## **Replacing the NTN N-CON Collector Motor Box**



## Items needed:

- Medium-sized, slot screwdriver
- 3/16-inch hex key (long L Allen wrench)
- 3/32-inch hex key (long L Allen wrench)
- 3/8-inch wrench
- Permanent marker
- Replacement motor box (included)



Please contact the Site Liaison at 1-800-952-7353 if you have any questions or concerns.

## **Instructions:**

With the collector lid in the closed position, complete the following steps.

- 1. Turn the power switch to the OFF position.
- 2. Disconnect power from the collector by unplugging the power cord from the collector or power source.
- 3. Loosen the four  $\frac{1}{4}$ -20 socket cap screws on the motor drive arm with a  $\frac{3}{16}$ " hex key.

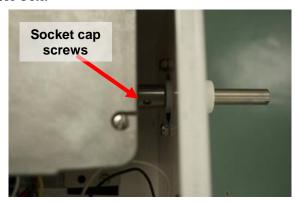


- 4. Slide both drive arms off the motor drive axels.
- 5. Swing the lid cover over to the fully open position, resting on the splash shield.
- 6. Remove the bucket, cover and set aside.
- 7. Release front and rear latches on cover and remove.

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- 8. Disconnect the Molex connectors from the current motor box.
- 9. Mark the shafts attached to the motor drive with a permanent marker to indicate left and right.
- 10. Loosen the set screw that locks the right motor drive axel connecting the front collector arm to the motor box.

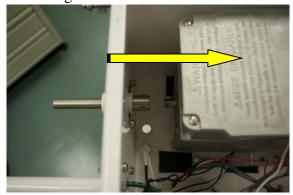


11. Remove the two screws that secure the right axel bushing to the collector. A slot screwdriver and 3/32 wrench will be needed. Set aside the motor drive axel assembly.





- 12. Loosen the set screw that locks the left motor drive axel.
- 13. Slide the motor box to the right and remove.



14. Transfer the Motor box standoffs from the old motor box to the new one.

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- 15. Install the replacement motor box.
- 16. Slide the motor box to the left and tighten the set screw on the motor drive axel.
- 17. Re-attach the right motor drive axel assembly from step 11. Install both screws and lock nuts before tightening one screw completely. Tighten the set screw.
- 18. Reassemble the collector by repeating steps 3-8 in reverse order.
- 19. Reconnect power to the collector.
- 20. Cycle the collector by activating the sensor. The lid should open and close freely.
- 21. Include a note in Block 10 (Remarks) of the FORF to indicate that the motor box was replaced.

## **Aligning Collector Lid**

The collector lid should seat firmly on top of the bucket when closed. Follow these procedures to align the collector lid.

- 1. Open the collector by activating the sensor, turn the key switch OFF and then turn it back ON.
- 2. When the forward edge of the collector seal pad is approximately a half inch above the bucket, turn the key switch OFF.
- 3. Loosen the four \(^1/4\)-20 cap screws on the motor drive arm.
- 4. Press the collector lid down firmly on the sample bucket. While holding the cover in place, re-tighten the four cap screws on the motor drive arm.
- 5. Turn the power switch ON and check the alignment. Cycle the collector by activating the sensor.

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