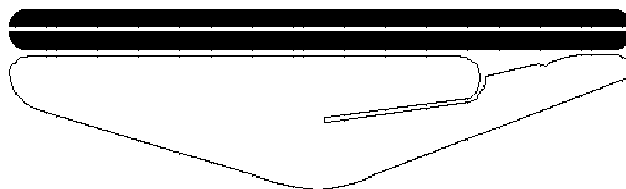


Owner's Manual

SSLS2.5-27 & SSLS4-27  
Series Lift Tables



**SOUTHWORTH**

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## **INTRODUCTION**

This manual contains information to acquaint you with the safe and proper installation, use and upkeep of the machine. You should ensure that this manual is available to personnel working with the machine and require its use by these personnel.

In the interest of safety, please read this entire manual carefully and be familiar with its contents before you install, use or service the machine. If you have any questions about any instructions in this manual, please contact your dealer or Southworth Products Corp.

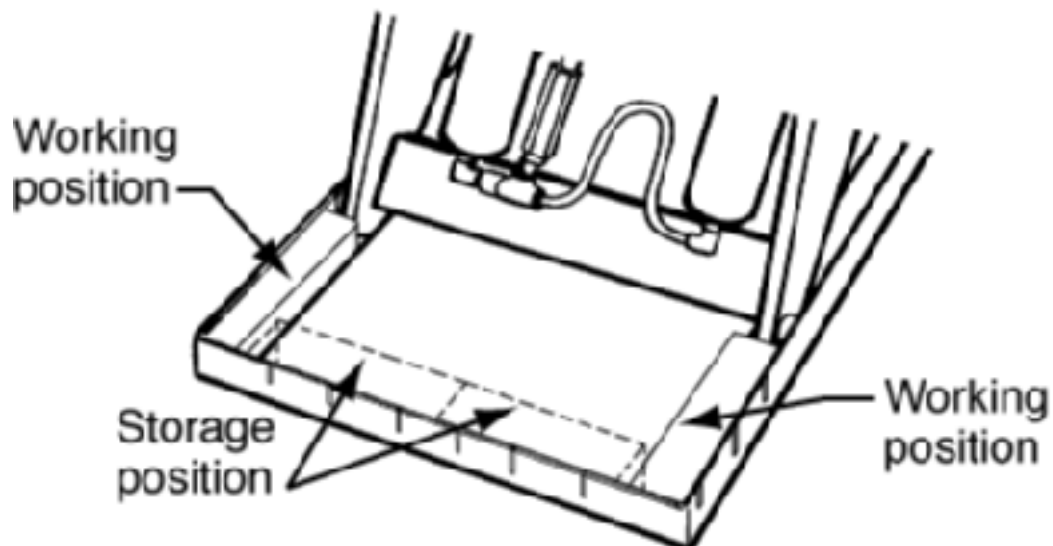
Southworth's product warranty is provided in the back of this manual. This instruction manual is not intended to be or to create any other warranty, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, all of which are hereby expressly excluded.

As set forth more specifically in the product warranty, Southworth's obligation under that warranty is limited to the repair or replacement of defective components, which shall be the buyer's sole remedy. Southworth shall not be liable for any loss, injury or damage to persons or property, nor for any direct, indirect or consequential damage of any kind resulting from the lift table.

## **INCREASED PRODUCTIVITY**

This sanitary lift can be used to raise and lower products vertically. This could reduce loss time injuries due to back strain and cumulative trauma illness. This reduction could increase job efficiency, productivity and work quality.

## **SAFETY FIRST**



**FIGURE 1 – MAINTENANCE BLOCK**

**WARNING !**  
**ONLY AUTHORIZED PERSONNEL SHOULD PERFORM INSPECTION OR**  
**MAINTENANCE AND SERVICE PROCEDURES. UNAUTHORIZED**  
**PERSONNEL ATTEMPTING THESE PROCEDURES DO SO AT**  
**THE RISK OF SEVERE INJURY OR DEATH.**

**DANGER !**  
**FAILURE TO PROPERLY ADHERE TO LIFT BLOCKING PROCEDURES IS TO**  
**RISK THE SUDDEN AND UNCONTROLLED DESCENT OF THE LIFT**  
**DURING MAINTENANCE OR INSPECTION. A FALLING LIFT CAN**  
**CAUSE SEVERE INJURY OR DEATH.**

This procedure describes the only factory-approved method of working under a lift. Follow these instructions **EVERY** time you plan to reach or crawl beneath the lift to perform service or maintenance – no matter how momentary that might be.

