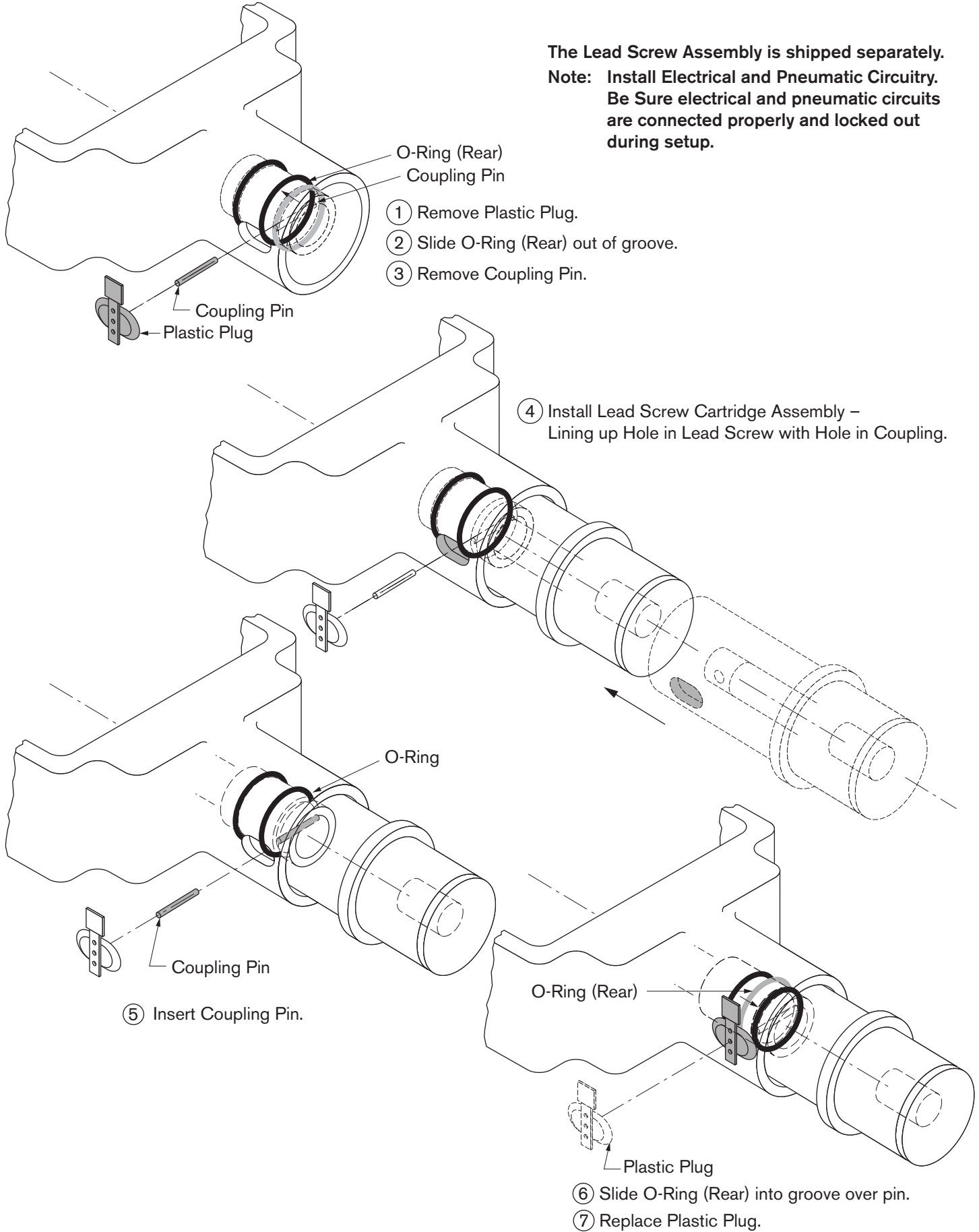


SET-UP AND INSTALLATION FOR LEAD SCREW CARTRIDGE ASSEMBLY

The Lead Screw Assembly is shipped separately.
Note: Install Electrical and Pneumatic Circuitry.
Be Sure electrical and pneumatic circuits
are connected properly and locked out
during setup.

