

## Removing/Installing and Adjusting Beam

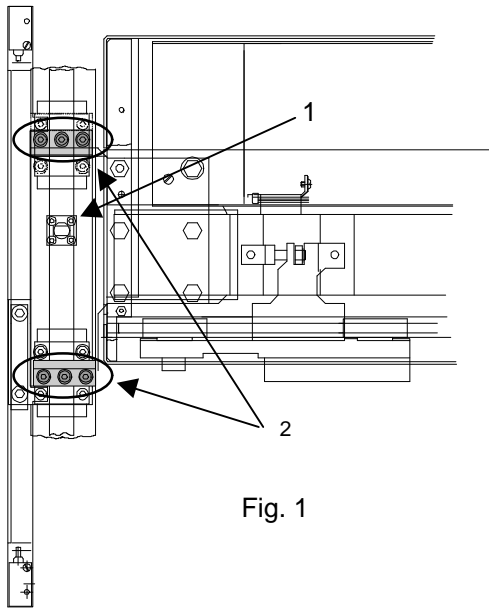


Fig. 1

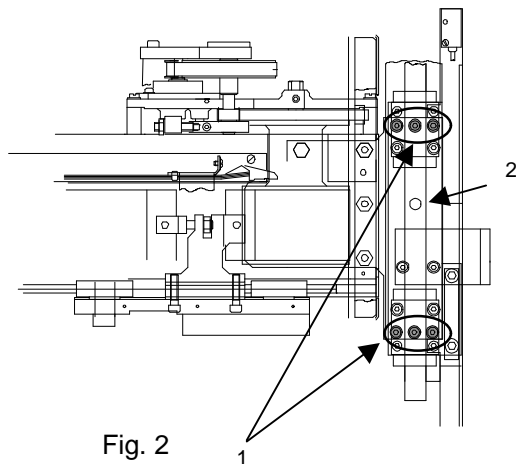


Fig. 2

If only the beam is removed and installed again without making any adjustments to the drive belts the belts / belt tension and the right-angularity must not be re-adjusted after the work.

Tools required:

- 13 mm open-end wrench
- 7 mm open-end wrench
- 3 mm Allen key
- 2 mm Allen key

### **Removing the beam:**

1. Remove both side covers and the beam cover.
2. Pull out cable from X-Board (S11, S12, S2, S4, S3, S5), cut cable ties and loosen cable up to the beam/side bearing plate.
3. Loosen cable support (3 screws).
4. Remove the 4 screws of the fixing part (Y-max side) and pull out the locating pin upwards (Fig. 1/1).
5. Remove 6 screws on both sides.  
If all cables are loosened the beam can be lifted upwards.

### **Caution:**

On the right side the beam is secured by an additional pin (Fig.2/2). When lifting the beam please note that it is not canted.

### **Installing the beam:**

6. Place beam carefully onto the bearing plates and ensure that the pin (Fig. 2/2) is perfectly slipping into its hole.
7. If necessary, clean locating pin (Fig. 1/1) before installation and lubricate using the oil supplied with the plotter.
8. Insert pin and slightly screw in screws – do not tighten! The 6 screws each on left and right can be screwed in – but do not tighten.

