

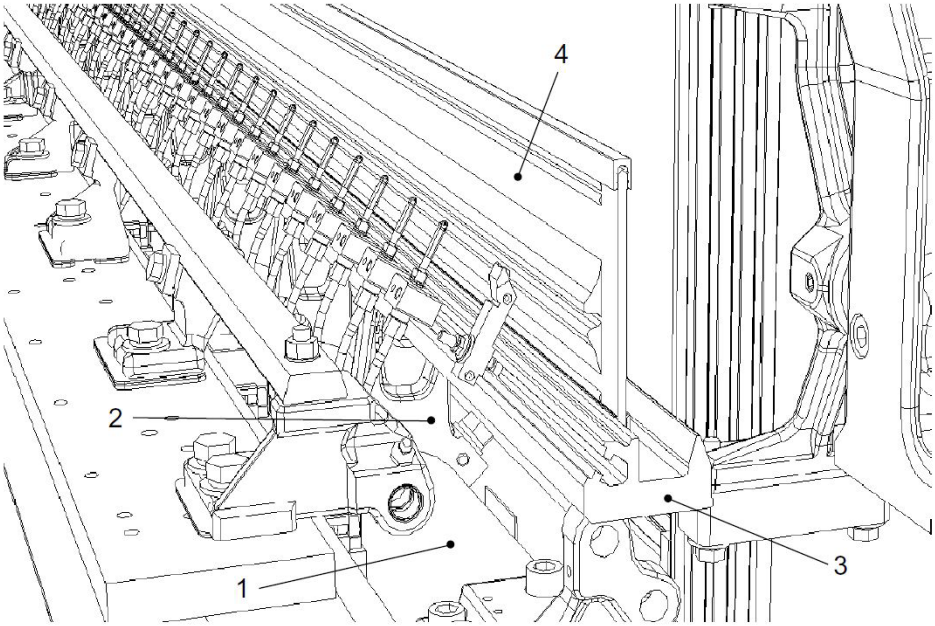
Section 6.1

Beating Motion

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- (1) Rotational force transmitted from the main motor swings rocking shaft 1 through the crank shaft, connecting rod, and beating lever inside the oil bath gearing box.
- (2) Sword 2, sley 3, and reed 4 on rocking shaft 1 beat up an inserted weft to the specified position.



6.1.1 Nominal Reed Space and Drawing-in Width

The tables below list the nominal reed spaces and effective drawing-in widths.

Values in parentheses should apply to the machines equipped with the same beam as the Model T500.

Nominal reed space (cm)	Maximum	Minimum	
		Single Beam	Twin Beam
140 ~ 150	See the table-1.	Nominal reed space - 60 cm	-
170 ~ 250		Nominal reed space - 70 cm (T500 type : - 60 cm)	
280 ~ 336			Nominal reed space - 70 cm
340 ~ 390	Nominal reed space		

Table - 1

Nominal reed space (cm)	Shedding type	Heald frame type	Selvage type	Max. effective drawing-in width (mm)
140~336	Positive Dobby	Riderless	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
		Rod Change (Flat Heald)	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
	Positive Cam (Convertible Dobby)	Riderless	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
		Rod Change (Flat Heald)	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
	Positive Cam	Riderless	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
Rod Change (Flat Heald)		Full-leno selvage (M)	-10	
		Half-leno selvage	-5	
		Full-leno selvage (E)	-5	
		Tucked-in selvage	-40	
Negative Cam (~R/S230)	Riderless	Full-leno selvage (M)	-5	
		Half-leno selvage	0	
		Full-leno selvage (E)	0	
		Tucked-in selvage	-35	
	Rod Change (Flat Heald)	Full-leno selvage (M)	-10	
		Half-leno selvage	-5	
		Full-leno selvage (E)	-5	
		Tucked-in selvage	-40	

