

SEWING MACHINE

brother®

**PQ1500
OPERATION MANUAL**



“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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CONTENTS

Accessories

Names of Parts

Before You Begin

Changing Needles and Light Bulb

Threading

Stitch Samples and Needle Chart

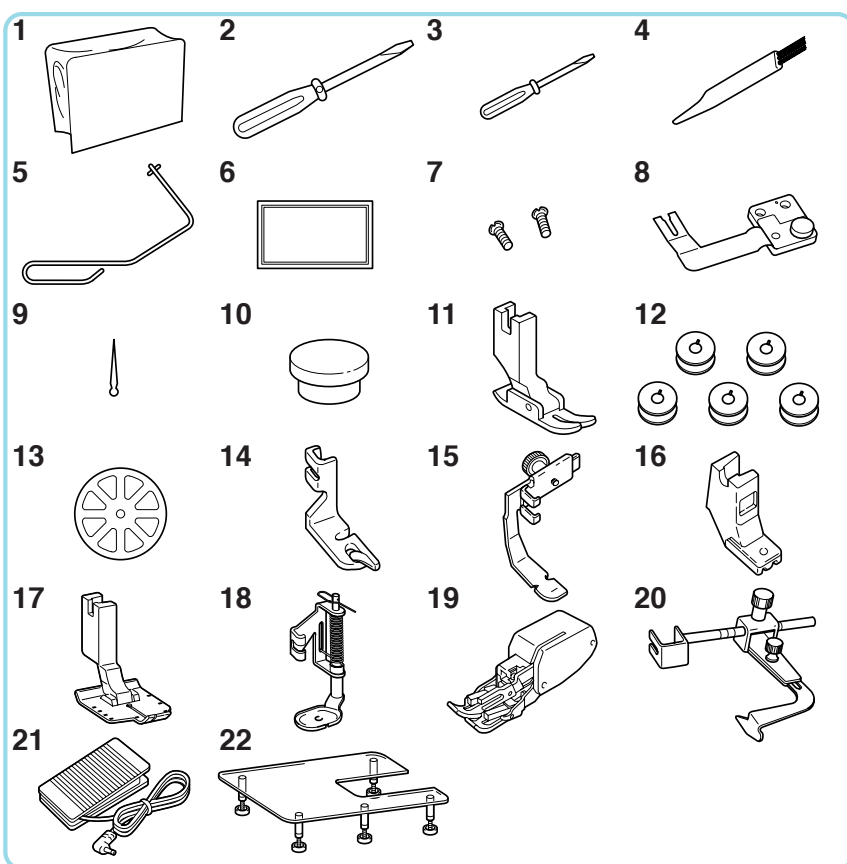
Changing Presser Feet

Basic Sewing

Caring for Your Machine

Trouble Shooting

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 1 Size 16 1 Ballpoint Needle	X80805-001
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
Optional Accessories		
22	Fabric Extension Table	SA506

