3-15 PSIG Follower Option
AC Drive Modification Kit
For SV9000/ HV9000 Models Listed Below

Cutler-Hammer

Applicable Models

This modification kit applies to the following models:

Variable Torque Models	Constant Torque Models
All SV9000/ HV9000 Models	All SV9000/ HV9000 Models

Items Included in kit KIT-00PSIG-1000

Item	Part No.	Qty.	Description
1	015-001098-0001	1	3-15 PSIG Follower Board
2	036-000514-0500	4	1/4 Turn Standoff, Black Nylon
3	019-000560-0117	1	Mounting Plate (door)
4	0075-23C	4	Metal Standoff (door)
5	036-000203-2592	4	Screw (door)
6	036-000493-0008	4	Lock Washer (door)
7	036-000504-0001	1	Bulkhead Union
8	036-000505-0001	6'	Tubing
9	036-000493-3192	2	Lock Washer, 5/16
10	9071A15H01	3	Hose Clamp
11	020-000348-0132	1	Arcnet Cable, 11 feet
12	020-000335-8091	1	Arcnet Cable, 8 inches
13	067-000007-1655	3'	#16 GA Green Wire
14	0010-22N	1	#10 Ring Lug
15	0019-2B	6"	Sleeve Tubing
16	038-000044-0001	1'	Heat Shrink Tubing
17	0361-102	11'	2-Conductor Wire W/ Shield
18	0IS-00PSIG-1000	1	Instruction Sheet

General Description

This modification kit contains an add-on circuit board which provides a pneumatic transducer which converts a 3-15 PSIG signal to a 0-8 vDC or 1-9 vDC signal interface with the SV9000/ HV9000 drive.

The Printed Circuit Board contains components that are static sensitive. Special handling is required to prevent damage due to static charge.

Installation

Make sure you read this instruction sheet completely and understand all of the instructions before proceeding with installation.

If the 3-15 PSIG Follower option was factory installed, proceed to the Customer Wiring on page 4.

1. Disconnect all power to the drive.
   CAUTION: Allow 10 minutes for Bus capacitors to discharge before servicing unit.
2. Mount the option board to the back of the enclosure door see Figure 1.

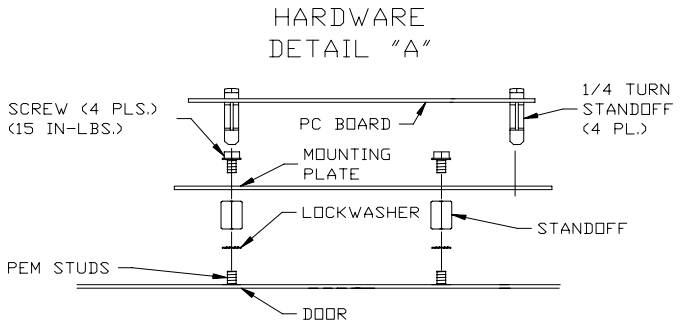

Figure 1

Field Wiring

1. Remove any previous customer connections made to TB1-2 and TB1-3 on the drive. The analog signal input portion of the Isolated Process Follower option, if previously installed cannot be used with 3-15 PSIG Follower option. If the Isolated Process Follower option is already installed, proceed to the Alternate Field Wiring on page 3.

Field Wiring (con't)

2. Prepare one end of the 2-conductor shielded cable (item 17) by stripping 3 inches of the outer insulation exposing the black and red wires along with the shield. Cut away foil. Cover the end of the outer insulation with heat shrink tubing.
3. Connect the stripped end of the 2-conductor shielded cable to TB-PF of the 3-15 PSIG Follower board as shown in Figure 2. Connect the green ground wire (item 13) and the shielded wire with sleeve tubing (item 15) to TB-PF-3. Route the green wire to the door ground stud and attach it by using the ring lug (item 14).
4. Plug in the Arcnet cable (item 11) to P-ARC1 of the 3-15 PSIG Follower board. Arcnet cable (item 12) is not required with this configuration. Route the shielded cable and the arcnet cable to the drive. Route the cables away from all power wires and avoid pinching or cutting the insulation.
5. After routing the shielded cable cut it to the proper length. Strip the end of the cable as described in step 2. Cut the shield wire back even with the insulation prior to heat shrinking the cable.
6. Connect the red and black wires of the 2-conductor cable to TB1 of the drive as shown in Figure 3.
7. Connect the Arcnet cable to TB1 as shown in Figure 3. Strip the cable 1/2" and apply shrink tubing (item 16). Fold back WH/BU and BU/WH and heat shrink tubing over wires. Twist the remaining wires and terminate as shown.
8. Connect one end of the air hose (item 8) to the transducer (XDCR) on the option board. Use a clamp (item 10) to secure the hose as shown in Figure 7.

