Manual Price $30.00

LIFT TABLE SERIES

Operation
Maintenance
Repair Parts List

Lift Products, Inc.
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Toll Free 877-LIFTPRO (877-543-8776)

MANUAL NO. 901850
REV. A 07/13

WARNING

Do not operate this lift table unless you have been trained and authorized to do so, and have read all warnings and instructions in operator's manual and on the lift table.

Do not operate this lift table until you have checked its condition. Give special attention to electrical system, lift system (including limit switches), guards and safety devices.

Operate lift table only from designated operating position. Never place any part of your body into the structure. Keep feet clear of lift table.

Do not overload lift table. Check capacity plate for load weight and loading information.

Before lifting, be sure load is centered.

Do not handle unstable or loosely stacked loads. Use special care when handling long, high or wide loads.

Watch out for obstructions, especially overhead.

Do not lift personnel.

Do not allow anyone to place any part of their body into or under the lifting mechanism.

When leaving lift table, fully lower lifting mechanism. When leaving lift table unattended, also disconnect power.

TABLE OF CONTENTS

Section			Page
1	DESCRIPTION		
	1-1	Introduction	1-1
	1-2	General Description	1-1
	1-3	Safety Features	1-1
	1-4	Options and Accessories	1-1
2	INSTALLATION		
	2-1	Receiving Instructions	2-1
	2-2	Installation Instructions	2-1
	2-2.1	Floor Installation	2-1
	2-2.2	Pit Installation	2-1
3	OPERATION		
	3-1	General	3-1
	3-2	Operating Precautions	3-1
	3-3	Load Capacity	3-1
	3-3.1	Static Edge Loads	3-1
	3-3.2	Axle (Rolling Edge) Loads	3-1
	3-4	Operator Checks	3-1
	3-5	Operation	3-2
	3-5.1	Training	3-2
	3-5.2	Loading	3-2
	3-5.3	Raising	3-2
	3-5.4	Lowering	3-2
4	PLANNED MAINTENANCE		
	4-1	General	4-1
	4-2	Monthly and Quarterly Checks	4-1
	4-3	Lubrication	4-1
	4-3.1	Lift Cylinder	4-1
	4-3.2	Checking and Adding Hydraulic Reservoir Fluid	4-2
5	TROUBLESHOOTING		
	5-1	General	5-1
6	HYDRAULIC SYSTEM SERVICING		
	6-1	Suction Filter Replacement	6-1
	6-2	Lowering Solenoid Valve	6-2
	6-3	Lowering Flow Control Valve	6-3
	6-4	Pump Assembly Removal	6-4
	6-4.1	Pump Assembly Removal (24" Table)	6-4
	6-4.2	Pump Assembly Removal (36/48/60" Tables)	6-4
	6-5	Lift Cylinder Repair	6-6
7	ELECTRICAL COMPONENTS		
	7-1	Hydraulic Panel Assembly Removal	7-1
	7-1.1	Hydraulic Panel Assembly Removal (24" Table)	7-1
	7-1.2	Hydraulic Panel Assembly Removal (36/48/60" Tables)	7-2
	7-2	Lift Limit Switch Removal	7-2
	7-2.1	Lift Limit Switch Removal (24" Table)	7-2
	7-2.2	Lift Limit Switch Removal (36/48/60" Tables)	7-3
	7-3	Lift Limit Switch Adjustment	7-5
	7-4	Electrical Box Removal	7-6
	7-4.1	Electrical Box Removal (24" Table)	7-6
	7-4.2	Electrical Box Removal (36/48/60" Tables)	7-6
	7-5	Electrical Box Disassembly	7-6
	7-5.1	Electrical Box Disassembly (24" Table, 115V, Single Phase, 60 Hz)	7-6
	7-5.2	Electrical Box Disassembly (34/48/60" Table, 115V, Single Phase, 60 Hz)	7-6
	7-5.3	Electrical Box Disassembly (24" Table, 460V, Single Phase, 60 Hz)	7-9
	7-5.4	Electrical Box Disassembly (36/48/60" Table 230V, Single Phase, 60 Hz)	7-9
	7-5.5	Electrical Box Disassembly (24" Table 230V, Three Phase, 60 Hz)	7-9
	7-5.6	Electrical Box Disassembly (36/48/60" Table, 230V, Three Phase, 60 Hz)	7-9
	7-5.7	Electrical Box Disassembly (24" Table, 460V, Three Phase, 60 Hz)	7-9
	7-5.8	Electrical Box Disassembly (36/48/60" Table, 230V, Three Phase, 60 Hz)	7-10
	7-6	Hand Held Switch Assembly Removal	7-10
	7-7	Foot Switch Assembly Removal	7-11
8	ELEVATION SYSTEM SERVICING		
	8-1	Lift Cylinder Removal	8-1
	8-2	Elevation System	8-1
9	ILLUSTRATED PARTS BREAKDOWN		9-1

LIST OF ILLUSTRATIONS

Figure		Page
1-1	Name Plate	1-1
1-2	Serial Number and Decal Location	1-2
1-3	Lift Table Main Components	1-3
2-1	Pit Installation	2-2
3-1	Sample of Operator Check List	3-3
4-1	Lubrication Diagram	4-3
5-1	Electrical Box Wiring Schematic (24" Table) (115V, Single Phase, 60 Hz)	5-2
5-2	Table Electrical Wiring Diagram (24/36/48/60" Tables) (115V, Single Phase, 60 Hz)	5-3
5-3	Electrical Box Wiring Schematic (24" Table) (230V, Single Phase, 60 Hz)	5-4
5-4	Table Electrical Wiring Diagram (24/36/48/60" Tables) (230V, Single Phase, 60 Hz)	5-5
5-5	Electrical Box Wiring Schematic (24" Table) (230V, Three Phase, 60 Hz)	5-6
5-6	Table Electrical Wiring Diagram (24/36/48/60" Tables) (230V, Three Phase, 60 Hz)	5-7
5-7	Electrical Box Wiring Schematic (24" Table) (460V, Three Phase, 60 Hz)	5-8
5-8	Table Electrical Wiring Diagram (24/36/48/60" Tables) (460V, Three Phase, 60 Hz)	5-9
5-9	Hydraulic System with Internal Flow Control Valve	5-10
5-10	Hydraulic System with External Flow Control Valve	5-10
6-1	Hydraulic System (24" Table)	6-1
6-2	Hydraulic System (36/48/60" Tables)	6-2
6-3	Pump Assembly	6-3
6-4	Lift Table Panel Assembly (24" Table)	6-5
6-5	Lift Table Panel Assembly (36/48/60" Tables)	6-6
6-6	Lift Cylinder with Internal Flow Regulator	6-7
6-7	Lift Cylinder without Internal Flow Regulator	6-7
7-1	Hydraulic System (24" Table)	7-1
7-2	Hydraulic System (36/48/60" Tables)	7-3
7-3	Lift Table Panel Assembly (24" Table)	7-4
7-4	Lift Table Panel Assembly (36/48/60" Tables)	7-5
7-5	Lift Limit Switch Adjustment	7-5
7-6	Overload Relay	7-7
7-7	AC-Contactor (24" Tables Only)	7-8
7-8	Hand Held Switch Assembly	7-10
7-9	Foot Switch Assembly	7-12
8-1	Lift Cylinder Installation	8-2
9-1	Decals and Paint	9-2
9-2	Elevation System	9-4
9-3	Hydraulic System (24" Table)	9-6
9-4	Hydraulic System (36/48/60" Tables)	9-7
9-5	Lift Cylinder Installation	9-8
9-6	Lift Table Panel Assembly (24" Table)	9-10
9-7	Lift Table Panel Assembly (36/48/60" Tables)	9-12
9-8	Electrical Box Assembly (24" Table) (115V, Single Phase, 60 Hz)	9-14
9-9	Electrical Box Assembly (36/48/60" Tables) (115V, Single Phase, 60 Hz)	9-16
9-10	Electrical Box Assembly (24" Table) (230V, Single Phase, 60 Hz)	9-18
9-11	Electrical Box Assembly (36/48/60" Tables) (230V, Single Phase, 60 Hz)	9-20
9-12	Electrical Box Assembly (24" Table) (230V, Three Phase, 60 Hz)	9-22
9-13	Electrical Box Assembly (36/48/60" Tables) (230V, Three Phase, 60 Hz)	9-24
9-14	Electrical Box Assembly (24" Table) (460V, Three Phase, 60 Hz)	9-26
9-15	Electrical Box Assembly (36/48/60" Tables) (460V, Three Phase, 60 Hz)	9-28
9-16	Pump Assembly	9-30
9-17A	Lift Cylinder with Internal Flow Regulator	9-32
9-17B	Lift Cylinder without Internal Flow Regulator	9-34
9-18	Control Switch Installation 506036	9-36
9-19	Hand-Held Switch Assembly 506038	9-37
9-20A	Foot Switch Assembly 506045	9-38
9-20B	Foot Switch Assembly HD 506046	9-39
9-21	Platform Beveled Toeguard 506001	9-40

LIST OF TABLES

Table		Page
3-1	Operator Checks	3-2
4-1	Inspection and Service Chart	4-1
4-2	Recommended Lubricants and Oils	4-1
4-3	Lubrication Chart	4-2
5-1	Troubleshooting Chart	5-1

SECTION 1
DESCRIPTION

1-1. INTRODUCTION.

This publication describes the Lift Table Series manufactured by Lift Products, Inc., Elm Grove, Wisconsin 53122-0349. Included are operating instructions, planned maintenance instructions, lubrication procedures, maintenance instructions, and parts list with parts location illustrations.

For maintenance instructions not contained in this publication, contact Lift Products Customer Service. Be prepared to give the model number, serial number, lifting capacities and lift travel of your table.

The model number, serial number and lifting capacities are stamped on the name plate (Figure 1-1). The lift travel can be determined by subtracting the lowered height from the elevated height.

Users shall comply with all requirements indicated in current edition of A.N.S.I. MH29.1. By following these requirements and the recommendations contained in this manual, you will receive many years of dependable service from your lift table.

Figure 1-2 shows the location and identification of the decals. Also listed is the touchup paint as well as the location of the name plate. Figure 1-3 shows the locations of lift table main components.

NOTE: The user shall see that all name plates and markings are in place and are maintained in a legible condition.

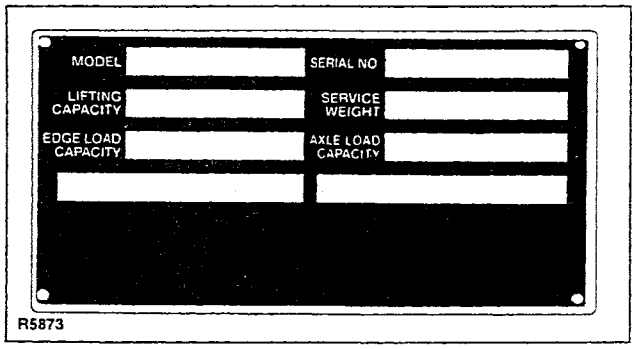

Figure 1-1. Name Plate

1-2. GENERAL DESCRIPTION.

The lift tables have been designed primarily for indoor applications. All models are similar in design but differ in capacity, lift height and platform size.

The lift and lower motion is controlled by a control box attached by a cord. The control box is mounted on a magnet for easy attachment to a convenient location.

An optional foot switch may be used to control the lift and lower motion.

1-3. SAFETY FEATURES.

The lift tables are designed and engineered to provide maximum safety for operator and payload. Some of the safety features incorporated into the design are:

All control functions automatically return to "OFF" when released.

Travel limit switch to restrict lift motion above the preset limit.

Pressure compensated flow control valve regulates maximum lowering speed within prescribed limits.

Maintenance Safety Bars to support lift table during maintenance operations.

High visibility color scheme of the lift table provides visual alert of its presence.

1-4. OPTIONS AND ACCESSORIES.

Lift Products offers many options and accessories for the lift table such as:

Beveled Toeguard Platform

Foot Controls

For proper operation and maintenance instructions of any optional accessories, not contained in this manual, contact Lift Products Customer Service. Be prepared to give the model number, serial number, lifting capacities and lift travel of your table.

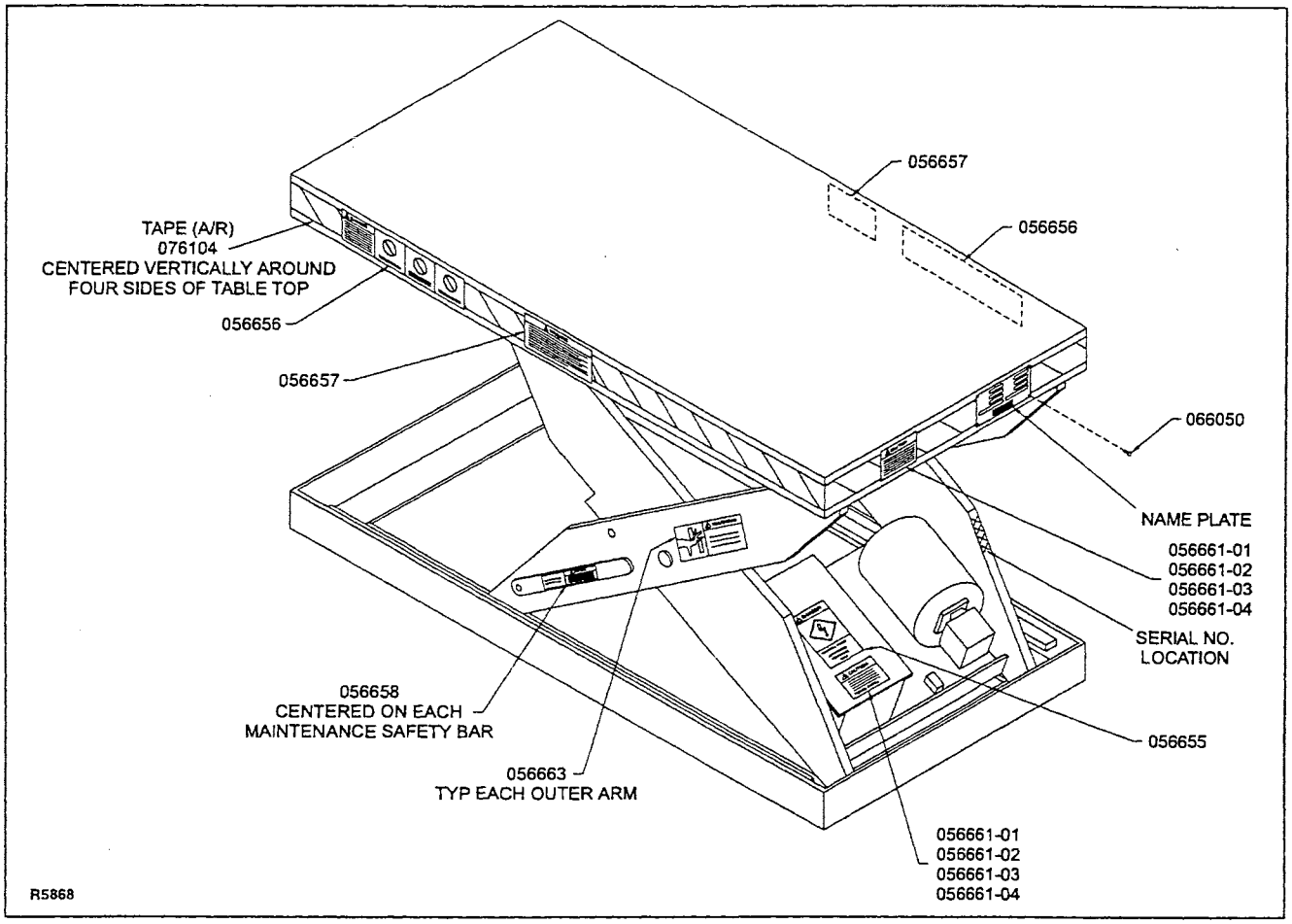

Figure 1-2. Serial Number and Decal Location

TOUCH-UP PAINT	
055824	BLUE
908082	YELLOW

DECALS		
PART NO.	**DESCRIPTION**	**NO. REQD.**
506026 *	DECAL KIT	1
056655	. DANGER	1
056656	. DANGER	2
056657	. WARNING	2
056658	. WARNING	2
056661-01	. CAUTION, 115V, 1Ø, 60HZ	2
056661-02	. CAUTION, 230V, 1Ø, 60HZ	2
056661-03	. CAUTION, 230V, 3Ø, 60HZ	2
056661-04	. CAUTION, 460V, 3Ø, 60HZ	2
076104	STRIPE TAPE	AR
056663	WARNING	2
061331A	NAME PLATE	1
066050	SCREW	4

* Do not use decal 056660 contained in decal kit 506026 unless lift table is equipped with "Tip Up" top option.

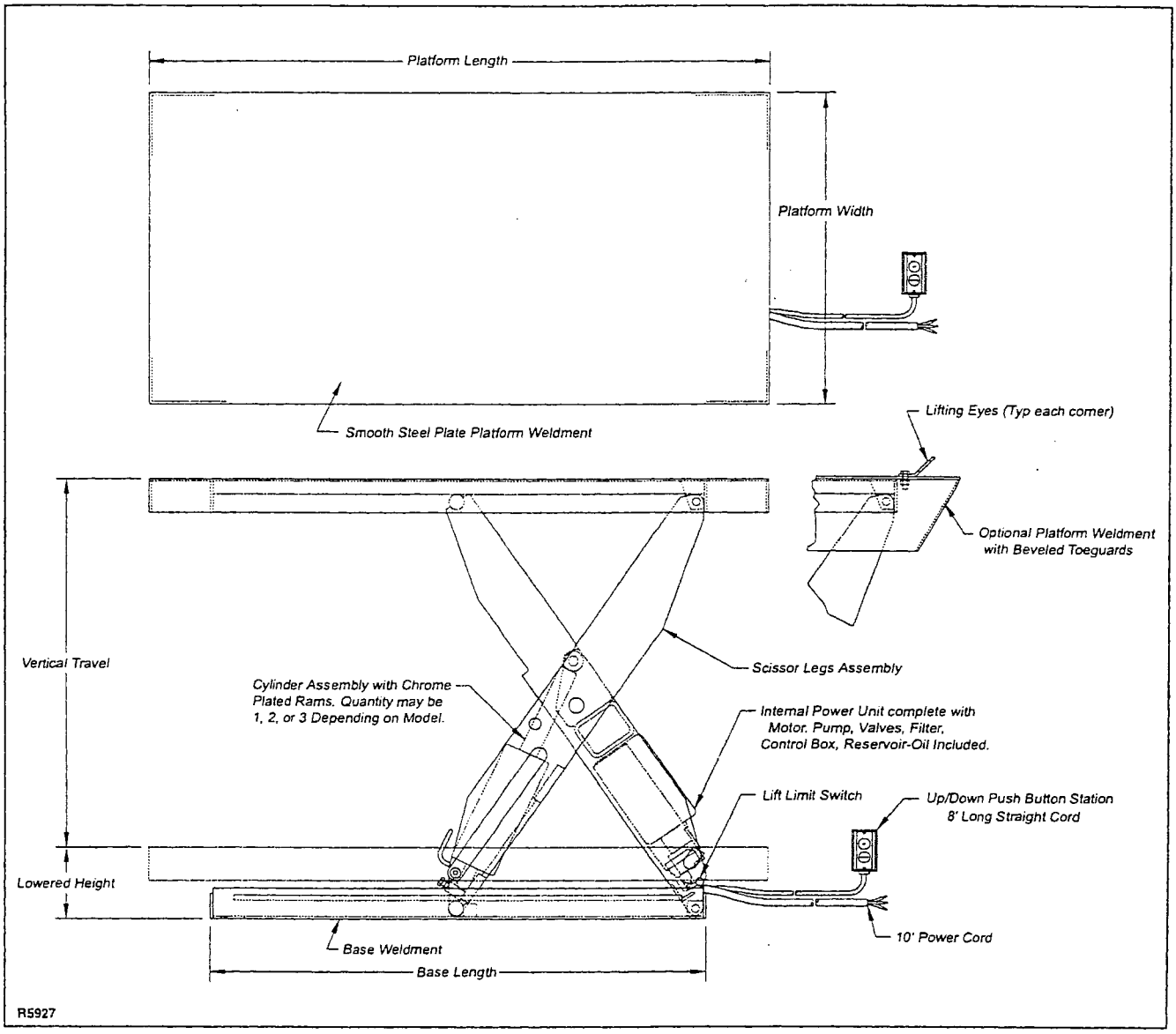

Figure 1-3. Lift Table Main Components

NOTES

SECTION 2
INSTALLATION

2-1. RECEIVING INSTRUCTIONS.

Upon receipt, visually inspect the lift table. If any damage is found, report it to the carrier and to your Lift Products dealer immediately.

Remove all packing and strapping material. Check the platform size, type of electrical system, etc., to be sure the lift table is correct for the intended application.

2-2. INSTALLATION INSTRUCTIONS.

2-2.1. Floor Installation.

WARNING: Modifications and additions which affect capacity and safe operation shall not be performed by the customer or user without manufacturers prior written approval.

1. Clean the installation area.

CAUTION: The lift table should only be picked up from under the base. Do not lift the table by the platform.

2. Position the lift table in the desired position.

NOTE: The lift table comes pre-wired with a 10 foot power cord. Check the decal located on the electrical box for the voltage/phase and be sure you have the same power supply source. The proper plug and mating receptacle must be purchased and installed by the user.

NOTE: Units equipped for a 115 volt power supply need to have a separate 30 amp rated circuit and proper wiring to ensure an actual 115 volts at the lift table electrical box when operating under full load.

3. Install the proper plug and connect to the power receptacle.

WARNING: Make certain electrical cables and cords are kept clear of moving parts in the lift table mechanism.

4. Using the control box or optional foot switch, check for proper operation. When the UP button is depressed the platform should raise. When the UP button is released the platform should remain stationary. When the DOWN button is pressed the platform should lower.
5. Raise the platform and swivel both maintenance safety bars down against the base. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
6. Check for oil in the hydraulic reservoir. Refer to Section 4, Planned Maintenance. (Note: Unit is supplied with oil.)
7. The base contains predrilled mounting holes. Mark the location of these holes on the floor.
8. Shift the lift table over, drill holes in the floor and install anchors.
9. Reposition the lift table and shim until level. Make sure the lift table is fully supported along its entire base with shims or concrete grout.
10. Bolt the base to the anchors installed in the floor.
11. Raise the platform and position the maintenance safety bars in their proper disengaged position.
12. Operate the lift table through several complete cycles and check for pinched hoses or hydraulic leaks from fittings that may have loosened during shipping.

2-2.2 Pit Installation.

WARNING: Modifications and additions which affect capacity and safe operation shall not be performed by the customer or user without manufacturers prior written approval.

NOTE: All pit installed models are equipped with a beveled toeguard platform.

1. Install pit as shown in Figure 2-1.

CAUTION: Reinforce concrete to suit local soil conditions.
All pit work, curb angle, 3 inch conduit, hydraulic hose and oil, and electrical work are the responsibility of the owner or pit contractor.
Electrical installation must be in compliance with all federal, state, and local codes.
Pit drains are to be installed in compliance with local code and weather conditions.

NOTE: In all cases, the hydraulic cylinder is on the left side of the pit.
The conduit is installed with entry from either side or from the end opposite the hydraulic cylinder.
Use 12 inch minimum radius bends in the conduit.

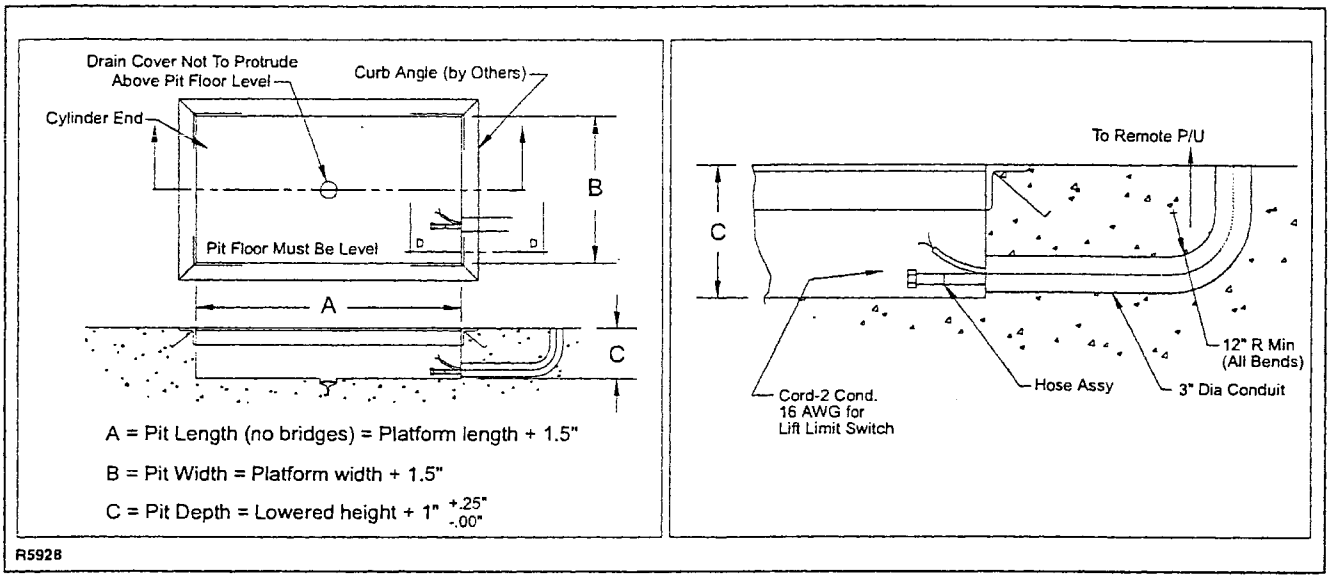

Figure 2-1. Pit Installation

2. Install 3 inch diameter conduit from power unit location to lift table pit.

CAUTION: When moving the lift table use the lifting eyes provided on the platform and the long shipping bolts to lock the lift table in position.
Check for proper clearance around the lift table pit area.

3. Place the lift table in position for installation.
4. Remove the long shipping bolts and install lifting eyes using shorter bolts that will not contact the base.
5. Raise the platform, ensuring that the base remains on the floor.
6. Swivel both maintenance safety bars down against the base. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
7. The base contains predrilled mounting holes. Mark the location of these holes on the floor.
8. Raise the platform and position the maintenance safety bars in their proper disengaged position.
9. Lower the platform fully and remove the lifting eyes and bolts. Install lifting eyes using the long shipping bolts to lock the lift table in position.
10. Remove lift table from the pit.
11. Drill holes in the floor and install anchors.
12. Reposition lift table in the pit.
13. Remove the lifting eyes and long shipping bolts.
14. Install the lifting eyes using the shorter bolts.
15. Raise the platform ensuring that the base remains on the floor.
16. Swivel both maintenance safety bars down against the base. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
17. Shim the lift table base until level. Make sure the lift table is fully supported along its entire base with shims or concrete grout.
18. Bolt the base to the anchors installed in the floor.

NOTE: Check the decal located on the electrical box for the voltage/phrase and be sure you have the same power supply source. Use #16 AWG-4 wire from control box to lift table pit. A standard length of 20 feet is supplied with the control box.

19. Install power cord through 3 inch conduit and connect to power receptacle.

NOTE: For hydraulic hose installation, use 3/8 inch ID hose with swivel fittings on both ends.

20. Install hydraulic hose through 3 inch conduit and connect to hydraulic fitting.
21. Raise platform and position the maintenance safety bars in their proper disengaged position.
22. Lower platform and remove the lifting eyes and bolts.
23. Check for oil in the hydraulic reservoir. Refer to Section 4, Planned Maintenance.
24. Operate the lift table through several complete cycles and check for pinched hoses or hydraulic leaks from fittings.
25. Again check oil in the hydraulic reservoir. Refer to Section 4, Planned Maintenance.

NOTES

SECTION 3
OPERATION

3-1. GENERAL.

This section gives detailed operating instructions for the lift table. Routine precautions are included for safe operation.

3-2. OPERATING PRECAUTIONS.

WARNING: Improper operation of the lift table may result in injury, or load and/or lift table damage. Observe the following precautions when operating the lift table.

1. Do not operate this lift table unless you have been trained and authorized to do so. Read all warnings and instructions in this manual and on the lift table.
2. Do not operate this lift table until you have checked its condition. Give special attention to electrical system, lift system, guards and safety devices.

WARNING: Make certain electrical cables and cords are kept clear of moving parts in the lift table mechanism.

3. Do not exceed the rated capacity (see name plate). Overloading may result in damage to the hydraulic system and structural components. Refer to paragraph 3-3.
4. Do not handle unstable or loosely stacked loads. Use special care when handling long, high, or wide loads to avoid tipping, loss of load, or striking bystanders.
5. Check for obstructions when raising or lowering the lift table.
6. Operate lift table only from designated operating position. Never place any part of your body into the structure. Keep feet clear of lift table.
7. Watch out for obstructions overhead.
8. Do not lift personnel.
9. Do not allow anyone to place any part of their body into or under the lifting mechanism.
10. When leaving lift table, fully lower lifting mechanism. When leaving lift table unattended, also disconnect power.

3-3. LOAD CAPACITY.

The load capacity rating is stamped on the name plate. This load capacity assumes the load is uniformly distributed and centered on the platform.

3-3.1. Static Edge Loads.

The lift table is designed for uniformly distributed centered loads. If the load is lifted at the sides or ends of the platform, the static edge load stamped on the name plate should not be exceeded.

3-3.2. Axle (Rolling Edge) Loads.

When a load is rolled onto the platform, the lift table should be fully lowered. The axle load stamped on the name plate should not be exceeded.

3-4. OPERATOR CHECKS.

Table 3-1 covers important points on the lift table which should be checked on a daily basis before the table is used. Depending on use, some lift tables may require additional checks. When the lift table is used on a round-the-clock basis, it should be examined before each shift.

Figure 3-1 shows a sample format for a Operator Check List, which can be modified as necessary to fit your operation.

WARNING: Periodic maintenance of this lift table by a QUALIFIED TECHNICIAN is required.

CAUTION: A QUALIFIED SERVICE TECHNICIAN should check the lift table monthly for proper lubrication, proper fluid levels, motor maintenance and other areas specified in Section 4.

WARNING: If the lift table is found to be unsafe and in need of repair, or contributes to an unsafe condition, report it immediately to the designated authority. Do not operate it until it has been restored to a safe condition. Do not make any unauthorized repairs or adjustments. All service must be performed by a qualified maintenance technician.

Table 3-1. Operator Checks

ITEM	PROCEDURE
Decals & Nameplate	Check that all decals and nameplate are in place and legible.
Hardware	Check for signs of loose or missing hardware.
Hydraulic Lines	Check for cut or frayed hose, leaking fittings or damaged lines.
Lift and Lower	Check for proper operation of lift and lower to their maximum positions.
Lift Cylinders	Check for signs of leakage.
Lift Limit Switch	Check for loose or bent mounting. Check that the limit switch shuts off the pump motor at the preset platform height.
Lift Motor	Check for grinding or laboring sounds.
Pivot Points	Check for smooth pivoting action.
Platform	Check for dents or warpage.
Power and Switch Box Cords	Check for cut or frayed cord.
Push Buttons	Check that the push buttons do not for stick or malfunction when pressed.
Rollers	Check upper and lower rollers for signs of wear.
Drift	Check for excessive downward drift when controls are in neutral position.

3-5. OPERATION.

3-5.1. Training.

Only operators trained to adhere strictly to the operating instructions shall be permitted to operate the lift table.

The user shall ensure that operators understand that safe operation is the operator's responsibility. The user shall also ensure that operators are knowledgeable of, and observe, the safety rules and practices.

An effective operator training program should center around company's policies, operating conditions, and lift tables. The program should be presented completely to all new operators and not condensed for those claiming previous experience.

3-5.2. Loading.

1. Always center the load on the platform as much as possible. Refer to paragraph 3-3 for load capacity.
2. If the load is lifted at the sides or ends of the platform, refer to paragraph 3-3.1 for static edge load capacity.
3. When a load is rolled onto the platform, the lift table should be fully lowered. Refer to paragraph 3-3.2 for rolling edge load capacity.

3-5.3. Raising.

CAUTION: Do not exceed the rated frequency of operation indicated on the lift table.

Pressing and holding the UP push button or optional foot switch activates the pump and motor causing the cylinder(s) to extend and the platform to raise. If the table is overloaded, the relief valve should open, preventing buildup of excessive pressure. When the lift table reaches a preset height, the lift limit switch will cause the lift table to stop.

When the UP push button or optional foot switch is released, the platform will remain in position.

CAUTION: Do not continue to press the UP push button or optional foot switch if the lift table has reached the end of its travel or is not raising. The pump and/or motor can be permanently damaged by doing this.

3-5.4. Lowering.

Pressing and holding the DOWN push button or optional foot switch activates the lower solenoid valve. Oil from the cylinder is directed back to the reservoir, allowing the lift table to lower at a controlled rate.

When the DOWN push button or optional foot switch is released, the platform will remain in position.

Electric Lift Table
Daily Operator Check-Off List

Date _____ Operator _____

Truck No. _____ Model No. _____

Dept. _____ Shift _____

Check	O.K. (✓)	Need Maintenance
Decals & Nameplate		
Condition of Hydraulic Lines		
Condition of Power and Switchbox Cords		
Lift—Lower Controls		
Lift Limit Operation		
Missing Hardware		
Hydraulic Leaks, Cylinders, Valves, Hoses, Etc.		
Pivot Points		
Push Buttons		
Rollers		
Lift Motor		
Platform		
No Excessive Drift		

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Figure 3-1. Sample of Operator Check List

NOTES

SECTION 4
PLANNED MAINTENANCE

4-1. GENERAL.

Planned maintenance consists of periodic visual and operational checks, parts inspection, lubrication, and scheduled maintenance designed to prevent or discover malfunctions and defective parts. The operator performs the checks in Section 3, and refers any required servicing to a qualified maintenance technician who performs the scheduled maintenance and any required servicing.

WARNING: Modifications and additions which affect capacity and safe operation shall not be performed without manufacturers prior written approval.

4-2. MONTHLY AND QUARTERLY CHECKS.

Table 4-1 is an inspection and service chart based on normal usage of equipment eight hours per day, five days per week. If the lift table is used in excess of forty hours per week, the frequency of inspection and service should be increased accordingly. These procedures must be performed by a qualified service technician or your Lift Products service representative.

INTERVAL	INSPECTION OR SERVICE
Monthly	Check condition of pump motor
Monthly	Check condition of hydraulic fittings and hoses
Monthly	Check caster wheels (If equipped) for wear and proper function
Monthly	Inspect wiring for loose connections and damaged insulation
Monthly	Lubricate unit (See Table 4-3)
Quarterly	Check lift cylinder wiper ring and packing
Semi-annually	Replace hydraulic filter assembly

Table 4-1. Inspection and Service Chart

4-3. LUBRICATION.

Refer to table 4-2 for the recommended types of grease and oil. Table 4-3 in conjunction with figure 4-1 identifies the items requiring lubrication.

Table 4-2. Recommended Lubricants and Oils

No. 1	Grease—Lithium base, general purpose.
No. 2	Hydraulic oil-Heavy duty with a viscosity of 150 SUS (in temperatures below 32°F use 100 SUS) foam suppressing agent and rust and oxidation inhibitors. Part No. 900855 (1 gallon) 900893 (1 quart)
No. 3	Moly-Grease—Dow Corning Molykote 44 (contains silicone). Part No. 055753

4-3.1. Lift Cylinder.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Loosen the bolt securing the bottom of each lift cylinder to the base.
5. Partially collapse the cylinder rod and lift the bottom of the cylinder out of the channel in the base.
6. Apply a light coat of moly-grease to the channel. (See Table 4-2, No. 3)
7. Position the cylinder(s) in the channel and secure with the mounting bolt(s).
8. Raise the platform and position the maintenance safety bars in their proper disengaged position.

4-3.2. Checking and Adding Hydraulic Reservoir Fluid.

NOTE: If the pump cavitates (is oil "starved") near the end of the lift cycle, add hydraulic fluid.

1. With the lift table fully lowered, install lifting eyes in each end of the lift table platform.

NOTE: Do not energize the table power supply. Raise the platform only enough to engage both maintenance safety bars.

2. Raise the platform and swivel both maintenance safety bars down against the base. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
3. Remove the breather plug from the hydraulic reservoir.

NOTE: The fluid level should not be higher than 1 inch below the bottom edge of the breather port (measuring straight in through the port).

