


TO: James L. App, City Manager
FROM: Ken Johnson, ES Chief 
SUBJECT: Diesel Exhaust Removal Equipment Purchase
DATE: September 7, 2004

NEEDS: For the City Council to consider authorizing the purchase of diesel exhaust removal equipment for Fire Station 2.

- FACTS:**
1. Council Resolution 04-15 authorized the acceptance of a Federal Emergency Management Agency Assistance to Firefighters Grant in the amount of \$84,375.
 2. Approximately \$18,750 of the grant funds were allocated to exhaust removal equipment, as specified in the grant application.
 3. Purchasing and Procedures Manual Section 7.0 allows for the use of sole source vendors when the City's purchasing authority believes the City's best interests are served by a particular vendor.

ANALYSIS &

CONCLUSION: The recommended vendor (Air Cleaning Systems) was the lowest responsive bidder for Fire Station 1's existing exhaust system. The price quote for Fire Station 2 is commensurate with that provided in their bid for Fire Station 1.

Staff recommends acceptance of the quote for \$18,750, submitted by Air Cleaning Systems, and authorize the purchase of exhaust removal equipment specified above.

POLICY

REFERENCE: Purchasing and Payment Procedures Manual, Section 7.0
Council Resolution 04-15

FISCAL

IMPACT: None. As noted above, the City received FEMA grant in the amount of \$84,375 of which \$18,750 is earmarked specifically for this acquisition. The grant funds cover the entire cost of the acquisition. The Council approved a budget appropriation for said grant funds by Resolution No. 04-015 on January 20, 2004.

The balance of said grant funds will be used to complete the Firefighter Health & Wellness Program.

- OPTIONS:**
- a. Adopt Resolution No. 04-xx authorizing the Chief of Emergency Services to purchase \$18,750 in exhaust removal equipment from Air Cleaning Systems; or
 - b. Amend, modify or reject above option.

RESOLUTION NO. 04-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
AUTHORIZING THE PURCHASE OF EXHAUST REMOVAL EQUIPMENT

WHEREAS, Council Resolution 04-15 authorized the acceptance of a Federal Emergency Management Assistance to Firefighters Grant in the amount of \$84,375; and

WHEREAS, \$18,750 of the grant funds were allocated to purchase exhaust removal equipment; and

WHEREAS, the City has determined that Air Cleaning Systems is the sole source vendor; and

WHEREAS, Air Cleaning Systems submitted a quotation of \$18,750.

THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of El Paso de Robles authorizes the Chief of Emergency Services to purchase \$18,750 of exhaust removal equipment from Air Cleaning Systems.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 7th day of September 2004 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:


Frank R. Mecham, Mayor

ATTEST:

Sharilyn M. Ryan, Deputy City Clerk



Paso Robles Department of Emergency Services

To: Ken Johnson, Chief
From: Kevin Taylor, Battalion Chief 
Date: August 9, 2004
Subject: Sole Source Vendor (Purchase Order Number 05FD001)

I recommend that we purchase the Diesel Exhaust Removal System for Fire Station 2 via the Sole Source Vendor provision in the Purchasing and Payment Procedures Manual. This system is funded 90% by the 2003 FEMA Health and Wellness Grant and 10% by monies allocated to Emergency Services via Council Resolution 04-15.

Section 7.0 – Sole Source Vendors states:

In the case of sole source vendors, quotation and bid requirements may be waived by the City's purchasing authority when in his judgment the City is best served by a particular vendor.

The executive manager shall submit a purchase order and written explanation as to justification of sole sourcing to the City's purchasing authority for approval. If approved by the purchasing authority, a copy of the written explanation shall be attached to the copy of the purchase order that is forwarded to Administrative Services.

Justification for use of the sole source vendor provision includes:

1. The recommended vendor (Air Cleaning Systems) was the lowest responsive bidder for Fire Station 1's exhaust system. The price quote for Fire Station 2 is commensurate with that provided in their bid for Fire Station 1.
2. Fire Station 1 is outfitted with an identical system. Duplicating the system at Fire Station 2 will allow for parts interchange and a single annual maintenance charge.
3. All experiences with the system at Fire Station 1 have been positive.
4. The system utilizes boots to capture the vehicle exhaust. These boots must be replaced periodically and are cheaper when purchased in quantity.

A purchase order is attached. Please contact me with any questions or comments.



City of El Paso de Robles

"The Pass of the Oaks"

1000 Spring Street, Paso Robles, CA 93446
 (805) 237-3999 Fax (805) 237-6565

This number must appear on all invoices, cartons, packing slips, bills of lading & correspondence.

