

Section 8.2

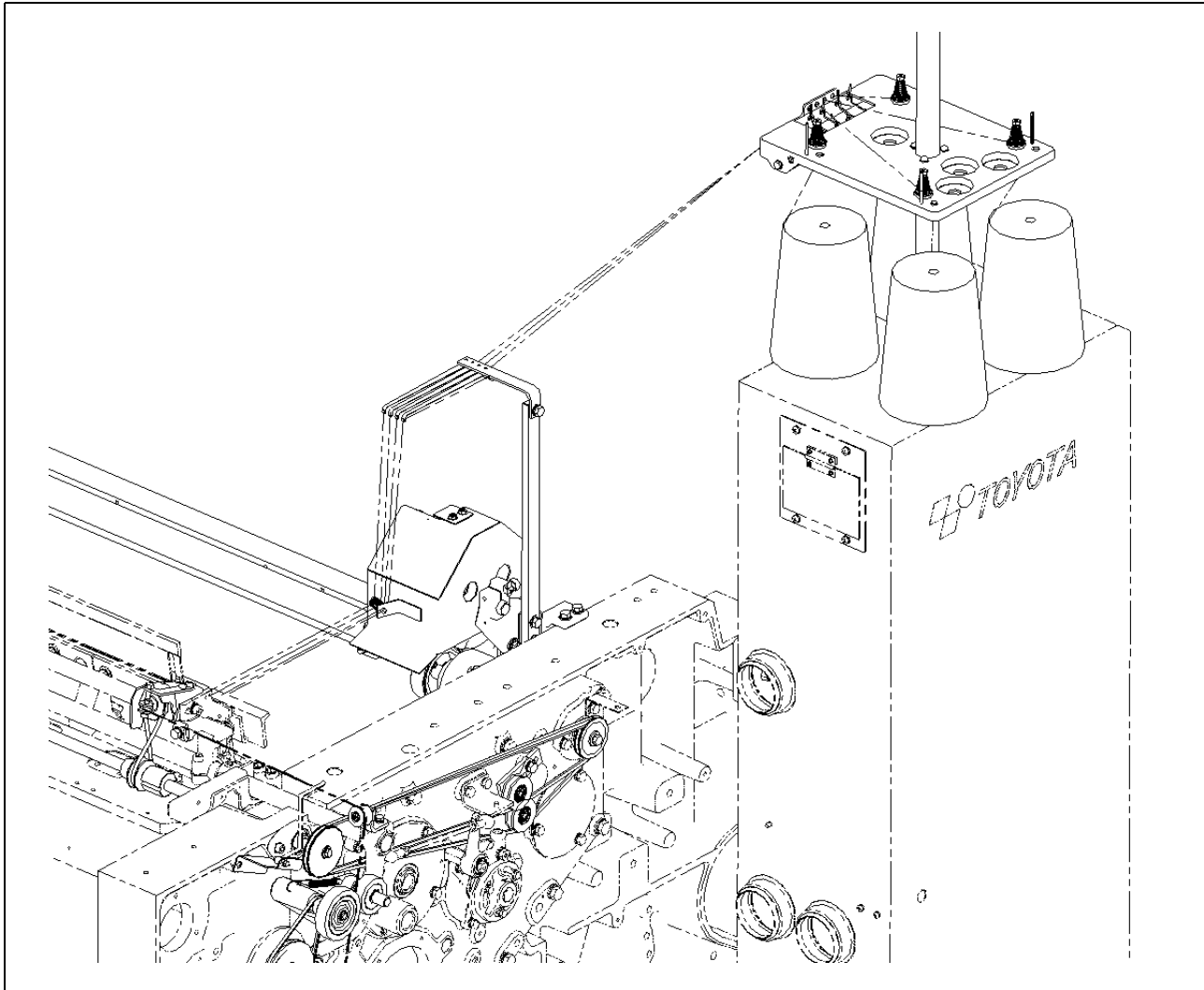
Waste Selvage Device

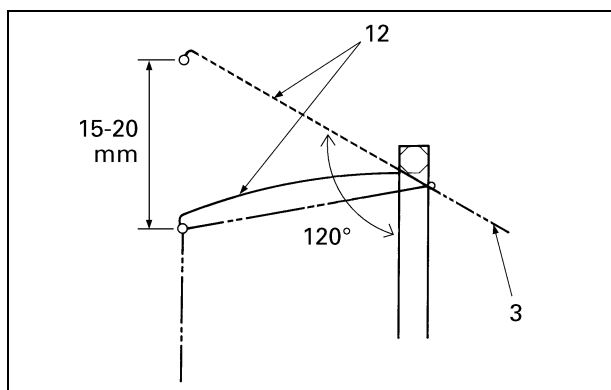
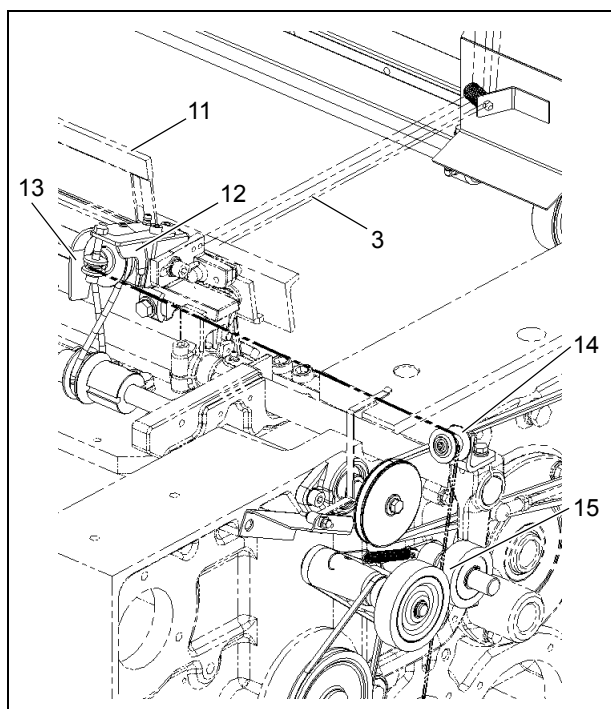
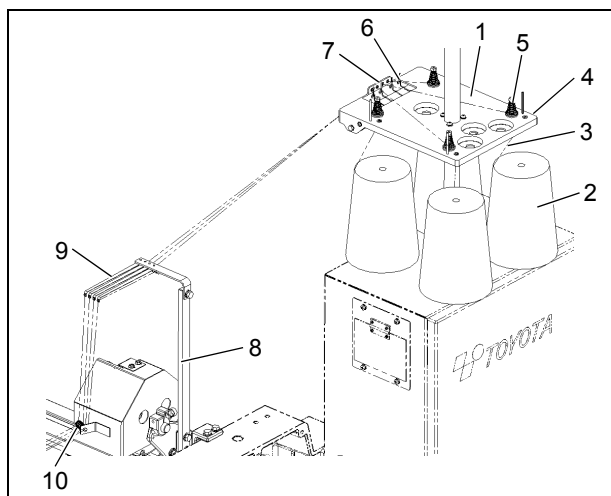
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8.2 Waste Selvage Device

The waste selvage device binds weft 1 jetted up to the outside of the right edge of the woven fabric with several warps 2 (or with yarns from the waste-selvage cheeses) in order to apply tension to the weft, for an ideal selvage construction.





8.2.1 Stand-equipped Type

This type uses waste-selvage cheeses 2 on waste-selvage stand 1 to feed waste-selvage yarns into the machine.

Four cheeses are the standard.

[1] Routing Waste-selvage Yarns

- (1) Route yarn 3 coming from cheese 2 through yarn guide 4, tensor spring 5, wire dropper 6, and yarn guide 7.
- (2) Route it further through the yarn guide supported by leno selvage bracket 8, threat hole of tensor spring 9, and through guide 10 to the head.
- (3) Route the yarn further through reed 11, CC spindle 12, and catch cord roller 13.
- (4) Then pass it through the CC feeler and CC roller 14, and hold the catch cord 3 by CC take-up gear 15.

