

NECCHI

instructions
for the use and maintenance
of your

NECCHI *miranda*



Dear Madam,

This booklet contains the instructions for the use and maintenance of the

NECCHI *miranda*

the new model designed to give every woman an always more complete and improved sewing machine.

By following these instructions, it will be very easy for you to use your NECCHI and obtain all its wonderful performances. The instructions given hereafter will also help you to maintain your machine in good order, so that you are sure always to find it perfect and ready for use.

Furthermore, you have the most valuable cooperation a woman can wish for at your disposal: The NECCHI service. Apply to any NECCHI shop and you will find, at all times, technical assistance, advice and suggestions on the use of the sewing machine, new ideas for decorations and all the accessories necessary for your sewing jobs.

You too, as millions of women all over the world do, will be proud and happy to say:

“My sewing machine is a NECCHI! ».

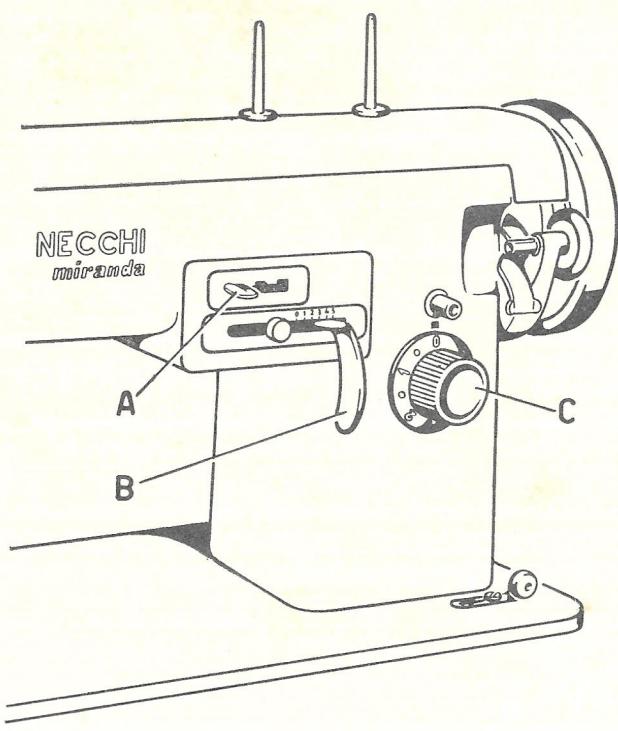


Fig. 1

NECCHI

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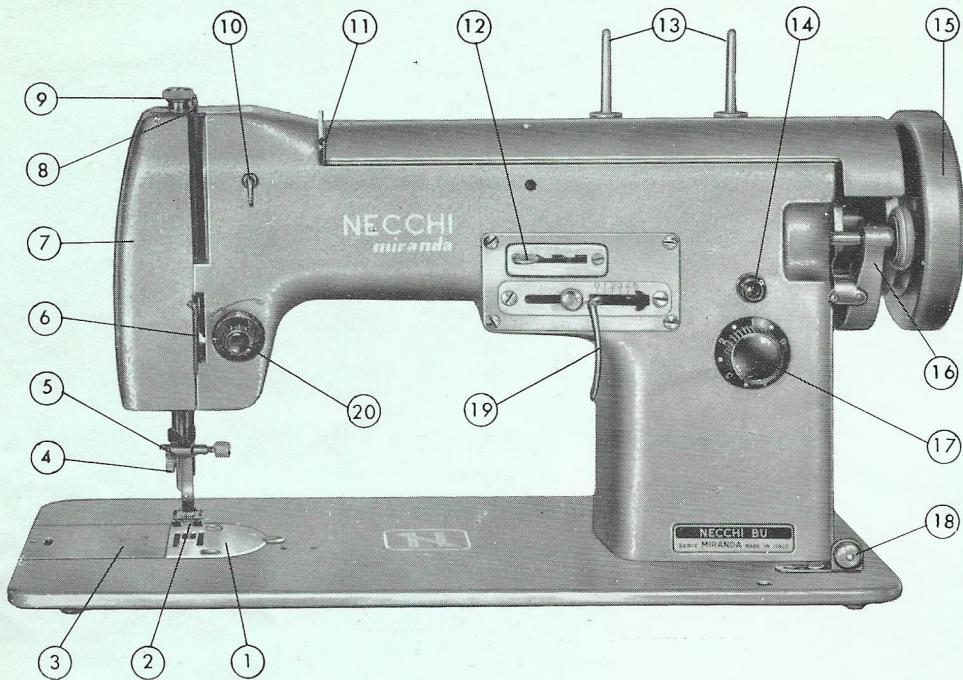


