brother



"IMPORTANT SAFETY INSTRUCTIONS"

"Read all instructions before using."

When using a sewing machine, basic safety precautions should always be taken, including the following:

DANGER — To reduce the risk of electric shock.

- The sewing machine should never be left unattended while plugged in. Always unplug the sewing machine from the electrical outlet immediately after using and before cleaning.
- Always unplug before changing the light bulb. Replace bulb with same type rated 120V 15 watts for 120V model or rated 240V 15watts for 220-240V model.

WARNING — To reduce the risk of burns, fire, electric shock, or injury.

- Do not allow this sewing machine to be used as a toy. Close attention is necessary when the sewing machine is used by or near children.
- Use this sewing machine only for its intended use as described in this manual. Use only accessories recommended by the manufacturer as contained in this manual.
- Never operate this sewing machine 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 sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.
- Never drop or insert any object into any opening.
- Do not use outdoors.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- To disconnect, turn the main switch to the symbol "O" position which represents off, then remove plug from outlet.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
- Always use the proper needle plate. The wrong plate can cause the needle to break.
- Do not use bent needles.
- Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
- Turn off power to the machine by flipping the ON/OFF switch to the symbol "O" before making any adjustments in the needle area, such as threading the needle, changing the needle, threading the bobbin or changing the presser foot etc.
- Always unplug the sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
- This sewing machine is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with this sewing machine.

CAUTION For U.S.A. only— This appliance has 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.

"SAVE THESE INSTRUCTIONS"

"This sewing machine is intended for household use."

CONGRATULATIONS ON CHOOSING A BROTHER SEWING MACHINE

Your machine is the home use sewing machine available.

To fully enjoy all the features incorporated into it, we suggest that you study this booklet.

PLEASE READ BEFORE USING YOUR SEWING MACHINE

For safe operation

- Be sure to watch the needle while sewing. Do not touch moving parts such as the balance wheel, thread take-up or needle while the machine is operating.
- Remember to turn off the power switch and unplug the cord when:
 - Operation is completed
 - Replacing or removing the needle or any other parts
 - A power failure occurs during use
 - Maintaining the machine
 - Leaving the machine unattended
- Do not place anything on the foot controller.
- Plug the machine directly into the wall. Do not use extension cords.

For a longer service life

- When storing your sewing machine, avoid direct sunlight and high humidity locations. Do not store the sewing machine beside a space heater, iron, or other hot objects.
- Use only neutral soaps or detergents to clean the case. Benzene, thinner, and scouring powders can damage the case and machine, and should never be used.
- Do not drop or hit the machine.
- Always consult the operation manual when replacing any accessories, the presser feet, needle or other parts to assure correct installation.

For repair or adjustment

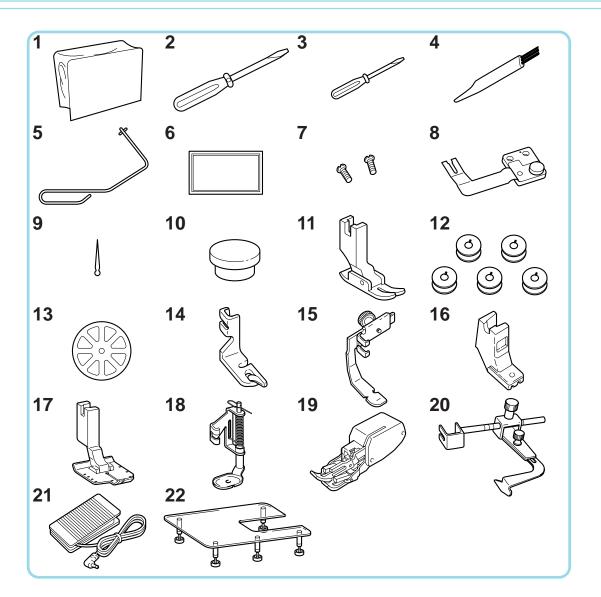
In the event that a malfunction occurs or adjustment is required, first follow the troubleshooting table in the back of the operation manual to inspect and adjust the machine yourself. If the problem persists, please consult your nearest authorized Brother service center.

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Accessories



No.	Part Name	Part Code	
1	Cover	XA0917-052	
2	Medium Screwdriver	125877-001	
3	Small Screwdriver	125878-001	
4	Cleaning Brush	XA4527-001	
5	Knee Lift	XA0830-001	
6	Needles and Case 1 Size 9		
	(ORGAN HLX5) 2 Size 11		
	1 Size 14	X80805-001	
	1 Size 16		
	1 Ballpoint Needle		
7	Lining Plate Screw (2)	062670-812	
8	Fabric Separator	184720-001	
9	Feed Pin	138483-001	
10	Feed Pin Changer	117934-009	
11	General Purpose Foot	XA1425-001	
12	Bobbin (5)	SA159	
13	Spool Cap	XA2111-000	
14	Rolled Hem Foot	X57138-001	
15	Zipper Foot	112797-001	
16	Invisible Zipper Foot	148475-001	
17	1/4" Foot	XA7258-001	
18	Quilting Foot	XA7255-101	
19	Walking Foot	XA7253-001	
20	Seam Guide	XA7256-001	
21	Foot Controller	XA3931-051	
Op	tional Accessories		
22	Fabric Extension Table	SA506	

Note

Foot controller: Model N5V

This foot controller can be used for sewing machine model PQ1500.



