TORC STARK

HAC100 Hydraulic Puller

Operation Manual

Pingyuan Jingke Hydraulic Co., Ltd.

Catalogue

I、Introduction

HAC100 vehicle-mounted hydraulic puller is made of high-strength materials, controlled by wireless remote switch, double-acting hydraulic design, and can disassemble large and small shafts and disc parts. The entire system is installed on a trolley, no lifting equipment is required, and the operation is flexible and easy to use.

Note: No unauthorized changes are allowed in the design, structure and application.

II、Technical parameter

Model：W6025-2A

Item	Value	Unit
Maximum output of cylinder	100	T
Cylinder stroke	250	mm
Minimum opening	250	mm
Drawing depth at minimum opening	510	mm
Maximum opening	1100	mm
Drawing depth at maximum opening	430	mm
L	2400	mm
H	1477	mm
B	830	mm
Maximum working pressure of oil pump	70	MPa
Power source requirements	380V、50HZ、2.2KW	
weight	650	Kg

III、Operation and use

Schematic diagram of control switch

1. Align the puller cart to the workpiece waiting to be processed and push it to a suitable position to position it.

2. Turn on the power, the power indicator light is on, and the pump station starts to run.

3. Press the "Up" key of the control switch, and the main oil cylinder will start to rise and adjust to the coaxial position with the workpiece to be drawn.

4. then press the "West" button (i.e. open button) to open the claw, which should be larger than the diameter of the workpiece to be drawn; at this time, press the "East" button (i.e. close button) to make three puller claws simultaneously hold tight the workpiece.

5. Finally, place a suitable plug, and then press the "South" button (ie jacking), the main cylinder starts to pull the workpiece until the workpiece is removed.

6. After the drawing is completed, first press the "North" button (ie. retract) to retract the piston rod of the main cylinder.

7. Press the "West" key (i.e. open button) to open the claw and release the workpiece.

8. Press the "East" button (i.e. close button) to retract the claw.

9. Press the "Down" button of the control switch, and the main cylinder begins to descend.

Note: Please follow the above steps to operate the hydraulic puller

IV、Precautions：

1. The hydraulic puller is a high-pressure power tool. Read the instruction manual carefully before use.
2. The working pressure of the system shall not exceed 70MPa.
3. In the system, the pressure gauge displays the operating load, and overloading is strictly prohibited.
4. The components of the puller are protected from overheating, flames, machine rolling, sharp edges and chemical corrosion.
5. The high pressure oil pipe should be kept in a free state, and the bending diameter must be greater than 500mm. Pipes needs to be subjected to a pressure test every year.
6. It is strictly forbidden to press heavy objects on the high-pressure hose, and not to drag and

lift other hydraulic accessories with the high-pressure hose.

7. The protective device and puller accessories cannot be removed, and the safety valve cannot be adjusted arbitrarily to prevent equipment damage and personal injury.

8. Try to keep the coaxiality of the oil cylinder, the plug and the parts to ensure the stability of the work.

9. Every time the hydraulic oil is changed in the pumping station, the exhaust screw must be loosened to completely exhaust the air in the oil circuit, and then tighten the screw.

10. Check the amount of hydraulic oil before work and replenish it in time.

11. Before the system pipeline is connected, it is strictly forbidden to pressurize the oil pump, so as not to damage the valve core of the quick connector or even hurt people.

V、Hydraulic Oil

Before use the tool, fill up the hydraulic oil first.

The hydraulic oil selected should meet the GB/T7631.2-1987 standard, and the appropriate hydraulic oil should be selected according to the ambient temperature. Use L-HM32 anti-wear hydraulic oil when the ambient temperature is low; use L-HM46 anti-wear hydraulic oil when the ambient temperature is normal; use L-HM68 hydraulic oil when the ambient temperature is high.

Note: The oil temperature should not exceed 70℃ during use.

VI、Failure and troubleshooting

Failure phenomenon	Reason	Troubleshooting method
Motor not working	1. The power is not connected properly, 2. The power switch is not on or malfunctions.	Check the power supply and the switch
Oil leakage	1. The joint is not tightened; 2. The sealing ring is damaged; 3. Insufficient pre-tightening force of screws for sealing; 4. The surface of the piston rod is strained and grooved; 5. Unauthorized increase of pressure causes component damage and hydraulic oil leakage.	Tighten the joints and screws, Disassemble and replace the seals. Adjust the relief valve to the set value.

Hydraulic oil overheated	1、Long-term continuous overload work. 2、The ejector rod and the workpiece are seriously out of axis, causing the piston to eccentrically load and violently rub against the cylinder and cylinder head to generate heat. 3、Hydraulic oil pollution causes valve blockage and seal ring wear, which increases hydraulic resistance and internal leakage. 4、The hydraulic pump and motor are worn out, with large internal leakage and low efficiency.	1. Proper intermittent operation. 2. The puller and the workpiece are as coaxial as possible. If the cylinder body is worn out, it must be repaired or replaced in time. 3. Check whether the oil circuit is smooth or dismantle and repair it. 4. Disassembly and repair.
Excessive vibration and noise	1、The fixing bolts of the motor base and the oil pump are loose; the coupling is loose. 2、The hydraulic pump is damaged and the bearing is worn or broken. 3、The oil level is too low and the oil is contaminated. 4、The noise of the relief valve is air in the oil system.	1. Tighten the screws. 2. Dismantle and repair. 3. Add oil or replace with new oil. 4.Check the liquid level and discharge the air in the pipeline.

VII、Structure Diagram