Kodak

GMCE Trendsetter AL, CL, and NEWS

Outrigger Upgrade for Rotator Unload Table

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Revision History

Revision	Date	Author	Comments
B	02 Jul 2008	Frank van Eerdt/ Ken Johnston	First release

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1. BACKGROUND

The outrigger upgrade kit is an optional feature upgrade that can be installed on GMCE Trendsetter® NEWS™, Autoloader, and ContinuousLoad devices with the rotator unload table to enable automatic unloading of single and dual broadsheet plates.

The main feature of this upgrade is the addition of two outrigger pin cylinders, used for driving the broadsheet plates along the unload table, and the single broadsheet imaging (SBI) vacuum couplings, used to restrict the amount of vacuum leak when unload table is only unloading one broadsheet plate.

On Trendsetter NEWS devices, single broadsheet plates can be unloaded either on the home or the away side

2. PREREQUISITES

- GMCE Controlled Release 3.1
- Button-style unload table panels with slots for the outrigger pins
  FCO CA14960, kit 518-02392A:
  http://techplanet.creo.com/output/computer_to_plate/trendsetter_al/nav/fcos.htm#ca14960

3. PARTS REQUIRED

Part #	Description	Qty
518-01447A	KIT,DUAL PIN OUTRIGGER,UNLOAD TABLE,TS8	1

4. SPECIAL TOOLS REQUIRED

The following tool is not included in the upgrade kit, and needs to be sourced locally.

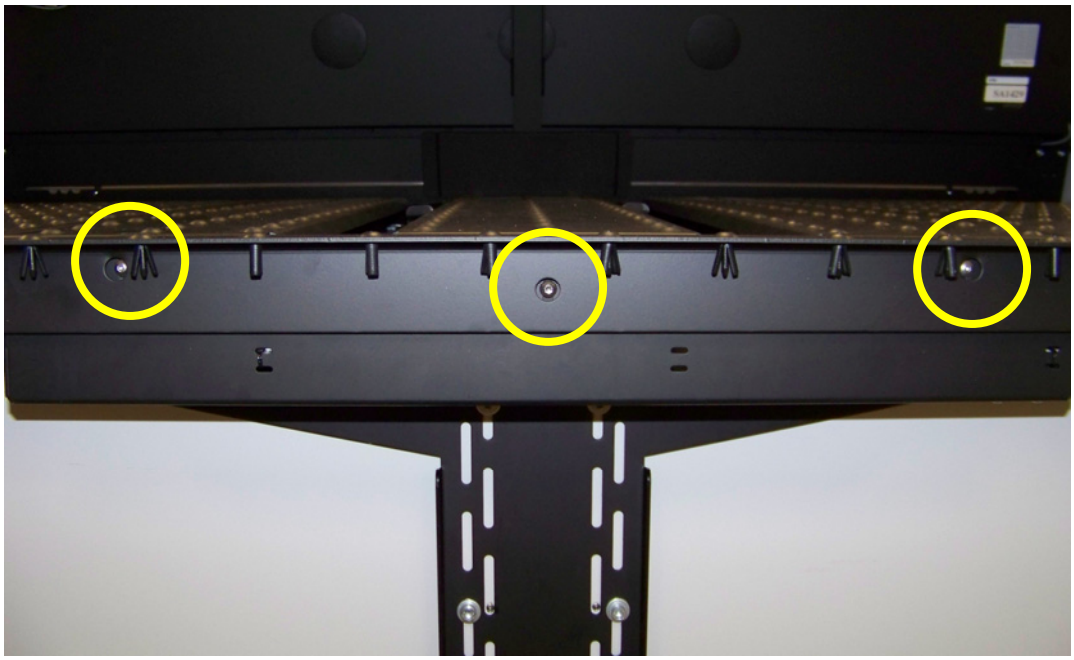
- Power drill

5. UPGRADE PROCEDURE

5.1 Removing the Unload Table Center Panels

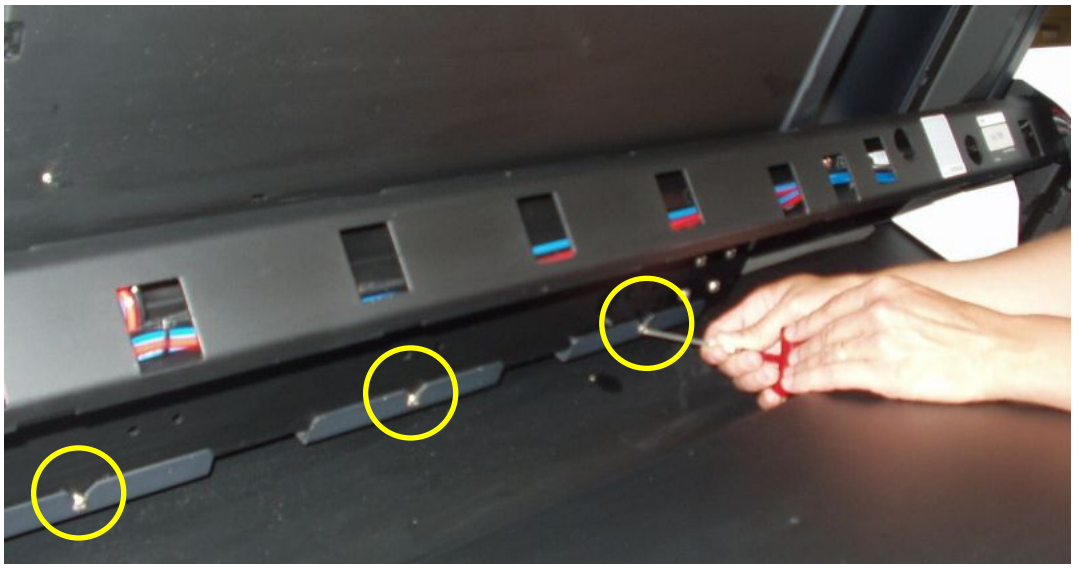
1. Shut down Print Console to prevent unexpected movement of the unload table.

2. With the unload table in the down position (**`table down`**), use a 3-mm hex key to loosen the three screws holding the exit side of the unload table's three center panels.



3. Move the unload table to the up position.
   `table up`

4. Loosen, but do not remove, the three screws attaching the unload table's three center panels to the bottom of the unload table frame.



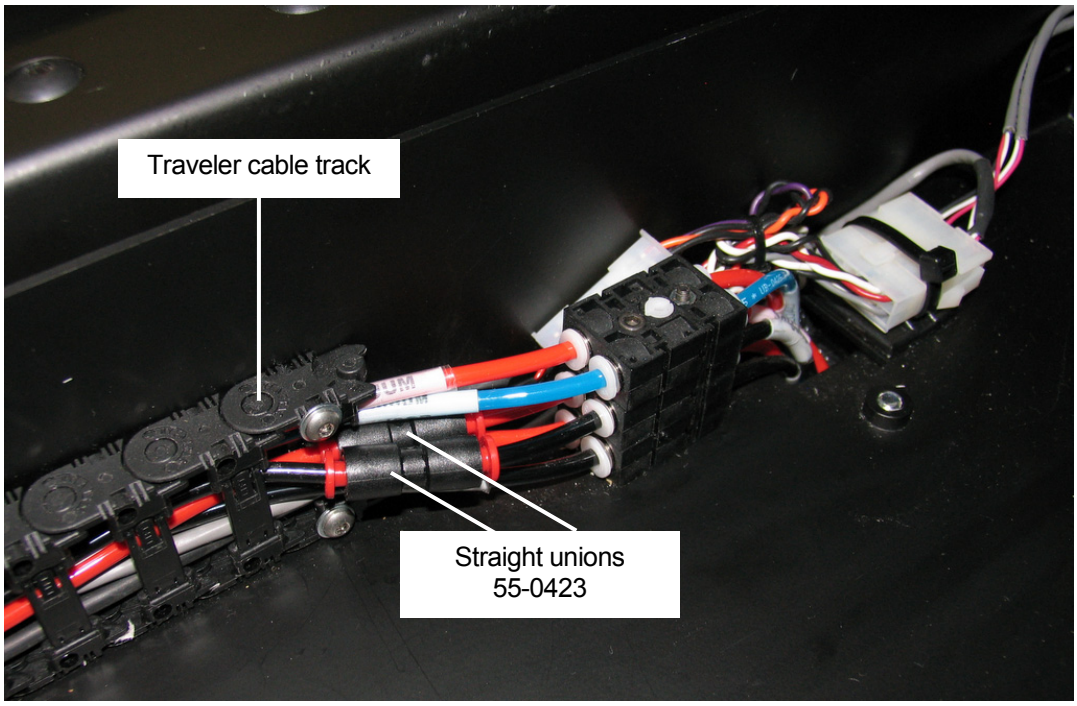
5. Move the unload table to the down position.
   `table down`