**NOTE: IF THE FACTORY-PROVIDED MAINTENANCE DEVICE IS DAMAGED OR MISSING, STOP IMMEDIATELY AND CONSULT THE FACTORY FOR ASSISTANCE. THE MANUFACTURER IS NOT LIABLE FOR YOUR FAILURE TO USE THE APPROVED MAINTENANCE DEVICE(S) AND PROCEDURES THAT HAVE BEEN PROVIDED.**

1. Any load must be removed from the lift prior to engaging the maintenance device(s). These devices are designed to support an unloaded lift only. Failure to remove the load from the lift prior to blocking could cause the failure of the maintenance device(s) and allow the lift to fall unexpectedly. This can result in personal injury or death, or permanent damage to the maintenance device(s) and/or the lift.
2. Raise the lift to its fully raised position. If you do not, the maintenance device(s) may not be able to be placed properly in its/their designed blocking position.
3. Remove the maintenance device(s) from its/their storage location and place it/them into the engaged position as shown in Figure 1. (Note: further information may be useful here to provide additional instructions as to the location and method of storage and engaged positions).
4. Lower the lift until it makes complete contact with the maintenance device(s). Re-check to ensure that all provided devices are fully and securely engaged. If the device(s) is/are not fully engaged the lift could fall unexpectedly, resulting in permanent damage to the device(s) or the lift.

**DANGER !**  
**IF FOR ANY REASON YOU ARE UNABLE TO LOWER THE LIFT COMPLETELY**  
**ONTO THE MAINTENANCE DEVICE(S), STOP IMMEDIATELY AND CONSULT**  
**THE FACTORY. FAILURE TO PROPERLY USE THE FACTORY APPROVED**  
**MAINTENANCE DEVICE(S) COULD RESULT IN SEVERE INJURY OR DEATH.**

5. (For single-acting hydraulic, and pneumatic lifts) Once the maintenance device(s) is/are properly and securely engaged, continue to press the down button, valve or switch for an additional 5-10 seconds to relieve all pressure in the operating system (add more specifics here as required for pneumatic lifts).

**WARNING !**  
**FAILURE TO RELIEVE OPERATING SYSTEM PRESSURE COULD RESULT IN**  
**THE SUDDEN AND UNEXPECTED RELEASE OF HIGH PRESSURE**  
**FLUIDS (OR AIR) DURING MAINTENANCE AND/OR REPAIR OF THE LIFT AND**  
**RESULT IN SEVERE INJURY OR DEATH.**

6. Follow OSHA electrical lock-out/tag-out procedures. Disconnect and tag all electrical and/or other power sources to prevent an unplanned or unexpected actuation of the lift.

7. Once inspection or work is complete, reverse the performance of the steps above to raise the lift off the maintenance device(s) and place the device(s) back into its/their designated storage position(s).

**DANGER !**  
**HIGH VOLTAGE ! – DISCONNECT AND/OR LOCK OUT THE ELECTRICAL**  
**SUPPLY TO THE POWER UNIT PRIOR TO ANY INSTALLATION OR**  
**MAINTENANCE BEING PERFORMED.**

**WARNING!!**  
**FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL CAN CAUSE**  
**PERSONAL INJURY AND/OR PROPERTY DAMAGE!**

Carefully read all safety messages in this manual and all warning stickers on your sanitary lift. Keep ALL safety signs and labels in good condition and replace those that are damaged.

**WARNING!!**  
**WATCH HANDS AND FINGERS! KEEP EXTREMITIES AWAY FROM**  
**SCISSORS ARMS WHEN MACHINE IS IN OPERATION!**

**Safety Features:**

- Continuous-touch up/down footswitch control.

**LOCK OUT PROCEDURE**

When cleaning, maintaining or disassembly is required, the lift should be completely powerless. The main power to the lift controls and power unit must be disconnected and locked out.

