Arcoaire®
Air Conditioning & Heating

F96VTN

Product Specifications

Up to 96% AFUE, Variable–Speed, Two–Stage Gas Furnace

EASIER TO SELL

- Up to 96% AFUE in upflow and horizontal positions 95% AFUE in downflow position
- Two–stage heating operation
- Variable–speed, constant torque ECM blower for extra SEER boost with select cooling equipment
- Supports single– and two–stage cooling units
- Dehumidification feature in cooling
- Low NOx units are designed for California installations and meet 40 ng/J NOx emissions. Can be installed in air quality management districts with a 40 ng/J NOx emissions requirement.
- Cabinet air leakage less than 2.0% at 1.0 in. W.C. and cabinet air leakage less than 1.4% at 0.5 in. W.C. when tested in accordance with ASHRAE standard 193

TOUGHER

- Flame roll–out sensors standard
- Adjustable heating blower OFF delay
- Factory set blower ON delay
- RPJ® primary heat exchanger
- Stainless steel secondary heat exchanger
- High temperature limit control prevents overheating
- Direct ignition with Silicon Nitride ignitor

QUIETER

- Operates quieter at lower heating rates
- Two–speed induced draft combustion blower
- Variable speed, constant torque ECM blower motor
- Fully insulated steel cabinet

EASIER TO INSTALL AND SERVICE

- Direct vent (2–pipe), single–pipe venting or ventilated combustion air
- 24 VAC humidifier terminal
- Electronic air cleaner terminal
- 35" (889mm) high, for ease of installation
- Quarter turn knobs for easy door removal and secure attachment
- Factory shipped for natural gas, with propane gas conversion kits available
- Four position – upflow/downflow/horizontal (left/right) installation
- At least twelve different venting configurations
- Through the casing flue pipe for counterflow or horizontal applications with accessory (order separately)
- Concentric vent available
- Slide out heat exchanger assembly and blower assembly
- Twinning capable (model sizes 0601714, 0801716, 1002120, 1202422)
- 5 ton sizes (sizes 0802120, 1002120) allow 15 Amp breaker with accessory (order separately)

LIMITED WARRANTY *

- 5 year No Hassle Replacement™ limited warranty
- Lifetime heat exchanger limited warranty with timely registration
- 5 year parts limited warranty
  - With timely registration, an additional 5 year parts limited warranty

* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Illustrations and photographs are only representative. Some product models may vary.

⚠ WARNING

CARBON MONOXIDE POISONING AND FIRE HAZARD
Failure to follow this warning could result in personal injury, death, and/or property damage.
This furnace is not designed for use in recreation vehicles, manufactured (mobile) homes or outdoors.
Failure to follow this warning could result in personal injury, death, and/or property damage.

ENERGUIDE
Annual Fuel Utilization Efficiency (AFUE)
THIS MODEL 96
MID HIGH
78% 82% 88% 97%

AHRI CERTIFIED™ www.ahridirectory.org

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org .

DESIGN CERTIFIED®

ENERGY STAR

CERTIFIED®

Certified System™
ISO 9001 Quality

Model Number	Input (BTUH)	Efficiency AFUE		ENERGY STAR®	Cooling Capacity CFM range @ .5 in. w.c. (125 Pa)	Dimensions H x W x D Inches (Millimeters)	SHIP WT. LB (KG)
		Upflow/Hz	Downflow				
F96VTN0401410	40,000	95%	95%	√	445 – 1030	35 x 14-3/16 x 29–1/2 (889 x 361 x 750)	123 (55.8)
F96VTN0401712	40,000	96%	95%	√	400 – 1105	35 x 17–1/2 x 29–1/2 (889 x 445 x 750)	133 (60.3)
F96VTN0601412	60,000	95%	95%	√	445 – 1115	35 x 14-3/16 x 29–1/2 (889 x 361 x 750)	132 (59.9)
F96VTN0601714	60,000	96%	95%	√	210 – 1475	35 x 17–1/2 x 29–1/2 (889 x 445 x 750)	139 (63.0)
F96VTN0801716	80,000	96%	95%	√	360 – 1655	35 x 17–1/2 x 29–1/2 (889 x 445 x 750)	147 (66.7)
F96VTN0802120	80,000	96%	95%	√	440 – 2005	35 x 21 x 29–1/2 (889 x 533 x 750)	156 (70.7)
F96VTN1002120	100,000	96%	95%	√	405 – 2005	35 x 21 x 29–1/2 (889 x 533 x 750)	170 (77.1)
F96VTN1202422	120,000	96%	95%	√	505 – 2190	35 x 24–1/2 x 29–1/2 (889 x 622 x 750)	190 (86.2)

MODEL NUMBER IDENTIFICATION GUIDE

DIGIT POSITION	1	2,3	4	5	6	7-9	10,11	12,13	14	15
BRAND	F, G, N, R									
EFFICIENCY		80 - 80% AFUE 92 - 92% AFUE 95 - 95% AFUE 96 - 96% AFUE 97 - 97% AFUE								
MOTOR TYPE			C = Comm. Variable-Speed Constant Airflow (VCA) ECM E = Fixed-Speeds Constant Torque (FCT) ECM V = Variable-Speed Constant Torque (VCT) ECM							
HEATING STAGES				M - Modulating S - Single Stage T - Two Stage						
FEATURE					L = Low NOx M = Mobile/Manufactured Home N = Standard NOx U = Ultra Low Nox					
HEATING INPUT						026 = 26,000 BTU/h 040 = 40,000 BTU/h 060 = 60,000 BTU/h …….				
CABINET WIDTH							14 = 14.2" 17 = 17.5" 21 = 21.0" 24 = 24.5"			
COOLING CAPACITY								08 = 800 CFM 10 = 1000 CFM 12 = 1200 CFM 14 = 1400 CFM 16 = 1600 CFM 20 = 2000 CFM 22 = 2200 CFM		
MAJOR SERIES									A, B, C, D…	
MINOR SERIES										1, 2, 3, 4…

