18-GJ65D1-4

AVAILABLE IN FRENCH CANADIAN (FC)

Installer's Guide

Convertible Air Handlers
1-1/2 – 5 Ton

TEM3A0B18S21SA
TEM3A0B24S21SA
TEM3A0B30S31SA
TEM3A0B36S31SA
TEM3A0C42S41SA
TEM3A0C48S41SA
TEM3A0C60S51SA

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

***Important**: This Document is customer property and is to remain with this unit.*

The TEM3 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.

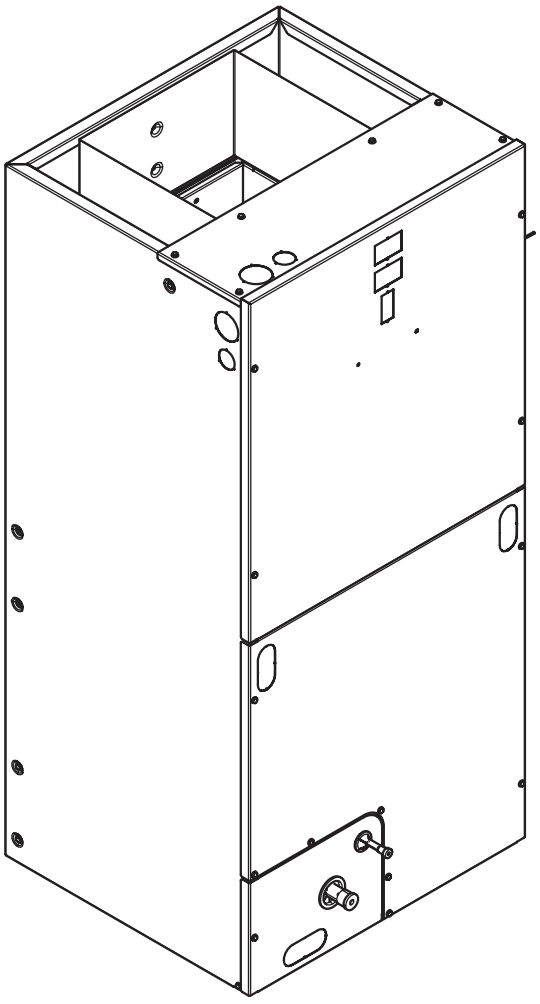
Section 1. Features

1.1 Standard Features

- MULTI-POSITION UPFLOW, DOWNFLOW, HORIZONTAL LEFT AND HORIZONTAL RIGHT
- PAINTED FINISH ON GALVANIZED STEEL EXTERIOR WITH FULLY INSULATED CABINET THAT MEETS R4.2 VALUE
- STURDY POLYCARBONATE DRAIN PANS
  - The TEM3 air handler has factory installed drain pans and is shipped for upflow and horizontal left applications.
- 208/230 VAC OPERATION
- MULTI-SPEED DIRECT DRIVE BLOWER
- FACTORY INSTALLED R-410A THERMAL EXPANSION VALVE
- ALL ALUMINUM COIL
- BOTTOM RETURN
- MEETS THE MINIMUM LEAKAGE REQUIREMENTS FOR THE FLORIDA AND CALIFORNIA BUILDING CODES

1.2 Optional Accessories

- 5,10, and 15 KW SINGLE PHASE ELECTRIC HEATERS
  - Circuit breakers available on all single phase 5, 10, and 15 KW heaters.
  - Pull disconnects available on all single phase 5 and 10 KW heaters.
- SINGLE POINT POWER ENTRY KIT
- SUPPLY DUCT FLANGE KIT
- DOWNFLOW WATER MANAGEMENT KIT - BAYTEMDFKT1A (required for 5 Ton models)
- DOWNFLOW SUB-BASE KITS - TAYBASE185, TAYBASE235



Manufactured in the U.S.A.

Section 2. Safety Information

⚠ WARNING

SAFETY HAZARD! This information is intended for use by individuals possessing adequate backgrounds of electrical and mechanical experience. Any attempt to repair a central air conditioning product may result in personal injury and/or property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

⚠ WARNING

HAZARDOUS VOLTAGE!
Disconnect all electrical power, including remote disconnects before installing or servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Failure to disconnect power before servicing could result in death or serious injury.

⚠ WARNING

LIVE ELECTRICAL COMPONENTS! During installation, testing, servicing, and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

⚠ WARNING

EXPLOSION HAZARD!
Do not store corrosive or combustible materials, gasoline, or other flammable vapors or liquids near the unit. Failure to follow this warning could result in property damage, serious personal injury, or death.

⚠ WARNING

ELECTRICAL HAZARD!
Grounding Required! Follow proper local and state electrical code on requirements for grounding. Failure to follow this warning could result in property damage, serious personal injury, or death.

⚠ CAUTION

HAZARDOUS VAPORS! Do not install an air handler with a non-ducted return in the same closet, alcove, or utility room as a fossil fuel device. Hazardous vapors can be distributed throughout the conditioned space and equipment damage can result.

***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.*

***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:** The TEM3 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:** The 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."*

⚠ 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.

⚠ CAUTION

CORROSION HAZARD! To prevent shortening its service life, the air handler should not be used during the finishing phases of construction. 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

SAFETY HAZARD! Sharp Edge Hazard. Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing. Personal injury may result.

⚠ WARNING

THIS PRODUCT CONTAINS FIBERGLASS WOOL INSULATION! FIBERGLASS DUST AND CERAMIC FIBERS ARE BELIEVED BY THE STATE OF CALIFORNIA TO CAUSE CANCER THROUGH INHALATION. GLASSWOOL FIBERS MAY ALSO CAUSE RESPIRATORY, SKIN, OR EYE IRRITATION.

PRECAUTIONARY MEASURES

- Avoid breathing fiberglass dust
- Use a NIOSH approved dust/mist respirator
- Avoid contact with the skin or eyes. Wear long-sleeved, loose fitting clothing, gloves, and eye protection.
- Wash clothes separately from other clothing, rinse washer thoroughly.
- Operations, such as sawing, blowing, tear-out, and spraying may generate fiber concentrations requiring additional respiratory protection. Use the appropriate NIOSH approved respirator in these situations.

FIRST AID MEASURES

EYE CONTACT: FLUSH EYES WITH WATER TO REMOVE DUST
IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION.

SKIN CONTACT: WASH AFFECTED AREA GENTLY WITH SOAP AND WARM WATER AFTER HANDLING.

***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.*

Section 3. Installation Instructions

3.1 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.

3.2 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 in Section 7.*

Important: *A downflow condensate management kit BAYTEMDFKT1A is required and must be ordered separately for downflow applications of all 5-ton air handlers.*

The unit must be installed in a level position to ensure proper condensation drainage. Make sure the unit is level in both directions within 1/8" on either side.

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.

3.3 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.

3.4 Condensate Drain

The unit is supplied with primary and auxiliary condensate drains that have 3/4" NPT connections. Both drains must be trapped outside the unit and piped in accordance with applicable building codes. 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. Insulate the primary drain line to prevent sweating where dew point temperatures may be met. (Insulation is optional depending on climate and application needs.)

3.5 Refrigerant Piping

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

3.6 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.

3.7 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.

3.8 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 operated at 208 VAC 60HZ, follow the instruction on the indoor unit wiring diagram to change the low voltage transformer to 208 VAC operation.

Be sure the 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.

3.9 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.

3.10 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. The thermostat should be mounted 4 to 5 feet above the floor.

3.13 Sequence of Operation

Cooling (cooling only)

PSC versions - When the thermostat calls for cooling, the circuit from R to G is completed. The blower relay is energized.

