PLC-2700V-7 Series

Semi-dry Direct-drive, Post-bed, Unison-feed,
Lockstitch Sewing System with Vertical-axis Large Hook

DIGITALLY Smart Solution

■ WHEN YOU PLACE ORDERS

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

Machine head

[1 needle]

Application	Code
1-needle / Vertical-axis 2.0-fold capacity hook	10

Digital	Code
Digital	V

Option	Code
No provide	Z

PLC2710VS70BBZ

Wiper / Automatic reverse feed device	Code
Not Provide / Provided (with hand switch)	0B

Automatic foot lifter	Code
With AK (Pedal drive)	B

[2 needle]

Application	Code
1-needle / Vertical-axis 2.0-fold capacity hook	60

Digital	Code
Digital	V

Presser foot	Code
With AK (Pedal drive)	B

Option	Code
No provide	Z

PLC2760VS□A70BBZ

Needle gauge	Code
8mm	C
10mm	D
Without gauge	Z

Presser foot	Code
With center guide	A

※When selecting "Z" in the needle gauge, the presser foot with center guide is not provided.

Wiper / Automatic reverse feed device	Code
Not Provided / Provided (With hand switch)	0B

Control box

SC952A□

Power supply	Code
Single-phase 100～120V	S
3-phase 200～240V	D
Single-phase 200～240V (for general export)	K
Single-phase 200～240V (for CE)	N
Single-phase 200～240V (for China)	U

● To order, please contact your nearest JUKI distributor.

Inspire the Knowledge in Sewing Adjustment

Epoch-making Sewing Systems in history

PLC-2760V-7

JUKI ECO PRODUCTS	The PLC-2700V-7 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.

● 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.

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.

CM001 ISO14001 JSAE389 089

Registered Organization : JUKI CORPORATION Head Office
The Scope of the Registration : The activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines, household sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.

JUKI CORPORATION
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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.
✻ Paper from responsible sources **FSC™ C001712**

MARCH, 2019 Printed in Japan(TN)

Semi-dry Direct-drive, Post-bed, Unison-feed,
Lockstitch Sewing System with Vertical-axis Large Hook

PLC-2700V-7 Series

Digital sewing system proposes the production process added with a computerized new value to all the people who engage in production.

Semi-dry Direct-drive, Post-bed, Unison-feed,
Lockstitch Sewing System with Vertical-axis Large Hook

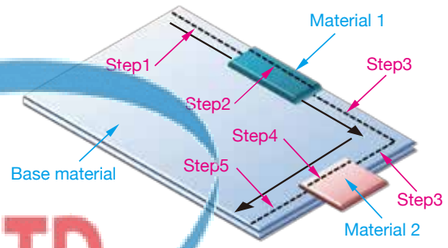
PLC-2700V-7 Series

Needle-thread active tension

Upper thread tension can be set via the panel based on sewing material to be used. Settings can be saved and loaded, ensuring reproducibility. Ensuring stability in product qualities and usage simplicity even when operated by inexperienced personnel.

Convenient continuous sewing function

Functions such as automatic switchover of pre-registered patterns in a cycle operation (Cycle pattern, Polygonal-shape stitching) or Custom pitch composing for continuous sets of different pitch length are available for user convenience.



Usage example for polygonal-shape stitching function
Sewing patterns can be switchover in response to a preset stitch count, or via hand switch and multi-layered section detection function.

Example of design stitches
by means of the custom pitch function

Sewing Adjustment Digitalization

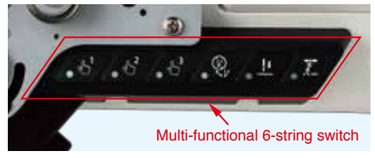
Digitalization adjustment made possible for core specifications such as thread tension, pitch length, sewing speed, presser foot pressure and alternating vertical movement. Crucial adjustment work are now made simple without excessive experience and skills while reinforcing high quality reproductions. Man-hours in setup changing and maintenance are substantially reduced. Password protection is introduced to ensure that alteration of settings by an unauthorized third party is prevented.

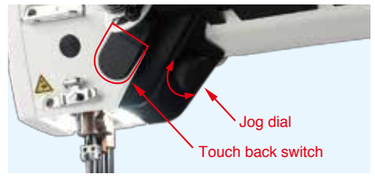
Sewing conditions are featured on one display.

Users can now easily grasp relative condition from the information displayed in one glance. A 4.3 inch colored touch panel is adopted as an intuitive graphical user interface, enhancing usage simplicity.