4. Check and add hydraulic fluid as necessary. Do not overfill.
5. Replace the breather plug.
6. Using the lifting eyes, raise the platform enough to place the maintenance safety bars in their proper disengaged position.
7. Lower the platform and remove the lifting eyes.
8. Operate the lift table through several complete cycles and check for oil leaking from the breather plug and cavitation at the end of the lift cycle. Oil leaking from the breather plug indicates overfilling and some oil should be removed from the reservoir. Cavitation at the end of the lift cycle indicates a need for more oil.

Table 4-3. Lubrication Chart

FIG 4-1 INDEX NO.	LOCATION	METHOD OF APPLICATION	TYPE (Table 4-2)	APPLICATION OF LUBRICANT
1	Hydraulic System	—	No. 2	Check and add hydraulic oil to reservoir. Refer to paragraph 4-3.2.
2	Upper rollers	Gun	No. 1	Pressure lubricate (two fittings).
3	Lower rollers	Gun	No. 1	Pressure lubricate (two fittings).
4	Pivot points	Gun	No. 1	Pressure lubricate (three fittings).
5	Lift cylinder	Brush	No. 3	Refer to paragraph 4-3.1.

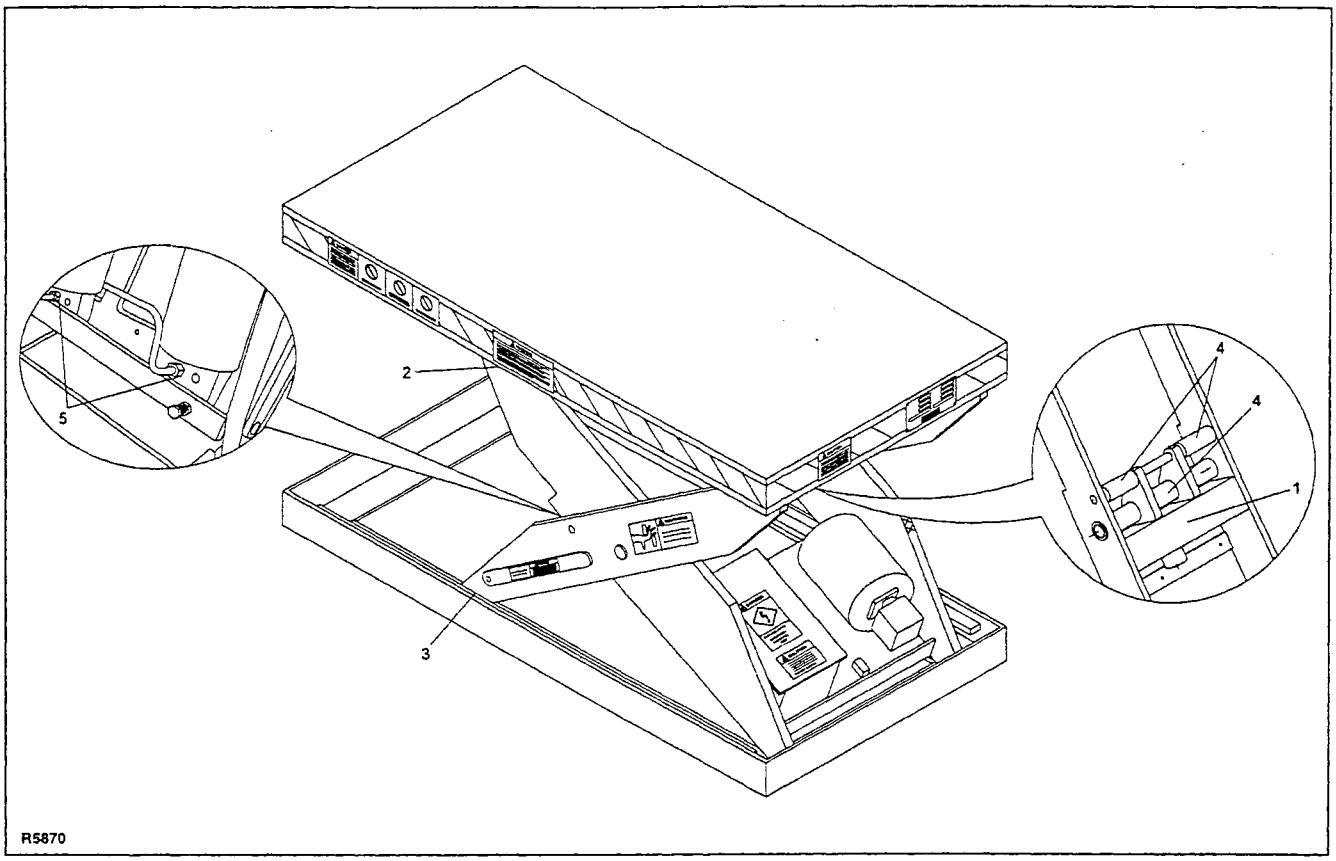


Figure 4-1. Lubrication Diagram

NOTES

SECTION 5
TROUBLESHOOTING

5.1 GENERAL

Table 5-1 serves as a guide to determine possible causes of trouble. Refer to electrical wiring diagrams (Figure 5-1 to 5-8) and hydraulic schematics (Figure 5-9 and 5-10) as a supplement to the troubleshooting chart or when tracing an electrical circuit.

Table 5-1. Troubleshooting Chart

MALFUNCTION	PROBABLE CAUSE	CORRECTIVE ACTION
Does not raise but pump motor is running.	a. Oil level too low.	Add oil to reservoir.
	b. Load heavier than capacity.	Refer to name plate for maximum load capacity.
	c. Filter is clogged.	Remove and clean.
	d. Defective pump or motor.	Replace.
Platform raises slowly	a. Load heavier than capacity.	Refer to name plate for maximum load capacity.
	b. Lack of lubrication.	Lubricate.
	c. Defective rollers.	Replace.
	d. Defective pump.	Replace.
	e. Defective cylinder.	Overhaul cylinder.
	f. Relief valve.	Adjust or replace.
Does not raise but pump motor not running.	a. No electrical power.	Check power source.
	b. Defective controls.	Repair as required.
	c. Defective pump motor.	Replace.
Platform does not lower	a. Maintenance safety bar or obstruction blocking movement.	Correct condition.
	b. Defective lowering solenoid valve.	Replace.
	c. Defective controls.	Repair as required.
Platform creeps downward under load	a. External leak in hydraulic system.	Look for loose fittings in the hydraulic line. Repair fittings.
	b. Defective packing in cylinder.	Look for oil on top of cylinder packing. Overhaul cylinder.
	c. Defective solenoid valve.	Replace.
	d. Defective check valve.	Replace.
	e. Defective relief valve.	Replace.

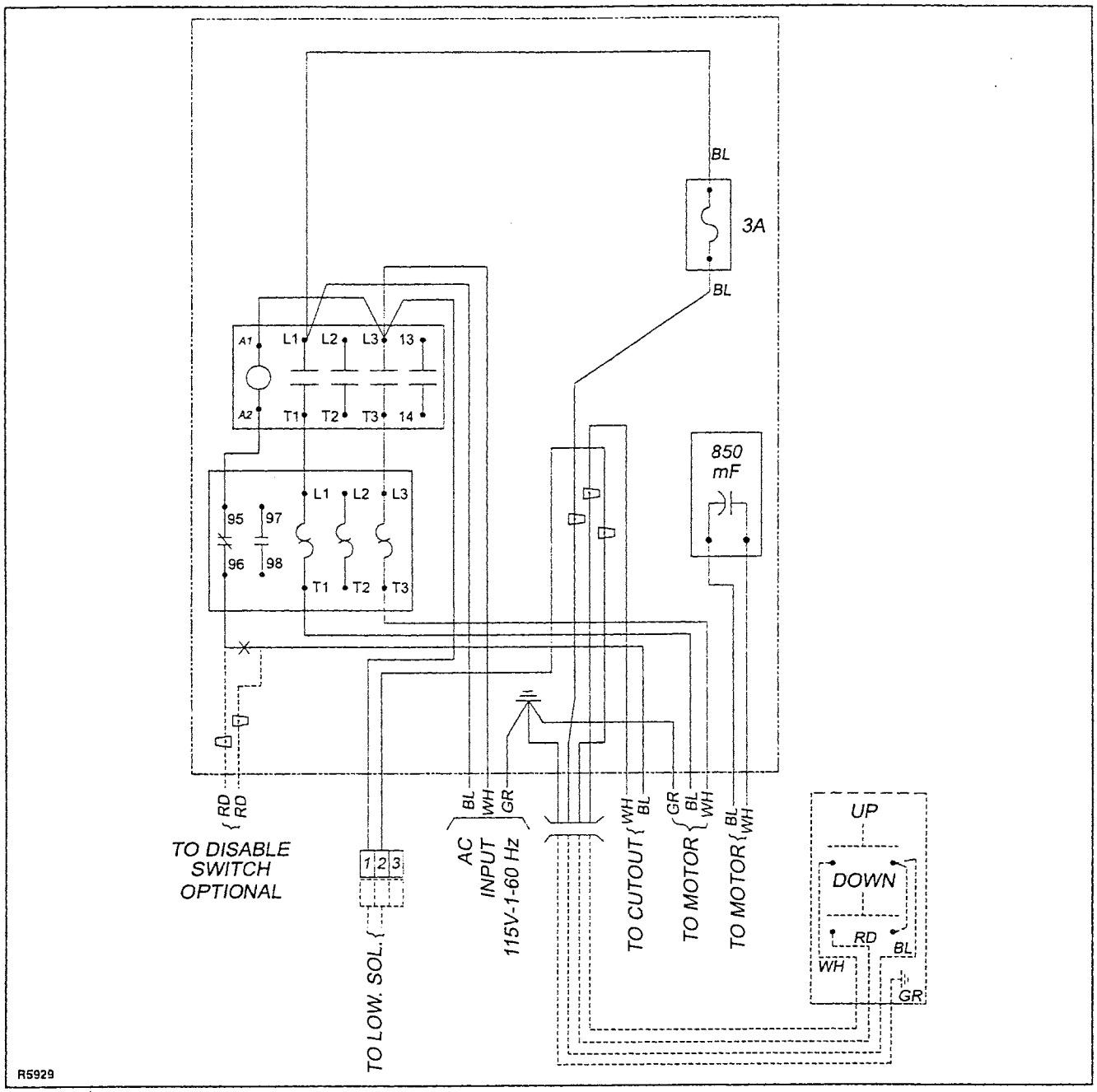


Figure 5-1. Electrical Box Wiring Schematic (24" Table)
(115V, Single Phase, 60 Hz)

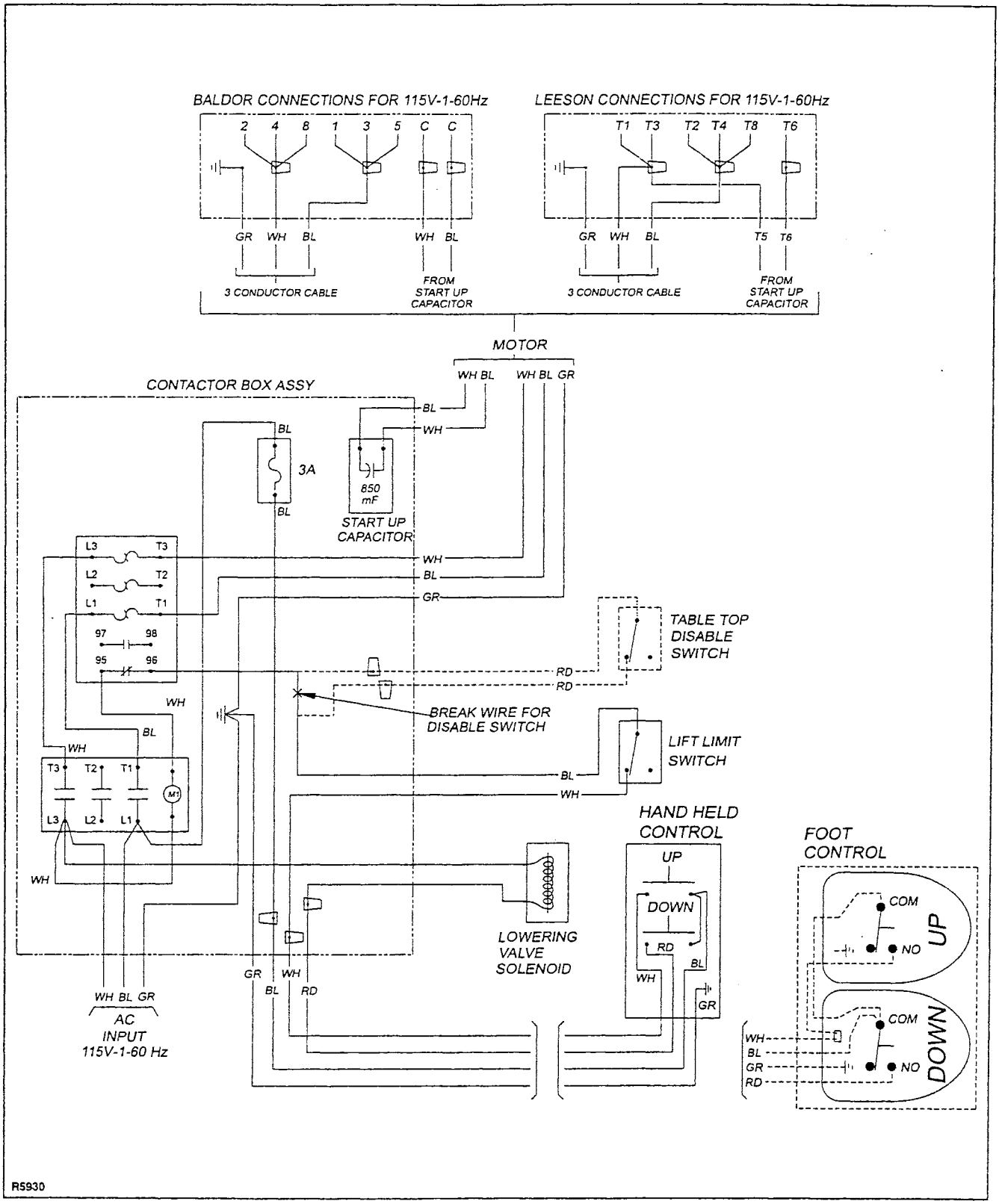


Figure 5-2. Table Electrical Wiring Diagram (24/36/48/60" Tables) (115V, Single Phase, 60 Hz)

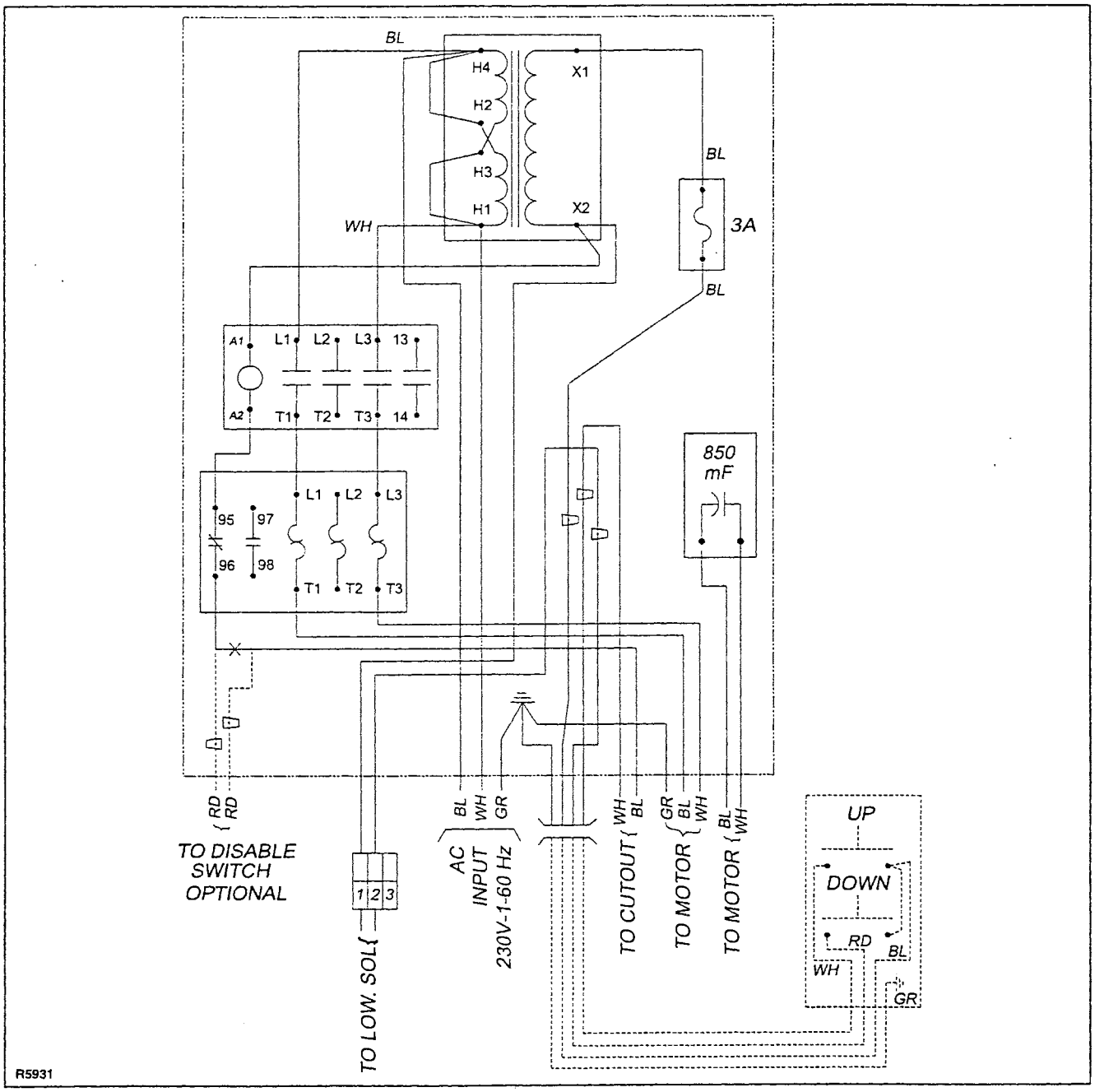


Figure 5-3. Electrical Box Wiring Schematic (24" Table)
(230V, Single Phase, 60 Hz)

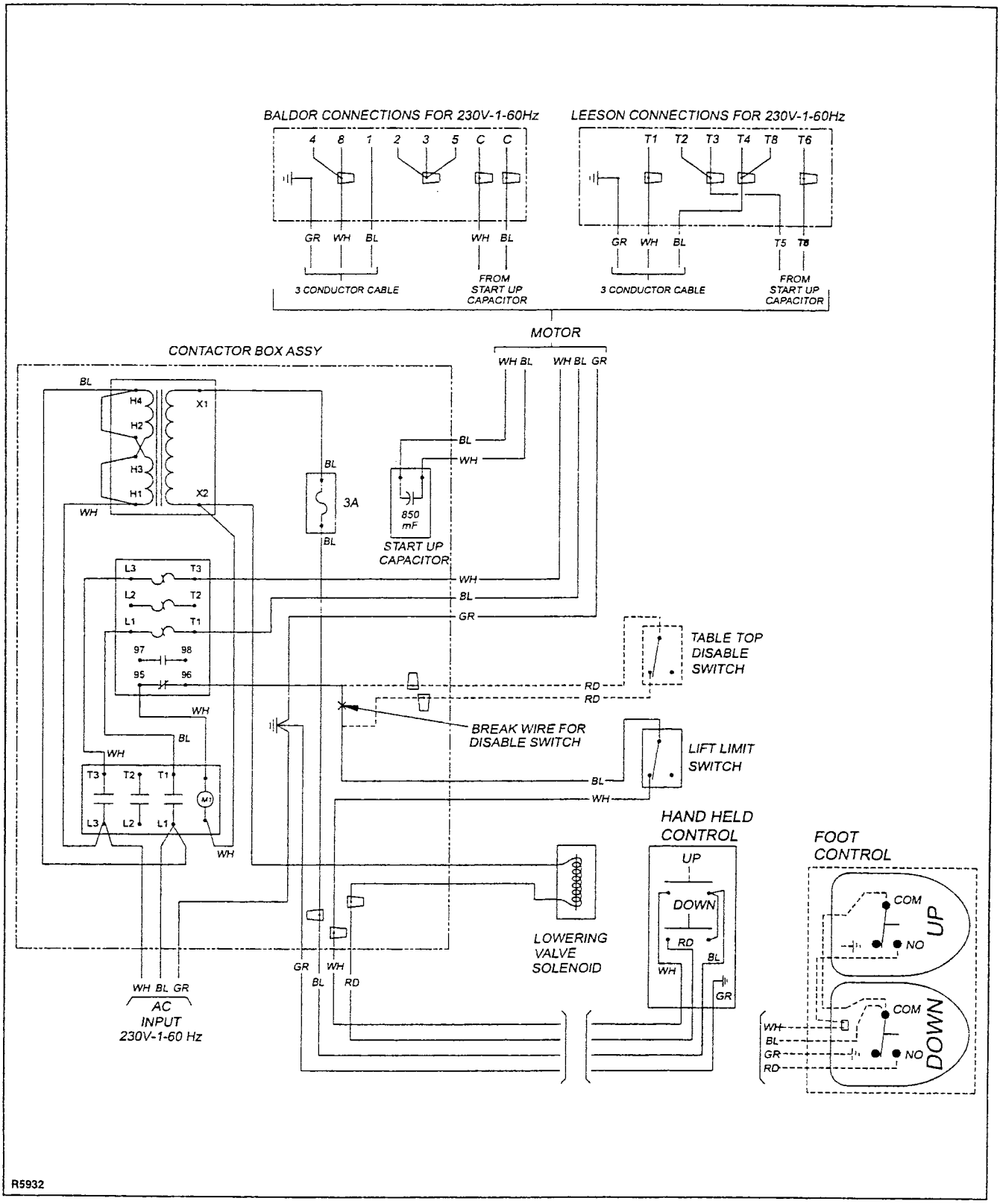


Figure 5-4. Table Electrical Wiring Diagram (24/36/48/60" Tables) (230V, Single Phase, 60 Hz)

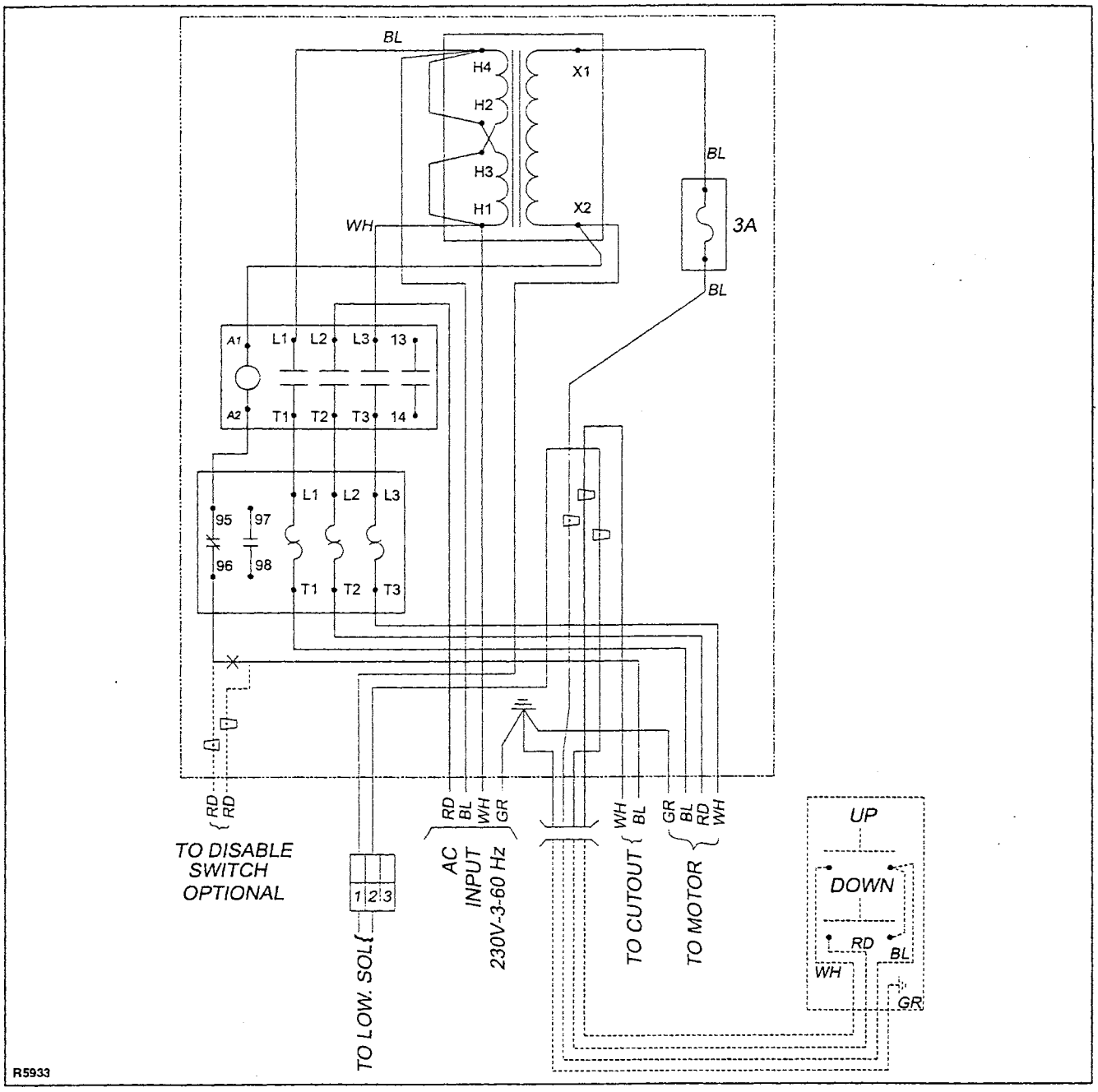


Figure 5-5. Electrical Box Wiring Schematic (24" Table)
(230V, Three Phase, 60 Hz)

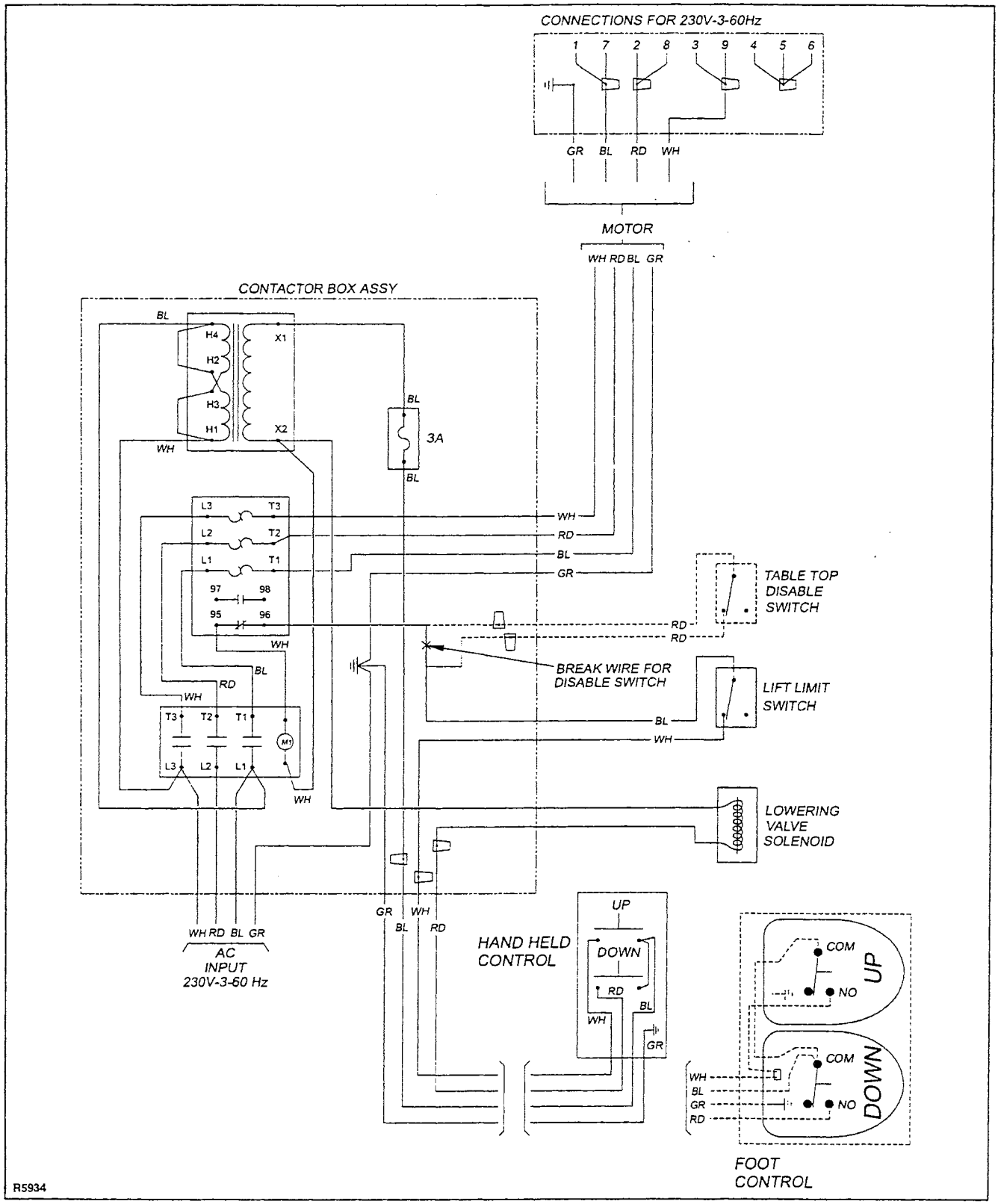


Figure 5-6. Table Electrical Wiring Diagram (24/36/48/60 Tables) (230V, Three Phase, 60 Hz)

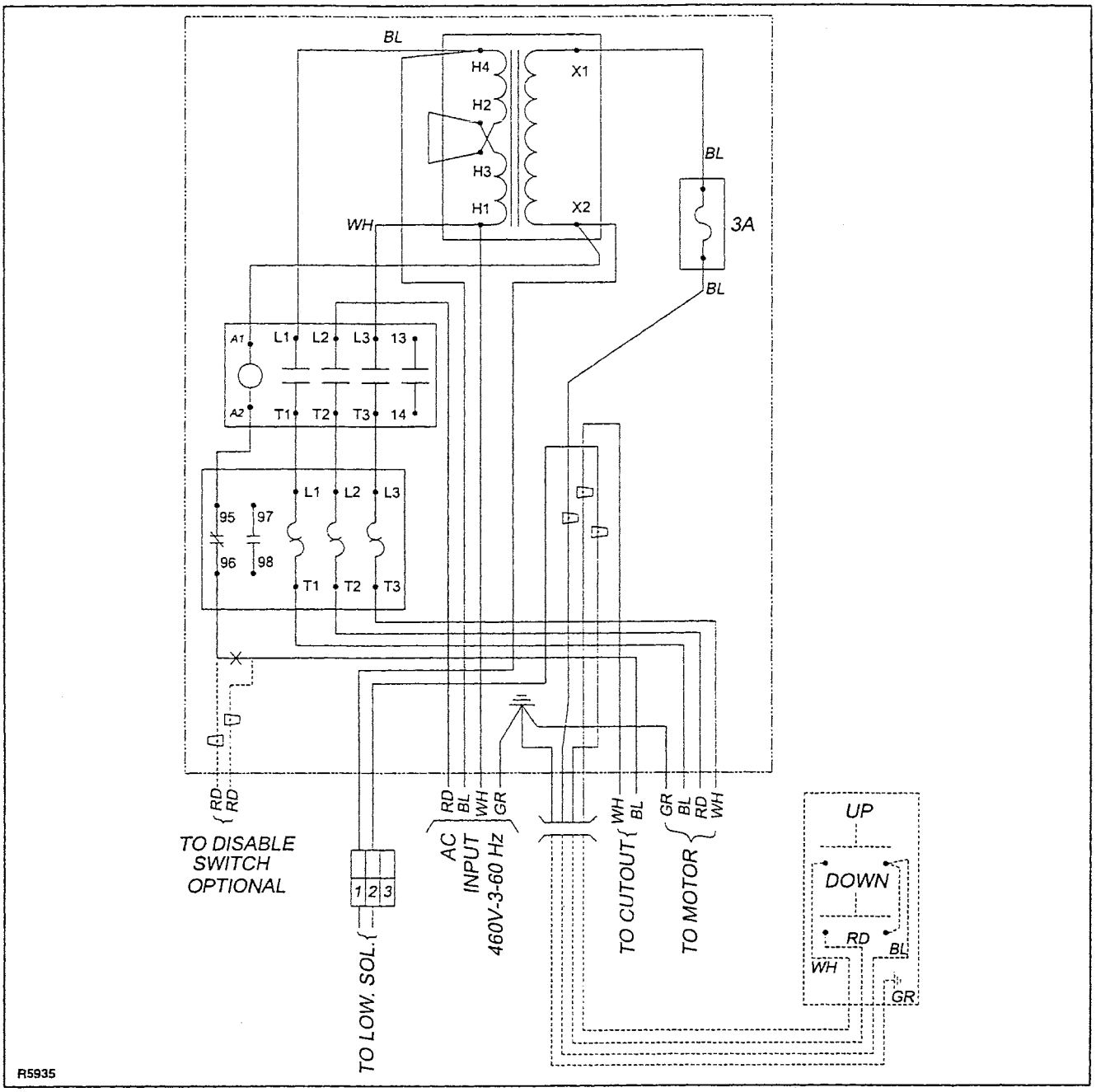


Figure 5-7. Electrical Box Wiring Schematic (24" Table)
(460V, Three Phase, 60 Hz)

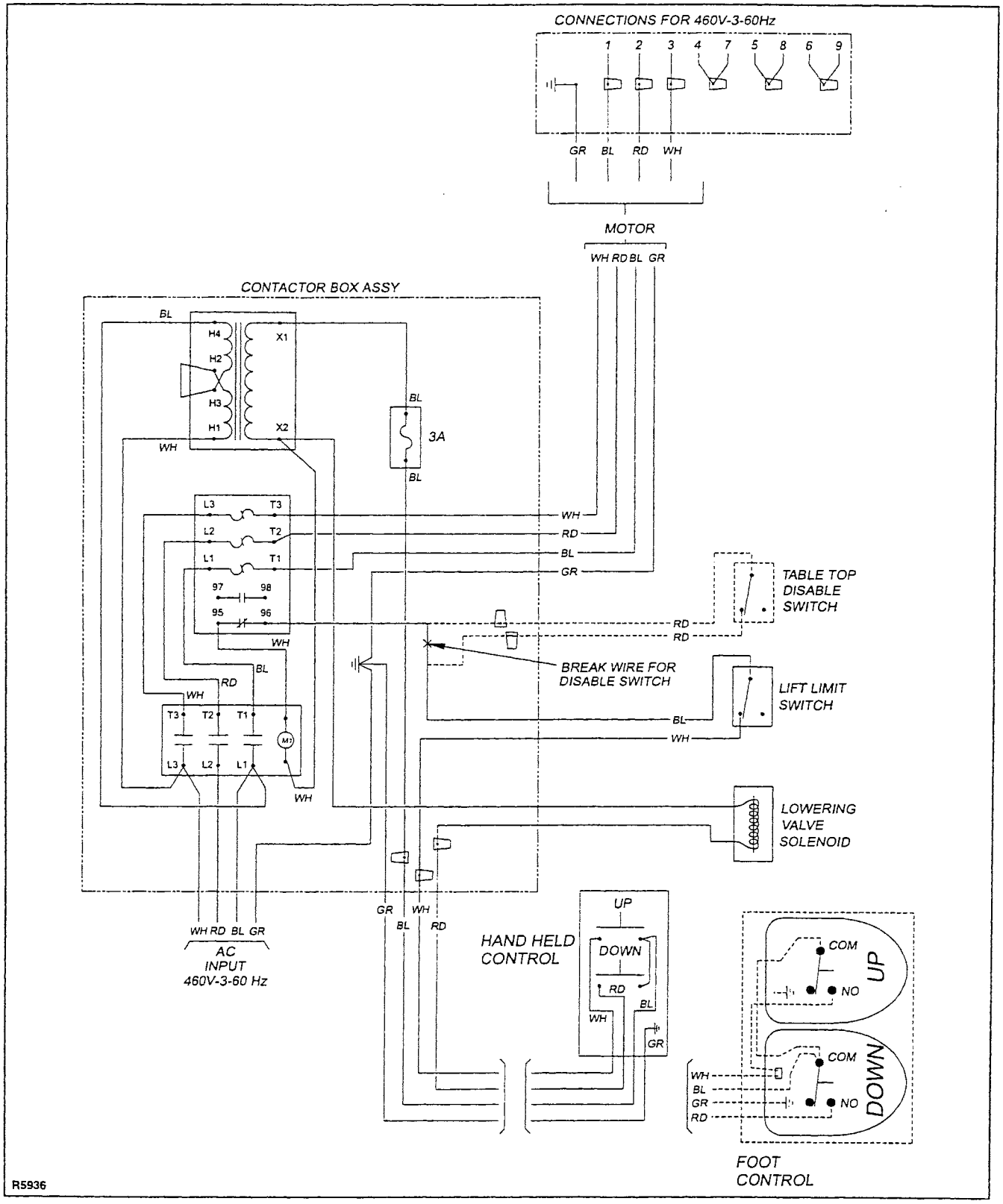


Figure 5-8. Table Electrical Wiring Diagram (24/36/48/60" Tables) (460V, Three Phase, 60 Hz)

