

AEM03FB0A/AEP03FB0A Economizers are used with PGF/PAF/PHF 042-060 units for automatic sensor-controlled introduction of outdoor air into the system through an electro-mechanically controlled damper.

STEP 1:

Check for correct number of parts. See list below.

- 1 - Economizer Assembly
- 1 - Outdoor Air Hood (Attached to Economizer)
- 1 - Internal Divider
- 1 - Wire Harness
- 1 - Wiring Diagram Sticker
- 6 - #10 - 16 x ½ Hex Screws (Self-tapping)

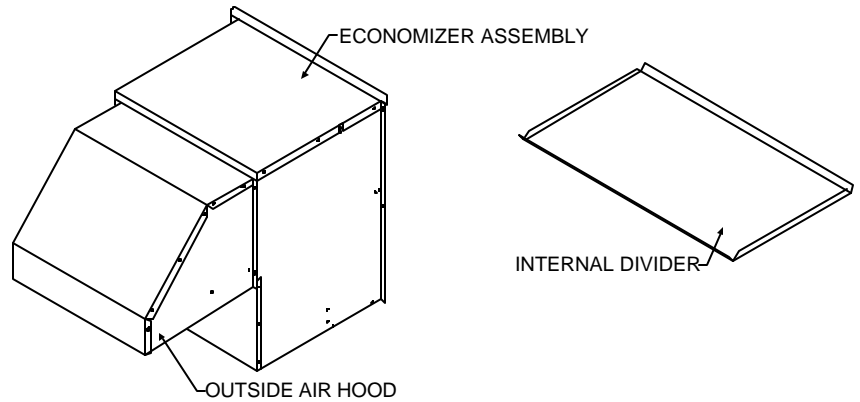


Figure 1

STEP 2:

Remove discharge air sensor and wire harness from Economizer.

STEP 3:

Disconnect all power to unit.

STEP 4:

Remove the return air access panel and both return air duct covers. (See Figure 2).

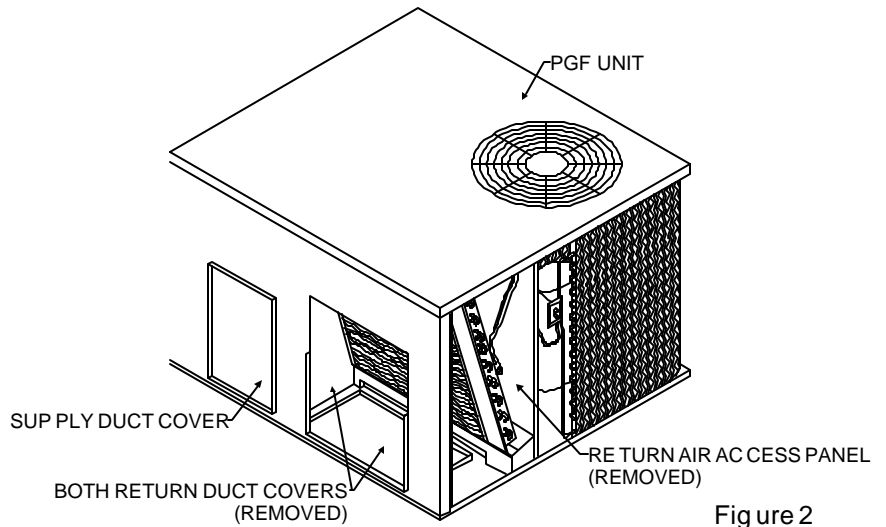


Figure 2

STEP 5:

Remove electrical access panel.

STEP 6:

Remove the screws on the unit top and disconnect plug from the fan motor to the electric compartment of unit, then remove top of unit.

STEP 7:

Route the cable through the unit as shown. (See Figure 3). The short gray wires will be used for the discharge air sensor. Then wire the harness into the low voltage of unit per diagram.