A190043

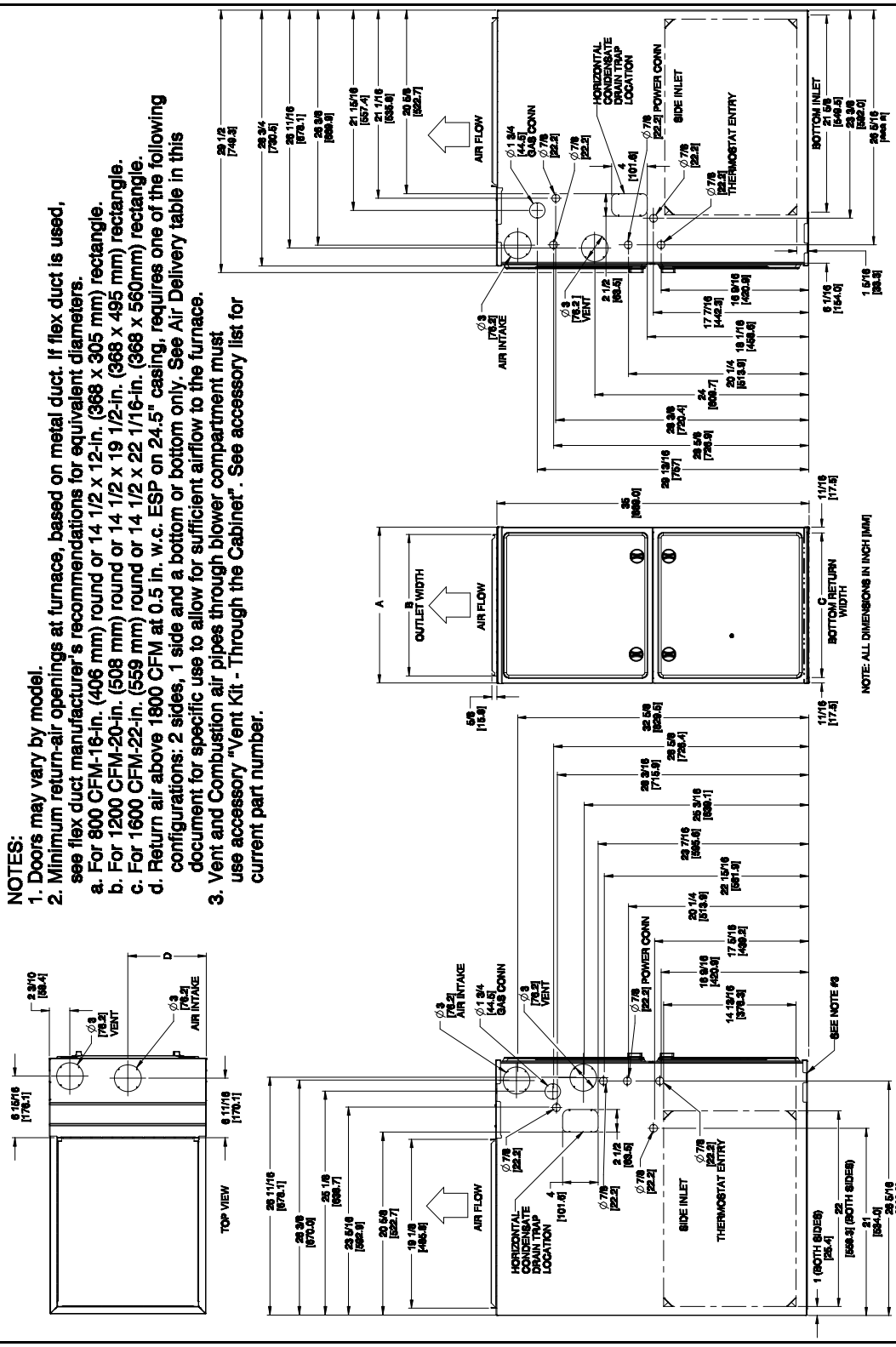
For California Residents:
For installation in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J NOx emission limit, and thus is subject to a mitigation fee of up to $450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com