6. Remove the unload table's three center panels.

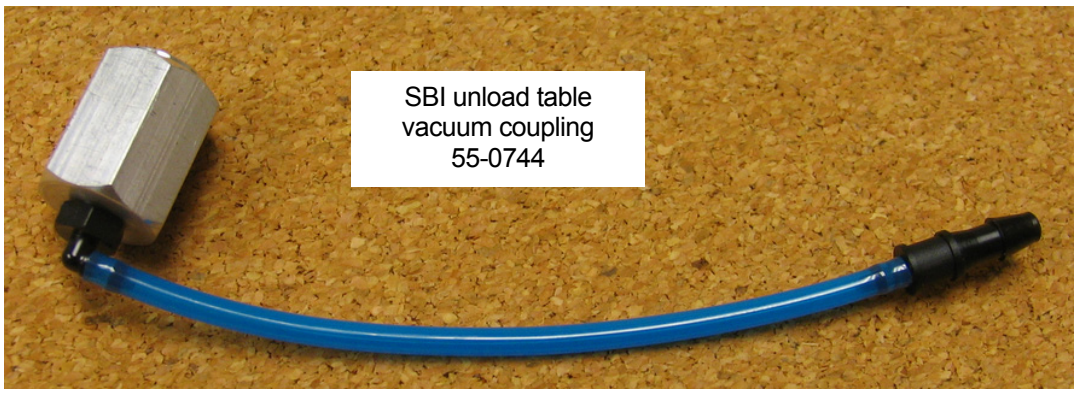
5.2 Modifying the Pneumatic Plumbing

1. Move the unload table traveler to an easily accessible position:
   `table move 900`
2. Turn off the compressed air supply to the device.
3. On the unload table traveler's cable track, locate and remove the two brass fixed orifices for the unload table cylinder.

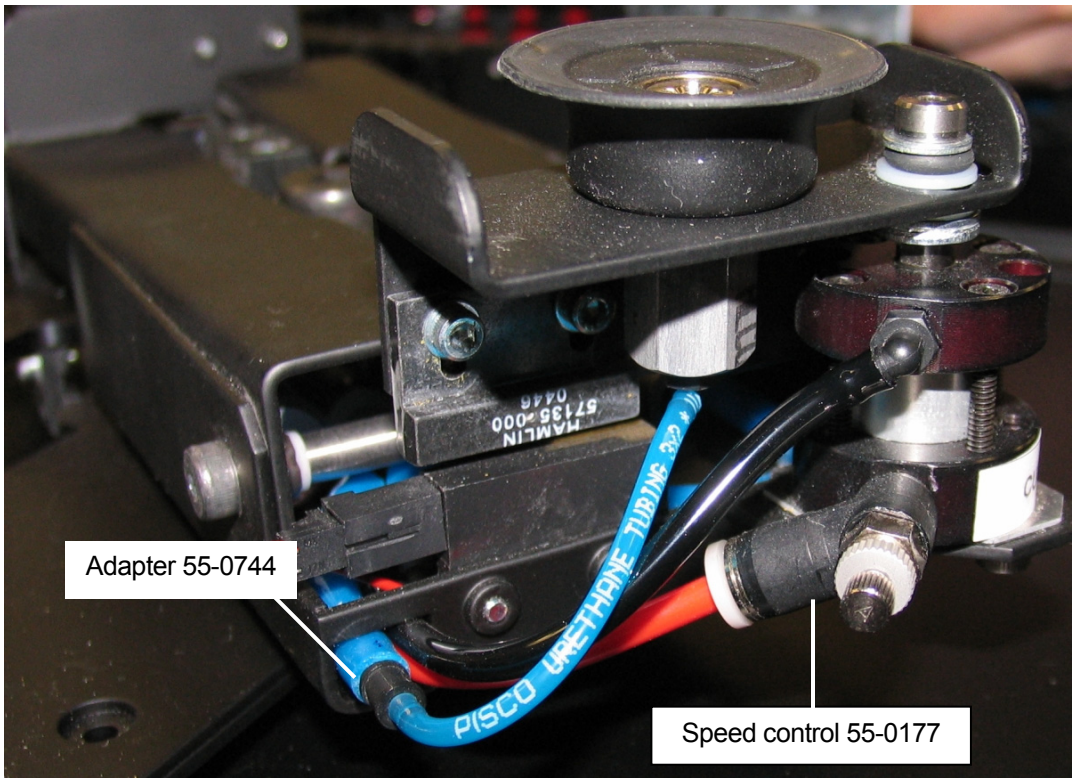
   Reconnect the tubing with the two supplied straight unions (55-0423).



