

**JUKI®**

# LZ-2280N Series

High-speed, 1-needle, Lockstitch, Zigzag Stitching Machine



# LZ-2280N Series

The sewing machine produces soft seams with consistency with a low tension applied to the thread even when it runs at a high speed.

# LZ-2280N SERIES

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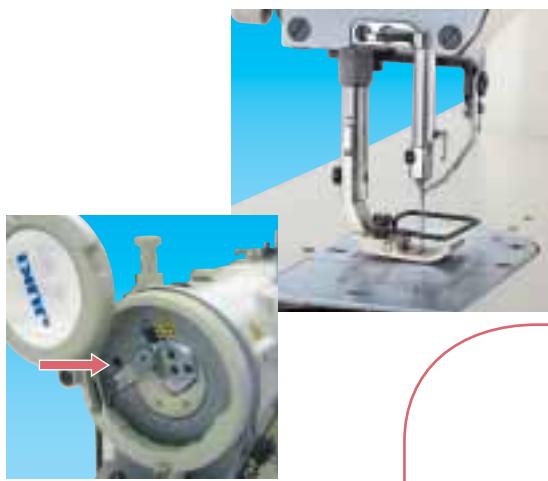
A market-proven titanium-finished hook and rotary thread take-up lever have been adopted. This allows the machine to produce high-quality and consistent seams when an extra low tension is applied to the thread. The combination of the hook and the thread take-up lever prevents stitch skipping and thread breakage under the high-speed sewing and provides responsiveness to thread changing. A broad range of thread types such as synthetic thread, spun thread and cotton thread can be used.

**The highly reliable machine head is structured to reduce operating noise and prevent oil leakage**

The shape of the machine frame is designed to reduce vibration and noise during sewing. By applying three safeguards in the machine's design, oil leakage is completely eliminated. The shape of the machine arm is designed to prevent oil from gathering, the direct oil-circulation method is adopted to circulate the oil directly from the oil sight window to the oil pan, and a high-quality packing is incorporated. In addition, a bobbin thread winder is built in at a position that permits easy bobbin winding.

**The machine comes with a micro-lift mechanism**

Thanks to the micro-lift mechanism, the rise of the presser foot can be finely adjusted using a screwdriver. This will prove effective when you need to perform sewing operations with the presser foot kept in a slightly raised position such as when reinforcing the material or attaching tapes.

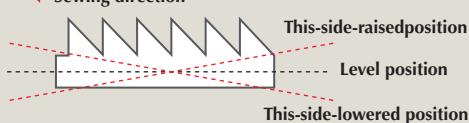


**The adjustable range of the feed mechanisms has been widened, thereby upgrading the machine's responsiveness to materials**

The feed mechanism has been improved by widening the adjustable range of the height and inclination of the feed dog. Inclination of the feed dog can be widely adjusted to a this-side-raised position, level position, or this-side-lowered position. This facilitates sewing of overlapped sections of material that have to be securely held between the presser foot and the feed dog during sewing.

