



## AutoAawn

# CONTROL BOX REPLACEMENT

**NOTE: For safety, disconnect or turn off all incoming electric and air lines at the coach source before attempting to remove box: turn off electric at coach battery or breaker box; turn off air at compressor or bleed air from tank.**

### A. REMOVE EXISTING CONTROL BOX

**1. Identify and tag each connection** in box before disconnecting: Mark each Airline with valve number to which it is connected (4F, 4R, 5, etc --see **Exhibit A & D**)

Identify and mark each Electric line with terminal designation: (+, -, 2, 3, 85, 86). Terminal location and marking depends on type of box being removed. Figures 1-2 show different box styles. (4 or 6 air valve; with without anemometer connections). Refer to appropriate attached exhibit for valve and terminal functions. (For all types, there are 5 electric lines : 2 @ incoming 12 Vdc, 2 @ output to motor, 1 @ ignition cutoff relay).

It is important to identify the input and output lines correctly to insure they are reconnected

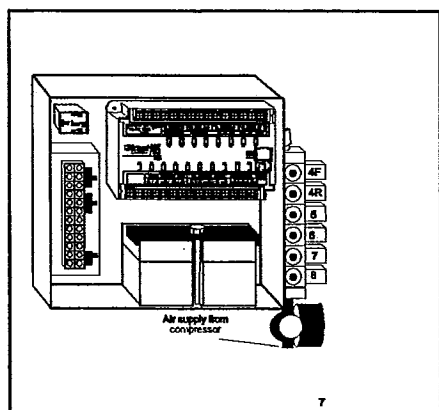


Fig. 1 D105, 6 Valve, Exhibit A & B

correctly in the  
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terminal  
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in new box.

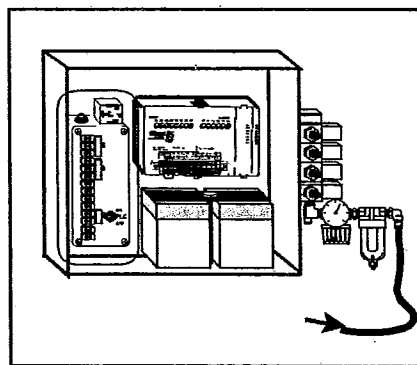


Fig. 2 D05, 4 Valve  
Exhibit C & D

replace  
instructi  
since  
designa  
different

**2. Disconnect all lines, including air.**

**3. Unbolt and remove box.**

## B. INSTALL REPLACEMENT 24 VDC CONTROL BOX:

**Note:** There are two styles of Control Box:

- 1) 6 valve for awnings with pneumatic Rafter arms; Fig. 1 and exhibits **A & B** or
  - 2) 4 valve for awnings with sealed Gas Rafter arms; Fig. 2 and exhibits **C & D**.
- Identify which style is being installed and follow connections shown on exhibits.

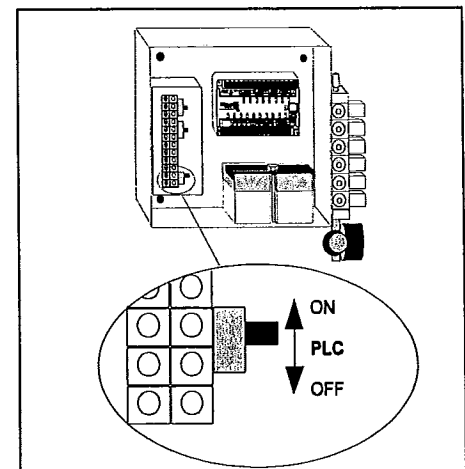
- 1 **Mount the box** securely through the mounting holes at the back of the box.
2. **Re-connect air lines** to valves. If changing from pneumatic to gas rafters, lines 5 & 6 are no longer used and may be trimmed back. Match the number on the remaining lines to the corresponding valve number marked on the valve and shown in **Exhibit A or D**. Push Air line onto the barbed fitting of the corresponding valves. No locking collars are needed.
3. Move "**PLC**" switch to "**OFF**" position. (**Fig. 5**)

Before making any electrical connections, remove jumper wire between batteries; reconnect after all other connections are complete.

4. **Connect motor leads** to terminals in box as shown in **Exhibit B or C**. **Note:** Terminals in replacement box are marked by number to identify the function. Before making connections, check to identify the termination of the other end of the wire (power source or motor).

5. **Reconnect ignition safety cutoff** (relay that breaks signal from remote receiver or control box to open awning). Connect wire from ignition signal (positive) to terminal 85 (upper terminal) on relay. Connect common ground to Terminal 86. **Note:** Although relay will operate correctly if connections are switched, we have consistently designated the upper terminal for incoming positive signal.

