

# **INSTRUCTION BOOK**

**MODEL 793-2  
793FA-2**

## Do's and Don'ts

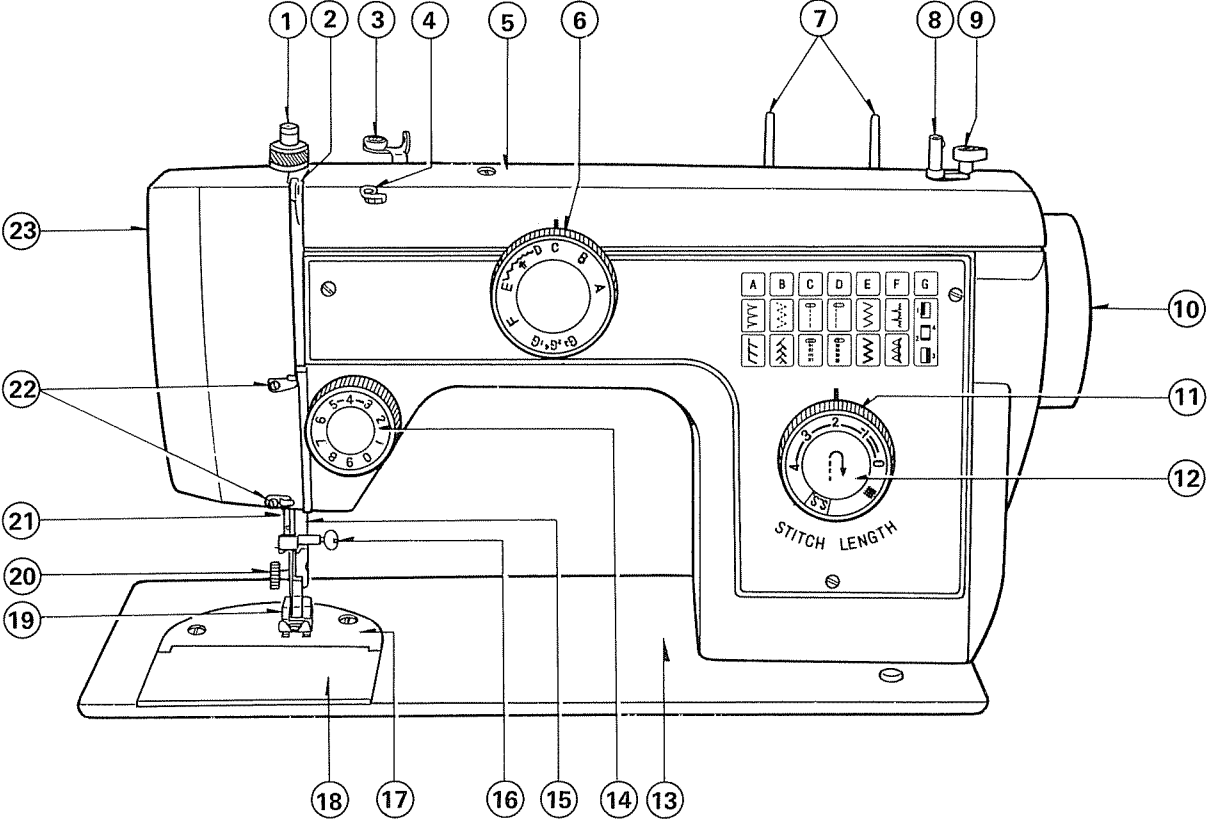
1. Always be aware of the up-and-down movement of the needle and do not turn your attention from the machine while it is running.
2. When changing the needle, the sewing foot, the bobbin or any other parts, always disconnect the machine by pulling the plug out of the wall socket.
3. Do not place anything on the foot control, otherwise the machine will start inadvertently, or the control or motor may burn out.
4. The maximum permissible power for the sewing lamp bulb is 15 watts.
5. When using your sewing machine for the first time, place a piece of waste fabric under the sewing foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

## Contents

The parts of Model 793-2 . . . . .	4–5
The parts of Model 793 FA-2 . . . . .	6–7
Detachable workplate, Model 793 FA-2 . . . . .	8
How to use the foot control . . . . .	9
The sewing lamp . . . . .	9
Size of needle and thread for selected fabric . . . . .	10
Inserting the needle . . . . .	11
The pattern selector . . . . .	12
Selecting stretch stitch . . . . .	13
Stitch length regulator . . . . .	13
Dropping the feed . . . . .	14
Reversing the feed . . . . .	14
Regulating the sewing foot pressure (Patch-O-Matic) . . . . .	14
Regulating the thread tensions . . . . .	15
Removing and inserting the bobbin case and bobbin, Model 793-2 . . . . .	16
Removing and inserting the bobbin case and bobbin, Model 793 FA-2 . . . . .	17
Winding the bobbin . . . . .	18
How to wind bobbin correctly . . . . .	19
Threading the bobbin case . . . . .	20
Threading the needle thread . . . . .	21
Drawing up the bobbin thread . . . . .	22
Sewing with straight stitch . . . . .	23
How to begin sewing . . . . .	23
How to turn corners . . . . .	24
How to finish ends of seams . . . . .	24

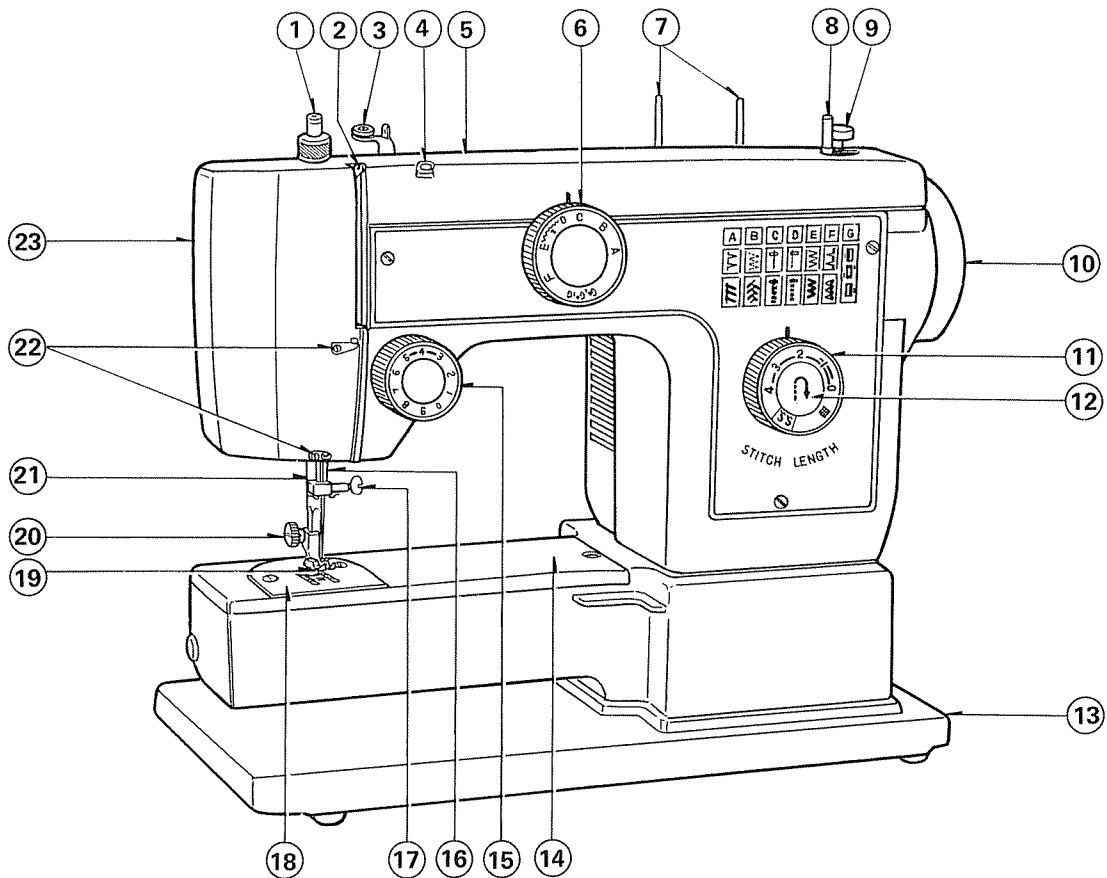
Applications for the free arm of Model 793 FA-2 .....	25
Sewing tubular — shaped articles on Model 793 FA-2 .....	26
Sewing with a twin needle .....	27
Tricot zigzag stitch .....	28
Triple, straight stretch stitch .....	29
Feather stitch .....	30
Overlock stitch .....	31
Sewing buttonholes .....	32—33
Sewing on buttons .....	34
Sewing zippers .....	35
Hemming .....	36
Sewing blind hems .....	37
Embroidery .....	38
Cleaning the shuttle race .....	39
Cleaning the feed dog .....	40
How to oil the machine .....	41
Drive belt tension .....	42
Faults and how to remedy them .....	43—44

The parts of Model 793-2



- |    |  |    |                        |
|----|--|----|------------------------|
| 1  | Sewing foot pressure regulator (Patch-O-Matic) | 13 | Bedplate               |
| 2  | Take-up lever                                  | 14 | Needle thread tension  |
| 3  | Bobbin winder tension                          | 15 | Presser bar            |
| 4  | Thread guide                                   | 16 | Needle clamp and screw |
| 5  | Top cover                                      | 17 | Needle plate           |
| 6  | Pattern selector                               | 18 | Bedplate cover         |
| 7  | Spool pins                                     | 19 | Sewing foot            |
| 8  | Bobbin winder spindle                          | 20 | Sewing foot screw      |
| 9  | Bobbin winder stop                             | 21 | Needle bar             |
| 10 | Hand wheel                                     | 22 | Thread guides          |
| 11 | Stitch length regulator                        | 23 | Face plate             |
| 12 | Reversing button                               |    |                        |

