OWNER'S MANUAL



Kenmore SEWING MACHINE

MODEL 385. 19150

IMPORTANT SAFETY INSTRUCTIONS

Your sewing machine is designed and constructed only for HOUSEHOLD use. Read all instruction before using this sewing machine.

DANGER— To reduce the risk of electric shock:

- 1. An appliance should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
- 2. Always unplug before relamping. Replace bulb with same type rated 13.2 V d.c., 3 Watts.
- 3. Do not reach for the appliance that has fallen into water. Unplug immediately.
- 4. Do not place or store appliance where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.

WARNING-To reduce the risk of burns, fire, electric shock,

or injury to persons.

- 1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
- Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.

- 4. Never operate the appliance with any air opening blocked. Keep ventilation openings of the sewing machine and toot controller free from accumulation of lint, dust, and loose cloth.
- 5. Never drop or insert any object into any opening.
- 6. Do not use outdoors.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- 8. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
- 9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 10. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
- 11. Always use the proper needle plate. The wrong plate can cause the needle to break.
- 12. Do not use bent needles.
- Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
- 14. Switch the sewing machine off ("O") when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
- 15. Always unplug the sewing machine from the electrical outlet when removing covers, lubricating, or when making any other adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

IMPORTANT

Be sure to keep machine away heat sources, humidity, and direct sunlight.

SEARS, ROEBUCK AND CO.

Dear Customer:

You have just invested in a very fine zigzag sewing machine. Before using your new Kenmore machine, please pause for a moment and carefully read this booklet which contains instructions on how to operate and care for your machine.

Specific instructions are given on threading, tension adjustments, cleaning, oiling, etc. This will help you obtain the best sewing results and avoid unnecessary service expense for conditions beyond our control.

Advice on the operation and care of your machine is always available at your nearest Sears Retail Store. Please remember, if you have questions about your machine or need parts and service, always mention the model number and serial number when you inquire.

Kenmore Sewing Machine

Record in space provided below the model number and serial number of this appliance. The model number and serial number are located on the nomenclature plate, as identified on Page 6 of this booklet.

Model No. 385. _____ Serial No. _____ Retain these numbers for future reference.

THIS MODEL IS A CENTER NEEDLE, LOW BAR SEWING MACHINE.

	A Portable Case or Cabinet is Available
SECTION	2. PREPARE YOUR MACHINE FOR SEWING
	Set Up the Machine . 7~11 Plug in the Machine and Switch on the Power 7 Set the Foot Control 8 Check the Feed Balance Dial 8 Set the Pressure Adjusting Lever 8 Adjust the Presser Foot Lever 9 Thread Cutter 9 Accessory Storage Box 10 Free-Arm Sewing: the Removable 10~11
	Know What the Presser Feet Will Do
	Foot Storage Compartment
	• Presser Foot Types
	A. Zigzag Foot
	D Quilter 13
	F Zipper Foot
	F. Satin Stitch Foot
	G. Blind Hem Stitch Foot
	H. Straight Stitch Foot
	J. Sliding Buttonhole Foot
	N. Automatic Buttonhole Foot
	Check the Presser Foot
	Change the Presser Foot.
	Choose the Needle and Thread
	Check the Needle 2000 Check the Needle
	Fabric, Needle, Thread and Stitch Length Chart Chart 17
	• To Unange the Needle and a service state state of 1/
	The Demonstrate Bobbin from the Mechine 18
	IO nemove the bobbin from the watching and a second bin
	Additional Spool Pin 18
	• Wind the Bobbin 19
	Insert the Bobbin into the Bobbin Holder 20
	Prepare the Top Thread
	• Thread the Needle
	Pick Up the Bobbin Thread 22
	• Adjust the Top Thread Tension

For Straight Stitch	5	4		;	,				;		£	÷	~	÷		•	,	-	ı.	¢	c	:	23
For Zigzag Stitch	,	4	,		٤	÷	,	ł	ı	c	•	,	×		-	-	2	٠	,		,		24

SECTION 3. LEARN TO USE THE CONTROLS

Main Function of Buttons	25
Reverse Stitch Button	25
Auto-Lock Button	25
Up/Down Needle Position Button	25
Control Panel	26
 Display Sharpness Adjusting Knob 	26
Mode Button ,	27
Pattern Selection Buttons.	27
Direct Entry Stitch Buttons Direct Entry Stitch Buttons	27
Memory Button	28
Mirror Image Button	28
Clear Button	28
• Twin Needle Button and the second s	29
Editing Button	29
Stitch Width Control Button	29
Stitch Length Control Button	29
Message Button	30

SECTION 4. PRACTICE COMMON STITCHING SKILLS

Use the Seam G	រៃជា	de	5	. ,	7	,		-	÷			a	Ŧ	,			÷				7	÷	r	-				31
Turn a Square (Cor	m	er	÷	د		÷	¢	÷	÷		•		;	,	-			Ŧ	÷	÷			;	ł			31
Sewing on Heav	vy I	Fa	ıbı	ric	s		;	:	7	¢	Ŧ	v	7		c		;	-	,	,					¢			32
Dropping the F	eed	d I	Do	g	5		5	z				×	,	-	,	¢				e	;	÷		1			÷	32
Basting 19		,		. ,		-	,	,		,		-	-		7		-	÷		v		,			,	-	2	33
Darning 10		_					7	τ			,	:	,	÷	;	;	-	۲					£	,	-			34
Sew a Button .	, ,	-	×		. ,	ę			+	4	,	¢				÷	ž	-	4	ł	v		¢				÷	35
Put in a Zipper			٩	5		;	;		+	÷		:		÷		ı	¥		2	~				÷	3	86	\sim	38

SECTION 5. LEARN THE STITCHES

Char	of Sewing Functions	r r s	• •					39
Stitc	Pattern Chart	e e :-		= /		•	40	∼ 46
Strai	ht Stitches $[10] \sim [12]$, $[17]$ and	18			c.		47	~56
• St	aight Stitch	* = 2			,	• -		47
• To	pstitching			e •			· ,	48
• Pc	sition the Needle for Topstitching		÷ •	- •	,	- ,		49
• Pi	itucking.		۰.		5	• •	· · ·	50
• Q	ilting	e			,	• •	· · ·	51

• Gathering , , , , , , , , , , , , , , , , , , ,
Straight Stretch 12 53
Lock-a-Matic Seam 11 54
Outline Stretch 17
Saddle Stitch 18 56
Zigzag Stitches $13 \sim 15$, 20 , 27 and 32 , 57~63
• Basic Zigzae 13
• Satin Stitch 13
• Overcasting Stitch 13
• Mending 14
Overedge Seam 15 61
• Knit Stitch 20 62
• Double Edge Zigzag 27 62
• Rick-Rack Stretch 32
Automatic Darning 29
Darning Small Rips 65
Adjusting Evenness of Darning 65
Automatic Buttonholing [1] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4
Adjust the Stitch Width and Density 68
Manual Buttonholing
Stitch Density on One Side
Corded Buttonholes
Hemming and Edging Stitches 16, 21, 22, 28
30 and 31 72~76
Blind Hem Stitch (stretch) 16
Blind Hem Stitch (woven) 28
• Shell Stitch 28
• Scallop Stitch 21 and 22
Cut-Out Work Edging and Applique 30 and 31 76
Reinforcing Stitches 25 26 33 and 35 77~79
• Feather Stitch 25
• Fagoting Stitch 33
• Elastic Casing Stitch [33]
Elastic Stretch Stitch [35]
Twin Needle Stitching 21 22 24 25 30
36 40 and 41
Decorate with Geometric Patterns $[43] \sim [54]$ 81

Decorate with Stretch Stitch Patterns $39 \sim 41$ and $57 \sim 80$ Cross Stitch 34 Smocking 23 , 24 , 36 , 37 and 41 Sand Stitch 38 Shading Stitches 55 and 56 Program Decorative Stitch Patterns
 57 ~ 82 etc. 6 One Cycle Stitching 7 Two Cycle Stitching 88 6 Cycle Stitching by Pressing Mirro Image Button 89 89 7 Test Sewing Pattern Combinations 89 90 91 Memory Lock Alphabet and Numbers 91
 Monogramming [00] ~ [09], [10] ~ [40]
SECTION 6. PERFORMANCE PROBLEMS CHART What to Do When
SECTION 7. CARE FOR YOUR MACHINE Cleaning the Machine
PARTS LIST
INDEX

A Portable Case or Cabinet is Available

A full line of sewing cabinets is available at your nearest Sears retail store or through our general catalog. Another option . . . buy a Carrying Case . . . then your Kenmore goes anywhere, can be stored anywhere.





Locate and Identify the Parts



Locate and Identify the Parts (Continued)

Identify the Accessories



Set Up the Machine

• Plug in the Machine and Switch on the Power



Before connecting the power cord, make sure the voltage and frequency shown on the machine conform to your electrical power.

Turn off the power switch, and insert the foot control plug (1) machine plug (2) and power supply plug (3) in this order.

For Your Safety

- 1. While in operation, always keep your eye on the sewing area, and do not touch any moving parts such as the thread take-up lever, balance wheel or needle.
- 2. Always turn off the power switch, and unplug from the power supply:
 - · When leaving the machine unattended.
 - When attaching or removing parts.
 - When cleaning the machine.
- 3. Do not place anything on the foot control, except in use.



When the power switch is turned on, the straight stitch is set on liquid crystal display automatically.

Store the power supply cord



Power supply cord can be stored in extension table as shown.

PREPARE YOUR MACHINE FOR SEWING SECTION 2.

Set Up the Machine (Continued)

Set the Foot Control



sew.

To increase speed, gently press down with the ball of your foot.

To decrease speed, release your foot pressure slightly.

NOTE: The foot control is sensitive and will increase or decrease your sewing speed immediately. Practice on a scrap of fabric to regulate your sewing speed to your taste and needs.

OPERATING INSTRUCTIONS

"For appliances with a polarized plug (one blade wider than the other).

To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way."

"Foot Controller Model 21371 or YC-542 for use with Sewing Machine Models 385. 19150000 through 385. 19150999 and 385. 19153690."

ର

• Check the Feed Balance Dial

The toot control regulates the speed at which you For most sewing, the groove in the Feed Balance Dial should point to the arrow (" \triangleright ").

> You will rarely need to adjust the dial. But, if necessary, use this dial to regulate the feed balance for:

Buttonholes (See p. 70 for details).

- Any "stretch" stitch such as patterns [12]. 15 , 17, 18, 20, 21, 23 ~ 25, 27, \sim [41], [57] \sim [80] and monogramming 30
- when sewing on special tabrics.

• Set the Pressure Adjusting Lever



The pressure adjusting lever should be set at "3" for regular sewing. Reduce the pressure to "2" for applique, cut work, drawn work, basting and embroidery.

Set the pressure to "1" when sewing chiffon, lace, organdy and other fine tabrics. Velours and knits with a lot of stretch may also require a "1" setting.

0.... basting, manual darning and embroidery.

(For U.S.A. market only) 8



The Presser Foot Lever raises and lowers your presser foot.

You can raise it about 1/4" higher than the normal up position for easy removal of the presser foot or to help you place heavy fabrics under the presser foot.

You don't need a pair of scissors to cut the thread after you finish sewing. Just use the handy thread cutter.

PREPARE YOUR MACHINE FOR SEWING SECTION 2.

Set Up the Machine (Continued)

Accessory Storage Box

The lid of the accessory storage box lifts open toward you.

Sewing accessories are conveniently located in the box.