Manual unit controls different operations

A "One-touch" hand unit allows manual control over crucial settings during the sewing operation.





- **Multi-functional 6-string switch**
  A switch which allows a "One-touch" switchover of pattern and functions. In addition to the one-touch changeover switch to which any desired operation can be assigned, automatic reverse feed switchover switch and the needle entry alignment switch are also available.
- **Jog dial**
  Pulley rotates in correspondence to the dial. Lifting and dropping of the needle bar can be done without reaching out to the hand wheel. In addition, the dial works as the needle "UP/DOWN" correction switch when it is pushed.
- **Touch back switch**
  When pushed, sewing direction becomes reversed (reversed stitch). When released, sewing direction returns to the normal feed.

Active presser foot pressure mechanism

Presser foot pressure can be controlled, managed and set (numerical) digitally. Automatic detection or manual hand switch control can be selected to allow adjustments of presser foot pressure in response to a multi-layered section of material.

Multi-layered section detection function

When sensor detects a multi-layered section during sewing operation, system can automatically adapt to it by changing to other pre-registered setting (pitch length, upper thread tension, presser foot pressure and alternating vertical movement).The multi-layered detection threshold value is automatically calculated based on the measured value.

Data and sewing machine management with IoT (Internet of Things)

A "Two-way" contactless communication for parameter adjustment data can be conducted with the sewing machine by a commercial Android terminal. This feature allows sewing machines in a sewing line to be uniformly set and status checked quickly, thereby contributing to stabilization in product quality. Control panel is standardized with USB ports, promising simplicity in data management and system updates.

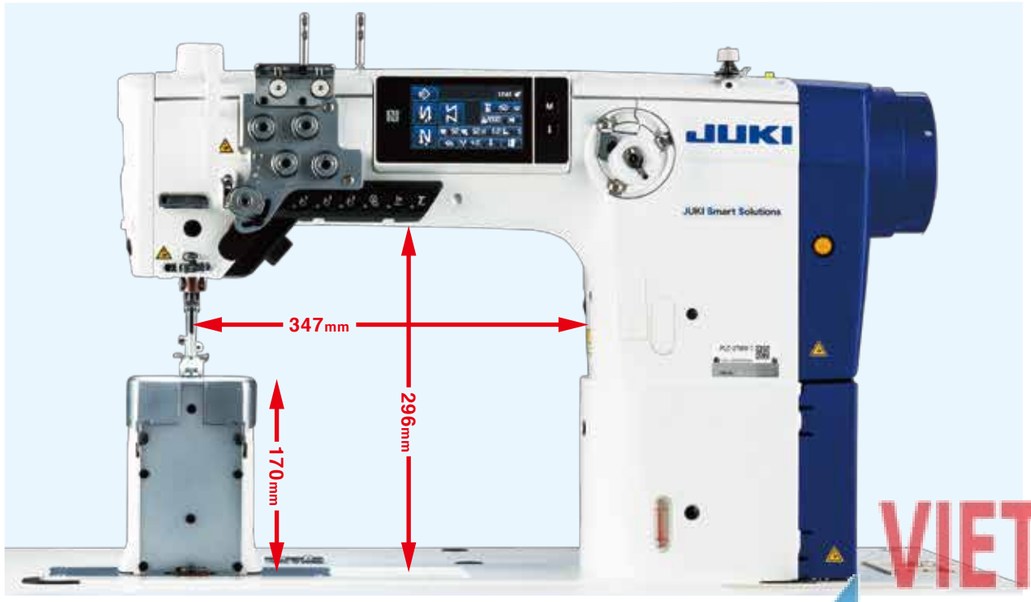
*Android OS Version 6.0 is recommended to use JUKI Smart APP.
(Operation is confirmed with respect to Versions 5.0 and later.)
Contact JUKI distributor in your area for how to use the application software.

The sewing machine can be paired with equipment which supports NFC (Near Field Communication)
only by holding the equipment over the sewing machine.

Superior basic performance that produces high responsiveness to materials

Longer distance from machine arm to needle working area

Superior workability for large sewing operation and extra heavy material.

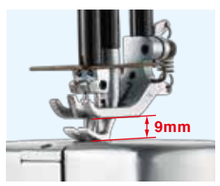


High-torque direct-drive motor is installed

Adopts a high-torque direct drive motor to support heavy-weight operations. The motor delivers efficient demonstration of enhanced responsive capabilities and high penetrative force during sewing of multi-layered sections.

