

STG Donaclone: Field Proven & Reliable

Heavy-Duty Workhorse for Construction & Off-Highway Applications

That Donaldson's STG Donaclone™ is arguably the most commonly used air cleaner, on the widest variety of heavy-duty equipment in the world, is a testament to its reliability and durability. With its two-stage air cleaning, heavy-duty construction, and variety of configurations, the STG works well in many applications.

Powerful Two-Stage Filtration

The first stage of this powerful air cleaner consists of a cluster of our exclusive, patented Donaclone™ tubes. They spin the incoming air to create a centrifugal force that separates up to 95% of the dust and dirt in the airstream. Donaclone™ tubes have no moving parts – so there is nothing to break down or maintain. They function properly whenever the engine is running.

This pre-cleaned dust is collected in a dust cup on the bottom of the air cleaner housing.

The second stage of filtration is the primary filter, a cylindrical-shaped unit of specially-developed pleated filter media, designed to trap and stop dust particles, both large and small. The result is air to your engine that is up to 99.9% contaminant free!

A safety filter, which fits inside the primary filter, is standard on all models for protection during primary filter changeout. Physical orientation does not affect the proper functioning of



This STG Donaclone, mounted on a large mining machine, is protecting the engine from harmful dirt in this severely dusty environment.

either cleaning stage! The STG operates well mounted horizontally or vertically. (Note that if mounting horizontally, the Vacuator™ Valve option on the dust cup is necessary.)

Mounting: Sturdy mounting brackets are attached to the top section of the STG; you will also need to order one separate mounting band for the lower body.

If you're replacing a worn out air cleaner, be sure to check ductwork, clamps, and other intake system parts that may also need replacing.

STG air cleaners feature a corrosion-resistant, chemical-resistant polymer coating. This black coating isn't paint, rather it's a pigmented polyester that provides a long-lived, hard protective finish.

Versatile STG Provides Airflow to 1760 cfm Choose Peripheral or Tubular Inlet, Horizontal or Vertical Mount

Applications

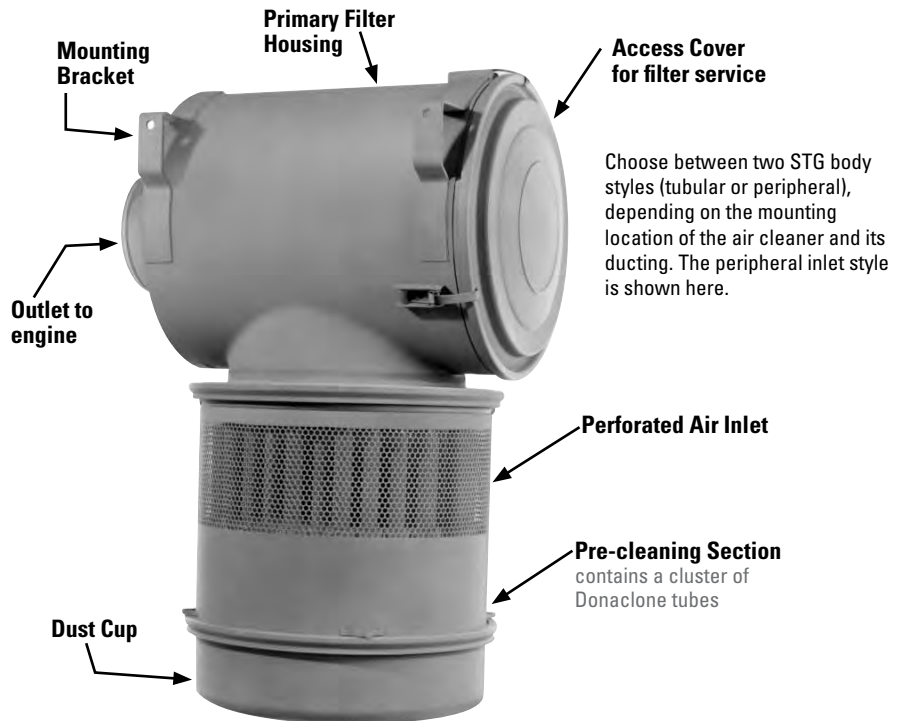
- Allows 390 to 1760 cfm airflow throughput per air cleaner
- Horizontal or vertical installation
- Off-road, high dust conditions
- Ideal for scrapers, earth movers, graders