Constant torque version – 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)

PSC versions - When the thermostat calls for cooling, the circuit from R to G is completed. The blower relay is energized.

Constant torque version – 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)

PSC versions - When the thermostat calls for heating, the circuit from R to G is completed. The blower relay is energized.

Constant torque version – 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.

PSC versions - When the thermostat calls for heating, the circuit from R to G is completed. The blower relay is energized. The circuit from R to W is completed energizing the heating contactor(s).

Constant torque version - 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.

3.12 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 following list:

[ ] 1. Be sure unit suspension (if used) is secure and there are no tools or loose debris in, around or on top of the unit.

[ ] 2. Properly insulate suction lines and fittings.

[ ] 3. Properly secure and isolate all refrigerant lines.

[ ] 4. Verify that all electrical connections are tight.

[ ] 5. Check all duct outlets; they must be open and unrestricted.

[ ] 6. Check drain lines and be sure all joints are tight.

[ ] 7. Be sure the return air filter is installed.

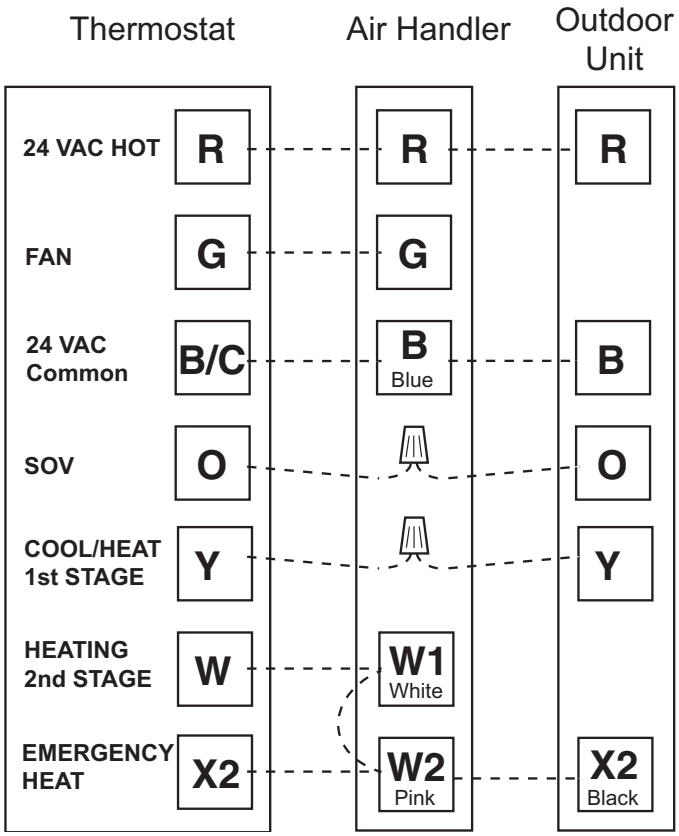
[ ] 8. Operate complete system in each mode to verify proper performance. Verify operation of supplementary electric heater.

3.13 Maintenance

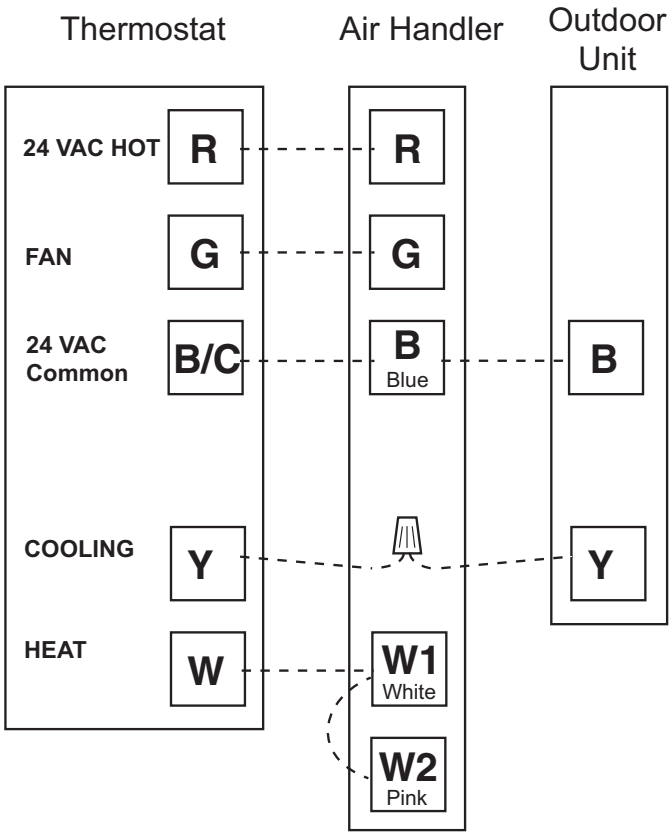
The system air filter(s) should be inspected, cleaned or replaced at least monthly. Make certain that the access panels are replaced and secured properly before placing the unit back in operation. This product is designed for dependable service; however, periodic maintenance should be scheduled and conducted 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.

