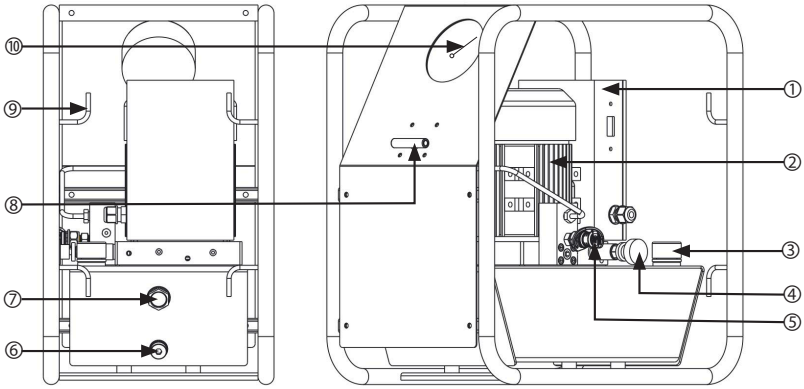
NEP Product Components:



NO	Name
1	Electric Cabinet
2	Power-Driven Machine
3	Refueling And Exhaust Outlet
4	Relief Valve
5	Quick Interface
6	Oil Outlet
7	Oil Level Gauge
8	Release Valve
9	Cable Collector
10	Manometer

Component Function Introduction:

Hand Shank

The NEP is equipped with a single-button handle. The start and stop of the pump are controlled by the control handle. The handle comes standard with a non-preserved button. Pressing the button starts the motor, and releasing it stops the motor. Once the pressure is reached, release the button; if additional pressure is needed, restart the pump. Do not run for long periods after reaching the pressure, as this can cause overheating.

Overflow Pressure Regulating Valve

Before use, adjust the system pressure through the relief pressure regulator first, then connect the tool to prevent damage from excessive pressure. Ensure that the unloading valve is fully closed, loosen the locking nut on the relief valve, and rotate it counterclockwise a few times to ensure the realtime pressure is below the target pressure. Press the handle button to start the motor, and the pressure begins to build up. Continue pressing the button while rotating the relief pressure regulator clockwise to reach the target pressure, then tightenthe nut.

Unloading Valve

When the valve is closed--hydraulic oil flows to the outlet,it pressure is established after the motor starts, and the pressure is maintained after the motor shuts down. When the valve position is open, hydraulic oil returns to the tank and pressure cannot be established.

Open The Exhaust Valve

This port is a non-sealed port, and the slight leakage of hydraulic oil during transportation is normal. The exhaust plug should be installed when using to ensure good ventilation of the tank.

Oil Level Indicator

This port is a non-sealed port, and the slight leakage of hydraulic oil during transportation is normal. The exhaust plug should be installed when using to ensure good ventilation of the tank.

- The oil level should be observed after all actuating elements have returned to their positions.

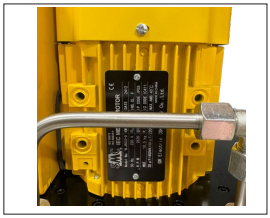
Product usage steps:

1.Preparation Before Use

-Check all parts (frame, motor, pressure gauge, etc.) are undamaged, the feet are stable, and the connection is not loose.

-Check the rated voltage (NEP electric ultra high pressure pump has a standard voltage of 220V).

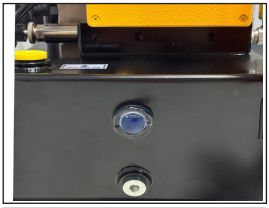
Check the electronic control box to determine the rated voltage.



Check pump body nameplate.

◆After confirming that the voltage is consistent, use a power socket in accordance with specifications to connect reliably. If the voltage is not consistent, do not force the adapter connection to avoid burning out the motor or causing short circuit

-Check the hydraulic oil level of the pump. The oil level should be above 2/3 of the upper oil gauge. When the hydraulic oil is insufficient, open the filling port and inject the wear-resistant hydraulic oil of the same model as the original pump (it is recommended to use the hydraulic oil grade ISO VG46). The maximum filling amount is the top of the oil gauge.

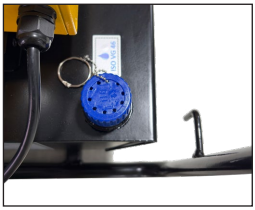


Hydraulic oil level

If the oil level is lower than 2/3 of the upper oil gauge scale line,the outlet plug should be removed and the hydraulic oil replenishment operation should be performed.