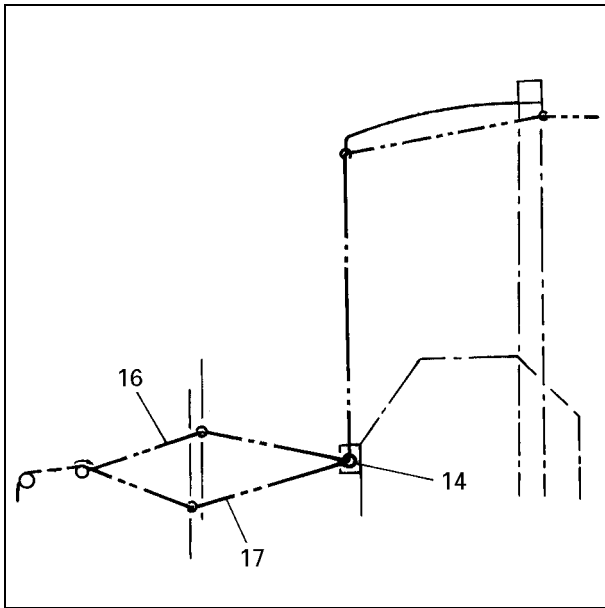
[2] Adjusting the Inclination of Tensor Spring

- (1) When tensor spring 12 holds no yarn, adjust tensor spring 12 at approx. 120° from the vertical plane as shown at left.

REFERENCE: At the installation of the machine, tensor spring 12 is adjusted at horizontal position.

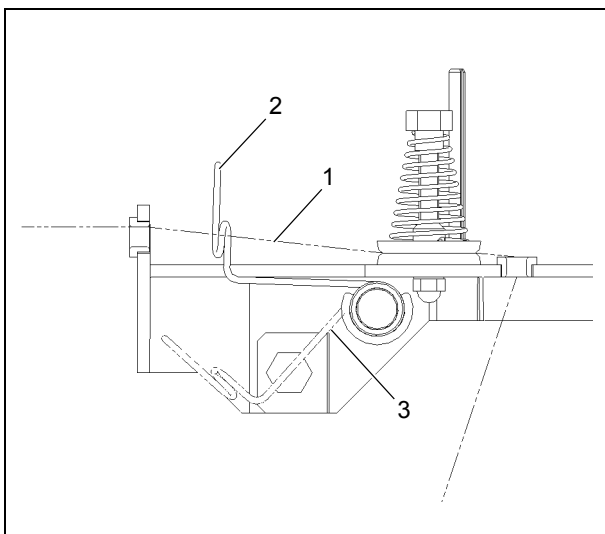
- (2) Thread the yarn and adjust tensor 5 at the cheese stand (figure above) so that the yarn hole bends down by 15 to 20 mm from the position in (1) (position without supporting the yarn).

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[3] Adjusting the Yarn Guide Height

Adjust yarn guide **14** up or down so that the tensions of upper and lower warp yarns (**16** and **17**) are almost identical to each other.



[4] Waste-selvage Yarn Break Detector

- (1) If catch cord **1** is broken, wire dropper **2** falls to come into contact with Stopper **3**.
- (2) The signal from the stopper is sent to the control box to stop the loom.

NOTE:

- Tape stopper bar **3** onto which unused wire dropper **2** fell. Otherwise, the loom cannot be operated in the same state as broken yarn.
- Clean stopper bar **3** periodically. Fly or size dust adhesion may cause detection failure.

[5] Setting the Waste-selvage Cam Timing

When using catch cord cams (1/1) and shedding motion by CC for satin weave or the like, set the alignment timing of catch cord heald frames at 350° . When weaving thick or hard twist yarns, however, the timing may be delayed by 10° to 30° .

[6] Waste-selvage Cheese Specifications

Catch cord CC is held at the right end of the cloth to apply a proper tension to the fabric selvage portion. In the case of catch cord selvage, use strong yarn without a knot. Generally use 100 to 105-d finished yarn. Use four cheeses (packages), each with an outside diameter of $\varnothing 80$ or less and a height within 200 mm, per machine. Use four (warp length \times 3.5 to 5.7) catch cords (CC) per loom.

