AXLE OR SPROCKET REPLACEMENT - MODEL B



FLYWHEEL COG TOOL SET - PN 484

Axle Shaft - PN 248 Flywheel Repair Sprocket Kit - PN 485 Chain w/Connector & Swivel - PN 280



MORRISVILLE, VERMONT USA WWW.CONCEPT2.COM E-MAIL:ROWING@CONCEPT2.COM

TOOLS NEEDED: Philips Head Screwdriver Flat Head Screwdriver Long Nose Pliers Pliers or Pipewrench

Bridge Pin Hammer 1/2″ Wrench

Note: Please read through these directions completely before beginning replacement procedure. It is highly recommended that the chain be replaced at the same time as the sprockets. The old chain does get worn and may not work at all on the new sprockets. If it does work, it will probably wear the new sprockets prematurely.

1. Remove the Performance Monitor from the wheel assembly by following the enclosed directions.

2. Pull the handle out a few feet from the chain guide and put the bridge pin through the chain where it emerges from the monorail. This will hold some slack in the chain.

3. Remove the handle by tapping the rounded end of the U-bolt to dislodge the stainless steel nuts from the wooden handle. Use a "" wrench to remove the two nuts from the U-bolt. Remove the U-bolt from the handle and chain; remove the chain from the sprockets and let it rest on the floor.

4. Use a "" wrench to remove the four bolts which hold the flywheel assembly to the black arms. Hold on to the assembly wheel while removing the bolts so that the assembly does not drop to the floor.

5. The cage around the wheel is made up of two separate halves. When the two halves are disassembled they must be reassembled with no change in their relative position. To accomplish this, mark each half with a piece of tape. The marks can then be aligned when the cage is reassembled.

6. Lay the wheel flat on its side. Remove the retaining clip from the axle at the center of the cage. Long nose pliers work well to grab the clip. We have included new clips with the parts in case the old clips are damaged.

7. Use the "puller" tool to remove first cage half. Screw the two outside (5/16"x1") bolts into the mounting holes of the cage and turn the center bolt clockwise. See Fig. 1 below left. Make sure that the center bolt is pushing onto the axle and not the bearing.



Fig. 1

When the bearing is removed from the end of the axle, the two flywheel cage halves can be separated by prying the hooks on one half over the wire of the other half. A screwdriver or other flat tool works well for this. See Fig. 2.



Fig. 2

8. Remove "puller" from cage and set this half aside. The second half can be removed the same way.

9. You now have a flywheel with an axle through it and two cage halves. This is a good time to clean everything. WD-40, or other solvents and a rag will remove any dust and/or oil from the wheel and the cage.

10. Remove the sprockets from the axle. The tool that looks like a large nut with a bearing inside it will hold the axle so the sprockets can be unscrewed. This tool should be placed onto the end of the axle opposite the sprockets. The writing on the bearing should be away from the wheel. The large nut can then be held with a wrench and the sprockets removed counterclockwise. A large pair of pliers or a pipe wrench may be needed depending on how severely the sprockets are worn. See Fig. 3.

11. When putting on the new sprockets, the larger one must go on first with the hub of the sprocket toward the wheel. The smaller one can then go on. Both sprockets can be put on finger tight. They do not need to be tightened with a wrench. See Fig. 4.

12. Gently lay the flywheel down on its side with the flat side of the wheel up. Take the open cage half (this is the one with the chain guide and wire for the monitor on it) and start the bearing onto the end of the axle. The third and final tool is then used to push the bearing back onto the axle. One end of the tool is countersunk; this is the end to use toward the axle. Center the tool, countersunk end down, on the bearing at the center of the cage and gently tap the end with a hammer. When you feel the axle bottom out in the tool, stop tapping. The end of the axle will go into the countersink the correct distance so a clip can be inserted. See Fig. 5.

13. Turn the flywheel over and place the other cage half on the wheel. Align your marks on the two cage halves and rehook the halves using the same technique as in disassembly. See steps 8, 7 and 6. Tap this half onto the axle the same way as the first half. Double check your alignment marks on the cages and, if they are correct, put the new clips on both ends of the axle. The clips need to be in the grooves to hold securely.

Fig. 5

14. Attach the Performance Monitor to the flywheel following the same page of instruction for the disassembly. Mount the flywheel assembly to the two arms of the Indoor Rower.

Towards flywheel





Fig. 3