Breakdown details	Phenomenon or possible cause	Check item • Method	Treatment • Countermeasures
Lack of discharge Bad suction Pressure does not rise	There is little flow out. No fluid comes out.	Measure the suction pressure with a vacuum gauge -0.03MPa or more if displayed, cavitation.	Lower the viscosity of used oil.
		Blockage of suction pipe. Check the contamination of the suction filter.	Suction filter cleaning.
		Lack of flow in the tank. Check by oil gauge or visually.	Replenish oil to the specified amount. Criteria: 3~4 times the amount of discharge per minute is required.
		Is there any possibility of air ingress through the pipe connection?	Tighten the piping
		Is the viscosity of the oil low compared to the operating pressure?	Use of oil of suitable viscosity for the pump.
		While looking at the pressure gauge, tighten the pressure adjustment bolt of the relief valve. Result: The pressure does not rise.	The relief valve is expected to get stuck, so clean the relief valve to remove the foreign material.
		While looking at the pressure gauge, tighten the pressure adjustment bolt of the relief valve. Result: pressure rises.	Since the relief valve is operating normally, increase the set pressure.
		Check the rotation direction with the opposite eye of the pump rotation direction.	Correction to the direction of rotation indicated on the pump.
		Are the flow paths on the suction side and discharge side blocked?	The suction side and discharge side flow paths are opened.
			The suction side and discharge side flow paths are expanded.
Oil leakage	Oil leakage occurs in the oil seal.	Is the rotation direction of the pump wrong?	Pump repair or replacement.
		Is there pressure in the suction pipe?	The pump is higher than the oil level and installed within 1m. The internal pressure of the oil seal is Max' 0.03MPa.
		The oil temperature is higher than the durability temperature of the oil seal.	Use of special material oil seal (contact us)
		The type of oil is not suitable for the oil seal.	Oil seal change and pump replacement.
Oil does not come out. The breaker works.	The motor does not rotate.	Power failure or voltage drop.	Check the power equipment.
		Are the magnetic switch or circuit breaker working?	Reset the magnetic switch and circuit breaker.
		Power cord disconnection or poor connection.	Replace or reconnect power cord.
	Overload	Is the required power adequate?	Increase the motor power or reduce the size of the pump. If you do not know the cause, please contact Ayung Machinery after checking the oil viscosity, working pressure, and piping conditions.
	Even if the pump is turned by hand, it does not rotate. Rotation is heavy	Is the viscosity or lubricity of the fluid used?	Repair because there is a possibility that the rotor is worn or foreign substances are stuck.
		Is the fluid used to be dirty?	Replace or repair the pump.
The sound is loud. Abnormal noise generation	The suction resistance is large. (Cavitation) The suction pipe is too thin. The suction pipe is too long. Pump rotation is too fast. The suction filter is becoming resistance. The viscosity of the oil is too high. The suction height is too high.	Suction pressure is measured with a vacuum gauge. If it is displayed above -0.03 MPa, cavitation.	Suction pressure within -0.03 MPa. (Direction close to atmospheric pressure) Make the pipe thicker. Shorten the piping. Slow pump rotation. Replace the filter with a low resistance. It lowers the viscosity of the oil. Lower the suction height.
	Are inhaling air together (Aeration)	Are there any air bubbles in the tank? Is the piping loose?	No air intrusion into tanks, piping or pumps.
		Check that the return piping is in the oil.	Return piping is immersed in oil.
	Poor concentricity of the coupling.	Check whether the concentricity of both couplings is abnormal.	Correct within the standard value of the coupling..