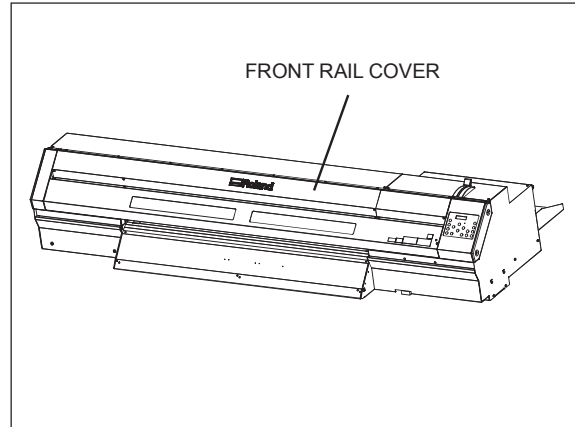


4-12 TOOL HEIGHT ADJUSTMENT (Referential Time : 20min.)

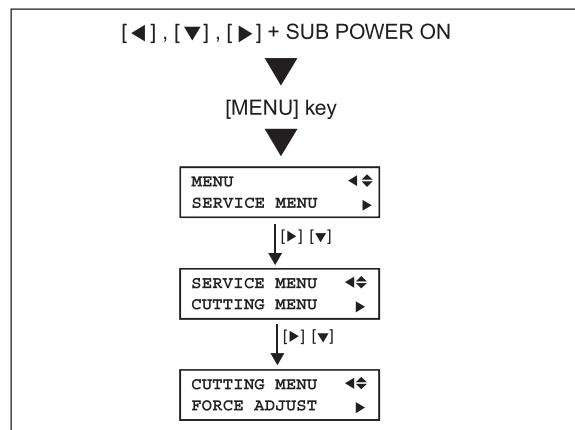
- 1 Remove the Front Rail Cover.



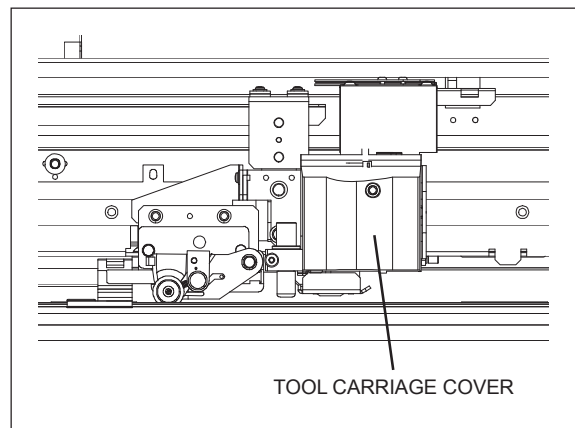
- 2 Turn on the sub power switch while pressing [◀], [▼] and [▶] keys to enter the SERVICE MODE. Select [FORCE ADJUST] menu.



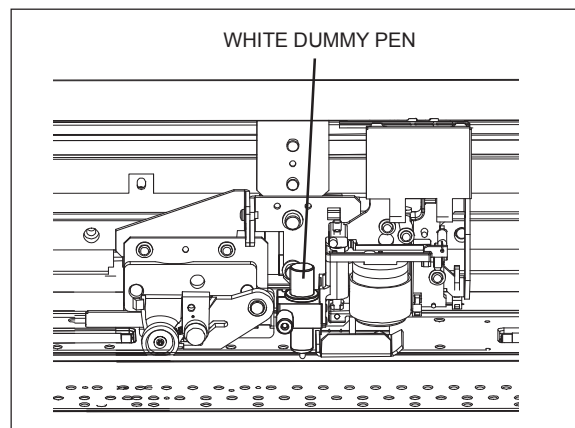
Only the Tool Carriage can be moved in [FORCE ADJUST] menu.



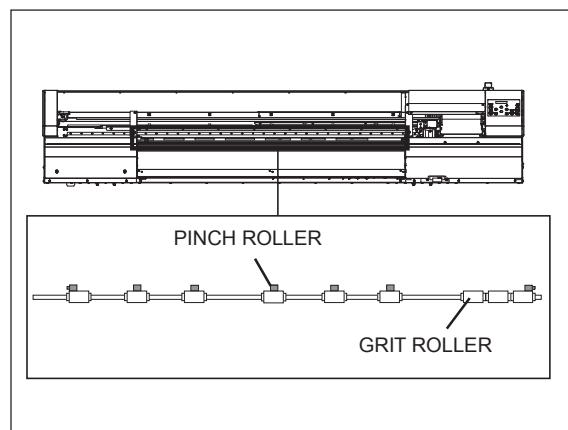
- 3 Remove the Tool Carriage Cover.



