

Fitting new Fuel Hose to an MGB GT V8.

Health and Safety Warning. Working with fuel needs care. If working inside a building; make sure there is ventilation, open doors and windows. Make sure radiant heating sources or naked flames are switched off. Gas operated fridges have a pilot light, make sure gas supply is off and flame is out.

Purchase new fuel hose that is compatible with E10. Gates Barricade is one recommendation. Part No 4219-03670 0.25" internal diameter. This is a 3m length sufficient to service two V8s. Purchase 8 fuel hose clamps, screw type, 0.5" or 13mm diameter. This arrangement is proven to work better than worm drive clips of the same diameter which distort and are not guaranteed to make a seal, particularly on Barricade which is more rigid than older hose design. You may also need 14mm dia clamps where the hose is stretched over a bead.

The replacement of the fuel hose that fits between the two float chambers is not covered in detail. It is often neglected because access is quite a time consuming job. It has been documented as a safety issue in earlier notes. That procedure requires the removal of a carburettor to gain access to the hose and is covered in the service manual. If the hose is secured by constant force hose clamps would recommend screw type hose clamps are used. The hose location makes it difficult to fix a leak should a screw type clamp not be used. Barricade hose is a little more rigid than earlier hose design and may not be adequately clamped by a constant force clamp to make a seal. Neither pipe has a stretching bead so the hose clamp both locates and seals.. Make sure hose clamps are in position and have socket access before reassembling carb!

If leaks are known to exist at the banjo or the thread adaptor on the fuel pump read steps 10, 11 and 12.

Workshop notes.

1 Advisable to have fuel tank at low level. Disconnect battery.

2 Under-bonnet. Remove nearside air cleaner. Have a rag handy to mop up fuel drips. Remove hose from copper fuel feed pipe on bulkhead, remove clamp from fuel filter, withdraw filter from clamp. Disconnect hose clamp at carburettor, withdraw hose and filter assembly. Both hose ends might be difficult to shift, in which case, remove fuel filter which will allow better purchase on stuck hose.

3 Cut new hose to length and mount on fuel filter using new fuel hose clamps. Position the hose clamp adjacent to and inboard from the bead on the inlet and outlet connections on the fuel filter. Relocate filter on bulkhead Slide a new hose clamp on each end of the assembly and offer up hose to carburettor then bulkhead copper pipe. Important to push hose fully home on carb and fuel feed pipe, locate hose clamp centrally. Neither carb nor copper fuel feed pipe have a stretching bead so hose clamp is both locating and sealing.

4 Fuel Pump. Chock off side front wheel. Loosen rear wheel. Jack rear and locate axle stand, remove rear wheel. Have a rag handy to catch drips. Disconnect fuel hose at fuel tank. Disconnect fuel hose at copper pipe in front of spring hanger. In the boot remove fuel pump cover then detach electrical leads from fuel pump. Then slacken off large diameter worm drive hose clamp that locates

fuel pump inside rubber seal. Push fuel pump out of seal by about an inch. From underneath car slide pump forward until it pops out of seal and can be removed to bench.

5 Remove old fuel pipes. Cut new hose to length and slide on to fuel pump inlet and outlet pipes. They are a tight fit and need some effort to position them against the shoulder on the pump. Fit new hose clamps, do final tightening when pump is reinstalled to make sure there is socket access for subsequent tightening.

6 Offer up fuel pump assembly to rubber seal, locate in correct position and secure worm drive clamp around seal. Slide new hose clamps in position and attach to fuel tank outlet and copper feed pipe. Note there is no stretching bead on either pipe connection so the hose clamp both locates and seals, locate clamp carefully and tighten. Go back to fuel pump and tighten fuel hose clamps.

7. Refit pump electrical connections and attach cover over fuel pump. Have a final check round to make sure all clamps are secure. Reconnect battery. Turn ignition switch to activate pump from outside car and immediately take a look at fuel tank, fuel pump inlet, outlet and feed pipe connections. If there are weeps an extra nip on the relevant hose clip will fix it.

8. Take a look under bonnet once the fuel pump connections are deemed sound. Correct any leaks by first giving an extra nip to hose clamps. If leaks persist dismantle and find the leak path.

9. Refit air cleaner and start engine, do another check on the fuel pump. Stop engine, refit rear wheel and remove axle stand. Do final tightening on the rear wheel.

10. If there are signs of leakage at the banjo remove banjo through bolt. Hold slim open ended 7/8 AF spanner on thread adaptor to prevent it from turning whilst undoing banjo through bolt with 7/16 BSW ring spanner or socket. Note relative position of inlet and outlet connections. Dismantle fitting, remove sealing washers from banjo. If seals are aluminium and stuck; drive out from opposite side with a small sharp chisel. Clean up sealing surfaces with a wire brush. Fit new fibre sealing washers, note washer adjacent to through bolt locates in a counter-bore in the banjo. Reassemble through bolt and tighten. Continue reassembly from 5.

11. If there is leakage from the thread adaptor remove with 7/8" AF socket or ring spanner. The adaptor seals on a machined face at the bottom of the internal thread in the fuel pump body. In some cases two fibre washers are used to form the seal and also position the adaptor axially. Don't lose the non-return valve which is loose when the adaptor is removed, you can see the spring on the outlet side, on the inlet side the seal is visible.

12 At this stage reassembly is one step removed from domestic plumbing in that it can be very difficult to make a seal on a flat surface. The fibre washers will likely seal 99.9%, the last 0.1% will leak past the thread. So apply PTFE tape to external thread of adaptor. To apply the tape hold the adaptor with the hexagon facing away from you, hold the tape on the thread so that the free end points to the left, slowly wind on 3 turns of tape whilst pulling the tape tightly into the threads, the tape will also cover the hexagon, it doesn't matter. Make sure the non-return valves are in the correct position, fit new fibre washer(s), assemble adaptor making sure there is clearance between the boss on the fuel pump and the hexagon of the adaptor. Finally tighten the adaptor securely. Reassemble banjo and through bolt using new fibre washers, locate angular position of inlet and outlet pipes before final tightening. Proceed with steps 5 through 9.