

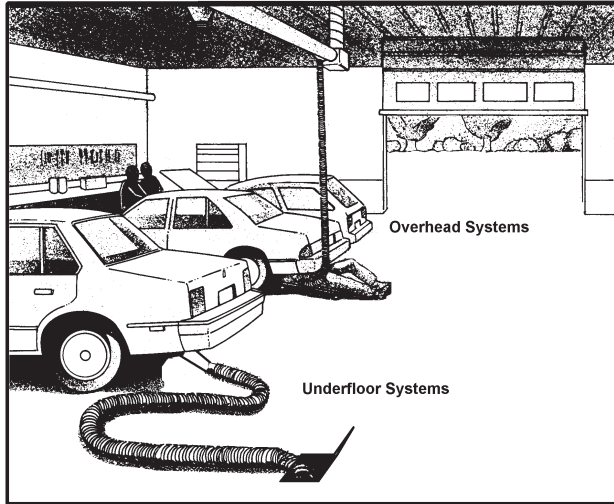


EHP1000B

Exhaust Hose Products

SVI International, Inc. - Exhaust Hose Products

February 2012

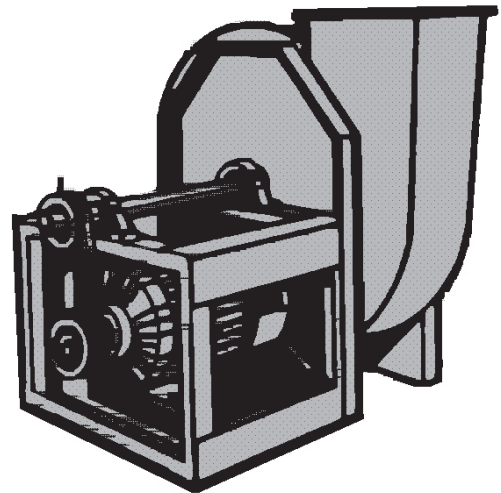
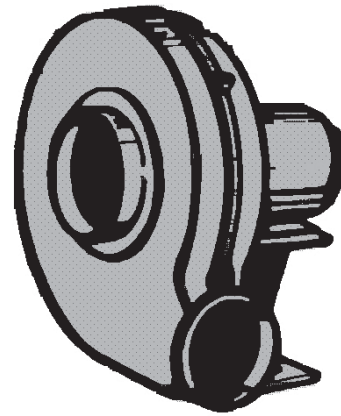


Exhaust Systems A Complete Source for the Removal of Exhaust Fumes

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

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.



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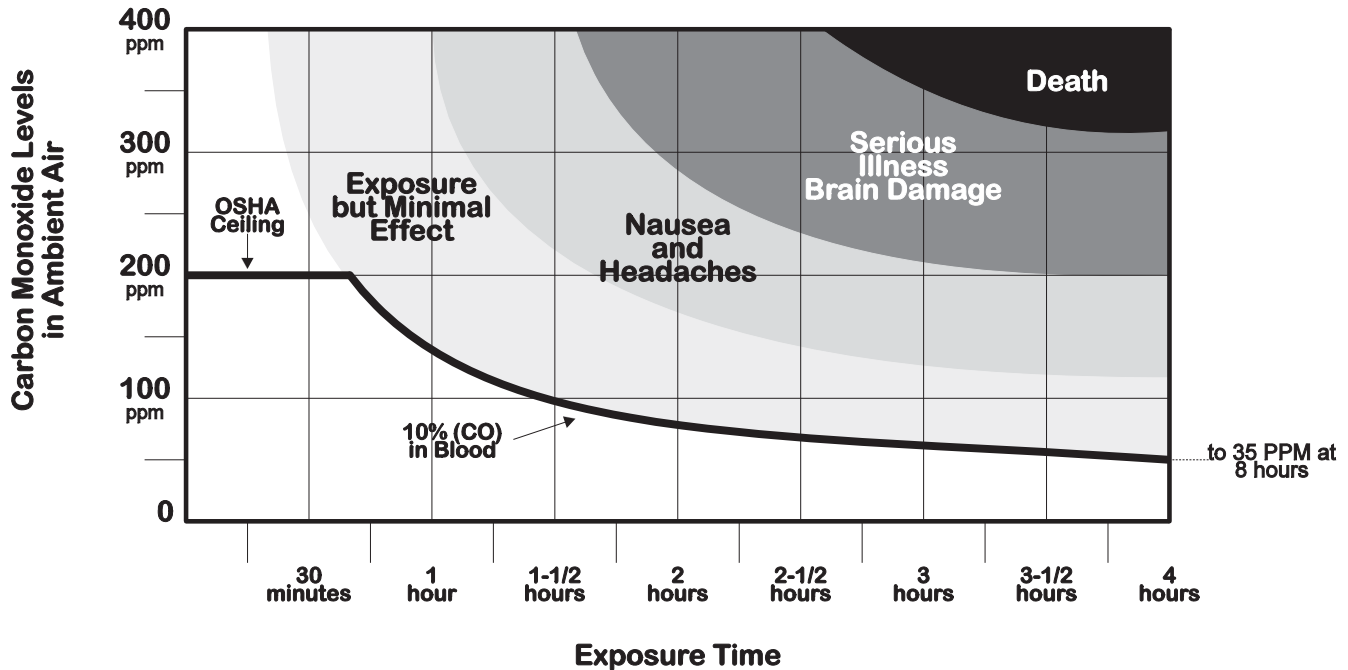
Carbon Monoxide Danger Levels

General Information

For a safe working environment automotive tailpipes should be no further than a few feet from open air. The exhaust must be 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 V-belt 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 general nature. Local codes will supersede any specifications given in this manual. For further information, please call SVI.