PHYSICAL DATA

Heating Capacity and Efficiency			0401410	0401712	0601412	0601714	0801716	0802120	1002120	1202422
Input	High Heat	(BTUH)	40,000	40,000	60,000	60,000	80,000	80,000	100,000	120,000
	Low Heat	(BTUH)	26,000	26,000	39,000	39,000	52,000	52,000	65,000	78,000
Output	High Heat	(BTUH)	39,000	39,000	58,000	58,000	78,000	78,000	97,000	117,000
	Low Heat	(BTUH)	25,000	25,000	38,000	38,000	50,000	51,000	63,000	76,000
Certified Temperature Rise Range °F (°C)		High Heat	40 – 70 (22 – 39)	40 – 70 (22 – 39)	40 – 70 (22 – 39)	40 – 70 (22 – 39)	40 – 70 (22 – 39)	40 – 70 (22 – 39)	40 – 70 (22 – 39)	40 – 70 (22 – 39)
		Low Heat	30 – 60 (17 – 33)	30 – 60 (17 – 33)	30 – 60 (17 – 33)	30 – 60 (17 – 33)	30 – 60 (17 – 33)	30 – 60 (17 – 33)	30 – 60 (17 – 33)	30 – 60 (17 – 33)
Airflow Capacity and Blower Data										
Rated External Static Pressure (in. w.c.)		Heating	0.10	0.10	0.12	0.12	0.15	0.15	0.20	0.20
		Cooling	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Airflow Delivery @ Rated ESP (CFM)		High Heat	800	850	1110	1135	1450	1555	1865	2120
		Low Heat	560	625	770	860	1130	1200	1435	1625
		Cooling	1030	1105	1115	1475	1655	2005	2005	2190
Cooling Capacity (tons) @ 400, 350 CFM/ton		400 CFM/ton	2	2.50	2.50	3.50	4	5	5	5
		350 CFM/ton	2.50	3	3	4	4.50	5.50	5.50	6
Direct–Drive Motor Type			Electronically Communicated Motor (ECM)							
Direct–Drive Motor HP			1/2	1/2	1/2	3/4	3/4	1	1	1
Motor Full Load Amps Default / Low Amp Kit†			6.30	6.50	6.30	10.10	9.20	13.9/10.4	13.9/10.4	11.7
RPM Range			600 – 2000	400 – 1200	600 – 2000	400 – 1200	400 – 1200	400 – 1200	400 – 1200	400 – 1200
Speed Selections			Variable (PWM)							
Blower Wheel Dia x Width		in.	11 x 7	11 x 8	11 x 7	11 x 8	11 x 8	11 x 10	11 x 10	11 x 11
Air Filtration System			Optional Media Cabinet Field Supplied Filter							
Filter Used for Certified Watt Data			NAHA00*06FB							
Electrical Data										
Input Voltage	Volts–Hertz–Phase		115–60–1							
Operating Voltage Range		Min–Max	104–127							
Maximum Input Amps Default / Low Amp Kit†		Amps	7.0	7.2	7.1	10.9	10.0	14.7/11.3	14.7/11.3	12.6
Unit Ampacity Default / Low Amp Kit†		Amps	9.70	9.80	9.70	14.60	13.40	19.3/14.9	19.4/15.0	16.7
Minimum Wire Size Default / Low Amp Kit†		AWG	14	14	14	14	14	12/14	12/14	12
Maximum Wire Length @ Minimum Wire Size Default / Low Amp Kit†		Feet	38	37	38	25	27	29/24	29/24	34
		(M)	(11.7)	(11.5)	(11.7)	(7.7)	(8.4)	(9.0/7.5)	(9.0/7.5)	(10.5)
Maximum Fuse/Ckt Bkr (Time–Delay Type Recommended)Default / Low Amp Kit†		Amps	15	15	15	15	15	20/15	20/15	20
Transformer Capacity (24vac output)			VA							
External Control Power Available	Heating		24.3 VA							
	Cooling		34.6 VA							
Controls										
Gas Connection Size			1/2" – NPT							
Burners (Monoport)			2	2	3	3	4	4	5	6
Gas Valve (Redundant)	Manufacturer		White Rodgers							
Minimum Inlet Gas pressure (in. wc)			4.50							
Maximum Inlet Gas pressure (in. wc)			13.60							
Manufactured (Mobile) Home Kit			*not approved for MH use*							
Ignition Device			Silicon Nitride							
Heating Blower Control (Heating Off–Delay)			Adjustable: 90, 120, 150, 180 seconds							
Cooling Blower Control (Time Delay Relay)			90 seconds							
Communication System			None							
Thermostat Connections			R, W/W1, W2 Y/Y2, Y1, G, Com 24V, DHUM							
Accessory Connections			EAC (115vac); HUM (24vac); 1–stg. AC (via Y/Y2)							

† Low Amp Kit (NAHA00101PC) allows select furnaces to be installed with a 15 Amp Breaker and 14 AWG wire within the listed wire length. Affected data shown as Default Value/Value with Lower Amp Kit.

UNIT DIMENSIONS



NOTES:
1. Doors may vary by model.
2. Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
   a. For 800 CFM-16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
   b. For 1200 CFM-20-in. (508 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
   c. For 1600 CFM-22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560mm) rectangle.
   d. Return air above 1800 CFM at 0.5 in. w.c. ESP on 24.5" casing, requires one of the following configurations: 2 sides, 1 side and a bottom or bottom only. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace.
3. Vent and Combustion air pipes through blower compartment must use accessory "Vent Kit - Through the Cabinet". See accessory list for current part number.

FURNACE SIZE	A CABINET WIDTH	B OUTLET WIDTH	C BOTTOM INLET WIDTH	D AIR INTAKE	SHIP WT. LB (KG)
F96VTN0401410	14−3/16 (361)	12−1/2 (319)	12−9/16 (322)	7−1/8 (181)	123 (55.8)
F96VTN0401712	17−1/2 (445)	15−7/8 (403)	16 (406)	8−3/4 (222)	133 (60.3)
F96VTN0601412	14−3/16 (361)	12−1/2 (319)	12−9/16 (322)	7−1/8 (181)	132 (59.9)
F96VTN0601714	17−1/2 (445)	15−7/8 (403)	16 (406)	8−3/4 (222)	139 (63.0)
F96VTN0801716	17−1/2 (445)	15−7/8 (403)	16 (406)	8−3/4 (222)	147 (66.7)
F96VTN0802120	21 (533)	19−3/8 (492)	19−1/2 (495)	10−1/2 (267)	156 (70.7)
F96VTN1002120	21 (533)	19−3/8 (492)	19−1/2 (495)	10−1/2 (267)	170 (77.1)
F96VTN1202422	24−1/2 (622)	22−7/8 (581)	23 (584)	12−1/4 (311)	190 (86.2)

Fig. 1 – Dimensional Drawing

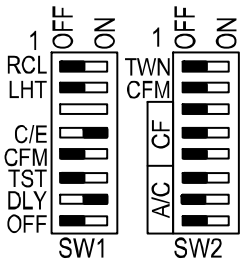
MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS FOR ALL UNITS	
POSITION	**CLEARANCE in.(mm)**
REAR	0
FRONT (Combustion air openings in furnace and in structure)	1 (25)
Required for service	*24 (610)
All Sides of Supply Plenum	*1 (25)
Sides	0
Vent	0
Top of Furnace	1 (25)

* Consult your local building codes.

