

## **Bottom Bracket Repair – NXT (7000)**

Bulletin Number:	635-4161	Revision:	Α
Bulletin Date:	01/10/2010	Revision Date:	
Applies to Models:	Spinner NXT 7000		

Spinner NXT's manufactured prior to March 2007 may have premature wear of the bottom bracket housing. Star Trac has developed a new cartridge design 740-7515 if the traditional bottom bracket replacement procedure with the 800-4030 is not stable.

The new cartridge design provides a heavy duty steel sleeve that needs to be pressed into the existing bottom bracket housing and will assure smooth operation of the Spinner NXT

#### **Time Required**

60 minutes

#### **Parts Required**

- NXT Bottom Bracket Cartridge 740-7515
- Loctite 680 Retaining Compound part number 140-3420 (two .5 ml capsules per bike)
- NXT Crank set 800-4026
- Bottom Bracket hardware kit 740-7512

#### **Tools Required**

- 3 mm Allen wrench
- Flat screwdriver
- Wrench/sockets:
  - 14 mm
  - 15 mm
  - 29 mm
  - 42 mm
- Crank arm puller
- Hammer, up to 3 lb sledge preferred
- Drift pin
- Tape measure
- 220 grit sand paper
- 1" x 3" cast iron pipe union

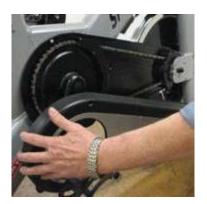
635-4161 2 of 10 Rev: A



# **IMPORTANT NOTE:**

Before you begin you must understand that you will not be able to use the NXT Spinner® for <u>at least</u> 6 hours. The Loctite used to secure parts will need time to cure. If you can allow additional cure time, please do so.

**Step 1.** Remove the chain cover and the inner chain guards (front and back).





Step 2. Loosen the flywheel on both sides. Slide the flywheel back so there is slack on the chain.



First, loosen the jam nut then back out the screw.



Next, loosen the axle nut.

635-4161 3 of 10 Rev: A



**Step 3.** Remove chain from the main sprocket. The chain may be dirty. Use a towel to hold the chain while removing.

Note: Use caution to avoid getting your fingers pinched between the chain and sprockets.





Step 4. Remove the crank arms:







**Step 5.** Remove the bottom bracket shaft and bearings.





Use a drift pin to tap out the old bearings. Use caution to not damage the bearing housing.

635-4161 4 of 10 Rev: A



**Step 6.** Clean the bearing housing in the bike frame. Be sure to remove all dirt and grease residue. If required use 220 grit sand paper or emery cloth to remove any excessive material or adhesive to make su housing is clean and free of debris.



Before (dirty)



After (clean)

**Step 7.** Apply Loctite 680 Retaining Compound to the inside of the NXT housing. The compound should be applied to both sides of the frame housing and on the center bore of the housing.



635-4161 5 of 10 Rev: A



**Step 8.** Separate new Bottom Bracket Cartridge into 4 pieces. Main Housing, Threaded Cap, Retaining Nut, Washer



**Step 9.** Install the main housing of the new bottom bracket cartridge from the left side of the bike. Using the 1" pipe coupling and sledge hammer. Hammer against the pipe coupling to seat the Bottom Bracket cartridge into the frame. The cartridge is fully assembled when there is a 1/8" lip of the cartridge showing outside the frame housing.

Do not hammer the housing in by the main axle. This will damage the cartridge and rendering the housing unusable.

Wipe off any excess Loctite when fully installed.



635-4161 6 of 10 Rev: A





**Step 10.** Carefully thread the right side of the cartridge into the housing and hand tighten. Using the 42 mm wrench or 42 mm specialty tool tighten the right hand housing to 60 ft lbs. This needs to be very tight. There should be no gap between the edge of the new cartridge and the frame housing.





635-4161 7 of 10 Rev: A



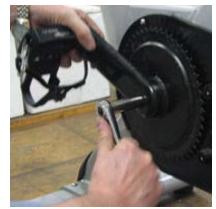
**Step 11.** Install the washer on the left side of the frame. Install the new axle nut on the left side of the frame. Tighten to 30 lbs-ft.



Tighten the nut to 30 lbs-ft

**Step 12.** Install the new crank arms. Do not use the old crank arms as wear and tear on the used crank arms may result in improper fit. Make sure the crank hardware kit 740-7512 is used with washers, bolt and blue Loctite. Please refere to the hardware instruction bulletin for installation instructions.

Once hardware is installed and torqued to proper tension check the axle for normal rotation. Both crank arms should rotate without rubbing or binding.



Tighten the nut to 30 lbs-ft



Install the bolt cap.



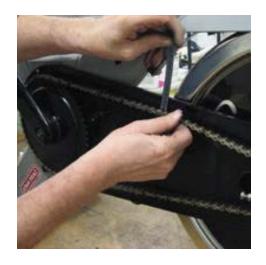
**Step 13.** Reinstall the chain. Pull the flywheel forward to take up the slack in the chain. Finger tighten the flywheel adjustment screws to hold some tension on the chain.





**Step 14.** Use the flywheel adjustment screws to align the flywheel and add tension to the chain. Do not over-tighten the chain. The chain will be tight when there is about 1 inch (2.5 cm) of up-down movement in the center between the sprockets.





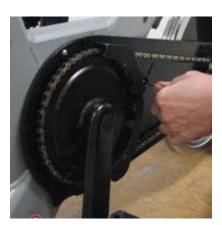
635-4161 9 of 10 Rev: A



**Step 15.** Secure the flywheel axle nut on both sides of the frame. Take care to make sure the nuts are tightened on both sides at the same time so the flywheel stays in the correct, centered position. Reinstall the chain guards and chain cover.



Tighten the nut to 30 lbs-ft





**Step 16.** Test bike for function and verify chain tension. Adjust as needed.

## **IMPORTANT NOTE:**

#### Do not use the bike for at least 6 hours.

You may test the bike for proper chain tension and normal bike function immediately after service. However do not return to full use for at least 6 hours.

635-4161 10 of 10 Rev: A