Section 4. Wiring

HEAT PUMP SYSTEMS

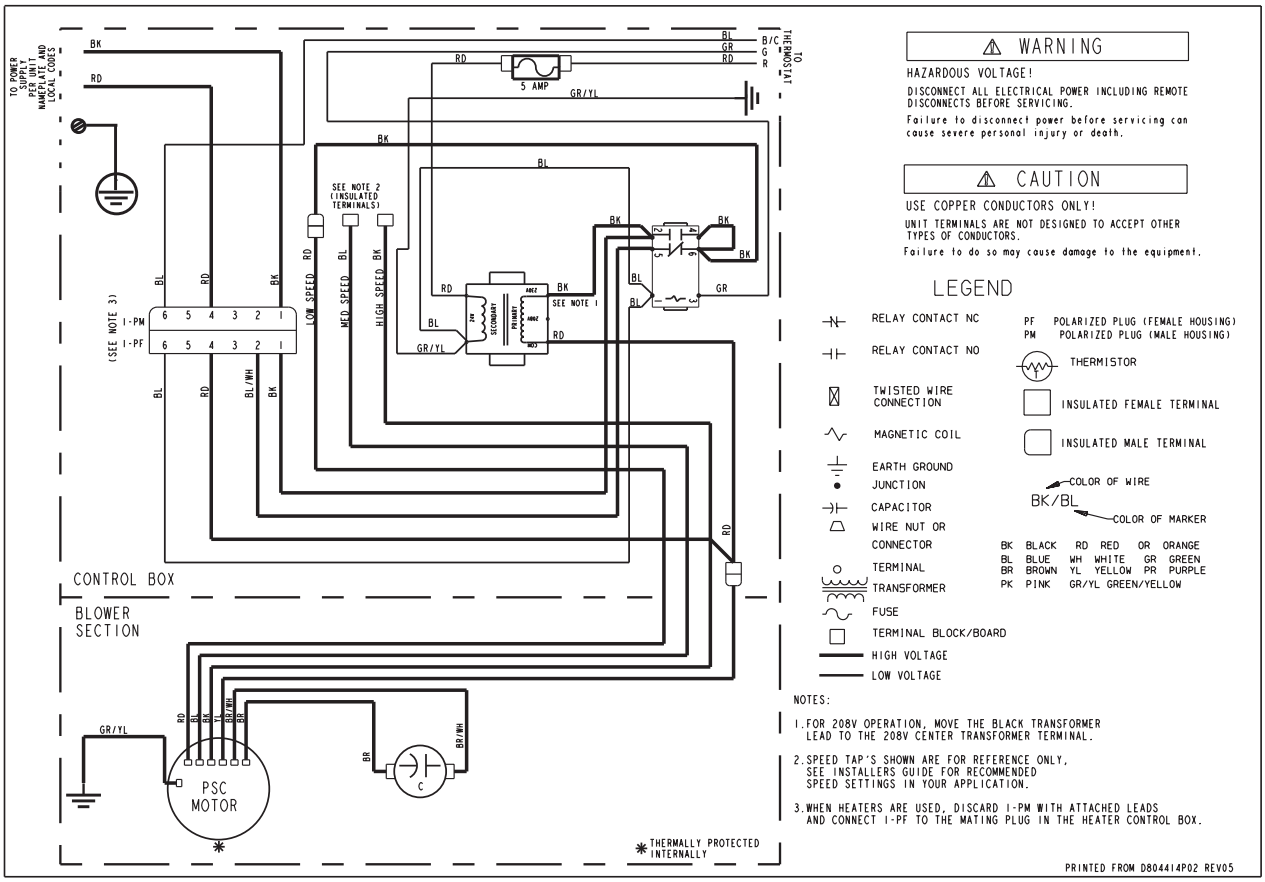


AC SYSTEMS

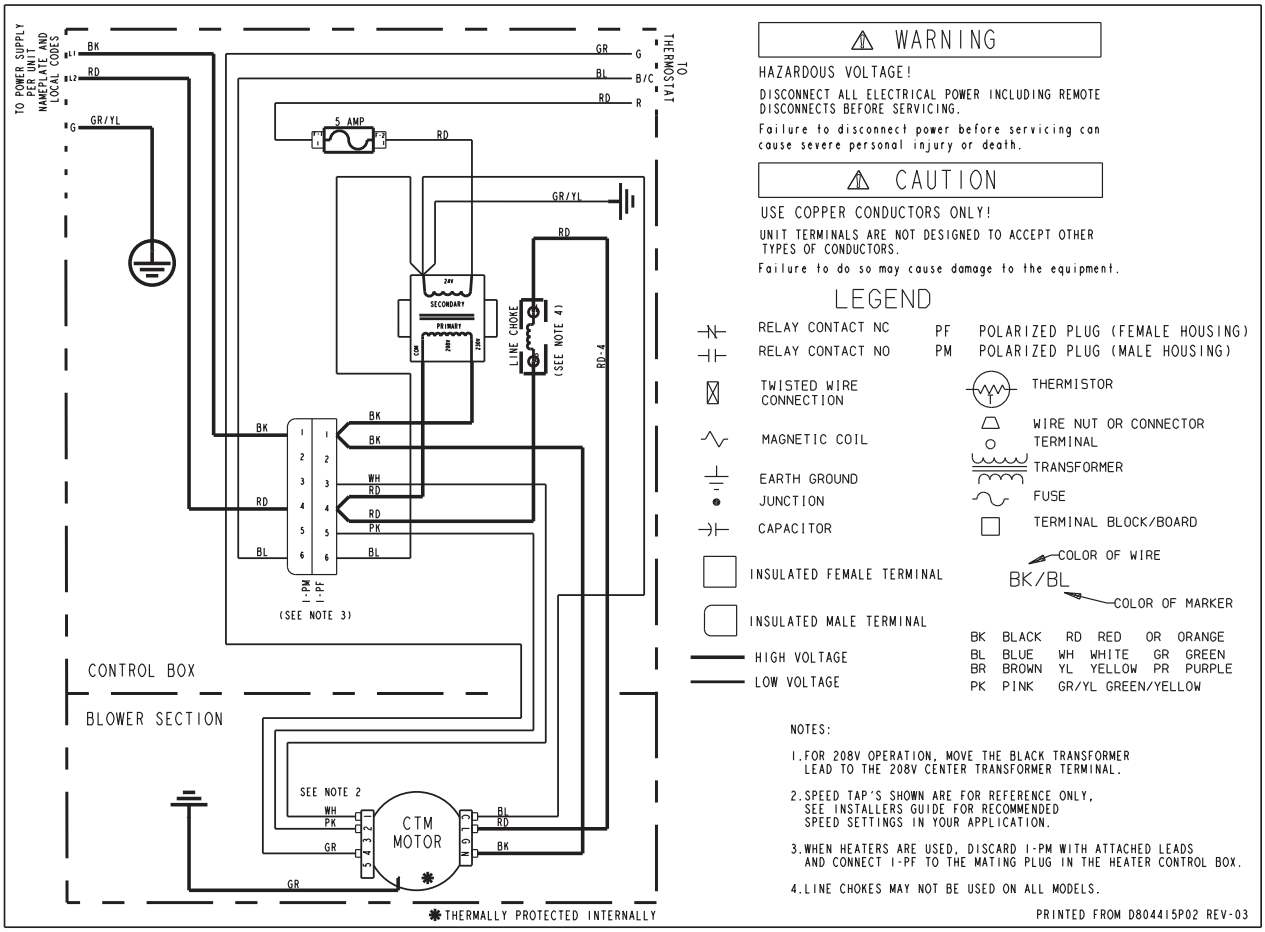


In AC systems for multiple stages of electric heat, jumper W1 and W2 together if comfort control has only one stage of heat.

Wiring diagram for TEM3A0B18-C48



Wiring diagram for TEM3A0C60



Section 5. - Heater Pressure Drop Table - Use for all TEM air handler models

AIRFLOW CFM	NUMBER OF RACKS			
	1	2	3	4
	AIR PRESSURE DROP - INCHES W.G.			
1800	0.02	0.04	0.06	0.14
1700	0.02	0.04	0.06	0.14
1600	0.02	0.04	0.06	0.13
1500	0.02	0.04	0.06	0.12
1400	0.02	0.04	0.06	0.12
1300	0.02	0.04	0.05	0.11
1200	0.01	0.04	0.05	0.10
1100	0.01	0.03	0.05	0.09
1000	0.01	0.03	0.04	0.09
900	0.01	0.03	0.04	0.08
800	0.01	0.03		
700	0.01	0.02		
600	0.01	0.02		

HEATER RACKS	
HEATER MODEL	NO. OF RACKS
BAYHTR1505	1
BAYHTR1510	2
BAYHTR1515	3

Section 6.
Performance and Electrical Data – TEM3A0B18S21SA, TEM3A0B24S21SA

AIR FLOW PERFORMANCE						
TEM3A0B18S21SA, TEM3A0B24S21SA④						
EXTERNAL STATIC (in w.g)	AIRFLOW					
	Speed Taps - 230 VOLTS			Speed Taps - 208 VOLTS		
	High	Med	Low †	High	Med	Low †
0.1	984	903	719	946	827	612
0.2	948	868	694	910	796	589
0.3	906	828	665	868	760	567
0.4	858	781	630	820	717	543
0.5	802	726	588	764	666	513
0.6	735	660	537	697	605	
0.7	651	581		614	532	

NOTES:
1. Values are with wet coil, no filter, and no heaters
2. CFM Correction for dry coil = Add 3%
3. † = Factory setting
4. For the TEM3A0B24S21SA, the recommended speed tap is medium at 0.4" external static pressure

TEM3A0B18S21SA, TEM3A0B24S21SA MINIMUM AIRFLOW CFM		
Heater	Minimum Heat Speed Tap	
	With Heat Pump	Without Heat Pump
BAYHTR1505BRKA BAYHTR1505PDCA	Low	Low
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low

