

## Fuel Gauges for Motor Cars

by Ron Zammit



One of the problems I've always had with motor cars is running out of gas. In the early 1990's I was lucky enough to purchase, via a friend, an enclosed cab MT19B at one of the Union Pacific auctions. This car has the outside gas filler with spring loaded cap, making gas checks very difficult.

After trying various sticks and rods for gas gauges, I decided to find a better way. I had not run out of gas that much with the car—it gets great mileage—but the times I did were embarrassing.

In checking the JC Whitney Catalog, I found just the item needed: a gas gauge kit for about \$20. The kit comes complete with gauge and float. The wiring and gauge mounting were simple. However the float was a bit more difficult. You have to drill some holes in the tank. It goes without saying, but I'll say it anyway: do not drill into the gas tank with gas and/or gas vapor inside! In working with automobiles, I've filled gas tanks with water to

solder/drill/weld. However on the Fairmont tank, I drained it, then used a hair dryer running on the "fan" setting to blow out vapor. I ran the fan until no gasoline odor was detectable. I had to purchase a hole saw for the large hole via which the float enters the tank. Then, using the float-mounting bracket as a template I drilled the small holes needed around the one large hole. Using the gasket provided, the float bracket was attached to the tank and has never leaked.

Calibration is a snap; the float rod is adjustable so you can get "full" and "empty" readings to register on the gauge correctly. The unit is not linear for the Fairmont tank's shape. Therefore "1/2" full is not really correct, but you can get used to this. At least I have an indication as to how much fuel is left. And that has solved my problem, I have not run out of fuel with this car.

Maybe I should modify one of these for 6 volts and install on my 2-cycle car!