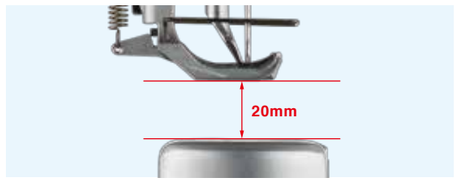
Walking-foot/presser-foot alternating vertical movement mechanism prevents irregular stitches

The sewing machine incorporates a mechanism which maintains a steady balance of alternating vertical movement of the walking foot and presser foot even when the material is changed. Maximum alternating height is featured with 9 mm, thereby allowing smooth passage when overcoming the step.



Higher lift of the presser bar

Auto lifter's maximum lift is realized at 20mm. This capability allows products such as high end sofas etc. with processes requiring joining of leather and thick sponges to be carried out easily.



Eccentricity of the feed driving cam is adjustable

Vertical rise/drop volume of bottom feed are adjustable. This feature allows the machine to adapt to different material used. For example, the rise/drop volume of the bottom feed increases when sewing heavy materials to ensure passage and decreases for light material to reduce flopping results.

Vertical-axis double-capacity hook is adopted

Utilizes a design which allows adjustment (screw) for the needle guard opening volume. As adjustment for the needle guard is simple, sections of the needle guard is hardened to prevent wearing of the blade point on the hook and skip stitches.

"One-touch" Bobbin winding device

Bobbin winding system eliminates the requirement to manually wind the bobbin during the beginning of the operation. User can simply set the bobbin to enable auto winding.

The upper and lower feed ratio is adjustable

The top/bottom feed ratio can be changed by only adjusting the bottom feed amount while keeping the top feed amount unchanged. This feature is helpful to prevent uneven material feed.

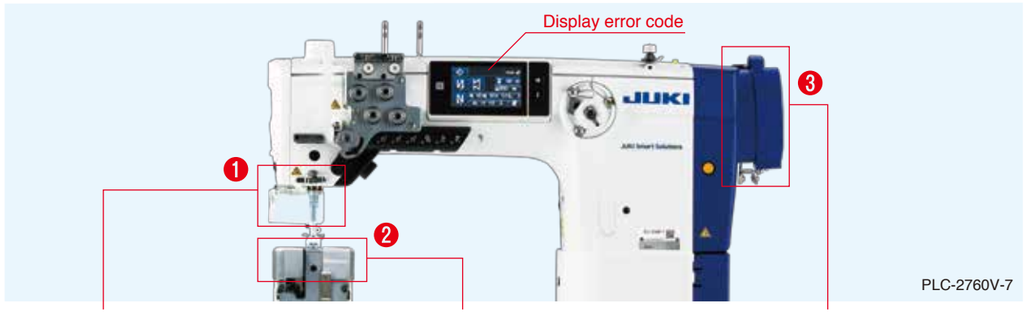
Consistent oil supply to the sewing machine even at low speed operation

Adopts mechanism that prevents backward flow of oil, guarantees consistent supply of oil even during low speed operation. With the stable supply of oil to the hook, quality seams can be achieved.

Smart Devices

Cover Sensor Unit

The cover sensor unit detecting ❶,❷ and ❸ (shown below) are closed tightly during sewing, thereby preventing the sewing machine from starting up unexpectedly.



❶ Eye guard with an open/close sensor

Prevents broken needle from flying everywhere during operation. The sewing machine does not run while the eye guard is left opened. In this way, the eye guard system protects the user even when he/she forgets to turn the power OFF when replacing needle.

❷ Hook cover with an open/close sensor

Sewing machine will not run when hook cover is left opened. The hook cover prevents material from entanglement with the hook during sewing.

❸ Handwheel cover with an open/close sensor

While the handwheel cover is opened, the sewing machine will not run even when the power is switched "ON". In addition, the cover will also prevent entanglement to the handwheel from threads etc. during operation.

Skip Stitch Detector

Sewing machine will halt with buzzer sounded during operation if the system detects a skip stitch, this allows users to be free of fear from not noticing the fault, reduces operators' stress level and lessen faulty products.

Bobbin Thread Remaining Detector

The buzzer sounds when the amount of thread remaining on the bobbin reaches the predetermined amount (The sewing machine can be stopped if required). This allows operators to be free from worrying about the bobbin thread remaining amount.

