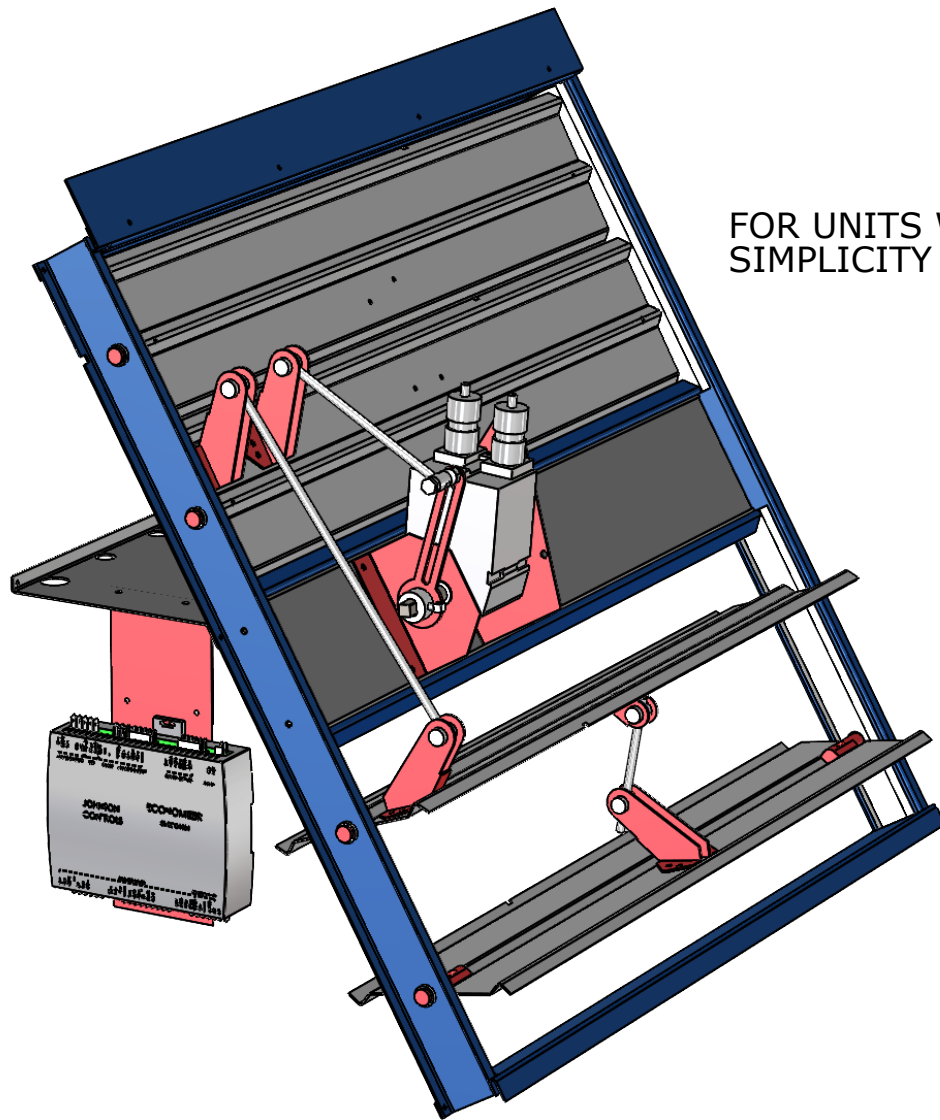




HVAC Accessories and Engineered Systems

INSTALLATION INSTRUCTIONS FOR
3 - 6 TON SUNLINE SERIES ECONOMIZER
ULTRA LOW LEAK (MEETS IECC-2015 & ASHRAE 90.1-2016)