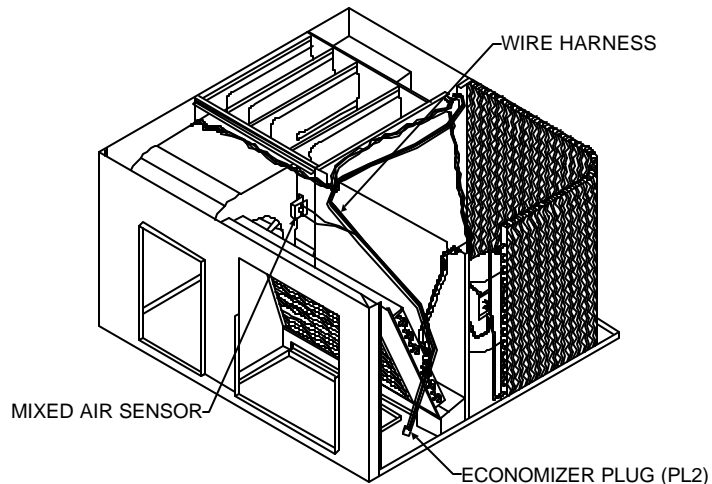


Figure 3

STEP 8:

Install the discharge sensor in blower section of the unit. Drill a hole in the divider wall and mount the sensor as shown in Figure 3.

STEP 9:

Place the adhesive backed wiring diagram on the electrical access door by the unit diagram.

STEP 10:

Insert Economizer Divider through return access panel and place over bottom return opening as shown in Figure 4.

STEP 11:

Then mount economizer assembly over horizontal return duct opening. Align holes in top flange with holes in unit. Then using the self-tapping screws provided to secure to face of unit.

STEP 12:

Slide S-clip over middle divider and internal divider.

STEP 13:

Make the connection of the Economizer plug to the unit Economizer plug. See the enclosed Honeywell® specification data for operation and check out.

STEP 14:

Install all removed panels. Being sure to plug fan motor back in the unit low voltage compartment.

STEP 15:

Turn power back on to the unit.

