

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

WL-550B2 SERIES USER'S MANUAL

WL-550B2 系列操作手冊



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.

2021.03V

泵浦使用說明

A. 危險注意事項：

1. 嚴禁噴槍對人噴射。
2. 泵浦、引擎/馬達運轉時會產生高溫，須小心使用。
3. 噴霧機在高速運轉下，須注意皮帶及普利部份，不可碰觸。

B. 使用前注意事項：

1. 檢查每個扣件，確定噴霧機與引擎或馬達都穩固地裝在架子上。
2. 檢查引擎齒輪箱是否加機油；使用燃料是否正確；馬達電壓是否正確。
3. 啟動引擎前開關是否打開；化油器開關是否打開。
4. 兩個皮帶輪應裝於一直線上，皮帶應鬆緊適中。
5. 鎖好輸水管、噴槍。
6. 使用前須檢查泵浦內是否有機油、油量是否足夠及油品狀況是否正常。

C. 泵浦使用事項：

1. 把吸水管鎖緊泵浦吸水口，同時將吸水過濾端放入水槽底部上方20公分處，預防吸進底部泥沙，確保泵浦壽命。
2. 吸水管給水量需大於泵浦使用水量，如此才能達到使用壓力。
3. **WL-550B2/WL-550BC2**使用前將把手開關鈕(#P23)切換至洩壓，排除泵浦內空氣。待正常出水後再將把手開關鈕切換至噴霧，即可使用噴槍做噴霧工作。
4. **WL-550ASB2/WL-550ASBC2**出水管路須裝在洩壓汽缸套(#121)上，方可有洩壓功能。使用前，打開泵浦球形閥(#35)，排除泵浦內空氣。待正常出水後，關閉球閥開關，即可使用噴槍做噴霧工作。
5. 壓力調整：壓力調整弁加壓以順時針方向調整，調整壓力同時須打開噴槍，最高壓力不得高於泵浦設定壓力，以維護機械壽命。並可依實際壓力需求，逆時針降壓以確保最佳使用壓力。(請依照壓力錶或調壓把手上顯示之壓力作為調壓參考值。)
6. 暫停使用泵浦時或無水空轉時不宜超過5分鐘，以確保U迫緊不受水溫升高而降低使用壽命。

泵浦使用說明

D. 使用後注意事項：

1. WL-550B2/WL-550BC2:

- A. 噴霧完畢，將把手開關鈕(#P23)轉至“洩壓”，並以清水操作噴霧機以清除內部殘留之化學品。
- B. 使用完畢後，將「調壓把手」(#P1-1)刻度轉至“啟動”，避免彈簧疲乏。

2. WL-550ASB2/WL-550ASBC2: 噴霧完畢，請用清水操作噴霧機以清除內部殘留之化學品，並將調壓螺帽(#147)放鬆，以免彈簧疲乏。

E. 日常保養：

- 1. 泵浦與引擎初使用10-15小時應更換機油，以後每隔70小時再更換一次。(使用前應注意機油是否變質。)
- 2. 機油冷卻後才可進行更換，更換機油時，請打開排油螺絲(#08)排出骯髒之機油。
- 3. 加機油時，把排油螺絲(#08)鎖緊，打開加油蓋(#04A)，注入SAE#30~#40車輛用清潔機油，正確加油量在油鏡(#07)的2/3位置。

F. 簡易故障排除：

1. 無法供水及壓力不穩

- A. 檢查吸水塑膠管是否洩漏(破損或鬆脫)。
- B. 打開出水開關排掉多餘的空氣。
- C. 取下進水室(#29)及出水室(#31)檢查活門組(#28A)是否阻塞或損壞。
- D. 檢查過濾網是否阻塞。

2. 壓力不足

- A. 檢查壓力是否調整適當。
- B. 檢查皮帶是否太鬆。
- C. 檢查噴霧管與接頭是否洩漏或損壞。
- D. 噴嘴磨損或孔徑太大導致壓力下降。
- E. 檢查迫緊是否磨耗。

3. 汽缸洩漏

- A. 取出汽缸內的迫緊(#21, #21-1, #22-1, #23, #24) 檢查是否磨耗。
- B. 檢查柱塞(#14A/B)是否損壞，柱塞損壞可能導致汽缸洩漏或壓力不足。

