Nortek-Style Manufactured Housing Furnaces

HVAC EQUIPMENT GUIDE

Electric Furnaces, 80% Gas Furnaces 95% Gas Furnaces, 83% Oil Furnaces Coils and Accessories





NORTEK - Manufactured Housing HVAC Equipment Guide

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MANUFACTURED HOUSING ELECTRIC FURNACES



MANUFACTURED HOUSING OIL FURNACES

M5SB*A - Downflow Without Coil Box M5SB*B - Downflow With Coil Box



M5SB*B

MANUFACTURED HOUSING GAS FURNACES

MG2R*A - Downflow Without Coil Box MG2R*B - Downflow With Coil Box MG2R*C - Downflow With Coil Box



MANUFACTURED HOUSING GAS FURNACES

MG1E*A - Downflow Without Coil Box MG1E*B - Downflow With Coil Box



MG1E*A



MG1E*B

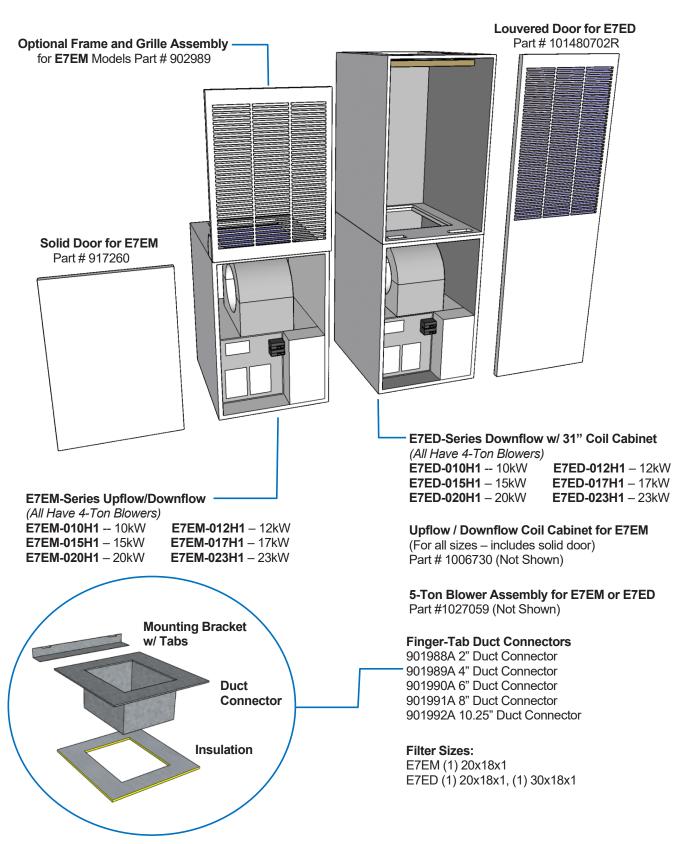
Confort Cire

MG2R*B/C

E7-Series Electric Furnaces:

