

# JUKI™

Post-bed, Unison-feed, Lockstitch Machine  
with Vertical-axis Large Hook

## PLC-1700 Series

Most-advanced  
machine lineup best-  
suited to the stitching  
process for heavy-weight  
materials such as car  
seats and sofas

[1-needle type]

**PLC-1710**

**PLC-1710-7** (with automatic thread trimmer)

[2-needle type]

**PLC-1760**

**PLC-1760L** (thick-thread long-pitch type)

**PLC-1760-7** (with automatic thread trimmer)



PLC-1710-7



PLC-1760-7



High-quality stitches which match the car seat designs  
Soft-to-the-touch stitches help create a relaxed state of mind, as if sitting on a sofa

The PLC Series machines have been finished with one-rank upgraded performance, laying importance on stitching.

#### PLC-1700 Series

### *Consistent stitching performance*

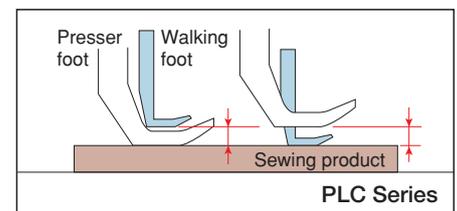
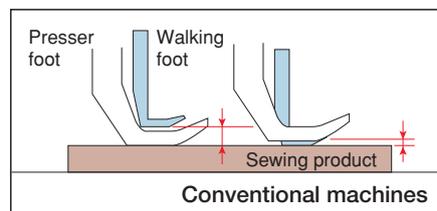
The PLC-1700 Series machines have substantially been improved in their overall "efficiency of feed." The machine smoothly handles large and heavy-weight materials with an increased efficiency of feed, thereby producing consistent seams free from irregular stitches (differences in stitch length).



## Increased efficiency of feed

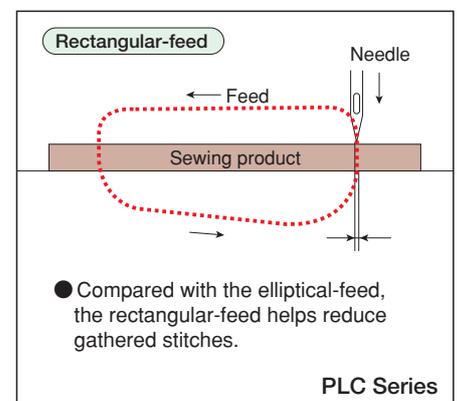
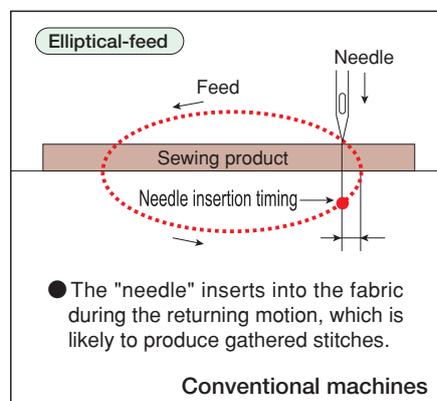
### The alternating vertical movement mechanism prevents irregular stitches

- The machine comes with JUKI's unique alternating vertical movement mechanism, where the presser foot's amount of alternating vertical movement does not change even when the material weight changes.
- The amount of alternating vertical movement of the presser foot does not decrease even when a heavy-weight material is sewn. Therefore, the efficiency of the walking foot does not decrease so as to prevent uneven material feed.
- The amount of alternating vertical movement is adjustable up to 6.5mm according to the weight of the material or any multi-layered part of it.



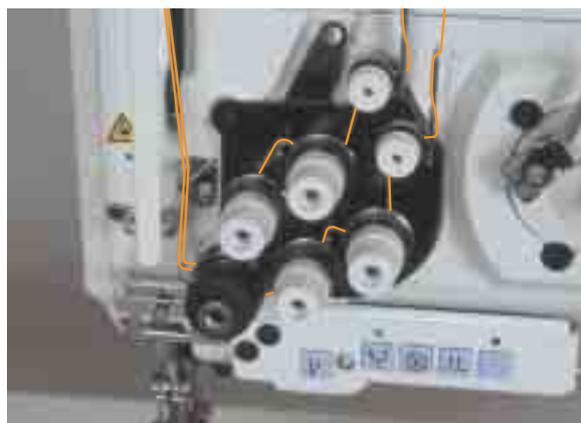
### Powerful rectangular-feed mechanism

- JUKI's unique feed mechanism has been employed to eliminate stitch gathering, which is likely to occur with the conventional feed mechanism (elliptical-feed).
- The rectangular-feed locus produces an increased efficiency of feed with consistency from the beginning to the end of sewing.
- Since the feed dog's amount of lift is small, material flopping, noise and vibrations can be reduced.