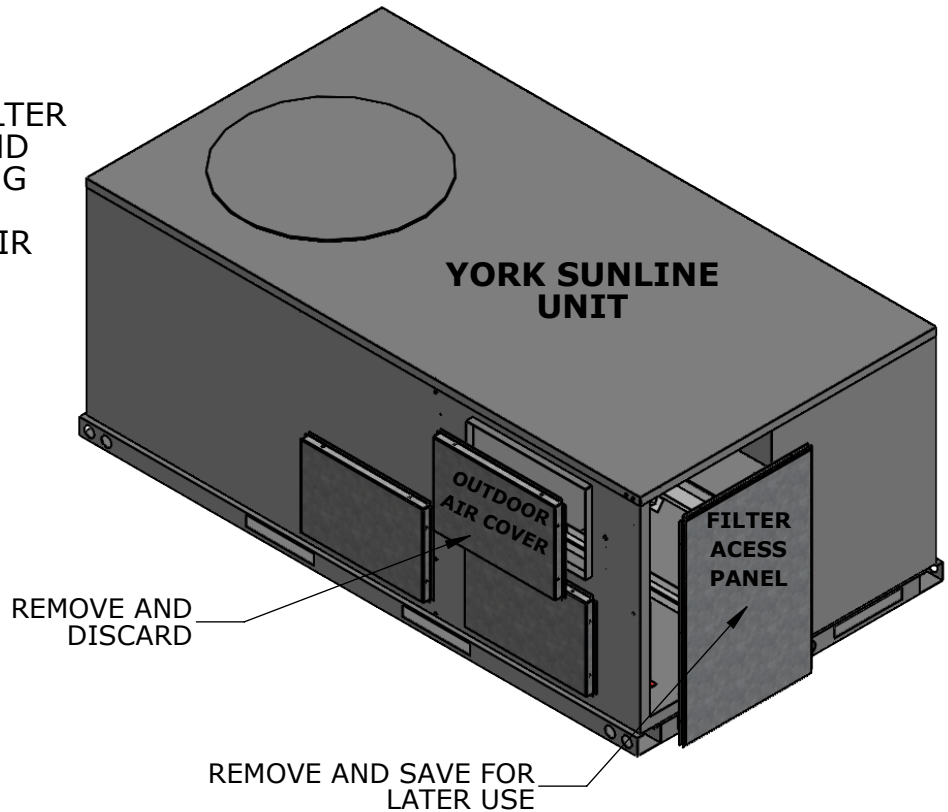
FOR UNITS WITH
SIMPLICITY CONTROLS

READ COMPLETELY BEFORE INSTALLING!!!

CAMBRIDGEPORT IS NOT RESPONSIBLE FOR IMPROPERLY INSTALLED EQUIPMENT

STEP 1

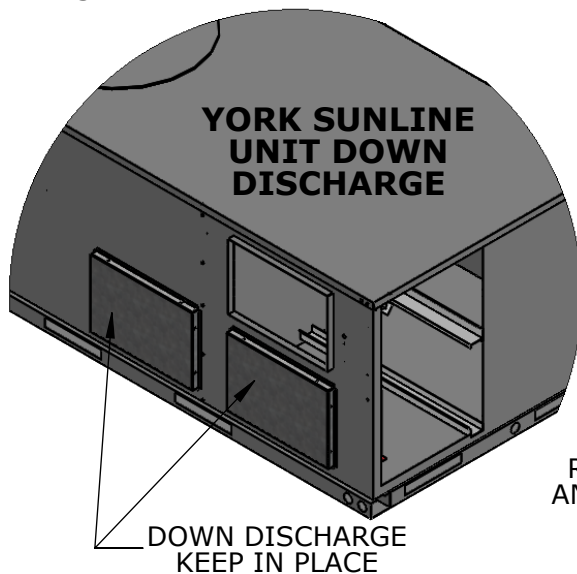
REMOVE AND **SAVE** THE FILTER SECTION ACCESS PANEL AND CORRESPONDING MOUNTING SCREWS. REMOVE AND **DISCARD** THE OUTDOOR AIR OPENING COVER. SAVE ALL MOUNTING SCREWS FOR LATER USE.



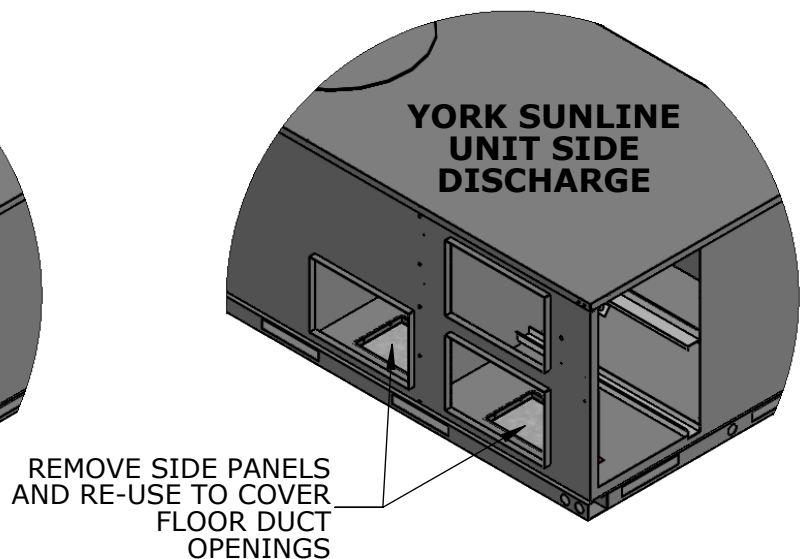
STEP 2

CONFIGURE UNIT PANELS BASED ON AIR DISCHARGE APPLICATION (EITHER SIDE DISCHARGE OR DOWN DISCHARGE).

