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High-speed, Cylinder-bed, Top and Bottom Coverstitch Machine



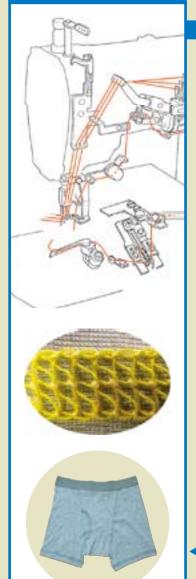


## A line-up consisting of 8 different machine types.

# MF-7800 series

#### Soft-seam

## Well-tensed seam

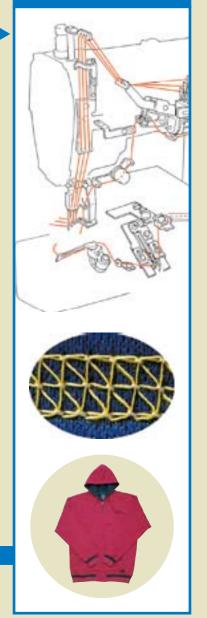


## It is possible to select (change over) the stitch type according to sewing items.

It is now possible to change over the stitch type, such as elastic soft-seams for inner wear and high-quality well-tensed seams for outer wear.

\*Neither the replacement of parts nor the changing of thread tension is required. The stitch type can be changed over (soft-seams / well-tensed seams) simply by changing the thread path.

Reduction in the thread tension by half contributes to the production of beautifullyfinished seams and the achievement of a satisfactory finish of sewing items which snugly fit the skin. In addition, the machine achieves lower vibration and lower noise in consideration of sewing comfort and ease of handling.



## Simplified maintenance mechanism

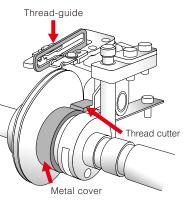
The machine comes with diverse and trouble-free functions in consideration of the shop-floor.

## Commercially-available gauge components are applicable with no additional work.

As a result of the commonality of components, commerciallyavailable components (presser foot, throat plate and needle clamp) are now applicable and easily obtainable.

## Newly-developed looper-thread twining preventing mechanism (patent pending)

The thread-guide in the looper thread cam unit is additionally equipped with a newly-developed looper-thread twining preventing mechanism, thereby preventing the looper thread from twining around the looper thread cam.



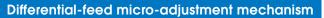
2 The newly-developed

metal cover for the looper thread cam unit also covers the rotating part of the looper thread cam shaft, thereby preventing the looper thread from twining around the looper thread cam shaft. Even if the looper thread twines around the metal cover, the newly-installed thread cutter cuts the thread to prevent a long piece of looper thread from twining around the cover.

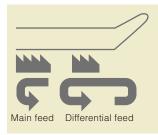
#### Needle bar stroke conversion mechanism

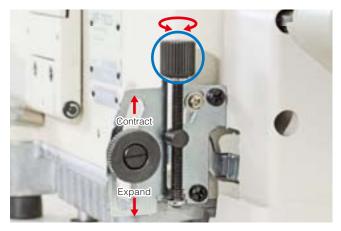
By changing over the needle bar stroke, penetrating force of the needle as well as thread tension to fit heavy-weight materials (fleece, blankets) can be obtained.

The needle bar stroke can be changed by adjusting the eccentric pin. (Changing of parts is not required. Factory-set at the time of delivery: 31mm; for sewing heavy-weight materials: 33mm)



It is possible to finely adjust the differential feed amount to a best-suited value for the material to be used. The differential feed ratio is constant even if the stitch length is changed.





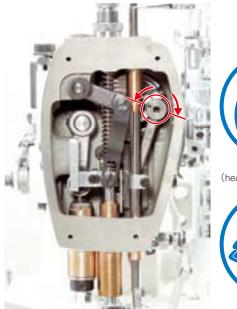
#### Micro-lifter mechanism

Elastic material or delicate material can be sewn with the presser foot kept slightly raised. This effectively helps reduce the degree of slippage, warpage and damage of the material.



