FRONT EXHAUST PIPES AND MANIFOLD ON TWIN EXHAUST R TYPE / SILVER DAWN WITH R.H.D.

N. W. Geeson

On cursory inspect the twin front pipes appear easy to fit, however after a few minutes grappling with something akin to an octopus most owners have changed their mind.

Note that the exhaust front pipes are a different part number for manual and automatic transmission.

The following description describes re-fitting of the front twin exhaust pipes; removal is the exact opposite of the fitting sequence. Great care must be taken if the exhaust manifold is to be removed and it is advisable to apply copious quantities of easing fluid, WD40 etc onto the stud ends before attempting removal if the stud ends protrude through the nuts, see WARNING below.

The terms inner and outer relate to the pipe positions relative to the chassis centre line, the inner is therefore the one nearest to the chassis centre. Brass exhaust flange nuts should be used and fitted to bolts that are such a length that no threads protrude through the nuts when the nuts are tightened.

Fit the outer front pipe to the rear exhaust manifold and secure loosely with one bolt / nut. The rear end will rest on the chassis section adjacent to the silencer.

Fit the inner front pipe by passing the rear end over the silencer, then lifting the front end up to couple to the front exhaust manifold loosely with one bolt / nut.

Fit the four-hole flange gasket and completely bolt up the inner front pipe to the silencer flange. Use exhaust jointing compound on the gasket if necessary and ensure no bolt thread, or very few, protrude through the nuts.

Fit the four-hole flange gasket and completely bolt up the outer front pipe to the silencer flange. See note above about thread lengths and jointing compound.

If the manifold has been removed ensure it is only lightly retained by its reach nuts and is free to move slightly. Make sure that the manifold flanges will align without strain to the front pipe flanges. If the engine has been removed, ensure that the rear torque buffers and tie rod have been tightened and all engine components fitted to enable the engine to sit down into its correct position on the mountings, before coupling the front pipes. Support the rear end of the front pipes adjacent to the silencers but without connecting the exhaust mounting at the rear end of the front pipes.

Bolt up completely the front manifold to inner front pipe. See note above about thread lengths and jointing compound.

Bolt up completely the rear manifold to outer front pipe. See note above about thread lengths and jointing compound.

Tighten the exhaust manifold reach nuts if the manifold has been replaced. Ensure that absolutely no threads protrude at the end of the reach nuts, fit washers under the nuts to attain this situation.

WARNING: the exhaust manifold studs penetrate through to the water cooling jacket!! If the threads are left overhanging the nut ends there is a danger that the studs will break during removal, for that reason ensure no threads overhang the nut ends. Also ensure that the stud holes in the manifold have clearance to prevent seizure to the studs. It is advisable to over drill the manifold holes and fit copper sleeves over the studs to prevent such seizures. If there is any doubt about the condition of the brass manifold reach stud

nuts, they need renewing. Should a stud break then a jig plate should be made out of at least _ inch plate, using either two remaining studs or a new exhaust manifold gasket as a pattern to drill the two holes in the jig plate. Drill the jig plate absolutely vertical in a press drill. This jig plate then needs bolting to the remaining unbroken stud and aligned with the broken stud section. The broken stud can then be drilled out with an under sized drill, absolutely in alignment, using the jig plate as a guide. As previously noted, the broken stud section will enter through into the water jacket. Moral here! Do not break the studs!

Grease should be applied to the new copper asbestos type manifold gaskets as it carbonises with heat and ensures good sealing.

Connect the exhaust mounting at the rear end of the front pipes, ensuring that no strain is placed on the exhaust but that the mounting is just taking the weight of the system. Do not forget to ensure the earth cable is fitted correctly between the rear of the gearbox, this exhaust mounting and the chassis.

The front three flange joint bolts will be approx 1.30 inch under the heads. Diam 5/16 BSF

The silencer to front pipe, four flange bolts will be approx 1.150 inch under the heads. Diam _ BSF.