Electronic eyelet button holer

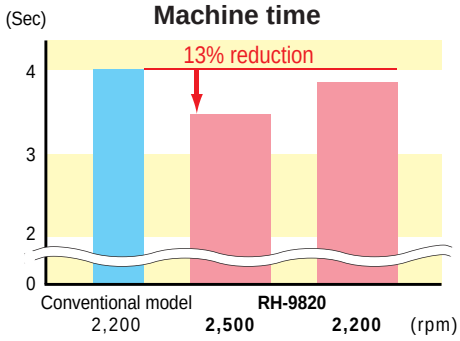
RH-9820

- Enhanced productivity with the world's highest max. sewing speed 2,500 rpm
- Fine stitches with high-precision stitch point
- Large arm pocket allowing smooth material handling
- Easy-to-use operation panel

The further-improved, reliable sewing mechanism is optimally controlled by the most advanced electronic technology.
Productivity and sewing quality are combined at the highest level ever.

The world's highest max. sewing speed 2,500 rpm enhances productivity

The maximum sewing speed of 2,500 rpm has been achieved by the adoption of an optimal machine structure for high-speed drive. The speed is significantly enhanced from the former 2,200 rpm level.
By enhancing the rigidity of the needle bar-area parts (patent pending) and having the feed mechanism and needle bar rotating mechanism servo-controlled, the operating time has been reduced, resulting in 13% reduction of the machine time compared with the conventional model.

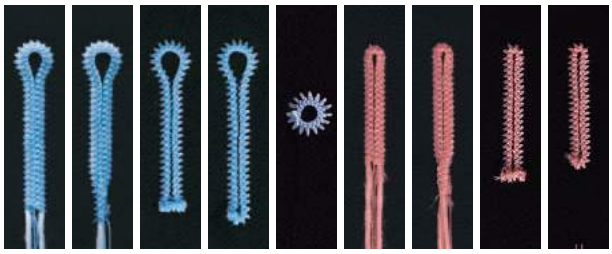


-01 Spec., 100 stitches, Cutting after sewing, Sewing length 22mm, Back material setting

Fine stitches are available

Precision of stitch point has been improved

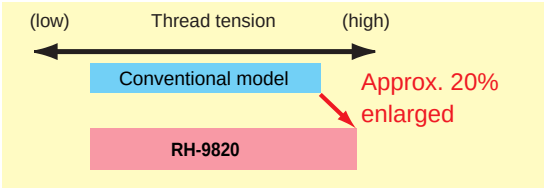
With the highly-rigid feed mechanism with servo control, stitch point is very precise and feed drifting, which is specific to electronic sewing machines, does not occur even in high-speed sewing of weighty materials. The servo control also makes home position detection unnecessary.



Skipped stitches are reduced

The shape of the looper, the thread take-up amount and some other parts have been reviewed. Skipped stitches and insufficient thread tightening due to a change of thread tension are reduced, regardless of types of threads. The range of sewing capability has been enlarged.

Range of sewing capability



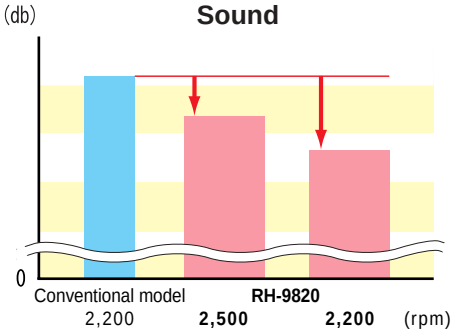
Zigzag width 3.0 mm, Cutting after sewing,
2 pieces of polyester serge (one piece with interlining on one side)
Spun yarn #40, Lower thread tension: 30g
Sewing speed: Conventional model - 2,200 rpm, RH-9820 - 2,500 rpm

Large arm pocket providing ease of operation

The arm pocket of 120 mm depth gives a sufficient space, enabling material setting smooth. It is the most suitable for sewing of vertical buttonholes and hip pocket parts. The arm shape provides a good view of the needle area, allowing operators to observe the sewing operation.

Sewing with less noise

With thorough review of the mechanisms causing noise, quieter sewing even at higher sewing speed than the conventional model has been realized. The machine is made with a sound design gentle to ears, eliminating impact noise.
The vibration of the feed base which is transmitted to an operator is also reduced. The working environment with less operator fatigue can be materialized.



Operation panel easy to use for everyone

The RH-9820 is equipped with a liquid crystal display (LCD) and indicates display items with icons and letters. Setting and check of sewing patterns and change of sewing modes are easy to understand and carry out.

