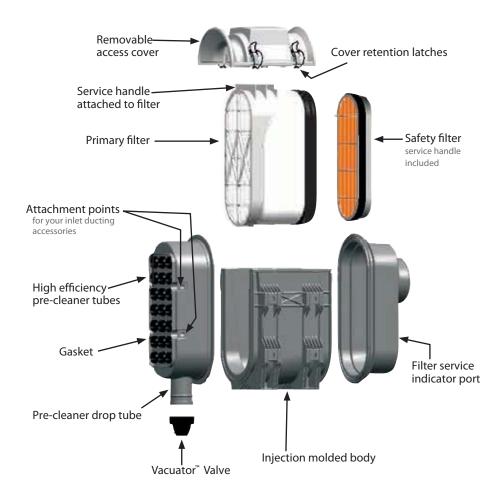
## Air Cleaner Service Instructions



#### Check Vacuator™ Valve & Pre-Cleaner Tubes

Shut off the engine. Inspect the Vacuator<sup>TM</sup> Valve for damage. If damaged, replace. If plugged or full of contaminant, check the pre-cleaner tubes, which should be free of contaminant. If plugged or excess contaminant is visible, the pre-cleaner tubes will need to be cleaned.

To clean the pre-cleaner tubes, remove the housing service cover and Vacuator Valve and leave the filter installed (to avoid dust from entering the air induction outlet). Use a low-volume of compressed air to gently blow out the separator tubes. The compressed air can be pushed through both sides of the tubes AND from the drop tube where the Vacuator Valve attaches.

If compressed air is not available or the use of compressed air was not effective due to dried contaminant within the housing, remove the air cleaner from the machine, cover the air intake pipe to prevent contaminant. Remove the primary and secondary filters and Vacuator Valve. Use a low pressure water (e.g., garden hose) to clean the tubes and inside of housing. Direct the flow of water through the separator tubes from both ends and repeat as needed to clean out the housing. Spray out the Vacuator Valve port, alternating between it and the separator tubes. Make sure that all internal housing surfaces are dry prior to reinstalling the filters, Vacuator Valve, and unit on the machine.



# **Element Replacement Instructions**

Note: Your air cleaner service cover may be in a different position than shown.

Side Service Access Models End Service Access Models





Shut off engine. Unlatch and remove the housing service cover.





Remove primary filter. Pull the filter out of housing. For side service access models: you must first loosen the filter gasket seal. Using the handle, which will tilt the filter to approximately a 5° angle.

Note: Remove any excess dirt and wipe out the housing before removing the safety (or secondary) filter.





Remove safety/secondary filter. Using the plastic handle on the face of the safety filter, pull the filter toward the center of the housing and remove.

Note: A safety/secondary filter only needs to be replaced at every third primary air filter change.





Inspect the new filter before installing. Visually check for cuts, tears, or indentations on the sealing surfaces before installation. If any damage is visible, do not install.



#### Side Service Access Models

#### End Service Access Models







If replacing safety/secondary filter, use the plastic handle on the safety filter, slide the filter at an angle into the outlet side and push in place until the filter seats firmly and evenly within the housing.

Note: On side service access models, insert the safety filter tab into the positioning slot before pushing the filter in place.





### Insert the primary filter.

For end service access models, slide the filter into the housing until the gasket seats against the housing.

For side service access models, slide the filter down at approximately a 5° angle until it hits the end of the housing. Rotate the filter toward the outlet section to complete the seal.





Replace the service cover.

For end service access models, insert the hinge tabs into the housing, tilt the service cover into place and secure latches.

For side service access models, place the service cover in position and fasten the latches.

Note: If the cover doesn't seat, remove and re-check the filter position. The cover will be difficult to install if the filter isn't installed correctly.





Visually inspect your inlet and outlet connections.

If your air cleaner has a Vacuator Valve, inspect the valve. Replace if any signs of wear or damage are visible.



#### **Air Filter Service Indicator**

This Air Filter Service Indicator represents the filter element condition without filter disassembly. The service sight glass indicates filter contamination by showing "red" or "green" in the sight glass. The visible amount of red on the indicator will increase as the dust in the element increases.

For maximum engine performance the filter should be changed or cleaned immediately after the "red" signal locks in full view.

 To reset the service indicator, press the button on the top of the indicator.

