

Latch-Lock Handle Assembly Instructions for 4-Bolt, 60 Series Ball Valves

Kit Contents:

- Latch-lock handle
- Spacer (except 67 series)
- Stem spring
- Lock plate
- Instruction sheet
- Body bolts (fasteners) (2) for use in 4-bolt assemblies using bolts (not studs)

WARNING:
Before servicing any installed valve, you must

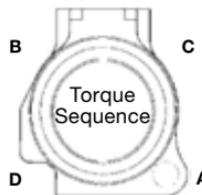
- depressurize system
- cycle valve

WARNING:
Residual material may be left in the valve and system.

NOTE: It is important to refer to the exploded view diagram while following the instructions.

1. Place and leave the valve **handle** in the OPEN position.
2. Remove and set aside the **stem nut** for later use.
3. Remove and discard the **stem spring, stop plate, and handle**. Leave **grounding spring** on valve.
4. Loosen all of the **fasteners**.
5. If valve is assembled with studs, remove the upper two **body nuts** on the **upstream side** of the valve and set aside for later use. If the valve is assembled with **bolts**, remove the two upper **bolts** and discard while saving **body nuts** for later use. Replace with two longer **bolts** supplied in kit.
6. Position the **lock plate** over the two upper **body studs/bolts**. Thread **body nuts** over studs/bolts.

7. Incrementally tighten all four **fasteners** until finger tight.
8. Tighten the **fasteners** in the alphabetical (crisscross) sequence shown in the Torque Sequence diagram. Tighten the **studs/bolts** to the value listed in the "1st" column of the chart below, based on the Valve Series, Body Material, and Fastener Material & Type (stud or bolt). Repeat the sequence for the 2nd, 3rd, 4th, and 5th torque.



Fastener Torque Chart

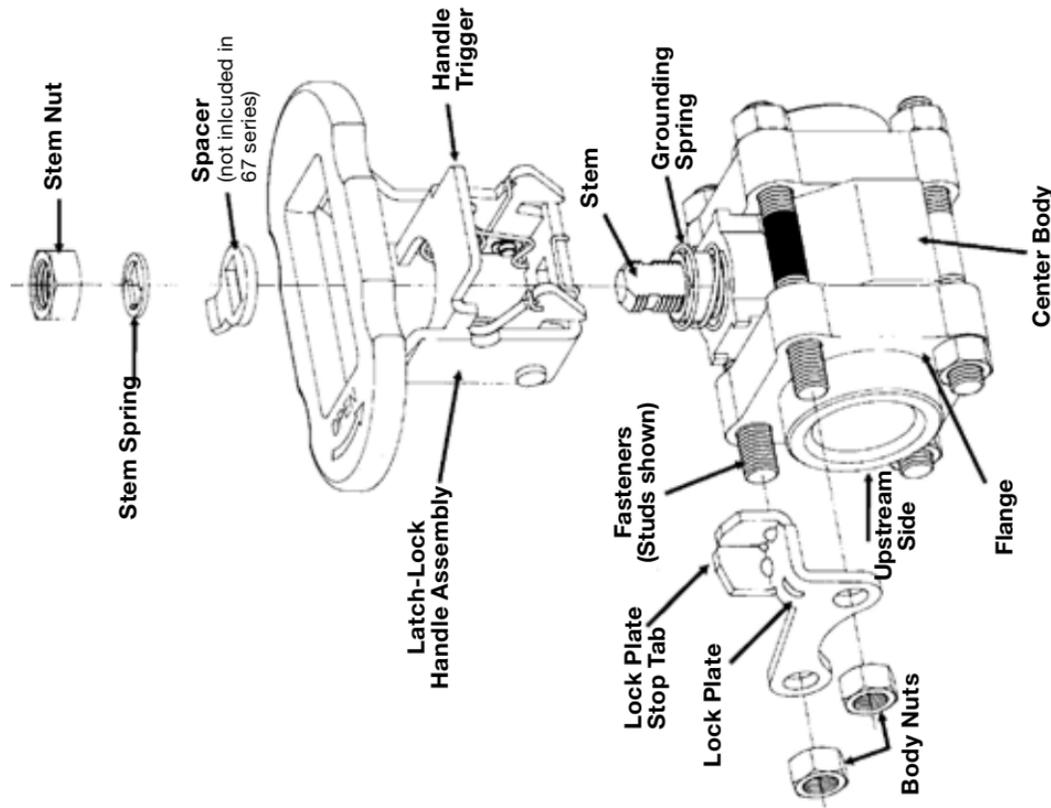
Valve Series	Body Material	Fastener Material & Type	Torque Value, in.-lb (N-m)				
			1st	2nd	3rd	4th	5th
63	Stainless Steel or Carbon Steel	Stainless Steel or Carbon Steel Studs/Bolts	10 (1.1)	20 (2.3)	40 (4.5)	100 (11.3)	100 (11.3)
	Brass	Carbon Steel Bolts	10 (1.1)	20 (2.3)	40 (4.5)	60 (6.8)	60 (6.8)
65	Stainless Steel or Carbon Steel	Stainless Steel or Carbon Steel Studs/Bolts	25 (2.8)	50 (5.7)	100 (11.3)	300 (33.9)	300 (33.9)
	Brass	Carbon Steel Bolts	25 (2.8)	50 (5.7)	100 (11.3)	180 (20.3)	180 (20.3)
67	Stainless Steel	Stainless Steel	35 (4.0)	75 (8.5)	150 (17.0)	300 (33.9)	300 (33.9)

