

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

25/45 SERIES USER'S MANUAL

25/45 系列操作手冊



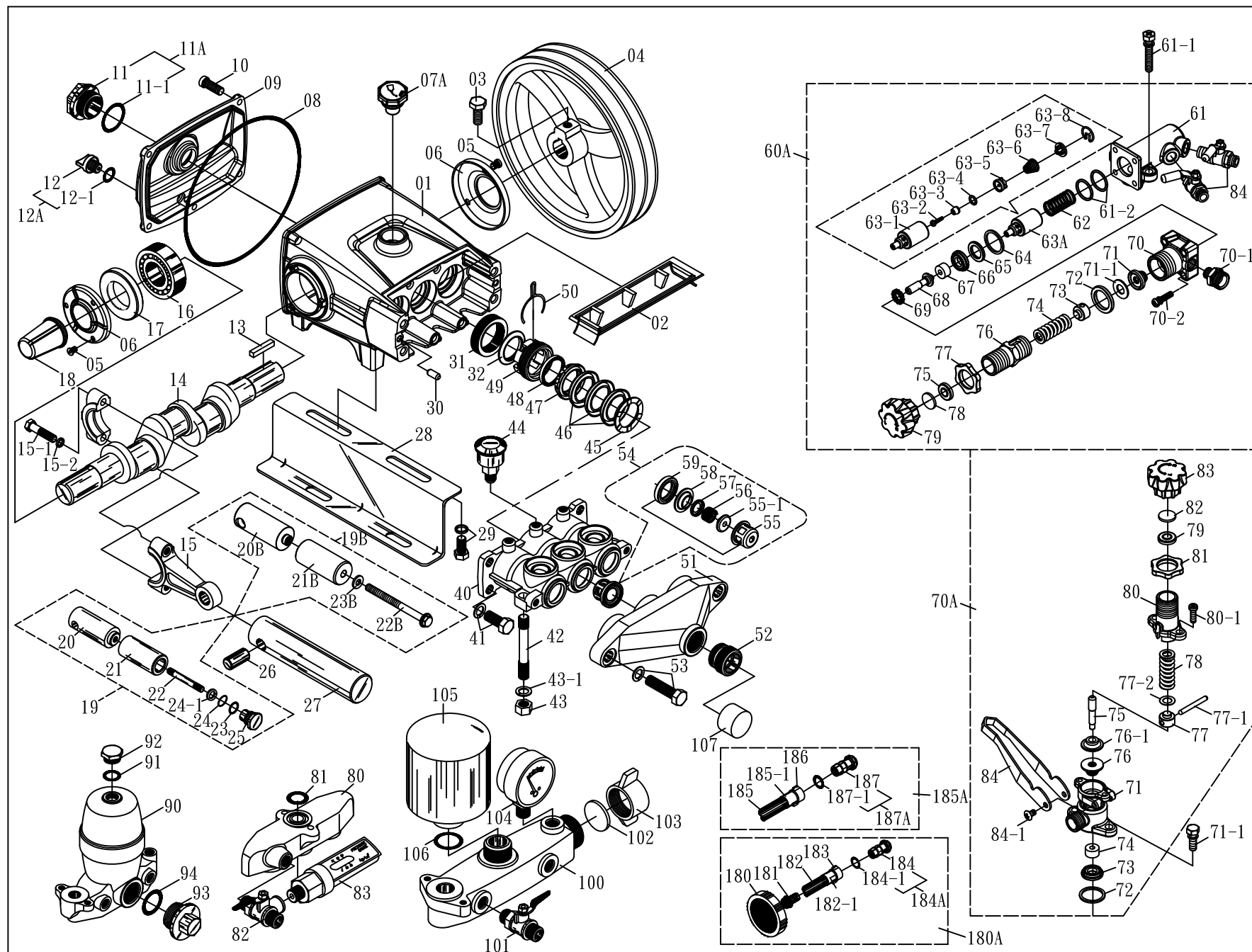
感謝您購買物理產品，使用前請詳閱本說明。

Thank You For Buying Our Product.

Please Read The Operation Manual Before Use.

2021.03

WULI AGRICULTURE MACHINE CO., LTD.