FURNACE SETUP SWITCH DESCRIPTION

A/C OR CF AIRFLOW BASED ON COOLING UNIT TONNAGE (FOR PWM MODELS)

CF	OFF 3 4 5	OFF 3 4 5	OFF 3 4 5	OFF 3 4 5	OFF 3 4 5	OFF 3 4 5	OFF 3 4 5	OFF 3 4 5
AC	OFF 6 7 8	OFF 6 7 8	OFF 6 7 8	OFF 6 7 8	OFF 6 7 8	OFF 6 7 8	OFF 6 7 8	OFF 6 7 8
MODEL SIZE								
2.5T-40	DEF	1.5T(2)	2T	2.5T	2.5T(1)	2.5T	2.5T	2.5T
3T-40	DEF	1.5T(2)	2T	2.5T	3T(1)	3T	3T	3T
3T-60	DEF	1.5T(2)	2T	2.5T	3T	3T(1)	3T	3T
3.5T-60	DEF	1.5T(2)	2T	2.5T	3T	3.5T(1)	3.5T	3.5T
4T- 80	DEF	1.5T(2)	2T	2.5T	3T	3.5T	4T(1)	4T
5T-80, 100	DEF	2T(2)	2.5T	3T	3.5T	4T	5T(1)	5T
120	DEF	2T	2.5T(2)	3T	3.5T	4T	5T(1)	5.5T



1. Default A/C airflow when A/C setup switches are in OFF position.
2. Default Low−Stage A/C airflow when CF switches are in OFF position

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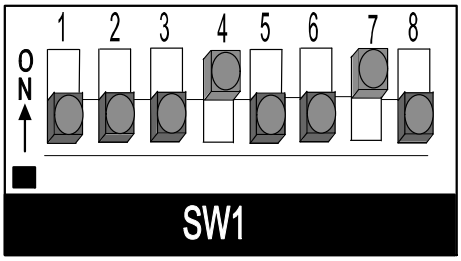
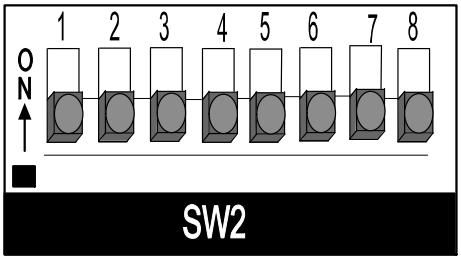
DIP SWITCH CONFIGURATION





SW1

Switch	Description		Factory
1	**Status Code Recovery** - Turn ON to retrieve status codes.	See manual for use.	OFF
2	**Low Heat Only -** SW1 - 2 OFF allows two-stage operation SW1 - 2 ON for two-stage operation using two-stage TSTAT.	using single stage TSTAT (Adaptive Heat Mode).	OFF
3	**Not used**		OFF
4	**Comfort/Efficiency Adjust** - Turn ON to decrease low- approximately 10% for maximum comfort.	heat airflow by approximately 7% and high-heat	ON
5	**CFM per Ton Adjust -** See Airflow Tables in manual for	desired settings. Also see SW2 - 2.	OFF
6	**Component Self Test** - Turn ON to initiate Component disconnected. Turn OFF when Self Test is completed.	Self Test for troubleshooting assistance when R TSTAT lead is	OFF
7 & 8	**Blower Off Delay** - See manual or unit wiring diagram for Factory default is 120 Seconds.	settings. Adjustable 90 - 180 seconds.	7-ON 8-OFF

SW2

Switch	Description		Factory
1	**Twinning** - When Twinned furnace setup is required, SW2 - 1 SW2-1 ON selects the secondary furnace unit. See kit instructions	OFF selects the main furnace unit. for further details.	OFF
2	**CFM per Ton Adjust -** See Airflow Tables in manual for	desired settings. Also see SW1 - 5.	OFF
3-5	**CF Setup Switches** - The Continuous Fan setup switch selects airflow. See Cooling Air Delivery Tables and Continuous Fan delivery	desired CF and low-stage cooling (two-stage A/C units) Tables (when present) for specific switch settings.	ALL OFF
6-8	**A/C Setup Switches -** The Air Conditioning setup switch units) airflow. See Cooling Air Delivery Tables in manual for specific	selects desired cooling or high-stage cooling (two-stage switch settings.	ALL OFF

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AIR DELIVERY – CFM (with filter)

(SW1–5 and SW4–3 set to OFF, except as indicated. See notes 1 and 2.)

Unit Size: 0401410	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1125	1105	1080	1055	1030	1005	975	955	930	905
Cooling (SW2–8,7,6)	OFF	OFF	ON	605	565	525	485	445	See note 4				
	OFF	ON	OFF	760	730	695	655	625	590	555	525	490	455
	OFF	ON	ON	950	925	900	870	840	810	785	760	730	705
	ON	OFF	OFF	1125	1105	1080	1055	1030	1005	975	955	930	905
	ON	OFF	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	OFF	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
	Maximum Clg Airflow[2]			1130	1105	1080	1055	1030	1005	980	955	930	905
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	605	565	525	485	445	See note 4				
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	605	565	525	485	445	See note 4				
	OFF	ON	OFF	760	730	695	655	625	590	555	525	490	455
	OFF	ON	ON	950	925	900	870	840	810	785	760	730	705
	ON	OFF	OFF	1125	1105	1080	1055	1030	1005	975	955	930	905
	ON	OFF	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	OFF	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
Cont. Fan Default:	OFF	OFF	OFF	385	335	See Note 4							
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	245	180	See Note 4							
	OFF	ON	OFF	310	245	See Note 4							
	OFF	ON	ON	385	335	See Note 4							
	ON	OFF	OFF	385	335	See Note 4							
	ON	OFF	ON	385	335	See Note 4							
	ON	ON	OFF	385	335	See Note 4							
	ON	ON	ON	385	335	See Note 4							
Heating (SW1)	High Heat Airflow[3]			800	770	730	700	665	635	605	570	540	510
	Low Heat Airflow[3]			560	520	470	425	390	See note 4				

Unit Size: 0401712	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1240	1210	1180	1145	1105	1060	1005	950	895	835
Cooling (SW2–8,7,6)	OFF	OFF	ON	585	540	490	445	400	360	315	265	210	155
	OFF	ON	OFF	780	740	695	655	620	580	545	510	480	445
	OFF	ON	ON	975	945	910	870	835	805	775	740	710	680
	ON	OFF	OFF	1170	1140	1115	1085	1050	1020	985	945	890	835
	ON	OFF	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	OFF	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
	Maximum Clg Airflow[2]			1240	1210	1180	1145	1105	1060	1005	950	895	835
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	585	540	490	445	400	See note 4				
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	585	540	490	445	400	See note 4				
	OFF	ON	OFF	780	740	695	655	620	580	545	510	480	445
	OFF	ON	ON	975	945	910	870	835	805	775	740	710	680
	ON	OFF	OFF	1170	1140	1115	1085	1050	1020	985	945	890	835
	ON	OFF	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	OFF	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
Cont. Fan Default:	OFF	OFF	OFF	585	540	490	445	400	See note 4				
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	305	235	See Note 4							
	OFF	ON	OFF	470	410	350	See Note 4						
	OFF	ON	ON	585	540	490	445	400	See note 4				
	ON	OFF	OFF	585	540	490	445	400	See note 4				
	ON	OFF	ON	585	540	490	445	400	See note 4				
	ON	ON	OFF	585	540	490	445	400	See note 4				
	ON	ON	ON	585	540	490	445	400	See note 4				
Heating (SW1)	High Heat Airflow[3]			850	810	770	730	700	660	630	595	560	530
	Low Heat Airflow[3]			625	580	535	490	445	405	365	320	270	220

