

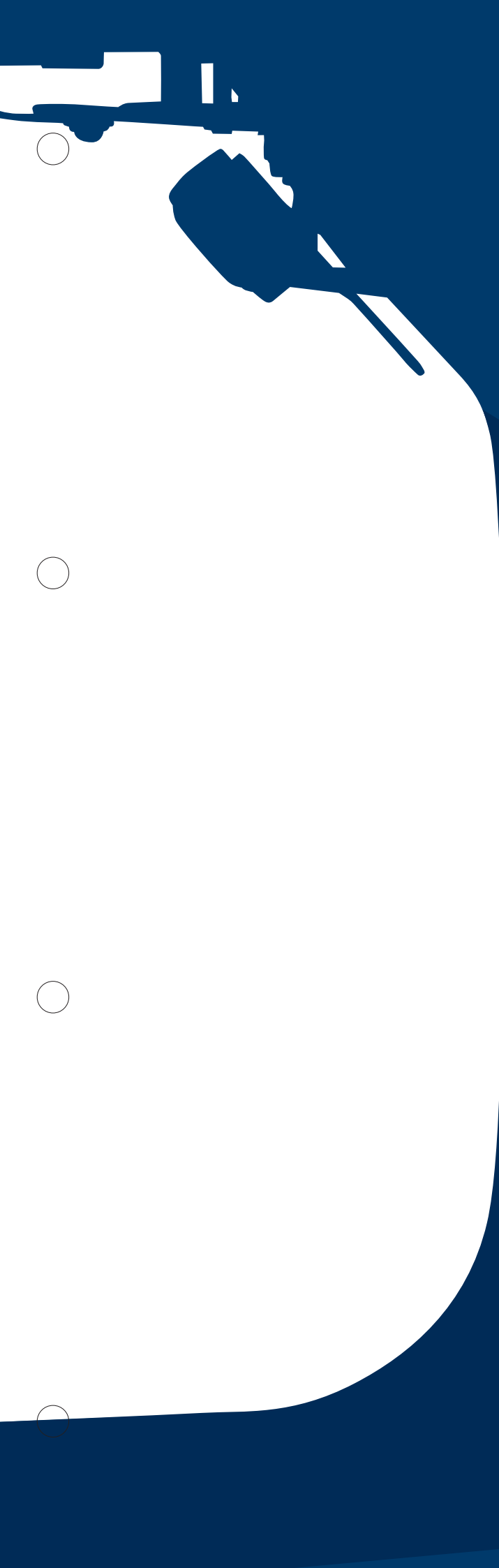


**JUKI**<sup>®</sup>

# LH-4100 series

LH-4128 / LH-4128-7 / LH-4168-7 / LH-4188-7

Semi-dry-head, Direct-drive, High-speed,  
2-needle, Needle-feed, Lockstitch Machine



# LH-4100 series

Even when the sewing material is changed or even if the sewing process is difficult, the machine will adapt itself to the circumstance and enables easy sewing. By the adjusting thread tension at a multi-layered part of the material or to the material thickness, the machine is adaptable to a broader range of sewing materials.



LH-4128



LH-4188-7

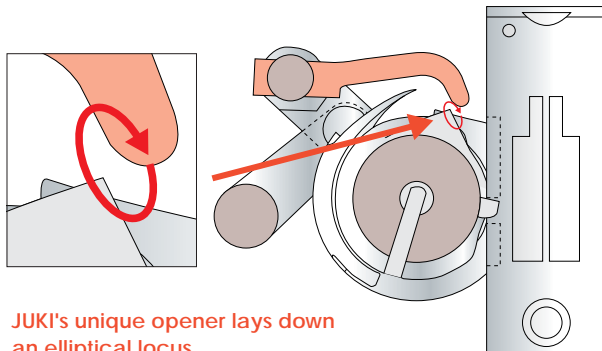
# LH-4100 Series machines come with a direct-drive, semi-dry head, and high & long arm to provide maintainability, silent operation and beautifully-finished seams. This is the highest grade 2-needle lockstitch machine series launched by JUKI.

## Range of sewing capabilities is dramatically increased

The LH-4100 Series has been designed laying importance on the ease of thread tension adjustment in cases of the changing of sewing materials ranging from light-weight (soft) to heavy-weight (hard). All thread paths on which the needle thread and/or bobbin thread passes have been totally rechecked to ensure a range of sewing capabilities that is substantially broader than that of the conventional models.

## Soft opener which helps reduce operating noise of the machine

The opener achieves a silent operating environment which has never been obtained by the conventional ones. It guides the bobbin case with literally a "soft touch" to reduce bobbin thread tension, thereby helping tense the thread uniformly and produce beautifully finished seams.

