

Pulley Assembly and Timing Belt

● Tools Needed

- ½" or ¼" Cold Chisel & Pair of large pliers
- Allen Wrenches: (3/16) (5/16) (5/32) (3/32)
- Open Head Wrenches: (5/8) (1/2) (9/16)
- Ratchet Sockets: (5/8) (1/2) (9/16)
- Retaining Ring Remover
- Large Flathead Screwdriver & Phillips Screwdriver



● Estimated Time

- 30 minutes to disassemble and reassemble the shroud
- 2 hours to complete reinstalling the upper pulley

● Removing Upper Pulley Assembly

- Remove the Dog Bone bolt from Lower Crank Arm



- Remove upper shroud, lower shroud, and Guard Disk Plate on the left and right side



- Remove the right Pedal Arm
 - Separate the Pedal Arm from the Pedal Base
 - Pull them apart from each other after the two bolts have been removed



- Remove the right Leg Beam cap



- Remove the e-clip from the Upper Crank Arm shaft



- Remove the right Leg Beam by sliding it off of the Upper Crank Arm shaft



- Note: If the Leg Beam assembly has seized and will not come off pulling with your hands, then use a pulley puller to remove the Leg Beam assembly from the shaft.



Notes:

- Remove the right Upper Crank Arm Cap by prying it off



- Remove Upper Crank Arm retaining ring



- Remove both Upper Crank Arm bolts on the right side
 - Note: Bolts are on the opposite sides of each other

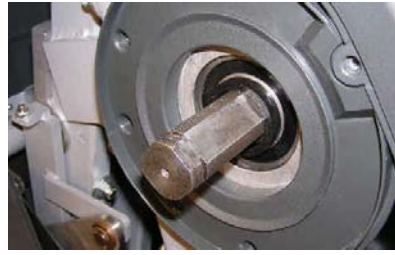
- Wedge a chisel between the Upper Crank Arm gap, and hammer the chisel in just enough to slide the Crank Arm off the shaft of the Upper Pulley Assembly on the right side

- Note: When hammering the chisel into the crank, do not let the chisel go so far down that it touches the crank shaft to prevent damage to the Upper Pulley Assembly.

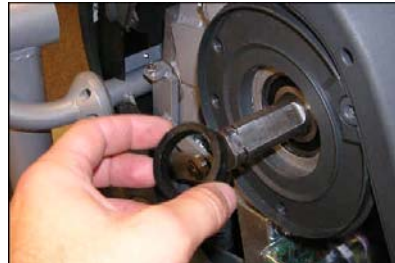


Notes:

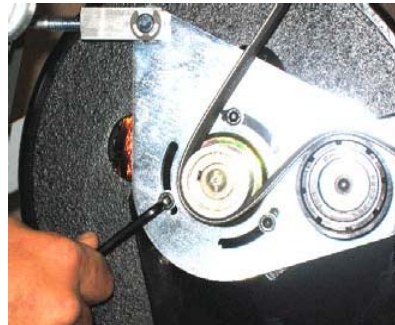
- Slide the crank arm off the Upper Pulley shaft on the right side
- Hammer the chisel in some more to create a larger gap in the crank



- Remove the plastic Disk Shroud
- Complete the same process for the left side



- Remove the three idler pulley screws on the Brake Assembly



- Loosen the Brake tension bolt approximately three complete turns



Notes:

- Unplug all wires from the Load Control, and Upper body electronics board

- Remove the four Brace Plate bolts



- Completely remove the Brace Plate from the frame
- Remove the four Lower Pulley Bolts



- Slide the bolts out and remove the Lower Pulley from the frame



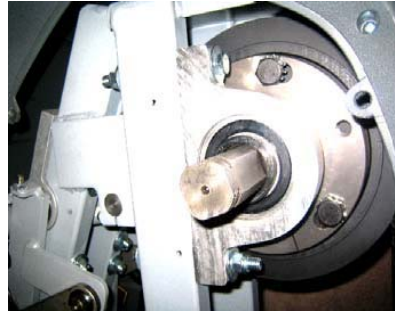
Note: DO NOT TURN THE JACKSCREWS TO KEEP THE CORRECT MANUFACTURE TENSION ON THE TIMING BELT

Notes:

- Remove the four Upper Pulley Bolts
- Slide the bolts out and remove the Upper Pulley from the frame
- Note: Be careful, once the last bolt has been removed the Upper Pulley Assembly will drop out and could cause damage to other components in the unit if it drops.

● **Installing Upper Pulley Assembly**

- Rap the drive belt around the Upper Pulley and align the Pillow Block bearing with the holes in the frame
- Mount the Upper Pulley down
- Tighten the bolts down



Note: Before tightening the nuts down with a ratchet make sure all four bolts are in. Also the bolts should be tightened down approximately 50-foot pounds of torque

● **Installing Timing Belt**

- Align the timing mark on the Timing Belt with the line on the Upper Pulley



Note: There's two timing marks on the timing belt that's 47 teeth apart from each other, so make sure the top mark on the belt is align with the mark on the Upper Pulley

Notes:

- Slide the Lower Pulley through the bottom loop of the drive belt
 - Do not mount the Lower Pulley to the frame yet
- Adjust the Lower Pulley so the timing mark on it is aligned with the timing line on the belt



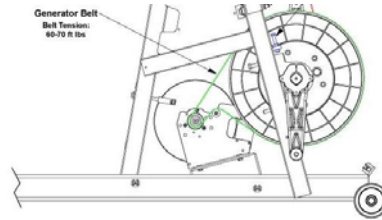
Note: If the timing line on the belt is not aligned with the timing mark on the Lower Pulley, then, hold the timing belt with one hand by the Upper Pulley to prevent throwing the Upper Pulley out of timing. And with your other hand turn the shaft of the Lower Pulley until the timing line on the belt is aligned with the mark on the Lower Pulley.

- Mount the Lower Pulley
 - Screw the nuts on hand tight
- Tighten the bolts down
 - Make sure all four bolts are in
 - Tightened down approximately to 50 pounds of torque
- **Installing Brace Plate and Electronics**
 - Align the holes in the Brace Plate with the holes in the frame and slide bolts through
 - Tighten the nuts hand tight
 - Tighten the nuts to 60 foot pounds of torque
 - Plug in all the wires to the electronic boards

Notes:

- **Installing Brake Belt**

- Rap the Brake belt around the large plastic pulley that's mounted to the Lower Pulley assembly
- Align the Poly-V grooves on the Brake belt with the grooves on both pulleys
- Tighten all three idler pulley bolts
 - Do not apply any torque
- Screw the tension bolt for the Brake belt back to it's original tension
- Tighten the idler pulley bolts
- Test the unit for slippage
 - If the unit slips then apply more tension to the Brake tensioning bolt (a half a turn at a time then test again)



- **Installing Upper Crank Arms** - Repeat the same process for left side

- Screw the plastic Upper Shroud Disk back in
- Slide the crank onto the Upper Pulley shaft
 - Wedging a chisel between the Upper Crank Arm gap and hammer the chisel in

Note: Make sure there is one spacer on each side of the Upper Pulley before installing the Upper Crank.

- Slide the Upper Crank Arm onto the right side of the shaft
 - Make sure the Crank Arm is flush with the spacer
- Pull the chisel out from the Upper Crank Arm
- Install the retaining ring
- Screw both pinch bolts back into the Upper Crank
 - Torque the bolts down to 50 foot pounds
- Snap the Upper Crank Arm Cap back onto the Upper Crank arm on the right side