

## Intake Temperature Gauge



The following instructions are for the installation of your Intake Temperature Gauge. 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

- Intake Temperature Gauge
- 3/8-18 NPT Intake Temperature Sensor
- 9ft Sensor Harnesses
- 5ft Power Harness
- Mounting Bracket
- Gauge Visor

### Wiring Schematic

**Red:** 12v Constant Source (+)

**White:** 12v Ignition Switched Source (+)

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

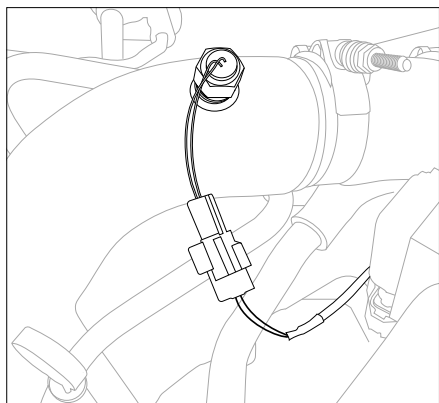
**Black:** Vehicle/Engine Ground (-)

**⚠ WARNING** Disconnect negative battery terminals before starting any work on the vehicle.

### Intake Temperature Gauge

- There are typically three installation options available for your Intake Temperature Sensor.
  - **Pre-Intercooler (Hot Side):** The Intake Temperature Sensor should be installed after the turbo and before the intercooler.
  - **Post Intercooler (Cold Side):** The Intake Temperature Sensor should be installed after the intercooler and before the throttle body.
  - **Air Intake Pipe:** This is meant for vehicles that are not equipped with an intercooler where you want to install the Intake Temperature Sensor on the air intake pipe between the air filter and throttle body.

**Note:** To make the installation of the sensor easier, you may want to remove the section of the pipe you are installing the sensor into.



- Using a scoring tool, mark the spot where the sensor will be installed. Drill a small pilot hole in the location you marked with the scoring tool.
- Once you drill your pilot hole, slowly increase the size of the hole until you reach an end drill bit size of 3/7/64ths.

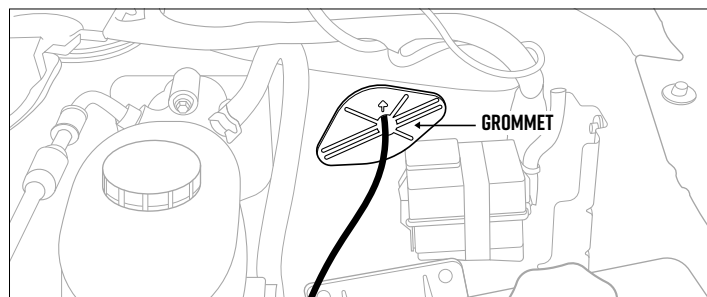
**Note:** Be sure to use a shop vacuum while drilling the hole to the correct size. Doing this will allow you to clean out the metal shavings that are caused from drilling.

- Once the hole in the hot/cold pipe has been drilled to 3/7/64ths, tap the hole to 3/8-18 NPT.

**Note:** If the pipe wall is too thin to tap, you will have to weld a 3/8-18 NPT bung to the pipe to install the sensor, available at [www.MaxTow.com](http://www.MaxTow.com). We recommend a professional installation if you need to weld the bung to the pipe.

- Now that your pipe is tapped to 3/8-18 NPT or your 3/8-18 NPT bung is installed, wrap teflon tape around the threads of the Intake Temperature Sensor and thread into the hole.
- Plug the Intake Temperature Sensor Harness into the Intake Temperature Sensor and route through the engine bay and through the firewall keeping it clear of any moving parts and heat sources.

**Note:** Be sure to use a grommet when routing the Intake Temperature Sensor Harness through the firewall to protect it from being cut or damaged. If one is not available you will need to drill a hole and install a grommet.



- Plug the Intake Temperature Sensor Harness into the back of the Intake Temperature Gauge.