Air Cleaner Features

- Very reliable! Only one critical filter seal!
- Airflow throughput can be doubled by using two air cleaners
- Two body styles (peripheral inlet and tubular inlet) to accommodate location and ducting
- Optional inlet shroud available for peripheral style
- When the air cleaner is mounted directly on the engine and there is clearance around it for airflow, choose the peripheral inlet style (see photo on right)
- When the air cleaner is mounted above the cab or somewhere far from the engine to get above the dust cloud, choose the tubular inlet style, which will accept ducting into the inlet
- Built-in Donaclone pre-cleaning tubes separate up to 95% of incoming dust to dust cup before it reaches the filter, resulting in more thorough cleaning and fewer filter changes!
- Choose the dust cup best suited to your maintenance practices: (1) the quick-release style for easy, manual emptying, or (2) a dust cup with a Donaldson Vacuator Valve that expels the dust automatically
- All models include a fitting for a filter service indicator

Filter Features

- Replacement primary filter choices: Standard life filters (for scheduled maintenance) and Donaldson Endurance extended service high efficiency filters
- Safety filter on all models



HEAVY DUST



How the Two-Stage STG Donaclone Works

Air is drawn in through the perforations in the lower part of the unit and forced down through a bank of Donaclone tubes. The Donaclone tubes spin the air so that centrifugal force causes the heavier dust particles to separate from the airstream.

While these particles fall into the dust cup at the bottom, the partially cleaned air is directed upward, into the primary filter in the upper portion of the unit. The specially-developed pleated media in the primary filter stops up to 99.9% of the remaining dust, allowing clean air to pass to the engine.

When specifying an Air Cleaner . . .

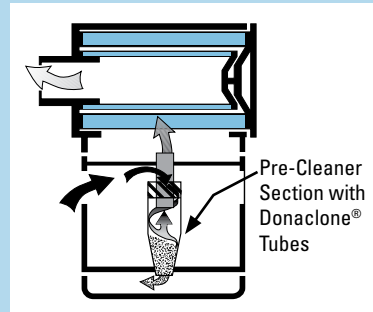
Determine the airflow requirements of your engine, then find the corresponding cfm airflow in the table at right. The restriction numbers (shown in inches of water) indicate the approximate initial restriction of each model air cleaner at that cfm. If there are two air cleaner models that fit your parameters, choosing the one with the lowest restriction will provide longest filter service life. When calculating total initial restriction of the entire air intake system, include the restriction caused by ducting, elbows, pre-cleaners, etc.

Initial Airflow Restriction

CFM @ "H2O			Air Cleaner Model
6"	8"	10"	
STG WITH PERIPHERAL INLET			
710	840	950	G140076
1015	1175	1320	G160077
1360	1570	1760	G161006
STG WITH TUBULAR INLET			
390	455	515	G120332
915	1065	1200	G160445
1127	1308	1466	G161020

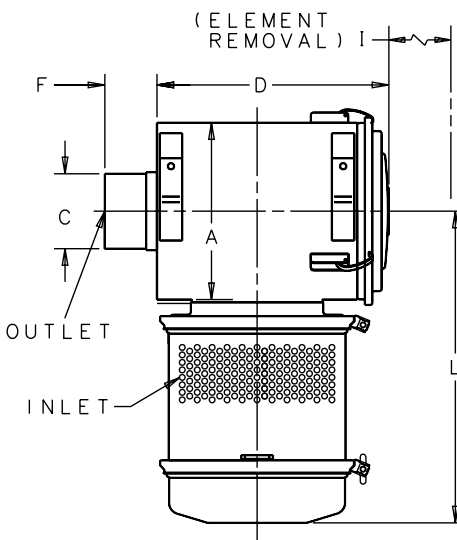
Airflow Pattern "G"

Air in the side, through the pre-cleaner, out the end of the air cleaner (upper) portion.