PURCHASE ORDER	
No.	05FD001

VENDOR:

AIR CLEANING SYSTEMS
 4096 Mission Blvd.
 Montclair, CA 91763

SHIP TO:

City of Paso Robles
 Dept of Emergency Services
 Fire Station #2
 235 Santa Fe Avenue
 Paso Robles, CA 93446

Vendor Number

Order Date	Date Required	Terms

Part Number and/or Description	Tax-able Qty	Unit Price	Non-Taxable Amount	Taxable Amount
Diesel Exhaust Removal Systems (Equipment to provide two (2) SBTA systems for back in coverage for two (2) vehicles. The 3 HP fan is sized to accommodate both vehicles leaving at the same time if required. System includes UL certified electrical control panel, auto start sensors, dedicated compressor, filter scrubber, complete pneumatic system for passive release, and all labor, at prevailing rates to complete the installation.) (Includes sales tax and freight, per Jim Bunting)	1		18,750.00	
Net 30 days				

Account Distribution			Sub-Total \$ 18,750.00	Sub-Total \$ -
Account Number	%	Amount	7% Sales Tax	-
100-220-5454-150		18,750.00	Freight	
		-	Purchase Order Total	
		-	\$ 18,750.00	

IMPORTANT:
 1. Acknowledge Receipt of Order
 2. Advise Definite Ship Date
 3. Confirm Pricing
 Buyer reserves the right to cancel any order not completed within specified time. All prices shall be F.O.B. Paso Robles, CA, unless otherwise specified. An itemized packing list must accompany each shipment.

Authorized Signature:

Department:

City Manager:
 (City Manager signature required for all Purchase Orders over \$2,500)

Copy (circle one)
 Vendor
 Department
 Finance
 Receiving/Payment

Approved _____ To be signed after goods/services received & approved for Payment:

 Signature _____ Date _____



AIR CLEANING SYSTEMS

4096 Mission Blvd. Montclair, California 91763
800-998-1974 FAX 909-629-3236

email: info@aircleaningsystemsusa.com

April 10, 2004

City Paso Robles Fire Department
900 Park St.
Paso Robles Ca. 93446

Attention: Randy Harris

Subject: Costs for Plynovent Diesel Exhaust Removal Systems, Station # 2

The costs below are for equipment, all miscellaneous materials, installation (less electrical), and labor at prevailing rates. Freight costs and sales taxes are excluded as well.

Station # 2 **\$18,750.00** This is for equipment to provide two (2) SBTAs systems for back in coverage for two (2) vehicles. The 3 HP fan is sized to accommodate both vehicles leaving at the same time if required. System includes UL certified electrical control panel, auto start sensors, dedicated compressor, filter scrubber, complete pneumatic system for passive release, and all labor, at prevailing rates to complete the installation.

PAYMENT TERMS: Net 30 days
EXPIRATION DATE: Price will be in effect for the entire 2003 FEMA Grant Period.
EXCLUSIONS: ~~Electrical hook up and connection, Sales Tax, Freight~~

(Will be included)
Per SA SIM Bunting 8/2/04

AIR CLEANING SYSTEMS has been serving the California market since 1972, and currently services hundreds of customers each month by providing complete systems, installations, contract service and filter replacement. We own the building from which we operate our business, and keep in stock a full complement of spare parts and filters for all the equipment we sell, as well as many other manufacturer's products. We are also a **licensed contractor in the state of California (# 772590)**.

Air Cleaning Systems performs all of the service (both warranty and non-warranty) for all of the systems we sell and install, as well as systems provided and installed by others. We always keep spare parts in stock that are most commonly required and generally can provide **service within 24 hours**, on stocked parts, as well as emergency service when required, including evenings and weekends. Many times we perform the service the same day it is requested. In the unlikely

event the required part is not in our stock, the factory will ship the part for next day delivery if requested.

PLYMOVENT is the recognized leader in the field of source capture fume extraction. They are a worldwide company with facilities in New Jersey, Sweden, Canada, Germany, and Russia. Experience counts and we both have it!

Since 1990, Air Cleaning Systems and Plymovent have been providing diesel exhaust extraction systems to fire departments in the Southern California area. Over 450 fire stations in Los Angeles, Orange, Ventura, San Bernardino, Riverside, and San Luis Obispo counties, as well as Clark County Nevada currently have Plymovent Diesel Exhaust systems in operation. In San Diego County, as well as Northern California, there are approximately another 400 fire stations currently using the same Plymovent system. These two areas are serviced by other authorized and certified Plymovent stocking distributors.