Display with icons and letters, easy to understand

Shortcut keys

Frequently-used settings such as sewing speed and sewing length can be quickly set.

Multilingual display

English Chinese Japanese

Fine adjustment can easily be made

Fine adjustment such as cutting space and knife position compensation can be made on the LCD panel. As the items are shown with icons, operators can operate intuitively without the instruction manual.

Production counter

The number of buttonholes sewn can be counted up to 999,999.

Setting with one-touch key operation

The needle is rotated to make the needle's eye face front, enabling easier threading.

The material setting position (Front/Back) can be set.

The timing of buttonhole cutting (Before sewing/After sewing) can be set.

Cycle sewing

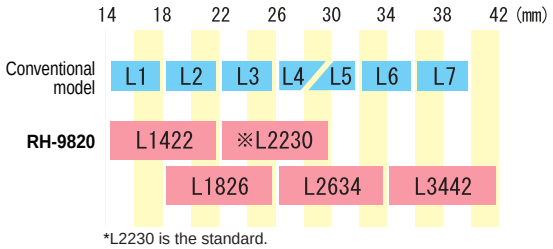
Up to 9 programs, each with up to 9 steps, can be stored.

Sewing length ranges in -02 spec. are increased

In -02 spec., the range of sewing length with each gauge has been increased to 8 mm. The wider gauge ranges reduce the trouble of gauge replacement.

*Change of the ranges L1422-L3442 is available by replacing gauge parts. (For details, please consult your place of purchase.)

Ranges of gauges (sewing length)

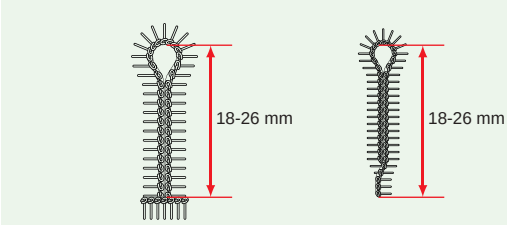


*L2230 is the standard.

Special specification (-02-L1826*) in Short-cut upper & lower thread trimmer spec.

With -02-L1826 spec., one single machine supports a wide range of applications, from straight-bartack buttonholes for casual pants to taper-bartack buttonholes for jeans. Sewing length of this spec. is 18-26 mm.

*Special specification for Chinese market

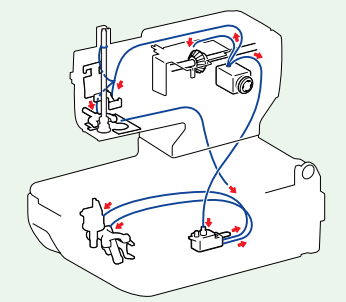


Easy maintenance

Daily cleaning and lubrication can efficiently be done in a shorter time.

Centralized lubrication system

The places to supply oil have been concentrated into one. Minimum oil is automatically lubricated with wicks from the oil tank to every parts requiring lubrication, such as the areas of the needle bar and looper base. The oil level window is laid out at the position easy to check.

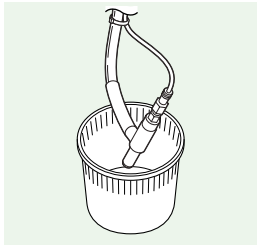


Thread waste can be collected

The machine is equipped with a special pocket in which thread waste can gather. This prevents thread waste from littering, keeping the working environment clean.

Eyelet cloth chips can be cleared

Cloth chips made at eyelet cutting can be cleared by air pressure.



Easy adjustment favorable to maintenance staffs

While continuing the conventional basic adjusting method, many improvements have been made. Installation to production lines and fine adjustment of the machine can be done in a shorter time.

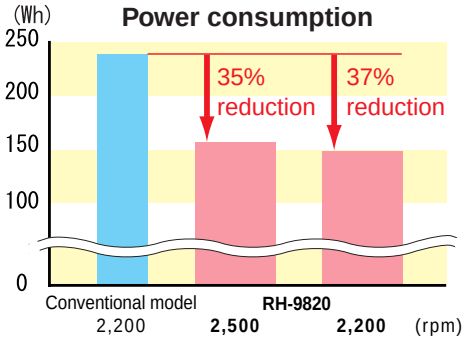
- The number of air tubes has been reduced, saving the trouble of connecting.
- Adjustment of the needle bar and the loopers can be made with the familiar, conventional method.
- An eccentric pin is adopted for the spreader. It enables adjustment without steps, making the operation easier.