#### Comfortable work space

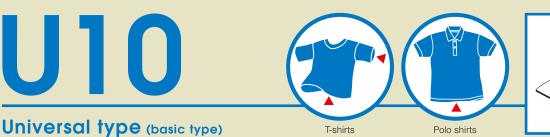
The cylinder bed is designed to provide a comfortable work space, to secure not only a longer distance from machine arm to needle for covering process so as to help reduce the operator's mental pressure, but also an optimum cylinder length for hemming processes so as to ensure improved operability.







Blankets





The machine can be used for the hemming process of the T-shirts, polo shirts and for the covering process.

It is not a specific-purpose model, but a basic one which can be used for a broader range of processes independently.

\*K10: Modification to the covering type model is easily achieved simply by changing the throat plate and feed dog.





MF-7823U10B56

## List of gauges

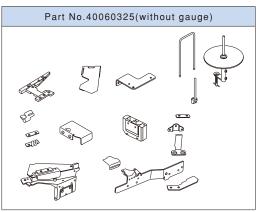
List of subclass

Model name		U10					
Needle gauge		3.2mm	4.0mm	4.8mm	5.6mm	6.4mm	
Needle clamp		13350004	13350103	13350509	13350301	13350400	
Throat plate	В	40058587	40058706	40040514	40040515	40040513	
(tonque shape of throat plate*)	D	-	40058956	-	40040516	40061463	
Presser foot asn	n.	40058589	40058708	13376058	13375050	13375050	
Main feed dog		13431200				13430103	
Differential-feed de	og		13433503				

\* For replacement parts for the K10 type, refer to the throat plate, main feed dog and differential feed dog columns in the list of gauges for the K10.

\* For the shape of the throat plate, B type is standard. The D type throat plate allows the needle thread to stretch moderately.

## Replacement parts for C10



\* Select an appropriate gauge from the list of gauges for C10. \* The folder is not included in the replacement parts for C10.

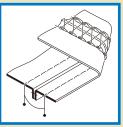
Application	Seam	Model No.	Number of needles	S Number of threads	→ ⊢ Needle gauge (mm)	→ ↓ Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
		MF-7822-U10-B	2	4	3.2, 4.0, 4.8			5 (8)	6,500
		MF-7822-U10-B48/UT22	2	-	4.8		1:0.9~1:1.8 (1:0.6~1:1.1)		
U10		MF-7823-U10-B			5.6, 6.4				
Universal type		MF-7823-U10-D56			5.6	0.9~3.6			
(basic type)		MF-7823-U10-B	3	5					
		MF-7823-U10-B			5.6, 6.4				
		MF-7823-U10-B //UT25/SS10							

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 Differential ratio can be switched by adjustment.

\*3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch.





## For covering

This model is best suited to the covering processes for polo shirts, sportswear and knit outers, etc.

\*U10: Modification to the universal type (basic type) model is easily achieved simply by changing the throat plate and feed dog.







MF-7823K10B56

## List of gauges

Model name	К10					
Needle gauge	5.6mm	6.4mm				
Needle clamp	13350301	13350400				
Throat plate	13352307	13352406				
(tonque shape of throat plate)	(B type only)					
Presser foot asm.	1337	5050				
Main feed dog	13430707					
Differential-feed dog	1343	2901				

\* For replacement parts for the U10 type, refer to the throat plate, main feed dog and differential feed dog columns in the list of gauges for the U10.

## List of subclass

Application	Seam	Model No.	Number of needles	Sumber of threads	→ ⊢ Needle gauge (mm)	→ Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
K10 Covering		MF-7823-K10-B //UT22 MF-7823-K10-B //UT22 MF-7823-K10-B //UT25	3	5	5.6, 6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5(8)	6,500

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 Differential ratio can be switched by adjustment.

\*3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch.



