

Union
Installation / Removal
Instructions

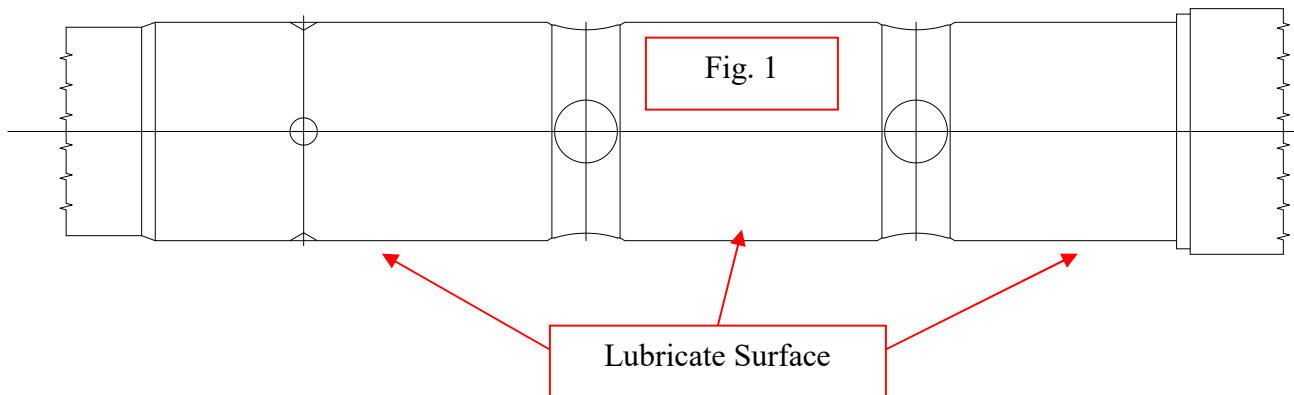
Model: SP0221
Number: 040-727
Revision: A (014964)

Tools:

- 1) Use Parts contained in the Installation / Removal Kit Part #P006012K

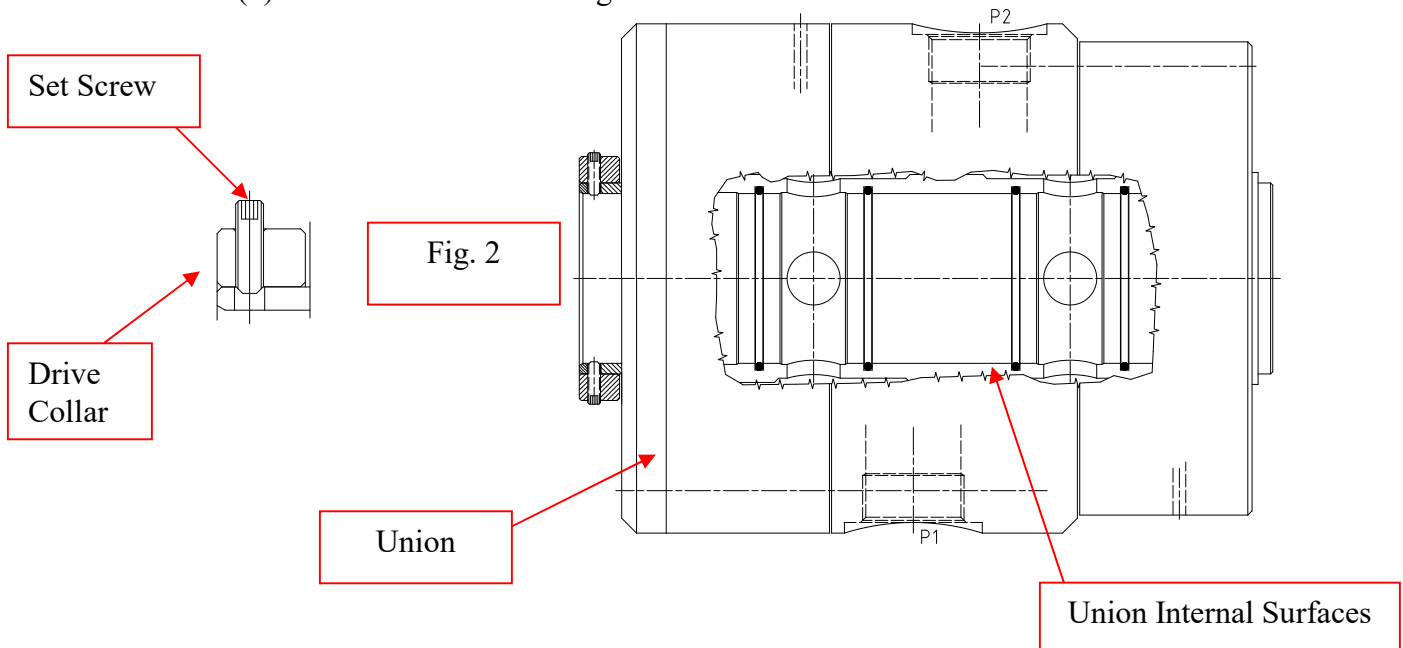
Customer Shaft Preparation (See Fig. 1):