FOR DOWN DISCHARGE KEEP SIDE SUPPLY AND RETURN PANELS INSTALLED AND REMOVE UNIT FLOOR DUCT OPENING PANELS



FOR SIDE DISCHARGE: REMOVE UNIT SIDE PANELS AS NEEDED AND USE THEM TO COVER FLOOR OPENINGS

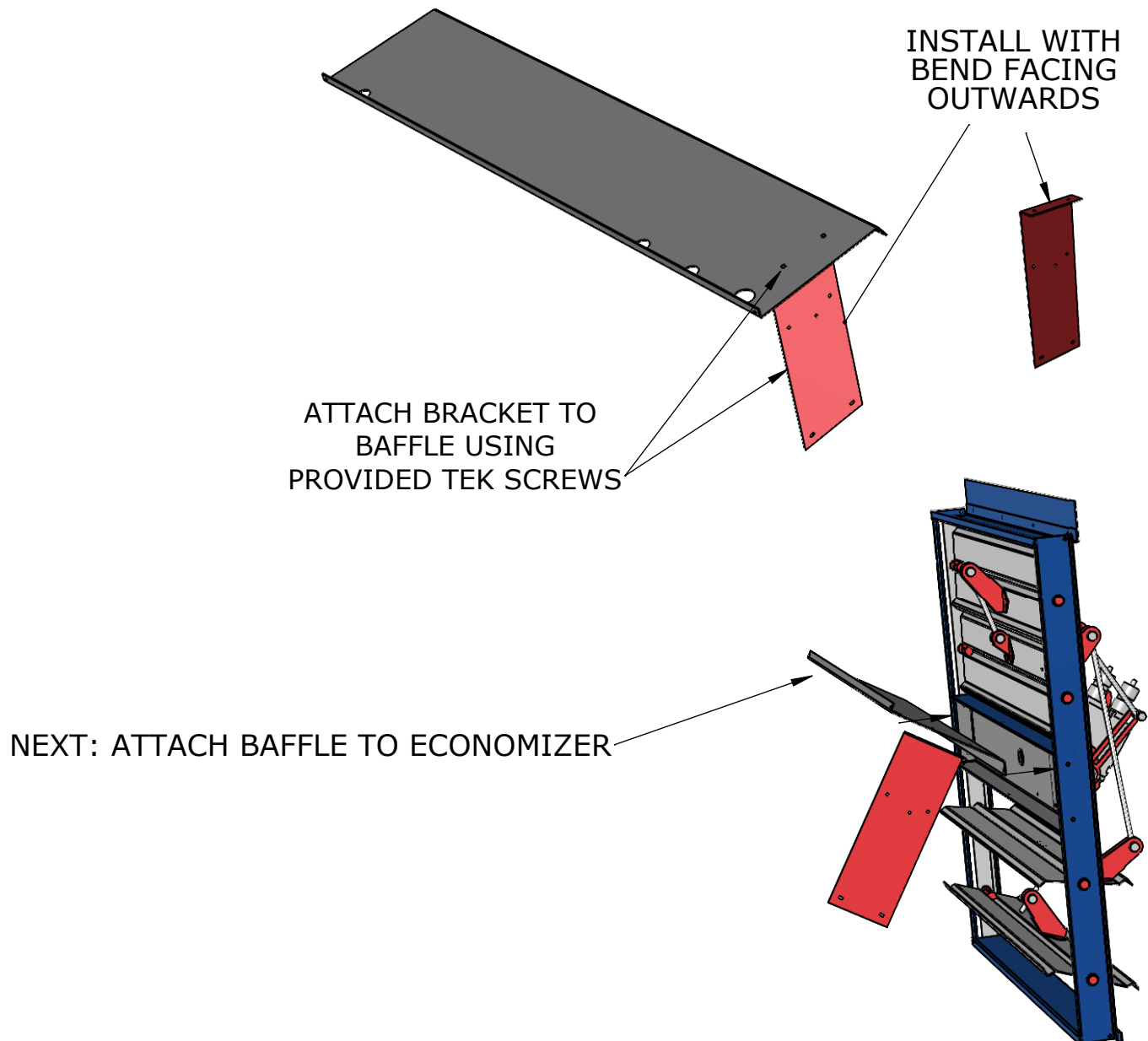


STEP 3

ASSEMBLE DAMPER DIVIDER: FIRST, MOUNT SE ECONOMIZER MODULE BRACKET TO PRE-DRILLED HOLES IN DIVIDER BAFFLE

ATTACH DIVIDER BAFFLE TO ECONOMIZER AS SHOWN IN PRE-LOCATED HOLES USING (2) #10 TEK SCREWS PROVIDED BY CAMBRIDGEPORT.