[7] Specifying Heald Frames through which Waste-selvage Yarns shall be Threaded**[7.1] When Using Ground Heald Frames**

The standard is 1/1 plain weaving. It is possible to thread through common heald frames with ground yarns is possible, but the grasping force may be insufficient in other than plain weaving selvage.

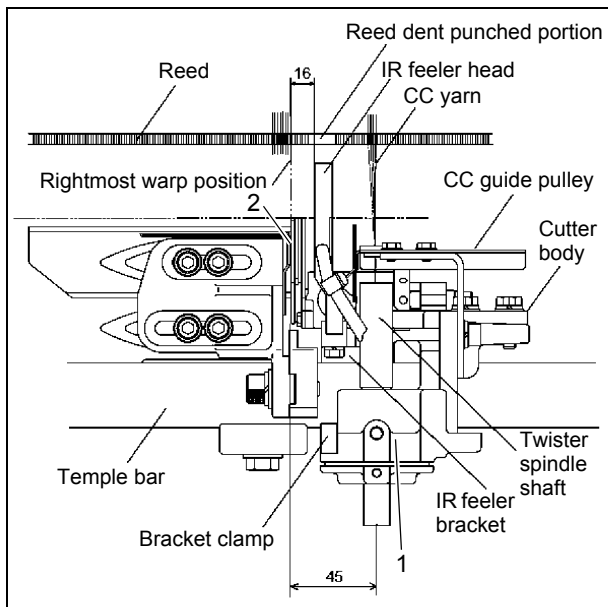
See the table below.

Weave structure	Heald frames through which waste-selvage yarns 1 to 4 shall be threaded
1/1 Plain weave	1, 2 1, 2
1/2 Twill weave	1, 2 3, 4
1/3 Twill weave	1, 2 3, 4
1/4 Satin weave	1, 2 (Plain weave) 3, 7 (Satin weave)
2/2 Twill weave	1, 2 3, 4

[7.2] When Using Catch Cord Heald Frames (1/1)**■ When using waste-selvage heald frames (1/1 shedding, 2 heald frames)**

In the case of dobby with negative cam shedding (single-speed type), install selvage frames in front of ground frames to pass the selvage yarns there.

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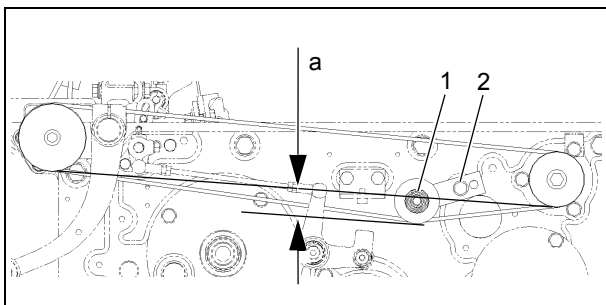
8.2.2 CC Spindle

[1] CC Spindle Left-to-right Position

- (1) Since CC spindle 1 moves with cutter 2, see Section 3.6 "Weft Cutter".

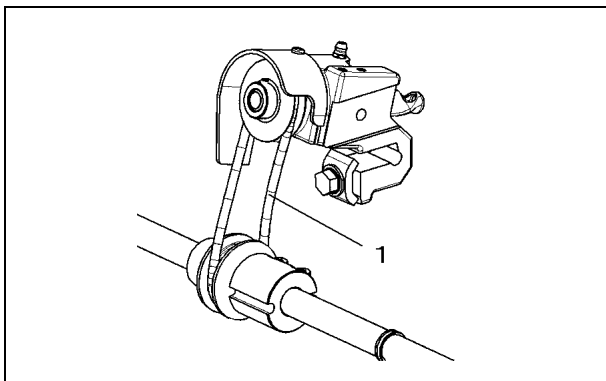
[2] CC Spindle Drive Belt Tension Setting

- (1) Adjust the position of tensor pulley 1 to set dimension "a" to 10 to 20 mm, and tighten bolt 2.



