

Singer 645-645E-645E3-645E6

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INSTRUCTION MANUAL

Introduction

This manual provides essential instructions for the safe and efficient operation, maintenance, and troubleshooting of your Singer 645, 645E, 645E3, or 645E6 sewing machine. Please read this manual thoroughly before using your machine to ensure proper function and to prevent damage or injury.

Keep this manual in a safe place for future reference.

Important Safety Instructions

When using an electrical appliance, basic safety precautions should always be followed, including the following:

- Read all instructions before using this sewing machine.
- Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
- Always unplug the sewing machine from the electrical outlet immediately after using and before cleaning, removing covers, or making any user servicing adjustments.
- Never operate this sewing machine if it has a damaged cord or plug, if it is not working properly, or if it has been dropped or damaged.
- Do not use outdoors.

Setup

1. Unpacking and Placement

1. Carefully remove the machine from its packaging.
2. Place the machine on a stable, flat surface with adequate lighting.
3. Ensure the power switch is in the OFF position before plugging in.

2. Power Connection

1. Connect the power cord to the machine and then to a suitable electrical outlet.
2. Connect the foot controller to the machine.

3. Bobbin Winding

1. Place a spool of thread on the spool pin.
2. Guide the thread through the upper thread guide and around the bobbin winding tension disc.
3. Insert the thread through the hole in the bobbin and place the bobbin onto the bobbin winder spindle.
4. Push the bobbin winder spindle to the right.
5. Press the foot controller gently to wind the bobbin. Stop when the bobbin is full.
6. Cut the thread and push the bobbin winder spindle back to the left.

4. Inserting the Bobbin

1. Open the bobbin cover plate.
2. Insert the wound bobbin into the bobbin case, ensuring the thread unwinds in the correct direction (usually counter-clockwise).
3. Pull the thread through the tension spring and guide slot.
4. Close the bobbin cover plate.

5. Threading the Upper Thread

1. Raise the presser foot and needle to their highest positions.
2. Place the spool of thread on the spool pin.
3. Follow the numbered threading path indicated on your machine, guiding the thread through all guides, tension discs, and the take-up lever.
4. Thread the needle from front to back.
5. Pull about 6 inches of thread through the needle eye.

Operating Instructions

1. Bringing Up the Bobbin Thread

1. Hold the upper thread lightly with your left hand.
2. Turn the handwheel towards you to lower the needle into the needle plate and then raise it again.
3. The upper thread will catch the bobbin thread, forming a loop. Pull the loop up through the needle plate opening.
4. Pull both threads (upper and bobbin) under the presser foot and towards the back of the machine.

2. Basic Stitching

- Select your desired stitch pattern and length using the appropriate dials or buttons.
- Place your fabric under the presser foot.
- Lower the presser foot.
- Gently press the foot controller to begin sewing. Guide the fabric smoothly.
- To finish, raise the needle and presser foot, then pull the fabric away and cut the threads.

3. Tension Adjustment

Correct thread tension is crucial for balanced stitches. Adjust the upper thread tension dial as needed:

- If the bobbin thread appears on the top side of the fabric, increase upper tension.
- If the upper thread appears on the underside of the fabric, decrease upper tension.

4. Embroidery/Serger Functions (for applicable models)

For models 645E, 645E3, and 645E6, refer to specific sections for embroidery unit attachment and serger

stitch settings. These models offer advanced capabilities beyond basic sewing.

- **Embroidery:** Attach the embroidery unit, hoop your fabric, and select your desired design. Follow the on-screen prompts or specific instructions for your embroidery module.
- **Serger:** Utilize the differential feed and multiple thread cones for overlock stitches, rolled hems, and other serger-specific finishes. Adjust loopers and knives as per your project requirements.

Maintenance

1. Cleaning

- **Regular Cleaning:** Use a soft brush to remove lint and dust from the bobbin area, feed dogs, and tension discs.
- **Needle Plate:** Remove the needle plate and clean underneath it regularly to prevent lint buildup.
- **Exterior:** Wipe the machine's exterior with a soft, damp cloth. Do not use harsh chemicals.

2. Lubrication (Oiling)

Refer to your machine's specific oiling points, usually indicated in the original manual. Use only high-quality sewing machine oil. Over-oiling can cause issues.

3. Needle Replacement

Replace the needle frequently (after every 8-10 hours of sewing or when it becomes dull/bent) to prevent skipped stitches and fabric damage. Ensure the flat side of the needle faces the back of the machine when inserting.

Troubleshooting

Problem	Possible Cause	Solution
Skipped Stitches	Incorrect needle, bent needle, improper threading, wrong tension.	Replace needle with correct type/size, rethread machine, adjust tension.
Thread Breakage	Poor quality thread, incorrect threading, too high tension, burr on needle plate.	Use good quality thread, rethread, reduce tension, check for burrs.
Fabric Puckering	Too high tension, incorrect stitch length, wrong presser foot pressure.	Adjust tension, increase stitch length, adjust presser foot pressure.
Machine Jamming	Lint buildup, tangled threads in bobbin case, incorrect bobbin insertion.	Clean bobbin area, reinsert bobbin correctly, remove tangled threads.

If problems persist after attempting these solutions, consult a qualified service technician.

Specifications

- **Model Series:** Singer 645, 645E, 645E3, 645E6
- **Machine Type:** Electronic Sewing Machine (some models with Embroidery/Serger capabilities)
- **Power Supply:** Standard household electrical outlet (voltage may vary by region)
- **Needle System:** Standard home sewing machine needles (e.g., 130/705H)
- **Bobbin Type:** Class 15 (or specific to model, refer to machine markings)
- **Stitch Types:** Varies by model, typically includes utility, decorative, and stretch stitches.

Embroidery/Serger models offer additional specialized stitches.

Note: Specific features and capabilities may vary slightly between the 645, 645E, 645E3, and 645E6 models. Refer to your machine's specific markings for precise details.