

ST-2000 Scissor Table

Capacity: 2000 Lb

P/N: 601-700-025

## **SETUP • OPERATING • MAINTENANCE INSTRUCTIONS**

## IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS LIFT TABLE, READ THIS MANUAL COMPLETELY AND THOROUGHLY. UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS. FAILURE TO DO SO COULD CAUSE ACCIDENTS RESULTING IN SERIOUS OR FATAL PERSONAL INJURY AND/OR PROPERTY DAMAGE.

The use of portable automotive lifting devices is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are dropping, tipping or slipping of components caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard

level surfaces, and using equipment for a purpose for which it was not designed.

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual is lost or not legible, contact Norco Industries, Inc. for a free replacement. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

#### WARRANTY

This power train lift table is covered by a Limited Lifetime Warranty. For details, see the back cover of Norco's product catalog.

# A WARNING

- Adequately support the vehicle before starting repairs.
   Consult the in-ground or above-ground lift manufacturer for the recommended support procedure and under hoist support stand locating points.
- Support the engine with a stand before unbolting the transmission from the engine.
- Fuel tanks must be emptied before removal, installation or transportation.
- Inspect the lift table before each use. Do not use the lift table if it is damaged, altered, modified, in poor condition, leaking hydraulic fluid, leaking air, or unstable due to loose or missing hardware. Take corrective action before using the lift table.
- Do not use lift table beyond its rated capacity. Do not lift or support the vehicle with this lift table.
- · Do not exceed 120 P.S.I. input air pressure.
- Use only on a hard level surface.

- Be sure setup is stable and secure. Use this lift table only with adapters and load restraints provided by Norco. Use of this lift table is limited to the removal, installation and transportation (in the lowered position) of transmissions, transfer cases, engines, rear ends and leaf springs. Center load on saddle. Consult the vehicle manufacturer for the component's center of balance. Off-center loads can cause lift failure and/or loss of load.
- Never remove, install or transport any component without first tightly securing it to the universal saddle, adapters or fuel tank saddle using the load restraints provided.
- Do not move the lift table when the load is raised. Always lower the load completely before moving, storing or using as a work table.
- Do not stand under a load that is raised by the lift table.
- No alterations shall be made to this lift table and use only with factory approved adapters.

## SETUP

- 1. Refer to the exploded view parts drawing for identification, location and position of parts.
- 2. Remove the red fill plug in the top of the air/hydraulic foot pump and replace with the black vented fill plug
- 3. Install the air quick disconnect of your choice at the rear of the hydraulic foot pump and connect the shop air line.
- 4. The power train lift table is equipped with a universal saddle.

### OPERATING INSTRUCTIONS

- 1. Lift the vehicle to the desired work height and support the vehicle in accordance with the manufacturer's recommended support procedure and the warnings given in this manual.
- 2 Follow the manufacturer's recommended service procedure for removing and installing the component.
- 3. When removing a transmission, use an under hoist stand rated greater than the weight of the engine to support the engine before unbolting the transmission from the engine.
- 4. Position the lift table directly under the component to be lifted. Connect shop air supply to the air/hydraulic foot pump (use minimum 90 P.S.I. air pressure, do not exceed 120 P.S.I.).
- 5. IMPORTANT: Become familiar with the pedal operation of the air/hydraulic foot pump before using the lift table under load. Depressing the foot pedal end marked "Pump" raises the lift table saddle. To raise the saddle a small distance it is necessary to use incremental taps of your foot on the foot pedal until the saddle reaches the desired height. Lowering the saddle is accomplished by depressing the foot pedal end marked "Release". The pump is equipped with a two speed release mechanism. Gently depressing the foot pedal end marked "Release" lowers the jack slower than if you depress the pedal all the way down. If you want to lower the load slower than the slow speed release, use gentle incremental taps of your foot on the "Release" pedal.