ELECTRICAL DATA											
TEM3A0B18S21SA, TEM3A0B24S21SA											
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				1.3*	2	15			1.3*	2	15
BAYHTR1505BRKA BAYHTR1505PDCA	1/1	4.80	16400	20.0	27	30	3.60	12300	17.3	23	25
BAYHTR1510BRKA BAYHTR1510PDCA	1/1	9.60	32800	40.0	52	60	7.20	24600	34.6	45	45
* = Motor Amps											

Performance and Electrical Data – TEM3A0B30S31SA, TEM3A0B36S31SA

AIR FLOW PERFORMANCE						
TEM3A0B30S31SA⑤, TEM3A0B36S31SA④⑤						
EXTERNAL STATIC (in w.g)	**AIRFLOW**					
	Speed Taps - 230 VOLTS			**Speed Taps - 208 VOLTS**		
	High	**Med**	**Low †**	**High**	**Med**	**Low †**
0.1	1461	1336	979	1406	1173	834
0.2	1404	1291	971	1352	1152	819
0.3	1344	1242	962	1295	1121	810
0.4	1281	1188	944	1234	1081	804
0.5	1214	1130	916	1169	1035	791
0.6	1142	1066	876	1100	981	768
0.7	1066	997		1026	920	732

NOTES:
1. Values are with wet coil, no filter, and no heaters
2. CFM Correction for dry coil = Add 3%
3. † = Factory setting
4. For the TEM3A0B36S31SA, the recommended speed tap is medium at 0.4" external static pressure
5. For the TEM3A0B30S31SA and TEM3A0B36S31SA in downflow applications, airflow must not exceed 1200 cfm due to condensate blowoff

TEM3A0B30S31SA, TEM3A0B36S31SA MINIMUM AIRFLOW CFM		
Heater	**Minimum Heat Speed Tap**	
	With Heat Pump	Without Heat Pump
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low
BAYHTR1515BRK	Low	Low

ELECTRICAL DATA											
TEM3A0B30S31SA, TEM3A0B36S31SA											
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				2.5*	3	15			2.5*	3	15
BAYHTR1505BRKA BAYHTR1505PDCA	1/1	4.80	16400	20.0	28	30	3.60	12300	17.3	25	25
BAYHTR1510BRKA BAYHTR1510PDCA	1/1	9.60	32800	40.0	53	60	7.20	24600	34.6	46	50
BAYHTR1515BRK - Circuit 1 ①	2/1	9.60	32800	40.0	53	60	7.20	24600	34.6	46	50
BAYHTR1515BRK - Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1515BRK with single circuit power source kit BAYSPEKT201A	1/1	14.40	49100	60.0	83	90	10.80	36900	51.9	73	80

* = Motor Amps
① MCA and MOP for circuit 1 contains the motor amps

Performance and Electrical Data – TEM3A0C42S41SA, TEM3A0C48S41SA

AIR FLOW PERFORMANCE						
TEM3A0C42S41SA⑤, TEM3A0C48S41SA④⑤						
EXTERNAL STATIC (in w.g)	AIRFLOW					
	Speed Taps - 230 VOLTS			Speed Taps - 208 VOLTS		
	High	Med	Low †	High	Med	Low †
0.1	1959	1704	1344	1786	1465	1154
0.2	1898	1675	1332	1748	1462	1126
0.3	1828	1631	1325	1697	1444	1108
0.4	1750	1574	1310	1633	1410	1095
0.5	1662	1504	1277	1557	1359	1076
0.6	1563	1420	1223	1468	1289	1039
0.7	1452	1321		1365		

NOTES:
1. Values are with wet coil, no filter, and no heaters
2. CFM Correction for dry coil = Add 3%
3. † = Factory setting
4. For the TEM3A0C48S41SA, the recommended speed tap is medium at 0.4" external static pressure
5. For the TEM3A0C42S41SA and TEM3A0C48S41SA in downflow applications, airflow must not exceed 1600 cfm due to condensate blowoff

TEM3A0C42S41SA, TEM3A0C48S41SA MINIMUM AIRFLOW CFM		
Heater	Minimum Heat Speed Tap	
	With Heat Pump	Without Heat Pump
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low
BAYHTR1515BRK	Low	Low

ELECTRICAL DATA											
TEM3A0C42S41SA, TEM3A0C48S41SA											
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				2.6*	3	15			2.6*	3	15
BAYHTR1505BRKA BAYHTR1505PDCA	1/1	4.80	16400	20.0	28	30	3.60	12300	17.3	25	25
BAYHTR1510BRKA BAYHTR1510PDCA	1/1	9.60	32800	40.0	53	60	7.20	24600	34.6	47	50
BAYHTR1515BRK - Circuit 1 ①	2/1	9.60	32800	40.0	53	60	7.20	24600	34.6	47	50
BAYHTR1515BRK - Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1515BRK with single circuit power source kit BAYSPEKT201A	1/1	14.40	49100	60.0	83	90	10.80	36900	51.9	73	80

* = Motor Amps
① MCA and MOP for circuit 1 contains the motor amps

Performance and Electrical Data – TEM3A0C60S51SA

AIR FLOW PERFORMANCE			
TEM3A0C60S51SA			
EXTERNAL STATIC (in w.g)	**AIRFLOW**		
	Speed Taps - 208-230 VOLTS		
	High	**Med †**	**Low**
0.1	1954	1864	1780
0.2	1919	1827	1741
0.3	1885	1791	1704
0.4	1852	1756	1668
0.5	1821	1723	1633
0.6	1790	1691	1599
0.7	1761	1660	1567

NOTES:
1. Values are with wet coil, no filter, and no heaters
2. CFM Correction for dry coil = Add 3%
3. **†** = Factory setting
4. Low = Taps 1-3, Med = Tap 4, High = Tap 5
5. BAYTEMDFKT1A must be used for downflow applications and airflow must not exceed 1800 cfm.

