



**TRANE PACK13  
VERTICAL  
ECONOMIZERS  
I/O/M MANUAL**

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**For information on iAIRE's Economizer Controls Package,  
please refer to IOM-0014**

## Trane Economizer Description

**PLEASE NOTE:** Our economizer is a low leak, field installed economizer with the iAIRE patented controls packages and actuator, allowing you to reduce the amount of outside air needed from your rooftop HVAC system by up to 2/3 and will improve indoor air quality.

This reduction in system operation creates on-going utility savings. Payback on capital equipment costs with an iAIRE economizer can be realized in fewer than three years. These packages are designed to work directly on existing rooftop HVAC systems.

These economizers are all low leak and meet the IECC 2015 requirement and are Title 24 compliant by meeting section 120.2(i) for the required controls and the efficiency requirements in 140.4(e).

### Unit to RTU Conversion

PACK13-V	4 TCY/WCY/YCY 5024-036, 4 DCZ/WCZ/YCZ 6036, 4 TCC/YCC/WCC 4018-036, 4 DCY 4024-036
PACK15-H	4 TCY/WCY/YCY 5024-060, 4 DCZ/WCZ/YCZ 6036-6060, 4 TCC/YCC/WCC 4018-060, 4 DCY 4024-060
PACK35-V	4 TCY/WCY/YCY 5042-060, 4 DCZ/WCZ/YCZ 6048 & 6060, 4 TCC/YCC/WCC 4042-060, 4 DCY 4042-060

### Part Number

**EC - 1 - 2 3 4 5 - 6**

type	unit/ton (1)							
EC - ECONOMIZER	26	6075	CHAS12	A-BOX	FND35	PREC810	AFF	SCL34
	712	100	CHAS34	B-BOX	PACK13	VOY12	LXS	SCLHE12
	1525	125	CHAS5	C-BOX	PREC35	VOY12HE	LXL	SCLHE34
	3050	150	CHAS69	D-BOX	PREC48	VOY1525HE	SCS12	PRED
	Controls Only		Carrier	E-BOX	Trane		SCS34	PREDS
				F-BOX			SCSHE12	SL
				Lennox			SCSHE34	SLL
							SCL12	SLU
							York	

### configuration (2)

0 - NO ECON  
C - CONVERTIBLE  
H - HORIZONTAL  
V - VERTICAL

### actuator (3)

0 - NO ACTUATOR  
A - 20 IN-LB  
B - 62 IN-LB  
C - 160 IN-LB

### controls (4)

0 - ECON ONLY  
A - IAQ  
B - IAQ (NO IONIZATION)  
D - DCV

### power exhaust (5)

0 - NO POWER EXHAUST  
A - 208/230V 1Φ FIXED PE  
B - 208/230V 3Φ FIXED PE  
C - 460V 3Φ FIXED PE

### options (6)

0 - NONE  
B - HUMIDITY  
C - BACNET  
D - BLDG PRESSURE\*  
R - RTU OPEN  
U - ULTRA LOW LEAK

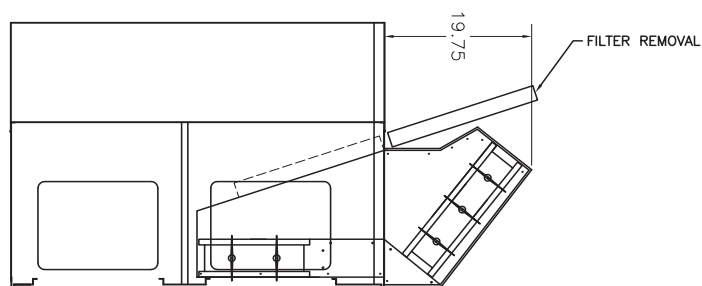
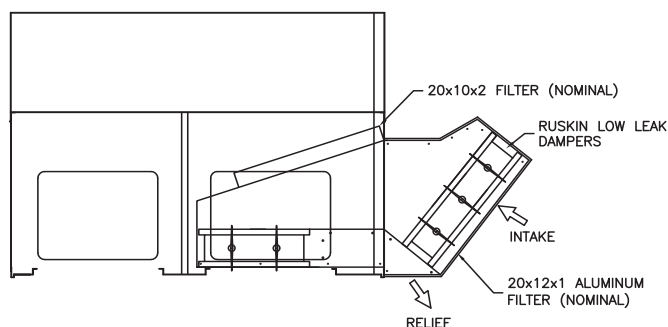
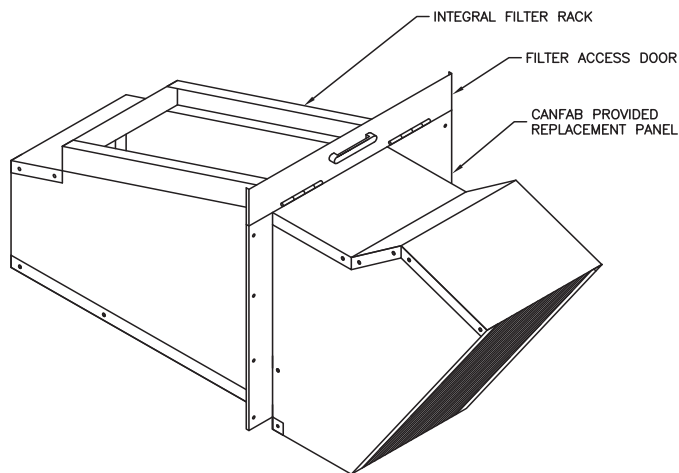
Note: By adding option "D" any powered exhaust will be modulating.

