

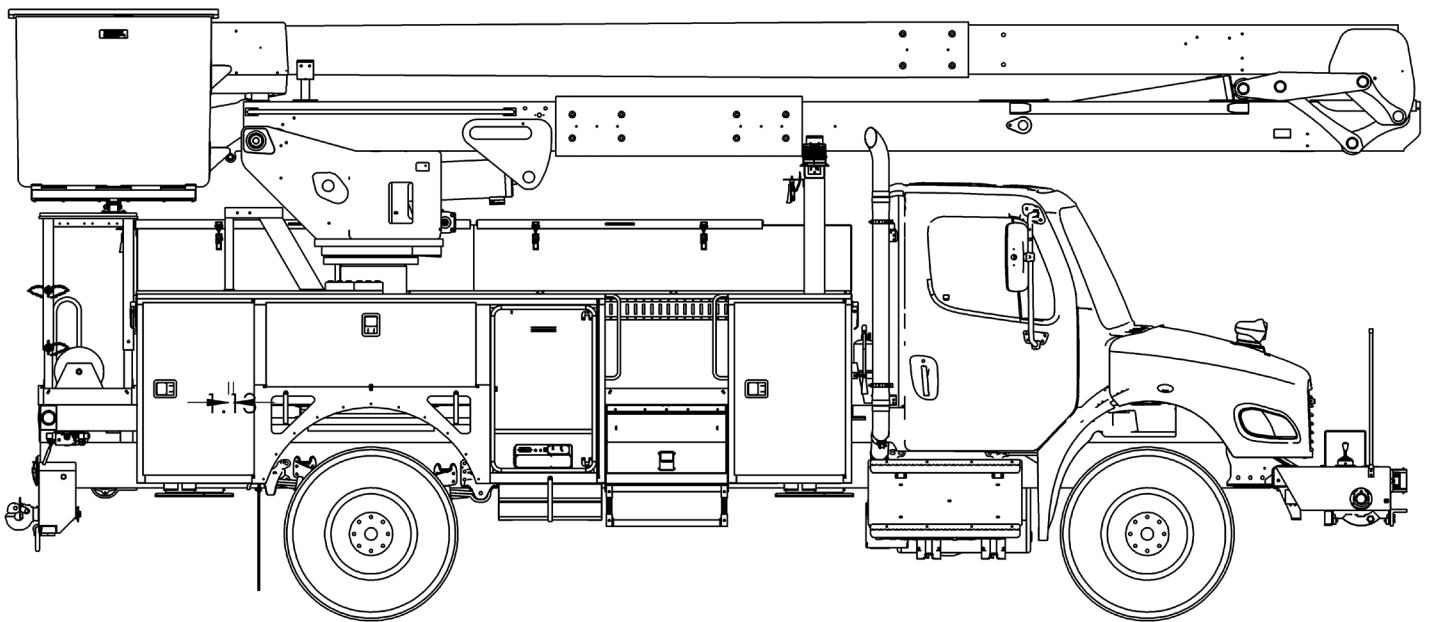


TEREX®

TECH TIPS

CHECKING TENSION OF THE OPTIMA LEVELING SYSTEM

NO. 163



SERVICE CALL:
**CHECKING TENSION OF THE
OPTIMA LEVELING SYSTEM**



MODEL(S):
**OPTIMA TC, OPTIMA TCX,
OPTIMA HR, AND OPTIMA HRX**



TOOLS NEEDED:
3/4" AND 1/2" TORQUE WRENCH
2" SOCKET (3/4" DRIVE)
15/16" SOCKET (1/2" DRIVE)
1/2" AND 3/4" DRIVE BREAKER
BAR
ASSORTED WRENCHES/SOCKETS

TEREX UTILITIES TECHNICAL SUPPORT TEAM

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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.



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INTRODUCTION

Every 90 days (360 Hours), the leveling system tension will need to be inspected as stated in service intervals in the manual.

Leveling tension that is either too tight or loose can cause accelerated wear on the chains, sprockets, rods and other components in the leveling system.