- E7ED Downflow Only w/ 31" Coil Cabinet
- E7EM Upflow/Downflow NO CABINET

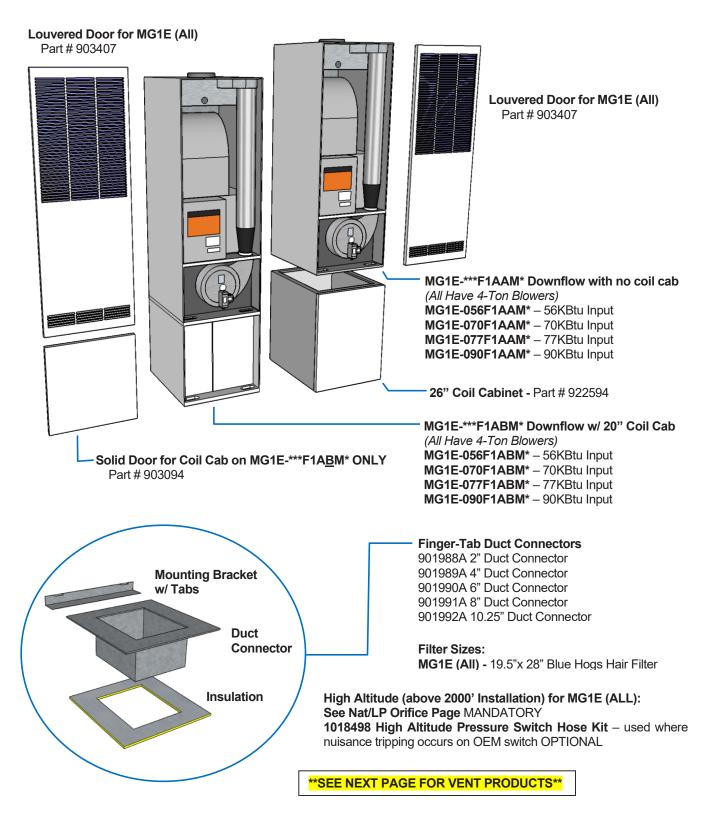




MG1E-Series 80% AFUE Gas Furnaces:

- MG1E-***F1ABM* Downflow w/ 20" Coil Cabinet
- MG1E-***F1AAM* Downflow NO CABINET





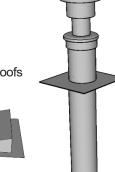
MG1E-Series 80% AFUE Gas Furnaces:

- MG1E-***F1ABM* Downflow w/ 20" Coil Cabinet •
- MG1E-***F1AAM* Downflow NO CABINET

FLAT ROOF JACKS: Use alone or in combination with wedges below for pitched roofs 903658 - Flat Roof Jack 15" to 23" 903659 - Flat Roof Jack 21" to 35" 903660- Flat Roof Jack 27" to 47"

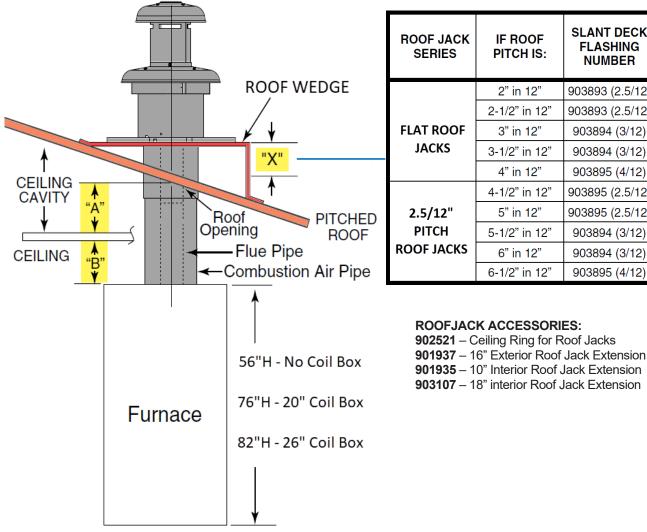
PITCHED ROOF JACKS: Use alone or in combination with wedges below for higher pitch roofs 903664 - 2/12 Pitch Roof Jack 35" to 63" 920638 - 2/12 Pitch Roof Jack 51" to 95"

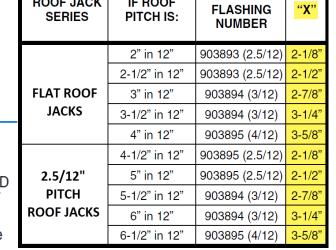
ROOF WEDGES: Use in combination with Flat or Pitched Roof Jacks 903893 - 2.5/12 Roof Wedge 903894 - 3/12 Roof Wedge 903895 - 4/12 Roof Wedge



SLANT DECK

TO SELECT ROOFJACK: A + B (+X IF PITCHED ROOF)









MG1E-Series 80% AFUE Gas Furnaces NAT GAS Orifice Selection

NATURAL GAS ORIFICES: Use the following steps to determine appropriate orifice for installation altitude.

- 1. Consult Local Utility for "LOCAL HEATING VALUE" at installation site. Use "Local Heating Values" chart to determine if this value is considered "LOW" or "HIGH" based on installation altitude.
- 2. Use "Natural Gas High Heating Value" or "Natural Gas Low Heating Value" chart to determine appropriate orifice based on furnace model.

