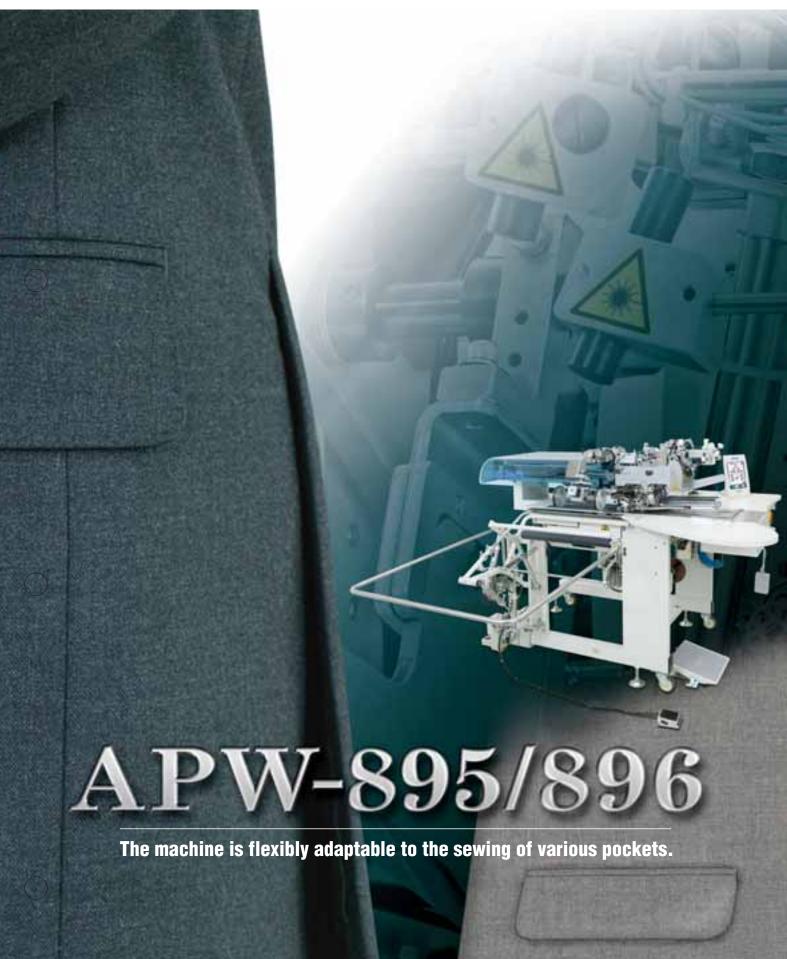


## **APW Series**

APW-895 / Lockstitch, Automatic Welting Machine (for straight pockets with flaps) APW-896 / Lockstitch, Automatic Welting Machine (for slanted pockets with flaps)





# APW-895/896

### Machine time is reduced to provide increased productivity



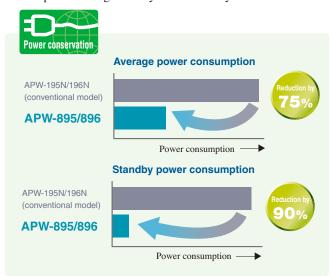
#### **Increased productivity**

In addition to the high-speed machine head with a maximum speed of 3,000 sti/min, faster movement (jump and forwarding) of the clamp foot achieves a shorter machine time.



#### Power consumption is substantially reduced

The reduced energy consumption of the APW-895/896 ensures superior power-conservation and cost effectiveness. The adoption of a direct-drive system (compact AC servomotor) with superb energy-transfer properties cuts the average power consumption by 75% compared with the forerunner of the APW-895. The power consumption during standby is reduced by as much as 90%.



## APW-895/896



The machine supports the sewing of straight pockets (with flaps) on suits, jackets and pants.

Double-/single-welt sewing can be changed over by the simple touch of a key on the operation panel.