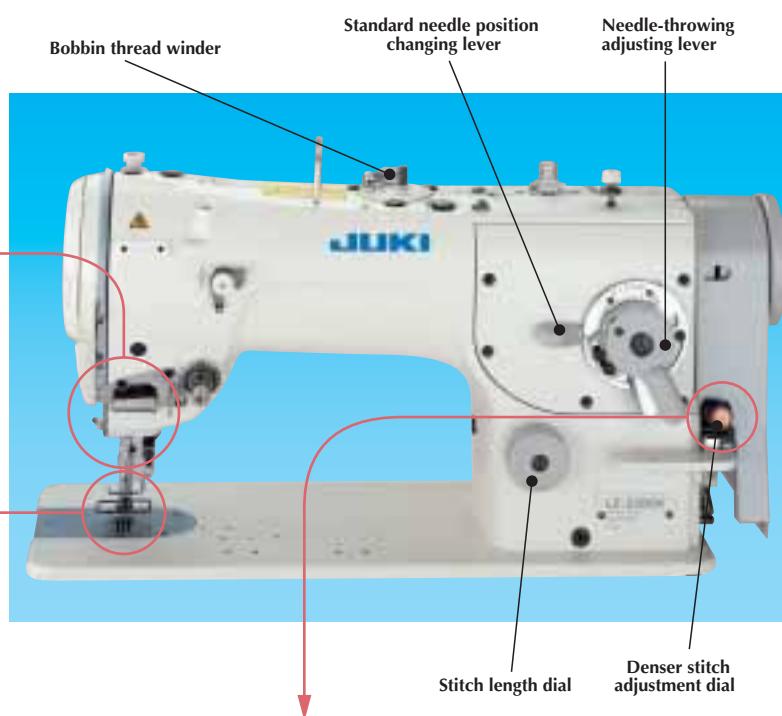
## Inclination of the feed dog

← Sewing direction



**The machine ensures easy adjustment of zigzag width and feed pitch**

A special dial with a built-in lever for adjusting zigzag width is adopted for easier handling. The machine is also provided with a lever for changing the needle-throwing position that makes it convenient to set the sewing position from the material edge. This enables the operator to minutely adjust the needle-throwing position without readjusting the positions of other components such as the guides and binders. In addition, the machine is provided with a denser stitching mechanism for fastening stitches.



**Feed pitch for denser stitching is adjustable as desired.**

The feed pitch for denser stitching is adjustable as desired to enable fine adjustments. The feed pitch only for denser stitching can be made smaller solely by means of a knob. The feed pitch can be partially made smaller during sewing.

## Highly reliable models in the LZ-2280N series that respond to many different kinds of sewing specifications.

### Standard zigzag stitching machine

#### LZ-2280N

The standard zigzag stitching machine creates softly finished seams. The needle rocking mechanism is provided with a triangular cam which helps produce beautiful seams with consistency.



### Standard wider zigzag stitching machine

#### LZ-2281N

Two kinds of gauges can be selected in accordance with the application of the machine: an A-type gauge with a zigzag width of 5 mm, and a B-type gauge with a zigzag width of 8 mm. The needle rocking cam is provided with a triangular cam which helps produce beautiful seams with consistency.



### Fagoting machine

#### LZ-2285N

The pressure provided by the left- and right-hand sections of the fagoting holder can be separately adjusted in order to prevent an uneven material feed.



### 3-step zigzag stitching machine

#### LZ-2286N

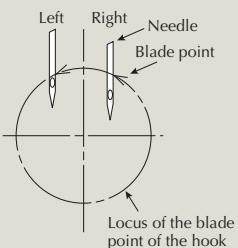
The maximum needle throw is 10 mm. The needle rocking mechanism means a higher degree of accuracy, thereby leading to a very high performance.



### The hook driving shaft offset mechanism assures trouble-free and consistent zigzag stitching

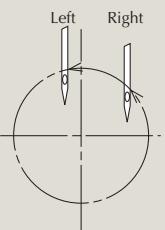
The machine is equipped with a hook-driving shaft-offset mechanism which places the hook-rotating shaft off-center from the center of zigzag stroke of the needle. This mechanism allows the blade point of the hook to catch the needle thread every time regardless of the needle throwing direction. As a result, the machine is immune to sewing troubles such as stitch skipping and thread breakage, annoyances likely to occur with the conventional machine, especially when the needle throws to the right.

#### State of the conventional machine



The position at which the blade point of the hook catches the needle thread is different between the time when the needle moves to the right and when it moves to the left.

#### LZ-2200 Series



The position at which the blade point of the hook catches the needle thread becomes almost uniform by offsetting the hook driving shaft.

### Greater durability is secured by preventing the hook from heating up when the machine is running at high speeds

The inner hook is finished with titanium to keep it from becoming hot. The machine requires only a very small quantity of oil. This prevents oil stains on the material and improves durability of the hook. In addition, the hook configuration is carefully designed to avoid needle breakage.



