

CONTROL VALVES

(See Code Instruction Sheet 10/0.4.1 For Actuator Code Description
Shown on Valve Data Plate to Determine Actuator Size and Action.)

DISASSEMBLY

DIRECT ACTING ACTUATORS 35, 55, 55A, 85, 85A, 135, 270

(See correct figure for parts)

SIZES 135 AND 270 ONLY

1. Remove bonnet using wrench on hex of bonnet; lift off H.O.D. and gasket.

SIZES 35, 55, 55A, 85 AND 85A

1. Remove nuts and bolts from upper diaphragm case; lift off case with H.O.D. attached.
2. Remove lock nut under cover and lift off bonnet and gasket from upper diaphragm case.

DISASSEMBLY - ALL SIZES

1. Remove nut, lockwasher and handwheel.
2. Remove packing gland, packing ring(s), washer and "O" ring from bonnet.
3. Screw handscrew down into bonnet until stem bottoms on bonnet threads.
4. Remove retainer ring, half rings and handscrew disc. **SIZE 270 ONLY**—Remove retainer ring, half rings, thrust disc, thrust races and needle bearing.
5. Remove handscrew through upper end of bonnet.

Clean all parts and replace any that are worn or damaged.

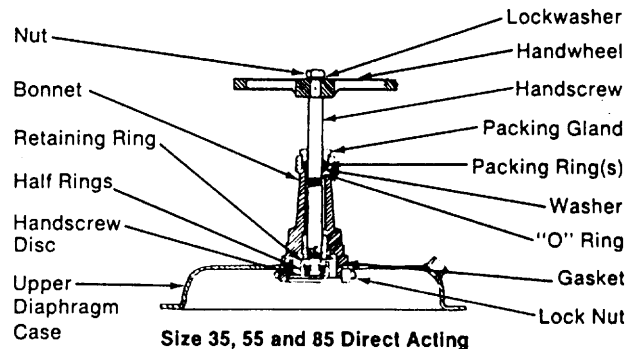
LUBRICATION OF PARTS: Handscrew - coat with a good grade of Anti-Sieze Compound. Also apply a small amount of this compound to bonnet threads. "O" Ring - lubricate with Silicon Grease. Needle Bearing - lubricate with a few drops of light machine oil.

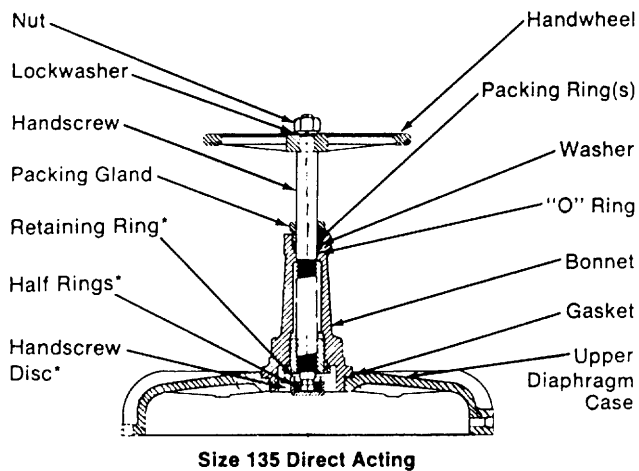
REASSEMBLY - ALL SIZES

1. Insert handscrew in top of bonnet and screw down through bonnet threads.
2. Place retaining ring over handscrew thread. Insert half rings in the handscrew groove with wide face of rings upward toward bonnet. Install the handscrew disc over half rings and fit retainer ring into groove of disc making sure it enters groove.

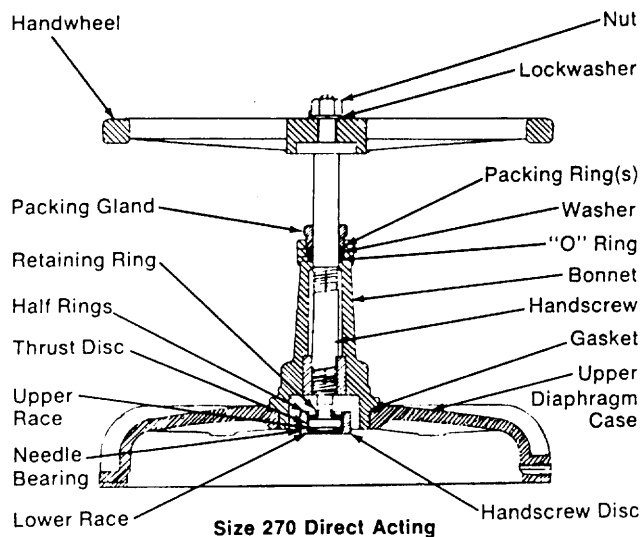
SIZE 270 ONLY—Place one race in bottom of handscrew disc followed by needle bearing and second race. Position thrust disc on top race. Replace the half rings and install disc assembly over rings and replace retaining ring in disc groove.

3. Screw handscrew up through bonnet. Place "O" ring over handscrew stem and into bonnet followed by washer and packing ring(s). Screw packing gland into bonnet and tighten sufficiently to prevent handwheel from turning due to vibration, etc. Install bonnet on upper diaphragm case.
4. Place handwheel over stem. Install lockwasher and tighten nut.
5. Reinstall H.O.D. assembly on actuator.



