

## *In-Line Temperature Sensor Kit (OC-11)*



*Read all instructions before beginning work. Following instructions in the proper sequence will ensure the best and easiest installation.*

Thank you for purchasing Maximum Motorsports' In-Line Temperature Sensor Kit. We designed the kit for use with the MM IRS Differential Oil Cooler Kit (OC-10).

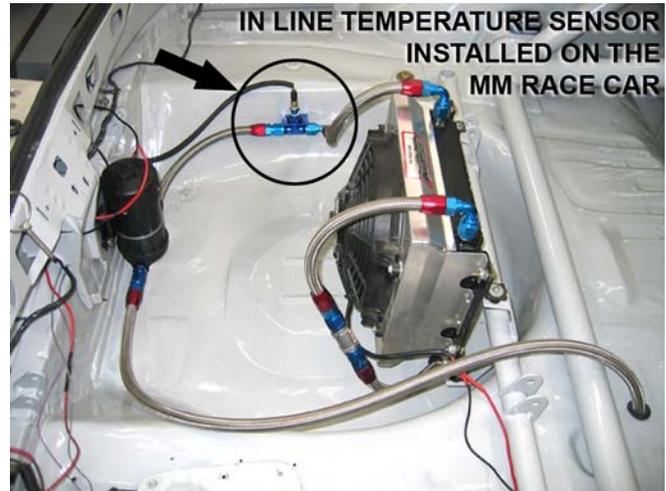
The MM In-Line Temperature Sensor Kit allows you to choose where you want to locate a temperature sensor, giving you the freedom of measuring temperature values that are important to you. When properly installed, the high quality AN fittings provide leak-free performance. The MM In-Line Temperature Sensor Kit will only work with a Autometer 1/8" temperature sensor. This kit does NOT include a temperature sensor.

### **Required Tools**

- (2) 7/8" wrenches
- Hacksaw with 32 TPI (or finer) blade
- Teflon tape or Loctite thread sealant

### **Fluid Line Preparation**

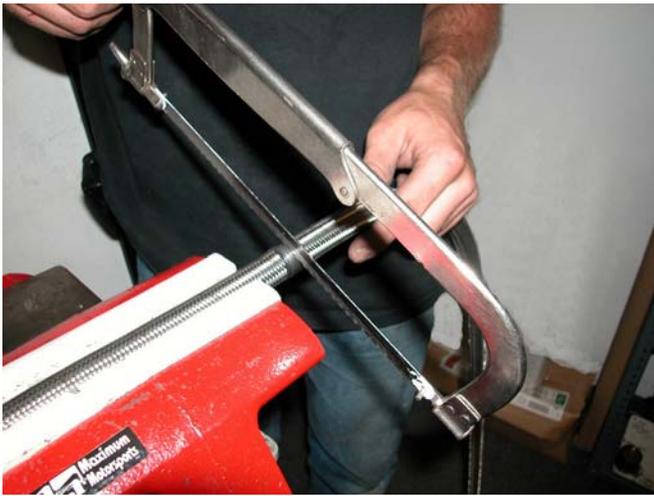
1. Determine where you want to install the MM In-Line Temperature Sensor Kit. Placement will depend on what you wish to measure (e.g. differential outflow temperature or differential cooler outflow temperature). An example of installation location is shown on the MM race car.



2. Remove the stainless steel braided hose from the car (if previously installed).
3. Determine whether you want to remove a section of the hose that the MM In-Line Temperature Sensor Kit will replace (approx. 4.5") or if you want to simply install the kit without trimming the hose.
4. Mark the location where you want to install the MM In-Line Temperature Sensor Kit.
5. Tightly wrap a piece of masking tape or electrical tape around the stainless steel braided hose where it is to be cut.



6. Squarely cut through the tape-wrapped sections of the hose using a sharp 32 TPI (or finer) hacksaw blade.



- Trim the frayed wire ends of the stainless steel braid using a pair of snips, and remove the tape.

NOTE: Make sure that inside of the hose is clean and clear of any shavings.

- Repeat Steps 4-7 for any additional cuts necessary.

### Connecting the AN Fittings



(2) HOSE ENDS, -8 AN, STRAIGHT, CUTTER      (1) GAUGE ADAPTER -8 AN x -8 AN x 1/8" NPT

- Disassemble the red socket from the blue nipple on one of the -8 AN straight hose end fittings.

