

WULI



物理農業機械股份有限公司

WULI AGRICULTURE MACHINE CO., LTD.

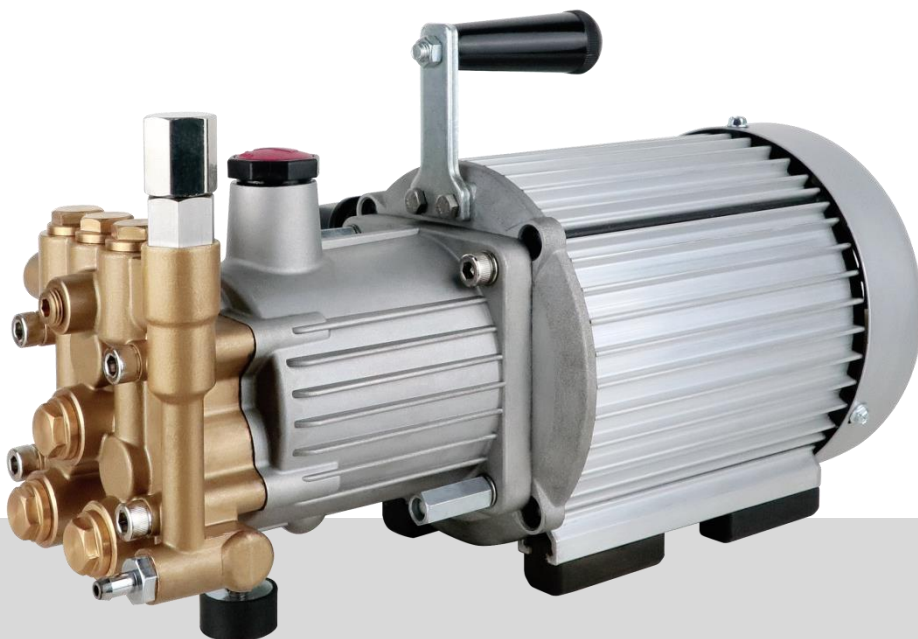
動力噴霧機、高壓洗淨機、微霧系統專業設計製造

微霧泵浦操作手冊

MISTING PUMP OPERATION MANUAL MODEL

WN-1003A-5 WN-1003A-6

WN-1004A-5 WN-1005A-6



感謝您購買物理產品，使用前請詳閱本說明。

Thank you for choosing our product.

Please read the manual before use.

2025.03V

W U L I A G R I C U L T U R E M A C H I N E C O . , L T D .

安全須知 General Safety Information



微霧機請放置於乾燥的地方，避免電線短路。

To reduce the risk of short circuit, please place the pump in a dry area.



微霧機運轉後溫度會上升，請勿直接碰觸機械表面。

To reduce the risk of burns, do not touch the surface of the pump while operating.



請做好微霧機防護措施，避免運轉時人員誤觸受傷。

Please keep off the machine while operating. Do not handle the pump or motor with wet hands.



使用前請檢查進水管與微霧機機油，以避免吸入空氣及機器無油運轉造成損壞。

Before each use, check all hoses for weak or worn areas and the oil level to avoid damage to the pump from air in the pump or dry running.



任何檢修、保養請先關閉電源，並拔除插頭避免危險。

Always completely shut down the unit and unplug it before performing maintenance.



使用前請確認使用自來水源已經開啟，避免機器空轉造成損壞。

The unit must not be run without water. Please ensure the tap is turned on before operation; running without water will cause serious damage to the pump.



請勿讓兒童使用本機器，使用時請注意兒童安全。

Do not operate the machine near children or animals.



請勿使用水柱、濕抹布清洗或擦拭機器，以避免觸電危險。

Do not use water jets or wet cloth to clean or wipe the machine to avoid the risk of electric shock.



機器請勿覆蓋任何物品，例如：布、紙箱...等。

Do not cover the machine with anything, such as cloth, cartons, etc.

使用說明

一、 操作說明

1. 每一個接頭都要鎖緊，以防止洩漏。
2. 啟動馬達前，先接好進水管。打開水源並啟動馬達，將泵浦內空氣排出後，關閉馬達，鎖緊出水管即可正常使用。
3. 使用工作壓力請勿超過本產品所設定之工作壓力 70kgf/cm^2 (1,000 p.s.i.)。
4. 請直接用水龍頭進水，水量不得低於 7 公升/分鐘。
5. 進水管口徑不得小於 5/8 英吋。

