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> Juki LU-1508NS Industrial Walking Foot Sewing Machine, Vertical Axis Hook, Servo Motor

JUKI LU-1508NS

Juki LU-1508NS Industrial Walking Foot Sewing Machine Instruction Manual

Model: LU-1508NS-Servo

Brand: JUKI

1. PRODUCT OVERVIEW

The Juki LU-1508NS is a robust single-needle, straight stitch, walking foot industrial sewing machine designed for heavy-duty materials. It features advanced walking foot technology, a rectangular feed mechanism, and an increased needle stroke, making it highly effective for sewing thick fabrics such as leather. The machine incorporates a convenient top-loading bobbin system with a vertical-axis hook, optimizing performance for extra-heavy materials. Equipped with a quiet servo motor, this unit is suitable for both industrial and home environments. The complete unit includes the machine head, table, stand, motor, sewing light, and drawer, arriving fully installed and ready for operation.



Image: Juki LU-1508NS Industrial Walking Foot Sewing Machine, showcasing its robust design and components.

2. SETUP AND INITIAL PREPARATION

2.1 Assembly

The Juki LU-1508NS is typically shipped as a complete unit, including the machine head, table, stand, motor, sewing light, and drawer. Ensure all components are securely assembled according to the provided assembly instructions (not included in this manual). Minor blemishes or scratches on the table and legs may be present due to the industrial manufacturing process and do not affect machine operation.

2.2 Oiling the Machine

Before initial use and regularly thereafter, ensure the machine is properly oiled. The LU-1508NS features an oil bath located underneath the machine. Fill this oil bath with sewing machine oil to approximately 1 millimeter above the sponge. Additionally, there are manual oiling points on the machine head. The side cover, secured by a magnetic catch, can be easily opened to access internal wicks for lubrication. A red-marked oiling point on top of the machine indicates an oil well where more than a few drops can be added. Another red-marked point on the top of the machine lubricates the internal linkage for the steppage adjustment.

2.3 Needle Selection

This machine uses 135 X 17 needles for general sewing. For leather point applications, use 135 X 16 needles. Always ensure the correct needle type and size are used for your material to prevent damage and ensure optimal stitch quality.

3. OPERATING INSTRUCTIONS

3.1 Bobbin Winding

To wind a bobbin, guide the thread from the thread stand's eyelet down towards the machine. Pass the thread twice through the post on the machine head, from back to front. Then, thread it through the bobbin tension eyelet and around the tension discs, exiting through the same eyelet. This unique mechanism ensures proper tension during winding. The LU-1508NS uses an oversized U-style bobbin, offering greater thread capacity than standard G-style bobbins. Ensure the bobbin fits snugly onto the winder post and engage the lever. Hold the thread back initially to get it started, and remember to unthread the needle before winding.

3.2 Threading the Machine (Upper Thread)

For upper threading, guide the thread from the thread stand's eyelet down towards the machine. Pass it through the eyelet plate twice (top to bottom), typically using the first and third holes. Guide the thread through the pre-tensioner's eyelet and around its small tension disc. Then, route the thread around the main tension discs, ensuring it passes between them to feel resistance. Lift the thread controller until it clicks into position. Next, pass the thread through the large guide first, then the smaller guide on the way up to the take-up arm. Thread the take-up arm from right to left. Guide the thread back down through the large thread guide (which you previously went up through). Pass it through the slot in the guide below, then underneath the small tab on the left side (for left-to-right needle threading). Finally, thread the needle bar thread guide and then the needle from left to right. Loosely hold both upper and bobbin threads back as you begin sewing to ensure proper stitch formation.

3.3 Stitch Length Adjustment

The stitch length can be adjusted using the knob on the machine body. This machine offers a large stitch length, going up to approximately 9-10 millimeters, which is beneficial for decorative topstitching and handling thick materials.

3.4 Reverse Lever

The machine is equipped with a shorty reverse paddle. This paddle requires less downward pressure compared to some other models, making it easier to engage reverse stitching for securing seams.

3.5 Knee Lift Operation

The detachable knee lift provides exceptional clearance, allowing for significant uncompressed material to pass under the presser feet. It can accommodate materials up to 13/16 of an inch or more when operated by the knee lift. Remember to detach the knee lift when tilting the machine head back for maintenance.

3.6 Presser Foot Adjustments

Two screws on the machine head control the downward pressure on the presser feet. The larger column adjusts the outer presser foot, while the smaller screw adjusts the inner presser foot. The inner presser foot's spring is small, so its adjustment has a limited effect on resistance. For delicate materials like leather, it is recommended to back out the large column almost entirely to reduce marking. You can always tighten it if more downward pressure is needed for material

control.

3.7 Steppage Adjustment

An internal steppage adjustment for the presser feet is located behind a removable panel on the machine head. This adjustment controls how high the feet step. Use a 9mm wrench to loosen the bolt and adjust the linkage. Raise the linkage for maximum steppage or lower it for minimal steppage. For everyday projects, setting it to the middle notch or range is usually sufficient. This adjustment is crucial for adapting to different material thicknesses and ensuring smooth feeding.

4. MAINTENANCE

4.1 Regular Oiling

Beyond the initial setup, regular oiling is crucial for the longevity and smooth operation of your Juki LU-1508NS. Always ensure the oil bath is adequately filled. Utilize the manual oiling points on the machine head, especially the red-marked oil well, for consistent lubrication. The magnetic side cover allows for easy access to internal components for oiling without needing to remove screws.

4.2 Cleaning

Periodically clean lint and debris from the bobbin area, feed dogs, and tension discs. A clean machine performs better and reduces the risk of thread breakage or skipped stitches.

5. SPECIFICATIONS

- **Max. Sewing Speed:** 2500 stitches/minute
- **Max. Stitch Length:** 9mm
- **Unit Dimensions (LxWxH):** 48 inches by 20 inches by 48 inches (approx. 20"D x 48"W x 48"H)
- **Needle System:** 135 X 17 (for general sewing), 135 X 16 (for leather point)
- **Alternating Vertical Movement:** 2.5 6.5mm
- **Motor:** 110V with quiet servo motor
- **Item Weight:** 239 pounds
- **Manufacturer:** JUKI
- **Date First Available:** September 1, 2011
- **Color:** White
- **UPC:** 189684000565

6. TROUBLESHOOTING

If you encounter issues with your Juki LU-1508NS, consider the following common troubleshooting steps:

- **Skipped Stitches or Thread Breakage:** Check that the machine is correctly threaded, both upper and bobbin threads. Ensure tension settings are appropriate for your material and thread type. Verify the needle is inserted correctly and is not bent or dull.
- **Uneven Stitching:** Adjust the presser foot pressure and steppage according to the material thickness. Ensure the machine is properly oiled.
- **Machine Noise:** Industrial clutch motors produce noise. Ensure all covers are properly secured and the machine is adequately lubricated.

For persistent issues, consult a qualified sewing machine technician or contact Juki customer support.

7. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or service, please refer to the official Juki documentation that accompanied your machine or visit the Juki website. It is recommended to register your product to facilitate any future support needs.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Example: How do I reset this device or fix this error?

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