## For wider hemming

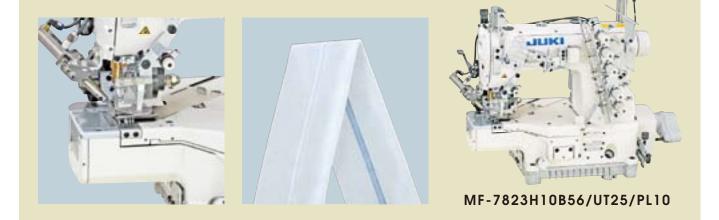
H10: This model is best suited to wider hemming processes for T-shirts, Polo shirts, etc. (Hemming witdh: Max. 43 mm)

## For elastic band welting

H10 with PL: This model is best suited to elastic-band welting for swimwear, briefs, etc. It welts the elastic band which has been overlocked on the garment body.







## List of gauges

Model name	H10						
Needle gauge	5.6mm	6.4mm					
Needle clamp	13350301	13350400					
Throat plate	13355706	13355805					
(tonque shape of throat plate)	(B type only)						
Presser foot asm.	4002	7897					
Main feed dog	13430509						
Differential-feed dog	1343	2703					

## List of subclass

Application	Seam	Model No.	Number of needles	Sumber of threads	→ ⊢ Needle gauge (mm)	Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
		MF-7812-H10-B	2	3					6,500
	ніп	MF-7823-H10-B	- 3						5.000
H10		MF-7823-H10-B							
Wider hemming		MF-7823-H10-B		5	5.6, 6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1) 5 (	5 (8)	6,500
Elastic band welting		MF-7823-H10-B //UT22/PL10		5				-	
		MF-7823-H10-B // UT25/PL10							5,000
	1 rija	MF-7823-H10-B //UT25/PL11	1						

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 Differential ratio can be switched by adjustment.

\*3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch.



This model is best suited to hemming processes for sleeves and the bottoms of T-shirts, Polo shirts, etc. It comes with a left hand fabric trimmer for trimming fabric in parallel, at all times, to the seam with consistency. The upper knife stroke can be adjusted with ease.

%The knife drive section is a unit-structure to permit easy removal. The machine is therefore used as a hemming type model without a trimming capability.



## List of gauges

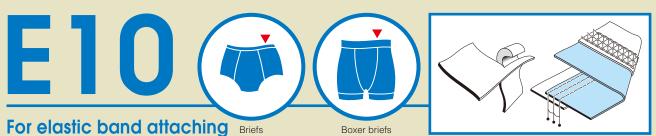
Model name	е		H21					
Needle gauge		4.0mm	4.8mm	5.6mm	6.4mm			
Needle clamp		13350103	13350509	13350301	13350400			
Throat plate	В	40058639	13445101	40041203	40041204			
(tonque shape of throat plate)	D	40035066	-	40049944	-			
Presser foot as	m.	40048637	40039796	4003	9794			
Main feed dog		1343	1200	40032900				
Differential-feed	Differential-feed dog 13433503		4004	0376				

## List of subclass

Application	Seam	Model No.	Number of needles	Sumber of threads	↓ → ⊢ Needle gauge (mm)	→ Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
		MF-7822-H21-B			4.0, 4.8				
		MF-7822-H21-B48/MC36						5 (8)	5,500
		MF-7822-H21-B48/UT22	2	4	4.8				
		MF-7822-H21-B48/UT25		-					
H21		MF-7822-H21-B48/UT25/MC35							
Hemming	>	MF-7822-H21-B48/UT25/SS10				0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)		
(with left hand	$\sim$	MF-7823-H21-B							
fabric trimmer)		MF-7823-H21-B //MC36							
		MF-7823-H21-B //UT22	3	5	5.6, 6.4				
		MF-7823-H21-B //UT25							
		MF-7823-H21-B //UT25/SS10							

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 Differential ratio can be switched by adjustment.
\*3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch. The numeric value given in parentheses indicates the lifting amount of the presser foot for bottom coverstitch.



## (with right hand fabric trimmer and tension roller)

This model is best suited to endless flat elastic band sewing processes for briefs, boxer briefs, etc. The right hand fabric trimmer trims the fabric, even at a multi-layered joined part, to produce a beautiful finish with the seam and fabric edge aligned with consistency. The right hand fabric trimmer mechanism is a unit-structure to permit easy installation / removal. This contributes to easier adjustments, such as looper aligning.







