PIPING FOR BASIC HYDRAULIC DRILLING CIRCUIT

- Cam Switch
- Interlock Switch
- Fast Approach Valve 2-way N.O.
- Flow Control Valves with controlled flow out
- Feed Sol.
- Retract Sol.
- 4-way 2-position Momentary Contact Hydraulic Valve
- Return Line
- Pressure Line
- Pressure Relief Valve
- Pump Motor
230/460 Volts
3 Phase 60 Cycle
Thru Fused Disconnect

This circuit is a basic method of controlling Hypneumat equipment.
Check local, state, & OSHA regulations for specific circuit requirements.
1. Turn Hydraulic Pump Selector Switch to “ON”

2. Turn Unit Motor Selector Switch to “ON”

3. Push Cycle Start Button
   a. Supplies power to Circuit (1CR)

4. Push Twin Palm Feed Buttons
   a. Valve shifts and unit feeds forward at rapid approach until Cam Switch is actuated

5. Cam Switch is actuated
   a. 2-Way N.O. Valve is energized to a closed position
   b. Feed rate is then controlled by flow control valve

6. Depth Switch is actuated at depth required
   a. Valve shifts and unit rapid retracts

**EMERGENCY STOP**

1. Push Emergency Stop Button
   a. 1CR Master Relay Drops Out
   b. Hydraulic Pump shuts off
   c. Unit Motor shuts off and coasts to stop
   d. Valve shifts, but unit cannot retract

2. To return unit to retract position, “Cycle Start” Button must be pressed