PROFESSIONAL LIFTING EQUIPMENT

MODEL 78125 1,250 LB. CAPACITY ENGINE STAND
MODELS 78155 / 78155H 1,250 LB. CAPACITY ENGINE STANDS
MODELS 78200 / 78230 2,000 LB. CAPACITY ENGINE STANDS
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 DEVICE, 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.

⚠ WARNING

- Inspect the engine stand before each use. Do not use if damaged, altered, modified or in poor condition, or has loose or missing hardware or components. Take corrective action before using the engine stand.
- Do not exceed rated capacity.
- Use only on a hard level surface.
- Consult engine manufacturer for proper mounting locations.
- Assure load is centered, balanced and secured to the mounting attachments.
- Mount the engine so its weight is balanced within one inch of the stand's rotational axis.
- Only use the engine mounting plate and four adapter arms that accompany the model 78125 / 78155 / 78155H engine stand when mounting engine stands weighing 1,250 pounds or less.
- Use grade 5, metric grade 8.8 (or better) cap screws for all mounting hardware.
- Threaded holes in adapters and engine blocks must be clean and not damaged to insure thread engagement. A bolt or screw thread engagement must be equal to 1-1/2 times the bolt or screw thread diameter in order to maintain strength requirements.
- Always move the stand slowly to avoid tipping of load.
- Rotate engine slowly to avoid jerking or movement of the engine which could cause the mounting hardware to loosen.
- Do not alter or modify the stand.
- Only attachments and/or adapters supplied by Norco shall be used.
- Never work under any load that is mounted to this stand.

SETUP

Please refer to the exploded view drawing in order to identify the index numbers of parts to be assembled.

MODEL 78125 / 78155 / 78155H ENGINE STAND

1. The index #12 wheels should have the index #33 wheel sleeves installed in them. Place the wheels inside the wheel brackets at the ends of the index #4 main base crossmember and secure them with the index #5 bolts and index #34 nuts provided.

2. Attach the index #8 locking caster wheel and index #53 caster wheel to the caster brackets at either end of the index #1 "T" base. Secure them with the index #9 bolts, index #10 flat washers and index #11 nyloc nuts provided and in the sequence shown on the exploded view drawing.

3. Assemble the closed end of the index #3 main base tube to the index #4 main base crossmember with the bolts, washers, and nuts provided. Do not tighten the bolts at this time.

4. Assemble the index #13 gear housing upright to the top of the index #3 main base tube and index #4 main base crossmember with the bolts, washers, and nuts provided as shown on the exploded view drawing. Tighten the bolts and nuts mentioned in steps 3 and 4.

5. Install the index #1 "T" base into the open end of the index #3 main base tube. Align the hole at the open end of the main base tube with any one of the threaded inserts in the side of the "T" base and secure them together with the index #2 adjustment knob assembly and index #10 flat washer provided.

6. The index #26 handle lever has an oval shaped hole at one end which must be installed on the exposed end of the index #56 worm that protrudes out of the side of the gear box. Secure the handle lever to the worm using the index #27 handle lever nut.

7. Slide the index #38 mounting plate receiver over the exposed end of the index #15 drive shaft. Align the two holes in the mounting plate receiver with the threaded holes in the drive shaft and secure them with the bolts and lockwashers provided.

8. Install the four index #39 adapter arms to the index #38 mounting plate using the bolts, washers, and nuts provided as shown on the exploded view drawing.

OPERATING INSTRUCTIONS

MOUNTING ENGINES WEIGHING 1250 POUNDS OR LESS

1. Consult the vehicle or engine manufacturer for the engine's center of gravity. The engine's center of gravity will have to be aligned with the rotational axis of the engine stand's mounting head assembly.

2. Remove the clutch bell housing from the engine and secure any other engine parts that might be loose or hanging from the engine.

3. Remove the adjustment knob from the side of the engine stand and extend the "T" base so that it is about 6" farther than the engine when the engine is mounted to the stand. are loosely connected to the mounting plate assembly. Fasten the four engine adapter arms to the engine using the proper bolt thread size and length. Remember to use grade 5, metric 8.8 bolts or better. Do not tighten the bolts.

4. Align the rotational axis of the mounting plate assembly as close as possible to the engine's center of gravity. Tighten the four bolts that secure the engine adapter arms to the engine and the bolts, flat washers and nuts that connect the other end of the engine adapter arms to the mounting plate assembly.

5. Attach an engine lifting bar or sling to the engine and raise the engine with a shop crane or lifting device with a load capacity that can adequately handle the engine weight. Once the engine is lifted to the desired height, slowly push the engine with the mounting plate assembly pointing toward the drive shaft of the engine stand. Insert the stand's drive shaft into the receiver on the mounting plate. Turn the stand's gear box handle until the threaded holes in the drive shaft align with the holes in the mounting plate receiver. Once aligned, secure with the bolts and lockwashers provided.

6. Make sure the setup is stable and slowly and carefully remove the shop crane or engine lifting device.

REMOVING ENGINES FROM THE MODEL 78125 / 78155 / 78155H

1. Attach an engine lifting bar or sling to the engine. Connect the bar or sling to a shop crane or lifting device and slowly lift the engine just enough to take pressure off the engine stand.

2. Remove the bolts and lockwashers that secure the mounting plate to the stand's drive shaft. Slide the drive shaft out of the mounting plate receiver and slowly and carefully maneuver the engine away from the stand.

3. Unscrew the four bolts that secure the adapter arms to the engine.

MOUNTING ENGINES TO THE MODEL 78200 / 78230

1. Consult the vehicle or engine manufacturer for the engine's center of balance. The engine's center of balance will have to be located in the center of the mounting plate between the stand's two mounting plates.

2. Extend the base of the engine stand to a point where the distances between the two mounting plates will accept the engine, the length of two adapter arms assemblies and a couple extra inches of free play.

3. Attach an engine lifting bar or sling to the engine and raise the engine with a shop crane or lifting device with a load capacity that can adequately handle the engine weight. Once the engine is lifted to the desired height, slowly position the engine between the mounting plates. Loosely attach four adapter arms assemblies to each side or end of the engine where the arms positioned as far apart as practical for greater supporting strength.

4. Loosely attach the opposite ends of the adapter arm assemblies to their respective mounting plates with the flange nuts provided. Remember to position the arms in the slots of the mounting plates where the arms are positioned as far apart as practical.

5. By raising and lowering the engine, position the engine's center of balance within one inch of the engine stand's rotational axis. After the engine and adapter arms are correctly positioned, Torque all mounting hardware to 75 foot pounds.

6. Make sure the setup is stable and secure before removing the shop crane or lifting device.

REMOVING ENGINES FROM THE MODEL 78200 / 78230

1. Attach an engine lifting bar or sling to the engine. Connect the bar or sling to a shop crane or lifting device and slowly lift the engine just enough to take pressure off the engine stand.

2. Disconnect the adapter arm assemblies from their respective mounting plates. Loosen all the bolts that attach the adapter arms to the engine allowing the arms to swing free so the engine can be removed from between the mounting plates.

3. Slowly and carefully maneuver the engine away from the stand. Unscrew the bolts that attach the adapter arms to the engine.

PREVENTATIVE MAINTENANCE

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

2. Lubricate the wheels, casters, gear and rotating shaft with a general purpose grease.

3. Every engine stand owner is responsible for keeping the engine stand label clean and readable. Use a mild soap solution to wash the external surfaces of the stand. Contact Norco Industries for a replacement label if your stand's label is not readable.

4. Inspect the stand before each use. Do not use the stand if any component is cracked, broken, bent. Do not use the stand if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the stand again.

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.