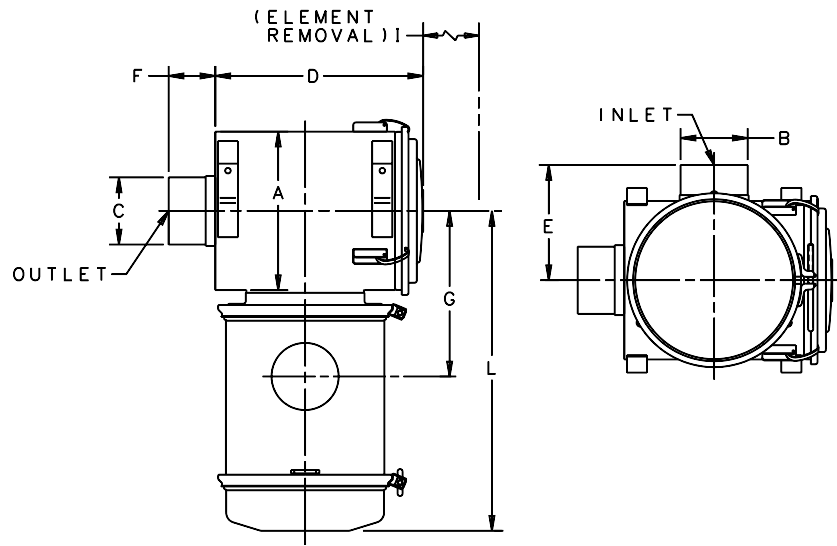


STG Specification Illustrations

with Peripheral Inlet



with Tubular Inlet



STG Donaclone™ Specifications

Air Cleaner Models	Body Diameter (A)		Inlet Diameter (B)		Outlet Diameter (C)		Length (D)		(E)		Inlet Length (F)		(G)		Service Clearance (I)		(L)		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg
STG WITH PERIPHERAL INLET																				
G140076	14.00	356	n/a		6.00	152	17.38	441	n/a		3.88	99	15.47	393	15.25	387	24.16	614	75	34
G160077	16.00	406	n/a		7.00	178	19.69	500	n/a		3.88	99	17.29	439	17.00	432	26.16	664	91	41
G161006	16.00	406	n/a		8.00	203	26.06	662	n/a		3.50	89	17.30	439	23.38	594	26.93	684	115	52
STG WITH TUBULAR INLET																				
G120332	11.81	300	5.00	127	5.00	127	15.43	392	7.88	200	3.94	100	11.54	293	13.19	335	22.06	560	53	24
G160445	16.00	406	7.00	178	7.00	178	19.59	498	11.00	279	3.87	98	14.81	376	17.25	438	26.31	668	93	42
G161020 ¹	16.00	406	6.00	152	8.00	203	26.06	662	10.02	255	3.50	89	14.06	357	23.38	594	26.31	668	120	55