4. Replace the unload traveler suction cup couplings with the supplied SBI unload vacuum couplings, 252-09489A.

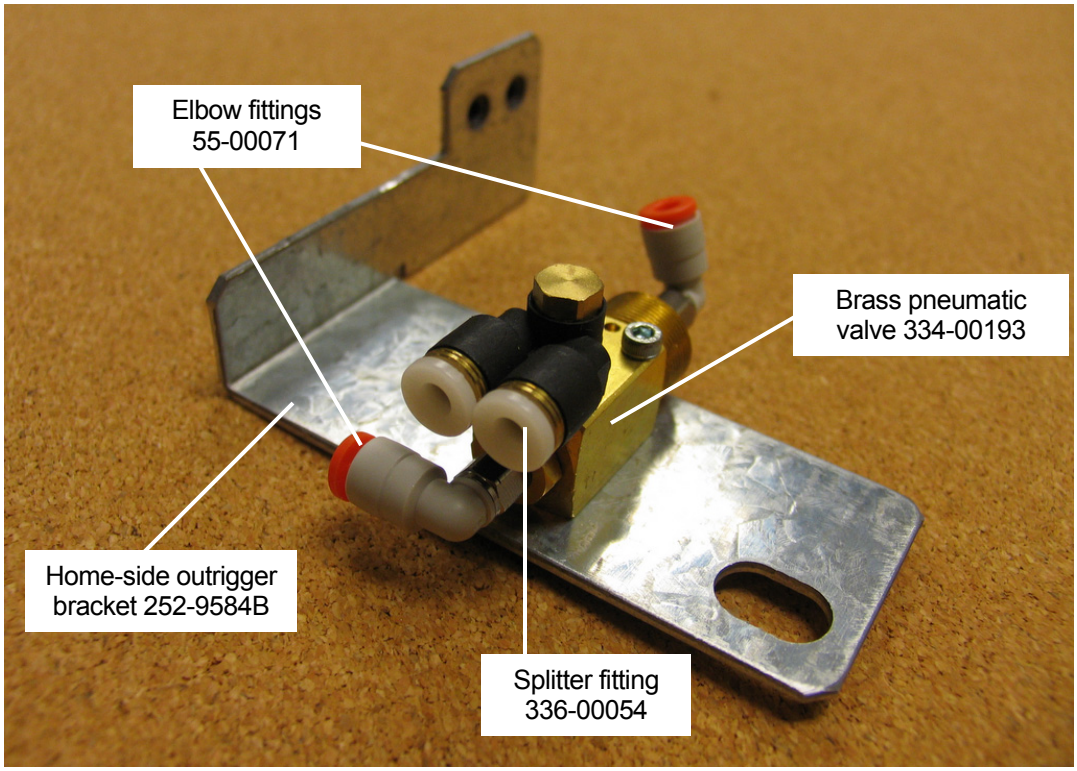


5. Replace the bottom plastic barbs on the up/down cylinder extension ports with the supplied speed control elbows (55-0177). Trim a short piece of the red air line so it fits in the new speed control fitting.
6. Splice the SBI unload vacuum coupling into the existing air line using the provided adapter (55-0744) and 3 mm length of vacuum tubing. If needed, cut the tubing to a length so that the air line doesn't kink.

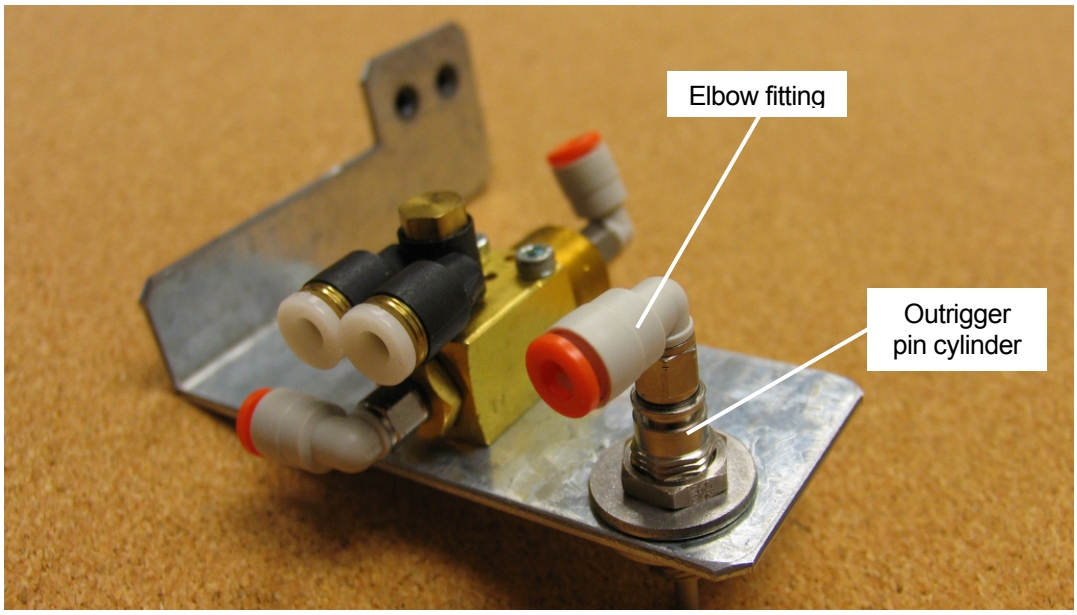


5.3 Installing the Outriggers

1. Install two elbow fittings (55-0071) and the splitter fitting (336-00054) onto the brass pneumatic valve (334-00193), and then attach the valve to the home-side outrigger bracket (252-9584B).



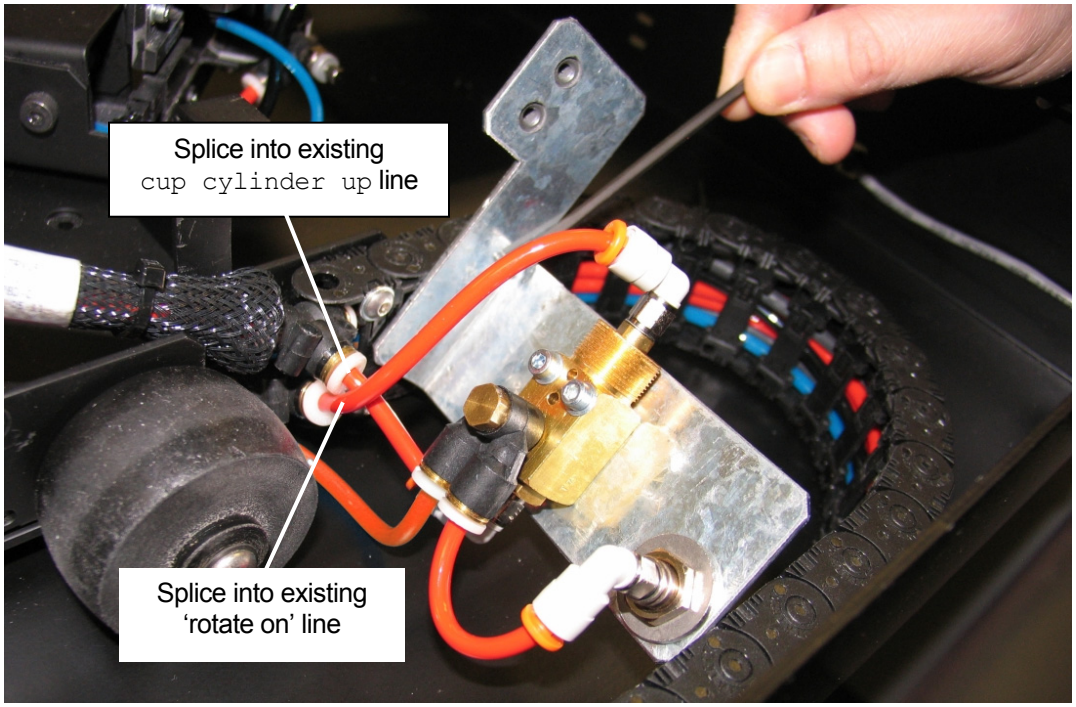
2. Install the outrigger pin cylinder onto the home-side outrigger bracket, using the two supplied M10 washers; one on top, one in the bottom. Screw an elbow fitting into the bottom of the pin cylinder.