Plymovent and Air Cleaning Systems were chosen by the City of Los Angeles Fire Department as the product and contractor of choice to install the **Plymovent Vehicle Exhaust Extractor System** in all fire facilities that house diesel emitting apparatus in the City of Los Angeles. The recommendation was made by a work group, which was formed to evaluate how to reduce and/or eliminate diesel exhaust in the workplace. As the result of their extensive study and evaluation, the Plymovent System was chosen and subsequently recommended. This project represents a total of 105 fire stations. The project is underway at this time with approximately 50% of the fire stations completed and represents approximately \$3,500,000 in total scope.

All installations of Plymovent diesel smoke extraction systems are installed only by factory trained and certified installers. This guarantees consistency with all installations. There are currently six (6) certified installation crews in Southern California that are authorized to install the Plymovent system.


Plymovent is an international company with their United States corporate facility headquartered in Edison, New Jersey, and is a Certified ISO 9001 supplier. Plymovent is also well financed and bondable for projects in excess of \$7,000,000 in scope. The company has a long history of stable ownership by the same partners.

We have included a copy of a narrative, which has been used throughout the country with success. Feel free to use this in its entirety for best results.

We appreciate your inquiry and we want to assist you in any way possible. Feel free to contact us on any other information you may need.

Sincerely,

Jim Cleary
Air Cleaning Systems

	TECHNICAL DESCRIPTION	BSAB no. T0.3 Ser. no: SBT Date: Jan-00 Replace:
SBT-6-100, SBT-6-W-100, SBT-6-125, SBT-6-W-125, SBT-10-100, SBT-10-W-100, SBT-10-125, SBT-10-W-125	© Copyright 1997. All rights reserved. All information within this printed matter may not be reproduced, handed over, copied, xeroxed or translated into another language in any form or means without written permission from PlymoVent AB. PlymoVent AB reserves the right to make design changes.	

Sliding Balancer Track System



Intended for vehicles with low level, side exhaust pipes.

Area of use:

SBT is used in fire and rescue stations where there is one vehicle parked behind the exit door waiting an emergency call. The distance from door to vehicle-exhaust being a maximum of 10 m. The exhaust being side ward.

Method of Operation.

An automatic, pneumatic controlled exhaust gas extraction system, specially designed for fire and rescue vehicles with low level, side exhaust pipes. The system is used to remove the poisonous petrol and diesel gas fumes direct at the emission source, the exhaust pipe.

When the vehicles are on their way out of the station, the extraction hose, connected to the exhaust by a special device called a GRABBER®, moves along with the vehicle.

Poisonous diesel gases pass from the GRABBER®, up the extraction hose and into the ducting and extraction fan before escaping to the atmosphere.

As the vehicles drive out through the doors, the trolley moves over a release valve on the track, which releases the air pressure in the GRABBER® allowing it to disconnect the exhaust pipe.

