

Exhaust Hose Products

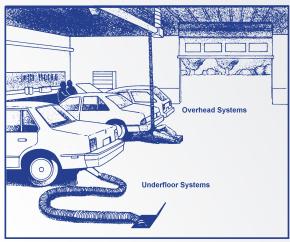
Automotive Shop Equipment | Exhaust Removal

SVI Exhaust Removal Products are used everywhere vehicle service is performed to keep automotive service technicians safe from harmful levels of carbon monoxide (CO).

The Industry's Largest Selection of Shop Equipment Parts

SVI Has Everything to Properly Size and Develop Exhaust Ventilation Systems





SVI is making it easy to develop and size exhaust evacuation systems. Getting the right blower is a snap with the enclosed data. In most cases SVI has done all the work for you. With the data and tables listed here the right system can be customized for every application. Sizing of the fan is the most important part of the process. An underpowered system can leave dangerous amounts of carbon monoxide in the work area. An overpowered system will waste money, electricity and give mechanics problems with rags, tools, paper, etc. getting pulled into the system. Get the right system the easy way. Call SVI.

Exhaust Hose Products (CO) Removal

SVI International, Inc. 800-321-8173 • 815-748-0200

155 Harvestore Drive DeKalb, IL 60115 www.sviinternational.com



SVI's Product Line is Vast

CONTACT US TODAY IF THERE'S SOMETHING YOU CAN'T FIND

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Shims for 3/4" Wedge and Screw Anchors

Color Coded Shims are In-Stock! Order Today!

BH-7512-92 Assortment 150 Shims (50 each)

BH-7512-90 1/16" Blue Pack of 50 1/8" Red BH-7512-91 Pack of 50 BH-7512-89 1/4" Black Pack of 50

HEAVY DUTY PLASTIC SLOTTED SHIMS

Extra-thick shims make it easy to level and align 2- and 4-post surface mount lifts. These rugged plastic shims will not corrode, rot or rust. A must-have for every professional lift installer in the industry.

Many Sizes

Available!



Installation Supplies

- Carbide Drill Bits
- Core Bits
- Epoxy and Adhesives
- Wedge Anchors
- Screw Anchors
- Rebar Cutters and Adapter
- Rod Seal Install Tools
- Safety & Inspection Stickers

Simpson Carbide Drill Bits Many Options and Sizes Available! BH-7064Q-12-21 (Drilling Depth 16" / 3/4" dia.) SDS Max Quad Head Bit

BH-7065Q-12-23 (Drilling Depth 18" / 3/4" dia.) Spline Shank Quad Head Bit BH-7065Q-12-16 (Drilling Depth 11" / 3/4" dia.) Spline Shank Quad Head Bit



Wedge Anchors Many Sizes Available!

BH-7075-03 3/4" x 5-1/2"

Rod Seal Install Tool Set

Includes 3 Install Tools

to Service 3/4" ID Seals

up to 3" ID Seals

Ask How to Get Free Shipping on Wedge Anchors!

BH-7079-01



BH-7075-26 1/2" x 4"

Screw Anchors

Many Sizes Available!

BH-7075-37

3/4" x 5"



Inspection Stickers Roll of 250 BH-7011-11

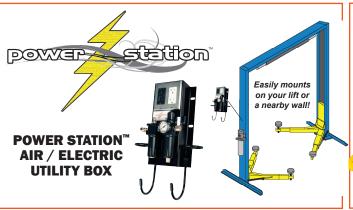
ASK FOR OUR INSTALLATION SUPPLIES CATALOG





Options Available—Call Today!





Vehicle Lifts and Lifting Equipment

New Lifts for Cars, Trucks, Buses, Motorcycles, UTVs and More





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INCREASE EFFICIENCY • ELIMINATE COSTLY DAMAGE TO DOORS • REDUCE STRESS OF SHOP TECHNI-



A Must-Have for All 2-Post Lifts!

Available in 2 Sizes!

BH-7077-02-2S 12" tall x 18" wide BH-7077-02-2 24" tall x 18" wide

Prevents Door Dings!

Just one damaged door can cost 3 times as much as a simple investment in one SVI doorjammerPRO™.





Auto Lift Cables and Chain Sheaves / Pulleys / Chain Rollers















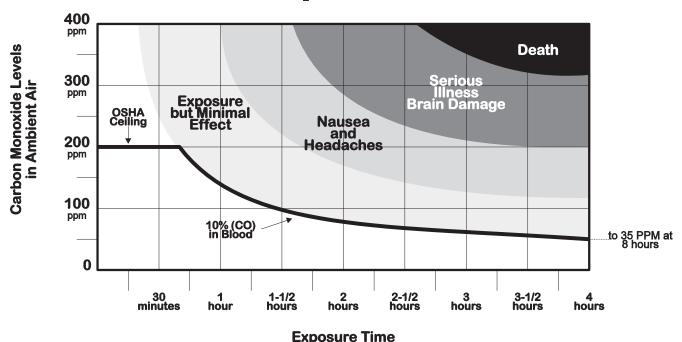
Carbon Monoxide Danger Levels

General Information

For a safe working environment automotive tailpipes should be no further than a few feet from open air. The exhaust must dispersed in open air to keep carbon monoxide (CO) levels below 200 parts per million. If the tailpipe exhaust cannot rise directly from the tailpipe to open air a hose and tailpipe adapter should be used to funnel the fumes to the open air and away from human contact. In these unassisted setups the hose should not extend beyond eleven feet and the hose should be kept as straight as possible. There is not enough line pressure to move the exhaust much beyond eleven feet.

When the tailpipe exhaust must travel farther than eleven feet it is strongly recommended and generally required by O.S.H.A. that power assisted room ventilators or a ducted, blower assisted system be installed. The following pages will assist in providing the necessary information and equipment for these systems.

Exposure



O.S.H.A. Exposure Curve

STEL (Short Term Exposure Limit) - 200 PPM for 15 minutes TWA (Time Weighted Average) - 35 PPM over 8 hours

Exhaust Removal Systems

Room Ventilators are an option if adequate fresh air is available to replace the air being removed by the ventilator fan. In some cases room ventilators can be used in conjunction with point-of-source (tailpipe) systems to provide good carbon monoxide removal. Please call SVI for details on room ventilators.