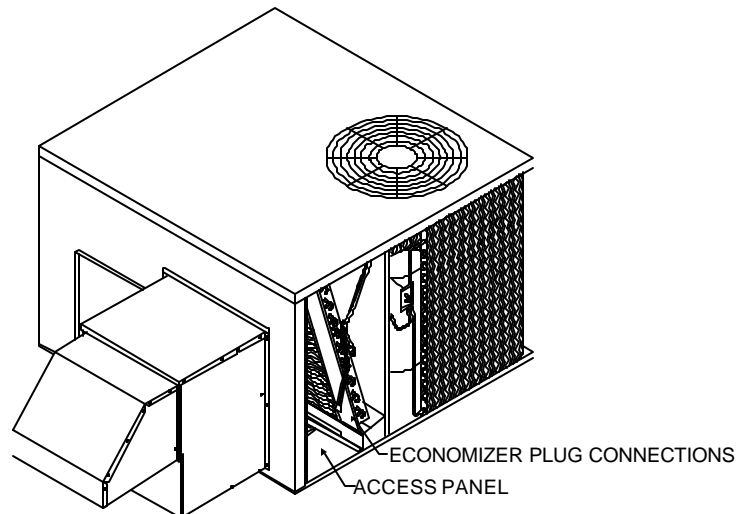
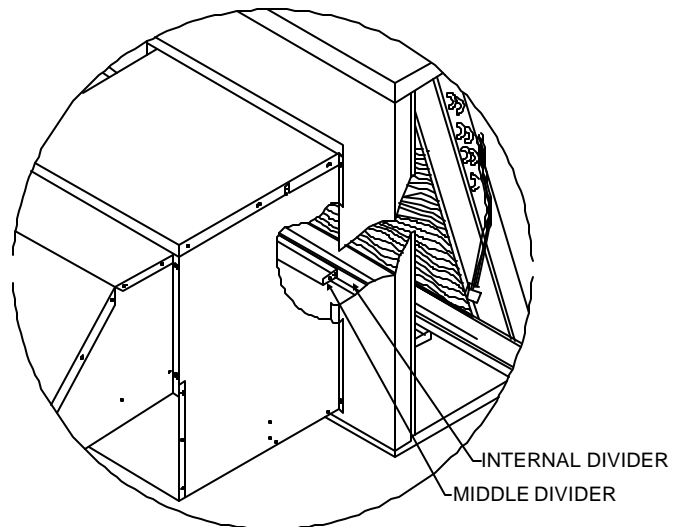
