1-needle, Unison-feed, Lockstitch Machine with a Large Hook



# DNU-1541 DNU-1541S (with a safety mechanism) DNU-1541S (with an automatic thread trimmer)





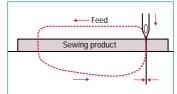


## ith its reliable feed and consistent seam quality, the machine responds outstandingly to the sewing of heavy-weight materials.

#### Excellent sewing capabilities and feed performance.

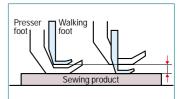
- With its larger needlebar stroke, higher presser foot lift, and newly adopted double-tension mechanism, the machine offers excellent sewing capabilities and responsiveness.
- The alternating vertical movements of the walking foot and presser foot are as large as 6.5mm. In addition, the ratio between alternating vertical movements of the walking foot and presser foot remains unchanged even when the material thickness changes. Thanks to this feature and the adoption of a new method of rectangular feed that prevents needle from fraying, the machine sews multi-layered parts of a material with consistent stitching pitch while preventing stitch gathering.

#### Rectangular feed



 Compared with the elliptical feed, the rectangular feed helps reduce gathered stitches

#### Alternating vertical movement mechanism



• The ratio of alternate vertical movement remains unchanged even when the material thickness changes.



Higher lift of the presser foot



• The maximum alternating vertical movement is 6.5mm.

## High-speed performance increases productivity.

The machine delivers increased productivity at sewing speeds as high as 2,500rpm (DNU-1541, -1541S) or 3,000rpm (DNU-1541-7).



## Safety mechanism. (DNU-1541S)

When the thread is caught in the hook or any other sewing trouble occurs, the safety mechanism will automatically operate to prevent the machine from being damaged.



#### Excellent operability and maintainability.

- The stitch length can be easily selected by the stitch dial. The machine's enhanced operability features include a clear view of the area around the needle, placement of the bobbin thread winder on the front face of the machine arm, and a large handwheel (160mm).
- A knee-lifter mechanism is built in the bed. This reduces the pressure required to operate the knee-lifter and facilitates setup.
- The machine's full-open-type top design makes adjusting works easier.
- The machine comes with a lubricating mechanism that uses a centralized oil wick. This substantially reduces the time and trouble required for oiling the machine. (Hook: automatic.)
- A walking foot mechanism is built into the machine arm to prevent oil from scattering



1-needle, Unison-feed, Lockstitch Machine with a Large Hook and an Automatic Thread Trimmer

DNU-1541-7



**DNU-1541-7-0B/XC-E500**\* XC-E500 control panel is optionally available.

## The vertical stroke of the walking foot and presser foot can be easily set and changed.



The vertical stroke of the presser foot and walking foot (amount of alternating vertical movement) can be easily changed with the large dial mounted on the top of the machine head. The sewing speed is automatically regulated based on the vertical stroke setting. This ensures ideal sewing conditions at all times.

## Thread trimming without fail.

## A helpful automatic reverse feed function is provided as standard.



Consisting only of a moving knife and counter knife, the simple and well-balanced thread trimming mechanism is capable of cutting thick thread up to without fail.



With just a light press on the one-touch type reverse feed button, reverse feed stitching is actuated. Furthermore, if a suspended ruler is attached on the machine or a 3-dimensional sewing product is sewn, the button can be shifted upward to prevent interruption.

## The area around the needle entry is designed to be easily observed.

Since the needle thread tension-release solenoid is fitted on the rear face of the machine head, the area around the needle entry and one-touch type reverse feed button is easily viewable. This substantially contributes to improved operability.

#### **OPTIONS**

#### Pneumatic auto-lifter

Model name	31		Switch type		Air regulator	
		Knee switch type	Pedal switch type	Not provided	Provided	
DNU-1541 DNU-1541S	AK119A	GAK-A19010A0		-		-
	AK119B	GAK-A19010B0	-			-
	AK120A	GAK-A20010A0		-	-	
	AK120B	GAK-A20010B0	-		-	
DNU-1541-7	AK123A	GAK-A2300AA0		-		•
	AK123B	GAK-A2300BA0	-			-

#### Automatic reverse feed function

Model name	Part No.	Remarks
DNU-1541 DNU-1541S	213-48552	Provided with an air regulator

<sup>\*</sup>To use a pneumatic auto-lifter and reverse feed function in combination with a machine that is without an automatic thread trimmer, select AK119A or AK119B.