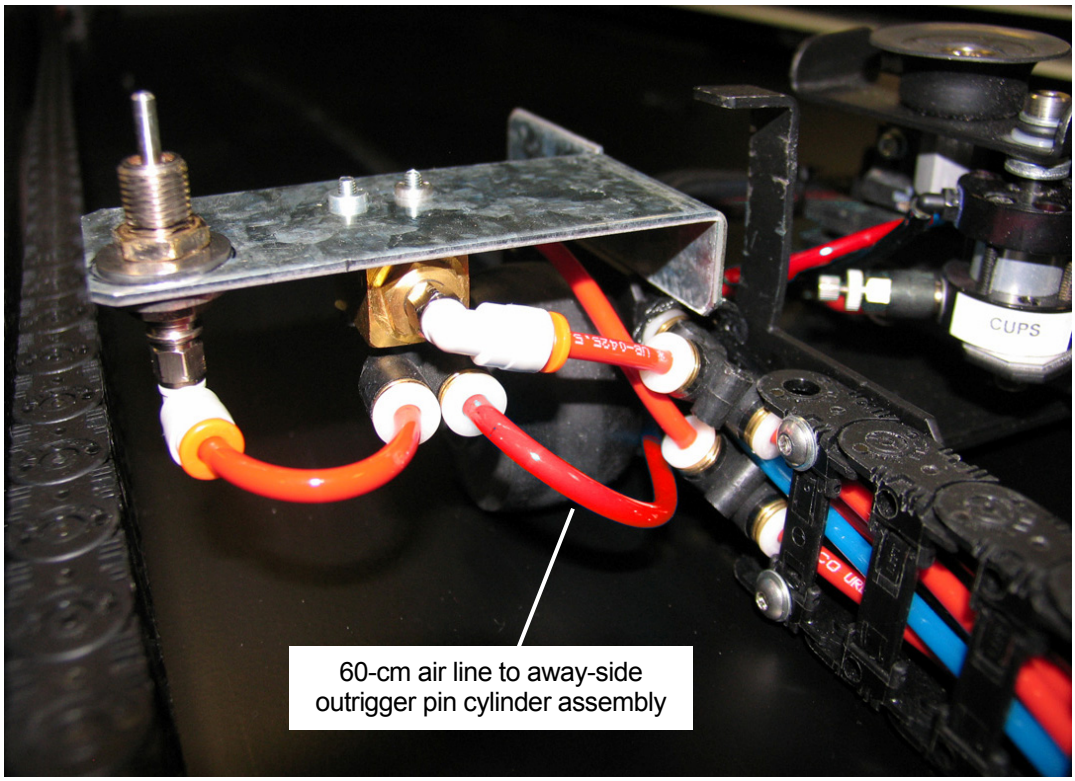


3. Using the supplied air line and TEE fittings (55-0102), splice the new air lines into the existing red air lines for the `cups up` and `rotate on` cylinders.

   Connect the pin cylinder to the brass valve and connect an approximately 60-cm (2-ft.) long air line to the remaining splitter port.

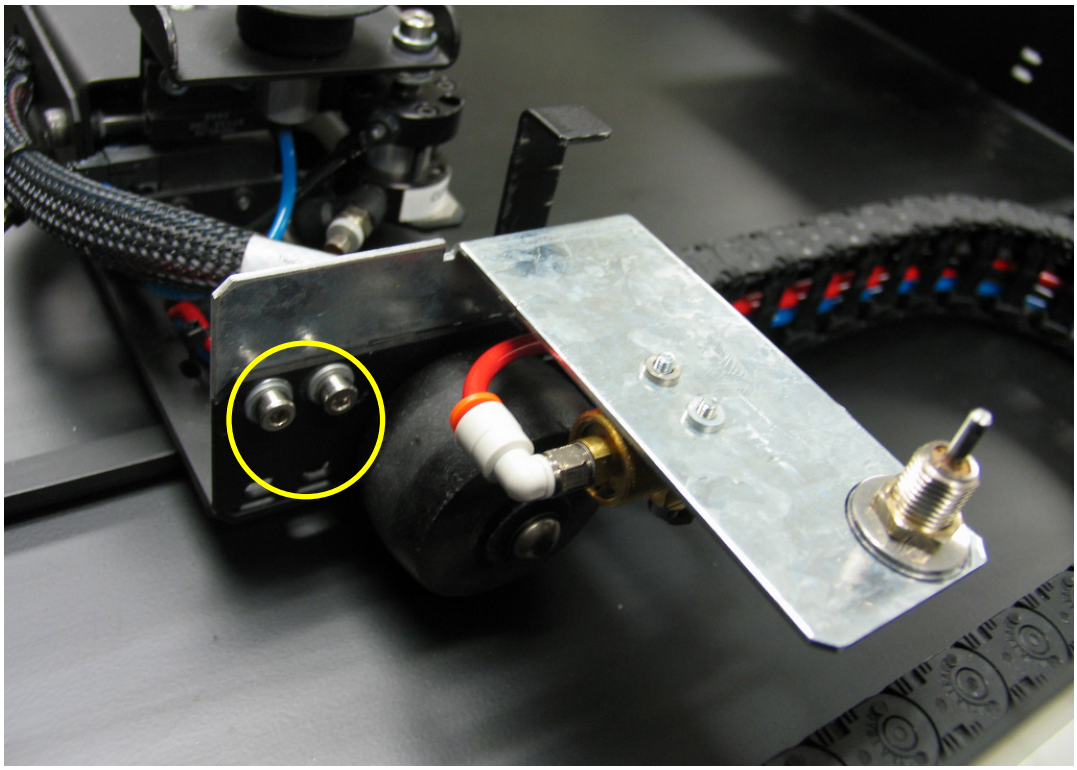
   Cut the existing cable ties attached to the air lines under the traveler assembly, and route the new 60-cm air line along with the existing air line to the away-side outrigger pin. Add new cable ties.



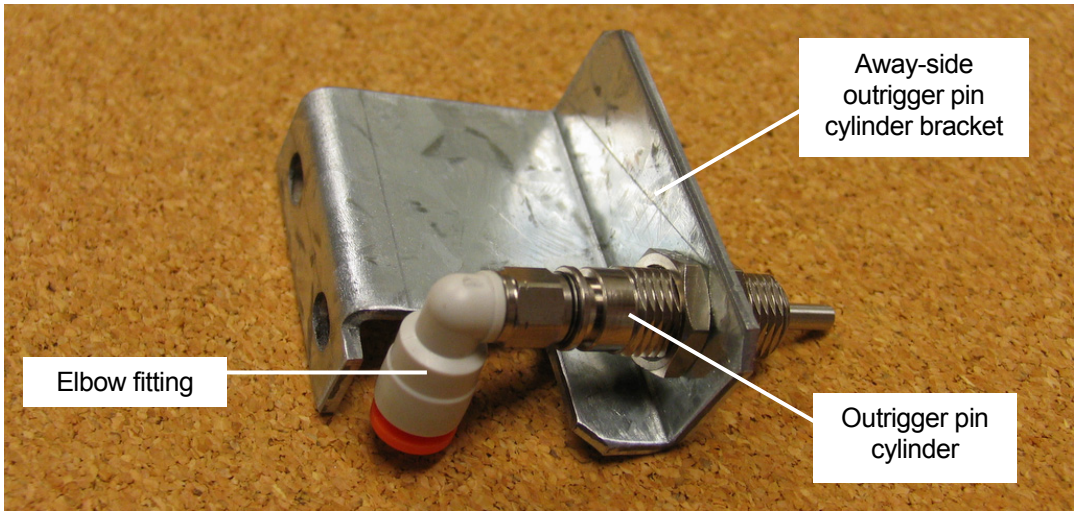


Note: The outrigger pin cylinders will be activated when the `table cups up` command is issued. The outrigger pin cylinders will be deactivated when the rotator is activated, to keep the bottom of the plate from being scratched by the outrigger pins.

