



# PRODUCT CATALOG

1934 - 2022

**88**  
YEARS

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#### NOTE:

The information and photographs in this catalog are believed to be accurate and factual as of the print date. Velvac assumes no responsibility for information that may be incorrect or has changed since press time. Product specifications and offerings subject to change without notice.

## BUILDING FOR THE FUTURE

Velvac's vision for the future of our aftermarket parts business is clear — **"To improve driver safety and well being by achieving product leadership and by being better, faster, and easier to do business with than our competitors"**.

That vision has propelled Velvac to many years of strong growth and in 2020 drove us to build a new, state-of-the-art manufacturing facility in Reynosa, MX. The new facility was needed to support that growth, provide space for "in-sourcing" the manufacture of products that had previously been sourced overseas, and to better serve the demanding quality and delivery needs of our customers.

At the height of the COVID pandemic, Velvac invested in its future by constructing a 150,000 sq. ft. production facility on the US/Mexico border. That investment has paid-off and now, two years later, Velvac plans to almost double the size of that facility to support further growth. When combined with our logistics facility in Pharr, TX, our production and logistics footprint on the US/Mexico border will approach 400,000 sq. ft. after the expansion.

Among the products produced in our new facility are mirrors, air brake hose assemblies, 3-in-1 assemblies, fuel caps, pogo sticks, and others — all made with the highest levels of quality in our IATF 16949/ISO 14001 certified facility.



## FINDING MIRRORS WITH [www.velvac.com](http://www.velvac.com)

### How to navigate the make model matrix on [www.velvac.com](http://www.velvac.com)

#### Step 1

Hover over PRODUCTS on Velvac's home page and then click on Mirrors.



#### Step 2

Under Mirrors in the left grey box, click Shop RV Mirrors.





## FINDING MIRRORS WITH [www.velvac.com](http://www.velvac.com)

### Step 3

Find the correct RV mirror and related service parts by choosing manufacturer, model and year. A list of relevant parts will populate, click on part you are looking for.

CHOOSE A MANUFACTURER  
 Thor

CHOOSE A MODEL  
 Four Winds

CHOOSE A YEAR  
 2020

2020XG SYSTEM, 102" BODY, BLACK, CAMERA, DRIVER SIDE



SKU: 719993  
 Heated Remote Flat Glass, Heated Manual Convex Glass

[VIEW DETAILS](#)

2020XG SYSTEM, 102" BODY, BLACK, CAMERA, PASSENGER SIDE



SKU: 719992  
 Heated Remote Flat Glass, Heated Manual Convex Glass

[VIEW DETAILS](#)

### Step 4

Click on ADD TO CART for products you want to buy.


## 2020XG System, 102" Body, Black, Camera, Driver Side

SKU: 719993

Heated Remote Flat Glass, Heated Manual Convex Glass



#### REPLACEMENT ITEMS

<p><b>Deluxe Replacement Head, Black, Camera, Left Side</b></p> <p>SKU: 719777            Heated, Remote Flat Glass, Manual Convex</p> 	<p><b>2020XG Replacement Flat Glass Kit, Left Side</b></p> <p>SKU: 716103            Heated Flat Glass</p> <p>\$70.63</p> <p>Quantity <input type="text" value="1"/></p> <p><a href="#">ADD TO CART</a></p>	<p><b>2020XG Replacement Convex Glass Kit, Left Side</b></p> <p>SKU: 716105            Heated Convex Glass</p> <p>\$59.23</p> <p>Quantity <input type="text" value="1"/></p> <p><a href="#">ADD TO CART</a></p>
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### Step 5

Or instead of searching by RV type, you can search by photo to see a list of all RV manufacturers and vehicles that use that particular mirror.

As always, you can also contact our Technical Services Group at 1.800.783.8871 or via e-mail at [technicalservice@velvac.com](mailto:technicalservice@velvac.com) if you need additional help locating a RV mirror.

#### PRODUCTS

##### Mirrors




- Shop RV Mirrors
- Shop by Mirror Head/Base**
- All Mirrors
- 3-to-4s and 4-to-4s
- Air Products
- Electrical Products
- Fittings & Hardware
- Hose Support
- Fuel System Products
- Accessories
- Cameras & Vision Systems
- Retail Merchandising

Home > Products > Mirrors > Shop by Mirror Head/Base >

## SHOP BY MIRROR HEAD/BASE

**Instructions: Select the mirror head you have.**

Note: Color and Options represented on the selection page are generic.

<p>2020XG GMGVAN</p>  <p>MORE</p>	<p>2020SS DELUXE</p>  <p>MORE</p>	<p>2025 EUROMAX</p>  <p>MORE</p>
<p>2030 DELUXE WITH TOP HAT- INVERTED</p>  <p>MORE</p>	<p>2020SS SUPERSTAR</p>  <p>MORE</p>	<p>2030 V MAX II</p>  <p>MORE</p>

## STAINLESS STEEL MIRROR

# Will your mirror survive?



**In severe applications where corrosion issues are extreme, a stainless body mirror isn't nearly robust enough to survive.**

The mounting hardware will rust and fail before the mirror. For these conditions, Velvac developed a 100% stainless steel 8-1/2" convex mirror. All metal components are stainless steel allows the mirror to stand up to the harshest elements that the environment can dish out.



[velvac.com](http://velvac.com)

More information on page M21

**OUR PARTS PUT YOU IN THE PASSING LANE**

# MIRRORS

## See clearly.

A combination of quality, styling and performance make Velvac mirrors the benchmark for medium and heavy duty commercial, recreational and specialty vehicles. Our mirrors reduce blind spots and provide clear views of passing lanes, making you a safer, more efficient driver.

- West Coast, Convex, and Hood Mount Mirrors
- Van and Cab Chassis Commercial Mirrors
- Walk In Van, RV and Specialty Mirrors





## HEAVY DUTY TRUCK

### West Coast Mirror Systems

#### 2010 Mirror Features

- Two-way remote controlled adjustable West Coast mirror system.
- Velvac's 2010 west coast mirror offers the widest viewing area available!
- Larger glass 2010 mirrors feature over 104 square inch viewing area.
- Designed to fit any standard 17½" span loop.
- Replaceable ⅛" FSC mirror glass.
- 4 amp, temperature-controlled heating element provides quick, even defrosting and prevents mirror glass from overheating.
- Polished 300 series stainless steel outer shell and heavy-duty ABS plastic inner housing combine to ensure durability and good looks.
- Optional marker light provides additional safety by indicating the widest point of the vehicle to oncoming drivers.
- Mounting hardware included.



#### Mirrors with 10' Wire Harness and Heater Switch

Left Part #	Right Part #	M/R	Heat	Light
708209	708210	M	•	-
708211	708212	R	•	-
708369	708368	R	•	•

#### Mirrors without Harness or Switches

Left Part #	Right Part #	M/R	Heat
708209-4	-	M	•
708211-4	708212-4	R	•

M = Manual Adjustment  
R = Remote Control Adjustment

#### Remote 2010 Mirror Features

- Heavy-duty, 1.5 RPM motor for fast, smooth adjustments.
- Sealed motor housing for protection against moisture and contaminants.
- Automatic slip clutch for manual adjustments without gear damage.
- Interchangeable wire harness allows for convenient retrofitting.
- Remote models also include a momentary motor switch.



#### Replacement Parts

Part #	Description
709309	Heated glass w/ bezel
709329	Motor
747386+	Lighted heater switch
747387+	Momentary motor switch
747451	4 Conductor harness, 124"



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

- Popular V-back design available in three different versions to meet any requirement or price point.
- Over 96 square inches of viewing area.
- Comes as stainless steel or painted versions, all with 5/16" hardware.

V-Back



#### Good

- Cost effective mirror for high replacement application.
- Gasket surrounds silvered glass for durability and edge shock protection.
- Glass not replaceable.
- Standard painted finish.
- Plated hardware.
- Individually packaged in display box.

Part #	Color	Heat
705114	Black	-
705115	Black	•
705116	White	-
705112	Stainless steel	-
705113	Stainless steel	•

#### Better

- Cost effective version of OEM (best) mirror.
- Gasket surrounds silvered glass for durability and edge shock protection.
- Front surface chrome glass used on heated mirrors.
- Replaceable glass.
- Housing is powder coated to meet OEM requirements.
- Plated hardware.
- Individually packaged in display box.

Part #	Color	Heat
708001	Black	-
708005	Stainless steel	-
708008	Stainless steel	•



#### Best

- Popular replacement mirror for several OE applications.
- HD support bands and gasket surround the front surface chrome glass for added strength and durability.
- Replaceable glass.
- Housing is powder coated to meet OEM requirements.
- All stainless steel hardware.
- Individually packaged.

Part #	Color	Heat
708022	Stainless steel	-
708046	Stainless steel	•

#### Flat Glass Kit

Part #	Heat
702042	-



## HEAVY DUTY TRUCK

### West Coast Mirror Systems

- Designed with 1/8" silvered glass and 5/16" - 18 plated hardware. Mounting fasteners are included.
- Angle back, pillow back and rib back mirrors are packaged in a display box.
- AMP rating for angle back - round corner and angle back - square corner mirror systems: 1.0 AMP heating element; 1.6 AMP marker light.



#### Angle Back - Round Corner

Part #	Size	Description	Color	Flat Glass/Convex Glass Area (in <sup>2</sup> )
705333	7" x 16"	Standard glass	Stainless steel	93
705335	7" x 16"	Heated glass	Stainless steel	93
708331	7" x 16"	Heated w/ marker light	Stainless steel	93
705334	7" x 16"	Split glass	Stainless steel	64 Flat/36 Convex
705148 <sup>1</sup>	7" x 16"	Ford F650/F750 heated w/ marker light	Stainless steel	93
705150 <sup>1</sup>	7" x 16"	Ford F650/F750 standard glass	Stainless steel	93

#### NOTES

<sup>1</sup> See page M51 for additional information on mirror heads and bracket kit.



#### Angle Back - Square Corner

Part #	Size	Description	Color	Flat Glass/Convex Glass Area (in <sup>2</sup> )
708526	7" x 16"	Standard glass	Stainless steel	99
708525	7" x 16"	Heated glass	Stainless steel	99
705332	7" x 16"	Heated w/ marker light	Stainless steel	99
705108	6½" x 16"	Heated w/ marker light	Stainless steel	84



#### Pillow Back

Part #	Size	Description	Color	Flat Glass/Convex Glass Area (in <sup>2</sup> )
705101	6½" x 16"	Standard glass	Black	81
705102	6½" x 16"	Standard glass	Stainless steel	81
705103	6½" x 16"	Standard glass	White	81

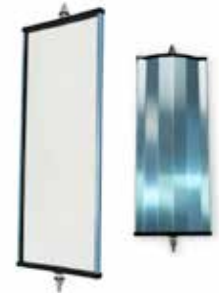
#### Rib Back

Part #	Size	Description	Color	Flat Glass/Convex Glass Area (in <sup>2</sup> )
705104	6½" x 16"	Standard glass	Black	88
705117	6½" x 16"	Heated glass	Black	88
705105	6½" x 16"	Standard glass	White	88



#### Aluminum Economy Angle Back

Part #	Size	Description	Color	Flat Glass/Convex Glass Area (in <sup>2</sup> )
705038 <sup>1</sup>	6" w x 16" h	Standard glass	Aluminum	94
705107 <sup>1</sup>	6" w x 16" h	Split glass	Aluminum	66 Flat / 21 Convex
705111 <sup>2</sup>	6" w x 16" h	Standard glass	Aluminum	94



#### NOTES

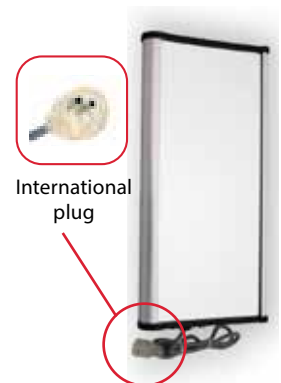
<sup>1</sup> Includes black plastic end caps

<sup>2</sup> Includes heavy duty metal end caps

#### International S-Series

- 7" x 16" aluminum mirror head.

Velvac Part #	Side	Heat	Fleetrite Cross Ref #	Navistar Cross Ref #	Cham-Cal Cross Ref #
708335	Both	-	MIR4070	1657021C91 1657048C91	20000
708336	Right	•	MIR4071	1667899C91	20090
708337	Left	•	MIR4074	1669515C91	20080



International plug

Part #	Description
713198	Loop and bracket assembly (one side - brackets only)

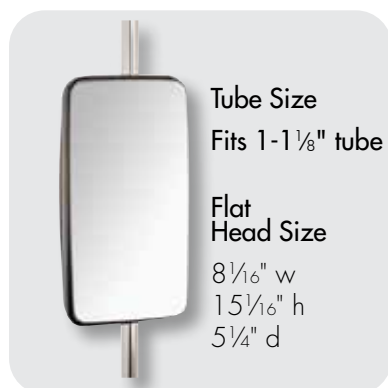




# MIRRORS

## HEAVY DUTY TRUCK

### West Coast Mirror Systems



Tube Size  
Fits 1-1 1/8" tube

Flat  
Head Size

8 1/16" w  
15 1/16" h  
5 1/4" d

**Ferrara Vehicles:**  
FD-100, HD-57, HD-77, HD-107, LP-102  
Ladders, Mid & Rear  
Mount Platforms, Ember,  
Igniter, Inferno, Intruder  
2, Ultra Pumpers,  
Custom Tankers, Heavy  
Rescues, Type I Wildland  
(2006-Present)

**Hino Vehicles:**  
145, 165,  
185, 238,  
258ALP, 258LP,  
268, 268A,  
338, 338CT  
(2005-Present)

**HME Vehicles:**  
Custom Pumper,  
Tanker, Rescue,  
Platform,  
Scorpion™,  
Silverfox®  
(2004-Present)

**Kovatch Vehicles:**  
Eliminator, Dryside Tanker,  
Heavy Duty Rescue,  
Challenger, Legacy,  
Rearmount Pumper, TDA,  
Midmount, Rearmount  
Ladder/Platform, Predator,  
Severe Service, Panther and  
Legacy (2003-Present)



### Flat Glass Head Glass adjustable

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
427	V514270016 <sup>1,4</sup>	7 1/4" w x 14 1/4" h	Right	Chrome	R	•	-	HC21Q23QX	Sutphen
427	V514270015 <sup>1,4</sup>	7 1/4" w x 14 1/4" h	Left	Chrome	R	•	-	N/A	N/A
427	V514270104	7 1/4" w x 14 1/4" h	Right	Black	R	•	•	87903E0250	Hino
427	V514270103	7 1/4" w x 14 1/4" h	Left	Black	R	•	•	87906E0160	Hino
427	V514270122	7 1/4" w x 14 1/4" h	Right	Black	R	•	-	DS514270122	Ferrara
427	V514270014	7 1/4" w x 14 1/4" h	Right	Black	M	•	-	879010W051	Hino
427	V514270013	7 1/4" w x 14 1/4" h	Left	Black	M	•	-	879060W010 879060W011	Hino
427	V514270002	7 1/4" w x 14 1/4" h	Right	Black	M	-	-	87903E0090 87903E0091	Hino
427	V514270001	7 1/4" w x 14 1/4" h	Left	Black	M	-	-	87906E0051	Hino



### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
427	V154270011	7 1/4" w x 14 1/4" h	Both	Black	Both	•	N/A	101445027	Ferrara
								87961E0020	Hino
								005881V191 005881V231	Kovatch

**Pierce Vehicles:**  
PUC Ariels, Pumpers, Rescues. Arrow XT™, Impel™, Quantum®, Saber®, Velocity® (2003-Present)

**Seagrave Vehicles:**  
Marauder II, Attacker HD (2004-Present)

**Spartan Vehicles:**  
Gladiator®, Metro Star®, Metro Star®-X, Metro Star®- RT (2004-Present)

**Sutphen Vehicles:**  
Aerial Platforms - SP70, SP95, SPH100, Remount, Aerial Ladders - SA75, SA100, Pumpers - Guardian, Monarch, Shield, Specialty - Heavy Rescue, Wildland - Type I, Industrial- SA|110, SP|112, Pumper (2004-Present)

#### Flat Mirror Cover

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
427	V134271008	N/A	Both	Chrome	N/A	N/A	-	S8791E0030	Hino
427	V134271000	N/A	Both	Black	N/A	N/A	-	DS134271000	Ferrara
								101445029	Hino
427	V614270006 <sup>2,3</sup>	N/A	Both	Black	N/A	N/A	•	S8791E0020	Hino



#### Flat Mirror Actuator

Model	Velvac Part #	Side
427	V084270006	Both



#### Side Mount Bracket

Model	Velvac Part #	Dimension "A"	Dimension "B"	Side	Color	Material	OEM Cross Ref #	OEM
407	V584070310 <sup>5</sup>	31¾"	7 <sup>57</sup> / <sub>64</sub> "	Both	Stainless	Stainless	P3207000	Seagrave Spartan

- Dimension A: Distance between upper and lower mounting holes
- Dimension B: Distance between the outside edge of the mirror bracket and the mounting surface



#### NOTES

**M/R:** Manual/remote

<sup>1</sup> Chrome backcover with chrome housing

<sup>2</sup> Furnished with punched holes

<sup>3</sup> Kit furnished with marker light

<sup>4</sup> For use with bracket assembly V584070310

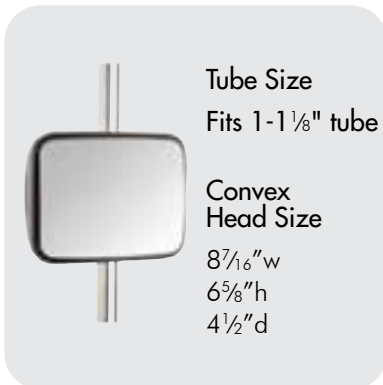
<sup>5</sup> Furnished less electrical harness

OEM numbers and information is being shown for known applications, and is for reference only. Order product using Velvac part numbers and product attributes listed in the tables.

\*Matching convex model 428 shown on page M16

## HEAVY DUTY TRUCK

### Convex Mirror Systems



**E-ONE Vehicles:**  
Cyclone® & Typhoon®  
Aerials, Custom Chassis, Custom Pumpers, Rescue (2004-Present)

**Ferrara Vehicles:**  
FD-100, HD-57, HD-77, HD-107, LP-102  
Ladders, Mid & Rear Mount Platforms, Ember, Igniter, Inferno, Intruder 2, Ultra Pumpers, Custom Tankers, Heavy Rescues, Type I Wildland (2006-Present)

**Hino Vehicles:**  
145, 165, 185, 238, 258ALP, 258LP, 268, 268A, 338, 338CT (2005-Present)

**HME Vehicles:**  
Custom Pumper, Tanker, Rescue, Platform, Scorpion™, Silverfox® (2004-Present)



### Convex Glass Head Glass adjustable

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
428	V564281014 <sup>1,3</sup>	7 3/4" w x 5 3/4" h	Both	Chrome	M	•	-	N/A	N/A
428	V564281015 <sup>1,2</sup>	7 3/4" w x 5 3/4" h	Both	Chrome	M	•	•	N/A	N/A
428	V564281002	7 3/4" w x 5 3/4" h	Both	Black	M	•	-	DS564281002	Ferrara
428	V564281001	7 3/4" w x 5 3/4" h	Both	Black	M	-	-	S8790E0021	Hino



### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
428	V154280002	7 3/4" w x 5 3/4" h	Both	Black	M	•	-	101445028	Ferrara
428	V154280001	7 3/4" w x 5 3/4" h	Both	Black	M	-	-	87931E0010	Hino

## HEAVY DUTY TRUCK

### Convex Mirror Systems

**Kovatch Vehicles:**  
Eliminator, Dryside Tanker, Heavy Duty Rescue, Challenger, Legacy, Rearmount Pumper, TDA, Midmount, Rearmount Ladder/Platform, Predator, Severe Service, Panther and Legacy (2003-Present)

**Pierce Vehicles:**  
PUC Ariels, Pumpers, Rescues; Arrow XT™, Impel™, Quantum®, Saber®, Velocity® (2003-Present)

**Seagrave Vehicles:**  
Marauder II, Attacker HD (2004-Present)

**Spartan Vehicles:**  
Gladiator®, Metro Star®, Metro Star®-X, Metro Star®- RT (2004-Present)

**Sutphen Vehicles:**  
Aerial Platforms - SP70, SP95, SPH100, Remount, Aerial Ladders - SA75, SA100, Pumpers - Guardian, Monarch, Shield, Specialty - Heavy Rescue, Wildland - Type I, Industrial-SA|110, SP|112, Pumper (2004-Present)

### Convex Mirror Cover

Model	Velvac Part #	Side	Color	Light	OEM Cross Ref #	OEM
428	V134281011	Both	Black	-	DS134281011	Ferrara
					S8791E0050	Hino



### NOTES

**M/R:** Manual/remote

<sup>1</sup> Chrome backcover with chrome housing

<sup>2</sup> Furnished with turn signal

<sup>3</sup> For use with bracket assembly V584070310

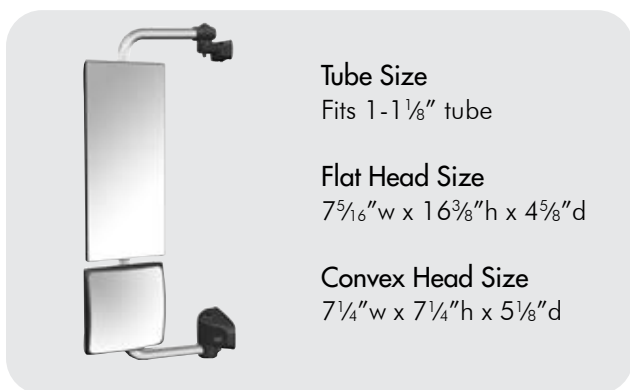
OEM numbers and information is being shown for known applications, and is for reference only. Order product using Velvac part numbers and product attributes listed in the tables.



# MIRRORS

## HEAVY DUTY TRUCK

### OEM Replacement Parts and Accessories



**Tube Size**  
Fits 1-1 1/8" tube

**Flat Head Size**  
7 5/16" w x 16 3/8" h x 4 5/8" d

**Convex Head Size**  
7 1/4" w x 7 1/4" h x 5 1/8" d

**Freightliner Vehicles:** Columbia (1999-2002)

**Kovatch Vehicles:** Eliminator, Dryside Tanker, Heavy Duty Rescue, Challenger, Legacy, Rearmount Pumper; TDA, Midmount, Rearmount Ladder/Platform, Predator, Severe Service, Panther and Legacy (2003-Present)

**Pierce Vehicles:** PUC Ariels, Pumpers, Rescues, Arrow XT™, Impel™, Quantum®, Saber®, Velocity® (2003-Present)

**Seagrave Vehicles:** Marauder II, Attacker HD (2004-Present)

#### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
383	V153832107	6 3/4" w x 15 7/8" h	Both	Black	Both	•	A2254882002	Freightliner
							054627V007	Kovatch
							A2254882002	Pierce
							P1680051 P2178761	Seagrave

#### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
388	V153882120	6 3/4" w x 6 3/4" h	Both	Black	M	-	-	Freightliner

#### Flat Glass Housing

Head adjustable. Order glass and bracket to make complete head.

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
409	V514090029	6 3/4" w x 15 7/8" h	Right	Chrome	R	•	-	-	Kovatch
								1443302	Pierce
								P3206800	Seagrave
409	V514090028	6 3/4" w x 15 7/8" h	Left	Chrome	R	•	-	-	Kovatch
								1964877	Pierce
								P3206700	Seagrave

#### Side Mount Bracket

Model	Velvac Part #	Dimension "A"	Dimension "B"	Side	Color and Material	OEM Cross Ref #	OEM
407	V584070310 <sup>1</sup>	31 3/4"	7 5/8"	Both	Stainless	P3207000	Seagrave

• Dimension A: Distance between upper and lower mounting holes

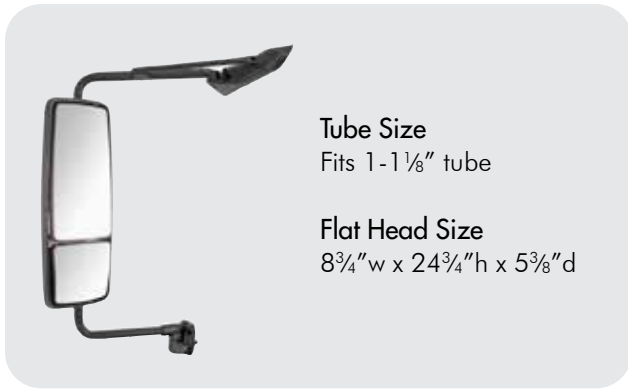
• Dimension B: Distance between the outside edge of the mirror bracket and the mounting surface

#### NOTES

M/R: Manual/remote

<sup>1</sup> Furnished less electrical harness

### OEM Replacement Parts and Accessories



**Tube Size**  
Fits 1-1 $\frac{1}{8}$ " tube

**Flat Head Size**  
8 $\frac{3}{4}$ "w x 24 $\frac{3}{4}$ "h x 5 $\frac{3}{8}$ "d

**International Vehicles:** DuraStar 4100, 4200, 4200LP, 4300, 4300LP, 4400, 4400LP, 4700, 4700LP, 4700LPX, 4800, 4900, Hybrid, Mid-Cab; WorkStar 7300, 7400, 7500, 7600, 7700, Hybrid; TranStar 8100, 8100CH, 8200, 8500, 8600 (2002-Present); LoneStar Daycab, Sleeper Cab, Harley (2008-Present); ProStar (2006-Present); TerraStar Class 4/5 (2010-Present)

#### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
400	V154003107	7 $\frac{1}{4}$ "w x 14 $\frac{7}{8}$ "h	Both	Black	Both	•	2505818C1 2505818C2	International
400	V154003100	7 $\frac{1}{4}$ "w x 14 $\frac{7}{8}$ "h	Both	Black	Both	-	2505817C1 2505817C2	International



#### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
400	V154003117	7"w x 6 $\frac{3}{8}$ "h	Both	Black	M	•	2505820C1 2505820C2 2505820C3	International
400	V154003110	7"w x 6 $\frac{3}{8}$ "h	Both	Black	M	-	2505819C1 2505819C2	International



#### NOTES

M/R: Manual/remote

## HEAVY DUTY TRUCK

### OEM Replacement Parts and Accessories



**Tube Size**  
Fits 1-1 $\frac{1}{8}$ " tube

**Flat Head Size**  
8 $\frac{3}{16}$ "w x 17 $\frac{3}{8}$ "h x 4 $\frac{3}{8}$ "d

**Convex Head Size**  
8 $\frac{1}{8}$ "w x 8 $\frac{1}{8}$ "h x 4 $\frac{9}{16}$ "d

**International Vehicles:** DuraStar 4100, 4200, 4200LP, 4300, 4300LP, 4400, 4400LP, 4700, 4700LP, 4700LPX, 4800, 4900, Hybrid, Mid-Cab, WorkStar 7300, 7400, 7500, 7600, 7700, Hybrid; TranStar 8100, 8100CH, 8200, 8500, 8600 (2002-Present); ProStar (2006-Present); TerraStar Class 4/5 (2010-Present)



#### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
405	V404055800	7 $\frac{5}{8}$ "w x 16 $\frac{3}{4}$ "h	Both	N/A	Both	•	2505814C2	International
405	V404055700	7 $\frac{5}{8}$ "w x 16 $\frac{3}{4}$ "h	Both	N/A	Both	-	2505813C2	International



#### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
406	V404065304	7 $\frac{5}{8}$ "w x 7 $\frac{5}{8}$ "h	Both	N/A	M	•	2505816C2	International
406	V404065204	7 $\frac{5}{8}$ "w x 7 $\frac{5}{8}$ "h	Both	N/A	M	-	2505815C2	International



#### Bracket Assemblies

Model	Part #	Side	Color	M/R	OEM Cross Ref #	OEM
405/463	V584004001	Left	Black	M	2505274C3	International
405/463	V584004002	Right	Black	M	2505275C3	International

**NOTES**  
M/R: Manual/remote

### OEM Replacement Parts and Accessories



**Tube Size**  
Fits 1 1/8" tube

**Flat Head Size**  
7 13/16" w x 16 3/4" h x 4 3/4" d

**Convex Head Size**  
7 13/16" w x 8 7/16" h x 5 3/8" d

**Freightliner Vehicles:** Columbia (2003-2006); Condor (2005-2007); M2 106, M2 106V, 108SD, M2 112, M2 112V, M2 114SD (2003-Present); Sterling (2002-2009)

#### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
414	V154148002	6 7/8" w x 15 3/4" h	Both	Black	Both	•	A2258516001	Freightliner



#### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
415	V154158002	7 1/2" w x 7" h	Both	Black	M	•	A2259713001	Freightliner



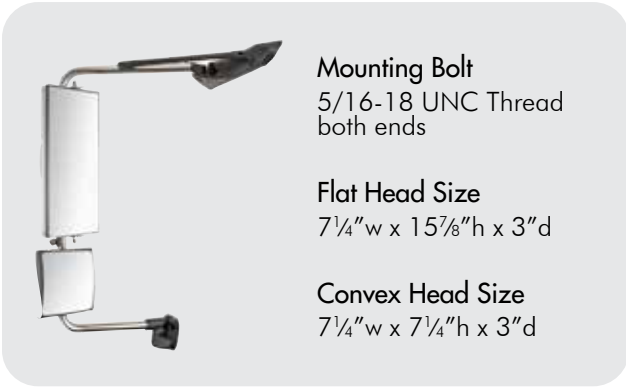
#### NOTES

M/R: Manual/remote



## HEAVY DUTY TRUCK

### OEM Replacement Parts and Accessories



**Mounting Bolt**  
5/16-18 UNC Thread  
both ends

**Flat Head Size**  
7¼" w x 15⅞" h x 3" d

**Convex Head Size**  
7¼" w x 7¼" h x 3" d

**International Vehicles:** LoneStar Daycab, Sleeper Cab, Harley (2008-Present)



### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
438	V154382117	6⅞" w x 16" h	Both	Black	Both	•	2595727C1	International

### OEM Replacement Parts and Accessories



**Tube Size**  
Fits 1-1/8" tube

**Flat Head Size**  
7 7/8" w x 14 3/8" h x 2 3/4" d

**Convex Head Size**  
7 3/4" w x 7" h x 2 3/4" d

**International Vehicles:** DuraStar 4100, 4200, 4200LP, 4300, 4300LP, 4400, 4400LP, 4700, 4700LP, 4700LPX, 4800, 4900, Hybrid, Mid-Cab; WorkStar 7300, 7400, 7500, 7600, 7700, Hybrid; TranStar 8100, 8100CH, 8200, 8500, 8600 (2015-Present); ProStar (2015-Present); TerraStar Class 4/5 (2015-Present)

#### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
466	V614660001	7 1/2" w x 14" h	Both	N/A	Both	•	2514655C91	International



#### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
466	V614660002	7 3/8" w x 6 3/4" h	Both	N/A	Both	•	2514656C91	International



#### Bracket Assemblies

Model	Part #	Side	Color	M/R	Heat	CB	U	U/L	OEM Cross Ref #	OEM
466	V584660020	Right	Stainless	R	•	•	•	•	2514651C1	International

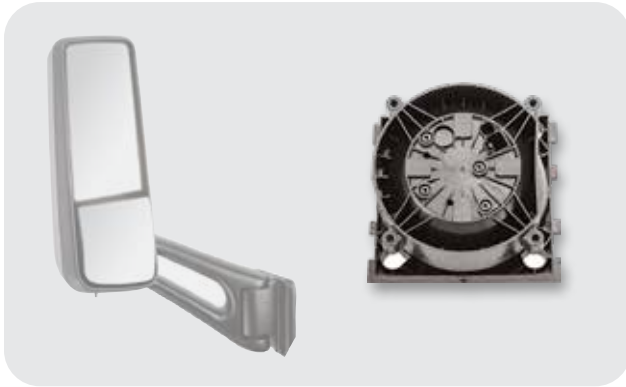


#### NOTES

- CB** Bracket assembly furnished with wiring harness for CB
- U** Bracket assembly furnished with wiring harness lighted flat (upper) mirror
- U/L** Bracket assembly furnished with wiring harness for heated flat
- M/R** Manual/remote

## HEAVY DUTY TRUCK

### OEM Replacement Parts and Accessories



#### Kenworth Vehicles:

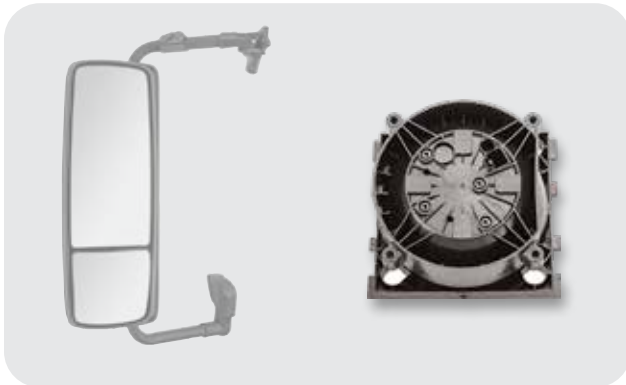
T680, T880 (2012-Present)

#### Peterbilt Vehicles:

567, 579 (2012-Present)

#### Flat Mirror Actuator

Model	Velvac Part #	Side	OEM Cross Ref #	OEM
480	V084803997	Both	84803997	Kenworth, Peterbilt



#### Volvo Vehicles:

VNM200, VNM430, VNM630, VNL 430, VNL 630, VNL 670, VNL 730, VNL 780, VNX 300  
(September 2011-Present)

#### Flat Mirror Actuator

Model	Velvac Part #	Side	OEM Cross Ref #	OEM
473	V614730023	Both	85133991	Volvo

### OEM Replacement Parts and Accessories

#### RAMI CB Insulator Kit

Model	Velvac Part #	OEM Cross Ref #	OEM
387	V613871900	MEK613871900	Freightliner, Volvo, Western Star



#### Head Clamp and Screws Kit

Model	Velvac Part #	OEM Cross Ref #	OEM
405	V624059999	MEK624059999	Freightliner
		2507274C1	International, Ford
		-	Kovatch
		-	Pierce
		-	Seagrave



#### Clamp Kit, 3 EA

Model	Velvac Part #	OEM Cross Ref #	OEM
425	V614250010	2595657C91	International

#### 2-Mirror Switch

Model	Velvac Part #	OEM Cross Ref #	OEM
387	V083200233	687993	E-ONE
		79885145	HME
		005881V178	Kovatch
		P2005000	Seagrave
		0497RR8001	Spartan



# MIRRORS

## HEAVY DUTY TRUCK

### West Coast Mirror Systems



**Mounting Bolt**  
5/16-18 UNC Thread  
both ends

**Flat Head Size**  
7¼" w x 15⅞" h x 3" d

#### International Vehicles:

Paystar 5000, 5070, 5500, 5600, 5900SFA, 5900SBA, 9100, 9100i, 9200, 9200i, 9300, 9400, 9400i, 9600, 9700, 9800, 9900, 9900i, 9900ix (2004-Present)



#### Flat Glass Head Head adjustable

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	International Cross Ref #
438	V514380014 <sup>1</sup>	6⅞" w x 16" h	Right	Stainless	R	•	•	2503919C92
438	V514380013 <sup>1</sup>	6⅞" w x 16" h	Left	Stainless	R	•	•	2596749C91
438	V514380012 <sup>1</sup>	6⅞" w x 16" h	Right	Stainless	R	•	-	2503923C92
438	V514380011 <sup>1</sup>	6⅞" w x 16" h	Left	Stainless	R	•	-	2596747C91
438	V514380008	6⅞" w x 16" h	Right	Stainless	M	•	•	2596746C91
438	V514380007	6⅞" w x 16" h	Left	Stainless	M	•	•	2503920C92 2596745C91
438	V514380006	6⅞" w x 16" h	Right	Stainless	M	•	-	2503924C92
438	V514380005	6⅞" w x 16" h	Left	Stainless	M	•	-	2503925C92 2596743C91



#### Flat Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	International Cross Ref #
438	V154382117	6⅞" w x 16" h	Both	Black	Both	•	2595727C1

#### NOTES

**M/R:** Manual/remote

<sup>1</sup> Two-way adjustment



## HEAVY DUTY TRUCK

### West Coast Mirror Systems



Tube Size  
Fits 1-1 $\frac{1}{8}$ " tube

Flat Head Size  
7 $\frac{1}{4}$ " w x 12 $\frac{3}{8}$ " h x 3 $\frac{1}{2}$ " d

International Vehicles:  
TerraStar Class 4/5 (2010-Present)

Ford Vehicles:  
LCF L45, L55 (2004-2009)

#### Flat Glass Head Head adjustable

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	International and Ford Cross Ref #
408	V514080002	6 $\frac{3}{4}$ "w x 12"h	Both	Black	M	-	-	2588800C2

\*Matching convex model 408 shown on page M14



#### Bracket Assemblies

Model	Velvac Part #	Side	Color	M/R	Heat	International Cross Ref #
463	V584004001	Left	Black	M	-	2505274C3
463	V584004002	Right	Black	M	-	2505275C3

#### NOTES

M/R: Manual/remote



### Convex Mirror Systems



10" diameter wide view (Plexiglas®)



8½" diameter wide view



8½" diameter offset mount heated glass



8½" diameter offset mount standard glass



5" & 6" diameter center mount standard glass

#### DuraBall® Convex

- Velvac's DuraBall® mirror and pivot system features a HD nylon inner and outer ball with stainless bolt and locking "L" bracket for easy mounting and operation.
- Heavy gauge stainless steel or powder coated galvanized steel construction protects mirrors against corrosion.
- Rolled edge on 5" and 8½" diameter mirrors - outer gasket on 6" diameter mirrors
- Available in popular 10", 8½", 6" and 5" diameters with several lens options. The 8½" is also available with center mount or offset mount.
- DuraBall® mirrors guaranteed against shell cracking and breaking for 5 years.
- Mirrors other than wide view include mounting "L" bracket or tube bracket, mounting hardware and display box.
- All wide view mirrors feature shatter resistant Plexiglas® lens.

Wide View Part #	Standard Glass Part #	Heated Glass Part #	Dia.	ROC	Mount	Color
709218	-	-	10"	8.5"	Center	Stainless Steel
709216	-	-	10"	8.5"	Center	Black
709217	-	-	10"	8.5"	Center	White
709226	-	-	10"	8.5"	Center	Post Office White
708448	708441	708453	8.5"	5.5"/12"/12"	Center	Stainless Steel
708449	708442	-	8.5"	5.5"/12"	Center	Black
708450	-	-	8.5"	5.5"	Center	White
708463	-	-	8.5"	5.5"	Center	Post Office White
-	708444	708457	8.5"	12"	Offset	Stainless Steel
-	708446	-	8.5"	12"	Offset	Black
-	708478	-	6"	14"	Center	Stainless Steel
-	708476	-	6"	14"	Center	Stainless Steel w/ Tube Bracket <sup>1</sup>
-	708479	-	6"	14"	Center	Black
-	708473	-	5"	Flat glass	Center	Stainless Steel

#### Helpful hint:

Mirror head diameter and ROC (radius of curvature) help determine field of view coverage and image size provided by the convex mirror. Wide view convex mirrors are typically used for front and rear cross view applications where a wide field of view is desired. Standard convex mirrors are used for viewing targeted blind spots or passing lanes around the vehicle.

#### NOTES

<sup>1</sup> Stainless steel tube bracket and clamp kit 723057 can be found on M35

DuraBall® is a registered trademarks of Velvac, Inc.

Plexiglas® is a registered trademark of Evonik Industries

#### Three Screw and Specialty Convex Mirror

- Three screw ball stud offers secure mounting and easy adjustment.
- Available in high luster stainless steel, chrome plated steel or painted steel finishes.
- New convex mirrors listed in **RED** are now available with 100% stainless steel ball stud, support plates and mounting hardware.
- 8½", 7½", 6" and 5" diameters with standard convex and heated options. The 8½" and 7½" are also available either center mount or offset mount.
- Includes mounting "L" bracket, mounting hardware and comes in a display box.
- 708558 convex features high luster chrome plated stainless steel shell and heavy duty nylon ball stud; bracket not included.

Standard Glass Part #	Heated Glass Part #	Dia.	ROC	Mount	Color
708501	708559	8.5"	13"	Center	Stainless Steel
<b>708760</b>	-	8.5"	13"	Center	Stainless Steel+
-	<b>708762</b>	8.5"	13"	Center	Stainless Steel+
708503	-	8.5"	13"	Center	Black
708556	-	8.5"	13"	Center	Chrome
708558	-	8.5"	13"	Center	Chrome Plated Stainless
708502	708560	8.5"	13"	Offset	Stainless Steel
<b>708761</b>	-	8.5"	13"	Offset	Stainless Steel+
-	<b>708763</b>	8.5"	13"	Offset	Stainless Steel+
708504	-	8.5"	13"	Offset	Black
708557	-	8.5"	13"	Offset	Chrome
708508	-	7.5"	13"	Center	Stainless Steel
708510	-	7.5"	13"	Center	Black
708554	-	7.5"	13"	Center	Chrome
708509	-	7.5"	13"	Offset	Stainless Steel
708511	-	7.5"	13"	Offset	Black
708555	-	7.5"	13"	Offset	Chrome
708515	-	6"	13"	Center	Stainless Steel
708516	-	6"	13"	Center	Black
708553	-	6"	13"	Center	Chrome
708520	-	5"	13"	Center	Stainless Steel
708514	-	5"	13"	Center	Stainless Steel - Flat Glass
708521	-	5"	13"	Center	Black
708513	-	5"	13"	Center	Black - Flat Glass
708552	-	5"	13"	Center	Chrome



8½" diameter center mount, standard glass



708558 8½" diameter center mount stainless steel w/ HD nylon ball stud



8½" diameter, center mount, heated glass



7½" diameter, offset mount, standard glass



5" & 6" diameter center mount standard glass

#### NOTE:

Part numbers listed in **RED** are **NEW!**

### Convex Mirror Systems

#### Eyeball and Standard K-10 Convex

- Provides outstanding views of troublesome and dangerous blind spots around the vehicle.
- Choose from 10", 8½" and 6" diameter in stainless steel or ABS plastic.
- HD inner and outer nylon ball stud with stainless steel mounting hardware for durable, smooth and long lasting operation.
- Eyeball mirrors with plexiglas® lens are commonly used for back up or front cross view applications.
- Heavy duty outer gasket protects mirrors from edge shock and allows mirror lens to be easily replaced.



Back view  
Eyeball convex

Eyeball Part #	Standard K-10 Part #	Glass Kit Part #	Dia.	ROC	Mount	Color
708605	-	702159	10"	8½"	Center	Stainless steel
708604	-	702159	10"	8½"	Center	Black ABS
708608	-	702158	8½"	5½"	Center	Stainless steel
708603	-	702160	6"	5½"	Center	Black ABS
-	708602	702149	10"	13"	Center	Stainless steel
-	708601	702148	8½"	13"	Center	Stainless steel
-	708609	702148	8½"	13"	Offset	Stainless steel

#### Stick-On Convex Spot Mirrors

- Mount easily and securely using attached adhesive pad.
- Attractive packaging displays easily on pegboards or wire display rack.

Part #	Diameter	ROC	Description	Color
723050	2"	4½"	Round stick-on	Aluminum shell
723060	3"	4½"	Round stick-on	Aluminum shell
723065	3¾"	4½"	Round stick-on	Aluminum shell
723075	4" w x 5½" h	8½"	Rectangle stick-on	Aluminum shell



#### Convex Fork Lift Mirror

- Acrylic spherical convex lens provides wide view and resists cracking or breaking.
- ⅜" plated mounting stud, nut and washer.
- Individually boxed.

Part #	Diameter	Description/Color
708611	4½" w x 7½" h	Black textured ABS mirror back with black PVC outer gasket



#### The Wedge™ Stick-On Convex Mirror

- Unique wedge design provides more usable viewing area/larger image size than conventional stick on mirrors.
- Universal design permits use on both driver and passenger mirrors.
- Mounts easily and securely using attached adhesive pad.

Part #	Diameter	ROC	Description	Color
723068	3¼"	8½"	Wedge stick-on	Black plastic shell
723068-6	3¼"	8½"	50-pack wedge	Black plastic shell



The Wedge™ is a trademark of Velvac, Inc

#### Shatter-Resistant Stud Mount Convex Mirror

- ⅝" - 18 mounting stud.
- Viewing area 55 square inches/40" ROC glass with shatter resistant backing.



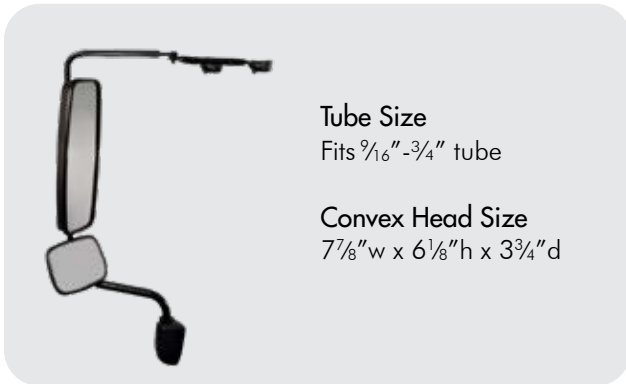
Part #	Glass Part #	Gasket Part #	Diameter	ROC	Color
708198-5	702098-5	703008	6½" w x 10" h	40"	Stainless steel
708176-5	702098-5	703007	6½" w x 10" h	40"	White
708197-5	702098-5	703008	6½" w x 10" h	40"	Black





## HEAVY DUTY TRUCK

### Convex Mirror Systems



**Tube Size**  
Fits 9/16"-3/4" tube

**Convex Head Size**  
7 7/8" w x 6 1/8" h x 3 3/4" d

**Hino Vehicles:**  
Various (2005-2006)



#### Convex Glass Head Head adjustable

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	Hino Cross Ref #
260	V562601127	7 1/2" w x 5 5/8" h	Both	Black	M	-	-	S8790E0010

**NOTES**  
**M/R:** Manual/remote



**Tube Size**  
Fits 1-1 1/8" tube

**Convex Head Size**  
8 7/8" w x 6 7/8" h x 4 1/8" d

**International Vehicles:**  
TerraStar Class 4/5 (2010-Present)

**Ford Vehicles:**  
LCF L45, L55 (2004-2009)

**NOTES**  
**M/R:** Manual/remote



#### Convex Glass Head Head adjustable

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	International and Ford Cross Ref #
408	V564080002	8" w x 6" h	Both	Black	M	-	-	2588801C2

#### Bracket Assemblies

Model	Velvac Part #	Side	Color	M/R	Heat	International Cross Ref #
463	V584004001	Left	Black	M	-	2505274C3
463	V584004002	Right	Black	M	-	2505275C3



## HEAVY DUTY TRUCK

### Convex Mirror Systems



**Tube Size**  
Fits 1-1 1/8" tube

**Convex Head Size**  
(head adjustable)  
7 1/4" w x 7 1/4" h x 3" d



**Convex Head Size**  
(glass adjustable)  
8 7/16" w x 6 5/8" h x 4 1/2" d

**International Vehicles:** Durastar 4100, 4200, 4200LP, 4300, 4300LP, 4400, 4400LP, 4700, 4700LP, 4700LPX, 4800, 4900, Hybrid, Mid-Cab (2002-Present); Prostar (2006-present); TranStar 8100, 8100CH, 8200, 8500, 8600 (2002-Present); WorkStar 7300, 7400, 7500, 7600, 7700, Hybrid (2002-Present)

Convex glass heads are commonly used on International fender mount mirrors – fender bracket assembly shown below.

#### Convex Glass Head **Head adjustable**

Model	Velvac Part #	Glass size	Side	Color	M/R	Heat	Light	International Cross Ref #
388	V563882208	6 3/4" w x 6 3/4" h	Both	Chrome	M	-	-	2507272C1
409	V564090013	6 3/4" w x 6 3/4" h	Both	Black	M	-	-	-



#### Convex Glass Head **Glass adjustable**

Model	Velvac Part #	Glass size	Side	Color	M/R	Heat	Light	International Cross Ref #
428	V564281001	7 3/4" w x 5 3/4" h	Both	Black	M	-	-	V564281001

#### Convex Glass Kit

Model	Velvac Part #	Glass size	Side	Color	M/R	Heat	International Cross Ref #
388/409	V153882120	6 3/4" w x 6 3/4" h	Both	Black	M	-	2507273C1
428	V154280001	7 3/4" w x 5 3/4" h	Both	Black	M	-	-



#### Convex Mirror Cover for Glass Adjustable Head

Model	Velvac Part #	Side	Color	Light
428	V134281011	Both	Black	-



#### Fender Bracket Assembly **No head provided**

Model	Left Bracket #	Right Bracket #	Color	Material	Heat
404	V584049211	V584049212	Black	Steel	-



#### NOTES

**M/R:** Manual/remote

## HEAVY DUTY TRUCK

### Look Down Mirrors

#### Over Door Convex Mirror

- Mounts above exterior passenger side window for greater blind spot visibility.
- Used as an accessory mirror on heavy trucks for better viewing directly below "peek-a-boo" window.
- Assembly includes stainless steel mirror head with mounting bracket.



Velvac Part #	Size	ROC	Color
715198	4.25" x 8.37"	12"	Stainless steel

#### Long Arm Over Door Convex Mirror

- Over 1" longer than standard over door mirrors.
- All stainless steel construction and hardware.
- Assembly includes stainless steel mirror head with mounting bracket.



Velvac Part #	Size	ROC	Color
716872	4.25" x 8.37"	12"	Stainless steel

## HEAVY DUTY TRUCK

### Look Down Mirrors



Bracket Mount  
Convex Head Size  
11<sup>3</sup>/<sub>16</sub>" w x 6<sup>7</sup>/<sub>8</sub>" h x 2<sup>7</sup>/<sub>16</sub>" d

Bracket Hole Location  
Width Between Holes:  
3<sup>1</sup>/<sub>16</sub>"

Hole Size: 1<sup>1</sup>/<sub>64</sub>"

Freightliner Vehicles:  
Various (2003-Present)

International Vehicles:  
Various (2001-2005)

**NOTES**

M/R: Manual/remote

<sup>1</sup> Furnished with black arm, chrome back cover, black bezel and black holder

<sup>2</sup> Furnished with black arm, black back cover, black bezel and black holder

<sup>3</sup> Includes bezel kit

#### Convex Look Down Mirror

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	OEM Cross Ref #	OEM
360	V593605228 <sup>1</sup>	10 <sup>5</sup> / <sub>8</sub> " w x 6 <sup>1</sup> / <sub>4</sub> " h	Right	Chrome	M	-	-	A2248560003	Freightliner
								3571502C2	International
360	V593601152 <sup>2</sup>	10 <sup>5</sup> / <sub>8</sub> " w x 6 <sup>1</sup> / <sub>4</sub> " h	Right	Black	M	-	-	A2248560000	Freightliner
								3571501C1	International



#### Convex Glass Kit

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	OEM Cross Ref #	OEM
360	V613600001 <sup>3</sup>	10 <sup>5</sup> / <sub>8</sub> " w x 6 <sup>1</sup> / <sub>4</sub> " h	Both	Black	M	-	MEK613600001F	Freightliner
							2585911C1 2585911C2	International



Bracket Mount  
Convex Head Size  
11<sup>1</sup>/<sub>16</sub>" w x 6<sup>3</sup>/<sub>4</sub>" h x 2<sup>5</sup>/<sub>8</sub>" d

Bracket Hole Location  
Width Between Holes:  
3<sup>1</sup>/<sub>16</sub>" or 2<sup>3</sup>/<sub>4</sub>"

Hole Size: 1<sup>1</sup>/<sub>64</sub>"

Freightliner Vehicles:  
Various (2003-Present)

**NOTES**

M/R: Manual/remote

<sup>1</sup> Furnished with black mounting bracket and black housing

<sup>2</sup> Furnished with gray mounting bracket and gray housing

#### Convex Look Down Mirror

Model	Velvac Part #	Glass Size	Side	Color	M/R	Heat	Light	Freightliner Cross Ref #
412	V594121161 <sup>1</sup>	10 <sup>3</sup> / <sub>4</sub> " w x 6 <sup>3</sup> / <sub>8</sub> " h	Right	Black	M	-	-	A2258773000
412	V594121461 <sup>2</sup>	10 <sup>3</sup> / <sub>4</sub> " w x 6 <sup>3</sup> / <sub>8</sub> " h	Right	Gray	M	-	-	A2258773001



Back

## HEAVY DUTY TRUCK

### Hood Mount Mirrors



Adjustable arm with bent and straight arm



Fixed arm dual view



Lane change



Slant arm



Angle arm

### Velvac's Mod Pod™ and K-10 Version-2 Hood Mount Assemblies

- Aerodynamic design features corrosion resistant stainless steel tubing brackets with chrome-plated die cast mounting base for long lasting attractive appearance.
- (4) ¼" - 20 mounting studs are factory assembled to the base for easy installation on either conventional or COE trucks
- Velvac Mod Pod mirror kits features Velvac's 8½" DuraBall with nylon ball joint system, against cracking or breaking (see page M10 for details).
- K-10 V-2 mirror kits feature an 8½" Eyeball convex mirror (see page M12 for details).



