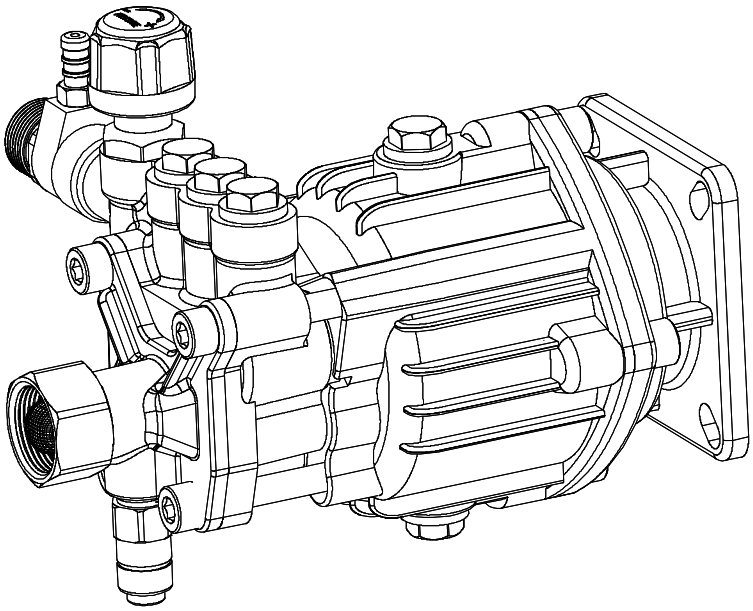
HIGH PRESSURE PUMP
WOBBLE PLATE, ENGINE DIRECT DRIVEN

OPERATION AND PARTS LIST MANUAL

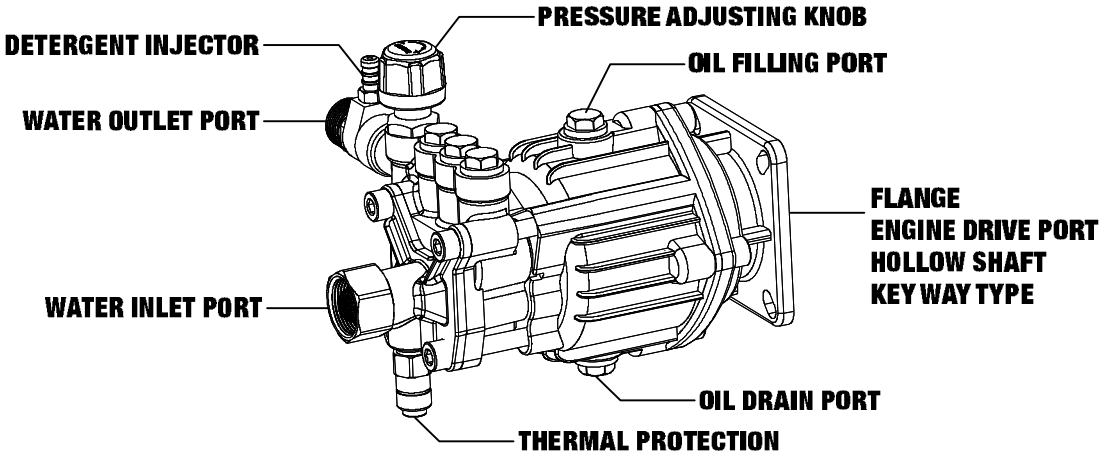


This manual contains:
IMPORTANT WARNINGS and **INSTRUCTIONS**. READ AND RETAIN FOR REFERENCE

WARNING: To reduce the risk of injury, the user must read and understand the operators manual before using this product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

PUMP DESCRIPTION



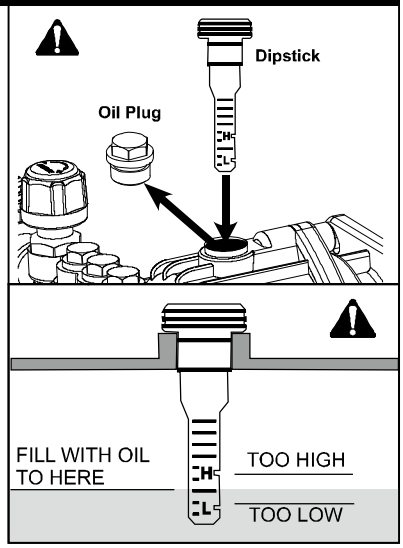
GENERAL SAFETY INFORMATION

1. The pump is designed to pump non-flammable or non explosive fluid, pump clean filtered water only.
2. Do not operate in or around an explosive environment. Do not operate in a confined area.
3. Always wear safety glasses or goggles and appropriate clothing.
4. Do not alter the pump from manufacturers design or exceed the specifications in speed or pressure.
5. Never point the high pressure discharge at a person, any part of the body or animals.
6. Maximum inlet water temperature is 60 C°/140 F°
7. Use only components that are rated for the flow and pressure of the pump, include hose, fitting, safety valves and spray guns etc.

