

Routine Maintenance

A. Routine Maintenance Schedule

Component	Action	Frequency
Pump	Check Oil Level	Before every use
	Change the oil	If necessary
Filter	Clean	Before every use

B. Oil Change Timing

1. After the first 30~50hours of use.
2. Every 100~200 hours of use after the first change.
3. Whenever the oil quality appears poor.

C. Change Pump Oil

1. Open the oil inlet cover.
2. Unscrew the oil drain plug. Please use a container or a tray to catch oil as it comes out of the pump. When the oil stops draining, please refasten the plug.
3. Carefully refill 270ml of motor oil of #30 or #40 weight and make sure the oil level is up to the middle of the oil window.
4. Refasten the oil inlet cover.

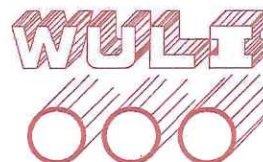
⚠ Attention : Please do not change oil immediately after using the pump. The oil will be hot and might cause personal injury.

D. Check Oil Level

1. If the oil is below the middle of the oil window, please refill the oil up to the middle.
2. If the oil is above the middle of the oil window, please be aware the oil may splash out and cause the unit to malfunction over time.

E. Storage

Please store the unit in a cool dry place away from hazardous conditions.



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

操作手冊 OPERATION MANUAL

手提式高壓洗淨機 PORTABLE HIGH PRESSURE CLEANER

MODEL

WH-0608

WH-0707



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 operation manual before use.

安全須知 General Safety Information



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.



機器運轉後溫度會上升，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.



請做好操作絕緣防護措施，避免運轉時人員誤觸受傷。

Do not handle the pump or motor with wet hands.



勿將噴水口直接對準機器或電器及人員、動物。

Do not aim the spray gun at people, animals or any electrical device.



任何檢修、保養請先關閉電源，避免危險。

To reduce the risk of electric shock, turn off the motor before any maintenance and troubleshooting.



機器必須配合水來操作使用，缺水將造成機器嚴重損壞。

The unit must not be run without water. Lack of water will cause serious damage to the seals.



請勿讓兒童使用本機器，使用時請注意兒童安全。

While operating the pump, please supervise the safety of children.



勿在雨天及雷雨中操作。操作時，勿覆蓋物體以避免危險。

Do not work in the rain or during thunderstorms. When the unit is working, do not cover and do not place in a closed space with poor ventilation

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、出水管。啟動馬達運轉，待出水管出水順暢後，關閉馬達，將噴槍接於出水管，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。
4. 將吸水管(網)放入蓄水槽內，保持水管通暢。
5. 使用完時，請先關閉噴槍再關電源，於馬達停止運轉後，再開啟噴槍釋放管內壓力，以避免產生蓄壓。
6. 使用前請先檢視壓力錶附件、並自行安裝。

