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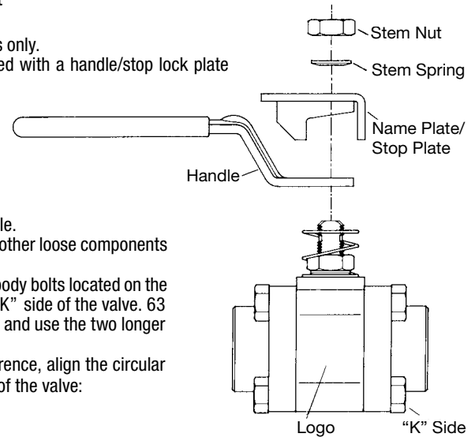
MS-INS-60-LOCK, RevE
October, 2023 CP

ASSEMBLY INSTRUCTIONS FOR 8-BOLT 60 SERIES LOCKING HANDLES

Kit Contents: Locking Bracket, Body Bolts (2)•, Stop Lock Plate*, Instruction Sheet

- • Longer bolts included in the SS-51K-S62L-BK and the SS-51K-S-51K-S62XL-BK kits only.
- * The S62 Series Valve has an integral handle/stop plate. This handle will be replaced with a handle/stop lock plate which is contained in the S62 Series Locking Handle Kit.



NOTE: Disassembly/reassembly of "F60T" FIRE Series Ball Valves *must* be done by Swagelok to maintain Factory Mutual (FM) approvals.

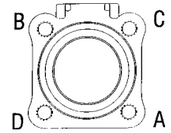
1. With the valve in the "open" position, position the valve with the logo facing you.

NOTE: Before proceeding to step #2, note the position of the handle, it must be reassembled to the valve in the same position. (For an oval handle, refer to Fig.'s #1a & 1b)

2. Using a wrench, remove the stem nut, stem spring, name plate/stop plate, and handle.
3. Discard the name plate/stop plate. (S62 Series: discard the handle/stop plate) Set all other loose components aside for later use.
4. Using the word "SWAGELOK" on the side of the valve as a reference, loosen the four body bolts located on the "K" side of the valve. Refer to drawing. Remove only the **top two** body bolts on the "K" side of the valve. 63 through 68 Series: set these bolts aside for later reuse, S62 Series: discard the bolts and use the two longer bolts supplied in the kit.
5. Refer to the drawings for the proper valve series. With the logo facing you as a reference, align the circular holes of the locking bracket with the body's bolt holes located on the following side of the valve:

VALVE SERIES	PROPER SIDE OF THE VALVE
63 through 68	Right side -or- "K" side
S62	Left side -or- "S" side

For proper positioning of the locking bracket, refer to drawing. The side of the bracket with the slight curve cut out of it enables it to fit around the valve's end connection.



6. While holding the locking bracket in place, slide the body bolts or the longer bolts (S62 Series assemblies) through and tighten until finger-tight. Lube body bolt threads with lube provided (no lube required for Carbon Steel).
7. With the valve in the fully "open" position, torque the body bolts in the alphabetical (crisscross) sequence shown in the diagram below. Torque to the value listed in the "1st" column of the chart below, according to the appropriate valve body & bolt material. Repeat the sequence for the 2nd, 3rd, 4th, and 5th torques.

"S60P" & "T60M" SERIES VALVES ("T60M" Series Valve Not Available in 62 Series)

VALVE SERIES	BODY MATERIAL	BOLT MATERIAL	TORQUE VALUES 1st	2nd	3rd	4th	5th
S62P	Stainless Steel	Stainless Steel	5	10	20	40	40
	Carbon Steel	Carbon Steel					
63	Stainless Steel	Stainless Steel	10	20	40	100	100
	Carbon Steel	Carbon Steel					
65	Stainless Steel	Stainless Steel	25	50	100	300	300
	Carbon Steel	Carbon Steel					
67	Stainless Steel	Stainless Steel	35	75	150	400	400
	Carbon Steel	Carbon Steel					
68	Stainless Steel	Stainless Steel	40	100	200	600	600
	Carbon Steel	Carbon Steel					

"B60T", "F60T", & "Z60T" SERIES VALVES (Not Available in 62 Series)