	Velvac			K-10		
	Bracket Only #	Kit w/ 8½" DuraBall Convex #	Kit w/ 8½" DuraBall Wide View #	Bracket Only #	Kit w/ 8½" Eyeball Mirror #	Kit w/ 8½" K-10 Convex #
<b>Universal Adjustable</b>						
Kit with Bent & Straight Arms	714622 <sup>+</sup>	714620 <sup>+</sup>	714621 <sup>+</sup>	-	-	-
Kit with Straight Arm Only	-	-	-	714646 <sup>+</sup>	-	-
Kit with Bent Arm Only	-	-	-	714647 <sup>+</sup>	716915 <sup>+</sup>	716914 <sup>+</sup>
<b>Fixed Arm Dual View</b>						
Right Side	714630	714626	714628	714648	716913	-
Left Side	714631	714627	714629	715529	716922	-
<b>Fixed Arm Side View</b>						
Lane Change	714625	714623	714624	-	-	-
K-10 Slant Arm	-	-	-	714649	716917	716916
K-10 Angle Arm	-	-	-	715620	716919	716918

#### Helpful hint:

The popular Velvac Mod Pod and K-10 Version-2 (V-2) mirror systems incorporate a lock down feature that offers superior stability and easy adjustments. To position the mirror, simply loosen the set screw with a 5/32" allen wrench, lift and rotate the mirror arm into proper viewing or fold back position then retighten the set screw. Precision gears set at 12 degree intervals ensures a perfect view every time!

Mod Pod™ is a trademark of Velvac, Inc



### Hood Mount Mirrors

#### Aero-Bell™ Tripod

- Stylized single piece chrome plated ABS bells and molded nylon clamps help conceal hardware, giving the mirror a clean, aerodynamic appearance.
- Stainless steel construction including the tubing braces, convex mirror head (8½" stainless steel DuraBall) and hardware eliminating rust.
- Packaged in a display box.



#### Velvac Tripod

- All stainless steel construction and hardware, including tubing braces, convex mirror head (8½" stainless steel DuraBall), mounting bells, tube clamps and hardware.
- Standard tripod for use on traditional hood styles; use short tripod for slope nosed vehicles with shorter hoods.
- Packaged in a display box.



#### Value Tripod

- All stainless steel construction including tubing braces, convex mirror head (8½" stainless steel three screw), mounting bells, tube clamps and plated hardware.
- Adjustable tripod fits most hood/fender applications.
- Packaged in a plain box.

	Aero-Bell Tripod		Velvac Tripod		Value Tripod	
	Part #	Dim "A"	Part #	Dim "A"	Part #	Dim "A"
<b>Standard Tripod</b>						
Mirror & Bracket Kit	715150+	21" to 32¾"	713444+	21" to 32¾"	715779+	26" to 35"
Bracket Only	715151	-	713445+	-	715778+	-
<b>Short Tripod</b>						
Mirror & Bracket Kit	715148+	17½" to 24½"	714721+	17½" to 24½"	717845+	17½" to 26"
Bracket Only	-	-	714720+	-	717844+	-
<b>Fixed Arm Mirror/ Bracket</b>						
Freightliner Columbia and Century	715168	20.35"	-	-	-	-
Freightliner - FLD	715166	23.55"	-	-	-	-



**Part No 748600** - Single replacement bell assembly for Velvac Tripods.

Aero-Bell™ is a trademark of Velvac, Inc



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## HEAVY DUTY TRUCK

### Hood Mount Mirrors



#### Fender and Mirror Bracket Assembly

Model	Part #	Main Support Adjustable Range	Side	Color	Material	Heat
445	V594450100	17 <sup>3</sup> / <sub>4</sub> " to 26 <sup>3</sup> / <sub>8</sub> "	Both	Stainless	Stainless	-



#### Convex Glass Head

Model	Part #	Glass Size	Side	Color	M/R	Heat	Light
445	V564450350	8"	Both	Stainless	M	-	-

#### NOTES

M/R: Manual/remote

#### LaneOptics Mirror

- Stylized aerodynamic convex mirror system combines the look and quality of a proprietary OEM hood mirror, with a universal mounting base that allows the mirror to be installed on almost any truck hood.
- Molded black, OEM approved ABS mirror housing -- overall head size is 9" x 7".
- 1" O.D. stainless steel tubing arms – two lengths available for proper mirror positioning.
- Black powder coated four stud universal mounting base uses same hole pattern as Velvac Pod or Mod Pod mirrors. Mounts to almost any truck hood for easy installation or retrofit.
- Universal mounting hardware correctly orients mirror on the hood.
- The head can be rotated to mount to either the right or left side of the vehicle.
- Glass size is 50 square inches.
- 17" radius of curvature (ROC).

#### Mirror

Part #	Application	Arm	Side
720306	Universal	Short	Both
720308	T700	Short	Both
720310	Universal	Long	Both



#### Replacement Glass and Bezel Kits

Part #	Description
<b>710789</b>	Heated Glass Kit for RS and LS Mirrors
<b>710799</b>	Standard Glass Kit for RS and LS Mirrors

#### MODELS THAT REQUIRE LONG ARMS

Kenworth T300, T370, T660, T270

Mack CV713, CXN613

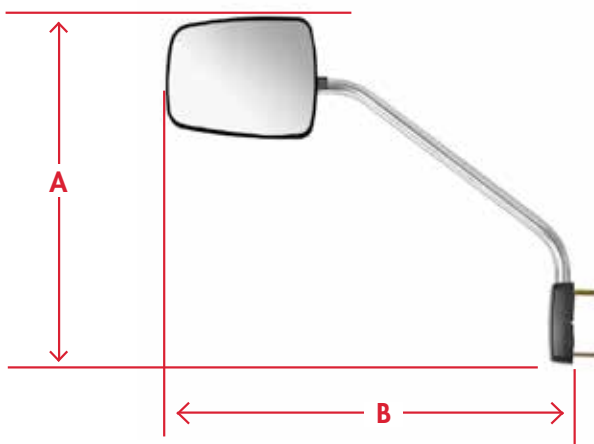
International 4300, 4400, 9200i, 4200 BX, 4300BX

Freightliner M2 106, 9335, C9218, 9336

Sterling AT9513

Hino 258ALP

Description	Dim A	Dim B
Long Arm	21.81"	31.16"
Short Arm	19.81"	25.15"



#### NOTE:

**Part numbers listed in RED are NEW!**

### Hood Mount Mirrors

#### LaneOptics MirrorCam

- Combines the LaneOptics Mirror with an integrated color camera for added blind spot visibility.
- 73.7° FOV camera provides clear color images of passing lanes and side blind spots.
- Camera angle is pre-positioned; simply adjust the mirror head to the proper viewing angle and camera is automatically oriented.
- 17" radius of curvature (ROC).
- Includes five pin cable connector.



5-pin Connection

#### MirrorCam

Left Side #	Right Side #	Application	Arm	Connector
720301	720300	Universal	Short	5 pin
720303	720302	T700	Short	5 pin
720305	720304	Universal	Long	5 pin

#### Replacement Glass and Bezel Kits

Part #	Description
<b>719708</b>	Right Side Glass, Bezel and Camera Kit
<b>719709</b>	Left Side Glass, Bezel and Camera Kit

#### **NOTE:**

**Part numbers listed in RED are NEW!**

## HEAVY DUTY TRUCK

### Hood Mount Mirrors

#### MirrorCam with Monitor Kits

- Kits include one pair of MirrorCam hood mirrors, 7" monitor and cable.
- Kits with back up camera also include adjustable mount camera with infrared LED lights.

Part #	Application	Arm	Back Up Camera
720465	Universal	Short	-
720466	T700	Short	-
720467	Universal	Long	-
720468	Universal	Short	•
720469	T700	Short	•
720470	Universal	Long	•



### Blind Spot Mirrors

#### Bracket Mount Mirror

- Attaches easily to 3/4" diameter west coast mirror brackets.
- All stainless steel construction.

Part #	Description
712648	Two arm bracket



Bracket and hardware ONLY - mirror head sold separately

#### Fender Mount Extension Bracket

- Adjustable from 13½" to 17½".
- Bell mount base provides extra support.
- Stainless steel construction.
- Mounting hardware included.

Part #	Description
723047+	Fender mounted extension bracket



Bracket and hardware ONLY - mirror head sold separately



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## HEAVY DUTY TRUCK

### Universal Mirror and Bracket Kits



#### Universal West Coast Mirror Assembly

- Versatile head and loop assembly for flat side mounting on fire trucks and other specialty vehicles.
- Mounting centers 31½"; Extends 8⅛" from truck body.
- All stainless steel construction with preset pivot breakaway system.

Velvac Part #	Description	Color	Upper Head	Lower Head
713760	Complete pair	Stainless steel	8" x 16" Remote heated west coast mirror	6½" x 6" Convex
713769	Complete pair	Stainless steel	7" x 16" OE V-back west coast mirror	6½" x 6" Convex
713759	Replacement loop bracket, mounting feet and hardware	Stainless steel	N/A	N/A

#### NOTES

See page M2 for more information on remote mirror head

See page M3 for OE V-back West Coast



Conventional tractor bracket kit

#### Universal Bracket Kit and Head/Loop System

- Universal stainless steel bracket kit is fully adjustable to fit a variety of conventional straight truck and tractor doors; it extends out a maximum of 20" from door.
- Use head and loop assemblies in combination with universal bracket kit to produce a complete major system for conventional truck and tractors; loop span is 17.56".
- All kits shown below are packaged as pairs. Loop and clamp kits include both short clamps for use with split wide angle heads and long clamps for west coast heads.



Split head <sup>1</sup>

Velvac Part #	Description	Color	Upper Head	Lower Head
700064+	Universal conventional tractor bracket kit	Stainless steel	N/A	N/A
701001+	Head and loop - split head	White	6½" x 10"	6½" x 6"
701006+	Head and loop - split head	Stainless steel	6½" x 10"	6½" x 6"
701050+	Head and loop - west coast	White	7" x 16"	N/A
701054+	Head and loop - west coast	Stainless steel	7" x 16"	N/A
701071+	Loop and clamp kit	White	N/A	N/A
701072+	Loop and clamp kit	Stainless steel	N/A	N/A

#### NOTES

<sup>1</sup> See page M31 for replacement mirror heads

<sup>2</sup> See page M3 for replacement mirror heads



West coast <sup>2</sup>



## HEAVY DUTY TRUCK

### Clamps, Brackets, and Hardware



#### Clamp and Tubing Arm Kits for 6", 8" and 8½" Mirror Heads

- Ideal for adding an auxiliary spot mirror to existing loop or brace.
- For ¾" O.D. tubing.
- Plastic coated clamp for secure grip and damage resistance.
- Overall length 6".

Part #	Description
723057	Stainless steel



#### Clamp and Tubing Arm Kit for 5" and 6" Plastic Mirror Heads

- Stainless steel formed tube arm.
- Zinc plated steel clamp.
- Ideal for adding an auxiliary spot mirror to existing loop or brace.
- For ⅝" and ¾" O.D. tubing.
- Overall length 5⅞".

Part #	Description
723049	Stainless steel tubing



#### Clamp, Brace & Bracket Kit

- Ideal for adding auxiliary spot mirrors to existing loop or brace.

Part #	Description
723091	Clamp, tubing arm & L bracket



#### Adjustable Tubing Arms

- Kits include ¾" O.D. threaded leg, ⅝" O.D. adjustable leg, adjusting nut and sleeve.
- Available in stainless steel and powder-coated galvanized steel finishes.

Part #	Description	Adjustable Arm Length
<b>747076</b>	Stainless steel	10"-15"
<b>747075</b>	Stainless steel	15"-21"
747070+	Stainless steel	19"-25"
747072+	Black	19"-25"

**NOTE: Part numbers listed in RED are NEW!**



#### 6" Pivot Bolt Mounting Bracket

- Ideal for adding an auxiliary spot mirror below a west coast mirror head.
- Stainless steel construction.
- Overall length 4⅞".

Part #	Description
723055	For ⅝" and ¾" pivot bolts

#### Sleeve and Nut Kit

- Includes chrome adjusting nut and brass sleeve.
- Used on Velvac adjustable tubing arms, tripods, Mod Pod, and other adjustable brackets.

Part #	Description
748215+	Sleeve and nut kit

#### "L" Style Mounting Bracket

- Sturdy ⅛", 11 gauge construction.
- Pivot hole accepts ⅝" and ¾" bolts.
- Slotted hole provides additional mirror head adjustment.
- Ideal for mounting Velvac DuraBall® convex and all other convex mirrors.



Part #	Description
723100	Stainless steel

#### The Stabilizer Heavy-Duty Convex L-Bracket

- Rigid stabilizer bracket improves image stability in convex spot mirror by reducing vibration.
- Individually packaged.



Part #	Description
723115	Stabilizer L-bracket



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## HEAVY DUTY TRUCK

### Clamps, Brackets, and Hardware

#### Tubing Brace Clamp Kit for 3/4" O.D. Tubing

- Used to support tubing arms on loop assemblies; not used for installing mirror heads.
- Kit includes stainless steel clamp and mounting hardware.



Part #	Description
748029	Tubing brace clamp kit for 3/4" O.D. tubing

#### Flat Clamp Kit for 3/4" O.D. Tubing

- Used to mount West Coast mirror heads to 3/4" O.D. tubing - mounts on horizontal leg of loop.
- Plastic coating for secure grip and damage resistance.
- Kit includes stainless steel clamp and mounting hardware.



Part #	Description
704066	Flat clamp kit for 3/4" O.D. tubing

#### Clamp Kit for 1" O.D. Tubing

- Used to mount side and stud mount mirror heads to 1" O.D. tubing.
- Plastic coating for secure grip and damage resistance.
- Kit includes stainless steel clamp and mounting bolt.



Part #	Description
704070	Clamp kit for 1" O.D. tubing

#### Clamp Kit for 3/4" O.D. Tubing

- Used to mount side and stud mount mirror heads to 3/4" O.D. tubing.
- Plastic coating for secure grip and mar resistance.
- Kit includes stainless steel clamp and mounting bolt.



Part #	Description
704068	Clamp kit for 3/4" O.D. tubing

#### Clamp Kit for 5/8" O.D. Tubing

- Used to mount side and center mount mirror heads to 5/8" O.D. tubing.
- Kit includes two-piece aluminum clamp and stainless steel mounting hardware.



Part #	Description
704069	Clamp kit for 5/8" O.D. tubing

#### Clamp Kit for 1" O.D. Tubing

- Used to add a convex mirror to a 1" O.D. tube.
- All stainless steel.



Part #	Description
719263	Clamp kit for 1" O.D. tubing

#### Interior Rearview Mirror

- Glass measures 9" w x 2" h.
- Day/night feature reduces night driving glare.
- Dual ball joint adjustment.
- Textured black housing.
- Mounting pad and adhesive sold separately as mirror mounting kit.
- Rear view mirror will fit on flange type mounting pads up to .90" wide.



Part #	Description
723095	Rear view mirror
723097	Mirror mounting kit

#### Twist Clamp Kit for 3/4" O.D. Tubing

- Used to mount West Coast mirror heads to 3/4" O.D. tubing - mounts on vertical leg of loop.
- Plastic coating for secure grip and damage resistance.
- Kit includes stainless steel clamp and mounting hardware.



Part #	Description
704065	Twist clamp kit for 3/4" O.D. tubing

#### Switch Kit for Heated Mirrors

- Dash mounted kit controls one to two heated mirror heads.



Part #	Description
747053	Switch kit for heated mirror

### Model 2020 Mirror Systems

Velvac's 2020 and 2020XG family of mirrors feature OE fit and styling, and provide outstanding visibility of passing lanes and blind spots around the vehicle, making them the industry standard for wide body cutaway van and truck cab chassis applications. These mirrors mount directly to the OE sail area on the door for clean and easy installation. The modular design allows a single mirror style to be used across multiple van and truck platforms, making them perfect for all OE and fleet applications. In addition to the original 2020 mirrors, Velvac also offers the Mini LEM system with an integrated camera and the 2020XG, the next generation in wide body mirror technology.



Standard

Deluxe



Unique pivot design

### Model 2020 Mirror System

- Model 2020 mirrors are designed specifically for wide body applications such as high cube cutaway vans, rental trucks, Class C RV's and ambulances. The fixed length arms are designed to position the mirror beyond the body providing the driver with an unobstructed view of blind spots and passing lanes around the vehicle. These versatile mirrors are available in several body widths and finishes as well as manual or heated remote glass.
- Mirrors available for 86", 96" and 102" wide bodies.
- Die cast arms and bases are anodized and powder coated for corrosion resistance.
- Available in black, white and black base/arm with chrome head.
- Two mirror head options:
  - Standard head with lower wedge convex
  - Deluxe head with full width lower convex
- Fold away feature allows mirrors to fold forward and back for easy vehicle storage and protection against impact.



### Model 2020 Mini LEM Mirror System

- Velvac has added the exclusive pre-positioned lower camera option to the 2020 mirror, providing even greater coverage of the blind spot areas around the vehicle.
- Camera image is reversed to provide a picture in the same orientation as the mirror image for seamless observation of blind spots and passing lanes.
- CMOS color camera provides greater image definition, truer colors and anti-blooming technology, allowing drivers to quickly identify objects in a variety of light conditions.
- Systems can be designed to integrate with back-up cameras for complete vehicle blind spot coverage. See [Vision Systems](#) section for more information on Velvac's back-up cameras and monitors.



2020 Mini LEM with turn signal option in flat glass

## MEDIUM DUTY TRUCK

### Ford, GM 2020 Van and Cab Chassis

#### Model 2020XG Mirror System

- A combination of styling, quality and performance make the 2020XG the benchmark for wide body mirror systems. The fully integrated arm, base and mirror head look stylish, and together reduce vibration and provide large, clear views of the blind spots and passing lanes. Since these mirrors are designed specifically for 96" and 102" wide bodies, they provide a complete vision solution with no compromising.



#### Style/Value

- Fully integrated base, arm and mirror head for a clean OE look.
- "Swept back" design prepositions the mirror in the optimal location; no head adjustment necessary.
- Stylized mirror base fits directly in the OE "sail area" mounting holes.
- Rigid design for better stability and image clarity.
- Easily replaceable mirror head, glass and arm components help reduce downtime and service costs.

#### Quality

- Die cast aluminum mounting base and upper arm are anodized and powder coated for corrosion protection.
- OEM-approved plastic mirror shell and lower arm deliver durability and UV resistance.
- Pivot system allows the mirror to be folded forward or back upon impact and returned easily to the normal driving position.

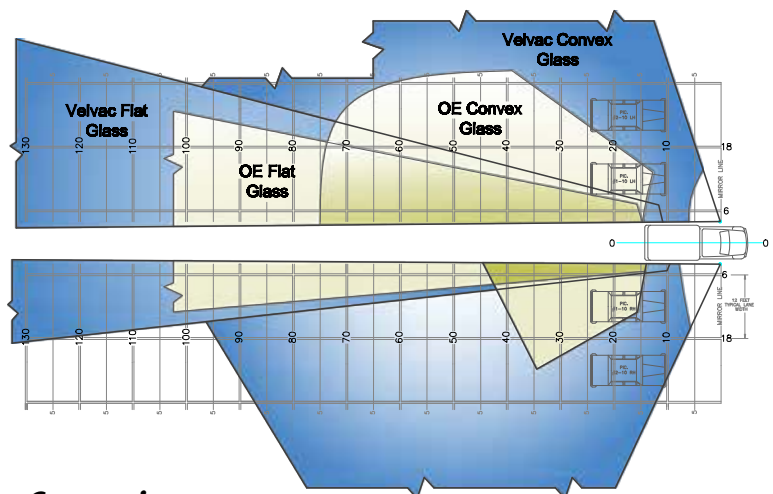
#### Increased safety

- Advanced vibration dampening in mirror head keeps image steady even on rough road surfaces.
- 63 sq. in. flat glass and 29½ sq. in. convex glass with 18" ROC provides great visibility of the passing lanes and blind spots around the vehicle.

#### Field of View Coverage

- Field of view diagram below shows the superior vision and blind spot coverage provided by Velvac 2020 and 2020XG mirrors relative to typical OE mirrors used on wide body applications. Velvac's 2020 and 2020XG mirrors can help to reduce blind spots and provide visibility of multiple passing lanes around the vehicle leading to better driving decisions and the reduction of costly accidents.

#### Field of View Comparison



#### Field of View Comparison

Information shown above represents a typical vision pattern when using Velvac 2020 or 2020XG mirrors compared to a typical OE option mirror.

#### Helpful hint:

Most cutaway van and cab chassis OE mirrors are not designed for body widths that extend beyond 96 & 102 inches. Misuse of these narrow OE mirrors leads to obstructed views and dangerous blind spots and may not fully meet all DOT mirror requirements based on these applications. Be confident that your wide body vehicle meets or exceeds FMVSS 111 requirements for Rear View Mirrors with Velvac's mirrors.



## MEDIUM DUTY TRUCK

### Ford Van Chassis – 2020 System



**Vehicle:**  
E-Series Cutaway Van Mirrors  
(2003-Present)

#### 86" Body Width

Model	Pair Part #	Left Side Part #	Right Side Part #	Color	Head	Flat Glass	Convex Glass	Options
2020	715401	715403	715402	Black	Standard	Manual	Wedge	-
2020	715419	715421	715420	Black	Standard	Heat/Remote	Wedge	-
2020	715410	715411	715412	White	Standard	Manual	Wedge	-
2020	715428	715429	715430	White	Standard	Heat/Remote	Wedge	-

#### 96" Body Width

Model	Pair Part #	Left Side Part #	Right Side Part #	Color	Head	Flat Glass	Convex Glass	Options
2020	715404	715405	715406	Black	Standard	Manual	Wedge	-
2020	715422	715423	715424	Black	Standard	Heat/Remote	Wedge	-
2020	715455	715457	715456	Black	Standard	Heat/Remote	Wedge	Light
2020	715449	715451	715450	Black	Deluxe	Manual	Manual	-
2020	715437	715439	715438	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	715413	715415	715414	White	Standard	Manual	Wedge	-
2020	715431	715433	715432	White	Standard	Heat/Remote	Wedge	-
2020	715443	715445	715444	White	Deluxe	Heat/Remote	Heat/Manual	Light

#### 102" Body Width

Model	Pair Part #	Left Side Part #	Right Side Part #	Color	Head	Flat Glass	Convex Glass	Options
2020	715407	715409	715408	Black	Standard	Manual	Wedge	-
2020	715425	715427	715426	Black	Standard	Heat/Remote	Wedge	-
2020	715458	715459	715460	Black	Standard	Heat/Remote	Wedge	Light
2020	715452	715453	715454	Black	Deluxe	Manual	Manual	-
2020	715440	715441	715442	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	715416	715417	715418	White	Standard	Manual	Wedge	-
2020	715434	715435	715436	White	Standard	Heat/Remote	Wedge	-
2020	715446	715447	715448	White	Deluxe	Heat/Remote	Heat/Manual	Light
2020	-	715751	715750	Black	Deluxe	Remote	Manual	-

#### NOTES

**Light** Lighted arm

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

# MIRRORS

## MEDIUM DUTY TRUCK

### Ford Van Chassis – 2020 Mini LEM System with Color Camera



Flat Glass  
62 sq. in.

Convex Glass  
30 sq. in. | 12" ROC

#### Vehicle:

E-Series Cutaway Van Mirrors  
(2003-Present)

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	719311	719313	719312	Black	Deluxe	Manual	Manual	-
2020	719317	719319	719318	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020	719326	719327	719328	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	719335	719337	719336	Black	Deluxe	Heat/Remote	Heat/Manual	Signal
2020	719344	719345	719346	Black	Deluxe	Heat/Remote	Heat/Manual	Signal/Light
2020	719332	719333	719334	Chrome	Deluxe	Heat/Remote	Heat/Manual	Light

### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	719353	719355	719354	Black	Deluxe	Manual	Manual	-
2020	-	719361	719360	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020	719368	719369	719370	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	719388	719389	719390	Black	Deluxe	Heat/Remote	Heat/Manual	Signal/Light
2020	719356	719357	719358	White	Deluxe	Manual	Manual	-
2020	719362	719363	719364	White	Deluxe	Heat/Remote	Heat/Manual	-
2020	719382	719383	719384	White	Deluxe	Heat/Remote	Heat/Manual	Signal

#### NOTES

**Light** Lighted arm

**Signal** Signal arrow in glass

\*All remote mirror PAIRS include switches and wire harnesses.  
These items are NOT included when remote mirrors are sold  
as sides



## MEDIUM DUTY TRUCK

### Ford Van Chassis – 2020XG System



**Flat Glass**  
64 sq. in

**Convex Glass**  
29 sq. in. | 18" ROC

**Vehicle:**  
E-Series Cutaway Van Mirrors  
(2003-Present)

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Options
2020XG	715899	715901	715900	Black	Manual	Manual	-
2020XG	715905	715907	715906	Black	Heat/Remote	Heat/Manual	-
2020XG	716346	716347	716348	Black	Heat/Remote	Heat/Manual	Light
2020XG	716343	716345	716344	Black	Heat/Remote	Heat/Manual	Signal
2020XG	715902	715903	715904	White	Manual	Manual	-
2020XG	715908	715909	715910	White	Heat/Remote	Heat/Manual	-
2020XG	716382	716383	716384	White	Heat/Remote	Heat/Manual	Light
2020XG	716379	716381	716380	White	Heat/Remote	Heat/Manual	Signal
2020XG	715953	715955	715954	Chrome	Heat/Remote	Heat/Manual	-
2020XG	716414	716415	716416	Chrome	Heat/Remote	Heat/Manual	Light
2020XG	716411	716413	716412	Chrome	Heat/Remote	Heat/Manual	Signal

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Options
2020XG	715923	715925	715924	Black	Manual	Manual	-
2020XG	715929	715931	715930	Black	Heat/Remote	Heat/Manual	-
2020XG	716322	716323	716324	Black	Heat/Remote	Heat/Manual	Light
2020XG	716319	716321	716320	Black	Heat/Remote	Heat/Manual	Signal
2020XG	715926	715927	715928	White	Manual	Manual	-
2020XG	715932	715933	715934	White	Heat/Remote	Heat/Manual	-
2020XG	716370	716371	716372	White	Heat/Remote	Heat/Manual	Light
2020XG	716367	716369	716368	White	Heat/Remote	Heat/Manual	Signal
2020XG	715971	715973	715972	Chrome	Heat/Remote	Heat/Manual	-
2020XG	716394	716395	716396	Chrome	Heat/Remote	Heat/Manual	Light
2020XG	716391	716393	716392	Chrome	Heat/Remote	Heat/Manual	Signal

#### NOTES

**Light** Lighted head

**Signal** Signal arrow in glass

**Chrome** Chrome head with black arm and base

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

# MIRRORS

## MEDIUM DUTY TRUCK

### Ford Van Chassis – 2020XG Mini LEM System



Flat Glass  
64 sq. in.

Convex Glass  
29 sq. in. | 18" ROC

Vehicle:  
E-Series Cutaway Van Mirrors  
(2003-Present)

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717516	717517	717518	Black	Deluxe	Heat/Remote	Heat/Manual	-

### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717504	717505	717506	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	717526	717527	717528	Black	Deluxe	Heat/Remote	Heat/Manual	Signal
2020XG	718615	718617	718616	White	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	717507	717509	717508	Chrome	Deluxe	Heat/Remote	Heat/Manual	-

#### NOTES

**Signal** Signal arrow in glass

**Chrome** Chrome head with black arm and base

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

## MEDIUM DUTY TRUCK

### Ford Van Chassis – 2020SS Shuttle Mirror System



**Flat Glass**  
 Superstar 51½ sq. in.  
 Deluxe 63.3 sq. in.

**Convex Glass**  
 Superstar 23½ sq. in.  
 Deluxe 30 sq. in.

Vehicle:  
 Ford E Van



#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	728525	728527	728526	Deluxe	Manual	Manual	-
2020SS	728515	728513	728514	Deluxe	Heat/Remote	Heat/Manual	-
2020SS	728555	728557	728556	Deluxe	Heat/Remote	Heat/Manual	Light
2020SS	728561	728563	728562	Deluxe	Heat/Remote	Heat/Manual	Signal
2020SS	728521	728519	728520	Deluxe	Heat/Remote	Heat/Remote	-
2020SS	728534	728535	728536	Deluxe	Heat/Remote	Heat/Remote	Light
2020SS	728573	728575	728574	Deluxe	Heat/Remote	Heat/Remote	Signal

#### 100" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	728754	728755	728756	Superstar	Manual	Manual	-
2020SS	728757	728759	728758	Deluxe	Manual	Manual	-
2020SS	728766	728767	728768	Deluxe	Heat/Remote	Heat	-

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	728518	728517	728516	Deluxe	Heat/Remote	Heat/Manual	-
2020SS	728524	728523	728522	Deluxe	Heat/Remote	Heat/Remote	-
2020SS	728609	728611	728610	Deluxe	Heat/Remote	Heat/Manual	Light

#### NOTES

Light Lighted arm

Signal Signal arrow in glass

# MIRRORS

## MEDIUM DUTY TRUCK

### Ford Van Chassis – 2020SS Shuttle Mini LEM System



Vehicle:  
Ford E Van

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	719515	719517	719516	Deluxe	Heat/Remote	Heat/Remote	Camera

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	728784	728785	728786	Deluxe	Heat/Remote	Heat/Remote	Camera

## MEDIUM DUTY TRUCK

### Low Mount Mirrors

#### Door/Fender Mirror System

- Complete kit includes one door mount head/bracket and one fender mount head/ bracket
- All stainless steel construction

#### Vehicle:

Ford E-Van  
(1992-Present)

Pair Part #	Description
713154	Door/fender - complete pair



#### Universal Low Mount Mirror System and Accessories

- Low mount mirror kit includes right side and left side door-mounted stainless steel bracket system, solid stainless steel elbow and 7½" x 10½" mirror head.
- Mirror heads provide over 63 square inches of flat viewing area (see below for more information on the 7½" x 10½" mirror heads).
- Optional wide angle conversion kit includes 6½" x 6" convex and stainless steel tube support for blind spot viewing.



Part #	Description	Color
712479	Low mount mirror kit: bracket, head elbow - pair	Stainless steel
748216	Replacement elbow	Stainless steel
712245	Wide angle conversion kit - one side	Stainless steel



#### 7½" X 10½" Center Bracket Flat Glass Mirror Heads

- Over 63 sq. in. viewing area.
- ⅛" FSC glass.
- Rolled edge design holds glass and gasket securely in place.
- Mirror glass not replaceable.

Part #	Description
709002	Stainless steel
709006	Stainless/heated
709275	Flat black
709276	White



## MEDIUM DUTY TRUCK

### Back Up Mirrors

**Vehicle:**

Ford E-Van  
(1992-Present)

#### Rear Cross View Mirror System

- Kits include mirror head, bracket and stainless steel mounting hardware.
- Assemblies include either a Velvac 8½" wide view convex or an 8½" K-10 Eyeball convex mirror.



Kit #	Bracket Only #	Color	Head
713120	713118	White	Velvac
713121	713119	Stainless steel	Velvac
716908	713204	Stainless steel	K-10

**Vehicle:**

Dodge and older GM  
and Ford Vans

#### Universal Rear Cross View Mirror System

Kit #	Bracket Only #	Color	Head
712640	712638	Stainless steel	Velvac





## MEDIUM DUTY TRUCK

### Ford Cab Chassis – 2020 System



#### Vehicle:

Ford F250-F550 (Up to 2016);  
Ford F650-F750 (Current Model)

#### Flat Glass

Standard 57 sq. in.  
Deluxe 62 sq. in

#### Convex Glass

Standard 10 sq. in. | 8" ROC  
(Wedge Convex)  
Deluxe 30 sq. in. | 12" ROC

### 86" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	715141	715154	715153	Black	Standard	Manual	Wedge	-

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	714527	714529	714528	Black	Standard	Manual	Wedge	-
2020	714533	714535	714534	Black	Standard	Heat/Remote	Wedge	-
2020	714539	714541	714540	Black	Standard	Heat/Remote	Wedge	Light
2020	714515	714517	714516	Black	Deluxe	Manual	Manual	-
2020	714521	714523	714522	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	715859	715861	715860	Chrome	Deluxe	Heat/Remote	Heat/Manual	Light

### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	714530	714531	714532	Black	Standard	Manual	Wedge	-
2020	714536	714537	714538	Black	Standard	Heat/Remote	Wedge	-
2020	714542	714543	714544	Black	Standard	Heat/Remote	Wedge	Light
2020	714518	714519	714520	Black	Deluxe	Manual	Manual	-
2020	714524	714525	714526	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	715131	715133	715132	White	Deluxe	Heat/Remote	Heat/Manual	Light

#### NOTES

**Light** Lighted arm

\*All remote mirror PAIRS include switches and harnesses

# MIRRORS

## MEDIUM DUTY TRUCK

### Ford Cab Chassis – 2020XG System with Outside Air Temperature Sensor (OAT)



Flat Glass  
64 sq. in.  
Convex Glass  
29 sq. in. | 18" ROC

Vehicle:

**CURRENT MODEL APPLICATION**  
Ford F450-F550 Series  
(2017-Present)

NOTES

**Light** Lighted arm  
**Chrome** Chrome head with black arm and base

- 2020XG Mirrors with OAT connect directly to the OE vehicle wire harness and door connector.
- OE switches are used to control the 2020XG remote, heat and light options.
- Included door adapter kit below provides an easy to install interface between the mirror base and the OE mounting area.
- Mirror pairs come complete with all necessary electrical connectors, adapter kit, mounting hardware and detailed installation instructions.

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	719748	719749	719750	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	719751	719753	719752	Black	Deluxe	Heat/Remote	Heat/Manual	-

#### 102" Body Width

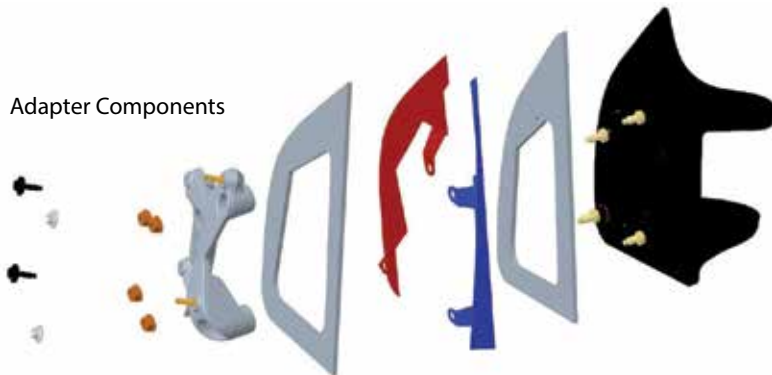
Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	719754	719755	719756	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	719757	719759	719758	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	719760	719761	719762	Chrome	Deluxe	Heat/Remote	Heat/Manual	-

### Adaptor Kits for Current Model F450-F550 (2017-present) with OAT

Model	Left Side #	Right Side #
2020XG	<b>748567</b>	<b>748568</b>

**NOTE: Part numbers listed in RED are NEW!**

Adapter Components



Adapter kit installed on mounting base of F550.

## MEDIUM DUTY TRUCK

### Ford Cab Chassis – 2020XG System with OAT Continued



#### Vehicle:

Ford F450-F550 Series  
(Up to 2016)

- Installs directly to OEM mounting area.
- OEM Switches are used to control the 2020XG remote, heat and light options.

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717379	717381	717380	Black	Deluxe	Manual	Manual	-
2020XG	717181	717183	717182	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	717174	717175	717176	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	717513	717515	717514	Chrome	Deluxe	Heat/Remote	Heat/Manual	-

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717382	717383	717384	Black	Deluxe	Manual	Manual	-
2020XG	717187	717189	717188	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	717184	717185	717186	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	717501	717503	717502	Chrome	Deluxe	Heat/Remote	Heat/Manual	-

# MIRRORS

## MEDIUM DUTY TRUCK

### Ford Cab Chassis – 2020XG System



Flat Glass  
64 sq. in.

Convex Glass  
29 sq. in. | 18" ROC

#### Vehicle:

Ford F250-F550 (Up to 2016);  
Ford F650-F750 (Current Model)

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	716355	716357	716356	Black	Deluxe	Manual	Manual	-
2020XG	716358	716359	716360	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	716364	716365	716366	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	716361	716363	716362	Black	Deluxe	Heat/Remote	Heat/Manual	Signal
2020XG	716423	716425	716424	Chrome	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	716429	716431	716430	Chrome	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	716426	716427	716428	Chrome	Deluxe	Heat/Remote	Heat/Manual	Signal

### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	716331	716333	716332	Black	Deluxe	Manual	Manual	-
2020XG	716334	716335	716336	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	716340	716341	716342	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	716337	716339	716338	Black	Deluxe	Heat/Remote	Heat/Manual	Signal
2020XG	716402	716403	716404	Chrome	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	716408	716409	716410	Chrome	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	716405	716407	716406	Chrome	Deluxe	Heat/Remote	Heat/Manual	Signal

#### NOTES

**Light** Lighted head

**Signal** Signal arrow in glass

**Chrome** Chrome head with black arm and base

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

## MEDIUM DUTY TRUCK

### Ford Cab Chassis – 2020XG Mini LEM System



Flat Glass  
64 sq. in.

Convex Glass  
29 sq. in. | 18" ROC

Mini LEM Camera

**Vehicle:**

Ford F250-F550 (Up to 2016); Ford F650-F750 (Current Model)

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717589	717591	717590	Black	Deluxe	Heat/Remote	Heat/Manual	Signal

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717592	717593	717594	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	717607	717609	717608	Chrome	Deluxe	Heat/Remote	Heat/Manual	Signal

**NOTES**

**Signal** Signal arrow in glass

**Chrome** Chrome head with black arm and base

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

### Ford Cab Chassis – West Coast System

#### Bracket Assembly

Part #	Side
719267	Left
719268	Right

**Vehicle:**

F650/F750  
(Up to 2015)

#### West Coast Head

Part #	Glass Size	Side	Color	M/R	Heat	Light
705148	7" w x 16" h	Both	Stainless steel	M	•	•
705150	7" w x 16" h	Both	Stainless steel	M	-	-



#### Convex Glass Head

Part #	Glass Size	Side	Color	M/R	Heat	Light
708685	8½"	Both	Stainless steel	M	-	-



**NOTES**

M/R Manual/remote

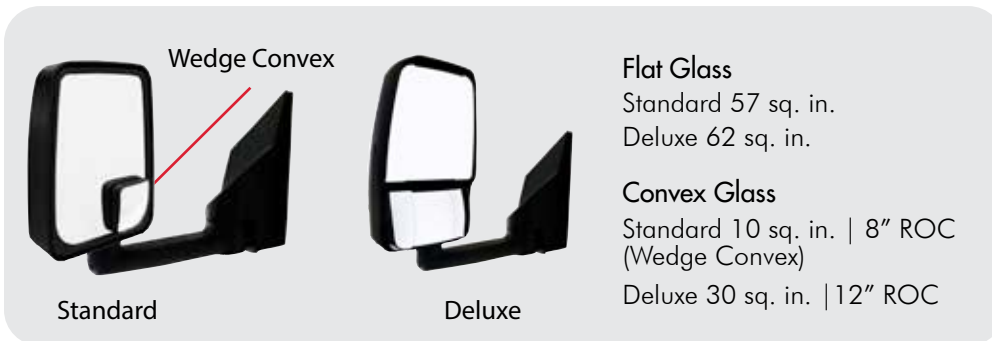
Order head and bracket to make complete mirror system

# MIRRORS

## MEDIUM DUTY TRUCK

### GM Van Chassis – 2020 System

Vehicle:  
GM Cutaway Van



### 78" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	718389-5	718391-5	718390-5	Black	Deluxe	Manual	Manual	-

### 86" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	714601	714603	714602	Black	Standard	Manual	Wedge	-
2020	714604	714605	714606	Black	Standard	Heat/Remote	Wedge	-
2020	714591	714593	714592	Black	Deluxe	Manual	Manual	-
2020	715695	715697	715696	White	Standard	Heat/Remote	Wedge	-
2020	715710	715711	715712	Black	Standard	Heat/Remote	-	-
2020	714591	714593	714592	Black	Deluxe	Manual	Manual	-
2020	717116	717117	717118	Black	Deluxe	Heat/Remote	Heated	-

### 93" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	716800	716801	716802	Black	Deluxe	Heat/Remote	Heat	Light

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	714557	714559	714558	Black	Standard	Manual	Wedge	-
2020	714563	714565	714564	Black	Standard	Heat/Remote	Wedge	-
2020	714569	714571	714570	Black	Standard	Heat/Remote	Wedge	Light
2020	714545	714547	714546	Black	Deluxe	Manual	Manual	-
2020	714551	714553	714552	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	714916	714917	714918	White	Standard	Heat/Remote	Wedge	-
2020	714910	714911	714912	White	Standard	Manual	Wedge	-
2020	714904	714905	714906	White	Deluxe	Heat/Remote	Heat/Manual	Light

## MEDIUM DUTY TRUCK

### GM Van Chassis – 2020 System Continued

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	714560	714561	714562	Black	Standard	Manual	Wedge	-
2020	714566	714567	714568	Black	Standard	Heat/Remote	Wedge	-
2020	714572	714573	714574	Black	Standard	Heat/Remote	Wedge	Light
2020	714548	714549	714550	Black	Deluxe	Manual	Manual	-
2020	714554	714555	714556	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020	714913	714915	714914	White	Standard	Manual	Wedge	-
2020	714919	714921	714920	White	Standard	Heat/Remote	Wedge	-
2020	714907	714909	714908	White	Deluxe	Heat/Remote	Heat/Manual	Light

#### NOTES

**Light** Lighted arm

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

### GM Van Chassis – 2020 Mini LEM System



Flat Glass  
62 sq. in.

Convex Glass  
30 sq. in. | 12" ROC

Vehicle:

GM Cutaway Van

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	719403	719405	719404	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020	719412	719413	719414	Black	Deluxe	Heat/Remote	Heat/Manual	Light

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020	719445	719447	719446	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020	719478	719479	719480	Chrome	Deluxe	Heat/Remote	Heat/Manual	Signal/Light

#### NOTES

**Light** Lighted arm

**Signal** Signal arrow in glass

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides



# MIRRORS

## MEDIUM DUTY TRUCK

### GM Van Chassis – 2020XG System



Flat Glass  
64 sq. in.

Convex Glass  
29 sq. in. | 18" ROC

Vehicle:  
GM Cutaway Van

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Options
2020XG	715911	715913	715912	Black	Manual	Manual	-
2020XG	715917	715919	715918	Black	Heat/Remote	Heat/Manual	-
2020XG	716352	716353	716354	Black	Heat/Remote	Heat/Manual	Light
2020XG	716349	716351	716350	Black	Heat/Remote	Heat/Manual	Signal
2020XG	715914	715915	715916	White	Manual	Manual	-
2020XG	715920	715921	715922	White	Heat/Remote	Heat/Manual	-
2020XG	716388	716389	716390	White	Heat/Remote	Heat/Manual	Light
2020XG	716385	716387	716386	White	Heat/Remote	Heat/Manual	Signal
2020XG	715962	715963	715964	Chrome	Heat/Remote	Heat/Manual	-
2020XG	716420	716421	716422	Chrome	Heat/Remote	Heat/Manual	Light
2020XG	716417	716419	716418	Chrome	Heat/Remote	Heat/Manual	Signal

### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Options
2020XG	715935	715937	715936	Black	Manual	Manual	-
2020XG	715941	715943	715942	Black	Heat/Remote	Heat/Manual	-
2020XG	716328	716329	716330	Black	Heat/Remote	Heat/Manual	Light
2020XG	716325	716327	716326	Black	Heat/Remote	Heat/Manual	Signal
2020XG	715938	715939	715940	White	Manual	Manual	-
2020XG	715944	715945	715946	White	Heat/Remote	Heat/Manual	-
2020XG	716376	716377	716378	White	Heat/Remote	Heat/Manual	Light
2020XG	716373	716375	716374	White	Heat/Remote	Heat/Manual	Signal
2020XG	715980	715981	715982	Chrome	Heat/Remote	Heat/Manual	-
2020XG	716435	716437	716436	Chrome	Heat/Remote	Heat/Manual	Light
2020XG	716397	716399	716398	Chrome	Heat/Remote	Heat/Manual	Signal

#### NOTES

**Light** Lighted head

**Signal** Signal arrow in glass

**Chrome** Chrome head with black arm and base

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

## MEDIUM DUTY TRUCK

### GM Van Chassis – 2020XG System for GM Cut with 8D8 Option



Flat Glass  
64 sq. in.

Convex Glass  
29 sq. in. | 18" ROC

Vehicle:  
GM Cutaway Van

Mirrors connect directly to OE door harness and are controlled by OE switches, making installation fast and easy.

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	718416	718417	718418	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	718419	718421	718420	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	718422	718423	718424	Black	Deluxe	Heat/Remote	Heat/Manual	Signal
2020XG	718434	718435	718436	Chrome	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	718437	718439	718438	Chrome	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	718440	718441	718442	Chrome	Deluxe	Heat/Remote	Heat/Manual	Signal

#### 102" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	718425	718427	718426	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	718428	718429	718430	Black	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	718431	718433	718432	Black	Deluxe	Heat/Remote	Heat/Manual	Signal
2020XG	718443	718445	718444	Chrome	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	718446	718447	718448	Chrome	Deluxe	Heat/Remote	Heat/Manual	Light
2020XG	718449	718451	718450	Chrome	Deluxe	Heat/Remote	Heat/Manual	Signal

#### NOTES

Light Lighted arm

Signal Signal arrow in glass

Mirrors shown above are used on GM cutaway van chassis with 8D8 option. This option provides OE door harness and control switches with the chassis. Velvac switch and harness are not included, and are not required for installation

# MIRRORS

## MEDIUM DUTY TRUCK

### GM Van Chassis – 2020XG System Mini LEM System



Flat Glass  
64 sq. in.  
Convex Glass  
29 sq. in. | 18" ROC

Mini LEM Camera

Vehicle:  
GM Cutaway Van

### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020XG	717550	717551	717552	Black	Deluxe	Heat/Remote	Heat/Manual	-
2020XG	717553	717555	717554	Black	Deluxe	Heat/Remote	Heat/Manual	Signal

#### NOTES

**Signal** Signal arrow in glass

**Chrome** Chrome head with black arm and base

\*All remote mirror PAIRS include switches and wire harnesses. These items are NOT included when remote mirrors are sold as sides

### GM Van Chassis – 2020SS Shuttle Mirror System



Left Side  
Door Mount

Right Side  
Fender Mount

Flat Glass  
Superstar 51½ sq. in.  
Deluxe 63.3 sq. in.  
Convex Glass  
Superstar 23½ sq. in.  
Deluxe 30 sq. in.

Vehicle:  
GM G Van



Superstar

### 93" Body Width

Model	Pair Part #	Left Side #	Right Side #	Color	Head	Flat Glass	Convex Glass	Options
2020SS	718736	718737	718738	Black	Deluxe	Heat/Remote	Heat	-
2020SS	718739	718740	718741	Black	Deluxe	Heat/Remote	Heat	Light
2020SS	718742	718743	718744	Black	Deluxe	Heat/Remote	Heat	Signal
2020SS	718745	718746	718747	Black	Deluxe	Heat/Remote	Heat/Remote	-
2020SS	718751	718752	718753	Black	Deluxe	Heat/Remote	Heat/Remote	Signal

#### NOTES

**Light** Lighted arm

**Signal** Signal arrow in glass

## MEDIUM DUTY TRUCK

### GM Van Chassis – 2020SS Shuttle Mirror System Continued

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	718525	718527	718526	Deluxe	Manual	Manual	-
2020SS	718515	718513	718514	Deluxe	Heat/Remote	Heat/Manual	-
2020SS	718555	718557	718556	Deluxe	Heat/Remote	Heat/Manual	Light
2020SS	718561	718563	718562	Deluxe	Heat/Remote	Heat/Manual	Signal
2020SS	718521	718519	718520	Deluxe	Heat/Remote	Heat/Remote	-
2020SS	718534	718535	718536	Deluxe	Heat/Remote	Heat/Remote	Light
2020SS	718573	718575	718574	Deluxe	Heat/Remote	Heat/Remote	Signal

#### 100" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	718754	718755	718756	Superstar	Manual	Manual	-
2020SS	718757	718759	718758	Deluxe	Manual	Manual	-
2020SS	718763	718765	718764	Deluxe	Heat/Remote	Heat	Light
2020SS	718766	718767	718768	Deluxe	Heat/Remote	Heat	-

### GM Van Chassis – 2020SS Shuttle Mini LEM System



Vehicle:  
GM G Van

#### 96" Body Width

Model	Pair Part #	Left Side #	Right Side #	Head	Flat Glass	Convex Glass	Options
2020SS	719301	719303	719302	Deluxe	Heat/Remote	Heat/Manual	-
2020SS	719295	719297	719296	Deluxe	Heat/Remote	Heat/Remote	-
2020SS	728784	728785	728786	Deluxe	Heat/Remote	Heat/Remote	-

## MEDIUM DUTY TRUCK

### Low Mount Mirrors

**Vehicle:**

GM Low Mount Cab and Cutaway



### Camper Style Mirror Head

- Complete with 3/8" - 16 x 2 1/4" mounting bolt and hardware.

Part #	Delbar Part #	Glass Size	Head Size	Material
716138-5	HR-1164	63 sq. in.	7 1/2"w x 10 1/2"h	Stainless steel

### Back Up Mirrors

**Vehicle:**

GM G Van (1997-Present)



### Rear Cross View Mirror System

- Kits include mirror head, bracket and stainless steel mounting hardware.
- Assemblies include either a Velvac 8 1/2" wide view convex or an 8 1/2" K-10 Eyeball convex mirror.

