

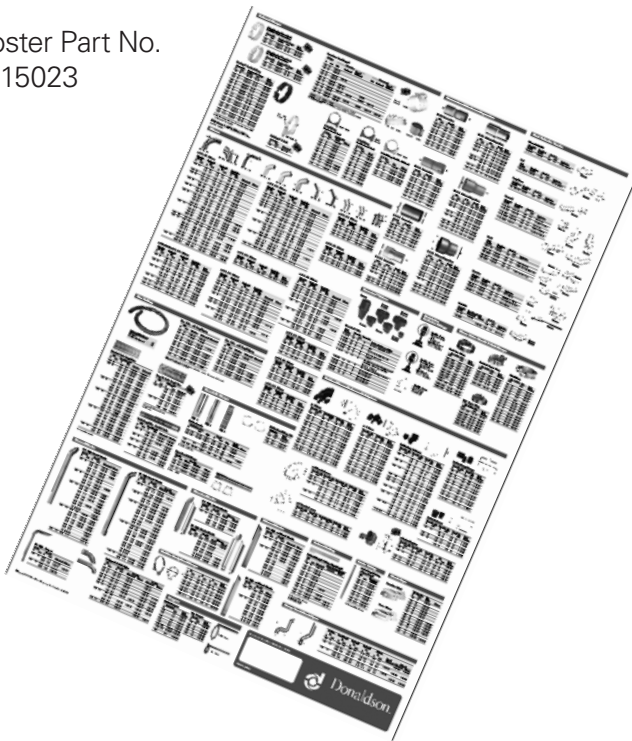
## Free Exhaust Accessory Poster

For mechanics and parts counter personnel, this “door width” sized poster (25"x38" / 635 mm x 965 mm) is available from Donaldson or your local Donaldson distribution outlet.

This handy visual makes it easy for your customers to identify the replacement accessories they're looking to replace.

The parts information is updated annually so if you have an old version, consider updating.

Poster Part No.  
F115023



## Section Index

Donaldson offers an extensive line of accessories available in a variety of materials for both vertical and horizontal exhaust systems.

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### Intake Accessories

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## Common Components Of Heavy Duty Exhaust Systems

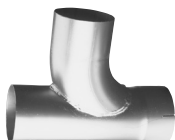
### Bent Tubes & Elbows

For directional changes of exhaust flow in exhaust systems. Available in common angles (90°, 67° and 45°) for both O.D. and I.D. tube connections.



### Wye Connector

For joining legs of dual manifold outlet to form a single exhaust system. Wye connectors can provide an additional 3 to 7 dBA exhaust noise reduction over that of the primary muffler and may also be used to replace conventional wye pipe.



### Resonator

Secondary noise reduction component that generally provides 2 to 3 dbA additional noise reduction.



### Tubing (Straight or Flexible)

Straight or flexible tubing for connection to muffler or resonator. Purchased in standard lengths and cut to size if needed.

### Muffler

The primary component in an exhaust system for engine noise reduction.

### Exhaust Filter or Emissions Device

Traditional exhaust systems with mufflers are transitioning from noise reduction devices to emissions reduction devices to meet federal and state regulations. The primary component in the emissions device converts or captures exhaust emissions to reduce overall engine emissions. An emissions reduction device can be an add-on installed into the existing system or a retrofit muffler replacing the original muffler.



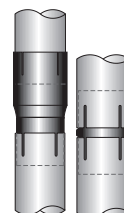
### Hanger

Secures the muffler or pipe horizontally or vertically to chassis or side of cab.



### Reducers, Connectors & Expanders

Shorter length tubes used for connecting two other exhaust pipes of different diameters or the same diameter.



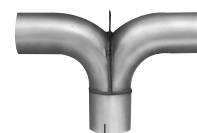
### Spark Arrestor

An exhaust system add-on used to capture sparks emitted from internal combustion engines through the exhaust system. All Donaldson models are U.S. Forest Service approved.



### Splitter Tee Adapter

An adapter pipe with one inlet and two outlet tubes used to convert a single exhaust system to a dual exhaust system.



### Stack or Tail Pipes

Vertically mounted outlet pipe; available in curved outlet or straight squared configuration.



Note: Super stacks also available that can offer an additional 2 to 3 dBA noise reduction with no backpressure penalty.

### Stack Cap

Moisture protector used on vertically mounted mufflers or stack pipes.



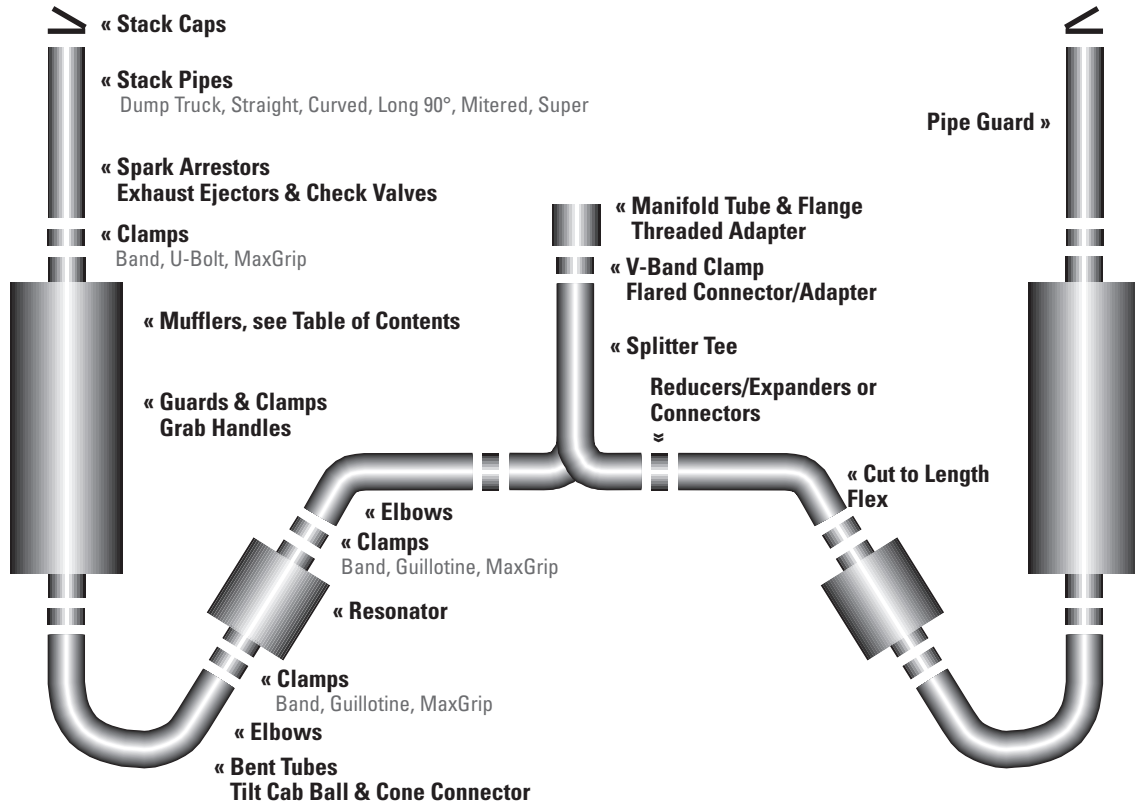
### Clamps

Exhaust systems use a variety of exhaust clamps. Selecting the proper clamp for the job is critical to a strong, reliable joint connection. Common types include u-bolt, band clamps, bent bolt clamps and v-band clamps.

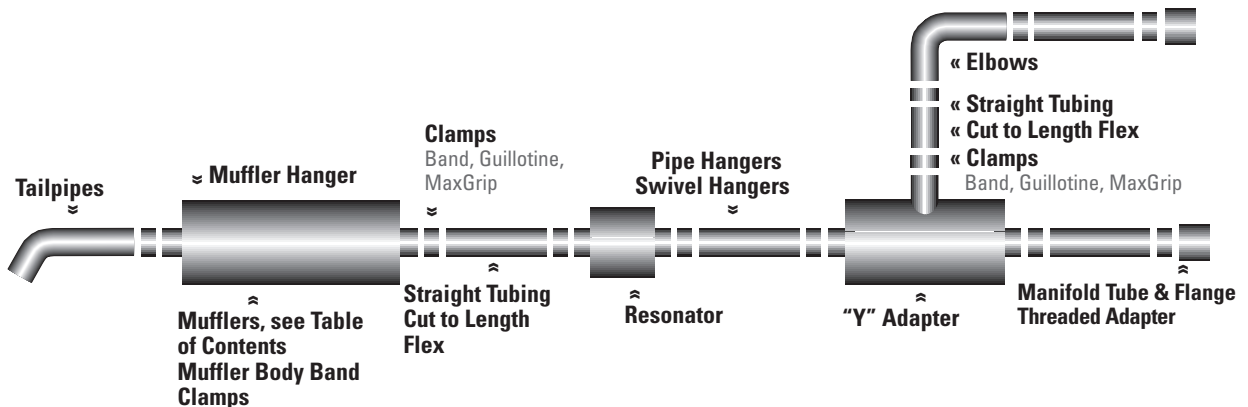


From the manifold to the exhaust stack, you'll find Donaldson can be the best source for your exhaust system accessories. The system diagrams below represent typical components found on exhaust systems.

## Vertical System Components (cab or stanchion mounted)



## Horizontal System Components (Chassis mounted)



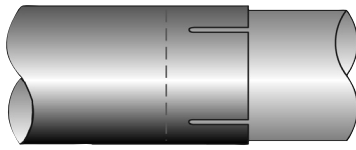
# Exhaust Joint/Connections

## Guide to Selecting the Best Clamp for the Exhaust Joint Connection

### Type of Joint/Connection

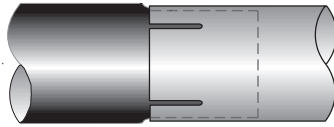
### Type of Clamp to Apply

(blue text = primary clamp recommendation)



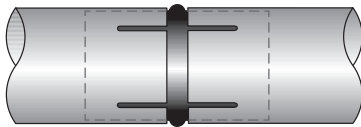
Exhaust - tube to tube Standard OD

- MaxGrip™ Bent Bolt**
- Stepped SealClamp™ (Aluminized or Stainless)**
- Offset MaxGrip™ Bent Bolt
- SealClamp™ Flat Band (Aluminized or Stainless)
- Narrow Band (Aluminized)
- U-Bolt (any type, any material)



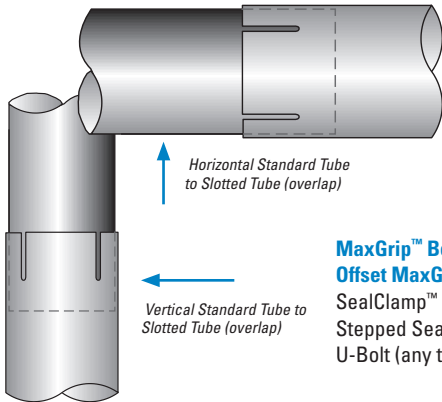
Slotted Tube to Shrunk OD

- MaxGrip™ Bent Bolt**
- SealClamp™ Flat Band (Aluminized or Stainless)
- Narrow Band (Aluminized)
- U-Bolt (any type, any material)



Slotted Tube to Slotted Tube  
(butt with internal connector)

- MaxGrip™ Bent Bolt (2 required per connection)**
- SealClamp™ Flat Band (Aluminized or Stainless)
- U-Bolt (any type, any material, 2 required per connection)

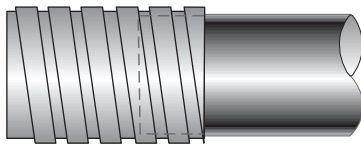


Horizontal Standard Tube to Slotted Tube (overlap)

Vertical Standard Tube to Slotted Tube (overlap)

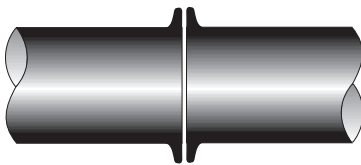
- MaxGrip™ Bent Bolt**
- Stepped SealClamp™ (Aluminized or Stainless)**
- Offset MaxGrip™ Bent Bolt
- SealClamp™ Flat Band (Aluminized or Stainless)
- Narrow Band (Aluminized)
- U-Bolt (any type, any material)

- MaxGrip™ Bent Bolt**
- Offset MaxGrip™ Bent Bolt**
- SealClamp™ Flat Band (Aluminized or Stainless)
- Stepped SealClamp™ (Aluminized or Stainless)
- U-Bolt (any type, any material)



Standard Tube to Flex Tube

- Stepped SealClamp™ (Aluminized or Stainless)**
- Offset MaxGrip™ Bent Bolt (with chevron)**



Flared, Lipped or Flange Connection

### V-Band Clamps



MaxGrip™ Bent Bolt



Offset MaxGrip™ Bent Bolt



Offset MaxGrip™ Bent Bolt (chevron design)



Flat Band SealClamp™



Stepped SealClamp™



U-Bolt Single, Round Band



U-Bolt Double, Flat Band



Narrow Band Accuseal®





Based on the type of exhaust joint, your choice of clamp to apply may be limited. But, when you're looking to purchase a clamp based on specific performance features, the information below may be helpful as you try to select the proper clamp for the application.

## Clamp Performance Rankings (10 high - 1 low)

### Holding Force

- 10 **Offset MaxGrip™ Bent Bolt**
- 10 **V-band Clamp**
- 8 **MaxGrip™ Bent Bolt**
- 7 U-bolt (any style or material)
- 5 SealClamp™ (any style or material)
- 3 Narrow Band (aluminized)

### Ease of Assembly

- 9 **MaxGrip Bent Bolt**
- 9 **Narrow Band (aluminized)**
- 8 **Offset MaxGrip Bent Bolt**
- 8 **Stepped SealClamp (aluminized or stainless)**
- 6 U-bolt (any style or material)
- 5 V-band Clamp
- 3 SealClamp Flat Band (aluminized or stainless)

### Sealing Properties

- 10 **Stepped SealClamp (aluminized or stainless)**
- 9 **V-band Clamp**
- 8 **SealClamp Flat Band (aluminized or stainless)**
- 6 MaxGrip Bent Bolt
- 6 Offset MaxGrip Bent Bolt
- 5 Narrow Band (aluminized)
- 3 U-bolt (any style or material)

### Appearance

- 10 **Stepped SealClamp (stainless)**
- 10 **V-band Clamp**
- 9 **Stepped SealClamp (aluminized)**
- 7 Offset MaxGrip Bent Bolt
- 7 Narrow Band (aluminized)
- 7 SealClamp Flat Band (stainless)
- 6 SealClamp Flat Band (aluminized)
- 5 MaxGrip Bent Bolt
- 5 U-bolt (double, flat band, chrome)
- 4 U-bolt (double, flat band, zinc)
- 4 U-Bolt (single, round band, chrome)
- 2 U-Bolt (double, round band, steel)
- 1 U-Bolt (single, round band, steel)

### Tube Deformation

- 10 **V-band Clamp**
- 9 **Stepped SealClamp (aluminized or stainless)**
- 8 **Offset MaxGrip Bent Bolt**
- 8 **SealClamp Flat Band (aluminized or stainless)**
- 7 MaxGrip Bent Bolt
- 7 Narrow Band (aluminized)
- 2 U-bolt (double, flat band, chrome or zinc)
- 2 U-Bolt (double, round band, steel)
- 1 U-Bolt (single, round band, chrome or steel)

### Price

- 10 **U-Bolt (single, round band, steel)**
- 9 **U-Bolt (double, round band, steel)**
- 8 **Narrow Band (aluminized)**
- 8 **SealClamp Flat Band (aluminized)**
- 8 **U-bolt (double, flat band, zinc)**
- 7 MaxGrip Bent Bolt
- 7 Offset MaxGrip Bent Bolt
- 7 SealClamp (other than aluminized)
- 6 U-Bolt (single, round band, chrome)
- 3 U-bolt (double, flat band, chrome)
- 1 V-band Clamp

### What Features Are Most Important to You?

- \_\_\_\_\_ Holding Force
- \_\_\_\_\_ Ease of Assembly
- \_\_\_\_\_ Sealing Properties
- \_\_\_\_\_ Tube Deformation
- \_\_\_\_\_ Appearance
- \_\_\_\_\_ Price

This same information about our clamp options is available in flyer F111237.

## Offset MaxGrip™ Bent Bolt Clamp

Donaldson introduces a series of bent bolt clamps for use on exhaust systems. The clamps are manufactured in heavy-duty aluminized steel to minimize corrosion.