零件表 PARTS LIST

圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
01	B010103050	曲軸箱 (紅)	Crankcase (Red)	1
	B010103051	曲軸箱 (藍)	Crankcase (Blue)	
01-1	B012904000	汽缸銷	Set Pin	2
02	B011403000	防塵蓋	Dustproof Cap	1
03	B011003110	曲軸油封蓋	Crankshaft Oil Seal Cover	2
03-1	BS12108010100	大扁頭螺絲	Screw	8
03-2	B011102111	曲軸油封蓋 (套筒)	Crankshaft Oil Seal Cover (Cone)	1
03-3	BG10280030	O形環	O-ring	1
03-4	BP11822243	皮帶輪 10B2*24*5	Pulley 10B2*24*5	1
03-5	BS11112032121	六角螺絲	Screw	1
04A	B011901014	加油蓋組	Oil Inlet Cover Assy	1
05	B011703000	後蓋迫緊	Rear Cover Packing	1
06	B011603000	曲軸箱後蓋 (紅)	Rear Cover (Red)	1
	B011603310	曲軸箱後蓋 (藍)	Rear Cover (Blue)	
06-1	BS12108016100	大扁頭螺絲	Screw	7
07A	B012201003	油鏡組	Oil Window Assy	1
07	B012201020	油鏡	Oil Window	1
07-1	BG10234028700	O形環	O-ring	1
08A	B011801001	排油螺絲組	Drainage Screw Assy	1
08	B011801000	排油螺絲	Drainage Screw	1
08-1	BG10110015	O形環	O-ring	1
09	B010803050	曲軸	Crankshaft	1
09-1	B012101110	曲軸鍵	Crankshaft Key	1
10A	B010603001	連桿組	Connecting Rod Assy	3
10-1	N/A	連桿	Connecting Rod	3
10-2	BS11208035500	六角螺絲	Set Bolt	6
10-3	BS31208500	平面華司	Washer	6

