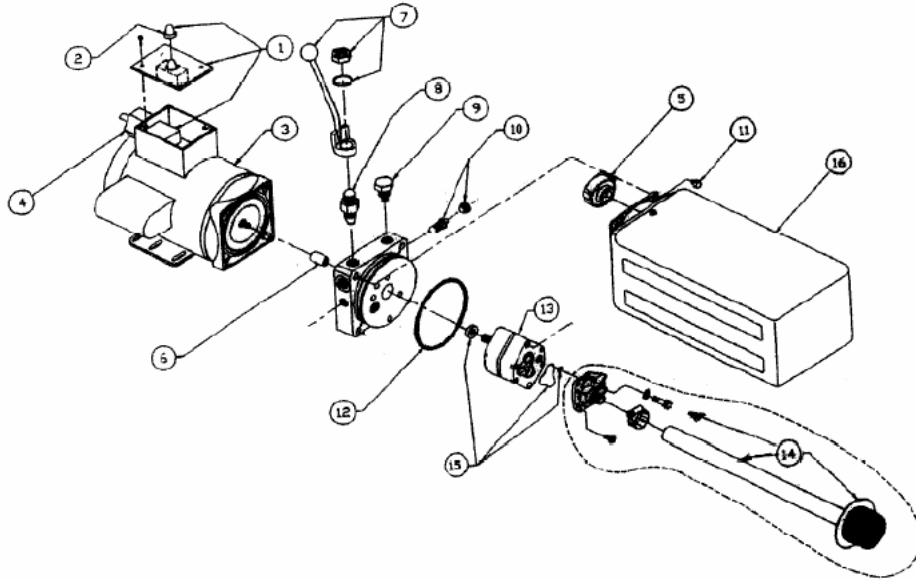




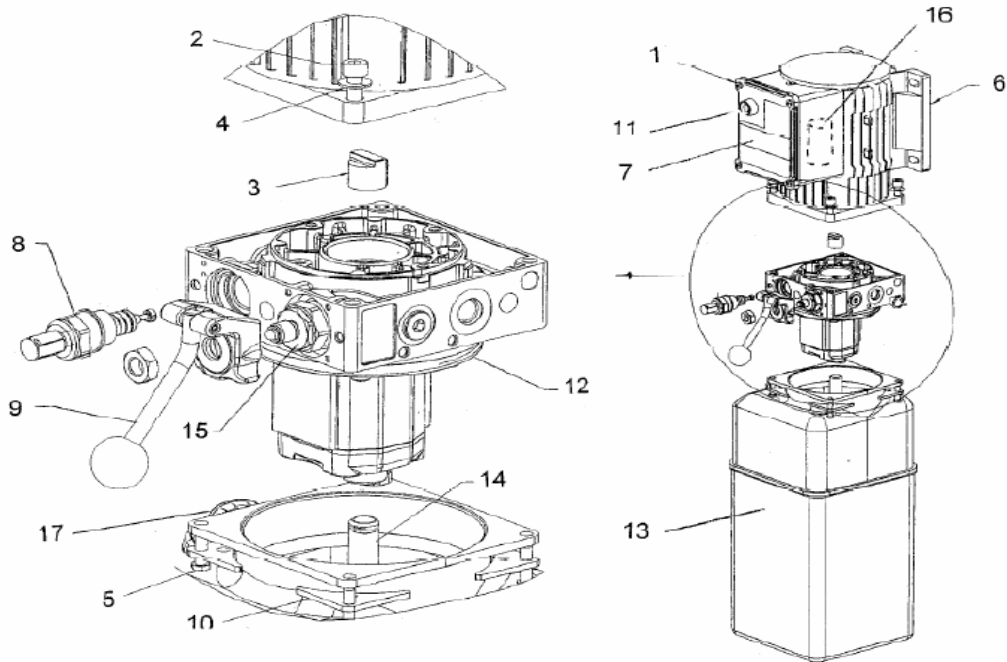
Power Unit Guide

Direct Lift SPX Power Unit



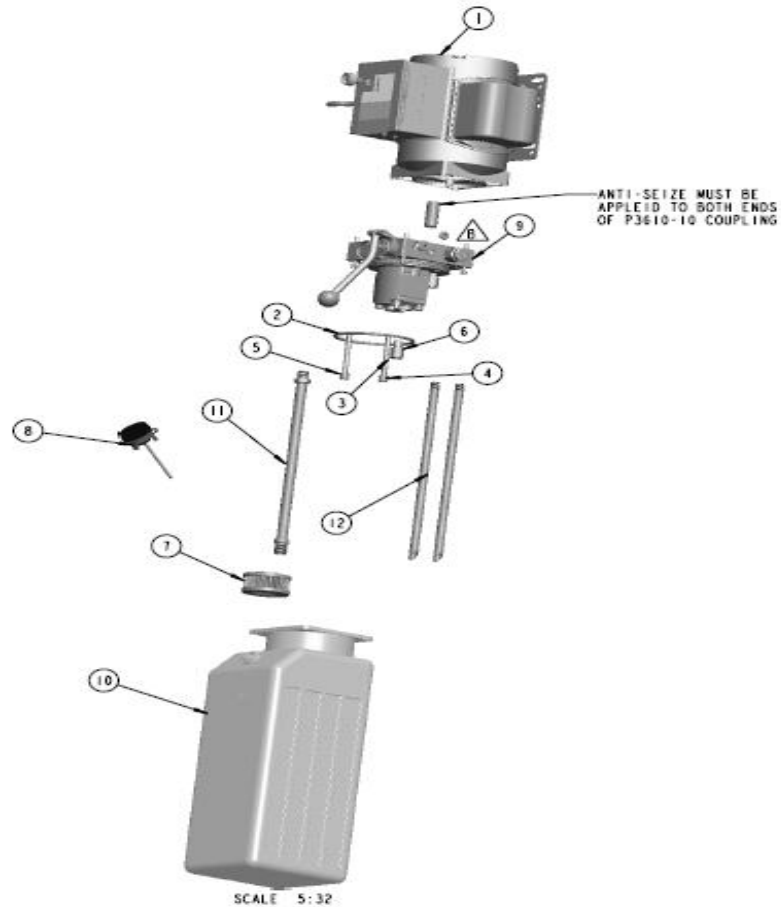
Item Number	Description	Part Number	Item Number	Description	Part Number
1	Switch (3 screw Style)	P461-2	9	Check Valve	2507AA
	(2 Prong Style)	991324	10	Relief Valve	Consult Factory
2	Switch boot	P1115	11	Reservoir Screw	3346aa
3	Motor	Consult Factory	13	Pump assembly	PS-2.5
4	Limit Switch Assembly	991414DL	14	Vertical Inlet Kit	K-102
5	Breather	8060-cc	15	Pump O-ring Kit	K-110
	Breather (pipe thread)	1683AB	16	Reservoir Tank	44105-01
6	Coupling	MA-5-1			
7	Handle	K-100			
8	Lowering Valve	VF-9021			

Direct Lift GHS 3000 Series Power Unit



Item Number	Description	Part Number	Item Number	Description	Part Number
1	PHMS 5X10mm	40277	11	Raise Switch	P1483RLC
2	SCHS M8-6X30mm	FA7138-10	12	Pump Assembly	Consult Factory
