





MT-FMGM3

# TRANSMISSION TEMPERATURE GAUGE INSTRUCTIONS



The following instructions are for the installation of your Transmission Temperature Gauge into your 2014-2019 Chevrolet Silverado & GMC Sierra with a 6.6 Duramax Engine. Before you begin, lay out all items and ensure there are no missing parts. If any items are missing, please STOP immediately and contact MaxTow Gauges.

## What's Included

- Fuel Pressure Gauge
- 1/8-27 NPT Transmission Temperature Sensor
- Power & Sensor Harnesses
- Mounting Bracket
- Gauge Visor

Yellow: 12v Constant Source (+)

Wire Schematic

Red: 12v Ignition Switched Source (+)

**Drange:** 12v Headlight Switched Source (+)

Black: Vehicle/Engine Ground (-)

# AWARNING

DISCONNECT NEGATIVE BATTERY TERMINALS BEFORE STARTING ANY WORK ON THE VEHICLE.

Check that you have all parts required for installation, and that the engine is cool.

Open the hood and locate the truck's batteries. Using a wrench, disconnect the negative terminal of each battery to ensure there is no power running through the truck during the installation.

**Nate:** When it comes time to wire and connect the gauge to its power source, you will be able to reconnect the negative terminals on the batteries.

We install the Transmission Temperature Gauge using a 1/2" Transmission Line T-Fitting Adapter:

**Warning:** Be sure that the transmission is cool before removing the transmission cooler line.

## Using an Inline T-Fitting Adapter

1. Safely jack up the truck, if not raised already. Locate the cooler feed line on the passenger side of the transmission housing.

**Note:** The lower line is the cooler feed line and the upper line is the return line from the cooler.

2. Using a Pick Tool, release the plastic retaining clip cover and slide it out of the way. Release and remove the retaining clip from the transmission. Slide the line out of the transmission case and drain the fluid from the line.

Note: Use a drain pan to catch the fluid.

**3.** Measure and mark the location where you would like to install the T-Fitting. Cut 1-7/8" out of the cooler feed line with a Pipe Cutter (make sure to always use a new blade).

**Nate:** You can also remove the cooler feed line entirely from the truck and cut it on a work bench. If the cooler feed line is removed from the truck, up to 4 quarts of transmission fluid will need to be drained from the system and must be refilled with fresh transmission fluid once the T-Fitting has been installed.



- **4.** Deburr both ends of the cut line with a Deburring Tool to ensure a proper fit of the T-Fitting onto the cooler feed line.
- **5.** Install the cooler line T-Fitting's female fittings over each end of the cut line. Then, place the metal cutting rings over each end of the cooler line.



6. Hold the body of the T-Fitting with a 24mm wrench and handtighten each nut. Then, tighten one and one-quarter more turns with a 26mm wrench to ensure proper sealing of the cutting rings. Now you can install the 1/8-27 NPT temperature sensor into the port on the T-Fitting housing.

**Nate:** Be sure to use Teflon Tape on the threads of the temperature sensor to prevent any leaks.

**Nate:** Check the dipstick to ensure the proper amount of fluid is in the transmission according to manufacturer's specifications.



#### Using an Allison 1000 Transmission Test Port Adapter

1. Safely jack up the truck, if not raised already. Locate and remove the factory plug from the bell housing located next to the spinon transmission filter using a 15mm Socket.

Note: Have a drain pan ready to catch any fluid loss.

2. Wrap Teflon Tape on the male threads of the sensor. Thread the sensor into the test port extender adapter and tighten using 14mm wrenches.







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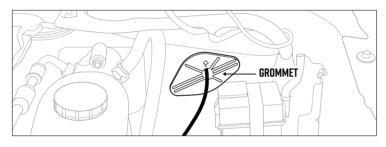
**3.** Thread the test port extender with the sensor attached into the transmission test port and tighten using 14mm wrench.



### Finalizing the Transmission Temperature Gauge

1. Plug the Transmission Temperature Sensor Harness into the Transmission Temperature Sensor and route the harness through the engine bay, through the firewall, using a grommet, keeping it clear of any moving parts, and heat sources.