Parts

You Needle

and Thre

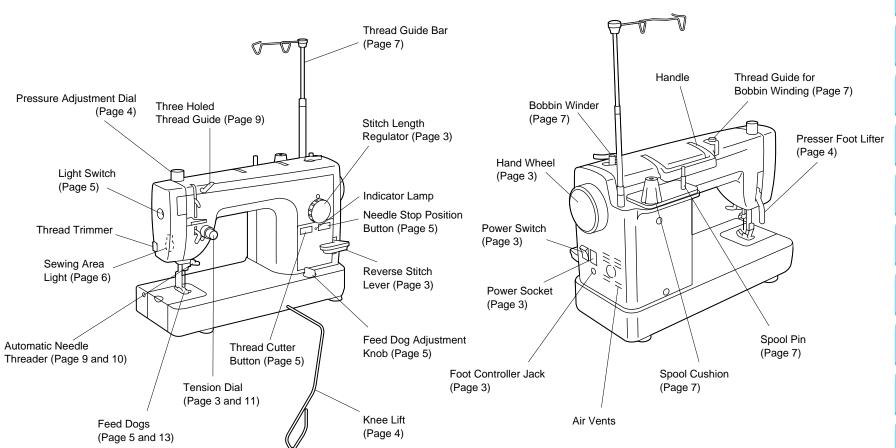
Stitch
Samples and
Needle Char

Changing Presser Fe

Basic

Your Machine

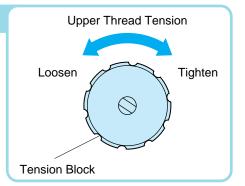
Names of Parts



Before You Begin (1)

Tension Dial

- When tighter tension is desired, turn the tension dial to the right. Upper and bobbin threads will meet on right side of the fabric.
- When looser tension is desired, turn tension dial to the left. Upper and lower threads will then meet on wrong side of fabric.



Hand Wheel

- Position needle using hand wheel.
- * Always turn hand wheel towards you.



Power Cord and Foot Controller

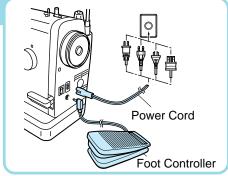
♠ Note

Please use common household current.

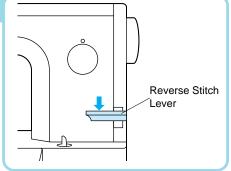
- Plug in cord.
- Plug foot controller into machine.

Note

Foot controller: Model N5V This foot controller can be used for sewing machine model PQ1500.

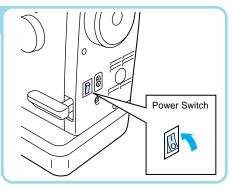


- Sewing in reverse is possible when the reverse stitch lever is in the lowered position.
- * Make sure to push the lever all ing is desired.
- is set for at least 5 mm.



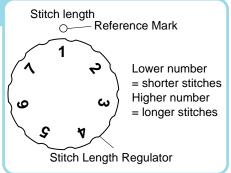
Power Switch

- Flip power switch to "I" position to turn on.
- To switch power off, flip switch to "O" position.



Stitch Length Regulator

 Adjust desired stitch length using stitch regulator dial.

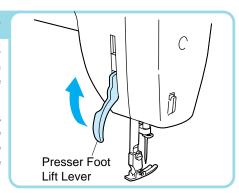


- the way down when reverse sew-
- * Stitch length for reverse stitches



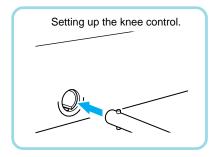
Threading

- Lowering the presser foot lift lever lowers the sewing foot down onto the fabric and engages the tension function.
- When working with heavy fabrics or other fabrics that don't slide easily under the foot, raise the presser foot lever to position the fabric.

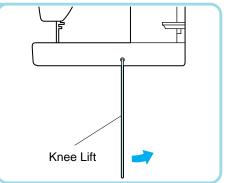


Knee Lift

 Using the convenient knee lift enables you to lift the presser foot easily leaving your hands free to work with the fabric.



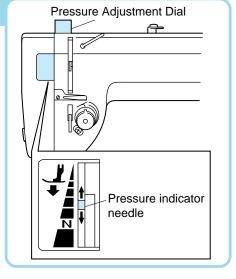
 $\ensuremath{\boldsymbol{\ast}}$ Push the knee lift all the way in.



Pressure Adjustment Dial

 Turning the pressure adjustment dial raises and lowers the pressure indicator needle.

See also: "Feed Dog Adjustment Knob" on page 5.



CONTENTS Accessories

ies Names Parts

Before You Begin

> Changing eedles and ight Bulb

Threading Samples
Needle C

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Basic Sewing

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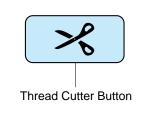
Before You Begin (2)

Thread Cutter Button

⚠ Note

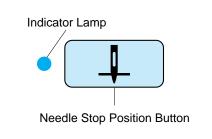
When the machine stops due to jammed threads and so forth, do not step on the foot controller until turning the power off and moving the needle with the hand wheel to check the situation. Otherwise broken needles could result.

