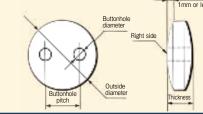
# Applicable button requirements

| Applicable button requirements | 5     |                                       |                                                                       |                                                              |                                         |                      |
|--------------------------------|-------|---------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------|----------------------|
| Specification                  | ons t | for 4-holed a                         | nd 2-holed                                                            | buttons                                                      |                                         |                      |
|                                | А     | Buttonhole diam                       | eter                                                                  | Needle: $\phi$ 1.5mm or more<br>Needle: $\phi$ 2mm or more w |                                         |                      |
|                                | В     | Distance betwee                       | n buttonholes                                                         | 1.5~6.0mm                                                    |                                         |                      |
|                                | С     | Buttonholes                           |                                                                       | All holes must be located e                                  | equidistant from the c                  | enter of each button |
|                                | D     | Outside diamete                       | Outside diameter Min. φ8mm<br>Max. φ32mm<br>Line height within ±0.25r |                                                              | mm                                      |                      |
|                                | Εı    | Button with a ro                      | und edge                                                              | R(roundness) of button ed                                    | dge must be a 3mm                       | radius or less       |
| 루브 부                           | E2    | Button with a V-                      | shaped edge                                                           | Within 120° angle                                            |                                         |                      |
|                                | Ез    | Button with an a                      | ingular edge                                                          | The thickness must be 5                                      | mm or less                              |                      |
|                                | F     | Bulge                                 |                                                                       | 5mm or less                                                  |                                         |                      |
|                                | G     | Area around but                       | tonholes                                                              | Must be smooth                                               |                                         |                      |
|                                | н     | Thickness                             |                                                                       | 8mm or less                                                  |                                         |                      |
| Specificat                     | ions  | for shank an                          | d marble b                                                            | outtons                                                      |                                         |                      |
| - F                            | Α     | Buttonhole diam                       | eter                                                                  |                                                              | φ1.5mm or more                          |                      |
|                                | В     | Thickness                             |                                                                       |                                                              | 6.8mm or less                           |                      |
|                                | С     | Distance from th<br>of the buttonhole |                                                                       | e button head to the center                                  | Shank button: 1~6<br>Marble button: 1.5 |                      |
| F i                            | D     | Length of shank                       |                                                                       |                                                              | 8mm or less                             |                      |
| C E                            | Е     | Straight section                      | on the side of                                                        | button                                                       | 3.5mm or less                           |                      |
| A B                            | F     | Outside diamete                       | r                                                                     |                                                              | Min ø8mm, Max. ¢                        | 32mm                 |
| G                              | G     | Distance from th                      | ne center of the                                                      | e hole to the button edge                                    | 2mm or less                             |                      |
| Sp                             | ecifi | cations for st                        | ay buttons                                                            |                                                              |                                         |                      |
| 1mm or less*1                  |       | Туре                                  | Outside diam                                                          | neter Buttonhole diameter                                    | Buttonhole pitch                        | Thickness            |
| Buttonhole                     |       | Type A                                | 8.5mm                                                                 | 2.5mm                                                        | 3.1mm                                   | 2.0mm                |
| diameter<br>Right side         |       | Type B                                | 10.2mm                                                                | 3.2mm                                                        | 4.0mm                                   | 2.0mm                |
|                                | 1     |                                       |                                                                       |                                                              |                                         |                      |



| Thickness |       |                              |                                                                                                  |
|-----------|-------|------------------------------|--------------------------------------------------------------------------------------------------|
| Spec      | ifica | tions for counter button     | S                                                                                                |
|           | А     | Buttonhole diameter          | Needle: $\phi$ 1.5mm or more when using #12~#16<br>Needle: $\phi$ 2mm or more when using #12~#18 |
|           | В     | Distance between buttonholes | 2.0~5.0mm                                                                                        |
| E2 E2     | С     | Buttonholes                  | All holes must be located equidistant from the center of each button                             |
| G         | D     | Outside diameter             | Min. φ8mm<br>Max. φ25mm<br>Line height within ±0.25mm                                            |
|           | Εı    | Button with a around edge    | R(roundness) of button edge must be a 2mm radius or less                                         |
|           | E2    | Button with an angular edge  | The thickness must be 5mm or less                                                                |
| н н       | F     | Height of button edge        | 2mm or less                                                                                      |
|           | G     | Area around buttonholes      | Must be smooth                                                                                   |
|           | Н     | Thickness                    | 5mm or less                                                                                      |

Requires the use of stay buttons with a projection height of 1mm or less on the top.

