

## CONSEW P1206RB

# Consew P1206RB Industrial Walking Foot Sewing Machine User Manual

Model: P1206RB | Brand: CONSEW

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, setup, and maintenance of your Consew P1206RB Industrial Walking Foot Sewing Machine. This machine is designed for sewing light to heavy-weight materials such as leather, vinyl, upholstery, synthetics, canvas, and various coated and laminated products. Please read this manual thoroughly before operating the machine.

## 2. UNPACKING AND ASSEMBLY

The Consew P1206RB machine is delivered unassembled in three separate boxes. Careful unpacking and assembly are required to ensure proper function and safety. It is recommended to have assistance during the assembly process due to the weight and size of the components.

### Assembly Steps:

- Unpack Components:** Carefully remove all parts from their packaging. Verify that all components listed in the packing list are present and undamaged.
- Assemble Table Stand:** Construct the table stand according to the provided diagrams. Ensure all bolts are securely tightened.
- Mount Table Top:** Secure the table top to the assembled stand.
- Install Servo Motor:** Attach the servo motor to the underside of the table, ensuring proper alignment with the machine head's pulley.
- Mount Machine Head:** Carefully place the sewing machine head into the cutout of the table top. Ensure it is seated correctly and secured.
- Connect Belt:** Install the drive belt between the motor pulley and the machine handwheel. Adjust tension as necessary.
- Install Knee Lifter and Foot Pedal:** Attach the knee lifter mechanism and the foot pedal linkage. Adjust for comfortable operation.



Figure 2.1: Fully assembled Consew P1206RB machine with table and servo motor.

### 3. KEY FEATURES

The Consew P1206RB is equipped with several features designed for industrial sewing applications:

- **Oil Pump System:** Features an integrated oil pump, oil pan, and adjustable oil flow for continuous lubrication of moving parts.
- **Adjustable Oil Gauge:** Allows monitoring and adjustment of oil levels.
- **Reverse Stitching:** A reverse lever enables back-tacking for securing stitches.
- **Large Horizontal Axis Hook:** Designed for efficient bobbin handling and reduced thread changes.
- **Side-Loaded Bobbin:** Facilitates easy bobbin insertion and removal.
- **Adjustable Upper Thread Tension:** Provides control over stitch quality for various materials and threads.
- **Locking Stitch Regulator:** Ensures consistent stitch length during operation.
- **Walking Foot Mechanism:** Synchronized feeding of the top and bottom layers of fabric, ideal for thick or slippery materials.



Figure 3.1: Overview of the Consew P1206RB machine head.

## 4. SETUP AND PREPARATION

Before operating the machine, proper setup is crucial for optimal performance and safety.

### 4.1 Oiling the Machine

The machine features an automatic oil pump system. Ensure the oil pan is filled with appropriate industrial sewing machine oil to the indicated level. The adjustable oil gauge allows for control over the oil flow rate to different parts of the machine.



Figure 4.1: Underside view illustrating the oil pan and lubrication system.

## 4.2 Needle Installation

Use needle type 135 x 17. To install a new needle:

1. Turn the handwheel to raise the needle bar to its highest position.
2. Loosen the needle clamp screw.
3. Insert the new needle with the long groove facing left and the scarf facing right. Push it up as far as it will go.
4. Tighten the needle clamp screw securely.

## 4.3 Bobbin Winding and Insertion

Refer to the machine's threading diagram for specific bobbin winding and insertion instructions. Ensure the bobbin is wound evenly and inserted correctly into the large horizontal axis hook.

## 4.4 Threading the Machine

Follow the numbered threading path on the machine, guiding the upper thread through all tension discs, thread guides, and the needle eye. Ensure the thread is seated correctly in the tension assembly.

## 5. OPERATING INSTRUCTIONS

Familiarize yourself with the machine's controls before beginning to sew.

### 5.1 Power On/Off

Use the main power switch, typically located on the table stand, to turn the machine on or off. The servo motor provides precise speed control.

### 5.2 Adjusting Stitch Length

The stitch length is adjusted using the locking stitch regulator dial located on the machine head. Rotate the dial to select the desired stitch length. The maximum stitch length is 3.6 stitches per inch (7 mm).



Figure 5.1: Stitch length adjustment dial and handwheel.

### 5.3 Reverse Stitching

To engage reverse stitching, press and hold the reverse lever. Release the lever to resume forward stitching. This function is used for securing seams at the beginning and end of a stitch line.

### 5.4 Presser Foot Lift

The presser foot can be lifted by hand (up to 5/16" or 8 mm) or by using the knee lifter (up to 5/8" or 16 mm). The knee lifter allows for hands-free lifting of the presser foot, which is beneficial when handling large or heavy materials.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your sewing machine.

### 6.1 Lubrication

Periodically check the oil level in the oil pan and replenish as needed. Ensure the adjustable oil flow is set correctly for continuous lubrication during operation. Refer to the oil gauge for proper levels.

### 6.2 Cleaning

Regularly clean lint and thread debris from the bobbin area, feed dogs, and tension discs. Use a soft brush or compressed air. Disconnect power before cleaning.

### 6.3 Needle Replacement

Replace needles frequently, especially when sewing dense or heavy materials, or if the needle shows signs of bending or dullness. A dull or bent needle can cause skipped stitches, thread breakage, or

damage to fabric.

## 7. TROUBLESHOOTING

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This section addresses common issues that may arise during machine operation.

- **Skipped Stitches:** Check if the needle is inserted correctly and is not bent or dull. Ensure the correct needle type (135 x 17) is being used. Verify proper threading of the upper thread and bobbin.
- **Thread Breakage:** Inspect the thread path for any snags or sharp edges. Check upper thread tension; it may be too tight. Ensure the needle is not bent or dull.
- **Uneven Stitching:** Adjust upper and lower thread tension. Ensure the presser foot pressure is appropriate for the material being sewn. Verify that the material is feeding smoothly.
- **Machine Not Starting:** Check if the power cord is securely plugged in and the main power switch is on. Ensure the motor is functioning correctly.
- **Noise or Vibration:** Ensure all screws and bolts are tightened. Check for any loose parts or obstructions. Verify that the machine is properly lubricated.

## 8. SPECIFICATIONS

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Feature	Specification
Maximum Speed (S.P.M.)	3000 (Speed depends on thread, material, and operation)
Presser Foot Lift (Hand)	5/16" (8 mm)
Presser Foot Lift (Knee)	5/8" (16 mm)
Needle Bar Stroke	1-29/64" (37 mm)
Maximum Stitch Length	3.6 s.p.i. (7 mm)
Work Space	10-1/4" x 4-3/4" (260 x 120 mm)
Recommended Needle Type	135 x 17
Item Model Number	P1206RB
Item Weight	185 pounds
Product Dimensions	0.16 x 0.12 x 0.16 inches (Machine Head)
UPC	783827105515

## 9. SUPPORT

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For technical assistance, parts, or service inquiries, please contact your authorized Consew dealer or customer support. Ensure you have your machine's model number (P1206RB) and serial number available when seeking support.