3	Coupling	FA7138-4	13	Reservoir	10 liter P1532 14 liter P1533
4	Washer M8	FA7138-6	14	Suction Tube	10 Liter P3000-10 14 liter P3000-14
5	HHCS M6-1X20mm	FA7138-7	15	Lowering Valve	P3000-2
6	Motor	Consult Factory	16	Capacitor 220v	FA7350-5RLC
7	Switch Cover	Consult Factory		Capacitor 110v	FA7196-5RLC
8	Relief Valve	Consult Factory	17	Fill Cap	P1461
9	Handle	P3000-3		Release valve handle nut	P3000-3A
10	Tank Washer	P1002-8			

Direct Lift Wuxi Deli Series Power Unit



12	2	P3614-1	RETURN TUBE WUXI DELI
11	1	P3614	SUCTION TUBE WUXI DELI
10	1	P3613	TANK 10 Liter
9	1	P3610-1A	PUMP WUXI DELI
8	1	P3610-7	TANK CAP
7	1	P3610-6	FILTER WUXI DELI
6	1	HCF-Z1-4	LOAD DELAY VALVE
5	2	GB95-85-8	WASHER
4	2	GB859-87-8	SPLIT WASHER
3	2	GB70-85-M8X80	BOLT SOCKETHEAD M8 x 80
2	1	GB3452.1-2000-109X5.3	O-RING
1	1	FA7389	MOTOR 208-230 AC
ITEM	QTY	PART NO.	DESCRIPTION