零件表 PARTS LIST

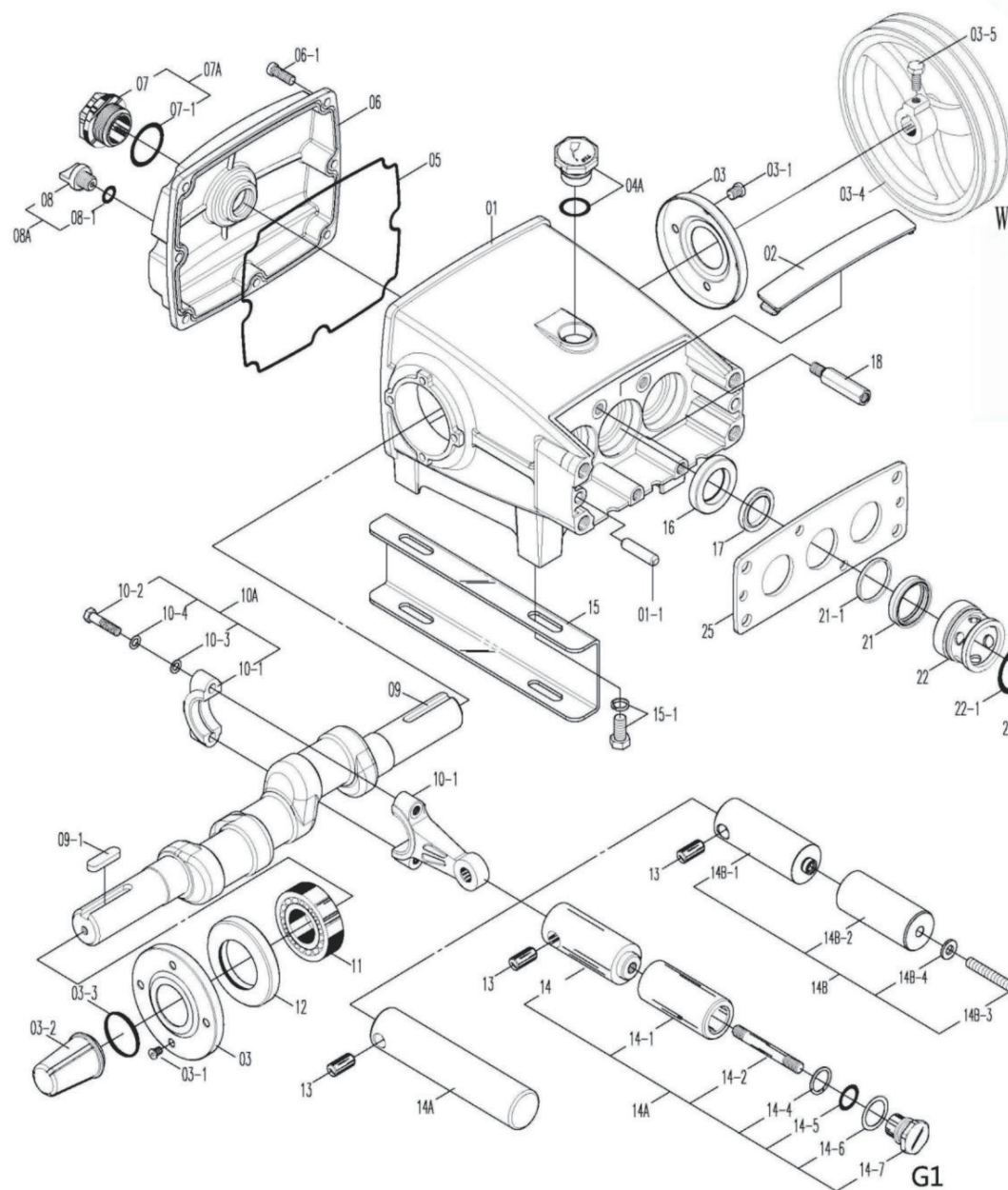
圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
10-4	BS32110500	彈簧華司	Spring Washer	6
11	B010703010	軸承	Bearing	2
12	B010918010	曲軸油封	Crankshaft Oil Seal	2
13	B010503110	柱塞銷	Piston Pin	3
14A	B010403050	不鏽鋼柱塞	Sst Piston	3
	B013003002	陶瓷柱塞組(G1)	Ceramic Piston Assy (G1)	
14	B013103050	柱塞桿	Piston	3
14-1	B013203000	柱塞套	Ceramic Piston Sleeve	3
14-2	B013303000	柱塞套固定螺絲	Piston Screw	3
14-4	BG30190024	背托環	Back-up Ring	3
14-5	BG10180024	O形環	O-ring	3
14-6	B013503000	柱塞套平墊圈	Gasket	3
14-7	B013403000	柱塞套固定螺帽	Set Nut	3
14B	B013003004	陶瓷柱塞組(G2)	Ceramic Piston Assy (G2)	3
14B-1	B013103150	柱塞桿	Piston Rod	3
14B-2	B013203100	柱塞套	Ceramic Piston Sleeve	3
14B-3	B013303100	柱塞套固定螺絲	Piston Screw	3
14B-4	B015122153	止水墊片	Gasket	3
15	B010303000	腳座	Crankcase Stand	2
15-1	BS11112016122	六角螺絲附華司	Set Bolt W/ Washer	4
16	B010203000	柱塞油封	Piston Oil Seal	3
17	B011203010	柱塞中間皮	Waterproof Ring	3
18	B012303050	軸箱螺絲	Screw	1
20	B020103050	汽缸	Cylinder	1
20-1	BS11112032122	六角螺絲附華司	Set Bolt W/ Washer	4
20-2	BS11110032222	六角螺絲附華司	Set Bolt W/ Washer	2
21	B020303111	防水迫緊(兩用)	Packing (General)	3