Product Description

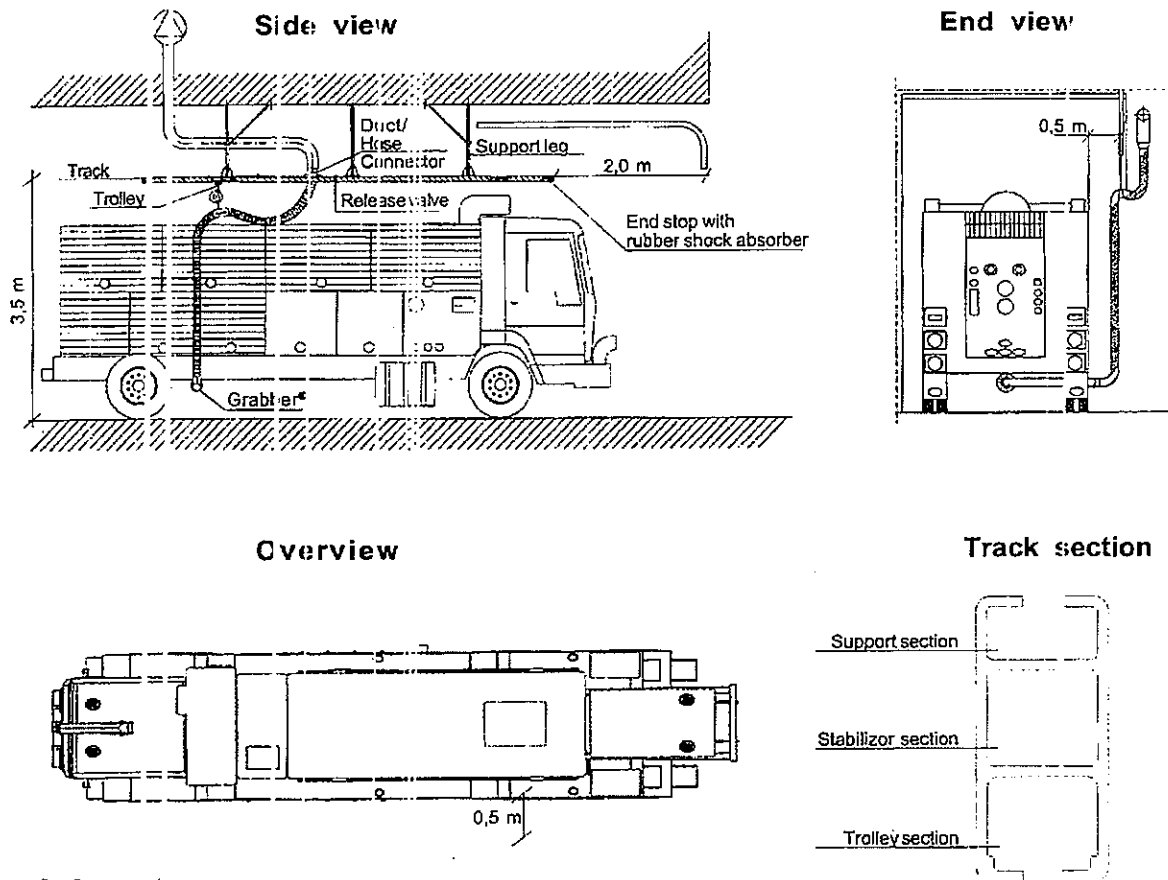
The SBT system consists of a special and easily visible extraction hose assembly with a unique pneumatic exhaust connection called the PlymoVent Grabber®. This resembles a glove which, when filled with compressed air, makes a total seal around the exhaust pipe.

The extraction hose has an inbuilt safety disconnect coupling and a Manual Fill Deflation Valve. It is suspended on a balancer block, safety hole hang from a special trolley running inside an aluminium profile above and to the side of the vehicle.

The aluminium profile, track, is designed to the three (3) section principle of which two (2) sections have open areas, one on the underside and one on the overside. The overside open area is used for positioning the support legs, duct and exhaust hose connector and the release valve.

The underside open area is used for positioning the end stops and for the sliding the trolley. Upon an alarm call the hose assembly and the trolley move along with the vehicle, the trolley slides under a release valve immediately releases the air pressure in the Grabber®.

The trolley travels to the rubber shock absorber at the exit end, taking up the kinetic energy from the trolley and the hose assembly. On the return of the vehicle to the station, the Grabber® is connected to the exhaust pipe and activated by simply pressing the MFD valve as the vehicle backs through the gate. At the same time the fan automatically starts up and the vehicle continues to its rest position.

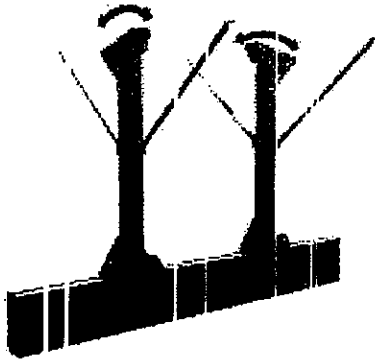


Advantages

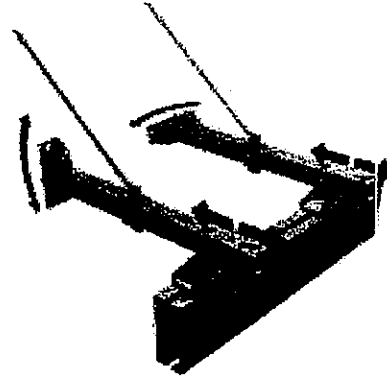
- Aluminium profiles; Light and strong
- End stops with rubber shock absorbers; to take up kinetic energy from the trolleys.
- Adjustable release points depending on the speed of the call-off vehicle.
- Pre-fitted extraction hose with easily seen black/yellow markings.
- Unique pneumatic exhaust pipe connector "GRABBER®"; to suit different sizes of exhaust pipe. 100 % tight against diesel exhaust fume leaks on startup.
- Safety disconnect coupling; Fail safe system, easily reconnectable.
- Automatic start-stop of fan by exhaust gas start-up detector. Reduces electric costs in installation whilst giving 100 % security that fans start or stop when vehicles start or stop.