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. 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. $4800 \text{ CFM} = .23$ " per 100 ft. $\text{friction loss} \times 1.69 = 0.39$ " 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 $.110" \times 22' = 2.42$ " (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

- 1) 1a)* Type of System: Overhead Underfloor
- 1b)* Choose one: Single Phase Three Phase
- 1c)* Choose one: Direct Drive Belt Driven
- 1d)* To be mounted: Inside Outside

2)* How Many Stalls

3)* What Type of Vehicles (see Chart A)
CFM per stall

4) Total CFM Requirement (Multiply line 2 by line 3)

5) Determine Hose Size inches (See Chart A)

6) Determine Static Pressure

6a)* What is total length of ductwork (in feet)

6b) Divide line 6a by 100

6c) Static Pressure in Ductwork per 100 ft.
(see Chart B)

6d) Total Static Pressure (multiply 6b x 6c)

6e) Static Pressure in Exhaust Hose
(see Chart C)

6f)* Number of feet of exhaust hose per drop

6g) Multiply 6e x 6f

6h)* Total Number of Elbows or Bends in Ductwork

6i) Multiply 6h x .06"

6j) Sub Total Static Pressure: (6d + 6g + 6i)

6k) TOTAL STATIC PRESSURE (6j + 10%)
(Round up to nearest inch - i.e. 2.3 = 3")

Use line 4 and 6k to select Blower:
SVI Part Number

Chart A

Vehicles	use CFM	Hose Dia.
Cars/Light Trucks	235	3" to 4"
Medium Trucks	300	4"
Diesel Trucks/Buses	400	5"
Heavy Diesel Engines	600	6"

Chart B

DUCTWORK STATIC PRESSURE	
Total CFM	SP per 100 ft.
500	1.50 inches
800	1.39 inches
1000	1.24 inches
1200	1.00 inches
1500	0.90 inches
1800	0.80 inches
2000	0.70 inches
2500	0.64 inches
3000	0.58 inches
3500	0.57 inches
4000	0.46 inches
4500	0.42 inches
5000	0.41 inches
6000	0.38 inches

Chart C

EXHAUST HOSE STATIC PRESSURE		
Exhaust Hose ID	CFM	Static Press. per foot
3"	200	.335"
3"	235	.408"
4"	235	.104"
4"	300	.171"
4"	400	.305"
5"	400	.110"
5"	600	.244"
6"	400	.054"
6"	600	.103"

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

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



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 and Light Trucks. FLARELOCK comes in 11 foot lengths but couples together to any length required. No splice connector is required. Durable and crush resistant, this is the most popular hose style.

SVI #	Old SVI #	Hose Dia.	Length	Recommended Application
ES-1000-25	11AFLT250	2-1/2"	11 ft.	For motorcycles and compact cars
ES-1000-30	11AFLT300	3"	11 ft.	For passenger cars
ES-1000-35	11AFLT350	3-1/2"	11 ft.	For cars, light trucks and vans
ES-1000-40	11AFLT400	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
ES-1001-25	11AUNH2500	2-1/2"	11 ft.	For motorcycles and compact cars
ES-1001-30	11AUNH3000	3"	11 ft.	For passenger cars
ES-1001-40	11AUNH4000	4"	11 ft.	For gasoline engine trucks



Act Hose

ACT Hose is available with or without wire. ACT Hose can be used on overhead hose reel systems when rubber hose is desired. The wire prevents the hose from collapsing on itself when stored on the hose reel. 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 over the hose reel and flexible rubber hose near the exhaust pipes. ACT Hose is available with wire through all 11 ft. or just the first 30 inches.

SVI #	Old SVI #	Hose Dia.	Length	Recommended Application
ES-1002-40	18AACT400	4"	11 ft.	For gasoline engine trucks
ES-1002-50	18AACT500	5"	11 ft.	For diesel trucks
ES-1002-60	18AACT600	6"	11 ft.	For heavy duty vehicles with 600 Hp.
ES-1003-40	18AACT400W11	4"	11 ft.	Same as above with 11' of Wire Insert
ES-1003-50	18AACT500W11	5"	11 ft.	Same as above with 11' of Wire Insert
ES-1003-60	18AACT600W11	6"	11 ft.	Same as above with 11' of Wire Insert
ES-1004-40	18AACT400W30	4"	11 ft.	Same as above with 30" of Wire Insert
ES-1004-50	18AACT600W30	5"	11 ft.	Same as above with 30" of Wire Insert
ES-1004-60	18AACT600W30	6"	11 ft.	Same as above with 30" of Wire Insert