零件表 PARTS LIST

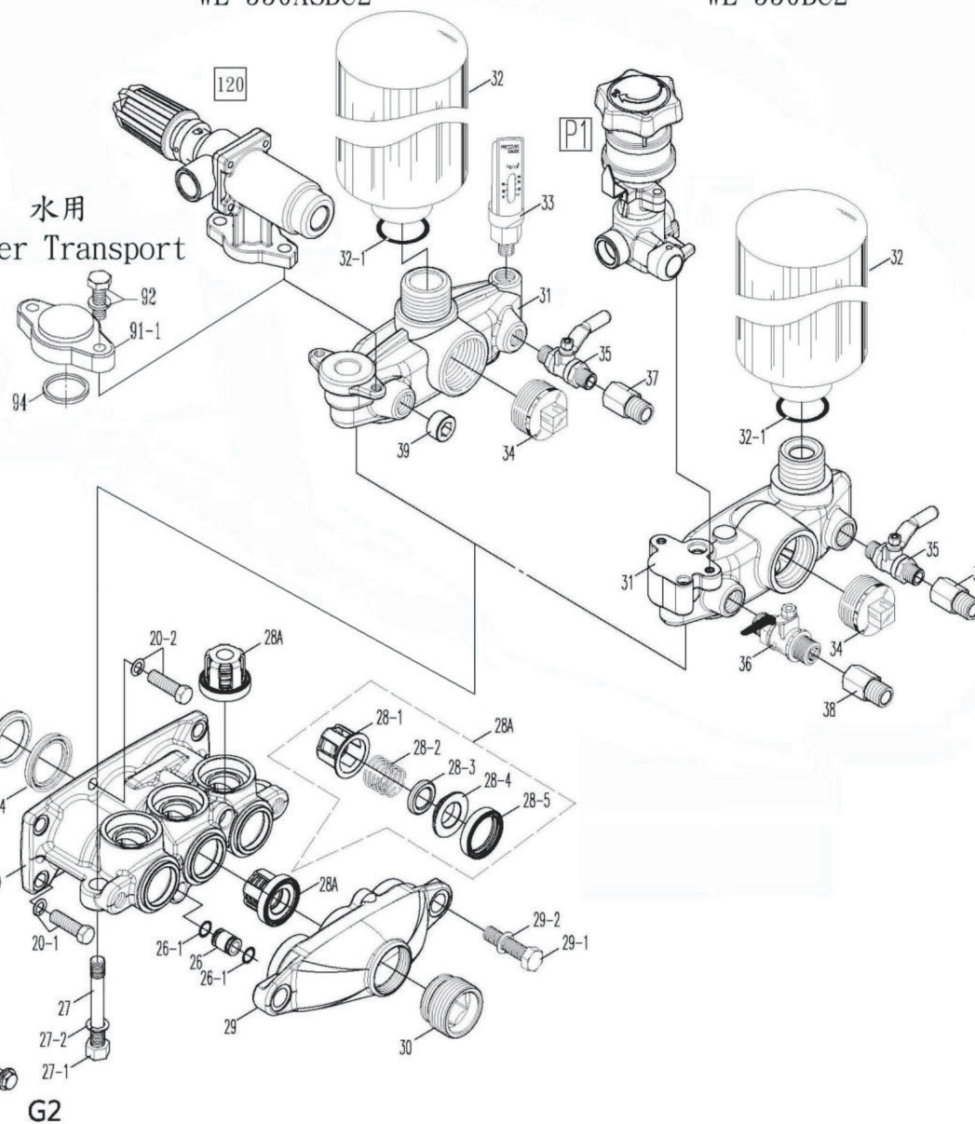
圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
21	B020303113	防水迫緊(NKA11/水用)	Packing (Water Transport)	3
21-1	B020303091	防水迫緊墊片	Spacer	3
22	B020503050	U迫緊固定環	Set Ring	3
22-1	BG10410046	O形環	O-ring	3
23	B020303081	U迫緊墊片	Spacer	3
24	B020303101	U迫緊 (VN905/兩用)	U-packing (General)	3
	B020303103	U迫緊(NKA11/水用)	U-packing (Water Transport)	
25	B020603050	迫緊防脫套	Set Socket	1
26	B024102000	連接管	Connecting Pipe	2
26-1	BG10100014010	O形環	O-ring	4
27	BS15116078300	雙頭牙螺絲	Double-end Screw	2
27-1	BS21116200	六角螺帽	Nut	2
27-2	BS32116200	彈簧華司	Spring Washer	2
28A	B040003031	活門組	Valve Assy	6
28-1	B040303020	活門帽	Valve Cage	6
28-2	BJ20305000	活門彈簧	Valve Spring	6
28-3	B040103020	活門塞	Valve Plug	6
28-4	B040236090	活門座	Valve Seat	6
28-5	B040436090	活門皮	Valve Packing	6
29/30	B031403052	進水室含銅接頭	Suction Chamber W/ Connector	1
29	B031403050	進水室	Suction Chamber	1
30	B032303050	進水接頭	Connector	1
29-1	BS11116050100	六角螺絲	Set Bolt	2
29-2	BS32116200	彈簧華司	Spring Washer	2
31	B030203051	出水室	Outlet Chamber	1
	B030203050	出水室(水用/ASB2系列)	Outlet Chamber(Water Transport/ASB2 Series)	
32	B030403000	空氣室	Air Chamber	1

