



WAFER BUTTERFLY VALVE GEAR OPERATOR KIT & CHAINWHEEL OPERATOR KIT INSTALLATION INSTRUCTIONS

WBF-3B-0110



Operator or Chainwheel Operator mounts directly to Spears® Wafer Butterfly Valve stem shaft using the following kit components:

Gear Operator Kit
Gear Operator Assembly
Handwheel & Nut
Drive Bushing
Mounting Bolts (4)
Lock Washers (4)
Nuts (4)

Chainwheel Operator Kit
Gear Operator
Chainwheel Assembly
Drive Bushing
Mounting Bolts (4)
Lock Washers (4)
Nuts (4)

Please read all instructions carefully before proceeding. "Unit Installation" and "Position Adjustment" instructions apply to both Gear Operator Kits and Chainwheel Operator Kits.

Unit Installation

IMPORTANT:

Chainwheel operated valves should be mounted in the inverted (stem down) position to assure proper chain clearance with piping system.

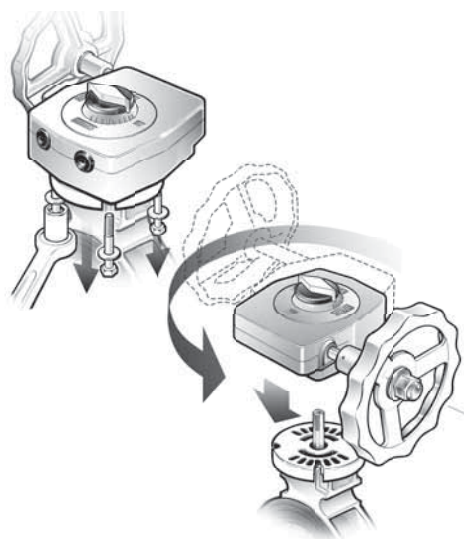
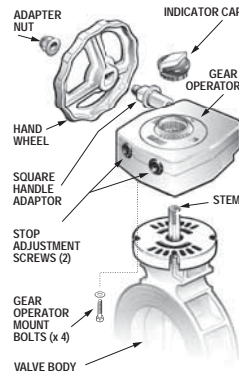
Step 1 Install Handwheel onto Gear Operator shaft adapter and secure with Nut. Tighten snug (Chainwheel is pre-assembled onto Gear Operator shaft).

Step 2 Rotate valve Disc to full closed position. Rotate handwheel to position Gear operator at full closed position (as indicated on top indicator).

Step 3 Drive Bushing is timed to Gear Operator and Valve Stem with a large spline tooth and index mark on Drive Bushing. Gear Operator is shipped with Drive Bushing permanently installed.

Step 4 Place Gear Operator housing on Wafer Butterfly Valve stem being sure to align housing so that the Gear Operator shaft is perpendicular (90°) to the direction of Flow. If operational interference is encountered, remove Gear Operator housing and rotate 180°. Note: Do not mount the Gear Operator with the Gear Operator Shaft directly over the pipe.

Step 5 Align mounting holes on valve platform with Gear Operator and install Mounting Bolts & Nuts with Lock Washers. (Note: Handwheel/Chainwheel can be rotated open slightly to aid alignment and mounting.) Tighten Mounting Bolts to 10 ft-lbs torque.



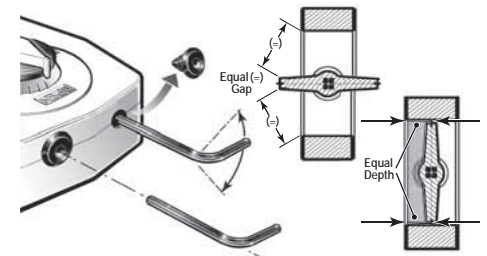
Position Adjustment

Step 1 Remove (2) rubber grommets from end of Gear Operator housing adjacent to "OPEN" designation to give access to stop adjustment screws.

Step 2 Closed Adjustment: Rotate Handwheel/Chainwheel to full closed position. Measure distance from both leading edges of the disc (perpendicular to stem) to the gasket sealing surface on the seat side of valve. These distances should be equal when properly adjusted for the closed position. If not, use an Allen wrench to adjust the stop located on the "O" side of the "OPEN" designation until proper position is reached.

Step 3 Open Adjustment: Rotate Handwheel/Chainwheel to full open position. Disc should be positioned squarely at 90° to valve body when properly adjusted for the open position. If not, use an Allen wrench to adjust the stop located on the "N" side of the "OPEN" designation until proper position is reached.

Step 4 Re-install rubber grommets in operator housing. Valve is now ready to be placed into service.



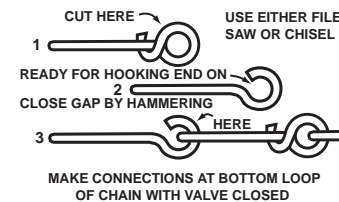
Chain Installation (Chainwheel Operator only):

Step 1 Special Lock Link chain (purchased separately) is required and should be ordered to the desired length. Chain length is determined by Chainwheel height from floor. Refer to "HOW TO ORDER CHAIN" on price schedule.

Step 2 Insert a minimum chain length of 3-feet through lower side of the Chain Guide eyelet. Lay chain links over each tooth on the upper side of the Chainwheel Sprocket being sure that chain is not twisted. Thread chain down through the opposite Chain Guide eyelet.

Step 3 Attach chain ends according to the following directions:

Directions For Making Endless Chain



SPEARS® MANUFACTURING COMPANY • CORPORATE OFFICE
15853 Olden St., Sylmar, CA 91342 • PO Box 9203, Sylmar, CA 91392
(818) 364-1611 • www.spearsmfg.com

<p>PACIFIC SOUTHWEST 15860 Olden St. Sylmar (Los Angeles), CA 91342 (818) 364-1611 • (800) 862-1499 Fax (818) 367-3014</p>	<p>ROCKY MOUNTAIN 4890 Florence St. Denver, CO 80238 (303) 371-9430 • (800) 777-4154 Fax (303) 375-9546</p>	<p>UTAH 5395 West 1520 South Salt Lake City, UT 84104 (303) 371-9430 • (800) 777-4154 Fax (303) 375-9546</p>	<p>SOUTHEAST 4235 Newport Pl., Suite 100 Lawrenceville (Atlanta), GA 30043 (678) 985-1263 • (800) 662-6326 Fax (678) 985-5642</p>
<p>NORTHWEST 4103 C St. NE Suite 200 Auburn (Seattle), WA 98002 (253) 939-4433 • (800) 347-7327 Fax (253) 939-7557</p>	<p>SOUTH CENTRAL 1000 Lakeside Parkway Flower Mound, TX 75028 (469) 528-3000 • (800) 441-1437 Fax (469) 528-3001</p>	<p>NORTHEAST 590 Industrial Dr., Suite 100 Lewisberry (Harrisburg), PA 17339-9532 (717) 938-8844 • (800) 233-0275 Fax (717) 938-6547</p>	<p>FLORIDA 9563 Parkouth Court Orlando, FL 32837 (407) 943-1960 • (800) 327-6390 Fax (407) 425-3563</p>
			<p>MIDWEST 1 Gateway Ct., Suite A Bolingbrook (Chicago), IL 60440 (630) 759-7529 • (800) 662-6330 Fax (630) 759-7515</p>
			<p>INTERNATIONAL SALES 15853 Olden St. Sylmar (Los Angeles), CA 91342 (818) 364-1611 • Fax (818) 898-3774</p>