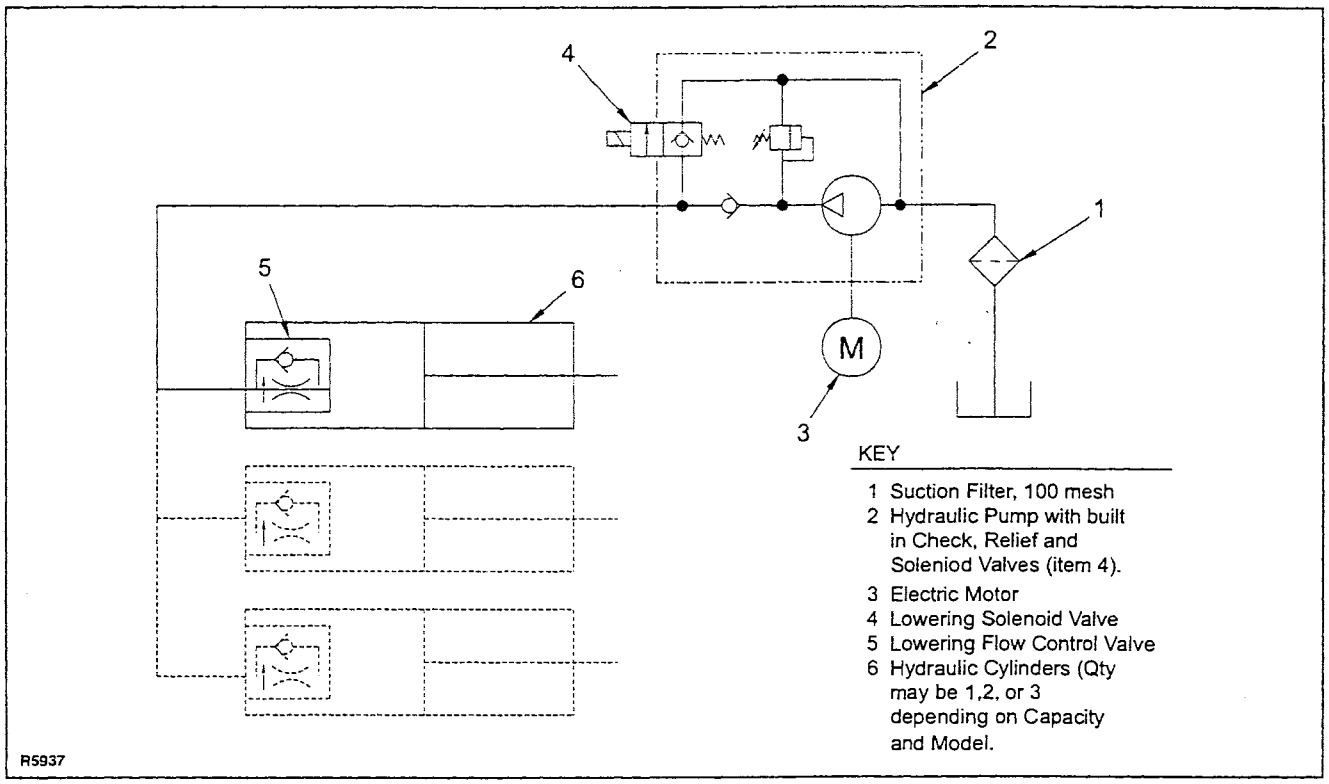


Figure 5-9. Hydraulic Schematic with Internal Flow Control Valve

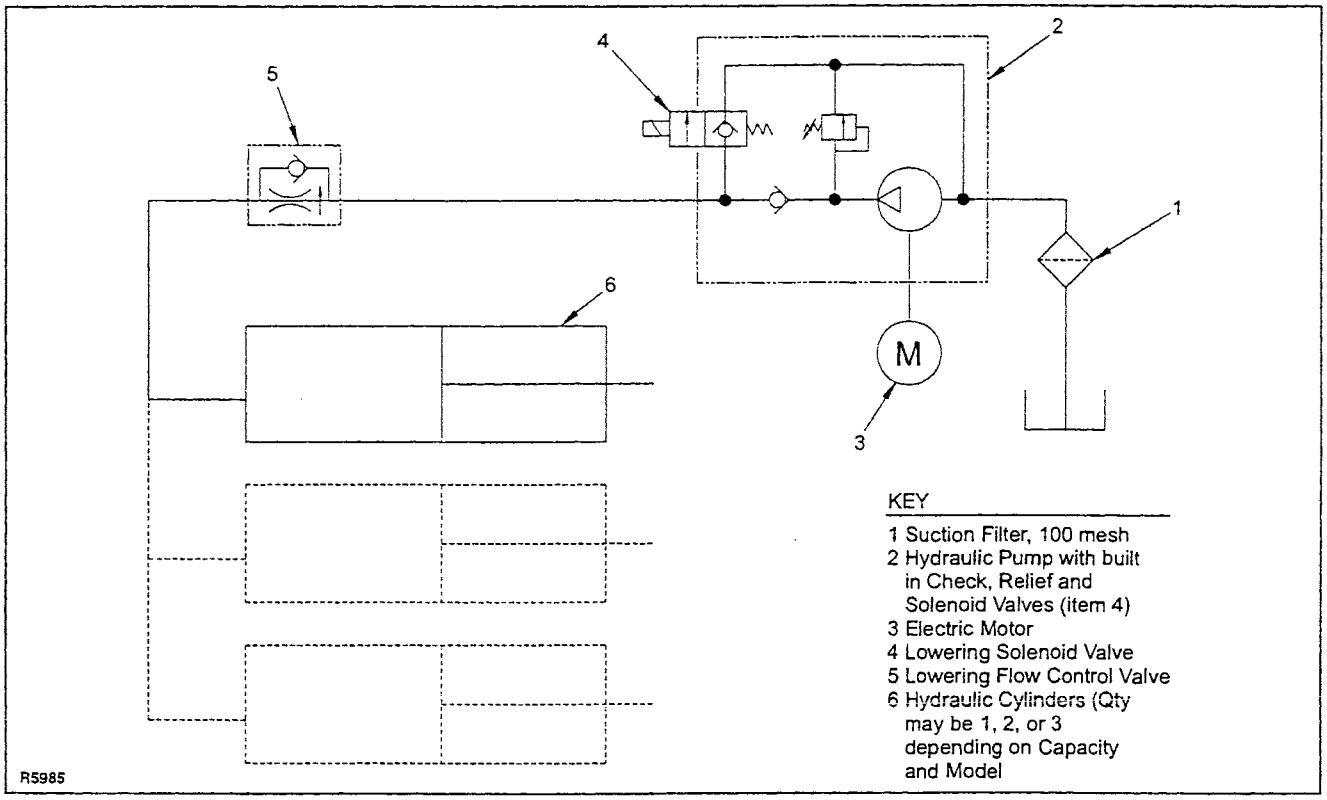


Figure 5-10. Hydraulic Schematic with External Flow Control Valve

SECTION 6
HYDRAULIC SYSTEM SERVICING

6-1. SUCTION FILTER REPLACEMENT.

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.

Refer to figure 6-1 or 6-2 and replace the suction filter as follows:

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.

WARNING: Hydraulic system pressure must be relieved before removing hydraulic system components.

4. Place a suitable drain pan at the base of the lift table, underneath the hydraulic oil filter (6).
5. Remove hose clamp and hose (9) from nipple (8).
6. Remove filter assembly (6) from the reservoir and allow the reservoir to drain into the drain pan.

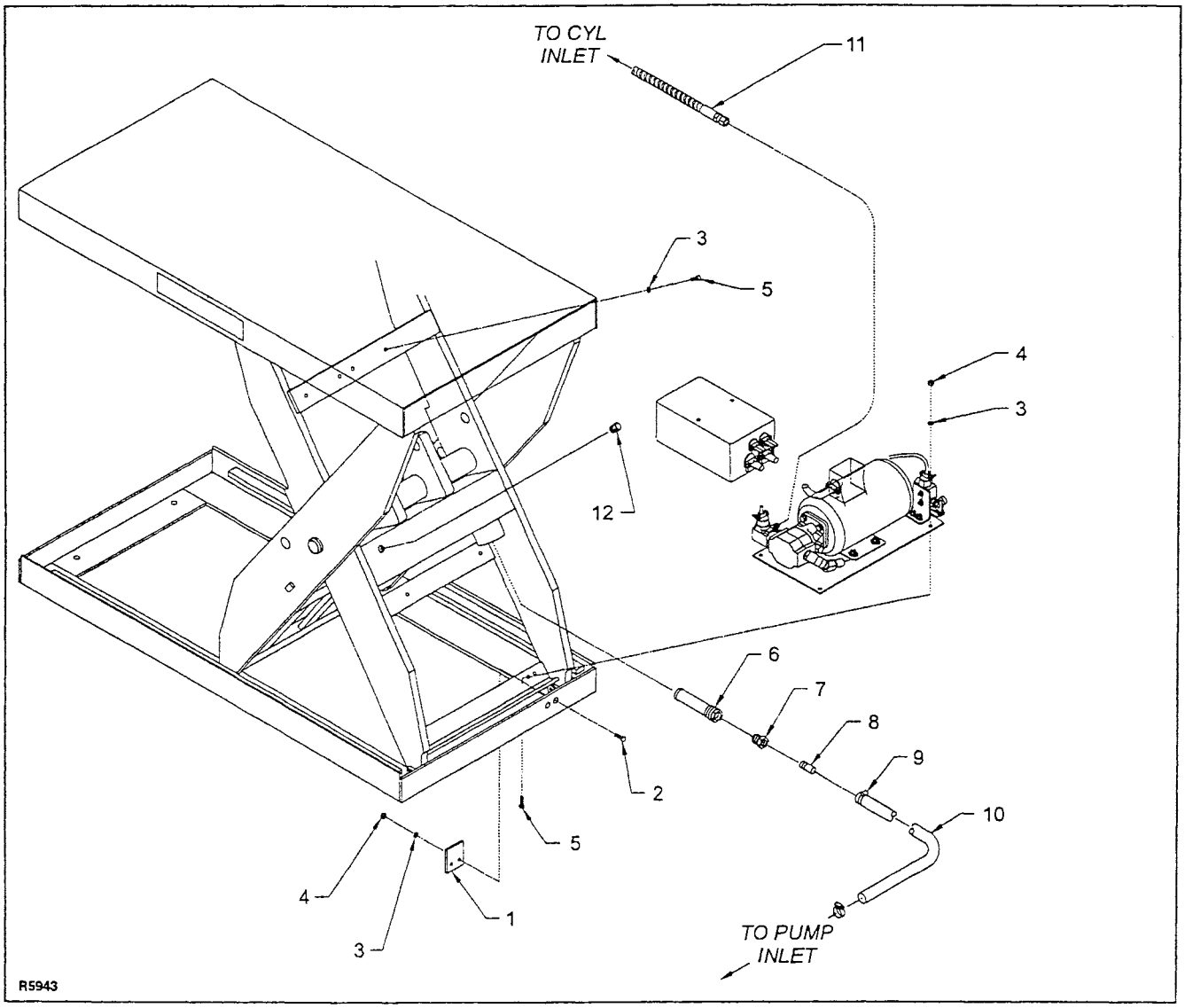


Figure 6-1. Hydraulic System (24" Table)

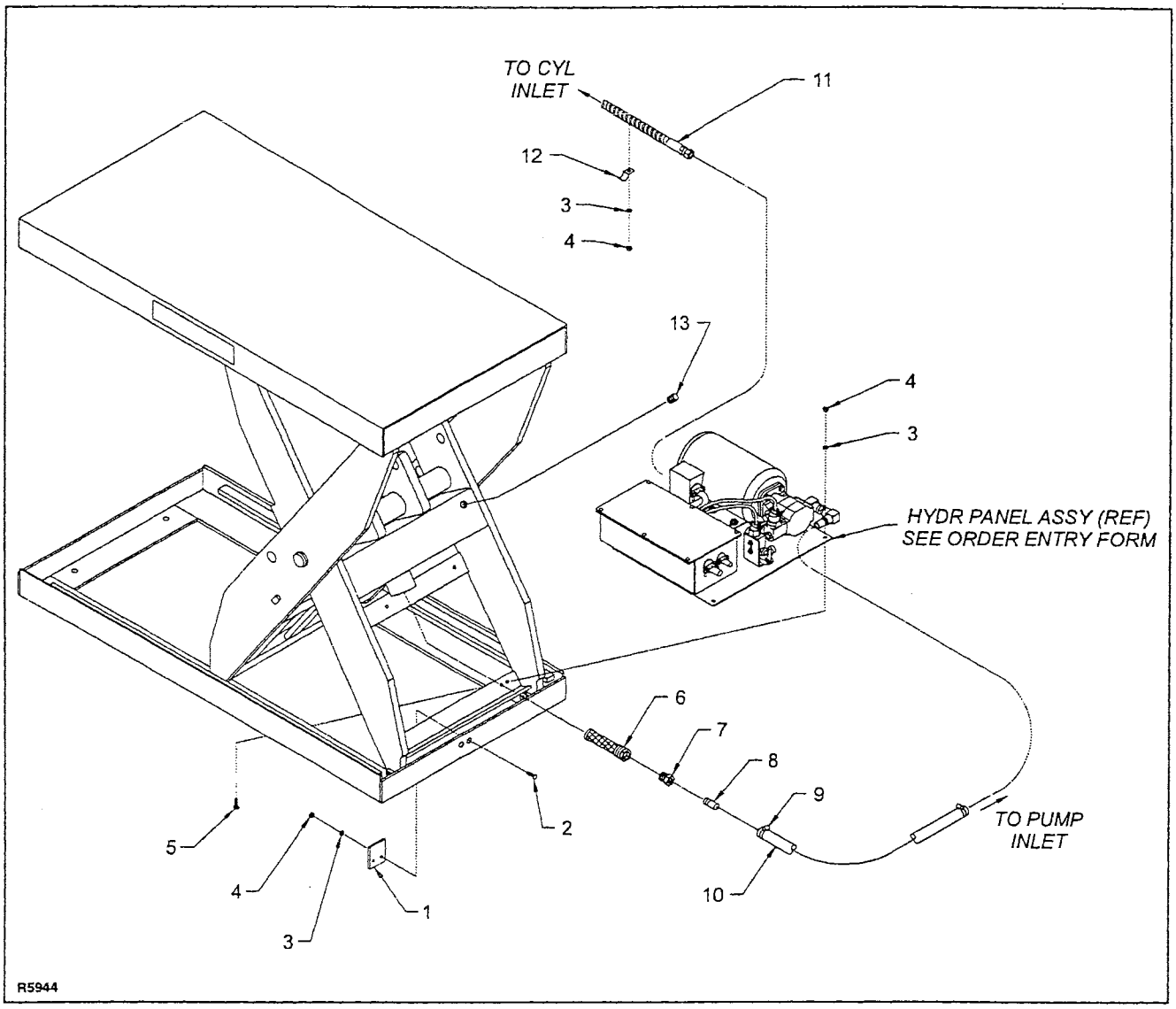


Figure 6-2. Hydraulic System (36/48/60" Tables).

7. Remove adapter (7) and nipple (8) from filter (6)
8. Install nipple (8) and adapter (7) into the replacement filter (6).
9. Install filter assembly (6) into the reservoir.
10. Install hose and hose clamp (9) onto the nipple
11. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

6-2. LOWERING SOLENOID VALVE.

Refer to figure 6-3 and remove the lowering solenoid valve from the pump assembly as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.

WARNING: Hydraulic system pressure must be relieved before removing hydraulic system components.
Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

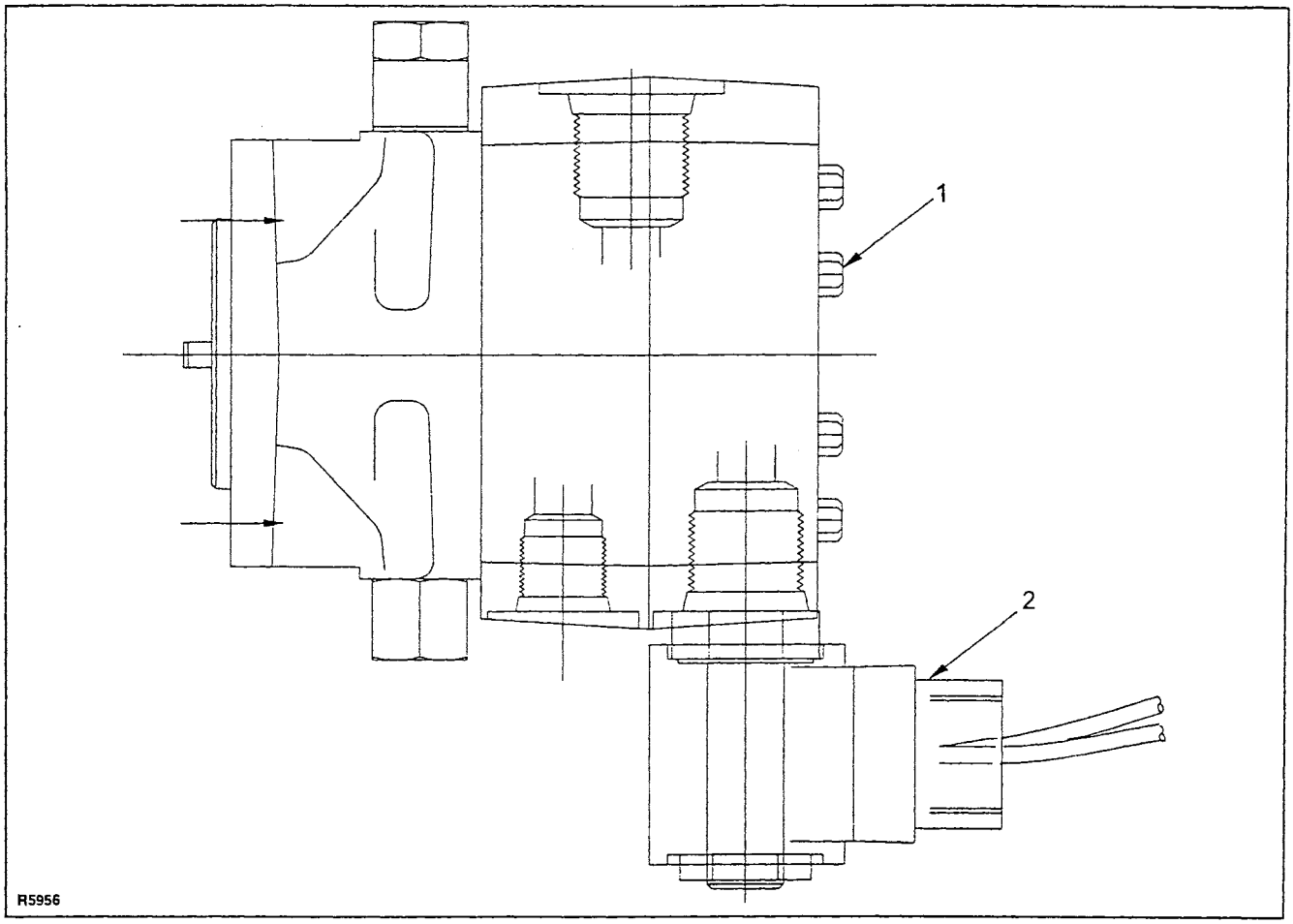


Figure 6-3. Pump Assembly.

4. Label and disconnect the lowering solenoid valve wiring harness.
5. Remove the large nut holding the solenoid coil onto the valve spool.
6. Remove the coil from the valve spool.
7. Remove the valve spool from the pump assembly.
8. Install the replacement valve spool with lubricated o-ring.
9. Install the replacement solenoid coil and retaining nut.
10. Connect the solenoid valve wiring harness and turn on electrical power.
11. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

6-3. LOWERING FLOW CONTROL VALVE.

NOTE: On newer units, the lowering flow control valve is an internal part of the lift cylinder. Refer to lift cylinder repair for removal of the flow control valve.

On older units, the lowering flow control valve is located between the end of the pump pressure hose and lift cylinder. Refer to Figure 9-5 and remove the flow control valve as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.

3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.

WARNING: Hydraulic system pressure must be relieved before removing hydraulic system components.

4. Disconnect the pump pressure hose at the lowering flow control valve (14).
5. Remove the flow control valve (14) and connector (1) from the lift cylinder fitting.
6. Assembly connector (1) onto the replacement flow control valve (14) for installation.
7. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

6-4. PUMP ASSEMBLY REMOVAL.

A defective hydraulic pump must be replaced as a complete unit.

6-4.1. Pump Assembly Removal (24" Table).

Refer to figure 6-4 and remove the pump assembly as follows:

WARNING: Hydraulic system pressure must be relieved before removing hydraulic system components.
Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Drain the hydraulic oil reservoir into a suitable container.
5. Label and disconnect the lowering solenoid valve wiring harness (20) and drive motor wiring (2 & 3).
6. Remove clamp (12) and suction hose (13).
7. Remove pressure hose from fitting (17).
8. Remove limit switch (7) from pump mounting panel.
9. Remove four pump mounting panel bolts and motor/pump assembly.
10. To separate the pump from the motor, remove the four hex-head cap screws that connect the pump to the motor end housing.

NOTE: When reassembling the pump to the motor, always use a new gasket.

11. After reassembly, refer to Section 7, Electrical Components, for limit switch adjustment.
12. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

6-4.2. Pump Assembly Removal (36/48/60" Tables).

Refer to figure 6-5 and remove the pump assembly as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.
Hydraulic system pressure must be relieved before removing hydraulic system components.
Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Drain the hydraulic oil reservoir into a suitable container.
5. Remove nut and solenoid coil (11).
6. Remove clamp (15) and hose (16).
7. Remove pump pressure hose from fitting (10).
8. Label and disconnect the drive motor wiring harness (2).
9. Remove four hex-head screws, washers, lockwashers, and hex nuts (6, 7, 8, & 9).
10. Remove the motor and pump assembly.
11. To separate the pump from the motor, remove the four hex-head cap screws that connect the pump to the motor end housing.

NOTE: When reassembling the pump to the motor, always use a new gasket.

12. After reassembly, refer to Section 7, Electrical Components, for limit switch adjustment.
13. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

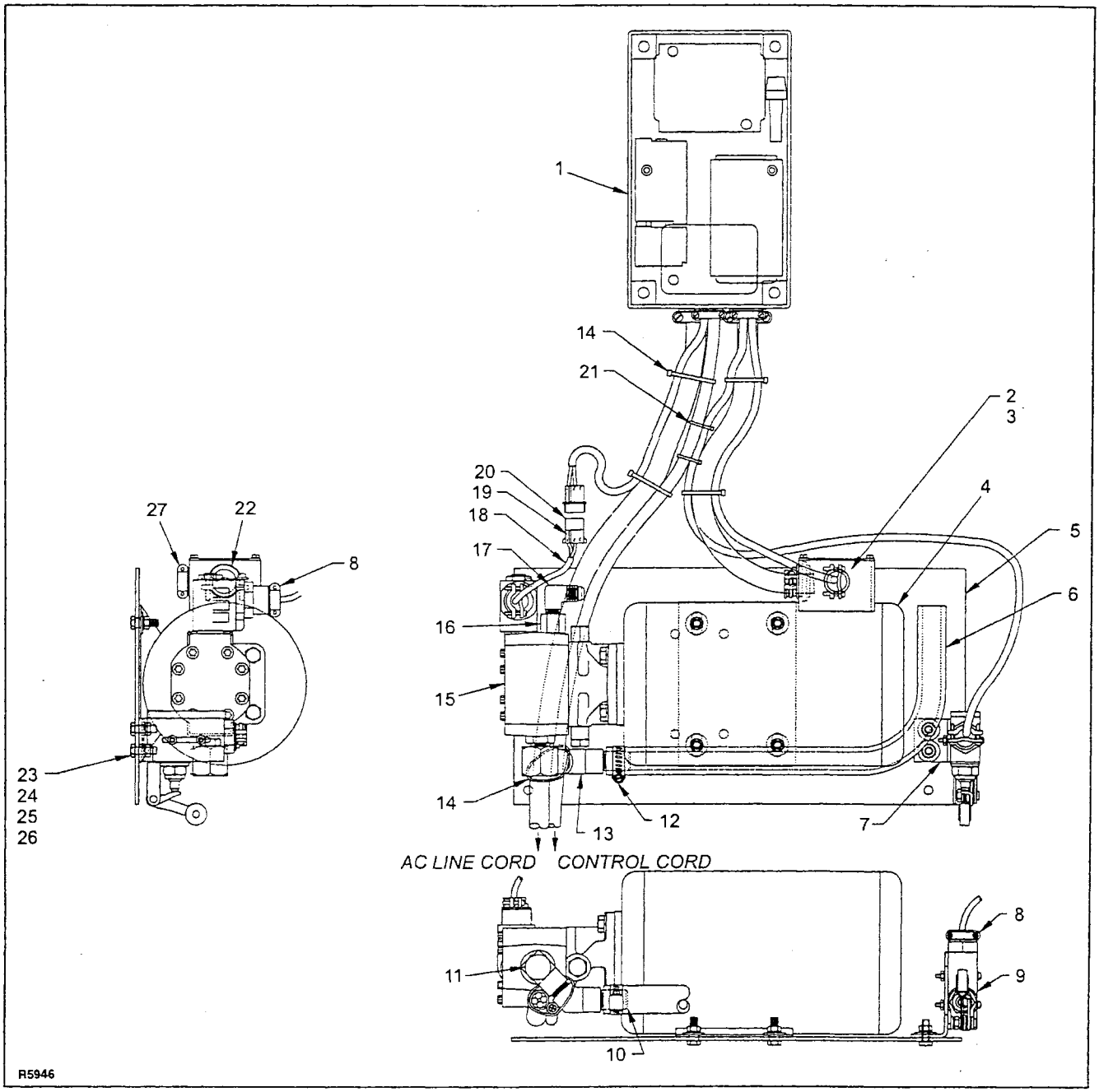


Figure 6-4. Lift Table Panel Assembly (24" Table).

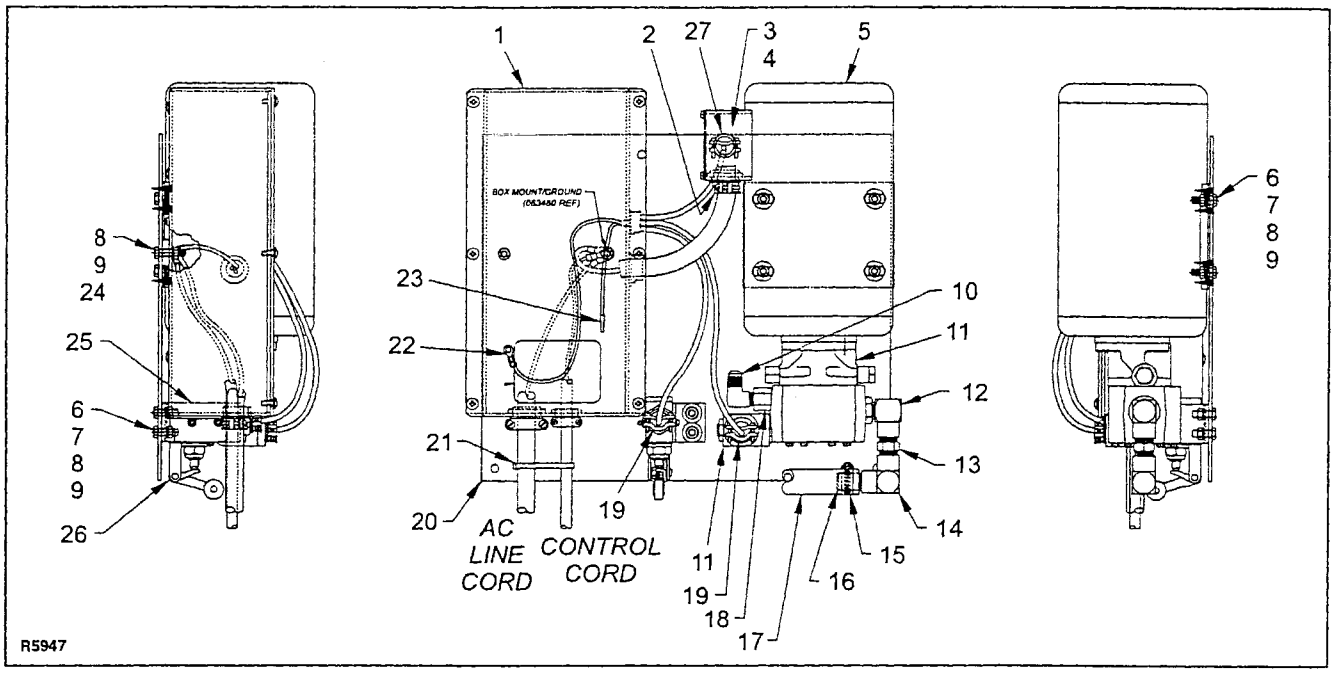


Figure 6-5. Lift Table Panel Assembly (36/48/60" Tables)

6-5. LIFT CYLINDER REPAIR.

Refer to Section 8 for lift cylinder removal. Refer to Figures 6-6 or 6-7 and repair the lift cylinder as follows:

CAUTION: To prevent damage, use proper pipe clamp vise, the cylinder will be distorted if the vise is tightened to much.

1. Secure lift cylinder assembly in a vise and remove two hex-head cap screws (8), lock-washers (7), and gland retainer (4).
2. Remove snap-ring (2).
3. Pull out cylinder-rod (3), gland (11), and piston (15).
4. Remove flow regulator valve (17) if equipped.
5. Remove lift cylinder tube (1) from vise.

CAUTION: To prevent damaging the finish on the cylinder-rod, use proper pipe clamp vise with non-marring jaws.

6. Secure cylinder-rod (3) in vise.
7. Remove gland nut (16) and piston (15).
8. Remove cylinder-rod (3) from vise.
9. Remove gland (11) and gland retainer (4) from cylinder-rod (3).

NOTE: Before reassembling the hydraulic lift cylinder, it is recommended that the wear-rings (9, 14), ring-wiper (10), o-ring (12), seal (13), and gland-nut (16) be replaced.

10. Install new o-ring (12), seal (13), and wear-ring (14) in piston (15).
11. Install new wear-ring (9) and ring-wiper (10) in gland (11).
12. Install gland retainer (4) and gland (11) fully onto cylinder-rod (3).

CAUTION: To prevent damaging the finish on the cylinder-rod, use proper pipe clamp vise with non-marring jaws.

13. Secure cylinder-rod (3) is vise.
14. Install piston (15) and new gland nut (16).

CAUTION: To prevent damage, use proper pipe clamp vise, the cylinder will be distorted if the vise is tightened to much.

15. Install flow regulator valve (17) if equipped.
16. Lubricate inside the lift cylinder tube (1) with clean hydraulic oil and install cylinder-rod assembly.
17. Install snap-ring (2), gland retainer (4), lock-washers (7), and hex-head cap screws (8).
18. Remove cylinder assembly from vise.

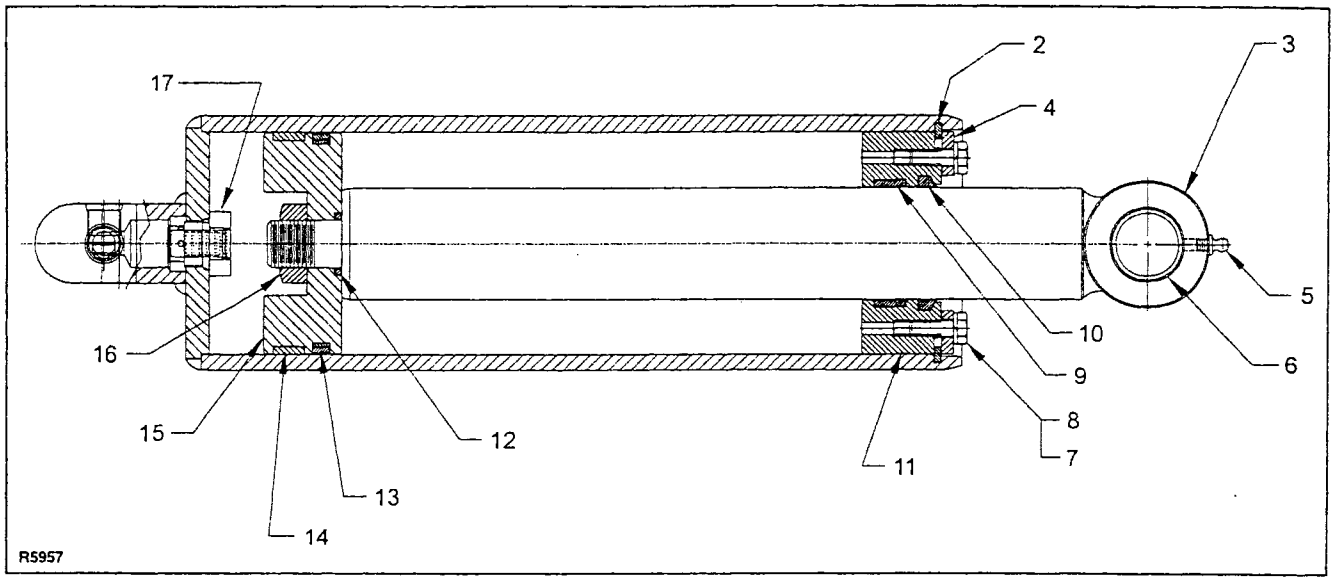


Figure 6-6. Lift Cylinder with Internal Flow Regulator

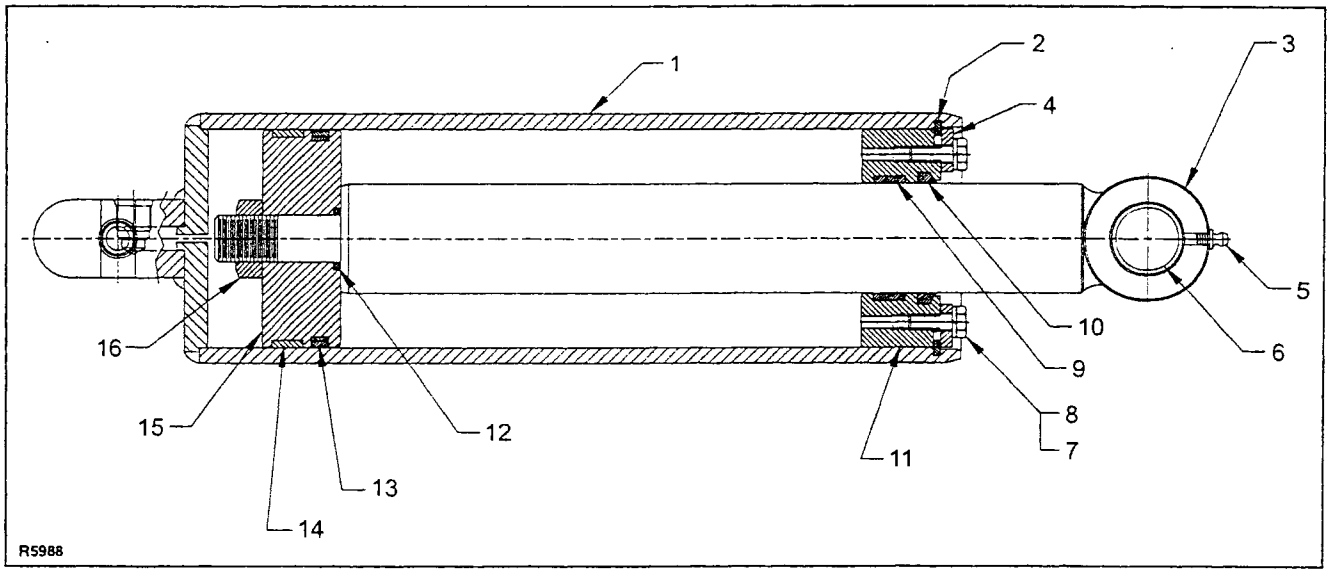


Figure 6-7. Lift Cylinder without Internal Flow Regulator

NOTES

SECTION 7
ELECTRICAL COMPONENTS

7-1. HYDRAULIC PANEL ASSEMBLY REMOVAL.