System Design

- 1. Determine the number of stalls requiring exhaust removal and the type of vehicles being serviced.
- 2. Determine the position of the fan/blower. The blower should be mounted on a rigid platform approximately 16' high. Belt drive blowers weigh between 200 and 600 lbs. (200 lbs. for a typical 2000 cfm blower; 600 lbs. for an 8000 cfm blower.
- 3. Choose either an overhead or underfloor duct system layout. Ductwork should be graduated, narrow farthest from the fan, widening as the ductwork approaches the fan and the CFM increases. This allows for an even flow throughout the system and is generally more acceptable to O.S.H.A. inspectors. The stall farthest from the blower will have the same airflow as that stall closest to the blower.
- 4. Determine the layout and distance from the fan to the farthest stall (in feet)
- 5. If the system is to be mounted overhead via ductwork, how will the hoses be retracted. Page 6 provides many options.
- 5. If the system is to be mounted underfloor a drain should be included to flush the floor ducting of water, oil and other foreign material. Underfloor ductwork (usually schedule 80 PVC) should be sloped at 1" per 40 feet to allow for proper drainage.
- 6. Determine the amount of air flow required.
- 7. Determine the duct and hose sizing. See page 13.
- 8. Determine the blower size based on the CFM requirement plus the pressure loss due to friction (Static Pressure). See pages 4-5.

Considerations

The greater the number of outlets connected to one fan, the greater the chance of large variations in the amount of suction. In many cases, two smaller fans will provide better overall performance than one large fan.

Sixteen Discharge positions are available for the fan. Fan housings are reversible and rotatable in 450 increments.

SVI can provide in-line dampers and/or tailpipe dampers which can close off particular outlets that are not in use.

Exhaust blowers are available with either the fan connected directly to the motor shaft or via a Vbelt drive arrangement. Direct drive arrangements have the advantage of greater efficiency electrically and a less expensive initial cost. Belt drive fans are especially desirable when the required horsepower or fan speed requirement is in doubt.

If a direct drive blower is desired but the CFM requirements may change over time SVI can provide a manual damper at the fan inlet. This damper allows the user to control the air flow and restrict a portion of it should the CFM requirement be lower than the maximum output of the fan.

Fan performance is developed using standard air which is 70°F., 29.92" barometric pressure and .075 lbs. per cubic foot. Temperature and/or altitude conversion factors are used in making corrections to standard conditions. Please call SVI if the application requires nonstandard temperature and/or altitude.

The recommendations in this booklet are of a a general nature. Local codes will supersede any q specifications given in this manual. For further information, please call SVI.

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Blower Selection

Sizing the right blower requires knowing how much air movement is required plus the amount of static pressure.

Static Pressure is the pressure in the system which is lost to friction. Ductwork, dampers, hoses and blowers all provide resistance to the air passing through them. In an air system, the common unit of pressure is the height of a water column in inches per 100 feet (wg).

Room ventilators which have no ductwork will only have the efficiency loss created by the fan and belts. There is no static pressure loss as there is no interference with the air. Ducted systems must account for static pressure loss.

Total Static Pressure is determined by adding the static pressures of any of the air handling components in a system capable of offering resistance to the flow of air. A 10 percent allowance to the sum of these static pressures is added to determine the total static pressure. Ductwork Static Pressure is calculated based on the length of the longest run of duct, the number and size of elbows, and the diameter and velocity of the largest duct and the hoses. SVI has developed handy charts to make this whole process simple. Most of the pressure loss due to friction occurs in the hoses.

Your SVI sales people can determine all these factors for you. Just give them a call.

Five Steps to Determine Static Pressure

Step 1. Determine the total amount of C.F.M. required by the system.

This is done by multiplying the CFM per stall requirement times the total number of stalls or exhaust hose drops. Use the following as a guideline.

Vehicle	CFM per inlet
Passenger Cars:	200 CFM
Light Trucks:	250 CFM
Medium Trucks:	300 CFM
Diesel Trucks	400 CFM
Buses	400 CFM
Heavy Diesel Engines	600 CFM

If passenger cars and light trucks will be the primary vehicles, use 235 CFM.

Step 2. Determine the total length and the pressure loss due to friction in the ductwork (in ft.).

Include any vertical rises, but not the hoses. Hoses will be figured later. Determine the friction loss using Chart B on the Blower Selection Checklist. The left column is shown in multiples of 100 feet. (example: 120 feet of duct pulling 2500 CFM will be $0.38 \times 1.2 = .46$ ° w.g.)

Step 3. Add the Elbows to the System.

Multiply the number of 90° bends in the system by .06" wg. P This approximation is not exact but provides a friction loss within acceptable error levels.

Step 4. Add the friction pressure loss from the exhaust hose to the calculation.

Use Chart A on Blower Selection Checklist to determine how much friction loss (static pressure) to add to the total.

Step 5. Take the total static pressure component for determining the size of the blower.

A 10% error factor is generally added to the calculation.

Example: The Right Fan for the Job

Example: An "L" shaped exhaust system with 12 bays is proposed. The service bays will be repairing diesel trucks. The overall length of the shop is 90 feet long by 75 feet wide.

Step 1. The overall CFM requirement will be 400 CFM per outlet x 12 bays = 4800 CFM. The system will require 20" diameter ductwork. (See page 13 for ductwork diameter).

Step 2. The ductwork will run 75 ft. + 90 ft + an extra 4 ft. vertical = 169 ft. The friction loss at 2000 FPM will be based on 169 ft. 4800 CFM = .23" per 100 ft. friction loss x 1.69 = 0.39" of overall friction loss in the ductwork.

Step 3. There will be one elbow at the base of the L plus a goose neck (twin elbows) leading to the blower (mounted on the roof). $3 \times .06$ ° = .18° for the elbows.

Step 4. The exhaust hose will add .110" x 22' = 2.42" (using 22' of 5" exhaust hose per drop) for a total static pressure loss of 2.99".

Step 5. The 10% allowance brings the total to 3.29" S.P. By requesting an **ES-1214-4800** you will receive the correct belt drive blower for this application.

Please see pages 14-15 for a handy worksheet for putting together your entire system.