Note

Foot controller: Model N5V

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

CONTENTS

Accessories

Names of Parts

Before You Begin

Changing Needles and Light Bulb

Threading

Stitch Samples and Needle Chart

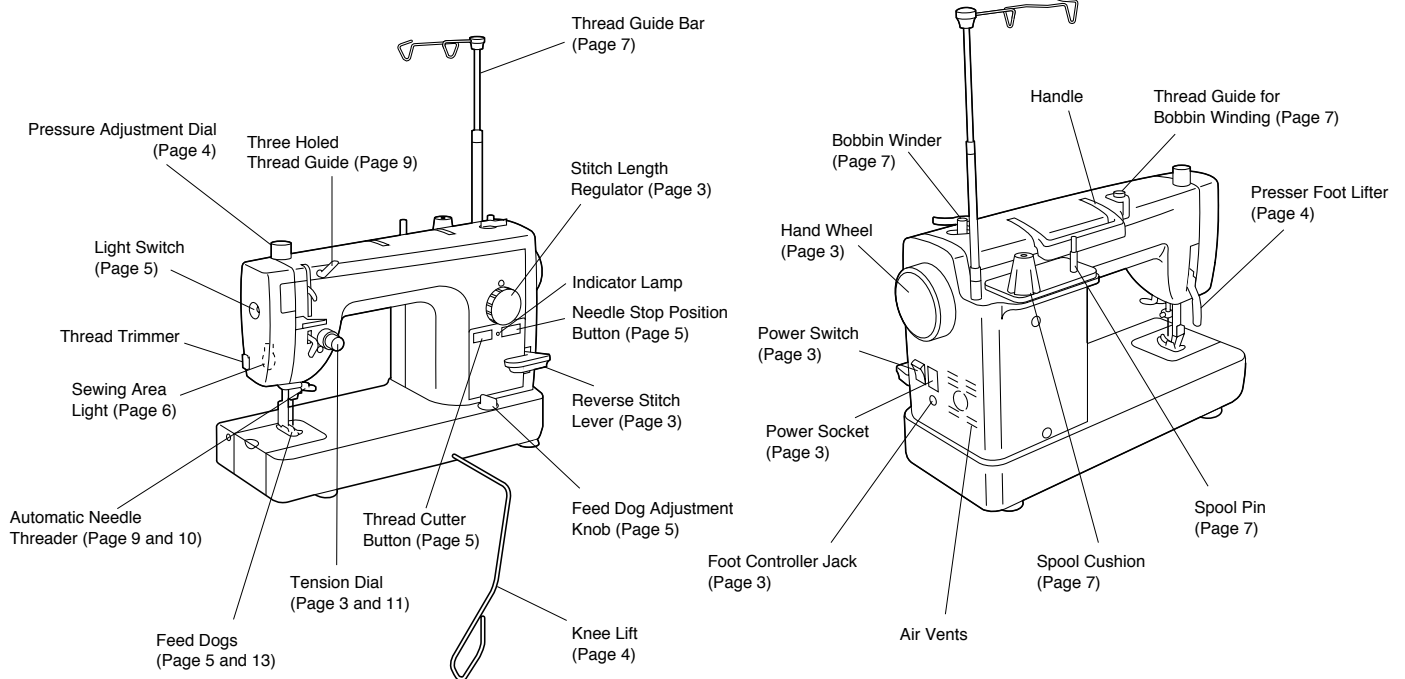
Changing Presser Feet

Basic Sewing

Caring for Your Machine

Troubleshooting

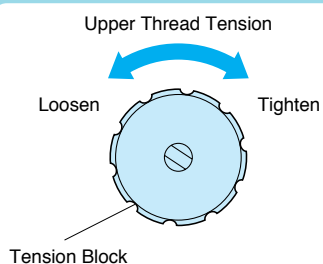
Names of Parts



Before You Begin (1)

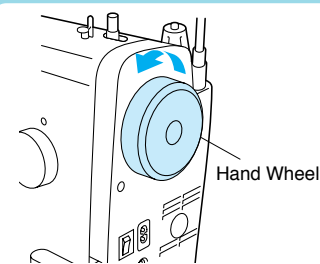
Tension Dial

- 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.



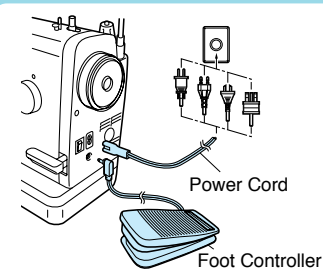
Power Cord and Foot Controller

Note
Please use common household current.

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

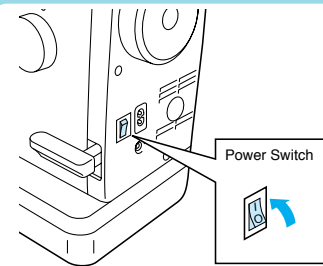
Note

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



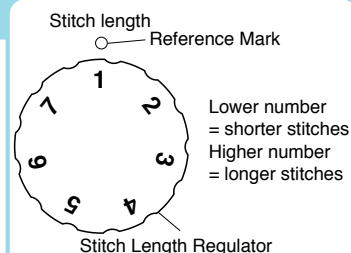
Power Switch

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



Stitch Length Regulator

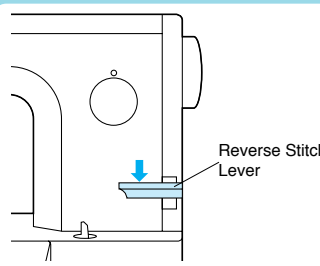
- Adjust desired stitch length using stitch regulator dial.



Reverse Stitch Lever

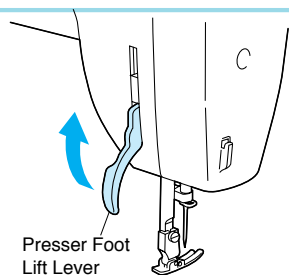
- Sewing in reverse is possible when the reverse stitch lever is in the lowered position.

- * Make sure to push the lever all the way down when reverse sewing is desired.
- * Stitch length for reverse stitches is set for at least 5 mm.



Presser Foot Lift Lever

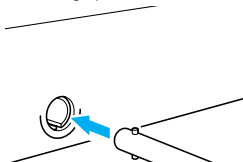
- Lowering the presser foot lift lever lowers the sewing foot down onto the fabric and engages the tension function.
- * When working with heavy fabrics or other fabrics that don't slide easily under the foot, raise the presser foot lever to position the fabric.



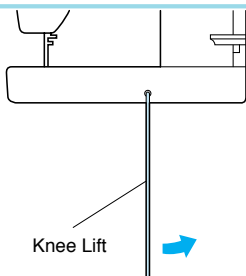
Knee Lift

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

Setting up the knee control.

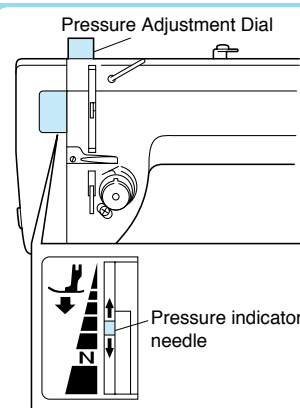


- * Push the knee lift all the way in.



Pressure Adjustment Dial

- Turning the pressure adjustment dial raises and lowers the pressure indicator needle.
- See also: "Feed Dog Adjustment Knob" on page 5.



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.

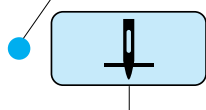


Thread Cutter Button

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.

