PERMIT ISSUED

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
03-1389	DEC 01 2003	153 A025002

CITY OF PORTLAND

Location of Construction:	Owner Name:	Owner Address:	Phone:
12 Kimberly Ct	Nial Construction Inc	191 State Rd Ste # 2	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
NA	Pine State Plumbing & Heating	PO Box 6308 Scarborough	2078831200
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
NA	NA	HVAC	R3

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
New Condo/ Residential	Install A Gas Majestic DVRT36RP Direct Vent Heater unit #2	$39.00	$1,500.00	2

FIRE DEPT: ☑ Approved ☐ Denied
Signature:

INSPECTION:
Use Group: Type:
Signature:

Proposed Project Description:
Install A Gas Majestic DVRT36RP Direct Vent Heater

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)
Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied
Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	11/06/2003

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☑ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 11/18/03	Date:	Date:

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

03-1389

153 A 025

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL _____ Use of Building residence Single unit-Condo Date 11/6/03

Name and address of owner of appliance Unit 2 191 Harvard St Portland

Installer's name and address Pine State Plumbing + Heating

PO Box 6308 Scarborough, ME 04070 Telephone 321-2261

Location of appliance:

- ☐ Basement
- ☑ Floor
- ☐ Attic
- ☐ Roof

Type of Fuel:

- ☑ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: Majestic DVRT36RP

U.L. Approved ☑ Yes ☐ No

Will appliance be installed in accordance with the manufacture's installation instructions? ☑ Yes ☐ No

IF NO Explain: _____

The Type of License of Installer:

- ☐ Master Plumber # _____
- ☐ Solid Fuel # _____
- ☐ Oil # _____
- ☑ Gas # PNT552
- ☐ Other _____

Type of Chimney:

- ☐ Masonry Lined
  Factory built _____
- ☐ Metal
  Factory Built U.L. Listing # _____
- ☑ Direct Vent
  Type _____ UL# _____

Type of Fuel Tank

- ☐ Oil
- ☐ Gas

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
RECEIVED
NOV 6 2003

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ **feet.**

Cost of Work: $ 1500.00

Permit Fee: $ 39.00

Approved

Fire: Denied

Ele.: _____

Bldg.: _____

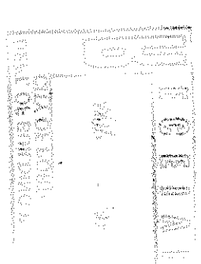
Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature _____ Date Approved _____

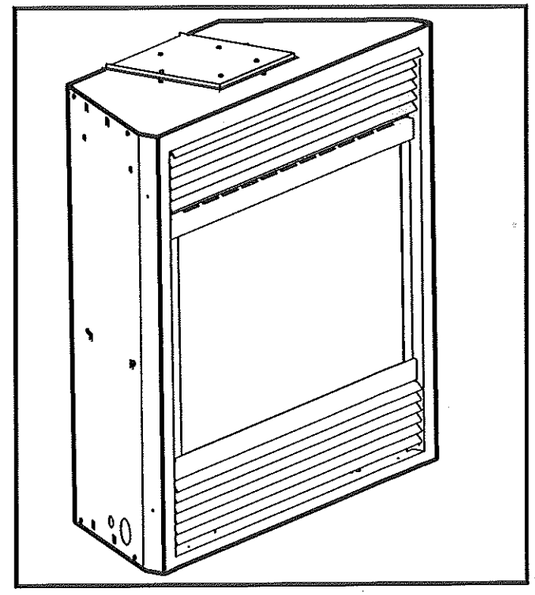
Signature of Installer Matt McC

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy



MAJESTIC
VERMONT
Castings

DVRT36
DVRT39
DVRT43



Installation Instructions and Homeowner's Manual

INSTALLER/CONSUMER SAFETY INFORMATION

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING APPLIANCE

WARNING!
IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT, CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE

FOR YOUR SAFETY
Installation and service must be performed by a qualified installer, service agency or your gas supplier.

WHAT TO DO IF YOU SMELL GAS:
- **Do not try to light any appliance.**
- **Do not touch <u>any</u> electric switch; do not use <u>any</u> phone in your building.**
- **Immediately call your gas supplier from your neighbor's phone. Follow the gas suppliers instructions.**
- **If you cannot reach your gas supplier call the fire department.**

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND/OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

The VermontCastings,
Majestic Products Company

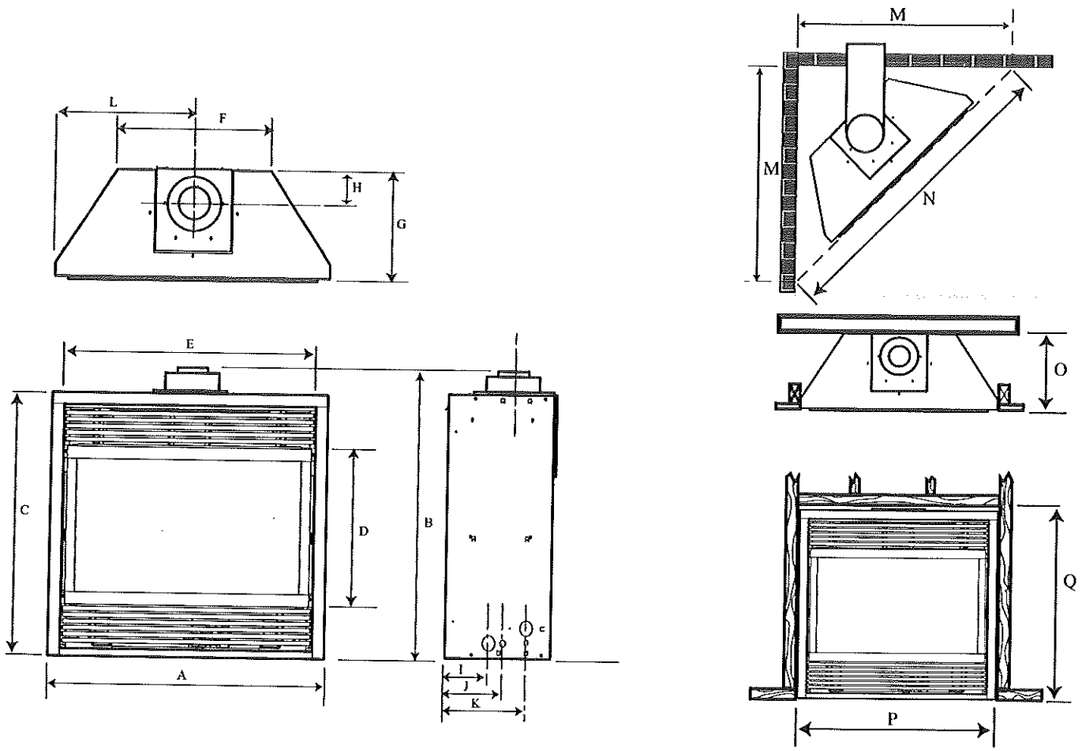
410 Admiral Blvd. Mississauga,
Ontario, Canada. L5T2N6

www.majesticproducts.com / www.vermontcastings.com

INSTALLER: DO NOT DISCARD THIS MANUAL - LEAVE FOR HOMEOWNER

10002428/1201
Rev. 3

FIREPLACE DIMENSIONS (INSTALLED AS TOP VENT)



Ref.	DVT36	DVT39	DVT43
Appliance Dimensions			
A	36" (914 mm)	39" (991 mm)	43" (1092 mm)
B	37-1/4" (946 mm)	37-1/4" (946 mm)	40" (1016 mm)
C	34-1/4" (870 mm)	34-1/4" (870 mm)	37" (940 mm)
D	21" (533 mm)	21" (533 mm)	23-1/2" (597 mm)
E	32-7/8" (835 mm)	35-7/8" (911 mm)	39-7/8" (1012 mm)
F	20" (508 mm)	24-3/8" (619 mm)	31" (787 mm)
G	14-1/4" (362 mm)	15-3/4" (400 mm)	16-1/4" (412 mm)
H	6" (152 mm)	6" (152 mm)	6" (152 mm)
I	5-1/2" (140 mm)	5-1/2" (140 mm)	5-1/2" (140 mm)
J	7-3/4" (197 mm)	8-1/2" (216 mm)	8-1/2" (216 mm)
K	10-3/4" (273 mm)	12-1/2" (318 mm)	12-1/2" (318 mm)
L	18" (457 mm)	19-1/2" (495 mm)	21-1/2" (546 mm)
Framing Dimensions			
M	36" (914 mm)	40" (1016 mm)	44" (1118 mm)
N	51" (1295 mm)	56" (1422 mm)	62-1/4" (1581 mm)
O	14-1/2" (368 mm)	16-1/2" (419 mm)	16-1/2" (419 mm)
P	36-1/2" (927 mm)	39-1/2" (1003 mm)	43-1/2" (1105 mm)
Q	35" (889 mm)	35" (889 mm)	37-3/4" (959 mm)

DECORATIVE BAY WINDOWS

When fitting the Bay Window Kits the original front frame/glass assembly MUST remain in place. The Bay Window kit is fitted over the existing front glass.

Bay window kits are available for the DVRT36 and DVRT 39 model fireplaces.

Installation

1. Remove the existing bottom louvre assembly complete with the hinges.
2. Remove the top louvre assembly.
3. Assemble the Bay Window Kit according to the instructions supplied with the kit.
4. Place the 2 pieces of ceramic refractory along the base of the bay window (Fig. 58).
5. Hang the Bay Window Assembly over the existing window frame assembly.
6. Re-install the upper louvre assembly.

Do not remove the existing window frame assembly.

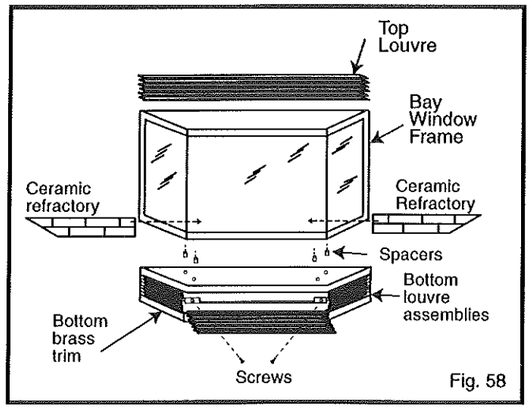


Fig. 58

DECORATIVE FRAME TRIMS

A selection of decorative frame trim kits are available for mounting around the outside of the appliance to enhance its visual effect on the room. Installation instructions for each decorative frame trim are included with the frame trim kit. Contact your authorized distributor for details of the trim kits and ordering information for the tirm kits applicable to this model appliance.

Should this fan require servicing or repair the power supply must be disconnected. For rewiring of any replacement parts see Fig. 55.

Any electrical re-wiring of this fan must be done by a licensed electrician.

Method A (Not using EB-1, Fig. 54)

1. Connect the ground wire to the power supply line to ground stud located on the base of the firebox.
2. Connect the black wire of the supply line to either terminal of the speed control unit.
3. The second terminal of the speed control unit is attached to either terminal of the thermal sensor.
4. The second terminal of the thermal sensor is connected to either terminal of the fan motor.
5. The second fan motor terminal is connected to the white wire of the supply line.

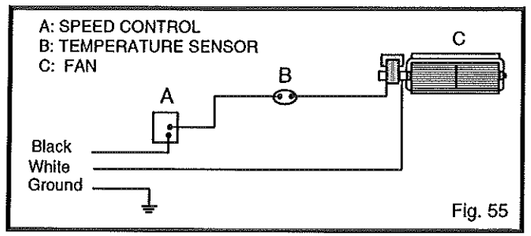


Fig. 55

Method B (Using EB-1 Box)
For instruction on wiring the EB-1 Electrical Junction Box see section 'EB-1 Electrical Box'.

REMOTE CONTROLS

Optional remote control units are available to control different functions of the appliance.

Model	Function/s Controlled
MRC1	ON/OFF
MRC2	ON/OFF and Temperature
MRC3	ON/OFF and Temperature control with a digital display and a programmable 24 hour clock
IMT	Wall mounted thermostat control.

CERAMIC REFRACTORY PANELS

Ceramic refractory panels are available to line the firebox area. The ceramic lining kit for the DVRT43 is supplied standard with the appliance.

Unit	Kit Model
DVRT36	DVT36CR
DVRT39	DVT39CR

Take care when handling the refractory panels as they are fragile until held in place and supported.

Installation, refer to Figs. 56 & 57

1. Remove the window frame assembly
2. Remove the logs.
3. Place the lower supports for the side refractory panels on the base of the firebox. place each support so that the slotted hole fits over the forward screw head along the edge of the base.
4. Lay the angular base panels in place on the floor of the firebox on either side of the burner housing assembly.
5. Loosely attach the top adjustable tabs to the studs located in the top of the firebox toward the front corners.
6. Place the rear refractory panel in place. Locate the 'small brick' edge of the panel into the two small supports on the back panel just above the rear log support.
7. Slide the side refractory panels into place to hold the rear panel secure. Adjust the top adjustable tabs to hold the side panel against the firebox wall and secure the tab. Repeat the procedure on the other side.
8. Replace the logs and window frame assembly.

For aesthetic purposes we recommend lining up the horizontal mortar lines.