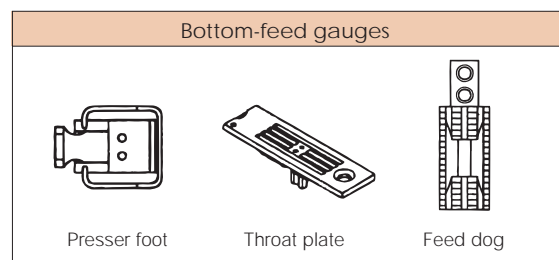
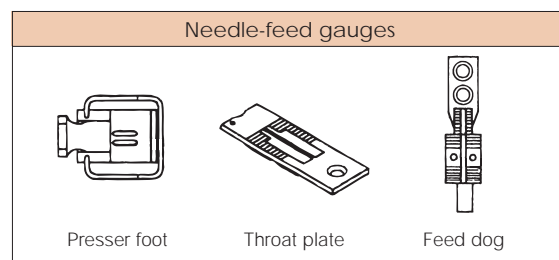
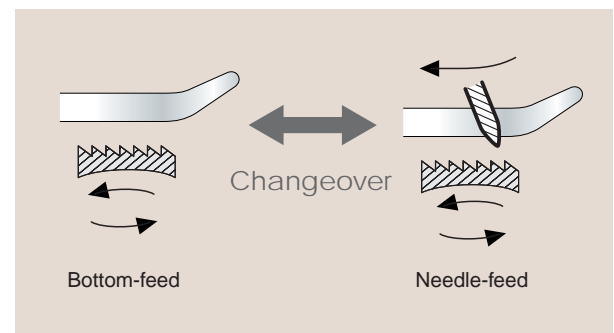


JUKI's unique opener lays down an elliptical locus



## Changeover between the needle feed and bottom feed (LH-4128)

For example, for processes such as the topstitching of brassier cups and top-center plait of men's shirts, which need to be sewn so as to prevent puckering, the use of a bottom feed gauge is recommended. The bottom feed gauge is effective at the prevention of puckering and enables sewing with a lower tension applied to the thread.



To changeover between the needle feed and bottom feed, the replacement of gauges and a simple adjustment are required.

JUKI's feed method permits adjustments of the timing between the needle and feed dog, which affects the sewing performance of the machine.

**JUKI always pursues new technologies  
to offer machines which promise consistent quality  
with improved workability and durability.**

**Sewing environment which ensures excellent workability**

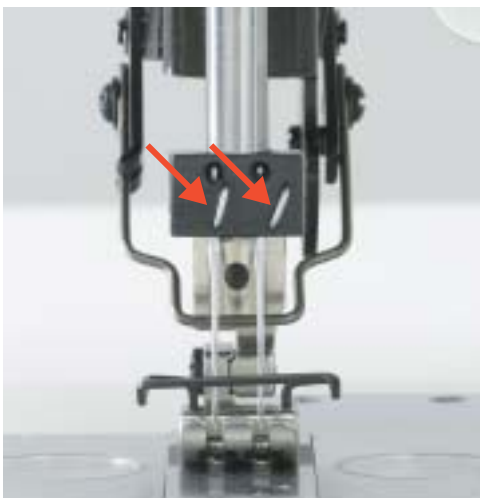
The machine is provided with a high & long arm which facilitates the handling of sewing products even when sewing large ones such as jeans. In addition, increased stop accuracy and excellent responsiveness, which are the most prominent features of the direct drive, work in combination with the high & long arm to help eliminate operator stress, thereby increasing productivity.



The machine has the largest distance from needle to machine arm among any other similar models regardless of manufacturer, i.e., JUKI and its competitors.

**New model of wire-type needle clamp**

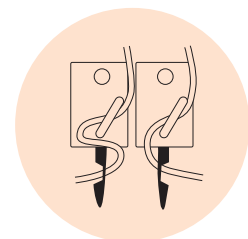
The machine comes with a newly developed needle clamp to increase the stability of needle-thread loops and to reduce untwining of the thread. The needle clamp works to improve the right and left seam balance and prevent thread breakage, in an idling stitching process, by changing needle threading according to the type and thickness of thread.



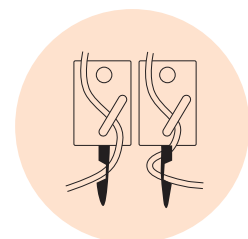
LH-4128-7



LH-4168-7



Filament thread (high-count)



Filament thread (medium- to low-count), Span thread



**Separately driven needle bars which provide outstanding durability and holding power (LH-4168-7, LH-4188-7)**

The machine is installed with JUKI's newly developed unique separately driven needle bars. When one of the needle bars is stopped, it is held in place with added stability. This mechanism demonstrates outstanding durability. The machine is able to run at the highest rpm even when only one needle is in operation (the other needle bar is held idle). This feature totally eliminates a fundamental problem of 2-needle bar lockstitch machines, which is how to hold either needle bar securely in an idle state.