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 #	Old SVI #	Hose Dia.	Length	Recommended Application
ES-1005-40	18A4020SF	4"	20 ft.	For gasoline engine trucks
ES-1005-50	18A5012SF	5"	12 ft.	For diesel engine trucks

Stainless Steel Hose

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

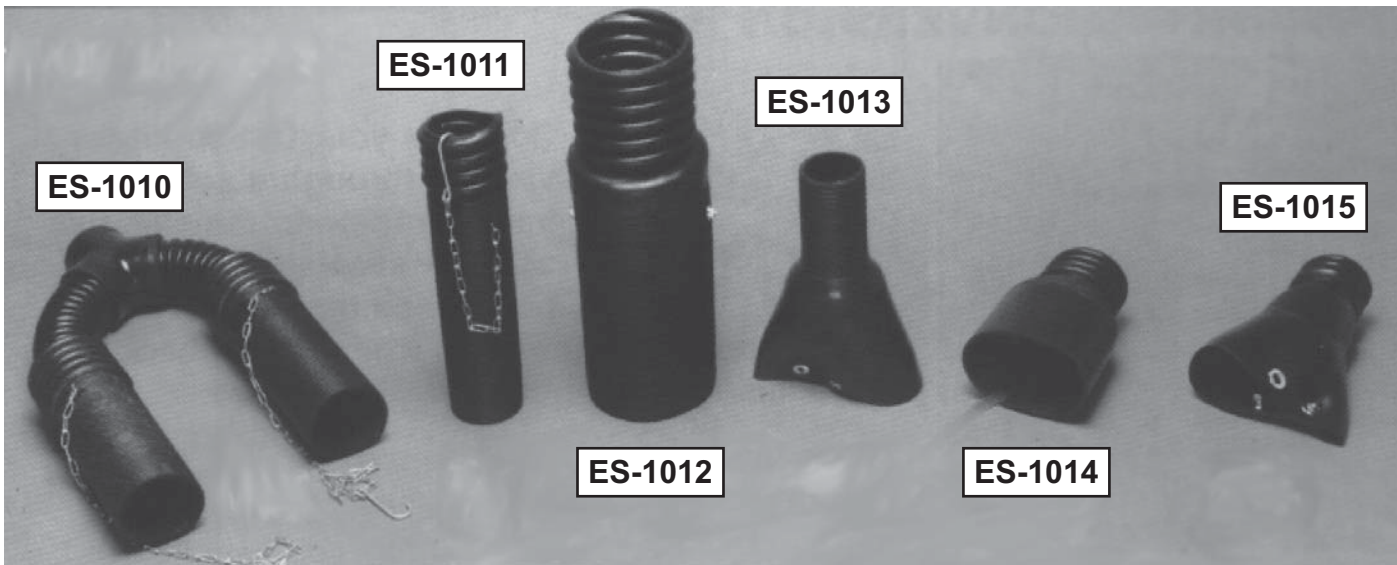
SVI #	Old SVI #	Hose Dia.	Length	Recommended Application
ES-1006-40	190SS4000	4"	10 ft.	Longer Lengths Available
ES-1006-50	190SS5000	5"	10 ft.	Longer Lengths Available

Flexaust® Fabric/Wire Hose

Lightweight, flexible and flame retardant, SVI's ES-1007 series hoses are ideal for overhead hose reels. SVI uses this hose in our ES-1100H series reel/hose combinations. This hose is a single-ply construction impregnated with a unique thermoplastic polymer fabric and spring steel wire reinforcement. It includes a wear strip to add additional durability to the hoses. (Color: orange/black)

SVI #	Old SVI #	Hose Dia.	Length	Recommended Application
ES-1007-40	CW-325-W	4"	25 ft.	For cars and light trucks
ES-1007-50	CW-325-W	5"	25 ft.	For diesel trucks
ES-1007-60	CW-325-W	6"	25 ft.	For heavy duty vehicles with 600 Hp.

Flexaust® is a Registered Trademark of The Flexaust Company



Tailpipe Adapters

SVI #	Old SVI #	Description	Tailpipe Style	Tailpipe Max Dia.	Use with Hose Sizes
ES-1010-30	17ATPA3000	Spaced Twin Tail Pipes	Separated	3"	up to 2-1/2"
ES-1011-25	17AF250	Straight with hook and chain	Single	2"	2-1/2", 3", 3-1/2"
ES-1011-30	17AF300	Straight with hook and chain	Single	2-1/2"	2-1/2", 3", 3-1/2"
ES-1011-35	17AF350	Straight with hook and chain	Single	3"	2-1/2", 3", 3-1/2"
ES-1012	17ADSR600	Stack Adapter	Diesel Stack	5-1/2"	4", 5"
ES-1012-06	17ADSR600-6	Stack Adapter	Diesel Stack	5-1/2"	6"
ES-1013	17AUNA100	Plug into Unihose	All	All	3"
ES-1014-25	17AF475	Oval Adapter (2-1/2" x 6")	Twin up to 2"	6" Oval	3", 4"
ES-1014-35	17AF575	Oval Adapter (3-1/2" x 8-1/2")	Twin up to 3"	8" Oval	3", 4"
ES-1015-25	17ARA250	Universal with Snaps	All	All	2-1/2"
ES-1015-30	17ARA300	Universal with Snaps	All	All	3"
ES-1015-40	17ARA400	Straight with hook for trucks	Single	3-1/2"	3-1/2", 4", 5"

