

Removal and Replacement of the MG Y Fuel Tank

by C.R. Tyrell

Additional Notes – Tony Slattery International MG Y Type Register

I had to remove the fuel tank in my YT Tourer to get it repaired, flushed, and sealed after it sat for 32 years. The car was parked for long term storage with a full tank of fuel with stabilizer added. Thirty-two years later the fuel had evaporated completely, and left behind a conglomeration of dried varnish, rust, and who knows what else. It was found later that the internal baffles had broken free and required repair as well.

Safety First

To make a stable platform for tank removal it is imperative to raise the car off the ground to a sufficient height to be able to easy access under the rear of the car. For stability the front of the car should be raised as well. This is fairly easy when done properly and is safe. Anytime you are putting a car in the air pay. Short-cuts can result in injury and even death.

I use a floor jack of sufficient size and lifting capacity to lift the car. The “saddle” of the floor jack can be rotated so that 2 of the four raised edges are lined up forward on the jack. I lift the front of the car first.

Removing the Tank

Lifting the Front of the Car

Place the floor jack under the car at the centre of the front cross member and push it far enough so that the raised edges of the saddle are just past the rear edge of the cross member. Pump the floor jack up so that the saddle just makes contact with the cross member. Once contact is made pull the floor jack so that the edges of the saddle catch on rear edge of the cross member, and feels “locked-in”. Doing this will reduce the chances of slippage considerably. Lift the car as high as you can and place axle stands* under the front suspension spring pans, in such a manner as to provide a stable non-slip footing. Let the car down until the weight is carried by the jack stands and the car is stable.

** The IMGYTR recommends the placement of ramps under the front wheels rather than axle stands.*

Lifting the Rear of the Car

I lift the rear of the car with a floor jack. The only thing that I do different is to put a small piece of softwood in the saddle of the jack. This softwood has a 3/4” hole in it to allow the drain plug of the differential to not hit the saddle directly. I do not know if all Y’s have this protruding pipe plug in the drain, but mine does and I thought it better than risk damaging it by the saddle of the jack.

I raised the car to a height to allow me to put a set of ramps under the tires. If ramps are not available, use jack stand under the leaf springs at the axle housing. This has been proven to be a stable location.

Now that the car is raised to a level to get under it the removal process can begin.

Preparing to remove the fuel tank.

Drain the fuel from the tank by removing the drain plug on the bottom of the tank. Make sure you have a large enough container** to capture all the gasoline that is removed from the tank. Store any gasoline in appropriate sealed container. Replace drain plug.

*** A full fuel tank is 36 litres (8 Imperial gallons and 9.5 US Gallons). It is easier to use the fuel pump to drain the tank into small cans “under the bonnet”. Disconnect the flex hose to the carburettor from the fuel pump and add a longer hose to put in a 5 litre (1 Imperial Gallon or 1 US Gallon) can. At 5 litres a time you can tip the fuel into others cars/mowers as you go & need too. IMGYTR*

To create a good clearance sufficient to remove the fuel tank, it is recommended to remove the exhaust pipe and silencer/muffler assembly. This is easily done on the Y, and should come away in one piece. A new exhaust manifold gasket will be needed on the re-install. This action will give good clearance to drop the tank from between the frame rails.

The part is done through the boot/trunk.

It is advantageous to remove the wood section of the boot/trunk floor. The right hand side comes out first with the removal of the retaining slot head screws and washers. Once the screws are removed the panel is easily removed. Once the right side is removed the left side floor panel can be removed. In my experience the floor screws and washers came undone with very little coaxing. Judicial use of a quality penetrating oil the day before can be advantageous with removal of stubborn screws. They can be accessed through the spare tire compartment once the spare is removed.

Removing the fume excluder and seal (4 screws) is the most taxing of this job. Three of the screws can be accessed with a “stubby” screwdriver fairly easily, but the fourth is under the filler pipe neck on the tank and impossible to remove with the tank in place.

Removing the filler pipe is straight forward. Loosen the two gear clamps (jubilee clamps) and loosen the rubber hose by twisting on the pipe. The filler pipe should pull straight out from the rear mudguard. The hose then can be removed from the filler neck on the fuel tank. The filler neck should be sealed up temporarily to exclude fumes and prevent the accidental entry of foreign bodies into the tank.

From under the car, undo the fuel line fitting from the tank. The pick-up tube is soldered to the tank and remains in situ.

There are two 5/16 BSW cap screws fixing the tank to the frame and one 5/15 BSW nut. The two cap screws are, one on either side of the tank toward the front, and can be accessed through the wheel arches. The nut is centred at the rear of the tank through a tab welded to the rear frame cross member.‡

‡ Sometimes it's also easier to remove the Panhard Rod to allow more forward movement of the tank to disengage the rear stud from the chassis. IMGYTR

Disconnect the electrical connection to the sender unit. I just pulled apart the Lucas bullet connector that runs along the frame on the right side near the sender.

Remove the nut and washers from the rear attachment. The stud will retain the tank in position. Support the tank lightly with the trolley jack and then remove the cap screws and washers from either side of the tank. The tank should now be free. The tank is fairly light weight and that is a good thing as a fair amount of “jostling” is required to free the tank from the trunk fume excluder.

Once the tank is out, that 4th screw in the fume excluder can be removed.

Special Note:

The fume excluder on the trunk (boot) floor is difficult to work around, but with 3 of the 4 screws removed it will allow for some movement to aid in the removal of the tank. A helper is advantageous in the assistance of removing the tank filler neck from the excluder. This is why I suggested removing the exhaust from the car, to give easier access to be able to drop the tank straight down.

It may be advisable to “ease” the opening of the excluder before it is re-installed to assist in the re-install of the fuel tank. It then can be re-installed with the 4 screws and washers on top of the rubber gasket, before the tank goes back in‡‡. I did not install the excluder until after the tank was in place and found it impossible to install the screw under the filler neck.

‡‡ replace that 4th screw with a Hex head bolt it can be fitted after the tank is in place and you will get a better seal around the filler neck. IMGYTR

I apologize for not taking any pictures of the process, but the process is apparent when you look at it.