magic-pak®

INSTALLATION AND MAINTENANCE INSTRUCTIONS

MGE4 Series

Gas Heating with Electric Cooling Unit

Save these instructions for future reference

⚠

This is a safety alert symbol and should never be ignored. When you see this symbol on labels or in manuals, be alert to the potential for personal injury or death.

Installation

⚠ WARNING

These units are not approved for mobile home applications. Such use could result in property damage, personal injury, or death.

General

These instructions explain the recommended method of installation of the MGE4 gas heating with electric cooling unit and associated electrical wiring.

The MGE4 series are self-contained, gas-fired heating with electric cooling models with optional CLIMATE GUARD™ coated coils. The unit design has been certified by Intertek Testing Services for compliance with the latest edition of the American National Standard – ANSI Z21.47/National Standard of Canada – CAN/CGA-2.3 for direct vent central furnaces. The MGE4 models are certified to be in compliance with the latest edition of A.R.I. Standard 390. All models are design certified for heating operation when fired with natural or propane gas. Units must be equipped to use the fuel type provided in the field.

Table of Contents

⚠ WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer or service agency.

Manufactured By
Allied Air Enterprises LLC
A Lennox International Inc. Company
215 Metropolitan Drive
West Columbia, SC 29170

(P) 507858-01

⚠ CAUTION

The installation of this appliance must conform to the requirements of the National Fire Protection Association; the National Electrical Code, ANSI/NFPA No. 70 (latest edition) in the United States; the Canadian Electrical Code Part 1, CSA 22.1 (latest edition) in Canada; and any state or provincial laws or local ordinances. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

These instructions, and any instructions packaged with mating components and/or accessories, should be carefully read prior to beginning installation. Note particularly any **CAUTIONS** or **WARNINGS** in these instructions and all labels on the units.

These instructions are intended as a general guide only, for use by qualified personnel and do not supersede any national or local codes in any way. Compliance with all local, state, provincial, or national codes pertaining to this type of equipment should be determined prior to installation.

Units that comply with the maximum cabinet leakage 2% of rated airflow requirements of ANSI/ASHRAE 193 (complies with IECC 2015) are identified on the rating plate.

⚠ WARNING

In the State of Massachusetts:

This product must be installed by a licensed Plumber or Gas Fitter. When flexible connectors are used, the maximum length shall not exceed 36". When lever-type gas shutoffs are used, they shall be T-handle type.

⚠ WARNING

Because the MGE unit is installed in a confined space, the return air must be handled by ducts that are sealed to the unit casing and terminate outside the space containing the unit. Even a small leak at the return air duct connection can cause a potentially dangerous negative pressure condition.

⚠ WARNING

For your safety, do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. Such actions could result in property damage, personal injury, or death.

⚠ WARNING

Installation and servicing of air conditioning equipment can be hazardous due to internal refrigerant pressure and live electrical components. Only trained and qualified service personnel should install or service this equipment. Installation and service performed by unqualified persons can result in property damage, personal injury, or death.

⚠ WARNING

The unit must be installed with approved wall sleeve and grille accessories for safe operation. Improper installations could result in property damage, personal injury, or death.

Inspection

Upon receipt of equipment, carefully inspect it for possible shipping damage. If damage is found, it should be noted on the carrier's freight bill. Take special care to examine the unit inside the carton if the carton is damaged. File a claim with the transportation company. If any damages are discovered and reported to the carrier do not install the unit, as claim may be denied.

Check the unit rating plate to confirm specifications are as ordered.

Limitations

The unit should be installed in accordance with all national and local safety codes. Limitations of the unit and appropriate accessories must also be observed.

The outdoor fan is designed to operate against no more than .10" w.c. static pressure.

Minimum and maximum operation conditions must be observed to assure maximum system performance with minimum service required. Refer to Table 1 for the application limitations of the unit.

Outdoor Ambient Air Temperature °F		
Minimum DB	Maximum DB	
Cool	Cool	Heat
65	115	75

Indoor Ambient Air Temperature °F			
Minimum		Maximum	
DB/WB	DB	DB/WB	DB
Cool	Heat	Cool	Heat
62/57	50	90/72	80

DB = Dry Bulb

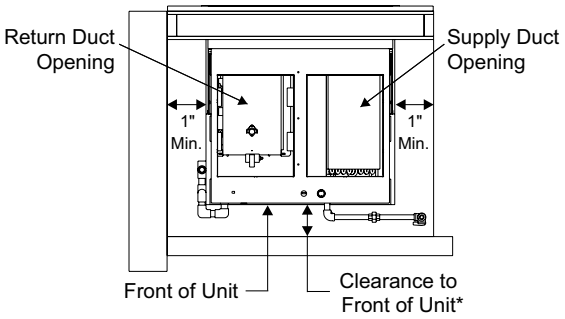
WB = Wet Bulb

Table 1. Application Limitations

Clearance to combustible materials is 0” at the side, top, and front of plenum. If accessibility clearances are greater than clearances to combustibles, accessibility clearances take precedence.

The front of the unit must be accessible for service. If the unit is enclosed, providing a door or access panel opposite the front of the unit is the preferred method of providing access. The door or access panel must be at least 30” wide (centered on the unit) and as tall as the unit.

Top View

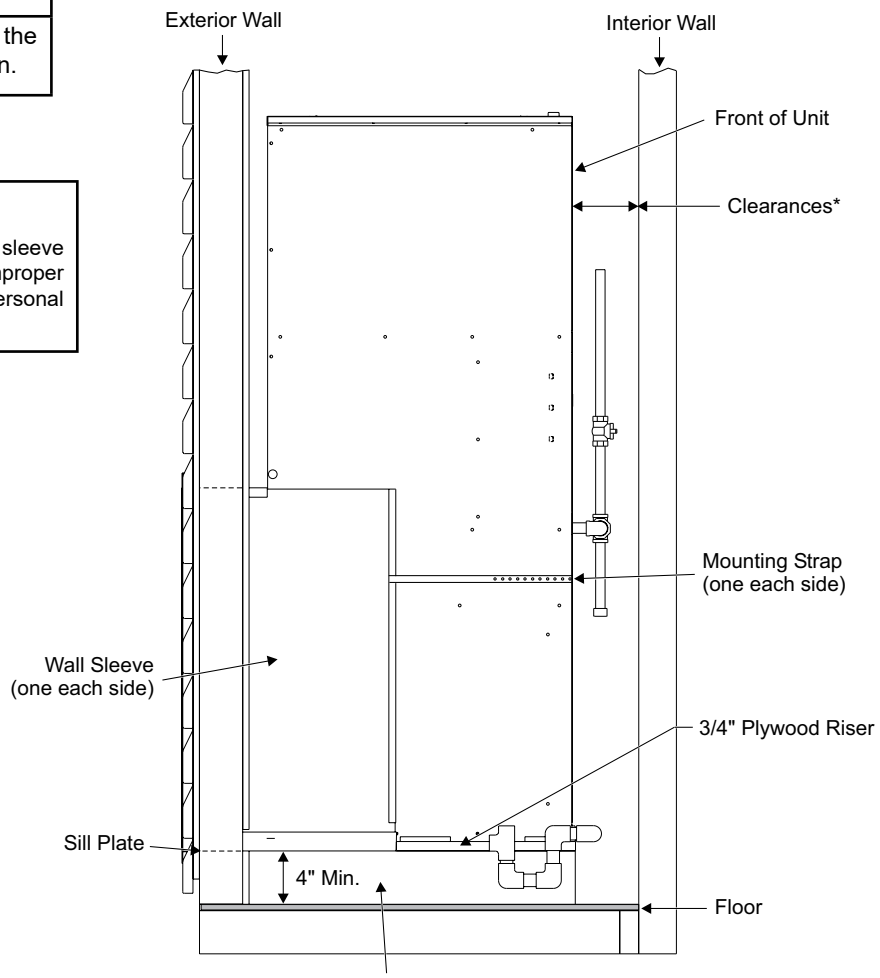


Minimum Unit Clearance	
Front*	**Sides**
1”	1”
* Added clearance must be provided for the gas supply line and drain trap installation.	