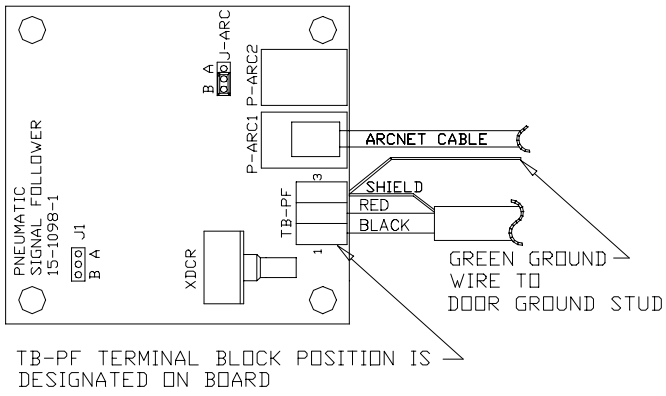

Figure 2

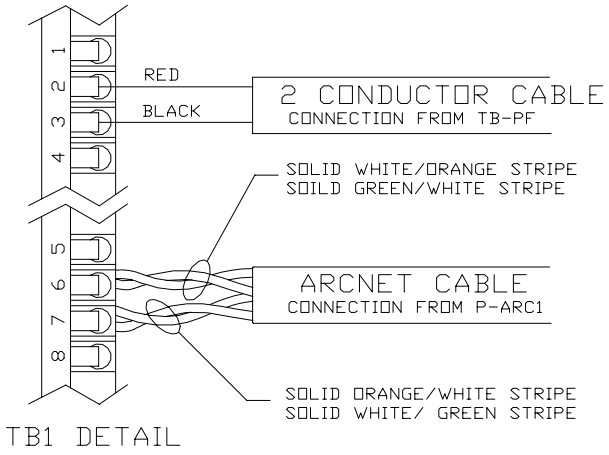

Figure 3

Cutler-Hammer

Alternate Field Wiring

1. Prepare one end of the 2-conductor shielded cable (item 17) by stripping 3 inches of the outer insulation exposing the black and red wires along with the shield. Cut away foil. Cover the end of the outer insulation with heat shrink tubing.
2. Connect the stripped end of the 2-conductor shielded cable to TB-PF of the 3-15 PSIG Follower board as shown in Figure 4. Connect the green ground wire (item 13) and the shielded wire with sleeve tubing (item 15) to TB-PF-3. Route the green wire to the door ground stud and attach it by using the ring lug (item 14).
3. Route the shielded cable to the drive. Route the cable away from all power wires and avoid pinching or cutting the insulation.
4. After routing the shielded cable cut it to the proper length. Strip the end of the cable as described in step 1. Cut the shield wire back even with the insulation prior to heat shrinking the cable.
5. Connect the red and black wires of the 2-conductor cable to TB1 of the drive as shown in Figure 5.
6. Plug one end of the Arcnet cable (item 12) into PARC-1 of the 3-15 PSIG Follower board. Arcnet cable (item 11) is not required with this configuration. Connect the other end of the arcnet cable into PARC-2 of the Isolated Process Follower board as shown in Figure 4.
7. Connect one end of the air hose (item 8) to the transducer (XDCR) on the option board. Use a clamp (item 10) to secure the hose as shown in Figure 7.

