# MF-7900 Series High-speed, Cylinder-bed, Top & Bottom Coverstitch Machine

# JUKI ECO PRODUCTS

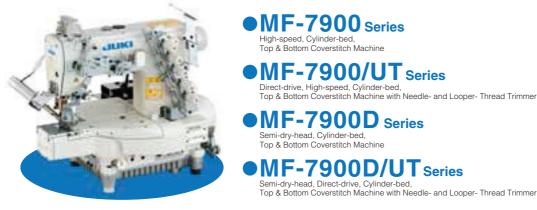
# **MF-7900D Series**

Semi-dry-head, Cylinder-bed, Top & Bottom Coverstitch Machine



# The MF-7900 Series is a newly developed coverstitch machine provided with lots of mechanisms for improving the seam quality.

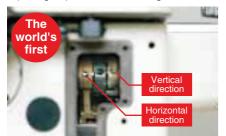
It is provided with many different sewing-related mechanisms which contribute to improved seam quality, such as the new feed mechanism, and differential-feed micro-adjustment mechanism. In addition, the machine is provided as standard with a looper thread twining prevention mechanism for improved maintenance.



### Seam quality is improved !!

#### Thanks to the new feed mechanism, many different types of sewing are achieved.

The feed locus can be adjusted externally. The feed locus is now adjustable in terms of the vertical direction and horizontal direction, thereby improving responsiveness to sewing materials.



#### **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.



#### Differential-feed micro-adjustment mechanism

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 Main feed dog Differential feed dog constant even if the stitch length is changed.





### Simplified maintenance mechanism

The looper thread twining prevention mechanism has been improved and is provided as standard for the sewing machine.

In the case of looper thread breakage, the looper thread twining prevention mechanism is activated to trim the looper thread before the thread twines on the looper thread cam. In this way, the looper thread twining prevention mechanism prevents the looper



thread from twining on the looper thread cam. In addition, the looper thread cam, which has been incorporated in the sewing machine, has been changed so that it is mounted outside of the sewing machine. The externally-mounted looper thread cam promises improved maintainability.

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

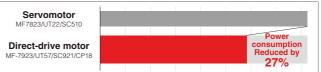
As a result of the commonality of components, commercially-available components (presser foot, throat plate and needle clamp) are now applicable and easily obtainable.

#### All of the sewing machines with a thread trimmer are provided with a direct-drive motor.

The direct-drive motor system has been adopted by all of the sewing machines with a thread trimmer. As a result, the sewing machine starts up swiftly and promises increased stop accuracy, thereby demonstrating improved responsiveness. In addition, the machine is no longer provided with a V-belt. This means that the adoption of the direct-drive motor is also

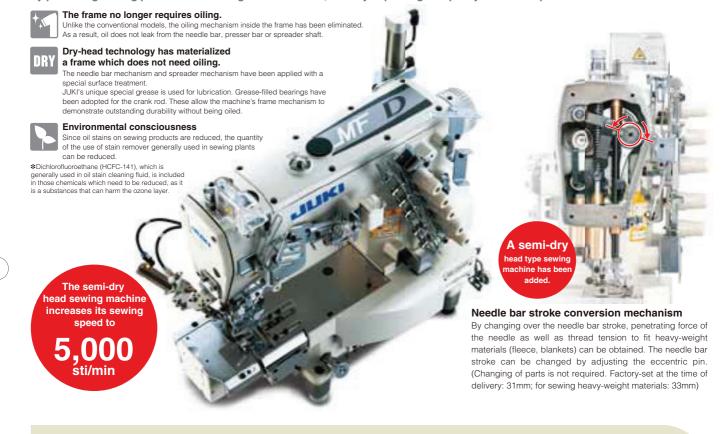


effective in the elimination of belt shavings. Power is directly transmitted from the motor to the sewing machine, thereby contributing to reduced power consumption. (This sewing machine reduces power consumption by 27% as compared with the conventional models.)



# JUKI's dry-head technology protects sewing products from being stained with oil.

With the excellent functions inherited from the MF-7900 Series, the MF-7900D is provided with a dry frame mechanism to eliminate the cause of oil stains. Stain removing work or re-sewing work is substantially reduced by protecting sewing products from being stained with oil, thereby improving the quality of finished products.





the covering process for sportswear and knitwear.



thereby increasing work efficiency in the covering process, etc.

The machine can be used for the hemming process of the sleeves and bottoms of T-shirts and for

The front cover is trimmed to allow operators to bring their hands closer near the needle entry area,

Binder mounting base Various binders can be installed by loading the binder mounting base supplied with the unit.