LOCAL HEATING VALUES FOR NATURAL GAS									
		BTU PER CUBIC FOOT							
SEA LEVEL	650	700	750	800	850	900	950	1,000	1,050
2,000 FT	LOW	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH
3,000 FT	LOW	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH
4,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
5,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
6,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
7,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
8,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
9,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
10,000 FT	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

NATURAL GAS - HIGH HEATING VALUE									
ALTITUDE ABOVE		FURNACE	MANIFOLD PRESSURE IS 3.5 IN WC						
SEA LEVEL	MG1-056	MG1-070	MG1-077	MG1-090	(GAS VALVE SETTINGFOR NAT. GAS)				
0 to 1,999 FT	29	24	21	17	Factory Orifice Size				
2,000 to 2,999 FT	29	26	23	18	Service Orifice Size				
3,000 to 3,999 FT	30	26	24	19	Service Orifice Size				
4,000 to 4,999 FT	30	27	25	20	Service Orifice Size				
5,000 to 5,999 FT	30	28	26	21	Service Orifice Size				
6,000 to 6,999 FT	30	28	27	22	Service Orifice Size				
7,000 to 7,999 FT	31	29	27	23	Service Orifice Size				
8,000 to 8,999 FT	31	29	28	24	Service Orifice Size				
9,000 to 9,999 FT	32	30	29	25	Service Orifice Size				

NATURAL GAS - LOW HEATING VALUE									
ALTITUDE ABOVE	E ABOVE FURNACE MODELS		MANIFOLD PRESSURE IS 3.5 IN WC						
SEA LEVEL	MG1-056	MG1-070	MG1-077	MG1-090	(GAS VALVE SETTINGFOR NAT. GAS)				
0 to 1,999 FT	29	24	21	17	Factory Orifice Size				
2,000 to 2,999 FT	29	24	20	17	Service Orifice Size				
3,000 to 3,999 FT	29	25	21	18	Service Orifice Size				
4,000 to 4,999 FT	29	26	22	19	Service Orifice Size				
5,000 to 5,999 FT	30	27	23	20	Service Orifice Size				
6,000 to 6,999 FT	30	27	24	21	Service Orifice Size				
7,000 to 7,999 FT	30	28	25	22	Service Orifice Size				
8,000 to 8,999 FT	31	29	26	23	Service Orifice Size				
9,000 to 9,999 FT	31	29	27	24	Service Orifice Size				

ORIFICE PART NUMBERS:

661017R - #17	661018R - #18	<mark>661019R - #19**</mark>	661020R - #20	661021R - #21
661022 - #22	662023R - #23	661024R - #24	661025R - #25	661026R - #26
661027 - #27	661028 - #28	661029R - #29	661030R - #30	661031 - #31
<mark>661032R - #32**</mark>	661035 - #35	661036R - #36	661037R - #37	661038 - #38
<mark>661039R - #39**</mark>	661040 - #40	661041R - #41	661042R - #42	661043R - #43
661044R - #44	661045R - #45	661046R - #46	661047R - #47	661048R - #48
661049R -#49	661050R - #50	661051R - #51	661052R – #52	661055R - #55
661056R - #56	661057R - #57	661058R - #58	661059 - #59	661060 - #60
661061R - #61				

NOTE: #19, #32, and #39 Orifices have been discontinued. Use the next size smaller orifice



MG1E-Series 80% AFUE Gas Furnaces PROPANE Orifice Selection

PROPANE ORIFICES: Use the chart below to determine appropriate orifice based on model and installation altitude.

PROPANE GAS									
ALTITUDE ABOVE		FURNACE	MODELS		MANIFOLD PRESSURE IS 10 IN WC				
SEA LEVEL	MG1-056	MG1-070	MG1-077	MG1-090	(GAS VALVE SETTINGFOR LP GAS)				
0 to 1,999 FT	45	42	40	36	Conversion Orifice Size				
2,000 to 2,999 FT	47	42	41	37	Service Orifice Size				
3,000 to 3,999 FT	47	43	42	38	Service Orifice Size				
4,000 to 4,999 FT	47	43	42	39	Service Orifice Size				
5,000 to 5,999 FT	48	44	43	40	Service Orifice Size				
6,000 to 6,999 FT	48	44	43	41	Service Orifice Size				
7,000 to 7,999 FT	49	44	43	42	Service Orifice Size				
8,000 to 8,999 FT	49	45	44	42	Service Orifice Size				
9,000 to 9,999 FT	50	46	45	43	Service Orifice Size				

NOTES: Includes 4% Input Reduction for each 1,000 feet. Reference Sources: ANSI Z223.1, CSA B149.1, NFPA 54 and National Fuel Gas Code.