IMPORTANT

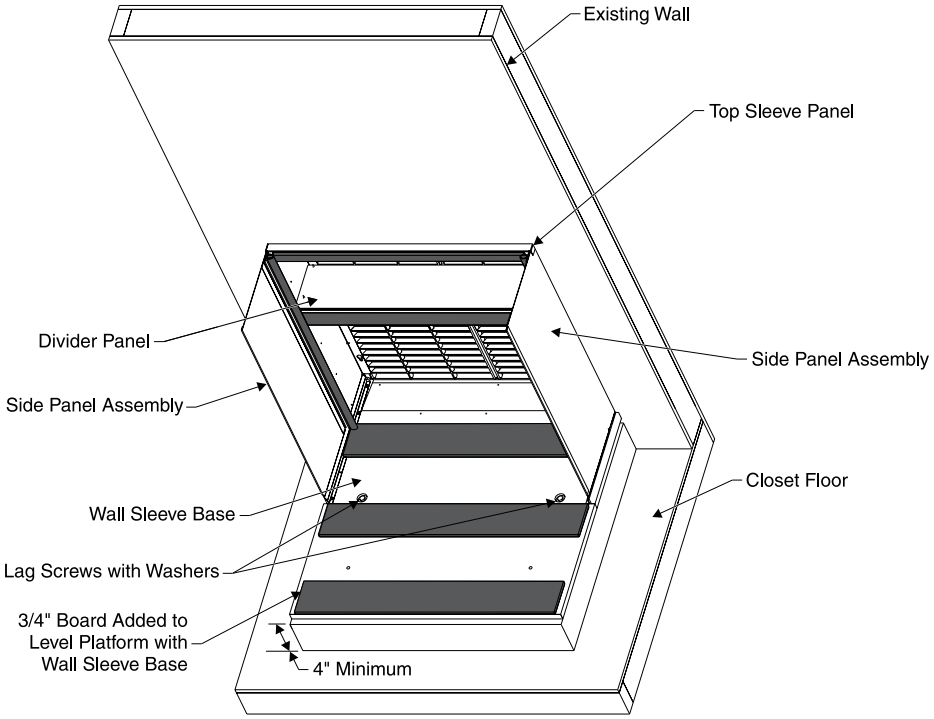
The unit must be installed with approved wall sleeve and grille accessories for safe operation. Improper installations could result in property damage, personal injury, or death.

Side View



Platform (field supplied) must be level with sill plate of hole in exterior wall. Unit must be supported by platform.

Figure 1. Minimum Clearances



NOTE: Platform must be constructed so that it is level with sill plate of wall opening.

Figure 2. Wall Sleeve and Louver Kit Installed

Location

> **⚠ WARNING**
>
> The unit must be installed with approved wall sleeve and grille accessories for safe operation. Improper installations could result in property damage, personal injury, or death.

For information on wall sleeves and grille accessories, see the **Accessories** section.

The design is certified for up-to-the wall (inside wall) installation only. The interior portions of the unit may be surrounded by a closet with clearances to combustible material held to 0” at the sides, top, and front of the plenum. The front and sides of the unit require 1” clearance to combustible materials. All servicing and cleaning of the unit can be performed from the front. If installed in a closet or utility room, provide 25” clearance in front for service if the door to the room is not in line with the front of the unit (see Figure 1). **Accessibility clearances must take precedence over fire protection clearances.**

There is no minimum clearance required on locating the unit to an interior corner of a building.

If the unit is installed in a residential garage, it must be located or protected to avoid physical damage by vehicles. The unit must be installed so that no electrical components are exposed to water.

> **⚠ CAUTION**
>
> This unit must be installed level to allow for proper drainage of the unit base pan and indoor drain pan.

Wall Sleeve and Louver Grille Installation

Refer to installation instructions included with the wall sleeve kit and the louver grille kit along with Figure 2 for guidance in assembling and installing the wall sleeve and louver grille.

> **⚠ CAUTION**
>
> The sleeve is not intended as the sole support for the unit. An additional support must be provided for adequate support (see Figure 2).

Venting

The venting system is an integral part of the appliance. The venting system must not be modified in any manner other than what is specified in these instructions.

This appliance should be installed in a location such that the vent outlet is located in the following manner:

1. Distances to windows that open, building openings, or public walkways should be consistent with the National Fuel Gas Code Z223.1 or CAN/CGA-B149.1 & .2.

2. For U.S. installations, the vent system shall terminate a minimum horizontal clearance of 4' from electric meters, regulators, and relief equipment. For installations in Canada, refer to the current CAN/CGA-B149.1 & .2 or with the authorities having local jurisdiction.
3. Flue products from properly adjusted and maintained units, will not cause degradation to building materials.

The unit contains an exhaust blower. The blower draws the combustion products out of the heat exchanger together with dilution air and forces the mixture from the unit to the outside. No special provisions are required for supplying air for combustion, nor is a chimney required.

The vent outlet must be extended (see Vent Pipe Installation).

The venting system is designed for proper operation under all weather conditions and for winds up to 40 miles per hour, and should be unobstructed for a minimum of 2 feet.

Existing Venting Systems

When an existing furnace is removed and replaced, the MGE4 unit venting system may no longer be sized to properly vent the attached appliances. An improperly sized venting system can result in spillage of flue products into the living space, the formation of condensate, leakage, etc. Refer to the **WARNING** box in the next column for proper test procedure.

Vent Pipe Installation

Determining the length of the vent pipe extension is dependent upon which wall sleeve accessory is installed at the job site for each particular installation.

⚠ CAUTION

For proper operation, the vent length must be correct for the installation. The unit may not operate correctly with inadequate vent length.

1. Access vent pipe at the side of the unit that will face the outdoors.
2. The vent pipe and vent pipe extension is located to the right of the outdoor fan (see Figure 3).

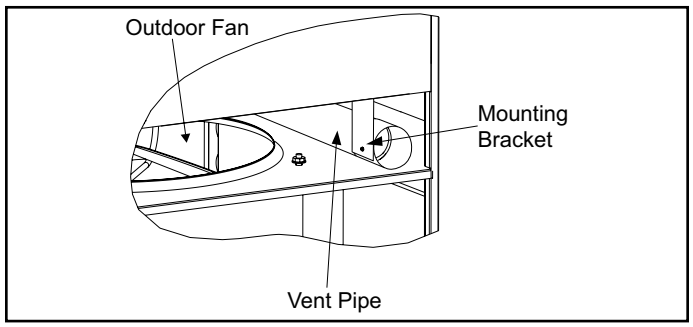


Figure 3. Locating Vent Pipe and Extension

3. Remove the 5/16" screw used to mount the vent pipe assembly to the mounting bracket. Keep this screw.

⚠ CAUTION

Carbon Monoxide Poisoning Hazard

Failure to follow the steps outlined below for each appliance connected to the venting system being placed into operation could result in carbon monoxide poisoning or death.

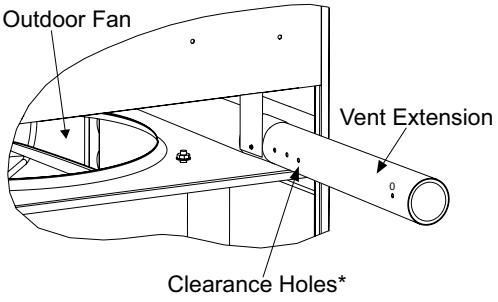
The following steps shall be followed for each appliance connected to the venting system being placed into operation, while all other appliances connected to the common venting system are not in operation:

1. Seal any unused openings in the common venting system.
2. Visually inspect the venting system for proper size and horizontal pitch, as required in the National Fuel Gas Code, ANSI Z223.1/NFPA 54 (latest edition) or the CSA B149.1, Natural Gas and Propane Installation Codes and these instructions. Determine that there is no blockage or restriction, leakage, corrosion, or other deficiencies which could cause an unsafe condition.
3. As far as practical, close all building doors and windows between the space in which the appliance(s) connected to the venting system are located and other spaces in the building.
4. Close fireplace dampers.
5. Turn on clothes dryers and any appliance not connected to the venting system. Turn on any exhaust fans, such as range hoods and bathroom exhausts, so they are operating at maximum speed. Do not operate a summer exhaust fan.
6. Follow the lighting instructions. Place the unit being inspected in operation. Adjust the thermostat so appliance is operating continuously.
7. Test for spillage from draft hood equipped appliances at the draft hood relief opening after 5 minutes of main burner operation. Use the flame of a match or candle.
8. If improper venting is observed during any of the above tests, the venting system must be corrected in accordance with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 (latest edition) and/or the CSA B149.1, Natural Gas and Propane Installation Codes.
9. After it has been determined that each appliance remaining connected to the venting system properly vents when tested as outlined above, return doors, windows, exhaust fans, fireplace dampers, and any other gas-fired burning appliance to their previous conditions of use.

4. Five holes have been drilled into the vent extension (see Figure 4). Four of those holes are provided so that the vent can be extended the necessary length required for the installation. The wall sleeve that is installed determines which of these clearance holes should be used. Using Table 2 and Figure 4, determine which clearance hole should be used to position the vent extension properly. Slide the vent extension outward and line up the correct clearance hole on the vent extension with the hole in the vent pipe and the hole in the mounting bracket.
5. Re-install the 5/16” screw that was removed in Step 3. Thread the screw first through the clearance hole in the mounting bracket, the proper clearance hole in the vent extension, and into the engagement hole in the vent pipe. The length of the vent pipe extension that extends out of the cabinet should be as shown in Table 2.

Wall Sleeve Used	Hole #	Approximate Length the Vent Exacts from the Cabinet
ASLEEVE6-1, 2, 5	4	5.5 in.
ASLEEVE8-1, 2, 5	3	7.5 in.
ASLEEVE10-1, 2, 5	2	9.5 in.
ASLEEVE12-1, 2, 5	1	11.5 in.