#### List of subclass machines

Application	Seam	Model No.	Number of needles	Number of threads	Needle gauge (mm)	Stitch length *1 (mm)	Differentialfeed	Presser foot lifting amount *3 (mm)	Max. sewing speed (sti/min)*4
		MF-7922-U11-B**	2	4	3.2,4.0,4.8				6,500
		MF-7923-U11-B**	- 3	5	5.6.6.4	- 0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	0,000
MF-7900/U11		MF-7923-U11-B**/PL12, PL13		5	0.0,0.4				5,000
Universal type		MF-7922-U11-B48/UT51	2	4	4.8				6,000
(basic type)		MF-7923-U11-B**/UT51, UT53, UT57 MF-7923-U11-B**/UT59	- 3	5	5.6,6.4				6,000
		MF-7923-U11-B**/UT52/PL12 MF-7923-U11-B**/UT57/PL13							5,000
		MF-7922D-U11-B40	2	4	4.0				
MF-7900D/U11 Universal type (basic type)	Files	MF-7923D-U11-B** MF-7923D-U11-B**/UT51, UT57 MF-7923D-U11-B**/UT59	3	5	5.6,6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	5,000
		MF-7923D-U11-B**/UT57/PL12	1						

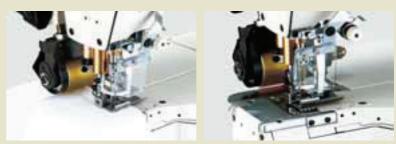
\*1 Stitch length can be adjusted to 4.5mm at the maximum. \*2 Differential ratio can be switched by adjustment. \*3 The lift of the presser foot is 5mm for the top and bottom coverstitch machine, and 8mm for the bottom coverstitch machine. \*4 \*sti/min\* stands for \*Stitches per Minute.\*

### H1 For elastic band welting H11 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 subclass machines

Application	Seam	Model No.	Number of needles	Number of threads	Needle gauge (mm)	Stitch length *1 (mm)	Differentialfeed ratio *2	Presser foot lifting amount *3 (mm)	Max. sewing speed (sti/min)*4
MF-7900/H11 Elastic band welting		MF-7923-H11-B**/PL12 MF-7923-H11-B**/PL13 MF-7923-H11-B**/UT52, UT57/PL12 MF-7923-H11-B**/UT57/PL13	3	5	5.6,6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	5,000
MF-7900D/H11 Elastic band welting		MF-7923D-H11-B**/UT57/PL13							

\*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. \*4 "sti/min" stands for "Stitches per Minute."

#### H22,H23 For hemming (with left hand fabric trimmer) Polo -shirts shirts



#### List of subclass machines

Application	Seam	Model No.	Number of needles	Number of threads	Needle gauge (mm)	Stitch length *1 (mm)	Differentialfeed ratio *2	Presser foot lifting amount *3 (mm)	Max. sewing speed (sti/min)*4
		MF-7922-H22, H23-B** MF-7922-H22, H23-B48/MC40	2	4	4.0,4.8				
MF-7900/		MF-7923-H22, H23-B** MF-7923-H22, H23-B** MF-7923-H22, H23-B**/MC40	3	5	4.8	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	6,000*
H22,23 For hemming (with left hand fabric		MF-7922-H22, H23-B48/UT51, UT57 MF-7922-H22, H23-B48/UT57/MC37	2	4	4.8	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	
trimmer)		MF-7922-H23-D40/UT59/MC37			4.0				6,000*
		MF-7923-H22, H23-B**/UT51, UT57, UT59 MF-7923-H22, H23-B**/UT57/MC37 MF-7923-H22, H23-B**/UT59/MC37	3	5	5.6,6.4	0.5-0.0			
	MF-7900D/ H22,23 For hemming (with left hand fabric trimmer)	MF-7923D-H22, H23-B56 MF-7923D-H22, H23-B56/MC40	3	5	5.6,6.4		1:0.9~1:1.8 (1:0.6~1:1.1)	5 (8)	
		MF-7922D-H22, H23-B48/UT57/MC37			4.8				
For hemming		MF-7922D-H22, H23-D40/UT57/MC37 MF-7922D-H23-D40/UT57, UT59/MC37	2	4	4.0	0.9~3.6			5,000
		MF-7923D-H22, H23-B**-UT51, UT57 MF-7923D-H22, H23-B**-UT57/MC37 MF-7923D-H22, H23-B**-UT59/MC37	3	5	5.6,6.4				

\*1 Stitch length can be adjusted to 4.5mm at the maximum. \*2 Differential ratio can be switched by adjustment. \*3 The lift of the presser foot is 5mm for the top and bottom coverstitch machine, and 8mm for the bottom coverstitch machine. \*4 "sti/min" stands for "Stitches per Minute."



MF-7913-E11-B56/PL12/MC37

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. Cloth cutting knife can be detached with one touch operation in case of sewing without using the knife.

