

PROFESSIONAL LIFTING EQUIPMENT

MODEL 72030 300 LB. CAPACITY CLUTCH 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 product 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 vehicle manufacturer for the recommended support procedure and the recommended lift and support locating points.
- Inspect the jack before each use. Do not use the jack if it is damaged, altered, modified, in poor condition, leaking hydraulic fluid or unstable due to loose or missing hardware. Take corrective action before using the jack.
- Do not use jack beyond its rated capacity.
- Use only on a hard level surface.

- Stay clear of all the jack's pinch points as you raise and lower the lift arm.
- Be sure setup is stable and secure. Use this jack only with adapters provided by Norco. Use of this jack is limited to the removal, installation, and transportation (in the lowered position) of clutches and flywheels. Never move the jack with the load any higher off the ground than necessary.
- · Always release the load slowly.
- · Move the jack cautiously around corners to prevent tipping.
- · No alterations or modifications shall be made to this jack.

SETUP

1. This clutch jack is designed to remove, install and transport (in the lowered position) 14" and 15-1/2" double disc clutches and/or flywheel assemblies. The 2" diameter spline shaft included with the jack is for use with 15-1/2" clutches. Optional 1-3/4" diameter spline shaft for use with 14" clutches and an optional flywheel adapter are available. Raise the tilting saddle in a vertical position and install the appropriate spline shaft or flywheel adapter shaft through the saddle receiver bushing. The spline or flywheel shaft should enter the saddle receiver bushing from the side of the receiver that does not have the round boss. Secure the spline or flywheel shaft to the saddle receiver with the detent pin provided.

2. The pump handle should already be installed in the pump receiver. Rotate the handle in a clockwise direction to make sure it is secure inside the receiver. Some clutch jack models include an integrated handle and this setup step would not be applicable.

3. Apply a thin coat of grease on the spline shaft.

4. Sometimes air gets trapped in the jack's hydraulic system during shipment. An air bound hydraulic system feels spongy when pumped and sometimes the jack will not pump full incremental strokes.

PURGING AIR FROM THE HYDRAULIC SYSTEM

- a. Open the release valve knob by turning it in a counterclockwise direction two full rotations.
- b. Pump the handle 10 to 15 times.
- c. Close the release valve knob by turning it in a clockwise direction until it stops.
- **d.** Pump the handle until the elevator arm is raised to maximum extension.
- e. If the condition remains, repeat steps "a" through "d" until air is purged from the system.

OPERATING INSTRUCTIONS

REMOVAL

1. Lift the vehicle to the desired work height in accordance with the vehicle manufacturer's recommended procedure. Once the load is lifted, place jack stands at the vehicle manufacturer's suggested support positions. Always use jack stands with an adequate capacity rating to support the load before removing or installing clutches.

2. Check to see if there is enough clearance under the vehicle to roll the clutch jack with the clutch. The tilting saddle may be tilted flat so the clutch is parallel with the floor. This will give added clearance under the vehicle. If there is not enough clearance it may be necessary to lift the front end of the vehicle higher and readjust the jack stand columns accordingly.

3. Push the jack under the vehicle. Tilt the tilting saddle in the vertical position. Close the jack's release valve knob by turning it all the way in a clockwise direction until it stops. Pump the jack handle slowly so the saddle is raised close to the position of the clutch. Using the tilt saddle's adjustment screw, turn the screw so the angle of the spline shaft matches the vehicle clutch assembly.

4. Match the free end of the spline shaft with the opening of the clutch assembly by pumping and moving the jack in position. Once the spline shaft is in position rotate the splines on the shaft until they meet with the splines in the clutch assembly. It may be necessary to adjust the tilt saddle's adjustment screw again to completely engage the splines on the shaft with the internal splines of the clutch assembly. Once the splines are completely engaged, pull the clutch assembly completely on to the jack's spline shaft.

5. Pull the clutch jack along with the clutch away from the flywheel.

6. Once the clutch assembly is free from the flywheel, turn the jack's release valve knob very slowly in a counterclockwise direction to lower the clutch assembly to the floor.

INSTALLATION

1. Check to see if there is enough clearance under the vehicle to roll the clutch jack with the clutch. The tilt saddle may be tilted flat so the clutch is parallel with the floor. This will give added clearance under the vehicle. If there is not enough clearance it may be necessary to lift the front end of the vehicle higher and readjust the jack stand columns accordingly.

2. Place the tilt saddle in an upright position with the spline shaft horizontal to the floor. For a 15-1/2" clutch the spline shaft must pass completely through all components. In the case of a 14" clutch, place the new front clutch disc and intermediate plate into the pot type flywheel and load the pressure plate and new rear disc on the jack's spline shaft.

3. Push the jack under the vehicle. Use the tilt saddle's adjustment screw to change the clutch assembly to match the flywheel.

4. Operate the jack to raise the clutch assembly to the correct height. Roll the clutch jack forward to insert the end of the spline shaft into the flywheel pilot bearing. Align the splines. Bolt the clutch to the flywheel. (For a 14" clutch the clutch disc in the flywheel is slightly lower than the center line of the pilot bearing. It may be necessary to raise the spline by pumping the jack up a little to correctly align the spline shaft with the pilot bearing).

5. Bolt the clutch to the flywheel.

6. Slightly release pressure off the spline shaft by turning the jack's release valve knob slightly in a counterclockwise direction and stop. If it is difficult to remove the clutch jack spline shaft from the clutch assembly, turn the tilt saddle adjustment screw to realign the spline shaft with the clutch.

7. Back the jack away slowly from the clutch assembly. Once the spline shaft clears the clutch, slowly turn the jack's release valve knob in a counterclockwise direction to lower the jack to the floor.

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. Lubricate moving parts once a month with a general purpose grease.

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.

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.