

High Pressure Cleaner T1 Manual

Implementation Standards:
T/ZZB 0231-2017

Please Read The Instructions Carefully
Before Using The Machine

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1. Safety Information:

It is necessary to read the manual carefully and understand it completely before using the machine.

The symbols listed below are used to indicate this information:

DANGER:

Potential hazard that will result in severe injury or loss of life

WARNING:

Hazard that could result in severe injury or loss of life

CAUTION:

Potential hazard that may result in moderate injury or damage to equipment

Please read and understand all the WARNING stickers on the machine

WARNING sticker	Content
	<ul style="list-style-type: none">-1.This machine must be connected to sockets with proper earthing.2. It is recommended to use socket that has a protection switch against wrong currents.3. Always remove the plug from the socket before cleaning or doing maintenance work on the machine.-DO NOT use pressure washer in front of people, animal, electrical or power-Please read the instructions before using the machine
	<ul style="list-style-type: none">-Oil grade: 15W40, synthetic only-The first time of oil-change must be done within the first 10 days or 50 working hours after purchased.Check oil level weekly. Please contact Customer Service immediately if the oil is milky (water in oil).Change oil every 200 working hours or 3 months whichever comes first

! DANGER

- 1.Install ground device to machine and equip with electric leakage protection switch.
- 2.NEVER touch power with wet hands.
- 3.Working pressure of machine has been set before leaving factory, Please don't regulate by oneself.
- 4.Disconnect the power before conducting any maintenance and repair.
- 5.NEVER spray flammable liquids, dust or vapors.
- 6.if any parts are damaged or missing do not operate this product until the parts are replaced.

! WARNING

7. Before using machine, please read through this operation manual at first in case of any potential hazard and unnecessary loss which may cause by misuse. Be sure you know how to stop machine in emergency quickly. Be thoroughly familiar with the controls. Read and understand the manual before any operation or maintenance.
8. ALWAYS read warning banners on the side of the machine.
9. NEVER overreach or stand on unstable support. Keep good balance at all times.
10. Please check supply power carefully, and make sure supplying voltage is within $\pm 10V$ limit of rating voltage and supplying current is not less than rating current.
11. The machine conforms to safety standards, DO NOT rebuild or modify any part of your pressure washer.
12. DO NOT use pressure washer when you are under the effect of alcohol or drugs.
13. NEVER operate the pressure washer in bare feet, sandals, or open-toed shoes.
14. NEVER let a child use the pressure washer.
15. NEVER spray directly at a person, animal, electrical device or the machine itself.
16. During operation, pulling gun trigger may cause the kickback. ALWAYS grip high pressure water gun with both hands tightly, and make sure high pressure hose doesn't tie together.
17. ALWAYS wear eye protection when you are using the pressure washer.
18. NEVER use machine if the power cord or other important parts of the machine, such as safety devices, high pressure hoses, gun were broken
19. DO NOT change the cord or plug on original machine, if replacement is needed, use only identical replacement parts.
20. Use clean water at room temperature, with inlet water not exceeding $50^{\circ}\text{C}/122^{\circ}\text{F}$ and inlet pressure not over 2 bar.
DO NOT use machine when temperature is below $0^{\circ}\text{C}/32^{\circ}\text{F}$.
21. DO NOT move machine by pulling cable, and cable shouldn't be placed on the road.
22. Pressured water from machine may destroy surface of wood, glass, paint, motorcycle and others, and it also damages the edges of various objects and a variety of flowers, bushes, etc.
23. High pressure hoses, connectors and spray gun are important parts of the machine. To ensure safe operation, please use only identical replacement parts.

! CAUTION

- 24.Store the pressure washer indoors to prevent the water in the unit from expanding under freezing conditions.
- 25.NEVER leave the pressure washer unattended while it is powered "ON".
- 26.ALWAYS turn the water supply on before turning the pressure washer on.
Running the pump dry will cause damage to the machine.
- 27.When the machine has not been used for a long time, please turn a few cycles of motor impeller in the off state before using machine again, and then start the machine.

Please operate machine following "Safety Information". We shall not assume responsibility for any accident or injury caused by misuse or improper operation.

2. Assembly/Operating Instruction:

1.Operation requirement

Inlet hose diameter over than 1/2"

Machine is with automatic water suction function. Please connect clean water (exclusive of sand) with flow not less than 15.0L/min.

For tap water, max pressure 2bar and min flow 15.0L/min is required.

Max water temperature 50°C/122°F

Grip trigger and spray lance tightly with both hands during cleaning

Always start machine in auto stop mode, only use manual mode when micro switch does not work

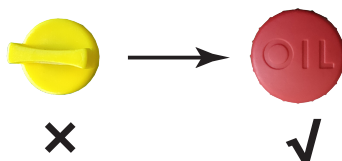
Please don't keep using machine auto stop more than 2 minutes in manual mode.

2.Preparation for start

Check whether nut and screw become loose

Change oil cap:

The oil cap installed on the machine is designed for transportation only, Please change into breather plug in parts bag before start.



