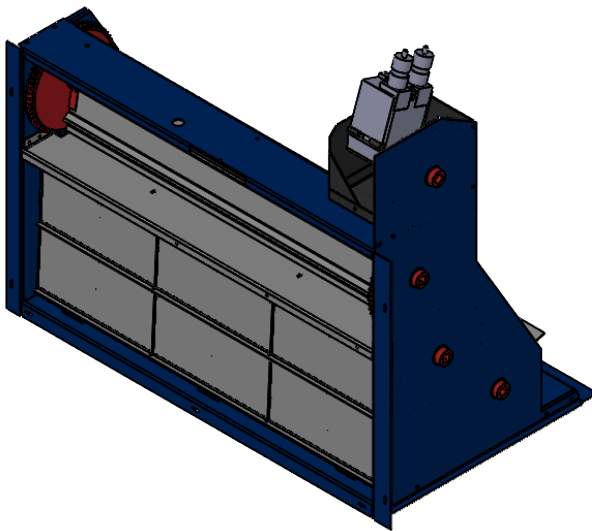
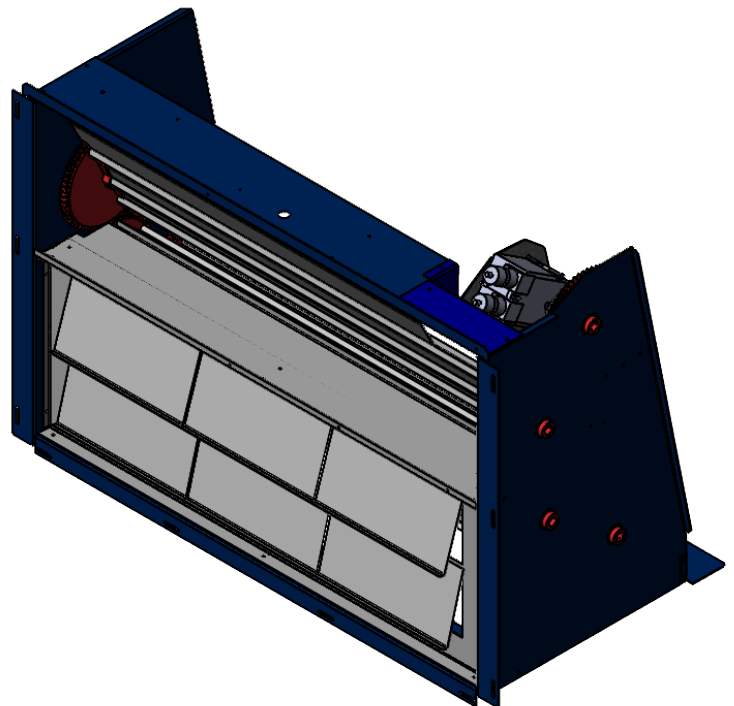


**INSTALLATION INSTRUCTIONS FOR  
CARRIER 3A (CAS PART #1022355)/  
4A (CAS PART #1022356) ECONOMIZER  
DOWNSHOT CONFIGURATION**



