



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Source Capture Vehicle Exhaust Systems for Fire Station #1 and #2		
Presenter & Title:	Michael K. Antenore, Fire Chief		
Date:	May 6, 2024		
Please Check Appropriate Box:			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective: EMS-II/III			
Estimated Cost: \$ 171,505	Budgeted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<i>If "Other Funding," please explain how the item will be funded:</i>			
Executive Summary:			
<p>Diesel exhaust contains more than 40 toxic compounds that expose firefighters to substances that may be detrimental to health. This exposure may increase the risk of eye and nose irritation, headaches, nausea, respiratory diseases and various cancers.</p> <p>Station 1 (2002) and Station 2 (1994) were built with older whole house exhaust technology that does not effectively remove airborne toxins from the workplace.</p> <p>The proposed purchase of a vehicle exhaust source capture system is the best available technology to collect diesel and gasoline engine exhaust from the tail pipe to ensure that 100% of the toxins are removed safely and efficiently.</p> <p>Plymovent provided the lowest cost and best technology solution of the 3 vendor quotes. Hastings Air Energy Control Control, Inc. is the exclusive Plymovent dealer for this geography.</p>			
Attachments: <i>(please list)</i>			
<ul style="list-style-type: none"> • Exhaust System Quotes • Resolution 			
Voting Requirements:			
<p><i>This motion requires a simple majority of affirmative votes for passage. (City Council Only)</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the alderpersons has resulted in a tie; (b) when one half of the alderpersons elected have voted in favor of an ordinance, resolution, or motion even though there is no tie vote; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
Recommendation / Suggested Action: <i>(how the item should be listed on agenda)</i>			
Recommend Approval of Resolution Authorizing Purchase of a Source Capture Vehicle Exhaust System for Fire Station #1 and #2 from Hastings Air Energy Control, Inc.			

Vehicle Exhaust System

Geneva Fire Department

Quote Summary

	<u>Station 1</u>	<u>Station 2</u>	<u>Total</u>
Nederman	\$154,995	\$104,995	\$259,990
MagneGrip	\$126,235	\$68,640	\$194,875
Plymovent	\$103,940	\$67,565	\$171,505

RESOLUTION NO. 2024-53

**RESOLUTION AUTHORIZING THE PURCHASE OF
SOURCE CAPTURE VEHICLE EXHAUST SYSTEM**

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, the purchase of a Plymovent exhaust extraction system for Fire Station #1 and #2 from Hastings Air Energy Control, Inc. not to exceed \$171,505.00 (Exhibit A).

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this ____ day of May 2024.

AYES: ____ **NAYS:** ____ **ABSENT:** ____ **ABSTAINING:** ____ **HOLDING OFFICE:** 10

APPROVED by me as Mayor of the City of Geneva, Kane County, Illinois this ____ day of May, 2024.

Mayor

ATTEST:

City Clerk

January 01, 2023

To Whom It May Concern,

The purpose of this letter is to confirm that Hastings Air Energy Control Inc. is the exclusive dealer of Plymovent vehicle exhaust extraction systems in the state of Illinois for the zip codes inclusive of 600-617. As the only Plymovent dealer in this territory, Hastings Air Energy Control Inc. is in good standing and has the exclusive rights to sell, install and service our vehicle exhaust extraction systems.

For over 35 years, Plymovent has created products that provide a safe and healthy work environment. Together with our nationwide dealer network, Plymovent continuously strives to design and engineer products that meet or exceed our customers' expectations and needs.

If you have any questions, please do not hesitate to contact me.

Kindest regards,
PLYMOVENT CORP.



Brad Pitzl
President/General Manager



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air energy control, inc.
creating a cleaner workplace

Prepared For: Matthew Lohse
Prepared by: Dean Havnen
Date: 4/26/2024

Proposal for Geneva Fire Department Fire Station #1 - Plymovent Exhaust Extraction for (8) Vehicle Connections

Hastings Core Focus:

Providing innovative solutions that create healthier lives for workers and energy savings for employers.



<p>Engineered Solutions Down & Backdraft Tables Vehicle Exhaust Systems Replacement Filters & Parts</p>	<p>Dust / Wet Collectors Air Filtration Products Ventilation Equipment Industrial Vacuum Systems</p>	<p>Automation & Energy Controls Remote Monitoring Access Installation & Service Industrial Flex Hose</p>
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Bill To:

Geneva Fire Dept. #1
200 Eastside Dr

Geneva, IL 60134

Ship To:

Geneva Fire Dept. #1
200 Eastside Dr

Geneva, IL 60134

Date: 4/23/2024

Salesperson: Dean Havnen

Quote: QUO-30852-G5M8L1

Expires: 7/23/2024

Quote Per Request

The proposal includes the design, manufacture and installation of a vehicle exhaust extraction system which allows eight (8) vehicles with under carriage exhaust to be connected.

Scope

System includes:

- (3) 75ft MRP Rail based systems Complete - (2) Rails having two vehicle connections & (1) Rail having one vehicle connection
- (1) 45ft MRP Rail based system Complete with two vehicle connections
- (1) 25ft MRP Rail based system complete with one vehicle connection
- (1) 10hp exhaust fan complete with silencer & back-draft damper.
- (1) Control panel and low voltage control sensors for system activation
- All mechanical installation and electrical line voltage wiring included.

System warranty is 5 YEARS PARTS and LABOR on all system components and 10 YEAR on all aluminum extrusions.

Customer Responsibilities

Tailpipe modifications of the apparatus for the mounting of the conical tailpipe adapters to be provided by owner/ others.



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Date: 4/26/2024

Salesperson: Dean Havnen

Quote: QUO-30852-G5M8L1

Expires: 7/26/2024

Part #	Description	Qty
VE-MRP-25	Mini Rail System 25 Includes: 23.25' Of Extruded Aluminum Profile, 1 Mrp Rail Connection End 125Mm/5" Dia Connection (Rear) 50' Feet Of Mrp Rubber Lip Note: Must Order Front End Cap Of Choice, Rubber Bumper Or Hydraulic Shock Separately"	1.0
VE-MRP-45	Mini Rail System 45 Includes: 42.75' Of Extruded Aluminum Profile 1- Mrp Rail Connection End 125Mm/5" Dia Connection (Rear) 90' Feet Of Mrp Rubber Lip Note: Must Order Front End Cap Of Choice, Rubber Bumper Or Hydraulic Shock Separately"	1.0
VE-MRP-75	Mini Rail System 75 Includes: 71.25' Of Extruded Aluminum Profile 2- Mrp Rail End Caps 1- Hydraulic Shock 2- Rrdc-125, Middle Rail Duct Connector, 5" Diameter 150' Feet Of Mrp Rubber Lip 7-Top Suspension Mount Kits * "	3.0
VE-STRA-MG-UH41	STRA UPPER HOSE PACK - MAGNETIC GRABBER. 4" ST HOSEPACK FOR 1 DROP INCLUDES: UPPER HOSE, CRAB, HOSE CLAMPS, METAL SADDLE & BALANCER	8.0
VE-XX-MH410	SBTA. STRA. VSRX MID HOSE PACK 4" ST HOSE X 10' INCLUDES HOSE & CLAMPS	8.0
VE-STRA-MG-LH54HTBA	STR LOWER HOSE PACK - MAGNETIC GRABBER (MG) BLACKARMOUR (BA) 5", HIGH TEMP (HT) HOSE 4", SAFETY DISCONNECT HANDLE (SDCH) LOWER ASSEMBLY, STR/VSRX	8.0
FAN-086N	TEV Fan, 10 Hp, 3450 Rpm, 208-230/460V, 3Ph, 60Hz, Tefc Motor. Upblast vertical discharge configuration	1.0
ADAP-037	Rectangular To Round (16" Dia Male Fitting) Transition For Tev 7 Series Fans	1.0
DAMP-034	Damper, backdraft 6" BDD/One per drop on STRA	8.0
DAMP-046A	Damper - Backdraft - 12"	1.0



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SIL-12A	Silencer - 12" - 12x16x36	1.0
VE-CP-040	Control operation system for 10HP-208V-240V 3PH 26 AMP	1.0
ADAP-151TG	Topgrade stainless steel tailpipe adapter (TPA) 7", for Magnetic Grabber (MG) 5"	8.0
SEN-002	Engine Pressure Sensor Assembly w/ear clips	8.0
VE-LEG-LP1	Sq Alumn Leg Tube, 1.2" Sq. X 16' Long, Extruded Alumn, Field Cut To Req'D Length	27.0
VE-LEG-MKF	Vertical Leg Mount Kit	8.0
VE-WRK-R08	Wireless Receiver w/3 relays, 2400 MHZ with enclosure.	1.0
VE-WRK-T09	Transmitter, Remote, 2.4 GHZ w/spade lugs	8.0
VE-WRK-T10	Transmitter, remote, Dual Ignition, 2400 MHZ wired.	8.0
INST-M	Mechanical installation to include: mounting & bracing of the equipment, all exhaust ducting, mounting of the exhaust fan & control panel and all control wiring.	1.0
INST-E	Electrical line voltage wiring of (1) 10hp exhaust fan & (1) control panel.	1.0
PD	Per Diem	1.0
FRT	Freight	1.0
LIFT	Lift Usage Charges	1.0

Total: \$103,940.00

NOTE: Shipping and Tax are NOT INCLUDED.

I have read the terms page, a single, separate page from the pricing, and I accept the terms and conditions of this quotation.

Signed: _____
Name: _____ Title: _____

Terms:
 Prepay - 3% Discount:
 Net 30 Days from Shipment
 Visa/Mastercard/Discover

Purchase Order # _____

Thank you for considering Hastings.

Please remit to:
Hastings Air-Energy Control, Inc.
5555 S. Westridge Drive
New Berlin, WI 53151-7900



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TERMS:

Freight for equipment is FOB destination. Hastings will deliver with our truck. Future parts or filter orders will ship prepaid and add.

Normal delivery is 10 to 12 weeks after receipt of confirming purchase order or prepayment check.

Warranty is per manufacturer specifications. Contact representative for more details.

Payment terms are 3% discount for 100% prepayment with the order, or 40% with order net 30 from date of start up. Payment terms discount (3%) does not apply if the payment is made with a credit card. A 1½% per month finance charge will be assessed on all invoice balances outstanding past 30 days.

For credit card payments over 5,000.00 dollars, a 3% service charge will be added. If multiple payments are made to an order, the 3% service charge will not be avoided when the total credit card payments to the order exceed 5,000.00 dollars.

Price does not include sales tax. Please provide municipality's tax exemption certificate.

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Prepared For: Matthew Lohse
Prepared by: Dean Havnen
Date: 4/26/2024

Proposal for Geneva Fire Department Station #2 - Plymovent Exhaust Extraction for (4) Vehicle Connections

Hastings Core Focus:

Providing innovative solutions that create healthier lives for workers and energy savings for employers.



<p>Engineered Solutions Down & Backdraft Tables Vehicle Exhaust Systems Replacement Filters & Parts</p>	<p>Dust / Wet Collectors Air Filtration Products Ventilation Equipment Industrial Vacuum Systems</p>	<p>Automation & Energy Controls Remote Monitoring Access Installation & Service Industrial Flex Hose</p>
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Bill To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Ship To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Date: 4/26/2024

Salesperson: Dean Havnen

Quote: QUO-30853-P3X9Z6

Expires: 7/26/2024

Quote Per Request

The proposal includes the design, manufacture and installation of a vehicle exhaust extraction system which allows four (4) vehicles with under carriage exhaust to be connected.

Scope

System includes:

- (1) 75ft MRP Rail based system Complete with one vehicle connection
- (3) 25ft MRP Rail based system complete with one vehicle connection
- (1) 5hp exhaust fan complete with silencer & back-draft damper.
- (1) Control panel and low voltage control sensors for system activation
- All mechanical installation and electrical line voltage wiring included.

System warranty is 5 YEARS PARTS and LABOR on all system components and 10 YEAR on all aluminum extrusions.

Customer Responsibilities

Tailpipe modifications of the apparatus for the mounting of the conical tailpipe adapters to be provided by owner/ others.



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Bill To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Ship To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Date: 4/26/2024
Salesperson: Dean Havnen
Quote: QUO-30853-P3X9Z6
Expires: 7/26/2024

Part #	Description	Qty
VE-MRP-25	Mini Rail System 25 Includes: 23.25' Of Extruded Aluminum Profile, 1 Mrp Rail Connection End 125Mm/5"" Dia Connection (Rear) 50' Feet Of Mrp Rubber Lip Note: Must Order Front End Cap Of Choice, Rubber Bumper Or Hydraulic Shock Separately"	3.0
VE-MRP-75	Mini Rail System 75 Includes: 71.25' Of Extruded Aluminum Profile 2- Mrp Rail End Caps 1- Hydraulic Shock 2- Rrdc-125, Middle Rail Duct Connector, 5"" Diameter 150' Feet Of Mrp Rubber Lip 7-Top Suspension Mount Kits * "	1.0
VE-STRA-MG-UH41	STRA UPPER HOSE PACK - MAGNETIC GRABBER. 4" ST HOSEPACK FOR 1 DROP INCLUDES: UPPER HOSE, CRAB, HOSE CLAMPS, METAL SADDLE & BALANCER	4.0
VE-XX-MH410	SBTA. STRA. VSRX MID HOSE PACK 4" ST HOSE X 10' INCLUDES HOSE & CLAMPS	4.0
VE-STRA-MG-LH54HTBA	STR LOWER HOSE PACK - MAGNETIC GRABBER (MG) BLACKARMOUR (BA) 5", HIGH TEMP (HT) HOSE 4", SAFETY DISCONNECT HANDLE (SDCH) LOWER ASSEMBLY, STR/VSRX	4.0
FAN-088N	TEV Fan, 7.5 Hp, 3450 Rpm, 208-230/460V, 3Ph, 60Hz, Tefc Motor. Upblast vertical discharge configuration	1.0
ADAP-036	Rectangular To Round (12" Dia Male Fitting) Transition For Tev 5 Series Fans	1.0
DAMP-034	Damper, backdraft 6" BDD/One per drop on STRA	4.0
DAMP-046A	Damper - Backdraft - 12"	1.0
SIL-12A	Silencer - 12" - 12x16x36	1.0
VE-CP-025	Control operation system for 7.5HP-208V-240V 3PH 19AMP	1.0
ADAP-151TG	Topgrade stainless steel tailpipe adapter (TPA) 7", for Magnetic Grabber (MG) 5"	4.0
SEN-002	Engine Pressure Sensor Assembly w/ear clips	4.0
VE-LEG-LP1	Sq Alumn Leg Tube, 1.2" Sq. X 16' Long, Extruded Alumn, Field Cut To Req'D Length	7.0



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VE-LEG-MKF	Vertical Leg Mount Kit	4.0
VE-WRK-R08	Wireless Receiver w/3 relays, 2400 MHZ with enclosure.	1.0
VE-WRK-T09	Transmitter, Remote, 2.4 GHZ w/spade lugs	4.0
VE-WRK-T10	Transmitter, remote, Dual Ignition, 2400 MHZ wired.	4.0
INST-M	Mechanical installation to include: mounting & bracing of the equipment, all exhaust ducting, mounting of the exhaust fan & control panel and all control wiring.	1.0
INST-E	Electrical line voltage wiring of (1) 5hp exhaust fan & (1) control panel.	1.0
PD	Per Diem	1.0
FRT	Freight	1.0
LIFT	Lift Usage Charges	1.0

Total: \$67,565.00

NOTE: Shipping and Tax are NOT INCLUDED.

I have read the terms page, a single, separate page from the pricing, and I accept the terms and conditions of this quotation.

Signed: _____
Name: _____ Title: _____

Terms:
 Prepay - 3% Discount:
 Net 30 Days from Shipment
 Visa/Mastercard/Discover

Purchase Order # _____

Thank you for considering Hastings.