Door Ports

SVI #	Old SVI #	Description	Use w/Hose Sizes
ES-1020-25	16LDF25	2-1/2" rubber Door Port	for 2-1/2" hose
ES-1020-30	19MADF30	3" aluminum Door Post	for 3" hose



90° Elbows

SVI #	Old SVI #	Description
ES-1021-25	19MAEL25	2-1/2" Aluminum Elbow for Overhead Drops
ES-1021-30	19MAEL30	3" Aluminum Elbow for Overhead Drops
ES-1021-40	19MAEL40	4" Aluminum Elbow for Overhead Drops
ES-1021-50	19MAEL50	5" Aluminum Elbow for Overhead Drops
ES-1022-25	16LEB25	2-1/2" Rubber Elbow for Overhead Drops
ES-1022-30	16LEB30	3" Rubber Elbow for Overhead Drops

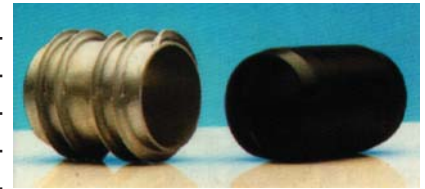


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Splice Connectors

SVI #	Old SVI #	Description
ES-1023-25	16LSP25	2-1/2" Rubber Splice Connector
ES-1023-30	16LSP30	3" Rubber Splice Connector
ES-1023-40	16LSP40	4" Rubber Splice Connector
ES-1024-30	19MAC30	3" Aluminum Splice Connector
ES-1024-40	19MAC40	4" Aluminum Splice Connector for Superflex and ACT Hose
ES-1024-50	19MAC50	5" Aluminum Splice Connector for Superflex and ACT Hose
ES-1025-60	19MAC60-OC	6" Aluminum Duct and Splice Connector



Overhead Duct Connectors

SVI #	Old SVI #	Description
ES-1026-30	19MOC30	3" Aluminum Duct Connector
ES-1026-40	19MOC40	4" Aluminum Duct Connector
ES-1026-50	19MOC50	5" Aluminum Duct Connector
ES-1026-50D	19MOC50D	5" Aluminum Duct Connector with Damper



Y Connectors

SVI #	Old SVI #	Description
ES-1027-25	16LRY25	2-1/2" Rubber Y Connector
ES-1027-30	16LRY30	3" Rubber Y Connector
ES-1027-40	16LRY40	4" Rubber Y Connector
ES-1027-40A	19MAY40	4" Aluminum Y Connector



Y Assembly

SVI #	Old SVI #	Description
ES-1028-25	11AYA250	Hose and Y Assembly for 2-1/2" hose
ES-1028-30	11AYA300	Hose and Y Assembly for 3" hose
ES-1028-40	11AYA400	Hose and Y Assembly for 4" hose

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



Monoloc™ Assembly

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



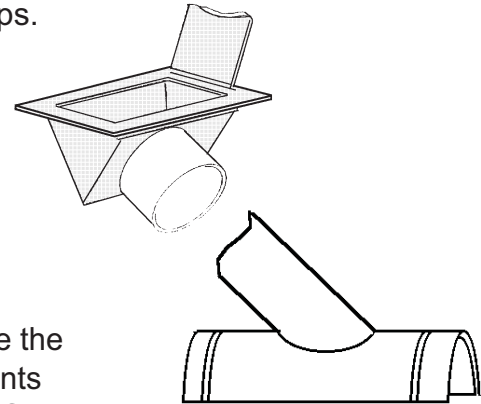
MONOLOC™ Assemblies have a special "snug fit" tailpipe adapter to fit most vehicle exhaust pipes. The adapter fits tightly over the tailpipe and grips the pipe to provide a positive seal. It includes an adjustable air intake vent to open for cooling air. MONOLOC is a Trademark of Crushproof Tubing Company.



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.

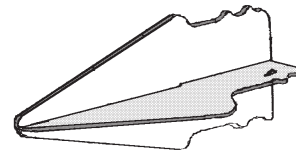
SVI #	Old SVI #	Description
ES-1110-03	BP-4899-03	Angled Floor Fitting Kit for 3" hoses
ES-1110-04	BP-4899-04	Angled Floor Fitting Kit for 4" hoses



Hose Guide Kit

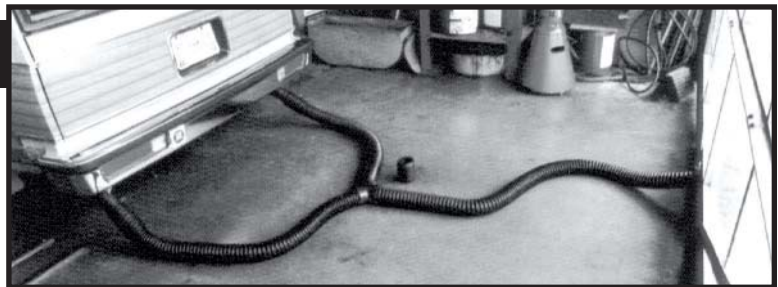
For use on all underfloor systems. The hose guide serves to guide the rubber hose easily through the underground system. It also prevents rags and papers from being sucked into the system. These Hose Guide Kits include a guide adapter, hose ties, and screen element.