- Clamps are reusable
- Aluminized band, stainless steel welds, deburred strap edges and finished with a heat resistance silver paint
- Self positioning for easy installation
- Protected by patents, both issued and pending



### Offset MaxGrip Bent Bolt

For Muffler to Stack Connections

Nominal I.D.	Functional I.D. Range	Part Number
in mm	inches mm	
4.00 102	4.04-4.21 103-107	M002164
5.00 127	5.04-5.21 128-132	M001865



### Offset MaxGrip Bent Bolt

For Tube to Flex Connections

Nominal I.D.	Functional I.D. Range	Part Number
in mm	inches mm	
4.00 102	4.04-4.21 103-107	M002134
5.00 127	5.04-5.21 128-132	M002135

Chevron design

## MaxGrip™ Bent Bolt Clamp

- More holding power than any other clamp tested
- Donaldson patented technology
- Clamps are reusable
- Aluminized band, stainless steel welds and deburred strap edges finished with heat resistant black paint
- Use these clamps on slotted, lapped tube connections and manifold connections
- Ideal for use on Donaldson "captured" slots for maximum sealing
- Coated bolts and threads
- Hardened flange nuts



### MaxGrip Bent Bolt Clamp

Nominal I.D.	Functional I.D. Range	Part Number
in mm	inches mm	
1.75 44	1.79-1.96 45-50	M001866
2.00 51	2.04-2.21 52-56	M001867
2.50 64	2.54-2.71 65-69	M001756
3.00 76	3.04-3.21 77-82	M001702
3.50 89	3.54-3.71 90-94	M001502
3.75 95	3.73-3.90 95-99	M001593
3.88 99	3.89-4.06 99-103	M001432
4.00 102	4.04-4.21 103-107	M001503
4.25 108	4.21-4.38 107-111	M001566
4.50 114	4.54-4.71 115-120	M001703
5.00 127	5.04-5.21 128-132	M001668
5.25 133	5.21-5.38 132-137	M001504
6.00 152	6.04-6.21 153-158	M001505
6.25 159	6.21-6.38 158-162	M001799
6.75 171	6.83-7.00 173-178	M001506

#### Recommended installation torque for any style bent bolt clamp:

- For clamps 3" or less - 25 ft. lbs. (34N•M)
- For clamps 3" and larger, on tube to tube connections - 35 ft. lbs. (48N•M)
- For clamps 3" and larger, on tube to casting connections - 50 ft. lbs. (68N•M)

## SealClamp™ – The Original Band Clamp

### Preformed & Flat Styles

Used to seal muffler inlets, outlets, elbow joints, flex pipes, and other system connections. Also minimizes noise and exhaust gas leaks.

SealClamps are easy to install! There's no need to weld or disconnect your exhaust system.

When installed, the wide band conforms to the shape of straight or flex pipe, and seals without distorting the pipe.



Stepped Preformed SealClamp

### Stepped Preformed SealClamp

- Full 360° clamping area
- No flex pipe pinching
- Available in stainless and aluminized

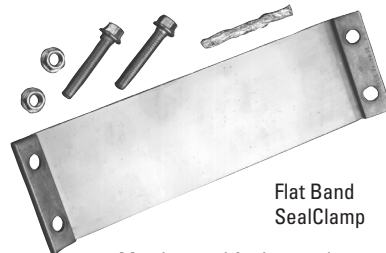
O.D. Pipe in	mm	Stainless	Aluminized
2.50	64	X007829	
3.00	76	X007830	X007833
3.50	89	X007831	X007834
4.00	102	X007784	X007824
5.00	127	X007785	X007805
6.00	152	X009076	

U.S. Patent Nos. 6,116,659; 6,634,607 B2; 6,796,004 B2



Stepped Preformed SealClamp is Individually packaged with installation instructions

- For overlapping I.D. to O.D. slotted joints and flex tube
- Flat band style may be used for butt-style joints in light duty applications
- Nuts and bolts fit both 9/16" and 14mm wrenches
- Reduces noise and exhaust leaks
- Installs easily – no disconnecting or welding necessary
- Available in aluminized and stainless steel
- Stainless models have improved corrosion resistance and high temperature strength compared to aluminized



Flat Band SealClamp

May be used for butt-style joints in light duty applications

### Flat Band SealClamp

O.D. Pipe in	mm	Stainless	Aluminized
2.00	51	X004536	
2.25	57	X004537	
2.50	64	X004476	
2.75	70	X004538	
3.00	76	X004478	
3.50	89	X004480	X006204
4.00	102	X004482	X006203
4.50	114	X004962	
5.00	127	X004484	X006202
6.00	152	X004539	

**Installation instructions and torque recommendations:** are available in the Shoptalk section, pages 16-17.



Donaldson Flat Band SealClamps are Individually packaged. Loose parts inside the shrink wrapped package.

## Torcite®



Torcite® Lap Joint

O.D. Pipe in	mm	Aluminized	Donaldson SealClamp <sup>1</sup>	Stainless	Donaldson SealClamp <sup>2</sup>	Polished Stainless
2.00	51			J190056		
2.25	57			J190057		
2.50	64			J190058	X007829	
2.75	70			J190059		
3.00	76	J009604	X007833	J190060	X007830	
3.50	89	J009605	X007834	J190061	X007831	
4.00	102	J009606	X007824	J009623	X007784	P222740
4.50	114	J190054		J190062		
5.00	127	J009607	X007805	J009624	X007785	P222741
6.00	152	J190055		J190063	X009076	P222742

1 - Equivalent Donaldson Aluminized Steel Stepped Preformed SealClamp™  
 2 - Equivalent Donaldson Stainless Steel Stepped Preformed SealClamp™

## Standard U-Bolt Clamps



- Single, round band
- Cold rolled steel or Chrome
- 3/8-16" UNC-2A

O.D. Pipe in	mm	Steel	Chrome
2.00	51	P206403	
2.25	57	P206404	
2.50	64	P206405	
2.75	70	P206406	
3.00	76	P206407	
3.25	83	P206408	
3.50	89	P206409	
4.00	102	P206410	J009486
5.00	127	P206411	J009487
6.00	152	P207667	



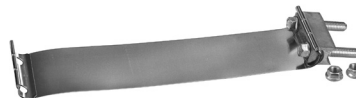
- Double, round band
- 3/8-16" UNC-2A

## Accuseal®



O.D. Pipe in	mm	Aluminized	304 Stainless
2.00	51	J000204	
2.25	57	J000205	
2.50	64	J000206	
2.75	70	J000207	
3.00	76	J000200	P238111
3.50	89	J000201	
4.00	102	J000202	P238112
4.50	114	J000208	
5.00	127	J000203	P238113
6.00	152	J000209	

## Easyseal®

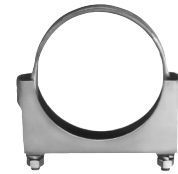


May be used for lap and butt-style joints

O.D. Pipe in	mm	304 Bright Stainless	Donaldson SealClamp <sup>1</sup>
2.00	51	J000210	X004536
2.25	57	J000212	X004537
2.50	64	J000211	X004476
2.75	70	J000213	X004538
3.00	76	J000214	X004478
3.50	89	J000215	X004480
4.00	102	J000216	X004482
4.50	114	J000219	X004962
5.00	127	J000217	X004484
6.00	152	J000218	X004539

1 - Equivalent Donaldson Stainless Steel Flat Band SealClamp™

O.D. Pipe in	mm	Steel
2.00	51	J000220
2.25	57	J000222
2.50	64	J000221
2.75	70	J000224
3.00	76	J000227
3.50	89	J000228
4.00	102	J000230
4.50	114	J000231
5.00	127	J000232
6.00	152	J000233



- Double, flat band
- 3/8-16" UNC-2A

O.D. Pipe in	mm	Zinc	Chrome
3.00	76	P206600	P206608
3.50	89	P206601	P206609
4.00	102	P206602	P206610
5.00	127	P206603	P206611
6.00	152	P207596	P207598

Torcite®, Accuseal® and Easyseal® are a registered trademarks of Torca Co.

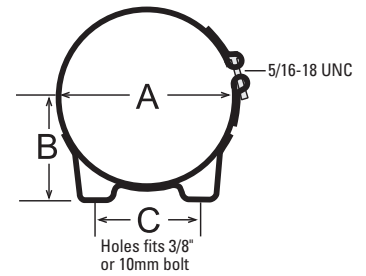
## Muffler Body Band Clamps for Traditional Mufflers



- Aluminized mild steel with high temperature black finish (matches finish on off-road mufflers)
- Band width 1.25" (32mm)
- Intended for traditional mufflers only. For emissions product needs, see Heavy-Duty Muffler Body Bands

### Muffler Body Band Clamps

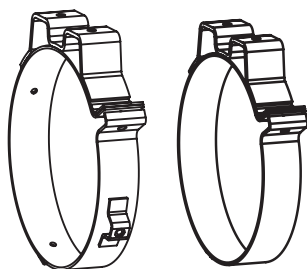
--- A ---		--- B ---		--- C ---		Part Number
in	mm	in	mm	in	mm	
6.00	152	3.75	95	3.75	95	M002117
6.62	168	4.00	102	4.00	102	M002118
8.50	216	5.00	127	5.00	127	M002119
9.00	229	5.50	140	5.50	140	M002120
10.08	256	6.00	152	6.00	152	M002121
11.06	281	6.50	165	6.50	165	M002122
11.84	301	7.00	178	7.00	178	M002123



## Heavy-Duty Muffler Body Band Clamps

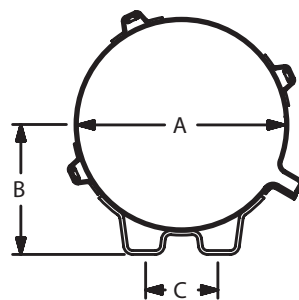
### Clamp Notes:

- Pinch bolts are not included
- Most use 3/8-1-1/2" long grade 5 or 8 grade bolts
- Band width 2.00" (unless noted)
- Reuse existing frame mounting bolts
- Materials is zinc-plated mild steel.



P227803

P230281  
No heat shield  
stand off



### W-Foot Body Bands

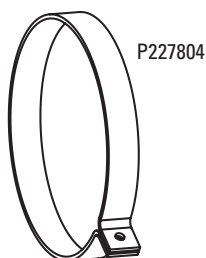
- Use for vertical or horizontal mounting
- Bolts not included

### For Heat Shield Applications

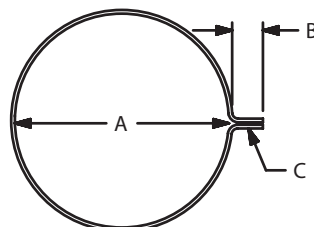
--- A ---		--- B ---		--- C ---		Part Number
in	mm	in	mm	in	mm	
10.00	254	6.28	160	3.5	89	P227803
11.00	269	6.50	165	6.5	165	P229513
13.00	330	7.50	191	6.5	165	P230283

### No Heat Shield Applications

--- A ---		--- B ---		--- C ---		Part Number
in	mm	in	mm	in	mm	
10.00	254	6.28	160	3.50	89	P230282
11.00	269	6.50	165	6.50	165	P230281
13.00	330	7.50	191	6.50	165	P230045



P227804



Band width 1.5" (38mm)

### Muffler Body Bands for Schools Buses

--- A ---		--- B ---		--- C ---		Part Number
in	mm	in	mm	in	mm	
10.00	256	1.75	44	0.40	10	P228241 <sup>1</sup>
11.00	279	1.75	44	0.40	10	P227804 <sup>2</sup>

- 1 - Bluebird conventional bus with Cat Engine Works
- 2 - Bluebird rear engine bus

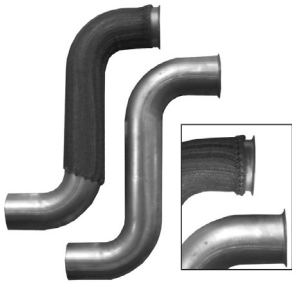


# Heat Sleeves & Heat Wrap Flex Tubing

ACCESSORIES

## Heat Sleeves

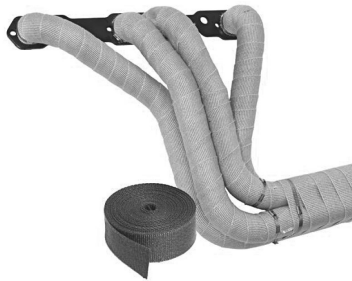
Slips onto 3" to 5" dia. pipe



Length	Part Number
12"	P235764
18"	P235765
24"	P235766

## Heat Wrap

2" wide roll, easy to install on any pipe



Length	Part Number
2"X50' (600") Roll	P235767

## Sleeve & Wrap Clamps

Wrap clamps make installation easy!  
No tools needed.



Length	Part Number
2 PC of 18" Long Clamp	P235768
12 PC of 18" Long Clamp	P235769

Heat sleeves or heat wrap could reduce the outside temperature of a bare pipe by up to 300°F to 400°F.

## Flex Tubing

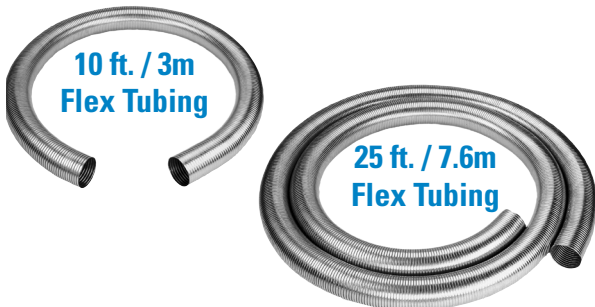
- Flex tubing (and cut lengths) should be installed in a half extended state. Donaldson flex tubing ships in the half extended state.
- Material thickness for stainless and galvanized is 0.015"

### Flex Tubing

--- I.D. --- in	--- mm	10 ft. (3 m) Lengths		25 ft. (7.6 m) Lengths <sup>1</sup>	
		Stainless	Galvanized	Stainless	Galvanized
2.00	51	P226151	P226148		
2.50	64	P226152	P226149		
3.00	76	P226144	P226140	P226132	P226129
3.50	89	P226145	P226141	P226133	P226154
4.00	102	P226146	P226142	P226156 <sup>2</sup>	P226155 <sup>2</sup>
5.00	127	P226147	P226143	P226158 <sup>2</sup>	P226157 <sup>2</sup>
6.00	152	P226153 <sup>1</sup>	P226150 <sup>1</sup>		

<sup>1</sup> - Size exceeds shipping limits by North American small package carriers. This item must ship by truck.

<sup>2</sup> - Shipped on pallet, product is not boxed.



### Cutting and installation instructions for Flex Tubing:

are available in the Shoptalk section, page 18.

## Standard Cut to Length Flex



- Deburred ends
- Sized by flex I.D.
- Stainless and galvanized material thickness - 0.015"
- Measured fully extended



Close-up of deburred edge

### Standard Cut to Length Flex

--- I.D. ---		Overall Length		Stainless	Galvanized
in	mm	in	mm		
3.00	76	12.00	305	J240003	
		18.00	457	P206552	
		24.00	610	J240004	
3.50	89	12.00	305	J240005	
		18.00	457	P206553	
		24.00	610	J024850	
4.00	102	12.00	305	J240006	P224479
		18.00	457	P206554	J024754
		24.00	610	J024836	J024835
		36.00	914	J034673	J034743
		5.00	127	12.00	305
5.00	127	18.00	457	P206555	J024755
		24.00	610	J024838	J024837
		36.00	914	J034674	J034744
6.00	152	18.00	457	P206556	
		30.00	762	P206559	

## Flex Cut Lengths with Finished Ends



- Flex tubing (and cut lengths) should be installed in a half extended state. Donaldson flex tubing ships in the half extended state.
- One end O.D., one end I.D. slotted
- Sized by flex I.D.
- Overall length includes finished ends
- Welded tube ends

### Cut-to-Length Flex - Finished Ends

--- I.D. ---		Overall Length		Galvanized
in	mm	in	mm	
3.00	76	18.00	457	P206544
4.00	102	18.00	457	P206546
5.00	127	18.00	457	P206547

## Long-Life Cut to Length Flex



- Improved flexibility
- Consistent product quality—optimized material choice/consistency
- Heavier gauge stainless material over standard flex (0.018" gauge)
- Up to 8 times longer life than conventional flex
- Less leakage and lower emissions during truck start up
- Simplified installation—installation strip and flow direction
- Ends square cut and deburred
- Installation length indicator
- 12 month/120,000 mile/200,000 km warranty (on-highway vehicles only)

Donaldson patented technology

### Long-Life Flex

--- I.D. ---		Mid Length <sup>1</sup>		Stainless
in	mm	in	mm	
4.00	102	12.00	305	P224412
		15.00	381	P224415
		18.00	457	P224418
5.00	127	21.00	533	P224421
		15.00	381	P224515
		18.00	457	P224518
		21.00	533	P224521

1 - Length measured in half compressed state

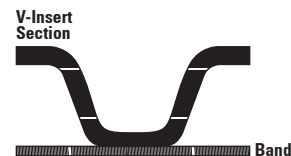
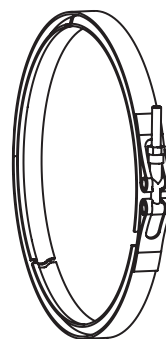
**Recommended clamps:**  
Preformed SealClamp or Offset MaxGrip Bent Bolt

## V-Band Clamps

### V-Band Clamps for Large Diameter Mufflers



- The unique design reduces service time creates a reliable, leak-free seal between components
- Piloted v-insert section, facilitates reassembly and alignment for clamping



- Body Dia. - in mm	Part Number
10.0 254	P227750
11.0 279	P212925
13.0 330	P229851
14.0 356	P235305

### V-Band Clamps for Pipes and Turbo Housing Flanges

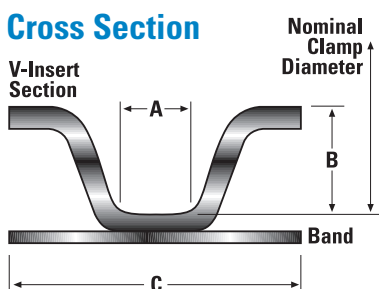


- Used to connect vehicle exhaust pipe flange to turbo or engine manifold
- May also hold the turbo housing flanges
- Built to withstand high temperatures produced by heavy-duty engines/turbos
- Manufactured to the highest tolerances and meet or exceed OEM specifications for material and quality standards

