# INSTALLATION INSTRUCTIONS
# MODEL AXRD
# HORIZONTAL ECONOMIZER

**Recognize this symbol as an indication of Important Safety Information!**

AXRD-CCM10 Economizers are used with units (See Chart below) for automatic sensor-controlled introduction of outdoor air into the system through an electro-mechanically controlled damper.

| UNIT MODEL | UNIT SIZE |
|---|---|
| RQ*L-*, RQPW-* | 024-025 |
| RRNL-*, RSNL-* | 024-036 |
| RRPL-*, RSPL-* | 024-036 |
| RRRL-* | 024 |
| RQ*L-*, RQPW-* | 030-048 |
| RRNL-*, RSNL-* | 042-060 |
| RRPL-*, RSPL-* | 042-060 |
| RRRL-* | 036-060 |

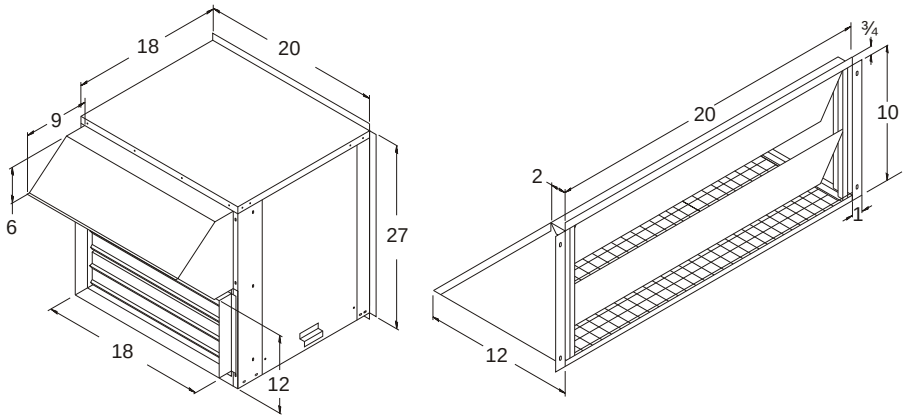



Figure 1

**Step 1:**
Check for correct number of parts. See list below.

1 - Economizer Assembly w/ Filter
1 - Barometric Relief Damper
1 - Outdoor Air Hood (Attached to Economizer)
1 - Wiring Diagram Sticker
2 - Bushing .562 ID to .875 OD (304210)

**WARNING:**
Disconnect electrical power to the unit. Failure to do so can cause electrical shock resulting in personal injury or death.

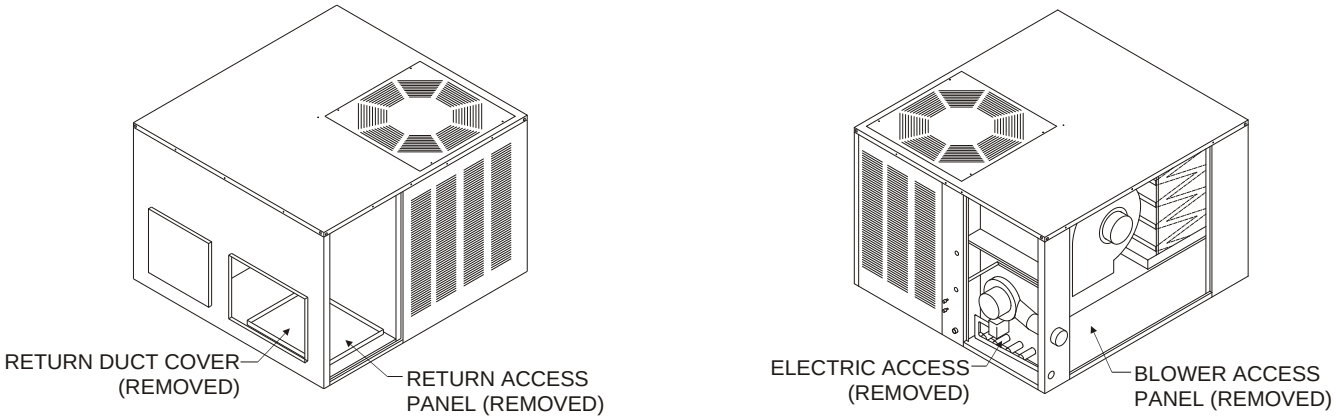



Figure 2

**Step 2:**
Remove the return access panel and the return duct cover. See Figure 2.

**Step 3:**
Remove the blower access panel and the electrical access panel's.

**Step 4:**
Remove the return air access panel. See Figure 2.

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**Step 5:**
Optional wiring methods.

