

November 27, 2014

**New-developed mechanism "DRY" Oil Pan System
JUKI has launched the "DDL-900A"
Direct-drive, high-speed, 1-needle lockstitch machine**



JUKI will launch the "DDL-900A" in overseas markets from December, 2014. This is a direct-drive, high-speed, 1-needle lockstitch machine which is provided with a newly-developed mechanism called the "DRY" Oil Pan System for preventing oil stains on sewing products.

This model has adopted the new "DRY" Oil Pan System structure which integrates the sewing machine with the bed. The "DRY" Oil Pan System is structured so as to seal the oil shield which contains the oil and supply oil to the frame and needle bar. The oil quantity supplied to the needle bar is smaller than that of the conventional model. In addition, the oil supplied to the frame is collected by means of an automatic oil recovery mechanism, thereby preventing any leakage of oil.

The oil shield which seals the oil is made of die cast aluminum to achieve higher rigidity and better cooling performance. When comparing with a plastic oil tank, our tank with this oil shield is improved not only in breakage prevention, but also in sealing performance and prevention of oil leakage.

The new model comes with the needle breakage preventing function by means of the main-shaft angle control. This function has been conventionally provided as standard for the JUKI sewing machines with a thread trimmer. The new model, therefore also prevents needle breakage while reverse-feed stitching operations are carried out with the touch-back switch. Furthermore, the

height of the touch-back switch is adjustable according to the item to be sewn.

A maximum sewing speed of 5,000 sti/min is achieved, thereby contributing to increased productivity.

The high-speed, 1-needle, lockstitch machine with a thread trimmer is the basic sewing machine which is frequently used in clothing plants for producing a broad range of sewing products such as skirts, pants (slacks), men's shirts, suits and lingerie. JUKI expects to expand its sales with this new model which not only achieves a maximum sewing speed of 5,000 sti/min, but also is provided with the newly developed dry oil pan.

◆ Features

● Higher productivity.

- The machine achieves sewing speed of 5,000sti/min.
- The thread trimming speed is 300sti/min, which is the highest among the equivalent class models. This speed is 1.5-fold faster than the conventional model.

● “DRY” Oil Pan System (oil pan which does not use oil)

- In order to prevent oil stains on sewing products, the sewing machine has adopted the “DRY” Oil Pan System which is integrated into the sewing machine bed. The needle bar is lubricated with a smaller quantity of oil as compared with the conventional model. In addition, oil which externally splashes is shielded by the newly-developed frame oil recovery mechanism and automatic oil circulation mechanism.
- Oil is stored in the oil-shielded made of highly rigid aluminum die cast which is integrated into the machine head and provides increased cooling performance. The new oil-shielded has increased sealing performance as compared with a plastic oil tank and effectively prevents oil leakage and tank breakage. Furthermore, as the tank has a capacity of 450cc, which is equivalent to that of the conventional model, the frequency of oil replenishing does not change. These features ensure a reliability of mechanical parts as high as that of the conventional model.
- The frame mechanism employs a market-proven forced lubricating method and prevents oil from splashing outside through the newly added frame oil recovery mechanism and automatic oil circulation mechanism, thereby eliminating oil stains on sewing products

● Excellent workability and operability.

- JUKI's sewing machine which is provided with a thread trimmer is also provided as standard with the renowned needle breakage preventing function. The main shaft angle control works to prevent needle breakage even when the touch-back switch is used to perform reverse feed stitching. The height of the touch-back switch is adjustable according to the items to be sewn..
- Since the LED lights cast their light exactly downward to illuminate the needle entry area from the right and left sides of the needle bar, sewing work can be carried out more easily as compared with the use of light from one direction. In addition, the illuminance of the LED lights can be adjusted in five steps and can be used as an auxiliary light for work
- Fine adjustments of the hook can be carried out with ease through the adjustment hole.

- The control panel which belongs equivalently to the highly-functional CP-180 family is built into the control box. With this panel, various sewing data ranging from the sewing speed to the production support functions can be adjusted. In addition, the control panel has been newly provided with a password lock function to restrict panel operation. The machine may be used simply by entering any given passcode number.
- The control box and the operation panel are integrated with the machine head motor cover to simplify the setup procedure.

● **Energy saving**

➤ **Compact and small energy-saving direct-drive motor**

In comparison with the conventional V-belt driven sewing machine, the sewing machine driven by the direct-drive motor saves power consumption by 25%. Furthermore, the new retry control helps increase the material penetrating power of the needle by approximately 10%.