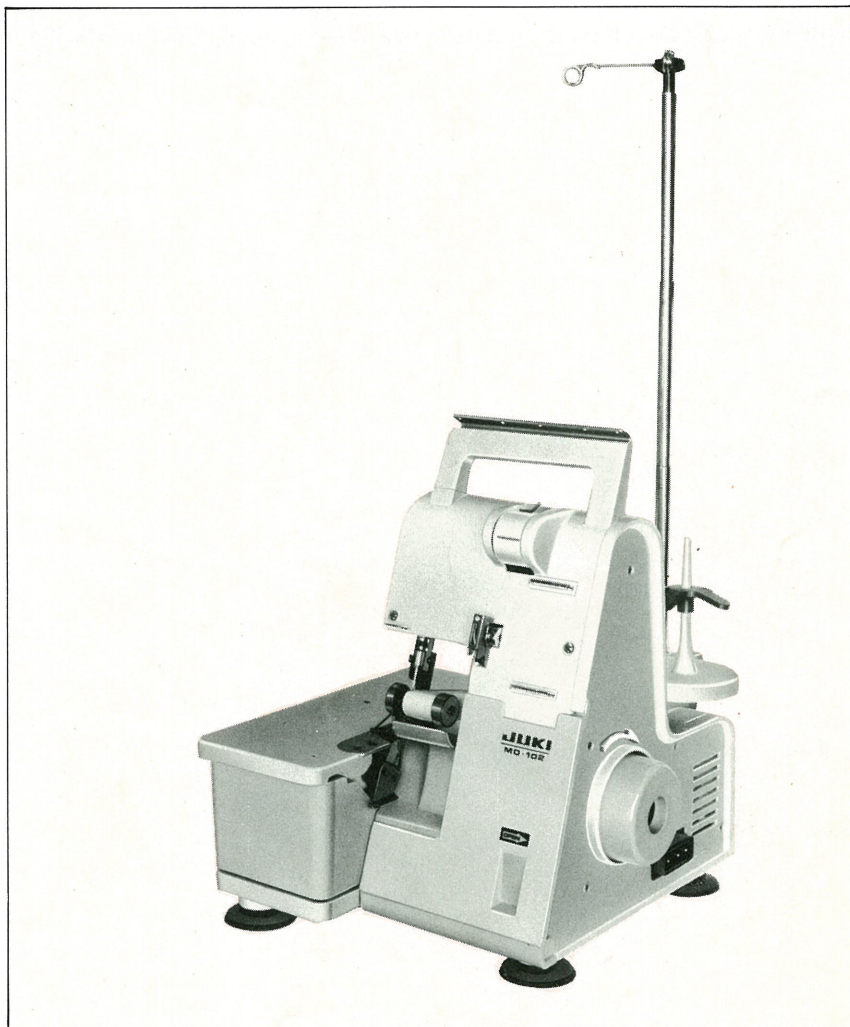


JUKI®

MODEL **MO-102**

JUKI—LOCK sewing machine

INSTRUCTION BOOK



TOKYO JUKI INDUSTRIAL CO., LTD.

INTRODUCTION

JUKI LOCK SEWING MACHINE MODEL MO-102 of improved design produces excellent safety stitches (also overedge stitches, double chain stitches) on any type of material (either light weight or heavy weight materials) including cotton, wool, rayon, tricot, jersey, knitted fabric, etc.

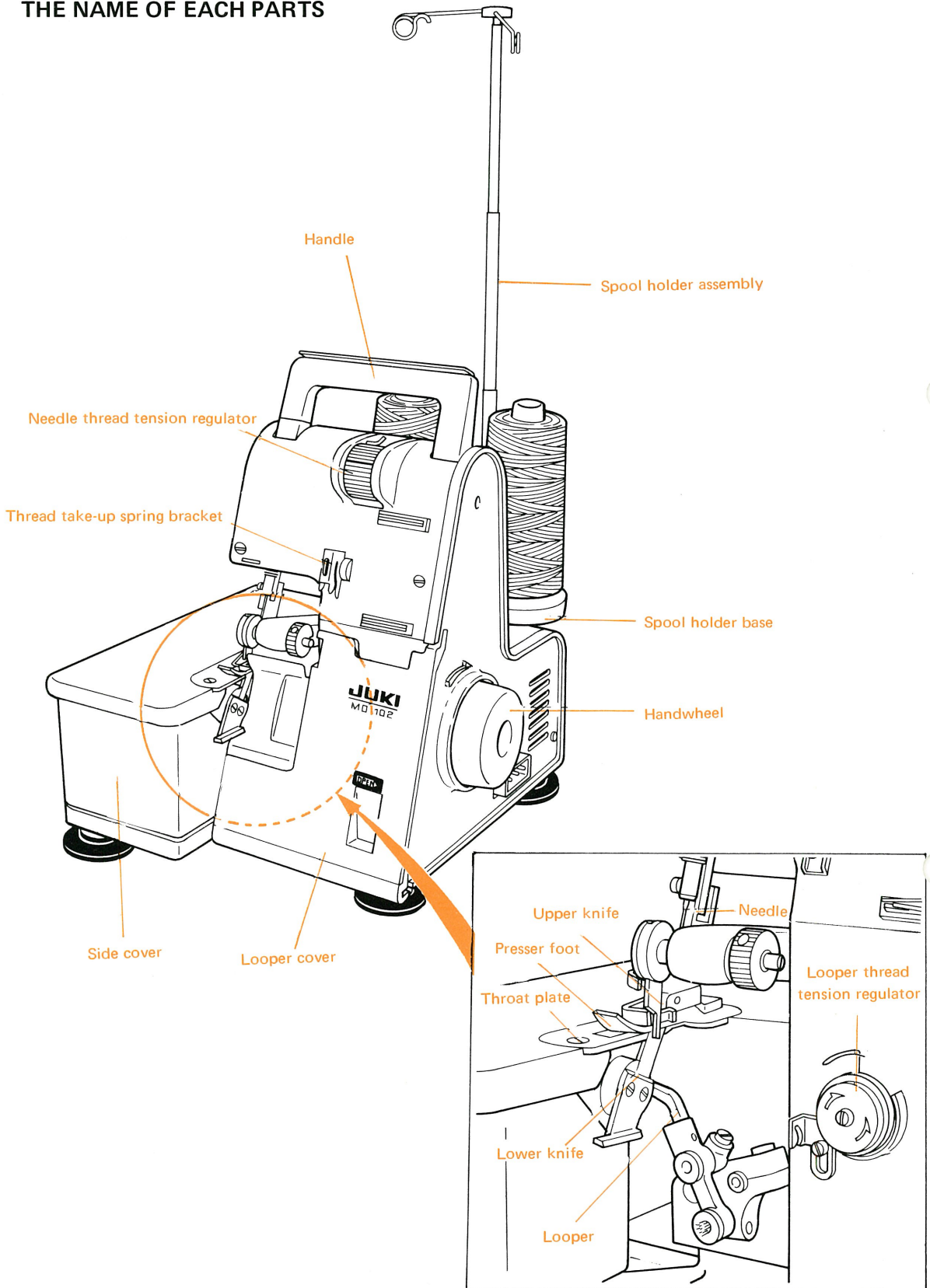
In order to obtain the best results, before operating the MO-102 machine, it is essential to understand the correct usage thoroughly. If you read this INSTRUCTION BOOK carefully and operate the machine in strict accordance with the instructions, we feel sure you will be delighted with the results.