Indicator Lamp

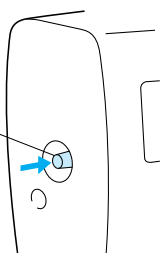


Needle Stop Position Button

Light Switch

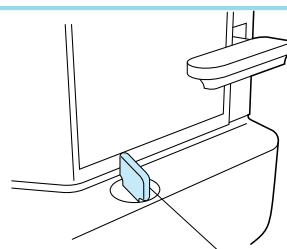
- Push light switch to turn the light over the sewing area on and off.

Light Switch



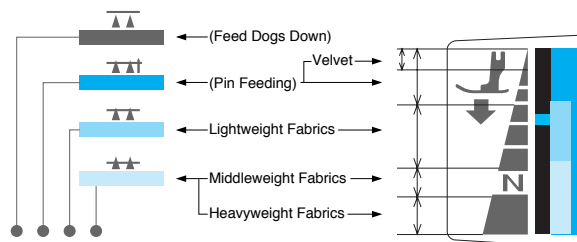
Feed Dog Adjustment Knob

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



Feed Dog Adjustment Knob

Foot Pressure and Feed Dog Position



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

Note

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

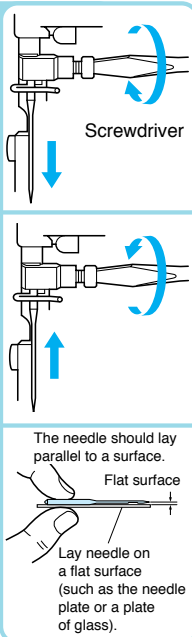
Changing Needles and Light Bulb

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.



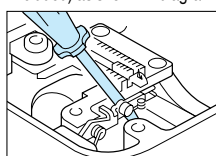
* Check needles on a flat surface to make sure they're not bent.

Note

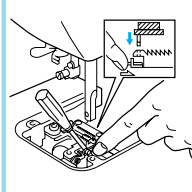
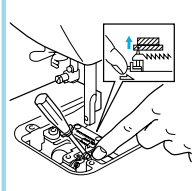
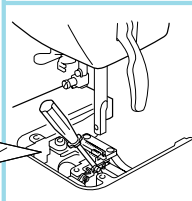
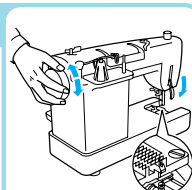
HLX5 needles should be used; however, Schmetz 130/705H may also be used under normal circumstances.

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.



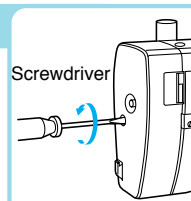
- ⑥ Attach new feed pin to feed pin changer, lower and attach while holding spring with fingertip.
- ⑦ Remove screwdriver.
- ⑧ Re-attach needle plate, needle and presser foot.

Note

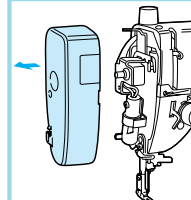
Please make sure power is off before carrying out the following operation. The glass plate over the light bulb will be hot immediately after using the machine, so you should wait until the machine has had a chance to cool down before changing bulbs.

Changing Light Bulbs

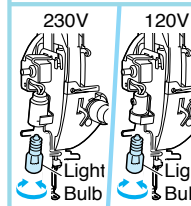
- ① Turn off power.
- ② Remove screw from head.



- 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.

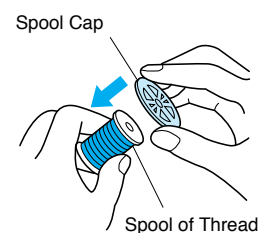
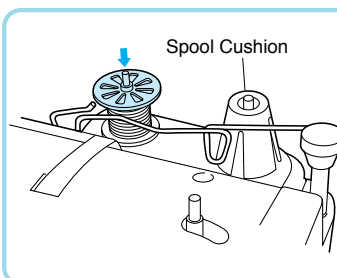
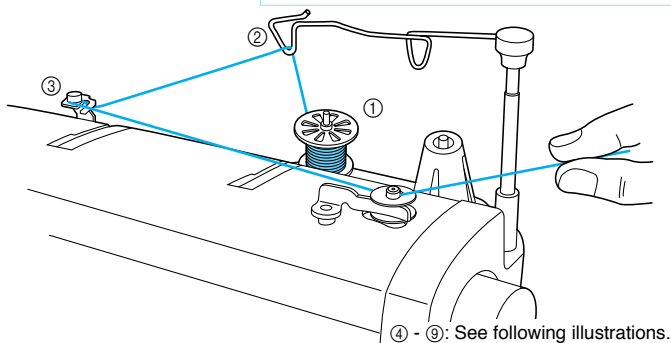


Threading (1)