AIR DELIVERY – CFM CONTINUED (with filter)

(SW1–5 and SW4–3 set to OFF, except as indicated. See notes 1 and 2.)

Unit Size: 0601412	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1180	1150	1130	1100	1075	1045	1020	995	965	935
Cooling (SW2–8,7,6)	OFF	OFF	ON	625	585	540	495	445	See note 4				
	OFF	ON	OFF	820	785	745	710	670	635	595	560	525	490
	OFF	ON	ON	1000	970	935	905	875	845	815	785	755	725
	ON	OFF	OFF	1180	1150	1130	1100	1075	1045	1020	995	965	935
	ON	OFF	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985
	ON	ON	OFF	1220	1195	1170	1140	1115	1090	1065	1035	1010	985
	ON	ON	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985
	Maximum Clg Airflow[2]			1220	1195	1170	1140	1115	1090	1065	1035	1010	985
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	625	585	540	495	445	See note 4				
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	625	585	540	495	445	See note 4				
	OFF	ON	OFF	820	785	745	710	670	635	595	560	525	490
	OFF	ON	ON	1000	970	935	905	875	845	815	785	755	725
	ON	OFF	OFF	1180	1150	1130	1100	1075	1045	1020	995	965	935
	ON	OFF	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985
	ON	ON	OFF	1220	1195	1170	1140	1115	1090	1065	1035	1010	985
	ON	ON	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985
Cont. Fan Default:	OFF	OFF	OFF	375	315	See Note 4							
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	200	125	See Note 4							
	OFF	ON	OFF	285	215	See Note 4							
	OFF	ON	ON	375	315	See Note 4							
	ON	OFF	OFF	375	315	See Note 4							
	ON	OFF	ON	375	315	See Note 4							
	ON	ON	OFF	375	315	See Note 4							
	ON	ON	ON	375	315	See Note 4							
Heating (SW1)	High Heat Airflow[3]			1115	1090	1060	1035	1010	980	955	930	905	875
	Low Heat Airflow[3]			780	740	695	655	615	575	530	490	450	405

Unit Size: 0601714	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1330	1295	1260	1220	1190	1150	1110	1075	1045	1005
Cooling (SW2–8,7,6)	OFF	OFF	ON	725	600	435	280	210	See note 4				
	OFF	ON	OFF	780	725	660	615	540	See note 4				
	OFF	ON	ON	975	925	875	835	785	750	690	655	610	570
	ON	OFF	OFF	1160	1120	1090	1045	1010	970	920	885	840	800
	ON	OFF	ON	1330	1295	1260	1220	1190	1150	1110	1075	1045	1005
	ON	ON	OFF	1705	1650	1595	1545	1475	1415	1340	1275	1200	1105
	ON	ON	ON	1705	1650	1595	1545	1475	1415	1340	1275	1200	1105
	Maximum Clg Airflow[2]			1705	1650	1595	1545	1475	1415	1340	1275	1200	1105
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	725	600	435	280	210	See note 4				
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	725	600	435	280	210	See note 4				
	OFF	ON	OFF	780	725	660	615	540	See note 4				
	OFF	ON	ON	975	925	875	835	785	750	690	655	610	570
	ON	OFF	OFF	1160	1120	1090	1045	1010	970	920	885	840	800
	ON	OFF	ON	1330	1295	1260	1220	1190	1150	1110	1075	1045	1005
	ON	ON	OFF	1705	1650	1595	1545	1475	1415	1340	1275	1200	1105
	ON	ON	ON	1705	1650	1595	1545	1475	1415	1340	1275	1200	1105
Cont. Fan Default:	OFF	OFF	OFF	725	600	435	280	210	See note 4				
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	725	600	435	280	210	See note 4				
	OFF	ON	OFF	780	725	660	615	540	See note 4				
	OFF	ON	ON	975	925	875	835	785	750	690	655	610	570
	ON	OFF	OFF	975	925	875	835	785	750	690	655	610	570
	ON	OFF	ON	975	925	875	835	785	750	690	655	610	570
	ON	ON	OFF	975	925	875	835	785	750	690	655	610	570
	ON	ON	ON	975	925	875	835	785	750	690	655	610	570
Heating (SW1)	High Heat Airflow[3]			1145	1105	1075	1030	995	955	905	870	825	785
	Low Heat Airflow[3]			870	820	760	720	655	620	560	525	470	435

AIR DELIVERY – CFM CONTINUED (with filter)

(SW1–5 and SW4–3 set to OFF, except as indicated. See notes 1 and 2.)

