PowerCore® G2 Filtration Technology
for Engine Air Intake Systems

Big Performance, Small Footprint

The second generation of Donaldson PowerCore® Filtration Technology is now available for engine air intake systems.

Donaldson PowerCore® G2 delivers longer life and less restriction in one-third less space than our original PowerCore.

Proven History

Donaldson PowerCore® Filtration Technology has been delivering peak air filtration performance in compact configurations for nearly a decade. Millions of units have been installed around the world in on- and off-road applications.
Reliable
Since 1999, Donaldson has produced and sold millions of PowerCore units that operate on a wide variety of vehicles and equipment. Donaldson is committed to quality management. View our certifications and registrations at www.donaldson.com in the About Donaldson section.

Project Management
Our project teams use a stage-gate product development process and Six Sigma methodologies to ensure effective product development and introductions while making sure no critical design or manufacturing details are overlooked.

Aftermarket Retention
PowerCore® G2 Filtration Technology provides world leading filtration performance and unique features that ensure maximum engine protection and help bring your end users back to your service network for original replacement parts for the life of the vehicle.

Global Supply Chain
Donaldson has the expertise, processes and facilities in place to ensure a constant supply of products to meet the demands of our worldwide customers.

Expect the Best. Demand the Original.
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Proven History

Donaldson PowerCore® Filtration Technology has been delivering peak air filtration performance in compact configurations for over a decade. Millions of units have been installed around the world in on- and off-road applications.
Donaldson PowerCore® Filtration Technology has been protecting engines and equipment for over a decade - with millions of units installed worldwide.

PowerCore G2 Filtration Technology offers size reduction and geometric flexibility to overcome the tight space constraints resulting from today’s complex emissions systems. Its customizable filtration performance features lower restriction and longer filter life.

With Donaldson PowerCore filtration technology you get equal or better performance in significantly less space, the freedom to design unique configurations to fit tight spots, and overall design simplicity.

For given filter life and efficiency targets, the PowerCore G2 configurations can result in a 30% reduction in size from previous axial flow filters and a 60% reduction in size from cylindrical filters.

Patents issued and Pending
3x More Capacity and up to 10x More Efficient
with Ultra-Web Advanced Nanofiber Technology compared to conventional cellulose filters.

**PowerCore G2 Ultra-Web**

- Invented by Donaldson in the 1980s
- Engineered to perform in extreme temperature and humidity conditions, unlike ordinary nanofibers
- Unique, advanced nanofibers collect contaminant on the media surface
- High efficiency, longer filter life
- High capacity – holds more contaminant
- Identifiable by the blue media color
- Over 1 billion square feet sold

**Ultra-Web Cross Section**

- Dust Particles
- Cellulose Media Substrate
- Nanofiber Layer
- Airflow

**Dust Holding Capacity**

<table>
<thead>
<tr>
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<td>Relative Dust Capacity</td>
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**Overall Efficiency**

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**Geometric Flexibility**

Provides a matrix of performance advantages!

**PowerCore Air Filters**

- Easier and cleaner to service
- Lighter
- Non-metal
- Rugged construction

**Intake Ducts & Plenums**

**Service Indicators**

**Secondary Filters**

**Branding**
Donaldson PowerCore® Filtration Technology has been protecting engines and equipment for almost a decade—with millions of units installed worldwide.

PowerCore G2 Filtration Technology offers size reduction and geometric flexibility to overcome the tight space constraints resulting from today’s complex emissions systems. Its customizable filtration performance features lower restriction and longer filter life.

Conventional Cellulose Air Cleaner

Original PowerCore® Air Cleaner

PowerCore G2 Air Cleaner

With Donaldson PowerCore filtration technology you get equal or better performance in significantly less space, the freedom to design unique configurations to fit tight spots, and overall design simplicity.

PowerCore Straight-Through Airflow Design

- Reduced space needs — by as much as half that of a conventional filter
- Maximum air filter design flexibility

Dirty air travels in and is filtered in one pass through the media.

Clean air travels on to your engine.

Filter media is formed into flutes — these flutes are layered to give tight, rugged structure to the filter.

- Increased dust and soot holding capacity
- Reduced restriction across the filter

Fluted channels are alternately sealed; air enters an open flute and is forced to exit through an adjacent flute

Contaminants stay inside the filter — and won’t drop back into an unprotected air filter housing.

For given filter life and efficiency targets, the PowerCore G2 configurations can result in a 30% reduction in size from previous axial flow filters and a 60% reduction in size from cylindrical filters.

Same Performance or better in a Smaller Package

Patents issued and Pending

Custom Housing Features

Sensor Ports
Built-in Scavange Tubes
Pre-cleaning
Filter Service Access
Built in Mounting Brackets
3x More Capacity and up to 10x More Efficient with Ultra-Web Nanofiber Technology compared to conventional cellulose filters.

Ultra-Web
Nanofiber Filtration by Donaldson

- Invented by Donaldson in the 1970s
- Unique, advanced nanofibers collect contaminant on the media surface
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PowerCore Air Filters

- Easier and cleaner to service
- Lighter
- Non-metal
- Ragged construction

Provides a matrix of performance advantages!
Proven Technology
Even Better

Our philosophy of continuous improvement brings a new generation of innovation and performance solutions to original equipment manufacturers – PowerCore® G2.

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