The following procedure shows how to set the tension of the leveling system on Optima units with side or end mount platforms. The platform must be rotated to the stored position, emptied of all contents and leveled before performing this Tech-tip.

STEP 1

Remove any materials that may be stored in the platform. The platform should be empty other than the liner.



STEP 2

Set up the unit for operation, leaving the lower boom in the rest and raise the upper boom so the platform is approximately 6-8 inches from the rest. The platform needs to be clear of the rest or the leveling will not be tensioned correctly.

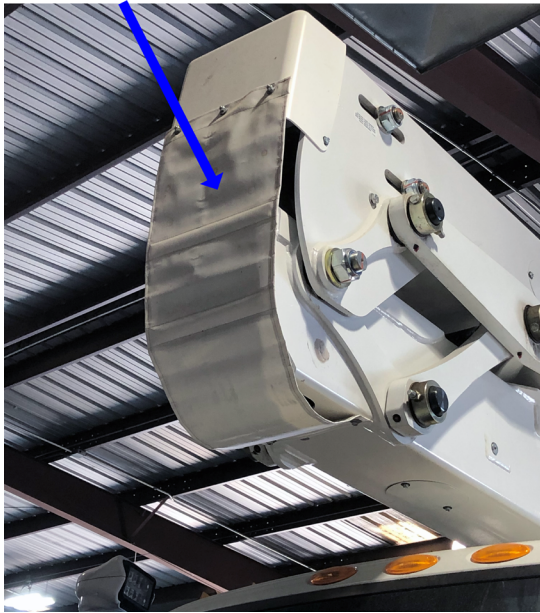
Note: If necessary, the lower boom can be raised, and the unit rotated over the side of the truck if the knuckle cannot be reached over the front of the truck chassis.



STEP 3

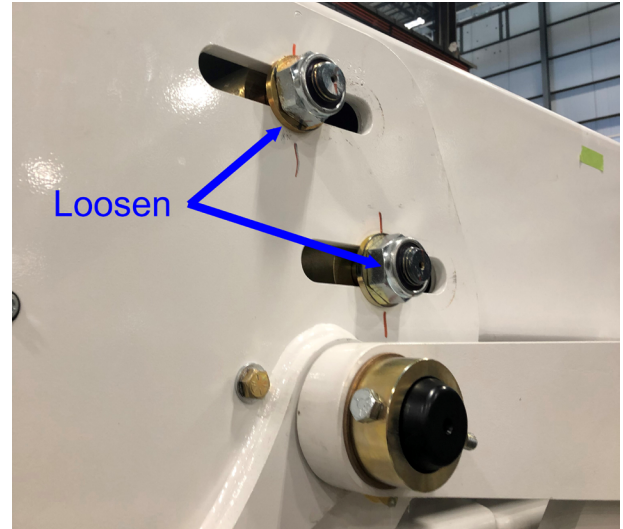
Remove the covers at the knuckle to allow access to the tensioner and adjustment bolt.

Remove



STEP 4

Loosen, but do not remove both the large 1 1/4" lock nuts on the side of the boom for the leveling tensioner. The nuts should be loose enough that the tensioner can slide forward and backward.



Do Not remove the nuts or back them off to the point that the nylock is removed from the threads. If the nuts are removed or the nylock disengages the threads the nuts must be replaced. If new nuts are installed lubricate the threads with anti-seize, Terex part number 65370833.

STEP 5

Loosen the tensioning bolt 1 full turn to relax the leveling system.

Loosen



STEP 6

Torque the tensioning bolt to:

- 40 ft lbs. Lubricated with Anti-seize for side mount units
- 60 ft lbs. Lubricated with Anti-seize for end mount units



