

# HYDRAULIC TORQUE WRENCH PUMP INSTRUCTION MANUAL



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## 1. Features and Parameters

1.1 This high pressure torque wrench pump consists of oil pump, control valve, reservoir, motor, and instruments, with characteristics of compact design, low weight, easy structure, convenient operation and high pressure, etc... This pump adopts R-series high pressure radial-direction piston pump with one-way valve and high pressure relief valve, to control the pressure safely.

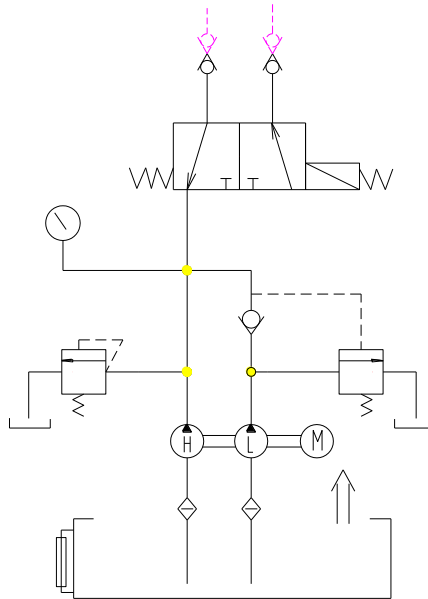
### 1.2 Main Technical Parameters

Model Description	WPE-2T-1 WPE-2T-2
Rate Pressure (MPa)	70
Flow Rate (L/min)	6 / 1.1
Oil Cap. (L)	8
Power (KW)	1.5
Power Source	220V/50Hz
Control Valve Type	Solenoid
Dimension (cm)	53×47×70
Weight (KG)	63/67

## 2. Usage

This pump uses high pressure components, compact and convenient; solenoid valve control, stable and safely; easy to operate. Standard adjustable pressure from 6-70 MPa, automatically exchange of low pressure and high pressure ensure the working output.

### 3. Hydraulic Diagram



### 4. Operation

4.1 Fill the pump with ISO 32# hydraulic oil fully. If without oil or few oil when working, the pump will suck air which will lead to no pressure rising.

4.1 Loosen the pressure regulating valve on the pump.

4.3 Start the pump, press the green button, and then the motor start working. If press the red button, the motor stops.

4.4 Press the green button on the remote control handle, and the motor starts working; at the same time, observe the pressure shows on the pressure gauge. If the pressure is lower than the working pressure, adjust the pressure regulating valve clockwise slowly until the pressure reaches needed pressure. And then loosen the green button. Repeat several times. If there is no fault, install the tool on the bolt.

4.5 This pump is without automatic stop function. If there is no person operates after the pump start, please press the red button to stop the pump. Press the green button to put the pump into work again if needed.

**WARNING: Pressure overload is forbidden. ( $\leq 70\text{MPa}$ )**

## 5 Points for Attention

5.1 Please use ISO 46# or ISO 32# hydraulic oil. Use clean oil.

5.2 Oil level should be up the middle of the level gauge to prevent pump sucking air.

5.3 Working temperature of the oil is -10 to 70 °C. If the temperature is too high, use cooler to lower the temperature or stop working until the temperature turns to normal.

5.4 Before starting the motor, loose the pressure regulating valve completely to prevent overload of pressure of the pump. Inching start of the pump motor several times to eliminate the air inside the pump for the first time use.

## 6 Trouble-Shooting

Faults	Main Causes	Trouble-shoot
Low pressure	<ol style="list-style-type: none"> <li>1. Safety valve pressure adjusted too low</li> <li>2. Safety valve cone valve blocked</li> <li>3. O-ring of reversing valve broken</li> <li>4. Leaking at the couplers</li> <li>5. Pressure gauge no display</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust safety valve</li> <li>2. Inspect cone valve or valve base</li> <li>3. Change O-ring</li> <li>4. Check the coupler and valve block</li> <li>5. Change pressure gauge or inspect the gauge adaptor</li> </ol>
Low flow	<ol style="list-style-type: none"> <li>1. Plunger coupling with the gap wear is too large</li> <li>2. Piston or piston spring broken</li> <li>3. Leakage</li> <li>4. Oil tem. Is too low or too high</li> <li>5. Low oil level</li> </ol>	<ol style="list-style-type: none"> <li>1. Change piston</li> <li>2. Change related accessories</li> <li>3. Fasten the coupler and change seals</li> <li>4. Control oil tem. -10~+70°C</li> <li>5. Fill oil</li> </ol>