Cat	Part Number	Nominal Diameter		V-Insert Sections					
		in	mm	--- A ---		--- B ---		--- C ---	
		in	mm	in	mm	in	mm	in	mm
3406, 3406B, 3176	P206607	5.88	149	0.40	10	0.28	7	0.88	22
3176T	P222018	4.75	121	0.40	10	0.28	7	0.88	22

Cummins	Part Number	Nominal Diameter		V-Insert Sections					
		in	mm	-- A --		-- B --		-- C --	
		in	mm	in	mm	in	mm	in	mm
B Series, #3903652	J009618	3.21	82	0.26	7	0.14	4	0.75	19
C Series	P222017	4.13	105	0.26	7	0.14	4	0.75	19
L10, M11	P222018	4.75	121	0.40	10	0.28	7	0.88	22
V555, V902, V903	J009612	3.88	99	0.40	10	0.28	7	0.88	22

Detroit Diesel	Part Number	Nominal Diameter		V-Insert Sections					
		in	mm	-- A --		-- B --		-- C --	
		in	mm	in	mm	in	mm	in	mm
6-71T, 12V71, 8.2N, 8.2T	P206606	4.81	122	0.21	5	0.28	7	0.88	22
6V53, 6V71, 6V92, 8V92	P206604	3.82	97	0.21	5	0.28	7	0.88	22
8.2 N, #2069773	J009611	4.06	103	0.24	6	0.28	7	0.88	22
8V71T	P213191	5.81	148	0.21	5	0.28	7	0.88	22
8V71T, 16V-71, 16V92T, 6V92, 8V92	P210110	5.25	133	0.21	7	0.14	4	0.75	19
8V92, 8V71, 4-53, 6-71	P206605	4.5	114	0.21	5	0.28	7	0.88	22
Series 60	P206607	5.88	149	0.40	10	0.28	7	0.88	22

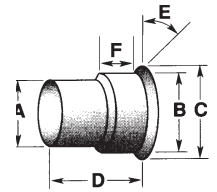


IH	Part Number	Nominal Diameter		V-Insert Sections					
		in	mm	-- A --		-- B --		-- C --	
		in	mm	in	mm	in	mm	in	mm
DT466	J009613	4.33	110	0.21	5	0.28	7	0.88	22

Mack	Part Number	Nominal Diameter		V-Insert Sections					
		in	mm	-- A --		-- B --		-- C --	
		in	mm	in	mm	in	mm	in	mm
48RU2341, 4ME21409	J009614	4.61	117	0.16	4	0.28	7	0.75	19

## Flared Connectors - All 16 ga. Aluminized Steel

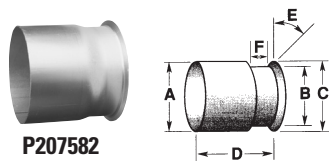
O.D. -- A -- in (mm)	I.D. -- B -- in (mm)	O.D. -- C -- in (mm)	-- D -- in (mm)	E	-- F -- in (mm)	Flared Connector	V-Band Clamp	Application
3.00 (76)	3.02 (77)	3.62 (92)	4.00 (102)	22°	0.75 (19)	P207619	P206604	DD 6V 71
3.50 (89)	3.63 (92)	4.25 (108)	4.00 (102)	22°	0.75 (19)	P207581	P206605	8V-71-VT-555
4.00 (102)	4.02 (102)	4.75 (121)	4.00 (102)	22°	0.75 (19)	P207620	P206606	6 71-12V 71



O.D. -- A -- in (mm)	I.D. -- B -- in (mm)	O.D. -- C -- in (mm)	-- D -- in (mm)	E	-- F -- in (mm)	Flared Connector	V-Band Clamp
3.50 (89)	3.52 (89)	4.19 (106)	4.75 (121)	45°	2.12 (54)	P207568	P206605
4.00 (102)	4.02 (102)	4.70 (119)	4.75 (121)	45°	2.50 (64)	P207567	P206606
5.00 (127)	5.02 (128)	5.70 (145)	4.75 (121)	45°	3.00 (76)	P207566	P206607

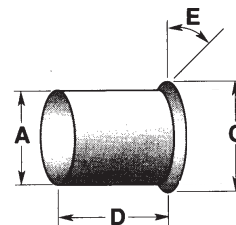


P207568, P207567, or P207566



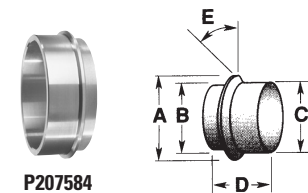
O.D. -- A -- in (mm)	I.D. -- B -- in (mm)	O.D. -- C -- in (mm)	-- D -- in (mm)	E	-- F -- in (mm)	Flared Connector	V-Band Clamp	Application
4.00 (102)	3.63 (92)	4.25 (108)	3.81 (97)	22°	0.75 (19)	P207582	P206605	8V 71

O.D. -- A -- in (mm)	O.D. -- C -- in (mm)	-- D -- in (mm)	E	Flared Connector	V-Band Clamp
3.12 (79)	3.75 (95)	1.50 (38)	20°	P206612	P206604
3.00 (96)	3.92 (100)	2.25 (57)	20°	J009479	J009611
3.75 (95)	4.19 (106)	1.50 (38)	20°	P206613	
3.50 (89)	4.29 (109)	1.50 (38)	20°	J009391	P206605
4.12 (105)	4.75 (121)	1.50 (38)	22°	P206614	P206606
5.00 (127)	5.50 (140)	5.25 (133)	45°	J009393	
	5.69 (145)	3.00 (76)	20°	P206615	P206607
	5.86 (149)	5.00 (127)	20°	J009629 <sup>1</sup>	



**J009629**  
Adapter with  
Pyrometer Fitting  
(1/4" NPT)

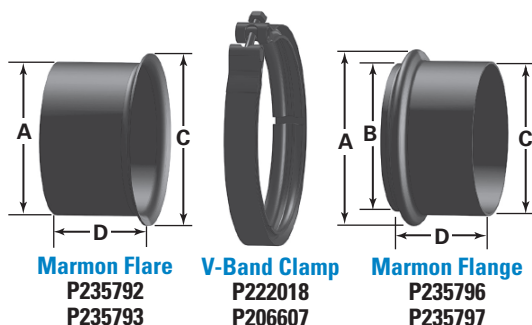
1 - Adapter has pyrometer fitting



### Flared Connector

O.D. -- A -- in (mm)	I.D. -- B -- in (mm)	O.D. -- C -- in (mm)	-- D -- in (mm)	E	Flared Connector	V-Band Clamp	Application
5.01 (127)	4.25 (108)	4.80 (122)	1.94 (49)	20°	P207584	P210110	Air Research Turbo

## Marmon Flange & Flare Connectors



**Marmon Flare**  
P235792  
P235793

**V-Band Clamp**  
P222018  
P206607

**Marmon Flange**  
P235796  
P235797

Join parts together for leakproof and serviceable connections with a V-Band Clamp. All components made from 304 Stainless Steel.

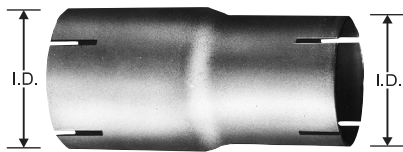
	O.D. -- A -- in (mm)	I.D. -- B -- in (mm)	O.D. -- C -- in (mm)	-- D -- in (mm)	Part No.	V-Band Clamp
<b>Marmon Flare</b>	4.00 (102)	—	4.63 (118)	3.00 (76)	P235792	P222018
	5.00 (127)	—	5.63 (143)	3.00 (76)	P235793	P206607
<b>Marmon Flange</b>	4.72 (120)	3.80 (97)	4.00 (102)	3.00 (76)	P235796	P222018
	5.72 (145)	4.80 (122)	5.00 (127)	3.00 (76)	P235797	P206607

## I.D. - I.D.

Reduces O.D. pipe of different sizes. 16 gauge aluminized steel.



-- I.D. -- in mm	-- I.D. -- in mm	Length in mm	Part Number
2.50 64	2.00 51	6.00 152	P207382
2.75 70	2.50 64	6.00 152	P207385
3.00 76	2.50 64	6.00 152	P206313
	2.75 70	6.00 152	P207386
3.50 89	3.00 76	6.00 152	P206314
4.00 102	3.00 76	6.00 152	P206315
	3.50 89	8.00 203	P206316
5.00 127	4.00 102	6.00 152	P206317
6.00 152	5.00 127	8.00 203	P206318



## I.D. - O.D.

Reduces larger O.D. pipe to smaller I.D. pipe. Also used as muffler bushing or manifold outlet. 16 gauge aluminized steel.



-- I.D. -- in mm	-- O.D. -- in mm	Length in mm	Part Number
2.50 64	2.00 51	6.00 152	P207397
3.00 76	2.50 64	6.00 152	P206319
	2.75 70	6.00 152	P207401
3.50 89	3.00 76	6.00 152	P206320
4.00 102	3.00 76	6.00 152	P206321
	3.50 89	6.00 152	P206322
4.50 114	4.00 102	6.00 152	J190046
5.00 127	4.00 102	6.00 152	P206323
6.00 152	5.00 127	6.00 152	P207402



## O.D. - I.D.

Reduces larger I.D. pipe to smaller O.D. pipe. 16 gauge aluminized steel.



-- O.D. -- in mm	-- I.D. -- in mm	Length in mm	Part Number
2.50 64	2.00 51	6.00 152	P207389
2.50 64	2.25 57	4.00 102	J008942
3.00 76	2.50 64	6.00 152	P206324
3.50 89	3.00 76	6.00 152	P206325
4.00 102	3.00 76	6.00 152	P206326
	3.50 89	6.00 152	P206327
4.50 114	4.00 102	6.00 152	J190041
5.00 127	4.00 102	6.00 152	P206328
6.00 152	5.00 127	6.00 152	P207394



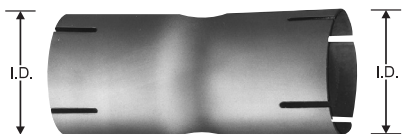
## Connectors

### I.D. - I.D.

Connects O.D. pipes of the same size. 16 gauge aluminized steel.



--- I.D. --- in mm	-- Length -- in mm	Part Number
2.00 51	6.00 152	P207405
2.50 64	6.00 152	P206371
3.00 76	6.00 152	P206372
3.50 89	6.00 152	P206373
4.00 102	6.00 152	P206374
5.00 127	6.00 152	P206375
6.00 152	6.00 152	P207408

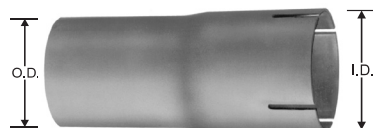


### I.D. - O.D.

Connects O.D. and I.D. pipes of the same size. 16 gauge aluminized steel.



I.D.-O.D. in mm	-- Length -- in mm	Part Number
2.00 51	6.00 152	P207411
2.50 64	6.00 152	P206366
2.75 70	6.00 152	P207413
3.00 76	6.00 152	P206367
3.50 89	6.00 152	P206368
4.00 102	8.00 203	P206369
5.00 127	8.00 203	P206370
6.00 152	6.00 152	P207414

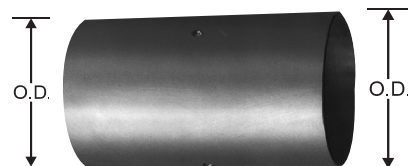


### O.D. - O.D.

Connects I.D. pipes of the same size. Also used on manifold outlet. Connector has tube stop. 16 gauge aluminized steel.



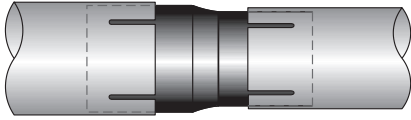
O.D.-O.D. in mm	-- Length -- in mm	Part Number
2.50 64	6.00 152	P206361
3.00 76	6.00 152	P206362
3.50 89	6.00 152	P206363
4.00 102	8.00 203	P206364
5.00 127	8.00 203	P206365





## O.D. - O.D.

Reduces I.D. pipe of different sizes.  
16 gauge aluminized steel.

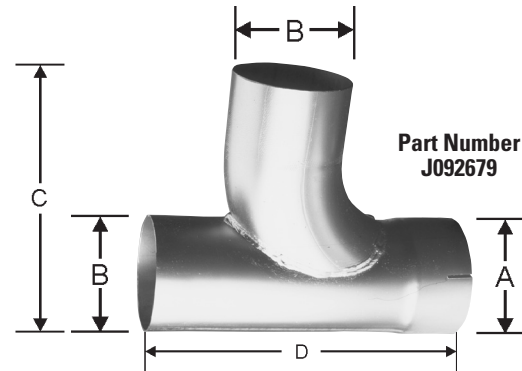


-- O.D. -- in	mm	-- O.D. -- in	mm	Length in	mm	Part Number
3.00	76	2.50	64	6.00	152	J190042
3.50	89	3.00	76	6.00	152	J190044
4.00	102	3.00	76	6.00	152	J009648
		3.50	89	6.00	152	J190045
5.00	127	4.00	102	8.00	203	J009649
6.00	152	5.00	127	8.00	203	J009650



## Standard "Y" Adapter Pipe

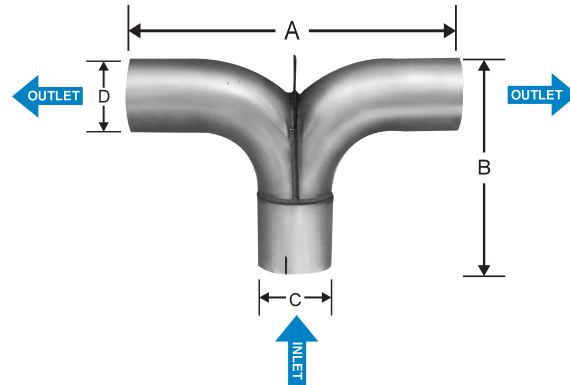
- 16 gauge aluminized steel construction



- A (I.D.) - in	mm	- B (O.D.) - in	mm	----- C ----- in	mm	----- D ----- in	mm	Part Number
4.00	102	4.00	102	10.82	275	15.75	400	J092679
5.00	127	5.00	127	10.50	267	16.00	381	J092689

## Splitter Tee Adapter

- Converts single exhaust pipe to dual exhaust system
- 16 gauge aluminized steel



(A) in	mm	(B) in	mm	Truck ID (C) in	mm	Leg OD (D) in	mm	Part Number
17.50	445	12.00	305	4.00	102	4.00	102	P206297
26.00	660	14.00	356	5.00	127	5.00	127	P206298

Band width 1.5" (38mm)

## Tilt Cab Ball & Cone Connectors

- 16 gauge aluminized steel construction



**Ball Connector**  
P205976 - 4" Pipe I.D.  
P206300 - 5" Pipe I.D.



**Cone Connector**  
P205979 - 4" Pipe O.D.  
P206299 - 5" Pipe O.D.

## Stack Caps

The exhaust stack cap is designed to be mounted on top of a vertical straight exhaust stack pipe and prevents water and debris from entering the stack. The stack cap is not water-tight during pressure washes or under strong wind conditions. Use zinc plated or chrome stack caps where exhaust gas temperatures are less than 900°F/482°C. For exhaust gas temperatures above 900°F/482°C, use 304 stainless steel stack caps.

For proper installation, the exhaust cap needs clearance for counterweight rotation and should be installed at a point that allows for this without interference.

The exhaust cap should be placed on the outer diameter of the stack pipe. Allow approximately ¼" of clearance between cap and top of stack.

