

## **BACK UP FUEL PUMP**

### **by Dave DuBois**

Talk about what spares to carry on a trip and just about everyone agrees that a spare fuel pump should be one of the primary items to carry. Of course, with space at a premium in our favorite cars, we have to balance the number of spares we carry with the space available. With some judicious packing and use of various nooks and crannies, one can find a lot of room to tuck various items. I would like to suggest that instead of just carrying a spare fuel pump and taking up space that could be available for other spares (or another bottle of wine), install the fuel pump permanently instead. Since all the fuel pumps used on our cars make use of just check valves and can be hooked up in line with the primary fuel pump, whichever pump is used just pumps through the disabled pump. The addition of a single pole, double throw (SPDT) switch to switch the power from one pump to the other completes the installation and make changing pumps on the go a simple flip of the switch, you don't even have to pull to the side of the road to do it. If, instead of a simple SPDT switch, you use one with a center off position, you get the added advantage of a simple anti-theft device.

In adding a back up pump to our MGB, I used one of the Facet (little square, run all the time, make a lot of noise) pumps that I picked up at NAPA for around \$40.00. The part number of the pump, is 610-1051. It is a low pressure (1.5 lbs – 4 lbs) pump and will work for any MG from T series to MGB and MGC. You can also use the AIRTEX model E8016S 2.5-4.5 psi. It is \$30.99 from AutoZone or the Carter (Federal Mogul) model P60504, also 2.5 – 4.5 psi and available from NAPA. There are any number of pumps on the market that can be used, including another SU pump, just specify a pump with the above pressure range. My one caveat about using another SU pump as a back up is to use one that is solid state. The points in the original pumps tend to develop a film over times of disuse and as such would probably be dead when you needed it.

I mounted the pump to the back side of the battery enclosure on our MGB, using some sound mounts that I had on hand so we wouldn't have to listen to the constant clatter of the pump. The sound mounts are available from Pegasus Racing at [www.pegasusautoracing.com/home.asp](http://www.pegasusautoracing.com/home.asp). Click on Air & Fuel Delivery on the left side of the page, then on Fuel Pump Accessories. The mounts show up under part number 1130 and sell for about \$13.00 (sound mounts are also available from NAPA under P/N 35144). If you are adding the back up pump to an MGA or a T series car, you will have to scout out a convenient spot under the car, preferably (but not necessarily) at the rear of the car near the fuel tank. I cut the fuel line from the tank to the original pump and used some flexible fuel hose to route the fuel through the back up pump and back to the original pump to complete the plumbing. While you are modifying the fuel line, this would be a good time to install a shut off valve in the fuel line also. I used a ¼" ball valve that I got from Lowes (Campbell Hausfeld P/N MP 3217) and the necessary adapters to fit it in the line. You can also get a valve with compression fittings from NAPA. The valve is a Weatherheal A6770 It is really great to be able to remove a fuel pump without taking a bath in gasoline.

To wire the spare pump up, attach the ground wire for the pump to one of the attachment points where the pump is attached to the battery housing. Make sure that you have the attachment point

used for the ground cleaned down to shiny metal and smear some Kopr-Shield (a conductive, anti-corrosion surface compound, Thomas & Betts P/N 201-31879) or a similar product on the attachment point. Mount your single pole, double throw switch in a convenient spot where it is easy to get to and not real obvious (I mounted mine in a hole drilled through the rear bulkhead on the passenger side, just above floor level). Disconnect the power lead from the original pump and route it to the common terminal of the switch. Run a wire from one of the other two terminals to the original pump and a wire from the other terminal to the back up pump.

You are now all set for the next time that pesky SU pump fails. Just flip the switch and continue on home, where you can remove the offending pump for repair (see my companion articles, [SU Fuel Pumps 101](#) and [Fuel Delivery Troubleshooting Guide](#) for a list of people who do SU fuel pump repair or restoration) or replacement. If you want to continue driving your MG while the pump is being repaired or while waiting for the replacement to arrive, get a double male union (Moss P/N 376-300) and install it between the input and output lines to the pump that has been removed.