- 1) Ensure that the shaft surface is free from burrs and sharp corners
- 2) Inspect shaft dimensions and confirm they are to specifications per Dwg. SP0221
- 3) Apply and lubricate entire length of shaft surface with silicone grease



Union Preparation (See Fig. 2):

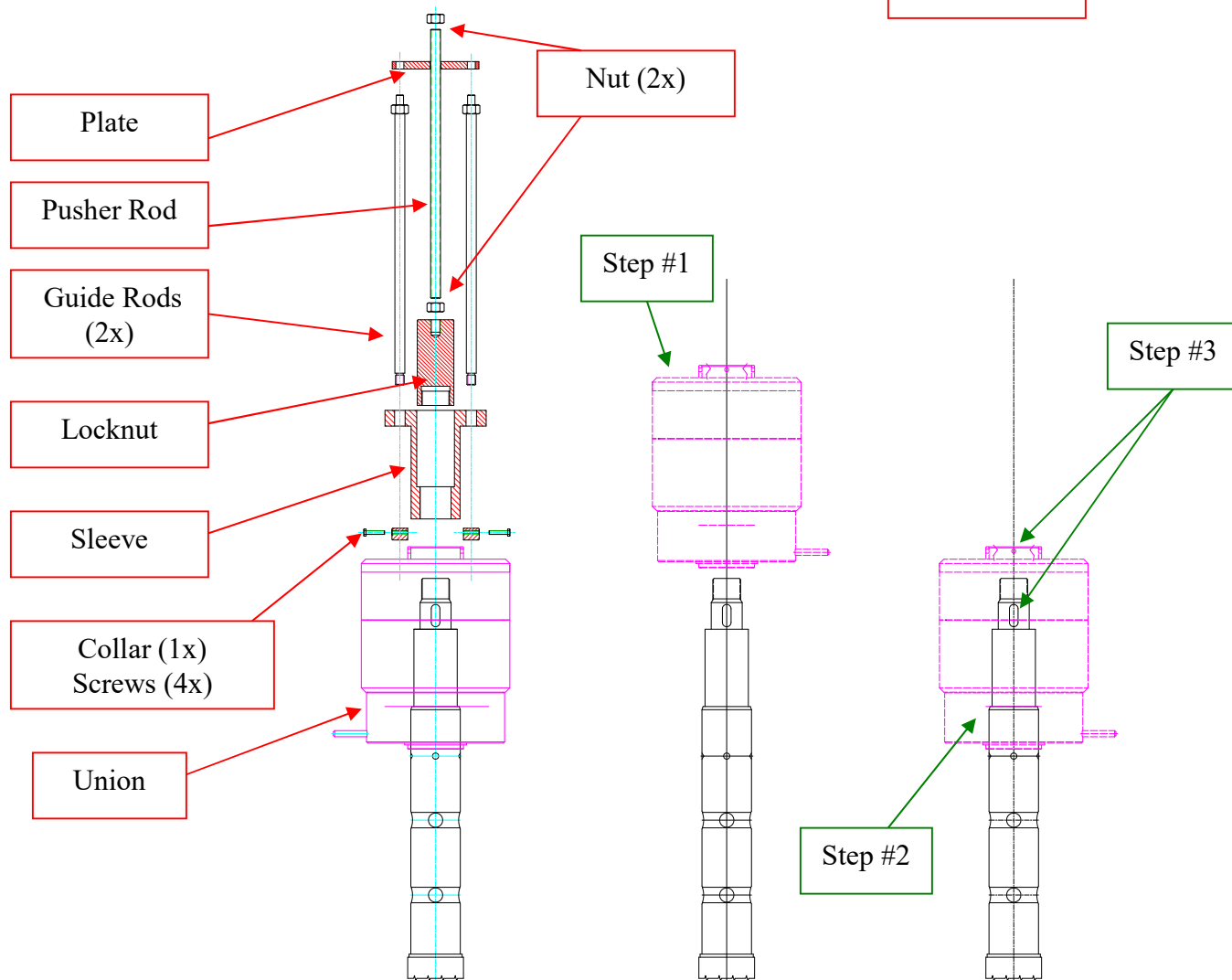
- 1) Apply silicone grease to all Union Rotor internal surfaces and O-Rings
- 2) Remove (4x) Set Screws so that Drive Collar can be removed from Union Rotor
- 3) Union weight is approximately **75 Kg. (165lbs.)**
- 4) Union is supplied with Eye Bolts for lifting purposes
 - a) If Union is not supplied with Eye Bolts
 - (1) Install 1-1/2" BSP Fittings into Port P1 & Port P2



