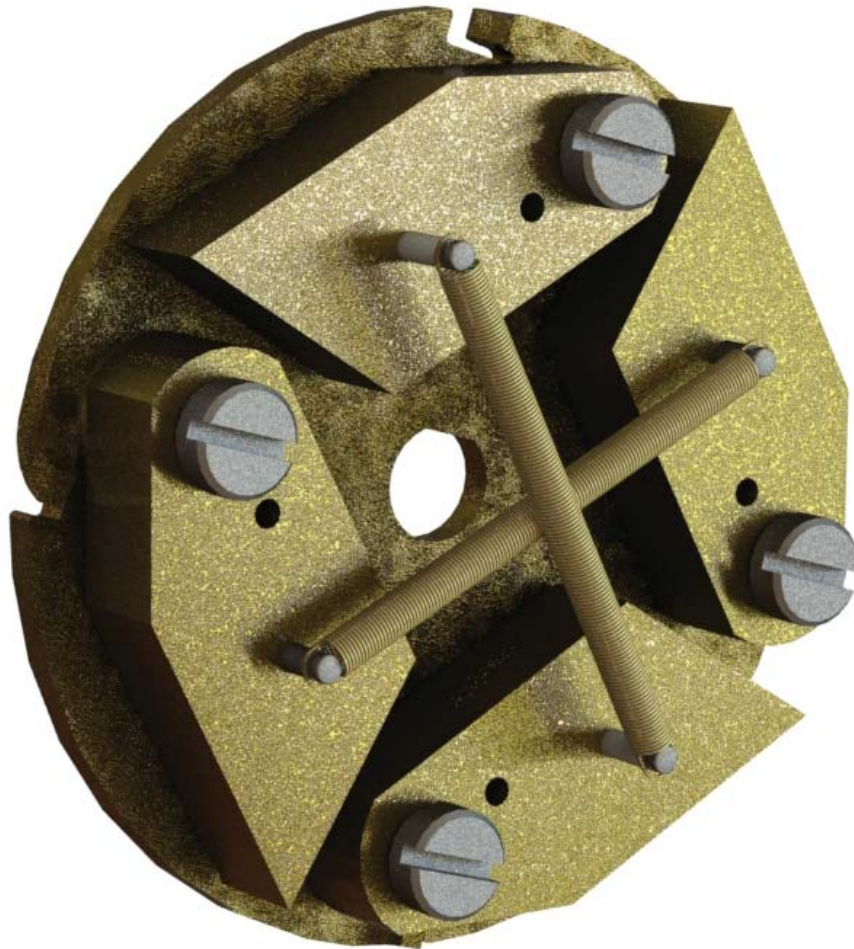


Field Service Instructions Flywheel Replacement



**READ ALL INSTRUCTIONS BEFORE
BEGINNING DISASSEMBLY**

1 TOOLS & PARTS REQUIRED

720182-1	70 ft/min; Flywheel Repl; Kit NA	For Service Lifts installed anywhere in North & South America please contact PCW for correct P/N
720183-1	35 ft/min; Flywheel Repl; Kit NA	
720184-1	18 m/min; Flywheel Repl; Kit EU	
720173-1	Flywheel Wrench	Service lifts outside the Americas
	4 mm T-Handle	
	13 mm Deep Socket	
	5 mm Ball-type Allen	
	Torque Wrench, 0-10 foot-pounds (0-13.5 Newton-meters)	

IF AT ANY TIME DURING THE REINSTALLATION PROCESS THE FLYWHEEL, ITS COUNTERWEIGHTS OR SPRINGS, MOVE OUT OF THE ORIGINAL ALIGNMENT, STOP INSTALLATION AND CONTACT PRODUCT SUPPORT FOR A NEW FLYWHEEL.

2 WHO CAN DO & INSPECT THE WORK

1. Only a technician authorized by the turbine manufacturer or owner may perform Step 3 through Step 10.
2. Step 11 must be performed by a Power Climber Wind Level 2 Certified Technician, or someone who holds a valid certification of a Power Climber Wind Maintenance Training Course.

