

# FUEL SENDER ADJUSTMENT & FITTING INSTRUCTIONS

## 6 - HOLE Top-Mount Type



### Safety Instructions

**Caution: No Smoking! No open fire or source of flame!**

#### A) Fitting the sender to the fuel tank

If an installation must be made, the fuel tank must be completely drained first. Drain the fuel into an approved container. REMOVE THE TANK WHENEVER POSSIBLE.

**Warning : Risk of explosion exists due to the presence of residual gases in the tank!! Make sure that the tank is aired sufficiently (at least 15 minutes).**

Choose the sensor location carefully, making sure that the float arm of the fuel sender will not conflict with any baffles, pipes or internal obstructions inside the fuel tank. Also ensure that the float unit does not come into conflict with the side walls of the tank.

Make a preliminary hole in the installation opening using a drill and then finish the hole using a compass saw or piercing saw. Comply with the safety instructions of the tool manufacturer.

The rubber gasket can be used as a template for marking the bolt holes. The main hole in the tank should be cut to 40mm Diameter. Six Bolt holes (diameter 5mm to 5.5mm) should be drilled around the centre of the main hole on a P.C.D. (pitch circle diameter) of 60.4mm. Pay special attention to the orientation of the float arm in relation to the bolt holes.

Clean the tank of residue from the drilling or sawing work.

Fix the fuel sender to the tank using M5 Bolts, washers and nuts.

#### B) Fuel Sender Length Adjustment

Should adjustment to the length or angle of the fuel sender be necessary, please bear in mind the following points:-

- To adjust length, **do not** remove the arm from the brass pivot point. Shortening can be done in two ways: either add a series of zigzag bends in the arm to shorten the length; or by cutting the arm in half and rejoining to the correct length. We have found that as long as a suitable thread-locking agent is used, (one that is insoluble in petrol e.g. Loctite 290), simple 2-way screw terminal blocks can be used:-

### Terminal Blocks

#### Standard Screw Terminal

#### Polyethylene



(5 amp is generally the best size)

To lengthen, it is suggested that a suitable gauge of brass rod be added in a similar method to above.

Note that removing the float and re-bending the arm around the float is not as easy as it sounds, and therefore we recommend that the bend around the float is maintained, removing a centre section of the arm instead.

**Important !** – Ensure that the fuel sender float does not reach the top or bottom the tank before the float arm has reached its full span of travel. (For example, if the fuel sender float hits the top of the tank before reaching its end stop, the fuel gauge will never read full.)

*Note - It is advisable to allow a gap between the bottom of the tank and the lowest point of travel of the Fuel sender float unit in order to provide a reserve quantity of fuel after the gauge reads empty.*

(Ref: FUEL SENDER ADJUSTMENT.doc)