**SOCKET**



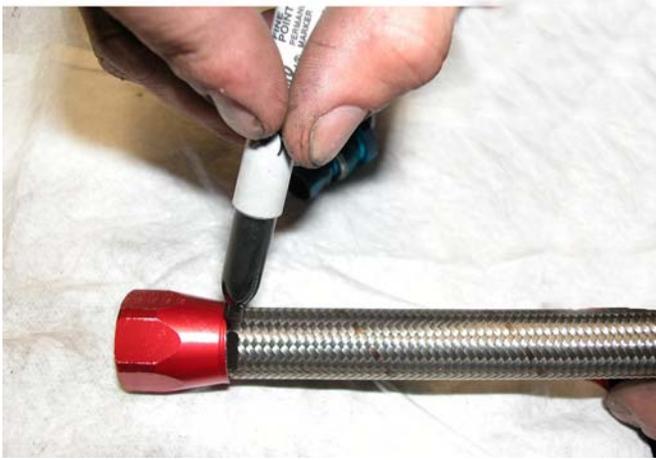
**NIPPLE**



- Use motor oil or gear oil to lubricate the inside threads of the socket.
- Install the socket onto the hose by twisting the socket COUNTER-CLOCKWISE. Butt the end of the hose up to the base of the threads of the red socket.



- Use a felt pen to mark the hose at the base of the socket, so that you can tell if the hose is getting pushed out during the rest of the assembly.

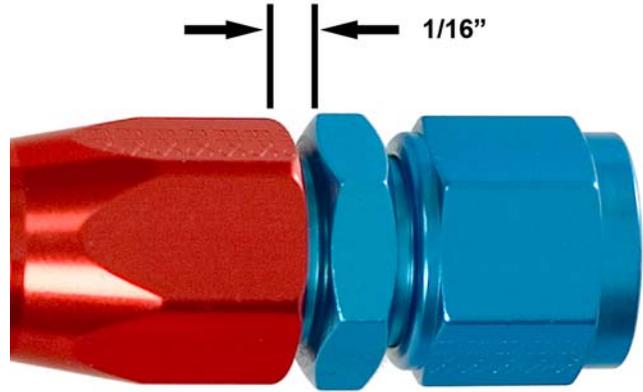


13. Use motor oil or gear oil to lubricate the threads on the nipple and place the nipple in a vise (use soft jaws to protect the finish). Hold the HOSE, not the socket, and push the hose and socket onto the nipple until the socket threads can be started. Again, holding the HOSE, start the threads and go as far as you can by hand.



14. When you can no longer tighten the fitting by hand, clamp the socket in a vise (again, use soft jaws). Use an appropriate size wrench to tighten the nipple until the nipple is within 1/16" of bottoming on the socket.

NOTE: Do NOT use an adjustable or oversize wrench or you will damage the fitting.



15. Make sure your mark at the end of the socket has not moved more than 1/16", if it has, return to Step 13 and repeat the process.
16. Thread the -8 AN straight fitting onto one side of the gauge adapter. Hand-tighten the fittings.
17. Using the proper sized wrench, rotate the fitting approximately one turn, or until snug.
18. Repeat Steps 9-17 to install the other AN fitting.

### Installing the Kit on the Car

19. Install your temperature sensor into the 1/8" NPT fitting on the gauge adapter according to the manufacturer specifications.

Note: Use Teflon tape or the Loctite thread sealant provided with the OC-10 kit on the NPT pipe threads of the gauge adapter and the temperature sensor.

A pipe fitting is tapered in such a manner that the outer diameter of the fitting increases in size the further away from the end it is measured. Similar to a bottle cork, the further into a hole the fitting is threaded, the tighter the seal.



20. Reinstall the hose with the MM In-Line Temperature Sensor Kit onto your car, and check for leaks.

NOTE: If you find that oil does leak around the NPT pipe threads, tighten the fitting another 1/4 turn. If further tightening is required the fitting must be removed and the previously applied Loctite cleaned out before reapplying new loctite and tightening the fitting further. Simply tightening a fitting that has cured Loctite will destroy the seal the Loctite was intended to provide.

21. Wire up the temperature sensor per the manufacturer's instructions.

This kit includes:

- 2 Hose End, -8 AN, Straight, Cutter
- 1 Gauge Adapter -8AN x -8AN x 1 /8" NPT