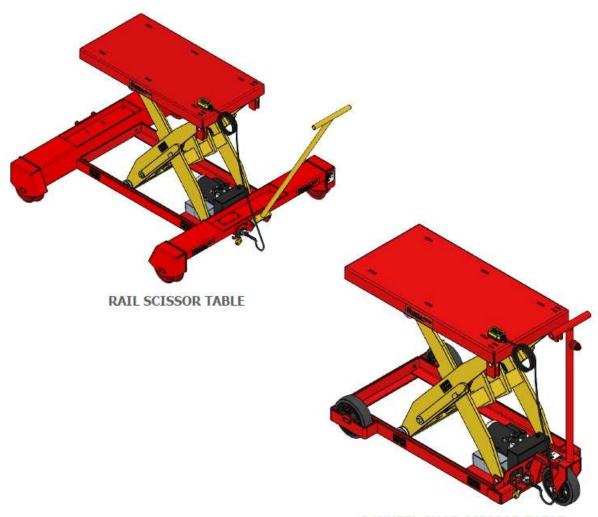


## **OPERATING MANUAL**

# **ELECTRIC SCISSOR TABLE 3000 lbs., 24 x 48**

### Applies to

- Rail Scissor Table Assembly # 113150126
- 3 Wheel Shop Scissor Table Assembly #113150127



3 WHEEL SHOP SCISSOR TABLE



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### 1. Important Safety Information

To ensure the safe use of this equipment, it is the responsibility of the owner and operator that any individual operating this equipment or working in the vicinity of this equipment is deemed to be competent, defined by the region's Safety Codes and Regulations, an example is as follows:

Competent: in relation to a person, means adequately qualified, suitably trained and with sufficient experience to safely perform work without supervision or with only a minimal degree of supervision.

In order for this equipment to perform safely as designed, proper maintenance must be performed periodically.

Improper operation, maintenance, lubrication and repair of this equipment may result in serious injury or death.

Hydra Tech tools are specially designed pieces of equipment and as such should NOT be modified in any way.

Hydra-Tech cannot anticipate every possible condition that may present a potential hazard. Therefore, the warnings provided in this manual and affixed to the equipment are not exhaustive. It is the responsibility of the owner and operator to ensure that any application of this equipment not specifically recommended by Hydra-Tech—including operation, maintenance, lubrication, or repair—is performed in a safe manner. Such use must safeguard the operator, all personnel in the vicinity, and the equipment itself from injury or damage.

Information, images, and specifications contained within this document are based on information available at the time it was written or last revised. The contents of this document may change over time, and the latest version of this document should be obtained by the owner and/or operator prior to use of the equipment.

For further information or suggestions regarding the safe operation, maintenance and repair of this equipment please contact Hydra-Tech International using the following contact information:

Telephone (403) – 720 – 7740 Website: <u>www.hydra-tech.net</u>



#### a) Safety is everybody's business!

- Wear proper personal protective equipment when operating hydraulic equipment.
- When the pump is running, oil is under high pressure.
- Always check pump fluid levels prior to use.
- Always check the unit for damage prior to use.
- Never connect electric power to a unit that has damaged cords.

#### b) Signal Words

This manual uses Signal Words to direct the reader's attention to important safety-related messages. These messages describe uses of the product that could result in personal injury or property damage. Each signal word corresponds to a specific hazard level. The following are definitions of signal words that might appear in this manual.

**QC:** This symbol is used to indicate that an inspection of equipment is required before operating, or additional attention is required to ensure safety and quality standards are met to prevent personal, product or property damage.

▲ SAFETY: This symbol is used to indicate that extra care or caution is needed while operating and working with the equipment to ensure safety and prevent injuries and accidents.

#### c) Hazards

Hydra-Tech strives to identify all foreseeable hazards associated with the use of its products. However, material handling is dangerous, and no manual can address every risk. Therefore, the end user is always ultimately responsible for exercising sound judgment in the use of this product.



#### d) Warnings: A SAFETY

Improper or careless operation of this device might result in serious personal injuries.