二、 泵浦的潤滑

1. 泵浦在使用最初之 30~50 小時應更換機油，以後每隔 100~200 小時應更換一次(使用前應檢查機油是否足量或變質)。
2. 更換機油時，請旋開洩油螺絲排出骯髒的機油，須在油冷及冷機狀態。
3. 將洩油螺絲鎖緊後，打開加油蓋注入 SAE 30~40 或二行程之乾淨機油，油量約 350cc。

三、 特別注意事項

1. 使用自來水作為泵浦的水源。
2. 馬達電源線請勿超過 10 公尺。
3. 馬達延長線線徑需大於 2mm^2 。
4. 確實地更換機油以保持泵浦的潤滑，降低機械損耗。
5. 水溫請勿超過攝氏 60 度。
6. 若要移動馬達，請注意馬達表面溫度。
7. 若過電流保護開關經常性跳脫，請注意是否電壓不穩、延長線未依規定設置或環境溫度過高。

Instructions

A. Operating Instructions

1. Tighten every connector securely to prevent leaking.
2. Make sure the inlet hose is fastened securely and the faucet is turned on before starting the motor.
3. Working pressure should not exceed 70 kgf/cm^2 (1,000 p.s.i.)
4. Connect the inlet hose to a faucet and note that the flow rate of the faucet should not be less than 7 liters per minute.
5. Make sure the suction hose diameter is larger than 5/8 inch.

