

Installation Guide: NexBot Drives 763-006 Multi-Part Maintenance Kit

SKU: NXB-KIT-763-006 | Revision: 1.0 | Category: Wear Parts & Consumables > Robot Maintenance Kits > Emergency Repair Kits

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

1. Required Tools & Materials

- Calibrated Torque Wrench (low-to-medium range)
- Metric Hex Key Set (2mm - 6mm)
- Digital Multimeter (DMM) with insulated probes
- Anti-Static Wrist Strap and Mat
- Personal Protective Equipment (Safety Glasses, Gloves)
- Insulated Phillips and Flathead Screwdrivers
- Non-Abrasive Lint-Free Cloths
- Fuse Puller Tool

2. Pre-Installation Checks

1. Verify the correct robot system is powered down and in the designated maintenance position.
2. Apply all required Lockout/Tagout (LOTO) procedures to primary power sources before beginning work.
3. Confirm the received kit is SKU NXB-KIT-763-006 and the packaging seal is intact.
4. Inspect the kit's outer packaging (Dimensions: 350 x 250 x 80 mm) for any signs of shipping damage.
5. Prepare a clean, well-lit, and static-dissipative work surface adjacent to the service area.
6. Review the specific maintenance chapter for the robot model being serviced.

3. Installation Procedure

Step 1: Kit Unpacking and Content Verification

Carefully open the NXB-KIT-763-006 package. Lay out all components on the static-free surface and verify each item against the included packing list to ensure the kit is complete before starting the service.

Warning: If any components are missing or damaged, do not proceed. Contact NexBot Robotics support with the kit's lot number.

Step 2: Accessing the Robot Drive Controller

Following the robot's service manual, unfasten and remove the main controller access panel. Store the panel and its original fasteners in a safe location to prevent loss.

Step 3: Removing the Existing High-Current Fuse

Locate the main high-current fuse within the drive controller assembly. Using an appropriate fuse puller, carefully remove the old fuse from its holder, avoiding contact with adjacent components.

Warning: Confirm with a DMM that all power has been discharged from nearby capacitors before handling any electrical components, even after LOTO.

Step 4: Installing the New High-Current Fuse

Take the new High-Current Fuse from the kit. Align it correctly with the fuse holder and press it firmly and evenly into place until it is fully seated. Ensure it has made a solid connection.

Warning: Never force a fuse into place. Verify the amperage and voltage rating on the new fuse matches the requirement specified in the robot's service manual.

Step 5: Replacing Specified Fasteners

Identify the key structural or high-vibration fasteners designated for replacement in the service manual. Systematically remove the old fasteners and replace them with the new M3, M4, and M5 fasteners provided in the Assorted Fastener Set from the kit.

Warning: Use a calibrated torque wrench to tighten all new fasteners to the specification listed in the robot's service manual. Do not overtighten.

Step 6: Re-installing Access Panels

Once all components from the kit have been installed, carefully re-attach the controller access panel. Ensure no wires or cables are pinched during re-assembly.

Step 7: Disposal of Used Components

Gather all old components removed during the service, including the old fuse and fasteners. Dispose of these used parts in accordance with local environmental and facility regulations.

4. Post-Installation Verification

1. Perform a final visual inspection of the service area to ensure all connections are secure and no tools have been left inside the controller.
2. Double-check that all newly installed fasteners have been torqued to the correct specifications.
3. Verify routing of all internal cables to ensure they are clear of moving parts and heat sources.
4. Carefully remove all Lockout/Tagout devices per established safety procedures.
5. Power on the robot system in a controlled or manual mode and listen for any unusual noises.
6. Execute the standard post-maintenance system diagnostic and calibration routines to confirm full functionality.

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