BEFORE USE

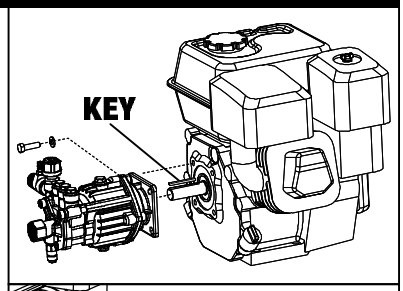
⚠ WARNING **Operating pump with low or no oil causes permanent damage, and VOIDS WARRANTY, check oi before use.**

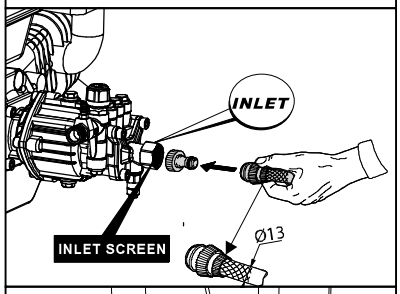
1. Using an 10mm open-end wrench or socket wrench, remove the oil plug from pressure pump. Save the plug.
2. Take out the oil dipstick form parts bag.
3. Insert the oil dipstick into the oil filling hole, and check the oil level, and add the oil if the level is lower than recommend, and do not over fill.
4. Reinsert the plug and tighten, make sure the O-ring is present on it, without O-ring or O-ring wear will leaking oil.
5. Pump oil amount 120ml, oil type API SF SAE 10W-30 or 15W/40. Change after the first 30 hours, then subsequently 100 hours.

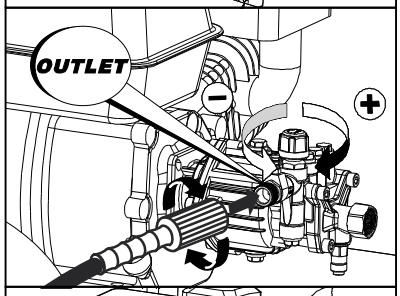


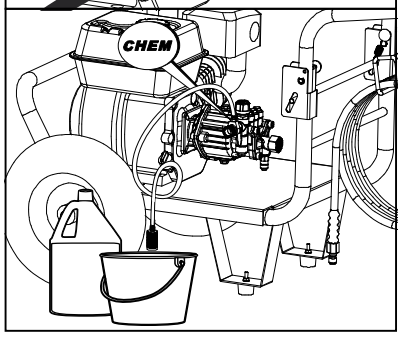
INSTALLATION AND OPERATING

1. Install the shaft key into the keyway and apply a light coating of anti-seize on the engine shaft and key
2. Align the two key ways and push the pump completely onto engine.
3. Install all four bolts through the pump flange and tighten on to engine evenly.
4. Before connecting garden hose to water inlet, inspect inlet screen . Clean screen if it contains debris or have it replaced if damaged.
   DO NOT run pressure washer if inlet screen is damaged.
5. Run water through your garden hose for 30 seconds to clean out any debris.
6. Connect the garden hose (not to exceed 50 feet in length and with the ID no less than 13mm) to the water inlet. Tighten by hand.
7. Turn ON the water, squeeze the trigger to purge the pump system of air and impurities.
8. Attach the high pressure hose to pump outlet and tighten.
9. Keep spray gun a safe distance from area you plan to spray.
10. Increase (decrease) spray pressure by turning pressure control knob clockwise (counterclockwise).
11. Press chemical hose onto barbed fitting located near back of high pressure hose connection.
12. Press other end of chemical hose, with filter, into container holding chemicals or cleaning solutions. Install chemical (black) nozzle.