**1022355  
3A ECONOMIZER  
FOR 3-6 TON UNITS**



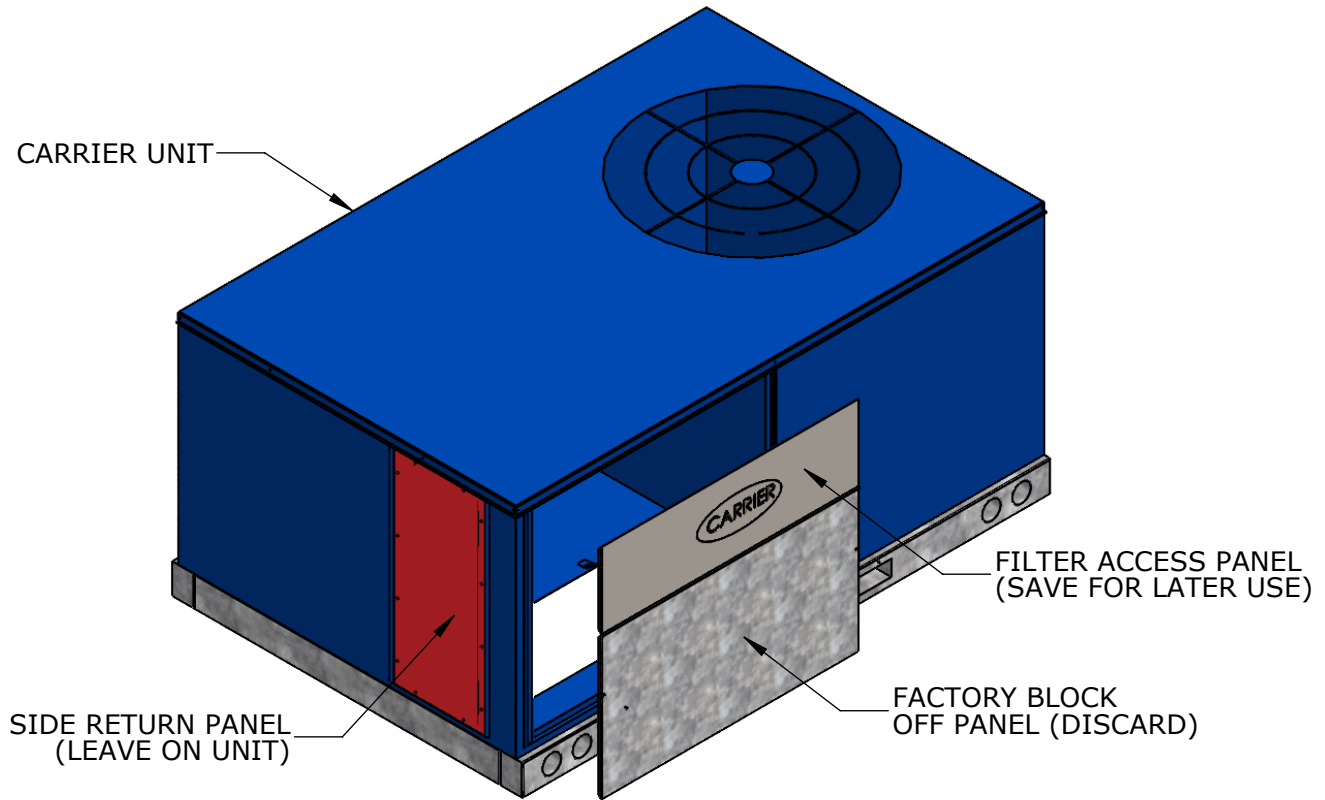
**1022356  
4A ECONOMIZER  
FOR 7.5-12.5 TON UNITS**

**READ COMPLETELY BEFORE INSTALLING!!!**

CAMBRIDGEPORT IS NOT RESPONSIBLE FOR IMPROPERLY INSTALLED EQUIPMENT

**PAGE 1**

**BEFORE BEGINNING VERIFY DOWNSHOT ECONOMIZER CONFIGURATION  
IF AIR FLOW IS HORIZONTAL SEE PAGE 7 FOR INSTRUCTIONS**



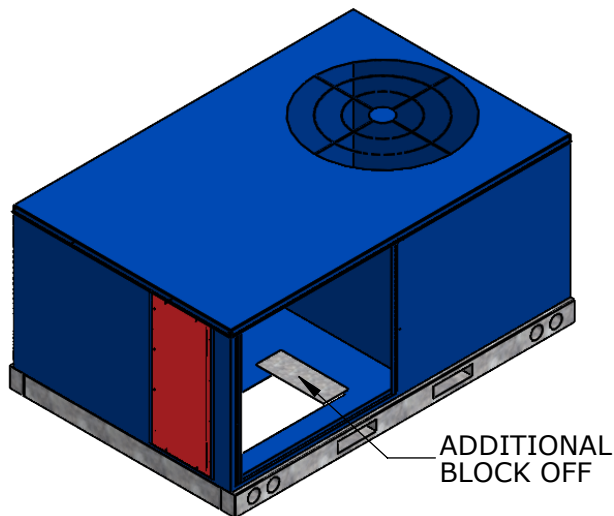
## STEP 1: PANEL REMOVAL

REMOVE FILTER ACCESS PANEL (KEEP FOR LATER USE) AND FACTORY BLOCK OFF PANEL (DISCARD) FROM THE UNIT AS SHOWN ABOVE.