1 - G161020 has two inlets, each 6" (152mm) in diameter

NOTE: All STG models are tapped to accept a filter service indicator

HEAVY DUST

STG Service Parts

G140076

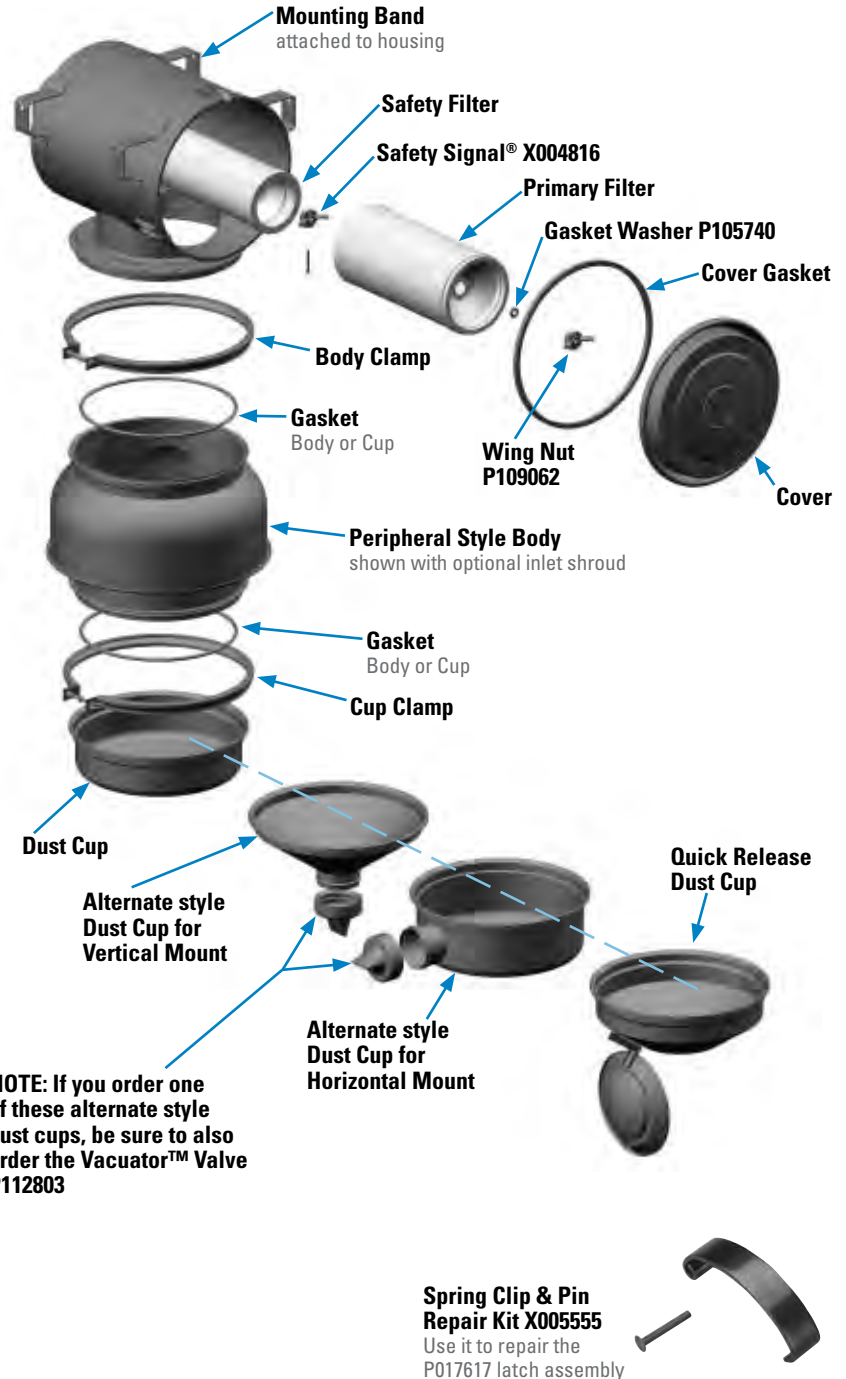
clamp, cup.....	P100866
cover latch assembly.....	P017617
dust cup.....	P1008603
filter, primary - SM.....	P181041
filter, primary - ES & HE.....	EAF5041
filter, primary.....	P1820413
filter, safety.....	P119370
gasket, body or cup.....	P017335
gasket, cover.....	P016972
gasket kit.....	X0035389
inlet shroud (optional).....	P102870
mounting band.....	H0003502
spring clip & pin.....	X005555

G160077

body, lower.....	P115023
clamp, body.....	P100780
clamp, cup.....	P100789
cover.....	P109153
cover latch assembly.....	P017617
dust cup.....	P1007943
dust cup, quick release.....	P107377
dust cup, vac valve, horz.....	P103530
dust cup, vac valve, vert.....	P104973
filter, primary - SM.....	P181039
filter, primary - ES & HE.....	EAF5039
filter, primary.....	P1820393
filter, safety.....	P114931
gasket, body or cup.....	P017336
gasket, cover.....	P017367
gasket kit.....	X0035399
inlet shroud (optional).....	P101759
mounting band.....	H0003512
spring clip & pin.....	X005555

G161006

clamp, body.....	P100780
clamp, cup.....	P100789
dust cup.....	P1007943
dust cup, quick release.....	P107377
dust cup, vac valve, horz.....	P103530
dust cup, vac valve, vert.....	P104973
filter, primary - SM.....	P181042
filter, primary - ES & HE.....	EAF5042
filter, primary.....	P1820423
filter, safety.....	P128408
gasket, body or cup.....	P017336
gasket, cover.....	P017367
gasket kit.....	X0035399
inlet shroud (optional).....	P101759
mounting band.....	H0003512



NOTE: If you order one of these alternate style dust cups, be sure to also order the Vacuator™ Valve P112803

NOTES:

- 2 = Two required for proper installation
- 3 = Shipped with air cleaner initially
- 9 = Gasket Kit includes all gaskets listed