VALVE SERIES	BODY MATERIAL	BOLT MATERIAL	TORQUE VALUES 1st	2nd	3rd	4th	5th	6th	7th
63	Stainless Steel	Stainless Steel	10	20	40	100	150	150	—
	Carbon Steel	Carbon Steel	10	20	40	80	125	125	—
65	Stainless Steel	Stainless Steel	25	50	100	200	300	400	400
	Carbon Steel	Carbon Steel							
67	Stainless Steel	Stainless Steel	35	75	150	300	400	500	500
	Carbon Steel	Carbon Steel	35	75	150	300	375	450	450
68	Stainless Steel	Stainless Steel	40	100	200	500	600	700	700
	Carbon Steel	Carbon Steel							

8. Place and hold the handle on the valve stem in its original position. Refer to drawing
9. Position the stop lock plate on the stem and handle. Refer to appropriate drawing for correct positioning.

NOTE: S62P Series: Replace the old handle/stop plate with the new handle/stop lock plate included in the kit.

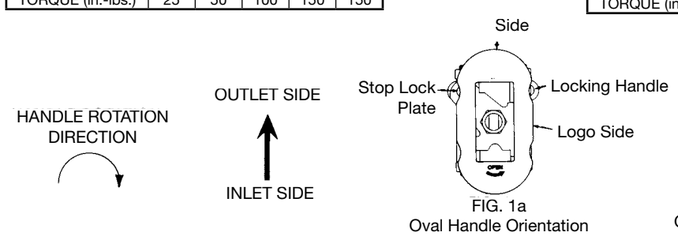
10. Place the stem spring (concave side up) onto the stem.
11. Assemble the stem nut onto the stem and snug.
12. While holding the handle, torque the stem nut to the proper torque listed below:

"S60P" & "T60M" SERIES VALVES ("T60M" Not Available in 62 Series)

VALVE SERIES	S62P	63	65	67	68
TORQUE (in.-lbs.)	25	50	100	150	150

"B60T" & "F60T", & "Z60T" SERIES VALVES (Not available in 62 Series Valves)

VALVE SERIES	63	65	67	68
TORQUE (in.-lbs.)	75	150	200	200



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ASSEMBLY INSTRUCTIONS FOR 2-WAY DESIGN, 4-BOLT 60 SERIES LOCKING HANDLES

Kit Contents: Locking Bracket, Body Bolts (2), Stop Lock Plate*, Instruction Sheet, Body Hex Nuts (2)

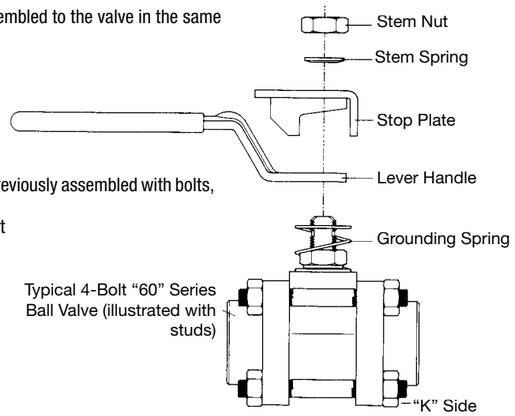
- * The "62" Series Valve has an integral handle/stop plate. This handle will be replaced with a handle/stop lock plate which is contained in the "62" Series Locking Handle Kit.

1. With the valve in the "open" position, position the valve with the logo facing you.

NOTE: Before proceeding to step #2, note the position of the handle, it must be reassembled to the valve in the same position. (Refer to Fig. #1a for an oval handle).

2. Using a wrench, remove the stem nut, stem spring, name plate/stop plate, and handle.
3. Discard the name plate/stop plate. (62 Series: discard the handle/stop plate) Set all other loose components aside for later use.
4. Loosen all four body bolts/studs. Remove only the **top two** body bolts.

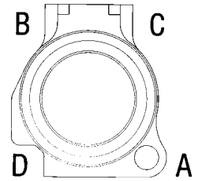
NOTE: If your assembly was previously assembled with studs, do not discard the studs and nuts, they will be used to reassemble this valve. If your assembly was previously assembled with bolts, discard them and use the longer bolts and nuts supplied in the kit.