In case you do not understand any points or have any doubts about the operating procedure of this machine, please contact your nearest service center or nearest agent and we will be pleased to have our after-sales service agent accommodate your needs.

CONTENTS

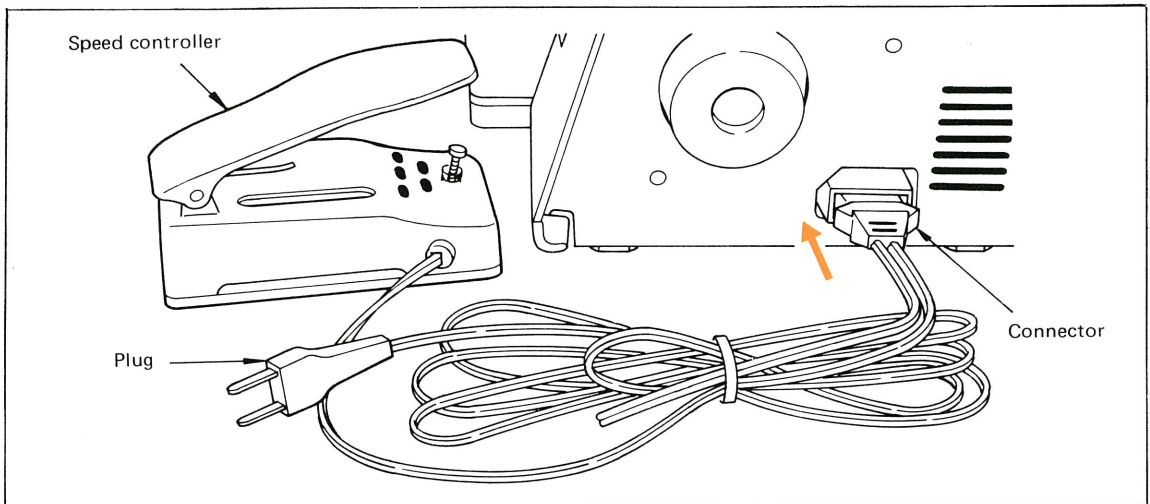
The name of each parts	1
Driving the motor	2
How to use the speed controller	2
The important cautions on the motor	2
Setting up the spool holder assembly	3
How to set a small home-use spool	4
Lubricating the machine	5
Threading the machine	6
Attaching the needle	7
Hints for starting and finishing a stitch	7
Adjusting the thread tension	8
Correct tension	8
Incorrect tension and the method of correction	8
Adjusting the pressure of the presser foot	9
Adjusting the stitch length	10
Replacing the knife	11
How to replace the upper knife	11
How to replace the lower knife	12
Attaching a lamp (optional)	12
Cause of troubles and their remedies	13
Reference table (Material/Thread/Stitch length)	14
Accessories	14
Specification of model MO-102	15
Packing specification	15

THE NAME OF EACH PARTS

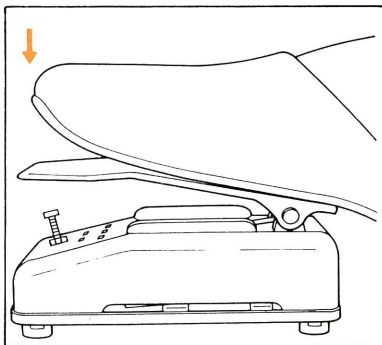


DRIVING THE MOTOR

Before starting to drive the motor of this machine, make sure that the machine is placed in the horizontal position on a flat desk. (See the relative paragraph under “Adjusting the level of machine”). Plug the connector of the speed controller cord into the receptacle located on the machine base as illustrated below. Then, connect the main plug to the power supply source.



How to use the speed controller



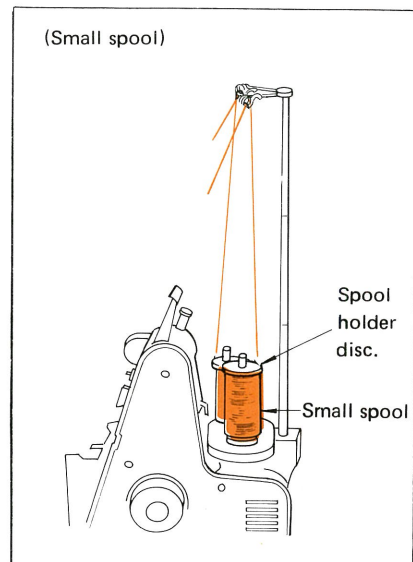
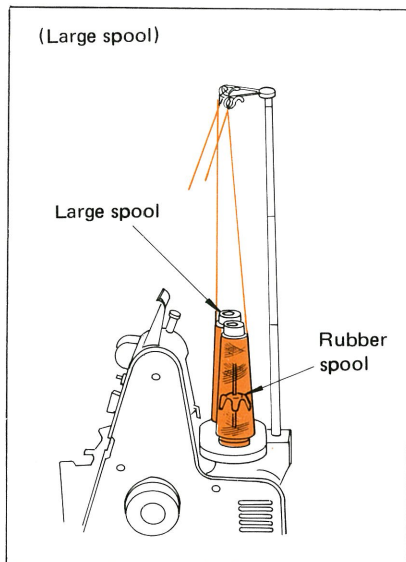
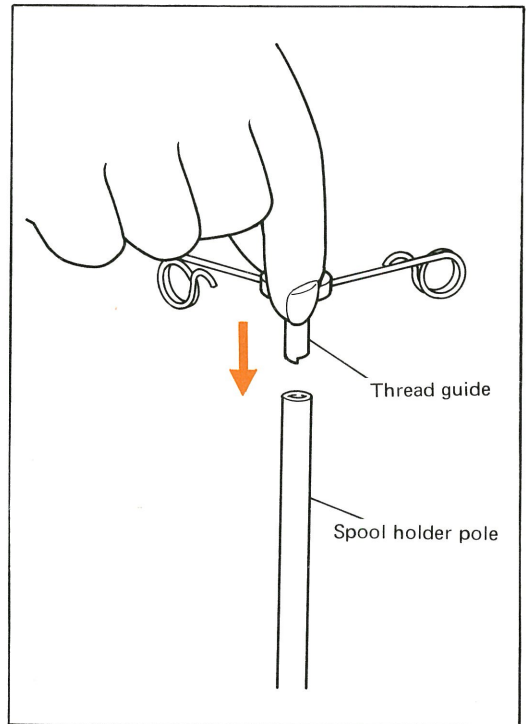
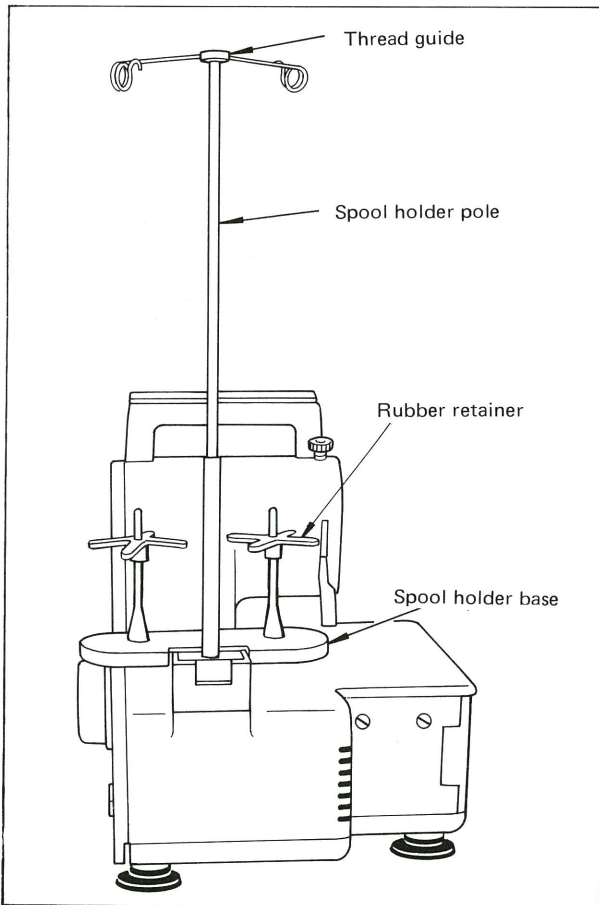
- 1 Place your foot on the speed controller as the illustration shows.
2. You can change the sewing speed by pressing down the actuator pedal; The speed is increased as you press it downwards.

