

# Locking Handle Kit for AN, SP Series 5 & 6 and SI Series 6, 1/2" thru 3", SI, DI, CS Series 8 & 9 and DP, SD Series 5, 1/2" thru 4", MP / MI Series 5, 1/2" thru 2" Installation, Operation, and Maintenance Instructions



## WARNING:

For your safety and protection, it is important that the following precautions be taken prior to working on the valve.

1. Depressurize and drain the line.
2. Cycle the valve to relieve any pressure trapped in the valve.
3. Disconnect any air and electrical connections to the valve assembly.
4. Know what the media is in the line and wear appropriate protective clothing and equipment. Obtain appropriate MSDS sheets.
5. To ensure safe product selection and operation, it is the responsibility of the process system designer and end user to determine the appropriate compatible materials of construction and adequate product ratings for the process system. Process system designer, installer, and end user are responsible for proper installation, operation, and maintenance.
6. Fasteners are designed to prevent loosening under normal operating conditions. Prior to commissioning at final point of operation, all valves should be inspected to ensure fasteners are tightened to manufacturer's recommendations and no damage has occurred during transit or handling.
7. When disposing of Teflon parts, do not incinerate or subject to open flames.

## PARTS LIST

ITEM	DESCRIPTION
1	Jam Nut
2	Flat Washer (1/2 and 3/4" Only)
3	Handle Lock Bar
4	Handle Lock Spacer
5	Handle Lock Spring
6	Handle (Not included with kit)
7	Stop Pin

## 1. General

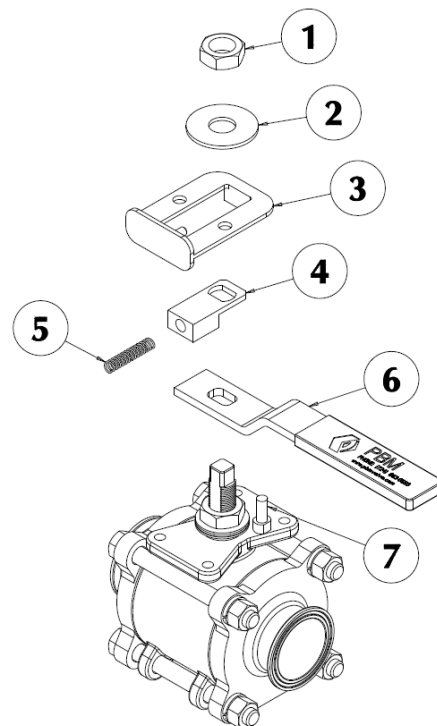
This Installation, Operation, and Maintenance manual is for the safe use of PBM locking handle kits. Please read the instructions carefully and save them for future reference.

## 2. Installation

Fasteners are designed to prevent loosening under normal operating conditions. Prior to commissioning at final point of operation, all valves should be inspected to ensure the fasteners are tightened to manufacturer recommendations and no damage has occurred during transit or handling.

## 3. Operation

For manual valves, operation consists of pushing in the handle lock bar and turning the handle 1/4 turn to close or open the valve until the handle lock bar locks back into position. Good operating procedure requires periodic inspection of the valves and replacement of parts as required. Always use PBM factory authorized replacement parts.



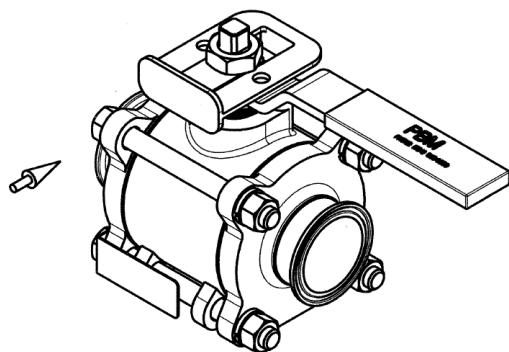
## Assembly of Locking Handle Kit to a manual valve:

1. The valves noted above can be converted to have a locking handle in the field.
2. Loosen and remove the upper jam nut that secures the handle to the stem. Discard the jam nut.
3. Assemble Handle Lock Spring over pin on the handle lock bar.

4. Slide Handle Lock Spacer into slot on Handle Lock Bar while guiding the Handle Lock Spring into the hole. The thick side of the Handle Lock Bar should face down.
5. As the Handle Lock Spacer top surface becomes flush with the top surface of the handle lock bar, release the handle lock bar. The spring force will hold it in the slot in the Handle Lock Bar.
6. Place the sub-assembly over the valve stem, with the spring side on the opposite side of the stop pin. It may be necessary to compress the spring lightly for proper installation of the sub-assembly.
7. For 1/2" and 3/4" valves, install the flat washer on top of the handle lock assembly.
8. Install the jam nut onto the stem and tighten nut.
9. Install the stop pin onto the as shown on the diagram in the appropriate position shown, if needed.
10. Visually inspect the valve for any alignment or hardware issues. If all looks OK, cycle the valve and check for freedom of operation.

### Assembly of Locking Handle Kit to an automated or bare stem valve:

1. The valves noted above can be converted to have a locking handle in the field. The lever handle will need to be purchased separately.
2. Disconnect all electrical line(s) and/or air line(s) that are supplying the actuator, switch, or solenoid. Remove the automation from the bracket assembly and set aside. Remove the bracket, insert, and hardware, if applicable, and set aside.
3. Loosen and remove the locking hex nut that secures the stem washers to the stem and discard.
4. Remove two of the stem washers and install one jam nut back onto the stem.
5. **For valves 2" and smaller**, tighten nut to completely compress spring washers, then loosen nut 1/2 turn. **For valves 2-1/2" and 3"**, tighten nut until a gap of about 0.05" (1.3 mm) exists between the adjacent spring washers.  
**For 4" valves**, tighten the nut until a gap of about 0.10" (2.5 mm) exists between the adjacent spring washers.
6. Place valve handle on valve stem in the orientation desired (handle to be purchased separately).
7. Assemble Handle Lock Spring over pin on the handle lock bar.
8. Slide Handle Lock Spacer into slot on Handle Lock Bar while guiding the Handle Lock Spring into the hole. The thick side of the Handle Lock Bar should face down.
9. As the Handle Lock Spacer top surface becomes flush with the top surface of the handle lock bar, release the handle lock bar. The spring force will hold it in the slot in the Handle Lock Bar.
10. Place the sub-assembly over the valve stem, with the spring side on the opposite side of the stop pin. It may be necessary to compress the spring lightly for proper installation of the sub-assembly.
11. For 1/2" and 3/4" valves, install the flat washer on top of the handle lock assembly.
12. Install the second jam nut onto the stem and tighten nut.
13. Install the stop pin onto the as shown on the diagram in the appropriate position shown.
14. Visually inspect the valve for any alignment or hardware issues. If all looks OK, cycle the valve and check for freedom of operation.



Push and hold handle lock bar in direction shown,  
Then turn handle CW or CCW to close or open valve.



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