 The thread cutter trims upper and bobbin threads at the end of seams.



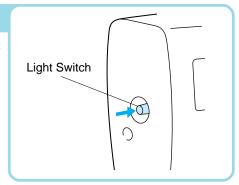
Needle Stop Position Button

- When indicator lamp is lit up, the machine will stop sewing with the needle lowered through the fabric.
- When indicator lamp is off, position of the needle when sewing stops will be random.
- If the safety mechanism is activated, for example if the thread becomes tangled, the red lamp flashes.



Light Switch

 Push light switch to turn the light over the sewing area on and off.

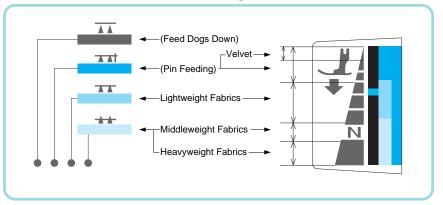


Feed Dog Adjustment Knob

Height of feed dogs can be adjusted to coincide with fabric weights.



Foot Pressure and Feed Dog Position



Select one of four feed dog positions according to your needs.

Note

If a setting other than **T** is selected, the feed pin will not operate.

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U Needles

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Needle Cha

Changing Presser Feet

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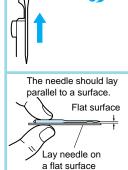
Changing Needles and Light Bulb

♠ Note

Please make sure power is off before carrying out the following operations. There is a chance of injury if the machine accidentally starts running during this operation.

Changing the Needle

- 1) Turn the sewing machine off. Raise needle to highest position using hand wheel, and lower presser foot.
- 2 Loosen screw with screwdriver, and remove needle.
- 3 Hold the needle with the flat side to the right. and insert the needle as far as it will go. Make sure needle is screwed in tightly.



Screwdriver

* Check needles on a flat they're not bent.

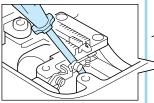
surface to make sure (such as the needle plate or a plate of glass).

Note

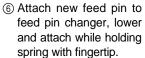
HLX5 needles should be uses; however, Schmetz 130/ 705H may also be used under normal circumstances.

Changing the Feed Pin

- 1 Set the feed dogs to "velvet" position. (see Page 5)
- ② Remove needle, presser foot and needle plate.
- (3) Lower presser foot and turn hand wheel until feed pin is in its highest position.
- (4) Insert small screwdriver (included) as shown in diagram.



(5) While holding spring with fingertip, lower the feed pin changer onto the needle to pick it up.

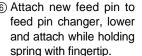


- (7) Remove screwdriver.
- (8) Re-attach needle plate,









needle and presser foot.



Note

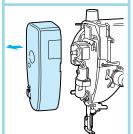
Please make sure power is off before carrying out the following operation. The glass plate over the light bulb will be hot immediately after using the machine, so you should wait until the machine has had a chance to cool down before changing bulbs.

Changing Light Bulbs

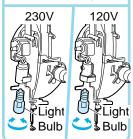
- 1) Turn off power.
- ② Remove screw from head.



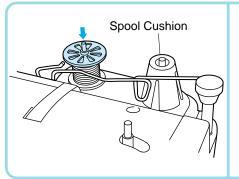
(3) Remove bulb housing.

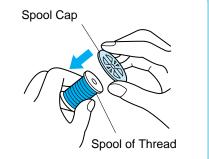


- (4) Unscrew bulb and remove.
- ⑤ Screw in new bulb. Sewing Light: See page 19.
- (6) Re-attach bulb housing and tighten screw.

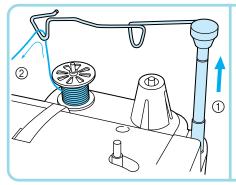


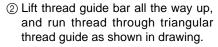
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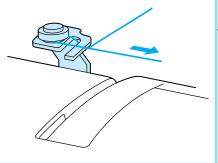




- 1) Put spool of thread on spool pin.
- * Use spool cushion when using cross wound thread.
- * Use spool cap when using parallelwound thread.

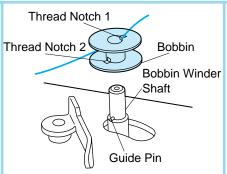




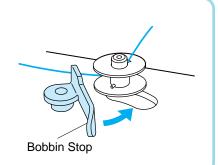


4 - 9: See following illustrations.

③Run thread through bobbin winding thread guide as shown in drawing.



(4) Run thread through top thread notch 1, and align bottom thread notch 2 with guide pin on bobbin winder shaft.

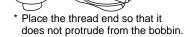


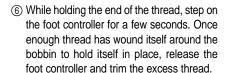
(5) Press bobbin stop up against empty bobbin. If the bobbin stop does not slide easily between the top and bottom of the bobbin, check that the bobbin is seated properly with the guide pin (4) inserted into the lower notch.