The important cautions on the motor

- The sewing speed of this machine is up to 1,700 s.p.m.
- The pulley of this machine rotates in the reverse direction of the ordinary home-use sewing machine.
- The motor and the speed controller will be warmed up slightly after a continuous operation for a long time. However, do not worry about this, because it is nothing abnormal.
- While the motor is running, you may see small sparks through the ventilation openings which are located on the pulley side and the far side on the motor bracket. They are also normal sparks which are caused by contacts made between the carbon brushes and the commutators.
- Please do not forget to disconnect the power plug from the power supply source when the machine is not operated.

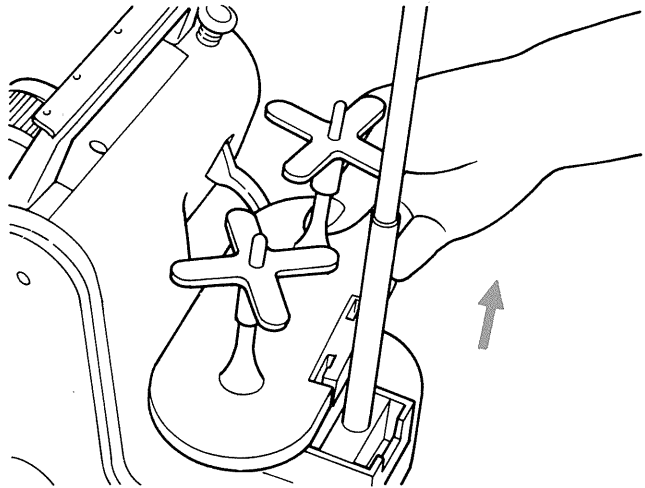
SETTING UP THE SPOOL HOLDER ASSEMBLY

- Fix the thread guide on the top of the spool holder pole.

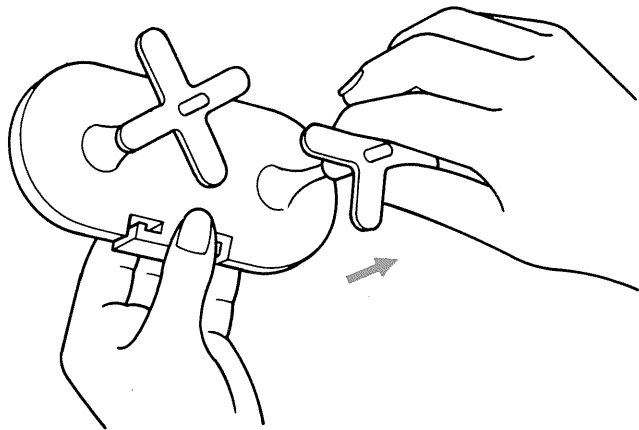


HOW TO SET A SMALL HOME-DSE SPOOL

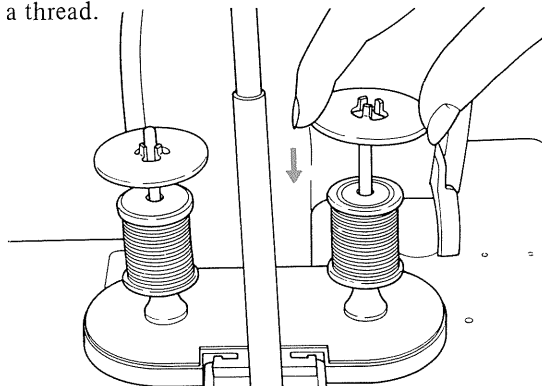
1. Take out the spool holder base by pulling upwards.