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



Kits

SVI offers convenient kits for service station and car dealership applications



SVI #	Old SVI #	Description	Kit Contents
ES-1030	11ACKO3001	Car Dealership Kit for Overhead Systems	(2) ES-1000 series hoses
ES-1040-01	11ATKO4001	Gasoline Truck Kit for Overhead Systems	(1) ES-1011 series tailpipe adapter
ES-1050-01	11ATKO5002	Diesel Truck Kit for Overhead Systems	(1) ES-1021 series 90° elbow (1) ES-1025 series duct connector

ES-1031	11ACKU3002	Car Dealership Kit for Underfloor Systems	(1) ES-1000-30/40 hoses
ES-1040-02	11ATKU4002	Gasoline Truck Kit for Underfloor Systems	(1) ES-1011-30/40 tailpipe adapter (1) ES-1022-30/40 90° elbow

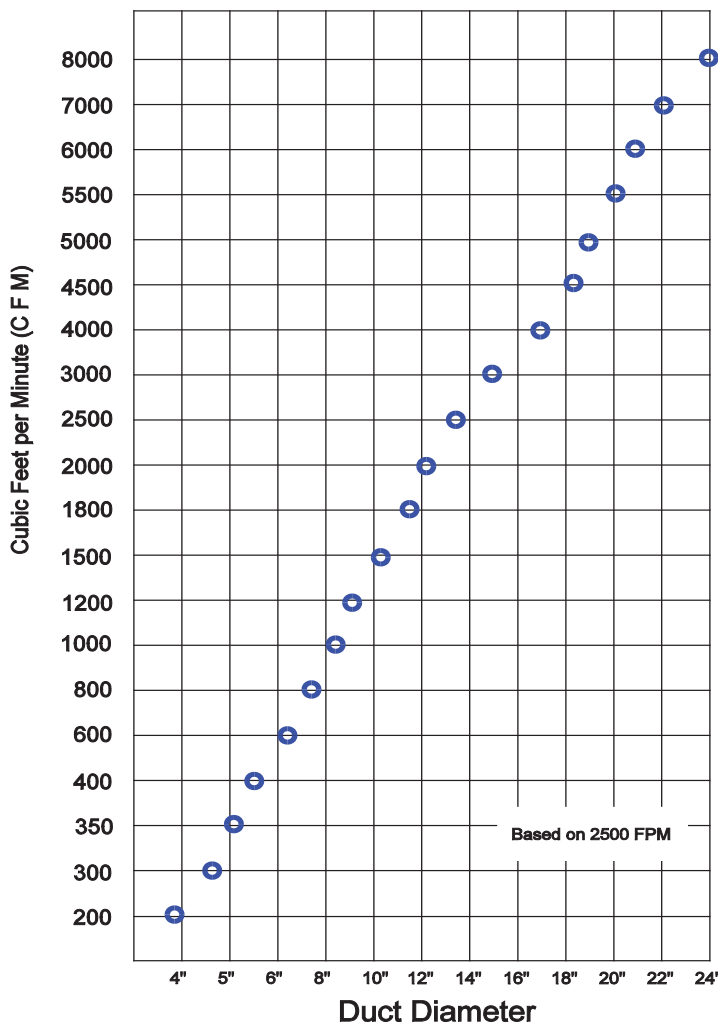
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ES-1032	11ADSS25	Service Station Kit for 2-1/2" or 3" hose	(2) 4' x 2-1/2"/3" hoses
ES-1033	11ADS30	(For single exhaust remove Y and connect two lengths of hose with splice connector)	(1) 6' x 2-1/2"/3" hose (1) ES-1027-25/30 Y adapter (2) ES-1011-25/30 tailpipe adapter
		Door Ports may be ordered separately.	(1) ES-1023-25/30 splice connector

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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:

$$\text{Duct Cross Section Area Required} = \frac{\text{CFM}}{\text{FPM}} \times 2 = \text{Area in Cu. in (A}^{3\text{in}})$$

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

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

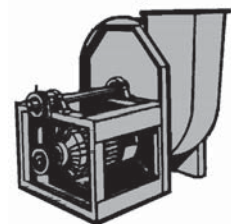
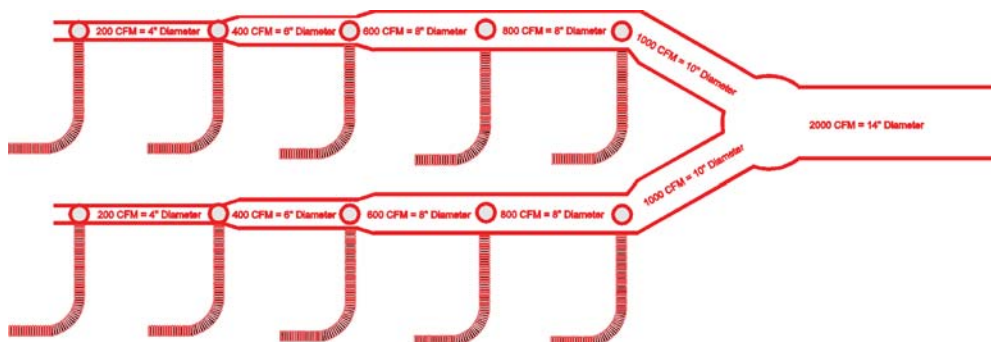
If the duct diameter is known or installed and you need to determine the maximum capacity of exhaust the system can handle the above formula can be done in reverse:

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

(Example: 14" Ductwork = radius² = 7² = 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 x 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.

