

CARVEWRIGHT

W O O D W O R K I N G S Y S T E M

Replacing the Board Tracking Sensor

To replace the board tracking sensor you will need the following tools:

- #2 Phillips screwdriver (magnetic tip preferred)
- Tape

Remove the board tracking sensor assembly:

1. **Note the squaring plate adjustment pin setting and tape pin in place.** During factory calibration the squaring plate is set perpendicular to the travel of the cutting head. This adjustment needs to be maintained as the squaring plate is removed to replace the board tracking sensor. Note the position of the arrow on the squaring plate adjustment screw with respect to the series of notches on the squaring plate.

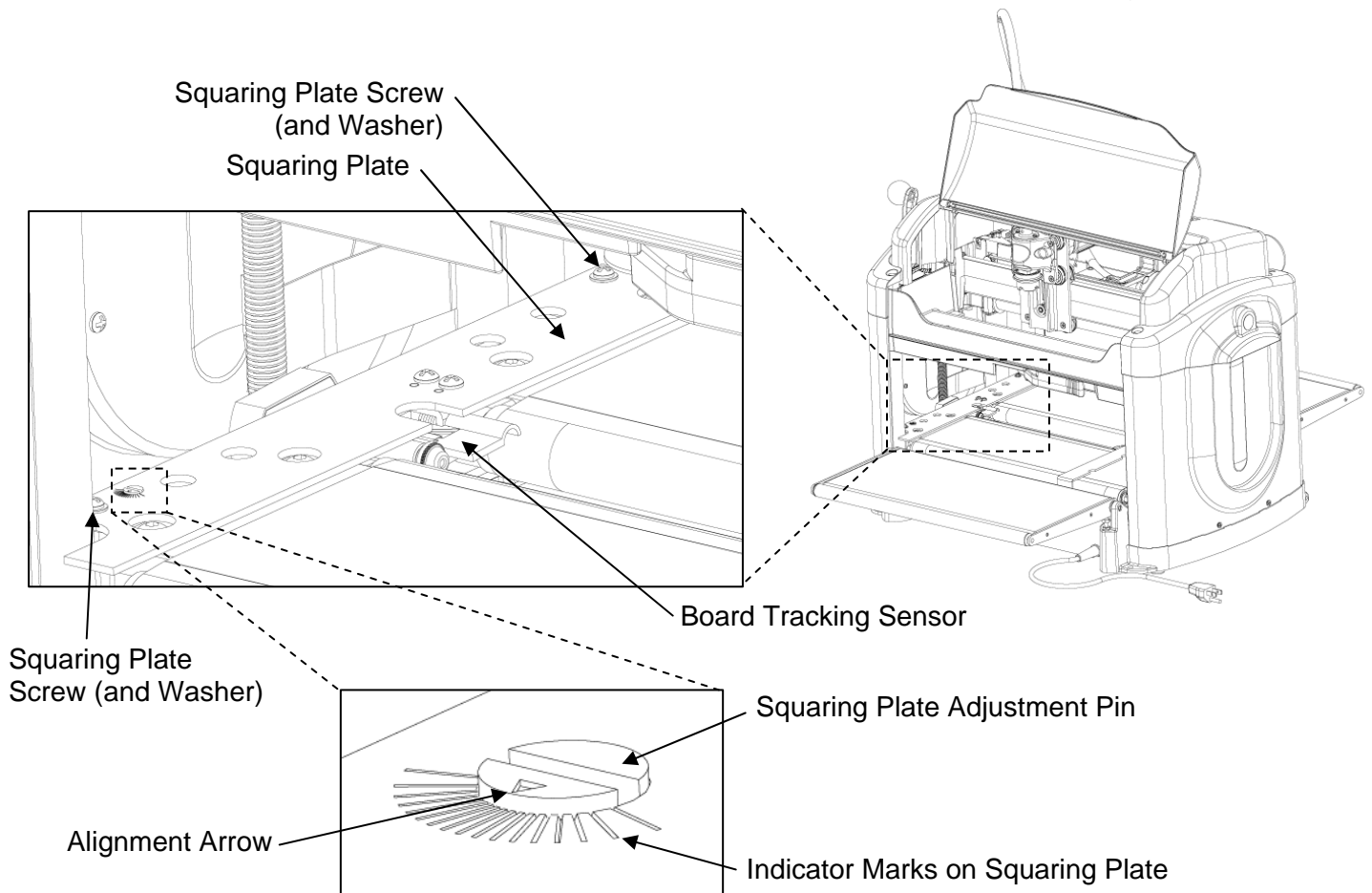


FIGURE 1: DETAILED VIEW OF THE SQUARING PLATE ATTACHMENT

Once you have noted and/or marked the position of the arrow on the squaring plate adjustment pin relative to the indicator marks on the squaring plate, place a large piece of tape over the adjustment pin to hold it in place as the squaring plate is being removed. The adjustment pin should stay with the squaring plate as it is removed.