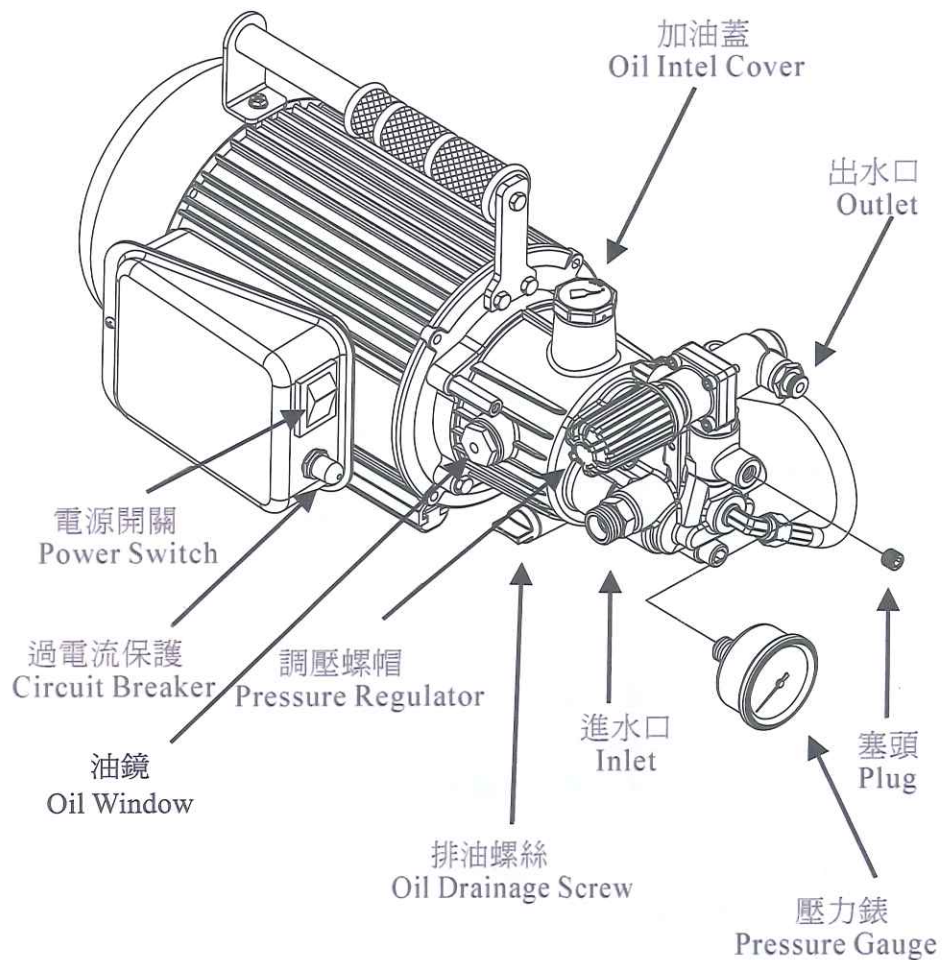
二、幫浦的潤滑

1. 幫浦在使用最初之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變質)
2. 更換機油時，請旋開排油螺絲排出骯髒的機油。
3. 排油螺絲鎖緊後，打開加油蓋注入#30~40機油，油量約270cc。

三、特別注意事項

1. 馬達電源線請勿超過10公尺。
2. 馬達延長線線徑需大於2mm²。
3. 確實的更換機油以保持幫浦的潤滑，降低機械損耗。
4. 水溫請勿超過攝氏60度。
5. 若要移動馬達，請注意馬達表面溫度。
6. 若過電流保護開關經常性跳脫，請注意是否電壓不穩或延長線未依規定設置，亦或是環境溫度過高。
7. 進水口與吸水網之高度差請勿超過半公尺。