Please remit to:
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New Berlin, WI 53151-7900



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TERMS:

Freight for equipment is FOB destination. Hastings will deliver with our truck. Future parts or filter orders will ship prepaid and add.

Normal delivery is 10 to 12 weeks after receipt of confirming purchase order or prepayment check.

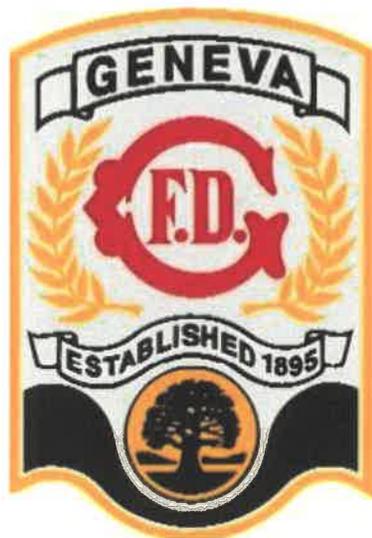
Warranty is per manufacturer specifications. Contact representative for more details.

Payment terms are 3% discount for 100% prepayment with the order, or 40% with order net 30 from date of start up. Payment terms discount (3%) does not apply if the payment is made with a credit card. A 1½% per month finance charge will be assessed on all invoice balances outstanding past 30 days.

For credit card payments over 5,000.00 dollars, a 3% service charge will be added. If multiple payments are made to an order, the 3% service charge will not be avoided when the total credit card payments to the order exceed 5,000.00 dollars.

Price does not include sales tax. Please provide municipality's tax exemption certificate.

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Diesel Exhaust Removal System

Geneva Fire Department

Matthew Lohse

Hastings Air Energy Control, Inc. – Corporate Headquarters

5555 S Westridge Drive, New Berlin, WI 53151 | p: 262.364.0500 | f: 262.364.0550 | www.hastingsair.com

Minnesota Office
3809 Chandler Drive NE
Minneapolis, MN 55418

Michigan Office
32778 W 8 Mile Rd, Suite B
Farmington, MI 48336

Illinois Office
28835 Herky Drive, Unit #115
Lake Bluff, IL 60044

Ohio Office
4926 Logsdon Meadow Drive
Liberty Township, OH 40511



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Introduction

Hastings Air Energy Control



HASTINGS
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5555 South Westridge Drive
New Berlin, WI 53151-7900

P: 800.236.8450 / 262.364.0500
F: 800.260.9199 / 262.364.0550

Illinois Office

P: 847.362.9660
F: 847.362.9661

Michigan Office

P: 248.888.9911
F: 248.478.9911

Minnesota Office

P: 651.405.8500
F: 800-260-9199

Ohio Office

P: 513.315.5141
F: 800.260.9199

The Hastings Story

Hastings Air Energy Control, Inc. was established and incorporated in Wisconsin on February 15th, 1969 to provide quality air cleaning and energy saving solutions to commercial and industrial facilities. Since its humble beginnings Hastings has grown dramatically and become an industry leader with 47 employees and the authority and resources to sell in a dozen States in the Greater lakes and Upper Great Plains Regions of our country.

Hastings is headquartered at: 5555 S Westridge Drive, New Berlin, WI 53151 and currently keeps satellite offices in Illinois, Michigan, Minnesota, and Ohio where we provide solutions and service for dust collection, mist collection, and vehicle exhaust removal systems for service garages and emergency response providers.

We have installation capabilities with experienced installer who have been factory trained and certified by our vendor manufacturers to insure the best possible installations.

We take great pride in the work we do and offer a full service staff to help you. We also provide service contracts to meet your specific needs.

Hastings looks forward to being of service to you and your organization.



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Illinois Office

P: 847.362.9660

F: 847.362.9661

Michigan Office

P: 248.888.9911

F: 248.478.9911

Minnesota Office

P: 651.405.8500

F: 800-260-9199

Ohio Office

P: 513.315.5141

F: 800-260-9199

Our Success is based on the Customers We Keep

Hastings Air-Energy Control, Inc. was established in 1969 to provide quality air cleaning solutions to the people of Wisconsin. Since that time Hastings has grown dramatically, establishing offices in Illinois, Michigan and Minnesota and becoming an industry leader with the authority and resources to sell throughout the Upper Midwest and Great Lakes Regions.

Our many years of experience and success have enabled us to secure product lines of the highest quality, while always maintaining competitive rates. This allows us to provide you with the very best air cleaning equipment and services at reasonable prices.

We carry a full line of products, parts, and accessories from **PlymoVent, Airflow Systems, Filter-1, Amtech, Dustcontrol, Air-King**, and others. And because we care about saving energy and minimizing the cost of ownership we offer our own **iVEC™ Systems** controls that deliver energy savings and enhanced efficiency.

We take great pride in the work we do and we back it with a staff of factory-trained and certified technicians who are prepared to respond to your needs at a moment's notice. We are also happy to provide service contracts to meet your specific needs.



Project Quotes & Station Drawings



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Prepared For: Matthew Lohse
Prepared by: Dean Havnen
Date: 6/19/2023

Budgetary Proposal for Geneva Fire Department Fire Station #1 - Plymovent Exhaust Extraction for (8) Vehicle Connections

Hastings Core Focus:

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Salesperson: Dean Havnen

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Expires: 7/19/2023

Quote Per Request

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Quote: QUO-30852-G5M8L1

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ADAP-037	Rectangular To Round (16" Dia Male Fitting) Transition For Tev 7 Series Fans	1.0
DAMP-034	Damper, backdraft 6" BDD/One per drop on STRA	8.0
DAMP-046A	Damper - Backdraft - 12"	1.0



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creating a cleaner workplace

P: 800.236.8450 / 262.364.0500
 F: 800.260.9199 / 262.364.0550
 hastingsair.com

Proudly Serving our Customers Nationally and throughout North America

SIL-12A	Silencer - 12" - 12x16x36	1.0
VE-CP-040	Control operation system for 10HP-208V-240V 3PH 26 AMP	1.0
ADAP-151TG	Topgrade stainless steel tailpipe adapter (TPA) 7", for Magnetic Grabber (MG) 5"	8.0
SEN-002	Engine Pressure Sensor Assembly w/ear clips	8.0
VE-LEG-LP1	Sq Alumn Leg Tube, 1.2" Sq. X 16' Long, Extruded Alumn, Field Cut To Req'D Length	27.0
VE-LEG-MKF	Vertical Leg Mount Kit	8.0
VE-WRK-R08	Wireless Receiver w/3 relays, 2400 MHZ with enclosure.	1.0
VE-WRK-T09	Transmitter, Remote, 2.4 GHZ w/spade lugs	8.0
VE-WRK-T10	Transmitter, remote, Dual Ignition, 2400 MHZ wired.	8.0
INST-M	Mechanical installation to include: mounting & bracing of the equipment, all exhaust ducting, mounting of the exhaust fan & control panel and all control wiring.	1.0
INST-E	Electrical line voltage wiring of (1) 10hp exhaust fan & (1) control panel.	1.0
PD	Per Diem	1.0
FRT	Freight	1.0
LIFT	Lift Usage Charges	1.0

Total: \$103,940.00

NOTE: Shipping and Tax are NOT INCLUDED.

I have read the terms page, a single, separate page from the pricing, and I accept the terms and conditions of this quotation.

Signed: _____
 Name: _____ Title: _____

Terms:
 _____ Prepay - 3% Discount:
 _____ Net 30 Days from Shipment
 _____ Visa/Mastercard/Discover

Purchase Order # _____

Thank you for considering Hastings.

Please remit to:
Hastings Air-Energy Control, Inc.
5555 S. Westridge Drive
New Berlin, WI 53151-7900



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TERMS:

Freight for equipment is FOB destination. Hastings will deliver with our truck. Future parts or filter orders will ship prepaid and add.

Normal delivery is 10 to 12 weeks after receipt of confirming purchase order or prepayment check.

Warranty is per manufacturer specifications. Contact representative for more details.

Payment terms are 3% discount for 100% prepayment with the order, or 40% with order net 30 from date of start up. Payment terms discount (3%) does not apply if the payment is made with a credit card. A 1½% per month finance charge will be assessed on all invoice balances outstanding past 30 days.

For credit card payments over 5,000.00 dollars, a 3% service charge will be added. If multiple payments are made to an order, the 3% service charge will not be avoided when the total credit card payments to the order exceed 5,000.00 dollars.

Price does not include sales tax. Please provide municipality's tax exemption certificate.

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creating a cleaner workplace

Prepared For: Matthew Lohse
Prepared by: Dean Havnen
Date: 6/19/2023

Budgetary Proposal for Geneva Fire Department Station #2 - Plymovent Exhaust Extraction for (4) Vehicle Connections

Hastings Core Focus:

Providing innovative solutions that create healthier lives for workers and energy savings for employers.



<p>Engineered Solutions Down & Backdraft Tables Vehicle Exhaust Systems Replacement Filters & Parts</p>	<p>Dust / Wet Collectors Air Filtration Products Ventilation Equipment Industrial Vacuum Systems</p>	<p>Automation & Energy Controls Remote Monitoring Access Installation & Service Industrial Flex Hose</p>
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Experience + Service = Results



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Bill To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Ship To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Date:

Salesperson: Dean Havnen

Quote: QUO-30853-P3X9Z6

Expires: 7/19/2023

Quote Per Request

The proposal includes the design, manufacture and installation of a vehicle exhaust extraction system which allows four (4) vehicles with under carriage exhaust to be connected.

Scope

System includes:

- (1) 75ft MRP Rail based system Complete with one vehicle connection
- (3) 25ft MRP Rail based system complete with one vehicle connection
- (1) 5hp exhaust fan complete with silencer & back-draft damper.
- (1) Control panel and low voltage control sensors for system activation
- All mechanical installation and electrical line voltage wiring included.

System warranty is 5 YEARS PARTS and LABOR on all system components and 10 YEAR on all aluminum extrusions.

Customer Responsibilities

Tailpipe modifications of the apparatus for the mounting of the conical tailpipe adapters to be provided by owner/ others.



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Bill To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Ship To:

Geneva Fire Dept. Station #2
2530 Fargo Boulevard

Geneva, IL 60134

Date:

Salesperson: Dean Havnen
Quote: QUO-30853-P3X9Z6
Expires: 7/19/2023

Part #	Description	Qty
VE-MRP-25	Mini Rail System 25 Includes: 23.25' Of Extruded Aluminum Profile, 1 Mrp Rail Connection End 125Mm/5" Dia Connection (Rear) 50' Feet Of Mrp Rubber Lip Note: Must Order Front End Cap Of Choice, Rubber Bumper Or Hydraulic Shock Separately"	3.0
VE-MRP-75	Mini Rail System 75 Includes: 71.25' Of Extruded Aluminum Profile 2- Mrp Rail End Caps 1- Hydraulic Shock 2- Rrdc-125, Middle Rail Duct Connector, 5" Diameter 150' Feet Of Mrp Rubber Lip 7-Top Suspension Mount Kits * "	1.0
VE-STRA-MG-UH41	STRA UPPER HOSE PACK - MAGNETIC GRABBER. 4" ST HOSEPACK FOR 1 DROP INCLUDES: UPPER HOSE, CRAB, HOSE CLAMPS, METAL SADDLE & BALANCER	4.0
VE-XX-MH410	SBTA. STRA. VSRX MID HOSE PACK 4" ST HOSE X 10' INCLUDES HOSE & CLAMPS	4.0
VE-STRA-MG-LH54HTBA	STR LOWER HOSE PACK - MAGNETIC GRABBER (MG) BLACKARMOUR (BA) 5", HIGH TEMP (HT) HOSE 4", SAFETY DISCONNECT HANDLE (SDCH) LOWER ASSEMBLY, STR/VSRX	4.0
FAN-088N	TEV Fan, 7.5 Hp, 3450 Rpm, 208-230/460V, 3Ph, 60Hz, Tefc Motor. Upblast vertical discharge configuration	1.0
ADAP-036	Rectangular To Round (12" Dia Male Fitting) Transition For Tev 5 Series Fans	1.0
DAMP-034	Damper, backdraft 6" BDD/One per drop on STRA	4.0
DAMP-046A	Damper - Backdraft - 12"	1.0
SIL-12A	Silencer - 12" - 12x16x36	1.0
VE-CP-025	Control operation system for 7.5HP-208V-240V 3PH 19AMP	1.0
ADAP-151TG	Topgrade stainless steel tailpipe adapter (TPA) 7", for Magnetic Grabber (MG) 5"	4.0
SEN-002	Engine Pressure Sensor Assembly w/ear clips	4.0
VE-LEG-LP1	Sq Alumn Leg Tube, 1.2" Sq. X 16' Long, Extruded Alumn, Field Cut To Req'D Length	7.0



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VE-WRK-R08	Wireless Receiver w/3 relays, 2400 MHZ with enclosure.	1.0
VE-WRK-T09	Transmitter, Remote, 2.4 GHZ w/spade lugs	4.0
VE-WRK-T10	Transmitter, remote, Dual Ignition, 2400 MHZ wired.	4.0
INST-M	Mechanical installation to include: mounting & bracing of the equipment, all exhaust ducting, mounting of the exhaust fan & control panel and all control wiring.	1.0
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PD	Per Diem	1.0
FRT	Freight	1.0
LIFT	Lift Usage Charges	1.0

Total: \$67,565.00

NOTE: Shipping and Tax are NOT INCLUDED.

I have read the terms page, a single, separate page from the pricing, and I accept the terms and conditions of this quotation.

Signed: _____
 Name: _____ Title: _____

Terms:
 _____ Prepay - 3% Discount:
 _____ Net 30 Days from Shipment
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Equipment

Mini Rail System (MRP)

MRP EXHAUST RAIL SYSTEM



The Flexible exhaust MRP Rail System
for Fire and EMS Departments



WHY DIESEL EXHAUST EXTRACTION IS IMPORTANT

Diesel engines, used in fire trucks, produce a mixture of toxic gases and particulates from the combustion process. These hazardous vehicle exhaust emissions in a fire station are one of a firefighter's most significant cancer health risk and a serious legal liability for the fire department. It is essential to create healthy and safe working conditions by reducing these risks. Protective measures are an important aspect of this.

Eliminate this hazard from your fire station with our vehicle exhaust capture and removal systems. From existing stations to new design-built, our totally automatic start-up and disconnect source capture systems are the recommended method for controlling exhaust emissions in your station.

THE MRP EXHAUST RAIL SYSTEM

MRP Rail system from Plymovent is suitable for exhaust extraction for Fire & EMS vehicles.

Vehicles can be connected to just one rail system in Low Ceiling Stations. The overhead trolleys moved easily connected to vehicles apparatus bays. The total number of trolleys are equal the total number of vehicles that need extraction simultaneously, thereby providing optimal extraction efficiency with a energy efficient system.

Exhaust emissions are vented to the outside through the rail system typically through one outlet.