Table 2. Determining Hole Setting



* The clearance holes are not marked on the actual vent extension.

Figure 4. Positioning Vent Pipe Extension

6. Position the vent pipe at the center of the steel insert when using poly louvers. The vent pipe should have a slight downward slope to allow any moisture to drain away from the unit as well as being centered on the metal grate.

Installing and Securing Unit to Wall Sleeve

Before installing and securing the unit to the wall sleeve, make sure that the proper louver kit is installed. Due to the high temperatures of the combustion products released from the gas vent, MGE gas package units require the use of either an aluminum louver kit or special MGE polypropylene louver kit (see the **Accessories** section).

1. Make sure the gaskets attached to the sleeve are not damaged.
2. Verify divider panel is positioned properly. Refer to Table 3 for wall sleeves that allow for multiple divider panel locations.
3. Place the MGE unit into the wall sleeve. Lift leading end of unit and walk unit onto the sleeve. Once in the sleeve, lower the unit into position. This prevents damage to the base pads. Assure that the unit is level and completely seated against the gaskets on the wall sleeve. The unit must be supported by a field supplied base platform.

	ASLEEVE**-2	ASLEEVE**-5	Orientation of Flange
Model	Two positions	Three positions	
MGE4-11- 09, 12	Lower	Lower	Down
MGE4-11- 18, 24			Up
MGE4-11- 30	Upper	Middle	
MGE4-11- 36	NA	Upper	

Table 3.

4. Use the two installation brackets to secure the unit to the wall sleeve (see Figure 5). The units are shipped with the brackets placed loose on the unit top panel, beneath packaging. Hook each bracket into the front edge of the wall sleeve side. Position the bracket so it can be bent around the front corner of the unit. Remove one of the two screws in that position on the unit. Line up one of the holes in the installation bracket with the screw hole and attach the bracket to the unit with that screw. Make sure to fasten tight enough that the seal is maintained. Trim off excess bracket if applicable.
5. Inspect the fit up of the unit to the wall sleeve. Verify that the gaskets of the wall sleeve make a complete seal to the unit paying particular attention to top and bottom corners of unit to sleeve seal. Caulk if needed.

Ductwork

Ductwork should be designed and sized according to the methods in Manual Q of the Air Conditioning Contractors of America (ACCA).

Check unit air supply outlet for debris before making ductwork connections.

It is recommended that supply and return duct connections at the unit be made with flexible joints. If flexible ducts are used, a 6” sheet metal starter collar is required.

The supply and return air duct systems should be designed for the CFM and static requirements of the job (see Table 4). **They should not be sized to match the dimensions of the duct connections on the unit.** The return duct should be sealed to the unit casing and terminate outside the space containing the unit.

⚠ CAUTION

Do not screw into the indoor coil.

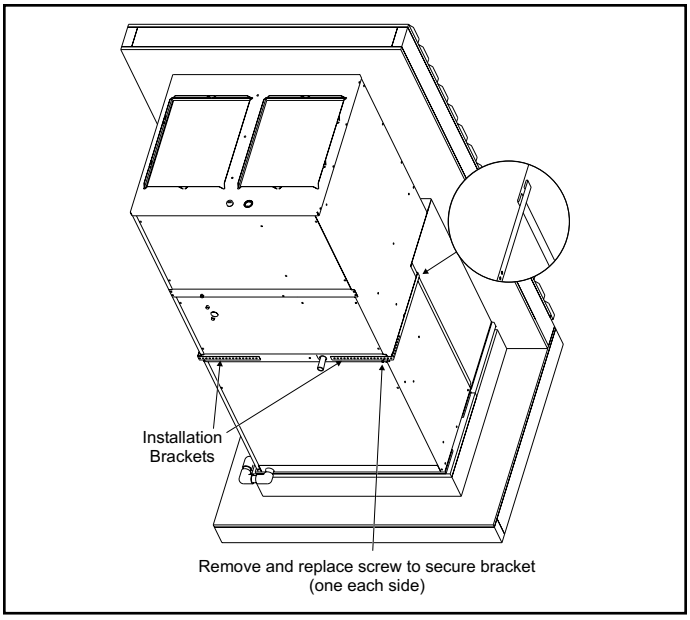


Figure 5. Securing Unit

	Model	Gas Heating		Indoor Blower Speed	0.1 “w.c.			0.2 “w.c.			0.3 “w.c.			0.4 “w.c.			0.5 “w.c.		
		Rise Range (F°)	Mid Rise (F°)		SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise
3/4 Ton	15MGE4-11-091*P	15 - 45	30	TAP 1 (FAN)	430	46	---	370	50	---	320	53	---	265	57	---	200	62	---
				TAP 2 (COOL)†	375	39	---	315	42	---	N/A	N/A	---	N/A	N/A	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	N/A	N/A	---	440	83	---	390	87	---	340	92	---
				TAP 4 (HEAT)*	365	35	31	300	39	37	240	42	47	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	460	83	24	415	88	27	370	98	30
	24MGE4-11-091*P	25 - 55	40	TAP 1 (FAN)	430	46	---	370	50	---	320	53	---	265	57	---	200	62	---
				TAP 2 (COOL)†	375	39	---	315	42	---	N/A	N/A	---	N/A	N/A	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	N/A	N/A	---	440	83	---	390	87	---	340	92	---
				TAP 4 (HEAT)*	445	48	40	390	53	46	340	56	53	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	530	102	34	480	108	37	440	114	41

N/A: Do not operate unit using this blower speed at this external static pressure.

† As shipped speed for Cooling operation. Blower speed must be field adjusted to speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

Table 4. Blower Performance (208V or 230V)

	Model	Gas Heating		Indoor Blower Speed	0.1 "w.c.			0.2 "w.c.			0.3 "w.c.			0.4 "w.c.			0.5 "w.c.		
		Rise Range (F°)	Mid Rise (F°)		SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise
1 Ton	15MGE4-11-121*P	15 - 45	30	TAP 1 (FAN)	415	39	---	350	43	---	285	47	---	240	51	---	165	54	---
				TAP 2 (COOL)†	425	46	---	370	49	---	315	53	---	N/A	N/A	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	N/A	N/A	---	475	93	---	430	97	---	385	101	---
				TAP 4 (HEAT)*	370	36	30	315	39	35	260	42	43	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	470	80	24	415	85	27	370	89	30
	24MGE4-11-121*P	25 - 55	40	TAP 1 (FAN)	415	39	---	350	43	---	285	47	---	240	51	---	165	54	---
				TAP 2 (COOL)†	425	46	---	370	49	---	315	53	---	N/A	N/A	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	N/A	N/A	---	475	93	---	430	97	---	385	101	---
				TAP 4 (HEAT)*	450	50	40	405	53	44	355	57	50	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	525	101	34	485	105	37	450	110	40
	36MGE4-11-121*P	30 - 60	45	TAP 1 (FAN)	415	39	---	350	43	---	285	47	---	240	51	---	165	54	---
				TAP 2 (COOL)†	425	46	---	370	49	---	315	53	---	N/A	N/A	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	N/A	N/A	---	475	93	---	430	97	---	385	101	---
				TAP 4 (HEAT)*	590	87	45	555	91	48	515	96	52	475	100	56	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	680	138	39	650	143	41	615	148	44	585	153	46

N/A: Do not operate unit using this blower speed at this external static pressure.

† As shipped speed for Cooling operation. Blower speed must be field adjusted to speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

Table 4. Blower Performance (208V or 230V)