4. Mount the home-side outrigger bracket onto the unload table traveler using the two M4*10 screws and flat washers.

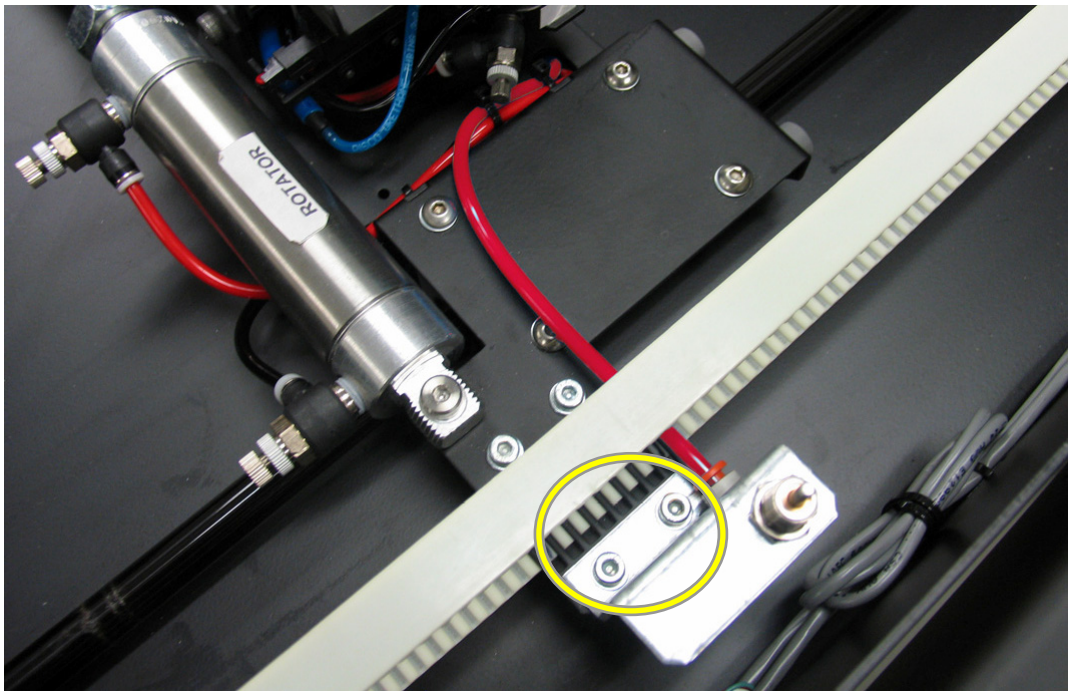


5. Screw an elbow fitting into the bottom of the away-side pin cylinder and Install the outrigger pin cylinder onto the away-side outrigger bracket. No washers are needed here.

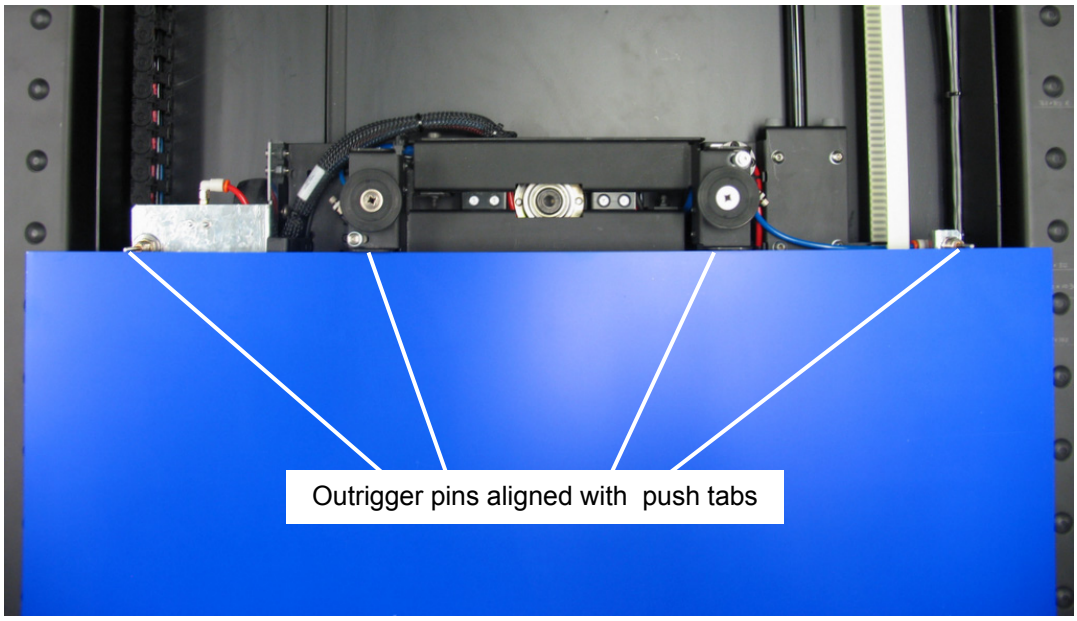


6. Mount the away-side outrigger bracket onto the unload table traveler using the two M4*12 screws and cupped spring washers. Do not tighten the screws yet.

7. In the elbow fitting, insert the end of the 60 cm long air line that is connected to the brass valve on the home-side outrigger pin cylinder assembly.

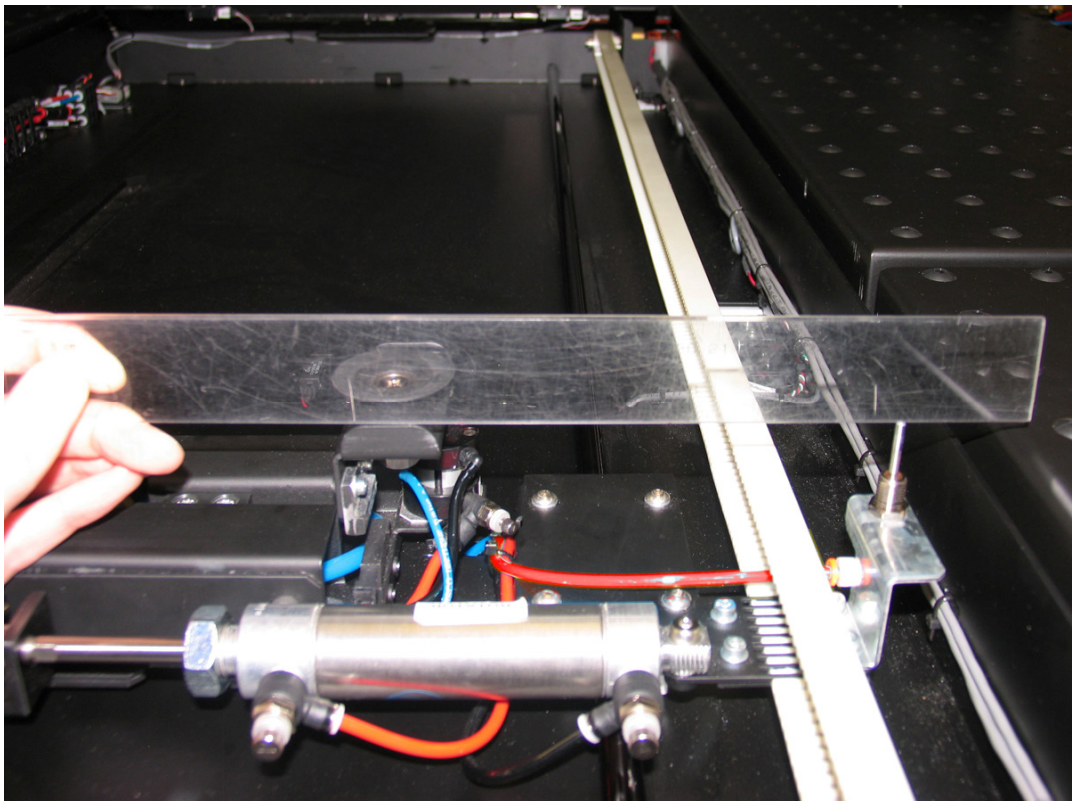


8. Align the outrigger pins to the unload table traveler push tabs, and then tighten the M4 bracket screws.



9. Turn the compressed air supply to the platesetter back on and check for leaks.

10. With **`table cups up`** activated, check the vertical position of the outrigger pins to verify that they are level with the unload table traveler push tabs. If necessary, adjust the vertical position of the outrigger pin cylinder shafts by adjusting their 12-mm jam nuts.



