

## AW-3S

Automatic Bobbin Thread Wind-and-Feed Device (Retrofit Kit for AMS-EN Series Shuttle Hook Machine)

This is **Automatic Bobbin Thread Wind-and-Feed Device** that can be retrofitted to the computer-controlled cycle machine with a semi-rotary hook, AMS-221EN and AMS-224EN.

Improved seam quality, productivity and operability are achieved by installing this device to the sewing machine!



This device is suitable for the sewing of products such as air bags, sports shoes and bags.

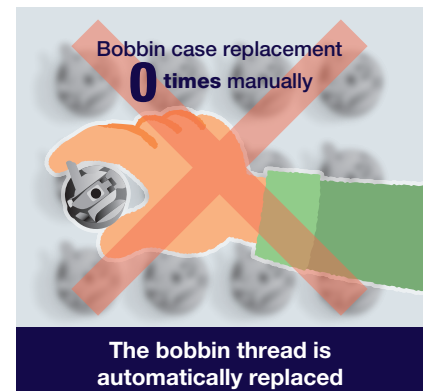


### 1 With this device, manual bobbin thread changing work is eliminated, thereby increasing productivity!

In the case of AMS-221EN without AW-3S, approximately 30 seconds are generally required every time the operator changes the bobbin thread manually. On the other hand, in the case of AMS-221EN installed with AW-3S, the bobbin thread is automatically changed while the operator picks up the sewn product and places a new material to be sewn on the sewing machine, thereby eliminating the downtime due to manual changing of the bobbin thread. As a result, productivity is increased. Considering that bobbin thread changing has always been an obstacle to automatization, AW-3S opens up further possibilities for automatization.

	AMS221EN・224EN Series	
	Without the AW-3S	AW-3S is installed
Time required to change the bobbin thread	Approx. 30 seconds/time	None
Number of times to change the bobbin thread per day	Approx. 60 times/day	None
Time required to change the bobbin thread per day	Approx. 30 minutes/day	None

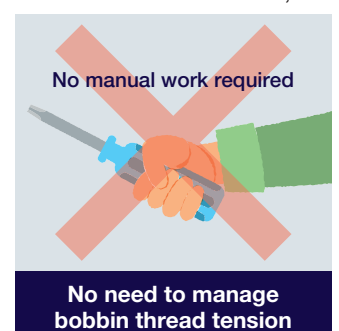
\* The number of times to change the bobbin thread varies in accordance with sewing conditions. Working hours are eight hours per day.



### 2 Reduction of defective rate and re-sewing, consistent seam quality is achieved!

Bobbin thread changing is carried out frequently. In general, the operator manually changes the bobbin. By retrofitting AW-3S to the sewing machine, not only the bobbin can be automatically changed before it runs out of thread, but also an empty bobbin can be wound with thread during sewing. The operator is able to concentrate on sewing without worrying about the remaining amount of the bobbin thread. In addition, the operator neither need to worry about the timing of changing the bobbin nor have to replace the bobbins by himself/herself.

Moreover, only two bobbin cases are used alternately in repetition. It means that uniform bobbin thread tension and consistent seam quality are achieved without requiring additional adjustment of the bobbin thread tension.



## 3 Reduction of the bobbin thread consumption Number of stitches memory mode: Automatic

When loading a sewing pattern, AW-3S automatically calculates the bobbin thread amount to be consumed to sew the next sewing pattern and determines whether the sewing machine can complete the sewing of the pattern with the bobbin thread amount remaining before starting sewing.

If the remaining amount of the bobbin thread is not enough for sewing the loaded sewing pattern, AW-3S will automatically change the bobbin to another bobbin that is fully wound with thread. (AW-3S is able to automatically wind the preset amount of thread on a bobbin.)

In addition, AW-3S gradually adjusts the length of thread remaining on the bobbin that has to be removed to an appropriate length.

## 4 This device helps improve operability and workability while reducing the operator's fatigue.

Since AW-3S automatically feeds the bobbin thread, it is no longer necessary for the operator to get under the machine to manually change the bobbin thread. This contributes to the reduction of the operator's fatigue. With AW-3S, the operator is able to concentrate on sewing work without worrying about the remaining amount of the bobbin thread.

In addition, AW-3S allows even a new operator who has just joined the company to carry out sewing work immediately.

### Options

- **Part No. 40262117** ..... Auxiliary cover set for throat plate to be attached to AW-3SB (for the 2516)  
<Auxiliary cover for throat plate, screw, washer>  
If you want to attach the automatic bobbin thread feeding device to AMS-221EN/2516, please place an order for the aforementioned parts together with AW-3SB (for AMS-221EN).
- **Part No. 40256480** ..... Bobbin thread remaining amount detecting device
- **Part No. 40256479** ..... Mounting jig
- **Part No. 40262169** ..... Bobbin (large winding amount type)  
Bobbin thread remaining amount detection device (Option) is not supported.

### SPECIFICATIONS

Device	AW-3S
Sewing machine head to which the device is installed	AMS-221EN / AMS-224EN (sewing machine head with a semi-rotary hook)
Applicable bobbin and bobbin case	Exclusive bobbin and bobbin case
Thread	#5~#30, 135~45 (TEX), 020~060 (TKT)
Applicable types of thread	Tetoron thread, nylon thread
Remaining thread removal operation, bobbin winding and threading operations	Automatic (while the sewing machine is in operation)
Input device	IP-420 (for AMS-221EN / AMS-224EN)
Power requirement	Single-phase 100~240V
Power consumption	100 VA
Compressed air	0.5 Mpa
Max air consumption	156dm <sup>3</sup> (ANR) /min

### WHEN YOU PLACE ORDERS

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

**AW-3S** 

Sewing machine head	Code
for AMS-221EN	<b>B</b>
for AMS-224EN	<b>C</b>



Registered Organization: JUKI CORPORATION Head Office  
The Scope of the Registration: The activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines, household sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.

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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 soyink on recycle paper.  
\* Paper from responsible sources **FSC™ C001712**