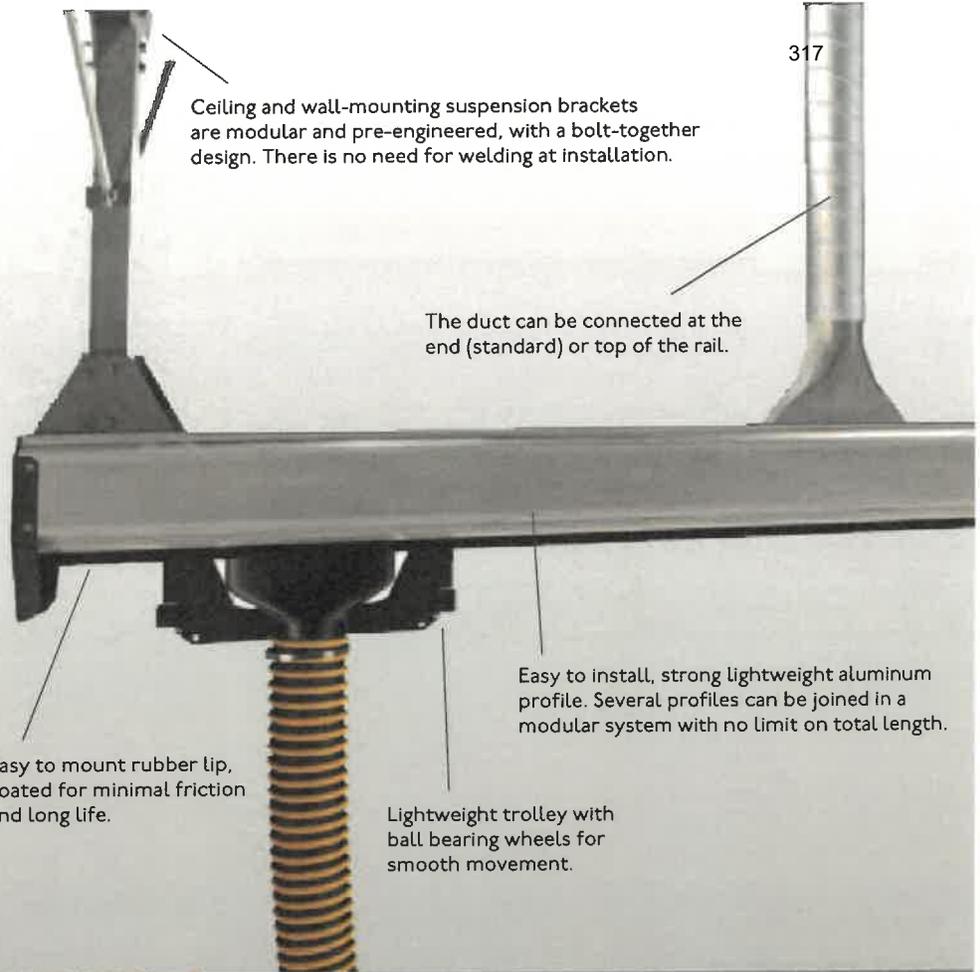
MRP is a ventilation system for exhaust with an extruded aluminum rail and a sliding trolley. The rail is installed overhead in Fire and EMS apparatus bays then connected to an exhaust fan.

The trolley is equipped with a Plymovent unique hose, Magnetic Nozzle and can be positioned anywhere in the apparatus bay where the vehicle is parked.

BENEFITS

The Plymovent MRP System Rail design provides maximum efficiency and eliminates the need for numerous individual trolleys required for hose support in Horizontal Tracks

- Only vertical hose from crab required
- Usage for any & all vehicles
- Flexible design for all stations
- Only one duct connection necessary
- One trolley crab per vehicle
- Energy efficient system for low ceilings



Magnetic grabber and stainless steel pipe adapter

A COMPLETE SYSTEM SOLUTION

At the heart of the exhaust extraction system, are Plymovent Control Boxes and Fans, which are designed with a self-cleaning, self-balancing and spark-resistant impeller. They are energy efficient and a perfect match to any new or existing Fire or EMS Station design and layout.

Plymovent performance guarantees ensuring that you won't regret investing in Plymovent – the Intelligent Process Ventilation High Performance Fans & Control Boxes. Plymovent local Dealers will design, supply, and install your system ensuring your complete satisfaction.



PLYMOVENT OFFERS TOTAL SOLUTIONS FOR AIR CLEANING

For more than 40 years we have made it our business to ensure clean air in fire stations. We provide high-quality products to protect firefighters and others from exposure to hazardous diesel exhaust, dust and debris. We offer a broad range of exhaust extraction systems, supported by complete engineering services. Contact us to find out what genuine commitment to customer requirements really means.

FROM SCRATCH TO THE RIGHT SOLUTION

Plymovent is not just a manufacturer. We offer professional advice and engineering services to provide a solution tailored to your specific needs or requirements. In addition, our worldwide network of distributors offer service and maintenance to keep your system functioning optimally.

For more information, please contact your authorized Plymovent distributor or visit www.plymovent.com.

PLYMOVENT®

clean air at work

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Cranbury, NJ 08512
USA

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T +1 609 395 3500
F +1 609 655 0569
E cleanair@plymovent.com

 [plymoventusa](https://www.facebook.com/plymoventusa)  [@plymoventusa](https://twitter.com/plymoventusa)  [plymoventusa](https://www.instagram.com/plymoventusa)

Plymovent Corp. is ISO 9001:2008 Certified.



Your authorized Plymovent distributor:



+1 800.236.8450 | hastingsairenergy.com

Plymovent reserves the right to make design changes.

Plymovent cares about the air you breathe. We offer products, systems and services which ensure clean air at work, anywhere in the world.

We respect the environment and we deliver high-quality products. Our expertise gained over many years and our genuine commitment to customer requirements enable us to provide precisely the solutions you need.

Product: Mini Rail Profile (MRP)

Summary: MRP removes diesel fumes at the source from start up to exit of vehicles from fire or emergency facilities, and supports bays up to 65 ft. MRP features a square aluminum rail with an open section that is sealed by rubber lips. A trolley travels inside the rail profile, and the trolley duct opens the rubber seal lips within the profile.



Fig. 1.1

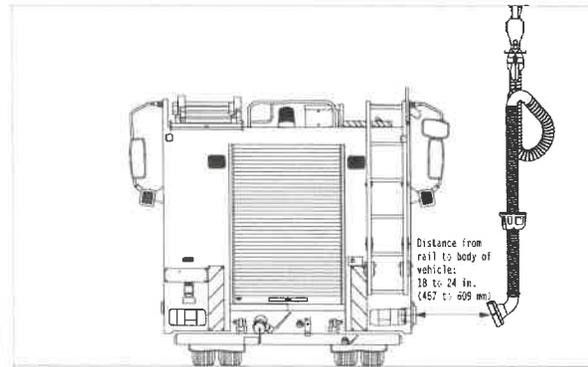


Fig. 1.2

Drawings are not to scale.

System Specifications			
Type	Length: ft (m)	# of Suspensions	Weight: lbs (kg)
MRP-20	19 (5,8)	2	199.5 (90,5)
MRP-30	28.5 (8,7)	3	299.2 (135,7)
MRP-35	33.3 (10,1)	3	347.5 (157,6)
MRP-40	38 (11,58)	4	399 (181)
MRP-45	42.8 (13)	4	447 (202,8)
MRP-50	47.5 (14,5)	5	498.7 (226,2)
MRP-55	52.8 (16)	5	550.3 (249,6)
MRP-60	57 (17,4)	6	598.3 (271,4)
MRP-65	61.8 (18,8)	6	646.6 (293,3)

Support Details			
Length: ft (m)	Brace Length	X1	X2
0 - 1.5 (0 - 0,5)	N/A	0	0
1.5 - 3 (0,5 m - 0,9)	20 in. (0,5 m)	14 in. (0,36 m)	14 in. (0,36 m)
3 - 6 (0,9 - 1,8)	30 in. (0,76 m)	21 in. (0,53 m)	21 in. (0,53 m)
6 - 10 (1,8 - 3)	72 in. (1,8 m)	51 in. (1,3 m)	51 in. (1,3 m)

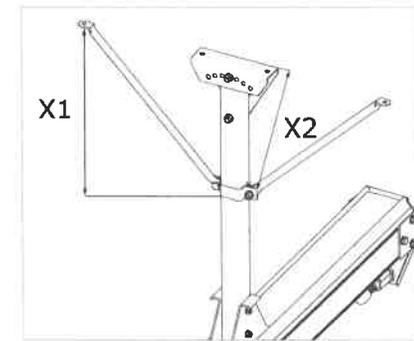


Fig. 1.3

Notes:

1. System support method: see fig. 1.3 and support details table.
2. System location: see system specifications table.
3. Based on 1 crab and hose assembly; each additional crab/hose adds 40 lbs (18 kg).

Job Name:	DWG BY: TV	Revision: 0	Rev. Date: 06/11/20
Engineer:	Plymovent Corp. 5 Corporate Drive Cranbury, NJ 08512 800-644-0911		MRP
Customer:			

Product: Mini Rail Profile (MRP) - Page 2

Maximum reach based on specific track height (in ft)

Type		Magnetic Grabber					
		Height: 12 ft 6 ft from door		Height: 13 ft 7 ft from door		Height: 14 ft 8 ft from door	
		Back in ft (m)	Drive through ft (m)	Back in ft (m)	Drive through ft (m)	Back in ft (m)	Drive through ft (m)
MRP-20	19 (5.8)	24 (7.3)	28 (8.5)	25 (7.6)	30 (9.1)	26 (7.9)	32 (9.8)
MRP-30	28.5 (8.7)	33.5 (10.2)	37.5 (11.4)	34.5 (10.5)	39.5 (12)	35.5 (10.8)	41.5 (12.6)
MRP-35	33.3 (10.1)	38.3 (11.7)	42.5 (13)	39.3 (12)	44.5 (13.6)	40.3 (12.3)	46.5 (14.2)
MRP-40	38 (11.58)	43 (13.1)	47 (14.3)	44 (13.4)	49 (14.9)	45 (13.7)	51 (15.5)
MRP-45	42.8 (13)	47.8 (14.6)	51.8 (15.8)	48.8 (14.9)	53.8 (16.4)	49.8 (15.2)	55.8 (17)
MRP-50	47.5 (14.5)	52.5 (16)	56.5 (17.2)	53.5 (16.3)	58.5 (17.8)	54.5 (16.6)	60.5 (18.4)
MRP-55	51.8 (15.8)	57.3 (17.5)	61.3 (18.7)	58.3 (17.7)	63.3 (19.3)	59.3 (18)	65.3 (19.9)
MRP-60	57 (17.4)	62 (18.9)	66 (20.1)	63 (19.2)	68 (20.7)	64 (19.5)	70 (21.3)
MRP-65	61.8 (19)	66.8 (20.4)	70.8 (21.6)	67.8 (20.7)	72.8 (22.2)	68.8 (21)	74.8 (22.8)

Disclaimer: The intended use of this drawing is to provide general equipment dimensions. The information provided is confidential and proprietary to Plymovent Corp. and is not to be recreated, modified and/or otherwise distributed without written consent of Plymovent Corp. There are no expressed or implied warranties concerning the accuracy, completeness, reliability, or usability of this information. Use of this or any Plymovent Corp. drawing, for purposes other than its intended use, is unlawful and actions may be taken against the violating party(ies).

Job Name:	DWG BY: TV	Revision: 0	Rev. Date: 06/11/20
Engineer:	Plymovent Corp. 5 Corporate Drive Cranbury, NJ 08512 800-644-0911		MRP
Customer:			



Equipment

Fans, Silencer & Rain Cap

TEV (60Hz)

TEV-359/3110/559/585/745/768

The TEV is a central extraction fan that is equipped with a lightweight aluminium impeller, making it suited to exhaust gases, volatile fumes and dust. Matched inlet and outlet areas, together with optimized impellers, ensure even airflow, high capacity and low noise level.

The fan is intended and designed for mounting filter units and vehicle exhaust extraction systems. The fan is rated for outdoor use.



APPLICATIONS

The TEV fans are intended to be used for the following applications:

- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding
- vehicle exhaust extraction systems



Do **not** use the TEV fans for the following applications or in the following circumstances:

- aluminium laser cutting
- extraction of aggressive fumes and gases (e.g. from acids, alkaline or soldering paste containing lithium)
- extraction of hot gases exceeding 176°F (80°C) continuously
- grinding aluminium and magnesium
- flame spraying
- extraction of cement, saw dust, wood dust, etc.
- explosive environments or explosive substances/gases



SPECIFICATIONS

Physical dimensions and properties

Material:	<ul style="list-style-type: none"> • aluminum • powder coated galvanized sheet metal
Color housing	basalt gray (RAL 7011)
Motor design	NEMA
Fan type	centrifugal, up blast
Impeller	backward inclined
Discharge position	90° rotatable
Design conditions	68°F (20°C) at sea level
Max. airflow temperature	176°F (80°C) continuously

Performance

Max. starts/stops per hour 20 (1ph); 30 (3ph)

Ambient conditions

Operating temperature:	<ul style="list-style-type: none"> • min. -4°F (-20°C) • nom. 68°F (20°C) • max. 176°F (80°C)
Max. relative humidity	80%
Storage conditions	<ul style="list-style-type: none"> • -4 to 176°F (-20 to 80°C) • relative humidity max. 80%

Options and accessories

Outlet transition from rectangular to round

- | | |
|---------------|----------------|
| • TOL-250 | • TEV-359/3110 |
| • TOL-315 | • TEV-559/585 |
| • TOL-400/500 | • TEV-745/768 |

Soft connection for noise and vibration free connection to duct (to be installed with inlet and outlet transition TOL)

- | | |
|----------|-------------------------|
| • SC-200 | • TEV-359/3110 (inlet) |
| • SC-250 | • TEV-359/3110 (outlet) |
| | • TEV-559/585 (inlet) |
| • SC-315 | • TEV-559/585 (outlet) |
| | • TEV-745/768 (inlet) |
| • SC-400 | • TEV-746/768 (outlet) |

Vibration dampers to isolate noise and vibration

- | | |
|-------------|------------------------|
| • TEV-AV/35 | • TEV-359/3110/559/585 |
| • TEV-AV/79 | • TEV-745/768 |

Set consisting of TOL, 2 x SC and TEV-AV (not available in North America)

- | | |
|-------------|----------------|
| • TEV-KIT/3 | • TEV-359/3110 |
| • TEV-KIT/5 | • TEV-559/585 |
| • TEV-KIT/7 | • TEV-745/768 |

Scope of supply

Extraction fan

Shipping data

Number/package 1

APPROVALS/CERTIFICATES

	Compliance with CE directives
	Directive 2011/65/EC (RoHS) valid as of 8 June 2011
	Plymovent certifies that the products shown herein are licensed to bear the AMCA Seal. The ratings shown comply with the requirements of the AMCA Certified Ratings Program. Plymovent are reated AMCA type B
	Certified motor
	Certified motor

