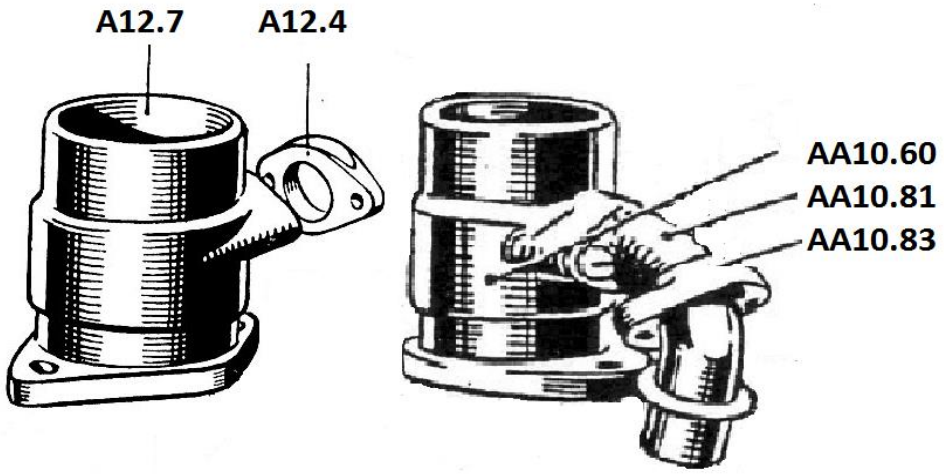
The Riley RM Centre Information Slip

AA10.60 Thermostat housing



Diagrams showing the 1½ and early 2½ thermostat housing bypass arrangements.

The basic thermostat housing as supplied is a replacement for those fitted to all 1½ and early 2½ engines but will need the adapters A12.4 or AA10.81 refitting before use. These parts along with AA10.83 are not available from the Riley RM Centre so care should be exercised during their removal. This thermostat housing is also suitable for Roadster models but further modifications are required.

The style of replaceable thermostat element fitted into this housing and its location means that the original Riley bypass system is no longer required; in fact, better cooling is generally available with it removed. Some owners however believe it to beneficial to retain at least a small bypass. The unfinished pilot hole in the bypass flange is put there to mark the centre should you wish to retain the bypass system. Simply complete the hole, it is however not recommended to enlarge the hole size.

Previous versions of the replacement housing contained a machined groove for the thermostat element retaining circlip. This allowed a clearance for air to bleed out of the cooling system around the edge of the thermostat element whilst filling the cooling system or before the thermostat opened. However the circlip groove could weaken the casting so has been deleted, this means that when fitting the thermostat element care must be taken to enable that a slight air gap exists whilst making sure the circlip is fully supported within the housing. You can be sure of the correct air gap if the thermostat is just free to rotate. Alternatively a groove can be cut at the edge of the thermostat element to allow the air to bleed, setting the circlip so that the groove is situated in the gap.

When fitting this thermostat housing to a 2½ the original brass seal holder A12.4 should be used to support the seal, but please ensure the resulting thickness does not put too much strain on the water pump housing A12.38. Failure to have clearance between the two can easily result in a cracked water pump housing, please note these housings are now getting rare. If there is no clearance a small amount should be removed from thermostat housing flange where A12.4 fastens on, 0.025" is a sufficient clearance to ensure correct operation.

The Riley RM Centre Ltd

THE RILEY R.M. CENTRE LTD							
DRAWN	ISS	CHANGE	APP	DATE	NOTES	**AA10.60 Thermostat housing**	A4
SP	1			22/3/18			
						DWG NO. AA10.60 -IS	SHEET 1