7-1.1. Hydraulic Panel Assembly Removal (24" Table).

Refer to figure 7-1 and remove the hydraulic panel assembly as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.
Hydraulic system pressure must be relieved before removing hydraulic system components.
Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.

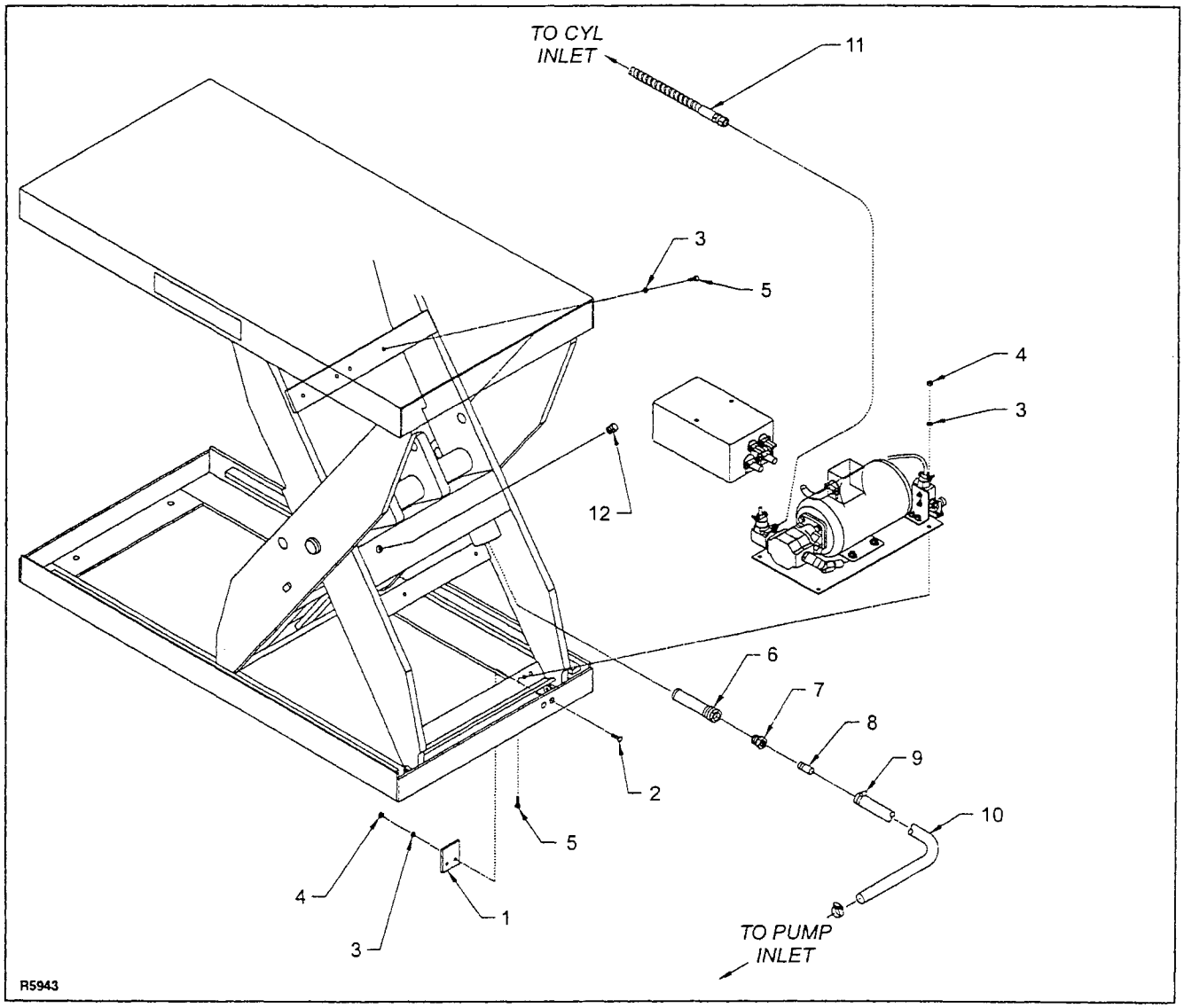


Figure 7-1. Hydraulic System (24" Table)

2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Drain the hydraulic oil reservoir into a suitable container.
5. Label and disconnect the lowering solenoid valve wiring harness and drive motor wiring.
6. Remove the oil suction hose (10) and clamp (9) from the pump.
7. Remove pressure hose (11) from pump outlet fitting.
8. Remove limit switch from pump mounting panel.
9. Remove the hydraulic panel assembly by removing four hex-head cap screws (5), lock-washers (3), and hex-nuts (4).
10. After reassembly, refer to this section for limit switch adjustment.
11. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

7-1.2. Hydraulic Panel Assembly Removal (36/48/60" Tables).

Refer to figure 7-2 and remove the hydraulic panel assembly as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.
Hydraulic system pressure must be relieved before removing hydraulic system components.
Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Drain the hydraulic oil reservoir into a suitable container.
5. Remove six screws, lock-washers, and the electrical box cover.
6. Label and disconnect the AC-electrical wiring and control electrical wiring at the hydraulic panel assembly box.
7. Remove clamp (9) and suction hose (10) from the pump.
8. Remove pressure hose (11) from the pump outlet fitting.
9. Remove the hydraulic panel assembly by removing four hex-head cap screws (5), lock-washers (3), and hex nuts (4).
10. After reassembly, refer to this section for limit switch adjustment.
11. Refer to Section 4, Planned Maintenance, for hydraulic oil fill and check procedures.

7-2. LIFT LIMIT SWITCH REMOVAL.

7-2.1. Lift Limit Switch Removal (24" Table).

Refer to figure 7-3 and remove the lift limit switch as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.
Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Remove screws and cover from the electrical box assembly.
5. Label and disconnect the lift limit switch wires.
6. Remove wire ties (21) securing the limit switch wiring harness.
7. Loosen the strain relief clamp and remove the limit switch wiring harness from the contactor box.
8. Remove lift limit switch (9) by removing two hex-head cap screws (23), lock-washers (24), washers (25), and hex-nuts (26).
9. After reassembly, refer to this section for lift limit switch adjustment.

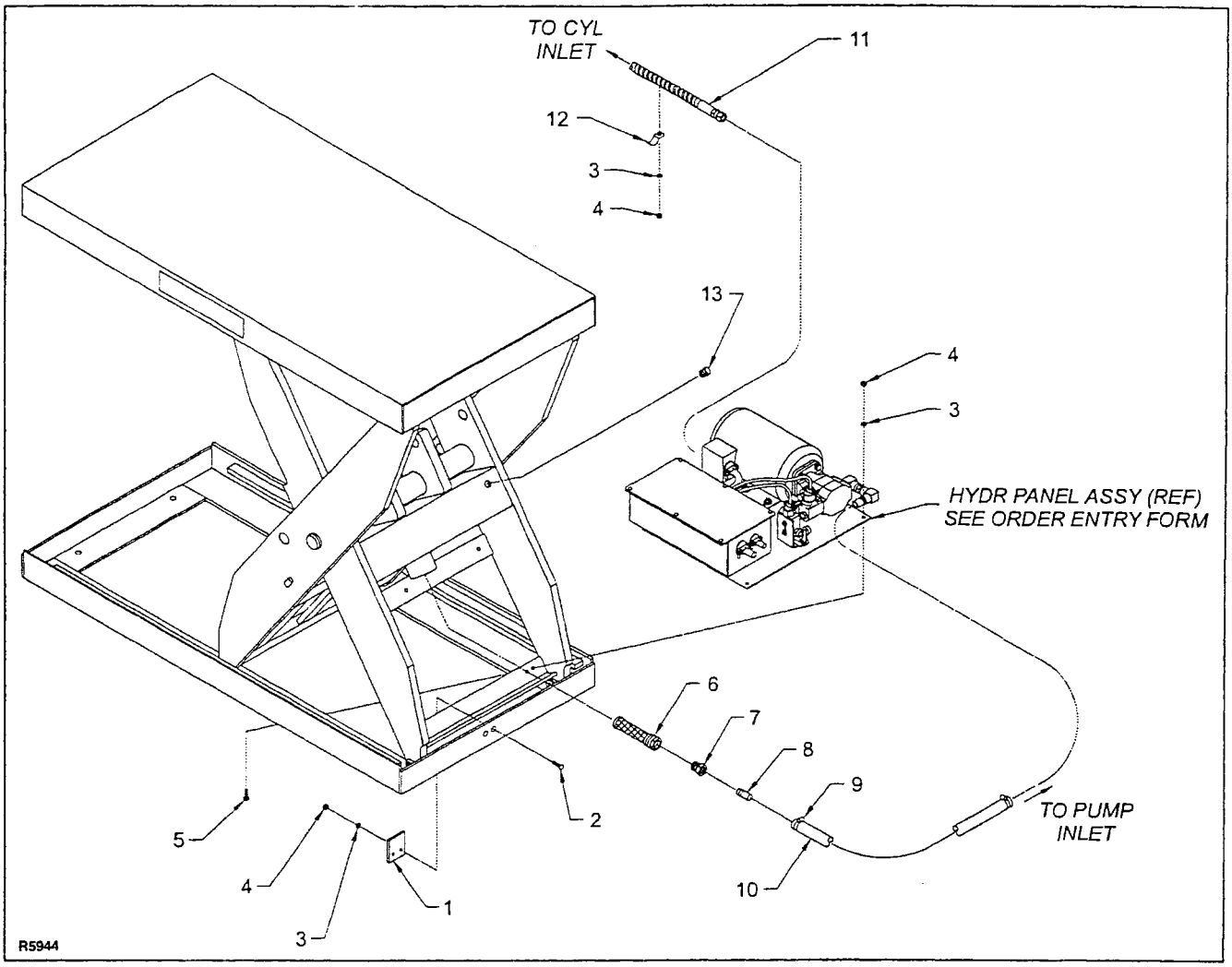


Figure 7-2. Hydraulic System (36/48/60" Tables)

7-2.2. Lift Limit Switch Removal (36/48/60" Tables).

Refer to figure 7-4 and remove the lift limit switch as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions. Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Remove screws and cover from the electrical box assembly.
5. Label and disconnect the lift limit switch wires.
6. Remove the strain relief clamp and the limit switch wiring harness from the contactor box.
7. Remove lift limit switch (26) by removing two hex-head cap screws (6), washers (7), lock-washers (8), and hex-nuts (9).
9. After reassembly, refer to this section for lift limit switch adjustment.

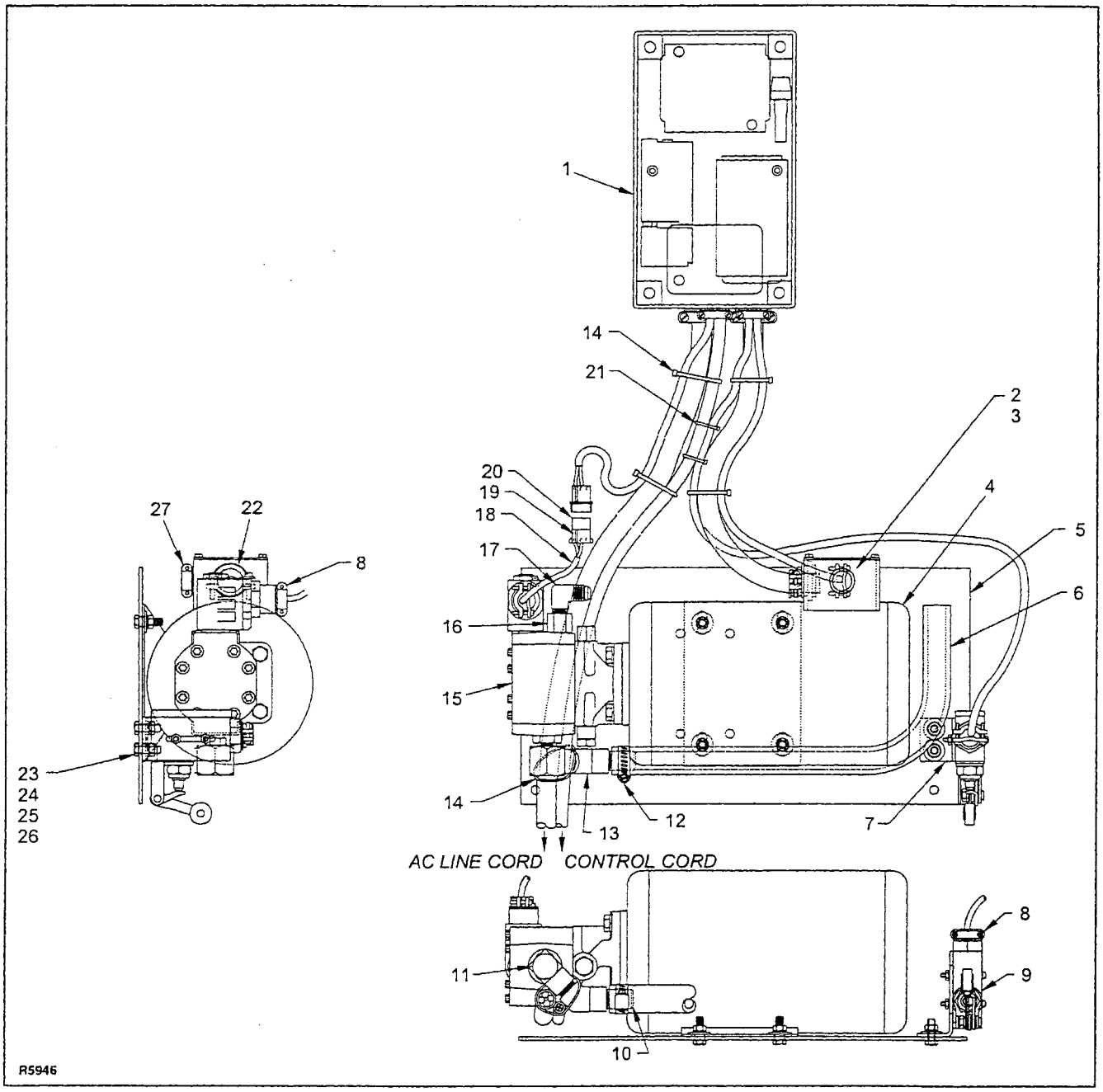


Figure 7-3. Lift Table Panel Assembly (24" Table)

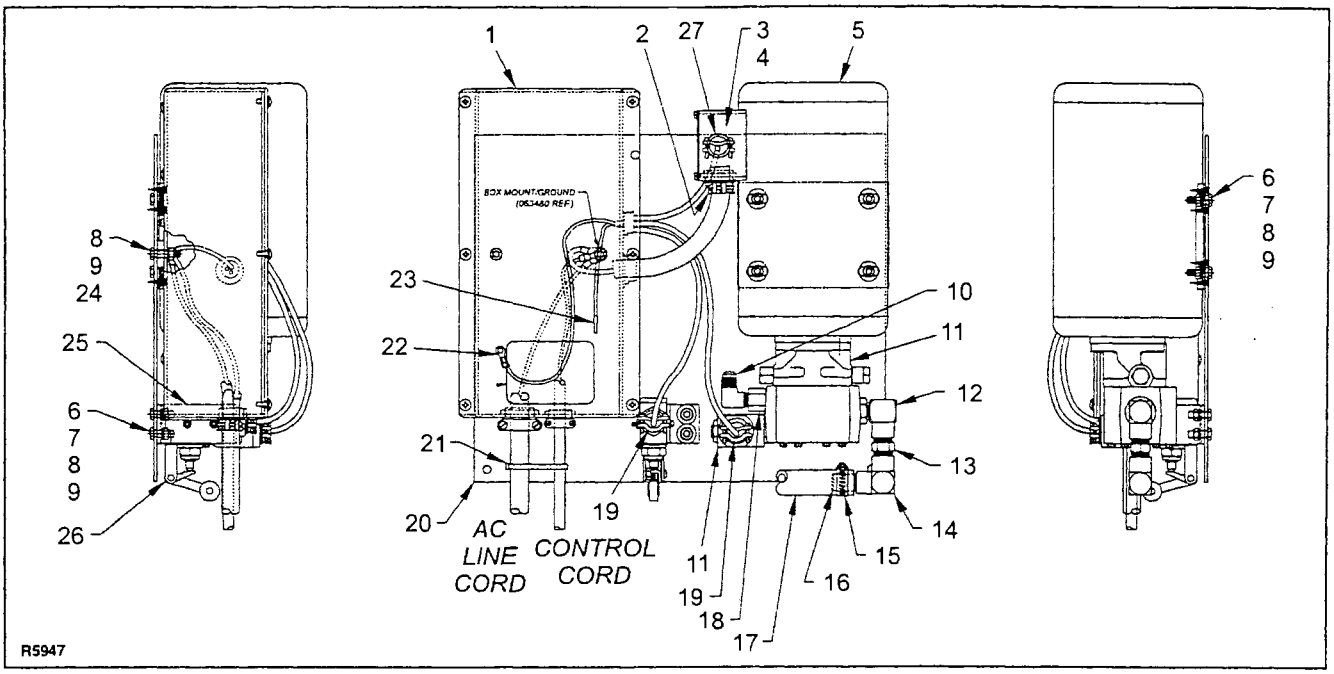


Figure 7-4. Lift Table Panel Assembly (36/48/60" Tables)

7-3. LIFT LIMIT SWITCH ADJUSTMENT.

At times it is necessary to change vertical travel so that the platform top levels with a surrounding surface or structure. By adjusting the limit switch components, vertical travel can be changed by about six inches. To adjust the lift limit switch, refer to figure 7-5 and adjust the limit switch as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions.

1. Raise the platform to the desired height.
2. Position jack stands or blocking underneath lift table to prevent injury during the following adjustments.
3. Loosen hex nut.
4. Position arm and roller flat against base activator plate.
5. Press lever against switch until switch is fully depressed.
6. While holding arm and lever in position, tighten hex-nut.
7. Remove jack stands or blocking and operate table normally through a complete lift and lower cycle to check table height. Adjust as necessary.

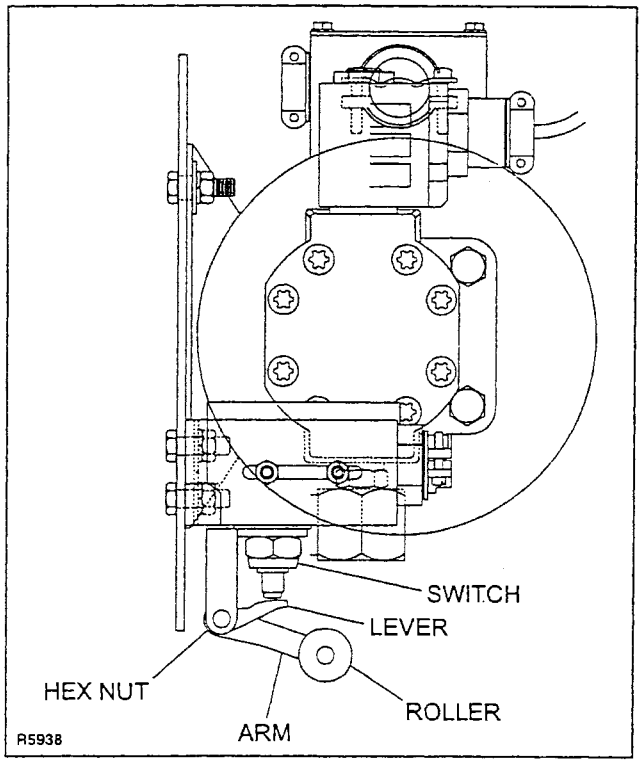


Figure 7-5. Lift Limit Switch Adjustment

7-4. ELECTRICAL BOX REMOVAL.

7-4.1. Electrical Box Removal (24" Table).

The electrical box is mounted to the upper cross-brace frame. Refer to figures 9-3, 9-6, and 9-8 for identification of parts and assemblies. Remove the electrical box as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions. Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Remove six screws and the electrical box cover.
5. Label and disconnect wiring harnesses for the lift limit switch, lowering solenoid valve, pump drive motor, AC-electrical, and lift controls.
6. Remove the strain relief clamps and the wiring harnesses from the electrical box.
7. Remove the electrical box by removing two hex-head cap screws from the back of the box.

7-4.2. Electrical Box Removal (36/48/60" Tables).

The electrical box is mounted with the pump drive motor on the hydraulic/electrical panel assembly. Refer to figures 9-4, 9-7, and 9-9 for identification of parts and assemblies. Remove the electrical box as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions. Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Remove six screws and the electrical box cover.
5. Label and disconnect wiring harnesses for the lift limit switch, lowering solenoid valve, pump drive motor, AC-electrical, and lift controls.
6. Remove the strain relief clamps and the wiring harnesses from the electrical box.
7. Remove the electrical box by removing two hex-head cap screws, lock-washers, and hex-nuts from the back of the box.

7-5. ELECTRICAL BOX DISASSEMBLY.

7-5.1. Electrical Box Disassembly (24" Table, 115V, Single Phase, 60Hz).

Refer to Figure 9-8 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (30), AC-contactor (31), and capacitor.
2. Using a screwdriver, pry the tab on the overload relay (30) and AC-contactor (31) and remove from the mounting rail (7). Refer to Figure 7-6 and 7-7.
3. Separate overload relay (30) and AC-contactor (31).
4. Remove the screws (5) and lock-washers (6) which fasten mounting rail (7). Remove the mounting rail.
5. Lift and remove the capacitor.
6. After reassembly adjust the overload relay setting to 22 Amps.

7-5.2. Electrical Box Disassembly (36/48/60" Table, 115V, Single Phase, 60Hz).

Refer to Figure 9-9 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (24), AC-contactor (21), and capacitor.
2. Using a screwdriver, pry the tab on the overload relay (24) and remove the relay from the mounting rail. Refer to Figure 7-6.
3. Remove the screws (33) and lock-washers (32) which fasten mounting rail (34). Remove the mounting rail.
4. Remove screws (29), lock washers (26) and washers (28). Remove AC-contactor (21).
5. Lift and remove the capacitor.
6. After reassembly adjust the overload relay setting to 22 Amps.

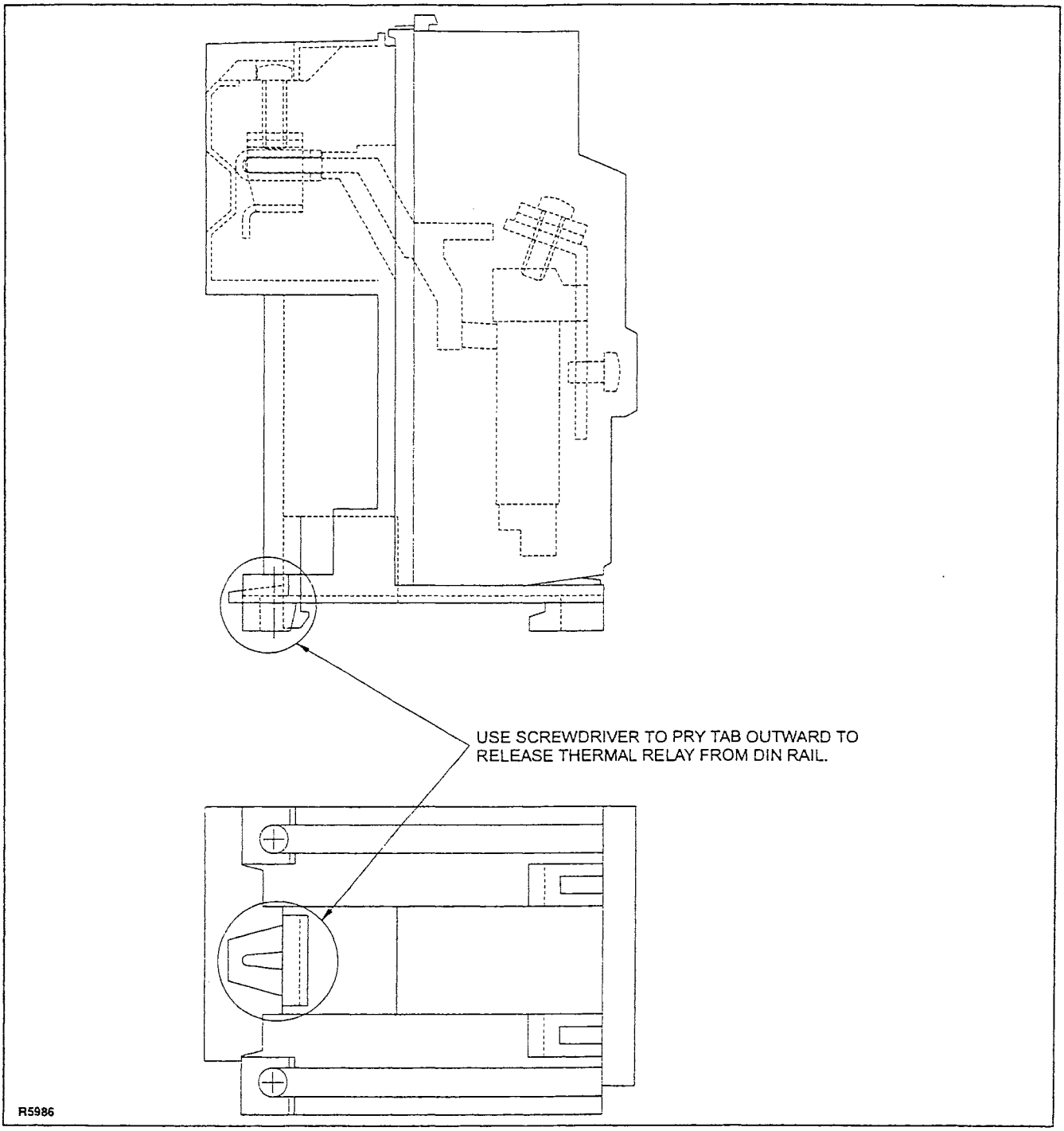


Figure 7-6. Overload Relay

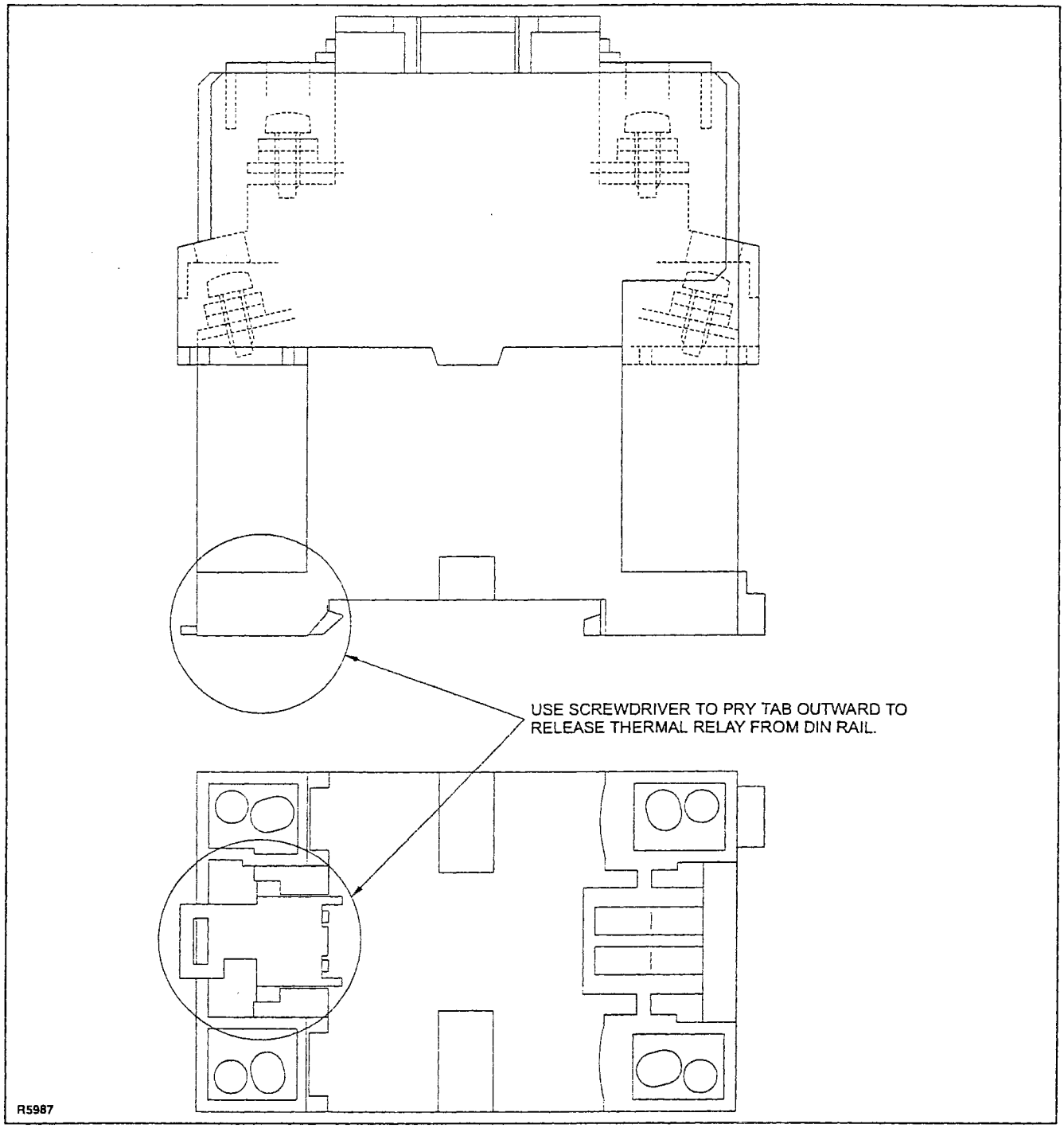


Figure 7-7. AC-Contactor (24" Tables Only)

7-5.3. Electrical Box Disassembly (24" Table, 230V, Single Phase, 60Hz).

Refer to Figure 9-10 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (32), AC-contactor (33), transformer (5), and capacitor.
2. Using a screwdriver, pry the tab on the overload relay (32) and AC-contactor (33) and remove from the mounting rail (13). Refer to Figure 7-6 and 7-7.
3. Separate overload relay (32) and AC-contactor (33).
4. Remove the screws (12) and lock-washers (11) which fasten mounting rail (13). Remove the mounting rail.
5. Remove screws (6), lock washers (8) and washers (7) and remove transformer (5).
6. Lift and remove the capacitor.
7. After reassembly adjust the overload relay setting to 11 Amps.

7-5.4. Electrical Box Disassembly (36/48/60" Table, 230V, Single Phase, 60Hz).

Refer to Figure 9-11 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (25), AC-contactor (22), transformer (4) and capacitor.
2. Using a screwdriver, pry the tab on the overload relay (25) and remove the relay from the mounting rail. Refer to Figure 7-6.
3. Remove the screws (34) and lock-washers (33) which fasten mounting rail (35). Remove the mounting rail.
4. Remove screws (30), lock washers (27) and washers (29). Remove AC-contactor (22).
5. Remove screws (26), lock washers (27) and washers (29). Remove transformer (4).
6. Lift and remove the capacitor.
7. After reassembly adjust the overload relay setting to 11 Amps.

7-5.5. Electrical Box Disassembly (24" Table, 230V, Three Phase, 60Hz).

Refer to figures 9-12 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (31), AC-contactor (32), and transformer (5).
2. Using a screwdriver, pry the tab on the overload relay (31) and AC-contactor (32) and remove from the mounting rail (13). Refer to Figure 7-6 and 7-7.
3. Separate overload relay (31) and AC-contactor (32).
4. Remove the screws (12) and lock-washers (11) which fasten mounting rail (13). Remove the mounting rail.
5. Remove screws (8), lock washers (6) and washers (7). Remove transformer (5).
6. After reassembly adjust the overload relay setting to 5 Amps.

7-5.6. Electrical Box Disassembly (36/48/60" Table, 230V, Three Phase, 60Hz).

Refer to figures 9-13 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (25), AC-contactor (21), and transformer (4).
2. Using a screwdriver, pry the tab on the overload relay (25) and remove the relay from the mounting rail (34). Refer to Figure 7-6.
3. Remove the screws (33) and lock-washers (32) which fasten mounting rail (34). Remove the mounting rail.
4. Remove screws (29), lock washers (26) and washers (28). Remove AC-contactor (21).
5. Remove screws (35), lock washers (26) and washers (28). Remove transformer (4).
6. After reassembly adjust the overload relay setting to 5 Amps.

7-5.7. Electrical Box Disassembly (24" Table, 460V, Three Phase, 60Hz).

Refer to figures 9-14 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (33), AC-contactor (32), and transformer (5).
2. Using a screwdriver, pry the tab on the overload relay (33) and AC-contactor (32) and remove from the mounting rail (13). Refer to Figure 7-6 and 7-7.
3. Separate overload relay (33) and AC-contactor (32).

4. Remove the screws (12) and lock-washers (11) which fasten mounting rail (13). Remove the mounting rail.
5. Remove screws (8), lock washers (6) and washers (7). Remove transformer (5).
6. After reassembly adjust the overload relay setting to 2.6 Amps.

7-5.8. Electrical Box Disassembly (36/48/60" Table, 460V, Three Phase, 60Hz).

Refer to figures 9-15 for identification of parts and disassemble the electrical box as follows:

1. Label and disconnect wiring/terminal rings for the overload relay (24), AC-contactor (20), and transformer (4).
2. Using a screwdriver, pry the tab on the overload relay (24) and remove the relay from the mounting rail (34). Refer to Figure 7-6.
3. Remove the screws (33) and lock-washers (32) which fasten mounting rail (34). Remove the mounting rail.
4. Remove screws (29), lock washers (26) and washers (28). Remove AC-contactor (20).
5. Remove screws (25), lock washers (26) and washers (28). Remove transformer (4).
6. After reassembly adjust the overload relay setting to 3 Amps.

7-6. HAND HELD SWITCH ASSEMBLY REMOVAL.

Refer to figure 7-8 and remove the hand held switch assembly as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions. Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.

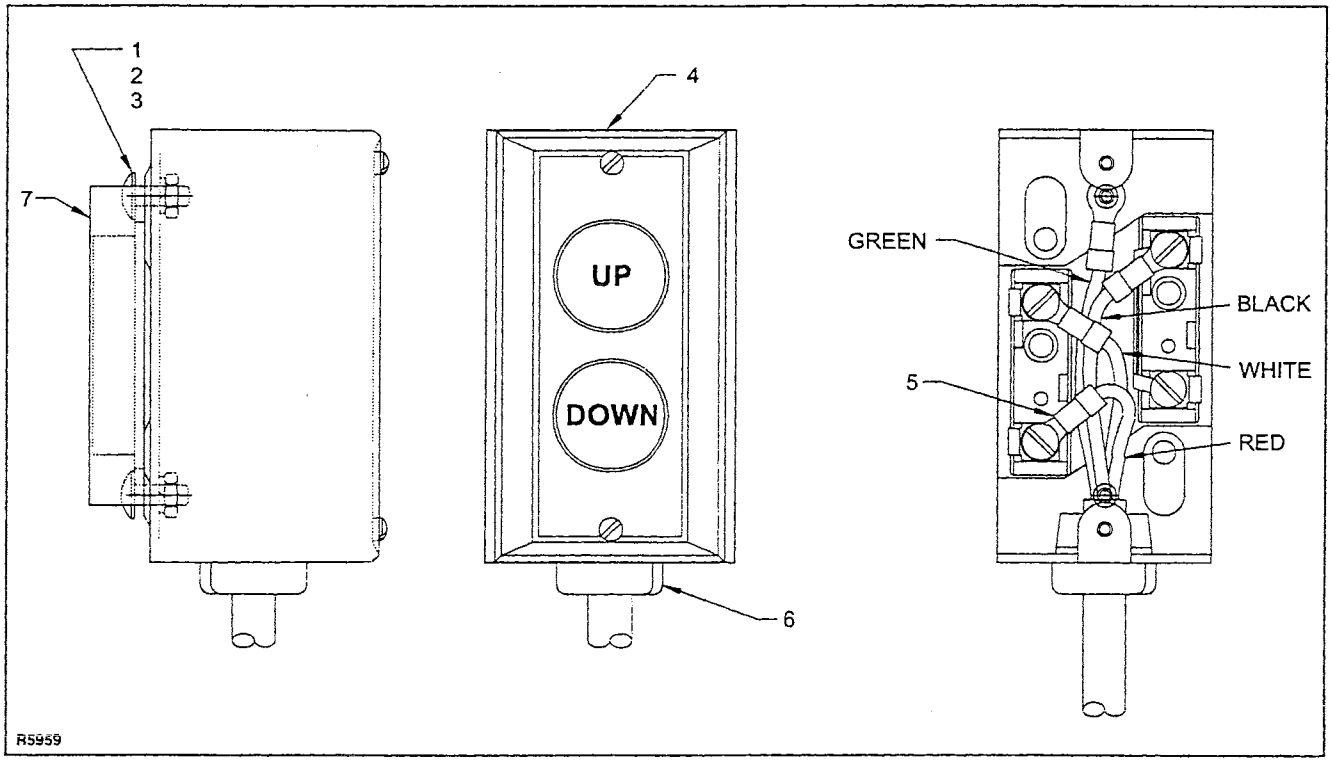


Figure 7-8. Hand Held Switch Assembly

4. Remove two screws (7) and cover (8).
5. Label and disconnect terminal rings (5).
6. Remove strain relief bushing (6).
7. Remove control cable (10) from switch assembly (4).