零件表 PARTS LIST

圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
32-1	BG10330039	O形環	O-ring	1
33	B250001031	壓力錶	Pressure Gauge	1
34	B030703020	出水塞頭 PT1-1/4	Plug Pt1-1/4	1
35	B031603110	球形閥 10mm	Ball Cock 10mm	1
36	B031604110	球形閥 13mm	Ball Cock 13mm	1
37	B032003000	接頭由令 10mm	Connector 10mm	1
38	B032004000	接頭由令 13mm	Connector 13mm	1
39	BS50016000	內六角塞頭 PT1/2	Plug Pt1/2	1
		【 兩 用 】	【 GENERAL 】	
*120	B050003311	自動洩壓總成	Unloading Valve Assy	1
*P1	B050002024	安全弁 (中文)	Safety Valve Assy (Zh)	1
	B050002025	安全弁 (英文)	Safety Valve Assy (En)	
ACC.	B150103001	吸水管組 1-1/4"*10尺	Suction Hose Assy	1
ACC.	B150101001	吸水管組 3/4"*9尺	Suction Hose Assy	1
ACC.	B150603110	過濾網申目	Filter Socket	1
ACC.	B150903110	過濾網	Filter	1
		【 水 用 】	【 FOR WATER TRANSPORT ONLY 】	
91-1	B031703000	迴水桿底座	Overflow Rod Seat	1
92	BS11110025122	六角螺絲附華司	Set Bolt W/ Washer	2
94	BG20250030	方形環	Square Ring	1
ACC.	B150403110	吸水管蝶頭	Suction Hose Wing Nut	1
ACC.	B150503120	吸水管申目	Suction Hose Socket	1
ACC.	BG20280037030	方形環	Square Ring	1
*120零件表及展開圖請參閱第9~10頁。			*120 parts list & diagram please refer to page 9~10.	
*P1零件表及展開圖請參閱第11~13頁。			*P1 parts list & diagram please refer to page 11~13.	
			2020.02V	



水用
Water Transport



WL-550ASB2
WL-550ASBC2

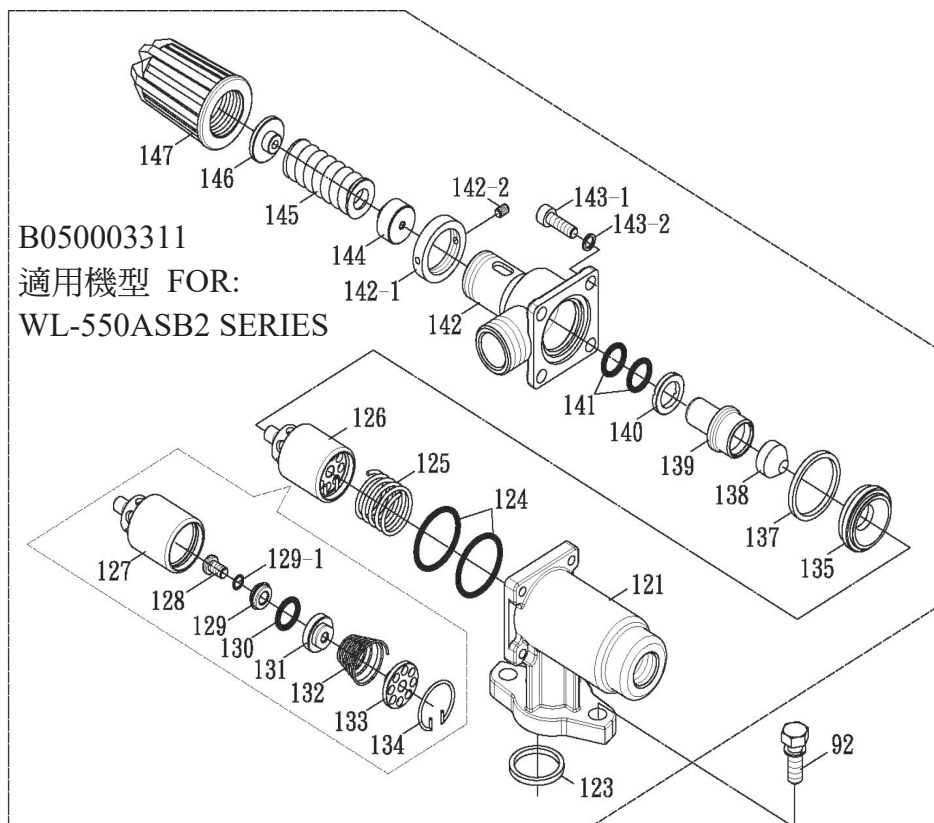
WL-550B2
WL-550BC2

G2

G1

WL-550B2 SERIES

自動洩壓總成 UNLOADING VALVE ASSEMBLY



圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
*92	BS11110025122	六角螺絲附華司	Set Bolt W/ Washer	2
121	B050203001	洩壓汽缸套	Unloading Valve Cylinder	1
123	BG20250030	方形環	Square Ring	1
124	BG10300035010	O形環	O-ring	2
125	BJ50301010	洩壓輔助彈簧	Auxiliary Spring	1
126	B052203001	柱塞活門組	Piston Valve Assy	1
127	B052203000	柱塞活門體	Piston Valve Body	1
128	BS14108010300	圓頭螺絲	Screw	1