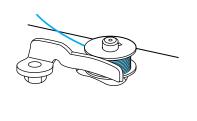
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Before You Needles and Light Bulb

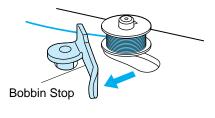




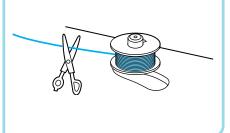




(7) Stop winding when bobbin is full. Take foot off foot controller.



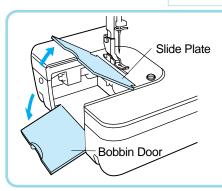
(8) Manually move bobbin stop back to original position.



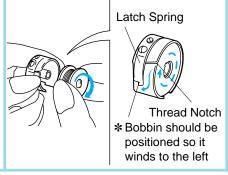
(9) Cut thread and remove bobbin.

Bobbin Insertion

▲ CAUTION – Moving parts –
To reduce risk of injury, switch off before servicing. Replace cover.

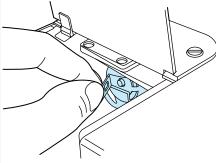


① Lift slide plate (and open bobbin door).

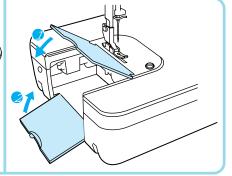


② Put bobbin into the bobbin case.

- * Run thread through thread notch and under latch spring, so that a length of about 10 cm is exposed.
- * Use a bobbin case with an idling prevention spring.

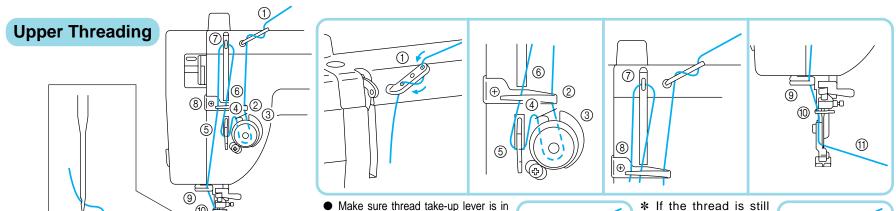


- 3 Pull the latch lever of the bobbin case out and push the bobbin case into the shuttle race and release the latch lever.
- * If the latch lever is not all the way on the hook, it may fly off during sewing and cause lower thread breakage.



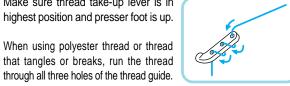
(4) Lower slide plate and close bobbin door, following numbers 1 2 above in order.

A Note Please turn power is off before using automatic needle threader. Accidentally stepping on the foot controller during this operation could cause bodily injury or damage to the machine.



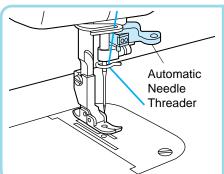
Using the Automatic Needle Threader

* When using polyester thread or thread that tangles or breaks, run the thread

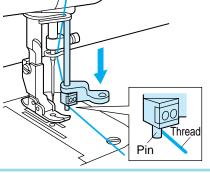


tangles or breaks, run the thread through the holes backwards as shown in diagram.

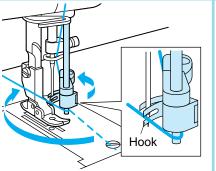




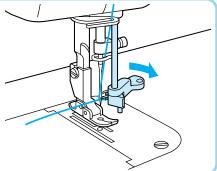
- 1) Pull hand wheel towards you until needle is in the highest position, and lower presser foot.
- 2 Take thread in your left hand, and gently pull it forwards.



- ③ Lower automatic needle threader.
- * Pull thread along the right side of the pin.
- * Do not force the needle threader lower than the eye of the needle which is in the highest position.



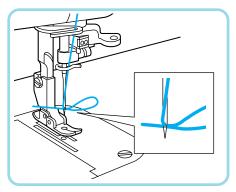
- (4) Catch thread with hook.
- * Pull thread to the right, and make sure it has been caught with the hook.



⑤ Turn the hook and raise needle threader lever while gently holding the end of the thread.

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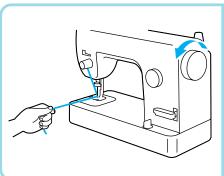
Needle (HLX5)	Thread
#9	#30 #50 #60
#11	#30
#14	#30
#16	#20

cannot be used with the threadneedle combinations illustrated in the chart to the left. Transparent nylon thread can be used regardless of the chart, providing the needle used is a #14 or #16.

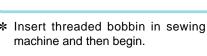
The automatic needle threader

Pull loop to the right.

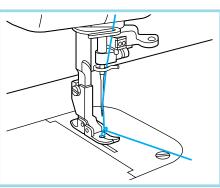
How to Pull Out the Bobbin Thread



* Insert threaded bobbin in sewing machine and then begin.



1) While gently holding the end of the needle thread, turn the hand wheel towards you to raise the needle.



2 Pull up the upper thread to pull the bobbin thread out.



③ Pull approximately 15 cm of upper and bobbin threads out.

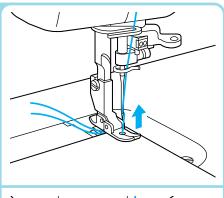
* Lift foot and run both upper and bobbin threads under and behind presser foot.

