

**Job Responsibilities - Preventive Maintenance**

- Add hydraulic fluid to the reservoir
- Check the condition of the hydraulic filtration system and the saturation level of the filter
- Change spin-on and cartridge type hydraulic filters
- Adjust hydraulic hoses and fittings for proper position and alignment
- Adjust the charge pressure on a bladder type accumulator
- Torque bolts on a circular pattern

**Job Responsibilities - Fluid Filtration and Maintenance**

- Draw a hydraulic pressure line sample using a sampling valve
- Examine hydraulic fluid for water and contaminants
- Transfer fluid through a portable filtration unit
- Label a fluid sample for laboratory analysis
- Prepare a hydraulic fluid sample container in the field
- Convert a petroleum-based system to a high water content fluid (HWCF) system
- Draw a hydraulic fluid sample from the reservoir

**Job Responsibilities - Assemble Components**

- Assemble a hydraulic fixed displacement unbalanced gear pump
- Assemble a hydraulic balanced-piston pressure relief valve
- Assemble a three-position, four-way, solenoid operated directional control valve
- Make a hydraulic hose assembly with permanent ends
- Make a hydraulic hose assembly with reusable ends
- Make a flared hydraulic tubing assembly

**Job Responsibilities - Field Repairs**

- Check a hydraulic valve spool for an obstruction
- Adjust a balanced piston hydraulic pressure reducing valve
- Adjust a balanced piston pressure relief valve
- Replace the shaft seal in a vane pump
- Drain and recharge a piston accumulator
- Set the pressure on a hi-low double pump

### **Job Responsibilities - Major Repairs**

- Overhaul a pressure balanced, fixed displacement vane pump
- Install a rebuild kit in a fixed displacement, axial piston, swash plate pump
- Overhaul a hand operated hydraulic jack
- Overhaul a double-acting industrial cylinder

### **Job Responsibilities - Minor Repairs**

- Replace an O-ring on a straight thread fitting
- Replace a directional control valve solenoid
- Seal a hydraulic pipe fitting with sealing tape
- Maintain a hydraulic reservoir

### **Job Responsibilities - Replace Components and Fluids**

- Drain, flush, and replace hydraulic fluid
- Replace a hydraulic pump and align the coupling
- Determine specifications from a component code breakdown
- Replace a hydraulic V-packing
- Replace a pipe system with a custom made tube assembly
- Replace a pressure gauge
- Identify components from a circuit diagram
- Replace and align a foot mounted hydraulic cylinder
- Replace a hydropneumatic accumulator bladder

### **Job Responsibilities - Trouble Shooting**

- Determine why a cylinder fails to move the load when the directional control valve is shifted
- Check a cylinder piston for bypass leakage
- Check a hydraulic pump or motor for bypass leakage
- Determine the cause of erratic pressure, low pressure, or high pressure in a balanced piston pressure relief valve
- Isolate solenoid control valve failures
- Verify that hydraulic lines meet size requirements
- Distinguish between aeration and cavitation