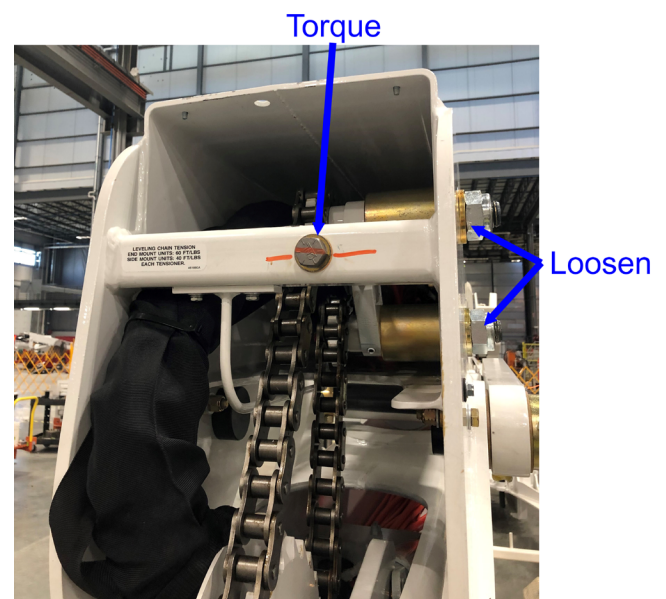
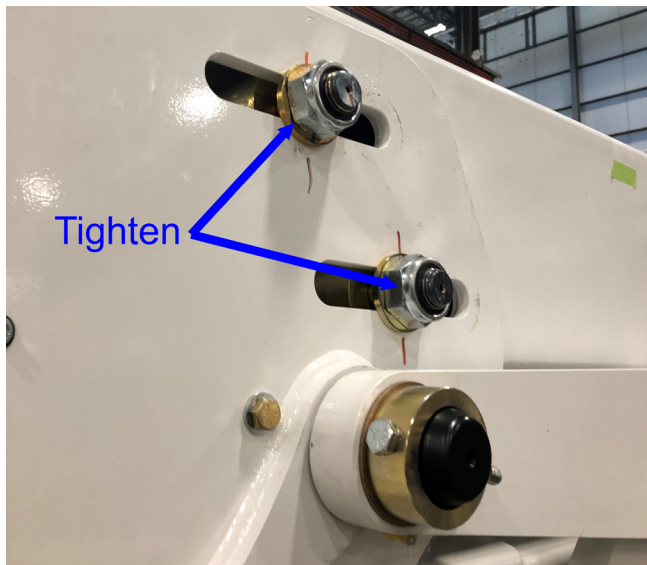
STEP 7

Tighten the nuts on the tensioner assembly slightly and run the upper boom through its full range of motion bringing the platform back to within 6-8 inches of the rest.

Note: On an Optima TC and TCX the upper boom will only travel to approximately 75 degrees. The Optima HR and HRX the upper boom will travel over 180 degrees.

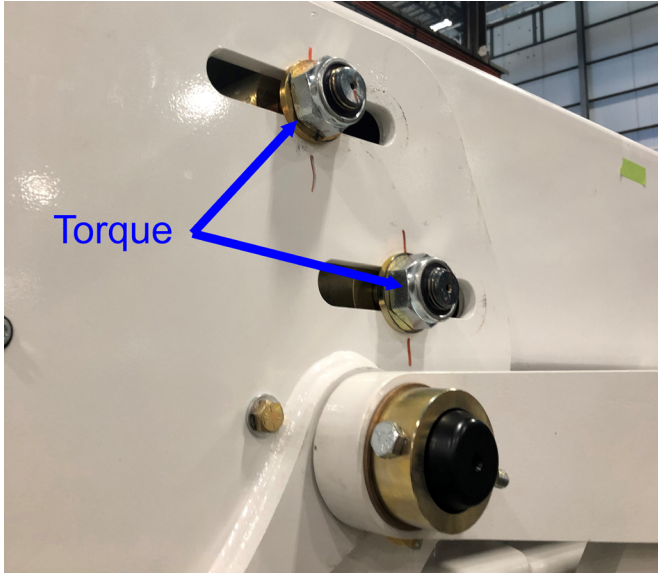
STEP 8

Loosen the leveling tensioner nuts according to Step 4 and retorque the tensioning bolt according to Step 6.



STEP 9

Torque the lock nuts for the tensioner assembly to 300 ft lbs.



STEP 10

Install all covers and operate the unit through its full range of functions from the lower controls to verify proper leveling system operation.

Video Tech Tip

A **video tech-tip** is available as a reference to this written procedure



FOR FURTHER ASSISTANCE,
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