Blower Selection Checklist

				_		Chart A			
1)	1a)*	Type of System:	Overhead		Underfloor	Vehicles		Hose Dia.	
	1b)*	Choose one:	Single Phase		Three Phase	Cars/Light Trucks Medium Trucks	235 300	3" to 4" 4"	
	1c)*	Choose one:	Direct Drive		Belt Driven	Diesel Trucks/Bus Heavy Diesel Eng		5" 6"	
	1d)*	To be mounted:	Inside		Outside				
2)*	How	/ Many Stalls			ŗ	С	hart B		
3)*		nt Type of Vehicles I per stall	(see Chart A)			DUCTWORK Total CFM	STATICPRE SP per 1		
43					, []	500	1.50 in	ches	
4)	Tota	il CFM Requiremen	nt (Multiply line 2 by li	ne 3) []	800	1.39 in		
5 *	Doto	ermine Hose Size	inches (Se	00 C	hart A)	1000 1200	1.24 in 1.00 in		
3)	Dete	ennine nose size	linches (36	ee C	mart A)	1500	0.90 in		
6)	Dete	ermine Static Pres	SIIro			1800	0.80 in		
٠,			n of ductwork (in fee	t)		2000	0.70 in		
	ou,	Triat io total long.	ror adotwork (iii loo	, ()		2500	0.64 in		
	6b)	Divide line 6a by 1	00			3000	0.58 in		
	U.J.	Bivide inite od by 1				3500	0.57 in		
	6c)	Static Pressure in I	Ductwork per 100 ft			4000	0.46 in		
	••,	(see Chart B)	Buotino in poi 100 in			4500	0.42 in		
		(coo onan b)				5000	0.41 in	ches	
	6d)	Total Static Pressu	re (multiply 6b x 6c))		6000	0.38 in	ches	
	6e)	Static Pressure in (see Chart C)	Exhaust Hose			С	hart C		
	6f)*	Number of feet of e	exhaust hose per dr	ор		EXHAUSTHOS			
	6g)	Multiply 6e x 6f					FM pe	r foot	
	6h)*	Total Number of Elb	oows or Bends in Du	ctwo	ork	3" 2	35 .·	335" 408"	
	6i)	Multiply 6h x .06"						104" 171"	
						4" 4		305"	
	6j)	Sub Total Static Pr	essure: (6d + 6g + 6	3i)				110"	
	614	TOTAL STATIC DE	DECCLIDE (6: 1 400/	2.\				244"	
	6k)		RESSURE (6j + 10% est inch - i.e. 2.3 = 3	,				054" 103"	

Call: 800-321-8173 • Fax: 800-899-1784

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^{*} Required Fields. Provide the required information, and any other known information; SVI will help determine the best blower for your application.



Hose Selection

SVI offers a wide selection of exhaust hoses to meet all automotive service applications. Our rubber hose is made from a compound specially formulated to withstand up to 600°F. of tailpipe exhaust temperatures. Even at high temperatures it will maintain maximum flexibility and durability. This innovative compound has kept pace with the emergence of high heat-producing catalytic converters and emission control devices.



Flarelock Hose

Our Standard hose for use on Cars, SUVs, and Light Trucks. FLARELOCK comes in 11' lengths but couples together to any length required. No splice connector is required. FLARELOCK hose can be used underground, out-the-door, or in overhead systems. FLARELOCK hose will withstand exhaust temps up to 600°F when used with a proper adapter and a fan-assisted system. Durable and crush resistant, this is the most popular hose style.

SVI#	Ret #	Hose Dia.	Length	Recommended Application	
ES-1000-20	FLT200	2"	11 ft.	For Small Cars and Motorcycles	
ES-1000-25	FLT250	2-1/2"	11 ft.	For Most Cars	
ES-1000-30	FLT300	3"	11 ft.	For Gas Cars and Trucks	
ES-1000-35	FLT350	3-1/2"	11 ft.	For Cars, Light Trucks and Vans	
ES-1000-40	FLT400	4"	11 ft.	For Gasoline Engine Trucks	

Unihose Hose

UNIHOSE is the same as FLARELOCK except includes a tailpipe adapter joined in one continuous piece.

	SVI#	Old SVI#	Hose Dia.	Length	Recommended Application / Description
P	ES-1001-25	UNH2500	2-1/2"	11 ft.	For motorcycles and compact cars
а	ES-1001-30	UNH3000	3"	11 ft.	For passenger cars
	ES-1001-40	UNH4000	4"	11 ft.	For gasoline engine trucks
9	ES-1203-10	#3R8	3"	11 ft. hose	ES-1001-30 with ES-1203-07 Tailpipe Adapter
е	ES-1203-10SL		3"	11 ft. hose	ES-1001-30 with ES-1202-20-3PS Positive ID Adapter
	ES-1203-10RO		3"	11 ft. hose	ES-1001-30 with ES-1014-25 Oval Twin Tail Pipe Adapter



ACT Hose

ACT Hose is available with or without wire. Designed for use with larger gas vehicles and diesel trucks. ACT Hose is available with wire through all 11 ft. or just the first 30 inches. Add wire to resist kinking using the "W11" suffix for 11' of wire or "W30" suffix for 30" of wire. Always use an overhead exhaust system and proper adapter with your ACT hose to ensure the longest possible hose life and best ventilation. ACT hoses are all 11' long, except for the ACT40-20, which is 20' long. Hoses will withstand exhaust temps up to 600°F when used with a proper adapter and a fan-assisted system. ACT hose WITH wire helix should never be run over with a vehicle. If hose is used in an application where hose is left on the floor and run over, use the hose WITHOUT the wire helix. ACT Hose can be spliced together with an aluminum splice connector. Wire inserted ACT hose and non-wire inserted hoses can be used together with a splice connector allowing for wire inserted hose on the overhead system and flexible rubber hose near the exhaust pipes.

SVI#	Ref#	Hose Dia.	Length	Recommended Application
ES-1002-40	ACT400	4"	11 ft.	For gasoline engine trucks • No Wire
ES-1002-42	ACT40-20	4"	20ft	For gasoline engine trucks • No Wire • 20 ft. continuous length
ES-1003-40	ACT400W11	4"	11 ft.	For gasoline engine trucks • With 11' of Wire Insert
ES-1004-40	ACT400W30	4"	11 ft.	For gasoline engine trucks • With 30" of Wire Insert
ES-1002-40D	ACT400DYNO	4"	11 ft.	For Dynamometers and High Performance Applications
ES-1002-50	ACT500	5"	11 ft.	For diesel trucks • No Wire
ES-1003-50	ACT500W11	5"	11 ft.	For diesel trucks • With 11' of Wire Insert
ES-1004-50	ACT600W30	5"	11 ft.	For diesel trucks • With 30" of Wire Insert
ES-1002-60	ACT600	6"	11 ft.	For heavy duty vehicles with 600 Hp. • No Wire
ES-1003-60	ACT600W11	6"	11 ft.	For heavy duty vehicles with 600 Hp. • With 11' of Wire Insert
ES-1004-60	ACT600W30	6"	11 ft.	For heavy duty vehicles with 600 Hp. • With 30" of Wire Insert

4" ACT400
Adapters:
F350, F400, F450, RA300,
F475, F575, F675,
F675-SC, DSR600, F800-4
Door Port: ADF40
Y-Connector: AY40
Elbows: AEL40
Splice: SP40, AC40
Duct Connector: OC40

5" ACT500	6" ACT600
Adapters:	Adapters:
DSR600, DSR8600,	DSR600-6, DSR8600,
DSR9600	DSR9600
Door Port: n/a	Door Port: n/a
Y-Connector: n/a	Y-Connector: n/a
Elbows: AEL50	Elbows: AEL60
Splice: AC50	Splice: AC60-OC
Duct Connector:	Duct Connector:
OC50, OC50-D	AC60-OC

Superflex Hose

SUPERFLEX Hose will stretch and flex like an accordion. The compressed rubber hose will not kink even if bent at 180°. SUPERFLEX is great for attaching directly to overhead duct connectors as it will easily bend around automobiles, automotive lifts and other obstructions in the work area. Please note: SUPERFLEX hose can be linked together with a splice connector but will not connect with FLARELOCK hose.