2. **Free the squaring plate from the base.** Remove the two screws (see Figure 1) holding the squaring plate in place rotate it up as shown in Figure 2.

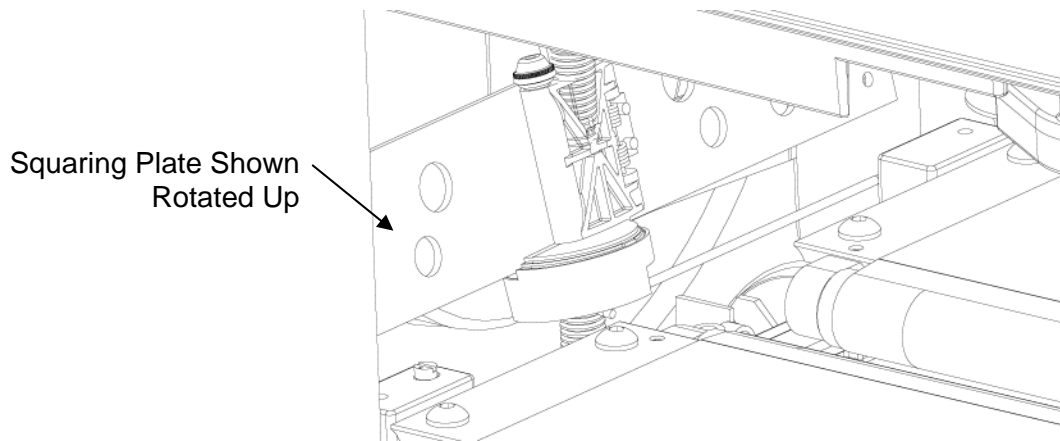


FIGURE 2: FREED SQUARING PLATE

3. **Unplug cable.** Unplug the 8-pin connector from the back of the board tracking sensor body. Lift the unplugged squaring plate (and board tracking sensor) out of the machine.

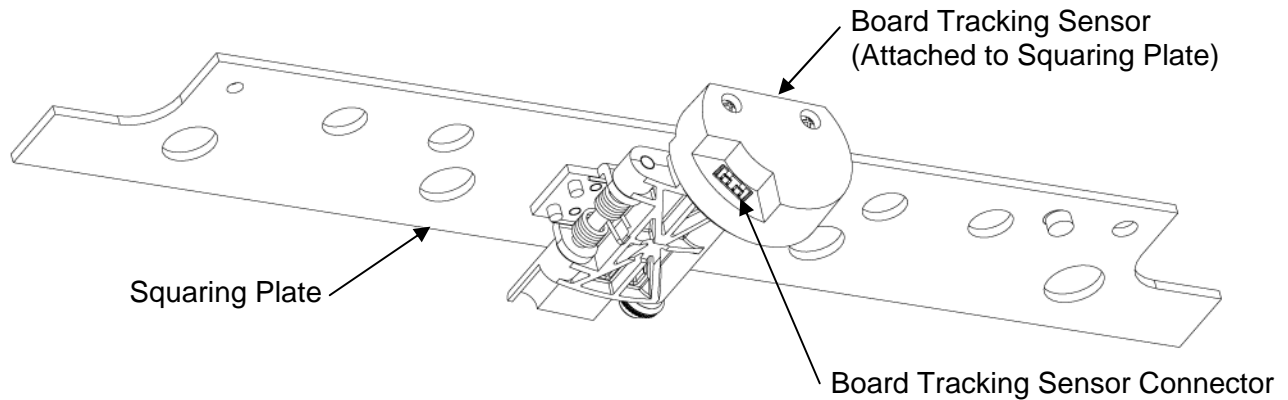


FIGURE 3: SQUARING PLATE ASSEMBLY (UNDERNEATH VIEW)

4. **Remove the board tracking sensor assembly from the squaring plate.** Unscrew the two board tracking sensor screws and remove the board tracking sensor assembly.