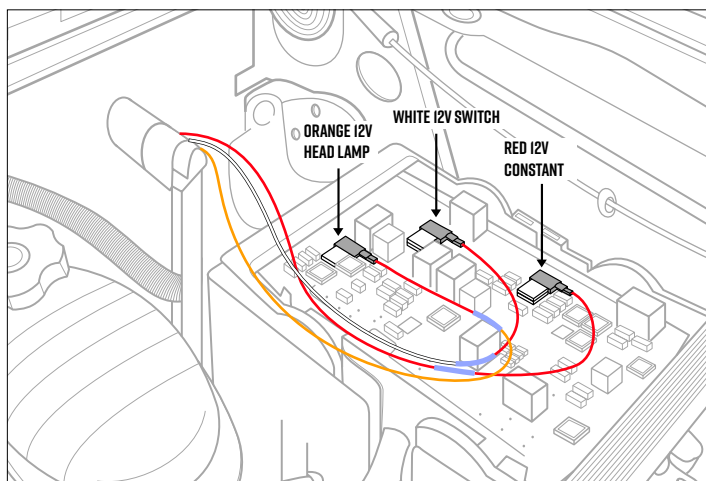
## Gauge Wiring

1. With your Intake Temperature Sensor Harness connected, plug in the power harness and place the gauge in the mounting location.
2. In order to test for power, reconnect the Negative Battery Terminals.
3. It may be necessary to remove the Vehicle Trim and/or Kick Panels in order to gain access to the vehicle's Fuse Box.
4. Using a test light, locate a constant 12-Volt Power Source in the vehicle's fuse panel that receives 12- Volt Power when the ignition is turned off. You can splice into the circuit or use an optional Expandable Circuit. Connect the **Red Wire** of the gauge to the Constant 12-Volt Power Source.

**Note:** It is required to use an automotive grade 18-20 gauge wire and proper splice connectors when extending any of the power wires.

5. Repeat the same step for the **White Wire** of the gauge to locate an Ignition Switched 12-Volt Power Source. This source should not have any power with the key turned off and have 12- Volts with the key turned on.
6. Connect the **Orange Wire** of the gauge to the positive Headlight Switch Power Source using a Splice Connector at the headlight switch. You can also use an Expandable Circuit and install into the fuse box if you have a fuse available. This will allow the gauge face to dim 30% when the headlights are turned on.

**Note:** Make sure that the connection source does not dim. If the voltage is reduced when you lower the Dimmer Wheel it will cause the gauge to flash from not having enough voltage.



7. Locate a clean, reliable grounding source and connect the **Black Wire** from the gauge.
8. After all wiring is complete, turn the vehicle's key to the "On" position and confirm that your gauge illuminate.
9. Turn on the headlights to ensure that the gauge are dimming.
10. Start vehicle and check for leaks.
11. Reinstall any panels that may have been removed.
12. 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.

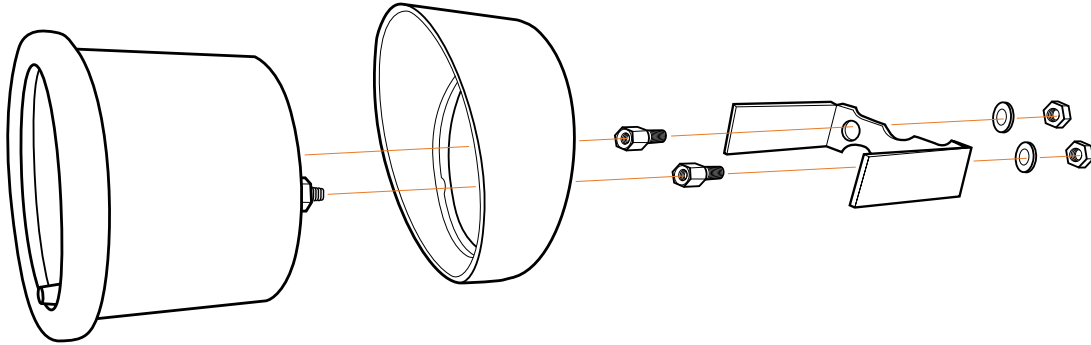
### Daytime Mode

- 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.

### 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 flat 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.



# INSTALLATION INSTRUCTIONS

1.877.7MAXTOW • Support@MaxTow.com



## ONE YEAR NON-TRANSFERABLE LIMITED WARRANTY AND DISCLAIMER

MaxTow Performance, 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](http://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 re-installing 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 thirty (30) 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 non-transferable 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 AND 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 warranty period and to supply new or rebuilt replacements for defective parts. MaxTow will refund the purchase price for such Product only if 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 non-qualified 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 2-312(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 non-transferable 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.