ARTICLE NUMBERS, WEIGHTS AND PACKING DIMENSIONS

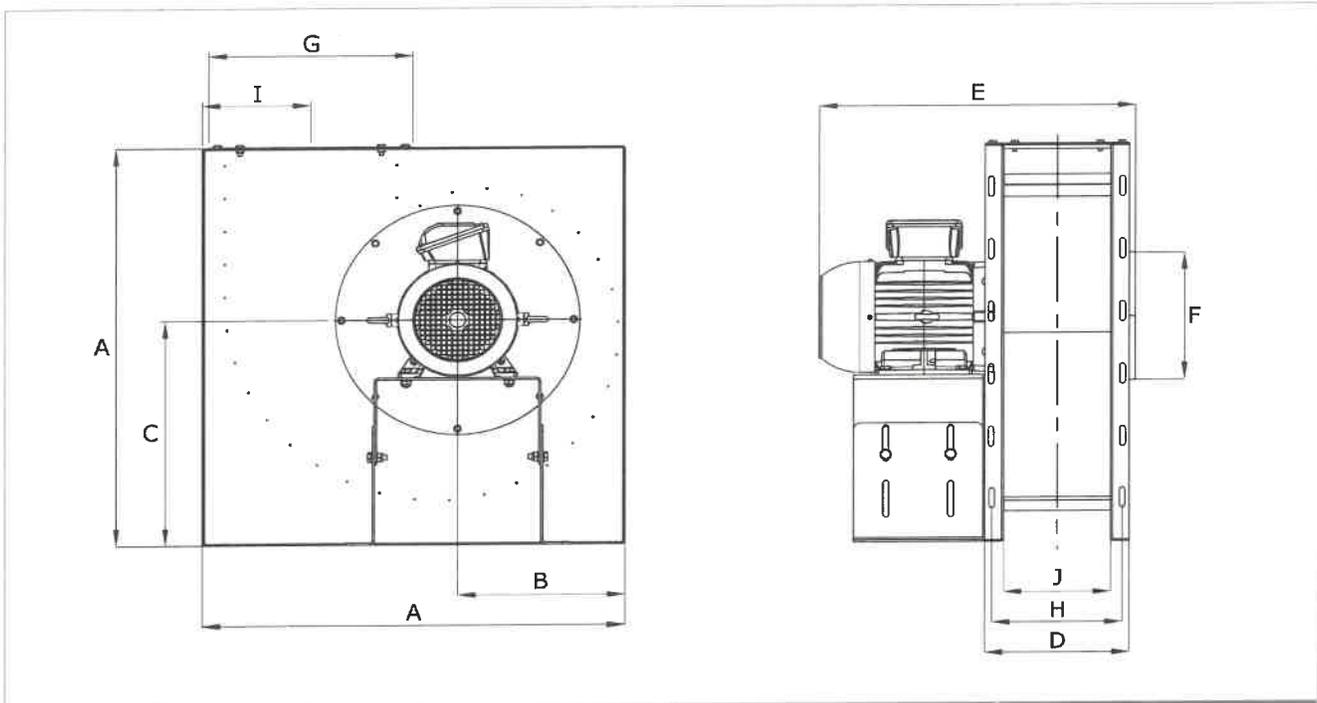
Fan type	Connection voltage	Article number	Weight		Packing dimensions
			Net lbs (kg)	Gross* lbs (kg)	
TEV-359	115/208-230V/1ph/60Hz	0000102927	114.6 (52)	142 (64,4)	31.5 x 39.4 x 31.5 in. (80 x 100 x 80 cm)
	208-230/460V/3ph/60Hz	0000102928	105.8 (48)	135.6 (61,5)	31.5 x 39.4 x 31.5 in. (80 x 100 x 80 cm)
	575V/3ph/60Hz	0000102929	117.9 (53,5)	147.7 (67)	33.5 x 29.5 x 31.5 in. (85.1 x 74,9 x 80 cm)
TEV-3110	208-230/460V/1ph/60Hz	0000102930	120.2 (54,5)	134.5 (61)	31.5 x 39.4 x 31.5 in. (80 x 100 x 80 cm)
	208-230/460V/3ph/60Hz	0000102931	117.9 (53,5)	137.8 (62,5)	25.6 x 32.3 x 31.1 in. (65 x 82 x 79 cm)
	575V/3ph/60Hz	0000102932	116.4 (52,8)	140 (63,5)	33.5 x 29.5 x 31.5 in. (81,5 x 75 x 80 cm)
TEV-559	208-230/460V/1ph/60Hz	0000102933	214.7 (97,4)	238.1 (108)	31.5 x 39.4 x 37.8 in. (80 x 100 x 96 cm)
	208-230/460V/3ph/60Hz	0000102934	206.3 (93,6)	221.6 (100,5)	31.5 x 39.4 x 37.4 in. (80 x 100 x 95 cm)
	575V/3ph/60Hz	0000102935	218.3 (99)	244.3 (110,8)	33.5 x 29.5 x 37.4 in. (81,5 x 75 x 95 cm)
TEV-585	208-230/460V/1ph/60Hz	0000102936	207 (94)	237.0 (107,5)	31.5 x 39.4 x 37.8 in. (80 x 100 x 96 cm)
	208-230/460V/3ph/60Hz	0000102937	203.9 (92,5)	223.8 (101,5)	25.6 x 32.3 x 37.4 in. (65 x 82 x 95 cm)
	575V/3ph/60Hz	0000102938	192.9 (87,5)	222.7 (101)	33.5 x 29.5 x 37.4 in. (81,5 x 75 x 95 cm)
TEV-745	208-230/460V/1ph/60Hz	0000102939	330.7 (150)	363.8 (165)	31.5 x 47.2 x 49.2 in. (80 x 119,2 x 125 cm)
	208-230/460V/3ph/60Hz	0000102940	328.4 (149)	377.0 (171)	31.9 x 47.2 x 44.9 in. (81 x 119,2 x 114 cm)
	575V/3ph/60Hz	0000102941	339 (147)	353.8 (160,5)	31.9 x 47.2 x 49.2 in. (81 x 119,2 x 125 cm)
TEV-768	208-230/460V/3ph/60Hz	0000102942	392.1 (177,9)	442.0 (200,5)	31.9 x 47.2 x 49.2 in. (81 x 119,2 x 125 cm)
	575V/3ph/60Hz	0000102943	392.1 (177,9)	442.0 (200,5)	31.9 x 47.2 x 49.2 in. (81 x 119,2 x 125 cm)

*Gross weight = includes packaging



TEV fans are enclosed in a cardboard box and bolted, as well as metal strapped, to a wooden skid.

DIMENSIONS



	TEV-359 TEV-3110		TEV-559 TEV-585		TEV-745 TEV-768		
	in.	mm	in.	mm	in.	mm	
A	25.2	640	30.9	785	38.6	980	
B	10.5	267	12.2	310	15.8	402	
C	14.0	355	17.5	444	23.7	603	
D	9.1	230	10.6	270	11.4	290	
E	1~ motor 3~ motor	20.6 19.4	524 494	26.8 26.7	681 678	27.0 27.1	686 688
F	Ø 7.9	Ø 200	Ø 9.8	Ø 250	Ø 12.4	Ø 315	
G	12.3	312	15.0	380	18.1	460	
H	8.0	204	9.6	244	10.4	264	
I	6.4	163	8.0	202	9.5	242	
J	6.3	160	7.9	200	8.7	220	



Equipment

Controls

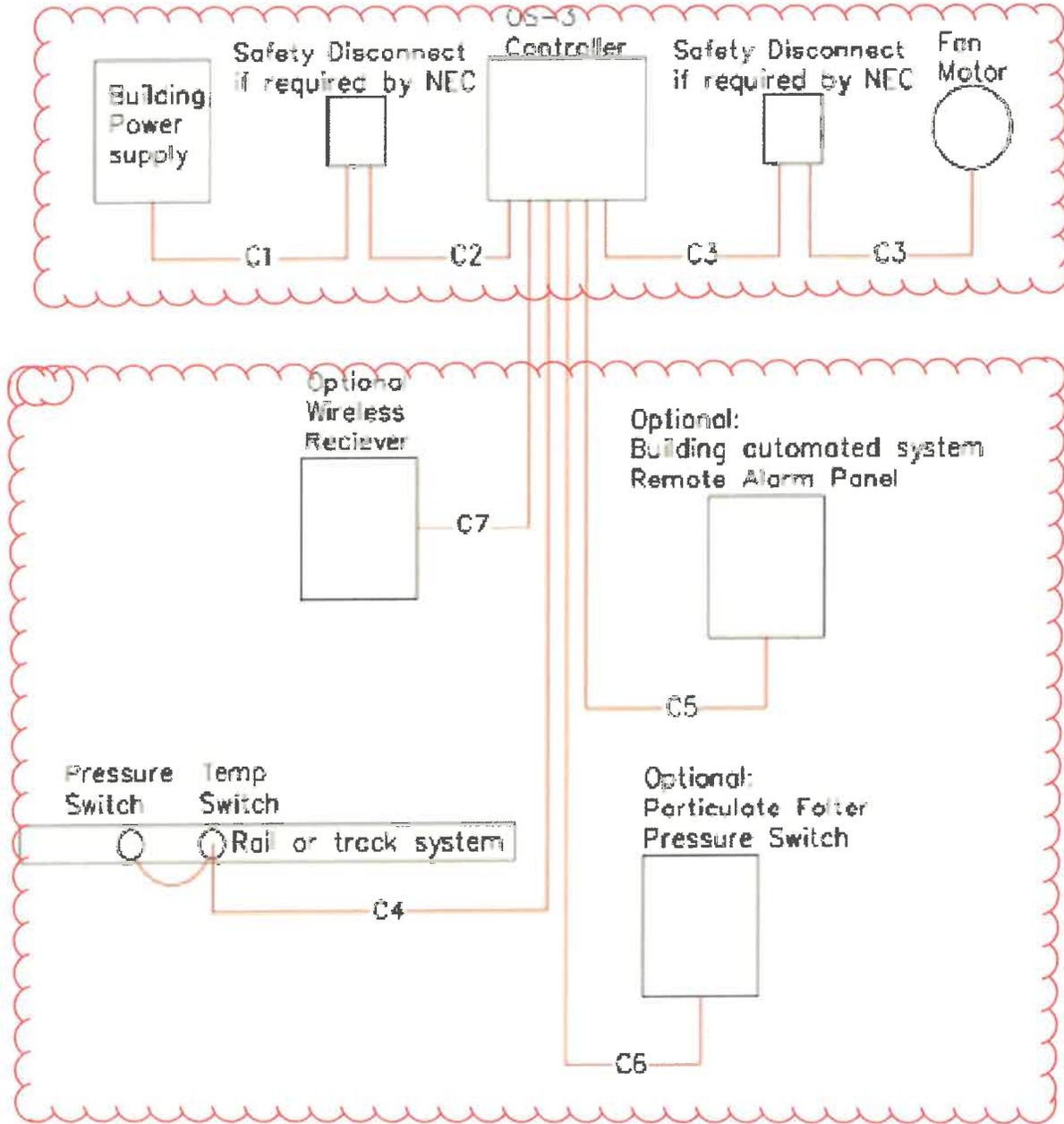
OS-3 AUTOMATIC SYSTEM CONTROL



<h1>PLYMOVENT®</h1>	<h2>TECHNICAL DESCRIPTION</h2>	BSAB no: T0.7 Ser.no: OS-3 II Date: Oct-11 Replace: Jan-11
BLOWER OPERATING SYSTEM: OS-3 II		© Copyright 2008: 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.
		<p>Area of use: OS-3 is an energy saving control unit, which together with pressure sensor and temperature sensor makes a fully automatic system for the control of Plymovent's vehicle exhaust fans.</p> <p>Delivery: The control unit, OS-3, is delivered complete with functions for manual and automatic start/stop of the exhaust fan.</p> <p>NOTE! The control unit, OS-3, is delivered without cable for field wiring. Cables for field wiring must apply to UL and NEC.</p>
<hr/>		
<p>General information:</p>		
<p>OS-3 controller is designed to be used for control of exhaust fans in vehicle exhaust systems, with or without particle filtration system. The controller can be set for both manual and automatic control of the fan. Depending on the system, different sensors for start/stop function can be used. Mainly two types of sensors will be used; pressure sensor to detect pressure difference in systems and temperature sensors to detect temperature level in the system. The OS-3 control box also includes an alarm device, which can be used for status control of the airflow in the exhaust system. A built in "after running time" function will secure that toxic gases in the duct system will be exhausted out of the ducting before the fan stops. The after running time can easily be adjusted between 7 sec. to 6 minutes.</p>		
<p>Method of operation:</p>		
<p>When the control unit is set into "automatic" mode, the exhaust fan is started by a signal from an externally mounted pressure or/and temperature sensor. Normally the system is activated by the pressure sensor and kept running by the temperature sensor.</p>		
<p>Pressure sensor:</p>		
<p>The pressure sensor reacts on increasing pressure (positive pressure) which occurs in the system when a vehicle is starting up. The pressure sensor is adjustable to fit all engine sizes.</p>		
<p>Temperature sensor:</p>		
<p>The temperature sensor will detect the increasing temperature which occurs in the system when a vehicle is running. The temperature sensor is adjustable to fit all engine sizes.</p>		
<p>Automatic mode:</p>		
<p>When the engine is turned on, the pressure sensor reacts and forwards a signal to the control unit. The control unit is then starting the exhaust fan. The fan stops after the pre-adjusted after run time is out.</p>		
<p>Manual mode:</p>		
<p>When the control unit is set in manual mode the exhaust fan is running continuously.</p>		
<p>Stop mode:</p>		
<p>When pressing the stop button, the fan will stop immediately and after a short period of time, 2-3 seconds, the controller will move into automatic mode. This built in function will prevent the risk of having exhaust gas leakage in the system due to operator error.</p>		
<p>Alarm mode:</p>		
<p>The alarm device will detect high pressure loss over the filter unit; when the "Fan on LED Light" flashes the pressure over the filter is to high. Filter needs to be replaced.</p>		
<hr/>		
		OS-3/USA/2/12

Plymovent Electrical Flow Chart

Line Voltage Wiring needed from electrical contractor. SD not needed for control panel, just fan motor



All control wiring by Hastings.

WIRELESS INSTALLED BY HASTINGS AIR ENERGY CONTROL

EN Wireless

WIRELESS CONTROL SYSTEM



EN User manual

WIRELESS IR SYSTEM SEQUENCE OF OPERATION

The wireless system includes the following components:

- (1) Wireless Receiver that gets tied into the OS-3 control panel
- Wireless transmitters (one per vehicle connection/ drop)
- Standard pressure sensors (one per vehicle connection/drop)

The wireless system works just like the wired system as such it works off the pressure sensor for system activation:

- Each vehicle has a pressure sensor tied into a wireless transmitter
- The transmitter is either mounted on the internal crab assembly on the STRA system or mounted on the riser bracket on the SBTA system
- The pressure sensor wire taps are tied into the transmitter.
- Anytime the vehicle is started or reattached when backing into the station, the pressure sensor is pulled in (contacts closes) by the exhaust pressure being emitted by the vehicle.
- The pressure sensor then closes and a signal is generated by the wireless transmitter that is sent to the receiver mounted by the OS-3 control panel that activates the exhaust fan

That is the run down on the wireless & it is that simple.

The advantage for the wireless:

- More responsive system activation
- Eliminates electrical shorts in the wires
- Each transmitter is numbered & the receiver can inform the service tech on a faulty pressure sensor/ trouble code



WIRELESS CONTROL UNIT



Equipment

Safety Disconnect Handle (SDCH), & Magnetic Grabber –
Black Armour® - Flex Hose & Steel Saddle

SAFETY DISCONNECT HANDLE



The ergonomic handle for safe operation of
your exhaust removal system

SAFETY DISCONNECT HANDLE

Plymovent offers a safe solution for operating an exhaust removal system in emergency stations. Designed for functionality and efficiency, the safety disconnect handle is easy to use and represents the next step in safety disconnects. With an uninterrupted airflow through the exhaust removal hose, the exhaust gases are carried out of the breathing zone with maximum efficiency.

FUNCTIONAL DESIGN

The safety disconnect handle is ergonomically-designed for ease of use. The round handle has large grips so that it can be operated even while wearing gloves and can be reached from any angle. The user does not have to bend over to connect the exhaust removal system, thus limiting the risk of exposure to exhaust gases.

The safety disconnect handle is patent pending and was designed with its function in mind. The inside is made of durable steel to withstand high-temperature exhaust gases, while the outside is made of engineered plastics. When operating a pneumatic system, the integrated pneumatic valve is shielded and positioned to allow its simple operation. The safety disconnect handle for a magnetic system does not include the valve, but it does offer benefits like easy operation of the system and the safety disconnect function.

Ergonomic in use and operation, with large grips and easy-to-operate functions

Made of 'scratch-safe' materials resistant to high temperatures

Uninterrupted airflow through the hose

Available for magnetic and pneumatic systems



PLYMOVENT SOURCE CAPTURE SYSTEMS: AN INDUSTRY STANDARD

The safety disconnect handle can be integrated with Plymovent's pneumatic and magnetic exhaust removal systems. A Plymovent system enables you to remove dangerous exhaust gases efficiently, saving you money and assuring clean air at the workplace.

Our philosophy is to provide quality systems that are safe, user-friendly and code-compliant and that will enhance quality of life for your fire fighters and personnel. That is why we have developed a line of source capture systems designed to meet your station's needs.

Plymovent Corp. is ISO 9001:2008 certified.



Plymovent cares about the air you breathe. We offer products, systems and services which ensure clean air at work, anywhere in the world.