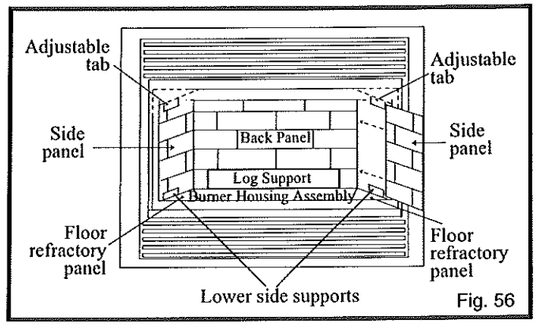


Fig. 56

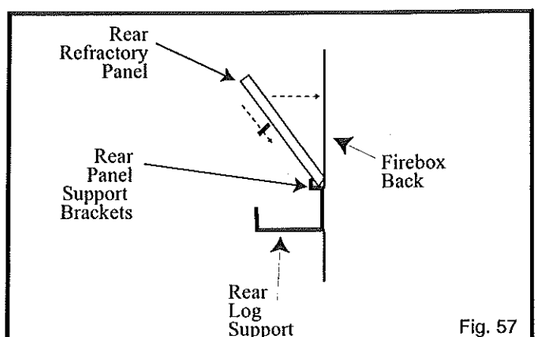
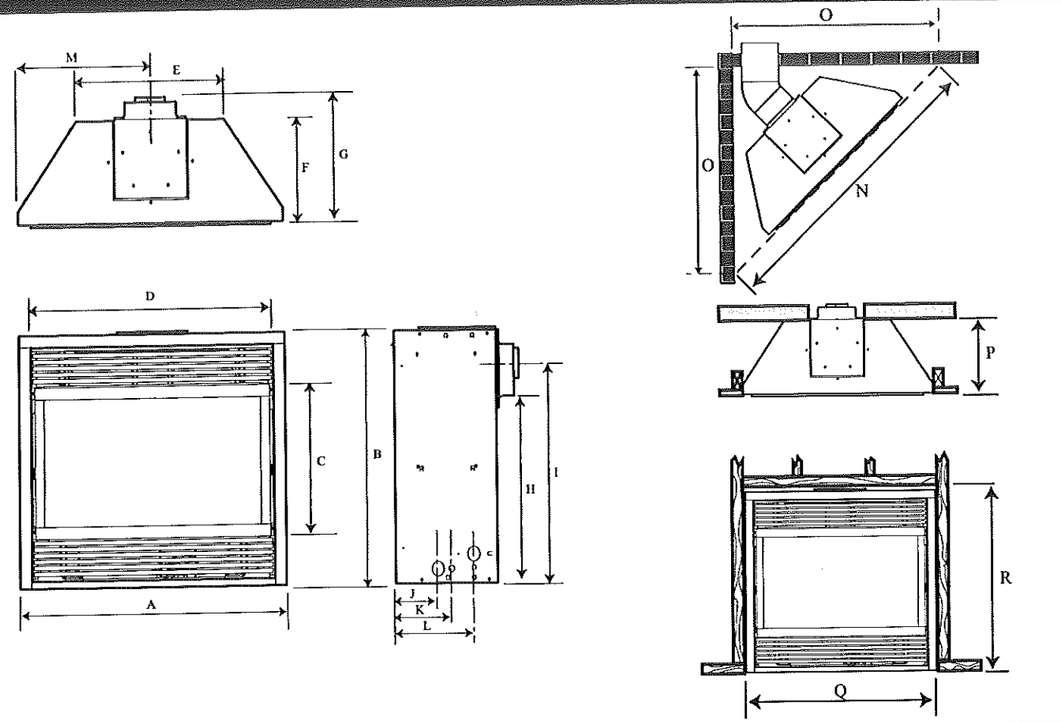


Fig. 57

FIREPLACE DIMENSIONS (INSTALLED AS REAR VENT)



Appliance Dimensions			
Ref.	**DVR36**	**DVR39**	**DVR43**
A	36" (914 mm)	39" (991 mm)	43" (1092 mm)
B	34-1/4" (870 mm)	34-1/4" (870mm)	37" (940mm)
C	21" (533 mm)	21" (533 mm)	23-1/2" (597 mm)
D	32-7/8" (835 mm)	35-7/8" (911 mm)	39-7/8" (1012 mm)
E	20" (508 mm)	24-3/8" (610 mm)	31" (787 mm)
F	14-1/4" (362 mm)	15-3/4" (400 mm)	16" (406 mm)
G	16-3/4" (425 mm)	18" (457 mm)	18-1/4" (464 mm)
H	25-1/4" (641mm)	25-1/4" (641mm)	28" (711 mm)
I	28-3/4" (730 mm)	28-3/4" (730 mm)	31-1/2" (800 mm)
J	5-1/2" (140 mm)	5-1/2" (140 mm)	5-1/2" (140 mm)
K	7-3/4" (197 mm)	8-1/2" (216 mm)	8-1/2" (216 mm)
L	10-3/4" (273 mm)	12-1/2" (318 mm)	12-1/2" (318 mm)
M	18" (457mm)	19-1/2" (495mm)	21-1/2" (546mm)
Framing Dimensions			
N	59-9/16" (1436 mm)	62-1/4" (1581 mm)	68-1/2" (1740 mm)
O	40" (1016 mm)	44" (1118 mm)	48" (1219mm)
P	14-1/2" (368 mm)	16-1/2" (419 mm)	16-1/2" (419 mm)
Q	36-1/2" (927 mm)	39-1/2" (1003 mm)	43-1/2" (1105 mm)
R	35" (889 mm)	35" (889 mm)	37-3/4" (959 mm)

CLEARANCE TO COMBUSTIBLES

Appliance		
Top	0"	(0 mm)
Bottom	0"	(0 mm)
Side	0"	(0 mm)
Back	0"	(0 mm)
Venting		
Concentric sections of DV Vent		
	1"	(25 mm)
Non-concentric sections of DV Vent		
Sides and bottom	1"	(25 mm)
Top	2"	(50 mm)

MANTELS

The height that a combustible mantel is fitted above the fireplace is dependent on the depth of the mantel. This also applies to the distance between the mantel leg (if fitted) and the fireplace.
For the correct mounting height and widths refer to Figs. 2a, 2b, 2c and the Mantel Chart below.
The distances and reference points are not affected by the fitting of a bay window front trim kit.
Noncombustible mantels and legs may be installed at any height and width around the appliance.
When using paint or lacquer to finish the mantel, such paint or lacquer must be heat resistant to prevent discoloration.

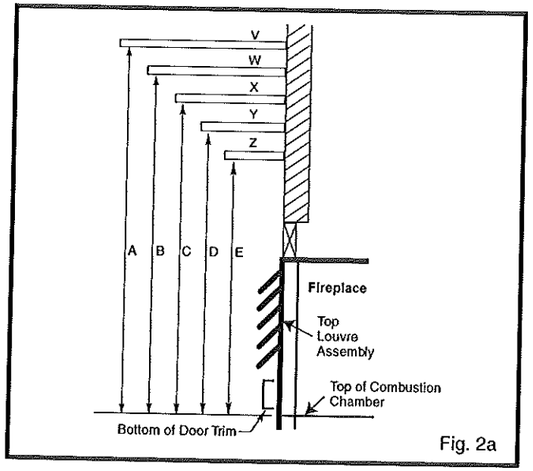


Fig. 2a

Ref.	Mantel Shelf Depth	Ref.	Mantel From Top of Comb. Chamber
V	10" (254 mm)	A	19" (483 mm)
W	8" (203 mm)	B	17" (432 mm)
X	6" (152 mm)	C	15" (381 mm)
Y	4" (101 mm)	D	13" (330 mm)
Z	2" (50 mm)	E	11" (279 mm)

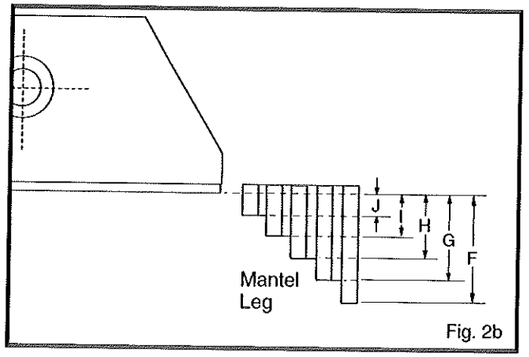


Fig. 2b

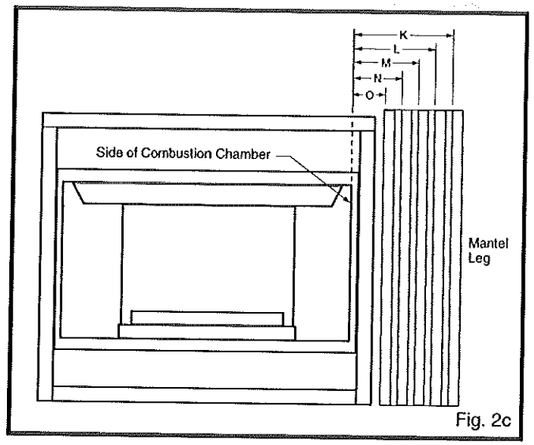


Fig. 2c

Ref.	Mantel Leg Depth	Ref.	Mantel Leg From Side of Combustion Opening
F	10" (254 mm)	K	11-1/2" (292 mm)
G	8" (203 mm)	L	9-1/2" (241 mm)
H	6" (152 mm)	M	7-1/2" (191 mm)
I	4" (101 mm)	N	5-1/2" (140 mm)
J	2" (50 mm)	O	3-1/2" (89 mm)

HEARTH

A hearth is not mandatory but is recommended for aesthetic purposes. We recommend a non-combustible hearth which projects out 12" (305mm) or more from the front of the fireplace.

Cold climate installation recommendation:

When installing this unit against a non-insulated exterior wall or chase, it is mandatory that the outer walls be insulated to conform to applicable insulation codes.

OPTIONAL ACCESSORIES AVAILABLE

FAN KITS

FK24 Fan Assembly
The FK24 Fan Assembly is standard on RFN and RFP units. This auxiliary fan system increases the efficiency of the circulation of the heating air.
The FK24 fan kit allows variable speed control of the circulation fan and also incorporates a heat sensor in the circuit.
Specifications
115 Volt / 60Hz / 56 Watts
Maintenance
The fan itself does not require regular maintenance, however periodic cleaning of the fan and the surrounding area is required.
Check the area under the control door (lower louvre assembly) and in front of the fan and wipe or vacuum this area at least once a month during operating season.
Installation
The fan assembly and other components are supplied fully wired eliminating the need for a licensed electrician to carry out the installation.
If hard wiring the fan in using Method B (following) we strongly recommend the use of a licensed electrician.
1. Open the lower louvre assembly. Maneuver the fan & bracket assembly around the gas valve and lines to locate the unit onto the screw studs on the back of the fireplace.
2. Install the thermal sensor under the bottom of the firebox, locating it over the two 10mm studs and secure it with nuts.
3. Locate the fan speed control unit. This can be fitted behind the lower louvre assembly as in Fig. 54 or located remotely in a conveniently located wall mounted electrical box. Remote location of the speed control will require suitable extension of the component wiring.
4. The power supply may be connected in two ways:
   Method A
   Route the 6' lead fitted to the unit to a conveniently located wall socket.
   Method B
   The EB-I receptacle box (Pt. # ZA1200) may be hard wired into the house supply. The fan lead is then plugged into the EB-I box.

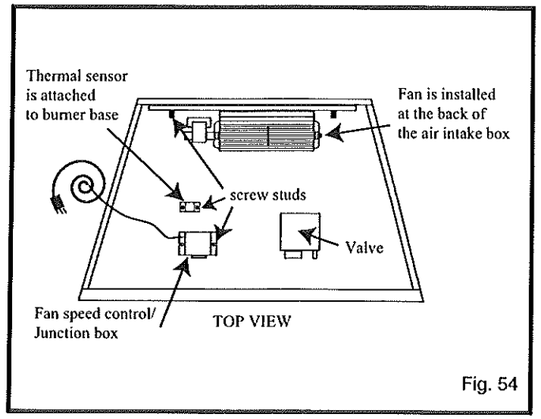


Fig. 54

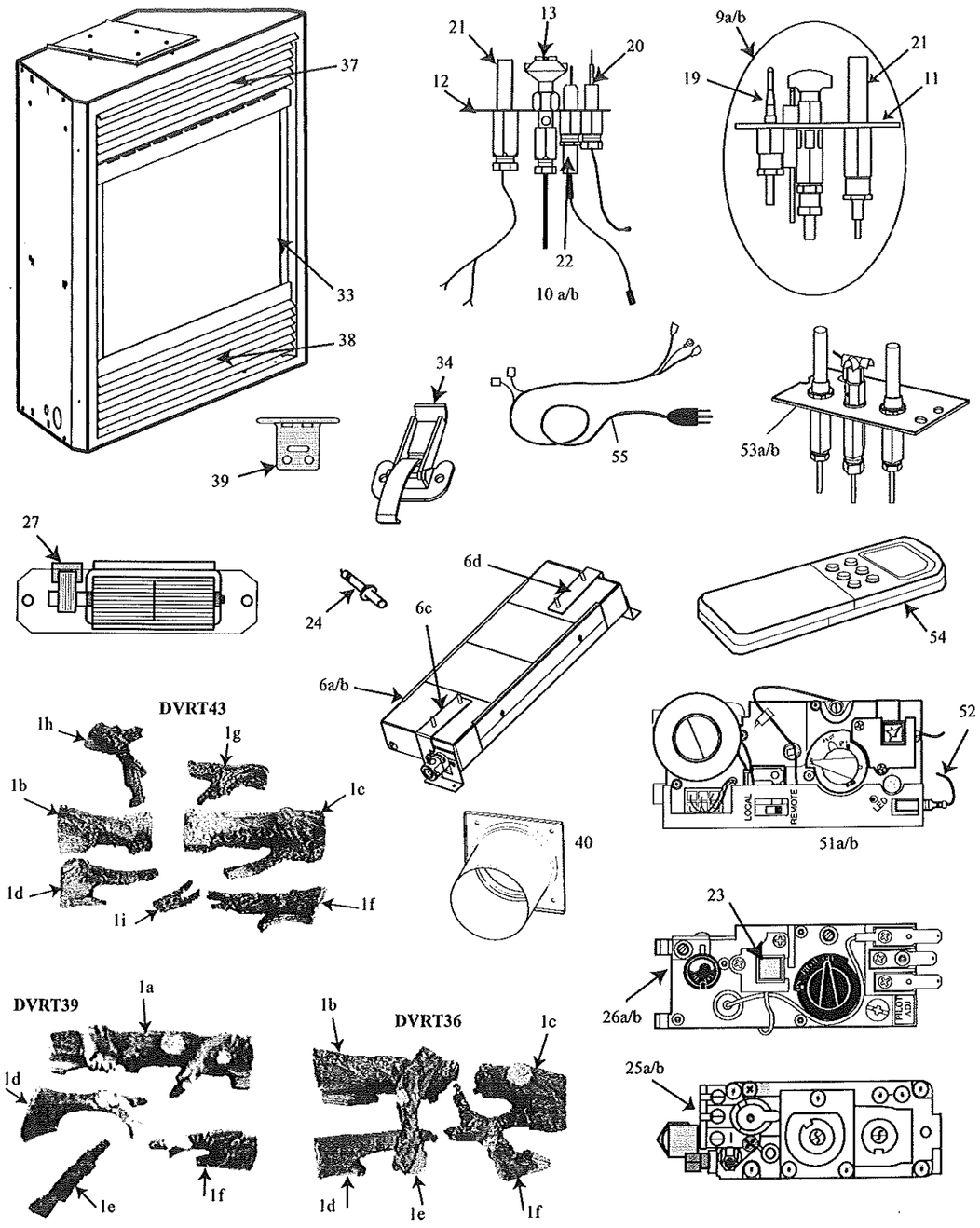
FK12
This auxiliary fan system increases the efficiency of the circulation of the heating air.
The FK12 Fan Assembly is a fixed speed fan system and does not allow for variable speed control. It does not use the speed control unit or the heat sensor used in the FK24 Kit.
Specifications
115 Volts / 60 Hz / 56 Watts.
Maintenance
The fan itself does not require regular maintenance, however periodic cleaning of the fan and the surrounding area is required.
Check the area under the control door (lower louvre assembly) and in front of the fan and wipe or vacuum this area at least once a month during the operating season.
Installation
The fan assembly is supplied fully wired eliminating the need for a licensed electrician to carry out the installation.
1. Open the lower Louvre assembly. Maneuver the fan & bracket assembly around the gas valve and lines to locate the unit against the back wall of the appliance, resting on the base.
2. With the protective cover removed from the self-adhesive 'Velcro' strips apply mild pressure to the fan & bracket unit to secure the strips to the metal panels. No further securing is required.
3. Power to the fan can be supplied by plugging the supplied lead into a conveniently located wall socket or by using a hard-wired EB-I connector box.