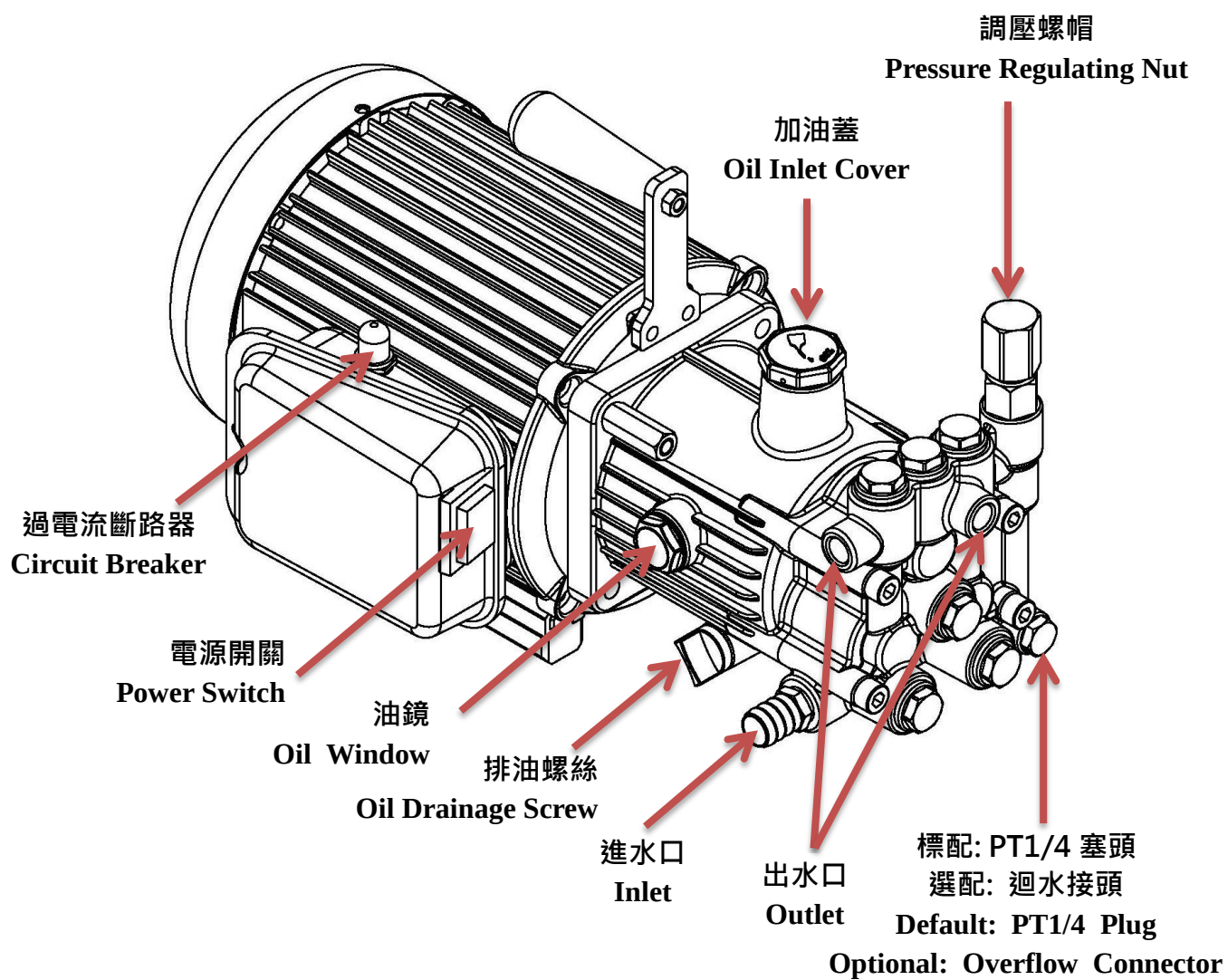
B. Oil Change

1. Replace the oil in the pump after the first 30~50 hours of use. After this, the oil should be changed after every 100~200 hours of use. Make sure the oil is in good condition before use.
2. Unscrew the drainage screw and drain all oil and residue from the pump.
3. Tighten the drainage screw before refilling with clean SAE 30~40 oil or Two Stroke Engine Oil; the oil amount is approximately 350 cc.

C. Reminders

1. Use tap water as inlet water source.
2. The electrical cord should not exceed 10 meters.
3. Make sure the extension cord diameter for the motor is larger than 2mm^2 .
4. Be sure to change the oil according to the Oil Change section or the pump may be damaged.
5. The inlet water temperature should not exceed 60°C .
6. Be careful of the motor surface temperature when moving it.
7. If the circuit breaker triggers repeatedly, please check if the voltage is unstable, if the extension cord is too long or if the surrounding temperature is too high.

部位名稱 Pump Overview



故障排除與診斷

⚠ 注意:排除故障與診斷時，請關閉電源及水源，並將插頭拔除。

一、無法吸水及壓力不穩

1. 檢查進水管是否洩漏或阻塞。
2. 檢查進水壓力是否足夠。
3. 取出活門組(1)，確認是否阻塞或損壞。

二、壓力不足

1. 調整調壓螺帽(2)，調整壓力。
2. 打開調壓螺帽(2)，檢查壓力閥座(4)(須注意正反面)及調壓彈簧(3)是否磨損、彈性疲乏或異物阻塞。
3. 檢查活門組(1)是否阻塞。
4. 檢查防水迫緊組(5)、U 迫緊組(6)是否磨損。

三、汽缸洩漏

1. 檢查防水迫緊組(5)、U 迫緊組(6)、軸承油封(8)是否損壞。
2. 檢查柱塞組(7)，若磨損嚴重則更換柱塞組(7)。
3. 檢查各部 O 形環是否損壞。

四、軸箱噪音、脈動過大

1. 檢查水龍頭的水是否正常。
2. 檢查噴嘴是否阻塞。
3. 檢查是否定期更換潤滑油。
4. 檢查柱塞是否因潤滑油不足，導致卡死。
5. 取出柱塞組(7)，重新組裝。
6. 注入新潤滑油。