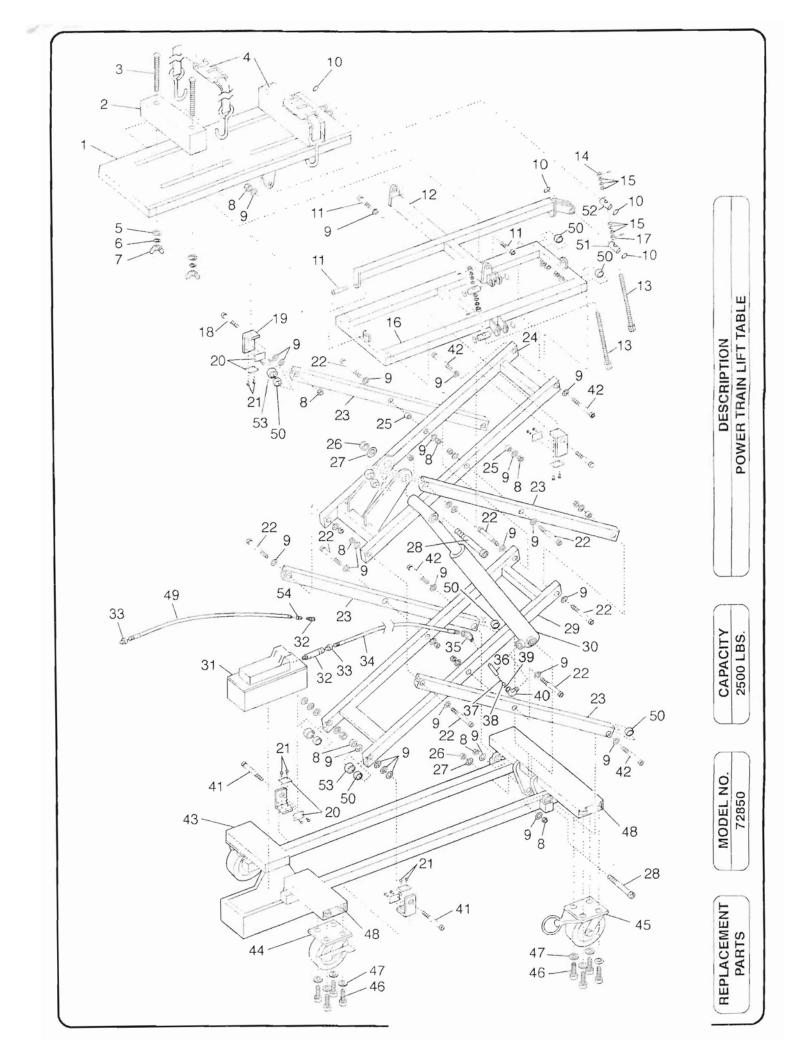
- 6. Depress the air/hydraulic pump foot pedal marked "Pump" to raise the lift table saddle to a height very close to the center of balance point of the component but do not touch it.
- 7. Depress the locking levers on the lift's two caster wheels to prevent the lift from moving.
- 8. Using the universal table, adjust the blocks to fit the component configuration. Secure the blocks to the universal table by tightening the wingnuts under the table.
- Turn the side to side and fore and aft tilt screws with a socket wrench in order to align the saddle with the component lift surface. Now gently raise the lift table saddle to support the component.
- 10. Use the tie downs to secure the components to the saddle or adapter. Make sure the setup is stable before lowering the load.
- 11. To lower the load, very gently depress the air/hydraulic foot pump marked "Release" and make sure the lift table's saddle and component (load) do not hang up on any other undercar or undertruck components, wiring, fuel lines, brake lines, ect. Continue to lower the component all the way down.
- Follow the vehicle manufacturer's recommended service procedure and this manual's operating instructions when reinstalling the component.

### PREVENTATIVE MAINTENANCE

- 1. Always store the lift table in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The lift table must be cleaned of water, snow, sand, or grit before using.
- 2. Lubricate moving parts once a month with a general purpose grease. Inspect all lift arms, saddle base and cylinder assemblies to make sure all related bolts and nyloc nuts are tight but do not restrict the movement of assembly components that rotate the bolts.
- 3. It should not be necessary to refill or top off the reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be performed in a dirt-free environment by qualified hydraulic repair personnel who are familiar with the equipment. Norco Authorized Service Centers are recommended.

IMPORTANT: In order to prevent seal damage and lift table failure, never use alcohol, hydraulic brake fluid, or

- transmission oil in the lift table's hydraulic ram or air/hydraulic foot pump.
- 4. Every lift table owner is responsible for keeping the lift table label clean and readable. Use a mild soap solution to wash external surfaces of the lift table but not any moving hydraulic components. Contact Norco Industries for a replacement label if your jack's label is unreadable.
- 5. Inspect the lift table before each use. Do not use the lift table if any component is cracked, broken, bent, shows sign of damage, or leaks hydraulic fluid. Do not use the lift table if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the lift table again.
- 6. Do not attempt to make any hydraulic repairs unless you are a qualified hydraulic repair person that is familiar with this equipment.