## **INSTALLATION**

1. After locating the unit in the work area, anchor the base firmly to a level floor before operating unit.
  - A. When leveling the unit, shims may be used to obtain a level position. Southworth Products recommends using a grout to provide a solid surface underneath the support angle base. The channel must have a solid base to support the wheels or damage/failure to the support could result.
  - B. There are four anchor points on the lift. These are located on the inside base of the lift. Use a corrosion resistant 3/4" bolt in all four points for proper anchoring.
  - C. To access the four inside anchor points, the lift must be raised. See the electrical schematic (page 9) for proper wiring.
2. Plug the power cable into a 110V AC, properly grounded outlet with sufficient amperage capacity to run a 1 HP electric motor.
3. Check hydraulic fluid level in reservoir. The level should be approximately 1 ½ " below the fill hole.
4. Grease each of the four grease points on the lift. They are located on the four cylinder areas by the middle of the scissors arms. These grease points have been greased at our factory.
5. The four grease points should be greased on a regular basis. Depending on your type of operation and wash down procedure, Southworth Products recommends you grease these points on a weekly basis.

## **OPERATION**

### **WARNING!!**

**KEEP EXTREMITIES AWAY FROM ALL MOVING PARTS. UNDER NO CIRCUMSTANCES SHOULD ANY ONE WALK UNDER OR HAVE ANY PART OF THEIR BODY UNDER THIS LIFT!**

**NOTE: LOADS MUST NOT EXCEED 2,500 LBS. FOR THE SSL2.5-27 MODEL LIFT AND 4,000 LBS. FOR THE SSL4-27 MODEL LIFT.**

Once the unit has been properly set up per the SET UP instructions, try the unit empty first to test the operation to be sure it is working properly. Then test the unit with a load. Keep all loads properly centered and balanced as much as possible.

## SUGGESTED PREVENTATIVE MAINTENANCE SCHEDULE

Inspect the following Weekly:	Leg rollers, center pivot pins and bushings, leg hinge pins and bushings for evidence of wear, loose bolts or broken cotter pins or keepers. Repair or replace as required.
Inspect the following Monthly:	Apply oil or WD-40 to non-greased pivot points or rollers describes above (if applicable).  Check the appearance of the hydraulic fluid.
Inspect the following every six months or 500 hours of operation:	Check all the hydraulic fittings and hoses and repair the connections as necessary.  Inspect cylinder return line and rod. Appearance of considerable fluid in the vent lines indicates a need to repack the cylinder.  Disassemble the down valve. Blow the plunger clean with compressed air. Reassemble and install.  Change oil in reservoir, clean the suction screen and vent cap. Replace return line filter element.

\*Notes: If holes at main pivot points are neglected and allowed to oblong, major structural problems will develop and extensive repairs will be needed.

### **CAUTION!** **AWKWARD PLACEMENT OF LOAD COULD CAUSE EQUIPMENT DAMAGE**

Engage the hand pendant to raise or lower the lift. The hand pendant is a momentary control which allows easy operation. The unit can be started or stopped at any position throughout the unit's cycle.

### **CAUTION!**

**WHEN LIFTING HEAVY LOADS, DO NOT JOG UNIT MORE THAN 2-3 TIMES TOO QUICKLY. WAIT APPROX. 5 SECS. BETWEEN EACH JOG. SUDDEN JOGS MAY CAUSE THE UNIT TO HAVE SURGES IN ELECTRICAL POWER. THIS COULD CAUSE THE FUSE TO TRIP EXCESSIVELY AND CAUSE**

**IMPROPER WEAR ON THE HYDRAULIC UNIT**

To lower a product or just the unit by itself, simply depress the down button and the unit will lower. This is done without the power unit engaging.

**NOTE: ANY CONTROL MODIFICATIONS OR OTHER ADJUSTMENTS MADE TO THIS EQUIPMENT WITHOUT CONTACTING SOUTHWORTH PRODUCTS WILL VOID THE WARRANTY**

**LIFT SPECIFICATIONS**

Construction	Fabrication from Heavy Duty T304 Stainless Steel
Capacity	2,500 lbs. or 4000 lbs. (depending on model)
Platform Size	42" x 48"
Base Size	35 ½" x 45"
Lowered Height	9 ¼ "
Raised height	36"
Elevation Time	30 seconds (approx.)
Descent Time	24 seconds (approx.)
Power Unit	Internal 110V AC, TEFC motor , 1hp
Controls	NEMA 4 footswitch
Actuation	Dual, low pressure hydraulic cylinders, washdown, white epoxy-coated