#### MF-7813E10B56/PL11/MC36

## List of gauges and Knives

Model name		E10			
Needle gauge	4.0mm	5.6mm 6.4mm			
Needle clamp	13550103	13350301	13350400		
Throat plate	13356001	13356209	13356308		
(tonque shape of throat plate)	(B type)				
Presser foot asm.	40022100 40022101				
Main feed dog	13430806	1343	0905		
Differential-feed dog	13433107 13433206				
Upper knife	40038754				
Lower knife		40038091			

## List of subclass

Application	Seam	Model No.	Number of needles	Number of threads	→ ⊢ Needle gauge (mm)	→ Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
		MF-7822-E10-B40	2		4.0				5,500
		MF-7813-E10-B56/PL	- 3		5.6		3.6 1:0.9~1:1.8 (1:0.6~1:1.1)	5 (7)	5,000
		MF-7813-E10-B // UT21							
E10		MF-7813-E10-B // UT23			5.6, 6.4				5,500
Elastic band attaching		MF-7813-E10-B // UT23/MC35		4		0.9~3.6			
(with right hand fabric trimmer)		MF-7813-E10-B56/UT23/PL10/MC35							
unnner)		MF-7813-E10-B56/UT23/PL11/MC35	]		5.6				5,000
		MF-7813-E10-B56/UT24/PL10/MC35			5.0				5,000
		MF-7813-E10-B56/UT24/PL11/MC35	]						
		MF-7823-E10-B		5	5.6, 6.4				5,500

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 Differential ratio can be switched by adjustment.

\*3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch.

E20

E21

## For endless spandex elastic band attaching (with manual binder and tension roller)

## For endless spandex elastic band attaching (with air binder and tension roller)

This model is best suited for sewing elastic bands on briefs. E20 is opened / closed with the knee lever and E21 is opened / closed with the knee switch. The machine comes provided as standard with a tension roller to smoothly sew elastic bands on different-sized garment bodies. The machine flexibly adapts to varying elasticities due to its soft seams.







MF-7823E20B56/PL11



MF-7823E21B56/UT25/PL11

## List of gauges

Model name	E20/21						
Needle gauge	5.6mm	6.4mm					
Needle clamp	13350301	13350400					
Throat plate	13351606	13351705					
(tonque shape of throat plate)	(B type only)						
Presser foot asm.	40037398						
Main feed dog	13430301						
Differential-feed dog	1343	2307					

## Part No. of binder

Briefs

Elastic band width (mm)	Part No.					
25	40024766	Option				
30	40024767	Option				
35	40024768	Standard				
40	40024769	Option				

## List of subclass

	Application	Seam	Model No.	Number of needles	Sumber of threads	↓ → ⊢ Needle gauge (mm)	Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
	E20/21 Endless spandex elastic band attaching (with binder)	MF-7822-E20-B	2	4						
		dex elastic aching	MF-7822-E21-B			5.6, 6.4	5.6, 6.4 0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	6 (7)	5,000
			MF-7823-E20-B // UT22/PL11		3 5					
			MF-7823-E21-B // UT25/PL11	3						

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 Differential ratio can be switched by adjustment.

\*3 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch.



This model is best suited for attaching collarettes on underwear, T-shirts and briefs . Multilayered joining parts of T-shirts can be fed smoothly due to the adoption of a special-purpose gauge. When using a narrow tape, consistent stitching is achieved by attaching an optional tape guide (part number: 40056407) which works to prevent the tape from slipping out of position.

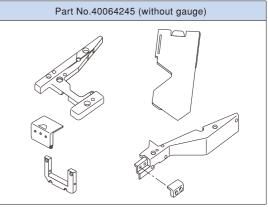
\* U10: Modification to the universal type (basic type) model is easily achieved simply by changing the throat plate and feed dog.