-Install the exhaust plug, align the exhaust plug with the fuel filling exhaust port, and then rotate it slowly in a clockwise direction until it is tightened to the appropriate degree. Ensure that the tank ventilation function is maintained; replace the exhaust plug during handling or transportation, and reinstall the sealing plug to ensure that it is sealed to prevent oil leakage.

Exhaust plug



Install the exhaust plug

◆If the exhaust plug is not installed to discharge air, it will seriously affect the normal operation of the equipment. The internal air in the oil tank will cause pressure fluctuation and flow deviation, causing component wear and failure, reducing the smoothness and accuracy of operation.

2.Start And Pressure Setting

-Connect the power supply and press the handle switch to trigger the motor to run. Check for any abnormalities in temperature, sound or vibration, and whether the rotational speed is close to the rated value, etc., to verify if the motor is operating normally.

Press the motor start button to start the motor.

-Set the working pressure

Preparations: Before adjusting the pressure, make sure that the relief valve is tightened and that the pump is not connected to tools or other hydraulicequipment.

Initial adjustment: rotate the locking nut on the relief valve counterclockwise to the open state, and rotate the relief valve counterclockwise several times to ensure that the real-time pressure is lower than the target pressure.

Start and observe: After connecting the power supply, press the motor switch (A) button on the control handle, the motor starts and pressure is established.

Pressure regulation and verification:

-Set target pressure:

- Continue to press the control handle button and rotate the overflow valve clockwise slowly until the pressure gauge shows the target pressure.
- Maximum pressure limit: NEP2500 is 2500bar; NEP1500 is 1500bar.

◆ The pump pressure can only be adjusted from low to high, not in reverse. If the pressure needs to be adjusted from high to low, unloading is required first. The relief valve pressure should be adjusted below the target pressure, and then the relief valve should be repressurized to the target pressure.

-Pressure holding verification:

- Release the handle button, and the system automatically maintains pressure after the motor stops. If the overpressure is exceeded, open the unloading valve to discharge the pressure below the target value, close the unloading valve, and readjust.

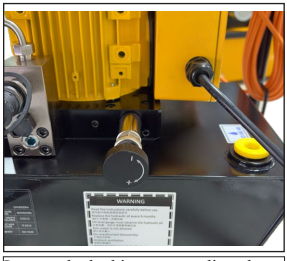
◆The pressure of the relief valve is not affected by the counterclockwise adjustment under the pressure holding condition.

-Calibration and verification:

- Open the relief valve to discharge pressure to 0, and close the relief valve again
- Restart the motor and observe whether the pressure is consistent with the target value.
- Two pressures are consistent and effective; if not, adjust repeatedly until the standard is reached.

Locking and closing:

- Lock the nut on the relief valve.
- Final depressurization: Open the unloading valve to ensure that the system pressure is completely zero.



Loosen the locking nut to adjust the overflow pressure.

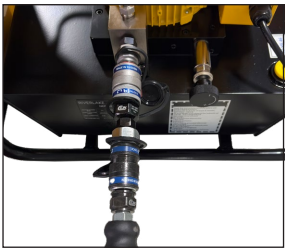
Slowly open the unloading valve when depressurizing,and reduce the system pressure to the pressure indicator number 0.

-**Connect the extender**， and install a CEJN female connector (or male connector) at the outlet. The outlet thread is G1/4, with standard plug. The rated pressure of the electric pump is 1500Bar, 2500Bar.

Retreat of the outer lock ring: Push the outer lock ring of the joint axially backward to make the joint in a state of connection.

Axial alignment insertion: Keep the tubing and fitting aligned axially, and slowly and smoothly insert the tubing into the fitting along the axial direction.

Forward push rotation lock of the outer lock ring: When the tubing is fully inserted into the joint, push the outer lock ring forward along the axial direction until the outer lock ring reaches the locking position and is firmly locked. The fixing condition of the outer lock ring can be checked by pushing it appropriately to ensure that it is locked in place.



The outer lock ring is pushed back, and the oil pipe is fully pushed into the outlet by axial alignment.

After pushing the oil pipe, push the outer lock ring forward and rotate it clockwise to lock.

◆ The NEP ultra high pressure electric pump must be connected to the same or higher pressure and matching connectors or hoses when in use. Connecting to a connector or hose with a lower pressure rating may cause the connector to fly out or the oil pipe to burst, which may cause personal injury to the user.

