

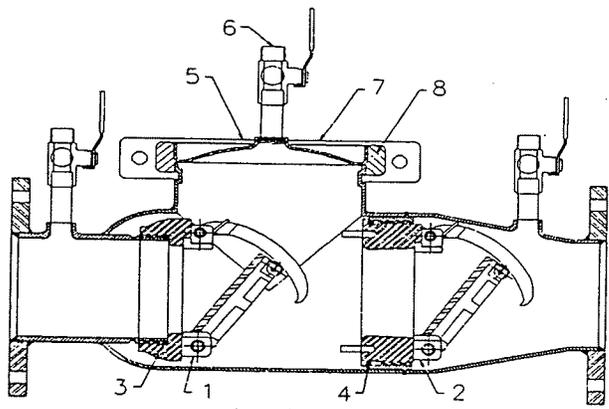
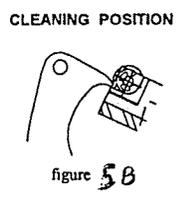
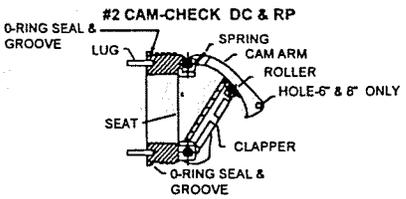
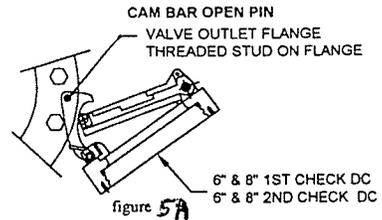
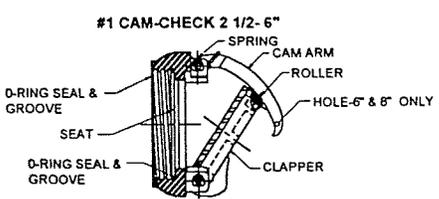
**Ames Model 2000 SS and 2000 SE Double Check  
and 3000 SS & 3000 SE Double Detector Check Backflow Preventer  
General Installation, Maintenance, and Parts Information 2 1/2" - 8"**

**MAINTENANCE INSTRUCTIONS**

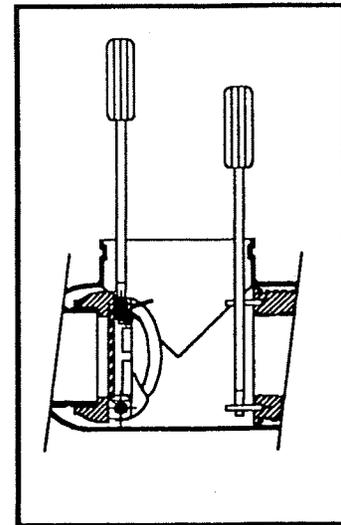
**NOTE:** Ames assemblies require minimum maintenance. All assemblies must be retested once maintenance has been performed. Before servicing be certain shut off valves are closed.

**REMOVING CAM-CHECKS**

1. Shut down water system and lock out system if possible. Slowly open all ball valves to relieve air and water pressure. Loosen bolts on groove coupler and remove groove coupler and cover plate from valve body.
2. Remove #1 Cam-Check assembly by using your hands to unscrew (turn counter-clockwise) Cam-Check and remove through top access port. **Do not use Cam Arm as a handle to unscrew Cam-Check.** If Cam-Check cannot be loosened by hand, insert a long screwdriver between valve body and Cam-Check (see figure 2). Gently apply pressure against the Cam-Check until loosened. Finish unscrewing by hand. Unscrew #2 Cam-Check (turn counter clockwise) by placing a long screwdriver across lugs and applying pressure to loosen #2 Cam-Check. Finish unscrewing by hand.
3. To clean #1 Cam-Check (except 2 1/2" - 4" DC Check), locate the Cam Arm opening stud on the outlet flange of the valve assembly. Slide the Cam Arm over the stud with the check threads facing downward (figure 5A). Tighten 1/4" nut on stud to secure cam bar. Slowly pull the assembly outward to open check allowing exposure of the seat and clapper contact area for cleaning. To clean #2 Cam-Check, lift Cam Arm and hold in open position. Raise clapper so that the end of the Cam Arm rests between roller and clapper (figure 5B). Thoroughly clean the seat area and clapper sealing surfaces of both Cam-Checks. Rinse Cam-Checks and O-rings thoroughly. Inspect seats, clapper sealing surfaces, Cam Arms, and O-rings for damage, nicks, and debris. If not damaged, gently close the clapper. If damaged, install a new Cam-Check assembly and/or O-ring.
4. Before reinstallation of Cam-Checks, thoroughly clean O-ring groove and lubricate O-ring with FDA approved lubricant. Insert and thread #2 Cam-Check first and then #1 Cam-Check. #2 Cam-Check should be tightened by inserting a long screwdriver between lugs to tighten firmly (see figure 2). Do not over tighten. Tighten #1 Cam-Check firmly by hand only. Replace cover plate, clean groove coupler gasket and groove. Replace groove coupler. Close ball valves. Re-pressurize and bleed air from all test cocks.