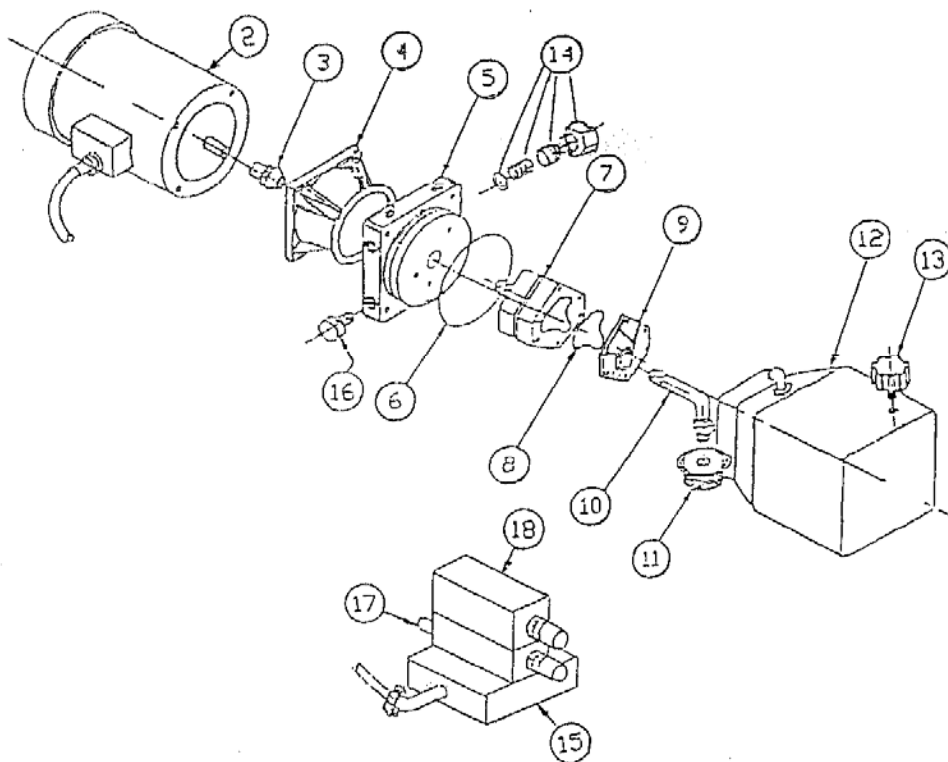
## TROUBLESHOOTING

The chart below lists some problem/solutions that might occur due to normal wear or due to malfunction. Locate the problem situation and follow the suggested solutions.