外觀結構圖 Overview

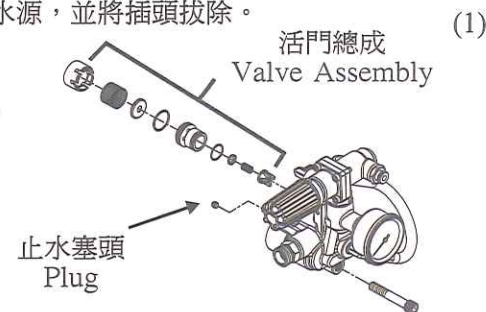


故障的診斷與排除

故障排除與診斷時，請關閉電源及水源，並將插頭拔除。

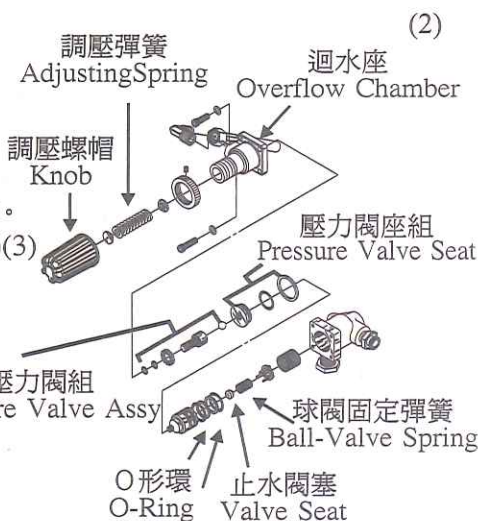
一、無法吸水及壓力不穩

1. 檢查進水管是否洩漏或阻塞。
2. 拆下汽缸總成，取出活門總成，確認是否阻塞或損壞。(1)
3. 檢查止水塞頭(1)是否磨損



二、壓力不足

1. 旋轉調壓螺帽(2)，調整壓力。
2. 鬆開迴水座、調壓螺帽、檢查壓力閥組、壓力閥座組及調壓彈簧是否磨損、彈性疲乏或異物阻塞。
3. 檢查活門(1)是否阻塞。
4. 檢查U迫緊、防水迫緊是否磨損。



三、汽缸洩漏

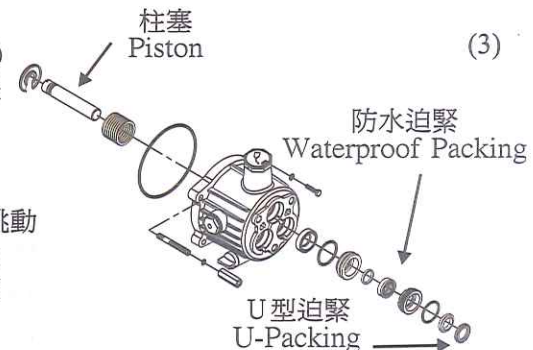
1. 檢查U迫緊、防水迫緊是否損壞。
2. 檢查柱塞，若磨損嚴重則更換柱塞。
3. 檢查各部O形環是否損壞。(1)(2)(3)

四、軸箱噪音、脈動過大

1. 檢查潤滑油是否變白濁。
2. 檢查柱塞是否因潤滑油不足，導致卡死。(3)
3. 取出柱塞，重新組裝。
4. 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，電源開關請先關閉)
2. 檢查延長線是否過長及電壓是否正確。
3. 馬達請勿置於不通風處。



六、無法洩壓，或噴槍關閉時出水跳動

1. 檢查止水閥塞是否磨損。(2)
2. 檢查球閥固定彈簧是否疲乏或異物阻塞。(2)
3. 檢查O形環是否破損。

Instructions

A. BEFORE OPERATION

1. Make sure that the pump is firmly installed and the connectors are tightened properly.
2. Put the suction hose and filter into the water tank and ensure the flow of water into the filter is unobstructed.
3. Stop spraying and turn the power off after use. To release the remaining pressure from the spray hose, operate the spray gun until there is no more discharge. Do not remove the spray hose or spray gun without first releasing the pressure.
4. Please set up the suction hose and spray hose before turning on the motor. Run the motor until water begins to come out. Then turn off the motor and connect the spray gun to the spray hose. Restart the motor for normal operation.
5. If your tool kit includes a pressure gauge, please install the gauge before use.
6. Never attempt to run the pump over its available working pressure.

B. PUMP LUBRICATION

1. Change the oil when the pump has been used for the first 30~50 hours.
2. Change the oil after every 100~200 hours of use.
3. Use #30~#40 weight of oil, add 270 cc each time.
4. Please check the quality of oil before every use.