### Dual-tension mechanism

- The machine is able to perform sewing with low-count thread under a higher tension, which is difficult for the conventional single-tension method, with ease. The machine comes with a dual-tension thread tension system (two tension posts are used for a single thread).



## Excellent operability

### The basic performance (specifications) has been dramatically improved

- A maximum number of revolutions of 2500rpm (increased by 25%) is achieved to increase productivity.
- The machine is able to support a maximum stitch length of 9mm (12mm for the L type).
- It is now possible to factory-install the presser foot with a center guide for 2needles at the time of delivery.

### Higher lift of the presser foot

- The presser foot lift is as high as 16mm, allowing the user to handle the material with ease.



### Simple-setting of the amount of alternating vertical movement

- The vertical strokes of the presser foot and walking foot (alternating vertical movement) can be easily changed using a large dial mounted on the top surface of the machine head. In addition the sewing speed is automatically adjusted with the set value. With this feature, ideal sewing conditions are maintained at all times.



### Instantaneous change-over device for the alternate vertical movement amount (DL device)

- The machine has been provided with a DL device, which demonstrates its ability in processes for sewing lots of multilayered parts of material.
- The amount of alternating vertical movement is instantly maximized by turning on the DL switch placed under the arm or the knee switch.



### Safety mechanism

- Even in a situation such that the thread is caught in the hook, the safety device automatically works to prevent the hook from breaking. Resetting is possible only with a button.

### Thread trimming without fail

- The count of thread which can be cut by the thread trimmer is TEX 50 to 135.
- The knife pressure is easily adjustable when the count of thread is changed.



## *L type (thick-thread long-pitch)*

**The machine performs sewing with consistency with a broader range of needle counts up to #0. In addition, it achieves the maximum stitch length of 12mm.**

- A triangular cam has been adopted for the feed rock cam. This enables consistent sewing with a thread count of up to 0.
- The machine comes provided as standard with a handwheel which is larger than the S type (standard) so as to increase the material-penetrating force of the needle.
- In order to ensure an efficiency of feed (presser foot pressure) which is larger than that provided by the S type (standard), a double-coil spring is equipped as standard for the pressure bar spring.
- The maximum stitch length is 12mm for both forward and reverse feed directions. In addition, the alternating vertical movement dial is provided as standard.



Option

● Suspended ruler H152 (MAH-152010A0)



The suspended ruler which is currently being used by the LU-1500N Series machine users can be used in its as-is status.

● Combination of the machine head specifications and optional devices at the time of delivery

- ①AK device kit (400-40414) : PLC-1710, PLC-1760, PLC-1760L
- ②BT device kit (400-40415) : PLC-1710, PLC-1760
- ③BT device kit (400-40469) : PLC-1760L
- ④DL device kit (400-40416) : PLC-1760L

	Machine-head mounted device				Gauge size (mm)	Optional (possible to retrofit) devices
	BT device	DL device	Alternating vertical movement dial	AK device		
PLC-1710	—	—	—	—	—	① or ①+② ②
PLC-1710-7	○	○	○	○	—	—
PLC-1760	—	—	—	—	6, 8, 10, 12	① or ①+② ②
PLC-1760-7	○	○	○	○	6, 8, 10, 12	—
PLC-1760L	—	—	○	—	10	① or ①+③+④ ③+④※
	○	○	○	○		—

※The BT device and DL device can be retrofitted to the PLC-1760L only when they are used by the set.

List of gauge components

● 1-needle

Model	Throat plate	Walking foot	Feed dog	Presser foot	Throat plate support	Throat plate support			
Part	Throat plate		Standard	For thick-thread	Standard	For thick-thread	Presser foot	Throat plate support	Throat plate support
PLC-1710	○	○	○	○	○	○	○	○	○
PLC-1710-7	○	○	○	○	○	○	○	○	○
Shape									
Part No.	40038970	40038969	21444559	40040295	40038971	40040294	40017286	40038972	40038976

● 2-needle

Model	Throat plate	Throat plate for under-tape attachment	Throat plate support	Walking foot	
Part	Standard	For automatic thread trimmer	For L type	Standard	For L type
PLC-1760	○	○	○	○	○
PLC-1760-7	○	○	○	○	○
PLC-1760L	○	○	○	○	○
Shape					
Part No.	40038996	40038759	—	40039004	40038769
Needle gauge	6mm	40038995	40038758	—	40038767
	8mm	40038994	40038757	40038893	40038765
	10mm	40038993	40038756	—	40038762
	12mm	—	—	—	—

Model	Center guiding walking foot	Presser foot	Presser foot with a center guide	Needle clamp	Feed dog			
Part	Standard	For L type	Presser foot	Presser foot with a center guide	Slot	Round hole	For L type	
PLC-1760	○	○	○	○	○	○	○	
PLC-1760-7	○	○	○	○	○	○	○	
PLC-1760L	○	○	○	○	○	○	○	
Shape								
Part No.	40038854	—	40038800	40038810	40038778	40039009	40038783	—
Needle gauge	6mm	40038852	—	40038797	40038808	40038776	40039008	40038782
	8mm	40038850	40039271	40038795	40038806	40038774	40039007	40038781
	10mm	40038848	—	40038792	40038802	40038772	40039006	40038780
	12mm	—	—	—	—	—	—	—

※ The needle gauge for the PLC-1760L is 10mm only.