Unit Size: 0801716	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1595	1560	1530	1500	1470	1440	1405	1370	1340	1290
Cooling (SW2–8,7,6)	OFF	OFF	ON	625	555	495	425	360	300	See Note 4			
	OFF	ON	OFF	810	755	700	645	595	540	480	425	380	330
	OFF	ON	ON	1040	995	950	900	860	815	770	725	680	630
	ON	OFF	OFF	1215	1175	1135	1095	1055	1015	975	935	900	860
	ON	OFF	ON	1390	1355	1320	1285	1245	1210	1175	1140	1105	1070
	ON	ON	OFF	1595	1560	1530	1500	1470	1440	1405	1370	1340	1290
	ON	ON	ON	1790	1760	1735	1700	1655	1610	1570	1485	1395	1295
	Maximum Clg Airflow[2]			1790	1760	1735	1700	1655	1610	1570	1485	1395	1295
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	625	555	495	425	360	300	See Note 4			
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	625	555	495	425	360	300	See Note 4			
	OFF	ON	OFF	810	755	700	645	595	540	480	425	380	330
	OFF	ON	ON	1040	995	950	900	860	815	770	725	680	630
	ON	OFF	OFF	1215	1175	1135	1095	1055	1015	975	935	900	860
	ON	OFF	ON	1390	1355	1320	1285	1245	1210	1175	1140	1105	1070
	ON	ON	OFF	1595	1560	1530	1500	1470	1440	1405	1370	1340	1290
	ON	ON	ON	1790	1760	1735	1700	1655	1610	1570	1485	1395	1295
Cont. Fan Default:	OFF	OFF	OFF	625	555	495	425	360	300	See Note 4			
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	465	390	300	See Note 4						
	OFF	ON	OFF	625	555	495	425	360	300	See Note 4			
	OFF	ON	ON	690	630	570	510	445	385	See Note 4			
	ON	OFF	OFF	690	630	570	510	445	385	See Note 4			
	ON	OFF	ON	690	630	570	510	445	385	See Note 4			
	ON	ON	OFF	690	630	570	510	445	385	See Note 4			
	ON	ON	ON	690	630	570	510	445	385	See Note 4			
Heating (SW1)	High Heat Airflow[3]			1470	1435	1400	1365	1330	1295	1260	1225	1190	1155
	Low Heat Airflow[3]			1150	1110	1070	1030	990	950	910	870	830	790

Unit Size: 0802120	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1905	1870	1825	1785	1750	1700	1665	1625	1560	1460
Cooling (SW2–8,7,6)	OFF	OFF	ON	950	770	620	515	440	365	See Note 4			
	OFF	ON	OFF	1015	935	880	825	765	690	625	580	See	note
	OFF	ON	ON	1155	1105	1040	990	920	875	815	755	710	645
	ON	OFF	OFF	1335	1290	1245	1190	1145	1085	1040	990	930	890
	ON	OFF	ON	1520	1485	1435	1390	1340	1300	1255	1200	1160	1115
	ON	ON	OFF	1905	1870	1825	1785	1750	1700	1665	1625	1560	1460
	ON	ON	ON	2290	2230	2160	2085	2005	1915	1820	1730	1640	1525
	Maximum Clg Airflow[2]			2290	2230	2160	2085	2005	1915	1820	1730	1640	1525
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	950	770	620	515	440	365	See Note 4			
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	645	540	435	See Note 4						
	OFF	ON	OFF	950	770	620	515	440	365	See Note 4			
	OFF	ON	ON	1015	935	880	825	765	690	625	580	See	note
	ON	OFF	OFF	1155	1105	1040	990	920	875	815	755	710	645
	ON	OFF	ON	1335	1290	1245	1190	1145	1085	1040	990	930	890
	ON	ON	OFF	1520	1485	1435	1390	1340	1300	1255	1200	1160	1115
	ON	ON	ON	1905	1870	1825	1785	1750	1700	1665	1625	1560	1460
Cont. Fan Default:	OFF	OFF	OFF	950	770	620	515	440	365	See Note 4			
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	645	540	435	See Note 4						
	OFF	ON	OFF	950	770	620	515	440	365	See Note 4			
	OFF	ON	ON	1015	935	880	825	765	690	625	580	See	note
	ON	OFF	OFF	1155	1105	1040	990	920	875	815	755	710	645
	ON	OFF	ON	1335	1290	1245	1190	1145	1085	1040	990	930	890
	ON	ON	OFF	1520	1485	1435	1390	1340	1300	1255	1200	1160	1115
	ON	ON	ON	1520	1485	1435	1390	1340	1300	1255	1200	1160	1115
Heating (SW1)	High Heat Airflow[3]			1575	1535	1485	1445	1400	1350	1310	1260	1215	1170
	Low Heat Airflow[3]			1230	1170	1125	1065	1015	955	900	855	795	755

AIR DELIVERY – CFM CONTINUED (with filter)

(SW1–5 and SW4–3 set to OFF, except as indicated. See notes 1 and 2.)

Unit Size: 1002120	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1890	1845	1800	1755	1700	1655	1610	1560	1510	1460
Cooling (SW2–8,7,6)	OFF	OFF	ON	1015	825	630	485	405	325	See Note 4			
	OFF	ON	OFF	1080	895	815	740	690	615	555	475	See	note
	OFF	ON	ON	1155	1080	1020	940	890	825	785	710	660	590
	ON	OFF	OFF	1310	1260	1195	1140	1075	1025	970	925	875	810
	ON	OFF	ON	1520	1475	1425	1365	1315	1255	1210	1155	1110	1055
	ON	ON	OFF	1890	1845	1800	1755	1700	1655	1610	1560	1510	1460
	ON	ON	ON	2290	2230	2160	2085	2005	1915	1820	1730	1640	1525
	Maximum Clg Airflow[2]			2290	2230	2160	2085	2005	1915	1820	1730	1640	1525
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	1015	825	630	485	405	325	See Note 4			
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	745	640	535	See Note 4						
	OFF	ON	OFF	1015	825	630	485	405	325	See Note 4			
	OFF	ON	ON	1080	895	815	740	690	615	555	475	See	note
	ON	OFF	OFF	1155	1080	1020	940	890	825	785	710	660	590
	ON	OFF	ON	1310	1260	1195	1140	1075	1025	970	925	875	810
	ON	ON	OFF	1520	1475	1425	1365	1315	1255	1210	1155	1110	1055
	ON	ON	ON	1890	1845	1800	1755	1700	1655	1610	1560	1510	1460
Cont. Fan Default:	OFF	OFF	OFF	1015	825	630	485	405	325	See Note 4			
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	745	640	535	See Note 4						
	OFF	ON	OFF	1015	825	630	485	405	325	See Note 4			
	OFF	ON	ON	1080	895	815	740	690	615	555	475	See	note
	ON	OFF	OFF	1155	1080	1020	940	890	825	785	710	660	590
	ON	OFF	ON	1155	1080	1020	940	890	825	785	710	660	590
	ON	ON	OFF	1155	1080	1020	940	890	825	785	710	660	590
	ON	ON	ON	1155	1080	1020	940	890	825	785	710	660	590
Heating (SW1)	High Heat Airflow[3]			1905	1865	1825	1775	1730	1685	1640	1590	1545	1490
	Low Heat Airflow[3]			1480	1435	1375	1330	1265	1215	1160	1115	1060	1005

