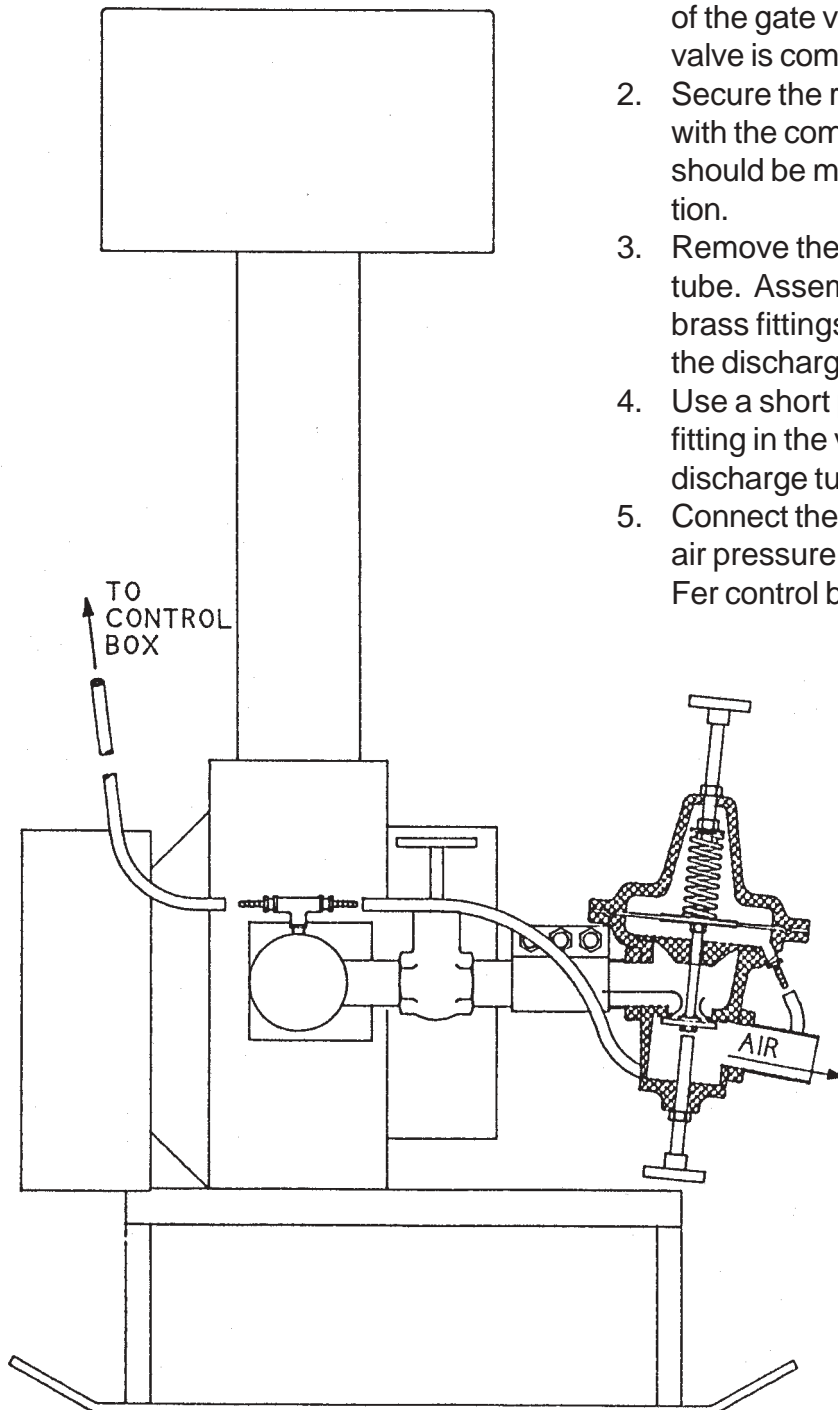


# AIR TRANSFER REGULATOR VALVE INSTALLATION & OPERATION INSTRUCTIONS

## INSTALLATION

1. Thread the 4" long pipe nipple into the outlet of the gate valve. Make sure that the gate valve is completely open.
2. Secure the regulator valve to the pipe nipple with the compression clamp. The valve should be mounted in a nearly vertical position.
3. Remove the brass fitting from the discharge tube. Assemble the pipe nipple and both brass fittings to the pipe tee and thread into the discharge tube.
4. Use a short piece of hose to connect the fitting in the valve with one of the fittings in the discharge tube.
5. Connect the other fitting in the valve with the air pressure limit switch located in the Transfer control box.



