Weedeater/Poulan Fuel Line Replacement Instructions

Written for Weedeater model Lt-7000, but works with most Featherweight models too.

COMPLETELY READ INSTRUCTIONS FIRST!

Parts Required

1 foot small fuel line .08 ID X .14 OD 1 foot large fuel line 3/32 ID X 3/26 OD

Tools Required

1 foot 16 gage solid brass wire Clean Rags Needlenose pliers Scissors 5/32 hex head key Phillips Screwdriver

Stage One Disassembly

- 1. Pull spark plug lead from spark plug and drain all fuel from tank into suitable container and set aside.
- 2. Using Phillips screwdriver, remove two screws holding air filter cover in place, and lift off cover. Set aside on clean rag for cleaning/inspection.
- 3. Gently lift out foam air filter and metal grille with your fingers. Set aside on clean rag for cleaning/inspection.
- 4. Using 5/32 hex head key, remove two carburetor bolts and lift out choke housing, taking care to leave bolts in housing. Primer bulb is at the top of the housing, and may have lines still attached. Carefully, using Needlenose pliers, pull remnants of fuel hose off the two Primer Bulb nipples, so as not to snap off the nipples, and lift choke housing away. Set aside on clean rag for cleaning/inspection.
- 5. **NOTE**: There are two holes on the carburetor throttle linkage. The cable will be routed to the larger of the two holes. Remove throttle cable from carburetor linkage, and gently pull carburetor away from motor, noting orientation and taking care not to tear carburetor to engine gasket. There are two nipples on the bottom of the carburetor. Using Needlenose pliers, carefully remove fuel hose from carburetor nipples, so as not to snap off the nipples, and lift carburetor away. Set aside on clean rag for cleaning/inspection.
- 6. There are two fuel lines that penetrate the fuel tank below where the carburetor normally sits on the engine. Each line is a different size, and each has a device attached to it inside the tank. One device is small and bell shaped, the one-way valve, and the other item is larger, and cylindrically shaped, the fuel filter. If your fuel line is rotted inside the tank, these two devices will fall out of the tank filler hole if you turn the hole towards the ground and shake, ensuring your hand is over the tank filler hole to catch the items as they fall out of the tank. Take care to place both items on clean rag for cleaning/inspection. Alternatively, if both lines are still intact, pull both lines out of the top of the tank until they stop or break off (or cut them off). Then, using the 16 Gage brass wire, press the remainders back into the tank, and then shake them out of the fuel filler hole into your hand. The goal is to remove all of the old fuel line bits and attached devices from the fuel tank, saving everything onto the clean rag.

You are now ready to proceed to Stage Two

<u>Stage Two</u> Cleaning/Inspection/Preparation

- 1. Look at everything on the rag. Firstly, pick up the fuel filter and see if it is clean. Remove any amount of remaining rotten fuel line from it, if you intend to reuse it. If it is dirty, throw it away and get a new one. Next, pick up the one-way valve and remove any residual fuel line from it. Wipe with clean rag, and set both aside for Stage Three Assembly.
- 2. Inspect the carburetor. If you spot any dirt on the carburetor, dip it into the residual fuel you saved from Stage One, and "swish" it around so as to remove debris from the carburetor. If you are satisfied with the cleanliness of the carburetor, and had no problems with it before disassembly, leave it alone. If it was acting up before, then you may wish to consider rebuilding it. For the purposes of this instruction, simply inspect the carburetor and gently clean it if it's objectionably dirty. Pat dry with clean rag, and set aside for Stage Three Assembly.
- 3. Locate the choke housing assembly with primer bulb. Check primer bulb to ensure that it is still pliable and not ruptured. Ensure that the two screws are still present in the choke assembly and take care to ensure that the two screws stay intact, unless you wish to disassemble this portion and clean it, you should note the exact position and orientation of the parts before you attempt this. For the purposes of this instruction, we are leaving it as a whole assembly. Remove any foreign material and wipe with clean cloth, and set aside on clean rag for Stage Three Assembly.
- 4. Check foam air filter to ensure it has not perished. If it is still good, clean it in a solution of mild dishwashing detergent and lukewarm water. Rinse in clear water until soap bubbles are no longer present, and then pat dry with clean rag. Spray a small amount of WD-40 onto foam element, ensuring you completely cover the foam, but not saturate the foam. Blot with clean rag and set aside for Stage Three Assembly.
- 5. Wipe out outer air filter cover with clean rag and set aside for Stage Three Assembly.

You are now ready to proceed to Stage Three

<u>Stage Three</u> Reassembly and Testing

- 1. You will see two different sized fuel lines. Using the scissors, take the large line out of the packet, and clip the end of it at 45 degrees, making a tapering point on the line. The large line is the fuel return line. Using the 16-gage brass wire, bore a hole into the tip of the line, pass the wire into the hole, and bend ¼ inch of the wire back along the length of the wire, making a "hook". Using the Needlenose pliers, crimp the "hook" flat, catching the line tightly. Thread the free end of the wire into the large fuel line hole in the tank, and push it over to the filler hole. Using the Needlenose pliers, catch the free end of the wire out of the filler hole. The fuel line will follow the wire. Assist by hand feeding the fuel line through the tank until you have two inches of line protruding from the filler hole. Remove the wire from the fuel line, and using the scissors, make a 90-degree cut to remove the previous 45-degree cut. Now, locate the one-way valve, and attach it to the end of the fuel line that protrudes from the filler hole. Then, reverse the direction and pull the fuel line back into the tank about 4 inches. The fuel line with the valve installed should be long enough to just touch the bottom of the tank.
- 2. Now, repeat procedure 1 above for the small fuel line. The small line is the fuel supply line, so when you have two inches protruding from the fuel filler hole, attach the fuel filter. Reversing the direction, pull the fuel supply line back into the tank so that the filter will not hang out of the fuel filler hole, but will "flop" around all inside the tank.
- 3. Take the carburetor and attach the small hose from the tank to the long, straight nipple on the bottom of the carburetor. You will need to "cut to fit" the fuel line, and retain the fuel line that you cut off.
- 4. Using Needlenose pliers, insert throttle cable back into large hole on carburetor linkage.
- 5. Locate the choke housing with primer bulb. Take the cut off piece of small fuel line from step 3 above, and attach it to the short, bent nipple on the bottom of the carburetor, and route this to the small nipple on the primer bulb. Next, take the large fuel line from the tank, and route it to the large nipple on the primer bulb. You will need to trim both lines to fit, and align the two screws on the choke housing with the carburetor and the engine, and using your thumb and forefinger, start the screws into the engine, sandwiching the carburetor and the choke housing to the engine, ensuring the fuel lines are not caught in the process. Using the 5/32 hex head key, tighten the two carburetor screws snugly, but being careful not to overtighten. Check the operation of the choke lever that it is not restricted.
- 6. Place wire grille into choke housing and install foam air filter. Place air filter cover on top of air filter, and using Phillips screwdriver, tighten snugly, being careful not to overtighten.
- 7. Fill tank with fuel & oil mixture, place fuel cap on fuel filler hole and tighten. Pump the primer bulb 10 times, and look continuously for leaks.
- 8. Move choke to closed position, depress throttle trigger, and pull sharply on starter rope until engine fires. Move choke to center position and again pull sharply on starter rope until engine fires and runs. Keep engine running for 30 seconds by "feathering" the throttle trigger and looking for fuel leaks. Open choke completely and operate normally. If no leaks, and your Weedeater is running smoothly, you did it right. Congratulations.