ORIFICE PART NUMBERS:

661017R - #17	661018R - #18	<mark>661019R - #19**</mark>	661020R - #20	661021R - #21
661022 - #22	662023R - #23	661024R - #24	661025R - #25	661026R - #26
661027 - #27	661028 - #28	661029R - #29	661030R - #30	661031 - #31
<mark>661032R - #32**</mark>	661035 - #35	661036R - #36	661037R - #37	661038 - #38
<mark>661039R - #39**</mark>	661040 - #40	661041R - #41	661042R - #42	661043R - #43
661044R - #44	661045R - #45	661046R - #46	661047R - #47	661048R - #48
661049R -#49	661050R - #50	661051R - #51	661052R – #52	661055R - #55
661056R - #56 661061R - #61	661057R - #57	661058R - #58	661059 - #59	661060 - #60

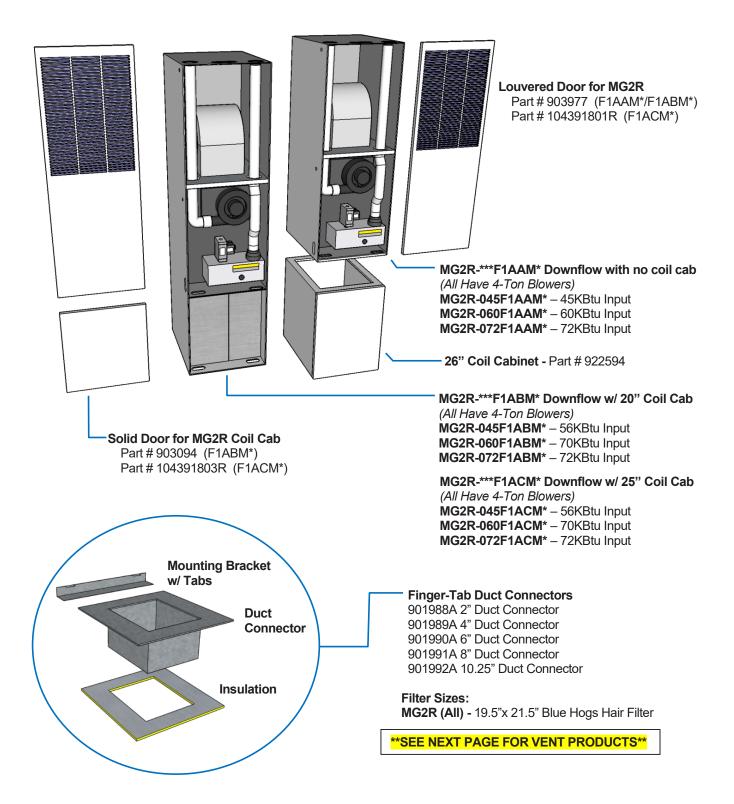
NOTE: #19, #32, and #39 Orifices have been discontinued. Use the next size smaller orifice



MG2R-Series 95% AFUE Gas Furnaces:

- MG2R-***F1ABM* Downflow w/ 20" Coil Cabinet
- MG2R-***F1ACM* Downflow w/ 25" Coil Cabinet
- MG2R-***F1AAM* Downflow NO CABINET





MG2R-Series 95% AFUE Gas Furnaces:

- MG2R-***F1ABM* Downflow w/ 20" Coil Cabinet •
- MG2R-***F1ACM* Downflow w/ 25" Coil Cabinet •
- MG2R-***F1AAM* Downflow NO CABINET