- 4 Put the White Dummy Pen (ST-006) on the Tool Carriage.



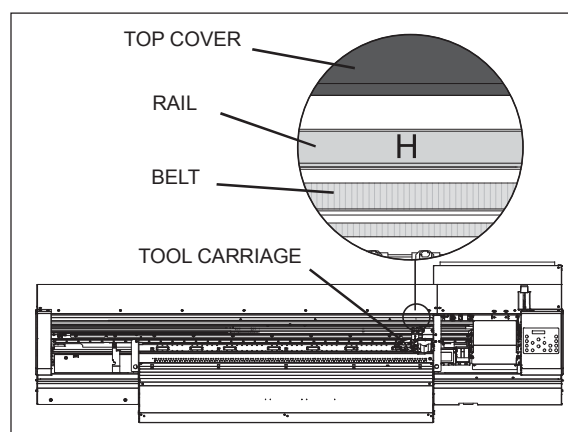
- 5** Move the Pinch Rollers at the positions shown in the figure, and lower them.



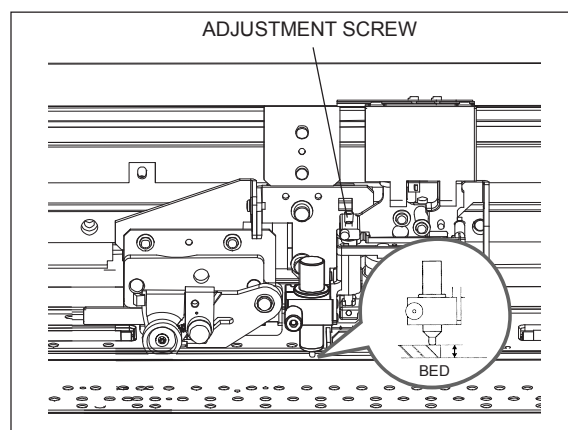
- 6** Move the Tool Carriage to the position under the H mark which is written on the rail.



The rail has an H mark at the point where Tool Height Adjustment is made during the production of the machine.
H mark indicates the highest position of the bed. (The position where the space between the Head and Bed is the smallest.)



- 7** Turn the Adjustment Screw to adjust the space between the Pen end and Bed to be 2.5mm to 2.6mm.



- 8** Move on to the Tool Pressure Adjustment.

4-13 TOOL PRESSURE ADJUSTMENT (Referential Time : 15min)

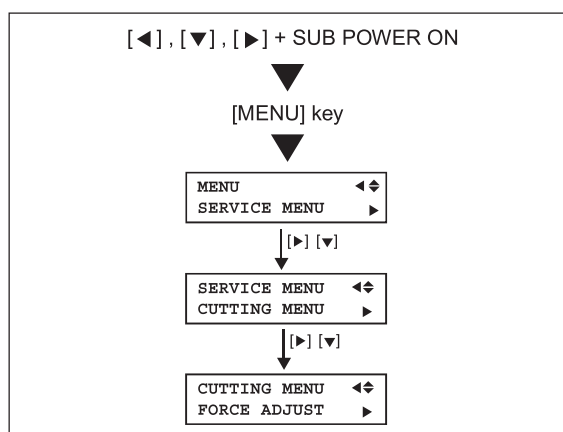
This adjustment is to specify the tool pressure during Cutting.

Before this adjustment, it is necessary to carry out [4-12 TOOL HEIGHT ADJUSTMENT].

