



Made in the USA

*"Superior Designs
For Superior
Performance For
Over 50 Years!"*

CRUSHPROOF EXHAUST TUBING



CRUSHPROOF TUBING COMPANY





LEADING THE WAY...

During the past 50 years Crushproof Tubing Company has been leading the exhaust hose industry and has set the standard to which all other manufacturers aim. Through innovative design and on-going development, the Crushproof Tubing Co. has fashioned the most complete line of service products related to the ventilation of garage exhaust fumes.

Specially formulated rubber compound

Crushproof exhaust tubing has been designed to withstand intermittent exhaust temperatures up to 600 degrees Fahrenheit, while maintaining maximum flexibility and durability. Crushproof's innovative compounding has kept pace with the emergence of high heat producing catalytic converters and emission control devices.

Exclusive patented manufacturing process

Crushproof hoses are spirally convoluted and non-reinforced. The spiral (helical) convolutions permit:

1. Use of threaded adapters and accessories that can be tightly screwed into or onto the tubing.
2. Multiple pieces of our FLARELOCK style hose to connect without additional parts.

Ventilation System Data & Specifications

Overhead System

1. Duct connection 10-12' from floor.
2. Roof
3. Optional counter-weight.
4. Use "Y" connectors or kits for dual exhaust.
5. Plenum style duct line with soldered joints.
6. Flexible joint.
7. Fan

VehicleType	CFM/ Vehicle	Hose Size	Branch Connection
Automobile	200	3" I.D.	4" I.D.
Gas Truck	400	4" I.D.	4" I.D.
Diesel Truck	400	5" I.D.	6" I.D.

Underfloor System

1. Elbow connector.
2. Section of hose.
3. Straight tailpipe adapter.
4. Sealable floor plate. Self-closing is better.
5. Sloped drain tile sized for 2000 fpm or less.
6. Sump or dry well.
7. Pipe to fan and discharge above roof.

* For dynamometer testing on cars or light trucks double the cfm ratings on the chart to the left.
 * For heavy duty or diesel truck dyno testing there is a 1200 cfm minimum.
 * Be sure to use the proper adapter on tailpipes.

Friction Loss

This data will prove helpful to ventilation engineers for sizing fans and ducting.

Hose ID (nominal)	CFM	Friction Loss Per Foot
3"	100	.344"
	150	.480"
3.5"	200	.380"
	300	.380"
4"	200	.190"
	350	.095"
5"	400	.150"
	600	.170"
6"	400	.170"
	600	.380"

CRUSHPROOF...The Industry Standard

**Designed for use in
IM240 and VMAS
emission testing!**

OUR PATENTED DYNAMOMETER HOSE

Our Crushproof Dynamometer Hose is made of a blend of rubber formulated to withstand the high temperature of a dynamometer *when used with a fan assisted system.*

- Heavy wall thickness increases durability.
- Can be used in many other applications.



Reel not included



- **F350 DYNO adapter:** 3-1/2" ID for use with 3" or smaller tailpipes
- **F475 DYNO adapter:** 3" x 6" oval accomodates twin 2" tailpipes
- To prolong hose life, always use an adapter and allow the hose to cool after each use.

Crushproof Reel Hose

Designed for use on hose reels and overhead exhaust systems. The first 5' of this 25' lightweight tubing is crushproof, while the last 20' is wire-reinforced. Each 25' length comes with a tailpipe adapter.

- CPRH400 (4' X 25' Hose with DSR600 Adapter)
- CPRH500 (5' x 25' Hose with DSR600 Adapter)
- CPRH600 (6' x 25' Hose with DSR600-6 Adapter)

TE6000 Telescoping Overhead System

FOR USE WITH CARS AND GASOLINE TRUCKS

- Fully extended length is 17 feet.
- Easy to install and shipped completely assembled.
- Hoses can be shortened for low ceilings.
- Weighs only 30 lbs.
- Crushproof RA300 Universal Adapter will fit all single and most twin tailpipe configurations. Three locking snaps allow unit to be shut off and 100% rubber adapter will not damage vehicle.
- Hose will connect to 5" airflow "T" or stub.