零件表 PARTS LIST

圖號 No.	編號 CODE		零件名稱	DESCRIPTION	數量 Q'TY
	25型系列 25 SERIES	45型系列 45 SERIES			
01	B010101300	B010102300	曲軸箱 (紅)	CRANKCASE (RED)	1
	B010101310	B010102310	曲軸箱 (藍)	CRANKCASE (BLUE)	
02	B011401000	B011402000	防塵蓋	DUSTPROOF CAP	1
03	BS11110019121		六角螺絲	SET BOLT	1
04	BP11212190300	BP11612240300	皮帶輪	PULLEY	1
05	BS12106006200		大扁頭螺絲	SCREW	6
06	B011001000		曲軸油封蓋 A (中空)	CRANKSHAFT OIL SEAL COVER (A)	2
07A	B011901014		加油蓋組	OIL INLET COVER ASSY	1
08	B011701000	B011702000	後蓋迫緊	REAR COVER PACKING	1
09	B011601021	B011602521	曲軸箱後蓋 (紅)	REAR COVER (RED)	1
	B011601022	B011602530	曲軸箱後蓋 (藍)	REAR COVER (BLUE)	
10	BS12108016100		大扁頭螺絲	SCREW	4/5
11A	B012201003		油鏡組	OIL WINDOW ASSY	1
11	B012201020		油鏡	OIL WINDOW	1
11-1	BG10234028700		O形環	O-RING	1
12A	B011801001		排油螺絲組	DRAINAGE SCREW ASSY	1
12	B011801000		排油螺絲	DRAINAGE SCREW	1
12-1	BG10110015		O形環	O-RING	1
13	B012101110		曲軸鍵	CRANKSHAFT KEY	1
14	B010801110	B010802110	曲軸	CRANKSHAFT	1
15	B010601001	B010602002	連桿	CONNECTING ROD ASSY	3
15-1	BS11206025500	BS11206030500	六角螺絲	SET BOLT	6
15-2	BS32206501		彈簧華司	SPRING WASHER	6
16	B010701050	B010702050	軸承	BEARING	2
17	B010901000	B010902000	曲軸油封	CRANKSHAFT OIL SEAL	2
18	B011101020		曲軸油封蓋 B (套筒)	CRANKSHAFT OIL SEAL COVER (B)	1
19	B013007001	B013002001	陶瓷柱塞組 (G1)	CERAMIC PISTON ASSY (G1)	3
20	B013107000	B013102000	柱塞桿	PISTON ROD	3

圖號 No.	編號 CODE		零件名稱	DESCRIPTION	數量 Q'TY
	25型系列 25 SERIES	45型系列 45 SERIES			
21	B013207001	B013202001	柱塞套 (陶瓷)	CERAMIC PISTON SLEEVE	3
22	B013307000	B013308000	柱塞套固定螺絲	PISTON SCREW	3
23	B013507000	B013508002	柱塞套平墊圈	GASKET	3
24	BG10095014520	BG10140018500	O形環	O-RING	3
24-1	BG30101014010	BG30156019	背托環	BACK-UP RING	3
25	B013407000	B013408000	柱塞套固定螺帽	SET NUT	3
19B		B013002003	陶瓷柱塞組 (G2)	CERAMIC PISTON ASSY (G2)	3
20B		B013102150	柱塞桿	PISTON ROD	3
21B		B013202150	柱塞套 (陶瓷)	CERAMIC PISTON SLEEVE	3
22B		B013302150	柱塞套固定螺絲	PISTON SCREW	3
23B		B015122153	止水墊片	GASKET	3
26	B010501110	B010502110	柱塞銷	PISTON PIN	3
27	B010401010	B010402010	不鏽鋼柱塞	SST PISTON	3
28	B010301000	B010302000	腳座	CRANKCASE STAND	2
29	BS11112016122		六角螺絲附華司	SET BOLT W/ WASHER	4
30	B012901110		汽缸銷	SET PIN	2
31	B010201000	B010202000	柱塞油封	PISTON OIL SEAL	3
32	B011201010	B011202010	柱塞中間皮	WATERPROOF RING	3
40	B020101000	B020102000	汽缸	CYLINDER	1
41	BS11110025122	BS11112025122	六角螺絲附華司	SET BOLT W/ WASHER	4
42	BS15112060100	BS15112070100	雙頭牙螺絲	DOUBLE-END SCREW	2
43	BS21112100		六角螺帽	NUT	2
43-1	BS32112200		彈簧華司	SPRING WASHER	2
44	B020801002	B020801113	黃油杯 (銅)	GREASE CUP (BRASS)	3
45	B020201020	B020202020	V迫緊底座	V-PACKING SEAT	3
46	B020301120	B020302160	V迫緊 (氟素)	V-PACKING (F.P.M.)	9
	B020301130	B020302170	V迫緊 (A120)	V-PACKING (A120)	
	B020301110	B020302150	V迫緊 (乙烯隆)	V-PACKING (UCL)	
	B020301100	B020302140	V迫緊 (NBR)	V-PACKING (NBR)	