WIRING INSTRUCTIONS

The fireplace, when installed, must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electric Code.

For USA installations follow the local codes and the national electrical code ANSI/NFPA No. 70.

PARTS PICTORIAL - DVRT36/39/43



FRAMING AND FINISHING

Check fireplace to make sure it is levelled and properly positioned.

657
6341

1. Choose the unit location.
2. Place the unit into position and secure it to the floor with 1.5" (38mm) screws, or nails. The holes to secure the unit to floor are located just behind the access door grille on the left and right side of the unit.
3. Frame in the fireplace with a header across the top. It is important to allow for the finished wall face when setting the depth of the frame.
4. Attach the fireplace to the frame using the adjustable frame drywall strips (located behind the access door for shipping). Preset the depth to suit the facing material of the wall. The strips are adjustable to 1/2" (13 mm), 5/8" (16 mm), or 3/4" (19 mm) Figs. 3 & 4
5. Screw through the slotted holes in the drywall strip and into pre-drilled holes in fireplace side. Measure from face of fireplace to the face of the drywall strip to confirm the final depth.

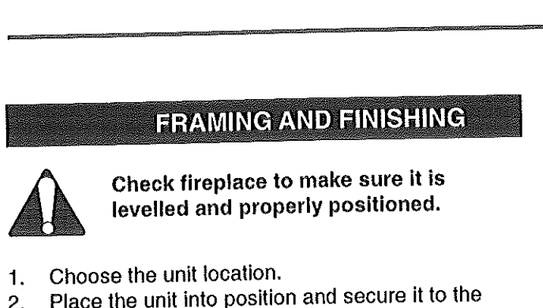
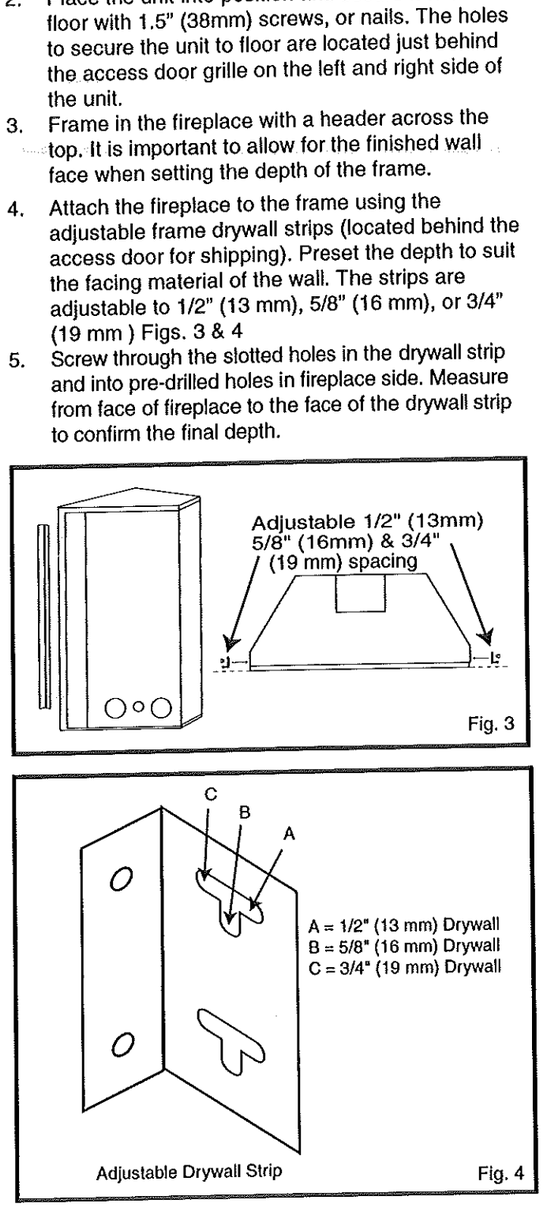


Fig. 3



Adjustable Drywall Strip

Fig. 4

FINAL FINISHING

Noncombustible materials such as brick or tile may be extended over the edges of the face of the appliance. DO NOT cover any vent or grille panels.
If a Trim Kit is going to be installed on the fireplace, the brick or tile will have to be installed flush with the edges of the appliance.

GAS SPECIFICATIONS

Model	Fuel	Gas Control	Max. Input BTU/h	Min. Input BTU/h
DVRT36RN	Nat	Millivolt	25,000	17,500
DVRT36RP	Prop	Millivolt	25,000	18,750
DVRT39RN	Nat	Millivolt	30,000	21,000
DVRT39RP	Prop	Millivolt	30,000	22,500
DVRT43RN	Nat	Millivolt	33,000	23,100
DVRT43RP	Prop	Millivolt	33,000	24,750

GAS INLET AND MANIFOLD PRESSURES

	Natural	LP (Propane)
Inlet Minimum	5.5" wc	11" wc
Inlet Maximum	14" wc	14" wc
Manifold Pressure	3.5" wc	10" wc

DVRT36 / DVRT39 / DVRT43
CERTIFIED TO

ANSI Z21.88b-1999 / CSA 2.33b-M99
Vented Gas Fireplace Heaters

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370 m) above sea level.
For elevations above 4,500 feet (1,370 m) in USA, installations must be in accordance with the current ANSI Z223.1 and/or local codes having jurisdiction.
In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370 m).

CFM186

GAS LINE INSTALLATION

When purging the gas lines, the front glass must be removed.

The gas pipeline can be brought in through the side of the fireplace as well as the bottom. Knockouts are provided on the bottom behind the valve to allow for the gas pipe installation and testing of any gas connection. It is most convenient to bring the gas line in from the rear right side of the valve as this allows fan installation or removal without disconnecting the gas line.

The gas line connection can be made with properly tinned 3/8" copper tubing, 3/8" rigid pipe or an approved flex connector. Since some municipalities have additional local codes, it is always best to consult your local authority and the **CSA-B149.1** installation codes.

For USA installations consult the current National Fuel Gas Code, **ANSI Z223.1.**

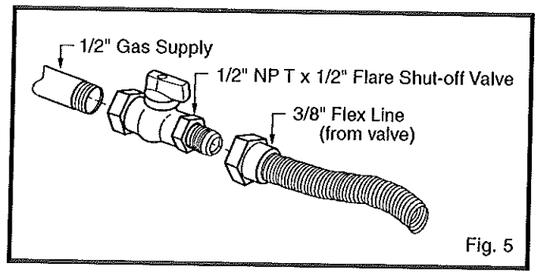


Fig. 5

Always check for gas leaks with a mild soap and water solution. Do not use an open flame for leak testing.

REPLACEMENT PARTS LIST

Items marked '*' are not shown in the following parts pictorial page.

Ref.	Description	DVRT36	DVRT39	DVRT43
24	Ignitor (Piezo), Honeywell Gas Valve	20000062	20000062	20000062
25a	Gas Valve, SIT 820 (Nat.)	52677	52677	52677
25b	Gas Valve, SIT 820 (Prop.)	52678	52678	52678
26a	Gas Valve, Honeywell (Nat.)	10001782	10001782	10001782
26b	Gas Valve, Honeywell (Prop.)	10001759	10001759	10001759
27	FK24 Fan Assembly, with bracket (optional)	54103	54103	54103
28*	FK12 Fan Assembly	ZA1110	ZA1110	ZA1110
29*	Electric Cord (6') (optional)	51865	51865	51865
30*	Fan Speed Control (optional)	51738	51738	51738
31*	Fan Speed Control Knob (optional)	51882	51882	51882
32*	Fan Temperature Sensor (optional)	51704	51704	51704
33	Window Frame Assembly	10001425	10002478	10001805
34	Lower Window Frame Clamps	54174	54174	54174
35*	Window Glass (complete with gasket)	54427	54445	54564
36*	Window Glass Gasket	57317	57317	57317
37	Top Louvre Assembly	10000037	10000039	10000041
38	Bottom Louvre Assembly	10000038	10000040	10000042
39	Hinge (bottom louvre assembly)	52356	52356	52356
40	Plate, Flue pipe with 4" pipe assembly	10002509	10002509	10002509
41*	Plate, Flue cover	10002298	10002298	10002298
42*	Plate, Air inlet cover with 7" collar	10002766	10002766	10002766
43*	Gasket, flue cover plate	10002233	10002233	10002233
44*	Gasket, flue pipe cover plate	10002237	10002237	10002237
45*	Gasket, air inlet plate	10002449	10002449	10002449
46*	Remote ON/OFF switch	51842	51842	51842
47*	Wire harness (remote switch)	55923	55923	55923
48*	Remote ON/OFF switch Kit (incls. above plus brackets)	53875	53875	53875
49*	EB-1 electrical/connection box kit (optional)	ZA1200	ZA1200	ZA1200
50*	Ceramic Lining Kit (Optional)	BT2TB0	CT2TB0	N/A
50a*	Ceramic Lining Kit Standard on DVRT43	N/A	N/A	10000459
51a	RF Valve Nat	20002045	20002045	20002045
51b	RF Valve LP	20002046	20002046	20002046
52	Antennae	20003651	20003651	20003651
53a	Pilot RF Nat	20002266	20002266	20002266
53b	Pilot RF LP	20002268	20002268	20002268
54	Transmitter	20002047	20002047	20002047
55	Cord Set	20002541	20002541	20002541

REPLACEMENT PARTS LIST

Items marked '*' are not shown in the following parts pictorial page.

Ref.	Description	DVRT36	DVRT39	DVRT43
1	Log Set (complete)	10002427	10002469	10002853
1a	Log - Rear	N/A	B35	N/A
1b	Log - Rear Left	B43	N/A	B45
1c	Log - Rear Right	B31	N/A	B46
1d	Log - Front Left	B32	B37	B48
1e	Log - Top Left	B33	B38	N/A
1f	Log - Front Right	B34	B36	B49
1g	Log - Top rear	N/A	N/A	B47
1h	Log - Crossover front left	N/A	N/A	B50
1i	Log - Front center	N/A	N/A	B51
2*	Lava Rock - (Burner)	57897	57897	57897
3*	Lava Rock	10001454	10001454	10001454
4*	Rear Log Support Assembly	10002425	10002471	10002855
5*	Front Grate Assembly	10002432	10002432	10002852
6a	Burner Housing Assembly, Nat.	10002510	10002578	10002866
6b	Burner Housing Assembly, Prop	10002510	10002578	10002885
6c	Log support with Stud Assembly	10002912	10002912	10002914
6d	Log support with Stud Assembly	N/A	10002912	N/A
7*	Ceramic Tile (singular)	57803	57803	57803
8a*	Orifice/s, Main Burner, (RN)	Refer to the rating plate for orifice specifications		
8b*	Orifice/s, Main Burner, (RP)	Refer to the rating plate for orifice specifications		
9a	Pilot assembly, PSE (Nat.)	10001739	10001739	10001739
9b	Pilot assembly, PSE (Prop.)	10001740	10001740	10001740
10a	Pilot assembly, SIT Top Conv. (Nat.)	10002264	10002264	10002264
10b	Pilot assembly, SIT Top Conv. (Prop.)	10002265	10002265	10002265
11	Pilot, PSE (with cable and electrode)	10001824	10001824	10001824
12	Pilot, SIT Top Convertible	10002266	10002266	10002266
13	Pilot hood, SIT Top Convertible	10002385	10002385	10002385
14a*	Orifice, PSE pilot (Nat.)	10001822	10001822	10001822
14b*	Orifice, PSE pilot (Prop.)	10001823	10001823	10001823
14c*	Orifice, SIT Top Conv. (Nat.)	10002268	10002268	10002268
14d*	Ofifice, SIT Top Conv. (Prop.)	10002269	10002269	10002269
15*	Pilot tube with fittings (PSE)	53211	53211	53211
16*	Pilot tube with fittings (SIT Top Conv.)	10001296	10001296	10001296
17*	Manifold Tube with fittings	57318	57318	57318
18*	Flexible Gas Line (18") with fittings	20002500	20002500	20002500
19	Thermocouple, PSE	10001828	10001828	10001828
20	Thermocouple, SIT Top Convertible	53373	53373	53373
21	Thermopile	51827	51827	51827
22	Ignitor electrode (with cable), SIT	10001297	10001297	10001297
23	Ignitor (Piezo), SIT 820 Gas Valve	52464	52464	52464

The fireplace valve must not be subjected to any test pressures exceeding 1/2 p.s.i. Isolate or disconnect this and any other gas appliance control from the gas line when pressure testing.

The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

When using copper or flex connector use only approved fittings. Always provide a union when using black iron pipe so that the gas line can be easily disconnected for burner or fan servicing (Fig. 5). See the gas specification for pressure details and ratings.

REMOTE ON/OFF SWITCH INSTALLATION

Do not wire the remote ON/OFF wall switch for this gas appliance into a 120V power supply.

1. Thread the wiring through the electrical knockout located on either side of the unit. Take care not to cut the wire or insulation on metal edges. Ensure the wire is secured and protected from possible damage. Run one end of the gas control valve and the other end to the conveniently located wall switch.
2. Attach the wire to the ON/OFF switch and install the switch into the receptacle box. Attach the cover plate to the switch.
3. Connect the wire to the gas control valve (Fig. 6).

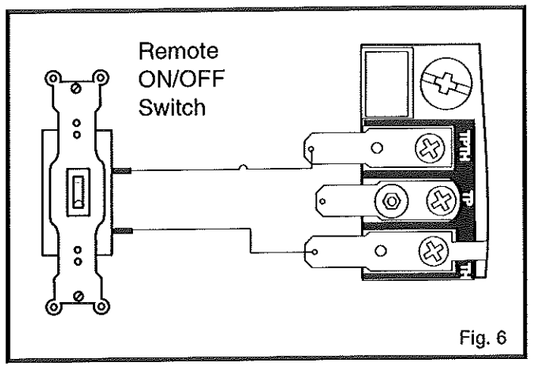


Fig. 6

Alternative Switch Location

The remote switch can be installed on either side of the access door. Mount the switch to the bracket provided and screw the bracket to either side of the frame, using the pre-punched holes (Fig. 7).

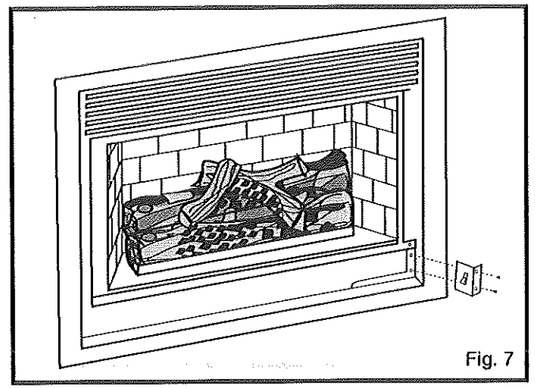


Fig. 7

EB-1 ELECTRICAL BOX

The fireplace, when installed, must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code

For USA installations follow the local codes and the national electrical code ANSI/NFPA No. 70.