We respect the environment and we deliver high-quality products. Our expertise gained over many years and our genuine commitment to customer requirements enable us to provide precisely the solutions you need.



PLYMOVENT®

clean air at work

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Plymovent reserves the right to make design changes.

BRO_SDCH_Letter_EN

www.plymovent.com

Safety Disconnect Handle (SDCH)

Plymovent's Safety Disconnect Handle is the easy and ergonomic way to operate your Plymovent FIRE system. With a Safety Disconnect Handle that does not block the flow of exhaust gasses through the hose, the dangerous gasses are removed as fast and efficient as possible. The Safety Disconnect Handle allows for an effortless handling and operation of both the pneumatic- and magnetic Plymovent systems. This product allows you to show that removal exhaust gasses from your Fire station is a serious matter and that you work with the best materials available.



DESCRIPTION

Easy to use ergonomic handling and operation	✓
Ergonomic design	✓
Safety disconnect function	✓
Easy reconnect mechanism	✓
Available for both pneumatic and magnetic systems	✓
True 100mm (4") and 125mm (5") design for uninterrupted exhaust removal flow.	✓
Solid design for easy handling and operation.	✓
Available for both 100mm (4") and 125mm (5") hoses.	✓
Can be used on existing Plymovent FIRE systems	✓

AVAILABLE ACCESSORIES

Product name	Art.no	Description
SDCH-P 100mm / 4"	90550-101 702502-A	Safety Disconnect Handle - Pneumatic for 100mm / 4" hose
SDCH-P 125mm / 5"	90555-101 702503-A	Safety Disconnect Handle - Pneumatic for 125mm / 5" hose
SDCH-M 100mm / 4"	90560-101 702500	Safety Disconnect Handle - Magnetic for 100mm / 4" hose
SDCH-M 125mm / 5"	90565-101 702501	Safety Disconnect Handle - Magnetic for 125mm / 5" hose

APPLICATIONS

The Safety Disconnect Handle is suitable to operate with the following Plymovent extraction systems:

- The Plymovent SBT system
- The Plymovent STR system
- The Plymovent hose reels / drops

AMBIENT CONDITIONS

Operating temperature	-5°C / 23°F to 60°C / 140°F
Use	Indoor use only
Storage conditions	-5°C to +60°C (23°F-140°F)

SCOPE OF SUPPLY

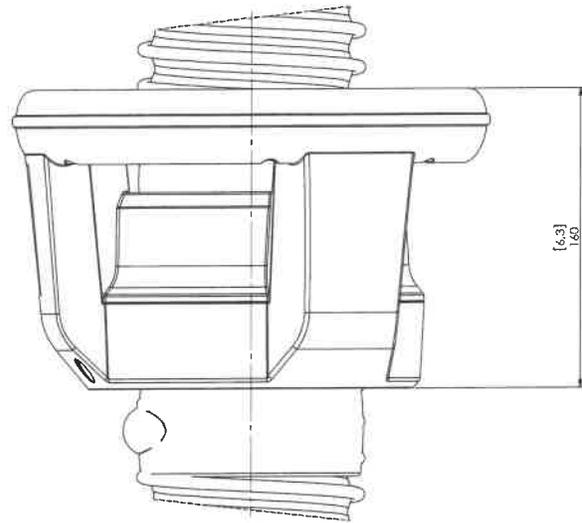
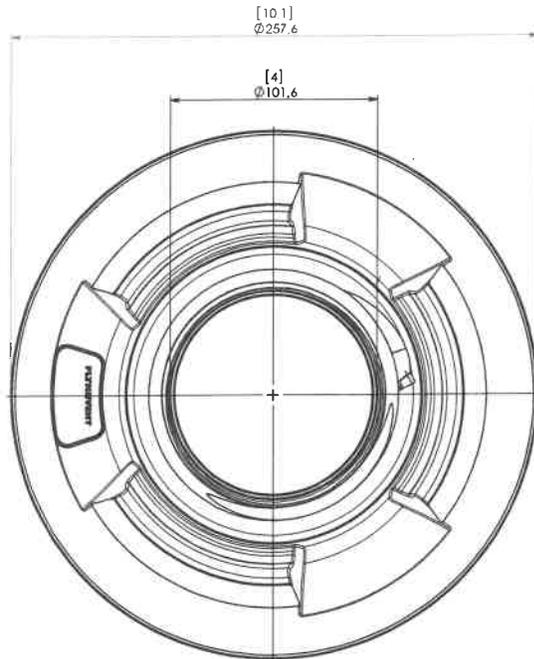
The Safety Disconnect Handle - Pneumatic:

- 1 x the Safety Disconnect Handle
- 1 x the integrated air valve top operate the Plymovent Grabber®

The Safety Disconnect Handle - Magnetic:

- 1 x the Safety Disconnect Handle

TECHNICAL DATA



PHYSICAL DIMENSIONS AND PROPERTIES

Article number	90550 - 1011 702502-A 90555 - 1011 702503-A 90560 - 1011 702500 90565 - 1011 702501
Safety Disconnect: - Standard release force setting	<ul style="list-style-type: none"> • approx 150 N / 33 lb-force • approx 450 N / 99 lb-force
Certifications	<ul style="list-style-type: none"> • PAK / TUV
Pneumatic valve	<ul style="list-style-type: none"> • In: Unregulated air Max 6 bar / 87 Psi • Out: Regulated air for Grabber® Max. 1 bar / 15 Psi
Material	Nylon PA6 (30%) aluminium inner flanges.
Weights SDCH SDCH incl Mechanical Air valve	1,55 kg / 3.4 lbs 1,75 kg / 3.8 lbs
Dimensions	See drawing above

USER INSTRUCTIONS

Using the Plymovent Pneumatic Safety Disconnect handle:

When a vehicle drives into the station attach the Pneumatic Grabber® to the tailpipe (touching the Grabber® stop) and press down on the valve. The Grabber® will now be inflated and connect to the tailpipe creating a positive seal and engage the exhaust removal fan. The exhaust removal fan will start automatically.

When the vehicle exits the station the Grabber® will disconnect automatically putting the valve in the empty position (valve will pop up).

Using the Plymovent Magnetic Safety Disconnect handle:

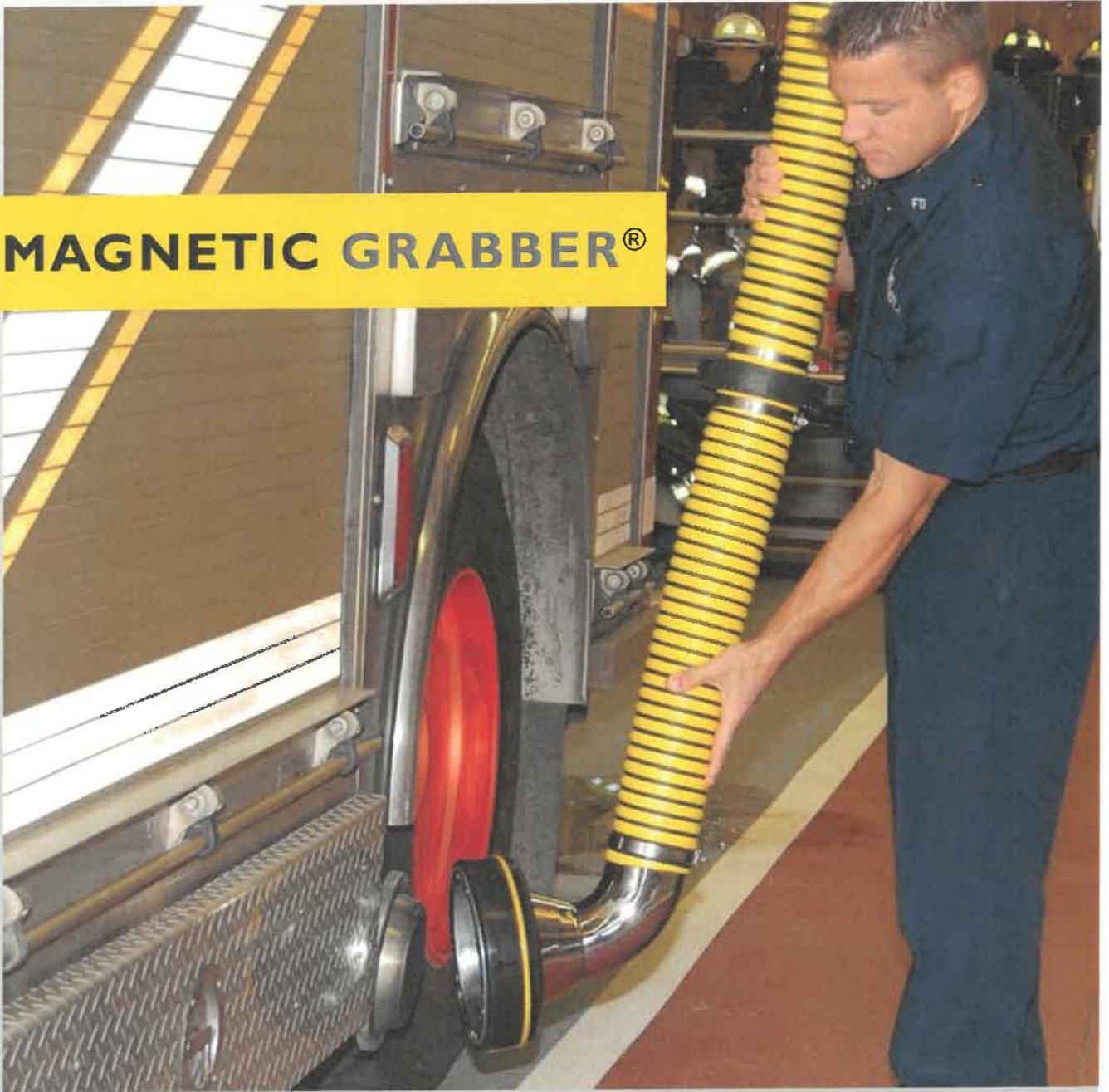
When a vehicle drives into the station attach the Magnetic Grabber® to the tailpipe connector. The Magnetic Grabber® is now connected and the exhaust removal fan will start automatically.

When the vehicle exits the station the Grabber® will disconnect automatically.

Balancer Locking Cable

In every application of the SDCH a Balancer locking cable should be used. Please make sure this part is present at your system.

MAGNETIC GRABBER[®]



The “click and seal” nozzle for
effective exhaust removal



WHY DIESEL EXHAUST EXTRACTION IS IMPORTANT

Diesel engines, used in fire trucks, produce a mixture of toxic gases and particulates from the combustion process. These hazardous vehicle exhaust emissions in a fire station are one of a firefighter's most significant cancer health risk and a serious legal liability for the fire department. It is essential to create healthy and safe working conditions by reducing these risks. Protective measures are an important aspect of this.

Eliminate this hazard from your fire station with our vehicle exhaust capture and removal systems. From existing stations to new design-built, our totally automatic start-up and disconnect source capture systems are the recommended method for controlling exhaust emissions in your station.

THE MAGNETIC GRABBER®

Now there is an exhaust removal system for every station. Combining the various benefits of the Magnetic Grabber® and the opportunity to have an easy to use professional Plymovent system in your station make the decision an easy one.

EASY TO OPERATE - "CLICK AND SEAL"

The conical design makes attaching the Magnetic Grabber® to the vehicle extremely user friendly. At the sound of a clear "click" you know you have a correctly "sealed" connection of the system to the vehicle, minimizing the danger of diesel exhaust emissions in the station. The strategically positioned magnets ensure a good connection to the vehicle, as well as a controlled automatic disconnect when the vehicle exits the station.

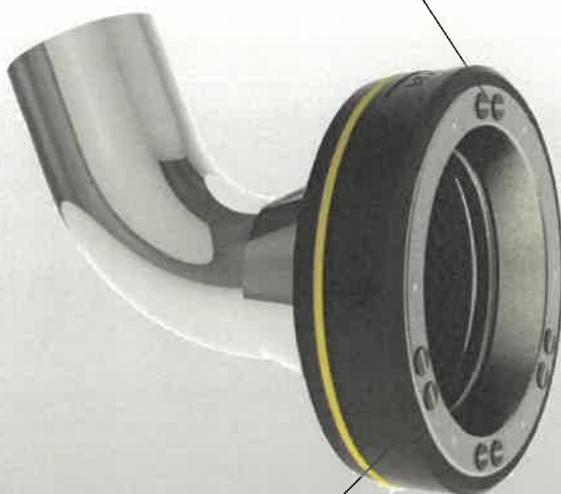
PROFESSIONAL LOOK AND PERFORMANCE

With its stainless polished look the Magnetic Grabber® is easy to recognize, but also the functionality is what you can expect of a Plymovent system. With no obstructions in the hose, the system can remove dangerous diesel exhaust at its maximum capacity. The new Magnetic Grabber® system can be quickly attached to any vehicle equipped with the innovative Plymovent tailpipe connector. The tailpipe connector's ambient air intake also ensures the vehicle's exhaust temperatures are reduced thereby making the system safer to use.

SAFETY OF THE SYSTEM

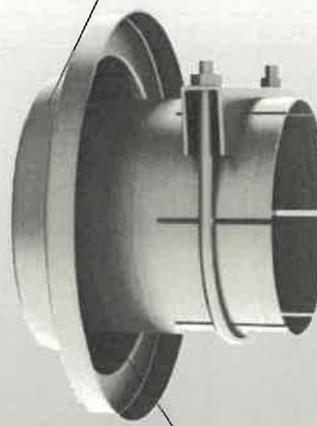
In order to protect your investment and provide protection against damages, Plymovent has integrated a rubber cover on the Magnetic Grabber®. With the Magnetic Grabber's® rubber cover, along with your systems Safety Disconnect, you and your system are well protected.

Strategically positioned integrated magnet for easy connection



Protective rubber safety cover to avoid damage to vehicle and surroundings

Unique conical design for soft release



Ambient air intake protects the system and surroundings from high-temperature exhaust gasses

BENEFITS

- Easy to operate “click and seal”
- Virtually 100% source capture
- Ambient air intake
- Unique conical design for easy use
- Functions without electrical power input



Plymovent has over 30 years of experience and tens of thousands of source capture ventilation and filtration installations worldwide. With subsidiaries and distributors in over 45 countries, Plymovent is your knowledge based partner for source capture technology. Over 50,000 Plymovent source capture systems across the world have been installed to reduce hazardous vehicle exhaust emissions in a variety of sectors including:

- Volunteer and paid fire departments
- Federal and state fire stations
- EMS departments
- Training facilities
- Private and corporate fire stations
- Airport ARFF stations
- Military, fleets and automotive



PLYMOVENT SOURCE CAPTURE SYSTEMS:

- AN INDUSTRY STANDARD

The Magnetic Grabber® can be connected to the product range of fans and control equipment of Plymovent. A Plymovent system enables you to get fully automatic control of your products in the most efficient way, saving you money and bringing you clean air at work.

Our philosophy is to provide quality systems that are safe, user-friendly, code compliant and that will enhance the quality of life for your firefighters and personnel. That is why we have developed a line of source capture systems designed to meet your station's needs. Plymovent is ISO 9001:2000 certified.

PLYMOVENT®

clean air at work

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Fax: +46 40 30 31 40
export@plymovent.com

Your authorised Plymovent distributor:

Plymovent cares about the air you breathe. We deliver products, systems and services which ensure clean air at your work environment, anywhere in the world.

Our expertise gained over many years, high quality products and genuine commitment to customer requirements enable us to provide precisely the solutions you need.

