

## Spring Spares Set 1361282 and 1360180

### Installation and Maintenance Instructions

#### Caution

Before installation or any maintenance is performed, ensure that all steam, air or gas lines are isolated to prevent personal injury.

Ensure any residual internal pressure in the pump or connecting lines is carefully relieved.  
Also ensure hot parts have cooled to prevent risk of injury from burns.

Always wear appropriate safety clothing before carrying out any installation or maintenance work.

A lifting eye is fitted to the pump to assist lifting. On no account should this be used to lift anything more than the pump.  
Always use suitable lifting gear and ensure the pump is safely secured.

When dismantling the pump, care should be taken to prevent personal injury from the strong snap action mechanism.  
Always handle with care.

All pumps date coded F04 and later have an improved method of spring retention. The date code of the pump can be found on the main name-plate in the box titled serial number. Spring sets are now held in-place using blind anchors and rely on the spring tension to hold the shaft in place.

**Figure 1** Shows the old design mechanism pre date code F04, where the shaft is retained with M6 nuts and washers together with anti rotation grub screw.

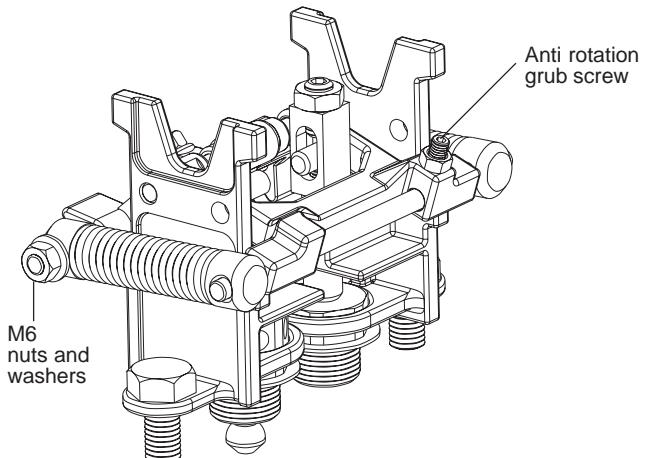


Fig. 1 Old design mechanism pre date code F04

#### Removal

Simply remove the actuator springs (**Figure 2**) by removing the M6 nuts and washers from the existing M6 actuator shaft (nearest pillar), and withdrawing the spring sets from both ends.

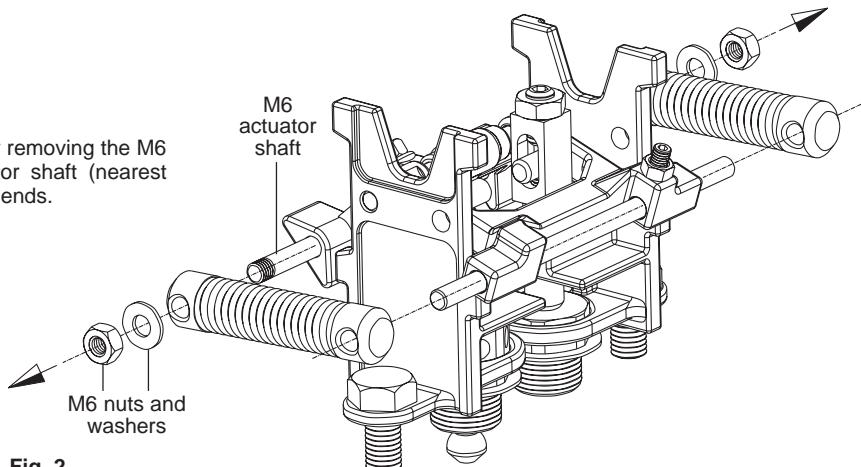
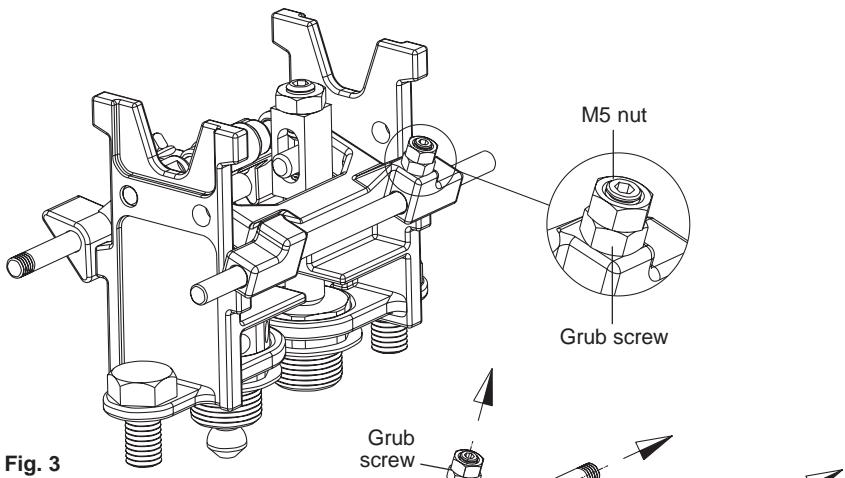