- 1 #1 Ck Assy
- 2 #2 Ck Assy
- 3 #1 Ck Assy O'Rg
- 4 #2 Ck Assy O'Rg
- 5 Cover
- 6 Test Cock
- 7 Groove Coupler
- 8 Groove Cplr Gskt

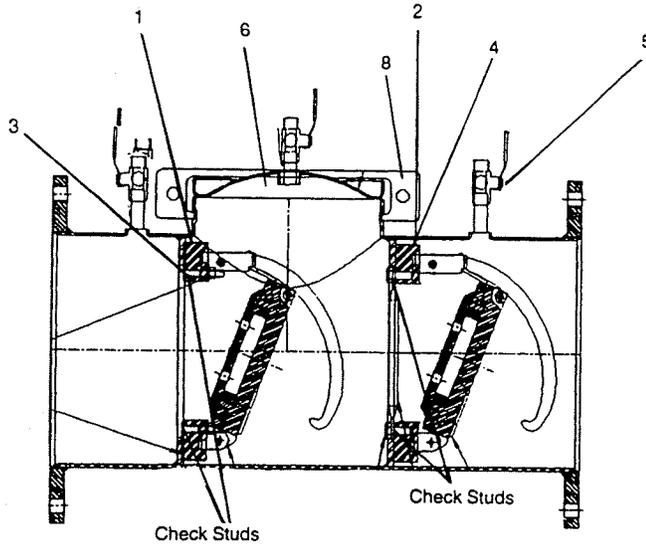


**FIGURE 2**

# Ames Model 2000SS and 3000SS Double Check & Double Detector Check Backflow Preventer

8" - 12"

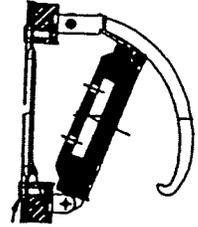
**FIGURE 1**



- 1 #1 Ck Assy
- 2 #2 Ck Assy
- 3 #1 Ck Assy O'Ring
- 4 #2 Ck Assy O'Ring
- 5 Test Cock
- 6 Cover
- 8 Groove Coupler

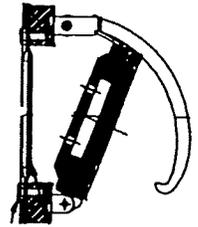
**FIGURE 2**

#1 CAM-CHECK

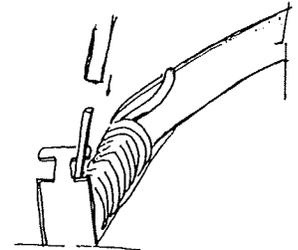


**FIGURE 3**

#2 CAM-CHECK DC



**FIGURE 4**



## MAINTENANCE INSTRUCTIONS

NOTE: Ames assemblies require minimum maintenance. All assemblies must be retested once maintenance has been performed. **Before servicing be certain shut off valves are closed.**

### REMOVING CAM-CHECKS

1. Shut down water system and lock out system if possible. Slowly open all ball valves to relieve air and water pressure. Loosen bolts on groove coupler and remove groove couple and cover plate from valve body.

#### 2. #1 CHECK (Fig. 2)

Using a 9/16" socket wrench or nut driver, remove the four nuts from the #1 check studs (See fig.1). Using two hands, place them at 12 o'clock and 6 o'clock, wiggle the check assembly free. Remove through access port with back of clapper first with spring end down. Pull check assembly out of main body.

#### #2 CHECK (Fig. 3)

After loosening bolts with a 9/16" socket, remove bolts completely. Using the centerline access bar, spin the cam assembly from the 9 o'clock position to the 12 o'clock position, then (without letting go of the access bar) push the cam assembly slightly downstream so that the clapper is now parallel to the valve body. Now bring the cam assembly through the check retaining wall. Leave the cam assembly clapper parallel to the valve body. Pull the cam assembly through the access port.

3. Using a 3/8" nut driver or a piece of small diameter pipe, place on the cam arm torsion spring and move away from and around the torsion spring retaining bracket so as to relieve the torsion spring tension. (See Figure 4.) This will allow the cam arm to move freely, enabling you to inspect the clapper face and cam seat. Thoroughly clean the seat area and clapper sealing surfaces, cam arms, and o-rings for damage, nicks, and debris. If damaged, install a new check assembly o'ring, or washer, shutoff disk.

4. Before reinstallation of check assembly, thoroughly clean O-ring groove and lubricate O-ring with F.D.A. approved lubricant.