O.D. Pipe Size in	mm	Zinc Plated	Chrome	304 Stainless
1.50	38	P270530		
1.75	44	P270531		
2.00	51	P270532		M002480
2.25	57	P270533		
2.50	64	P270534		M002482
2.75	70	P270535		
3.00	76	P270536	P271507	M002484
3.50	89	P270538		M002485
4.00	102	P270539	P270837	M002486
4.50	114	P270540		M002487
5.00	127	P270541	P270838	M002488
5.50	140	P270542		
6.00	152	P270543	P271511	M002490
8.00	203			M002491

**P270539 - Zinc Plated**



**P270837 - Chrome**



- Single bolt mount
- Nylon stop for quiet operation (zinc and chrome only)
- All metal construction (304 stainless steel only)

## Universal Swivel Hanger

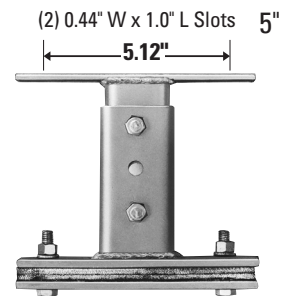
- Heavy reinforced rubber pad
- Double pivot design improves flexibility and installation
- One piece construction installs in seconds
- 11 gauge cold rolled steel construction



**P206507 - 9" length**  
**J008167 - 13" length**

## Universal Mounting Bracket

- For 4" (102 mm) and (127 mm) pipes
- 3/8"-16 UNC-2A(4)
- Heavy gauge hot rolled steel construction
- Expands to 10" (254mm)



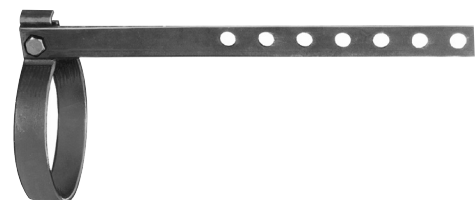
**P207784**

## Pipe Hangers

- Pre-punched holes (0.41" dia.) for easy installation
- 12 gauge hot rolled steel construction
- 12" overall bar length, width 0.88"
- 3/8"-16 UNC bolts/nuts included

### Pipe Hangers

Pipe Dia. in	mm	Part Number
3.00	76	P206523
3.50	89	P206524
4.00	102	P206525
5.00	127	P206526



## Muffler Guards

- Bright stainless shipped with protective film on one side
- Order clamps separately, unless noted otherwise



Style 1

Style 2

### Muffler Guards

-- Muffler Diameter --		Style	-- Length --		Wrap	Bright Stainless
in	mm		in	mm		
8.50 - 9.00	216-229	2	51.00	1295	180°	P206540
8.50 -10.00	216-254	1	45.00	1143	270°	X005207 <sup>1</sup>
		2	51.00	1295	180°	J009429
10.00-10.50	254-267	2	51.00	1295	180°	P206542

1 - Includes two (2) clamps

## Muffler Guard Clamps

- Two clamps required for installation
- Clamps sold separately
- Chrome plated (unless noted)



### Muffler Guard Clamps

Muffler Dia. in	mm	Part Number
8.50	216	P206510
9.00	229	P206511
10.00	254	P206512

1 - Zinc plated

## Muffler Hangers

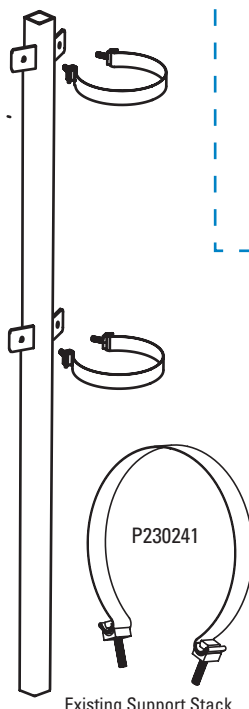
- For vertical and horizontal installations
- 11 gauge steel construction
- 12" overall bar length
- 3/8"-16 UNC bolts/nuts included

### Muffler Hangers

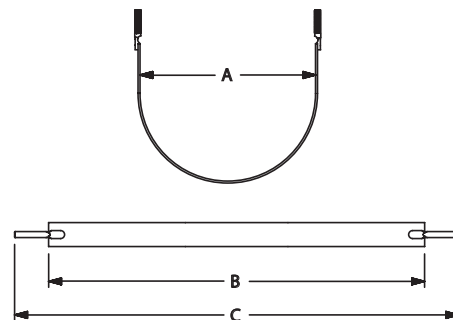
-- Muffler Dia. -- in	mm	Part Number
6.00	152	P206515
7.00	178	P206516
8.50	216	P206517
9.00	229	P206518
10.00	254	P206519
8.25x11.50	210x292	P206520
10.00x15.00	254x381	P206521
11.00	279	P224841



## Heavy Duty Muffler Mounting Straps



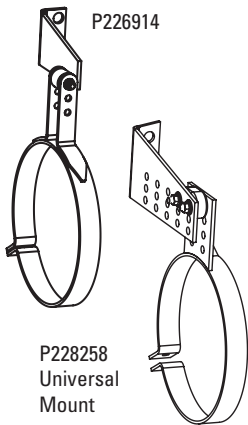
Existing Support Stack



- Works with vertical mount Mack trucks when converting to a 10" diameter muffler.

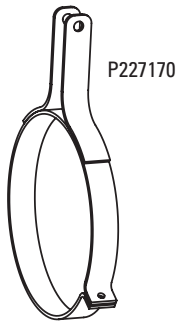
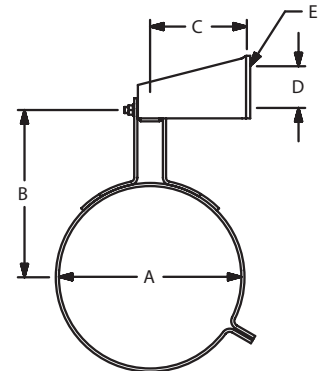
	--- A ---		--- B ---		--- C ---		Part Number
in	mm	in	mm	in	mm		
10.00	256	25.40	645	30.20	767	P230241	

## Horizontal Hangers for Round Mufflers



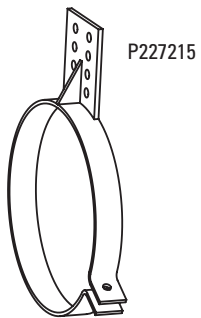
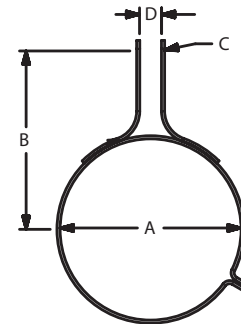
---- A ----		---- B ----		---- C ----		---- D ----		---- E ----		Part Number
in	mm	in	mm	in	mm	in	mm	in	mm	
10.00	256	9.31	236	5.75	146	1.75	44	0.38	10	P227728
11.00	279	10.16	258	6.00	152	2.50	66	0.75	19	P226914 <sup>1</sup>
11.00	279	6.50-10.50	165-268	5.50-9.00	140-229	1.00/2.50	25/66	0.50/0.75	13/19	P228258 <sup>2</sup>
13.00	330	6.50-10.50	165-268	5.50-9.00	140-229	1.00/2.50	25/66	0.50/0.75	13/19	P230046 <sup>2</sup>

1 - Works with International School bus when converting to round muffler  
 2 - Universal mount



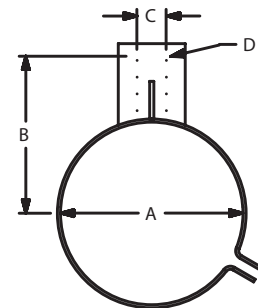
---- A ----		---- B ----		---- C ----		---- D ----		Part Number
in	mm	in	mm	in	mm	in	mm	
10.00	256	10.78	274	0.56	14	1.31	33	P230284
11.00	279	10.78	274	0.56	14	1.31	33	P227170 <sup>1</sup>

1 - Works with 2004 Thomas Conventional with Mercedes Benz Engine

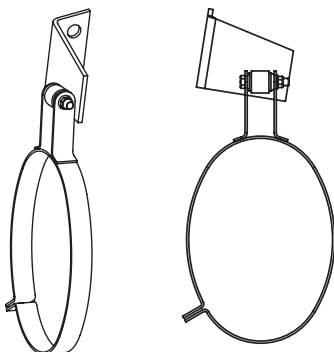


• Universal application

---- A ----		---- B ----		---- C ----		---- D ----		Part Number
in	mm	in	mm	in	mm	in	mm	
11.00	279	6.25 / 9.25	175	44	0.50	13		P227215
13.00	330	7.25 / 10.25	175	44	0.50	13		P230047



## Horizontal Hanger for Oval Mufflers



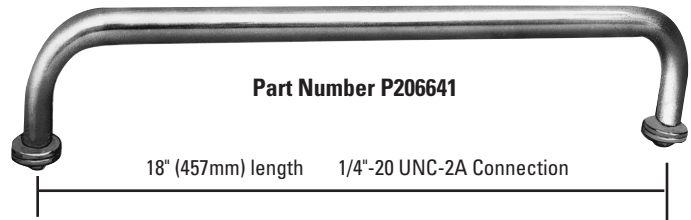
### Part No. P229114

- Unique for Front Engine International School Bus with Oval DOC muffler
- Direct replacement to OE hanger
- Works with oval muffler diameter of 8.25" x 11.5"



## Grab Handle

- For use with muffler and pipe guards
- Chrome plated



## Manifold Tube

- For manifold connections
- Size: 4" (102mm) O.D.
- Basic application: Cummins NH series engines
- 16 gauge cold rolled steel



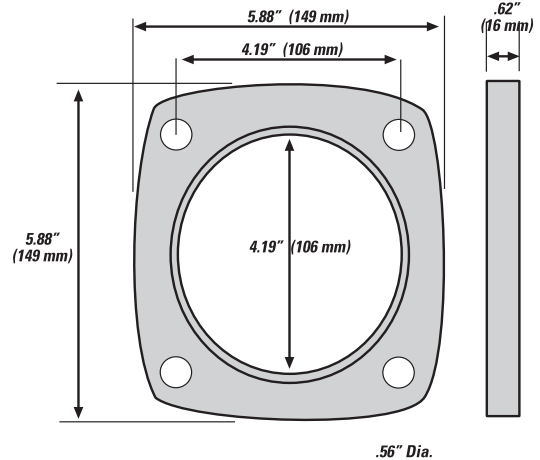
**Manifold Tube**  
**Part Number**  
**P206617**

## Manifold Flange

- 16 gauge cold rolled steel



**Manifold Flange**  
**Part Number P206616**



## Threaded Adapter



--- O.D. ---		Thread (NPT)		Part
inch	mm	inch	mm	Number
3.00	76	3.00	76	J009514
3.50	89	3.50	89	J009516
4.00	102	4.00	102	J009518

NPT - National Pipe Thread



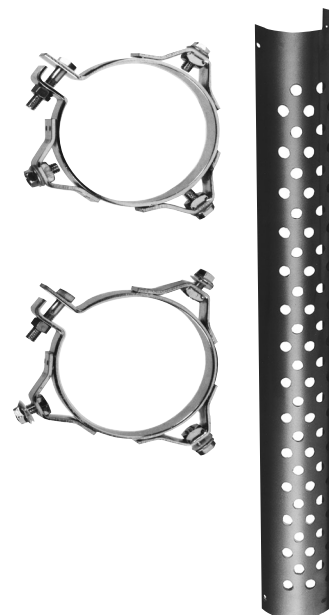
## Universal Pipe Guards & Clamps

- 180° wrap coverage
- 48" (1219mm) length
- Polished stainless steel
- Shipped with protective film on one side
- Clamps must be ordered separately

### Universal Pipe Guards & Clamps

Pipe Dia. in	mm	Stainless <sup>1</sup>	Clamp Kit
4.00	102	P206543	P206508
5.00	127	P206543	P206509
6.00	152	P206543	P224492

1 - Requires clamp kit for installation

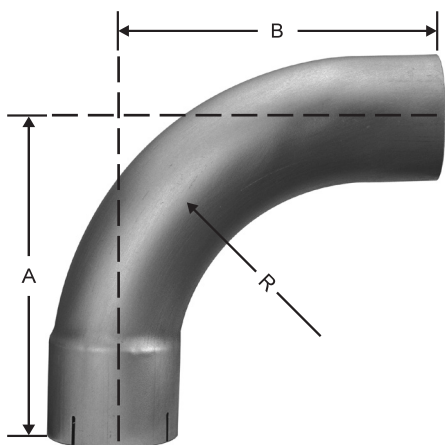


### Pipe Guard Clamp Kits

- Two clamps per kit
- Chrome plated
- 12 gauge cold rolled steel construction

## 90° O.D. - I.D.

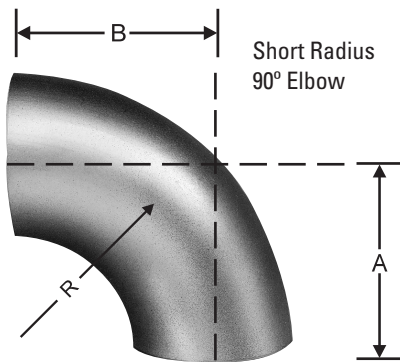
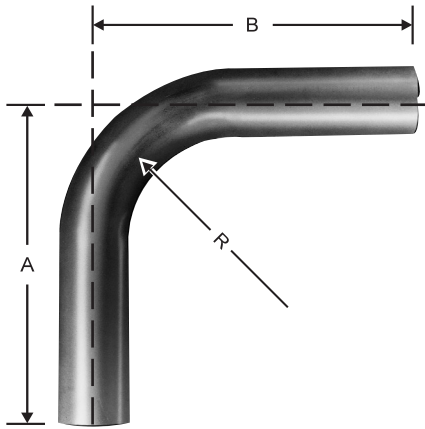
- 16 gauge aluminized or chrome plated steel
- One end O.D., one end I.D. slotted



Diameter O.D.-I.D.		Leg Length (A)		Leg Length (B)		Center Line Radius (R)		Aluminized	Chrome
in	mm	in	mm	in	mm	in	mm		
2.00	51	9.00	229	9.00	229	5.00	127	P207333	
		6.38	162	6.38	162	4.00	102	J008671	
2.50	64	6.25	159	6.25	159	4.00	102	P206339	
		12.00	305	12.00	305	5.00	127	P207335	
2.75	70	6.38	162	6.38	162	5.00	127	P216172	
3.00	76	8.00	203	8.00	203	5.00	127	P206340	
		14.00	356	14.00	356	5.00	127	P206341	
3.50	89	9.00	229	9.00	229	5.00	127	P206342	
		12.00	305	12.00	305	5.00	127	P224669	
		16.00	406	16.00	406	5.00	127	P206343	
4.00	102	8.00	203	8.00	203	4.50	114		P224671
		8.00	203	8.00	203	5.00	127	J008681	
		10.00	254	10.00	254	4.50	114		P207345
		10.00	254	10.00	254	7.00	178	P206344	
		18.00	457	18.00	457	4.50	114		P206353
		18.00	457	18.00	457	7.00	178	P206345	
4.50	114	25.00	635	32.00	813	7.00	178	P207338	
		12.00	305	12.00	305	6.00	152	J190002	
5.00	127	8.50	216	8.50	216	5.50	140	J190003	J190004
		11.00	279	11.00	279	5.50	140	P207339	J009547
		15.00	381	15.00	381	7.50	191		P207346
						10.00	254	P206347	
		18.00	457	18.00	457	7.50	191		P206354
6.00	152					10.00	254	P206348	
		25.00	635	32.00	813	10.00	254	P207340	
		15.00	381	15.00	381	10.00	254	P207341	
		26.00	660	26.00	660	10.00	254	P206350	

## 90° O.D. - O.D.

- 16 gauge aluminized or chrome plated steel
- Both ends O.D.

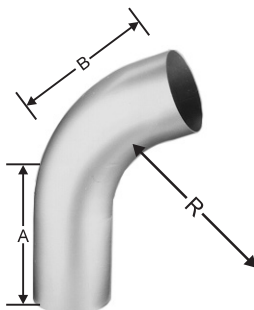


Diameter O.D.-O.D.		Leg Length (A)		Leg Length (B)		Center Line Radius (R)		Aluminized	Chrome	Stainless		
in	mm	in	mm	in	mm	in	mm					
2.00	51	9.00	229	9.00	229	5.00	127	P207322				
2.25	57	10.00	254	10.00	254	4.00	102	P216174				
2.50	64	12.00	305	12.00	305	5.00	127	P207324				
2.75	70	12.00	305	12.00	305	5.00	127	P207325				
3.00	76	3.50	89	3.50	89	3.00	76	P206397				
		6.00	152	6.00	152	4.00	102	P207362				
		10.00	254	10.00	254	5.00	127	P207326				
		14.00	356	14.00	356	5.00	127	J190013				
3.50	89	4.00	102	4.00	102	4.00	102	P206398				
		8.00	203	8.00	203	4.00	102	P207363				
		9.00	229	9.00	229	5.00	127	J190014				
		12.00	305	12.00	305	5.00	127	P207327				
		16.00	406	16.00	406	5.00	127	P207328				
4.00	102	4.50	114	4.50	114	4.00	102	P206399				
		4.50	114	4.50	114	4.50	102			P235771 <sup>1</sup>		
		8.00	203	8.00	203	4.00	102	P207364				
		9.00	229	15.00	381	4.00	102	P207330				
		12.00	305	12.00	305	4.00	102	P206346				
		18.00	457	18.00	457	4.50	114		J190016			
						7.00	178	P207329				
		25.00	635	25.00	635	5.00	127	J190017				
		5.00	127	5.50	140	5.50	140	5.50	140	P206400		P235772 <sup>1</sup>
				10.00	254	10.00	254	5.50	140	P207365		
11.00	279			16.00	406	5.50	140	P207332				
15.00	381			15.00	381	7.50	191		J190019			
						10.00	254	P207331				
20.00	508			20.00	508	10.00	254	P206349				
6.00	152	6.50	165	6.50	165	6.00	152	P207361				
		10.00	254	10.00	254	6.00	152	P207366				
		23.00	584	23.00	584	10.00	254	P216175				

1- 439 Stainless Steel

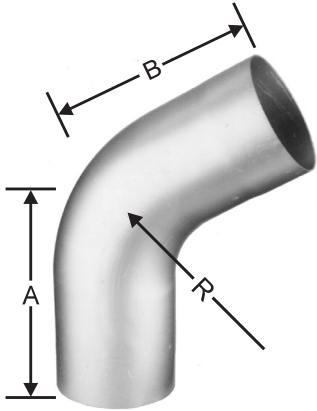
## 67° O.D. - O.D.

- 16 gauge aluminized steel
- Both ends O.D.
- For Peterbilt Truck



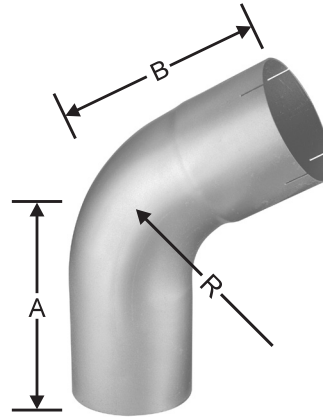
Diameter O.D.-O.D.		Leg Length (A)		Leg Length (B)		Center Line Radius (R)		Part Number
in	mm	in	mm	in	mm	in	mm	
5.00	127	7.50	191	11.00	279	8.00	203	J009560

## 60° O.D. - O.D.



- 16 gauge aluminized steel
- Both ends O.D.

