

# JUKI

## Model

# TL-82

### SINGLE-NEEDLE LOCKSTITCH TAILORING SEWING MACHINE

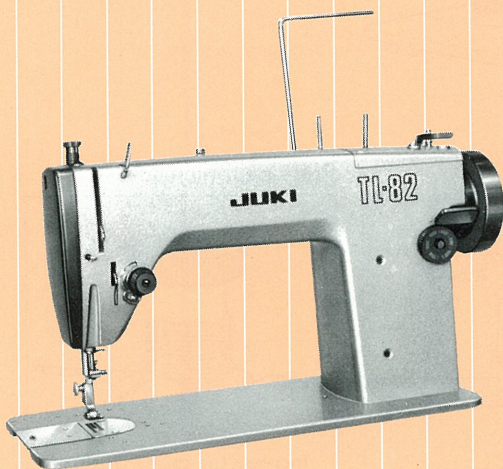
## INSTRUCTION BOOK

Thank you for buying the TL-82 sewing machine.

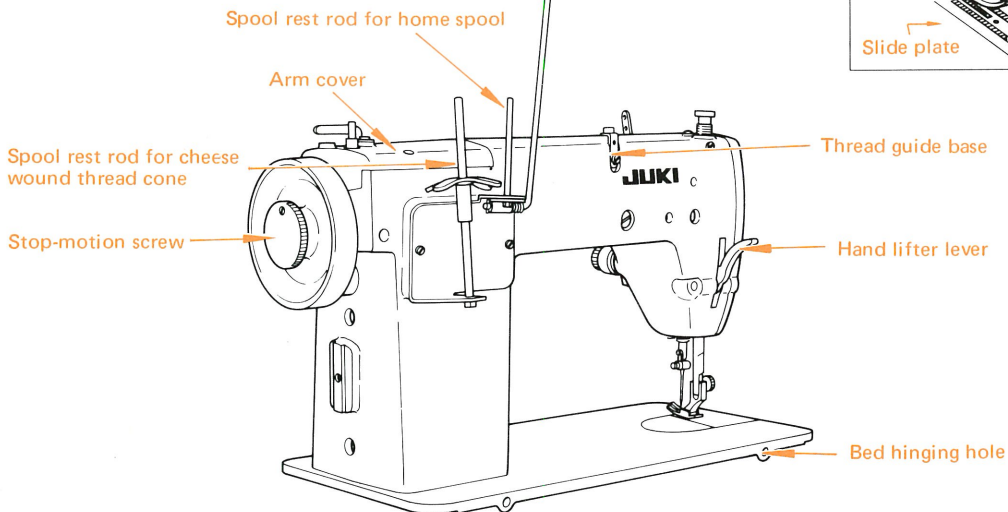
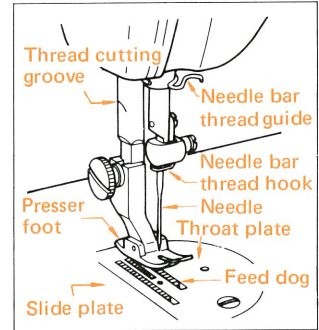
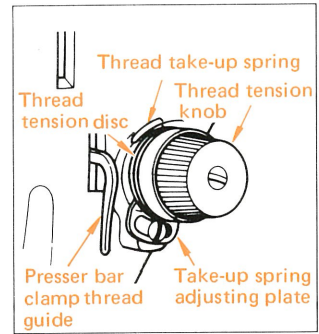
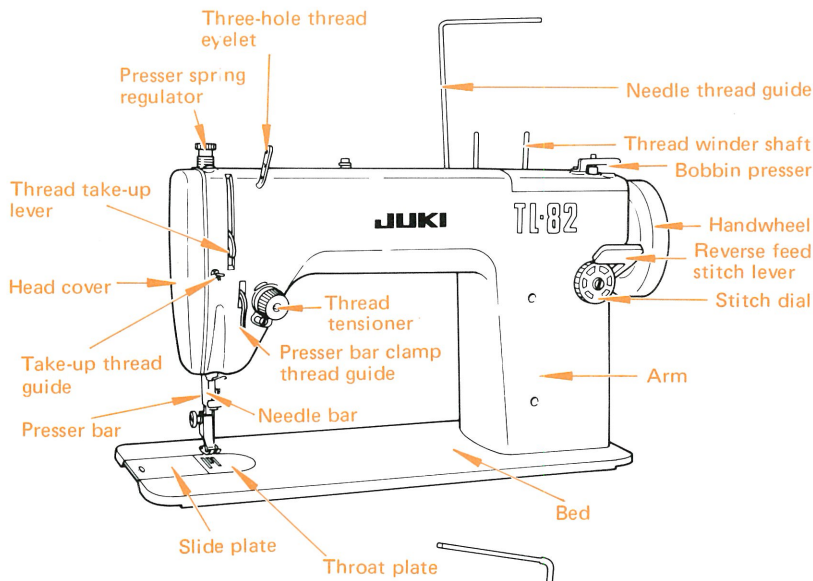
JUKI Model TL-82 is a single-needle lockstitch sewing machine having a twice-rotation, which is capable of sewing various articles of clothing. This machine is ideally used in the home industry, tailor shops and dressmaking shops. Please read this Instruction Book carefully before using this unit in order to get the most out of it and to enjoy using it for a long time.