(commedable dimension)

## List of button carrier

|      |          |        |            | F    | or 4-holed           | butt   | on         |      |                                               |        |            |      |                      | For    | 2-hol      | ed b | utton    |        |            |
|------|----------|--------|------------|------|----------------------|--------|------------|------|-----------------------------------------------|--------|------------|------|----------------------|--------|------------|------|----------|--------|------------|
|      | 1        |        |            |      | 2                    |        |            |      | 3                                             |        |            |      | 4                    |        |            |      | 5        |        |            |
|      |          |        |            |      |                      | a<br>a |            |      | ¢b<br>the the the the the the the the the the | σ<br>  |            |      |                      | )<br>a |            |      |          | )<br>a |            |
| Mark | Part No. | Dimen  | nsion(mm)  | Mark | Part No.             | Dimen  | sion(mm)   | Mark | Part No.                                      | Dimer  | sion(mm)   | Mark | Part No.             | Dimen  | sion(mm)   | Mark | Part No. | Dimen  | sion(mm)   |
| А    | 17856600 | a<br>b | 2.0<br>1.0 | D    | 17856907             | a<br>b | 2.8<br>1.2 | к    | 17857608                                      | a<br>b | 4.0<br>1.4 | м    | 17858002             | a<br>b | 2.0<br>1.0 | U    | 17858705 | a<br>b | 4.0<br>1.4 |
| в    | 17856709 | a<br>b | 2.4<br>1.2 | Е    | 17857004             | a<br>b | 2.8<br>1.4 | кı   | 17857707                                      | a<br>b | 4.0<br>1.8 | N    | 17858101             | a<br>b | 2.4<br>1.2 | v    | 17858804 | a<br>b | 4.2<br>1.4 |
| С    | 17856808 | a<br>b | 2.6<br>1.2 | F    | 17857103             | a<br>b | 3.0<br>1.2 | L    | 17857806                                      | a<br>b | 5.0<br>1.8 | Р    | 17858200             | a<br>b | 2.6<br>1.2 | w    | 17858903 | a<br>b | 4.4<br>1.4 |
|      |          |        |            | Fl   | 17857202             | a<br>b | 3.0<br>1.4 |      |                                               |        |            | Q    | 17858309             | a<br>b | 2.8<br>1.2 | х    | 17859000 | a<br>b | 4.6<br>1.4 |
|      |          |        |            | G    | 17857301             | a<br>b | 3.2<br>1.4 |      |                                               |        |            | R    | 17858408             | a<br>b | 3.0<br>1.2 | Y    | 17859109 | a<br>b | 4.8<br>1.4 |
|      |          |        |            | н    | Standard<br>17857400 | a<br>b | 3.4<br>1.4 |      |                                               |        |            | S    | 17858507             | a<br>b | 3.2<br>1.4 | z    | 17859208 | a<br>b | 5.0<br>1.4 |
|      |          |        |            | J    | 17857509             | a<br>b | 3.6<br>1.4 |      |                                               |        |            | т    | Standard<br>17858606 | a<br>b | 3.4<br>1.4 |      |          |        |            |

# **AMB-289**

Computer-controlled, High-speed, Single-thread Chainstitch, Button-neck-wrapping Machine



The range of applicable buttons is further extended.