| INDEX                      | DESCRIPTION   | PART   | REQ'D               |
|----------------------------|---|--|---------------------|
| NO.                        |   | NO.  | NO.                 |
| 1                          | Saddle Assembly   | 284065                                       | 1                   |
| 2                          | Wood Block  | 284068                                       | 2                   |
| 3                          | 1/2" Carriage Bolt  | 11213  | 4                   |
| 4                          | Ratchet Tie Down  | 72002  | 1 pr.               |
| 5                          | 1/2" Flat Washer  | 2113   | 4                   |
| 6                          | 1/2" Lockwasher   | 2001   | 4                   |
| 7                          | 1/2" - 13 Wing Nut  | 1069   | 4                   |
| 8                          | 5/8" - 11 Nyloc Nut   | 1098   | 20                  |
| 9                          | 3/4" SAE Flat Washer  | 2137   | 24                  |
| 10                         | Trunion Retaining Rings   | 12141  | 8                   |
| 11                         | 3/4" Dia. x 1 1/4" Long Shoulder Bolt   | 11231  | 4                   |
| 12                         | Saddle Base Assembly  | 284070                                       | 1                   |
| 13                         | Drive Screw Assembly  | 284089                                       | 2                   |
| 14                         | Collar with Set Screw   | 229081                                       | 2                   |
| 15                         | Bearing and Two Races   | 229085                                       | 4 sets              |
| 16                         | Support Table Assembly Collar with Set Screw 3/4" Dia. x 2 1/2" Long Shoulder Bolt Guide Angle Guide Plate  | 284075                                       | 1                   |
| 17                         |   | 284087                                       | 2                   |
| 18                         |   | 11219  | 2                   |
| 19                         |   | 284084                                       | 4                   |
| 20                         |   | 284086                                       | 8                   |
| 21                         | 1/4" - 20 x 1/2" Flat Allen Socket Cap Screw 3/4" Dia. x 4 1/4" Long Shoulder Bolt Scissor Arm Assembly Top Lift Frame Assembly Bronze Oilite Bushing 2" Long | 3177   | 16                  |
| 22                         |   | 11221  | 8                   |
| 23                         |   | 284095                                       | 4                   |
| 24                         |   | 284080                                       | 1                   |
| 25                         |   | 284116                                       | 8                   |
| 26<br>27<br>28<br>29<br>30 | 3/4" - 10 Nyloc Nut<br>1" Flat Washer<br>1" Dia. x 4" Long Shoulder Bolt<br>Bottom Lift Frame Assembly<br>Cylinder  | 1097<br>2138<br>11222<br>284085<br>284105    | 2<br>2<br>2<br>1    |
| 31                         | Air/Hydraulic Pump Ram Half Coupler Hose Half Coupler Hose Assembly 45° Street Elbow  | 910130                                       | 1                   |
| 32                         |   | 910231B                                      | 2                   |
| 33                         |   | 910232B                                      | 2                   |
| 34                         |   | 284110                                       | 1                   |
| 35                         |   | 13026  | 1                   |
| 36<br>37<br>38<br>39<br>40 | Velocity Fuse Body Velocity Fuse Spring Velocity Fuse Valve Retaining Pin 1/16" Dia. x 1/2" Long 90° Street Elbow   | 284121<br>793366<br>793364<br>11233<br>13011 | 1<br>1<br>1<br>1    |
| 41                         | 3/4" Dia. x 2 3/4" Long Shoulder Bolt   | 11232  | 2                   |
| 42                         | 3/4" Dia. x 2 1/4" Long Shoulder Bolt   | 11234  | 4                   |
| 43                         | Base Frame Assembly   | 284100                                       | 1                   |
| 44                         | Locking Caster Wheel  | 284125                                       | 2                   |
| 45                         | Directional Locking Caster Wheel  | 284120                                       | 2                   |
| 46<br>47<br>48<br>49<br>50 | 3/8" - 16 x 1 1/4" Long Hex. Hd., Gr. 5 Bolt<br>3/8" Flat Washer<br>3/8" - 16 Nyloc Nut<br>60" Extension Hose<br>Bronze Oilite Bushing 1" Long                | 11013<br>2108<br>1054<br>284130<br>284111    | 16<br>16<br>16<br>1 |
| 51                         | Drive Trunion   | 284118                                       | 2                   |
| 52                         | Slave Trunion   | 284119                                       | 2                   |
| 53                         | Roller Bushing  | 284088                                       | 4                   |
| 54                         | Female Pipe Coupler   | 13039  | 1                   |