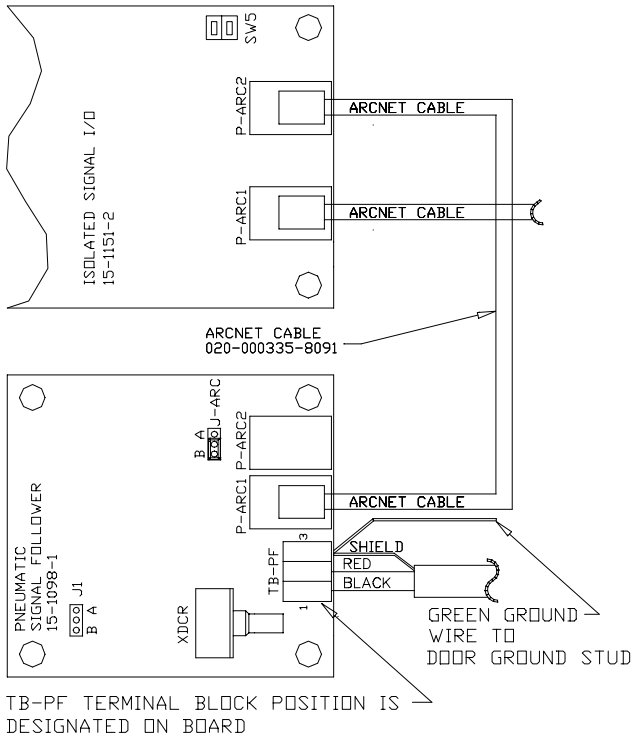

Figure 4

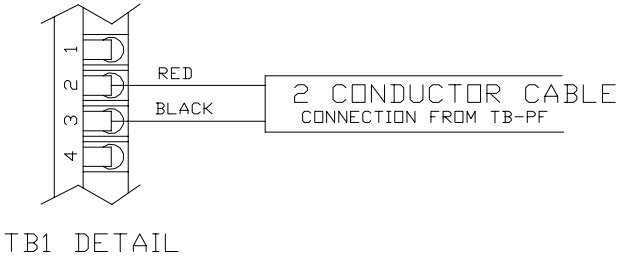

Figure 5

Customer Wiring

1. Select an appropriate location for the bulkhead union air connection. Drill a 5/16" hole and mount the bulkhead union (item 7) with two lock washers (item 9) as shown in Figure 6.

2. Route the hose from the 3-15 PSIG Follower board to the bulkhead union. Make sure the hose does not pinch when the door is closed. Cut the hose to the proper length and secure with a hose clamp to the connector as shown in Figure 7.

3. Connect the hose of the customer's air source to the bulkhead union and secure with a hose clamp as shown in Figure 7.

4. The 3-15 PSIG Follower board can be set for 0-8 vDC operation by putting the J1 jumper in the “B” position or 1-9 vDC operation by putting the J1 jumper in the “A” position. The J-ARC jumper should be in the "B" position. Verify proper operation of the drive with the 3-15 PSIG Follower option board installed.

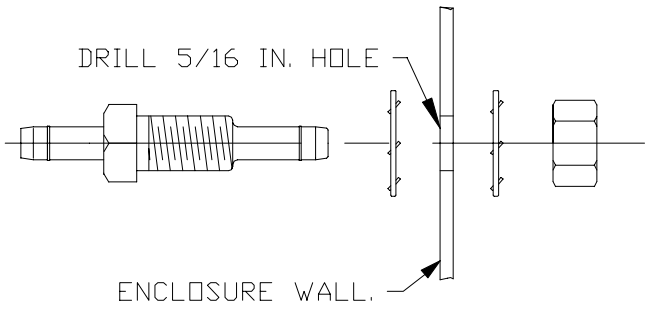

Figure 6

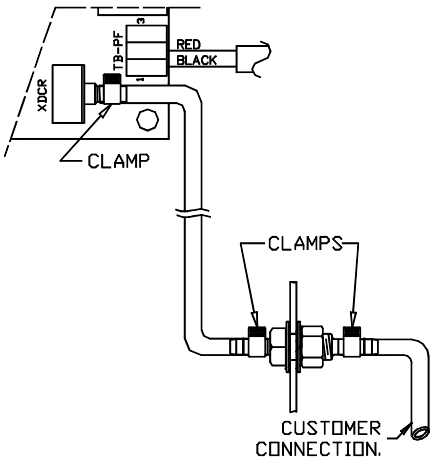

Figure 7