Delivery

The track is delivered in parts together with a product manual. Fan, fan control device and compressed air supply need to be added individually depending on application.



Vertical mounting



Horizontal mounting

The SBT, in all different versions, is built out of a few standard components which will be described in this section.

Support leg

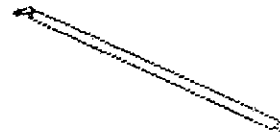
The aluminium support leg is used for both vertical and horizontal mounting. The standard length is 19" (5790 mm) and it has to be cut to proper lengths. The dimension is 2" x 2" x 0,1" (50x50x2,5 mm).



Prod. No SBT-SL

Side brace

There are three different lengths available, 20" (500 mm), 30" (750 mm) and 6' (1800 mm). The brace can be mounted separately or in pairs using the same brackets.



Prod. No SBT-SB-S, 20" (500 mm)

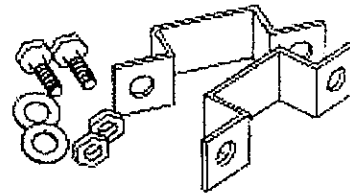
Prod. No SBT-SB-M, 30" (750 mm)

Prod. No SBT-SB-L, 6' (1800 mm)

Delivery

Side brace clamp kit

The kit includes two aluminium brackets for one or two side braces.



Prod. No. SBT-SBCK

Adjustable mounting kit (vertical)

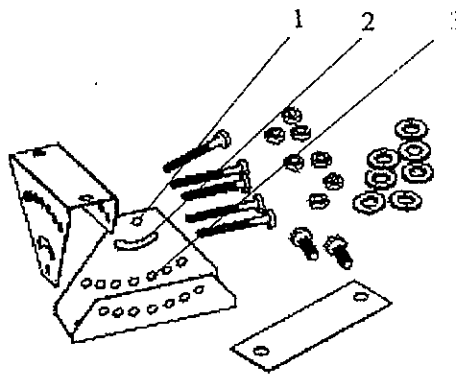
The two brackets are exactly the same. They can also be used if the roof is angled and they can be mounted in both directions.

Maximum angle is 30 degrees.

In order to fasten the bracket to the support leg three through holes have to be drilled. Start by drilling hole "1" and "2" using the drilling template "SBT-DT".

The end of the template with an "arrow" shall be towards the end of the support leg.

Then adjust the bracket to an exact position and fix it by drilling a third hole "3", using the most centered hole from the top row.



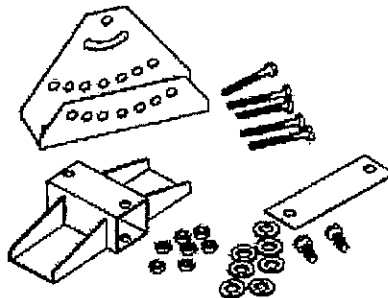
Prod. No. SBT-MKV



Prod. No. SBT-DT

Adjustable mounting kit (horizontal)

The bracket that shall be used against the wall is the same as for the vertical kit but on the track side there is a new bracket which is adjustable in relation to the support leg. When the bracket is fixed in right position two through holes in the support legs are drilled using the bracket as a template.

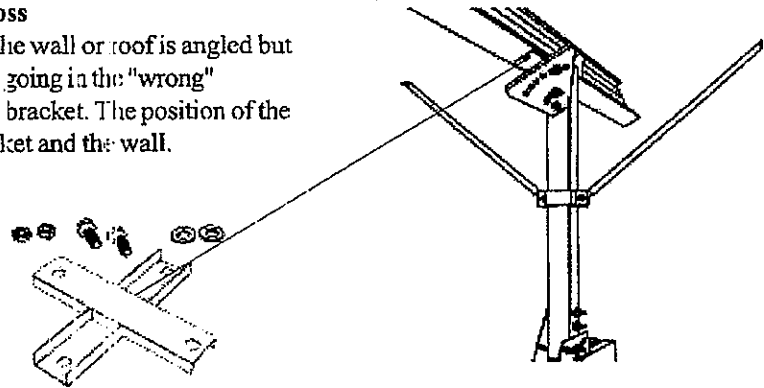


Prod. No. SBT-MKH

Delivery

Universal mounting cross

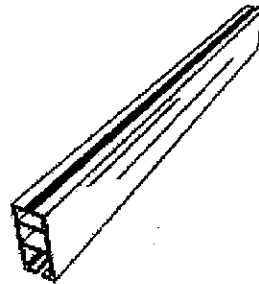
The cross can be used if the wall or roof is angled but the only available bearing is going in the "wrong" direction for the standard bracket. The position of the cross is between the bracket and the wall.



