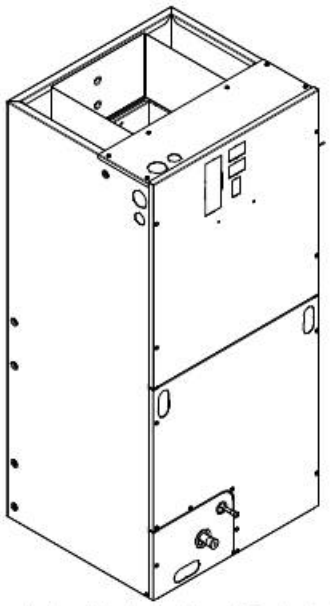
Installer's Guide

Convertible Air Handlers
1–1/2 — 5 Ton

A4AH4E24A1B60A
A4AH4E30A1B30A
A4AH4E36A1C30A
A4AH4E42B1C30A
A4AH4E48B1C30A
A4AH4E60B1C30A



The A4AH4 series air handler is designed for installation in a closet, utility room, alcove, basement, crawlspace or attic. These versatile units are applicable to air conditioning and heat pump applications. Several models are available to meet the specific requirements of the outdoor equipment. Field installed electric resistance heaters are available.

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

October 2022

18-GF16D1-1B-EN

SAFETY SECTION

Important: *This document contains a wiring diagram, a parts list, and service information. This is customer property and is to remain with this unit. Please return to service information pack upon completion of work.*

Important: *These instructions do not cover all variations in systems nor provide for every possible contingency to be met in connection with the installation. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to your installing dealer or local distributor.*

⚠ WARNING

HAZARDOUS VOLTAGE!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized.

⚠ CAUTION

GROUNDING REQUIRED!

Failure to inspect or use proper service tools may result in equipment damage or personal injury.

Reconnect all grounding devices. All parts of this product that are capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

⚠ WARNING

LIVE ELECTRICAL COMPONENTS!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Follow all electrical safety precautions when exposed to live electrical components. It may be necessary to work with live electrical components during installation, testing, servicing, and troubleshooting of this product.

⚠ WARNING

PRESSURIZED REFRIGERANT!

Failure to follow this Warning could result in personal injury

System contains oil and refrigerant under high pressure. Recover refrigerant to relieve pressure before opening the system. Do no use non-approved refrigerants or refrigerant substitutes or refrigerant additives.

⚠ CAUTION

SHARP EDGE HAZARD!

Failure to follow this Caution could result in property damage or personal injury.

Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing.

⚠ CAUTION

HAZARDOUS VAPORS!

Failure to follow this caution could result in property damage or personal injury.

Equipment corrosion damage. To prevent shortening its service life, the air handler should not be used during the finishing phases of construction or remodeling. The low return air temperatures can lead to the formation of condensate. Condensate in the presence of chlorides and fluorides from paint, varnish, stains, adhesives, cleaning compounds, and cement creates a corrosive condition which may cause rapid deterioration of the cabinet and internal components.

⚠ CAUTION

COIL IS PRESSURIZED!

- **Coil is pressurized with approximately 8–12 psi dry air and factory checked for leaks.**
- **Carefully release the pressure by removing the rubber plug on the liquid line.**
- **If no pressure is released, check for leaks.**

⚠ WARNING

SAFETY HAZARD!

This appliance is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

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⚠ WARNING

SAFETY HAZARD!

Children should be supervised to ensure that they do not play with the appliance.

⚠ WARNING

WARNING!

This product can expose you to chemicals including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Important: *Installation of this unit shall be made in accordance with the National Electric Code, NFPA No. 90A and 90B, and any other local codes or utilities requirements.*

Important: *Air handlers do not require repositioning of the coil or drain pan for upflow or horizontal left applications. See the downflow and horizontal right installation sections for application instructions.*

Note: *Air handlers have been evaluated in accordance with the Code of Federal Regulations, Chapter XX, Part 3280 or the equivalent. "SUITABLE FOR MOBILE HOME USE."*

Note: *Condensation may occur on the surface of the air handler when installed in an unconditioned space. When units are installed in unconditioned spaces, verify that all electrical and refrigerant line penetrations on the air handler are sealed completely.*

Note: *The manufacturer recommends installing ONLY A.H.R.I approved, matched indoor and outdoor systems. Some of the benefits of installing approved matched indoor and outdoor split systems are maximum efficiency, optimum performance, and the best overall system reliability.*

Features

Table 1. Standard Features

- MULTI-POSITION UPFLOW, DOWNFLOW, HORIZONTAL LEFT AND HORIZONTAL RIGHT
- GALVANIZED STEEL EXTERIOR WITH FULLY INSULATED CABINET THAT MEETS R4.2 VALUE
- STURDY POLYCARBONATE DRAIN PANS
  - Factory installed drain pans; upflow and horizontal left as shipped
- 208/230 VAC OPERATION
- MULTI-SPEED DIRECT DRIVE BLOWERS
- FACTORY INSTALLED R-410A THERMAL EXPANSION VALVE
- ALL ALUMINUM COIL
- BOTTOM RETURN
- MEETS THE MINIMUM LEAKAGE REQUIREMENTS FOR THE FLORIDA AND CALIFORNIA BUILDING CODES

Table 2. Optional Accessories

- 4,5,8,10,15, 20 and 25 KW SINGLE PHASE ELECTRIC HEATERS
  - Circuit breakers available on all single phase 4, 5, 8, 10, 15, 20 and 25 KW heaters
  - Lug terminals available on all single phase 4, 5, 8, and 10 KW heaters
- 10 and 15 KW THREE PHASE ELECTRIC HEATERS
  - Heaters available with lug terminals
- SINGLE POINT POWER ENTRY KIT (for 15 and 20 KW Heaters)
- SUPPLY DUCT FLANGE KIT
- DOWNFLOW SUB-BASE KITS - TAYBASE185, TAYBASE235
- R-22 CONVERSION KITS — BAYATXV1836B, BAYATXV4248B, BAYATXV6161B
- SLIM FIT FILTER BOX KIT — BAYSF1185AAA, BAYSF1235AAA

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Installation Instructions

1. **Unpacking**

   Carefully unpack the unit and inspect the contents for damage. If any damage is found at the time of delivery, proper notification and claims should be made with the carrier.

   Check the rating plate to assure model number and voltage, plus any kits match with what you ordered. The manufacturer should be notified within 5 days of any discrepancy or parts shortage.

2. **Location**

   The air handler should be centrally located and may be installed in a closet, alcove, utility room, basement, crawl space or attic. Minimum clearances must be met.

   Important: *The downflow sub-base may be required with electric heat applications. See minimum clearance table.*

   The unit should be installed in a level position to ensure proper condensation drainage. Up to an additional 1/4" rise over the width or depth of the unit is allowed to create additional sloping towards the drain. Unit must be positioned between level and ¼" rise, sloping toward the drain connections.

   When the unit is installed in a closet or utility room, the room should be large enough, and have an opening to allow replacement of the unit. All servicing is done from the front and a clearance of 21" is needed for service unless the closet door aligns with the front of the air handler.

   If you are installing the unit in an unconditioned space such as an attic or crawl space, you must ensure that the area provides sufficient air circulation to prevent moisture collection on the cabinet during high dew point conditions. A drain pan must be installed under the entire unit when it is installed in or above a finished ceiling or in an unconditioned space.

3. **Duct Work**

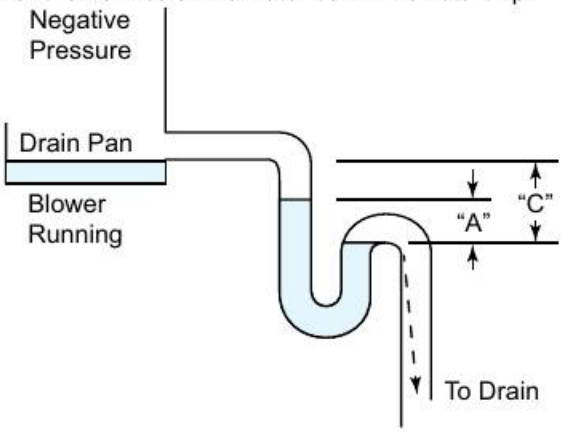
   The duct work should be installed in accordance with the NFPA No. 90A "Installation of Air Conditioning and Ventilating systems" and No. 90B "Residential Type Warm Air Heating and Air Conditioning Installation."