It is strongly suggested that the wiring of the EB-1 Electrical Junction Box be carried out by a licensed electrician.

Ensure that the power to the supply line has been disconnected before commencing this procedure.

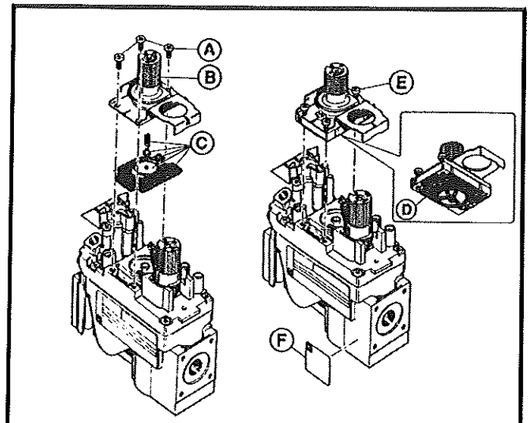
The EB-1 Electrical junction box has been supplied standard on the DVRT 36/39/43 models to allow for the easy installation of an optional fan kits (Fig. 4).
To connect the EB-1 box to the house electrical supply follow the steps below.

1. Unscrew the retaining screw from the EB-1 base plate (Fig. 8) and remove the EB-1 assembly from the fireplace.
2. Remove the front cover of the EB-1 box.
3. Remove the plug socket assembly from the EB-1 box.
4. Feed the supply line in from the outside through the cable clamp (Fig. 8).
5. Connect black wire of the power supply line to the brass screw (polarized) of the socket assembly.
6. Connect the white wire of the power line to the chrome screw of the socket assembly.
7. Connect the ground wire of the supply line to the green screw of the socket assembly.
8. Refit the socket assembly back into the electrical box and replace the cover plate. Secure the cable with the clamp on the outside of the unit to prevent strain on the connections.
9. The EB-1 electrical junction box is now ready to supply power to the FK12 or FK24 fan kits if fitted.

coded "conversion screw".
a) Using a suitable small screwdriver lift out the central regulator cap from the "Hi - Lo" knob on the valve.
b) Unscrew the exposed conversion screw.
c) Insert the new color coded conversion screw. **Do not over-tighten the screw, it must be finger tight.**
d) Refit the regulator cap.
e) Mount conversion label supplied with conversion screw to valve in a visible position.

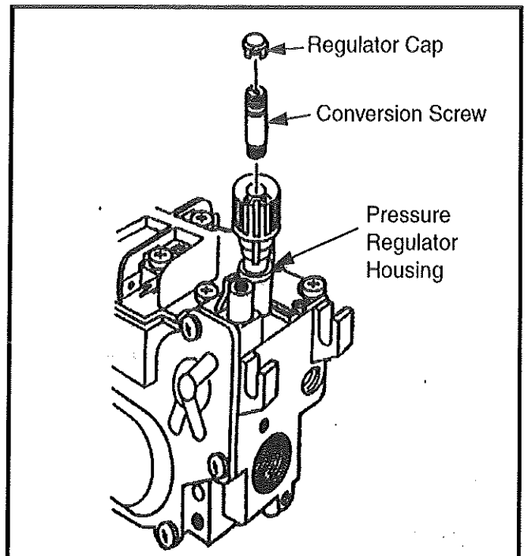
10. Reassemble fireplace in the reverse order, except window screen assembly. Leave this off until after unit has been checked for leaks and the gas supply has been bled.
11. After bleeding gas line and checking for leaks with a soap solution, replace the front glass. Fire up the unit, check for flame impingment on logs, adjusting them if necessary. Check manifold and supply pressures against the appliance specifications.

The procedure for converting from one gas to another is the same regardless of the initial gas used. The only variation is in the orifice-sizes and component part numbers. Your authorized service provider will ensure correct parts are used.



Nova SIT820 Gas Valve

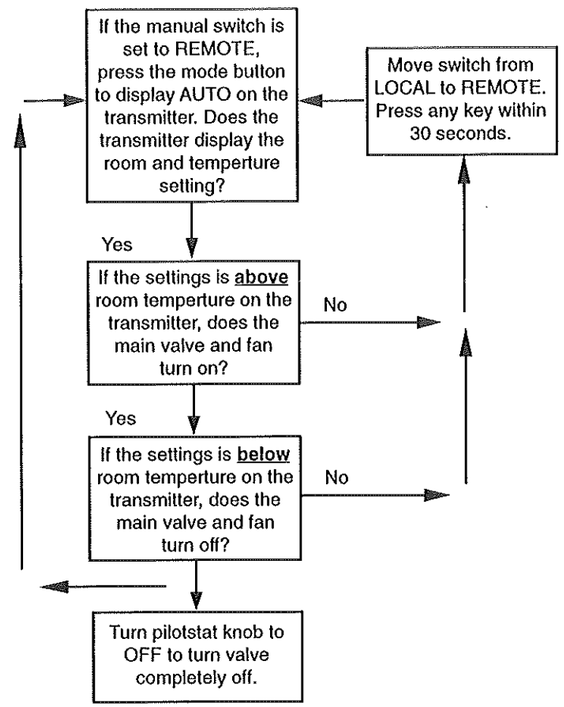
Fig. 12



Honeywell Gas Valve

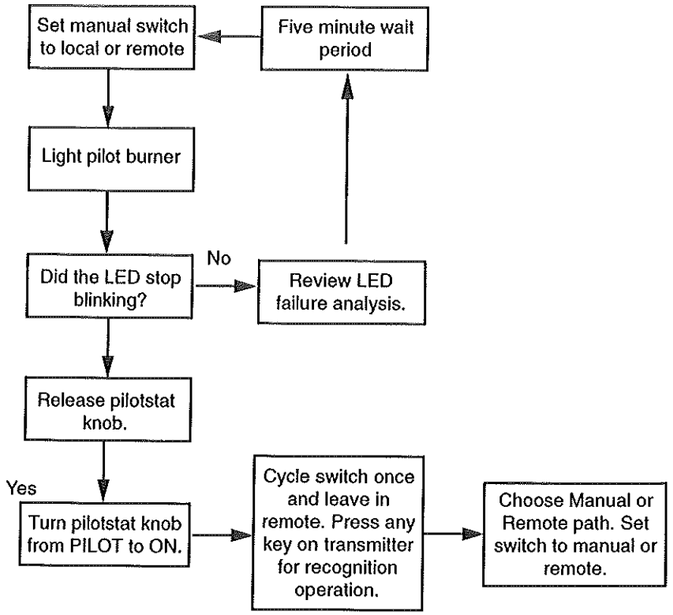
Fig. 13

Auto Path

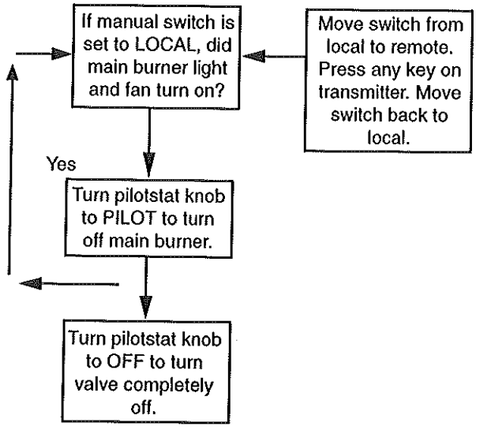


10002428

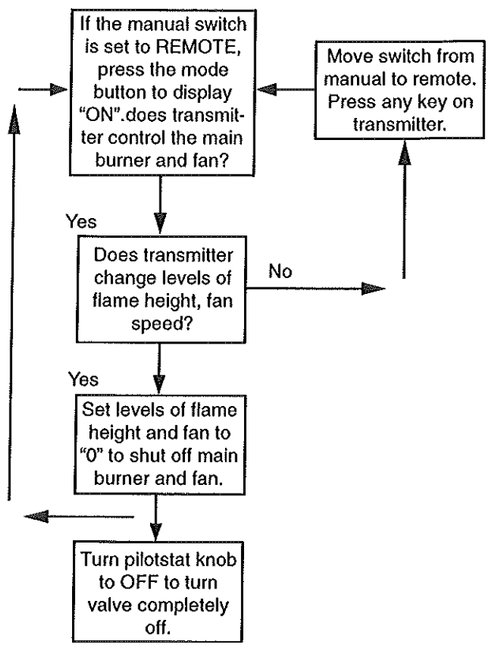
Comfort Valve system control sequence of operation with transmitter



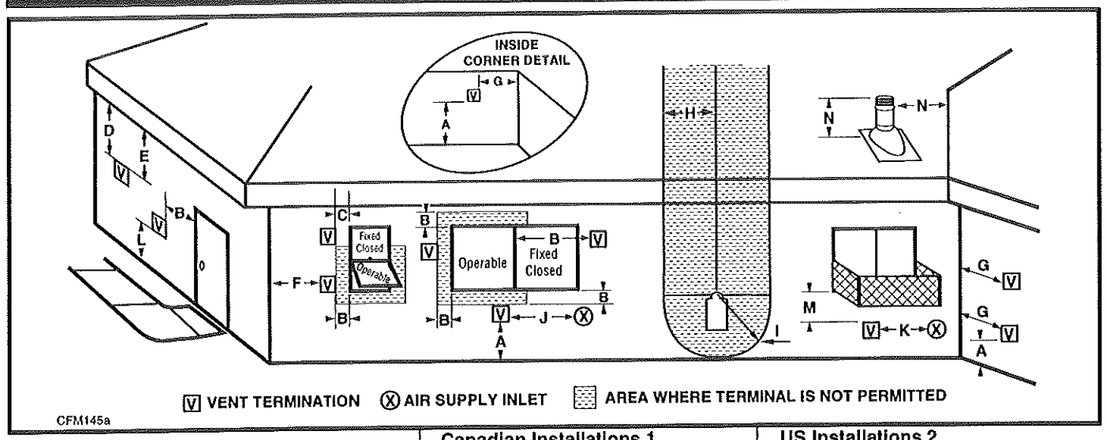
Local Path



On Path



GENERAL VENTING INFORMATION–TERMINATION LOCATION



	Canadian Installations 1	US Installations 2
A = Clearance above grade, veranda, porch, deck, or balcony	12 inches (30cm)	12 inches (30 cm)
B = Clearance to window/door that may be opened	6 in (15cm) for appliances<10,000 Btuh (3kW), 12 in (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36 in (91cm) for appliances > 100,000 Btuh (30 kW)	6 in (15cm) for appliances > 10,000 Btuh (3kW), 9 in (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12 in (30cm) for appliances > 50,000 Btuh (15kW)
C = Clearance to permanently closed window	12" (305 mm) recommended to prevent window condensation.	12" (305 mm) recommended to prevent window condensation.
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (610mm) from the center line of the terminal	18" (458 mm)	18" (458 mm)
E = Clearance to unventilated soffit	12" (305 mm)	12" (305 mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3 feet (91 cm) within a height of 15 feet above the meter/regulator assembly	3 feet (91 cm) within a height of 15 feet above the meter/regulator assembly
I = Clearance to service regulator vent outlet	3 feet (91 cm)	3 feet (91 cm)
J = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	6 in (15cm) for appliances <10,000 Btuh (3kW), 12 in (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36 in (91cm) for appliances > 100,000 Btuh (30 kW)	6 in (15cm) for appliances < 10,000 Btuh (3kW), 9 in (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12 in (30cm) for appliances > 50,000 Btuh (15 kW)
K = Clearance to a mechanical air supply inlet	6 feet (1.83m)	3 feet (91 cm) above if within 10 feet (3 m) horizontally
L = Clearance above paved sidewalk or a paved driveway located on public property	7 feet (2.13m)†	7 feet (2.13m)†
M = Clearance under veranda, porch, deck or balcony	12 inches (30cm) ‡	12 inches (30cm) ‡
N= Clearance above a roof shall extend a minimum of 24" (610mm) above the highest point when it passes through the roof surface, and any other obstruction within a horizontal distance of 18" (450mm).		

1 In accordance with the current CSA-B149 Instalation Codes.
2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes.
† A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
‡ Only permitted if veranda, porch, deck, is fully open on a minimum 2 sides beneath the floor.
Note: 1 Local codes or regulations may require different clearances.
2 The special venting system used on Vermont Castings Majestic Products Company's Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.

Termination Clearances

Termination clearances for buildings with combustible and noncombustible exteriors.

Inside Corner

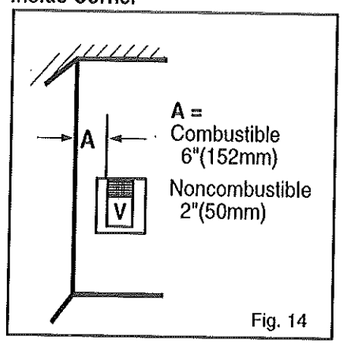


Fig. 14

Outside Corner

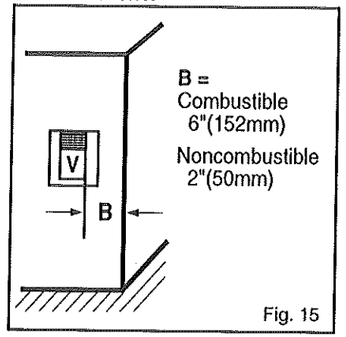
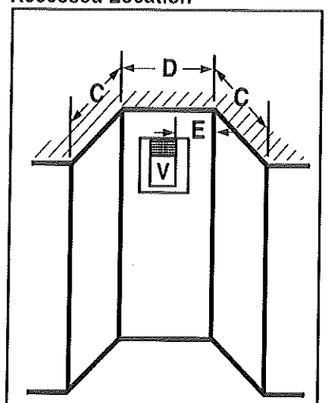


Fig. 15

Recessed Location



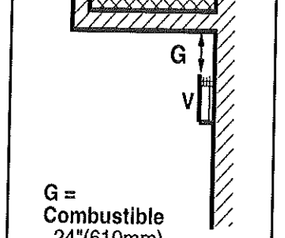
C = Maximum depth of 48" (1219mm) for recessed location.

D = Minimum width for back wall of a recessed location.
Combustible 38"(965mm)
Noncombustible 24"(610mm)

E = Clearance from corner in recessed location.
Combustible 6"(152mm)
Noncombustible 2"(50mm)

Fig. 18

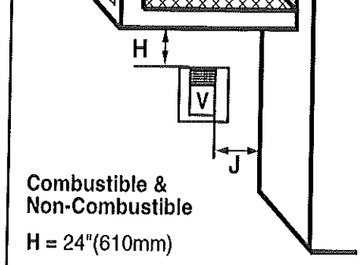
Balcony - with no side wall



G =
Combustible
24"(610mm)
Non-Combustible
18"(457mm)

Fig. 16

Balcony - with perpendicular side wall



Combustible & Non-Combustible

H = 24"(610mm)

J = 20"(508mm)

Fig. 17

Delay Timer Mode

The shut off delay timer has a maximum of 2 hours and a minimum of zero minutes. To change the timer level, press the time key followed by an arrow key. Pushing the key once will change the timer by 10 minutes.