Durability of the machine has been improved

The rigidity of the machine arm has been enhanced. Nicking of the knife is substantially reduced by minimizing lateral movement of the hammer against the knife.

Economical model with low power consumption

With the adoption of a energy-saving compact motor, electric power consumption has been lowered by more than 35% compared with the conventional model, while enhancing productivity with the improved max. sewing speed. The RH-9820 is the most energy-saving electronic eyelet buttonhole sewing machine in the market.

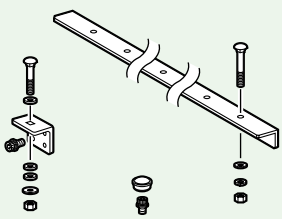


-01 Spec., Without bartack, Cutting after sewing, Sewing length 22 mm, Front material setting

Semi-submerged installation is available

By using the optional parts for semi-submerged installation, favorable operation style can be selected.

Semi-submerge set
(SA7127-001)



Environment-conscious

Brother has established our original “Brother Green Label” for the products in conformity with ISO 14021 and JIS Q14021. The RH-9820 is certified as an environment-conscious sewing machine according to “Brother Green Label” standard, such as “Reduction of power consumption by 35% and above”, “Reduction of noise by 3 dB and above” and “Use of lead-free solder for all PC boards”.

*Comparison with the conventional model RH-981A

Industry’s top energy saving with the direct drive system
Use of lead-free solder in all PCB
Significant extension of the hook’s lifetime

Options

Lapel device (For -00, -01 spec.)

(SA8078-001)
With this device, eyelet buttonholes and straight buttonholes can be sewn without replacing the knife and hammer. It is suitable for cycle sewing of eyelet buttonholes and a lapel buttonhole for menís jackets.

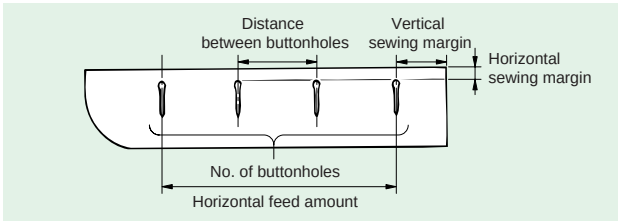
	Eyelet buttonhole	Straight buttonhole
-00	8-50mm	5-44mm
-01	8-42mm	5-36mm

Fly indexer (For -02 spec.)

(Standard size SA8079-001)
(Large size SA8080-001)
The number of buttonholes can be set and the fly can be fed automatically. This device provides speedy sewing of fly buttonholes.

	Standard size	Large size
Buttonhole spacing	38.1 mm, 50.8 mm, 44.45 mm	38.1 mm, 50.8 mm, 44.45 mm, 57.15 mm
No. of buttonholes	2-4	2-6
Vertical sewing margin	L1422, L1826, L2230: 8-23 mm L2634, L3442: 0-11 mm	
Horizontal sewing margin	31.5-41.5mm	
Max. overall feed amount	152.4mm	285.75mm

When sewing with buttonhole spacing out of the given values, please modify the cloth feed bar F assembly (option) for use. The number of buttonholes 2 to 9 is possible.



Gauge parts set (For -02 spec.)*1

	Sewing length	Part code
L1422	14-22mm	SA7750-001
L1826	18-26mm	SA7771-001
L2230	22-30mm	SA7752-001
L2634	26-34mm	SA7756-001
L3442	34-42mm	SA7764-001

Replacement parts set (For -01, -02 spec.)*1

	Part code
-01 → -02	SA7773-001
-02 → -01	SA7784-001

*1 For details, please consult your place of purchase.
*2 The standard switch is different according to the destination.)

Thread nipper device set

(SA7931-001)
Thread cast-off at sewing start can be prevented, providing fine finish with quality stitches.

Thread breakage detector

(SA8077-001)
The sensor of the device detects upper thread breakage.

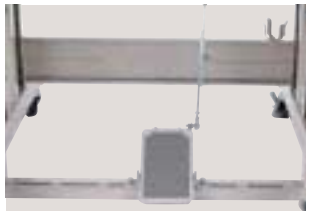
Waist belt presser

(For L26 spec. SA7777-001) (For L30 spec. SA7781-001)
When sewing a waist-belt part having different thicknesses, these work clamps securely holds the article according to its thicknesses. Flopping of the cloth can be prevented.

Treadle unit*2 (SA6567-101)

The operations of work clamp lowering and machine start can be made with a treadle. The speedy operation is suitable for buttonhole sewing of waist belt requiring high productivity.

