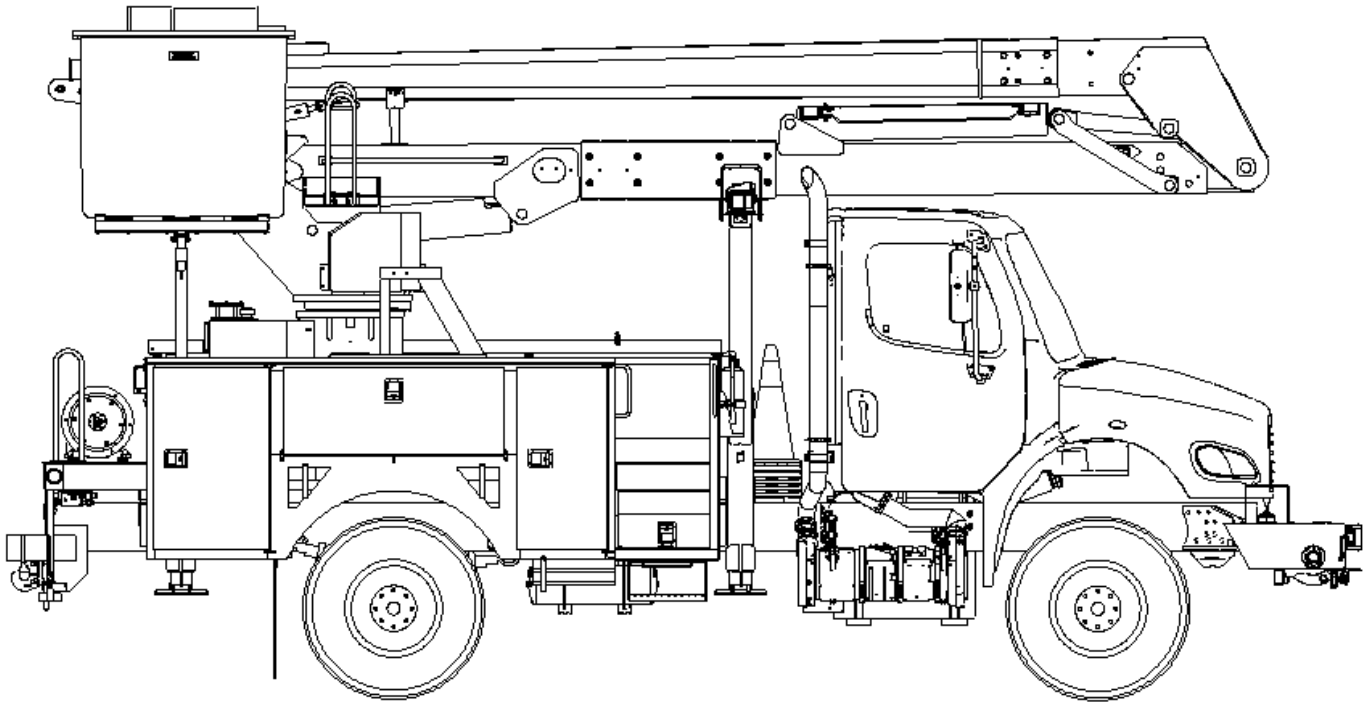




# TECH TIPS

REPLACING LEVELING CHAINS

NO. 126



**SERVICE CALL:**  
REPLACING LEVELING CHAINS



**MODEL(S):**  
HR42 TO HR60, HRX46 TO HRX60  
ALL TC, TCX, RM, RMX AND OM  
MODELS



**TOOLS NEEDED:**  
TORQUE WRENCH CAPABLE OF  
440 FT/LBS.  
ASSORTED WRENCHES/SOCKETS  
PLIERS, SIDE CUTTER  
ROPE  
PAINT MARKER PEN

TEREX UTILITIES TECHNICAL SUPPORT TEAM

PHONE: 1-844-TEREX4U (1-844-837-3948) | EMAIL: [UTILITIES.SERVICE@TEREX.COM](mailto:UTILITIES.SERVICE@TEREX.COM)



## **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.



TECH TIP 126 | RELEASED 12.22.2023 | VERSION 1.0

©TEREX UTILITIES. ALL RIGHTS RESERVED

# CONTENTS

## TECH TIP#126

### TOC

4

| Remove covers at boom tip and elbow

**INTRODUCTION**  
**STEP 1 - STEP 3**

5

| Mark the chain

**STEP 4 - STEP 6**

6

| Remove the chain

**STEP 7 - STEP 10**

7

| Compare old and new chain

**STEP 11 - STEP 12**

8

| Verify chain length

| Remove leveling rods

**STEP 13 - STEP 17**

9

| Inspect tensioner idler sprockets

**STEP 18 - STEP 20**

10

| Install chains

**STEP 21 - STEP 24**

## INTRODUCTION

This Tech Tip provides the basics to remove and replace the leveling chains in a Terex Aerial Device. This applies to units with leveling chains in the upper boom only.

