

## **HERSEY 6CM / 2 REPAIR PROCEDURES**

### **II. MAIN AND CHECK VALVES**

#### **A. MAIN OR CHECK VALVE ASSEMBLIES, DISCS, SEATS, & O-RINGS. 2 1/2", 3", 4", & 6" MODEL 6C-M & HERSEY NO. 2**

1. Close inlet and outlet shutoff valves.
2. Open testcocks 2, 3, & 4 to release pressure.
3. Remove main valve cover bolts and nuts (the 2 1/2" bronze 6C-M has hex cap screws only).
4. Remove the main valve cover and gasket.
5. Insert the proper eyebolts into the threaded holes on the top of the spring retainer, and lift the entire main valve assembly out of the body.
6. a) Remove the eye bolts and place the assembly so it rests on a flat surface with its guide fingers pointing up, to permit cleaning of the disc.  
b) Remove the hex cap screw and guide to release the main valve disc, if it is to be replaced.
7. Replace the guide and tighten the hex cap screw. Replace the eyebolts in the spring retainer. Place the assembly aside.
8. Remove the main valve seat, unscrewing it counter-clockwise with the 6C-M seat removal tool (Be careful not to damage the seat face when seating the tool).
9. Replace the seat and the seat o-ring, if required. (Lubricate o-ring to hold it in place).
10. Tighten the seat (again being careful not to damage the seat face), until resistance is felt.
11. Carefully lower the main valve assembly into the body (being careful the the guide fingers do not damage the seat face).
12. Remove the eyebolts from the spring retainer; replace the cover gasket and cover.
13. Tighten the cover bolts and nuts and repeat steps 3 thru 13 for the check valve assembly.
14. Close testcocks.
15. Open inlet and outlet valves.

#### **B. MAIN OR CHECK VALVE SPRING, SPRING RETAINER AND DISC HOLDER 2 1/2", 3", 4" & 6" MODEL 6C-M & HERSEY NO. 2**

NOTE: This operation should not be performed unless replacement of one of the above parts is required. The spring exerts a strong force against the spring retainer and caution is advised when this operation is done.

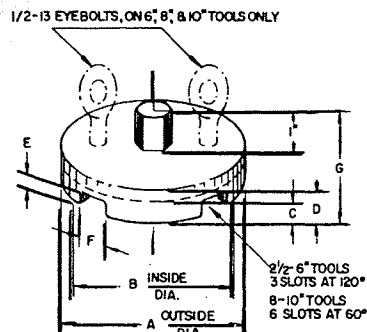
1. Close inlet and outlet shutoff valves.
2. Open testcock 2, 3, & 4 to release pressure.
3. Remove main valve cover bolts and nuts (The 2 1/2" bronze 6C-M has hex cap screws only).
4. Remove the main valve cover and gasket. Leave the check valve assembly in the body.
5. a) Attach the two threaded rods of the spring removal tool to the main valve flange with the nuts and washers provided.  
NOTE: The 2 1/2" bronze 6C-M has threaded holes on the main valve flange. The rods must be screwed in the flange of this type of unit.  
b) Fully tighten the nuts on the top and bottom of the main valve flange.
6. Slide the spring removal plate down on the rods to rest on the nuts, and securely tighten the nuts and washers on the top of the plate.
7. Remove the spring retainer nut.
8. Gradually loosen the top rod nuts to allow the spring to relax. Caution! *Check rods to make sure they are not turning. Retighten flange nuts if necessary.*
9. When the spring is fully relaxed, remove the plate. The spring, spring retainer or the disc holder can now be replaced.
10. To reassemble, reverse steps 1 thru 9.
11. Repeat procedure for check valve.