Fig. 2

NAME OF MACHINE PARTS

- | | |
|------------------------------|------------------------------------|
| 1 - Needle plate | 11 - Thread guide |
| 2 - Presser foot | 12 - Needle position lever |
| 3 - Sliding plate | 13 - Spool pins |
| 4 - Presser foot thumb screw | 14 - Reverse sewing push-button |
| 5 - Needle clamp | 15 - Balance wheel |
| 6 - Thread guide hook | 16 - Bobbin winder |
| 7 - Face plate | 17 - Stitch length regulating knob |
| 8 - Take-up lever | 18 - Bobbin winder thread guide |
| 9 - Pressure regulating knob | 19 - Zig-zag stitch lever |
| 10 - Thread guide | 20 - Thread tension knob |

Chapter 1

GENERAL INSTRUCTIONS

1. TO INSURE PERFECT FUNCTIONING OF MACHINE

Always bear in mind the following rules:

- Balance wheel must always be turned towards the operator.
- Do not try to help feeding by pulling fabric, since this action would bend needle. The machine automatically feeds the fabric without assistance.
- Do not operate machine with presser foot resting on feed dog unless there is cloth in between.
- Keep a small piece of cloth underneath presser foot whenever machine is not in use. This will prevent damage to feed dog and presser foot.
- Always bring presser bar lever to its lowest position before starting to sew.

2. RECOMMENDED NEEDLE AND THREAD SIZES

NECCHI machines use Syst.
15 x 1 or Syst. 705 needles

	Sizes of thread		Sizes of needles	
	mercerized cotton	silk	syst. 15 x 1	syst. 705
Muslin - Batiste - Fine linens - thin fabrics	80 to 150	0 and 00 twist.	10	70
Shirtings - Sheetings - Heavy silks	80 to 60	A & B twist.	14	90
Heavy weight linens - Woollen goods	60 to 40	C twist.	16	100
Heavy weight woollens - Woven coating	40 to 30	D twist.	18	110
Heavy fabrics in general	30 to 24	E twist.	19	120

3. TO INSERT NEEDLE

- Bring the needle bar to its highest position by turning the balance wheel toward you.
- Loosen screw (Fig. 3) and insert the needle into the groove pushing it up as far as it will go.

Make sure that the flat side of the needle shank is toward the right.

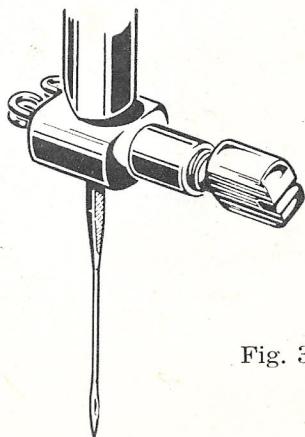


Fig. 3

4. TO THREAD MACHINE

To prevent breaking of the upper thread, it is essential to thread the machine as described below:

- a) Bring needle to its highest position by turning the balance wheel toward you.
- b) Place the spool of thread on the spool pin.
- c) Run spool thread through two holes of the thread guide « A » on the upper cover-plate.
- d) Run spool thread over the machine arm through two holes of guide « B ».
- e) Draw thread down, then insert it from right to left in slot of tension discs housing « C ».
- f) Bring thread up and down over the thread take-up spring « D ».
- g) Pass thread under thread guide hook « E ».
- h) Pass thread through the slot « F » of hook « E ». Lead thread upwards, passing it from right to left through the eye « G » of the thread take-up lever.
- i) Pull thread down and lead it again through the slot « F » of the guide hook « E ».
- j) Draw thread into slot between the machine arm and the face plate.
- k) Pass thread end through needle clamp guide « H » and finally pass it from left to right through the eye « I » of the needle, leaving about four inches of thread hanging free.

