

TITLE: ODYSSEY™ Plotter: Edge Sensor Maintenance and Replacement

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Summary: This document provides information on the proper maintenance of Odyssey material edge sensors and explains how to replace them.

The ODYSSEY plotter uses two edge sensors to align the material. Each edge sensor has an optical element. If this sensor picks up dirt and/or debris, the material might not align or track properly.

To clean an edge sensor:

- With canned air, blow clean the space between each edge sensor and the plotter.
- With the plotter turned off, use a cotton swab and one or two drops of isopropyl alcohol to wipe the edge sensor lens
- If cleaning fails to correct the problem, replacement of the sensor might be necessary.

To replace an edge sensor:

CAUTION: The sensor is a static sensitive device. Wear a grounded wrist strap when handling the sensor. Leave the new sensor in the anti static bag until ready to install.

- Turn off power to the plotter.
- Remove the two screws that attach the edge sensor bracket to the plotter.
- Lift the entire edge sensor unit out of the plotter.
- Disconnect the cable that attaches to the edge sensor unit. The cable has two small tabs that fit into holes on the receptacle, pull on the ears of the connector, do not pull on the wires.
- Connect the replacement edge sensor unit to the cable. Make sure the tabs on the cable connector face the holes on the receptacle. Snap the connector in place.
- Insert the edge sensor unit into the plotter, making sure the opening between the sensor and the bracket points toward the cutting area of the plotter.

Edge Sensor Alignment

After an edge sensor is replaced, perform the edge sensor calibration procedure. This procedure is also required if any of the following happens.

- An edge sensor is physically moved, including removal and reinstallation.

- The front or back curved extrusion is moved.
- The electrical control board is replaced.

To calibrate the edge sensor (edges):

1. Load a roll of sheet of new material. The material should be at least four feet long and preferably three feet wide or more, with vinyl backing. The right edge of the material should appear perfectly straight over this length and have no nicks or defects.
2. From the Main Menu, press F4 and the Enter key simultaneously.
3. Press F2.
4. Press F1 (Calibrate)
5. Press F4 (Edges). The display shows the current edge offset.
6. Press Enter to run the calibration or Cancel to quit.
7. Wait while the ODYSSEY performs a series of alignment measurements. A set of 5 identical readings in a row is required to complete this calibration.

Note: This step could take several minutes. If the ODYSSEY runs beyond this time and the measured offset keeps changing, press Cancel and retry with a different sheet of material.

8. If the value displayed is greater than ± 10 , loosen and adjust one or both edge sensors, then repeat this procedure.
9. Press Enter to accept the new offset value or Cancel to keep the old value.