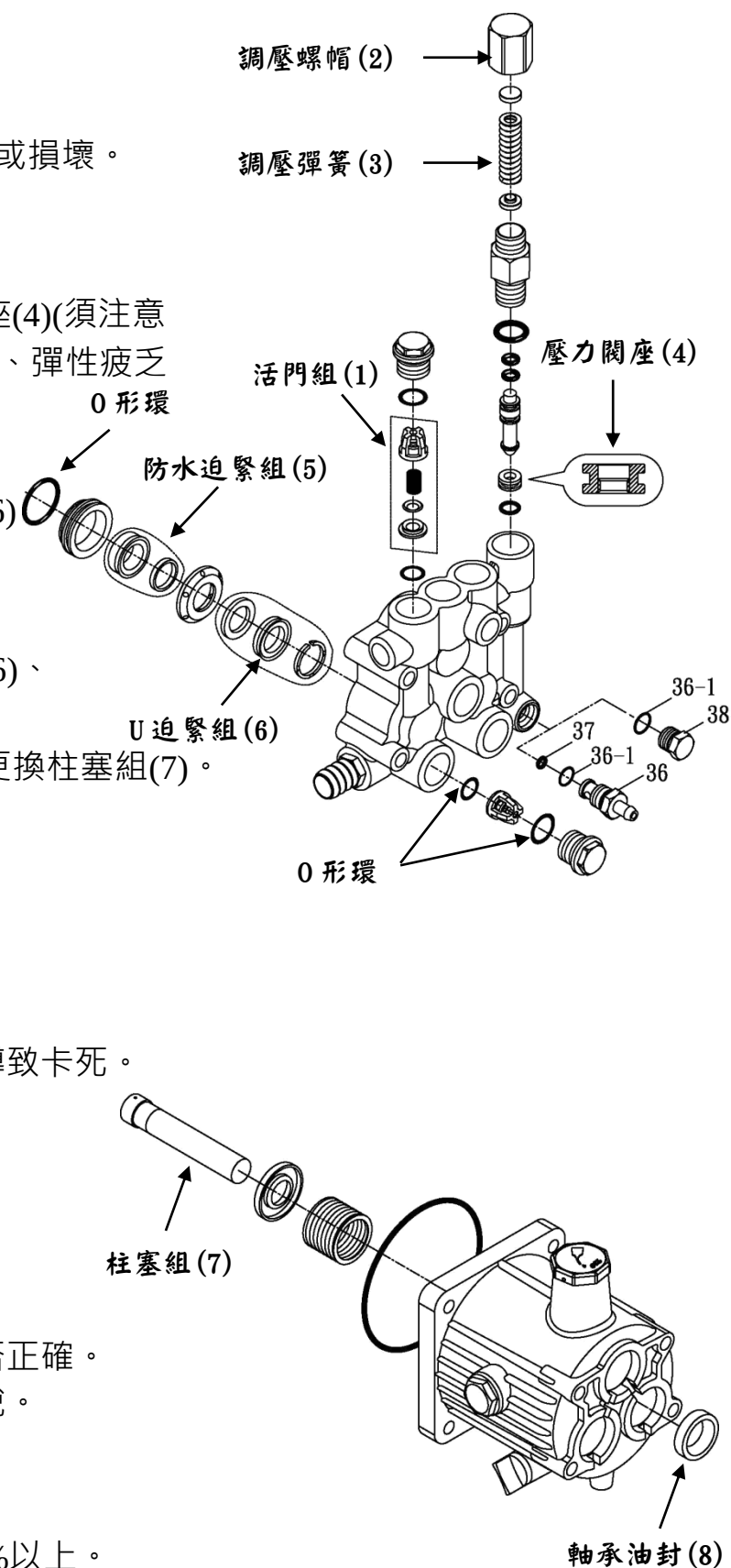
五、馬達無法啟動

1. 檢查過電流保護器是否跳脫。
(按壓前請先關閉電源開關)
2. 檢查延長線是否過長及電壓是否正確。
3. 檢查周圍溫度是否過高導致跳脫。

六、汽缸或出水管溫度過高

1. 檢查出水管路或噴嘴是否阻塞。
2. 檢查出水量是否為額定值的 70% 以上。
3. 若使用水量太小，建議送回經銷商修改外部迴水，以維持使用壽命。

▲ 若欲更換圖號#36、#36-1、#37 零件改為外部迴水，請由經銷商判斷後再進行更改。



Troubleshooting

! Attention: Always unplug the power and stop the water supply before maintenance.

A. Suction failure & unstable pressure

1. Check if the inlet hose is blocked or leaking.
2. Check if the inlet water pressure is sufficient.
3. Remove Valve Assy (1) and check if it is blocked or damaged.

B. Insufficient pressure

1. Adjust Nut (2) to regulate the pressure.
2. Remove Nut (2) and check if the Valve Seat (4) or Spring (3) is worn out, elastic fatigue or blocked. Pay attention to the installation direction of the Valve Seat (4).
3. Check if Valve Assy (1) is blocked.
4. Check if Waterproof Packing (5) or U-Packing (6) is worn out.

C. Leaking cylinder

1. Check if U-Packing (6) or Waterproof Packing (5) is damaged.
2. Check if Piston (7) is worn out.
3. Check if O-Rings are damaged.