SVI#	Ref#	Hose Dia.	Length	Recommended Application
ES-1005-40	40-20SF	4"	20 ft.	For gasoline engine trucks
ES-1005-50	50-12SF	5"	12 ft.	For diesel engine trucks

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Stainless Steel Hose

High temperature hose for use with Dynomometers. Lightweight and flexible, it withstands 1650°F.

SVI#	Ref#	Hose Dia.	Length	Recommended Application
ES-1006-40	190SS4000	4"	10 ft.	Longer Lengths Available
ES-1006-50	190SS5000	5"	10 ft.	Longer Lengths Available

Door Ports

Door ports are installed by putting one piece on each side of the door and then connecting them with included screws. Fits 1" doors out of the box. Use threaded rod and nuts (not included) for thicker doors.

SVI#	Ref#	Description	Use w/Hose Sizes
ES-1020-25	DF25	2-1/2" Rubber Door Port	for 2-1/2" hose
ES-1020-30	ADF30	3" Aluminum Door Port	for 3" hose
ES-1020-40	ADF40	4" Aluminum Door Port	for 4" hose



90° Elbows

Rubber elbows connect to underfloor systems. Aluminum elbows connect two hoses for overhead pulley systems. Fits Hose shown below.

SVI#	Ref#	Description
ES-1021-25	AEL25	2-1/2" Aluminum Elbow for Overhead Drops
ES-1021-30	AEL30	3" Aluminum Elbow for Overhead Drops
ES-1021-40	AEL40	4" Aluminum Elbow for Overhead Drops
ES-1021-50	AEL50	5" Aluminum Elbow for Overhead Drops
ES-1022-25	EB25	2-1/2" Rubber Elbow for Underfloor Systems
ES-1022-30	EB30	3" Rubber Elbow for Underfloor Systems







Tailpipe Adapters

SVI#	Ref#	Description	Tailpipe Style	Tailpipe Max Dia.	Use with Hose Sizes
ES-1010-30	TPA3000	Spaced Twin Tail Pipes	Separated	3"	up to 2-1/2"
ES-1011-25	F250	Straight with Hook and Chain	Single	2"	2-1/2", 3", 3-1/2"
ES-1011-30	F300	Straight with Hook and Chain	Single	2-1/2"	2-1/2", 3", 3-1/2"
ES-1011-35	F350	Straight with Hook and Chain	Single	3"	2-1/2", 3", 3-1/2"
ES-1015-40	F400	Straight with Hook for Trucks	Single	3-1/2"	3-1/2", 4", 5"
ES-1012	DSR600	Stack Adapter	Diesel Stack	5-1/2"	4", 5"
ES-1012-06	DSR600-6	Stack Adapter	Diesel Stack	5-1/2"	6"
ES-1012-86	DSR8600	Stack Adapter - Vertical	Diesel Stack		5", 6"
ES-1012-96	DSR9600	Stack Adapter - Vertical	Diesel Stack		5", 6"
ES-1013	UNA1000	Plug into Unihose	All	All	3"
ES-1014-25	F475	Oval Adapter (2-1/2" x 6")	Twin up to 2"	6" Oval	3", 4"
ES-1014-35	F575	Oval Adapter (3-1/2" x 8-1/2")	Twin up to 3"	8" Oval	3", 4"
ES-1015-25	RA250	Universal with Snaps	All	All	2-1/2"
ES-1015-30	RA300	Universal with Snaps	All	All	3"
ES-1015-75SC	F675SC	Flush-Mount, with Suction Cup			3", 4"





Flush-Mounted **Tailpipe Adapter**

ES-1015-75SC (ref F675SC)

For flush mounted tailpipes, the ES-1015-75SC (ref F675-SC) provides the perfect solution! It's industrial-grade suction cup will stick to any vehicle without damaging the finish and hold the adapter over the tailpipe, creating a capture shroud. Because it does not slide over the pipe, it does need to be used as part of a fan-assisted system.







Splice Connectors

Connect two hoses together. Aluminum has external threads and rubber has internal threads. Rubber splices are crushproof.

SVI#	Ref#	Description
ES-1023-25	SP25	2-1/2" Rubber Splice Connector
ES-1023-30	SP30	3" Rubber Splice Connector
ES-1023-40	SP40	4" Rubber Splice Connector
ES-1024-30	AC30	3" Aluminum Splice Connector
ES-1024-40	AC40	4" Aluminum Splice Connector for Superflex and ACT Hose
ES-1024-50	AC50	5" Aluminum Splice Connector for Superflex and ACT Hose
ES-1025-60	AC60-OC	6" Aluminum Duct and Splice Connector



Overhead Duct Connectors

Connects Crushproof hose to overhead ductwork "T"

SVI#	Ref#	Description
ES-1026-30	OC30	3" Aluminum Duct Connector
ES-1026-40	OC40	4" Aluminum Duct Connector
ES-1026-50	OC50	5" Aluminum Duct Connector
ES-1026-50D	OC50D	5" Aluminum Duct Connector with Damper



Y Connectors

Allows three pieces of hose to be connected to make a "Y" assembly for use with dual exhaust vehicle. Our hoses thread into

SVI#	Ref#	Description	the connectors.
ES-1027-20	RY20	2" Rubber Y Connector	
ES-1027-25	RY25	2-1/2" Rubber Y Connector	
ES-1027-30	RY30	3" Rubber Y Connector	
ES-1027-40	RY40	4" Rubber Y Connector	
ES-1027-40A	AY40	4" Aluminum Y Connector	



Assembly

Convert a single exhaust hose into dual kit for servicing many of today's most popular cars and trucks. Includes Y adapter, (2) 4' Lengths of Hose, and (2) Specified Adapters

SVI#	Ret #	Description
ES-1028-25	YA250	Hose and Y Assembly for 2-1/2" hose with F250 (2)
ES-1028-30	YA300	Hose and Y Assembly for 3" hose with F300 (2)
ES-1028-40	YA400	Hose and Y Assembly for 4" hose with F350 (2)
ES-1028-50	YA4475D	Hose and Y Assembly for Diesel / DYNO



Each Y Assembly includes (2) 4 ft hoses, Y adapter plus (2) tailpipe adapters

Monoloc™ Assembly

SVI#	Ref#	Description
ES-1028-08	CMA308	3" x 8" Hose and Adapter Assembly
ES-1028-11	CMA311	3" x 11" Hose and Adapter Assembly



MONOLOC™ Assemblies have a special "snug fit" tailpipe adapter to fit most vehicle exhaust pipes. The adapter fits tightly over the tailpipe and grips the pipe to provide a positive seal. It includes an adjustable air intake vent to open for cooling air. MONOLOC is a Trademark of Crushproof Tubing Company.