ENSURE BAFFLE IS LOCATED IN CORRECT POSITION AND ORIENTATION ON DAMPER BLADE ASSEMBLY.



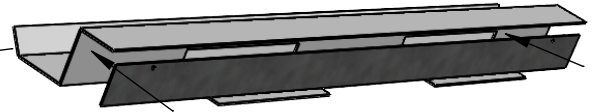
BOTTOM ISO VIEW

PAGE 2 OF 9

STEP 4

PREPARE CABINET FOR ECONOMIZER. FIRST INSTALL FILTER RACK BLOCK OFF PANEL USING TWO TEK SCREWS AS SHOWN. NEXT, UNPLUG S/A SENSOR (BLUE WIRES) AND R/A SENSOR (BLK/WHT WIRES). LASTLY, CUT ZIP TIES TO FREE FACTORY WIRING AND REMOVE AIR FILTERS FROM UNIT

TOP FILTER RACK



INSTALL BLOCK OFF TO
COVER OPENINGS
USING PROVIDED TEK SCREWS



CUT ZIP TIES

REMOVE
FILTERS

UNPLUG SENSORS

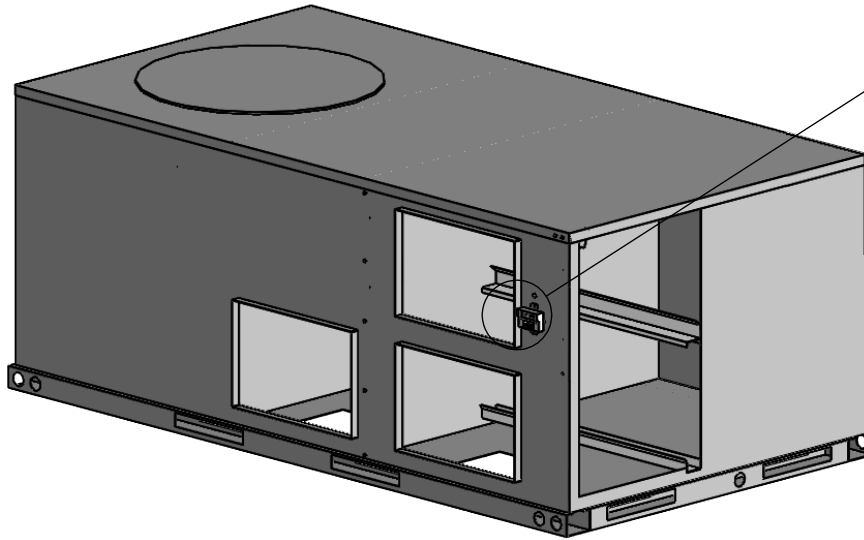
BOTTOM ISO VIEW

PAGE 3 OF 9

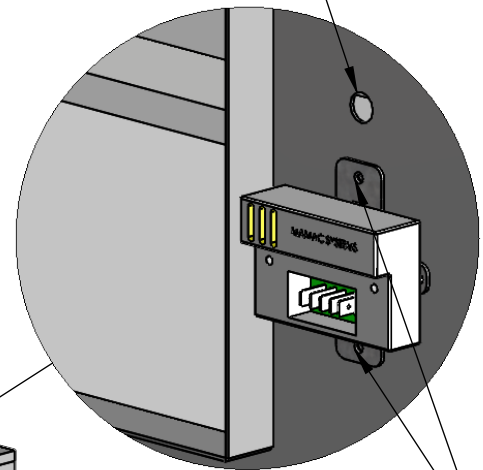
STEP 5

INSTALL OUTDOOR AIR/ENTHALPY SENSOR ON SIDE OF UNIT USING (2) #8 X 3/4" TEK SCREWS PROVIDED BY CAMBRIDGEPORT.

ALSO, REMOVE 1/2" KNOCKOUT DIRECTLY ABOVE SENSOR FOR LATER USE WHEN WIRING TO CONTROLLER.



1/2" KNOCKOUT

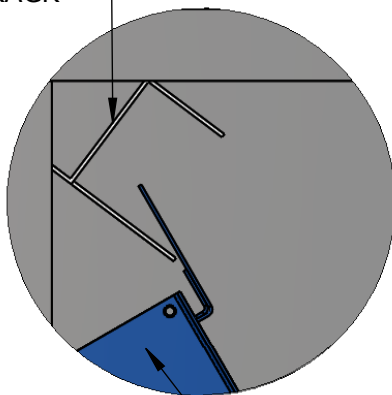


TEK SCREWS

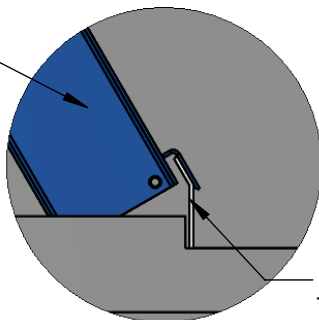
UPPER
FILTER
TRACK

STEP 6

SLIDE DAMPER INTO UNIT AS SHOWN BELOW. MAKE SURE ALL WIRING IS ABOVE ECONOMIZER DIVIDER BAFFLE. CONFIRM DAMPER ASSEMBLY IS RESTING ON TOP OF FILTER RACK TRACK ANGLES IN TOP AND BOTTOM OF UNIT