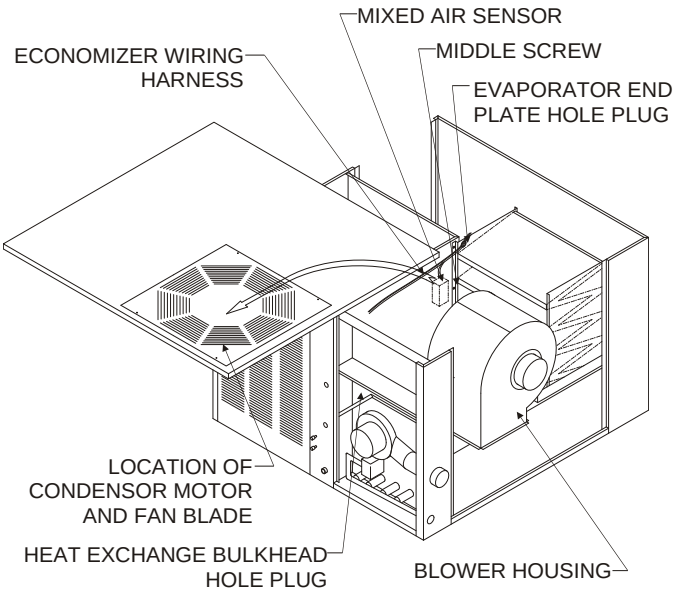



Figure 3

### Method A

1. Remove all the screws from the perimeter of the top and screw in center of top.
2. Lift up approximately 8" and rotate 90 degrees, then set top down on the unit. **"IMPORTANT DO NOT LET TOP REST ON MOTOR OR FAN BLADE!"**
3. Push out hole plugs from the heat exchanger mounting bulkhead and from the top of the evaporator endplate.
4. Install the mixed air sensor, remove the middle screw from the coil support then place the through hole on the sensor mount and reinstall screw. Connect black wire's to mixed air sensor terminals.
5. Lift and rotate the top back into place and secure with same screws.

### Method B

1. Unplug wires from the limit control (Gas Heat Only) and the blower motor.
2. Remove 2 screws securing the blower housing to the blower shelf.
3. Slide the blower out of the unit.
4. Push out hole plugs from the heat exchanger mounting bulkhead and from the top of evaporator endplate.
5. Install the mixed air sensor, remove middle screw from coil support then place through hole on sensor mount and reinstall screw. Connect black wire's to mixed air sensor terminals.
6. Slide blower back into the unit.
7. Secure blower housing with 2 screws removed earlier.
8. Plug wires back onto limit control (Gas Heat Only) and blower motor. Refer to unit wiring diagram for proper wiring connections.

