MODEL HF106

IMPORTANT SAFETY INSTRUCTIONS

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

DANGER – To reduce the risk of electric shock:
1. An appliance should never be left unattended when plugged in. Always unplug this sewing machine from the electric outlet immediately after using and before cleaning.
2. Always unplug before replacing a sewing machine bulb. Replace bulb with same type rated 15 Watts.

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 sewing machine is used by or near children.
2. Use this appliance only for its intended use as described in this owner’s manual.
   Use only attachments recommended by the manufacturer as contained in this owner’s manual.
3. Never operate this sewing machine 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 this sewing machine to the nearest authorized dealers or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air opening blocked. Keep ventilation openings of this sewing machine and foot controller free from accumulation of lint, dust and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administrated.
8. To disconnect, turn all controls to the off (“O”) position, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
11. Always use the proper needle plate. The wrong plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
14. Switch this sewing machine off (“O”) when making any adjustment in the needle area, such as threading the needle, changing the needle, threading the bobbin or changing the presser foot, and the like.
15. Always unplug this sewing machine from the electrical outlet when removing covers, lubricating, or when making any other adjustments mentioned in this owner’s manual.

SAVE THESE INSTRUCTIONS

Designs and specifications are subject to change without prior notice.
1. Name of Parts

2. Standard Accessories

3. Free Arm Sewing

4. Power Connection

5. Controlling Sewing Speed

6. Raising and Lowering the Presser Foot

7. Changing the Needle

For free arm sewing, pull out the extension table to the left and remove it.

To replace extension table:
Slide the extension table along the free arm inserting the tab into the slot.

Accessory kit
Standard accessories are located inside the extension table.

Operating Instructions:
The symbol "O" of a switch indicates the "OFF" position of a switch.
For appliances with a polarized plug (one blade is wider than the other).
To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If it does not fit fully in the outlet, reverse the plug.
If it still does not fit, contact a qualified electrician to install the proper outlet.
Do not modify the plug in any way.

Foot controller Model YC-482-J or TJC-150 is used with sewing machine Model HF106.

The presser foot lifter raises and lowers the presser foot.
You can raise it about 1/4" higher than normal up position.
This helps when removing the foot or when sewing thick materials.

To remove the needle:
Loosen the needle clamp screw by turning it toward you.
Remove the needle by pulling it downward.

To replace the needle:
Insert a new needle into the needle clamp with flat side away from you.
Push the needle up as far as it will go.
Tighten the needle clamp screw firmly with a screwdriver.
8. Sewing Light

To replace:
Loosen the setscrew and remove the face plate to the direction of arrow.
Turn the bulb counterclockwise to remove it.
Turn the bulb clockwise to replace it.

9. Spool Pin

The spool pin holds the spool of thread for feeding the thread to the machine.
Pull out the spool pin and place the felt on it.

10. Removing and Inserting the Bobbin Case

Open the hook cover.
Raise the needle by turning the handwheel toward you.
Lift the latch and pull out the bobbin case.

When inserting the bobbin case, place the finger into the recess of the hook race.

11. Winding the Bobbin

Pull the handwheel out to the right.
Pull the thread from the spool and draw it around the thread guides.
Draw the thread through the hole on the bobbin from the inside to outside, put the bobbin on the bobbin winder spindle and push to the right.
Hold the free end of the thread with your hand and depress the foot control.
Stop the machine when it has made a few turns. Cut the thread close to the hole on the bobbin. Depress the foot control again.
When the bobbin is fully wound, push the bobbin winder spindle to the left and cut the thread.
Push the handwheel in for sewing.

Note: Do not move the bobbin winder spindle while the machine is running.
12. Threading the Bobbin Case

Place the bobbin into the bobbin case. Make sure the thread unwinds in the direction of the arrow.

Pull the thread into the bobbin case slit.

Draw the thread under the tension spring and into the delivery eye. Pull out about 4” (10 cm) of the thread.

13. Threading the Machine

Raise the thread take-up lever to its highest position by turning the handwheel toward you. Raise the presser foot.

