

Fuel Gauges Installation and Calibration instructions.

The standard product is suitable for a tank depth of 300mm-1.5m. For other depths consult the manufacturer.

We offer two types of level senders suitable for diesel fuel. The through tank type, shown centrally on the picture above and the metal probe type shown on the right.

These instructions must be carefully followed in order that the unit remains compliant with the requirements of the Boat Safety Scheme.

Installation

The Through Tank type.

This must be fitted at the bottom of the tank and it measures the depth of fuel above it. It will read empty when the fuel reaches the level of the sensor and it is calibrated to read full when the tank has been filled. Ideally it should be fitted about 50mm above the bottom of the tank. This unit **MUST** only be fitted to a threaded 1/4" BSP female bush that has been welded to the tank. It is recommended that a shut off valve is fitted on the tank side of the unit to facilitate removal should this become necessary in the future.

Before assembly ensure all threads are clean and free of grease then assemble using a good quality jointing compound.

Ensure that the shut off valve is open before finally tightening the unit into the shut off valve, as if not, damage to the sensor due to overpressure may result

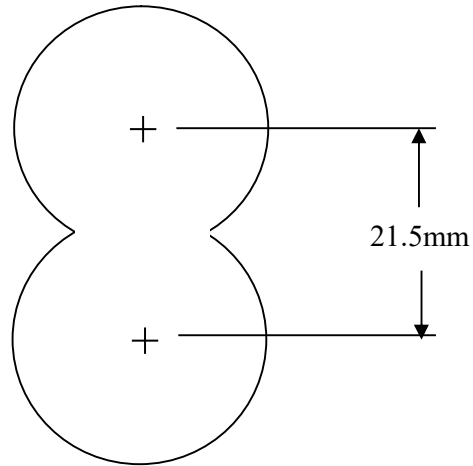
The Metal Probe type

Ensure all threads are clean and free of grease then fit the 3/4" compression fitting to the tank using a good quality jointing compound. Remember this unit can only be used where a 3/4" female bush has previously been welded to the tank. Slide the sensor through the compression fitting until the case moulding of the amplifier touches the face of the nut. Tighten the compression nut until it just grips the brass body, then tighten a further half turn.

Mounting the Gauge and Electrical Connection.

The hole cut-out for the gauge is as per diagram.

Mark the hole centres 21.5mm apart, then using a small drill make two pilot holes. Now using a 32mm (1 ¼") hole saw, cut out the two circles. Try the gauge and remove rough edges as necessary.

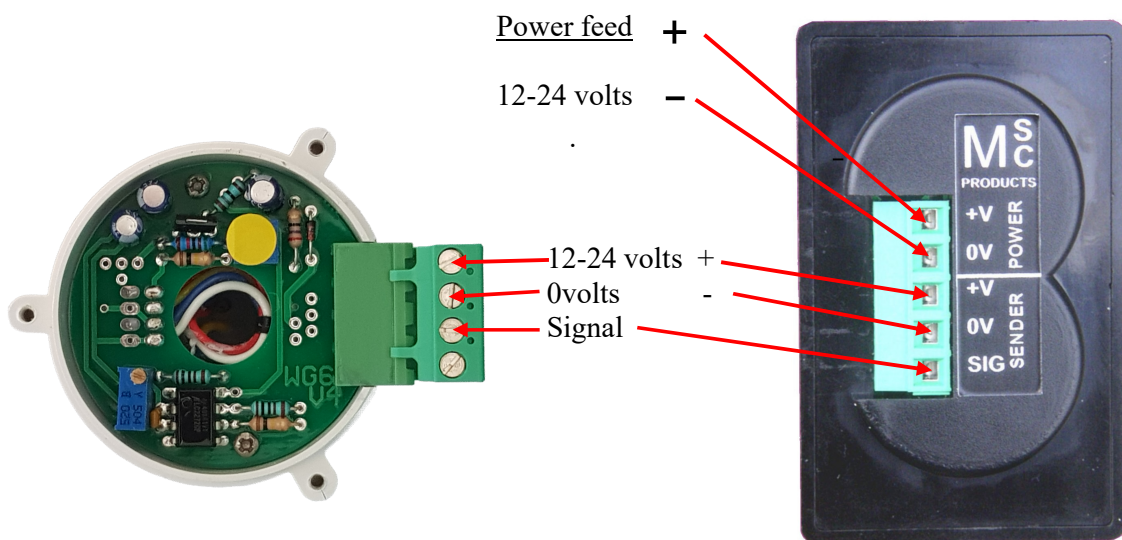


Electrical connection.

