# **ECONOMATIC DRAIN INSTRUCTION SHEET** SERIES 5700S

Read carefully before attempting to install, operate or maintain ECONOMATIC drain. Protect yourself and others by observing all safety information. Failure to do so could result in personal injury and/or property damage. Keep instruction sheet for future reference.

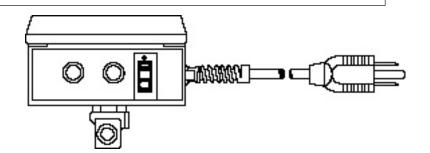
## **SPECIFICATIONS**

Adjustable Cycle Time.....1-60 Minutes Adjustable Drain Time.....1-30 Seconds Max. Working Pressure . . . . . . 200 PSIG Max. Fluid Temperature . . . . . 165(F Ambient Temperature......35° F to 165° F

Enclosure.....NEMA 1

Seals ......Buna-N

Power Plug ......6 ft. Heavy-Duty Grounded



WARNING: Do not apply electrical power to the drain unless the unit is fully assembled. Failure to do so could result in personal injury or damage to unit.

## **INSTALLATION**

Take care to insure that pipe dope, pipe tape, scale or metal chips are trapped before the solenoid valve seat. Install the Y-strainer (S202 or S204) upstream of the ECONOMATIC drain to trap large debris and sludge, and to extend the life of the ECONOMATIC drain. The ECONOMATIC drain must be installed with the direction of flow (as indicated on the solenoid valve) to atmosphere. The solenoid piping should be pitched downhill. In cases where the normal installation of the ECONOMATIC drain is not possible, it may be piped to a higher discharge point provided that: (a) a trap test port is provided to check for plugging, and (b) the blow down cycle is adjusted to account for increased volume.

# **OPERATION**

The ECONOMATIC drain may be operated by simply connecting the provided electrical power and adjusting the desired time cycle of 1 to 60 minutes and the open drain cycle of 1 to 30 seconds. Operation of the drain should only take place when using compressed air. When the compressor is shut down, the ECONOMATIC drain should also be disconnected. Failure to do so could lead to solenoid burn out or premature life failure. The ECONOMATIC drain is equipped with a manual override switch to check drain performance or excessive water accumulation, do not use as a blow down for the compressed air system. The switch indicator light will be on when the solenoid valve is in the open position during automatic or manual operation.

#### **MAINTENANCE**

Your Arrow ECONOMATIC drain will give you years of service if the drain is properly maintained on a regular basis. It is recommended that the maintenance be done monthly. Operating conditions will have to be taken into consideration and the schedule adjusted accordingly.

- 1. Depressurize the pneumatic system.
- 2. Disconnect the electrical supply to the ECONOMATIC drain.
- such as Lestoil or Fantastic and 3. Remove the drain and flush the solenoid inlet and outlet ports with a safe oil cutting detergent water. Make sure water is kept away from all wiring and the ECONOMATIC drain box to prevent damage to the electrical components.
- 4. Replace the drain in the system and reconnect the power.

# DRAII

## SOLENOID DISASSEMBLY

If the drain is bleeding air, it may be necessary to disassemble the drain solenoid completely. Remove it from the system to clear the seat of foreign materials.

#### TOOLS NEEDED:

- (1) Small slot screwdriver
- (2) Adjustable crescent wrench
- (3) #2 Phillips screwdriver (5704S only)
- 1. Be sure the electrical power is disconnected.
- 2. Remove the cover of the ARROW ECONOMATIC drain assembly.
- 3. Remove the nut which retains the solenoid to the coil and remove the solenoid valve. Observe the direction of flow indicated on the solenoid so that it can be reassembled in the same direction.
- Remove the stem assembly.
  5702S Carefully unthread the stem assembly of the solenoid (CCW).
  5704S Remove the 4 Phillips head screws which retain the solenoid actuator.

DO NOT STRIKE OR TWIST THE STEM WITH ANY OBJECT. DOING SO MAY DAMAGE THE ASSEMBLY.

- 5. Inspect the valve seat and remove any foreign material.
- Inspect the diaphragm or plunger assembly and remove any foreign material. If it is necessary to use a solvent, it may be used only on metal surfaces.
- 7. Reassemble the solenoid and valve reversing the above procedures. On the 5704, be sure the diaphragm and spring are aligned correctly. Be sure that the actuator cover is carefully aligned over the pin and the additional outer cast portion is positioned on the outer side of the solenoid.
- 8. Reinstall the solenoid into the housing. Be sure the inlet and outlet are positioned correctly for the flow.

ID#	KIT DESCRIPTION	KIT PART NO.	CONTENTS
		5702S 5704S	
1, 8, 9, 10	Solenoid Valve Kit	VK5702	1/4 Solenoid Valve
			w/coil, Flag Disconnects,
			Female Disconnects
		VK5704	1/2 Solenoid Valve w/coil,
			Flag Disconnects, Female
			Disconnects
8, 9, 10	Solenoid Coil Kit	CK5700	Solenoid Valve Coil, Flag
			Disconnects, Female
		Disconnects	
5, 6, 7, 9	Timer Board Kit	TK5700	Timer Board, Knobs,
		Screws, Female	
			Disconnects
4 & 9	Switch Kit	SK5700	Lighted Switch, Female
			Disconnects
2, 3, 8, 9	Power Cord Kit	PK5700	Power Cord, Cable
			Restraint, Flag Disconnects,
11	Y-Strainer		Female Disconnects
		S202	1/4"Y-Strainer
		S204	1/2"Y-Strainer
N/S	Y-Strainer Screen	SSK202	Replacement Screen for
			S202/S204 Y-Strainers