2. Pull out the rubber retainers gradually.

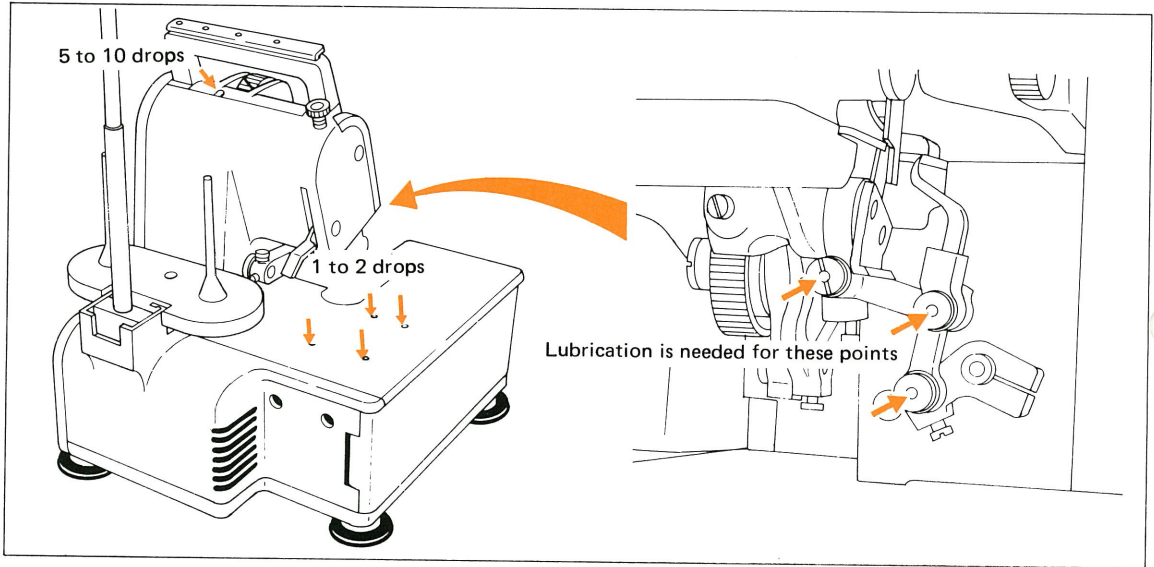


3. Attach the spool holder base to the original position securely by means of the coupling grooves and put the spool holder discs over the spool which will prevent the spool holder pole from being tangled with a thread.



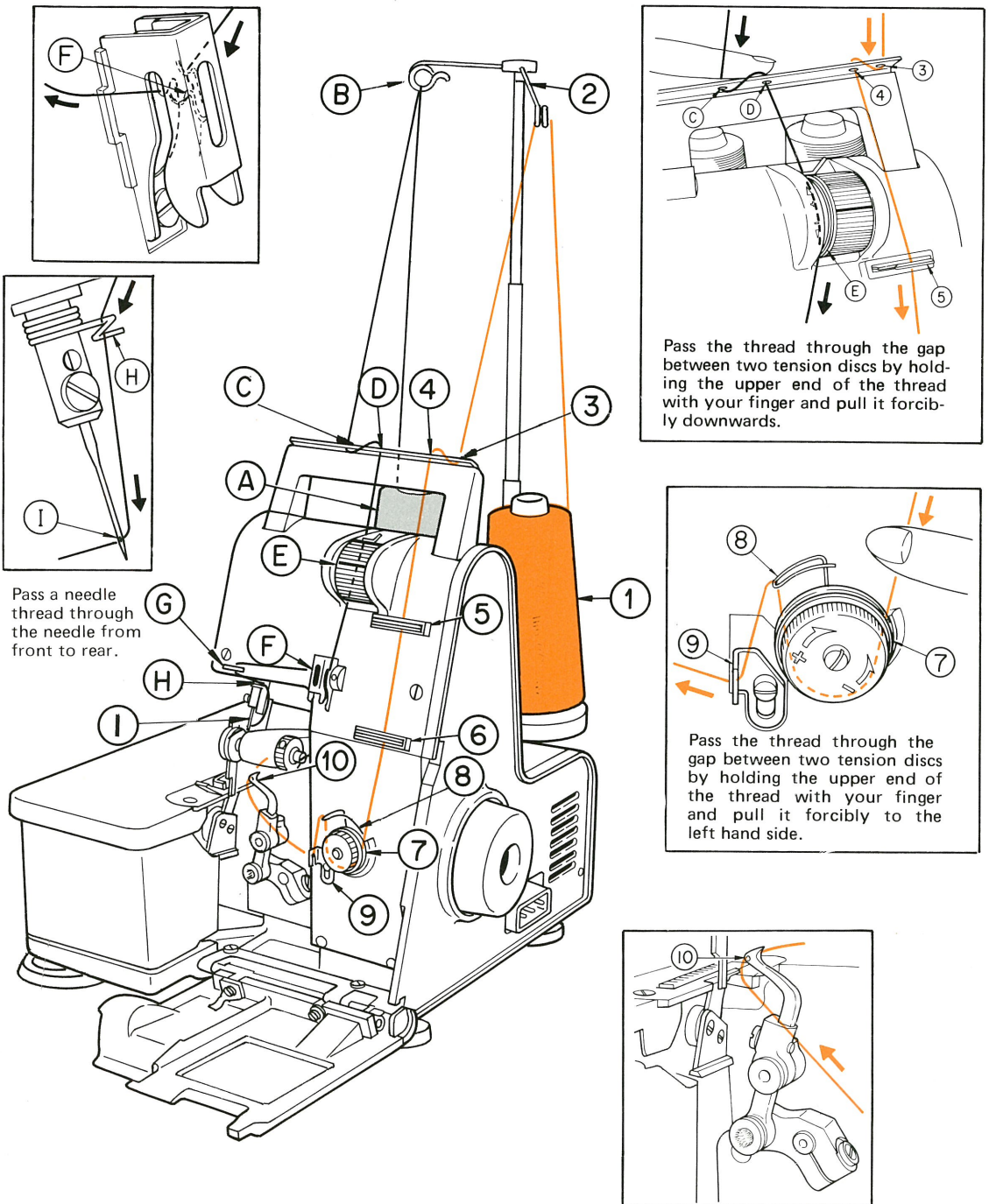
LUBRICATING THE MACHINE

Before you start to operate the machine, you should apply a few drops of lubricating oil into each oil holes as specified in the following illustration.



THREADING THE MACHINE

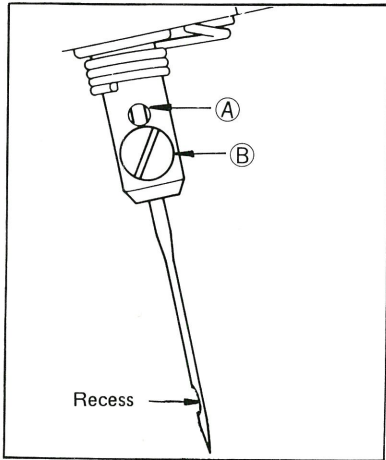
- (1) Thread the machine in the correct order shown in the following illustration.
- (2) To start with, you should thread the looper thread.
- (3) When you use a small home-use spool, you should apply a disc type spool holder over it.
- (4) You should provide the needle and the looper with an excessive length of thread for about 50 mm respectively.



ATTACHING THE NEEDLE

The type of needle to be used for this machine is BL × 1 and size is No. 11 or 14.

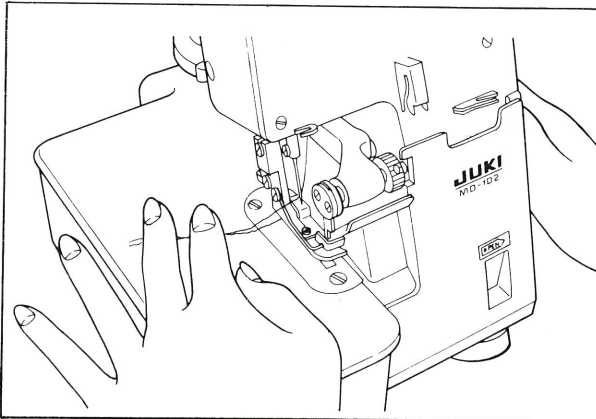
The standard size is No. 14, but you have to decide it depending on the physical characteristics of the sewing material and also the thickness of the thread to be used.



