

### MODELS 86000 & 86002 6000 LBS. CAPACITY MID-RISE ABOVE GROUND LIFTS SETUP • OPERATING • MAINTENANCE INSTRUCTIONS

Note: Revision letters (A, B, C, D etc.) after model numbers have been omitted as they do not affect the setup, operating and maintenance instructions of a particular jack unless otherwise noted.

#### **IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING**

BEFORE USING THIS LIFT, 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 mid-rise lifts 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 loads caused primarily by improperly securing loads, overloading and 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 this 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 product is covered by a Limited Lifetime Warranty. For details see the back cover of Norco's product catalog.

# A WARNING

- Inspect the lift for mechanical fitness before using. Do not use the lift if any lift component is cracked, broken, bent, shows signs of damage or excessive wear, leaks hydraulic fluid, has loose or missing hardware or components, or is modified or altered in any way. Take corrective action before using the lift again.
- · Lift to be used by trained operator only.
- · Only authorized personnel allowed in lift area.
- Before operating, position lift on a hard level surface capable of sustaining the weight of the lift and its maximum capacity and allowing the lift wheels to roll unobstructed during raising and lowering operations.
- Always position the lift where there is plenty of work room around the vehicle once it is on the lift. Always keep the lift area free of obstructions, debris, grease and oil spills.
- · Use vehicle manufacturers' recommended lift points only.
- Position the lift arms so the vehicle weight is evenly distributed on the lift. Position the lift arms' points of contact with the

vehicle so weight is evenly distributed with each lift arm contact point.

- · Make sure setup is stable and secure before lifting.
- Before removing or installing heavy components, always use four safety stands to help support the vehicle after it is lifted to the required height.
- · Keep clear of lift during raising and lowering operations.
- Keep entire personal body, electrical and hydraulic lines clear of pinch points when lift is moving.
- The locking pawl must be engaged in one of the lock positions on the locking column prior to performing any work or service.
- Avoid excessive vehicle rocking or movement while on the lift.
- Never drive on the electrical line, hydraulic line or lock release cable.
- · Clear area if vehicle is in danger of falling.
- Disconnect the electrical and hydraulic lines and store them on the pump trolley when the lift is not in use.

#### SETUP

Each mid-rise lift is shipped in two packages. The largest package contains the lift. The smaller package includes the electrohydraulic pump mounted on the power trolley and a container of hydraulic fluid.

WHEN REMOVING THE LIFT FROM THE WOODEN PALLET DO NOT RAISE THE LIFT BY THE LIFT ARMS AS THIS WILL DISLODGE THE CYLINDERS FROM THEIR RECEIVERS. THE LIFT SHOULD BE REMOVED FROM THE PALLET BY RAISING FROM UNDERNEATH THE LIFT. **1.** Sit the power trolley upright and remove the vent filler cap on the top of the fluid reservoir.

**2.** Fill the pump reservoir with one gallon of hydraulic fluid provided and screw the vented filler cap back on the pump reservoir.

**3.** Install the lock release cable lever on the handle of the power trolley as shown in figure 1.



**4.** Remove the dust cover from the hydraulic port in the electrohydraulic pump and install the hydraulic hose as shown in figure 1.

**5.** Adjust the lock release cable lever so the locking pawl clears the lock positions when the lock release cable lever is depressed. When the lock release cable lever is not depressed the locking pawl should be positioned where it will automatically lock into the locking cleats when the lift is raised to those positions.

6. Plug the power line into an approved 110V outlet. Remove the cylinder screws (see figure 1). Place a tray or container on the ground and inbetween the two cylinders. The cylinders are installed with hydraulic fluid forward of the seal in order to prevent rust and corrosion inside the cylinders during transport and storage. The first time you raise the lift the fluid will shoot out of the cylinder vent holes until the lift is raised to maximum extension. Lower the lift and raise it a second time to remove most of the fluid. After the second operation, replace the original cylinder screws with the vented screws provided.



### **OPERATING INSTRUCTIONS**



1. Using power trolley, position lift on solid flat surface where there is plenty of work room around the vehicle once it is on the lift. Make sure a 110V outlet is readily available.