SUB-0026

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PD 09/25/21 V.01.00

## PACK13 Vertical Submittal



### Electrical Data

PART #	WEIGHT
EC-PACK13-VBA0-*	80 lbs.

PART	AMPS	PART	AMPS	TOTAL
ACTUATOR	.29A	CONTROLS	.27A	.56A

*OPTIONS
0 - No Options
B - Humidity/Enthalpic
C - BACNet

### Features

- **iAIRE Patented Controls Scheme Included**
- Low Leak Damper Included
- VOC, CO2 and Ionization included
- Heavy Gauge Galvanized Steel Construction
- American Sterling Grey Paint Finish
- One Piece Assembly
- Gear Driven Dampers
- Uses HVAC Unit Filter Access Door
- Capable of Relieving up to 100% of the Outside Air Intake

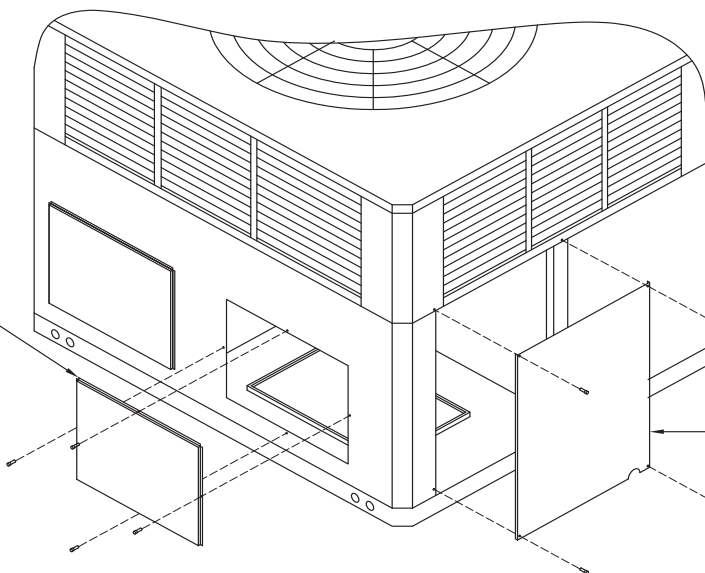
Economizers with Indoor Air Quality control are Title 24 compliant by meeting section 120.2(i) for the required controls and the efficiency requirements in 140.4(e). They also meet California ozone emissions requirements to be CARB certified.

## PACK13 - Vertical Install

STEP 1: REMOVE RETURN AIR PANELS FROM A/C UNIT.

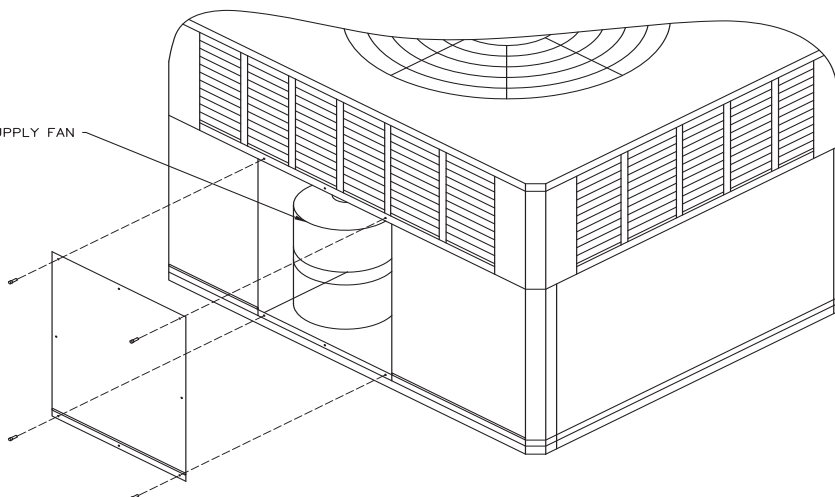
THIS PANEL IS TO BE REINSTALLED AFTER THE ECONOMIZER INSTALLATION IS COMPLETE.

THIS PANEL WILL BE REPLACED WITH THE ECONOMIZER HOOD ASSEMBLY.