7-7. FOOT SWITCH ASSEMBLY REMOVAL.

Refer to figure 7-9 and remove the foot switch assembly as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions. Ensure that all electrical power is disconnected and locked out prior to performing any wiring service.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Remove mounting hardware from plate (4).
5. Remove strain relief clamp (5).
6. Remove screws (6) and cover (7).
7. Label and disconnect terminal rings and wire nut (8).
8. Remove control cable (9) from foot switch assembly (2 or 3).

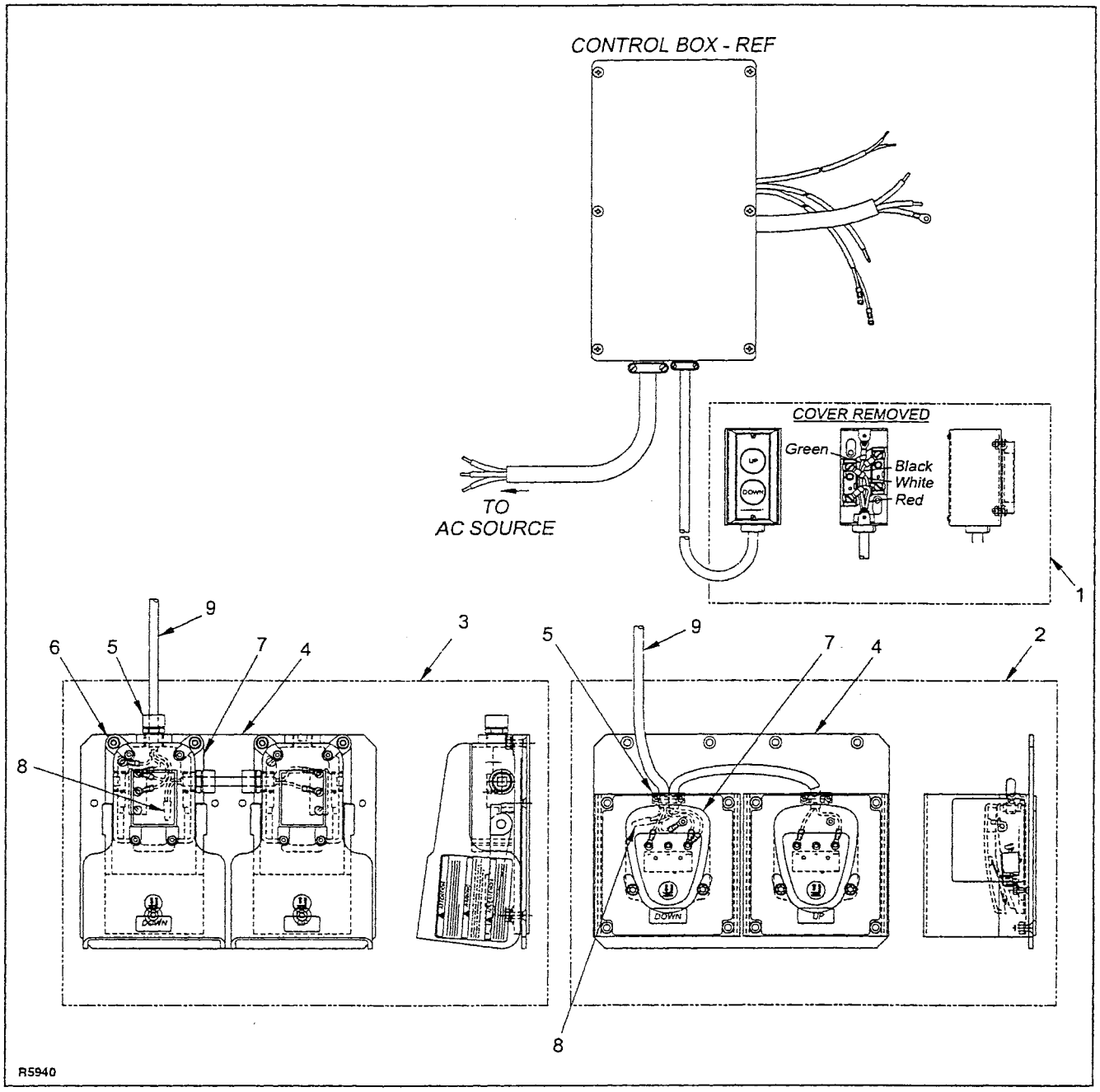


Figure 7-9. Foot Switch Assembly

SECTION 8
ELEVATION SYSTEM SERVICING

8-1. LIFT CYLINDER REMOVAL.

The removal of lift cylinders is dependent upon the model, size, and configuration of the lift table. Lift tables are available with one, two, or three cylinders. Refer to figure 8-1 and remove the lift cylinders as follows:

WARNING: Improper operation of the lift table may result in operator injury or load and/or lift table damage. Refer to Section 3 for proper operational instructions. Hydraulic system pressure must be relieved before removing hydraulic system components.

1. Raise the platform.
2. Swivel both maintenance safety bars down against the base.
3. Lower the platform until the safety bars contact the end of the base and the platform does not lower any further.
4. Drain the hydraulic oil reservoir into a suitable container.
5. Remove pressure hoses and connector (1, 14).
6. Remove any tube assemblies (9, 10, 11, 13).
7. Remove hex-head bolts (15) and jam-nuts (16).
8. Remove socket head cap screws (6) and lockwashers (7).
9. Support cylinders to prevent tipping or falling while completing remainder of removal procedures.
10. Remove set-screws (17) and cylinder shaft (5).
11. Remove cylinders (4) from base assembly.
12. Remove all adapters (8), plugs (3), and fittings (2, 12) for installation into replacement cylinders.

8-2. ELEVATION SYSTEM.

Refer to figure 9-2 for part identification and replacement parts for elevation system components.

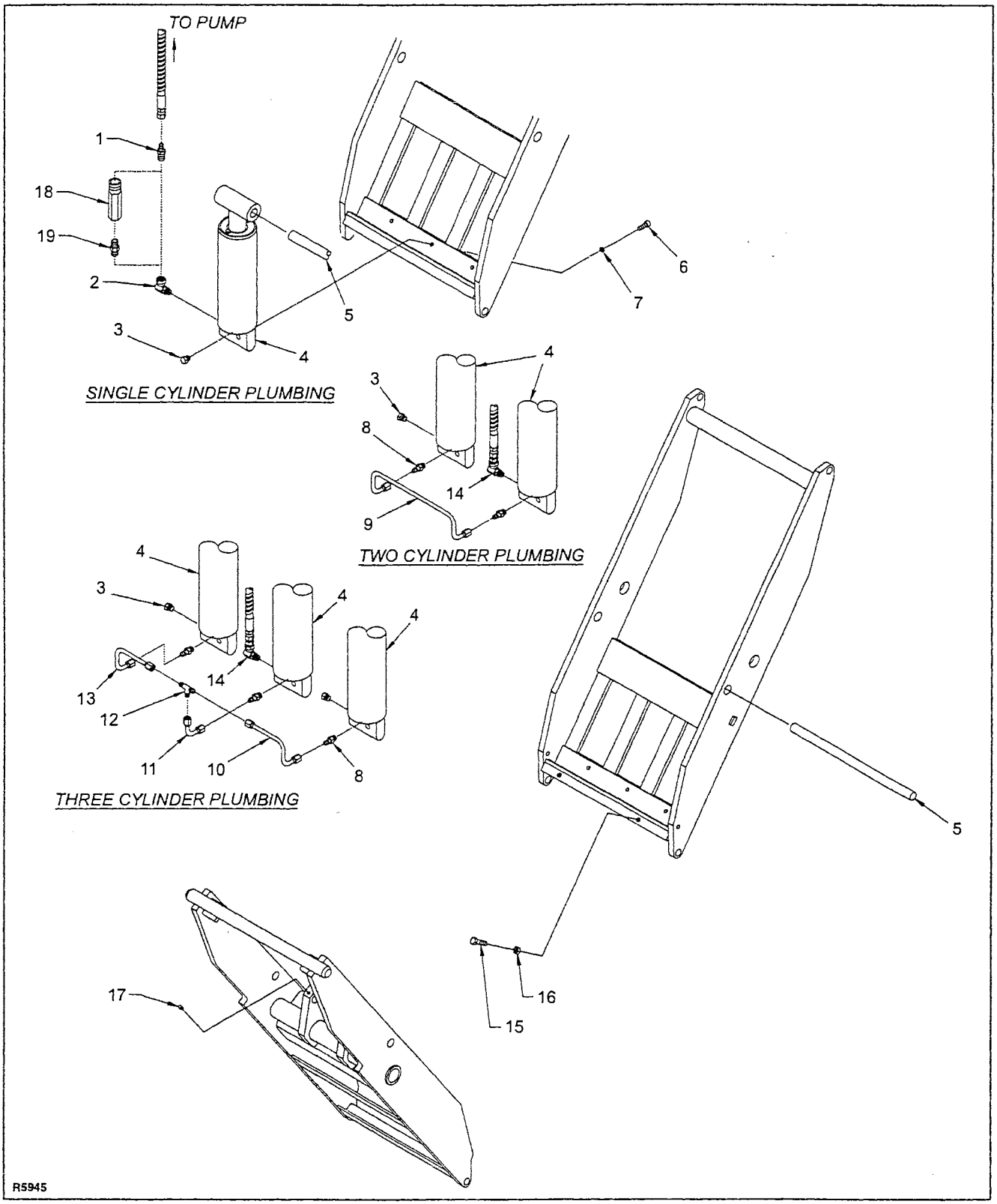


Figure 8-1. Lift Cylinder Installation

SECTION 9
ILLUSTRATED PARTS BREAKDOWN

Following is an illustrated parts breakdown of assemblies and parts associated with the Lift Table.

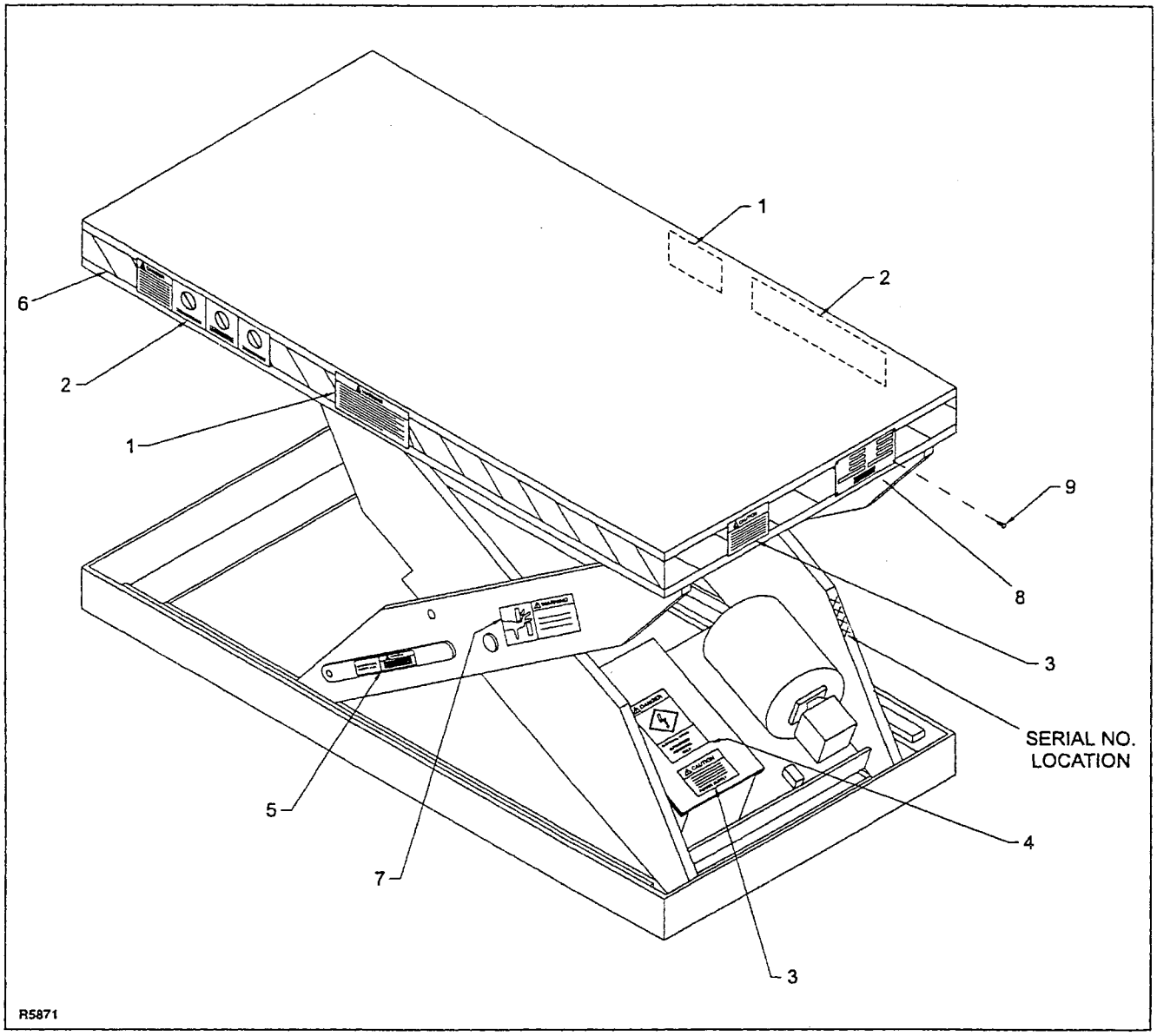


Figure 9-1. Decals and Paint

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506026 *	DECAL KIT	1
1	056657	. WARNING	2
2	056656	. DANGER	2
3	056661-01	. CAUTION, 115V, 1Ø, 60HZ	2
3	056661-02	. CAUTION, 230V, 1Ø, 60HZ	2
3	056661-03	. CAUTION, 230V, 3Ø, 60HZ	2
3	056661-04	. CAUTION, 460V, 3Ø, 60HZ	2
4	056655	. DANGER	1

INDEX NO.	PART NO.	PART NAME	NO. REQD.
5	056658	. WARNING	2
6	076104	STRIPE TAPE	AR
7	056663	WARNING	2
8	061331A	NAME PLATE	1
9	066050	SCREW	4
—	055824	BLUE TOUCH-UP PAINT	
—	908082	YELLOW TOUCH-UP PAINT	

* DO NO USE DECAL 056660 CONTAINED IN DECAL KIT 506026 UNLESS LIFT TABLE IS EQUIPPED WITH "TIP UP" TOP OPTION.

NOTES

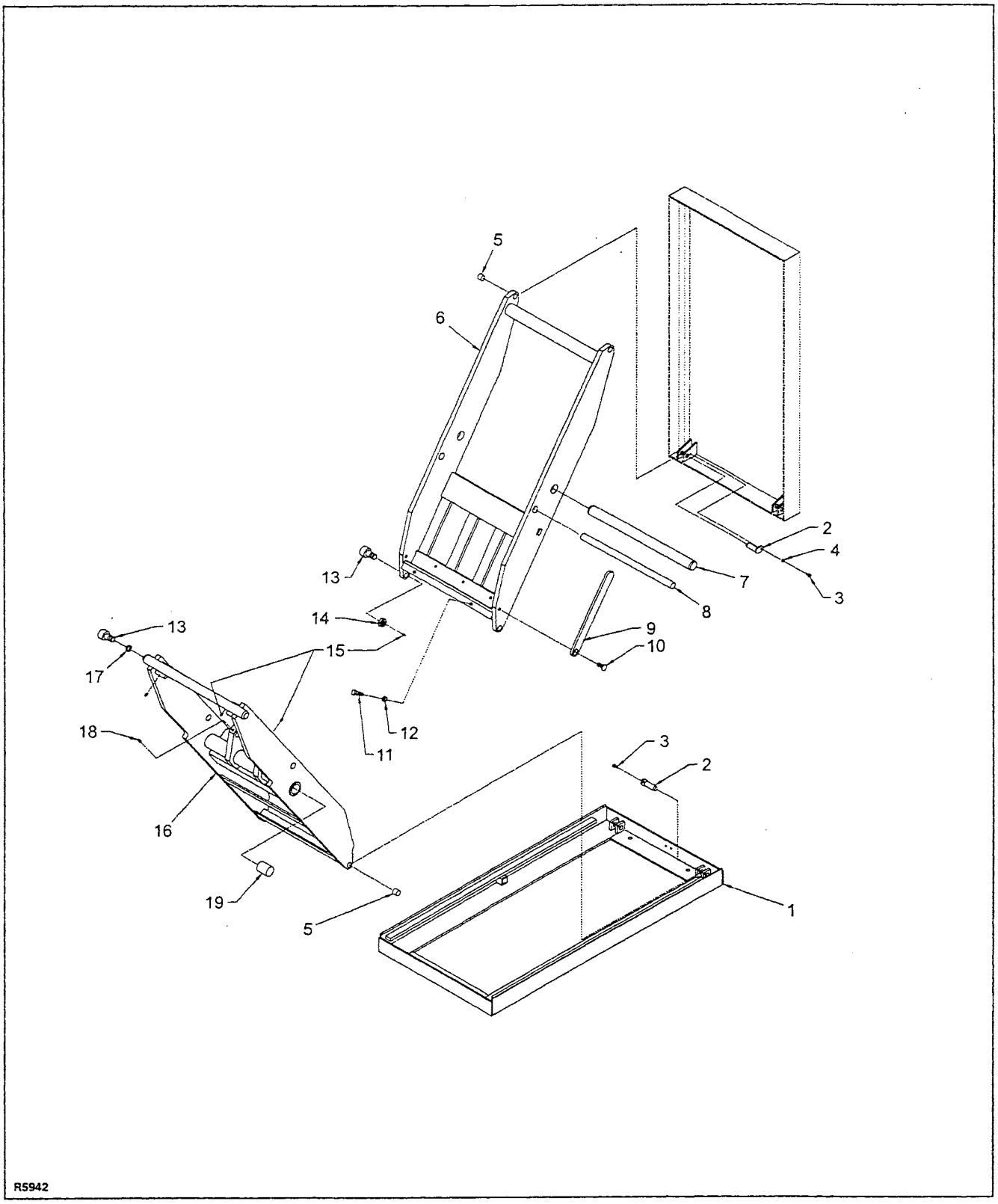


Figure 9-2. Elevation System

INDEX NO.	PART NAME	LIFT TABLE (INCHES)				NO. REQD.
		24 PART NO.	36 PART NO.	48 PART NO.	60 PART NO.	
—	LIFT TABLE ASSY	506070	506030	506040	506050	1
1	. BASE-WELDMENT	506003-07	506003-05	506003-04	506003-06	1
2	. PIN-WELDMENT	506014-01	506014-01	506014-01	506014-01	4
3	. SCREW, HD 1/4-20 X1/2	063495	063495	063495	063495	4
4	. WASHER-LOCK, SPLIT, 1/4	077209	077209	077209	077209	4
5	. BEARING-SLEEVE	052958-01	052958-01	052958-04	052958-04	4
6	. ARM-WELDMENT, OUTER	506008-06	506008-01	506008-04	506008-05	1
7	. SHAFT-PIVOT	404071-01	404071-01	404071-02	404071-02	1
8	. SHAFT-CYLINDER	404068-01	404068-01	404068-02	404068-02	1
9	. BAR, SAFETY	404067-03	404067-01	404067-02	404067-02	2
10	. SCREW CAP, HEX, FLT, 1/2-13 X 1 1/4	069716	069716	069716	069716	2
11	. SCREW-HEX CAP, 1/2-13 X 11/2	064709	064709	064709	064709	2
12	. NUT, HEX, JAM, 1/2-13	059537	059537	059537	059537	2
13	. CAM FOLLOWER	051238	051238	051238	051238	4
14	. NUT-LOCK, THIN, 7/8-14	059130	059130	059130	059130	2
15	. FITTING-GREASE, 3/16DR, W/CHK	025713	025713	025713	025713	5
16	. ARM-WELDMENT, INNER	506055-01	506005-01	506010-02	506047-01	1
17	. SPACER-ROLLER	404047	404047	404047	404047	AR
18	. SCREW-SET, 5/16-18 X 3/8	073480	073480	073480	073480	2
19	. BEARING, SLEEVE	052958-03	052958-03	052958-03	052958-03	2

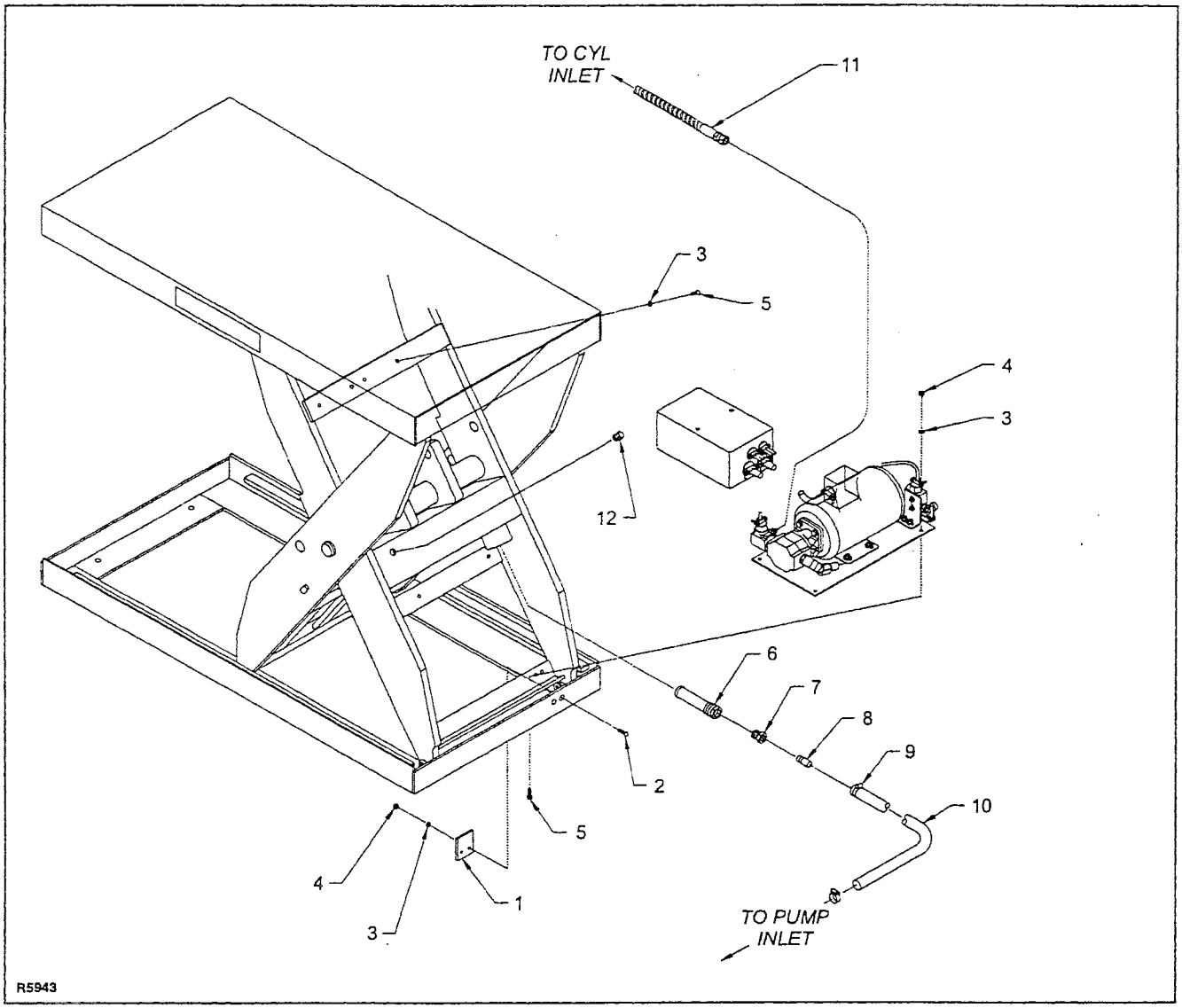


Figure 9-3. Hydraulic System (24" Table)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
1	404069	PLATE, ACTIVATOR, STANDARD	1
2	069480	MACH. SCREW-PHILLIPS, FLAT-HD	2
3	077209	WASHER-LOCK, SPLIT, 1/4	8
4	059421	NUT-HEX, 1/4-20	6
5	063478	SCREW-HEX CAP, 1/4-20 X 3/4	6
6	035114	FILTER	1

INDEX NO.	PART NO.	PART NAME	NO. REQD.
7	026504	REDUCING BUSHING 1/2 TO 3/8 PTR	1
8	026128	NIPPLE, HOSE 3/8	1
9	056110	CLAMP HOSE, SCREW TYPE	2
10	308900	HOSE-LP, RUBBER .906 .625	AR
11	506033-06	HOSE ASSEMBLY, HYDRAULIC	1
12	076701	VENT-3/8 NPT	1

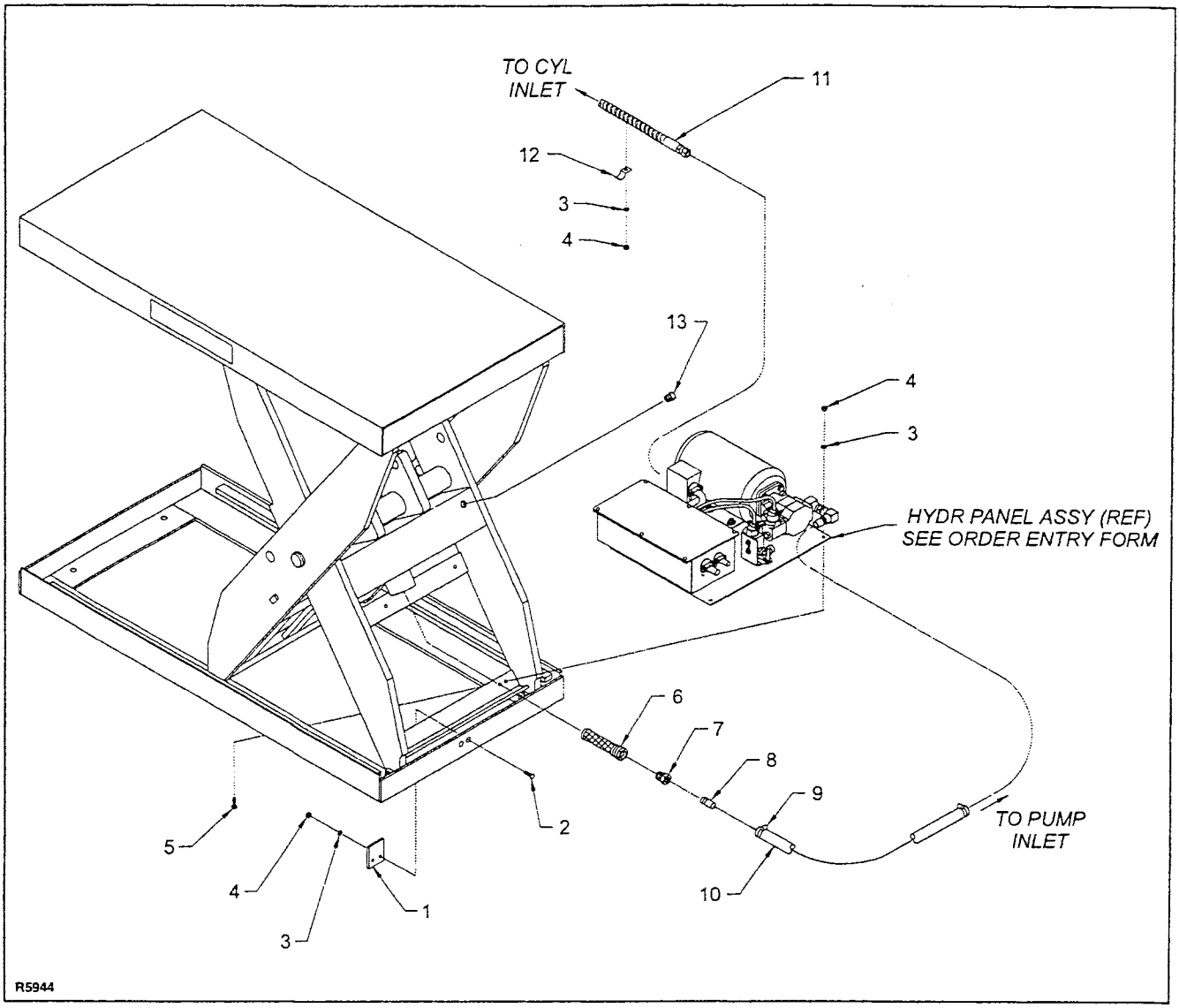


Figure 9-4. Hydraulic System (36/48/60" Tables)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
1	404069	PLATE, ACTIVATOR, STANDARD	1
2	069480	MACH. SCREW-PHILLIPS, FLAT-HD	2
3	077209	WASHER-LOCK, SPLIT, 1/4	7
4	059421	NUT-HEX, 1/4-20	7
5	063478	SCREW-HEX CAP, 1/4-20 X 3/4	4
6	035114	FILTER	1
7	026504	REDUCING BUSHING 1/2 TO 3/8 PTR	1
8	026128	NIPPLE, HOSE 3/8	1

INDEX NO.	PART NO.	PART NAME	NO. REQD.
9	056110	CLAMP HOSE, SCREW TYPE	2
10	308900	HOSE-LP, RUBBER .906 .625	AR
11	506033-01*	HOSE ASSY (36" LIFT)	1
11	506033-02*	HOSE ASSY (48" LIFT)	1
11	506033-03#	HOSE ASSY (36" LIFT)	1
11	506033-04#	HOSE ASSY (48" LIFT)	1
11	506033-05#	HOSE ASSY (60" LIFT)	1
12	056139	CLAMP	1
13	076701	VENT-3/8 NPT	1

* USED WITH LIFT CYLINDER 505618.
\# USED WITH LIFT CYLINDER 506049.

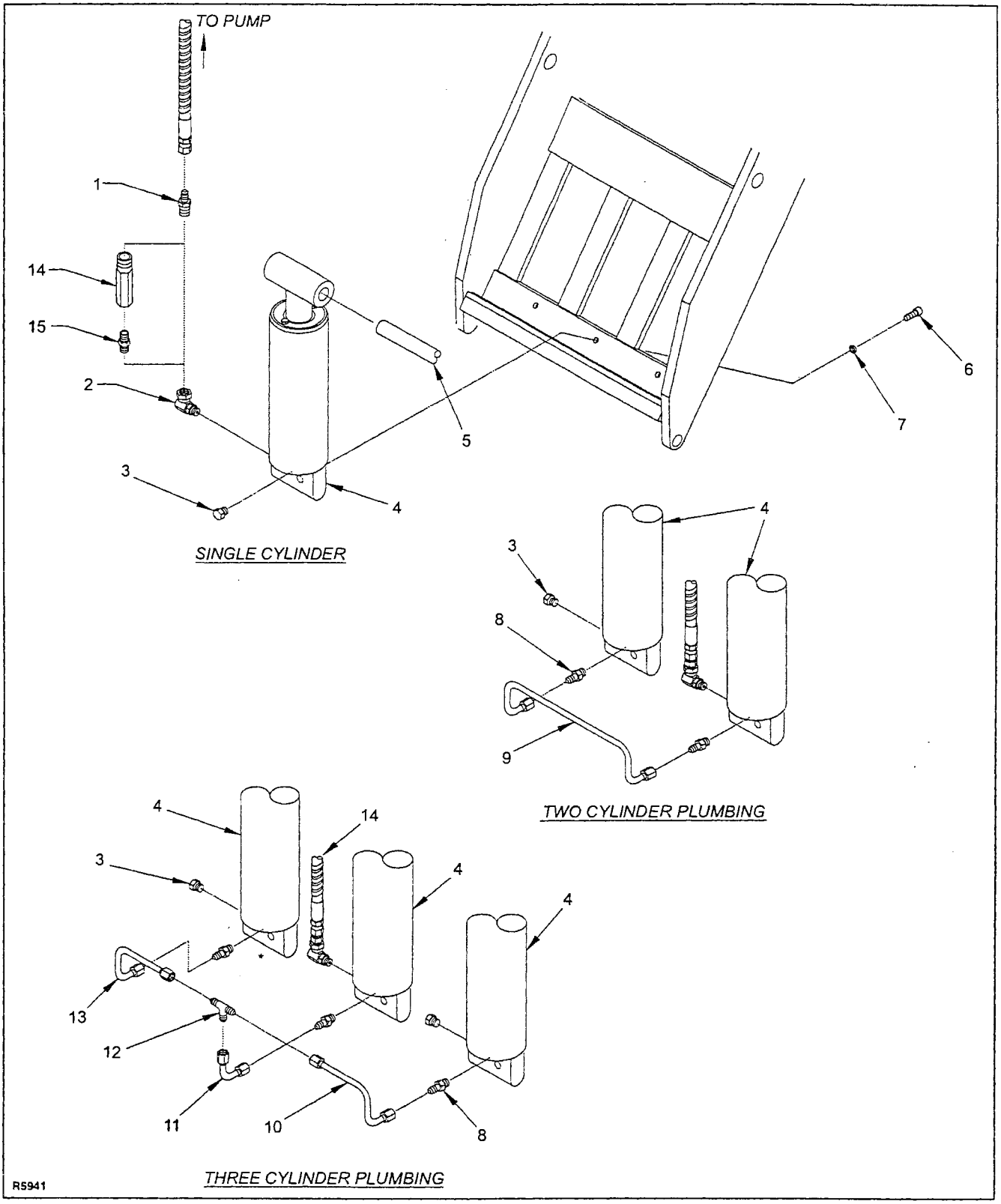


Figure 9-5. Lift Cylinder Installation

INDEX NO.	PART NAME	LIFT CYLINDER (INCHES)				NO. REQD.
		24 PART NO.	36 PART NO.	48 PART NO.	60 PART NO.	
1	CONNECTOR, MALE, 3/8 NPT X 3/8 JIC	026912	026912	026912	026912	1
2	ADAPTER, 90 DEGREE ELBOW	025128	025128	025128	025128	1
3	PLUG, O-RING-TYPE, 9/16-18	026309	026309	026309	026309	AR
4	CYLINDER (SEE FIG. 9-17A & 9-17B)	—	—	—	—	REF
5	SHAFT-CYLINDER	404068-01	404068-01	404068-02	404068-02	1
6	SOCKET HD CAP SCREW	065605	065605	065605	065605	AR
7	WASHER-LOC, SPLIT, 3/8	077117-04	077117-04	077117-04	077117-04	AR
8	ADAPTER	026922	026922	026922	026922	AR
9	TUBE ASSEMBLY, DUAL	506073	506018	506018	506018	AR
10	TUBE ASSEMBLY, RH	—	—	506020	506020	1
11	TUBE ASSEMBLY, MID.	—	—	506021	506021	1
12	TEE, UNION, JIC 37	—	—	027109	027109	1
13	TUBE ASSEMBLY, LH	—	—	506019	506019	1
14*	FLOW CONTROL VALVE (2.0 GPM)	—	048159-01	048159-01	—	1
14*	FLOW CONTROL VALVE (3.0 GPM)	—	048159-03	048159-03	—	1
14*	FLOW CONTROL VALVE (3.5 GPM)	—	—	048159-01	—	1
15*	CONNECTOR	—	026109	026109	—	1

