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 torques.

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 (not 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.

**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 torques.

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 (not 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.

<table>
<thead>
<tr>
<th>Valve Series</th>
<th>Body Material</th>
<th>Fastener Material &amp; Type</th>
<th>1st Torque Value, in.·lb (N·m)</th>
<th>2nd Torque Value, in.·lb (N·m)</th>
<th>3rd Torque Value, in.·lb (N·m)</th>
<th>4th Torque Value, in.·lb (N·m)</th>
<th>5th Torque Value, in.·lb (N·m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>Stainless Steel</td>
<td>Stainless Steel Studs/Bolts</td>
<td>10 (1.1)</td>
<td>20 (2.3)</td>
<td>40 (4.5)</td>
<td>100 (11.3)</td>
<td>100 (11.3)</td>
</tr>
<tr>
<td>65</td>
<td>Stainless Steel</td>
<td>Stainless Steel Studs/Bolts</td>
<td>25 (2.8)</td>
<td>50 (5.7)</td>
<td>100 (11.3)</td>
<td>300 (33.9)</td>
<td>300 (33.9)</td>
</tr>
<tr>
<td>67</td>
<td>Stainless Steel</td>
<td>Stainless Steel Studs/Bolts</td>
<td>35 (4.0)</td>
<td>75 (8.5)</td>
<td>150 (17.0)</td>
<td>300 (33.9)</td>
<td>300 (33.9)</td>
</tr>
</tbody>
</table>

**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 torques.
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 (not 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.

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<tr>
<th>Valve Series</th>
<th>Body Material</th>
<th>Fastener Material &amp; Type</th>
<th>1st Torque Value, in.·lb (N·m)</th>
<th>2nd Torque Value, in.·lb (N·m)</th>
<th>3rd Torque Value, in.·lb (N·m)</th>
<th>4th Torque Value, in.·lb (N·m)</th>
<th>5th Torque Value, in.·lb (N·m)</th>
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<tr>
<td>63</td>
<td>Stainless Steel</td>
<td>Stainless Steel Studs/Bolts</td>
<td>10 (1.1)</td>
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<td>35 (4.0)</td>
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<td>150 (17.0)</td>
<td>300 (33.9)</td>
<td>300 (33.9)</td>
</tr>
</tbody>
</table>
Latch-Lock Handle Assembly

Instructions for 8-Bolt, 60 Series Ball Valves

Kit Contents:
- Latch-lock handle
- Spacer
- Lock plate
- Body bolts (fasteners) (2 for use in 4-bolt assemblies using bolts nut only)

WARNING: Before servicing any installed valve, you must
- depressurize system
turn off the supply

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 four body bolts (fasteners) on the upstream side end of the valve assembly.
5. Remove and set aside the upper two body bolts for later use.
6. 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.
7. Incrementally tighten all four body bolts until finger tight.
8. 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.

Stem Nut Torque Chart

<table>
<thead>
<tr>
<th>Valve Series</th>
<th>Body Material</th>
<th>Bolt Material</th>
<th>Torque Value, in·lb (N·m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 Stainless Steel</td>
<td>Stainless Steel</td>
<td>10 (1.1)</td>
<td>20 (2.3)</td>
</tr>
<tr>
<td>63 Carbon Steel</td>
<td>Carbon Steel</td>
<td>10 (1.1)</td>
<td>20 (2.3)</td>
</tr>
<tr>
<td>65 Stainless Steel</td>
<td>Stainless Steel</td>
<td>25 (2.8)</td>
<td>50 (5.7)</td>
</tr>
<tr>
<td>65 Carbon Steel</td>
<td>Carbon Steel</td>
<td>25 (2.8)</td>
<td>50 (5.7)</td>
</tr>
</tbody>
</table>

Assembly Diagram #1

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Fastener Torque Chart

<table>
<thead>
<tr>
<th>Valve Series</th>
<th>Body Material</th>
<th>Bolt Material</th>
<th>Torque Value, in·lb (N·m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 Series Valves</td>
<td>Stainless Steel</td>
<td>Stainless Steel</td>
<td>10 (1.1)</td>
</tr>
<tr>
<td>80 Series Valves</td>
<td>Carbon Steel</td>
<td>Carbon Steel</td>
<td>10 (1.1)</td>
</tr>
<tr>
<td>80 Series Valves</td>
<td>Stainless Steel</td>
<td>Stainless Steel</td>
<td>25 (2.8)</td>
</tr>
<tr>
<td>80 Series Valves</td>
<td>Carbon Steel</td>
<td>Carbon Steel</td>
<td>25 (2.8)</td>
</tr>
</tbody>
</table>

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