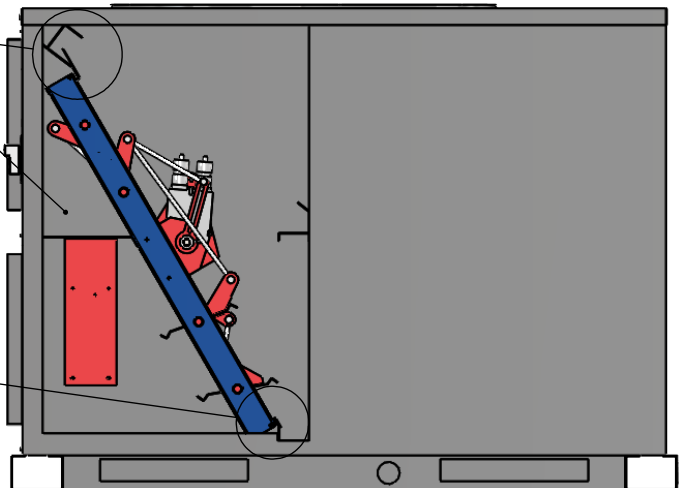


DAMPER
BLADE
ASSEMBLY



LOWER
FILTER
TRACK

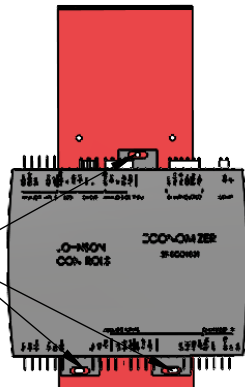
KEEP WIRING
ABOVE BAFFLE



STEP 7

ATTACH SE ECONOMIZER
MODULE TO BRACKET
PREVIOUSLY INSTALLED
ON BAFFLE IN STEP 3

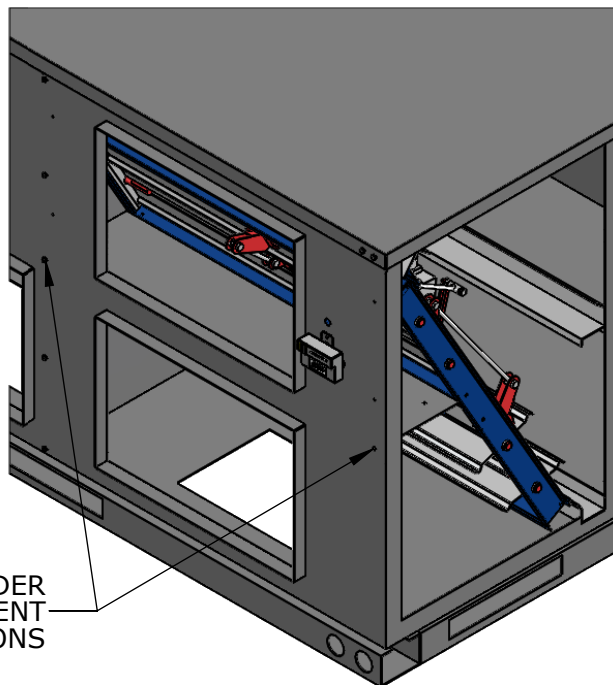
TEK SCREWS



STEP 8

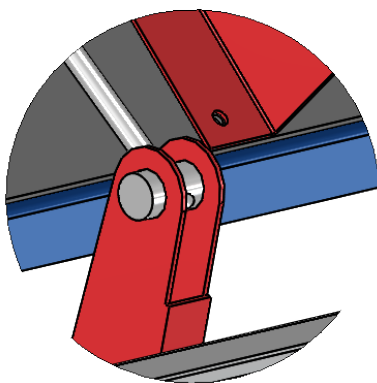
SECURE DIVIDER BAFFLE TO UNIT AT (2)
LOCATIONS AS SHOWN. USING
GASKETED SCREWS THAT WERE
REMOVED IN STEP 1.