- Read and understand this entire manual before installing, assembling, operating or servicing this equipment. Keep this manual in a location known to persons who use the equipment. Read the manual whenever necessary to refresh your understanding of proper use, inspection, and maintenance procedures. Failure to read and understand this owner's manual before using or servicing the equipment constitutes a misuse of the product.
- The Electric Hydraulic Scissors Lift Table presents pinch point and hydraulic pressure & electrical hazards to the user and bystanders. ALWAYS follow these instructions to avoid injury.
- DO NOT load the table beyond its lift rated capacity. Handle only stable and safely arranged loads within the maximum capacity of the lift. The lift capacity can be found on the name plate on the cart frame.
- ALWAYS use care to center and distribute the load evenly on the lift platform.
- DO NOT attempt to lift an overhanging or cantilever load.
- DO watch the load when the lift table is in operation.
- ALWAYS keep clear of the lift table while it is moving.
- DO NOT place hands or feet under the platform. DO NOT put any body part in the scissor mechanism.
- DO NOT use this lift table to raise personnel.
- DO NOT store objects under the platform, where it could be damaged, prevent safe lifting or damage the scissor lift entirely.
- DO NOT use the lift table if any damage is observed, or unusual noises heard.
- DO ensure that all information, safety, and warning labels remain in place and are legible.
- DO remove any load from the lift table before servicing the lift table or its hydraulic power unit. DO completely lower the platform or use the attached maintenance locking bars to support the platform, before servicing this product.



- If oil is needed, DO use an anti-wear hydraulic oil with a viscosity grade of 150 SUS at 100°F (ISO 32 cSt @ 40°C). DO NOT use brake fluid or jack oils in the hydraulic system.
- Contact the manufacturer for SDS (Safety Data Sheet) information.
- Maintenance and repairs are to be done only by personnel qualified to perform the required work. Consideration will not be given for warranty repair charges without prior written authorization by the manufacturer.
- DO NOT perform any modifications to the lift table.

### e) Notice: **☑** QC

Proper use and maintenance are essential for this product to function properly.

- Always use this product in accordance with the instructions in this manual.
- Periodically lubricate pivot points with a liquid spray grease.
- Always use this product in dry conditions.
- Use only factory-approved replacement parts.



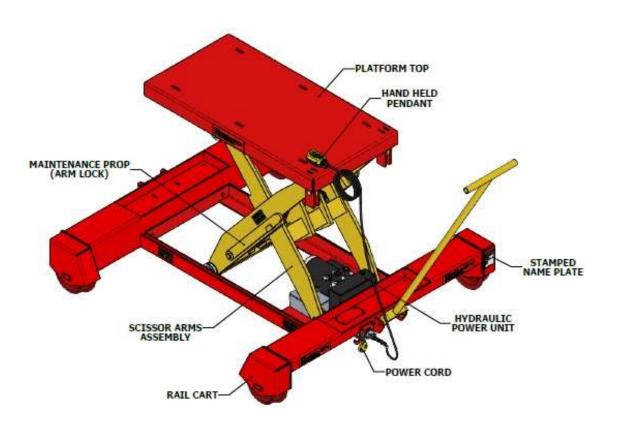
### 2. Electric Scissor Lift Table 3000 lbs, 24 x 48

### a) Scissor Lift Table Components

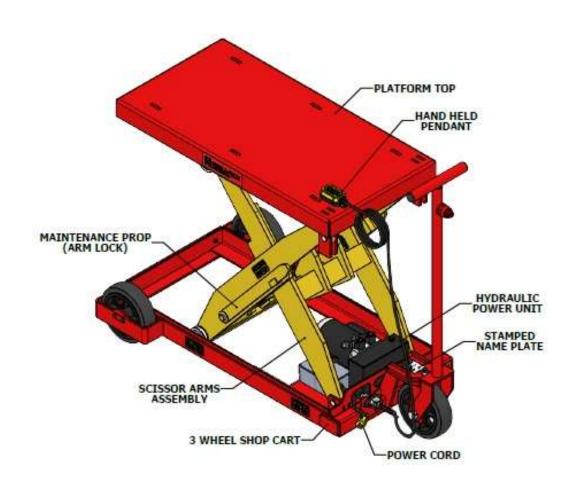
The scissor lift table is suitable for use in most industrial locations and many commercial locations. It is intended to lift stable, evenly distributed, nonhazardous materials loads having a size or footprint approximately the same size as the platform.