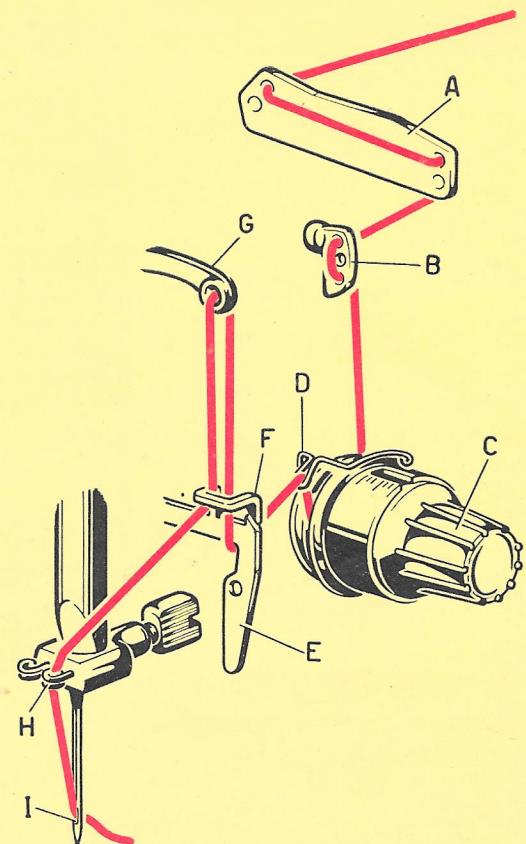


Fig. 4

5. HOW TO USE THE NEEDLE THREADER

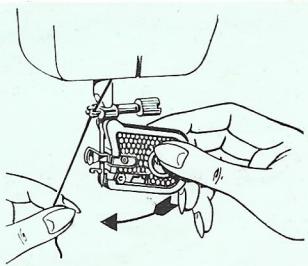


Fig. 5a

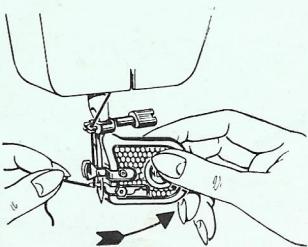


Fig. 5b

- Bring needle to its highest position.
- Place thread as shown in Fig. 5a, so that its hook passes through needle eye.
- Pass thread under hook (Fig. 5b).
- Gently swing threader upwards; the hook will draw thread through needle eye.

6. TO WIND EMPTY BOBBIN

- Disconnect balance wheel « P » by turning knob « Q » in the direction of the arrow (Fig. 6).
 - Pass thread through points shown in the illustration and insert thread through one of the two holes of the bobbin flange from the inside to the outside leaving about 4 inches of loose thread.
 - Insert the bobbin, with its flange provided with holes toward the left, on spindle « E » and press lever « F » against the bobbin.
 - Hold with the left hand the end of the thread hanging from the flange hole and run machine: after a few turns, the thread, held by the hand, will be cut.
- As soon as the bobbin is filled, the bobbin winder will automatically stop.