Unit Size: 1202422	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2–8	SW2–7	SW2–6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	2060	2015	1975	1930	1885	1840	1790	1750	1705	1630
Cooling (SW2–8,7,6)	OFF	OFF	ON	865	775	690	595	505	425	See Note 4			
	OFF	ON	OFF	1080	1005	935	860	785	705	625	555	490	425
	OFF	ON	ON	1285	1220	1150	1085	1020	960	895	820	750	690
	ON	OFF	OFF	1465	1410	1350	1285	1230	1175	1115	1060	1000	935
	ON	OFF	ON	1685	1635	1585	1530	1475	1420	1375	1325	1270	1225
	ON	ON	OFF	2060	2015	1975	1930	1885	1840	1790	1750	1705	1630
	ON	ON	ON	2265	2225	2180	2145	2100	2060	2010	1895	1770	1645
	Maximum Clg Airflow[2]			2320	2310	2270	2230	2190	2135	2020	1895	1770	1645
CF Switches	SW2–5	SW2–4	SW2–3										
Low–Clg Default:	OFF	OFF	OFF	865	775	690	595	505	425	See Note 4			
Low–Cooling (SW2–5,4,3)	OFF	OFF	ON	585	470	See Note 4							
	OFF	ON	OFF	865	775	690	595	505	425	See Note 4			
	OFF	ON	ON	1080	1005	935	860	785	705	625	555	490	425
	ON	OFF	OFF	1285	1220	1150	1085	1020	960	895	820	750	690
	ON	OFF	ON	1465	1410	1350	1285	1230	1175	1115	1060	1000	935
	ON	ON	OFF	1685	1635	1585	1530	1475	1420	1375	1325	1270	1225
	ON	ON	ON	2060	2015	1975	1930	1885	1840	1790	1750	1705	1630
Cont. Fan Default:	OFF	OFF	OFF	865	775	690	595	505	425	See Note 4			
Continuous Fan (SW2–5,4,3)	OFF	OFF	ON	585	470	See Note 4							
	OFF	ON	OFF	730	630	See Note 4							
	OFF	ON	ON	865	775	690	595	505	425	See Note 4			
	ON	OFF	OFF	865	775	690	595	505	425	See Note 4			
	ON	OFF	ON	865	775	690	595	505	425	See Note 4			
	ON	ON	OFF	865	775	690	595	505	425	See Note 4			
	ON	ON	ON	865	775	690	595	505	425	See Note 4			
Heating (SW1)	High Heat Airflow[3]			2165	2120	2075	2030	1985	1940	1895	1850	1770	1645
	Low Heat Airflow[3]			1675	1625	1575	1525	1475	1425	1375	1325	1275	1225

NOTE: See notes at end of table.

Cooling[4] and Heating Air Delivery – CFM (Bottom Return[5] with Filter) – NOTES

1. Nominal 350 CFM/ton cooling airflow is delivered with SW1−5 and SW4−3 set to OFF.
   Set both SW1−5 to ON for nominal 400CFM/ton (+15% airflow)
   Set SW4−3 to ON for nominal 325 CFM/ton (−7% airflow)
   Set both SW1−5 and SW4−3 to ON for nominal 370CFM/ton (+7% airflow)
   The above adjustments in airflow are subject to motor horsepower range/capacity
   This applies to Cooling and Low−Cooling airflow, but does not affect continuous fan airflow.
2. Maximum cooling airflow is achieved when switches SW2−6, SW2−7, SW2−8 and SW1−5 are set to ON, and SW4−3 is set to OFF.
3. All heating CFM's are when comfort/efficiency adjustment switch SW1−4 is set to OFF.
4. Ductwork must be sized for high−heating CFM within the operational range of ESP. Operation within the blank areas of the chart is not recommended because high−heat operation will be above 1.0 ESP.
5. All airflows on 21" (533 mm) casing size furnaces are 5% less on side−return only installations.
6. Side returns for 24.5" (622 mm) casing sizes require two sides, or a side and bottom to allow sufficient airflow at the return of the furnace.
7. Airflows over 1800 CFM require bottom return, two−side return, or bottom and side return or excessive watt draw may result. A minimum filter size of 20x25" (508 x 635 mm) is required.