Typical 4-Bolt "60" Series Ball Valve (illustrated with studs)

5. With the logo facing you as a reference, align the circular holes of the locking bracket with the body's bolt holes. For proper positioning of the locking bracket, refer to appropriate drawing. The side of the bracket with the slight curve cut out of it enables it to fit around the valve's end connection.
6. While holding the locking bracket in place, slide the body studs (if your valve had originally been assembled with studs) or the longer bolts through and attach the body hex nuts finger-tight. For torquing convenience, be sure the bolt heads are positioned on the same end of the valve body as the bolts which were not removed. Lube body bolt threads with lube provided (no lube required for Carbon Steel).
7. With the valve in the fully "open" position, torque the body studs/bolts in the alphabetical (crisscross) sequence shown in the diagram below. Torque to the value listed in the "1st" column of the chart below, according to the appropriate valve series/body material and fastener type/material. Repeat the sequence for the 2nd, 3rd, 4th, and 5th torques.

VALVE SERIES	FASTENER TYPE/MATERIAL	1st	2nd	3rd	4th	5th
62 Series Carbon -or- Stainless Steel	Stainless or Carbon Steel Bolts / Studs	5	10	20	40	40
62 Series Brass	Carbon Steel Bolts	5	10	20	30	30
63 Series Carbon -or- Stainless Steel	Stainless or Carbon Steel Bolts / Studs	10	20	40	100	100
63 Series Brass	Carbon Steel Bolts	10	20	40	60	60
65 Series Carbon -or- Stainless Steel	Stainless or Carbon Steel Bolts / Studs	25	50	100	300	300
65 Series Brass	Carbon Steel Bolts	25	50	100	180	180
67 Series Carbon -or- Stainless Steel	Carbon Steel Bolts	35	75	150	400	400
67 Series Stainless Steel	Stainless Steel Bolts / Studs	35	75	150	300	300
68 Series Carbon -or- Stainless Steel	Carbon Steel Bolts	40	100	200	600	600
68 Series Stainless Steel	Stainless Steel Bolts / Studs	40	100	200	500	500

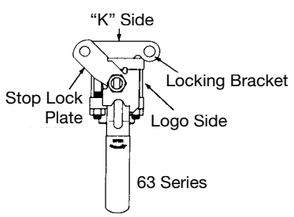


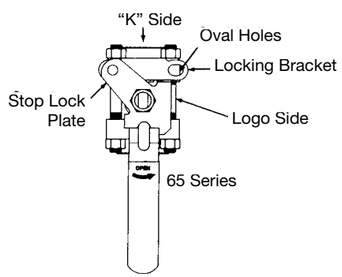
8. Place and hold the handle on the valve stem in its original position. Refer to drawing
9. Position the stop lock plate on the stem and handle. Refer to appropriate drawing for correct positioning.

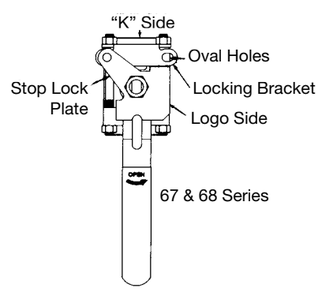
NOTE: 62 Series: Replace the old handle/stop plate with the new handle/stop lock plate included in the kit.

10. Place the stem spring (concave side up) onto the stem.
11. Assemble the stem nut onto the stem and snug.
12. While holding the handle, torque the stem nut to the proper torque listed to the right:

VALVE SERIES	62	63	65	67	68
TORQUE (in.-lbs.)	25	50	75	150	150







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ASSEMBLY INSTRUCTIONS FOR 3-WAY DESIGN, 4-BOLT 60X SERIES LOCKING HANDLES

Kit Contents: Locking Brackets (2), Body Bolts (2), Stop Lock Plate*, Instruction Sheet, Body Hex Nuts (2)

* The 62 Series Valve has an integral handle/stop plate. This handle will be replaced with a handle/stop lock plate which is contained in the "62" Series Locking Handle Kit.

1. With the valve in the "open" position, position the valve with the logo facing you.

NOTE: Before proceeding to step #2, note the position of the handle, it must be reassembled to the valve in the same position. (Refer to Fig. #2a for an oval handle).

