

### PowerPleat<sup>™</sup> 11, 13 — Protection for Large Equipment RadialSeal<sup>™</sup> technology for guick and easy servicing

## Applications

• PowerPleat 11 air cleaner provides up to 437 cfm airflow. The PowerPleat 13 air cleaner provides up to 597 cfm airflow.

PowerPleat<sup>™</sup> Air Cleaners

 Temperature tolerance: -40 °F to 180 °F / -40 °C to 83 °C (Do not install next to turbocharger, muffler, exhaust pipes, or other hightemp components.)

### **Equipment Types**

- Compressors and generator sets.
- Excavators, bull dozers, cranes and large construction.
- On- and off-highway vehicles.
- Marine and offshore equipment.

### **Air Cleaner Features**

- Durable plastic housing corrosionfree and lightweight
- Two-stage air filtration. Built-in, tangential pre-cleaner ahead of primary filter removes up to 85% of incoming dust.
- Easy to service. No tools needed. Usually done in 5 minutes or less.
- Clockwise and counterclockwise inlet orientation versions available.
- Easy-to-fasten latches secure cover.
- Service indicator port is included.
- Welded-on mounting bracket.
- A plastic inlet hood and stack (up to 18" /457mm tall) may be added.



- **Filter Features**
- Filters have RadialSeal<sup>™</sup> Sealing Technology that creates a reliable, critical seal and makes servicing easy.
- One piece, molded urethane endcaps encase the filter media and liners.
- Metal-free primary filter element.
- Safety filter protects engine during in-field filter change outs.





## Contact Donaldson for PowerPleat availability in your region.







### Air in the Side, Out the End (standard flow filters)

# When Selecting an Air Cleaner . . .

Determine the airflow requirements of your engine, then find the corresponding cfm airflow in the table at right. The restriction numbers (shown in inches of water) indicate the approximate initial restriction of each model air

### **Initial Airflow Restriction**

Airflov 6"	w CFM 8"	@ H₂0 10"	Air Cleaner Model
324	377	424	G110468 / G110469 (Short body)
337	390	437	G110474 / G110475 (Long body)
443	516	580	G130374 / G130375 (Short body)
463	534	597	G130372 / G130373 (Long body)

cleaner at that cfm. If there are two air cleaner models that fit your parameters, choosing the one with the lower restriction will provide longer filter service life. When calculating total initial restriction of the entire air intake system, include the restriction caused by ducting, elbows, and pre-cleaners. See pages 271-272 for ducting restriction estimates.

### PowerPleat 11 – 13 Air Cleaner Performance Curves\*



### G130374/G130375



### G110474/G110475



### G130372/G130373



\*Results generated using laboratory testing pursuant to ISO5011. Actual performance during use may vary depending on multiple factors, including specific product configuration, external conditions and application.



# **PowerPleat 11, 13 Specifications**



Clockwise and counterclockwise inlet orientations are determined by the airflow path inside the air cleaner when looking into the outlet, as illustrated above with the blue arrows showing airflow.



### PowerPleat 11, 13

Air Cleaner Models	Inlet Orientation	Inlet Dia. (A)	Outlet Dia. (B)	Body Dia. (C)	Housing Length (D)	Service Clear. (I)	Weight Ibs kg
G110468	CCW	5.0"	4.5"	12.2"	13.8"	13.8"	10.1 lb
		127 mm	114 mm	310 mm	350 mm	350 mm	4.6 kg
G110469	CW	5.0"	4.5"	12.2"	13.8"	13.8"	10.1 lb
		127 mm	114 mm	310 mm	350 mm	350 mm	4.6 kg
G110474	CCW	5.0"	4.5"	12.2"	19.3"	19.3"	12.6 lb
		127 mm	114 mm	310 mm	490 mm	490 mm	5.7 kg
G110475	CW	5.0"	4.5"	12.2"	19.3"	19.3"	12.6 lb
		127 mm	114 mm	310 mm	490 mm	490 mm	5.7 kg
G130374	CCW	6.0"	5.0"	13.5"	16.7"	19.3"	14.3 lb
		152 mm	127 mm	342 mm	425 mm	490 mm	6.5 kg
G130375	CW	6.0"	5.0"	13.5"	16.7"	19.3"	14.3 lb
		152 mm	127 mm	342 mm	425 mm	490 mm	6.5 kg
G130373	CCW	6.0"	5.0"	13.5"	20.9"	23.6"	17.6 lb
		152 mm	127 mm	342 mm	530 mm	600 mm	8.0 kg
G130372	CW	6.0"	5.0"	13.5"	20.9"	23.6"	17.6 lb
		152 mm	127 mm	342 mm	530 mm	600 mm	8.0 kg