	Model	Gas Heating		Indoor Blower Speed	0.1 "w.c.			0.2 "w.c.			0.3 "w.c.			0.4 "w.c.			0.5 "w.c.		
		Rise Range (F°)	Mid Rise (F°)		SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise
1.5 Ton	15MGE4-11-181*P	15-45	30	TAP 1 (FAN)	470	54	---	400	59	---	345	63	---	290	67	---	235	70	---
				TAP 2 (COOL)†	670	118	---	625	123	---	565	131	---	525	136	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	765	184	---	730	191	---	675	201	---	630	206	---
				TAP 4 (HEAT)*	370	39	30	305	43	37	250	46	45	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	460	92	24	415	96	27	370	101	30
	24MGE4-11-181*P	25-55	40	TAP 1 (FAN)	470	54	---	400	59	---	345	63	---	290	67	---	235	70	---
				TAP 2 (COOL)†	670	118	---	625	123	---	565	131	---	525	136	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	765	184	---	730	191	---	675	201	---	630	206	---
				TAP 4 (HEAT)*	450	52	40	385	57	46	330	61	54	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	540	116	33	490	121	37	450	127	40
	36MGE4-11-181*P	30-60	45	TAP 1 (FAN)	470	54	---	400	59	---	345	63	---	290	67	---	235	70	---
				TAP 2 (COOL)†	670	118	---	625	123	---	565	131	---	525	136	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	765	184	---	730	191	---	675	201	---	630	206	---
				TAP 4 (HEAT)*	590	86	45	555	90	48	515	95	52	475	99	56	N/A	N/A	N/A
				TAP 5 (HEAT)	715	129	38	680	135	39	650	140	41	615	146	44	585	151	46
	48MGE4-11-181*P	35-65	50	TAP 1 (FAN)	470	54	---	400	59	---	345	63	---	290	67	---	235	70	---
				TAP 2 (COOL)†	670	118	---	625	123	---	565	131	---	525	136	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	765	184	---	730	191	---	675	201	---	630	206	---
				TAP 4 (HEAT)*	695	141	51	655	147	54	620	153	58	580	161	62	N/A	N/A	N/A
				TAP 5 (HEAT)	830	214	43	795	221	45	760	228	47	730	236	49	690	242	52
	60MGE4-11-181*P	40-70	55	TAP 1 (FAN)	470	54	---	400	59	---	345	63	---	290	67	---	235	70	---
				TAP 2 (COOL)†	670	118	---	625	123	---	565	131	---	525	136	---	N/A	N/A	---
				TAP 3 (COOL)	N/A	N/A	---	765	184	---	730	191	---	675	201	---	630	206	---
				TAP 4 (HEAT)*	800	182	56	770	187	58	740	191	60	710	198	63	675	204	66
				TAP 5 (HEAT)	905	250	49	870	257	51	850	263	53	825	270	54	805	276	56

N/A: Do not operate unit using this blower speed at this external static pressure.

† As shipped speed for Cooling operation. Blower speed must be field adjusted to speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

Table 4. Blower Performance (208V or 230V)

	Model	Gas Heating		Indoor Blower Speed	0.1 "w.c.			0.2 "w.c.			0.3 "w.c.			0.4 "w.c.			0.5 "w.c.		
		Rise Range (F°)	Mid Rise (F°)		SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise
2 Ton	15MGE4-11-241*P	15-45	30	TAP 1 (FAN)	450	49	---	400	52	---	345	56	---	285	59	---	235	65	---
				TAP 2 (COOL)†	815	206	---	780	210	---	750	215	---	720	219	---	690	224	---
				TAP 3 (COOL)	910	273	---	880	278	---	850	283	---	820	287	---	785	286	---
				TAP 4 (HEAT)*	370	36	30	320	38	35	250	42	45	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	465	82	24	420	85	26	370	90	30
	24MGE4-11-241*P	25-55	40	TAP 1 (FAN)	450	49	---	400	52	---	345	56	---	285	59	---	235	65	---
				TAP 2 (COOL)†	815	206	---	780	210	---	750	215	---	720	219	---	690	224	---
				TAP 3 (COOL)	910	273	---	880	278	---	850	283	---	820	287	---	785	286	---
				TAP 4 (HEAT)*	450	49	40	400	52	45	345	56	52	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	530	99	34	490	103	37	450	107	40
	36MGE4-11-241*P	30-60	45	TAP 1 (FAN)	450	49	---	400	52	---	345	56	---	285	59	---	235	65	---
				TAP 2 (COOL)†	815	206	---	780	210	---	750	215	---	720	219	---	690	224	---
				TAP 3 (COOL)	910	273	---	880	278	---	850	283	---	820	287	---	785	286	---
				TAP 4 (HEAT)*	600	89	45	560	93	48	520	96	52	485	100	56	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	700	148	38	665	153	40	635	157	42	600	162	45
	48MGE4-11-241*P	35-65	50	TAP 1 (FAN)	450	49	---	400	52	---	345	56	---	285	59	---	235	65	---
				TAP 2 (COOL)†	815	206	---	780	210	---	750	215	---	720	219	---	690	224	---
				TAP 3 (COOL)	910	273	---	880	278	---	850	283	---	820	287	---	785	286	---
				TAP 4 (HEAT)*	720	145	50	675	151	53	635	157	56	595	164	60	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	820	223	44	780	232	46	745	238	48	710	246	50
	60MGE4-11-241*P	40-70	55	TAP 1 (FAN)	450	49	---	400	52	---	345	56	---	285	59	---	235	65	---
				TAP 2 (COOL)†	815	206	---	780	210	---	750	215	---	720	219	---	690	224	---
				TAP 3 (COOL)	910	273	---	880	278	---	850	283	---	820	287	---	785	286	---
				TAP 4 (HEAT)*	810	182	55	775	186	58	745	191	60	710	195	63	680	200	66
				TAP 5 (HEAT)	910	248	49	885	253	51	860	258	52	830	265	54	800	270	56

N/A: Do not operate unit using this blower speed at this external static pressure.

† As shipped speed for Cooling operation. Blower speed must be field adjusted to speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

Table 4. Blower Performance (208V or 230V)

	Model	Gas Heating		Indoor Blower Speed	0.1 "w.c.			0.2 "w.c.			0.3 "w.c.			0.4 "w.c.			0.5 "w.c.		
		Rise Range (F°)	Mid Rise (F°)		SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise
2.5 Ton	24MGE4-11-301*P	25-55	40	TAP 1 (FAN)	490	55	---	465	65	---	435	72	---	415	81	---	390	89	---
				TAP 2 (COOL)†	930	239	---	900	243	---	885	250	---	835	256	---	805	262	---
				TAP 3 (COOL)	1030	309	---	995	316	---	965	321	---	930	325	---	900	328	---
				TAP 4 (HEAT)*	450	47	40	400	49	45	350	53	51	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	530	93	34	490	98	37	450	103	40
	36MGE4-11-301*P	30-60	45	TAP 1 (FAN)	490	55	---	465	65	---	435	72	---	415	81	---	390	89	---
				TAP 2 (COOL)†	930	239	---	900	243	---	885	250	---	835	256	---	805	262	---
				TAP 3 (COOL)	1030	309	---	995	316	---	965	321	---	930	325	---	900	328	---
				TAP 4 (HEAT)*	600	80	45	560	84	48	515	89	52	475	93	56	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	705	136	38	670	141	40	635	146	42	600	151	45
	48MGE4-11-301*P	35-65	50	TAP 1 (FAN)	490	55	---	465	65	---	435	72	---	415	81	---	390	89	---
				TAP 2 (COOL)†	930	239	---	900	243	---	885	250	---	835	256	---	805	262	---
				TAP 3 (COOL)	1030	309	---	995	316	---	965	321	---	930	325	---	900	328	---
				TAP 4 (HEAT)*	715	140	50	670	146	53	630	152	57	590	159	61	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	815	218	44	775	227	46	740	233	48	705	241	51
	60MGE4-11-301*P	40-70	55	TAP 1 (FAN)	490	55	---	465	65	---	435	72	---	415	81	---	390	89	---
				TAP 2 (COOL)†	930	239	---	900	243	---	885	250	---	835	256	---	805	262	---
				TAP 3 (COOL)	1030	309	---	995	316	---	965	321	---	930	325	---	900	328	---
				TAP 4 (HEAT)*	810	163	55	775	169	58	740	173	60	710	179	63	680	185	66
				TAP 5 (HEAT)	935	233	48	900	240	50	870	245	52	835	254	53	810	257	55

N/A: Do not operate unit using this blower speed at this external static pressure.

† As shipped speed for Cooling operation. Blower speed must be field adjusted to speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

Table 4. Blower Performance (208V or 230V)

	Model	Gas Heating		Indoor Blower Speed	0.1 "w.c.			0.2 "w.c.			0.3 "w.c.			0.4 "w.c.			0.5 "w.c.		
		Rise Range (F°)	Mid Rise (F°)		SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise	SCFM	Watts	Temp Rise
3 Ton	24MGE4-11-361*P	25-55	40	TAP 1 (FAN)	615	82	---	580	86	---	540	91	---	500	96	---	450	102	---
				TAP 2 (COOL)†	1020	307	---	980	313	---	940	314	---	900	318	---	865	323	---
				TAP 3 (COOL)	1040	329	---	1000	329	---	965	333	---	930	338	---	890	344	---
				TAP 4 (HEAT)*	450	48	40	385	52	46	325	55	55	N/A	N/A	N/A	N/A	N/A	N/A
				TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	550	107	33	500	112	36	450	117	40
	36MGE4-11-361*P	30-60	45	TAP 1 (FAN)	615	82	---	580	86	---	540	91	---	500	96	---	450	102	---
				TAP 2 (COOL)†	1020	307	---	980	313	---	940	314	---	900	318	---	865	323	---
				TAP 3 (COOL)	1040	329	---	1000	329	---	965	333	---	930	338	---	890	344	---
				TAP 4 (HEAT)*	615	82	44	580	86	46	540	91	50	500	96	54	460	102	58
				TAP 5 (HEAT)	N/A	N/A	N/A	710	129	38	685	135	39	650	140	41	615	145	44
	48MGE4-11-361*P	35-65	50	TAP 1 (FAN)	615	82	---	580	86	---	540	91	---	500	96	---	450	102	---
				TAP 2 (COOL)†	1020	307	---	980	313	---	940	314	---	900	318	---	865	323	---
				TAP 3 (COOL)	1040	329	---	1000	329	---	965	333	---	930	338	---	890	344	---
				TAP 4 (HEAT)*	715	135	50	675	142	53	640	148	56	600	155	60	560	162	64
				TAP 5 (HEAT)	N/A	N/A	N/A	820	212	44	785	219	46	745	227	48	715	234	50
	60MGE4-11-361*P	40-70	55	TAP 1 (FAN)	615	82	---	580	86	---	540	91	---	500	96	---	450	102	---
				TAP 2 (COOL)†	1020	307	---	980	313	---	940	314	---	900	318	---	865	323	---
				TAP 3 (COOL)	1040	329	---	1000	329	---	965	333	---	930	338	---	890	344	---
				TAP 4 (HEAT)*	825	175	54	790	179	57	755	185	59	720	191	62	690	197	65
				TAP 5 (HEAT)	935	240	48	905	246	49	870	254	51	845	260	53	815	266	55

N/A: Do not operate unit using this blower speed at this external static pressure.