自動洩壓總成 UNLOADING VALVE ASSEMBLY

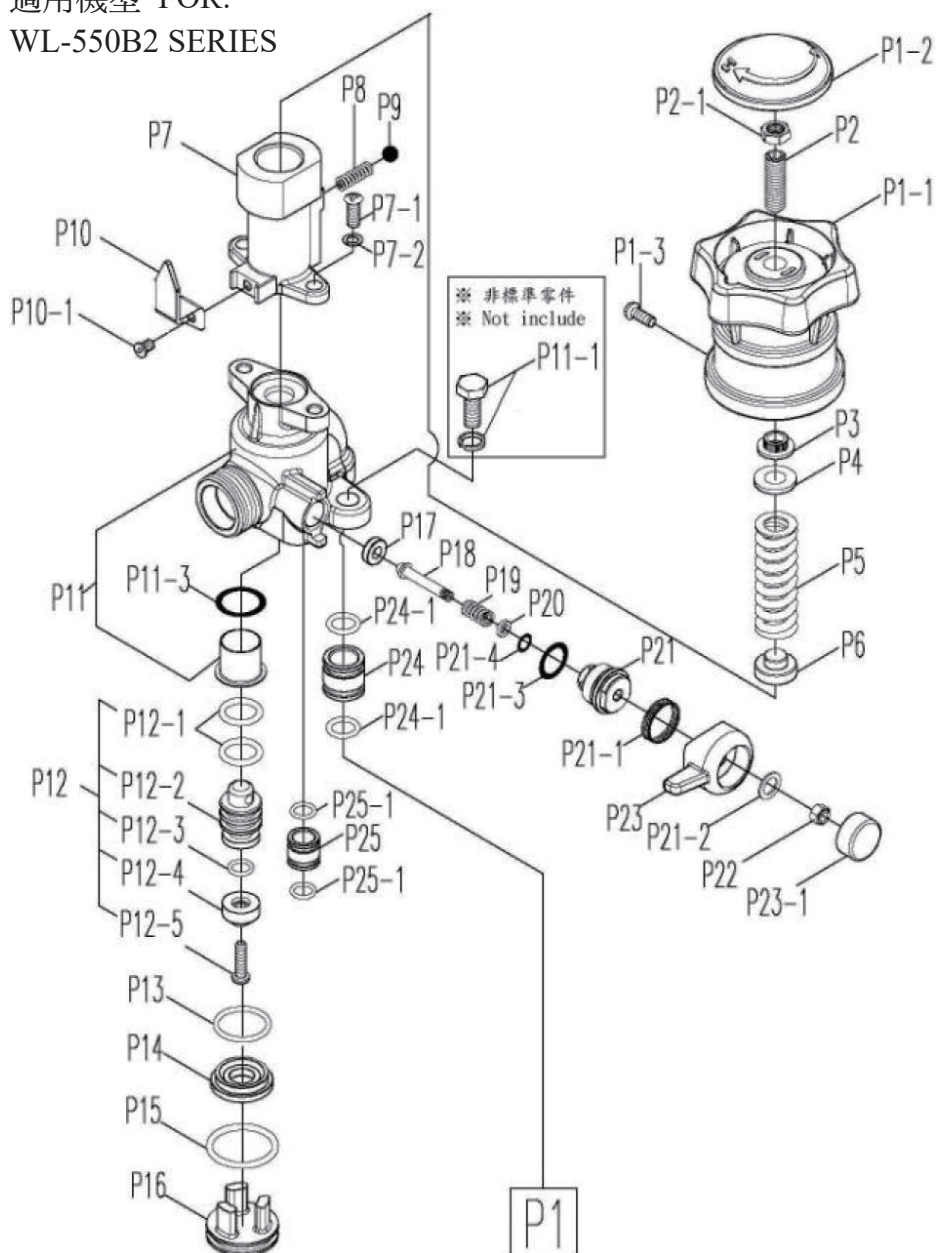
圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
129	B052403000	閘塞頭	Valve Plug	1
129-1	BG10060008	O形環	O-ring	1
130	BG10130018010	O形環	O-ring	1
131	B052503000	閘塞座	Valve Plug Seat	1
132	BJ30301010	球閘固定彈簧	Spring	1
133	B052303110	彈簧底座	Spring Seat	1
134	B052603000	C扣環	C-clip	1
135	B051003010	壓力閘座	Valve Seat	1
137	BG20320037	方形環	Square Ring	1
138/139	B050803011	壓力閘桿組	Valve Rod Assy	1
138	B050903000	壓力閘	Pressure Valve	1
139	B050803020	壓力閘桿	Pressure Valve Rod	1
140	B051903000	消音片	Damper Plate	1
141	BG10135018510	O形環	O-ring	2
142	B050503011	迴水座	Overflow Chamber	1
142-1	B071109051	固定環	Set Ring	1
142-2	BS17106005300	無頭內六角螺絲	Screw	2
143-1	BS16108019300	內六角螺絲	Hex Screw	4
143-2	BS32108300	彈簧華司	Spring Washer	4
144	B071409000	彈簧下座	Spring Seat	1
145	BJ41101000	調壓彈簧	Pressure Regulating Spring	1
146	B071311000	彈簧上座	Spring Seat (Upper)	1
147	B071709000	調壓螺帽	Pressure Regulating Knob	1
*92 不屬於自動洩壓總成標準零件，須另外訂購。			* 92 is not a standard part, please order it as needed.	
			2020.04V	