## STEP 1

Soak the new chains in 30W non-detergent oil, then hang them to drip while removing the old chains.

## STEP 2

Set-up the unit in the best configuration to safely perform the job while preventing damage to the chassis. Stored, rotated off the side, or rotated 180 degrees off the back of the unit.



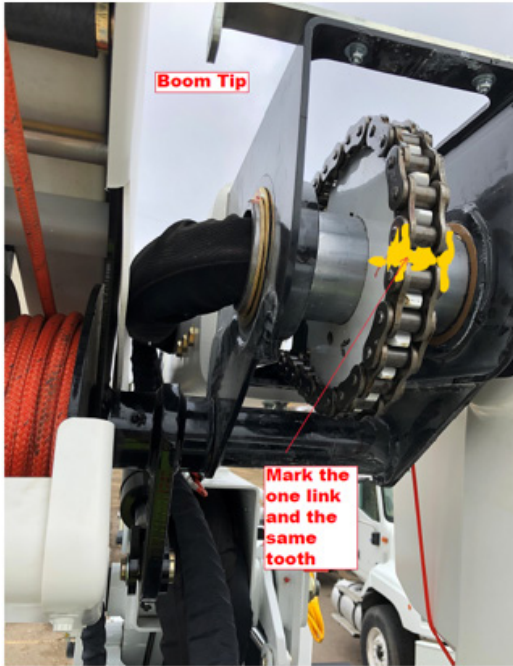
## STEP 3

Remove covers at the boom tip and the elbow. Also remove the access panel on the upper boom near the elbow area.



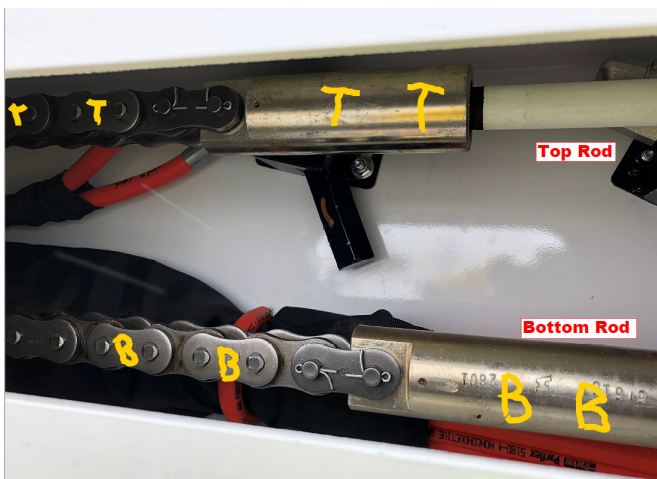
## STEP 4

Clean off an area on both the sprocket and chain. Using a paint marker, mark one link and tooth. Also mark the sprocket in-line with the tooth as shown in the examples below.



## STEP 5

At the access hole for the master links at the elbow area, mark the chain and the leveling rod, top and bottom in several locations.



## STEP 6

Loosen the lock nuts for the leveling tensioner.





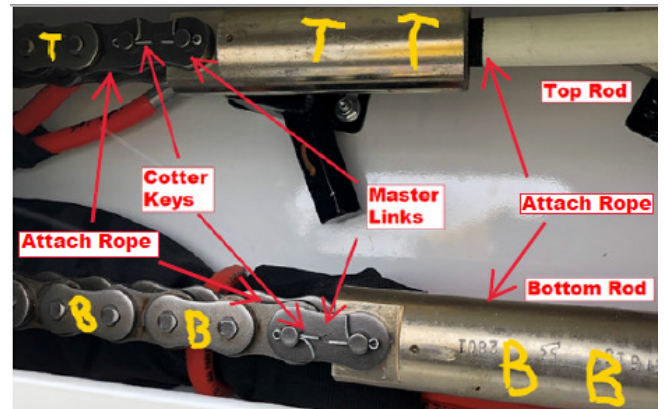
## STEP 7

Loosen the leveling tension bolt. Continue until the top rod is touching the bottom of the boom. If the platform assembly starts to rotate, stop and support it to keep it from tilting.