Underfloor Connectors with Lid

SVI's Underfloor Connectors are designed to connect to underfloor PVC ducting. Included is a top floor fitting with a hinged lid and lower saddle for connecting to the ducting. A hole is drilled in the top of the ducting with the saddle attached by use of hose clamps.

SVI#	Old SVI#	Description
ES-1110-03	BP-4899-03	Angled Floor Fitting Kit for 3" hoses
ES-1110-04	BP-4899-04	Angled Floor Fitting Kit for 4" hoses



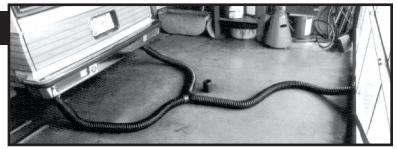
For use on all underfloor systems. The hose guide serves to guide the rubber hose easily through the underground system. It also prevents rags and papers from being sucked into the system. These Hose Guide Kits include a guide adapter, hose ties, and screen element.

SVI#	Old SVI#	Description
ES-1140-03	BP-4898-03	Hose Guide Kit for 3" hoses
ES-1140-04	BP-4898-04	Hose Guide Kit for 4" hoses



Kits

SVI offers convenient kits for service station and car dealership applications



SVI#	Ref#	Description
ES-1030	CKO3001	Car Dealership Kit for Overhead Systems
ES-1040-01	TKO4001	Gasoline Truck Kit for Overhead Systems
ES-1050-01	TKO5002	Diesel Truck Kit for Overhead Systems

Kit Contents

(2) ES-1000 Series Hoses

(1) ES-1011 Series Tailpipe Adapter

(1) ES-1021 Series 90° Elbow

(1) ES-1025 Series Duct Connector

SVI#	Ref#	Description
ES-1031	CKU3002	Car Dealership Kit for Underfloor Systems
ES-1040-02	TKU4002	Gasoline Truck Kit for Underfloor Systems

NIT	Contents	
/41	EO 4000 00	

(1) ES-1000-30 or -40 Hose

(1) ES-1011-30 or -40 Tailpipe Adapter

(1) ES-1022-30 or -40 Series 90° Elbow

SVI#	Ref#	Description
ES-1032	DSS25	Service Station Kit for 2-1/2" Hose
ES-1033	DSS30	Service Station Kit for 3" Hose
ES-1034	DSS40	Service Station Kit for 4" Hose (Alum. Y)

Note: For single exhaust remove Y and connect two lengths of hose with splice connector). Door Ports may be ordered separately.

Kit	Conten	ts		

(2) 4' Hoses (2-1/2", 3" or 4")

(1) 6' Hose (2-1/2", 3" or 4")

(1) Y Adapter • ES-1027-25, -30, -40A

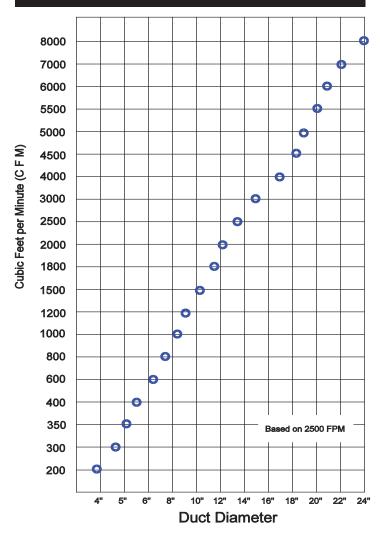
(2) Tailpipe Adapters •

ES-1011-25, -30, or ES-1015-40

(1) Splice Connector ES-1023-25, -30, -40

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Duct Diameter Size Chart



Getting the proper size ducting for the exhaust system being installed is very important. The larger the duct diameter, the bigger and more costly the fan required. Too small duct diameter will not have the capacity to adequately remove the exhaust fumes. Duct sizing is generally graduated with the largest diameter nearest the fan/blower. This keeps the air velocity constant throughout the system so the stalls farthest from the fan pull the same CFM as those closest the fan. This graduation is based on the amount of exhaust (CFM) being pulled through a given section of ducting. For evacuating toxic carbon monoxide the ducting should be sized for a minimum velocity of 2000 - 2500 FPM.

CFM=Cubic Feet Per Minute (Volume or Amount of Exhaust being moved) FPM=Feet Per Minute (the Velocity of the Exhaust being moved) The Duct Diameter Chart is based on the following formula:

$$\frac{\text{Duct Cross Section}}{\text{Area Required}} = \frac{\text{CFM}}{\text{FPM}} \text{ x = Area in Cu. in (A}^{\text{3in}})$$

$$\frac{A^{3in}}{\sqrt{3.1416}}$$
 x 2 = required Duct Diameter

(Example: 800 CFM @ 2000 FPM = $.40' \times 144 = 57.60'' / 3.1416 = 18.33''$ The square root of $18.33 = 4.28'' \times 2 = 8.56''$ diameter rounded up to 9'' or 10'' dia.)

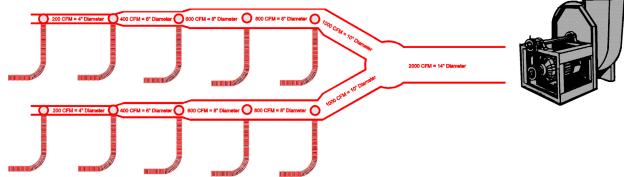
If the duct diameter is known or installed and you need to determine the maximum capacity of exhaust the system can handle the above formula can be done in reverse:

CFM =
$$\frac{\pi r^2}{144}$$
 x 2000

(Example: 14" Ductwork = radius² = 7^2 = 49 x 3.1416/144 = 1.069 x 2000 = 2138')

Exhaust ducting is graduated because the CFM of each bay must be added to all the others as the exhaust moves closer to the fan. The last bay (farthest from the fan will require the minimum diameter (4" duct diameter for 200 CFM automobile exhaust). If the system has ten stalls, the ducting nearest the fan must handle $200 \times 10 = 2000$ CFM, and therefore must be at least 14" diameter.

Underfloor systems require a 1" per 40' slope in order to allow for drainage and cleaning. Schedule 40 or Schedule 80 PVC is recommended for most underfloor systems.

