

Cleaning & Replacing Hydro Generator

Models: 520HN



BOSCH

Tools needed:

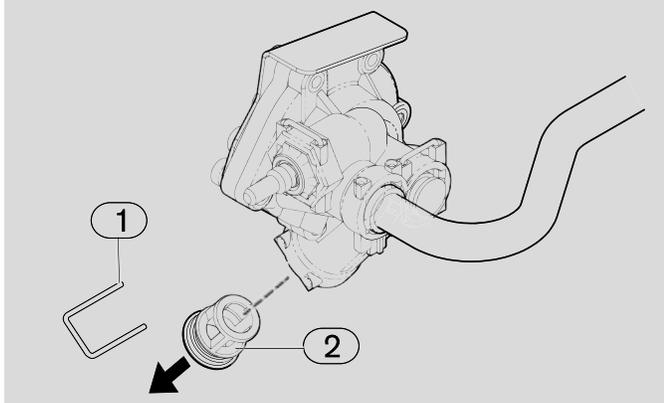
- ▶ Phillips head screwdriver
- ▶ Flat head screwdriver

Removing hydro generator

1. Shut off gas to heater.
2. Shut off water supply to the heater using installer supplied cold water shut-off valve. If not installed, install before proceeding.
3. Open lowest hot water faucet to drain lines and relieve pressure in heater.
4. Position a bucket below water connections to water heater.
5. Remove the retaining clip (Fig. 1, Num. 1) from the bushing on the water valve.
6. Remove the bushing (Fig. 1, Num. 2) from the water valve. If water filter comes out during this step, reinstall after heater is drained.

Water valve

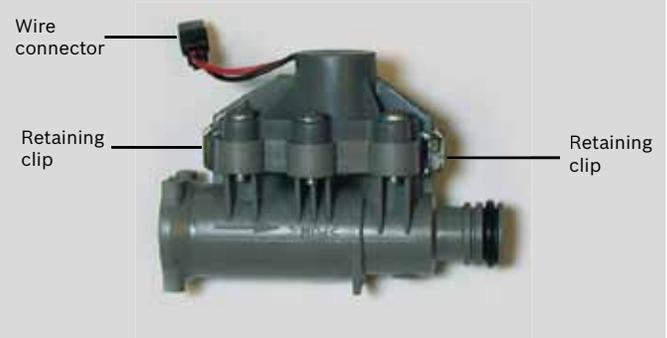
Figure 1



7. Contents of heater and water lines will drain.
8. Disconnect connector on the wire leads coming from the hydro generator. (Fig. 2)

Hydro generator uninstalled

Figure 2



9. Remove bottom retaining pin and top clip from hydro generator to disconnect piping. (Fig. 3)
10. Carefully separate piping from both ends of the hydro generator. Pull hydro generator free from heater and bring to clean working environment.

Hydro generator installed

Figure 3



Cleaning hydro generator

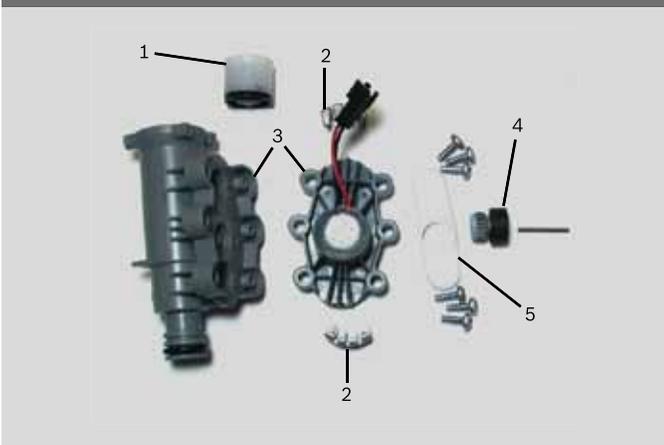
1. Remove inner venturi. Gently push a philips head screwdriver in the smaller outlet side of hydro generator until venturi comes out the other end. (Fig. 4, pos. 1)
2. Clean and flush venturi of any build up or debris.
3. Remove 2 retaining clips on generator by prying them off with a flat head screwdriver. (Fig. 4, pos. 2)
4. Remove 6 philips head screws and separate the hydro-generator halves being careful to catch any internal components that may fall out. (Note: There is a black rubber o-ring between the halves that needs to be in place for reinstallation.) (Fig. 4, pos. 3)
5. Remove the flow wheel (with magnet) (Fig. 4, pos. 4) from the internal steel axle with the white oval shaped component. (Fig. 4, pos. 5)
6. Clean all components as well as the inside of the generator walls with rubbing alcohol and a clean cloth. Inspect flow wheel magnet for cracks. Inspect flow wheel blades to ensure they are intact. Flush flow wheel blades with water if they are clogged with debris.
7. Clean internal steel axle shaft with clean rag.
8. Slide flow wheel with magnet assembly (magnet facing in) on the internal steel axle. Ensure that it spins freely.
9. Reinstall white oval shaped component over internal steel axle (flat side facing in).
10. Reassemble the two halves of the hydro generator, lining up the screw holes; Ensure black o-ring is in place between the two halves.
11. Reinstall 6 philips head screws being careful not to over tighten and replace retaining clips holding the two halves of the generator together.
12. Reinstall venturi (black side first) into larger inlet side of hydro generator. Gently push on venturi with Philips head screwdriver until it seats.

Reinstalling hydro generator

1. Reinstall hydro generator onto heater. Secure piping in and out of hydro generator using retaining pin and clip on the appropriate ends. (Fig. 2)
2. Reconnect lead wires from hydro generator to connector.
3. Reinstall bushing and retaining clip (and inlet filter if removed) in water valve and slowly open cold water shut-off valve while checking for leaks.
4. Turn on power using ON/OFF button, open gas supply and return heater to service.

Hydro generator breakdown

Figure 4



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