IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety should always be followed, including the following:
Read all instructions before using this sewing machine.

DANGER - To reduce the risk of electric shock:
1. An appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
3. The LED lamp maximum power is 0.3W, maximum voltage is DC 9V. If the lamp is damaged, you should not use the product, send it to SINGER or a service agent to repair or replace at once.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons:
1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.
5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
6. Always use the proper needle plate. The wrong plate can cause the needle to break.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
9. Switch the sewing machine off ("O") when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
10. Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
11. Never drop or insert any object into any opening.
12. Do not use outdoors.
13. Do not operate where aerosol spray products are being used or where oxygen is being administered.
14. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
16. The sound pressure level under normal operating conditions is 75dB(A).
17. Please turn off the machine or unplug when the machine is not operating properly.
18. Never place anything on the foot controller.
19. If the supply cord that is fixed with foot controller is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard.
20. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
21. Children should be supervised to ensure that they do not play with the appliance.

SAVE THESE INSTRUCTIONS

This sewing machine is intended for household use only.
Congratulations

As the owner of a new Singer sewing machine, you are about to begin an exciting adventure in creativity. From the moment you first use your machine, you will know you are sewing on one of the easiest to use sewing machines ever made.

May we recommend that, before you start to use your sewing machine, you discover the many features and the ease of operation by going through this instruction book, step by step, seated at your machine.

To ensure that you are always provided with the most modern sewing capabilities, the manufacturer reserves the right to change the appearance, design or accessories of this sewing machine when considered necessary.

SINGER is the exclusive trademark of The Singer Company Limited S.à.r.l. or its Affiliates. ©2012 The Singer Company Limited S.à.r.l. or its Affiliates. All rights reserved.
# List of Contents

## Machine Basics
- Principle Parts of the Machine .......................................................... 2/3
- Connecting Machine to Power Source .................................................. 4
- Two Step Presser Foot Lifter/ Adjusting Presser Foot Pressure .......... 5
- Accessories ......................................................................................... 6

## Threading the Machine
- Winding the Bobbin ............................................................................. 7
- Inserting the Bobbin ........................................................................... 8
- Threading the Upper Thread ............................................................... 9
- Raising the Bobbin Thread ................................................................. 10
- Thread Tension .................................................................................. 11

## Sewing
- How to Choose Your Pattern ............................................................. 12
- Three Needle Position Dial ............................................................... 13
- Stitch Width Dial & Stitch Length Dial .............................................. 14
- Sewing Straight Stitch ...................................................................... 15
- Reverse Sewing/ Removing the Work/ Cutting the Thread .............. 16
- Blind Hem ......................................................................................... 17
- Buttonholes ....................................................................................... 18
- Left and Right Side Balance for Buttonhole .................................... 19
- Sewing on Buttons ........................................................................... 20

## General Information
- Installing the Removable Extension Table ....................................... 21
- Attaching the Presser Foot Shank .................................................... 22
- Needle/ Fabric/ Thread Chart ............................................................. 23
- How To Drop Feed Dog ................................................................... 24

## Maintenance and Troubleshooting
- Inserting & Changing Needle .......................................................... 25
- Troubleshooting Guide ................................................................. 26
Principal Parts of the Machine

1. Thread tension dial
2. Presser foot pressure adjustment
3. Thread take-up lever
4. Reverse sewing lever
5. Thread cutter
6. Presser foot
7. Needle plate cover
8. Removable extension table/accessory storage
9. Three needle position dial
10. Bobbin stopper
11. Stitch width dial
12. Stitch length dial
13. Pattern selector dial
Principal Parts of the Machine

14. Horizontal spool pin
15. Bobbin winding spindle
16. Hole for auxiliary spool pin
17. Handwheel
18. Buttonhole stitch balance adjustment slot
19. Power and light switch
20. Main plug socket
21. Bobbin thread guide
22. Upper thread guide
23. Face plate
24. Handle
25. Presser foot lifter
26. Drop feed control
27. Foot speed control
28. Power cord
Connecting Machine to Power Source

Connect the machine to a power source as illustrated. (1)

Attention:
Unplug power cord when machine is not in use.

