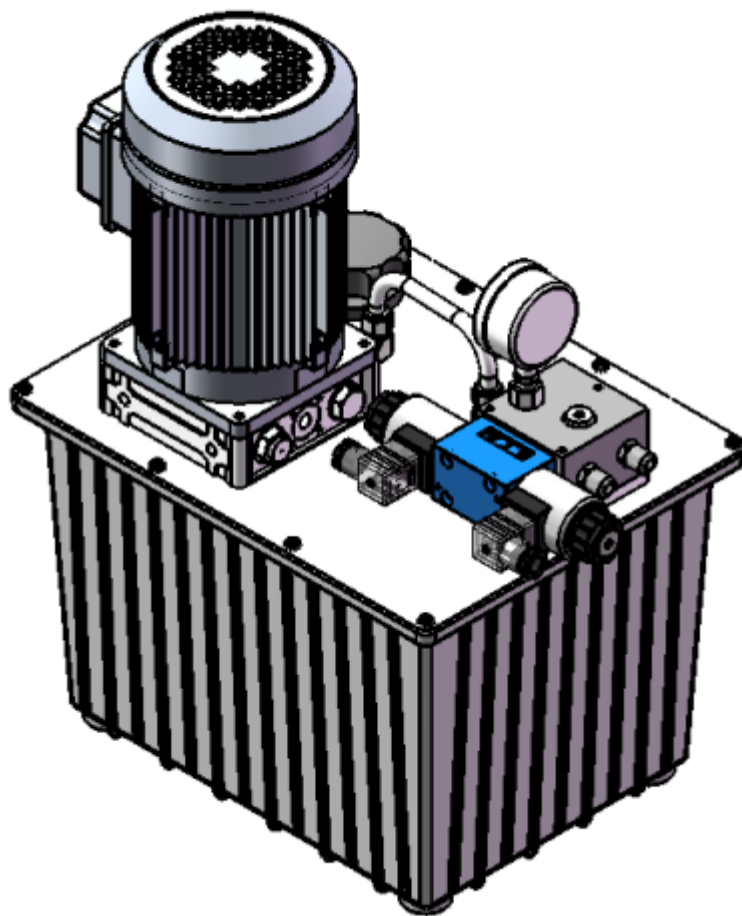


**GROUP B**

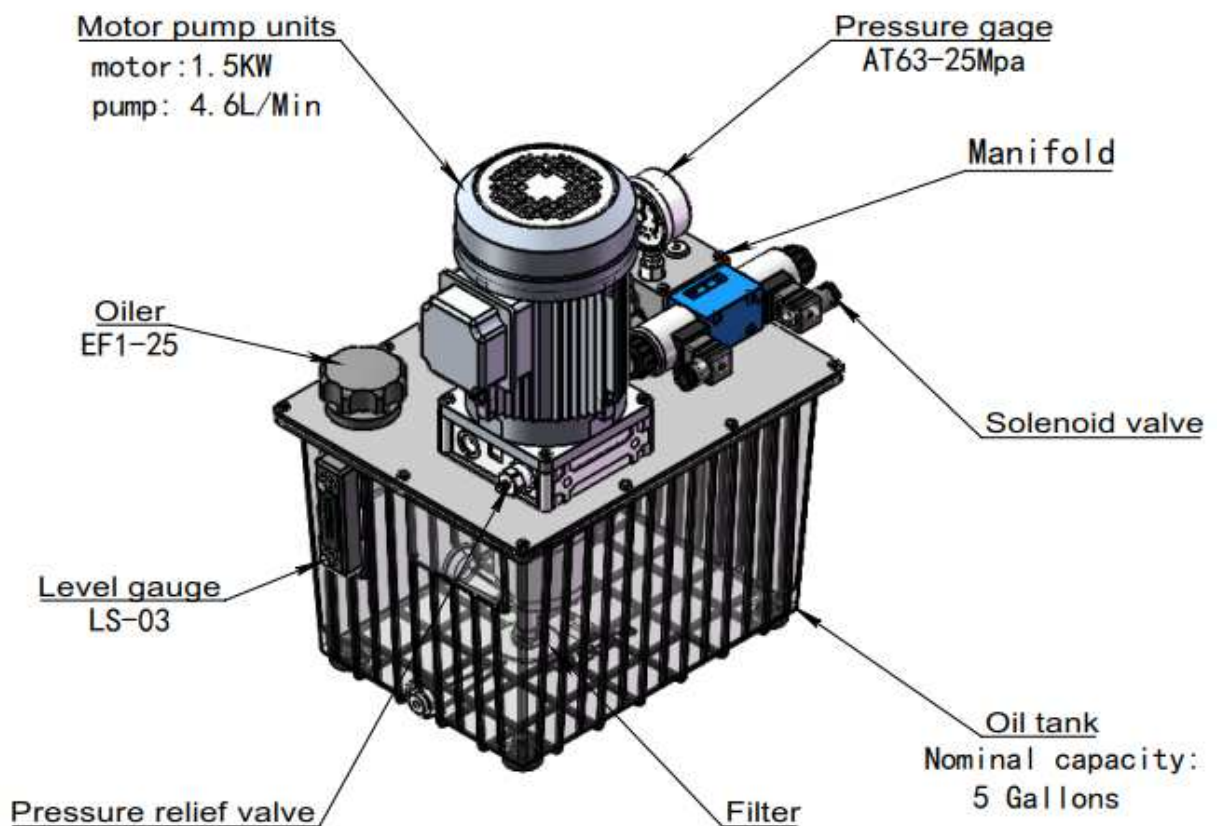
OPERATION MANUAL OF  
HYDRAULIC UNITS

Model :