Connect the wires to the connector blocks as shown using a wire gauge that fits the blocks. Multistrand 0.5-0.75mm CSA is ideal as this is a gauge of wire that can be supported and attached mechanically. (Do not use single strand wire) Connect to a supply in the range of 12-24 volts. Insert the plug into the sender ensuring that the two retaining clips on the plug fit over the OUTSIDE of the socket. If the sender and gauge are a long distance apart only the 0 volts and signal need to be run between the sender and the gauge leaving the +&- supply to be fed locally to the gauge and the + supply to be fed locally to the sender.

Sender

Gauge



The unit will now be operational

Calibration Procedure

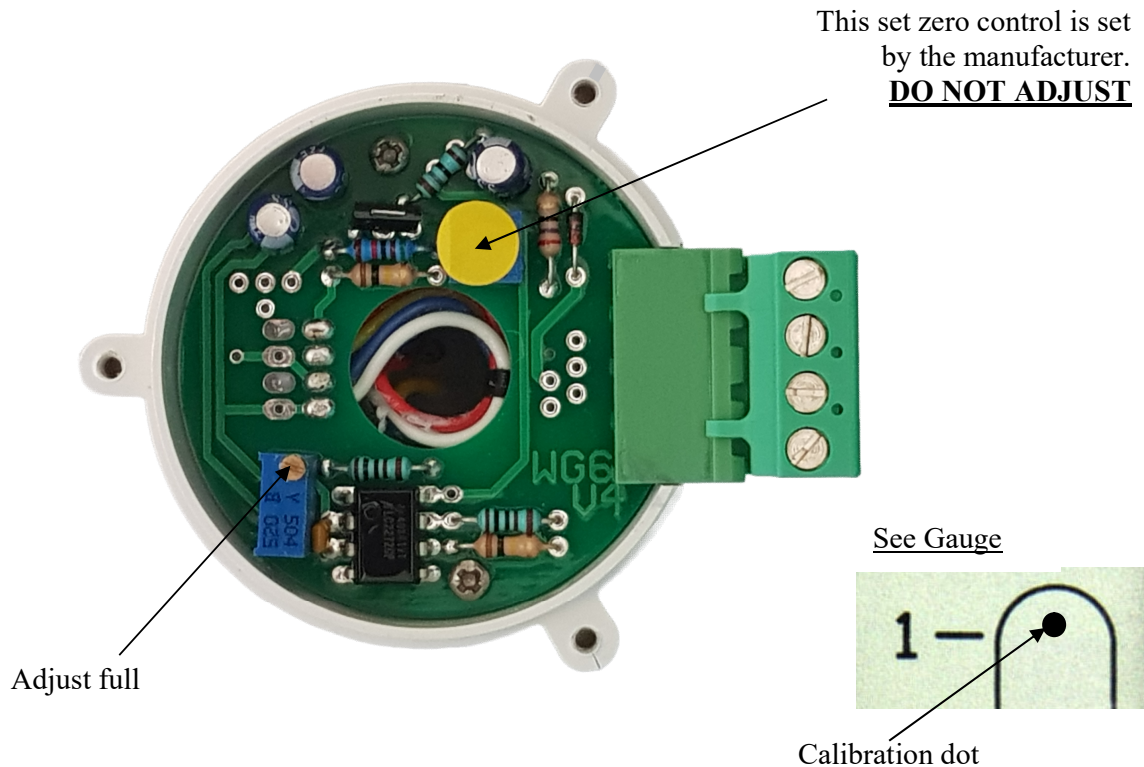
Metal Probe type

This section should not be needed unless the tank depth has been wrongly specified. Please consult the manufacturer if in doubt.

Through Tank type

With the fuel tank full proceed as follows. Please note although the main scale of the gauge is heavily damped, causing it to only move slowly, the calibration dot is almost instantaneous in function making adjustment easier.

If the dot is showing turn the 'Adjust full' control slowly anti-clockwise until it goes out then slowly clockwise until it just shows. If the dot is not showing turn the 'Adjust full' control slowly clockwise until the dot just shows. After approximately ten seconds the main scale will show full



Mount the gauge in its final position using the double sided gasket supplied

Finally

Fit the lid using the three screws provided. Your unit is now fully operational and I hope it continues to help you to plan your 'fuel stops' for many years.