The pictures below identify the major components of the scissors lift table:

#### i. Rail Scissor Table major components:



### ii. 3 Wheel Shop Scissor Table major components:

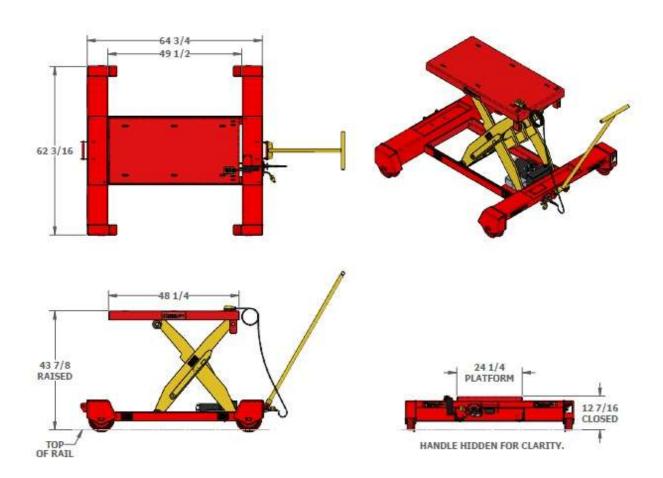




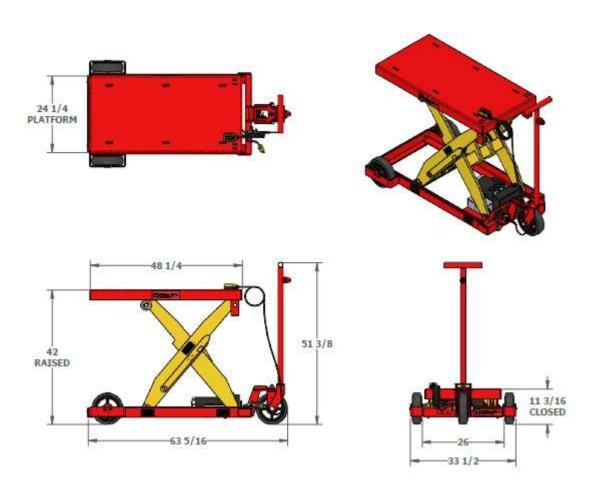
### b) Scissor Lift Table Dimensions

The 3000 lbs Electrical Scissor Lift Table top has a 24.25 inch width, and a 48.25 inch length. As shown below.

#### **Rail Scissor Table set up Dimensions** i.



### ii. 3 Wheel Shop Scissor Table set up Dimensions





#### c) Name Plate:

- The Scissor Lift Table model number, serial number, date of manufacturing and capacities are stamped on the Name Plate. As shown below.
- The load capacity rating is stamped on the name plate of your scissor lift table
  designates its net capacity. The addition of ancillary equipment to the scissor
  lift table will necessitate a lowering of the load capacity. The lift table's load
  capacity must never be exceeded, as permanent damage or personal injury may
  result. A SAFETY



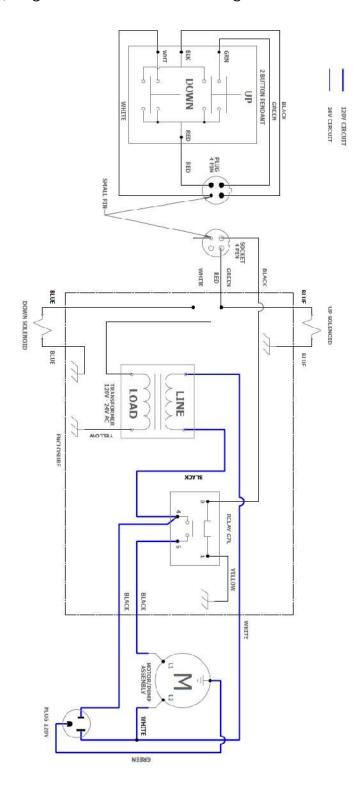
Rail Scissor Table Name Plate.



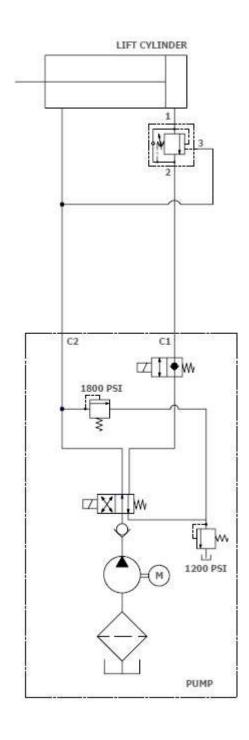
3 Wheel Shop Scissor Table Name Plate.