# The parts of Model 793 FA-2



- |    |  |    |                        |
|----|--|----|------------------------|
| 1  | Sewing foot pressure regulator (Patch-O-Matic) | 14 | Free arm               |
| 2  | Take-up lever                                  | 15 | Needle thread tension  |
| 3  | Bobbin winder tension                          | 16 | Needle bar             |
| 4  | Thread guide                                   | 17 | Needle clamp and screw |
| 5  | Top cover                                      | 18 | Needle plate           |
| 6  | Pattern selector                               | 19 | Sewing foot            |
| 7  | Spool pins                                     | 20 | Sewing foot screw      |
| 8  | Bobbin winder spindle                          | 21 | Presser bar            |
| 9  | Bobbin winder stop                             | 22 | Thread guides          |
| 10 | Hand wheel                                     | 23 | Face plate             |
| 11 | Stitch length regulator                        |    |                        |
| 12 | Reversing button                               |    |                        |
| 13 | Bedplate                                       |    |                        |

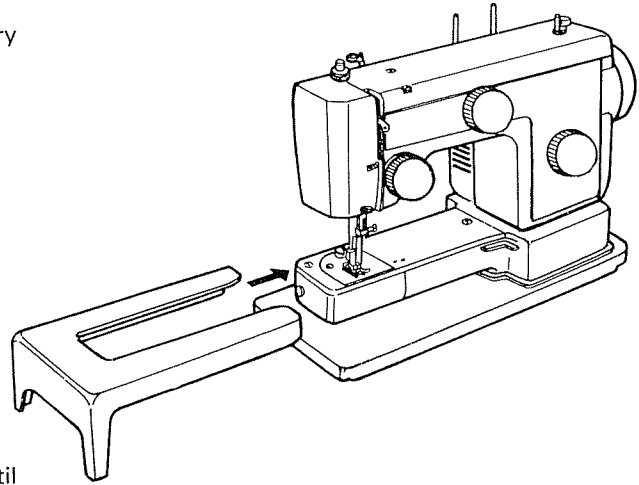


## Detachable workplate, Model 793 FA-2

The detachable workplate increases the sewing area for ordinary sewing operations.

### Removing

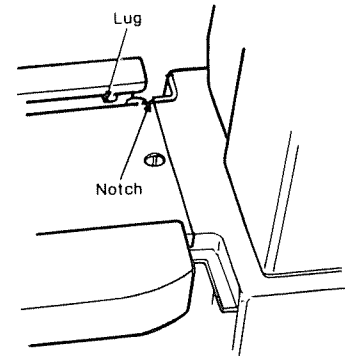
Lift the end of the workplate near to the lug and pull it away.



### Fitting

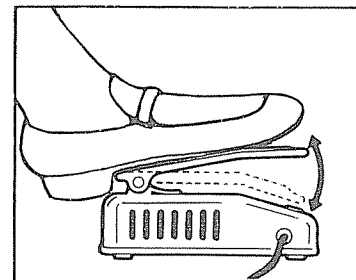
Push the workplate over the free arm of the sewing machine until its lug snaps into the notch in the arm.

**Note:** The detachable workplate is removed to allow sewing of tubular articles.



## How to use the foot control

Place the control in a position where you can reach it easily with your foot.  
Turn the hand wheel towards you and press the pedal of the foot control down.  
The harder you press the pedal the faster the machine sews.



## The sewing lamp

### \* Switch

The sewlight switch is found on the back of face plate.

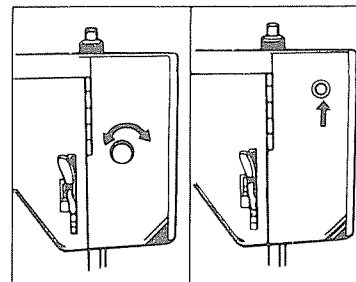
### \* Changing the bulb

Bulb Type (A): To remove — Turn counter-clockwise

To replace — Turn clockwise

Bulb Type (B): To remove — Push and twist counter-clockwise

To replace — Push and twist clockwise



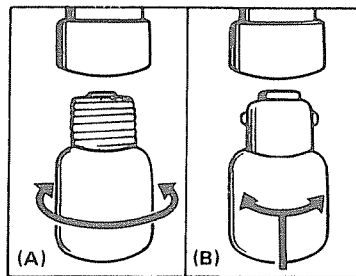
### \* Bulb

Use a 15-watt bulb.

### Caution!

Before leaving the machine, changing parts or doing any other work on it, always remove the plug from the wall socket.

Never place anything on the foot control, otherwise the machine will start unintentionally, or the control or motor may burn out.



## Size of needle and thread for selected fabric

Needle size	Thread	Fabric
9 fine	<ul style="list-style-type: none"> <li>● polyester</li> <li>● cotton covered polyester</li> <li>● fine mercerized cotton (70-100)</li> <li>● silk A</li> </ul>	tricot, lingerie fabrics, chiffon, net, voile, sheer lace, fine silk, organdy
11 light	<ul style="list-style-type: none"> <li>● polyester</li> <li>● cotton covered polyester</li> <li>● mercerized cotton (50-60)</li> <li>● silk A</li> </ul>	light weight knits, jerseys, silk, batiste, taffeta, satin, lace, crepe
14 medium	<ul style="list-style-type: none"> <li>● polyester</li> <li>● cotton covered polyester</li> <li>● mercerized cotton (50)</li> <li>● silk A</li> </ul>	double knits, linen, poplin, gingham, pique, seersucker, fine corduroy, velveteen, light weight wools
16 heavy	<ul style="list-style-type: none"> <li>● polyester</li> <li>● cotton covered polyester</li> <li>● mercerized cotton (40-50)</li> <li>● heavy duty mercerized (40)</li> <li>● silk D (buttonhole twist for topstitching)</li> </ul>	heavy wools, corduroy, felt, terrycloth, canvas, upholstery and drapery fabrics

- Always use same type and size of thread in both needle and bobbin.
- Always use a sharp needle. A blunt point can cause skipped stitches or snag the fabric. Chemical finishes and man-made fibers blunt the needle faster.
- Never use a bent needle.
- If your machine is skipping stitches, replace the needle before looking for trouble elsewhere.

**BLUE TIPPED** needles are designed to sew stretch, very fine fabrics and synthetics.

**A BLUE TIPPED** needle is supplied with the machine.

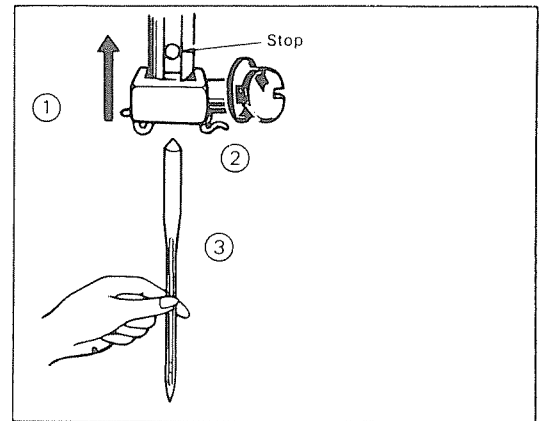
## Inserting the needle

To insert the needle proceed as follows:

Turn the hand wheel towards you until the needle is at its highest position.

Loosen the needle clamp screw.

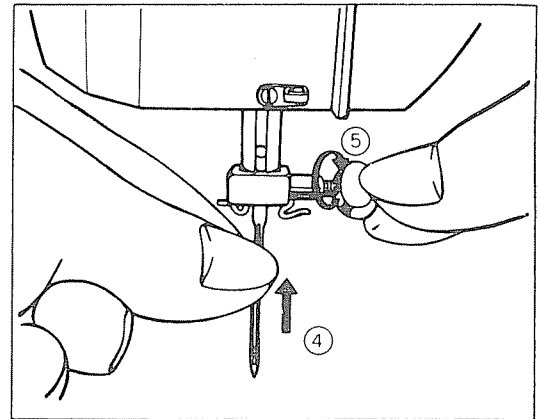
Place the needle with the flat side facing away from you.



Push the needle up into needle clamp as far as possible.

Tighten the needle clamp screw securely.


Turn hand wheel towards you one complete rotation to be sure needle is correctly positioned.




## The pattern selector


Turn the selector until the symbol of the stitch you require is at the setting mark.


The marks (symbols) on the dial correspond to the patterns shown on the panel respectively, as follows:

 (C) straight stitch, middle needle position


 (D) straight stitch, left needle position


 (E) zigzag stitches in widths from 1 to 5

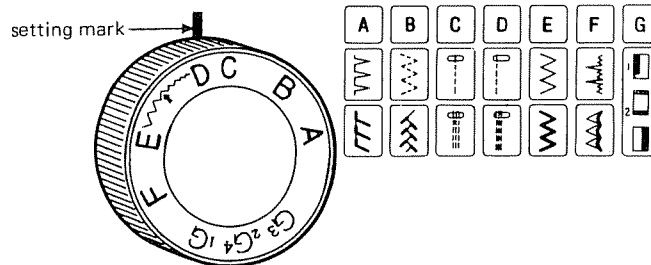
 stitch with a twin needle

 (F) stretch blind stitch

$G^1 \rightarrow G^2 \rightarrow G^3 \rightarrow G^4$  Sewing buttonhole without turning fabrics


 (B) tricot stitch


 (A) fancy stretch stitch





### PATTERN SELECTOR


When sewing stretch stitch, set the stitch length regulator at "S.S."