† As shipped speed for Cooling operation. Blower speed must be field adjusted to speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

Table 4. Blower Performance (208V or 230V)

Air Filter

All indoor return air must be filtered. A washable filter is furnished with the unit, located in the return air opening. If a filter is installed at a separate central return location, then the factory furnished filter must be removed from the unit.

The filter should be cleaned at least three times during each of the heating and cooling seasons, or more frequently if unusual conditions are encountered. To clean the washable filter, shake filter to remove excess dirt and/or use a vacuum cleaner. Wash filter in soap or detergent water and replace after filter is dry. It is not necessary to oil the filter after washing.

If an installation is made in which it is more desirable to mount the filter exterior to the unit, in the return duct work or elsewhere, the washable filter can be used or replaced with a disposable filter. If a disposable filter is used, use the information provided in Table 5 when sizing the disposable filter.

Model Number	Filter Area (in^2)
15MGE4-11-09*	175
24MGE4-11-09* 15MGE4-11-12* 24MGE4-11-12*	210
36MGE4-11-12*	285
15MGE4-11-18* 24MGE4-11-18* 36MGE4-11-18* 48MGE4-11-18*	325
60MGE4-11-18* *MGE4-11-24*	385
MGE4-11-30	435
MGE4-11-36	480

Table 5. Minimum Required Surface Area for Disposable Filters

Condensate Drain

Provisions must be made to properly drain the outdoor drain pan of this appliance.

Outdoor drain connection: 3/4” NPT to 3/4” PVC fitting (schedule 40 minimum). Drain must be trapped as shown in Figure 6. The drain line should pitch gradually downward at least 1” per 10’ of horizontal run to open drain.

⚠ CAUTION

Use thread sealant on the threaded fittings. Install threaded fittings by hand only. **Do not over torque the fittings.**

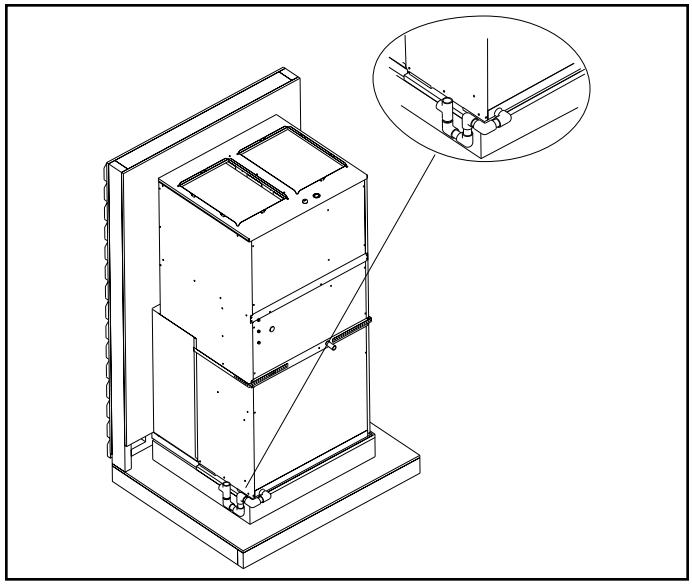


Figure 6. Condensate Drain Installation

Electrical Connections

All wiring must be done in accordance with the National Electrical Code (NEC), ANSI/NFPA No. 70 (latest edition); Canadian Electrical Code CSA C22.2 Part 1 (latest edition); or local codes, where they prevail. Any alteration of internal wiring will void certification and warranty. Units are factory wired for a 230 volt power supply. If power supply is 208 volts, it will be necessary to change a wire connection on unit transformer from 240 volt terminal to 208 volt terminal as shown on the wiring diagram.

Use wiring with a temperature limitation of 75°C minimum. Run the 208 or 230 volt, single phase, 60 hertz electric power supply through a fused disconnect switch to the control box of the unit and connect as shown in the unit’s wiring diagram.

The unit must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code ANSI/NFPA No. 70 (latest edition) or CSA C22.2 Part 1 (latest edition).

Power supply to the unit must be NEC Class 1 and must comply with all applicable codes. A fused disconnect switch should be field provided for the unit. The switch must be separate from all other circuits. If any of the wire supplied with the unit must be replaced, replacement wire must be of the type shown on the wiring diagram.

Electrical wiring must be sized to minimum circuit ampacity marked on the unit. Use copper conductors only. Each unit must be wired with a separate branch circuit and be properly fused.

Gas Supply and Piping

Refer to unit rating plate to make sure the furnace is equipped to burn the gas supplied (natural or propane).

⚠ WARNING

Any conversion of a natural gas unit to propane gas must be done by qualified personnel using a conversion kit available from the manufacturer, following the instructions in the conversion kit. If done improperly, over-firing of the burners and improper burner operation can result. This can create carbon monoxide which could cause asphyxiation.

Gas supply piping should be installed in accordance with local codes and the regulations of the utility. Piping must be of adequate size to prevent undue pressure drop. Consult the local utility or gas supplier for complete details on special requirements for sizing gas piping.

If local codes allow the use of a flexible gas appliance connector, always use a new listed connector. Do not use a connector which has previously serviced another gas appliance.

Pipe connections must be tight, and a non-hardening pipe compound resistant to liquefied petroleum gases must be used.

Connect the gas pipe to the furnace controls providing a ground joint union as close to the controls as is possible to facilitate removal of controls and manifold. Provide a drip leg on the outside of the furnace. A manual shutoff valve shall be installed in the gas line, outside the unit, 5' above the floor, or in accordance with any local codes.

The furnace must be isolated from the gas supply piping system by closing the individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 psig (3.5 kPa) or 14" W.C. If the piping system is to be tested at pressures in excess of 1/2 psig (3.5 kPa), the furnace and its appliance main gas valve must be disconnected from the gas supply piping system.

After gas piping is complete, carefully check all piping connections (factory and field) for gas leaks. Use a leak detecting solution or other preferred means. Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak detection has been completed.

⚠ WARNING

The gas valve supplied with this furnace is rated at 1/2 psig maximum. Any higher pressure may rupture the pressure regulator diaphragm and may cause over-firing of the burners and improper burner operation. The over-firing may result in the creation of carbon monoxide which could cause asphyxiation.

⚠ WARNING

Fire or Explosion Hazard

Failure to follow the safety warnings exactly could result in serious injury, death, or property damage.

Never test for gas leaks with an open flame. Use a commercially available soap solution made specifically for the detection of leaks to check all connections. A fire or explosion may result causing property damage, personal injury, or loss of life.