## 60° O.D. - I.D.



- 16 gauge aluminized steel
- One end O.D., one end I.D. slotted

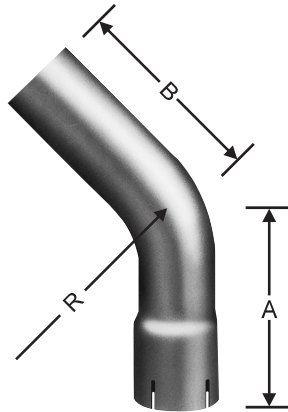
Diameter O.D.-O.D.		Leg Length (A & B)		Center Line Radius (R)		Part Number
in	mm	in	mm	in	mm	
4.00	102	8.00	203	5.00	127	J009644
5.00	127	8.00	203	5.50	140	J009645

Diameter O.D.-I.D.		Leg Length (A & B)		Center Line Radius (R)		Part Number
in	mm	in	mm	in	mm	
3.50	89	8.00	203	5.00	127	J009639
4.00	102	8.00	203	5.00	127	J009640
5.00	127	8.00	203	5.50	140	J009641

## 45° O.D. - I.D.

## Elbows

- 16 gauge aluminized or chrome plated steel
- One end O.D., one end I.D. slotted

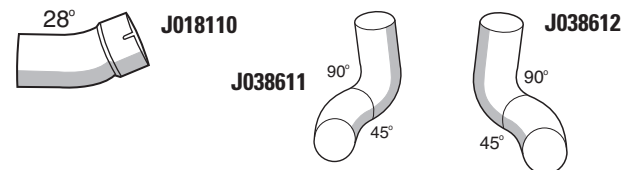


Diameter O.D.-I.D.		Leg Length (A & B)		Center Line Radius (R)		Aluminized	Chrome
in	mm	in	mm	in	mm		
2.50	64	6.00	152	4.00	102	P206279	
3.00	76	7.00	178	5.00	127	P206280	
3.50	89	8.00	203	5.00	127	P206281	
4.00	102	8.00	203	4.50	114		P206285
		9.25	235	7.00	178	P206282	
		12.00	305	5.00	127	J190023	
5.00	127	8.00	203	8.00	203	J190025	
		8.00	203	7.50	191		P206286
		12.00	305	8.00	203	P206283	
		15.00	381	5.50	140	J190027	
6.00	152	8.00	203	6.00	152	P207359	

## Bent Tubes for Trucks

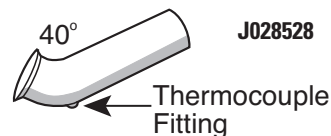
### Kenworth Truck Bent Tubes

Kenworth Part No.	Donaldson Part No.	Dia. O.D. in	mm	Application
K180-5419	J018110	5.00	127	28° Elbow
K180-14764L	J038611	5.00	127	Left Hand Elbow
K180-14764R	J038612	5.00	127	Right Hand Elbow



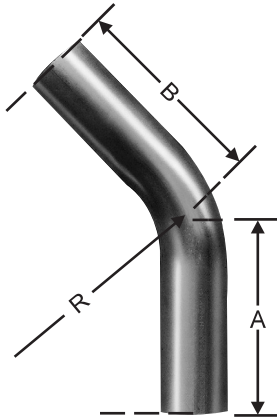
### Mack Truck Bent Tubes

Mack Part No.	Donaldson Part No.	Dia. O.D. in	mm	Application
4ME21698	J028528	4.00	102	R & RD Models



### 45° O.D. - O.D.

- 16 gauge aluminized or chrome plated steel
- Both ends O.D.

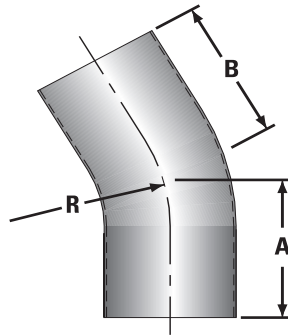


Diameter O.D.-O.D.		Leg Length (A)		Leg Length (B)		Center Line Radius (R)		Aluminized	Chrome	Stainless
in	mm	in	mm	in	mm	in	mm			
2.00	51	6.00	152	6.00	152	5.00	127	P207347		
2.50	64	6.00	152	6.00	152	5.00	127	P207349		
2.75	70	6.00	152	6.00	152	5.00	127	P207350		
3.00	76	7.00	178	7.00	178	5.00	127	P207351		
3.50	89	8.00	203	8.00	203	5.00	127	P207352		
4.00	102	8.00	203	8.00	203	4.00	102	P207353		
4.00	102	8.00	203	8.00	203	4.50	102			P235788 <sup>1</sup>
5.00	127	8.00	203	8.00	203	5.50	140	P207354	P216169	P235789 <sup>1</sup>
6.00	152	8.00	203	8.00	203	6.00	152	P207355		

1- 439 Stainless Steel

### 30° O.D. - O.D.

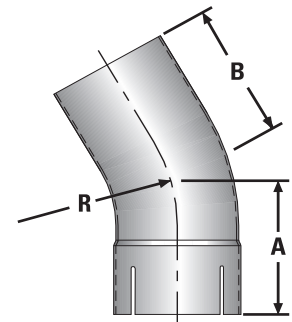
- 16 gauge aluminized steel
- Both ends O.D.



Diameter O.D.-O.D.		Leg Length (A & B)		Center Line Radius (R)		Part Number
in	mm	in	mm	in	mm	
3.50	89	4.00	102	5.00	127	J009635
4.00	102	4.00	102	5.00	127	J009636
5.00	127	4.00	102	5.50	140	J009637

### 30° O.D. - I.D.

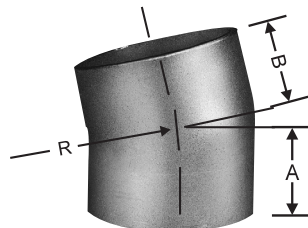
- 16 gauge aluminized steel
- One end O.D., one end I.D. slotted



Diameter O.D.-I.D.		Leg Length (A & B)		Center Line Radius (R)		Part Number
in	mm	in	mm	in	mm	
3.50	89	4.00	102	5.00	127	J009631
4.00	102	4.00	102	5.00	127	J009632
5.00	127	4.00	102	5.50	140	J009633

### 15° O.D. - O.D.

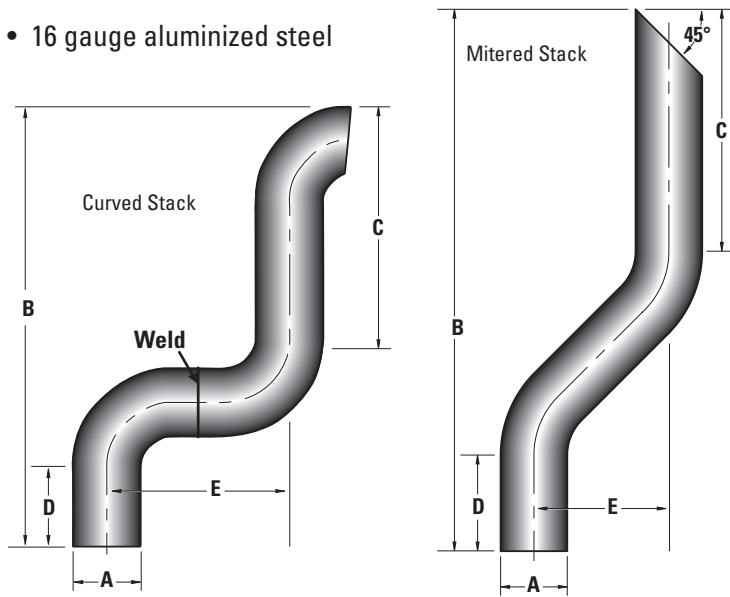
- 16 gauge aluminized steel
- For use where clearance is a problem



Diameter O.D.-O.D.		Leg Length (A & B)		Center Line Radius (R)		Part Number
in	mm	in	mm	in	mm	
3.00	76	1.75	44	5.00	127	P206393
3.50	89	1.75	44	5.00	127	P206394
4.00	102	2.50	64	4.00	102	P206395
5.00	127	4.00	102	5.50	140	P206396

## Dump Truck Stack Pipes

- 16 gauge aluminized steel



### Dump Truck Stack Pipes

- O.D. Dia. -		Overall Length (B)		Leg Length (C)		Leg Length (D)		-- Offset -- (E)		Curved	Mitered
in	mm	in	mm	in	mm	in	mm	in	mm	Aluminized	Chrome
4.00	102	38.00	965	19.50	495	10.50	267	12.10	307	P224581	
		51.00	1295	32.28	820	7.67	195	8.20	208		P224692
5.00	127	38.00	965	18.00	457	9.00	229	12.10	307	P224582	
		51.00	1295	31.70	805	7.11	181	7.04	179		P224693

## Super Stack

- Aluminized
- Packing inside stack will reduce exhaust noise by 2 to 3 dBA
- Mounts directly into existing system replacing the conventional stack

Part Number: M001327

O.D. Dia.	--Length--	O.D. Dia.	--Length--
in	mm	in	mm
5.00	127	35.50	902



## Straight Stack Pipes

- Keeps exhaust smoke and fumes from damaging cargos or blackening van bodies
- 16 gauge aluminized steel or chrome

### O.D. Style - Straight Stacks



O.D. Dia.		-- Length --		Aluminized	Chrome
in	mm	in	mm		
3.00	76	24.00	610	P208328	
		48.00	1219	P206376	
3.50	89	24.00	610	P208336	
		48.00	1219	P206377	
4.00	102	24.00	610	J240012	
		48.00	1219	P206378	P206388
		60.00	1524	J640001	
5.00	127	24.00	610	P224589	P224590
		48.00	1219	P206379	P206389
		60.00	1524	P208393	P206391

### I.D. Style - Straight Stacks



I.D. Dia.		-- Length --		Aluminized	Chrome
in	mm	in	mm		
3.00	76	24.00	610	P216191	
		36.00	914	P208324	
		48.00	1219	P207285	P207314
3.50	89	18.00	457	P207281	
		24.00	610	J024735	
		36.00	914	P208348	
4.00	102	48.00	1219	P207286	
		18.00	457	P207282	
		24.00	610	J024737	P224627
		36.00	914	P208364	P224628
		48.00	1219	P207287	
5.00	127	60.00	1524	P207288	P207299
		18.00	457	P207283	
		24.00	610	J024739	J240024
		36.00	914	P208380	J340023
		48.00	1219	P207292	
6.00	152	60.00	1524	P207289	P207300
		48.00	1219	P216197	

## 45° Mitered Chrome Stack Pipes

- Keeps exhaust smoke and fumes from damaging cargos or blackening van bodies
- 16 gauge

### O.D. Style - 45° Mitered Stacks



O.D. Dia.		-- Length --		Chrome
in	mm	in	mm	
4.00	102	18.00	457	P224696
		36.00	914	P224698
5.00	127	18.00	457	P224703
		36.00	914	P216227
		48.00	1219	P216228
		60.00	1524	J540008

### I.D. Style - 45° Mitered Stacks



- I.D. Dia. -		-- Length --		Chrome
in	mm	in	mm	
4.00	102	18.00	457	P224604
		48.00	1219	P224605
5.00	127	18.00	457	P224607
		60.00	1524	P224608
		84.00	2134	P224611
		96.00	2438	P224707



## Curved & Long 90° Stack Pipes

- Keeps exhaust smoke and fumes from damaging cargos or blackening van bodies
- 16 gauge aluminized steel or chrome

### O.D. Style - Curved Stacks



O.D. Dia.		--- Length ---		----- Curved -----	
in	mm	in	mm	Aluminized	Chrome
3.00	76	24.00	610	P208330	
		48.00	1219	P206380	P207312
3.50	89	24.00	610	P208338	
		48.00	1219	P206381	
4.00	102	24.00	610	J024748	J024749
		36.00	914	P208358	P208359
		48.00	1219	P206382	P206386
		60.00	1524	P208388	P208389
		72.00	1829	J640005	
5.00	127	24.00	610	J024750	J024751
		36.00	914	P208374	P208375
		48.00	1219	P206383	P206387
		60.00	1524	P208394	P208395
		72.00	1829	P224600	
		96.00	2438	P209912	

### I.D. Style - Curved Stacks



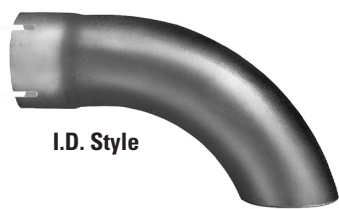
I.D. Dia.		-- Length --		----- Curved -----	
in	mm	in	mm	Aluminized	Chrome
3.00	76	36.00	914	P208326	
		48.00	1219	P207293	P207318
3.50	89	24.00	610	P224633	
		36.00	914	P208350	P216200
4.00	102	24.00	610	J024746	J024757
		36.00	914	P208366	J034746
		48.00	1219	P207295	P207320
		60.00	1524	P207290	P207301
		72.00	1829	P216202	
		84.00	2134	P224638	
5.00	127	24.00	610	J024747	J024758
		36.00	914	P208382	P216204
		48.00	1219	P207296	P207321
		60.00	1524	P224709	P207302
		72.00	1829	P216205	
		84.00	2134	P224638	
		96.00	2438	P209910	
6.00	152	36.00	914	P216206	



### I.D. Style - Long 90°

I.D. Dia.		-- Length --		Aluminized
in	mm	in	mm	
4.00	102	60.00	1524	P224710
5.00	127	60.00	1524	P224711

## Tailpipes - O.D. & I.D Styles



I.D. Style



O.D. Style

### Tailpipes O.D. & I.D. Styles

-- Dia. --		-- Length --		----- O.D. Style -----		----- I.D. Style -----	
in	mm	in	mm	Aluminized	Chrome	Aluminized	Chrome
2.00	51	9.00	229	P206306		P207415	
2.50	64	12.00	305	P206308		P206301	
3.00	76	12.00	305	P206309		P206302	J014621
3.50	89	12.00	305	P206310		P206303	J014622
4.00	102	12.00	305	P206311		P206304	J014623
		18.00	457	P208386	P206384	P207297	P207308
5.00	127	12.00	305			P224617	P224618
		18.00	457	P208392	P206385	P207298	P207309
		20.00	508	P206312		P206305	
6.00	152	20.00	508	P207419		P207559	

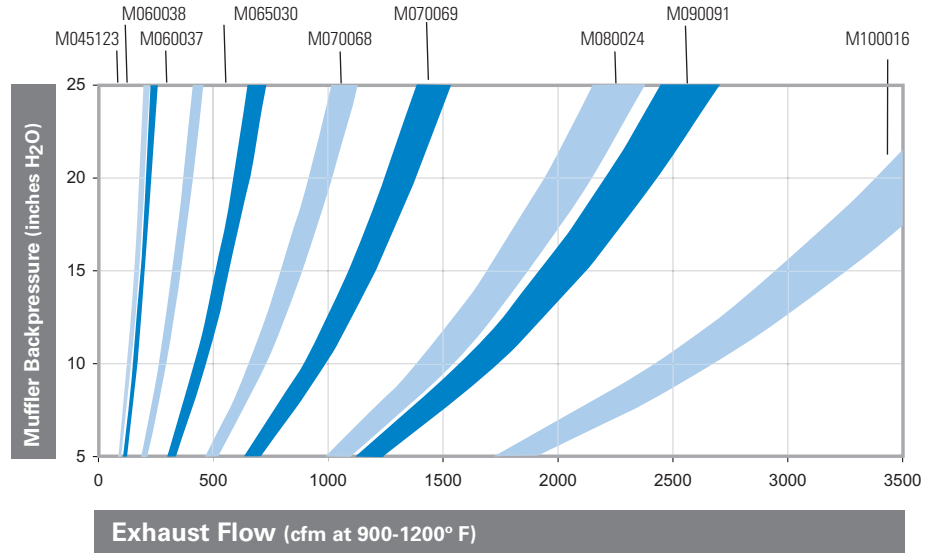
## Spark Arrestors

- U.S. Forest Service approved (80% efficiency on incendiary sparks)
- Reduces fire hazard
- Centrifugal force separates solids from exhaust gas
- Aluminized steel with stainless steel critical parts
- Can be installed vertically or horizontally (If possible, the clean out should face away from all fuel tanks, the vehicle operator's position and the air cleaner inlet.)
- Not designed to support tail or stack pipes without additional support



### Selecting a Spark Arrestor

Generally, if a spark arrestor will fit on the exhaust pipe of an engine, it will also have acceptable backpressure for that engine. In some cases, a larger size spark arrestor will be required to stay within backpressure limits, and in those cases adapters will have to be used.



### Spark Arrestor Service Tip

The spark arrestor should be inspected and cleaned out every 1,000 operating hours or three times per season. Visually inspect for holes, cracks and metal corrosion. Check the mounting clamp to make sure the spark arrestor is securely mounted. Replace the spark arrestor if your inspection reveals any of the above unsafe conditions.