Briefs



#### List of subclass machines

Application Seam		Model No.		Number		Stitch	õõ	Presser foot	Max. sewing
			Number of needles	of	gauge (mm)	length *1 (mm)	Differentialfeed ratio *2	lifting amount *3 (mm)	speed (sti/min)*4
		MF-7922-E11-B40/PL12/MC40	2	4	4.0				5,000
MF-7900/E11 Elastic band attaching		MF-7923-E11-B**/PL12/MC40 MF-7923-E11-B**/PL13/MC40	3	5	5.6,6.4	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (7)	
(with right hand fabric trimmer)		MF-7913-E11-B56/UT55,UT56/PL12/MC37 MF-7913-E11-B56/UT55/PL13/MC37 MF-7913-E11-B**/UT56/PL13/MC37		4	5.6				3,000
					5.6,6.4				
MF-7900D/E11 Elastic band attaching (with right hand fabric trimmer)		MF-7913D-E11-B56/UT56/PL13/MC37	3	4	5.6	0.9~3.6	1:0.9~1:1.8 (1:0.6~1:1.1)	5 (7)	5,000

\*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. \*4 sti/min" stands for "Stitches per Minute."

**E222** For endless spandex elastic band attaching (with manual binder and tension roller)

**E23** For endless spandex elastic band attaching (with air binder and tension roller)



Boxer

briefs



List of subclass machines

This model is best suited for sewing elastic bands on briefs. E22 is opened / closed with the knee lever and E23 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.



Application	Seam	Model No.	Number of needles	Number of threads	-I - Needle gauge (mm)	Stitch length *1 (mm)	Differentialfeed ratio *2	Presser foot lifting amount *3 (mm)	Max. sewing speed (sti/min)*4
		MF-7923-E22-B**/PL13 MF-7923-E23-B**/PL13 MF-7923-E22-B**/UT52/PL13 MF-7923-E22-B**/UT57/PL13	3	5	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-7923-E23-B56/PL13

\*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. \*4 'sti/min' stands for 'Stitches per Minute.'



# <u>UT51</u>

#### Electromagnetic needle thread / looper thread trimming device / Auto-lifter

It is an electromagnetic needle thread / looper thread trimming device / Auto-lifter. The machine does not need an air compressor to achieve easy layout changing.



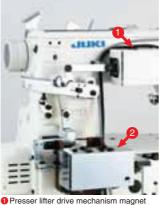
Electromagnetic needle thread / looper thread trimming device

# <u>UT53</u>

#### 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.





2 Thread trimmer drive mechanism magnet

#### 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.

### UT56 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.

## JT59 UT59 Please

UT59 cannot be attached to the machine as a device. Please order with the machine head.

### Pneumatic type top and bottom thread trimming device with thread-fray-prevention function

It is the state-of-the-art function to make the thread-fray-prevention at the end of sewing more reliable.

# <u>SS11</u>

#### Short stitch device : Part No.70004376

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 well-tensed seams even when the machine performs short stitching.



The short stitch pitch can be adjusted with ease.

# **UT52**

#### Electromagnetic needle thread / looper thread trimming device / Auto-lifter

It is an electromagnetic needle thread / looper thread trimming device / Auto-lifter with cloth puller.



Electromagnetic needle thread / looper thread trimming device



Presser lifter drive mechanism magnet
 Thread trimmer drive mechanism magnet

#### Pneumatic type needle thread / looper thread trimming device / Auto-lifter

It is a pneumatic type needle thread / looper 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. The air blow type wiper is supplied with the sewing machine as an accessory.



Pneumatic type needle thread / looper thread trimming device

# PL12

#### Cloth puller : Gear type

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

(Example: Attaching flat elastic bands)





#### Pneumatic cloth chip suction device

MC37 (solenoid valve type) : Part No.40023706, MC40 (mechanical valve type) : Part No.40023707