DIVIDER
ATTACHMENT
LOCATIONS



STEP 9

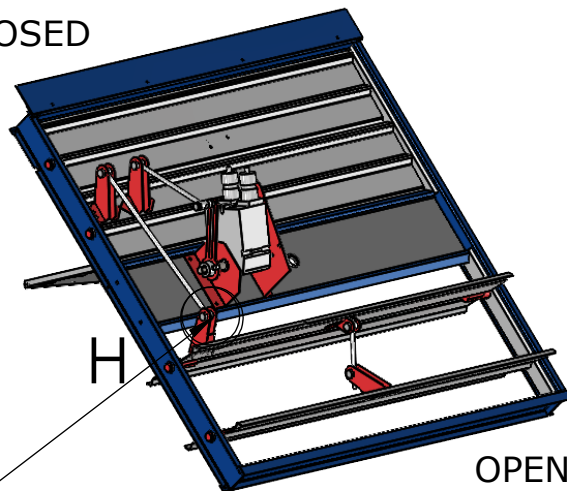
SET DAMPER LINKAGE ARM SO THAT THE ROD IS FLUSH WITH THE BRASS BUSHING IT IS
INSERTED INTO. THE OUTSIDE AIR DAMPER SECTION SHOULD BE FULLY CLOSED WHILE
PERFORMING THIS STEP. THE END RESULT WILL BE OUTSIDE AIR SECTION 100% CLOSED
AND RETURN AIR SECTION (BOTTOM OF DAMPER RACK) 100% OPEN WHEN ACTUATOR IS
DE-ENERGIZED



DETAIL H
SCALE 1 : 2

CLOSED

ATTACH
HERE

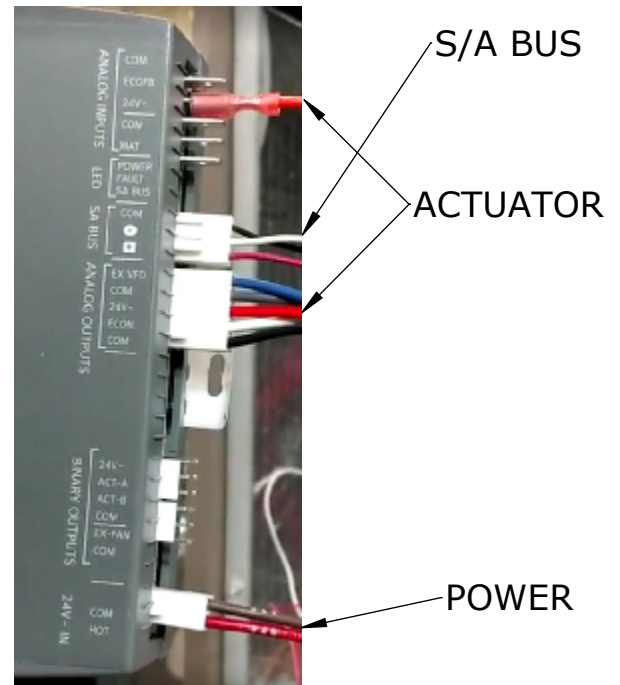
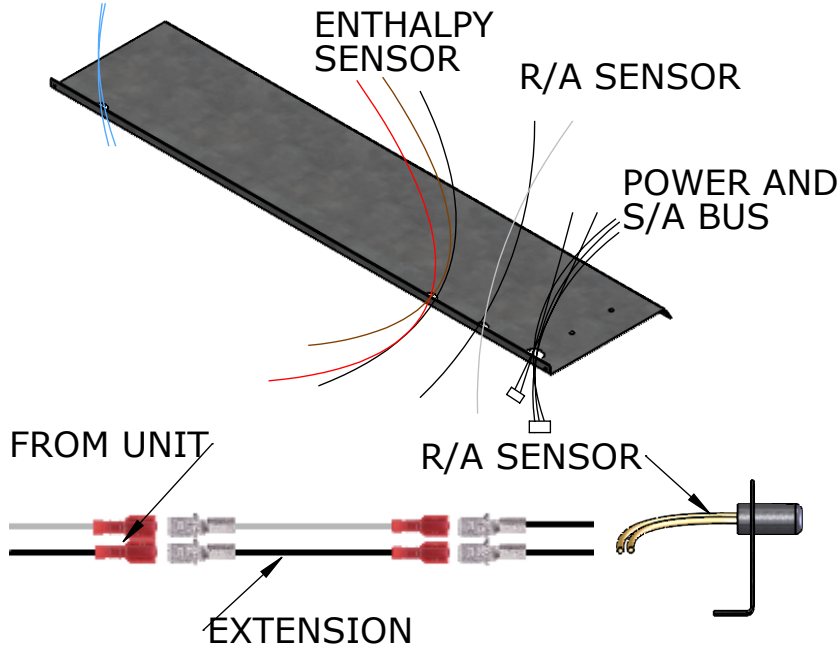


