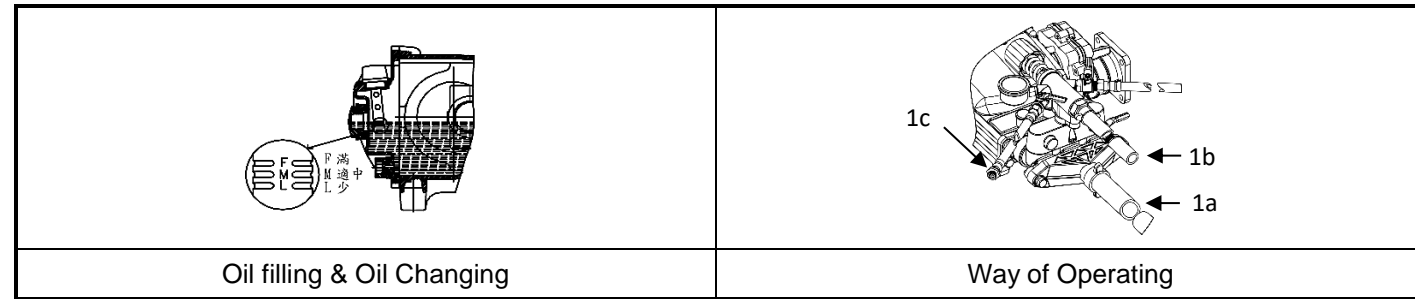


## TS-28DD AP Power Sprayer Manual



### 1. Oil Filling & Oil Changing

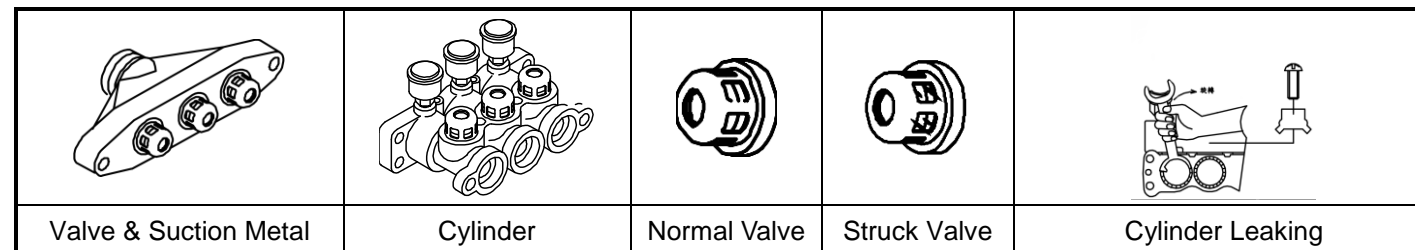
Fill #30 or #40 Oil through the oil hole. Keep the oil level just half of the oil gauge. Change the oil after 50 hours use for the first time and every 100 hours since then. The proper time for changing oil is after operating and the machine is still warm. Remove the drain plug and begin draining.

### 2. Grease Filling

The three grease cups on the cylinder must always be filled with grease. After using for every two hours, wind the grease cups about two circles per time.

### 3. Spray

- Fix firmly the suction hose (1a), overflow hose (1b) and spraying hose (1c) on the suction metal, over flow body and cock respectively. Make sure they must be set firmly and let no air leak out.
- Operate the power and start the power sprayer.
- Turn off the cock.
- After the power sprayer is normally operating, adjust the pressure screw. Then turn on the cock and begin operating the power sprayer.