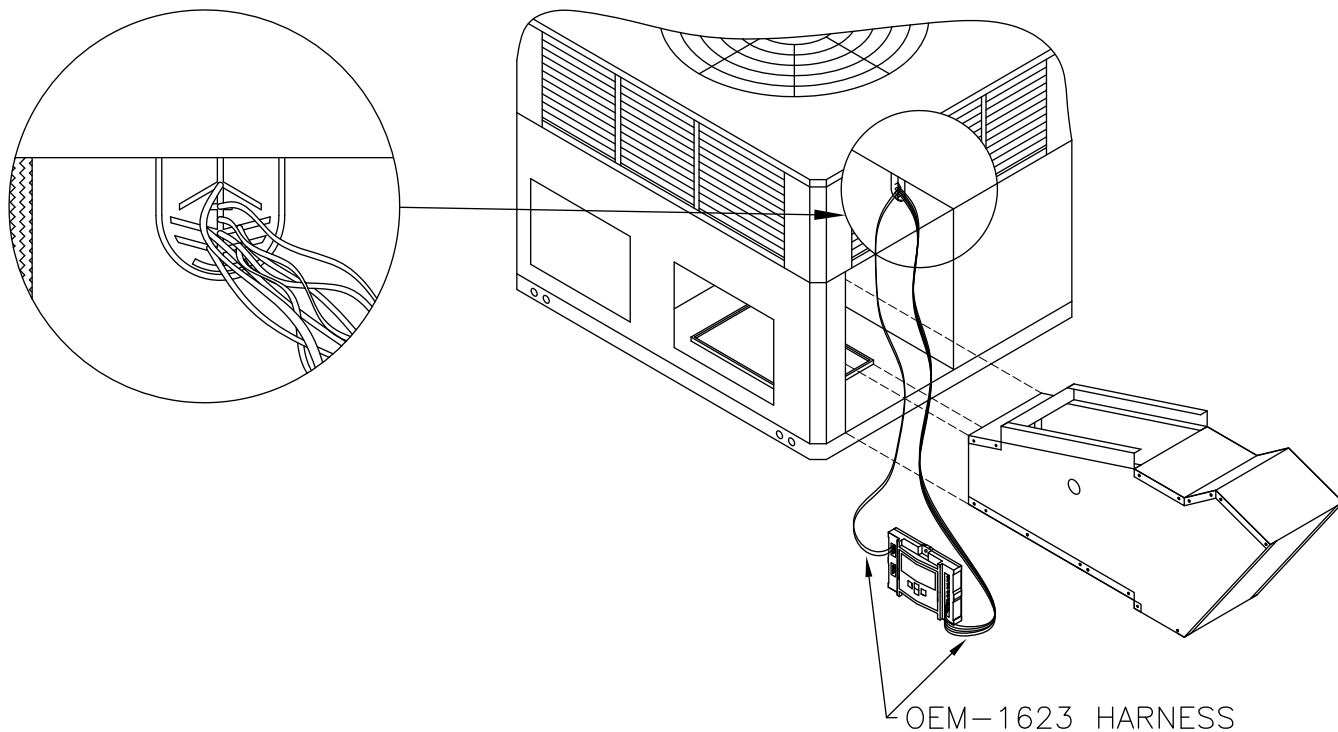
STEP 2: REMOVE FAN COMPARTMENT PANEL FOR ACCESS TO NEXT WIRING LOCATIONS.

SUPPLY FAN

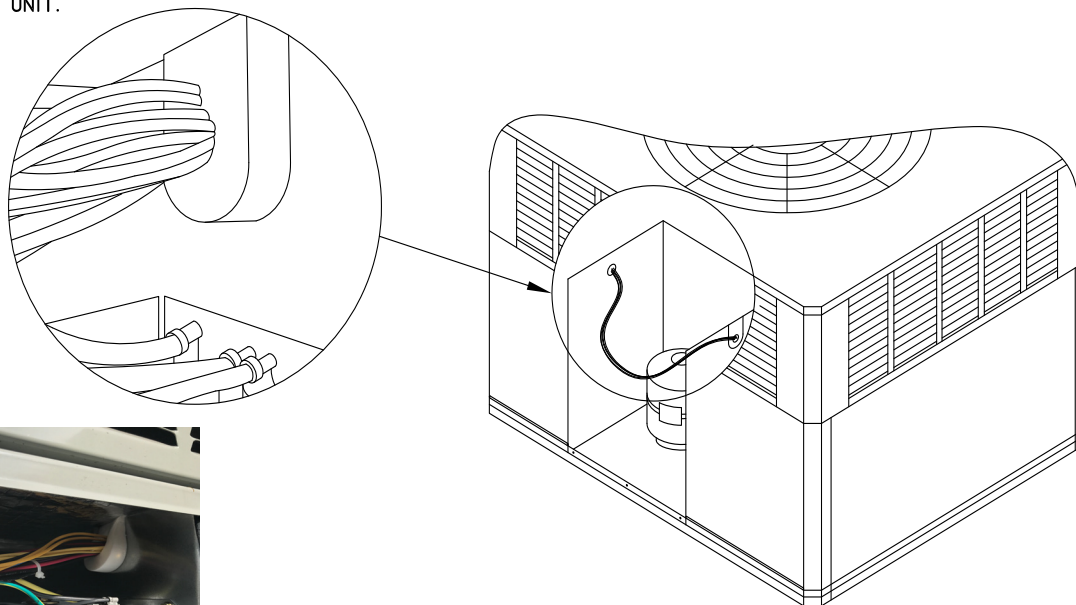


## PACK13 - Vertical Install (cont'd)

STEP 3: ROUTE WIRE HARNESS THROUGH STRAIN RELIEF IN UPPER RIGHT CORNER OF COIL FRAMING PRIOR TO FULLY INSERTING ECONOMIZER DAMPER ASSEMBLY.

