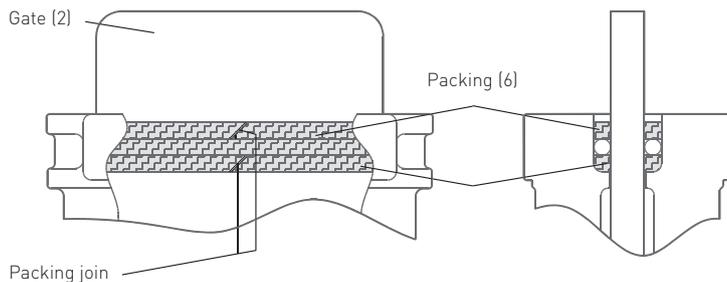


KEYSTONE FIGURE 969 HOPPER KNIFE GATE VALVES
INSTALLATION AND OPERATING MANUAL

Gland packing replacement instructions for F969 hopper 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 pipeline is not pressurized and any hazardous medium is drained away.
2. Close valve, remove clevis pins/bolts.
3. Use actuator or handwheel to raise spindle clear of gate.
4. Remove all upstand bolts.
5. Remove actuator sub-assembly (handwheel, upstand, gearbox and spindle or cylinder actuator).

NOTE

Heavy valves will require a chain block or crane.

6. Remove gland follower nuts (8) and washers (7), then remove gland follower (3) from gate (2).
7. Remove packing (6) 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.

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 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 gland packing ensuring the joints of the two layers are on opposing sides of the cavity.
2. Firmly press the packing (6) around gate and into gland cavity.

KEYSTONE FIGURE 969 HOPPER KNIFE GATE VALVES

INSTALLATION AND OPERATING MANUAL

REASSEMBLY

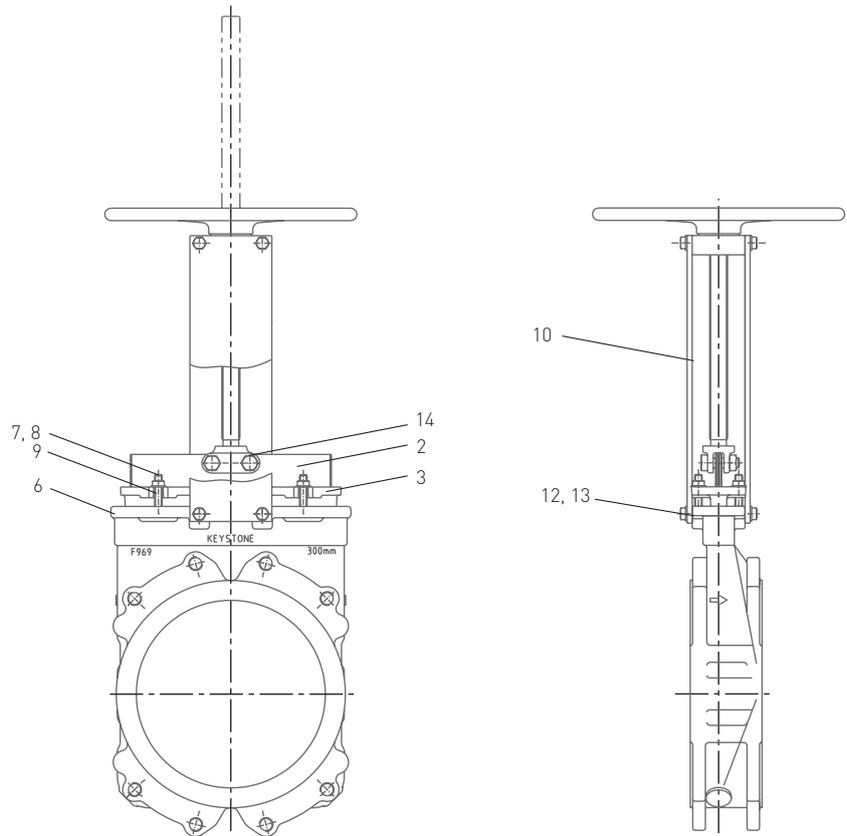
1. Replace gland follower (3) onto the gate (2) and push down until firmly on valve.
2. Coat stud (9) threads with anti-seize compound. Replace the gland follower washers (7) and gland follower nuts (8) onto each stud (9), screw them down equally, do not over tighten.
3. Refit the upstand (10) and handwheel. Replace both upstand bolts (12) and upstand washers.
4. Use actuator (handwheel or pneumatic actuator) to lower spindle to align clevis and gate.
5. Fit clevis bolts (14).
6. Assembly is complete, actuate the valve to check that the gate is seating properly in the closed position.
7. When commissioning, gland follower nuts (8) may require tightening for final gland packing adjustment.

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.

CAUTION

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



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