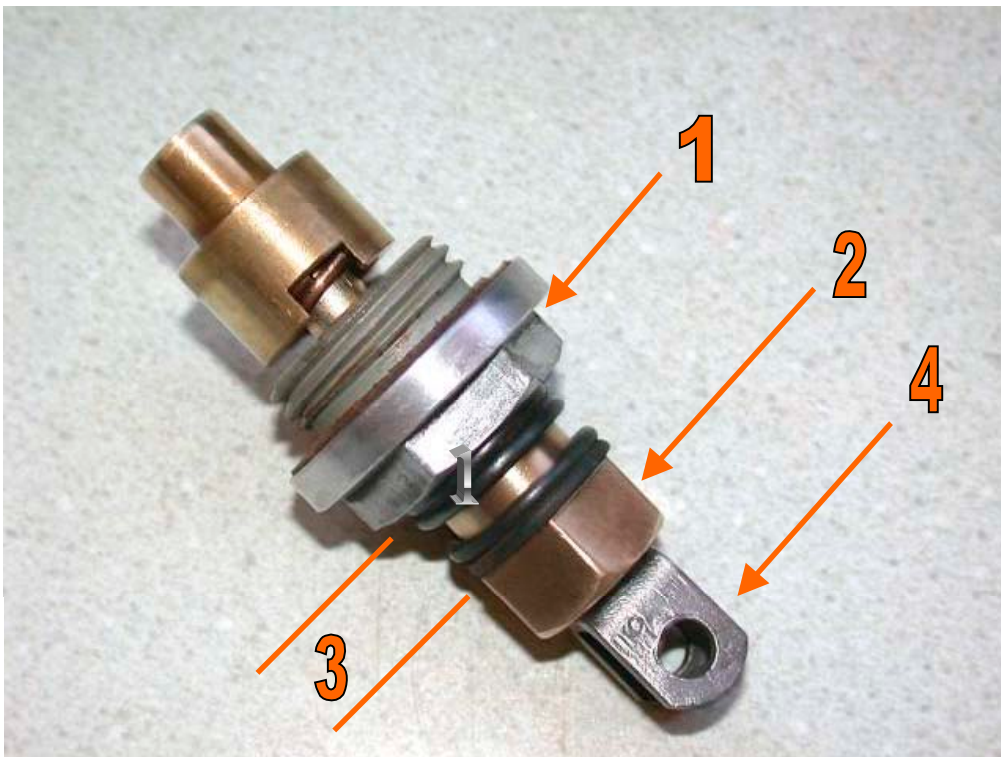


SU-Filters B16b fuel kit instructions

Thank you for your purchase! Below are instructions and some tips that we have found helpful in installing this kit.

Let's start with the carburetors...

1. **Disconnect the battery!** Make sure that all ignition sources are well away from the work area, some raw gas is likely to be spilled at some point in the process.
2. At this point you can either remove the fuel lines or simply remove the float bowl lids as a unit disconnecting them at the fuel pump. If you have a syringe you can remove the floats (an 'L' shaped thin wire works well) and suck the gas from the float bowls at this point. This will minimize leakage when the carbs are removed.
3. Remove the linkage/carb connectors/vacuum fitting and cable(s).
4. Remove the carburetors and clean them, inside and out.
5. Remove the levers that act on the jets.
6. Remove the larger aluminium nut; (1) this is the one above the spring loaded "bottom" nut (2) that positions the jet for mixture adjustment.



You should have something that looks like this once the nut is fully out.

9. Re-assemble, starting with the new O-rings in the brass cups followed by the brass gland washers (convex side towards the spring). Re-install the spring and mixture nut to the proper place (using the measurement 3 taken earlier). Finally, gently insert the jet into the assembly.

9b. Centering the jet:

(If you have an SU toolkit use the mandrel to center the jet according to the instructions in the kit). If you do not have the kit, turn the jet mixture adjustment screw until it is in all the way, and let the piston and needle assembly center the jet as you slowly tighten the jet assembly nut. Be sure the piston and needle move freely after the nut is tightened. Return the mixture nut to the correct distance (3).