Provided as standard



|             | JUKI   |
|-------------|--------|
| 1 Alexandre |        |
| U.          |        |
|             | 12-420 |
|             |        |



| Мос                            | del name             | AMB-289                                                                                                                                                                                              |  |  |  |  |  |
|--------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Stitch type                    |                      | Single-thread chainstitch                                                                                                                                                                            |  |  |  |  |  |
| Couring one of                 | Max. sewing speed    | 1,800sti/min (neck-wrapping), 1,200sti/min (button sewing)                                                                                                                                           |  |  |  |  |  |
| Sewing speed                   | Normal sewing speed  | 1,500sti/min (neck-wrapping), 1,000sti/min (button sewing)                                                                                                                                           |  |  |  |  |  |
| Application                    |                      | Sewing of various button types (buttons to be sewn by machine)                                                                                                                                       |  |  |  |  |  |
| Button size                    |                      | Sewing button without neck-wrapping: $\phi 8 \sim \phi 38$ mmSewing button with neck-wrapping: $\phi 8 \sim \phi 32$ mmCounter button: $\phi 8 \sim \phi 25$ mm                                      |  |  |  |  |  |
| Display scree<br>shape-setting | en for setting basic | Distance between buttonholes:<br>1.5~6.0mm (in increments of 0.1mm)<br>Height of neck-wrap:<br>0, 1.5~10.0mm (in increments of 0.1mm)<br>Number of cross-over stitches:<br>2~64 (in increments of 2) |  |  |  |  |  |
| Needle                         |                      | ORGAN SM×332EXTLG-NY (standard needle),<br>(at the time of delivery #14) #12~#18                                                                                                                     |  |  |  |  |  |
| Thread                         |                      | SPUN / Cotton thread<br>500~170dtex (#60~#30CA)                                                                                                                                                      |  |  |  |  |  |
| Thread take-u                  | qu                   | Needle thread take-up                                                                                                                                                                                |  |  |  |  |  |
| Needle bar st                  | roke                 | 60.0mm                                                                                                                                                                                               |  |  |  |  |  |
| Needle throwing system         |                      | drived by Stepping motor                                                                                                                                                                             |  |  |  |  |  |
| Feed system                    |                      | drived by Stepping motor                                                                                                                                                                             |  |  |  |  |  |
| Auto-lifter                    |                      | drived by Stepping motor                                                                                                                                                                             |  |  |  |  |  |
| Cloth feeding                  | system               | drived by Pneumatic                                                                                                                                                                                  |  |  |  |  |  |
| Thread trimm                   | ing system           | drived by Pneumatic                                                                                                                                                                                  |  |  |  |  |  |
| Thread tensic                  | on adjustment        | Active tension<br>(Exclusive electronic thread tension control system)                                                                                                                               |  |  |  |  |  |
| Number of da                   | ta that can be input | Max. 99 patterns                                                                                                                                                                                     |  |  |  |  |  |
| Number of cy                   | cle stitch patterns  | The number of registered patterns:<br>20 (30 patterns for one cycle)                                                                                                                                 |  |  |  |  |  |
| Operation par                  | nel                  | Color LCD touch panel: IP-420D                                                                                                                                                                       |  |  |  |  |  |
| Button loader                  |                      | Provided as standard                                                                                                                                                                                 |  |  |  |  |  |
| Product coun                   | t                    | Provided as standard (up/down system)                                                                                                                                                                |  |  |  |  |  |
| Lubrication                    |                      | No lubrication<br>* Periodic greasing is required.                                                                                                                                                   |  |  |  |  |  |
| Power require<br>and power co  |                      | Single-phase 200~240V, 3-phase 200~240V/400VA                                                                                                                                                        |  |  |  |  |  |
| Compressed<br>and air consu    |                      | 0.5MPa(5kgf/cm <sup>2</sup> ), 11dm <sup>3</sup> /min                                                                                                                                                |  |  |  |  |  |
| Dimensions                     |                      | 600mm(W)×600mm(D)×400mm(H)                                                                                                                                                                           |  |  |  |  |  |
| Weight                         |                      | Machine head: 65kg, Control box: 13kg                                                                                                                                                                |  |  |  |  |  |

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

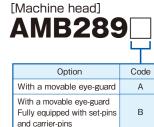
Specifications

★CompactFlash™ or CFA specification compatible media. ★CompactFlash™ is a registered trademark of SanDisk Corporation, U.S.A.