* USED WITH LIFT CYLINDER 505618

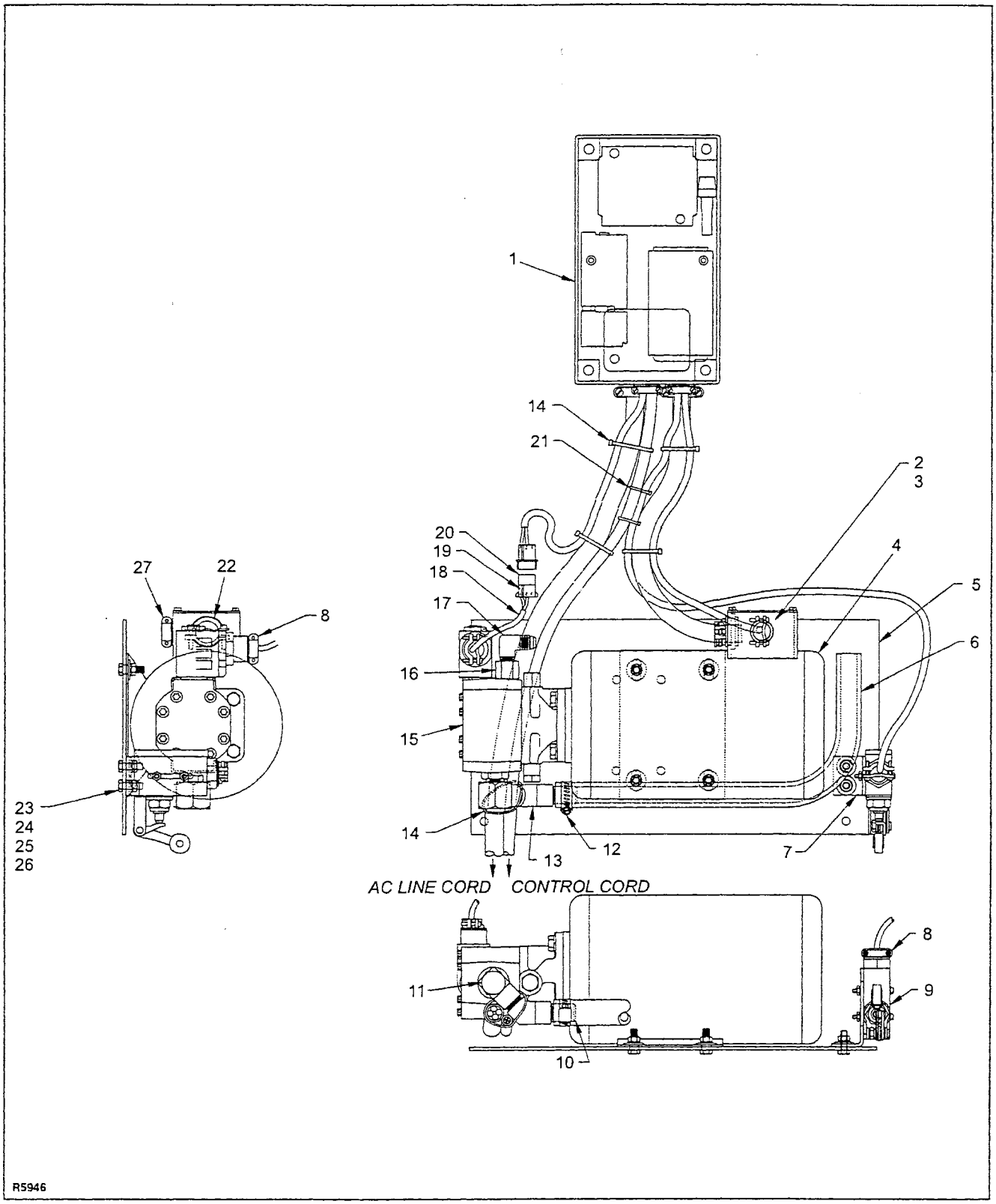


Figure 9-6. Lift Table Panel Assembly (24" Table)

INDEX NO.	PART NAME	LIFT TABLE PANEL ASSY (24" Table).(VOLTS)				NO. REQD.
		115V-1 PHASE PART NO.	230V-1 PHASE PART NO.	230V-3 PHASE PART NO.	460V-3 PHASE PART NO.	
1	BOX ASSY, ELECTRICAL	506074-01	506074-02	506074-03	506074-04	1
2	. NUT-WING, WIRE CONNECTOR	005429	005429	005429	005429	AR
3	. CONNECTOR-WIRE, FIXED SPRING	005460	005460	05460	005460	AR
4	. MOTOR-AC, 1.5 HP	016420	016420	016421	016421	1
5	. PANEL, HYDRAULIC	404110	404110	404110	404110	1
6	. HOSE-LP, RUBBER	308900	308900	308900	308900	1
7	. BRACKET-MOUNTING, SWITCH	404070	404070	404070	404070	1
8	. RELIEF-STRAIN	005405	005405	005405	005405	2
9	. SWITCH-LIMIT	020703	020703	020703	020703	1
10	. NIPPLE-HOSE	026128	026128	026128	026128	1
11	. ELBOW-FEMALE, ADAPTER	025540	025540	025540	025540	1
12	. CLAMP-HOSE, SCREW TYPE	056110	056110	056110	056110	1
13	. STREET-ELBOW, 3/8 NPT, 90 DEGREE	026711	026711	026711	026711	1
14	. WIRE TIE, NYLON, 8"	056113	056113	056113	056113	5
15	. PUMP ASSY. 1/4 GEAR	506042-01	506042-01	506042-01	506042-01	1
15	. PUMP ASSY. 3/8 GEAR	506042-02	506042-02	506042-02	506042-02	1
16	. ADAPTER-REDUCING, 3/4 TO 1/4	025124	025124	025124	025124	1
17	. ELBOW-MALE, 3/8 X 1/4 JIC	025517	025517	025517	025517	1
18	. TUBING 1/4 SHRINK, BLACK	010612	010612	010612	010612	AR
19	. CONTACT-SOCKET	005627	005627	005627	005627	2
20	. HOUSING-SOCKET	005648	005648	005648	005648	1
21	. WIRE TIE, NYLON, 4"	056111	056111	056111	056111	2
22	. RELIEF-STRAIN	005414	005414	005405	005405	1
23	. SCREW-HEX CAP, 1/4-20 X 3/4	063478	063478	063478	063478	6
24	. WASHER-LOCK, SPLIT, 1/4	077209	077209	077209	077209	6
25	. WASHER	077031	077031	077031	077031	6
26	. NUT-HEX, 1/4-20	059421	059421	059421	059421	6
27	. RELIEF - STRAIN	005405	005405	—	—	1

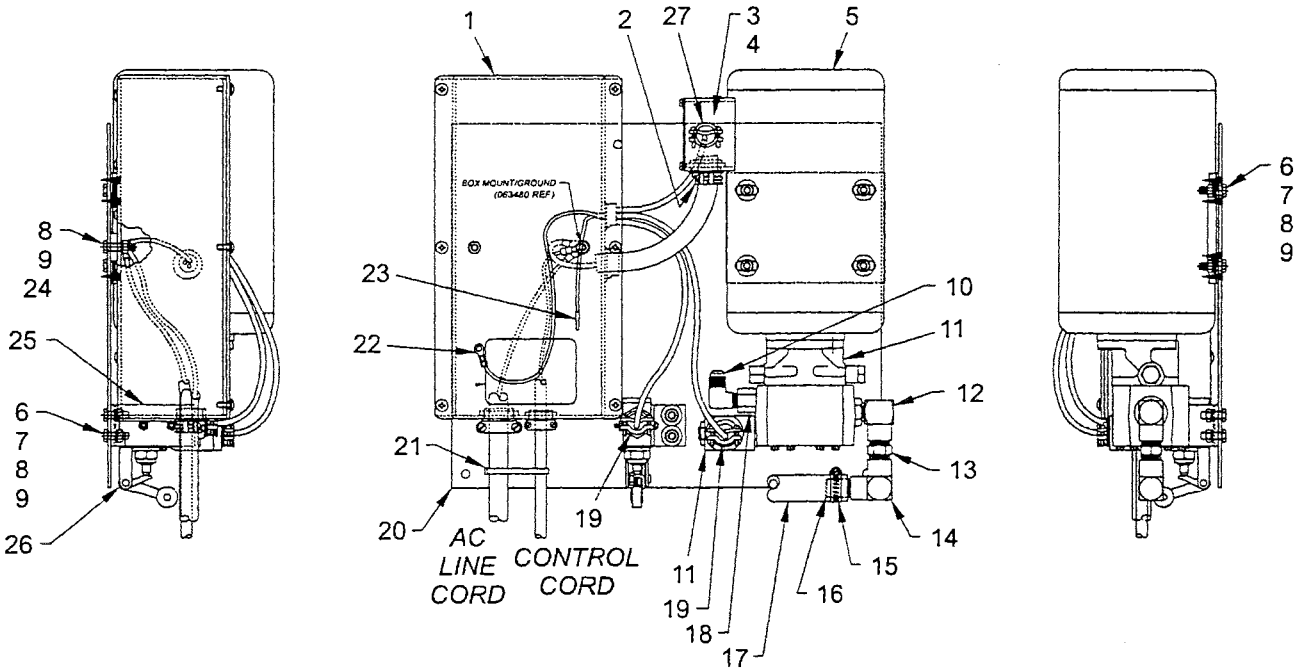


Figure 9-7. Lift Table Panel Assembly (36/48/60" Tables)

INDEX NO.	PART NAME	LIFT TABLE PANEL ASSY (36/48/60" Tables) (VOLTS)				NO. REQD.
		115V-1 PHASE PART NO.	230V-1 PHASE PART NO.	230V-3 PHASE PART NO.	460V-3 PHASE PART NO.	
1	BOX ASSY, ELECTRICAL	506024-01	506024-02	506024-03	506024-04	1
2	. RELIEF-STRAIN	005414	005414	005405	005405	1
3	. NUT-WING, WIRE CONNECTOR	005429	005429	005429	005429	AR
4	. CONNECTOR-WIRE, FIXED SPRING	005460	005460	005460	005460	AR
5	. MOTOR-AC, 1.5 MHP	016420	016420	016421	016421	1
6	. SCREW-HEX CAP, 1/4-20 X 3/4	063478	063478	063478	063478	6
7	. WASHER	077031	077031	077031	077031	6
8	. WASHER-LOCK, SPLIT, 1/4	077209	077209	077209	077209	8
9	. NUT-HEX, 1/4-20	059421	059421	059421	059421	8
10	. ELBOW-MALE, 3/8 X 1/4 JIC	025517	025517	025517	025517	1
11	. PUMP ASSY., 1/4 PUMP GEAR	506042-01	506042-01	506042-01	506042-01	1
11	. PUMP ASSY., 3/8 PUMP GEAR	506042-02	506042-02	506042-02	506042-02	1
12	. ELBOW-FEMALE ADAPTER	025540	025540	025540	025540	1
13	. NIPPLE-HOSE 3/8	026109	026109	026109	026109	1
14	. ELBOW 90 DEGREE 3/8	025505	025505	025505	025505	1
15	. CLAMP-HOSE, SCREW TYPE	056110	056110	056110	056110	1
16	. NIPPLE-HOSE 3/8	026128	026128	026128	026128	1
17	. HOSE-LP, RUBBER	308900	308900	308900	308900	1
18	. ADAPTER-REDUCING, 3/4 TO 1/4	025124	025124	025124	025124	1
19	. RELIEF-STRAIN	005405	005405	005405	005405	2
20	. PANEL, HYDRAULIC	404063	404063	404063	404063	1
21	. WIRE TIE, NYLON, 8"	056113	056113	056113	056113	1
22	. TERMINAL-RING, 3/16, 16GA	021203	021203	021203	021203	1
23	. CONTACT-SOCKET	005627	005627	005627	005627	1
24	. SCREW-HEX CAP,.1/4-20 X 1	063480	063480	063480	063480	2
25	. BRACKET-MOUNTING, SWITCH	404070	404070	404070	404070	1
26	. SWITCH-LIMIT	020703	020703	020703	020703	1
27	. RELIEF-STRAIN	005405	005405	—	—	1

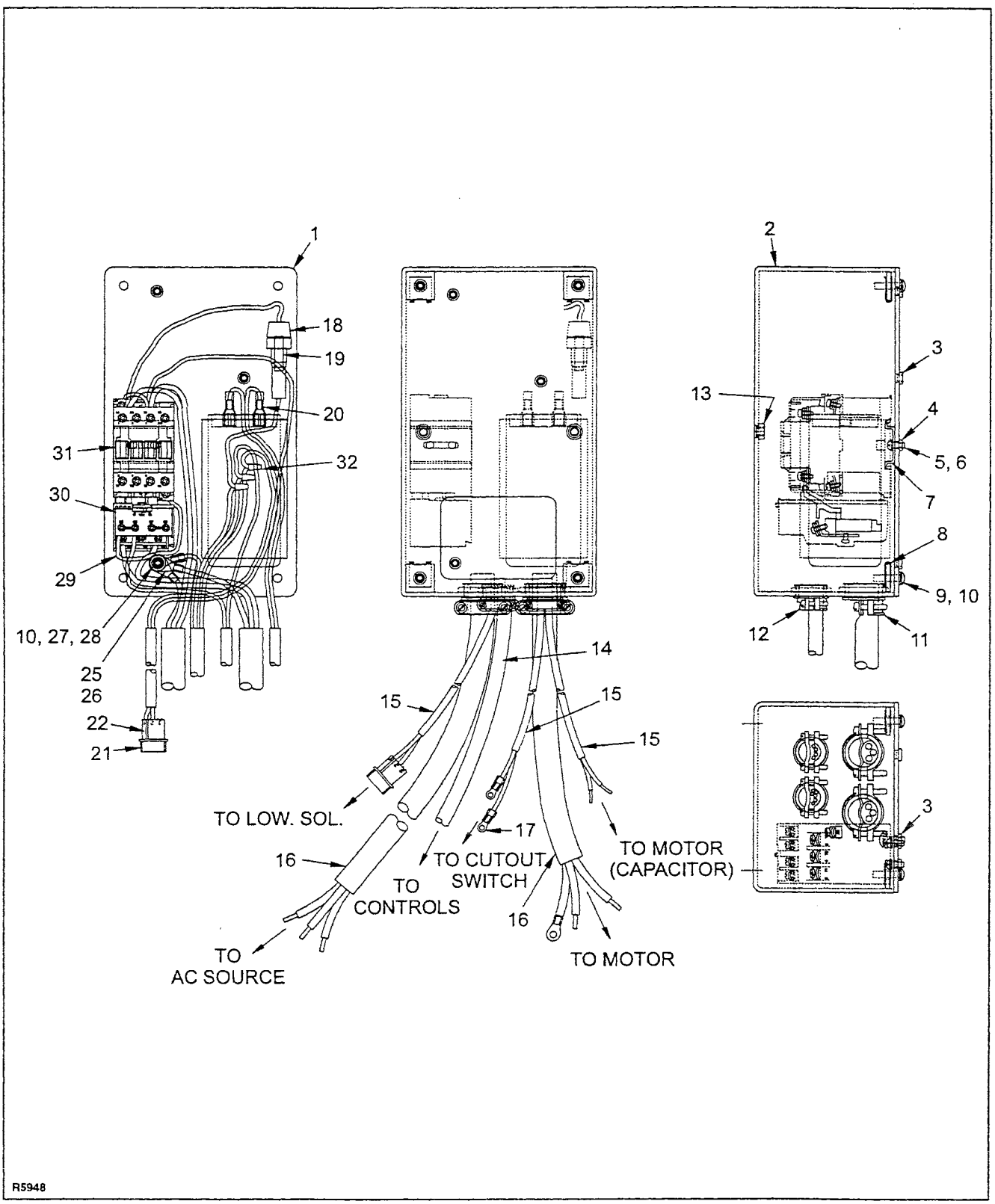


Figure 9-8. Electrical Box Assembly (24" Table)
(115V, Single Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506074-01	BOX ASSY, ELECTRICAL (24" Table) (115V, SINGLE PHASE, 60HZ)	1
1	404105	COVER	1
2	506057	BOX-WELDMENT, ELECTRICAL	1
3	059950	CLINCH-NUT 10-32	3
4	059952	CLINCH-NUT	2
5	070492	SCREW, PH RD HD, 8-32	2
6	077205	WASHER-LOCK, SPLIT, 8-32	2
7	404065	MOUNTING RAIL	1
8	059936	NUT, SPEED-TYPE	4
9	072407	SCREW-SHT MET, #10 B X 3/4	4
10	077207	WASHER-LOCK, SPLIT, #10	5
11	005414	RELIEF-STRAIN	2
12	005405	RELIEF-STRAIN	2
13	059951	NUT-CLINCH, 1/4-20	2
14	004733	CORD, 4 COND, 18 GA	AR

INDEX NO.	PART NO.	PART NAME	NO. REQD.
15	004724	CORD, 2 COND, 16 GA	AR
16	004732	CORD, 3 COND, 10 GA	AR
17	021236	TERMINAL-RING NO. 6, 16 GA	2
18	009504	FUSE-HOLDER, IN-LINE	1
19	008919	FUSE-3 AMP	1
20	021252	TERMINAL, INSUL, 1/4 SPADE	2
21	005647	CONNECTOR-PIN	1
22	005626	CONTACT-PIN	2
25	021237	TERMINAL-RING	AR
26	021203	TERMINAL-RING-3/16, 16GA	AR
27	071385	TRUSS, HD PH, 10-32 X 5/8	1
28	077032	WASHER-3/16 X 1/2 X 13GA	1
29	023000	WIRE, 16 GA, WHITE	AR
30	008924-04	RELAY-OVERLOAD, 17-26A	1
31	006009	AC-CONTACTOR	1
32	005460	CONNECTOR-WIRE NUT	3

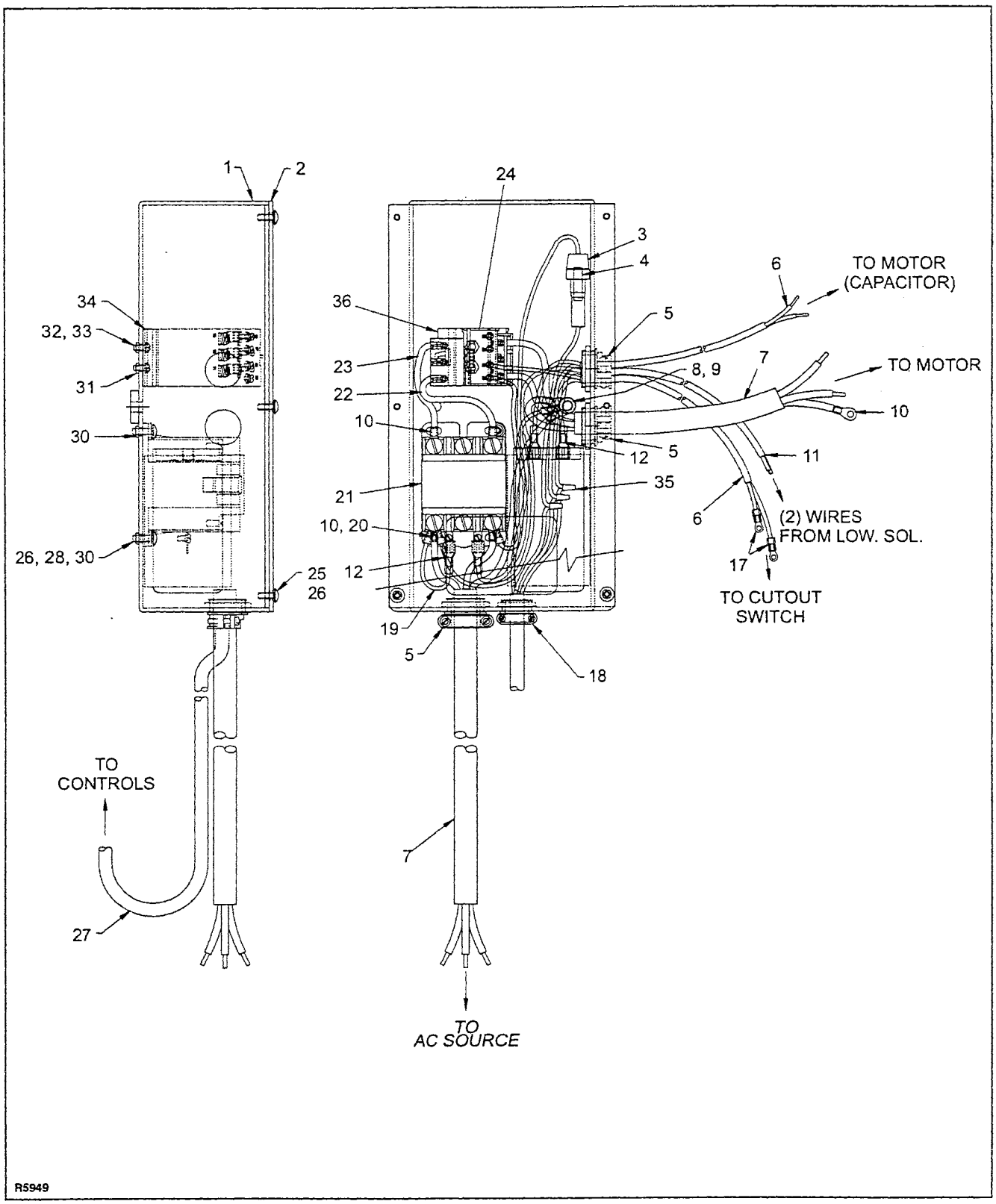


Figure 9-9. Electrical Box Assembly (36/48/60" Tables)
(115V, Single Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506024-01	BOX ASSY, ELECTRICAL (36/48/60" TABLES) (115V, SINGLE PHASE, 60HZ)	1
1	506017	BOX	1
2	404064	COVER	1
3	009504	HOLDER-FUSE, IN-LINE	1
4	008919	FUSE-3 AMP	1
5	005414	RELIEF-STRAIN	3
6	004724	CORD, 2 COND, 16 GA	AR
7	004732	CORD, 3 COND, 10 GA	AR
8	021206	TERMINAL-RING 1/4, 16 GA	1
9	021238	TERMINAL-RING, 1/4, 10 GA	2
10	021237	TERMINAL-RING	5
11	010612	TUBING, 1/4 SHRINK BLACK	AR
12	021252	TERMINAL, INSUL, 1/4 SPADE	2
17	021236	TERMINAL-RING, NO. 6, 16 GA	2
18	005405	RELIEF-STRAIN	1
19	023000	WIRE, 16 GA, WHITE	AR

INDEX NO.	PART NO.	PART NAME	NO. REQD.
20	021203	SCREW, TERMINAL-RING, 3/16, 16 GA	3
21	006006	CONTACTOR, AC	1
22	023011	WIRE, 10 GA, STRANDED, BLACK	AR
23	023036	WIRE, 10 GA, STRANDED, WHITE	AR
24	008924-04	RELAY-OVERLOAD, 17-26A	1
25	071376	SCREW-TRUSS, #10-32 X 1/2	6
26	077207	WASHER-LOCK, SPLIT, #10	8
27	004733	CORD, 4 COND, 18 GA	AR
28	077032	WASHER-3/16 X 1/2 X 13 GA	2
29	071385	TRUSS, HD PH, 10-32 X 5/8	2
30	059950	CLINCH-NUT, 10-32	2
31	059952	CLINCH-NUT	2
32	077205	WASHER-LOCK, SPLIT, 8-32	2
33	070492	SCREW, PH RD HD, 8-32	2
34	404065	MOUNTING-RAIL	1
35	005460	CONNECTOR-WIRE NUT	3
36	008924-05	BASE-MTG, RELAY	1

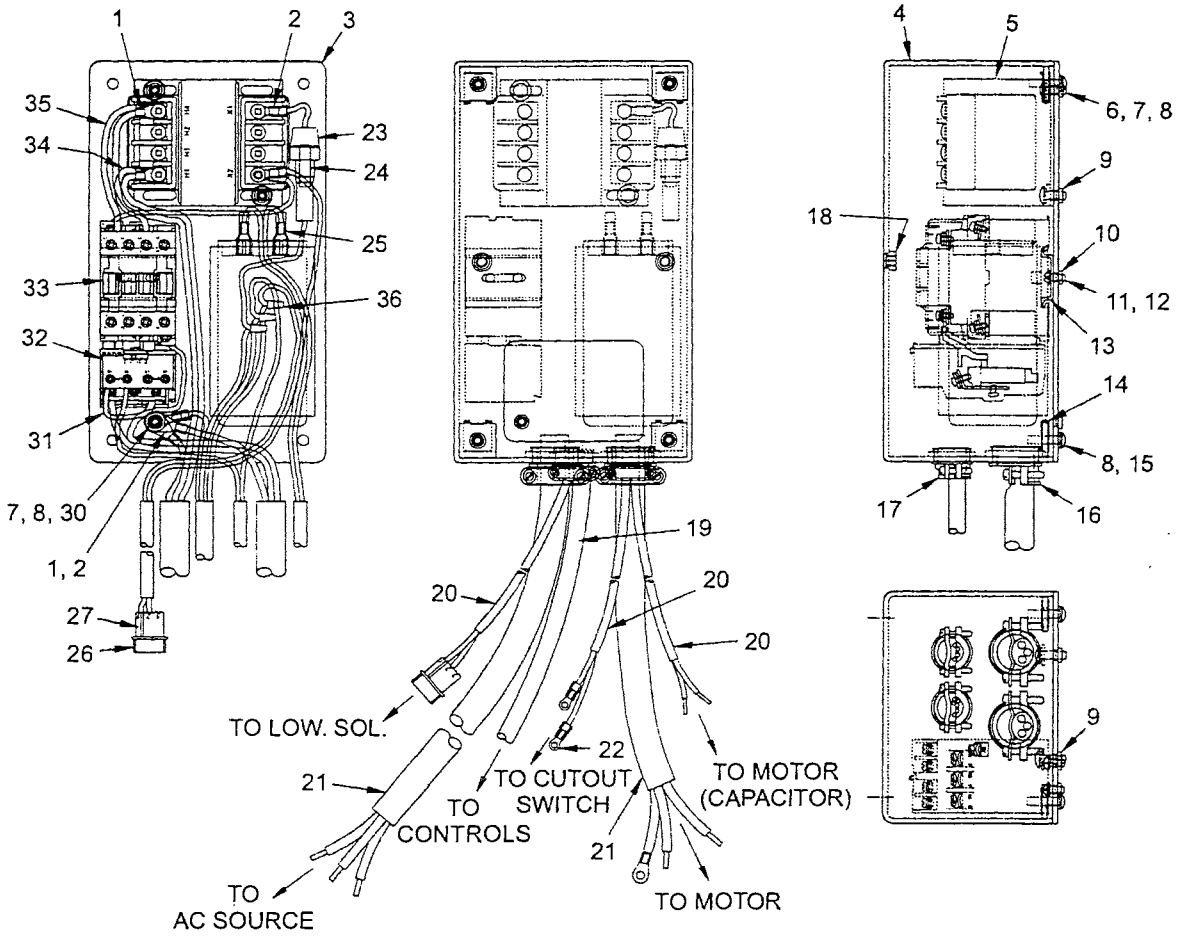


Figure 9-10. Electrical Box Assembly (24" Table) (230V, Single Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506074-02	BOX ASSY, ELECTRICAL (24" TABLE) (230V, SINGLE PHASE, 60HZ)	1
1	021237	TERMINAL-RING	7
2	021203	TERMINAL-RING, 3/16, 16 GA	4
3	404105	COVER	1
4	506057	BOX-WELDMENT, ELECTRICAL	1
5	021800	TRANSFORMER 115V	1
6	071376	SCREW-TRUSS, #10-32 X 1/2	2
7	077032	WASHER-3/16 X 1/2 X 13 GA	3
8	077207	WASHER-LOCK, SPLIT, #10	7
9	059950	CLINCH-NUT	3
10	059952	CLINCH-NUT	2
11	077205	WASHER-LOCK, SPLIT, 8-32	2
12	070492	SCREW, PH RD HD, 8-32	2
13	404065	MOUNTING RAIL	1
14	059936	NUT, SPEED-TYPE	4
15	072407	SCREW-SHT MET, #10 B X 3/4	4
16	005414	RELIEF-STRAIN	2

INDEX NO.	PART NO.	PART NAME	NO. REQD.
17	005405	RELIEF-STRAIN	2
18	059951	NUT-CLINCH	2
19	004733	CORD, 4 COND, 18 GA	AR
20	004724	CORD, 2 COND, 16 GA	AR
21	004702	CORD, 3 COND, 14 GA	AR
22	021236	TERMINAL-RING NO. 6, 16 GA	2
23	009504	FUSE-HOLDER, IN-LINE	1
24	008919	FUSE-3 AMP	1
25	021252	TERMINAL. INSUL, 1/4 SPADE	2
26	005647	CONNECTOR-PIN	1
27	005626	CONTACT-PIN	2
30	071385	TRUSS, HD PH, 10-31 X 5/8	1
31	023000	WIRE, 16 GA, WHITE	AR
32	008924-03	RELAY-OVERLOAD 9-15A	1
33	006009	AC-CONTACTOR	1
34	023036	WIRE, 10 GA, STRANDED, WHITE	AR
35	023011	WIRE, 10 GA, STRANDED, BLACK	AR
36	005460	CONNECTOR-WIRE NUT	3

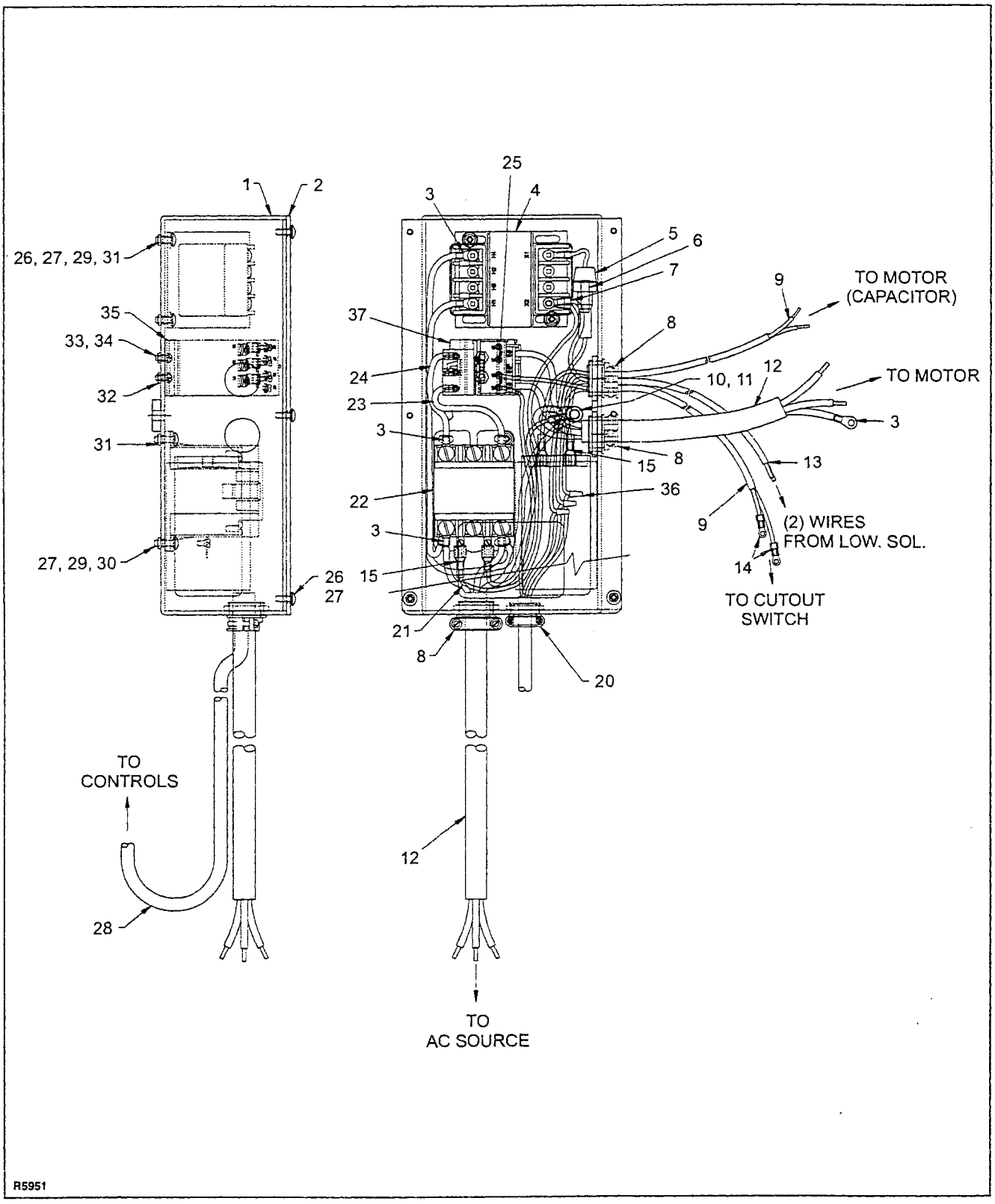


Figure 9-11. Electrical Box Assembly (36/48/60" Tables)
(230V, Single Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506024-02	BOX ASSY, ELECTRICAL (36/48/60" TABLES) (230V, SINGLE PHASE, 60HZ)	1
1	506017	BOX	1
2	404064	COVER	1
3	021237	TERMINAL-RING	9
4	021800	TRANSFORMER 115V	1
5	009504	FUSE-HOLDER, IN-LINE	1
6	008919	FUSE-3 AMP	1
7	021203	TERMINAL-RING, 3/16, 16 GA	3
8	005414	RELIEF-STRAIN	3
9	004724	CORD, 2 COND, 16 GA	AR
10	021238	TERMINAL-RING, 1/4, 10 GA	2
11	021206	TERMINAL-RING, 1/4, 16 GA	1
12	004702	CORD, 3 COND, 14 GA	AR
13	010612	TUBING-1/4 SHRINK, BLACK	AR
14	021236	TERMINAL-RING NO. 6, 16 GA	2
15	021252	TERMINAL, INSUL, 1/4 SPADE	2

INDEX NO.	PART NO.	PART NAME	NO. REQD.
20	005405	RELIEF-STRAIN	1
21	023000	WIRE, 16 GA, WHITE	AR
22	006006	CONTACTOR, AC	1
23	023011	WIRE, 10 GA, STRANDED, BLACK	AR
24	023036	WIRE, 10 GA, STRANDED, WHITE	AR
25	008924-03	RELAY-OVERLOAD 9-15A	1
26	071376	SCREW-TRUSS, #10-32 X 12	8
27	077207	WASHER-LOCK, SPLIT, #10	10
28	004733	CORD, 4 COND, 18 GA	AR
29	077032	WASHER-3/16 X 1/2 X 13 GA	4
30	071385	TRUSS, HD PH, 10-32 X 5/8	2
31	059950	CLINCH-NUT	4
32	059952	CLINCH-NUT	2
33	077205	WASHER-LOCK, SPLIT, 8-32	2
34	070492	SCREW, PH RD HD, 8-32	2
35	404065	MOUNTING RAIL	1
36	005460	CONNECTOR-WIRE NUT	3
37	008924-05	BASE-MTG, RELAY	1