### d) Electrical and Hydraulic System Diagrams

1) 115 VAC, Single-Phase Electric Circuit Diagram



### 2) Hydraulic Diagram





#### For safety reasons <u>∧</u> SAFETY

- Troubleshooting and repair of this equipment should be done by qualified individuals trained to understand mechanical devices and their associated electrical and hydraulic circuits, as well as the hazards associated with them.
- Care should be taken to identify all potential hazards and comply with applicable safety procedures before beginning work.
- Ensure that all system pressure and electrical power have been removed before attempting to work on the electrical or hydraulic systems. Follow all applicable lockout/tagout procedures.
- The load must be removed, and the platform either positively and adequately supported or fully lowered, before any work is performed on the lift table.



### 3. Operation Instructions

#### a) Loading the platform.

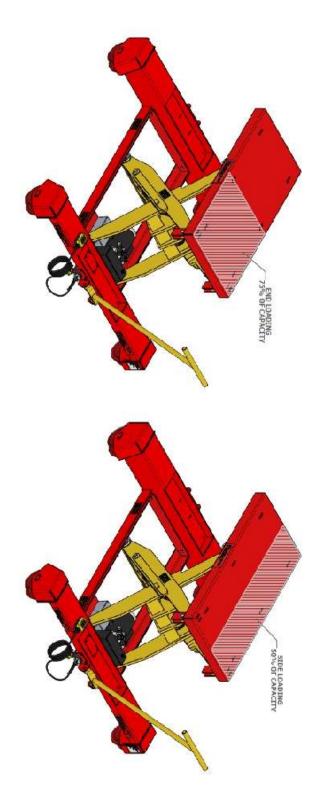
The load rating, in pounds, is shown on the scissor table name plate located on the equipment base. This indicates the net capacity of the scissor lift table for a static load, centered and evenly distributed on the platform.

For Off-Centre loads, the lift table's maximum capacity is

- 75% of the rated capacity for end loading (either end).
- 50% of the rated capacity for side loading (either side).

The drawings below identify the end and side load of the scissors lift table and as follows:

### i. Rail Scissor Table





#### ii. 3 Wheel Shop Scissor Table



#### For safety reasons <u>∧</u> SAFETY

• DO NOT exceed the lift table's load ratings. Injury to personnel or permanent damage to the lift table can result from exceeding the listed capacity.

**Note:** Take into account the weight of any equipment added to the platform by third parties when determining the maximum working load to be placed on the platform.

- The platform rollers are not captured. DO NOT overhang any load over the end
  of the platform. A cantilevered or overhanging load at the hinged end can cause
  the platform to tilt and dump the load. For applications involving side or end
  edge loading, consult the factory.
- This lift table is not approved for lifting personnel.

#### b) Operation

The scissor lift table is furnished with an internally mounted electric-hydraulic power unit and a handheld pushbutton control that plugs into a socket on the front of the frame. Install the push button control before connecting the scissor table to the 120v power supply. Please refer to the table below for the recommended Power Cord.

| 110V, Single Phase | 20A circuit | 30A circuit |
|--------------------|-------------|-------------|
| 25 feet            | 12 AWG      | 10 AWG      |
| 50 feet            | 8 AWG       | 6 AWG       |
| 75 feet            | 6 AWG       | 4 AWG       |

#### To operate the table

- Press the "RAISE" pushbutton to energize
  the power unit and raise the platform. The
  platform will rise only while the pushbutton
  is pressed. When the push button is
  released, the platform will stop and hold its
  position.
- Press the "LOWER" pushbutton Press the "LOWER" pushbutton to energize the power unit and lower the platform. If you release the button on the hand control the platform will stop as well as the pump.
- The scissor table hydraulic system contains a relief valve that will not allow the table to lift past its capacity (3000 lbs) and a check valve that locks the load when the control button is released. In the event of a hydraulic line failure the check valve on the cylinder will prevent the platform from lowering.





#### For safety reasons **▲** SAFETY

- At the beginning of every shift, before loading table; Check the condition of the controls, scissor mechanism, hydraulic lines, and electric cable. If any item needs repair or otherwise contributes to an unsafe condition, remove the lift table from service until it has been restored to a safe operating condition.
- Never use the lift table if any damage or unusual noise is observed, if it needs repair, or if any other malfunction is observed. Notify your supervisor or maintenance personnel.
- Always watch the area around the platform and any load on the platform when it is in operation.
- Keep all personnel clear of the machine when it is in operation. Before operating the lift table, make certain no part of any person or object is under the platform.