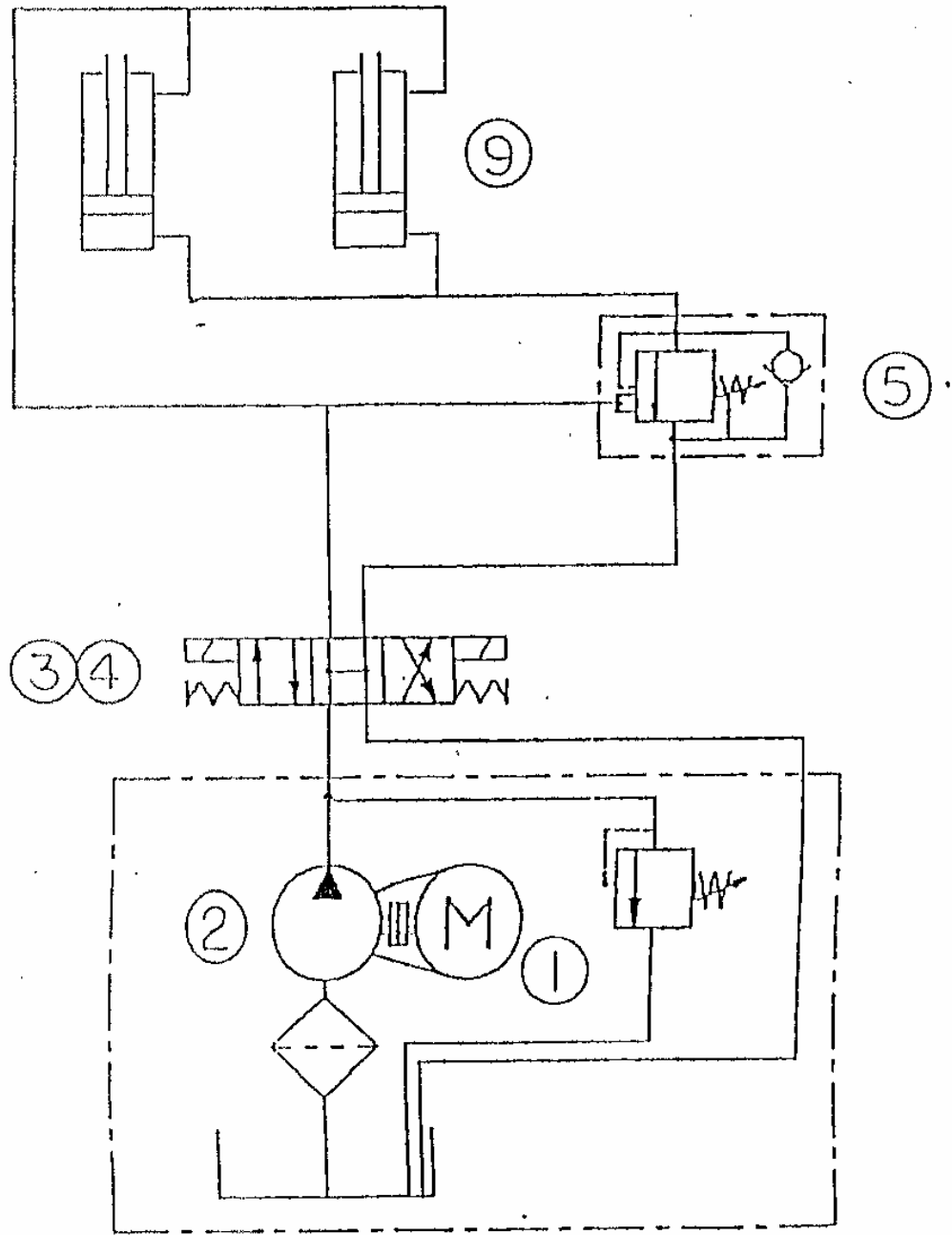
*For additional help call: 800-743-1000*

<b>PROBLEM SITUATION</b>	<b>SUGGESTED SOLUTION</b>
<i>Motor to power unit does not turn on</i>	<ul style="list-style-type: none"> <li>* Check electrical service</li> <li>* Check and/or replace fuse</li> <li>* Contacts in switch or solenoid</li> <li>* Loose wires in junction box</li> <li>* Check and/or replace motor</li> </ul>
<i>Motor turns on but will not lift product</i>	<ul style="list-style-type: none"> <li>* Hydraulic fluid is low and needs to be filled</li> <li>* Pump coupling between motor and hydraulic pump has come loose or needs to be replaced</li> <li>* Check and/or replace hydraulic pump</li> <li>* Strainer has become plugged and needs to be cleaned</li> </ul>
<i>Motor and pump do not run smoothly</i>	<ul style="list-style-type: none"> <li>* Air in the hydraulic lines needs to be removed</li> <li>* Dirt or foreign particles in hydraulic fluid</li> <li>* Motor has come loose from base plate and needs tightening</li> <li>* Check and/or replace lovejoy coupling</li> <li>* Check and/or replace hydraulic pump</li> <li>* Check and/or replace motor</li> </ul>
<i>Non-level platform while raising load</i>	<ul style="list-style-type: none"> <li>* Air in the hydraulic cylinders needs to be removed</li> <li>* Flow divider is plugged</li> </ul>
<i>Excessive oil about base of hydraulic cylinders</i>	<ul style="list-style-type: none"> <li>* Hydraulic fitting to cylinder is loose and needs to be tightened</li> <li>* Check and/or replace hydraulic hose</li> <li>* O-rings in hydraulic cylinders need to be replaced</li> </ul>