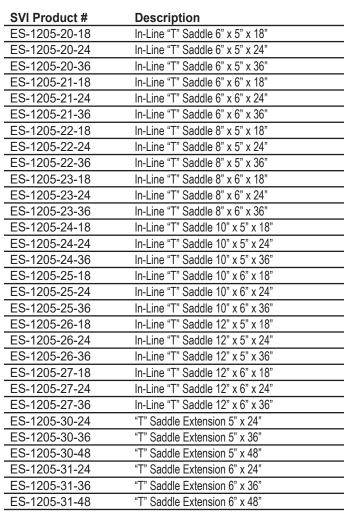


Please Note: All size and pressure selections listed above are recommendations only. These do not take into consideration state or local codes which may specify other materials or sizes.

Information and specifications are published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE). Please call SVI for further details.









Overhead Blazing Fast Saddles

- Save labor cost by eliminating the need to drill and fasten a separate saddle.
- Safer to install. There is no drilling upside down with hot chips falling on you or your face.
- · Saves material by combining two fittings into one.
- Easy to relocate or install for a future drop.
- Eliminates crushed spiral duct from slippage during saddle installation.
- Reduces air leakage by eliminating saddle surface area on spiral duct.
- Keeps cost in-line while reducing the bull and spending less time on the saddle.

Standard Duct Saddles

ES-1205-44 5" x 15" Overhead Duct Saddle in stainless steel.



	SVI Product#	Description
	ES-1205-01	Duct Saddle w/ 5" to 3" Reducer
	ES-1205-02	Duct Saddle w/ 5" to 4" Reducer
	ES-1205-03	Duct Saddle 5" Straight
	ES-1205-04	Duct Saddle 6" Straight
7	ES-1205-44	Duct Saddle 5" x 15" Long
	ES-1205-44L	Duct Saddle 5" x 30" Long



Floor Duct Saddles

SVI Product#	Description	
ES-1203-05	3" Duct Saddle	
ES-1204-06	4" Duct Saddle	

Diesel Stack Adapters

SVI Product#	Description	_
ES-1305-02	5" Diesel Stack Adapter	
ES-1306-02	6" Diesel Stack Adapter	

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Positive ID™ Tailpipe Adapters

The Positive ID™ is exactly what you need when you want a tailpipe adapter to easily fit and stay put. Simply insert the adapter into the tailpipe until it stops and then give it a twist to the right. It is now so secure you could



Hose sold separately. See ES-1203-10SL for 3" Adapter with Hose.

The Positive ID™ Adapter exclusively available from SVI is the only tailpipe adapter that engages the inside of the tailpipe. The Positive ID™ works where others can't. It is also available for Telescopic Systems and can be easily added to previous systems supplied by Garage Products or others.

literally put the car in neutral and pull it by the length of exhaust hose connected to the tailpipe. A simple twist to the left and you have removed it just as easily as it was installed.

Works on recessed tailpipes

Allows cool air draw. Make a Positive ID[™]

Won't fall off or scratch paint or chrome.

ES-1202-20-3	3" Positive ID™ Tailpipe Adapter
ES-1202-20-3PS	3" Positive ID™ Tailpipe Adapt w/stop
ES-1202-20-4	4" Positive ID™ Tailpipe Adapter
ES-1202-20-4PS	4" Positive ID™ Tailpipe Adapt w/stop
ES-1202-20-5	5" Positive ID™ Tailpipe Adapter
ES-1202-20-6	6" Positive ID™ Tailpipe Adapter

The "One-Step" Shock Lock Adapter

The "One Step" Universal Exhaust Collector takes the hassle out of tailpipe connections and works with virtually all vehicles currently on the market including recessed and semi-recessed configurations. Simply remove the collector from the stirrup or harness, position between the floor and the tailpipe and the shock automatically locks into place.



Works where other collectors do not.

Takes the frustration out of tailpipe connections.



Alligator Jaw Tailpipe Adapters



These tailpipe adapters clamp firmly to the outside diameter of round and oval tailpipes. They are produced in stainless steel and available in 3" and 4" sizes. Alligator Jaw Adapters are widely used on both in-floor and overhead SVI exhaust removal systems. SVI also supplies these adapters as replacement parts for systems sold by others. Also complete hose, adapter and hose guide assemblies are available.

Specialty Tailpipe Adapters





ES-1204-14
Tailpipe Adapter for Single Exhaust Pipe with Twin Pipe Tip Found on 2008-2015 Ford F-250, F-350, F-450 and some F-550 trucks.

Ford Tailpipe found on 2008 F450 models

This tailpipe reduces EGT's (exhaust gas temperatures).

If anyone needs special or custom tailpipe adapters
for new model applications—SVI is your answer!

SVI knows custom.

Call SVI today for your custom exhaust needs.

Put SVI Exhaust Removal Products to work for you today. If you have any ideas for new exhaust removal products, please let us know.

We are always open to input, suggestions and special requirements.

SVI is your answer. Call 800-321-8173 today!



Telescopic Overhead Systems

SVI has earned a reputation in the automotive service equipment industry as one of the most flexible and responsive companies through attention to customer needs and service. The same flexibility and responsiveness will be apparent to all who use the SVI line of exhaust removal systems. We listen to input, we listen to your needs, we innovate and we get the job done for YOU. Let's go to work together and get the exhaust the heck out of there...



- · Simple to install.
- Stays up out of the way.
- Easy to use, easy to store.
- · Full repair parts availability.
- · Eliminate pulleys, reels and winches.
- · Ideal for existing facilities, no breaking concrete.

ES-1205-43

Telescopic Overhead Exhaust Removal Systems. As a result of SVInitiative, Telescopic Systems are now available in different lengths to accommodate various ceiling heights. You also get more adapter choices than ever before. Choose from the all-new Positive ID™ adapter, the main stay alligator jaw style or the exclusive shock loaded "One-Step" universal exhaust collector.



Telescopic Overhead Systems

SVI Product#	Adapter Type	Description
ES-1205-43	Alligator Jaw	16' Overhead Telescopic Exhaust System
ES-1205-43EL1	Alligator Jaw	17' Overhead Telescopic Exhaust System
ES-1205-43EL2	Alligator Jaw	18' Overhead Telescopic Exhaust System
ES-1205-43EL3	Alligator Jaw	19' Overhead Telescopic Exhaust System
ES-1205-43EL4	Alligator Jaw	20' Overhead Telescopic Exhaust System
ES-1205-43EL5	Alligator Jaw	21' Overhead Telescopic Exhaust System
ES-1205-43SL	Positive ID™	16' Overhead Telescopic Exhaust System
ES-1205-43SLEL1	Positive ID™	17' Overhead Telescopic Exhaust System
ES-1205-43SLEL2	Positive ID™	18' Overhead Telescopic Exhaust System
ES-1205-43SLEL3	Positive ID™	19' Overhead Telescopic Exhaust System
ES-1205-43SLEL4	Positive ID™	20' Overhead Telescopic Exhaust System
ES-1205-43SLEL5	Positive ID™	21' Overhead Telescopic Exhaust System



800-321-8173 fax: 800-899-1784

Put SVI Exhaust Removal Products to work for you today.