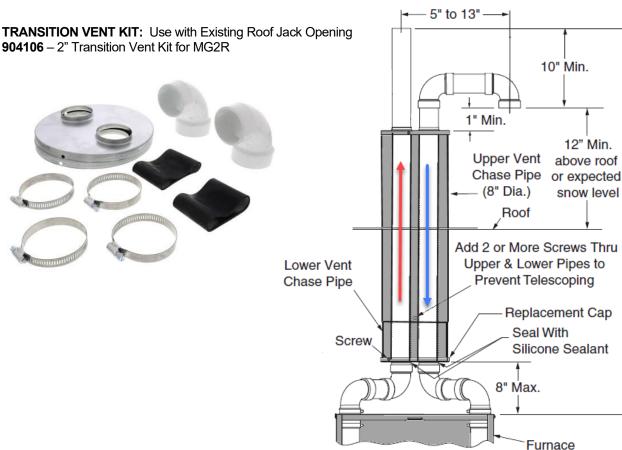
PIPING SIZE TABLE: Combined Intake and Exhaust Max. Length *Consult IOM for complete venting information

MAXIMUM DIRECT VENT, DUAL PIPE LENGTH (FT.)							
MG2R INPUTS (BTU)	INLET / OUTLET 2" DIAMETER	INLET / OUTLET 3" DIAMETER					
45,000	30	60					
60,000	30	60					
72,000	30	60					

- 1. Subtract 2.5ft. for each additional 2" Long Radius Elbow, subtract 5ft. for each additional 2" Short Radius Elbow, subtract 3.5ft. for each additional 3" Long Radius Elbow, and 7ft. for each additional 3" Short Radius Elbow.
- Two (2) 45 degree elbows are equivalent to one (1) 90 degree elbow. 2.
- This table applies for elevations from sea level to 2,000ft. elevation. For higher 3. elevations, decrease pipe lengths by 8% per 1000ft. of altitude.

CONCENTRIC PVC KITS: Vertical or Horizontal Intake and Exhaust Termination Kit 904952 - 2" Concentric for MG2R

904953 - 3" Concentric for MG2R







12" Min.

15' Max.



MG2R-Series 95% AFUE Gas Furnaces NAT GAS Orifice Selection

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LOCAL HEATING VALUES FOR NATURAL GAS									
	BTU PER CUBIC FOOT								
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4,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
5,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
6,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
7,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
8,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
9,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
10,000 FT	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

	HIGH HEATING VALUE & MANIFOLD PRESSURE = 3.5 IN. W.C.				OW HEATING LD PRESSUR	VALUE & E = 3.5 IN. W.C	
ALTITUDE ABOVE		INPUT (BTU)		ALTITUDE ABOVE		INPUT (BTU)	
SEA LEVEL	45,000	60,000	72,000	SEA LEVEL	45,000	60,000	72,000
0 to 1,999 FT	49	45	47	0 to 1,999 FT	49	45	47
2,000 to 2,999 FT	50	46	48	2,000 to 2,999 FT	49	45	47
3,000 to 3,999 FT	50	46	48	3,000 to 3,999 FT	49	45	47
4,000 to 4,999 FT	51	47	48	4,000 to 4,999 FT	50	45	47
5,000 to 5,999 FT	51	47	49	5,000 to 5,999 FT	50	45	47
6,000 to 6,999 FT	51	48	49	6,000 to 6,999 FT	50	46	48
7,000 to 7,999 FT	52	48	50	7,000 to 7,999 FT	51	47	48
8,000 to 8,999 FT	52	49	50	8,000 to 8,999 FT	51	47	49
9,000 to 9,999 FT	52	49	50	9,000 to 9,999 FT	51	48	49

ORIFICE PART NUMBERS:

661017R - #17	661018R - #18	<mark>661019R - #19**</mark>	661020R - #20	661021R - #21
661022 - #22	662023R - #23	661024R - #24	661025R - #25	661026R - #26
661027 - #27	661028 - #28	661029R - #29	661030R - #30	661031 - #31
<mark>661032R - #32**</mark>	661035 - #35	661036R - #36	661037R - #37	661038 - #38
<mark>661039R - #39**</mark>	661040 - #40	661041R - #41	661042R - #42	661043R - #43
661044R - #44	661045R - #45	661046R - #46	661047R - #47	661048R - #48
661049R -#49	661050R - #50	661051R - #51	661052R – #52	661055R - #55
661056R - #56	661057R - #57	661058R - #58	661059 - #59	661060 - #60
661061R - #61				

NOTE: #19, #32, and #39 Orifices have been discontinued. Use the next size smaller orifice



MG2R-Series 95% AFUE Gas Furnaces PROPANE Orifice Selection

PROPANE ORIFICES: Use the chart below to determine appropriate orifice based on model and installation altitude.