- (1) Bring the needle bar up to the highest position.
- (2) Insert the needle into the needle holder until the top edge of the needle reaches the bottom of **(A)**.
- (3) Make sure that the recessed part of the needle faces backwards and securely tighten the clamp screw **(B)**.

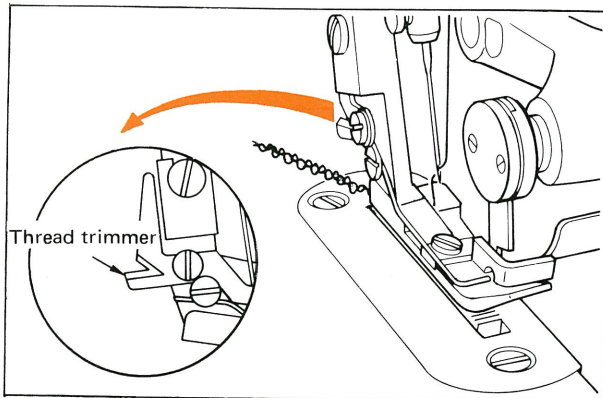
(Note) Use a needle No. 11 when you sew the knitted fabrics.

HINTS FOR STARTING AND FINISHING A STITCH



After threading the machine, hold the needle and looper threads together with your left hand fingers by stretching them slightly as the illustration shows, check that these two threads properly interloop each other by rotating the handwheel clockwise with your right hand, place a sewing material in position and start to stitch.

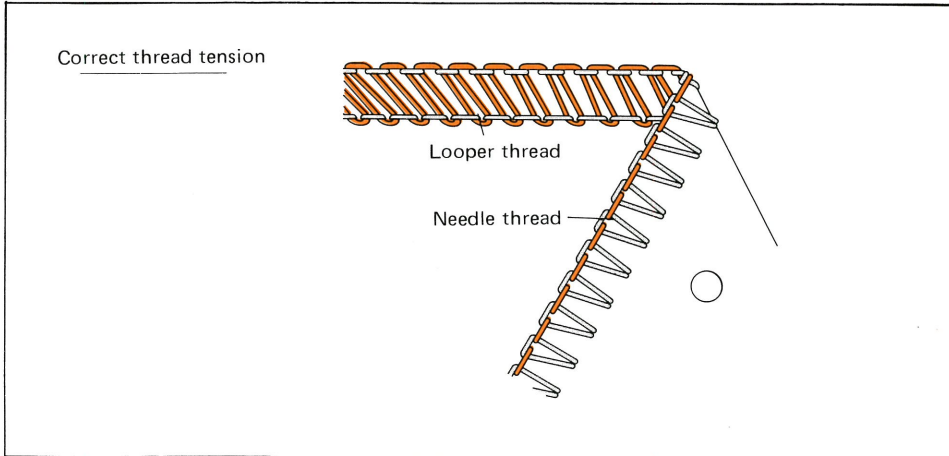
When you finish a stitch, keep on forming a 2 to 3 cm long idle chain from the edge of the cloth and then trim such idle chain by means of the thread trimmer knife which is located on the presser foot.



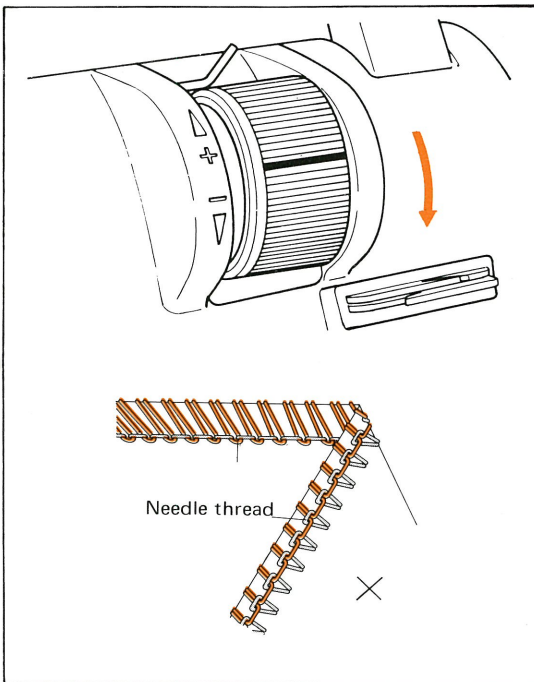
ADJUSTING THE THREAD TENSION

Correct tension

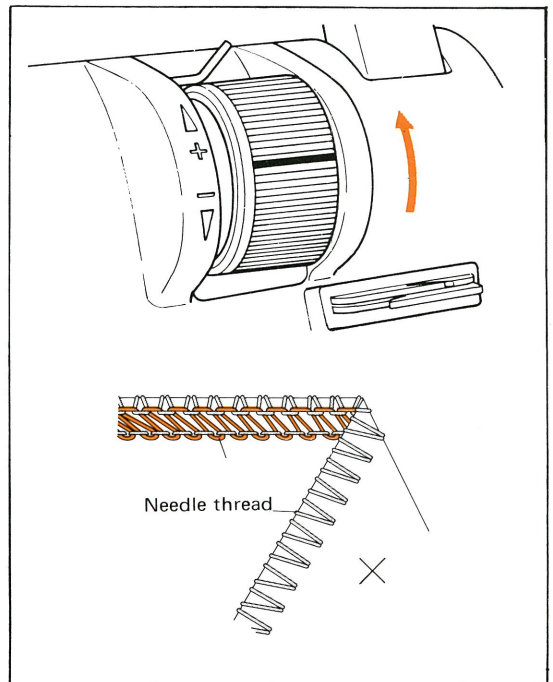
You should adjust the thread tension correctly every time when you want to change the type of material and the type and the thickness of thread.