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

# PL13

#### Cloth puller : Flat type

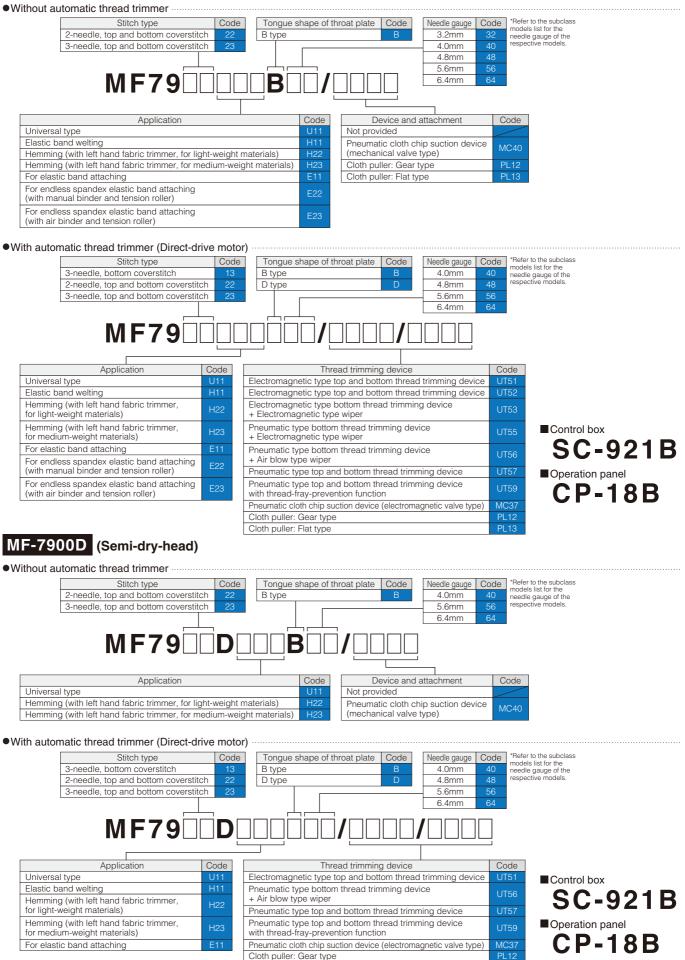
This is a flat type cloth puller. It helps feed soft material which requires a higher feeding force to assist sewing. (Example: Hemming)



### WHEN YOU PLACE ORDERS

Please note when placing orders, that the model name should be written as follows:

### MF-7900



Cloth puller: Flat type

### SPECIFICATIONS (U11, H11, H22, H23, E11, E22, E23)

Model name		MF-7900 series	MF-7900D series				
Stitch type		2-needle/3-needle top and bottom covering stitch	2-needle/3-needle top and bottom covering stitch				
Needle		UY128GAS (#	10S) #9~#12S				
Lift of the press	er foot	5mm (with top and bo 8mm (with bottom cov	ttom covering stitch), vering stitch)				
Stitch pitch adju	ustment	By c	dial				
Differential feed	l adjustment	By micro-adjustn	nent mechanism				
Lubrication		Automatiac	Automatic (frame: no lubrication)				
Lubricating oil		JUKI Machine Oil 18 (e	quivalent to ISO VG18)				
Feed dog inclin	ation adjustment	Provided as standard					
Micro-lifter		Provided as standard					
Needle gauge (	mm)	3.2, 4.0, 4.8, 5.6, 6.4					
Needle bar stroke converting function		U11, H11, H22, H23, E11 : Provided as standard: 31mm: at the time of delivery / When sewing a heavy-weight material: 33mm **					
		E22, E23 : Provided as standard: 33mm: at the time of delivery / When sewing a heavy-weight material: 35mm	_				
Silicon oil tank for needle tip and needle thread		Provided as standard					
Cartridge oil filter		Provided as standard					
Power requirement / Power consumption		Single-phase 100~120V / 200~240V, 3-phase 200~240V / 500VA (with automatic thread trimmer)					
	U11	41kg (without device), 49kg (with UT51), 51kg (with PL/UT52), 44kg (with UT57)					
	H11 (with PL) *	43kg (without device), 51kg (with UT52), 46kg (with UT57)					
Weight of the machine head	E22, E23 (with PL)	43kg (without device), 51kg (with UT52), 46kg (with UT57)					
maonine noau	E11 (with PL)	44kg (without device), 48kg (with UT55), 47kg (with	UT56)				
	H22, H23	42kg (without device), 50kg (with UT51), 45kg (with	UT57)				

\* "H11" excepts MF-7900D Series.

### Compressedair / Air consumption (with automatic thread trimmer)

Device	Top and bottom thread trimmer Auto-lifter	Bottom thread trimmer Auto-lifter	Air blow type wiper	MC37 MC40	Air consumption dm³/min (ANR)	Compressed air MPa
UT55	—	•	_	•	456	0.5
UT56			•	—	182	0.5
0156			•	•	637	0.5
		_	_	—	0.7	
		—	•	—	182	0.5
0157, 0159	UT57, UT59			•	456	0.5
				•	637	

JUKI ECO PRODUCTS	The MF-7923U11B56/UT57 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.
<b>620</b>	<ul> <li>This sewing machine reduces power consumption by 27% as compared with the conventional models.</li> <li>The sewing machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.</li> </ul>
JUKI ECO PRODUCTS	For details of JUKI ECO PRODUCTS, refer to : http://www.juki.co.jp/eco_e/index.html *The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the environment.



JUNI CORPORATION He Registration : The activities ign, sales, distribution, and r trial sewing machines, housel dustrial robots, etc., including ces of data entry systems. ered Organi cope of the pment, des tivities of n and main household ncluding sa



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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.