★Other company names and product names/brand names are trademarks or registered trademarks of the respective companies.

## When you place orders

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



• To order, please contact your nearest JUKI distributor.

# Options

| Part No. | Description                    |
|----------|--------------------------------|
| 40021446 | Marking light asm.             |
| 40021447 | Counter button B asm.          |
| 40020807 | Counter button feed plate asm. |

# Button set pins (options)

| No. | Part No. | Description                                        |
|-----|----------|----------------------------------------------------|
| 1   | 17974056 | For marble button                                  |
| 2   | 17974254 | For shank button ( $\phi$ 1.5 $\sim$ $\phi$ 2.0mm) |
| 3   | 17974452 | For shank button (\phi2.0mm or more)               |
| 4   | 40023428 | For metallic button                                |
|     |          |                                                    |

# Options (assembly parts)

| Part No. | Part name                                                      | Use                                                           |
|----------|----------------------------------------------------------------|---------------------------------------------------------------|
| 40020779 | Tongue for knit<br>(with a thread clamping function)           | For preventing thread from twining at the beginning of sewing |
| 40020766 | Tongue stopper SS (1.7mm)                                      | For light-weight materials                                    |
| 40020771 | Tongue stopper T (6.0mm)                                       | For heavy-weight materials                                    |
| 40020774 | Tongue stopper guide D (6.0mm)                                 | For knits                                                     |
| 40020763 | Tongue stopper guide                                           | For tongue of AMB-189                                         |
| 40024296 | Tongue stopper spacer B assembly                               | For light-weight materials                                    |
| 40024298 | Tongue stopper spacer C assembly                               | For light-weight materials                                    |
| 40021017 | Button clamp jaw attachment<br>A for tucking and neck-wrapping | For tucking and neck-wrapping                                 |
| 40021014 | Button clamp jaw attachment<br>B for tucking and neck-wrapping | For tucking and flat-stitching                                |
| 40021019 | Tongue D                                                       | For preventing tongue from damaging fabrics                   |
| 40021016 | Tongue spacer                                                  | For adjusting tucking amount                                  |
| 40020815 | Counter button feed plate B                                    | For counter buttons                                           |
| 40020818 | Counter button feed plate C                                    | For 2-holed stay buttons                                      |
| 40020813 | Counter button guide lever B                                   | For thin buttons                                              |
| 40020821 | Stay button clamp jaw lever (left)                             | For thin buttons                                              |
| 40020822 | Stay button clamp jaw lever (right)                            | For thin buttons                                              |
| 40020832 | Flat fabric clamp A (6.0mm)                                    | For preventing fabric from flopping                           |
| 40020833 | Flat fabric clamp B (3.0mm)                                    | For preventing fabric from flopping (for 2-holed buttons)     |

#### Grease

| Part No. | Part name     | Use                         |
|----------|---------------|-----------------------------|
| 13525506 | Grease tube   | For gears ,cams             |
| 40013640 | JUKI grease B | For worm gears              |
| 40006323 | JUKI grease A | For the other moving points |



| Option Code                                     |   |              |                                                 |      |                    |
|-------------------------------------------------|---|--------------|-------------------------------------------------|------|--------------------|
|                                                 | 7 |              | Power supply                                    | Code | Operation panel    |
| With a movable eye-guard A                      |   | 3-phase      | 200~240V                                        | E    | IP panel for AMB-2 |
| With a movable eye-guard                        |   |              | 200~240V                                        | К    |                    |
| Fully equipped with set-pins B and carrier-pins |   | Single-phase | CE 200~240V<br>(not provided with power switch) | N    |                    |

**୵<sub>୷</sub>ୢ** FŞC



JUKI CORPORATION FAX : (81) 42-357-2274 SEWING MACHINERY & SYSTEMS BUSINESS UNIT http://www.juki.com

2-11-1, TSURUMAKI, TAMA-SHI, TOKYO 206-8551, JAPAN PHONE : (81) 42-357-2370

\* 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.

