

# OPERATOR'S MANUAL

OPERATION, INSTALLATION & MAINTENANCE

# 23644-400

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(REV. B)



## 23644-400 ARO STOP®

PUMP SAVER CONTROL VALVE - 1/2" PIPE SIZE



**READ THIS MANUAL CAREFULLY BEFORE INSTALLING,  
OPERATING OR SERVICING THIS EQUIPMENT.**

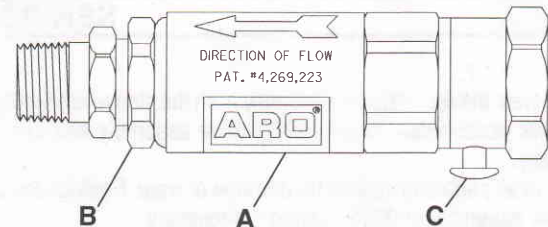
It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

### GENERAL DESCRIPTION

This device is to terminate operation of a 4" to 7" reciprocating type air motor in the event of a ruptured outlet hose or the pump runs out of media. **For compressed air use only.**

**Operating Pressure Range** . . . 20 - 175 p.s.i. (1.4 - 12 bar)

**Temperature Range** . . . . . 0° to 180°F (-18° to 82°C)

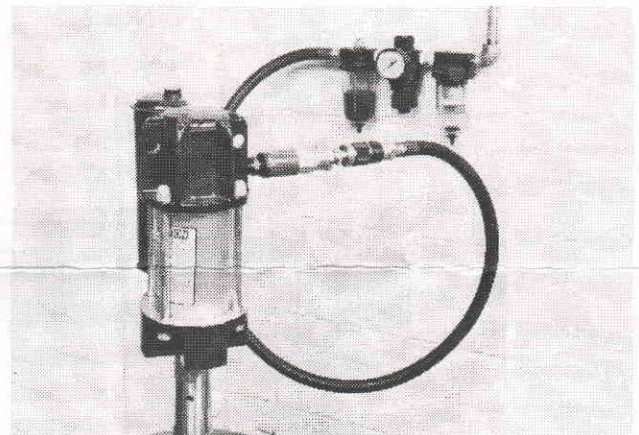


### OPERATION

The ARO-STOP control valve senses an increased volume of air to the pump, beyond the preadjusted setting, and shuts off the air supply to the pump. The "runaway" condition may be caused by any of the following: 1.) depleted pumping material, 2.) a ruptured line on the outlet of the pump, 3.) excessive cavitation in the material supply.

### INSTALLATION

The ARO-STOP valve should be installed in a filtered and regulated air line as close to the inlet of the pump as possible. Equipment other than a lubricator should not be installed between the ARO-STOP valve and the inlet of the pump. Upstream plumbing from the ARO-STOP valve should be 1/2" minimum. A swivel or 1/2" connector & coupler should be installed before the ARO-STOP valve to facilitate easy adjustment. Use one ARO-STOP valve for each pump. See typical installation photo.



### ADJUSTMENT

THE ARO-STOP VALVE MUST BE PROPERLY ADJUSTED AND TESTED. THE INSTALLATION SHOULD BE TESTED REGULARLY AND ADJUSTED WHEN A CHANGE IN OPERATING CONDITIONS OCCURS.

1. Turn "A" sleeve clockwise to the maximum inward position. See arrow on sleeve of ARO-STOP valve.
2. Supply ARO-STOP valve with desired inlet operating pressure.
3. Depress "C" reset button on the ARO-STOP valve to start the pump. Open the pump outlet to the desired flow condition.
4. Turn "A" sleeve counterclockwise slowly until the pump stops.
5. Turn "A" sleeve clockwise one turn and tighten "B" locking nut against body.
6. To restart pump, depress the "C" reset button and hold it in for approx. 3 seconds or until pump primes. If the pump does not reset

and run, repeat step (5). If pump operates, continue on the Test Section.

#### TEST:

7. To test installation, with the pump operating, remove the pump (or siphon tube) from the material supply. If the pump shuts off, the unit is set properly.
8. If the pump continues to turn, resubmerge the pump (or siphon tube) in the material supply. Loosen the "B" locking nut and turn the "A" sleeve counterclockwise approx. one half turn, tighten "B" locking nut, and repeat step (7).

#### RESTART:

9. To restart: Remedy the cause of the shutdown. If the air supply is shut-off, turn the air back on.
10. Depress the "C" reset button and hold it in approx. 3 seconds.

ARO-STOP® is a registered trademark of The Aro Corporation.