Inlet I.D.		Outlet I.D.		Body Dia.		Body Length		Overall Length		Part Number
in	mm	in	mm	in	mm	in	mm	in	mm	
1.50	38	1.25 <sup>1</sup>	32	4.38	111	4.75	121	8.38	213	M045123
		1.50	38	6.00	152	3.75	95	9.36	241	M060038
2.00	51	2.00	51	6.00	152	5.00	127	11.10	283	M060037
2.50	64	2.50	64	6.61	168	6.25	159	13.00	330	M065030
3.00	76	3.00	76	7.00	178	7.56	194	14.63	372	M070068
3.50	89	3.50	89	7.00	178	9.00	229	16.50	419	M070069
4.00	102	4.00	102	8.00	203	10.63	270	18.19	461	M080024
5.00	127	5.00	127	9.00	229	11.75	298	20.75	527	M090091
6.00	152	6.00	152	10.00	254	13.38	340	23.50	597	M100016

1 - 1.25" is an outer diameter, not inner diameter.

## Resonators

- Provides an additional 2 to 3 dBA exhaust noise reduction
- Installs in the exhaust system
- Straight-through design does not increase backpressure
- Aluminized steel
- Both ends I.D. slotted
- Common dimensions for both models:
  - Body Dia. 9" (229mm)
  - Body Length 10" (254mm)
  - Overall Length 16.5" (419mm)



5" (125mm) I.D. and O.D. - Part No. M090072  
4" (102mm) I.D. and O.D. - Part No. M090362

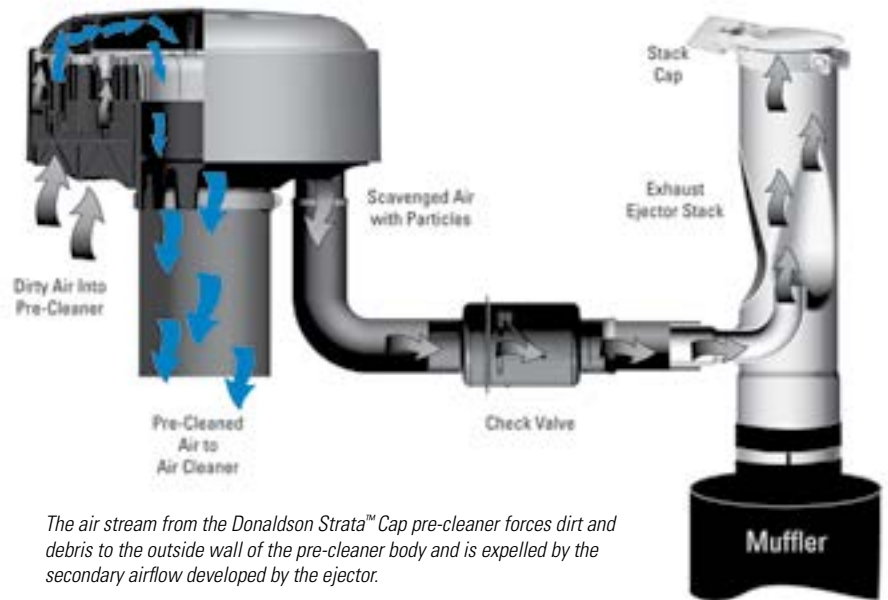
## Exhaust Ejectors

### Components for Scavenged Air Systems: Exhaust Ejectors & Check Valves

----- Basic Scavenged Air System -----

Donaldson exhaust ejectors and check valves are key components to create a scavenged or aspirated air system. The ejector is used with Donaldson Donaspin™ or Strata™ Cap pre-cleaners, Strata™ systems, or PowerCore® PSD air cleaners.

A scavenged air system is typically used in off-highway equipment to extend air filter life. The exhaust ejector mounts as a stack at the end of exhaust system. It is recommended that the stack be covered with a curved exhaust stack or rain cap.



The air stream from the Donaldson Strata™ Cap pre-cleaner forces dirt and debris to the outside wall of the pre-cleaner body and is expelled by the secondary airflow developed by the ejector.

## Exhaust Ejectors & Check Valves

Engine Intake CFM		Exhaust CFM @ 900° F		Standard Ejectors Inlet Dia.			Scavenge			
Low	High	Low	High	inches	mm	Part Number	Length inches	mm	Tube O.D. inches	mm
220	365	554	919	3.02	77.0	H002612	12.00	304.8	1.25	32
315	450	793	1133	4.02	102.0	H002613	18.00	457.2	1.25	32
425	600	1070	1511	4.02	102.0	H002614	18.00	457.2	1.50	38
500	740	1259	1864	5.03	127.8	H002615	22.00	558.8	1.50	38
660	950	1662	2393	5.03	127.8	H002616	22.00	558.8	1.75	44
800	1150	2015	2896	6.04	153.4	H002617	24.00	609.6	2.00	51
950	1350	2393	3400	6.04	153.4	H002618	24.00	609.6	2.00	51
1100	1500	2770	3778	6.04	153.4	H002619	24.00	609.6	2.00	51



### 3 ft. / .91 m Silicone Scavenge Hose & Lined Hose Clamp for:

- 1.25" / 32 mm Scavenge Tube: Hose: P171376 and Lined Hose Clamp P532924
- 1.50" / 38 mm Scavenge Tube: Hose: P171378 and Lined Hose Clamp P115200
- 1.75" / 44 mm Scavenge Tube: Hose: P171380 and Lined Hose Clamp P115200
- 2.00" / 51 mm Scavenge Tube: Hose: P171381 and Lined Hose Clamp P115200

## Standard Exhaust Ejectors

- Can be used with any pre-cleaner with scavenge tube connection
- Adds only 4" (102mm) to 8" (203mm) H<sub>2</sub>O (0.3" to 0.6" Hg.) to exhaust backpressure
- All models have a nominal OD outlet end for proper fit of stack caps and other accessories
- Finish on Standard Ejectors is high temperature, black, semi-gloss finish
- Compact Ejector made with 16 gauge aluminized steel (not painted)
- Can be installed horizontally or vertically
- Select the appropriate ejector by the intake or exhaust flow (cfm) of your engine

### Compact Style Ejectors

Part Number	Engine Intake CFM	Inlet I.D.		Scavenge Tube O.D.		Ejector Length		Exhaust Flow Rate (CFM)	
		inch	mm	inch	mm	inch	mm	Min.	Max.
H001278	165-215	2.77	70	1.25	32	9.75	248	415	545
H001279	300-390	3.02	77	1.25	32	10.80	274	760	990
H001284	450-590	4.02	102	1.25	32	14.38	365	1140	1500

## Ejector Check Valve Prevents Exhaust Backflow

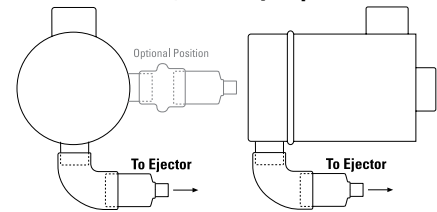
The exhaust ejector check valve prevents backflow of damaging exhaust gases by way of an internal hinge flap. Add an ejector check valve when configuring the intake system to expel filtered contaminant through the exhaust system.

- Mounts horizontally (see installation diagrams)
- Durable, non-corrosive metal construction
- No servicing required

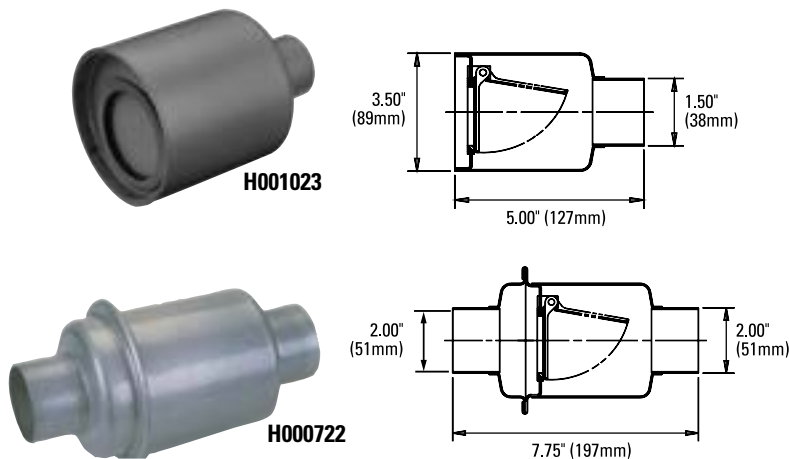
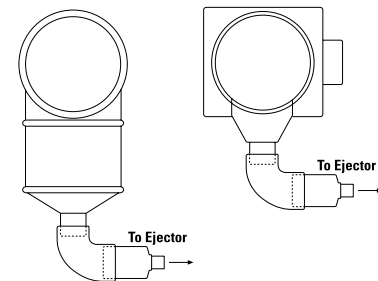
### Check Valve Installation

The illustrations are side views of two-stage air cleaners, showing the position of the check valve. A 3" (76mm) inner diameter rubber reducing elbow or hump reducer is required for installation. See pages 94-96 for options.

#### Installation on F Series Cyclopac™



#### Installation on S Series Donacore™



These flexible rubber adapters and elbows have smooth radii and inside surfaces to minimize flow resistance within the air intake system.

These rubber products are heavy-duty!

Larger elbows (5"/125mm) are ribbed or compounded for added strength and durability. All Donaldson rubber products meet ASTM standards.

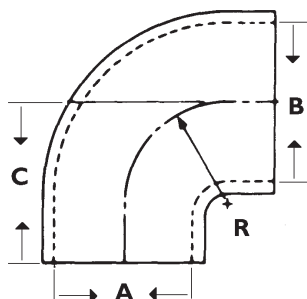
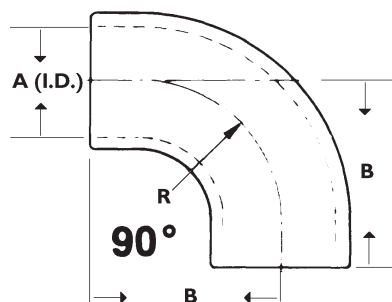
- Resist tears, punctures and vacuum collapse

- Absorb vibration
- Reduce intake noise levels under severe conditions
- Material: EPDM rubber construction
- Temperature range: -40°F (-40°C) to +212°F (+100°C)
- Application tip: A minimum 1½" of metal piping should be inserted into the rubber fitting

## 90° Rubber Elbows & Reducing Elbows

### 90° Elbows

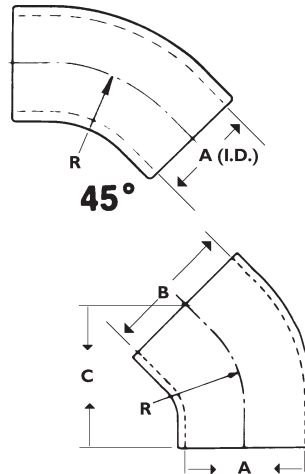
Inner Dia. (A) in	mm	Center Height (B) in	mm	Radius (R) in	mm	Part Number
2.00	51	3.50	76	2.00	51	P105529
2.25	57	3.75	95	2.25	57	P105530
2.50	64	4.00	102	2.50	64	P105531
3.00	76	5.25	133	3.75	95	P105532
3.50	89	5.50	140	4.00	102	P114318
4.00	102	5.75	146	4.50	114	P105533
4.50	114	5.50	140	3.50	89	P113733
5.00	127	6.12	155	4.50	114	P107844
5.50	140	6.50	171	4.63	118	P105534
6.00	152	7.00	179	5.00	127	P105535
7.00	179	7.56	192	5.56	141	P105536
8.00	203	8.50	216	6.50	165	P112605
10.00	254	10.50	267	8.50	216	P114314



### 90° Elbow Reducers

Inner Dia. (A) in	mm	Inner Dia. (B) in	mm	Center Height (C) in	mm	Radius (R) in	mm	Part Number		
3.00	76	3.50	89	3.50	89	2.25	57	P123462		
		4.00	102	4.50	114	3.00	76	P536163		
4.00	102	5.00	127	6.00	152	3.75	95	P121482		
		5.00	127	6.00	152	4.74	120	3.50	89	P537468
		6.00	152	6.00	152	4.25	108	4.25	108	P143895
5.00	127	7.00	179	6.25	159	4.25	108	P159820		
		5.50	140	6.00	152	6.75	171	5.00	127	P117724
		7.00	179	6.25	159	4.38	111	4.38	111	P128990

## 45° Rubber Elbows, Reducing Elbows and Hump Reducers



### 45° Elbows

Inner Dia. (A)		Radius (R)		Part Number
in	mm	in	mm	
2.00	51	2.00	51	P105541
2.25	57	2.25	57	P105542
2.50	64	2.50	64	P105543
3.00	46	3.75	95	P105544
3.50	89	3.50	89	P109331
4.00	102	4.25	108	P105545
4.50	114	3.50	89	P114316
5.00	127	4.50	114	P109021
5.50	140	4.75	121	P105546
6.00	152	5.00	127	P105547
7.00	178	5.56	141	P105548
8.00	203	6.50	165	P112606
10.00	254	8.50	216	P114313

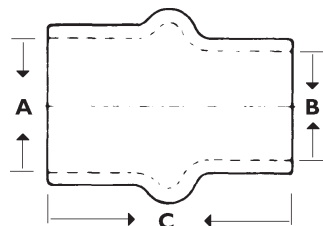
### 45° Elbow Reducers

Inner Dia. (A)		Inner Dia. (B)		Center Height (C)		Radius (R)		Part Number
in	mm	in	mm	in	mm	in	mm	
5.50	140	6.00	152	6.44	164	4.88	124	P133338
6.00	152	7.00	179	7.38	187	5.31	135	P133339



### Rubber Hump Reducers

Inner Dia. (A)		Inner Dia. (B)		Length (C)		Part Number
in	mm	in	mm	in	mm	
3.00	76	2.50	64	4.50	114	P102820
		2.75	70	3.50	89	P520883
3.50	87	3.00	76	5.00	127	P101290
		2.75	70	4.00	102	P520882
4.00	102	2.75	70	4.00	102	P520884
		3.00	76	5.25	133	P101291
		3.50	87	5.25	133	P101292
4.50	114	4.00	102	6.00	152	P540256
5.00	127	4.00	102	6.00	152	P101293
		4.50	114	6.25	159	P604045 <sup>1</sup>
5.50	140	4.00	102	6.00	152	P101891
		5.00	127	6.00	152	P103516
6.00	152	5.00	127	6.00	152	P112611
		5.50	140	6.00	152	P101294
		7.00	179	7.00	179	P136494
7.00	179	5.00	127	7.00	179	P136494
		5.50	140	7.00	179	P126530
		6.00	152	6.00	152	P112610
8.00	203	5.50	140	7.00	179	P129660
		6.00	152	6.00	152	P114315
		7.00	179	6.00	152	P112609
10.00	254	8.00	203	6.00	152	P112607



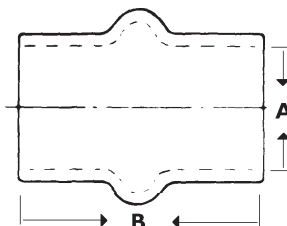
1 - Use clamp size for nominal 5" (127mm) I.D. each end





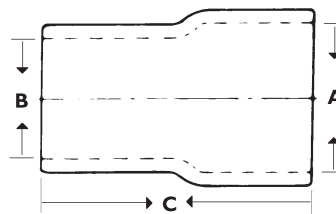
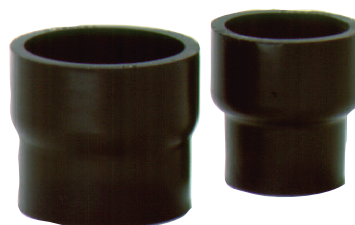
## Rubber Straight Humps

Inner Dia. (A)		Length (B)		Part Number
in	mm	in	mm	
3.00	76	5.30	135	P105608
3.50	89	5.25	133	P114319
4.00	102	5.25	133	P105609
4.50	114	6.00	152	P114317
5.00	127	6.00	152	P105610
5.50	140	6.00	152	P105611
6.00	152	7.00	165	P105612
7.00	179	7.00	165	P105613
8.00	203	5.00	127	P112608
10.00	254	6.00	152	P111414



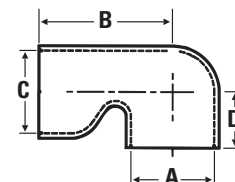
## Rubber Reducers

Inner Dia. (A)		Inner Dia. (B)		Length (C)		Part Number
in	mm	in	mm	in	mm	
2.00	51	1.50	38	2.50	64	P104087
		1.75	44			
2.25	57	2.00	51	2.50	64	P104088
2.50	64	2.00	51	2.50	64	P104089
		2.25	57			

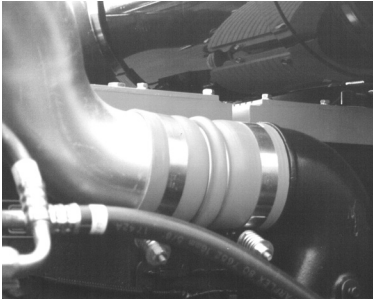


## 90° Cobra Adapters

Inner Dia. (A)		Inner Dia. (C)		Length (B)		(D)		Part Number
in	mm	in	mm	in	mm	in	mm	
2.75	70	4.00	102	6.50	165	1.81	46	P600328
3.00	76	3.00	76	5.22	133	1.91	49	P547694
4.00	102	4.00	102	6.44	164	2.69	68	P600325
		4.00	102	6.44	164	3.19	81	P600326
		5.00	127	6.44	164	3.19	81	P600327

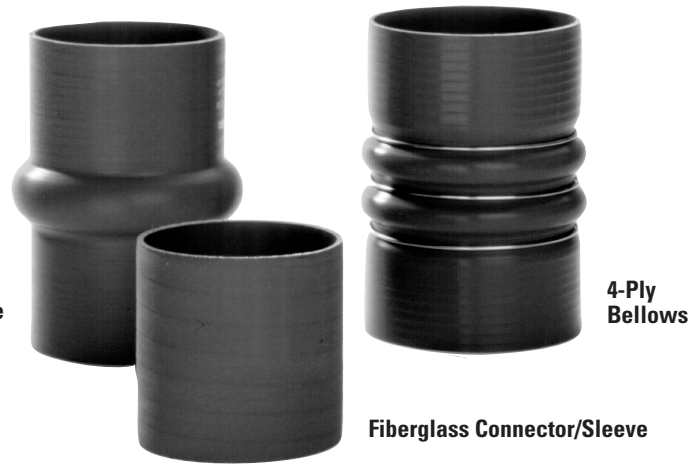


## Silicone Charge Air Connectors



Our three styles of charge air connectors are designed to ease connections in air intake system piping: they compensate for slight misalignment and isolate vibration between hose connections. The silicone elastomer material resists chemicals, steam, ozone, coolants and aging conditions normally found in any engine operating environment.