**Visit our web site
for more information**

www.crushproof.com

for over 50 years!

QUALITY HOSE PRODUCTS



Flarelock Hose

Our most popular hose line. The flared end allows multiple lengths to be connected without additional parts. This product should always be used with the appropriate adapter for your application. All hoses are 11' long and the sizes shown (2", 2.5", 3" or 4") refer to the inside diameter.

HOSE	2" FLT200	2.5" FLT250	3" FLT300	4" FLT400
Adapters	F250, RA300	F250, F300, RA250	F250, F300, F350, F475 F575, RA300, UNA1000	F350, F400, DSR600 F475, F575, F800
Door Port/ Y-Connector	DF25 / RY20	DF25 / RY25	ADF30 / RY30	ADF40 / AY40
Splice Connector	SP20	SP25	SP30, AC30	SP40, AC40
Elbows & Duct Connectors	N/A / N/A	EB25, AEL25 / N/A	EB30, AEL30 / OC30	AEL40 / OC40

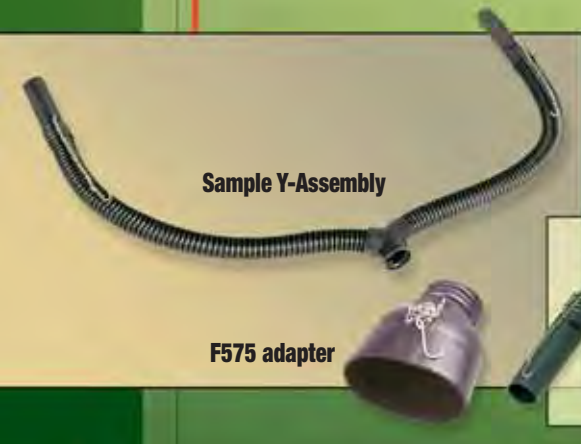


Act Hose

Designed for use with larger gas vehicles and diesel trucks. Available with or without wire reinforcement to prevent kinking. "W11" suffix will add 11' of wire to the hose; "W30" will add 30" of wire. All hoses are 11' long and the sizes shown (4", 5" or 6") refer to the inside diameter.

HOSE	4" ACT400* ACT400W11	5" ACT500 ACT500W11	6" ACT600 ACT600W11
Adapters	F350, F400, DSR600 F475, F575, F800	DSR600, DSR8600	DSR600-6, DSR8600
Door Port/ Y-Connector	ADF40 / AY40	N/A / N/A	N/A / N/A
Splice Connector	SP40, AC40	AC50	AC60-OC
Elbows & Duct Connectors	AEL40 / OC40	AEL50 / OC50 OC50-D	AEL60 / AC60-OC

*4" ACT hose is available in 20' lengths (40-20)



Sample Y-Assembly

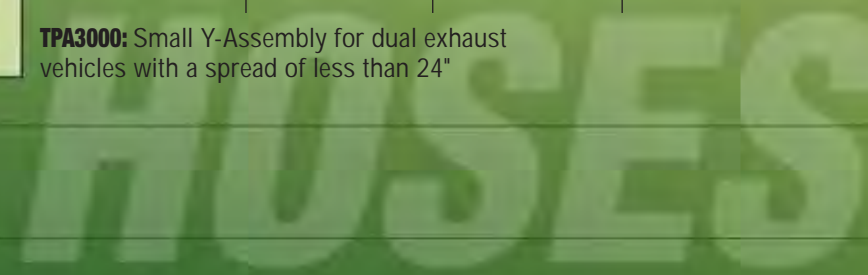
F575 adapter

Y-Assemblies

Designed for converting a single hose into two hoses for dual exhaust vehicles.