D. Noisy crankcase, strong vibration

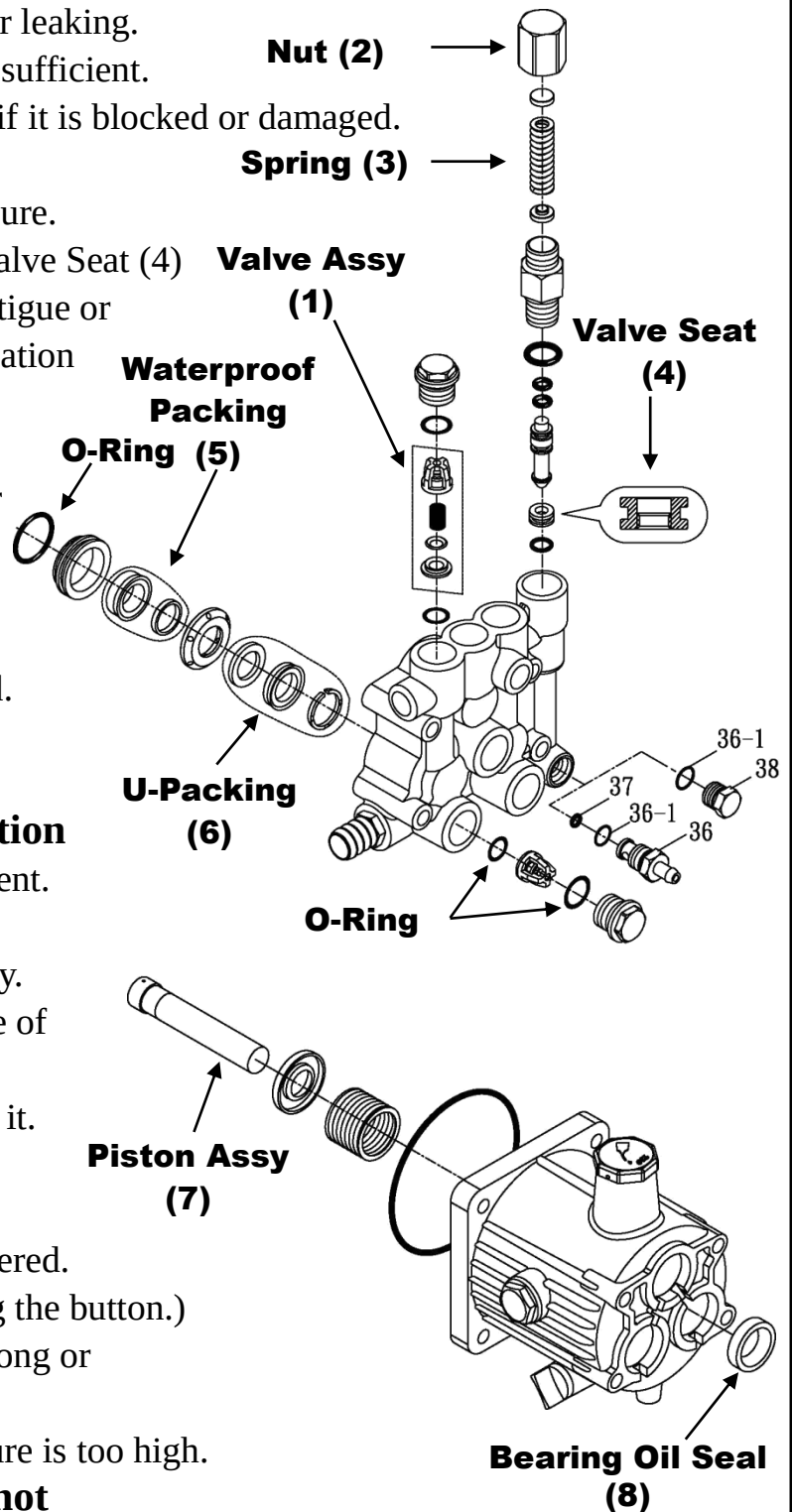
1. Check if the water supply is sufficient.
2. Check if the nozzles are clogged.
3. Check if the oil is changed regularly.
4. Check if Piston (7) is stuck because of insufficient oil.
5. Take out Piston (7) and reassemble it.
6. Change oil.