OPEN

STEP 10

- RECONNECT THE SUPPLY AIR SENSOR (BLUE WIRES). POLARITY INSENSITIVE
- CONNECT THE 20" LONG BLK/WHT EXTENSION WIRES PROVIDED BY CAMBRIDGEPORT TO THE BLK AND WHT RETURN AIR SENSOR WIRES DISCONNECTED IN STEP 4. RECONNECT THE NEWLY EXTENDED RETURN AIR SENSOR (BLK & WHT WIRES). POLARITY INSENSITIVE
- CONNECT POWER WIRING AND COMMUNICATION BUS FROM UNIT TO SE ECONOMIZER MODULE (SEE ILLUSTRATION BELOW)
- CONNECT ACTUATOR HARNESS AND FEEDBACK WIRE
- ENSURE WIRING IS NEAT AND NOT INTERFERING WITH DAMPER OPERATION

S/A SENSOR



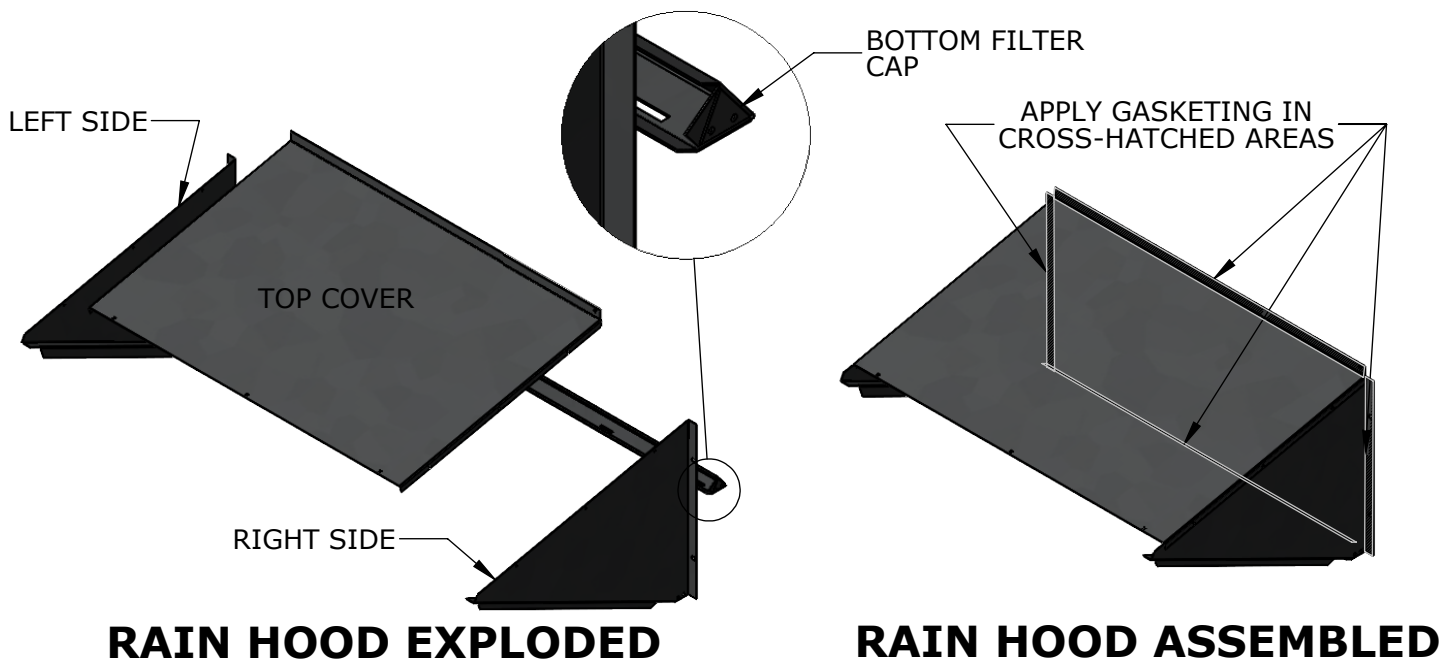
STEP 11

ROUTE ENTHALPY SENSOR WIRES(SEE DIAGRAM ABOVE): RUN RED WIRE FROM "+" TERMINAL ON ENTHALPY SENSOR TO 24V ON ECONOMIZER MODULE, RUN BLACK WIRE FROM "-" TERMINAL TO COM, AND RUN BROWN WIRE FROM "0" TO OAH AS SHOWN BELOW.