# LZ-2282N · LZ-2282N-7

**with automatic thread trimmer**

# High-speed, 1-needle, Lockstitch, Standard Zigzag Stitching Machine with Lower Knife

**Productivity is dramatically increased**

The machine incorporates a built-in lower knife that trims only the lower material. This allows the machine to simultaneously attach lace to the body of the foundation and trim only the body during processes to attach lace to the bottoms or tops of slips or to the joint seam lines of shorts.

The machine demonstrates consistent trimming performance

The knife is driven by a motor that runs independently from the sewing machine motor. With this feature, the knife can continue to run at a high speeds during trimming even when the speed of the machine is reduced during startup or when sewing curved sections. Furthermore, the knife is placed just beside the needle to provide a constant trimming width even on the curved sections.

#### Upgraded operability

Since the knife stops at the upper position of its stroke at all times, the material can be smoothly placed on the machine. The knife height can easily be changed by operating the lever mounted on the front face of the machine in accordance with the type of material to be used. If the knife height is set at 0 (zero), the working surface of the machine will become flat. In this case, the knife-driving mechanism will be automatically turned off, permitting machine use for typical standard zigzag stitching operation.



# LZ-2284N · LZ-2284N-7

**with automatic thread trimmer**

# High-speed, 1-needle, Lockstitch, Zigzag Stitching Machine [with Standard/3-step Zigzag Stitching Pattern Changeover Function]

Switch between the standard zigzag stitching pattern and 3-step zigzag stitching pattern with simple one-touch control

The operator can easily switch the needle-throwing pattern between the standard and 3-step zigzag stitching patterns using the lever located in the free space under the arm. (Time required: Approx. 15 sec)  
When using the zigzag pattern, adjust the stitch length to adjust the width.

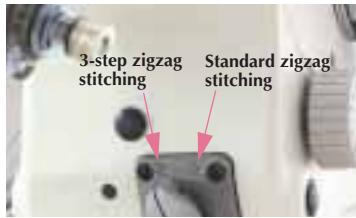
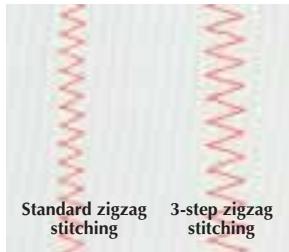
When changing the sewing product or design, there's no need to adjust the sewing machine head or machine layout.

**Equipped with two different functions, the machine is available to handle a wider range of application**

Designed to handle both standard and 3-step zigzag stitching, the machine offers increased availability.

**Needle sway, vibration, and noise are all reduced**

The needle sway is reduced by approximately 25 % and operating noise by 2 to 2.5 dB compared with JUKI's conventional replaceable-cam type zigzag stitching machine.



## Standard/3-step zigzag stitching pattern changeover lever



Simple lever operation achieves changeover between standard zigzag stitching and 3-step zigzag stitching.\*

\*To switch the zigzag stitching type, operate the lever with the needlebar held at its lowest dead point.

**LZ-2282N-7** with lower knife

**with lower knife**

LZ-2284N-7 with standard/3-step zigzag stitching pattern changeover function

**High-speed, 1-needle, Lockstitch, Zigzag Stitching Machine with automatic thread trimmer**

**Simplified thread trimming mechanism cuts the thread without fail**

The thread trimming mechanism which is equipped with a knife slide mechanism. This means that the thread trimmer cuts the thread regardless of the needle entry both when the needle throws to the right and left. The thread trimmer is driven by the recognized "solenoid and cam system" that is used for JUKI lockstitch machines. This means that the thread trimmer is highly reliable. Since the knife unit is installed on the slide plate, it can be removed/installed with ease. So, easy maintenance is ensured.



The machine is equipped, as standard, with a needle thread feeding device

The machine comes with a needle thread feeding device which feeds the needle thread only by the required amount at the start of sewing. Thanks to the device, not only stitch skipping and slip-off of the needle thread are prevented, but also the length of thread remaining at the needle eyelet after thread trimming can be shortened.



