

KTC NBR390AF

KTC Neplos NBR390AF 9.5sq. Flex Ratchet Handle

USER MANUAL

1. Introduction

This manual provides essential instructions for the safe and effective use, maintenance, and care of your KTC Neplos NBR390AF 9.5sq. Flex Ratchet Handle. Please read this manual thoroughly before using the tool and retain it for future reference.

The KTC Neplos NBR390AF is a professional-grade 9.5 square drive flex ratchet handle, designed for durability and precision with a 90-tooth gear mechanism for fine adjustments in confined spaces.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the tool:

- Wear appropriate personal protective equipment, such as safety glasses, when using hand tools.
- Ensure the correct size socket is securely attached to the ratchet head before applying torque.
- Do not use the ratchet handle if it is damaged or appears to be malfunctioning.
- Avoid using extension pipes or 'cheater bars' on the handle, as this can exceed the tool's design limits and cause breakage or injury.
- Keep the tool clean and free from grease or oil to maintain a secure grip.
- Store the tool in a dry, secure place, out of reach of children.

3. Product Features

- **Model:** NBR390AF
- **Drive Size:** 9.5 square (3/8 inch)
- **Gear Mechanism:** 90-tooth for fine ratcheting action
- **Head Style:** Flex head for adjustable angles
- **Material:** Stainless Steel construction

- **Finish:** Powder Coated for durability
- **Usage:** Professional applications



Figure 1: Overview of the KTC Neplos NBR390AF Flex Ratchet Handle.

4. Setup

1. **Inspect the Tool:** Before each use, visually inspect the ratchet handle for any signs of damage, wear, or loose components. Do not use if damage is observed.
2. **Attach a Socket:** Select the appropriate 9.5sq. (3/8 inch) drive socket for your fastener. Press the socket firmly onto the square drive of the ratchet head until it clicks into place, ensuring a secure connection.
3. **Adjust Flex Head (if needed):** The flex head allows for angular adjustment. Pivot the head to the desired angle to access fasteners in tight or awkward spaces. Ensure the head is stable at the chosen angle before applying torque.



Figure 2: Close-up view of the ratchet head, showing the direction switch for tightening or loosening.

5. Operating Instructions

1. **Select Direction:** Locate the direction switch on the ratchet head (refer to Figure 2). Move the switch to the 'R' position for tightening (clockwise rotation) or 'L' position for loosening (counter-clockwise rotation).
2. **Position the Tool:** Place the attached socket onto the fastener. Ensure the socket is fully engaged with the fastener head to prevent stripping.
3. **Apply Torque:** Grip the handle firmly and apply steady, controlled force to turn the fastener. The 90-tooth mechanism allows for small arcs of movement, ideal for confined areas.
4. **Utilize Flex Head:** For fasteners that are not directly accessible, adjust the flex head to an angle that provides clearance and leverage. This feature is particularly useful in automotive or machinery repair.



Figure 3: The flex head can be articulated to various angles for improved access to fasteners.

6. Maintenance

Proper maintenance ensures the longevity and performance of your ratchet handle:

- **Cleaning:** After each use, wipe the ratchet handle clean with a dry cloth to remove dirt, grease, and debris. For stubborn grime, use a mild solvent and ensure the tool is thoroughly dried afterward.
- **Lubrication:** Periodically apply a small amount of light machine oil to the ratchet head mechanism to ensure smooth operation. Avoid over-lubricating, as this can attract dirt.
- **Storage:** Store the ratchet handle in a clean, dry environment, away from excessive moisture or corrosive chemicals. A tool chest or drawer is ideal.
- **Inspection:** Regularly check the ratchet head for wear on the teeth or pawls. If the ratcheting action feels loose or skips, the internal mechanism may require servicing by a qualified technician.

7. Troubleshooting

If you encounter issues with your KTC Neplos NBR390AF, consider the following:

- **Stiff Ratcheting Action:** This may indicate a lack of lubrication or accumulation of dirt. Clean and lubricate the ratchet head as described in the Maintenance section.
- **Ratchet Head Not Locking:** Ensure the direction switch is fully engaged in either the 'R' or 'L' position. If the issue persists, the internal mechanism may be worn or damaged.
- **Socket Not Attaching Securely:** Verify that you are using a 9.5sq. (3/8 inch) drive socket. Check for debris in the square drive or damage to the socket retention ball.
- **Flex Head Loose:** If the flex head does not hold its position, inspect the pivot mechanism for wear or damage. This may require professional servicing.

For issues not resolved by these steps, contact KTC customer support or a qualified tool repair specialist.

8. Specifications

Manufacturer	Kyoto Machine Tools (KTC)
Model Number	NBR390AF
Product Dimensions	22.5 x 2.6 x 2 cm
Item Weight	320 g
Drive Size	9.5 sq. (3/8 inch)
Number of Gears	90
Style	Flex Head
Material	Stainless Steel
Finish	Powder Coated
Colour	Silver
Usage	Professional

9. Warranty and Support

For warranty information, product support, or service inquiries, please refer to the official KTC website or contact your authorized KTC dealer. Keep your purchase receipt as proof of purchase.