### 4. Trouble Shooting

- Feeding failure & pressure instability :
  - Check whether the suction hose is any leaking of air. Tight it up.
  - Check whether the strainer is stuck. Clean it up, if necessary.
  - Turn on the cock for a little while to let out the air left in the feeder and then turn it off.
  - Check whether the suction metal, cylinder and six valves are stuck. Clean it up, if necessary.
  - Check the flat valve and valve seat to see whether they are damaged.
  - Check whether the valve springs are damaged.
- Cylinder Leaking :
  - Take the stopper away from the cylinder with screw driver.
  - Remove the plunger cover and wind by the three grands on the cylinder (for 1/3 round ~ 1/2 round). If leaking is still uncontrollable, change the V-packing in the cylinder.
- Pressure Falling :
  - Check whether the V-belt is loose.
  - Check whether the spraying hose and coupling packing of spraying hose are broken. Renew the parts if necessary.

### 5. Maintenance

- Operate the power sprayer with clean water for about 5minutes after use in order to clean the pesticide left in the machine.
- Remove the suction hose, over flow hose, and spraying hose. Then wipe every part of the machine dry.
- Check the oil in the crank case. Refill oil, if necessary.
- Check whether every screw is set firmly.
- Check whether there is any leak of oil.

### 6. Caution

- During operation, please don't reach out your hands into space of revolving belt wheel to prevent you from being harmed.
- Please check if there is enough oil before operating machine.
- Please check if gasoline, diesel oil or cooling water are enough before operating machine.
- Please check if contact of electric source and insulation are under good condition before operating machine.
- The spraying machine sprayed by pesticide or chemical liquid is prohibited to be used for pumping water to prevent poison.
- Please renew pressure gauge if it is damaged in order to maintain machine's safety.
- Loosen pressure adjusting screw counterclockwise, after using this machine.

### 7. Warranty

- Warranty : This warranty involves any failure parts produced or supplied by manufacturer when failure part caused any abnormal performance. During warranty period, the manufacturer offer free maintenance.
  - No service charge and expense of replaced part are required with warranty.
  - Warranty period : One year after delivery.
- The manufacturer is not responsible for damage provokes in case of :
  - A serious lack of foreseen maintenance.
  - Damages caused by the nature disaster such as earthquake.
  - Modifications or intervention that are not authorized by the manufacturer.
  - Non-normative uses that contrary to the specific.
  - The use of non-original spare parts and assigned oil for the pump.
  - Natural aging situation such as rust on surface caused by time.
  - Not inquire to factory or your local distributor when damage occurs.
  - The performance is still good base on power sprayer's registered spec. even some noise or vibration show up.
  - Using the pump without following the instructions of this manual.
- The manufacturer is not responsible for expense provoked in case of :
  - Losing of failure parts during warranty application.
  - Any direct and/or indirect lose comes from warranty items.
  - Regarding to warranty, all seals, packing, O-rings and oil are excluded.