3.Operation And Adjustment Of Work

-Start the electric pump, confirm that the pressure has been set and the load equipment connection is correct, press the motor start button on the control handle, start the electric pump.

-When the pressure exceeds the target range, open the unloading valve to perform unloading operations until the pressure drops to 0. Then, readjust the target pressure according to the set pressure method.

◆A check valve is configured between the pressure regulating valve and the oil outlet. The pressure can only be adjusted in sequence from small to large and cannot be adjusted in reverse.

4.Monitoring During Operation

-- Pressure monitoring: Keep a close eye on the pressure gauge values in real time. By fine-tuning the overflow pressure regulating valve, maintain the system's working pressure stably at the target value to ensure that pressure fluctuations are controlled within the target range.

-Oil level monitoring: continuously observe the oil quantity of the oil gauge. If the oil level is too low, stop the machine immediately. After the equipment is cooled, slowly inject an appropriate amount of ISO VG46 anti-wear hydraulic oil through the oil filling exhaust port to restore the oil level to the normal range. During the process of adding oil, pay attention to avoid impurities mixed into the hydraulic oil.

-Overload Protection Monitoring: Assuming the electrical control box is equipped with an overload protection device, when the system is overloaded, the safety plug will automatically pop out to trigger emergency stop protection. Operators should first check the cause of the overloading under power-off conditions, resolve the fault, and reset the safety plug before restarting the equipment. It is strictly prohibited to forcibly reset and start the equipment without resolving the overloading fault to avoid severe damage to the equipment.

Overload Protector

5.Release Pressure And Shut Down

-Turn Off The Motor: After completing work, first press the motor stop button on the control handle to shut down the motor. Then disconnect the power supply by unplugging the power cord, ensuring the equipment is completely de-energized.

-Cut Off The Hydraulic Circuit: Gradually open the relief valve to reduce system pressure until the pressure gauge reads 0, achieving system depressurization.

-Remove the oil pipe: After the system pressure has completely dropped to 0 and all the actuating elements have returned, carefully pull out the hydraulic oil pipe. When removing the oil pipe, be careful to avoid the residual hydraulic oil in the oil pipe splashing out to prevent injury to personnel or pollution of the working environment. After the oil pipe is removed, it should be properly sorted and stored for the future use.

Troubleshooting:

Troubleshooting Guide		
Issue	Possible causes.	Solution
1. The pump does not start	Not connected to a power source.	Check whether the circuit is connected normally and restart.
	The electrical circuit of the pump is short-circuited or tripped.	Check whether the circuit is connected normally and restart.
	The voltage is too low.	Check the voltage and turn off other electrical loads.
	The socket cord is too long and too thin	Replace the high-power socket strip
	The handle button is damaged.	Contact the manufacturer for repair.
	Pump components are damaged.	Contact the manufacturer for repair.
2. The motor stops during pressurization	The voltage is too low.	Check the voltage and turn off other electrical loads. Replace the strip and check the input voltage.
	Current overload	Check the system for large damping terms that are causing overpressure.
3. The pump is not pressurized or the upper pressure is too low	Insufficient amount of oil.	Check the oil level and inject new hydraulic oil.
	The electromagnetic unloading valve opens.	Check the energization of the unloading valve.
	Leakage from the outside of the pump.	Observe leaks and carry out repairs or replacement of accessories.
	The hydraulic oil is too dirty and blocking the suction port.	Change the hydraulic oil and clean the suction port.
	Leakage inside the pump.	Contact the manufacturer for repair.
	System leaks.	Check for system leaks and repair them.
4. The system establishes pressure, and the tool does not move	Overloaded.	Check and select the right load.
	System congestion.	Check if the system is clogged and unblock the system.
5. The flow is too small	The hydraulic oil is too dirty and blocking the suction port.	Change the hydraulic oil and clean the suction port.
	There is a throttle valve in the system	Adjust the throttle flow.
	System congestion.	Check if the system is clogged and unblock the system.
6. The tool cannot be returned normally	The tool backstroke has a large damping	Check and remove the large damping term.
	The system has a return throttle valve.	Check the system and adjust the throttle valve.
	The system throttle valve adjustment is smaller.	Check the circuit and readjust the flow valve.
	Motor failure.	Contact the manufacturer for repair.
7. Severe fever	The system throttle valve adjustment is smaller.	Check the circuit and readjust the flow valve.
	Motor failure.	Contact the manufacturer for repair.