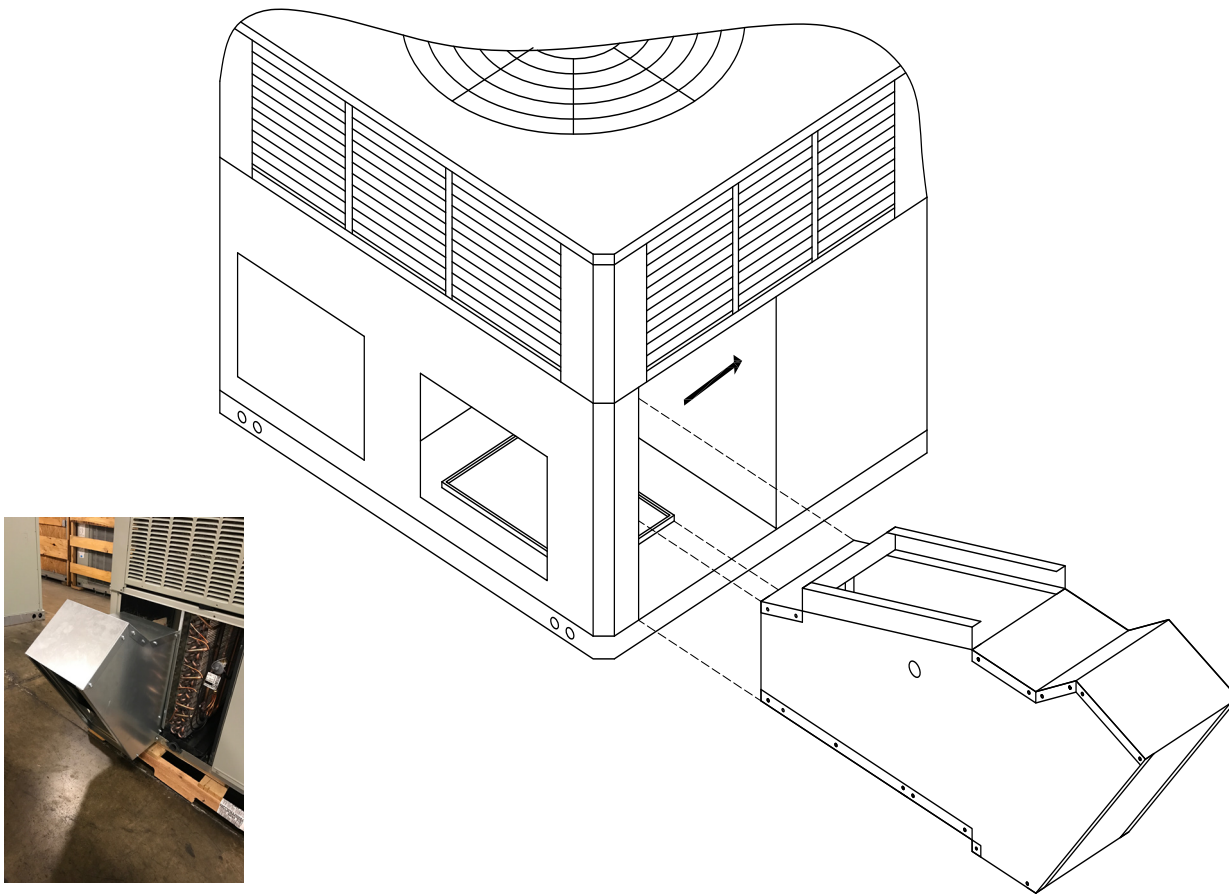


STEP 4: MOUNT DISCHARGE AIR SENSOR IN SUPPLY FAN CHAMBER AND PLUG HARNESS WIRES INTO THE SENSOR BY SNAKING THE WIRES THROUGH THE SUPPLY FAN COMPARTMENT USING HOLES IN UNIT.