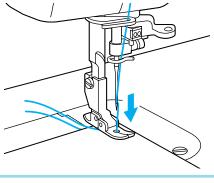
* Turn the hand wheel once completely.

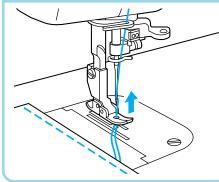
Stitch Samples

- 1) Set stitch length regulator to desired stitch length.
- ② Make sure approximately 15 cm of upper and bobbin threads are pulled out and laying behind presser foot. While needle is in raised position, insert a test strip from the garment fabric under the foot.
- ③ Lower presser foot.
- 4 Lower needle through fabric, then step gently on presser foot and begin.

- (5) Raise needle to highest point.
- (6) Lift presser foot, remove fabric and then cut thread.
- * When using thread cutter:
- (5) Push thread cutter button
- (6) Lift foot and remove fabric.

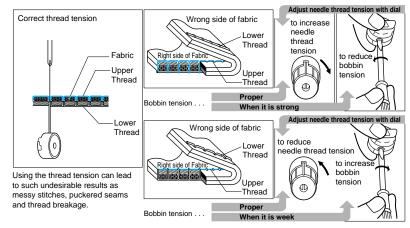






Thread Tension

Bobbin thread should feed smoothly. Adjust bobbin thread to match that of upper thread. (If bobbin thread is too tight it may cause fabric to bunch up)



- Selecting the proper needle for use with the fabric and thread you are working with.
- * The following chart applies to many different sewing methods.

	Fabric - Thread - Needles				Schmetz
	Cloth	Thread	Needle (HLX5)	HLX5	130/705H
Special	Velvet	Silk, Polyester #30 – #50	#11 – #14	#9	#65
	Quilt	Polyester #20 – #50		#11	#75
fabric	Synthetic Suede	Polyester #20 – #50	#11 – #16	#14	#90
lablic	Knit	Polyester #20 – #50		#16	#100
	Coating	Polyester #50	#11 – #14		
Light	Lawn	Cotton #80			
weight	Tricot	Polyester #60	#9		
fabrics	Silk Georgette	Silk #50			
lablics	Wool Georgette	Silk, Polyester #50	#11		
Middle	Gingham	Cotton #60 – #80	#11 – #14		
weight	Lightweight Jersey	Polyester #60	#11		
fabrics	Gabardine, Flannel	Silk #50			
Heavy	Denim	Cotton #20 – #50	#14 – #18		
weight	Jersey	Polyester #20 – #50	#11 – #16		
fabrics	Tweed	Silk #20 – #50	#11-#10		

- * HLX5 needles are recommended; however, Schmetz 130/705H needles may also be used under normal sewing conditions.
- * Adjust pressure of sewing foot and drop feet height according to chart.
- * When sewing on knit fabrics such as jersey or tricot, use a ballpoint needle or 11 other needle designed for use with knit fabrics.

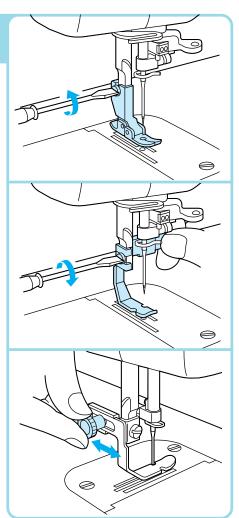
CONTENTS

Threading

Note Make sure the power is off before changing presser feet.

Changing Presser Feet (Zipper Foot)

- 1) Raise presser foot, and raise needle to highest position.
- (2) Loosen and remove screw using screwdriver.
- 3 Attach zipper foot and tighten screw.
- * Use the same method to attach the other feet that come with your PQ1500.
- * See page 17 for directions on attaching the Walking Foot.
- * Use the position knob on back of the zipper foot to adjust position of foot in relation to needle.
- * Only the zipper foot has a position knob. You can begin sewing with all other presser feet immediately after attaching.



Presser Feet

Pin Feed Foot For perfect stitching on otherwise difficult fabrics like velvet, leather and suede.

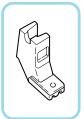


Rolled Hem Foot Use on the edges of fabric, such as on hems of dress shirts, to fold the edge of the fabric in three while sewing.



• Invisible Zipper Foot Use to attach con-

cealed fasteners.

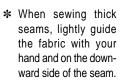


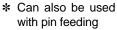
Quilting Foot Spring action foot for darning, quilting or free-motion embroidery.

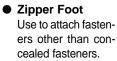


Use only feet supplied with your PQ1500. Each foot is specially designed for this machine and has clearance for the pin at the rear of each foot. Use of other presser feet with the PQ series machines may damage or break the pin mechanism.

 General purpose Foot This foot is used for most sewing. (Can also be used for sewing thick fabrics or seams.)





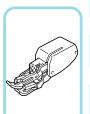


• 1/4" Foot For quilt and patchwork piecing with 1/4" or 1/8" seam allowance.



Walking Foot

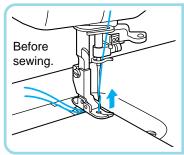
For sewing or quilting on fabrics which stick or tend to slip Useful for sewing multiple layers as in quilting.