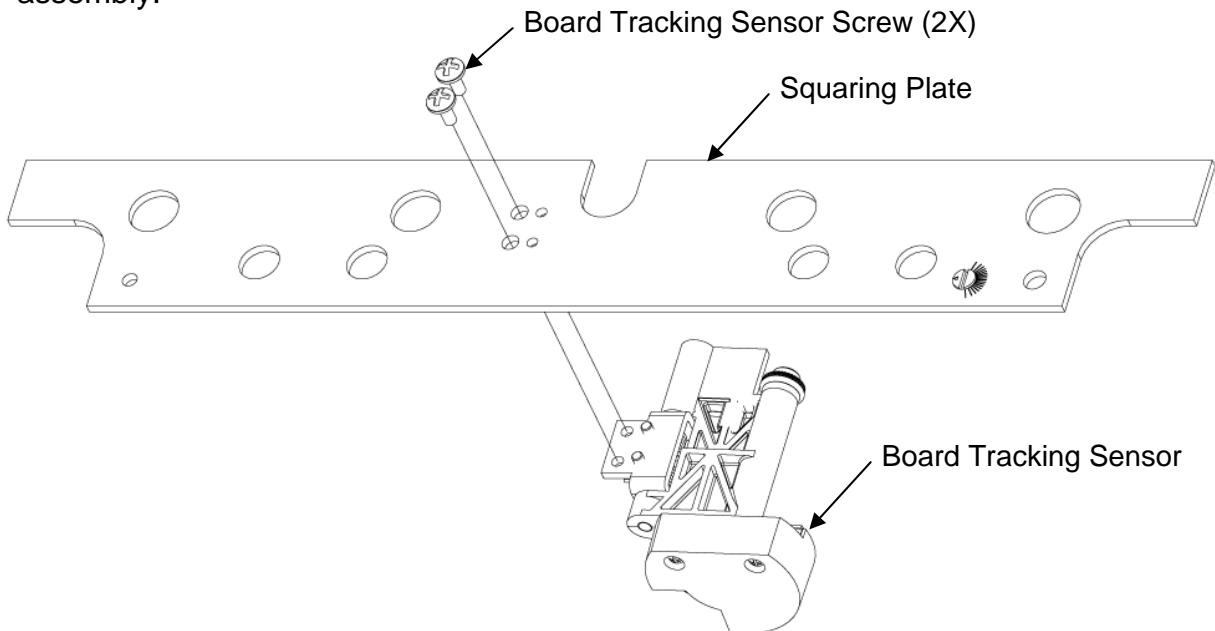


FIGURE 4: SQUARING PLATE ASSEMBLY

Reassemble the board tracking sensor assembly:

1. **Reassemble the new board tracking sensor to the squaring plate.** Reinsert the two screws holding the board tracking sensor to the squaring plate and tighten.
2. **Verify the proper placement of the board tracking sensor damper spring.** There is a small cylindrical rubber dampening spring that should be positioned over the left screw head on the sliding plate guide rod retainer. Verify that this is in place.

