

## Procedure 7.21 - Replacing the Idler Spring or Drive Belt Idler

### Procedure

1. Remove the covers as described in Procedure 7.1.

### WARNING

Before continuing with this procedure, review the Warning and Caution statements listed in Section One, Things You Should Know.

2. Loosen the drive belt by pushing down on the top of the drive belt idler arm. Hold the idler arm down while you pull the belt out of the sheave rim. Place the belt on the left end of the sheave shaft.
3. Remove the spring from the top of the drive belt idler arm.
4. If you are replacing the idler spring...

#### THEN...

Continue with the next step.

#### OTHERWISE...

Skip to Step 9.

### Removing the Idler Spring

An exploded view of the idler spring assembly is shown in Diagram 7.19.

5. Remove the outer locknut on the idler spring assembly. Remove the idler spring assembly from the frame upright.
6. Remove the inner locknut on the idler spring assembly. Remove the idler spring from the screw.

### Replacing the Idler Spring

7. Place the new spring on the screw. Install the inner locknut on the idler spring assembly.
8. Push the idler spring assembly through the frame upright. Install the outer locknut on the idler spring assembly.
9. If you are replacing the drive belt idler...

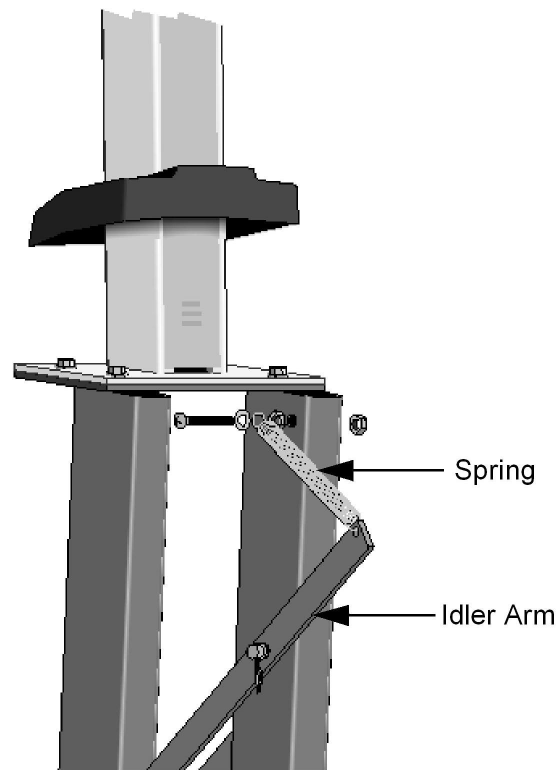
#### THEN...

Continue with the next step.

#### OTHERWISE...

Skip to Step 18.

## Diagram 7.19 - Idler Arm Assembly



### Removing the Drive Belt Idler

10. Using the needle nose pliers, remove the hitch pin from the clevis pin that secures the idler arm to the climber frame. Hold the idler arm while you remove the clevis pin from the climber frame.

**Note:**

Set the idler arm assembly on a work bench while you perform the following steps.

11. Remove the retaining ring from the drive belt idler.
12. Slide the drive belt idler and wave washer from the idler shaft weldment.

### Replacing the Drive Belt Idler

13. Visually inspect the wave washer removed in Step 12 for wear or damage. If the visual inspection indicates no wear or damage...

**THEN...**

Use the original washer when you perform the next step.

**OTHERWISE...**

Use a new washer when you perform the next step.

14. Place the wave washer and drive belt idler onto the idler shaft weldment.
15. Install the retaining ring next to the drive belt idler.
16. Have an assistant position the idler arm assembly at its mounting position on the climber frame. Push the clevis pin through the climber frame and idler arm assembly. Push the hitch pin into the clevis pin.
17. Route the drive belt over the disk hub and behind the drive belt idler (refer back to Diagram 7.16).
18. Using the needle nose pliers, place the spring in the top of the drive belt idler arm.
19. Mount the drive belt on the sheave by performing the following sub-steps:
  - a. Kneel on the right side of the climber and face the sheave.
  - b. Hold the drive belt between the 12 o'clock and 3 o'clock positions on the sheave rim.
  - c. Turn the sheave counterclockwise.

**Note:**

As you move the sheave, the belt will position itself on the rim.

- d. Grasp the drive belt at the 4 o'clock position.
- e. Turn the sheave counterclockwise to fully seat the belt on the sheave rim.

**Note:**

Make sure that the belt is on the sheave rim before you continue with this procedure.

20. Kneel behind the stair arms. Press down on the ends of the stair arms. Watch the drive belt as it moves on the sheave, drive belt idler, and disk hub. If the drive belt does not track correctly...

**THEN...**

Continue with the next step.

**OTHERWISE...**

Skip to Step 25.

21. Remove the set screws that secure the sheave to the sheave shaft.
22. Gently tap the sheave to re-position it on the sheave shaft.
23. Add a drop of blue loctite to the tip of each set screw. Replace the screws on the sheave hub.
24. Return to Step 20.

25. Check the operation of the climber as described in Section Four, then replace the covers as described in Procedure 7.1.