# AIR TRANSFER REGULATOR VALVE INSTALLATION & OPERATION INSTRUCTIONS

## OPERATING INSTRUCTIONS

1. Loosen the locking nut on the top threaded rod and turn the handle counterclockwise (loosen it) until no spring pressure can be felt on the valve diaphragm.
2. Loosen the locking nut on the bottom threaded rod and turn the handle clockwise until it stops. The valve is now completely closed.
3. Loosen the bottom threaded rod 2 complete turns and lock in place with the locking nut. This sets the maximum amount that the valve can open.
4. Start the air system and manually set the feed rate at the expected medium rate of discharge from the dryer.
5. Turn the top adjusting rod clockwise (tighten) until air starts to be discharged from the valve.
6. Continue to slowly tighten the top rod and increase the volume of discharged air until the grain is being discharged at a low enough rate to prevent grain damage. Adjust the valve a small amount and then wait for the system to respond to that change before making further adjustments.
7. If the line pressure cycles between too high and too low, then the amount that the valve can open should be decreased. Loosen the locking nut on the bottom adjusting rod and tighten the rod in small increments until the oscillation stops.
8. Check the valve operation by setting the feed rate from the dryer to the lowest expected discharge rate.
9. As the line pressure decreases due to the lower feed rate, the valve will open and discharge more air to slow the velocity of the grain.
10. If surging occurs then more air is required. Turn the top adjusting rod counterclockwise (loosen) to decrease the amount of air being discharged.
11. If the grain velocity is too fast, then turn the top adjusting rod clockwise, (tighten) to increase the volume of discharged air and slow the grain velocity.
12. Secure the position of the top and bottom rods with the locking nuts after the valve has been adjusted.
13. Use the manual gate valve to clean a plugged system to avoid having to readjust the compensating valve.

801A199

801A199  
AIR CONTROL REGULATOR VALVE (BOXED)  
CONSISTS OF:

1. 80-023 AIR CONTROL REGULATOR VALVE WITH MANUAL (BREUNEMATIC) 1 REQ'D
2. MS0740-0180 HOSE- AIR & WATER. BLACK 1/4" ID. 200 PSI (18" LONG) 1 REQ'D
3. MS5317 COUPLER- COMPRESSION. 1.900 PIPE DIA. W/GASKET 1 REQ'D
4. 801N033 BAG- AIR CONTROL REG. VALVE 1 REQ'D
5. NO # 14" X 18" CARDBOARD PACKING 2 REQ'D
6. NO # PACKING MATERIAL 2 REQ'D
7. 602M011 BOX- SHIPPING 19" X 15" X 10-1/2"H 1 REQ'D
8. MS0300 STRETCH WRAP. 12" (FOR OUTSIDE OF BOX) 6 REQ'D
9. 4FH0559 FIT- NIPPLE. PIPE 1-1/2 X 4. (STEEL) 1 REQ'D

801N033  
AIR CONTROL REGULATOR VALVE BAG  
CONSISTS OF:

1. 4FH0510 FIT- NIPPLE. PIPE 1/4 X CLOSE. (STEEL) 1 REQ'D
2. 4FH0581 FIT- TEE. PIPE 1/4 FPT. (BLACK) 1 REQ'D
3. 4FH0971 FIT- HOSE BARB 1/4 X 1/4 MPT. (BRASS) 1 REQ'D
4. 801A199-MANUA MANUAL- AIR CONTROL REG. OPERATING INSTRUCTION SHEET 1 REQ'D
5. 105M0005 BAG- 5" X 7" X.004 PLASTIC 1 REQ'D

AIR CONTROL  
REGULATOR VALVE  
(BOXED)

AG. DIVISION OF  
**DMG**  
DAVID MFG CO  
MASON CITY, IA

REF	EXPLANATION	ECO NO	BY	DATE
G	ADDED 4FH0559	801-1085	CDF	3-16-95

DR BY	DATE	801A199
CDF	11-30-93	