6.1.1 Nominal Reed Space and Drawing-in Width

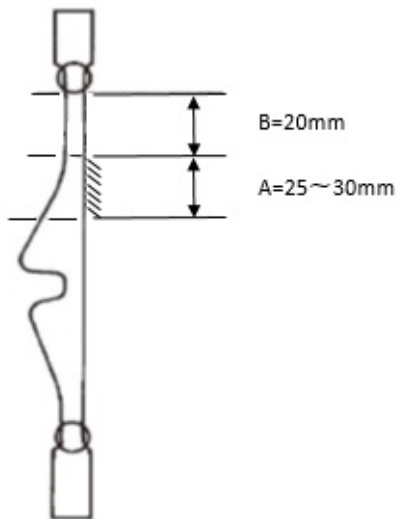
Nominal reed space (cm)	Shedding type	Heald frame type	Selvage type	Max. effective drawing-in width (mm)
	Crank (~R/S336)	Riderless	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
		Rod Change (Flat Heald)	Full-leno selvage (M)	-10
			Half-leno selvage	-5
			Full-leno selvage (E)	-5
			Tucked-in selvage	-40
	New E-Shed	Riderless (118, 155mm stave)	Full-leno selvage (M)	-5
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-35
		Rod Change (Flat Heald) (110, 120mm stave)	Full-leno selvage (M)	-10
			Half-leno selvage	-5
			Full-leno selvage (E)	-5
			Tucked-in selvage	-40

For rubber coupling-equipped full-leno selvage (M) specifications, the maximum drawing-in width is limited to -17 mm.

6.1.1 Nominal Reed Space and Drawing-in Width

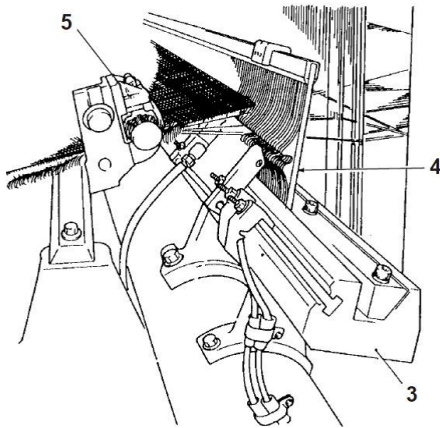
Nominal reed space (cm)	Shedding type	Heald frame type	Selvage type	Max. effective drawing-in width (mm)
340~390	Positive Dobby	Riderless	Full-leno selvage (M)	0
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-15
		Rod Change (Flat Heald)	Full-leno selvage (M)	0
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-15
	Positive Cam (Convertible Dobby)	Riderless	Full-leno selvage (M)	0
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-15
		Rod Change (Flat Heald)	Full-leno selvage (M)	0
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-15
	Positive Cam	Riderless	Full-leno selvage (M)	0
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-15
		Rod Change (Flat Heald)	Full-leno selvage (M)	0
			Half-leno selvage	0
			Full-leno selvage (E)	0
			Tucked-in selvage	-15

6.1.2 Mounting the Reed



NOTE: When handling the reed, observe the following precautions:

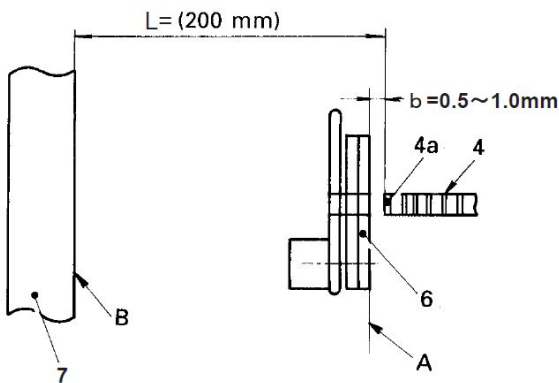
- (1) Unpacking
 - Unpack the carton containing the reed on the workbench or the like.
- (2) Drawing-in
 - Draw warps in the center of dents to prevent the dents from becoming damaged.
 - Take care not to damage or bend the dents with the warp threader.
- (3) Transportation
 - Cover the reed with cloth or corrugated cardboard to protect it from damage during transportation.
- (4) Mounting
 - Be sure to clean the reed holder before mounting it onto the sley.
 - Check the dents for damage.
 - When installing the reed, take care not to bring it into contact with the feeler heads.
 - When installing the temple cover, take care not to touch it against the dents.
- (5) In operation
 - If a warp is broken when the machine is in operation, draw a warp in section **A** (not in section **B**) of the dents as shown at left.