10. Remove the float bowl at the “banjo” fitting where it attaches to the main carburetor body. Remove the old rubber or fiber gaskets, cleaning off all residue from the sealing surfaces.

11. Install the new PTFE seals and re-attach the float bowls to the carburetor bodies.

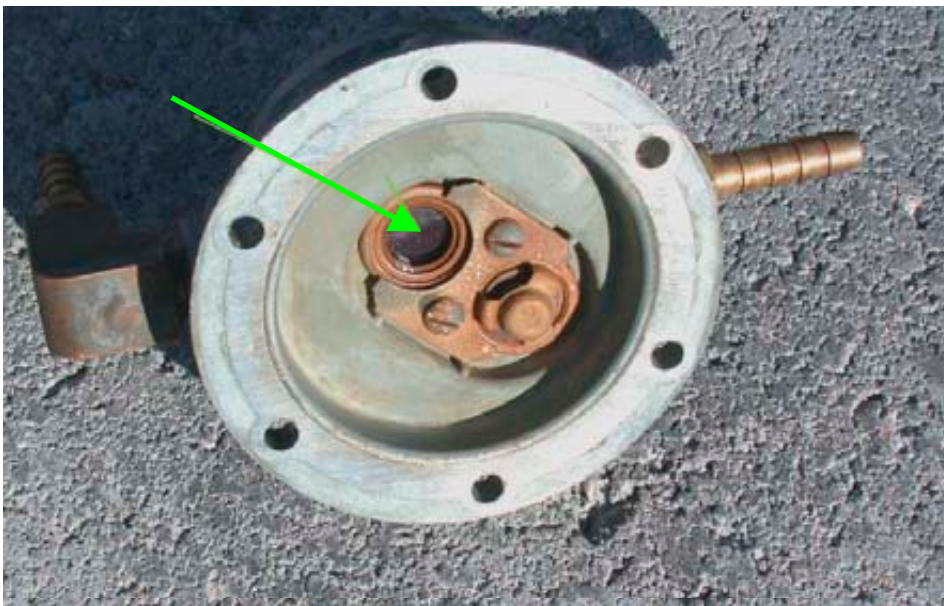
That’s it for the carburetion part of the kit, now, on to the fuel pump!



Above is an AC pump installed on the B16 engine. The output side of the pump is marked with an AC; the input side is marked "in".

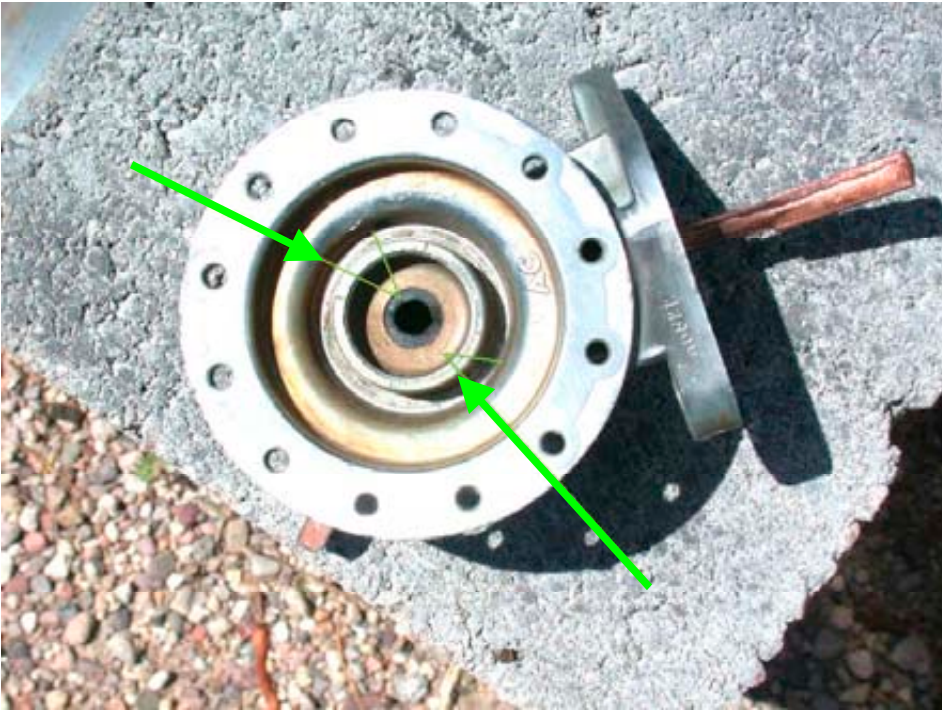
1. Remove the pump from the engine block, it is recommended that you loosen the bail and remove the glass bowl from the pump before removing the pump, it makes it easier to reach the bolts and will prevent gas dripping on paintwork etc. when the pump is removed.
2. Clean any oil/grit from the pump body and check the bowl area for accumulated sediments. Carefully remove the screen.
3. Secure the lower pump casting in a suitable fixture (there is a small wedge or gusset on the bottom casting that can be carefully clamped in a bench vise).
4. Remove the screws holding the two casting together. This should be done a bit at a time (a few turns on each screw in succession) to remove spring pressure, remove the top casting.
5. Remove the diaphragm, this is done by pushing down on it slightly and turning it $\frac{1}{4}$ turn in either direction until it releases. Remove the spring.