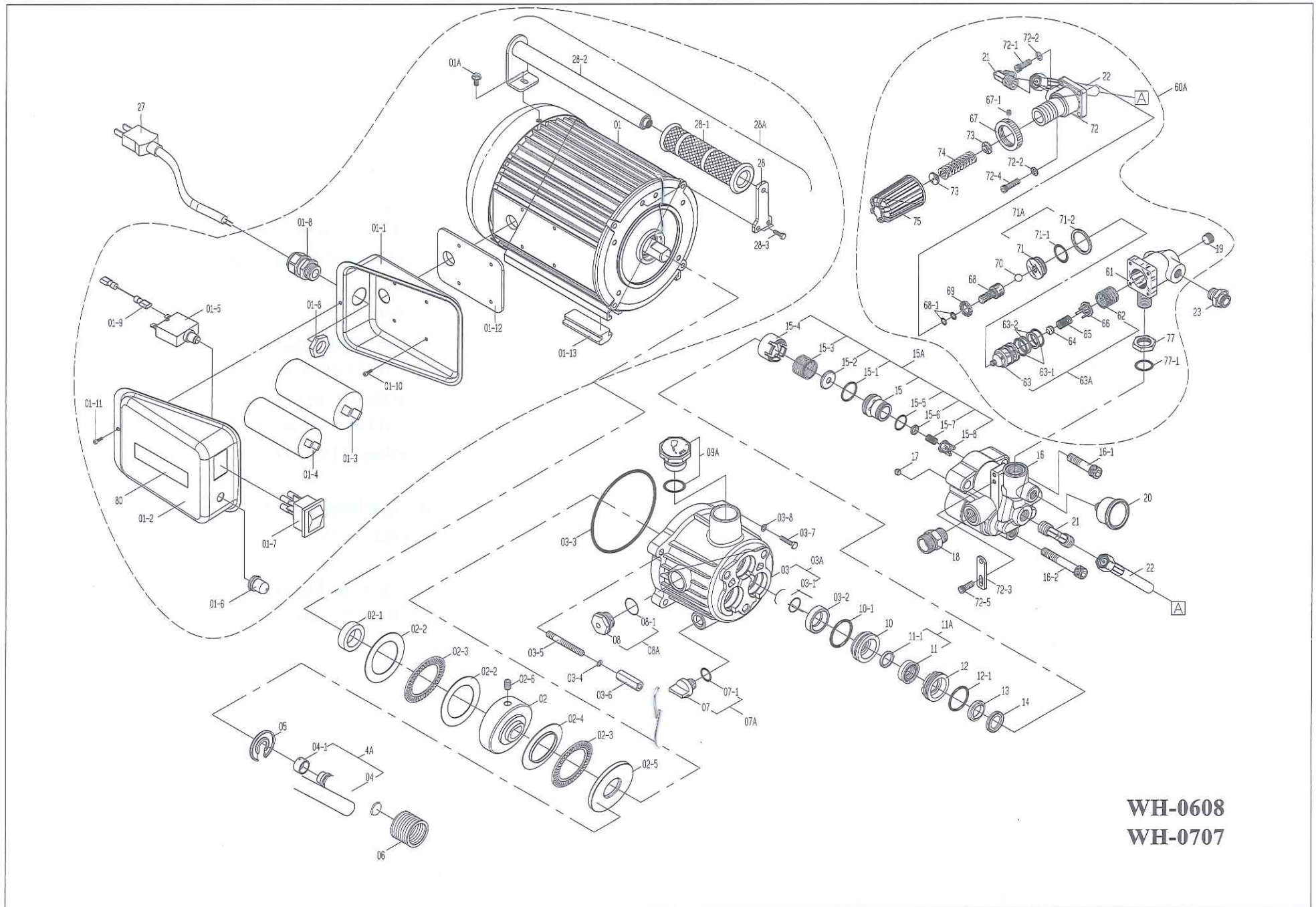
C. WARNINGS

1. Make sure the diameter of any extension cords used is larger than 2mm².
2. The height difference between the suction inlet and the filter should not be more than 0.5 meter.
3. Make sure the temperature of water into the pump is below 60°C.

4. Monitor the temperature of the motor and move the unit to a cooler location with better ventilation if necessary.
5. If the circuit breaker stops the motor, check the stability of the power supply, the length of any extension cords being used or the temperature of the environment.