## When you place orders

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

### Machine head

#### ●1-needle (without automatic thread trimmer)

PLC1710S

Pneumatic auto-lifter	Code
Not provided	
Pedal switch type (AK136B)	AK136B

#### ●1-needle (with automatic thread trimmer)

PLC1710S70BAK136B

Pneumatic auto-lifter	Code
Pedal switch type (AK136B)	AK136B

#### ●2-needle (without automatic thread trimmer)

Specifications	Code
Standard	S
Thick-thread long-pitch	L

Presser foot	Code
Standard	S
With a center guide	A

PLC1760    /   /

Needle gauge	Code
6mm	B
8mm	C
10mm	D
12mm	E

Device	Code
Not provided	
With BT device and DL device	BT/DL

※In the case where S (standard) is selected for the specification category, gauge provided with the device is not applicable.

Pneumatic auto-lifter	Code
Not provided	
Pedal switch type (AK136B)	AK136B

※In the case where L (long pitch) is selected for the specification category, the needle gauge D (10mm) is only applicable.

※In the case where S (standard) is selected for the specification category, gauge provided with the device is not applicable.

#### ●2-needle (with automatic thread trimmer)

PLC1760S   70BAK136B

Needle gauge	Code
6mm	B
8mm	C
10mm	D
12mm	E

Presser foot	Code
Standard	S
With center guide	A

Pneumatic auto-lifter	Code
Pedal switch type (AK136B)	AK136B

### Operation panel

CP160C

● To order, please contact your nearest JUKI distributor.

## Specifications

Model name	PLC-1710-7	PLC-1710	PLC-1760-7	PLC-1760	PLC-1760L
Type	1-needle		2-needle		
	With automatic thread trimmer	—	With automatic thread trimmer	—	Thick-thread long-pitch type
Sewing speed	2,500rpm				1,800rpm (P=0~10mm) 1,600rpm (P=10~12mm)
Needle	134×35 Nm110~160 Standard Nm140				134×35 Nm140~200 Standard Nm200
Thread	TEX 50~135				TEX 105~270
Max. stitch length	9mm (forward / backward)				12mm (forward / backward)
Stitch adjusting method	By dial				
Thread take-up	Slide type				
Automatic reverse feed function	Pneumatic type	By lever	Pneumatic type	By lever	By lever
Needle bar stroke	36mm				38mm
Hook	Vertical-axis 1.6-fold capacity hook (latch type)				Vertical-axis 1.6-fold capacity hook (cap type)
Lift of the presser foot	By hand: 9mm, Auto: 16mm				
Alternating vertical movement	1~6.5mm	2.5~6.5mm	1~6.5mm	2.5~6.5mm	1~6.5mm
Alternating vertical movement adjusting method	Dial	Slot slide	Dial	Slot slide	Dial
DL device	Provided as standard	—	Provided as standard	—	Option
Safety mechanism	Provided as standard				
Bobbin thread winder	Built in the machine arm				
Bottom-feed micro-adjustment mechanism	Provided as standard				
Lubrication	Lubrication: Centralized tank method * Lubrication with an oiler for the hook section				
Distance from needle to machine arm	255mm				
Post height	161.7mm				
Bed size	517mm×178mm				
Knee-lifter	—	Provided as standard	—	Provided as standard	Provided as standard
Auto-lifter	Provided as standard	Option	Provided as standard	Option	Option
Weight of the machine head	55kg	55kg	56kg	56kg	58g
Air consumption	0.3dm <sup>3</sup> /min (ANR)	—	0.3dm <sup>3</sup> /min (ANR)	—	0.3dm <sup>3</sup> /min (ANR)



### JUKI CORPORATION HEAD OFFICE

The environmental management system to promote and conduct  
 ① the technological and technical research, the development and design of the products in which the environmental impact is considered,  
 ② the conservation of the energy and resources, and the recycling, in the research, development, design, distribution, sale and maintenance service of the industrial sewing machines, household sewing machines and industrial-use robots, etc., and in the sale and maintenance service of the data entry system and in the purchase, distribution and sale of the household commodities including the healthcare products.

# JUKI®

**JUKI CORPORATION**  
**MARKETING & SALES H.Q.**

8-2-1, KOKURYO-CHO, CHOFU-SHI,  
 TOKYO 182-8655, JAPAN  
 PHONE : (81) 3-3480-2357, 2358  
 FAX : (81) 3-3430-4909, 4914  
<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.
- \* This catalogue prints with environment-friendly soyink on recycle paper.