6. **Connect 12 Vdc Coach power source** to Box. Connect "positive" (+) and "negative" (-) leads to appropriate terminals as shown in **Exhibit B or C**.



**Figure 3**

7. **Connect supply air input line** to Regulator on valve stack of control box. **Note: it is strongly recommended that an air filter with drain and desiccant dryer also be installed.**

8. **Unused terminals:** All replacement boxes have terminals for possible Anemometer connections (terminals 13 & 14). These will be unused if the original installation did not have an Anemometer connection. This will not affect operation.

## F. TEST COMPLETED INSTALLATION

*NOTE: Do not use the old remote transmitter.* The signal of the Transmitter sent with the replacement box is matched to the receiver (serial number on receiver matches serial number on control box cover).

1. The awning roller should be in the up or closed position and all air and electric lines should be connected.
2. Turn on air and electric source power

### Caution!

Before starting your first automated operation, read Emergency Stops below.

- 3) Check power levels. You should have a minimum of 10 Vdc and 95 psi air pressure. to operate the awning.
- 4) Momentarily move the slide switch inside the control box (**Exhibit C**) marked "Awning" to the "open" position or push "open" on the remote transmitter. The awning should open automatically in the sequence shown in the "Troubleshooting Guide".

*Note: The controller is programmed to ignore the "Open" command for (15) minutes after it is closed. This is to allow sufficient time for the air compressor to recharge and cool down and to prevent overheating of the motor. If it is necessary to operate the awning before 15 minutes, simply turn the "PLC" off and on (See "Troubleshooting Guide") to reset.*

Be Patient. There will be a slight delay as the system checks itself before any movement is seen. After the awning has opened completely (this process takes approximately 60 seconds, depending on power strength) make sure the Rafter Arms are locked. That is, the locking pin has "popped" into one of the five locking holes of the rafter arm.

### Emergency Stop

The automatic programmed opening of the awning can be stopped **only** by using the remote transmitter. The "Stop" button on the remote transmitter will stop and reverse the opening sequence anytime during the first 45 seconds of operation (until the main arms are extended and locked). There is no emergency stop in the closing sequence.

### OPERATION

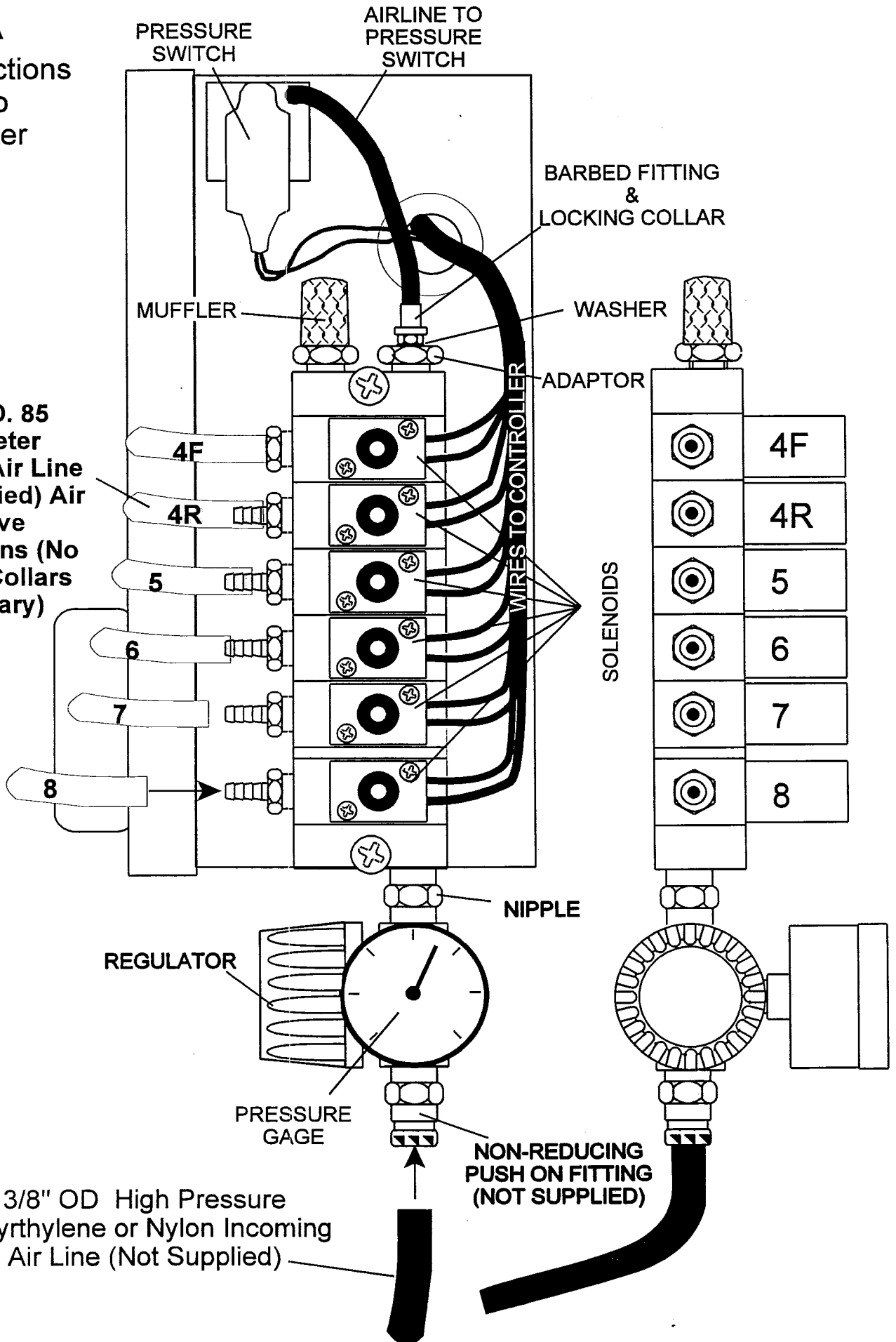
See Owners Manual for complete operation and maintenance instructions as well as minor troubleshooting.