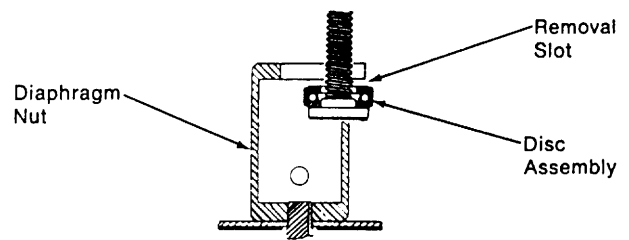


*Supplied only as handscrew complete



4. Lift diaphragm case while moving the case to one side so that handscrew disc assembly can be disengaged from diaphragm nut by passing it through the slot in the diaphragm nut. See sketch.
5. Remove handscrew from bonnet.

Clean all parts and replace any that are worn or damaged.



NOTE: Handscrew and bearing must be replaced as an assembly on all sizes except 270R.

SIZE 270R ONLY-To inspect or replace needle thrust bearing, remove retaining ring, thrust washer, upper race, needle bearing and lower race. Parts for this size may be ordered separately.

LUBRICATION OF PARTS: Handscrew—coat with a good grade of Anti-Sieze compound. Needle Bearing - lubricate with a few drops of light machine oil.

REASSEMBLY

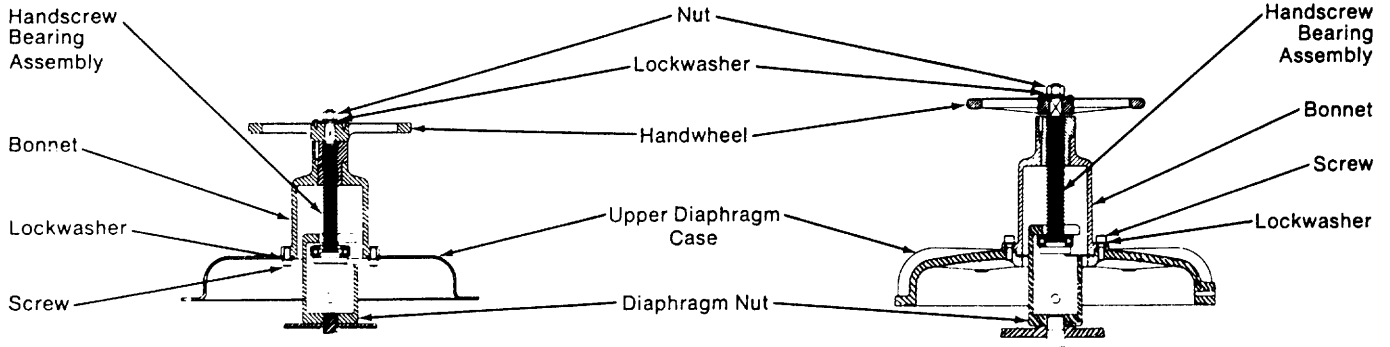
1. Install parts in reverse order.

DISASSEMBLY

**REVERSE ACTING ACTUATORS
35R, 55R, 55AR, 85, 85AR, 135R, 270R**

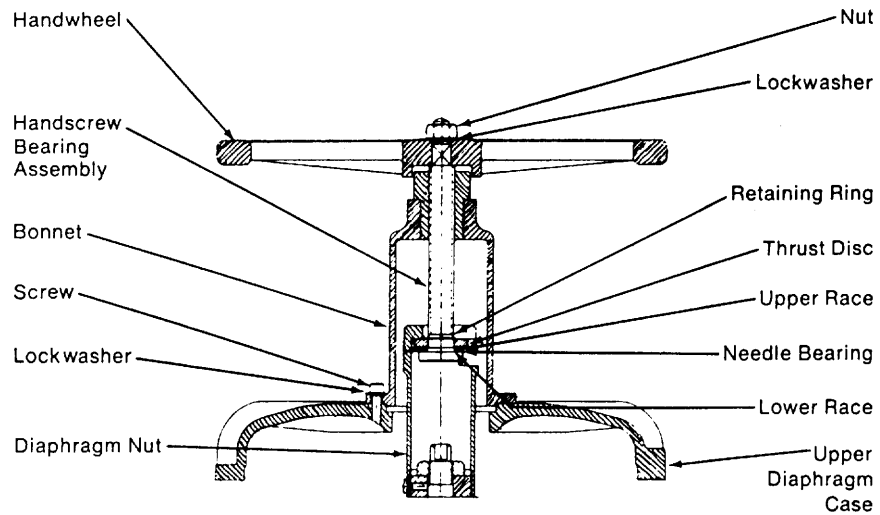
(See Drawings on Page 3 for Parts)

1. Remove nut, lockwasher and handwheel.
2. Screw handscrew into the bonnet as far as it will go.
3. Remove nuts and bolts from upper diaphragm case.



Sizes 35R, 55R, 55AR, 85R, and 85AR Reverse Acting

Size 135R Reverse Acting



Size 270R Reverse Acting