   The duct work should be insulated in accordance with the applicable requirements for the particular installation as required by HUD, FHA, VA the applicable building code, local utility or other governing body.

4. **Condensate Drain**

   The unit is supplied with primary and auxiliary condensate drains that have 3/4" NPT connections. The primary drain must be trapped outside the unit and piped in accordance with applicable building codes.

   The figure shows the operation of a properly designed trap under normal operating conditions when the blower is running and the condensate is draining. Note the difference in height of the water column must at least equal the normal negative static pressure existing during operation between the cooling coil and blower. It is advisable to have the difference in water column height somewhat greater than the normal maximum operating static to allow for greater static caused by dirty filters or for the bounce of the water column on start up.



Proper operation of condensate trap under normal operating conditions.

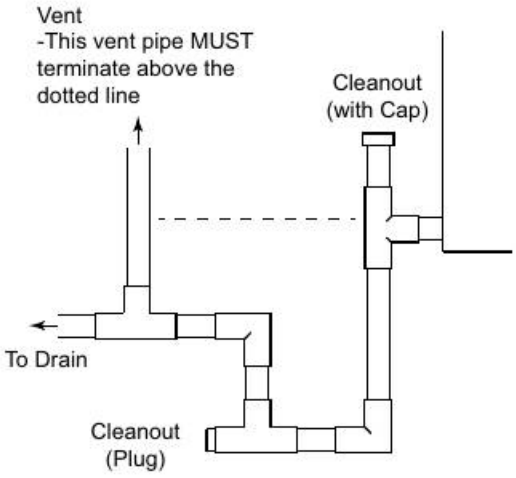
"A" height of water column equals negative static pressure existing in system.

"C" dimension should at least equal two times the maximum negative static pressure that can occur in system.

Do not reduce the drain line size less than the connection size on the drain pan. Condensate should be piped to an open drain or to the outside. All drains must pitch downward away from the unit a minimum of 1/4" per foot of line to ensure proper drainage.

Important: *If cleanout Tee is used, stand pipe must be sealed/capped.*

Important: *If a vent Tee is used, it must be downstream from the trap.*



Insulate the primary drain line to prevent sweating where dew point temperatures may be met. (Insulation is optional depending on climate and application needs.)

5. **Refrigerant Piping**

   Refrigerant piping external to the unit shall be sized in accordance with the instructions of the manufacturer of the outdoor equipment.

6. **Metering Device**

   All units are shipped and installed with an internally-checked, bleed TXV designed for air conditioning or heat pump operation. Pressures equalize after shut down. Some outdoor models may require a start assist kit. See outdoor unit for more information.

7. **Blower**

   This unit is supplied with a multi-speed motor with a direct drive blower wheel which can obtain various air flows. The unit is shipped with factory set cooling and heating speed taps. Airflow performance tables are available for additional speed taps. Disconnect all power to the unit before making any adjustments to the motor speed taps. Be sure to check the air flow and the temperature drop across the evaporator coil to ensure sufficient air flow.

8. **Wiring**

   Consult all schematic and pictorial wiring diagrams of this unit and the outdoor equipment to determine compatibility of wiring connections and to determine specific requirements.

   All field wiring to the air handler should be installed in accordance with the latest edition of the National Electric Code NFPA No. 70 and any local codes. Check rating plates on unit for rated volts, minimum circuit ampacity and maximum over current protection. Supply circuit power wiring must be 75 degree C (167 degree F) minimum copper conductors only. Copper supply wires shall be sized to the National Electric Code or local code requirements, whichever is more stringent.

   The unit is shipped wired for 230/240 Volt AC 60 HZ 1 Phase Operation. If the unit is to be operated at 208 VAC 60HZ, follow the instructions on the indoor unit wiring diagram to change the low voltage transformer to 208 VAC operation (Ensure unit is properly grounded).

   Class 2 low voltage control wiring should not be run in conduit with power wiring and must be separated from power wiring unless class 1 wire with proper voltage rating is used.

   Low voltage control wiring should be 18 Awg, color coded (105 degree C minimum). For lengths longer than 100ft., 16 Awg wire should be used. Make certain that separation of control wiring and power wiring has been maintained.

9. **Air Filter**

   To protect the coil, blower and other internal parts from excessive dirt and dust an air filter must be installed before air enters the evaporator coil. A remote filter must be installed. Consult the filter manufacturer for proper sizing and maximum velocity requirements.

10. **Thermostat**

    Select a thermostat that is commonly used with HP or AC single stage heating/cooling with electric heat. The thermostat will energize the fan on a demand for heat or cool.

    Install the thermostat on an inside wall, away from drafts, lights or other heat sources in a location that has sufficient air circulation from other rooms being controlled by the thermostat.

11. **Sequence of Operation**
    Cooling (Cooling only)

    When the thermostat calls for cooling, the circuit from R to G is completed. The blower motor is energized directly by the 24VAC signal from the thermostat.

    The circuit from R to Y is also complete energizing the compressor contactor of the outdoor unit. The contactor will close and start the compressor and condenser fan motor.

    Cooling (heat pump)

    When the thermostat calls for cooling, the circuit from R to G is completed. The blower motor is energized directly by the 24VAC signal from the thermostat.

    The circuit from R to Y is also complete energizing the compressor contactor of the outdoor unit. The contactor will close and start the compressor and condenser fan motor.

    Circuit R to O energizes the reversing valve to the cooling position.

Heating (heat pump)

When the thermostat calls for heating, the circuit from R to G is completed and the blower motor is energized directly by the 24VAC signal from the thermostat.

The circuit from R to Y is also complete energizing the compressor contactor of the outdoor unit. The contactor will close and start the compressor and condenser fan motor.

In the heating mode, the reversing valve of the outdoor unit is not energized.

If the indoor temperature continues to fall, the R to W circuit is completed energizing the electric heat contactor(s).

Heating (electric heat only)

Note: *The thermostat must be setup to bring the blower on when the electric heat is energized.*

When the thermostat calls for heating, the circuit from R to G is completed and the blower motor is energized directly by the 24VAC signal from the thermostat. The circuit from R to W is completed energizing the heating contactor(s).

Defrost

Supplemental heat during defrost can be provided by connecting the X2 (black) wire from the outdoor unit to W1 or W2 at the indoor unit. This will prevent cold air from being discharged from the indoor unit during defrost.