Auto Mode

In the AUTO mode, the room temperature, set temperature, flame and fan levels will be shown. AUTO will appear next to both the flame and fan icons.

When the control is in the AUTO mode, the main burner will turn on/off or modulate based on the heat needed to maintain the set temperature. The flame level will change automatically to optimize the heat output needed to maintain the set temperature. To change the set temperature, press the up or down key. Pushing a key once will change the temperature by one degree.

In the AUTO mode, the fan speed will increase with increasing flame height or decrease with decreasing flame height. "AUTO" is displayed next to the flame and fan icons.

Fan Override During Auto Mode

If a lower or higher fan speed is desired when operating in the AUTO mode, the fan speed can be overridden by pushing the fan button followed by the up or down key. Pushing a key once will change the fan level by one unit. In this mode "AUTO" is displayed next to the flame icon and "MANUAL" is displayed next to the fan icon.

Change Between F/C Temperature Units

Push the up and down arrow keys simultaneously for at least 3 seconds to toggle between Fahrenheit and Celsius units.

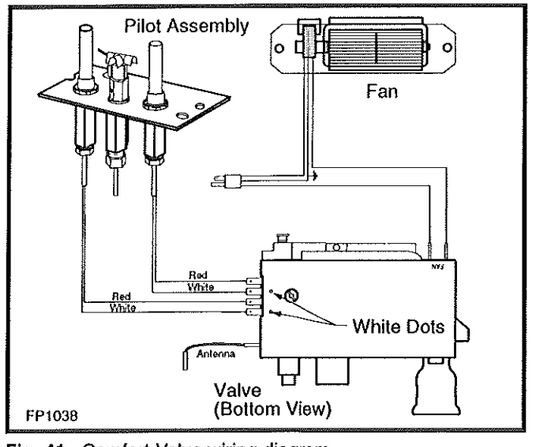


Fig. 41 Comfort Valve wiring diagram.

Disable Thermostat Function

To disable the thermostat function in the AUTO mode, push the time and down keys simultaneously for at least 3 seconds.

To Change Batteries

1. Remove cover on the backside of the transmitter. Install 3 AAA batteries as shown and reattach cover.
2. Once steps 1-3 in OPERATION are completed, receiver/valve and transmitter are now ready. Press any button on transmitter for recognition process to occur between the receiver/valve and transmitter.
3. Use functions as described in TRANSMITTER section.

Troubleshooting

1. Locate LED light on valve.
2. LED will blink after every valid command received by the transmitter; this is not an error.
3. Failure codes may occur anytime after pilot burner is lit.
4. Sequence is failure code followed by light not blinking for 30 seconds.
5. In the event of multiple failure codes, next failure code follows previous failure code by approximately 3 seconds.

If an Error Code 3 is observed while performing the testing, complete the following:

1. Make sure the spade connectors are pushed all the way on. If rhe Error Code 3 is still showing, then go to the next step.
2. Switch the front two thermopile leads with the back two. Be sure the white lead is connected to the spade with the white dot next to it. If the Error Code 3 is still showing, replace the thermopiles.

If an Error Code 8 is observed while performing the testing, complete the following:

1. Confirm the valve is not in REMOTE mode.
   - If the valve is producing Error Code 8 and in REMOTE mode, the valve is defective and should be replaced.
   - If the valve is in LOCAL mode and producing Error Code 8, then go to the next step.
2. Slide the Remote/Local switch to REMOTE and teach the valve a transmitter (see item 6, page 30). The Error Code will clear itself after approximately 1.5 minutes and return to normal operation.

LED Count	Service Action
8	Replace valve
7	Confirm stepper motor connection exists
5	Confirm fan connection exists and works
4	Confirm gas type; jumper in place
3	Replace thermopiles
2	Turn fan ON

NOTE: Some keys are not active.

OPERATING INSTRUCTIONS

The Comfort Control Valve allows remote control of temperature, fan and flame appearance.

NOTE: The antenna should hang in free air away from grounded metal.

OPERATION

1. If the manual switch is in remote position, switch it to LOCAL. (Fig. 39)
2. Turn the pilotstat knob counterclockwise from OFF to the PILOT position, push the knob down, and hold in position. The pilot valve opens and allows gas to flow to the pilot burner.
3. Push plunger on the piezo until the pilot burner is lit. When the pilot burner is lit, the LED on the control will come on after approximately 40 seconds and will provide 1 short blink continuously in the normal mode. When the light turns off which will be approximately 10 seconds after it has been continuously red, the receiver/valve is fully powered.
4. Release the knob. The shaft will move upward. The pilot burner should now stay burning. If the pilot burner goes out, repeat step 2.
5. Turn the knob counterclockwise to the ON position. If the manual switch is in the LOCAL position, the main burner will turn on immediately.
6. ON the initial use of a transmitter, a recognition operation is required between the receiver/valve and transmitter. Change the switch from LOCAL to REMOTE. Press the fan or flame button on the transmitter within 30 seconds. The LED will blink indicating the transmitter will now work with the receiver/valve. If the switch continues in the REMOTE position, the transmitter will now control the main valve, flame modulation level and fan control.
7. If the manual switch is in the LOCAL position, the valve will be at the highest fixed pressure setting and the fan will be at the highest fixed speed. The transmitter will control the fan only.

SHUT OFF PROCEDURE

If the manual switch is in the REMOTE position, the transmitter can shut off the main burner and fan. However, the control is still on and a command from the transmitter can turn on the main burner or fan.

To shut off the system, turn the pilotstat knob clockwise to the OFF position. This action closes the main gas and safety valves. The transmitter cannot turn on the main burner or fan.

TRANSMITTER OPERATION

Off Mode

In the OFF mode, the fireplace flame and fan are off, the display will show OFF and displays the room temperature. If the receiver is in REMOTE mode, the fireplace will shut off.

On (Manual) Mode

In the ON mode, the room temperature, flame and fan levels will be shown. MANUAL will appear next to both the flame and fan icons.

When the control is in the ON mode, the flame and fan levels, and delay timer are changed with the up and down buttons. To change the flame level, press the flame button followed by an arrow key. To change the fan level, press the fan key followed by an arrow key. Pushing the arrow key once will change the level by one unit.

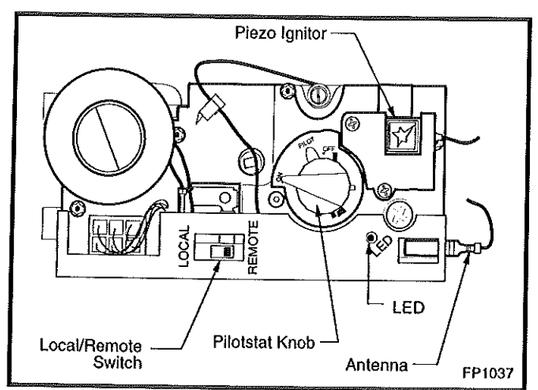


Fig. 39 Comfort control valve.

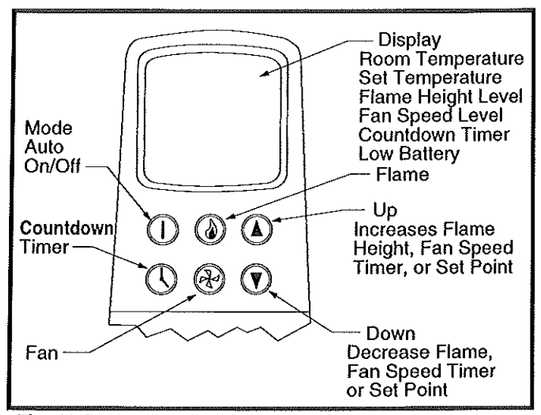


Fig. 40 Transmitter diagram.

GENERAL INFORMATION FOR CONNECTING VENT PIPES

Crimped End Pipes

Before joining elbows and pipes apply a bead of high temperature sealant to the crimped end of the elbow or pipe.

Join the pipes using a 2" (50 mm) overlap and secure the joints with three sheet metal screws (Fig. 19). Wipe off excess sealant.

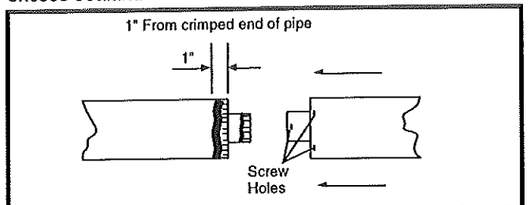


Fig. 19

CANADIAN INSTALLATIONS:

The venting system must be installed in accordance with the current CSA-B149.1 installation code.

USA INSTALLATIONS:

The venting system must conform to local codes and/or the current National Fuel Code ANSI Z223.1.

Only venting components manufactured by the Vermont Casting Majestic Products Company may be used in Direct Vent systems.

Twist Lock Pipes

When using Vermont Casting Majestic Products Company twist-lock pipe it is not necessary to use sealant on the joints. The only areas of the venting system that need to be sealed with high temperature silicone sealant are the collars on the fireplace and termination, and the sliding joint of any telescopic vent section used in the system.

To join twist lock pipes together, simply align beads of the male end with the grooves of the female end, twisting the pipe until the flange on the female end contacts external flange on the male end. It is recommended that you secure joints with three (3) sheet metal screws, however this is not mandatory with twist lock pipe.

To make it easier to assemble the joints we suggest putting a lubricant (Vaseline or similar) on the male end of the twist lock pipe prior to assembly.

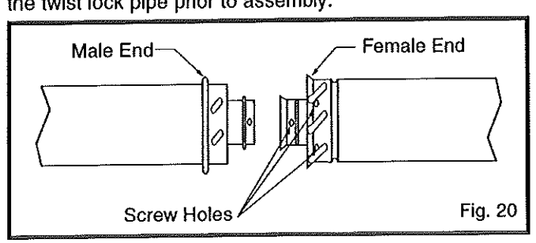
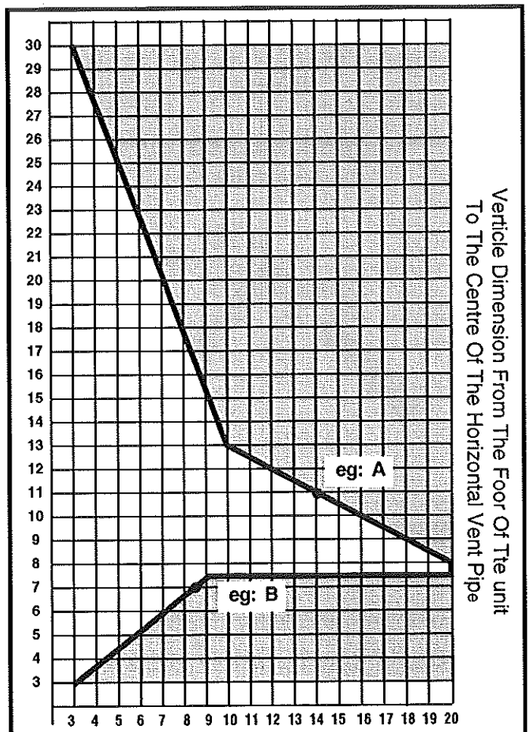


Fig. 20

HOW TO USE THE VENT GRAPH

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions of the vent system.

1. Determine the height of the center of the horizontal vent pipe exiting through the outer wall. using this dimension on the Sidewall Vent Graph below, locate the point intersecting with the slanted graph line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Select the indicated dimension, and position the fireplace in accordance with same.
   Example A:
   If the vertical dimension from the floor of the fireplace is 11' (3.4m) the horizontal run to the face of the outer wall must not exceed 14' (4.3m).
   Example B:
   If the vertical dimension from the floor of the unit is 7' (2.14m), the horizontal run to the face of the outer wall must not exceed 8-1/2' (2.6m).



Sidewall Vent Graph showing the relationship between vertical and horizontal dimensions for a Direct Vent flue system. CFM102

REAR WALL VENT APPLICATION

When installed as a rear vent unit this appliance may be vented directly to a termination located on the rear wall behind the appliance

- Only Vermont Castings Majestic Products Company venting components are approved to be used in these applications (See 'venting components' listed for different installation requirements).
- The maximum horizontal distance between the rear of the appliance (or end of the transition elbow in a corner application) and the outside face of the rear wall is 20" (508 mm), (Fig. 21).
- Only one 45˚ elbow is allowed in these installations.
- The minimum clearances between any combustible material and the vent pipe sections are:

  Top 2" (50 mm)
  Sides 1" (25 mm)
  Bottom 1" (25 mm)

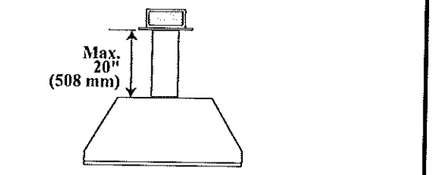


Fig. 21

REAR WALL VENT INSTALLATION

STEP 1
Locate and cut the vent opening in the wall (Fig. 22). For combustible walls first frame in opening (Fig. 22).
COMBUSTIBLE WALLS: Cut a 10-3/8"H x 9-3/8" W (265 mm x 240 mm) hole through the exterior wall and frame as shown (Fig.22).
NON-COMBUSTIBLE WALLS: Hole opening should be 7.5" (190 mm) in diameter.

Zero clearance sleeve is only required for combustible walls.

REAR WALL VENT INSTALLATION

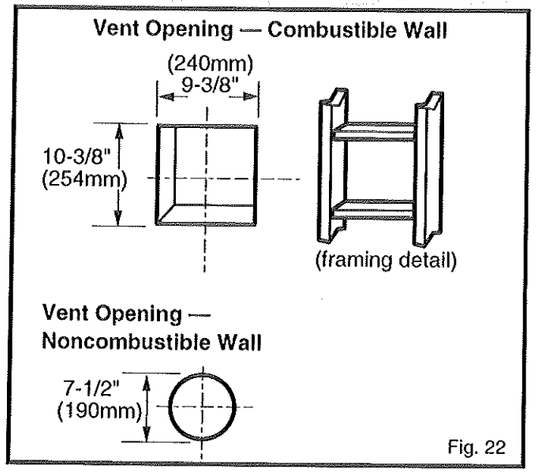


Fig. 22

STEP 2
Measure wall thickness and cut zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve to its maximum opening (10-3/8" x 9-3/8") and attach to firestop with #8 sheet metal screws (supplied). Install firestop assembly (Fig. 23).