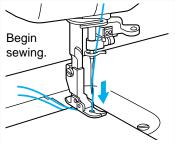
CONTENTS

Basic Sewing (1)

Basic Sewing



 Lift foot, pull about 15 cm of upper and bobbin thread under and behind foot, and position fabric under foot.



② Lower foot.③ While needle is pierced all the way through fabric, step gently on foot

controller.

4 Raise needle to highest position.5 Lift foot, remove fabric and cut

Finish

Sewing

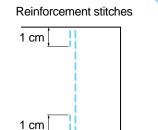
thread.

- When using thread trimmer:
 ④ Push thread trimmer button (this will cause the upper and bobbin threads to be cut automatically and the
- needle to stop in a raised position.)

 (5) Lift presser foot and remove fabric.



- ① Make sure needle is pierced all the way through fabric.
- ② Lift presser foot, and turn fabric using needle as an axis.
- 3 Lower foot continue sewing.

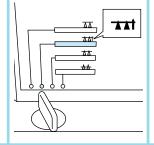


At the beginning of a seam, sew a few stitches with the hand wheel, hit the reverse stitch button and sew a few stitches back to reinforce your seam, then go back to normal sewing and finish the seam. Do the same at the end of a seam.

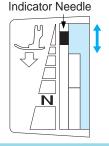
Pin Feeding (for hard-to-handle fabrics)

Fabric: Velvet Quilt Synthetic Suede Knit Coading Others

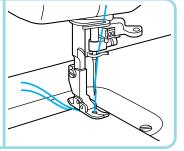
The above fabrics can be sewed neatly by sewing by pin feeding.



 Move feed adjustment knob to pin feeding position.



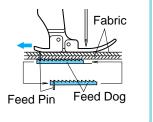
② Adjust pressure adjustment dial until indicator needle is in the right position.



③ Gently pull thread until feed pin catches fabric and sew.

Pin Feeding Unit





The feed pin passes up through all layers of fabric moving with the feed dog's motion to feed all layers of the fabric evenly.

* For safety, the feed pin is automatically lowered when presser foot is raised.

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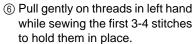
Basic Sewing (2)

A Note Make sure power is off before changing feet.

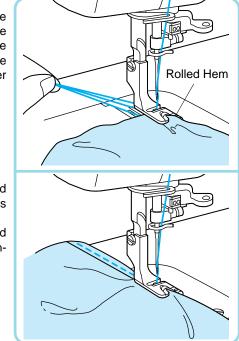
Rolled Hem Foot

- 1) Attach rolled hem foot.
- * Refer to page 12 for instructions on changing sewing feet.
- ② Insert needle approximately 0.5 cm from the edges of the fabric and sew 2 stitches.
- ③ Raise needle and foot, pull fabric towards you.

0.5 cm 0.5 cm→ With your right hand, put the edge of the rolled hem under the presser foot, from the spot where the threads come out. Insert the edge so that it lies directly under the needle.



⑦ Fold hem over about 0.5 cm and continue feeding folded hem under foot while sewing.



4 Hold the 4 threads in your left hand.



CONTENTS Accessories

Caring for Your Machine

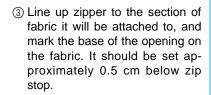
Basic Sewing (3)

♣ Note

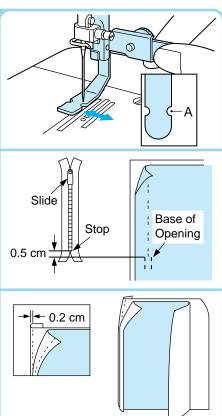
- Make sure power is off before changing feet.
- When attaching zippers to stretch fabrics, use the pin feed method and adjust foot pressure accordingly.

Zipper Foot

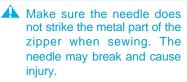
- 1 Attach zipper foot.
- ② Turn hand wheel to lower needle and adjust position of foot to needle.



④ Fold hem about 0.2 cm from mark, and make a mark along the edge. Separate the seam allowance.



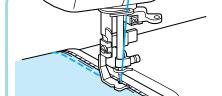
⑤ Sew zipper onto fabric along mark.

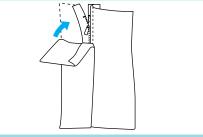


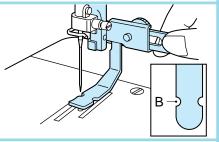
(6) Line up folded seam to stitches.

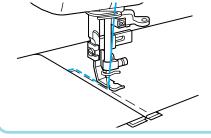


- Turn hand wheel to lower needle and make sure the needle and position of the foot are lined up properly.
- Baste zipper onto fabric and sew along edge with fabric right side up.
- * Reinforce base of opening by sewing over it twice.
- If the zipper slide gets in the way, lower the needle all the way through the fabric, lift the foot, and move the slider out of the way.