Correct Nozzle Size and Conical Tailpipe Adapter Size to be Verified With Owner Prior to Installation

MAGNETIC GRABBER® BLACKARMOUR

VEHICLE EXHAUST REMOVAL SYSTEM

The Magnetic Grabber® BlackArmour is a patented vehicle exhaust removal device. The Magnetic Grabber® nozzle incorporates a self-aligning conical design with integrated magnets that provide a quick and easy "Click and Seal" connection and controlled disconnect from the vehicle's tailpipe. The nozzle is used in conjunction with the conical tailpipe adapter (TPA) and is primarily used in the Fire and Emergency Services stations where the vehicles may be ran indoors for equipment checks and for exiting the building on emergency calls. The Magnetic Grabber® BlackArmour is a durable system that is resilient to the most extreme and aggressive road treatment conditions due to the zinc diffusion process which ensures maximum durability and exceptional corrosion resistance.



APPLICATIONS

The Magnetic Grabber® BlackArmour is intended to be used for the following applications:

- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities.

SPECIFICATIONS

Physical dimensions and properties

Material	<ul style="list-style-type: none"> duplex coated steel stainless steel EPDM rubber
Color	<ul style="list-style-type: none"> polished stainless steel charcoal black finish

Ambient conditions

Max. relative humidity	all ambient conditions allowed
Storage conditions	all ambient conditions allowed

Where used

All Plymovent railsystems such as SBT and STR

Scope of supply

Matching nozzle and TPA to be ordered seperately

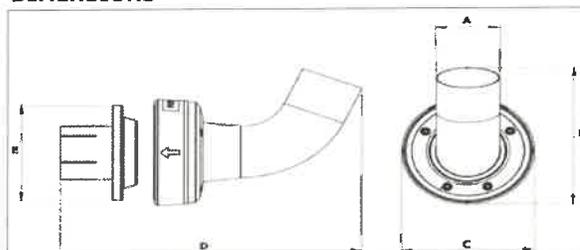
Order information

Article no.	see remaining specifications
Number/package	1

Shipping data

Gross weight	see remaining specifications
Packing dimensions	see dimensions
Packaging	bubble wrap

DIMENSIONS



Dimension	4" / 100 mm	5" / 125 mm
A	4" / 100 mm	5" / 125 mm
B	3" / 75 mm version	10.2" / 260 mm
	4" / 100 mm version	10.6" / 271 mm
	5" / 125 mm version	11.5" / 293 mm
C	3" / 75 mm version	7.5" / 190 mm
	4" / 100 mm version	8.3" / 212 mm
	5" / 125 mm version	9.9" / 253 mm
D	3" / 75 mm version	15" / 381 mm
	3.5" / 90 mm version	15" / 381 mm
	4" / 100 mm version	16.8" / 426 mm
	5" / 125 mm version	17.3" / 440 mm
	6" / 150 mm version	18.5" / 470 mm
E	3" / 75 mm version	6.5" / 164 mm
	3.5" / 90 mm version	6.5" / 164 mm
	4" / 100 mm version	7.2" / 184 mm
	5" / 125 mm version	9" / 228 mm
	6" / 150 mm version	9" / 228 mm
	7" / 175 mm version	9" / 228 mm

MATCHING COUNTERPARTS

NOZZLE (Descr. / Dim. / Art.#)	TAILPIPE ADAPTER (Descr. / Dim. / Art.#)					
	TPA BA 3" / 75 mm 0000112176	TPA BA 3.5" / 90 mm 0000112177	TPA BA 4" / 100 mm 0000112178	TPA BA 5" / 125 mm 0000112179	TPA BA 6" / 150 mm 0000112180	TPA BA 7" / 175 mm 0000112188
MG BA - SBT 3" / 75 mm 0000112120	✓	✓	-	-	-	-
MG BA - STR 3" / 75 mm 0000112100	✓	✓	-	-	-	-
MG BA - SBT 4" / 100 mm 0000112127	-	-	✓	-	-	-
MG BA - STR 4" / 100 mm 0000112108	-	-	✓	-	-	-
MG BA - SBT 5">4" / 125>100 mm 0000112130	-	-	-	✓	✓	✓
MG BA - STR 5">4" / 125>100 mm 0000112117	-	-	-	✓	✓	✓
MG BA - SBT 5">5" / 125>125 mm 0000112480	-	-	-	✓	✓	✓
MG BA - STR 5">5" / 125>125 mm 0000112479	-	-	-	✓	✓	✓

APPROXIMATE GROSS WEIGHTS

MG COMBINATIONS	SBT / STR
3" / 75 mm	13 lbs / 6 kg
3.5" / 90 mm	14 lbs / 6,5 kg
4" / 100 mm	14 lbs / 6,5 kg
5" / 125 mm	15 lbs / 7 kg
6" / 150 mm	16 lbs / 7,5 kg
7" / 175 mm	16 lbs / 7,5 kg

Product type
Article no.
Product category
Version

MG BlackArmour™
see remaining specifications
nozzles
170217/0

Always check the latest version on www.plymovent.com

PLYMOVENT®

clean air at work



COMMERCIAL NEWSLETTER | DECEMBER 19, 2018

TOPGRADE CONICAL TAILPIPE ADAPTER

WE BELIEVE IN SUSTAINABLE PRODUCTS WHICH ARE ENGINEERED TO LAST

The durability of stainless steel means that it is not only the best, but also the most economically and sustainable choice for our TopGrade conical Tailpipe Adapter (TPA) range. All Magnetic Grabber® materials used in the production of the TopGrade conical TPA are fully recyclable at the end of their lifecycles and together with our customers and partners, we are building engineering a world that lasts forever.

Plymovent's legacy of market leading innovation and consistent quality is at the heart of providing you the means to have the right product for every application. By grouping our products into ranges based on performance and application we aim to make choosing the best product for your application easier. Please refer to the TopGrade conical TPA Product Data Sheet for a complete list of article numbers.

MAGNETIC STAINLESS STEEL?

The Plymovent base material for our TopGrade conical TPA is a magnetic stainless steel originally designed for high-end gas turbine exhaust systems with good corrosion resistance, high-temperature strength and good formability. It has proven to be a perfect base material to produce the Plymovent TopGrade conical TPA from. The TopGrade conical TPA is ideal for the most extreme weather conditions and is resilient to excessive salt and brine.

With Kind regards,

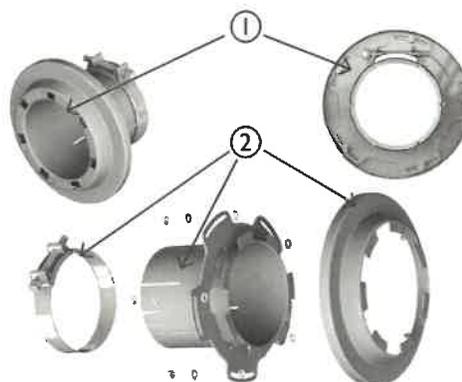
Kees Janssen
Product Manager EE



SPECIFICATIONS FOR THE LATEST CONICAL FULL BLOWN STAINLESS STEEL TAILPIPE ADAPTER

1. Unparalleled, fully adjustable ambient air inlet slots
Allowing you to match the extraction demand you need to provide optimized performance of your system.
2. All components are of stainless steel pedigree
Stainless steel grade of the Plymovent TopGrade conical TPA is complimentary to the standard aluminized stainless steel tailpipe grades.

*Compatible with all Plymovent Magnetic Grabber® nozzles.**



**Plymovent recommends using the Magnetic Grabber® Black Armour nozzle in conjunction with the TopGrade TPA as well as using the Galvanized nozzle with the Galvanized TPA.*

HIGH TEMPERATURE EXHAUST HOSE (HT)

HOSES

Plymovent's market-leading High Temperature Exhaust Hose (HT) for Fire and EMS stations is a proprietary construction, with a high-quality synthetic fabric that can endure exhaust gas temperatures of up to 900°F (482°C) continuous in a properly designed system. Independent laboratory test results available upon request. The hose is flame and abrasion resistant. Upper, Mid and Lower hose packages available for Plymovent track and rail systems.



APPLICATIONS

The HT is intended to be used for the following applications: 

- Fire and emergency services stations with heavy-duty vehicles that generate high temperature hazardous exhaust fumes, such as 2007 and newer diesel vehicles that contain aftertreatment technologies such as a diesel particulate filter.

Note: For safety reasons vehicle regeneration should never be performed inside the Fire or EMS Station due to the high exhaust temperatures associated with DPF regeneration.

SPECIFICATIONS

Physical dimensions and properties

Material	<ul style="list-style-type: none"> • proprietary multi-layer, high temperature synthetic fabric hose
• Hose wall	<ul style="list-style-type: none"> • spring steel wire helix and a high temperature synthetic wear strip for abrasion resistance
• Spiral	<ul style="list-style-type: none"> • constructed with a proprietary, high-temperature, semi-rigid material to ensure proper operation with Grabbers
• Lower Hose	

Diameters available 4 and 5 in. (100 and 125 mm)

Ambient conditions

Operating temperature	<ul style="list-style-type: none"> • continuous: up to 900°F (482°C) • intermittent: up to 1050°F (566°C)
-----------------------	---

Recommended lengths

Upper hose standard lengths are 6 ft, 12 ft, 14.5 ft, 17 ft, and 19 ft (1,8 m, 3,7 m, 4,4 m, 5,1 m, 5,8 m)

Product combinations

Track/Rail Systems	<ul style="list-style-type: none"> • SBTA • STRA • VSRX
Nozzles	<ul style="list-style-type: none"> • Magnetic Grabber • Pneumatic Grabber

Options and accessories

Balancer, hose saddle, hose clamps, nozzles (must be ordered separately)

Order information

Article no.	see remaining specifications
Number (package)	1

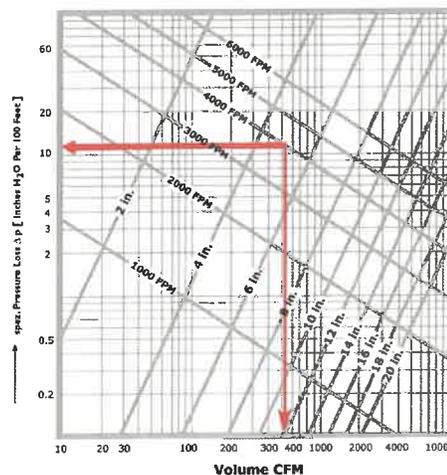
Shipping data

Gross weight	see remaining specifications
Country of origin	USA

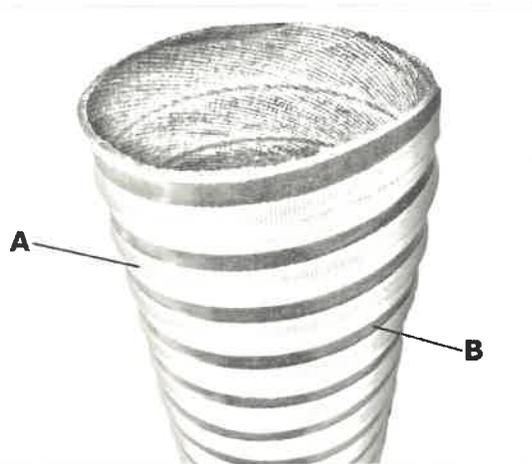
Recommended air speed

4000 to 4500 fpm (20,3 to 20,8 m/s).

AIRFLOW



Example: for a 5 in. (125 mm) HT hose with airspeed of 4000 FPM (20 m/s), the static pressure loss w.g. per 100 feet is 11 in. and air volume is 350 CFM (10 m³/m).



CONSTRUCTION:

- A. Internal spring steel wire helix with an external high temperature wear strip (yellow)
- B. High temperature synthetic outer layer provides additional abrasion protection (black)

ACCESSORIES

Balancer

The non-locking spring recoil balancer controls the point at which the Grabber disconnects from the tailpipe. As the hose attains its maximum reach, the balancer locking cable will bottom out, in turn pulling the nozzle from the moving vehicle's tailpipe.



Safety Disconnect Handle

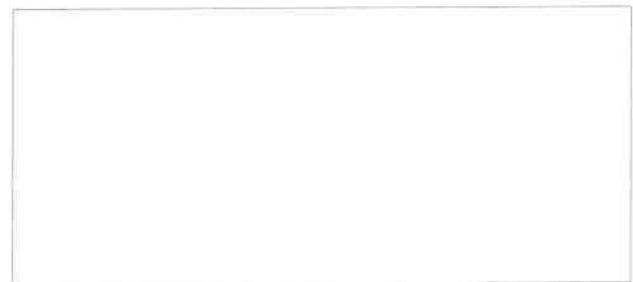
Plymovent's safety disconnect handle is ergonomically-designed for ease of use. The round handle has large grips so that it can be operated even while wearing gloves and can be reached from any angle. The operator does not have to bend over to connect the nozzle to the tailpipe, further reducing the risk of exposure to exhaust emissions.



REMAINING SPECIFICATIONS

Art. no.	Dimensions	Length	Weight
Upper Hose (single piece)			
0000116367 710040-1	Ø 4 in. (100 mm)	6 ft (1,8 m)	3 lbs (3,9 kg)
0000116369 710041-1	Ø 4 in. (100 mm)	12 (3,7 m)	6 lbs (5,8 kg)
0000116371 710042-1	Ø 4 in. (100 mm)	14.5 (4,4 m)	7.3 lbs (3,3 kg)
0000116373 710043-1	Ø 4 in. (100 mm)	17 ft (5,1 m)	8.5 lbs (3,9 kg)
0000110175 710044-1	Ø 4 in. (100 mm)	19 ft (5,8 m)	9.5 lbs (4,3 kg)
0000110177 710045-1	Ø 5 in. (125 mm)	6 ft (1,8 m)	3.6 lbs (4,6 kg)
0000116379 710046-1	Ø 5 in. (125 mm)	12 (3,7 m)	7.2 lbs (3,3 kg)
0000116381 710047-1	Ø 5 in. (125 mm)	14.5 (4,4 m)	8.7 lbs (3,9 kg)
0000116383 710048-1	Ø 5 in. (125 mm)	17 ft (5,1 m)	10.2 lbs (4,6 kg)
0000116385 710049-1	Ø 5 in. (125 mm)	19 ft (5,8 m)	11.4 lbs (5,1 kg)
Mid Hose			
0000116346 710015-1	Ø 4 in. (100 mm)	10 ft (3 m)	5 lbs (2,3 kg)
0000116349 710016-1	Ø 5 in. (125 mm)	10 ft (3 m)	6 lbs (2,6 kg)
Lower Hose			
0000116342 710014-1	Ø 4 in. (100 mm)	2 ft (0,61 m)	1.4 lbs (0,6 kg)
0000116339 710013-1	Ø 5 in. (200 mm)	2 ft (0,61 m)	1.7 lbs (0,8 kg)

Plymovent Authorized Distributor:



Product type	HT™
Article no.	see remaining specifications
Product category	hoses
Version	020518/1

Always check the latest version on www.plymovent.com

STEEL SADDLE

STEEL SADDLE WITH LIFTING LUGS

The steel saddle is made from light weight steel and is a solid and sturdy elbow for lifting a 100 mm (4 in.) or a 125 mm (5 in.) hose. With the designed multi positionable lifting lugs the elbow can be balanced in different ways. The steel saddle lifts the hose and prevents it from shifting.