Increased adjustable range of sewing lengths (min. 18mm to max. 220mm)



\* The picture shows the APW-89



Sewing pockets with flaps



\* The picture shows the APW-895



Sewing straight pockets (single welt)

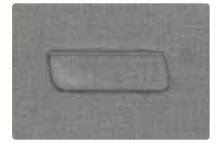
### APW-896

In addition to the APW-895's functions, the APW-896 supports the sewing of slanted pockets (for sewing slanted flaps).

The world's first computer-controlled sidewise cutting position of the corner knives enables easy adjustments of the knives simply by operating the panel.







The sewing of slanted pockets (sewing slanted flaps)

#### **JUKI ECO PRODUCTS**

The APW-896 Series are an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.



- This model has cleared "JUKI Group's Green Procurement Guideline"\*, a set of standards stricter than the relevant international restrictions on the use of hazardous chemical substances (e.g., the RoHS Directive)\*.
- The introduction of a servomotor has reduced the electrical power consumption by 75%, as compared with the conventional model.
   Through design adjustments in the mechanical balance, the vibration of the new model is reduced by 9 dB, as compared with the conventional model.
- The cabinet-retraction design of the stacker helps reduce the package size. As a result, the load capacity of a container for transportation has been increased by about 80%, as compared with the conventional model.
- The number of man-hours required to manufacture the sewing machine has been reduced by 14%, contributing to reduced energy consumption during the production process.

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.

#### Functions common to both the APW-895 and APW-896

# Time required for setup changing is substantially shortened

- •The machine is equipped with a simple gauge changing mechanism which enables the changing and adjustment of the position of the hook driving shaft saddle from the top of the bed without tilting the machine head. The time required to change a needle gauge is less than a half of that required by conventional machines.
- The position of the folding plate and needle does not change even when double-/single-welt sewing is changed over. This means that the folding plate does not need any adjustment.
- •The machine is provided as standard with a micro-adjusting function for adjusting the clamp foot position. This enables both accurate and quick adjustments of the welting width.

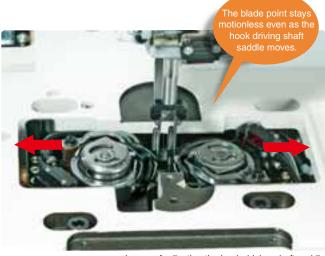


Image of adjusting the hook driving shaft saddle

\* The picture shows the APW-895.

#### Increased sharpness of the center knife

An independently driven (speed can be changed) stepping motor is adopted for the center knife.

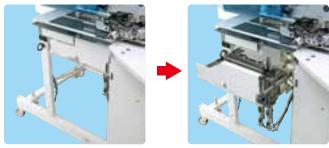
The center knife therefore remains unaffected by the sewing speed and cuts more sharply and cleanly. In addition, the knife shape is improved to prevent bending and demonstrates increased sharpness when an elastic material is being sewn.



\* The nicture shows the APW-895

#### The corner knives are easily adjustable

The corner knives, which can be drawn out in the entire knife unit is adopted. The knives are easily adjusted and can also be changed with ease. The slim corner knife cover helps reduce material thrusting, thereby achieving material cutting with accuracy.



\* The picture shows the APW-895.

# Highly-visible and easy-to-use large color LCD touch-panel (IP-420)

The graphic display and touch panel on the large color LCD help dramatically increase ease of use. Basic operations are carried out with the graphic screen and pictogram buttons. Guidance messages are given in your selected language.

#### **External mediuma**

Now the USB-ready main body of the sewing machine uses many different kinds of media.

In addition to the CompactFlash card, the main body of the sewing machine is provided as standard with a USB connector. Now, data can be input/output to/from various kinds of media (FD (floppy disks), SM (SmartMedia), CF (CompactFlash), SD (Secure Digital Card) etc.) by means of a USB thumb device and a card reader.