D. TROUBLESHOOTING

1. Unstable Working Pressure
 - (a) Check whether the suction hose is leaking, clogged or afloat.
 - (b) Check the valve assemblies, plug to see if it is clogged or damaged.(1)
2. Insufficient Pressure
 - (a) Adjust the knob of the pressure regulator.
 - (b) Check to see if the pressure valve , pressure valve seat and regulating spring are worn out. (2)
 - (c) Check to see if the U-packing , waterproof packing (3) and valve assemblies (1) are damaged.
3. Leakage
 - (a) Check the U-packing, waterproof packing and pistons. Replace them if necessary. (3)
4. Unusual Noise
 - (a) Check the pistons and oil. Replace them if necessary.
 - (b) Check that the flow rate of the water supply is sufficient.
5. Insufficient Motor Start
 - (a) Check the circuit breaker. Please turn off the power before resetting the breaker.
 - (b) Check to see if the voltage is correct or an extension cord is too long.
 - (c) Put the unit in a well ventilated location to lower the temperature.
6. Insufficient Pressure Release
 - (a) Check to see if the valve plug is worn out. (2)
 - (b) Check to see if the ball valve spring has the proper tension or is stuck.(2)
 - (c) Check to see if the o-ring is damaged.



WH-0608
WH-0707

零件表 PARTS LIST

WH-0608 / WH-0707

圖號 NO.	編號 CODE	名稱	DESCRIPTION	Q'TY
01	BA20401016160	馬達 60HZ 110V 1HP	MOTOR (WH-0608 110V)	1
	BA20401016210	馬達 60HZ 220V 1HP	MOTOR (WH-0608 220V)	
	BA21401016110	馬達 50HZ 230V 1HP	MOTOR (WH-0707)	
01-1	D020203022	電器盒	COVER	1
01-2	D020203001	電器盒上蓋	COVER	1
01-3	N/A	啟動電容器 60HZ	CONDENSOR (START) 60HZ	1
	D020201005	啟動電容器 50HZ	CONDENSOR (START) 50HZ	
01-4	D020201107	運轉電容器 60HZ	CONDENSOR (RUN) 60HZ	1
	D020201117	運轉電容器 50HZ	CONDENSOR (RUN) 50HZ	
01-5	B130967000	過電流斷路器 15A	CIRCUIT BREAKER 15A	1
	B130963115	過電流斷路器 9A	CIRCUIT BREAKER 9A	
01-7	B130563021	電源開關	POWER SWITCH	1
01-8	B110565000	電源線固定夾	WIRE BINDER/NUT	1
01-12	B019316000	出線皮	PACKING	1
01-13	B100563010	腳墊	CUSHION	4
02	B019312020	偏心盤	WOBBLE PLATE	1
02-1	B019313000	軸承油封	BEARING OIL SEAL	1
02-2	B019118010	推力墊圈	GASKET	2
02-3	B019114010	平面軸承	BEARING	2
02-4	B019305000	培林支撐套	BEARING SPACER	1
02-5	B019105021	平面軸承片	BEARING	1
02-6	BS17108010500	無頭內六角螺絲	SCREW	1
03A	B019501001	曲軸箱組	CRANKCASE ASSY	1
03	1019501001	曲軸箱	CRANKCASE	1
03-1	1019508000	引擎培林	BEARING	3
03-2	B019503000	柱塞油封	PISTON OIL SEAL	3
03-3	BG10995103510	O形環	O-RING	1
03-4	BS32108300	彈簧華司	SPRING WASHER	4

