

Instructions For Replacement Of Maintenance Gate Packing Seal

- 1) Remove valve from service to repair bench.
- 2) Using the crank handle fully close the blade.
- 3) Remove the lexan power covers from both sides of the valve.
- 4) Remove the two 3/8" bolts fastening the clevis to the blade.
- 5) Remove two 5/16" bolts in each side of the side frames, which fasten the power frame and acme screw assembly.
- 6) Remove the power frame and acme screw assembly.
- 7) Remove the screw support bracket from the center frame.
- 8) Remove the bolts and spring assemblies from the seal plate in the center frame.
- 9) Mark the position that the seal plate is installed in the center frame so as to reinstall it the same way top or bottom.
- 10) Slip the seal plate off the end of the blade.
- 11) Turn the seal plate over and remove the old Teflon packing from the cavity.
- 12) To install the new packing, first cut one end at 45 degrees on the horizontal plane.
- 13) Starting on the bottom of the seal plate in the center, work the packing carefully around the cavity. Pliers or vise grips may be used to compress the loops that form at both ends so that it will fit into the cavity in the seal plate.
- 14) When the packing reaches the bottom center, cut the packing at 45 degrees to lap over the initial 45 degree cut.
- 15) Using a round screw driver shank or round metal bar, insert between the packing and force it into the end loops to open a space for the corners of the blade.
- 16) Turn the seal plate over and with the joint in the packing to the outlet side of the valve, force the seal plate evenly down over the end of the blade and as far down as it will go making contact between the center frame and the packing.
- 17) Replace the spring assemblies and bolts into the holes in the seal plate.
- 18) Bolts may be threaded into the center frame. Some pressure is necessary to compress the springs enough to get the bolts started. Use a shallow 7/16" socket on a ratchet and work from the center of the seal plate towards each end. Once the thread is started, the bolts may be run down until each spring is fully compressed.
- 19) Replace the acme screw support bracket onto the center frame.
- 20) Replace the acme screw assembly and power frame and fasten to the side frames with the four 5/16" bolts, washers and nuts.
- 21) Fasten the clevis to the blade with the two 3/8" bolts and lock nuts. Using the crank handle move the blade back and forward to make sure it operates satisfactory.
- 22) Replace the lexan power covers on both sides of the valve
- 23) Install valve back into service.

Instructions For Replacement of Roller Gate Bonnet Seals Removable Seal Models

- 1) Disconnect all electrical power and air from valve
- 2) Remove seal cover plates on both sides of valve frame.
- 3) Remove woven Teflon packing from recess under seal covers, exposing the end of the seals.
- 4) Using a wood or plastic dowel and a hammer, tap one seal through the valve and out the opening on the other side far enough to be gripped with pliers or vise grips and pulled out completely.
- 5) Using the old seal, for a reference cut the new seals to the proper length
- 6) Push new seal into slot until it is of equal distance in the opening on each side of valve, about 1/4 inch
- 7) Repeat procedure for the seal on the other side of the blade.
- 8) If seals are very tight, a c-clamp can be used with a piece of wood or plastic on the blade to move the blade one way or the other to create more room for the seal.
- 9) Replace woven packing into the cavity beneath the seal covers to seal off opening at the end of the seals.
- 10) Replace seal cover plates.
- 11) Reconnect electrical power and air supply.

Limit Switch Adjustment For ANDCO Electric Actuator

- 1) Disconnect all electrical power from actuator. Remove the cover from the junction box on the actuator.
- 2) Remove the pipe plug from the end of the motor. Notice that the motor shaft is slotted. The actuator can be run electrically for gross adjustment and then the motor shaft can be turned with a screwdriver for fine adjustment. Turn the shaft clockwise to extend the unit, and counter-clockwise to retract.
- 3) **To set the extend limit switch**, start from the fully retracted position. Extend the actuator to the desired position. If the extend switch is still fully closed by the cam, then you must push down the plunger (in the middle of the limit switch assembly) and turn the slotted gear shaft nearest the extend switch clockwise to open the switch. Once the flat spot on the cam rotates and allows the switch to open, it will be set, and open at that position every time.
- 4) **To set the retract limit switch**, start from the extended position. Retract the actuator to the desired position. If the retract switch is still closed by the cam, then you must push down the plunger and turn the slotted gear shaft nearest the retract switch counter-clockwise until the switch opens.
- 5) Replace the pipe plug in the end of the motor.
- 6) Replace cover on junction box and reconnect electrical power to actuator.