Prod. No. SBT-UMC

SBT track

The track is delivered in the same length as the support leg, 19' (5790 mm) or 9,5' (2895 mm)



Prod. No. SBT-TRACK
Prod. No. SBT-TRACK-1/2

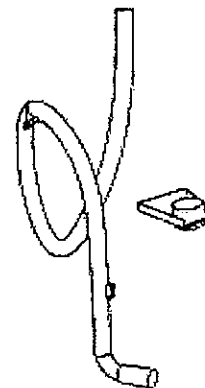
Hose kit

There are 7 hose kits available which also contains the hose connector.

- Hose diameters are 4" (100 mm) or 5" (125 mm).
- Length 9,7' (6m) or 32,8' (10 m).
- Grabber 120 or 160

Prod. No.

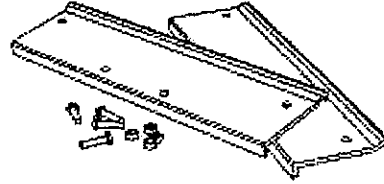
- SBT-HK - 00-6-100
- SBT-HK - 00-6-120
- SBT-HK - 00-6-160
- SBT-HK - 00-10-120
- SBT-HK - 00-10-160
- SBT-HK - 25-6-160
- SBT-HK - 25-10-160



Delivery

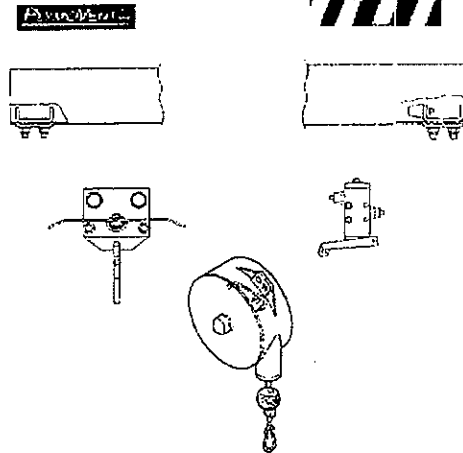
Splicing sleeve

If the track is longer than 19' (5790 mm) a splicing sleeve shall be used.



Common material

Common material that are always included are gathered under product no "SBT-KIT". Material included in the kit are for example release valve, end stop, hazard stripe etc.

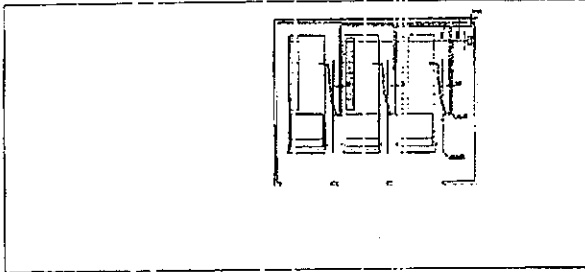


If there is a need for a special part from any of above kits see spare part list.

Service and maintenance

Only light service and maintenance is required on the SBT system.
For further information see SBT maintenance instruction.
The Plymøvent factory trained and certified service organization offers agreements for service and maintenance covering the complete installation.

System solutions and design



A three bay application with all vehicles required at an alarm situation.

Fan to be designed for exhaust extraction from all vehicles at the same time - 100% diversity.