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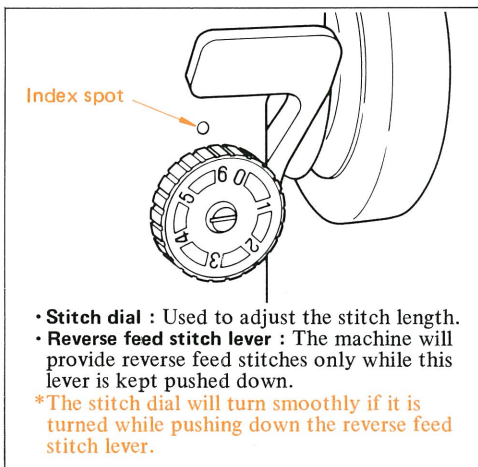
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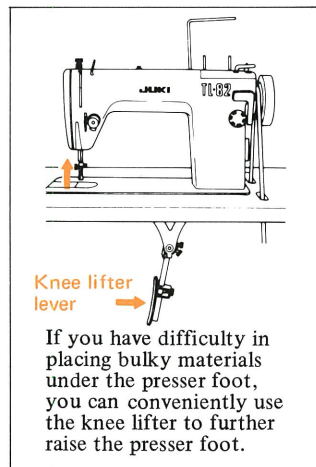
# NAME AND FUNCTION OF EACH COMPONENT



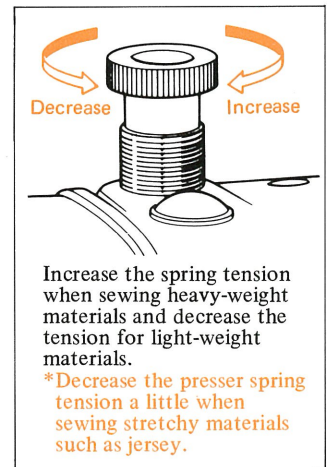
## Stitch dial and reverse feed stitch lever



## Lifter lever

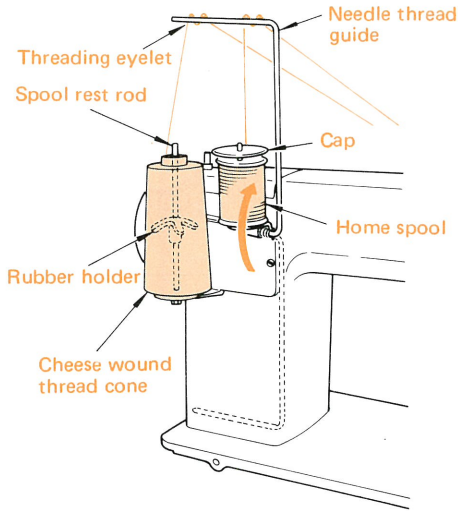


## Presser spring regulator



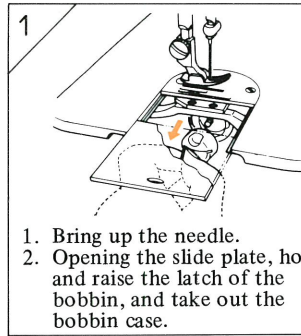
# INSTALLING THE SPOOL REST ROD, WINDING THE BOBBIN, LOADING A BOBBIN INTO THE BOBBIN CASE

