



9.9 Vapor Filtration Cartridge Assembly Replacement

Safety



Use lockout / tagout procedures prior to starting work.

9.9.1 Removing the 8" Vapor Filtration Cartridge Assembly (#1 and #2)

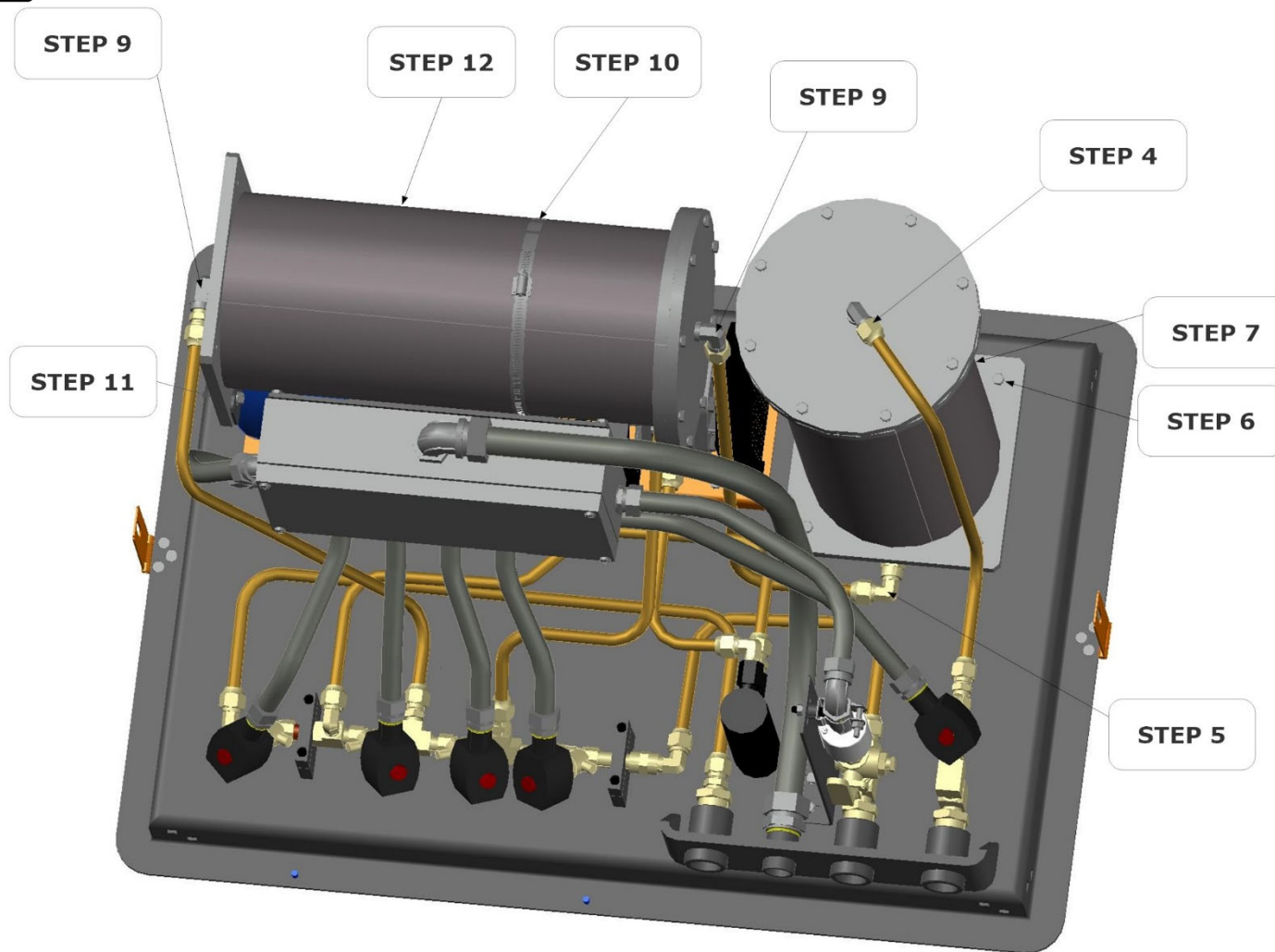
1. Turn OFF power to the VST Control Panel at the Power Switch located on the front of the VST Control Panel. (The power, ground, and neutral will be completely disconnected from the GREEN MACHINE).
2. Follow lockout & tagout procedures prior to starting work.
3. Unlock the hasps and remove the cover from the GREEN MACHINE.