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# Exhibit A

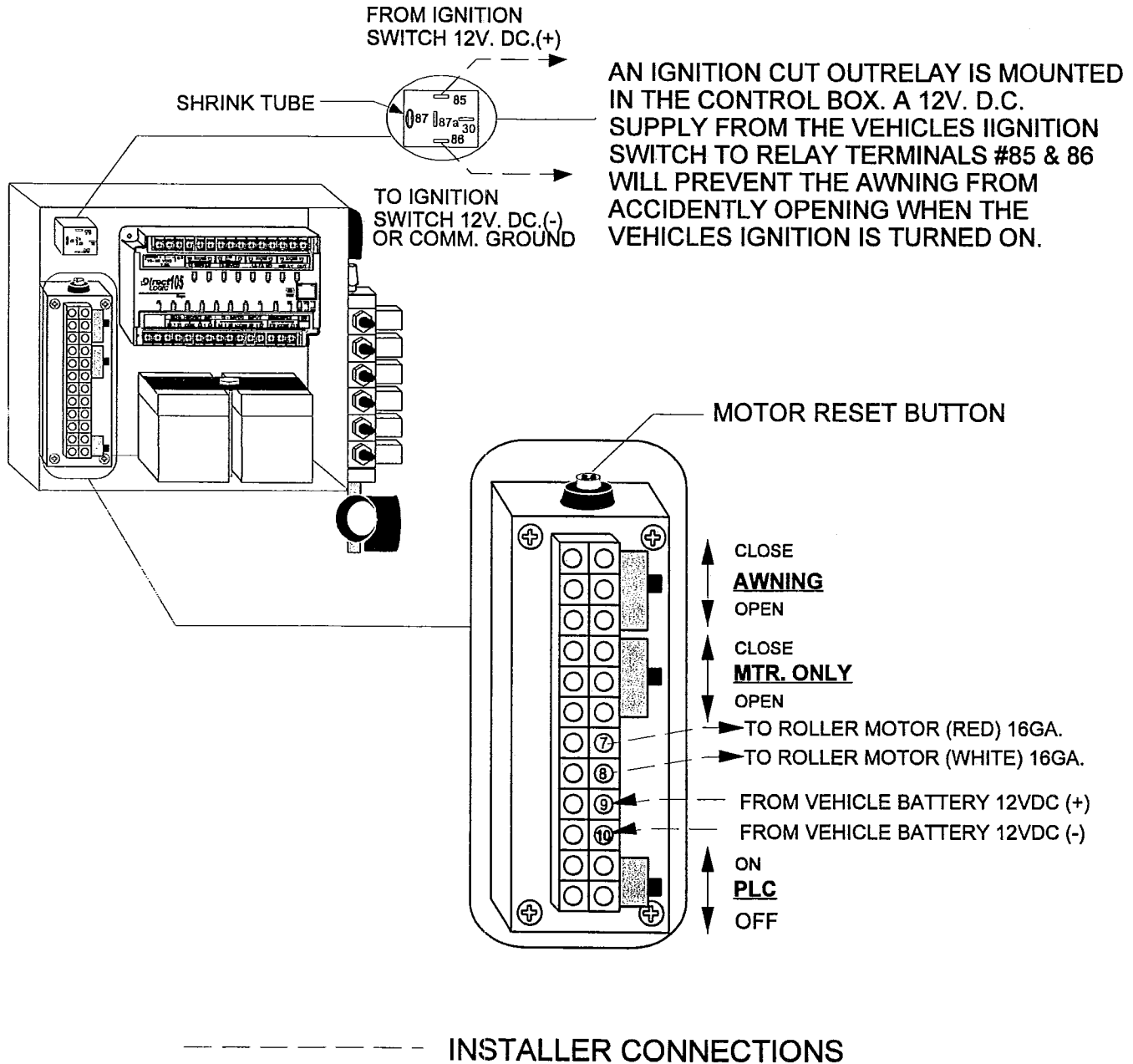
Air Connections  
6 Valve, no  
anemometer