ITEM NO.	PART NUMBER	FUNCTION
2	113583	MOTOR
3	1487AA, 1485AA, 2361AB	COUPLING
4	KM97	C-FACED ADAPTER
5	KN12	END HEAD
6	G1-1073-48	O-RING
7	KP12	PUMP
8	K-40	SEAL KIT
9	2130AC	SUCTION COVER
10	T2 5001-00	ELBOW
11	1611-AA	STRAINER
12	KR50	RESERVOIR
13	1214-AA	BREATHER
14	KC08	RELIEF VALVE
15	PS027-D03-8	SUB PLATE
16	02160700	SOLENOID
17	CBV1-10-S-IA6T-50/25	COUNTERBALANCE VALVE
18	11272600	DIRECTIONAL VALVE COMPLPETE
18A	11272610	DIRECTIONAL VALVE (COIL)



**Figure 1. POWER UNIT ASSEMBLY**



**Figure 2. HYDRAULIC SCHEMATIC**

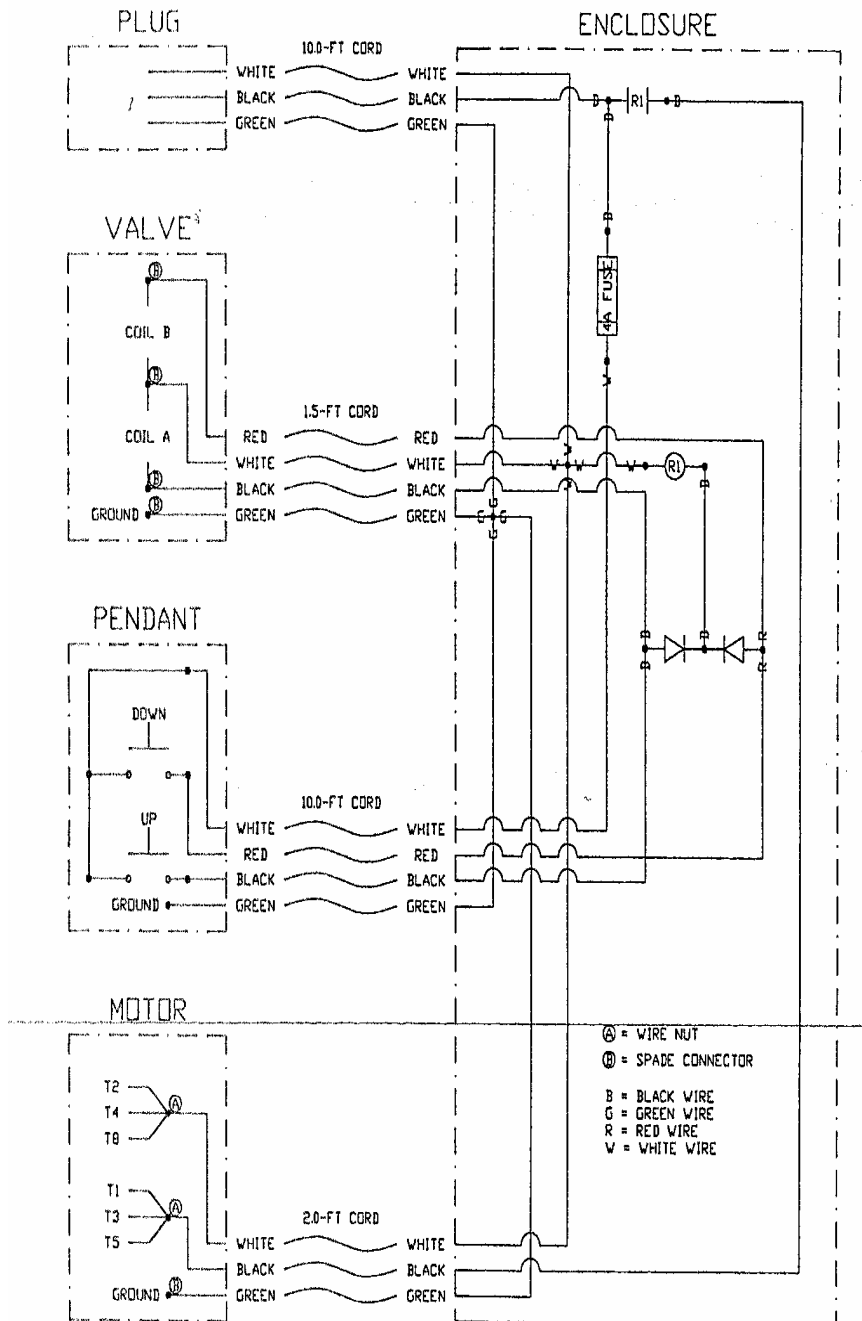
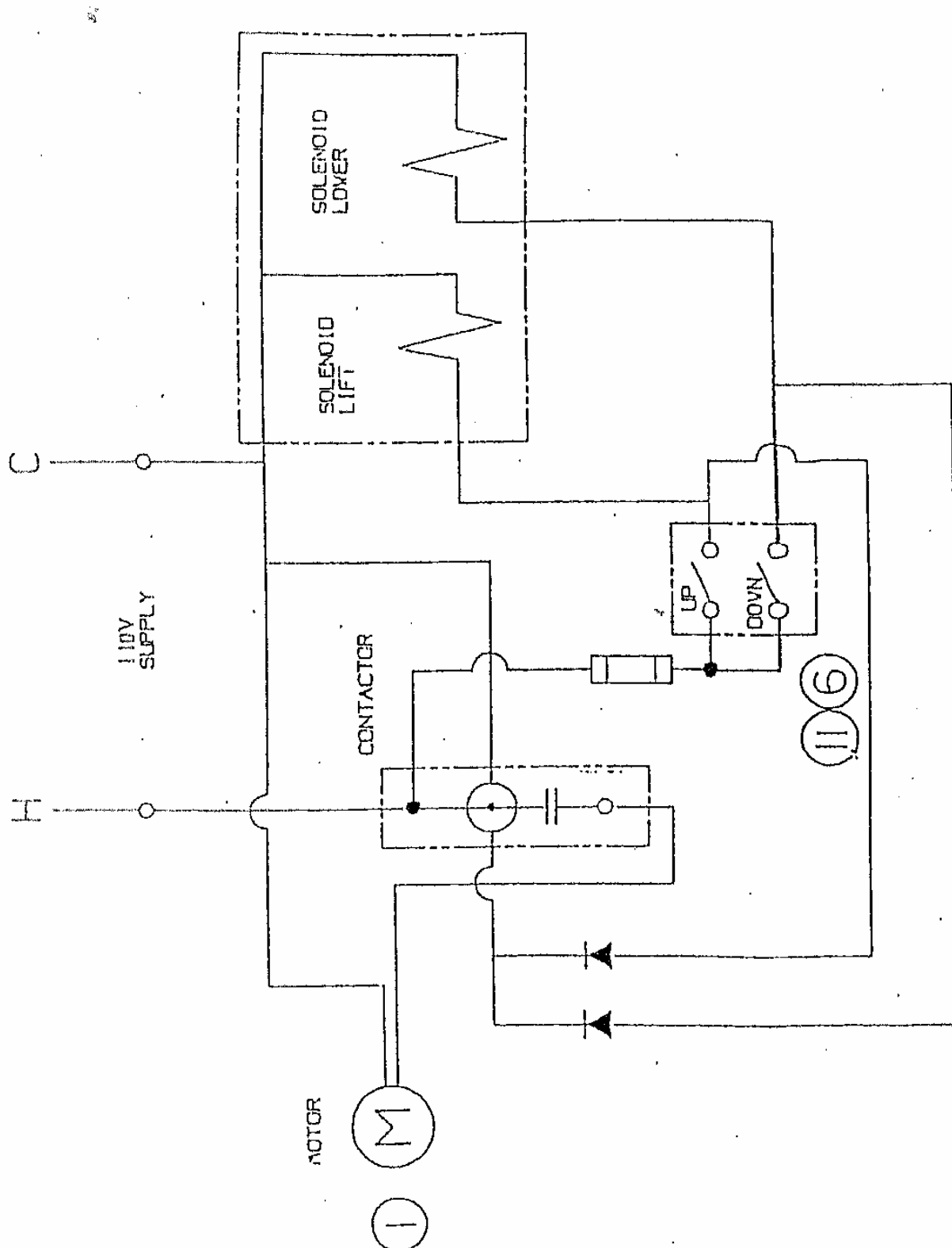