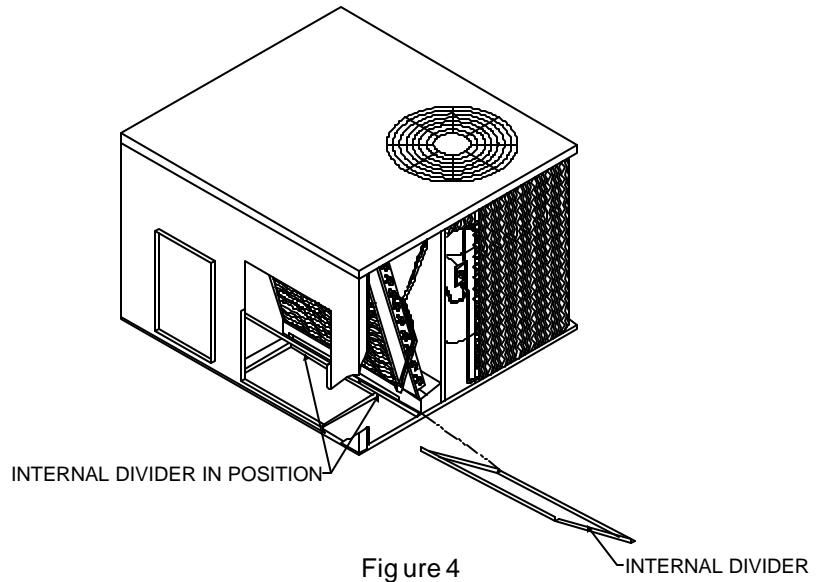
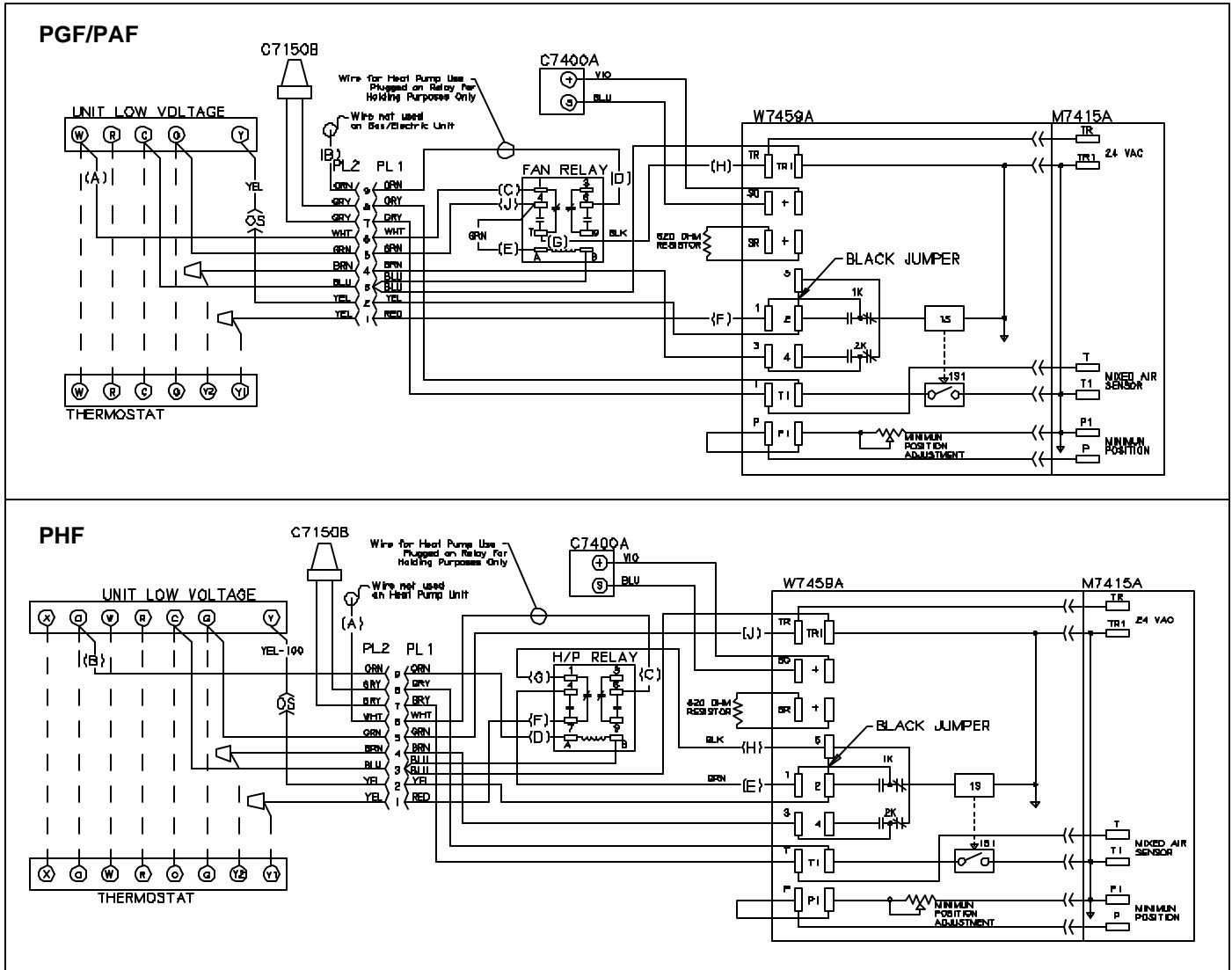