**Bobbin thread is retained with a low tension, thereby preventing stitching troubles at the start of sewing**

The bobbin thread is retained with a low tension after thread trimming, which enables the bobbin thread to smoothly come out of the hook. As a result, tensing-up of thread and stitch gathering are prevented.



17-2284NU

with standard/3-step zigzag stitching pattern changeover function

17-2284NU-7

with standard/2-step zigzag stitching pattern changeover function and automatic thread trimmer

High-speed, 1-needle, Lockstitch, Zigzag Stitching Machine with Anti-material-slip type

**Uneven feed of the upper and lower cloths is totally eliminated**

With its newly developed feed mechanism, the machine prevents "uneven feed of the upper and lower cloths" when sewing girdles and body suits made of slippery, elastic materials.

Simplified mechanism for easy operation

Drop-feed sewing machines are widely said to feed in the lower cloth more quickly than the upper cloth. However, this machine prevents uneven feed of the upper and lower cloths in spite of its a drop-feed mechanism. In appearance, the gauge parts are identical to those of a conventional zigzag stitching machine, and operability is in no way affected by the newly developed feed mechanism.

The machine flexibly responds to many different materials

The machine only requires simple adjustments when changing the material\* to power net and tricot, never failing to produce beautiful seam quality free from uneven feed of the upper and lower cloths.

\* For some types of materials, the machine will not effectively prevent uneven feed of the upper and lower cloths.



LZ-2280NU series



## Conventional machine

## OPTIONS

Model	Part No.	Description	Feature
—	225-61559	Automatic reverse feed Kit	This device allows a machine without thread trimmer to perform automatic reverse feed function.
—	225-26578	Hook with a hard blade point	Prevents the blade point of the hook from wearing out
RF-1	GRF-010000B0	Pedal-operated reverse feed stitching device	The device enables the operator to perform reverse feed stitching using the pedal without using the right hand. (excluding the LZ-2285N)
—	229-07406	Presser spring	This is the spring which strongly holds down the material when sewing a heavy weight material.
—	B3129012A00	Tension spring	Tightly tensed seams can be produced by increasing the tension applied to the needle thread.
M097	MAM-097000A0	Fagotting feller asm. (down-rolled type)	This is the exclusive fagot stitch folder for the LZ-2285N, which is applicable to the sewing of lingerie, foundation garments and baby wear. (The fagot stitch folder asm. (up-rolled type): The MAM-09700BA0 has been factory-installed on the machine prior to delivery.)

### ●Hook with non-rotational bobbin

The hook with non-rotational bobbin eliminates sewing troubles resulting from bobbin idling.

It provides a uniform bobbin thread tension at all times, thereby guaranteeing a consistent stitch formation.

235-23152 Hook  
235-22550 Bobbin case (asm.)  
235-23004 Bobbin



Application	Mainly for the standard zigzag stitch: Effectively prevents the material swelling at the sewn part, as well as irregular stitches when sewing lace to slips, camisoles and shorts.
Precaution	The quantity of thread to be wound around this bobbin is approximately 60% of that wound around the conventional bobbin. Therefore, this bobbin is not recommended for pattern stitching such as three-point zigzag, stitching and scallop stitching, or intape-attaching processes, even if the stitch system is the standard zigzag stitch.
Applicable thread	Thread specifically developed for sewing foundation garments and lingerie such as Resilon, Poelon, Satin, and Berlon (#50, #60)
Not-applicable thread	Thread which has naps, decorative yarn of multi-fiber thread such as woolly thread, Berlon D420 and D300, and spun thread

\*If you want to use a non-rotational bobbin, consult your distributor beforehand.

### ●Oilless bobbin case / Hook (special race surface plastic hook)

The oilless bobbin case and hook effectively prevent oil stains.

\*When using the oilless bobbin and hook, a hook driving shaft front setscrew (part number: 110-79506) is necessary.



235-57259 Hook compl. D  
400-03609 Bobbin case D3 (compl.)  
400-03610 Bobbin case D3 (asm.)