You should now be looking at the interior of the two castings.



Upper Casting

Lower Casting



6. Thoroughly clean the interiors, use carb cleaner and a soft bristle brush if necessary.
7. Remove the “H” clamp that holds the one-way valves in place (green arrow, upper casting). Remove the valves and clean away any gasket residue.
8. Install the new gaskets and valves in the proper orientation (the seal/spring on the output side goes “UP” into the casting - the seal/spring on the intake side goes “DOWN” and should be facing the pump chamber). Re-install the “H” keeper. If you have any doubts about the valve orientation check by blowing on the intake and output sides of the casting, you should only be able to get air through the intake side (marked “IN”).
9. Place the oil seal over the central boss (green arrows) of the lower casting, place the spring on top of the seal edges, then compress the spring with the diaphragm assembly, making sure the longer flat part of the activating rod lines up with the cam follower arm. Turn the diaphragm about 90 degrees until the holes in the diaphragm line up with the threaded holes in the lower casting. The diaphragm assembly should stay locked into the lower casting, if not try it again.
10. Place the upper casting in the proper orientation on the lower casting; remember the output side (marked “AC”)

must face the front of the engine. Make sure the holes in the castings and diaphragm are lined up properly and start two screws, 180 degrees away from each other, with a few turns; do not tighten them yet. Install the other screws then begin to tighten the screws in an "X" type pattern until all are snug. Do not overtighten the screws or you may damage the diaphragm!

11. Lightly oil the cork bowl gasket; give the oil some time to work into the cork to prevent brittleness. Place the new cork bowl gasket in the upper casting.

12. Re-install the pump on the block making sure to engage the cam follower properly, again do not overtighten, you can crack the plastic spacer between the pump and the block.

13. Re-install the screen and the bowl; tighten the bail, turning the bowl slightly as you do to insure a good seal.

14. Re-attach the fuel lines and re-install the carburetors if you have not already done so. This is a good time to add an aftermarket fuel filter between the pump output and the carburetors. If you saw considerable sediment in the pump or float bowls a disposable filter between the line from the tank and the input side of the pump would be a good idea too! At the very low pressures encountered in this system the inexpensive plastic filters will work well and will show up (by discoloration) if there are sediment or corrosion problems with the fuel tank / lines!

(Note: This is also a good time to re-check the tune of the carburetors, especially if there were leaks around the jet area as this can seriously effect the mixture!

15, Prime the system with the hand pump, start the engine and check carefully for any leaks.

Again, thank you for your purchase!

J.D. (Dave) Gard

<http://su-filters.com>