

# **DP-2100**

Computer-controlled, Dry-head, Lockstitch Sleeve Setting Machine with Multi-programming Device



# DP-2100

### An excellent new type belt feed mechanism

- Thanks to JUKI's unique right-and-left independent drive system of the top feed belt, right and left feed amounts can be adjusted separately. This prevents the material from slipping out of position, thereby sewing sleeves with a consistent seam allowance.
- The machine comes provided with a mechanism for moving the belt feed and intermediate presser up and down alternately, enabling it to eliminate tucks produced at the sleep cap as well as irregular puckering produced in the neighborhood of the sleeve cap.
- By introducing the belt feed, the machine reduces scratches to the material made by the feed.

# The machine has solved the problems of conventional sleeve-attaching machines.

The introduction of active-tension enables the separate setting of suitable thread tensions for sewing sleeves on a portion-by-portion basis. This prevents an inadequate thread tension at a portion where the shirring amount is large or an excessive thread tension at a portion where the shirring amount is small. In addition, specified tension settings can be stored in the memory on a pattern-by-pattern basis and can be reproduced with ease.



New type belt feed mechanism



Alternating vertical movement mechanism



**Active tension mechanism** 

### Color panel, IP-420C, with upgraded operability

- Since the machine comes with a touch-sensitive operation panel with a color LCD, data required for sewing, such as the shirring amount, needle thread tension and stitch pitch can be entered with ease.
- In addition to the CompactFlash TM, the machine is provided as standard with a USB connector. As a result, the use of a USB flash drive or card reader enables the storage and transmission of sewing data by means of various kinds of media (such as a floppy disk, SmartMedia, CompactFlash and SD card) to enable sewing using the same sewing data among sewing machines in a plant or among subcontract plants.
- The operating screen gives a graphic display of an armhole. The operator can, therefore, easily confirm the portion to be sewn and enter/edit data.

### **Operation mode selection is enabled**

The operation mode of a single machine can be changed over between manual, semi-auto and full-auto according to the ease of use for each operator.

# Dry-head sleeve sewing machine

The DP-2100 is the world's first sleeve sewing machine that has adopted the dry-head technology, which does not need oiling. The machine protects the sleeve sewing process, which determines the quality of men's and ladies' garments, from troubles such as oil stains. No need for lubrication facilitates maintenance.

### Highly-reliable direct-drive system

The machine comes with the direct-drive system, in which a compact AC servomotor is directly joined to the main shaft. It offers a quick startup, increased stopping accuracy and excellent responsiveness.

### **Increased lift of the presser foot**

An increase in the lift of the presser foot facilitates placement of the material under the presser foot as well as the removal of a finished portion.



CompactFlash™



IP-420C



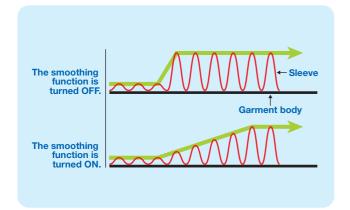
### Stitch length is increased

The maximum stitch length has been increased to 6 mm. With this large stitch length, an adequate shirring amount is ensured even when a heavy-weight material is used.

# Many different data input features help the machine perform high-quality sleeve settings quickly and accurately.

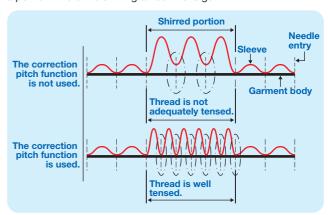
#### **Smoothing function**

The machine prevents an abrupt change in the shirring amount at the sewing-step changing point by utilizing a smoothing function. This upgrades the finished quality of the seams.



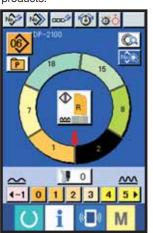
#### **Correction pitch setting function**

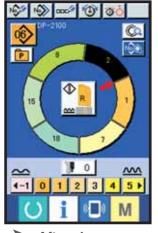
The stitch pitch can be changed on a portion-by-portion basis. Seam grinning can be prevented by decreasing the stitch length at a portion where the shirring amount is large.