Bobbin Winding



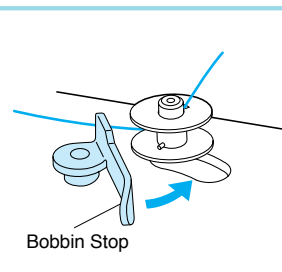
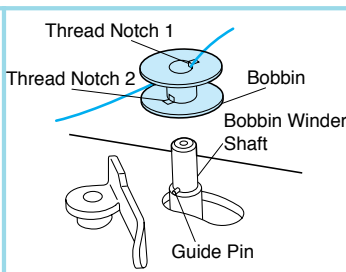
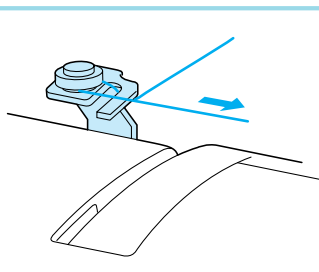
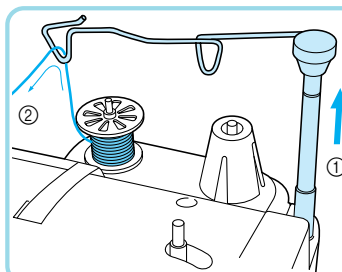
Note
Do not move bobbin stop while machine is running.



① Put spool of thread on spool pin.

* Use spool cushion when using cross-wound thread.

* Use spool cap when using parallel-wound thread.

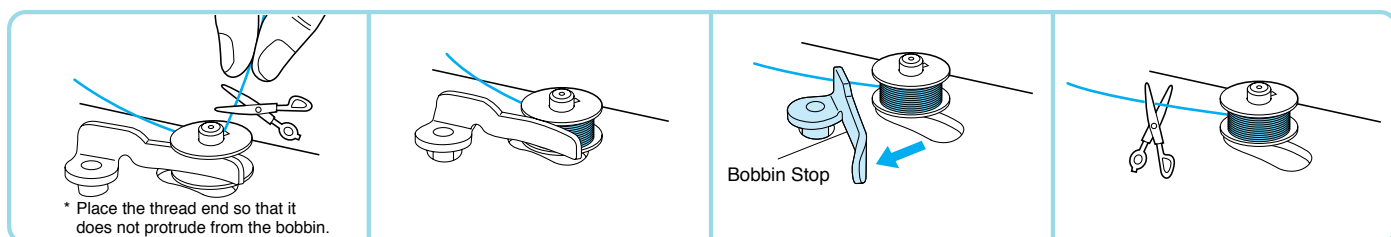


② Lift thread guide bar all the way up, and run thread through triangular thread guide as shown in drawing.

③ Run 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.



* Place the thread end so that it does not protrude from the bobbin.

Bobbin Stop

⑥ While holding the end of the thread, step on the foot controller for a few seconds. Once enough thread has wound itself around the bobbin to hold itself in place, release the foot controller and trim the excess thread.

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

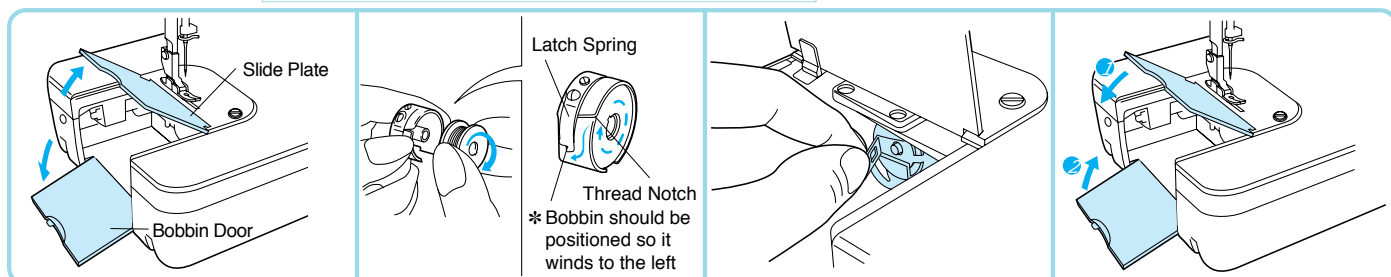
⑧ Manually move bobbin stop back to original position.

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.

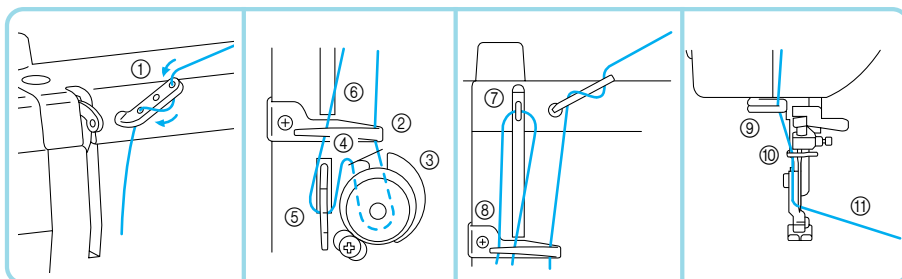
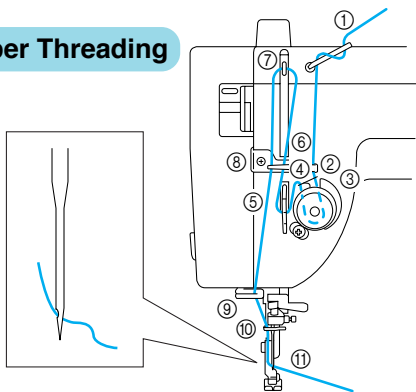
- * If the latch lever is not all the way on the hook, it may fly off during sewing and cause lower thread breakage.

