



## JUKI CORPORATION

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# Three subclass models of the coverstitch machine "MF-3620 Series" have been additionally launched.



JUKI is launching three different subclass models of the "4-needle, feed-off-the-arm coverstitch machine for flat seamers: the MF-3620 Series", on the 21st of March, 2010; i.e., one for sewing swimwear, one for sewing boxer briefs and running shirts and one for multipurpose use.

The flat seamer joins the edges of materials facing each other with lapped while cutting excess material edges. The seam joining edges, therefore, promise a neat finish without excessively thick parts or unpleasant looking parts, and sufficiently withstands tensile forces applied to the seams in a vertical direction. With this feature, the flat seamer is used for sewing knits, and in the joining process and coverstitch process for sports-related products such as swimwear and sportswear.

The MF-3620 has been developed by renewing the UNION SPECIAL brand 36200 as a JUKI single brand. The two standard models have been launched in October, 2009. We are delighted to announce that new subclass models have been added; one model is best-suited to the sewing of hard-to-sew materials with multidirectional elasticity such as swimwear, while another model is for the prevention of uneven feed of the tape-attached parts of boxer briefs and running shirts to provide more consistent seam quality. In addition, the multipurpose type subclass model which is able to perform both one-side cutting and both-sides cutting has also been added, intended for sewing plants engaged in the sewing of diversified sewing items.

## Additional model names and outlines of the added products

#### 1. MF-3620 L201

The L201 is a both-sides cutting type subclass model for sewing swimwear which cuts the edges of two pieces of materials to be joined.

Since the sewing machine employs a both-sides cutting method, it is able to finish materials which have multidirectional elasticity without slipped seams or uneven material feed by using the special lapping former (cloth guide for both-sides cutting) for guiding two pieces of material smoothly into the presser foot, and this special presser foot is then used for both-sides cutting of the lapped seams.

Swimwear is made so that it stretches in all directions, provides ease of wear and fits the wearer's body snugly, so this subclass model sewing machine for sewing swimwear ensures sufficient tensile strength to withstand force applied to the seams in a vertical direction even when using a hard-to-sew material since it securely laps the edges of two pieces of material which is elastic in all directions so that four needle threads can join them.

#### 2. MF-3620 L211

The L211 is a both-sides cutting type model for sewing boxer briefs and running shirts which cuts the edges of two pieces of material to be joined.

Boxer briefs and running shirts have tape attached to secure the material's cut edges during the cutting process. When joining two pieces of material; one is a single-ply body material and the other is a tape-attached material edge, there is a difference in height since they differ in thickness.

To prevent the difference in height at the lapped edges from affecting the finished product quality and to prevent uneven material feed at the taped section, a throat plate provided with a difference in height between the right and left parts and an exclusive presser foot have been adopted. These special parts enable the sewing machine to finish beautiful seams without stretching the material at the end of sewing and to be free from uneven material feed at the taped section. As with the case of the subclass model for sewing swimwear (L201), the L211 also ensures sufficient seam strength by securely lapping the edges of two pieces of material by means of the exclusive special presser foot.

#### 3. MF-3620 U300

The U300 is a multipurpose type subclass model which is able to perform both the one-side cutting and both-sides cutting.

Since the MF-3620 neatly joins the materials without excessively thick parts or unpleasant looking parts, and provides the seams with a sufficient tensile strength to withstand force applied to the seams in a vertical direction, it is used for multiple purposes such as joining the crotches of men's briefs and ladies' panties and seaming the sides of swimwear, knits and T-shirts.

The cloth trimming knife, however, is integral to the presser foot. It is therefore necessary to use either the one-side cutting type knife which cuts the excess material edge only of the upper piece of lapped materials or the both-sides cutting type knife which cuts the excess material edges of two pieces of lapped materials according to the material thickness.

To respond to the aforementioned need, the multipurpose type subclass model (U300), which permits a choice of the one-side cutting type knife or the both-sides cutting type, has been developed for sewing plants where diversified sewing items have to be produced.

#### Features of MF-3620 Series

#### 1) Direct-drive motor type is available

- The sewing machine has excellent responsiveness to smoothly accelerate the sewing speed at the beginning of sewing and to decelerate it at the end of sewing, thereby promising increased ease of sewing.
- ➤ The load applied to the main shaft bearing by the belt tension is eliminated, thereby reducing the operating noise and vibration.

#### 2) Enhanced oil-leakage prevention

- > The opening of the thread take-up lever is shielded to prevent oil from leaking, and also to prevent dust from getting into the inside of the sewing machine.
- > The bottom of the cylinder arm has been equipped with an oil returning groove and oil slinger grooves to improve oil collection, thereby preventing oil leakage.

## 3) Improvement of sewing capabilities

➤ The looper locus and feed locus have been analyzed to develop the optimum looper configuration, thereby achieving more beautifully finished seams with increased consistency as compared with the conventional model.

## 4) Improvement of the presser foot

- ➤ The guide section, which is likely to get worn down by the vertical motion of the presser foot, has been improved with respect to its durability and maintainability.
- The presser foot area has been re-designed to allow cloth chips cut off by the knife to smoothly flow to along the presser foot surface.
- > Thanks to the improved knife base, the vertical motion of the knife is now smoothened to reduce the load applied to the knife, thereby increasing the service life of the knife.

\*The aforementioned four features are the same as with those of the two models of the "4-needle, feed-off-the-arm coverstitch machine for flat seamers" launched on the 8th of October, 2009.

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