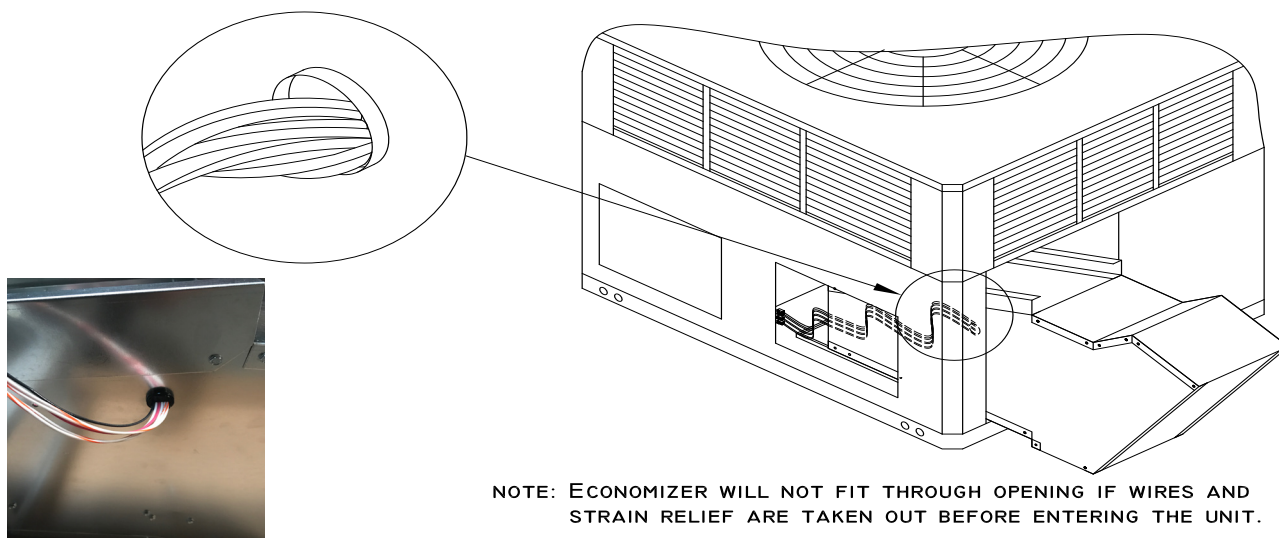


## PACK13 - Vertical Install (cont'd)

**STEP 5: BEGIN INSERTING THE ECONOMIZER INTO THE UNIT AND LINE IT UP WITH THE RIGHT SIDE OF THE UNIT'S OPENING BUT DO NOT INSERT COMPLETELY UNTIL STEP 6 IS COMPLETE.**



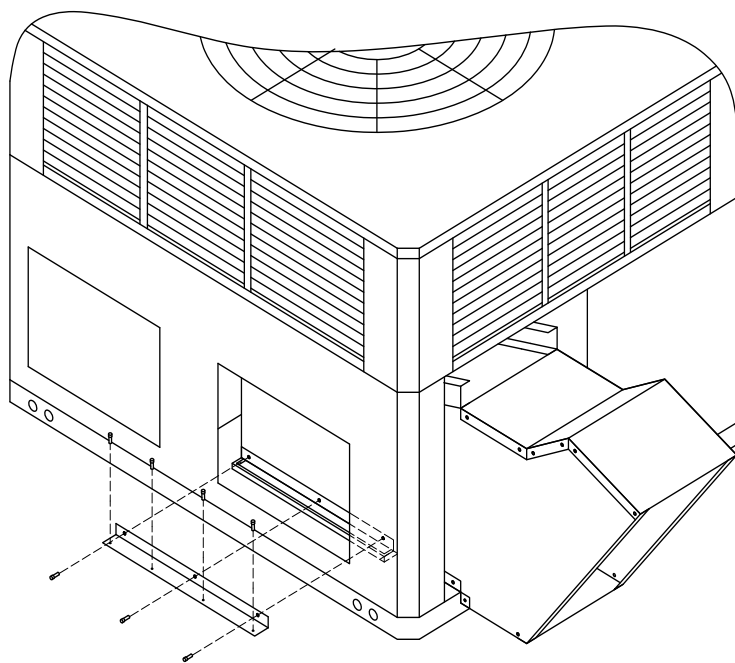
**STEP 6: PRIOR TO COMPLETELY INSERTING THE ECONOMIZER INTO THE RETURN AIR COMPARTMENT, RUN THE ACTUATOR WIRES (RED AND BLACK) AND THE SENSOR WIRES (ORANGE AND WHITE) THROUGH THE PROVIDED STRAIN RELIEF OPENING AND LET THE WIRES HANG LOOSE.**



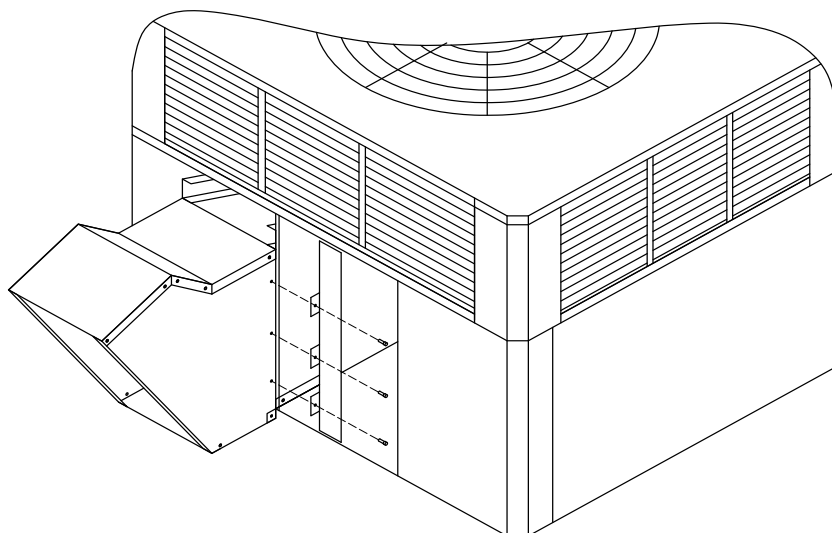
**NOTE: ECONOMIZER WILL NOT FIT THROUGH OPENING IF WIRES AND STRAIN RELIEF ARE TAKEN OUT BEFORE ENTERING THE UNIT.**

## PACK13 - Vertical Install (cont'd)

STEP 7: INSERT ANGLE TO COVER THE RETURN AIR OPENING AND SCREW INTO SIDE OF ECONOMIZER AND THE LIP OF THE RETURN AIR OPENING USING SCREWS AND HOLES PROVIDED.