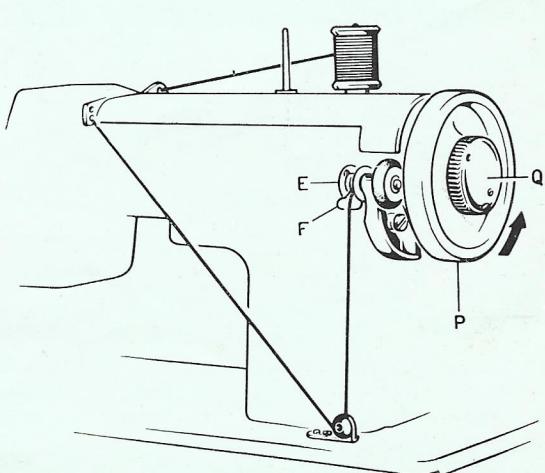


Fig. 6

7. TO REMOVE BOBBIN CASE

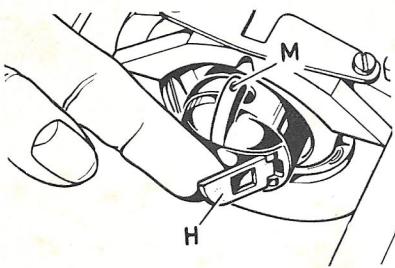


Fig. 7

- Bring needle to its highest position and move slide plate to the left.
- Remove bobbin case by lifting latch « H » and pulling it to the left (Fig. 7).

NOTE: The bobbin will drop out when latch is released.

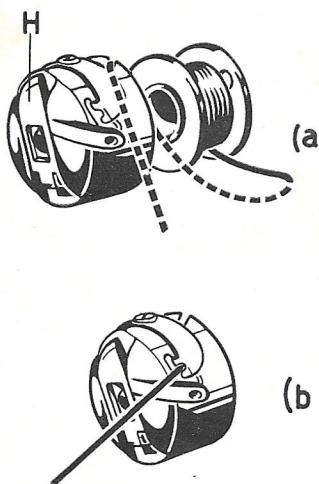


Fig. 8

8. TO INSERT BOBBIN INTO BOBBIN CASE

- Insert bobbin into bobbin case; thread must be wound around bobbin as indicated in Fig. 8a.
The bobbin flange provided with holes must be turned toward the outside of the bobbin case, in order that the right direction of rotation should be insured.
- Insert thread into groove of bobbin case.
- Lift latch « H » so that bobbin is blocked and draw thread under tension spring as indicated in Fig. 8b.

Leave about 4 inches of thread hanging out.

9. TO INSERT BOBBIN CASE

- Bring needle to its highest position and move slide plate to the left.
- Insert bobbin case by latch « H » (Fig. 7) and place it on center stud of shuttle. Finger « M » must go into notch of shuttle ring.
- Release latch « H » and press on bobbin case until a click is heard.
- Let about 4 inches of thread hanging out.

10. TO ADJUST TENSIONS

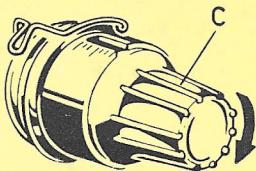


Fig. 9

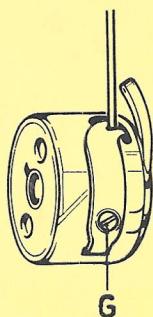


Fig. 10



Fig. 11



Fig. 12



Fig. 13

— The upper tension is increased by turning knob « C » in the direction of the arrow (Fig. 9), it is decreased by turning same in the opposite direction.

— The lower tension is increased by turning screw « G » (Fig. 10) to the right and it is decreased by turning same to the left.

a) The upper and lower threads must lock in the centre of the fabric (Fig. 11), that is, their tensions must be even. In this condition, two faults may occur:

1) Even tensions, too loose. The stitches are loose. It is then necessary to increase both tensions.

2) Even tensions, too tight. The fabric ruffles or the thread breaks. It is necessary to loosen both tensions.

b) If the upper tension is tighter than the lower, the upper thread will lie flat on top of fabric and the lower thread will be pulled to the upper surface (Fig. 12) and be visible there in small knots. Adjust tension by tightening the lower tension and loosening the upper one.

c) If the lower tension is too tight, the lower thread will lie flat on the underside of the fabric (Fig. 13); therefore tighten the upper tension and loosen the lower.