Kit #	Bracket Only #	Color	Head
713796	-	White	Velvac
713798	-	Stainless steel	Velvac

### Side Mirrors

**Vehicle:**

GMC Canyon Pickup Truck



### Colorado Canyon Pickup Mirrors

- Provides views around 78" bodies to increase driver safety with enhanced view of passing lanes and blind spots.
- Large 11.10 square inch convex with 12 1/2" ROC targets blind spots.
- 56.62 square inch flat glass area.
- Mirrors fold forward and back for easy storage.
- Black finish for OE appearance.

Part #	Description
715885	Complete pair
715886	Right side mirror
715887	Left side mirror
723106	Right side convex
723107	Left side convex
702086	Flat glass kit

#### Deluxe Heads for 2020 Mirror Assemblies

Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Signal Arrow	Camera	Dampening Clip**
715513	715512	White	Manual	Heat/Manual	-	-	-
714589	714590	White	Heat/Remote	Heat/Manual	-	-	-
719927	719928	White	Heat/Remote	Heat/Manual	-	X	-
714579	714580	Black	Manual	Manual	-	-	-
715641	715642	Black	Manual	Manual	-	-	X
714581	714582	Black	Heat/Remote	Heat/Manual	-	-	-
716865	716866	Black	Heat/Remote	Heat/Manual	-	-	X
716973	716974	Black	Heat/Remote	Heat/Manual	X	-	-
719925	719926	Black	Heat/Remote	Heat/Manual	-	X	-
716867	716868	Black	Heat/Remote	Heat/Remote	-	-	X
717045	717046	Chrome	Manual	Manual	-	-	-
714607	714608	Chrome	Heat/Remote	Heat/Manual	-	-	-
716433	716434	Chrome	Heat/Remote	Heat/Manual	X	-	-
719915	719914	Chrome	Heat/Remote	Heat/Manual	-	X	-



#### NOTES

\*\*Used on 2020SS Mirror Applications

#### Replacement Glass Kits for 2020 Deluxe Mirror Assemblies

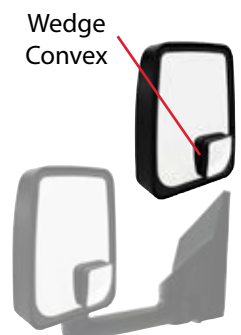
- Kits include the following:

Left Side #	Right Side #	Glass Type	Signal Arrow	Mating Clip	Inner Housing	Dampening Clips	Man Handset
709770	709770	Flat		X	X	X	X
709448	709448	Heated Flat		X			
709644	709644	Heated Flat		X	X	X	
709673	709674	Heated Flat	X	X	X		
709764	709764	Convex		X	X		X
709449	709449	Heated Convex		X			
709589	709589	Heated Convex		X	X		X



#### Standard Heads for 2020 Mirror Assemblies

Left Side #	Right Side #	Color	Flat Glass	Convex Glass
714576	714576	White	Manual	Wedge Stick On
714578	714578	White	Heat/Remote	Wedge Stick On
714575	714575	Black	Manual	Wedge Stick On
714577	714577	Black	Heat/Remote	Wedge Stick On



## MEDIUM DUTY TRUCK

### Service Heads and Glass Kits

709407,  
709748



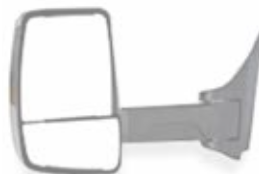
723068

#### Replacement Glass Kits for 2020 Standard Mirror Assemblies

- 709407 and 709748 include the bezel and wedge convex stick on. 723068 is the wedge convex only.

Left Side #	Right Side #	Glass Type	Bezel	Wedge Stick On
709407	709407	Flat/Convex Kit	X	X
709748	709748	Heated Flat/Convex Kit	X	X
723068	723068	Wedge Only	-	-

#### Replacement Heads for 2020XG Mirrors – GM/Ford Truck and Van



Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Signal Arrow	Marker Lamp	Camera
715987	715988	White	Manual	Manual	-	-	-
715991	715992	White	Heat/Remote	Heated/Manual	-	-	-
716507	716506	White	Heat/Remote	Heated/Manual	-	X	-
719781	719782	White	Heat/Remote	Heated/Manual	-	-	X
715985	715986	Black	Manual	Manual	-	-	-
715989	715990	Black	Heat/Remote	Heated/Manual	-	-	-
719275	719274	Black	Heat/Remote	Heat/Remote	-	-	-
719277	719276	Black	Heat/Remote	Heat/Remote	X	-	-
716499	716498	Black	Heat/Remote	Heated/Manual	X	-	-
716505	716504	Black	Heat/Remote	Heated/Manual	-	X	-
719777	719778	Black	Heat/Remote	Heated/Manual	-	-	X
719785	719786	Black	Heat/Remote	Heat/Remote	-	-	X
715997	715998	Chrome	Heat/Remote	Heated/Manual	-	-	-
716509	716508	Chrome	Heat/Remote	Heated/Manual	-	X	-
716503	716502	Chrome	Heat/Remote	Heated/Manual	X	-	-
719779	719780	Chrome	Heat/Remote	Heated/Manual	-	-	X
719783	719784	Chrome	Heat/Remote	Heat/Remote	X	-	X

#### Replacement Heads for GM Topkick and Kodiak Application



Left Side #	Right Side #	Color	Flat Glass	Convex Glass
716012	716011	Black	Heat/Remote	Manual



## MEDIUM DUTY TRUCK

### Service Heads and Glass Kits

#### Replacement Heads for GM Cutaway – 8D8 Option Code Specific

Left Side #	Right Side #	Color	Flat Glass	Convex Glass	Signal Arrow	Marker Lamp
716011	716012	Black	Heat/Remote	Heated/Manual	-	-
716521	716522	Black	Heat/Remote	Heated/Manual	-	X
716515	716516	Black	Heat/Remote	Heated/Manual	X	-
716055	716056	Chrome	Heat/Remote	Heated/Manual	-	-
716525	716526	Chrome	Heat/Remote	Heated/Manual	-	X
716519	716520	Chrome	Heat/Remote	Heated/Manual	X	-



#### Replacement Glass Kits for 2020XG Mirrors – GM/Ford Truck and Van

- Kits include the following:

Left Side #	Right Side #	Glass Type	Signal Arrow	Glass Clip	Inner Housing	Dampener System*	
716103	716104	Heated Flat	-	X	X	-	
709995	709994	Heated Flat	X	X	X	-	
716105	716106	Heated Convex	-	X	X	-	
709931*	709932*	Heated Convex	-	X	X	X	
709422	709422	Flat Glass Retaining Clip					
709855	709855	Convex Glass Retaining Clip					



#### NOTES

- \* Recommended for use on 2020XG Mirrors on GM Kodiak or Top Kick Trucks

#### Replacement Heads for 2015 Standard Mirror Assemblies

Left Side #	Right Side #	Color	Flat Glass	Convex Glass
714258	714258	White	Manual	Wedge Stick On
714256	714256	Black	Manual	Wedge Stick On



#### Replacement Glass Kits for 2015 Standard Mirror Assemblies

- 709407 includes the bezel and wedge convex stick on. 723068 is the wedge convex only.

Left Side #	Right Side #	Glass Type	Bezel	Wedge Stick On
709407	709407	Flat/Convex Kit	X	X
723068	723068	Wedge Only	-	-



# MIRRORS

## MEDIUM DUTY TRUCK

### Camera Kits



#### Replacement Camera Kits for 2020XG Mirrors

- Kits include the camera and housing.

Left Side #	Right Side #	Color
K710795	K710796	Black
C710795	C710796	Chrome
L710795	L710796	White

### 2020, 2020XG, and 2020SS Service Parts



Switch kit



Harness



Light



Arm covers

#### Mating Wire Harnesses and Switch Kits

Mating Wire Harness Part #	Switch Kit Part #	Switch Kit Description	Mirror Model	Vehicle
748304 Passenger door to HR switch kit	747524	Switch Kit - HR Flat Glass	2020	Ford E Van
	747632	Switch Kit - HR Flat Glass	2020	GM G Van
	747633	Switch Kit - HR Flat Glass	2020	Ford F Superduty
747923 Passenger door to HR/ HR switch kit	747918	Switch Kit - HR Flat and HR Convex Glass	2020XG/2020SS	Ford E Van
747863 Passenger door to HR switch kit	747855	Switch Kit - HR Flat Glass	2020XG/2020SS	Ford E Van
	747856	Switch Kit - HR Flat Glass	2020XG/2020SS	GM G Van
	747901	Switch Kit - HR Flat Glass	2020XG/2020SS	Ford F Superduty
745116 Passenger door to HR/ HR switch kit	745013	Switch Kit - HR Flat and HR Convex Glass	2020XG/2020SS	GM G Van

#### Other Service Parts

Part #	Description	Mirror Model	Vehicle
747019	Wire Harness - Mirrors with Marker Light/Turn Signal	2020XG/2020SS	All
709993	Mirror Head Marker Light	2020XG	All
747551+	Lower Elbow Marker Light	2020/2020SS	All
716107	Black 96" Arm Cover Kit - Pair	2020XG	All
716113	Black 106" Arm Cover Kit - Pair	2020XG	All
716109	White 96" Arm Cover Kit - Pair	2020XG	All
716115	White 106" Arm Cover Kit - Pair	2020XG	All
709785	Cover Plate Kit	N/A	GMC Topkick



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## WALK-IN VAN

### Mirror Assemblies

- Universal mirrors include an adjustable loop mounting bracket that will fit most walk-in van applications.
- Fixed custom mirrors include a fixed loop bracket for specific mounting applications.
- All mirrors include 6½" w x 10" h upper flat glass head and 6½" w x 6" h lower convex.

Part #	Application	Description	Color	Mounting Centers	Loop Leg Length
<b>Universal</b>					
721090+	Various	Complete pair	Stainless steel	22" to 36.5"	8"
721092+	Various	Loop and brackets	Stainless steel	22" to 36.5"	8"
<b>Fixed Custom</b>					
712323	Grumman (Morgan) Utilimaster	Complete pair	Stainless steel	30.57"	10.5"
724007	Various	Complete pair	Stainless steel	30.37"	10.42"
724008	Various	Complete pair	Stainless steel	33"	8"
727067	Various	Complete pair	Stainless steel	33"	8"



Universal adjustable loop



Fixed custom



### Wide Angle Mirror Heads

#### Stud Mount Mirror Heads

- Center mount wide angle mirror heads feature Velvac's DuraBall nylon ball stud for superior strength and durability (see page M11 for DuraBall information).
- 5/16" - 18 mounting stud. Use with mounting clamp 704068 on page M36.
- 1/8" replaceable FSC glass on flat glass models; 1/8" silvered glass on convex glass.

#### 6½" x 6" Convex Glass

- Viewing area 32 sq. in. | 21" ROC

Part #	Glass #	Gasket #	Color
708156	702023	703006	Stainless
704280	702023	703005	Ford White



#### 6½" x 10" Flat Glass

- Viewing area 55 sq. in.

Part #	Glass #	Gasket #	Color
708181	702076	703008	Stainless
704268	702076	703007	Ford White



### Wide Angle Mirror Heads Continued

#### Side Mount Angle Mirror Heads

- The original Velvac wide angle mirror head is used on walk-in van, cutaway van, cab chassis and a variety of other applications.
- $\frac{5}{16}$ " - 18 threaded mounting port for a clean, easy installation. Use with mounting clamp 704068 on page M36.
- $\frac{1}{8}$ " replaceable FSC glass on all flat glass models except UPS brown which is silvered. All convex glass is silvered glass.



#### 6½" x 6" Flat Glass

- Viewing area 32 sq. in.

Part #	Glass #	Gasket #	Color	Type
704093	702051	703005	Stainless	Steel
704078	702051	703005	White	Steel
704178-5	702051	703101	White	Plastic
704158	702051	703103	UPS Brown	Plastic
704159	702051	703103	Black	Plastic

#### 6½" x 6" Convex Glass

- Viewing area 32 sq. in. | 21" ROC



Part #	Glass #	Gasket #	Color	Type
704095	702023	703005	Stainless	Steel
704315	704335	703005	Stainless (heated)	Steel
704077	702023	703005	White	Steel
704177-5	702057	703101	White	Plastic
704120	704121	703101	PO White	Plastic
704155	702057	703103	UPS Brown	Plastic
704153-5	702057	703103	Black	Plastic

#### 6½" x 10" Flat Glass

- Viewing area 55 sq. in.



Part #	Glass #	Gasket #	Color	Type
704091	702076	703007	Stainless	Steel
704325	704338	703007	Stainless (heated)	Steel
704032	702076	703007	White	Steel
704132-5	702076	703102	White	Plastic
704122	702076	703102	PO White	Plastic
704154	702076	703104	UPS Brown	Plastic
704152-5	702076	703104	Black	Plastic

### Rear Cross View Mirror Systems

#### RVX™/Corner Rotator

- Designed to easily mount to structural rear corner of walk-in van or high cube bodies. Fits on 90° corner with up to 1½" radius.
- Includes factory assembled spring loaded bracket with Velvac 10" wide view or K-10 Eyeball convex mirror head.
- Mirrors are designed to fold away and rotate.

Kit #	Bracket Only #	Color	Head	Rear Door Style
715213	-	White	Velvac	A, B or C
715212	-	Stainless steel	Velvac	A, B or C
716901	714403	Stainless steel	K-10	A, B or C
716900	714403	Stainless steel w/ black ABS head	K-10	A, B or C

RVX™ is a trademark of Velvac, Inc



#### Walk-in Van Bodies

- Universal mounting bracket fits walk-in vans and vehicles with flat mounting surfaces.
- Kits include mirror head, reinforced ¾" O.D. tubing arm, heavy-duty mounting brackets and stainless steel hardware.
- Assemblies include either a 10" Velvac wide view convex or a 10" K-10 Eyeball roll-up narrow convex mirror.

Kit #	Bracket Only #	Color	Head	Rear Door Style	Panel Mount
712644	712642	White	Velvac	A or C	Rear standard
712643	712641	Stainless steel	Velvac	A or C	Rear standard
716906	712647	Stainless steel	K-10	A or C	Rear standard
716907	713752	Stainless steel	K-10	A or C	Rear breakaway
716903	715101	Stainless steel	K-10	B or D	Side
716902*	715101	Stainless steel w/ black ABS	K-10	B or D	Side

\* Also used on Sprinter Vans



Rear standard



Rear breakaway



Side mount



Roll-up narrow



Roll-up full



Hinged narrow



Hinged full



## WALK-IN VAN

### Clamps and Pivot Hardware

#### Preset Rivet Plate



- Designed for use on all Velvac preset loops except those with tension control stop preset as found in kit Part No. 748371.
- Two stainless steel rivet plates extend life of loop and improve pivot action on mirrors with worn preset rivets.
- Mounts easily between existing mirror loop and preset lock plate.

Part #	Description
748377	Preset rivet plate kit

#### Clamp Kit for 5/8" O.D. Tubing



- Used to mount side and center mount mirror heads to 5/8" O.D. tubing.
- Kit includes two-piece aluminum clamp and stainless steel mounting hardware.

Part #	Description
704069	Clamp kit for 5/8" O.D. tubing



#### Standard Mounting Cabfeet Kits

- Used on non-preset style loops.
- Heavy-duty 90° bracket permits a variety of mounting applications.
- Cabfeet mounting holes are 2" on center.
- Available in stainless steel and powder coated galvanized steel finishes.
- Kits include cabfeet and hardware to mount one pair of mirrors.

Part #	Description
757015	Stainless Steel
757016	White

#### Spring Preset Pivot Kit



- Replacement kit for mirrors with standard Velvac spring preset systems and UPS walk-in vans with Velvac mirrors.
- Use to upgrade mirrors with rubber washer preset to a spring preset for improved pivot action.
- Stainless steel rivet plate extends life of loop and improves pivot action on mirrors with worn preset rivets.
- 5/16" - 18 x 2" stainless steel bolt.
- Kit contains parts for one complete spring preset pivot end.

Part #	Description
712979	Spring preset pivot kit

#### Rubber Preset Pivot Kit



- Replacement kit for mirrors with Velvac rubber preset pivots and a rubber washer style preset.
- 5/16" - 18 x 1 1/2" stainless steel bolt.
- Kit contains parts for one complete preset pivot end.

Part #	Description
748009	Rubber preset pivot kit

#### Non-Preset Pivot Kit



- Replacement kit for mirrors with Velvac non-preset pivot end and with a standard pivot.
- 5/16" - 18 x 1" stainless steel bolt.
- Kit contains parts for one complete non-preset pivot end.

Part #	Description
748012	Non-preset pivot kit

#### Heavy-Duty Preset and Pivot Upgrade Kit



- Designed for use on all Velvac preset loops except those with tension control stop preset as found in kit Part No. 748371.
- Improves pivot holding force on mirrors with large loops or large/heavy mirror head combinations.
- Unique spring/washer combination retains pivot system torque to keep mirror in set viewing position until moved and provides superior detent action for foldaway applications.
- Life cycle tested to over 50,000 pivot cycles.
- Preset rivet plate fits over existing preset rivets to extend life of loop and improve cycle performance.
- Easy retrofit - can be completed without taking mirror assembly off the vehicle.
- 5/16" - 18 x 1 3/4" stainless steel pivot bolt and 5/16" - 18 x 2" stainless steel preset bolt.
- Kit contains all upper and lower pivot hardware for one mirror assembly.
- Kit can be used to upgrade mirror loops with standard rubber or spring preset systems (similar to Part No. 748009 or 712979).

Part #	Description
748355	Heavy-duty preset and pivot upgrade kit

\*Order one Part No. 748355 per side

All USPS mirrors are manufactured to USPS OE requirements and are USPS White.



Side mirror



Front cross view



Rear cross view

### Mirror and Bracket Kits

Part #	Body Type	Application	Dimension
712896	LLV	Right side	6½" w x 10" h
712897	LLV	Left side	6½" w x 10" h
712898	LLV	Front cross view	10" Diameter
712900	LLV	Rear cross view	10" Diameter
714782	CRV	Right side	6½" w x 10" h
714783	CRV	Left side	6½" w x 10" h
714784	CRV	Front cross view	8" Diameter
714785	CRV	Rear cross view	8" Diameter

### Replacement Main Head

Part #	Body Type	Application	Dimension
704122	LLV	Both side mirrors	6½" w x 10" h
704122	CRV	Both side mirrors	6½" w x 10" h

### Replacement Convex Head

Part #	Body Type	Application	Dimension
704120	LLV	Both side mirrors	6½" w x 6" h
723103	LLV	Front cross view	8" Diameter
709226	LLV	Rear cross view	10" Diameter
704120	CRV	Both side mirrors	6½" w x 6" h
723103	CRV	Front cross view	8" Diameter
709226	CRV	Rear cross view	10" Diameter
708463	Ford Aerostar	Rear cross view	8½" Diameter
708463	Ford Windstar	Rear cross view	8½" Diameter
708463	Dodge Caravan	Rear cross view	8½" Diameter



# MIRRORS

## CLASS A RV, BUS, REFUSE

### Common Replacement Heads and Glass Kits

Velvac's line of side mount and corner mount mirrors are designed with a focus on safety, quality and styling. Typical applications include Class A motorhomes, motorcoach, fire truck and rescue vehicles. Produced from high quality materials, these mirrors can be configured to meet specific customer and application requirements.

#### Available Features/Options

- Deluxe, V-MAX™ or V-MAX III™ mirror heads
- Top Hat™ add-on convex for Deluxe head
- Chrome plated or powder coated finish
- Easily replaceable manual or heated remote glass
- Lower marker lamp on arm or signal arrow in the flat glass
- Lower LEM camera with LED marker lamp

#### Model 2025 Mirror System

- Mirror system mounts to the flat side of the vehicle, allowing the mirror to be viewed through the side window.



Shown with Deluxe head

#### Revolution™ Mirror System

- Mirror base pivot system mounts to flat side of vehicle and allows mirror to be folded forward or back for vehicle storage.



Shown with V-MAX™ head

#### Model 2030 Mirror System

- Corner mounting base available with 9", 10", 11", 12" or 15" radius. Contact Velvac for custom applications.
- Mirror arm lengths available from 10", 12", 14" or 17". This allows mirrors to be viewed through the windshield or side windows.



Shown with Deluxe head and add-on Top Hat™ convex



Deluxe



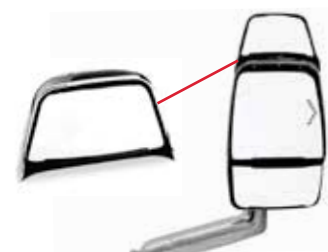
V-MAX



V-MAX III



V-MAX III with LEM



Top Hat Add-On Convex

Deluxe Revolution™, V-Max™, V-MaxIII™ and Top Hat™ are trademarks of Velvac, Inc.

Mirror Head	Flat Glass		Lower Convex Glass			Upper Convex Glass		
	Square Inch	Size	Square Inch	Size	Radius	Square Inch	Size	Radius
Deluxe	62.3	8" x 8"	30	8" x 4"	12"	N/A	N/A	N/A
V-MAX	98.7	8" x 13"	30	8" x 4"	21"	N/A	N/A	N/A
V-MAX III/V-MAX III w/ LEM	72.5	8" x 9"	30	8" x 4"	21"	26.4	8" x 3.3"	21"
Top Hat Convex	N/A	N/A	N/A	N/A	N/A	17.8	6" x 3.5"	12.5"

### Common Replacement Heads and Glass Kits

#### Mirror Heads

V-MAX	V-MAX III	V-MAX LEM	V-MAX III LEM	Color	Side
714946	-	-	-	White	Right
714947	-	-	-	White	Left
714944	717192	716208	717226	Black	Right
714945	717193	716207	717225	Black	Left
714942	717180	716206	716152	Chrome	Right
714943	717179	716205	716153	Chrome	Left

#### Glass Kits

V-MAX	V-MAX III	V-MAX LEM	V-MAX III LEM	Description
709450	709732	709450	709732	Heated flat right or left
-	709702	-	7102080	Heated flat with blinker RS
-	709701	-	7102070	Heated flat with blinker LS
709650	709650	709650	709650	Heated lower convex RS/LS
-	709733	-	709733	Heated upper convex glass
709651	709651	709651	709651	Lower convex housing RS/LS

#### NOTES

RS Right side

LS Left side

For replacement Deluxe heads and glass kits see page M59

#### Top Hat Add-On Convex

- Installs easily on top of Deluxe head for added visibility of blind spots or other vision targets.
- Fits on either driver side or passenger side mirror.

Part #	Color
715372	Black
715373	White
715374	Chrome

#### NOTES

All heads shown are heated remote flat glass

Camera not included with replacement LEM heads

Information shown on M68-M69 is only a portion of our RV product line. See next page for more information on how to navigate our make model matrix on our website. This tool will help you find RV mirror and related service parts by using specific drop down criteria.

**Haven't found the mirror  
for your application?**

**Velvac's Technical Services and  
Engineering Team have hundreds  
of years of combined  
experience in the industry.**

**Contact a specialist today at  
[technicalservices3@velvac.com](mailto:technicalservices3@velvac.com)  
or call 262-768-0700  
and ask for Technical Services**

**OUR PARTS PUT YOU IN THE PASSING LANE**

# **VISION SYSTEMS**

**The future is here.**

Velvac has developed some of the most sophisticated vision systems in the industry. You'll find that we're at the forefront in ensuring safety for drivers.

- LaneOptics MirrorCam
- AeroCam
- PodCam



# VISION SYSTEMS

## CAMERA SYSTEMS

- Velvac offers a variety of camera systems and kits to increase safety and convenience.
- Below camera placement can also be for straight trucks, RVs, buses and speciality vehicles.

### **Helpful hint:**

Be mindful of the connection type. The connectors are one of two types: A and B, shown to the right. All pieces must be compatible or will require the use of an adaptor



4-pin  
'A' Connection



5-pin  
'B' Connection



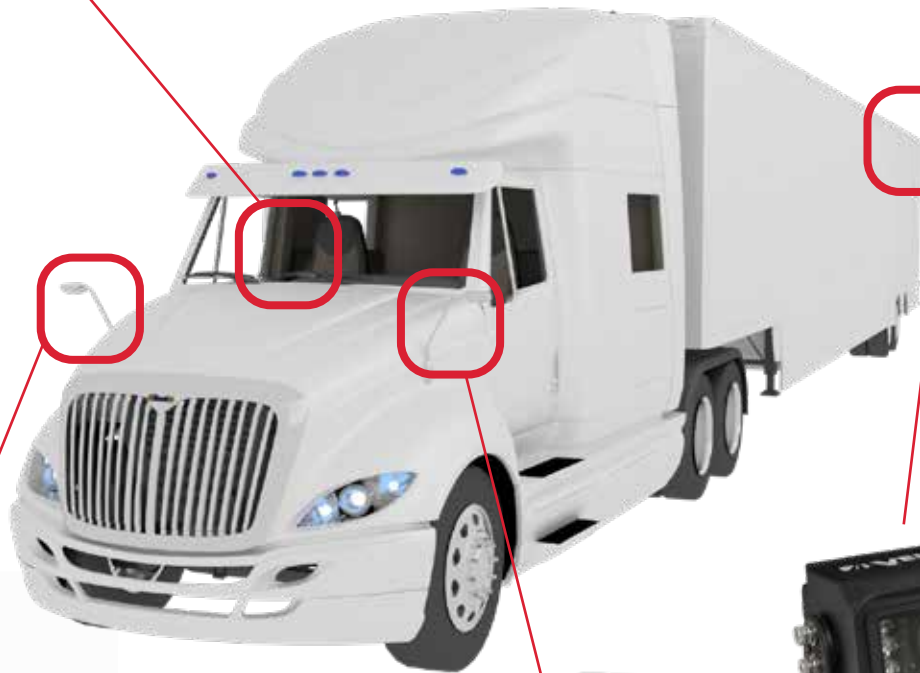
Monitor  
Page V7



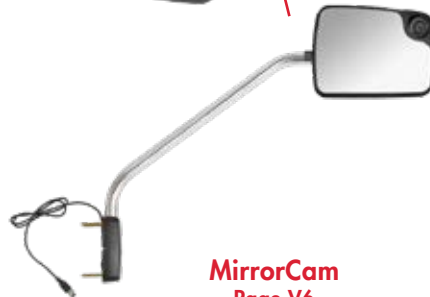
Apply  
Anywhere!



PodCam  
Page V6



AeroCam  
Page V5



MirrorCam  
Page V6



Rear-View Camera  
Page V3



717973



710615

### Flush Mount Rear View Camera

Part #	FOV	Connector	IP Rating	Power
717973	120° H, 90° V	A	IP69K	12 VDC
710615	120° H, 90° V	A	IP69K	12 VDC



710522



710521



710523



710326

### Adjustable Rear View Camera

Part #	Housing	FOV	Connector	IP Rating	Power
710522	White	123° H, 95° V	A	IP69K	12 VDC
710523	Black	112° H, 80° V	A	IP69K	12 VDC
710521	Black	120° H, 90° V	A	IP69K	12 VDC
710326	Black	80° H, 60° V	B	IP69K	12 VDC

#### NOTES

- CMOS Complimentary metal oxide semiconductor  
 CCD Charged couple device

### Rear View Cameras

- Velvac offers a variety of rear view cameras including the exclusive flush mount back-up camera and adjustable back-up style.
- Integrated flush mount provides clean appearance with no exposed wires or hardware.
- Camera angle is preset to provide the optimum visibility with no needed adjustments.
- IR-LED.
- CMOS technology reduces blooming.
- Includes durable backing plate, gasket and mounting hardware.
- IP69K rated for dust and water protection
- IR-LED lights allows the camera to provide clear images even in low ambient light
- CMOS image technology reduces blooming due to sunlight or headlight conditions
- Mounting brackets and hardware included
- Cameras 710522, 710523, and 710521 have a built-in microphone allowing communication with the driver from outside the vehicle



## CAMERAS

### Rear View Camera

- High resolution color.
- Waterproof housing.
- Cylindrical 3/4" through hole mount.
- IR-LED.
- CMOS technology reduces blooming.



Part #	Side	Housing	FOV	Connector	IP Rating	Power
710325	Rear	Black	80° H, 60° V	B	IP69K	12 VDC

### Front Facing Cameras

- High resolution color.
- Waterproof housing.
- Mounts on top or bottom of windshield.
- CMOS technology reduces blooming.



Part #	FOV	Connector	IP Rating	Power
717871	120° H, 90° V	B	IP69K	12 VDC

### Interior Cameras

- High resolution color.
- IR-LED.
- CCD image technology.
- Mounting hardware included.



#### NOTES

CMOS Complimentary metal oxide semiconductor

CCD Charged couple device

Part #	FOV	Connector	IP Rating	Power
710589	120° H, 90° V	B	N/A	12 VDC





AeroCam  
Post Cam



Short Arm  
AeroCam

### AeroCam Post Cams

Right Side #	Left Side #	FOV	Connector	IP Rating	Power
717994	717993	73° H, 53° V	B	IP69K	12 VDC
717994-5	717993-5	73° H, 53° V	A	IP69K	12 VDC

### Short Arm AeroCams

Right Side #	Left Side #	FOV	Connector	IP Rating	Power
717870	717869	73° H, 53° V	B	IP69K	12 VDC
717992	717991	73° H, 53° V	A	IP69K	12 VDC



### AeroCam

Right Side #	Left Side #	Description
717810	717809	AeroCam only, no hardware included

### Side View Cameras

- Velvac offers both traditional mount side view cameras and hood mount AeroCams, as well as side view CMOS cameras integrated into the Velvac 2020 Mini-LEM and V-MAX and V-MAX III LEM mirror systems (see page M68-M69). Also featuring an integrated camera is the MirrorCam, part of the LaneOptics hood mount mirror series (see page M23).

### AeroCam Post Cam

- Post Cam kits include both ¾" O.D. and 1" O.D. SS tube clamps for unlimited mounting options.
- 1" clamp wraps around camera post for easy mounting to almost any surface.
- ¾" and 1" clamps can be nested together to allow Post Cam to mount to ¾" tubular hood or side mount mirrors.
- Includes (2) 15' camera cables for routing to monitor or recording device.
- Note: Camera must be mounted horizontally for proper camera view.

### Short Arm AeroCam

- Easily attaches to any flat vertical surface.
- Applications include: walk in van, refuse truck, yard tractor, fire truck.
- Black powder coated tube arm and mounting base.
- Includes mounting hardware and universal backing plates.
- Base mounting pattern is 2" x 3.75".

### AeroCam

- AeroCam Vision Systems provide a clear view along the side of the truck and trailer to reduce blindspots and improve driver safety.
- Features the same hole pattern as Velvac Pod and Mod Pod mirrors.
- FOV: 73° Horizontal, 53° Vertical.

## CAMERAS

### Side View Cameras

#### PodCam

- Molded black housing and universal mounting base allows you to easily position the camera onto a variety of OEM hood mounted mirrors.
- Mounting to the hood mirror provides an ideal viewing perspective and keeps camera away from splash areas.
- The camera's 73 degree horizontal viewing angle allows for fast, clear object recognition and added visibility of passing lanes and blind spot areas to the sides of the vehicle.
- Standard 5 pin connector attaches to many monitors and recording devices.
- Detailed vehicle specific mounting instructions and drill templates included.
- Includes (2) 34" camera cables and hardware for connection to the monitor or recording device.
- PodCam's universal mounting system allows the camera to be quickly and easily mounted to a variety of vehicle hood mirrors. Vehicle specific installation instructions are provided for these truck models: Cascadia P4, Cascadia P3, Volvo VNL, Navistar LT.

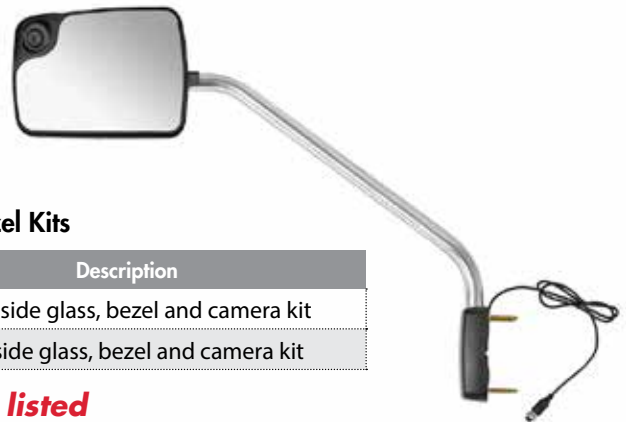


#### PodCam

Part #	FOV	Connector	IP Rating	Power
710910	73° H	B	IP69K	12 VDC

#### MirrorCam

Left Side#	Right Side #	Application	Arm	Connector
720301	720300	Universal	Short	B
720303	720302	T700	Short	B
720305	720304	Universal	Long	B



#### Replacement Glass and Bezel Kits

Part #	Description
<b>719708</b>	Right side glass, bezel and camera kit
<b>719709</b>	Left side glass, bezel and camera kit

**NOTE: Part numbers listed in RED are NEW!**

#### NOTE

Camera can also be used on other vehicles and applications

#### LaneOptics MirrorCam

- Combines the LaneOptics Mirror with an integrated color camera for added blind spot visibility.
- 73.7° FOV camera provides clear color images of passing lanes and side blind spots.
- Camera angle is pre-positioned; simply adjust the mirror head to the proper viewing angle and camera is automatically oriented.
- 17" radius of curvature (ROC).
- Includes five pin cable connector.
- MirrorCam with monitor kits includes one pair of MirrorCam hood mirrors, 7" monitor and cable, and optional back up camera.

#### MirrorCam Pair with Monitor Kits

Part #	Application	Arm	Back Up Camera
720465	Universal	Short	-
720466	T700	Short	-
720467	Universal	Long	-
720468	Universal	Short	•
720469	T700	Short	•
720470	Universal	Long	•



NOTE: See page M31 for applications requiring a long arm MirrorCam



709915



710723



710323



710324

- Velvac's color 5.6" and 7" LCD monitors are designed for heavy duty and commercial truck applications - built and tested to withstand extreme road conditions such as vibrations, electrostatic discharge, humidity and temperature changes and to deliver high quality images to the driver.
- 5.6" and 7" monitors include audio speaker with volume.
- 5" monitor has full camera views.
- 7" monitor has 8 different view modes; view 1 to 4 cameras at a time.

Part #	Screen	Camera Inputs	Triggers	Mounting	Connector	Power
709915 <sup>1</sup>	5.6" Color LCD	2	2	4-hole amps pattern	A	12VDC
710723	7" Color LCD	4	4 + 1 split	4-hole amps pattern	A	12VDC
710323	5" Color LCD	3	3	Bracket included <sup>2</sup>	B	12VDC
710324	7" Color LCD	4	4	Bracket included <sup>2</sup>	B	12VDC

### NOTES

<sup>1</sup> Requires the addition of mounting brackets shown on page V8.

<sup>2</sup> Additionally you can purchase T-slot bracket 790605.



### Three Camera Controller

- This controller allows different views to automatically engage based on triggers for left/right turn signals or reverse.
- This flexible control box can be wired for full time viewing of the rear camera if needed.

Part #	Description	Connector
716318	Three camera controller	A

## MONITOR MOUNTS



790563



790564



790576



790605

Part #	Description
790563	4" Single knuckle monitor mount (4-hole amps pattern) bracket with thumbscrew
790564	6" Double knuckle monitor mount (4-hole amps pattern) bracket with thumbscrew
790576	Double knuckle monitor mount for 1" ball (4-hole amps pattern)
790605	Double knuckle monitor mount (T slot)

## CABLES

- Cables can be connected together to create various lengths.
- Cable quantity and length will vary based on number of cameras and distance from camera to monitor.
- Tractor to trailer camera cable kit includes all necessary straight and coiled cables to connect truck monitor to back up camera on top of trailer -- the coiled cable is designed to safely span area between tractor and trailer.



'A' connector cable



'B' connector cable



Tractor to trailer camera cable

### Adaptor

- Use adaptor to connect A cameras to the B monitors (page V7)

Part #	Description	Connector
747850	15' Camera to monitor cable	A
745243	15' Camera to monitor cable	B
747864	25' Camera to monitor cable	A
745244	25' Camera to monitor cable	B
747865	34' Camera to monitor cable	A
745245	34' Camera to monitor cable	B
747866	50' Camera to monitor cable	A
747867	75' Camera to monitor cable	A
745142	Camera splitter/Y-cable	B
745261	45' Camera to monitor cable	B
745252	Tractor to trailer camera cable kit*	B

\*Kit includes coiled cable assembly with plug connectors, mating sockets for truck and tractor, 33' of camera cable for routing to truck monitor and 65' of camera cable for routing to back of trailer/back up camera

Part #	Description	Connector
747894+	Adaptor	A ---> B



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## CAMERA KITS

### Back-Up Camera Kits



- CMOS/IR-LED camera.
- 5" monitor with 3 camera inputs.

Kit Part #	Camera	Monitor	Cables Included	Total Cable Length
719598	710326	710323	1 - 34'	34'
719599	710326	710323	2 - 25'	50'
719600	710326	710323	2 - 34'	68'



- CMOS/IR-LED camera.
- 7" monitor has 8 different view modes; view 1 to 4 cameras at a time.
- 4 camera inputs.

Kit Part #	Camera	Monitor	Cables Included	Total Cable Length
719601	710326	710324	1 - 34'	34'
719602	710326	710324	2 - 25'	50'
719603	710326	710324	2 - 34'	68'

## CAMERA KITS

### Side View Camera Kits

- CMOS/IR-LED camera.
- 5" monitor with 3 camera inputs.



Kit Part #	Camera	Monitor	Cables Included	Total Cable Length
719592	710325	710323	1 - 34'	34'
719593	710325	710323	2 - 25'	50'
719594	710325	710323	2 - 34'	68'

- CMOS/IR-LED camera.
- 7" monitor has 8 different view modes; view 1 to 4 cameras at a time.
- 4 camera inputs.



Kit Part #	Camera	Monitor	Cables Included	Total Cable Length
719595	710325	710324	1 - 34'	34'
719596	710325	710324	2 - 25'	50'
719597	710325	710324	2 - 34'	68'



## CAMERA KITS

### Rear View Camera Kits



- CCD/IR-LED camera.
- 7" monitor.
- 4 camera inputs.
- 4" single knuckle monitor mount.
- Adapter harness Type A to Type B.

Kit Part #	Camera	Monitor	Monitor Mount	Adapter Harness	Cables Included	Total Cable Length
709954	710522	710324	790563	747894	1 - 34'	34'



- CCD/IR-LED camera.
- 7" monitor.
- 3 camera inputs.
- 4" single knuckle monitor mount.

Kit Part #	Camera	Monitor	Monitor Mount	Cables Included	Total Cable Length
709921	710522	709915	790563	1 - 34'	34'

# VISION SYSTEMS

## AEROCAM VISION SYSTEM

AeroCam Vision Systems provide a clear view along the side of the truck and trailer to reduce blindspots and improve driver safety.

- Optimized camera field of view reduces blind spots
- Fast and easy installation: the same hole pattern as Velvac Pod and Mod Pod mirrors makes for easy retro-fits
- CMOS camera technology produces superior imaging even in extreme light conditions and harsh weather
  - » 40° to 85°C / -40° to 185°F
  - » Built-in anti-blooming protection to maintain visibility under sunlight, glare and headlight conditions
  - » Superior depth perception
  - » Vibrant colors and clarity
  - » Integrates seamlessly into the Kenworth NavPlus® and Peterbilt SmartNav™ monitors
- For a complete solution, additional cameras can be integrated for full coverage
- FOV: 73° Horizontal, 53° Vertical
- IP Rating: IP69K



Right Side #	Left Side #	Description
717810	717809	AeroCam only, no hardware included

AeroCam is available for these vehicle models:

- » Kenworth T700
- » Kenworth T700 with navigation
- » All other PACCAR vehicles
- » All other PACCAR vehicles with navigation



Available with dash mounted monitors

**OUR PARTS PUT YOU IN THE PASSING LANE**

# HOSE SUPPORT

## Hose and cable support accessories

Velvac has the pogo sticks and suspenders you need to organize your hoses and cables to get maximum life from these vital components.

- Pogo sticks
- Springs & handles
- Hose & cable accessories



# HOSE SUPPORT

## HOSE AND CABLE SUPPORT ACCESSORIES



### Hose & Cable Suspenders

- Molded of durable rubber components which remain flexible to -40°F
- Will not stretch out or corrode like traditional steel support springs
- Reduce damage to cab body paint
- 3/4" diameter holes
- For use with hose brackets, pogo sticks and slide bars

Part #	Overall Length
580081	5"
580082	12"
580086	16"
580094	24"



### Slide Bar & Hose Suspender Kit

- Slide bar is 3/4" O.D. stainless steel tubing with 42-1/2" mounting centers
- Kit includes slide bar, 24" hose and cable suspender, nylon ring and zinc-plated steel "S" hook

Part #	Description
580066	Complete Kit
580078	Replacement Ring with "S" Hook
580067	Replacement Slide Bar
580076	"S" Hook



### Single and Double Hose Spring Support

Tracker bar tender kits are designed to hold air lines and electrical cables to prevent kinks and abrasions during normal highway use.

- 16", 20" or 25" Spring: plated for added corrosion resistance and double looped ends for additional strength
- Snap clip: rust resistant stainless steel which clips easily onto a tracker bar or pogo stick
- 3 Hose holder assembly: neatly holds two air hoses and an electrical cable
- Velvac plastic tube: protects spring from the elements while giving a clean look



580037, 580043



580038



580039



580040

580041

### Hose Holders & Separators

- ABS plastic construction

Part #	I.D.	Description
580043	1/2"	2 Hose Separator
580037	3/8"	2 Hose Separator
580038	3/8"	4 Hose Separator
580039	3/4"	2 Hose Separator
580040	.62"	3 Hose Separator
580041	.62"	4 Hose Separator

Part #	Description
580111	Single Spring Kit, 16"
580112	Single Spring Kit, 20"
580070	Double Spring Kit, 16"
580071	Double Spring Kit, 25"
580107	Stainless Steel Snap Clip

# HOSE SUPPORT

## HOSE AND CABLE SUPPORT ACCESSORIES



### Replacement Clamp

- Replaces hanger clamp for 3-in-1 or 4-in-1 air/electrical combo

Part #	Description
580044	Replacement Clamp



### Hose Support Springs

- Springs support either air or vacuum lines
- Heat-treated and zinc plated spring steel construction provides corrosion resistance
- Double wire loop ends add extra strength

Part #	Description
038001	3/4" O.D. x 13" long
038003	1" O.D. x 13" long
038008	1-1/8" O.D. x 8" long
038005	1-1/8" O.D. x 28" long



### Grab Handles

- 3/4" O.D. heavy gauge stainless steel tubing
- 5/16" diameter mounting holes

Part #	Description	Grabbing Width
690021	12" Span	3"
690022	18" Span	2"
690023	24" Span	2"

NOTE: Span measurement taken between mounting holes

## POGO STICKS



Part #	Description	Size
581100	Zinc and Yellow Dichromate	24"
581100-5	Zinc and Yellow Dichromate w/ Holder	24"
581101	Zinc and Yellow Dichromate	40"
581101-5	Zinc and Yellow Dichromate w/ Holder	40"
581106	Zinc and Yellow Dichromate	50"
581106-5	Zinc and Yellow Dichromate w/ Holder	50"
581102	Chrome	24"
581102-5	Chrome w/ Holder	24"
581103	Chrome	40"
581103-5	Chrome w/ Holder	40"
581107	Chrome	50"
581107-5	Chrome w/ Holder	50"
581104	Stainless Steel	24"
581104-5	Stainless Steel w/ Holder	24"
581105	Stainless Steel	40"
581105-5	Stainless Steel w/ Holder	40"

# HOSE SUPPORT

## POGO STICKS

- Durable, powder coated steel bodies provide excellent support for air, vacuum and electrical lines
- Snubber chain assembly helps prevent pogo stick from coming in contact with cab
- Heavy-duty, e-coated, oil-tempered steel springs can withstand 90° from vertical bends
- 5/8" - 11 stud and nut for extra support
- Heavy fabric hose holder strap included where pictured



NO SNUBBER CHAIN  
for use only when  
pogo stick is at  
least 24" away  
from cab



- Combines popular 40" pogo stick with 5" rubber hose and cable suspender
- Adapter kit retrofits 5" hose and cable suspender on existing pogo sticks and includes "S" hook and eyebolt hardware (9/32" hole is required for installation of eyebolt)

Part #	Description
581001	40" Pogo Stick with Snubber Chain
581005	40" Pogo Stick with Gladhand Holder and Snubber Chain
581006	Gladhand Holder Kit

Part #	Description
581011	40" Pogo Stick
581015	40" Pogo Stick with Gladhand Holder
581006	Gladhand Holder Kit

Part #	Description
581040	Pogo Stick and Hose Suspender Assembly with Snubber Chain
581038	Hose and Cable Adapter Kit

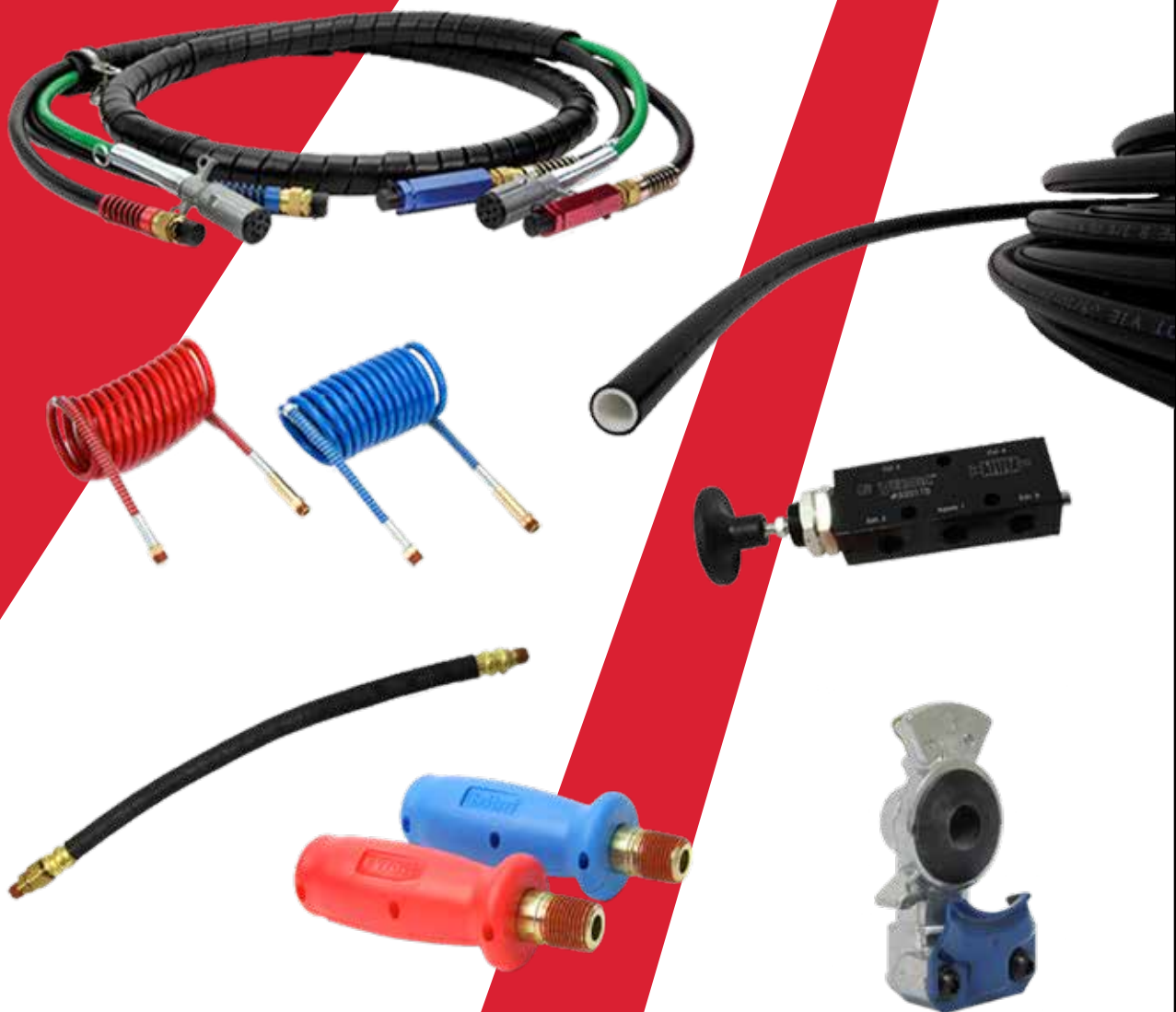


# AIR

## High quality air components.

From gladhands to hose assemblies to valves, Velvac is your full system provider for critical air components on commercial vehicles.

- Extensive line-up of air products
- TS-certified manufacturers
- Exceeds industry specifications



## 3-IN-1 AIR/ELECTRICAL ASSEMBLIES

- Contains a service air line, emergency air line and an ABS power line (green)
- Enclosed in a heavy duty, beveled edge, spiral wrap
- The spiral wrap keeps the unit neat and compact and provides protective covering
- Air hose assemblies conforms to SAE J1402 / FMVSS 107
- Durable color-coded aluminum anodized gladgrips and ½" adaptor brass end fittings resist corrosion and improve durability
- 3/8 inch ID hose assemblies meet SAE J1402 and FMVSS 107, threads sealant pre-applied to reduce install time
- Coated hose support springs provide multiple points of contact for minimal abrasive wear, maximizing longevity
- ABS cable assembly conforms to SAE J2394 and 7-way plug to SAE J560.
- Includes adjustable padded clamp and carabiner for hanging

Part #	Length
145110+	10'
145112+	12'
145115+	15'
145120+	20'

\*Each assembly contains a service air line, emergency air line and an ABS power line (green) enclosed in a heavy duty, beveled edge, spiral wrap.