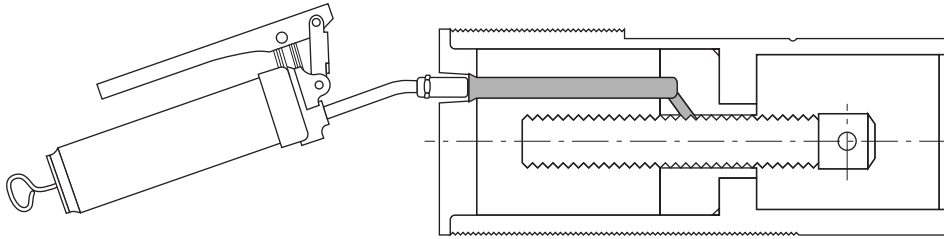


- ① Remove Plastic Plug.
- ② Slide O-Ring (Rear) out of groove.
- ③ Remove Coupling Pin.

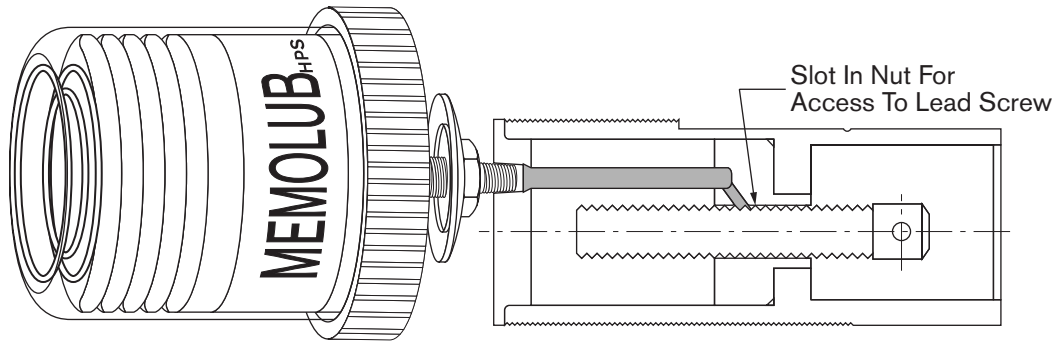
④ Install Lead Screw Cartridge Assembly –
Lining up Hole in Lead Screw with Hole in Coupling.

⑤ Insert Coupling Pin.

- ⑥ Slide O-Ring (Rear) into groove over pin.
- ⑦ Replace Plastic Plug.

**SET-UP AND INSTALLATION
 FOR LEAD SCREW CARTRIDGE ASSEMBLY (Continued)**


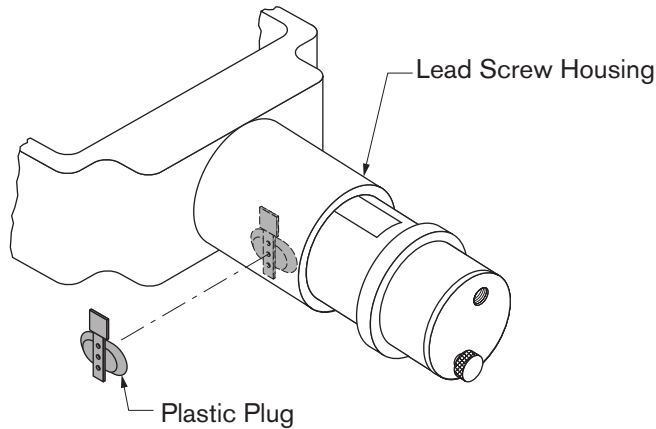
- ⑧ Prime tube and lead screw nut. (New units are greased at factory.)



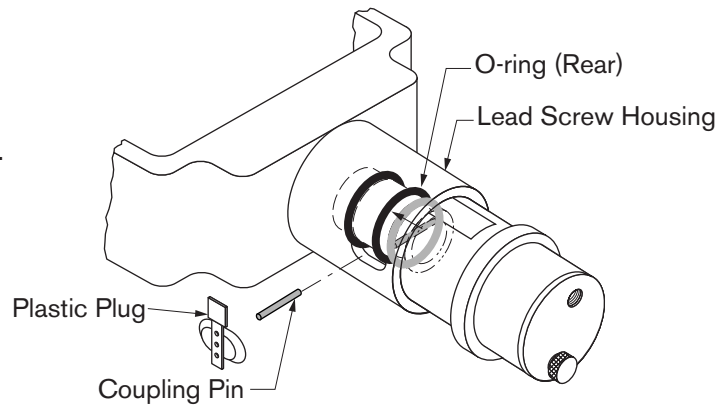
- ⑨ Screw greaser fitting into end cap of lead screw cartridge until actuator of greaser is activated.

