

# INSTRUCTION

## *BK - 20*

BELT LOOP CUTTER

Industrial Sewing Machines

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**KANSAI**  
SPECIAL®

## **INTRODUCTION**

*Thank you for your purchasing Kansai Special's BK-20 belt loop cutting attachment.*

*This unit is designed to operate with the Kansai Special DVK-1702B, DVK-1702BK, B-2000, or B-2000C machines. It may be coupled with a newly purchased machine or it may be coupled with a machine in current operation.*

*The BK-20 has a maximum production rate of 200 pieces per minute, dependant upon the length of the belt loop.*

*Read and study this instruction manual carefully before beginning any of the procedures and save it for later use.*

1. This instruction manual describes adjustments and maintenance procedures on this machine.
2. Before starting the machine, check to make sure the pulley cover, safety cover, etc. are secured.
3. Before adjusting, cleaning, threading the machine or replacing the needle, be sure to turn off the power.
4. Never start the machine with no oil in the reservoir.
5. Refer to the parts list as well as this instruction manual before performing preventive maintenance.
6. The contents described in this instruction manual are subject to change without notice.

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## 【1】 SPECIFICATIONS

1. Power source : Available in the following voltages  
(all AC single phase)100 , 115-120 , 200 , 220-240
2. Motor ..... 25W
3. Installation style ..... Directly on the tabletop or separate table
4. Cutting rate (production rate) ... Up to 200 cuts per minute
5. Size range of belt loops ..... 50~150mm
6. Maximum cutting width ..... 30mm
7. Production counter ..... 0~9999 pieces

## 【2】 ASSEMBLY AND INSTALLATION

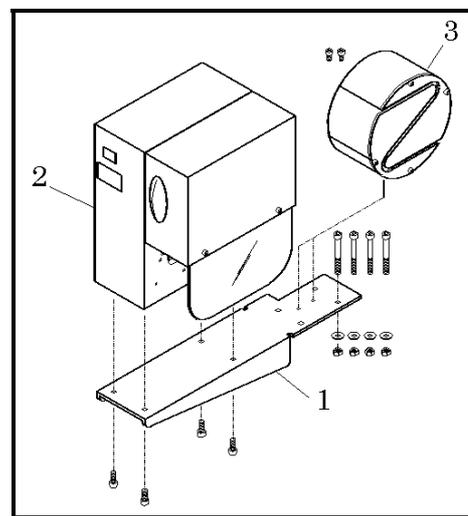
Contents of the carton

1. BK-20 cutting head ... 1
2. Tensioner ..... 1
3. Mounting plate ..... 1
4. Hardware

Bolt	Nut
M6 × 55 ... 4 Pieces	M6 Nut ..... 4 Pieces
M6 × 15 ... 4 Pieces	M6 Washer ... 4 Pieces
M5 × 10 ... 2 Pieces	

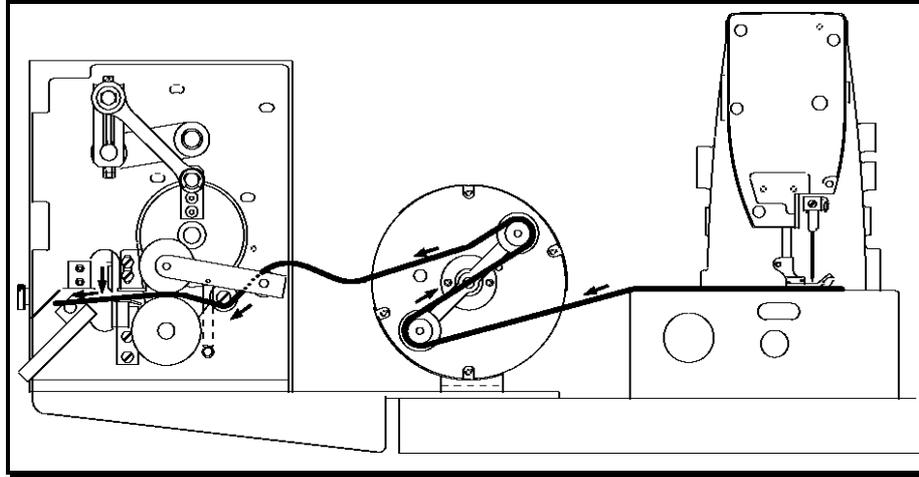
Assemble the unit according to the following simple directions, using figure as a guide.