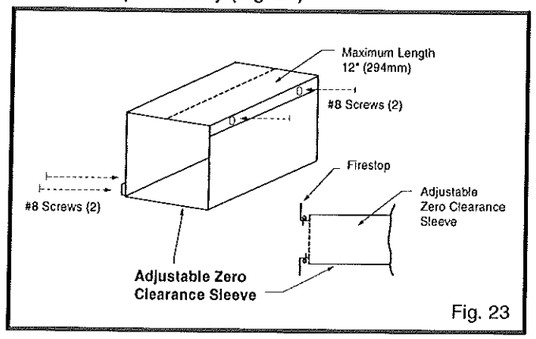


Fig. 23

STEP 3
Measure the horizontal length requirement for the venting including a 2" (50 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (50 mm), (Fig. 21).
STEP 4
Install the 4" (100 mm) vent to the appliance collar and secure with 3 sheetmetal screws. Install the 7" (175 mm) vent pipe to the appliance collar and secure with 3 sheetmetal screws. It is not necessary to seal this connection. If a 45˚ elbow is being used attach the elbow to the appliance in the same manner then attach the venting to the elbow.

It is critical that there is no downward slope away from the appliance when connecting the vent or elbow.

LIGHTING AND OPERATING INSTRUCTIONS
FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This fireplace has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
B. BEFORE LIGHTING smell all around the fireplace area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any fireplace**
- **Do not touch any electric switch**
- **Do not use any phone in your building**
- **Immediately call your gas supplier from a neighbor's phone and follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the Fire Department**

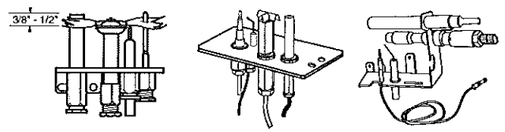
C. Use only your hand to push in or turn the gascontrol knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this page.
2. Turn off all electrical power to the fireplace.
3. For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the On/Off switch to "OFF" position or set thermostat to lowest level.
4. Open control access panel.
5. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.

EURO SIT SIT NOVA HONEYWELL

6. Wait (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas , STOP! Follow "B" in the safety information above this page. If you don't smell gas, go to the next step.
7. Remove glass door before lighting pilot. (See Window Frame Assembly in manual).
8. Visibly locate pilot by the main burner.
9. Turn knob on gas control counter clockwise to "PILOT".
10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.



- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.

11. Replace window frame assembly.
12. Turn gas control knob to "ON" position.
13. For RN/RP appliances turn the ON/OFF switch to "ON" position or set themostat to desired setting.
14. Turn on all electrical power to the fireplace.

TO TURN OFF GAS FIREPLACE

1. Turn the On/Off switch to "OFF" or set the thermostat to lowest setting.
2. Turn off all electric power to the fireplace if service is to be performed.
3. Open control access panel.
4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
5. Close control access panel.

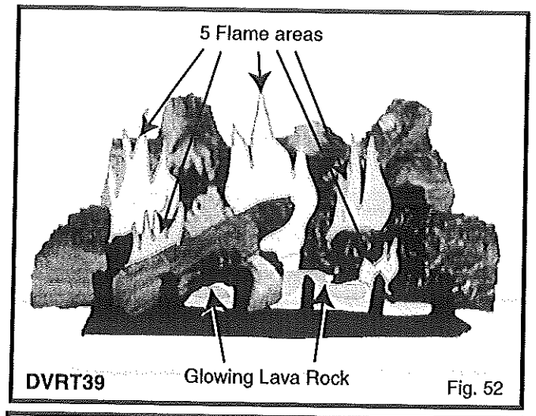


Fig. 52

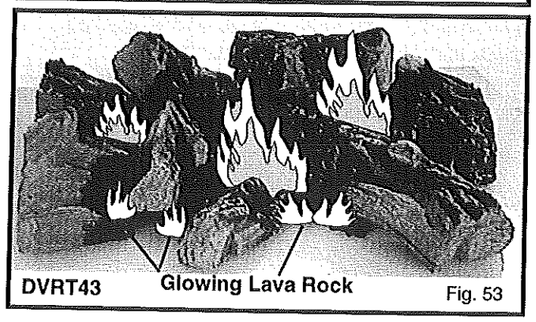


Fig. 53

NOTE: Glowing Lava Rock for DVRT36, DVRT39, and DVRT43 is only allowed to be positioned at the front area (radiant portion) of the burner housing assembly.

STEP 5
Guide the venting through the vent hole as you place the appliance in its installed position. Guide the 4" (100 mm) and 7" (175 mm) collars of the vent termination into the outer ends of the venting. Do not force the termination. If the vent pipes do not align with the termination remove and realign the venting at the appliance flue collars (Fig. 24). Attach the termination to the wall as outlined in the instruction sheet supplied with the termination.

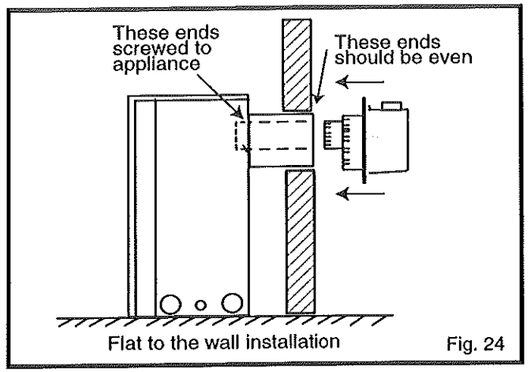


Fig. 24

VERTICAL SIDEWALL APPLICATIONS

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The Vent Graph, showing the relationship between vertical and horizontal side wall venting, will help to determine the various dimensions allowable.

Minimum clearance between vent pipes and combustible materials is one 1" (25mm) on top, bottom and sides unless otherwise noted.

When vent termination exits through foundations less than 20" (508mm) below siding outcrop, the vent pipe must flush up with the siding.

It is best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the outer wall.

Horizontal plane means no vertical rise exists on this portion of the vent assembly.

When installing the appliance as a rear vent unit the 90˚ or 45˚ Transition Elbow attached directly to the rear of the unit is NOT INCLUDED in the following criteria and calculations, and unless specifically mentioned should be ignored when calculating venting layouts.

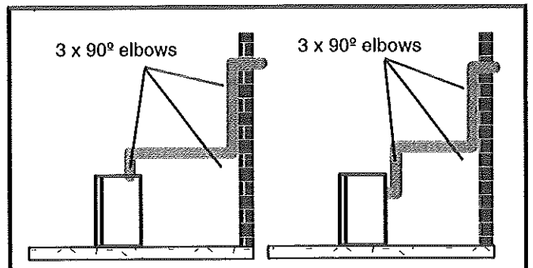


Fig. 25

- The maximum number of 90˚ elbows per side wall installation is three (3), Fig. 25.
- If a 90˚ elbow is fitted directly on top of the fireplace flange the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm), Fig. 26.

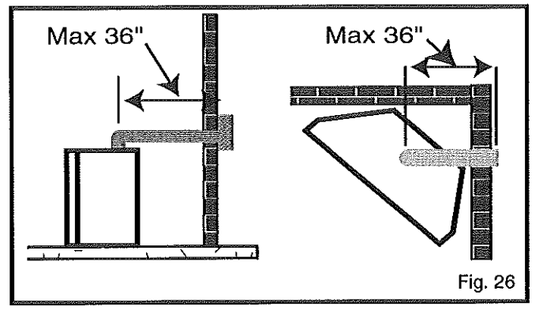


Fig. 26

- If a 90˚ elbow is used in the horizontal vent run (level height maintained) the maixmum horizontal vent length is reduced by 36" (914 mm), Fig. 27a&b. This does not apply if the 90˚ elbows are used to increase or redirect a vertical rise (Fig. 25).

Example: According to the vent graph (page 15) the maximum horizontal vent length in a system with a 7.5' vertical rise is 20' (6m) and if a 90˚ elbow is required in the horizontal vent it must be reduced to 17' (5.2 m).

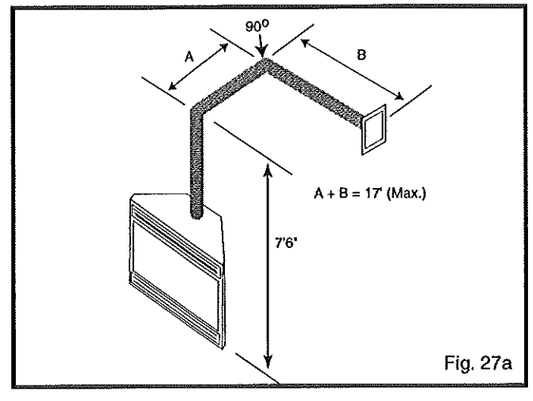


Fig. 27a

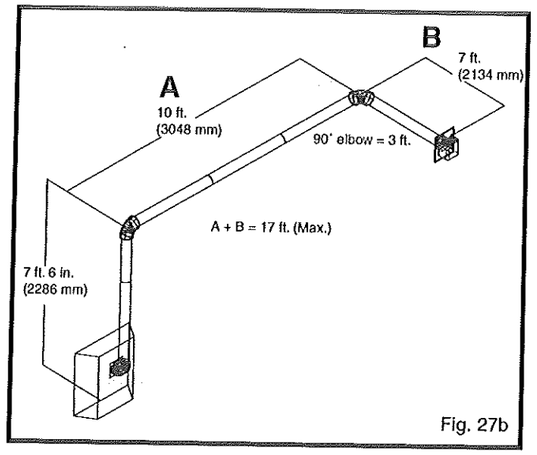


Fig. 27b

In Fig. 27a&b Dimension A plus B must not be greater than 17' (5.2m).

- The maximum number of 45° elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (45 cm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270° (Fig. 28).

Example:

Elbow 1	=	90°
Elbow 2	=	45°
Elbow 3	=	45°
Elbow 4	=	90°
Total angular variation	=	**270°**

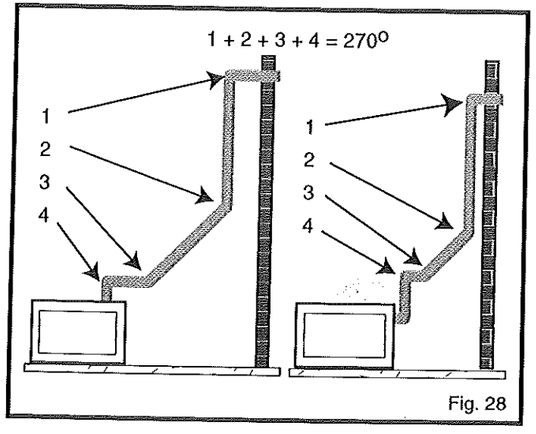


Fig. 28

VERTICAL SIDEWALL INSTALLATIONS

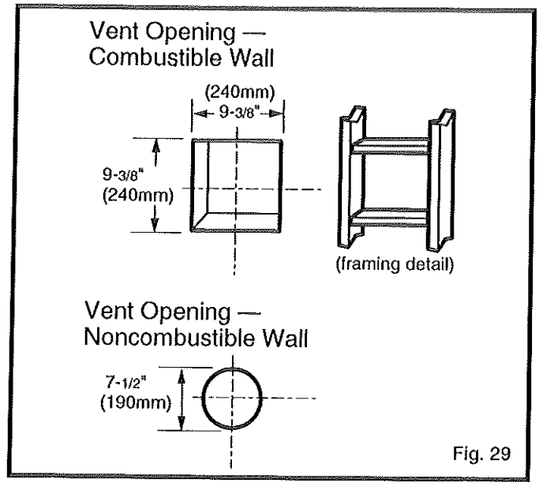


Fig. 29

STEP 1
Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or non-combustible, cut opening to size (Fig. 29). (For combustible walls first frame in opening (Fig. 29).

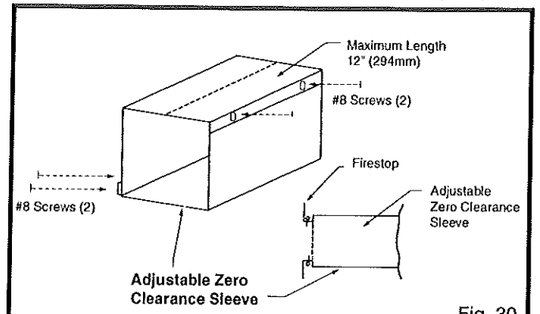


Fig. 30

Zero clearance sleeve is only required for combustible walls.

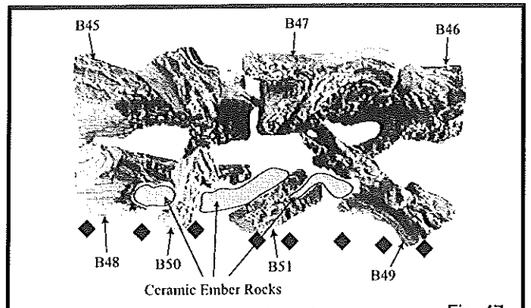
COMBUSTIBLE WALLS: Cut a 9-3/8"H x 9-3/8" W (240 mm x 240 mm) hole through the exterior wall and frame as shown (Fig.29).
NON-COMBUSTIBLE WALLS: Hole opening must be 7.5" (190 mm) in diameter.

STEP 2
Measure wall thickness and cut zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve and attach to firestop with #8 sheet metal screws (supplied). Install firestop assembly (Fig. 30).

the burner housing. The 2 holes in the base of the log located over the 2 studs on the burner housing bracket.

6. Install the right front log (B49) on the right front corner of the burner housing assembly. The notch in the outer end of the log locates against the outermost tine of the front grate.
7. Install the right rear top log (B47). This log sits on top of the right rear log. It has a rectangular hole on the underside that locates over the rectangular lug on the lower log.
8. Install the left front cross-over log (B50). This log is located over the round knob on the top of the left rear log and lays across the cut-out on the front left log.
9. Install the center front log (B51). The hole in the base of this log located over the stud attached to the front log grate.
10. Scatter the Ceramic Ember Rocks (Pt. #57897) over the burner housing assembly in the area forward of the front logs, see shaded areas in Fig. 47.
11. Scatter the lava rock (Pt. #10001454) around the base of the firebox area. Do not place any of this material on the burner housing assembly.

Do not mix up the lava rock materials. The lava rock from the package labelled 10001454 must not be placed on the burner housing assembly.



DVRT43 Log Set
Fig. 47

FLAME & TEMPERATURE ADJUSTMENT

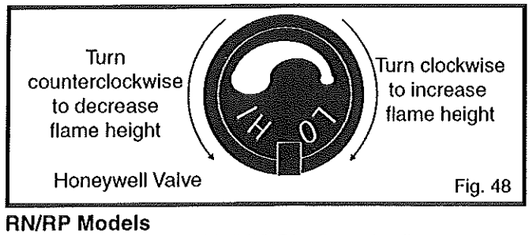


Fig. 48

RN/RP Models
For units equipped with 'HI/LO' valves the flame adjustment is accomplished by rotating the 'HI/LO' adjustments knob located near the center of the gas control valve (Figs. 48 & 49).

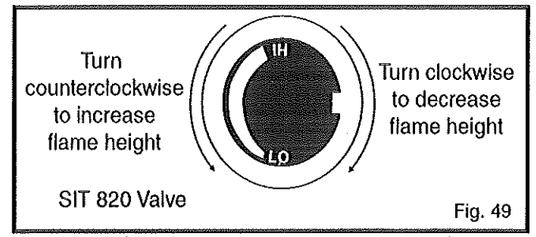


Fig. 49

FLAME CHARACTERISTICS

It is important to periodically perform a visual check of the pilot and burner flames. Compare them to the pictorials illustrated below (Figs. 50, 51, 52 & 53). If the flame patterns appear abnormal contact a qualified service provider for service and adjustment.