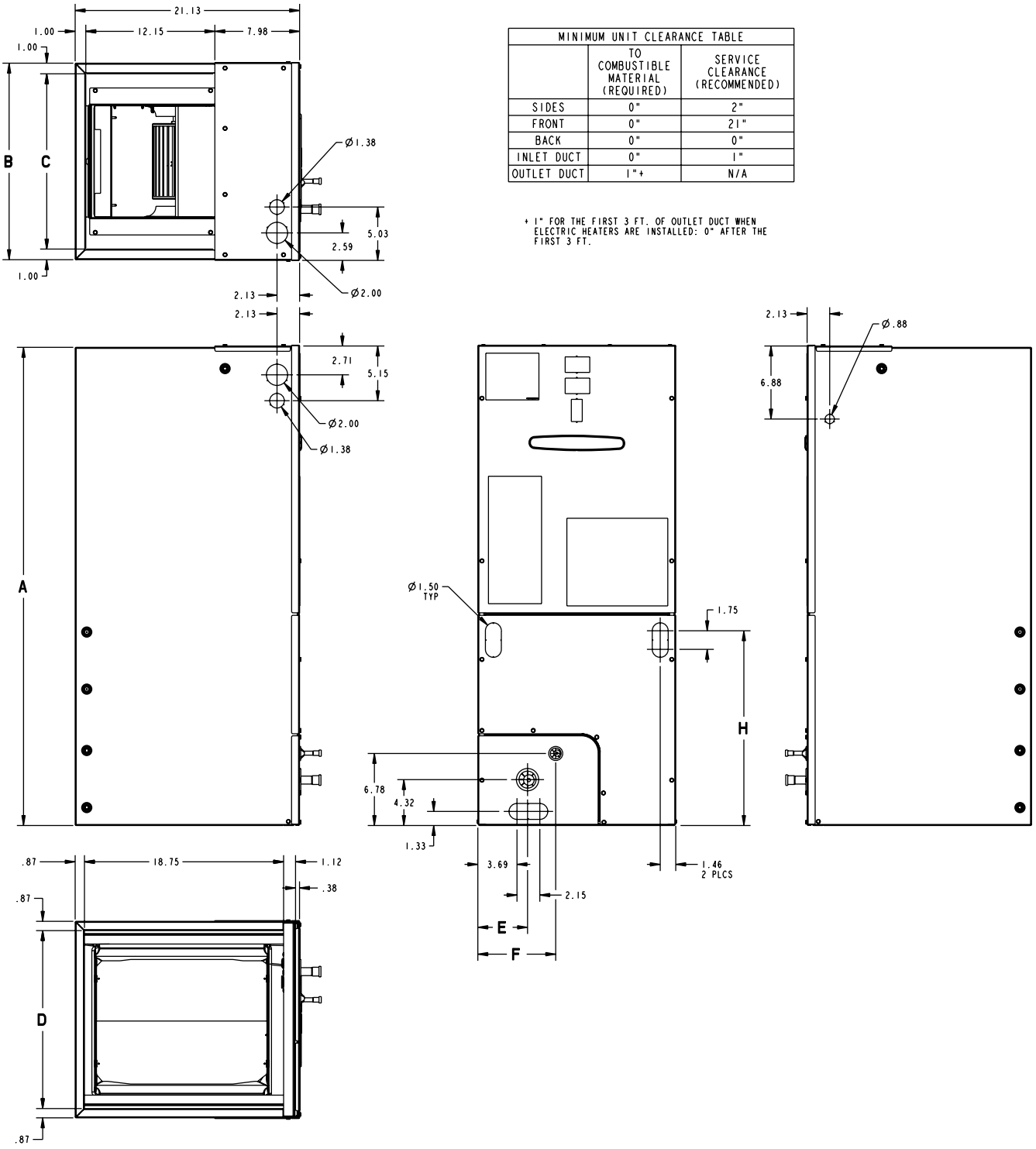
TEM3A0C60S51SA MINIMUM AIRFLOW CFM		
Heater	**Minimum Heat Speed Tap**	
	With Heat Pump	Without Heat Pump
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low
BAYHTR1510BRKA BAYHTR1510PDCA	Low	Low
BAYHTR1515BRK	Low	Low
Low = Taps 1-3		

ELECTRICAL DATA											
TEM3A0C60S51SA											
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				6.3*	8	15			6.3*	8	15
BAYHTR1505BRKA BAYHTR1505PDCA	1/1	4.80	16400	20.0	33	35	3.60	12300	17.3	30	30
BAYHTR1510BRKA BAYHTR1510PDCA	1/1	9.60	32800	40.0	58	60	7.20	24600	34.6	51	60
BAYHTR1515BRK - Circuit 1 ①	2/1	9.60	32800	40.0	58	60	7.20	24600	34.6	51	60
BAYHTR1515BRK - Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1515BRK with single circuit power source kit BAYSPEKT201A	1/1	14.40	49100	60.0	83	90	10.80	36900	51.9	73	80

* = Motor Amps
① MCA and MOP for circuit 1 contains the motor amps

Section 7. Dimensional Data

TEM3 Air Handlers



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

+ 1" FOR THE FIRST 3 FT. OF OUTLET DUCT WHEN ELECTRIC HEATERS ARE INSTALLED: 0" AFTER THE FIRST 3 FT.

PRODUCT DIMENSIONS									
Air Handler Model	A	B	C	D	E	F	H	Flow Control	Gas Line Braze
TEM3A0B18, 24, 30, 36	45.02	18.50	16.50	16.75	4.68	7.33	18.34	TXV	3/4
TEM3A0C42, 48, 60	51.27	23.50	21.50	21.75	7.01	9.66	24.59	TXV	7/8
All dimensions are in inches.									

Section 8. Coil Conversion Instructions

8.1 Downflow

Important: Restrictions apply to Downflow applications.

1) For 2.5 and 3 ton downflow applications, airflow must not exceed 1200 cfm due to condensate blowoff.
2) For 3.5 and 4 ton downflow applications, airflow must not exceed 1600 cfm due to condensate blowoff.
3) For 5 ton downflow applications, BAYTEMDFKT1A must be used at all times and airflow must not exceed 1800 cfm.

Follow the conversion steps when installing the air handler in downflow 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 two coil retaining brackets located at the front of the drain pan. Each is held in place by one screw. Discard brackets. See Figure 1.
3. Remove the two screws holding the center horizontal brace and rotate out of place. Retain parts. See Figure 1.

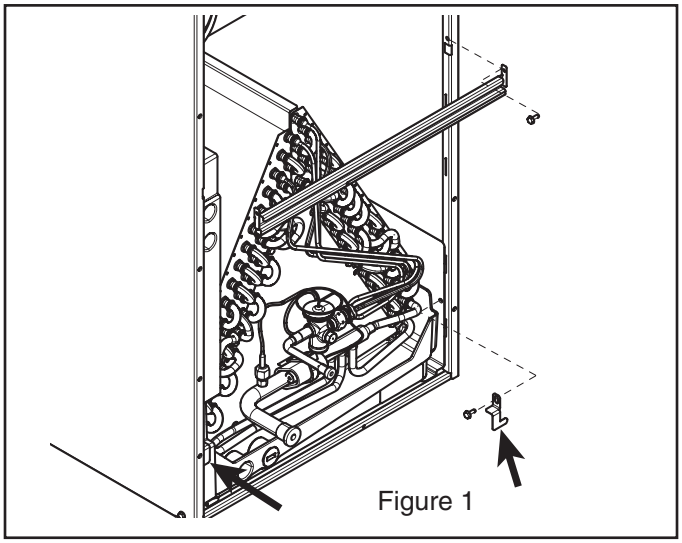


Figure 1

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

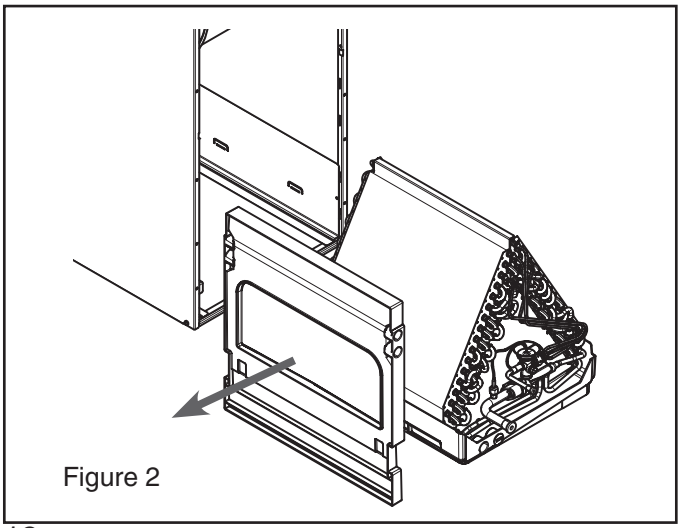


Figure 2

5. On both sides of the cabinet, remove the two screws that hold the coil support brackets. Seal the holes to prevent air leakage. See Figure 3.
6. Rotate and lift the two coil support brackets to remove from front slots in cabinet. See Figure 3.