PROCEDURE FOR REMOVING AND REPLACING LEAD SCREW ASSEMBLY

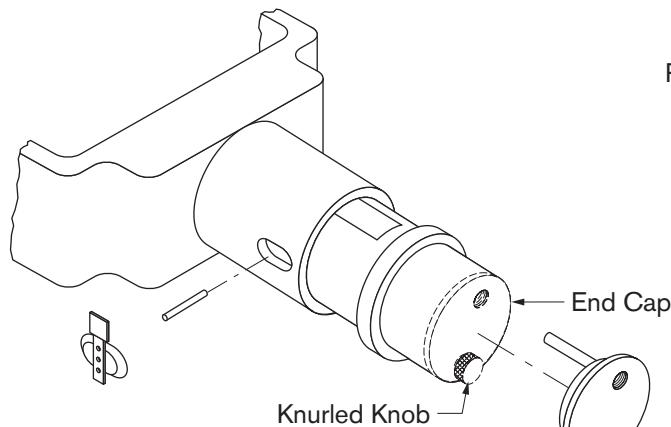
Procedure for Removing Lead Screw Assembly



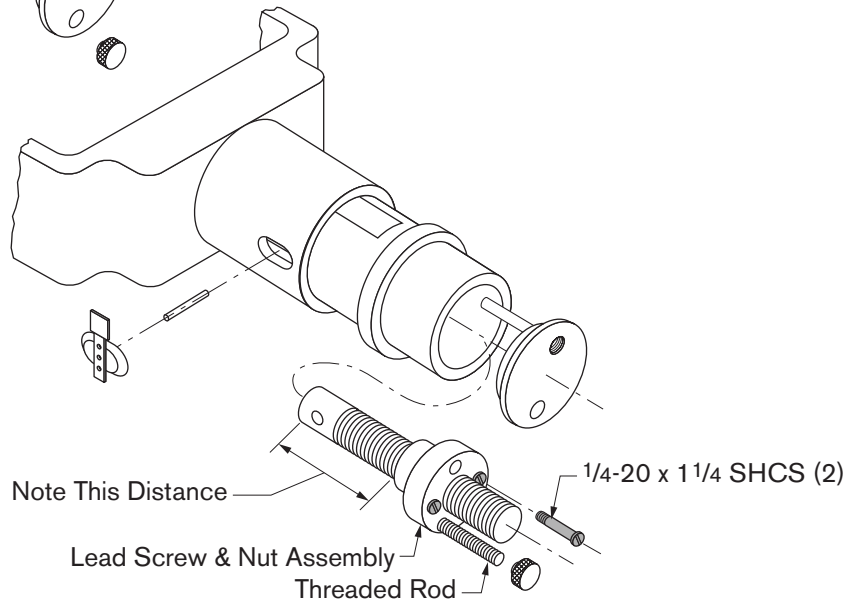
- ① **POWER OFF. AIR OFF.** Unit in Full Retract Position. Remove Plastic Plug in Lead Screw Housing.



- ② Slide O-Ring (Rear) out of Groove. Rotate Spindle until Coupling Pin is visible in hole from which Plastic Plug was removed. Remove Coupling Pin.