YA250	YA300	YA575	YA400
4' x 2.5" hose (2)	4' x 3" hose (2)	4' x 3" hose (2)	4' x 4" hose (2)
RY25 (1)	RY30 (1)	RY30 (1)	AY40 (1)
F250 (2)	F300 (2)	F575 (2)	F350 (2)

TPA3000: Small Y-Assembly for dual exhaust vehicles with a spread of less than 24"



PREMIUM ACCESSORIES

Crushproof offers a complete line of accessory items that are designed to make your exhaust system safe and easy to use and prolong the life of the hose. Remember, no system is complete without a tailpipe adapter.

Tailpipe Adapters

Hook and chain holds them in place. Protects the hose and tailpipe. Always select an adapter with at least 1/2" diameter clearance around the tailpipe.



Part #	Style	Tailpipe Style	Max. O.D.	Hose Size Options		
F250	Straight w/Hook & Chain	Single	Up to 2"	2"	2.5"	3"
F300	Straight w/Hook & Chain	Single	Up to 2.5"	2.5"	3"	3.5"
F350	Straight w/Hook & Chain	Single	Up to 3"	3"	3.5"	4"
F400	Straight w/Hook & Chain	Single	Up to 3.5"	3.5"	4"	
DSR600	Stack Adapter	Diesel Stack	Up to 5.5"	4"	5"	
DSR600-6	Stack Adapter	Diesel Stack	Up to 5.5"	6"		
F800	Stack Adapter	Diesel Stack	Up to 7.5"	4"		
DSR8600	Stack Adapter	Diesel Stack	Up to 7.5"	5"	6"	
UNA1000	Plug in UniHose	All Cars	All Cars	3"		
F475	Oval Adapter (3" x 6" oval)	Twin up to 2"	Oval 2.5" x 5.5"	3"	4"	
F575	Oval Adapter (3.5" x 8.5" oval)	Twin up to 3"	Oval 3" x 8"	3"	4"	
RA250	Bell w/Snaps	All	All	2.5"	3.5"	
RA300	Bell w/Snaps	All	All	2"	3"	

Door Ports

Use on 1" thick doors

- DF25 (rubber) For 2.5" hose
- ADF30 (alum.) For 3" hose
- ADF40 (alum.) For 4" hose



Y-Connectors

Allows for three hoses to be joined together for dual exhaust vehicles. Hose threads into the connectors.

- RY20 (2") Rubber
- RY25 (2.5") Rubber
- RY30 (3") Rubber
- AY40 (4") Aluminum



Elbows

Rubber elbows connect to underfloor exhaust systems. Aluminum elbows connect two hoses for overhead pulley system.

- | | |
|---------------|-------------------------|
| Rubber | Aluminum |
| EB25 (2.5") | AEL25 (2.5") |
| EB30 (3") | AEL30 (3") • AEL40 (4") |
| | AEL50 (5") • AEL60 (6") |



Splice Connectors

Connects two lengths of hose. Hose threads into rubber and over aluminum.

- | | |
|---------------|-----------------|
| Rubber | Aluminum |
| SP25 (2.5") | AC30 (3") |
| SP30 (3") | AC40 (4") |
| SP40 (4") | AC50 (5") |
| | AC60-OC (6") |



Overhead Duct Connectors

Use to connect to overhead "T" of listed size:

- OC30 (3")
- OC40 (4")
- OC50 (5")
- OC50D (5") w/damper
- AC60-OC (6")



800.654.6858

FACTORY PACKAGED KITS

Our factory packaged kits offer out-of-the-box exhaust solutions at a 5% savings.

Car Dealership Kit

(Overhead)	(Underfloor)
CK03001	CKU3002
3" x 22' hose	3" x 11' hose
1 - F300	1 - F300
1 - AEL30	1 - EB30
1 - OC30	



OVERHEAD KIT

Service Station Kit

DSS25 (2.5")	DSS30 (3")	DSS40 (4")
2 - 4' x 2.5" hose	2 - 4' x 3" hose	2 - 4' x 4" hose
1 - 6' x 2.5" hose	1 - 6' x 3" hose	1 - 6' x 4" hose
1 - RY25	1 - RY30	1 - AY40
2 - F250	2 - F300	2 - F400
1 - SP25*	1 - SP30*	1 - SP40*



Note: For single exhaust, remove the "Y" and connect two lengths of hose with Splice Connector (*). Door ports not included; may be ordered separately.