ORIFICES FOR PROPANE GAS MANIFOLD PRESSURE = 10 IN. W.C.							
ALTITUDE ABOVE		INPUT (BTU)					
SEA LEVEL	45,000	60,000	72,000				
0 to 1,999 FT	57	55	56				
2,000 to 2,999 FT	57	55	56				
3,000 to 3,999 FT	57	55	56				
4,000 to 4,999 FT	57	56	56				
5,000 to 5,999 FT	58	56	56				
6,000 to 6,999 FT	59	56	57				
7,000 to 7,999 FT	59	56	57				
8,000 to 8,999 FT	60	56	57				
9,000 to 9,999 FT	61	57	57				

ORIFICE PART NUMBERS:

661017R - #17	661018R - #18	<mark>661019R - #19**</mark>	661020R - #20	661021R - #21
661022 - #22	662023R - #23	661024R - #24	661025R - #25	661026R - #26
661027 - #27	661028 - #28	661029R - #29	661030R - #30	661031 - #31
<mark>661032R - #32**</mark>	661035 - #35	661036R - #36	661037R - #37	661038 - #38
<mark>661039R - #39**</mark>	661040 - #40	661041R - #41	661042R - #42	661043R - #43
661044R - #44	661045R - #45	661046R - #46	661047R - #47	661048R - #48
661049R -#49	661050R - #50	661051R - #51	661052R – #52	661055R - #55
661056R - #56	661057R - #57	661058R - #58	661059 - #59	661060 - #60
661061R - #61				

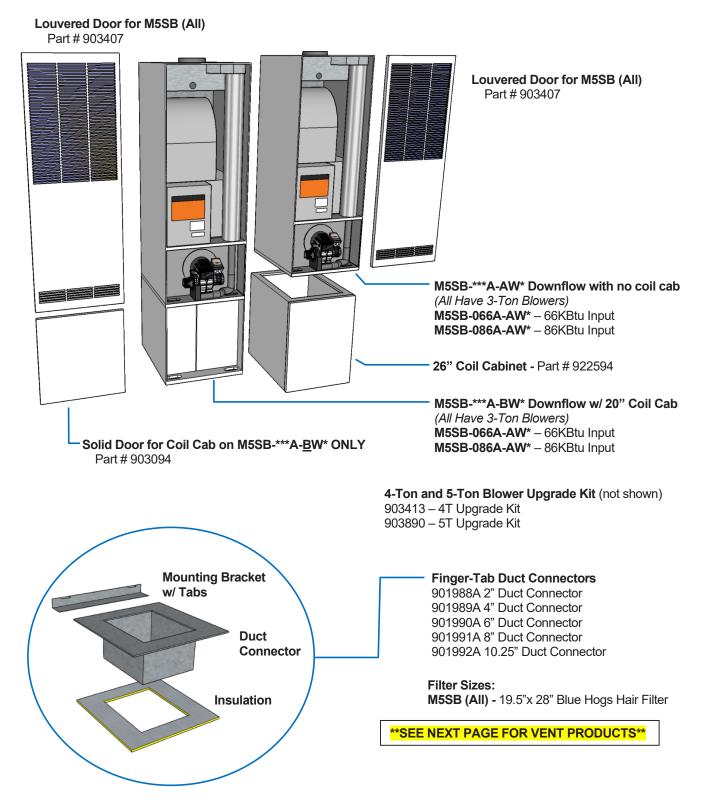
NOTE: #19. #32. and #39 Orifices have been discontinued. Use the next size smaller orifice



M5SB-Series 83% AFUE Oil Furnaces:

- M5SB-***A-BW* Downflow w/ 20" Coil Cabinet
- M5SB-***A-AW* Downflow NO CABINET





M5SB-Series 83% AFUE Oil Furnaces:

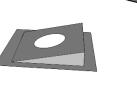
- M5SB-***A-BW* Downflow w/ 20" Coil Cabinet
- M5SB-***A-AW* Downflow NO CABINET