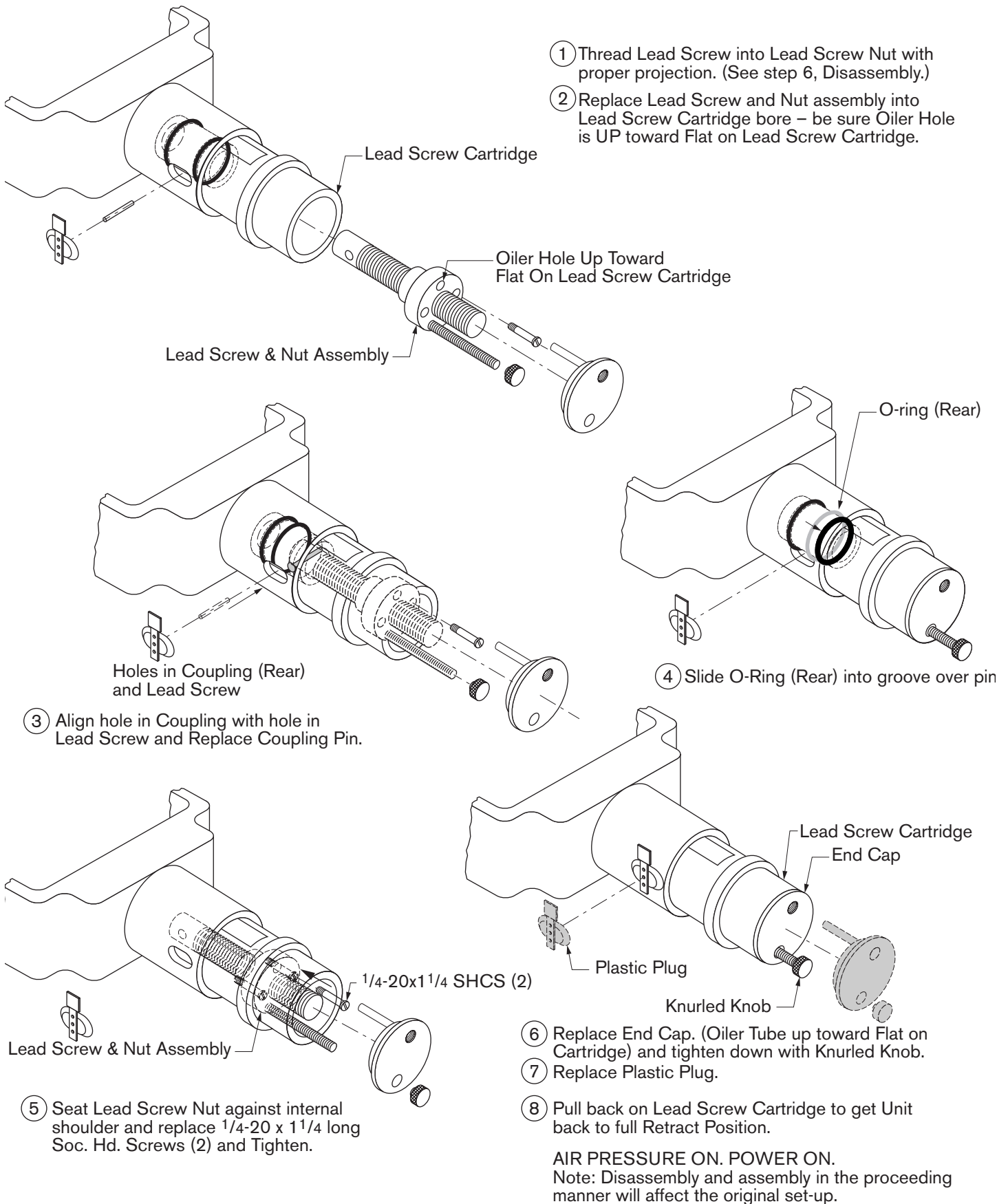
- ③ Remove End Cap by removing Knurled Knob.



- ④ Remove two 1/4-20 x 1 1/4 long Soc. Hd. Cap Screws from inside of Lead Screw Cartridge. Lead Screw & Nut can be pulled out (do NOT rotate) using Threaded Rod
IMPORTANT NOTE: For ease of reassembly, note the distance Lead Screw projects from Lead Screw Nut. (Approximately 1 7/8")
- ⑤ For replacing Lead Screw, Lead Screw Nut or Assembly, see procedure for replacing Lead Screw Assembly.

PROCEDURE FOR REMOVING AND REPLACING LEAD SCREW ASSEMBLY (Continued)
Procedure for Removing Lead Screw Assembly

- ① Thread Lead Screw into Lead Screw Nut with proper projection. (See step 6, Disassembly.)
- ② Replace Lead Screw and Nut assembly into Lead Screw Cartridge bore – be sure Oiler Hole is UP toward Flat on Lead Screw Cartridge.