- Each cable assembly and plug tested and certified for proper wiring and continuity, preventing shorts and ensuring reliability
- Enclosed in a heavy-duty, beveled edge spiral wrap for convenience
- Components are individually substitutable to minimize replacement costs



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 4-IN-1 AIR/ELECTRICAL ASSEMBLIES

- Include everything in 3in1s plus:
- ISO 3731-compliant power line includes pin connectors that prevent connections with non-ISO sockets
- Durable yellow outer jacket resists abrasion, and offers quick identification of auxiliary circuit lines
- Heavy-duty zinc die cast plugs with spring guards included
- Contains a service air line, emergency air line, ABS power line (green) and ISO power line (yellow)
- ABS cable assembly conforms to SAE J2394 and the 7-way plugs to SAE J560 and ISO 3731, respectively
- Air hose assemblies conforms to SAE J1402 / FMVSS 107

Part #	Length
145212+	12'
145215+	15'



## SPIRAL WRAP



- Replace worn or damaged 3-in-1 or 4-in-1 air/electrical assembly wrap
- Prevents tangling and potential damage to lines
- Various sizes allow for customized bundle combinations
- The 1.50" replaces the wrap used on Velvac's 3-in-1

100' Coil	Diameter
020078	1.25"
020079	1.50"
020080	2"

- Use to protect or bundle jumper lines, slider hoses, ABS lines, hydraulic hoses and more

## GLADHANDS

### Iron Gladhands with Polyurethane Seals

- Solid, one-piece construction
- Service and emergency gladhand color-coated for easy identification
- Color-coded polyurethane seal
- Positive, spring loaded locking mechanism keeps gladhand properly positioned
- Meets SAE J318 specs including breakaway requirement

Part #	Description
035031+	Universal gladhand w/ black polyurethane seal
035032+	Emergency gladhand w/ red polyurethane seal
035033+	Service gladhand w/ blue polyurethane seal

- 1/2" FPT port

**Lifetime guarantee covers both gladhands and seals!**



035031

### Aluminum Gladhands

- Velvac's most economical gladhand
- Clamp plates are color-coded for easy identification
- All include flat rubber coupling seal
- 1/2" FPT port
- Meets SAE J318 requirements

Part #	Description
035038+	Universal gladhand
035042+	Emergency gladhand
035045+	Service gladhand
035179	Aluminum emergency gladhand w/ screen filter
035180	Aluminum service gladhand w/ screen filter
035181	Aluminum emergency gladhand w/ guardian seal and flap
035182	Aluminum service gladhand w/ guardian seal and flap



035181



035038



035180

### Premium Powder Coated Gladhand

- Available in service and emergency color coding
- Powder coated aluminum improves corrosion resistance
- Polyurethane seals improve resistance to oil and chemicals
- Bright color coding allows for easy brake line identification
- Meets SAE J318 requirements

Part #	Description
035169	Powder coated service gladhand w/ polyurethane seal
035170	Powder coated emergency gladhand w/ polyurethane seal

- Stainless steel wear plates are resistant to corrosion and improve service life
- 1/2" FPT port



035169



035170



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## GLADHANDS

### Shutoff Gladhands

#### Flange

- Lightweight die cast aluminum bodies
- Meets SAE J318 requirements
- Includes mounting seal to prevent corrosion between gladhand and trailer

Part #	Description
035152*	Emergency shutoff
035151*	Service shutoff

- Rubber seal included
- 3/8" - 18 port



035152

### Shutoff Gladhands

#### Bulkhead

- Clamp plates are color-coded for easy identification (applies to flange and bulkhead mount gladhands)
- Polyurethane seal included
- 3/8" - 18 NPTF port size
- 1" - 14 USN mounting nut
- 1/4" - 18 NPTF port in Emergency gladhand for pintle hook or other air fitting

Part #	Description
035094*	3/8" Service gladhand
035095*	3/8" Emergency gladhand
035173*	1/2" Service gladhand
035174*	1/2" Emergency gladhand

- Includes additional air brake compression fitting - 3/8" Or 1/2" as shown in part number box



035095

### Quick Release Gladhands

- Combines quick release valve and service gladhand in a single unit – helps reduce tire and brake wear
- E Coated aluminum housing with blue polyurethane seal and filter screen

Part #	Description
<b>035196</b>	Standard Service gladhand
<b>035197</b>	37° Service gladhand

- Meets SAE J318 Specifications
- 1/2" female pipe thread



035197

035196

### 37° Bracket Mount Gladhand

- Lightweight die cast aluminum bodies
- Clamp plates are color-coded for easy identification
- (2) 3/8" FPT ports (one plugged)
- (2) 1 1/32" diameter mounting holes
- Meets SAE J318 requirements

Part #	Description
035092	Service gladhand
035093	Emergency gladhand
<b>035185</b>	Service gladhand with filter
<b>035186</b>	Emergency gladhand with filter

- Black polyurethane seal included



035092

**Note: Part numbers listed in RED are NEW!**

## GLADHANDS

### Plated Aluminum Gladhands

(with E-Coating)

- E-Coated aluminum gladhand body with a full face plate
- E-Coated aluminum improves corrosion resistance and provides better protection than typical zinc plating
- Meets SAE J318 requirements
- Service and emergency gladhands have a powder coated face plate for increased corrosion resistance
- Universal gladhand has a zinc plated face plate for increased corrosion resistance
- Rubber seal
- Color coded for easy hose identification
- Emergency is polarized to eliminate incorrect hose connections
- Cost saving angle mount eliminates the need for extra mounting hardware

Part #	Description	Replaces Haldex-Midland Number	Connection Thread
035143	Plated - service	11452	1/2" Pipe thread
035144	Plated - emergency	11451	1/2" Pipe thread
035146	Plated - 37° service	11444	1/2" Pipe thread
035147	Plated - 37° emergency	11441	3/8" Pipe thread



035143



035144

### Pivoting Gladhands

- Spring loaded to safely swing out of the way when not in use
- Seals out contaminants when not in use
- 3/8" - 18 NPTF ports

Part #	Description
035167	Blue - service
035168	Red - emergency



035167

### "Pacifier" Gladhand Seal

- Reusable gladhand sealing device protects air lines from dust, debris and moisture

Part #	Description
035142	"Pacifier" gladhand seal



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



### Polyurethane Gladhand Seals

- Color-coded seals will not crack or tear, reducing maintenance time and costs associated with rubber seal replacement
- Available in an attractive display box with 25 sets of seals (sets consist of 4 seals per bag, 2 red and 2 blue)

Part #	Description
035012	Display box with seals
035009	Red polyurethane seals
035010	Blue polyurethane seals
035011	Black polyurethane seals



*See page R7 in Retail Merchandising*

### Counter Top Bucket Display

- A convenient way to display new products while increasing your inside store sales
- Round clear canister, 7" diameter x 7½" height
- Sold complete with cover for easy shipping or fleet sales
- Product label includes an area to display your part number, UPC code and price

Part #	Contents
035160	200 Black polyurethane gladhand seals
035161	200 Red polyurethane gladhand seals
035162	200 Blue polyurethane gladhand seals
035163	200 Black rubber gladhand seals
058380-4	10 Rolls black silicon self fusing tape
058381-4	10 Rolls red silicon self fusing tape
690202	Display bucket only



*See page R6 in Retail Merchandising*

### Line Identification Tags

- 22 gauge aluminum construction with bright red enamel lettering
- 7/8" diameter hole

Part #	Description
035025	Emergency tag
035026	Service tag

GladhandL™, Glad-Lock™ and Stow-A-Way™ are trademarks of Velvac, Inc



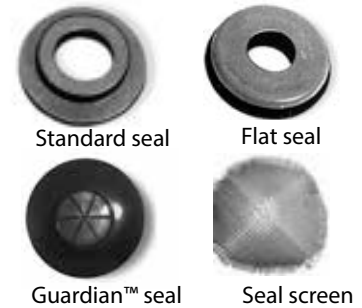
## GLADHANDS

### Rubber Gladhand Seals

- Seals constructed of durable black Buna N compound
- "Guardian" seal with rubber flap and metal seal screen help protect air lines from debris

Part #	Description
035005+	Standard seals
035007+	Flat seals
035140	Seal screen
035141+	Guardian seal with flap

Guardian™ is a trademark of Velvac, Inc



### Energy Suspension® Seals

- Could be the last seal you buy!
- Designed to fit all SAE approved gladhands
- Polyurethane seals improve resistance to oil and chemicals, increasing service life and decreasing down time
- Will not crack, dry out or tear like the conventional rubber seals

Part #	Description
035165	Blue service seal
035164	Red emergency seal
035166	Black universal seal

Energy Suspension® is a registered trademark of Energy Suspension

- Rated to -40°F
- 50 seals per bag



### Gladhand Seals with Built-in Screens

- Polyurethane seals with stainless steel screens built in
- Traps harmful contaminants before they can cause an air break system failure
- Keeps bugs out of the air lines

Part #	Description
035175+	Blue service seal with screen
035176+	Red emergency service seal with screen
035177+	Black universal service seal with screen

- Available in blue, black and red



### Gladhand Holder Kit

- Designed to mount on all Velvac pogo sticks
- Holds and seals gladhands when tractor is disconnected from trailer
- Durable zinc-plated steel construction
- Kit includes two gladhand holders and mounting hardware

Part #	Description
581006	Gladhand holder kit
580009	Gladhand holder only

- Single gladhand holder can be mounted directly to cab using 5/16" bolt holes



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### Stow-A-Way™ Gladhand and Plug Holder

- Holds gladhand and electrical hook ups at a 45° angle for easy insertion and extraction
- When properly placed, allows cable and air line storage with both feet firmly on the ground
- Designed for heavier ABS cables

Part #	Description
580042	Stow-A-Way gladhand & plug holder
580123	Stow-A-Way single plug holder & (2) gladhands

- Standard mounting holes make it easy to replace older designs
- Glass-filled nylon, non-corrosive construction

580042



### Glad-Lock™

- Rugged polypropylene gladhand lock helps prevent unwanted connections to tractors and trailers
- Two keys furnished with each lock

Part #	Description
035150+	Glad-Lock w/ matching keys

- Universal design for use on many types of aluminum or iron gladhands



### Dummy Coupling

- Durable zinc-plated steel construction for corrosion resistance
- 6-1/2" Coupling length
- 8-1/2" Chain length, 18" cable

Part #	Description
035036	Vented dummy coupling
035037	Non-vented dummy coupling
035100	Dummy shut-off gladhand



035036



035100

### GladhandL™ Gladhand Grips

- 1/2" NPTF
- Sold in pairs in an attractive display package with information header
- Part No. 035070 polyurethane style features a soft grip with a machined steel core

Part #	Description
035070+	(1) red and (1) blue polyurethane GladhandL™ grip with hardware
035178	(1) red and (1) blue solid aluminum gladhand grip, hardware not needed

- Part No. 035178 solid aluminum style features an anodized body with a diamond knurl



035070



035178

#### Helpful hint:

Improve leverage and reduce air hose kinks by using one of the two styles of gladhand grips

## AIR BRAKE HOSE

**3/8" I.D.  
3/8" Ends  
Both Ends Swivel**

Length (Inches)	Part #
18	146518+
20	146520+
22	146522+
24	146524+
26	146526+
28	146528+
30	146530+
32	146532+
34	146534+
36	146536+
38	146538+
40	146540+
42	146542+
44	146544+
46	146546+
48	146548+
54	146554+
60	146560+
72	146572+
84	146584+
96	146596+

**3/8" I.D. Hose  
1/4" Ends  
One End Fixed, One End Swivel**

Length (Inches)	Part #
9	147009+
12	147012+
16	147016+
18	147018+
20	147020+
22	147022+
24	147024+
26	147026+
28	147028+
30	147030+
32	147032+
34	147034+
36	147036+
38	147038+
40	147040+
42	147042+
44	147044+
46	147046+
48	147048+
54	147054+
60	147060+
72	147072+

**3/8" I.D. Hose  
3/8" Ends  
One End Fixed, One End Swivel**

Length (Inches)	Part #
18	146018+
20	146020+
22	146022+
24	146024+
26	146026+
28	146028+
30	146030+
32	146032+
34	146034+
36	146036+
38	146038+
40	146040+
42	146042+
44	146044+
46	146046+
48	146048+
52	146052+
54	146054+
60	146060+
72	146072+
84	146084+

- Brake hose assemblies meet SAEJ1402 requirements
- Fittings are permanently swaged

### Air Brake Hose Repair Fitting

- One package will repair two 3/8" rubber air brake hoses
- Male fittings feature pre-applied sealant
- Meets DOT 106 SAE J1402 requirements
- One package contains two fittings and one hex installation tool, all in a clamshell for retail display
- Kit for easy repair of 3/8" rubber air brake hose



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Part #	Fitting Size	Sloan #	Tectran #	Tramec #
500007+	3/8"	431402	70-31402	31402
500008+	1/2"	431403	70-31403	31403

## AIR BRAKE HOSE

### 1/2" I.D. Hose 3/8" Ends One End Fixed One End Swivel

Length (Inches)	Part #
12	148012+
16	148016+
18	148018+
20	148020+
22	148022+
24	148024+
26	148026+
28	148028+
30	148030+
32	148032+
34	148034+
36	148036+
38	148038+
40	148040+
42	148042+
44	148044+
46	148046+
48	148048+
54	148054+
60	148060+
66	148066+
72	148072+
84	148084+
96	148096+

### 1/2" I.D. Hose 3/8" Ends Both Ends Swivel

Length (Inches)	Part #
18	148518+
20	148520+
22	148522+
24	148524+
26	148526+
28	148528+
30	148530+
32	148532+
34	148534+
36	148536+
38	148538+
40	148540+
42	148542+
44	148544+
46	148546+
48	148548+
54	148554+
60	148560+
72	148572+
84	148584+
96	148596+

### 3/8" I.D. Hose 3/8" Ends One End Fixed - 1/2" One End Swivel - 3/8"

Length (Inches)	Part #
18	149018+
24	149024+
28	149028+
30	149030+
32	149032+
36	149036+
42	149042+
46	149046+
48	149048+
60	149060+
72	149072+



### Air Brake Bulk Hose

- Manufactured to a minimum burst pressure of 870 psi
- Conforms to SAE J1402 and DOT -106 standards
- Performs within an operating temperature range of -40° to +200°F

Part #	Hose I.D.	Hose O.D.	Coil Length
022011	3/8"	3/4"	50'
022011-7	3/8"	3/4"	250'
022047	1/2"	7/8"	50'
022047-7	1/2"	7/8"	250'



\* See pages FH8 & FH9 for applicable reusable fittings



### Air Brake Hose Assembly Display Rack

- For display and organization of 3/8" and 1/2" air hose assemblies

See page R3 in Retail Merchandising



## AIR BRAKE HOSE

### Trailer Nose Box Hose Assembly

- Fits conventional and recessed trailer nose boxes
- Manufactured with 3/8" I.D., SAE Type A four spiral air brake hose
- 1-1/2" swaged end fitting, 1-1/2" reusable end fitting with spring
- 5-3/4" length

Part #	Description
140079+	Trailer nose box hose assembly

- Assembly meets SAE J1402 and FMVSS 106 requirements

**NOTE:** Replacement fitting assembly with spring available - see Part No. 500019 on page FH9



### Rubber Air Line Hose

- Tractor to trailer air line hose assembly

Part #	Description
140139+	10' Black
140140+	12' Black
140141+	15' Black
140142+	20' Black

- Hose measures 7/8" O.D., 3/8" I.D.

Part #	Description
140133+	12' Blue
140135+	15' Blue
140134+	12' Red
140136+	15' Red

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### Slider Air Hose Assemblies with Spring Guard

Part #	Length	Tube O.D.	Tube I.D.
149119+	72"	3/8"	3/8"
149120+	96"	3/8"	3/8"
149121+	108"	3/8"	3/8"
149122+	102"	3/8"	3/8"

Part #	Length	Tube O.D.	Tube I.D.
149123+	120"	3/8"	3/8"
149124+	102"	1/2"	3/8"
149125+	108"	1/2"	3/8"



### Air Compressor Discharge Hose



- Stainless steel braided outer jacket
- Extruded inner Teflon® tube prevents carbon buildup
- Withstands extreme temperatures of -100° to +450°F

- Hose and reusable fittings can be assembled to produce air compressor discharge hose assemblies

\* See pages FH10 & FH11 for applicable reusable fittings

Part #	I.D.	O.D.	Coil Length	Recommended Working Pressure (psi)	Minimum Bursting Pressure (psi)	Minimum Bend Radius
142113	1/2"	5/8"	50'	1500	8500	6-1/2"
142114	5/8"	3/4"	25'	1200	6000	7-3/4"

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## AIR BRAKE HOSE

### Air Compressor Discharge Hose Assemblies



- Female swivel both ends
- Hose measures 5/8" O.D., 1/2" I.D.

Part #	Length
142518+	18"
142524+	24"
142536+	36"
142552+	52"
142554+	54"
142572+	72"
142584+	84"



- 5/8" straight tube both ends
- Hose measures 5/8" O.D., 1/2" I.D.

Part #	Length
142336+	36"



- 5/8" straight tube x 5/8" compression fitting
- Hose measures 5/8" O.D., 1/2" I.D.

Part #	Length
142136+	36"
142148+	48"



- 5/8" compression fitting both ends
- Hose measures 5/8" O.D. 1/2" I.D.

Part #	Length
142624+	24"

### Nylon Tubing

- SAE Type A tubing is single wall extruded non-reinforced nylon
- SAE Type B tubing has seamless extruded nylon core with fiber reinforced protective nylon cover



Black Part #	Tube O.D.	SAE Type	Coil Length
020062	1/8"	A	100'
020062-7	1/8"	A	1000'
020065	5/32"	A	100'
020066	3/16"	A	100'
020064	1/4"	A	100'
020064-6	1/4"	A	1000'
020052*	5/16"	A	100'
020053	3/8"	B	100'
020053-7	3/8"	B	500'
020055	1/2"	B	100'
020055-7	1/2"	B	500'
020057	5/8"	B	100'
020057-7	5/8"	B	250'
020059	3/4"	B	100'
020059-7	3/4"	B	250'

- Withstands temperatures of -40° to +200°F
- Tubing meets SAE J844 and FMVSS 106 requirements



Red Part #	Tube O.D.	SAE Type	Coil Length
020154	1/4"	A	100'
020154-6	1/4"	A	1000'
020156	3/8"	B	100'
020156-7	3/8"	B	500'
020158	1/2"	B	100'
020158-7	1/2"	B	500'

- Can be used with either air brake or nylon tube fittings
- 150 psi maximum working pressure



Green Part #	Tube O.D.	SAE Type	Coil Length
020142	1/8"	A	100'
020144	1/4"	A	100'
020144-6	1/4"	A	1000'
020146	3/8"	B	100'
020146-7	3/8"	B	500'
020157	5/8"	B	100'



Yellow Part #	Tube O.D.	SAE Type	Coil Length
020164	1/4"	A	100'
020164-6	1/4"	A	1000'
020166	3/8"	B	100'
020166-7	3/8"	B	500'
020168	1/2"	B	100'
020168-7	1/2"	B	500'



Blue Part #	Tube O.D.	SAE Type	Coil Length
020132	1/8"	A	100'
020134	1/4"	A	100'
020134-6	1/4"	A	1000'
020136	3/8"	B	100'
020136-7	3/8"	B	500'
020138	1/2"	B	100'
020138-7	1/2"	B	500'

NOTE: See pages FH2-FH9 for applicable fittings

\*Does not meet DOT or SAE specifications

**For air brake systems only, NOT for fuel line applications**

## AIR BRAKE HOSE AND TUBING

### Fifth Wheel Slider Coil

- Continuously returns to original shape
- Flexes from 10" to 54"
- Includes (2) 1/4" tube 1/4" MPT fittings

Part #	Description
022028+	Fifth wheel slider coil

- Temp range from -40° to 208°F
- Max. pressure rating of 150 psi



- Meets SAE J844 requirements

### Cab Blower Kit

- Designed for truck cab or low pressure shop use
- Air hose rated at 200 psi max recommended operating pressure
- Kit includes 50' hose, economy air nozzle, tire inflator and gladhand

Part #	Description
149001**	Cab blower kit - rubber

\*Note: 149001 and 149126 can be used to inflate tires for emergency.



### Air Cab Blow Gun Kit

Kit includes:

- Pre-installed DOT nylon tube fittings
- SAE J844 coiled nylon tube that extends from 10" to 54"

Part #	Description
149126**	Air cab blow gun kit

- Two nozzle fittings and lever-type air gun



### Tube Cutter

Part #	Description
090028	Nylon tube cutter



## COILED NYLON TUBING

- Assemblies include permanently swaged 1/2" - 14 NPTF end fittings with heavy gauge spring for extra support



12' Assembly kit

- Each standard kit contains one emergency (red) and one service (blue) 1/2" O.D. nylon tubing assembly



15' and 20' Assembly kit

- Assemblies meet SAE J844 and FMVSS 106 requirements



15' Assembly kit with long lead

- 6" lead on both ends

Part #	Description
022002+	Standard kit
022004+	Emergency only
022009+	Service only

- 12" lead on both ends

Part #	Length	Description
022025+	15'	Standard kit
022026+	15'	Emergency only
022027+	15'	Service only
022030+	20'	Standard kit
022031+	20'	Emergency only
022032+	20'	Service only

- One 40" lead, one 12" lead

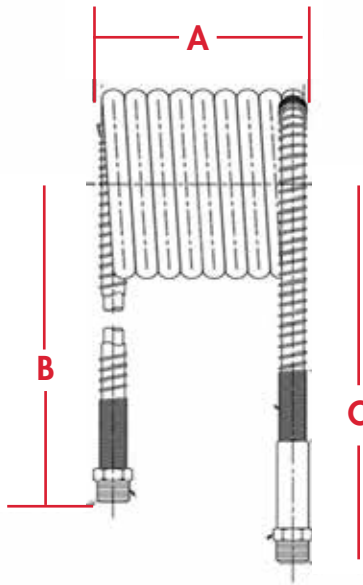
Part #	Description
022001+	Standard kit
022005+	Emergency only
022008+	Service only



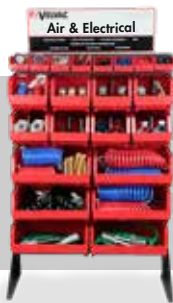
**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### Glacier Air Coils

- Durable heavy duty jacketing means coils remain flexible at -85°F (-65°C)
- Permanently swaged 1/2-14 NPTF end fittings with thread sealer simplifies assembly
- 2.5" integrated brass handle allows for easier coupling and uncoupling of gladhands
- Larger 5.5" coil O.D. prevents kinking and provides superior recoil and coil memory
- Meets or exceeds applicable requirements of SAE J844, J1131 and FMVSS 571.106



Part #	Description	Working Length - A	Leg Length - B	Leg Length - C
022633+	Glacier coil set			
022634+	Red	12'	9.25"	11.5"
022635+	Blue			
022636+	Glacier coil set			
022637+	Red	15'	9.25"	11.5"
022638+	Blue			
022639+	Glacier coil set			
022640+	Red	15' Long lead	41.25"	11.5"
022641+	Blue			
022642+	Glacier coil set			
022643+	Red	20'	9.25"	11.5"
022644+	Blue			



### Air and Electrical Display Rack

- Display is designed to hold up to 800 pounds

*See page R3 in Retail Merchandising*

## AIR BRAKE VALVES

### Dash Control Valves

- Replaces Bendix® PP-7™ control valve
- Automatic pressure release at 40 psi
- Non-override at 25 psi
- 1/8" NPT supply and control ports
- 1/4" NPT delivery port
- 1/4" threaded exhaust port on Part No. 034079
- Knob and mounting nut sold separately (see page A12)

Part #	Shaft Diameter	Replaces
034051+	3/8"	Bendix® 288239, 288721 & Midland KN20025
034079+	5/16"	Bendix® 106113, 288241



\*Remote controlled - 1/4" - 20 female thread for knob or cable

- Replaces Bendix® PP-1° control valve
- Automatic pressure release at 40 psi
- 1/8" NPT supply port
- Knob and mounting nut sold separately (see page A12)

\*Remote controlled - 1/4" - 20 female thread for knob or cable

Part #	Delivery Ports	Replaces
034013+	(2) 1/8" NPT	Bendix® 275175, 276566, 276567 & Midland KN20021
034014+	(2) 1/4" NPT	Bendix® 287417, 287600
034015**	(2) 1/8" NPT	Bendix® 279786, 281587



034013



034015  
(as shown; top portion only is different)

- Plunger trips at 40 psi and charges manually
- 1/8" NPT supply port
- 1/4" NPT delivery port
- 1/4" NPT exhaust port
- Knob and mounting nut sold separately (see page A12)

Part #	Description	Replaces
034017**	Automatic tripper dash control valve	Bendix® 288746

- Replaces Bendix® PP-3™ control valve
- Tripper exhausts at 30 psi and charges above 50 psi



\*Remote controlled - 1/4" - 20 female thread for knob or cable

- 1/8" NPT supply port
- (2) 1/8" NPT delivery ports
- 1/8" NPT brake valve port
- Knob and mounting nut sold separately (see page A12)

Part #	Description
034016+	Pressure balanced dash control valve

- Replaces Bendix® PP-2™ control valve part numbers 275250, 276462
- Automatic pressure release at 40 psi



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### Push-Pull Dash Control Valve

- Replaces Midland KN20030, KN20031
- Automatic pressure release at 25-35 psi
- All ports 1/4" NPT

Part #	Description
034055	Dash control valve

- 1/4" - 28 thread size



### Pressure Reducing Valve

- Replaces Bendix® RV-1 pressure reducing valve part number 283590
- Used where a constant set pressure lower than supply pressure is required

Part #	Description
034085+	Pressure reducing valve

- Adjustable-factory preset at 70 psi
- 1/4"-18 NPT supply and delivery ports



### Tractor Protection Valve

- Replaces Bendix® TP-3° control valve part number 279000 & Midland KN34060
- 1/4" NPT tractor emergency port
- 3/8" NPT tractor service port
- 1/2" NPT trailer emergency and trailer service ports

Part #	Description
034068	Tractor protection valve

NOTE: Always use this valve in conjunction with an equivalent valve to Bendix® PP-1®, PP-3™ or PP-7™ control valves (see page A11)



### Tractor Protection Valve

- Replaces Bendix® TP-5™ tractor protection valve part number 288605
- Formerly VM-2 style control valve manifold
- 3/8" NPT service and trailer/emergency supply ports (rear)

Part #	Description
034082	Tractor protection valve

- 1/4" NPT stop light switch port
- 3/8" NPT trailer control port
- 1/2" NPT trailer service and trailer emergency supply ports



### Dash Control Valve

- Replaces Bendix® MV-3° dash control valve part numbers 065157, 800516
- 1/4" diameter horizontal mounting holes at 4-7/32" O.C.
- 1/4" diameter vertical mounting at 3" O.C. mounting holes

Part #	Description
034081	Dash control valve
034148	Trailer air supply and parking brake knob and pin kit replaces Bendix® MV-3° dash control valve



034148



## AIR BRAKE VALVES

### Knob and Pin Kits



034049



034050



034052



034053



034054

Part #	Replaces	Description	Cross Ref #
034049	Bendix® PP-7™ control valve	Trailer air supply knob and pin kit for dash control valves	Bendix® 290655 & Midland KN20900
034050	Bendix® PP-1° control valve	Parking brake knob and pin kit for dash control valves	Bendix® 248433 & Midland KN20903
034052	-	Plain black knob and pin	Bendix® 241866
034053	Bendix® PP-1°, PP-2™ and PP-3™ control valves	Pull to Park/Push to release parking brake knob and pin kit for dash control valves	Bendix® 240302
034054	-	Dash control valve mounting nut	Bendix® 239357

NOTE: All knob kits include roll pin for securing valve

### Modulating Relay Valve

- Replaces Bendix® R-7™ relay valve part numbers 103081, 283932
- 3/8" NPT supply and (2) delivery ports

Part #	Description
034023	Modulating relay valve

- 1/4" NPT control and balance ports
- Spring brake release pressure of 95 psi



### Double Check Valve

- Replaces Bendix® DC-4° double check valve part number 278614 and Midland KN25060
- All ports 3/8" NPT

Part #	Description
034062	Double check valve

- May be mounted in any position



### Relay Valve

- Replaces Midland KN28060
- 3/8" NPT control port
- (2) 1/2" NPT supply (reservoir) ports

Part #	Description
034059	Relay valve

- Crack pressure 4.6 psi
- (2) 3/8" delivery ports



### Relay Valve

- Replaces Bendix® R-8™ relay valve part numbers 286370, 286371
- (2) 3/4" NPT supply ports
- (2) 1/2" NPT, (1) 1/4" NPT delivery ports

Part #	Description
034024	Relay valve

- 1/8" NPT balance port located under exhaust cover
- Cracking pressure 3 psi
- 1/4" NPT service port



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## AIR BRAKE VALVES

### Relay Valves

- Replaces Bendix® R-6™ relay valve
- 1/4" NPT service port
- (4) 3/8" NPT delivery ports

Part #	Supply Port(s)	Replaces
034020	(1) 1/2" NPT	Bendix® 279180, 280375
034021	(1) 3/4" NPT (in mounting flange) (1) 3/8" NPT	Bendix® 279952



### Relay Valves

Part #	Replaces	Supply Port(s)	Delivery Ports	Cross Ref #
034025	Bendix® R-12™ relay valve	1/2" NPT	Verticle (4) 1/2" NPT	Bendix® 102166, 102626
034026	Bendix® R-12™ relay valve	(2) 3/4" NPT	Horizontal (2) 1/2" NPT	Bendix® 103009
034027	Bendix® R-14™ relay valve	(2) 3/4" NPT	Horizontal (2) 1/2" NPT	Bendix® 103010
034028	Bendix® R-14™ relay valve	1/2" NPT	Verticle (4) 1/2" NPT	Bendix® 103028



Vertical Ports



Horizontal Ports

### Relay Valves (RG-2 Style)

Part #	Reservoir Ports	Delivery Ports	Replaces
034056	(2) 3/8"	(2) 3/8"	Midland KN28500
034057	(1) 3/8", (1) 1/2"	(2) 3/8"	Midland KN28510
034058	(2) 1/2"	(2) 1/2"	Midland KN28520

- Fast, low cracking pressure - 5 psi
- 1/4" NPT control port



### Relay Emergency Valve

- Replaces Bendix® RE-6° relay valve part number 281865
- 1/4" NPT service and emergency ports
- (1) 3/4" NPT, (1) 3/8" NPT supply ports

Part #	Description
034029 <sup>+</sup>	Relay emergency

- (2) 3/8" NPT, (2) 1/4" NPT delivery ports



### Multi-Function Trailer (RT-4 Style)

- Replaces Midland KN26000
- 3/8" NPT trailer supply and control ports
- 1/2" NPT and 3/8" NPT reservoir ports

Part #	Description
034063 <sup>+</sup>	Multi-function trailer valve

- (4) 3/8" NPT delivery ports
- PPV closing pressure at 55 psi



## AIR BRAKE VALVES

### Relay Emergency Valves

- 1/4" NPT delivery and service control ports
- 1/2" NPT supply port
- 1/4" NPT service and emergency inlets
- (4) 3/8" NPT delivery ports
- 3/4" NPT reservoir
- Crack pressure 3 psi
- 1/4" NPT emergency and service ports
- (4) 3/8" NPT delivery ports
- 3/4" NPT reservoir port



034066



034067



034069  
(w/ratio feature)

Part #	Description	Replaces
034066	Relay emergency valve	Sealco A-1000
034067	Relay emergency valve	Midland KN30400 & Wagner A99036
034069	Relay emergency valve	Sealco 110200

### Air Governors

- Replaces Bendix® D-2™ air governor
- Factory preset opening and closing pressures of 100 to 120 psi
- (6) 1/8" NPT ports and two mounting holes
- Mounting gasket and (4) 1/8" socket head pipe plugs included
- High temperature governor designed with high temperature withstanding O-rings

Part #	Description	Replaces
032131	Air governor	Bendix® 275491 & Midland KN18530
034083	High temperature air governor	Bendix® 284358 & Midland KN18534



- Individually boxed

### Trailer Spring Brake

- Replaces Bendix® SR-5™ trailer spring brake valve part number 065437
- 3/4" NPT reservoir mounting port
- 1/4" NPT service/spring brake reservoir, service, trailer supply and trailer service ports

Part #	Description
034035+	Trailer spring brake valve

- (4) 3/8" NPT delivery ports
- Anti-compounding



### Spring Brake Valve

- Replaces Bendix® SR-1™ trailer spring brake valve part number 286364
- 1/4" NPT reservoir, control, supply and delivery ports
- 55 psi reservoir trip pressure

Part #	Description
034030	Spring brake valve

- Bracket mounted



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## AIR BRAKE VALVES

### Foot Valves

- Replaces Bendix® E-3™ brake valve part number 277863 & Midland KN22100
- 1/2" NPT supply and delivery ports
- (2) 1/4" NPT auxiliary supply ports



034038



034039

- Replaces Bendix® E-6™ brake valve part number 286171 & Midland KN22140 and KN22150
- 3/8" NPT supply and delivery ports

Part #	Description
034038	Single circuit brake valve

Part #	Description
034039	Dual circuit brake valve

Part #	Side Ports	Rear Ports	Application	Replaces
034040	(2) 1/4" Supply	No threads	Ford	Bendix® 284760
034077	(4) 1/4" Supply (4) 1/4" Delivery (Threaded)	1/8" Supply (2) 1/2" Supply (2) 1/2" Delivery	Navistar	Bendix® 288383

- Replaces Bendix® E-7™ brake valve
- Dual circuit valves
- 1/2" exhaust port with diaphragm
- Three mounting holes - firewall mounted
- O-rings included



034040



034077

### Trailer Spring Brake Valves

- Replaces Bendix® SR-2™ trailer spring brake valve
- 1/4" NPT service reservoir (2) and trailer supply ports
- (4) 3/8" NPT delivery ports
- 1/4" NPT trailer service port on Part No. 034031



034033 & 034034



034031



034032

- Replaces Bendix® SR-4™ trailer spring brake valve
- 1/4" NPT reservoir charging (2), trailer supply and trailer service ports
- (4) 3/8" NPT delivery ports

Part #	Reservoir Port	Replaces
034031+	1/2" MPT	Bendix® 103061
034032*+	3/4" MPT	Bendix® 287376

\*Does NOT have trailer service port for anti-compound

Part #	Reservoir Port	Replaces
034033	3/4" MPT	Bendix® 101112
034034	1/2" MPT	Bendix® 101622



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## AIR BRAKE VALVES

### Quick Release Valves

- Replaces Bendix® QR-1® quick release valve
- 3/8" NPT exhaust port
- (2) 11/32" mounting holes at 1-1/2" on center
- Cracking pressure of 1 psi

Part #	Delivery Ports	Supply Ports	Replaces
032015	3/8" NPT	3/8" NPT	Bendix® 229859, 288251 & Midland KN32005
032018	3/8" NPT	1/2" NPT	Bendix® 229860 & Midland KN32011
034078	1/4" NPT	3/8" NPT	Bendix® 229813



### In-Line Quick Release Valves

- Speeds up release of trailer service brakes when installed on service side gladhand
- Speeds up application of trailer parking brakes when installed on emergency side gladhand
- Suitable for use on double or triple trailers
- Flow Rate: Forward - 9.0 SCFM at 2 psi; Exhaust - 8.0 SCFM at 2 psi
- 1/2" - 14 MPT with Vibraseal thread sealer one end, 1/2" - 14 FPT other end
- 1-1/2" diameter x 3-1/2" long
- Durable zinc die cast bodies



032019



032020

Part #	Description
032019	Mounts between tractor protection valve and air lines
032020	Mounts at tractor gladhand

### Limiting and Quick Release Valves

- Replaces Bendix® LQ-2™ quick release valve part number 229505
- Limits front axle service brake application by 50% and serves as a quick release valve for that axle - commonly found on pre-121 (pre-1985) vehicles
- 3/8" NPT supply, delivery and exhaust ports
- 1/4" NPT control port
- 19/32" diameter mounting holes at 1-1/2" on center
- Replaces Bendix® LQ-4™ quick release valve part number 289144
- For limiting front axle pressure
- 3/8" NPT supply and delivery ports
- (2) 19/32" diameter mounting holes at 1-1/2" on center
- Nominal hold off pressure of 4 psi
- Nominal equalizing pressure of 60 psi

Part #	Description
034036	Limiting and quick release valve



034036



034084

Part #	Description
034084	Limiting and quick release valve

### Quick Release/ Double Check Valve

- Replaces Bendix® QR-1C® quick release valve part number 289714 & Midland KN32041
- 1/4" NPT supply and balance ports
- (2) 3/8" NPT delivery ports
- (2) 11/32" diameter mounting holes at 1-1/2" on center
- Supply and delivery differential is 1 psi max

Part #	Description
034012	Quick release valve



## AIR BRAKE VALVES

### Air Tractor Control Kits

- Kits add hand and foot control to trucks with pre-FMVSS 121 air brakes hauling an air brake trailer (for trucks with FMVSS 121 air brakes, consult the truck manufacturer)
- Hose assembly jumper lines and support springs included with kit (kit No. 131012 only)
- Hand control valve included (except for Part No. 131016). This normally closed valve has 1/4" FPT inlet/ outlet/exhaust ports and an 1/8" FPT pressure gauge port (180 psi maximum supply pressure)

- hand control valve also sold separately
- NOT FOR ABS APPLICATIONS

Part #	Description
131012+	Kit for tractor installations
131014+	Kit for dump truck installations
131016+	Kit for dump truck installations without hand valve
032051	Hand control valve



131012

## AIR ACCESSORY VALVES

### Universal Fan Clutch Drive Solenoid Kit

- Nominal voltages: 12 VDC
- Working voltage: 11-16 VDC
- Maximum operating pressure: 150 psi
- Max exposure temperature: 200°F
- Mounting hole: 3/8"
- Ports: (3) 1/8" - 27 FPT
- Universal kit replaces existing solenoids found on Kysor, Bendix® and Horton fan clutches

Part #	Description
032192+	Universal solenoid kit
032194**	Replacement solenoid
032190	Replacement in-line filter
032191	Replacement 1/8" NPT exhaust vent

- Kit includes valve, wire harness with Weather-Pack sealed connectors, exhaust shield, in-line filter and butt connectors

\*Valve may also be used for shutter stat solenoid applications. Replaces Navistar numbers 450284C91 and 1692761C91 for this use



Five year guarantee against failure under normal operating conditions!

### Three-Way Solenoid

- Provides On/Off exhaust function
- Inlet port normally closed - for intermittent use only
- (2) 1/4" FPT ports
- 12 VDC

Part #	Description
320051+	Three-way solenoid

- 100 - 120 psi operating pressure
- 2-9/32" diameter mounting holes on 2-1/2" centers



### Air Solenoid Valve

- Replaces Neway 90054075 (normally open)
- 12 VDC, 10 watts
- Intermittent use only

Part #	Description
034075+	Air solenoid valve

- 100 psi maximum operating pressure
- 1/4" threads



NOTE: Always use in conjunction with a momentary contact switch (see Part No. 090202 on page E15)



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## AIR ACCESSORY VALVES

### Power Take-off and Dump Pump Control Valve Kit

- Replaces Chelsea 328388-79X
- Kit includes combo control valve with 1/4" built-in push-to-connect fittings, in-line fuse holder with 9 amp fuse, cable, pressure protection valve 1/4" nylon tubing (50') and fittings-control valve assembly also sold separately

Part #	Description
032144+	PTO and dump pump control valve kit
032142+	Combo control valve (feathering valve)
034073	PTO cable
032086	Pressure protection valve



032144

### Power Take-Off Air Shift Kit

- Power take-off kit controls add-on air-controlled accessories
- Kit includes control valve, indicator light, 1/4" nylon tubing (50) and fittings, cable, bracket and pressure protection valve. Control valve assembly, indicator light and cable sold separately

Part #	Description
034070+	Power take-off air shift kit
034071	Air shift valve assembly
034072+	Indicator light
034073	PTO cable
032086	Pressure protection valve



034070

### Power Take-Off Combo Control Valve with Shift Tower

- Combo valve controls PTO and dump pump operations
- 1/4" brass push-to-connect fittings included on valve assembly
- Shift tower measures 4-5/8" x 3-5/8" x 8" H overall with 2" access hole and mounting holes 4-1/4" on center

Part #	Description	Replaces
032143+	PTO combo valve with shift tower	-
032142+	Combo control valve (feathering valve)	Chelsea 329358X
032146+	Control valve shift tower	Chelsea 329219X



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### Power Take-Off Four-Way Control Valve

- Replaces Chelsea 328865X
- Panel-mounted, three position valve
- 150 psi maximum operating pressure
- 1/8" - 27 NPTF

Part #	Description
032145	PTO four-way control valve assembly

- Operating temperature range from -20° to +200°F



### Air and Air-Electric Three-Way Toggle and Flipper Valves

- Push-connect fittings mate easily with 1/4" nylon tubing for easy installation
- 150 psi maximum operating pressure
- On/Off faceplate Part No. 032039 fits air-electric and flipper valves Part Nos. 032232, 032233, 032234 and 032236 and installs using 10-24 x 1/4" screw

#### Air-Electric Valves

##### Technical Information:

- » Switch Off Position: No air flow, electrical contacts open
- » Switch On Position: Air flows through valve, electrical contacts closed
- » Amperage: 5 amp resistive current load at 12 VDC
- » Terminal Size: 1/4" blade
- » Pressure Switch: Open below 10 psi, closed above 35 psi



Part #	Photo	Description	Toggle Style	Lever Position	Primary Vehicle Application
032225+	A	Air-electric toggle valve	Paddle	-	Kenworth, Volvo
032227+	B	Air-electric toggle valve	Blade	-	Mack
032228+	C	Air-electric toggle valve	Bat	-	Peterbilt
032229+	D	Air toggle valve	Paddle	-	Kenworth, Volvo
032231+	E	Air toggle valve	Blade	-	Mack
032232	F	Air-electric flipper valve	-	Right off	Freightliner
032234	F	Air-electric flipper valve	-	Right off	Navistar
032235	F	Air-electric flipper valve	-	Right off	Navistar
032233	G	Air flipper valve	-	Right off	Freightliner
032236	G	Air flipper valve	-	Right off	Navistar

\*These are only primary listings - valves are universal and suitable for a variety of applications



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## AIR ACCESSORY VALVES

### Universal Air Accessory Dash Valves

- Two position, three-way air valves
- Include DOT compliant (FMVSS 106) push-to-connect fittings for 1/4" tubing
- Built-in standard four pin electrical connector for backlit function
- Additional rear port used to easily jumper air lines between valves
- Fit standard 22 mm x 44 mm openings, easily replacing valves found on many current model trucks
- Electric Connector: Valve connector mates with Metri-Pack 150 Series connector Part No. 12045813 with female terminals (for reference only - not available from Velvac and not included)
- Rated Pressure: 150 psi maximum

Part #	Description
032247+	Inter-axle differential lock dash valve
032248+	Fifth wheel slide dash valve
032249+	Air suspension dump dash valve
032250+	Power take off dash valve
032253+	Universal dash valve
032022+	Inter-axle differential lock dash valve
032023+	Differential lock dash valve



- Operating Temperature: -10° to +160°F
- Rated Current Load: 1 amp at 14 VDC (max.)

### Universal Three-Way Toggle Valve

- 1/8" NPT supply and delivery (2) ports
- Includes chrome-plated flip handle
- Faceplate sold separately - install using a 10-24 x 1/4" screw

Part #	Description
032037+	Universal three-way toggle valve
032039	Faceplate - On/Off



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### Transmission Range



032403    032404    032405    032406

Part #	Description
032403	Range value A-6909
032404	Range value A-6913
032405	Range value A-6915
032406	Range Value A-6918

### Transmission Selectors



032400    032401    032402

Part #	Description
032400	Trans selector A4487
032401	Trans selector A4490
032402	Trans selector A4491



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### Height Control Valves: Standard Leveling Valve, Cab Leveling Valve and a Rapid Dump Feature Valve

Part #	Description	Ports	Replaces	Used with Vehicles
034101	Height Control Valve - Cab	1/4" NPT	WABCO S464 007 004-0 Barksdale KD2483	International cab, Peterbilt cab
034111	Height Control Valve	1/4" NPT	WABCO S464 002 443-0 Barksdale KD2484 Midland KN 27000	International chassis
034112+	Height Control Valve	1/4" NPT	Hadley/Neway 90054007, Barksdale KD2485	Kenworth chassis
034113+	Height Control Valve	1/4" NPT	Delco King of the Road 12C-1 (KOR 5549705) & 12-6-2 (KOR 5549706), Barksdale KD2489	Volvo chassis
034114+	Height Control Valve	1/4" NPT	Hadley H00450CE Barksdale KD2482	Volvo / Mack chassis
034122+	Height Control Valve w/ Dump	1/4" NPT	Hadley H00500RS Barksdale KD2486	International chassis
034123	Height Control Valve w/ Dump	1/4" NPT	WABCO 464 008 115-0 Barksdale KD2487	Volvo chassis
034124	Height Control Valve w/ Dump	1/4" NPT	International 2506169C91 Hadley HAD500NS, Barksdale KD2488	International chassis w/dump, Peterbilt chassis w/ dump
034126+	Height Control Valve w/ Dump	1/4" NPT	Haldex PR 90554950 & 90554945, Barksdale KD2490	Kenworth chassis w/dump, Volvo chassis
034137+	Height Control Valve w/ Dump	1/4" NPT	Barksdale KD2481, Volvo 85112638, Volvo 85108667, Volvo 85112623, Mack 99QK148M	Volvo / Mack chassis
034160*	Height Control Valve	1/4"	Freightliner 16-14318-000 Barksdale KD2590	Freightliner
034162*	Height Control Valve w/ N.O. dump	1/4"	Hadley H01501UD Barksdale KD2592	Various
034163*	Height Control Valve	1/4"	Hadley H500C Barksdale 2593	Various
034164*	Height Control Valve	1/4"	Ridewell 6300BFAB10/13 Barksdale 2594	Various
034165*	Height Control Valve	1/4"	Freightliner 16-14530-000 Barksdale KD2595	Freightliner
034166*	Height Control Valve	1/4"	Freightliner 18-30630-000 Barksdale KD2596	Freightliner
034167*	Height Control Valve w/ Dump	1/4"	Hadley H500CA Barksdale 2597	Various

- Valves feature patent Shear-Seal® design technology
- Superior performance in high cycle and contaminated air conditions
- Precision machined metal sealing surface creates a zero leak\* seal
- Increased life expectancy and lower air consumption
- Direct replacement for many OE valve installations



Standard



Cab



Dump

NOTE: See photos on next page.  
\*Zero-leak is less than 4CC per minute

Shear-Seal® is a registered trademark of  
Barksdale Control Products

## AIR ACCESSORY VALVES

### Atlas Series Dual Height Control Valves



#### Applications include:

- Trucks and Trailers with pusher or tag axles , trailer with lift axles, low boy trailers and boom trucks with outriggers.
- Raise or lower suspension to a predetermined secondary height.
- Air retention/ blocking valve is also available for boom truck / outrigger applications
- Integral quick dump feature quickly exhausts air from air bags and can be activated from either primary or secondary ride height settings

Part #	Description
<b>034185</b>	Truck rear chassis - alternate ride height
<b>034186</b>	Truck rear chassis - alternate ride height
<b>034187</b>	Truck rear chassis - blocking
<b>034188</b>	Trailer - alternate ride height
<b>034189</b>	Trailer - alternate ride height

NOTE: An air pilot signal ( to Aux Port ) is needed to actuate the alternate ride height or blocking function – that signal could come from the lift axle circuit or an independent air switch or solenoid valve.

For air switches, solenoid valves, linkage or other air components see catalog pages XX – XX, or visit our website [www.velvac.com](http://www.velvac.com).

**NEW Atlas Series Height Control Valves provide custom ride control solutions in a single valve**

### Shear-Seal® Height Control Valve Linkage and Hardware

#### Adjustable Linkage

- Adjusts for 8-3/4" to 14-1/2"
- 1/4" diameter mounting bolts
- Zinc plated steel rods
- Elastomer ends



Adjustable linkage



034135



034136



034134

Part #	Description
034130	Adjustable Linkage - adjustment range 6.9-9.6 inches
034131	Adjustable Linkage - adjustment range 9.8-11.5 inches
034132	Adjustable Linkage - adjustment range 10.9-13.6 inches
034133	Adjustable Linkage - adjustment range 12.8-19.0 inches
034134	Linkage Hardware - 5/16-18 thread
034135	Linkage Hardware - 1/4-20 thread
034136	Linkage Hardware - 8 mm course thread



**Note: Part numbers listed in RED are NEW!**

## AIR ACCESSORY VALVES

### Height Control Valves



032139



034065  
Delayed response\*\*



034064  
Immediate response



032140



032141  
Immediate response\*

Part #	Ports	Description	Replaces
032139+	1/8" NPT	Includes linkage and brackets	Hadley H600
032140+	1/4" NPT	Valve only	Midland/Haldex & Neway 90554241
032141**	1/4" NPT	Includes built-in dump valve	Midland/Haldex & Neway 90554271
034064+	1/4" NPT	Includes linkage kit	Midland KN27000
034065***	1/8" NPT	Includes fitting package	Neway 90054007

\* Normally open dump feature; needs air pressure to dump from air spring

\*\*7-12 seconds prior to releasing air to air bags; also known as selfleveling

### Air Horn Actuator Valves



A

B

C

D

E

- Direct replacements for air horn valves found on many trucks
- Replace similar valves from both Grover and Hadley
- Molded mounting bracket and push-connect fittings provide easy installation

Part #	Photo	Description	Ports	Vehicle Application
032240+	A	Single outlet	(3) 1/4"	Kenworth
032241+	A	Dual outlet	(3) 1/4"	Kenworth
032242+	B	Dual outlet	(3) 1/4", (1) 3/8"	Freightliner
032243+	B	Single outlet	(3) 1/4", (1) 3/8"	Freightliner
032244+	C	Medium-duty	(2) 3/8"	Navistar
032245+	D	Conventional cab	(2) 3/8"	Navistar
032246+	E	Cab over	(2) 3/8"	Navistar

### Rapid Dump Air Suspension Valve

- Replaces Humphrey 250A N/O valves
- Pilot operated
- Dual delivery design allows for in-line plumbing of air spring lines and eliminates need for tee fittings

Part #	Description
032195	Rapid dump air suspension valve

- (4) 1/8" FPT ports
- Mounts on either right or left frame rail using 1/4" mounting holes



### Three-Way Pilot Valve

- Replaces Neway 90054079
- For Neway suspension systems
- 1/4" NPT supply/delivery/exhaust ports

Part #	Description
034074	Three-way pilot valve





## AIR ACCESSORY VALVES

### Pressure Protection Valves



032086

- Nominally closed
- Nominal closing pressure 65-75 psi
- (2) 1/4" FPT ports
- 150 psi maximum operating pressure

Part #	Description
032086	Pressure protection valve

- Designed for convenient in-tank mounting on tanks with dual outlet ports
- All valves except Part No. 032221 include Vibraseal sealant on mounting thread for easy installation



032216

Part #	Inlet Port (NPTM)	Outlet Ports (NPTF)	Nominal Opening Pressure (psi)	Nominal Closing Pressure (psi)	Primary Vehicle Application
032216	3/8"	3/8"	55	45	Freightliner
032217	3/8"	3/8"	85	67	Ford
032218	1/2"	3/8"	55	45	Freightliner
032219	1/2"	3/8"	85	67	Freightliner
032220	1/2"	1/4"	65	55	Peterbilt
032221	1/2"	1/4"	100 (max)	70 (min)	Kenworth
032222	1/4" Hex nipple	1/4"	100 (max)	70 (min)	Mack*

**NOTE**

These are only primary listings - valves are universal and suitable for a variety of applications

\* Replaces Mack number 20QE2326A

- Replaces Bendix® PR-4™ pressure protection valve part number 286500
- 1/4" NPT supply and delivery ports

Part #	Description
034037	Pressure protection valve

- 85 psi nominal closing pressure
- Non-adjustable



034037

### Height and Lumbar Control Seat Valves

- Valves control air ride truck seats and lumbar supports
- Available in push/pull and paddle type configurations
- Spring-loaded, three-way function
- Electro-pneumatic combination valve designed to operate air seats using an electric air compressor
- Designed to replace valves on seats by major manufacturers such as Bostrom, National and Sears



A



B



C



D

Part #	Photo	Description	Ports	Primary Seat Application
032110	A	End and side ported with removable chrome knob	(2) 1/8" FPT	Various
032205	B	End ported with removable chrome knob	(2) 1/8" FPT	Various
032206	C	Electro-pneumatic with removable black knob & (2) 1/4" blade terminals	(1) 1/8" FPT	Various
032201+	D	Paddle type	(2) 3/16" Barbs	Bostrom

**NOTE:** These are only primary listings - valves are universal and suitable for a variety of applications



## PRESSURE SWITCHES AND INDICATORS

### Pressure Regulator Valve

- Replaces Bendix® 217380 & Midland KN31070
- Non-exhaust type regulator
- 3/8" NPTF delivery and supply ports
- 10-125 psi adjustable pressure gauge

Part #	Description
032060+	Pressure regulator valve



### Air Pressure Gauge

- 1-1/2" diameter dial
- Accommodates a 1/8" FPT port
- Pressure range of 0 - 160 psi

Part #	Description
035065+	Air pressure gauge



### Brake Light Switch

- Replaces Bendix® SL-4™ stop light switch part number 228600
- 1/4" NPT supply
- Actuates at 3-5 psi

Part #	Description
036036+	Stop light switch



### Low Pressure Indicators

- Replaces Bendix® LP-3™ low pressure indicator
- 1/4" NPT supply
- Automatic pressure release at 60 +/- 6 psi

Part #	Description	Replaces
034041+	Single terminal	Bendix® 279416
034042+	Double terminal	Bendix® 228750



NOTE: Use in conjunction with either warning buzzer Part No. 036043 or warning light Part No. 036049

### Pressure Regulator Valve

- A compact, high quality in-line pressure regulator with gauge and bracket kit, rated to 125 psi with 1/4" NPT ports

Part #	Description
320149	Pressure regulator valve



### Low Air Warning Buzzer

- 12 volt buzzer
- 9/32" diameter mounting holes

Part #	Description
036043+	Low air warning buzzer



NOTE: Use in conjunction with a low pressure switch, Part No. 034041 or 034042



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## PRESSURE SWITCHES AND INDICATORS

### Low Air Pressure Switch

- Normally closed/actuation pressure: 55 PSI
- 12 – 24 VDC
- 1/8" NPTF air inlet port

Part #	Description
<b>034150</b>	Low Air Pressure Switch

- Replaces: Midland # BE13240 | OEM # 13240A



### Stop Light Switch

- Normally open/actuation pressure 3-5 PSI
- 12 – 24 VDC
- 1/4" NPTF air inlet port

Part #	Description
<b>036050</b>	Stop Light Switch

- Replaces: Midland # BE13250 | OEM # 3250



**Note: Part numbers listed in RED are NEW!**

### Low Air Pressure Warning Light

- 12 volt red light
- Uses #57, 1895 or 293 bulb
- Mounts through 3/4" hole
- Complete with low air face plates

Part #	Description
036049+	Low air pressure warning light assembly

NOTE: Use with low pressure switches Part Nos. 034041 and 034042.