#### Combination of optional devices

Model name	Combination	Pneumatic auto-lifter	Automatic reverse feed function	DL device
	Automatic reverse feed function	-		-
DNU-1541 DNU-1541S	Pneumatic auto-lifter	AK120A	-	-
	Friedifiatic auto-liitei	AK120B	-	-
	Pneumatic auto-lifter+ Automatic reverse feed function	AK119A		-
		AK119B		-
	Pneumatic auto-lifter+ Automatic reverse feed function	AK123A	Provided as	-
DNU-1541-7		AK123B		-
	Pneumatic auto-lifter+ Automatic reverse feed function+ DL device	AK123B	standard	DL21(D kit)

Instantaneous change-over device for the alternate vertical movement amount (DL device).\*



Model name	21. 1	Remarks
DNU-1541-7	GDL-21000DA0	[DL21 (D kit)] for installed after the setup of the machine

- For sewing processes that handle heavy-weight materials or multi-layered parts of material, the alternating vertical movements of the walking foot and presser foot can be quickly set to maximum by pressing the DL switch. The result is beautiful seams free from gathered stitches.
- The machine is provided with both a hand switch and knee switch.
- \*The DL device cannot be used alone. It is designed for use in combination with the auto-lifter (AK123B).

### Suspended ruler H152

## Part No. MAH-152010A0 SS-7151610SP × 2 WP-0621016SD × 2 WS-0610002KN × 2

#### 3-pedal unit PK75

Part No. GPK-750000A0 (for DNU-1541-7) Highly operable 3-pedal unit for standing work.



#### **SPECIFICATIONS**

		The state of the s		
Model name	DNU-1541	DNU-1541S	DNU-1541-7	
Max. sewing speed	2,500rpm		3,000rpm	
Max. stitch length	9mm (Normal/Reverse feed)			
Needle bar stroke		36mm		
Lift of the presser foot		By hand: 9mm, By knee: 16mm		
Thread take-up		Slide type		
Amount of alternating vertical movement	2.5 ~	6.5mm	1 ~ 6.5mm	
Dial for adjustment of alternating vertical movement	-		Provided as standard	
Bottom-feed adjusting mechanism		-	Provided as standard	
Hook	Horizontal-axis full-rotary double-capacity hook			
Needle (at the time of delivery)	135 × 17 ( Nm160) Nm125 ~ Nm180			
Thread	#30 ~ #5, B46 ~ B138, Nm=60/3 ~ 15/3			
Pitch changing method	By dial			
Bobbin winder	Provided as standard			
Knee-lifter mechanism		Provided as standard		
Safety mechanism	-	Provided as standard	-	
Lubrication	Cer	ntralized oil wick lubrication (hook: autom	atic)	
Lubricating oil	JUKI New Defrix Oil No.2(equivalent to ISO VG32)			
Distance from needle to machine arm	264mm			
Bed size	477mm × 178mm			
Weight of the machine head	36.5kg		42.5kg	
Automatic reverse feed function	Option		Provided as standard	
Power requirement	<u>-</u>		Single-phase 100 ~ 120V, 220 ~ 240V 3-phase 200 ~ 220V, 220 ~ 240V	

#### WHEN YOU PLACE ORDERS

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

[Without an automatic thread trimmer] [With an automatic thread trimmer]

#### **DNU-1541**

7	
Safety mechanism	Code
Not provided	
Provided	S

#### DNU-1541-7-0B

Pneumatic auto-lifter	Code
Knee switch type (AK123A)	Α
Pedal switch type (AK123B)	В
Not provided	

DL device	9	Code
Not provided		
Provided*		Α
* Select the auto-lifter code B (AK123B)		

To order, please contact your nearest JUKI distributer.

[PSC box/control panel for SC]

#### SC-380-

PSC box			
For General	Single-phase	220 ~ 240V	07
Export	3-phase	200 ~ 220V	11
For JUS(LA)*	Single-phase	110 ~ 120V	37
	3-phase	220 ~ 240V	38
For CE	Single-phase	220 ~ 240V	34

Control panel	Code
Not provided	00000
Control panel display language:English. Instruction manual comes in three different languages	E500B
Control panel display language:English. Instruction manual comes in five different languages.	E500C

[Motor for SC]

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Motor			
For General Export	Single-phase 3-phase	200 ~ 240V	60
For JUS(LA)*	Single-phase	100 ~ 120V	61
F01 303(LA)	3-phase	200 ~ 240V	62
For CE	Single-phase	200 ~ 240V	63

<sup>\*</sup> JUS: North America and Central and South America.

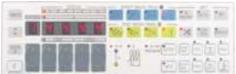
#### AC servomotor/controller SC-380

The SC-380 is provided with many different standard functions, including speed-control, soft-start, automatic reverse stitching with the specified number of stitches, constantdimension stitching, and overlapped (multi-layered) stitching. These functions ensure sewing performance optimally suited to the material and process.



#### Control panel that improves functions of the sewing machine (optional)

The XC-E500 is provided with program sewing and a host of other functions that contribute to increased efficiency.







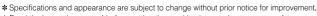


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\* Read the instruction manual before putting the machine into service to ensure safety.

#### JUKI CORPORATION HEAD OFFICE

considered. 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, nousehold sewing machines and industrial-use robots, etc., and on the purchase, distribution and sale of the household commodities including the healthcare products.

