

NELES

MGR-Series Manual Gear Actuators

Installation, Maintenance and
Operating Instructions



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READ THESE INSTRUCTIONS FIRST!

These instructions provide information about safe handling and operation of the valve.

If you require additional assistance, please contact the manufacturer or manufacturer's representative.

SAVE THESE INSTRUCTIONS!

Addresses and phone numbers are printed on the back cover.

1. GENERAL

This instruction manual contains important information regarding the installation, operation and troubleshooting of the Jamesbury™ MGR Manual Gear Actuators. Please read these instructions carefully and save them for future reference.

WARNING

BEFORE INSTALLING A VALVE EQUIPPED WITH A MANUAL GEAR ACTUATOR, BE SURE THAT THE INDICATOR POINTER ON TOP OF THE ACTUATOR IS CORRECTLY INDICATING THE VALVE'S POSITION. FAILURE TO ASSEMBLE THESE PRODUCTS TO INDICATE CORRECT VALVE POSITION COULD RESULT IN PERSONAL INJURY.

1.1 CAUTION

When servicing the valve actuator assembly, remove the entire assembly from service. Be sure butterfly valves are in the closed position before attempting to remove them from the pipeline.

2. INSTALLATION

Mount these actuators to the valve by following the actuator mounting instructions that are supplied with Wafer-Sphere™ butterfly valves, with ball valves and with linkages.

2.1 ADJUSTMENT OF ACTUATOR STOPS

After installation of the manual gear actuator on the valve, it is then necessary to adjust the actuator stops for the proper full-open and full-close valve position (see **Figure 1**).

To adjust either stop screw, the protective plastic cap must be removed and the locknut must first be loosened. Turning either screw in reduces valve travel. Turning either screw out increases valve travel.

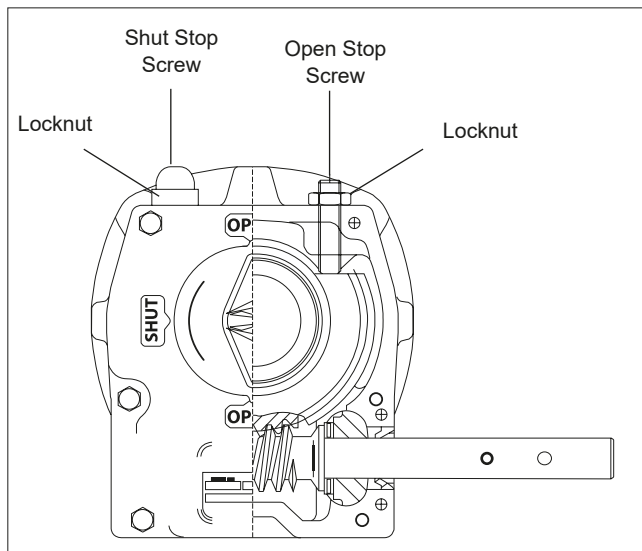


Figura 1.

Back off the screw, if necessary, turn the valve to the correct open or closed position as described in the information listed above, then turn the stop screw until it contacts the gear segment. While holding the screw to prevent it from turning, tighten the locknut.

Fully cycle the actuator and valve in both directions by turning the handwheel. Check that the proper open and closed positions are achieved and that the indicator pointer is indicating correctly, i.e., closed when the valve is closed. Rework and readjust as needed. Replace the protective cap.

3. OPTIONS

3.1 PADLOCK FLANGE OPTION

The padlock flange option for MGR-Series gear actuators allows for manual lockout of the actuator at 10-degree intervals.

Assembly

1. Cycle actuator to fully closed position (turning counter-clockwise) so that handwheel pinhole is as shown in (**Figure 2a**). Remove handwheel from gear shaft (if necessary) by removing spring pin.
2. Remove 2 cover bolts closest to gear shaft.
3. Place bracket onto valve shaft. Insert washer between bracket and actuator cover bolt hole (**Figure 2a**) and insert fasteners removed in step 2. Center actuator shaft and hole in bracket and tighten bolts.
4. Insert padlock flange on shaft and shim 0.03 mm to match drawing off bracket face (**Figure 2b**). Line up hole in padlock flange with hole in input shaft.
5. Pin padlock flange to shaft.