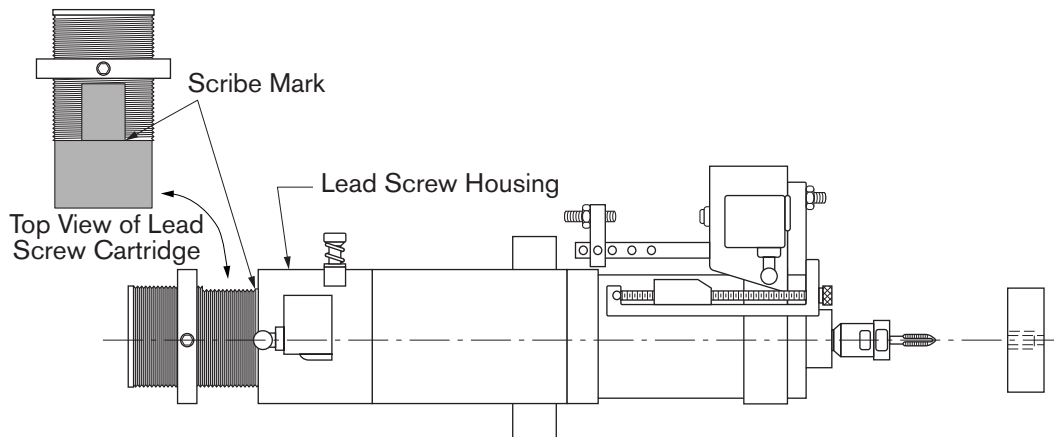


AIR PRESSURE ON. POWER ON.
 Note: Disassembly and assembly in the preceding manner will affect the original set-up.

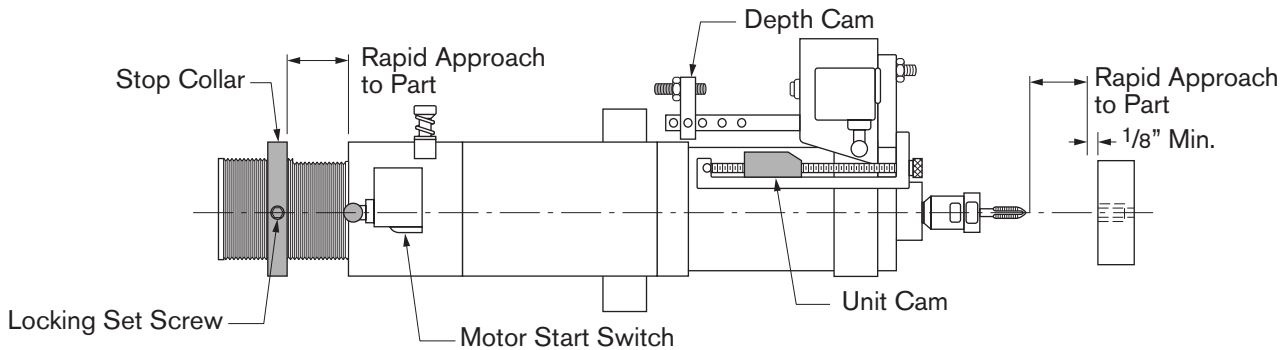
LEAD SCREW TAPPING UNIT SET-UP

NOTES:

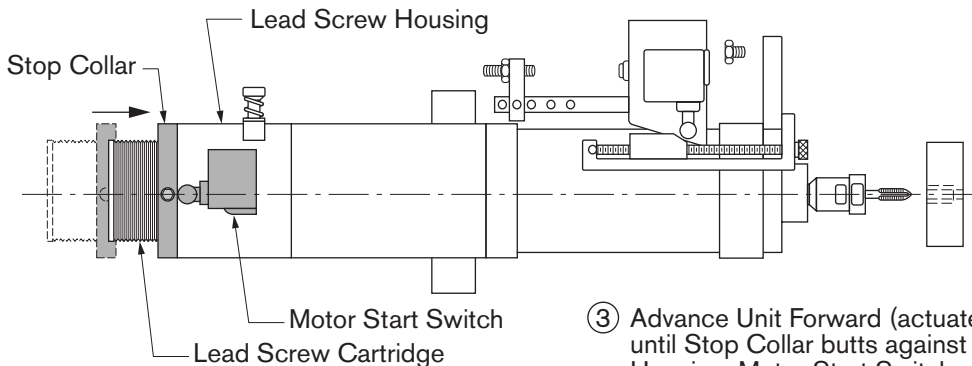
1. Follow instructions carefully to avoid jammed Lead Screws and Nuts. Be sure Lead Screw and Nut is properly oiled.
2. Steps 3, 4 and 5 can be accomplished with Air OFF by pushing Lead Screw Cartridge "L" forward.
3. When using Air Brake Motors, maintain 80 psi on Air Line leading to Air Brake. Do NOT lubricate Air Line to Brake.
4. **Set unit pressure to feed port with minimum air pressure to hold Stop Collar against Lead Screw Housing during tapping operation.**
5. Provision should be made in Electrical and Pneumatic circuitry for:
 - a. Complete power shut off
 - b. Motor Off-On Switch
 - c. Manual positioning of Valve
 - d. Single Cycle operation – separate from all other operations on machine.