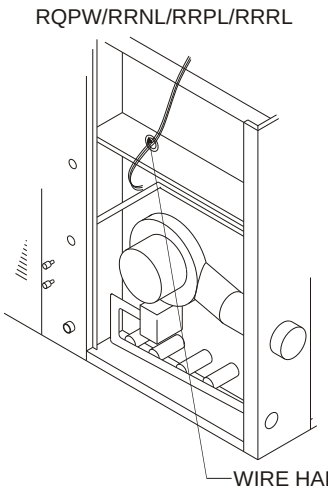



Figure 4

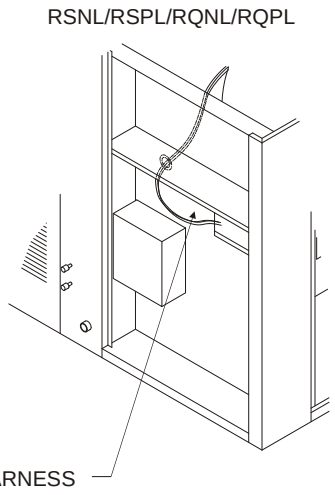
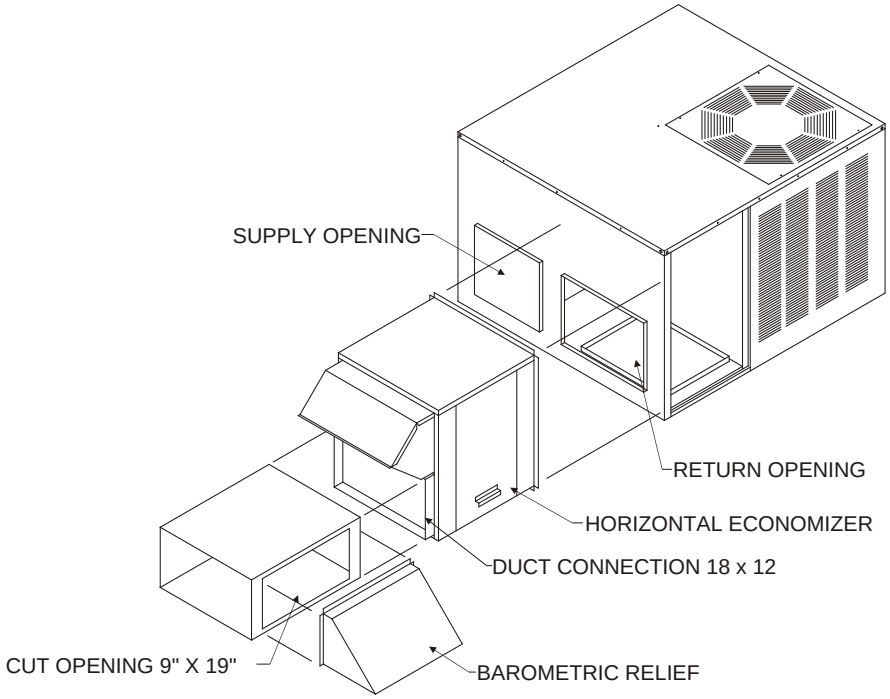



Figure 5

**Step 6:**
Route wire's through the division wall and into designated location shown above, then connect as shown in the wiring diagram on the back page. Replace removed panels and secure.

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**Step 7:**
Slide the economizer assembly in place and secure with ½ x 10 self tapping screws provided. Connect the plug on the economizer to the plug on the harness. Place all other removed panels including filter access panel.

**HARNESS DETAIL**

**E# = WIRE END DESIGNATION**

| | |
|---|---|
| E2 | STUD #6 18 Ga. Wire |
| E3 | Female ¼ Quick Disc. |
| E4 | Male ¼ Quick Disc. Insul |
| E6 | Wire Nut Size 73B |
| E7 | Raw Ends |

**HARNESS STARTS AT PL2**

| | | | | | | |
|---|---|---|---|---|---|---|
| E7 | — | WHT— | 80" | — | 1 |
| E7 | — | YEL — | 80" | — | 2 |
| E7 | — | BRN — | 80" | — | 3 |
| E7 | — | ORG— | 80" | — | 4 |
| E7 | — | BLU — | 80" | — | 5 |
| E7 | — | GRN— | 80" | — | 6 |
| E3 | — | BLK — | 44" | — | 7 |
| E3 | — | BLK — | 44" | — | 8 |
| E7 | — | GRY— | 80" | — | 9 |