All names, numbers, symbols and descriptions are used for reference purposes only. It is not implied that any part listed is the product of these manufacturers; however, some parts may be the actual product of these manufacturers.



SVI Product #	Description
ES-1205-20-18	In-Line "T" Saddle 6" x 5" x 18"
ES-1205-20-24	In-Line "T" Saddle 6" x 5" x 24"
ES-1205-20-36	In-Line "T" Saddle 6" x 5" x 36"
ES-1205-21-18	In-Line "T" Saddle 6" x 6" x 18"
ES-1205-21-24	In-Line "T" Saddle 6" x 6" x 24"
ES-1205-21-36	In-Line "T" Saddle 6" x 6" x 36"
ES-1205-22-18	In-Line "T" Saddle 8" x 5" x 18"
ES-1205-22-24	In-Line "T" Saddle 8" x 5" x 24"
ES-1205-22-36	In-Line "T" Saddle 8" x 5" x 36"
ES-1205-23-18	In-Line "T" Saddle 8" x 6" x 18"
ES-1205-23-24	In-Line "T" Saddle 8" x 6" x 24"
ES-1205-23-36	In-Line "T" Saddle 8" x 6" x 36"
ES-1205-24-18	In-Line "T" Saddle 10" x 5" x 18"
ES-1205-24-24	In-Line "T" Saddle 10" x 5" x 24"
ES-1205-24-36	In-Line "T" Saddle 10" x 5" x 36"
ES-1205-25-18	In-Line "T" Saddle 10" x 6" x 18"
ES-1205-25-24	In-Line "T" Saddle 10" x 6" x 24"
ES-1205-25-36	In-Line "T" Saddle 10" x 6" x 36"
ES-1205-26-18	In-Line "T" Saddle 12" x 5" x 18"
ES-1205-26-24	In-Line "T" Saddle 12" x 5" x 24"
ES-1205-26-36	In-Line "T" Saddle 12" x 5" x 36"
ES-1205-27-18	In-Line "T" Saddle 12" x 6" x 18"
ES-1205-27-24	In-Line "T" Saddle 12" x 6" x 24"
ES-1205-27-36	In-Line "T" Saddle 12" x 6" x 36"
ES-1205-30-24	"T" Saddle Extension 5" x 24"
ES-1205-30-36	"T" Saddle Extension 5" x 36"
ES-1205-30-48	"T" Saddle Extension 5" x 48"
ES-1205-31-24	"T" Saddle Extension 6" x 24"
ES-1205-31-36	"T" Saddle Extension 6" x 36"
ES-1205-31-48	"T" Saddle Extension 6" x 48"



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.

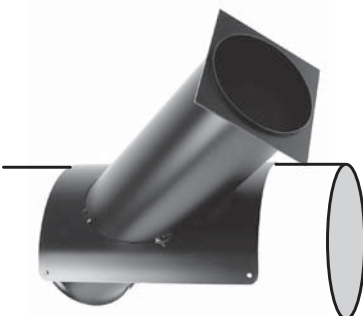
Standard Duct Saddles



Custom duct saddles are always available upon request—SVI is responsive!

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
ES-1205-44	Duct Saddle 5" x 15" Long
ES-1205-44L	Duct Saddle 5" x 30" Long

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



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





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 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.

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.

*US and Foreign Patents Pending
Registered Trademark*

**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-1202-20-6	6" Positive ID™ Tailpipe Adapter

Alligator Jaw Tailpipe Adapters



ES-1203-07 3" Tailpipe Adapter
ES-1204-08 4" Tailpipe Adapter
ES-1204-09 Replacement Spring

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.

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.