Foot control
The foot control pedal regulates the sewing speed. (2)

Attention:
Consult a qualified electrician if in doubt of how to connect machine to power source.
Unplug power cord when machine is not in use.
The foot control must be used with the appliance by FC-1902A (110-120V area)/ FC-2902A (220-240V area)/ 4C-316Q (110-125V area).

Sewing light
Press main switch (A) to "I" for power and light.
Two Step Presser Foot Lifter

When sewing several layers or thick fabrics, the presser foot can be raised to a higher position for easy positioning of the work. (A)

Adjusting Presser Foot Pressure

The presser foot pressure of the machine has been pre-set and requires no particular readjustment according to the type of fabric (light-or-heavy weight).

However, if you need to adjust the presser foot pressure, turn the presser adjusting screw with a coin.

For sewing very thin fabric, loosen the pressure by turning the screw counter clockwise, and for heavy fabric, tighten by turning it clockwise.
## Accessories

### Standard accessories (1)
- a. All purpose foot
- b. Zipper foot
- c. Buttonhole foot
- d. Button sewing foot
- e. Seam ripper/ brush
- f. Edge/ quilting guide
- g. Pack of needles
- h. Spool holders
- i. Bobbin (3x)
- j. L-screwdriver
- k. Auxiliary Spool Pin
- l. Spool pin felt
- m. Soft cover

### Optional accessories (2)
(These 10 accessories are not supplied with this machine; they are, however, available for purchase from your authorized retailer.)
- n. Satin stitch foot
- o. Overcasting foot
- p. Hemmer foot
- q. Cording foot
- r. Blind hem foot
- s. Quilting/ straight stitch foot
- t. Gathering foot
- u. Darning/ embroidery foot
- v. Even Feed foot
- w. Twin needle
**Winding the Bobbin**

- Place thread and corresponding spool holder on to spool pin. (1/2)
- Snap thread into thread guide. (3)
- Wind thread clockwise around bobbin winder tension discs. (4)
- Thread bobbin as illustrated and place on spindle. (5)
- Push bobbin spindle to right. (6)
- Hold thread end. (7)
- Step on foot control pedal. (8)
- Cut thread. (9)
- Push bobbin spindle to left (10) and remove.

**Please Note:**
When the bobbin winder spindle is in "bobbin winding" position, the machine will not sew and the handwheel turn. To start sewing, push the bobbin winder spindle to the left (sewing position).
**Inserting the Bobbin**

When inserting or removing the bobbin, the needle must be fully raised.

1. Insert the bobbin in the bobbin case with the thread running counterclockwise direction (arrow).
2. Pull the thread through the slit (A).
3. Draw the thread clockwise until it slips into the notch (B).
4. Pull out about 15 cm (6 inches) of thread and attach the bobbin cover plate. (C)

**Attention:**
Turn power switch to off ("O") before inserting or removing the bobbin.
Threading the Upper Thread

This is a simple operation but it is important to carry out correctly as by not doing so several sewing problems could result.

- Start by raising the needle to its highest point (1), and continue turning the handwheel counterclockwise until the needle just slightly begins to descend. Raise the presser foot to release the tension discs.

  **Note:** For safety, it is strongly suggested you turn off the power before threading.

- Lift up the spool pin. Place the spool of thread on the holder with the thread coming off the spool as shown. For small thread spools, place small side of spool holder next to spool. (2)

- Draw thread from spool through the upper thread guide (3) and pulling thread through pre-tension spring as illustrated. (4)

- Thread tension module by leading thread down right channel and up left channel. (5) During this process it is helpful to hold the thread between the spool and thread guide.

- At the top of this movement pass thread from right to left through the slotted eye of the take-up lever and then downwards again. (6)

- Now pass the thread behind the horizontal thread guide, and then behind the thin wire needle clamp guide (7) and then down to the needle which should be threaded from front to back.

- Pull about 6-8 inches of thread to the rear beyond the needle eye. Trim thread to length with built in thread cutter. (8)
Raising the Bobbin Thread

Hold the upper thread with the left hand. Turn the handwheel (1) towards you (counterclockwise) lowering, then raising needle.