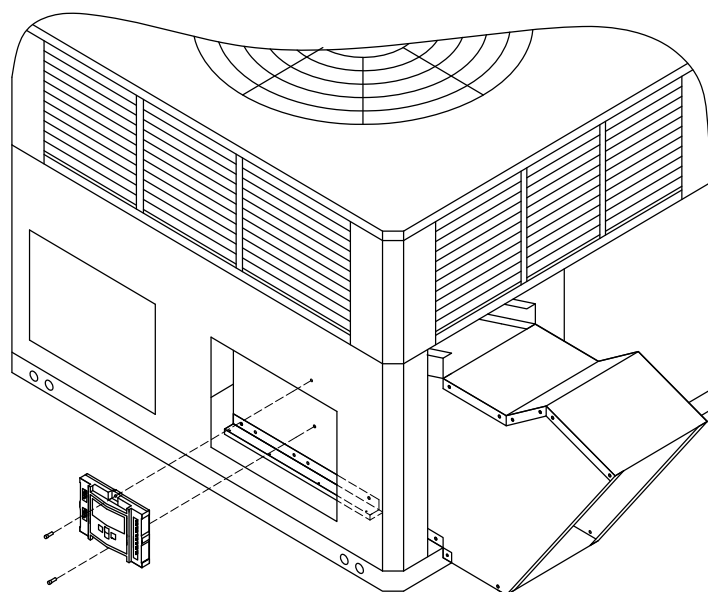


STEP 8: ATTACH SIDE ANGLE TO THE SIDE OF THE ECONOMIZER USING HOLES AND SCREWS PROVIDED.



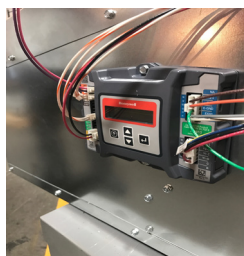
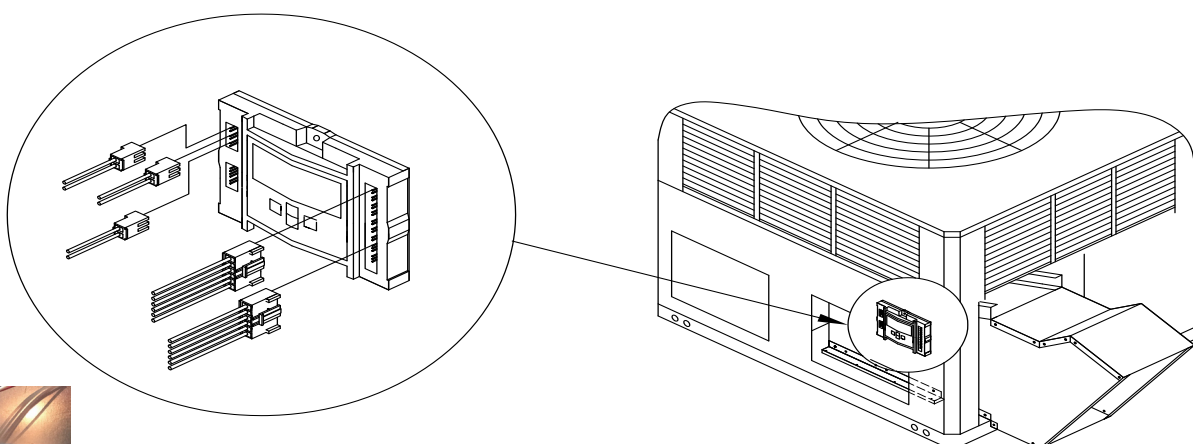
## PACK13 - Vertical Install (cont'd)

STEP 9: INSTALL HONEYWELL JADE LOGIC MODULE ON TO THE SIDE OF THE ECONOMIZER THROUGH THE SIDE RETURN AIR OPENING USING SCREWS AND HOLES PROVIDED.