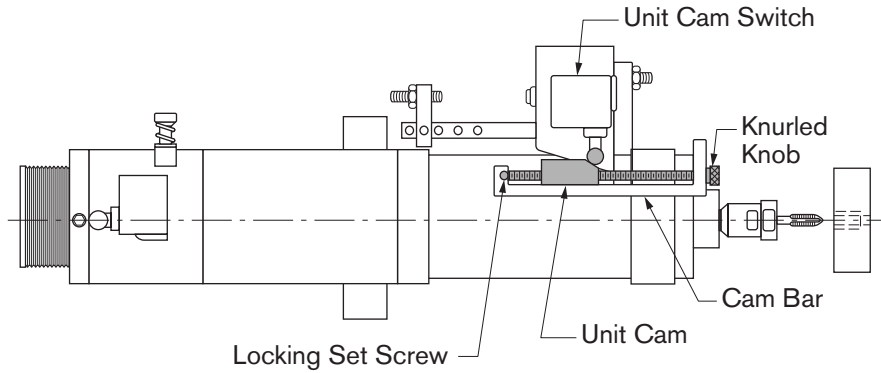
- ① **AIR ON. POWER OFF.**
 Unit in Full Retract Position, Scribe Mark must be even with Back of Lead Screw Housing.
 If Not, rotate pulley or spindle until Scribe Mark is in position.



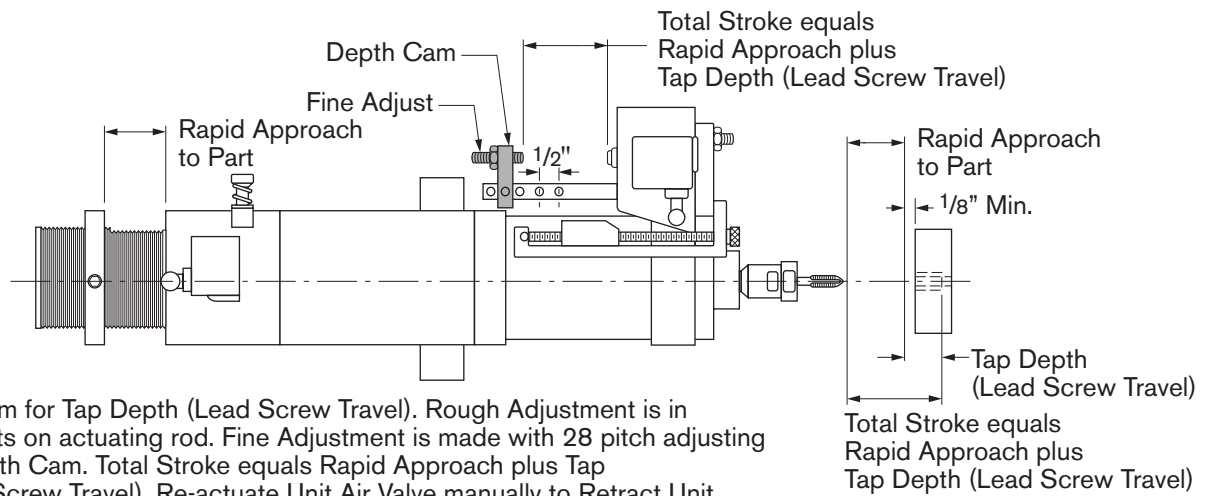
- ② Loosen Locking Set Screw and set Stop Collar for Rapid Approach to part.
 Allow 1/8" Minimum distance before Tap enters part. Lock Stop Collar in place with Locking Set Screw. Make sure Unit Cam and Depth Cam are far enough back so as not to allow them to actuate before Motor Start Switch.