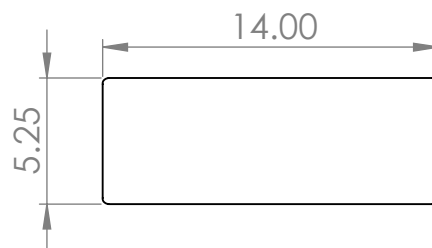
## STEP 2: DUAL ENTHALPY

IF DUAL ENTHALPY OPTION HAS BEEN ADDED NOW IS THE TIME TO INSTALL THE SECOND ENTHALPY SENSOR (SOLD SEPARATELY) BELOW THE ECONOMIZER IN THE RETURN AIR DUCT. SEE PAGE 17 FOR ENTHALPY SENSOR WIRING DETAIL

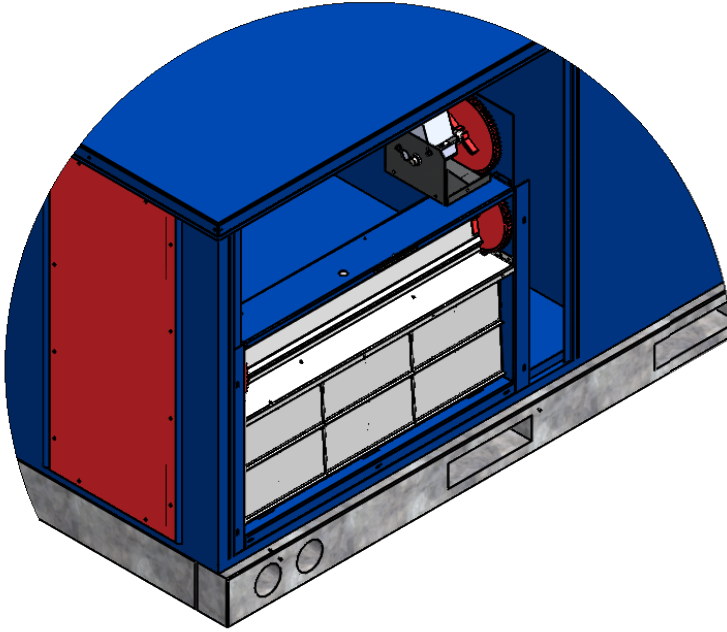
## STEP 3: BLOCK OFFS



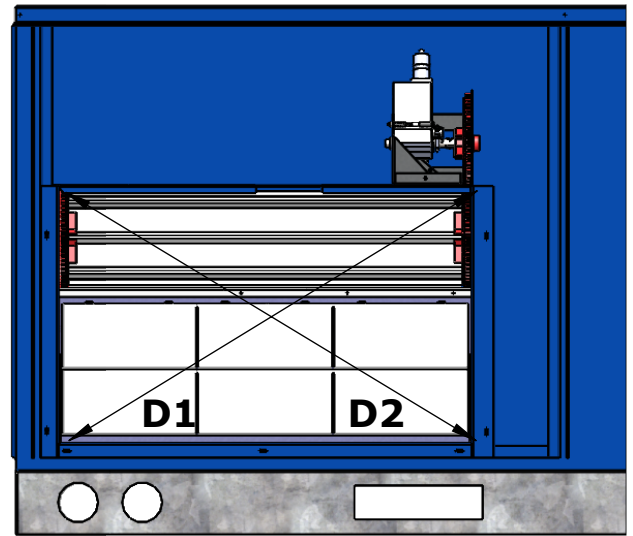
IF 10-12.5 TON UNIT IS BEING INSTALLED, AN ADDITIONAL BLOCK OFF IS REQUIRED ON THE BOTTOM RETURN OPENING. INSTALL 5.25" X 14" PANEL ON RIGHT SIDE OF OPENING.