• Free-Arm Sewing: the Removable Extension Table

The extension table provides added sewing surface and can be Your sewing machine can do free arm sewing. easily removed for free arm sewing.

This feature makes sewing easy for:



For free arm sewing.

Pull the end of the extension table away from the machine, as illustrated.

For attaching the table.

Push the extension table until its lugs fit into the machine.

- - Bar tacking to reinforce pockets, plackets and waistlines on ready-made or homemade garments to avoid fabric bunching around the needle.

Ħ



* Stitching sleeves, waistbands, pants legs, or any circular garment area.



* Darning socks or mending knees, elbows, or areas of wear in children's clothes.



Sewing buttons on sleeves, waistbands, etc.

Know What the Presser Feet Will Do

The Presser feet are an important feature of this machine. You need to know what each foot does in order to use them effectively.

The Foot Storage Compartment with most of the presser feet is located in the accessory storage box. (See page 10). Automatic buttonhole foot N and other sewing accessories will be found under the Foot Storage Compartment.

NOTE: The numbers after each foot indicate the stitch patterns where you use the foot.

The Automatic Buttonhole Foot N fits in the accessory storage box as illustrated.

Foot Storage Compartment





Presser Foot Types



Know What the Presser Feet Will Do (Continued)

Presser Foot Types (Continued)



• Check the Presser Foot

Your presser foot is held in place by a Foot Holder. Each presser foot merely snaps on the foot holder, which is seldom removed.

If you need to remove or attach the foot holder, here is what you do:

To Remove:



To Remove:

Turn the screw toward the back of the machine. Use the large screw driver.

To Attach:



To Attach:

- 1. Match the hole in the foot holder with the threaded hole in the presser bar.
- 2. Fit the foot holder screw into the hole.
- 3. Tighten the screw by turning it toward you.

• Change the Presser Foot

Use the correct presser foot for the stitch you wish to sew. Consult the Stitch Pattern Chart and the detailed directions for sewing with the various presser feet.



To Snap Off the Presser Foot:

1. Press the Up/Down Needle Position Button to raise the needle to its highest position.

Red

button

- 2. Raise the presser foot.
- 3. Press the red button on the back of the foot holder. The presser foot will drop off.

Groove

To snap on:

To Snap On the Presser Foot:

- 1. Set the Pressure adjusting lever at "3".
- Place the presser foot so the horizontal pin on the foot is just under the groove of the foot holder.
- 3. Lower the presser fool holder to lock the presser foot in place.
- NOTE: If you do not hear the presser foot snap in place, press down on the presser foot holder firmly until you hear the snap.

Choose the Needle and Thread



The choice of needle and thread depends on the fabric you are sewing.

In your needle case, you will find the following color-coded needles:

Blue (11)	for stretch fabrics
Orange (11)	for lightweight fabrics
Red (14)	for medium or medium-heavy weight fabrics
Purple (16)	for medium-heavy weight and decorative top- stitching on these fabrics.
	(This needle has a larger thread hole for thicker topstitching thread.)
Green (18)	for heavy weight fabrics and decorative top- stitching on these fabrics.
Twin Needle	for sewing parallel rows of straight or deco- rative stitches.

NOTE: These needles are found in the accessory storage box. (see page 10)

• Check the Needle

- 1. Look for barbed or blunt point.
- 2. A damaged needle can cause permanent snags or runs in knits, fine silks and silk-like fabrics.

Always buy a good quality thread. It should resist tangling and be strong, smooth and consistent in thickness.

• Fabric, Needle, Thread and Stitch Length Chart

FABRIC	NEEDLE SIZE AND COLOR	THREAD SIZE	RECOMMENDED STITCH LENGTH SETTING
Lightweight: Batiste, Dimity, Chiffon, Silks, Fine Lace, Organza, Crepe, Taffeta, Voile, Organdy	11-ORANGE	Polyester Core/Cotton Wrap Fine Mercerized Cotton Silk A	2.0 (12 stitches per inch)
Medium Weight: Cotton, Cotton Blends, Percale, Gingham, Shantung, Pique, Seersucker, Satin, Knits, Suitings, Linen, Wool Crepe, Leather	14-RED	50 Mercerized Cotton Polyester Core/Cotton Wrap Silk A	2.0 ~ 2.5 (10 ~ 12 stitches per inch)
Medium Heavy Weight: Corduroy, Denim, Wool, Sailcloth, Wool Flannel, Gabardine, Velvets, Leather	14-RED or 16-PURPLE	50 Mercerized Cotton Mercerized Heavy-Duty Polyester Core/Cotton Wrap Silk A	2.5 ~ 3.0 (8 ~ 10 stitches per inch)
Heavy Weight: Coatings, Upholstery Cotton Duck, Heavy Twills, Canvas	18-GREEN	Heavy Duty Mercenzed Cotton Polyester Core/Cotton Wrap Silk A	3.0 (8 stitches per inch)
Decorative top-stitching on all types of fabric	16-PURPLE 18-GREEN	Buttonhole Twist (Use as top thread only)	$4.0 \sim 4.5$ $(4 \sim 6 \text{ stitches per inch})$
Stretch Fabric: Polyester Double Knits, Nylon Tricot, Jersey, Stretch Terry, Spandex, Cire Tricot	11-STRETCH FABRIC NEEDLE- BLUE	Polyester Core/Cotton Wrap 50 Mercerized Cotton	2.0 ~ 2.5 (10 ~ 12 stitches per inch)

• To Change the Needle



- NOTE: Raise the needle bar to its highest position by pressing the Up/Down Needle Position Button:
- 1. Loosen the needle clamp screw by turning it toward you.
- 2. Remove the needle by pulling it downward.
- 3. Insert the new needle into the needle clamp with the flat side away from you.
- 4. Push the needle up as far as it will go.
- Tighten the needle clamp screw firmly with the large screwdriver from your accessory box.

Prepare the Bobbin

• To Remove the Bobbin from the Machine



 Remove the cover plate by (2) Take out the bobbin. sliding the hook cover plate release button to the right. Horizontal Spool Pin



Lift up the spool pin. Place the spool of The additional spool pin is used to wind thread on the spool pin with the thread extra bobbin without unthreading the coming off the spool as shown.

Attach the large spool holder pressing it additional spool pin in the hole. Firmly against the thread spool.

* The small spool holder is used with narrow or small thread spools.



The additional spool pin is used to wind extra bobbin without unthreading the machine or twin needle sewing (see page 80). To use, insert the spool stand and an additional spool pin in the hole. Place the felt and spool on the pin with the thread coming off the spool as shown.



- (1) Guide the thread around the thread guide.
- (2) Thread through the hole in the bobbin from the inside to the outside.
- ③ Put the bobbin on the bobbin winder spindle, and push it to the right. With the free end of the thread held in your hand, depress the foot control. Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin.
- (4) Depress the foot control again. When the bobbin is fully wound, it will stop automatically.
- (5) Return the bobbin winder to its original position by moving the spindle to the left, and cut the thread as shown.

- Prepare the Bobbin (Continued)
- Insert the Bobbin into the Bobbin Holder



(1) Put the bobbin into the bobbin holder so that the thread feeds counter-clockwise (left).



2 Pull about 4 inches of thread toward you through the tension slot (A).



(3) Then pull the thread clockwise toward the back of the machine through the slot (B).

1

2



(4) Pull out about 15 cm (6") of thread and attach the hook cover plate.

- Prepare the Top Thread
- Thread the Needle





Raise the presser foot lifter.

Press the Up/Down needle position button twice to raise the needle.

- 1 Draw thread into thread guide using both hands.
- (2) Then down around the check spring holder.
- (3) Firmly draw the thread from right to left over the take-up lever and down into the take-up lever eye.
- (4) Then down through the lower thread guide.
- (5) Slide the thread behind the needle bar thread guide on the left.
- (6) Thread the needle from front to back.

Prepare the Top Thread (Continued)

• Pick Up the Bobbin Thread



your left hand.

Up/Down needle position button He He 2



(1) Hold the top thread lightly with (2) Press the Up/Down Needle Position Button Twice.

Bring the bobbin thread up by pulling the top thread.

3 Pull both threads under and to the back of the presser foot, leaving 4 to 6 inches of thread clear.

Adjust the Top Thread Tension



For Straight Stitch

The ideal straight stitch will have threads locked between the two layers of fabric, as shown above, magnified to show detail.

If you look at the stitch, front and back, you will notice that there are no gaps, that each stitch is smooth and even.

When adjusting top thread tension, the higher the number, the tighter the top thread.

Choose the Correct Tension:

The best tension will depend on;

the stiffness and thickness of the fabric the number of fabric layers the type of stitch



Tension is too loose:

The top thread shows through the bottom of the fabric. The bottom side of the stitch will feel bumpy.

Tension is too tight:

The bobbin thread will come through the top of the fabric. The top side of the stitch will feel bumpy.

Prepare the Top Thread (Continued)

• Adjust the Top Thread Tension (Continued)

For Zigzag Stitch

In the correct zigzag stitch, the bobbin threads will not show on the top side of fabric and the top threads will show slightly on the bottom side. See below for the correct appearance. To match this appearance, adjust your top tension.





Top side of Fabric



Bottom side of Fabric

Too Tight:

Corner of each zigzag will pull together on the top side of fabrics.

Top tension



Top side of Fabric



Bottom side of Fabric

Too Loose:

The top thread will loop through bottom side of tabric and will be pulled almost together.

Just Right



Top side of Fabric



Bottom side of Fabric

Just Right:

Minimize the amount of top thread visible on the bottom side of fabric without causing excessive puckering or causing the bobbin thread to show on the top side. Results vary with fabric, thread and sewing conditions.

Main Function of Buttons



Reverse Stitch Button



Use this button to:

- ---- reinforce the seams and the top edges of pockets:

At Straight Stitching, Zigzag Stitching

) and Mending Stitching (ž). ₹

Press and hold the reverse stitch hutton.

The machine will sew in reverse until you release the button.

At Utility

Stitching and Decorative Stitching:

Press this button, then the machine will sew auto-lock stitch immediately and stops automatically.



We I) and Mending Stitching (

The machine will take a few stitches in place and stop automatically.

At Utility

Stitching and Decorative Stitching:

Press this button running the machine then the machine will sew auto-lock stitch at the end of pattern and stops automatically.

Up/Down Needle Position Button



At Straight Stitching Zigzag Stitching When you press this button, the needle will go up or down.

> It the needle is up and you press this button, the needle will go down to its lowest position.

> If the needle is down and you press this button, the needle will go to its highest position.

Control Panel



Display Sharpness Adjusting Knob



By turning the display sharpness adjusting knob, sharpness of liquid crystal display will change.

 $\widehat{}$

(î

12

Stitch No.

====

ą

4

7

MEM

ρ

Foot No.

MODE

Utility mode

FOOT

2

QA



You can select these patterns by pressing pattern selection buttons.

2

5

8

٥

The following patterns can be selected simply by pressing the stitch button.



When the power switch is turned on, the utility mode is set automatically.

Press the mode button, to change to block alphabet or script alphabet.

The LED indicates the mode selected.

To Select a Stitch Pattern:

Press two numbers to indicate which pattern you want to use.

Memory Button



The Memory Button, with its LED Light, will "memorize" your pattern selection. Press the Memory Button after you select your stitch pattern. The LED light will go on to show that the machine has recorded your selection.

NOTE: If you are selecting a series of different stitch patterns, you must press the memory button after each selection. The machine will remember them in order.

R-A

Use this button to:

Mirror Image Button

- sew & memorize patterns in a mirror image.
- sew & memorize letters and numbers in two third size.

