

AW-3S

Automatic Bobbin Thread Wind-and-Feed Device

(Retrofit Kit for AMS-EN Series Shuttle Hook Type / PLK-J Series Double-size Rotary Hook Type)

AW-3S can be retrofitted

Computer-controlled cycle machines with input functions can be fitted with a retrofitted **automatic bobbin thread wind-and-feed device** to achieve high sewing quality, productivity, and ease of operation.

Supported models

AMS-221EN Series <Shuttle hook type>

AMS-224EN Series <Shuttle hook type>

PLK-J Series <Double-size rotary hook type>



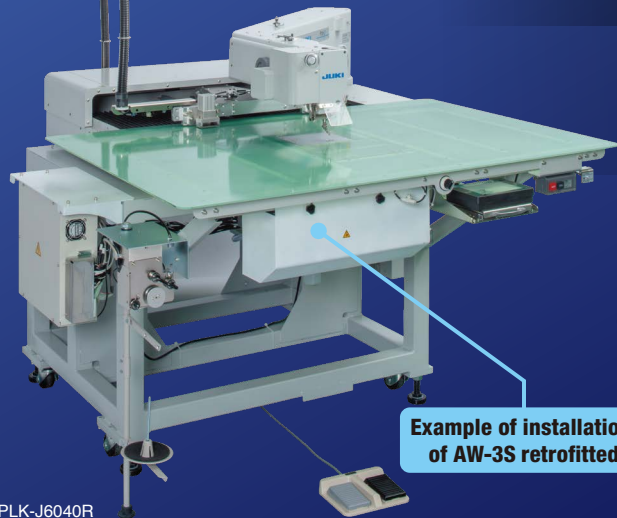
Air bags



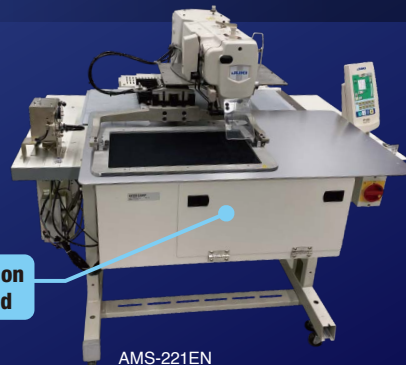
Sports shoes



Bags



PLK-J6040R



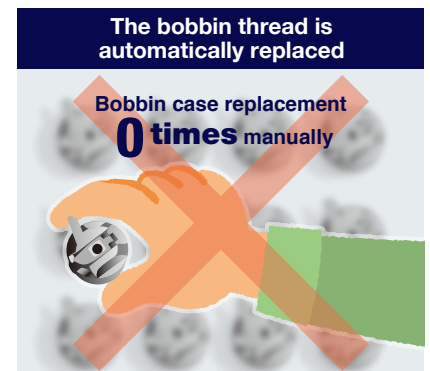
AMS-221EN

1 Increasing productivity!

In case of AMS-22*EN / PLK-J Series without AW-3S, approximately 30 seconds are generally required every time the operator changes the bobbin thread manually. On the other hand, In case of AMS-22*EN / PLK-J Series 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 replacement of the bobbin thread. As a result, productivity is increased. Considering that bobbin thread replacement has always been an obstacle to automatization, AW-3S opens up further possibilities for automatization.

	AMS221EN・224EN Series/PLK-J Series	
	Without AW-3S	With AW-3S
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.

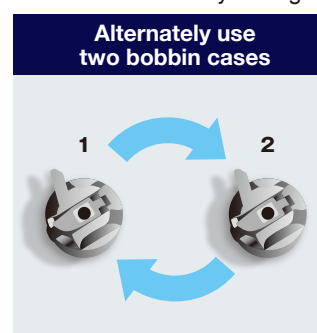


• The image is a shuttle hook type bobbin case.

2 Consistent seam quality!

Bobbin thread replacement 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.



• The image is a shuttle hook type bobbin case.



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 the start of 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.

Options

AMS	• Auxiliary cover set for throat plate to be attached to AW-3SB (for the 2516) <Auxiliary cover for throat plate, screw, washer>	Part No. 40262117 If you want to attach the automatic bobbin thread feeding device to AMS-221EN2516, please place an order for the aforementioned parts together with AW-3SB (for AMS-221EN).
	• Bobbin thread remaining amount detecting device	Part No. 40256480 A bobbin that supports bobbin thread remaining amount detecting device is not included.
	• Bobbin compatible with bobbin thread remaining amount detecting device	Part No. 40249633
	• Large-winding bobbin	Part No. 40262169 Bobbin thread remaining amount detection device (Option) is not supported.
PLK	• Chuck jig	Part No. GAW02541000
	• Lubrication hook asm	Part No. 40282720
AMS/PLK	• Mounting jig	for AMS Part No. 40256479
		for PLK Part No. 40285309 (with countersunk screw)

• The mounting jig is not included with AW-3 and must be purchased separately.

SPECIFICATIONS

Device	AW-3S	
Sewing machine head to which the device is installed	AMS-221EN / AMS-224EN	PLK-J Series
Applicable bobbin and bobbin case	Bobbins and bobbin cases for shuttle hook	Bobbins and bobbin cases for double-size rotary hook
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)	PAL (for PLK-J)
Power requirement	Single-phase/3-phase 100~240V	Single-phase/3-phase 200~240V
Power consumption	100 VA	
Compressed air	0.5 Mpa	
Max air consumption	156dm ³ (ANR) /min	

WHEN YOU PLACE ORDERS

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

Shuttle hook type
for AMS-221EN/
224EN

Power supply	Code
Single-phase/3-phase 100~240V	DA

Double-size
rotary hook type
for PLK-J Series

Power supply	Code
Single-phase/3-phase 200~240V	DA
Single-phase/3-phase 200~240V (for USA)	DD

AW3S

Sewing machine head

Code

AMS-221EN

B

AMS-224EN

C

Accessories

Code

Bobbin compatible with bobbin thread remaining amount detecting device

A

Large-winding bobbin

C

AW3SD

Sewing machine head

Code

PLK-J4040R, PLK-J6040R

6040

PLK-J10050R

10050

PLK-J12060R

12060

PLK-J-UNIT-R

JUNIT

Accessories

Code

Standard

A

JUKI
https://www.juki.co.jp/en

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The AW-3S is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.



• The sewing machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.
For details of JUKI ECO PRODUCTS, refer to: <https://www.juki.co.jp/en/company/eco>
*The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned substances, but also other ones which also adversely affect the environment.



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.

• 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

APRIL, 2024 Printed in Japan(TN)