## Installing the spool rest rod

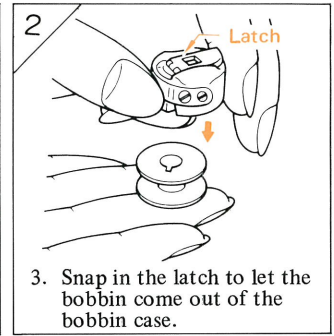


1. Fix the spool onto the spool rest rod.  
\*Place the cap on the top of the spool when using a home spool.  
\*For a cheese wound thread cone, fix the cone over the rubber holder onto the spool rest rod.
2. Raise the needle thread guide.
3. Pass the thread through the threading eyelet.

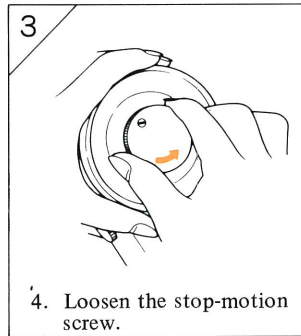
## Winding the bobbin



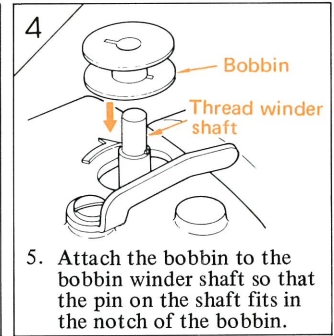
1. Bring up the needle.
2. Opening the slide plate, hold and raise the latch of the bobbin, and take out the bobbin case.



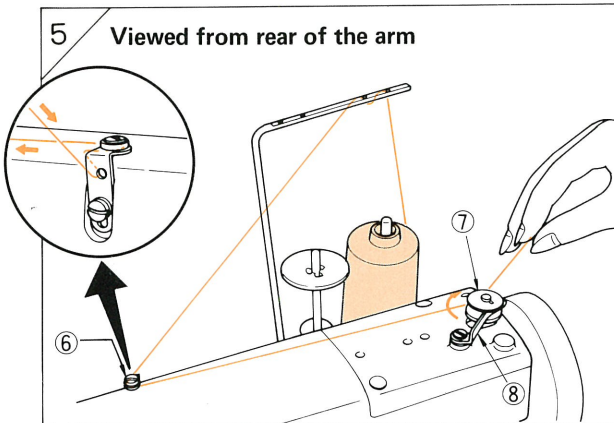
3. Snap in the latch to let the bobbin come out of the bobbin case.



4. Loosen the stop-motion screw.



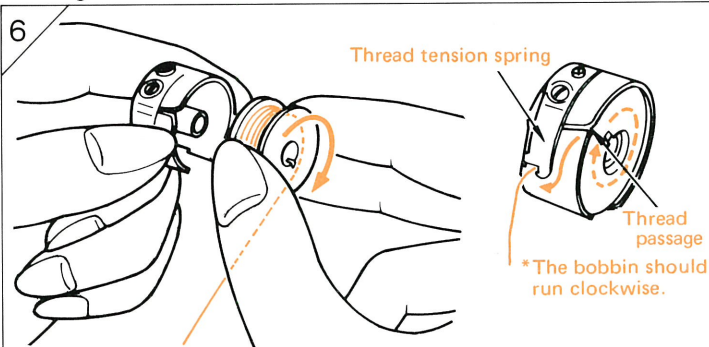
5. Attach the bobbin to the bobbin winder shaft so that the pin on the shaft fits in the notch of the bobbin.