Stem Nut Torque Chart

Valve Series	Torque in.-lb (N-m)
63	75 (8.5)
65	150 (17.0)
67	200 (22.6)

9. Install the **latch/lock handle** over the valve stem as shown. Be sure the handle trigger engages the **lock plate stop tab**.
10. Install the **spacer** (tab pointing up) and the **stem spring** (concave side up) as shown.
11. Thread the **stem nut** onto the stem until finger-tight.
12. While using the **handle** to retain the stem, tighten the **stem nut** to the proper torque listed in the chart below.

Assembly Diagram #2



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Printed in U.S.A.
June 2012, Rev C
MS-INS-60LLK

Latch-Lock Handle Assembly Instructions for 8-Bolt, 60 Series Ball Valves

Kit Contents:

- Latch-lock handle
- Spacer
- Stem spring
- Lock plate
- Instruction sheet
- Body bolts (fasteners) (2) for use in 4-bolt assemblies using bolts (not studs)

WARNING:
Before servicing any installed valve, you must

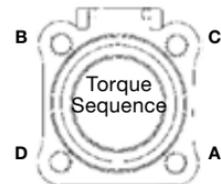
- depressurize system
- cycle valve

WARNING:
Residual material may be left in the valve and system.

NOTE: It is important to refer to the exploded view diagram while following the instructions.

- Place and leave the valve **handle** in the OPEN position.
- Remove and set aside the **stem nut** for later use.
- Remove and discard the **stem spring**, **stop plate**, and **handle**. Leave **grounding spring** on valve.
- Loosen four **body bolts** (fasteners) on the upstream side end of the valve assembly.
- Remove and set aside the upper two **body bolts** for later use.
- Position the **lock plate** as shown and reposition the two upper **body bolts** through the holes in the **lock plate**, the **flange**, and into the valve **center body**.
- Incrementally tighten all four **body bolts** until finger tight.

- Tighten the four **body bolts** in the alphabetical (crisscross) sequence shown in the Torque Sequence diagram. Tighten the **bolts** to the value listed in the "1st" column of the chart below, based on the Valve Series, Body Material, and Bolt Material. Repeat the sequence for the 2nd, 3rd, 4th, and 5th and where applicable, the 6th and 7th torque.



Fastener Torque Chart
S60P and T60M Series Valves

Valve Series	Body Material	Bolt Material	Torque Value, in.-lb (N-m)				
			1st	2nd	3rd	4th	5th
63	Stainless Steel	Stainless Steel	10	20	40	100	100
	Carbon Steel	Carbon Steel	(1.1)	(2.3)	(4.5)	(11.3)	(11.3)
65	Stainless Steel	Stainless Steel	25	50	100	300	300
	Carbon Steel	Carbon Steel	(2.8)	(5.7)	(11.3)	(33.9)	(33.9)

