

April, 2023

TRAINING BULLETIN

#TB10011

TOPIC

How to clean a carburetor

MODEL REFERENCE

Most horizontal shaft, OHV gas engines from 160 to 430cc



Symptoms of a dirty carb may include:

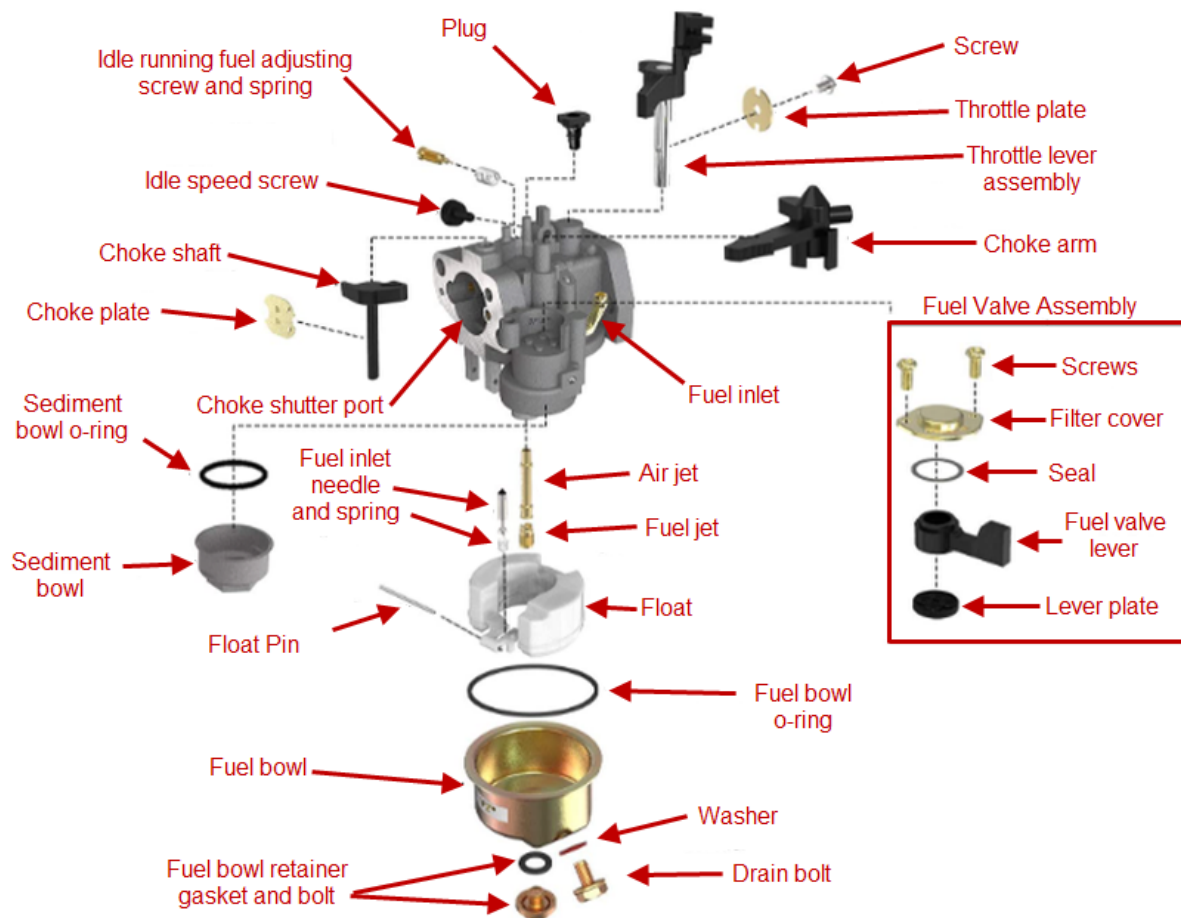
1. Engine runs rough.
2. Engine will turn over, but will not start, or dies very quickly.
3. Engine struggles under load and may shut off.

Causes of a dirty carb:

1. Fuel has been left too long and has become stale possibly creating solids/gels obstructions.
2. Debris has entered the fuel tank and gets lodged in the carburetor.

Exploded view of a carburetor and its components

(picture is of a carb from a Powerease R225 engine. Other carbs may differ in appearance, but will have similar function)



Cleaning process

How dirty the carburetor is will dictate how extensive a tear down and cleaning it will need. In minor cases, simply draining the old fuel and replacing it with new fuel may be enough. Otherwise, disassembly and a more detailed cleaning will be necessary.

1. Ensure the engine is in the off position and can not be started.
2. Remove the carburetor **drain bolt** to empty carburetor. A container will be needed to the catch fuel.
3. Remove **sediment bowl** and clean it out. Evidence of debris or congealed fuel will be signs further cleaning may be needed.
4. Remove **fuel bowl retainer gasket and bolt** to remove the **fuel bowl**.
5. Inspect **float** to ensure it freely moves.
6. Remove the **float** by sliding out the **float pin**.
7. Inspect the **fuel inlet needle**, and under the carb where it will seat. Both must be spotless. Check the **fuel inlet spring** for damage.
8. Use a flat head screwdriver to unscrew the **fuel jet**. The **air jet** will come out with it. Both have very small holes that must be clean.
9. Spray carb cleaner up into the carb where the **air jet** was located. Also, spray carb cleaner in both jets located on either side of the **choke shutter port**. Metal parts can be soaked in carb cleaner.
10. Dry all parts and reassemble carburetor. Test the machine with fresh gasoline.

*Note: In some case, the carburetor may need to be replaced if cleaning is unsuccessful.

Preventive maintenance:

1. Only use clean, fresh fuel.
2. Ensure fuel strainer is present and intact when filling the gas tank.
3. Occasionally empty sediment bowl on the carb.
4. Use fuel stabilizer to prolong quality of the gasoline.
5. When putting the unit into storage add fuel stabilizer to the remaining gasoline in the tank. Then turn on the machine and run it dry to use up all the fuel the carburetor, so it is dry as possible.