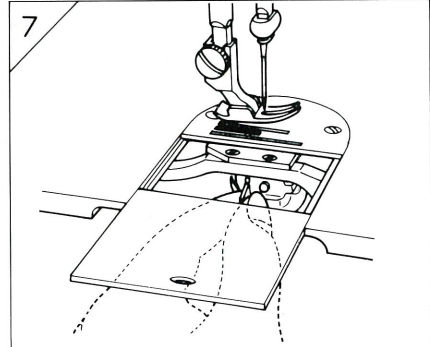
6. Pull out the thread from the spool and pass it through the eyelet in the thread guide base.
7. Wind the thread several times round the bobbin.
8. Press the bobbin presser against the bobbin.
9. Run the machine to wind the thread fully round the bobbin.  
\*When the thread has been wound fully round the bobbin, the bobbin presser will come off the bobbin automatically to stop the rotation of the bobbin.
10. Tighten the stop-motion screw.



## Loading the bobbin into the bobbin case



11. Snap in the bobbin case latch, and put the bobbin into the bobbin case so that the bobbin runs clockwise.
12. Passing the thread through the thread passage slit of the bobbin case, further pass it under the thread tension spring, and pull out the thread open end about 10cm from the bobbin case.

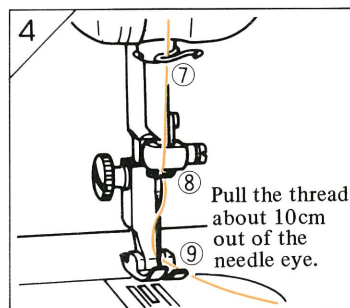
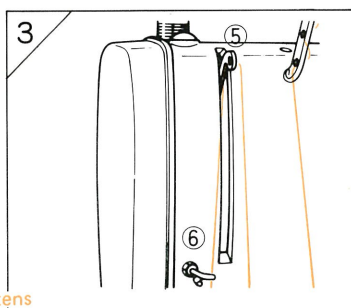
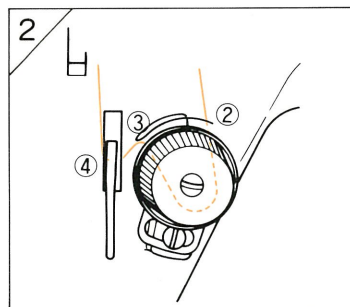
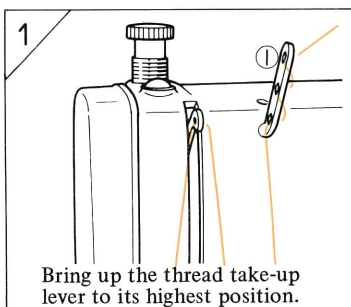
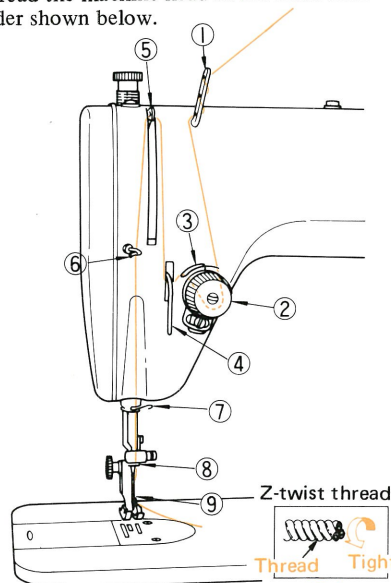


13. Raise the latch of the bobbin case, and fix the bobbin case with the wound bobbin in it onto the shaft of sewing hook.
14. Finally, close the slide plate.