A60T Series Valves

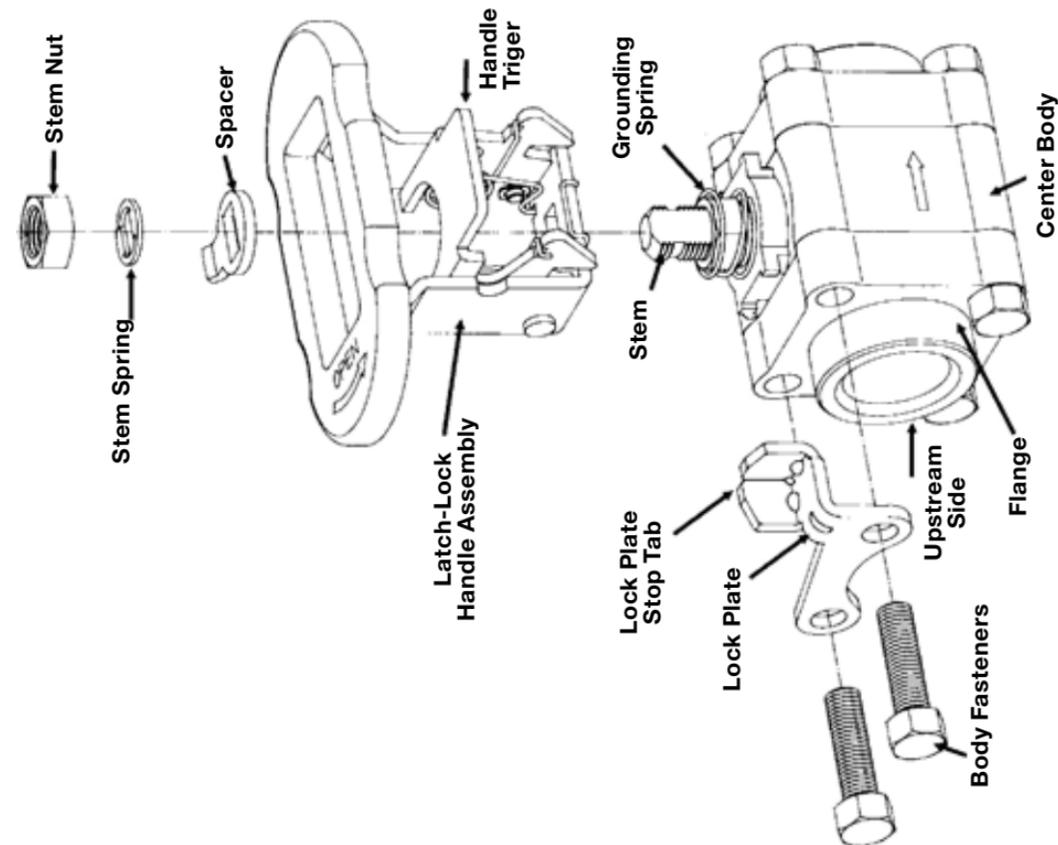
Valve Series	Body Material	Bolt Material	Torque Value, in.-lb (N-m)						
			1st	2nd	3rd	4th	5th	6th	7th
63	Stainless Steel	Stainless Steel	10 (1.1)	20 (2.3)	40 (4.5)	100 (11.3)	150 (17.0)	150 (17.0)	—
	Carbon Steel	Carbon Steel	10 (1.1)	20 (2.3)	40 (4.5)	80 (9.0)	125 (14.1)	125 (14.1)	—
65	Stainless Steel	Stainless Steel	25 (2.8)	50 (5.7)	100 (11.3)	200 (22.6)	300 (33.9)	400 (45.2)	400 (45.2)
	Carbon Steel	Carbon Steel	25 (2.8)	50 (5.7)	100 (11.3)	200 (22.6)	300 (33.9)	400 (45.2)	400 (45.2)

- Install the **latch/lock handle** over the valve stem as shown. Be sure the handle trigger engages the **lock plate stop tab**.
- Install the **spacer** (tab pointing up) and the **stem spring** (concave side up) as shown.
- Thread the **stem nut** onto the stem until finger-tight.
- While using the **handle** to retain the stem, tighten the **stem nut** to the proper torque listed in the chart below.

Stem Nut Torque Chart

Valve Series	Torque in.-lb (N-m)
63	75 (8.5)
65	150 (17.0)

Assembly Diagram #1



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Printed in U.S.A.
June 2012, Rev C
MS-INS-60LLK