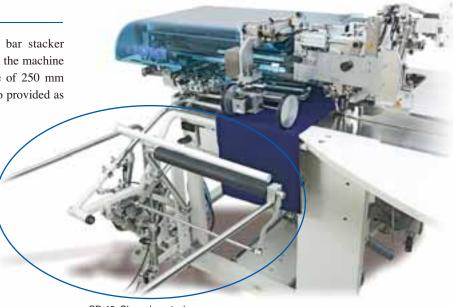


## Newly developed stacker which is able to handle small articles

Two kinds of stackers are available; i.e., clamp bar stacker (SP-46) and roller stacker (SP-47). With the stacker, the machine is able to handle materials with a shortest distance of 250 mm from its edge to the pocket. A stacking sensor is also provided as standard to prevent stacking errors.



SP-47: Roller stacker

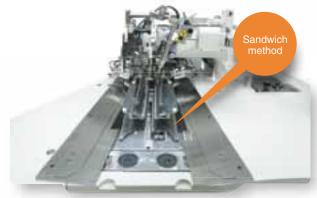


SP-46: Clamp bar stacker

#### **OPTION**

#### Shim device: SA-118S

The device feeds a highly-frictional garment body (material fabric) sandwiched vertically between the clamp foot and shim.



\* The picture shows the APW-895.

#### Other options

| Model   | Description                           | Feature   |
|---------|---------------------------------------|---|
| SP-48   | Grasp stacker                         | The general-purpose stacker has a wide range of applications, including men's wear, ladies' wear, sportswear, jumpers, etc.                                 |
| SA-117  | Dart stretcher                        | It is capable of smoothing wrinkles in a garment body with the edges of the material fabric clamped.  |
| SA-119E | Suction device                        | This suction device is intended for sewing tables with monolithic right and left parts  |
| SA-121  | Flap pattern<br>matching marker       | When using a patterned flap, the pattern matching position can be checked with a marking lamp   |
| SA-126  | Bundle clamp*<br>(Part No.: 40045778) | It clamps parts for items such as trousers while stacked to carry out operations. This device is to be used in combination with the roller stacker (SP-47). |
| SA-131  | Additional marker                     | It is a marking lamp that adds reference lines.   |
| SA-134  | Right angle detecting sensor          | It is a sensor to detect the right-flap angle. (The automatic left-flap angle detecting function is provided as standard.)                                  |
| SA-136  | Interfacing presser                   | It is a pneumatic type interlining presser. Place an order when using the standard table.   |

<sup>\*</sup> Place your order for the bundle clamp SA-126 and suction motor SA-127 as parts.

#### Suction device: SA-119

(for sewing tables with separated right and left parts)
Suction motor: SA-127 (Part No.: 40045779)

The device improves the ease of the material placement by sucking the garment body. The device should be used in combination with a suction motor (SA-127).

\* The SA-127 is not required if a commercially available suction motor or suction device is provided at your factory.



\* The picture shows the APW-895.

#### Automatic interlining feeder: SA-120

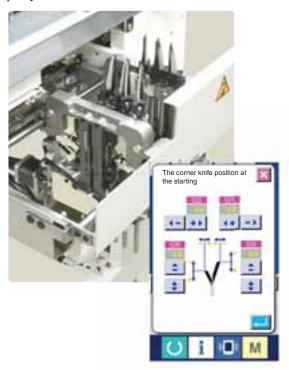
The device automatically feeds rolled interlining onto the table and cuts it. It helps reduce the time required to place the interlining, thereby increasing productivity and workability.

# APW-896

A worldfirst feature!!

The world's first "corner-knife cutting adjustment" through the operation panel is achieved

There are many different kinds of welting patches in terms of specifications and materials. The corner knife cutting at the corner part of a welt needs fine adjustments. This can now be easily adjusted in 0.1 mm steps only through the operation panel since the corner knife comes with "computer control of the cutting position" and an "independent right- and left-blade lifting/lowering" mechanism. Fine adjustments of the amount of knife cutting to the stitch can be done both in the crosswise and lengthwise directions, not through the use of a tool, but simply by operating the operation panel. This substantially reduces the adjustment time and finishes high-quality welt.



#### Automatic left-flap angle detecting function

When sewing a slanted flap

Cannot be used. Only the flap sensor can be used.