12. **Operational and Checkout Procedures**

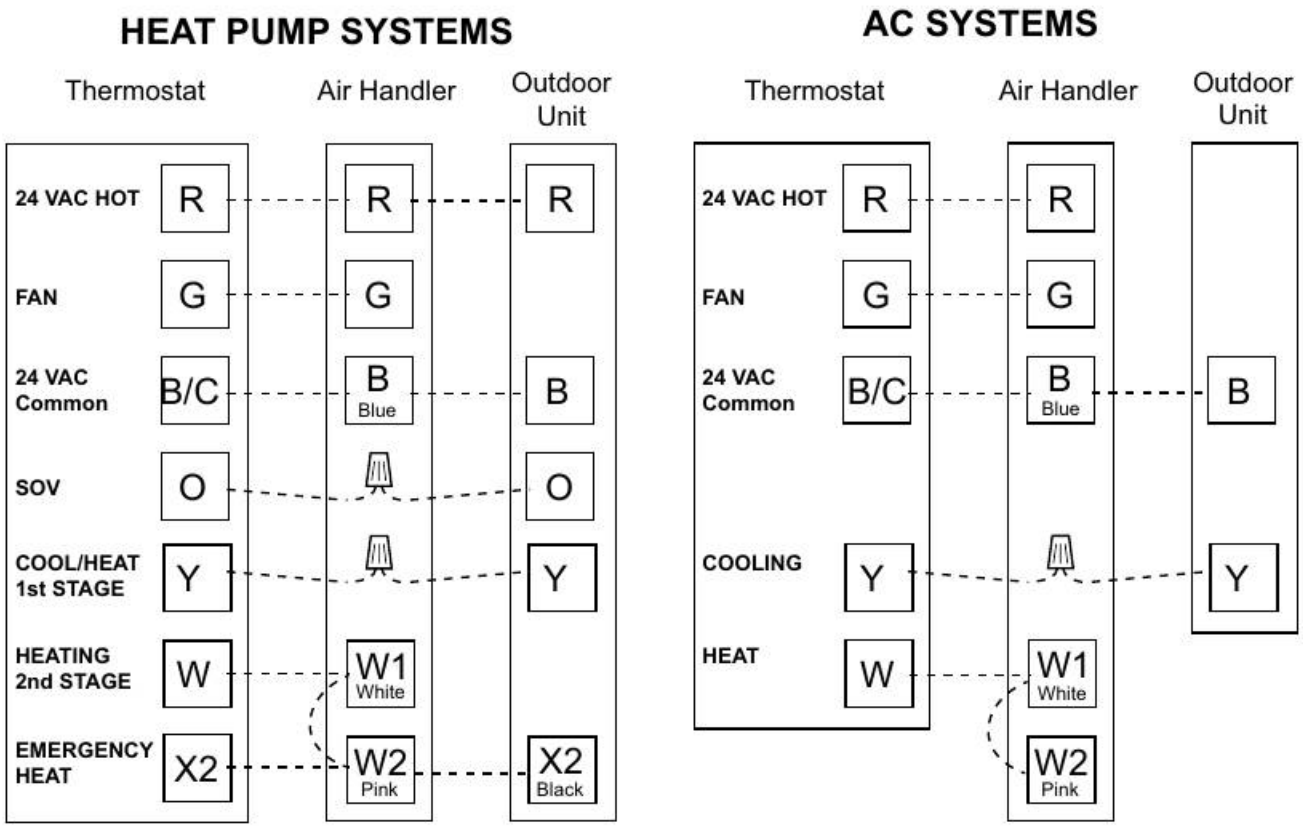
    To obtain proper performance, all units must be operated and charge adjustments made in accordance with procedures found in the Service Facts document of the outdoor unit. After installation has been completed, it is recommended that the entire system be checked against the checkout list located at the back of this document. See "Checkout Procedures," p. 23.

13. **Maintenance**

    The system air filter(s) should be inspected, cleaned or replaced at least monthly. Make certain that the access panels are replaced and secured properly before placing the unit back in operation. This product is designed for dependable service; however, periodic maintenance should be scheduled and conducted by trained professional service personnel. This service should be conducted at least annually, and should include testing and inspection of electrical and refrigerant components. The heat transfer surface should be cleaned. The blower motor is permanently lubricated for normal operating conditions.

Field Wiring

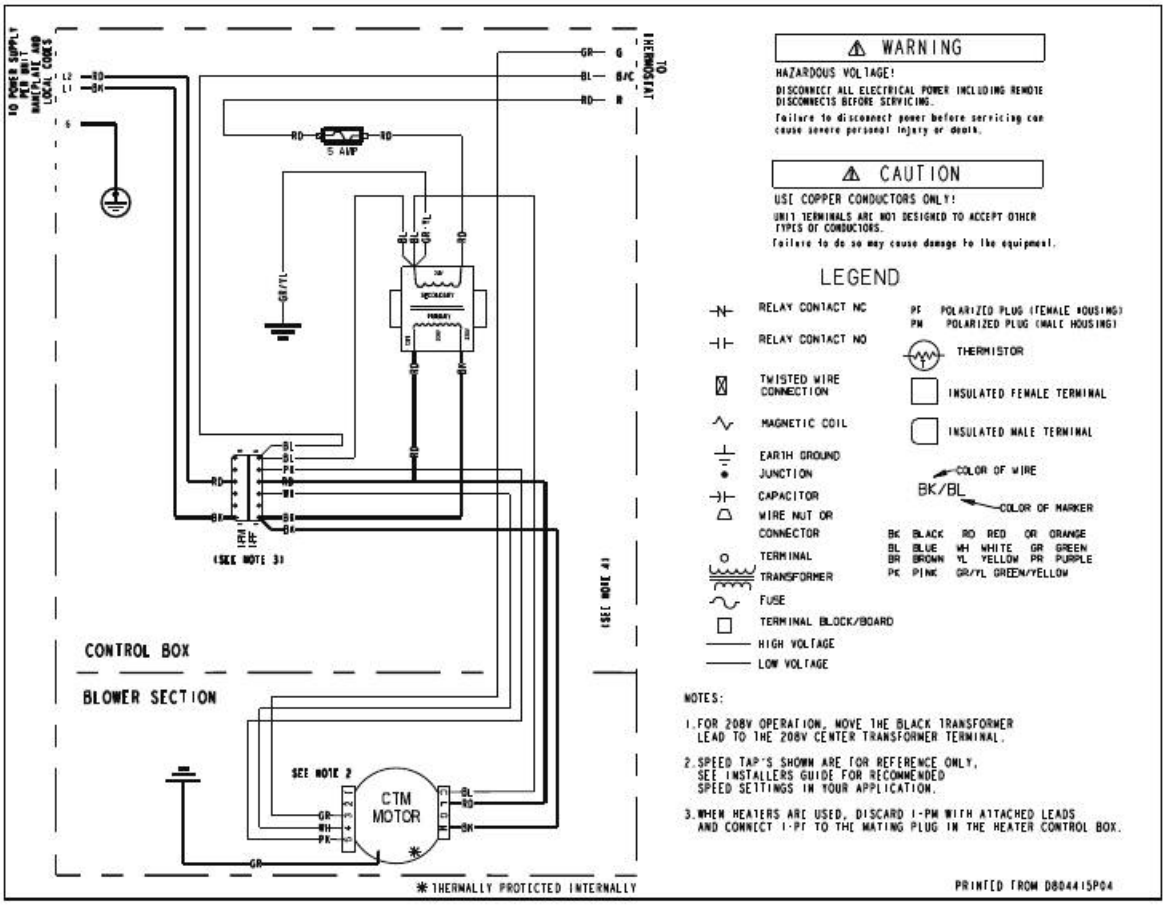
Figure 1. Field Wiring Diagram — A4AH4E*



In AC systems for multiple stages of electric heat, jumper W1 and W2 together if comfort control has only one stage of heat.

Electrical Data

Figure 2. Electrical Schematic — A4AH4E*



Performance and Electrical Data

Table 3. Air Flow Performance Tables

A4AH4E24A1B60A				
EXTERNAL STATIC (in w.g)	AIRFLOW			
	Speed Taps: 208 – 230 VOLTS			
	High	**Med-High**	**Med †**	**Low**
0.1	1140	1078	930	851
0.2	1087	1017	870	796
0.3	1034	955	807	733
0.4	978	894	741	663
0.5	922	834	671	584
0.6	863	774	597	497
0.7	804	715	519	403
• Low = Taps 1–2, Med = Tap 3, Med-High= Tap 4, High = Tap 5				

A4AH4E30A1B30A					
EXTERNAL STATIC (in w.g)	AIRFLOW				
	Speed Taps: 208 – 230 VOLTS				
	High	**Med-High**	**Med †**	**Med-Low**	**Low**
0.1	1192	1126	1070	995	940
0.2	1148	1079	1021	943	885
0.3	1103	1031	971	890	828
0.4	1057	980	919	834	767
0.5	1009	929	865	775	702
0.6	961	875	810	714	635
0.7	911	820	753	651	564
• Low = Tap 1, Med-Low = Tap 2, Med = Tap 3, Med-High= Tap 4, High = Tap 5					

A4AH4E36A1C30A, A4AH4E42B1C30A					
EXTERNAL STATIC (in w.g)	AIRFLOW				
	Speed Taps: 208 – 230 VOLTS				
	High	**Med-High**	**Med †**	**Med-Low**	**Low**
0.1	1492	1418	1302	1268	1140
0.2	1460	1385	1266	1230	1096
0.3	1426	1349	1228	1190	1050
0.4	1390	1311	1187	1147	1002
0.5	1352	1271	1144	1101	952
0.6	1311	1229	1099	1053	899
0.7	1269	1184	1051	1003	845
• In downflow applications, airflow must not exceed 1600 cfm due to condensate blowoff. • Low = Tap 1, Med-Low = Tap 2, Med = Tap 3, Med-High= Tap 4, High = Tap 5					