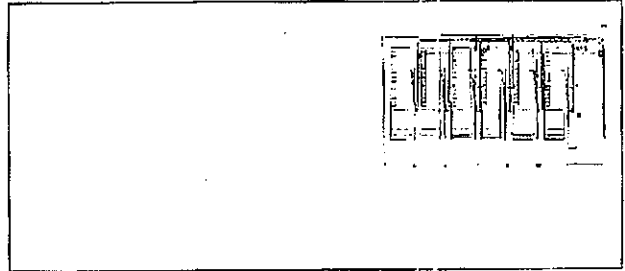
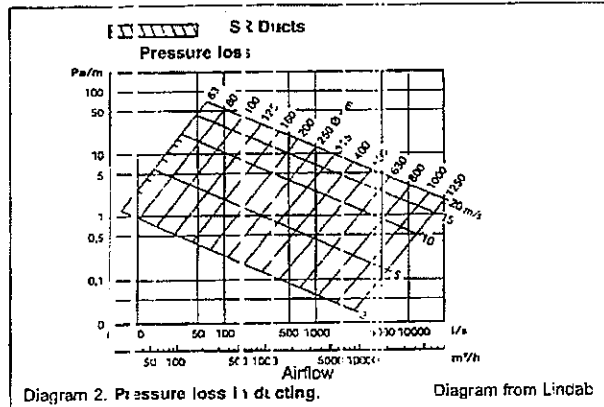
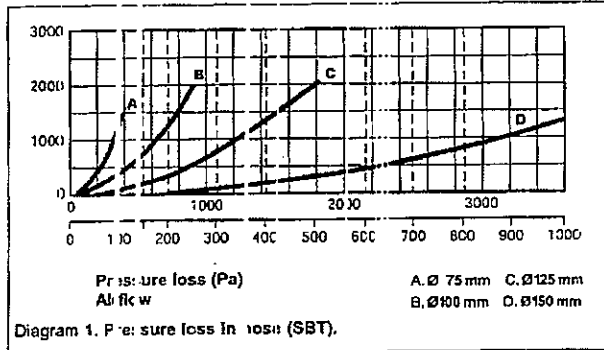
Fan control system is designed to provide the most efficient solution. Automatic fan start by pressure sensors, located in duct when the vehicle starts the engine. The control unit, PCU-1000, provides option with manual start and stop for servicing.

Advantages

- Automatic fan start when vehicle engine is switched on.
- Low voltage control system for simple and cost effective installation.
- Adjustable fan running time between 7 sec. - 6 min.
- Energy saving and efficient with automatic motorized dampers, ASE-12.

Guide values for airflow

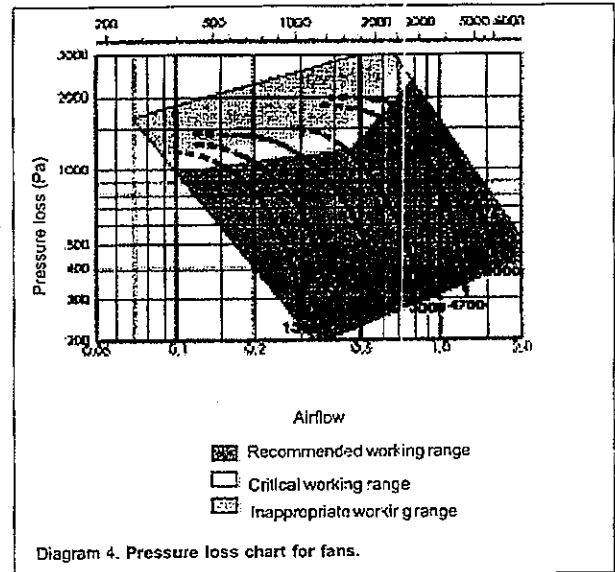
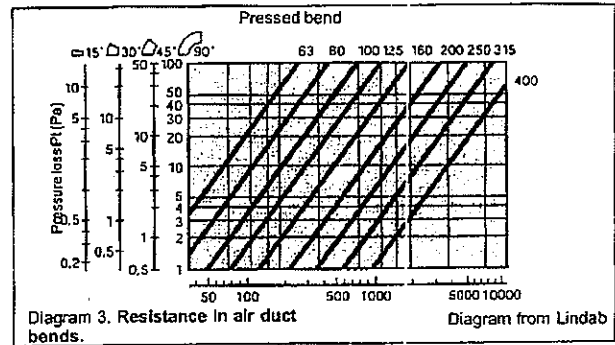
Chief and officer vehicle:	100 l/s = 360m ³ /h
Fire truck up to 10 l engine:	720 m ³ /h
Fire truck up to 16 l engine:	1080 m ³ /h
Fire truck up to 24 l engine:	1800 m ³ /h
Air velocity in ducting:	10 - 15 m/s