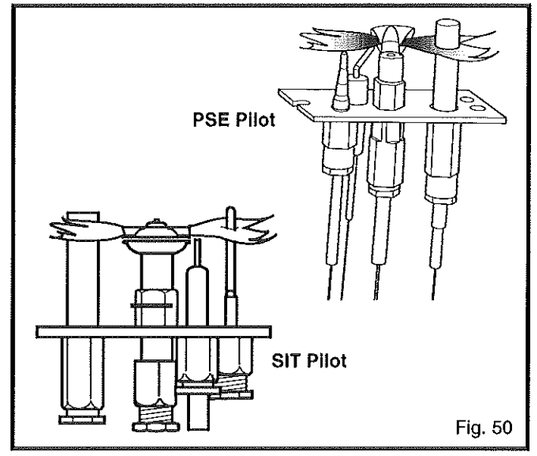
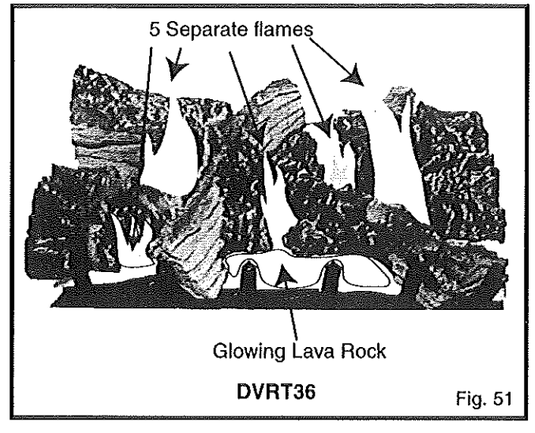


Fig. 50



DVRT36
Fig. 51

INSTALLATION OF LOGS & LAVA ROCK

Unpack the logs from their shipping box.
Remove each log from its wrapping material.

Dispose of the plastic bags and wrapping in a safe manner. Keep the logs and plastic bags away from children.

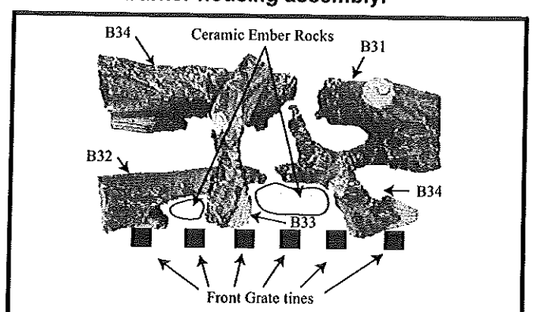
Take care handling the logs as the material is fragile. The individual logs can be identified by the number cast into the underside of each log.

DVRT36

Refer to Fig. 45

1. Remove the top louvre assembly.
2. Remove the window frame assembly.
3. Fit the **left-rear log (B34)** onto the left side of the rear log support. The two (2) holes in the log locate on the 2 studs of the support.
4. Fit the **right-rear log (B31)** onto the right side of the support. The 2 holes in the log locate over the 2 studs of the support.
5. Fit the **left-front log (B32)** onto the support bracket over the burner housing. Again the 2 holes in the log locate on the 2 studs on the bracket.
6. Place the **left-top log (B33)** across the left front and rear logs (Fig. 45). The hole under the end of this log locates over the knob on the left rear log. The forward end of log B33 rests in the cutout in the left front log.
7. Place the **right front log (B34)** in position by resting the 'heal' of the log between the outside and first prong of the front grate and laying the log down in the cutout of the right rear log (Fig. 45).
8. Scatter the Ceramic Ember Rocks **(Pt #57897)** over the burner housing assembly in the area forward of the front logs. See shaded areas in Fig. 45.
9. Scatter the lava rock (Pt # 10001454) around the base of the firebox area. Do not place any of this material on the burner housing assembly.

Do not mix up the lava rock materials. The lava rock from the package labelled 10001454 must not be placed on the burner housing assembly.



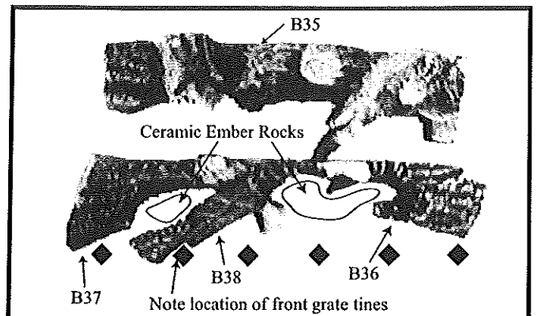
DVRT36 Log Set Fig. 45

DVRT39

Refer to Fig. 46

1. Remove the top louvre assembly
2. Remove the window frame assembly
3. Fit the **rear log (B35)** onto the rear log support. The two (2) holes in the log locate on the 2 studs on the support.
4. Fit the **right-front log (B36)** onto support bracket over the right side of the burner housing assembly. The 2 holes in the log locate over the 2 studs of the bracket.
5. Fit the **left-front log (B37)** onto the support bracket over the left side of the burner housing. Again the 2 holes in the log locate on the 2 studs on the bracket.
6. Place the **left-top log (B38)** in place. The notch along the lower front edge sits against the front grate (Fig. 46) and the top of the log sits in the cutout on the inner end of log B37.
7. Scatter the Ceramic Ember Rocks **(Pt #57897)** over the burner housing assembly in the areas between the logs. See shaded areas in Fig. 46.
9. Scatter the lava rock (Pt # 10001454) around the base of the firebox area. Do not place any of this material on the burner housing assembly.

Do not mix up the lava rock materials. The lava rock from the package labelled 10001454 must not be placed on the burner housing assembly.



DVRT39 Log Set (viewed from the top) Fig. 46

DVRT43

Refer to Fig. 47

1. Remove the top louvre assembly.
2. Remove the window frame assembly.
3. Install the **right-rear log (B46)** onto the rear log support. The two (2) holes in the base of the log locate on the 2 studs in the log support.
4. Install the **left-rear log (B45)** on the rear log support. The 2 holes in the base of the log locate on the 2 studs in the log support.
5. Install the left front log **(B48)** on the left side of

STEP 3

Place fireplace into position. Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening (Fig. 31).

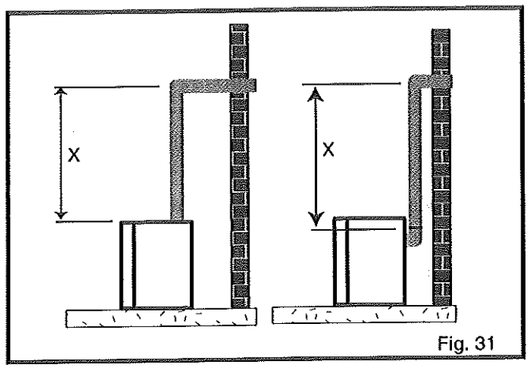


Fig. 31

STEP 4

Apply a bead of silicone to the inner and outer flue collars of the fireplace and using appropriate length of pipe section(s) attach to fireplace with three (3) screws. Follow with the installation of the inner and outer elbow, again secure joints as described in the 'Connecting Vent Pipe' section.

STEP 5

Measure the horizontal length requirement including a 2" (50 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (50 mm) (or the distance required if installing a second 90° elbow)(Fig. 32).

Always install horizontal venting on a level plane.

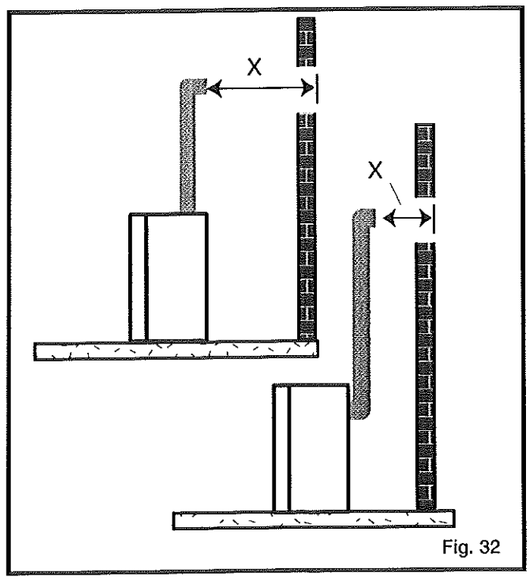


Fig. 32

STEP 6

Use appropriate length of pipe sections - telescopic or fixed - and install. The sections which go through the wall are packaged with the starter kit, and can be cut to suit if necessary.

Sealing vent pipe and firestop gaps with high temperature sealant will restrict cold air being drawn in around fireplace.

STEP 7

Apply high temperature sealant to 4" (100 mm) and 7" (175 mm) collars or the termination one inch away from crimped end. Guide the vent terminations 4" and 7" collars into their respective vent pipes. double check that the vent pipes overlap the collars by 2" (50 mm). Secure the termination to the wall with screws provided and caulk around the wall plate to weatherproof. As an alternative to screwing the termination directly to the wall, you may also use expanding plugs or an approved exterior construction adhesive. You may also attach the termination with screws through the inner body into the 4" vent pipe, however for this method you must extend the 4" pipe approximately 6" (150 mm) beyond the outer face of the wall.

Support horizontal pipes every 3' (91 cm) with metal pipe straps.

BELOW GRADE INSTALLATIONS

When it is not possible to meet the required vent terminal clearances of 12 " (305 mm) above grade level, a starter vent kit is recommended. It allows installation depth down to 7 " (178 mm) below grade level. The 7 " (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure that sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

If installing a snorkel, a minimum 24" (610 mm) vertical rise is necessary. The maximum horizontal run with the 24" vertical pipe is 36" (915 mm). This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24" (610mm).

1. Establish vent hole through the wall (Fig. 29).
2. Remove soil to a depth of approximately 16" (406 mm) below base of snorkel. Install drain pipe. Install window well (not supplied). Refill hole with 12" (305 mm) of coarse gravel leaving a clearance of approximately 4" (100 mm) below snorkel (Fig. 33).

3 Install vent system.
4 Ensure a watertight seal is made around the vent pipe coming through the wall.
5 Apply high temperature sealant caulking (supplied) around the 4" and 7" snorkel collars.
6 Slide the snorkel into the vent pipes and secure to the wall.
7 Level the soil so as to maintain a 4" clearance (100 mm) below snorkel (Fig. 33).

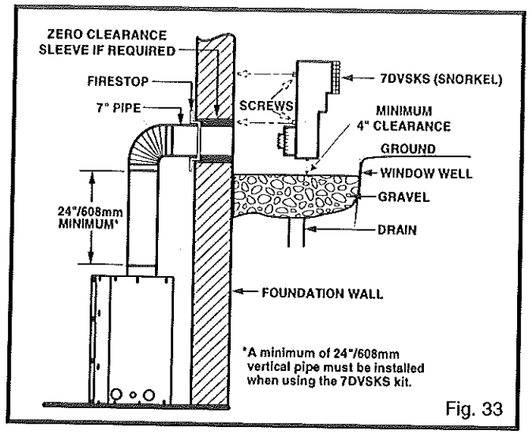


Fig. 33

DO NOT BACK FILL AROUND SNORKEL.

A CLEARANCE OF AT LEAST 4" MUST BE MAINTAINED BETWEEN BETWEEN THE SNORKEL AND THE SOIL.

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8 x 1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face (Fig. 34).

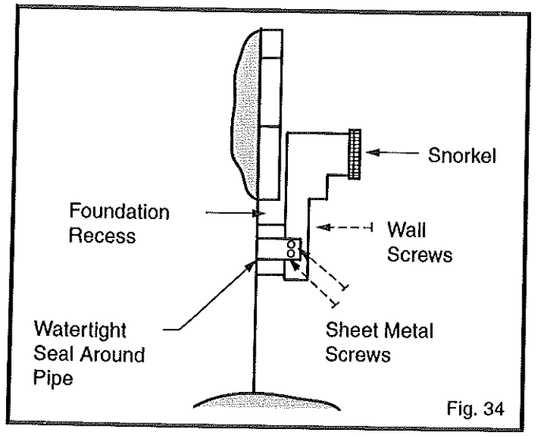


Fig. 34

VERTICAL THROUGH-THE-ROOF APPLACATIONS

This Gas Fireplace has been approved for,

- Vertical installations up to 40' (12m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows (Fig. 35).

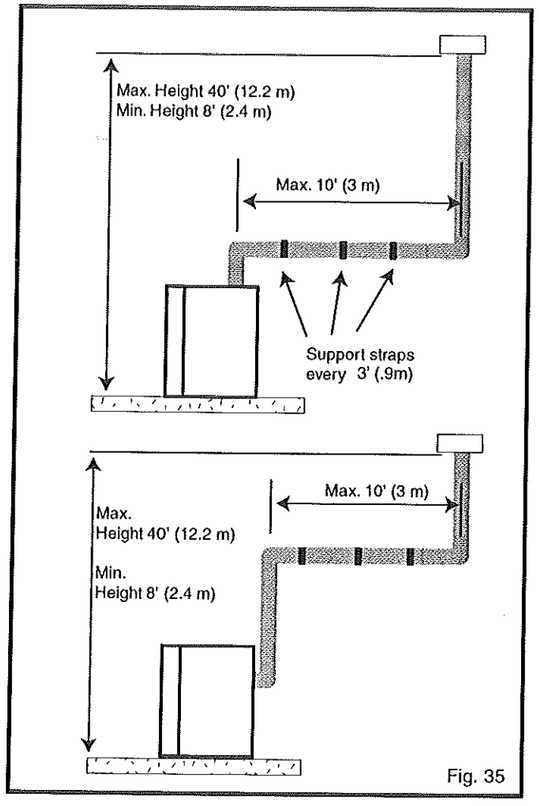


Fig. 35

- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450mm).
  Example: Maximum horizontal length
  No elbows = 10' (3m)
  1x45° elbows = 8.5' (2.6m)
  2x45° elbows = 7' (2.1m)
- A minimum of an 8' (2.5m) vertical rise is required.
- Two sets of 45° elbows offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows (Fig. 36).

OPERATING INSTRUCTIONS

GLASS INFORMATION

Only glass approved by The Vermont Castings, Majestic Products Company should be used on this fireplace.

- The use of any non-approved replacement glass will void all product warranties.
- Care must be taken to avoid breakage of the glass.
- Under no circumstances should this appliance be operated without the front glass in place, or with the glass in a damaged condition.
- Replacement glass (complete with gasket) is available through your Vermont Castings, Majestic Products dealer and should only be installed by a licensed qualified service person.

GENERAL MAINTENANCE

Burner and Burner Compartment
It is important to keep the burner and the burner compartment clean. At least once per year the logs and lava rock/ember material should be removed and the burner compartment vacuumed and wiped out. Remove and replace the logs as per the instructions in this manual.