Basi Sewir

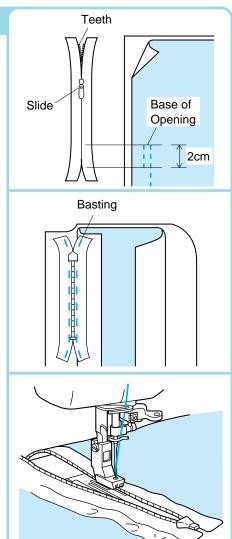
CONTENTS

Your Machine

- 1) Attach invisible zipper foot.
- ② Align zipper with fabric. Mark the base of the opening approximately 2 cm above the end of the zipper.

- ③ Separate the seam allowance.
- ④ Line up zipper with fabric on the wrong side of the fabric, open zipper, and baste zipper to the fabric.

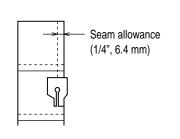
- ⑤ Sew the zipper to the fabric with the wrong side of the zipper and fabric up.
- When sewing with the teeth to the right, the left side of the foot should line up with the left teeth of the zipper.

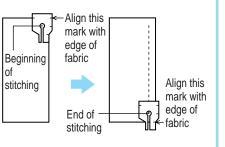


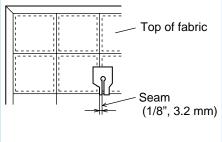
1/4" Foot

- Sewing machine settings: Stitch length = 2 - 2.5
- Sew a consistent seam allowance (1/4", 6.4 mm) when piecing together a quilt.
- Use guides (mark) to begin, end, or pivot 1/4" from edge of fabric.

 Accurately top stitch 1/8" from seam.







anging ser Feet S

Threading

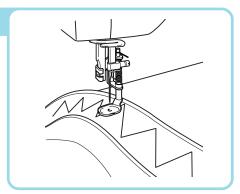
CONTENTS Accessories

Your Machine

Quilting Foot

Reduce the foot presser and turn the dial on the machine lowering the feed dogs for free motion quilting.

Also the needle threader will not work when this foot is in use.



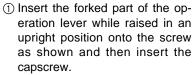
Walking Foot

⚠ Note

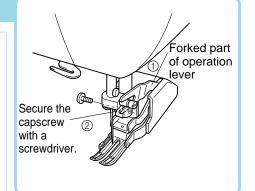
• Do not press the pedal all the way down.

Try to keep the sewing speed below 70% of the maxinum speed.

- The cloth may not feed if you sew at high speeds.
- The feed dog for feeding the cloth may not move if the clamping pressure on the cloth is too strong.
- It is not advisable or necessary to use the Pin Feed mode with the walking foot.



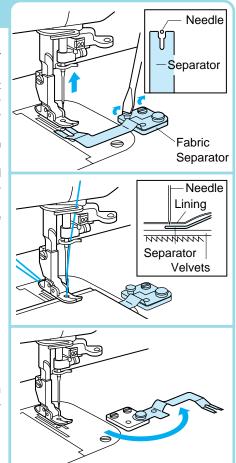
2 Tighten the screw securely with a screwdriver. Tightening adequately is important as the screw might loosen due to the foot and forked operation lever vibration.



Lining

- (1) Raise needle and foot.
- ② Move separator so it sits under presser foot.
- ③ Make sure it is lined up so that the needle passes through the slot of the separator without hitting the plate itself.
- 4 Secure liner plate in place with lining plate screws.
- (5) Set pressure of sewing feet and feed position to pin feeding position.
- 6 Pull thread until lower needle catches fabric.
- * Sew 2-3 reinforcement stitches.

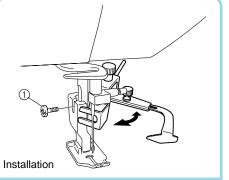
(7) When not using separator, it can be swung off to the side as illustrated in drawing.



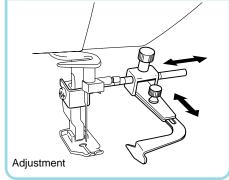
• Use the separator to neatly sew 2 hard to manage fabrics together by keeping them from interacting with one and other before the needle sews them together in a perfect seam.

Seam Guide

1) Tighten the screw securely with a screwdriver since it might otherwise loosen due to vibration.



To be able to adjust the position of the foot towards the arrow.



♠ Note

• Lighten the presser foot pressure slightly when using the fabric separator.

Caring for Your Machine

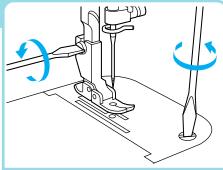
Cleaning the Machine

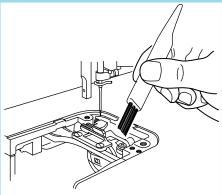
⚠ Note

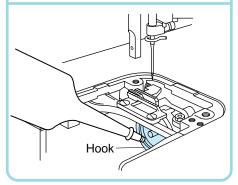
Make sure power is off before cleaning sewing machine.

- 1 Turn machine off.
- ② Remove foot.
- ③ Remove needle plate.
- ④ Clean out dust and thread scraps.
- * Thread scraps can be swept out through the bobbin door.

- ⑤ When the area under the needle plate is cleaned out, oil hook of bobbin case with sewing machine oil.
- * Use a cloth to clean the machine of any excess oil.
- (6) Attach needle plate and foot.

