



TClinic

REPAIR OF GAS TANK - FUEL GAUGE LEAKS

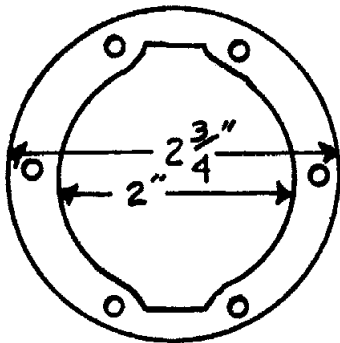
by Barney (Doc) Jackson

Does your gas tank leak around the fuel gauge? If it doesn't you're lucky — I thought all of them did. The trouble is usually caused by over-tightening the six screws around the perimeter of the tank unit. Several ways to correct this have been tried (by me), but the best one so far has been to make a support ring to go on top of the tank unit allowing the pressure exerted by the screws to be equally distributed. First, remove the tank unit and inspect the casting for a bent, wavy appearance — be sure to check the electrical circuit and the float lever operation. If the casting is bent (look closely, most of them are), place the unit upside down resting on a hard, flat surface (vice jaw worked nicely) and using a small hammer, very carefully tap on and around the screw holes. Then, using a file or a piece of wet or dry, check the flatness of the casting by lightly filling or sanding the back side — the high spots will shine. Repeat tapping and checking until the back side of the unit (next to the tank) is completely flat — this is very important. Now turn your attention to the front side. Lightly file the raised letters until this side too is completely flat — it is necessary to have a flat surface for the support ring to seat on. Next make the support ring as shown — use whatever material

is handy — I used hardened aluminum — stainless would be ideal but is hard to work. The edge thickness cannot exceed $\frac{1}{8}$ ". The outer diameter is $2\frac{3}{4}$ " and inner one 2" — shape the inner part as shown — drill the perimeter holes slightly larger than in the unit — this prevents the screws from binding. Clean the tank mounting area — make sure that all rust, paint, old gasket and other junk is removed — again, a flat, clean area is a must. Mount unit in the tank using a new gasket and a good grade of cement such as GASGACHINCH (available in motorcycle shops). CAUTION: DO NOT USE PERMATEX #1 OR #2. Place a little cement on the screw threads and firmly tighten. A little cement should ooze out — wipe clean. Make a new gasket for the electrical cover, clean all surfaces and cement in place. If it should still leak (mine didn't), repeat all of the above operations but make a new gasket from a rubberized gasket material (used in refrigeration work). If it still leaks, buy (dirty word) a new tank unit and use the support ring. As a last resort, sell the car. (Bob Goldstein will buy anything!!)

First printed by TCMG in November 1972

2002 Update



YAMABOND is also reported to be an excellent gasket sealant in this application. Available from Yamaha motorcycle shops.

And before giving up and selling your TC you can always make a flat plate and replace the sending unit completely. Most of us rely on the dip stick method of keeping track of petrol anyway. See TClinic #14.

And one ingenious fellow made up sending units from aluminum billet and machined "O" ring seals everywhere. Works really nice.