零件表 PARTS LIST

圖號 No.	編號 CODE		零件名稱	DESCRIPTION	數量 Q'TY
	25型系列 25 SERIES	45型系列 45 SERIES			
47	B020401011	B020402011	黃油環 (POM)	GREASE RING (POM)	3
	B020401110	B020402110	黃油環 (銅)	GREASE RING (BRASS)	
48	B020901000	B020902000	V型油環	V-TYPE O-RING	3
49	B020501000	B020502000	調整環	ADJUSTING RING	3
50	B020701010	B020702010	調整環固定夾	SET CLIP	3
51/52	B031401031	B031402031	進水室含銅接頭	SUCTION CHAMBER W/CONNECTOR	1
51	B031401030	B031402030	進水室	SUCTION CHAMBER	1
52	B032301110	B032302110	進水室接頭	CONNECTOR	1
53	BS11112035122	BS11112038122	六角螺絲附華司	SET BOLT W/ WASHER	2
54	B040001001	B040002031	活門組	VALVE ASSY	6
55	B040301000	B040302030	活門帽	VALVE CAGE	6
55-1		B040502000	活門塞座	VALVE PLUG BASE	6
56	BJ20101000	BJ20201002	活門彈簧	VALVE SPRING	6
57	B040101000	B040102020	活門塞	VALVE PLUG	6
58	B040201000	B040202020	活門座	VALVE SEAT	6
59	B040401000	B040402000	活門皮	VALVE PACKING	6
*60A	B050001331	B050002316	自動洩壓總成(G3)	UNLOADING VALVE ASSY (G3)	1
61-1	BS13110047122	BS13110038122	六角螺絲附華司	SET BOLT W/ WASHER	2
*70A	B050001006		安全弁(G3)	SAFETY VALVE ASSY (G3)	1
71-1	BS11110025122		六角螺絲附華司	SET BOLT W/ WASHER	2
80	B030301000	B030302000	出水室	OUTLET CHAMBER	1
81	BG10140018500	BG1018002400	O形環	O-RING	1
82	B030901110		三通球形閥	T-BALL VALVE	1
83	B250001021		壓力錶 (橫)	PRESSURE GAUGE (HORIZONTAL)	1
90	B030101000	B030102000	出水室連結空氣室	OUTLET & AIR CHAMBER	1
91	BG10140018500		O形環	O-RING	1
92	B030801000		空氣室塞頭	AIR CHAMBER PLUG	1
93	B030701000	B030702000	出水塞頭	PLUG	1

圖號 No.	編號 CODE		零件名稱	DESCRIPTION	數量 Q'TY
	25型系列 25 SERIES	45型系列 45 SERIES			
94	BG10219027100	BG1028003400	O形環	O-RING	1
100	B030201000	B030202000	出水室	OUTLET CHAMBER	1
101	B031601110		球形閥	BALL COCK	2
102		B030602000	防漏墊片	LEAK-PROOF GASKET	1
103		B030502001	封口蝶頭	WING NUT	1
104	B031101000		壓力錶	PRESSURE GAUGE	1
105	B030401110	B030402110	空氣室	AIR CHAMBER	1
106	BG10219027100		O形環	O-RING	1
107	B031501110	B031502110	*進水口蓋(選配)	*SUCTION CHAMBER CAP (OPTIONAL)	1
180A	N/A		吸水管組	SUCTION HOSE ASSY	1
180	B150901110		過濾網	FILTER	1
181	B150601110	B150602110	過濾網申目	FILTER SOCKET	1
182	B150101001	B150102001	吸水管	SUCTION HOSE	1
182-1	B152101000	B152102000	銅束	FERULE	1
183	B150401110	B150402110	吸水管蝶頭	SUCTION HOSE WING NUT	1
184A	B150501110	B150502110	吸水管申目組	SUCTION HOSE SOCKET ASSY	1
184	N/A		吸水管申目	SUCTION HOSE SOCKET	1
184-1	BG2016002200	BG2021002700	方形環	SQUARE RING	1
185A	B150201001		迴水管組	OVERFLOW HOSE ASSY	1
185	N/A		迴水管	OVERFLOW HOSE	1
185-1	B152101510		銅束	FERULE	1
186	B150701110		迴水管蝶頭	OVERFLOW HOSE WING NUT	1
187A	B150801110		迴水管申目組	OVERFLOW HOSE SOCKET ASSY	1
187	N/A		迴水管申目	OVERFLOW HOSE SOCKET	1
187-1	BG2013001800		方形環	SQUARE RING	1