Clear Button



The Clear Button works in two ways to clear a series of stitch patterns, depending on whether you have pressed the foot control.

1. Foot Control Not Pressed:

The Clear Button clear one stitch pattern at a time, beginning with the last selected and ending with the first selected. This allows you to correct any mistakes made while programming a series of patterns. The Clear Button will delete all stitches at once if pressed after editing.

2. Foot Control Pressed:

The Clear Button deletes all stitch patterns in the series at once.

NOTE: Turning off the machine will clear the memory completely.

28

Twin Needle Button



Just press this button and the machine Use this button to: automatically reduces the maximum width for twin needle sewing.

Press button again for single needle sewing.

For detailed instruction, see page 80.





- check and correct pattern combinations before sewing.
- press again when editing is completed and the light will go out.

For editing, use the stitch width control button to select editing position. (see page 94, 95).

Stitch Width Control Button



- Stitch width and stitch length will be Stitch width and stitch length will be showing on liquid crystal display.
- To Decrease the stitch width: Press the "-" button.

The stitch width will decrease. To Increase the stitch width: Press the "+" button.

The stitch width will increase.

• Stitch Length Control Button



- showing on liquid crystal display.
- * To Decrease the stitch length: Press the "-" button.

The stitch length will decrease. To Increase the stitch length: Press the "+" button.

The stitch length will increase.

Message Button



When you press the message button, the message on the liquid crystal display will scroll to the left after 2 seconds.

* Suitable presser foot, Thread tension, Pressure or special sewing method will be shown on the liquid crystal display.



Adjusting the thread tension may be required depending on the type of fabric and thread being used.



The seam guides on the needle plate are engraved to help you measure seam width. The lines are 1/8'' apart, with the 5/8'' and 7/8'' lines marked.

Turn a Square Corner

1.52



To turn a square corner 5/8" from the fabric edge:

- 1. Stop stitching and lower the needle by pressing the Up/Down Needle Position button when the fabric edge facing you lines up with the cornering guide as shown.
- 2. Raise the presser foot and turn the fabric to line the edge with the 5/8" seam guide.
- 3. Lower the presser foot and begin stitching in the new direction.

Sewing on Heavy Fabrics



When sewing from 3 to 12 layers of fabric, such as sewing over welt seams when hemming jeans.

- 1. Use Foot A (Zigzag foot) with the black spring button.
- NOTE: This black button locks the foot so it does not give with the fabric.
- 2. Sew as usual.
- 3. Stop when your needle reaches the point where the fabric layers increase.
- 4. Lower the needle and raise the presser foot.
- 5. Press and hold the black button as you lower the presser foot.
- 6. Release the black button and continue sewing.





The drop feed lever is located underneath the free arm bed on the back side of the machine. Remove extension table to operate.

- To raise the feed dogs, push the lever in the direction of the arrow as illustrated.
 Then turn the handwheel.
- (2) For dropping the feed dogs, push the lever in the direction of the arrow as illustrated.
- Feed dogs must always be up for normal sewing.

Basting 19





Drop the feed dogs. (see p. 32).

- Press the toot control. The machine will make one stitch and stop automatically.
- 2. Release the foot control.
- 3. Hold the fabric taut and slide it to the place where you want the next stitch.
- 4. Press the foot control.

When basting is completed, reset the presser adjusting lever to 3, reset the tension dial to 5 and raise the feed dog.

Darning 10





- 1. Drop the feed dogs. (see p. 32).
- 2. Stretch the fabric with the hole in the center between embroidery hoops, as shown.
- 3. Lower the presser bar and sew at a slow speed.
- 4. Move the fabric back and forth slowly until you have covered the darning area.
- 5. Turn the fabric 1/4 turn and sew another layer of stitching over the first layer.
- NOTE: If your fabric is thin or badly damaged, use a separate piece of fabric under the hole to refinforce it.
- 6. When darning is completed, reset the presser adjusting lever to 3, tension dial to 5 and raise the feed dog.
- NOTE: See pages 64 ~ 65, automatic darning for a quick, easy way to mend rips & holes.



How to darn correctly.

Make the turning points of each row blunt or the stitching will draw little holes at the ends. Beginners may prefer the L or M movement. Take care not to get circles.

The quick mastering of this work depends on proper guiding.

Therefore:

- Hold the hoop correctly.
- Always work from left to right.
- Move work lengthways (not sideways).
Sew a Button





Drop the feed dogs. (see p. 32).

- 1. Match the button holes to the horizontal slot on the presser foot.
- 2. Lower the foot to hold the button in place.
- 3. Turn the hand wheel by hand until the needle point is just above the button.
- Press the stitch width button (+ or -) so the needle will enter the <u>left</u> hole of the button.





- Turn the hand wheel so the needle will enter the right hole of the button. Readjust the stitch width if necessary.
- 6. Stitch several times.
- After you finish sewing, cut the thread but leave 3 to 4 inches of thread at the button.
- 8. Draw the thread to the reverse side of the fabric and knot the threads.

When sewing the button is completed, raise the feed dogs for normal sewing.

Put in a Zipper

It's as easy at A - B - C





- A. Attach the zipper foot, as shown.
- 1. To sew on the left side of the zipper, attach the foot holder to the right pins on the zipper foot.
- 2. To sew on the right side of the zipper, attach the foot holder to the left pins on the zipper foot.



- B. Prepare your fabric.
- Put the top sides of the fabric together and sew to the end of the zipper opening. Use the reverse to lock the stitches.
- 2. Set the stitch length at "4.5" and sewing zipper opening.

Put in a Zipper (Continued)





C. Sew in the zipper.

- 1. Fold back the left seam allowance as shown.
- 2. Turn under the right seam allowance to form a 1/8" fold.
- 3. Place the zipper teeth next to the 1/8" fold and pin in place.
- NOTE: Be sure the top of the zipper (the slider) is at the top of the garment.



- 4. Attach the foot holder to the right pins on the zipper foot.
- Lower the zipper foot on the top side at the bottom of the zipper so that the needle pierces the fold and the zipper tape.
- 6. Sew through the fold and the zipper tape to the point where the slider begins.
- 7. Lower the needle to hold the fabric and raise the presser foot.



8. Open the zipper.

9. Lower the presser foot and stitch the rest of the seam.



10. Close the zipper and turn the fabric top side up. Spread flat.



- 11. Remove the zipper foot and attach the foot holder to the left pins on the zipper foot.
- 12. Stitch across and below the bottom of the zipper.
- Turn the corner and continue to guide the foot along the zipper teeth, as shown.
 Stitch through the fabric and the zipper tape.



- 14. Stop about two inches from the top of the zipper.
- 15. Lower the needle into the fabric and raise the presser foot.
- 16. Remove the basting stitches and open the zipper.
- 17. Lower the foot and stitch the rest of the seam. Make sure the fold is even.

Chart of Sewing Functions

Now that you are familiar with your machine and ready to sew, what are you going to sew? The following chart tells you (in alphabetical order) what sewing functions this machine performs and directs you to the proper page for detailed instructions. In many cases, you also have a choice of stitches.

FUNCTION	STITCH PATTERN(S)	Ref. Page	FUNCTION	STITCH PATTERN(S)	Røf. Page
APPLIQUE	30, 31	43,76	GATHER	10	40, 52
BARTACK	13, 14	40, 60	HEMS	15, 16, 20, 27, 28	41~43, 61, 62, 74
BASTE	10, 19	33,40,41	KNITS, STRETCH FABRIC	See all Stitches	40~45, 53, 55~56
BATHING SUIT, SEW	20	42,62		marked "S"	61~63, 73, 75~80,
BLIND HEM	16, 28	41, 43, 73			84~85
BUTTON, SEW	13	35,40	MEND	10, 13, 14, 29	34, 40, 57, 64~65
BUTTONHOLE		46,66~71	PINTUCK	10	40, 50
BARTACK			QUILT	10	40, 51
ROUNDED			REINFORCE SEAMS	14, 17, 25, 26, 33, 35	40~42, 44, 55, 60,
KEYHOLE					77~79
CROSS STITCH	34	44, 83	SHELL TUCKS	28	43, 74
CUT-OUT WORK	30, 31	43,76	SMOCK	23, 24, 36, 37, 41	44, 84
DARN	10, 13, 14, 29	34, 40, 43, 64, 65	STRAIGHT SEAM	10,11	40, 47~52, 54
EDGE A GARMENT/PROJECT	15, 20, 21, 27, 28,	41~43, 61~62, 74,	STRETCH STITCH	12 and all Stitches	40~45, 53, 55~56,
	30, 31	75~76		marked "S"	61~63, 73, 75~80,
DECORATE (WITH STITCHES)	23~26, 28, 36, 37,	42~45, 74, 77, 80, 81			84~85
	41~54		TOPSTITCH	10	40, 48
ELASTIC, APPLY	25, 33, 35	42, 44, 77, 79	SADDLE STITCH	18	41,56
EMBROIDER	10, 13, 34, 38, 55, 56	40, 44~45, 58, 83,	OUTLINE STITCH	17	41, 55
		85~86	TRIMS, SEW	20~22	42, 62, 75
FAGOTING (create open work)	25, 26, 33	42, 44, 78	TWIN NEEDLE STITCH	21, 22, 24, 25, 30,	42,80
FINISH RAW EDGE	13~16, 20, 28	40~43, 59~62, 74		36, 40, 41	
			ZIPPER	10	36~38, 40

Stitch Pattern Chart

Stitch Pattern	No.	Foot	Other Attach.	Needle	Thread Tension	Adjusting Lever	Uses	Refer to Page
	10	Straight (H)	Quilter Zipper toot Blind hem stitch foot Satin stitch foot	Check Chart on p. <u>17</u>	2~6	3	Regular seams, pintucking, quilting, zippers, topstitching, darning, mending, basting, gathering, etc.	34 36 ~ 38 47 ~ 52
LOCK-A- MATIC SEAM	11	Zigzag (A)		Check Chart on p. <u>17</u>	2~6	3	For fastening and securing at the beginning and the end of a seam. (Press the Reverse Button at end of seam.)	54
STRAIGHT STRETCH	12	Straight (H)		Check Chart on p. <u>17</u>	2~6	3	Use on knits and other stretch fabrics good for topstitching.	53
ZIGZAG (regular)	13	Zigzag (A)	Satin stitch foot	Check Chart on p. <u>17</u>	3~8	3	Mend, darn, finish edges, apply trims, embroider, gather, buttons, satin stitch, monogram decorative stitches.	35 57 ~ 59
MENDING	14	Zigzag (A)		Check Chart on p. <u>17</u>	3~6	3	Use for sewing patches, repairing straight or corner tears, finishing seams on terrycloth sewing bar tacks for belt loops and drapery pleats istronger than zigzag).	60

······			Other	Nandla	Thread	Adjusting	Uses	Refer to Page
Stitch Pattern	No.	Foot	Attach.	1466710	Tension	Lever	the for overcesting, for knits and woven	61
OVEREDGE SEAM	15			Check Chart on p. <u>17</u>	3~7	3	tabrics needing extra strength, tor narrow seams on knits or heavy weight woven tabrics.	
15 15 15 15 15 15 15 15 15 15 15 15 15 1		Overedge (C)						72~73
BLIND HEM STITCH	16			Check Chart on p. 17	2~6	3	Use for stretch fabrics, more elastic.	12 13
		Blind Hem Stitch (G)						
S S	_			Blue	3~6	3	Use in place of straight stitch on knits, bias	55
OUTLINE STRETCH	17	•		(11)			seam, tricot, chillon ioi a hat, ion poor ing	
		Zigzag (A)						
<u> </u>				Check	2~6	3	Topstitching suits, blazers, jumpers, denim	56
SADDLE	18	Zigzag (A)		Chart on p. 1	7		00(115.	
		Blind Hem Stitch (G)						33
	19			Blue	0~2.9	5 0	Basting, tailor tacks, tack quilt layers.	
		Zigzag (A)						