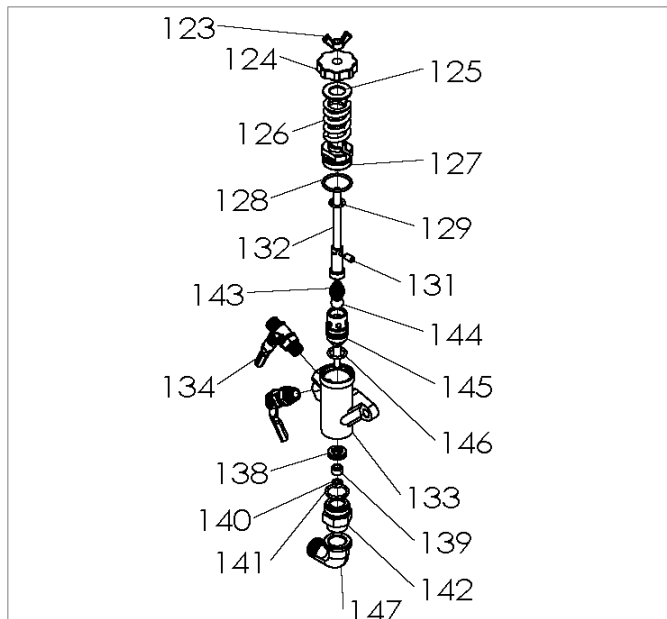
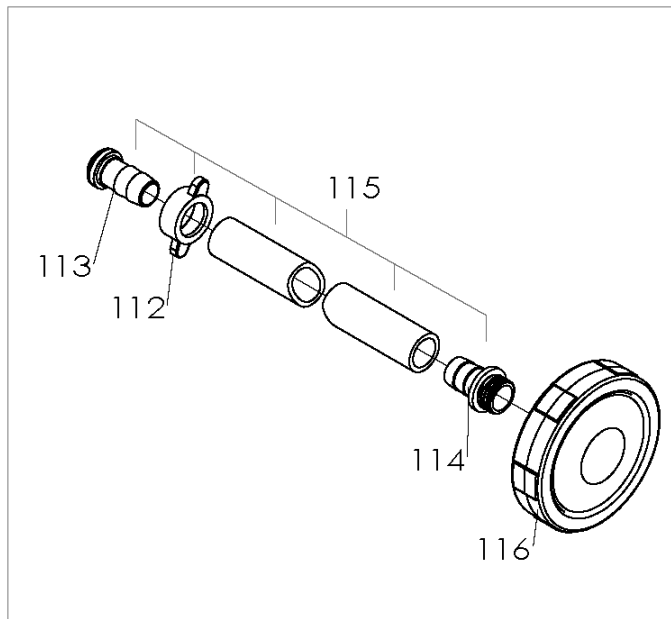
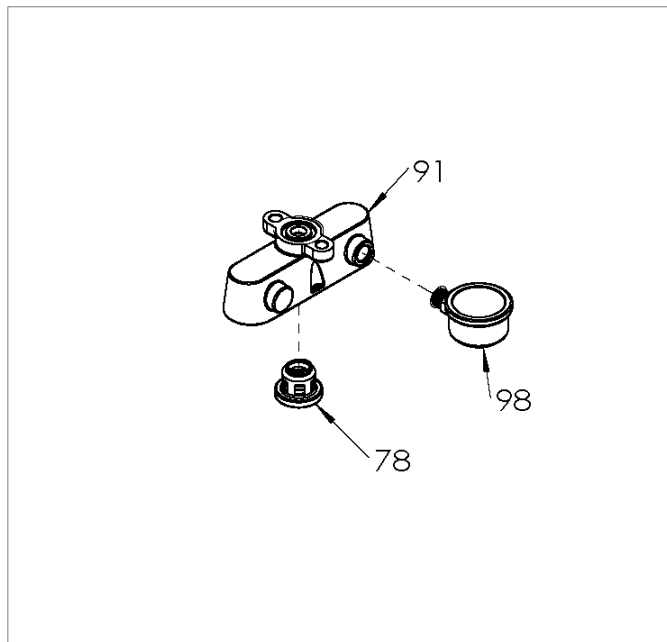
