

## Norco 78099

# Norco Professional Lifting Equipment 4 POINT ENGINE SUPPORT TOOL

Model: 78099 | Brand: Norco

## PRODUCT OVERVIEW

The Norco 78099 Heavy Duty 4 Point Engine Support Tool is designed for securely supporting vehicle engines during maintenance or removal of other components like transmissions or subframes. This tool mounts onto the vehicle's shock strut towers, providing stable support. It is engineered to accommodate various engine sizes and vehicle configurations through its adjustable features.

Key features include fully adjustable strut tower mounts that can span up to 47-1/2 inches, two front support adapters for flexible positioning, and three 1/2-inch diameter hooks, 14 inches long, with spin knobs for precise and strong engine support.

## SAFETY INFORMATION

Always read and understand all instructions and warnings before using this equipment. Failure to follow these instructions may result in serious injury or property damage.

- Ensure the vehicle is on a level, stable surface and properly secured before beginning any work.
- Never exceed the rated load capacity of the engine support tool.
- Verify all connections and adjustments are secure before applying load.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Keep hands and other body parts clear of pinch points and moving parts.
- Do not modify the equipment. Use only genuine Norco replacement parts.

## SETUP AND ASSEMBLY

The Norco 78099 engine support tool requires assembly before use. Follow these steps:

1. **Unpack Components:** Carefully remove all parts from the packaging. Verify all components are present and undamaged. Refer to the parts list (if provided separately) to ensure completeness.
2. **Assemble Transverse Bar:** Connect the sections of the transverse support bar if it comes in multiple pieces. Ensure all fasteners are tightened securely.

3. **Attach Strut Tower Mounts:** Slide the adjustable strut tower mounts onto the transverse support bar. These mounts can be positioned up to 47-1/2 inches apart to fit various vehicle widths. Secure them loosely for initial adjustment.
4. **Install Front Support Adapters:** If required for heavier engines or specific configurations, attach the two front support adapters to the transverse support bar. These can be adjusted to suit the engine compartment.
5. **Attach Hooks:** Insert the three 1/2-inch diameter, 14-inch long hooks into their designated positions on the support structure. Use the spin knobs to secure and adjust their length.
6. **Initial Placement:** Position the assembled tool over the vehicle's engine bay, resting the strut tower mounts on the vehicle's shock strut towers. Adjust the width of the mounts to fit snugly and securely on the towers.
7. **Secure Mounts:** Once positioned correctly, tighten the fasteners on the strut tower mounts to firmly secure them to the transverse bar.



**Image Description:** An overhead view of a red Norco 78099 4-point engine support tool installed on the engine bay of a dark-colored car. The tool consists of a main transverse bar spanning across the engine bay, with two angled support bars extending forward and outward to rest on the vehicle's strut towers. Adjustable hooks with spin knobs are visible, ready to connect to the engine for support. The car's hood is open, revealing the engine components beneath the support tool.

## OPERATING INSTRUCTIONS

Once the engine support tool is securely set up on the vehicle, follow these steps to support the engine:

1. **Identify Engine Lift Points:** Consult the vehicle's service manual to identify the appropriate and safe lifting points on the engine.
2. **Connect Hooks:** Attach the hooks of the engine support tool to the designated engine lift points. Ensure a secure connection.

- 3. **Adjust Support:** Use the spin knobs on the hooks to carefully raise or lower the engine until the desired support level is achieved. The goal is to relieve pressure from engine mounts or to hold the engine in a specific position.
- 4. **Verify Stability:** Before proceeding with any work, double-check that the engine is stable and securely supported by the tool. Ensure there is no excessive movement or strain on any part of the tool or engine.
- 5. **Perform Work:** With the engine safely supported, you can now proceed with transmission removal, subframe work, or other engine-related maintenance.
- 6. **Release Engine:** Once work is complete, carefully reverse the adjustment process using the spin knobs to lower the engine back onto its mounts. Disconnect the hooks and remove the support tool from the vehicle.

## MAINTENANCE

Proper maintenance ensures the longevity and safe operation of your Norco engine support tool:

- **Regular Inspection:** Before each use, inspect the tool for any signs of damage, wear, or deformation. Check all welds, fasteners, hooks, and adjustment mechanisms.
- **Cleaning:** Keep the tool clean and free from dirt, grease, and corrosive materials. Wipe down surfaces with a clean cloth after use.
- **Lubrication:** Periodically lubricate moving parts and threaded sections of the spin knobs with a light machine oil to ensure smooth operation.
- **Storage:** Store the engine support tool in a dry, clean environment when not in use. Avoid exposing it to extreme temperatures or harsh chemicals.
- **Damaged Parts:** If any part of the tool is damaged or worn, discontinue use immediately and replace the affected components with genuine Norco parts. Do not attempt to repair damaged structural components.

