

# Arc Trainer® 600A/610A Primary Drive 16 Rib Belt

Kit No. 600AK020

Installation Instructions

**NOTE:** This instruction sheet describes how to replace the primary drive 16 rib belt on the Arc Trainer 600A/610A.

**! WARNING:** Disconnect the power cord before continuing this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

## TOOLS REQUIRED

- Cloth or rag (2)
- 1/2" Socket wrench
- Phillips screwdriver
- 1/2" Open end wrench
- 3/16" Allen wrench
- 9/16" Socket wrench
- 7/16" Socket wrench
- 9/16" Open end wrench
- 3" Socket wrench extension
- 600AK012 (not supplied with this kit)

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1.

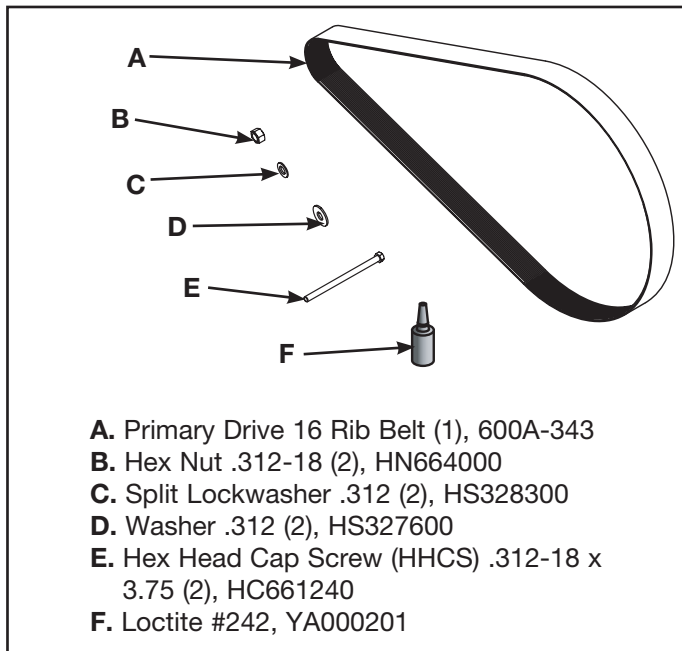


Figure 1

3. Disconnect the power source.

- A. Turn the main power switch to the off (0) position and unplug the power cord from the power outlet.

4. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws and four washers securing the access cover. See Figure 2.

- B. Remove the access cover.

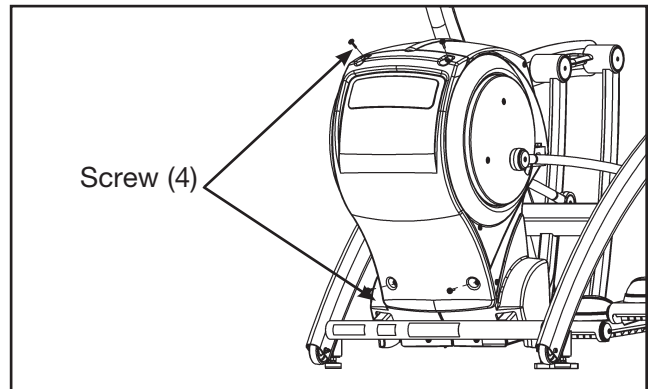


Figure 2

5. Detach the linkage arms.

- A. Using a 3/16" Allen wrench, remove the SHCS, washer, cap and spacer securing the linkage arm. See Figure 3. **NOTE:** Figure 3 shows the contents of the linkage cap kit that will be installed in step 19A.

- B. Lay the linkage arm down on the frame. **NOTE:** Place a cloth in between the linkage arm and the frame to prevent scratches.

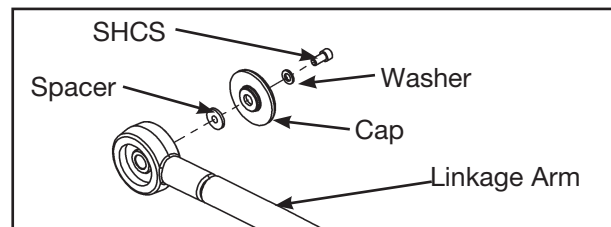


Figure 3



**6. Remove the side covers.**

- A.** Remove the six screws and six washers securing each side cover in place. See Figure 4.

- B.** Remove both side covers.  
**NOTE:** The gasket will come off with one of the side covers.