Always handle the logs with care as they are fragile and may also be hot if the fireplace has been in use.

FK24/FK12 Fan Assembly
The fan unit requires periodic cleaning. At least once per month in the operating season, open the lower louvre panels and wipe or vacuum the area around the fan to remove any build up of dust or lint.

Brass Trim
Clean the brass trim pieces using a soft cloth lightly dampened with lemon oil. Do not use water or household cleaners on any brass components.

LOUVRE REMOVAL

To remove the top louvre panel by lifting the panel up and out from the fireplace (Fig. 43). The lower panel is hinged at the bottom edge and swings down.

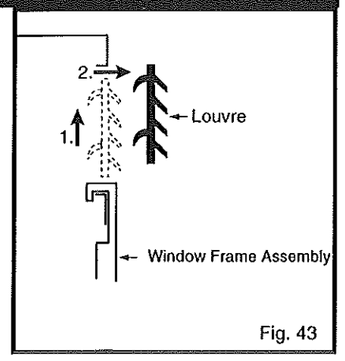


Fig. 43

WINDOW FRAME ASSEMBLY REMOVAL

1. Turn the fireplace OFF (including the pilot).
2. If the unit has been operating, allow time for the components to cool.
3. Remove the top louvre assembly.
4. Open the lower louvre panel.
5. Release the two clamps along lower edge of the frame by pulling down on clamp handles (Fig. 44).
6. Tilt window frame assembly out slightly at the bottom, lift the frame up and away from the fireplace.
7. To replace window frame assembly reverse procedure.

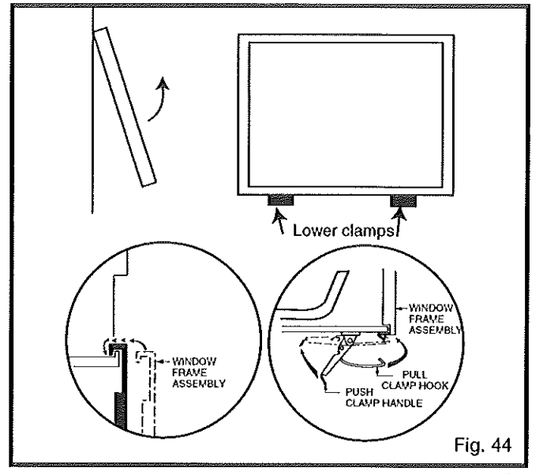


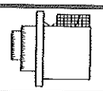
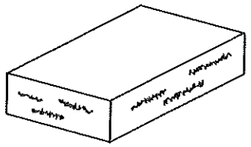
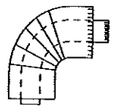
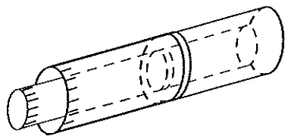
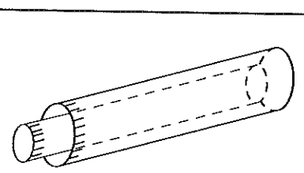
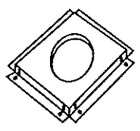
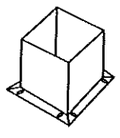
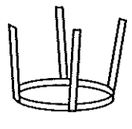
Fig. 44

GLASS CLEANING

It is necessary to periodically clean the glass panel. During start-up condensation, which is normal, forms on the inside of the glass. This condensation causes lint, dust and other airborne particles to cling to glass surface. Also initial paint curing may deposit a slight film on the glass. It is therefore recommended glass be cleaned two or three times with a non-ammonia based household cleaner and warm water (We recommend gas fireplace glass cleaner) within the first few weeks of operation. After the initial cleaning process the glass should be cleaned two or three times during each operating season depending on the environment in the house.

Clean the glass after the first two weeks of operation.

CRIMPED END VENTING COMPONENTS

	7DVRVT - Through the wall Rear Vent Termination
	Starter Kit-Model 7DVSK-Sidewall Venting Starter Kit-Model 7TDVSKV - Vertical Venting for 7DVSKV-A order 1/12 to 6/12 roof pitch for 7DVSKV-B order 7/12 to 12/12 roof pitch for 7DSKV-F order flat roof Starter Kit-Model 7TDVSKS-Snorkel Kit for Below Grade Installation
	45˚ elbow kit 7DVT45 for Vertical Installation Offsets 7DV45 for Rear Vent Application
	90˚ Transition elbow kit 7DVRT90 for Vertical Sidewall Applications or through-the-roof.
	Telescopic vent sections 7DVP610- 6" to 10" adjustable length 7DVP1018- 10" to 18" adjustable length 7DVP1834- 18" to 34" adjustable length 7DVP3466- 34" to 66" adjustable length
	Pipe sections for vertical or horizontal venting Model 7DVP8" - 4 per box Model 7DVP12" - 4 per box Model 7DVP24" - 4 per box Model 7DVP36" Model 7DVP48"
	Firestop Spacer Model 7DVFS
	Attic Insulation Shield Model 7DVAIS
	Vertical/Horizontal Combination Offset Support Model 7DVCS

- 7DVCS supports offsets (Fig. 38). This application will require that you first determine the roof pitch and use the appropriate starter kit. (See Venting Components List)
- The maximum angular variation allowed in the system is 270˚ (Fig. 36).

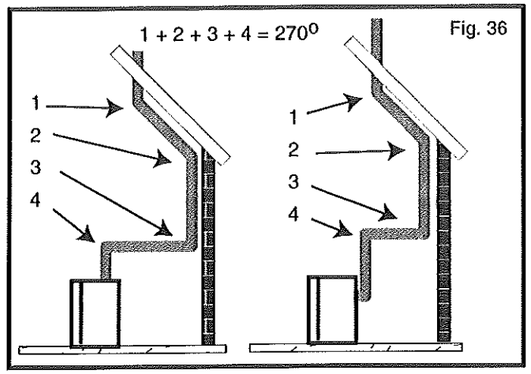


Fig. 36

- The minimum height of the vent above the highest point of penetration through the roof is 2'(610 mm) (Fig. 39). See note 2, page 13.

VERTICAL THROUGH-THE-ROOF INSTALLATION

1. Locate your fireplace.
2. Plumb to center of the (4") flue collar from ceiling above and mark position.
3. Cut opening equal to 9-3/8" x 9-3/8" (240 mm x 240 mm).
4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1 inch clearance to the vent pipe, i.e., the hole must be at least 9-3/8" x 9-3/8" (240 mm x 240 mm).
5. Place fireplace into position.
6. Place firestop(s) #7DVFS or Attic Insulation Shield #7DVAIS into position and secure (Fig. 37).
7. Install roof support (Fig. 38) and roof flashing making sure upper flange is below the shingles (Fig. 40).
8. Install appropriate pipe sections until the venting is above the flashing (Fig. 40).
9. Install storm collar and seal around the pipe.
10. Add additional vent lengths for proper height (Fig. 39).
11. Apply high temperature sealant to 4" and 7" collars of vertical vent termination and install.

If there is a room above ceiling level, fire stop spacer must be installed on both the bottom and the top side of the ceiling joists. If an attic is above ceiling level a 7DVAIS (Attic Insulation Shield) must be installed.

The enlarged ends of the vent section always face downward.

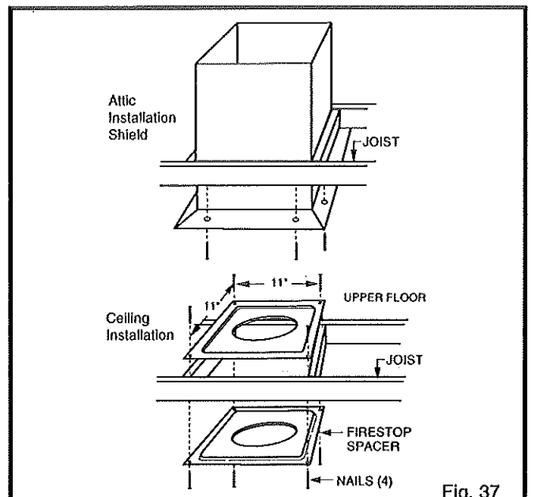
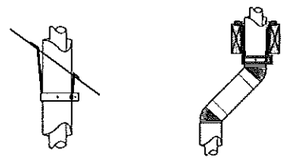


Fig. 37


Typical Roof Support Application

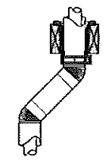

Typical Ceiling Support Application

Fig. 38

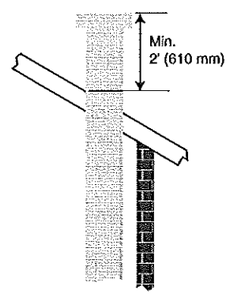


Fig. 39

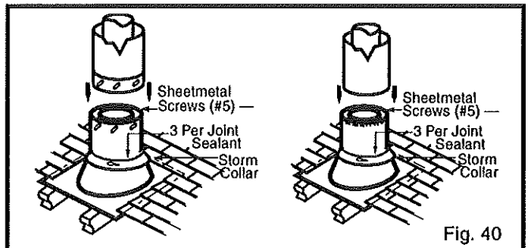


Fig. 40

GRAVITY DUCTING SYSTEM

The Gravity Ducting System is only applicable if installing the DVRT43 Direct Vent Fireplace.

Installation of the **DVRT43** fireplace provides you with an opportunity to heat either rooms on an upper level or adjacent rooms on the same level without the use of a blower. However, with the internal blower installed, there will be some increase in warm air movement to rooms serviced by the gravity duct (Figs. 41-42).

1. Plan the gravity duct run first. Use the following graph to ensure that the installation meets the **Vermont Castings, Majestic Products Company** recommendations. There is a maximum number of three elbows in a run, but the run must never go in a downward direction as this can trap heat in the gravity vent system. Be aware when designing the ducting system that elbows will restrict airflow. Minimize the use of elbows in any installation.
2. It is recommended that the gravity ducting system be installed so that the grills exit at the same vertical level. If the gravity venting system is installed such that the ducting exits at different levels, a chimney effect may occur resulting in uneven heat distribution.

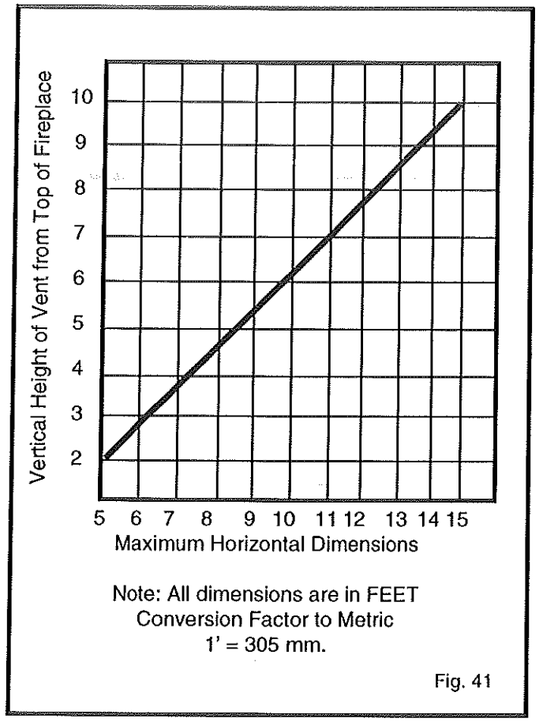
Do not discharge directly into the wall or inside an enclosure.

3. Materials needed for the gravity ducting installation.
   2 x 5" dia. duct to grille connector boots
   2 x Wall Outlet grilles
   5" dia. rigid ("C" vent) or 5" dia. flexible metal ducting
   5" dia. elbows (maximum of 3 per run).
4. Remove the gravity duct plugs from the top of the **DVRT43** by taking out the two (2) screws around the perimeter of each plug, and then removing the plugs from the fireplace.
   Note: Do not remove the center screw from the plugs.
5. Install 5" rigid (C-Vent) or flexible ducting on the DVRT43 and run the ducting observing the limitations shown in the graph. Be aware that flexible ducting is more restrictive to air flow than rigid ducting.
6. Secure all joints with three (3) sheet metal screws. Seal all joints with foil faced aluminium tape to prevent heat loss and maintain maximum air flow.
7. Ensure that the following clearances are maintained when installing the DVRT43 Gravity Ducting System.

CLEARANCE TO COMBUSTIBLES

Clearance between ducting & combustibles - 1"
Clearance between grille adapter & combustibles - 0"

Never allow a downward slope in any section of the ducting.



Note: All dimensions are in FEET
Conversion Factor to Metric
1' = 305 mm.

Fig. 41

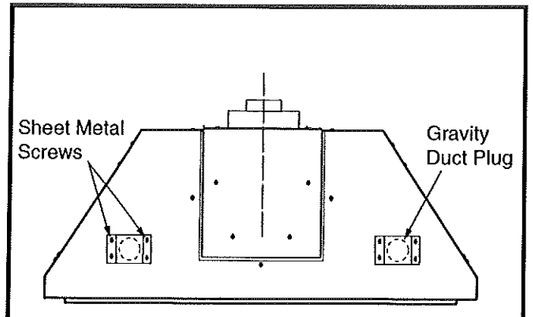
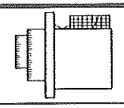
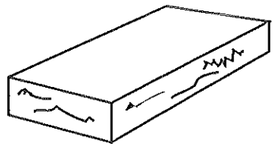
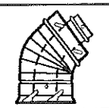
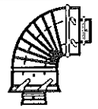
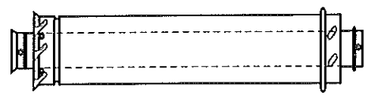
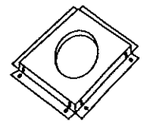
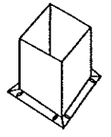
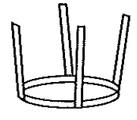


Fig. 42

TWIST LOCK VENTING COMPONENTS

	7DVRVT - Through the wall Rear Vent Termination
	Starter Kit-Model 7TDVSK-Sidewall Venting Starter Kit-Model 7TDVSKV-Vertical Venting for 7TDVSKV-A order 1/12 to 6/12 roof pitch for 7TDVSKV-B order 7/12 to 12/12 roof pitch for 7TDSKV-F order flat roof Starter Kit-Model 7TDVSKS-Snorkel Kit for Below Grade Installation
	45° elbow kit 7TDVT45 for Vertical Installation Offsets 7TDR45 for Rear Vent Application
	90° Transition elbow kit 7TDVRT90 for Vertical Sidewall Applications or through-the-roof.
	Telescopic vent sections 7TDVP1218 -12" to 18" adjustible length 7TDVP3564 -35" to 64" adjustible length
	Pipe sections for vertical or horizontal venting Model 7TDVP8" 4 per box Model 7TDVP12" 4 per box Model 7TDVP24" 4 per box Model 7TDVP36" Model 7TDVP48"
	Firestop Spacer Model 7DVFS
	Attic Insulation Shield Model 7DVAIS
	Vertical/Horizontal Combination Offset Support Model 7DVC