Figure 6

AEM03FB0A MODULATING ECONOMIZER



Steps to rewire PGF/PAF to a PHF

STEPS	WIRE NAME	WIRE COLOR	PGF/PAF LOCATION	PHF LOCATION
1	A	WHT - WHITE	"W" - UNIT LOW VOLT AGE	TAPED - NOT USED
2	B	ORN - OR ANGE	TAPED - NOT USED	"O" - UNIT LOW VOLT AGE
3	C	WHT - WHITE	"1" - FAN RE LAY	"6" - HEAT PUM RE LAY
4	D	ORN - OR ANGE	"6" - FAN RE LAY	"A" - HEAT PUM RE LAY
5	E	GRN - GREEN	"A" - FAN RE LAY	"1" - W7459 -LOGIC MOD ULE
6	F	RED - RED	"1" - W7459 - LOGIC MODULE	"7" - HEAT PUM RE LAY
7	G	BLK -BLACK	"7" - FAN RE LAY	"1" - HEAT PUM RE LAY
8	H	BLK - BLACK	"TR" W7459 - LOGIC MODULE	"5" - W7459 - LOGIC MOD ULE
9	J	GRN - GREEN	"4" - FAN RE LAY	"TR" - W7459 - LOGIC MOD ULE

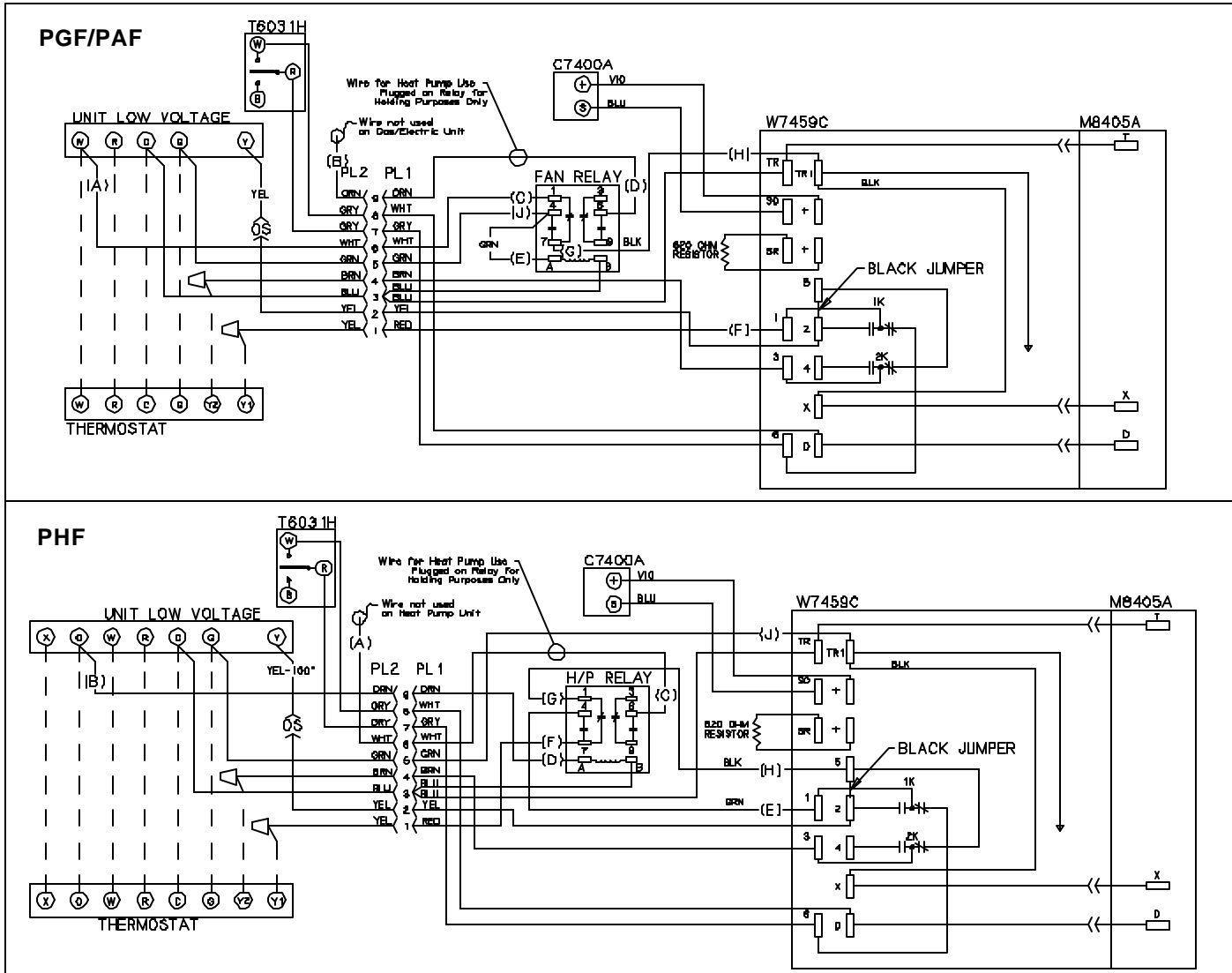
COMPONENT CODE

C7400	Fresh Air Sensor
PL1/PL2	Economizer Plug (Male/Female)
M7415A	Damper Actuator 24v
W7459A	Logic Module
C7150B	Mixed Air Sensor

Notes:

1. Connect mixed air sensor red to "T" and white to "T1".
2. Unit wiring shown as reference only. Check unit wiring for actual unit wiring.
3. Relays 1K and 2K activate when the Outdoor Air Enthalpy is higher than the Return Air Enthalpy.
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.

AEP03FB0A 3-POSITION ECONOMIZER



Steps to rewire PGF/PAF to a PHF

STEPS	WIRE NAME	WIRE COLOR	PGF/PAF LOCATION	PHF LOCATION
1	A	WHT - WHITE	"W" - UNIT LOW VOLT AGE	TAPED - NOT USED
2	B	ORN - OR ANGE	TAPED - NOT USED	"O" - UNIT LOW VOLT AGE
3	C	WHT - WHITE	"1" - FAN RE LAY	"6" - HEAT PUMP RE LAY
4	D	ORN - OR ANGE	"6" - FAN RE LAY	"A" - HEAT PUMP RE LAY
5	E	GRN - GREEN	"A" - FAN RE LAY	"1" - W7459 -LOGIC MOD ULE
6	F	RED - RED	"1" - W7459 - LOGIC MODULE	"7" - HEAT PUMP RE LAY
7	G	BLK - BLACK	"7" - FAN RE LAY	"1" - HEAT PUMP RE LAY
8	H	BLK - BLACK	"TR1" W7459 - LOGIC MODULE	"5" - W7459 - LOGIC MOD ULE
9	J	GRN - GREEN	"4" - FAN RE LAY	"TR1" - W7459 - LOGIC MOD ULE

COMPONENT CODE

C7400 Fresh Air Sensor
 PL1/PL2 Economizer Plug (Male/Female)
 M8405A Damper Actuator 24v
 W7459C Logic Module
 T6031H Mixed Air Sensor

Notes:

- Unit wir ing shown as ref er ence only. Check unit wir ing for ac tual unit wir ing.
- Re lays 1K and 2K ac tu ate when the Out door Air En thalpy is higher than the Re turn Air En thalpy.
- Fac tory in stalled re sis tor should be re moved only if C7400 Dif fer en tial En thalpy Sen sor is added.
- Y2 must be en er gized for the com pres sor to op er ate.