All three charge air connectors are for installation on the pressure side with maximum operating temperatures up to 500°F (260°C.) They are orange in color to be easily identifiable as tolerant of high temperatures, and carry a one year warranty.



**Hump Hose Connector**

**Fiberglass Connector/Sleeve**

**4-Ply Bellows**

### Connectors/Sleeves

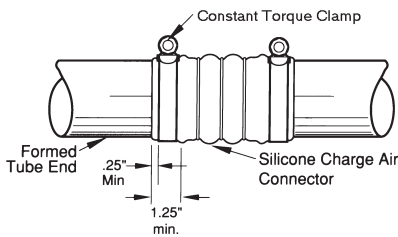
Inner Dia.		Length		Part
in	mm	in	mm	Number
2.00	51	36.00	914	P532948
2.25	57	36.00	914	P532949
2.50	64	36.00	914	P532950
3.00	76	36.00	914	P532951
3.38	86	3.50	89	P532952
		6.00	152	P532953
		36.00	914	P532954
3.50	89	3.50	89	P532956
		4.50	114	P532957
		36.00	914	P532958
4.00	102	36.00	914	P532959

### Hump Hose Connectors

Inner Dia.		Length		Part
in	mm	in	mm	Number
2.50	66	5.50	140	P532960
2.75	70	4.25	108	P532961
3.00	76	4.38	111	P532962

### 4-Ply Bellows

Inner Dia.		Length		No. of	Part
in	mm	in	mm	Rings	Number
3.50	89	6.00	152	3	P535572
4.00	102	6.00	152	0	P532943
		6.00	152	2	P535571
		6.00	152	3	P532944
		7.50	191	3	P532945
		8.00	203	3	P535573



Use the illustration as a guide for installing your charge air connector. For proper installation, use Donaldson Constant Torque clamps to retain clamp load. Torque to 70-75 lbs-in.

## Worm-Drive Hose Clamps

- Versatile clamps for wide size range of hose connections
- Made of strong, durable, noncorrosive stainless steel
- Inside of clamp is lined so that hose doesn't bulge through clamp holes
- Narrow band enables easy installation in confined areas



### High Torque Clamp

--- Min. to Max. Size --- inch	mm	Part Number
4-1/4 - 5-1/8	108-130	P115204
5-1/4 - 6-1/8	133-156	P115205
6-1/4 - 7-1/8	159-181	P115206
7-1/4 - 8-1/8	184-206	P115207
8-1/4 - 9-1/8	210-232	P115208
10-1/4 - 11-1/8	260-286	P115209

### Recommended application up to 150 lbs-in torque

This EXTRA heavy-duty clamp ensures total protection against leakage...eliminates the need for double clamping.



### Constant Torque Clamp

--- Min. to Max. Size --- inch	mm	Part Number
2-1/4 - 3-1/8	57-79	P532925
2-3/4 - 3-5/8	70-92	P532926
3-1/4 - 4-1/8	83-105	P532927
3-3/4 - 4-5/8	95-117	P532928
4-1/4 - 5-1/8	108-130	P532929

### Recommended application up to 90 lbs-in torque

Donaldson Constant Torque lined clamps are the best choice for systems where clamps cannot be retightened and have difficult access. Perfect for applications requiring higher torque, large diameters, temperature extremes, or where expansions and contractions within the system are common. This clamp is a good choice for critical coolant and charge-air connections.



### Lined Hose Clamp

-- Min. to Max. Size -- inch	mm	Part Number
9/16 - 13/16	14-21	P532919
11/16 - 15/16	17-24	P532920
13/16 - 1-1/16	21-27	P532921
13/16 - 1-1/2	21-38	P532923
13/16 - 1-3/4	21-44	P532924
15/16 - 1-1/4	29-32	P532922
1-9/16 - 2-1/2	40-62	P115200
2-1/16 - 3	52-76	P115201
2-13/16 - 3-3/4	71-95	P143422
3-5/16 - 4-1/4	84-108	P115202
4-5/16 - 5-1/4	109-133	P115203

### Recommended application up to 40 lbs-in torque

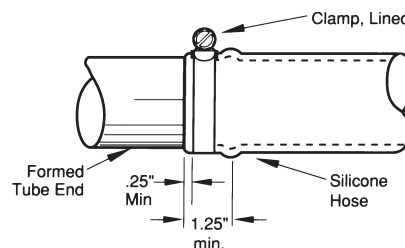
Donaldson lined hose clamps seal silicone and other soft hoses without damage. The inner liner extends under the perforations to protect the hose and prevents extrusions through the worm-gear perforations.

## T-Bolt Clamps



Nominal I.D. <sup>1</sup>	Min. to Max. Size inch	mm	Part Number
2.00	2.25-2.53	57-64	P148337
2.25	2.50-2.78	63-70	P148338
2.50	2.81-3.09	71-78	P148339
2.75	3.06-3.34	78-85	P148340
3.00	3.31-3.59	84-91	P148341
3.50	3.81-4.09	98-104	P148342
4.00	4.31-4.59	109-116	P148343
4.50	4.81-5.09	122-129	P148344
5.00	5.31-5.59	135-142	P148345
5.50	5.94-6.21	151-158	P148346
6.00	6.38-6.65	162-169	P148347
7.00	7.38-7.78	187-198	P148348
8.00	8.25-8.56	216-226	P148349
10.00	10.50-10.91	267-277	P148350

<sup>1</sup> - Nominal I.D. dimension, shown in inches, corresponds to I.D. dimension of rubber part being clamped.



Initial torque on lined hose clamp should be 40 lbs-in. If retorquing is required, limit to 20 lbs-in.

## Replacement Vacuator™ Valves

The Vacuator Valve, standard on the majority of Donaldson air cleaners, is an important part of the functionality of the air cleaner. It is an integral part of the pre-cleaning stage on two-stage air cleaners.

The dust cup, where pre-cleaned dust is collected, is normally under a slight vacuum when the engine is running. The normal engine pulsing of the vacuum causes the Vacuator Valve to open and close. This action automatically expels any collected dust and water. The Vacuator Valve also unloads when the engine is stopped.

### Application Notes

For proper operation, the Vacuator Valve should be located at the lowest point on the air cleaner or dust cup pointing down.

Never paint the Vacuator Valve. Solvents and chemicals will shorten the usable life.

If the Vacuator Valve is torn, shredded or turned inside out, its durometer may be too soft for the application. Choose a model with a harder durometer (higher number). Conversely, if the Vacuator Valve doesn't empty itself properly, the durometer may be too hard. Choose one with a softer durometer (lower number.)



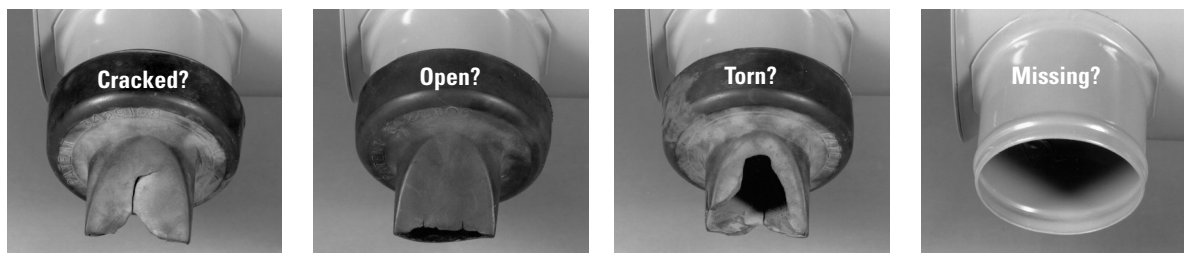
The Donaldson Vacuator Valve, also known as VacValve, is made in a variety of sizes and shapes to fit various applications. The Donaldson part number is molded into each part for easy identification.

### Vacuator Valves

Part Number	Diameter in	mm	Durometer	Used on Air Cleaner Styles
P103198	3.0	76	40	FRG 10", 12", 14" and 16"; FHG 10", 12", 14" and 16"; FTG; FWA 5"-16"; FWG 4"-16"; SRG; In-line Water Separators
P105220	3.0	76	60	FRG 18"; FHG 8"; FVG160587
P106593	3.0	76	60	FHG 6"-8", High Pulsation Models
P112803	3.0	76	40	FHG 6"-8"; PSD 10", PSD 12"; SBG 14"-16"; SDG; STG 12"-16"
P149099	1.0	25	60	ERA; EBA; EBB; ECG
P158914	2.0	51	50	XRB, FKB; PSD 8"; PSD 9"; FPG 6" and 8"; FRG 5"-9", 11"; FHG 5", FWG; FWA; Moisture Skimmers
P522958	2.0	51	60	FPG 4" -5"; FHG
P525956	1.0	25	60	EPG 11", 13", 15"
P617632	1.57	40	50	PSD 08"
P776008	2.0	51	60	FPG 9", 10" Twist-off cover; FRG 10", 13", and 15"

## For the longest filter service life, replace damaged or missing Vacuator Valves immediately!

If your valve is cracked, torn, remains open or is missing, dust particles that are normally expelled can deposit themselves onto the filter and will shorten air filter service life. **Replace it!**



## The Informer™ for Graduated, Continuous Readings

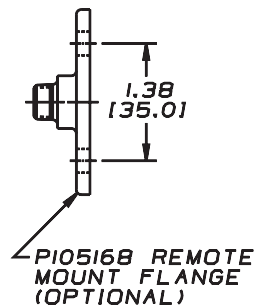
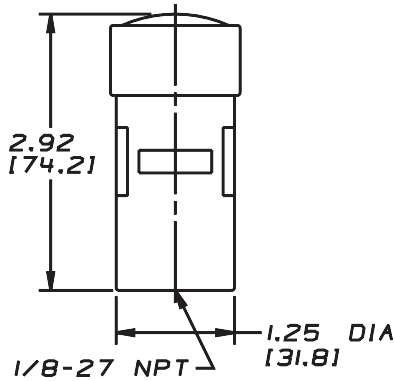


The Informer, when mounted on the air cleaner or the dashboard, provides a continuous reading whether the engine is running or is shut down. Reset button is on top. Kit includes full installation instructions and a P100089 safety filter

fitting. For remote mounting, order a P105168 flange and a P105622 90° elbow.

### The Informer™

Restriction Limit	Gauge Only	Kit (gauge & fitting)
20" H <sub>2</sub> O/5 kPa	X002278	X002103
25" H <sub>2</sub> O/6.2 kPa	X002277	X002102
30" H <sub>2</sub> O/7.5 kPa	X002275	X002101



## The Mini-Informer™ for Light & Medium Trucks

The Mini-Informer restriction gauge is designed to mount in the plastic air cleaners of passenger cars, light trucks, and sport utility vehicles. It's an accurate, durable, easy-to-read "go/no go" style indicator, smaller than the original Informer.

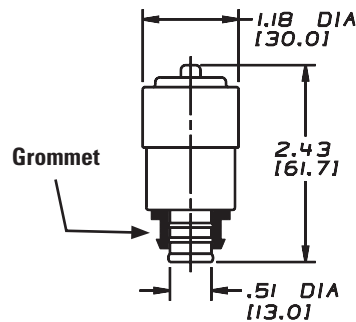


Through the clear window, a green flag shows when air filter restriction is below the service point. When the restriction reaches its limits, an orange flag imprinted with "change filter" pops up.

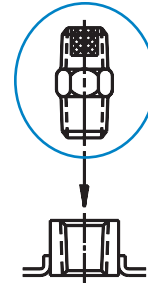
The Mini-Informer mounts in the air cleaner ducting in a rubber grommet.

### The Mini-Informer™

Restriction Limit	Gauge & Grommet	Gauge Only
25" H <sub>2</sub> O/6.2 kPa	X007276	X007335

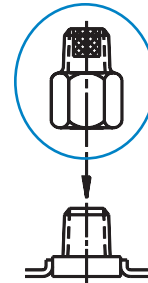


## Restriction Tap Fittings



### Part No. P100089

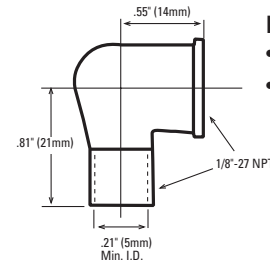
- Male threads both ends
- 1/8"-27 thread
- 0.44" (11mm) hex nut
- Internal sintered bronze safety filter



### Part No. P122067

- Female threads on one end, male threads on opposite end
- 1/8"-27 thread
- Internal sintered bronze safety filter

## Restriction Indicator Fitting



### Part No. P105622

- 1/8"-27 threads
- 90° elbow with threaded end

## Air Ram™ Inlet Hoods

- Primarily over-highway trucks
- For engine airflow of 700 to 1000+ cfm
- Improves intake system airflow and fuel economy by reducing restriction, examples:
  - at 33 mph, 53 kmh = 3.5" H<sub>2</sub>O restriction
  - at 45-52mph, 72-74 kmh = 4" H<sub>2</sub>O restriction
  - at 60 mph, 97 kmh = 5" H<sub>2</sub>O restriction
- Lightweight, non-corrosive, and durable – no service needed!
- Inlet screen prevents large debris from entering intake ducting
- Side louvers ensure continuous airflow to intake system
- Common inlet sizes fit most installations
- Eliminates water from air intake system
  - at 700 cfm airflow = 90%
  - at 800 cfm airflow = 93%
  - at 1000 cfm airflow = 93%\*

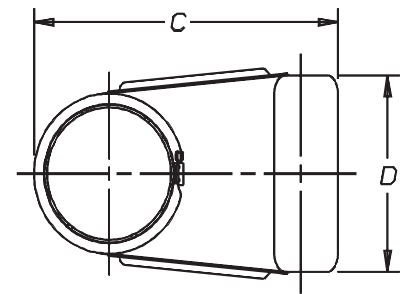
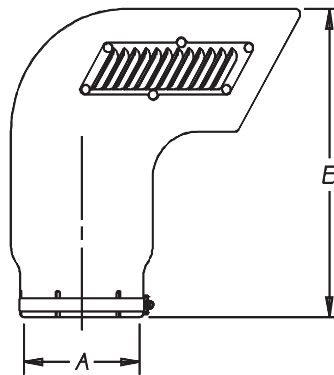
\* based on item H001660



**H001654**  
High profile model mounts on inlet stack, above and behind cab.



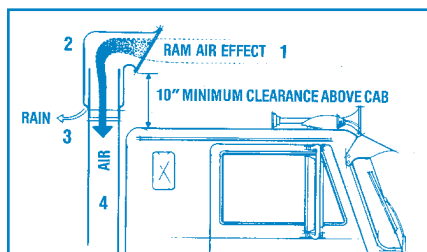
**H001200**  
Low profile model designed for air cleaners mounted on the side of the cab.



### Air Ram Inlet Hood

Part Number	Inlet Diameter (A)		Height (B)		Depth (C)		Width (D)	
	in	mm	in	mm	in	mm	in	mm
<b>MODELS WITH LOUVERS ON SIDE</b>								
H001660	6.06	154	14.80	376	14.85	377	8.98	228
H001654	7.06	179	15.53	394	15.63	397	9.86	250
H001661	8.06	205	16.16	410	16.95	431	10.92	277
<b>MODELS WITHOUT LOUVERS (LOW PROFILE)</b>								
H001200	7.06	179	6.25	159	12.03	306	13.20	335

Note: One mounting band is included with each Air Ram



#### How Air Ram™ Works

- 1- Moisture-filled air enters Air Ram.
- 2- Air is naturally forced against rear wall. Moisture sticks to the wall, separating from the air.
- 3- Moisture collects on the Air Ram wall and drains down to and out of the drain hole.
- 4- Virtually moisture-free air passes into air cleaner.

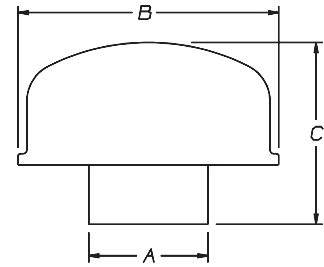
#### Installation Note

All Air Ram inlet hoods MUST be installed with the screen facing forward to ensure best performance. Airflow restriction will not be reduced if the Air Ram faces sideways; but if it faces backwards, restriction does increase and adversely affects engine performance.