**COMPONENT CODE**

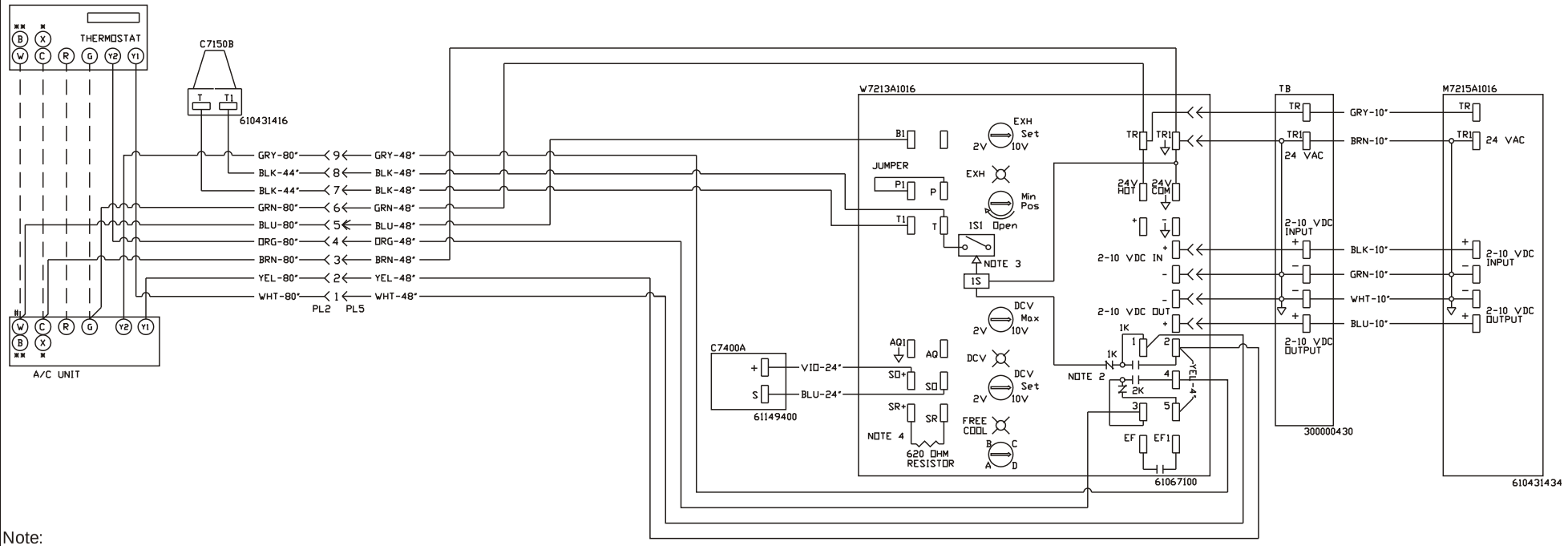
| | |
|---|---|
| C7150B | Mixed Air Sensor |
| C7400A | Fresh Air Sensor |
| M7215A | Damper Actuator 24v |
| PL2 | Female A/C Unit Plug |
| PL5 | Male Economzier Plug |
| TB | Logic Terminal Board |
| W7213A | Logic Module |

**WIRE COLOR CODE**

| | | | |
|---|---|---|---|
| BLK | Black | BLU | Blue |
| BRN | Brown | GRN | Green |
| GRY | Gray | ORG | Orange |
| RED | Red | TAN | Tan |
| VIO | Violet | WHT | White |
| YEL | Yellow | | |

| Revision | Change | Date |
|---|---|---|
| A | Changed wire colors | 02-28-07 |
| B | ECN# 6945 | 08-06-14 |

CONNECTOR & CONTACT CONFIGURATION
PL5 (30303903) PLUG - (30303912) PIN
PL2 (30303904) CAP - (30303913) SOCKET




Note:
* The "C" terminal is replaced with "X" terminal on heat pump.
** The "W" Terminal is replaced with "B" terminal on heat pump.
\# Unit 24 low voltage pigtail "BK/WH" on packaged its "BK" and "BL" on heat pump.

Notes:
1. Unit wiring shown as reference only. Check unit wiring for actual unit wiring.
[2] Relays 1K and 2K actuate when the Outdoor Air Enthalpy is lower than the Return Air Enthalpy.
[3] 1S is an electronic switch which closes when powered by a 24 VAC input.
[4] Factory installed resistor should be removed only if C7400 Differential Enthalpy Sensor is added.
5. Y2 must be energized for the compressor to operate.

Horizontal Economizer
RQNL/RRNL/RSNL
RQPL/RRPL/RSPL
RQPW/RRRL

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| | |
|---|---|
| Date: | August 6, 2014 |
| Supersedes: | 10-29-99 |
| Drawn by: | MGL |
| Unit #: | 60-324-22 |
| Diagram#: | 32422W |
| Approved by: | |