

'The original makers of SMITHS Instruments'

Instructions for 52mm Mechanical Temp/Pressure Gauges

Caution Disconnect the battery cable prior to any installation

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FITTING INSTRUCTIONS

CAUTION

Gauge to be fitted to negative earth vehicles only. Disconnect the battery cable prior to installation.

MOUNTING

- A 52mm (2 3/32") diameter hole is required with sufficient depth to accept the instrument, mounting bracket and the capillary tubing
- Insert gauge into the aperture and secure with the bracket, washers and nuts supplied.
- Select a desired location where the gauge will be easy to read from a normal driving position

Capillary tube routing:

Route the capillary tubing from the gauge through the bulk head / firewall taking care to avoid abrasion or damage to the capillary tubing.

Avoid any sharp bends in the capillary where it is attached to the gauge and also the capillary bulb. Care should be taken to prevent tubing coming into contact with any sharp edges and any hot or moving parts. It is advisable to use grommets or similar protection at the point the capillary tube goes through the bulk head / fire wall. Fasten capillary through out its route to prevent undue vibration and abrasion.

The capillary tubing may be coiled and taped to shorten the length if capillary tube is too long. The tube must not be coiled less than 2" in diameter as this may cause the capillary tube to fracture. See FIG 1

Capillary bulb connection:

In some cases, the lubricant or coolant may have to be drained from the block prior to installing the gauge and capillary.

The canillary high can be adapted to fit most engine block.

The capillary bulb can be adapted to fit most engine block connection

As supplied it is fitted with an adaptor suitable to fit engine blocks with either a 5/8"UNF or 3/8"NPT Female thread, depending on gauge part number. To convert the capillary bulb to fit an engine block with a 3/8"gas Male connecting thread, simply remove the double male adaptor. See Fig 2.

IMPORTANT NOTE:

The adapter has two male threads. It is easy to fit incorrectly: One end is 3/8" GAS, which mates with the capillary bulb nut. The other end is either 5/8" UNF or 3/8"NPT depending on the gauge code, which mates with the engine block.

To prevent the nut and adapter leaking, please ensure that the correct end of the adapter is inserted into the engine block. (The fitment into the 3/8" gas nut must not be loose). In the case of the 3/8"gas to 5/8"UNF adaptor - the 3/8" gas is the longer of the 2 threads. In the case of the 3/8"gas to 3/8"NPT adaptor - the 3/8"NPT is the longer thread.

Replace the lubricant or coolant if previously drained

Care should be taken to avoid excessive rough handling, pulling or twisting of the capillary tubing which could cause a rupture or kink resulting in tube leakage. The gauge would then be useless The temperature gauge may be used to replace the vehicle's temperature warning light but some vehicles rely upon the warning light sender unit for operation of emission control devices. If this is the case, the warning light sender unit should not be removed to be replaced by the gauge's capillary bulb.

Another suitable location should be used in this case.

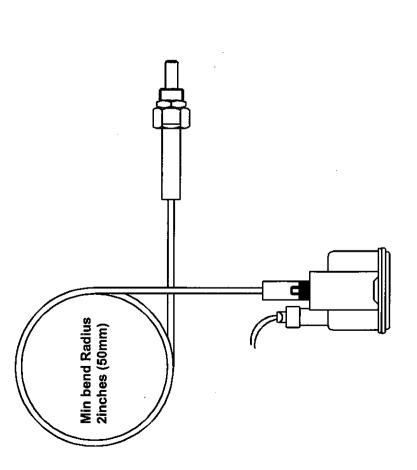
ILLUMINATION

WARNING: The maximum permissible power of the lamp 2.2watts. .

- Insert lamp into holder
- It is essential to push the lamp and holder assembly fully into the lamp tube at the rear of the gauge – The shoulder of the lamp holder MUST butt up to end of lamp tube.
- Connect one wire from the lamp/holder assembly to the illumination side of dimmer switch OR illumination switch. Connect the other wire to the negative (chassis) side of the vehicle.

Connect one wire to the fused side of the sidelight supply, connect the other wire to the negative side of the vehicle's instrument panel illumination wiring.

Fig 1



> 5/8 UNF or 3/8 NPT

-3/8 Gas Thread

Adaptor ---

-- Capillary Bulb

Soft Copper Washer

~ 3/8 Gas Nut