E. Cannot start motor

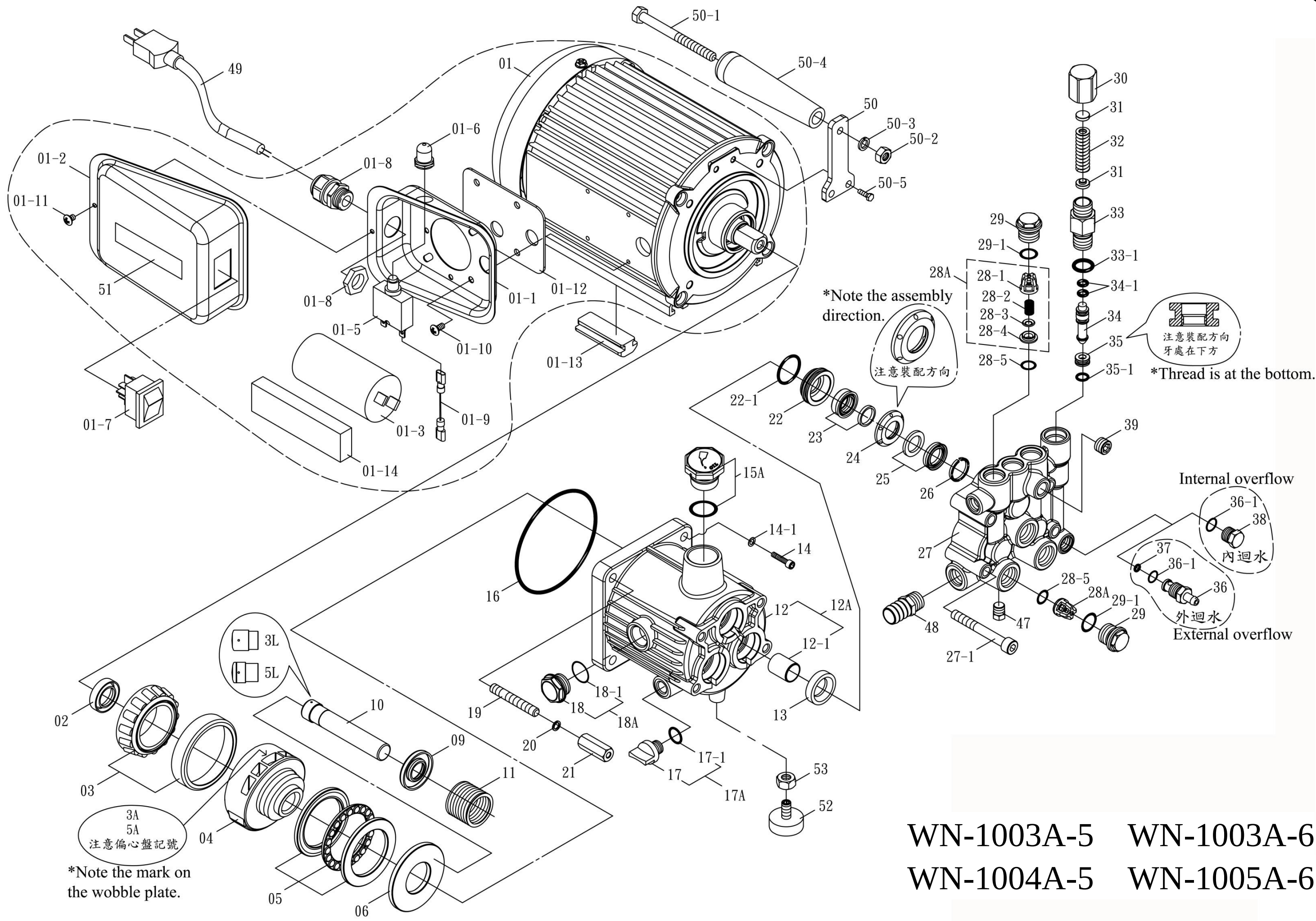
1. Check if the circuit breaker is triggered.
(Turn off the power before pressing the button.)
2. Check if the extension cord is too long or if the voltage is correct.
3. Check if the surrounding temperature is too high.

F. Cylinder or outlet hose is too hot

1. Check if the outlet hose or nozzles are blocked.
2. Check if the outlet volume reaches 70% or above of the suction volume.
3. If the suction volume is too much for your outlet volume, we suggest you return the pump to the seller to have it changed to the external overflow.



▲ Before using parts #36, #36-1, #37 to convert your pump to an external overflow type, please consult your dealer.



WN-1003A-5 WN-1003A-6
WN-1004A-5 WN-1005A-6

零件表 Parts List

圖號 NO.	編號 CODE	名 稱	DESCRIPTION	Q'TY
01	BA20400616000	馬達 (1003A-6)	MOTOR (1003A-6)	1
	BA20401016240	馬達 (1005A-6)	MOTOR (1005A-6)	
	BA21400616300	馬達 (1003A-5)	MOTOR (1003A-5)	
	BA21401016300	馬達 (1004A-5)	MOTOR (1004A-5)	
01-1	N/A	電器盒	COVER	1
01-2	N/A	電器盒上蓋	COVER	1
01-3	N/A	電容器 35uF-250V	CONDENSOR (1003A)	1
	D020201107	電容器 50uF-250V	CONDENSOR (1004/5A)	
01-5	B130963115	過電流斷路器 9A	CIRCUIT BREAKER 9A	1
01-6	N/A	防水套	WATERPROOF CAP	1
01-7	B130563021	電源開關	POWER SWITCH	1
01-8	B110565000	電源線固定夾	WIRE BINDER W/ NUT	1
01-9	N/A	連接線	WIRE	1
01-10	N/A	電器盒固定螺絲	SCREW	4
01-11	N/A	電器盒上蓋固定螺絲	SCREW	1
01-12	B019316000	出線皮	PACKING	1
01-13	B100563010	馬達腳墊	MOTOR STAND CUSHION	4
01-14	B100463030	防震墊片	CUSHION	1
02	B019313300	軸承油封	BEARING OIL SEAL	1
03	B019527300	斜軸承	BEARING	1
04	B019536300	偏心盤 (1003A)	WOBBLE PLATE (1003A)	1
	B019536301	偏心盤 (1004/5A)	WOBBLE PLATE (1004/5A)	
05	B019527301	止推滾珠軸承	BEARING	1
06	B019517300	平面軸承片(上)	BEARING PLATE (UPPER)	1
09	B019505300	止逆彈簧固定座	SPRING DISK	3
10	B019528310	陶瓷柱塞+滑靴 (1003A)	CERAMIC PISTON + PISTON SHOE	3
	B019528311	陶瓷柱塞+滑靴 (1004/5A)	CERAMIC PISTON + PISTON SHOE	