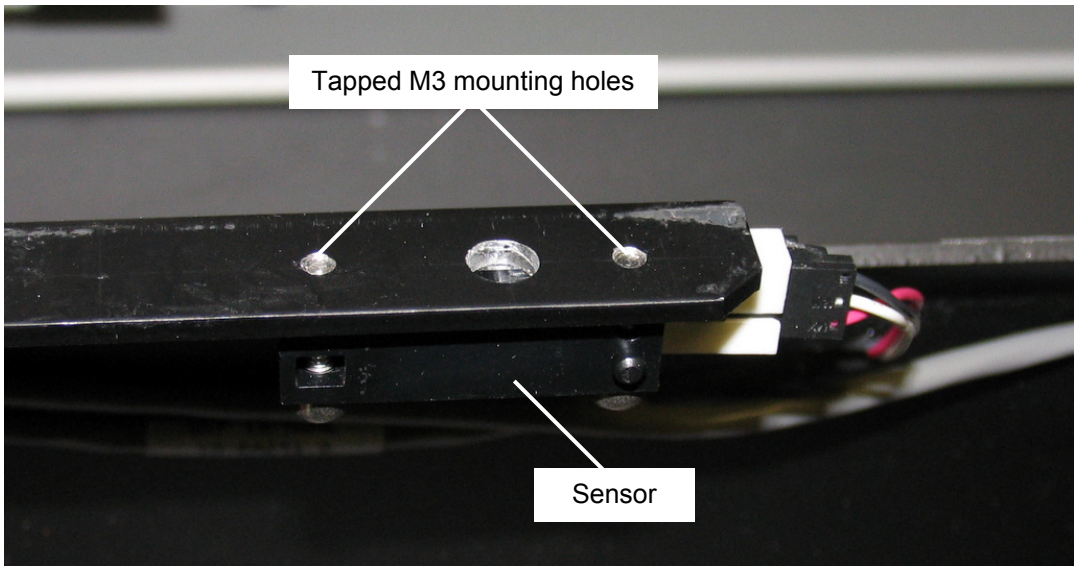
11. Adjust the speed of both the home- and away-side unload table cups up/down cylinders to match the speed of the outrigger pin cylinder. To do this, run a **`table cups up | down`** loop test and adjust the newly installed speed control elbows on the cups up/down cylinders.

5.4 Installing the New Plate Sensors

In order to detect both the home and away broadsheet plate entering and leaving the unload table, you need to add two new plate sensors and relocate the two existing plate sensors.

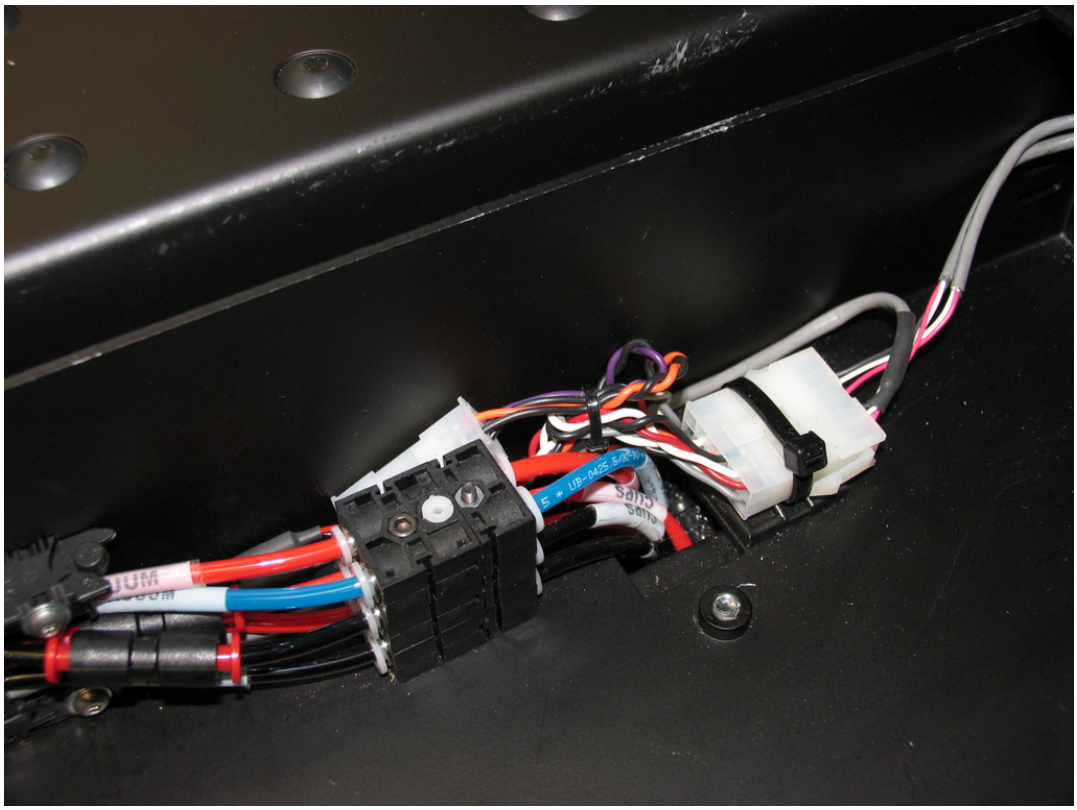
1. Remove the existing two plate sensors from the unload table and store them in a safe location for later reuse.
2. Refer to the drawing in Appendix A to drill the following holes in the correct locations.
   a. Using the 1/4-inch drill bit from the upgrade kit, drill the four holes for the sensors to “look through.”
   b. Using the 2.5-mm drill bit from the upgrade kit, drill a total of eight holes for mounting the four sensors. Note the orientation of the sensors, because the mounting is not symmetrical.
   c. Using the M3 tap and handle from the upgrade kit, carefully tap a thread into the eight sensor mounting holes.

3. Using the M3 screws from the parts kit, mount the four sensors in the new locations.

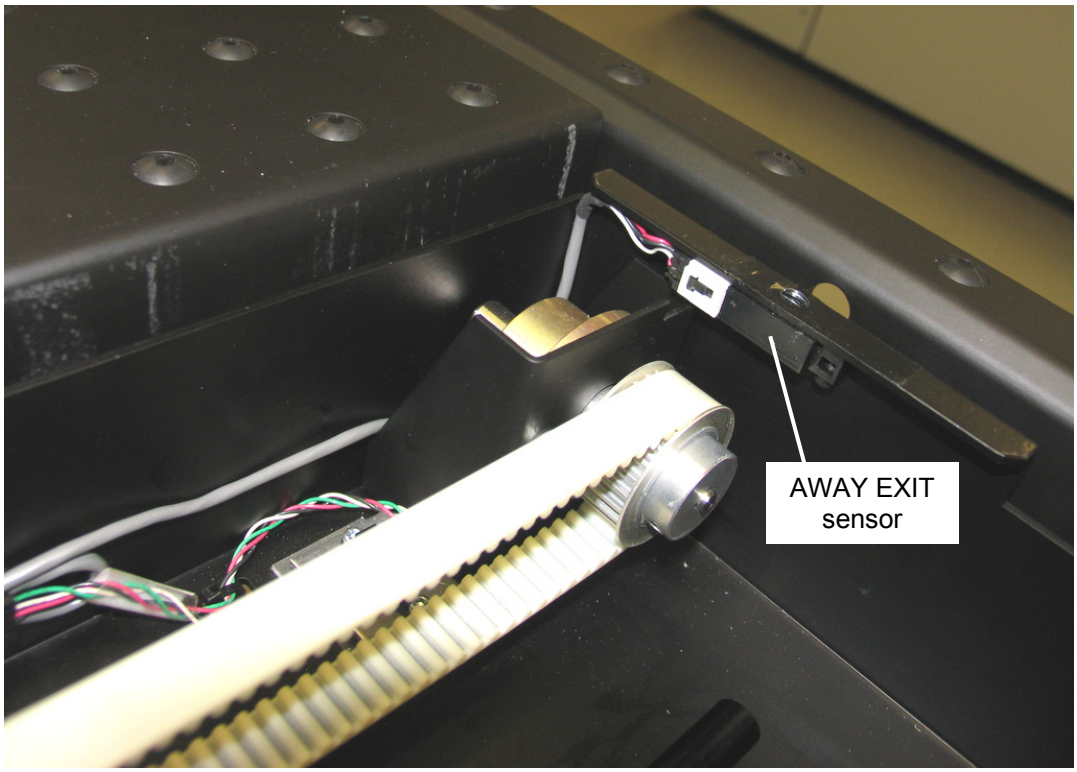


4. Connect the new sensor cable (10-5063B) to the existing cable harness and route the wires to the correct sensors as labeled on the wires.