Removing Vapor Filtration Cartridge Assembly #1 - See Figure 9-33.

4. Loosen the brass 45° flare nuts on the 90° elbow at the top of the cartridge.
Do not remove the tubing.
5. Loosen the brass 45° flare nuts on the 90° elbow at the bottom of the cartridge.
Do not remove the tubing.
6. Remove the 4-bolts holding the cartridge to the GREEN MACHINE base. Discard the bolts, lock washers, and aluminum risers.
7. Remove the cartridge from the GREEN MACHINE base.
8. Purge the removed cartridge with compressed air for 24 hours to remove any hydrocarbons (if any) before discarding.

Removing Vapor Filtration Cartridge Assembly #2 – See Figure 9-33.

9. Loosen the brass 45° flare nuts on the 90° elbows at the both ends of the cartridge.
Do not remove the tubing.
10. Loosen the screw on the band clamp. Do not try to remove the band clamp from the support structure.
11. Loosen and remove the two hex bolts on the end of the cartridge. Keep for reuse.
12. Remove cartridge from the support structure.
13. Purge the removed cartridge with compressed air for 24 hours to remove any hydrocarbons (if any) before discarding.



GM Replacing the Two Cartridges, 10/9/2019

Figure 9-33: Vapor Filtration Cartridge Assembly Replacement



9.9.2 Installing the New 8" Vapor Filtration Cartridge Assembly (#1 and #2)

Both new 8" Vapor Filtration Cartridge Assemblies will arrive with all the tubing fittings attached. Vapor Filtration Cartridge Assembly #1 will arrive with new bolts, washers, and aluminum risers.

Installing Vapor Filtration Cartridge Assembly #1

1. Install the 8" cartridge on the GM base with the new risers, bolts, and lock washer. Do not tighten the bolts at this time.

CAUTION: When installing the 45° flare nuts to the 90° elbow fitting, do not use any thread sealing compound when assembling the 45° flare nuts on the tubes.

CAUTION: When tightening the 45° flare nuts: Clamp the tube flare between nut and nose body of the tube by screwing the nut on finger tight. Tighten with a wrench an additional ¼ turn for a metal-to-metal seal.

2. Attach the tubing 45° flare nuts at the top of the cartridge to the 90° elbow.
3. Attach the tubing 45° flare nuts at the bottom of the cartridge to the 90° elbow.
4. With all the tubes installed and the flare nuts tightened, tighten the bolts holding the cartridge to the GREEN MACHINE base.

Installing Vapor Filtration Cartridge Assembly #2

5. Place cartridge #2 on the saddles of the support base. Orient the cartridge as shown in **Figure 9-33** with the 90° elbow point forward on the left-hand side, and the 90° elbow pointing down on the right-hand side.
6. Put the band clamp around the cartridge and loosely tighten the screws so the cartridge can slide to the left or right.
7. Replace the nuts and bolts on the left side of the cartridge.
8. Slide the cartridge so the left brass 45° flare nut can be screwed to the 90° elbow. Then tighten the nut as indicated above.
9. Install the 45° flare nut on the 90° elbow on the right side of the cartridge. Then tighten the nut as indicated above.
10. Tighten the screw on the band clamp.

Completing the Work:

11. Install the cover on the GREEN MACHINE and lock the hasps.
12. Remove the locks from lockout & tagout.
13. Turn ON power at the Power Switch on the front of the VST Control Panel. The GREEN MACHINE is now operational.