If you have any ideas for new exhaust removal products, please let us know. We are always open to input, suggestions and special requirements.

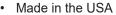
SVI is your answer. Call today!

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The In-Floor Exhaust Removal System

An IN-Floor Exhaust Removal System is an essential requirement for new shop construction where fine attention is given to overall appearance. No other exhaust removal system helps shop owners achieve a clean and clutter-free shop environment better than an SVI IN-Floor system.



- · Simple and easy to install.
- Cover closes automatically when not in use to keep everyone safe.
- The tailpipe and adapter assembly is easy to use and easy to store away out of sight.
- Patented spring-pin-loaded cover eliminates accidental back over damage to cover.
- Powder Coated and Stainless Steel components.
- Ideal for new facilities that want to achieve the highest level of professionalism and appearance.
- Each size is available with your choice of either the Positive ID™ or Alligator Jaw tailpipe adapter . Some shops will choose as an option to have one of each style hose assembly.

ES-1203-03	3" IN-Floor system (Alligator Jaw)	
ES-1203-03SL	3" IN-Floor system (Positive ID™)	
ES-1204-04	4" IN-Floor system (Alligator Jaw)	
ES-1204-04SL	4" IN-Floor system (Positive ID™)	

Each IN-Floor system does one automotive service bay and is supplied complete with the following:

- Duct Saddle
- Floor Fixture with Spring-Pin-Loaded Cover
- Hose Assembly with choice of Tailpipe Adapter and Hose Guide
- Fasteners (optional duct saddle extensions are available)

^{*} Underground 10" diameter duct tubes are not included.



Spring-pin-loaded hinge design keeps cover safe from potential damage. Snaps right into floor fixture cover pivot socket.

ES-1202-10 Self Closing Cover (Only)



ES-1203-10SL 3" Hose Assembly with Positive ID™ Adapter and Hose Guide

е



Quick Port Door Exhaust System







The Quick Port Door Exhaust System is ideal for independent garages and franchise type automotive shops everywhere.

This self storing system is always ready for immediate use. It's convenient location on the overhead door means hoses are not laying around on the floor causing any type of trip hazard. When you need to exhaust the fumes simply lift the hose up off of the "J" brackets, pull the hose to the tailpipe and attach the tailpipe adapter. Now with SVI and the Quick Port system you are breathing easy.

ES-1202-03 3" Quick Port System

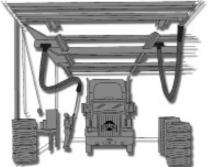
- Simple and easy to install.
- Self-sealing system. The hose when not in use seals the port keeping costly drafts and unwanted rodents out.
- Stores on the door not on the floor.
- Fits standard 10' wide service bay doors.
- Available in kit form (includes ES-1011-30)

Big Rig Overhead Exhaust Systems

Diesel truck service can require long periods where running the engine is necessary to make the correct adjustments. In diesel shops it very important to properly exhaust the fumes to keep service technicians safe from carbon monoxide levels. SVI Big Rig Overhead Exhaust Systems are an ideal solution for exhaust removal needs.

These systems can be purchased with your choice of either a 5" or 6" stainless steel stack adapter. The stack adapters are equipped with an air gate that can be kept closed when not in use. Each System consists of an air duct saddle, a stack adapter, a reel assembly with 40' of rope, wraprope breaking mechanism, two pulleys and an anchor snap. An adapter grip pole is also available as an option.

ES-1305	5" Overhead Exhaust System w/ Neoflex Hose	
ES-1305A	5" Overhead Exhaust System w/ Stainless Steel Hose	
ES-1305B 5" Overhead Exhaust System w/ Galv. Steel Hose		
ES-1306	6" Overhead Exhaust System w/ Neoflex Hose	
ES-1306A	6" Overhead Exhaust System w/ Stainless Steel Hose	
ES-1306B	6" Overhead Exhaust System w/ Galv. Steel Hose	

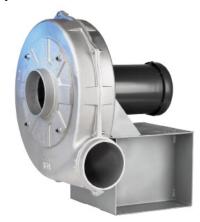


Options: - Wall winch with brake - Adapter Grip Pole

Blower Selection

Sizing the right blower is the main ingredient for any exhaust system's proper function. Fill out the Blower Selection form and consult with SVI to determine the proper blower model for any shop.

From Blowers to Hose and Tailpipe Adapters to Telescopic Overhead Systems SVI is the new leader in exhaust removal products.



SVI # ES-1212 series Belt Drive Blower Model

SVI # ES-1200 series Direct Drive Blower Model



Put SVI Exhaust Removal Products to work for you today. If you have any ideas for new exhaust removal products, please let us know. We are always open to input, suggestions and special requirements.

SVI is your answer. Call 800-321-8173 today!



Replacement Floor Fixture Flange and Cover Kit



Replacement floor fixture flange kits are great for use on virtually any make of IN-Floor system found in the field. Use these to clean up the appearance in older shops. They are also great for making technicians safe from opened holes caused by damaged or corroded away floor fixtures once sold by others.

ES-1202-01 ES-1202-01BH ES-1202-02BHL ES-1202-02 ES-1202-10

Single Access Floor Fixture Cover Drive-In Replacement Floor Flange w/ Cover Single Floor Flange w/ Cover (16-3/4" x 18") **Dual Access Floor Fixture Cover** Self Closing Cover (Only)









Hose Stops / Hose Bumpers Huge Selection Available

Designed to provide slip-free performance on air, water, grease and oil hose. See SVI's universal styles below! L-style are the larger, wider style. All hardware is included. Many others available!



STANDARD

BP-1525	for 3/8" ID x 5/8" to 3/4" OD Hose
BP-1526	for 1/2" ID x 7/8" OD Hose
BP-1527	for 1/4" ID x 1/2" OD Hose

NIDE STYLE (L-Style)

BP-1525L for 3/8" ID Hose x 5/8" to 3/4" OD Hose
BP-1526L for 1/2" ID x 7/8" OD Hose
BP-1527L for 1/4" ID x 1/2" OD Hose

BP-1528L for 11/16" ID x 1-3/8" OD Hose

BP-1529L for 29/32" ID x 1-3/4" OD Hose

*Hose Sizes Can Vary Slightly











Call now to request SVI's Hose Reel Hose Stop Catalog • 800-321-8173

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CUSTOM PRODUCTS

And let us know if you want something you use in your shop to be added to our product line!



In addition to SVI's Direct Fit™ Brand, we are proud to be a one-stop shop for many other great products including:









































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TERMS AND CONDITIONS OF THE SALES ORDER FOR SVI INTERNATIONAL, INC.