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## AIR TANK ACCESSORIES

### Air Dryer Replacement Cartridges

- All include seal rings



034046



034047



034048

Part #	Replaces	Cross Ref #
034046	Bendix® AD-SP® air dryer and other competitive part numbers	Bendix® 109994, Bosch 1-487-434-901 & WABCO 432-410-020-2, 432-420-220-2 (also fits System Saver 1200)
034047	Bendix® AD-4 air dryers	Bendix® 103981, 104358
034048	Bendix® AD-9® air dryer	Bendix® 107794, 107796

### Air Dryer Wiring Harness

- Fits and replaces Bendix® 12 and 24 volt AD-9®, AD-SP®, AD-IP® air dryers part numbers 109869, 109871, 298948 and System Saver 1200 units
- 22" leads

Part #	Description
034091	Air dryer wiring harness



## AIR TANK ACCESSORIES

### Safety Valves

- Replaces Bendix® ST-3™ safety valve
  - Automatic pressure release at 150 psi
  - 1/4" NPT
  - Adjustable valve preset to 125 psi by factory; adjustable from 41-149 psi
- Replaces Bendix® ST-4™ safety valve
  - 1/4" NPT
  - Automatic pressure release at 150 psi
  - Low profile valve fits and replaces Bendix® AD-9®, AD-SP®, AD-IP® air dryers and System Saver 1200 units



030075

030074



034090

Part #	Description	Replaces
030075+	Safety valve	Bendix® 284142 & Midland KN31200, KN31400
030074+	Adjustable safety valve	Bendix® 205105

Part #	Description	Replaces
034090+	Safety valve	Bendix® 800350

### Air Dryer Rebuild Purge Kits

- Replaces Bendix® AD-9® air dryer
- Installation instructions and all necessary lubricants included
- 12 and 24 VDC heater/thermostat kits also sold separately. These include the heater/thermostat assembly, seal rings and mounting hardware



034088



034087

Part #	Description	Replaces
034087+	Purge valve kit w/ purge piston assembly	Bendix® 5005037, 5004336, 5004337, 107798
034088	Purge assembly kit - 12V (includes aluminum purge housing, purge valve kit and 12V heater/thermostat kit)	Bendix® 800405

### Automatic Reservoir Drain Valve

- Replaces Bendix® DV-2™ reservoir drain valve part number 281923 & Midland KN24000

Part #	Description
034043	Automatic reservoir drain valve

- All ports 3/8" NPT



Non-heated



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## AIR TANK ACCESSORIES

### Single Check Valves



034044      320014      320001      034045      320003

Part #	Description	Replaces
034044	1/4" Threads	Bendix® 229603, 800375
320014	3/8" Threads	Bendix® 227870, 800373 & Midland KN23010
320001	1/2" Threads	Bendix® 227717, 227788, 227871, 800372 & Midland KN23000
034045	1/2" Female threads	Bendix® 800370
320003	3/4" Threads	Midland KN23040

### Air Tank Drain Cocks

- 1/4" MPT (except 036020)



036003      036019, 036020      036021

Part #	Description
036003+	Lever handle drain cock
036019+	Back seating drain cock - 1/4" MPT
036020+	Back seating drain cock - 3/8" MPT
036021+	Wing handle drain cock

### Drain Pull Valves

- Attached vinyl coated aircraft cable
- .075" diameter cable
- 1/4" MPT
- 120 psi maximum pressure

Part #	Description
032135+	Valve with 3' cable
032058+	Valve with 4' cable
032082+	Valve with 5' cable
032160+	Valve with 5' cable uncrimped on free end - includes one extra sleeve

Part #	Description
032081+	Valve without cable
032170	100' Bulk cable
032083+	Replacement 5' cable & sleeves
032185	Replacement cable sleeve



032135

## AIR TANKS, BRAKE CHAMBERS AND DIAPHRAGMS

### Air Brake Chambers

- Direct replacement for all popular service brake chambers
- Fully threaded shaft for maximum adjustability
- Mounting hardware, clevis and cotter pin included

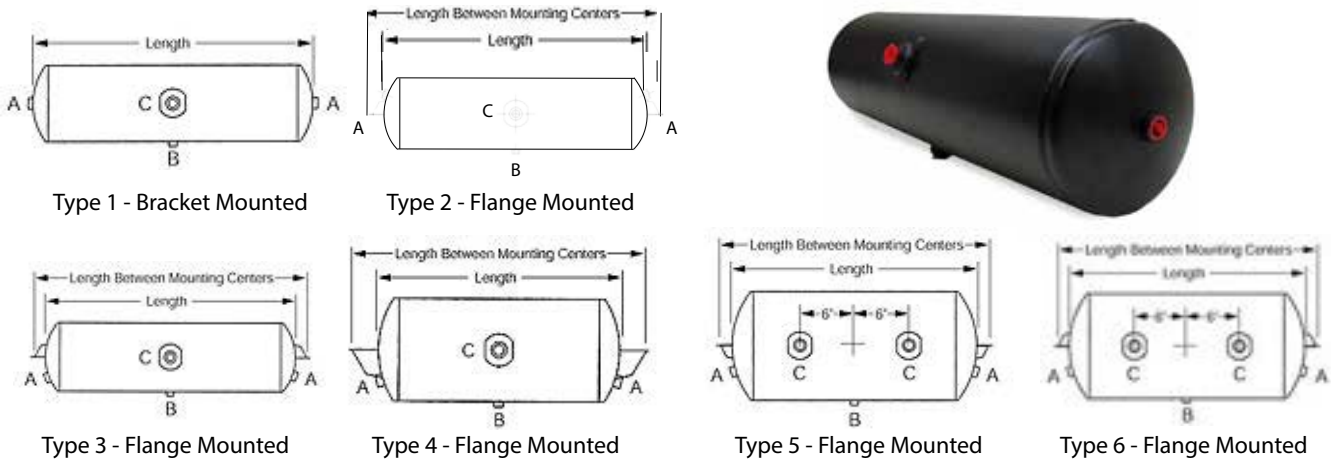
Part #	Dia.	Type	Working Stroke
030013	5.785"	12	1-3/4"
030015	6.5"	16	2-1/4"
030017	7"	20	2-1/4"
030019	7.5"	24	2-1/2"
030021	8.25"	30	2-1/2"



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## AIR TANKS, BRAKE CHAMBERS AND DIAPHRAGMS

### Air Tanks



- All tanks feature dual main ports except Part No 035103
- All steel construction
- All tanks are water tested prior to shipping
- Dipped tanks are rust resistant and primer sealed
- Internally corrosion resistant
- Tanks meet SAE J10 requirements

Part #	Tank Type	Diameter	Length	A	B	C	Cu. in. Capacity	Mounting Centers
035103*	1	8"	29-1/4"	1/2"	1/4"	3/4"	1425	-
035101	2	8"	29-1/4"	3/8"	1/4"	3/4"	1425	32"
035102	3	8"	29-1/4"	3/8"	1/4"	3/4"	1425	32"
035106	3	9-1/2"	22-1/2"	3/8"	1/4"	3/4"	1488	27-1/2"
035104	4	9-1/2"	22-1/2"	3/8"	1/4"	3/4"	1488	27-1/2"
035105	4	9-1/2"	22-1/2"	1/2"	1/4"	3/4"	1488	27-1/2"
035108	3	12"	27"	3/8"	1/4"	3/4"	2850	29-1/2"
035107**	5	12"	27"	3/8"	1/4"	3/4"	2850	29-1/2"
035109**	6	12"	27"	3/8"	1/4"	3/4"	2850	29-1/2"

\* This tank can also be used for vacuum applications - also see mounting brackets Part No. 501051

\*\* Dual main ports on same side of tank-ports are 12" apart on center

### Air Brake Diaphragm

- Gas and oil resistant
- Rubber/neoprene blend
- Fabric reinforced for extra strength and long life

Part #	Diameter	Type
031021	5"	9
031023	5.5"	12
031025	6"	16
031027	6.5"	20
031031	7"	24
031033	8"	30
031035	9"	36



### Air Tank Mounting Brackets

- For tanks up to 8-3/16" in diameter

Part #	Description
501051	Air tank mounting brackets





## AIR CYLINDER CONTROL VALVES

- Anodized aluminum black bodies
- Nitrile seals for long cycle life
- High impact knobs
- Balanced spool design
- Operating temperature range from -40° F to +180°F
- Stainless steel hardware
- Normal operating pressure 100 psi

### Four-Way Push/Pull Valves

- Aluminum shaft with delrin detent ring provides easy ID of valve position
- Threaded aluminum mounting boss for 1" diameter through hole mounting (nuts included)
- (3) 9/32" dia. body mounting holes
- (5) 1/4" - 18 FPT ports
- Normal operating pressure 100 psi
- Includes two faceplates:
  - » Pull to open/Push to close
  - » Pull to raise/Push to lower

Part #	Description
320175	2-position valve
320176	3-pos, holding type valve
320125	Replacement knob, faceplates and nuts



### Applications for valves:

- Two position valve operates any double acting air cylinder
- Three position valve operates systems where full air or vacuum pressure must be isolated

### Viper™ Four-Way Push/Pull

- One piece stainless steel shaft
- Can be mounted using (2) 3/16" diameter body mounting holes or through a 1/2" diameter through hole
- Includes faceplate

Part #	Description
320177	"Viper" four-way valve

Viper™ is a trademark of Velvac, Inc.

- (3) 1/8" NPT ports, (2) 10-32 exhaust ports



### Four-Way Push/Pull Compact Design Valve

- The compact design fits into today's small dash board designs
- Pneumatic valve is designed to control the operations of a typical air cylinder
- 150 psi max air pressure

Part #	Description	Parker #
320187	Four-way valve	410939002

- 0.4 Cv air flow
- Aluminum body and end caps
- 40 micron filtration



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## AIR CYLINDER CONTROL VALVES

### Four-Way Rotary Handle Valve

- Three position valve
- (3) 1/4" - 18 FPT ports
- 1/4" NPT threaded exhaust ports
- (2) 1/4" diameter body mounting holes at 1-15/16" on center
- Operating pressure to 150 psi

Part #	Description
320179	Rotary handle valve
030092+	1/4" Cone filter

- Includes solid one-piece handle and two faceplates (Raise/Lower and Open/Close)



### Four-Way Electronic Solenoid Valve

- Operates any single acting or pressure double acting air cylinder
- Actuated with a std On/Off switch
- Air-piloted assist
- (5) 1/4" -18 FPT port
- (3) 9/32" dia valve body mtg holes
- Normal operating pressure 100 psi
- Exhaust cone filters included

Part #	Description
320178+	4-way solenoid
320132	Electrical coil
320133	Solenoid mounting nut
030092+	1/4" Cone filter
030084+	1/8" Cone filter



### Four-Way Mini Electronic Solenoid Valve

- Compact design - 4" overall length
- Air-piloted assist
- 1/8" supply and delivery ports
- 10-32 exhaust ports
- 12VDC coil with low 2 watt draw
- Normal operation pressure
- 100 psi

Part #	Description
320180	4-way mini solenoid
030093+	10-32 Cone filter



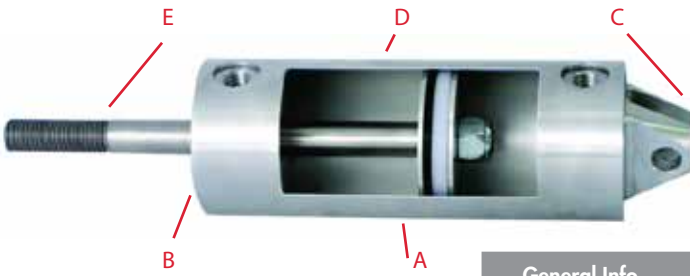
### Cone Filters

Part #	Description
030093+	10-32 Cone filter
030084+	1/8" Cone filter

Part #	Description
030092+	1/4" Cone filter
030094+	3/8" Cone filter



## AIR CYLINDERS



Backed by a 3 year warranty

Velvac's heavy-duty Enforcer™ series of air cylinders are built tough for long life and made from some of the strongest materials available today!

- Machined from 6061 series aluminum, 303 stainless steel, with Nitrile "O" rings and a UHMW polyethylene wear band
- Cycle tested into the millions. The solid construction means the cylinders will keep on working even in extreme conditions where other air cylinders fail. These cylinders are available in push/pull, solenoid operated and spring return versions

General Info	Feature	Type
Cylinder Construction	A	Aluminum cylinder tubing with a 16 RMS finish, lock ring construction secures end caps to tube
Front Cover	B	Solid aluminum with oilight bronze bushing, Delrin seal and 1/4" NPT port
Rear Cover	C	Solid aluminum with mounting hole for 1/2" clevis pin and 1/4" NPT port
Piston Cup	D	Solid aluminum with Nitrile "O" ring rated at -40° to +185°F and UHMW polyethylene wear band
Piston Rod	E	5/8" diameter 303 series stainless steel with 5/8" - 18 thread
Temp Rating	-	-40° to +185°F
Pressure Rating	-	10 psi minimum to 150 psi maximum Standard operating pressure 100 psi

### 2-1/2" Air Cylinder



Part #	Cylinder Type	Stroke	Retracted Length	Extended Length	Thrust at 100 psi	Draw at 100 psi
100204	Push/Pull	4"	9.89"	13.89"	491 lb	460 lb
100226	Spring Return	6"	13.75"	19.75"	251 lb	460 lb
100206	Push/Pull	6"	11.89"	17.89"	491 lb	460 lb
100208	Push/Pull	8"	13.89"	21.89"	491 lb	460 lb

### 3-1/2" Air Cylinder

Part #	Cylinder Type	Stroke	Retracted Length	Extended Length	Thrust at 100 psi	Draw at 100 psi
100308	Push/Pull	8.68"	15.60"	24.28"	962 lb	930 lb
100310	Bullet Type	10"	16.92"	26.95"	962 lb	930 lb

NOTE: Air cylinders and tailgate kits are designed to operate the locking linkage on dump bodies and are NOT to be used as a means of mechanically holding the tailgate shut. Custom kits are available - contact Velvac for more information

Enforcer™ is a trademark of Velvac, Inc.



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



Velvac's standard series of air cylinders are built for durability with a reputation for quality and affordability!

- Used in a wide variety of applications and conditions and can take the daily abuse associated with typical tailgate applications
- Backed with a 1 year warranty and 100% tested
- Available in push/pull, solenoid operated and spring return versions



100125

### 2-1/2" Air Cylinder

At 100 psi:

- Thrust: 483 lb
- Draw: 452 lb



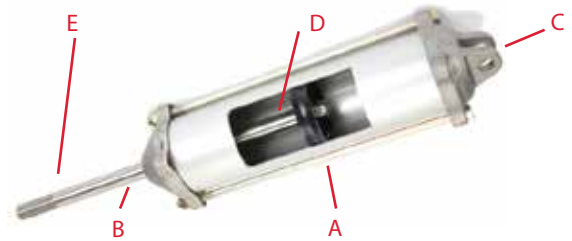
100126

### 3-1/2" Air Cylinder

At 100 psi:

- Thrust: 962 lb
- Draw 918 lb

\*Kit contains air cylinder Part No. 100132 and extended clevis kit #019051. Use this kit when replacing previous cylinder Part No. 101028



General Info	Feature	Feature/Benefit
Cylinder Construction	A	Smooth cylinder grade aluminum tubing with a 32 RMS finish, tie rod construction secures end caps to tube
Front Cover	B	Die cast aluminum with Nitrile dirt wiper and pressure seal and oil impregnated bronze bushing and 1/4" NPT port
Rear Cover	C	Die cast aluminum with mounting hole for 1/2" clevis pin and 1/4" NPT port
Piston Cup	D	Emralon-coated, single piece, molded piston cup
Piston Rod	E	5/8" diameter 300 series stainless steel with 5/8" - 18 thread
Temp Rating	-	-20° to +185°F
Pressure Rating	-	10 psi minimum to 120 psi maximum Standard operating pressure 100 psi

Part #	Cylinder Type	Stroke	Retracted Length	Extended Length
100122	Push/Pull	4"	9.89"	13.89"
100125	Spring Return Norm. Ext.	4"	10.62"	14.62"
100123	Push/Pull	6"	11.89"	17.89"
100126	Spring Return Norm. Ext.	6"	13.89"	19.89"
100124	Push/Pull	8"	13.89"	21.89"

Part #	Cylinder Type	Stroke	Retracted Length	Extended Length
100131	Push/Pull	6.68"	13.60"	20.28"
100132	Push/Pull	8.68"	15.60"	24.28"
100136	Push/Pull	8.68"	18.43"	27.12"
100137*	Push/Pull	8.68"	15.60"	24.28"

NOTE: Air cylinders and tailgate kits are designed to operate the locking linkage on dump bodies and are NOT to be used as

a means of mechanically holding the tailgate shut. For tailgate kits see page A32. Custom kits are also available - contact Velvac for information

## AIR CYLINDERS



Backed by a 3 year warranty

### High Lift Cylinder

General Information	Type
Cylinder Tube	Aluminum cylinder tubing with a 16 RMS finish
Front Cover	Solid aluminum with oil tight bronze brushing, Delrin seal and 3/8" NPT port
Rear Cover	Solid aluminum with mounting hole for 1" clevis pin and 3/8" NPT port
Piston Cup	Solid aluminum with Nitrile "O" ring rated at -40° to +185°F and UHMW polyethylene wear band
Temp Rating	-40° to +185°F
Pressure Rating	Standard operating pressure 100 psi, 10 psi minimum to 150 psi maximum

Part #	Bore	Cylinder Type	Stroke	Retracted Length	Extended Length	Thrust at 100 psi	Draw at 100 psi
100424	4"	Push/Pull	24"	34.5"	58.5"	1,275 lb	1,158 lb

### Tailgate Cylinders

- Velvac's Enforcer series of tailgate cylinders is the best choice for any tailgate
- Machined from 6061 series aluminum, 5/8" diameter 303 stainless steel shaft with 5/8" - 18 threads, Nitrile "O" rings and a UHMW polyethylene wear band

- Direct replacements to Haldex and MGM
- Standard operating pressure 100 psi, 90 psi minimum to 150 psi maximum



100614



100615



100613

Replaces MGM R5A



100603

Replaces Haldex R3PT75

Part #	Bore	Cylinder Type	Stroke	Retracted Length	Extended Length	Thrust at 100 psi	Draw at 100 psi
100603	6"	Spring return	3"	16.18"	19.18"	400 lb	2,400 lb
100613	6"	Spring return	4.38"	18.62"	23"	1,417 lb	1,400 lb

Part #	Cylinder Type
100614	*Bracket kit for 100613
100615	*Spacer kit for 100613

\*The bracket kit is used for new MGM installations, while the spacer kit is used when replacing the existing MGM cylinder

NOTE: Extended/retracted lengths are measured from the tip of the shaft to the end of the cylinder



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## AIR CYLINDER TAILGATE LOCK KITS



101054



100022



101059



100036



100144-7



### Air Operated Kits with 320175 Push Pull Valve

#### Additional Contents

Air Cylinder	Kit No	Clevis and Pins	Air Fittings	Rubber Air Hose Assys	Couplings	Nylon Tube
2 1/2" x 8" Stroke	101054	X				
	101055	X	X			100' of 3/8" OD
	100022	X	X	X	X	
	100028	X	X	X	X	50' of 3/8" OD
3 1/2" x 8" Stroke	101058	X				
	101059	X	X			100' of 3/8" OD
	101002	X	X	X	X	

### Electronic Solenoid Operated Kits with 320178 Solenoid Valve Installed on Cylinder

Air Cylinder	Kit No	Clevis and Pins	Toggle Switch
2 1/2" x 6" Stroke	100036	X	X
2 1/2" x 8" Stroke	100037	X	X
3 1/2" x 6" Stroke	101004	X	X
3 1/2" x 8" Stroke	101003	X	X
3 1/2" x 8" Stroke	101078	X	X

- All kits include 019011 clevis except kit 101003 which uses 4.93" clevis 019019

### Ox Bodies Replacement Air Cylinder Kit

Air Cylinder	Kit No	Clevis and Pins	Air Fittings
3 1/2" x 8" Stroke	100144-7	X	X

## FIFTH WHEEL AIR CYLINDERS

- Cast aluminum front and rear cover with 1/4" FTP port
- Mounting hole for 17/32" clevis, front and rear
- 100 psi operating pressure
- Gold anodized tube for corrosion resistance

Part #	Bore	Stroke	Replaces	Retracted Length	Extended Length
100101	2-1/2"	6-3/4"	Holland XA-2524-R	12-5/8"	19-13/32"
100102	2-1/2"	2"	Holland XA-2524-R-13-1	7-21/32"	9-21/32"



## LIFT AXLE AND SUSPENSION VALVES

### Manual Push/Pull Valves

- High flow dual pressure air valves for lift axles, suspension dump systems and tailgate control
- Solid aluminum construction
- Nitrile seals for long cycle life
- High impact knobs with face plates
- Balanced stainless steel and aluminum spool design



320188



320184

- Operating temperature range from -40° to +180°F
- Stainless steel hardware
- Normal operating pressure 100 psi



320192

Part #	Description	Valve Type	Ports	Air Flow	Applications	Schematic
320188	"Mini" valve w/ built in exhaust filter	3 Way	1/4" NPT	1.5 Cv	Single acting air cylinders, lift axles or suspension systems	
320184	Valve w/ remote 1/4" NPT exhaust air pilot reset option	3 Way	3/8" NPT	2.2 Cv	Single acting air cylinders, lift axles or suspension systems	
320192	3 position valve with center exhaust feature	4 Way	1/4" NPT	1.5 Cv	Single or double acting air cylinders	

### Lift Axle Control Valve

- Designed for the heavy duty truck and trailer industry
- Includes two industry-proven brake-style relay valves integrated into a single unit for compactness and ease of installation
- Excellent flow capability for rapid axle actuation

Part #	Description
034139	Rapid lift axle control valve
034140	Rapid lift axle valve w/ solenoid, N/O
034141	Rapid lift axle valve w/ solenoid, N/C

- Optional control solenoid for electric control operating system



### Brass Electric Coil Air Converter

- Solenoid override adapter mounts on the coil and allows the conversion of the electrical signal into an air signal
- 1/8" NPT ports
- Solid brass construction



Part #	Description
320148+	Brass electric coil air converter

### Silicone Lubricant

- Specially formulated silicone lubricant protects and extends the life of air valves and air brake valves. Helps repair the drying effects caused by alcohol and antifreeze



Part #	Description
320170	Light weight oil - 4 oz bottle
320171	Light weight oil - 5 pack of 4 oz bottles
320172	Heavy weight oil - 4 oz bottle
320173	Heavy weight oil - 5 pack of 4 oz bottles

- Light oil can be added directly into the air lines and the heavy oil can be added directly into the valves

#### Helpful hint:

To prevent damage to seals, premature air product failures, and possible warranty claim rejection, many OE manufacturers instruct customers to avoid the use of petroleum based products and de-icing agents in their air systems. It is recommended to change the air dryer filters regularly and use silicone valve oils to help repair seal damage and extend the life of air valves



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## LIFT AXLE AND SUSPENSION VALVES

### Solenoid Valves

- Solenoid valves allow the driver to operate single or double acting cylinders, lift axles or suspension dump systems electronically
- Constructed with the same materials as Velvac's air accessory valves
- Normal operating pressure 100 psi
- The solenoid valves have a 12-volt power consumption coil that uses only 4.8 watts



320185



320181



320186



320189



320190

Part #	Description	Valve Type	Ports	Air Flow	Applications	Schematic
320185	Spring return valve with 1/8" NPT external pilot	4 Way	3/8" NPT	2.2 Cv	Lift axles or suspension systems	
320181	Spring return valve with internal pilot assist	4 Way	3/8" NPT	2.2 Cv	Lift axles or suspension systems	
320186	Spring return valve with internal manual override	4 Way	3/8" NPT	2.2 Cv	Lift axles	
320189	Spring return valve with air operated external manual override	4 Way	3/8" NPT	2.2 Cv	Lift axles	
320190	Push-pull valve with solenoid air pilot return	4 Way	3/8" NPT	2.2 Cv	Single or double acting air cylinders and lift axles	

### Air-Pilot Valves



320191



320183



320182

Part #	Description	Valve Type	Ports	Air Flow	Applications	Schematic
320191	Air pilot spring return with 1/4" NPT air pilot supply support	3 Way	3/8" NPT	2.2 Cv	Suspension systems	
320183	Shuttle air pilot spring return valve	4 Way	3/8" NPT	2.2 Cv	Lift axles	
320182	Air pilot spring return valve with 1/8" external pilot port	4 Way	3/8" NPT	2.2 Cv	Lift axles	

## BRINGING PRODUCTION HOME

In 1934, Velvac, Inc. was founded to produce vacuum brake parts for Ford Motor Company's passenger cars. When Ford decided to use hydraulic brakes in their cars in 1938, Velvac refocused its business on the heavy truck and trailer business, who were still using vacuum brakes.

Since that time, Velvac has been continually producing quality air-brake system products for heavy vehicles. To be competitive, a number of those products were outsourced in the 1990s and early 2000s, but by the mid-to-late 2010s, the disadvantages of overseas production from a quality, cost, and delivery standpoint became apparent and Velvac began the process of "in-sourcing" many of its highest volume parts.

That trend has accelerated since the onset of the COVID pandemic and in 2020 and 2021, Velvac began producing 3-in-1 assemblies, air-brake hose assemblies, and other products that were previously outsourced, in our new state-of-the-art North American production facility. Velvac is committed to providing the highest quality, most cost-effective and reliable solutions to our customers, and our ongoing investments to bring our production "back home", are a testament to that commitment.



**OUR PARTS PUT YOU IN THE PASSING LANE**

# **ELECTRICAL**

**The only source you need.**

From our ISO and ABS coiled cables to plugs, fuses, sockets, terminals and switches, Velvac offers a full line of electrical components to keep drivers doing what they do best - driving.

- Cable and plug assemblies
- Fuses, sockets, terminals and connectors
- Battery lugs and terminals
- And more





## CABLE AND PLUG ASSEMBLIES

### Six-Way Coiled Cable Assembly

- 12' working length
- Durable black outer jacket resists abrasion and has excellent coil memory

Part #	Working length	Description
590061+	12'	6/14 Gauge
050029	12'	Replacement cable

- Heavy-duty zinc die cast plugs with spring guards included



### Four-Way Coiled Cable Assemblies

Part #	Working length	Description
590185+	12'	4/14 Gauge
590186+	15'	4/14 Gauge



### Two Pole Coiled Cable Assemblies

- Rated at 200 amps for lift gate applications at 12 VDC
- Internally grounded
- Withstands temperatures of -85° to +185°F
- Durable black polyethylene outer jacket resists abrasions and chemical damage while offering excellent coil retention

Part #	Description
590171+	12' Two pole coiled cable assembly
590172+	15' Two pole coiled cable assembly
590181+	12' Vertical two pole coiled cable assembly
590182+	15' Vertical two pole coiled cable assembly

- Heavy-duty zinc die cast plugs with springs guards included
- 4 gauge cable



### Single Pole Coiled Cable Assemblies

#### Tailgate Lift Power Cable

For applications that require direct electrical power to trailer lift gates; BLUE JACKETED

- Heavy-duty zinc die cast plugs with spring guards included

Part #	Description
590135+	12' Tailgate lift power cable assembly
590136+	15' Tailgate lift power cable assembly

- Rated at 265 amps intermittent service (30 seconds on/50 seconds off)
- 2 gauge cable



#### Tailgate Lift Battery Charging Cable

For applications where cables are used to charge trailer lift gate batteries; GREEN JACKETED, heavy-duty zinc die cast plugs with spring guards included

- 200 amp max for intermittent lift gate applications at 12 VDC
- 4 gauge cable

Part #	Description
590263+	12' Tailgate lift battery charging 4 gauge cable assembly
590264+	15' Tailgate lift battery charging 4 gauge cable assembly

- 110 amp max for continuous applications at 12 VDC
- External ground option



## SEVEN-WAY COILED CABLE ASSEMBLIES

### Seven-Way ABS Coiled Cable Assemblies

- Assemblies include heavy gauge wire commonly used to power trailer and dolly ABS
- 1/8, 2/10, 4/12 gauge cable
- Durable green outer jacket resists abrasion, provides excellent coil retention and offers quick identification of ABS lines
- Heavy-duty zinc die cast plugs with spring guards included
- Cable meets SAE J2394 June 1998 Type F requirements



Part #	Working Length	Description
590160+	12'	2-12" Leads
590161+	15'	2-12" Leads
590163+	15'	1-40" Lead 1-12" Lead
590080+	20'	2-12" Leads
590081+	20'	1-12" Lead 1-40" Lead

NOTE: See page E8 for ABS color code chart

### Seven-Way ISO Coiled Cable Assemblies

- Used in tractor/trailer systems requiring ISO 3731 style connectors; ISO pin prevents connections with non-ISO sockets
- 1/8, 2/10, 4/12 gauge cable
- Durable yellow outer jacket resists abrasion, provides excellent coil retention and offers quick identification of auxiliary circuit lines
- Heavy-duty zinc die cast plugs with spring guards included



Part #	Working Length	Description
590251+	12'	2-12" Leads
590252+	15'	2-12" Leads
590253+	15'	1-48" Lead 1-12" Lead
590254+	15'	1-72" Lead 1-12" Lead

### Seven-Way Coiled Cable Assemblies

- Durable black outer jacket resists abrasion and provides excellent coil retention
- Heavy-duty zinc die cast plugs with spring guards included
- Operating temperature range of -55° to +185°F



Part #	Working Length	Description
590154+	12'	6/12, 1/10 Gauge (2-12" Leads)
590156+	12'	6/14, 1/12 Gauge (2-12" Leads)
590155+	15'	6/12, 1/10 Gauge (2-12" Leads)
590157+	15'	6/14, 1/12 Gauge (2-12" Leads)
590159+	15'	6/12, 1/10 Gauge (1-72" Lead, 1-12" Lead)

### Seven-Way ABS & ISO Straight Cable Assemblies

- Heavy-duty zinc die cast plugs with spring guards included
- ISO assemblies used in tractor/ trailer systems requiring ISO 3731 style connectors
- ABS assemblies include heavy gauge wire commonly used to power trailer and dolly ABS - ABS cable meets SAE J2394 June 1998 Type F requirements

Part #	Working Length	Description
590180+	5'	6/12, 1/10 Gauge
590036+	8'	6/12, 1/10 Gauge
590046+	12'	6/12, 1/10 Gauge
590178+	15'	6/12, 1/10 Gauge



Part #	Working Length	Description
590165+	12'	1/8, 2/10, 4/12 Gauge
590166+	15'	1/8, 2/10, 4/12 Gauge
590179+	20'	1/8, 2/10, 4/12 Gauge

Part #	Working Length	Description
590255+	12'	1/8, 2/10, 4/12 Gauge
590256+	15'	1/8, 2/10, 4/12 Gauge



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## ELECTRICAL PLUGS

### Seven-Way Plugs

- Heavy-duty zinc die cast housings on all except plastic plug, which has an unbreakable nylon housing
- Easy to remove interiors make for quick replacements
- ATA color-coded wire terminals
- Internal clamp holds cable securely in place
- Standard seven-way plugs meet ATA and SAE J560 requirements; ISO plugs meet ISO 3731: 1997 requirements

### T-Grip Seven-Way Plugs

Part #	Description
593057+	Plug with spring guard
593101+	ISO plug with spring guard
593111+	Plastic plug with weather guard

ISO plug



T-grip

### Single Grip Seven-Way Plugs

Part #	Description
593022+	Plug with spring guard
593024+	Plug without spring guard

Plastic plug with weather guard



### Single Pole Plugs

- Used to provide power to heavy draw auxiliary trailer equipment
- Heavy-duty zinc die cast housings
- Power and ground terminals hold up to 1/0 gauge wire

Part #	Description
591161+	T-grip plug with spring guard
591105+	Single grip plug without spring guard

591161



591105



### Seven-Way Blade Type Plug

- Primarily used in RV applications
- Constructed of molded PVC for impact resistance

Part #	Description
054001+	Seven-way blade type plug

NOTE: See page E6 for seven-way blade type socket



### Two Pole Plug

- 200 amp, 4 gauge wire capacity
- Heavy-duty zinc die cast housings
- Internal ground
- Spring guard supports and protects cable

Part #	Description
593116+	T-grip plug with spring guard
593123+	Vertical T-grip plug w/ guard

593116



593123





## ELECTRICAL PLUGS

### Four-Way and Six Way Plugs

- Heavy-duty zinc die cast housings
- Plug locking system works with socket door to ensure proper hookup and prevent unintentional disconnections
- Spring guard 055049 supports and protects cable

Part #	Description
055059+	Four-way plug with spring guard
055054+	Four-way plug without spring guard
055049+	Six-way plug with spring guard
055050+	Six-way plug without spring guard

Plug with spring guard



Plug without spring guard



## PLUG ADAPTERS AND ACCESSORIES

### Truck Tractor to Trailer Adapters

- Heavy-duty zinc die cast housing on part nos. 591009 and 591010; also includes split brass pins and terminals and a spring clip to lock adapter and plug together

Part #	Description
591009+	Seven-way pin to six-way adapter
591010+	Six-way round to seven-way adapter

Female Pins



591009

Male Pins



591010

### Continuity Testers

- LED indicators quickly identify complete circuits by glowing red; no light means problem circuit
- Fits standard seven-way blade type, four-way flat connectors and seven-way round
- Constructed of molded PVC for impact resistance
- Internally grounded



057118



057120



057119



057121

Part #	Description
057118+	Seven-way plug circuit tester
057119+	Seven-way socket circuit tester
057120+	Seven-way blade circuit tester
057121+	Four-way flat circuit tester



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## PLUG ADAPTERS AND ACCESSORIES

### Four-Way Flat Set

- Set: 48" lead (female) side and 12" lead (male) side
- Single: 48" leads
- ATA color-coded:  
White: Ground  
Green: Right turn and brake lights  
Yellow: Left turn and brake lights  
Brown: Tail lights

Part #	Description
090226*	Four-way flat - female
090227*	Four-way flat - male
*Together these replace Velvac part no. 054003	
054003	Four-way flat set

- Constructed of molded PVC for impact resistance



### Seven-Way Plug Cleaner

- Stainless steel brushes quickly clean electrical contacts for improved conductivity
- Durable plastic body

Part #	Description
055034	Seven-way plug cleaner



## ELECTRICAL SOCKETS AND ACCESSORIES

### Seven-Way Circuit Breaker Sockets and Adapter Boxes

- Non-corrosive, reinforced nylon housing for added durability
- Designed for #8 ring terminals (see page E27)
- ATA color-coded contacts (see page E8 for ATA color code chart)
- Solid brass split pins are zinc-plated for corrosion resistance
- Each socket includes automatic reset circuit breakers with positive snap open/snap closed action to eliminate arcing (unless noted)
- Mounting holes are 4-1/2" on center and include steel bushings for added housing protection
- Adhesive-backed mounting gasket included
- Circuit breaker sockets meet SAE J560 requirements

- Durable zinc die cast housings
- Solid brass split pin socket offers replaceable circuit breakers for circuit protection of trailer wiring systems
- Slanted door front for plug support
- Replaceable thermoplastic base plate with ATA color codes for quick identification
- Each socket includes automatic reset circuit breakers with positive snap open/snap closed action to eliminated arcing

Part #	Description
055037+	Socket with 20 amp circuit breakers
055038+	Socket with 30 amp circuit breakers
055040+	Socket without circuit breakers
055039	Replacement cover kit (includes cover, shaft retainer, steel hinge pin and stainless steel spring)
055041*	Deep adapter box with bottom entry
055045*	Deep adapter box with back entry



Deep adapter box with back entry

Deep adapter box with bottom entry

Part #	Description
593052+	Socket with 20 amp circuit breakers
593054+	Socket with 30 amp circuit breakers

\*5/16" - 18" UNC cover plate studs and 2" inside depth

## ELECTRICAL SOCKETS AND ACCESSORIES

### Single and Two Pole Sockets

- Durable zinc die cast housings
- Power and ground terminals on single pole socket hold up to 1/0 gauge wire
- 200 amp, 4 gauge wire capacity on two pole socket
- Two pole socket has internal ground
- Single pole socket may be soldered or crimped

- Mounting holes 3" on center
- Rear housing 1-3/4" O.D.

Part #	Description
591113+	Single pole socket
593121+	Two pole socket
593124+	Vertical two pole socket



### Seven-Way Blade Type Socket

- Screw-type socket primarily used in RV applications
- 6-24 VDC
- Mounting holes are 2-1/4" on center
- Constructed of molded PVC for impact resistance

Part #	Description
054002	Seven-way blade type socket
090216	Mounting bracket

NOTE: See page E4 for seven-way blade type plug



### ISO Seven-Way Socket

- Used in tractor/trailer systems requiring ISO 3731 style connectors - ISO socket prevents connections with non-ISO plugs
- ISO color-coded yellow, non-corrosive, reinforced nylon housing

Part #	Description
593106+	ISO socket
054017	Terminal protector boot

- Wires secured by set screws
- Mounting holes are 2-15/16" on center



### Four-Way and Six-Way Sockets

- Durable zinc die cast housings
- Solid brass split pins
- Locking system on door works with plug to ensure proper hook-up and prevent unintentional disconnections
- Optional protector boot keeps terminals free of moisture and contaminants - sold separately

Part #	Description
055052+	Six-way socket
055056+	Four-way socket
090217	Mounting bracket
090218	Terminal protector boot



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## ELECTRICAL SOCKETS AND ACCESSORIES

### Seven-Way Sockets

- Non-corrosive, reinforced nylon housing for added durability
- Screw type socket with split pins designed for #8 ring terminals (see page E27)
- Push type socket with solid pins designed for 180° snap receptacles (see Part No. 056079 on page E26)
- Mounting holes are 3" on center
- Screw type socket includes screws and washers
- Gasket included on each socket
- Sockets meet SAE J560 requirements
- Protective rubber boot seals out moisture and contaminants - sold separately
- Durable zinc die cast housings
- ABS plastic interior with ATA color codes for quick identification
- Solid brass pins
- Wires attached by set screw retainers
- Slanted door front for plug support
- Tongue and groove door design protects socket interior from dirt and moisture
- Mounting holes are 2-15/16" on center
- 1-13/16" rear housing length
- Terminal protector boot keeps terminals free from moisture and contaminants - sold separately
- Sockets meet SAE J560 requirements (SAE applies only to solid pins)

Two hole socket with screw terminals



Socket with solid pins



Two hole socket with push terminals



Optional rubber terminal protector boot



Optional terminal protector boot

Part #	Description
055043+	Two hole socket with screw terminals
055062+	Two hole socket with push terminals
055063	Rubber terminal protector boot
593083+	Socket with solid pins
593084+	Socket with split pins
054017	Terminal protector boot
591022+	Replacement solid pin interior



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### Battery and Starter Cable

- Durable thermoplastic outer jacket keeps cable flexible at low temperatures and resists abrasion, ozone, oil and road salts
- Soft annealed stranded copper
- Cable meets SAE J1127 Type SGT requirements



#### Red Jacketed

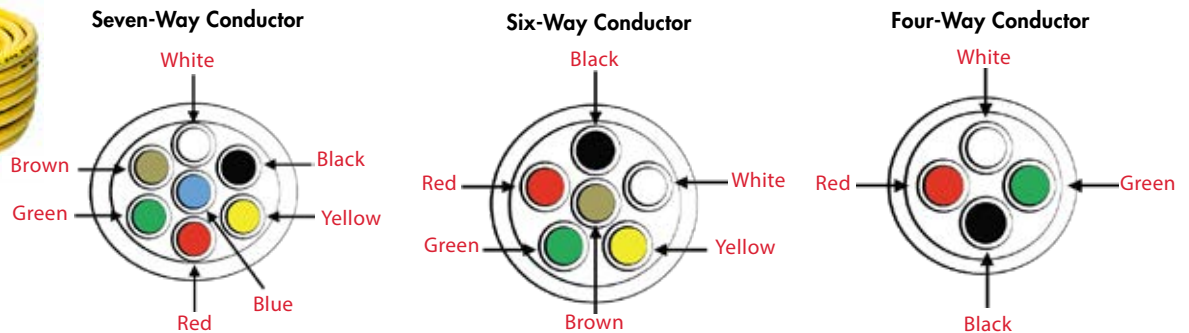
Part #	Coil Length	Wire Gauge
058033	25'	6
058033-7	100'	6
058035	25'	4
058035-7	100'	4
058037	25'	2
058037-7	100'	2
058039	25'	1
058039-7	100'	1
058241	25'	1/0
058241-7	100'	1/0
058243	25'	2/0
058243-7	100'	2/0
058245	25'	3/0
058247	25'	4/0

#### Black Jacketed

Part #	Coil Length	Wire Gauge
058233	25'	6
058233-7	100'	6
058235	25'	4
058235-7	100'	4
058237	25'	2
058237-7	100'	2
058239	25'	1
058239-7	100'	1
058041	25'	1/0
058041-7	100'	1/0
058043	25'	2/0
058043-7	100'	2/0
058045	25'	3/0
058047	25'	4/0

NOTE: Battery terminals and lugs sold separately (see pages E10-12)

### Multiple Conductor Cable



- ABS cable meets SAE J2394 June 1998 Type F requirements

#### ADA Color Code Chart

White	Ground return to towing vehicle
Black	ICC required marker and clearance light
Yellow	Left-hand directional signal
Red	Stoplights
Green	Right-hand directional signal
Brown	Tall lamps, 3-bar marker lamps
Blue	Auxiliary

Part #	Jacket Color	Coil Length	Conductor	Gauge
050019	Black	100'	Seven	6/12, 1/10
050019-7	Black	500'	Seven	6/12, 1/10
050042	Black	100'	Seven	14
050042-7	Black	500'	Seven	14
050037	Green (ABS)	100'	Seven	1/8, 2/10, 4/12
050051	Yellow (ISO)	50'	Seven	1/8, 2/10, 4/12
050052	Yellow (ISO)	100'	Seven	1/8, 2/10, 4/12
050007	Black	100'	Six	14
050007-7	Black	500'	Six	14
050001	Black	100'	Four	14
050001-7	Black	500'	Four	14

## BATTERY CABLE

### Battery-to-Battery Crossover Cable

- Molded lead terminals and black neoprene outer jacket

Part #	Description
058212 <sup>+</sup>	12" Battery crossover cable

- 2/0 gauge wire



### Ground Strap

- 4 gauge wire
- Molded zinc-plated steel lugs and tin-plated copper stranding

Part #	Description
058116	Ground strap (12" - 14")

- 7/16" diameter bolt hole



### Switch-to-Starter Cable

- 4 gauge wire
- Molded zinc-plated steel lugs and red PVC outer jacket

Part #	Description
058115	18" Switch-to-starter cable



### Battery Cable

- 2/0 gauge wire
- Molded copper lug and lead terminal

Part #	Description
058117 <sup>+</sup>	12" Battery cable

- Black PVC outer jacket



### Stud Top Battery Cable

- 2/0 gauge wire
- Molded tin-plated copper lugs and black PVC outer jacket

Part #	Color	Description
058118	Black	8" Stud top battery cable
058128	Red	8" Stud top battery cable
058119	Black	12" Stud top battery cable
058129	Red	12" Stud top battery cable



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## BATTERY CABLE

### Battery Booster Cables

- Black PVC outer jacket
- Red and black vinyl coated clamps feature solid copper contacts and heavy springs for positive clamping

Part #	Description
058152	16' Battery booster cable

- Copper stranded, 4 gauge wire
- Rated at 400 amps



### 800A Booster Cable

These heavy duty battery cables are rated at 800 amps and are designed to handle jump starting heavy duty equipment

- Solid copper parrot clamps for increased conductivity
- Tangle proof design

Part #	Description
058151	800A Booster cable

- Braided copper wire remains flexible even in subzero temperatures
- Includes strong plastic storage container to protect cables from damage when not in use



## BATTERY LUGS

- Fully annealed electrolytic copper construction provides excellent conductivity

- Wire gauge identification marked on lug barrels

- Heat-shrink tubing should be used over all battery terminal connections (see pages E33-E35)

### Standard Battery Lugs

- Unique flared barrel design eliminates wire strand hang-ups
- Unplated
- Crimpable



Part #	Wire Gauge	Stud Size
056033	6	1/4"
058073	6	5/16"
058074	6	3/8"
056034	4	1/4"
058076	4	5/16"
058077	4	3/8"
058078	4	1/2"
058079	2	5/16"
056035	2	3/8"
058081	1	5/16"
056036	1	3/8"

Part #	Wire Gauge	Stud Size
058082	1	1/2"
058083	1/0	5/16"
056037	1/0	3/8"
056038	1/0	1/2"
058084	2/0	5/16"
056039	2/0	3/8"
056040	2/0	1/2"
058086	3/0	3/8"
056041	3/0	1/2"
058088	4/0	3/8"
056042	4/0	1/2"

### Heavy-Duty Battery Lugs

- Tin-plated for corrosion resistance
- Crimpable



Part #	Wire Gauge	Stud Size
058325	1/0	3/8"
058326	1/0	1/2"
058327	2/0	3/8"
058328	2/0	1/2"

Part #	Wire Gauge	Stud Size
058329	3/0	3/8"
058330	3/0	1/2"
058331	4/0	3/8"
058332	4/0	1/2"

## BATTERY LUGS

### Heavy-Duty Flared Lug Maintenance Kit

Part #	Description
057002	Heavy-duty flared lug maintenance kit

- Kit includes 50 lugs in ten varieties ranging from 6 to 4/0 gauge with stud sized of 1/4", 3/8" and 1/2"
- Packaged in a durable plastic case with product information shown on inside label for easy identification

Part #	Qty	Part #	Qty
056033	6	056038	4
056034	6	056039	4
056035	6	056040	4
056036	6	056041	4
056037	6	056042	4



### Flared Butt Connectors

- Seamless construction
- Tin-plated for corrosion resistance

Part #	Wire Gauge
058020	1
058021	1/0
058022	2/0
058023	3/0
058024	4/0



## BATTERY TERMINALS

### Battery Stud Nut

- Stainless steel construction



Part #	Description
058068	3/8" Battery stud nut

### Heavy-Duty Terminal

- For 1" 4/0 gauge wire



Part #	Description
058016	Heavy duty terminal

### Medium-Duty Terminal

- For 6 to 2 gauge wire



Part #	Description
058012	Medium-duty terminal

### Side Post Terminal

- For 6 to 2 gauge wire



Part #	Description
058013	Side post terminal

### Battery Post and Terminal Cleaner



Part #	Description
058046	Battery post and terminal cleaner

### Stud Mount To-Post Mount Conversion Terminals

- All lead construction
- Both positive and negative posts included



Part #	Description
058017+	Stud mount-to-post mount conversion terminals

### Crimpable or Solderable Battery Terminals

#### Right Angle Barrel Terminals

- One-piece, cast copper construction
- Lead-plated for corrosion resistance
- Cable size clearly designated on terminals for correct size selection
- Polarity shown on terminals to avoid mixing positive and negative connections



Part #	Wire Gauge	Polarity
057056+	2/0	Positive
057057+	2/0	Negative
058055+	3/0	Positive
058056+	3/0	Negative
058011+	Replacement nut and bolt	

#### Right Elbow Terminals

- Tool die and letter codes permanently marked on terminals to simplify installation with other manufacturers' tools
- Uniform wall thickness assures high reliability when connector is crimped on cable



Part #	Wire Gauge	Polarity
058005+	2/0	Positive
058006+	2/0	Negative
058011+	Replacement nut and bolt	

#### Straight Barrel Terminals

- Long barrels for added strength and vibration resistance
- Heat-shrink tubing should be used over all battery terminal connections (See page E33)



Part #	Wire Gauge	Polarity
058050+	4	Universal
057050+	1	Positive
057051+	1	Negative
058001+	1/0	Positive
058002+	1/0	Negative
057052+	2/0	Positive
057053+	2/0	Negative
057054+	3/0	Positive
057055+	3/0	Negative
058057+	4/0	Positive
058058+	4/0	Negative
058011+	Replacement nut and bolt	

#### Left Elbow Terminals



Part #	Wire Gauge	Polarity
058003+	2/0	Positive
058004+	2/0	Negative
058011+	Replacement nut and bolt	

#### Marine Terminal

- 5/16" post



Part #	Description
058019+	Marine terminal

#### Crimpable or Solderable Terminals for Stud Top Batteries

Base terminal



Part #	Wire Gauge	Polarity
058090+	1/0	Universal
058091+	2/0	Universal
058092+	3/0	Universal
058093+	4/0	Universal

Flag terminal



Part #	Wire Gauge	Polarity
058252+	2/0	Universal

#### Helpful hint:

Most Velvac terminals are color coded according to wire gauge specifications:

- 4 - Green    1/0 - Black
- 2 - Pink     2/0 - Orange
- 1 - Pink     3/0 - Purple
- 4/0 - Yellow