   - IN-HOME
   - EXT-HOME
   - IN-AWAY



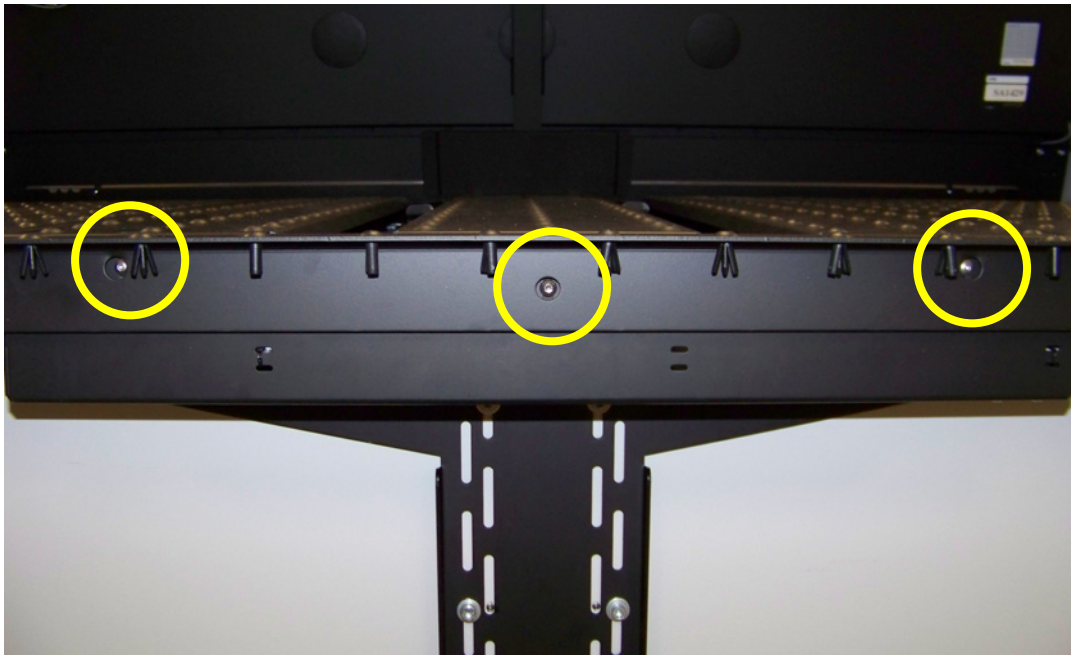
5. Connect the AWAY EXIT sensor to the existing EXIT sensor cable (0-3774B) that runs to the connection near the table stepper motor.



6. Secure all wires with the supplied cable ties.

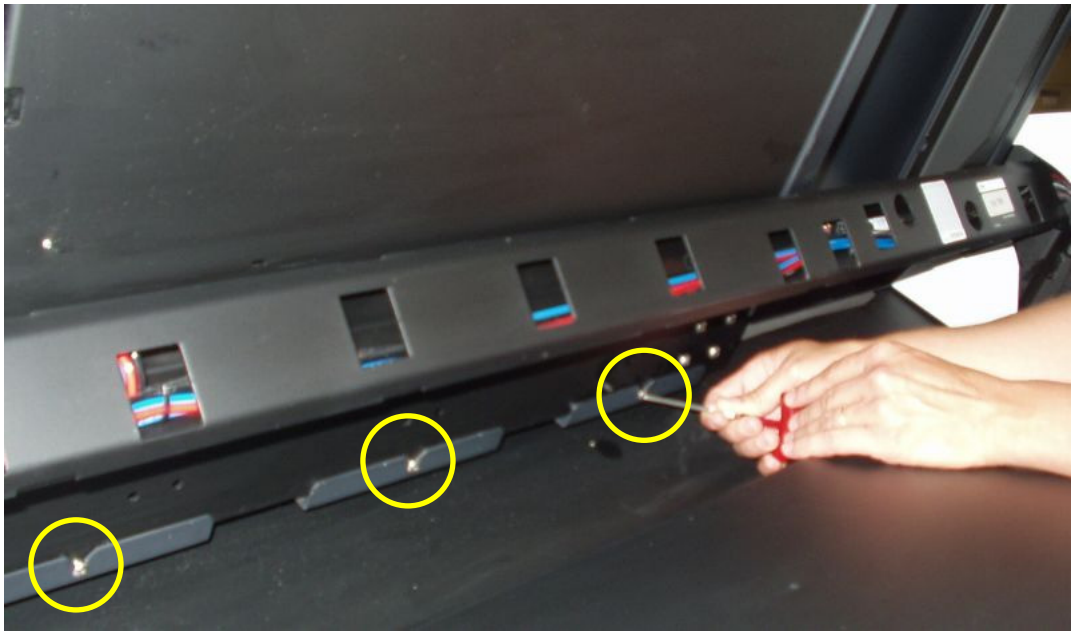
5.5 Reinstalling the Unload Table Panels

1. Reinstall the three unload table center panels.
2. Tighten the screw on the exit end of each of the three center panels.

