

RADIATOR MAINTENANCE

All Austin Seven radiators are designed to provide the engine with an adequate cooling system under all working conditions.

With this in mind they are constructed with top and bottom collection tanks to hold the water capacity, and the facility to abstract heat from the cooling water via the air flow through the core, this core is the section joining the top and bottom tanks.

While all Austin Seven radiators look similar and perform identical duties, for maintenance purposes they can be classified into two following types:—

Type A All models up to the last of the chrome fronted cars, i.e. 1922 - 1935

Type B All other models up to the end of production, i.e. 1935 — 1939

Maintenance Requirements:-

Type A

These are originally of honeycomb construction and normally have a long and trouble free life, the only problems are insufficient cooling area on the very early ones, which was rectified by increasing the radiator height and the method of mounting to the surrounding cowl.

This mentioned method consists of two felt lined metal brackets that support the bottom tank, the neck of radiator is also secured by the cowl, with the use of a rubber ring to prevent chafing. This method of support is excellent providing the felt and rubber wearing devices are in good condition. Any deterioration or wear will result in damage to the bottom tank or radiator neck. These points need careful monitoring, particularly with original undisturbed radiators.

Early types with honeycomb cores can give many years trouble free motoring, with the advantage that if severely blocked, the top tank can be removed and the core tubes manually cleaned. This cleaning method cannot be employed on the later type replacement cores, these are called 'film sections' — the term 'film' relating to the core construction.

Type B

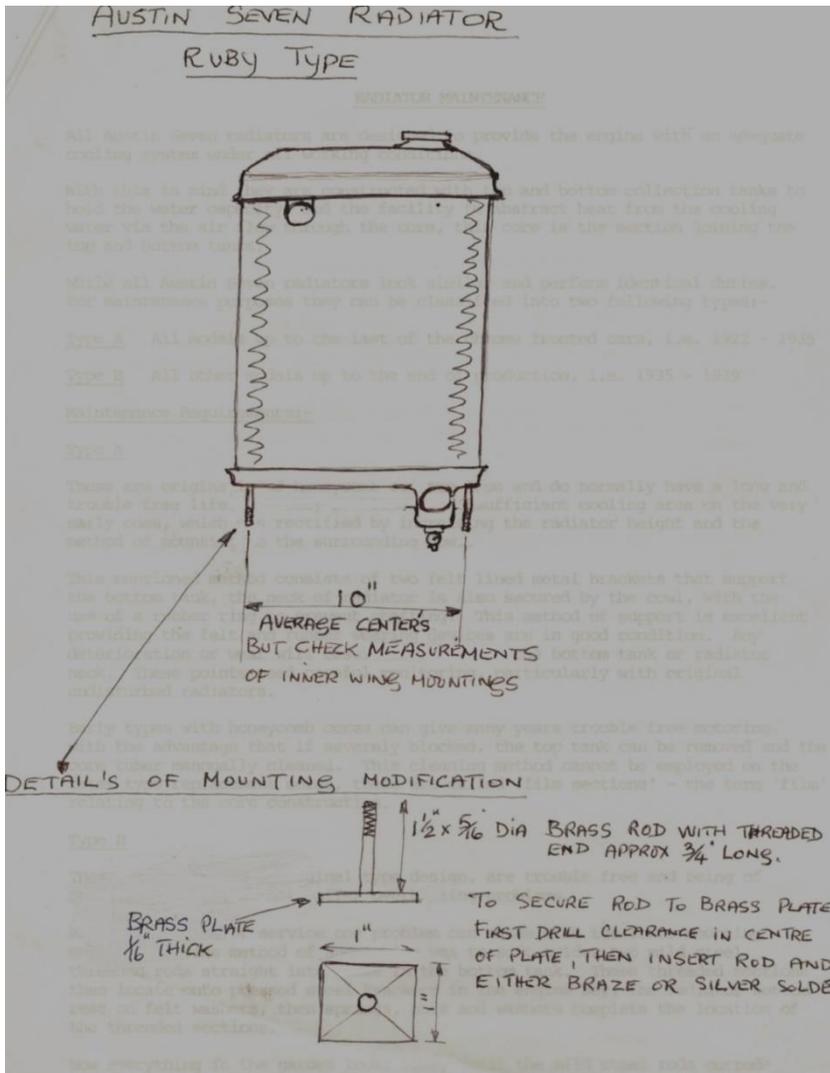
These again, if still original type design, are trouble free and being of increased height, do not suffer overheating problems.

After many years of service one problem can arise with the lower mounting system. Austins method of supporting was to soft solder two mild steel threaded rods straight into holes in the bottom tank. These threaded sections then locate onto pressed steel brackets in the engine bay, the radiator bottom rest on felt washers, then springs, nuts and washers complete the location of the threaded sections.

Now everything in the garden looks rosey until the mild steel rods corrode and drop out with of course a massive water leak resulting.

My suggest modified bottom securing system:—

1. Obtain two lengths of brass threaded rod 5/16" dia and 1 ½" long.
2. Braze or silver solder these rods centrally onto a brass backing plate of size 1" x 1" x 1/16" thick.



3. Carefully mark out the measurements of the engine bay support brackets onto the bottom tank, thus ensuring that when the brass plates are soldered into position, they correspond with their counter parts in the engine bay.

This soldering requires a certain amount of care and skill because of the danger of melting the solder joint between core and bottom tank if excessive heat is employed.

If in doubt, take your prepared plates along to your radiator repair specialist, charges can be kept to minimum by doing the preparation yourself.

This modification has the advantage of completely

sealing the holes in the bottom tank.

The top method of fixing the radiator by use of a combined bonnet support bracket, is very robust and gives very few problems.

Finally, only use glycol based antifreeze to fill your cooling system and remember leaving antifreeze in your car's cooling system all the year round, does not harm whatsoever.

In fact it is very beneficial because modern antifreeze contains preparations that prevent corrosion and the build up of sediment in radiator cores.

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29/10/1991