

## **Part Installation Procedure**

# **Pro Bike 6300/6400 Series – Crank Bearing Replacement**

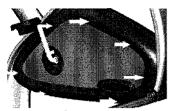


Image 1

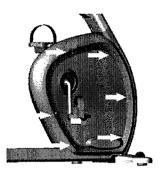


Image 2

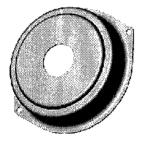


Image 3



Image 4



Image 5

## Parts Needed:

Crank bearing assembly kit 800-4004 Loctite 620

#### **Tools Needed:**

1 ½" or 36mm Open End Wrench or large 1 ½" Adjustable wrench 4 mm Allen Wrench Long Thin Flat Screwdriver (Approx. 10" Long) #2 Phillips Head Screwdriver Small Hammer Pedal Wrench Or 15mm Open End Wrench Small Pliers

## Testing / Adjusting the bearings

If either side to side play or a grinding noise from the bearings exists you may be able to adjust the looseness or tightness of the bearing assembly without replacing any parts.

- 1. Using the 9/16" open end wrench or a pedal wrench, remove the pedals. NOTE: The left pedal is reversed thread clockwise to loosen.
- 2. Remove the shroud screws from the right side using a Phillips screwdriver. (Remove the right shroud) **Image 1** Upright or **Image 2** Recumbent
- 3. Remove the left shroud by removing the Phillips screws from inside the left shroud. (Remove the left shroud)
- 4. Remove the drive belt off the crank pulley and the brake assembly by walking the belt off to the side as you slowly turn the crank. **NOTE**: Be careful to not get your fingers caught in the belt.
- 5. Remove the bearing cover on the left side of the crank assembly. (On the upright model it is necessary to remove the LCB to remove the bearing cover.) Image 3
- 6. Using the screwdriver bend open the tabs to allow the lock nut to turn. **Image 4**
- 7. Using a 7/8" open end wrench, remove the lock nut and the retaining washer from the left side of the crank arm. (Left side is reverse threads, Clockwise to loosen) **Image 5**
- 8. Using the 1 ¼" or 36mm Open End Wrench or large 1 ½" Adjustable wrench, carefully adjust the tension on the bearings by turning the cone nut. **NOTE**: DO NOT OVER TIGHTEN THE BEARINGS.
- Tightening the bearings too tight will cause a binding feeling within the bearings and the crank arm will be harder to turn.
- Loosening the bearings too much will cause a grinding noise and side to side looseness of the crank arm.

If adjusting the bearings did not solve the issue then proceed to crank bearing replacement.



# **Part Installation Procedure**



Image 1



Image 2



Image 3

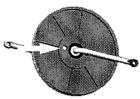


Image 4

## **Crank Bearing Replacement**

## Removing the Crank assembly

 Remove the 6 long screws from the right side of the bike using the 4mm Allen wrench and pliers to hold the nuts on the left side of the bike. Image 1 NOTE: There is a small hole in the crank pulley to allow access to insert the Allen wrench.



2. Remove the Lock nut and the retainer washer (if you have not done this in testing the bearings) and cone nut from the left side of the crank assembly (left side is reverse thread, Clockwise to loosen). **Image 2** 

### Removing the bearings

- 1. Push the crank assembly from the left side to the right as far as it will go, this will allow access to the inside of the bearing and the spacers.
- 2. Remove the right bearing by tapping it out with the screwdriver from the left side; you can also push on the spacers to get the bearing out. **Image 3**
- 3. Tap the bearing out of the left side by inserting the flat screwdriver through the access hole on the pulley and tap the all around the bearing spacers to tap the bearing out of the housing. **Image 4**
- 4. Remove the bearings and spacers from the crank assembly.



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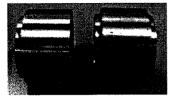


Image 1

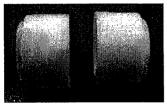


Image 2

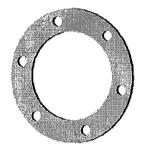


Image 3



Image 4



Image 5

## Replacing the crank bearing assembly

The new crank assembly has steel spacers (Image 1) instead of nylon spacers (Image 2) and does not have the right side bearing plate. Image 3 Image 4 shows the way the bearings and spacers would look inside the housing.

- 1. Clean the area inside the bearing housing.
- 2. Apply some of the 620 Loctite to the outer surface of the bearing then insert the right bearing in to the bike and align the right bearing in the housing and make sure it is seated properly.
- 3. Insert the crank arm into the right side of the bike with the pulley on the right side of the crank arm.
- 4. Slide the new steel bearing spacers onto the crank assembly it does not matter which spacer goes in first but do align them so they interlock into each other. Image 4 (Make sure the spacer is in the inner race of the right bearing).
- 5. Apply some of the 620 Loctite to the outer surface of the bearing then insert the left bearing and align the spacer to go into the inner race of the bearing (a small screwdriver or Allen wrench that can get inside the inner hole will help to align it).
- 6. Put the Cone nut onto the left crank arm and tighten it to force the bearings into the bike frame making sure the spacers are still aligned. Make sure the bearing is fully seated.

## ALERT: The bearing plate is not used on the right side of the bike.

- 7. Insert the screws through the small hole in the right side of the pulley and attach left bearing plate and the nuts on the left side, tighten all the screws equally.
- 8. Install and tighten the lock nuts fully and then check the outer screws again to make sure they are tight.
- 9. Rotate the crank and test for proper operation.
- 10. Attach the retaining ring and lock nut and bend the tabs of the retaining ring one in and one out to hold the lock nut securely in place. Image 5