Note:
If it is difficult to raise the bobbin thread, check to make sure the thread is not trapped by the hinged cover or the Removable Extension Table.

Gently pull on the upper thread to bring the bobbin thread up through the needle plate hole. (2)

Lay both threads to the back under the presser foot. (3)
Thread Tension

Upper thread tension
Basic thread tension setting: "4". (1)
To increase the tension, turn the dial to the next number up.
To reduce the tension, turn the dial to the next number down.
A. Normal thread tension for straight stitch sewing.
B. Thread tension too loose for straight stitch sewing. Turn dial to higher number.
C. Thread tension too tight for straight stitch sewing. Turn dial to lower number.
D. Normal thread tension for zig zag and decorative sewing.
Correct thread tension is when a small amount of the upper thread appears on the bottom side of fabric.

Lower thread tension
The bobbin tension has been set correctly at the factory, so you do not need to adjust it.

Please note:
- Proper tension setting is important for strong seams.
- There is no single tension setting appropriate for all stitch functions, thread or fabric.
- A balanced tension (identical stitches both top and bottom) is usually only desirable for straight stitch construction sewing.
- 90% of all sewing will be between "3" and "5".
- For zig zag and decorative sewing stitch functions, thread tension should generally be less than for straight stitch sewing.
- For all decorative sewing you will always obtain a nicer stitch and less fabric puckering when the upper thread appears on the bottom side of your fabric.
How to Choose Your Pattern

The diagram on this page display the stitch patterns available on the machine.

Turn the Pattern Selector Dial (e) to select the desired pattern. Use the Stitch Length Dial (d) to adjust the stitch length as desired for the project. Use the Stitch Width Dial (c) to adjust the width of the stitch as desired.

The Pattern Selector Dial may be turned in either direction.

a. Reverse Sewing Lever
b. Three Needle Position Dial
c. Stitch Width Dial
d. Stitch Length Dial
e. Pattern Selector Dial
Three Needle Position Dial

The needle position can be altered with the "Three needle position dial". For normal work, the needle position is middle. For edge stitching or sewing parallel lines of top stitch, select needle position left or right. For twin needle stitching, needle position is middle.

a. Straight
b. Zig-zag

L. Left Needle Position
M. Middle Needle Position
R. Right Needle Position


**Stitch Width Dial & Stitch Length Dial**

**Function of stitch width dial**
The maximum zigzag stitch width for zigzag stitching is 6mm; however, the width can be reduced on any patterns. The width increases as you move zigzag dial from "0" - "6". (1)

**Function of stitch length dial while zig-zag stitching**
Set the Pattern Selector Dial to zig-zag.
The density of zig-zag stitches increase as the setting of stitch length dial approaches "0".
Standard zigzag stitches are usually achieved at "3" or below. (2)
Dense zig-zag stitches are called satin stitches. (2)

**Function of stitch length dial for when straight stitching**
For straight stitch sewing, turn the Pattern Selector Dial to the straight stitch setting. Turn the Stitch Length Dial, and the length of the individual stitches will decrease as the dial approached "0". The length of the individual stitches will increase as the dial approaches "4". Generally speaking, use a longer stitch length when sewing heavier weight fabrics or when using a thicker needle or thread. Use a shorter stitch length when sewing lighter weight fabrics or when using a finer needle or thread.
Sewing Straight Stitch

To begin sewing, set the machine for straight stitch. (1)

Place the fabric under the presser foot with the fabric edge lined up with the desired seam guide line on the needle plate. (2)

Lower the presser foot lifter, and then step on the foot controller to start sewing. (3)
□ Reverse Sewing

To secure the beginning and the end of a seam, press down the reverse sewing lever (A). Sew a few reverse stitches. Release the lever and the machine will sew forward again. (1)

□ Removing the Work

Turn the handwheel toward you (counterclockwise) to bring the thread take up lever to its highest position, raise the presser foot and remove work behind the needle and presser foot. (2)

□ Cutting the Thread

Pull the threads under and behind the presser foot. Guide the threads to the side of the face plate and into thread cutter (B). Pull threads down to cut. (3)
For hems on curtains, trousers, skirts, etc.

Blind hem for stretch fabrics.

