# GB Series Ball Valve

**Swagelok®**

## Instructions for Installing Locking Handles (8GB and 16GB) and Panel Mounting (8GB only)

### Tools Required

| Part | Size | Tool |
|---|---|---|
| Hex key | 5/32 in. (4 mm) | |
| Wrench | 9/16 in. for 8GB 3/4 in. for 16GB | |
| Torque wrench | – | |

⚠ **WARNING**

**Before removing the valve from service, to avoid personal injury, you must:**
- **Depressurize the system.**
- **Cycle the valve.**
- **Purge system to remove any residual system media left in valve.**
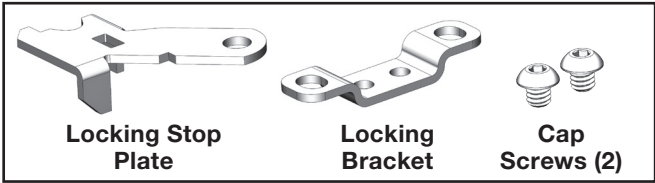
⚠ **CAUTION**

**The fire series is not bi-directional. While the handle orientation can be reassembled and rotated 180° from the factory assembled state, flow through the valve must be in the direction of the valve flow arrow for fire series A8GB and A16GB. Improper installation will cause seat leakage.**

## Instructions for 8GB and 16GB Oval Locking, and 16GB Lever Locking Handle Assemblies
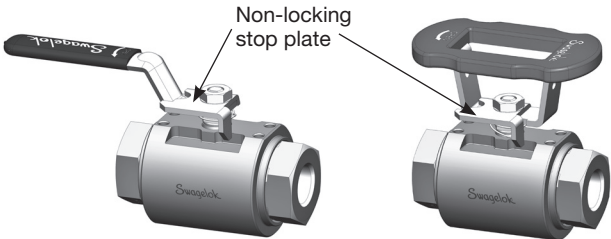
### Kit Contents

**Handle Options (only one included):**
- **8GB Oval Handle**
- **16GB Lever Handle**
- **16GB Oval Handle**



**Locking Stop Plate** **Locking Bracket** **Cap Screws (2)**



Upper stem nut

Stem spring CONCAVE UP

**Locking stop plate**

Oval handle or Lever handle

**Cap screws**

Grounding spring

Stem

**Locking bracket**

**Oval handle and 16GB lever handle assembly components**

**\*Bold indicates kit component**

1. Leave the valve in the open position.



Non-locking stop plate

**Factory assembled non-locking handles are in the open position**

2. Remove the following: **upper stem nut**, **stem spring**, **non-locking stop plate**, **handle**, and **grounding spring**.

3. Discard the **non-locking stop plate** and set all other loose components aside for later use.

4. Assemble the **locking bracket** onto the body using two **cap screws**. Tighten the **cap screws** to 75 in.·lb (8.5 N·m).

5. Assemble the **grounding spring, handle**, **locking stop plate, stem spring** (concave side up), and the **stem nut** as shown.

   Note: For 8GB valves factory assembled with a flat handle washer, the flat washer must be reused to ensure proper thread engagement.

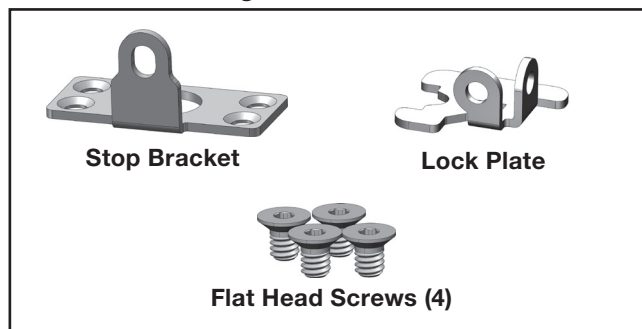6. Torque the **upper stem nut** as follows:

| GB Valve Type | Required Torque in.·lb (N·m) |
|---|---|
| 8GB | 75 (8.5) |
| A8GB | 75 (8.5) |
| 16GB | 100 (11.3) |
| A16GB | 150 (16.9) |