安全弁 SAFETY VALVE ASSEMBLY

B050002024/B050002025

適用機型 FOR:

WL-550B2 SERIES



安全弁 SAFETY VALVE ASSEMBLY

圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
P1-1	B050602000	調壓把手 (中文)	Pressure Regulating Knob (Zh)	1
	B050602010	調壓把手 (英文)	Pressure Regulating Knob (En)	
P1-2	B054602000	安全弁上蓋	Upper Cap	1
P1-3	BS14204012300	圓頭螺絲	Screw	1
P2	BS17208032500	調壓螺絲	Pressure Regulating Screw	1
P2-1	BS21208201	六角螺帽	Nut	1
P3	B054402050	調壓把手螺帽	Nut	1
P4	B051301221	彈簧上座	Spring Seat (Upper)	1
P5	BJ40101040	調壓彈簧	Spring	1
P6	B051402030	彈簧下座	Spring Seat	1
P7	B050302001	調壓管	Pressure Regulating Pipe	1
P7-1	BS14206020300	圓頭螺絲	Screw	2
P7-2	BS32108300	彈簧華司	Spring Washer	2
P8	BJ70101010	壓力固定彈簧	Spring	1
P9	B310115080	鋼珠	Sst Ball	1
P10	B054702000	壓力指針	Pressure Indicator	1
P10-1	BS14204006300	圓頭螺絲	Screw	1
P11	B050102070	安全弁本體	Safety Valve Body	1
	B052902020	壓力閥桿滑套	Valve Rod Sleeve	1
*P11-1	BS11110025122	六角螺絲附華司	Set Bolt W/ Washer	2
P11-3	BG10150020020	O形環	O-ring	1
P12-1	BG10100015010	O形環	O-ring	2
P12-2	B050802030	壓力閥桿	Valve Rod	1
P12-3	BG10080010	O形環	O-ring	1

安全弁 SAFETY VALVE ASSEMBLY

圖號No.	編號CODE	名 稱	DESCRIPTION	Q'TY
P12-4	B050902020	壓力閥	Pressure Valve	1
P12-5	BS14203012300	圓頭螺絲	Screw	1
P13	BG10190022010	O形環	O-ring	1
P14	B051001000	壓力閥座	Valve Seat	1
P15	BG10240029	O形環	O-ring	1
P16	B054202000	閥座固定座	Valve Seat	1
P17	B054502010	排氣止水墊片	Spacer	1
P18	B050801221	安全弁止水桿	Valve Rod	1
P19	BJ00106370	M03增壓彈簧	Spring	1
P20	B054802010	O型環固定片	Set Plate Pom	1
P21	B054402000	閥桿固定螺帽	Nut	1
P21-1	BJ70101100	排氣把手固定彈簧	Spring	1
P21-2	BS31105301	平面華司	Washer	1
P21-3	BG10140017500	O形環	O-ring	1
P21-4	BG10035007200	O形環	O-ring	1
P22	BS22204300	防鬆螺帽	Nut	1
P23	B054902002	把手開關鈕 (中文)	Switch (Zh)	1
	B054902003	把手開關鈕 (英文)	Switch (En)	
P23-1	B055002000	拉座用封口	Seal	1
P24	B054302011	安全弁進水連接管	Inlet Connecting Pipe	1
P24-1	BG10105013500	O形環	O-ring	2
P25	B054302051	安全弁排氣連接管	Air-release Pipe	1
P25-1	BG10065009530	O形環	O-ring	2
*P11-1 不屬於安全弁標準零件，須另外訂購。			* P11-1 is not a standard part, please order it as needed.	
			2020.04V	