Figure 3. ELECTRICAL SCHEMATIC – SINGLE PHASE



**Figure 4. ELECTRICAL SCHEMATIC – THREE PHASE**

**RECOMMENDED SPARE PARTS LIST FOR SSLS2.5-27 & SSLS4-27**

<b>ITEM #</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
1	P7002-1210GS	HYDRAULIC POWER UNIT
2	113583	MOTOR
3	1487AA/1485AA/2361AB	COUPLING
4	KM 97	C-FACED ADAPTER
5	N1-004-05	END HEAD
6	G1-1073-48	O-RING
7	KP 25	PUMP
8	K-40	SEAL KIT
9	2130 AC	SUCTION COVER
10	T2 5001-00	ELBOW
11	1611-AA	STRAINER
12	KR 45	RESERVOIR
13	1214-AA	BREATHER
14	RV-2	RELIEF VALVE
15	SV5-8-C-0-12 AP	SOLENOID VALVE
16	02160700	SOLENOID
17	CVH081-P5	CHECK VALVE
18	P7002-1230	DUAL FOOT PEDAL W/ GUARD
19	536-Q	SWITCH ONLY
20	P7002-730A	LIFT CYLINDER (RIGHT)
21	P7002-740A	LIFT CYLINDER (LEFT)
22	P7002-1250	PORT BREATHER

23	P7002-1261	HOSE ASSEMBLY
24	P7002-720	LIFT SPROCKET ASSEMBLY
25	P7002-1430	AXLE PIN, LIFT SPROCKET
26	P7002-1431	HAIRPIN, COTTER, AXLE PIN
27	P7003-020	LIFT CHAIN {10' BOX}
28	P7002-015A	HALF LINK, LIFT CHAIN
29	P7002-015	CONNECTING LINK, LIFT CHAIN
30	P7002-1242	FLOW DIV.
31	FDC1-10-0-22	CARTRIDGE
32	P7002-1310*	SEAL KIT, LIFT CYLINDER
33	P7002-740A	ROLLER, S/S
34	P7002-835	RETAINING RING, ROLLER
35	P7002-271	BUSHING, PLATFORM, PIVOT (2)
36	P7002-450	BUSHING, BASE, PIVOT (2)
37	P7002-823	AXIS LUBE FITTING
38	P7002-030A	BRONZE BEARING, AXIS (4)
39	P7002-040	WASHER SPACER, AXIS (2)
40	P7002-820A	AXIS PIN
41	P7002-825A	END HEAD
42	P7002-836	SERIES WS LOCK WASHER
43	P7002-837	HEX HEAD BOLT
44	P7002-840	WASHER SPACER, ROLLER
45		ALKON JC3 FLOW CONTROL

**\*To make sure correct seal kit is shipped, the serial number of lift must be known.**

**FOR CURRENT PRICES AND AVAILABILITY  
CALL OR FAX YOUR ORDER TO  
Southworth Parts Dept.**

**Tel: 800-743-1000 / Fax: 207-797-4734**  
repairparts@SouthworthProducts.com

## **Warranty**

Southworth Products Corp warrants this product to be free from defects in material or workmanship for a **period of one (1) year** from date of shipment, providing claim is made in writing within said year. This warranty shall not cover failure or defective operation caused by misuse, misapplication, negligence or accident, exceeding recommended capacities, or altering or repairing, unless alteration is authorized by Southworth Products Corp. Except as set forth herein, there are no other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose, all of which are hereby excluded.

Southworth Products Corp makes no warranty or representation with respect to the compliance of any product with state or local safety or product standard codes, and any failure to comply with such codes shall not be considered a defect of material or workmanship under this warranty. Southworth Products Corp shall not be liable for any direct or consequential damages arising out of such noncompliance.

Southworth Products Corp's obligation under this warranty is **limited** to the replacement or repair of defective components at its factory or another location at Southworth Products Corp's discretion. This is buyer's sole remedy. Except as stated herein, Southworth Products Corp will not be liable for any loss, injury, or damage to persons or property, nor for direct, indirect, or consequential damage of any kind resulting from failure or defective operation of said material or equipment.

This warranty may be altered only in writing by Southworth Products Corp, Portland, Maine. Southworth Products Corp is widely acknowledged as the leading maker of hydraulic lifts and materials-handling equipment. Southworth machines are rugged and reliable, and are designed to provide years of trouble-free service. The designs are based on extensive engineering experience. These are good reasons for specifying Southworth machines in your plant.

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