## List of gauges

Model name	C10					
Needle gauge	4.0mm	5.6mm	6.4mm			
Needle clamp	13350103	13350301	13350400			
Throat plate	13351408	13351606	13351705			
(tongue shape of throat plate)	(B type only)					
Presser foot asm.	40056504	40056410	40056411			
Main feed dog	40056684	13430301				
Differential-feed	40056683	40056416				

#### Replacement parts for U10



## List of subclass machines

Application	Seam	Model No.	Number of needles	Number of threads	→ ⊢ Needle gauge (mm)	Stitch length *1 (mm)	Differential- feed ratio	Presser lifting amount *2 (mm)	Max. sewing speed (rpm)
C10		MF-7822-C10-B40 2	2	4	4.0	0.02.6	6 1:0.9~1:1.8 (1:0.6~1:1.1)	E (9)	ifting Max. sewing speed (rpm)
Collarette attaching		MF-7823-C10-B	3	5	5.6,6.4	0.9~3.6		5 (8)	

\*1 Stitch length can be adjusted to 4.5mm at the maximum.

\*2 The numeric value indicates the lifting amount of the presser foot for top and bottom coverstitch.

# **UT21**

#### Electromagnetic type bottom thread trimming device + Electromagnetic type wiper / Auto-lifter

This is an electromagnetic type bottom thread trimming device / auto-lifter. It is used for processes which do not need top covering.



Electromagnetic type wiper

UT22 Electromagnetic type top and bottom thread trimming device / Auto-lifter

It is an electromagnetic type automatic top and bottom thread trimming device / autolifter. The machine does not need an air compressor to achieve easy layout changing.



Electromagnetic type top and bottom thread trimming device



Presser lifter drive mechanism magnet 2 Thread trimmer drive mechanism magnet

## UT23

Pneumatic type bottom thread trimming device + Electromagnetic type wiper / Auto-lifter

This is a pneumatic type bottom thread trimming device / auto-lifter. It is used for processes which do not need top covering.

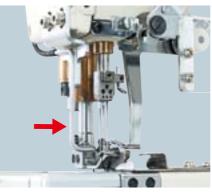


Pneumatic type bottom thread trimming device

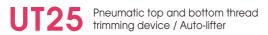
UT24

Pneumatic type bottom thread trimming device + Air blow type wiper / Auto-lifter

This is a pneumatic type bottom thread trimming device / auto-lifter. It pneumatically handles the needle thread (i.e, places the needle thread above the presser foot) instead of the mechanical wiper.



Air blow type wiper



It is a pneumatic automatic thread trimming device / auto-lifter. Since the automatic lift of the presser foot and automatic thread trimming can be activated by lightly depressing the pedal, work efficiency is dramatically increased.



Pneumatic top and bottom thread trimming device



Presser lifter drive mechanism air cylinder 4 Thread trimmer drive mechanism air cylinder

# MC35·36 Pneumatic cloth chip suction device

MC35 (solenoid valve type), MC36 (mechanical valve type)

Cloth chips trimmed by the hook knife are sucked away using air. So, there is no risk of sewing cloth chips in seams.

MC35 (solenoid valve type) for the servomotor or MC36 (mechanical valve type) for the clutch motor should be selected according to the use of your machine.



# **SS10** Short stitch device

This is a device for preventing the thread from coming undone at the end of sewing. The device is able to sew condensation stitches by the number specified as desired. It prevents the needle thread from being poorly tensed, which is likely to occur in cases where the amount of condensation is reduced.



The needle thread tightening mechanism helps produce welltensed seams even when the machine performs short stitching.



The short stitch pitch can be adjusted with ease.

## AH Pneumatically-driven hemming guide



Pneumatically-driven hemming guide/ for the H10 without a sensor	AH5
Pneumatically-driven hemming guide/ for the H10 with a sensor	AH6
Pneumatically-driven hemming guide/ for the H21 without a sensor	AH7
Pneumatically-driven hemming guide/ for the H21 with a sensor	AH8

Hemming guide with a sensor

The operator is able to carry out hemming by simply handling the material fabric during sewing only, instead of preliminarily folding the fabric to be hemmed and placing it on the machine.

