

Installation Guide: NexBot Robotics 842-013 Conveyor Section 1.5m

SKU: NXB-GEN-842-013 | Revision: 1.0 | Category: Accessories & Mounting > Workstation Equipment > Conveyor Sections

DANGER: Disconnect all power sources before beginning installation. Follow lockout/tagout (LOTO) procedures per OSHA 1910.147.

1. Required Tools & Materials

- Set of metric combination wrenches (8mm - 19mm)
- Metric socket set with ratchet
- Calibrated torque wrench
- 1-meter spirit level or laser level
- Industrial tape measure
- Rubber mallet
- Personal Protective Equipment (PPE): safety glasses, steel-toed boots, and work gloves
- Appropriate lifting straps and hoist for 45.5 kg load

2. Pre-Installation Checks

1. Verify the delivered product is SKU NXB-GEN-842-013 by checking the shipping label and product stencil.
2. Inspect the Anodized Aluminum 6061-T6 frame and legs for any dents, scratches, or warping that may have occurred during shipping.
3. Unpack the hardware kit and confirm all required nuts, bolts, washers, and connecting plates are present.
4. Ensure the installation floor area is clean, level, and free of debris or obstructions.
5. Measure the installation space to confirm it can accommodate the 1500 x 500 mm footprint and allows for safe access around the unit.
6. Confirm that adjacent equipment (other conveyor sections, robotic cells) is correctly positioned for connection.

3. Installation Procedure

Step 1: Position the Conveyor Section

Using approved lifting equipment and techniques, carefully move the 45.5 kg NexBot Robotics 842-013 Conveyor Section to its designated installation location. Ensure the orientation matches the production line flow.

Warning: Never attempt to lift or move the section manually without assistance. Use a mechanical lift or a team lift to prevent injury.

Step 2: Install Leveling Feet

Thread the four adjustable leveling feet into the pre-tapped holes at the base of each leg. Screw them in until they are approximately at the same height, leaving room for future adjustment.

Step 3: Perform Initial Leveling

Place a spirit level across the 500 mm width and along the 1500 mm length of the conveyor frame. Adjust the leveling feet until the section is approximately level in both directions.

Step 4: Align with Adjacent Equipment

Carefully push the conveyor section into its final position, aligning its connection points with the preceding or succeeding conveyor section. Ensure the side frames are flush and there is no vertical misalignment.

Warning: Beware of pinch points between conveyor frames during alignment. Keep hands clear of connection points.

Step 5: Install Connection Hardware

Insert the provided bolts and connector plates to join the 842-013 section to the adjacent unit. Hand-tighten the nuts initially to allow for minor adjustments.

Step 6: Perform Final Alignment and Leveling

With the sections loosely connected, perform fine adjustments to the leveling feet to achieve a perfectly level and smooth transition between the sections. Use the level across the joint to verify alignment.

Step 7: Torque All Fasteners

Using a calibrated torque wrench, tighten all connection and frame bolts to the specification outlined in the main system assembly manual. A consistent torque ensures structural rigidity and prevents loosening from vibration.

Warning: Do not over-torque fasteners, as this can damage the aluminum threads or warp the frame.

Step 8: Anchor to Floor (Optional)

If required by your facility's safety standards or application needs, use the anchor holes in the leveling feet to secure the conveyor section to the floor. Use appropriate concrete or floor anchors for this purpose.

Warning: Before drilling into the floor, verify that there are no subsurface utilities such as electrical conduits or water lines.

4. Post-Installation Verification

1. Double-check that all fasteners are tightened to the correct specification.
2. Verify the entire conveyor line is straight and level, with no dips or high points at section joints.
3. Manually pass a representative workpiece over the new section to ensure it transfers smoothly without snagging.
4. Push firmly on the side of the frame to check for any rocking or instability. Adjust leveling feet if motion is detected.
5. Ensure there is safe clearance around the conveyor for operators and maintenance personnel.
6. Remove all tools, hardware, and packaging materials from the installation area.

Note: For technical support, contact your authorized service provider or visit <https://robotics.barca.group/support>.