$$D1 = D2 \pm .125"$$



**ISO VIEW**



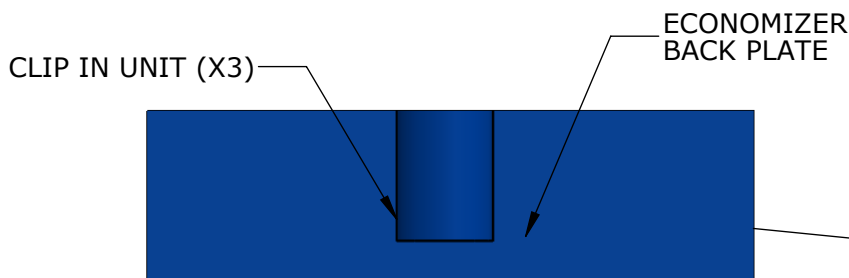
**FRONT VIEW**

## STEP 4: ECONOMIZER INSTALL

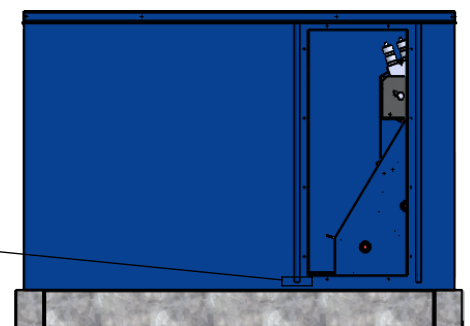
INSERT ECONOMIZER INTO UNIT. SLIDE ECONOMIZER TO BOTTOM LEFT CORNER OF UNIT AS SHOWN ABOVE. ALSO, ENSURE BACK PLATE OF ECONOMIZER SLIDES INTO CLIPS LOCATED BEHIND BOTTOM RETURN OPENING (SEE BELOW). BOTTOM RIGHT EDGE OF ECONOMIZER WILL LINE UP WITH RIGHT HAND SIDE OF RETURN OPENING IF ECONOMIZER IS POSITIONED CORRECTLY.

MAKE SURE ECONOMIZER IS SQUARE TO WITHIN .125" (SEE FRONT VIEW). ATTACH ECONOMIZER TO UNIT USING [2] SCREWS ON LEFT HAND SIDE AND [2] SCREWS ON BOTTOM EDGE (SCREWS PROVIDED BY CAMBRIDGEPORT).

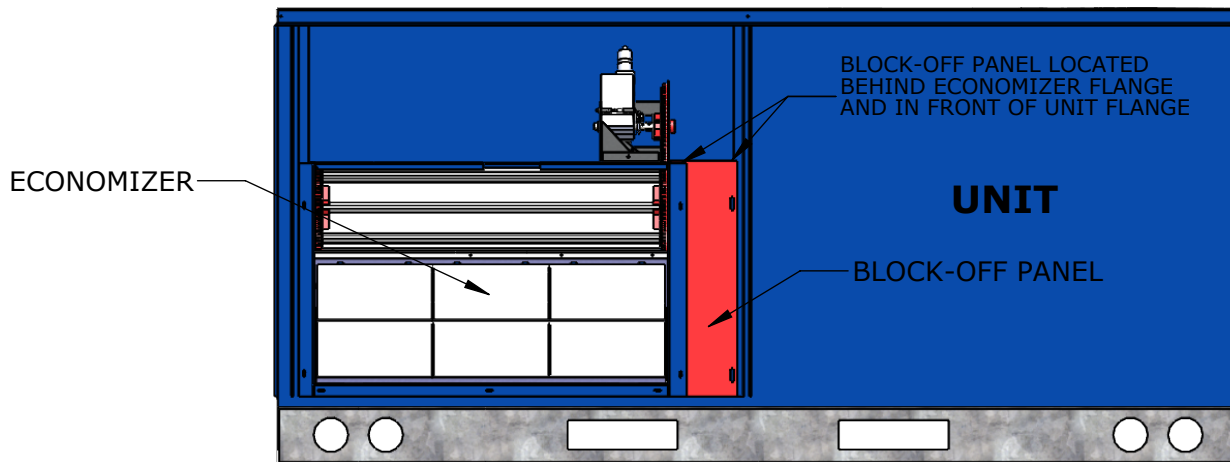
**WARNING: PRE-DRILLED HOLES MAY NOT ALWAYS LINE UP WITH HOLES IN UNIT. KEEPING ECONOMIZER SQUARE IS OF UTMOST IMPORTANCE. DO NOT FORCE SCREWS INTO PRE-DRILLED HOLES AND COMPROMISE THE ECONOMIZERS POSITION. IF NECESSARY DRILL NEW HOLES.**