Stitch Pattern Chart (Continued)

	Stitch Pattern	No.	Fo	ot	Other Attach	Needle	Thread	Adjusting	1	
a da da se a se a se a se a se a se a se	KNIT STITCH	20	Zigzag (A)			Blue (11)	3 ~ 6	Lever 3	Uses for swimwear and stretch velour.	62
	TWIN NEEDLE STITCHES	21 22 24 25 30 36 40 41	Zigzag (A) or Satin (F)		Twin Needle		3~7	3	Use for sewing parallel rows of straight or decorative stitches adding an exquisite touch to table linen and clothing. $ \begin{array}{c c} \hline & & \\ \hline & \\ $	80
	SCALLOP STITCH	21 22	Zigzag (A)			Check Chart on p. <u>17</u>	3~6	3	Use for scalloped edges on collars, pockets or placemats. Create a delicate edge on thin tabrics. Decorate edges on hemlines or sleeves.	75
	FEATHER STITCH	25 26	Zigzag (A)			Check Chart on p. <u>17</u>	2~6	3	Hand-quilting stitch, used to reinforce stretch and woven fabrics, use on spandex under- garments and to decoratively hem elastic fabric. Use for patchwork quilting.	77
	DOUBLE EDGE ZIGZAG	27	Overedge (C)			Check Chart on p. <u>17</u>	3~7	3	Use for fabrics that tend to fray extensively such as linens and gaberdines.	62

42

.

Stitch Pattern	No,	Foot	Other Attach.	Needle	Thread Tension	Adjusting Lever	Uses	Refer to Page
BLIND HEM STITCH	28	Blind Hem Stitch (G)		Check Chart on p. <u>17</u>	2~6	3	Use for woven fabrics: blind hem and overcasting.	73
SHELL STITCH	28	Satın (F)		Check Chart on p. <u>17</u>	6~9	3	Finish hems, sleeve and neck openings. Use on nylon tricot and other lingerie to overcast and seam. Do shell tucking on blouses and lingerie.	74
AUTOMATIC DARNING	29	Sliding Buttonhole (]		Check Chart on. p. <u>17</u>	2~6	3	Darn rips and holes quickly and automati- cally.	64 ~ 65
CUT-OUT WORK APPLIQUE	30 31	Satin (F)		Check Chart on p. <u>17</u>	2~6	2	Use on cut-out work and applique for edging the designs, also on placemats, blankets, collars, cuffs and pockets.	76

Stitch Pattern Chart (Continued)

Stìtch Pattern	No.	Foot		Other Attach.	Needle	Thread Tension	Adjusting Lever	Uses	Refer to Page
RICK-RACK STRETCH	32	Zigzag (A)			Check Chart on p. <u>17</u>	2~6	3	Decorate garments with one row or several.	63
J s		Satin (F)							
ELASTIC CASING FAGOTING	33	Satin (F)	I	Use paper behind	Check Chart on p. <u>17</u>	3~8	3	Elastic Casing: Replace bias tape casings in wrists and waists; tack down elastic. Fagoting: Join two folded edges for decorative open-work appearance.	78 ~ 79
CROSS STITCHING	34	Satin (F)	IT		Check Chart on p. <u>17</u>	2~6	3	Use in embroidery, combine with letters and numbers for samplers.	83
ELASTIC STRETCH	35	Zigzag (A)			Check Chart on p. <u>17</u>	3~6	3	Use for applying elastic.	79
s		Satin (F)							
SMOCKING	23 24 36 37	Zigzag (A)			Check Chart on p. <u>17</u>	2~6	3	Smocking on children's clothes, blouses, curtains, etc.	84
36 1572/15 S	41	Satin (F)	I						2

Stitch Pattern	No.	Foot	Other Attach.	Needle	Thread Tension	Adjusting Lever	Uses	Refer to Page
SAND STITCHING	38	Satın (F)		Check Chart on p. <u>17</u>	2~6	1 or 2	Fill in designs already outlined with satin or other embroidery stitch.	85
DECORATIVE GEOMETRICS	43~ 54	Satin (F)		Check Chart on p. <u>17</u>	2~8	3	Decorate garments with one row or several, one stitch or a combination. $\begin{pmatrix} 43 \\ 44 \\ 45 \\ 45 \\ 46 \\ 47 \\ 48 \\ 48 \\ 49 \\ 50 \\ 51 \\ 52 \\ 53 \\ 54 \\ 49 \\ 50 \\ 51 \\ 52 \\ 53 \\ 54 \\ 48 \\ 54 \\ 54 \\ 54 \\ 54 \\ 54 \\ 54$	81
SHADING STITCH 55 56 WHYPHY	55 56	Satin (F)		Check Chart on p. <u>17</u>	2~8	1 or 2	Use for free hand machine embroidery and attractive shading stitch applique.	86
STRETCH STITCH DECORATIVE	39~ 41, 57~ 67	Satın (F)		Check Chart on p. <u>17</u>	2~6	3	Decorate with flower or leaf designs. Use in combination (programmable) or singly. 39 40 41 65 69 70 71 72 73 74 7540 1 1 65 69 4 1 1 1 1 1 1 1 1 1 1	82, 87~89

Stitch Pattern Chart (Continued)

Stitch Pattern	No.	Foot	Other Attach.	Needle	Thread Tension	Adjusting Lever	Uses	Refer to Page
MONOGRAM Numbers, Letters, Period, Space	00~40	Satin (F)		Check Chart on p. <u>17</u>	2~6	3	Numbers and letters or sentences may be programmed in sequence for monogramming. $ \begin{array}{c} 00 & 01 & 02 & 03 & 04 & 05 & 06 & 07 & 08 & 09 \\ 0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 \\ A & B & C & D & E & F & G & H & I & J & K \\ 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 & 30 & 31 \\ L & M & N & O & P & O & R & S & T & U & V \\ 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 \\ W & X & Y & Z & & & & & & & \\ W & X & Y & Z & & & & & & & & & \\ \end{array} $	91 ~ 93
BUTTONHOLE Bartack Rounded Keyhole	1 2 3	Sliding Buttonhole (J) Automatic buttonhole (N)		Check Chart on p. <u>17</u>	2~6	3	Buttonholes in three shapes: also corded buttonholes. BH BH BH BH 3 Bartack Rounded Keyhole	66 ~ 71

Straight Stitches $10 \sim 12$, 17 and 18

When you turn on your machine, it is automatically set to sew a straight stitch [10]).

• Straight Stitch



The Stitch and Its Uses

You can use your basic straight stitch in many ways besides just sewing a straight seam. Three common uses for the straight stitch are:

- Pintucking
- Quilting
- Topstitching

All are discussed in this section.



To sew a straight stitch:

- 1. Raise the presser foot.
- 2. Raise the needle to its highest position.
- Place the edge of the fabric next to a stitching guide line on the needle plate (5/8" is most common).
- 4. Draw the threads towards the back and lower the presser foot.
- 5. Press the foot control.
- Hold the fabric loosely and gently guide it along the guide line, so that it feeds naturally.
 Do not force the fabric or try to pull it tight.



- At the end of the seam, you may want to reverse to lock the stitch.
- 8. When you stop sewing, the needle will automatically rise to its highest position.
- 9. Raise the presser foot and remove the fabric.
- 10. Cut the threads.

Topstitching



The Stitch and Its Uses

Topstitching emphasizes the lines of your garment and keeps seams and edges flat and crisp.

Accent suits or blouses with one or two rows of topstitching around the outer edges of cuffs, lapels or collars.

Use the Auto-Lock button to secure your topstitching and eliminate unsightly back-tacking.



Here's How

- 1. Lower the presser foot.
- 2. Keep the edge of the fabric next to the right edge of Foot A.
- 3. Evenly guide the fabric along this edge to produce an even row of topstitching 3/8" from the edge.
- NOTE: You can easily adjust your needle from left to right for topstitching without moving your fabric from under the presser foot. See the next page for instructions.

Position the Needle for Topstitching

The needle can be positioned to the left, center and right.



To position the needle to the left:

You can move the needle to any position desired by pressing stitch width control button.

W 0.0 on screen is for left needle position.



To position the needle at the center:

You can move the needle to any position desired by pressing stitch width control button.

W 3.5 on screen is for center needle position.



To position the needle to the right:

You can move the needle to any position desired by pressing stitch width control button.

W 7.0 on screen is for right needle position.





NOTE: Left or right needle position is recommended for stitching edge of the fabric.

Besides the normal straight stitch method of topstitching, this machine does other types of topstitching that are better for knits or produce a more elaborate decorative effect.

Always use zigzag foot A for left and right needle position. Do not use straight stitch foot H.

Pintucking



The Stitch and Its Uses

Pintucks are narrow tucks spaced close together to add design interest on such items as blouses and pillowcases. One pintuck can form a permanent front crease on knit pants.



Here's How

- 1. Attach the blind hem stitch foot.
- 2. Place the folded fabric under the presser foot.
- 3. Position the needle 1/16" inside from the folded edge and lower the presser foot.
- 4. Adjust the sliding guide on the blind hem foot to the folded edge by turning the guide screw, as shown.
- 5. Feed the folded edge smoothly against the sliding guide.
- NOTE: If the fabric tends to pucker, hold the material slightly taut while sewing. Also, decrease the upper tension slightly.

Quilting



The Stitch and Its Uses

Quilting is stitching two layers of fabric together with batting in between to add dimension and warmth.

You can use quilting on entire garments or parts of garments, such as yokes, pockets, cuffs and collars. It is also popular for table fashions. In addition to straight stitch quilting, you can quilt with decorative stitches or stitch pattern combinations.





Here's How

To do quilting successfully, follow these simple steps:

- 1. Loosen the quilter screw on the back of the presser foot as shown.
- 2. Slide the quilting guide (D) into the opening under the screw to the width between lines of auilting stitches you desire.
- 3. Tighten the screw.
- 4. Sew the first row of stitching.
- 5. Sew other rows, guiding the quilting guide over the previous row of stitching.
- NOTE: When you are quilting large areas, tack the layers together with the basting stitch. Then quilt from the center out.

Another quilting variation:

Instead of quilting with rows of straight stitches, you can bartack your quilt at regular intervals.

Set up the machine as if you were going to sew a button (see p. 35). Position your fabric and bartack.

• Gathering



The Stitch and Its Uses

Use this stitch to gather trim skirts, sleeves at the top, smocking or any time you want more fullness. Use two rows of stitches.

Here's How (for medium weight fabrics and tight, firm gathers)

- 1. Set the stitch length to "4.0".
- 2. Loosen the needle thread tension to "2" or as desired.

- NOTE: Steps 3 and 4 are for 5/8" seam allowances. For other widths, adjust your fabric accordingly.
- 3. Sew the first row of stitches with the right edge of Foot A on the edge of the fabric.
- 4. Sew the second row with the right edge of Foot A following the first row of stitches.
- 5. Using both hands, pull the bobbin threads from each end of the fabric until you have the gathers you want.
- 6. Knot the threads at each end even out the gathers.