Gasoline Truck Kit

(Overhead)	(Underfloor)
TK04001	TKU4002
4" x 22' hose	4" x 11' hose
1 - F400	1 - F400
1 - AEL40	
1 - OC40	

SPECIALTY HOSES



STAINLESS STEEL HOSE

Lightweight and will withstand 1650°F temperatures. Use with dynamometers or other high performance applications.

SS4000	SS5000
4" x 10'	5" x 10'
Any vehicle	



FABRIC/WIRE HOSE

Lightweight for use with overhead systems. 600°F intermittent temperature rating.

401	501
4" x 25'	5" x 25'
Gas Truck	Diesel Truck



UNI-HOSE

Hose and adapter all-in-one.

UNH2500	UNH3000	UNH4000
2.5" x 11'	3" x 11'	4" x 11'
Compact	Passenger	Lt. truck



SUPERFLEX

Accordian-like design allows for extra flexibility and stretch. Prevents kinking at 180° bend.

40-20 SF	50-12 SF
4" x 20'	5" x 12'
Gas Truck	Diesel Truck

*No stock adapter or accessories will fit on these parts.

ORDER GUIDE

For cars and gas engine trucks*

OVERHEAD: Connections for metal ductwork with fan-assisted ventilation.					
Outlet Size	Vehicle	Hose	Connector	Elbow	Adapters
3"	Car	(2) FLT300	(1) OC30	(1) AEL30	F250, F300, F350 F475, F575, RA300
4"	Car/Truck	(2) FLT400	(1) OC40	(1) AEL40	F350, F400, F475, F575
5"	Car/Truck	(2) ACT500w11	(1) OC50	(1) AEL50	DSR600, DSR8600
UNDERFLOOR: Connections for drain tile with fan-assisted ventilation.					
Outlet Size	Vehicle	Hose	Elbow		Adapters
2.5"	Car	(1) FLT250	(1) EB25		F250, F300, RA250
3"	Car	(1) FLT300	(1) EB30		F250, F300, F350 F475, F575, RA300
4" or 5"	Car/Truck	(1) FLT400	N/A		F350, F400, F475, F575

*For diesel vehicles please see page 7

5"/6" HEAVY DUTY EXHAUST HOSES AND ACCESSORIES FOR DIESEL TRUCKS & BUSES

TKO 5002 KIT

- 1 - ACT 500 W/11
- 1 - ACT 500
- 1 - DSR 600
- 1 - AEL 50
- 1 - OC 50

TKO 6002 KIT

- 1 - ACT 600 W/11
- 1 - ACT 600
- 1 - DSR 600-6
- 1 - AEL 60
- 1 - AC 60-OC

TKO 8600 KIT

- 1 - ACT 600 W/11
- 1 - ACT 600
- 1 - DSR 8600
- 1 - AEL 60
- 1 - AC 60-OC



**AEL 50
AEL 60**

**DSR 600
DSR 600-6
DSR 8600**



AC 60-OC



OC50



AEL 50 / AEL 60

- Integrated Lifting Ring
- Connects two hoses for overhead pulley system
- Weighs only 6.5 lbs.

DSR 600 / DSR 600-6

- DSR 600 - Threads into 5" hose
- DSR 600-6 - Threads into 6" hose
- Crossbar keeps tailpipe from slipping into hose
- Accommodates up to 5.5" O.D. tailpipe and/or diesel stacks
- Weighs only 3 lbs. / 6" I.D. x 17" length

DSR 8600

- Threads into 6" hose
- Crossbar keeps tailpipe from slipping into hose
- Accommodates up to 7.5" O.D. tailpipe and/or diesel stacks
- Weighs only 4.4 lbs. / 8" I.D. x 17" length

AC60-OC

- Serves as both duct connector and splice connector
- Connects to most ductwork
- Weighs only 4 lbs. / 5.5" I.D. x 6.75" length

OC50

- Connects to 5" overhead ductwork
- Weighs only 3 lbs.