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## BATTERY TERMINALS

### OEM Battery Bolt

- Recessed groove permits attachment of battery charger or jumper cables
- Zinc-plated steel construction
- 3/8" - 16" UNC
- 1-3/16" long



Part #	Description
058296	OEM battery bolt

### Three-Way Battery Terminals

- For 1 to 2/0 gauge wire
- Lead construction with zinc-plated steel bolts and nuts
- Positive and negative terminals included



Part #	Description
058071+	Three-way battery terminals

### Protective Battery Washers

- Washers seal out acid fumes protecting terminals from corrosion
- Packaged in convenient plastic screw top jars



Part #	Description
058094	Protective battery washers - red
058095	Protective battery washers - black

## SWITCHES AND SOLENOIDS

### Indicator Lights

- Chrome housing and nylon base
- LED's rated for 15mA at 12VDC
- 100,000 hours estimated bulb life expectancy
- Temperature rating up to +185°F (85°C)
- 20 AWG lead wires

Part #	Color
090213	Red
090214	Amber
090215	Green

- 7/16" diameter recommended mounting hole



### Toggle Accessories

Part #	Description
090210	Full boot
090211	Half boot

- Protect toggle switches from moisture, dust and dirt
- UV-resistant, black silicon construction
- Built-in hex nut base screws on to most Velvac toggle switches
- Rated for -40° to +350°F (+180°C)

Part #	Description
090212	Safety cover

- Rugged, spring-loaded design provides protection against accident actuation
- Mounting hole accepts all standard Velvac toggles with 15/32" mounting stems



090210 & 090211



090212

### Battery Disconnect Switch

- Two position: on/off
- Continuous rating 180 amps (max)
- Momentary rating 1000 amps (max)
- Momentary use only: 15 sec. on/5 min. off
- Heavy gauge, plated steel casing
- Die cast lever

Part #	Description
090104**	Battery disconnect switch SPST
090233+	Battery disconnect switch DPST
090234+	Battery disconnect switch DPST w/ anti-rotation indexing post

\*Not UL approved

- 3/4" diameter mounting stem
- UL approved for 6 to 36 VDC



090104



090233, 090234

### Wiper Control Switch

- Operating temperature: -20° to +160°F
- Nominal voltage: 12 VDC (9 VDC min., 16VDC max.)
- Terminal configuration: 8 pin amp connector-mates with amp connector 770579-1 and 171639-1 socket terminals (not included and not available from Velvac)

Part #	Description
090120	Wiper control switch

- Integrates multi-speed wiper and washer functions into a single dashboard device
- Backlit for easy identification
- Fits standard 22 mm x 44 mm opening
- Washer motor: 6 amps max. current draw



### Push Button Switch

- Rated for 50 amps at 12VDC
- 5/8" - 32 UNS mounting bushing for panels up to 1/2" thick
- Push for momentary-on action
- Boot nut included

Part #	Description
090190+	Momentary push button switch

- Die cast with silver/copper contacts and two screw terminals
- Dust and moisture resistant



### License / Utility Lights

Part #	Description
090173+	Twist-in license / utility light

- 12 VDC
- Weather-proof gasket
- 31" wire lead with .250" male disconnect
- 89 bulb
- Fits 1-1/4" mounting hole

Part #	Description
090174+	Bumper mount license / utility light

- Fits GM/GMC trucks with step bumper
- 12 VDC
- 7-7'8" wire lead with protective boot where wire attaches to light and self-grounding single post adapter
- 67 bulb
- Mounting holes approx. 2-11/16" on center



090173



090174



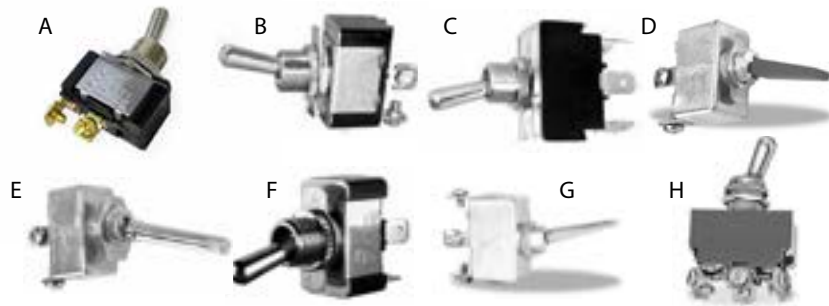
**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## SWITCHES AND SOLENOIDS

### Heavy Duty Toggle Switches

- Fully assembled with locating ring/tongue nut (and On/Off faceplate on single pole switches only)
- 1/2" diameter recommended mounting hole- all toggles must be installed with provided hex nut behind panel to prevent damage during installation



- Frame and support constructed from steel with zinc chromate, brass terminals
- Neoprene-sealed toggles are moisture and dust resistant

Photo	Part #	Poles	Amp	VDC	Circuitry	Terminals	Miscellaneous
<b>Single Pole</b>							
B	090176+	SPST	21A	14	On / Off	(2) 0.250" Flat blade	-
A	090177+	SPST	21A	14	On / Off	(2) Screw	-
B	090199+	SPDT	21A	14	On / Off / On	(3) 0.250" Flat blade	-
A	090200+	SPDT	21A	14	On / Off / On	(3) Screw	-
A	090201+	SPDT	21A	14	(On) / Off / (On)	(3) Screw	-
A	090202+	SPDT	21A	14	On / Off / (On)	(3) Screw	-
F	090191+	SPST	30A	12	On / Off	(3) 0.250" Flat blade	Red LED handle****
F	090192+	SPST	30A	12	On / Off	(3) 0.250" Flat blade	Green LED handle****
F	090193+	SPST	30A	12	On / Off	(3) 0.250" Flat blade	Blue LED handle****
D	090186+	SPST	50A	12	On / Off	(2) Screw	Black handle**
D	090187+	SPST	50A	12	On / Off	(2) Screw	Red handle**
D	090188+	SPST	50A	12	On / Off	(2) Screw	Chrome handle**
E	090189+	SPST	50A	6/12/24	On / Off	(2) Screw	1-5/8" Chrome handle
G	090184+	SPDT	50A	6/12/24	On / Off / On	(3) Screw	Chrome plated***
-	090040+	SPDT	50A	6-24	On / On	(3) Screw	( ) indicates MOMENTARY ACTION
-	090043+	SPDT	50A	6-24	(On) / Off / (On)	(3) Screw	
<b>Double Pole</b>							
A	090203+	DPST	21A	14	On / Off	(4) Screw	** Die cast housing with silver-plated contacts, heavy copper terminals, stems measure 15/32" dia. X 15/32" long
C	090204+	DPST	21A	14	On / Off	(4) 0.250" Flat blade	
H	090048+	DPDT	21A	14	On / On	(6) Screw	
C	090205+	DPDT	21A	14	On / On	(6) 0.250" Flat blade	
C	090206+	DPDT	21A	14	On / Off / On	(6) 0.250" Flat blade	
A	090208+	DPDT	21A	14	(On) / Off / (On)	(6) Screw	
C	090209+	DPDT	21A	14	(On) / Off / (On)	(6) 0.250" Flat blade	*** Paddle type handle
<b>"O" Ring Sealed</b>							
A	090179+	SPST	21A	14	On / Off	(2) Screw	****Black toggle handles tipped with LED, min draw requirements for LED is 20 mA at 12 VDC
A	090194+	SPST	21A	14	(On) / Off	(2) Screw	
A	090196+	SPDT	21A	14	On / On	(3) Screw	
A	090197+	SPDT	21A	14	On / Off / On	(3) Screw	
B	090198+	SPDT	21A	14	On / Off / On	(3) 0.250" Flat blade	
A	090207+	DPDT	21A	14	On / Off / On	(6) Screw	



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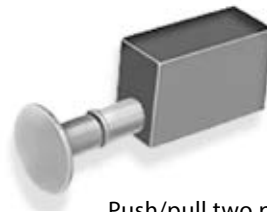
## SWITCHES AND SOLENOIDS

### Two-Speed Axle Switch and Automatic Terminal Block Switch

- Terminal block switch used in conjunction with axle switch to control two-speed electric axle shift
- Axle switch has red knob and uses (3) .156" female snap plugs (see page E25)



Terminal block switch



Push/pull two position axle switch

Part #	Description
090078	Two-speed axle switch
090079+	Automatic terminal block switch



090225



090085

### Three Wire Connector

- Use as a flasher socket or any other three wire application (see page E19 for flashers)
- 18 gauge 12" leads

Part #	Description
090225	Three wire connector
090085	Three wire socket

### Dimmer Switches and Socket Assemblies



#### Application

- Chrysler floor mounted (1841895, 1881938, 2097628, 2291202, CH-2437)  
Year: 1959-83
- Dodge Trucks  
Year: 1959-79
- AMC (3156124, 3160926)  
Year: 1959-83

Part #	Description
090073	Dimmer switch
090083	Dimmer switch socket assembly



#### Application

- All Ford floor mounted  
Year: 1959-83 (COTF-130A024A; COTZ-13A024A, SW-263)

Part #	Description
090081	Dimmer switch
090083	Dimmer switch socket assembly



#### Application

- Vehicles without auto dimmer
- All GM floor mounted (1997028, 1997037, 3841892, D808)  
Year: 1961-83
- All Jeep floor mounted (5461816)  
Year: 1974-82

Part #	Description
090080	Dimmer switch
090082	Dimmer switch socket assembly

### Universal Solenoids

- Designed to operate a minimum of 50,000 cycles
- 125 amps at 12 VDC
- Continuous voltage
- SPST, normally Off, one circuit Off/On
- 5/16" side studs, #10 top stud/s
- Both include hardware

Part #	Description
090054	Three stud universal solenoid
090056	Four stud universal solenoid



## SWITCHES AND SOLENOIDS

### Full Size Rocker Switches (Standard)



- 21 amps at 14 VDC
- .830" x 1.450" recommended mounting hole
- Universal, snap-in design allows for easy installation
- Moisture and dust resistant
- Packaging for all new switches displays easily on pegboards or wire display rack (see Retail section)

Part #	Poles	Circuitry	Terminals
090109+	SPST	On / Off	(2) .250" Flat blade
090150+	SPST	(On) / Off	(2) .250" Flat blade
090153+	SPDT	On / (On)	(3) Screw
090111+	DPST	On / Off	(4) .250" Flat blade
090136+	DPDT	On / On	(6) .250" Flat blade
090110+	DPDT	On / Off / On	(6) .250" Flat blade
090158+	DPDT	On / Off / (On)	(6) .250" Flat blade

( ) indicates MOMENTARY ACTION

### Accessories

Part #	Description
090219	End bracket
090220	Middle bracket
090221	Single bracket
090222	Panel plug



Accessories

### Full Size Rocker Switches (Lighted)

Part #	Poles	Circuitry	Terminals	Light Color
090123+	SPST	On / Off	(3) Screw	Red
090124+	SPST	On / Off	(3) Screw	Green
090125+	SPST	On / Off	(3) Screw	Amber
090128+	SPST	On / Off	(3) .250" Flat blade	Red

### On / Off Round Rocker Switch

Part #	Poles	Light Color
090167+	SPST	Red
090168+	SPST	Amber
090169+	SPST	Green

- Single pole switches rated for 10 amps at 12 VDC
- 12 VDC illumination voltage
- Snap-in mounting design for easy installation in .79" diameter mounting hole
- (3) .187" flat blade terminals

Part #	Description
090166+	Round rocker switch with On/Off markings

- Two positions (SPST) with two .187" silver-plated brass blade terminals
- On/Off designation permanently etched on rocker switch
- Snap-in mounting design for easy installation in .79" diameter mounting hole



090167



090166



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## SWITCHES AND SOLENOIDS

### Push / Pull Switches

Part #	Description
090181+	Push / pull switch

- Rated for 15 amps at 12 VDC, 25 amps at 6 VDC
- Heavy-duty, two position (SPST) push/pull switch with two brass screw terminals
- Brass and chrome construction
- 3-1/8" overall length x 7/8" wide
- Mounting stem measures 3/8" in diameter and 1-1/4" long
- Accommodates 1" panel with stainless steel springs

Part #	Description
090180+	Push / pull switch

- Rated for 75 amps at 6 to 28 VDC
- Heavy-duty, two position (SPST) push/pull switch with two brass screw terminals
- Chrome-plated metal knob
- Mounting stem measures 15/32" in diameter and 5/8" long

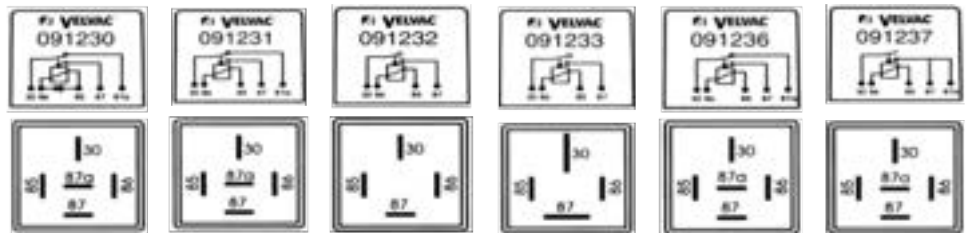


090181



090180

### RELAYS



### Heavy-Duty Relay Kit

- Ideal for powering accessories with high voltage draws such as fog lights, power windows and fans
- Help ensure maximum power available to accessories and lights
- Kit includes heavy-duty relay, switch, switch mounting plate, 20' of 14 gauge wire and terminals

Part #	Description	Voltage	Amp	Terminals	Mounting Tab
091230	Relay with diode	12	40	5	No
Application for 091230: Diode eliminates voltage spikes that can occur when the relay is shut off; it can be used to run up to 30 amps continuously					
091231	Relay	12	40	5	Yes
091232	Relay	12	40	4	Yes
Application for 091232: Used to run up to 30 amps continuously					
091236	Relay	24	20	5	Yes
091237	Dual relay	12	40	5	Yes
Application for 091237: Controls two separate 20 amp accessories; also used as a single 40 amp relay					
091233	Heavy-duty relay	12	70	4	Yes
Application for 091233: Ideal for controlling larger devices; can run up to 50 amps continuously					
091235	Heavy-duty relay kit	12	70	4	Yes
In addition to standard package of one, all relays may also be ordered in bulk shop packs of 25 by adding a -7 to the part number shown					

## SIGNAL FLASHERS

### Solid State LED Flasher

- Compact size fits standard two terminal flasher footprint - includes remote mount 36" long ground wire

Part #	Description
091225	Solid state LED flasher

- 6 amp flasher provides constant flash rate of 90 FPM for new LED lights



### Heavy-Duty Flashers

- 12 lamp and 25 amp rating
- Last five times longer than thermal flashers
- Three-terminal flasher for vehicles equipped with flashing dash lights

Part #	Description
091201	Two terminal
091202	Three terminal

- Operate at voltages as low as 7 VDC



### Thermal Flashers

- Flash two to three lamps for turn signals, two to six lamps for hazard warning

Part #	Description
091203	Two terminal
091204	Three terminal



#### NOTES

A thermal flasher (fixed load) is NOT recommended for use when a trailer is connected to a car or truck. A heavy-duty flasher (variable load) is recommended duty for this type of application

Dash "- xx" indicates package quantity

### Electro-Mechanical and Electronic Flashers

Part #	Style	Terminals	Color	Lamp Rating	Flash Rate FPM	Amp Rating
091215	A	2	Clear smoke	1-10	60-120	25
091216	A	3	Clear smoke	1-10	60-120	25
Applications for 091216: Fits most American cars, older import cars and light trucks						
091208	B	2	Red	2-12	70-120	25
091209	B	3	Clear smoke	2-12	70-120	25
Applications for 091209: Straight truck, single trailer, high flasher usage						
091210	B	2	Clear smoke	2-16	70-120	35
091211	B	3	Clear smoke	2-16	70-120	35
Applications for 091211: Straight truck, single or double trailer or any vehicle with high flasher usage						
091212	B	2	Clear smoke	2-20	70-120	45
091213	B	3	Black	2-20	70-120	45
Applications for 091213: Severe duty, double or triple trailers or vehicles where flasher is frequently used						
091214	B	3	Clear smoke	10 Lamps / Side*	60-120	25
Application for 091214: Alternating "Wig-Wag" headlight application for emergency vehicles and school buses						

\*10 lamps per side (1156, 1157) or 4 (H4651) sealed beams  
See page E16 for three wire flasher socket Part No. 090225

- Designed and tested to perform in excess of one million cycles
- 12 VDC operating range
- Audible signal indicates that flasher is activated
- Non-polarity sensitive



Style A  
electro-mechanical



Style B  
electronic

### Standard Circuit Breakers

- Copper colored battery stud provides easy identification
- "Waterproof" sealant and insert molded studs on waterproof breakers make them suitable for marine applications and trailer connections
- 12 VDC
- Meets applicable SAE J553 requirements
- Each circuit breaker includes two #10-32 nuts

Part # w/o mounting strap	Part # w/ mounting Strap	Amp
091011	091051	10
091015	091052	15
091020	091053	20
091025	091054	25
091030	091055	30
091040	091056	40
091050	091057	50



### ATM and MAXI™ Circuit Breaker

- Replacement for ATM/MINI® and MAXI™ blade type fuses
- 12 VDC, rated 5 to 30 amps
- -40°F (-40°C) to 185°F (85°C) operating temperature range
- ATM/MINI® Type II Modified Reset type breakers and MAXI™ Type I Automatic Reset type breakers meet applicable SAE J553 requirements

ATM/Mini® Part #	Maxi™ Part #	Amp
091500-3	-	5
091501	091510-10	10
091502	091511-10	15
091503	091512-10	20
091504	091513-10	25
091505	091514-10	30



### Fuse and Fuse Block

- Isolates faults in equipment such as lift trucks and other battery operated systems
- Silver plated copper link visible through a mica window

Part #	Description
091351	ANL style fuse, 300 amp
091350	Fuse block for ANL style fuses



### High Amp Circuit Breaker

- Type III switchable breaker typically used in auxiliary and accessory circuits for trucks, buses, RVs and marine applications
- Flush mount with sems nut installed
- 30 VDC
- -25°F (-32°C) to 180°F (82°C) operating temperature range
- Measures 2" x 3" overall
- Meets SAE J1625 requirements

Part #	Description
091005	60 High amp
091006	80 High amp
091007	100 High amp
091008	120 High amp
091003	150 High amp
091004	Economic 150 amp
091009	200 High amp





## CIRCUIT BREAKERS

### Universal Snap-off Blade Type Circuit Breakers

- Replacement for ATC/ATO® blade type fuses
- Color-coded for easy identification
- 12 VDC
- -40°F (-40°C) to 185°F (85°C) operating temperature range
- Type I Automatic Reset type breakers meet applicable SAE J553 requirements

Part #	Amp	Color
091076	6	Silver
091071	10	Red
091072	15	Blue
091073	20	Yellow
091074	25	Silver
091075	30	Green



## FUSES AND ACCESSORIES



AGC 1-30 / SFE 20, 30  
AGC 20, 30



ATC/  
ATO®



ATM/  
MINI®



MAXI™

### AGC, AGX and SFE Fuses

AGC Part #	AGX Part #	SFE Part #	Amp
091131-5	-	-	1
091132-5	-	-	2
091133-5	-	-	3
091135-5	-	-	5
091137-5	-	-	7 1/2
091140-5	-	-	10
091141-5	-	-	15
091142-5	See below	091171-5	20
091143-5	-	-	25
091144-5	See below	091172-5	30

### ATC/ATO®, ATM/MINI® and MAXI™ Fuses

ATC/ATO®	ATM/MINI®	MAXI™	Amp	Color
-	091300-5	-	2	Gray
091173-5	091301-5	-	3	Violet
091174-5	091302-5	-	4	Pink
091175-5	091303-5	-	5	Tan
091177-5	091304-5	-	7-1/2	Brown
091180-5*	091305-5*	-	10	Red
091181-5*	091306-5*	-	15	Blue
091182-5	091307-5*	091400-5	20	Yellow
091183-5*	091308-5*	-	25	Clear
091184-5*	091309-5*	091401-5	30	Green
-	-	091402-5	40	Orange
-	-	091403-5	50	Red
-	-	091404-5	60	Blue
-	-	091406-3	80	Natural

### AGX Fuse Assortments

Part #	Description
091251	AGX 20-30 amp assortment

Includes (2) 20 amp, (2) 25 amp and (2) 30 amp AGX fuses

### NOTES

Dash "- xx" indicates package quantity

\* In addition to display card packaging, fuses may also be ordered in bulk packs of 25 by adding a -25 to the part number



### Electrical Junction Box

- Measures 6-9/16" x 3-1/4"
- Includes all fasteners and grommets

Part #	Description
055060+	Electrical junction box



### ATC/ATO® Fuse Panel

- Accepts blade-type fuses, auto or manual reset circuit breakers
- 6 circuits, 30 amps per circuit with quick connect terminals
- No top cover needed; recessed fuse contacts provide touch-safe protection

Part #	Description
091427	ATC/ATO® fuse panel

- Black thermoplastic construction - temperature rating of -20°F (29°C) to +150°F (65°C)
- Fuses/circuit breakers sold separately



### ATC/ATO® Fuse Assortment with Combination Fuse Tester/Puller

- Assortment contains 42 ATC fuses - seven each of the six most popular fuses from 5 to 30 amps
- Reclosable heavy-duty display pkg.
- Combination fuse tester/puller tests and removes blade type and a variety of

Part #	Description
091254	Fuse assortment with tester

glass fuses



### Universal In-Line Fuse Holder

- Universal nylon twist-lock fuse holder for 1/4" x 1-1/4" AGC, AGA, AGW, AGX and SFE fuses
- 20 amp maximum load

Part #	Description
091188	Universal in-line fuse holder

- 14 gauge lead wire
- Fuse sold separately



### Heavy Duty In-Line Fuse Holder

- Nylon heavy duty fuse holder for 1/4" x 1-1/4" glass fuses
- 30 amp maximum load
- 12 gauge lead wire
- Includes one 30 amp AGC fuse installed

Part #	Description
091189	Heavy duty in-line fuse holder w/ 30 amp AGC fuse



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## FUSES AND ACCESSORIES

### Heavy Duty ATC/ATO® In-Line Fuse Holders

- Fits blade type fuses from 3 to 30 amps
- 12 gauge lead wire
- Part No. 091130 includes one 30 amp ATC fuse

Part #	Description
091190	Heavy duty ATC/ATO® in-line fuse holder w/o fuse
091130	Heavy duty ATC/ATO® in-line fuse holder w/ 30 amp ATC Fuse



### ATM/MINI® In-Line Fuse Holder with Cover

- Fits ATM/MINI® blade type fuses from 2 to 30 amps
- Cover provides protection from harsh under-the-hood environmental elements

Part #	Description
091426	ATM/MINI® In-line fuse holder with cover

- Fuse sold separately
- 12 gauge lead wire



### MAXI™ In-Line Fuse Holder with Cover

- Fits MAXI blade type fuses from 20 to 60 amps
- Cover provides protection from harsh under-the-hood environmental elements

Part #	Description
091425	MAXI In-line fuse holder with cover

- Fuse sold separately
- 8 gauge lead wire



### Add-A-Circuits

- Converts one circuit into two fuse protected circuits; plugs into fuse-block and accepts two fuses to provide protection for the existing circuit and the add-on circuit
- 10 amp maximum circuit load
- Fuse sold separately

Part #	Description
091325	ATM/MINI® Add-a-circuit
091326	ATC/ATO® Add-a-circuit



091325



091326

### Electrical Component Assortment and Spinner Display

- Assortment of popular, high running electrical components

See page R4 in Retail Merchandising



### Fuse Kits

- Convenient, pre-packaged fuse assortments save time by keeping popular sized fuses close at hand
- Multi-functional kits can be displayed on the front counter to attract the impulse sale of single fuses or used as mini storage systems to save time and money by eliminating multiple trips to the shop for additional parts

Part #	Description
091001	ATM/MINI® and MAXI fuse kit
091002	ATC/ATO®, AGC and ATM/MINI® fuse kit

- Durable, see-through plastic cases with handy "locator" cards are easy to refill for using over and over



### ATM/MINI® and MAXI™ Fuse Kit

ATM/MINI®	Qty	Amp
091300	10	2
091301	10	3
091303	10	5
091304	10	7-1/2
091305	10	10
091306	10	15
091307	10	20
091308	10	25
091309	10	30

MAXI™	Qty	Amp
091400	5	20
091401	5	30
091402	5	40
091403	5	50
091404	5	60
091406	3	80

### ATC/ATO®, AGC and ATM/MINI® Fuse Kit

AGC	Qty	Amp
091133	10	3
091135	10	5
091140	10	10
091141	10	15
091142	10	20
091144	10	30

ATM/MINI®	Qty	Amp
091303	10	5
091305	10	10
091306	10	15
091307	10	20
091308	10	25
091309	10	30

ATC/ATO®	Qty	Amp
091175	10	5
091180	10	10
091181	10	15
091182	10	20
091183	10	25
091184	10	30

#### Did you know...

Federal Motor Carrier Safety Regulation 393.95 requires every bus, truck, truck tractor and a drive-away towaway operation to carry a replacement fuse for each kind and size in the vehicle?

## TERMINALS AND CONNECTORS

### Crimp Terminals and Connectors

- One-piece construction assures maximum electrical conductivity
- Electro bright, tin-plated annealed copper construction for maximum corrosion resistance
- Injection-molded insulation allows a funnel barrel construction for easy installation and ensures a consistent wall thickness for maximum reliability after crimping
- Crimp ridge on each terminal for positive location of crimp tool on terminal barrel means fewer mis-crimps
- Open end terminal design permits easy inspection of wire
- Designed to withstand temps of -40° to +221°F (+105°C)
- Heat-shrink tubing and electrical tape available and sold separately (see pages E32, E33 and E38)



Velvac offers a wide variety of terminals and connectors. For the same application the following terminals may be available: crimp, crimp and seal, crimp/solder/seal, snap or heatless connectors

### Crimp and Seal Terminals and Connectors

Simple three step installation reduces wiring time and costs



- Heat-shrink terminals combine color-coded, heat-shrink tubing with one-piece solderless terminals to produce fast, watertight, corrosion resistance cutwire connections
- Improved mechanical performance provides improved pull-out strength and strain relief
- Designed to withstand temperatures of -67°F (-55°C) to +221°F (+150°C)
- Electrical tape and heat gun available and sold separately (see page E38)
- Resist abrasion, scoring, cut-through and the effects of long term aging
- UL approved



STEP 1: STRIP copper wire

STEP 2: INSERT wire into sealing gel. Rotate to coat wire

STEP 3: RE-INSERT wire until insulation contacts connector. CRIMP connector



### Crimp/Solder/Seal Terminals and Connectors

- Pre-inserted solder terminals reduce installation time and increase efficiency, while achieving the benefits of both crimp terminals and solder terminals
- Each terminal contains solder for increased strength and conductivity
- Adhesive-lined heat shrink tubing seals out moisture and contaminants
- Wire gauge is printed on each connector for easy ID

### Heatless Terminals and Connectors-Revolutionary New Product

- A heatless, solder-less terminal utilizing a revolutionary anaerobic sealing technology requires NO HEAT
- Simply strip the wire and crimp, activating the sealant that reacts when the copper wire is inserted into the connector to create an environmentally sealed connection
- Easily installs in a fraction of the time of comparable heat seal connectors
- Prevents the ingress of moisture and air that can result in corrosion
- Nylon insulation provides maximum abrasion and puncture resistance while remaining seamless
- Reduces overall installation costs by eliminating the need for torches or heat guns, reducing the installation time and improving productivity



## TERMINALS AND CONNECTORS

### Butt Splices

#### Crimps



Part #	Wire Gauge	Insulation
056051-50*	22-18	Vinyl-butted
057085-50	22-18	Nylon-smls**
056052-50*	16-14	Vinyl-butted
057086-50*	16-14	Nylon-smls**
056053-50*	12-10	Vinyl-butted
057087-50*	12-10	Nylon-smls**

#### Brazed seam



Part #	Wire Gauge	Insulation
056054-10	8	Vinyl
056055-10	6	Vinyl
056056-10	4	Vinyl
055106-10	22-18	Nylon
055107-10	16-14	Nylon
055108-10	12-10	Nylon



Part #	Wire Gauge	Insulation
058362-50*	22-18	None
058028-50*	16-14	None
058029-50*	12-10	None

#### Crimp/Solder/Seal



Part #	Wire Gauge	Insulation
056144-25	22-18	Heat shrink
056145-25	16-14	Heat shrink
056146-25	12-10	Heat shrink

#### Crimp/Seal



Part #	Wire Gauge	Insulation
055067-10	26-22	Nylon
058312-50*	22-18	Heat shrink
055075-10	22-18	Nylon & copper
055075-50	22-18	Nylon & copper
058313-40*	16-14	Heat shrink
055076-10	16-14	Nylon & copper
055076-50	16-14	Nylon & copper
058314-40*	12-10	Heat shrink
055077-10	12-10	Nylon & copper
055077-50	12-10	Nylon & copper
055068-10	8	Nylon

#### Heatless



Part #	Wire Gauge	Insulation
056111-5	22-18	Nylon
056111-100	22-18	Nylon
056112-5	16-14	Nylon
056112-100	16-14	Nylon
056113-5	12-10	Nylon
056113-100	12-10	Nylon

#### Step Down Splices



Part #	Wire Gauge	Tube Color
055069-10	22-18/16-14	Blue
055070-10	16-14/12-10	Yellow
055071-10	12-10/8	Pink

#### NOTES

Dash - "x" indicates package qty

\* Clam shell with quantity of ten (10) also available by adding "-10" to the base six digit number

\*\* Seamless

#### Helpful hint:

Terminal insulation is color-coded according to wire gauge specifications:

Red 22 - 18 AWG, 8 AWG

Blue 16 - 14 AWG, 6 AWG

Yellow 12 - 10 AWG, 4 AWG





## TERMINALS AND CONNECTORS

### Spade Connectors



Crimp

Block spade

Crimp/Seal

Wire Gauge	Crimp Part #	Stud Size, Insulation	Crimp Part #	Stud Size, Insulation
22-18	056043-50	8-10, Vinyl	056046-50	4-6, Vinyl
22-18	-	-	058345-50	6, Nylon
22-18	-	-	055114-10	6, Nylon
22-18	-	-	055115-10	10, Nylon
16-14	056044-50	8-10, Vinyl	056047-50*	4-6, Vinyl
16-14	057082-50	8-10, Nylon	057084-50	4-6, Nylon
16-14	-	-	055125-10	10, Nylon
12-10	056045-50	8-10, Vinyl	055135-10	10, Nylon
12-10	057083-50	8-10, Nylon	-	-

Part #	Wire Gauge	Stud Size
058309-50	22-18	8-10
055078-10	22-18	6
055079-10	22-18	10
058335-50	16-14	6
058310-50	16-14	8-10
058336-50	16-14	1/4"
055080-10	16-14	6
055081-10	16-14	10
058311-50	12-10	8-10
058337-50	12-10	1/4"
055082-10	12-10	10
055083-10	12-10	1/4"

### Crimp/Solder/Seal

Part #	Wire Gauge	Stud Size
056155-25	22-18	10
056156-25	16-14	10
056157-25	12-10	10



### Snap Terminals and Connectors

Plugs -  
butted seam



Receptacles -  
butted



Spades -  
butted



Receptacles -  
double



Wire Gauge	Part #	Snap Dia. Insulation	Part #	Snap Dia. Insulation	Part #	Stud Size Insulation	Part #	Snap Dia. Insulation
22-18	058338-50	0.156", Nylon	056076-50	0.156", Nylon	-	-	056080-50	0.157", Vinyl
16-14	058340-50*	0.156", Nylon	056078-50	0.156", Nylon	057092-50	8, Vinyl	-	-

### Male/Female Bullet Connections

Part #	Wire Gauge	Type	Insulation
055104-10	16-14	Male	Nylon
055105-10	16-14	Female	Nylon
055116-10	22-18	Male	Nylon

Part #	Wire Gauge	Type	Insulation
055117-10	22-18	Female	Nylon
055126-10	16-14	Male	Nylon
055127-10	16-14	Female	Nylon



### Ring Tongue Connectors



Butted seam

#### Crimp

Wire Gauge	Crimp Part #	Stud Size, Insulation	Wire Gauge	Crimp Part #	Stud Size, Insulation
22-18	056001-50	4-6, Vinyl	16-14	055121-10	10, Nylon
22-18	056002-50	8-10, Vinyl	16-14	055122-10	1/4", Nylon
22-18	056003-50	12-1/4", Vinyl	16-14	055123-10	5/16", Nylon
22-18	055109-10	6, Nylon	16-14	055124-10	3/8", Nylon
22-18	055110-10	10, Nylon	12-10	056008-50*	8-10, Vinyl
22-18	055111-10	1/4", Nylon	12-10	057079-50	8-10, Nylon
22-18	055112-10	5/16", Nylon	12-10	056009-50*	12-1/4", Vinyl
22-18	055113-10	3/8", Nylon	12-10	057080-50	12-1/4", Nylon
16-14	056004-50	4-6, Vinyl	12-10	056010-50	5/16", Vinyl
16-14	056005-10	8-10, Vinyl/Blue	12-10	057081-50	5/16", Nylon
16-14	057075-50	4-6, Nylon	12-10	056011-50*	3/8", Vinyl
16-14	057076-50*	8-10, Nylon	12-10	056012-50	7/16"-1/2", Vinyl
16-14	056006-50*	12-1/4", Vinyl	12-10	055130-10	10, Nylon
16-14	057077-50	12-1/4", Nylon	12-10	055131-10	1/4", Nylon
16-14	056007-50*	5/16"-3/8", Vinyl	12-10	055132-10	5/16", Nylon
16-14	057078-50	5/16"-3/8", Nylon	12-10	055133-10	3/8", Nylon
16-14	055120-10	6, Nylon	12-10	055134-10	1/2", Nylon

#### Hooked tongue - butted seam

Wire Gauge	Crimp Part #	Stud Size, Insulation
16-14	056049-50	4-6, Vinyl
16-14	056050-50	4-6 Vinyl



#### Brazed seam

Wire Gauge	Crimp Part #	Stud Size, Insulation
8	058349-50	8-10, Nylon
8	058350-50	12-1/4", Nylon
8	058351-50	5/16"-3/8", Nylon
8	058352-50	7/16"-1/2", Nylon
6	058353-50	12-1/4", Nylon
6	058354-50	5/16"-3/8", Nylon
6	058355-50	7/16"-1/2", Nylon
4	058356-50	12-1/4", Nylon
4	058357-50	5/16"-3/8", Nylon
4	058358-50	7/16"-1/2", Nylon



#### NOTES

Dash - "x" indicates package qty

\* Clam shell with quantity of ten (10) also available by adding "-10" to the base six digit number

## TERMINALS AND CONNECTORS

### Ring Tongue Connectors

Crimp/Seal



Part #	Wire Gauge	Stud Size
058334-50	22-18	6
058301-50	22-18	8-10
055064-10	22-18	6, 8, 10
055084-10	22-18	6
055085-10	22-18	8
055086-10	22-18	10
055087-10	22-18	1/4"
055088-10	22-18	5/16"
058302-50	16-14	4-6
058303-50	16-14	8-10
058304-50	16-14	1/4"
058305-50	16-14	5/16"-3/8"
055065-10	16-14	6, 8, 10

Crimp/Solder/Seal



Part #	Wire Gauge	Stud Size
056147-25	22-18	10
056149-25	16-14	1/4"
056150-25	16-14	3/8"
056151-25	12-10	10
056152-25	12-10	1/4"
056153-25	12-10	3/8"
056154-25	12-10	1/2"

### Three and Four Way Connectors

Three-way  
butted



Four-way  
butted



Wire Gauge	Four-Way #	Insulation	Three-Way #	Insulation
22 - 18	058346-10	Vinyl	058363-10	Vinyl
16 - 14	056084-10	Vinyl	056082-10	Vinyl
12 - 10	-	-	056083-10	Vinyl



Self strip connector

Part #	Wire Gauge
056093-50*	18-14
056094-10	12-10 Run, 18-14 Tap

### Pig Tails



Wire Gauge	Part #	Insulation
22 - 18	056184-50*	Nylon
16 - 14	056185-50*	Nylon
12 - 10	056186-50*	Nylon

### Wire Nuts



Part #	Size	Color
058364-50	71B	Grey
058365-50	72B	Blue
058366-40	73B	Orange
058367-10	74B	Yellow

### NOTES

Dash - "x" indicates package quantity

\*Clam shell with quantity of ten (10) also available by adding "-10" to the base six digit number

## TERMINALS AND CONNECTORS

### Male Quick Slide Terminals And Connectors - Tab Width .250"

#### Crimp



Part #	Wire Gauge	Insulation
056069-50	22-18	Nylon
055098-10	22-18	Nylon
056070-50	16-14	Nylon
055100-10	16-14	Nylon
056071-50	12-10	Nylon
055102-10	12-10	Nylon
056063-50	22-18	Vinyl
056064-50*	16-14	Vinyl
057090-50	16-14	Nylon
056065-50*	12-10	Vinyl
057091-50	12-10	Nylon

#### Crimp/Seal



Part #	Wire Gauge	Insulation
058315-40	22-18	Ht Shrink
058316-40	16-14	Ht Shrink
058317-10	12-10	Ht Shrink
055118-10	22-18	Nylon
055128-10	16-14	Nylon
055136-10	12-10	Nylon

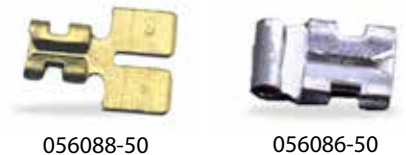
#### Crimp/Solder/Seal



Part #	Wire Gauge	Insulation
056169-25	22-18	Vinyl
056159-25	16-14	Vinyl
056164-25	12-10	Vinyl

#### Crimp (not insulated)

Part #	Description
056088-50	Double male to female
056086-50	90° Flag butted seam



### Female Quick Slide Terminals And Connectors - Tab Width .250"

#### Crimp



Part #	Wire Gauge	Insulation
056066-50	22-18	Nylon
055099-10	22-18	Nylon
056067-50*	16-14	Nylon
055101-10	16-14	Nylon
056068-50*	12-10	Nylon
055103-10	12-10	Nylon
058347-40	22-18	Nylon

Part #	Wire Gauge	Insulation
057096-40	16-14	Nylon
058348-40	12-10	Nylon
056060-50	22-18	Vinyl
056061-50*	16-14	Vinyl
057088-50*	16-14	Nylon
056062-50*	12-10	Vinyl
057089-50	12-10	Nylon

#### Crimp/Seal



Part #	Wire Gauge	Insulation
058318-50	22-18	Ht Shrink
055119-10	22-18	Nylon
058319-50	16-14	Ht Shrink
055129-10	16-14	Nylon
058320-10	12-10	Ht Shrink
055137-10	12-10	Nylon

#### Crimp/Solder/Seal

Part #	Wire Gauge	Insulation
056165-25	22-18	Ht Shrink
056166-25	16-14	Ht Shrink
056167-25	12-10	Ht Shrink

Part #	Wire Gauge	Insulation
056168-25	22-18	Vinyl
056158-25	16-14	Vinyl
056160-25	12-10	Vinyl



#### NOTES

Dash "x" indicates package qty

\* Clam shell with quantity of ten (10) also available by adding "-10" to the base six digit number

## TERMINALS AND CONNECTORS

### Terminal Kits

- Durable, see-through plastic cases with handy "locator" cards are easy to identify and refill
- Multi-functional kits can be displayed on the front counter to attract the impulse sale of single terminals or used as mini storage system

Part #	Description
056107	Solderless terminal kit
056108	Heat-shrink terminal kit
056109	Electrical connector kit

- Convenient, pre-packaged terminal assortments



### Solderless Terminal Kit

- 195 total fittings

Part #	Description	Qty.
057085	22-18 ga. Butt conn	12
057086	16-14 ga. Butt conn	12
057087	12-10 ga. Butt conn	12
056002	22-18 ga. Ring tongue	12
056005	16-14 ga. Ring tongue	12
056011	12-10 ga. Ring tongue	12
056043	22-18 ga. Spade tubing	12
056044	16-14 ga. Spade	12
056045	12-10 ga. Spade	12
057061	16-14 ga. Shrink tubing	5
057062	12-10 ga. Shrink tubing	5
057149	22-18 ga. Shrink tubing	5
056061	16-14 ga. F. quick	12
056062	12-10 ga. F. quick	12
056064	16-14 ga. M. quick	12
056065	12-10 ga. M. quick	12
058340	16-14 ga. Snap plug	12
056078	16-14 ga. Snap plug	12

### Heat Shrink Terminal Kit

- 132 total fittings

Part #	Description	Qty.
058312	22-18 ga. Butt conn	8
058313	16-14 ga. Butt conn	8
058314	12-10 ga. Butt conn	8
058309	22-18 ga. spade	8
058310	16-14 ga. spade	8
058311	12-10 ga. spade	8
058302	16-14 ga. Ring tongue	8
058303	16-14 ga. Ring tongue	8
058304	16-14 ga. Ring tongue	8
058305	16-14 ga. Ring tongue	8
058306	12-10 ga. Ring tongue	8
058308	12-10 ga. Ring tongue	8
058315	22-18 ga. F. quick slide	6
058316	16-14 ga. F. quick slide	6
058317	12-10 ga. F. quick slide	6
058318	22-18 ga. F. quick slide	12
058319	16-14 ga. F. quick slide	6
058320	12-10 ga. F. quick slide	6

### Electrical Connector Kit

- 170 total fittings

Part #	Description	Qty.
056051	22-18 ga. Butt conn	12
056052	16-14 ga. Butt conn	12
056053	12-10 ga. Butt conn	12
021007	3/8" tube O.D. clip	6
056091	22-14 ga. Pigtail	15
056093	18-14 Tap	10
056002	22-18 Ring tongue	12
056005	16-14 Ring tongue	12
056008	12-10 Ring tongue	12
021009	1/2" tube O.D. tube clip	6
056092	18-10 ga. Pigtail	15
056094	12-10 run 18-14 tap	10
056043	22-18 Spade	12
056044	16-14 ga. Spade	12
056045	12-10 ga. Spade	12

### Solderless Terminal Fleet Maintenance Kit

- Packaged in a heavy-duty steel box with 20 popular styles of solderless terminals and nylon tie straps

Part #	Description
056096	Kit with crimping tool
056097	Kit without crimping tool



NOTE: Terminals also sold separately on pages E24-E28. Tie straps sold separately on page E35. Crimping tool sold separately on page E37

Part #	Qty.	Part #	Qty.
056002	20	056044	20
056004	20	056047	20
056005	20	058340	20
056006	20	056078	20
056061	20	056093	20
056064	20	056050	20
056067	20	056051	20
056070	20	056052	20
056009	20	056053	20
056011	20	056186	20
056014	20		



## PRIMARY WIRE AND ACCESSORIES

### General Purpose Primary Wire

- Soft annealed copper strands
- PVC outer jacket
- Designed to withstand temperatures up to +250°F
- Wire meets SAE J1128 Type GPT requirements



Part #	Wire Gauge	Spool Size	Color
051101	18	100'	Black
051103	18	100'	Red
051105	18	100'	White
051117-6	16	1000'	Black
051121-6	16	1000'	Red
051123-6	16	1000'	White
051119-6	16	1000'	Green
051117	16	100'	Black
051121	16	100'	Red
051123	16	100'	White
051125	16	100'	Yellow
051127	16	100'	Blue
051129	16	100'	Brown
051119	16	100'	Green
051135-6	14	1000'	Black
051139-6	14	1000'	Red
051141-6	14	1000'	White
051143-6	14	1000'	Yellow
051145-6	14	1000'	Blue
051147-6	14	1000'	Brown
051137-6	14	1000'	Green
051135	14	100'	Black
051139	14	100'	Red
051141	14	100'	White

Part #	Wire Gauge	Spool Size	Color
051143	14	100'	Yellow
051145	14	100'	Blue
051147	14	100'	Brown
051137	14	100'	Green
051157-7	12	500'	Red
051159-7	12	500'	White
051161-7	12	500'	Yellow
051163-7	12	500'	Blue
051155-7	12	500'	Green
051153	12	100'	Black
051157	12	100'	Red
051159	12	100'	White
051161	12	100'	Yellow
051163	12	100'	Blue
051165	12	100'	Brown
051155	12	100'	Green
051175-7	10	500'	Black
051171-7	10	500'	Red
051177-7	10	500'	White
051175	10	100'	Black
051171	10	100'	Red
051177	10	100'	White
051173	10	100'	Blue



### Primary Wire Rack

- Holds (12) 100' spools, (8) 100' and (2) 1000' spools or (4) 1000' spools

*See page R9 in Retail Merchandising*

## SPIRAL WRAP

100' Coil	Diameter
020078	1.25"
020079	1.50"
020080	2"

### NOTES

See page A8 for 3-in-1 and 4-in-1 air/electrical assemblies

- Replace worn or damaged 3-in-1 or 4-in-1 air/electrical assembly wrap
- Use to protect or bundle jumper lines, slider hoses, ABS lines, hydraulic hoses and more
- Prevents tangling and potential damage to lines
- Various sizes allow for customized bundle combinations
- The 1.50" replaces the wrap used on Velvac's 3-in-1



## SPLIT LOOM

### Convuluted Split Loom

- High temperature loom suitable for engine compartment use
- Split seam permits easy insertion and repair of wire, tubing, cable, etc.
- Convuluted black nylon allows for excellent pinch and abrasion resistance
- Designed to withstand temperatures from -40° to +200°F
- Meets FMVSS 302 requirements
- 057225, 057226, and 057227 tool makes inserting wire into split loom much more faster and easier in the hands. A simple swipe of the hands and several feet of wire is inserted.

100' Coil	250' Coil	Loom I.D.
020104-7	020104	1/4"
020106-7	020106	3/8"
020108-7	020108	1/2"
020110-7	020110	5/8"
020112-7	020112	3/4"
020116-7	-	1"
020117-7	-	1-1/4"
020118-7	-	1-1/2"
020119-7	-	1-7/8"

100' Coil	Split Loom Size
057225	1/4"
057226	3/8"-1/2"
057227	3/4"+

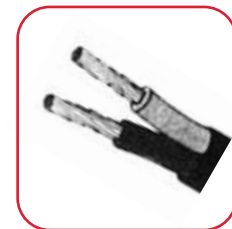


Shop it next time you're in!