IV MAIN AND CHECK VALVE ASSEMBLIES AND SEATS 8" & 10" MODEL 6CM & HERSEY NO. 2

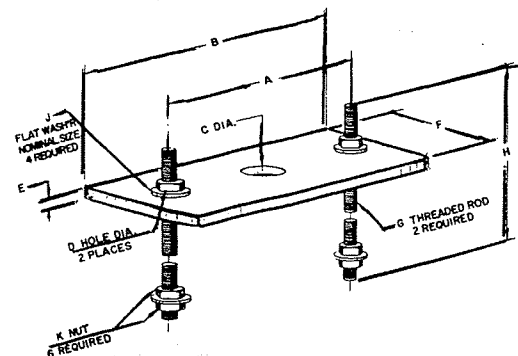
1. Close inlet and outlet shutoff valves.
2. Open testcocks 2, 3 and 4 to relieve pressure.
3. Remove valve cover bolts and nuts.
4. Remove valve cover and gasket, using eyebolt provided.
5. Insert eyebolts into the threaded holes on the top of the spring retainer, and lift the entire valve assembly out of the body (at this point, the valve seat may be replaced if necessary).
6. a) Remove the eyebolts and place the assembly so that it rests on a flat surface with its guide fingers pointing up, to permit cleaning of the disc.  
b) Remove the hex cap screw and guide. The disc can now be replaced, if necessary.
7. Reassemble the guide to the disc holder.
8. To remove and replace spring, follow procedure below:
  - a) Place valve assembly back in body of device.
  - b) Attach the two threaded rods of the spring removal tool to the valve flange with the nuts and washers provided, and tighten the nuts fully.

- c) Slide the spring removal plate down on the rods to rest on the hex nuts, and tighten the top nuts and washers against the plate.
- d) Remove the spring retainer nut from the valve assembly.
- e) Gradually loosen top rod nuts to allow spring to relax (use extreme caution until the spring is fully relaxed).
- f) Remove the tool plate, spring retainer and spring.
- g) Place new spring on disc holder. Place spring retainer on spring.
- h) Reassemble tool plate, nuts and washers to threaded rods.
- i) Tighten nuts until spring is compressed sufficiently to permit replacement of spring retainer nut.
- j) Loosen tool plate nuts and remove tool.
- k) Replace gasket and cover; close testcocks 2, 3, 4; and open shutoff valves.

MODEL 6CM MAIN & CHECK VALVE SEAT REMOVAL TOOLS



HERSEY PART NO.	SIZE DEVICE	A IN.	B IN.	C IN.	D IN.	E IN.	F IN.	G IN.
63553	2 1/2"	3 11/16	3 3/8	1 1/8	1 5/8	1/4	9/16	1 5/16
63353	3"	4 5/16	4	1 1/8	1 5/8	5/16	1 3/16	1 5/8
63453	4"	5 3/8	5	1 5/16	1 1/8	5/8	1 1/8	2 1/16
63653	6"	7 1/8	7 7/16	1 5/8	1 3/8	3/4	1 1/8	2 3/8
63853	8"	10 3/4	9 5/8	1 1/2	1 3/8	7/8	1 1/8	2 7/8
63953	10"	12 1/2	11 1/2	1 5/8	1 3/8	1"	1 3/8	2 7/8



HERSEY PART NO.	SIZE DEVICE	A IN.	B IN.	C IN.	D IN.	E IN.	F IN.	G IN.	H IN.	J IN.	K IN.
63560	2 1/2"	6	7 1/2	1 1/2	1 1/2	1/4	4	7/16 - 14	12 1/2	7/16	7/16 - 14
63360	3"	7	8 1/2	1 3/4	1 3/4	1/4	4	1/2 - 13	17	1/2	1/2 - 13
63460	4"	8 1/4	9 3/4	2	2	1/2	4	1/2 - 13	17	1/2	1/2 - 13
63660	6"	11	13	2	2	1/2	6	1/2 - 13	17	1/2	1/2 - 13
63860	8"	14 5/8	17	2	2	1/2	6	3/4 - 10	30	3/4	3/4 - 10
63960	10"	18	21	2 1/2	2 1/2	1/2	6	3/4 - 10	30	3/4	3/4 - 10

SPRING REMOVAL TOOLS