APPLICATIONS

The steel saddle is intended to be used for the following applications:

- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities. ✓

SPECIFICATIONS

Physical dimensions and properties

Material	powdercoated steel
Weight	approx. 0,9 kg (2 lbs)
Colour	black (RAL 9005)

Ambient conditions

Operating temperature:	equals selected hose
------------------------	----------------------

Where used

Plymovent STR, SBT or VSRX railsystems

Scope of supply

Steel saddle

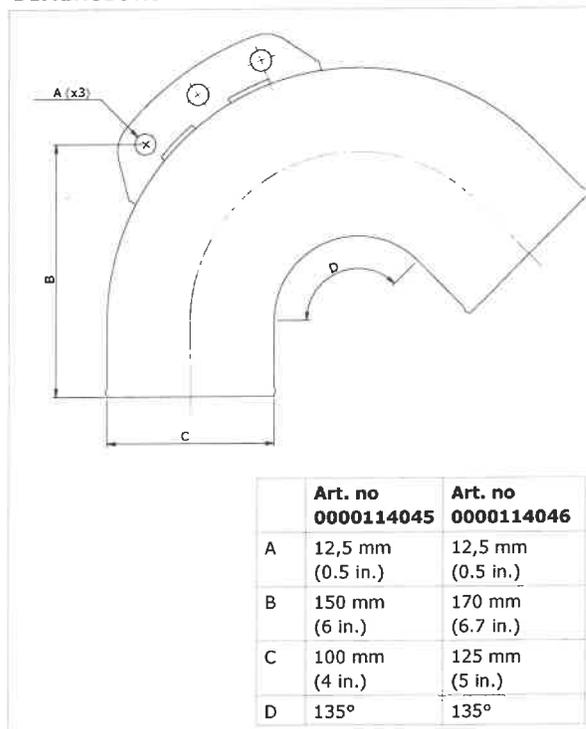
Order information

Article no.	see dimensions
Number/package	1

Shipping data

Gross weight	1 kg (2.2 lbs)
Packing dimensions	500 x 500 x 250 mm (20 x 20 x 10 in.)
Harmonized Tariff Code	84219990

DIMENSIONS



Product type	Steel saddle
Article no.	see dimensions
Product category	options and accessories
Version	300819/0

Always check the latest version on www.plymovent.com



Warranty

Plymovent & Hastings



clean air at work

WARRANTY

Statement of Limited Warranty

Seller warrants to the Buyer of all new products that it will be free of manufactured defects in workmanship and material.

This warranty is void if Seller finds that the product has been subjected to improper installation, improper care, service and maintenance or abnormal operations.

Warranty Period

All standard warranty periods start from the date of shipping to the original Buyer or third party in which invoice and/or sales order number must be provided. Standard warranty period applies unless otherwise stated in a written agreement between Buyer and Seller at time of sale. Warranty periods are as follows:

Standard Product

10 Year Conditional Warranty: Aluminum Rail Extrusions Only

10 Year Conditional Warranty will be granted on standard Aluminum Extrusion(s) only by Seller in accordance with following: Seller receives completed Warranty Card from Buyer, that material received is in good condition, within 30 business days of material receipt. Warranty applies to Aluminum Rail Extrusion product only.

If completed Warranty Card is not received by Plymovent within 30 business days of material receipt, Plymovent's 5 Year Warranty on Standard Product will apply.

For Warranty Card, please contact Plymovent's Customer Service and/or Sales or go online to www.plymovent.com under "contact us".

5 Year Conditional Warranty: Standard Fire Systems Only

5 Year Conditional Warranty will be granted by Seller in accordance with the following: Seller receives a completed Warranty Card from the Buyer, that material received is in good condition, within 30 business days of material receipt. Warranty applies to Fire product only and includes Exhaust Hoses used within Fire Systems only.

If completed Warranty Card is not received by Plymovent within 30 business days of material receipt, Plymovent's 3 Year Warranty on Standard Product will apply.

For Warranty Card, please contact Plymovent's Customer Service and/or Sales or go online to www.plymovent.com under "contact us".

EQUIPMENT LIMITED WARRANTY

Hastings Air-Energy Control, Inc. shall warranty all materials and equipment for a period of **(Five 5-Years Part and Labor)** from final acceptance and start-up. Defects shall be made good at the dealer's expense with no cost or obligation to the owner. **Hastings Air-Energy Control, Inc.** shall not be responsible for system misuse, abuse, improper or insufficient maintenance, natural disasters, components not operated properly under normal industry use, components that have been repaired, altered or modified. If any failure should occur, **Hastings Air-Energy Control, Inc.** shall repair or replace (with new or remanufactured parts), at their option, the product without cost. All repairs shall be completed at the original installation site of the product however **Hastings Air-Energy Control, Inc.** reserves the right, at his cost, to remove and return the product to the plant where the product can be inspected, repaired or replaced and then returned and reinstalled. Dealer shall be responsible for all labor costs and transportation costs, including, freight and insurance, in connection with completing a warranty work call.

No warranty is made regarding the suitability or compatibility of any **Hastings Air-Energy Control, Inc** product for a particular application or purpose. The customer and dealer are responsible for the final selection and or proper application as it applies to the intended use.

The enforceability of this warranty is limited to the original purchaser and is not transferable to, or enforceable by, any subsequent owner.

There are no other express warranties covering the system other than those set forth in this warranty. All implied warranties are limited to the **(Five 5-Years Parts and Labor)** period of this warranty and no warranties expressed or implied extend beyond this **(Five 5-Years Parts and Labor)** period.

Hastings Air-Energy Control, Inc will in no event be liable for any consequential, incidental, indirect or special damages (including but not limited to, lost profits, individual traveling costs, labor or other charges for adjustment) arising out of or in connection with the use, misuse, or function of the system.



HASTINGS
air energy control, inc.

5555 South Westridge Drive
New Berlin, WI 53151-7900

p: 800.236.8450
f: 800.260.9199

Illinois Office
m: 847.362.9660
f: 847.362.9661

Michigan Office
m: 248.888.9911
f: 248.478.9911

Minnesota Office
m: 952.882.8450
f: 800.260.9199

creating a cleaner workplace

MANAGEMENT SYSTEM CERTIFICATE

Certificate No:
39388-2008-AQ-USA-ANAB

This is to certify that the management system of

Plymovent Corporation
5 Corporate Drive, Cranbury, NJ, 08512, USA

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:
**The Assembly, Distribution and Sales of Engineered Exhaust Extraction Air
Filtration Systems.**

Place and date:
Katy, TX, 26 September 2018



For the issuing office:
DNV GL – Business Assurance
1400 Ravello Drive, Katy, TX, 77449-5164,
USA

John Stefan
Management Representative



NITW.E212640
Industrial Control Panels

[Page Bottom](#)

Industrial Control Panels

[See General Information for Industrial Control Panels](#)

PLYMOVENT CORP
115 MELRICH RD
CRANBURY, NJ 08512 USA

E212640

Industrial control panels.

Last Updated on 2001-04-19

[Questions?](#)

[Notice of Disclaimer](#)

[Page Top](#)

Certificate of Compliance with ARRA Buy American Provisions and the Buy American Act

Date ... 2020

Regarding: American Recovery Act. Compliance per Section 1605 of ARRA-09 Buy American Act (41U.S.C. 10a-10d)

Products: Source Capture Exhaust Extraction and Air Filtration Products

To whom it may concern:

Plymovent Corp., 5 Corporate Drive, Cranbury, NJ 08512, United States hereby certifies that the components or products we design, manufacture and/or assemble and deliver comply with section 1605 of ARRA-09 requirements with regards to determining whether substantial transformation has occurred in the U.S.A. (please refer to grid below for verification). Additionally, the majority of our products comply with the Buy American Act (41 U.S.C. 10a-10d) with respect to the exemptions for materials from countries that participate in the World Trade Organization Agreement and/or unreasonable priced domestic equivalents.

ARRA-09 Questions for determining whether substantial transformation has occurred in the U.S.A.

Question	Yes	No
1. Were all of the components of the manufactured goods manufactured in the United States, and were all of the components assembled into the final product in the U.S.?		X
2. Was there a change in character or use of the good or the components in America?	X	
2a. Was there a change in the physical and/or chemical properties or characteristics designed to alter the functionality of the good?	X	
2b. Did the manufacturing or processing operation result in a change of a product(s) with one use into a product with a different use?	X	
2c. Did the manufacturing or processing operation result in the narrowing of the range of possible uses of a multi-use product?	X	
3. Was/(were) the process(es) performed in the U.S. (including but not limited to assembly) complex and meaningful?	X	
3a. Did the process(es) take a substantial amount of time?	X	
3b. Was/(were) the process(es) costly?	X	
3c. Did the process(es) require particular high level skills?	X	
3d. Did the process(es) require a number of different operations?	X	
3e. Was substantial value added in the process(es)?	X	

Plymovent Corp. is an ISO 9001:2015 certified company and a UL listed panel shop (E212640) complying with standards in accordance to UL 508A and CAN/CSA-C22.2 NO. 14. With production, engineering, sales, marketing, administration and management personnel, final production and assembly of the products occur in Cranbury, New Jersey. Final installation of product to create a vehicle exhaust removal system using US manufactured ductwork and hardware is completed by Plymovent authorized dealers across America.



Features & Benefits Plymovent Users



VEHICLE EXHAUST REFERENCES

Homewood Fire Department

D/C Steve DeJong
17950 Dixie Highway
Homewood, IL 60430
708-206-3404

Calumet City Fire Department

D/C Pete Bendinelli
684 Wentworth Avenue
Calumet City, IL 60409
708-891-8142



Burbank Fire Department

Chief David Gilberg
6530 West 79th Street
Burbank, IL 60459
708-599-7766

Limestone Fire Protection District

Chief Mike Whalen
4948 W. Route 17
Limestone, IL 60901
815-932-4664



Bedford Park Fire Department

Chief Sean Maloy
6820 South Archer Road
Bedford Park, IL
708-563-4510

City of Peoria Fire Department

Facilities Director Jason Meeks

3505 N. Dries Lane

Peoria, IL 61604

309-645-1999

Hillside Fire Department

Ryan Wyckoff

523 N. Wolf Road

Hillside, IL 60162

708-547-8684

Rutland-Dundee Fire Protection District

Chief Richard Thomas

11 East Higgins Road

Gilberts, IL 60136

847-426-2522

Quincy Fire Department

D/C Steve Salrin

906 Vermont Street

Quincy, IL 60301

217-228-4459



Feature: Standing Tailpipe Attachment

PlymoVent's "Click and Seal" Magnet Grabber Nozzle allows the operator to attach the exhaust extraction hose to the vehicle's tailpipe in a standing position.

Benefit:

- Protects operator's breathing zone from coming in contact with harmful exhaust emissions.
- Easy 1 point attachment to the exhaust tailpipe. There is no need for secondary attachments on vehicle.
- Standing attachment eliminates the need to bend over which may put operator in an awkward or unsafe position when attaching the nozzle.



Feature: Compact Hose Design

PlymoVent's user friendly compact hose design allows the operator easy handling of the exhaust hose system.

Benefit:

- Compact 4" or 5" diameter hose is easy to grab and is similar in diameter and feel to the standard hoses used in the fire service.
- High temp heat resistant construction allows for continuous engine operation at idle engine speed or pump checks for periods up to 15 minutes in duration.
- High visibility yellow and black color assures clear visibility under all light conditions. This is important during night time calls when night blindness can occur.



Feature: Magnetic Grabber Nozzle

PlymoVent's state of the art "Click and Seal" Magnet Grabber Nozzle technology captures the total emission; both gases and particulates.

Benefit:

- Simple to attach
- Cools hose without check valves.
- No pins or pucks to align



Feature: Nozzle Debris Screen

PlymoVent incorporates a safety debris screen which guards against foreign objects being drawn in to the exhaust system which would interfere with the systems performance.

Benefit:

- Protects the exhaust fan impeller from damage due to foreign debris.
- Eliminates clothing, leaves, or other foreign objects from plugging the exhaust hose which would affect the systems performance
- Allows visible access and inspection for removal of foreign objects.



Feature: Tailpipe Adapter and Retrofit

We can easily retrofit any make or model of Fire or EMS vehicle to interface with PlymoVent.

Benefit:

- The tailpipe adapter eliminates the possibility of operator placing the grabber nozzle too far on to the tail pipe.
- Assures virtual 100% seal to eliminate the possibility of exhaust emissions escaping.
- Most new apparatus all ready come equipped to accept the PlymoVent system.



Continue: Tailpipe Adapter

Benefit:

- Ambient Air Intake louvers.
- Conical design for easy attachment and release.
- One step Click and Seal
- No pins to align.
- Adapters available for tailpipe diameters.
- Adapters not welded to exhaust pipe allows for easy transfer to new vehicles.

PLYMOVENT®
clean air at work

Magnetic Grabber® : Patent Pending Design

Integrated & strategically positioned Magnets for easy connection and release



Ambient air intake protects system and surroundings from hi-temp exhaust gasses

Conical design for soft release



Rubber cover to avoid damage to vehicle and surroundings

Feature: Controlled grabber release

Benefits:

- Controlled release of the grabber nozzle guarantees that the exhaust system will separate from your vehicle in a controlled and safe manner.
- Click & Seal design assures that toxic exhaust emissions are captured even during high acceleration exits or vehicle pump checks. Only when you reach the threshold of your door will the PlymoVent system release smoothly and safely from your vehicles tailpipe.



Feature: Straight Rail System

PlymoVent's sliding balancer track was first developed over two decades ago and is still the standard for durability and performance.

Benefits:

- Compact design allows easy access to vehicles storage compartments even with the exhaust system connected to the vehicle.
- Balancer travels with the vehicle to the exit door which maintains the control of the exhaust hose and nozzle when releasing from vehicle at controlled exit speeds.
- The vertical hose design of the straight rail system allows the grabber nozzle to be attached to exhaust tailpipes on vehicles that have tight clearance to the rear wheels or vehicles undercarriage.
- The straight rail is made from aircraft grade aluminum alloy for long life and durability. Our first system installed in 1987 has proven the durability of our product.



Feature: Safety Disconnect Handle

PlymoVent's safety disconnect coupling eliminates any possibility of damage to the system.

Benefits:

- The safety disconnect coupling allows for the lower hose which consists of the grabber nozzle, the reducing elbow and rigid lower 2ft hose section to separate from the upper hose of the PlymoVent exhaust system thus protecting your investment.
- The adjustable safety disconnect allows for easy field adjustment which can be set for a release force of 80 – 180 lb.
- Simple reattachment which requires no tools or replacement parts for the operator to put the system back into service and it only takes minutes.
- In the event of malfunction, the lower hose and grabber will drop off your vehicle tailpipe at the exit door or station apron safely.

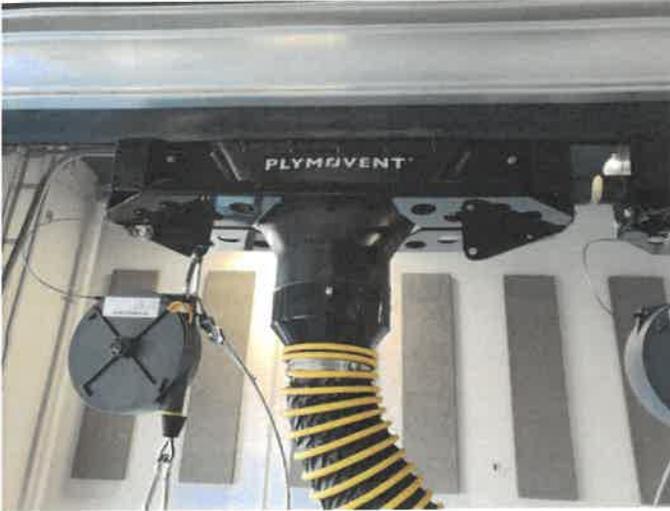


Feature: Clean & Neat Appearance

The design of all PlymoVent systems is to compliment your station.

Benefits:

- The overhead design of our system provides essential clearance required by *all Fire Depts. when personnel are responding to an emergency call.*
- Our system has been tested by third party organizations such as Under Writers Laboratories (UL) and International Standards Organization (ISO 9001) and many others for safety and reliability.