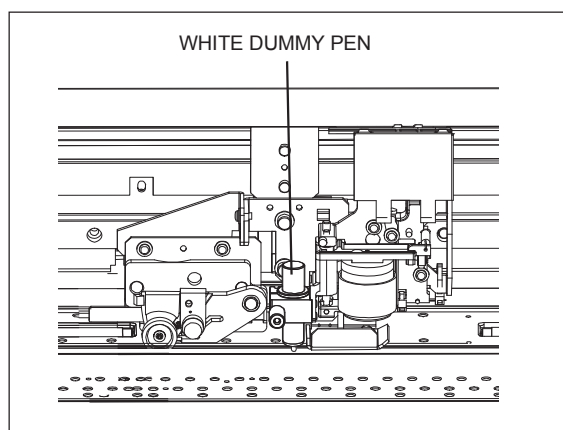
- 1 Turn on the sub power switch while pressing [◀], [▼] and [▶] keys to enter the SERVICE MODE. Select [FORCE ADJUST] menu.



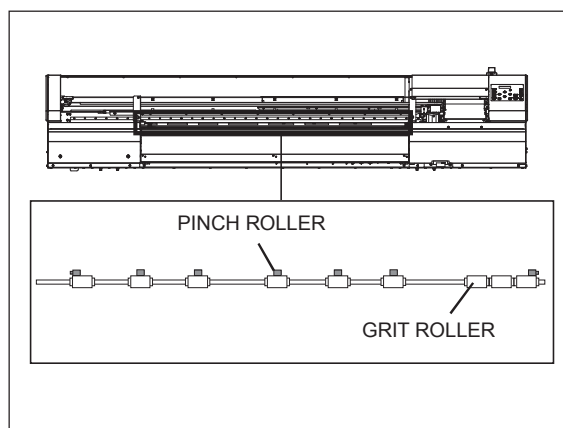
Only the Tool Carriage can be moved in [FORCE ADJUST] menu.



- 2 Put the White Dummy Pen(ST-006) on the Tool Carriage.



- 3 Move the Pinch Rollers at the positions shown in the figure, and lower them.



- 

Diagram illustrating the components of the tool carriage assembly:

- TOP COVER
- RAIL
- BELT
- TOOL CARRIAGE

- ```

graph TD
 A["CUTTING MENU <=>"] -- "[▶]" --> B["FORCE ADJUST <=>"]
 B -- "[▶]" --> C["30gf <=>"]
 C -- "[▶]" --> D["30gf 17 ▶ 16 ↩"]
 D -- "[TEST CUT]" --> E[""]

```

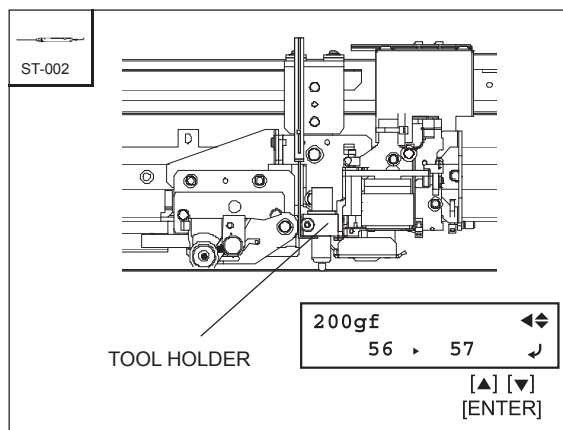
- 
- ST-013
- TOOL HOLDER
- 30gf  
17 ▶ 16
- [▲] [▼]  
[ENTER]

- ```

graph TD
    A["CUTTING MENU ◀◀ ▶▶  
FORCE ADJUST ▶"] -- "[▶] [▼]" --> B["FORCE ADJUST ◀◀ ▶▶  
200gf ▶"]
    B -- "[▶]" --> C["200gf ◀◀ ▶▶  
56 ▶ 57 ↩"]
    C -- "[TEST CUT]" --> D[""]

```

- 8** Pull up the handle part of the Tool Holder with the TENSION GAUGE(ST-002) and measure the pressure when the pen tip leaves the Bed.
Adjust the parameter in the [200gf] menu with [▲] and [▼] keys for the pressure to be 195 to 205gf (1.9N to 2.0N).
Press [ENTER] key to save the settings.



- 9** Select the [30gf] menu under [FORCE ADJUST] menu.
Confirm that the force is 25 to 35gf (0.25N to 0.35N) when the tip of the pen leaves the Bed by lifting the handle part of the Tool Holder with the DIAL TENSION METER(ST-013).

When the value of the force is not proper, make an adjustment again.

