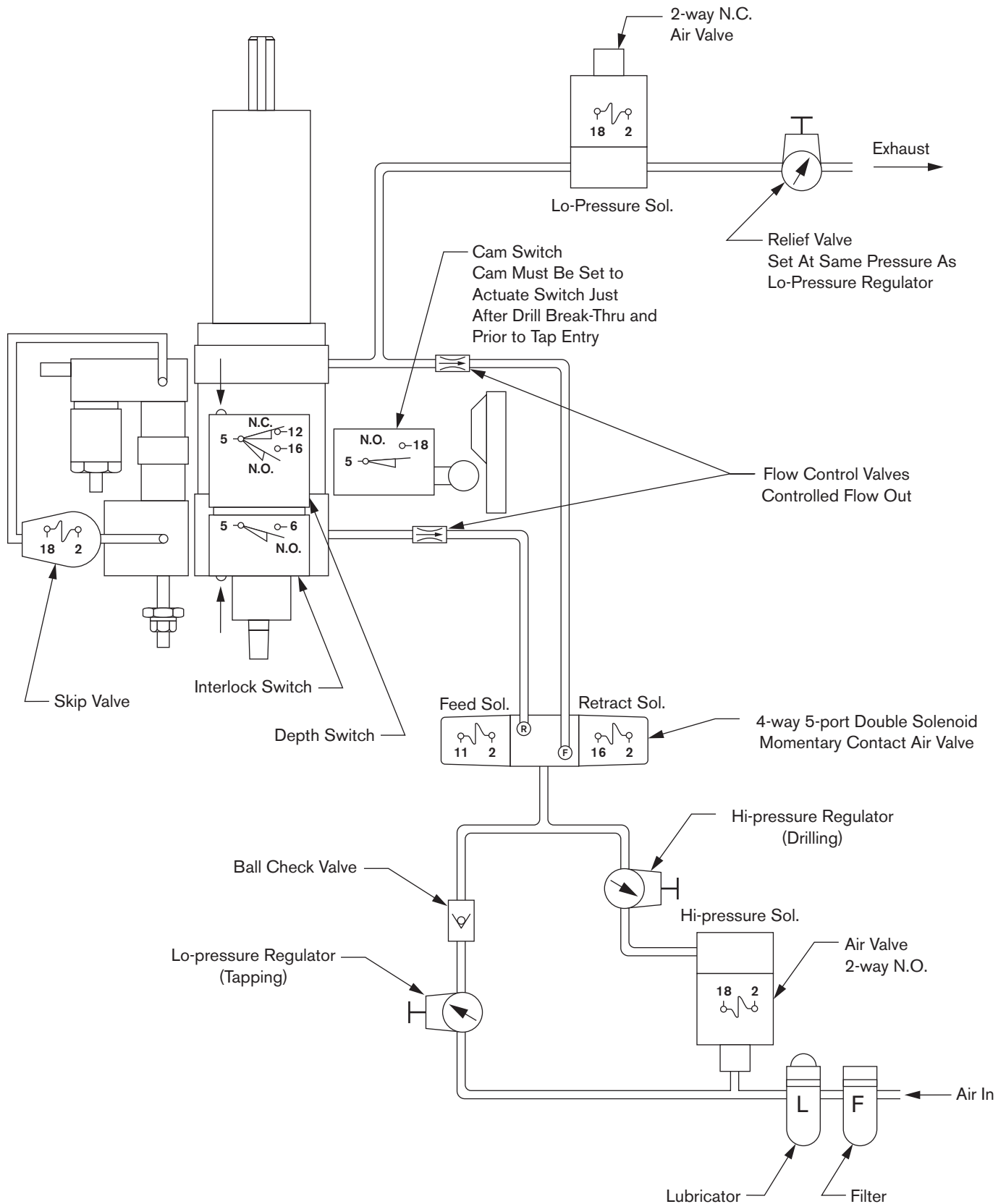


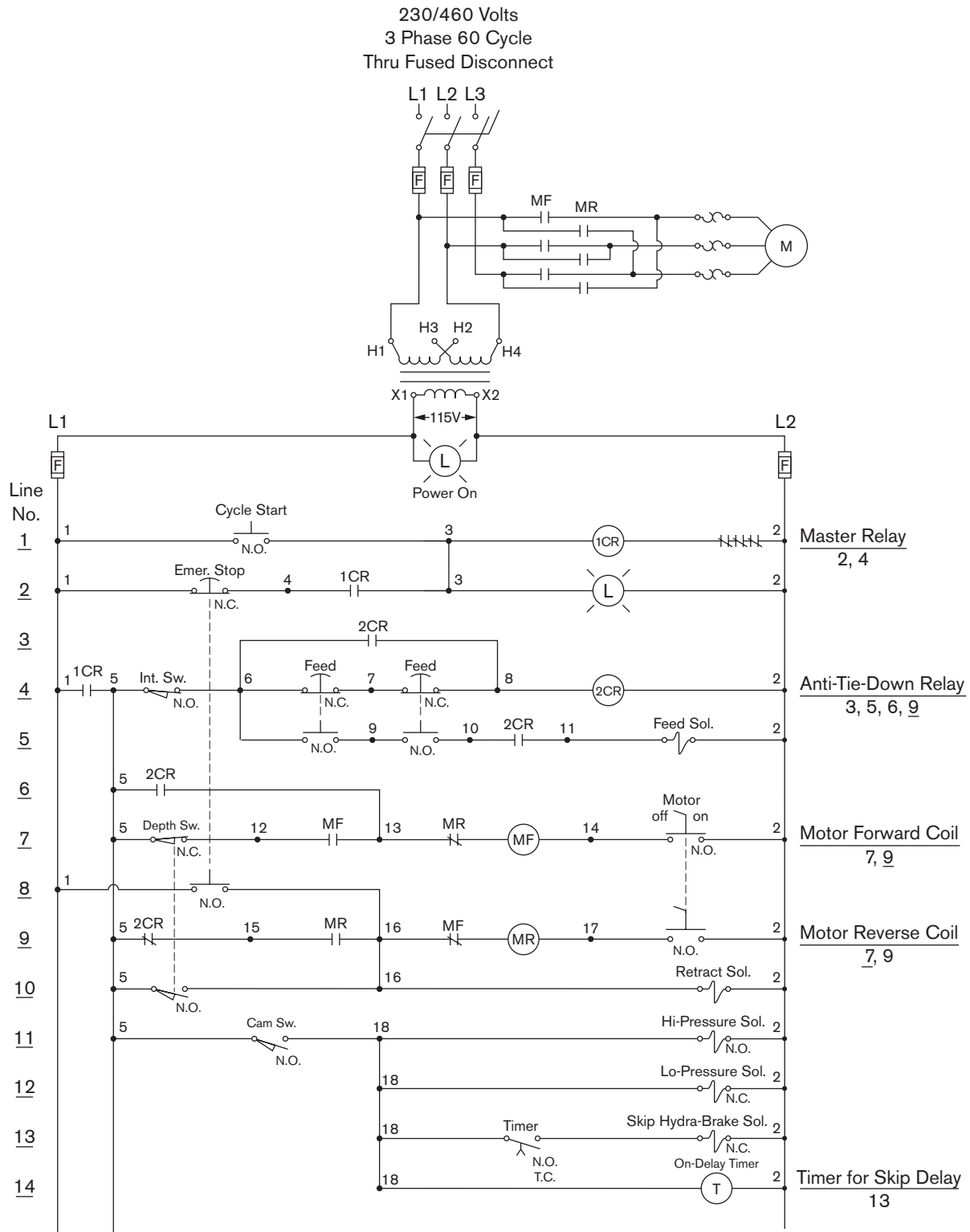
# HYPNEUMAT INC.

AUTOMATIC DRILLING & TAPPING UNITS

## PIPING FOR BASIC COMBINATION DRILL-TAP TOOL AIR CIRCUIT



**BASIC COMBINATION DRILL-TAP TOOL AIR CIRCUIT**



***IMPORTANT***

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

1. Turn Motor Selector Switch to "ON"
2. Push Cycle Start Button
  - a. Supplies power to Circuit (1CR)
  - b. Motor Forward Coil (MF) starts motor in clockwise rotation
3. Push Twin Palm Feed Buttons
  - a. Valve shifts and feeds unit under "HIGH PRESSURE"
4. After Drill Portion of tool breaks thru work piece and prior to tap portion of tool entering work piece, "Cam Switch" is set to actuate
  - a. High pressure is exhausted from lines
  - b. Hydra-Brake skip valve is actuated after .25 second delay from timer (eliminating control from Hydra-Brake)
  - c. Low pressure is introduced to unit
5. Depth Switch is actuated
  - a. Motor Forward Coil (MF) is dropped out
  - b. Motor Reverse Coil (MR) is energized and starts motor in counterclockwise rotation
  - c. Valve shifts and unit begins to retract
6. Unit Returns to full retract position and actuates Interlock Switch
  - a. Cam is dropped out
  - b. High pressure is again introduced to unit
  - c. Motor forward coil (MF) returns motor to clockwise rotation

#### EMERGENCY STOP

1. Push Emergency Stop Button
  - a. 1CR Master Relay drops out
  - b. Motor Forward Coil (MF) drops out
  - c. Valve shifts to retract position

NOTE: A. If Tap is "NOT" in part, unit will rapid retract and motor coasts to stop

NOTE: B. If Tap is "IN" part, motor will stop and unit will not rapid retract  
(see operation #2 for tap removal from part)

2. To return unit to full retract position, if tap is "IN" part
  - a. Push Emergency Stop button and hold down
  - b. Motor Reverse Coil (MR) is actuated and motor rotates counterclockwise
  - c. Tap leaves part and unit returns to full retract position
  - d. Release Emergency Stop Button

Visit us on the World Wide Web at <http://www.hypneumat.com>

---

Hypneumat Inc.  
5900 West Franklin Drive  
Franklin, WI 53132-9178  
Phone: (414) 423-7400  
Fax: (414) 423-7414

**HYPNEUMAT INC.**  
AUTOMATIC DRILLING & TAPPING UNITS