Angle detecting sensor

Left flap sensor

Automatic detection of a flap angle and calculation of the sewing starting /end position

Sewing starting

Cutting

Sewing starting

Sewing many control of difference amount of diffe

# Equal stitch-length right/left backtacking function is installed

The machine comes with an added function for equalizing the right and left backtack stitch length for the sewing of slanted pockets. This function helps improve the backtack seam quality.



# The machine is provided as standard with the "automatic left-flap angle detecting function"

By pressing the automatic angle detection button on the operation panel when sewing a left flap, the two sensors detect the flap angle to adjust the sewing starting (sewing end) position of the right and left needles when sewing a left flap.

- \* This function is provided as standard only on left-flap sewing.
- \* When automatic detection finds a difference of less than 0.5 mm, parallel stitching is performed.
- \* For the sewing of single welt, the flap-angle detecting sensors cannot be used. Only the flap sensor can be used.

#### WHEN YOU PLACE ORDERS

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



Model type Code
For straight pockets with flaps 895

\* Select "L" (Wide&Long) in case that the needle gauge size is more than 22mm and/or the sewing length (welt length) is more than 220mm.

| S IIIOI E III AII ZZOIIIII. |      |  |  |  |  |  |  |
|-----------------------------|------|--|--|--|--|--|--|
| Specifications              | Code |  |  |  |  |  |  |
| Standard                    | S    |  |  |  |  |  |  |
| Wide & Long                 | L    |  |  |  |  |  |  |
|                             |      |  |  |  |  |  |  |

| Stacker                   | Code |
|---------------------------|------|
| Not provided              | Z    |
| SP-46 (clamp bar stacker) | Q    |
| SP-47 (roller stacker)    | R    |
| SP-46+SP-47               | S    |
|                           |      |

| Power supply                        | Code |
|-------------------------------------|------|
| Single-phase 200~240V               | K    |
| 3-phase 200~240V                    | D    |
| 3-phase 380V (provided with SA-128) | W    |
|                                     |      |

**APW895**□△△□◆**4** 

| Needle gauge·Welting patch ruler size |                 |  |        |  |                                    |        |    |  |
|---------------------------------------|-----------------|--|--------|--|------------------------------------|--------|----|--|
| Specification                         | Needle<br>gauge | Double-welt ruler (installed on the main body) |        |  | Single-w<br>(accessory s<br>the ma | Code   |    |  |
| Spe                                   | 33-             | L-size   | R-size |  | L-size                             | R-size |    |  |
|                                       | 8mm             | 3.3mm  | 3.3mm  |  | 7.3mm                              | 7.3mm  | 80 |  |
|                                       | 10mm            | 4.3mm  | 4.3mm  |  | 9.3mm                              | 9.3mm  | 10 |  |
| 2                                     | 12mm            | 5.3mm  | 5.3mm  |  | 11.3mm                             | 11.3mm | 12 |  |
| Standard                              | 14mm            | 6.3mm  | 6.3mm  |  | 13.3mm                             | 13.3mm | 14 |  |
| Sta                                   | 16mm            | 7.3mm  | 7.3mm  |  | 15.3mm                             | 15.3mm | 16 |  |
|                                       | 18mm            | 8.3mm  | 8.3mm  |  | 17.3mm                             | 17.3mm | 18 |  |
|                                       | 20mm            | 9.3mm  | 9.3mm  |  | 19.3mm                             | 19.3mm | 20 |  |
|                                       | 22mm            | 10.3mm   | 10.3mm |  | 21.3mm                             | 21.3mm | 22 |  |
| D                                     | 24mm            | 11.3mm   | 11.3mm |  | 23.3mm                             | 23.3mm | 24 |  |
| - Po                                  | 26mm            | 12.3mm   | 12.3mm |  | 25.3mm                             | 25.3mm | 26 |  |
| Wide & Long                           | 28mm            | 13.3mm   | 13.3mm |  | 27.3mm                             | 27.3mm | 28 |  |
| Š                                     | 30mm            | 14.3mm   | 14.3mm |  | 29.3mm                             | 29.3mm | 30 |  |
|                                       | 32mm            | 15.3mm   | 15.3mm |  | 31.3mm                             | 31.3mm | 32 |  |