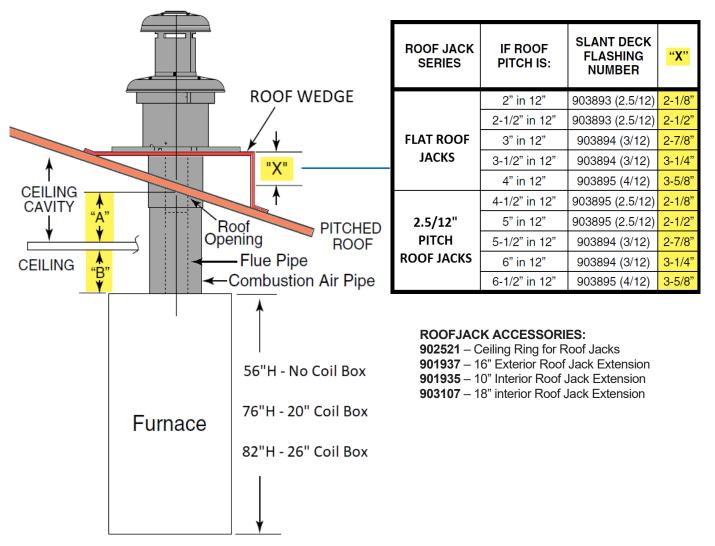
FLAT ROOF JACKS: Use alone or in combination with wedges below for pitched roofs
903658 – Flat Roof Jack 15" to 23"
903659 – Flat Roof Jack 21" to 35"
903660 – Flat Roof Jack 27" to 47"

PITCHED ROOF JACKS: Use alone or in combination with wedges below for higher pitch roofs **903664** – 2/12 Pitch Roof Jack 35" to 63" **920638** – 2/12 Pitch Roof Jack 51" to 95"

ROOF WEDGES: Use in combination with Flat or Pitched Roof Jacks
903893 – 2.5/12 Roof Wedge
903894 – 3/12 Roof Wedge
903895 – 4/12 Roof Wedge



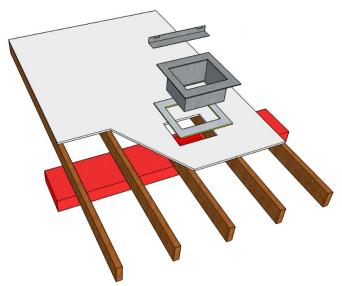
TO SELECT ROOFJACK: A + B (+X IF PITCHED ROOF)



DUCT CONNECTOR INSTALLATION DETAILS E7-Series, MG1E-Series, MG2R-Series, and M5SB-Series

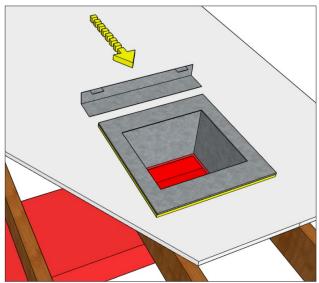


Step 1: Select duct connector based on distance/depth from finished floor to supply duct. Duct connector is lowered into hole through insulation ring. Corresponding hole is cut in supply duct to match duct connector finger/screw tabs.

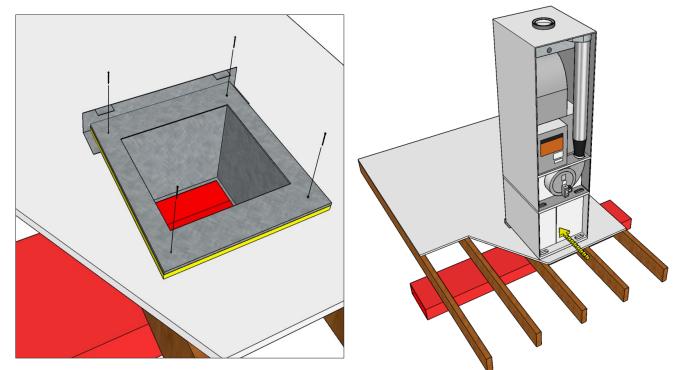


Step 3: Duct connector is then attached to the floor using appropriate screws, flat-head nails, or staples.

Step 2: Mounting bracket with tabs is slid underneath and centered side-to-side. Duct connector is then attached and sealed to supply duct using industry-approved methods – see furnace installation manual for more details.



Step 4: Furnace is slid back to against mounting bracket and secured to floor using methods detailed in install manual.