WARNING: Oil may expand at rising pressure caused by pump temperature increasing. Changing oil cap into breather plug is a must.

3. Maintenance and warranty:

1. Machines are all filled with the Company's original "motor oil" in pump. After a period of operation, please replace the grade "SAE 15W - 40" or equivalent grade 4-stroke motorcycle engine oil with proper amount. After the first 50 hours of working, the crankcase of pressure pump must be cleaned as follows:

①Unscrew the drain screw of pump at first and drain old oil in the crankcase, then reassemble the drain screw to the crankcase

②Unscrew the breather plug, adding clean kerosene in pump to the level of a little more than where marked in red on oil mirror [3]. Put breather plug back and fasten it. Run pump 10 to 15 seconds, turn off the machine and unscrew the breather plug [2] again, then empty kerosene.

③And then fill new oil to pump, the amount of new oil shall over the level where marked in red on oil mirror [3].

Change the oil in same method after total 100 hours of working, and change oil after every 100 hours, which is important for extending lifetime of pump.

2. When the machine is idle for a long time, remove the inlet hose and high pressure hose, drain water in pump, place machine properly

3. Cleaning Nozzles

A clogged nozzle can cause a significant reduction of water pressure coming out of the nozzle.

①Turn off the machine

②Turn off the water supply to the machine.

③Relieve any pressure trapped in the hose by squeezing the gun trigger 2-3times, then lock the spray gun.

④As figure B showed, using the nozzle tip cleaner provided, insert the wire into the nozzle hole and move back and forth until it becomes clear.

4. As clogged absorbent filter will cause inadequate absorption from low pressure, please clean absorbent filter regularly.

5. Keep pressure washer in proper condition in case of corrosion and damage. If place the machine in extreme cold place, please add anti-freeze liquid to prevent the pump parts from cracking

6 When the machine is shelved for a long time, please turn a few cycles of motor impeller in the of state before using machine again, and then start the machine.

4. Motor maintenance and repair:

1. Machine should be working in a dry environment. Keep motor surface clean, and air inlet free from blocking of fiber and others.
2. When the motor's thermal protection and short circuit protection occurred in succession, please identify whether it is caused by the motor failure, overload protection device or too low setting value. Operate machine again only after the fault is eliminated.
3. Ensure motor in adequate lubrication during operation. Please replace grease in time when bearing overheating or grease deterioration. When grease should be removed, please clean the old grease bearings and wash bearing and tank cap with petrol, and then fill ZL-3 lithium grease to half the gap between the outer ring and bearing
4. When the lifetime of bearing comes to the end, vibration and noise will significantly increase during motor running. If the limit wear clearance of the bearing and radial clearance up to 0.15mm, replace the bearings then.
5. When taking down the motor, rotor shall be removed from shaft end or none-shaft end. If there is no need to remove the fan, it is more convenient to remove the rotor from the non-shaft end. When removing rotor from the stator, please prevent damage to the stator winding or insulation.
6. Please note the form's primary winding, size, and the number of turns, such as the replacement gauge winding. When these data are missing, please ask the manufacturer. Arbitrary changes to the original design intent winding may result in one or several motor performance deterioration or even operation failure.

5. Motor storage and transportation:

1. Motor should be kept dry during storage. Avoid drastic changes in ambient temperature.
2. Motor dumping or inverted is forbidden during storage and transportation.

6. Troubleshooting:

No.	Common malfunction	Cause of malfunction	Solution
1.	Leaking from connection	1.Thread unfastened 2.0-ring damage at the joints 3. Quick - coupler is not plugged in 4. Thread connected with damaged gasket	1. Fasten thread 2. Change O-ring 3. Connect quick coupler again 4. Change gasket
2.	No water spraying or water pressure is instable	1. Nozzle is blocked 2. Hose is filled with air 3. Inlet hose is broken 4. Water filter is clogged	1. Remove nozzle and clean 2. Check whether the thread of inlet hose is fastened at first, and fill hose with water, then grip the gun, and finally turn on the machine 3. Change inlet hose 4. Clean filter
3.	Pressure failure	1. Nozzle hole is too big 2. Water filter is clogged	1. Change nozzle 2. Clean filter
4.	Hot crankcase	1. Too much oil 2. Connecting rod get crossed with axle caused by leaking of oil	1. Drain extra oil and leaven oil to 1/2 level 2. Repair and remove the bite
5.	No water or inadequate water outlet	1. The new pump does not absorb water 2. Pump body with debris 3. One way valve of inlet and outlet is damaged	1. Turn on the machine, fill inlet hose with water, and exhaust air 2. Clean and repair pump 3. Change one way valve
6.	Failure of starting up motor or motor automatically shut down during running	1. Without electricity poor contact of socket 2. Motor switch wet or damaged 3. Voltage is low	1. Check power and socket 2. Dry or repair motor switch 3. Ask the electrician to check voltage