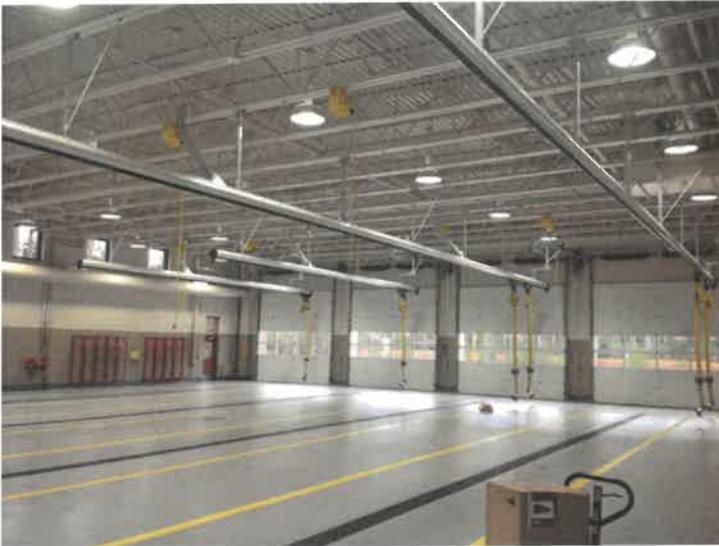


Features: Internal Trolley & Balancer

PlymoVent's internal trolley provides smooth transport of the exhaust extraction hose, the full length of your apparatus bay.

Benefits:

- Durable all aluminum housing incorporates sealed ball bearing transport wheels for continuous operation.
- Balancer stop plate, with redundant safety stops allows smooth release.
- Minimum moving parts require no maintenance.
- Redundant steel cable design.



Feature: Modular STRA Rail Design

PlymoVent's modular rail is designed to accommodate any length of apparatus bay regardless of the number of vehicles

Benefits:

- Modular rail design allows for future expansion of system to provide for more vehicles or longer apparatus bays with little additional costs.
- Durable aircraft aluminum alloy prevents distortion of rail when used in high volume stations.



Feature: Mounting Supports

PlymoVent's mounting supports are manufactured by PlymoVent to meet or exceed Underwriter Laboratories Standards and National Building Codes.

Benefits:

- Mounting support assures a stable hanging support for the system which has been tested under seismic load to out perform threaded rod or angle steel mounting systems.
- Mounting supports give you a clean professional look to your final installation.

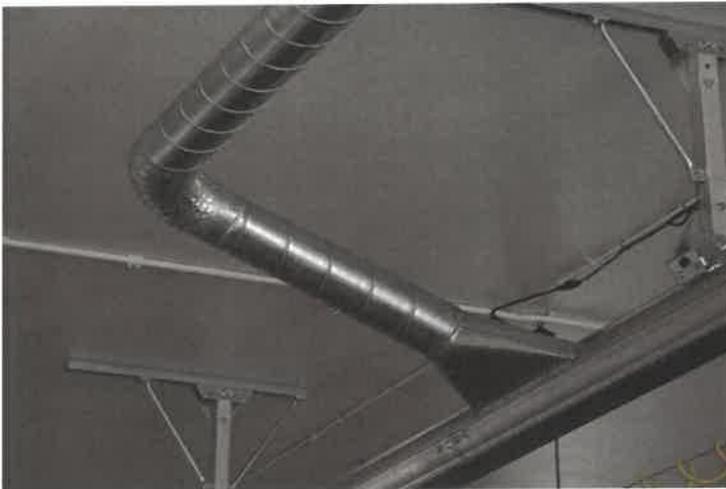


Feature: Adjustable Support Clamp

PlymoVent's adjustable support clamp guarantees that your system can be easily secured to your building's super structure and easily relocated if required.

Benefits:

- Reduced installation time
- Savings on labor cost during initial installation or relocation.
- Preset angled adjustment allows for easy installations on sloped ceilings.
- No hazardous in-station welding required.

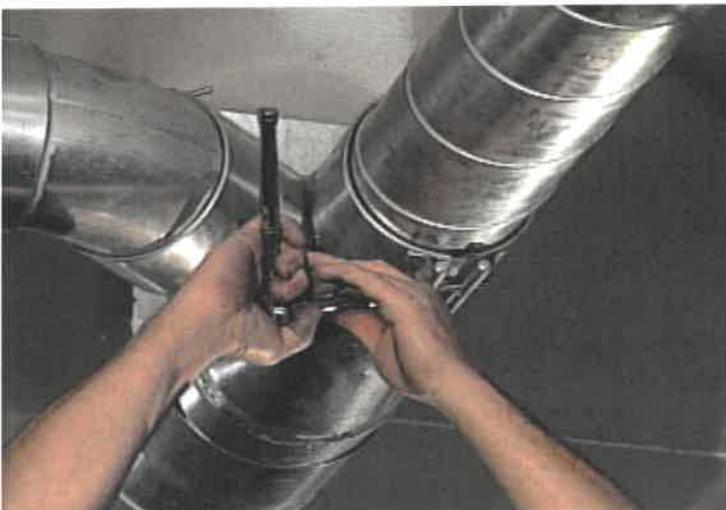


Feature: Airtight Duct System

PlymoVent's Airtight Duct System is far superior in performance and appearance to all others. It assures that toxic products of combustion will not escape your duct system even when the exhaust fan is not energized.

Benefits:

- Eliminates the possibility of lethal fumes leaking into the station which would affect station personnel.



Feature: Welded Fittings

PlymoVent's airtight duct system incorporates only all welded ductwork fittings.

Benefits:

- Welded fittings are not subject to heat stress which is commonly the case with snap together adjustable elbows and branches.
- Dual mechanical seals are installed at all slip joints to guarantee leak free operation.

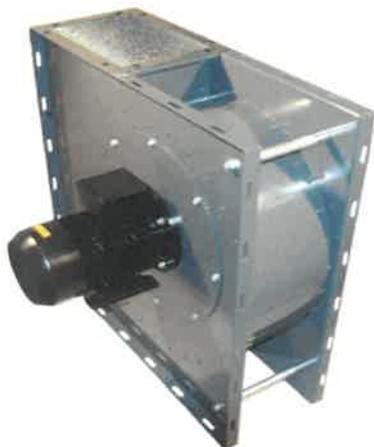


Features: Safety Seal Duct Joints

PlymoVent's safety seal duct system integrates dual mechanical rubber seals which eliminate the possibility of exhaust gas leakage between duct fittings and spiral ductwork.

Benefits:

- Internal safety seal eliminates leakage and the use of silicon or unsightly duct tape or mastics.
- Duct system meets SMACNA Class II Standard and is manufactured under the Union Label for quality.



Feature: Spark Resistant Blower

PlymoVent's spark resistant blower is specifically designed to transport the explosive products of combustion generated by your vehicles.

Benefits:

- Almag construction eliminates the chance of sparking and meets AMCA Class A construction.
- Stainless steel base and hardware resist corrosion even in salt air environments.
- Sealed motor bearings require little or no service for the life of the motor.
- Exhaust fan ISO 9001 certified.
- Direct drive so belts to be replaced.
- Harmonically balanced impeller to reduce vibration.
- Less kW versus air volume which equates to less power consumption.



Silencer and Back-Draft Rain Caps

- Each blower to have a silencer to reduce noise to 64dba
- Each blower to have a back-draft rain cap to keep the elements out the system along with prevent prevailing winds form entering the system

Roof Mounted Blowers:

- Blowers mounted on a treated lumber fan base and isolated from roof membrane with rubber walkway pads.

Wall Mounted Blowers:

- Blowers secured on wall mount brackets made of galvanized steel supports.



Feature: UL Listed OS-3 Controller

PlymoVent is the only recognized UL –Certified manufacturer of vehicle exhaust removal systems which build their own electrical control systems.

Benefits:

- Meets National Electrical Code (NEC) for Federal, State and Municipal codes.
- Manufactured under UL standard 508.
- Waterproof NEMAS 12 soft touch control panel face protects against water infiltration.
- Allen Bradley motor starters and overloads.
- Multi-tap electrical transformer allows power input from 110 – 600 VAC.
- Built-in intergraded timer fully adjustable by owner from 30sec. to 5min.
- Manual operation mode for pump checks of vehicles.
- Filter status indicator to monitor filter life and efficiency.
- UL certified enclosure and operation.



Feature: Manufacturer Start-Up

HASTINGS utilizes a team of certified National installers who are supervised by PlymoVent training officers who will provide final start-up of your system.

Benefits:

- Two-tier start-up team assures quality of installation and performance of system. Your final installation is reviewed by a **PlymoVent** training officer who will start up and sign off on your project
- On-site training provides firefighters with a comprehensive understanding of the system's operation.



HASTINGS
air energy control, inc.

- ☒ Established 1932
- ☒ Over 40 Employees
- ☒ (4) Service Centers
Milwaukee, Detroit, Chicago,
Minneapolis
- ☒ Service Technicians On Staff
- ☒ Preventive Maintenance Programs
Available
- ☒ Over 3200 Installations By Hastings
- ☒ Largest PlymoVent Dealer In The
Country

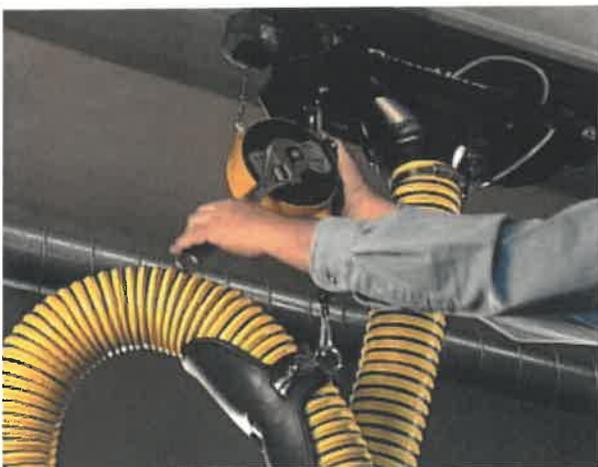


Feature: PlymoVent Online

PlymoVent has developed for use only in the Fire Service a 24-7 internet online service which provides Dept personnel with access to Email Communications, Frequently Asked Questions, Recipes and Fire Service Chat Room.

Benefits:

- Allows firefighters to communicate with PlymoVent and provides a rapid response system to answer questions related to the system and its performance.



Features: Tune-Up Service

HASTINGS provides a turnkey installation which is covered by a FIVE-YEAR parts and labor warranty. After the five years, all that may be required to keep your system in peak performance is a low cost, once a year tune-up service.

Benefits:

- Allows your Department members to be updated and trained on upgrades available to your Dept at no cost.
- Allows your Dept to budget for unforeseen expenses that may occur as well as provide preventive maintenance to your



Making Your Decision

"It's The Connection"

REASONS FOR SELECTING THE *PlymoVent* DIESEL EXHAUST CAPTURE SYSTEM

When a City, State or Governmental agency embarks on an evaluation process to choose a product or service, there are many levels of the evaluation, and rarely do they begin and end with price.

- 1. EXPERIENCE:** PlymoVent and Hastings Air Energy Control Inc. are the largest and most experienced companies in the Industry providing Emergency Vehicle Exhaust Capture Systems in Wisconsin, Illinois, Michigan, and Indiana. Our systems are third party tested and have been manufactured since 1988. The PlymoVent system is not a prototype or a new concept. All of the competitors combined do **NOT** equal 25% of the PlymoVent systems in operation nation wide. ***No other company offers this.***
- 2. REFERENCES:** With over 1056 fire stations in Wisconsin, Illinois, Michigan, and Indiana currently using the PlymoVent Diesel Exhaust Capture System, no other company comes close to our experience and system satisfaction. ***No other company offers this.***
- 3. MUTUAL AID:** When responding to major fires or participating in homeland security situations, it is important that your Diesel Exhaust Capture System be compatible with other departments or agencies that may be called up into your stations. This will also apply to your vehicles that may be parking in other agencies stations. Many fire stations in your area already have PlymoVent systems installed. This allows the compatibility between your Departments or other agencies. Standardization between departments would eliminate the risk of carcinogenic exhaust fumes putting your personnel at risk. ***No other company offers this.***
- 4. LOCAL DISTRIBUTION:** Hastings Air Energy Control Inc. stocks over \$100,000 in both equipment and parts at our main facility in New Berlin, Wisconsin. We also employ five trained and certified service technicians who are experienced in installation and service tune-ups of the PlymoVent systems. This assures a uniform installation and consistent, timely, quality service. ***No other company offers this.***
- 5. UL LISTED MANUFACTURER:** PlymoVent is the only manufacturer in the Industry that is a UL listed and certified manufacturer. Their facilities and products are inspected once every 30 days by a UL inspector that comes to the facility to review their procedures. Many cities require the purchase of a UL listed product over a generic one since the UL listing reduces the liability exposure to the Municipality and its associated agencies. Both risk management and building code officials recognize the importance of a UL listed product over other products that have not been third party tested. ***No other company offers this.***
- 6. UL LISTED ELECTRONIC CONTROL PANEL:** PlymoVent is the only manufacturer in this industry that manufactures its own electrical control operating system in its own **UL LISTED AND CERTIFIED** facility in Edison, New Jersey. This means that quality control is completely in house and production lead times are shorter as the result of no outsourcing, which can result in incompatibility. ***No other company offers this.***

7. **ISO-9001 CERTIFIED MANUFACTURER:** PlymoVent is one of only two manufacturers in the industry to have the ISO-9001 certification. Most cities are rated under ISO standards. This certification is used to set insurance liability ratings for your city and its residents. Whether your Department has a Class I – Class VI rating, the purchase of a system that meets ISO-9001 quality standards helps your Department achieve a more favorable ISO rating. Why would any city want to compromise and do business with any manufacturer that does not hold to the same quality and safety standards that your city must uphold? Insist that any supplier provide their ISO-9001 certificate with their bid.
8. **CUSTOMER CALL SYSTEM:** PlymoVent and Hastings Air Energy Control, Inc offer, at no cost to the user, a web based or intranet-based customer call software system. This **electronic accountability system** allows that in the event of a service request, the station or agency can do the request on line using the “PlymoVent Online” customer call system, or via you own department intranet system. When we receive the request, we respond with the time of arrival of our service technician, and after the service is performed, we respond once again to let the agency know the work has been completed and what was done. With over 1056 fire stations in operation, we want to be responsive and accountable...and we are. ***No other company offers this.***
9. **PIONEER CLUB:** PlymoVent is the only company in the industry to offer this “Pioneer Club Program for Future Upgrades”. This program entitles eligible departments to receive a charitable contribution consisting of PlymoVent equipment and parts in the event your system is out of date and worthy of upgrade. The equipment would be installed at an existing fire station, which at that time would be using an earlier generation of a PlymoVent system. The upgrade would be given free of charge and be treated as a charitable donation. ***No other company offers this.***
10. **FIVE-YEAR WARRANTY:** PlymoVent offers a FULL five-year warranty on all systems provided by PlymoVent and installed by certified installation contractors. ***No other company offers this.***
11. **Virtually 100% CAPTURE VERIFIED BY THIRD PARTY TESTING:** PlymoVent is the only company in the Industry that has third party testing verification and can say that its system captures virtually 100% of the vehicle exhaust emissions, both particulates and gases, at idle and high RPM. Other manufacturers do make these claims, but none of them can substantiate their performance through independent third party verification. This exposes your Department to unnecessary liability and will not allow you to comply with Federal, State and Local codes such as NFPA 1500-2000-A.9.1.6 which calls for “no less than 100% effective capture” or proposed standards by the American Association of Industrial Hygienist which are calling for an intended change to 0.02 mg/m3. ***No other company offers this.***

PlymoVent and Hastings Air Energy Control, Inc are full service companies providing not only the product, but also a long list of additional benefits that enhance the overall value of the PlymoVent system. Features, advantages, and benefits are all ingredients in the evaluation of any product or service.

The PlymoVent Diesel Exhaust Capture System offers more of these features, advantages and benefits than any other company in the Industry. There is a reason why major Metro Departments such as the City of Milwaukee, City of Indianapolis and City of Chicago chose to invest millions of dollars to install the PlymoVent system over all the other competitors, and it was *not* because the PlymoVent system was the lowest price. In fact PlymoVent was not the lowest price, but chosen because of system reliability over a long period of evaluation, as well as all of the reasons listed above.