 (C) triple straight stretch stitch, middle needle position

 (D) triple straight stretch stitch, left needle position

 (E) triple zigzag stretch stitch

 (F) fancy stretch stitch

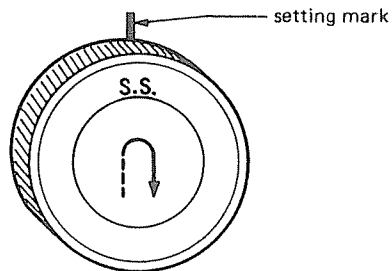
 (A) overlock stitch

 (B) feather stitch

**Note:** Raise the needle to its highest position before turning the pattern selector.

## Selecting stretch stitch

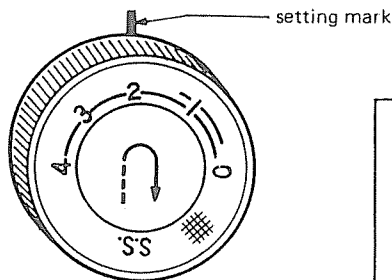
Set the stitch length regulator at "S.S." so that the stretch stitch feed is selected.



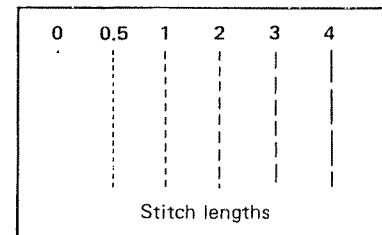
STITCH LENGTH REGULATOR

## Stitch length regulator

Turn the regulator so that the number for the required stitch length is at the setting mark. The numbers indicate the stitch length in mm. The lower the number, the shorter the stitch.



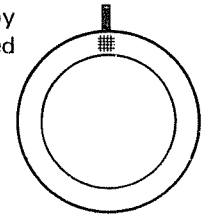
STITCH LENGTH REGULATOR



## Dropping the feed

Embroidering and darning are best carried out with the feed mechanism disengaged. This can be done by setting the stitch length regulator at " # " , which drops the feed and allows the material to be moved freely under the presser foot.

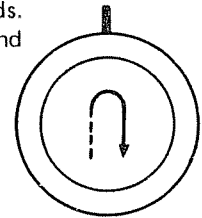
The feed starts its normal function again by turning the stitch length regulator to "0" or beyond it.



STITCH LENGTH  
REGULATOR

## Reversing the feed

Press the reverse feed button and hold for reverse stitching. Fabric will immediately start feeding in backwards. Release button and machine will resume normal forward sewing. Reverse stitch is very useful for fastening end of seams and darts without having to tie threads, and for strengthening seams.

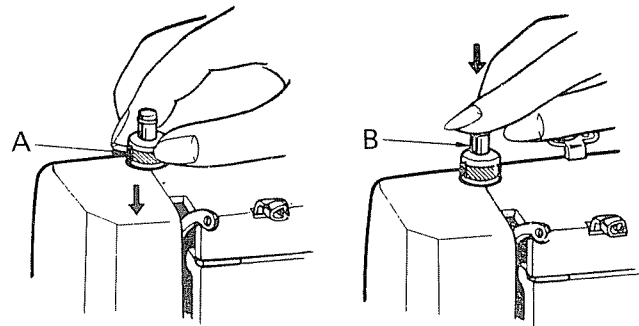


## Regulating the sewing foot pressure (Patch-O-Matic)

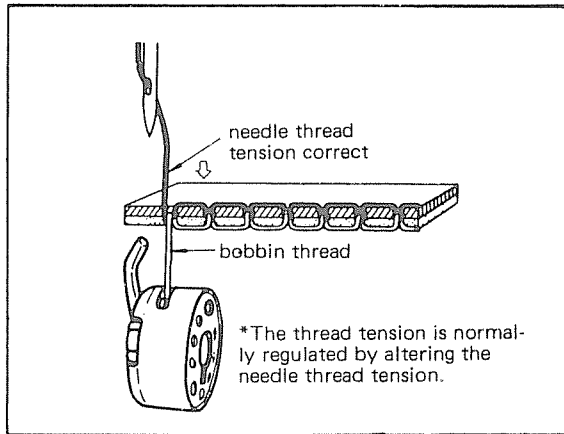
To release the sewing foot pressure, push ring A downwards. This causes the regulator to spring to its highest position. The material is now free of any pressure from the sewing foot.

For sewing thin or light materials push regulator B down just a little to provide the light sewing foot pressure required.

If you are sewing thick or heavy materials push the regulator farther down to increase the pressure of the sewing foot on the material.

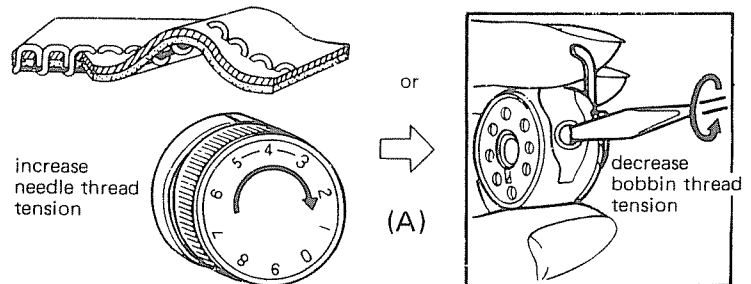


## Regulating the thread tensions



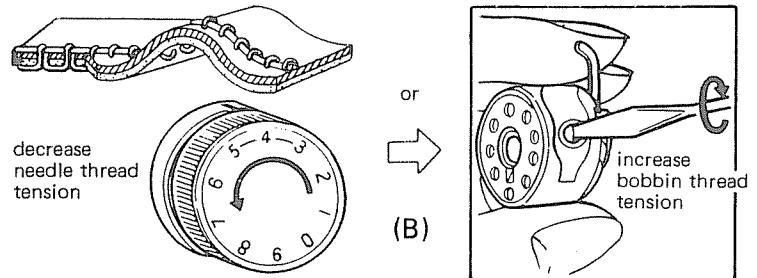
Correct regulation of the thread tensions is important for obtaining durable and tidy seams. If one of the tensions is not correct, untidy seams will be the result. The tensions are regulated as shown in the illustrations.

**Remarks:** The correct tension setting depends on the fabric used. It is best to try out which is the best tension on a piece of waste material.



If the bobbin thread runs in a straight line on the underside of the material, the needle thread tension is too loose.

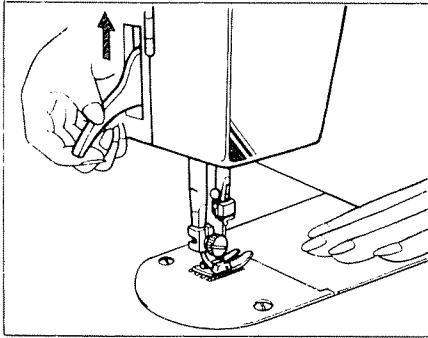
If you cannot remove this fault by increasing the needle thread tension, you may have to decrease the bobbin thread tension as shown in A.



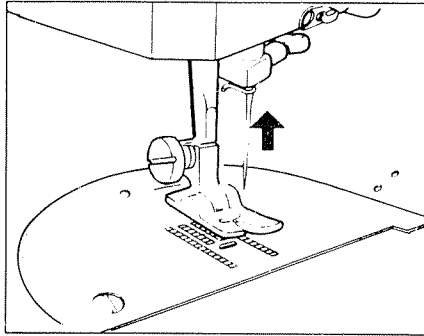
If the needle thread runs in a straight line on the top side of the material, the needle thread tension is set too tight. If the latter is set at number 4 or lower this fault should not normally occur. If it does, it is perhaps necessary to increase the bobbin thread tension as shown in B.



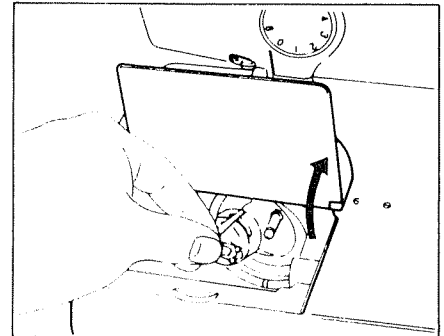
## Removing and inserting the bobbin case and bobbin, Model 793-2



1



2



3

1. Raise the sewing foot by lifting sewing foot lever.
2. Turn the hand wheel towards you until the take-up lever is at the top. Open the bedplate cover.
3. Open hinged latch of bobbin case and pull the bobbin case out of the machine. Release the latch and the bobbin will fall out. As long as you hold the bobbin case latch open the bobbin cannot drop out.

To insert bobbin case and bobbin---

Be sure that 5 to 6 inches of thread extends out of bobbin.

Hold bobbin case so long finger on case points up.

Open latch of bobbin case.

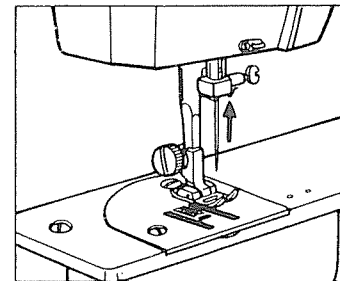
Slip case over center pin of shuttle and press in place until long finger of bobbin case enters notch.

Release latch and press down.

Close bedplate cover.

