

# Supplemental Information & Instructions for 456-800 or AHH5121 Fuel Tank MGA

## A Little History

For years Moss and many other suppliers of tanks for the MGA have been selling a tank made in England. They were ok, but not great. Most of the problems were cosmetic, but in several batches we found tanks where you could not fit a sending unit because the mounting flange welded in the tank had been made incorrectly. We inspected the tanks on receipt, so very few of these were shipped to customers but the problem was that we were shipping bad tanks back to England rather than to customers. We had been looking for another source and in 2006 we found an OE supplier of fuel tanks that was willing to work with us. We provided a sample, specifications, and some notes on what we thought were the critical issues.

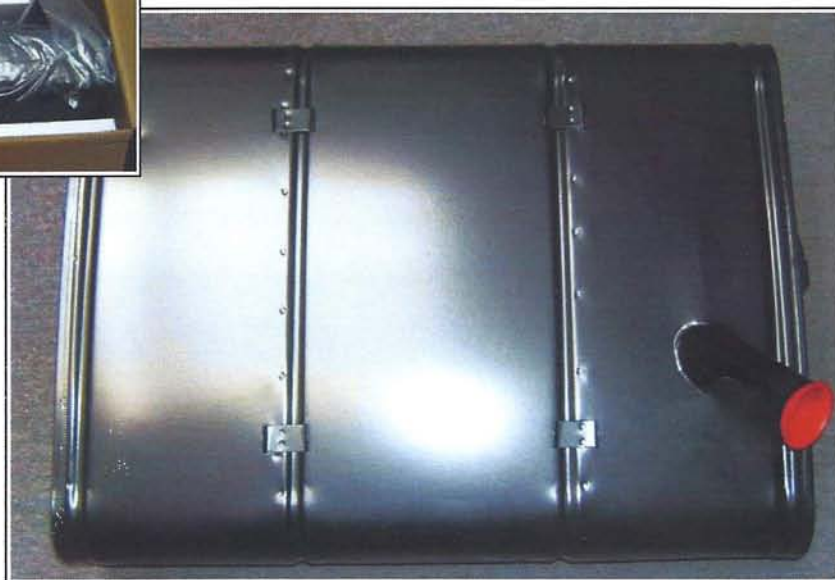
- **Zinc plated steel for rust and corrosion resistance**
- **High quality welds**
- **Pressure testing prior to shipment**
- **Correct dimensions and shape**
- **Proper placement of the brackets for the mounting straps**
- **Filler neck placement and angle**
- **Fuel outlet size and orientation**
- **Properly tapped and spaced holes for sending unit**
- **Bung for drain plug threaded to accept the OE plug**

Of all the features, the most important is the use of zinc-plated steel. Original gas tanks were made this way because the zinc protects the steel from the water that is absorbed by gasoline from the atmosphere. Without the zinc, the raw steel would quickly rust. Few manufacturers have the necessary equipment to safely weld zinc plated steel, and so most reproduction tanks are made with raw steel. Treatment with a sealer (aka "slushing compound") is necessary to protect the raw steel. The zinc plating in our tank means you don't have to seal the tank; the zinc will protect the steel. Unfortunately the zinc is not permanent, and these tanks will eventually begin to rust, but they should last as long as your original tank.



A good tank is no good if it arrives damaged. The tanks are packed in a thick cardboard box lined with blocks of foam that protect the tank and filler neck.

The tank comes with plugs and caps sealing the various openings in the tank.



## About this Tank

The first preproduction sample was received in June of 2006. We shipped it to Carl Heideman (Eclectic Motorworks, Holland, Michigan) for examination. Carl's comments and photos:

We have installed and evaluated the 456-800 gas tank you sent us in a 1958 MGA coupe that is undergoing a ground-up restoration. The car had previously been fitted with a brand new 456-800 from your previous manufacturer, so we were able to directly compare the new manufacturer's tank with the previous. The new tank went in very easily. In addition to this test fit and comparison, we compared the tank to five used original tanks we had in stock.

I would recommend this tank.

Here are comments about the tank with photos where appropriate:

[Tank] weighs 20.5lbs (originals weigh approx 19.5; previous tanks sold by Moss were 17.5 lbs)



Continuous [resistance] weld at tank ends. High quality look to welds



Internal baffles spot welded as original tanks; on previous tanks the internal baffles were MIG welded



High quality weld at filler neck.



High quality weld at fuel pickup





Sending unit ring threads are correct and in the correct spot. Sending unit tapped and drilled flange is 0.165" [thick] (originals were 0.188-0.195")



Reinforcing ribs have better appearance



Strap guides positioned more uniformly and have nice spot welds



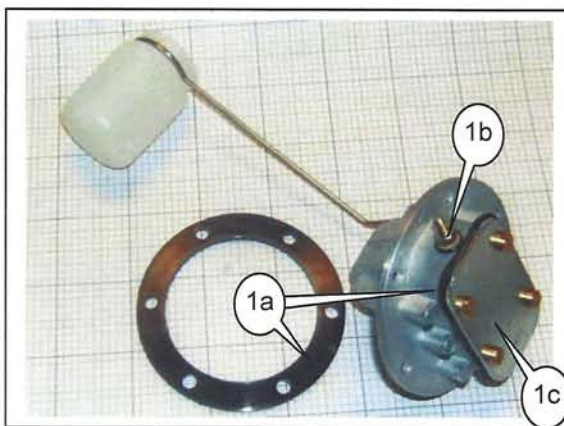
Drain plug [from tank] (right) matches original thread size, but head is 3/4" [AF] instead of original 3/8" WW size [~0.710" AF]. Drain plug is interchangeable with original. Seals with copper washer as original. Grant: some tanks supplied with an aluminum sealing washer.

*Moss is indebted to Carl and the other specialists we work with when we are developing a new item. We are pleased to be able to offer this tank, which represents a significant improvement in quality over the reproduction tank we were selling and over other reproduction tanks available today.*

## 360-280 Fuel Tank Sending Unit Installation Notes

The Smith, 'F' series petrol tank sending units are an antiquated design, and require careful installation if leakage is to be avoided. Our reproduction sender uses fuel & alcohol resistant Viton gaskets and seals (1a) which will provide improved performance over the original cork gaskets, but they still require careful installation.

It is not uncommon for gas to weep past the threads of the screws used to secure the sending unit, particularly when the threads on the screws are worn or damaged.



We suggest using nylon or copper sealing washers under each mounting screw. We offer a set of six screws and six nylon washers under #323-728. We also offer the nylon washers individually under #315-165.

Ensure that the mounting flange area is clean, and apply a good grade fuel resistant gasket sealer to both the mounting gasket and the small lid gasket. We recommend Hylomar gasket sealer which is available locally or under our #221-555.



The wire terminal on the sending unit (1b) should also be carefully checked for tightness. Care should be exercised so that the wire terminal (1b) itself is not rotated, because that will break the wire (which is very fine) inside the sending unit.

The very nature of this design is such that the hollow rheostat cavity (1c) will fill with fuel. This does not pose a safety hazard. If the cover plate is removed, the fuel will spill out and that does pose a hazard if there is a source of ignition. It is for this reason that you must always disconnect the battery prior to removing the cover plate from the installed sending unit.

Ensure the gas tank, sending unit, and dash gauge are securely grounded.

*If you have any questions about or trouble fitting the tank or the sending unit, please call our Technical Services Department at 805-681-3411. If you prefer, you may use the simple email form on the "Contact Us" web page <http://www.mossmotors.com/AboutMoss/ContactUs.aspx> Please select "Ask a technical or Parts Related Question" as the subject of the email.*



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