# The machine comes with an exclusive active-tension system ideal for the careful sewing of beautiful seams.

Shank buttor

Marble button

# This single machine can also sew flat buttons, shank buttons, marble buttons and stay buttons (counter buttons).

Shank buttor

-

adoption of the Y-feed on the body side and X-Y feed on the button-sewing

side enables the AMB-289 to sew patterns with variable numbers of

buttonholes (such as four-holed front buttons and two-holed stay buttons).

Stay button (counter button)

Neck-wrapping

The machine performs neck-wraps in the second process

(with the neck-wrap sewing unit installe

Stav button (counter button)

Marble buttor

9

• The stay button (counter button) sewing capability is a vital addition to • In combination with the independent-drive needle-throwing method, the the impressive application range of the AMB-289.

• Sewing methods and sewing shapes can be easily reset on the operation panel.

Sewing flat/wrapped-around Sewing flat button Sewing flat butto



Countinuous

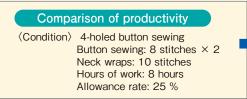


Neck-wrapping

The AMB-289 performs button-sewing and neck-wrapping in a

# The cycle time has been reduced to bolster productivity.

- The sewing speed has been enhanced to dramatically increase productivity.
- As compared with manual button sewing, the AMB-289 achieves productivity as high as 5 times.

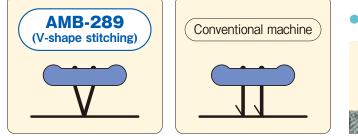






# The AMB-289 promises upgraded-guality neck-wrapping.

The AMB-289 finishes four-holed buttons with a hand-stitched appearance (V-shape stitching) by fixing the tucking position at a preset location. This results in the sewing of a neat seam on the wrong side of the garment and neck-wrap knots at a single location. Seam quality is further enhanced as a result.



# **Exclusive active tension** (electronic thread tension control system)

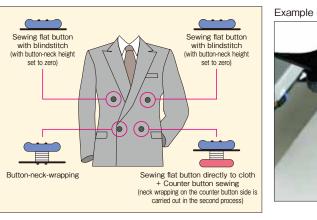
- The exclusive active tension system for AMB289 further improves responsiveness and allows delicate tension setting when the user changes fabrics.
- Thread tensions for button sewing and neck wrapping can be separately set on the operation panel.
- The machine stores sewing conditions in memory on a pattern-by-pattern basis. Required sewing conditions can be exactly reproduced for every pattern



- The remaining length of needle thread can be adjusted according to The machine incorporates a thread-fray prevention function that the type of material or thread to be used. It effectively prevents thread from slipping off the material at the start of sewing
- The AMB-289 does not require the use of exclusive thread intended for button sewing. General-purpose cotton threads and spun threads are both applicable, depending on the type of material. A full range of thread counts from  $500 \sim 170$  dtex (#60 $\sim$ #30CA) can be applied. This ensures use for diverse processes.
- The thread-trimming position is set to reduce the remaining length of thread on the material to a minimum.

# Cycle sewing

- •The machine sews buttons on a double-breast suit, a garment that requires the sewing of different types of buttons, in a continuous manner
- Cycle sewing data can be set/edited with the sewing item graphically displayed on the operation panel (the number of buttons, button sewing locations, and sewing order of buttons)
- The button loader can feed two types of buttons in a single sewing cycle.





The neck-wrap data can be finely adjusted via the entry screen of the operation panel to enhance the sewing quality. The distribution of neck wraps on the upper and lower parts of the button neck, a crucial point in determining the quality of neck-wrapping, can be adjusted to prevent buttons and button necks from becoming unstable and tilting.