| Options (When you have chosen specification type "S"(standard) ) |                           |                             |                              |   |  |                                |                                  | Options (Whe specification type " |                           |                                |
|--|---------------------------|-----------------------------|------------------------------|---|--|--------------------------------|----------------------------------|-----------------------------------|---------------------------|--------------------------------|
| SA-117*<br>Dart<br>stretcher                                     | SA-118S<br>Shim<br>device | SA-119<br>Suction<br>device | SA-119E<br>Suction<br>device | SA-120<br>Automatic<br>interlining feeder | SA-121<br>Pattern-matching<br>marking device | SA-131<br>Additional<br>marker | SA-136<br>Interfacing<br>presser | Code                              | SA-118L<br>Shim<br>device | SA-131<br>Additional<br>marker |
| _  | _                         | _                           | _                            | _   | _  | _                              | _                                | ZZ                                | _                         | _                              |
| •  |                           |                             |                              |   |  |                                |                                  | LO                                |                           | •                              |
| •  |                           |                             |                              |   | •  |                                |                                  | L1                                | •                         |                                |
| •  |                           |                             |                              | •   |  |                                |                                  | L2                                | •                         | •                              |
| •  |                           |                             |                              | •   | •  |                                |                                  | L3                                |                           |                                |
| •  | •                         |                             |                              |   |  |                                |                                  | L4                                |                           |                                |
| •  | •                         |                             |                              |   | •  |                                |                                  | L5                                |                           |                                |
| •  |                           | •                           |                              |   |  |                                |                                  | L6                                |                           |                                |
| •  |                           | •                           |                              |   | •  |                                |                                  | L7                                |                           |                                |
| •  |                           | •                           |                              | •   |  |                                |                                  | L8                                |                           |                                |
| •  |                           | •                           |                              | •   | •  |                                |                                  | L9                                |                           |                                |
|  | •                         |                             |                              |   |  |                                |                                  | M2                                |                           |                                |
| •  |                           |                             | •                            |   |  |                                |                                  | МЗ                                |                           |                                |
| •  |                           |                             | •                            |   | •  |                                |                                  | M4                                |                           |                                |
| •  | •                         |                             |                              |   |  | •                              |                                  | M6                                |                           |                                |
|  |                           |                             |                              |   |  |                                |                                  |                                   |                           |                                |

<sup>\*</sup> The SA-117 can be used for gauge sizes of 8 mm to 12 mm.

#### **APW-896**

Model type Code
For slanted pockets with flaps 896

Specifications Code
Standard S

 Stacker
 Code

 Not provided
 Z

 SP-46 (clamp bar stacker)
 Q

 SP-47 (roller stacker)
 R

 SP-46+SP-47
 S

 Power supply
 Code

 Single-phase 200~240V
 K

 3-phase 200~240V
 D

 3-phase 380V (provided with SA-128)
 W

M8 M9

### **APW896**[

| Needle gauge·Welting patch ruler size |       |                               |                             |                                    |        |    |  |
|---------------------------------------|-------|-------------------------------|-----------------------------|------------------------------------|--------|----|--|
| Needle gauge                          |       | Double-v<br>(installed on the | velt ruler<br>ne main body) | Single-w<br>(accessory s<br>the ma | Code   |    |  |
| Spe                                   | gaago | L-size                        | R-size                      | L-size                             | R-size |    |  |
|                                       | 8mm   | 3.3mm                         | 3.3mm                       | 7.3mm                              | 7.3mm  | 80 |  |
|                                       | 10mm  | 4.3mm                         | 4.3mm                       | 9.3mm                              | 9.3mm  | 10 |  |
| 5                                     | 12mm  | 5.3mm                         | 5.3mm                       | 11.3mm                             | 11.3mm | 12 |  |
| Standard                              | 14mm  | 6.3mm                         | 6.3mm                       | 13.3mm                             | 13.3mm | 14 |  |
| क्र                                   | 16mm  | 7.3mm                         | 7.3mm                       | 15.3mm                             | 15.3mm | 16 |  |
|                                       | 18mm  | 8.3mm                         | 8.3mm                       | 17.3mm                             | 17.3mm | 18 |  |
|                                       |       |                               |                             |                                    |        |    |  |

