

## Installation guide for TASMAN A50/1 Dual EGT system

### Overview

The instrument has two main components.

1. Termination box for the connection of thermocouple probes and the signal cable.
  2. LCD panel mounted display.
- These are connected via a 6 way shielded cable.

The installation at the motor consists of inserting the probes into the exhaust manifold so that the probe **tips** are in the **centre** of the exhaust pipe and 100 mm from the exhaust port. (piston skirt) See fig 2.

Note: **TIP position** 100mm from exhaust port.

The fittings may be from the side, or above as in fig 1

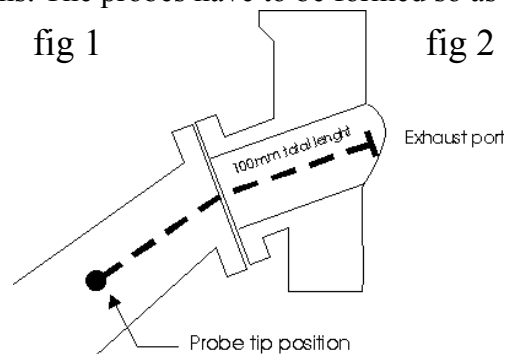
The compression fittings are welded or brazed to the exhaust manifold. See fig 1. Cut the threaded portion of the fittings to shape and shorten as required. The fittings have small parts and note the assembly order when disassembling for welding.

Note: The manifold is drilled **after** the fittings are welded in place. If the installation is to a retracting engine system, care must be taken to ensure the probes will not contact on the doors etc whilst extending or retracting. The termination box is attached to the side of the engine block using suitable washers and screws on a spare engine mount pad.

Remove the lid from the terminating box. Note the markings in the printed circuit board as to FRONT and REAR connections. The probes have to be formed so as to



fig 1



avoid contact with any metal components of the engine. It is advisable to make a pattern using a length of coat hanger wire or equivalent, as the probes do work harden. It is recommended that the probes run together as much as practicable, and in the case of a ROTAX installation, centrally between the exhaust ports. The probes are then tied together in at least two places with nylon ties.

## Electrical

To open the junction box, remove the 4 cover screws, loosen the cable gland cover and gently push in the grey cable.

The probe wires are then connected to their respective terminals on the printed circuit board. note: the probe **yellow** wire is to +.see fig 2.

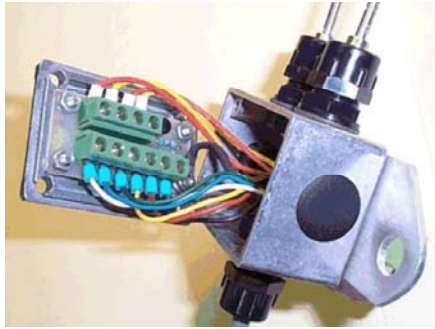


fig 2.

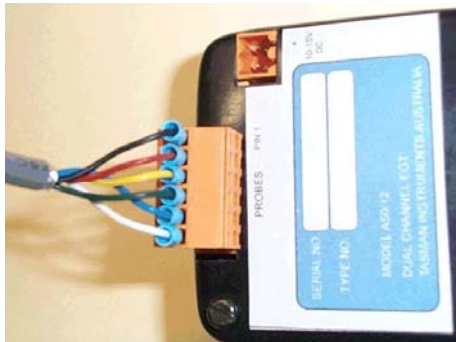


fig 3.

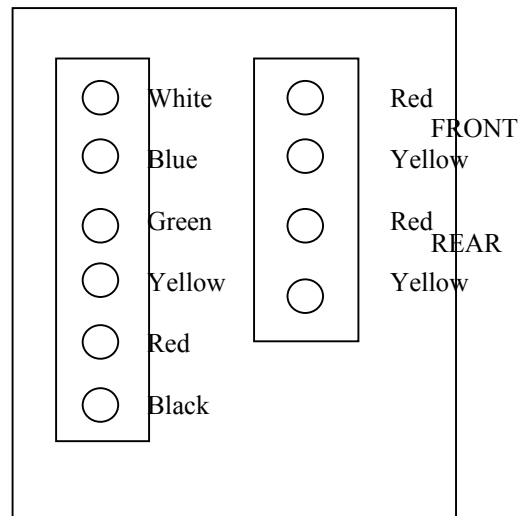


Fig 4

Mount the display in the instrument panel as required and thread the cable through from the engine compartment. Terminate the cable as per fig 3. Secure cable with nylon ties to the existing wiring loom of the engine. Connect the cable to the printed circuit board as per fig 4. The terminating box may now be closed, taking care not to pinch any of the wires with the lid. Connect the cable at the display as per fig 3. Connect 12V power to the display from a source that is via the engine ignition switch. (refer aircraft manual).

The installation is now complete.

For more information contact:

**TASMAN INSTRUMENTS**  
 33 the Crescent  
 Belgrave Heights  
 Victoria 3160  
 Australia  
 Tel +61 (0)3 9754 7211  
 Fax.+ 61 (0)3 9752 5002  
**EMAIL: [info@tasmaninstruments.com.au](mailto:info@tasmaninstruments.com.au)**