**HCP-10-1.5-4.6-1C-D2-20**



# 1.The structure of hydraulic unit



## Parameter description:

- 1.Rated capacity of oil tank: 5 gallons
- 2.Motor power: 1.5KW
- 3.Rated pressure: 10Mpa
- 4.Rated flow: 4.6 L/Min
- 5.The drive voltage of the solenoid valv: 24V DC
6. Rated voltage of motor :230/400V AC (THREE PHASE)
7. Motor frequency: 60Hz

## **Functional components**

1. Pump device-- is equipped with motors and pump,hydraulic station is the source of power. To mechanical energy into hydraulic oil pressure can be.

2. Manifold and solenoid valve— From hydraulic valve body and channel assembled. Right direction for implementation of hydraulic oil, pressure and flow control.

3. Oil tank-- The oil tank is made of die casting parts. Also loaded with oil filtering network, air filters ,used oil, oil filters and cooling.

Hydraulic station principle : motor driven pump rotation, which pump oil absorption from the oil tank. To mechanical energy into hydraulic pressure to the station, hydraulic oil through manifold (or valve combinations.) realized the direction, pressure, after adjusting flow pipe and external to the cylinder hydraulic machinery or motor oil, so as to control the direction of the motive fluid transformation force the size and speed the pace of promoting the various acting hydraulic machinery.

## **Maintenance and repair**

General failures and trouble shooting method are listed as follows:

### **1. Insufficient pressure and flow of hydraulic unit;**

- (1) Check whether motor and pumps the normal operation;
- (2) Check whether the oil level is normal;
- (3) Check whether the voltage is normal;
- (4) Check whether the motor running direction is correct;
- (5) Check the hydraulic unit for leaks;

### **2. Abnormal operation of actuator**

- (1) Check whether the solenoid valve works normally;
- (2) Check whether the hydraulic unit pressure is normal;
- (3) Check the hydro-cylinder for leakage;
- (4) Check whether the relief valve is adjusted correctly;

### **3. The oil temperature is too high (more than 60 degrees) and the noise is too high (more than 70 dB)**

- (1) High viscosity of hydraulic oil or leakage of oil pump;

- (2) Insufficient hydraulic oil in tank;
- (3) There is air in the working oil way;

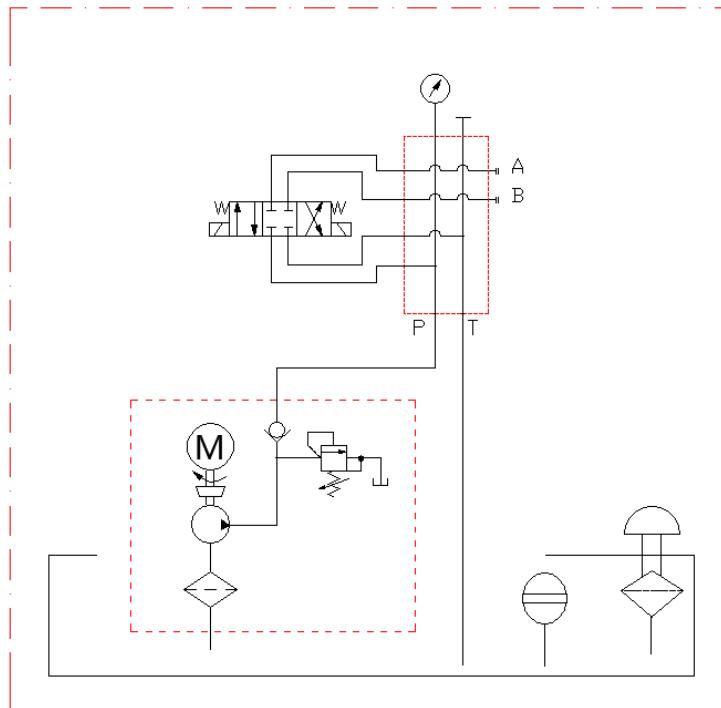
## **Points for attention**

### **1. Precautions before operation**

- (1) Please read this manual carefully before operation, and fully understand the structure and action of the system in combination with the actual hydraulic unit.
- (2) Confirm the hydraulic oil in the tank is at the best fluid level stage.

### **2. Precautions for use**

- (1) Please replace oil after first three month (or 750 hours), and replace oil half year (or 1500 hours) after first replacement.
- (2) Always keep oil temperature under 60°C.
- (3) Please put power pack at ventilating area.



Hydraulic schematic

**! WARNING !**

To guarantee the efficiency and working life of the power unit, please choice ISO VG32# or VG46# or equivalent hydraulic oil.

**! WARNING !**

Hazardour voltage can chock, burn or cause death. Turn off power before servicing.