9.3mm

19.3mm

19.3mm

| Options (When you have chosen specification type "S"(standard) ) |         |         |         |                    |                  |            |                  |                |      |
|--|---------|---------|---------|--------------------|------------------|------------|------------------|----------------|------|
| SA-117*  | SA-118S | SA-119  | SA-119E | SA-120             | SA-121           | SA-131     | SA134            | SA-136         | Code |
| Dart   | Shim    | Suction | Suction | Automatic          | Pattern-matching | Additional | Right angle      | Interfacing    | Oode |
| stretcher  | device  | device  | device  | interlining feeder | marking device   | marker     | detecting sensor | presser device |      |
| _  | _       | _       | _       | _                  | _                | _          | _                | _              | ZZ   |
| •  |         |         |         |                    |                  |            |                  |                | L0   |
| •  |         |         |         |                    | •                |            |                  |                | L1   |
| •  |         |         |         | •                  |                  |            |                  |                | L2   |
| •  |         |         |         | •                  | •                |            |                  |                | L3   |
| •  | •       |         |         |                    |                  |            |                  |                | L4   |
| •  | •       |         |         |                    | •                |            |                  |                | L5   |
| •  |         | •       |         |                    |                  |            |                  |                | L6   |
| •  |         | •       |         |                    | •                |            |                  |                | L7   |
| •  |         | •       |         | •                  |                  |            |                  |                | L8   |
| •  |         | •       |         | •                  | •                |            |                  |                | L9   |
|  | •       |         |         |                    |                  |            |                  |                | M2   |
| •  |         |         | •       |                    |                  |            |                  |                | МЗ   |
| •  |         |         | •       |                    | •                |            |                  |                | M4   |
| •  | •       |         |         |                    |                  | •          |                  |                | M6   |
|  |         |         |         |                    |                  | •          |                  |                | M7   |
| •  | •       |         |         |                    | •                | •          |                  |                | M8   |
|  | •       |         |         |                    |                  | •          |                  |                | M9   |
| •  |         | •       |         |                    |                  |            | •                |                | P1   |
|  | •       |         |         |                    |                  |            | •                |                | P2   |
| •  |         |         | •       |                    |                  |            | •                |                | P3   |
| •  |         |         | •       |                    | •                |            | •                |                | P4   |
| •  | •       |         |         |                    |                  | •          | •                |                | P6   |
|  |         |         |         |                    |                  | •          | •                |                | P7   |
| •  | •       |         |         |                    | •                | •          | •                |                | P8   |
|  | •       |         |         |                    |                  | •          | •                |                | P9   |
|  |         |         |         |                    |                  | •          | •                | •              | Q3   |
| •  |         | •       |         | •                  |                  | •          |                  |                | Q4   |
|  |         |         |         |                    |                  |            |                  |                | OΕ   |

9.3mm

ZZ M7 N0

<sup>●</sup>To order, please contact your nearest JUKI distributer.

<sup>\*</sup> The SA-117 can be used for gauge sizes of 8 mm to 12 mm.