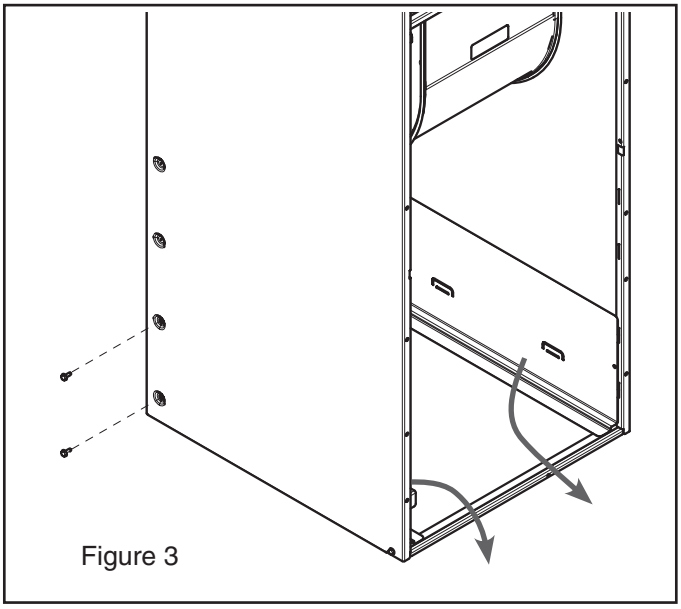


Figure 3

7. Bend the two tabs on each of the coil support brackets. Tabs should be bent inward so they are parallel to the bottom flange. See Figure 4.

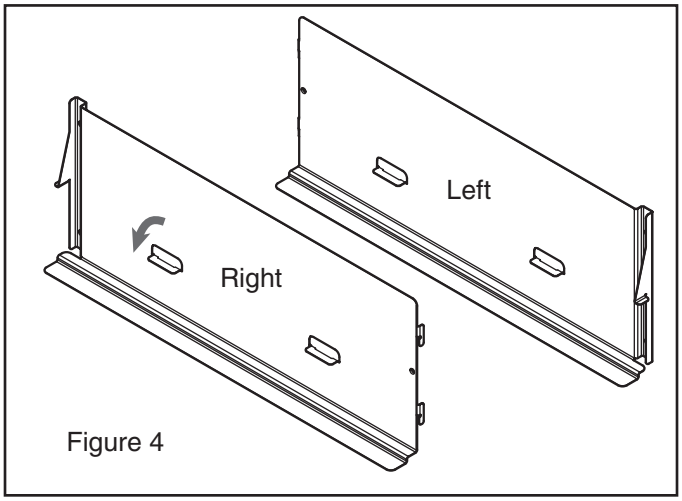


Figure 4

8. Rotate the unit into the downflow orientation.
9. Pre-drill four clearance holes in the cabinet at dimples located below the location the screws were removed for the coil support brackets. There are two holes per side. See location of holes in Figure 5.
10. Replace the center horizontal bracket using the screws removed in Step 8.1.3.
11. Place coil support brackets into the lower set of slots and rotate into place. Push downward to lock into place.
12. Secure each bracket with 2 screws that were previously removed in Step 8.1.5.

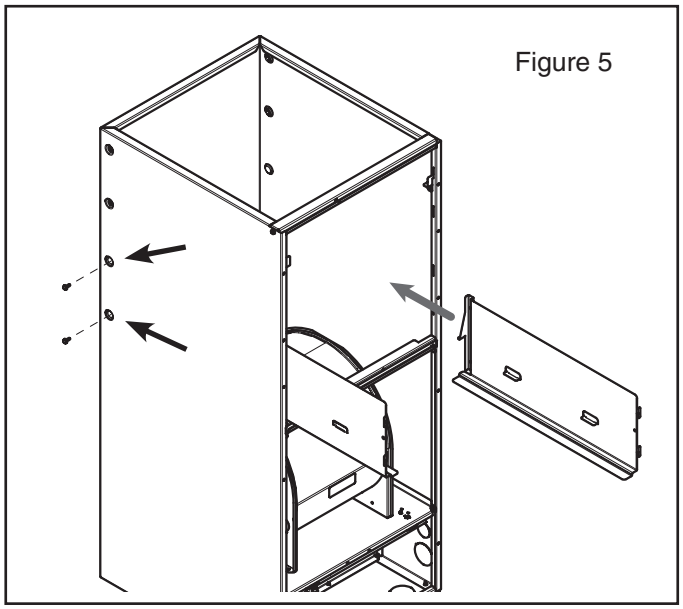


Figure 5

STOP:
BAYTEMDFKT1A downflow kit is required for the TEM3A0C60S51SA. Installation instructions are included with the kit.

13. Slide the coil assembly back into the air handler cabinet as shown in Figure 6.

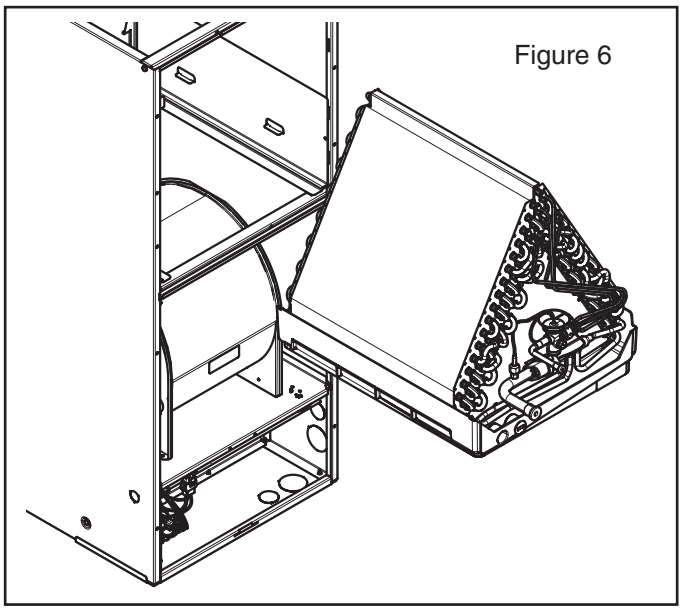


Figure 6

14. Remove the appropriate knock out for the condensate piping.
15. Replace all panels.

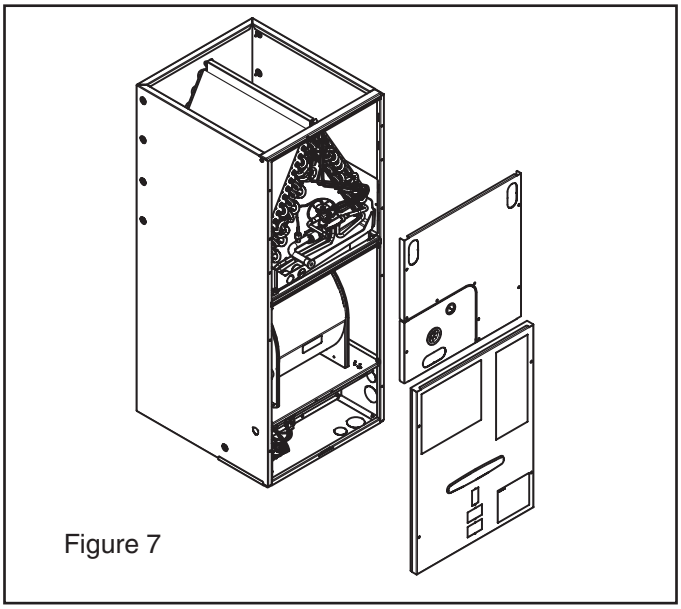


Figure 7

8.2 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 two coil retaining brackets located at the front of the drain pan. Each is held in place by one screw. Save brackets and screws. See Figure 8.
3. Remove the two screws holding the center horizontal brace and rotate out of place. Retain parts. See Figure 8.