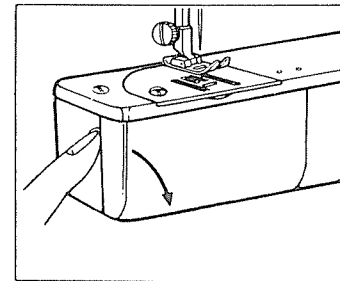
## Removing and inserting the bobbin case and bobbin, Model 793 FA-2

1. Raise the sewing foot and turn the hand wheel towards you until the take-up lever is at the top.



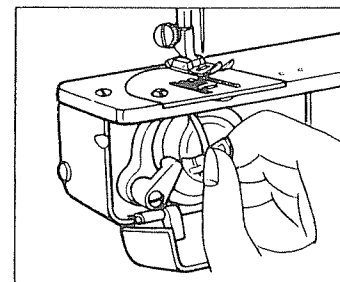
1

2. Open the arm cover.



2

3. Open hinged latch of bobbin case and pull bobbin case out of machine. Release the latch and the bobbin will fall out. As long as you hold the bobbin case latch open the bobbin cannot drop out. To insert bobbin case and bobbin --- Be sure that 5 to 6 inches of thread extends out of bobbin. Hold bobbin case so long finger on case points up. Open latch of bobbin case. Slip case over center pin of shuttle and press in place until long finger of bobbin case enters notch. Release latch and press down. Close arm cover.



3

## Winding the bobbin

Hold the hand wheel firmly with your left hand and turn stop motion knob toward you with your right hand.

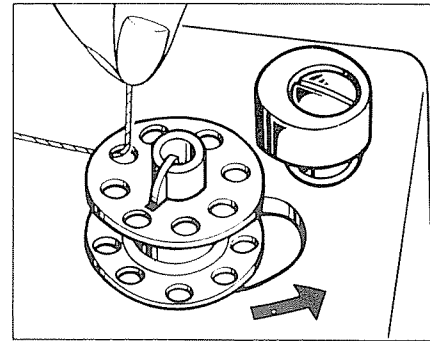
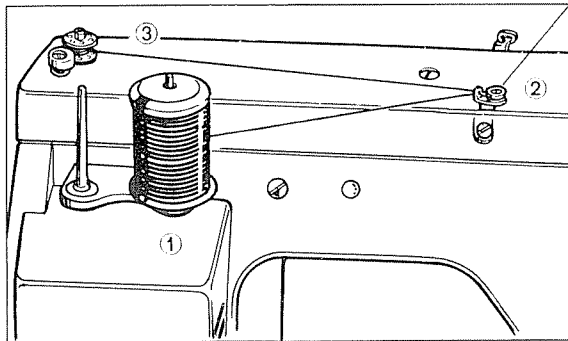
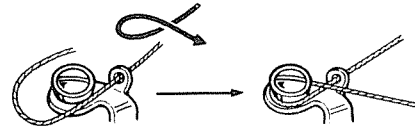
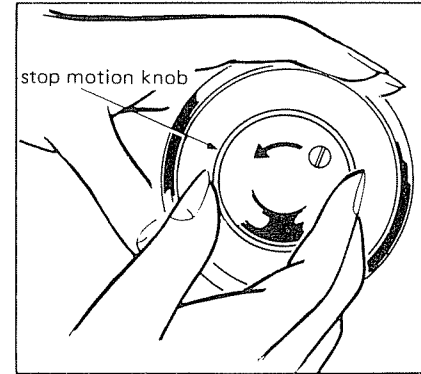
Place a spool of thread on pin 1. Pass the thread through the eyelet and under the disc of bobbin winder tension 2.

Thread the bobbin through one of its holes from the inside outwards and place the bobbin on bobbin winder spindle 3.

Push both spindle and bobbin towards the back so that the bobbin winder stop fits into the bobbin. Hold end of thread from bobbin and press down on foot control as when sewing. Release end of thread when winding starts.

Run the machine slowly until the bobbin stops, then push the spindle away from the stop and cut the thread. Remove bobbin.

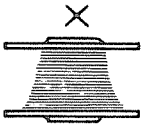
Tighten stop motion knob.



## How to wind bobbin correctly



The thread must be wound onto the bobbin evenly.

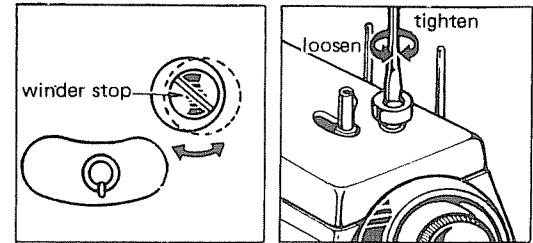
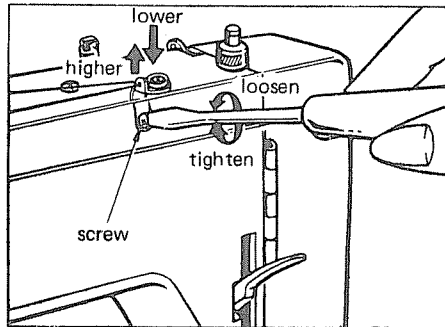


If the thread piles up at the bottom, loosen the fixing screw of the winder tension and set the tension a little higher.



If more thread is wound on at the top of the bobbin, push the winder tension down a little.

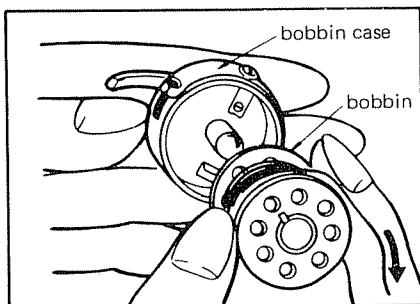
After adjustment, do not forget to tighten the fixing screw!



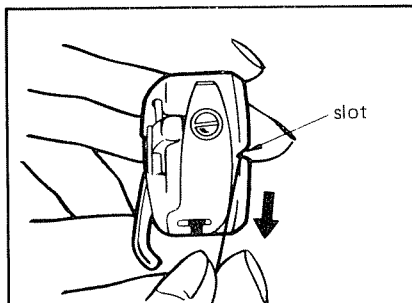
Set the winder stop so that the bobbin is filled to about  $\frac{3}{4}$  with thread. The bobbin must stop turning when the required amount of thread is wound on. If the amount of thread is not correct, loosen the screw and move the winder stop as shown in the illustration above.

## Threading the bobbin case

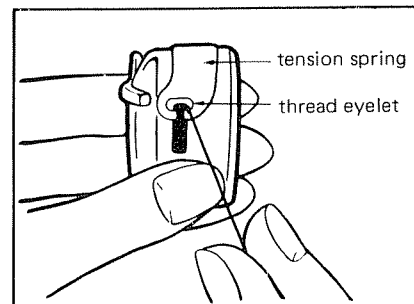
Hold the bobbin between the thumb and forefinger of your right hand and pull off a few inches of thread.



Hold the bobbin case in your left hand as shown in the drawing and place the filled bobbin inside.



Pull the thread into the slot in the edge of the bobbin case.

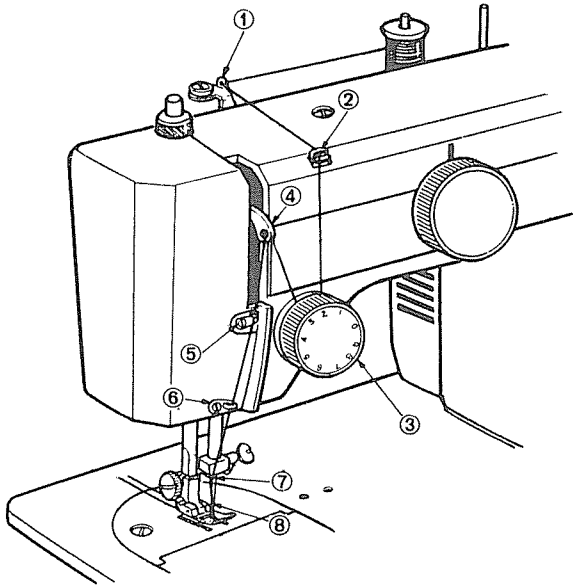


Now pull the thread under the tension spring and into the thread eyelet.

## Inserting the bobbin case

\* When inserting the bobbin case in the machine make sure the case is placed properly on the center pin (see pages 16 and 17).

## Threading the needle thread



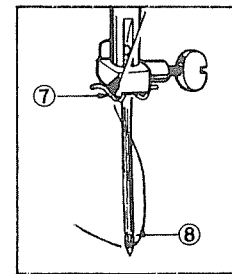
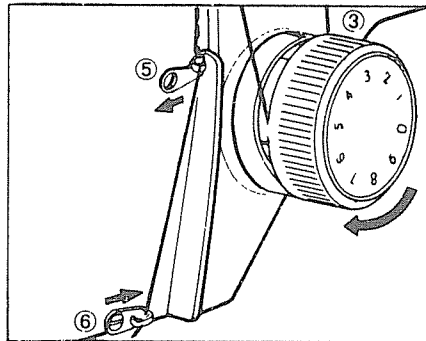
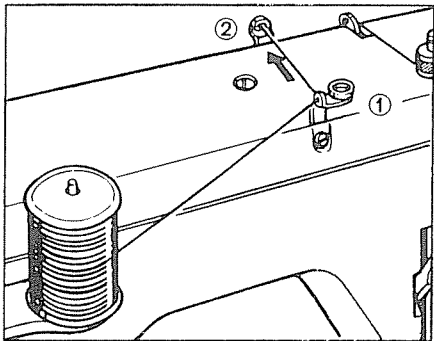
Move the take-up lever to its highest position by turning the hand wheel towards you.