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## INGERSOLL-RAND FLUID PRODUCTS

## TROUBLE SHOOTING

### ARO-STOP valve does not close when it should.

- Improper adjustment. Readjust and test.
- Change has occurred in operating conditions (i.e. decrease in supply pressure). Readjust and test.

### ARO-STOP valve closes for no apparent reason.

- Change has occurred in operating conditions (i.e. increase in supply pressure). Readjust and test.
- Material supply has been interrupted. Insure constant material supply.

- Air supply turned on too quickly. Depress reset button.

### Pump continues to cycle after ARO-STOP valve closes.

- Foreign matter on sealing surface of ARO-STOP valve. Disassemble and clean valve as described in Service Section.

**NOTE: Very slow cycling may occur even after ARO-STOP valve closes. This is normal.**

### ARO-STOP valve does not start when reset button is depressed.

- Improper adjustment. Readjust and test.

**⚠ WARNING** Always disconnect and relieve air pressure from the ARO-STOP valve before removing it from the system for servicing.

## SERVICE INSTRUCTIONS

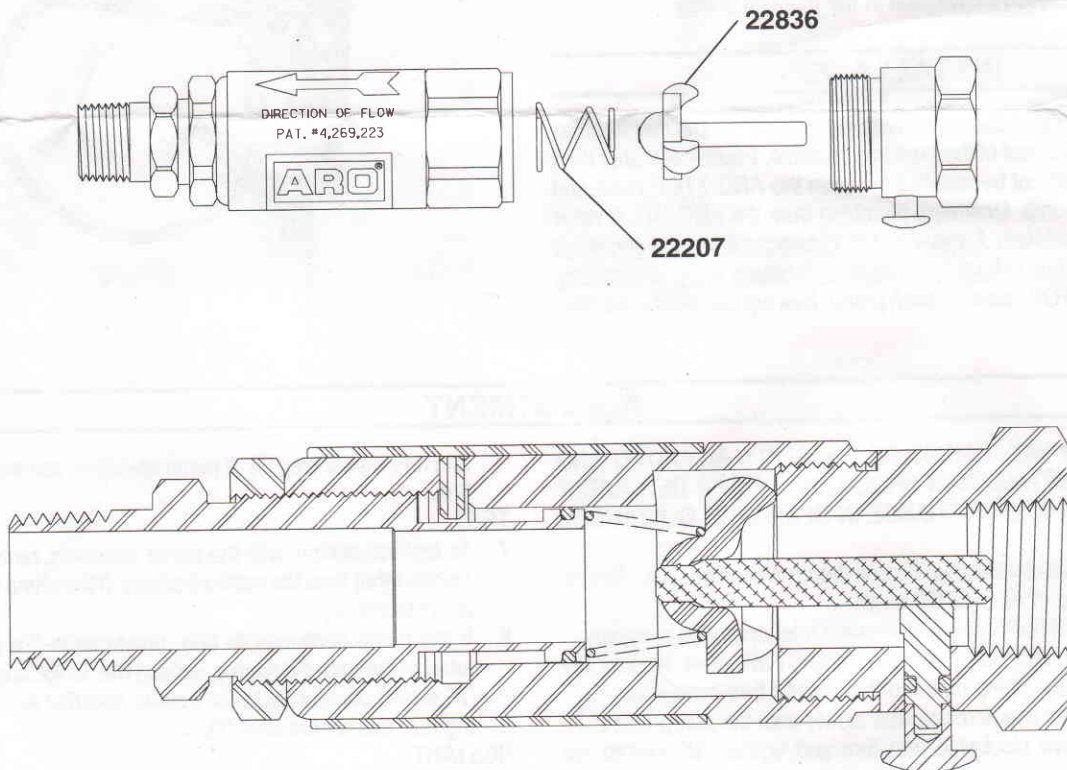
### DISASSEMBLY:

1. Unscrew the rear adapter assembly from the sleeve assembly. This allows accessibility to the 22836 valve assembly and the 22207 spring.
2. Clean all parts and inspect for damage or wear. Replace the 22836 valve assembly or 22207 spring if necessary.

### ASSEMBLY:

1. Reassemble the 22836 valve assembly and the 22207 spring as shown in the view.
2. Apply thread locking compound to the threads of the rear adapter assembly and tighten to the sleeve assembly using 30 - 40 ft lb (40.7 - 54.2 Nm) torque.

**NOTE: Parts other than 22836 valve assembly and 22207 spring, are not accessible for service and should not be disassembled.**







### INSTRUCTIONS

1. TURN SLEEVE TO  
MAX INWARD POSI-  
TION.
2. START PUMP.
3. TURN SLEEVE SLOW-  
LY UNTIL PUMP  
STOPS.
4. TURN SLEEVE ONE

