## SU FUEL PUMP RESTORATION by Dave DuBois

In the process of restoring a fuel pump, the following is accomplished. The fuel pump is completely disassembled and inspected. Any part that shows excessive wear or breakage is replaced. The diaphragm is checked for any signs of leakage and stiffening - it is replaced if there is the slightest question of it's continued satisfactory operation. The valve disks on the low and high pressure pumps used on the 'T' series MGs, MGAs and early MGBs and many other British cars are replaced if they are deeply grooved, otherwise they are lapped smooth and flat and polished. Likewise, the valve seats are polished if. Valves on the AUF 300/AZX 1300 pumps that are used on the later MGBs and many other British autos are checked for proper sealing, and replaced if they are defective. The coil is removed from the housing, and the wiring checked for any damage. If it is damaged, I replace it with a serviceable replacement (new coils are not available). I also check for damage to the internal swamping resistor from over heating. If it has been damaged it is renewed. The coil housing and pump body are cleaned, bead blasted and the coil housing is painted. The end cover is cleaned and, if necessary, buffed. All threaded screw holes are cleaned and a tap run through them to insure that the threads are sound. Any threads that are damaged are heli-coiled to restore them. Finally a serial number is stamped on the pump body for tracking purposes.

After cleaning and painting, the pump is reassembled, adjusted to factory specifications and converted to solid state. The points are replaced with an optical triggering circuit to provide current to the coil. Low pressure pumps have the coil housing machined to accept the later style coils (same as used in the high pressure pumps) for improved operation. During reassembly, all new gaskets are used and all joints are sealed to insure they are air tight. Once reassembled, the pump is tested for air leaks and then placed on a test stand and the current draw, fuel flow rate and pressure are measured and recorded. Then the pump is left to run continuously for a 24 hour endurance test to insure that it will continue to operate satisfactorily. It is then emptied of the mineral spirits used on the test stand and the ports are plugged to preclude any foreign material getting inside during shipping. The pump is shipped with a record of all parts used and the test results, along with any observations I may have made that I feel you should know (such as rust in the pump that would indicate that your fuel tank/lines should be cleaned). I keep a copy of the data on your fuel pump on file for future reference.

I place red or black tape over the junction of the end cover and the coil housing to keep moisture out and show the polarity the pump must be used with. This is done on all pumps other than the low pressure pumps that are installed in the engine compartment. These will get a polarity sticker on the bottom of the pump body to show the pump must be used with If you are going to change the polarity of the car this pump is used on, the pump must be sent back to me to get it changed over to the opposite polarity.

The charge for this service is \$60.00 for single ended pumps, \$70.00 for LCS pumps, and \$120.00 for double ended pumps, plus parts and shipping. Depending on what parts are needed, the total price has been running \$110.00 plus or minus for the single ended pumps, \$120.00 plus or minus for LCS pumps, and \$210.00 plus or minus for the double ended pumps. Note, this is an average for the restorations, your pump may be more or less depending on the cost of parts. After the pump has been dissembled and inspected, I send you a quote of the cost and wait for your authorization before proceeding with the overhaul.

There is a one year warranty on parts and a lifetime warranty on labor on all pumps that I restore.

If you wish to have me restore your SU fuel pump, please contact me by e-mail at SUfuelpumps@donobi.net, before sending your pump to insure that I am going to be able to meet your time requirements for getting the restored pump back to you. If you do not have e-mail, you can call me at 360-479-0462. I live on the west coast so please check your time and insure that you call AFTER 9:00 AM PACIFIC time. If you call before that you will

get a very sleepy, incoherent answer and will be asked to call back at the proper time. The preferred method to contact me is by e-mail so I can keep a record of what was discussed. Send your pump to me at:

SU Fuel Pump Restoration 1913 South Marine Dr. Bremerton, WA 98312

Note: Since this is a retirement business, I only work on the pumps from October 1 through May 31 each year. The rest of the year is used to get home projects completed and go on cruises. Below is a list of other people in the U.S. who repair SU fuel pumps. Any of these people can repair your SU fuel pump during my time off or if I can't meet your time requirements.

Tom Ball 330-666-2642 or 330-867-9800 Jerry Felper - felperg@earthlink.net or 714-630-1074 Lew Palmer - lew@roundaboutmanor.com

For SU fuel pump services in the UK and Europe, contact: Burlen Fuel System (rebuild service for all SU fuel pumps) - http://www.burlen.co.uk/ Peter Cole pcoleuk@gmail.com

For SU fuel pump service in Australia, contact: SU Midel Pty Ltd. (rebuild services for double ended pumps and LCS pumps) - http://www.sumidel.com/ Tony Oliver revilo@tpg.com.au http://users.tpg.com.au/revilo/

Note: If you also repair SU fuel pumps or know of somebody not listed above who does, please send me an email with contact information for the person so I can add them to the list of people to contact for fuel pump repair.

Revised March 2015