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

Threading (2)

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.

Upper Threading

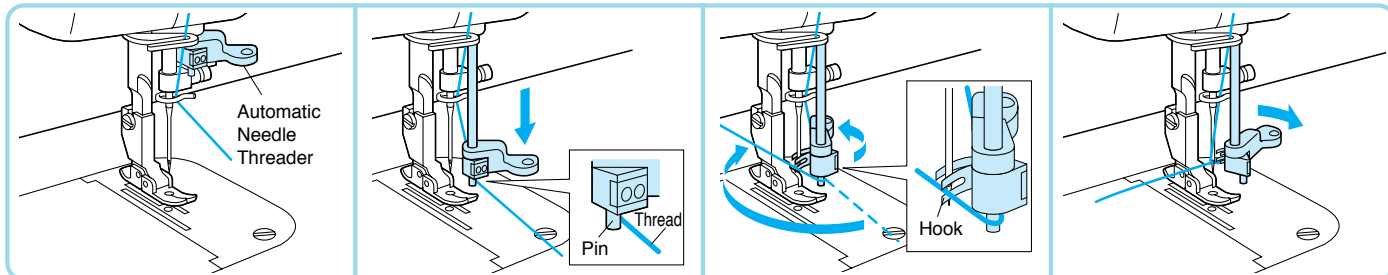


● Make sure thread take-up lever is in highest position and presser foot is up.

* When using polyester thread or thread that tangles or breaks, run the thread through all three holes of the thread guide.

* If the thread is still tangles or breaks, run the thread through the holes backwards as shown in diagram.

Using the Automatic Needle Threader

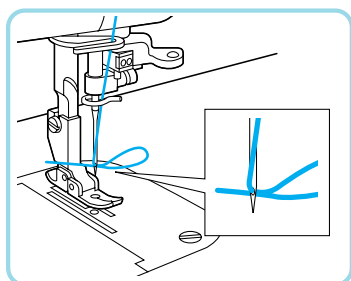


① Pull hand wheel towards you until needle is in the highest position, and lower presser foot.
② Take thread in your left hand, and gently pull it forwards.

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.

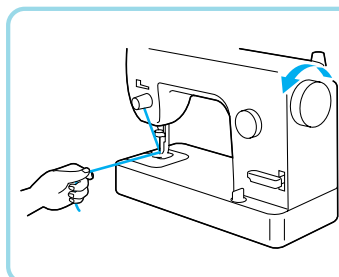


⑥ Pull loop to the right.

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

● The automatic needle threader cannot be used with the thread-needle 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.

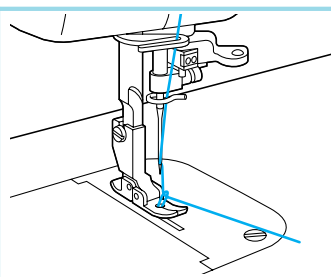
How to Pull Out the Bobbin Thread



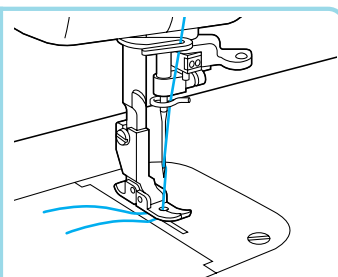
* Insert threaded bobbin in sewing machine and then begin.

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

* Turn the hand wheel once completely.



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



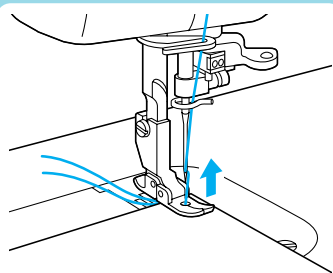
③ Pull approximately 15 cm of upper and bobbin threads out.

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

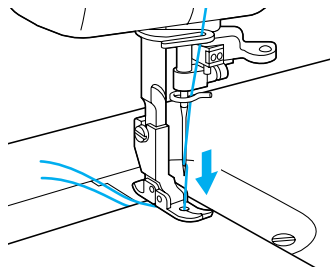
Stitch Samples and Needle Chart

Stitch Samples

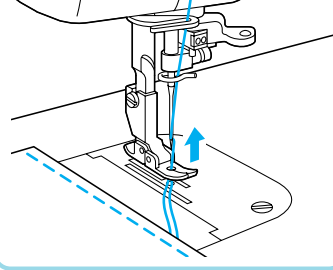
- ① Set stitch length regulator to desired stitch length.
- ② Make sure approximately 15 cm of upper and bobbin threads are pulled out and laying behind presser foot. While needle is in raised position, insert a test strip from the garment fabric under the foot.



- ③ Lower presser foot.
- ④ Lower needle through fabric, then step gently on presser foot and begin.