1. Attach the mounting plate to the tabletop using the M6 × 55 bolts, M6 washers, and M6 nuts supplied. The position of the unit is determined by the position of the 4 mounting holes which must be drilled in the tabletop as shown in tabletop specifications.
2. Attach the cutting head to the far end of the mounting plate using the M6 × 15 screws supplied.
3. Attach the tensioner to the mounting plate between the machine head and the cutting head using the M5 × 10 screws supplied.
4. Connect the power cord.



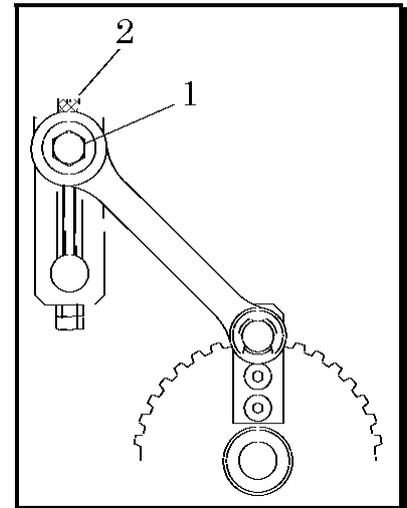
### 【3】 BELT LOOP MATERIAL PATH

1. Making sure that the BK-20 cutting head is switched off, sew out approximately 1metre (3 feet) of belt loop material.
2. Set the belt loop material through the tensioner and cutting head following the path shown in figure.



### 【4】 OPERATION

1. Switch on the power.
2. Sew as usual. The BK-20 will follow the sewing rate of the machine.
3. To adjust or change the cutting length, follow the procedures below
  - a. Switch off the power.
  - b. Loosen the nut 1 and turn the adjusting screw 2 right or left to set the desired length of cut. Turning the screw to the right (clockwise) increases the length of cut. Turning the screw to the left (counterclockwise) decreases the length of the cut.
  - c. Retighten the nut. Never operate the BK-20 while this nut is loose.
  - d. Shut the front cover and switch on the power.
  - e. Sew a bit of belt loop material and allow the BK-20 to cut two or three pieces of belt loops. Measure the length of the pieces to determine if the length is correct.
  - f. Repeat procedures a through e until the desired belt loop length is attained.
4. Proceed sewing as usual. The BK-20 will follow the speed of the sewing head up to a maximum rate of 200 pieces per minute.
5. For safety reasons, do not operate the BK-20 without material.
6. To maintain record of the production quantity, reset the production counter to " 0000 " at the start of the operation.



#### < Note >

As a safety feature, the BK-20 cutting head will not operate if the front cover is not fully latched closed. Also, the BK-20 is equipped with a tension meter which automatically stops the cutting operation if the supply of belt loop material is stopped (i. e. the BK-20 stops cutting when the sewing is finished.)

## 【5】 PRODUCTION RATE CALCULATIONS

The following calculation will allow you to determine your production rate according to the machine speed, the stitch density or stitch length, and belt loop cut length.

Calculate the production rate as follows

1. 
$$\frac{\text{Machine speed (stitches per minute)}}{\text{Stitch density (stitches per inch)}} = \text{Sewn unit length (inches per minute)}$$
2. 
$$\frac{\text{Sewn unit length (inches per minute)}}{\text{Loop cut length (inches per piece)}} = \text{Production qty (Pieces per minute)}$$

Example

If the machine speed is 4,000rpm, the stitch density is 8 stitches per inch, and the belt loop cut length is 3.5 inches

$$\frac{4,000 \text{ stitches per minute}}{8 \text{ stitches per inch}} = 500 \text{ inches per minute}$$

$$\frac{500 \text{ inches per minute}}{3.5 \text{ inches per piece}} = 143 \text{ pieces per minute}$$

## 【6】 TO SHARPEN THE KNIFE

When the knife become dull, sharpen the knife or replace the new knife.

When the knife replacing, do not loose the knife mount bracket.

The knife mount bracket is factory-set for standard.

< Note >

*Before replacing the knife, be sure to turn off the machine.*

**【7】 TABLETOP SPECIFICATIONS**

< Note >  
 All dimensions give in millimeters.