ACCESSORIES						
PART NUMBER	**COMPONENT NAME**	**DESCRIPTION**	**0401410**	**0601714**	**0601412**	**0601714**
NAHB001101CT	EXTERNAL TRAP KIT	CONDENSATE TRAP	X	X	X	X
NAHA00110DA	DRAIN ACCESSORY	1/2" CPVC TO 3/4" PVC (10 PACK)	X	X	X	X
NAHA002CV	VENT TERMINATION KIT	2" CONCENTRIC VENT	X	X	X	X
NAHA001CV		3" CONCENTRIC VENT		X		X
NAHA00101VC	INTERNAL VENT KIT	THROUGH THE CABINET	X	X	X	X
NAHA00301VT	DIRECT VENT TERMINATION KIT	2" BRACKET	X	X	X	X
NAHA00401VT		3" BRACKET		X		X
NAHA00101CK	INLET AIR PIPE COUPLING	COUPLING FOR POLYPROPYLENE VENT SYSTEMS	X	X	X	X
NAHA00101HV	HORIZONTAL INSTALLATION KIT	TRAP GROMMET (DIRECT VENT APPLICATION ONLY)	X	X	X	X
NAHA00101HH	FREEZE PROTECT KIT	CONDENSATE DRAIN LINE – TAPE	X	X	X	X
NAHA00201HH	CONDENSATE FREEZE PROTECT KIT	CONDENSATE TRAP WITH HEAT PAD	X	X	X	X
NAHA01101SB	FLOOR BASE KIT	COMBUSTIBLE FLOOR	X	X	X	X
AGAGC9NPS01A*	GAS CONVERSION KIT	NATURAL TO PROPANE	X	X	X	X
AGAGC9PNS01A*		PROPANE TO NATURAL	X	X	X	X
1188594‡	GAS VALVE TOWER PORT ADAPTER KIT	ADAPTER FOR GAS VALVE	X	X	X	X
NAHA00506FB†	WASHABLE FILTER PACK	1" X 16" X 25" WASHABLE FILTER (6 PACK)	X	X	X	X
NAHA00706FB		1" X 24" X 25" WASHABLE FILTER (6 PACK)	X		X	
NAHB00501FF	EXTERNAL BOTTOM FILTER RACK	14" X 25" WASHABLE FILTER INCLUDED	X		X	
NAHB00601FF		17–1/2" X 25" WASHABLE FILTER INCLUDED		X		X
NAHB00701FF		21" X 25" WASHABLE FILTER INCLUDED				
NAHB00801FF		24–1/2" X 25" WASHABLE FILTER INCLUDED				
NAHB00101CA	COIL ADAPTER KIT	WITH NO OFFSET	X	X	X	X
NAHB00201CA		WITH SINGLE OFFSET	X	X	X	X
NAHB00301CA		WITH DOUBLE OFFSET	X	X	X	X
NAHA01401RA	RETURN AIR KIT	14–3/16" WIDE	X		X	
NAHA01701RA		17–1/2" WIDE		X		X
NAHA02101RA		21" WIDE				
NAHA02401RA		24–1/2" WIDE				
NAHA001NK	CONDENSATE NEUTRALIZER KIT	NEUTRALIZES CONDENSATE	X	X	X	X
AGATWNPME01A	TWINNING KIT	TWO FURNACES OF SAME MODEL & SERIES				X

X Accessory available
† Suitable for 17 inch external bottom filter rack.
* Factory authorized and field installed. Gas conversion kits are CSA recognized.
‡ Order through FAST Parts.

ACCESSORIES						
PART NUMBER	COMPONENT NAME	DESCRIPTION	0801716	0802120	1002120	1202422
NAHB001101CT	EXTERNAL TRAP KIT	CONDENSATE TRAP	X	X	X	X
NAHA00110DA	DRAIN ACCESSORY	1/2” CPVC TO 3/4” PVC (10 PACK)	X	X	X	X
NAHA002CV	VENT TERMINATION KIT	2” CONCENTRIC VENT	X	X	X	
NAHA001CV		3” CONCENTRIC VENT	X	X	X	X
NAHA00101VC	INTERNAL VENT KIT	THROUGH THE CABINET	X	X	X	X
NAHA00301VT	DIRECT VENT TERMINATION KIT	2” BRACKET	X	X	X	
NAHA00401VT		3” BRACKET	X	X	X	X
NAHA00101CK	INLET AIR PIPE COUPLING	COUPLING FOR POLYPROPYLENE VENT SYSTEMS	X	X	X	X
NAHA00101HV	HORIZONTAL INSTALLATION KIT	TRAP GROMMET (DIRECT VENT APPLICATION ONLY)	X	X	X	X
NAHA00101HH	FREEZE PROTECT KIT	CONDENSATE DRAIN LINE – TAPE	X	X	X	X
NAHA00201HH	CONDENSATE FREEZE PROTECT KIT	CONDENSATE TRAP WITH HEAT PAD	X	X	X	X
NAHA01101SB	FLOOR BASE KIT	COMBUSTIBLE FLOOR	X	X	X	X
AGAGC9NPS01A*	GAS CONVERSION KIT	NATURAL TO PROPANE	X	X	X	X
AGAGC9PNS01A*		PROPANE TO NATURAL	X	X	X	X
1188594‡	GAS VALVE TOWER PORT ADAPTER KIT	ADAPTER FOR GAS VALVE	X	X	X	X
NAHA00506FB†	WASHABLE FILTER PACK	1” X 16” X 25” WASHABLE FILTER (6 PACK)	X			
NAHA00706FB		1” X 24” X 25” WASHABLE FILTER (6 PACK)		X	X	X
NAHB00501FF	EXTERNAL BOTTOM FILTER RACK	14” X 25” WASHABLE FILTER INCLUDED				
NAHB00601FF		17–1/2” X 25” WASHABLE FILTER INCLUDED	X			
NAHB00701FF		21” X 25” WASHABLE FILTER INCLUDED		X	X	
NAHB00801FF		24–1/2” X 25” WASHABLE FILTER INCLUDED				X
NAHB00101CA	COIL ADAPTER KIT	WITH NO OFFSET	X	X	X	X
NAHB00201CA		WITH SINGLE OFFSET	X	X	X	X
NAHB00301CA		WITH DOUBLE OFFSET	X	X	X	X
NAHA01401RA	RETURN AIR KIT	14–3/16” WIDE				
NAHA01701RA		17–1/2” WIDE	X			
NAHA02101RA		21” WIDE		X	X	
NAHA02401RA		24–1/2” WIDE				X
AGATWNPME01A	TWINNING KIT	TWO FURNACES OF SAME MODEL & SERIES	X		X	X
NAHA001NK	CONDENSATE NEUTRALIZER KIT	NEUTRALIZES CONDENSATE	X	X	X	X
NAHA00101PC	LOWER AMP KIT	ALLOWS 15 AMP BREAKER		X	X	

X Accessory available
† Suitable for 17 inch external bottom filter rack.
* Factory authorized and field installed. Gas conversion kits are CSA recognized.
‡ Order through FAST Parts.

Part Number	Gas Type	Orifice Size
1185612	Natural	42
1176928	Natural	43
1185574	Natural	44
1177213	Natural	45

Part Number	Gas Type	Orifice Size
1183809	Natural	46
1185613	Natural	47
1185614	Natural	48

Part Number	Gas Type	Orifice Size
1184256	Propane	54
1185615	Propane	55
1185616	Propane	56
1185617	Propane	1.25 mm
1185618	Propane	1.30 mm

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