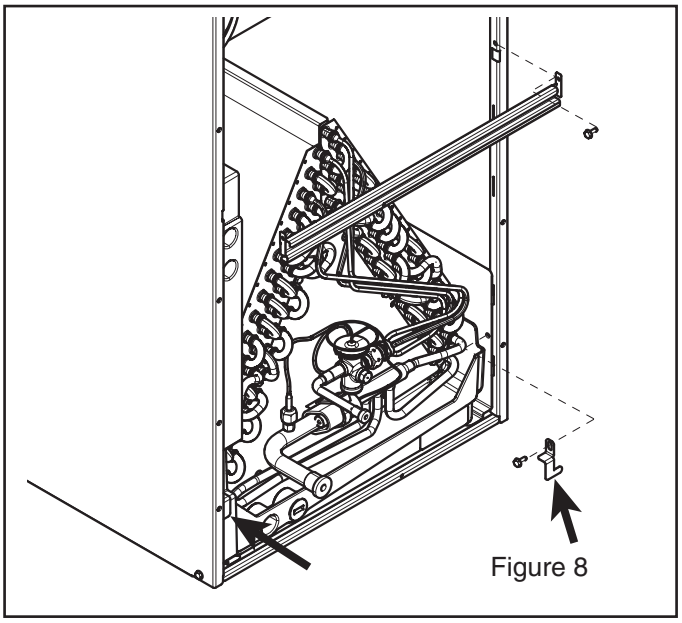


Figure 8

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

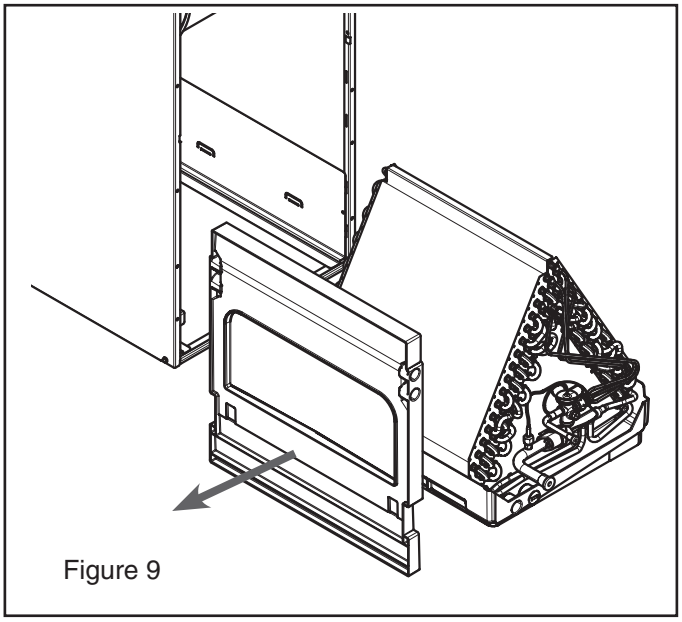


Figure 9

6. Change location of the water diverter bracket by removing the screws on the water diverter bracket that is located on the left side of the coil. Attach the water diverter to the right hand side of the coil using the same screws.

   Important: The coil slabs are different and the mount hole locations will vary. See the illustrations 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.

1-1/2 through 3 ton models

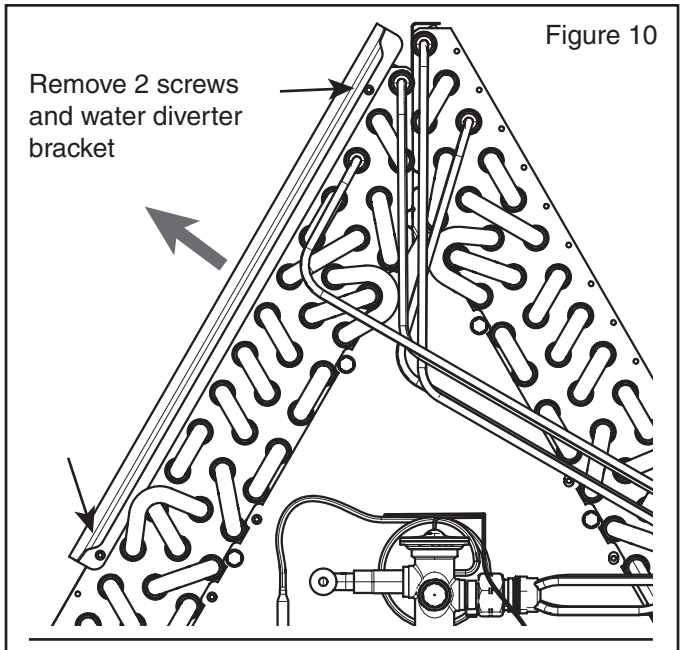


Figure 10

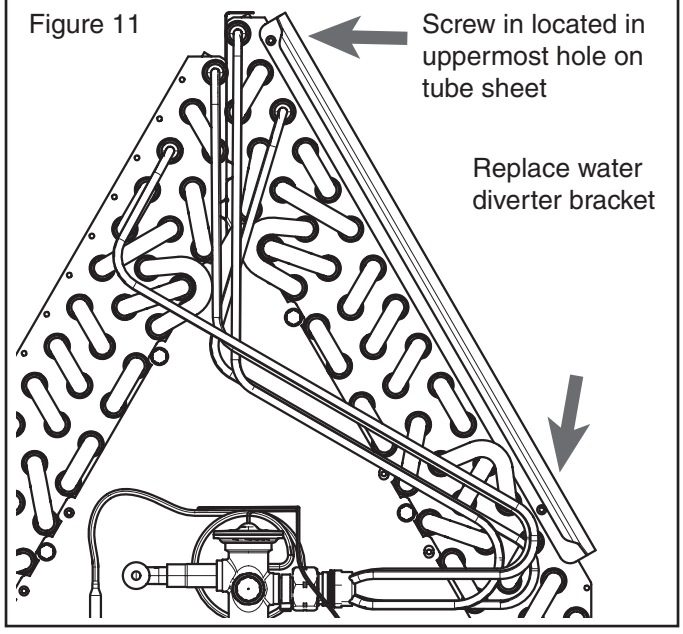


Figure 11

3-1/2 through 4 ton models

Figure 12

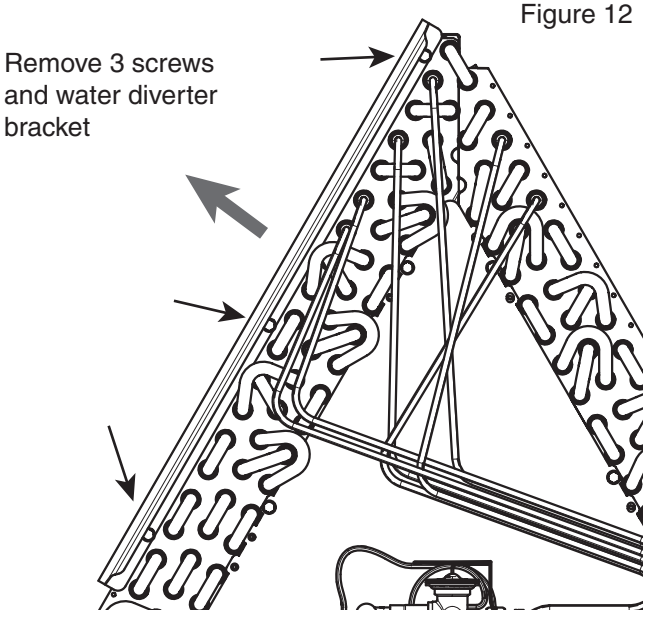
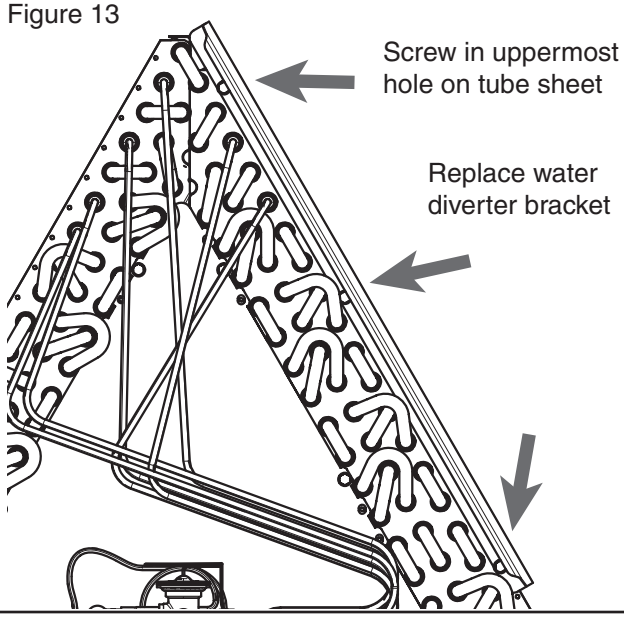