Lift the sewing foot by raising the sewing foot spool lifter, and thread the machine as follows:

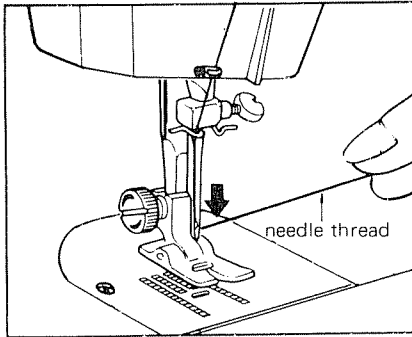
Pass the thread through guides 1 and 2. Hold the spool of thread with your right hand and pass the thread from the right between tension discs 3, and then upwards. When you do so, the thread passes under the tension guide and thread check spring on its own.

Pass the thread from right to left through take-up lever 4, then through thread guides 5 and 6 and through guide 7 at the bottom end of the needle bar.

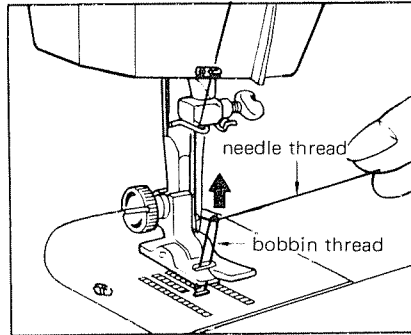
Thread needle 8 from the front and pull about six inches of thread through the eye.



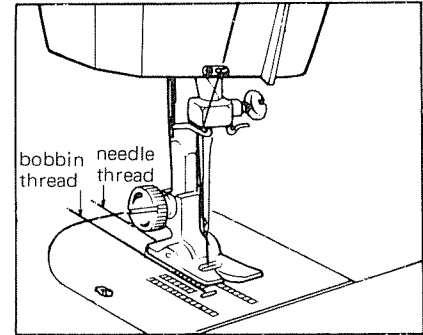
## Drawing up the bobbin thread



Hold the end of the needle thread with your left hand. Turn the hand wheel slowly towards you until the needle moves down then up again and the take-up lever is at its highest point.



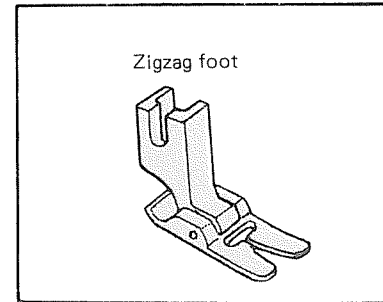
Pull the needle thread slowly. The bobbin thread will now come up through the needle hole in a loop.



Pull about six inches of both threads under the sewing foot toward rear of machine.

## Sewing with straight stitch

Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	C or D
Stitch length regulator . . . . .	1 to 4

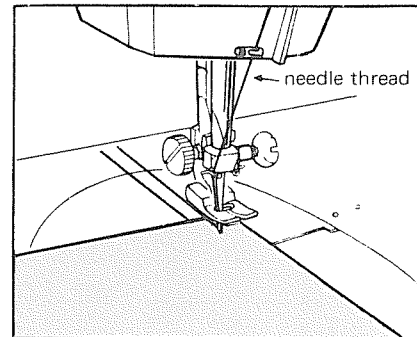


## How to begin sewing

Place fabric under sewing foot.

Hold thread ends loosely with left hand and turn hand wheel towards you with your right hand so needle enters fabric to begin sewing. To prevent fabric from being drawn into needle hole when you begin stitching, start about ¼" from edge of fabric.

Lower the sewing foot lifter so sewing foot is down on fabric. Press the pedal of the foot control to start machine.

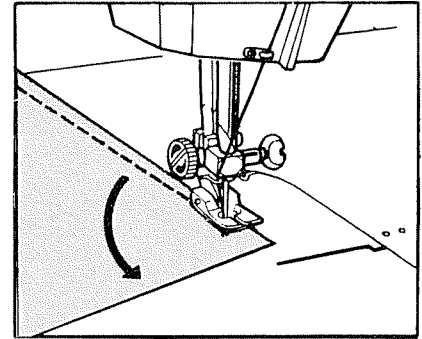




## How to turn corners

Stop stitching with needle down in fabric.

Raise sewing foot and turn fabric using needle as a pivot. Lower sewing foot and continue sewing in new direction.



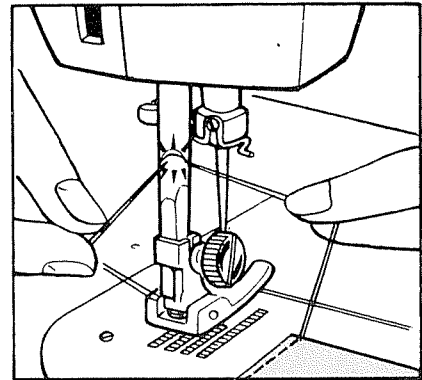
## How to finish ends of seams

At the end of the seam, press the reversing button and backstitch about  $\frac{1}{2}$ " , then sew forward to end of seam.

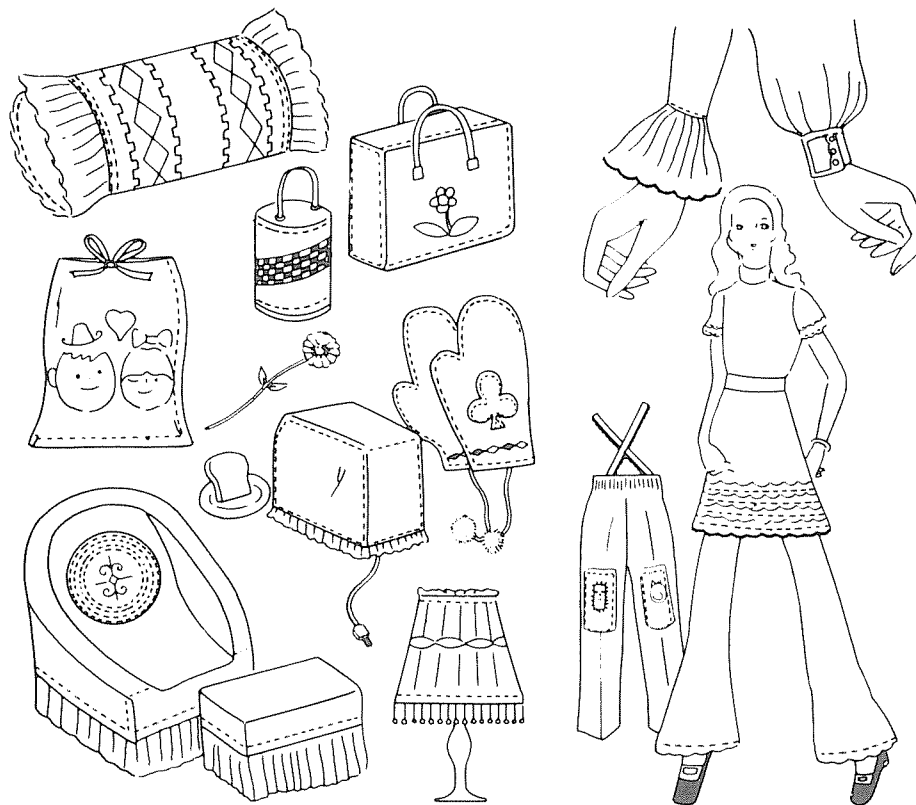
Stop the machine with take-up lever at the top. Lift the sewing foot and pull the material out from the back.

Cut the thread using the cutter at back of needle bar.

Leave about five inches of thread hanging from the needle eye.



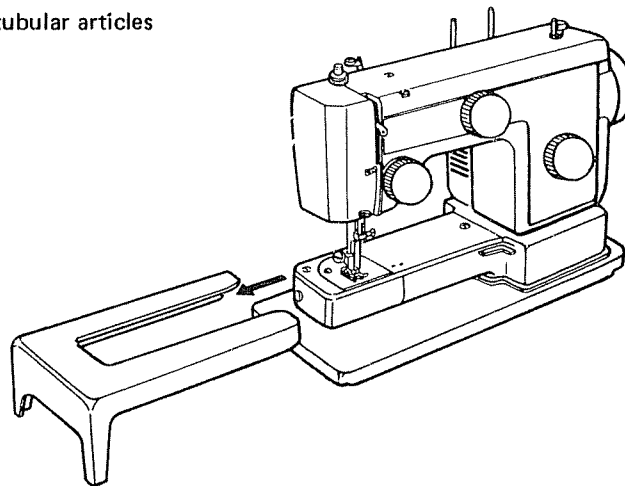
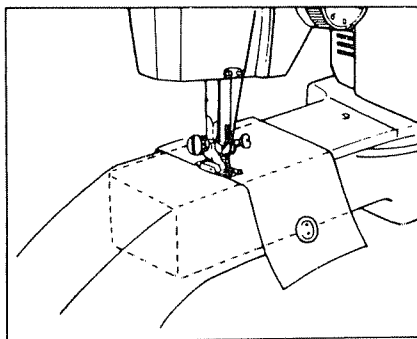
## Applications for the free arm of Model 793 FA-2



Here are a few examples of the kind of work you can do with the help of your free arm machine.

## Sewing tubular-shaped articles on Model 793 FA-2

The free arm is particularly suitable for sewing or darning tubular articles such as sleeves, trousers or socks.