#### **SPECIFICATIONS**

| Model name                            | APW-895   | APW-896   |  |  |  |  |  |
|---------------------------------------|---|---|--|--|--|--|--|
| Flap type                             | Rectangular flap  | Rectangular / Slanted flap  |  |  |  |  |  |
| Sewing speed                          | Max. 3,000 sti/min (1,000~3,000 sti/min)*   |   |  |  |  |  |  |
| Kind of welts                         | Parallel double welt, parallel single welt (with/without flaps)   | Parallel double welts, parallel single welts, slanted double welts, slanted single welts, trapezoidal sewing (with/without flaps) |  |  |  |  |  |
| Stitch length                         | Standard 2.5mr  | n (2.0~3.4mm)   |  |  |  |  |  |
| Stitch length (fastening stitching)   | S .   | ndard 1.0mm (0.5 $\sim$ 1.5mm)<br>ndard 2.0mm (0.5 $\sim$ 3.0mm)<br>ensation / back tack stitching                                |  |  |  |  |  |
| Corner-knife cutting adjusting method | Mechanical adjustment   | Electronic adjustment   |  |  |  |  |  |
| Needle                                | ORGAN DP × 17 Standard #16 (#14~#18), SCHMETZ 190R Standard #100 (#100~#110)                                |   |  |  |  |  |  |
| Thread                                | SPUN #60 (recommend)  |   |  |  |  |  |  |
| Hook                                  | Vertical-axis 1.7-fold capacity hook  |   |  |  |  |  |  |
| Number of independent sewing patterns | 99 patterns (999 patterns when a CF memory card is used)  |   |  |  |  |  |  |
| Number of cycle sewing patterns       | 20 patterns   |   |  |  |  |  |  |
| Number of alternate sewing patterns   | 20 pa   | tterns  |  |  |  |  |  |
| Machine head                          | 2-needle, lockstitch machine (LH-895)   | 2-needle, lockstitch machine with organized split needle bar (LH-896)   |  |  |  |  |  |
| Cloth feeding system                  | Driven by a st  | tepping motor   |  |  |  |  |  |
| Power requirement                     | Single-phasae 200∼240V, 3-pl  | hase 200~380V 50Hz / 60Hz   |  |  |  |  |  |
| Power consumption                     | 350   | OVA   |  |  |  |  |  |
| Compressed air /<br>Air consumption   | 0.5MPa, 40dr  | n³/min (ANR)  |  |  |  |  |  |
| Weight                                | 238.5kg   | 259.0kg   |  |  |  |  |  |
| Dimensions                            | 1,095mm(W)×1,500mm(D)×1,200mm(H)  (Width 1580mm = Stacker included) (Height 1800mm = Thread stand included) |   |  |  |  |  |  |

| Model name | With / Without (corner knife and center knife)  Sewing length (welt length) |  | Needle gauge (mm)         |
|------------|---|--|---------------------------|
|            | Without   | Min. 18mm~Max. 220mm (settable in increments of 0.1mm)   |                           |
| APW-895S   | With  | Min. 35mm When a solenoid valve is used: Min. 21mm *For a needle gauge width of 14mm or more, the minimum sewing length is 50mm. | 8, 10, 12, 14, 16, 18, 20 |
| APW-895L   | Without Min. 18mm~Max. 300mm (settable in increments of 0.1mm)              |  | 22, 24, 26, 28, 30, 32    |
| AP W-095L  | With  | Min. 50mm~Max. 250mm (settable in increments of 0.1mm)   | 22, 24, 20, 20, 00, 02    |
|            | Without   | Min. 18mm~Max. 220mm (settable in increments of 0.1mm)   |                           |
| APW-896    | With  | Needle gauge 12mm or less: Min. 21mm∼Max. 220mm<br>Needle gauge 14mm or more: Min. 50mm∼Max. 220mm                               | 8, 10, 12, 14, 16, 18, 20 |

<sup>\*&</sup>quot;sti/min" stands for "Stitches per Minute."

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JUKI CORPORATION HEAD OFFICE

JUKI CORPORATION HEAD OFFICE
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(1) The development of products and engineering processes that are sale to the environment (2) Green procurement and green purchasing (2) Green procurement and green purchasing (4) Resource saving (reduction of papers purchased, etc.)
(5) Reduction and recycling of waste (6) Improvement of logistics efficiency (modal shift and improvement of packaging, packing, etc.)



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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.

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