PROFESSIONAL LIFTING EQUIPMENT

MODEL 72450 1/2 TON CAPACITY AIR/HYD. UNDER HOIST TRANSMISSION JACK 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 JACK, 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 motor vehicles or their 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 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 floor service jack is covered by a Limited Lifetime Warranty. For details see the back cover of Norco's product catalog.

⚠ WARNING

- **DO NOT operate the foot pump after the ram has reached its full extension! This may cause over-pressurization of the hose and fittings causing fluid leakage.**
- Adequately support the vehicle before starting repairs.
- Consult the in-ground or above-ground lift manufacturer for the recommended support procedures and under hoist support stand locating points.
- Support the engine with a support stand before unbolting the transmission from the engine.
- Do not lift or support the vehicle with this jack.
- Do not use the jack beyond its rated capacity.
- Do not exceed 100 PSI air pressure.
- Be sure setup is stable and secure.
- Use of this jack with locating adapters and load restraints provided is limited to the removal, installation and transportation (in the lowered position) of transmissions and transfer cases.
- Center load on saddle.
- Consult the vehicle manufacturer for the transmission's center of balance.
- Slowly depress the "RELEASE" portion of the pump pedal to lower the load.
- Use only on a hard level surface.
- No alterations shall be made to this product and use only with approved adapters.

SETUP

1. Refer to the exploded view parts drawing for identification, location and position of parts.

2. Before operating jack, open the black vent knob (index #10) on top of the cylinder nut (index #9) by turning it all the way in a counterclockwise direction.

3. The air quick disconnect configuration of your choice can be installed in the threaded hole beneath the index #85 foot pedal.

4. Lay the power unit on a table top with the hydraulic block end over the edge of the table. Install the index #58 legs onto the bottom of index #51 hydraulic block with the bolts and washers provided.

5. Install the index numbers 130 and 132 caster wheel assemblies on to the ends of the legs and secure them with the nuts and washers provided.

6. Install the saddle assembly (index #133) on top of the index #29 ram and secure them with the index #165 bolt.

7. Chains, ratchet tie downs, or other acceptable means of restraining and securing the transmission to the jack's saddle must be readily available and easily anchored to the saddle.

8. Make sure the system air pressure supplied to the jack is clean and dry and does not exceed 100 p.s.i.

OPERATING INSTRUCTIONS

1. IMPORTANT: Become familiar with the pedal operation of the air/hydraulic foot pump before using the jack under load. Depressing the foot pedal end marked “Pump” raises the jack. To raise the jack a small distance it is necesary to use incremental taps of your foot on the foot pedal until the jack reaches the desired height. Lowering the jack 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.

2. Lift the vehicle to the desired work height and support the vehicle in accordance with the lift manufacturer’s recommended support procedure and the warnings given in this manual.

3. Use an under hoist stand rated greater than the weight the engine to support the engine before unbolting the transmission from the engine.

4. Position the transmission jack directly under the transmission. Depress the foot pedal end marked “Pump” in order to raise the saddle to a height very close to the center of balance point of the transmission but do not touch the transmission.

5. Adjust the index #149 universal saddle and index #137 containing angles so the flange of the transmission pan will rest on the top edges of the containing angles. The containing angles must then be secured to the universal saddle by tightening the index #140 knobs. Now gently raise the saddle so the containing angles are supporting the transmission pan flange. Fore and aft saddle tilt adjustments are sometimes necessary to properly position the transmission. Side to side tilt positioning may be necessary for the same reason and can be accomplished by activating the side to side tilt handle. **IMPORTANT: Do not put excessive pressure on either index #168 tilt handles to activate the index #166 tilt screws. Stop turning the handles when the index #162 threaded trunions or their cast brackets that contain them come close to contacting the index #161 slave trunions or the cast brackets that contain them.**

6. The restraint chains should be anchored to the containing angles on one side. The loose ends of the chains should be pulled over the center of balance portion of the transmission and secured to the two remaining containing angles. The chains should then be tightened to secure the transmission to the saddle.

7. Remove the transmission from the engine according to instructions in the vehicle service manual.

8. Once the transmission has been disconnected from the engine, very slowly depress the “Release” foot pedal to make sure the jack’s saddle and transmission do not hang up on any undercar components, wiring, fuel lines, ect. Continue to lower the jack all the way down.

9. Installation of the transmission requires the transmission jack’s saddle and containing angles to cradle the transmission and the transmission secured to the jack’s saddle with the chains.

10. An under hoist stand rated greater than the weight of the engine should be supporting the engine before transmission installation.

11. Raise the transmission slowly and at the same time position the jack so the transmission aligns with the engine. Do not remove the restraints, nor lower the jack, nor remove the under hoist stand until the transmission is secured to the engine and the engine and all corresponding components are prevented from falling.

PREVENTATIVE MAINTENANCE

1. Always store the jack in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The jack must be cleaned of water, snow, sand, or grit before using.

2. The jack must be lubricated periodically in order to prevent premature wearing of parts. A general purpose grease must be applied to caster wheels, front axle wheels, elevator arm, handle base pivot bolts, release mechanism and all other bearing surfaces. See the exploded view parts drawing for the location of the above mentioned parts. Failure to maintain proper lubrication voids warranty.

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 this equipment. Norco Authorized Service Centers are recommended

IMPORTANT: In order to prevent seal damage and jack failure, never use alcohol, hydraulic brake fluid, or transmission oil in the jack.

4. Every jack owner is responsible for keeping the jack label clean and readable. Use a mild soap solution to wash external surfaces of the jack but not any moving hydraulic components. Contact Norco Industries for a replacement label if your jack’s label is unreadable.

5. Inspect the jack before each use. Do not use the jack if any component is cracked, broken, bent, shows sign of damage, or leaks hydraulic fluid. Do not use the jack if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the jack again.

6. Do not attempt to make any hydraulic repairs unless you are a qualified hydraulic repair person that is familiar with this equipment.

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.

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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.