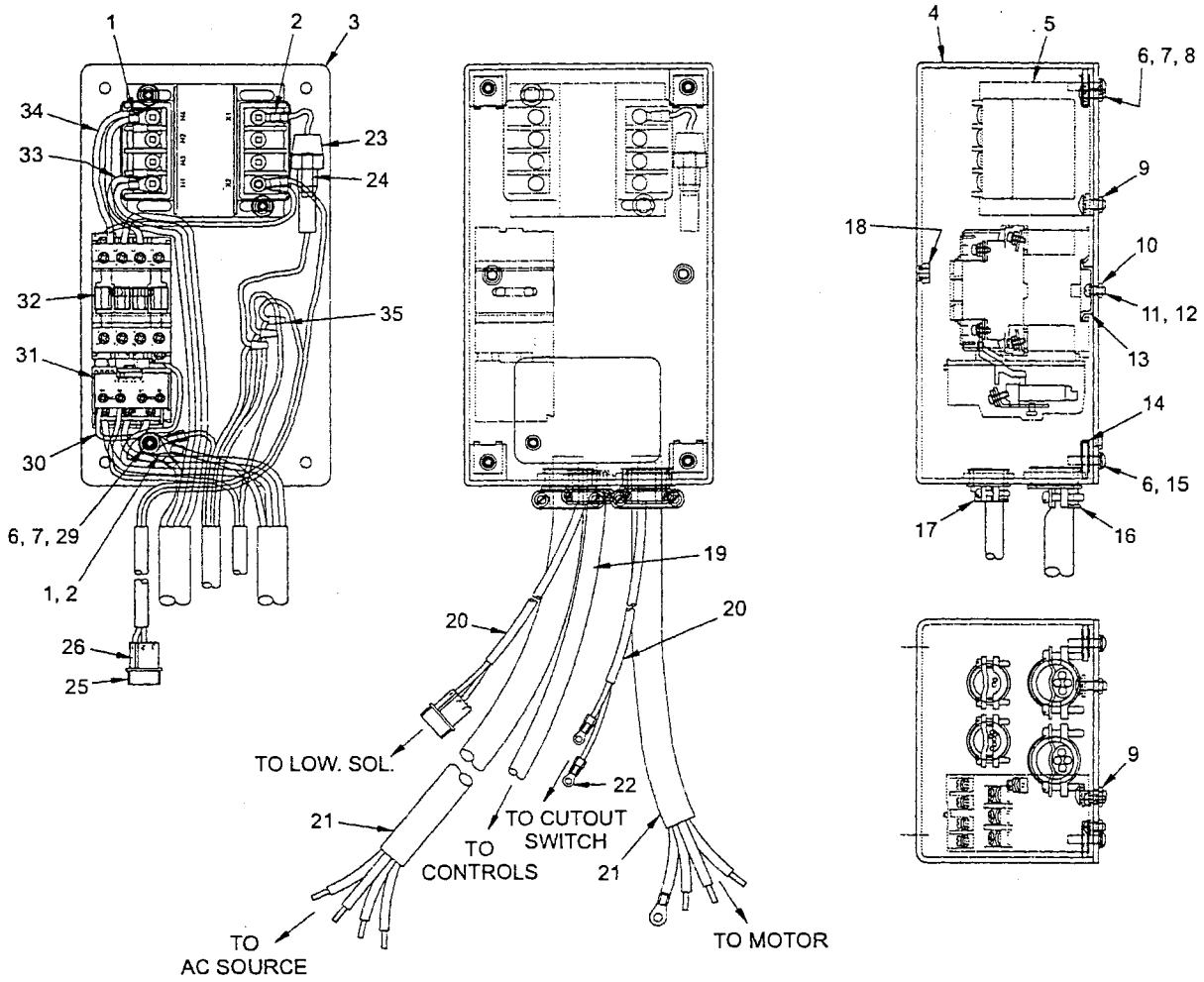


Figure 9-12. Electrical Box Assembly (24" Table)
(230V, Three Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506074-03	BOX ASSY, ELECTRICAL (24" TABLE) (230V, THREE PHASE, 60HZ)	1
1	021237	TERMINAL-RING	7
2	021203	TERMINAL-RING, 3/16, 16 GA	4
3	404105	COVER	1
4	506057	BOX-WELDMENT, ELECTRICAL	1
5	021800	TRANSFORMER 115V	1
6	077207	WASHER-LOCK, SPLIT, #10	7
7	077032	WASHER-3/16 X 1/2 X 13 GA	3
8	071376	SCREW-TRUSS, #10-32 X 1/2	2
9	059950	CLINCH-NUT	3
10	059952	CLINCH-NUT	2
11	077205	WASHER-LOCK, SPLIT, 8-32	2
12	070492	SCREW, PH RD HD, 8-32	2
13	404065	MOUNTING RAIL	1
14	059936	NUT, SPEED-TYPE	4
15	072407	SCREW-SHT MET, #10 B X 3/4	4

INDEX NO.	PART NO.	PART NAME	NO. REQD.
16	005414	RELIEF-STRAIN	2
17	005405	RELIEF-STRAIN	2
18	059951	NUT-CLINCH	2
19	004733	CORD, 4 COND, 18 GA	AR
20	004724	CORD, 2 COND, 16 GA	AR
21	004701	CORD, 4 COND, 14 GA	AR
22	021236	TERMINAL-RING NO. 6, 16 GA	2
23	009504	FUSE-HOLDER, IN-LINE	1
24	008919	FUSE-3 AMP	1
25	005647	CONNECTOR-PIN	1
26	005626	CONTACT-PIN	2
29	071385	TRUSS, HD PH, 10-32 X 5/8	1
30	023000	WIRE, 16 GA, WHITE	AR
31	008924-02	RELAY-OVERLOAD 4.5-7.5A	1
32	006009	AC-CONTACTOR	1
33	023036	WIRE, 10 GA, STRANDED, WHITE	AR
34	023011	WIRE, 10 GA, STRANDED, BLACK	AR
35	005460	CONNECTOR-WIRE NUT	3

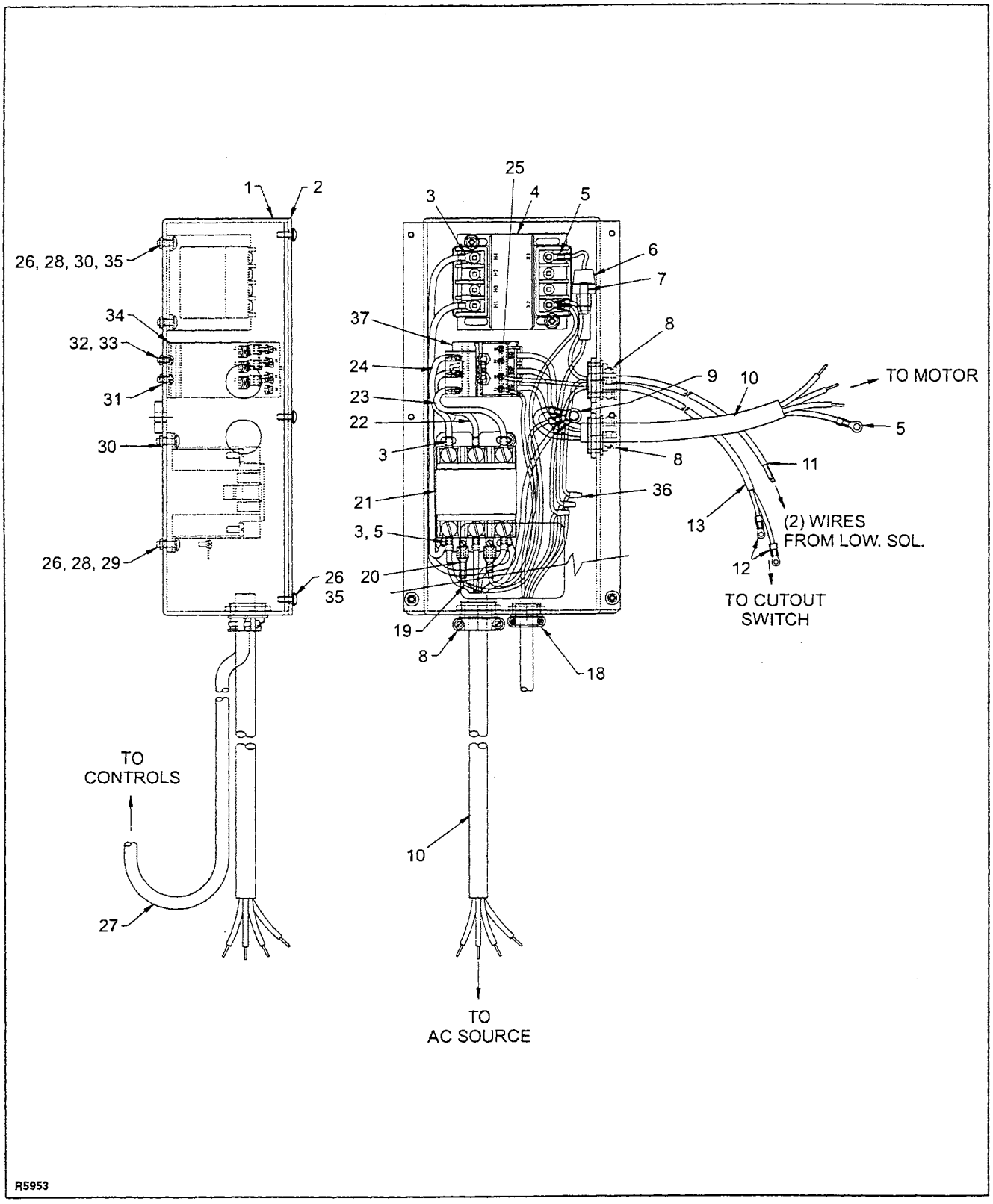


Figure 9-13. Electrical Box Assembly (36/48/60" Tables)
(230V, Three Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506024-03	BOX ASSY, ELECTRICAL (36/48/60" TABLES) (230V, THREE PHASE, 60HZ)	1
1	506017	BOX	1
2	404064	COVER	1
3	021237	TERMINAL-RING	7
4	021800	TRANSFORMER 115V	1
5	021203	TERMINAL-RING, 3/16, 16 GA	7
6	009504	FUSE-HOLDER, IN-LINE	1
7	008919	FUSE-3 AMP	1
8	005414	RELIEF-STRAIN	3
9	021206	TERMINAL-RING, 1/4, 16 GA	3
10	004701	CORD, 4 COND, 14 GA	AR
11	010612	TUBING-1/4 SHRINK, BLACK	AR
12	021236	TERMINAL-RING NO. 6, 16 GA	2
13	004724	CORD, 2 COND, 16 GA	AR
18	005405	RELIEF-STRAIN	1
19	023000	WIRE, 16 GA, WHITE	AR

INDEX NO.	PART NO.	PART NAME	NO. REQD.
20	021252	TERMINAL, INSUL, 1/4 SPADE	2
21	006006	CONTACTOR, AC	1
22	023010	WIRE, 10 GA, STRANDED, RED	AR
23	023011	WIRE, 10 GA, STRANDED, BLACK	AR
24	023036	WIRE, 10 GA, STRANDED, WHITE	AR
25	008924-02	RELAY-OVERLOAD, 4.5-7.5A	1
26	077207	WASHER-LOCK, SPLIT, #10	10
27	004733	CORD, 4 COND, 18 GA	AR
28	077032	WASHER-3/16 X 1/2 X 13 GA	4
29	071385	TRUSS, HD PH, 10-32 X 5/8	2
30	059950	CLINCH-NUT	4
31	059952	CLINCH-NUT	2
32	077205	WASHER-LOCK, SPLIT, 8-32	2
33	070492	SCREW, PH RD, HD, 8-32	2
34	404065	MOUNTING RAIL	1
35	071376	SCREW-TRUSS, #10-32 X 1/2	8
36	005460	CONNECTOR-WIRE NUT	3
37	008924-05	BASE-MTG, RELAY	1

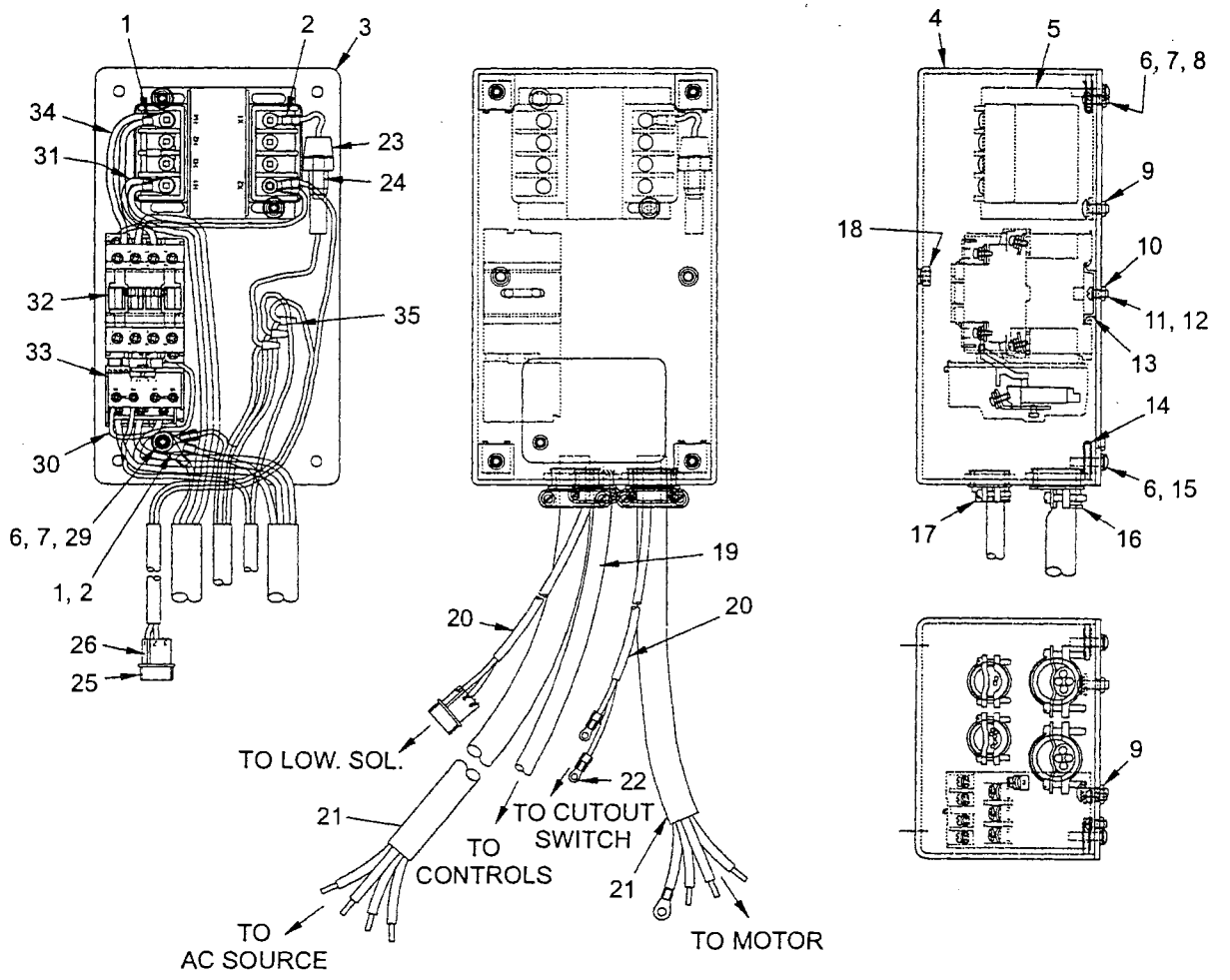


Figure 9-14. Electrical Box Assembly (24" Table)
(460V, Three Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506074-04	BOX ASSY, ELECTRICAL (24" TABLE) (460V, THREE PHASE, 60HZ)	1
1	021237	TERMINAL-RING	7
2	021203	TERMINAL-RING, 3/16, 16 GA	4
3	404105	COVER	1
4	506057	BOX-WELDMENT, ELECTRICAL	1
5	021800	TRANSFORMER 115V	1
6	077207	WASHER-LOCK, SPLIT, #10	7
7	077032	WASHER-3/16 X 1/2 X 13 GA	3
8	071376	SCREW-TRUSS, #10-32 X 1/2	2
9	059950	CLINCH-NUT	3
10	059952	CLINCH-NUT	2
11	077205	WASHER-LOCK, SPLIT, 8-32	2
12	070492	SCREW, PH RD HD, 8-32	2
13	404065	MOUNTING RAIL	1
14	059936	NUT, SPEED-TYPE	4
15	072407	SCREW-SHT MET, #10 B X 3/4	4

INDEX NO.	PART NO.	PART NAME	NO. REQD.
16	005414	RELIEF-STRAIN	2
17	005405	RELIEF-STRAIN	2
18	059951	NUT-CLINCH	2
19	004733	CORD, 4 COND, 18 GA	AR
20	004724	CORD, 2 COND, 16 GA	AR
21	004701	CORD, 4 COND, 14 GA	AR
22	021236	TERMINAL-RING NO. 6, 16 GA	2
23	009504	FUSE-HOLDER, IN-LINE	1
24	008919	FUSE-3 AMP	1
25	005647	CONNECTOR-PIN	1
26	005626	CONTACT-PIN	2
29	071385	TRUSS, HD PH, 10-32 X 5/8	1
30	023000	WIRE, 16 GA, WHITE	AR
31	023036	WIRE, 10 GA, STRANDED, WHITE	AR
32	006009	AC-CONTACTOR	1
33	008924-01	RELAY-OVERLOAD 2-3.3A	1
34	023011	WIRE, 10 GA, STRANDED, BLACK	AR
35	005460	CONNECTOR-WIRE NUT	3

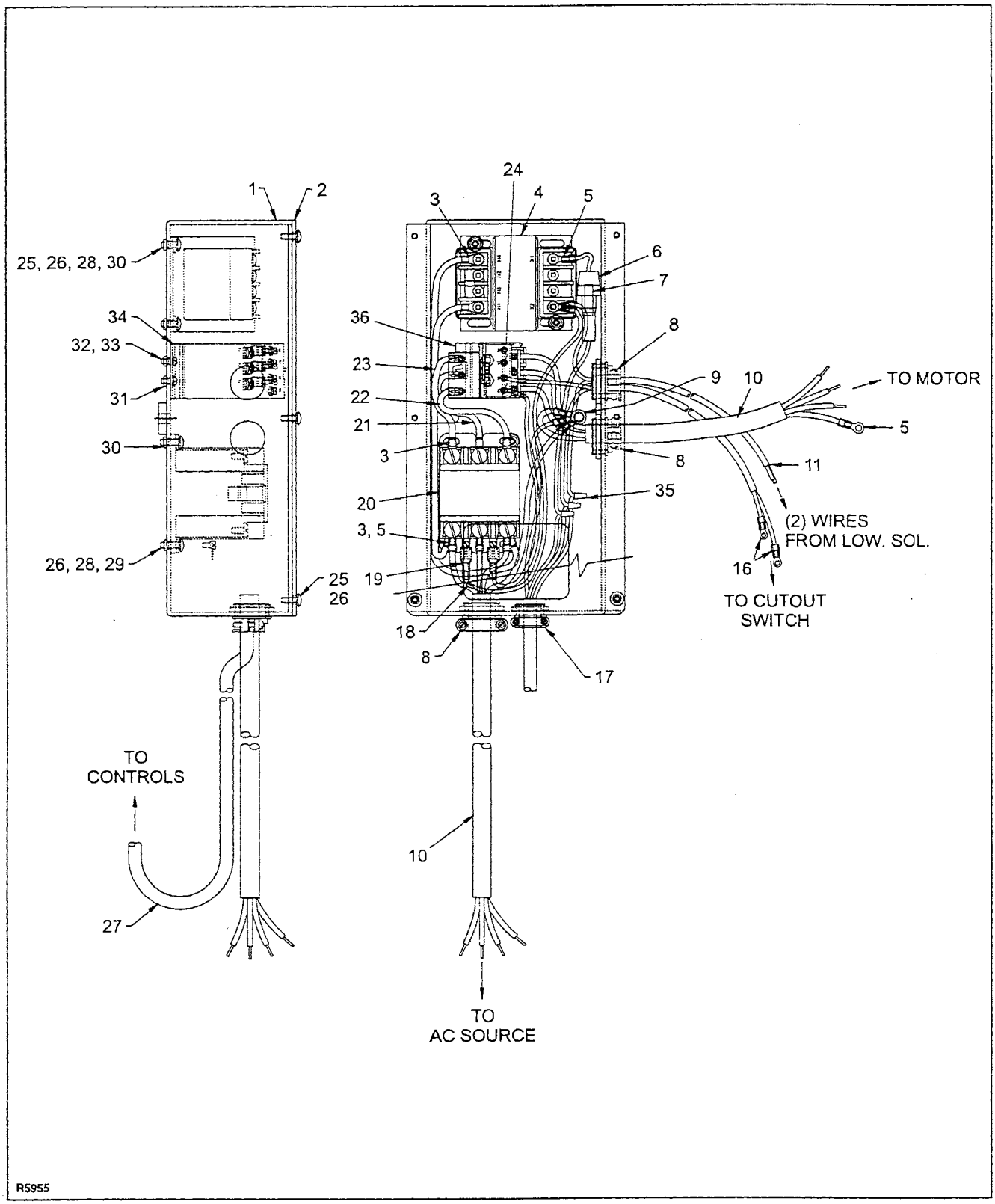


Figure 9-15. Electrical Box Assembly (36/48/60" Tables)
(460V, Three Phase, 60 Hz)

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506024-04	BOX ASSY, ELECTRICAL (36/48/60" TABLES) (460V, THREE PHASE, 60HZ)	1
1	506017	BOX	1
2	404064	COVER	1
3	021237	TERMINAL-RING	7
4	021800	TRANSFORMER 115V	1
5	021203	TERMINAL-RING, 3/16, 16 GA	7
6	009504	FUSE-HOLDER, IN-LINE	1
7	008919	FUSE-3 AMP	1
8	005414	RELIEF-STRAIN	3
9	021206	TERMINAL-RING, 1/4, 16 GA	3
10	004701	CORD, 4 COND, 14 GA	AR
11	010612	TUBING-1/4 SHRINK, BLACK	AR
16	021236	TERMINAL-RING NO. 6, 16 GA	2
17	005405	RELIEF-STRAIN	1
18	023000	WIRE, 16 GA, WHITE	AR
19	021252	TERMINAL, INSUL, 1/4 SPADE	2

INDEX NO.	PART NO.	PART NAME	NO. REQD.
20	006006	CONTACTOR, AC	1
21	023010	WIRE, 10 GA, STRANDED, RED	AR
22	023011	WIRE, 10 GA, STRANDED, BLACK	AR
23	023036	WIRE, 10 GA, STRANDED, WHITE	AR
24	008924-01	RELAY-OVERLOAD 2-3.3A	AR
25	071376	SCREW-TRUSS, #10-32 X 12	8
26	077207	WASHER-LOCK, SPLIT, #10	10
27	004733	CORD, 4 COND, 18 GA	AR
28	077032	WASHER-3/16 X 1/2 X 13 GA	4
29	071385	TRUSS, HD PH, 10-32 X 5/8	2
30	059950	CLINCH-NUT	4
31	059952	CLINCH-NUT	2
32	077205	WASHER-LOCK, SPLIT, 8-32	2
33	070492	SCREW, PH RD, HD, 8-32	2
34	404065	MOUNTING RAIL	1
35	005460	CONNECTOR-WIRE NUT	3
36	008924-05	BASE-MTG, RELAY	1

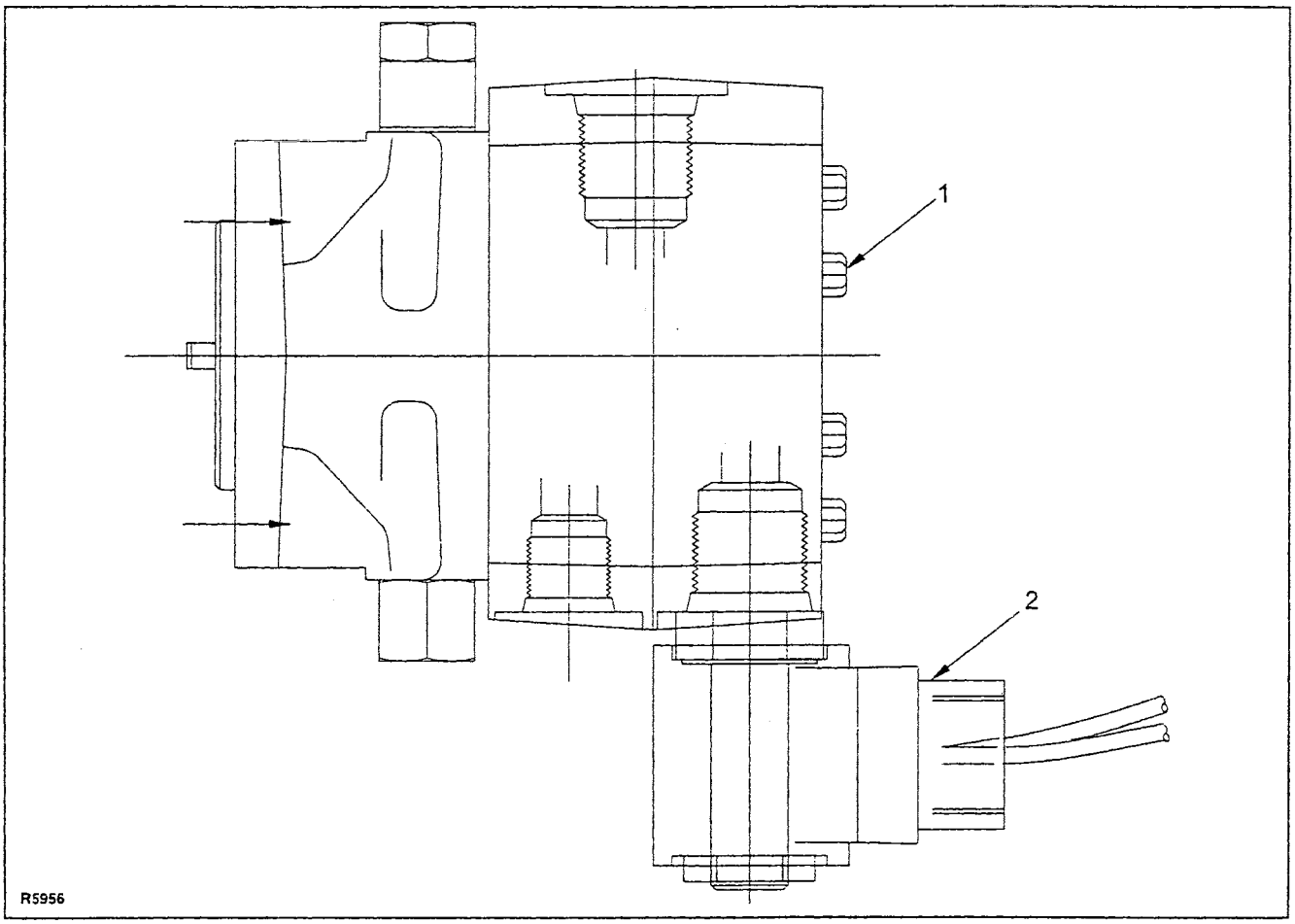


Figure 9-16. Pump Assembly

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506042	PUMP ASSEMBLY	1
1	046530	PUMP 1/4 GEAR (506042-01)	1
1	046531	PUMP 3/8 GEAR (506042-02)	1
2	048176-01	RELEASE VALVE	1

NOTE: REFER TO EXISTING PUMP NAMEPLATE FOR PART IDENTITIES WHEN ORDERING A NEW PUMP.

NOTES

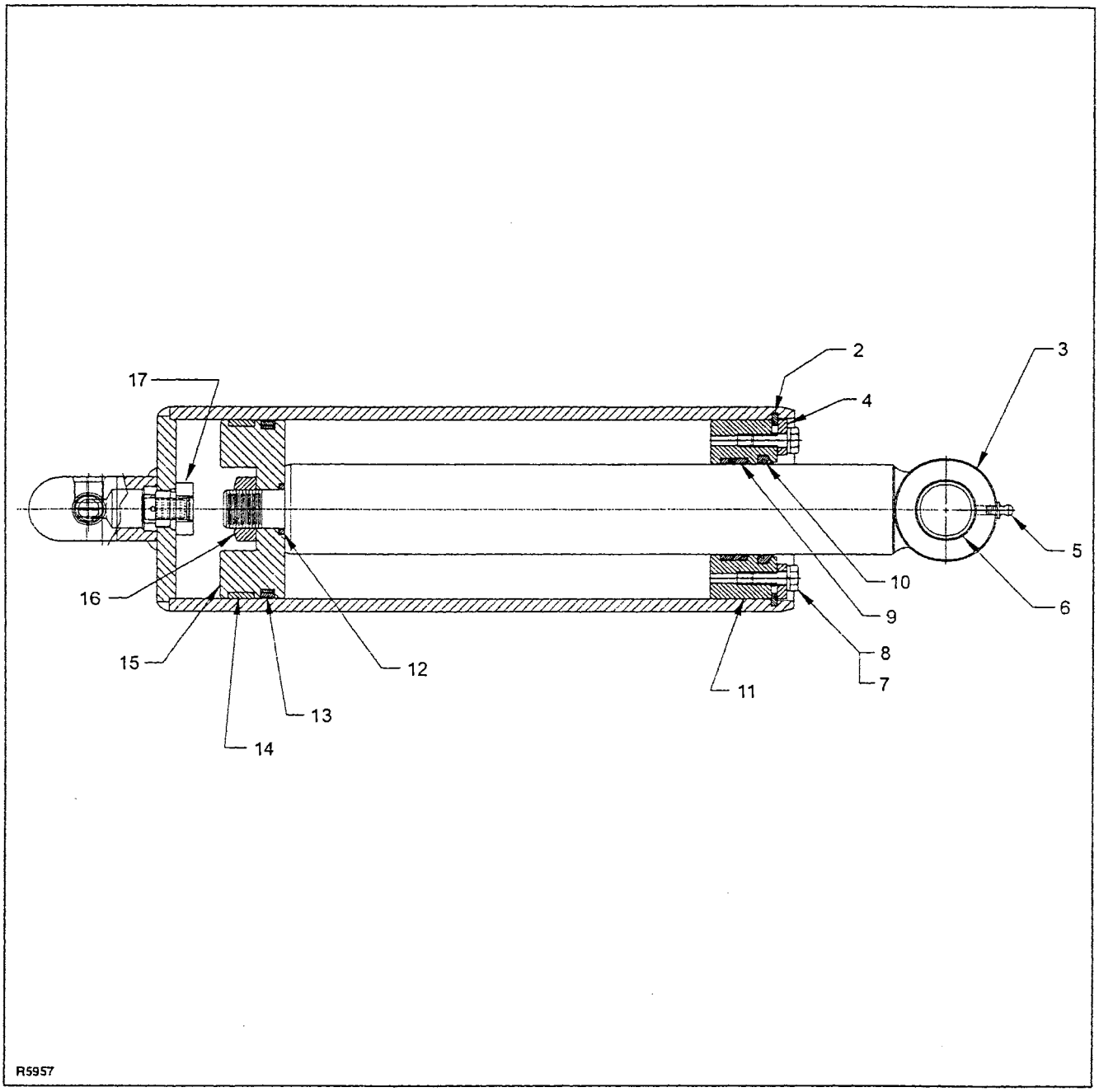


Figure 9-17A. Lift Cylinder with Internal Flow Regulator

3.5" DIA. CYLINDERS

INDEX NO.	PART NAME	PART NUMBER				NO. REQD.
		24" LIFT	36" LIFT	48" LIFT	60" LIFT	
—	CYLINDER	505049-07	506049-01	506049-03	506049-05	—
1	. TUBE ASSY	506051-07	506051-01	506051-03	506051-05	1
2	. SNAP RING	061835	061835	061835	061835	1
3	. ROD	506052-04	506052-01	506052-02	506052-03	1
4	. RETAINER - GLAND	404006-01	404006-01	404006-01	404006-01	1
5	. FITTING - GREASE	025713	025713	025713	025713	1
6	. BEARING	052958-02	052958-02	052958-02	052958-02	2
7	. WASHER, 1/4 SPLIT LOCK	077209	077209	077209	077209	2
8	. SCREW, 1/4-20 X 3/4	063478	063478	063478	063478	2
9	. WEAR RING	049515-01	049515-01	049515-02	049515-02	1
10	. RING - WIPER	049508	049508	049509	049509	1
11	. GLANG	404057-01	404057-01	404057-03	404057-03	1
12	. O-RING	042105	042105	042105	042105	1
13	. SEAL - CYLINDER	042204-01	042204-01	042204-01	042204-01	1
14	. WEAR RING	049515-03	049515-03	049515-03	049515-03	1
15	. PISTON	404101-01	404101-01	404101-01	404101-01	1
16	. NUT - GLAND, NYLOK	800293	800293	800293	800293	1
17	. VALVE - FLOW REGULATOR	048177-02	048177-02	048177-02	048177-02	1

4.0" DIA. CYLINDERS

INDEX NO.	PART NAME	PART NUMBER				NO. REQD.
		24" LIFT	36" LIFT	48" LIFT	60" LIFT	
—	CYLINDER	505049-08	506049-02	506049-04	506049-06	—
1	. TUBE ASSY	506051-08	506051-02	506051-04	506051-06	1
2	. SNAP RING	061840	061840	061840	061840	1
3	. ROD	506052-04	506052-01	506052-02	506052-03	1
4	. RETAINER - GLAND	404006-02	404006-02	404006-02	404006-02	1
5	. FITTING - GREASE	025713	025713	025713	025713	1
6	. BEARING	052958-02	052958-02	052958-02	052958-02	2
7	. WASHER, 1/4 SPLIT LOCK	077209	077209	077209	077209	2
8	. SCREW, 1/4-20 X 3/4	063478	063478	063478	063478	2
9	. WEAR RING	049515-01	049515-01	049515-02	049515-02	1
10	. RING - WIPER	049508	049508	049509	049509	1
11	. GLANG	404057-02	404057-02	404057-04	404057-04	1
12	. O-RING	042105	042105	042105	042105	1
13	. SEAL - CYLINDER	042204-02	042204-02	042204-02	042204-02	1
14	. WEAR RING	049515-04	049515-04	049515-04	049515-04	1
15	. PISTON	404101-02	404101-02	404101-02	404101-02	1
16	. NUT - GLAND, NYLOK	800293	800293	800293	800293	1
17	. VALVE - FLOW REGULATOR	048177-02	048177-02	048177-02	048177-02	1

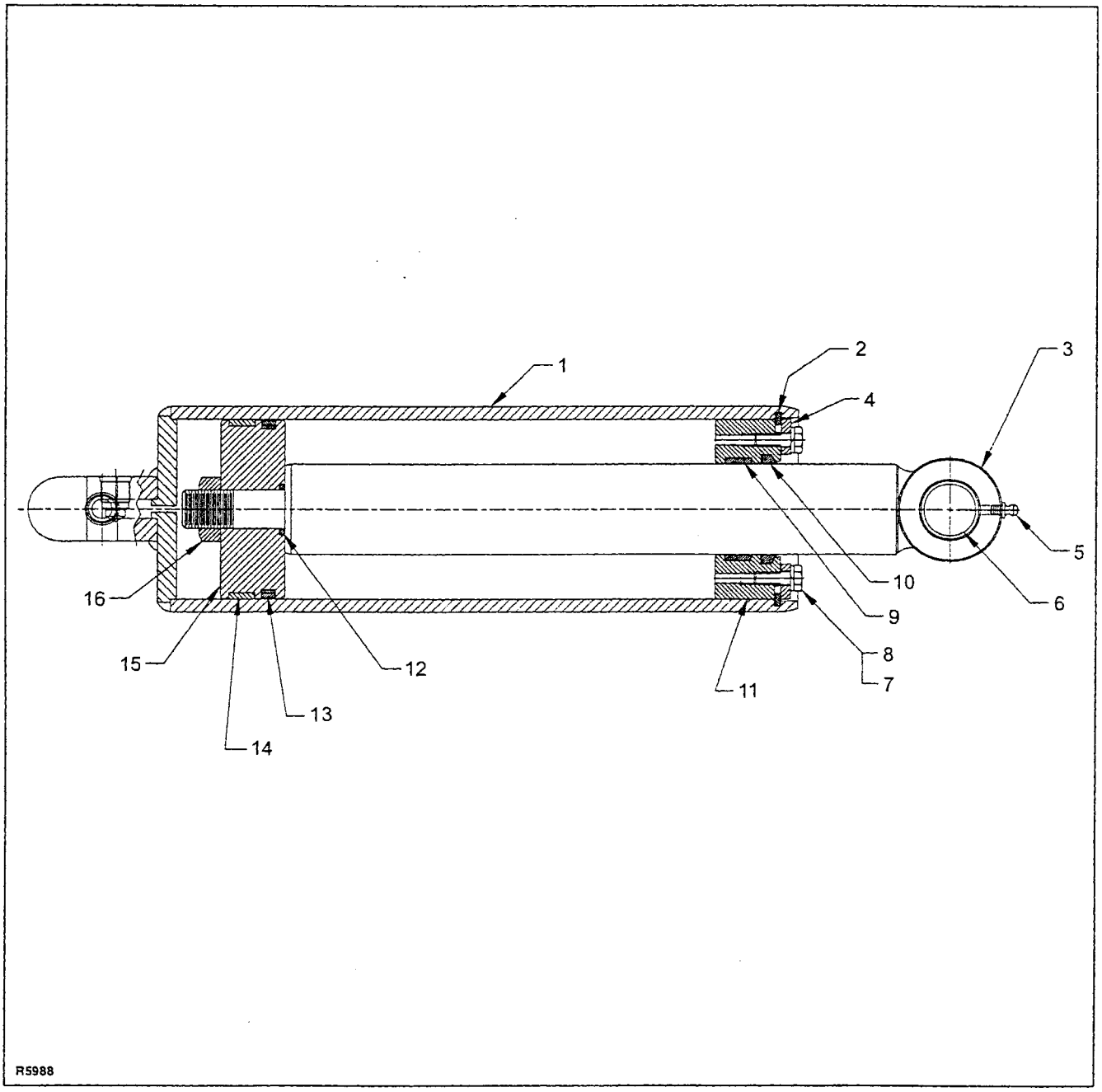


Figure 9-17B. Lift Cylinder without Internal Flow Regulator

3.5" DIA. CYLINDERS

INDEX NO.	PART NAME	PART NUMBER		NO. REQD.
		36" LIFT	48" LIFT	
—	CYLINDER	505618-01	505618-03	—
1	. TUBE ASSY	506016-01	506016-03	1
2	. SNAP RING	061835	061835	1
3	. ROD	506015-01	506015-02	1
4	. RETAINER - GLAND	404006-01	404006-01	1
5	. FITTING - GREASE	025713	025713	1
6	. BEARING	052958-02	052958-02	2
7	. WASHER, 1/4 SPLIT LOCK	077209	077209	2
8	. SCREW, 1/4-20 X 3/4	063478	063478	2
9	. WEAR RING	049515-01	049515-02	1
10	. RING - WIPER	049508	049509	1
11	. GLANG	404057-01	404057-03	1
12	. O-RING	042105	042105	1
13	. SEAL - CYLINDER	042200-01	042200-01	1
14	. WEAR RING	049515-03	049515-03	1
15	. PISTON	404056-01	404056-01	1
16	. NUT - GLAND, NYLOK	800293	800293	1