Fig. 2

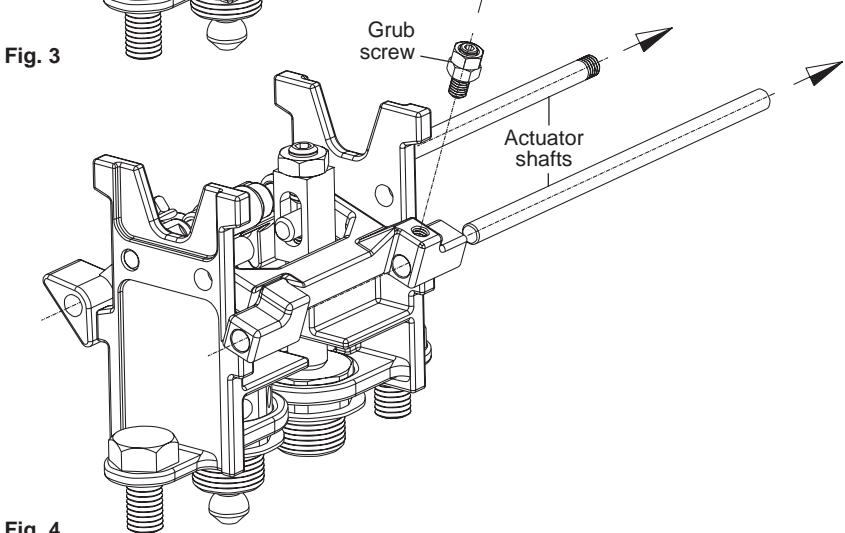
**Removing the grub screw from the actuator arm (Figure 3).**

An M5 nut is supplied loose with the spring kit. Screw on and lock the M5 nut on top of the existing grub screw-locking nut. Using the lower grub screw-locking nut (existing), unscrew from the actuator arm (Figure 4).



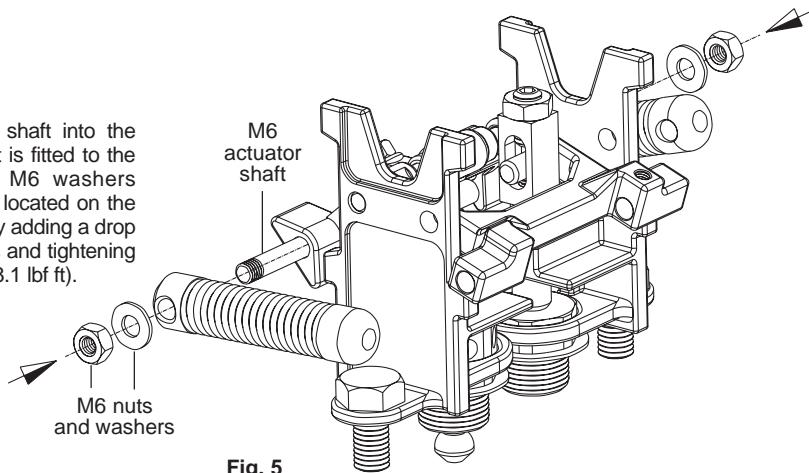
**Figure 4**

Withdraw both actuator shafts from the mechanism.



**Figure 5**

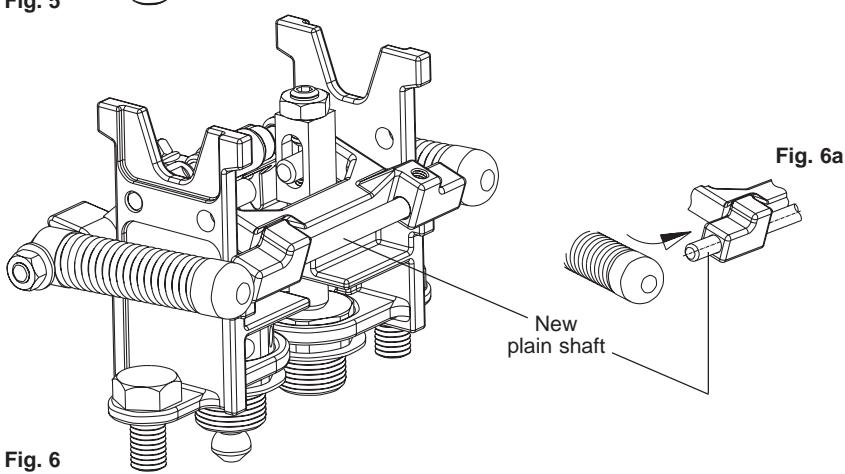
Slide the new M6 actuator shaft into the actuator arm; ensuring that it is fitted to the rear (nearest pillar). The M6 washers supplied in the kit should be located on the ends of the shaft before finally adding a drop of locktite 620 to the threads and tightening the nuts to 9 - 11 N m (6.6 - 8.1 lbf ft).



**Figure 6**

Slide the new plain shaft into the other actuator arm. Hook the blind spring anchors over the ends of the plain actuator shaft (Figure 6a), ensuring the shaft bottoms within the spring anchor blind holes. Make sure the shafts and springs are centralised, springs should be parallel if correctly fitted.

**Do not refit the grub screw to the actuator arms.**



Please contact your local Spirax Sarco service agent if any difficulties are experienced servicing this product.