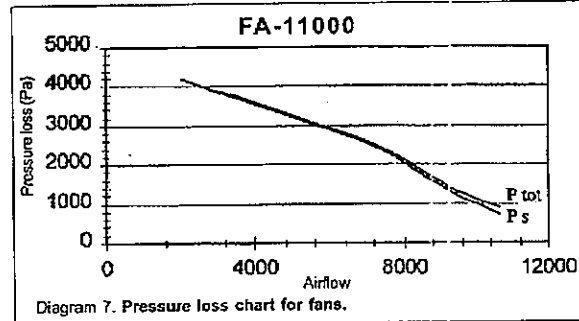
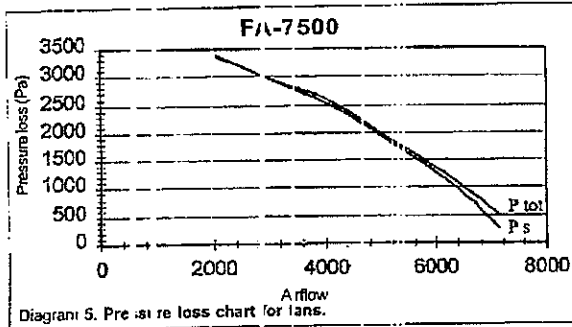


A six bay application with three vehicles required at an alarm situation.

Fan to be designed for exhaust extraction from three vehicles at the same time - 50% diversity.

Fan control system is designed provide the most energy saving and efficient solution. Automatic motorized dampers, ASE-12, allows extraction only from the vehicle with the motor running. Fan and dampers are activated automatically when the vehicle starts by the pressure sensor. The control unit, PCU-1000, provides option with manual start and stop for servicing.





Accessories

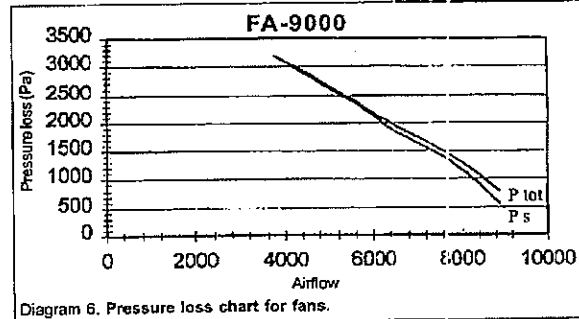
Fans

A strong fan with an even airflow is a prerequisite for an efficient system. The new fans from Plymovent are an optimal combination of noise level, airflow and power consumption. For further information ask for the technical description of the PlymoVent fans

Order no	Airflow m ³ /h	Voltage V	Amperage A
FS-1300	1400	415, 3-pt	1,1
FS-1800	1800	415, 3-pt	1,5
FS-2100	2100	415, 3-pt	2,0
FS-3000	3000	415, 3-pt	2,7
FS-4700	4700	415, 3-pt	4,9
FA-6000	6000	415, 3-pt	8,2
FA-7500	7500	415, 3-pt	10,4
FA-9000	9000	415, 3-pt	13,9
FA-11000	11000	415, 3-pt	19,9



There is a Pressure loss chart under design diagram:



Grabberstop

Order no	Description	
GS-75	Tail pipe adaptor/Grabberstop	Ø 75 mm
GS-100	Tail pipe adaptor/Grabberstop	Ø 100 mm
GS-125	Tail pipe adaptor/Grabberstop	Ø 125 mm
GS-150	Tail pipe adaptor/Grabberstop	Ø 150 mm



Fan Outlet

Order no	Description
OL-250-1	Outlet Ø 250 mm for fan 3000.
OL-250-2	Outlet Ø 250 mm for fan 4700 and 6000.
OL-315	Outlet Ø 315 mm for fan 4700 and 6000.
OL-400	Outlet Ø 400 mm for fan 7500 and 9000.
OL-500	Outlet Ø 500 mm for fan 11000.



PC-500

Pressure sensor for automatic exhaust fan start. One (1) sensor required per rail. To be used together with control unit, PCU-1000. For further information ask for the technical description of fan control device.

Order no	Power supply
PC-500	24 V



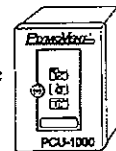
Sound damper + knee pipe

When the fan is positioned outside in a living area or inside the finishation the noise level can be reduced. Therefore we recommend an installation of a sound damper at the exhaust side of the fan. (Sound dampers are not kept in stock by Plymovent).



PCU-1000

Automatic control unit for exhaust fan control. The exhaust fan can be manually controlled or automatic controlled by pressure sensor, PC-500. For further information ask for the technical description of fan control device.



Order no	Power supply
PCU-1000	Multivoltage 115, 208, 230, 380, 460, 575 V, 3-phase

Automatic Damper ASE-12 E

Fully automatic, motorised damper, Ø160 mm, with built-in energy saver. Adjustable delay 7sec - 6 min. For further information ask for the technical description of fan control device.



Order no	Power supply
ASE-12 E	Multivoltage 115, 208, 230, 380, 460, 575 V, 1-phase