Soft seams can be produced by lowering the bobbin thread tension.



400-16408 Hook gib VS

### ●Parts for sewing with thick thread (recommended needle: DP × 5 #21, 134SUK Nm130)



225-56054 Knife unit  
D1440-583-H00 Needle thread guide  
400-17095 Thread tension disk (asm.)  
225-80369 Presser foot (asm.)



### ●Presser foot connecting components (replaceable presser bar)

D1501-583-H00 Presser bar  
D1502-583-H00 Presser connecting rod  
SS-7091110-TP Screw

### ●Presser foot connecting components

B1551-586-000 Presser foot connecting foot  
SS-7090910-TP Screw

## LIST OF THE MAJOR GAUGES

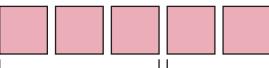
Max. zigzag width / Max. feed pitch	Throat plate	Feed dog	Presser foot (with finger guard)	Remarks
1.6	 10041101	 1304T017 Max. feed amount: 2mm	 P25B0359 10045052 (finger guard: small)	With a recess on the reverse side of the presser foot
1.6	 22580104	 225801500 Max. feed amount: 2mm	 P25B0260 Light-in-weight type	
1.6	 22582100	 22582209 Max. feed amount: 2mm	 22580765	Light-in-weight type with the front fulcrum
1.6	 22582704	 22582802 Max. feed amount: 2mm	 23503156 Light-in-weight type 23503152 (finger guard: small) 23503253 Front fulcrum type	<ul style="list-style-type: none"> <li>• Suited to sewing tasks that require frequent changes in the needle throw position.</li> </ul>
1.6	 22582401	 22581508 Max. feed amount: 2mm	 22580864 13055051 (finger guard: small) 22584965 Light-in-weight type	 MAB1090000C Max. 15.6 Presser foot with tape guide
1.6	 22545008	 22545137 Max. feed amount: 2.5mm	 22545382	Light-in-weight type
1.6	 22545511	 22545610 Max. feed amount: 1.6mm	 22545867	Light-in-weight type with the front fulcrum

Max. zigzag width / Max. feed pitch	Throat plate	Feed dog	Presser foot (with finger guard)	Remarks
	22548705 	22548804  Max. feed amount: 1.3mm	22548960  Light-in-weight type	
	22540507  22540010 	22548400  Max. feed amount: 2.5mm  22548119  Max. feed amount: 2.5mm  2254160  Max. feed amount: 5mm	22547962  Light-in-weight type  22547970  (finger guard: small)	<ul style="list-style-type: none"> <li>For standard zigzag stitching</li> </ul>
	22549000  22549208 	22549109  Max. feed amount: 2.5mm  22541009  Max. feed amount: 5mm  22549307  Max. feed amount: 2.5mm  22541130  Max. feed amount: 5mm	22548563  Light-in-weight type  22548671  (finger guard: small)	<ul style="list-style-type: none"> <li>The 5mm-feed is suited to tape-attaching process where the elastic tape is sewn with stretched.</li> </ul>
	22546519  22546212 	22545717  22546518   22546413  22546311 	22546564  Light-in-weight type  22547269 	
	MAD04360000  22549500 	MAD04040000   22549712 	MAD04150000   22549869  Light-in-weight type	<ul style="list-style-type: none"> <li>For attaching tape to brassieres, etc.</li> </ul>
<p>• In addition to the above-listed ones, many different gauges and attachments for zigzag stitching are available. Please contact us for details.</p>				

## WHEN YOU PLACE ORDERS

### LZ-2280N series (without automatic thread trimmer)

#### Machine head

**LZ228** 

Type	Code
Standard zigzag	0N
Standard wider zigzag (with a gauge for 5mm zigzag width)	1NA
Standard wider zigzag (with a gauge for 8mm zigzag width)	1NB
Standard zigzag (with lower knife)	2N
Standard/3-step zigzag	4N
Standard/3-step zigzag (with anti-material-slip type)	4NU
With standard/3-step zigzag (with tape attaching foot)	4NT
Fagoting	5N
3-step zigzag	6N
3-step zigzag (with tape attaching foot)	6NT

Automatic reverse feed function	Code
Provided	0B
Not provided	

LZ-2284NT, -2286NT and -2285N are not classified by the automatic reverse feed function.