1/4" O.D. 85  
Durometer  
Urethane Air Line  
(Not Supplied) Air  
to Valve  
Connections (No  
Locking Collars  
Necessary)



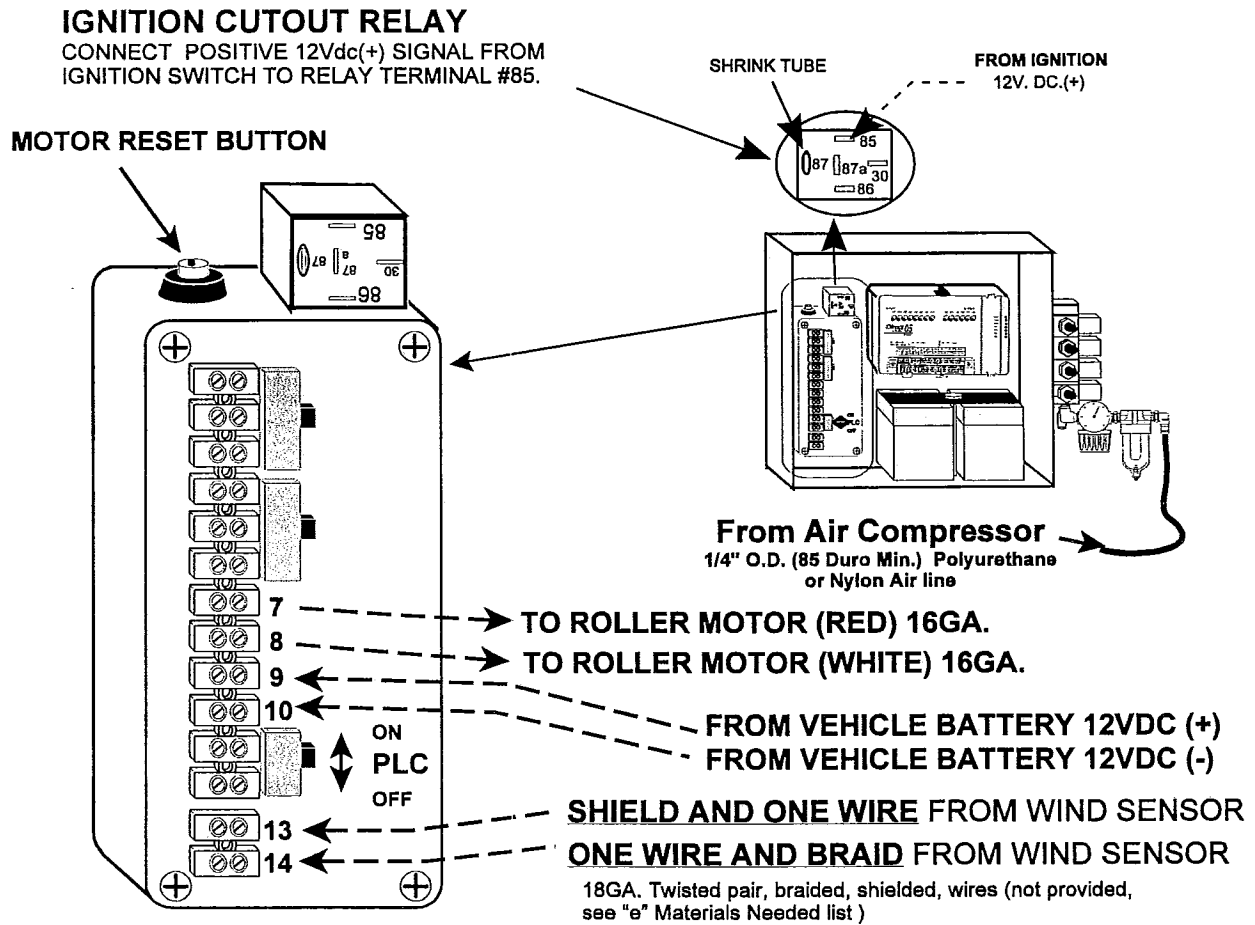
# Exhibit B

## Electrical Connections Overview 6 VALVE, NO AMEMOMETER (12 