

SOFT SEAT INSERTS MAINTENANCE MANUAL

1. GENERAL:

To ensure tight shut off to ANSI Class VI and to prevent damage to the seating faces of a plug and seat due to wire drawing or micro-cavitation it is sometimes desirable to fit an insert made of a soft material (usually PTFE or copper) into the plug or seat.

For high pressure applications the insert will generally be fitted in the seat for flow over applications and in the plug for flow under applications. This is so that the soft seat insert is better supported and acts as the primary seal with a metal to metal seal acting as a secondary back up seal on the downstream side.

2. SEAT RING INSERT:

The Soft Seat Insert fits in a recess in the seat ring and is retained by an insert held down by the standard or low noise retainer. In the case of cavitation control, ZZ or ED disk valves the insert is retained by means of the retainer or stack.

The insert is easily replaced during maintenance.

See Fig. 1

3. PLUG INSERT:

The insert is held in place by means of a retaining collar attached to the plug head by means of a socket head cap screw.

Once the valve has closed and the pressure builds up underneath the plug, the collar exerts an axial force on the insert, which is squeezed out radially against the seating face of the seat ring creating a tight seal.

To replace the insert remove grub screw and unscrew the cap screw. Withdraw collar and insert. To reassemble reverse this procedure. Tighten collar on insert by turning cap screw until original flat is aligned with the grub screw hole. Use an anti-seize paste on the cap screw and locktite on the grub screw. **See Fig 2**

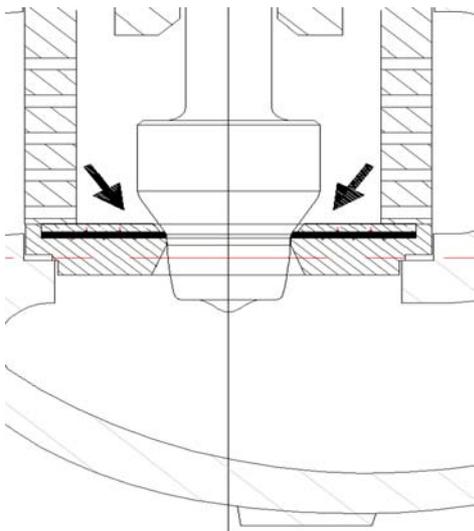


Fig 1

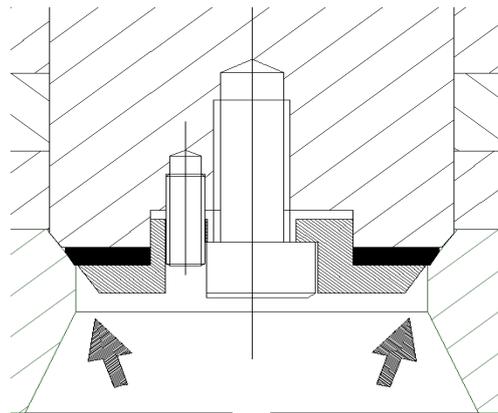


Fig 2