## PRIMARY WIRE AND ACCESSORIES

### Gray Jacketed Parallel Wire

Part #	Wire Gauge	Spool Size
051050	16	100'
051058	14	100'
051066	12	100'
051050-7	16	500'
051058-7	14	500'





## PRIMARY WIRE AND ACCESSORIES

### Three-Way and Four-Way Bonded Parallel Wire\*

Part #	Wire Gauge	Conductor	Wire Color	Spool Size
051052	16	Three	Brown-Green-Yellow	100'
051060	14	Three	Brown-Green-Yellow	100'
051054	16	Four	Brown-Green Yellow-White	100'
051062	14	Four	Brown-Green Yellow-White	100'

#### NOTES

See page E8 for ATA color code description

\* Round wire glued together



## HEAT-SHRINK TUBING

### Heavy Wall Heat-Shrink Tubing With Liner

- Durable polyolefin construction
- Inner liner melts to produce a flexible, waterproof seal for the life of the connection
- UL Listed/CSA certified in direct buried applications
- Flame retardant
- 3:1 shrink ratio
- See page E38 for heat gun - recommended heat range is 250°F (120°C) to 485°F (250°C)



Part #	Wire Gauge	Length	I.D. Pre-Shrink	I.D. After
057146-10	18-14	6"	.300"	.100"
057148-5	18-14	48"	.300"	.100"
057058-10	14-6	6"	.400"	.150"
057159-5	14-6	48"	.400"	.150"
057059-10	8-1	6"	.750"	.200"
057150-25	8-1	1-1/2"	.750"	.200"
057152-2	8-1	48"	.750"	.200"
057060-10	2-4/0	6"	1.100"	.375"
057097-25	2-4/0	1-1/2"	1.100"	.375"
057160-2	2-4/0	48"	1.100"	.375"

#### NOTES

See next page for more heavy wall heat-shrink tubing with liner

## HEAT-SHRINK TUBING

### Heavy Wall Heat-Shrink Tubing With Liner

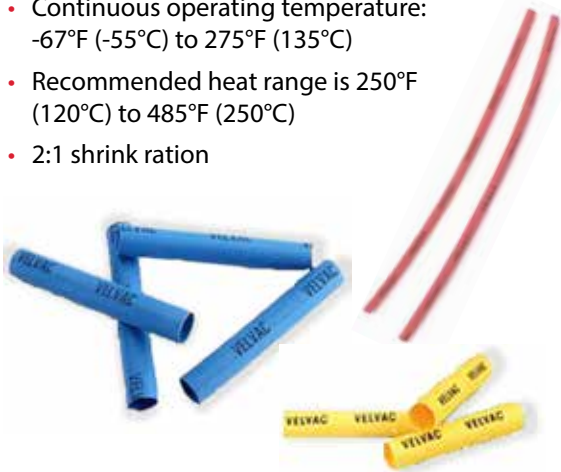
- Durable polyolefin construction
- Inner liner melts to produce a flexible, waterproof seal for the life of the connection
- UL Listed/CSA certified in direct buried applications
- Flame retardant
- 3:1 shrink ratio
- See page E38 for heat gun - recommended heat range is 250°F (120°C) to 485°F (250°C)



Part #	Wire Gauge	Length	I.D. Pre-Shrink	I.D. After
057147-10	18-14	6"	.300"	.100"
057158-10	14-6	6"	.400"	.150"
057073-10	8-1	6"	.750"	.220"
057151-25	8-1	1-1/2"	.750"	.220"
057153-2	8-1	48"	.750"	.220"
057074-10	2-4/0	6"	1.100"	.375"
057098-25	2-4/0	1-1/2"	1.100"	.375"
057174-2	2-4/0	48"	1.100"	.375"

### Thin Wall Heat-Shrink Tubing Without Liner

- Durable polyolefin construction
- UL recognized and flame retardant
- Continuous operating temperature: -67°F (-55°C) to 275°F (135°C)
- Recommended heat range is 250°F (120°C) to 485°F (250°C)
- 2:1 shrink ration



Part #	Wire Gauge	Length	Color	I.D. Pre-Shrink	I.D. After
057061-25	16-14	2"	Blue	.250"	.125"
057062-25	12-10	2"	Yellow	.375"	.187"
057149-25	22-18	6"	Red	.125"	.062"
057112-10	-	6"	Black	.190"	.093"
057113-10	-	6"	White	.250"	.125"
057114-10	-	6"	Red	.375"	.187"
057115-10	-	6"	Black	.500"	.250"
057116-10	-	6"	White	.750"	.370"
057117-10	-	6"	Red	1.00"	.500"

NOTES: Dash - "x" indicates package quantity

### Thin Wall Heat-Shrink Tubing

- Disk packaging for convenient storage and waste reduction
- Packaged for showroom display and impulse buying
- Available in three colors corresponding to NEMA color-codes
- Easily fits in toolbox

Part #	Description
057131	3/16" I.D., Red
057132	1/4" I.D., Blue
057133	5/16" I.D., Yellow

Packaged in 8' rolls - one roll per disk pack



## HEAT-SHRINK TUBING

### Heat-Shrink Tubing Kits

- Convenient, pre-packaged tubing assortments save time by keeping popular sized tubing in 6" lengths close at hand
- Durable, see-through plastic cases with handy "locator" cards are easy to find items and refill

Part #	Description
057110	Heavy wall heat-shrink tubing kit
057111	Thin wall heat-shrink



057110

### Heavy Wall Heat-Shrink Tubing Kit

- 36 total pieces

Part #	Pieces	Description
057060	4 pcs	1.10" Black
057059	4 pcs	.750" Black
057058	10 pcs	.400" Black
057074	4 pcs	1.10" Red
057073	4 pcs	.750" Red
057158	10 pcs	.400" Red

### Thin Wall Heat-Shrink Tubing Kit

- 86 total pieces

Part #	Pieces	Description
057112	36 pcs	3/16" Black
057113	24 pcs	1/4" White
057114	12 pcs	3/8" Red
057115	6 pcs	1/2" Black
057116	4 pcs	3/4" White
057117	4 pcs	1" Red

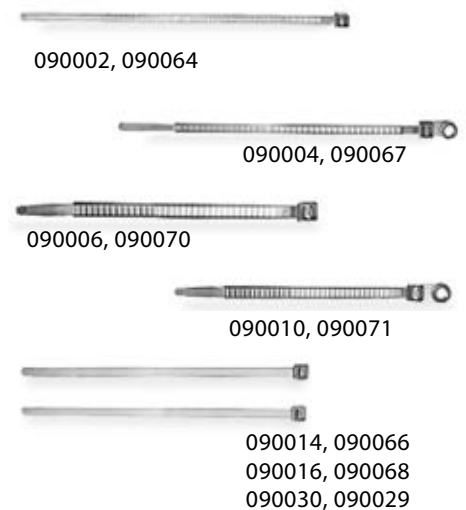


057111

## TIE STRAPS, GROMMETS AND WIRE CLIPS

### Cable Tie Straps

Stand. Part #	BK UV Tie Part #	Length	Min. Diam	Max. Diam	Min Ten. Strength	Stud Size
090002-100	090064-100	5"	1/16"	1-1/4"	30 lb	-
090004-100	090067-100	7"	1/16"	1-3/4"	50 lb	10
090006-25	090070-25	14"	3/16"	4"	120 lb	-
090010-25	090071-25	14"	3/16"	4"	120 lb	14
090014-100	090066-100	7"	1/16"	1-3/4"	50 lb	-
090016-100	090068-100	14"	1/16"	4"	50 lb	-
-	090030-50	24"	-	-	175 lb	-
-	090029-50	36"	-	-	175 lb	-



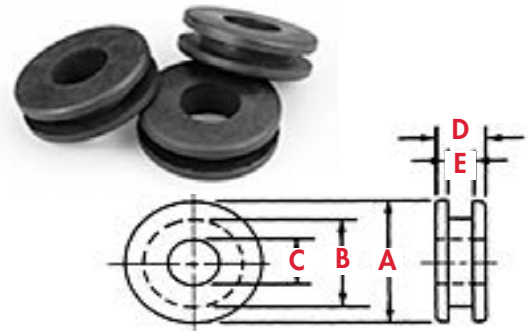
#### NOTES

Dash "-xxx" indicates package quantity

## TIE STRAPS, GROMMETS AND WIRE CLIPS

### Rubber Grommets

Part #	A	B	C	D	E
021059	9/16"	7/16"	5/16"	3/16"	1/16"
021061	1-3/8"	1"	1/2"	1/2"	1/8"
021063	1-1/4"	31/32"	5/8"	3/8"	1/8"
021065	1-3/4"	1-3/16"	3/4"	1/2"	7/32"



### Nylon Grommet



- Provides protection for 16, 14 and 12 gauge wires
- Fits into a 3/8" diameter mounting hole with wall thickness up to 1/8"

Part #	Description
021070	Nylon grommet

### Tube Clips



- Zinc-plated steel construction for corrosion resistance
- Rubber coating protects tubing and wires

Part #	Tube O.D.	Mounting Bolt Size
021001	3/16"	1/4"
021003	1/4"	1/4"
021005	5/16"	1/4"
021007	3/8"	1/4"
021009	1/2"	1/4"
021011	5/8"	1/4"
021013	3/4"	3/8"
021015	7/8"	1/4"
021017	1"	1/4"
021019	1-1/4"	5/16"

### Wire Clips



- Spring tension clips are ideal for holding primary wire to truck frame
- Tips are vinyl coated for wire protection

Part #	Description
021021	1/4" Wire clip
021023	1/2" Wire clip

### Rubber Cushioned Clamps



Clamp Diam.	3/8" Mount Screw, 5/8" Wide Part #	1/4" Mount Screw, 1/2" Wide Part #
1/4"	021102	021114
3/8"	021103	021115
1/2"	021104	021116
5/8"	021100	021117

Clamp Diam.	3/8" Mount Screw, 5/8" Wide Part #	1/4" Mount Screw, 1/2" Wide Part #
3/4"	021105	021118
1"	021106	021119
1-1/4"	021107	-
1-1/2"	021108	-
2"	021109	-
2-1/2"	021110	-
3"	021111	-
4"	021112	-
5"	021113	-

### Work Lights

- Incandescent light includes grounded metal swing-open bulb guard and 25' 16/3 outdoor all-weather power cord (cord remains flexible in sub-zero temperatures to -20°F)
- For use with up to 75 watt standard incandescent bulb (not included)
- Metal hanging hook
- On/Off switch, grounded three prong outlet and 13 amp resettable circuit breaker built into handle
- For use with up to 75 watt standard incandescent bulb (not included)

Part #	Description
057123	Work light



### Deluxe Crimping Tool

- Crimps terminals ranging in size from 26 to 6 gauge
- Five popular sized bolt cutting stations cleanly cut mild steel and nonferrous material

Part #	Description
058026+	Deluxe crimping tool



### Copper Cable Cutter

- Capable of cutting up to 1" diameter copper stranded electrical cable
- 13" long steel handles with vinyl hand grips

Part #	Description
057072+	Copper cable cutter



### Economy Crimping Tool

- Accepts 8 through 4/0 gauge terminals, connectors, lugs
- Hammer required for operation

Part #	Description
058030	Economy crimping tool



### Heavy-Duty Crimping Tool

- For crimp-type terminals from 6 to 4/0 gauge
- Rotating, letter-coded crimping die
- Reference guides on handles for proper die settings

Part #	Description
058171+	Heavy-duty crimping tool
058172	Replacement left jaw
058173	Replacement right jaw



### Compact Cable Cutter

- Designed to cut copper wire and cable up to 4/0 gauge

Part #	Description
057071+	Compact cable cutter



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## SHOP TOOLS AND ACCESSORIES

### Heat Gun

- Produces temperatures from 750° to 1100°F
- Built-in circuit breaker and three position switch (Hot/Off/Fan only)

Part #	Description
058160	Heat gun



### Triple Outlet All-Weather Extension Cord

- Heavy duty power block at female end with resettable 15 amp circuit breaker and three grounded outlets

Part #	Description
057128	50' Extension cord

- 50' 12/3 high visibility yellow cord rated at 15 amps, 125 VDC



### General Purpose Vinyl Electrical Tape

- Rated to 176°F (80°C)
- Meets UL510 requirements for UV resistance

Part #	Tape Thickness	Roll Size
058382	7 mil	3/4" x 60'

- UL listed 539H and meets Canadian Standards Association LR48769



### 50' Cord Reel

- Retractable 50' 14/3 yellow cord rated at 13 amps, 125 VDC to -40°
- Heavy duty cord includes heavy duty power block with built-in resettable 13 amp circuit breaker and three grounded outlets
- All hardware included

Part #	Description
057127	50' Cord reel

- Industrial/commercial grade auto ratcheting plastic alloy reel housing with built-in carrying handle
- Includes quick release wall/ceiling mounting bracket for portability



### Silicon Self-Fusing Tape

- Tape self fuses and cures in 24 hours to form a permanent moisture tight seal
- Has no adhesive lining leaving the application clean with no sticky residue
- Provides high tech alternative to heat shrink tubing
- Ideal for high temperature applications such as battery terminals

Part #	Color	Description
058380*	Black	Self-fusing tape
058381*	Red	Self-fusing tape

\*Add -4 to the part number for 10 piece bucket display in Retail section

- High dielectric strength
- Temperature range: -85° to +500°F
- Packaged in clamshell, 1" wide, 20' long rolls (qty 1 per clamshell)



**OUR PARTS PUT YOU IN THE PASSING LANE**

# **FITTINGS & HARDWARE**

## **Precision engineered.**

Velvac offers one of the most comprehensive fittings lines in the industry. From push-lock fittings with an engineered tube retention system and seal design for superior holding and side load retention capabilities, to more traditional brass male and female fittings, Velvac has you covered.

- Corrosion resistant
- Heavy gauge to exceed SAE torque requirements
- Extended diameter range



# FITTINGS & HARDWARE

## PUSH-LOCK AIR BRAKE FITTINGS

- Designed for use with SAE J844 nylon tubing
- DOT 49 CFR § 571.106 compliant high strength composite fittings offer weight savings over all brass style fittings currently being used by many OE vehicle manufacturers
- Fittings meet performance requirements as stated in SAE J1131\*
- Operating temperatures from -45°F to +140°F
- Maximum operating pressure 145 psi
- Elbows and male branch fittings with built-in swivel for positioning
- Engineered tube retention system and seal design for superior holding and side load retention
- Positive release bushing for easy insertion and removal of tubing
- Thread sealant applied to all male pipe threads to reduce installation time and expense

\* Indicates parts that DO NOT meet DOT or SAE specification for air brake applications

### WARNING!

Velvac's line of push-lock brake fittings and tubing are designed only for use in vehicles where air is utilized as the operating fluid. As such, Velvac's push-lock air brake fittings should only be used in a manner consistent with the manufacturer's specifications.

Using Velvac's push-lock fittings or tubing improperly or in a manner inconsistent with the manufacturer's specifications may result in serious injury or property damage. For example, Velvac's push-lock fittings and tubing are not intended for use in environments exceeding 145 psi and only for temperatures between -45°F and +140°F. Velvac push-lock fittings and tubing are intended for use only as defined in 49 CFR § 571.106.

Further, the U.S. Department of Transportation prohibits the use of push-lock fittings and nylon tubing as a connection between (I) a semi-tractor & trailer, or (II) a drive shaft and chassis.

**NOTE: 1/8" push-lock fittings DO NOT meet DOT or SAE specifications for air brake applications.**

**Note: Part numbers listed in RED are NEW!**

### 90° Male Swivel Elbows (Sealant applied)

- Composite body with brass pipe-fitting end



Part #	Tube Size	Pipe Size
016212**	1/8"	1/8"
016214**	1/8"	1/4"
016222+	5/32"	1/8"
016270+	5/32"	1/4"
016271+	3/16"	1/8"
016242+	1/4"	1/8"
016244+	1/4"	1/4"
016246+	1/4"	3/8"
016254+	1/4"	1/2"
016262+	3/8"	1/8"
016264+	3/8"	1/4"
016266+	3/8"	3/8"
016268+	3/8"	1/2"
016284+	1/2"	1/4"
016286+	1/2"	3/8"
016288+	1/2"	1/2"
016278+	5/8"	3/4"
016279+	5/8"	3/8"
016281+	5/8"	1/2"
016276+	3/4"	1/2"
016277+	3/4"	3/4"

### Union Tees

- Composite body



Part #	Tube Size
016910**	1/8"
016920+	5/32"
016930**	3/16"
016940+	1/4"
016960+	3/8"
016980+	1/2"
016985+	1/2 x 1/2 x 3/8"
016982+	5/8"
<b>016989+</b>	<b>3/8" x 3/8" x 1/4"</b>

### 45° Male Swivel Elbows (Sealant applied)

- Composite body with brass pipe-fitting end



Part #	Tube Size	Pipe Size
016412**	1/8"	1/8"
016451+	5/32"	1/8"
016442+	1/4"	1/8"
016444+	1/4"	1/4"
016446+	1/4"	3/8"
016452+	3/8"	1/8"
016464+	3/8"	1/4"
016466+	3/8"	3/8"
016947+	3/8"	1/2"
016453+	1/2"	1/4"
016486+	1/2"	3/8"
016950+	1/2"	1/2"
016454+	5/8"	3/8"
016450+	5/8"	1/2"
016455+	5/8"	3/4"
016456+	3/4"	3/8"
016457+	3/4"	1/2"

### Union 'Y'

- Composite body



Part #	Tube Size
016289+	1/4 x 1/4 x 1/4"
016291+	1/4 x 1/4 x 3/8"
016290+	3/8 x 3/8 x 3/8"

# FITTINGS & HARDWARE

## PUSH-LOCK AIR BRAKE FITTINGS

### Bulkhead Unions

- Brass construction



Part #	Tube Size
016810**	1/8"
016840+	1/4"
016860+	3/8"
016880+	1/2"

### 'Y' Male Branches

- Composite body



Part #	Tube Size	Thread Size
016294+	1/4"	1/4"
016295+	3/8"	1/4"

### Male Connectors

(Sealant supplied)



Part #	Tube Size	Pipe Size
016110**	1/8"	1/16"
016112**	1/8"	1/8"
016114**	1/8"	1/4"
016120+	5/32"	1/16"
016122+	5/32"	1/8"
016124+	5/32"	1/4"
016121**	3/16"	1/8"
016142+	1/4"	1/8"
016144+	1/4"	1/4"
016146+	1/4"	3/8"
016162+	3/8"	1/8"
016164+	3/8"	1/4"
016166+	3/8"	3/8"
016168+	3/8"	1/2"
016184+	1/2"	1/4"
016186+	1/2"	3/8"
016188+	1/2"	1/2"
016951+	3/4"	1/2"
016161+	3/4"	3/4"
016163+	5/8"	3/8"
016189+	5/8"	1/2"
016187+	3/4"	3/8"

### Full Unions

- Composite body



Part #	Tube Size A	Tube Size B
016610**	1/8"	1/8"
016620+	5/32"	5/32"
016630**	3/16"	3/16"
016640+	1/4"	1/4"
016660+	3/8"	3/8"
016680+	1/2"	1/2"
016670+	5/8"	5/8"
016621+	3/4"	3/4"
016623**	5/32"	1/4"
016622+	1/4"	3/8"
016624+	3/8"	1/2"

### Male Run Tees

(Sealant applied)

- Brass/composite



Part #	Tube Size	Pipe Size
016400+	1/4"	1/8"
016401+	1/4"	1/4"
016402+	3/8"	1/4"
016403+	3/8"	3/8"
016404+	3/8"	1/2"
016405+	1/2"	3/8"
016406+	1/2"	1/2"
016407+	5/8"	1/2"
016409+	1/4"	3/8"
016410+	1/4"	1/2"

### Female Bulkhead Connectors



Part #	Tube Size	Thread Size
016814+	1/4"	1/8"
016812+	1/4"	1/4"
016813+	3/8"	1/4"
016815+	3/8"	3/8"
016816+	1/2"	3/8"

### Female Elbows



Part #	Tube Size	Thread Size
016247+	1/4"	1/8"
016248+	1/4"	1/4"
016249+	3/8"	1/4"
016250+	3/8"	3/8"

### Female Connectors

(Sealant applied)



Part #	Tube Size	Pipe Size
016102+	1/4"	1/8"
016103+	1/4"	1/4"
016104+	3/8"	1/4"
016105+	3/8"	3/8"

\* Indicates parts that DO NOT meet DOT or SAE specification for air brake applications



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# FITTINGS & HARDWARE

## PUSH-LOCK AIR BRAKE FITTINGS

### Male Branch Swivel Tees

(Sealant applied)

- Composite body



Part #	Tube Size	Pipe Size
016312*+	1/8"	1/8"
016314*+	1/8"	1/4"
016342+	1/4"	1/8"
016344+	1/4"	1/4"
016343+	1/4"	3/8"
016364+	3/8"	1/4"
016366+	3/8"	3/8"
016368+	3/8"	1/2"
016386+	1/2"	3/8"
016388+	1/2"	1/2"
016408+	5/8"	1/2"

### Female Branch Tees



Part #	Tube Size	Pipe Size
016415+	1/4"	1/4"
016416+	3/8"	1/8"
016417+	3/8"	1/4"

### Plug In 90° Elbows



Part #	Tube Size
016348+	1/4"

### Composite Plugs



Part #	Tube Size
016115+	1/4" (Pkg. of 5)
016116+	3/8" (Pkg. of 5)
016117+	1/2"

### Union 90° Elbows

- Composite body



Part #	Tube Size
016282+	5/32"
016305*+	3/16"
016283+	1/4"

\* Indicates parts that DO NOT meet DOT or SAE specification for air brake applications

## BRASS METRIC FITTINGS

### 90° Male Swivel Elbow



Part #	Tube Size	Thread Size	Volvo PNs
018055+	1/4"	M16	
018056+	3/8"	M16	20414623
018057+	1/2"	M16	20515114
018058+	1/4"	M22	8082136
018059+	1/2"	M22	20462690
018060+	5/8"	M22	20378449
018061+	3/4"	M22	20462691
018062+	1/2"	M27	

### Male Push Lock Connector



Part #	Tube Size	Thread Size	Volvo PNs
018045+	1/4"	M10	8397965
018046+	1/4"	M12	20510630
018047+	3/8"	M12	8397850
018048+	1/4"	M16	20448956

**Note: Part numbers listed in RED are NEW!**

### Brass Fitting POP Display

- Choose from 3 different bin size layouts to best fit your needs

*See page R5 in Retail Merchandising*





# FITTINGS & HARDWARE

## BRASS PUSH-LOCK AIR BRAKE FITTINGS

- Designed for use with SAE J844 nylon tubing
- DOT 49 CFR § 571.106 compliant
- Fittings complies with worldwide Standard and Legislation including SAE J1131 "Hot Pull" requirements
- Operating temperatures from -40°F to +212°F

- Maximum operating pressure 0 to 150 psi
- Elbows and male branch fittings with built-in swivel for positioning
- Collet with multiple teeth for high grip on the tube
- Side load retention capabilities

- Positive release bushing for easy insertion and removal of tubing
- Thread sealant applied to all male pipe threads to reduce installation time and expense

### Male Run Tees (Sealant applied)



Part #	Tube Size	Pipe Size
017900+	1/4"	1/4"
017901+	3/8"	1/4"
017902+	3/8"	3/8"

### Male Branch Swivel Tees



Part #	Tube Size	Pipe Size
017970+	1/4"	1/8"
017972+	3/8"	1/4"
017973+	3/8"	3/8"
017974+	1/2"	3/8"

### 45° Male Fixed Elbows (Sealant applied)



Part #	Tube Size	Pipe Size
017980+	1/4"	1/8"
017981+	1/4"	1/4"
017982+	3/8"	1/4"
017983+	3/8"	3/8"
017984+	1/2"	3/8"
017985+	1/2"	1/2"

### 45° Male Swivel Elbows (Sealant applied)



Part #	Tube Size	Pipe Size
017991+	1/4"	1/8"
017992+	1/4"	1/4"
017993+	3/8"	1/4"
017994+	3/8"	3/8"
017995+	1/2"	3/8"
017996+	1/2"	1/2"
<b>017997+</b>	5/8"	3/8"
<b>017998+</b>	5/8"	1/2"

**Note: Part numbers listed in RED are NEW!**



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# FITTINGS & HARDWARE

## BRASS PUSH-LOCK AIR BRAKE FITTINGS

**90° Male Non-Swivel Elbows**  
(Sealant applied)



Part #	Tube Size	Pipe Size
017960+	1/4"	1/8"
017961+	1/4"	1/4"
017966+	3/8"	1/8"
017962+	3/8"	1/4"
017963+	3/8"	3/8"
017967+	1/2"	1/4"
017964+	1/2"	3/8"
017965+	1/2"	1/2"
<b>017949+</b>	5/32"	1/8"
<b>017976+</b>	5/8"	3/8"
<b>017977+</b>	5/8"	1/2"
<b>017978+</b>	3/4"	1/2"

**90° Male Swivel Elbows**  
(Sealant applied)



Part #	Tube Size	Pipe Size
017950+	1/4"	1/8"
017951+	1/4"	1/4"
017952+	1/4"	3/8"
017953+	3/8"	1/8"
017954+	3/8"	1/4"
017955+	3/8"	3/8"
017956+	3/8"	1/2"
017957+	1/2"	1/4"
017958+	1/2"	3/8"
017959+	1/2"	1/2"

**Male Connectors**  
(Sealant applied)



Part #	Tube Size	Pipe Size
017940+	1/4"	1/8"
017941+	1/4"	1/4"
017942+	1/4"	3/8"
017943+	3/8"	1/8"
017944+	3/8"	1/4"
017945+	3/8"	3/8"
017946+	1/2"	3/8"
017947+	1/2"	1/2"
<b>017937+</b>	1/2"	1/4"
<b>017938+</b>	5/8"	1/2"
<b>017939+</b>	5/32"	1/16"

**Union Elbows**



Part #	Tube Size
017931+	3/8"
017932+	1/2"

**Union Connectors**



Part #	Tube A
017910+	1/4"
017911+	3/8"
017912+	1/2"
017913+	5/8"
017914+	3/4"
<b>017907+</b>	1/8"
<b>017908+</b>	5/32"

**Union Tees**



Part #	Tube Size
017920+	1/4"
017921+	3/8"
017922+	1/2"

### WARNING!

Velvac's line of push-lock brake fittings and tubing are designed only for use in vehicles where air is utilized as the operating fluid. As such, Velvac's push-lock air brake fittings should only be used in a manner consistent with the manufacturer's specifications.

Using Velvac's push-lock fittings or tubing improperly or in a manner inconsistent with the manufacturer's specifications may result in serious injury or property damage. For example, Velvac's push-lock fittings and tubing are not intended for use in environments exceeding 145 psi and only for temperatures between -45°F and +140°F. Velvac push-lock fittings and tubing are intended for use only as defined in 49 CFR § 571.106.

Further, the U.S. Department of Transportation prohibits the use of push-lock fittings and nylon tubing as a connection between (I) a semi-tractor & trailer, or (II) a drive shaft and chassis.

**Note: Part numbers listed in RED are NEW!**

# FITTINGS & HARDWARE

## NYLON AIR BRAKE TUBE FITTINGS

- This pre-applied sealant offers many benefits:
  - » Provides no-leak assembly instantly. Saves application time and expense
  - » Will not contaminate systems such as tape shredding or liquid sealant washout
  - » Can be reused up to five times
  - » Provides excellent thread
- Brass construction with internal stainless steel tube supports
- Pipe thread sealant featured on several fitting styles
- Designed for use with nylon air brake tubing
- DOT compliant. Fittings meet SAE J246 requirements

### Sleeves



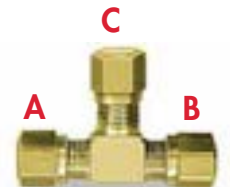
Part #	Tube Size
016340+	1/4"
016360+	3/8"
016380+	1/2"
016300+	5/8"
016301+	3/4"

### Tee Thread Runs



Part #	Tube Size	Pipe Size
017142+	1/4"	1/8"
017144+	1/4"	1/4"
017164+	3/8"	1/4"
017166+	3/8"	3/8"
017186+	1/2"	3/8"
017188+	1/2"	1/2"

### Tee End Tubes



Part #	Tube Size
016440+	1/4"
016460+	3/8"
016482+	A, B: 3/8" C: 1/4"
016480+	1/2"
016481+	5/8"

### Nuts



Part #	Tube Size
016140+	1/4"
016160+	3/8"
016180+	1/2"
016100+	5/8"
016101+	3/4"

### Bulkhead Unions



Part #	Tube Size
016204+	1/4"
016206+	3/8"
016208+	1/2"

### Female Elbows



Part #	Tube Size	Pipe Size
017043+	1/4"	1/8"
017046+	1/4"	1/4"
017064+	3/8"	1/4"
017066+	3/8"	3/8"
017086+	1/2"	3/8"

### Full Unions



Part #	Tube Size
016240+	1/4"
016260+	3/8"
016280+	1/2"
016200+	5/8"
016201+	3/4"

### Elbow End Tubes



Part #	Tube Size
016540+	1/4"
016560+	3/8"
016580+	1/2"
016510+	5/8"



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# FITTINGS & HARDWARE

## NYLON AIR BRAKE TUBE FITTINGS

### Male Elbows



Part #	Tube Size	Pipe Size
016942+	1/4"	1/8"
016944+	1/4"	1/4"
016946+	1/4"	3/8"
016962+	3/8"	1/8"
016964+	3/8"	1/4"
016966+	3/8"	3/8"
016968+	3/8"	1/2"
016984+	1/2"	1/4"
016986+	1/2"	3/8"
016988+	1/2"	1/2"
016916+	5/8"	3/8"
016908+	5/8"	1/2"
016912+	5/8"	3/4"
016918+	3/4"	1/2"
016922+	3/4"	3/4"

### Male Connectors (Sealant applied)



Part #	Tube Size	Pipe Size
016842+	1/4"	1/8"
016844+	1/4"	1/4"
016846+	1/4"	3/8"
016862+	3/8"	1/8"
016864+	3/8"	1/4"
016866+	3/8"	3/8"
016868+	3/8"	1/2"
016884+	1/2"	1/4"
016886+	1/2"	3/8"
016888+	1/2"	1/2"
016890+	1/2"	3/4"
016806+	5/8"	3/8"
016808+	5/8"	1/2"
016809+	5/8"	3/4"
016818+	3/4"	1/2"
016811+	3/4"	3/4"

### 45° Elbows (Sealant applied)



Part #	Tube Size	Pipe Size
017842+	1/4"	1/8"
017844+	1/4"	1/4"
017862+	3/8"	1/8"
017864+	3/8"	1/4"
017866+	3/8"	3/8"
017868+	3/8"	1/2"
017886+	1/2"	3/8"
017888+	1/2"	1/2"
017884+	1/2"	3/4"
017816+	5/8"	3/8"
017808+	5/8"	1/2"

#### Helpful hint

Air brake hose repair fitting kits are part numbers 500007 and 500008

### Tee Thread Branches (Sealant applied)



Part #	Tube Size	Pipe Size
017242+	1/4"	1/8"
017244+	1/4"	1/4"
017262+	3/8"	1/8"
017264+	3/8"	1/4"
017266+	3/8"	3/8"
017286+	1/2"	3/8"
017288+	1/2"	1/2"
017218+	5/8"	1/2"

### Female Connectors



Part #	Tube Size	Pipe Size
016642+	1/4"	1/8"
016644+	1/4"	1/4"
016662+	3/8"	1/8"
016664+	3/8"	1/4"
016666+	3/8"	3/8"
016686+	1/2"	3/8"
016688+	1/2"	1/2"
016618+	5/8"	1/2"



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# FITTINGS & HARDWARE

## AIR BRAKE COMPRESSION FITTINGS

- Designed for use with nylon or copper air brake tubing
- DOT compliant. Fittings meet SAE J246 requirements
- All brass construction
- Pipe thread sealant featured on several fitting styles. This pre-applied sealant offers many benefits:
  - » Provides no-leak assembly instantly. Saves application time and expense
  - » Can be reused up to five times
  - » Will not contaminate systems such as tape shredding or liquid sealant
  - » Provides excellent thread lubrication to prevent galling

### Full Unions



Part #	Tube Size
011033+	1/4"
011041+	3/8"
011043+	1/2"
011045+	5/8"
011047+	3/4"

### Male Connectors (Sealant applied)



Part #	Tube Size	Pipe Size
012017+	1/4"	1/8"
012021+	1/4"	1/4"
012023+	1/4"	3/8"
012035+	3/8"	1/8"
012037+	3/8"	1/4"
012041+	3/8"	3/8"
012043+	3/8"	1/2"
012045+	1/2"	1/4"
012047+	1/2"	3/8"
012049+	1/2"	1/2"
012053+	5/8"	3/8"
012055+	5/8"	1/2"
012061+	3/4"	1/2"

### Tee Thread Branches (Sealant applied)



Part #	Tube Size	Pipe Size
013049+	1/4"	1/8"
013057+	3/8"	1/4"

### 45° Male Elbows (Sealant applied)



Part #	Tube Size	Pipe Size
013075+	3/8"	1/4"
013076+	3/8"	3/8"
013077+	1/2"	3/8"

### Tee Thread Branches



Part #	Tube Size
011051+	1/4"
011057+	3/8"
011059+	1/2"

### Male Elbows (Sealant applied)



Part #	Tube Size	Pipe Size
012067+	1/4"	1/8"
012071+	1/4"	1/4"
012073+	1/4"	3/8"
012087+	3/8"	1/8"
012091+	3/8"	1/4"
012093+	3/8"	3/8"
012095+	3/8"	1/2"
012097+	1/2"	1/4"
013001+	1/2"	3/8"
013003+	1/2"	1/2"
013011+	5/8"	1/2"

### Tee Thread Runs



Part #	Tube Size	Pipe Size
013041+	3/8"	1/4"

### Elbow Ends Tube



Part #	Tube Size
011073	3/8"



### Fitting Labels

- Packet of peelable sticker labels for use on all brass fittings POP display units

*See page R6 in Retail Merchandising*



# FITTINGS & HARDWARE

## AIR BRAKE COMPRESSION FITTINGS

### Spherical Sleeves



Part #	Tube Size
011001+	1/4"
011003+	3/8"
011005+	1/2"
011007+	5/8"
011009+	3/4"

### Nylon Tubing Inserts



Part #	Tube Size
010087+	1/4"
010089+	3/8"
010094+	1/2"
010096+	5/8"
010098+	3/4"

### Compression Nuts



Part #	Tube Size
011013+	1/4"
011023+	3/8"
011025+	1/2"
011027+	5/8"
011029+	3/4"

Fitting sleeves should NEVER be reused

## RE-USABLE AIR HOSE FITTINGS

- Designed for use with rubber air brake hose
- Bodies, sleeves and nuts are all brass construction for durability and corrosion resistance
- Zinc-plated steel springs have rounded ends to protect air hose

### Swivel Fitting Assemblies (w/ spring)



Part #	Hose I.D.	Pipe Size
500035+	3/8"	1/4"
500042+	3/8"	3/8"

### Nuts



Part #	Hose I.D.
500004+	3/8"
500054+	1/2"

### Swivel Body Adaptors



Part #	Hose I.D.	Pipe Size	Straight Thread
140000+	3/8"	1/4"	3/4" - 20
142001+	3/8"	3/8"	3/4" - 20
500059+	3/8"	1/2"	3/4" - 20
500052+	1/2"	3/8"	7/8" - 20
500060+	1/2"	1/2"	7/8" - 20

### Fitting Assemblies (w/ spring)



Part #	Hose I.D.	Pipe Size
500019+	3/8"	1/2"
500025+	3/8"	3/8"
500027+	3/8"	1/4"
500070+	1/2"	1/2"
500078+	1/2"	3/8"

### Nuts (w/ or w/o spring)

(w/ or w/o spring)



Part #	Type	Hose I.D.
500021+	Spring & Nut	3/8"
500071+	Spring & Nut	1/2"
500037+	Nut Only	1/2"
500022+	Nut Only	3/8"
500030+	Spring Only	1/2"
500024+	Spring Only	3/8"



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# FITTINGS & HARDWARE

## RE-USABLE AIR HOSE FITTINGS

### Dual Barb Male Fitting (Sealant applied)



Part #	Hose Size	Tube Size
500079+	1/4"	1/8"
500080+	1/4"	1/4"
500081+	5/16"	1/4"
500082+	3/8"	1/4"
500083+	3/8"	3/8"
500084+	5/8"	1/2"
500085+	3/4"	3/4"

### Fitting Bodies



Part #	Hose I.D.	Pipe Size
500003+	3/8"	1/2"
500011+	3/8"	3/8"
500017+	3/8"	1/4"
500053+	1/2"	1/2"
500061+	1/2"	3/8"

### Firewall Couplings

- Zinc-plated



Part #	Description
501071	Firewall coupling

steel construction

- 1/4" FPT both ends
- 3/16" diameter mounting holes on 1-3/8" centers

### Union Assemblies



Part #	Hose I.D.
500031+	3/8"
500088+	1/2"

### Fitting Sleeves



Part #	Hose I.D.
500005+	3/8"
500055+	1/2"

Fitting sleeves should NEVER be reused

### Union Bodies



Part #	Tube Size
500033+	3/8"
500041+	1/2"

### Swivel Fitting Assemblies



Part #	Hose I.D.	Pipe Size
500039+	3/8"	1/4"
500046+	3/8"	3/8"
500044+	3/8"	1/2"
500094+	1/2"	3/8"

### Fitting Assemblies



Part #	Hose I.D.	Pipe Size
500001+	3/8"	1/2"
500009+	3/8"	3/8"
500015+	3/8"	1/4"
500050+	1/2"	1/2"
500051+	1/2"	3/8"

### Hose Splicers



Part #	Hose Size
500063+	3/8"
500064+	1/2"
500065+	5/8"
500066+	3/4"

## VACUUM HOSE FITTINGS

### Nipples



Part #	Hose Size	Tube Size
149005+	1/2"	1/2"
149006+	3/4"	1/2"

# FITTINGS & HARDWARE

## BULKHEAD CONNECTORS

### Male Clamping Studs



- Zinc-plated steel construction
- 1/2" MPT each end, 1/4" FPT one end
- 1" - 14 mounting thread
- 2-3/8" overall length

Part #	Description
035021	Male clamping stud

### Female Clamping Studs



- Zinc-plated steel construction
- 1/2" MPT, 1/4" FPT one end and 1/2" FPT other end
- 1-1/4" mounting thread
- 2-1/4" overall length

Part #	Description
035029	Female clamping stud

### Frame Clamping Studs



- Zinc-plated steel construction
- 1/2" MPT one end, 3/8" FPT one end
- 1-1/4" mounting thread
- 1-7/8" overall length

Part #	Description
035079	Male clamping stud

### Bulkhead Fittings: Female to Nylon Tubing

- 3/8" NPTF thread



Part #	Tube Size
017098+	1/2"
017099+	3/8"

### Bulkhead Fittings with Spring



Part #	Tube Size
500096+	3/8"

### Frame Couplings

- Zinc-plated steel construction
- FPT both ends



Part #	Frame	Overall Length	Thread
035081+	1/4"	1-1/2"	3/4" - 16
035087+	3/8"	1-3/8"	1" - 14

### Bulkhead 90° Elbow



Part #	Size	Body Thread
<b>035202+</b>	3/8"	7/8"-20 UNEF

## DISCHARGE HOSE FITTINGS

- Designed for use with stainless steel braided discharge hose
- All brass bodies with brass sleeves and steel nuts

### Female Swivel Fittings



Part #	Hose O.D.	Female Thread
142110+	5/8"	7/8" - 14
142111+	3/4"	1-1/16" - 14

### Straight Tubes



Part #	Hose O.D.
142102+	5/8"
142103+	3/4"

### Male Pipe Fittings



Part #	Hose O.D.	Pipe Thread
142101+	5/8"	1/2" - 14

### Compression Fittings



Part #	Hose O.D.	Male Thread
142106+	5/8"	13/16" - 18
142107+	3/4"	1" - 18

# FITTINGS & HARDWARE

## FULLER TRANSMISSION COMPRESSION FITTINGS

- Designed for use with polyethylene nylon and plastic tubing NOT FOR AIR BRAKE USE
- All brass construction

### Sleeves



Part #	Tube Size
010093+	3/16"

### Insert



Part #	Tube Size
010085+	3/16"

### Male Connectors



Part #	Tube Size	Pipe Size
012016+	1/8"	1/16"
012015+	3/16"	1/8"
012012+	5/32"	1/16"
012014+	5/32"	1/8"
012022+	1/8"	1/8"

### Male Elbows



Part #	Tube Size	Pipe Size
012069+	1/8"	1/8"
012064+	5/32"	1/8"
012066+	1/8"	1/8"
012068+	3/16"	1/8"

### Nuts



Part #	Tube Size
011012+	1/8"
011014+	3/16"
011016+	5/32"

### Full Unions



Part #	Tube Size
011032+	1/8"
011034+	5/32"

### Slotted Collets



Part #	Tube Size
011000+	1/8"
011020+	5/32"

## INVERTED FLARE FITTINGS

- Designed for use with flareable copper, brass, aluminum and welded steel hydraulic tubing
- All brass construction (unless otherwise noted)
- UL compliant for flammable liquid and gas
- Fittings meet SAE J246 requirements
- DOT compliant

### Unions



Part #	Tube Size	Straight Thread
006203+	3/16"	3/8" - 24
006204+	1/4"	7/16" - 24
006205+	5/16"	1/2" - 20
006206+	3/8"	5/8" - 18

### Male Elbows



Part #	Tube Size	Pipe Size	Straight Thread
006942+	1/4"	1/8"	7/16" - 24

### Female Connectors



Part #	Tube Size	Pipe Size	Straight Thread
006642+	1/4"	1/8"	7/16" - 24
006664+	3/8"	1/4"	5/8" - 18

# FITTINGS & HARDWARE

## INVERTED FLARE FITTINGS

### Male Connectors



Part #	Tube Size	Pipe Size	Straight Thread
006842+	1/4"	1/8"	7/16" - 24
006852+	5/16"	1/8"	1/2" - 20
006854+	5/16"	1/4"	1/2" - 20
006864+	3/8"	1/4"	5/8" - 18
006866+	3/8"	3/8"	5/8" - 18
006886+	1/2"	3/8"	3/4" - 18

### Nuts



- Brass construction

Part #	Tube Size	Straight Thread
006103+	3/16"	3/8" - 24
006104+	1/4"	7/16" - 24
006106+	3/8"	5/8" - 10

- Plated steel construction

Part #	Tube Size	Straight Thread
006304+	1/4"	7/16" - 24
006305+	5/16"	1/2" - 24



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## PIPE FITTINGS

### Reducer Bushings



- Brass

Part #	Pipe Size	Material
016079+	1/4" x 1/8"	Brass
016089+	1/4" x 1"	Brass
016080+	3/8" x 1/8"	Brass
016081+	3/8" x 1/4"	Brass
016082+	1/2" x 1/8"	Brass
016083+	1/2" x 1/4"	Brass
016084+	1/2" x 3/8"	Brass
016088+	1/2" x 1"	Brass
016085+	3/4" x 1/4"	Brass
016086+	3/4" x 3/8"	Brass
016087+	3/4" x 1/2"	Brass
017000	1" x 3/4"	Malleable iron

### Reducer Hex Nipples



Part #	Pipe Size	Material
018013+	1/4" x 1/8"	Brass
018030+	3/8" x 1/8"	Brass
018025	3/8" x 1/4"	Brass
018026	1/2" x 1/4"	Brass
018027	1/2" x 3/8"	Brass
018029	3/4" x 1/2"	Brass
018065	3/8" x 1/4"	Steel
018066	1/2" x 1/4"	Steel
018067	1/2" x 3/8"	Steel
018068	3/4" x 1/2"	Steel
018069	3/8" x 1/8"	Steel

### Street Elbows

- Brass construction



Part #	Pipe Size	Material
017015+	1/8"	Brass
017039+	1/4" x 1/8"	Brass
017017+	1/4"	Brass
017019+	3/8"	Brass
017021+	1/2"	Brass
017031+	3/4"	Brass

### Caps (Female Pipe Fittings)



Part #	Pipe Size
017223+	1/8"
017224+	1/4"
017225+	3/8"
017226+	1/2"
017227+	3/4"

### Male Branch Tees



Part #	Pipe Size	Material
016014+	1/8"	Brass
016015+	1/4"	Brass
016016+	3/8"	Brass
016017+	1/2"	Brass

### Pipe Crosses



Part #	Pipe Size	Material
017075+	1/4"	Brass
017077+	3/8"	Brass
017078+	1/2"	Brass



### Pipe Nipples



- Brass

Part #	Pipe Size	Length
016021+	1/8"	1-1/2"
016025+	1/4"	1-1/2"
016029+	3/8"	1-1/2"
016033+	1/2"	1-1/2"
016044+	1/4"	2 1/2"
016045+	3/8"	2 1/2"
016046+	3/8"	3"
016047+	3/4"	2 1/2"

- Malleable Iron

Part #	Pipe Size	Length
016037	1/8"	2"
016038	1/4"	2"
016039	3/8"	2"
016040	1/2"	2"
016041	1/2"	3"
016042	3/4"	2"
016043	3/4"	3"

### Hex Nipples



Part #	Pipe Size	Material
018009+	1/8"	Brass
018010+	1/4"	Brass
018011+	3/8"	Brass
018012+	1/2"	Brass
018023	3/4"	Plated steel

### Close Nipples



Part #	Pipe Size	Material
016051+	1/8"	Brass
016052+	1/4"	Brass
016053+	3/8"	Brass
016054+	1/2"	Brass
016065	3/4"	Malleable iron

### 45° Street Elbows



Part #	Pipe Size	Material
017023+	1/8"	Brass
017025+	1/4"	Brass
017027+	3/8"	Brass
017029+	1/2"	Brass

### Pipe Elbows



Part #	Pipe Size	Material
017003+	1/8"	Brass
017004+	1/4"	Brass
017005+	3/8"	Brass
017006+	1/2"	Brass

### Counter-Sunk Plugs



Part #	Pipe Size	Material
017106+	1/8"	Brass
017107+	1/4"	Brass
017108+	3/8"	Brass
017109+	1/2"	Brass
017110+	3/4"	Brass

### Square Head Plugs



Part #	Pipe Size	Material
017061+	1/8"	Brass
017063+	1/4"	Brass
017065+	3/8"	Brass
017067+	1/2"	Brass
017069+	3/4"	Brass
017059+	3/4"	Brass
017072+	1"	Brass

### Adapters



Part #	Pipe Size	Material
018034+	1/8" x 1/8"	Brass
018006+	1/4" x 1/8"	Brass
018035+	1/4" x 1/4"	Brass
018007+	3/8" x 1/4"	Brass
018036+	3/8" x 1/8"	Brass
018037+	3/8" x 3/8"	Brass
018008+	1/2" x 3/8"	Brass
018038+	3/4" x 1/2"	Brass



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# FITTINGS & HARDWARE

## PIPE FITTINGS

### Reducer Couplings



Part #	Pipe Size	Material
017081+	1/4" x 1/8"	Brass
017083+	3/8" x 1/4"	Brass
017089+	1/2" x 1/4"	Brass
017085+	1/2" x 3/8"	Brass
017090+	3/4" x 1/2"	Brass

### Couplings



Part #	Pipe Size	Material
016067+	1/8"	Brass
016068+	1/4"	Brass
016070+	1/2"	Brass
016077	3/4"	Malleable iron

### Hex Head Plugs



Part #	Pipe Size	Material
017051+	1/8"	Brass
017053+	1/4"	Brass
017055+	3/8"	Brass
017057+	1/2"	Brass
017056+	3/4"	Brass
017058+	1"	Brass

### Malleable Iron Street Tees



Part #	Pipe Size
017093	1/4"
017095	3/8"
017096	1/2"

### Brass Street Tees



Part #	Pipe Size	Material
017091	1/8"	Brass
017094	3/4"	Brass
<b>017112</b>	1/4"	Brass
<b>017113</b>	3/8"	Brass
<b>017114</b>	1/2"	Brass

### Pipe Tees



Part #	Pipe Size	Material
016001+	1/8"	Brass
016002+	1/4"	Brass
016003+	3/8"	Brass
016004+	1/2"	Brass
016005+	3/4"	Brass

### Slotted Plugs



Part #	Pipe Size	Material
017101+	1/8"	Brass

**Note: Part numbers listed in RED are NEW!**

## SAE 45° FLARE FITTINGS

- Designed for use with flareable copper, brass, aluminum and welded steel hydraulic tubing
- All brass construction
- UL compliant for flammable liquid and gas
- Fittings meet SAE J246 requirements

### Hose Barb to Female Flare Swivels



Part #	Tube Size	Hose Size
016945+	3/8"	3/8"
016948+	1/4"	1/4"

### Unions



Part #	Tube Size	Straight Thread
014204+	1/4"	7/16" - 20
014206+	3/8"	5/8" - 18
014208+	1/2"	3/4" - 16
014200+	5/8"	7/8" - 14
014209+	3/4"	1 1/16" - 14

### Cap Nuts



Part #	Tube Size	Straight Thread
014216+	3/8"	5/8" - 18
014217+	1/2"	3/4" - 16
014218+	5/8"	7/8" - 14

### Long Nuts



Part #	Tube Size	Straight Thread
014106+	3/8"	5/8" - 18



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# FITTINGS & HARDWARE

## SAE 45° FLARE FITTINGS

### 45° Elbows



Part #	Tube Size	Pipe Size	Straight Thread
015942+	1/4"	1/8"	7/16" - 20
015944+	1/4"	1/4"	7/16" - 20
015964+	3/8"	1/4"	5/8" - 18
015966+	3/8"	3/8"	5/8" - 18

Part #	Tube Size	Pipe Size	Straight Thread
015986+	1/2"	3/8"	3/4" - 16
015988+	1/2"	1/2"	3/4" - 16
015906+	5/8"	3/8"	7/8" - 14
015908+	5/8"	1/2"	7/8" - 14

### Male Elbows



Part #	Tube Size	Pipe Size	Straight Thread
014942+	1/4"	1/8"	7/16" - 20
014944+	1/4"	1/4"	7/16" - 20
014946+	1/4"	3/8"	7/16" - 20
014952+	5/16"	1/8"	1/2" - 20
014962+	3/8"	1/8"	5/8" - 18
014964+	3/8"	1/4"	5/8" - 18
014966+	3/8"	3/8"	5/8" - 18
014968+	3/8"	1/2"	5/8" - 18

Part #	Tube Size	Pipe Size	Straight Thread
014984+	1/2"	1/4"	3/4" - 16
014986+	1/2"	3/8"	3/4" - 16
014988+	1/2"	1/2"	3/4" - 16
014906+	5/8"	3/8"	7/8" - 14
014908+	5/8"	1/2"	7/8" - 14
014918+	3/4"	1/2"	1-1/16"-14
014911+	3/4"	3/4"	1-1/16"-14

### Male Connectors



Part #	Tube Size	Pipe Size	Straight Thread
014866+	3/8"	3/8"	5/8" - 18
014868+	3/8"	1/2"	5/8" - 18
014884+	1/2"	1/4"	3/4" - 16
014886+	1/2"	3/8"	3/4" - 16
014212+	5/8"	3/4"	7/8" - 14
014888+	1/2"	1/2"	3/4" - 16
014806+	5/8"	3/8"	7/8" - 14
014808+	5/8"	1/2"	7/8" - 14
014818+	3/4"	1/2"	1-1/16"-14
014811+	3/4"	3/4"	1-1/16"-14

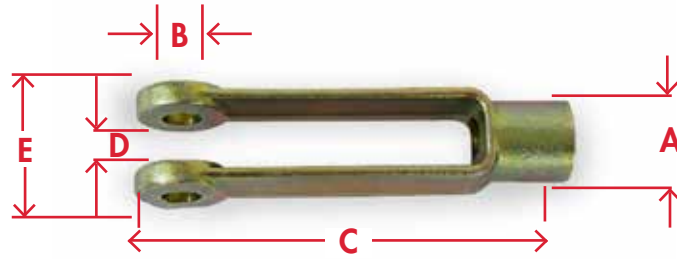
Part #	Tube Size	Pipe Size	Straight Thread
014822+	1/8"	1/8"	5/16" - 24
014832+	3/16"	1/8"	3/8" - 24
014842+	1/4"	1/8"	7/16" - 20
014844+	1/4"	1/4"	7/16" - 20
014210+	1/4"	3/8"	7/16" - 20
014211+	3/8"	3/4"	5/8" - 18
014852+	5/16"	1/8"	1/2" - 20
014854+	5/16"	1/4"	1/2" - 20
014862+	3/8"	1/8"	5/8" - 18
014864+	3/8"	1/4"	5/8" - 18

# FITTINGS & HARDWARE

## CLEVIS AND CLEVIS PINS

### Clevis

- Forged steel construction
- Zinc-plated for corrosion resistance



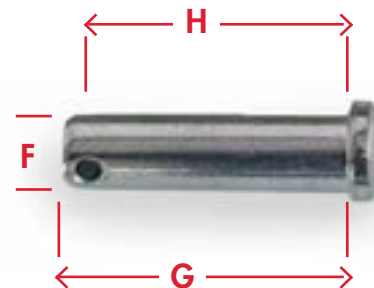
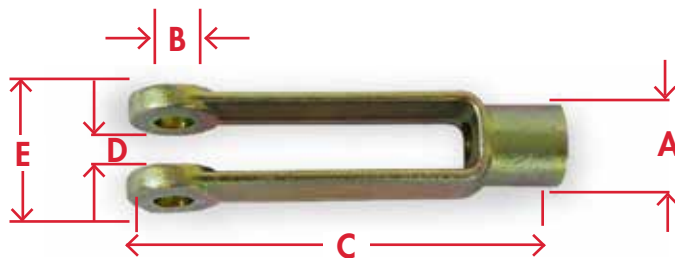
Part #	A	B	C	D	E
019003	5/16" - 24	5/16"	2-1/4"	11/32"	3/4"
019004	3/8" - 24	3/8"	2-1/2"	7/16"	7/8"
019006	1/2" - 20	1/2"	3"	9/16"	1-1/8"
019009	1/2" - 20	1/2"	1-7/8"	9/16"	1-1/4"
019011	5/8" - 18	1/2"	1-7/8"	9/16"	1-1/4"
019013	5/8" - 18	1/2"	2-5/16"	9/16"	1-1/2"
019015	5/8" - 18	5/8"	4-15/16"	11/16"	1-3/8"
019017	5/8" - 18	5/8"	2-5/16"	9/16"	1-1/2"

### Clevis and Clevis Pin Kits

- Each kit includes one yoke, clevis pin and cotter pin
- Forged steel construction
- Zinc-plated for corrosion resistance

Part #	A	B	C	D	E	F	G	H
019049	5/8" - 18	1/2"	1-7/8"	9/16"	1-1/4"	1/2"	1-1/2"	1-3/8"
019050	1/2" - 20	1/2"	1-7/8"	9/16"	1-1/4"	1/2"	1-1/2"	1-3/8"
019051	5/8" - 18	1/2"	4-15/16"	9/16"	1-1/4"	1/2"	1-5/8"	1-3/8"
019088*	5/8" - 18	1/2"	1-7/8"	9/16"	1-1/4"	1/2"	1-1/2"	1-11/32"

\*Includes 3/8" x 1/4" reducer bushing and 5/8" - 18 hex nut



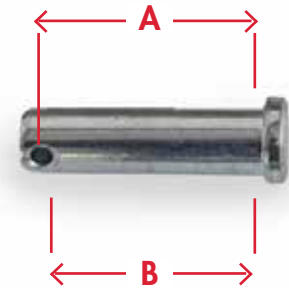
**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# FITTINGS & HARDWARE

## CLEVIS AND CLEVIS PINS

### Standard Clevis Pin

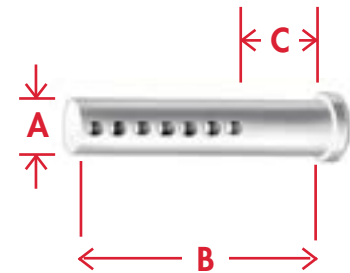
Part #	Nominal Size	A	B
019057	1/4	0.672"	0.633"
019059	5/16	0.812"	0.757"
019061	3/8	0.938"	0.883"
019065	1/2	1.203"	1.133"
019067	1/2	1.343"	1.273"
019069	1/2	1.593"	1.523"
019071	5/8	1.453"	1.383"
019073	5/8	1.593"	1.523"



### Universal Clevis Pin

- Each includes cotter pin

Part #	A	B	C
019058	1/4"	2"	17/32"
019060	5/16"	2"	9/16"
019062	3/8"	2"	17/32"
019064	7/16"	2"	9/16"
019070	1/2"	2"	9/16"
019072	5/8"	3"	9/32"



\*Holes are spaced at 1/4" intervals



**OUR PARTS PUT YOU IN THE PASSING LANE**

# FUEL SYSTEMS

## Protect your fuel system.

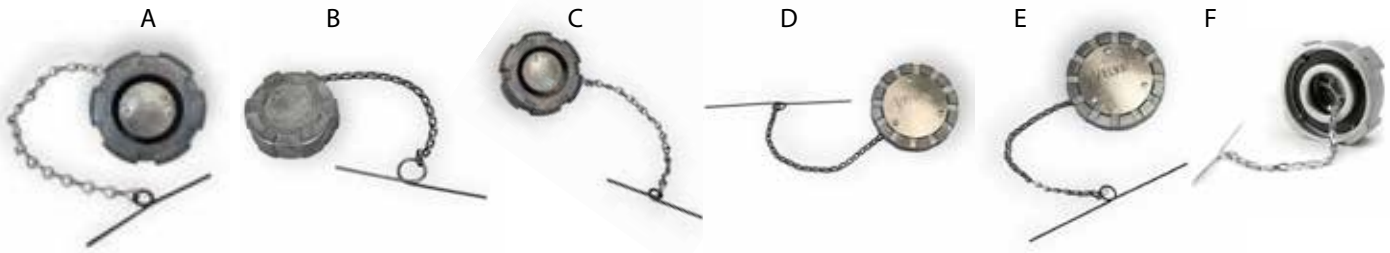
Velvac offers a wide range of locking fuel caps and anti-siphon tubes to keep unlawful occurrences at bay. With OEM approved designs and patented locking features, Velvac has your back.