Incorrect tension and the method of correction

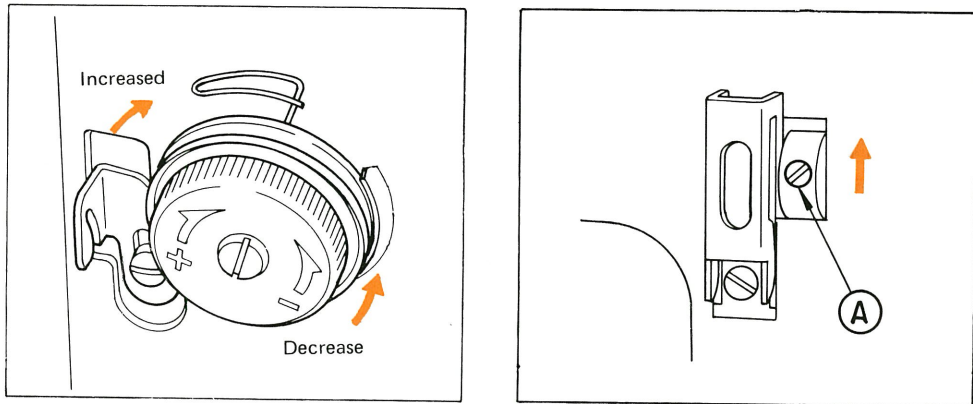


The above illustration shows a stitch formed by an incorrect thread tension where either the needle thread is too tight or the looper thread is too loose. In this case, you have to correct the thread tension by rotating the needle thread tension regulator to (-) direction.



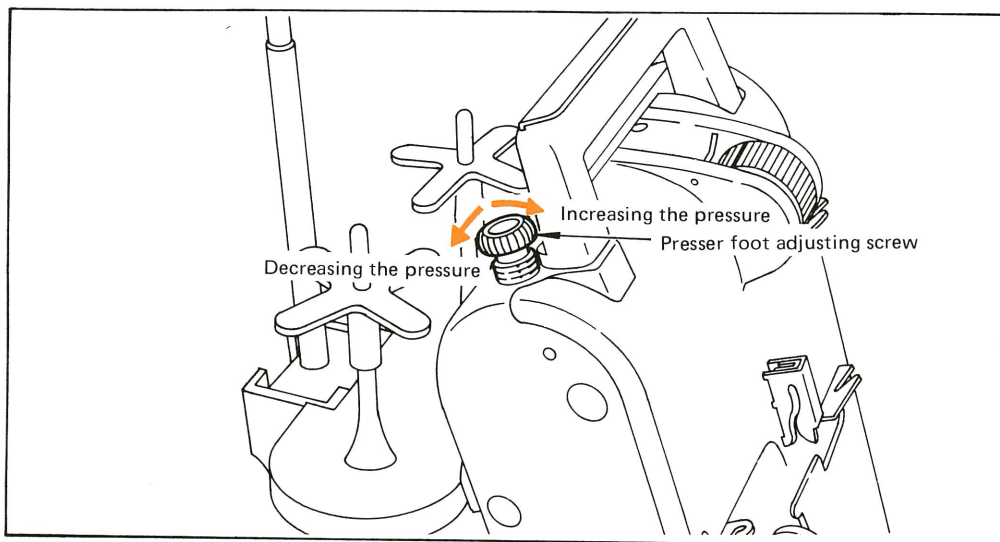
The above illustration shows a stitch formed by an incorrect thread tension where either the needle thread is too loose or the looper thread is too tight. In this case, you have to correct the thread tension by rotating the needle thread tension regulator to (+) direction.

In most cases, you do not need to change the looper thread tension after changing the sewing thread. However, increase it by turning the looper thread tension regulator in the clockwise direction and reduced by the counterclockwise turn when sewing an extra heavy weight material. When you use a synthetic fiber thread, loosen the screw (A) and move it upwards as shown by the arrow mark in the illustration. Make sure that the thread take-up spring is ready to work.



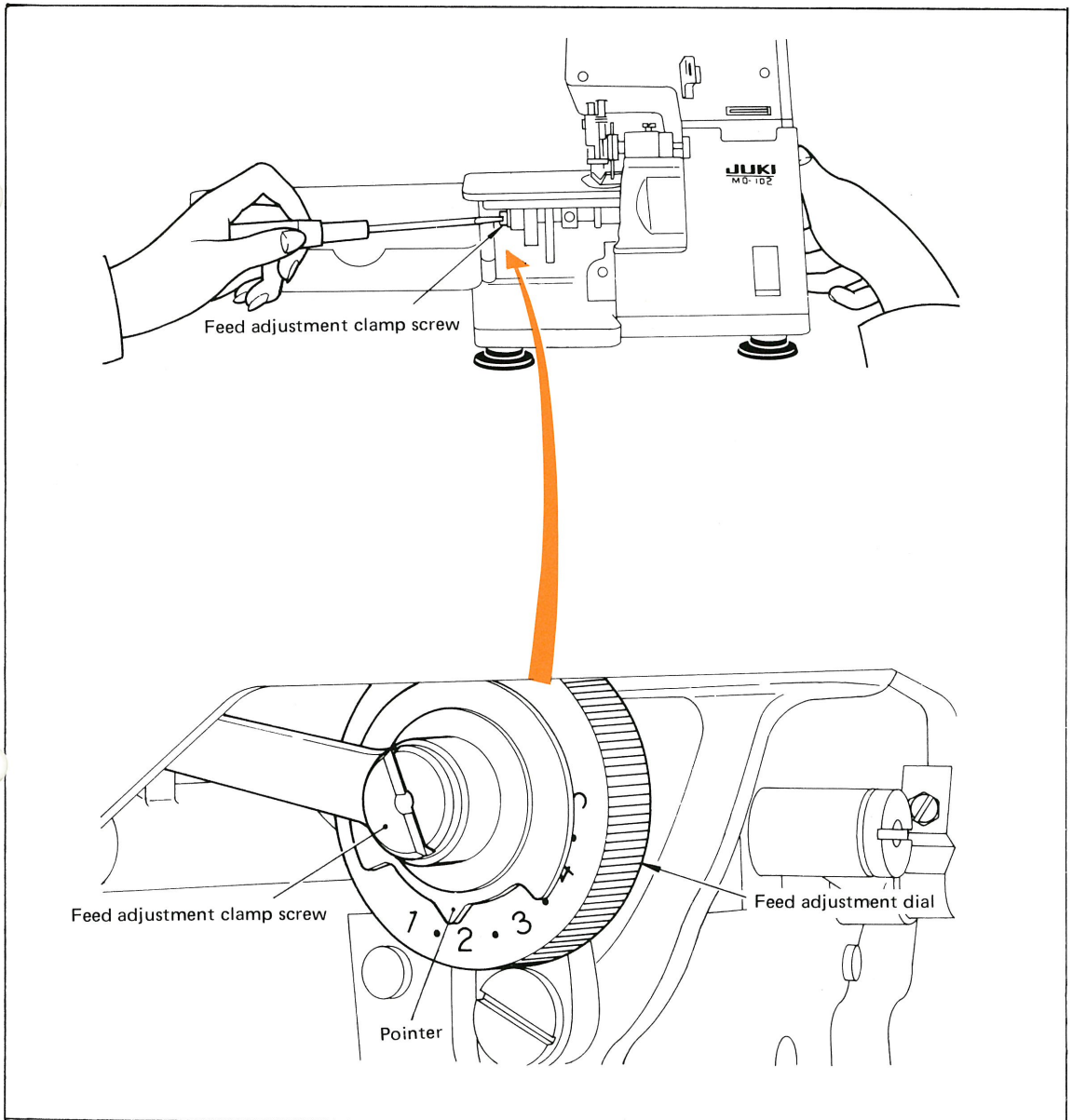
ADJUSTING THE PRESSURE OF THE PRESSER FOOT

Your machine has already been adjusted for sewing a medium heavy material before shipment. You may adjust the pressure of the presser foot according to the type of material to be sewn: the pressure should be decreased when you sew a light weight material such as tricot, De Chine etc. and, on the other hand, should be increased for a heavy weight material. Adjust the presser foot adjusting screw as illustrated below;