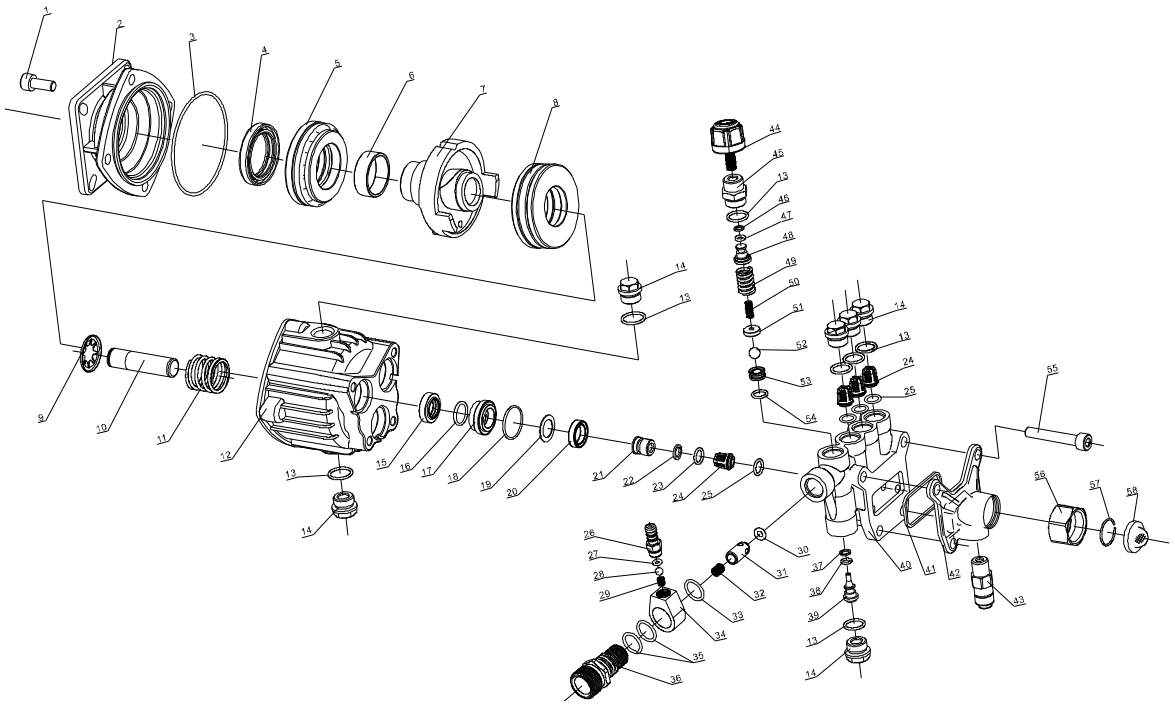




PUMP SPECIFICATIONS

Rating Outlet Pressure	2800PSI(193bar)
Rating Flow Rate	2.5GPM
Power Requirement	6.5HP
Max Inlet Pressure	90PSI(6.2bar)
Min Inlet Pressure	15PSI(1bar)
Max Inlet Water Temp.	Max 60°C/140°F
INPUT PRM	3400r/min
Crankcase Oil Capacity	120ml,SAE 10W-30 or 15W-40
Inlet Port	NPSH 3/4" -11.5
Outlet Port	M22x1.5-Ø15
Driving Port	Hollow type, 3/4", 3/16" Keyway