**DETAIL A**



**LEFT VIEW**



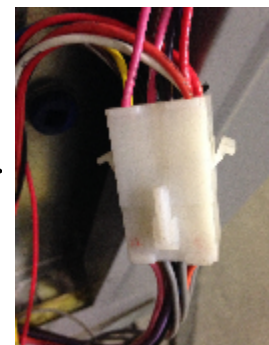
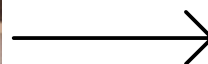
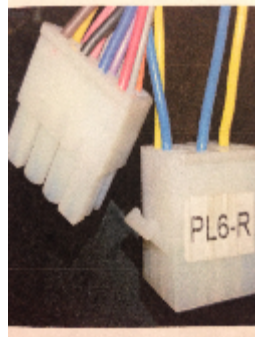
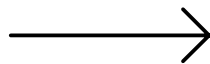
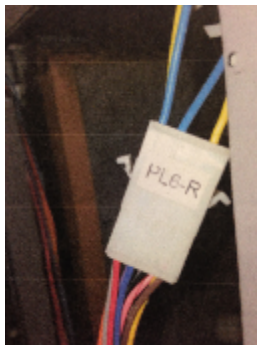
## STEP 5: BLOCK OFF INSTALL

INSTALL EXTRA BLOCK OFF PANEL ON RIGHT HAND SIDE OF ECONOMIZER. POSITION PANEL SUCH THAT HOLES/SLOTS IN ECONOMIZER/UNIT LINE UP WITH PRE-PUNCHED HOLES IN BLOCK OFF PANEL. PANEL WILL MEASURE EITHER 4-7/8" X 17-5/8" OR 4-3/4" X 23-1/8" DEPENDING ON UNIT SIZE.

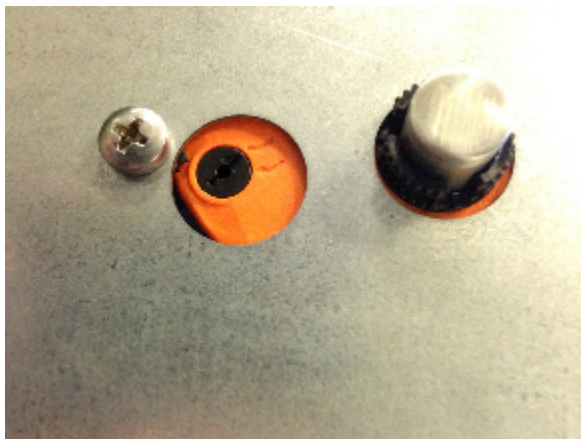
## STEP 6: WIRING HARNESS

IN ECONOMIZER SECTION OF THE RTU LOCATE FACTORY WIRING HARNESS "PL-6" AND REMOVE FACTORY HARNESS JUMPER LABELED "PL6-R". (NOTE: SAVE JUMPER "PL6-R" FOR FUTURE USE IF ECONOMIZER NEEDS TO BE BYPASSED).

CONNECT CAMPRIDGEPORT ECONOMIZER WIRING HARNESS TO THE UNIT WIRING HARNESS "PL-6".