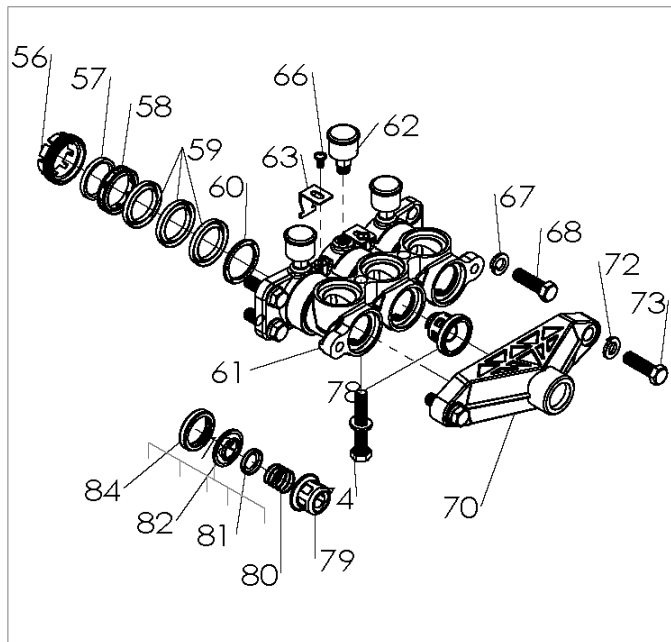
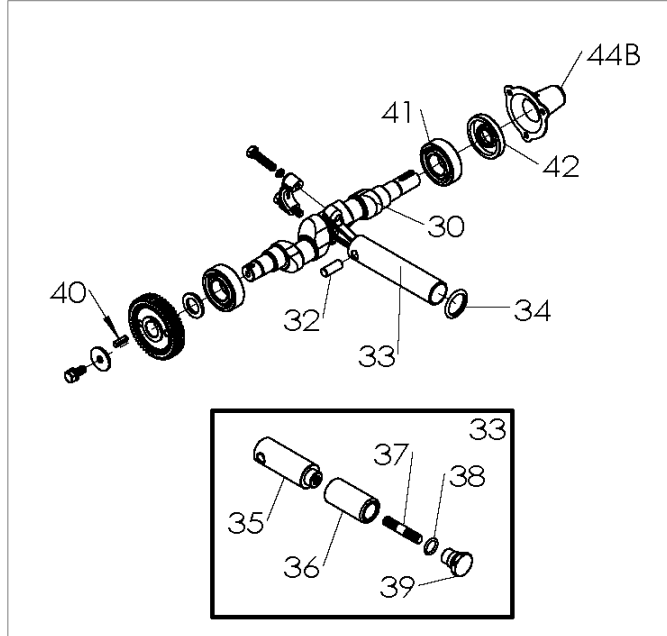
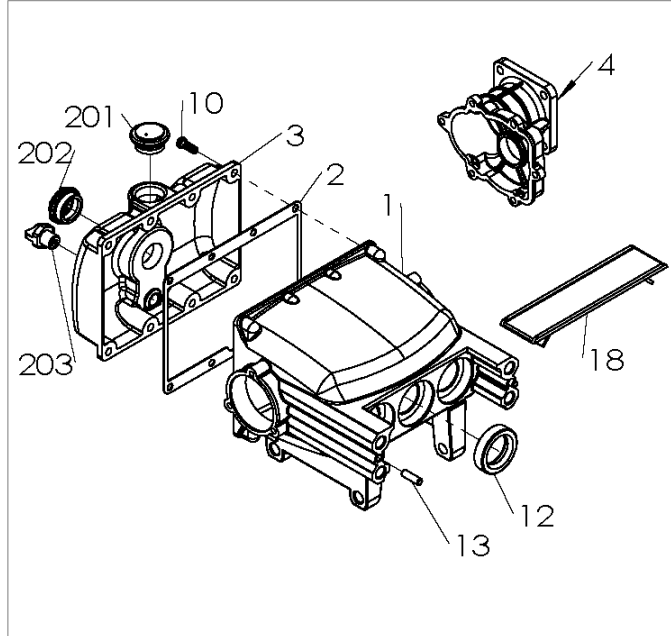