- ③ Advance Unit Forward (actuate Unit Air Valve manually) until Stop Collar butts against Lead Screw Housing. Motor Start Switch must actuate.

LEAD SCREW TAPPING UNIT SET-UP (Continued)


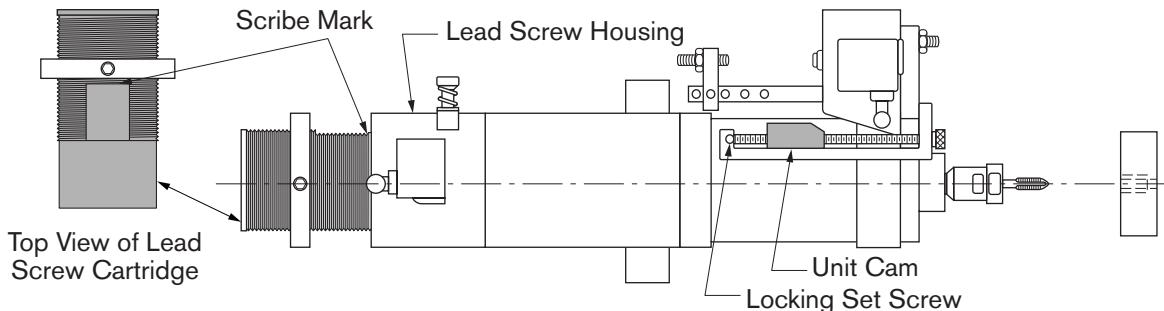
- ④ Loosen Locking Set Screw on Cam Bar and set Unit Cam to actuate Unit Cam Switch (Listen for Click). Back off Unit Cam (CCW on Knurled Knob) until Unit Cam Switch clicks off. Back off 1/2 turn more (CCW). Tighten Locking Set Screw.



- ⑤ Set Depth Cam for Tap Depth (Lead Screw Travel). Rough Adjustment is in 1/2" increments on actuating rod. Fine Adjustment is made with 28 pitch adjusting screw on Depth Cam. Total Stroke equals Rapid Approach plus Tap Depth (Lead Screw Travel). Re-actuate Unit Air Valve manually to Retract Unit.

⑥ **Checking Motor Rotation**

1. Motor OFF-ON Selector to OFF
2. AIR ON, POWER ON
3. Feed Unit forward
4. Quickly jog the Motor Off-On Selector Switch to ON, then OFF.
If Unit feeds forward, rotation is correct. If Unit begins to retract, change Three Phase Lead on Motor to correct rotation.



⑦ **AIR ON. POWER ON.**

Check Scribe Mark again. Run Lead Screw Tapping Unit through one cycle electrically.

If Scribe Mark has moved, re-adjust Unit Cam as follows:

If Scribe Mark has moved away from Lead Screw Housing, move Unit Cam toward front of unit.

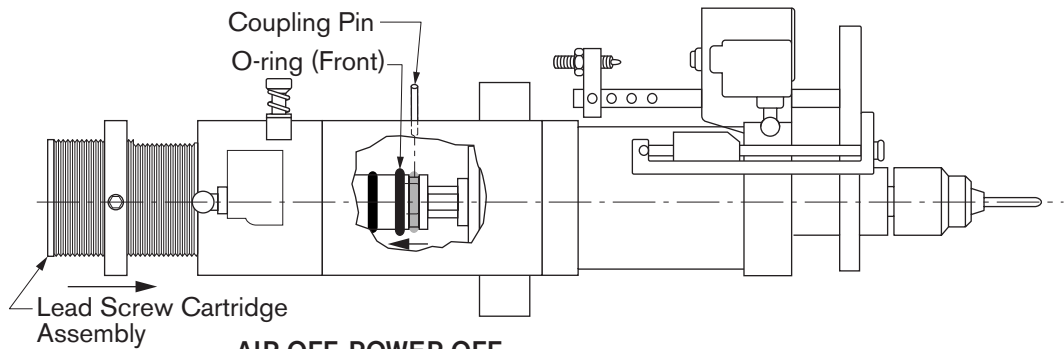
If Scribe Mark has moved into Lead Screw Housing, move Unit Cam toward rear of unit.

Re-adjust until Scribe Mark returns to proper position.

Be sure to tighten Locking Set Screw.