## STEP 7: ACTUATOR CHECK:

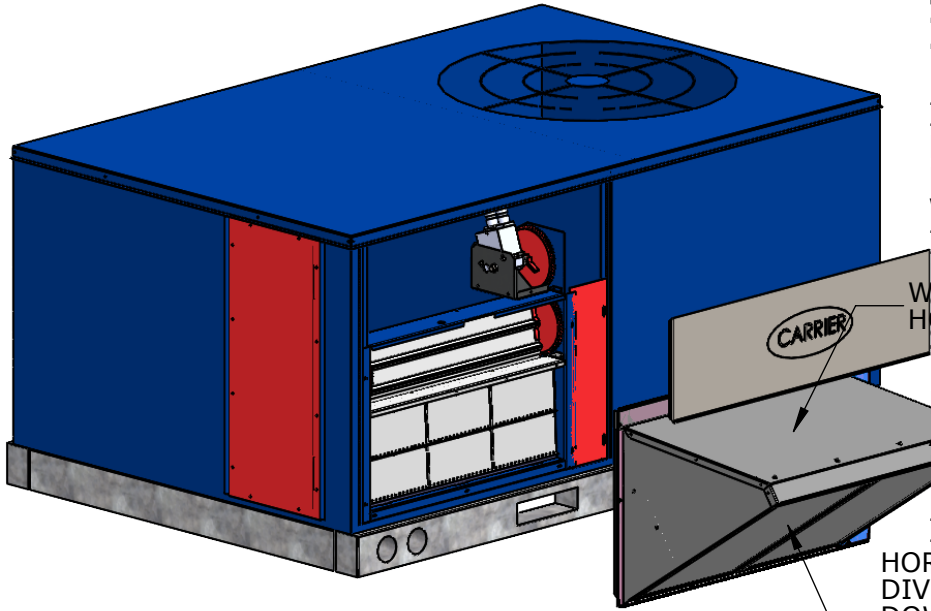


LOCATE WINDOW ON SIDE OF ACTUATOR BRACKET WHICH IS MOUNTED ON TOP OF DAMPER BLADE ASSEMBLY.

ENSURE BLACK SWITCH IS LOCATED IN THE COUNTERCLOCKWISE (POINTED UP) POSITION AS SHOWN HERE. IF SWITCH IS CLOCKWISE THEN FLIP SWITCH TO BE IN CCW POSITION.

**WARNING: IF SWITCH IS IN THE INCORRECT POSITION ECONOMIZER WILL NOT OPERATE PROPERLY**

## STEP 8: HOOD INSTALL



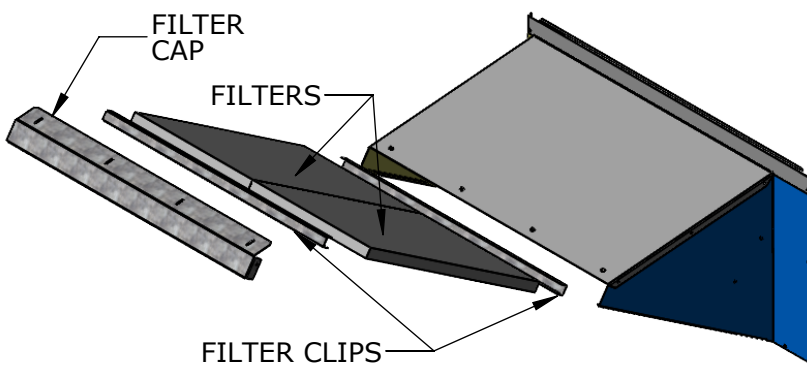
INSTALL WEATHER HOOD OVER DAMPER ASSEMBLY AND BLOCK OFF PANEL. SLIDE WEATHER HOOD FLANGES INTO GROOVES ON LEFT AND RIGHT SIDE OF RTU OPENING. SECURE HOOD TO UNIT USING SCREWS REMOVED IN STEP 1.

KEEP FILTERS, FILTER CLIPS, AND FILTER CAP UNINSTALLED DURING THIS STEP. ALSO, HORIZONTAL BAFFLE IS INSTALLED FOR DOWNSHOT APPLICATION.