**How to use:** Place the article over the free arm, lower the sewing foot and begin to sew, guiding the material lightly with your hands.

## Sewing with a twin needle

Pretty colored patterns can be made by sewing with twin needles and different-colored threads.

Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	†
Stitch length regulator . . . . .	0.5 to 1 (for stretch stitch use length "S.S.")

Set the pattern selector at " † ".

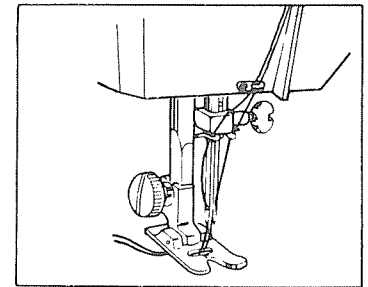
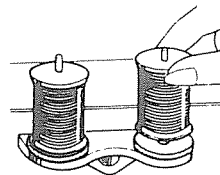
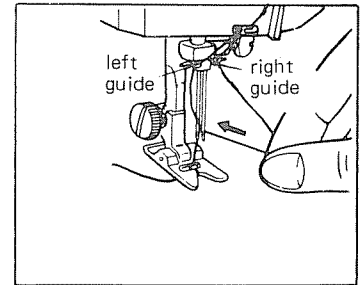
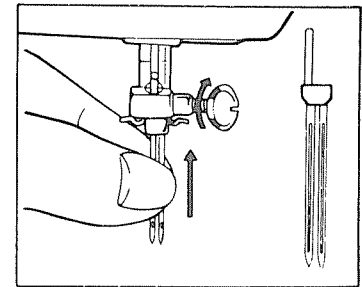
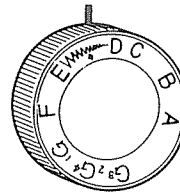
Insert the twin needle in exactly the same way as a single one (flat side away from you).

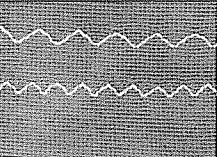
Place two spools of thread on the spool pins.

The machine is threaded in the same way as with a single thread, except that the threads are divided at the tension, passed between separate discs, separately through the thread guides at either side of needle bar and through the two needle eyes.

Note: Before starting to sew place the two round felt pieces provided in the accessories over the spool pins. To turn a corner with twin needles you have to take the needles out of the fabric or they will be twisted or broken.

The twin needle for this machine has its shank on the left. Needles with their shank in the middle can only be used for straight stitch at center needle position



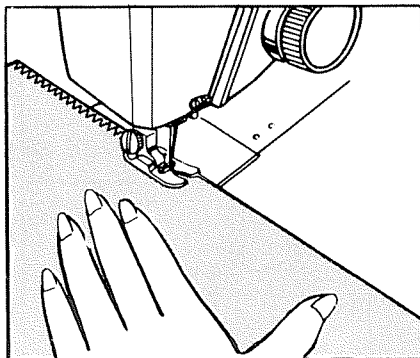


## Tricot zigzag stitch

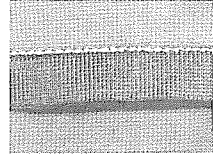
This stitch is very suitable for darning tears. It can also be used for reinforcing stretch materials and sewing on fabric parts.

Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	B
Stitch length regulator . . . . .	0.3 to 4

Set the machine as described at the left and begin to sew.



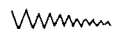
**Note:**  
Use the **BLUE TIPPED** needle in the accessories. This will prevent stitch skipping.



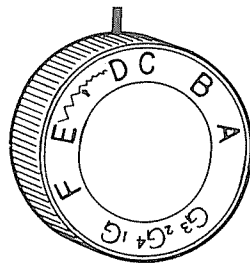
## Triple, straight stretch stitch

If you wish to sew stretch fabrics, this is the right stitch to use to avoid thread breaking. It is also very suitable for seams that need great strength, e.g. crutch seams or pocket seams.

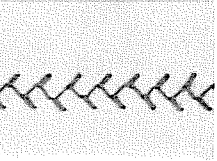
Triple straight stretch stitch	
Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	C
Stitch length regulator . . . .	S.S.

Triple zigzag stretch stitch	
Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	E (  )
Stitch length regulator . . . .	S.S.

Note: Stretch straight sewing in left needle position (D) is advisable in order to prevent skipping stitch on thin fabrics.



Note:  
Use the BLUE TIPPED needle in the accessories. This will prevent stitch skipping.

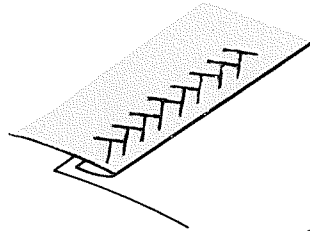


## Feather stitch

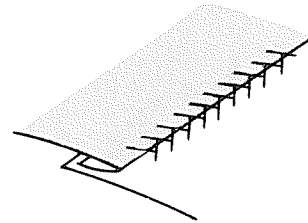
This stitch is suitable for fancy effects...

Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	B
Stitch length regulator . . . . .	S.S.

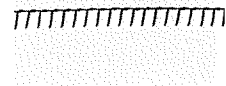
... and for sewing stretch fabrics.



or



## Overlock stitch



With this seam it is possible to provide raw edges, especially on easily fraying fabrics, with a good-looking and lasting edge finish.

Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	A
Stitch length regulator . . . . .	S.S.

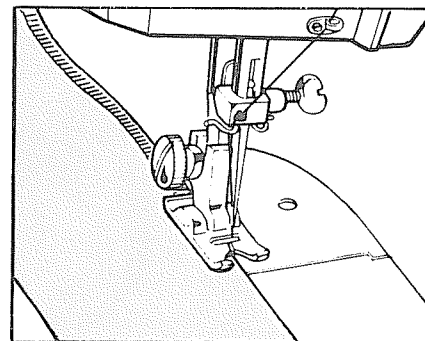
Place the fabric under the sewing foot so that the stitches are made over the edge

Lower the sewing foot and begin sewing.

Guide the material lightly as shown right.

Sew on a piece of waste fabric to check the stitch setting.

The overlock stitches are placed correctly when the needle just misses the fabric edge when descending on the right.

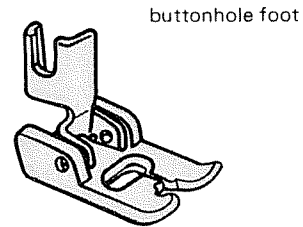




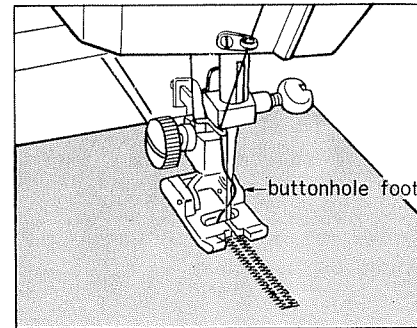
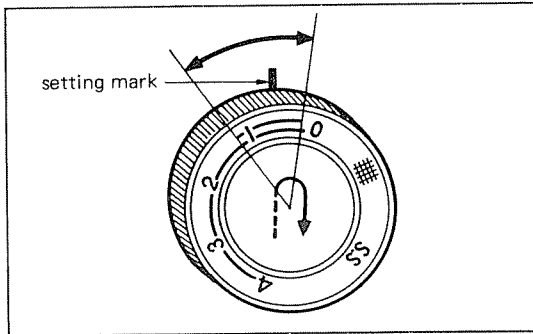
## Sewing buttonholes

The buttonhole mechanism fitted in this machine makes it possible to sew buttonholes in a short time without turning the material.

Sewing foot . . . . .	buttonhole foot
Pattern selector . . . . .	1G→ <sub>2</sub> G <sup>4</sup> →G <sup>3</sup> → <sub>2</sub> G <sup>4</sup>
Stitch length regulator . . . .	0.3 to 1.1



Change the regular sewing foot for the transparent buttonhole foot for sewing buttonholes.  
Mark the location and length of the buttonhole on the fabric using a pencil or tailor's chalk.  
To find the most suitable stitch length it is best to sew a sample buttonhole on a piece of waste fabric.



## Sewing buttonholes (continued)

Set the pattern selector at " 1G " and sew slowly until the seam is long enough, then stop the machine at B.

Set the selector at " 2G<sup>4</sup> " and sew about five stitches until the needle is at point C.

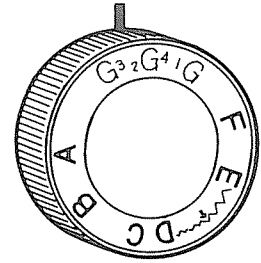
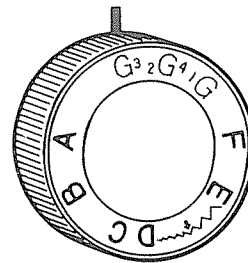
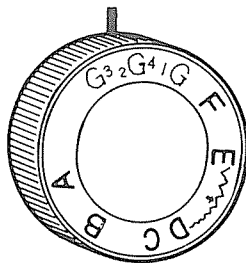
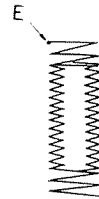
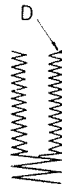
Set the selector at " G3 " and sew until the right seam is as long as the left one, then stop the machine with the needle at point D.

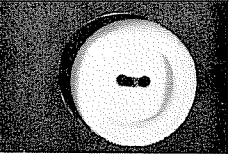
Set the selector at " 2G<sup>4</sup> " and sew about five stitches until the needle is at point E.

To secure the seam, set the pattern selector for zigzag at " D " and sew a few stitches.