EXPLODED VIEW



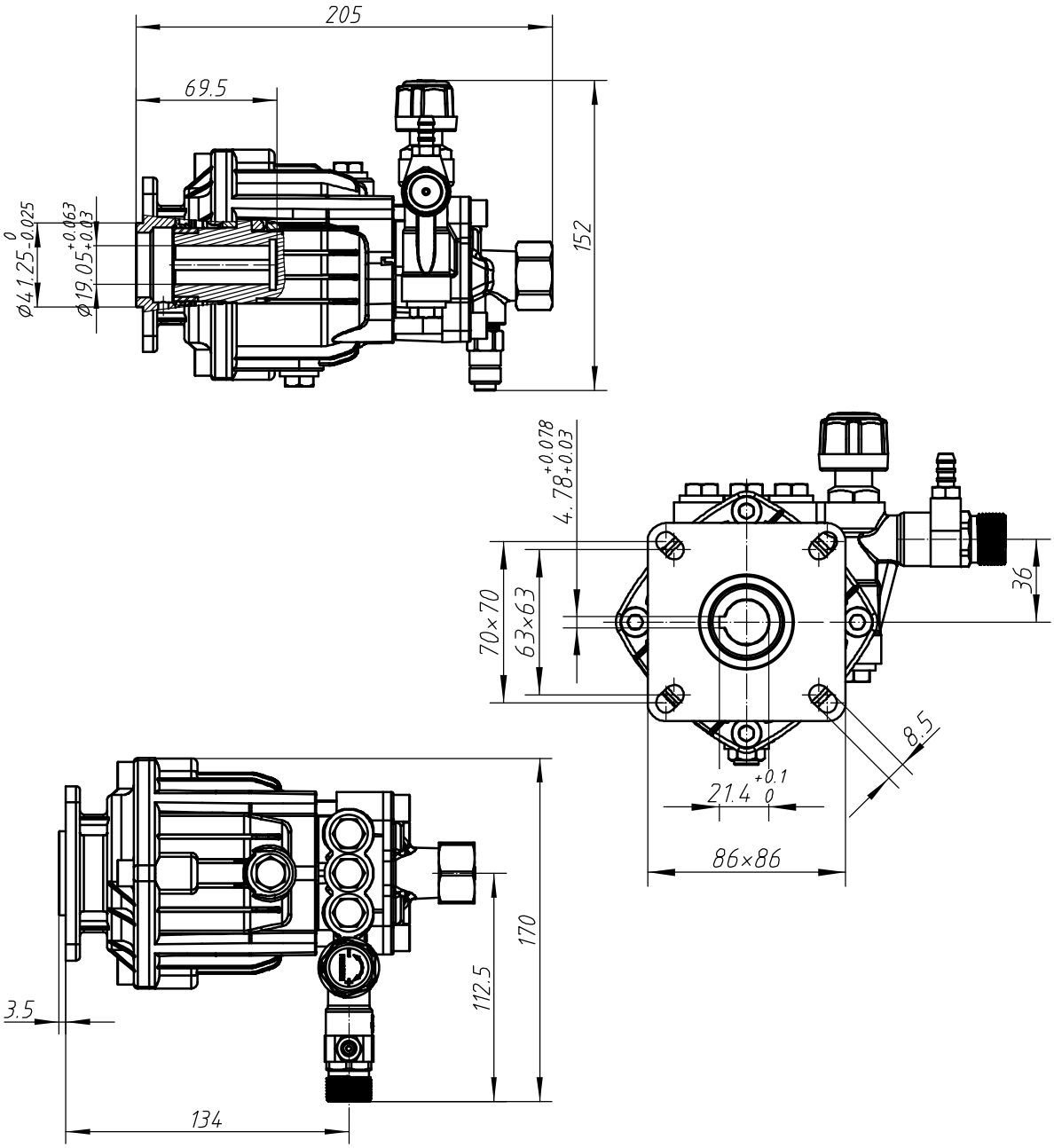
PARTS LIST

REF NO.	DESCRIPTION
1	Socket Head Screw M8X16
2	Pump Basal Flange
3	O-Ring(80X2.2)
4	Radial Shaft Seal
5	Rear Bearing
6	Wearable Sheath
7	Wobble Plate
8	Front Bearing
9	Spring Disk
10	15mm Plunger
11	Plunger Spring
12	Crankcase
13	O-Ring(14.2X1.9)
14	Plug
15	15mm Oil Seal
16	O-Ring(15X2.2)
17	Spacer
18	O-Ring(21.8X1.9)
19	Compaction flake
20	15mm Water Seal
21	Inlet Valve Plug
22	Backup Ring
23	O-Ring(9.8X1.9)
24	Checking Valve
25	O-ring (9.8X1.9)
26	Chemical Hose Barb
27	O-Ring
28	Ball
29	Small Cone Spring
30	O-Ring(5.3X2.65)
31	Outlet Cone Valve
32	Cone Valve Spring
33	O-Ring(12.2X2.6)
34	Soap Siphon Body
35	O-ring
36	Outlet connector
37	Backup Ring
38	O-Ring (9.25X1.78)
39	Backwater Valve Core
40	Pump Manifold
41	Seal Gasket
42	Water Inlet Body
43	Thermal Relief Valve
44	Adjusting Screw
45	Adjusting Screw Plug
46	Backup Ring
47	O-Ring
48	Spring Holder
49	Big Pressure Spring
50	Small Pressure Spring
51	Ball Holder
52	Steel Ball 8.7
53	Backwater Valve Port
54	O-Ring 9.25X1.78
55	Manifold Hold Bolt
56	Water Inlet Swivel Nut
57	Clip Ring 21.4
58	Water Inlet Filter