⚠ CAUTION

NEVER reach out towards the moving range of reed 4 and sley 3 at full width, the space between temple cover 5 and reed 4, and right and left cutters.

[1] Right-to-left Adjustment of Reed



- (1) Set the crank angle at 340° to 0° .
- (2) Press the emergency stop button down until it locks itself and the machine.
- (3) Adjust reed 4 to the right or left to provide 0.5 to 1.0 mm clearance ("b") between right end A of left selvage cutter 6 and the 1st dent 4a of reed 4.

NOTE: For those machines having the half leno selvage device, clearance "b" should be different. Refer to Chapter 8, Section 8.2 "Half-leno Selvage Device (Klöcker)."

Reference: When the right-to-left adjustment in step (3) is finished, the distance between end B of LH side frame 7 and the left end of the 1st dent 4a should be approx. 200 mm.

In the case of the Jacquard center alignment type:

$$L = 200 + (R/S - DW)/2 \text{ (mm)}$$

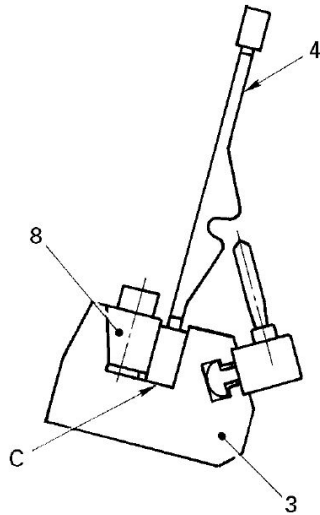
R/S : Reed space (mm)

DW : Drawing-in width (mm)

[2] Fixing the Reed with Reed Holder

[2.1] Block-structured reed holder

■ Installation procedure

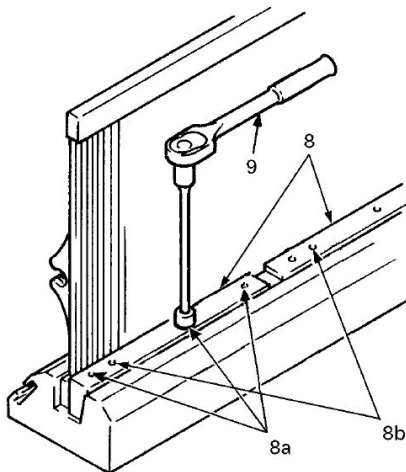


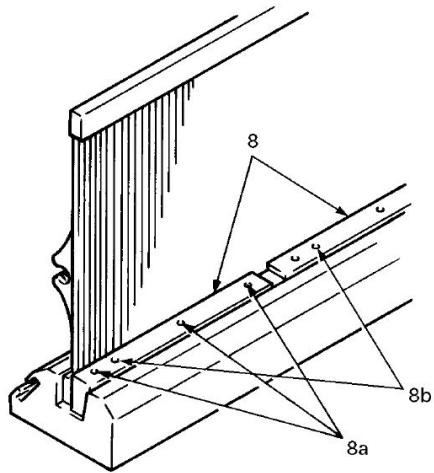
- (1) Insert reed **4** into the slot provided in sley **3**.
- (2) Fix reed **4** by securing reed holder **8** to sley **3** in the following manner:
 - Start the bolt tightening work from the lefthand side block and work your way over to the righthand side.
 - Temporarily tighten one or two center bolts out of three or five bolts **8a**, then tighten all those bolts evenly on each reed holder block.
 - Use special torque wrench **9** (No. 77105-00001) to torque those bolts **8a** to 5.9 to 6.9 N•m (60 to 70 kg-cm) evenly.

※ If you tighten with a torque higher than the specified one, the reed may be widened. Adhere to the specified torque.

※ Holes **8b** shown at left are to be used as a jack hole.

NOTE: Make sure that the lower end of reed **4** is fitted on bottom **C** of the groove in sley **3** without gap at both the right and left sides of the machine.





■ Removal procedure

- (1) Remove bolts from all of the blocks.
- (2) Insert one of the removed bolts as a jack bolt into jack hole **8b** provided in each block, then release reed holder **8**.
- (3) Take out reed **4**.

NOTE: Before tightening the jack bolts 8b, make sure that all the bolts 8a in the same block are removed.