

C-AHT770 & C-AHT770A Inlet manifold information

These single SU carb manifolds were developed to provide optimum airflow and air speed for the vast majority of road-used cars. The development program saw a significant increase in efficiency following production to the point where they are the best 'off the shelf' manifolds on the market for a majority of applications, including motorsport where only a single SU is allowed, yet not at extreme expense since sand casting methods were employed to keep costs down.

However, despite great effort on MSC's part to manufacture a manifold compatible with as many aftermarket exhaust manifolds as possible they are not all inter-compatible all of the time - the mounting flanges can vary in thickness even by the smallest amount. Mini Spares have ensured these manifolds fit with the Manifold range of manifolds since these are the most prodigious and best quality on the market. The flange thickness variation can cause poor sealing of the manifold resulting in air leaks into the induction system and blowing exhausts - both annoying and troublesome. However, there are several solutions to this problem.

The problem is that of varying thickness flanges - so what needs doing is to negate the problem. Initially the obvious solution is to grind whichever manifold has the thicker flanges down to match that of the other - but when attempting the fitment on a weekend and without the ownership of a decent mill in your garage, it is the hardest to achieve. The other option then is to counter this inconvenient 'step'.

Option 1 - The stepped washer. Using the standard very thick manifold washers, file one half of the washer down by the amount the manifold is stepped using the manifold stud centerline for locating the stepped 'edge'. When fitted, obviously the thick half of the washer needs to but up against the thinner manifold flanges.

Option 2 - Again using the very thick standard manifold washers as a basis, use a reasonably thick round file to file a groove across the washer, passing straight through the manifold stud hole. The stud hole should be drilled slightly over size (8.5mm) and the groove needs to be a little wider than the stud hole diameter. When fitted, the groove needs to sit over the vertical gap between the manifold flanges. When the nut is done up, the nut will tilt itself to allow for flange thickness differences.

Option 3 - Drill the stud hole out slightly oversize as above, then run two beads of weld parallel to each other, either side of the stud hole and a little ways away from it. This works similarly to option 2.

Option 4 - Speedy super-bodge. Get some 5/16-inch standard flat washers. Cut a few in half, through the centre of hole, to give several half-moon shaped washers. Glue one half to one side of a whole washer with super glue or RTV silicone. Should be aligned as per option 1. Short fix only - get them replaced as soon as possible with something a little more permanent.

Option 5 - Angle iron fix. You need some small angle iron, cut into 1-inch pieces. Drill a 8.5mm hole through the centre of each so the hole goes through the point of the angle. Fit them with the pointy bit facing the retaining nut and the gap down the middle straddling the gap in the flanges. Doing the nut up causes the angle iron to tilt into position, the angle iron edges pressing on the flanges.

The other issue is that of throttle cable abutment brackets. The plethora of alternative available and low-cost manufacturing methods used meant that MSC could not possibly cater for all types. In particular the variation of bracketry used on the HIF range of carbs. Where such a carb is used along with it's relevant bracket, it may be necessary to cut a wide-angled 'V' section out of the bracket to get clearance. This in no way affects the performance of the bracket. The original type thick carb to manifold spacer must also be used.