Cut the buttonhole open carefully using a seam ripper, taking care not to damage the end tacks. If you need more prominent buttonholes, use a filler thread.

Please note: Before the pattern selector can be moved to another symbol raise the needle to its highest position.






## Sewing on buttons

Sewing foot . . . . .	button sewing foot
Pattern selector . . . . .	D and E
Stitch width . . . . .	depending on holes in button
Stitch length . . . . .	###

Set the pattern selector at a stitch width that allows the needle to enter the right hole in the button when you turn the hand wheel.


Sew five or six stitches slowly.

Set the pattern selector at "D()" and sew three or four securing stitches.

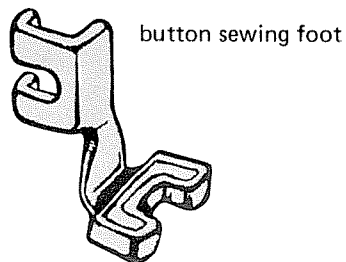
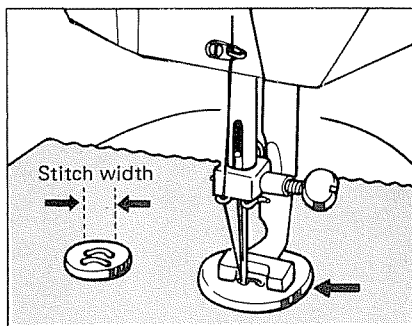
Please note: Raise the needle to its highest position before setting the pattern selector to the right width.

Change the regular sewing foot for the button sewing foot.

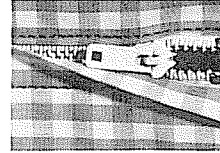
Place a button on the material so that its holes are crosswise to the sewing direction and the left hole is under the needle.

Set the pattern selector at "D()" and turn the hand wheel slowly towards you. Make sure the needle enters the left hole.

Lower the button sewing foot onto the button.



## Sewing zippers

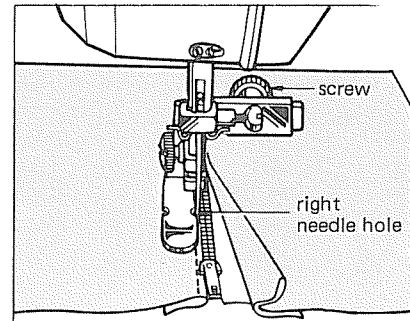
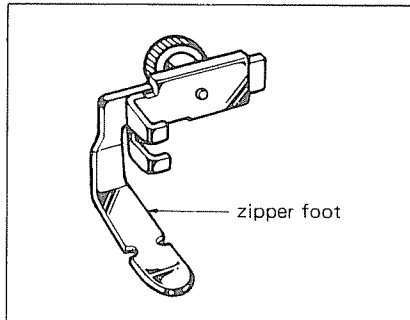


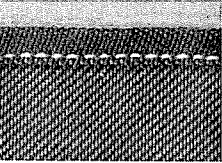
Sewing foot . . . . . zipper foot  
Pattern selector . . . . . C or D  
Stitch length regulator . . . . 1 to 4

Raise the needle to its highest position by turning hand wheel toward you. Install zipper foot on machine.

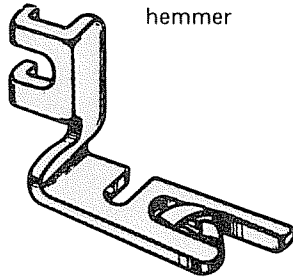
Loosen the screw on the zipper foot and set the foot so that the needle can enter into the left hole. Tighten the screw again. Now sew on the right half of the zipper.

Set the needle at the top again, loosen the screw and move the sewing foot to the left so that the needle can enter the right hole. Tighten the screw on the sewing foot. Now sew on the left half of the zipper.





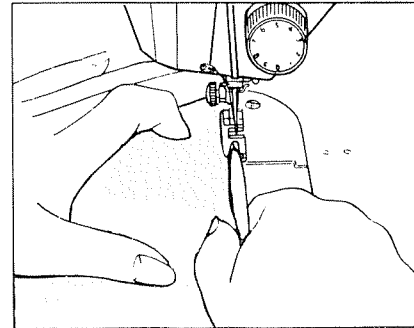
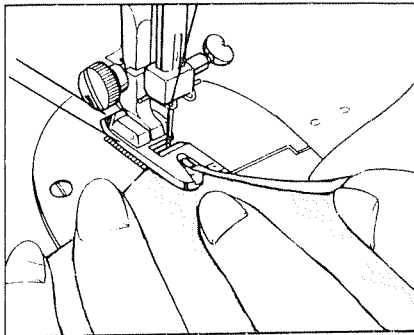
## Hemming



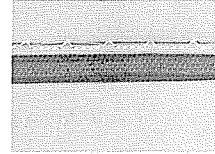
Sewing foot . . . . .	hemmer
Pattern selector . . . . .	C
Stitch length regulator . . . .	2 to 4

Fold over the fabric edge by about 3 mm (1/8") and place it under the foot. Secure the folded edge with a few stitches. Take out the workpiece and draw the hem into the hemmer foot by pulling on the threads. Lower the sewing foot and sew the hem. During sewing, fold the fabric to the left a little and allow it to run into the hemmer foot.

Make sure that the fabric does not move under the right half of the foot. The fabric must be fed into the scroll of the hemmer sufficiently so that the workpiece edge runs freely through the notch of the foot.



## Sewing blind hems



Sewing foot . . . . .	zigzag foot
Pattern selector . . . . .	F
Stitch length regulator . . . . .	2 to 4
Attachment . . . . .	Blind stitch hemmer

Turn the hand wheel towards you until the feed dog is below the needle plate surface. Lower the sewing foot.

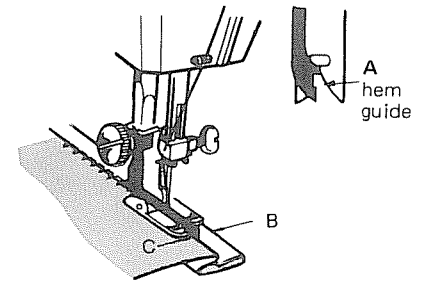
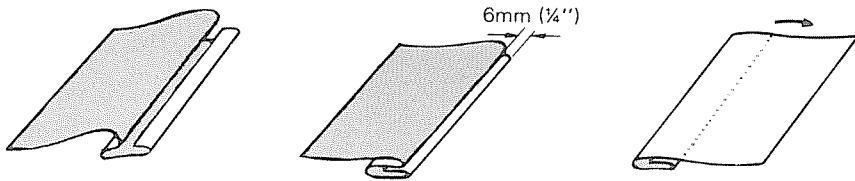
Loosen the sewing foot screw in order to place the hem guide between the screw and the sewing foot.

Tighten the sewing foot screw and make sure guide A is in the middle of the two prongs of the sewing foot.

Turn up hem the desired width and press. Turn raw edge in 12mm (1/2") and press or baste in place. Fold hem back against right side of garment with top edge of hem extending about 6mm (1/4") to the right of garment fold.

Place garment under sewing foot so that double-folded edge is up against hemmer guide (A). Straight stitches will fall on hem edge and zigzag stitch just catches one thread of folded edge.

Lower the sewing foot and sew slowly for better control, making sure double-folded edge runs along the guide (C).





## Embroidery

Remove sewing foot

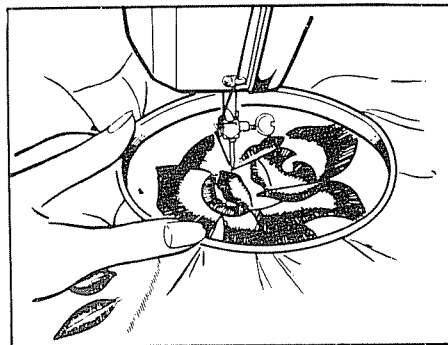
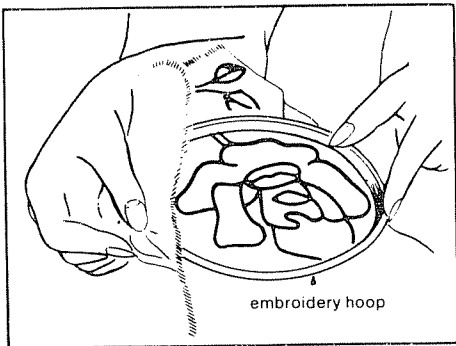
Pattern selector . . . . . E (W) (W) (W) (W) (W)  
stitch width 3 to 5

Stitch length regulator . . . . #

Place the fabric in an embroidery hoop. Set the stitch length regulator at “ # ”. Lower the sewing foot. Hold the embroidery hoop firmly with both hands.

While you are sewing the pattern move the embroidery hoop slowly and do not allow your fingers to get near the needle. (Set the needle thread tension a little looser so that the bobbin thread is not pulled through to the top side).

\* The required embroidery pattern can be marked on the fabric with a pencil or tailor's chalk.



## Cleaning the shuttle race

Unplug the machine from the power supply.