STEP 12

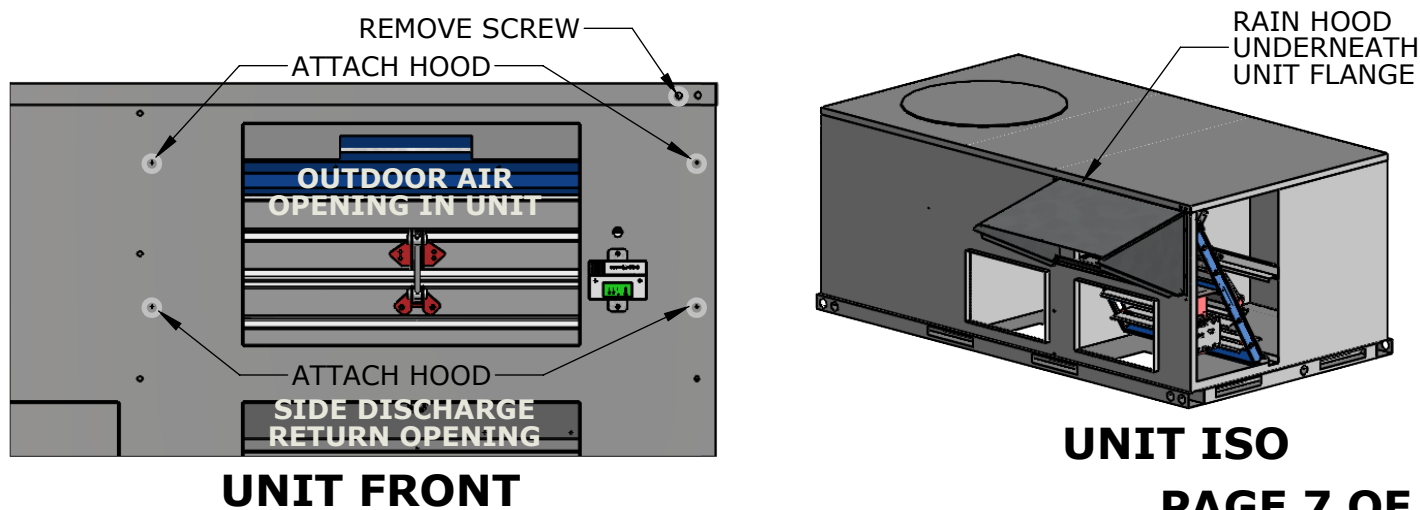
PREPARE RAIN HOOD FOR INSTALLATION TO UNIT. ASSEMBLE LEFT AND RIGHT SIDES OF RAIN HOOD TO TOP COVER AND BOTTOM FILTER CAP AS SHOWN USING PROVIDED TEK SCREWS. ENSURE FILTER CAP FACES UP TO CATCH FILTERS. APPLY GASKETING TO FLANGE SURFACES AROUND HOOD WHICH WILL COME IN CONTACT WITH UNIT.



STEP 13

REMOVE SCREWS (AS INDICATED BELOW) ON UNIT COVER TO ALLOW THE TOP FLANGE OF THE ECONOMIZER WEATHER HOOD TO SLIDE UNDER THE UNIT COVER.

ATTACH HOOD USING SCREWS PREVIOUSLY REMOVED

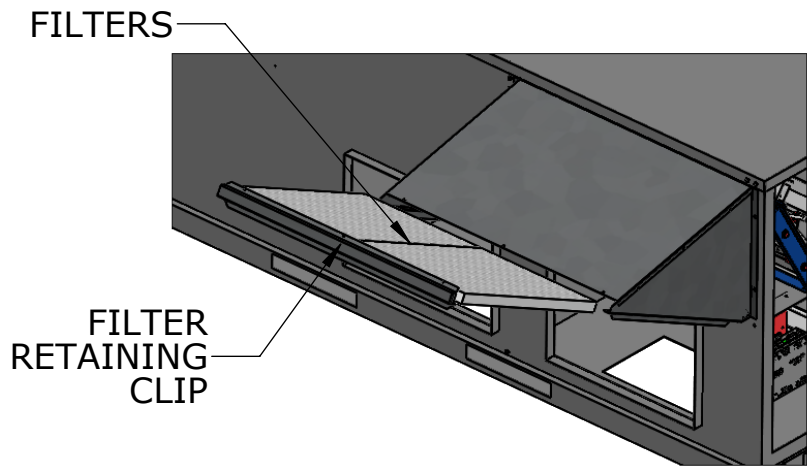


STEP 14

INSTALL TWO FILTERS INTO HOOD ASSEMBLY, SLIDING DOWN ALONG RETAINING FLANGES ON EITHER SIDE OF HOOD AND INTO BOTTOM FILTER CAP.

NOTE: INSTALL FILTERS SO THAT AIR FLOW ARROW POINT TOWARD UNIT.

INSTALL FILTER RETAINING CLIP OVER END OF FILTERS (SLIPS UNDER TOP OF HOOD) AND ATTACH WITH SCREWS PROVIDED.



**CONTINUE ON TO NEXT PAGE
FOR WIRING SCHEMATIC**