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TS-28DD/TCS-28DD 直結型(AP30自動洩壓型)

第零版



Pos.	Parts No.	Parts Name	Q'ty	Specification	Pos.	Parts No.	Parts Name	Q'ty	Specification
1	010-2803-241	Crank case	1		91	050-2800-220	Discharge Metal	1	
2	013-2803-000	Gasket, crank case	1		92	041-2200-000	Packing	1	
3	011-2803-241	Cover, crank Case	1		93	052-2801-252	Air Chamber	1	
4	PE4-GX00-010	Reduction gearbox	1	TS-22DD/28DD	94	055-2200-101	Pressure Gauge	1	
10	142-0104-001	Screw	8	1/4x5/8+S	95	123-2800-000	Packing	1	
12	130-2800-000	Oil Seal, plunger	3	28x42x10	96	056-2800-000	Washer	1	
13	012-2200-000	Pin	2		97	057-2800-000	Coupling	1	1"
18	016-2800-260	Plunger Cover	1		98	055-2200-101	Pressure Gauge	1	100kg
30	020-2800-222	Crank Shaft	1		112	057-2800-000	Coupling	1	1"
31	021-2800-241	Connecting Rod	3		114	032-2800-260	Core, Strainer	1	1"
32	023-2800-000	Plunger Pin	3		115	A03-S010-085	Suction Hose	1	1"x8.5ft
33	022-2800-002	Plunger	3		116	033-2800-000	Strainer Ass'y	1	
	022-3430-000	Plunger Ceramic	3	(TCS-343)	123	146-0516-004	Nut	1	5/16"(AP 用)
34	027-2800-000	Stopping Ring, Water	3		124	218-AP30-000	Nut	1	AP30
35	022-3430-001	Plunger Head	3	(TCS-343)	125	217-AP30-000	Wash	1	AP30
36	022-3430-003	Ceramic Bush	3	(TCS-343)	126	216-AP30-000	Spring	1	50KG
37	022-3430-002	Bolt	3	(TCS-343)	127	212-AP30-000	Joint	1	AP30
38	120-1419-000	O-Ring	3	14x2.5(TCS-343)	128	120-2732-000	O-ring	1	26.64x2.8(90°)
39	022-3430-004	Plunger Cap	3	(TCS-343)	129	120-1217-002	O-ring	1	11.8x2.4
40	025-2800-000	Key	1		131	140-0600-021	Screw	1	M6x10L
41	024-2800-001	Bearing	2		132	213-AP30-000	Release Spindle	1	AP30
42	131-2800-000	Oil Seal, Crank Shaft	1	20x52x8	133	200-AP30-000	Pressure regulator Body	1	AP30
44A	026-2800-001	Cover, Oil Seal-A	1	TS-28	134	051-2800-000	Cock	2	1/4"x8.5mm
56	044-2800-000	Grand	3		138	203-AGV3-000	Seat	1	AP30
57	041-2800-000	Grease Packing	3		139	066-AGV3-290	Return valve	1	AP30
58	042-2800-000	Grease Ring	3		140	146-0600-007	Nut	1	M6
59	043-2800-001	V-Packing	9		141	120-2025-001	O-ring	1	20x2.5
	043-2800-002	V-Packing	9		142	204-AP30-000	Joint	1	AP30
60	045-2800-000	V-Packing Seat	3		143	210-AP30-000	Spring	1	AP30
61	040-2800-220	Cylinder	1		144	067-2800-251	Ball Valve	1	1/2"(TS-22/28/60)
62	046-2800-000	Grease Cup	3		145	207-AP30-000	Check valve sleeve	1	AP30
63	047-2800-000	Stopper, Grand	2		146	120-1823-001	O-ring	1	18x2.5
66	142-0316-001	Screw	2	3/16x13/8"	147	059-C201-010	Joint	1	PT1/2"
67	144-0308-001	Washer, Spring	4	3/8"	162	057-1600-000	Coupling	1	1/2"
68	140-0308-002	Bolt	4	3/8x1 1/4"	164	A03-O004-085	Over Flow Hose	1	1/2"x8.5ft
70	030-2801-220	Suction Metal	1		201	923-2200-001	Oil Cap & O-Ring	1	
72	144-0308-001	Washer, Spring	2	3/8"	202	924-1000-000	Oil Gauge &Gasket	1	PF 3/4"
73	140-0308-002	Bolt	2	3/8x1 1/4"	203	925-2200-001	Plug Fuel Drain &Gasket	1	
74	140-0308-004	Bolt	2	3/8x55+S washer	205	031-1600-002	Core, coupling &Packing	1	1/2"
78	080-2800-001	Valve Ass'y	6		206	031-2800-002	Core, coupling &Packing	1	1"