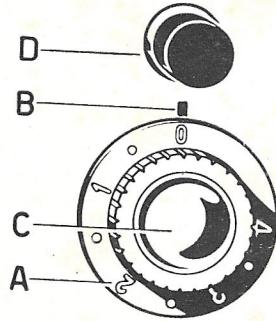


Fig. 14

11. TO REGULATE STITCH LENGTH

The length of stitch is regulated by means of knob «C» (Fig. 14) on which is the graduated scale «A» showing the various stitch lengths from 0 to 4. In order to set a certain length of stitch, turn knob «C» until the corresponding number on scale «A» is facing the white alignment mark «B» on the machine. Of course the length of the stitch is increasing from 0 (minimum length) to 4 (maximum length).

The normal stitch length is no. 2.

To reverse direction of sewing

- Regulate length of stitch as for forward sewing.
- Push button «D» (Fig. 14) as far as it will go.
The machine will sew in reverse with the same stitch length as previously regulated. Button «D» is to be pressed down with the finger all the time during which reverse sewing is desired.
- As soon as button «D» is left free, the machine resumes sewing forward with the same stitch length.

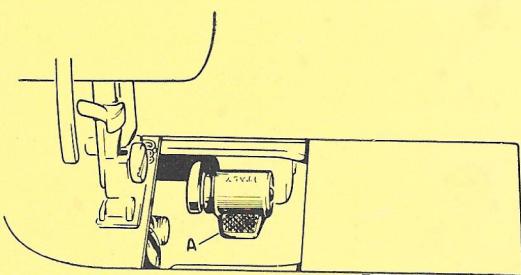


Fig. 15

12. TO DROP FEED DOG

The feed dog must be dropped for hoop embroidery, darning and sewing on buttons.

- Move slide plate to the left.
- Press lever «A» (Fig. 15).

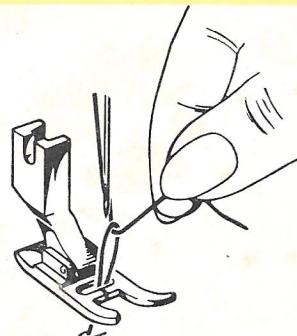


Fig. 16

13. TO START SEWING

- Holding the thread hanging out of the needle eye, turn balance wheel to bring needle to its highest position.
- Draw the upper thread; the lower thread will be pulled up through the hole of needle plate (Fig. 16).
- Place both threads behind presser foot. Start sewing slowly, holding the threads for the first 4-5 stitches.

14. TO REMOVE WORK FROM MACHINE

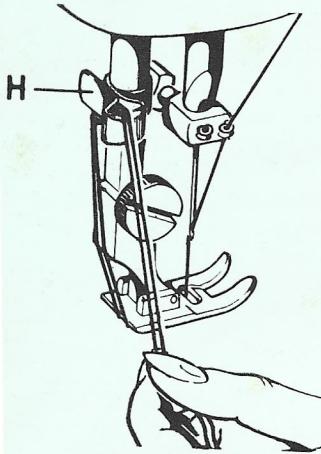


Fig. 17

- Bring needle and thread take-up lever to their highest position and raise presser foot.
- Draw fabric away from presser foot and draw threads, keeping them taut through thread-cutter « H » (Fig. 17).
- Cut threads and remove fabric.

The ends of both threads will be held by the thread cutter and the machine will be ready to perform another seam without requiring that the threads be held by the operator during the first 4 or 5 stitches.

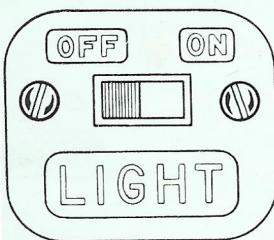


Fig. 18a

15. TO RUN MACHINE

- Connect machine to the outlet.
- Push switch « Light » (Fig. 18a) in position « ON ». The red signal light « R » (Fig. 19) will light up.
- Start machine by pressing on foot control.