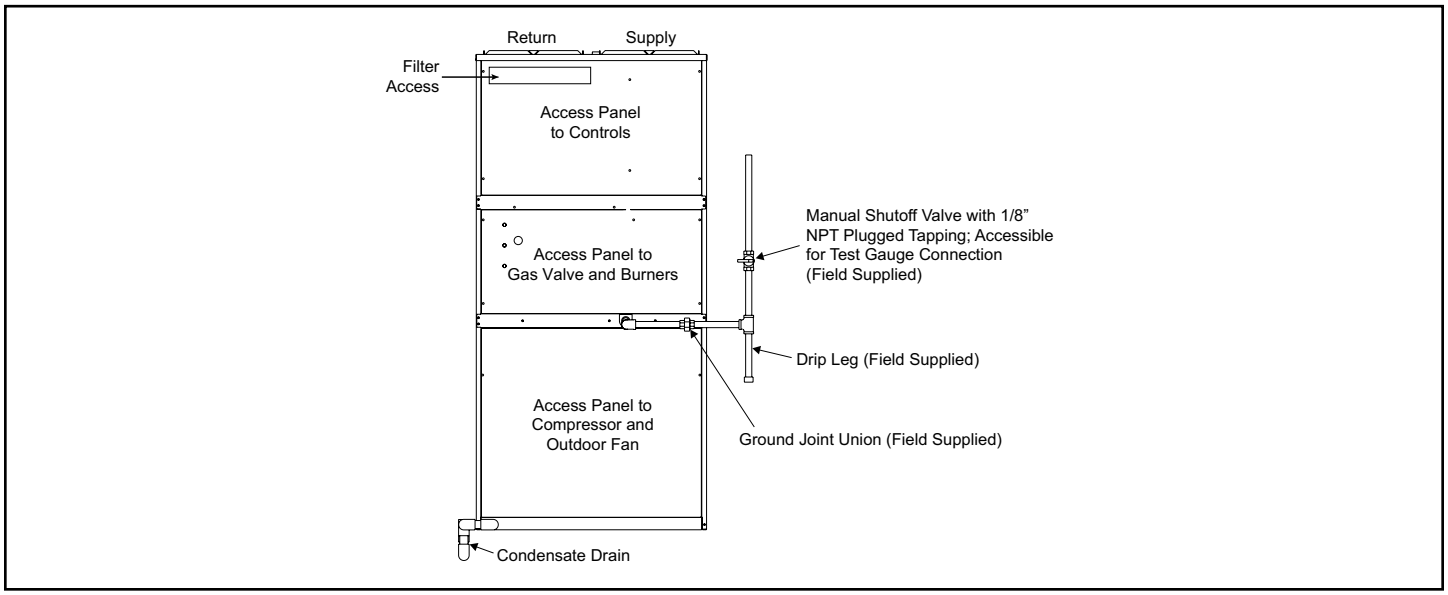


Figure 7. Gas Supply Piping

Thermostat

The room thermostat should be located on an inside wall where it will not be subject to drafts, sun exposure, or heat from electrical fixtures or appliances. Follow manufacturer's instructions enclosed with the thermostat for general installation procedures. Color-coded insulated wires (#18 AWG) should be used to connect the thermostat to the unit.

Start-Up

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.

⚠ CAUTION

This furnace is equipped with a direct ignition control. Do not attempt to manually light the burners.

To Light Burners

1. Turn off electrical power to unit.
2. Turn the thermostat to lowest setting.
3. Move the gas valve switch to the "ON" position (see Figure 8).
4. Turn on electrical power to the unit.
5. Set the room thermostat to the desired temperature. If the thermostat "set" temperature is above room temperature after the pre-purge time expires, burners will light.

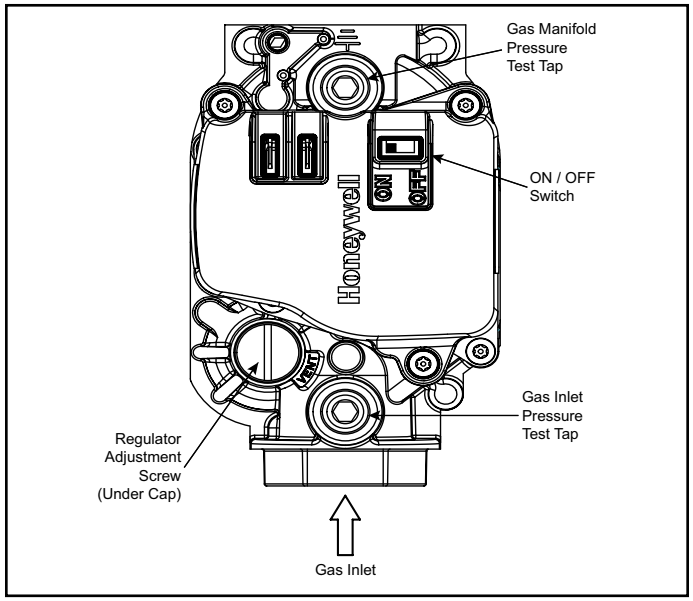


Figure 8. Gas Valve

To Shut Down Unit

1. Turn off electrical power to unit.
2. Move the gas valve switch to the "OFF" position (see Figure 8).

Operation

Operation of the unit is automatic and will provide heating and cooling depending on the setting of the thermostat.

Heating

1. Turn on main power supply.
2. Open manual gas shutoff valve.
3. Set thermostat system to "HEAT".
4. Set thermostat to temperature desired.

Sequence of Operation

1. Thermostat calls for heat.
2. Combustion blower starts and proper air flow is proven by the pressure switch closing.
3. Blower continues to operate for 30 seconds prior to the burners lighting.
4. Ignition control begins spark and opens gas valve. The burners are lit. Ignition is proved through flame sensor.
5. Circulating air blower starts 30 seconds after the burners light.
6. When the thermostat is satisfied, the burners and combustion blower shut off.
7. Circulating air blower will shut off 120 seconds later.

If the burners should fail to ignite, the ignition control will try to ignite the burners a total of three times. Should the burners fail to ignite within the three trials for ignition, the ignition control will lock out for 1 hour before beginning another ignition cycle. To reset the control, turn the thermostat down or off for 10 seconds and then set to desired setting. At this time, the ignition sequence will try again.

Cooling

1. Set thermostat system switch to "COOL."
2. Set thermostat to temperature desired.

NOTE*: When Y is energized, the combustion blower will operate for 10 seconds. The purpose of this action is to deter insect nesting in the flue pipe.*

To Shut Down Unit

For temporary or short periods of shutdown, set the thermostat system switch to "OFF". For a prolonged period of shutdown, set the thermostat system switch to "OFF" and turn off the electrical power supply and the gas supply to the unit.

Adjustments – Heating Section

Temperature Rise

At time of installation, the temperature rise must be adjusted to be within the range specified on the unit rating plate.

Checking and Adjusting Gas Input

The gas input must not exceed the figures shown on the rating plate. The unit is equipped for rated inputs with manifold pressures of: 3.5” w.c. for natural gas and 10.0” w.c. for propane. The furnace requires conversion for use with propane (a propane conversion kit is available from the manufacturer).

The manifold pressure can be measured by removing the pipe plug in the downstream side of the gas valve and connecting a water manometer or gauge.

Only small variations in gas input may be made by adjusting the regulator. **In no case should the final manifold pressure vary more than 0.3” w.c. for natural gas or 0.7” w.c. for propane.**

> **⚠ WARNING**
>
> The furnace rate must be within +/- 2% of the appliance rating input.

To adjust the regulator, turn the adjusting screw on the regulator clockwise to increase pressure and input or counterclockwise to decrease pressure and input.

$$\text{BTU/HR Input} = \frac{\text{Cubic Feet per Revolution}}{\text{\# Seconds per Revolution}} \times 3600 \times \text{Heating Value}$$

For Natural Gas: Check the furnace rate by observing the gas meter, when available, making sure all other gas appliances are turned off. The test hand on the meter should be timed for at least one revolution. Note the number of seconds for one revolution.

The heating value of the gas can be obtained from the local utility company.

For Propane Gas: The only check for the furnace rate is to verify proper orifice spud size is installed and properly adjust the manifold pressure using a manometer. Typical manifold set point for installations is 10.0” W.C.

Adjustments – Cooling Section

No adjustments are required or should be attempted regarding any of the components of the cooling system. The system should be checked to see that none of the wiring is loose or missing.

Blower

The unit contains a direct-drive, multispeed blower. The proper speeds have been preset at the factory for typical heating and cooling operation. Refer to the wiring diagram for recommended heating/cooling speeds for specific models. Speeds may require adjustment due to duct design and application. Direct-drive blower motors are permanently lubricated and do not require oiling.

Blower Operation

Continuous operation of the air handling blower will be obtained if the thermostat fan switch is set to “ON”. With the thermostat fan switch set to “AUTO”, the air handling blower will cycle corresponding with the thermostat cycling.

Fan Control

The blower will start approximately 30 seconds after the burners ignite and will stop approximately 120 seconds after the thermostat is satisfied. The time delay is preset at the factory and timing cannot be adjusted.

When the thermostat system switch is set for “COOL”, the blower will start 5 seconds after the thermostat calls for cooling and will stop 90 seconds after the thermostat is satisfied.

A fan switch is provided on the thermostat which will bring the blower on for continuous operation when the switch is set for “ON”.

Limit Control

A fixed temperature limit control is provided which will shut off the gas to the burners if the unit is overheated for any reason. The control must not be adjusted or relocated.

Rollout Switch

If for any reason the heat exchanger were to become blocked, there is a temperature sensitive switch located above the burners that will turn off the burners. After correcting the problem, this switch must be manually reset by pressing the button on top of it.

Installation and Operation in Extremely Cold Weather Areas

In areas where extremely cold outdoor temperatures (below – 20°F) can be expected, some additional installation and operating precautions should be taken. The following precautions are designed to prevent possible vent system ice blockage that could result in safety shutdown of the burners:

1. Adjust to the highest achievable temperature rise within the rise and static pressure ranges specified on the rating plate. Depending on specific model, it may be possible to change to a lower heating blower speed tap to get a higher temperature rise. This also increases comfort.