**Separately driven needle bars (Organized split needle bar)**  
JUKI's unique separately driven needle bars are housed inside.

**Teaching function**  
The number of stitches in a sewing area with one of the needle bars held idle, is automatically stored.

Left-needle stop switch

Right-needle stop switch

**The function for separately driving the needle bars is automatically reset (LH-4168-7, LH-4188-7)**

For sewing pockets on men's shirts, hip pockets on jeans and topstitching on collars, a corner sewing process is required without exception. The machine is provided with a function for automatically or semi-automatically sewing the corner sewing process with ease.

**Corner-teaching function (provided as standard)**

To start corner sewing, the operator need only press the right or left stop switch. Then, the machine automatically counts the number of stitches. This allows the operator to concentrate on material handling. Upon completion of corner sewing, the one-needle stop state is automatically reset.

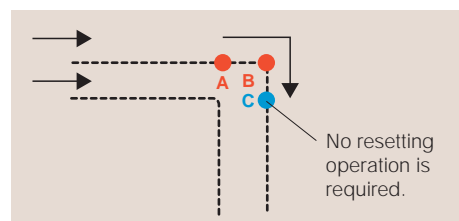
**Automatic feature (Optional panel : IP-100 and Auto lifter : AK125 are required)**

To sew two or more corners continuously, it is possible to enter a sewing program on the IP panel to automatize a sewing sequence from the beginning of sewing to thread trimming (including sewing of two or more corners).

As many as 20 steps of constant-dimension sewing and as many as 8 different corner patterns can be stored in one program. In addition, various conditions such as the up/down position of the needle bars, up/down position of the lifter, forward/reverse feed and automatic thread trimming can be set on a step-by-step basis.



Optional panel: IP-100B

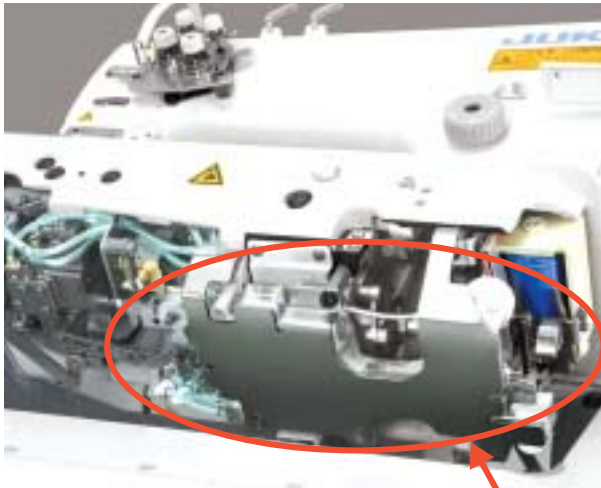


**Teaching function**

1. Press the left-needle stop switch at point A to stop the left needle.
2. Perform sewing with the left needle bar held idle until point B is reached. (The number of stitches is automatically stored in the memory)
3. At point C, the left needle, which has been held in an idle state, is automatically released.

## Dry frame is achieved for all classes of machines

JUKI's dry technology has achieved the adoption of a dry frame in all classes of machines, including those with separately-driven needle bars (organized split needle bar)/large hook. The dry frame eliminates oil dispersion from the thread take-up and needle bar frame section, thereby achieving a clean sewing environment. In order to use clean oil in the hook section at all times, a centralized tank system has been adopted for oiling. In addition, the hook section is oiled using independent left and right pumps and oil paths, whereby consistent oiling of the hook section is enabled without being affected by the single-direction oil flow.

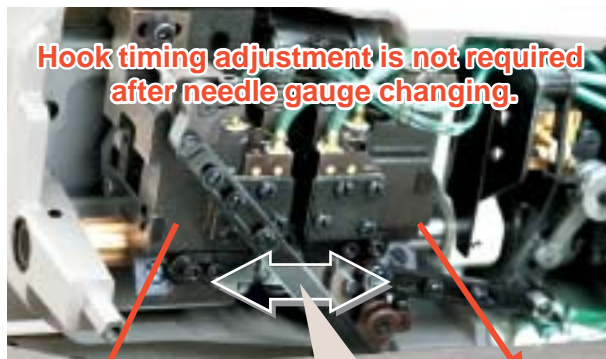


Oil tank  
Capacity: 220cc

## Trouble and time required to change the gauge is reduced to half or less (applies to all classes of machines)

Replacement and adjustment of the gauge is necessary in order to change the needle gauge according to the targeted sewing operation. For the LH-4100 Series, the aforementioned work is dramatically improved in efficiency.