零件表 PARTS LIST

圖號 No.	編號 CODE		零件名稱	DESCRIPTION	數量 Q'TY
	25型系列 25 SERIES	45型系列 45 SERIES			
*60A	自動洩壓總成(G3)			UNLOADING VALVE ASSY (G3)	
61	B050201000	B050202000	洩壓汽缸套	UNLOADING VALVE CYLINDER	1
61-2	BG10220027010		O形環	O-RING	2
62	BJ50101000	BJ50201000	洩壓輔助彈簧	AUXILIARY SPRING	1
63A	B052201001		柱塞活門組	PISTON VALVE ASSY	1
63-1	B052201000		柱塞活門體	PISTON VALVE BODY	1
63-2	BS18105016300		圓頭自攻螺絲	SCREW	1
63-3	B052401000		閥塞頭	VALVE PLUG	1
63-4	BG10080012010		O形環	O-RING	1
63-5	B052501000		閥塞座	VALVE PLUG SEAT	1
63-6	BJ30101000		球閥固定彈簧	SPRING	1
63-7	B052301000		彈簧底座	SPRING SEAT	1
63-8	B052601000		C扣環	C-CLIP	1
64	BG20250030		方形環	SQUARE RING	1
65	B052101110		壓力閥輔助片	AUXILIARY PLATE	1
66	B051001000		壓力閥座	VALVE SEAT	1
67	B050901000		壓力閥	PRESSURE VALVE	1
68	B050801120		壓力閥桿	VALVE ROD	1
69	B051901000		消音片	DAMPER PLATE	1
70	B050501000		迴水座	OVERFLOW CHAMBER	1
70-1	B051801110		迴水接頭	OVERFLOW COUPLING	1
70-2	BS14108025122		圓頭螺絲附華司	SCREW & WASHER	4
71	B050701020		伸縮套皮	COMPRESSION PACKING	1
71-1	B051101010		平墊圈	WASHER	1
72	B052001110		固定環	SET RING	1
73	B051401110		彈簧下座(有牙)	SPRING SEAT	1
74	BJ40101002		調壓彈簧	PRESSURE REGULATING SPRING	1
75	B051301250		彈簧上座	SPRING SEAT (UPPER)	1
76	B050301002		調壓彈簧套	PRESSURE REGULATING PIPE	1
77	B052001010		安全弁固定環	SET RING	1
78	B053601000		調壓把手墊片	GASKET	1
79	B053001011		調壓把手	PRESSURE REGULATING KNOB	1
84	B031601110		球形閥	BALL COCK	2

[illegible]