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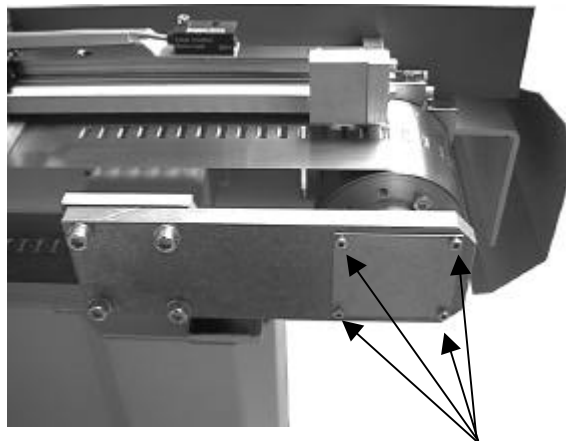
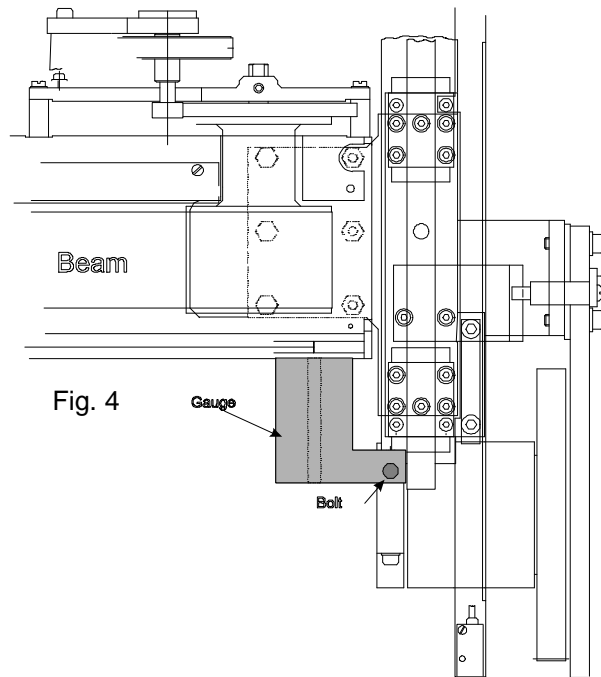
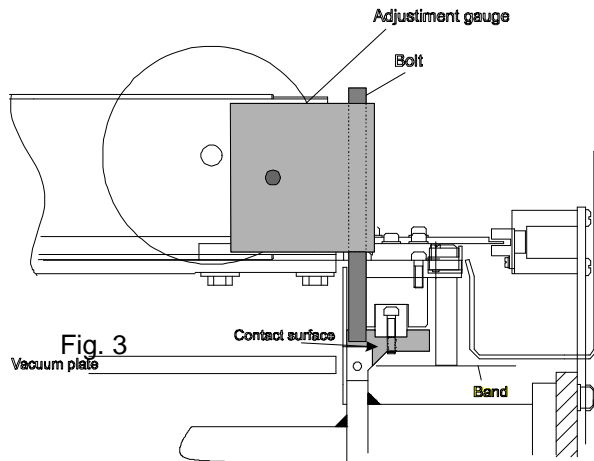


Fig. 4

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If the connection from the steel band to the bearing plate of the beam is detached or the steel band(s) is/are replaced during service works the angle of the beam **must** be adjusted again.

For this purpose beam adjustment gauges are required (Item No. E110901).

### Procedure after removing the beam:

1. Beam is installed. Screws are screwed in (see previous section) but not tighten.
2. The 2 front stops (bump rubbers) of the guide rail must be removed and the beam placed into its front position.
3. Attach adjustment gauges (Fig. 4) to the left and right. Move beam rearwards as far as possible until bolt of gauge hits the stop surface (Fig. 3). In this position the 6 screws on the right, the 4 screws of the locating pin and the 6 screws of the holding plates are tightened again.

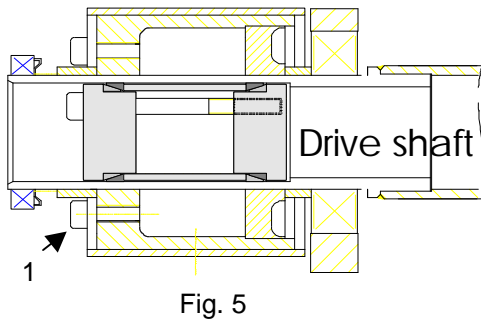
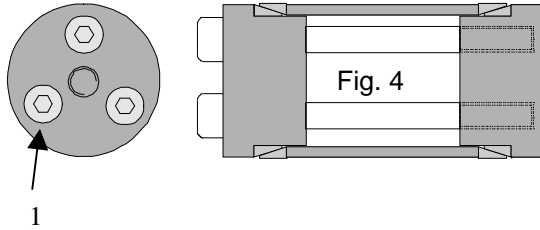
### Procedure after band replacement:

Beam is installed. Screws are screwed in (see previous section) but not tighten.

Adjust band on drive side (right) acc. to instructions in section **X-band**.

1. Open cover of step bearing/tension set by removing 4 screws (Fig. 4/1).
2. Loosen clamping of drive roll on the left.

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**3.** Loosen the 3 screws of the tension set (Fig. 4/1). To do that the shaft must be hold with the help of the hole on the right side of the shaft by inserting, as an example, the 4 mm Allen key supplied. As a result, the shaft is blocked.

**4.** Remove the 2 stops (bump rubbers) and move beam into its front position.

**5.** Install adjustment gauges to the left and right. Move beam rearwards as far as possible until both bolts of gauge hits the stop surfaces.

**6.** The 6 screws on the right, the 4 screws of the locating pin and the 6 screws of the holding plates are tightened again.

**7.** Tighten tension set. First slightly tighten the screws alternately. Then remove beam adjustment gauges, move beam into the direction of table center, fix shaft and tighten screws with .. Nm (until Sigma tension).

**8.** Subsequently install gauges and check the right-angularity again.

If not ok or the deviation is up to 0.5 mm this can be corrected by knocking with a hammer/punch at the protruding screw heads of the drive roll (Fig. 5/1). Otherwise, these screws have no other function.

If the deviation is more than 0.5 mm the beam c/w locating pin must be removed again as described above and the procedure from step 6 be repeated.