A4AH4E48B1C30A, A4AH4E60B1C30A					
EXTERNAL STATIC (in w.g)	AIRFLOW				
	Speed Taps: 208 – 230 VOLTS				
	High	**Med-High**	**Med †**	**Med-Low**	**Low**
0.1	2040	1874	1658	1512	1373
0.2	2008	1846	1622	1476	1333
0.3	1975	1816	1585	1438	1289
0.4	1942	1785	1546	1395	1240
0.5	1909	1751	1506	1349	1187
0.6	1875	1716	1463	1300	1129
0.7	1841	1678	1418	1246	1067

- In downflow applications, airflow must not exceed 1800 cfm due to condensate blowoff.
- Low = Tap 1, Med-Low = Tap 2, Med = Tap 3, Med-High= Tap 4, High = Tap 5

Notes:

- *Values are with wet coil, no filter, and no heaters*
- *CFM Correction for dry coil = Add 3%*
- *† = Factory Setting*

Table 4. Electrical Data

A4AH4E24A1B60A											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				2.8 *	4	15			2.8 *	4	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.8	13100	16.0	24	25	2.9	9800	13.8	21	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.8	16400	20.0	29	30	3.6	12300	17.3	25	25
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.7	26200	32.0	44	45	5.8	19700	27.7	38	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.6	32800	40.0	54	60	7.2	24600	34.6	47	50
BAYHTR3510LUG	1/3	9.6	32800	23.1	32	35	7.2	24600	20.0	28	30

A4AH4E30A1B30A											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				2.8 *	4	15			2.8 *	4	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.8	13100	16.0	24	25	2.9	9800	13.8	21	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.8	16400	20.0	29	30	3.6	12300	17.3	25	25
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.7	26200	32.0	44	45	5.8	19700	27.7	38	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.6	32800	40.0	54	60	7.2	24600	34.6	47	50

A4AH4E30A1B30A											
BAYHTR1517BRK-Circuit 1 [a]	2/1	9.6	32800	40.0	54	60	7.2	24600	34.6	47	50
BAYHTR1517BRK-Circuit 2		4.8	16400	20.0	25	25	3.6	12300	17.3	22	25
BAYHTR3510LUG	1/3	9.6	32800	23.1	32	35	7.2	24600	20.0	28	30
BAYHTR3517LUG	1/3	14.4	49100	34.6	46	50	10.8	36900	30.0	41	45
BAYHTR1517BRK with single circuit power source kit BAYSPEKT201A	1/1	14.4	49100	60.0	83	90	10.8	36900	51.9	73	80

[a] MCA and MOP for circuit 1 contains the motor amps.

A4AH4E36A1C30A, A4AH4E42B1C30A											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				4.1 *	5	15			4.1 *	5	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.8	13100	16.0	25	25	2.9	9800	13.8	22	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.8	16400	20.0	30	30	3.6	12300	17.3	27	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.7	26200	32.0	45	45	5.8	19700	27.7	40	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.6	32800	40.0	55	60	7.2	24600	34.6	48	50
BAYHTR1517BRK-Circuit 1 [a]	2/1	9.6	32800	40.0	55	60	7.2	24600	34.6	48	50
BAYHTR1517BRK-Circuit 2		4.8	16400	20.0	25	25	3.6	12300	17.3	22	25
BAYHTR1523BRK-Circuit 1	2/1	9.6	32800	40.0	55	60	7.2	24600	34.6	48	50
BAYHTR1523BRK-Circuit 2		9.6	32800	40.0	50	50	7.2	24600	34.6	43	45
BAYHTR3510LUG	1/3	9.6	32800	23.1	33	35	7.2	24600	20.0	30	30
BAYHTR3517LUG	1/3	14.4	49100	34.6	48	50	10.8	36900	30.0	42	45
BAYHTR1517BRK with single circuit power source kit BAYSPEKT201A	1/1	14.4	49100	60.0	83	90	10.8	36900	51.9	73	80

[a] MCA and MOP for circuit 1 contains the motor amps.

A4AH4E48B1C30A, A4AH4E60B1C30A											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protec-tion	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				6.0 *	8	15			6.0 *	8	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.8	13100	16.0	28	30	2.9	9800	13.8	25	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.8	16400	20.0	33	35	3.6	12300	17.3	29	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.7	26200	32.0	48	50	5.8	19700	27.7	42	45

A4AH4E48B1C30A, A4AH4E60B1C30A											
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.6	32800	40.0	58	60	7.2	24600	34.6	51	60
BAYHTR1517BRK-Circuit 1 [a]	2/1	9.6	32800	40.0	58	60	7.2	24600	34.6	51	60
BAYHTR1517BRK-Circuit 2		4.8	16400	20.0	25	25	3.6	12300	17.3	22	25
BAYHTR1523BRK-Circuit 1	2/1	9.6	32800	40.0	58	60	7.2	24600	34.6	51	60
BAYHTR1523BRK-Circuit 2		9.6	32800	40.0	50	50	7.2	24600	34.6	43	45
BAYHTR1525BRK-Circuit 1	4/1	6.0	20500	25.0	39	40	4.5	15400	21.6	35	35
BAYHTR1525BRK-Circuit 2		6.0	20500	25.0	31	35	4.5	15400	21.6	27	30
BAYHTR1525BRK-Circuit 3		6.0	20500	25.0	31	35	4.5	15400	21.6	27	30
BAYHTR1525BRK-Circuit 4		6.0	20500	25.0	31	35	4.5	15400	21.6	27	30
BAYHTR3510LUG	1/3	9.6	32800	23.1	36	40	7.2	24600	20.0	32	35
BAYHTR3517LUG	1/3	14.4	49100	34.6	50	50	10.8	36900	30.0	44	45
BAYHTR1517BRK with single circuit power source kit BAYSPEKT201A	1/1	14.4	49100	60.0	83	90	10.8	36900	51.9	73	80
BAYHTR1523BRK with single circuit power source kit BAYSPEKT201A	1/1	19.2	65500	80.0	108	110	14.4	49100	69.2	94	100

[a] MCA and MOP for circuit 1 contains the motor amps.

Notes:

- ** = Motor Amps*

Minimum Airflow CFM

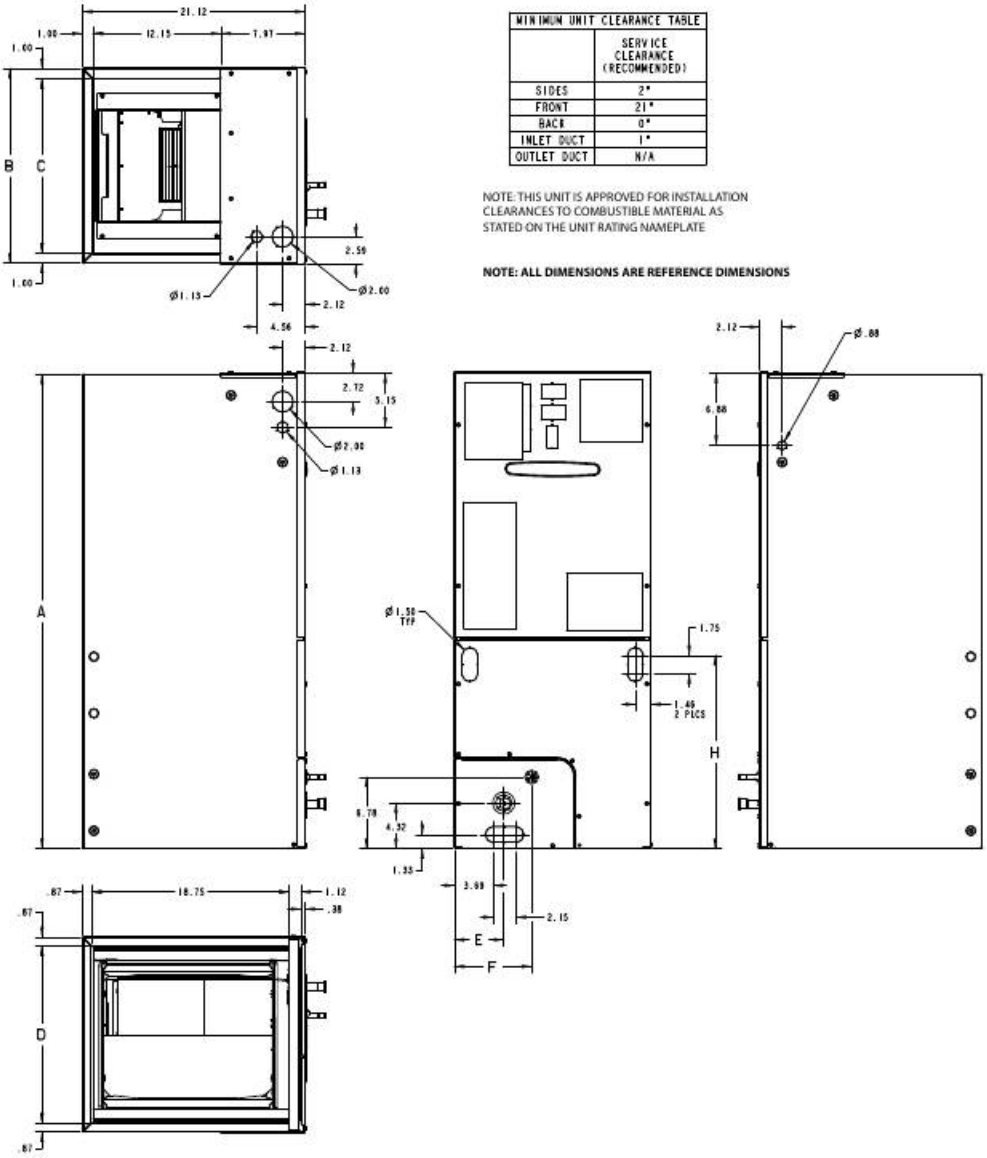
A4AH4E24A1B60A		
Heater	**Minimum Heat Speed Tap**	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	Low	Low
BAYHTR1508BRK, BAYHTR1508LUG, BAYHTR1510BRK, BAYHTR1510LUG, BAYHTR3510LUG	High	Med