### To remove shuttle:

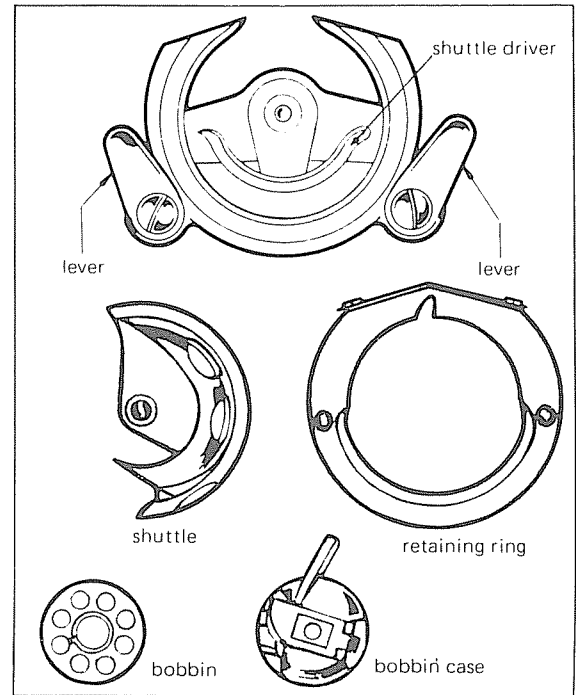
Raise needle to its highest position and remove bobbin case. Turn levers away from shuttle and lift out retaining ring and shuttle, by grasping center pin.

Clean the reverse side of feed dog with a small brush. Remove lint and thread from all parts of shuttle and wipe with a lightly oiled cloth.

### To reassemble:

Hold shuttle by center pin and fit carefully back into shuttle race, forming perfect circle with shuttle driver.

Replace retaining ring polished side out, making sure the bottom pin fits into notch. Lock retaining ring by turning levers back into position. Refit bobbin case with bobbin.





## Cleaning the feed dog

In order to make sure there are no disturbances in operation of the machine it is important to clean dust and thread waste on the feed dog as often as possible.

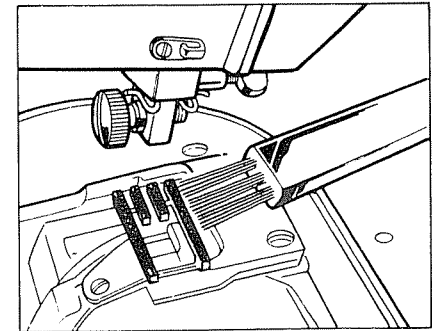
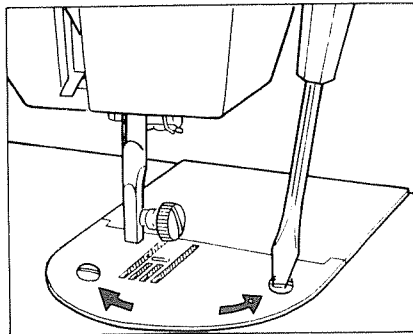
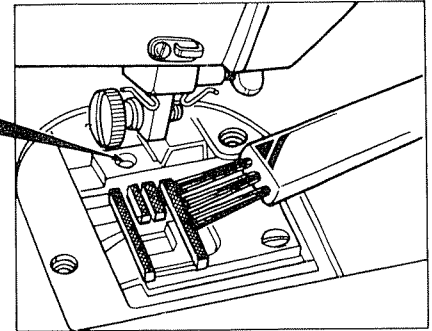
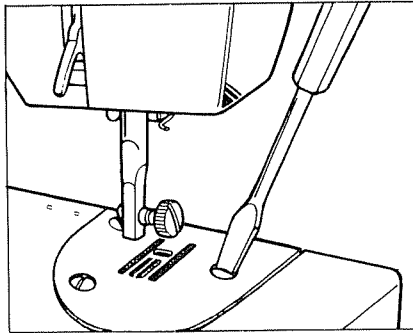
Remove the needle plate as shown in the illustrations on the left.

Clean the feed dog with a brush as shown on the right.

Replace the needle plate.

### Note:

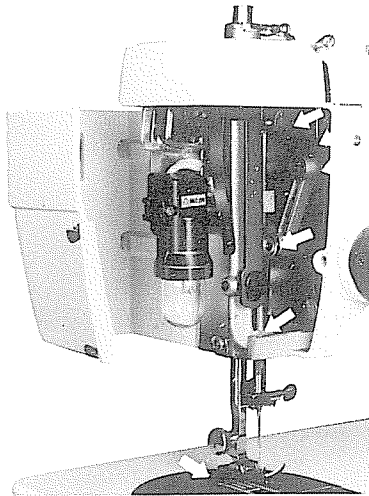
After cleaning, apply one or two drops of sewing machine oil to the holes as shown in the illustration on the right above.



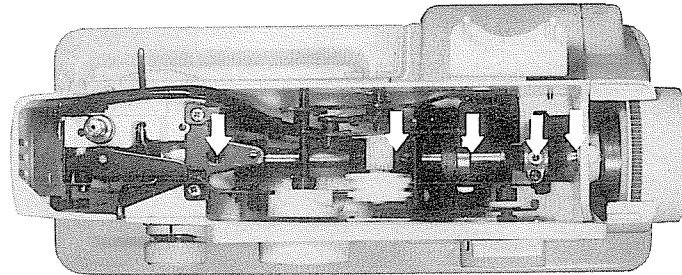
## How to oil the machine

The oil holes are marked with arrows in the illustrations below. Before oiling, they should be wiped clean. Apply one or two drops of a non-resinous sewing machine oil. If the machine is in constant use, this should be done every two or three days. If the machine should not run well after being out of use for a long period, apply a few drops of kerosene to the oil holes and run the machine fast with all covers on for about one minute. Before using the machine again oil it in the usual way.

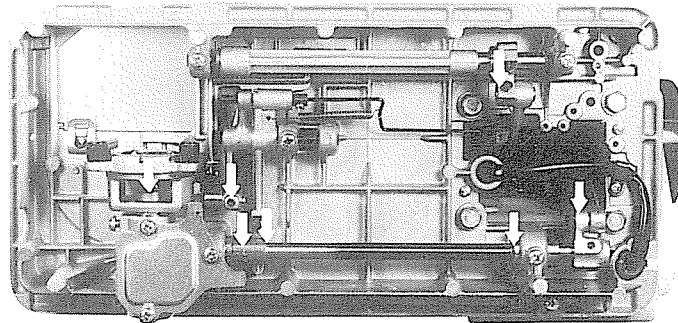
After oiling do not forget to sew first on waste fabric in order to soak up any excess oil.



Model 793-2 & 793 FA-2



Model 793-2 & 793 FA-2



Model 793-2

## Drive belt tension

If the motor no longer drives properly or the drive belt has just been replaced, the drive belt tension has to be adjusted.

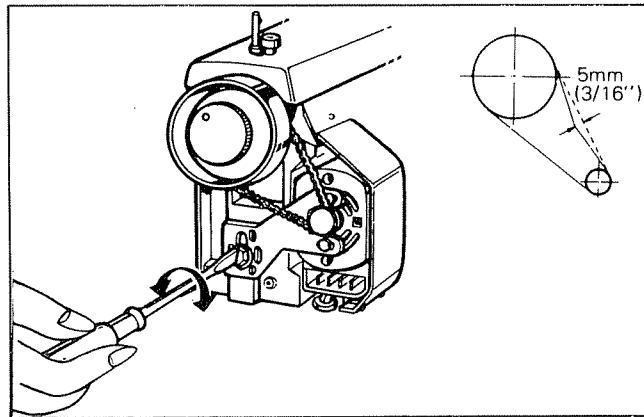
To do this:

Unscrew and take off the belt cover

Loosen the fixing screw of the motor bracket (see ill. below).

Push the motor bracket downwards to a position in which you can push the belt inwards by about 5mm (3/16'') (see ill.), then tighten the screw again.

**Caution: never adjust the belt too tight or you may damage the motor or the machine!**



## Faults and how to remedy them:

<b>Needle thread breaks</b>	
<b>Cause:</b>	<b>Remedy:</b>
Needle not properly threaded thread tension too tight Something wrong with the needle Thread is too heavy for needle Thread check spring is broken Needle not properly inserted Needle plate, shuttle or sewing foot damaged	Thread properly Loosen tension Replace needle Change Have a new spring fitted Insert needle properly Replace
<b>Bobbin thread breaks</b>	
Bobbin thread entangled because of incorrectly wound bobbin Bobbin thread not under tension spring on bobbin case	Wind bobbin correctly Thread bobbin correctly
<b>Stitches are left out</b>	
Needle not properly fitted on needle bar Needle bent or blunt Needle worn	Fit needle properly Replace Replace
<b>Needle breaks</b>	
Needle bent Needle not properly fitted Fabric too heavy or too hard You are pulling on the fabric	Replace Fit needle properly Use needle of correct size Do not pull

## Faults and how to remedy them

<b>Thread forms loops</b>	
<b>Cause:</b>	<b>Remedy:</b>
Thread tension not properly regulated Needle thread not properly threaded and/or bobbin thread not properly wound Thread size not suited to fabric Thread check spring not working properly	Read instructions for regulating needle- and bobbin thread tension Thread machine properly and/or wind bobbin thread correctly  See "Size of needle and thread"-page 10 Have spring replaced
<b>Shrinking or puckering of the seam</b>	
Tension too tight Sewing foot pressure too strong	Read instructions for regulating needle- and bobbin thread tensions Read instructions for regulating sewing foot pressure
<b>Irregular stitches</b>	
Needle- and bobbin thread of poor quality Bobbin thread unevenly wound	Use top quality threads Re-wind bobbin
<b>Machine does not run freely and makes a noise</b>	
Machine needs oiling Dust and thread in shuttle Wrong oil used, has now clogged machine Drive belt tension too tight	Read instructions on how to oil Read instructions on how to clean shuttle race Clean machine carefully and re-oil with top quality oil Loosen tension of drive belt

645-412-006 (E-N)