ACT 500 & ACT 500 W/11 • ACT 600 & ACT 600 W/11

- This new series of exhaust hose is made of a blend of rubber that can withstand intermittent 600 degree tailpipe exhaust temperatures without burning or crumbling.
- For added rigidity both the ACT 500 and ACT 600 hoses are available with wire inserted through the entire 11' length. Just add the "W/11" suffix to the part number.
- ACT 600 weighs only 26 lbs.; ACT 600 W/11 (wire inserted) weighs only 38 lbs. (11' lengths)
- ACT 500 weighs only 25 lbs.; ACT 500 W/11 (wire inserted) weighs only 34 lbs. (11' lengths)

- ACT 500** (no wire)
- ACT 600** (no wire)
- ACT 500 W/11** (shown)
- ACT 600 W/11** (shown)

*Reel hose also available. See page 3.

CARBON MONOXIDE KILLS!

Working near vehicle exhaust fumes exposes you to poisonous carbon monoxide (CO) gas, which is present in large amounts in vehicle exhaust fumes. Overexposure to this odorless and colorless gas can cause death. Even mild exposure to CO can cause headaches, dizziness, nausea and fatigue.

Always use a high performance rubber exhaust hose with proper ventilation when working on vehicles. Some actions required to avoid carbon monoxide poisoning include:

- Always attaching a tailpipe adapter to the vehicle tailpipe and checking that the other end of the hose is properly attached to a quality venting system.
- Provide exhaust hoses for each and every vehicle service bay.
- Replace damaged hoses immediately. Replacements should be kept in stock for such needs.
- Instruct all service personnel (including newly hired employees) to use exhaust hoses correctly.
- Instruct all service personnel that exhaust hoses must be used, even in warm weather, when open garage doors provide cross-ventilation.
- Check all powered exhaust systems daily.

. . . Because OSHA is Always Watching!



Suggestions to Prolong Hose Life

With Catalytic Converter-Equipped Vehicles, Particular Attention Should Be Paid To The Following:

1. Select the proper size of hose. OSHA recommendations call for a minimum 3" I.D. hose for car dealerships and 4" I.D. hose for truck dealerships. The larger the hose, the greater the flow capability - and heat tolerance - of the system. (See "Friction Loss Data") This is important because, when the exhaust fumes attain the extreme temperature characteristics of today's vehicles, these fumes have to be evacuated through a circuit which offers the least friction loss of static pressure (resistance).
2. Use the proper tailpipe adapter. It is NOT advisable to put the hose directly over the tailpipe. This will significantly decrease the service life of the hose. Select tailpipe adapters which have an opening at least 1/2" diameter greater than the O.D. of the tailpipe to allow for the influx of cooler, room temperature air: F250 = 2-1/2" I.D. / F300 = 3" I.D. / F350 = 3-1/2" I.D. / F475 (oval-shaped for oval and VW-type twin pipes) = 2-1/2" x 6".
3. Avoid kinking in hose. Kinking creates increased heat concentration due to reduced flow capability. In order to avoid kinking . . . (a) do not tie a pulley rope directly to the hose. Use Crushproof's aluminum 90 degree elbows with pulley systems; and (b) use Crushproof's wire-inserts where hose takes sharp bends (e.g., over diesel stacks).
4. Check exhaust systems. In car or truck dealerships which have overhead or underfloor exhaust systems, the entire system (blower, primary and intermediate ductwork) should be checked periodically to ensure that the system conforms to OSHA ventilation specifications. Of particular concern in underfloor systems will be the prevention of clogging of the ductwork (with rags, water, or other foreign material). The system will be expected to maintain an environmental reading of less than 35 parts per million of carbon monoxide or other noxious emittents.

CRUSHPROOF TUBING COMPANY

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