Please use a treadle and a connecting rod on the market.



Two-pedal foot switch*2 (S42838-301)

The operations of work clamp lowering and machine start can separately be made by foot-operated switching. It is suitable for buttonhole sewing of hip pockets requiring accurate material positioning.

Hand start switch*2 (SA7121-001)

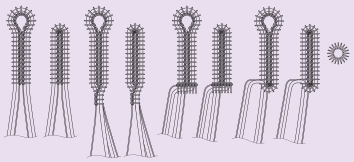
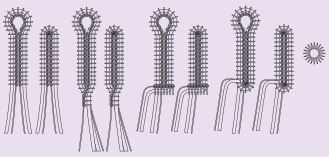
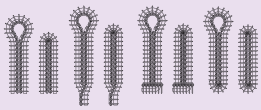
The operations of work clamp lowering and machine start can separately be made by hand-operated switching. It is useful for standing operation.

Exchange parts set (For circular stitching buttonhole)

(For -00 spec. SA7804-001)
(For -01 spec. SA7808-001)

Specifications

RH-9820-□□

Specifications		-00	-01	-02	
				L2230	L1826*1
Thread trimmer	Upper thread trimmer	Long thread cut	Long thread cut	Short thread cut	
	Lower thread trimmer	None	Long thread cut	Short thread cut	
Main applications		Ladies' wear	Men's wear, casual wear	Jeans	Jeans, trousers
Other applications		Men's wear, casual wear, jeans, trousers	Ladies' wear, jeans, trousers		
Features		Only the upper thread is cut by the thread trimmer. Buttonholes up to 50 mm long can be sewn.	All the threads are cut long by the thread trimmers. The long thread ends can be securely held in the subsequent process. It is suitable for cases that require accurate short end or manual trimming.	All the threads are cut short by the thread trimmers. This saves the trouble of manual trimming and reduces consumption of the thread.	
Sewing shape					
Sewing length		Eyelet buttonhole : 8-50mm Straight buttonhole : 5-50mm	Eyelet buttonhole : 8-42mm Straight buttonhole : 5-42mm	22-30 mm*2 L1422 (14-22 mm)*3 L1826 (18-26 mm)*3 L2634 (26-34 mm)*3 L3442 (34-42 mm)*3	18-26 mm*2 L1422 (14-22 mm)*3 L2230 (22-30 mm)*3 L2634 (26-34 mm)*3 L3442 (34-42 mm)*3
Length of work clamp (Standard)		30mm		30 mm	26 mm
Length of hammer (Standard)		22mm		24 mm	20 mm
Length of hammer (Accessory)		30mm		28 mm	24 mm
Sewing speed		1,000-2,500rpm			
Stitch pitch		0.5-2.0mm			
Zigzag width		1.5 - 5.0 mm (Up to 4.0 mm in mechanical, up to 5.0 mm with zigzag width compensation)			
Zigzag width (Factory setting)		2.5mm		3mm	
Taper bartack length		0-20mm			
Height of work clamp		12 mm as standard (Available up to 16 mm)		16mm	
Starting method		Foot switch (Treadle type, Two-pedal type), Hand switch (Two-lever type)			
Feed mechanism		Intermittent feed by 3 pulse motors (X, Y, θ)			
Needle*4		DOx558 Nm80 - Nm120 (SCHMETZ)			
Needle(Factory setting)*5		DOx558 Nm100	DOx558 Nm90	DOx558 Nm110	
Languages supported for operation panel		Japanese, English, Chinese, German, French, Spanish, Italian, Portuguese, Turkish and Indonesian			
Safety equipment		Emergency stop function and built-in automatic stopping device activated by safety circuit in case of trouble			
Upper shaft motor		AC servo motor 550W			
Air pressure		Main regulator: 0.5 Mpa, Hammer pressure regulator: 0.4 MPa			
Air consumption		43.2 l/min. (8 cycles/min.)			
Weight		Machine head: Approx. 120 kg.,Operation panel: Approx. 0.6 kg., Control box: 14.2-16.2 kg. (depending on the destination)			
Power supply / Power consumption		Single phase 100V/200V, 3-phase 200V/220V/380V/400V, 400VA			

*1 Special specification for Chinese market
*2 When the thread trimmers are not operated, sewing length is 5-42 mm..
*3 Change of the ranges L1422-L3442 is available by replacing gauge parts. (For details, please consult your place of purchase.)
*4 For Chinese market: DOx558 - NY2#12-#16 (ORGAN)
*5 For Chinese market: -00: #16, -01: #14, -02: #18

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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