A4AH4E30A1B30A		
Heater	**Minimum Heat Speed Tap**	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	Low	Low
BAYHTR1508BRK, BAYHTR1508LUG, BAYHTR1510BRK, BAYHTR1510LUG	Med-High	Med-Low
BAYHTR1517BRK, BAYHTR3517LUG, BAYHTR3510LUG	High	Med

A4AH4E36A1C30A, A4AH4E42B1C30A		
Heater	**Minimum Heat Speed Tap**	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	Low	Low
BAYHTR1508BRK, BAYHTR1508LUG, BAYHTR1510BRK, BAYHTR1510LUG	Med-High	Med-Low
BAYHTR1523BRK	Med-High	Med
BAYHTR1517BRK, BAYHTR3517LUG, BAYHTR3510LUG	High	Med

A4AH4E48B1C30A, A4AH4E60B1C30A		
Heater	**Minimum Heat Speed Tap**	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG, BAYHTR1508BRK, BAYHTR1508LUG, BAYHTR1510BRK, BAYHTR1510LUG, BAYHTR3510LUG	Med-Low	Med-Low
BAYHTR1517BRK, BAYHTR3517LUG	Med	Med
BAYHTR1523BRK, BAYHTR1525BRK	Med-High	Med

Outline Drawing



MINIMUM UNIT CLEARANCE TABLE	
	SERVICE CLEARANCE (RECOMMENDED)
SIDES	2"
FRONT	21"
BACK	0"
INLET DUCT	1"
OUTLET DUCT	N/A

NOTE: THIS UNIT IS APPROVED FOR INSTALLATION CLEARANCES TO COMBUSTIBLE MATERIAL AS STATED ON THE UNIT RATING NAMEPLATE

NOTE: ALL DIMENSIONS ARE REFERENCE DIMENSIONS

PRODUCT DIMENSIONS									
Air Handler Model	A	B	C	D	E	F	H	Flow Control	Gas Line Braze
A4AH4E24	45.02	18.50	16.50	16.75	4.68	7.33	18.34	TXV	3/4
A4AH4E30	46.77	18.50	16.50	16.75	4.68	7.33	20.09	TXV	3/4
A4AH4E36, A4AH4E42	51.27	23.50	21.50	21.75	7.01	9.66	24.59	TXV	7/8
A4AH4E48, A4AH4E60	57.40	23.50	21.50	21.75	4.68	9.66	27.19	TXV	7/8
All dimensions are in inches									

Heater Pressure Drop Table

Airflow CFM	Number of Racks					Heater Racks	
	1	2	3	4		Heater Model	No. of Racks
	Air Pressure Drop — Inches W.G.					BAYHTR1504	1
1800	0.02	0.04	0.06	0.14		BAYHTR1505	1
1700	0.02	0.04	0.06	0.14		BAYHTR1508	2
1600	0.02	0.04	0.06	0.13		BAYHTR1510	2
1500	0.02	0.04	0.06	0.12		BAYHTR1517	3
1400	0.02	0.04	0.06	0.12		BAYHTR3510	3
1300	0.02	0.04	0.05	0.11		BAYHTR3517	3
1200	0.01	0.04	0.05	0.10		BAYHTR3515	3
1100	0.01	0.03	0.05	0.09		BAYHTR1523	4
1000	0.01	0.03	0.04	0.09		BAYHTR1525	4
900	0.01	0.03	0.04	0.08			
800	0.01	0.03					
700	0.01	0.02					
600	0.01	0.02					

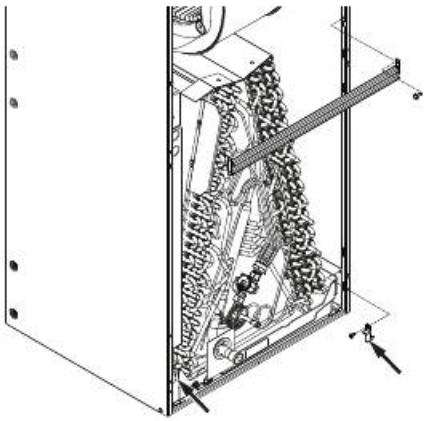
Coil Conversion Instructions

Downflow

Follow the conversion steps when installing the air handler in downflow configuration.

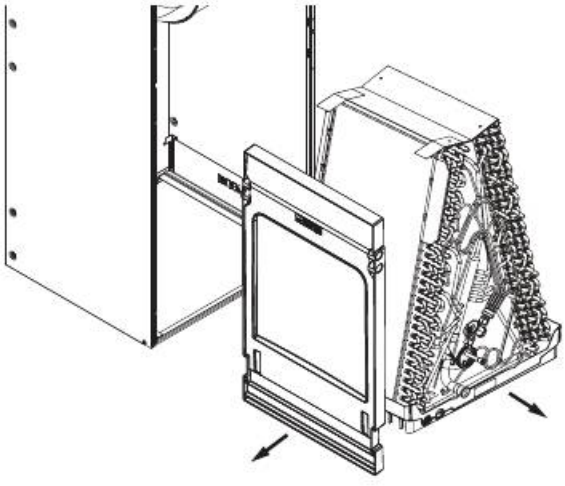
1. Remove the front panels panel from the air handler. The coil and line set panel do not need to be separated.
2. Remove the fasteners on both sides of the coil.
3. Remove the two screws holding the center horizontal bracket and rotate out of place. Retain parts.

Figure 3. All models



4. Slide the coil assembly out. Remove and discard the horizontal drain pan.

Figure 4. All models



5. On both sides of the cabinet, remove the screws that hold the coil support brackets and retain for later use. Seal the holes to prevent air leakage.
6. Rotate and lift the two coil support brackets to remove from front slots in cabinet.

