



Requirements for creating a new MadMan Sensor Kit

It is suggested that you consult the General Installation Instructions pdf file

<https://www.madmandevelopments.com/technical-docs>

All sensor threads are 1/8 NPT-27 (National Pipe Taper, 27 tpi) This thread will also screw into a 1/8 NPP (National Pipe Parallel), M10x1mm and 1/8 BSP (British Standard Pipe)

1. COOLANT TEMPERATURE

Most automotive engines do not have spare ports for additional coolant adapters so we use a Hose Adapter:



The Hose Adapter

The hose adapter fits in the **top radiator hose**. You need to **cut** the hose to fit the adapter. The adapter can **also carry the water level sensing screw**.

The adapters are available in 19, 32, 35, 38, 42, 45 and 50mm sizes. Other sizes on request.

To select the correct size:

You need to measure the inside diameter of the radiator hose, or measure the thickness of the hose wall and the outside diameter and subtract 2 x the thickness from the outside diameter: $ID = OD - (2 \times \text{Wall Thickness})$



The Adapter Plug

If your engine has a spare useable port where coolant water flows, you can use this port for temperature. Establish what the thread pitch and diameter is, we have a range of adapters that may fit or we can make adapters for new applications.

Coolant Level – Please note that in some cases a vehicle has a **plastic coolant bottle with a larger diameter pipe at the bottom and a smaller pipe at the top**. In these cases it is best to use the two self-tapping screws in the wiring harness bag as the coolant level sensors in the bottle – this method is more accurate than the coolant adapter. It is important to note that the bottle **MUST** drain if the lower radiator pipe is removed for this method to be effective.

2. OIL PRESSURE

Most engines have an oil pressure switch screwed into the engine block or into the oil filter housing. This switch is connected to the oil light on the dashboard.

We will need to fit the oil pressure sender to this port while keeping the original oil pressure switch. IF there is sufficient space, we use a Tee piece and the pressure sender itself or an adapter and Tee or an adapter, extension hose and Tee.



You need to tell us what the thread is on the oil pressure port or the thread on the oil pressure switch.

3. OIL TEMPERATURE

We usually fit the oil temperature sensor in the most-likely-to-fail location. This may be the **engine oil sump plug or the Autobox sump or filler plug or the transfer box**. Some vehicles have spare ports which can be used with suitable adapters.



4. EXHAUST GAS TEMPERATURE (EGT)

The EGT is best measured in the exhaust manifold before the turbo. Some engines have a plate or plug in the manifold – if this is the case, please give details of the plug or plate.

If no plug or port is available, the manifold must be drilled and tapped. The process is explained in the General Installation Instructions pdf file.



***** END *****