

# FUEL TANK AND EXHAUST SYSTEM

## FUEL TANK

The fuel tank which is different for the "F," "G" and "L" models, is a modified elliptically shaped tank, suitably ribbed for maximum strength and has a capacity of 17 gallons. A semi-circular vertical brace is positioned between the center and either end of the tank. The braces prevent distortion of the original tank shape followed by improper reading of the gas gauge. The filler tube is accessible through the left rear fender of the "F" and "G" models and is covered with a vented and easily applied cap. On the "L" models, a square spring loaded lid in the left rear fender covers the vented gas tank cap. The tank is supported by two straps just ahead of the frame rear cross member and is fitted with a tank unit and a direct act-

ing float, the movement of which is transferred to the tank unit rheostat contact by a link arm. A small flat spring loaded disc is provided at the upper end of the tank gauge unit float arm to dampen active movement of the float and jerky movement of the dash gas gauge pointer. See Fig. 242. Additional dampening of the pointer is furnished by an extra inertia wheel inside the dash gauge unit. The suction pipe is separate (See Fig. 243) and positioned to prevent starvation as gasoline tank becomes nearly empty.

Considerable attention has been given to locating the gasoline feed lines so as to reduce vapor lock to a minimum. The main feed line is located on the outside of the left hand frame side rail—opposite side to the exhaust system—and passes over the fuel pump side of the engine, along the front side of the frame front cross member. In this way, the lines are exposed to outside air currents along the side of the car frames and through the radiator grilles.

**CAUTION** — Always drain gasoline from complete fuel system—including carburetor, fuel pump, all fuel lines, and fuel tank—if car is stored for any appreciable length of time to prevent gum formations and resultant improper engine performance.

### Remove and Replace Fuel Tank

1. Clean under side of rear fender and gasoline tank filler spout to prevent dirt falling into gas tank while lowering tank.

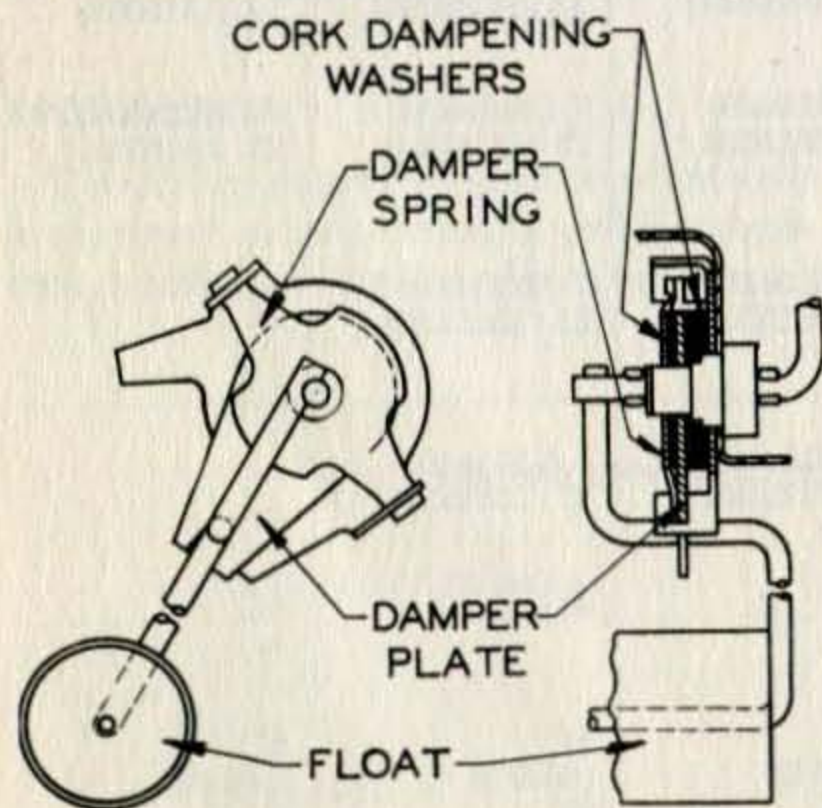


Fig. 242. Tank Gauge Unit Dampener

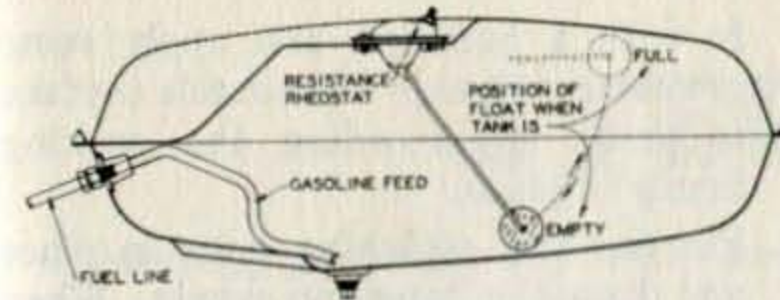


Fig. 243. Fuel Tank and Gauge

2. Remove tail pipe bracket.
3. Disconnect gas line at gasoline tank.
4. Remove gasoline tank filler cap and grommet.
5. Cover the opening in filler spout to prevent dirt falling into gas tank.
6. Loosen gas tank straps and drop gas tank.