3 LOWER THE SERVICE LIFT

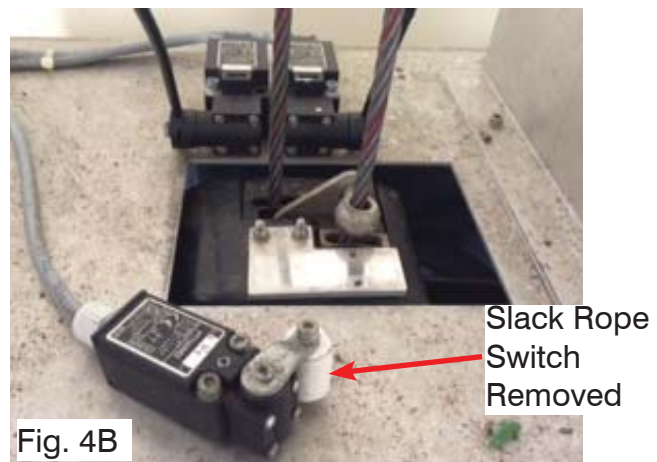
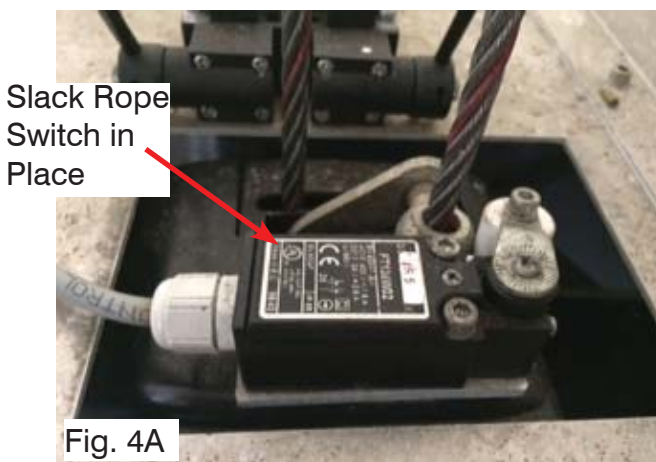
Use the controlled descent lever to bring the service lift down to rest on its feet.

4 REMOVE SLACK ROPE SWITCH

For service lifts with optional slack rope switch mounted to hoist mainframe cover (see Fig. 4A), remove slack rope switch from cover (see Fig. 4B).

Tools for this Step:

4 mm T-Handle



5 REMOVE HOIST MAINFRAME COVER

Unscrew the four captive screws from the hoist mainframe cover using 4 mm T-Handle, as shown in Fig. 5A. Remove the hoist mainframe cover and locate the flywheel assembly, as shown in Fig. 5B.

Tools for this Step:

4 mm T-Handle



Fig. 5A



Fig. 5B

6 REMOVE FLYWHEEL

1. Place the hole in the Flywheel Wrench over one of the flywheel bolt heads with the two flats up against two other adjacent bolt heads, as shown in Fig. 6A.
2. Using the deep socket, gently move aside the springs of the flywheel and seat the socket on the M8 nut on the threaded part of the overspeed drive pulley (see Fig. 6B and Fig. 6C).
3. Remove the nut and washer. Discard the nut. Do NOT discard the washer or the flywheel. **Save flywheel and contact Power Climber Wind to receive a Return Material Authorization Number for return.** Washer will be reused.

Tools for this Step:

Torque Wrench
13 mm Deep Socket
Flywheel Wrench

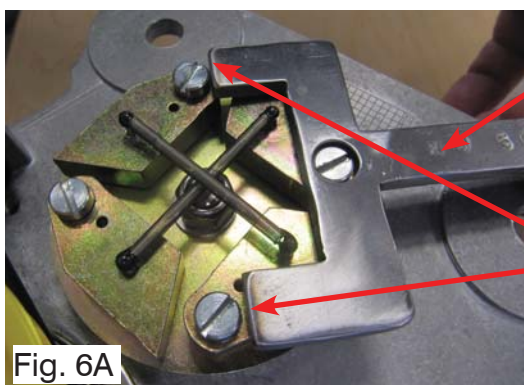


Fig. 6A



Fig. 6B

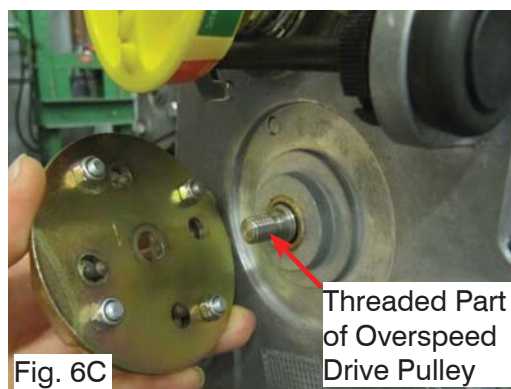


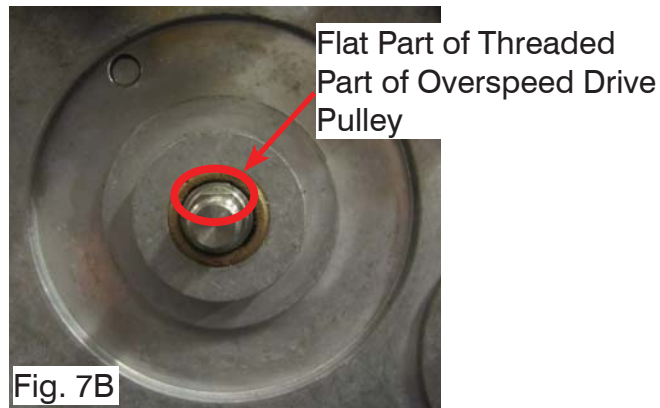
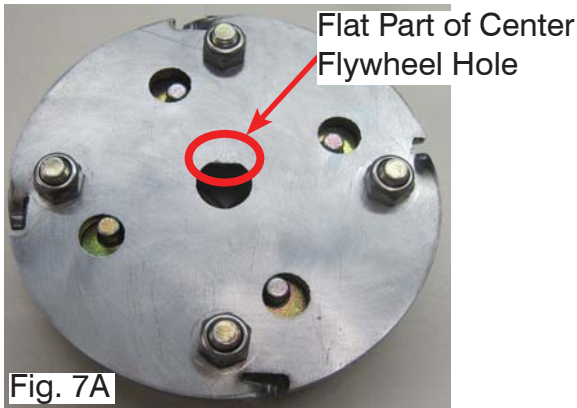
Fig. 6C

7 REINSTALL FLYWHEEL

1. Note that the center hole in the flywheel back plate is not entirely circular and has a flat part (see Fig. 7A). Note also that the threaded part of the overspeed drive pulley has a flat part as well (see Fig. 7B). Place the flywheel over the threaded part of the overspeed drive pulley so that the flat parts align.
2. Reinstall first the washer and then the new nut onto the threaded part of the overspeed drive pulley, **ensuring that the flat part of the flywheel center hole stays on the flat part of the threaded part of the overspeed drive pulley**. Using only your hand, hold the flywheel in place. Gently move aside the springs with the deep socket while fitting the deep socket on the nut and thread the nut until it is nearly seated **but not tight**, preventing wobble of the flywheel.
3. Fit the Flywheel Wrench over one bolt head and use it to hold the flywheel in place on the threaded part of the overspeed drive pulley. Gently move aside the springs with the deep socket while fitting the deep socket onto the nut. Tighten the nut to 10 foot-pounds (13.5 Newton-meters).

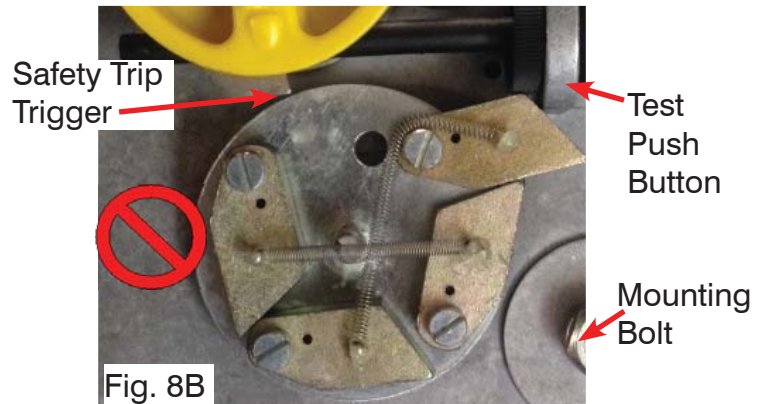
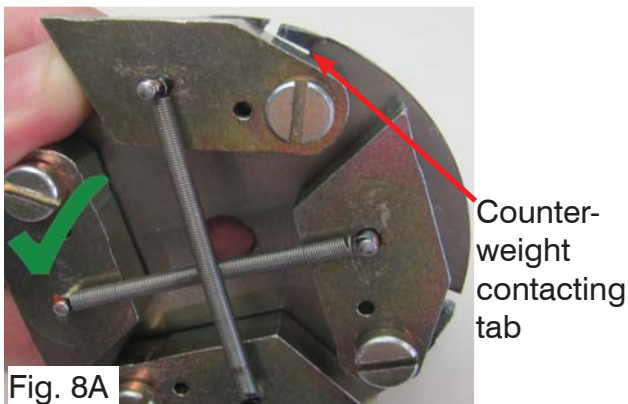
Tools for this Step:

Torque Wrench
13 mm Deep Socket
Flywheel Wrench



8 INSPECT FLYWHEEL

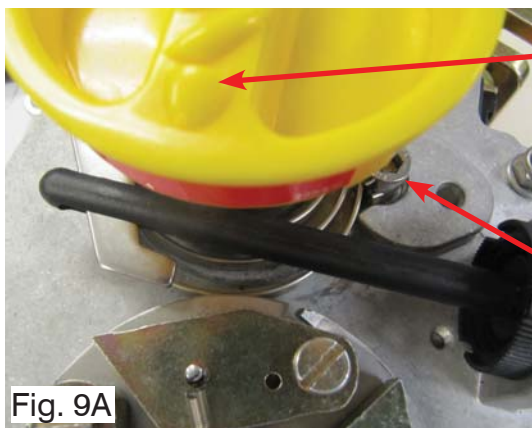
Manually rotate each flywheel counterweight (4 total) on Flywheel Assembly of the Overspeed Safety Device to ensure that their rotation past the outer diameter of the flywheel is limited, as shown in Fig. 8A. Flywheel counterweight should make contact with the flywheel weight retaining tab. If it can move too far and get caught on obstacles other than the overspeed safety trip trigger, such as shown in Fig. 8B, **the flywheel does not pass inspection and must be removed from service.**



9 RE-SEAT OVERSPEED CLOCK SPRING

Tools for this Step:
5 mm Ball-type Allen

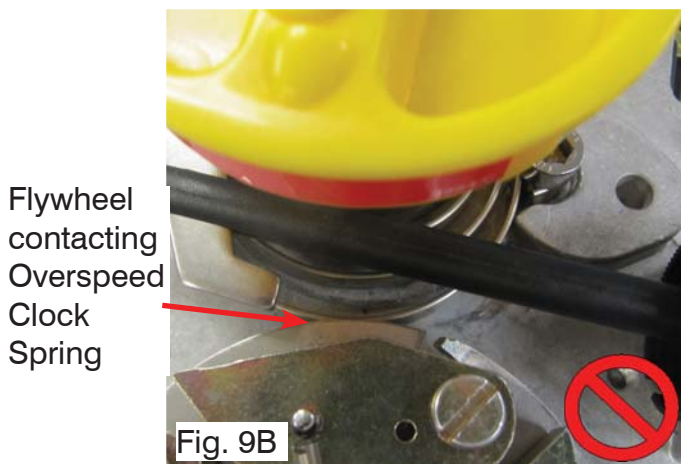
1. Verify that the yellow overspeed reset knob is in the vertical position, as shown in Fig. 9A.
2. Using 5 mm ball-type Allen, loosen the overspeed clock spring retainer bolt one turn ONLY, and re-tighten (see Fig. 9A).
3. Verify that the flywheel does NOT make contact with the overspeed clock spring in either the untripped (yellow overspeed reset knob in vertical position) or the tripped position (yellow overspeed reset knob in horizontal position). If contact is made, tag out service lift and contact Power Climber Wind. See Fig. 9B for overspeed clock spring in wrong position and Fig. 9C for overspeed clock spring in correct position.



Overspeed Reset Knob in vertical position

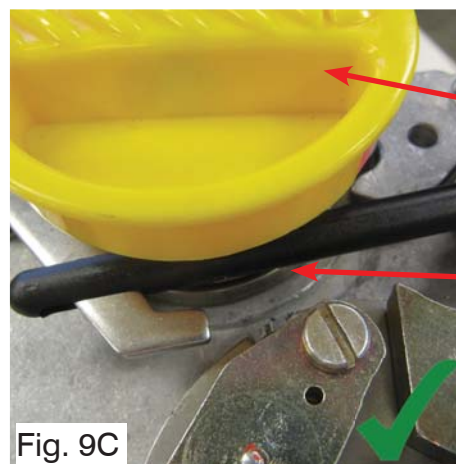
Overspeed Clock Spring Retainer Bolt

Fig. 9A



Flywheel contacting Overspeed Clock Spring

Fig. 9B



Overspeed Reset Knob in horizontal position
Overspeed not contacting Overspeed Clock Spring

Fig. 9C

IMPORTANT NOTE:

Per Section 9.3: verify that the flywheel does NOT make contact with the overspeed clock spring in either the untripped or the tripped position. If contact is made, tag out service lift and contact Power Climber Wind.

10 REINSTALL HOIST MAINFRAME COVER

1. Place hoist mainframe cover back on traction frame and tighten all four captive screws with 4 mm T-Handle.
2. Mark hoist cover with enclosed paint marker or other suitable means of identifying that flywheel has been updated.

Tools for this Step:

4 mm T-Handle
Paint Marker

11 PERFORM OVERSPEED TRIP TEST

After installation, perform the Overspeed Trip Test as outlined in the Annual Inspection Report that pertains to the hoist. Step 11 must be performed by a Power Climber Wind Level 2 Certified Technician, or someone who holds a valid certification of a Power Climber Wind Maintenance Training Course.

If at any time you have questions about this procedure, please contact:

North and South America: Service@PowerClimberWind.com or +1-206-394-5306

Europe, Asia, Australia, and Africa: Wind@PowerClimber.be or +32 3 451 05 00