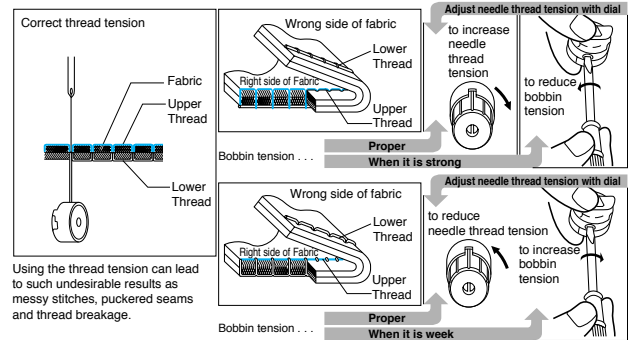
- ⑤ Raise needle to highest point.
- ⑥ Lift presser foot, remove fabric and then cut thread.



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

- * 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 other needle designed for use with knit fabrics.

Changing Presser Feet

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

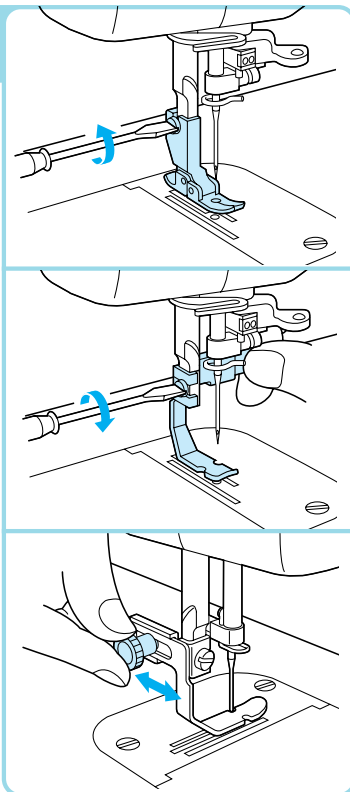
Changing Presser Feet (Zipper Foot)

- 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.

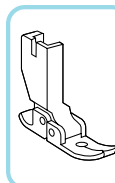
- * Use the position knob on back of the zipper foot to adjust position of foot in relation to needle.
- * Only the zipper foot has a position knob. You can begin sewing with all other presser feet immediately after attaching.



Presser Feet

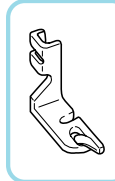
● Pin Feed Foot

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



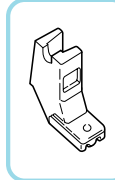
● Rolled Hem Foot

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



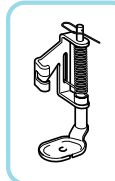
● Invisible Zipper Foot

Use to attach concealed fasteners.



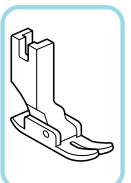
● Quilting Foot

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



● General purpose Foot

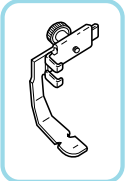
This foot is used for most sewing. (Can also be used for sewing thick fabrics or seams.)



- * When sewing thick seams, lightly guide the fabric with your hand and on the downward side of the seam.
- * Can also be used with pin feeding

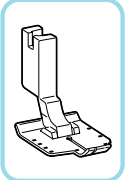
● Zipper Foot

Use to attach fasteners other than concealed fasteners.



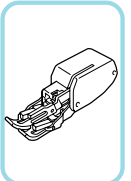
● 1/4" Foot

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.



* 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.

CONTENTS

Accessories

Names of Parts

Before You Begin

Changing Light Bulb

Threading

Stitch Samples and Needle Chart

Changing Presser Feet

Basic Sewing

Caring for Your Machine

Trouble Shooting

Basic Sewing (1)

Basic Sewing

Before sewing.

Begin sewing.

Finish Sewing.

* When changing sewing directions.

Reinforcement stitches

① 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 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
Coating
Others

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

① 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.

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.

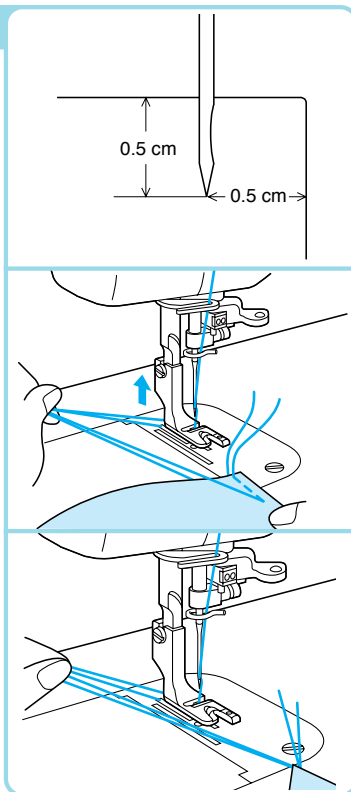
Basic Sewing (2)

Note Make sure power is off before changing feet.

Rolled Hem Foot

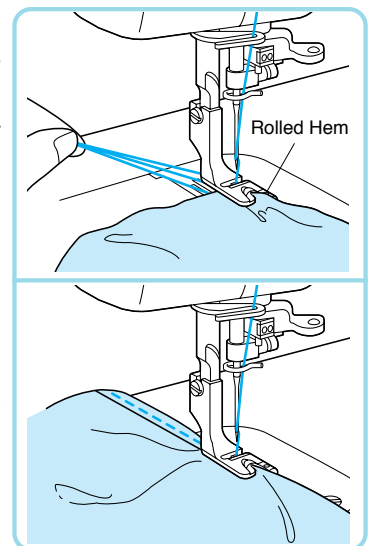
- ① Attach rolled hem foot.
- * Refer to page 12 for instructions on changing sewing feet.
- ② Insert needle approximately 0.5 cm from the edges of the fabric and sew 2 stitches.
- ③ Raise needle and foot, pull fabric towards you.