**Optional:** Lower the vehicle if it was raised.



**2.** Top off the transmission fluid to factory specifications and check for leaks.

**Nate:** Refer to the vehicle's repair manual as fluid check procedures may vary.

# **Gauge Wiring**

- 1. Reconnect the negative terminals of the two batteries to prepare power for the gauges and to test the fuses for power with a test light or multimeter.
- **2.** Attach the Micro II Expandable Circuits to the yellow wire and the red wires and attach the Mini Expandable Circuit to the orange wire.
- **3.** Connect the black wire to a reliable, clean, and unpainted ground source. There is an 8mm grounding screw on the firewall where the ground was connected for the transmission temperature sensor.
- Connect the constant yellow wire to the 20amp Micro2 #19 fuse inside the fuse box.
- Connect the ignition switched red wire to the 10amp Micro2 #34 fuse inside the fuse box.

**6**. Connect the headlamp switched orange wire to the 20amp Mini #15 fuse inside the fuse box.



- 7. Power up the truck to see if the gauges are functioning properly and check for any leaks or loose sensor connections. Top off any fluids if necessary.
- **B.** Test drive your vehicle to ensure all gauges are functioning properly.

### Selectable Brightness Levels

The Double Vision Gauge Series features 3 selectable brightness settings for both day and nighttime lighting modes. Below are the instructions on how to program each lighting mode.

#### **Daytime Mode**

- Press and hold the button located on the gauge face until a "d1" appears in the digital display.
- Press the button again to cycle through the 3 dimming modes.
- Press the button until you have selected your desired setting. Do not touch the button for 5 seconds and the gauge will save your selection.

#### **Nighttime Mode**

- This mode is only available if the orange dimmer wire is connected and your headlights are powered.
- Press and hold the button located on the gauge face until an "n1" appears in the digital display.
- Press the button again to cycle through the 3 dimming modes.
- Press the button until you have selected your desired setting. Do not touch the button for 5 seconds and the gauge will save your selection.

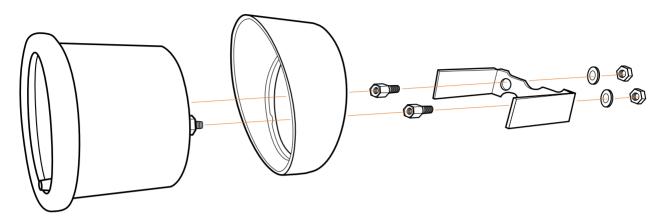






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# **Additional Information**



The supplied optional gauge visor is intended to be placed on the gauge so that the thickest part is at the top, creating a cover over the gauge to help keep sun glare off of the gauge face.

The included mounting bracket is designed to be used on a universal-style mount in order to keep the gauge secure. In some cases one or both legs of the bracket may need to be modified to fit the thickness and contour of the mount. Our A-pillar gauge pods do not require the use of the mounting bracket but can be used if you desire, and there is enough space to fit it between the gauge and the gauge pod. When installing the bracket onto the gauge, make sure not to over-tighten as it could pull the rear studs on the back of the gauge and damage it.

MaxTow Gauges Installation Instructions: Installation documents are solely to provide a guide for individuals that are mechanically and electronically able to install products. If you are unsure about the correct procedure of installation for a product, you should consult a licensed professional.









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#### **ONE YEAR NON-TRANSFERRABLE LIMITED WARRANTY & DISCLAIMER**

MaxTow Gauges, LLC ("MaxTow") warrants to the original retail consumer purchaser, and not any other purchaser or subsequent owner, that this Product will be free from defects in material or workmanship for a period of **one (1) year** from the purchase date.

For a period of **one (1) year** from the date of purchase, at no charge to the Purchaser, MaxTow will repair or replace this Product if it is determined by MaxTow to be defective. After the warranty period, the Purchaser must pay all charges for parts and labor.

Coverage under this warranty is only valid within the United States, including its territories, as well as in certain other countries. Purchasers should check our website, **www.MaxTow.com**, to determine the warranty coverage in the countries in which they are located.

MaxTow does **not warrant the installation** of the Product, which is the sole responsibility of the Purchaser. Installation should be done by licensed professionals. Improper installation may cause damage to the Product and any vehicle in which it is installed, and may cause burns and electrical injury to individuals. MaxTow's warranty does not cover any expenses incurred in removing Products that are defective or reinstalling replacement Products in their place.

During the warranty period, to have the Product repaired or replaced, the Purchaser must return the Product, freight prepaid by the Purchaser, to MaxTow (but for customers in the contiguous United States, MaxTow will pay the shipping charges if any Product fails during the first sixty (60) days after purchase). The Product must be returned in its original carton or in a similar package affording an equal degree of protection. MaxTow will return the repaired or replaced Product, freight prepaid, to the Purchaser. MaxTow does not provide Purchasers with temporary replacement units during the warranty period or at any other time.