Union Installation (See Fig. 3):

- 1) Utilize Parts from Kit Part #P006012K to install Union.
 - a) Parts include those illustrated in Fig. 3

Fig. 3



2) Installation Steps

- a) Step #1
 - i) Position Union above shaft
 - (1) Ensure Union Drive Collar has been removed
- b) Step #2
 - i) Lower Union onto shaft and bring to Initial rest point
 - (1) Location of first Union Rotor ID O-rings
- c) Step #3
 - i) Visually Align Shaft Keyway with Set Screw holes in Union Rotor
 - ii) **Customer must install Key onto Shaft**

2) Installation Steps (Continued)

d) Step #4

- i) Install Collar from Installation / Removal Kit onto Union Rotor End
(1) Secure to Union Rotor with (4x) Hex Head Screws

e) Step #5

- i) Install Sleeve onto shaft making sure Slot is aligned with Shaft Keyway

f) Step #6

- i) Install Locknut
- ii) Tighten Locknut against Sleeve

g) Step #7

- i) Install two Guide Rods through Sleeve Holes
- ii) Secure Guide Rods into Collar

h) Step #8

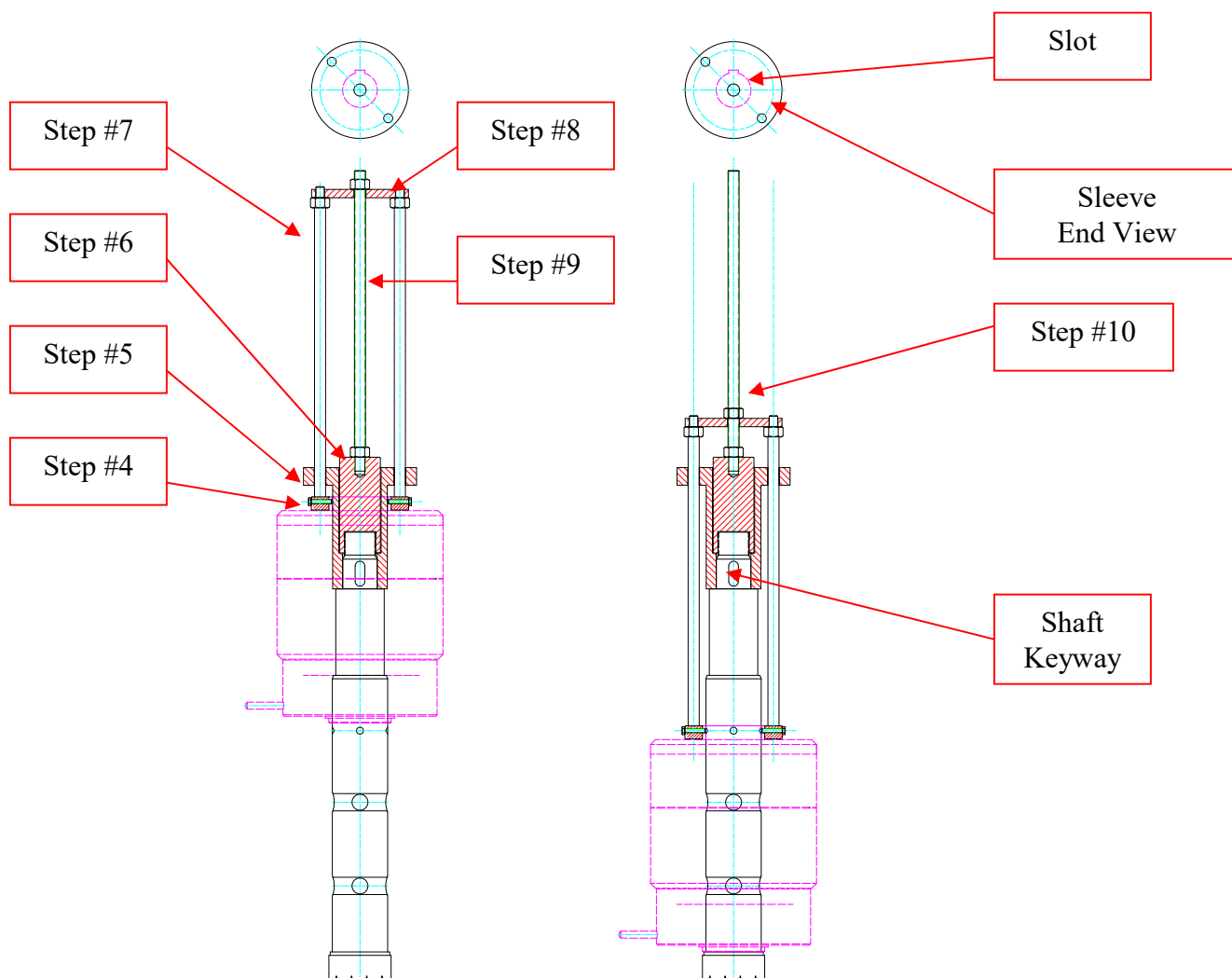
- i) Install Plate onto Guide Rods with Nuts providing support below Plate

