Service Call:
Adjusting Leveling System Tension with Dual Tensioner Bolts

Tools Required:
1 7/8 inch socket (3/4 inch drive)
15/16 socket (1/2 inch drive)
3/4 inch drive torque wrench
1/2 inch drive torque wrench
1/2 inch drive ratchet
Breaker Bar

Model(s):
TC, TCX, HR, HRX

Introduction
The tension of the leveling system should be checked every 90 days (360 Hours). The following procedure shows how to set the tension of the leveling system on units with dual tensioner bolts. The platform must be rotated to the stored position, emptied of all contents and leveled before performing this Tech-tip.
Tech Tip Safety Rules

**Danger**

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury. Many of the hazards identified in the operator’s manual are also safety hazards when maintenance and repair procedures are performed.

**Do Not Perform Maintenance Unless:**

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
  - manufacturer’s instructions and safety rules
  - employer’s safety rules and worksite regulations
  - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this tech tip is a supplement to the service manual. Consult the appropriate service manual of your machine for safety rules and hazards.
Step 1
Set the unit up for operation leaving the lower boom in the rest while raising the upper boom so that the platform is 6-8 inches out of the rest.

Step 2
Loosen, but do not remove both of the large 1¼” nuts on the side of the boom for the leveling tensioner assembly. The nuts should be loose enough that the tensioner can slide forward and backward.

If at any time the nuts are removed from the tensioner, then the nuts will need to be replaced with new parts. If installing new nuts or a new tensioner assembly, lubricate the threads with anti-seize.
Step 3
Loosen both the tensioner bolts ½ turn to relax the leveling system slightly beginning with the inside bolt first, then the outside one.

Step 4
To re-tension the leveling system torque the outside bolt first to the value found in the Quick Reference chart in the unit specific manual or the leveling install parts kitsheet.

If installing a new bolt or tensioner assembly lubricate the threads with anti-seize.
Step 5
Cycle the upper boom through its full range of motion and bring the platform back to within 6-8 inches of the platform rest.

Step 6
Re-torque the outside bolt again to the value found in the Quick Reference chart or the leveling install parts kitsheet.

Step 7
Torque the large 1¼” nuts on the side of the boom to the value found in the Quick Reference chart or the leveling install parts kitsheet.
Step 8
Torque the inside bolt to the value found in the Quick Reference chart or the leveling install parts kitsheet. Verify that the tensioner is in line with the boom and not pulled after torqueing of the inside bolt.

Step 9
Cycle both booms through the full range of motion to verify proper leveling system operation.