Figure 5. All models

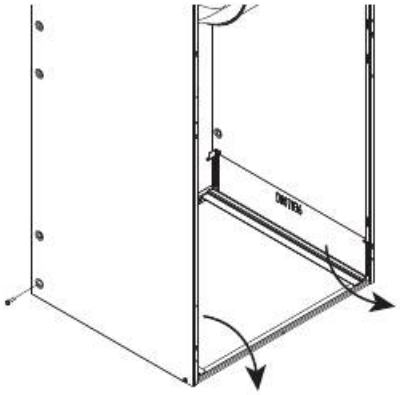
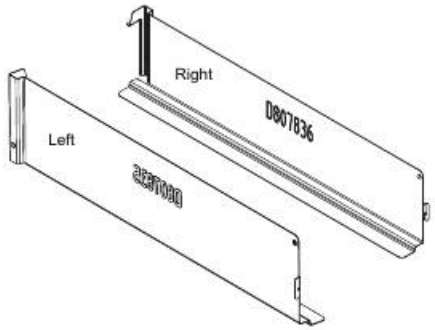
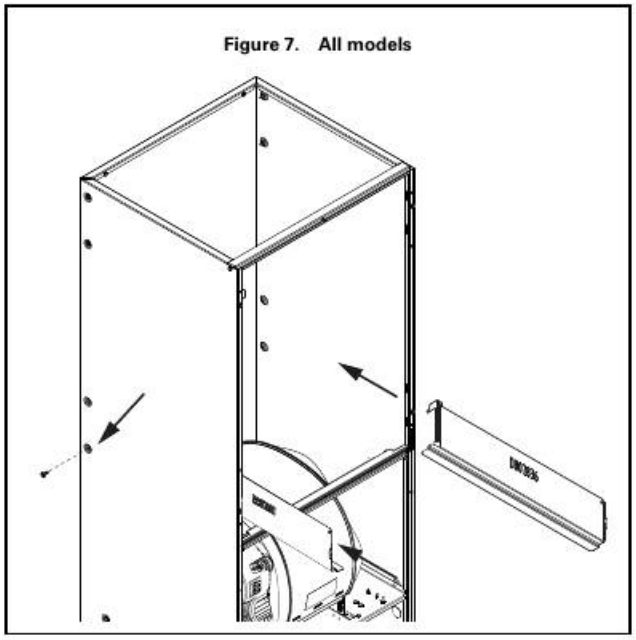


Figure 6. All models



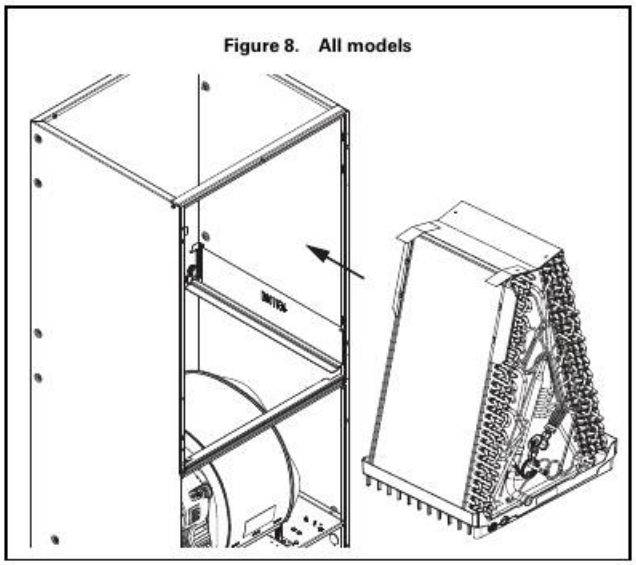
7. Rotate the unit into the downflow orientation.
8. Pre-drill two clearance holes in the cabinet at dimples located below the location the screws were removed for the coil support brackets. There is one hole per side. See location of holes.
9. Replace the center horizontal bracket removed in Step 3. Use the screws retained from Step 3 to attach.
10. Place coil support brackets into the lower set of slots and rotate into place. Push downward to lock into place.
11. Secure each bracket with a screw that were previously removed.

Figure 7. All models



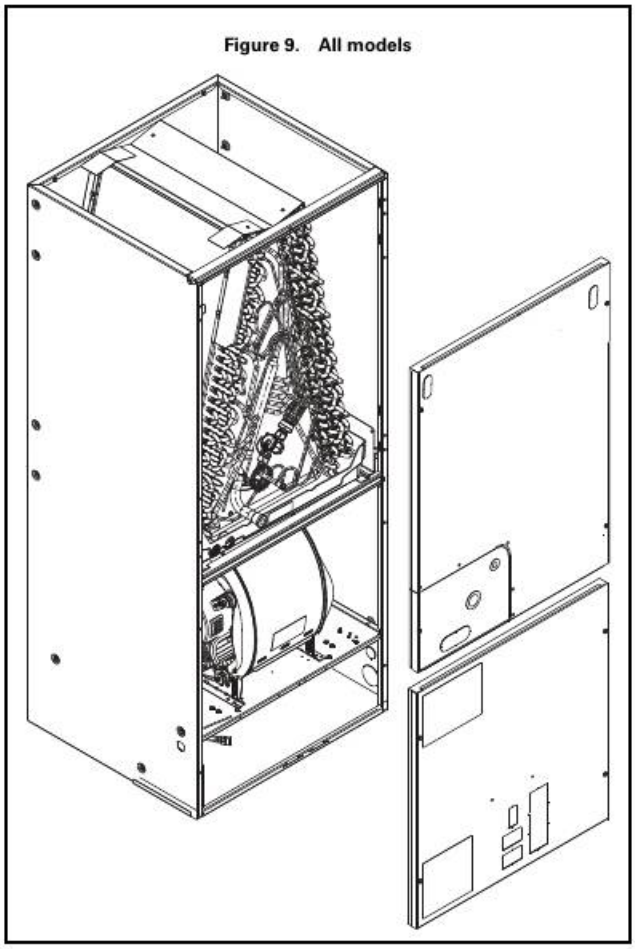
12. Slide the coil assembly back into the air handler cabinet as shown.
13. Remove the appropriate knock out for the condensate piping.

Figure 8. All models



14. Replace all panels.

Figure 9. All models

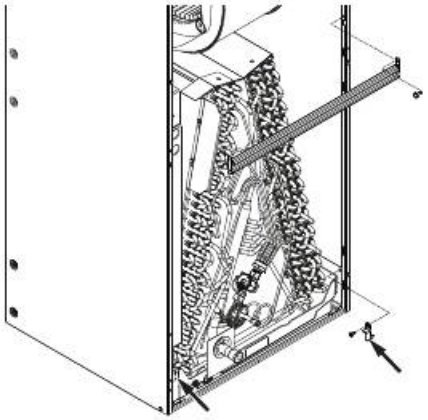


Horizontal Right

Follow the conversion steps when installing the air handler in horizontal right configuration.

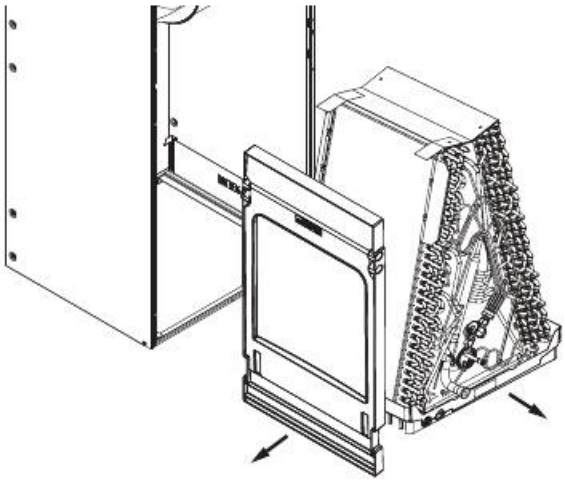
1. Remove the front panels from the air handler. The coil and line set panel do not need to be separated.
2. Remove the fasteners on both sides of the coil. Retain the coil retaining brackets and screws.
3. Remove the two screws holding the center horizontal bracket and rotate out of place. Retain parts.

Figure 10. All models



4. Make note of the horizontal drain pan orientation (up/down).
5. Slide the coil assembly out.

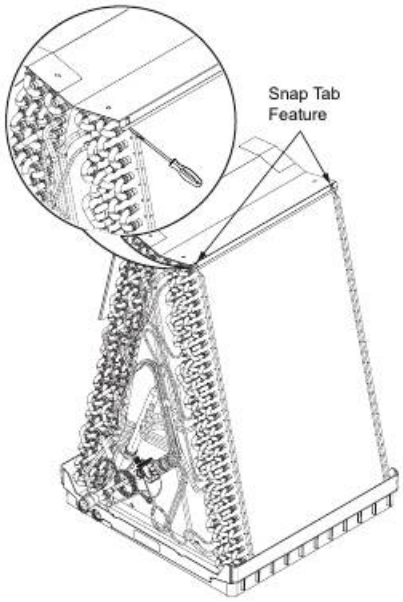
Figure 11. All models



Important: *For Horizontal Right applications, ON SOME MODELS the top panel assembly of the coil must be rotated for proper condensate management.*

6. On the right side of the top baffle, position a flathead tip underneath the top baffle flange and pivot the screwdriver downward to release the front tab as shown below.
7. Repeat for right rear tab to release top baffle assembly from coil.