Here's How (for light weight fabrics, ruffles and flounces)

- 1. Set your stitch length at "4.5".
- 2. Secure your gathering rows at the beginning.
- 3. Stitch two rows, as in steps 3 and 4 for medium weight fabrics.
- 4. Do not lock the threads at the end of your stitching rows.
- 5. Pull the bobbin threads to produce the fullness you desire.
- 6. Knot the threads and even out the gathers.





The Stitch and Its Uses

This stitch is the stretch variation of the straight stitch, especially developed for knits and stretch fabrics.

This stitch can also be used for topstitching.





A NOTE ON STRETCH STITCHING

Stretch stitching was developed to be used on stretch fabrics and knits. It can be used on other fabrics as well. It works well on curved seams and on any garments that will receive a great deal of strain (ie. children's clothes).

The stretch stitch does not actually stretch as it is being sewn, but is stitched in a forward and back motion (sometimes called a "reverse-action" stitch), so that it will give instead of break when the fabric stretches.

Lock-a-Matic Seam [11]



For general sewing, the lock-a-matic stitch is the fastest way to sew and secure a seam.

It is programmed to automatically sew reverse stitches at the beginning and when the reverse stitch button is pressed at the end of a seam.

Seams are sewn quickly and securely.



Lower the needle close to the top edge of the fabric.

The machine will sew four stitches forward, four stitches in reverse then continue sewing forward.



When you reach the lower edge of the fabric, touch the reverse button.

The machine will sew four reverse stitches, four forward stitches, then stop sewing.

mm

Outline Stretch 17



The Stitch and Its Uses

This stitch pattern, a variation of the straight stitch, is a narrow stretch stitch designed to eliminate puckering on knit fabrics and bias seams.

On tricot and filmy chiffons, it can be used to seam and overcast at the same time to produce a narrow, almost invisible seam or seam finish.



Here's How:

- 1. Place your fabric edge on the 5/8" seam line in order to produce a 5/8" seam.
- 2. Sew as you would a straight stitch.

Helpful Hints (for lightweight fabrics)

- 1. Set the pressure adjusting lever at "1" or "2".
- 2. To seam and overcast tricot:
 - a. Set the stitch width at "3".
 - b. Sew with the right hand stitch falling off the fabric edge.

Saddle Stitch 18



The Stitch and Its Uses

The saddle stitch is formed with one stitch foward, two stitches backward, and a fourth stitch forward.

You can achieve a lovely hand-worked look when topstitching suits, blazers, jumpers, and denim outfits with the saddle stitch.

NOTE: Adjust the needle position for the effect you want.



Here's How

- 1. Sew as you would for topstitching.
- 2. To turn corners:
 - a. Lower the needle into the fabric on the fourth stitch.
 - b. Raise the presser foot and turn the fabric.
 - c. Lower the presser foot and continue to sew.

Helpful Hint

The Blind hem stitch foot is good to use when topstitching near the edge of the garment. Just set the edge guide with the guide screw.

ì

LEARN THE STITCHES SECTION 5.



The Stitch and Its Uses

The zigzag stitch is one of the most common and most versatile stitches on your machine. It can be a utility stitch for sewing buttons, buttonholes, hemming, overcasting mending and darning. It can also be used to decorate with trims, appliques and cut-out work or as a decorative stitch.



Here's How

The many ways to sew a zigzag stitch are as varied as the stitch patterns on this machine or as the width and length settings allow. Consult the specific variations for detailed directions.

The zigzag stitch as a utility stitch has several variations, discussed in this section:

Satin Stitch 13 Overcasting Stitch 13 Multiple Zigzag 14 Overedge Seam 15 Knit Stitch 20



The Stitch and Its Uses

The Satin stitch is a versatile and often used decorative stitch, but it can also be used to overcast a raw edge (for example, blankets, linens, tablecloths and napkins).

The Satin stitch is especially attractive in applique and is the basis for the geometric stitches [42] to [54] on this machine.



Here's How

Once your machine is set up to stitch, you may want to experiment on a scrap of the fabric you are planning to use. Too tight a satin stitch may pucker some light weight fabrics.

Otherwise, stitch as usual.

• Overcasting Stitch 13



The Stitch and Its Uses

This zigzag variation is very useful in garment construction and in finishing raw edges of any sewing project.

Here's How

- The black ridge and brush and the guide wires on the overedge foot keep the edge neat and the fabric straight.
- 2. Place your fabric so that the double guide wires come to the edge.



NOTE: These wires keep light weight fabric from rolling into a ridge and hold medium weight fabric flat.

The machine will stitch over these wires. The black ridge and brush will keep the loose threads in so that the needle can stitch over them.

- As you sew, be sure your fabric edge pushes against the black ridge and brush guide.
- 4. When you stop sewing, remove the fabric by drawing it to the back and out. The fabric will catch on the wire guides if you pull it toward you.

For overcasting folded fabric:

You can also fold the raw edge of the seam and overcast.

- 1. Start the fold by sliding it under the needle and lowering the needle.
- NOTE. Be sure your needle is in the <u>left</u> position.
- 2. Lower the presser foot so that both guide wires are on the fabric.
- 3. Fold the fabric to the left 1/8" as you feed it into the machine and stitch.

Helpful Hints

Start overcasting about 1/8" inside the raw corner of your seam. If you start right at the edge, the fabric will bunch up and the stitches will become tangled.



The Stitch and Its Uses

The mending or multiple zigzag is a combnation zigzag and straight stitch. Use the mending everywhere you would use the basic zigzag stitch. It has more strength, elasticity, and is flatter than a regular zigzag.

The mending stitch is especially useful for:

- ----- sewing patches smoothly and securely.
- ----- repairing straight tears.
- ---- finishing seams on terrycloth.
- ----- sewing bar tacks for belt loops and drapery pleats.



- Here's How to Repair a Tear:
- Straight position the tear under the needle so that the stitching will catch both sides.

Cornered - stitch from each end to the center. Use a piece of fabric under the tear to reinforce your mending.



The Stitch and Its Uses

This stitch pattern combines the straight and the zigzag stitches, using the overedge foot, to stitch and overcast seams in one step. It also is a stretch stitch to provide elasticity for knits and extra strength for woven fabrics.

Use this stitch when you want a narrow seam that you do not have to press open flat. It is ideal for 1/4" seams on knits (when attaching ribbing) or on medium to heavyweight woven fabrics where you want a narrow seam.



Here's How

- Place your fabric so that the raw edges fit under the wire guides and touch the black ridge and brush guide.
- Gently guide the fabric so that the raw edges always touch the black ridge and brush guide.
- NOTE: When sewing over several thickness (under arms, in crotch, etc.) raise the presser foot slightly to ease the presser foot over the hump and keep stitches from bunching.
- 3. When you stop sewing, remove the fabric by drawing it to the back and out. The fabric or stitching will catch on the wire guides if you pull it toward you.

Knit Stitch 20



Set the pressure adjusting lever to "1", so that the knit will retain its shape as you are sewing.

The Stitch and Its Uses

This knit stitch is ideal for sewing swimwear and stretch velour, because it provides the greatest amount of elasticity and strength.

Here's How

- 1. Place your fabric to allow a 5/8" seam.
- 2. Trim the seam allowance after sewing.
- NOTE: Be careful not to cut the stitches.

Double Edge Zigzag 27 Set the Machine 27 D

The Stitch and Its Uses

such as linens and gabardines.



This stitch can be used for sewing

fabrics that tend to fray extensively

Black ridge and brush guide

Here's How

Two rows of zigzag, stitches are simultaneously sewn over the edge to insure that your seams will not ravel.







The Stitch and Its Uses

Sew on stretch fabrics in any area that you might use a zigzag stitch.

This stitch can be used as a decorative top stitch as well.

Automatic Darning 29



The machine automatically darns rips and holes. Large and small holes can be mended quickly and easily with this unique stitch.

Buttonhole foot J is used to hold the fabric securely while darning.

For extra support or strengthening the darn pin or baste a backing fabric such as organdy under the hole to be darned.



Push foot slide back. Press down the foot control. The machine will lock the stitches, sew 16 rows of darning, lock the stitches and stop automatically.



Keep the foot control depressed until the machine stops sewing.



For extra strength on blue jeans or other work clothes the darn can be reinforced as shown above.

The finished darn measures 2.0 cm (4/5'') long by 0.7 cm (1/4'') wide.

If hole is larger, move the fabric and sew additional darning units until the hole is covered.

• Darning Small Rips



Small rips can be repaired by programming the machine to sew a shorter darn.

Begin the first row of the darn stopping the machine when you reach the bottom edge of the rip. For example, you may only need to sew 5 stitches. Press the reverse button but do not hold it. The machine will now complete the 16 rows with 5 stitches in each row and stop automatically.

It is simple to make a darning of same size as the first one.

Press memory button when you have completed the first darning.

Depress the foot control. For a second darning of the same size.

Pressing mirror image button instead of memory button will give the same result but the darning is made in the reverse sequence.

Adjusting Evenness of Darning



If there is a difference in height between the starting point (left side) and the end point (right side) of darning, make adjustment by pressing the $\overline{-}$ or $\overline{+}$ button.

Press button, and adjust between d1 and d5.

LENGTH

Upon pressing the

button the selection is displayed on the screen.

Automatic Buttonholing 백 맹 종





The machine sews three different types of buttonhole to meet every sewing need. All three buttonholes are made in the same way.

The automatic buttonhole foot will gauge the buttonhole length.

Before you sew buttonholes on the actual garment, make <u>several</u> practice buttonholes on a scrap of the same fabric.



- 1. a. Press the Up/Down Needle Position Button to raise the needle to its highest position.
 - b. Raise the presser foot.
 - c. Remove the foot holder.
 - d. Attach the automatic buttonhole foot by tightening the foot holder screw.







- 2. a. Draw both threads toward the left under the foot.
 - b. Lower the needle to the bottom mark.
 - c. Lower the presser foot.
 - d. Open the button holder by pulling it back as shown above.
 - e. Place the button you intend to use on the button holder of the automatic buttonhole foot N.
- f. Press the back of the holder towards you to secure the button.
- NOTE: If the thickness of button is more than 0.4 cm (3/16"), measure thickness and diameter and set the button holder as shown.
- EXAMPLE: If the button is 2 cm (3/4") in diameter and 0.5 cm (3/16") in thickness, set the measure 2.5 cm (31/32"). Add thickness and diameter. And use the sum for the setting.





3. Depress the foot control and keep depressed until the machine stops by itself.

The buttonhole will be automatically sewn: the front bartack and left row first, then the right row and back bartack.

The machine will stop automatically.

- 4. To sew another buttonhole or to start from the beginning of the buttonhole press the key BH1, then depress the foot control.
- * To reinforce the buttonhole or make it denser simply depress foot control again without raising the buttonhole foot.
- 5. Cut the opening with the buttonhole opener in your accessory box.

• Adjust the Stitch Width and Density

Stitch Width:



The stitch width button controls the stitch width. It is pre-set at "5.0".

Press "+" or "-" to adjust the stitch width of the entire buttonhole.

Stitch Density in Entire Buttonhole:



The stitch length button controls the stitch density. It is pre-set at "0.4".

Press "+" or "-" to adjust the stitch density of the entire buttonhole.

Manual Buttonholing





NOTE: Do not put finger, screw driver or any other object near or under the sensor when sewing buttonholes by using sliding buttonhole foot J. Otherwise the sewing procedure in the pattern indicator may advance to the next steps.



- (1) a. Carefully mark the buttonhole length on your garment.
 - b. Change to the sliding buttonhole foot.
 - c. Insert the garment under the foot with the buttonhole marking running toward you.
 Slide both threads to the left.
- (2) a. Move the slider (A) away from you so that the bottom mark (C) on the slider meets the start mark (B).
 - b. Line up the markings on the foot with the bottom mark on your garment.
 - c. Lower the presser foot and press BH1 (bar-tack) button.
- NOTE: The markings on the slider are made in centimeters.