ADJUSTING THE STITCH LENGTH

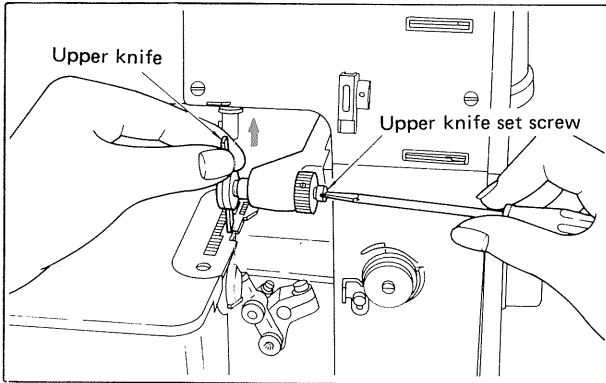
- (1) Open the side cover, hold the handwheel not to allow it to rotate with your right hand and loosen the feed adjustment clamp screw by means of the attached screw driver.
- (2) Set a desired index on the feed adjustment dial to the stationary pointer. The stitch length becomes larger as the index number increases.
- (3) After the adjustment has been done, you should securely fasten the clamp screw.



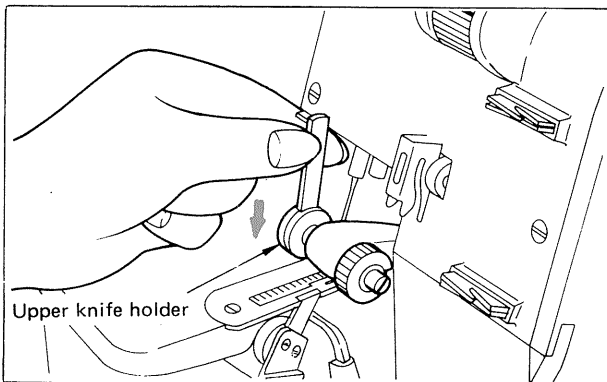
REPLACING THE KNIFE

Don't forget to disconnect the power plug from the power source before starting this job. The thread trimmer knife of this machine should be replaced as soon as it becomes dull. A spare blade for the lower knife is stored in the accessory box.

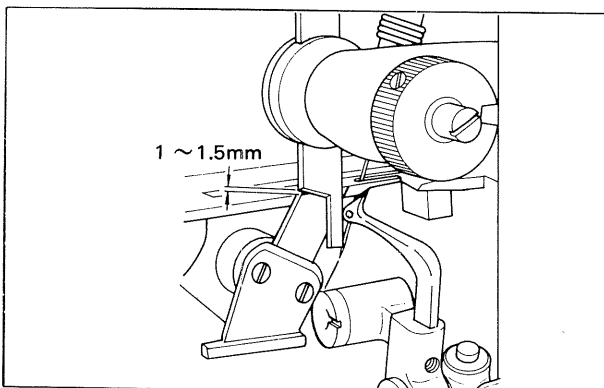
How to replace the upper knife



Loosen the upper knife set screw and pull out the upper knife upwards.

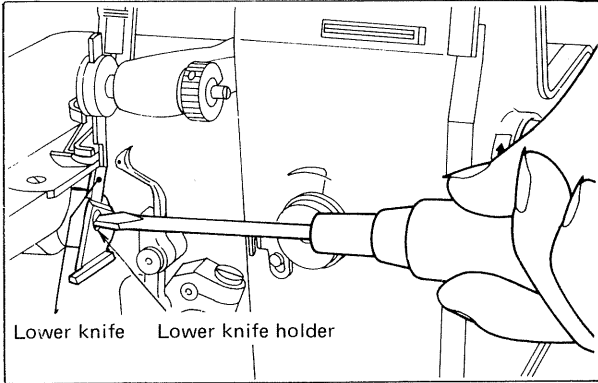


When attaching the upper knife, hold the knife facing its edge to the left, insert it into the groove of the upper knife holder by pushing the said holder fully to the right and then slightly tighten the knife set screw.

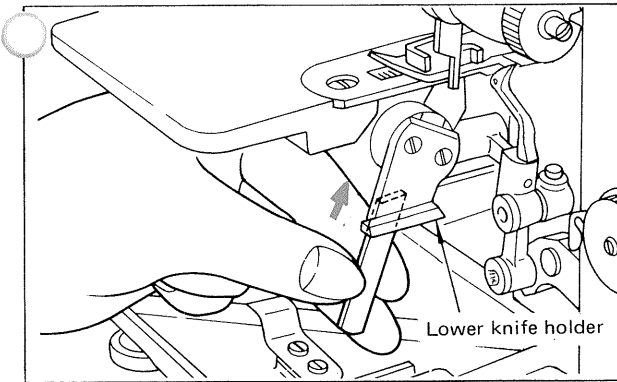


Followingly, check to see that the tip of the upper knife edge comes down to overlap by 1.0 mm to 1.5 mm with the blade of the lower knife when the upper knife has been lowered down to the lowest position by manually rotating the handwheel. If the upper knife is correctly positioned, you may fix it by tightening the set screw.

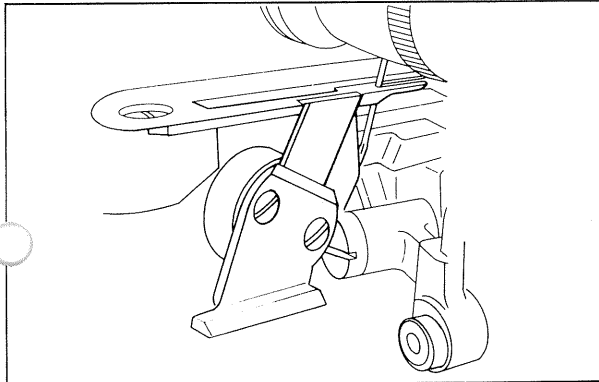
How to replace the lower knife



Loosen the lower knife set screw and pull the knife downwards, and it can be removed from the position.