2. Using a wrench, remove the stem nut, stem spring, name plate/stop plate, and handle.
3. Discard the name plate/stop plate. (62 Series: discard the handle/stop plate) Set all other loose components aside for later use.
4. Using the word "SWAGELOK" on the side of the valve as a reference, loosen all four body bolts/studs. Remove only the **top two** body bolts/studs.

NOTE: If your assembly was previously assembled with studs, do not discard the studs and nuts, they will be used to reassemble this valve. If your assembly was previously assembled with bolts, discard them and use the longer bolts and nuts supplied in the kit.

5. With the logo facing you, align the circular holes of the locking bracket with the body/bolt stud holes. For proper positioning of the brackets, refer to the proper drawing on the opposite page. The side of the bracket with the slight curve cut out of it enables it to fit around the valve's end connection.
6. While holding the locking bracket in place, slide the body studs (if your valve had originally been assembled with studs) or the longer bolts through. Position remaining locking bracket as shown in the appropriate drawing and attach the body hex nuts finger-tight. For torquing convenience, be sure the bolt heads are positioned on the same end of the valve body as the bolts which were not removed. Lube body bolt threads with lube provided (no lube required for Carbon Steel).
7. With the valve in the fully "open" position, torque the body studs/bolts in the alphabetical (crisscross) sequence shown in the diagram below. Torque to the value listed in the "1st" column of the chart below, according to the appropriate valve body material. Repeat the sequence for the 2nd, 3rd, 4th, and 5th torques.

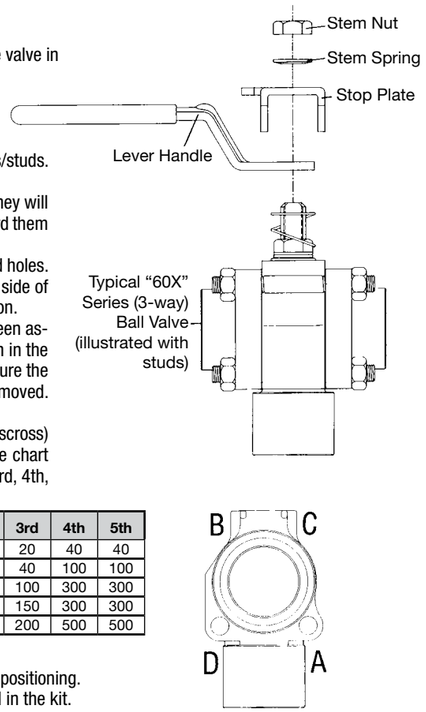
VALVE SERIES	FASTENER TYPE/MATERIAL	1st	2nd	3rd	4th	5th
62X Series Stainless Steel	Stainless Steel Bolts / Studs	5	10	20	40	40
63X Series Carbon -or- Stainless Steel	Stainless or Carbon Steel Bolts / Studs	10	20	40	100	100
65X Series Carbon -or- Stainless Steel	Stainless or Carbon Steel Bolts / Studs	25	50	100	300	300
67X Series Stainless Steel	Stainless Steel Bolts / Studs	35	75	150	300	300
68X Series Stainless Steel	Stainless Steel Bolts / Studs	40	100	200	500	500

8. Place and hold the handle on the valve stem in its original position. Refer to drawing
9. Position the stop lock plate on the stem and handle. Refer to appropriate drawing for correct positioning.

NOTE: "62" Series: Replace the old handle/stop plate with the new handle/stop lock plate included in the kit.

10. Place the stem spring (concave side up) onto the stem.
11. Assemble the stem nut onto the stem and snug.
12. While holding the handle, torque the stem nut to the proper torque listed below:

VALVE SERIES	62	63	65	67	68
TORQUE (in.-lbs.)	25	50	100	150	150



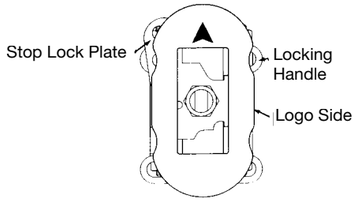


FIG. 2a
Oval Handle Orientation

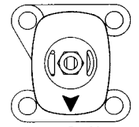


FIG. 2b
Oval Handle Orientation
62X Series