**Order SVI #
ES-1205-70**



**Works where other
collectors do not.**

**Takes the frustration out
of tailpipe connections.**





Telescopic Overhead Systems

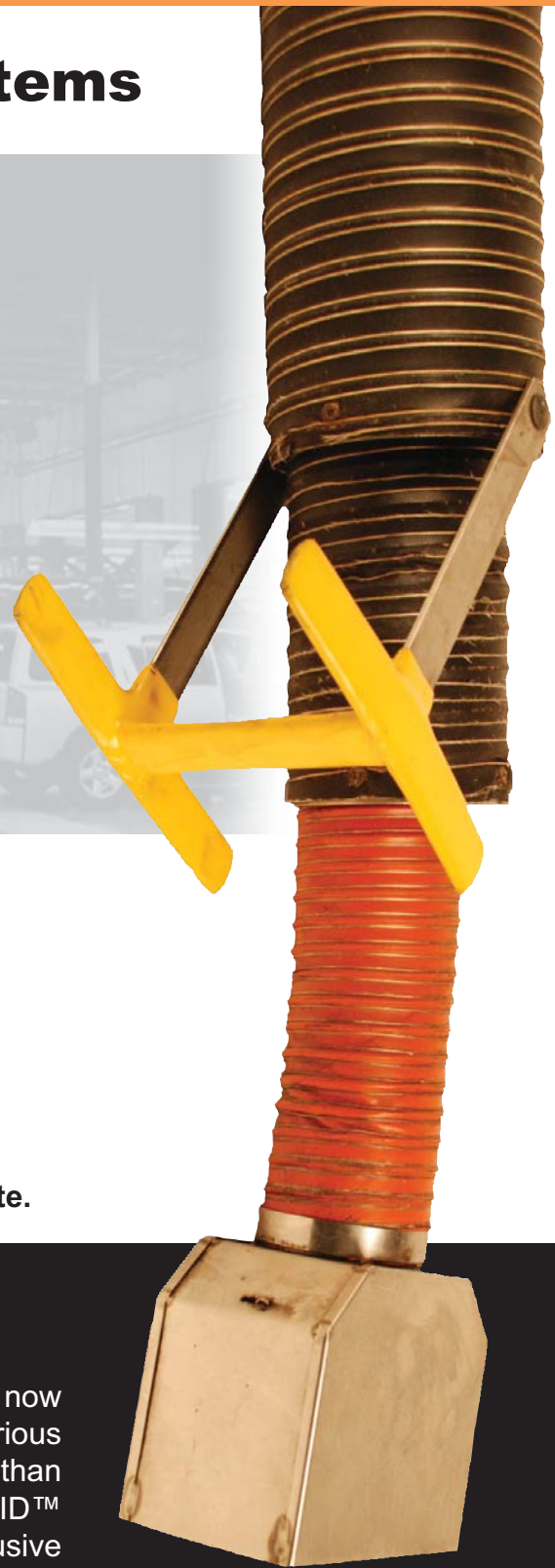
SVI has earned a reputation in the automotive service equipment industry as one of the most flexible and responsive companies through attention to customer needs and service. The same flexibility and responsiveness will be apparent to all who use the SVI line of exhaust removal systems. We listen to 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...

- **Made in the USA**
- **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 Tele Exhaust System
ES-1205-43EL1	Alligator Jaw	17' Overhead Tele Exhaust System
ES-1205-43EL2	Alligator Jaw	18' Overhead Tele Exhaust System
ES-1205-43EL3	Alligator Jaw	19' Overhead Tele Exhaust System
ES-1205-43EL4	Alligator Jaw	20' Overhead Tele Exhaust System
ES-1205-43EL5	Alligator Jaw	21' Overhead Tele Exhaust System
ES-1205-43SL	Positive ID™	16' Overhead Tele Exhaust System
ES-1205-43SLEL1	Positive ID™	17' Overhead Tele Exhaust System
ES-1205-43SLEL2	Positive ID™	18' Overhead Tele Exhaust System
ES-1205-43SLEL3	Positive ID™	19' Overhead Tele Exhaust System
ES-1205-43SLEL4	Positive ID™	20' Overhead Tele Exhaust System
ES-1205-43SLEL5	Positive ID™	21' Overhead Tele Exhaust System
ES-1205-43OS	One-Step	16' Overhead Tele Exhaust System
ES-1205-43OSEL1	One-Step	17' Overhead Tele Exhaust System
ES-1205-43OSEL2	One-Step	18' Overhead Tele Exhaust System
ES-1205-43OSEL3	One-Step	19' Overhead Tele Exhaust System
ES-1205-43OSEL4	One-Step	20' Overhead Tele Exhaust System
ES-1205-43OSEL5	One-Step	21' Overhead Tele 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!

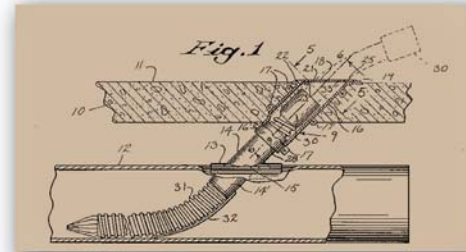
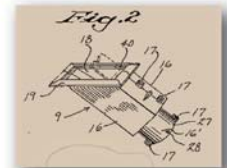
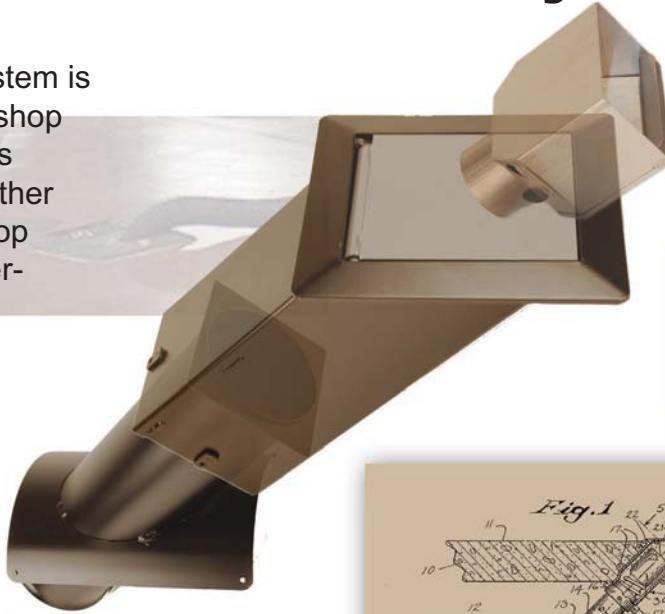
B A L T I M O R E • C H I C A G O • L O S A N G E L E S



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.