零件表 Parts List

圖號 NO.	編號 CODE	名 稱	DESCRIPTION	Q'TY
11	BJ00106051	柱塞彈簧	PISTON SPRING	3
12A	B019501301	軸箱(含引擎培林)	HOUSING W/ BEARING	1
12	B019501300	軸箱	AXLE HOUSING	1
12-1	1019508000	引擎培林	ENGINE BEARING	3
13	B019503000	柱塞油封	PISTON OIL SEAL	3
14	BS16208030500	內六角螺絲	SCREW	2
14-1	BS32208300	彈簧華司	SPRING WASHER	2
15A	B011901014	加油蓋組	OIL INLET COVER ASSY	1
16	BG10995103510	O 形環	O-RING	1
17A	B011801001	排油螺絲組	OIL DRAINAGE SCREW ASSY	1
17	B011801000	排油螺絲	OIL DRAINAGE SCREW	1
17-1	BG10110015	O 形環	O-RING	1
18A	B019229003	油鏡組	OIL WINDOW ASSY	1
18	B019229020	油鏡	OIL WINDOW	1
18-1	BG10158020600	O 形環	O-RING	1
19	B019509300	軸箱固定螺絲	SET SCREW	2
20	BS32208300	彈簧華司	SPRING WASHER	2
21	B019509320	軸箱固定螺帽	SET NUT	2
22	B019504300	防水油封套	LOW PRESSURE SEAL COLLAR	3
22-1	BG10290033	O 形環	O-RING	3
23	B019506001	防水迫緊	WATERPROOF PACKING	3
	B019507000	防水迫緊墊片	WATERPROOF PACKING GASKET	3
24	B019504320	迫緊中間環	U-PACKING SPACER RING	3
25	B019506300	U 迫緊	U-PACKING	3
	B019507300	U 迫緊墊圈	U-PACKING GASKET	3
26	B019507310	U 迫緊底座	U-PACKING SEAT	3
27	B019502300	汽缸	CYLINDER	1

零件表 Parts List

圖號 NO.	編號 CODE	名 稱	DESCRIPTION	Q'TY
27-1	BS16208060500	內六角螺絲	SCREW	4
28A	B040063301	活門組	VALVE ASSY	6
28-1	B040363300	活門帽	VALVE CAGE	6
28-2	BJ26301300	活門彈簧	VALVE SPRING	6
28-3	B040163022	活門塞	VALVE PLUG	6
28-4	B040263300	活門座	VALVE SEAT	6
28-5	BG10124016020	O 形環	O-RING	6
29	B019534300	活門固定螺絲	VALVE BOLT	6
29-1	BG10140018500	O 形環	O-RING	6
30	B019516000	調壓螺帽	PRESSURE REGULATING KNOB	1
31	B019515000	彈簧上座	SPRING SEAT (UPPER)	2
32	BJ00106120	調壓彈簧	PRESSURE REGULATING SPRING	1
33	B019512000	安全弁接頭	SAFETY VALVE CONNECTOR	1
33-1	BG10140018500	O 形環	O-RING	1
34	B019513000	壓力閥桿	PRESSURE VALVE ROD	1
34-1	BG10075011500	O 形環	O-RING	2
35	B019514000	壓力閥座	PRESSURE VALVE SEAT	1
35-1	BG10098013600	O 形環	O-RING	1
36	B019511000	迴水接頭	OVERFLOW CONNECTOR	1
36-1	BG10100014	O 形環	O-RING	1
37	BG10070011	O 形環	O-RING	1
38	B019511020	內部迴水接頭	INTERNAL OVERFLOW CONNECTOR	1
39	BS50008050	內六角油塞 PT1/4	PLUG PT1/4	1
47	BS50004000	六角塞頭 PT1/8	PLUG PT1/8	1
48	BK31404010	管牙插心	HOSE BARB CONNECTOR	1
49	B090563000	電源線	POWER CORD	1
50	B019110000	把手片	HANDLE PLATE	1

