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Undercarriage KH027

Undercarriage Kubota KH027 Mini Excavator Top Roller/Carrier Roller Instruction Manual

1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, maintenance, and troubleshooting of the Undercarriage Top Roller/Carrier Roller designed specifically for Kubota KH027 mini excavators. Adhering to these guidelines will ensure optimal performance and extend the lifespan of the component.

The top roller, also known as a carrier roller, supports the track chain and prevents it from sagging between the sprocket and idler, ensuring smooth operation of the excavator's track system.

2. SAFETY INFORMATION

- Always wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and sturdy footwear, when handling heavy machinery parts.
- Ensure the excavator is turned off, the engine is cool, and the tracks are properly blocked or secured before beginning any installation or maintenance work.
- Use proper lifting techniques and equipment when handling the top roller to prevent injury. The component can be heavy.
- Refer to the Kubota KH027 excavator's official service manual for specific safety procedures related to track system maintenance.
- Keep children and unauthorized personnel away from the work area.

3. PACKAGE CONTENTS

Upon unpacking, verify that all components are present and undamaged. The package should contain:

- 1x Undercarriage Top Roller/Carrier Roller for Kubota KH027

- (Mounting hardware may be sold separately or reused from the existing assembly. Please check your order details.)

4. SETUP AND INSTALLATION

This section outlines the general procedure for replacing an existing top roller. Consult your excavator's service manual for detailed, model-specific instructions.

4.1 Preparation

1. Park the excavator on a flat, stable surface.
2. Lower all attachments to the ground and shut off the engine.
3. Engage the parking brake.
4. Relieve track tension according to the excavator's service manual. This typically involves loosening a grease fitting on the track adjuster.
5. Carefully lift the side of the excavator where the roller is to be replaced, using appropriate lifting equipment and support stands. Ensure the track is clear of the ground.

4.2 Removal of Old Top Roller

1. Locate the worn or damaged top roller.
2. Remove any bolts, nuts, or retaining clips securing the old top roller to the excavator frame. Keep track of all hardware for potential reuse if it is in good condition.
3. Carefully detach and remove the old top roller.

4.3 Installation of New Top Roller



Figure 1: Undercarriage Top Roller for Kubota KH027. This image displays the main view of the top roller, highlighting its robust construction and threaded shaft for secure mounting.

1. Clean the mounting area on the excavator frame to ensure a proper fit.
2. Position the new top roller into its designated mounting location.
3. Secure the new top roller using the appropriate bolts, nuts, or retaining clips. Ensure all fasteners are tightened to the manufacturer's specified torque settings.



Figure 2: Angled view of the Undercarriage Top Roller. This perspective shows the hexagonal nut and the robust bearing housing, indicating the quality of the component.

4.4 Post-Installation

1. Carefully lower the excavator.
2. Adjust the track tension to the specifications outlined in your Kubota KH027 service manual. Incorrect tension can lead to premature wear of track components.
3. Perform a visual inspection to ensure the new top roller is properly seated and all fasteners are secure.
4. Slowly operate the excavator for a short distance to confirm proper function of the track system.

5. OPERATING INSTRUCTIONS

The top roller is an integral part of the excavator's undercarriage system. Its operation is passive, supporting the track chain. Proper operation of the excavator involves:

- **Smooth Operation:** Avoid sudden starts, stops, or turns that can put excessive stress on undercarriage components.
- **Terrain Awareness:** Be mindful of the terrain. Operating on excessively rocky, uneven, or abrasive surfaces can accelerate wear on rollers and tracks.

- **Regular Inspections:** Periodically check the top rollers during operation for unusual noises, excessive heat, or visible damage.

6. MAINTENANCE

Regular maintenance is crucial for the longevity and performance of your top roller.

- **Daily Visual Inspection:** Before each use, visually inspect the top rollers for any signs of damage, cracks, loose bolts, or excessive wear. Check for any debris (mud, rocks, etc.) lodged around the rollers.
- **Cleaning:** After operating in muddy or dirty conditions, clean the undercarriage thoroughly to prevent abrasive materials from causing premature wear to the rollers and other components.
- **Lubrication:** The top roller is typically a sealed unit and does not require regular greasing. However, refer to your excavator's service manual for specific lubrication requirements for other undercarriage components.
- **Track Tension:** Maintain correct track tension as specified by Kubota. Incorrect tension can lead to increased wear on rollers and other undercarriage parts.
- **Wear Monitoring:** Monitor the wear limits of the roller. Replace the top roller when it reaches its wear limit to prevent damage to other undercarriage components.

7. TROUBLESHOOTING

This section addresses common issues related to top rollers.

Problem	Possible Cause	Solution
Excessive Noise from Roller	Worn bearings, debris lodged in roller, loose mounting bolts.	Inspect for debris and remove. Check mounting bolt tightness. If noise persists, the roller may need replacement.
Roller Not Rotating Freely	Seized bearings, heavy mud/debris accumulation, bent shaft.	Clean the area thoroughly. If still seized, the roller requires replacement.
Premature Wear on Roller Tread	Incorrect track tension, abrasive operating conditions, misaligned track.	Adjust track tension. Evaluate operating environment. Check track alignment.
Loose Roller	Loose mounting bolts, worn mounting points.	Tighten mounting bolts to specified torque. Inspect mounting points for damage.

If you encounter issues not listed here or if solutions do not resolve the problem, consult a qualified service technician or contact the manufacturer.

8. SPECIFICATIONS

- **Product Type:** Top Roller / Carrier Roller
- **Compatibility:** Kubota KH027 Mini Excavator
- **Manufacturer:** FULIAN PART (Brand: Undercarriage)

- **ASIN:** B073ZCFLBY
- **Date First Available:** July 16, 2017

Note: Specific dimensions and material composition are proprietary and designed to meet or exceed OEM specifications for the Kubota KH027.

9. WARRANTY AND SUPPORT

For warranty information, please refer to the terms and conditions provided at the time of purchase or contact the seller directly. General support inquiries can be directed to the manufacturer, FULIAN PART, or the Undercarriage brand customer service.

It is recommended to retain your proof of purchase for any warranty claims.