- Made in the USA
- 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.



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.

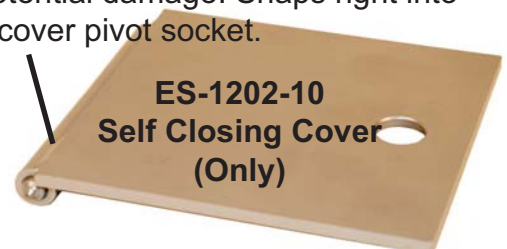
ES-1203-03	3" IN-Floor system (Alligator Jaw)
ES-1203-03SL	3" IN-Floor system (Positive ID™)
ES-1204-04	4" IN-Floor system (Alligator Jaw)
ES-1204-04SL	4" IN-Floor system (Positive ID™)

**ES-1203-04
3" Floor Access Fixture
without Cover**

(Pictured with Cover:
ES-1202-10)



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



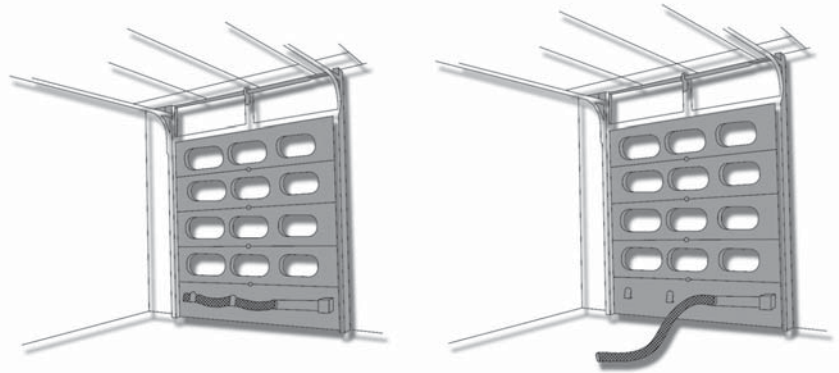
**ES-1202-10
Self Closing Cover
(Only)**



ES-1203-10SL

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

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.

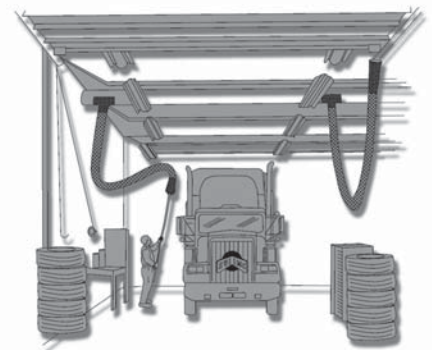
ES-1202-03 3" Quick Port System

- 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, wrap-rope breaking mechanism, two pulleys and an anchor snap. An adapter grip pole is also available as an option.

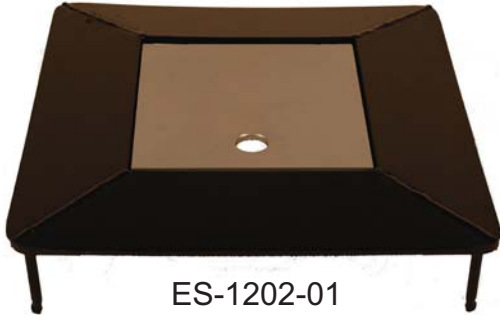


ES-1305	5" Overhead Exhaust System w/ Neoflex Hose
ES-1305A	5" Overhead Exhaust System w/ Stainless Steel Hose
ES-1305B	5" Overhead Exhaust System w/ Galv. Steel Hose
ES-1306	6" Overhead Exhaust System w/ Neoflex Hose
ES-1306A	6" Overhead Exhaust System w/ Stainless Steel Hose
ES-1306B	6" Overhead Exhaust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

- Options:**
- Wall winch with brake
 - Adapter Grip Pole



Replacement Floor Fixture Flange and Cover Kit



ES-1202-01

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** Single Access Floor Fixture Cover
- ES-1202-01BH** Drive-In Replacement Floor Flange w/ Cover
- ES-1202-02BHL** Single Floor Flange w/ Cover (16-3/4" x 18")
- ES-1202-02** Dual Access Floor Fixture Cover
- ES-1202-10** Self Closing Cover (Only)

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

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!



Two Piece "Donut Style" Hose Bumpers / Hose Stops

Designed to provide slip-free performance on air, water, grease and oil hose. Two styles are available. L style are the larger style equal to Lincoln style.

All hardware is included.



BP-1527	for 1/4" ID - 1/2" to 19/32" OD hose
BP-1527L	Lincoln-Style for 1/4" ID Hose
BP-1525	for 3/8" ID - 5/8" to 23/32" OD hose
BP-1525L	Lincoln-Style for 3/8" ID Hose
BP-1526L	Lincoln-Style for 1/2" ID Hose

**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!**