2. Make sure there are no leaks of outside air into the return air system.
3. Keep the outside louver grille as free as possible of any ice that may form and obstruct the flue outlet.

High Altitude

In both the United States and Canada, this unit is approved for operation at altitudes from 0 to 5,500 feet above sea level without any required modifications. For installations above 5,500 feet, refer to Table 6.

Maintenance

⚠ WARNING

Disconnect all electrical power to the unit before conducting any maintenance procedures. Failure to disconnect the power could result in personal injury or death.

Heating System

Burners

The burners can be removed for cleaning or changing orifices. To remove the burners:

1. Disconnect electrical service and turn off gas to the appliance.
2. Remove access panel to burners and gas valve compartment.
3. Burners can be individually removed from burner assembly by removing the two screws that hold each burner in the burner rack.
   - Burners can be cleaned using a bottle brush.
   - Orifices are threaded into the gas manifold and can be removed by unscrewing.
4. Reinstall orifices and burners in the reverse order in which they were removed. Ensure burners are properly seated over orifices and properly aligned.
5. Reinstall access panel and turn on gas and electrical service.

Heat Exchanger

The heat exchanger should be inspected periodically and cleaned if necessary. If cleaning is necessary, use a stiff brush with a wire handle to remove scale. While cleaning the heat exchanger, the vent extension tube should also be cleaned. Remove the four screws on the combustion blower mounting plate and take out the blower. Use a brush to clean the vent extension tube.

Filters

Cleaning the air filter: Follow directions noted on the filter. Washable filters may be washed, dried, and reused. Disposable filters must be replaced.

Cooling System

The refrigeration system normally requires no maintenance since it is a closed, self-contained system. Periodic maintenance is limited to:

- Cleaning the air filter. Follow directions noted on the filter and label attached to the access panel.
- Cleaning the condenser coil if covered with any foreign material, lint, leaves, or other obstructions.

The condensing coil should be cleaned at a minimum once per year. In areas subject to high traffic or environmental conditions which may contain chloride, sulfites, dust, ammonia, etc., more frequent cleaning is required.

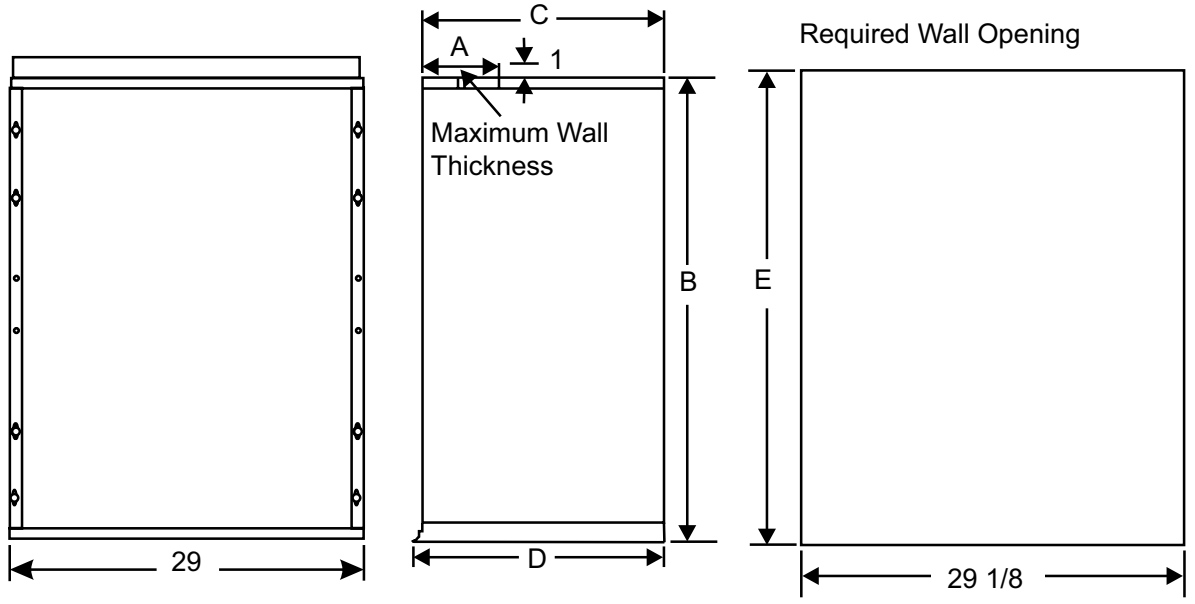
Altitude	Natural Gas		LP Gas	
	Burner Orifices	Manifold Pressure	Burner Orifices LP Kit	Manifold Pressure
0 - 5,500 ft.	As shipped	3.5” w.c.	ALPKT613 or 614 (model dependent)	10.0” w.c.
5,500 - 8,500 ft.		3.0” w.c.		8.0” w.c.
Above 8,500 ft.	Per National Fuel Gas Code	3.5” w.c.	Per National Fuel Gas Code	10.0” w.c.

Table 6.

Accessories

Wall Sleeve		Nomenclature	Magic-Pak Unit						Dimensions (in)				
			**MGE4-11-091*P	**MGE4-11-121*P	**MGE4-11-181*P	**MGE4-11-241*P	**MGE4-11-301*P	**MGE4-11-361*P	A	B	C	D	E
6” Wall Sleeve Kit	for 29” Louver	ASLEEVE6-1	•	•	•	•			6	29	16	16-5/8	29-1/8
	for 33” Louver	ASLEEVE6-2	•	•	•	•	•		6	32-3/4	16	16-5/8	32-7/8
	for 45” Louver	ASLEEVE6-5	•	•	•	•	•	•	6	45	16	16-5/8	45-1/8
8” Wall Sleeve Kit	for 29” Louver	ASLEEVE8-1	•	•	•	•			8	29	16	16-5/8	29-1/8
	for 33” Louver	ASLEEVE8-2	•	•	•	•	•		8	32-3/4	16	16-5/8	32-7/8
	for 45” Louver	ASLEEVE8-5	•	•	•	•	•	•	8	45	16	16-5/8	45-1/8
10” Wall Sleeve Kit	for 29” Louver	ASLEEVE10-1	•	•	•	•			10	29	16	16-5/8	29-1/8
	for 33” Louver	ASLEEVE10-2	•	•	•	•	•		10	32-3/4	16	16-5/8	32-7/8
	for 45” Louver	ASLEEVE10-5	•	•	•	•	•	•	10	45	16	16-5/8	45-1/8
12” Wall Sleeve Kit	for 29” Louver	ASLEEVE12-1	•	•	•	•			12	29	16	16-5/8	29-1/8
	for 33” Louver	ASLEEVE12-2	•	•	•	•	•		12	32-3/4	16	16-5/8	32-7/8
	for 45” Louver	ASLEEVE12-5	•	•	•	•	•	•	12	45	16	16-5/8	45-1/8

Table 7. Wall Sleeves



WARNING

The unit must be installed with approved wall sleeve and grille accessories for safe operation. Improper installations could result in property damage, personal injury, or death.

Accessory		Nomenclature	Magic-Pak Unit					
			**MGE4-11-091*P	**MGE4-11-121*P	**MGE4-11-181*P	**MGE4-11-241*P	**MGE4-11-301*P	**MGE4-11-361*P
Polypropylene Louvers	Polypropylene Louver Kit - White (29” Height / MGE)	ALVRPWHTMGE-1	•	•	•	•		
	Polypropylene Louver Kit - White (33” Height / MGE)	ALVRPWHTMGE-2	•	•	•	•	•	
	Polypropylene Louver Kit - Sandstone (29” Height / MGE)	ALVRPSANMGE-1	•	•	•	•		
	Polypropylene Louver Kit - Sandstone (33” Height / MGE)	ALVRPSANMGE-2	•	•	•	•	•	
	Polypropylene Louver Kit - Beige (29” Height / MGE)	ALVRPBGEMGE-1	•	•	•	•		
	Polypropylene Louver Kit - Beige (33” Height / MGE)	ALVRPBGEMGE-2	•	•	•	•	•	
	Polypropylene Louver Kit - Taupestone (29” Height / MGE)	ALVRPTPSTMGE-1	•	•	•	•		
	Polypropylene Louver Kit - Taupestone (33” Height / MGE)	ALVRPTPSTMGE-2	•	•	•	•	•	
Aluminum Louvers	Extruded Aluminum Louver Kit (29” Height)	ALVRAL-1	•	•	•	•		
	Extruded Aluminum Louver Kit - Custom Color (29” Height)	ALVRAL-1P	•	•	•	•		
	Extruded Aluminum Louver Kit (33” Height)	ALVRAL-2	•	•	•	•	•	
	Extruded Aluminum Louver Kit - Custom Color (33” Height)	ALVRAL-2P	•	•	•	•	•	
	Extruded Aluminum Louver Kit (45” Height)	ALVRAL-3	•	•	•	•		
	Extruded Aluminum Louver Kit - Custom Color (45” Height)	ALVRAL-3P	•	•	•	•		
	Extruded Aluminum Louver Kit (45” Height)	ALVRAL-4					•	•
	Extruded Aluminum Louver Kit - Custom Color (45” Height)	ALVRAL-4P					•	•
Impact Rated Louvers	Extruded Aluminum Louver Kit - Impact Rated (29” Height)	ALVRALC-1	•	•	•	•		
	Extruded Aluminum Louver Kit - Impact Rated / Custom Color (29” Height)	ALVRALC-1P	•	•	•	•		
	Extruded Aluminum Louver Kit - Impact Rated (33” Height)	ALVRALC-2	•	•	•	•	•	
	Extruded Aluminum Louver Kit - Impact Rated / Custom Color (33” Height)	ALVRALC-2P	•	•	•	•	•	

