with the spring washer and the knurled nut.

**B Installation with the Adjustable Stand**

Fasten to a stable place with the double-sided tape. (On top of the steering column cover or dashboard.)

1. Installing the Adjustable Stand  
① Place the stand's holder band around the back of the meter.  
NOTE: If you cannot get the band around the meter, loosen the hexagonal bolt and expand the band.  
② After getting the band in place, tighten the hexagonal bolt to secure the band.
2. Installing to the Car  
① Carefully decide installation place.  
② Bend the stand to securely fit the place of installation.  
③ Clean the surface; removing all oil or dust.  
④ Fasten using the double-sided tape.  
Clean to remove oil & dust  
⑤ After deciding the position and angle of the meter face, fasten the hexagonal bolts on both sides to secure.

Please be sure about where you wish to install the meter, as it is not advisable to reuse double-sided tape.

If after installing the meter, the 3-pin coupler cable is viewable and looks bad.  
⇒ Tie the 3-pin coupler cable behind the meter with the zip tie.