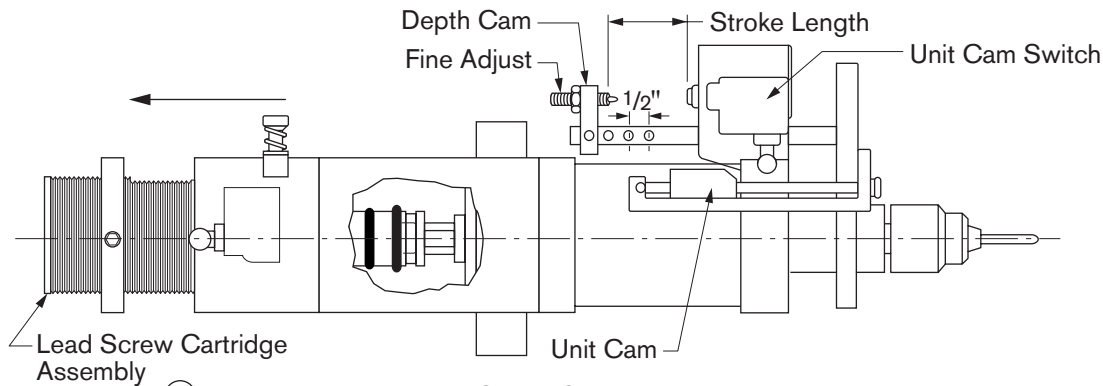
CHANGE OVER PROCEDURE FOR LEAD SCREW ASSEMBLY

Change Over Procedure – Lead Screw Tapping to Drilling



AIR OFF. POWER OFF.

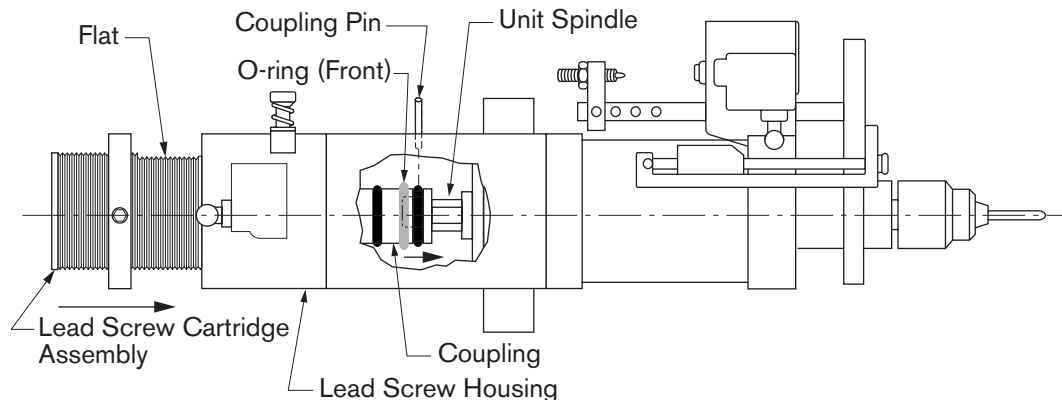
- ① Set the (Drill Tap) Selector Switch in Main Control Cabinet to "Drill" Position.
- ② Push Lead Screw Cartridge forward until O-Ring (Front) is accessible.
- ③ Slide O-Ring (Front) out of groove, remove Coupling Pin.



- ④ Pull out complete Lead Screw Cartridge Assembly.
- ⑤ Set Unit Cam far enough back as to not allow Unit Cam Switch to roll off back of Unit Cam.
- ⑥ Set Depth Cam for required stroke. Rough setting 1/2" increments. Fine adjustment with 28-pitch Adjusting Screw.

AIR ON. POWER ON.

Change Over Procedure – Drilling to Lead Screw Tapping



AIR OFF. POWER OFF.

- ① Insert complete Lead Screw Cartridge into Lead Screw Housing. Be sure Flat on Cartridge is UP.
- ② Push forward on Lead Screw Cartridge until coupling slides onto Unit Spindle. Align hole in Coupling and hole in Spindle and insert Coupling Pin.
- ③ Slide O-Ring (Front) into groove over pin.
- ④ Set the (Drill – Tap) Selector Switch in Main Control Cabinet to "TAP" Position.
- ⑤ Reset according to Hypneumat Lead Screw Tapping Set-Up. (Refer to Hypneumat Bulletin 82-13-3.)