The hook driving shaft saddle can be moved only by loosening the screw in the base. In this case, neither the hook driving shaft gear nor lower shaft is required to be loosened. In addition, the hook does not turn when moving the hook driving shaft saddle. This means that **"hook timing adjustment"**, which is the most troublesome work associated with the procedure, is not required. As a result, the time required to complete the gauge replacement for this machine is reduced to a half or less as compared with the conventional machines.



Hook driving  
shaft saddle  
(left)

To change the needle gauge in the hook section, adjustment is possible only by loosening the screw in the hook driving shaft saddle.

Hook driving  
shaft saddle  
(right)

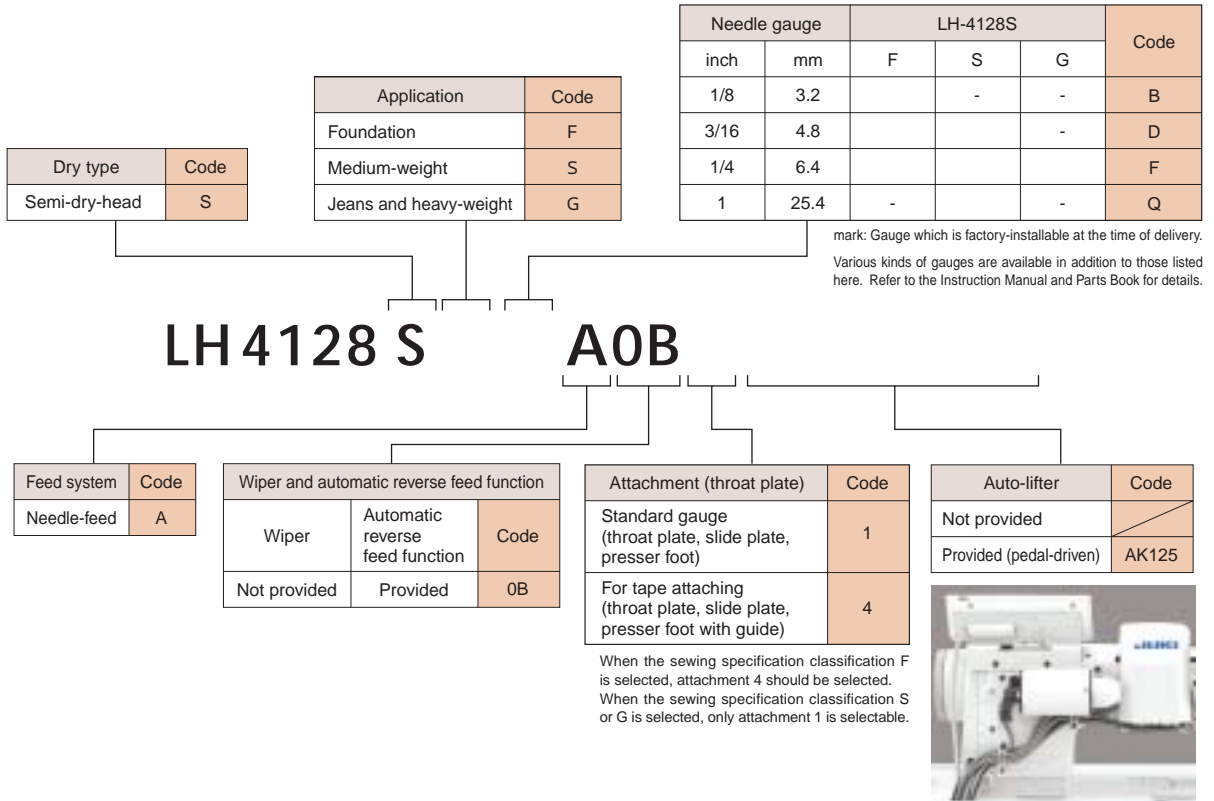
## SPECIFICATIONS

Model name	LH-4100 Series	
Application	F: Foundation S: Medium-weight G: Jeans and heavy-weight materials	
Dry type	Semi-dry-head	
Max. sewing speed	LH-4128(-7): 4,000rpm LH-4168-7, 4188-7: 3,200rpm	
Distance from needle to machine arm	127mm(H) × 267mm(W)	
Needle gauge	LH-4128	1 / 8" ~ 1-1 / 2" (3.2 ~ 38.1mm)
	LH-4128-7	5 / 32" ~ 1-1 / 4" (4.0 ~ 31.8mm)
	LH-4168-7	5 / 32" ~ 1" (4.0 ~ 25.4mm)
	LH-4188-7	
Feed system	Changeover between the needle feed and bottom feed	
Max. stitch length	5mm	
Thread take-up	Link type	
Separately driven needle bar changeover mechanism	Needle bar shaft link changeover method	
Opener system	Soft opener	
Tensioner	Integral type (lockstitch type)	
Thread trimming method	Direct-acting type	
Thread winder	Driven by the arm shaft	