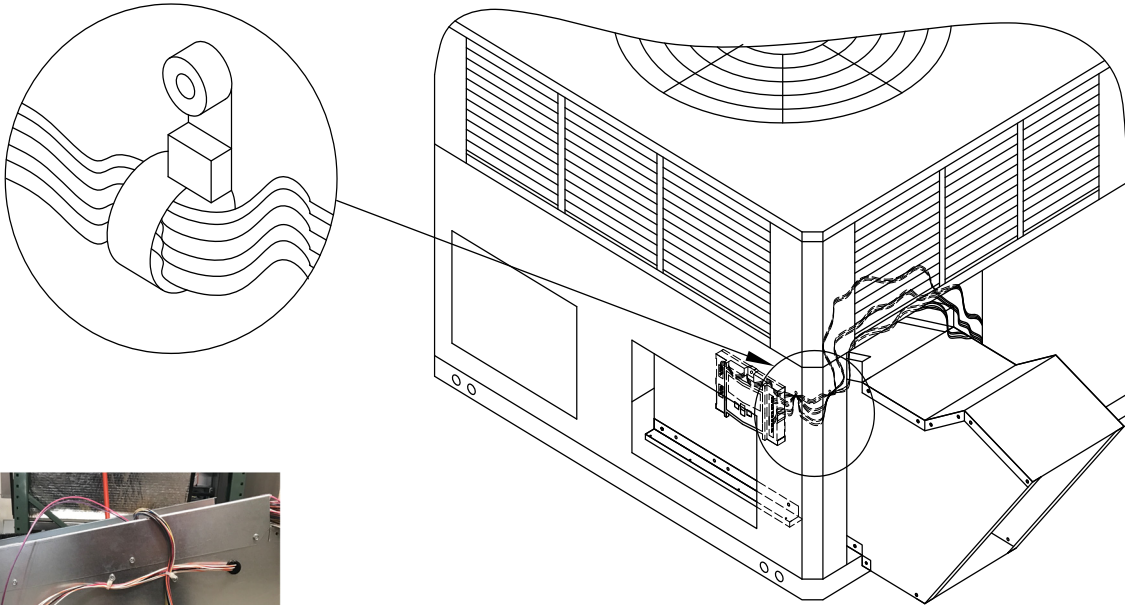
CAUTION: DO NOT MOUNT JADE LOGIC MODULE UNTIL ECONOMIZER IS FULLY MOUNTED.

STEP 10: CONNECT NECESSARY CONTROLS INTO JADE LOGIC MODULE. REFER TO PAGES 15-19 OF THIS PACKET FOR WIRING DIAGRAMS.



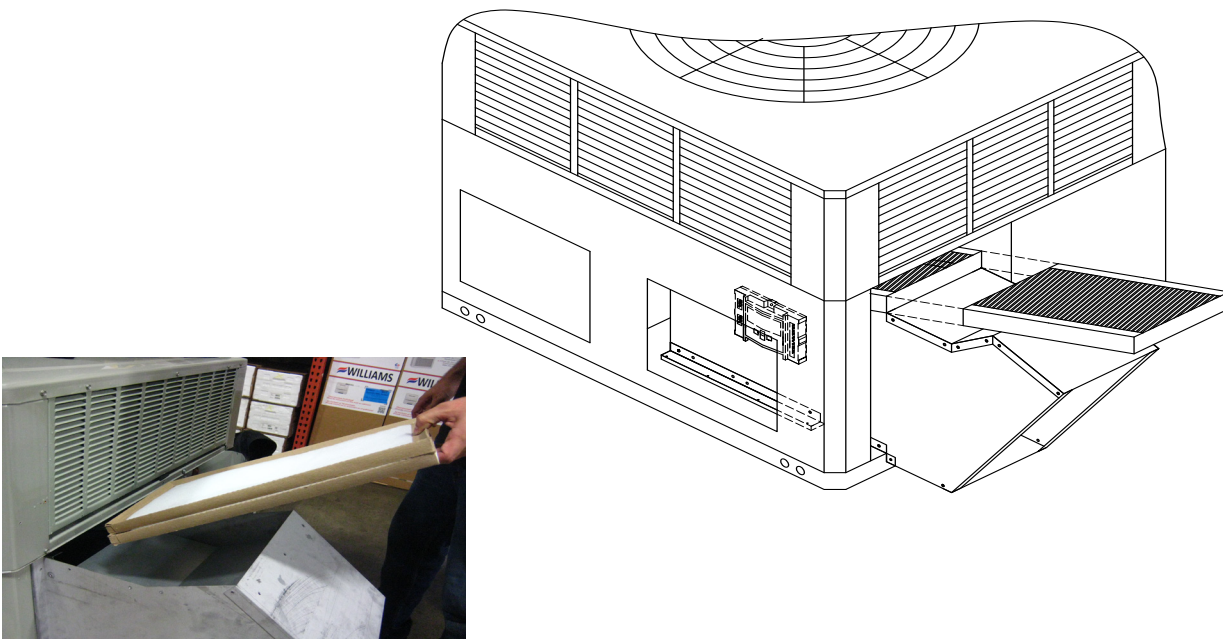
## PACK13 - Vertical Install (cont'd)

STEP 11: SECURE WIRES TO SIDE OF ECONOMIZER USING ZIP-TIES, SCREWS AND HOLES PROVIDED.



