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



# DNU-1541 DNU-1541S (with safety mechanism) DNU-1541-7 (with automatic thread trimmer)









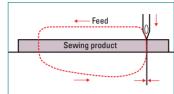
DNU-1541

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

#### Excellent sewing capabilities and feed performance.

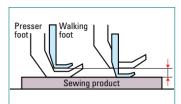
- With its larger needlebar stroke, higher presser foot lift, and newly adopted double-tension mechanism, the machine offers excellent sewing capabilities and responsiveness.
- The alternating vertical movements of the walking foot and presser foot are as large as 6.5mm. In addition, the ratio between 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 ( \$\phi\$ 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 Large Hook and Automatic Thread Trimmer DNU-1541-7



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

\* Operation panel is optionally available.

## 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.

## 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.



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.

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





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.

#### OPTIONS

#### Pneumatic auto-lifter

|                       |        |              | Switch type         |                      | Air regulator |          |
|-----------------------|--------|--------------|---------------------|----------------------|---------------|----------|
| Model name            | Type   | Part No.     | Knee<br>switch type | Pedal<br>switch type | Not provided  | Provided |
|                       | AK119A | GAK-A19010A0 | 0                   | _                    | 0             | _        |
| DNU-1541<br>DNU-1541S | AK119B | GAK-A19010B0 | _                   | 0                    | 0             | _        |
|                       | AK120A | GAK-A20010A0 | 0                   | _                    | _             | 0        |
|                       | AK120B | GAK-A20010B0 | _                   | 0                    | _             | 0        |
| DNU-1541-7            | AK123A | GAK-A2300AA0 | 0                   | _                    | 0             | _        |
| DNU-1541-7            | AK123B | GAK-A2300BA0 | _                   | 0                    | 0             | _        |

#### Automatic reverse feed function

| Model name            | Part No.  | Remarks                     |
|-----------------------|-----------|-----------------------------|
| DNU-1541<br>DNU-1541S | 213-48552 | Provided with air regulator |

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

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



| Model name |              | 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).

#### **Combination of optional devices**

| Model<br>name          | Combination   | Pneumatic auto-lifter | Automatic reverse feed function | DL device   |
|------------------------|---|-----------------------|---------------------------------|-------------|
|                        | Automatic reverse feed function   | _                     | 0                               | _           |
| DNIII 4E44             | Pneumatic auto-lifter   | AK120A                | _                               | _           |
| DNU-1541<br>DNU-1541S  | Prieumatic auto-liiter  | AK120B                | _                               | _           |
| DINO-10410             | Pneumatic auto-lifter+  |                       | 0                               | _           |
|                        | Automatic reverse feed function   | AK119B                | 0                               | _           |
| Pneumatic auto-lifter+ |   | AK123A                |                                 | _           |
| DNU-1541-7             | Automatic reverse feed function   | AK123B                | Provided as                     | _           |
|                        | Pneumatic auto-lifter+<br>Automatic reverse feed function+<br>DL device | AK123B                | standard                        | DL21(D kit) |

## 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

| Model name   | DNU-1541   | DNU-1541S                      | DNU-1541-7  |
|--|--|--------------------------------|---|
| Max. sewing speed                                    | 2,500  | Orpm                           | 3,000rpm  |
| Max. stitch length                                   | 9mm (forward / backward)                           |                                |   |
| 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  | 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 thread winder                                 |  | Provided as standard           |   |
| Knee-lifter mechanism                                |  | Provided as standard           |   |
| Safety mechanism                                     | _  | Provided as standard           | _   |
| Lubrication  | Centralized oil wick lubrication (hook: automatic) |                                |   |
| Lubricating oil                                      | JUKI New Defrix Oil No.2(equivalent to ISO VG32)   |                                |   |
| Distance from needle to machine arm                  | 264mm  |                                |   |
| Bed size   | 477mm×178mm  |                                |   |
| Automatic reverse feed function                      | Opi  | tion                           | Provided as standard                                |
| Compressed air                                       | -  | -                              | 0.5MPa  |
| Air consumption                                      | -  | -                              | 0.3dm³/min (ANR)                                    |
| Motor output   | 750W   |                                |   |
| Power requirement                                    | -  | -                              | Single-phase 100~120V, 200~240V<br>3-phase 200~240V |
| Power consumption                                    |  | Rating 425VA                   |   |
| Weight of the machine head                           | 36.  | 5kg                            | 42.5kg  |

#### WHEN YOU PLAGE ORDERS

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

#### [Without automatic thread trimmer]

#### DNU1541

| Safety mechanism | Code |
|------------------|------|
| Not provided     |      |
| Provided         | S    |

●To order, please contact your nearest JUKI distributer.

#### [With automatic thread trimmer]

#### DNU154170B

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

| Not provided |   |
|--------------|---|
| Provided*    | Α |

<sup>\*</sup> Select the auto-lifter code B (AK123B).









#### JUKI CORPORATION HEAD OFFICE

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 $\begin{tabular}{ll} $\divideontimes$ Specifications and appearance are subject to change without prior notice for improvement. \end{tabular}$ 

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

\* This catalogue prints with environment-friendly soyink on recycle paper.