TABLE 1	
Actuator	Padlock Flange Kit
MGR5_	092 2347 00
MGR7_	092 2348 00
MGR10_	
MGR12_	092 2349 00
MGR14_	
MGR15_	092 2350 00
MGR16_	092 2351 00
MGR20_	092 2352 00
MGR30_	
MGR40_	092 2353 00

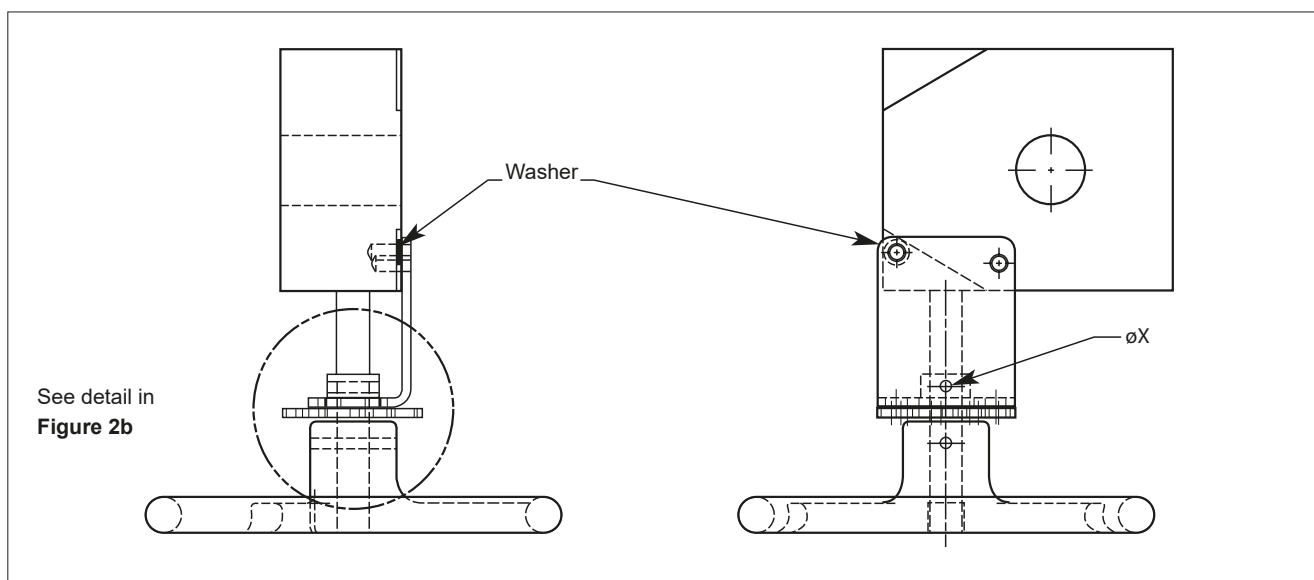


Figure 2a. Padlock Flange

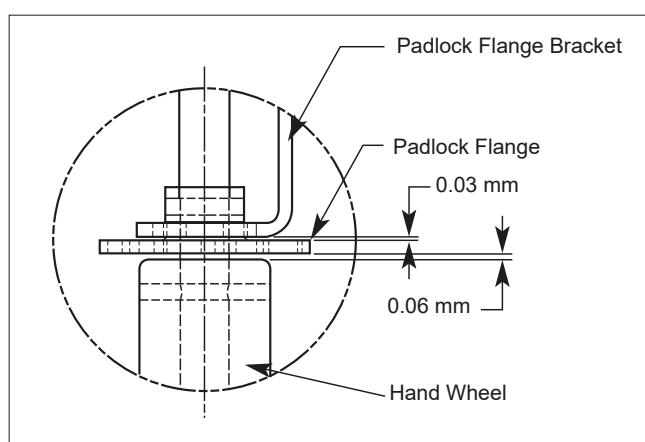


Figure 2b.

4. MAINTENANCE

Jamesbury manual gear actuators are permanently lubricated at the factory. Under normal circumstances no further lubrication is needed. In the event additional lubrication is desired use a good brand, #2 consistency, extreme pressure gear grease. Be sure to remove any foreign matter or moisture that may have entered during disassembly from the cavity before relubricating. Use a liquid gasket between the housing and cover if a separate fiber gasket was not present.

5. REPAIR KITS/SPARE PARTS

For further information on spare parts and service or assistance visit our web-site at www.neles.com

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