Blind hem for firm fabrics.

Set the Stitch Width Dial at a setting appropriate for the weight/type of fabric being sewn, within the range shown in the diagram on the right of the page. Generally, a narrower stitch is used for lighter weight fabrics, and a wider stitch is used for heavier weight fabrics. Sew a test first to make sure the machine settings are appropriate for the fabric.

Blind Hem:
Turn up the hem to the desired width and press. Fold back (as shown in Fig. 1) against the right side of the fabric with the top edge of the hem extending about 7 mm (1/4") to the right side of the folded fabric.

Start to sew slowly on the fold, making sure the needle touches slightly the folded top to catch one or two fabric threads. (2)

Unfold the fabric when hemming is completed and press.

Note:
To make blind hem sewing even easier, use a blind hem foot, available from your SINGER retailer. (See page 6 for part number)
**Buttonholes**

**Prepare**
1. Take off the all purpose foot and attach the buttonhole foot.
2. Measure diameter and thickness of button and add 0.3 cm (1/8") for bar tacks to obtain correct buttonhole length; mark buttonhole length on fabric (a).
3. Place fabric under the foot, so that marking on the buttonhole foot aligns with starting marking on fabric. Lower the foot, so that the buttonhole center line marked on the fabric aligns with the center of the buttonhole foot (b).

Adjust the Stitch Length Dial in the " " to set stitch density. Density varies according to the fabric. Always test sew a buttonhole on the fabric you are using to sew the buttonhole.

**Note:**
Density varies according to the fabric.
Always test sew a buttonhole on the fabric you are using to sew the buttonhole.

Follow the 4-step sequence changing from one step to another with the Pattern Selector Dial. When moving from step to step through the buttonhole process, be sure that the needle is raised before turning the Pattern Selector Dial to the next step. Take care not to sew too many stitches in steps 1 and 3. Use seam ripper and cut buttonhole open from both ends towards the middle.

**Tips:**
- Slightly reducing upper thread tension will produce better results.
- Use a stabilizer for fine or stretchy fabrics.
- It is advisable to use heavy thread or cord for stretch or knit fabrics. The zig-zag should sew over the heavy thread or cord. (A)
Left and Right Side Balance for Buttonhole

Stitch density on right and left sides of buttonhole can be adjusted by buttonhole balance control dial.

This dial should usually be in a neutral position (between "+" and "−")

If the stitches on the left side of buttonhole are too close together, turn the dial to the left (+).
* Turning dial to the left opens left side.

If the stitches on the left side of the buttonhole are too open, turn the dial to the right (−).
* Turning dial to right closes left side.

[Diagram of buttonhole balance control dial]
**Sewing on Buttons**

Move the drop feed control to right side to lower the feed dogs. (1)

Change the all purpose foot to the button sewing foot. (2)
Set the stitch length to "0".

Place the button and fabric under the Button Sewing foot, as illustrated in (3).
Set the machine for zig-zag stitch, then set the width to number "3" - "6". Turn the handwheel to check that the needle goes cleanly into the left and right holes of the button. Adjust the stitch width, as needed, according to the distance between the holes of the button. Slowly sew on the button with about 10 stitches.
Raise the needle out of the fabric. Set the machine for straight stitch again, then sew a few securing stitches to finish.

If a shank is required, place a darning needle on top of the button and sew. For buttons with 4 holes, sew through the front two holes first, push the work forward and then sew through the back two holes.
Installing the Removable Extension Table

Hold the removable extension table horizontally, and push it in the direction of the arrow. (1)

To remove the extension table, pull it toward the left.

The inside of the removable extension table can be utilized as an accessory box.

To open, flip cover down as shown. (2)
**Attaching the Presser Foot Shank**

Raise the presser bar (a) with the presser foot lifter. Attach the presser foot shank (b) as illustrated. (1)

**Attaching the presser foot**
Lower the presser foot shank (b) using the presser foot lifter, until the cut-out (c) is directly above the pin (d). (2) The presser foot (f) will engage automatically.

**Removing the presser foot**
Raise the presser foot using the presser foot lifter. (3) Raise the lever (e) and the foot disengages.