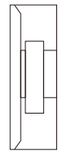
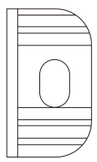
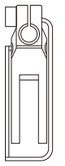
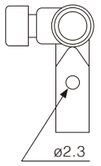
Parts number list for Smart Devices

Model	Needle gauge	Cover Sensor				
		Set parts (①+②+③+④)	① Eye guard	② Hook cover	③ Handwheel cover	④ Cable
PLC-2710V-7	——	40221394	40193646	40165318	40193648	40199929
PLC-2760V-7	——	40221395		(right) 40165318 (left) 40165319		
Model	**Needle gauge**	**Skip Stitch Detector, Bobbin Thread Remaining Detector**				
		Set parts (⑤+⑥+⑦)	⑤ Skip Stitch Detector	⑥ Bobbin Thread Remaining Detector	⑦ Filter regulator (asm.)	⑧ Feed lever base cover (asm.)
PLC-2710V-7	——	40221414	40221416	40221415	40198456	——
PLC-2760V-7	6 [mm]	40221417	40221419	40221418		40155443
	8 [mm]					40155445
	10 [mm]					40155447
	12 [mm]					40153488

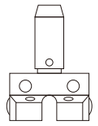
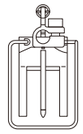
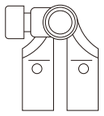
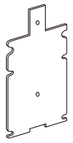
※ When purchasing ① eye guard, ② hook cover or ③ handwheel cover separately, 1 set of ④ cable should also be purchased.
※ When purchasing the skip stitch detection device and bobbin thread remain detection device, 2 pieces of ⑧ feed lever base side cover (asm.) that is suited with the needle gauge should also be purchased.
※ When purchasing ⑤ skip stitch detection device and ⑥ bobbin thread detection device separately, 1 piece of ⑦ filter regulator (asm.) should also be purchased.

List of gauge components

1 needle PLC-2710V-7

Part	Throat plate		Feed dog	Presser foot (asm.)	Walking foot (asm.)	Feed lever base cover	Side cover F (asm.)	Side cover A (asm.)
Shape	 Pitch (9mm or less)	 Pitch (9mm or more)			 ø2.3			
Part No.	40216771	40130067	40130061	10712552	10711653	40129979	40134098	40134097

2 needle PLC-2760V-7

Part		Throat plate		Feed dog	Needle clamp (asm.)	Presser foot with a center guide (asm.)	Walking foot guide (asm.)	Side cover (asm.)
Shape		 Pitch (9mm or less)	 Pitch (9mm or more)					
Needle gauge / Part No.	6mm	40206348	40130927	40218803 (Needle hole 3.5×2.5) 40205796 (Needle hole 5.5×3.4)	40218728	40038810	40038854	40134017
	8mm	40210225	40130908	40130907 (Needle hole 3.5×2.5) 40153187 (Needle hole 5.5×3.5)	40216775	40038808	40038852 (Needle hole φ2.1) 40067204 (Needle hole φ3.0)	40134018
	10mm	40218661	40130064	40130062 (Needle hole 3.5×2.5) 40130063 (Needle hole 3.3×2.5)	40218701	40038806	40038850 (Needle hole φ2.1) 40039271 (Needle hole φ3.0)	40134019
	12mm	—	40130928	40130926	40038772	40038802	40038848	40134020

SPECIFICATIONS

Model name	PLC-2710V-7	PLC-2760V-7
Type	1 needle	2 needle
Max. Sewing speed	2,500sti/min ※	
Stitch length	9mm at the time of shipment (max. 12mm)	
Stitch adjustment method	Electronic control	
Needle bar stroke	40mm	
Hook	Vertical-axis 2.0-fold capacity hook (latch type)	
Lift of the presser foot	20mm	
Alternating vertical movement	0.5～9.0mm	
Alternating vertical movement adjusting method	Electronic control	
Safety mechanism	Provided as standard	
Bobbin thread winder	Built in the machine arm	
Bottom-feed micro-adjustment mechanism	Provided as standard	
Lubrication	Automatic (Tank system)	
Distance from needle to machine arm	347mm	
Post height	170mm	
Knee-lifter	Provided as standard	
Auto-lifter	Provided as standard	
Needle	134×35(Nm100～180, Standard Nm140)	
Thread	#46～266, 60/3～10/3 (#30～5)	
Weight of the machine head	82kg	87kg
Power requirement / Power consumption	Single-phase: 100～120V / 220～240V, 3-phase: 200～240V / 200VA	

※ "sti/min" stands for "Stitches per Minute."