**NOTE**—Remove fuel tank filler neck from left rear fender before rotating and dropping right end of fuel tank.

To replace the gasoline tank, reverse sequence of operations for removal.

## MUFFLER

Mufflers are the straight through type and specially developed to accommodate the different engines. The outer shell is made of terne plate to better resist rust.

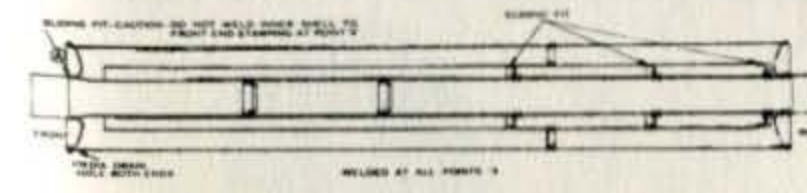


Fig. 244. Cross Section of Muffler

A  $\frac{1}{16}$ " drain hole is also provided in the outer shell at the bottom and at both ends of the muffler to allow a drain for any water which may collect inside.

A different muffler is used on each model and, although the outside dimensions of the "G" and "L" mufflers are the same, mufflers should not be interchanged between models.

The "F" model muffler may be identified by the letters "GM-F," the "G" model muf-

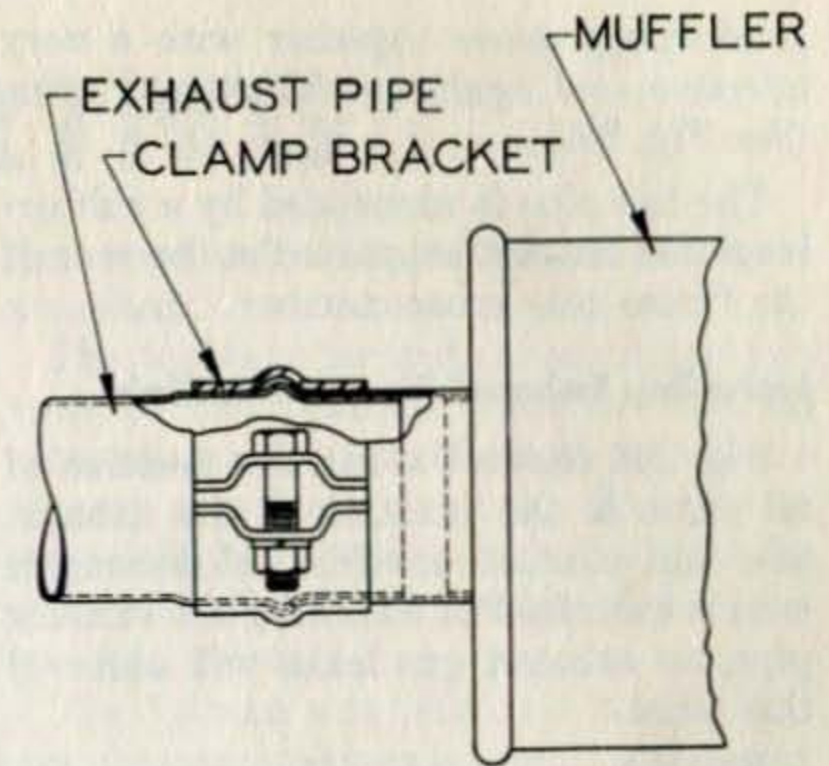


Fig. 245. Clamp Type Muffler Mounting

fler may be identified by the letters "GM-G" and the "L" model muffler by the letters "GM-8" embossed on the outer shells.

A clamp type muffler mounting is used. The muffler is supported at its front end by the exhaust pipe bracket while the rear end is supported by a rubber insulated hanger, which is a part of the rear clamp.

The mounting used on the "F" model is fundamentally the same as that used on the "G" and "L" models.

### Remove and Replace Muffler

The bell-mouthed ends of the muffler must seat against the bead on the tail pipe and exhaust pipe and index with the bead on the clamp bracket. (See Fig. 245.)

### EXHAUST PIPE AND TAIL PIPE

A different exhaust pipe is used on each model. The tail pipe is different on each model.

The exhaust pipe extends from the exhaust manifold to the muffler with a supporting bracket at the clutch housing.

The exhaust pipe is made very rigid at the manifold connection by the use of a