1. Place the spool on the spool pin as shown, with the thread coming from the front of the spool.
2. Draw the thread around the thread guide as shown.  
3. Draw the thread around the thread guide plate as shown.  
4. Pull the thread up, then draw it through the thread take-up lever as shown.  
5. Draw the thread and slip it into the needle bar thread guide. Thread the needle eye from the front to back. Pull about 4” (10 cm) of the thread.

14. Drawing up the Bobbin Thread

Raise the presser foot. Hold the needle thread with your left hand.

Turn the handwheel toward you until the needle thread picks up the bobbin thread.

Pull the both threads to the back and under the presser foot.
15. Selecting Stitch

Raise the needle above the fabric. Turn the dial to select the desired pattern.

**Note:** Do not turn the dial when the needle is down in the fabric, otherwise the needle and fabric could be damaged.

16. Reverse Button

Press the reverse button to sew in reverse.

### Machine Setting

<table>
<thead>
<tr>
<th>Stitch</th>
<th>1.5</th>
<th>2.5</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thread Tension Dial</td>
<td>2 - 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Straight Stitch Sewing

**Starting to sew:**
Raise the presser foot and position the fabric next to a stitching guide line on the needle plate. Lower the needle into the fabric. Lower the presser foot and smooth the threads toward the back. Dpress the foot control.

To fasten the beginning of the seam, press the reverse button and sew several reverse stitches.

### To change sewing direction

Stop the machine and turn the handwheel toward you to bring the needle down into the fabric. Raise the presser foot. Pivot the fabric around the needle to change sewing direction as shown.

### Finishing sewing

To fasten seam ends, press the reverse button and sew several stitches in reverse. Raise the presser foot and remove the fabric, draw the threads to the back. Cut the threads with the groove on the back of the presser bar as shown.

### Machine setting

<table>
<thead>
<tr>
<th>Stitch</th>
<th>2</th>
<th>3.5</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thread tension dial</td>
<td>2 - 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Zigzag Stitch Sewing

The zigzag stitch is used to prevent fabrics from fraying at the raw edges.

It can also be used for appliques, cut works and as a decorative stitch.

### Thread tension for zigzag sewing

To obtain better zigzag stitches, the needle thread tension should be slightly weaker than straight stitch. The needle thread appears slightly on the wrong side of the fabric.
19. Tricot Stitch

Place the fabric under the presser foot so that the edge is just inside the right side of the presser foot. Guide the fabric so the right hand stitches fall at the edge of the fabric.

20. Buttonhole

Make a test buttonhole using the same fabric and interfacing as the actual garment.

Procedure

1. Raise the needle and turn the pattern selector dial to select 1. Draw the both threads to the left. Lower the needle down into the fabric at the starting point A, and lower the buttonhole foot.
2. Sew down the left side stopping at the bottommark B.
3. Raise the needle and select 2. Sew 5 stitches of bartack and stop the machine.
4. Raise the needle and select 3. Sew up the right side of the buttonhole, stop the machine when you are directly opposite the first stitch on the left hand side.
5. Raise the needle and select 4. Sew 5 stitches of bartack and raise the needle out from the fabric.
6. Raise the presser foot, remove the fabric from the machine and cut the threads leaving 4" (10 cm) tails.
7. Insert a pin at the end of the buttonhole as shown, then cut the opening with a seam ripper.

Note: Make sure not to cut the stitches.

Corded Buttonhole

With the buttonhole foot raised, hook a fillar cord on the spur on the back of the foot.
Bring the ends toward you under the foot until they clear the front end.

Hook both ends into the forks on the front of the foot to hold them tight.

Lower the needle down into the fabric at the starting point, and lower the presser foot.

Sew a buttonhole over the fillar cord. Pull the left end of the cord to tighten it and cut.
### 21. Blind Hemming

**Fabric preparation:**
Fold up the fabric as shown.

- **Lower the foot,** stitch slowly for better control so that the needle catches the folded edge at the leftmost position.
- **Spread the fabric flat with the right side up.**

### 22. Shell Tuck

Fold the fabric in bias with the wrong side together.

- Place the folded edge under the right side of the slot on the foot. The needle should fall off the folded edge at the right swing to form tucks.