Figure 12. All models



8. Rotate 180 degrees and snap all four corner tabs to lock in place.
9. Remove left side water diverter brackets and screws and reinstall on the right side.

Important: *The coil slabs are different and the mount hole locations will vary. See the illustrations on the following pages that correspond to the unit tonnage to see the correct mounting position of the water diverter bracket.*

Important: *The water diverter brackets are not symmetrical and will vary by tonnage.*

Figure 13. All models

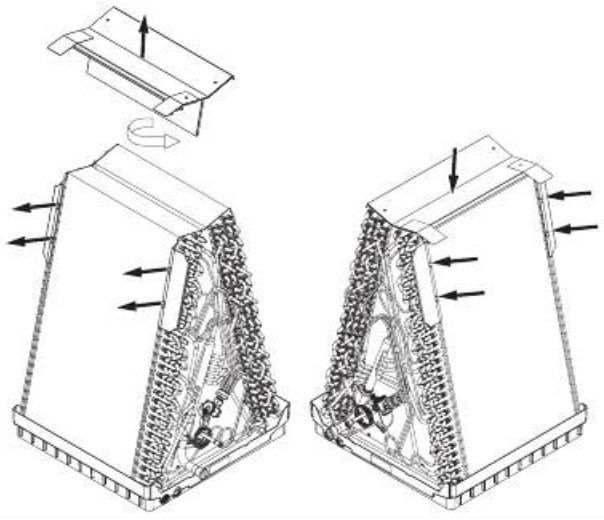


Figure 14. A4AH4E24A1B60AA

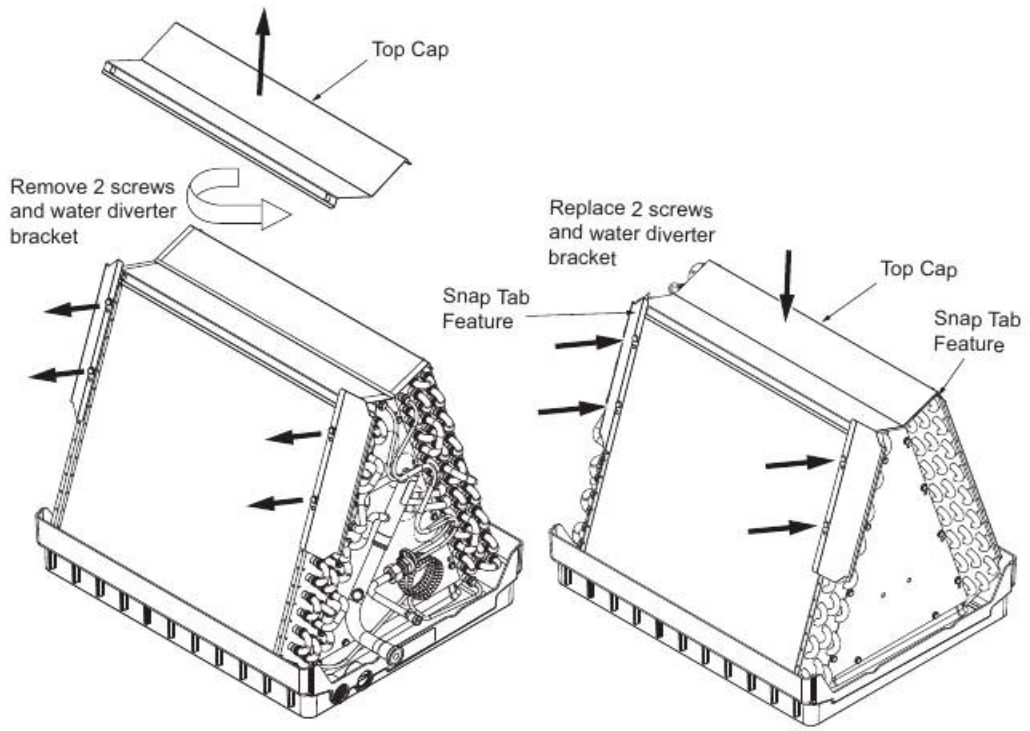


Figure 15. A4AH4E30A1B30AA

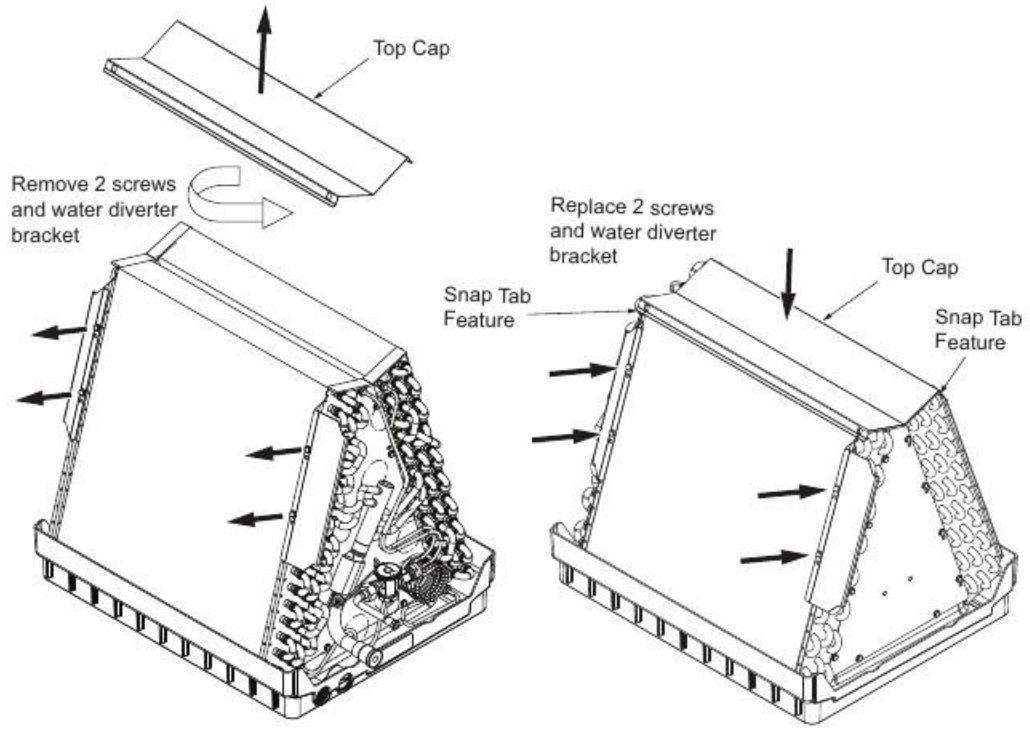


Figure 16. A4AH4E36A1C30AA, A4AH4E42B1C30AA

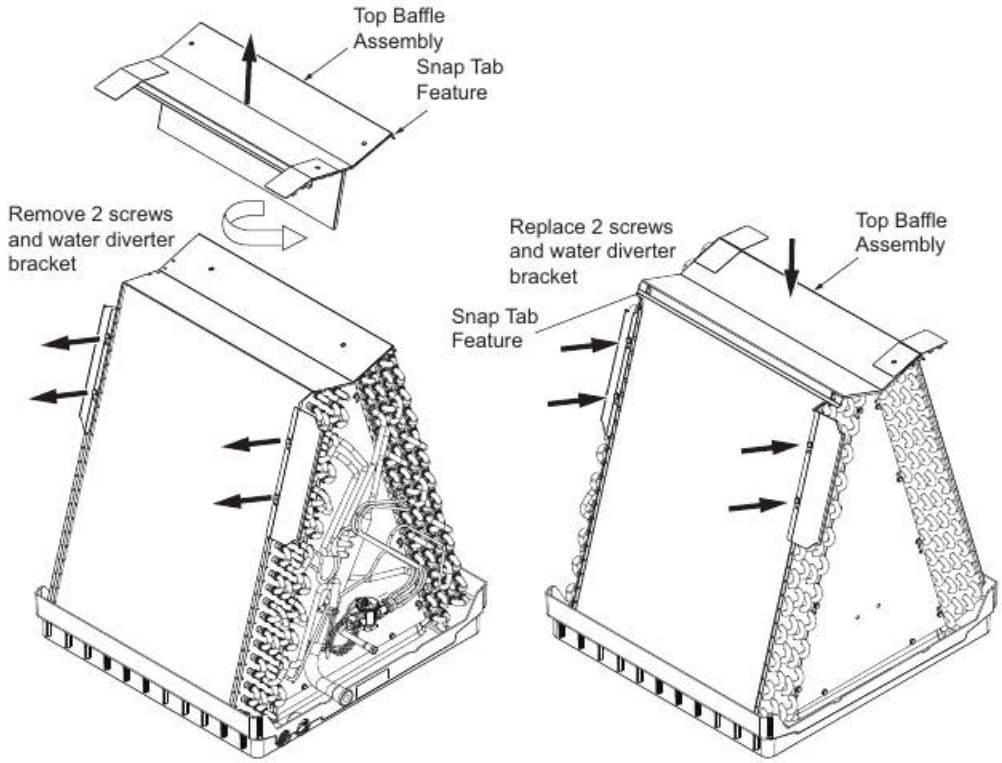
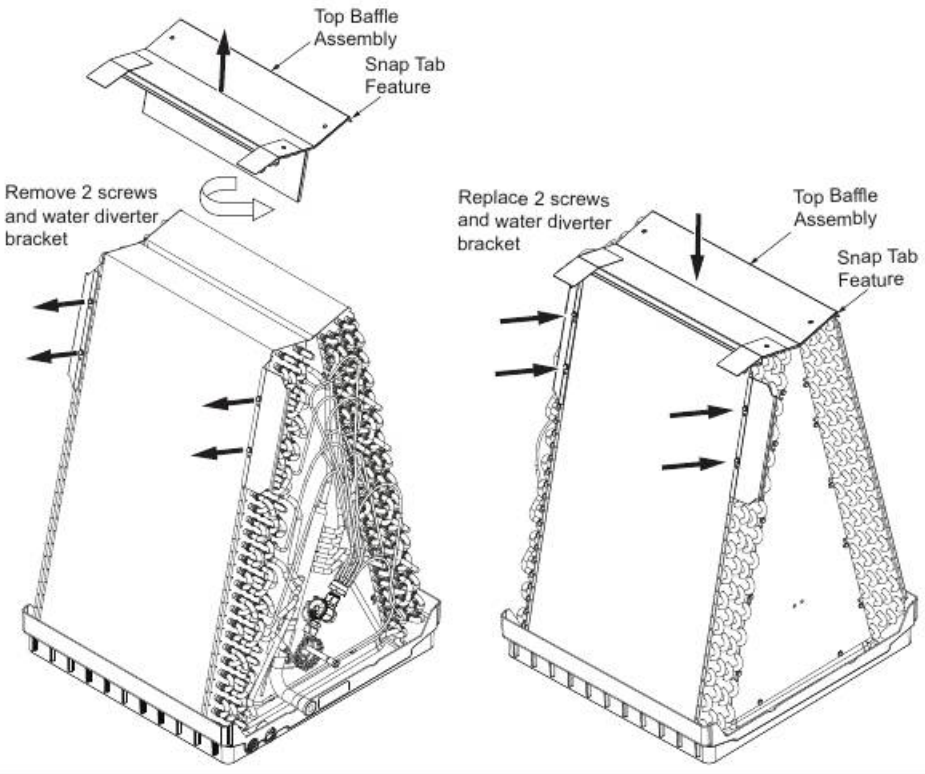


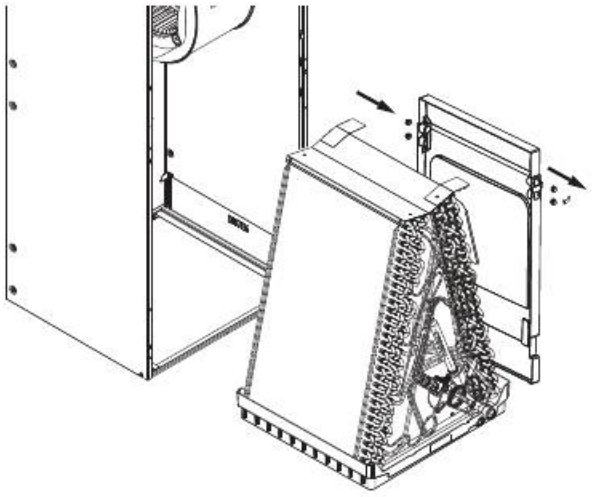
Figure 17. A4AH4E48B1C30AA, A4AH4E60B1C30AA



10. Relocate the horizontal drain pan from the left side of the coil to the right side.
11. Remove the drain pan support bracket. Do not discard. Remove the two drain plugs from the front of the drain pan and insert them in the drains at the rear of the drain pan.

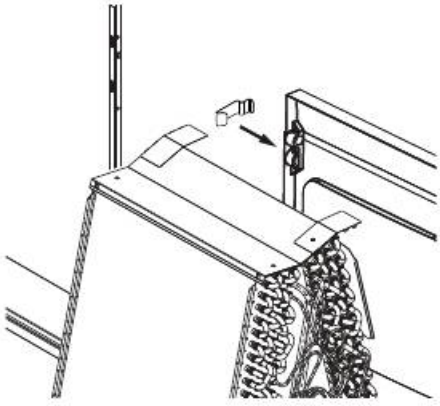
Important: *When reinstalling coil in Step 13, it is important that the coil corner locks in place under the tab in the side bracket to support the coil weight horizontally.*

Figure 18. All models



12. Reinstall the drain pan support bracket. The bracket should be located between the two drain plugs as shown.

Figure 19. All models

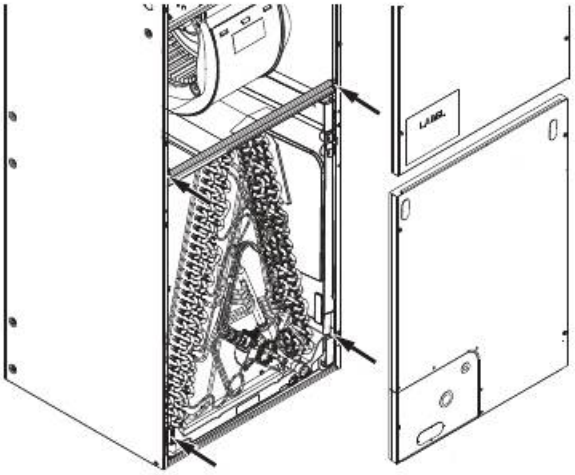


13. Slide the coil assembly back into the air handler cabinet.

Important: *Make sure that the coil corner locks in place under the tab in the side left bracket to support the coil weight in the horizontal right position.*

14. Replace the center horizontal bracket using screws removed earlier in Step 3.