(3) The machine will bartack and sew up the left side of the buttonhole.

Stop the machine at the top mark.



(4) Press the memory button.

The machine will bartack and sew down the right side.

Stop the machine when you are directly opposite the first stitch on the left hand side.



(5) Press the memory button.

The machine will auto-lock the end of the buttonhole and stop. Keep the foot control depressed until the machine stops by itself. Stitch Density on One Side





For Condition A:

Left Side Stitches too Far Apart (see above).

Turn the feed balance dial slightly toward "+". Use the large screw driver in your accessory box.



For Condition B:

Right Side Stitches too Far Apart (see above).

Turn the feed balance dial slightly toward "-".

After adjusting the feed balance dial, sew another test buttonhole to be sure your adjustment is correct.

NOTE: Remember to return the feed balance dial to the standard mark (\triangleright) when you have completed the buttonholes.
Corded Buttonholes



Use this procedure when you want to achieve a tailored, more attractive raised buttonhole.

Use filler cord (at least 15 inches of heavy thread).

Try a practice buttonhole first.



- 1. With the buttonhole foot raised, hook the filler cord on the cord spur at the back of the buttonhole foot.
- 2. Bring the ends toward you under the buttonhole foot until they clear the front end.
- 3. Hook the filler cord into the forks on the front of the J foot to hold them tight.
- 4. Lower the needle into the garment where the buttonhole will start and lower the foot.
- Sew the buttonhole according to the buttonhole sewing instructions on p. 69 to 70.
- 5. Sew the buttonhole according to the buttonhole sewing instructions of pro-Each side of the buttonhole and the bartacks will be sewn over the cord.
- 6. Remove the fabric from the machine and cut the sewing threads.
- 7. Pull the right end of the filler cord to tighten it.
- 8. Thread the end through a darning needle, draw to the bottom side of the fabric and cut.

NOTE: To adjust stitch density, see p. 70.

Hemming and Edging Stitches 16, 21, 22, 28, 30 and 31





Hemming and Edging garments, tablecloths, napkins and craft items has often required careful hand sewing to produce a professional, finished look.

The machine can do these precision stitches much faster and more precisely than you ever dreamed possible.

16	21	22	28	30	31
huhu/	لريبيا)	$\Big]$		huhuh
G	A or F	A or F	G	F	F

The Stitches covered in this section are:

Blind Hem Stitch 16 (stretch) 28 Shell Stitch 28 Scallop Stitch 21 and 22 Cut-Out Work Edging 30 and 31 Applique 30 and 31



The Stitches and Their Uses

The stretch Blind Hem Stitch **16** is to be used for stretch fabrics because it is the stronger and more elastic of the blind hem stitches.



The regular blind hem stitch **28** is strong enough for woven fabrics.



Here's How

- 1. Finish the raw edge of your hem any way you desire. (See Overcasting, p. 59)
- 2. Measure, turn up your hem and pin.

NOTE: For light weight fabrics, you may need a double fold.

- 3. Fold the material (Bottom side out) on the edge to be stitched as shown, leaving 1/8" of the finished hem edge showing.
- 4. Turn the sliding guide screw so that the sliding guide is very close (1/16") to the left side of the blind hem foot.
- 5. Place the fold of the hem against the sliding guide so that the 1/8" extending edge shows on the right. The long zigzag stitch should barely pierce the folded edge of the fabric, but still sew on the 1/8" extended edge. See at left for proper stitch appearance.
- 6. After hemming, press both sides of the finished hem. The right side of the garment will show only the blind stitches.

Helpful Hint

Hemming Thin Fabrics:

Reduce pressure on the presser foot to avoid a distinct line.



The Stitch and Its Uses

The Shell Stitch is formed by sewing a blind hem over folded fabric. Several rows of shell stitching are called shell tucks.

Shell stitching can be used to finish hems, sleeve and neck openings.

Shell tucking can be used to create scalloped tucks on blouses and lingerie.





Here's How

- 1. For best effect
 - ----- set the stitch width and length as you desire.
 - ----- you may need to tighten the top thread slightly.
 - ----- allow the needle to just clear the folded edge of the fabric when it zigzags.
- 2. If you sew rows of shell stitches, space the rows 1/2" apart.

You can sew Shell Stitch on knits or soft silky wovens in any direction.



The Stitch and Its Uses

Use this attractive scallop stitch to create scallop edges or decorate your sewing projects, such as collars, pockets or placemats. You can create a delicate appearance on thin fabrics, such as chiffon, using a single layer of fabric with a tear-away backing for support while stitching.

You can also use this scallop stitch to sew decorative edgings on the hemlines of dresses or sleeves.





Here's How

- 1. Sew your scallops at least 3/8" from the folded edge.
- After stitching, trim fabric close to the stitching. Be careful not to cut the thread.

Helpful Hints

For thin fabrics:

Use a single layer of fabric with a tear-away backing for support while stitching.

For hemlines and sleeves:

Use a tear-away backing, if necessary.

For collars, pockets or craft projects:

Place interfacing between the layers of fabric to provide stiffness.

Cut-Out Work Edging and Applique 30 a



The Stitch and Its Uses

Cut-Out Work and Applique are the major uses for this stitch, but it can also be used to provide edging on many sewing projects, including placemats, blankets, collars, cuffs and pockets.



Here's How - For Applique

- 1. Use a fusible heavy weight interfacing behind each piece of your applique.
- 2. Cut the interfacing slightly smaller than the design pieces.
- Tape or baste the applique in place and sew around each piece with stitch pattern 30 or 31.

NOTE: You may also use a satin stitch.

- 4. When sewing curves, leave the needle in the fabric, raise the presser foot and turn the fabric.
- 5. Lower the presser foot and stitch.



Here's How - For Cut-Out Work

- 1. Choose a simple design and trace the outline on the right side of the fabric.
- 2. Place a piece of tulle or organdy under the design and pin in place.
- NOTE: You may want to use a contrasting insert fabric to accent your work.
- 3. Baste the layers together, stitching just outside the outline. Remove the pins.
- 4. Stitch around the design, using stitch pattern 30 or 31.
- NOTE: You may also use a narrow satin stitch (see p. 58).
- Remove basting and cut the fabric inside the design close to the stitching, using embroidery scissors.



The Stitch and Its Uses

This stitch is strong, useful and decorative. It can reinforce stretch and woven fabrics. You can use it to sew spandex undergarments or decoratively hem elastic fabric. You may also use this stitch in patchwork quilting.



Here's How

1. Sew this pattern on a seam that is already joined and pressed flat.



2. Butt two folded edges together and use this stitch to join them.

• Fagoting Stitch 33



The Stitch and Its Uses

Use this stitch to join two pieces of fabric to create an open work appearance and add design interest.

For other stitches that may be used in fagoting, see stitch patterns **25** and **26** (p. 77).



Here's How

- 1. Fold under each fabric edge 1/2" and press.
- 2. Pin the two edges to paper or tearaway backing 1/8" apart.
- 3. Sew slowly, guiding the fabric so the needle catches the folded edge on each side.

Helpful Hint

You may want to set the stitch width on "7.0" for maximum effect.



The Stitch and Its Uses

Use this stitch to replace bias tape casings in such areas as wrists and waists. In children's clothing, this stitch is especially helpful, because it reduces bulk.



Here's How

- 1. Slide a piece of 1/8" elastic under the foot, then up through the slot in Foot F (satin stitch).
- 2. Sew the elastic on the bottom side of the fabric, pulling it gently to avoid sewing through the elastic.
- 3. Pull on the elastic to gather the fabric and bartack at both ends.



The Stitch and Its Uses

Choose this stitch to attach elastic to garments.





Here's How

- Mark the elastic into quarters and match these to the center front, center back and side seams.
- 2. Place the middle of the elastic under the center of the presser foot and stitch into place, making sure the elastic is evenly distributed.

Twin Needle Stitching 21, 22, 24, 25, 30, 36, 40 and 41



Turn off and unplug the machine before changing the needle to the twin needle. Insert the additional spool pin, and put the felt and spool on it with the thread comming off the spool as shown. Press the twin needle button.

When threading the machine for twin needle sewing follow this chart making sure you separete the threads, placing one in each thread guide on the sides of the needle bar.

Threading from (1) to (3) is the same as for single thread. Refer to page 21.

- (4) Draw the threads down and slide them through the lower thread guide.
- (5) Slide one of the threads through the needle bar thread guide on the left, and the other one on the right.
- (6) Thread the needle from front to back.

At corners, raise the needle till they clear the fabric. Partially raise the presser foot and carefully pivot the fabric. When twin needle sewing is completed, change needle and reset tension if necessary.

To return to single needle sewing, press the Twin Needle button or turn off the power switch.

NOTE: To avoid the thread twisting, it is advisable to thread the machine one thread at a time.





The Stitches and Their Uses

These stitches are purely decorative. You can sew one row or several or vary the stitch width and length for special effects.

Experiment on a scrap of fabric to see what special effects are possible.



Here's How

- 1. Adjust the stitch width and length as you desire.
- 2. Practice the stitch on a scrap of fabric.
- 3. Mark the lines for decoration on the fabric, using a washable fabric marker.
- 4. Lower the needle at the starting point.
- 5. Lower the presser foot.
- 6. Lock the stitch at the beginning (press auto-lock).
- 7. Gently guide the fabric along the marked line.
- 8. Use the auto-lock to secure the row of stitches at the end.



Helpful Hint

You may want to combine these geometric decorative stitches with other decorative stitches. See "Programming Decorative Stitch Patterns" (p. $87 \sim 90$) for detailed instructions.

Decorate with Stretch Stitch Patterns $39 \sim 41$ and $57 \sim 80$



**	A CEA CEA	3 65 %	× *	11111	
SU)	0		NAY VAY	<u></u>	
			* 20	1	
	୍ଷ <u>କ</u> ୍ଷ ସେ	• 550 ()	* *		

The Stitches and Their Uses

Decorative stretch patterns can be used for adding creative and personalized touch to the items you sew for your home and family.

Cross Stitch 34



The Stitch and Its Uses

You can make beautiful designs with this embroidery stitch pattern, in half the time it would take if embroidered by hand. You can also combine cross stitches with the other decorative patterns and letters or numbers for attractive samplers and other sewing projects.



Here's How

- Choose a plain close weave fabric such as linen or wool flannel for the background fabric.
- 2. If you choose light weight fabric, use a tear away fabric backing for support.
- 3. Adjust the stitch width and length as you desire to match the pattern you have or plan.
- 4. Find the center of the design, or if the design is a border, choose a starting point.
- 5. Count the cross stitches from the center up and program the number.
 (See p. 90, Pattern Single Units.)
 Use Auto-Lock to begin and end.
- For example: For 2 cross stitches.





For Cross-Stitching Without a Pattern:

- 1. Start in the center of the design and sew the first row, letting the fabric feed naturally.
- 2. Then count the next row of stitches to the left or right.
- 3. Add or delete stitches by pressing the Clear button and reprogramming.
- 4. Begin each row by lowering the needle at the corner of a previous stitch.
- 5. Use the placement arrow " Δ " on Foot F to insure straight, even rows.

Smocking 23 24, 36, 37 and 41



The Stitches and Their Uses

Smocking is a delicate decorative treatment or children's clothes or women's blouses.