ES = Extended Service
HE = High Efficiency
SM = Scheduled Maintenance

STG Service Parts

G120332

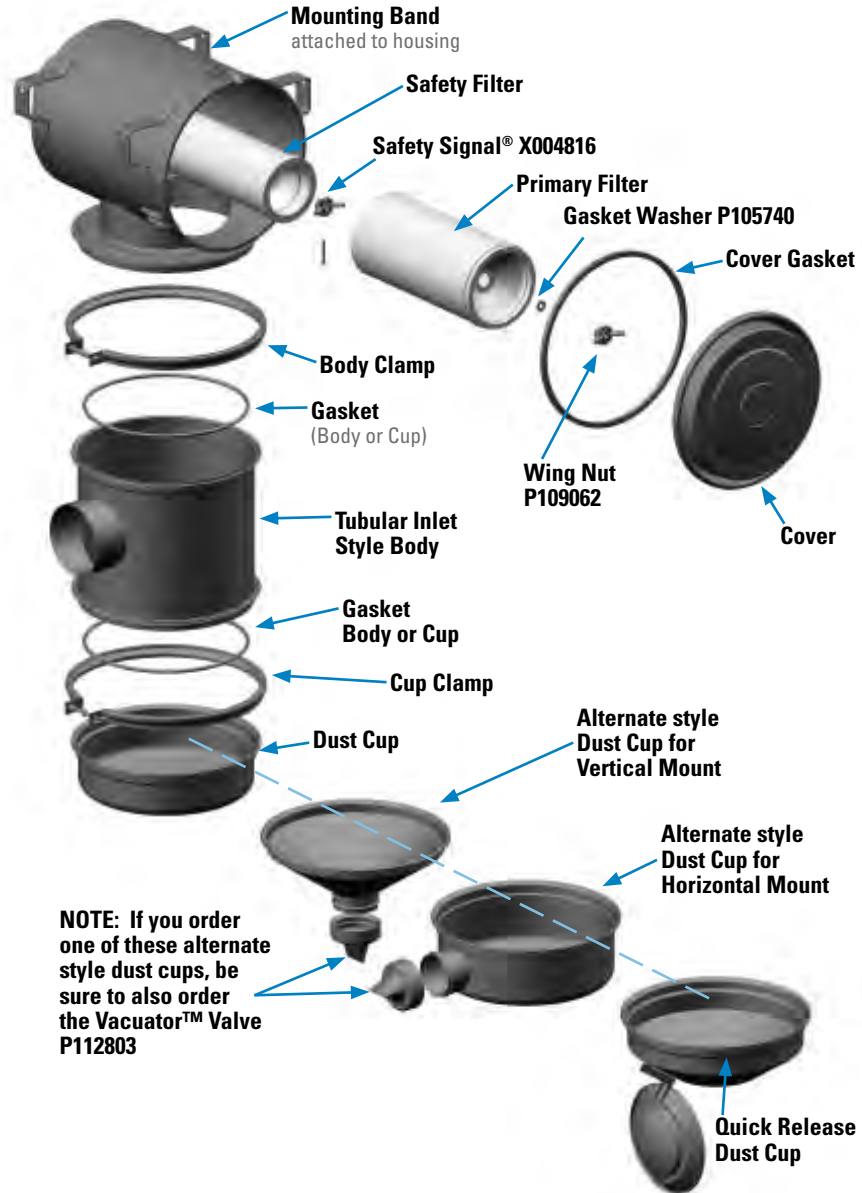
body, lower.....	P110875
dust cup, quick release	P107375
filter, primary - SM	P181044
filter, primary - ES & HE.....	EAF5044
filter, primary.....	P1820443
filter, safety	P119371
gasket, body or cup	P017804
gasket, cover	P017365
mounting band.....	H000349.....2
spring clip & pin	X005555

G160445

cover	P109153
cover latch assembly	P017617
dust cup	P1007943
dust cup, quick release	P107377
dust cup, vac valve, horz	P103530
dust cup, vac valve, vert	P104973
filter, primary - SM	P181039
filter, primary - ES & HE.....	EAF5039
filter, primary.....	P1820393
filter, safety	P114931
gasket, body or cup	P017336
gasket, cover	P017367
gasket kit	X0035399
mounting band.....	H0003512
spring clip & pin	X005555

G161020

dust cup.....	P1007943
dust cup, quick release	P107377
dust cup, vac valve, horz	P103530
dust cup, vac valve, vert	P104973
filter, primary - SM	P181042
filter, primary - ES & HE.....	EAF5042
filter, primary.....	P1820423
filter, safety	P128408
gasket, body or cup	P017336
gasket, cover	P017367
gasket kit	X0035399
mounting band.....	H0003512



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