Table 8. Accessories

Accessory	Nomenclature	Magic-Pak Unit				
		15MGE4-11-**1*P	24MGE4-11-**1*P	36MGE4-11-**1*P	48MGE4-11-**1*P	60MGE4-11-**1*P
LP Conversion Kit	ALPKT613	•				
LP Conversion Kit	ALPKT614		•	•	•	•

Table 9. LP Conversion Kits

Wiring Diagrams

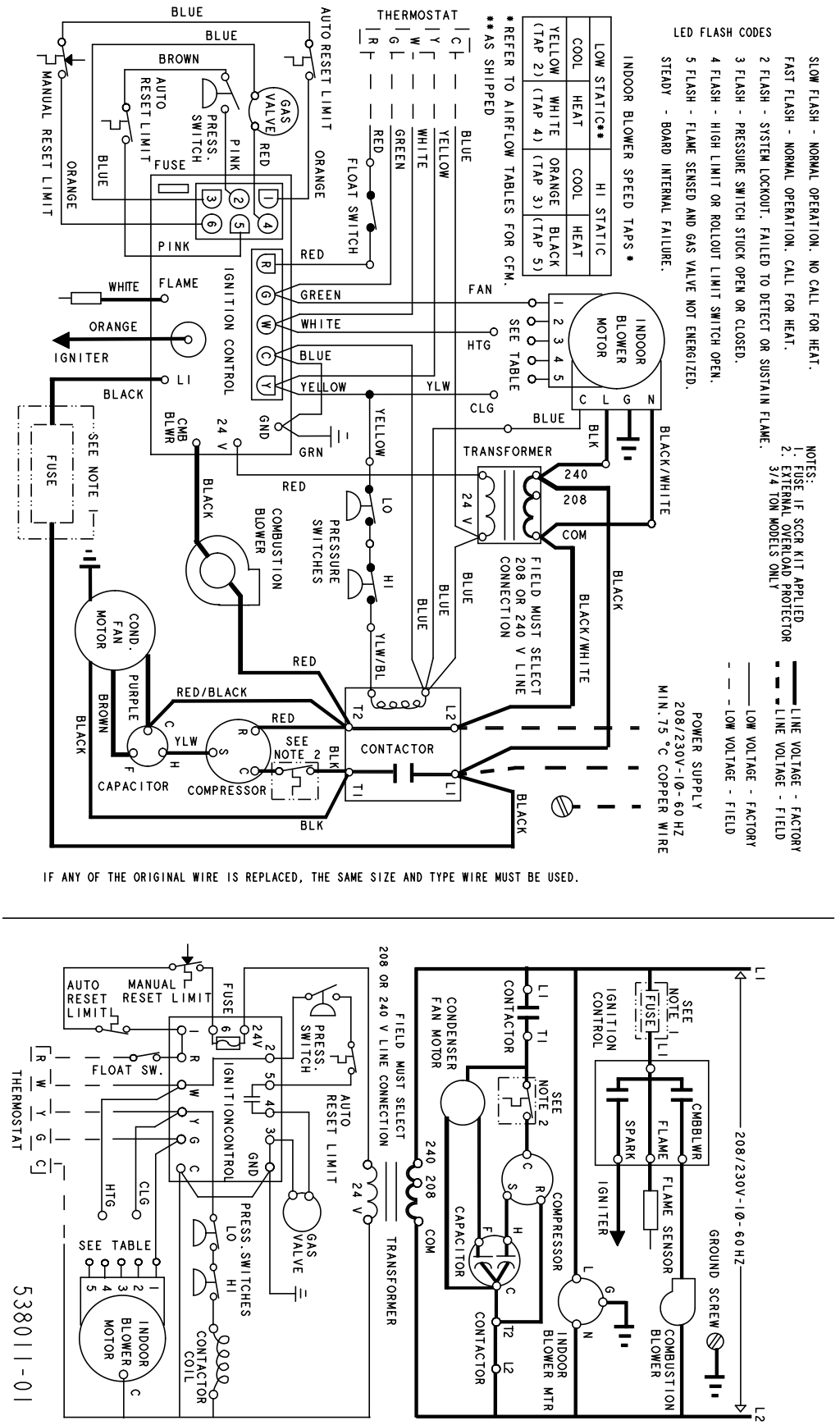


Figure 9. Wiring Diagram - 3/4 Ton through 2 Ton

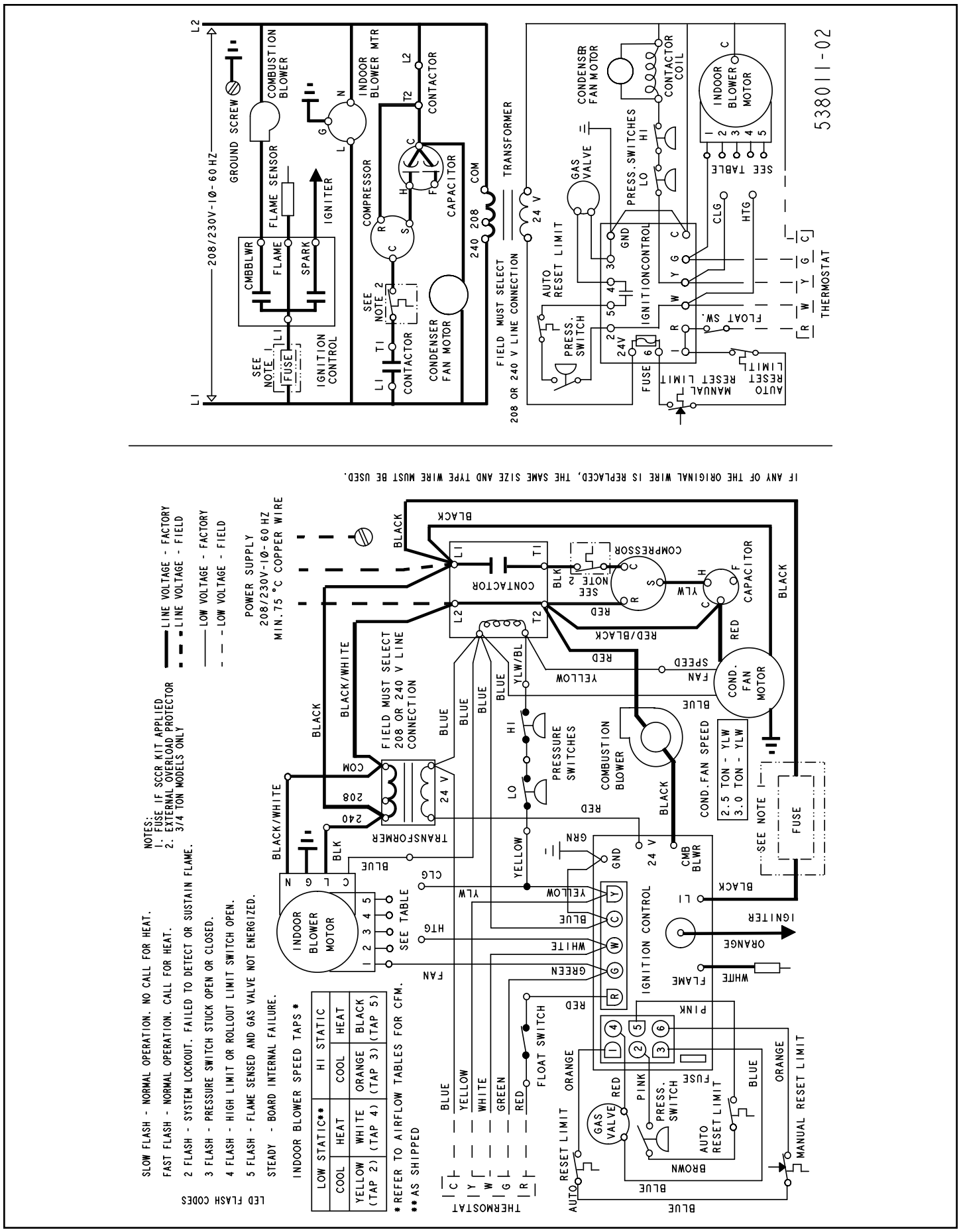


Figure 10. Wiring Diagram - 2-1/2 Ton and 3 Ton