零件表 Parts List

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微霧管路組立安裝

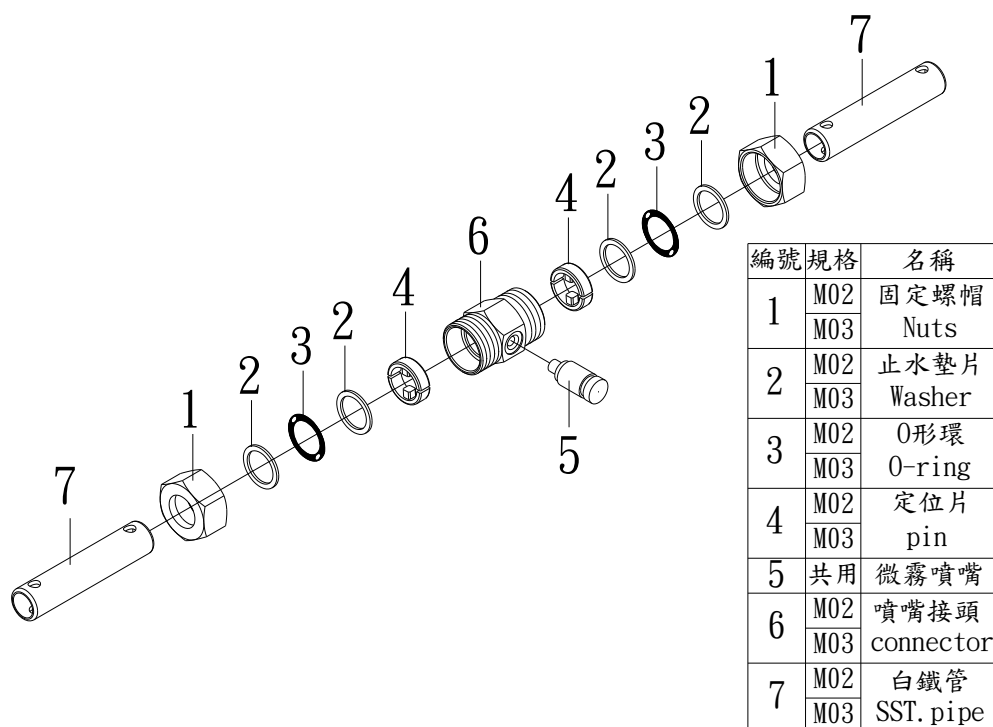
1. 決定管路的懸掛場所，於預定裝設處標示記號(噴嘴的最佳間隔距離，則依現場溫度及濕度要求決定)，用自攻螺絲將固定片鎖在標示記號處。確認固定片的位置與角度為噴嘴欲噴灑方向。
2. 確認白鐵管、接頭、管路內部是否有碎屑，以清水徹底清洗。將接頭螺紋部份以止水帶纏繞，噴嘴則不需纏繞。
3. 依圖示 A (第 14 頁)依序將白鐵管與接頭連接。組立順序為 No.1→ No.2→ No.3 → No.2→No.4; No.4 定位片須拆開定位於 No.7 白鐵管孔位。鎖緊固定螺帽(No.1) 與噴嘴接頭(No.6)，避免漏水。再用尾端接頭鎖緊最末端的白鐵管。
4. 鎖緊噴嘴，避免漏水。(請定期清洗噴嘴，清除沉澱物及鈣化產生的雜質，避免噴嘴阻塞。)

	
管固定片	接頭固定片
SST-03	SST-04
Pipe Fitting	Connector Fitting

STAINLESS STEEL MIST LINE INSTALLATION

1. Mount pipe/connector fittings with self-tapping screws in the area where the mist line will be installed. Please consider objects and high-traffic areas that may be in the path of the mist nozzles. The optimal spacing between nozzles is determined by the temperature and humidity requirements on site. Make sure the positions and angles of the connector fittings are in the direction the nozzles are going to spray.
2. Flush water through the pipes to ensure they are free of debris and dirt which may block nozzles. Wrap thread seal tape tightly around connector threads three to five times.
3. Per diagram A (page 14), assemble the connector by placing parts on the pipe in this order: No.1→No.2→No.3→No.2→No.4 (2 pcs). The peg in the center of the crescent-shaped pin (No. 4) should fit into the hole on the side of pipe. Then, fasten the nut (No. 1) to the connector(No.6).
4. Tighten the nozzles to prevent leakage. Clean the nozzles regularly to remove sediment and impurities caused by calcification to avoid nozzle blockage.

微霧白鐵管路組立圖示 A (DIAGRAM A)



微霧白鐵管路組立圖示 B (DIAGRAM B)