泵浦與引擎之使用說明

1. 檢查每個扣件，確定噴霧機與引擎都穩固的裝在架子上。
2. 兩個皮帶輪應裝於一直線上，皮帶應鬆緊適中。
3. 檢查引擎齒輪箱是否加機油，使用燃料是否正確。
4. 起動引擎前開關是否打開；化油器開關是否打開。
5. 把吸水管鎖緊泵浦吸水口，同時將吸水管過濾網(#180)放入水槽，不宜放於底部，最佳位置為底部上方20公分處，預防吸進底部泥沙，確保泵浦壽命。
6. 吸水管給水，應使用原廠尺寸的吸水管，以避免吸水量不足，達不到使用壓力。
7. 鎖好輸出水管、噴槍。
8. 打開泵浦排氣球閥後啟動引擎，排洩泵浦內之空氣，確認正常出水，然後將排氣球閥關閉，即可使用噴槍做噴霧工作。
9. 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規格壓力以上，以維護機械壽命，並可依工作物實際壓力需求，逆時針降壓以確保於工作物的最佳使用壓力。
10. 暫停使用引擎、泵浦時，空轉不宜超過5分鐘，以確保V迫緊不受水溫升高而壽命受損，及浪費燃料，關掉引擎。
11. 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)
12. 更換機油時，請打開排油螺絲排出骯髒之機油。
13. 加機油時把排油螺絲鎖緊，打開加油蓋，注入#30-40之清潔機油，正確加油量在油鏡2/3位置。
14. 黃油杯應隨時注滿黃油，每使用2小時應將黃油杯旋轉2至3圈。
15. 噴霧完畢，將調壓把手拉至頂端，並以清水操作噴霧機以清除內部殘留之化學品。
16. 嚴禁噴槍對人噴射。
17. 引擎運轉時會產生高溫，須小心使用。
18. 噴霧機在高速運轉下，須注意皮帶及普利部分，不可碰觸。

泵浦之簡易維修操作說明

一、無法供水及壓力不穩

1. 檢查吸水管(#182)是否洩漏(破損或未鎖緊)。
2. 打開出水開關排掉多餘的空氣。
3. 取下進水室及出水室檢查活門組是否阻塞或損壞。
4. 檢查過濾網(#180)是否阻塞。

二、壓力不足

1. 檢查壓力是否調整適當。
2. 檢查皮帶是否太鬆。
3. 檢查噴霧管與接頭是否洩漏或損壞。
4. 噴嘴磨損導致壓力下降。

三、汽缸洩漏

1. 取下防塵蓋(#02)鎖緊調整環(#49)。
2. 如仍無效，則為汽缸內V迫緊損壞。
3. 柱塞磨損(柱塞縱方向刮痕是為壓力下降及漏水的原因之一)。

ATTENTION!

1. Check every fastener to make sure that the sprayer and engine are installed firmly onto the frame.
2. Set both pulleys in a straight line and set the belt to an appropriate tightness.
3. Check whether there is sufficient engine oil and use the appropriate fuel.
4. Before starting the engine, check both ON/OFF switches on the engine and the carburetor.
5. Connect the suction hose to the inlet of the sprayer. Leave the suction hose filter 20 cm above the bottom of the water tank in order to prolong the life of the sprayer.
6. Make sure the water supply is sufficient to allow the pump to reach its working pressure.
7. Connect the spray hose to the spray gun.
8. Open the exhaust cock before starting the engine in order to release air from the pump. Before using the spray gun for spraying, confirm the circulation of water in the pump is flowing properly.
9. 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 in a clockwise direction to increase the pressure and counter-clockwise to reduce the pressure. Please use the pressure regulating knob value or the pressure gauge as the pressure reference when adjusting.
10. 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.
11. Replace the oil in the pump after the first 10 to 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 each use.
12. Drain any sludge before changing the oil.
13. Replace and tighten the nut before refilling with #30~40 oil, then refill the oil level up to 2/3 of the oil window.
14. Always keep the grease cup filled with grease. Twist the grease cup twice for every 2 hours of spraying.
15. After finishing spraying, loosen the pressure regulating knob and operate the sprayer with fresh water to clean out any remaining chemicals.
16. Never aim the sprayer output directly at people or animals.
17. Operate carefully, as the engine's working temperature is very hot.
18. Do not touch the pulleys or belts when the sprayer is running.

TROUBLESHOOTING

1. Instability of working pressure and water supply:
 - A. Check whether the suction hose (#182) is leaks or sticks.
 - B. Open the ball cock to release any air from the system.
 - C. Remove the suction chamber and outlet chamber to check if the valve assemblies are stuck or damaged.
 - D. Check whether the suction filter (#180) is obstructed.
2. Insufficient pressure:
 - A. Check whether the pressure is properly adjusted.
 - B. Check whether the belt is too loose.
 - C. Check whether the spray hose and the coupling are damaged.
 - D. Check whether the valve or valve sheath is worn down.
3. Cylinder leakage:
 - A. Remove the dustproof cover (#02) and then fasten the adjusting ring (#49).
 - B. If the problem persists, replace the v-packing in the cylinder.
 - C. Check whether the Piston is damaged. A scraped Piston can lead to sprayer leakage and low pressure.