If you wish to sew with the maximum speed, push switch « Speed » in position « HI ». To reduce speed, push it in position « LO » (Fig. 18b).

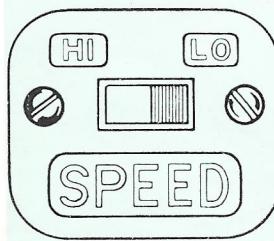


Fig. 18b

NOTE - Lighting can be eliminated by turning shade « S » (Fig. 19).

The red signal light however, will continue to glow.

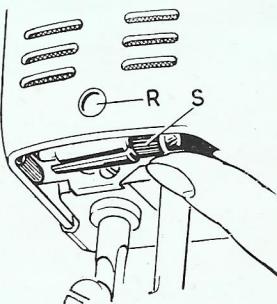


Fig. 19

16. MAINTENANCE OF MACHINE

a) Oiling

To insure easy and trouble-free running, the machine requires oiling. If used continuously, it should be oiled every two days.

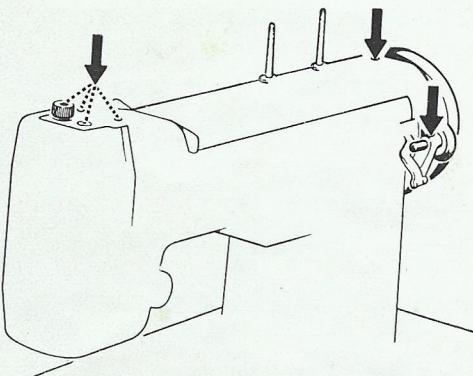


Fig. 20

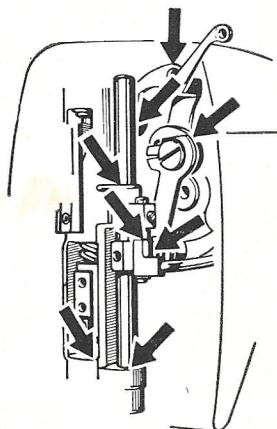


Fig. 21

The oiling points are indicated in Figs. 20, 21 and 22.

From time to time also oil shuttle rim and shuttle race (see para. 16c).

Use Necchioil or some good-quality light sewing machine oil.

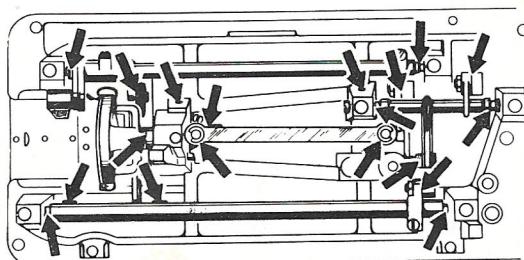


Fig. 22

Do not over oil motor.

Excessive oiling makes a motor smoke. Use one drop at each end once a year.

b) To clean feed dog and needle plate seat

- Remove needle plate.
- Clean feed dog teeth and needle plate with a small brush.

c) To remove and replace the shuttle

If machine runs hard or jams slightly, this may be due to a piece of thread which has been caught in shuttle race.

To correct this condition, proceed as follows:

- Bring needle to its highest position.
- Tilt machine back on its hinges and extract bobbin case.
- Push spring « Z » sideways with thumb of right hand (Fig. 23).
- Turn race place « T » around its hinge.
- Extract shuttle « R ».