# THREADING THE MACHINE HEAD, DRAWING UP THE BOBBIN THREAD, TRIAL SEWING

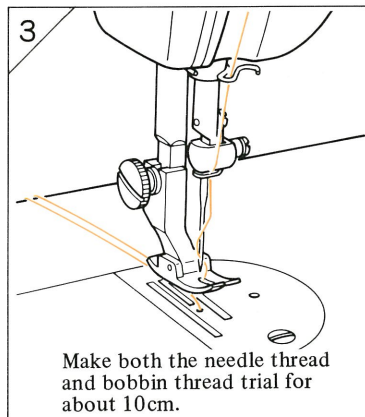
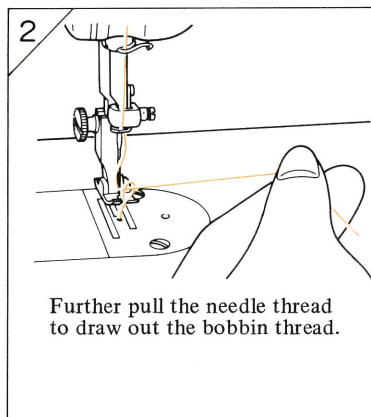
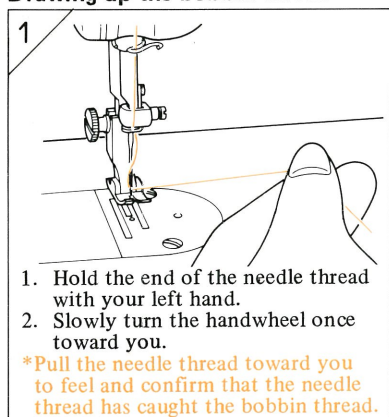
## Threading the machine head

Thread the machine head in the numerical order shown below.

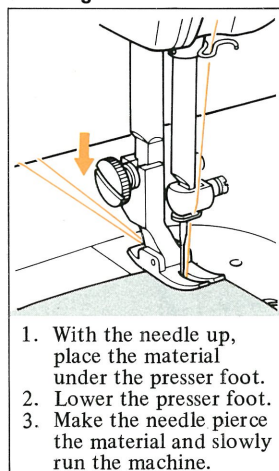


\*It is recommended to use Z-twist threads for the needle thread because use of S-twist thread may cause thread breakage or stitch skipping.

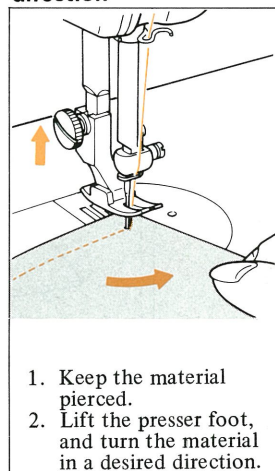
## Drawing up the bobbin thread



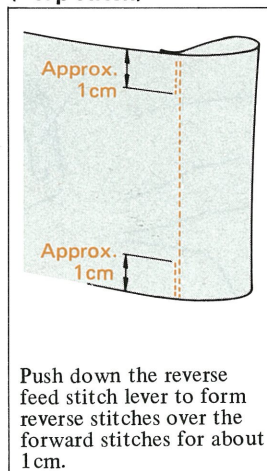
## Starting



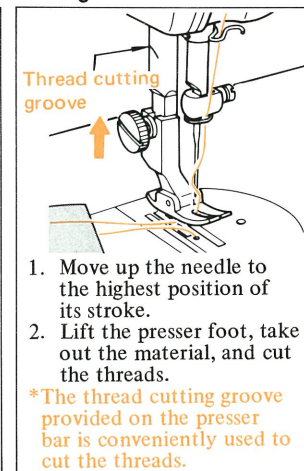
## Changing the sewing direction



## Reverse feed stitch (Stop stitch)



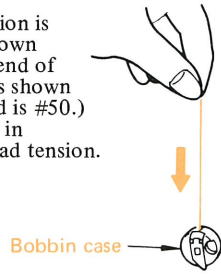
## Ending



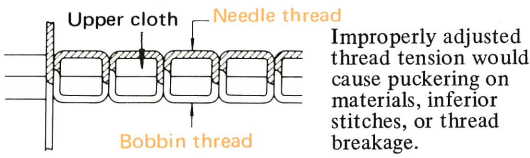
# ADJUSTING THE THREAD TENSION, TABULATED RELATIONSHIP BETWEEN MATERIAL, THREAD AND NEEDLE, ATTACHING THE NEEDLE

## Adjusting the thread tension

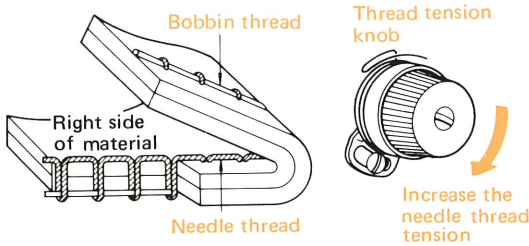
The standard bobbin thread tension is such that the bobbin case goes down slowly when you hold the open end of the bobbin thread and shake it as shown at right. (The count of the thread is #50.) Adjust the needle thread tension in accordance with the bobbin thread tension.