Direct Lift Power Unit Cross Reference SPX-GHS

Lift	Power Unit	Motor Part No.	Motor Color	Pump Part No.	PSI	Power Unit on Pre-ETL Lifts*
Pro-9F	P3564	FA7370	Black	P3391-1	3263	44000
Pro-9D	P3565	FA7379	Black	P3302-1	2755	44000
DL9	P3610	FA7389	Black	P3610-1A	2400	N/A
Pro V-10	P3547	FA7379	Black	P3547-1	2320	44003*
PRO10	P3302	FA7147	Silver	P3302-1	2755	N/A
Pro-12TP	P3547	FA7379	Black	P3547-1	2320	44003*
PRO12	P3291	FA7350	Silver	P3083-1	2973	N/A
HR8000	P3548	FA7370	Black	P3302-1	2755	44000
OH8000	P3565	FA7379	Black	P3302-1	2755	44000
Pro-6MR 110V	P3545	FA7196	Black	P3545-1	2755	44100
Pro Park 8S 110V	P3543	FA7196	Black	P3543-1	2320	44100
Pro Park 8+/L 110V	P3545	FA7196	Black	P3545-1	2755	44100
Pro Park 9 110V	P3543	FA7196	Black	P3545-1	2755	44100
Pro-14F	P3563	FA7370	Black	P3547-1	2320	44003*

Direct Lift Switch Identification



W-400DL Back View



W-400DL Front View



44000-02



991324



P1483RLC



P461-2



NLA
USE W-400DL



992120DL

Direct Lift Power Unit Troubleshooting

Trouble	Cause	Remedy
Electric motor does not run.	<ol style="list-style-type: none"> 1. Check fuse or circuit breaker. 2. Check for correct voltage to motor. 3. Inspect all wiring connections. 4. Micro switch burned out. 5. Overhead limit switch burned out. 6. Motor windings burned out. 	<ol style="list-style-type: none"> 1. Replace blown fuse or reset circuit breaker. 2. Supply correct voltage to motor. 3. Repair and insulate all connections. 4. Replace micro switch. 5. Replace micro switch. 6. Replace motor.
Electric motor runs but will not raise lift.	<ol style="list-style-type: none"> 1. Motor runs in reverse rotation. 2. Plugged suction screen. 3. Open Lowering valve. 4. Pump sucking air. Due to: <ol style="list-style-type: none"> A) Pump shaft seal is worn. B) Pump shaft is corroded. C) Loose or cracked suction stub or line. 5. Low oil level. 6. Pump not priming P500 before sn#12044 (8-13-86 thru 9-14-88) P502 sn#12044-#15612 (9-14-88 thru 1-20-89) P502 units after sn#15613 (after 1-20-89) 	<ol style="list-style-type: none"> 1. Change motor rotation. 2. Replace or clean suction screen. 3. Repair or replace lowering valve. 4. Tighten all suction line fittings. <ol style="list-style-type: none"> A) Replace pump shaft seal. B) Replace pump. C) Repair or replace. 5. Fill tank with Dexron III ATF. 6. Clean or replace load delay valve. <p>Loosen lowering valve cartridge a couple of turns - start motor- tighten valve. Loosen bleed screw on pump end head 1/2 turn -start motor- tighten bleed screw.</p>
Electric motor runs-raises unloaded but will not raise vehicle.	<ol style="list-style-type: none"> 1. Motor running on low voltage. 2. Trash in lowering valve. 3. Improper relief valve adjustment. 4. Overloading lift. 	<ol style="list-style-type: none"> 1. Supply correct voltage to motor. 2. Clean lowering valve. 3. Replace relief valve cartridge. 4. Check vehicle weight and/or balance vehicle weight on lifts.
Lift slowly settles down.	<ol style="list-style-type: none"> 1. External oil leaks. 2. Trash in lowering valve seat. 3. Trash in check valve seat. 	<ol style="list-style-type: none"> 1. Repair external leaks. 2. Clean or replace lowering valve. 3. Clean or replace check valve.
Slow lifting speed or oil blowing out filler breather cap.	<ol style="list-style-type: none"> 1. Air mixed with oil. 2. Oil return tube loose. 3. Oil by-passing 4. System overfilled. 5. Obstruction in return filter cavity. (P500 series) 	<ol style="list-style-type: none"> 1. a. Change oil to Dexron III ATF. b. Tighten all suction line fittings. 2. Reinstall return tube. 3. Replace relief valve and/ or O-rings on pressure side of pump. 4. Bleed cylinders and check oil level. Remove excess oil. 5. Remove obstruction and replace filter. (P500 series)
Power unit noisy	<ol style="list-style-type: none"> 1. Sucking air and oil. (Foamy oil causing cavitation) 	<ol style="list-style-type: none"> 1. Change out old oil with new Dexron III ATF.

Lift stop short of full rise.

2. Power unit loose on column.
3. Worn motor coupling.
4. Plugged suction filter
5. Fan cover or motor damage.
(3 Phase only)

1. Low on fluid.
2. Suction line too short or has
hole in it.

2. Tighten mounting bolts
3. Replace motor coupling.
4. Clean or replace filter.
5. Replace or repair.

1. Add oil.
2. Replace suction line.

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