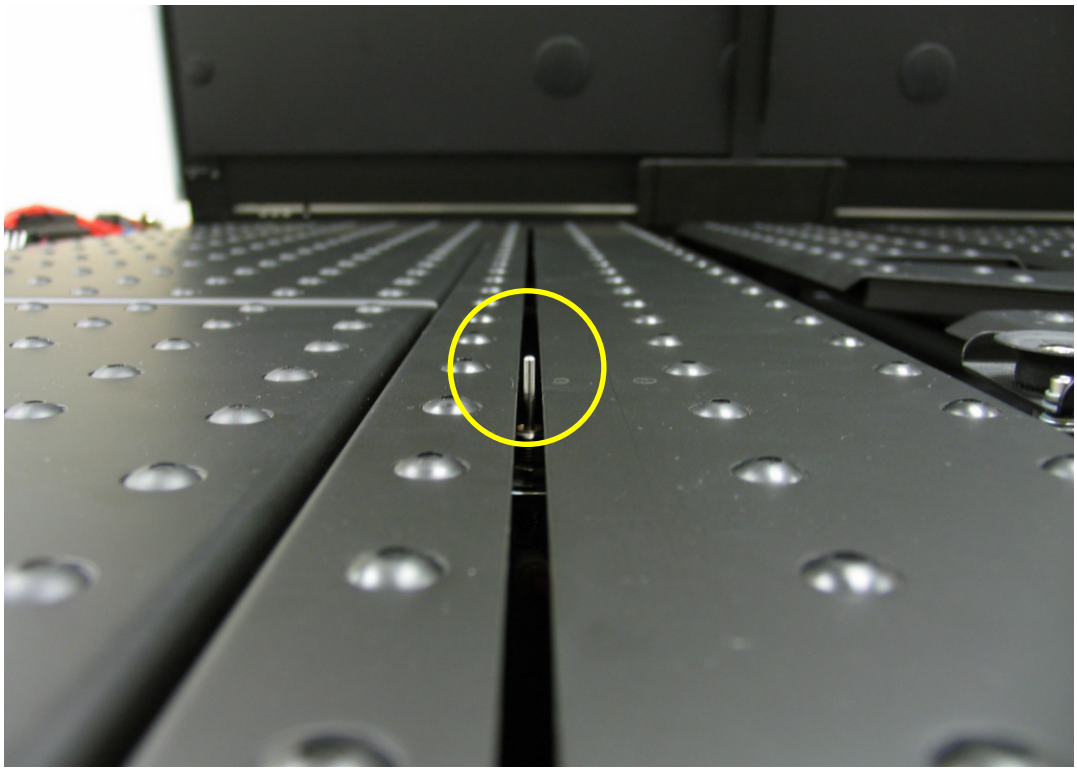


3. Move the unload table to the up position.
   `table up`

4. Tighten the screw on the entry end of each of the three center panels.



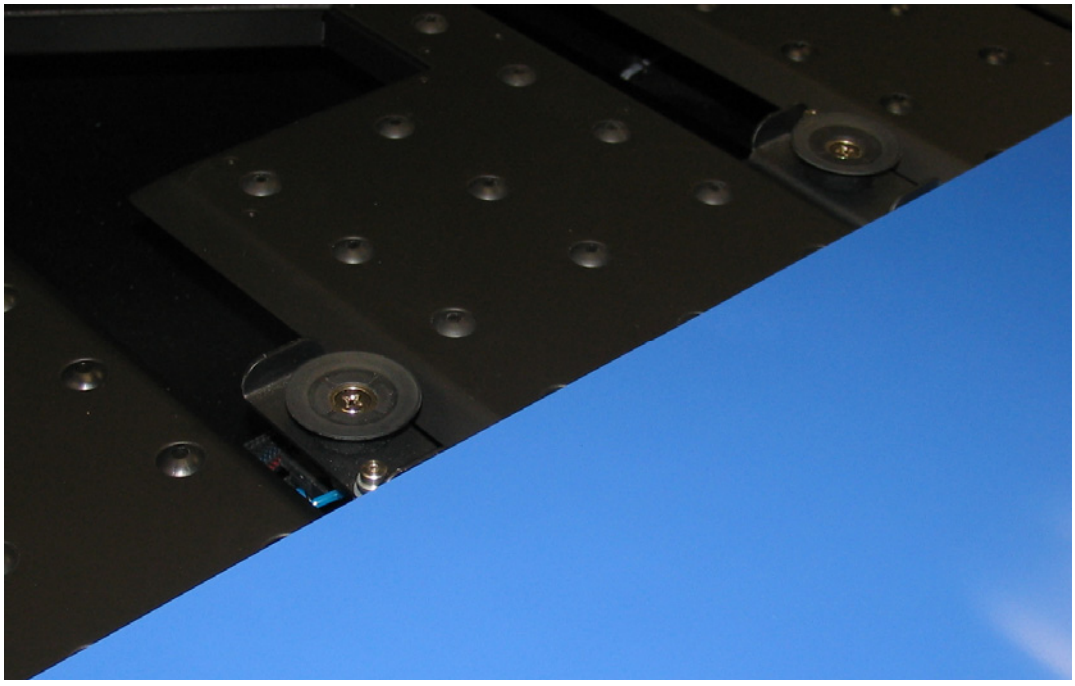
5. Move the table down (**`table down`**) and confirm that each outrigger pin is positioned in the center of the unload table panels' outrigger pin slots.



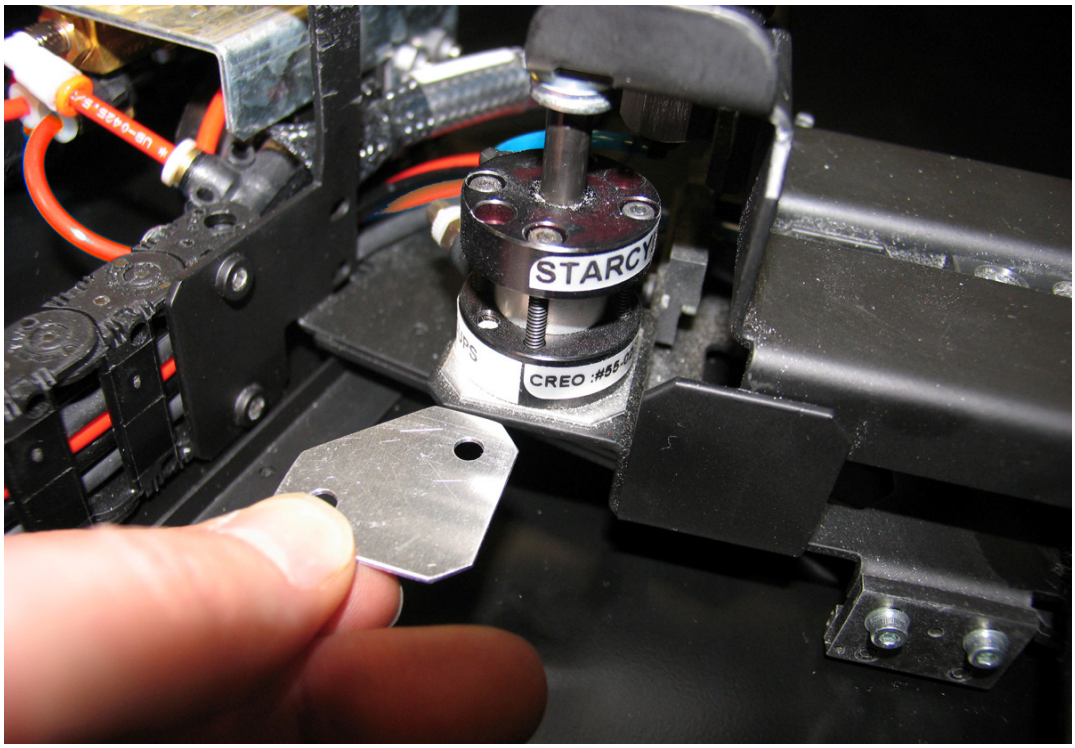
6. Move the unload table traveler between its home and away position (**`table move home | away`**,) with and without the unload cups activated (**`table cups up | down`**) to confirm that:
   - The outrigger assembly doesn't hit any unload table components during this movement
   - The outrigger pin stays in the middle of the slot
   - The outrigger pin extends above the panel for the entire length of unload table traveler travel when **`table cups up`** is activated
   - The outrigger pin cylinder shafts stays below the panel for the entire length of unload table traveler travel when **`table cups down`** is activated
7. If necessary, remove the unload table's center panels and readjust the position of the outrigger pin cylinders. When you are finished, ensure the jam nut on the outrigger pin cylinder is tightened and then reinstall the center panels.

6. TESTING THE UPGRADE

1. Place a long straight edge on top of the panels on the unload table to verify that they are properly aligned at the same height. If necessary, add washers underneath panels that are lower.
2. Check that all buttons on the unload table panels are fully seated. If any are protruding, push them down until they click into place.
3. Enter command:
   `table cups up`
4. Check to ensure that the vacuum cups and pusher fingers extend high enough to grab a plate and push it out.



5. If needed, add one or more of the supplied shims underneath the up/down cylinders to raise the entire assembly.



6. Check that the newly installed pin cylinders extend when the table cups are moved up and retract when the rotator is activated.

7. Ensure that the foamed plate pusher on the back of the load table makes good contact with both suction cups when the unload table is picking up plates unloaded from the drum onto the unload table. Adjust if necessary.

8. In Service Shell, enable the outrigger option and reset the device to apply the changes.

```
option outrigger enable
reset
```

9. Start Print Console and run a set of jobs to ensure the unload table operates correctly for dual broadsheet plates, single broadsheet plates on the home and away sides, and panorama plates.

APPENDIX A: LOCATION OF UNLOAD TABLE PAN SENSOR HOLES