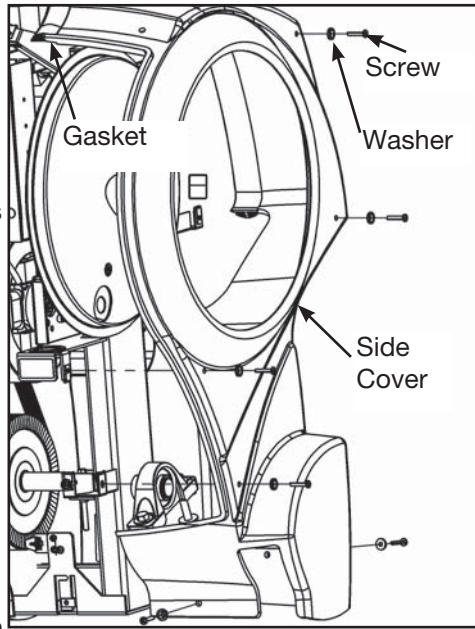


Figure 4

**7. Remove the crank covers and the crank arm disk supports.**

- A.** Using a Phillips screwdriver, remove the three screws securing each crank cover (and remove the crank covers). See Figure 5.
- B.** Using a Phillips screwdriver, remove the screw securing each crank arm disk support. See Figure 6.

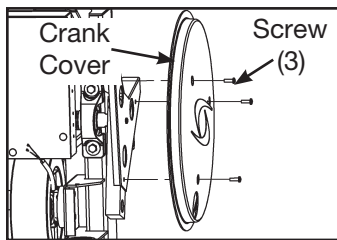


Figure 5

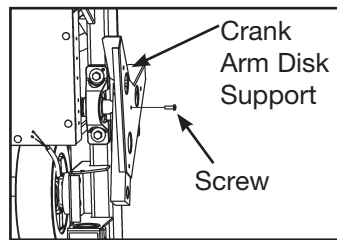


Figure 6

**8. Remove the Idler Pulley.**

- A.** Using a 9/16" socket wrench, remove the two bolts and washers from the idler pulley.
- B.** Remove the idler pulley from frame. See Figure 7. **NOTE:** Idler pulley is not needed with self-tensioning belt.

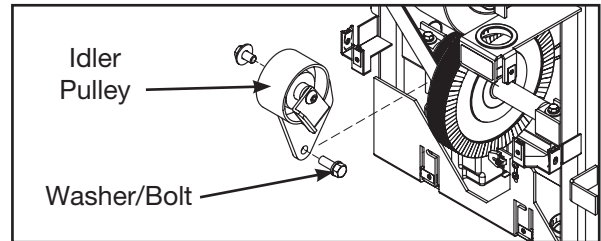


Figure 7

**9. Remove HHCS on lower pulley.**

- A.** Using a 7/16" socket wrench with a 3" extension, remove the two HHCS, two lock washers and two flat washers from the lower pivot shaft. See Figure 8.

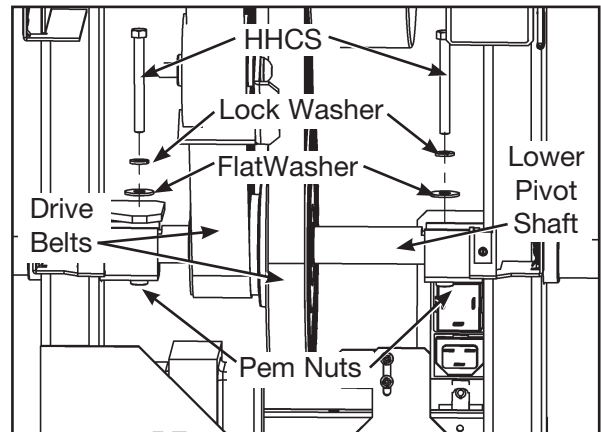


Figure 8

**10. Remove the lower pivot shaft.**

- A.** Remove the lower pivot shaft and spacers. Set them aside, they will be reinstalled in step 15B.
- B.** Reinstall the HHCS that was removed in step 9 and turn in at least 5 turns.
- C.** Strike the HHCS head with a metal hammer to brake the pem nut free from the bracket and discard. See Figure 8.

## 11. Crank shaft assembly pillow block bolts.

- A. Using a 9/16" socket wrench and a 9/16" open wrench remove the two bolts, four washers and two nuts from the left pillow block. See Figure 9.