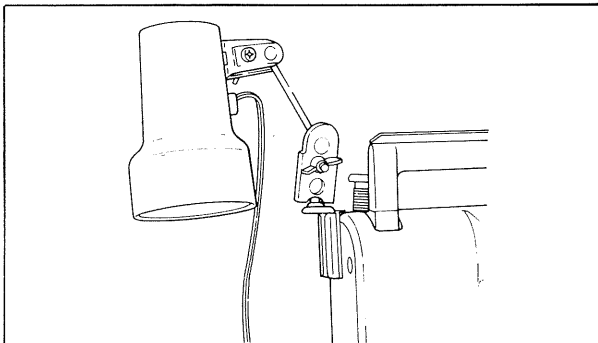


When you fix a new knife, hold it facing its edge to the right and insert it into the groove on the lower knife holder from the bottom.



Followingly, adjust the position of the lower knife so that the knife edge stays at the level of the throat plate and tighten the clamp screw by holding the knife securely not to allow it to move while you are screwing.

ATTACHING A LAMP



When you attach an optional lamp to the machine, refer to the illustration.

CAUSE OF TROUBLES AND THEIR REMEDIES

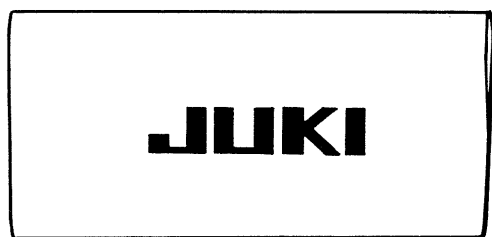
The following list should be used for shooting troubles.

Troubles	Causes	Remedies
Material is not fed properly.	<ul style="list-style-type: none"> ○ The pressure of presser foot is too weak. 	<ul style="list-style-type: none"> ○ Apply more pressure by turning the feed adjustment dial clockwise.
Needle is broken.	<ul style="list-style-type: none"> ○ The needle has been bent or it's point is not sharp. ○ The needle has been installed in a wrong way. ○ A material was forcibly pulled manually. 	<ul style="list-style-type: none"> ○ Replace the needle. ○ Install it correctly. ○ While a material is being sewn, you should not pull or push it but just softly guide it.
Thread is broken.	<ul style="list-style-type: none"> ○ Threading order is wrong. ○ Thread tension is too much. ○ The needle has been installed in a wrong way. 	<ul style="list-style-type: none"> ○ Thread the machine again in the correct way. ○ Refer to P. 8 ○ Refer to p. 7
Stitch is skipping.	<ul style="list-style-type: none"> ○ The needle has been bent or the point thereof is not sharp. ○ The needle has been installed wrongly. ○ Threading order is wrong. ○ The pressure of the presser foot is too short. 	<ul style="list-style-type: none"> ○ Replace the needle. ○ Install it again in the correct way. Refer to p. 7 ○ Thread the machine again correctly. Refer to p. 6 ○ Apply more pressure by turning the feed adjustment dial clockwise.
Correct stitch is not formed.	<ul style="list-style-type: none"> ○ The thread tension is not proper. 	<ul style="list-style-type: none"> ○ See p. 8
Stitch line wrinkles the material.	<ul style="list-style-type: none"> ○ Thread tension is too strong. ○ Threading order is incorrect or the thread is faultily hooked with other places. 	<ul style="list-style-type: none"> ○ Decrease the thread tension, especially in the case where you sew a light weight material. ○ Check and correct it. Refer to p. 6
Motor is not in order.	<ul style="list-style-type: none"> ○ It makes a noise. ○ It does not run at all. ○ Spark is abnormally extensive. 	<ul style="list-style-type: none"> ○ Replace the carbon brushes.

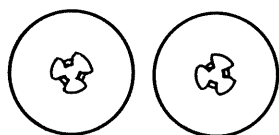
REFERENCE TABLE (MATERIAL/THREAD/STITCH LENGTH)

Material	Thread	Stitch Length
Light weight material. (Thin Tricot, Taffeta, Silk Crape Lining material for clothes.)	Cotton No. 80 to No. 100 Silk No. 80 to No. 100	2.5 to 4 mm ($\frac{7}{64}$ " to $\frac{5}{32}$ ")
Medium weight material. (Cotton, Tricot, Linen, Satin, General clothing.)	Cotton No. 60 to No. 100 Silk No. 50 to No. 100 Synthetic fiber No. 60 to No. 80	2.5 to 4 mm ($\frac{7}{64}$ " to $\frac{5}{32}$ ")
Heavy weight material (Tweed, Coating, Denim, Heavy weight clothing)	Cotton No. 40 to No. 60 Silk No. 40 to No. 60	3 to 4.5 mm ($\frac{1}{8}$ " to $\frac{3}{16}$ ")
Knitted fabric (Knitted fabric, Jersey)	Cotton No. 60 to No. 80 Wooly nylon Synthetic fiber No. 60 to No. 80	2.5 to 4 mm ($\frac{7}{64}$ " to $\frac{5}{32}$ ")

ACCESSORIES



(1)



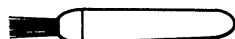
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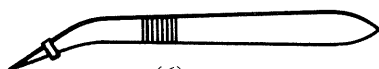
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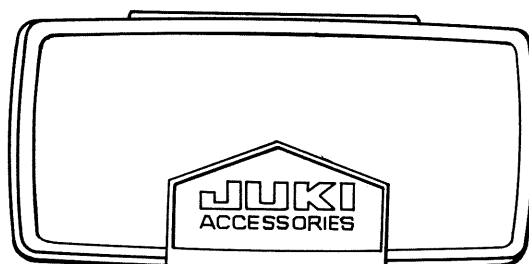
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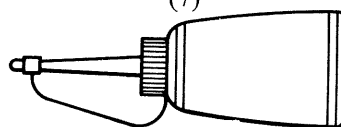
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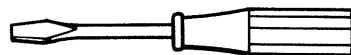
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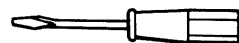
(7)



(8)



(9)



(10)

- (1) Plastic cover
- (2) Spool holder discs (2 pcs.)
- (3) Needles (5 pcs.)
- (4) Lower knife
- (5) Cleaning brush
- (6) Tweezers

- (7) Accessories box
- (8) Oiler
- (9) Screw driver (medium)
- (10) Screw driver (small)

SPECIFICATION OF MODEL MO-102

Sewing speed : Up to 1,700 s.p.m.
Overedge width : 3.5 mm
Stitch length : 2 to 4.5 mm
Height of presser foot : Max. 4.5 mm

Needle : BL x 1, Size No. 11 or 14.
Number of thread : 2 threads
Dimension : 263(d) x 236(w) x 280(h) mm
weight : 8.2 kg

PACKING SPECIFICATION

1. Machine head (with motor) 1 set
2. Speed Controller 1 set
3. Instruction book 1 copy
4. Accessory box 1 pce.
5. Spool holder assembly 1 pce.
6. Inspection certificate 1 copy
7. Parts book 1 copy