Here's How

- 1. Choose a soft, lightweight fabric such as batiste, gingham or challis.
- 2. Cut the fabric three times the finished width.
- 3. Set the stitch length control button at "4.5" and sew rows of straight gathering stitches 3/8" apart across the area to be smocked.
- NOTE: Loosen the needle thread tension to make gathering easier.
- 4. Knot the threads along the edge.
- Pull the bobbin threads and distribute the gathers evenly. 5.
- 6. Secure the threads at the other end.
- Sew the decorative stitches of your choice between the gathering stitches. 7.
- 8. Pull out the gathering stitches.

Helpful Hint

These stitches can be used in combination with others for any decorative effect you desire.

Sand Stitch 38



The Stitch and Its Uses

The sand stitch fills in outlined embroidery designs.



Here's How

Outline the pattern with a Satin Stitch
 13.

Set stitch width at "1.5". Set stitch length at "0.3" or as you desire.

- 2. Fill in the design with the sand stitch.
- 3. Decrease the stitch width to fill in small spaces.
- 4. Sew in rows, starting at the edge, until the pattern is filled in.

Shading Stitches 55 and 56



The Stitches and Their Uses

These stitches can be used to quickly and neatly outline designs. Use them to enhance appliques and create your own machine embroidered motifs.



Here's How

Draw the design on the right side of the fabric. Place a tear away backing or iron-on interfacing beneath the fabric for support where necessary.

Use the automatic settings or manually adjust the stitch length and width to achieve a desired effect. Reduce the pressure to facilitate sewing curved areas and you may need to pivot on sharp curves.

A second row in the same or varied thread color can be sewn inside the first row for a more pronounced outline.





See the Pattern Single Unit Chart. You will sew one flower.

NOTE: The machine will sew a single pattern each time the foot control is depressed. Do not release the foot control until the machine stops automatically.

Two Cycle Stitching



To sew two of any stitch pattern, press the memory button twice after selecting the stitch pattern numbers.

NOTE: Continue to press the foot control until the machine stops automatically.

To repeat the same combination of stitches, just press the foot control again after stitching the first combination.

* (" \leftarrow " means more memorized patterns exist before pattern 59.

LEARN THE STITCHES SECTION 5.



Cycle Stitching by Pressing Mirror Image Button Test Sewing Pattern Combinations



To Start Sewing at the Beginning of Your Pattern Combination:

There may be instances when you want to test a pattern without sewing all the patterns.

Sew as much as necessary then press the Memory button.

The machine will now start sewing at the beginning of your pattern combination.



To Start Sewing at the Beginning of the Pattern You Have Been Sewing:

If you run out of thread in the middle of a pattern. press the Mirror Image Button.

Remove the stitching of the last pattern only.

Lower the needle at the end of the last completed pattern.

The machine will start sewing at the beginning of the pattern you have been sewing when you have run out of thread and continue sewing the remaining patterns.

After selecting patterns and pressing the

button, the same number of patterns will be sewn in mirror image.

Program Decorative Stitch Patterns

Pattern Single Units

(Aid to Programming)

		M	144	\frown	M	4		+-		$\left[\right]$	×	$\left \right\rangle$	$\widehat{}$	2
10	12 	13 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	14 *******	15 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	16 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	17	18	20	21	22	23	24 ※	25 <<<<	26 } }
3	\square		-*	>		$\left[\times\right]$	Ø	्रि	<u>ها</u>	<u></u> ၀	(H)	*	R	
27	28	30	3 mm	³²	33	34 ×	35 XXX	36 人名	37 966	38 88 89	39 8 ¹	40 7 4	122	42
L	>	$\left[\right]$			T	1	Million	Ì			*	33:55		×
43 L	4~~~	45	46	47	48	49	50	51	52 	53	54	57 ****	58	59 XX XX
								74						
1	Ka	口			1 3	I W		X	E	Ø)				
60 80	61	页 62 し。	63	73	74 54	₩ 75 000	76	X 77 Z	78	(@ 79 ()	80			

* Up to 31 patterns can be programmed in the memory.

* The following patterns The following patterns

cannot be used in programmed sewing.

* The following patterns are one-point sewing. The foot control is depressed, only a single pattern is sewn each time.

64	65	66	67	68	69	70	71
0	₩	ß	$\left[\left\{ \right\} \right]$	3	10	Ą	3

LEARN THE STITCHES SECTION 5.

Memory Lock Alphabet and Numbers

Your machine will sew the 26 letters of the alphabet and numbers in block and script styles. Up to 31 patterns Memory lock patterns: (letters, numbers, punctuation marks and spaces) can be programmed.

Each letter and number is automatically locked at the beginning and end enabling you to remove the connecting threads. The chart below shows where to clip the extra threads. Each pattern start at "O".

The patterns shown below are automatically locked at the beginning and end of the pattern.

Use them alone as a single design on a shirt or combine them with letters, numbers and other craft patterns.

ABCDEEGHLJKLMNQPQRSI UVWXYZ ... & ? 1 0 1 2 3 4 5 6 7 8 9

ig BCDE, FIG HIF KILMIN OPPORISID M-WW II Z. V. No. 2. 1. 2. 2. 2. 415 16. 789



- Monogramming $00 \sim 09$, $10 \sim 40$
- Combining Letters in Block Style







• Combining Letters in Script Style.



• Checking and Editing Your Program

(Example) When patterns "A, B, C, D, E, F, G, H, I, J, K, L, M, N, O" are memorized.

The liquid crystal display will shown

Ishown ABCDEFGHIJKLMN

* Check pattern combination before sewing.



Press EDIT button, flash alphabet A and cursor alternately.

(" \rightarrow " means more memorized patterns exist off screen after the letter H). Move the cursor to right by pressing width control button +. (width control button – for move to left).

O Press the EDIT button again when editing is completed.

* To Delete Patterns Without Adding: (Example: Delete pattern D)



Press EDIT button.

Move the cursor to alphabet D by pressing width control button + -Press CLR button. (alphabet E will flash).

Press the EDIT button again when editing is completed. (LED will go off).



* To Delete and Add Patterns: (Replace D with Z)

Press EDIT button.

Move the cursor to alphabet D by pressing width control button + Press pattern 35.

Press MEM button.

Press EDIT button again when editing is completed.

- ABCDEFGH+ $\widehat{\mathbf{1}}$ flash (A++□) 2 *-flash (🖁 ↔ 🗍) (3) <u> 3</u> 5 ABCDZEFGHIJ+ * flash (Z ++ ℝ) (4) ABCDZŰEFGHIJ+ ▲flash (□ ++ ■) (5) EDIT ABCDZEFGHIJKLM
- * To Delete and Add Patterns: (Add pattern Z between D and E)

Press EDIT button.

Move the cursor to between alphabet D and E by pressing the width control button + .

Press pattern 35.

Press MEM button.

Press EDIT button again when editing is completed.

Adjusting Patterns



If decorative stitch patterns, letters/numbers or manual buttonholes are uneven when you sew on a particular fabric, adjust them with the feed balancing dial.

* After sewing with an altered dial setting, you must reset the dial to " \triangleright ".

• To Adjust Distorted Patterns



Comperssed Patterns:

Correct by turning the feed balance dial toward the "+". Use the large screw driver in your accessory box.

To Adjust Distorted Letters or Numbers







Compressed Letters or Numbers:

Correct by turning the feed balance dial toward the "+".

Drawn Out Letters or Numbers:

Correct by turning the feed balance dial toward the "-".



Drawn Out Pattern;

Correct by turning the feed balance dial toward the "--".

SECTION 6. PERFORMANCE PROBLEMS CHART

What to do When

Condition	Cause	Reference
	1. The needle thread is not threaded properly.	Refer to page 21
	2. The needle thread tension is too tight.	Refer to page 23
	3. The needle is bent or blunt.	Refer to page 17
The needle thread	4. The needle is incorrectly inserted.	Refer to page 17
breaks.	5. The needle thread and the bobbin thread are not set properly under (drawn to the	Refer to page 22
	rear of) the presser foot when sewing is starting.	
	6. The fabric is not drawn to the rear when sewing.	Refer to page 47
	7. The thread is too heavy for the needle.	Refer to page 17
	1. The bobbin thread is not threaded properly in the bobbin holder.	Refer to page 20
The bobbin thread breaks.	2. Lint has collected in the bobbin holder.	Refer to page 99
	3. The bobbin is damaged and doesn't turn smoothly.	Change the bobbin
	1. The needle is incorrectly inserted.	Refer to page 17
	2. The needle is bent or blunt.	Refer to page 17
The needle breaks	3. The needle clamp screw is loose.	Refer to page 17
The ficture preases.	4. The tension of the needle thread is too tight.	Refer to page 23
	5. The fabric is not drawn to the rear when sewing is finished.	Refer to page 47
	6. The needle is too fine for the fabric being sewn.	Refer to page 17
Screen is not clear	1. The sharpness of the liquid crystal display is not adjusted properly.	Refer to page 26
		Readjust
	1. The needle is incorrectly inserted.	Refer to page 17
	2. The needle is bent or blunt.	Refer to page 17
	3. The needle and/or threads are not suitable for the work being sewn.	Refer to page 17
Skipped stitches.	 A blue tipped needle is not being used for sewing stretch, very fine fabrics and synthetics. 	Refer to page 17
	5. The needle thread is not threaded properly.	Refer to page 21
	6. The presser foot pressure is not strong enough.	Refer to page 8
	7. The wrong needle is used.	Change the needle

SECTION 6. PERFORMANCE PROBLEMS CHART

Condition	Cause	Reference
Seam puckering.	 The needle thread tension is too tight. The needle thread is not threaded correctly. The needle is too heavy for the fabric being sewn. The stitch length is too long for the fabric. The presser foot pressure is not correctly adjusted. 	Refer to page 23 Refer to page 21 Refer to page 17 Make stitch dense Refer to page 8
The cloth is not feeding smoothly.	 The feed dog is packed with lint. The presser foot pressure is too weak. The stitches are too fine. The feed dog was not raised after "drop feed" was used. 	Refer to page 99 Refer to page 8 Make stitch coarsen Refer to page 32
Gathering.	 The needle thread tension is too loose. The needle is too heavy or light for the fabrics being sewn. 	Refer to page 23 Refer to page 17
The machine doesn't work.	 The machine is not plugged in or plugs are not fully inserted. A thread is caught in the hook race. The bobbin winder spindle is kept in the winding position. 	Refer to page 7 Refer to page 99 Refer to page 19
Patterns are distorted.	1. The bobbin winder spindle is kept in the winding position.	Refer to page 19
The automatic buttonhole stitches are not working.	 The stitch length is not suitable for the fabric being sewn. Interfacing is not used with stretch fabrics. 	Refer to page 68 Use interfacing
Noisy operation.	 There is thread caught in the hook race. Lint has built up in the bobbin holder or hook race. When turn on the power switch, slight resonant sound is coming out from the stepping motors. 	Refer to page 99 Refer to page 99 Not abnormal
Machine is stopped on the sewing, ignore the button you press or does not change the display on the LCD.	Safety circuit for static electricity countermeasure is working.	Turn off the power switch once, and turn on the power switch again.

SECTION 7. CARE FOR YOUR MACHINE

Cleaning the Machine

To insure that your machine operates at its best, you need to keep the essential parts clean at all times.

Unplug the machine and remove the presser foot and needle.

Cleaning the Bobbin Holder



Remove the cover plate by sliding the hook cover plate release button to the right.

Take out the bobbin.

Brush out dust and lint. (You may also use a vacuum cleaner.)