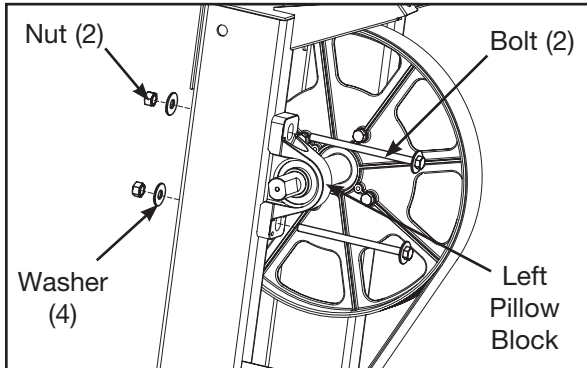


Figure 9

- B. Loosen the two bolts on the right pillow block. **NOTE:** Do not remove bolts.

## 12. Remove old primary drive belt.

- A. While pulling back on the left side of the crank shaft assembly, slide the belt past the pillow block.

## 13. Installing new primary drive belt.

- A. Install new primary drive belt by pulling back on the left side of crank shaft assembly and at the same time slide the belt past the pillow block.

## 14. Attach the crank shaft pillow block bolts.

- A. Slide alignment pin on pillow block into hole on frame
- B. Using a 9/16" socket wrench and a 9/16" open wrench, secure the two bolts, four washers and two nuts (removed in step 10A) to the left pillow block. See Figure 9.
- C. Secure bolts on the right pillow block that were loosened in step 11B.

## 15. Attach the lower pivot assembly.

- A. Place the two belts on the lower pivot shaft.
- B. Reinstall the two spacers that go under the lower pivot shaft (removed in step 10A).
- C. Attach the two new HHCS, two lockwashers, two washers and two hex nuts.

- D. Turn each HHCS in a couple of turns by hand.

- E. Place secondary drive belt on the (secondary pulley and then on the lower pulley.

- F. Place primary drive belt on the lower pulley and then stretch onto crank shaft pulley.

- G. Using a 1/2" socket wrench with a 3" extension tighten one of the HHCS a few turns then tighten the other HHCS a few turns. Alternate until both HHCS are secure.

- H. Using a straight edge, verify that both pulleys are aligned properly. See Figure 10. **NOTE:** The straight edge must be no more than 1/16" from pulley edge.

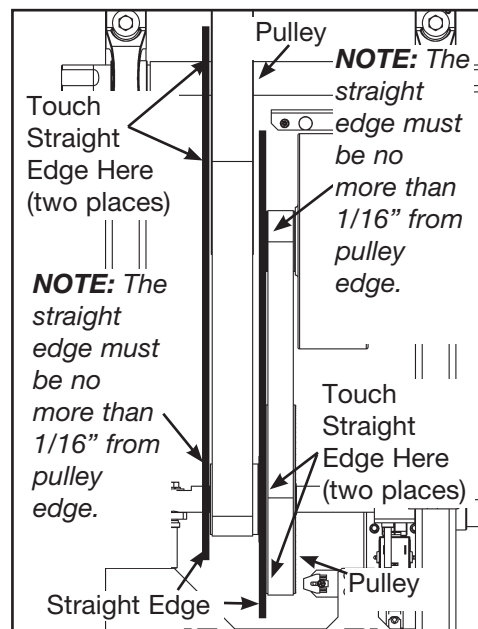


Figure 10

## 16. Attach the crank arm disk supports.

- A. Using a Phillips head screwdriver, attach the screw securing each crank arm disk support in place. See Figure 6.

## 17. Attach the crank covers.

- A. Place each crank cover in position.
- B. Using a Phillips head screwdriver, attach the three screws securing each crank cover in place. See Figure 5.

## 18. Attach the side covers.

- A. Place each side cover in position in the rubber gasket.

- B. Using a Phillips head screwdriver, tighten the six screws and six washers securing each side cover. See Figure 4.

#### 19. Secure the linkage arms.

- A. Attach each linkage arm to each crank (removed in step 5). **NOTE:** *If you need a new linkage cap then order kit number 600AK012.*
- B. Place a drop of loctite (F) to threads on SHCS and into the shaft where the SHCS will be tightened into.
- C. Using a 3/16" Allen wrench, reinstall the SHCS, washer, cap and spacer (removed in step 5A). See Figure 3

#### 20. Attach the access cover.

- A. While being sure not to pinch any cables, hold the access cover in place. See Figure 2.
- B. Using a Phillips head screwdriver, tighten the four screws and washers securing the access cover. See Figure 2.

#### 21. Test unit for proper operation.