## TROUBLESHOOTING

This section addresses common issues that may arise during the use of the engine support tool.

- **Tool does not fit vehicle:**
  - Ensure the strut tower mounts are fully extended or retracted to match the vehicle's width (up to 47-1/2 inches).
  - Verify the tool is compatible with your specific vehicle model.
- **Engine not stable after support:**
  - Re-check all connections, including strut tower mounts and hooks, for tightness.
  - Ensure the engine's center of gravity is properly balanced and supported.
  - Verify the vehicle is on a level surface and stable.
- **Spin knobs are difficult to turn:**
  - Clean any dirt or debris from the threads.
  - Apply a light lubricant to the threaded sections.
  - Ensure no excessive load is being applied that could bind the threads.

## SPECIFICATIONS

Model Number	78099
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Product Dimensions	49 x 6.5 x 5.5 inches
Item Weight	52 Pounds
Maximum Strut Mount Span	47-1/2 inches
Hook Length	14 inches
Hook Diameter	1/2 inch
Color	Red, Black
Manufacturer	NORCO Industries, Inc.

*Note: The "Load Capacity" listed in some product specifications as 52 Pounds appears to refer to the tool's own weight. The tool is designed to support engines, which are significantly heavier. Always refer to the manufacturer's official documentation for the actual maximum engine support capacity.*

## WARRANTY AND SUPPORT

For warranty information, technical support, or to order replacement parts, please contact Norco Professional Lifting Equipment directly.


- **Manufacturer:** NORCO Industries, Inc.
- **Website:** [www.norcoind.com](#) (This is a placeholder URL, as no specific support URL was provided in the input. Users should verify the official website.)
- **Customer Service:** Refer to the manufacturer's website or product packaging for current contact details.

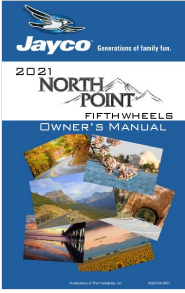

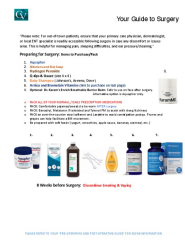


Please have your model number (78099) and purchase date available when contacting support.

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This manual is for informational purposes only. Specifications are subject to change without notice.

## Related Documents - 78099

	<p><a href="#">Norco 72000 &amp; 72020 1-1/2 Ton Truck Transmission Jacks: Setup, Operating &amp; Maintenance Instructions</a></p> <p>Comprehensive guide for Norco Models 72000 and 72020 1-1/2 Ton Capacity Truck Transmission Jacks, covering setup, operating procedures, safety warnings, maintenance, and repair service.</p>
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	<p><a href="#">Jayco 2021 North Point Fifth Wheels Owner's Manual</a></p> <p>Comprehensive owner's manual for the 2021 Jayco North Point Fifth Wheels recreational vehicle, covering operation, maintenance, safety, warranty, and troubleshooting for all major systems and components.</p>
	<p><a href="#">DES-CANADA Q2-2022 Automotive Service Equipment &amp; Tools Catalog</a></p> <p>Explore the comprehensive range of automotive service equipment and tools offered by DES-CANADA for Q2-2022. Find essential products for dealerships, repair shops, body shops, and fleet operators, including EV charging solutions, diagnostic tools, lifting equipment, key services, and more.</p>
	<p><a href="#">Your Guide to Surgery: Pre and Post-Operative Instructions</a></p> <p>A comprehensive guide for patients undergoing surgery, detailing preparation, day-of procedures, post-operative care, medication, and recovery expectations. Includes information on incision care, pain management, and common post-surgery FAQs.</p>
	<p><a href="#">Norco 3-Section Hi-Lo Manual Hydraulic Treatment Table - Instruction Manual</a></p> <p>Instruction manual for the Norco 3-Section Hi-Lo Table, Manual Hydraulic (Model NC94700). Provides essential information on maintenance, upholstery care, warranty details, safety warnings, and operating instructions for this adjustable medical treatment table.</p>
	<p><a href="#">BAL Exact-Slide RV Slide-Out System User Guide   Operation, Maintenance &amp; Troubleshooting</a></p> <p>Official user guide for the BAL Exact-Slide RV slide-out system by RV Products Group. Learn about operation, care, maintenance, troubleshooting common issues, and manual override procedures.</p>