**Attaching the edge/quilting guide**
Attach the edge/ quilting guide (g) in the slot as illustrated. Adjust as needed for hems, pleats, quilting, etc. (4)

**Attention:**
Turn power switch to off ("O") when carrying out any of the above operations!
Needle/Fabric/Thread Chart

Needle, Fabric, Thread Selection Guide

<table>
<thead>
<tr>
<th>Needle Size</th>
<th>Fabrics</th>
<th>Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-11 (70-80)</td>
<td>Lightweight fabrics-thin cottons, voile, silk, muslin, interlocks, cotton knits, tricots, jerseys, crepes, woven polyester, shirt &amp; blouse fabrics.</td>
<td>Light-duty thread in cotton, nylon, polyester or cotton wrapped polyester.</td>
</tr>
<tr>
<td>11-14 (80-90)</td>
<td>Medium weight fabrics-cotton, satin, kettlecloth, sailcloth, double knits, lightweight woolens.</td>
<td>Most threads sold are medium size and suitable for these fabrics and needle sizes. Use polyester threads on synthetic materials and cotton on natural woven fabrics for best results. Always use the same thread on top and bottom.</td>
</tr>
<tr>
<td>14 (90)</td>
<td>Medium weight fabrics-cotton duck, woolen, heavier knits, terry cloth, denims.</td>
<td></td>
</tr>
<tr>
<td>16 (100)</td>
<td>Heavyweight fabrics-canvas, woolens, outdoor tent and quilted fabrics, denims, upholstery material (light to medium).</td>
<td></td>
</tr>
<tr>
<td>18 (110)</td>
<td>Heavy woolen, overcoat fabrics, upholstery fabrics, some leathers and vinyls.</td>
<td>Heavy duty thread, carpet thread.</td>
</tr>
</tbody>
</table>

Important: Match needle size to thread size and weight of fabric.

Needle, Fabric Selection

<table>
<thead>
<tr>
<th>Needles</th>
<th>Explanation</th>
<th>Type of Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGER® 2020</td>
<td>Standard sharp needles. Sizes range thin to large. 9 (70) to 18 (110).</td>
<td>Natural woven fabrics-wool, cotton, silk, etc. Not recommended for double knits.</td>
</tr>
<tr>
<td>SINGER® 2045</td>
<td>Semi-ball point needle, scarfed. 9 (70) to 18 (110).</td>
<td>Natural and synthetic woven fabrics, polyester blends. Knits-polyesters, interlocks, tricot, single and double knits. Also sweater knits, Lycra®, swimsuit fabric, elastic.</td>
</tr>
<tr>
<td>SINGER® 2032</td>
<td>Leather needles. 12 (80) to 18 (110).</td>
<td>Leather, vinyl, upholstery. (Leaves smaller hole than standard large needle.)</td>
</tr>
</tbody>
</table>

Note:
1. For best sewing results always use genuine SINGER® needles.
2. Replace needle often (approximately every other garment) and/or at first thread breakage or skipped stitches.
How To Drop Feed Dog

For ordinary sewing, keep the feed dog up, for freehand embroidery, sewing on buttons and darning, drop the feed dog.

To raise (a) and lower (b) feed dog. (2)
**Inserting & Changing Needles**

Change the needle regularly, especially if it is showing signs of wear and causing problems. For best sewing results always use SINGER® Brand Needles.

Insert the needle as illustrated as follows:

A. Loosen the needle clamp screw and tighten again after inserting the new needle. (1)

B. The flat side of the shaft should be towards the back.

C/D. Insert the needle as far up as it will go.

**Attention:**

Turn power switch to off ("O") before inserting or removing the needle.