15. Replace the two coil retaining brackets removed in a previous step.
16. Replace all panels.

Figure 20. All models



Checkout Procedures

The final phase of the installation is the system Checkout Procedures. The following list represents the most common items covered in a Checkout Procedure. Confirm all requirements in this document have been met.

- ☐ All wiring connections are tight and properly secured.
- ☐ Voltage and running current are within limits.
- ☐ All refrigerant lines (internal and external to equipment) are isolated, secure, and not in direct contact with each other or structure.
- ☐ All braze connections have been checked for leaks. A vacuum of 350 microns provides confirmation that the refrigeration system is leak free and dry.
- ☐ Final unit inspection to confirm factory tubing has not shifted during shipment. Adjust tubing if necessary so tubes do not rub against each other or any component when unit runs.
- ☐ Ductwork is sealed and insulated.
- ☐ All drain lines are clear with joints properly sealed. Pour water into drain pan to confirm proper drainage. Provide enough water to ensure drain trap is primed.
- ☐ Supply registers and return grilles are open, unobstructed, and air filter is installed.
- ☐ Indoor blower and outdoor fan are operating smoothly and without obstruction.
- ☐ Indoor blower motor set on correct speed setting to deliver required CFM. "Blower and fan set screws are tight."
- ☐ Cover panels are in place and properly tightened.
- ☐ For gas heating systems, manifold pressure has been checked and all gas line connections are tight and leak free.
- ☐ For gas heating systems, flue gas is properly vented.
- ☐ System functions safely and properly in all modes.
- ☐ Owner has been instructed on use of system and given manual.

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