# PowerPleat<sup>™</sup> Air Cleaners



## PowerPleat 11, 13 Service Parts & Accessories



Outlet Hump Hose ..... P105610

Outlet band clamp..... P148345

0-ring seal..... P627758

Vacuator<sup>™</sup> Valve ..... P776008

- 3 = Shipped with air cleaner initially
- 8 = Cover assembly includes latches but no
- Vacuator™ Valve

Outlet Hump Hose ..... P105610

Outlet band clamp..... P148345

0-ring seal..... P627758

Vacuator<sup>™</sup> Valve ..... P776008



# PowerPleat<sup>™</sup> Air Cleaners Service Instructions



#### Check the Restriction Replace the filter only when the restriction level has reached the maximum recommended by the engine or equipment manufacturer or on a regular service

schedule.



PowerPleat 11, 13 servicing information is provided as a best practice guide. It is not intended to replace or

supersede the service instructions supplied by your engine or vehicle manufacturer.

**Remove the Primary Filter and** check the Vacuator<sup>™</sup> Valve

Shut off the engine. Unlatch the service cover.

Visually inspect and check Vacuator<sup>™</sup> Valve, and replace if needed.

Because of its RadialSeal<sup>™</sup>, the filter fits tightly over the outlet tube and there will be some initial resistance, similar to breaking the seal on a jar. Gently move the end of the filter back and forth slightly to break the seal while rotating. Pull straight out to avoid knocking the filter against the safety filter support frame.

Once the primary filter has been removed, clean the primary filter seal surface with a damp cloth.









Make sure the valve is flexible and not inverted. damaged or plugged. Replace it if damaged or if it looks like any of these images. A damaged or missing vac valve will disrupt the designed flow of air through the air cleaner.

## Visually Check the Safety **Filter and Clean Both Surfaces** of the Outlet Tube

If your air cleaner has a safety filter, visually check the safety filter in place for signs of damage. Do not remove the safety filter unless it is damaged or due for replacement. Also verify that the safety filter is properly seated in the housing.

The safety filter should be replaced every three primary filter changes, unless it has become excessively contaminated. Use a clean damp cloth to wipe both the filter sealing surface and the inside of the outlet tube. Ensure that the outlet tube sealing area is undamaged.

Contaminant on the sealing surface could hinder an effective seal and cause leakage. If the safety filter is to be replaced, avoid leaving the outlet tube exposed to the air.

Never leave air cleaner sitting without a safety filter.





Note: The PowerPleat 13 is shown above. The PowerPleat 11 has a different style of safety. See image on page 63.





Continued on next page



# PowerPleat<sup>™</sup> Air Cleaners Service Instructions





### Inspect the Old Filter

Inspect the old primary filter for any signs of leaks. A streak of dust on the inside of the filter is a telltale sign of a possible leak.

If you suspect a possible leak, verify the safety element is in good condition as it may need to be changed as well. Also make sure to follow Step 8 to ensure all connections are tight so that dirty outside air cannot bypass the air cleaner.







#### Inspect the New Filter Inspect the new filter for any damage

Inspect the new filter for any damage that may have occurred through mishandling. NEVER install a damaged filter. Visually check the inside of the open end, which is the sealing area.

Do not wipe the filter seal area as the new Donaldson filter may have a lubricant on the seal to aid installation.







### Insert the New Filter

First, if you're servicing the safety filter at this change-out, seat it properly into position before installing the primary filter. Insert new filters carefully. Seat the primary filter by hand, making certain it is inserted completely into the air cleaner housing. To complete a tight seal, apply pressure by hand at the outer rim of the filter, not the flexible center.

No cover pressure is required to hold the seal in place and one should NEVER use the service cover to apply pressure. This could damage the housing and fasteners and void the warranty. If the service cover presses against the filter before the cover is fully in place, remove the cover. With cover off, push the filter farther into the air cleaner by hand and then the cover will go on with no extra force. Once the filter is in place, secure the service cover.



## PowerPleat<sup>™</sup> Air Cleaners Service Instructions



## Check Inlet Hoods and Pre-Cleaners

Check any intake hoods and precleaner devices during maintenance routines.

A missing inlet hood will significantly shorten filter life. If your unit had a hood or pre-cleaner originally, make sure you replace it. Check openings and tubes on pre-cleaners to make sure they are not plugged. Replace any units that are damaged. Damaged or dented units will not operate properly.







### Check Connectors for Tight Fit

Make sure service indicators are reset and in proper working order.

Check that all mounting bands, clamps, bolts, and connections in the entire air cleaner system are tight.

Check for holes in piping, and repair or replace as needed.

Any leaks in the intake piping will admit dust directly to the engine.