Lift of the presser foot	By hand: 5.5mm, By knee: 13mm	
Lubrication	Centralized tank system	
Tank capacity	220cc	
Lubricating oil	JUKI New Defrix Oil NO.1	
Needle	DP × 5 #9 ~ #22 (S and F type) #16 ~ 22 (G type)	
Power consumption	650VA	
Outside dimensions of package	739mm (H) × 378mm (W) × 768mm (L)	
Machine head weight (including the package)	LH-4128 (-7): 68kg, LH-4168-7, 4188-7: 73kg +3 kg for the machine provided with an AK25.	

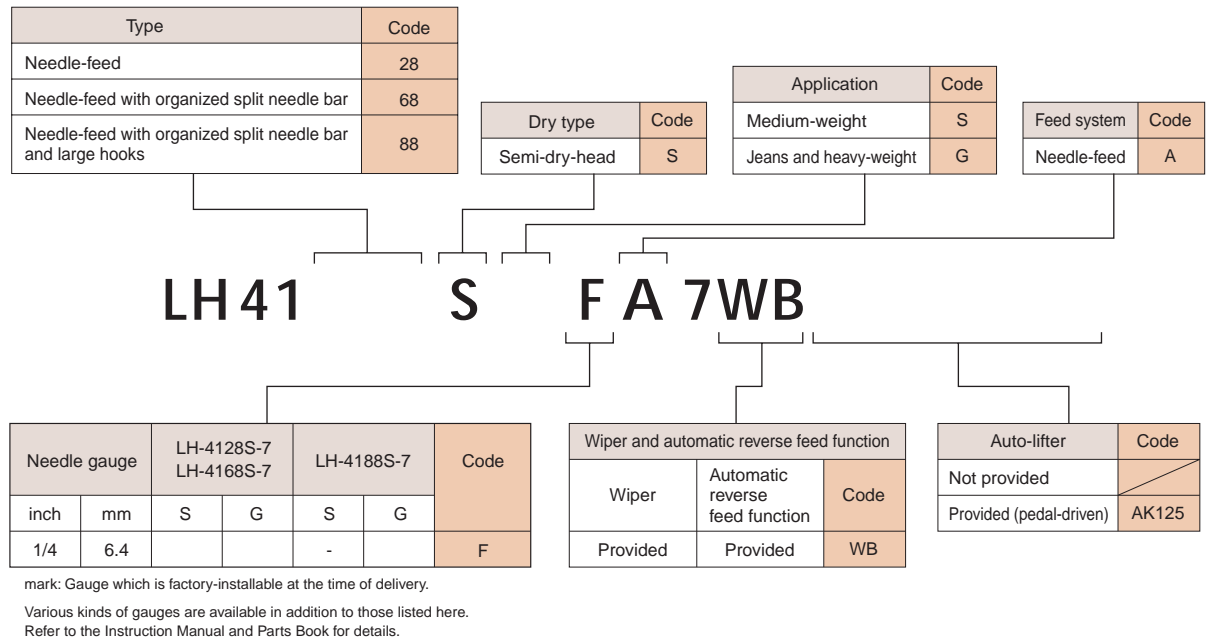
## WHEN YOU PLACE ORDERS

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

### Without automatic thread trimmer



### With automatic thread trimmer



### Operation panel

Operation panel
CP-160D

Inelligent panel
IP-100B

To order, please contact your nearest JUKI distributor.

**JUKI**<sup>®</sup>  
**JUKI CORPORATION**  
**MARKETING & SALES H.Q.**

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FAX : (81) 3-3430-4909, 4914  
<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.



**JUKI CORPORATION HEAD OFFICE**

The environmental management system to promote and conduct  
① the technological and technical research, the development and design of the products in which the environmental impact is considered.

② the conservation of the energy and resources, and the recycling, in the research, development, design, distribution, sale and maintenance service of the industrial sewing machines, household sewing machines and industrial-use robots, etc. and in the sale and maintenance service of the data entry system and in the purchase, distribution and sale of the household commodities including the healthcare products.