Figure 13



5 ton models

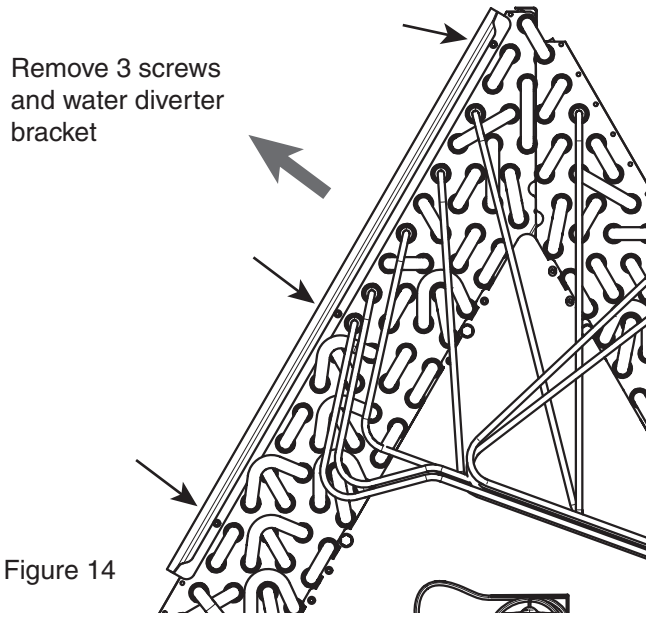
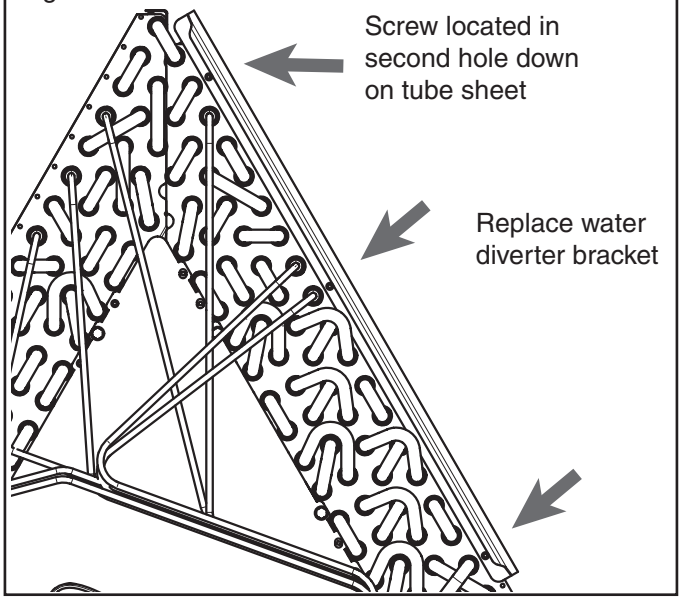


Figure 14

Figure 15



7. Relocate the horizontal drain pan from the left side of the coil to the right side.
8. 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. See Figure 16.

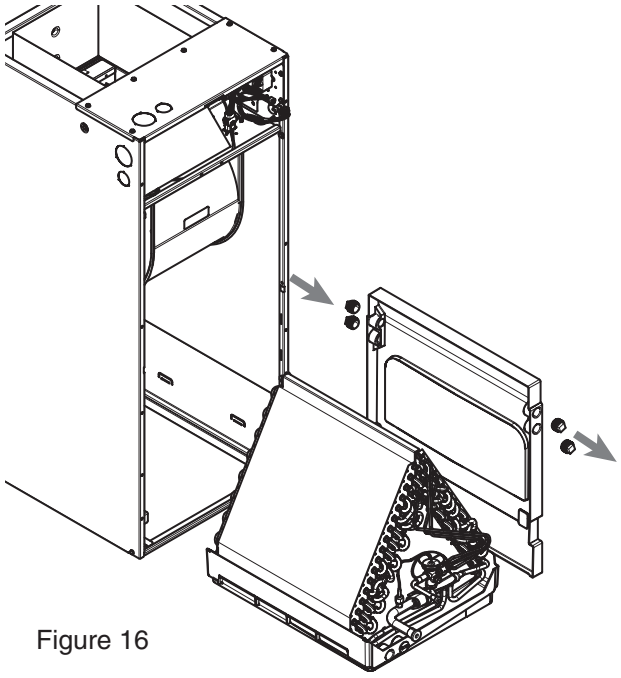


Figure 16

9. Slide the coil assembly back into the air handler cabinet.
10. Replace the center horizontal brace removed in Step 8.2.3.
11. Replace the two coil retaining brackets removed in Step 8.2.2. See Figure 17.
12. Remove the appropriate knock out for the condensate piping
13. Replace all panels.

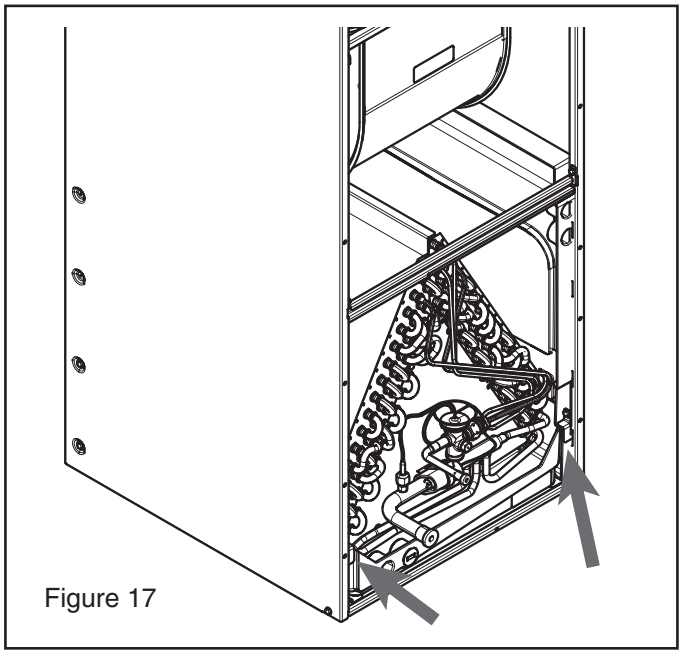


Figure 17

6200 Troup Highway
Tyler, TX 75707
www.trane.com
www.americanstandardair.com