- ④ Hold the 4 threads in your left hand.



- ⑤ 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.

- ⑥ Pull gently on threads in left hand while sewing the first 3-4 stitches to hold them in place.
- ⑦ Fold hem over about 0.5 cm and continue feeding folded hem under foot while sewing.



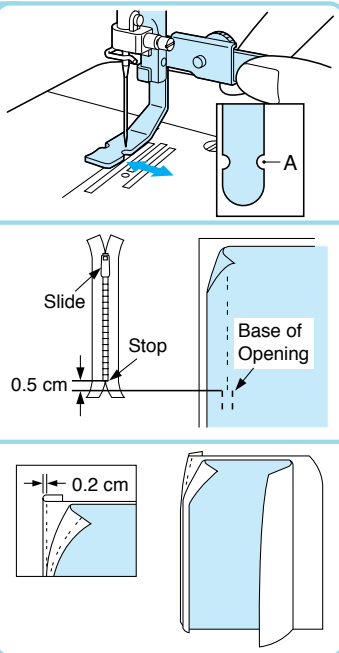
Basic Sewing (3)

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.
- ③ Line up zipper to the section of fabric it will be attached to, and mark the base of the opening on the fabric. It should be set approximately 0.5 cm below zip stop.
- 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.

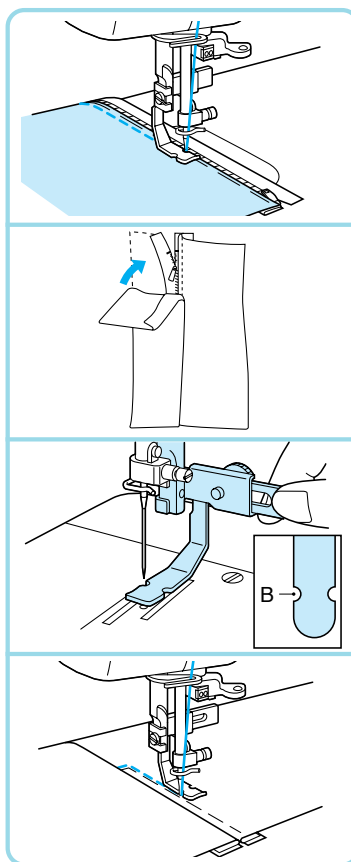
- ⚠ Make sure the needle does not strike the metal part of the zipper when sewing. The needle may break and cause injury.

- ⑥ Line up folded seam to stitches.

- ⑦ Change position of zipper foot.
- ⑧ Turn hand wheel to lower needle and make sure the needle and position of the foot are lined up properly.

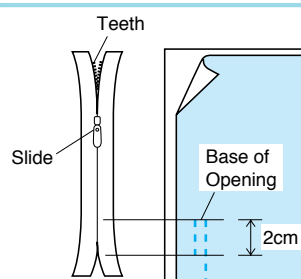
- ⑨ Baste zipper onto fabric and sew along edge with fabric right side up.

- * 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.

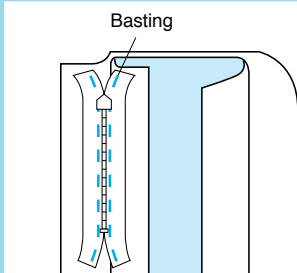


Invisible Zipper Foot

- 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.

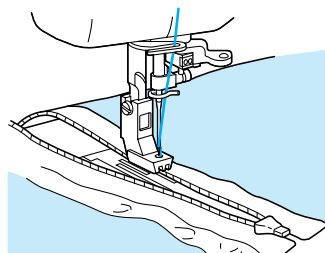


- ③ Separate the seam allowance.
- ④ Line up zipper with fabric on the wrong side of the fabric, open zipper, and baste zipper to the fabric.



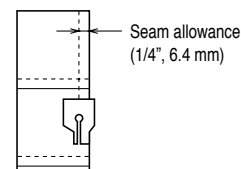
- ⑤ Sew the zipper to the fabric with the wrong side of the zipper and fabric up.

* When sewing with the teeth to the right, the left side of the foot should line up with the left teeth of the zipper.

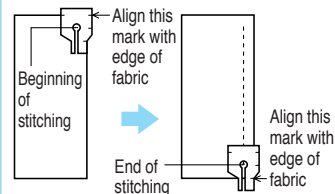


1/4" Foot

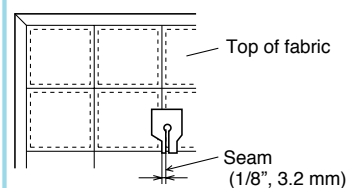
- Sewing machine settings:
Stitch length = 2 - 2.5
- Sew a consistent seam allowance (1/4", 6.4 mm) when piecing together a quilt.



- Use guides (mark) to begin, end, or pivot 1/4" from edge of fabric.