Needles must be in perfect condition. (2)

Problems can occur with:

A. Bent needles
B. Damaged points
C. Blunt needles
## Troubleshooting Guide

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper thread breaks</td>
<td>1. The machine is not threaded correctly.</td>
<td>1. Rethread the machine.</td>
</tr>
<tr>
<td></td>
<td>2. The thread tension is too tight.</td>
<td>2. Reduce the thread tension. (lower number)</td>
</tr>
<tr>
<td></td>
<td>3. The thread is too thick for the needle.</td>
<td>3. Select a larger needle.</td>
</tr>
<tr>
<td></td>
<td>4. The needle is not inserted correctly.</td>
<td>4. Remove and reinsert the needle. (flat side towards the back)</td>
</tr>
<tr>
<td></td>
<td>5. The thread is wound around the spool holder pin.</td>
<td>5. Remove the reel and wind thread onto reel.</td>
</tr>
<tr>
<td></td>
<td>6. The needle is damaged.</td>
<td>6. Replace the needle.</td>
</tr>
<tr>
<td>Lower thread breaks</td>
<td>1. The bobbin case is not inserted correctly.</td>
<td>1. Remove and reinsert the bobbin case and pull on the thread.</td>
</tr>
<tr>
<td></td>
<td>2. The bobbin case is threaded wrong.</td>
<td>The thread should pull easily.</td>
</tr>
<tr>
<td></td>
<td>3. The lower thread tension is too tight.</td>
<td>2. Check both bobbin and bobbin case.</td>
</tr>
<tr>
<td>Skipped stitches</td>
<td>1. The needle is not inserted correctly.</td>
<td>3. Loosen lower thread tension as described.</td>
</tr>
<tr>
<td></td>
<td>2. The needle is damaged.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The wrong size needle has been used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. The foot is not attached correctly.</td>
<td></td>
</tr>
<tr>
<td>Needle breaks</td>
<td>1. The needle is damaged.</td>
<td>1. Insert a new needle.</td>
</tr>
<tr>
<td></td>
<td>2. The needle is not correctly inserted.</td>
<td>2. Insert the needle correctly. (flat side towards the back)</td>
</tr>
<tr>
<td></td>
<td>3. Wrong needle size for the fabric.</td>
<td>3. Choose a needle to suit the thread and fabric.</td>
</tr>
<tr>
<td></td>
<td>4. The wrong foot is attached.</td>
<td>4. Select the correct foot.</td>
</tr>
<tr>
<td>Loose stitches</td>
<td>1. The machine is not correctly threaded.</td>
<td>1. Check the threading.</td>
</tr>
<tr>
<td></td>
<td>2. The bobbin case is not correctly threaded.</td>
<td>2. Thread the bobbin case as illustrated.</td>
</tr>
<tr>
<td></td>
<td>3. Needle/ fabric/ thread combination is wrong.</td>
<td>3. The needle size must suit the fabric and thread.</td>
</tr>
<tr>
<td></td>
<td>4. Thread tension wrong.</td>
<td>4. Correct the thread tension.</td>
</tr>
<tr>
<td>Seams gather or pucker</td>
<td>1. The needle is too thick for the fabric.</td>
<td>1. Select a finer needle.</td>
</tr>
<tr>
<td></td>
<td>2. The stitch length is adjusted wrong.</td>
<td>2. Readjust the stitch length.</td>
</tr>
<tr>
<td></td>
<td>3. The thread tension is too tight.</td>
<td>3. Loosen the thread tension.</td>
</tr>
<tr>
<td>Uneven stitches, uneven feed</td>
<td>1. Poor quality thread.</td>
<td>1. Select a better quality thread.</td>
</tr>
<tr>
<td></td>
<td>2. The bobbin case is threaded wrong.</td>
<td>2. Remove bobbin case, thread and insert correctly.</td>
</tr>
<tr>
<td></td>
<td>3. Fabric has been pulled.</td>
<td>3. Do not pull on the fabric while sewing, let the feed dogs pull the fabric under the foot.</td>
</tr>
<tr>
<td>The machine is noisy</td>
<td>1. Lint or oil have collected on the hook or needle bar.</td>
<td>1. Clean the hook and feed dog as described.</td>
</tr>
<tr>
<td></td>
<td>2. The needle is damaged.</td>
<td>2. Replace the needle.</td>
</tr>
<tr>
<td>The machine jams</td>
<td>Thread is caught in the hook.</td>
<td>Remove the upper thread and bobbin case, turn the handwheel backwards and forwards by hand and remove the thread.</td>
</tr>
</tbody>
</table>
Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical/electronic products. If in doubt please contact your retailer for guidance.