

5.45 Labeling Station

During the index advance, a label is printed using the batch information entered into the computer. This process is fully automated and uses a pneumatic arm and vacuum to transfer each label onto the bag. The arm begins by lowering in front of the printer. The vacuum and air jet are turned on and a label is printed. Once the label has been detected, the air jet turns off and the arm retracts. After the index move is complete and the film is in place, the arm rotates up, turns off the vacuum and extends to apply the label on the bag. The arm then retracts and rotates back to the home position.

There are two actuators and five sensors used to accurately and efficiently apply the label. The vacuum sensor (sec 3.3) indicates when the label has been picked up. The two sensors which indicate rotation are located to the right of the printer (Figure 5.4.16). The sensor that indicates rotation down to the home position is on the right (green). The sensor for rotation into the apply position is on the left (red). There are also two sensors on the arm (Figure 5.4.17) to indicate when



Figure 5.4.15 Printer Plate

the arm is extended, such as when the label is being picked up or applied. When the arm is in the retracted home position, the top (green in Figure 5.4.17) sensor should be illuminated. When the cylinder is extended, the lower sensor (red in Figure 5.4.17) should be illuminated.

The labeling station should be setup by following the subsequent steps.

- Slide the printer plate forward so that the dowel is centered in the slot (Figure 5.4.15).
- Move the blower mounting bar (blue piece in Figure 5.4.18) towards the printer so that it is just resting against the front of the printer dispenser and tighten.
- Adjust the blower bar so that the holes are centered on the label stock of the printer (Figure 5.4.21). The holes should be facing upwards or angled back slightly towards the printer.
- Adjust the position of the arm using three screws located beneath the arm. Adjust it so that the pickup pad is centered on the label stock and parallel with the printer peeling bar (Figure 5.4.20).

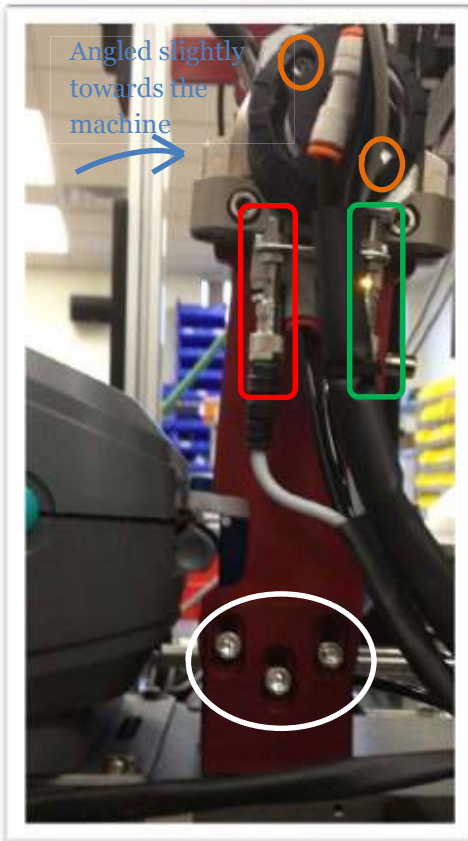


Figure 5.4.16 Label Arm and Rotary Actuator

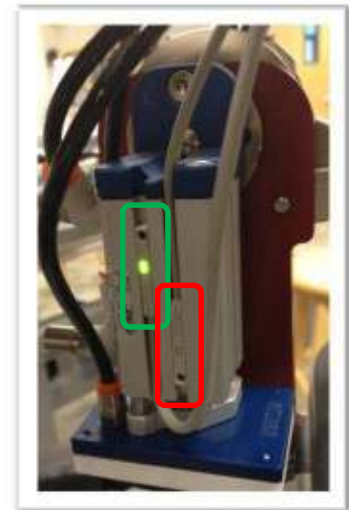


Figure 5.4.17 Label Arm Vertical

MAINTENANCE

- Adjust the height of the arm using the three screws circled in Figure 5.4.16. Tilt the arm assembly forward (away from the printer) as indicated by the arrow. Adjust the height so the pad comes down just above the peel off bar (as shown in Figure 5.4.19). Tighten screws.
- Adjust the rotation using the stops (circled in orange, Figure 5.4.16) to adjust the arm so that it rotates down to nearly touch the printer lid. Adjust the stops by loosening the screw. Once the screw is loose, rotate arm to desired position and move the stop down into position. Re-tighten screw. The screw is attached to the stop and slides in the groove along the circumference of the cylinder. The pad should