### LZ-2280N-7 series (with automatic thread trimmer)

#### Machine head

**LZ228** 

Type	Code
Standard zigzag (with lower knife)	2N
Standard/3-step zigzag	4N
Standard/3-step zigzag (anti-material-slip type)	4NU

Wiper and automatic reverse feed function		
Wiper	Automatic reverse feed function	Code
Provided	Provided	WB

Auto-lifter	Code
Provided (AK83)	AK
Not provided	

#### Control box

**SC920C** 

Power supply	Code
single-phase 100~120V	S
3-phase 200~240V	P
single-phase 200~240V(for General Export)	K
single-phase 200~240V(for CE)	N
single-phase 200~240V(for China)	U

#### Motor

**M92**

#### Operation panel

**CP18A**

**CP180A**

## SPECIFICATIONS

Model name	Without automatic thread trimmer	LZ-2280N	LZ-2281N	LZ-2282N	LZ-2284N	LZ-2286N	LZ-2285N			
	With automatic thread trimmer	—	—	LZ-2282N-7	LZ-2284N-7	—	—			
<b>Stitch system</b>	Standard zigzag	Standard wider zigzag	Standard zigzag (with lower knife)	Standard/3-step zigzag	3-step zigzag	Fagoting				
<b>Stitch pattern</b>										
<b>Max. sewing speed</b>	5,500sti/min*	5,000sti/min*				4,000sti/min*				
<b>Max. zigzag width</b>	5mm	5mm (A type) 8mm (B type)	4.5mm	5mm (standard) 10mm (3-step)	10mm	8mm				
<b>Max. feeding amount</b>	2.5mm	2.5mm (A type) 5mm (B type)	2.5mm	2.5mm (standard) 2mm (3-step)	2mm	2.2mm				
<b>Min. cutting allowance of lower knife</b>	—	—	3mm	—	—	—				
<b>Lower knife driving method</b>	—	—	AC motor	—	—	—				
<b>Lift of the presser foot</b>	By hand: 5.5mm, By knee: 10mm	By hand: 4mm By knee: 8.5mm	By hand: 5.5mm, By knee: 10mm	By hand: 5.5mm By knee: 8mm						
<b>Hook</b>	DP hook (with titanium-treated inner hook)									
<b>Thread take-up</b>	Rotary type									
<b>Lubrication</b>	Fully automatic									
<b>Lubricating oil</b>	JUKI New Defrix Oil No.1 (equivalent to ISO VG7)									
<b>Needle (at the time of delivery)</b>	438 (Nm70), DPX5 (#10)					438 (Nm80)				
<b>Needle position changing mechanism</b>	Provided as standard					—				
<b>Reverse feed stitching mechanism</b>	Provided as standard					—				
<b>Needle throw pattern cam</b>	Triangular cam			Grooved cam						

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

### ● Anti-material-slip type

Model name	Without automatic thread trimmer	LZ-2284NU
	With automatic thread trimmer	LZ-2284NU-7
<b>Stitch system</b>	Standard/3-step zigzag	
<b>Stitch pattern</b>		
<b>Max. sewing speed</b>	4,500sti/min*	

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

● To order, please contact your nearest JUKI distributor.



JUKI CORPORATION HEAD OFFICE  
An environmental management system to promote and conduct the following activities.  
(1) Eco-friendly development of products and technologies  
(2) Green procurement and green purchasing  
(3) Energy conservation (reduction in carbon-dioxide emissions)  
(4) Reduction in waste (reduction of wastes purchased, etc.)  
(5) Reduction and recycling of waste  
in the activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.

**JUKI**  
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\* 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 soy ink on recycle paper.