This limited warranty is nontransferrable and will automatically terminate if the original retail consumer purchaser resells the Product or transfers the vehicle in which the Product is installed. An "original retail consumer purchaser" is a person who originally purchases the Product, or a gift recipient of a new Product that is in its original packaging and unopened.

This limited warranty is subject to all of the following terms and conditions:

#### **TERMS & CONDITIONS**

1. NOTIFICATION OF CLAIMS; WARRANTY SERVICE: If Purchaser believes that a Product is defective in material or workmanship, written notice with an explanation of the claim shall be given promptly by Purchaser to MaxTow. All warranty claims must be made within the warranty period, and any Products returned to MaxTow must be shipped in accordance with MaxTow's procedures (including use of RMA numbers supplied by MaxTow after notification). The repair or replacement of any Product or part thereof shall not extend the original warranty period. The specific warranty on the repaired part only (not including gauge sensors) shall be in effect for a period of ninety (90) days following the repair or replacement of that part, or the remaining period of the Product warranty, whichever is greater. MaxTow does not provide a warranty on replacement gauge sensors.

2. **EXCLUSIVE REMEDY; ACCEPTANCE:** Purchaser's exclusive remedy and MaxTow's sole obligation is to supply (or pay for) all labor necessary to repair any Product found to be defective within the repair or replacement fails to remedy the defect. Purchaser's failure to make a claim as provided in paragraph 1 above or continued use of the Product shall constitute an unqualified acceptance of such Product and a waiver by Purchaser of all claims thereto.

3. EXCEPTIONS TO LIMITED WARRANTY: MaxTow shall have no obligation to Purchaser with respect to any Product that is subjected to any of the following: abuse, improper use, negligence, accident, modification, failure to follow the operating procedures outlined in the user's manual, failure to follow the maintenance procedures in the service manual for the Product, attempted repair by nonqualified personnel, operation of the Product outside of the published environmental and electrical parameters, or if the Product's original identification (trademark, serial number) markings have been defaced, altered, or removed. MaxTow excludes from warranty coverage Products sold AS IS and/or WITH ALL FAULTS. MaxTow also excludes from warranty coverage any consumable items such as fuses and batteries.

All software and accompanying documentation furnished with, or as part of the Product is furnished "AS IS" (i.e., without any warranty of any kind), except where expressly provided otherwise in any documentation or license agreement furnished with the Product.

4. **PROOF OF PURCHASE; REGISTRATION:** The Purchaser's dated bill of sale must be retained as evidence of the date of purchase and to establish warranty eligibility. Registration of any Product or of this limited warranty is voluntary, and failure to register will not diminish any rights available under this warranty.

#### **DISCLAIMER OF WARRANTY**

EXCEPT FOR THE FOREGOING WARRANTIES, MAXTOW HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY WITH REGARD TO ANY CLAIM OF INFRINGEMENT THAT MAY BE PROVIDED IN SECTION 2312(3) OF THE UNIFORM COMMERCIAL CODE OR IN ANY OTHER STATE STATUTE.

#### LIMITATION OF LIABILITY

THE LIABILITY OF MAXTOW, IF ANY, AND PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DAMAGES FOR ANY CLAIM OF ANY KIND WHATSOEVER, REGARDLESS OF THE LEGAL THEORY AND WHETHER ARISING IN TORT OR CONTRACT, SHALL NOT BE GREATER THAN THE ACTUAL PURCHASE PRICE OF THE PRODUCT FOR WHICH SUCH CLAIM IS MADE. IN NO EVENT SHALL MAXTOW BE LIABLE TO PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION, REIMBURSEMENT OR DAMAGES ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS OR FOR ANY OTHER REASON WHATSOEVER.

GOVERNING LAW: This nontransferrable limited warranty shall be governed by the law of the State of New Jersey, U.S.A., and the United States of America, excluding their conflicts of laws principles. The courts of Camden County, New Jersey, shall have the exclusive jurisdiction over any legal action with respect to this warranty.

This limited warranty gives specific legal rights. You may also have other rights that may vary from state to state or from country to country. Some states or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. You are advised to consult applicable state or country laws for a full determination of rights.