### 23. Balancing Thread Tension

**Correct thread tension for the straight stitches**

- **Needle thread is too tight.**
  - Decrease tension

- **Needle thread is too loose.**
  - Increase tension

### 24. Selecting Needles and Threads

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Thread</th>
<th>Needle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fine</strong></td>
<td>Crepe de Chine, Voile, Lawn, Organdy, Georgette</td>
<td>Fine Silk, Fine Cotton, Fine Synthentic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#9, #11</td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>Cotton, Pique, Serge, Parcale</td>
<td>50 Silk, 50-80 Cotton, 50-60 Synthetic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#11, #14</td>
</tr>
<tr>
<td><strong>Heavy</strong></td>
<td>Denim, Tweed, Gabardine, Caoting</td>
<td>50 Silk, 40-50 Cotton, 40-50 Synthetic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#14, #16</td>
</tr>
</tbody>
</table>

In general, fine threads and needle are used for sewing thin fabrics, and thicker threads and needle are used with heavy fabrics. Always test threads and needle size on a small piece of fabric which will be used for actual sewing. Use the same thread for needle and bobbin. When sewing stretch, very fine fabrics and synthetic, use a Blue Tipped needle to prevent skipped stitch.
25. Cleaning the Feed Dog

Remove the needle and presser foot. Remove the 2 setscrews and remove the needle plate.
Clean out dust and lint clogging on the feed dog with a lint brush. Replace the needle plate and secure it with the setscrew.

26. Dismantling and Assembling the Hook Race

Raise the needle to its highest position and open the hook cover. Open the bobbin case latch and pull out the bobbin case out from the machine.
Open the hook race ring holders. Remove the hook race ring. Take out the hook race ring and shuttle hook.
Clean the hook race with a lint brush and soft dry cloth. Clean the shuttle hook. Replace all the parts by following the procedure in reverse.

Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>The needle thread breaks.</td>
<td>1. The needle thread is not threaded properly. 2. Needle thread tension is too tight. 3. The needle is bent or blunt. 4. The needle is incorrectly inserted. 5. The thread is either too heavy or too fine for the needle.</td>
<td>See No. 6 See No. 11 See No. 3 See No. 3 See No. 12</td>
</tr>
<tr>
<td>The bobbin thread breaks.</td>
<td>1. The bobbin thread is not threaded properly. 2. The bobbin thread is too tight. 3. Lint has collected in the bobbin case.</td>
<td>See No. 6 See No. 13 See No. 25</td>
</tr>
<tr>
<td>The needle breaks.</td>
<td>1. The needle is incorrectly inserted. 2. The stitch selector has been turned when the needle is in the fabric. 3. The needle is too fine for the fabric being sewn.</td>
<td>See No. 3 See No. 8 See No. 12</td>
</tr>
<tr>
<td>Skipped stitches</td>
<td>1. The needle is incorrectly inserted or bent. 2. The needle and/or thread is not suitable for the fabric being sewn. 3. The Blue Tipped needle is not used when sewing stretch, very fine or synthetic fabrics. 4. The needle thread is not threaded properly.</td>
<td>See No. 3 See No. 12 See No. 12 See No. 6</td>
</tr>
<tr>
<td>Seam puckering</td>
<td>1. The needle thread tension or bobbin thread tension is too tight. 2. The needle and/or bobbin thread are not threaded properly.</td>
<td>See No. 11 See No. 6</td>
</tr>
<tr>
<td>Stitches form loops on the wrong side of the fabric.</td>
<td>1. The needle thread tension is too loose. 2. The needle is either too heavy or too fine for the thread. 3. The needle and/or bobbin thread are not threaded properly.</td>
<td>See No. 11 See No. 12 See No. 6</td>
</tr>
<tr>
<td>The cloth is not feeding.</td>
<td>1. The feed dog is packed with lint.</td>
<td>See No. 12</td>
</tr>
<tr>
<td>Noisy operation</td>
<td>1. The feed dog or shuttle hook is packed with lint. 2. The shuttle hook needs oiling.</td>
<td>See No. 12 See No. 13</td>
</tr>
</tbody>
</table>