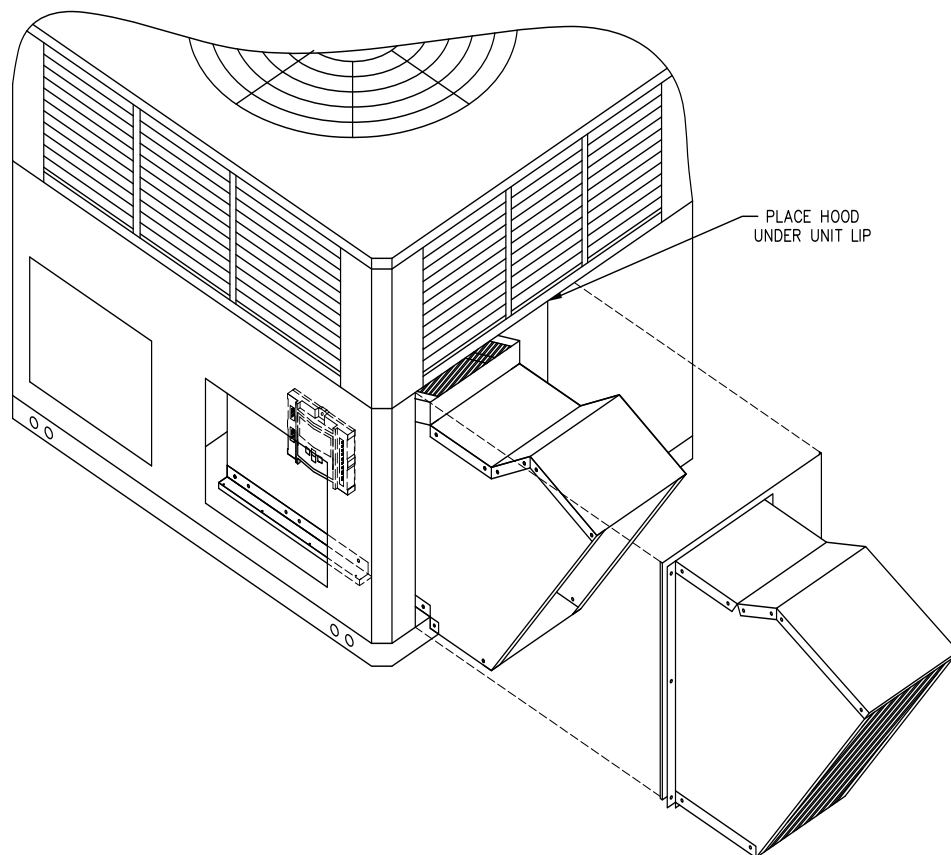
NOTE: BE SURE THE WIRE HARNESS IS OVER THE ECONOMIZER FOR CONNECTION TO LOGIC MODULE.

STEP 12: INSERT 2" FILTER THROUGH FILTER TRACK ON TOP OF THE ECONOMIZER.

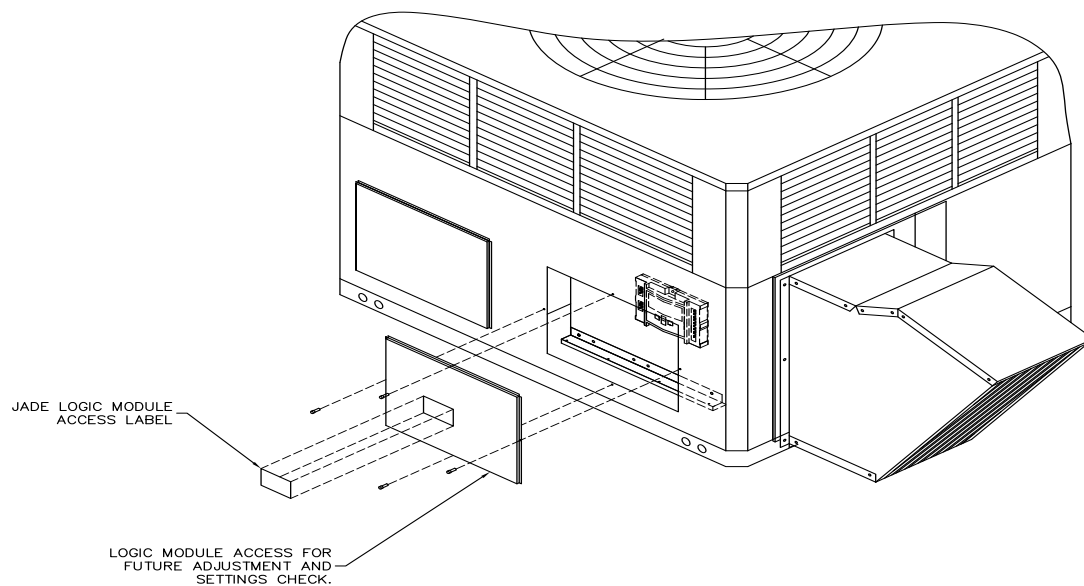


## PACK13 - Vertical Install (cont'd)

STEP 13: INSTALL ECONOMIZER HOOD OVER ECONOMIZER. PLACE TOP OF HOOD UNDER LIP OF THE UNIT AND SCREW IN USING SCREWS AND HOLES PROVIDED.



STEP 14: AFTER WIRING IS COMPLETED RE-INSTALL THE SIDE PANEL REMOVED IN STEP ONE AND ADHERE "JADE LOGIC MODULE ACCESS" LABEL TO THE OUTSIDE OF THE PANEL.



## Trane Economizer Install Notes

### Additional Notes

1. Power Supply. Provide disconnect means and overload protection as required.
2. Motor Spring>Returns closed when unit is not running.
3. Ensure that equipment transformer is sized to handle the extra load of the economizer and actuator.
4. When using a heat with defrost feedback, add an isolation relay between O and C. (Field provided and installed).