TROUBLE SHOOTING GUIDE

Problem	Probable Cause	Solution
Pump will not draw Chemicals	1.Spray wand not set to low pressure.. 2.Chemical filter clogged. 3.Chemical screen not in chemical. 4.Chemical solution too thick. 5.Pressure hose too long 6.Chemical build-up in chemical injector.	1.See "Using Spray Wand" section. 2.Clean Filter. 3.Ensure end of chemical hose is fully submerged into chemicals. 4.Dilute chemical. Chemical solutions should have same consistency as water. 5.Lengthen water supply hose instead of pressure hose. 6.Have parts cleaned or replaced by authorized dealer.
No or low pressure (after period of normal use).	1.Worn seal or packing. 2.Worn or obstructed valves. 3.Worn unloader piston. 4.Worn E-Z start valve.	Have parts cleaned or replaced by authorized dealer.
Water leaking at pump.	1.Loose connections. 2.Piston packings worn. 3.Worn or broken O-rings. 4.Pump head or tubes damaged from freezing.	1.Check and replace O-ring 2.Tighten hose connection. 1.Tighten connections. 2.Have parts cleaned or replaced by authorized dealer. 3.Have parts cleaned or replaced by authorized dealer. 4.Have parts cleaned or replaced by authorized dealer.
Oil leaking at pump	1.Oil seals worn. 2.Loose drain plug. 3.Worn drain plug O-ring. 4.Worn fill plug O-ring. 5.Pump overfilled. 6.Incorrect oil used. 7.Vent plug clogged.	1. Have parts cleaned or replaced by authorized dealer. 2.Tighten drain plug. 3.Inspect and replace O-ring. 4.Inspect and replace O-ring. 5.Check for correct amount. 6.Drain and refill with correct type and amount of oil. 7.Cleanvent plug. Use air hose to free it of blockage. If problem persists, replace vent plug.
Pump pulsates	Nozzle obstructed.	See "Using Spray Wand" section.

DIMENSIONS



PACKING LIST

1. Pump x1

2. Operating Manual x1

3. Detergent Injection Hose/Filter Kit x1

MAINTAIN

OUTLET CHECKING VALVE MAINTAIN

01. Hold the pump firmly, use the open-end wrench (size 14) to open the valve cap.

02. Use the internal circlip pliers to take out the checking valve.

03. Check and clean the valve, change if there is any damage

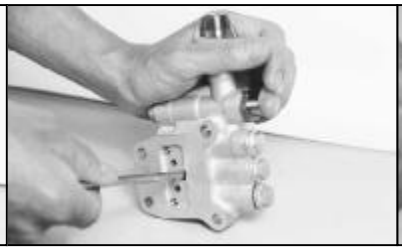
01. Put back the valve, and make sure the valve is in place.

02. Hold the pump firmly, use the open-end wrench(14mm) to tighten the valve cap, do not over tighten.

03. Hold the pump firmly, use the torque wrench to tighten the valve cap with the torque 25N/m.

INLET CHECKING VALVE MAINTAIN

01. Hold the pump firmly, use the Inner Hexagon spanner to loose the four bolts (M8).



02. Use a small bar tool to put through the valve hole and poked the valve plug.

03. Take out the valve, check and clean the valve, change if there is any damage

01. Put back the valve, and make sure the valve is in place.

01. Put back the valve cap, and push the cap in to the hole completely

03. Hold the pump firmly, use the hexagon head torque wrench to tighten the holding bolts with the torque 25N/m.

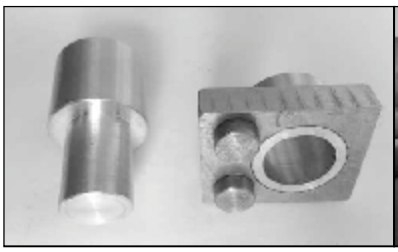
MAINTAIN

WATER SEAL MAINTAIN

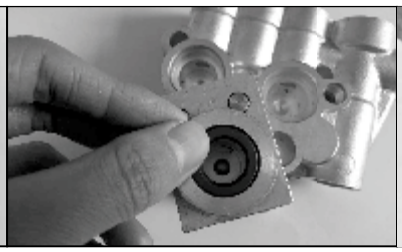
01. Disassembly the pump, and take the head assembly and put flat.

02. Use the finger to take out the seal compression ring .

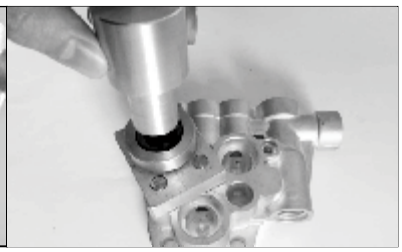
03. Use the special tool to take out the water seal. Check and change if there is any damage



01. To put back water it is better to use the special tooling, contains one guiding tube and one plug.



02. Put the seal in to the guiding tube, put in place.



03. Put the plug to push done the seal completely, take out the guiding tube and check if the seal is put in place. Put back the head on pump.

WATER CHECKING O-RING MAINTAIN

01. Use the circlip pliers to take spacer which holding the checking ring.

02. Use a small pin or paper clip to take out the o-ring which place inside the spacer.

03. Check the water checking ring, change if there is any damage

01. Hand put back the checking ring, and make sure it is put in place.

02. Use the circlip pliers to put back the spacer, make sure it is put in place.

03. Hold the pump firmly, use the hexagon head torque wrench to tighten the holding bolts with the torque 25N/m.