Attention

●Warning

1. Never point the spray gun at people or animals.
2. To reduce the risk of burns, do not touch the surface of the pump while operating.
3. Keep hands and clothing clear of the belts and pulleys when operating the pump.

●Before Use

1. Please tighten every connector securely to prevent leaking and make sure that the sprayer and the engine/motor are installed firmly on the frame.
2. Set the two pulleys in a straight line and the belts at an appropriate tightness.
3. Make sure that the oil in the pump is sufficient and in good condition.
4. **Engine:** Check whether there is sufficient engine oil and use the right fuel.
Before starting the engine, make sure both the ON/OFF SWITCHES of engine and carburetor are on.
5. **Motor:** Be sure to use the correct voltage and frequency for the motor.

●During Use

1. Couple the suction hose to the inlet of the sprayer. Leave the suction hose filter suspended 20cm from the bottom of the water tank.
2. Make sure the water supply is sufficient to allow the pump to reach its working pressure.
3. Couple the spray hose with the spray gun. Before using the spray gun for spraying, be certain water in the pump is flowing properly.
4. **WL-550B2/WL-550BC2:** Set the SWITCH BUTTON (#P23) to “Pressure Release” before starting the engine/motor to release air in the pump. Switch to “Spray” after the outlet is normal.
5. **WL-550ASB2/WL-550ASBC2:** Open the BALL COCK(#35) before starting the engine /motor to release air in the pump. Close it after the outlet is normal.
6. Pressure Adjustment: The maximum pressure should not exceed the set pressure of the pump. When adjusting the pressure, the spray gun must be opened. Turn PRESSURE REGULATING KNOB/NUT (WL-550B2/BC2#P1-1; WL-550ASB2/ASBC2#147) in a clockwise direction to increase the pressure and counter-clockwise to reduce the pressure. Please use the PRESSURE REGULATING KNOB (WL-550B2BC2#P1-1) value or the PRESSURE GAUGE(WL-550ASB2/ASBC2#33) as the pressure reference when adjusting.
7. In order to avoid any damage to the packings and the pump, shut off the engine /motor when stopping the unit for more than 5 minutes.

Attention

●After Use

1. Use water to operate the pump again in order to clean out any remaining chemicals.
2. WL-550B2/WL-550BC2:
 - A. Set the SWITCH BUTTON (#P23) to “Pressure Release”, and run the pump with clean water to prolong the life of the pump.
 - B. Set the PRESSURE REGULATING KNOB (#P1-1) to “Start” when the pump is not in use.
3. WL-550ASB2/WL-550ASBC2: When not in use, loosen the PRESSURE REGULATING NUT (#147) in order to maintain proper tension of the spring inside.

●Maintenance

1. Replace oil in the pump after the first 10~15 hours of use. After this, the oil should be changed after every 70 hours of use. Make sure the oil is in good condition before use.
2. After the oil has cooled, unscrew the DRAINAGE SCREW (#08) and drain all oil and residue from the pump.
3. Tighten the DRAINAGE SCREW (#08) before refilling with clean motor oil SAE #30~#40 up to the level of 2/3 of the OIL WINDOW (#07).

●Repair Instructions

1. Instability of working pressure and water supply:

- A. Check if the suction hose is blocked or leaking.
- B. Open the BALL COCK to release any air in the pump.
- C. Remove the SUCTION CHAMBER (#29) and OUTLET CHAMBER (#31) to check if the VALVE ASSY (#28A) are stuck or clogged.
- D. Check if suction filter is stuck or clogged.

2. Insufficient pressure:

- A. Check whether the pressure has been adjusted properly.
- B. Check whether the belt is too loose.
- C. Check whether the spray hose and the coupling are damaged.
- D. Check whether the packings are worn or the nozzle is worn out.

3. Cylinder leakage:

- A. Check if the packings (#21, #21-1, #22-1, #23, #24) in the cylinder are damaged.
- B. Check if pistons (#14A/#14B) are worn out or damaged. This may lead to leaking and low pressure.