4.0" DIA. CYLINDERS

INDEX NO.	PART NAME	PART NUMBER		NO. REQD.
		36" LIFT	48" LIFT	
—	CYLINDER	505618-02	505618-04	—
1	. TUBE ASSY	506016-02	506016-04	1
2	. SNAP RING	061840	061840	1
3	. ROD	506015-01	506015-02	1
4	. RETAINER - GLAND	404006-02	404006-02	1
5	. FITTING - GREASE	025713	025713	1
6	. BEARING	052958-02	052958-02	2
7	. WASHER, 1/4 SPLIT LOCK	077209	077209	2
8	. SCREW, 1/4-20 X 3/4	063478	063478	2
9	. WEAR RING	049515-01	049515-02	1
10	. RING - WIPER	049508	049509	1
11	. GLANG	404057-02	404057-04	1
12	. O-RING	042105	042105	1
13	. SEAL - CYLINDER	042200-02	042200-02	1
14	. WEAR RING	049515-04	049515-04	1
15	. PISTON	404056-02	404056-02	1
16	. NUT - GLAND, NYLOK	800293	800293	1

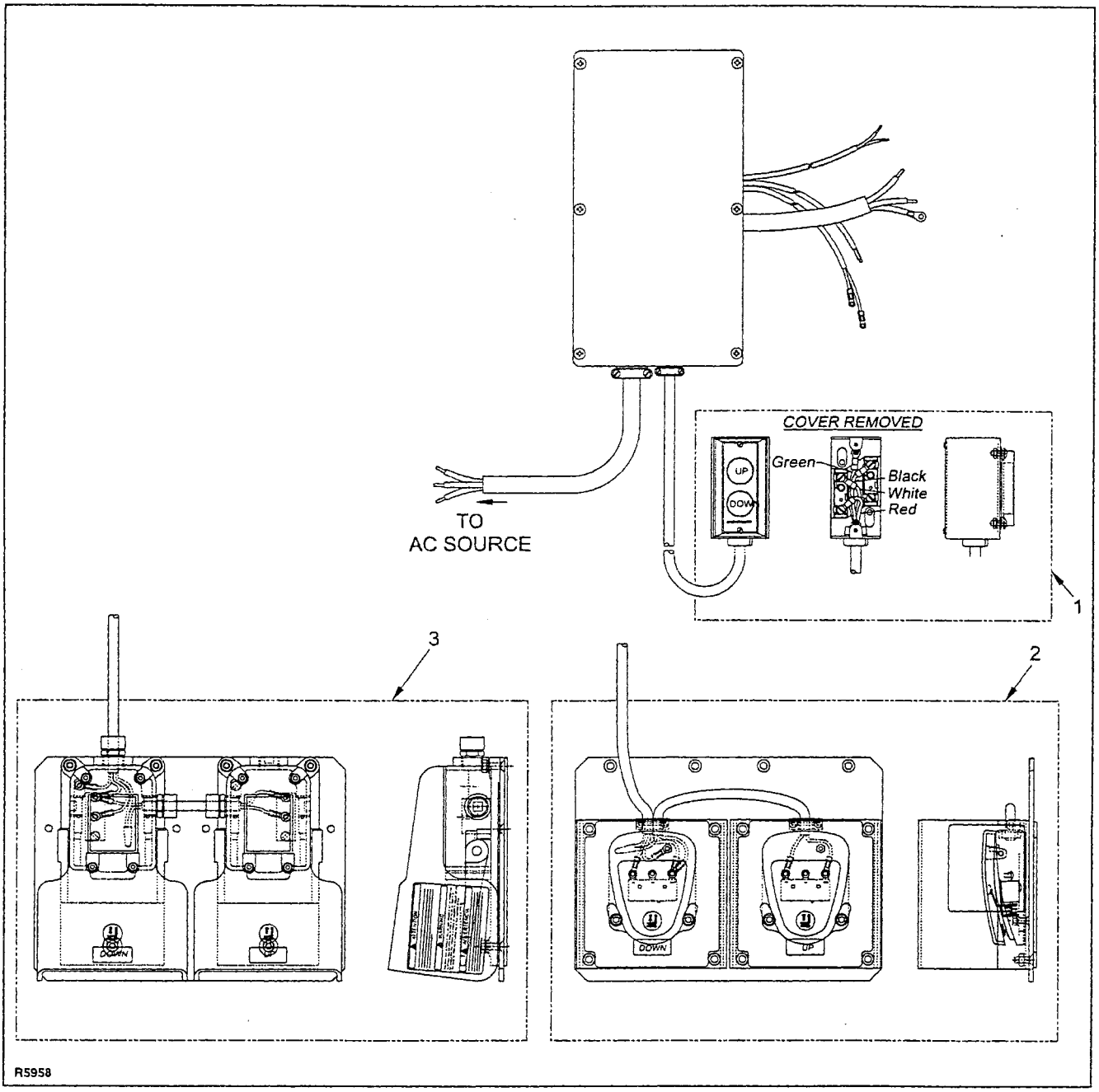


Figure 9-18. Control Switch Installation 506036

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506036	CONTROL SWITCH INSTALLATION	1
1	506038	CONTROL, HAND-HELD W/MAGNET (SEE FIG. 9-19)	1
2	506045	CONTROL, FOOT (SEE FIG. 9-20A)	1
3	506046	CONTROL, FOOT HD (SEE FIG. 9-20B)	1

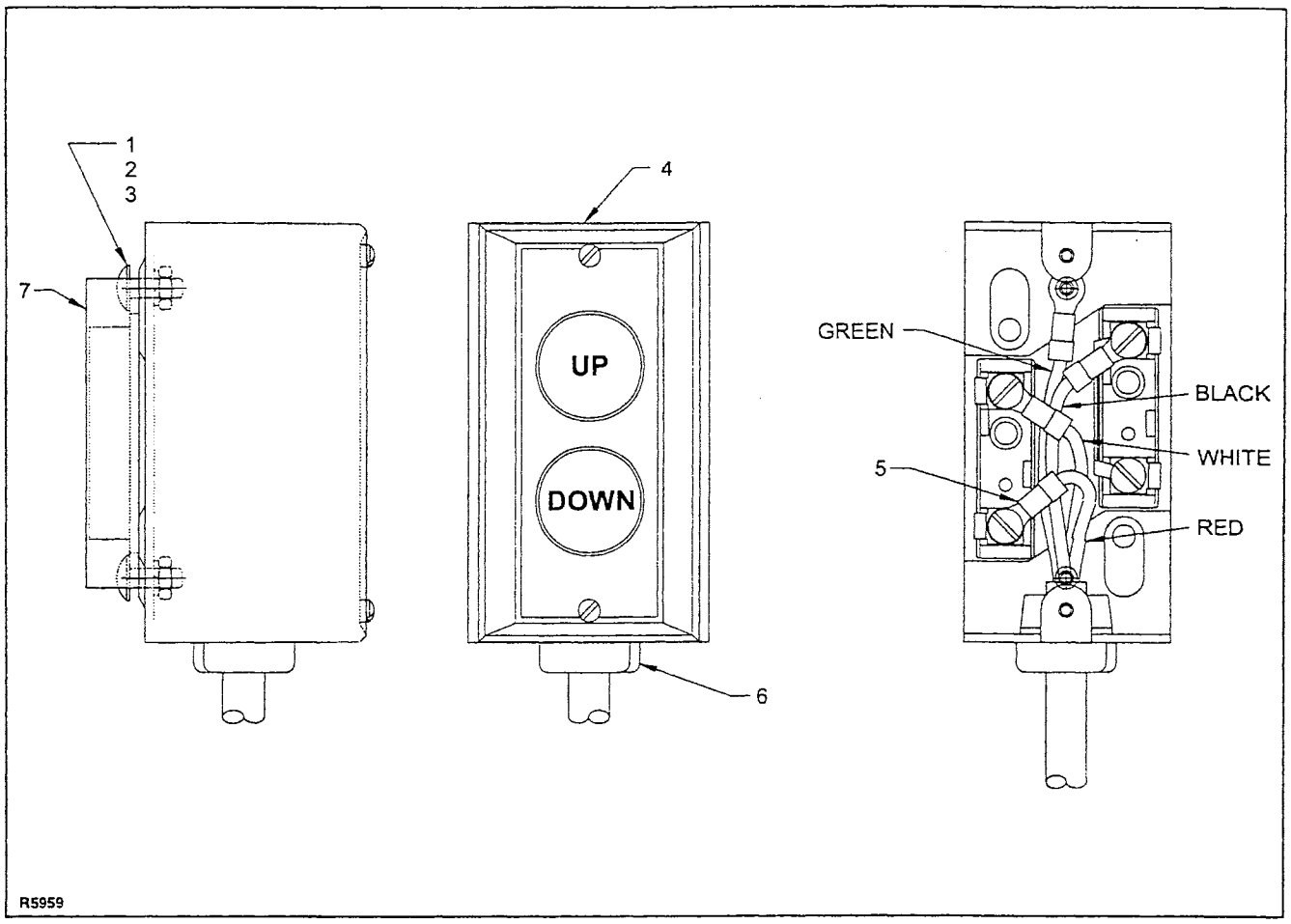


Figure 9-19. Hand-Held Switch Assembly 506038

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506038	HAND-HELD SWITCH ASSEMBLY	1
1	071376	SCREW-TRUSS, #10-32 X 12	2
2	077207	WASHER-LOCK, SPLIT, #10	2
3	059416	HEX-NUT, REGULAR 10-32	2
4	020790	BOX-SWITCH, 2 BUTTON, UP/DOWN	1
5	021203	TERMINAL-RING, 3/16, 16 GA	4
6	052905	BUSHING-RELIEF, STRAIN	1
7	058501	MAGNET	1

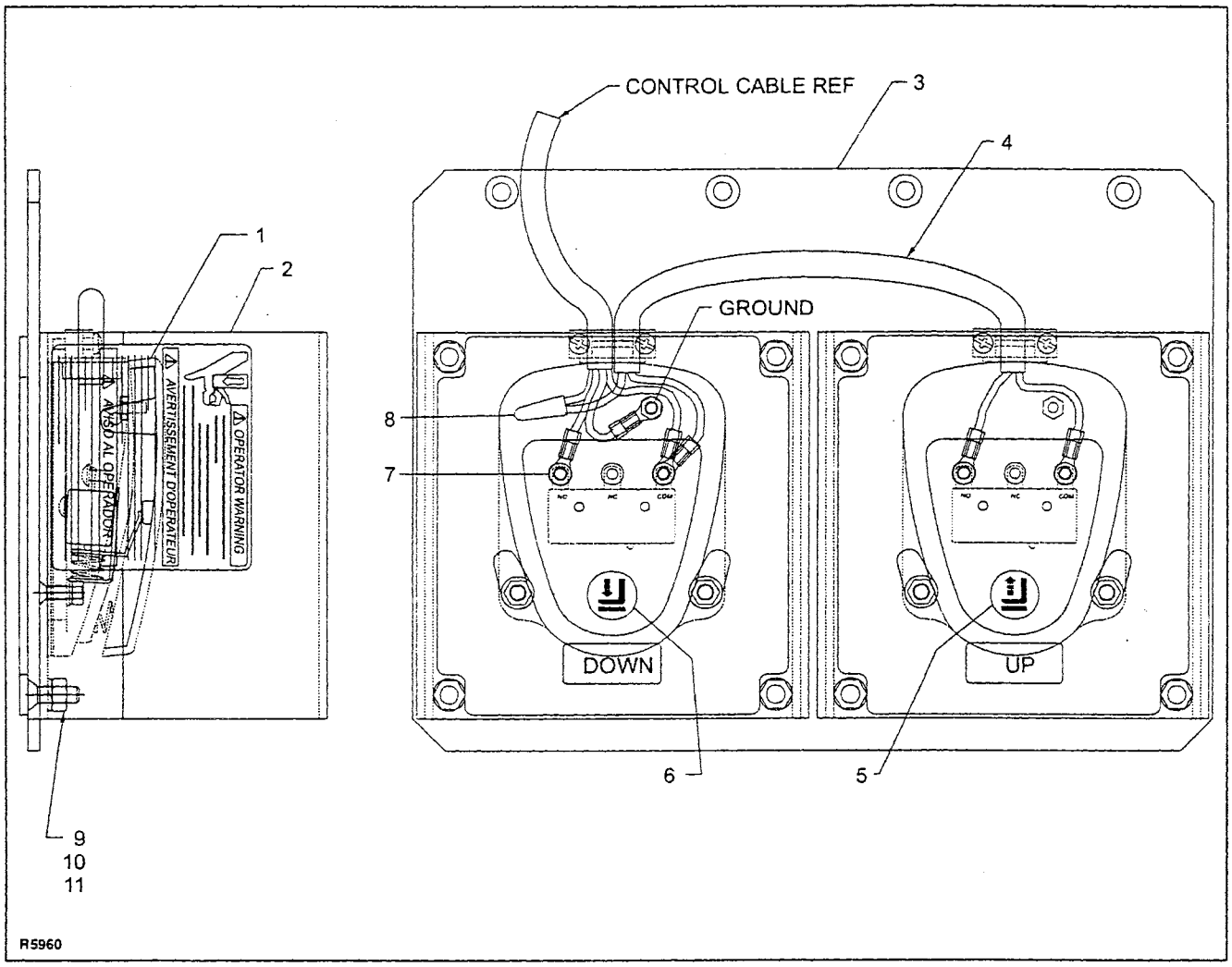


Figure 9-20A. Foot Switch Assembly 506045

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506045	FOOT SWITCH ASSEMBLY	1
1	020792	SWITCH-FOOT, SINGLE	2
2	020793	GUARD-FULL, SINGLE	2
3	404093	PLATE-MOUNTING	1
4	004724	CORD, 2 COND, 16 GA	AR
5	056641-03	DECAL-SW BUTTON, LIFT	1
6	056641-04	DECAL-SW BUTTON, LOWER	1
7	021203	TERMINAL-RING, 3/16, 16 GA	6
8	005446	WIRE-NUT	1
9	077209	WASHER-LOCK, SPLIT, 1/4	8
10	059421	NUT-HEX, 1/4-20	8
11	069478	SCREW-PH FL HD, 1/4-20 X 3/4	8

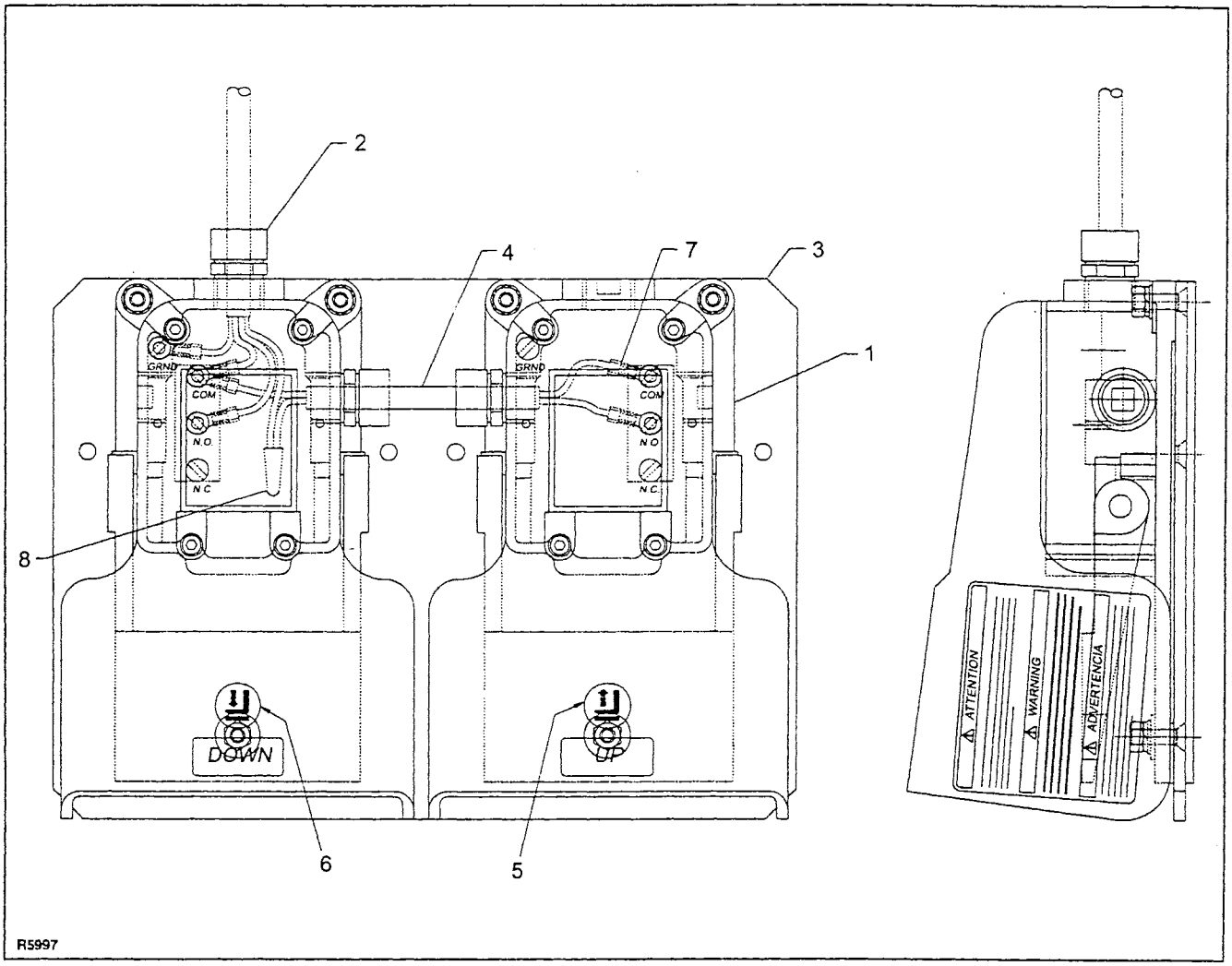


Figure 9-20B. Foot Switch Assembly HD 506046

INDEX NO.	PART NO.	PART NAME	NO. REQD.
—	506046	FOOT SWITCH ASSEMBLY, HD	1
1	020792	SWITCH-FOOT, SINGLE	2
2	019910	STRAIN RELIEF	3
3	404093	PLATE-MOUNTING	1
4	004724	CORD, 2 COND, 16 GA	AR
5	056641-03	DECAL-SW BUTTON, LIFT	1
6	056641-04	DECAL-SW BUTTON, LOWER	1
7	021203	TERMINAL-RING, 3/16, 16 GA	6
8	005446	WIRE-NUT	1
9	077209	WASHER-LOCK, SPLIT, 1/4	6
10	059421	NUT-HEX, 1/4-20	6
11	069479	SCREW	6
12	077030	WASHER	6

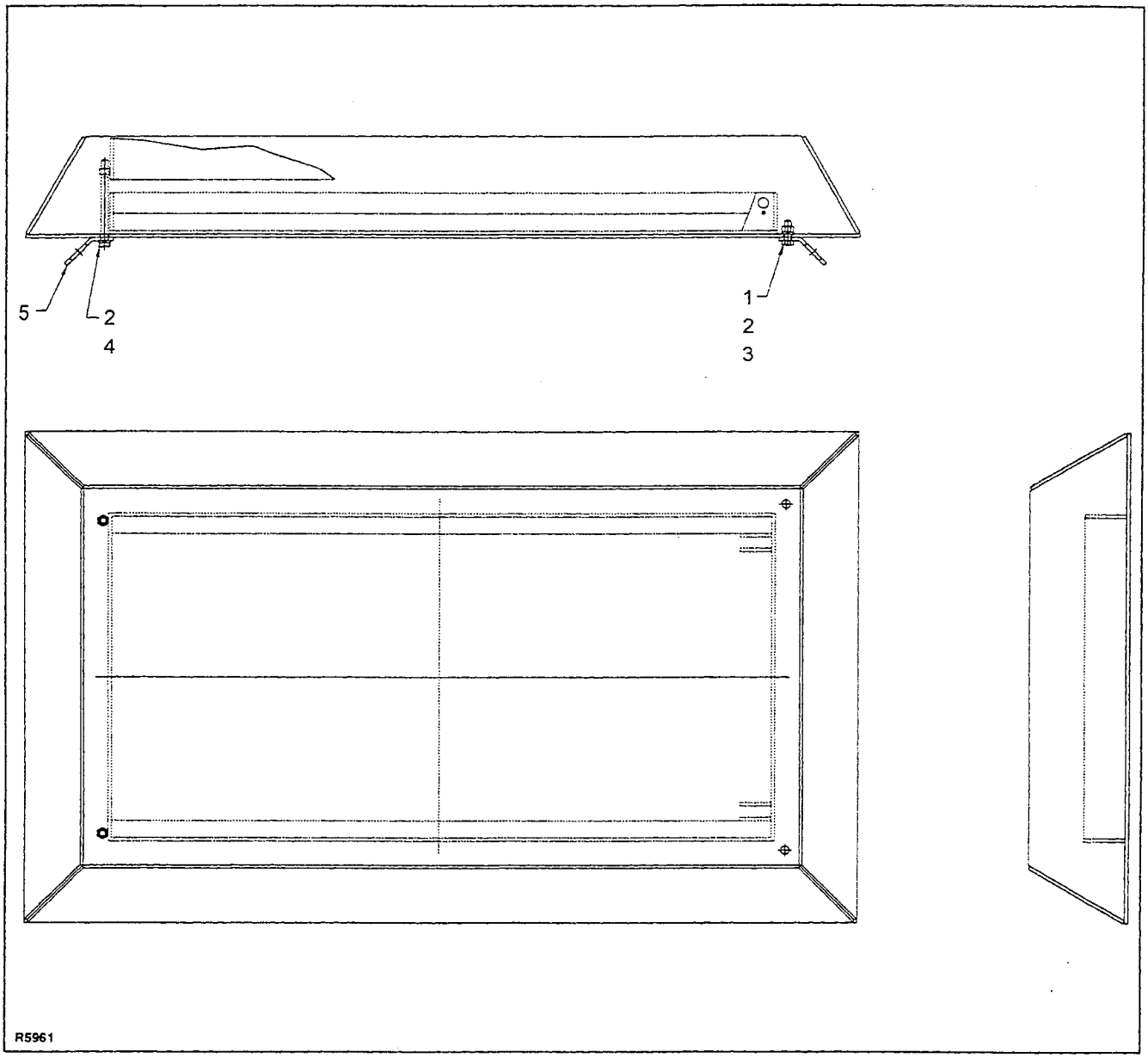
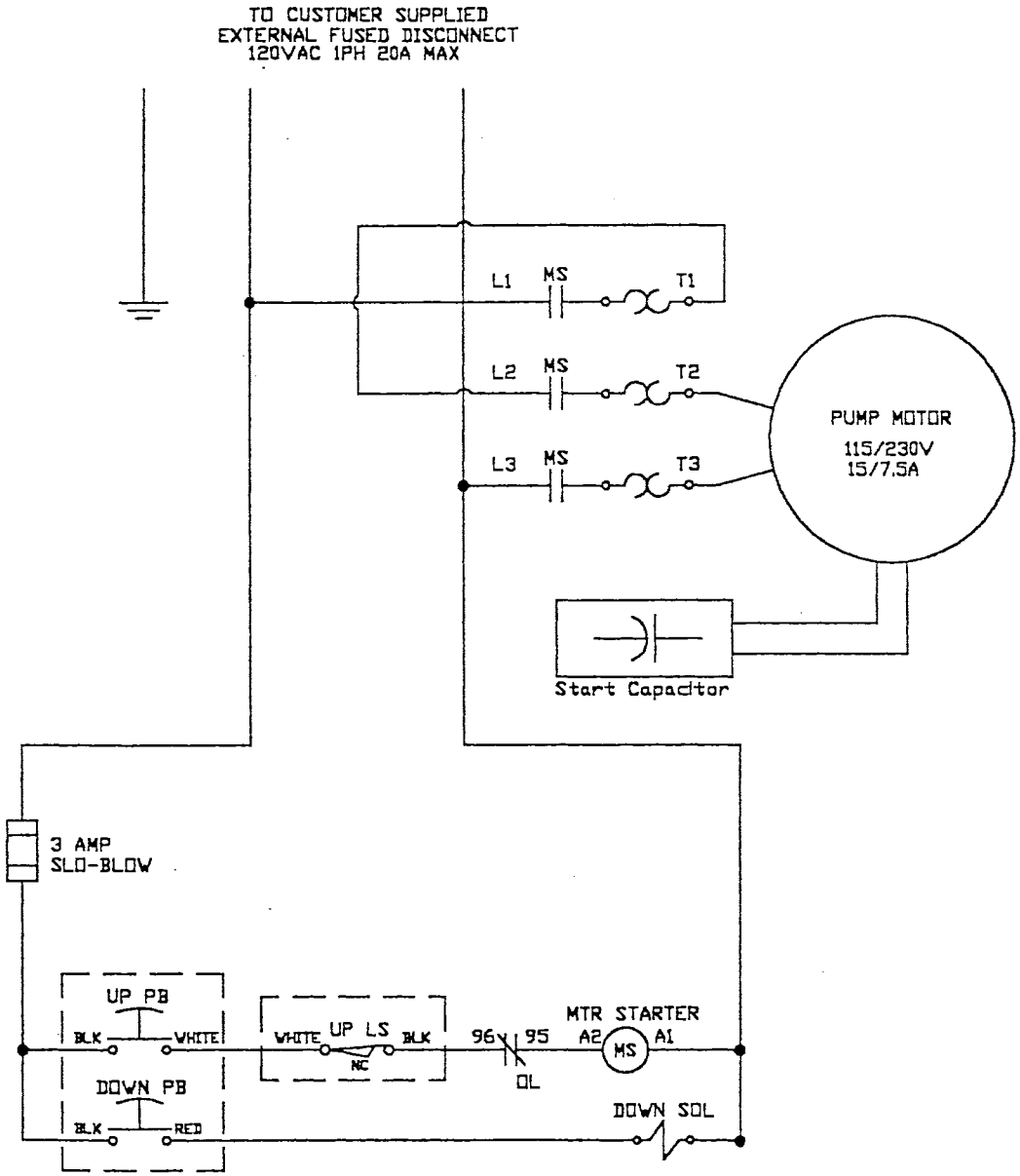


Figure 9-21. Platform Beveled Toeguard 506001

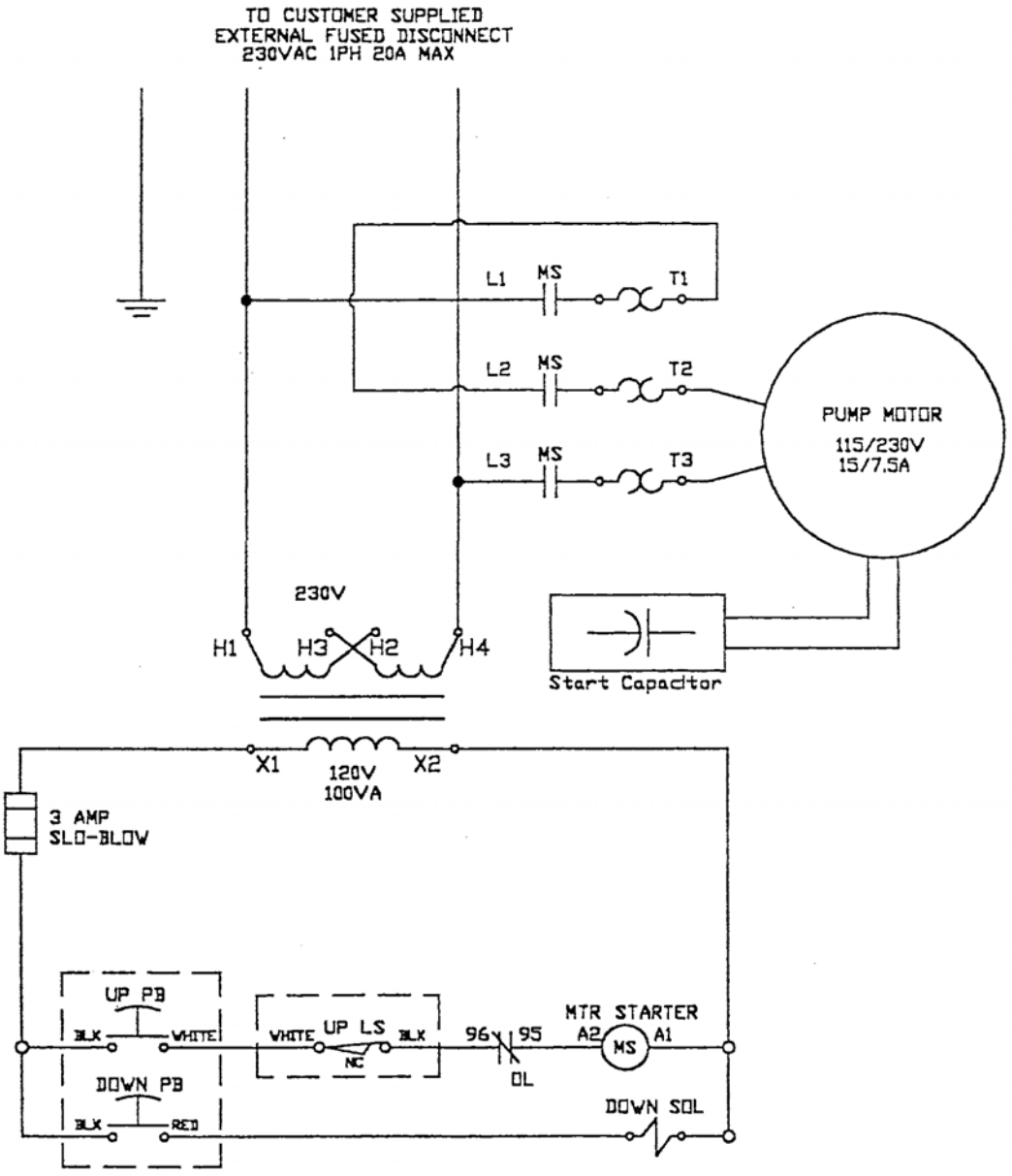
INDEX NO.	PART NAME	PLATFORM TOEGUARD 506001 PART NO.	NO. REQD.
—	PLATFORM, BEVELED TOEGUARD	506001	1
1	. NUT-HEX, 1/2-13	059437	2
2	. WASHER-LOCK, SPLIT, 1/2	077213	4
3	. SCREW-HEX CAP, 1/2-13 X 1/2	064709	2
4	. SCREW, HEX-CAP, 1/2-13 X 6	063720	2
5	. BRACKET, LIFTING	404034	4

SUPPLEMENTAL WIRING DIAGRAM FOR MAX-LIFT TABLES WITH SERIAL # STARTING WITH "D"



Lift Products Inc.	Hydraulic Lift Table Control Schematic 120v 1ph
Model : MAX-LIFT	
Date : 6/18/2001	
Drawn By : J.D.	DERCO Max-Lift1.dwg

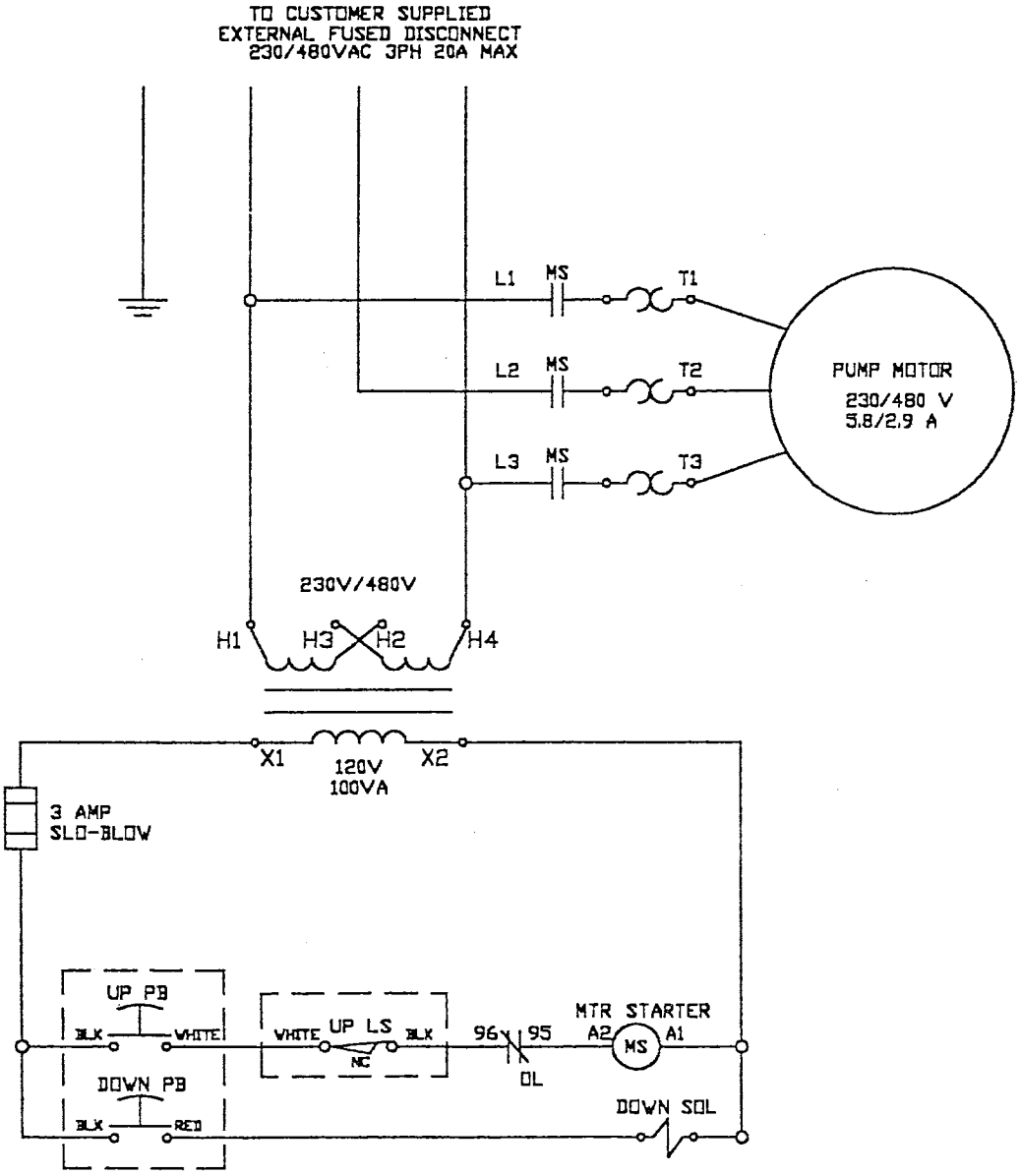
SUPPLEMENTAL WIRING DIAGRAM FOR MAX-LIFT TABLES WITH SERIAL # STARTING WITH "D"



Lift Products Inc.	Hydraulic Lift Table Control Schematic 230v 1ph
Model : MAX-LIFT	
Date : 6/18/2001	
Drawn By : J.D.	DERCO Max-Lift1.dwg

03/04

SUPPLEMENTAL WIRING DIAGRAM FOR MAX-LIFT TABLES WITH SERIAL # STARTING WITH "D"



Lift Products Inc.	Hydraulic Lift Table Control Schematic 230/480v 3ph
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