Cleaning the Hook Race



Remove the set screw on the left hand side of the needle plate with the screwdriver supplied with the machine.

Remove the needle plate.

Take out the bobbin. Lift up the bobbin holder and remove it.

Clean the Hook Race and Feed Dog



Clean the feed dogs, hook race and bobbin holder with the lint brush and a soft dry cloth.

Assemble the Hook Race



Insert the bobbin holder so that the knob fits next to the stopper in the hook race.

Attach needle plate with screw.

SECTION 7. CARE FOR YOUR MACHINE

Oiling the Machine



Open face cover plate and oil two points as shown below at least once a year. One or two drops of oil is sufficient. Remove excess oil; otherwise it may stain fabrics.

In case machine is not used for an extended time, oil it before sewing. Use Kenmore sewing machine oil.

No other oiling is required.



PARTS LIST

All parts listed herein may be ordered from any Sears store or service center.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- 1. PART NUMBER
- 2. PART DESCRIPTION
- 3. MODEL NUMBER
- 4. NAME OF ITEM

if the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for expedited handing.

Ret. No.	Description
*102869107	Bobbin box with 10 bobbins
802422002	Quilter
102403202	Spool pin telt
813404013	No. 11 Stretch fabric needles (BLU)
647814020	No. 11 Single needles (ORG)
647814031	No. 14 Single needles (RED)
647814042	No. 16 Single needles (PUR)
647814053	No. 18 Single needles (GRN)
826815000	Twin needle
625031500	Additional spool pin
826801003	Automatic buttonhole toot
823801015	Straight stitch toot
822508005	Zigzag toot
822804118	Satin stitch foot
820817015	Blind hem stitch toot
	Ret. No. *102869107 802422002 102403202 813404013 647814020 647814031 647814042 647814053 826815000 625031500 826801003 823801015 822508005 822804118 820817015

12	823803006	Zipper toot
13	822801001	Overedge foot
14	826811006	Sliding buttonhole toot
15	*6864	Needle threader
16	000009906	Light bulb
17	647808009	Buttonhole opener
18	820832005	Large screw driver
19	647803004	Small screw driver
20	*6889	Oil and lint brush set
21	802424004	Lint brush
22	822020503	Large spool holder
23	822019509	Small spool holder
24	*200002008	Piping foot
25	*200003009	Gathering toot
26	*200005001	Pin-Tucking toot
27	*200013105	Hemmer toot
28	*200027102	Binder toot
29	*200028103	Roller foot
30	*200029104	Teflon toot
31	*200030108	1/4" Seam toot
32	*200031109	Applique toot
33	*200032100	Cording toot
34	*214872000	Walking foot
35	*654805008	Embroidery foot
36	*941620000	Ruffler

* These items are not turnished with the machine, but may be ordered per instructions above.

INDEX

А

Accessories
Accessory storage box 5, 10
Alphabet & numbers
Appliqueing. 43,76
"Auto-Lock" pattern 25
Automatic buttonholing
Automatic buttonhole foot
Automatic darning 43, 64~65
Additional spool pin 2000 18
Auto-Lock button 25

В

Basting 33, 41
Blind nemming.
Blind hem stitch foot
12, 14, 41, 43, 101~102
Bobbin
Bobbin thread22~23
Bobbin winding
Bobbin winding spindle
Buttonhole ,
Buttonhole foot, automatic
Buttonhole foot, sliding
46, 64, 69~71, 101~102
Buttonhole opener
Buttonholing buttons 26
Button sewing

С

Carrying hand	ile .			¢					Ŧ		7		;	,	2			,		6
Cleaning bobl	oin h	o	ld	e	r	,	-								-					99
Cleaning hool	< rac	e.	ar	n	1	fe	e	d	d	0	gs								÷	99
Clear button		÷	;	,		4	=	,			-	2	;		#			2	26.	28
Corded butto	nhol	e		÷	-	-	,		;		~	ę		,		÷	,		. '	71
Cornering gui	de .			7	,	ç	Ţ			3				,		÷				31
Control panel		,	5	-	-		:		£		6	J	7					¢	v	26

Cross stitching	5	,	;		~	r	Ŧ	¢	-		4	ę	÷	ł	r	44, 83
Cut-out work	ç		÷	e			r	,	÷	÷	-	¢	¥	,		43, 76

D

Darning						34
Decorative stitching			v	45,	81~	82
Direct entry stitch button	: c			••••		27
Display sharpness adjusting knot),	۷				26
Distorted pattern	÷ .	,	Ŧ		× -	96
Double edge zigzag stitching	- :			,	42,	62
Drop feed lever	*		÷	1 × 1	6,	32

Ε

Editing button	26, 29
Editing pattern combinations	4~95
Elastic casings	14,79
Elastic stretch stitching	14,79
Extension table	5,10

F

Fabric, needle, thread and stitch length

chart						*	2				e		-	÷	÷	١.	-		17	t
Face cover plate	7			,				,	÷		,								5	i.
Fagoting			¢	ę		,				,	ų								78	1
Feather stitching		ĸ				F			,			ž					4	2,	77	ł.
Feed balance dial		,					7			,					_	1	5,	8	96	i i
Foot control			Ŀ.					÷		7	,				e.		ĺ	, (5, 8	
Foot holder							z	÷		Ŧ	7	,	,		÷			,	15	i.
Foot storage com	p	ar	tπ	۱e	n	t			,		,			5	,	-	÷		12	ł
Free arm sewing		¢	÷	5	,							Ŧ			,	¢	1	0,	11	

G

Gathering	c	:		,			,	2	4		1			1	÷	:		7				Ŧ		52
-----------	---	---	--	---	--	--	---	---	---	--	---	--	--	---	---	---	--	---	--	--	--	---	--	----

н

Hand wheel		,		¢			. 6
Hemming and edging stitching .			-	z		72	~73
Horizontal spool pin	4 7			~	÷		18

К

Knit stitching .	*	-	,	-		*	¥	•	,	:		42, 62

L

Large screw driver		z	4	,	ę		Ŧ	. 6	, 1	01~	~1	02
LED light							ž	s	•	. 21	7,	28
Light and power switch			z	,		÷			×	r		6
Lingt bulb	- ,	÷		v	2		¢ i	e a .	1	01~	-1	02
Lint brush			7	v	,	,	6,	99	, 1	011	-1	02
Lock-a-Matic seam	e -		-		2		,			- 40	Э,	54

Μ

Mode button			,	,			-					2		z	2	,	, .		27
Machine plug							7				¢.			2	,	-		ę	7
Machine socket		4	÷				÷	,			4	,							7
Manual buttonho	olin	g		,		,				÷				÷	÷	÷	69	}~	-70
Memory button		Ţ			c		,			,					,	,	2€	3.	28
Mending	, <i>.</i>								,		-		4			ę	4(Ĵ.	60
Mirror image but	tor	1			\$					_			,		ļ		26	3.	28
Monogramming	. .		z.							ř	ž	ç			,		46	S.	92
Message button	• .				r	:	-		,		_	,		×	,	,	28	5,	30

Ν

Needle	÷	÷			7						1	6	~	1	7,	. 1	10)1	~	102
Needle clamp		1	÷	6	,		÷	÷	3		4		,	ŗ	,		÷	ł	5,	17
Needle plate . :	-	÷	,			;			,	,	¥	¥	۲	ł.			÷		5,	31
Needle position		ę			,	,	,	,	,			£	2					×	*	49
Needle set	×		ç	,	,	÷		,	2	,		¥	÷	÷	÷	c	4	1		6
Needle, thread a	10		fa	b	ri	С	cl	na	ır	t	,	v	+	4			e	Ŧ	1	17
Needle threader	y	-			,			,	L			2	e	,	_	1	C	11	~	102

Oiling)
Outline stretch stitching	õ
Overcasting stitching	9
Overedge foot 12, 13, 41~42, 101~10	2
Overedge seam	

Р

			404.400
Parts list and a second second second	۲ ک	¢ -	101~102
Pattern chart and reasons and reasons	: پ		
Pattern memory			
Pattern selection			27
Pattern selection button			26~27
Performance problems	. ,		97~98
Pintucking.	• •		50
Portable case		· ·	4
Power supply			7
Power supply plug			7
Power switch			7
Presser bar	. , ,	5.1	15
Presser foot	, .	, -	5, 12~14
Presser foot lever	,		6, 9
Pressure adjusting lever			8
Program sewing		. e :	87~90

Q

Quilter	Ŧ	ł	÷	,	-	e	z	,	7	,	c	,	4	12	2,	1	3	,	5	1,	1	01~1	02
Quilting	,	\$	r	5		ł	,	,	9	,		¢			Ŧ	7		¥	¥	÷		40,	51

R

Reinforcing stitching					÷			,	¢		77
Reverse stitch button	č,		,	7	-	-	:	c	,	•	. 5, 25
Rick-Rack stretch stitching	•	-		¢		z	¢	•	;	÷	44, 63

Satin stitch foot _____ 12~13, 43~46, 101~102 Sliding buttonhole foot 12. 14. 46. 101~102 Stitch length/width control buttons 29, 49, 68 Stitch length/width increase button 29 Straight stitching 40, 47~49 Stretch stitching and a state and a state and a 40~45, 53, 55~56, 61~63, 75~80, 82~85, 87~89, 96

Т

S

ake-up lever
"hread cutter
Thread guide
Thread spool pin
hread tensions
Thread tension control
Thread chart and a second contract of the second se
op stitching a second
op thread
furning a square corner
Win needle

Twin	needle	button	2	5	L	,	e	7	ç	۲	1	26	5,	29,	80
Twin	needle	sewing	Ŀ			ł			ĸ				ı	42,	80

U

U	p/	/d	0	w	n	r	ie	e	dl	e	p	0	si	tı	o	n	bι	Jtte	on	,	۲	÷	ç		¢	٠	Ļ	-	-
	, .	,										Į,	,				ı	5,	15	i.,	1	7	, 2	22	2,	2	5	~	26

Ζ

Zigzag foot	2~13, 33, 40~42, 44, 47~48
51~58, 60, 62~63	3, 75, 77, 79, 80, 84,101~102
Zigzag stitching	35, 40, 57~59
Zigzag overcasting.	
Zipper application	
Zipper foot	

WARRANTY

FULL 25-YEAR WARRANTY ON SEWING MACHINE HEAD

For 25 years from the date of purchase, Sears will, free of charge, repair defects in material or workmanship which appear in the mechanical components of the sewing machine head.

FULL TWO YEAR WARRANTY ON ELECTRICAL EQUIPMENT OF SEWING MACHINE

For two years from the date of purchase, Sears will, free of charge, repair defects in material or workmanship which appear in the electrical equipment of the sewing machine, including electronic components, motor, wiring, switch and speed control.

FULL 90-DAY WARRANTY ON ALL PARTS AND MECHANICAL ADJUSTMENTS

For 90 days from the date of purchase, Sears will, free of charge, replace any parts and provide mechanical service necessary for proper operation of the sewing machine, except for normal maintenance.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE SEWING MACHINE TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO., D/817 WA, Hoffman Estates, IL 60179

SEWING MACHINE

Now that you have purchased your Kenmore Sewing Machine, should a need ever exist for repair parts or service, simply contact your nearest Sears Service Center. Be sure to provide all pertinent facts when you call or visit.

The model number of your Sewing Machine will be shown on your nomenclature plate on the back of your Sewing Machine. See page 6 for location.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

*PART NUMBER *PART DESCRIPTION *MODEL NUMBER *NAME OF ITEM

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

SEARS, ROEBUCK AND CO., Chicago, IL60684 U.S.A.

Sar S