i) Step #9

- i) Install Pusher Rod through Plate and into Locknut and secure with Nut

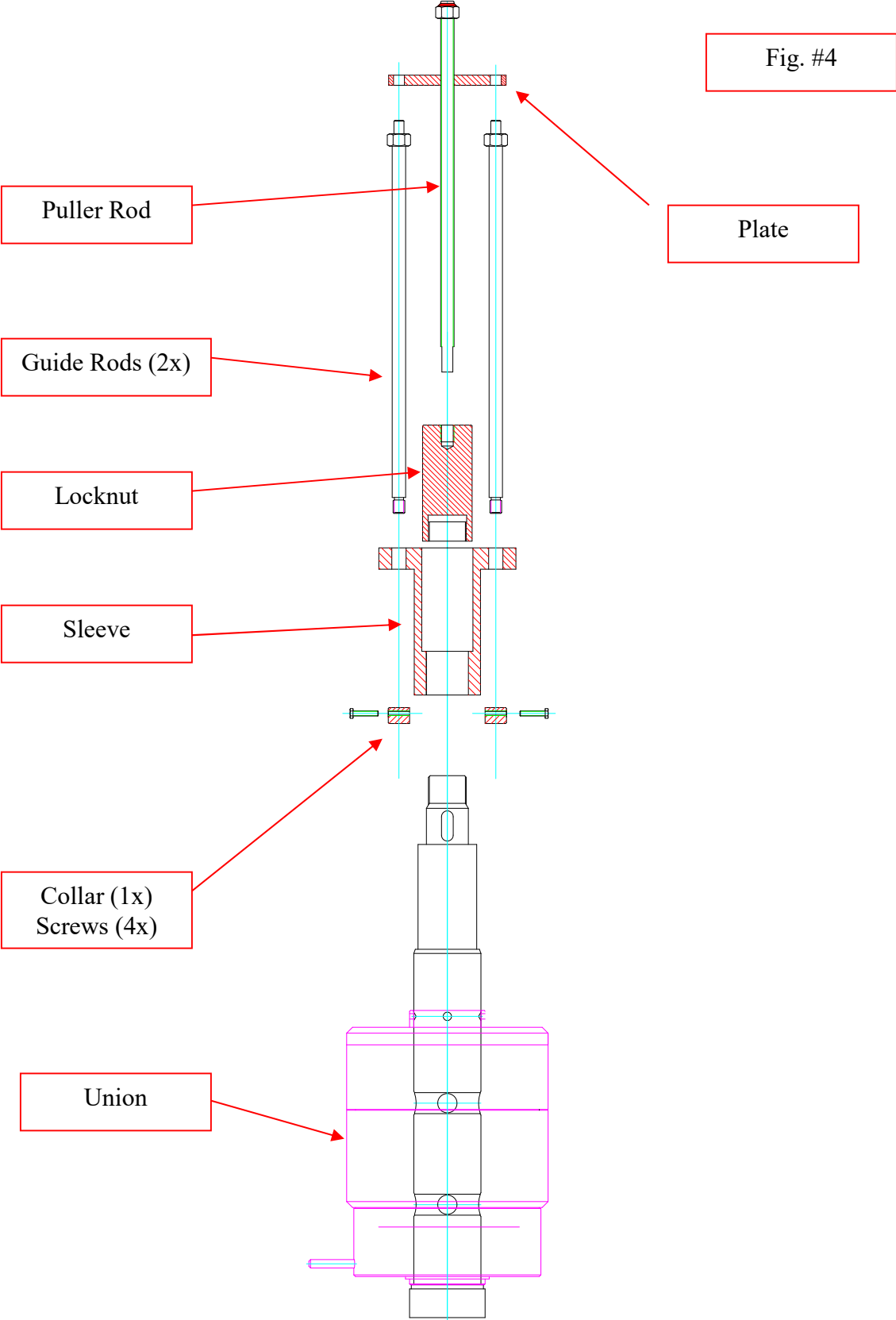
j) Step #10

- i) Install Nut onto Pusher Rod above Plate
- ii) Turn Nut to lower Union to final Position
- iii) Remove all Installation Tools and Re-Install Union Drive Collar with Set Screws.



Union Removal (See Fig. 4):

- 1) Utilize Parts from Kit Part #P006012K to remove Union.
- a) Parts include those illustrated in Fig. 4



2) Removal Steps

- a) Step #1
 - i) Remove Union Drive Collar
 - ii) Install and Secure Collar from Installation / Removal Kit to Union Rotor
- b) Step #2
 - i) Install Locknut onto the shaft and up against shaft shoulder
- c) Step #3
 - i) Install Guide Rods through Plate
 - ii) Secure Guide Rods to Collar
- d) Step #4
 - i) Install Nuts onto Guide Rods above Plate
- e) Step #5
 - i) Thread Puller Rod into Plate
 - ii) Turn Puller Rod until end comes to rest inside Locknut
- f) Step #6
 - i) Slowly and steadily turn the Puller Rod Hex Nut end
 - ii) Union will begin to move upward off the shaft
 - iii) Continue to turn Puller Rod until all Union Rotor O-Rings are all off the shaft
- g) Step #7
 - i) Remove all Removal Tools and Re-Install Union Drive Collar with Set Screws.