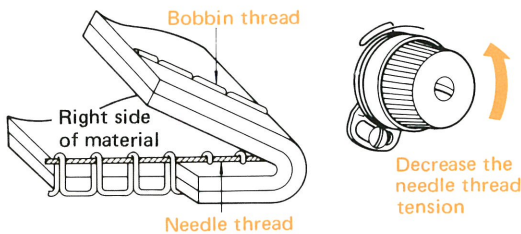
### Proper thread tension



### The needle thread tension is too low



### The needle thread tension is too high



## Tabulated relationship between material, thread and needle

	Material	Thread	Needle
			 (DB × 1)
Light-weight materials	Lawn	Cotton thread #80	No. 9
	Georgette	Silk yarn #50	
	Tricot	Synthetic thread #60	No. 11
	Wool-georgette	Silk yarn Synthetic thread #50	
Medium-weight materials	Gingham	Cotton thread #60 ~ #80	No. 11 ~ 14
	Light-weight jersey	Synthetic thread #60	
	Gaberdine Flano	Silk yarn #50	
Heavy-weight materials	Denim	Cotton thread #20 ~ #50	No. 14 ~ 18
	Canvas	Synthetic thread #50	
	Tweed	Silk yarn #50	

## Attaching the needle

1. Lower the presser foot.
2. Move the needle bar up to the highest position of its stroke.
3. Loosen the needle clamp screw to remove the needle.
4. With the lengthwise groove of the new needle facing to the left, insert the new needle into the needle bar until it can go no further.
5. Tighten the needle clamp screw.

## Checking the needle

\*Check the needle for its straightness occasionally. Any bent needle would cause stitch skipping, thread breakage or damage to materials.

# ADJUSTING THE THREAD GUIDE BASE (BOBBIN THREAD WINDER), THE TENSION AND STROKE OF THE THREAD TAKE-UP SPRING, AND THE HEIGHT OF THE FEED DOG

## Adjusting the thread guide base (Bobbin thread winder)

Loosen the screw of the thread guide base to make adjustment.

Thicker toward downside ↑ Move up

Thicker toward upside ↓ Move down

Loosens

Tightens

## Adjusting the tension of the take-up spring

1

- The tension of the take-up spring is too high. → Materials are often puckered.
- The tension of the take-up spring is too low. → Thread is often caught by the sewing hook.

1. Loosen the setscrew.

2

2. Turn the thread tension screw clockwise to increase the tension of the take-up spring, or turn it counter-clockwise to decrease the tension.

3. After adjustment, tighten the setscrew.

## Adjusting the stroke of the take-up spring

- The stroke is too large. → Stitch skipping often occurs.
- The stroke is too small. → Thread is often caught by the sewing hook.

Set the needle thread, bobbin thread and materials onto the machine, and manually turn the handwheel to make the adjustment.

The needle thread is just below the needle point.

\*When the stroke of the take-up spring has been properly adjusted, the take-up spring will start to work at the moment the needle thread caught by the blade point of the sewing hook has come just below the needle point.

## Adjusting the height of the feed dog

- The feed dog is too high. → Causes materials to pucker. The feed dog will bite and damage materials.
- The feed dog is too low. → Heavy-weight materials will not be fed.

1. Set the arm bed down away from you.

2. Loosen the screw of the feed driving shaft crank, and properly adjust the height of the feed dog.

3. Tighten the screw of the feed driving shaft crank.

# LUBRICATING THE MACHINE, ACCESSORIES, ATTACHING THE OVERHEAD LIGHT, TOPSTITCHING

## Lubricating the machine

**Top view of arm**

**Top view of arm & bed**

- Apply a few drops of oil to each of the arrowed points shown above.
- Use the machine oil (New Defrix Oil No. 1) supplied with the machine.
- Lubricate the machine once a day if you use it everyday.

- Be sure to always carry out trial sewing after lubricating the sewing hook assembly.