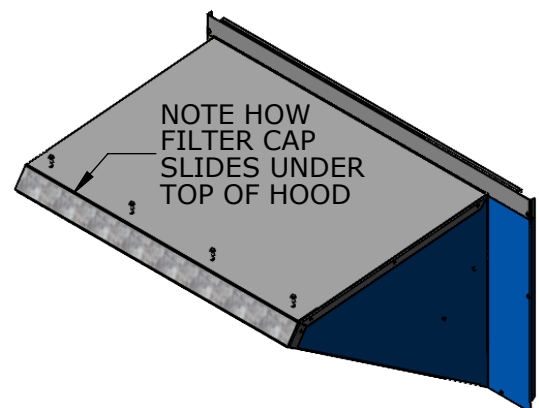
HORIZONTAL  
DIVIDER (FOR  
DOWNSHOT  
APPLICATION  
)

## STEP 9 - WEATHER HOOD FILTERS

- LOOSEN [4] SCREWS AND REMOVE FILTER CAP.
- PUT FILTERS TOGETHER AND CAP TOP/BOTTOM WITH FILTER CLIPS.
- SLIDE ADJOINED FILTERS DOWN FILTER TRACKS LOCATED ON EITHER SIDE OF WEATHER HOOD.
- SLIDE FILTER CAP UNDER HOOD ROOF BUT ENSURE SIDE FLANGES CAP OVER LEFT AND RIGHT WALLS (SEE "ASSEMBLED VIEW").
- SLIDE FILTER CAP UP AS FAR AS POSSIBLE AND REATTACH AT [4] LOCATIONS.
- VERIFY FILTERS ARE SECURE AND ALL PARTS ARE ASSEMBLED CORRECTLY.

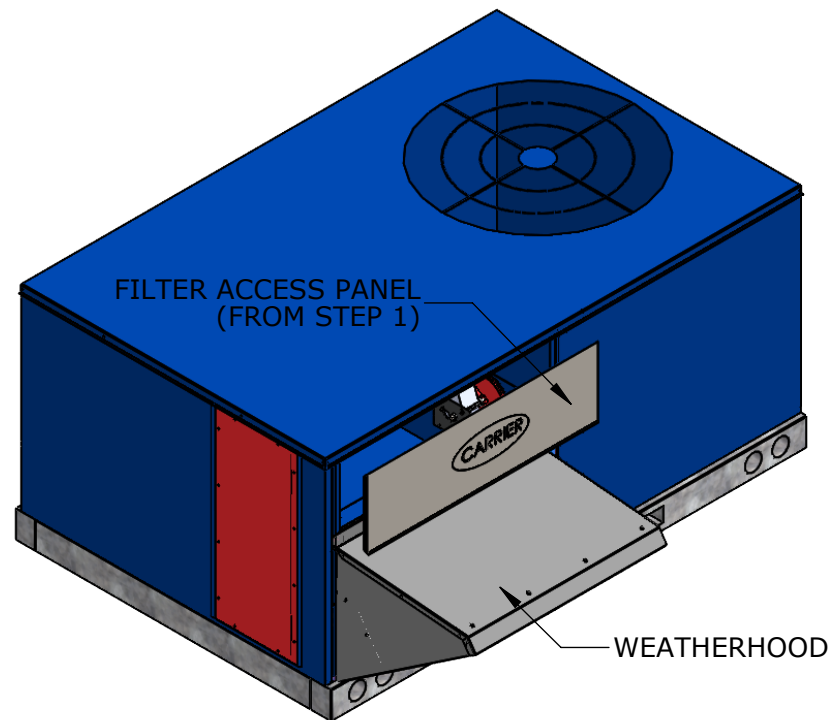


**EXPLODED VIEW**



**ASSEMBLED VIEW**





## **STEP 10: FILTER ACCESS AND WIRING**

REINSTALL FILTER ACCESS PANEL (REMOVED FROM STEP 1) ON TOP OF WEATHERHOOD. FOLLOW INSTRUCTIONS FOR WIRING AND BELIMO ZIP MODULE SETUP ON PAGE 13.