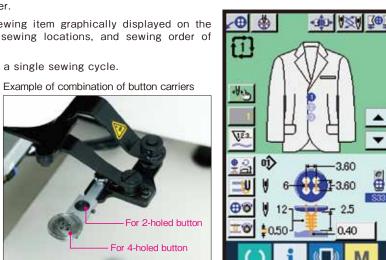
0.0

2.5

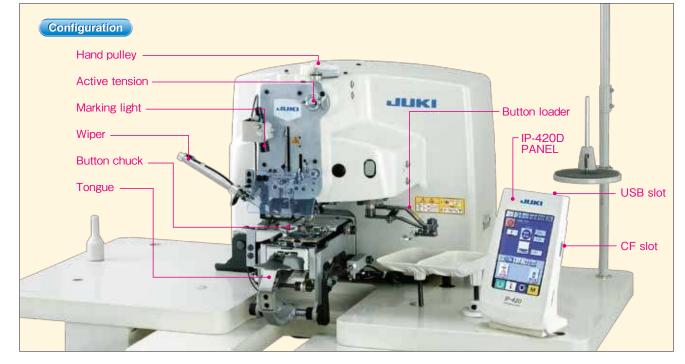
0.1



- ensures the tving of strong and reliable knots at the last stitch.
- The number of stay stitches, which increases strength of button sewing stitches, can be set on the operation panel within the range of 0 and 3 stitches.
- The tucking depth is increased to 5mm to ensure a consistent tucking depth in soft materials such as knits.
- The feed accuracies are high as 0.05mm (some points are 0.1mm). This promises an accurate needle entry position and tucking depth.



Cycle sewing Data entry sci



# The machine comes with new functions to improve workability.

### Dramatically reduced oil stains

As the machine requires no lubrication, oil spatters and all other lubrication-related troubles are eliminated. Sewn garments have dramatically fewer oil stains as a result \* Periodical greasing is required for some of the mechanical structures.

## Dramatically reduced vibration and noise

• The adoption of the needle-throwing mechanism dramatically reduces the vibration and noise usually produced during the neck-wrapping procedure.

#### The machine is provided as standard with a button loader.

7

- The machine is provided as standard with a button feeder that lets the operator place the next buttons to be sewn during overlapping-style work.
- The button-delivery position between the button loader and button chuck can be easily adjusted on the operation panel. No tools Setting of longitudinal and lateral adjustments are required.

#### LED now adopted

• The AMB-289 is provided as standard with an LED-type handy light and marking light. The sewing area is now brighter and more viewable than it would be under the incandescent light of a Shank buttons conventional machine. LED light also offer the advantage of a longer service life. The machine is optionally provided with a marking light for sewing flat buttons directly to cloth.

of button chuck.

#### Convenient hand pulley

• The hand pulley is mounted on the top of head. This makes it easy to check the needle entry point.

#### The button loader gauge for the conventional model can also be used with the AMB-289.

- The set pins and four-holed and two-holed button carriers used with the AMB-189NR (the conventional model provided with a button loader) can also be used with the AMB-289.
- \*The AMB-289 requires dedicated set pins for shank buttons, marble buttons, and metallic buttons (optional)

## Safety design

- The safety-first design makes it impossible to start the machine without buttons set on the button chuck.
- If the machine head tilts while the power ON, the safety switch automatically shuts down the machine even when the pedal or knee switch is pressed.

# The color panel IP-420D provides excellent operability.

- The operation panel is a touch-sensitive type LCD. The clear graphical displays make it much easier for the operator to set or modify sewing data.
- ●A CompactFlash<sup>™</sup> card can be used to store and transfer sewing data. This makes it possible for sewing machines at one or more factories to share data. In addition to the CompactFlash TM, the machine is provided as standard with a USB connector. As a



kinds of media (such as a floppy disk. SmartMedia. CompactFlash and SD card) to enable sewing using the same sewing data among sewing machines in a plant or among subcontract

Button loader

Caution) Special order pattern