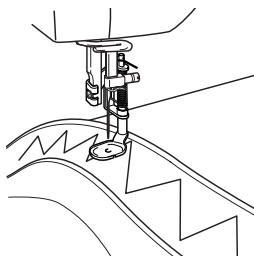


- Accurately top stitch 1/8" from seam.



Quilting Foot

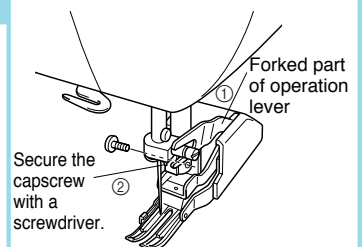
Reduce the foot presser and turn the dial on the machine lowering the feed dogs for free motion quilting. Also the needle threader will not work when this foot is in use.



Walking Foot

▲ Note

- Do not press the pedal all the way down. Try to keep the sewing speed below 70% of the maximum 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.



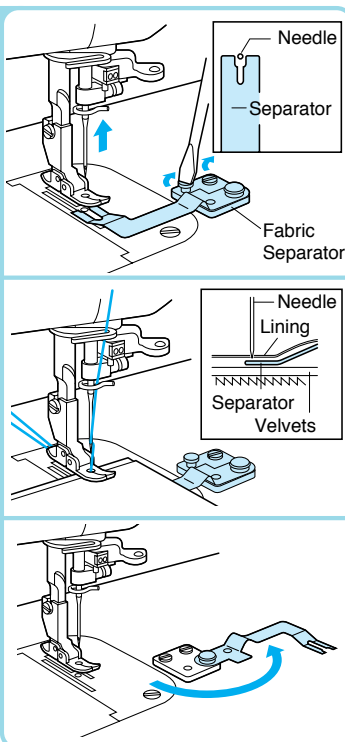
- ① Insert the forked part of the operation lever while raised in an upright position onto the screw as shown and then insert the cap screw.
- ② Tighten the screw securely with a screwdriver. Tightening adequately is important as the screw might loosen due to the foot and forked operation lever vibration.

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.



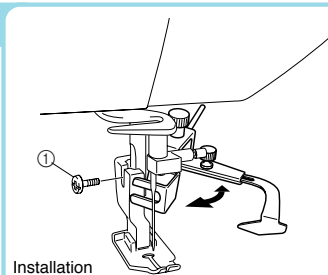
Note

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

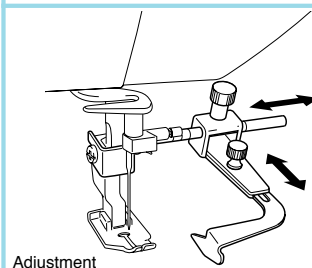
- Use the separator to neatly sew 2 hard to manage fabrics together by keeping them from interacting with one and other before the needle sews them together in a perfect seam.

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.



Caring for Your Machine

Cleaning the Machine

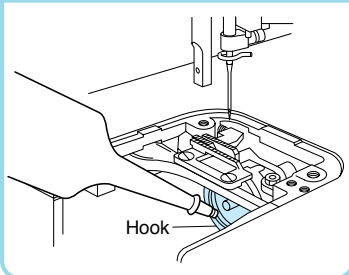
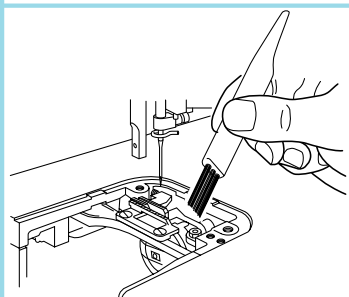
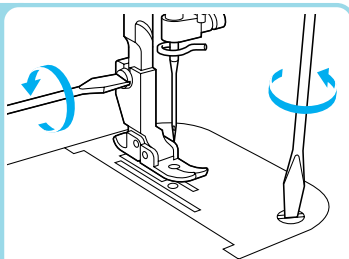
Note
Make sure power is off before cleaning sewing machine.

- 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.

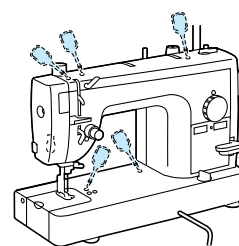
- ⑤ When the area under the needle plate is cleaned out, oil hook of bobbin case with sewing machine oil.
- * Use a cloth to clean the machine of any excess oil.

- 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.

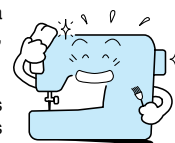


Keep Your Sewing Machine Clean

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 (maximum)	1,500 stitches per minute	Height of feed dog	0.7 mm 1.1 mm
Stitch Length (pitch)	0 – 7 mm	Height of lower needle	3 mm – 3.5 mm
Stroke of Needle	34.1 mm	Needles that may be used	HLX5#9 – #18 SCHMETZ 130/705H #65 – #100
Stroke of Thread Take-Up Lever	64.7 mm	Bed dimensions	439 mm × 178 mm
Foot Height	Foot Lift One 6 mm Two 9 mm Knee control Over 10 mm	Total weight	11 kg
		Sewing Light	120V model: 120V/15W Parts code: X53061-000 220-240V model: 240V/15W Parts cord: 205336-000
		Sewing area	595 mm × 285 mm

Trouble Shooting

* Before taking your sewing machine in for service, check the following chart.

