

Installation Guide: NexBot Robotics 842-005 Conveyor Section 2000mm

SKU: NXB-GEN-842-005 | 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

- Metric Allen Wrench Set (5mm, 6mm, 8mm)
- Torque Wrench with Metric Sockets (13mm, 17mm)
- Laser Level or Precision Spirit Level
- Measuring Tape (3m or longer)
- Rubber Mallet
- Heavy-duty Work Gloves
- Safety Glasses
- Adjustable Wrench

2. Pre-Installation Checks

1. Verify SKU NXB-GEN-842-005 on packaging matches the bill of lading.
2. Inspect the 2000mm anodized aluminum section for any shipping damage, such as dents, twists, or deep scratches.
3. Ensure the installation floor area is clean, clear of obstructions, and can support the weight of the conveyor system.
4. Confirm all required mounting hardware (support legs, joining plates, fasteners) are on-site and accounted for.
5. Review the master system layout diagram to confirm the correct placement and orientation of this specific conveyor section.
6. Check that the floor surface is level and prepared for anchoring, if required by the system design.

3. Installation Procedure

Step 1: Position Support Legs

Place the support legs at the designated locations according to your system layout plan. Roughly align them to match the 2000mm length of the conveyor section and ensure legs are oriented correctly for stability.

Step 2: Mount Conveyor Section onto Supports

With at least two people, carefully lift the 55.5 kg conveyor section and place it onto the prepared support leg brackets. Loosely attach the section to the brackets using the specified T-nuts and bolts.

Warning: Heavy object. Use a team lift or certified lifting equipment to prevent injury. The section weighs 55.5 kg.

Step 3: Connect to Adjacent Sections

If this section is part of a longer line, align the 842-005 section with the adjacent conveyor section. Use NexBot joining plates and hardware to loosely connect the sections, ensuring the top surfaces and side rails are perfectly flush.

Warning: Ensure no vertical or horizontal gap exists between sections to prevent pinch points or impede material flow.

Step 4: Level the Conveyor Surface

Use a laser level or precision spirit level across the entire 2000mm length and 500mm width. Adjust the height of the support legs until the conveyor surface is perfectly level, or at the precise incline specified in your system design.

Step 5: Secure All Fasteners

Systematically tighten all fasteners, starting from the support legs and then moving to any joining plates. Use a torque wrench to tighten bolts to the specification provided in the support leg documentation to avoid over-tightening.

Warning: Do not over-torque fasteners. This can damage the aluminum extrusion, strip threads, or introduce stress into the frame.

Step 6: Install End Caps and Side Guards

Install protective end caps on any exposed extrusion ends using a rubber mallet to gently tap them into place. Attach side guards or guide rails into the T-slots as required by your application to ensure product containment.

Step 7: Anchor Supports to the Floor

If required for high-speed or high-load applications, mark the anchor points through the support leg base plates. Drill and install appropriate floor anchors to permanently secure the conveyor system.

Warning: Verify floor composition before drilling. Ensure no utilities (electrical, plumbing, data) are present below the drilling locations.

4. Post-Installation Verification

1. Re-verify that the entire conveyor line is level and stable by applying firm pressure at various points.
2. Check that all fasteners are tightened to the correct torque specifications.
3. Confirm there are no gaps or misalignments between conveyor sections that could snag conveyed items.
4. Ensure all safety guards, end caps, and other accessories are securely installed and do not interfere with the transport path.
5. Wipe down the anodized aluminum surface with a soft cloth to remove any dirt, grease, or handprints from the installation process.
6. Perform a final walk-through of the area to identify and clear any remaining tools or potential trip hazards.

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