

# Single needle zigzag lock stitcher

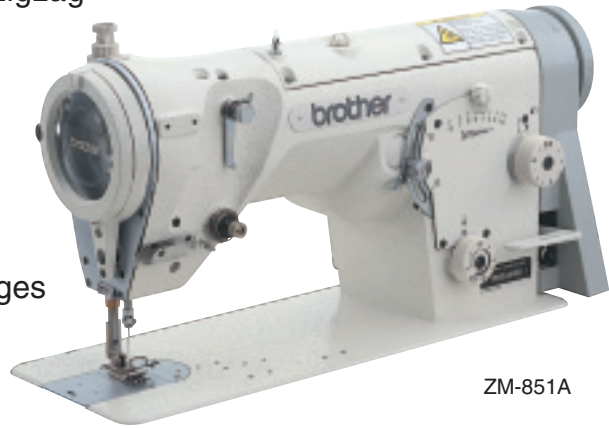
ZM-850A

Plain zigzag

ZM-851A

3-step zigzag

- Softer sewing finish
- Prevents skipped stitches and thread breakages
- Easy operation and setting



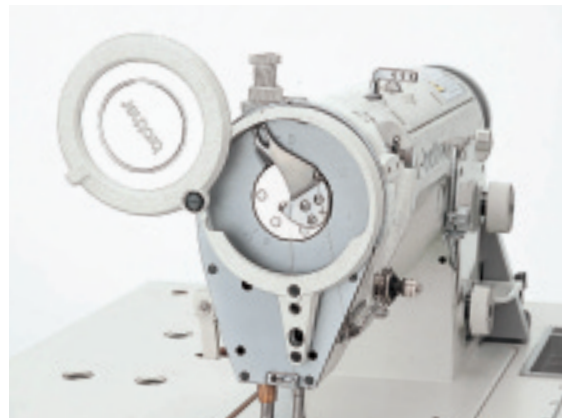
ZM-851A

*A standard model for sewing plain and 3-step zigzag which is ideal for large production volumes.*

## Seams with attractiveness and accuracy

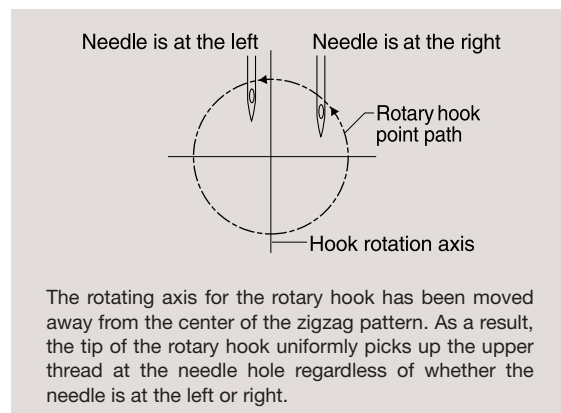
### Softer sewing finishes with improved quality

In order to provide a much softer sewing finish even with weaker thread tensions, the needle and rotary hook timing and the shape of the rotary hook and thread take-up lever have been changed, and the thread path has been improved. These changes ensure that this sewing machine provides the same stable and high-quality sewing finishes as electronic zigzag stitchers.



### Trouble-free hook shaft offset mechanism

This mechanism prevents the skipped stitches and thread breakages which can occur particularly when the needle is at the right zigzag position. At the same time, it improves maintenance by making it easier to adjust the rotary hook timing, and also prevents the rotary hook tip being damaged by the needle guard.



## High-durability titanium-coated rotary hook

The inner rotary hook has a titanium coating that boosts the rotary hook's heat resistance, so that less oil needs to be supplied for lubrication. This eliminates problems with oil staining the thread and contaminating the material.



## Stable small-amount lubrication for rotary hook

A unique oil valve method (patent pending) has been adopted in the rotary hook lubrication mechanism, making it possible to supply small amounts of oil to the rotary hook in stable.

## Easy operation and setting

### Adoption of a reference line adjustment lever

The zigzag reference line and zigzag width can be changed easily by operating a lever. This design makes operation much easier, and the reference line adjustment lever also includes a lock nut which allows fine adjustments to be made easily.



### Easy presser foot pressure adjustment

The presser foot adjustment screw has scale markings which serve as a guide for adjusting the presser foot pressure. In addition, it is also large in size and easy to operate.