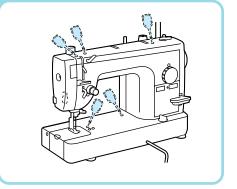






Lubrication Points

- Oil the machine approximately once per month.
- * Use a cloth to wipe the machine clean of any oil spilled near the lubrication points.



■ Keep Your Sewing Machine Clean

Please use a soft, dry cloth to wipe off light dirt and dust. If sewing machine is very dirty, wipe with a cloth soaked in warm water, or in warm water containing a neutral detergent. Then wipe off any detergent residue, and wipe off water with a dry cloth.

■ Precautions

Please keep sewing machine away from heat sources such as irons and space heaters. Do not use chemicals like benzine or thinner to clean your machine. When machine is not in use, please keep machine out of direct sunlight.



Item	Specification		Item	Specification		
Sewing Speed	1,500 stitches per minute		Height of feed dog	g 0.7 mm 1.1 mm		
(maximum)			Height of	3 mm – 3.5 mm		
Stitch Length			lower needle			
(pitch)			Needles that	HLX5#9 – #18		
Stroke of	34.1 mm		may be used	SCHMETZ 130	/705H #65 – #100	
Needle			Bed dimensions	439 mm × 178 mm		
Stroke of	64.7 mm		Total weight	11	1 kg	
Thread			Sewing Light	120V model: 1	20V/15W	
Take-Up Lever				P.	arts code: X53061-000	
Foot Height	Foot Lift	One	6 mm		220-240V model: 2	40V/15W
		Two	9 mm		P.	arts cord: 205336-000
	Knee control Over 10 mm		Sewing area	595 mm × 285 mm		

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Changing Presser Fee

Basic Sewing

Your Machine

Trouble Shooting

* Before taking your sewing machine in for service, check the following chart. Improper fabric/needle/ Upper threading is not Upper thread tension is **Thread** Thread is getting tangled. Bobbin case is scratched thread combination. threaded correctly. too hiah. shop See chart on p.11 for the right If you still cannot find Breakage Re-thread machine Remove needle plate and Clean bobbin case and under 8-10.19 Reduce tension needle to use with your properly. check bobbin case abric and thread. where Bobbin thread is not passing Bobbin case is scratched. **Bobbin Thread** Thread is getting tangled. Bobbin tension is too high. correctly from bobbin case. Reinsert bobbin Remove needle plate and **Breakage** Clean bobbin case and Reduce tension. properly check bobbin case under needle plate you Needle is bent, or tip is Area under needle Machine is not threaded Skipped Wrong needle. correctly dulled. plate needs to be cleaned. properly purchased See chart on p.11 to choose the Clean feed dog and bobbin **Stitches** Reattach. needle that best fits your Change needles. Rethread machine 8-10 case. Oil the machine. abric-thread combination the problem, please Wrong needle for the fabric Upper thread tension is You're sewing a lightweight fabric with **Fabric** Threading is incorrect. Bobbin tension is too high. and thread you are using. too high. feed dogs in heavyweight position. See chart on p.11 to choose **Puckers** Rethread machine. Adjust feed dogs needle that best fits your Reduce tension. Reduce tension. <u>;</u>=: 8-10 or your Sewing heavyweight fabric with feed dogs in lightweight fabric Pressure of sewing foot is Fabric Won't Feed Stitch length is too short. Thread is getting tangled. Properly or Irregular Rethread machine. Clean needle Adjust stitch length increase foot pressure. Adiust feed doas. Stitches plate and bobbin case. 8-10.19 nearest Improper fabric/needle/ Upper threading is Thread is not passing through Loop In thread combination take incorrect. bobbin case correctly See chart on p.11 for the righ Re-thread machine Seam Reset bobbin case needle to use with your properly. fabric and thread. Brother your sewing machine into Needle is not attached Improper fabric/needle/ You're pulling the fabric Needle Wrona needle. thread combination. correctly oo hard. See chart on p.11 for the righ Pull the fabric **Breakage** Reattach Change needles. needle to use with your dealer more aently. 13-16 abric and thread The foot controller has The automatic safety Sewing Machine The power isn't on Machine's not plugged in. Machine is out of oil come unpluaaed. device has operated. for repair Clean and oil the Doesn't Run Check to make sure the Turn the power on Reattach foot controller machine machine's plugged in. The area under the needle Machine Is Machine is out of oil plate needs to be cleaned. Clean feed dog and **Noisy** Oil the machine. bobbin case. Needle is not raised Using the automatic needle Wrona needle for the Hook of needle threader doesn't **Automatic Needle** all the way up. thread you're using pass through eye of needle. threader incorrectly Threader Doesn't Turn hand wheel to Check to make sure the Check the use of the auto-See chart on p.11 Work raise needle hook isn't bent matic needle threader Needle is not properly Needle is bent, or tip is Area under needle plate Upper threading is **Thread Cutter** Wrong needle. attached. dulled. needs to be cleaned incorrect. See chart on p.11 to choose the Clean feed dog and Doesn't Work

Change needles

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Names of Parts

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Stitch Samples and Needle Chart

Changing Presser Feet

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Rethread

bobbin case.

Reattach

needle that best fits your

fabric-thread combination