## Accessories

Accessory box

Bobbins (4 pcs.) Hemming holder

Cap Rubber holder

Needle (DBx1) Belt fastener Spool rest rod felt

Oiler

Screwdrivers (medium and small)

Spanners (large and small)

Screwdriver (large)

## Attaching the overhead light (available at extra cost)

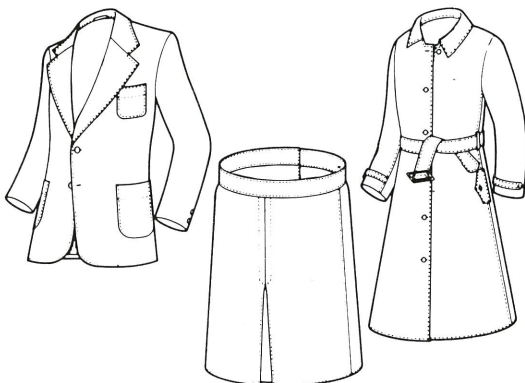
If you wish to use an overhead light, attach one exclusively used for a sewing machine to the arm of your machine as shown above.

## Topstitching

With this sewing machine, you can make beautiful topstitches having stitch length up to 6mm. You can use various threads ranging from the standard runstitching thread to #8 topstitching thread. Change the needle according to the thread used (see the table at right).

Count of thread	Needle No.
#80 ~ 50	No. 11
#60 ~ 50	No. 14 (11)
#50 ~ 30	No. 16
#20 ~ 8	No. 18

## Typical applications



## Specifications of TL-82

Description	Specification
Sewing speed	1,500 stitches/min. (Max. 1,800 stitches/min.)
Stitch length	Max. 6 mm
Needle bar stroke	32 mm
Lift of presser foot	7 mm 12 mm by knee lifter
Needle	DB x 1
Lubrication	Manual lubrication
Lubricating oil	New Defrix Oil No. 1
Transmission belt	Round leather belt 7 mm dia.
Bed size	399 x 178 mm

## TROUBLES AND CORRECTIVE MEASURES

Check for proper adjustment since the sewing machine is liable to incur failures if the fundamental adjustments have not been made properly.

Troubles	Causes	Corrective measures	Page
Stitches are skipped.	1. The needle is bent or the needle point is blunted.	○ Replace the needle	4
	2. The needle has not been attached to the needle bar properly.	○ Attach the needle properly to the needle bar.	4
	3. The relative position of the needle to the sewing hook is not correct.	○ Correct their positions.	*
	4. The stroke of the take-up spring is too large.	○ Decrease the stroke of the take-up spring.	5
Needle thread breaks	1. The machine head has been threaded incorrectly.	○ Correct the threading.	3
	2. The needle thread tension is too high or low.	○ Properly adjust the thread tension.	4
	3. The needle is bent or the needle point is blunted.	○ Replace the needle.	4
	4. The needle is not suited to the thread used.	○ Replace the needle by one suited to the thread used.	4
	5. The take-up spring tension is too high.	○ Properly adjust the tension.	5
The bobbin thread	1. The bobbin thread tension is too high.	○ Decrease the tension.	4
	2. The rubbing of the bobbin case spring has produced a wear channel.	○ Replace the bobbin case.	2
	3. Scratches on the needle hole in the throat plate.	○ Replace the throat plate.	*
The needle breaks	1. The needle is bent or has been installed improperly.	○ Replace or correctly attach the needle.	4
	2. The needle hits the throat plate or the presser foot.	○ Correctly position the needle, throat plate, or presser foot.	*
Stitches are puckered.	1. The presser foot applies too much pressure to the material.	○ Decrease the pressure of the presser foot.	1
	2. The tension of the needle thread is not balanced with that of the bobbin thread.	○ Balance the tensions.	4
	3. The stroke of the take-up spring is too large.	○ Decrease the stroke.	5
	4. The needle is too thick for the material.	○ Replace the needle by one suited to the material.	4
Stitch performance is bad.	1. The tension of the needle thread is not balanced with that of the bobbin thread.	○ Balance the tensions.	4
	2. The stroke of the take-up spring is not correct.	○ Correct the stroke of take-up spring.	5

\* If the above corrective measures should fail to eliminate your troubles, please consult the store where you bought your sewing machine.