#### \*This product (AH) is not sold in the U.S.

\*The hemming guide supports a hemming width of 15mm to 30mm. The stopper comes in three different plate thicknesses, i.e., 1.6mm, 2.6mm (standard) and 3.6mm. (The 1.6mm and 3.6mm thick stoppers are optionally available.)



This is a gear type cloth puller. It helps feed difficult-to-feed materials to assist smooth sewing.

(Example: Attaching flat elastic bands)



PL1

Cloth puller: Flat type

This is a flat type cloth puller. It helps feed soft material which requires a higher feeding force to assist sewing. (Example: Hemming)



## Compressed air / Air consumption (with automatic thread trimmer)

U	T24				
Bottom thread trimmer / Auto-lifter	Air-blow type wiper	MC35 MC36	Air consumption dm3/min (ANR)	Compressed air MPa	
0	0		182	0.5	
0 0		0	637	0.5	

(with automatic thread trimmer)

U	T25	Air consumption	Compressed air	
		MC35 MC36	dm3/min (ANR)	MPa
0			0.7	
0	0		182	0.5
0		0	456	0.5
0	0	0	637	

## WHEN YOU PLACE ORDERS

Please note when placing orders, that the model name should be written as follows: [without automatic thread trimmer]



\*The maximum sewing speed is less than 5,500rpm when using SC-500/M50.

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UT21 UT22

UT23

UT24

UT25

UT

UT

UT /SS10/MC35

## Common specifications (U10, K10, H10, H21, E10, E20, E21, C10)

Model nan	ne	MF-7800 series			
Stitch type		2-needle / 3-needle top and bottom covering stitch			
Needle		UY128GAS #9S~#14S (standard #10S)			
		U10, K10, H10, H21, C10	5mm (with top and bottom covering stitch), 8mm (with bottom covering stitch)		
Lift of the presser foot		E10 5mm (with top and bottom covering stitch), 7mm (with bottom covering			
		E20, E21 6mm (with top and bottom covering stitch), 7mm (with bottom cover			
Stitch pitch adjustmen	it	By dial			
Differential feed adjus	tment	By micro-adjustment mechanism			
Lubrication		Automatic			
Lubricating oil		JUKI MACHINE OIL 18 (equivalent to ISO VG18)			
Feed dog inclination a	djustment	Provided as standard			
Micro-lifter		Provided as standard			
Noodlo bor strake com	orting function	Provided as standard 31mm: at the time of delivery (U10, K10, H10, H21, E10, C10)			
Needle bar stroke conv		FIOVIDED as standard	33mm: at the time of delivery (E20, E21)		
Silicon oil tank for nee and needle thread	edle tip	Provided as standard			
Cartridge oil filter		Provided as standard			
	U10, K10, C10	42kg (without device), 44kg (with UT25), 48kg (with UT22)			
	H10	44kg (with UT24/UT25), 47kg (with PL), 53kg (with UT22, PL)			
	H21	43kg (without device), 45kg (with UT25), 49kg (with UT22)			
Weight of the machine head	E10	43kg (without device), 45kg (with UT23), 48kg (with PL), 49kg (with UT21), 50kg (with UT23/PL), 50kg (with UT24/PL)			
	E20	50kg (with PL), 56kg (with UT22/PL)			
	E21	48kg (with PL), 50kg (with UT25/PL)			



JUKI CORPORATION HEAD OFFICE JUKI CORPORATION HEAD OFFICE Juki Corporation perates an environmental management system to promote and conduct the following as the company engages in the research, development, design, sales, distribution, and maintenance of industrial sewing machines, household sewing maintenance services for data seviny systems: "Othe development of products and engineering processes that are safe to the environment "Genergy conservation (reduction in carbon-dioxide emissions) "Energy conservation (reduction in carbon-dioxide emissions) "Energy conservation (reduction in carbon-dioxide emissions) "Energy conservation (reduction carbon-dioxide emissions)" "Energy conservation (reduction carbon-dioxide emissions)"



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\* Specifications and appearance are subject to change without prior notice for improvement. \* Read the instruction manual before putting the machine into service to ensure safety. \* This catalogue prints with environment-friendly soyink on recycle paper.