### 4. Inspection and Maintenance **☑** QC

Proper maintenance is essential for maximizing the service life of this product. If an inspection reveals any irregularities in the lift table's condition, repair it before returning it to service. Only use manufacturer-approved replacement parts. Contact Hydra-Tech if you have questions that are not addressed in these instructions or if you are uncertain how to address an issue discovered during an inspection. Hydra-Tech can be contacted via our website: <a href="https://www.hydra-tech.net">www.hydra-tech.net</a>



#### For safety reasons <u>∧ SAFETY</u>

- Only qualified individuals trained to understand mechanical devices, electrical and hydraulic circuits, and the hazards associated with them, should attempt troubleshooting and repair of this equipment.
- Care should be taken to identify all potential hazards and comply with applicable safety procedures before beginning work.
- Remove any load and install the maintenance props before beginning any inspection or service on the lift table. See below:

#### a) Inspection procedures.

Prior to performing any inspection or maintenance on this lift table:

- Read and understand these maintenance procedures.
- Remove the load from the platform. Do not attempt to service a loaded lift table.
- Raise the platform to its full height. Rotate both locking bars forward so that
  their free ends drop down into the lift table's frame. Lower the platform until the
  locking bars slide up against the end of the frame.
- Disconnect power and follow established lockout/tagout policies as required.

#### b) Initial inspection.

Prior to use, any new, altered, modified, or repaired scissor lift table shall be inspected by a qualified person.



#### c) Daily inspection.

At the beginning of every shift, a designated person shall complete these inspections. Remove the lift table from service and repair or replace any damaged parts if any of the following is found.

#### Look for:

- 1) Frayed wires.
- 2) Oil leaks.
- 3) Pinched, chafed, worn, or cracking hydraulic hoses.
- 4) Damage, deformation, or cracks in any structural member or any weld. Give special attention to the scissor arms and cylinder mounts.
- 5) Loose or missing fasteners.
- 6) Unusual noise or evidence of binding.

### 5. Troubleshooting Guide

#### For safety reasons <u>∧ SAFETY</u>

- Only qualified individuals trained to understand mechanical devices, electrical and hydraulic circuits, and the hazards associated with them, should attempt troubleshooting and repair of this equipment.
- Care should be taken to identify all potential hazards and comply with applicable safety procedures before beginning work.
- Remove any load and install the maintenance props before beginning any inspection or service on the lift table. See below.

Consult the factory for any problems not addressed in this manual. ALWAYS have the product serial number or model number on hand when calling the factory.

| PROBLEM                                       | POSSIBLE CAUSES                                  | ACTION  |
|---|--|---|
| Power unit doesn't run<br>when "UP" button is | Pendant control cable damaged No supply voltage. | Replace pendant control Test with meter. Check fuses, breakers, |
| pressed.                                      | No supply voltage.                               | and overloads to determine the cause                            |
|   | Bad control transformer.                         | Check for 24 VAC at secondary. Replace if bad.                  |
| Motor runs but platform                       | Pump is failing to produce                       | Consult factory.  |
| doesn't move.                                 | pressure.  |   |
|   | Excess voltage drop to motor, due                | Check the power installation for                                |
|   | to power wire size being too small,              | adequacy. Refer to recommended                                  |
| Motor hums or pump                            | wire run to long, or incoming                    | power cord table, page 17.                                      |
| squeals, but the platform                     | voltage too low.                                 |   |
| does not move, or the                         | Pressure relief opening at full                  | Check for structural damage or binding                          |
| platform moves slowly.                        | pressure.  | of the scissor legs, etc.                                       |
|   | Contamination holding open the                   | Consult factory.  |
|   | lowering valve or the check valve.               |   |
| Platform raises, then                         | Contamination holding open the                   | Consult factory.  |
| drifts down.                                  | lowering valve or the check valve.               |   |
| Platform won't lower.                         | Solenoid coil is bad.                            | Check with multimeter using the diode-                          |
|   |  | check function. (Reading for ohms will                          |
|   |  | not provide an accurate test of the coil).                      |
|   |  | Replace if bad.   |
|   | Physical obstruction of the                      | Inspect for foreign material or objects                         |
|   | mechanism.                                       | blocking the scissor arms or the rollers.                       |



#### **6. Service Centers**

Please contact Hydra-Tech for current information on the closest service center to you.

Contact information for Hydra-Tech is as follows:

Telephone (403) – 720 – 7740 Website: <u>www.hydra-tech.net</u>

### 7. Warranty Information

For warranty information please refer to the information provided on the Hydra-Tech website at.

https://hydra-tech.net/resources/