CLARKSON PORTED SLIDE GATE VALVES

FIGURE 955/956

DN 250 - 750 (NPS 10 - 30) gland packing replacement instructions for:
- F955 ported slide gate valves
- F956 dual gland ported slide gate valves

PACKING REPLACEMENT

For optimum performance, the packing material should be replaced whenever the valve has been disassembled for routine maintenance. This is a very simple procedure, which can be done leaving the valve in the pipeline. Correct packing is essential for leak-free operation.
Use Emerson's preformed and pre-cut packing replacement kits for best results.
Ensure packing material selected is suitable for the service.

Strip-down procedure:

1. Ensure the pipeline is not pressurized and any hazardous medium is drained away.
2. Close valve, remove clevis split pins (18) and clevis pins (17).
3. Use actuator or handwheel to raise spindle clear of gate.
4. Remove all upstand bolts (12).
5. Remove actuator (19, 20) sub-assembly (handwheel, upstand, gearbox and spindle or cylinder actuator).

NOTE

Heavy valves will require a chain block or crane to assist.

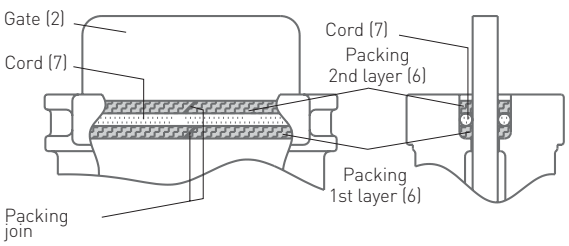
6. Remove gland follower nuts (10) and washers (11) then remove gland follower (3) from gate (2).
7. Remove packing (6) and packing cord (7) from gland cavity
8. Clean gland cavity.
9. Fit the gland follower over the gate (2).
10. If the gate has excessive irregularities or abrasion and requires replacement, then this will necessitate removal of the valve from the pipeline, to prevent damage to the valve seats (4).
11. For F956 valves repeat operations 6, 7 and 8 for the gland in the extension housing.

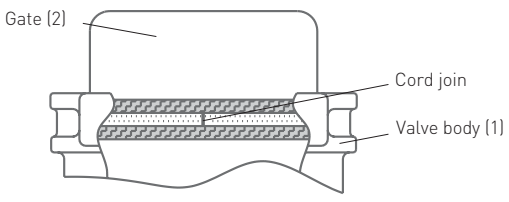
REPACKING PROCEDURE

NOTE

Care should be taken to stagger the mitred joints in each layer of packing to the opposite side of the gland follower, e.g.
- 1st packing layer joint to the front of the valve
- 2nd packing cord layer joint to the rear of the valve
- 3rd packing layer joint to the front of the valve

1. Press first layer of gland packing (6) into gland cavity by hand, then repeat the process with the packing cord (7) ensuring the joints of the two layers are on opposing sides of the cavity.
2. Firmly press the second layer of packing (6) around gate and into gland cavity. The joint should be on the opposite side of the gate to the cord joint (ie the same side as the joint in the first layer of packing (6).





REASSEMBLY

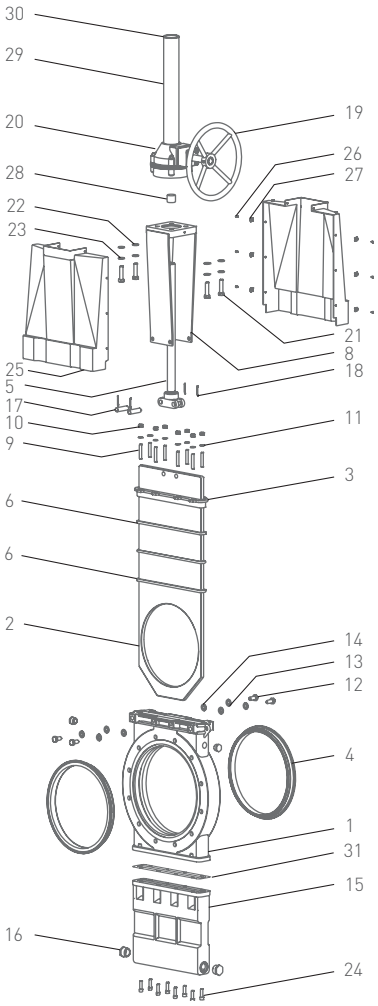
1. Replace gland follower (3) onto the gate (2) and push down until firmly on valve.
2. Coat stud (9) threads with anti-seize compound. Replace the gland follower washers (11) and gland follower nuts (10) onto each stud (9), screw them down equally, do not over tighten.
3. Refit the actuator sub-assembly (handwheel and upstand, gearbox and spindle or cylinder actuator) and replace both upstand bolts (12) and upstand washers (13) and (14).
4. Use actuator (handwheel or pneumatic actuator) to lower spindle to align clevis & gate.
5. Insert clevis pins (17) and clevis split pins (18), close valve
6. Assembly is complete, actuate to check all is functioning as desired.
7. When commissioning, gland follower nuts (10) may require tightening for final gland packing adjustment.
8. For F956 valves repeat operations repacking and reassembly procedures for the gland in the extension housing (15).

CAUTION

Do NOT over tighten gland packing as it will cause excessive resistance to gate movement.

NOTE

To minimize risk to personnel, Emerson recommend the use of purpose built guards and shrouds. Refer to the Emerson data sheet or consult factory for details.



NOTE: F955 valve illustrated.