VDC INPUT / 24 VDC OUTPUT)



# EXHIBIT C

## ELECTRICAL CONNECTIONS. 4 VALVE WITH ANEMOMETER



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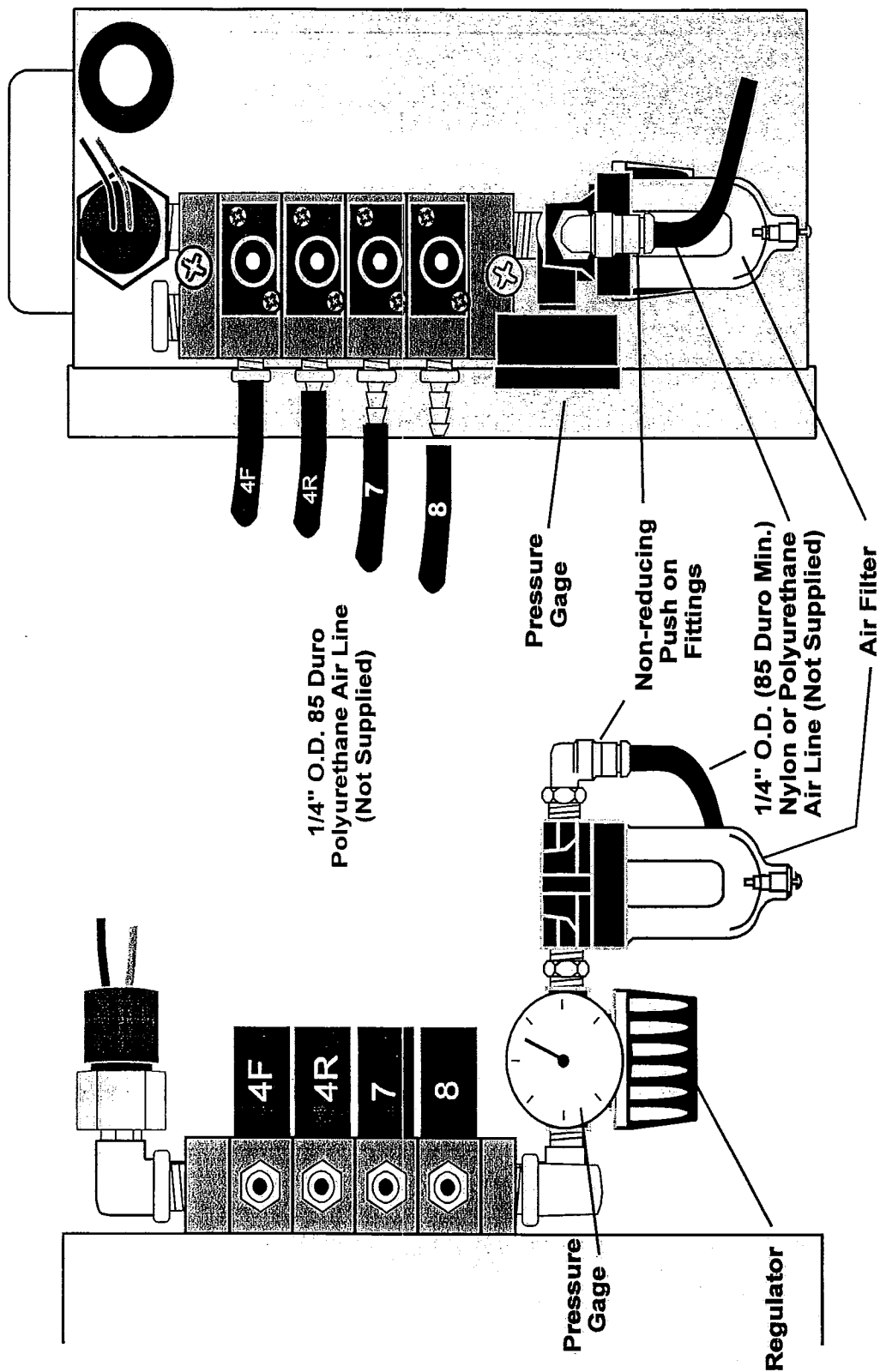


Exhibit D  
 4 Valve with anemometer  
 Air Connections