圖號 NO.	編號 CODE	名稱	DESCRIPTION	Q'TY
03-5	B019509000	軸箱固定螺絲	SCREW	2
03-6	B019509020	軸箱固定螺帽	NUT	2
03-7	BS16108025500	內六角螺絲	HEX SCREW	2
04A	B019304023	柱塞組	CERAMIC PISTON ASSY	3
04	B019304020	陶瓷柱塞	CERAMIC PISTON	3
04-1	B019308025	柱塞滑靴	PISTON SHOE	3
05	B019505000	止逆彈簧固定座	SPRING SEAT	3
06	BJ00106050	柱塞彈簧	SPRING	3
07A	B011801001	排油螺絲組	DRAINAGE SCREW ASSY	1
07	B011801000	排油螺絲	DRAINAGE SCREW	1
07-1	BG10110015	O形環	O-RING	1
08A	B019229003	油鏡組	OIL WINDOW ASSY	1
08	B019229020	油鏡	OIL WINDOW	1
08-1	BG10158020600	O形環	O-RING	1
09A	B011901014	加油蓋組	OIL INLET COVER ASSY	1
10	B019504000	防水油封套	WATERPROOF OIL SEAL COLLAR	3
10-1	BG10300034	O形環	O-RING	3
11	B019506000	防水迫緊	WATERPROOF PACKING	3
11-1	B019507000	防水迫緊墊片	WATERPROOF PACKING GASKET	3
12	B019504020	U迫緊套	U-PACKING COLLAR	3
12-1	BG10290033	O形環	O-RING	3
13	B019310003	墊圈	GASKET	3
14	B019309001	U型迫緊	U-PACKING	3
15A	B040063060	進出水活門組	VALVE ASSY	3
15	B040263130	進出水活門座	VALVE SEAT	3
15-1	BG10210025040	O形環	O-RING	3
15-2	B040163062	進水活門塞	INLET VALVE PLUG	3
15-3	BJ26301030	進水活門彈簧	INLET VALVE SPRING	3

機器保養維護方法

一、保養時間表

敬請遵守時間表定期施行機器、配件保養。

零件名稱	維護內容	維護時機
幫浦	確認油量或更換機油	使用前檢視油量是否足夠，必要時更換機油。
進水過濾器	清潔	每次使用前

二、更換機油時機與步驟

機油使用	SAE 30~40
更換油量	270 cc
更換時機	1. 首次使用 30~50 小時 2. 使用每隔 100~200 小時

1. 打開加油蓋。
2. 卸下排油螺絲，請準備容器盛裝排流出的舊機油。
3. 舊機油排流完畢後，請確實將排油螺絲鎖緊。
4. 從注油口加入指定油量之新油。
5. 確認新油添加是否達到油鏡的中心點。若油量低於油鏡時，請再注油至油鏡的中心點為止。
6. 確實關緊加油蓋。

⚠ 注意：

- *機器剛運轉完時，內部機油過熱，請勿進行換油作業。
- *當油量超過油鏡的中心點時，幫浦運轉時恐會造成機油濺出，而導致機器故障。

三、長期保管場所

請保存在以下地方

1. 幼童無法取得處、附近無危險物或火源的安全處。
2. 陽光無法直射、平坦、乾燥、清潔的地方。

故障診斷與障礙排除

若是發生不良狀況時，多半可以用下面的對策來解決，使機器恢復正常運作。萬一無法解決或是有不清楚的地方，請向購買的販售商詢問。詢問的同時，敬請告知您所購買的產品型號及機器流水號。

不良事項	原因	對策
• 無法啟動馬達	• 電源失效 • 電壓過低 • 檢查水源是否充足	• 確認電源供應 • 檢查電壓 • 檢查延長線是否過長
• 運轉聲音異常	• 電源受損 • 幫浦滲入空氣 • 迫緊受損	• 檢查電壓 • 拔掉噴槍，待出水正常後再接上 • 檢查吸水管是否破裂或扭曲導致空氣進入 • 清潔吸水管、過濾網 • 更換迫緊
• 馬達異常停止運轉	• 過載保護跳脫 • 電壓不足	• 檢查電壓 • 檢查進水 • 向零售商詢問
• 不進水 • 不出水	• 幫浦、管路有空氣 • 過濾器或噴嘴堵塞 • 活門沾黏	• 排除幫浦、管路空氣 • 清理過濾器和噴嘴 • 向零售商詢問
• 未達規定之壓力	• 噴嘴磨耗、出水量過大 • 幫浦不良	• 更換噴嘴 • 向零件商詢問
• 出水量不穩定	• 噴嘴堵塞 • 滲入空氣 • 進水過濾器堵塞	• 清理噴嘴及過濾器 • 檢查進水系統 • 向零售商詢問