# The starting position of the shirring program can be changed.

It is possible to change the starting position of the program entered. This enables the armhole display shown on the LCD to bear a close resemblance to the armholes of actual sewing products.





Before change After change



In addition, the machine comes provided with various data inputting features, such as teaching, grading and mirroring for the easy programming of sewing data and for improved operating efficiency.

Teaching function	Total sewing length is stored in the memory when sewing the portion between notch markes. This enables the quick and easy programming of sewing data.
Grading function	When basic data is entered, the data is developed on a size-by-size basis. This helps save the operator from future program entering work
Mirroring function	When a program for sewing either sleeve is entered, a program for sewing the remaining sleeve is automatically created. This helps save the operator from program entering work. It is also possible to incorporate a change made to either sleeve sewing program into the remaining sleeve program by means of the mirroring function.

#### **SPECIFICATIONS**

Model name	DP-2100	
Max. sewing speed *1	3,500sti/min (feed pitch 1.5~4.0mm)	
Feed system	Intermittent belt feed with the direct-driven stepping motor	
Stitch length (both top and bottom)	1.5~6.0mm	
Needle bar stroke	30.7mm	
Needle	DP×17 #10~#14	
Thread take-up	Link type	
Hook	Horizontal-axis full-rotary non-lubricated hook	
Lift of the presser foot	By hand: 5.5mm, Auto: 10mm	
Amount of the alternating vertical movement of the presser foot and walking foot	Max. 3.5mm	
Adjustment of amount of the alternating vertical movement of the presser foot and walking foot	Adjustment of stopping position in slot	
Bottom and variable top feed stitch adjusting method	Data entry through the operation panel, stepping motor	
Minimum resolution of bottom and variable top feed adjustment	0.1mm	
Number of programs that can be input	99 programs	
Number of steps that can be input (for one program)	30 steps	
Lubrication	No lubrication	
Needle thread tension	Active tension (electric thread tension control system)	
Right and left alternating sewing	Possible	
Automatic reverse feed function	Provided as standard	
Soft-start function	Provided as standard	
Auto-lifter	Provided as standard	
Power requirement / Power consumption	Single-phase 200~240V, 3-phase 200~240V / 560VA	
Total weight	106kg	

# **Programming device** performance

	Manual			
Operation mode	Semi-auto			
	Full-auto			
	Shirring amount			
Detailed data on steps stored in memory	Needle thread tension			
	Number of stitches			
	Stitch pitch			
Monitoring of shirring amounts and sewing positions				
Teaching function				
Grading function				
Mirroring function				
Program starting position changing				



The maximum sewing speed is limited by the amount of the alternating vertical movement of the walking foot and presser foot and stitch length.

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

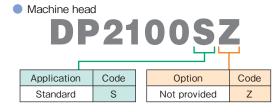
  ★CompactFlash™ or CFA specification compatible media.

  ★CompactFlash™ is a registered trademark of SanDisk Corporation, U.S.A.

  ★Other company names and product names/brand names are trademarks or registered trademarks of the respective companies.

#### WHEN YOU PLACE ORDERS

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



Control box

# MC650

Pov	Code	
3-phase	200~240V	E
Single-phase	200~240V	K
	CE 230V	N

Operation panel	Code
IP panel for DP-2100 (CompactFlash and) USB connector	IP420C

To order, please contact your nearest JUKI distributor.

#### **OPTIONS**

Table stand (not provided casters) : JTDP10

Auxiliary table : ST2







JUKI CORPORATION HEAD OFFICE
An environmental management system to promote and

JUNI CURPUKATION HEAD OFFICE
An environmental management system to promote and conduct the following:

(1) Eco-friendly development of products and technologies

(2) Green procurement and green purchased, (etc.)

(3) Energy conservation (reduction in carbon-doubte emissions)

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(4) Energy conservation (reduction in carbon-doubte emissions)

(5) Reduction and recycling of waste
in the activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.



JUKI CORPORATION INDUSTRIAL SEWING MACHINE DIV.

® 2-11-1, TSURUMAKI, TAMA-SHI, TOKYO 206-8551, JAPAN PHONE: (81) 42-357-2254

FAX: (81) 42-357-2274 http://www.juki.com

\* 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.