- Fuel caps
- Anti-siphon tubes
- Tank valves

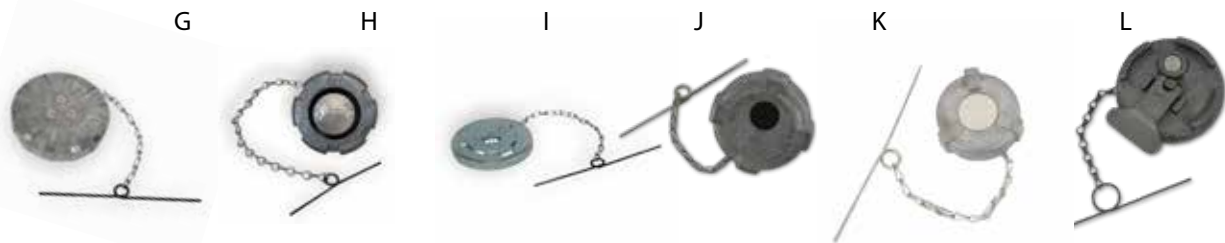


# FUEL SYSTEMS

## ALUMINUM NON-LOCKING FUEL CAPS — Designed for Diesel Fuel Applications



Part #	Photo	Type	V	T/R	P/R	Nominal Size	Threads Per Inch	Across Threads	
								Cap	Filler Neck
600135 <sup>+</sup>	A	Female	•	•	•	2"	11-1/2 NPSH	2-1/4"	2-1/4"
600198 <sup>+</sup>	B	Female	-	•	-	2"	11-1/2 NPSH	2-1/4"	2-1/4"
600136 <sup>+</sup>	C	Female	•	•	•	2"	8 UN 2B	2-1/4"	2-1/4"
600186 <sup>+</sup>	D	Female Replaces Freightliner A03-12927-4 and Kenworth K071-398**	•	•	•	3-1/2"	5-1/2	3-3/8"	3-1/2"
600184 <sup>+</sup>	E	Female Replaces Freightliner A03-15682-4 and Western Star 43301-3401*	•	•	•	3"	8 NPSL	3.37"	3.37"
600148 <sup>+</sup>	F	Female, 1/4 Turn Replaces Freightliner 03-37017-000	-	•	-	3"	CAM CAP	N/A	N/A
600168 <sup>+</sup>	G	Female	-	•	-	4"	8 NPSL	4.35"	4.35"
600180 <sup>+</sup>	H	Female	•	•	•	4"	8 NPSM	4.35"	4.35"
601065 <sup>+</sup>	I	Bayonet	•	-	-	4"	N/A	3-7/8"	3-7/8"
600260 <sup>+</sup>	J	Female, Kenworth	•	•	•	3"	5-1/2 NS	3.35"	3.35"
600264 <sup>+</sup>	K	Female, Reefer & International	-	•	-	2"	11-1/2 NPSH	2-1/4"	2-1/4"
600211	L	Lever, Peterbilt	-	-	•	4"	-	N/A	N/A



### Fuel Caps

- Comes in attractive clamshell packaging
- All locks have a single key available
- All locks are direct replacement of OEM caps

### NOTES

\* Freightliners after 1983 and Western Star after 1982 both with diesel fuel tanks with 3" male pipe filler necks

\*\* Freightliners prior to 1984 and Kenworth after 1984, Peterbilt prior to 1980 and Western Stars prior to 1983 all with diesel fuel tanks with 3" male pipe filler necks

V Vented  
T/R Thermal relief  
P/R Pressure relief



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# FUEL SYSTEMS

## ALUMINUM LOCKING FUEL CAPS

M



N



O



P



Q



Part #	Photo	Type	V	T/R	P/R	Nominal Size	Threads Per Inch	Across Threads	
								Cap	Filler Neck
600150+	M	Female, Freightliner M2	-	•	-	2.5"	8 UN	2.38"	2.38"
600185-6****	N	Female Replaces Freightliner A03-12927-6 and Kenworth K071-385-1234**	•	•	•	3"	5-1/2"	3-7/16"	3-1/2"
600183-6****	O	Female Replaces Freightliner A03-15682-6 and Western Star 43301-3403*	•	•	•	3"	8 NPSL	3.37"	3.37"
600149+	P	Female, 1/4 Turn Replaces Freightliner 03-37017-002	-	•	-	3"	CAM CAP	N/A	N/A
600169-6+	Q	Female	-	•	•	4"	8 NPSL	4.35"	4.35"
600181-6+	R	Female	•	•	•	4"	8 NPSM	4.35"	4.35"
600259+	S	Female, Volvo, Mack & International	-	-	•	3"	8 NPSL	3.37"	3.37"
600263+	T	Female, Kenworth w/ Thermo Relief	-	•	•	3-1/2"	5-1/2 NS	3.38"	3.38"
600212+	U	Lever, Peterbilt	-	-	•	4"	N/A	N/A	N/A

R



S



T



U



### NOTES

\*\*\* Keys not available separately

V Vented

T/R Thermal relief

P/R Pressure relief

### NOTE

All caps meet or exceed Federal Motor Carrier Safety Administration (FMCSA) requirements. This product conforms to the relief pressure and leakage rate test as required by 49 CFR 393.67 standards to protect from the inherent dangers associated with fuel leaks

Fuel caps come in attractive retail clamshell packaging

Part No. 600263 shown here >



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



# FUEL SYSTEMS

## GAS / DIESEL FUEL CAPS

Vented aluminum caps meet 49 CFR 393.67 requirements for vehicles built after October 1985. Vented brass caps are designed for use only on vehicles with non-vented fuel systems built prior to October 1985. Non-vented brass caps are designed for use only on vehicles equipped with properly vented fuel systems. For complete information on current fuel tank system requirements, see Code of Federal Regulations 49 CFR 393.67

- Available as vented or non-vented
- Fusible meltouts on brass fuel caps for thermal relief
- Safety chains and crossbars are standard on all caps except Part No. 600009 which features a 14" exterior cable with an attached 3/16" I.D. ring

- Patented Loc-Gard on locking cap protects against moisture and contaminants (US Patent No. 4,706,841)
- All locking fuel caps are supplied with 2 keys



### Aluminum Locking Fuel Cap

- Nominal size - 2"
- Threads per inch - 11-1/2
- Cap - 2-1/4"
- Filler neck - 2-5/16"



### Brass Locking Fuel Cap

- Nominal size - 2"
- Threads per inch - 11-1/2
- Cap - 2-1/4"
- Filler neck - 2-5/16"



### Brass Fuel Cap

- Nominal size - 2"
- Threads per inch - 11-1/2
- Cap - 2-1/4"
- Filler neck - 2-5/16"

Part #	Description
600270+	Female, non-vented

Part #	Description
600196-6+	Female, non-vented

Part #	Description
600133+	Female, non-vented
600007+	Female, vented

**WARNING!**  
Aluminum fuel caps are designed ONLY for Diesel applications; brass fuel caps are designed for gasoline, diesel and oil applications



### Brass Fuel Cap

- Nominal size - 2"
- Threads per inch - 11-1/2
- Cap - 2-1/4"
- Filler neck - 2-5/16"

Part #	Description
600009+	Female, non-vented



### Brass Fuel Cap

- Nominal size - 2-1/8"
- Threads per inch - 12
- Cap - 2-1/8"
- Filler neck - 2-1/16"

Part #	Description
600017+	Male, vented



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## REPLACEMENT PARTS FOR CAPS



600081

Part #	Replacement Part	Application
600011	2" Gasket	600196-6, 600009, 600133, 600007
600021	2 1/8" Gasket	600017
600081	3" Gasket	600184, 600185-6, 600183-6
601069	4" Gasket	600168, 600169-6, 600172, 600173-6
600176	Loc-Gard cap	600169-6, 600196-6
601063	Chain and bar	600168, 600169-6, 600172, 600173-6, 601065
600040	Chain and bar	600007, 600017, 600133, 600196-6
600631+	Key No 31	Lock No 31 - Used on 600169-6 and 600196-6
600632+	Key No 32	Lock No 32 - Used on 600169-6 and 600196-6
600633+	Key No 33	Lock No 33 - Used on 600169-6 and 600196-6
600219+	Key No 19	Lock No 19 - Used on 600169-6 and 600196-6
600220+	Key No 20	Lock No 20 - Used on 600169-6 and 600196-6

## ANTI-SIPHON TUBES



Dimension "B"

### Protect your fuel with Velvac's Anti-Siphon Tube

- Fast and easy installation — tube is designed to lock onto filler neck wall to prevent removal
- Eliminates the potential for fuel theft from syphoning through filler neck
- Durable all aluminum construction
- Vented design allows fueling at 20+ gallons per minute
- OEM approved with sizes to fit most vehicle applications



600265

Part #	Dimension "B" *	Description
600241	3-3/4 inches	Fits heavy duty Volvo, International and Mack trucks
600242	3-3/4 inches	Fits heavy duty Volvo, International and Mack trucks
600243	2-3/4 inches	Fits heavy duty Kenworth
600244	2-3/4 inches	Fits heavy duty Freightliner
600245	2-1/4 inches	Fits medium-duty trucks
600246	3-3/4 inches	Fits medium-duty and Reefer trucks
600258	-	4" Anti-siphon tube



600258

#### NOTE

\* Dimension "B" is from the underside of the top lip to the tip of the last barb



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## FUEL TANK VALVES

### Ball Valve

- Designed for fuel line shutoff in gasoline and diesel vehicles. May also be used for water and air service lines
- Heavy-duty forged brass body provides extended service
- Teflon® seats and seals provide positive sealing with easy opening and closing

Part #	Description
060050+	1/2" NPT
060051+	3/8" NPT
060053+	1/4" NPT

- 600 psi water, oil or fuel
- 150 psi on/off saturated steam service lines
- 29 in. Hg vacuum service



### Tank Cocks

- All brass bodies
- Mounting flanges with 1/4" bolt holes
- Standard 1-1/2" stems



Four-way  
060001, 060007

Part #	Description
060004+	Three-way tank cock with 3/8" FPT side ports
060012+	Three-way tank cock with 1/4" FPT bottom and side ports
060001+	Four-way tank cock with 3/8" FPT bottom and side ports
060007+	Four-way tank cock with 1/4" FPT bottom and side ports



Three-way  
060004



Three-way  
060012



**+** **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## RETURN FLOW SPLITTERS

- Designed for dual draw/dual return diesel fuel system
- Distributes fuel equally to both left and right tanks eliminating the need for crossover lines
- Durable zinc die cast bodies
- Convenient tee configuration for easy plumbing to each tank
- Applicable for marine use
- (3) 1/2" FPT ports
- (2) 1/4" mounting holes

Part #	Description	Vehicle Applications
060070	Standard flow	Fits heavy duty Volvo, International and Mack trucks
060071	High flow	Fits heavy duty Volvo, International and Mack trucks



## DIESEL FUEL VALVES

- All brass bodies provide added durability — both with 1/2" MPT bottom ports
- Neoprene seats make valves compatible with most liquids

Part #	Description
060026+	Leveling valve with 1/2" FPT side port
060027+	Leveling valve with 5/8" SAE 45" male flare side port



## ELECTRIC FUEL TANK SELECTOR VALVES

### Fuel Solenoid Shut Off Valve

- 12 VDC
- 3/8" port
- 3" overall height
- Includes seal ring and port plug

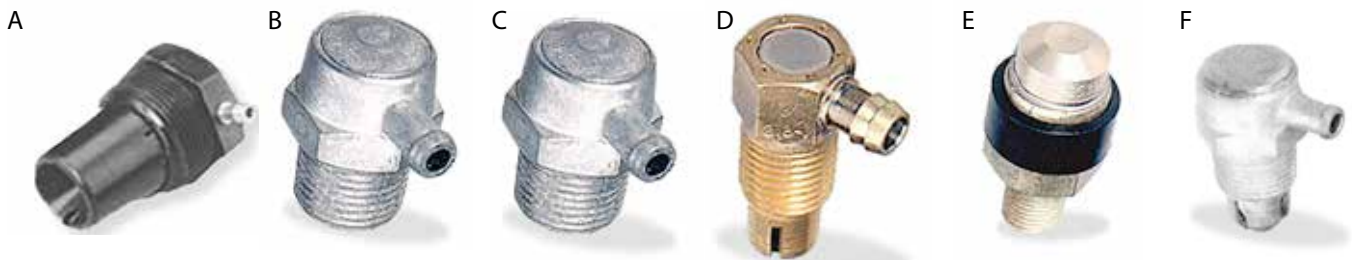
Part #	Description
034095+	Fuel solenoid valve



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## FUEL TANK SAFETY VENTS



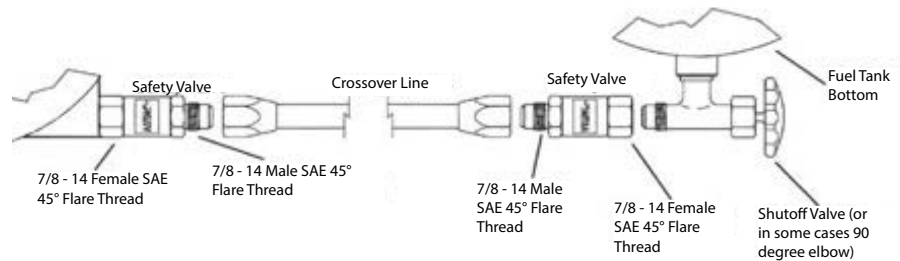
- Feature patented anti-spill protection
- Vents meet all applicable DOT requirements

Part #	Photo	Thread Size	Barb Size (I.D. Hose)	Fuel Application	Vehicle Application
060060	A	1-1/4" PTF SAE Short	1/4"	Diesel	Peterbilt
060061	B	1/2"-14 PTF SAE Short	5/16"	Gasoline	Various
060062	C	1/2"-14 PTF SAE Short	5/16"	Diesel	Various
060063+	D	1/4"-18" PTF	1/4"	Diesel	Various

### Valves with Pressure and Thermal Relief Features

Part #	Photo	Thread Size	Barb Size (I.D. Hose)	Fuel Application	Pre-1992
060040+	E	1/4"-18 PTF	N/A	Diesel	Kenworth
060064	F	1/2"-14 PTF SAE Short	5/16"	Diesel	Kenworth

## FUEL TANK VALVES



Fuel tank diagram

### Crossover Fuel Line Safety Valve

- Functions as a "fuse" in the fuel crossover line, automatically shutting off the flow of fuel if the line between a vehicle's main and auxiliary tanks is torn away or obstructed
- Separates before the crossover fuel line ruptures, preventing damage to fuel tank lines, fittings and valves
- Reduces the risk of fire and fuel slick by minimizing fuel loss if crossover fuel line is torn away
- 3-1/8" length, 1-1/4" diameter
- Lightweight aluminum construction

Part #	Description
060056	Crossover fuel line safety valve

## ADAPTER KITS

### Filler Neck Adapter Kit

- Part No. 600112 allows 2" female fuel caps to be installed on filler necks with small inside diameters
- Include aluminum adapter, installation instructions and adhesive

Part #	Description
600112	Filler neck adapter kit
600191	Filler neck adapter kit

- Part No. 600191 allows 2" female fuel caps to be installed on 2-1/2" male filler neck with 8 threads per inch



### Saddle Tank Mounting Kit

- Complete kit for mounting one saddle tank

#### NOTE

Replacement rubber pads available; no replacements available for other kit parts.

Part #	Description	Qty
602002	Saddle tank mounting kit	
<b>Kit Contents:</b>		
060033	Rubber pad	4
	Spring	4
	Lock nut	4
	Hex bolt	4



1/2" center hole

**OUR PARTS PUT YOU IN THE PASSING LANE**

# **BACK-UP ALARMS**

**Alarms, warning devices & switches.**

Velvac back-up alarms meet the needs of almost every vehicle application and environment.

- Heavy duty OEM style
- Patented double-reflex horn
- Speaker alarms



# BACK-UP ALARMS

## Horn Style Alarms

### Double Reflex Horn Style Back-up Alarm

- 10 year warranty
- High impact glass filled nylon housing meets high temperature demands of SAE J994 and UL flame testing. Provides durability needed for the toughest work and vehicle environments
- 12-24 VDC polarity and peak voltage protection, temperature range -40° to +85°C
- Slotted mounting centers with optional back or bottom mounting for easy installation
- Features patented double reflex horn speaker, providing efficient, high output sound with less power consumption and reduced heat for greater reliability and performance. 24" long folder horn allows alarm to run cooler by using about half the power consumption of conventional speaker alarms to achieve the same decibel output
- Meets requirements of SAE J994, CE, e-Mark and UL, OSHA, MSHA, IP67



Part #	Decibels	Rated Current mAmps (mA)	Connection Type	Mounting Bracket	Mounting Center	ECCO Equivalent	PRECO Equivalent
697002*	107	300	Wire	Integrated nylon	3.25"	575	270

\* Only the Heavy Duty External Switch shown below (697012) comes standard on the Double Reflex Horn Style Back-up Alarm.

### Heavy Duty External Switch

- For use on vehicles that do not have back-up lights readily available
- Equiv: Preco SW30

Part #	Voltage	Amps
697012*	12-80 V	10



### External Switch

- Switch will cause alarm to activate when linkage is shifted into reverse
- Operating temperatures of -40°F to +140°F
- 12-24 VDC
- Not for underwater use

Part #	Description
697011	External switch





# BACK-UP ALARMS

## Speaker Style Alarms

- High impact glass filled nylon housing meets high temperature demands of SAE J994 and UL requirements for flame testing
- Temperature range -40° to +85°C
- 12-24 VDC polarity and peak voltage protection
- Epoxy encapsulation protection and 3 year warranty



697287



699297

Part #	Decibels	Rated Current mAmps (mA)	Connection Type	ECCO Equivalent	PRECO Equivalent
697287	87	100	Wire	—	—
697297	97	500	Wire	—	—
699297	97	500	Terminal	510/520	230/240



697087, 697097 & 697107



697112



699112



699087, 699097 & 699107

Part #	Decibels	Rated Current mAmps (mA)	Mounting Center	ECCO Equivalent	PRECO Equivalent
Wire Connection Speaker Alarms					
697087	87	100 - 200	3.25"	—	—
697097	97	100 - 200	3.25"	—	240C5
697107	107	400 - 500	3.25"	575	270
697112	112	400 - 500	4.12"	—	—
Terminal Connection Speaker Alarms					
699087	87	200 - 300	3.25"	505	220/ELT 278
699097	97	200 - 300	3.25"	510/520	230/230LV/240
699107	107	200 - 300	3.25"	—	250
699112	112	200 - 300	—	—	—

\* Self-adjusting alarm features a true, high sensitivity microphone to sense ambient noise levels around the alarm and automatically adjust the sound output to be 10 decibels

- High impact glass filled nylon housing meets high temperature demands of SAE J994 and provides durability needed for even tough work and vehicle environments
- Meets SAE J944 requirements
- Epoxy encapsulation protects electronics against moisture, allowing steam cleaning or pressure washing
- Ground strap included on 699 Series terminal alarms - two 9" x 16" gauge wires included
- Slotted mounting centers with optional back or bottom mounting for easy installation - dimensions in table above
- Temperature range -40° to +85°C
- 1 year warranty

# BACK-UP ALARMS

## Back-Up Alarms & Warning Devices

### Flush Mount Alarms

- High impact glass filled nylon housing meets high temperature demands of SAE J994 and provides durability needed for even tough work and vehicle environments
- 12 - 24 VDC operation, temperature range -40° to +85°C
- 697124 and 697125 alarms are designed to mount flush into standard 4" hole on vehicle body. These alarms include rubber mounting boot and wire harness with mating connector



Part #	Decibels	Rated Current mAmps (mA)	Connection Type	Hole Diameter	ECCO Equivalent	PRECO Equivalent
697124	97	200 - 400	Wire harness w/ connector	4"	410/415	4030
697125	107	200 - 400	Wire harness w/ connector	4"	435	4050

### Warning Devices

- Yellow colored nylon housings clearly identify as warning devices
- 12 - 24 VDC operation - ground strap included
- Slotted mounting centers with optional back or bottom mounting for easy installation



Part #	Decibels	Rated Current mAmps (mA)	Connection Type	Mounting Centers
696087	87	90 - 400	Terminal	3.25"
696107	107	150 - 500	Terminal	3.25"

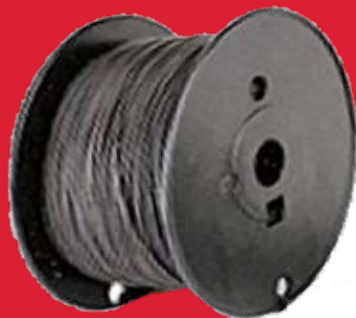
**OUR PARTS PUT YOU IN THE PASSING LANE**

# ACCESSORIES

Yep, it's in here.

From wiper blades to emergency triangles, if you couldn't find what you were looking for in the other sections of our catalog, it's probably right here.

- Wiper blades & emergency triangles
- Tarp straps & king pin locks
- And a whole lot more!



## WIPER BLADES

### Universal Winter Heavy Duty

- Heavy duty steel construction is surrounded by a rubber boot to minimize the accumulation of snow and ice on wiper blades



Part #	Length	Anco #	Trico #
W16	16"	30-16	37-160
W18	18"	30-18	37-180
W20	20"	30-20	37-205

Part #	Length	Anco #	Trico #
W22	22"	30-22	37-225
W24	24"	30-24	37-245
W28	28"	-	-

### Universal Wiper Blade

- All makes heavy duty wiper blade replaces the Anco 31 Series blade, featuring an all steel frame construction with compression molded-rubber for long life



Part #	Length	Anco #
75-14	14"	31-14
75-15	15"	31-15
75-16	16"	31-16
75-17	17"	31-17
75-18	18"	31-18

Part #	Length	Anco #
75-19	19"	31-19
75-20	20"	31-20
75-22	22"	31-22
75-24	24"	31-24

### Heavy Duty Flat Blade

- Used in flat windshield applications. Stainless steel rail. Typically used on heavy duty trucks, school buses, step vans and RVs



Part #	Length	Anco #	Trico #
71-13	13"	51-13	62-130
71-14	14"	51-14	61-140
71-15	15"	51-15	61-150

Part #	Length	Anco #	Trico #
71-16	16"	51-16	61-160
71-18	18"	51-18	61-180

### Winter Heavy Duty Narrow

- Heavy duty steel frame for narrow arms is surrounded by a rubber boot to minimize the accumulation of snow and ice



Part #	Length	Anco #	Trico #
WN15	15"	59-15	66-150

Part #	Length	Anco #	Trico #
WN16	16"	59-16	66-160

### Heavy Duty Flex Blades

- Designed for heavy duty arms that have less than 48 oz. of load. Can be used on flat or curved windshields with narrow saddle arms



Part #	Length	Anco #	Trico #
72-15	15"	52-15	63-151 64-150
72-16	16"	52-16	63-161 64-160

Part #	Length	Anco #	Trico #
72-18	18"	52-18	63-18 64-180
72-20	20"	52-20	63-12 64-200

## WIPER BLADES

### Premium Universal Wiper Blade

- All makes premium heavy duty wiper blade replaces the Anco 91 Series heavy duty blade. Features a riveted all steel frame and compression molded rubber blade for increased life and durability



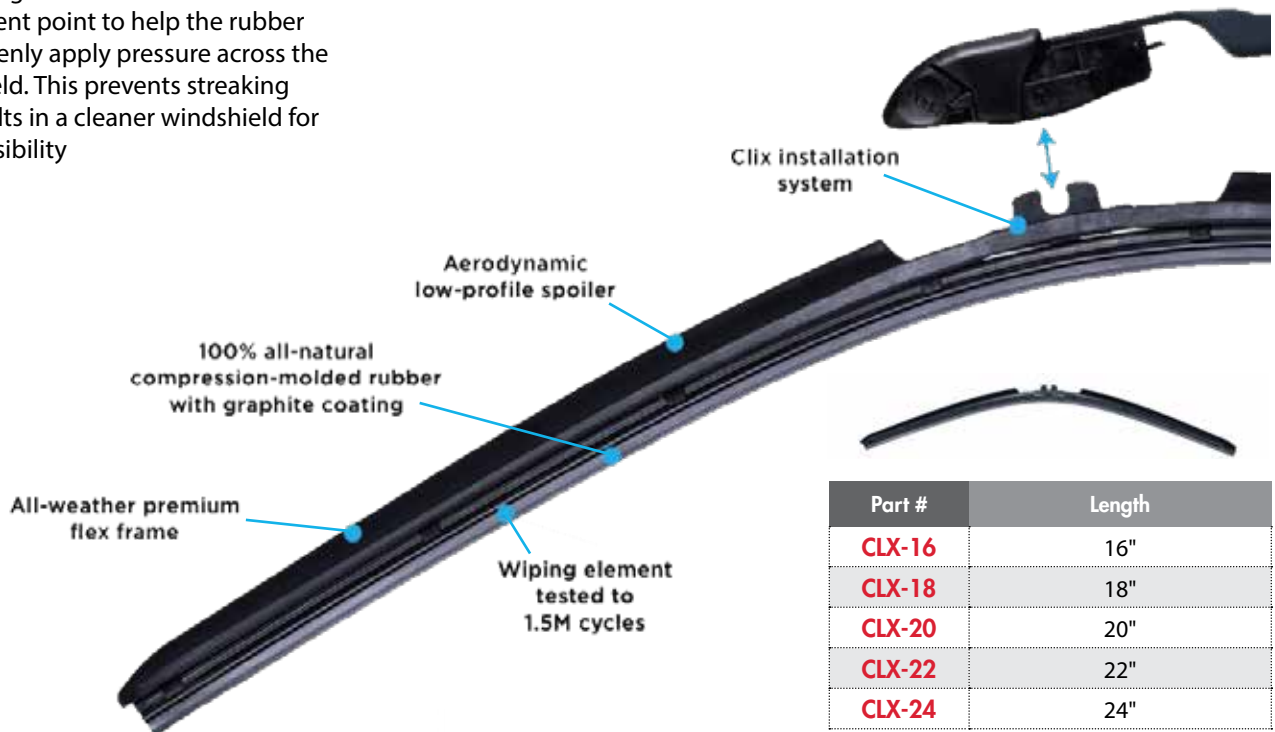
Part #	Length	Anco #	Trico #
76-16	16"	91-16	16-1 16-2
76-18	18"	91-18	18-1 18-2
76-19	19"	91-19	19-1 19-2
76-20	20"	91-20	20-1 20-2 20-4 20-9

Part #	Length	Anco #	Trico #
76-21	21"	91-21	21-1
76-22	22"	91-22	22-1 22-4 22-9
76-24	24"	91-24	24-1 24-4 24-9
76-28	28"	91-28	28-1

## CLIX WIPER BLADES

### Type B Beam Blades

- Two springs branch out from the attachment point to help the rubber blade evenly apply pressure across the windshield. This prevents streaking and results in a cleaner windshield for better visibility



Part #	Length
<b>CLX-16</b>	16"
<b>CLX-18</b>	18"
<b>CLX-20</b>	20"
<b>CLX-22</b>	22"
<b>CLX-24</b>	24"

**Note: Part numbers listed in Red are New!**



### Wiper Blade Rack

- Attractive 16-prong POP display

*See page R3 in Retail Merchandising*



# ACCESSORIES

## TARP STRAPS

### Tarp Straps

- Made of molded rubber for ozone resistance and stretch resiliency
- Designed to hold tarp covers on trucks and trailers
- Hooks are crimped to prevent hook disconnection
- Straps will stretch up to twice their original length
- Premium and DPM straps add increased UV protection

Rubber Tarp Part #	Premium EDPM	Description
580113	580118	9" Length
580114	580119	15" Length
580115	580120	21" Length
580116	580121	31" Length
580117	580122	41" Length



### WARNING!

Rubber tarp straps can have a strong spring tension and can cause bodily injury if they were to come unhooked or break. Safety glasses are recommended. Tarp straps are not to be used to restrain or secure cargo.

## EMERGENCY TRIANGLE

### Emergency Triangle Kit

- Kit contains three HD triangles packaged in a red plastic box
- Fluorescent orange plastic and red reflectors is visible day or night
- Snaps together for easy set up
- Heavy weighted sand filled base provides stability
- Meets all applicable FMVSS 125 and SAE/DOT specifications

Part #	Description
090240*	Emergency triangle kit



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## MECHANICS WIRE

### Mechanics Wire

- Heavy-duty black annealed construction

Part #	Wire Size	Roll Weight
090142	14 ga.	2 lb.
090145	14 ga.	5 lb.
090162	16 ga.	2 lb.
090165	16 ga.	5 lb.
090182	18 ga.	2 lb.
090185	18 ga.	5 lb.



## KING PIN LOCK

### King Pin Lock

- Help deter unwanted trailer hookups
- Made of durable cast iron, it enhances protection against theft, breakage or damage
- Lock set includes two (2) keys

Part #	Description
019032	King pin lock

- Heavy duty zinc plated lock set helps deter rusting and extends service life

NOTE: Each King pin lock is randomly keyed

NOTE: Keyed alike is not available



## DOCUMENT HOLDERS

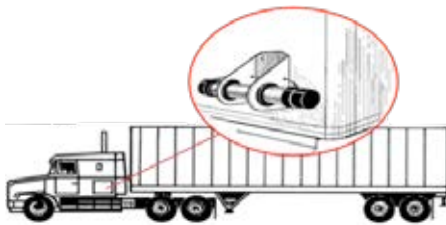
### Tite-Seal Document Storage Case

- Patented rubber caps create a watertight seal
- Aluminum mounting bracket features cushioned tube supports and pre-drilled mounting holes
- CapKeeper protective cable secures caps to mounting bracket

Part #	Description
090113*	Light duty aluminum tube with painted steel cap
090114*	9" Aluminum tube with bracket
090115*	9" Aluminum tube with bracket and CapKeeper cable
090116*	12" Aluminum tube with bracket and CapKeeper cable
090119	Replacement rubber cap

\* Bulk pack available. See price list

CapKeeper™ is a trademark of Velvac, Inc.



Standard case with bracket

090114



Case with bracket and CapKeeper™ cable

090115



Light duty

090113

### License and Permit Holder

- UV-resistant Lexan®
- Inside dimensions are 3-1/8" to 3-3/4" wide x 5-1/2" high x 1-1/4" deep
- Documents secured by a metal spring clip and plate
- Three 1/4" mounting posts

Part #	Description
090060	License and permit holder
090061	Replacement cover

Lexan® is a registered trademark of SABIC Innovation Plastics



# ACCESSORIES

## MOTORAD (STANT RADIATOR CAPS)

### Heavy Duty Radiator Caps

- Velvac is now featuring all makes of heavy duty truck radiator caps

Part #	Deep Neck	Pressure (lb.)
10206	1"	7
10238	Threaded filler neck	16



10206



10238

- For radiator overflow reservoir systems

Part #	Deep Neck	Pressure (lb.)
10228	3/4"	7
10229	3/4"	13
10230	3/4"	16
10231	3/4"	16 vented
10237	3/4"	10



10228, 10229



10230, 10231



10237

Part #	Deep Neck	Pressure (lb.)
10328	3/4"	7
10329	3/4"	13
10337	3/4"	10
10330	3/4"	16



10337

Stant® is a registered trademark of Stant



10328, 10329



10330

Manufactured by Stant®, an industry leader

Part #	I.D. Size	Deep Neck	Pressure (lb.)
10227	32 mm	16 mm	13
10233	32 mm	16 mm	16



10227



10233

Part #	O.D. Size	Deep Neck	Pressure (lb.)
10281	"B" 2-11/16"	3/4"	4
10282	"B" 2-11/16"	3/4"	7
10283	"B" 2-11/16"	3/4"	10
10292*	"B" 2-11/16"	3/4"	7
10293*	"B" 2-11/16"	3/4"	10
10294	"B" 2-11/16"	3/4"	15



10281

\*For radiator overflow reservoir systems

Manufactured by Stant®, an industry leader

## CONSPICUITY TAPE

### Conspicuity Tape

- All the red and white conspicuity tape is DOT-C2 certified and guaranteed to meet or exceed all FMVSS 108 & NHTSA requirements
- The red and white tape comes with a 3, 5 or 10 year warranty
- School bus yellow tape has an enhanced daytime appearance and sight detection for safety. It meets or exceeds FMVSS 131 and FMVSS 217 requirements
- The white is a high performance polyester film that is thin and flexible
- The conspicuity strips are weather, solvent and UV resistant
- The red circles are SAE-ADOT approved
- The latest addition to the line is the diamond plate conspicuity tape. It is thin and flexible, weather resistant and has a distinctive design



058373, 058374, 058377

Part #	Description	Warranty
058373	2" x 18" 11" Red / 7" White conspicuity strips	5 Year
058374	2" x 12" White conspicuity strips	5 Year
058377	2 - 3/4" Diameter red reflective circles	N/A



058395

Part #	Description	Warranty
058395	2" x 150' Roll of 11" Red / 7" White	3 Year



058370

Part #	Description	Warranty
058370	2" x 150' Roll of 11" Red / 7" White	5 Year



058396

Part #	Description	Warranty
058396	2" x 150' Roll of 11" Red / 7" White	10 Year



058397

Part #	Description	Warranty
058397	2" x 150' Roll of 6" Red / 6" White	5 Year



058398

Part #	Description	Warranty
058398	2" x 150' Roll of solid white	5 Year



058379

Part #	Description	Warranty
058379	2" x 150' Roll of solid yellow	10 Year



058399

Part #	Description	Warranty
058399	3-3/4" x 6-1/2" Reflective American flag	5 Year

# ACCESSORIES

## OIL FILLER CAPS

- Plates Steel assembly
- Nitrile Rubber Sealing Components

Part #	Outside Dimension
601157	1"
601158	1.25"
601159	1.35"
601160	1.375"
601161	1.5" (38 mm)
601163	1.62"
601164	1.75"
601165	2"
601167	2.25"

Part #	Outside Dimension	Chain
601162	1.5"	5"
601166	2"	12"



No Chain



Chain

## UNIVERSAL DIPSTICKS

- Nitrile Rubber Sealing Components

Part #	Description	Outside Dimension	Length
601105	Turn Tite	1"	48.75"
601106	Turn Tite	1"	84.75"

**Note: Part numbers listed in RED are NEW!**



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)





**OUR PARTS PUT YOU IN THE PASSING LANE**

# **RETAIL MERCHANDISING**

## **Sell more with POP displays!**

Our attractive custom designed displays help your team organize and position the "high runners" that your customers are looking for.

- Mirror, electrical & air displays
- Fittings & clamp displays
- Buckets, boxes & racks



## DISPLAYS WITH PRODUCT ASSORTMENTS

### Mirror Assortment and Spinner Display

- Velvac now offers a 3-sided spinner display complete with an assortment of popular mirrors that reduce blind spots and improve driver safety.
- Part. No. 690110 includes:
  - » 17 popular mirrors
  - » 150 items total
  - » 3-sided spinner display
  - » Plan-o-gram
  - » 25 4" peg hooks

Part #	Description
690110	Mirror assortment & display

- The assortment of mirrors includes:
  - » West coast
  - » 8½" convex
  - » 5, 6, 7½" convex
  - » Stick-on

**Assortment includes the following part numbers and quantities plus spinner display:**

Part #	Quantity
708501	12
708502	12
708556	6
708503	6
708520	10
708521	8
708515	10
708509	10
708508	10
705038	10
705333	8

Part #	Quantity
705107	6
708331	6
705335	6
723050	10
723060	10
723065	10
723075	10
723100	3
690108	25
690104	1
Plan-o-gram	1



**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## DISPLAYS WITH PRODUCT ASSORTMENTS

### Air and Electrical Display Rack

- Ships with an attractive laminated Velvac header
- Designed for a flexible product set
- Bins are designed to accept dividers to increase storage possibilities
- Display is formed from 16-gauge steel for strength and stability
- Display is designed to hold up to 800 pounds
- Easy to assemble
- Ships with plan-o-gram

Part #	Description
690201+	Includes rack and bins, air and electrical products, plan-o-gram, header, display and bin label



**Assortment includes the following part numbers and quantities plus air and electrical display pack:**

Part #	Quantity
035031	40
035032	40
035033	40
035037	5
035092	5
035093	5
035009	100
035010	100
035011	100
035094	5
035095	5

Part #	Quantity
035007	50
035070	4
022002	5
022001	5
022025	5
032082	5
032058	5
590160	4
590161	4
590163	4
590155	4

Part #	Quantity
590157	4
593057	5
593022	5
593083	5
593084	5
038001	5
038003	5
038005	5
580037	10
580039	5
580040	5

## DISPLAYS WITH PRODUCT ASSORTMENTS

### Electrical Component Assortment and Spinner Display

Part #	Description
690111	Electrical assortment & display

- Assortment of popular, high running electrical components
  - » Butt and ring tongue connectors
  - » Quick slide connectors
  - » Heatless connectors
  - » Fuse holders and fuses
  - » Heat shrink tubing
  - » Silicon self-sealing tape
  - » Electrical tape
  - » Crimping tools
  - » Cable ties
- Includes:
  - » 65 popular, high running part numbers
  - » 226 items total
  - » 3-sided spinner display
  - » Plan-o-gram
  - » 107 4" peg hooks



*Assortment includes the following part numbers and quantities plus spinner display:*

Part #	Quantity
058313-10	10
058313-40	10
058314-10	6
058314-40	4
058312-10	4
058312-50	6
056052-10	4
056052-50	6
056053-10	4
056053-50	6
056051-50	6
057086-50	4
058026	2
090070-25	9
058303-50	4
058304-50	4
058306-50	2
056005-10	4
056005-50	4
056006-50	4
056008-50	4
056011-50	2
058316-40	2
058319-50	2
056070-50	2
056067-50	2
056111-5	3
056112-5	3
056113-5	3
058382	8
058380	2
057131	2
057132	2
057133	2

Part #	Quantity
090068-100	9
091190	4
091130	4
091426	2
091189	2
091325	2
091326	2
091175-5	2
091180-5	2
091181-5	2
091182-5	2
091183-5	2
091184-5	2
091303-5	2
091305-5	2
091306-5	2
091307-5	2
091308-5	2
091309-5	2
091400-5	2
091401-5	2
091402-5	2
091403-5	2
091404-5	2
091131-5	2
091135-5	2
091140-5	2
091142-5	2
091144-5	2
091254	4
090066-100	9
690104	1
Plan-o-gram	1



### Brass Fitting POP Display

Part #	Cabinet Configurations
690194	Velvac header card, instruction sheet, 96 small bins and 48 small bin dividers
690195	Velvac header card, instruction sheet, 56 small bins, 4 medium bins, 2 large bins, 28 small bin dividers, 2 medium bin dividers and 1 large bin divider
690196	Velvac header card, instruction sheet, 40 small bins, 8 medium bins, 2 large bins, 20 small bin dividers, 4 medium bin dividers and 1 large bin divider



- Designed for more flexibility and storage space
- Attractive header card puts the Velvac name in front of customers
- Bins are designed to accept dividers that increase storage possibilities
- Frame is formed from 16-gauge steel for strength and stability
- Frame is designed to hold up to 800 pounds
- Choose from 3 different bin size layouts to best fit your needs
- Display assembly can be ordered in 3 different pre-designed configurations or by the individual pieces for a more custom display

Part #	Type	Specs
690187	Cabinet frame only	54"H x 36"W x 16"D (Header adds 10")
690188	Small storage bin	7 <sup>3</sup> / <sub>8</sub> "L x 4 <sup>1</sup> / <sub>8</sub> "W x 3"H (Holds: 50 seals, 5-10 drain plugs or 4-5 gladhands)
690189	Medium storage bin	10 <sup>3</sup> / <sub>4</sub> "L x 8 <sup>1</sup> / <sub>4</sub> "W x 7"H (Holds: 15 gladhands, 15 7-way plugs or 10 sockets)
690190	Large storage bin	14 <sup>3</sup> / <sub>4</sub> "L x 16 <sup>1</sup> / <sub>2</sub> "W x 7"H (Holds: 2-3 coiled electric sets or 1-2 coiled air sets)
690191	Small bin divider	2 <sup>1</sup> / <sub>2</sub> "H x 6 <sup>3</sup> / <sub>4</sub> "L
690192	Medium bin divider	6 <sup>1</sup> / <sub>2</sub> "H x 10"L
690193	Large bin divider	6 <sup>1</sup> / <sub>2</sub> "H x 13 <sup>3</sup> / <sub>4</sub> "L



## FITTINGS DISPLAY RACKS

### Fitting Assortments

- Steel cabinet with rust-resistant baked enamel finish
- Cabinet includes 18 drawer dividers and 9 large steel drawers with a "positive stop" feature, preventing drawers from being accidentally pulled out
- Dimensions: 17¼"W x 10⅞"H x 11⅝"D
- Assortments come complete with all specified fittings, cabinet and drawer dividers

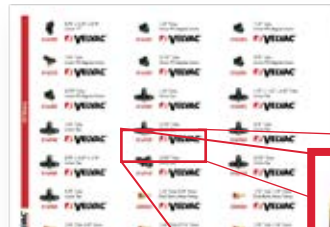
Part #	Pipe Size	Total Fittings
690072	Push-lock fitting assortment	155
690059	Large air brake compression fitting assortment	583
690071	Nylon air brake tube fitting assortment	304
690064	Brass pipe fitting assortment	340
690090	Cabinet only	-
690091	Replacement drawer dividers (Pkg. qty 12)	-



690090

### Fitting Labels

- Packet of peelable sticker labels for use on all brass fittings POP display units
- Custom label sets are available with competitive cross-reference number



You can add your PNs as cross reference to these stickable labels. Just contact [Sales@velvac.com](mailto:Sales@velvac.com) with the PNs you would like to include.

Part #	Description
409904	Complete set of bin labels for all fittings



**Your Pin Here**  
5/8" Tube 3/8" Pipe  
45 degree Swivel Elbow

017997

**VELVAC**<sup>®</sup>

## BUCKET AND COUNTER BOXES

### Counter Top Bucket Display

- A convenient way to display new products while increasing your inside store sales
- Round clear canister, 7" diameter x 7½" height
- Sold complete with cover for easy shipping or fleet sales
- Product label includes an area to display your part number, UPC code and price

Part #	Contents
035160	200 Black polyurethane gladhand seals
035161	200 Red polyurethane gladhand seals
035162	200 Blue polyurethane gladhand seals
035163	200 Black rubber gladhand seals
058380-4	10 Rolls black silicon self fusing tape
058381-4	10 Rolls red silicon self fusing tape
690202	Display bucket only



## BUCKET AND COUNTER BOXES

### Display Bin Box

- Manufactured with corrugated cardboard for extra durability
- Great for store merchandising or storage of loose parts
- Fits on standard shelving or display units
- Complete with Velvac logo for store merchandising and branding

Part #	Description
690007	White 4" x 9"
690008	White 6" x 9"



### Polyurethane Gladhand Seals

- Color-coded seals will not crack or tear, reducing maintenance time and costs associated with rubber seal replacement
- Available in an attractive display box with 25 sets of seals (sets consist of 4 seals per bag, 2 red and 2 blue)

Part #	Description
035012	Display box with seals
035009	Red polyurethane seals
035010	Blue polyurethane seals
035011	Black polyurethane seals



## HOSE CLAMP AND AIR HOSE RACKS

### Slotted Hose Clamp Rack and Assortment

- Assortment includes rack, header and 200 of the fastest moving miniature and general purpose slotted clamps

Part #	Description
022632	Slotted hose clamp rack & assortment

#### Assortment includes the following hose clamps:

Part #	SAE Size	Quantity	Description	Range (in.)
022204	4 Mini	30	Miniature clamp	7/32" - 5/8"
022206	6 Mini	30	Miniature clamp	5/16" - 5/8"
022310	10	20	Slotted clamp	5/8" - 1-1/16"
022312	12	20	Slotted clamp	3/4" - 1-1/4"
022320	20	20	Slotted clamp	1-11/64" - 1-3/4"
022324	24	20	Slotted clamp	1-1/4" - 2"
022328	28	20	Slotted clamp	1-5/8" - 2-3/8"
022332	32	20	Slotted clamp	1-3/4" - 2-1/2"
022336	36	20	Slotted clamp	2" - 2-3/4"
022565	1	-	Rack & header	-



## HOSE CLAMP AND AIR HOSE RACKS

### Large Hose Clamp Rack

- Attractive freestanding or wall mountable display
- Includes 270 of the most popular clamp offerings
- Rack dimensions: 21½"W x 23"H x 8"D
- Moveable hooks allow for several different configurations

Part #	Description
022628	Rack and header only
022630	Hose clamp assortment with rack and header



#### Assortment includes the following hose clamps:

Part #	Description	Size	Quantity
022626	Spring T-bolt clamp	4¼" - 4⅜"	15
022581	Spring T-bolt clamp	2¾" - 3⅛"	15
022430	Constant torq clamp	2¼" - 3⅛"	15
022435	Constant torq clamp	2¾" - 3⅝"	15
022425	Constant torq clamp	1¾" - 2⅝"	15
022445	Constant torq clamp	3¾" - 4⅞"	15

### Air Brake Hose Assembly Display Rack

- For display and organization of ¾" and ½" air hose assemblies
- 12 separate slots hold up to 48 hose assemblies
- Rack measures 21"W x 6"H x 6"D
- Air brake hose assemblies sold separately

Part #	Description
691020	Display rack



### Three-Sided Spinner Display

- Increase your sales opportunities by displaying product and letting your customers know what you have available for sale
- Assembles in minutes - no tools required
- Stands 5' tall (5'6" with the 3 Velvac header signs)
- Three 16" pegboard panels
- Rotating display stand

Part #	Description
690104	3-sided spinner display only



Product sold separately

Peghooks available separately:

Part #	Description
690108	4" Peghooks
690107	2" Peghooks

### Primary Wire Rack

- Holds (12) 100' spools, (8) 100' & (2) 1000' spools or (4) 1000' spools



Part #	Description
691015	Primary wire rack

### Wiper Blade Rack

- Attractive 16-prong POP display



Product sold separately

Part #	Description
690203	Wiper blade display rack

## NEW PRODUCTS

### New Products!

Velvac is adding new products every day.  
If you can't find what you are looking for  
and think Velvac can help,  
contact [sales@velvac.com](mailto:sales@velvac.com).







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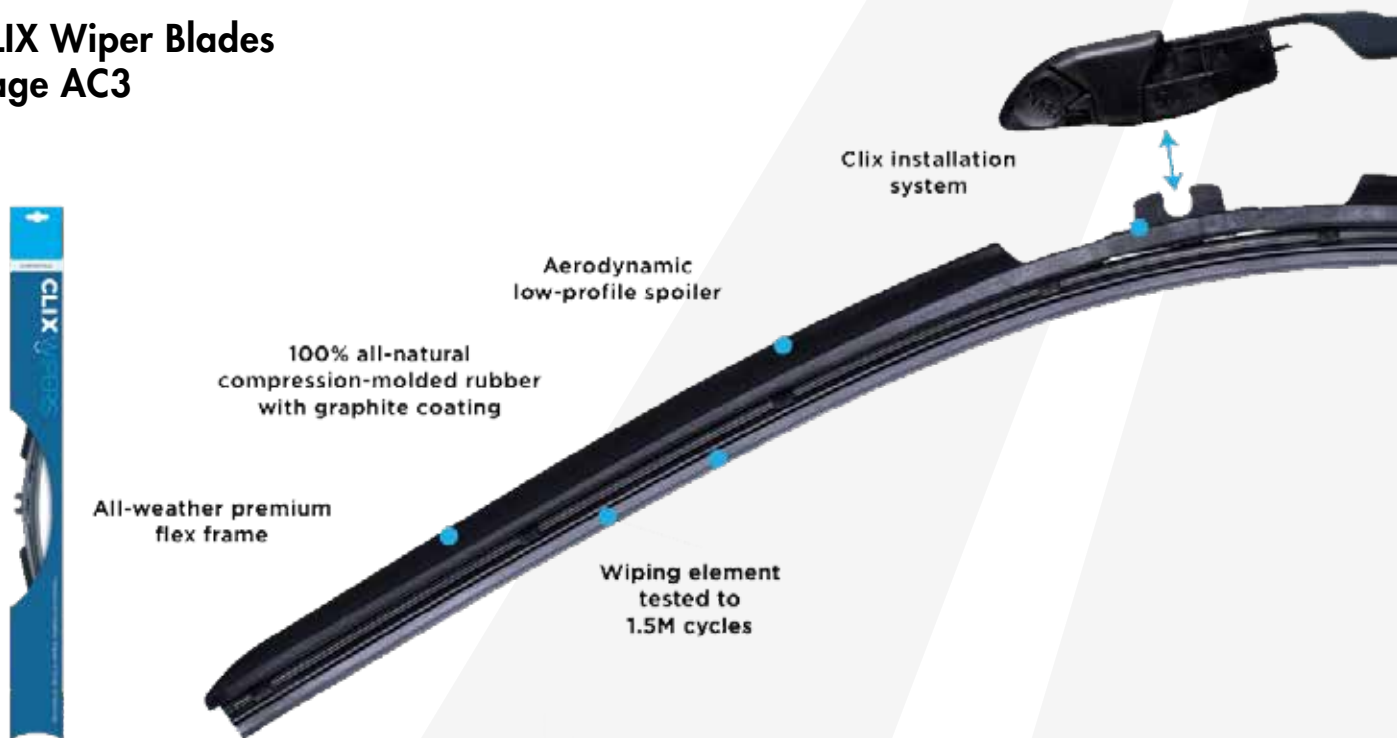
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