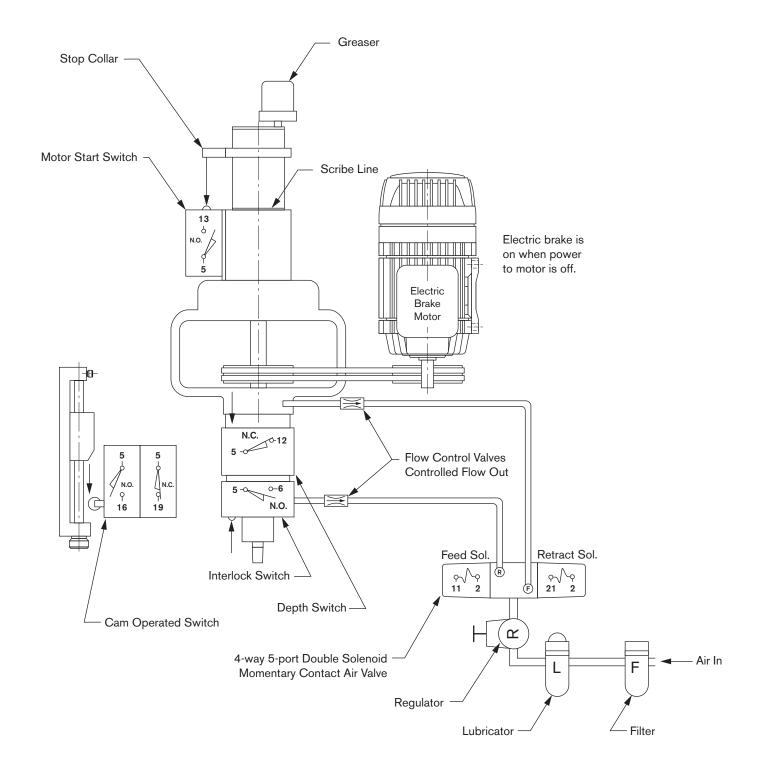
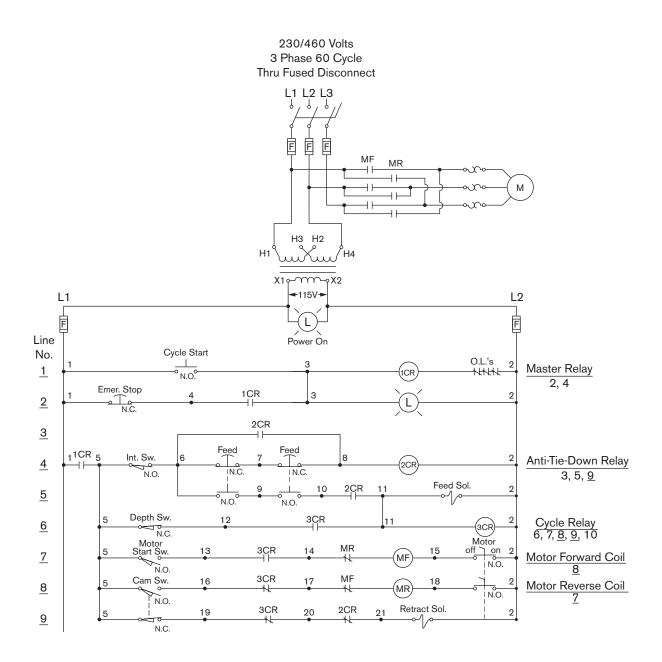


# LS-300 & LS-500 PIPING FOR BASIC LEAD SCREW TAPPING CIRCUIT WITH AIR RAPID APPROACH AND ELECTRIC BRAKE MOTOR





## LS-300 & LS-500 BASIC LEAD SCREW TAPPING CIRCUIT WITH AIR RAPID APPROACH AND ELECTRIC BRAKE MOTOR



### **IMPORTANT**

THIS CIRCUIT IS A BASIC METHOD OF CONTROLLING HYPNEUMAT EQUIPMENT. CHECK LOCAL, STATE, & OSHA REGULATIONS FOR SPECIFIC CIRCUIT REQUIREMENTS.



# LS-300 & LS-500 CYCLE SEQUENCE FOR LEAD SCREW TAPPING CIRCUIT WITH AIR RAPID APPROACH AND ELECTRIC BRAKE MOTOR

- Turn Motor Selector Switch to "ON"
- 2. Push Cycle Start Button
  - a. Supplies Power to Circuit (1CR)
- 3. Push Twin Palm Feed Buttons
  - a. Valve shifts for rapid approach
  - b. 3CR is energized
  - Brake is released and unit moves forward
- 4. Stop Collar on Lead Screw Cartridge makes contact with Motor Start Switch
  - a. Motor starts clockwise rotation (MF)
- 5. Cam Operated switch is set to actuate just after Motor Start Switch is actuated
- 6. Depth Switch is actuated at depth required
  - a. 3CR is dropped out
  - b. Motor starts counterclockwise rotation (MR)
  - c. Valve "does not" shift
- 7. Cam Switch drops off cam
  - a. Power to Motor is shut off
  - b. Brake is energized
  - c. Valve shifts to Rapid Retract position

## EMERGENCY STOP (Tap in part)

- 1. Pushing Emergency Stop Button, causes all motion to stop.
- 2. To return unit to back position, "Cycle" start button must be pressed and unit will automatically go to normal retract position.

#### NO HOLE IN PART

- 1. Unit Rapid approaches
- 2. Normal Cycle begins
- 3. Tap makes contact with part
- Unit cannot feed forward so Lead Screw Cartridge backs out of Rear Housing. Backing off of cartridge causes Motor Start Switch to deactuate.

#### RETURNING UNIT TO START POSITION

- Push Emergency Stop
- 2. Push Cycle Start button (unit retracts)
- 3. Remove part and Cycle unit one time to allow unit to reset Scribe line in cartridge

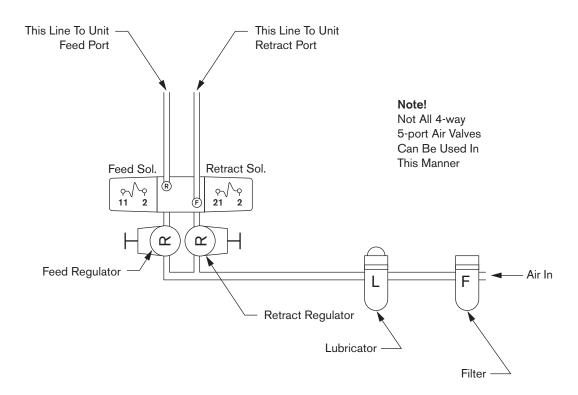
NOTE: A. In this circuit "Cam Switch" has no function on the way in.

NOTE: B. The "Motor Start Switch" has no function on the way out.

## **OPTIONAL PIPING FOR DUAL PRESSURE SYSTEM**

### NOTE!

This system used for vertical operation with heavy multiple spindle heads. Separate pressures for feed and retract strokes.



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