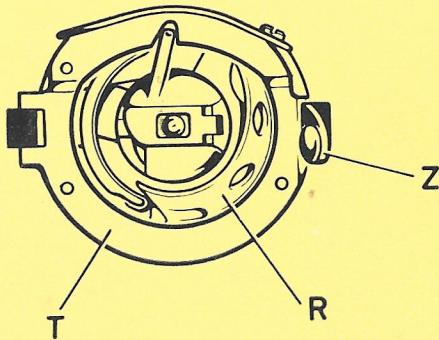


Fig. 23

- Carefully clean with a small brush and put a drop of oil in the shuttle race. Also oil the rim of the shuttle.
- Replace shuttle.
- Fit race plate onto the two short studs on the shuttle race and press it until spring blocks it in its housing.
- Replace bobbin case and lower machine to working position.

d) To replace light bulb

- Take off front plate.
- Remove light bulb « P » together with its shade from lamp holder « V » (Fig. 24).
- Remove light bulb from shade into which it is inserted by pressure.
- Insert new bulb into shade and insert it into lamp holder, by pressing slightly against wall portion « Q » to insure electric contact.

Use only NECCHI bulbs.

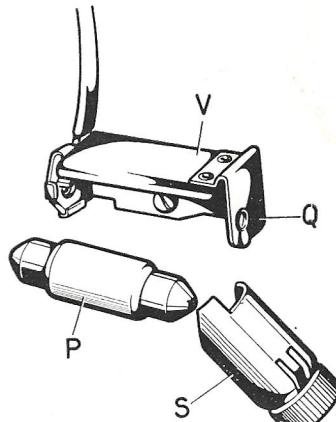


Fig. 24

17. CAUSES OF MINOR DIFFICULTIES

Needle thread breaks

- Needle is inserted incorrectly.
- Upper tension is too tight.
- Machine is improperly threaded.
- Thread is not suitable for fabric.
- Thread has knots.
- Needle eye is rough or sharp.
- Needle is too fine.
- Needle point is damaged, bent or blunt.
- Needle plate hole is damaged.
- Machine is started at full speed.
- Sewing is started with thread take-up lever not in its highest position.
- Bobbin case is damaged, due to being hit by needle.
- Shuttle race is damaged.

Needle breaks

- Fabric is pulled by hand in such a manner that needle hits needle plate.
- Needle is bent or blunt.

Lower thread breaks

- Lower thread tension is too tight.
- Bobbin is not evenly filled.
- Bobbin is too full and does not rotate in bobbin case.
- Dirt or lint in bobbin case.

Skip stitches

- Needle is inserted incorrectly.
- Needle is bent or blunt.
- Thread is too heavy for the size of needle.
- Needle is of wrong size for thread in use.

Uneven stitches

- Presser foot does not rest fully on fabric.
- Pressure of presser foot is insufficient.
- Feed dog is set too low.
- Fabric is pulled by hand.
- Stitch is too short.
- Needle is too fine for thread in use.

Machine does not sew straight stitch

- Lever « B » (Fig. 1) is not on the left.

Heavy turning or jamming of machine

- A loose piece of thread has been caught in shuttle race.
 - Motor belt is too tight (adjust it by loosening the motor fastening screws).
 - Machine is not lubricated.
 - Needle has blunt point.
- In case you cannot adjust the trouble, call for a mechanic at your local NECCHI Dealer.

Light does not go on

- Line has no current (check fuses and master switch).
- Plug is not well inserted in its receptacle.
- Filament of bulb is broken.

Although light is on, motor fails to turn

- The four-way plug is not well inserted in its receptacle.
 - See the reasons mentioned under para.: « Heavy turning or jamming of machine ».
- In case you cannot find or adjust the trouble, call for a mechanic at your local NECCHI dealer.

Motor turns too slowly

- A piece of thread is caught in shuttle race.
- Motor belt is too tight.
- Machine is not lubricated.

Overheating of motor, foot-control and/or bed plate

All electrical appliances heat up when running without causing damage. Excessive heating can only be due to overloading or heavy turning of machine. It can be eliminated by running machine more easily.

IMPORTANT: It is possible that, after considerable use, the mechanical parts of the machine require adjustment. If, by referring to the aforementioned causes of trouble, you cannot bring your machine into working condition, call for your NECCHI dealer. He will put the machine into perfect order.