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Engineering Report: AVDALSR085-1

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Subject: Procedure for Cylinder Head Modification for CHT
Sensor Installation

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Issue	Details of Change
1	Original Issue

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3 Procedure for modification

The procedure for installing the CHT probe is as follows. The work can be done while the head is fitted to the engine.

1. The cooling fins between the sparkplug housings are ground down several millimetres using a die grinder, sharp edges on the fins are de-burred.

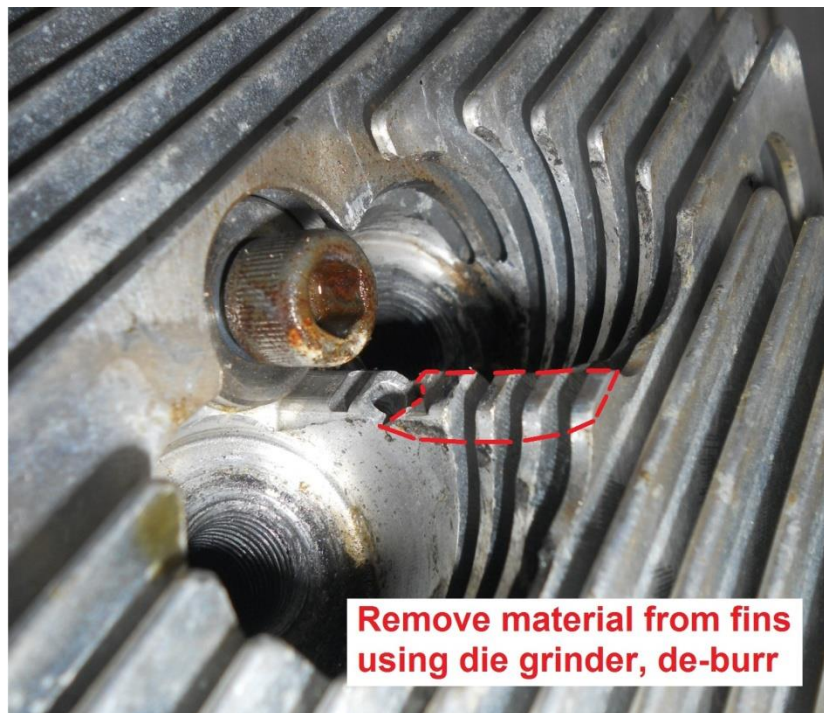


Figure 1 – Fin Modification

2. The existing 1/8" hole located on the bridge between the sparkplug housings is drilled out to 9/64" and the hole bored to no more than 12mm depth.
3. The now enlarged hole is tapped for a 5/32" fine thread screw, the thread must extend down into the hole far enough to accommodate a 5/32" screw, 3/8" (9.5mm) long.

Procedure for Cylinder Head modification, CHT sensor installation

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Figure 3 – CHT End Fitting

9. The CHT sensor with the new ring terminal is installed onto the cylinder with a 3/8" long, 5/32" fine thread screw into the newly tapped hole.
10. It is recommended at this point to test the thermocouple: the easiest way is usually to place the terminal in a mug of water which has just boiled: depending on the purity of the water, the altitude etc. the instrument should read over 90°C (194°F). The reading should be steady.
11. The lead is arranged to arrive at the terminal directly between each spark plug such that removal of either spark plug is not inhibited by the CHT sensor lead.



Figure 4 – CHT Cable Routing