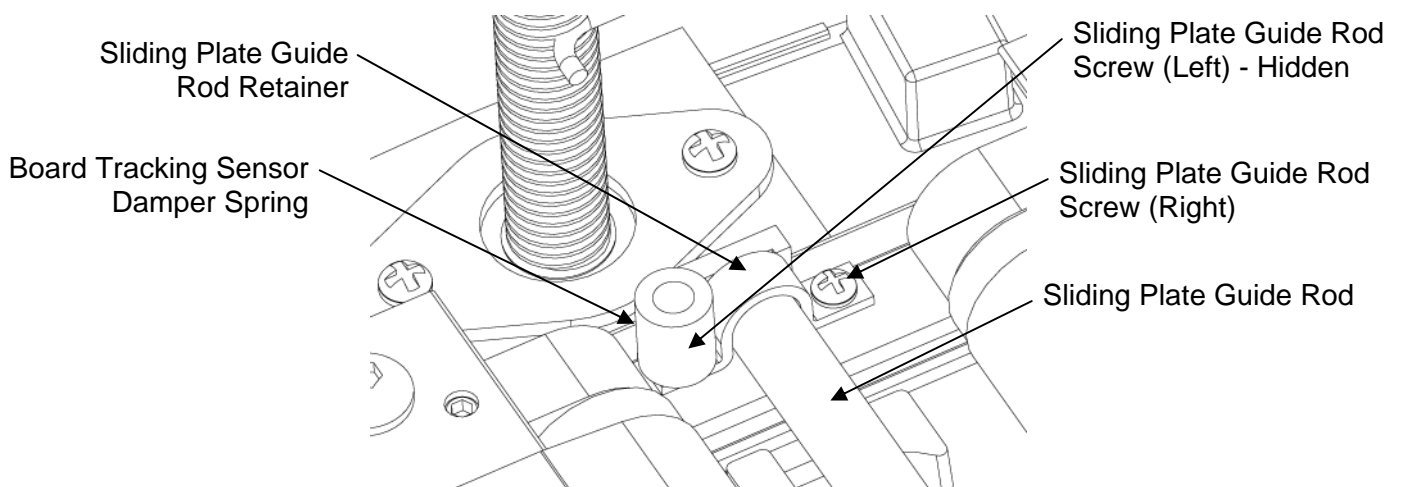


FIGURE 5: BOARD TRACKING SENSOR DAMPER SPRING PLACEMENT

- 3. Plug in the board tracking sensor.** Insert the squaring plate with board tracking sensor into the machine. Orientate it as shown in Figure 2 so that you have access to the connector on the back of the sensor from below. Before attempting to plug in the cable make sure to take note of the position of the orientation slots on the connector and the keys on the plug. Insert the cable into the connector so that the keys go into the slots.

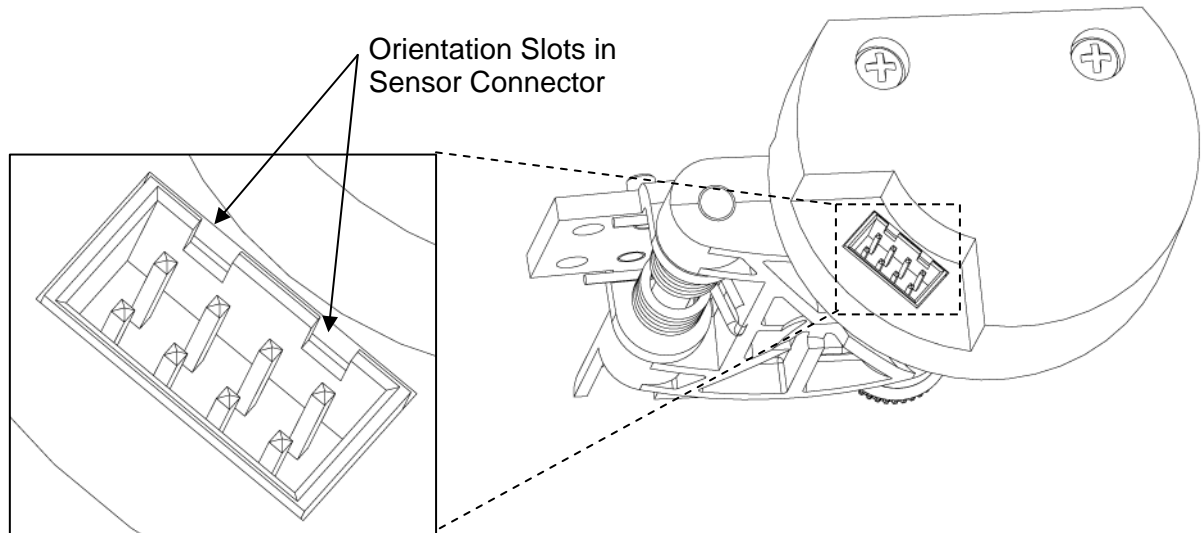


FIGURE 6: BOARD TRACKING SENSOR CONNECTOR ORIENTATION

- 4. Reassemble the squaring plate.** Lay the squaring plate down onto the bosses on the base casting and replace the screws. Before tightening, make sure that the squaring plate adjustment pin is inserted into its slot. Remove the tape over the adjustment pin and verify that the arrow is still pointing to the same indicator mark as recorded in Step 1.