# Instructions for 8GB Lever Locking and Panel Mount Assemblies

## Kit Contents

### 8GB Lever Locking Handle and Panel Mount

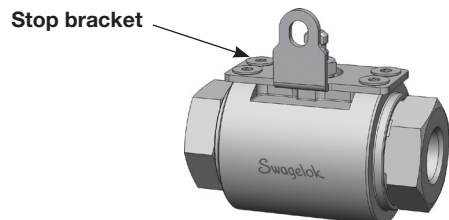**Stop Bracket**     **Lock Plate**

**Flat Head Screws (4)**

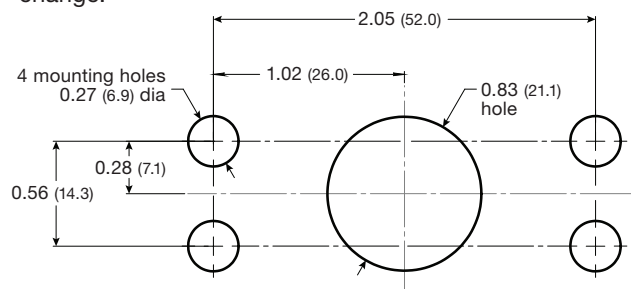NOTE: The panel mounting kit can only be used for 8GB valves with lever handles.

1. Leave the valve in the open position.

2. Remove the following: **upper stem nut**, **stem spring**, **non-locking stop plate**, **handle**, and **grounding spring**. Discard the **non-locking stop plate** and set all other loose components aside for later use.

3. If panel mounting is not desired, mount the **stop bracket** directly onto the valve as shown, tighten the 4 flat head screws to 75 in.lb (8.5 N.m) and skip to step 9.

   **Stop bracket**

4. For a panel mount, cut the **mounting holes** in the panel.

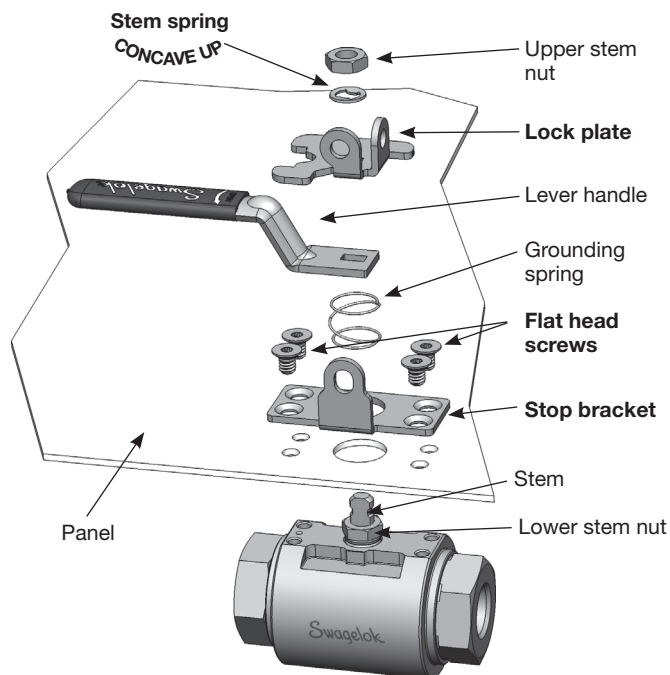   NOTE: Maximum panel thickness is: 0.105 in. (2.67 mm). Dimensions are for reference only and are subject to change.

   2.05 (52.0)
   1.02 (26.0)
   4 mounting holes 0.27 (6.9) dia
   0.83 (21.1) hole
   0.28 (7.1)
   0.56 (14.3)

5. To panel mount 8GB valves with factory assembled stop brackets and lock plates, loosen and remove the **upper stem nut**, **stem spring**, **lock plate**, **handle**, **grounding spring, flat head screws**, and **stop bracket**. Set the components aside for reassembly.

6. Position the valve stem through the **panel** while aligning the **panel** and the valve mounting holes as shown.

7. Place the **stop bracket** on top of the **panel** in the orientation shown.

8. Assemble the **stop bracket** to the **panel** and valve using the four **flat head screws**. Tighten the flat head screws to 75 in.·lb (8.5 N·m).

9. Assemble the **grounding spring**, **handle**, **lock plate**, **stem spring**, and **upper stem nut** in the orientation shown below.

   Note: For 8GB valves factory assembled with a flat handle washer, the flat washer must be reused to ensure proper thread engagement.

10. Torque the **stem nut** as follows:

| GB Valve Type | Required Torque in.·lb (N·m) |
|---|---|
| 8GB | 75 (8.5) |
| A8GB | 75 (8.5) |

Stem spring CONCAVE UP — Upper stem nut
**Lock plate**
Lever handle
Grounding spring
**Flat head screws**
**Stop bracket**
Stem
Lower stem nut
Panel

**8GB lever locking handle and panel mount**

**\*Bold indicates kit component**

*For additional information, see **www.swagelok.com**.*