**2.** Plug the power unit in and never drive on the electrical line, hydraulic line or lock release cable.

3. Before positioning the vehicle over the lift, make sure the

sliding radius arms are positioned inboard of the lift and there are no adapters on the arms that would cause interference.

4. Position the vehicle over the lift where the load is equalized and adjust the sliding radius arms with appropriate saddle adapters to the vehicle manufacturers' recommended lift points. Make sure the setup is stable and secure.

#### **OPERATING INSTRUCTIONS (Continued)**



NOTE: Before lifting it is important to use adapters that are positioned as close as possible to the vehicle's frame in order to achieve maximum lift height. This mid-rise lift includes a set of four swivel rubber lifting pads and four 2-1/8" high riser pads. The rubber lift pads sit on top of the four sliding radius arms and are intended for use with low profile vehicles. The 2-1/8" high riser pads are used only in conjunction with the rubber lift pads when added height is required to come closer to the vehicle frame. Higher profile vehicles like light duty trucks and vans will require the optional set of 4 model 86010 extension screw adapters. The extension screw adapters slide on the sliding radius arms (see figure 2). The lever on the adapter stopper must be lifted up in order to slide the extension screw adapter off the sliding radius arms (see figure 3). Four steel cover plates come with the optional model 86010 extension screw adapters, and can be used over the rubber pads if desired.

**5.** Press the "up" button on the power pump to raise the vehicle (see figure 1). Once the lift saddles have contacted the vehicle

## **MAINTENANCE & INSPECTION**

#### DAILY

1. Check the condition of all moving parts and replace or repair when necessary.

2. Check the adjustment of the mechanical safety lock.

**3.** Check the condition and position of the hydraulic hose and the lock release cable before operating the lift. Replace defective hoses and cable when necessary.

**4.** Check for external hydraulic fluid leakage and correct the problem immediately.

**5.** Check the condition of the electrical cord and plug before plugging into an approved 110V outlet.

**6.** Make sure the floor working surface is flat and smooth with no cracks.



frame and the vehicle begins to lift, stop raising the vehicle and visually check to see that the saddles' contact with the lift points are secure.

**6.** Raise the vehicle until the mechanical safety lock "clicks" in (see figure 4). Use the position that best suits your needs.

**7.** Never work on the vehicle without four safety stands in place to support the load.

**8.** To lower the lift, press the "up" button on the power pump to raise the lift 1" above the mechanical safety lock. Now depress the lock release cable lever and keep it depressed while depressing the "down" lever. The lock release cable lever must be depressed until the lift clears the mechanical stop(s). (See figure 5).

**9.** Once the lift has been completely retracted, remove the saddle adapters and push the sliding radius arms inboard of the lift before backing the vehicle off.

**10.**Disconnect the electrical and hydraulic lines and store them on the power trolley when the lift is not is use.

#### MONTHLY

**1.** All checks mentioned in the "Daily Maintenance and Inspection" procedures must be conducted.

2. Check all hydraulic hoses, fittings and cylinders for leaks.

3. Check and grease all hinge points and all mating bearing surfaces.

**4.** Check and lubricate the locking column and its corresponding components. Do not lubricate the mechanical stops on the locking column.

**5.** Inspect the power trolley wheels, all saddle adapters and main metal lift structure for excessive wear, signs of metal fatigue or fractures. Repair or replace components, adapters or structures as required.

## **REPAIR SERVICE**

If your Norco product requires service or repair, contact the Norco Customer Service Department for the location of the nearest Norco Authorized Service Center.

Norco Industries, Inc. 365 West Victoria St. Compton, CA 90220 (310) 639-4000 • Fax: (310) 639-7411 www.norcoindustries.com It will be necessary to provide the Norco Authorized Service Center with a copy of the bill of sale if requesting warranty repair. If the authorized service center determines your product is eligible for warranty repair, the repair will be made at no charge and returned freight prepaid. The cost of non-warrantable service, repair, and return freight is the customer's responsibility.