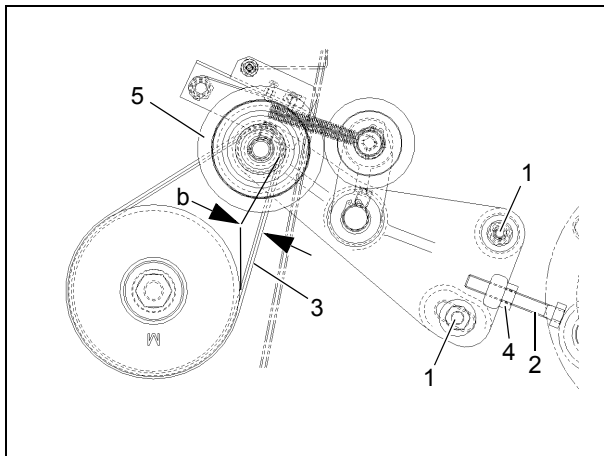
[3] CC Spindle Round Belt Installing Direction

- (1) Install round belt 1 by twisting it clockwise into the orthogonal direction. The spindle is rotated counterclockwise.



8.2.3 Catch Cord Take-up Gear

[1] Catch Cord Take-up Drive Belt Tension Setting



- (1) Loosen bolt 1, adjust jack bolt 2, and press the center of bolt 3 with the index finger. Set the tension so that flexure “b” is 3 to 4 mm.
- (2) Tighten bolt 1, and then tighten lock nut 4.
- (3) Manually turn CC gear 5 to confirm no belt slipping.

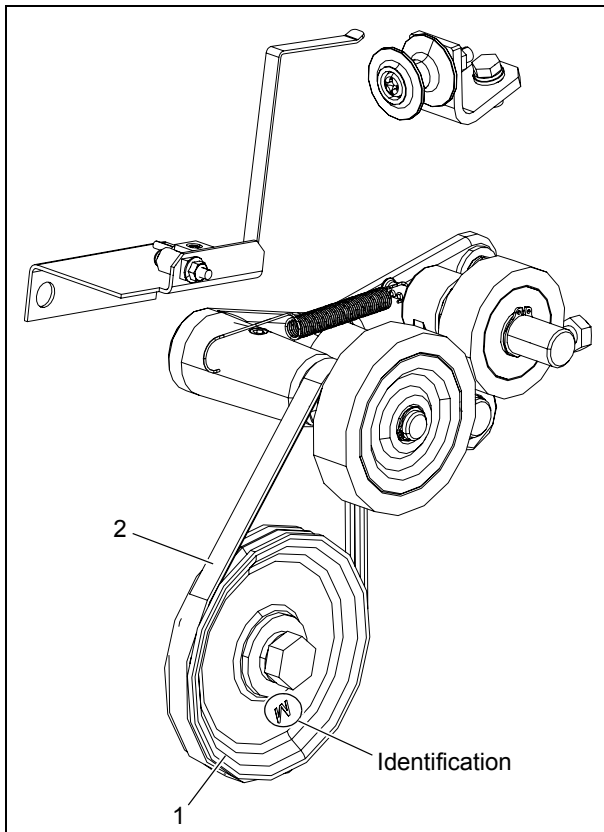
■ When a tension gauge is in use

Set the belt tension at 88 to 97 N (9.0 to 9.8 kgf).

NOTE: Be very careful so as not let your hand or finger be caught.

[2] Catch Cord Take-up Speed

- (1) Changing pulley 1 and belt 2, though not changed generally, can vary the catch cord take-up speed.



Density	Pulley	Belt
Standard	W1260-01041	72213-42502
	ø101 Identification: M	Model No.: 2-5MS-425
For high density	W1260-01051	72213-47504
	ø125 Identification: H	Model No.: 2-5MS-475
For low density	W1260-01061	72213-38702
	ø84 Identification: L	Model No.: 2-5MS-387

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8.2.4 Catch Cord Sagging Prevention Guide

If the catch cord tension is low to cause the machine to stop due to CC dropper fall, generally the catch cord stand tensor is strengthened to increase the catch cord tension. If the catch cord too weak to be cut when the tension is increased, install the catch cord sagging prevention guide (spare part) as illustrated.

Depending on the mounting position, however, the machine stopping by the cut catch cord may be delayed due to the installed guide. After installation, therefore, check and adjust the mounting position.