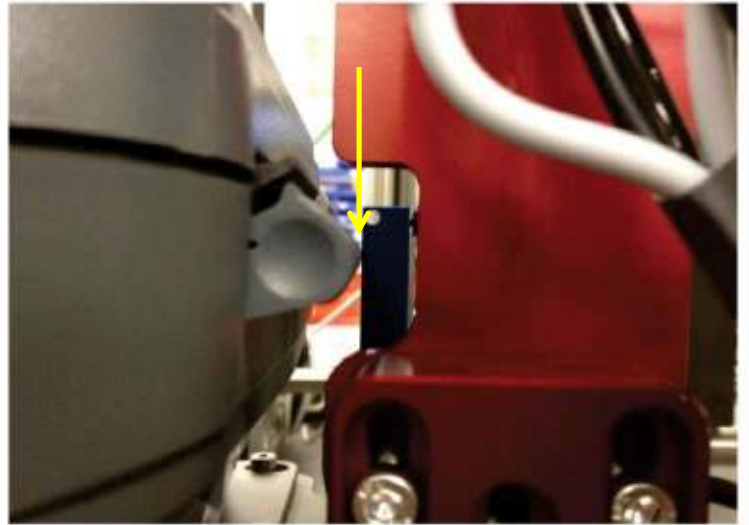


Figure 5.4.18 Blower Mount Position

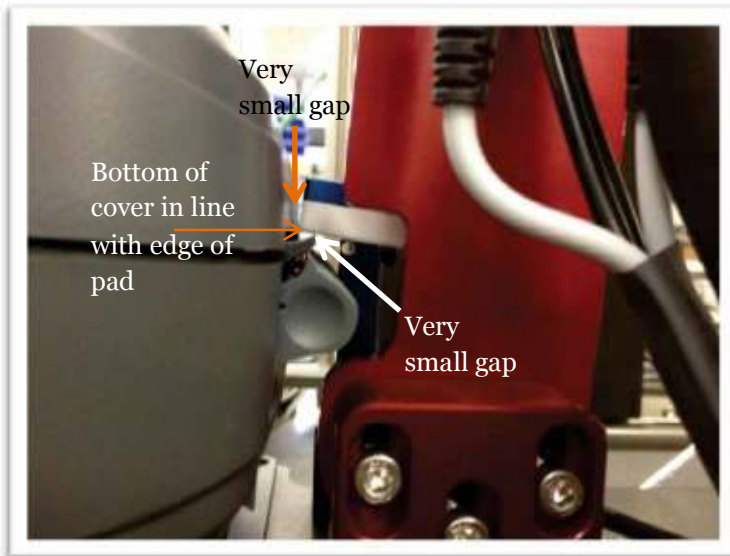


Figure 5.4.19 Label Pad Height and Rotation

not contact the lid or the peel-off bar during operation, but should be as close as possible.

- Recheck that the pad height extends down and nearly touches the peel-off bar and rotates back to nearly touch the printer lid.

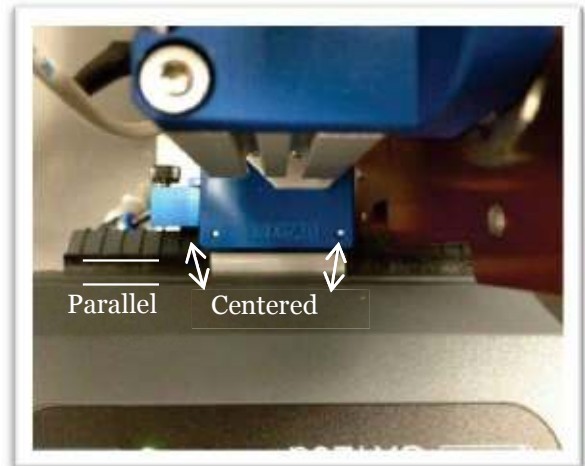


Figure 5.4.20 Label Pad Alignment

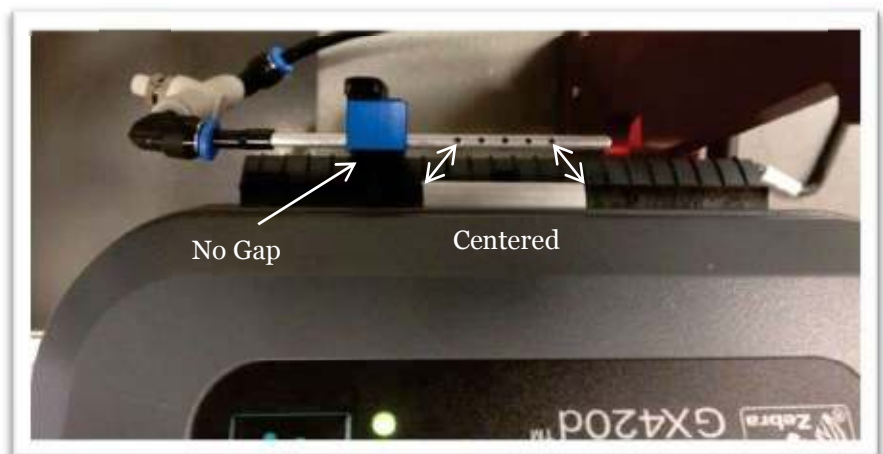


Figure 5.4.21 Blower Bar Position