### Adjustment dial for condense stitch settings

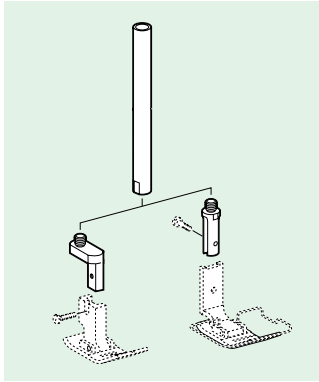
A new condense dial has been added. This makes it much easier to make condense stitch settings.



# Options

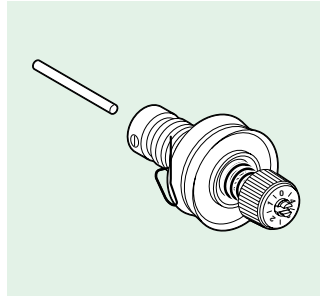
## Presser bar

This is the separate type presser bar for using the presser foot for lock stitchers.



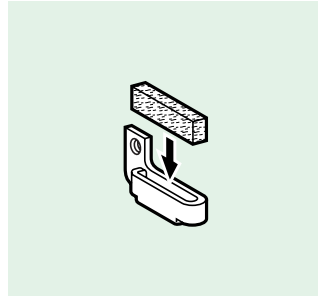
## Thread tension assy (disc type) / Tension release pin

The difference in thread tightening depending on sewing speed when ladies wear and knitted garments are sewn is more reduced.



## Thread guide, F / Felt

Prevents upper thread flapping causing skipped stitches and thread breakage when sewing coarse materials.



## Rotary hook (carbide-reinforced hook tip)

This prevents the hook tip from becoming worn and thus increases rotary hook durability.




# Gauge parts (850A/851A)

Zigzag width	Needle plate	Feed dog $p$ $h$ (p: pitch, h: height)	Presser foot
8 mm	<p>S48064-001* (850A-003 standard equipment)</p> <p>S48065-001* (850A-001(8mm), 851A standard equipment)</p>	<p>S52435-001* (850A-001(8mm), 851A standard equipment)</p> <p>S52436-001</p> <p>S48143-101</p> <p>S48145-101 (850A-003 standard equipment)</p> <p>S58908-001</p>	<p>S48293-001 (850A-001(8mm), -003, 851A standard equipment)</p> <p>S48299-001</p> <p>S48305-001</p> <p>S58950-001</p>
	<p>S54922-001</p>	<p>S54933-101</p>	
5 mm	<p>S48066-001</p> <p>S48067-001</p>	<p>S06171-101</p>	<p>S48308-001 (850A-001(5mm) standard equipment)</p>
	<p>S06166-001</p> <p>S53410-001* (850A-001(5mm) standard equipment)</p>	<p>S52068-001 (850A-001(5mm) standard equipment)</p> <p>S06170-101</p> <p>S54937-001</p>	
3 mm	<p>S54929-001</p>	<p>S54945-001</p>	<p>S54956-001</p>
	<p>S54930-001</p>	<p>S54946-001</p>	<p>S54957-001</p>

\* For -001 specifications, max. feed amount is 2.5mm.


# Specifications

**ZM-850A-00**



Use		Max. zigzag width
1	General (foundation)	5mm
		8mm
3	General (long stitch)*	8mm

**ZM-851A-00**



Use		Max. zigzag width
1	General (foundation)	8mm

\*If fine adjustments to the stitch length are needed, use "General (foundation)".

**Plain zigzag**  
(Max. zigzag width 5mm)



850A-001 (5mm type)

**Plain zigzag**  
(Max. zigzag width 8mm)









850A-001 (8mm type)  
850A-003

**3-step zigzag**



851A-001

Model	 Zigzag stitch	 1-needle	 Bottom feed	 Height of presser foot	 Needle stroke	 Max. sewing speed
850A	★	★	★	Manual 6 mm Knee 10 mm	33.3 mm	5,000 rpm
851A	★	★	★			

	850A-001, 851A-001 (foundation)	850A-003 (long stitch)
Max. feed amount	2.5 mm	5 mm
Thread take up	Rotary	
Presser pressure	20 – 60 N	
Needle type	SCHMETS SY1965 Nm70/10	
Height of feed dog	1 mm	
Arm pocket area	W269 X D178 mm	

Product specifications are subject to change for improvement without notice. Please read instruction manual before using the machine for safety operation.

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