CMH Series

SPECIFICATIONS

- Rifled copper tubing, enhanced aluminum fins
- · Immersion-tested at 500 psi, then nitrogen-pressurized and sealed
- · Left-hand refrigerant and plumbing connections
- · Externally mounted flowrater body with Schrader valve
- · Heavy duty plastic drain pans on all models
- AHRI certifiable with certain brands of A/C and heat pump systems
- UL listed for use with both R-22 and R-410a when proper metering device is used

Line-Set Connection Size

1-1/2 - 3 Ton	3/8" x 3/4"
3-1/2 - 5 Ton	3/8" x 7/8"



For Comfort-Aire/Century extended OEM ratings, please visit **www.marsdeliversratings.com**

MANUFACTURED HOUSING COILS



Representative drawing only. Some models may vary in appearance.

> TXV for 1.5 - 2.5 Ton H4TXV01 TXV for 3 - 4 Ton H4TXV02 TXV for 5 Ton H4TXV03





Warranty—6 years on parts, 10 years when installed as a part of a residential AHRI matched system (Some limitations apply; see printed warranty for details.) www.marsdelivers.com

CMH Series

DIMENSIONS

		Dimensions				Pallet	R-22
Coil Model	Nominal Tonage	Pan Widths (W)"	Pan Depth (D)"	Coil Height (H)"	Weight	Qty	Piston
CMH18/36PM1M	1.5 - 3	18"	19-1/2"	17"	32	8	0.067
CMH24/30PM1M	2 - 2.5	18"	19-1/2"	19"	35	8	0.059
CMH24/36PM1M	2 - 3	18"	19-1/2"	17"	42	8	0.067
CMH36PM2M	2.5 - 3	18"	19-1/2"	19"	45	8	0.067
CMH42/48PM1M	3.5 - 4	18"	19-1/2"	19"	35	8	0.076
CMH42/48PM2M	3.5 - 4	18"	19-1/2"	19"	45	8	0.076
CMH48PM2M	3.5 - 4	18"	19-1/2"	*21"	48	4	0.093
CMH48/60PM1M	4 - 5	18"	19-1/2"	*25"	46	4	0.093
CMH48/60PM2M	4 - 5	18"	19-1/2"	*23"	49	4	0.093

* (In reference to coil model number) NOTE: 21" or taller coils can only be used with the following equipment combinations -

Nortek Style:

E7-Series Electric Furnaces (All Models) MG1E/MG2R/M5SB with 922594 26" Coil Box (NOT FOR STANDARD 20" COIL BOX)

JCI Style: EBE-Series Electric Furnaces with 3500-8602 Cabinet Extension

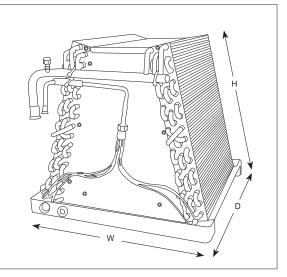
SERVICE COIL DIMENSIONS

		Dimensions				Pallet	R-22
Coil Model	Nominal Tonage	Pan Widths (W)"	Pan Depth (D)"	Coil Height (H)"	Weight	Qty	Piston
CMH18/24PM3M	1.5 - 2	18"	19.5"	11"	22	8	0.053
СМНЗ6РМЗМ	3	18"	19.5"	15"	28	8	0.073
CMH42/60PM3M	3.5 - 5	18"	19.5"	19"	45	8	*0.093

Coils are shipped with R-410A pistons already installed. *Same Piston is used for R-22 and R-410A These are Replacement Service Coils "Only" and are not RATED. For Manufactured Housing Use Only

PISTONS

Description	Piston Size	Part Number	Tonnage Outdoor Unit
	41	176799941	12
	53	176799953	18
	59	176799959	24
R-22 Pistons	67	176799967	30
n-22 FISIUIIS	73	176799973	36
	80	176799980	42
	84	176799984	48
	93	176799993	60
	41	176799941	12
	49	176799949	18
	53	176799953	24
R-410A Pistons	59	176799959	30
R-410A PISIONS	67	176799967	36
	73	176799973	42
	76	176799976	48
	93	176799993	60



"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

NOTES

NOTES

Nortek-Style Manufactured Housing Furnaces







Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations. Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

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