- 1. <u>GENERAL</u>. The terms and conditions of sales order outlined herein shall apply to the sale by SVI_INTERNATIONAL, INC. (hereinafter referred to as "Company") of the items described on the facing page (hereinafter referred to as "Merchandise") to Purchaser.
- 2. <u>DELIVERY</u>. Delivery shall be deemed to be complete when the Merchandise has been shipped F.O.B. Company's plants in DeKalb, Illinois, Montclair, California; and Hanover, Maryland ("Company's plants"). Shipments are subject to delays from causes or contingencies beyond the reasonable control of the Company. When otherwise not specified, shipments will be made in standard containers via carrier which, in the judgment of the Company, will result in the most practical method. Title and right of possession will pass to the Purchaser upon receipt by the carrier at the shipping point. If a customer of the Company should specify a specific carrier's method of shipment (i.e. UPS Next Day Air) and that carrier does not perform to the customer's expectations, freight credit to a customer's account will not be issued unless the Company can first obtain a credit.
- 3. <u>RISK OF LOSS</u>. Identification of the Merchandise under Uniform Commercial Code (hereinafter referred to as "UCC") Section 2-501 shall take place at the moment of shipment F.O.B. Company's plants. Risk of loss shall pass to the Purchaser when the Merchandise is shipped from the Company's plants.
- 4. TITLE. Title to the merchandise shall transfer to the Purchaser when the Merchandise is shipped from the Company's plants.
- **5.** WARRANTIES. The Company guarantees its products to be free from defects in workmanship and raw materials for a period of one year from date of purchase. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL WARRANTIES EXPRESS OR IMPLIED. COMPANY DOES NOT WARRANT THE MERCHANDISE IS MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE.
 Company's liability for breach of the terms of this Agreement, including any warranty, is limited to either refund of the invoice price of the Merchandise or at Company's option, replacement of the Merchandise free of charge, including transportation charges but not including the cost of labor. Purchaser has not relied on any statement or upon the conduct of Company with respect to the prospective use of the merchandise. Company shall not be liable for and Purchaser waives any and all claims for any loss or damage, directly or indirectly, arising from the use of the Merchandise and for punitive, incidental or consequential damages, including, but not limited to, damages to property, for loss of use, loss of time, loss of profit or loss of income. The Company does not authorize the sale of our products under any other warranty, expressed or implied. Please note: Electrical components and cylinder or shaft seals are not covered under warranty.
- **SETOFF**. All claims for money due or to become due from the Company shall be subject to deduction by the Company for any setoff or counterclaim arising out of this or any other claims of the Company or its affiliated companies, whether such setoff or counterclaim arose before or after any assignment by Purchaser.
- 7. INDEMNIFICATION. Purchaser agrees to indemnify the Company and hold it harmless from and against all claims, liability, loss, damage or expense, including reasonable counsel fees, arising from or by reason of any modifications or alterations made by Purchaser. If a customer of the Company modifies or alters any part, in any manner whatsoever, or uses any part in departure from recommended performance specifications, said customer agrees to indemnify and hold the Company harmless from and against all liability and expenses based on damage to property or injury to or death of any person arising out of or attributable to such modified or altered part. Further, the Company will not accept any such modified or altered part for credit to a customer's account.
- **8. FREIGHT POLICY**. Freight charges are prepaid and added to invoice or collect FOB shipping point. Note: All customers are responsible for all carrier shipping costs, fees, surcharges, etc. including order refusal and return fees.
- 9. RETURN POLICY. To return a part for credit or inspection, Purchaser must first contact our Main Office in Illinois, to obtain a Return Merchandise Form. Once Purchaser has obtained this form, the parts can be returned freight prepaid only. The Return form must be included with the shipment. Parts returned to the Company without the approved form will be returned freight collect to the shipper or refused. Returns must be initiated within 30 days of the invoice date. The Return Forms are valid for 30 days, from the date of issue. All Returns are subject to restocking charges. Return parts brought into our remote warehouses, will not be accepted by our personnel, without a Return Merchandise Form from the Main Office. Parts which have been used in any way or manner, including any installation or incorporation into a lift, hoist, or other equipment, shall NOT be eligible for return whether or not a Return form has been assigned. Please note: Electrical parts or components are not returnable for credit. This includes all switches, pushbuttons, relays, electric motors, capacitors, fuses, solenoids, power units with wiring issues or any other electrical items. Custom, built to order, special order, and non-stocked genuine parts are non-returnable.
- 10. <u>RESTOCK CHARGE</u>. Returns are subject to a restocking charge. Refusals are subject to the same restocking charge plus the cost of outbound and return freight charges and/or fees incurred by the Company due to shipment refusal.
- 11. PRICES AND PAYMENTS. All prices are subject to change without notice. All prices are F.O.B. shipping point. The Company standard terms are net 30 days, C.O.D. company check, C.O.D. cash, VISA, MasterCard, Discover or American Express. However, if in the judgment of the Company, the financial condition of the Purchaser at any time does not justify shipment according to standard terms of payment, the Company may require full or partial payment in advance.
- 12. <u>INTERPRETATION</u>. This sales order is intended by the parties as a complete and exclusive statement of the terms of their agreement. It supersedes all prior agreements, written or oral. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any terms used in this sales order. Acceptance or acquiescence in a course of performance rendered under this purchase order shall not be relevant to determine the meaning of this sales order even though the accepting or acquiescing party has knowledge of the nature of the performance and opportunity for objection. Whenever a term defined by the UCC is used in this sales order the definition contained in the UCC shall control.
- 13. MODIFICATION. This sales order can be modified or rescinded only by a writing signed by both parties.
- **14.** <u>WAIVER</u>. No claim or right arising out of a breach of this sales order can be discharged in whole or in part by a waiver or renunciation of the claim or right unless such waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party.
- **15.** <u>ASSIGNMENT</u>. No right or interest in this sales order shall be assigned by either party without the written consent of the other and no delegation of any obligation owed, or of the performance of any obligation by either the Company or Purchaser shall be made without the written consent of the other party. Any attempted assignment or delegation not made in conformity with this paragraph shall be wholly void and totally ineffective for all purposes.
- 16. <u>TIME TO PERFORM AND BRING ACTION</u>. Time is of the essence of this sales order. Any action for breach of this sales order shall be commenced within two (2) years after the cause of action has accrued. Any party who loses any litigation shall reimburse the other party for costs including reasonable attorney's fees. The exclusive jurisdiction for any legal action shall be the Circuit Court of DeKalb County, Illinois.
- 17. APPLICABLE LAW. This sales order shall be governed by the UCC of Illinois as effective and in force on the date of this sales order.



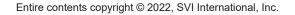
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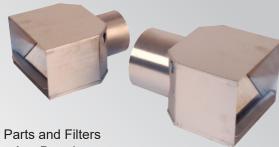
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