## Inlet Hoods

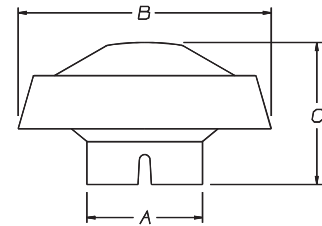
- Protects engine air intake from rain, snow, birds, and other large contaminants
- Mounts on stack or directly to air cleaner for on-road and off-road equipment
- Four styles in a wide variety of sizes
- Installs easily with one clamp. Clamp included with hood on styles B, C and D



### Inlet Hood - Style A<sup>1</sup>

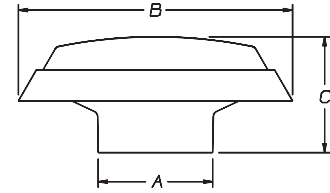
Fits O.D. (A)		Hood Dia. (B)		Height (C)		Add to Stack		Mat'l	Rain Shroud?	Weight		Part Number
inch	mm	inch	mm	inch	mm	inch	mm			lbs	kgs	
1.75	44	4.13	105	3.31	84	2.75	70	Metal	No	0.50	0.22	X002017
2.00	51	4.13	105	3.25	83	2.75	70	Metal	No	0.50	0.22	X002018
2.25	57	5.24	133	3.97	101	3.50	89	Metal	No	0.80	0.36	X002019
2.50	64	5.25	133	3.97	101	3.50	89	Metal	No	0.80	0.36	X001966
3.00	76	6.13	156	5.06	129	3.75	95	Metal	No	1.10	0.50	X002014
3.75	95	8.06	205	7.75	197	6.00	152	Metal	No	2.10	0.95	X001988
4.00	102	8.06	205	7.88	200	6.00	152	Metal	No	2.00	0.90	X002015

<sup>1</sup> - Clamps must be ordered separately for this style



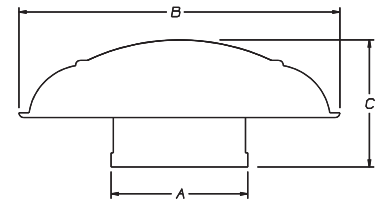
### Inlet Hood - Style B

Fits O.D. (A)		Hood Dia. (B)		Height (C)		Add to Stack		Mat'l	Rain Shroud?	Weight		Part Number
inch	mm	inch	mm	inch	mm	inch	mm			lbs	kgs	
1.75	44	6.00	152	3.37	86	2.05	52	Plastic	No	0.20	0.09	H002068
2.00	51	6.00	152	3.31	84	2.50	64	Plastic	No	0.20	0.09	H001377
2.50	64	6.00	152	3.31	84	2.50	64	Plastic	No	0.20	0.09	H001378
3.00	76	6.00	152	3.31	84	2.50	64	Plastic	No	0.20	0.09	H001379



### Inlet Hood - Style C

Fits O.D. (A)		Hood Dia. (B)		Height (C)		Add to Stack		Mat'l	Rain Shroud?	Weight		Part Number
inch	mm	inch	mm	inch	mm	inch	mm			lbs	kgs	
3.00	76	11.50	292	5.88	149	3.63	92	Plastic	No	1.10	0.50	H001063
3.75	95	11.50	292	5.13	130	3.63	92	Plastic	No	0.80	0.36	H000466
		11.50	292	5.13	130	3.63	92	Plastic	Yes	1.00	0.45	H000473
4.00	102	11.50	292	5.06	129	3.38	86	Plastic	No	0.90	0.40	H000467
		11.50	292	5.06	129	3.38	86	Plastic	Yes	1.00	0.45	H000472
4.50	114	11.50	292	4.88	124	3.38	86	Plastic	No	0.80	0.36	H000468
		11.50	292	4.88	124	3.38	86	Plastic	Yes	1.00	0.45	H000471
5.00	127	11.50	292	4.88	124	3.31	84	Plastic	No	0.80	0.36	H000469
		11.50	292	4.88	124	3.31	84	Plastic	Yes	1.00	0.45	H000470
		16.00	407	5.75	146	3.31	104	Plastic	Yes	1.80	0.80	H000605
5.50	140	16.00	407	5.75	146	4.94	125	Plastic	Yes	1.80	0.80	H000604
6.00	152	16.00	407	5.75	146	4.94	125	Plastic	Yes	1.80	0.80	H000606
		13.00	330	4.06	103	2.69	68	Bright	No	1.50	0.68	H001756
		16.00	406	5.69	145	4.25	108	Bright	Yes	1.50	0.68	H001948
7.00	178	12.81	325	4.81	122	3.44	87	Bright	No	1.50	0.68	H001773
		13.00	330	3.88	99	2.50	64	Bright	No	1.50	0.68	H001742
		16.00	406	5.75	146	4.09	104	Plastic	Yes	1.80	0.80	H000607
		16.00	406	5.69	145	4.25	108	Bright	Yes	1.50	0.68	H001947
8.00	203	16.00	406	6.19	157	4.69	119	Plastic	Yes	1.80	0.80	H001053
		16.00	406	6.19	157	4.60	117	Bright	Yes	1.50	0.68	H001946



### Inlet Hood - Style D

Fits O.D. (A)		Hood Dia. (B)		Height (C)		Add to Stack		Mat'l	Rain Shroud?	Weight		Part Number
inch	mm	inch	mm	inch	mm	inch	mm			lbs	kgs	
4.50	114	9.50	241	4.69	119	3.69	94	Metal	No	3.20	1.44	H000170
5.00	127	9.50	241	4.69	119	3.69	94	Metal	No	3.30	1.50	H000165
6.00	152	9.50	241	4.69	119	3.69	94	Metal	No	3.10	1.40	H000275
		9.50	241	4.69	119	3.69	94	Metal	Yes	3.20	1.44	H000276
7.03	179	17.00	432	6.75	171	5.75	146	Metal	No	4.60	2.08	H000339

## Stack-Top Moisture Eliminator

- For cabover trucks, on/off road, mounted on top of an intake stack
- Over 80% water removal efficiency
- Includes clamp for installation



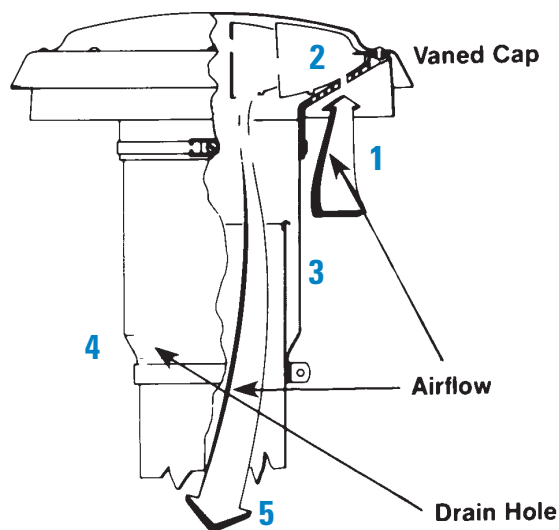
**Part No. X003691**

Airflow Range: 600-1200 cfm

I.D. 7.00" / 178mm

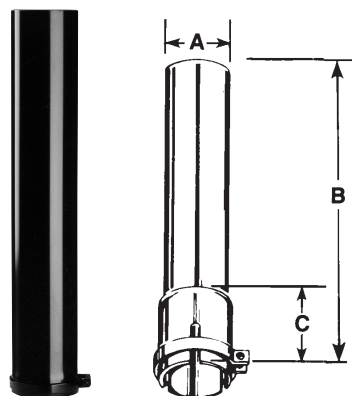
### How It Works

- 1- Moisture-filled air enters the moisture eliminator cap.
- 2- Built-in, stationary vanes cause the air to spin.
- 3- Moisture is forced to the outside wall, where it separates from the air and collects.
- 4- Water drains out through the drain hole.
- 5- As a result, drier air (acceptable for maximum filter life and engine performance) passes to the air cleaner.



## Air Stack Extensions

- For on-road and off-road trucks
- Helps extend filter life by elevating air inlet away from heavy dust concentrations and engine exhaust
- Installs easily and quickly with one clamp, which is included with unit
- Durable, corrosion-resistant steel construction



### Air Stack Extensions

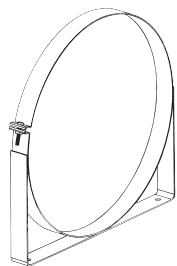
-(A - O.D.)-		-----(B)----		------(C)-----		Part Number
in	mm	in	mm	in	mm	
3.75	95	29.00	737	1.50	38	X001744
4.50	114	30.25	768	1.50	38	X001746
5.00	127	29.00	737	1.50	38	X001747
6.00	152	31.50	800	1.50	38	H000484
7.00	178	28.62	727	1.50	38	H000483

## Air Cleaner Mounting Bands

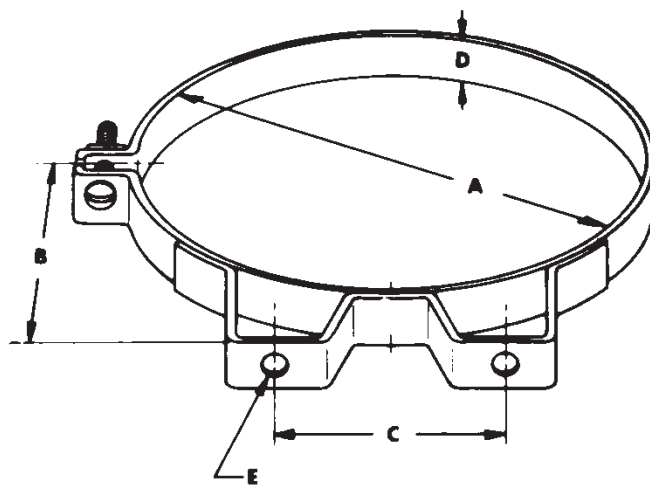


- Durable, corrosion resistant, steel construction
- Fully engineered and tested to resist the adverse effects of vibration
- Mounting band feet are designed to ensure maximum torque pressure, continuously
- Gauge of steel increases as diameter of mounting band increases
- Bright stainless models available
- Bolt and nut included with mounting band

Most of our air cleaners with metal housings require two mounting bands.



Two models (H770068, H770037) have different foot band compared to others.



### Air Cleaner Mounting Bands

A		B		C		D		E		Weight		Max. Bolt Torque		Part Number
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg	lbs-ft	N•m	
4.00	102	2.56	65	2.50	64	.75	19	.31	8	0.30	0.14	1.50	2.03	P007189
5.25	133	3.19	81	3.25	83	.88	22	.34	9	0.70	0.32	1.50	2.03	P002348
6.00	152	3.56	90	3.25	83	1.00	25	.34	9	0.80	0.36	1.50	2.03	P002351
6.50	165	3.88	99	3.75	95	.88	22	.41	10	0.70	0.32	2.00	2.71	P007191
7.00	178	4.13	105	4.50	114	.88	22	.30	8	0.80	0.36	3.00	4.07	P004906
7.75	197	4.44	113	4.25	108	1.00	25	.34	9	0.90	0.41	3.50	4.75	P003245
8.00	203	4.50	114	4.25	108	1.00	25	.34	9	1.10	0.50	4.00	5.42	P004307
9.00	229	5.13	130	4.5	114	1.25	32	.45	11	1.50	0.68	4.00	5.42	P004073
10.19	259	5.75	146	5.00	127	1.25	32	.45	11	1.50	0.68	4.00	5.42	P004076
11.00	279	6.13	156	5.00	127	1.25	32	.45	11	1.70	0.77	4.00	5.42	P004079
11.81	300	6.88	175	6.00	152	1.50	38	.41	10	2.50	1.13	4.00	5.42	H000349
13.00	330	7.25	184	6.00	152	1.50	38	.41	10	2.80	1.50	4.00	5.42	P013722
		7.25	184	6.00	152	1.50	38	.41	10	2.80	1.50	4.00	5.42	P522439*
14.00	356	8.13	207	8.00	203	1.50	38	.47	12	3.70	1.68	5.00	6.78	H000350
15.00	381	8.00	203	8.00	203	1.50	38	.47	12	4.10	1.86	6.00	8.14	P016845
		8.00	203	8.00	203	1.50	38	.47	12	4.10	1.86	6.00	8.14	P524552*
16.00	406	9.13	232	10.00	254	1.50	38	.47	12	4.75	2.16	5.00	6.78	H000351
18.00	457	9.2	234	15.75	400	1.96	50	.55	14	5.25	2.38	5.00	6.78	H770037
19.29	490	10.97	279	19.29	490	1.96	50	.55	14	6.39	2.9	5.00	6.78	H770068

\* Bright Stainless Model

## Mounting Bands Designed Exclusively for FPG Series Air Cleaners

### Polymer Mounting Band

The one-piece, high tech polymer mounting band will securely hold the housing in position. The band has tabs on the inside circumference which fit exactly into notches on the FPG housing.

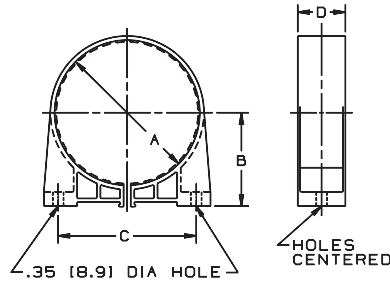
The band tightens around the air cleaner when the base of the band is bolted to a support, providing a fixed, stable mounting – even in high vibration applications.

Donaldson polymer bands are completely non-corrosive, lightweight, easy to install, and economical.

#### Application Note:

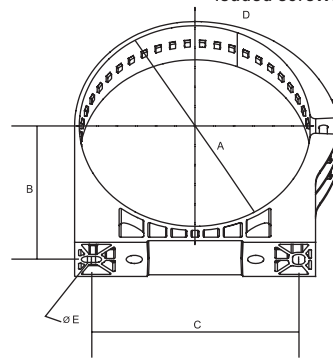
To accommodate even hard-to-fit applications, polymer bands allow the air cleaner housings to be rotated and positioned at various increments, depending upon the size:

Housing Diameter	Increment
4.80" (122mm)	11°
5.75" (146mm)	10°
6.74" (171mm)	7.5°
7.19" (183mm)	7°
8.35" (212mm)	5°



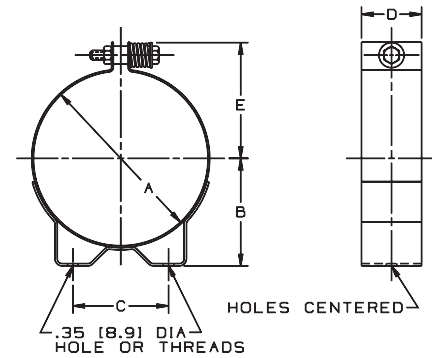
For G04 and G05 FPG Air Cleaners.

Bands for G06-G10 FPG Air Cleaners with spring loaded screws



### Metal Mounting Band

The metal mounting band has a spring-loaded bolt at the top to maintain a constant hold on the housing throughout high and low temperature extremes.



**WARNING:** Do not use any other mounting bands or straps with FPG air cleaners. Use of an unapproved mounting band voids warranty.

### FPG Mounting Bands (Order one band per FPG air cleaner)

Part Number	A		B		C		D		E		Weight		Maximum Belt Torque	
	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kgs	lbs.-ft.	N•m
<b>POLYMER BANDS</b>														
P777151	4.80	122	3.09	79	4.56	116	1.57	40	n/a		0.26	118	11 lbs.-ft.	14.8 N•m
P777730	5.75	146	3.52	90	5.35	136	1.99	51	n/a		0.37	167	11 lbs.-ft.	14.8 N•m
P778810	6.79	173	3.94	100	6.00	154	1.99	51	n/a		0.40	182	11 lbs.-ft.	14.8 N•m
P777731	7.17	182	4.11	105	6.50	165	1.99	51	n/a		0.45	206	11 lbs.-ft.	14.8 N•m
P777732	8.35	212	4.70	120	7.48	190	1.99	51	n/a		0.56	253	11 lbs.-ft.	14.8 N•m
P780532 <sup>1</sup>	9.48	241	5.47	136	5.63	143	1.99	51	n/a					
P780594 <sup>1</sup>	10.55	268	5.90	150	5.63	143	3.15	80	n/a					
<b>METAL BANDS</b>														
H008442	4.80	122	3.07	78	2.76	70	1.57	40	3.34	85	0.70	317	12 lbs.-ft.	16.2 N•m
H008443	5.75	146	3.54	90	3.15	80	1.99	51	3.83	97	1.30	590	12 lbs.-ft.	16.2 N•m
H008441 <sup>2</sup>	6.79	173	3.94	100	3.54	90	1.99	51	4.35	111	1.40	635	12 lbs.-ft.	16.2 N•m
H008444	6.79	173	3.94	100	3.54	90	1.99	51	4.35	111	1.40	635	12 lbs.-ft.	16.2 N•m
H002070	7.19	183	4.09	104	3.74	95	1.99	51	4.55	116	1.50	680	12 lbs.-ft.	16.2 N•m
H002023	8.13	207	4.72	120	4.33	110	1.99	51	5.14	131	1.60	726	12 lbs.-ft.	16.2 N•m

1 - Mounting bands (with spring-loaded screws) for FPG09 and FPG10 models with twist-off cover

2 - Model H008441 has 8mm threads