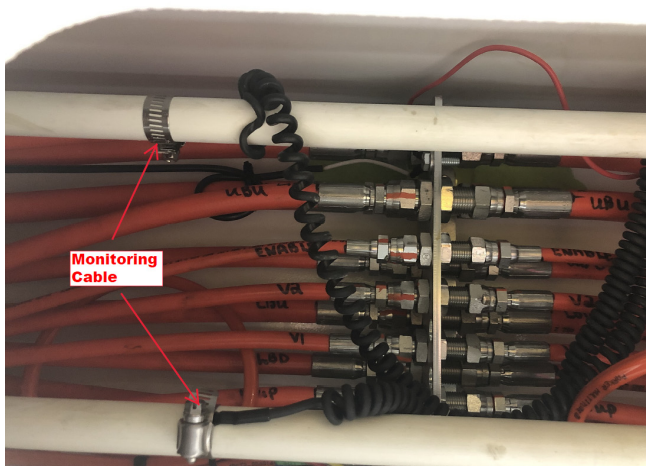


## STEP 8

Tie a rope to the end of each chain after the master link. Also tie a separate rope to the end of each leveling rod. Remove and discard the cotter keys and master links.



If the unit is a Category A or B unit, the monitoring cables must be unhooked.



## STEP 9

Loosen the rope and lower the elbow leveling chain down to the floor.

## STEP 10

Once removed, untie the ropes and lay the chain on the floor or a bench.



## STEP 11

Lay the replacement chain next to the old chain to make sure they are the same length. Mark the new chain exactly like the old chain. If the old chain had a half link, make sure to install a half link on the new chain. Set this chain off to the side and start removing the boom tip chain.



## STEP 12

Wrap the terminal end of the leveling rod with a rag to prevent metal transfer on the inside of the fiberglass boom. Loosen the ropes on the leveling rods and pull the rods out until the ends stick out the boom tip with the chains hanging on the rods. Mark the rods and chains for top and bottom in the same manner as Step 4, then remove the chain.





## STEP 13

Verify the chain length and mark the new chain similar to Step 10.

## STEP 14

Remove the leveling rods and unhook the ropes. The ropes are used to position the rods and chains back into the original location. Inspect and clean the leveling rods according to the instructions in **Tech Tip #55**.

## STEP 15

Once the rods have been cleaned and inspected, tie the ropes back on and reinstall the rods leaving them stick out the boom tip enough to attach the boom tip chain. Be sure to wrap the terminal end of the leveling rod.



## STEP 16

Connect the new boom tip chain to the leveling rods using new master links and cotter keys.



## STEP 17

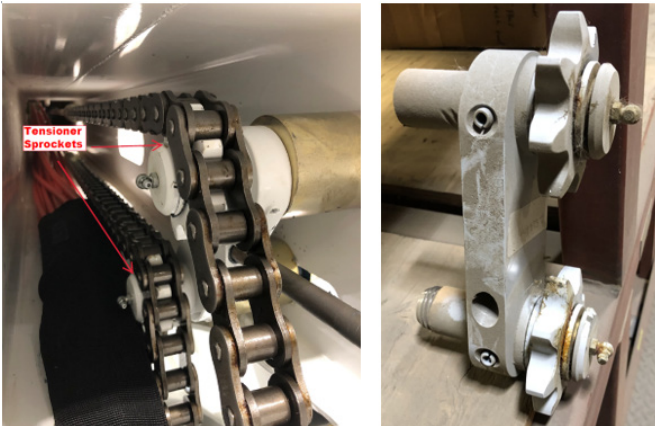
Continue to install the boom tip chain on the sprocket by pulling on the leveling rods and positioning the chain back into place.





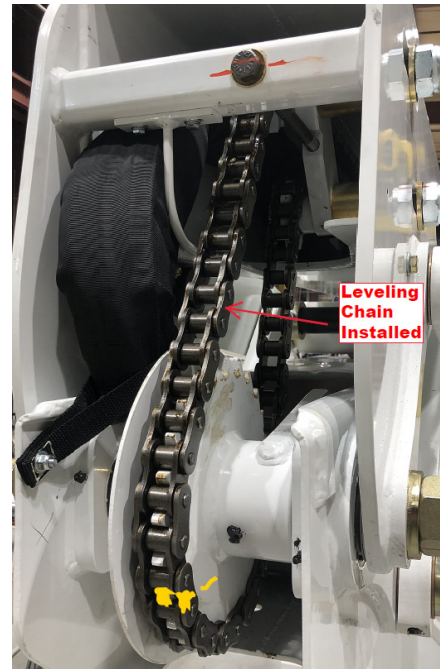
## STEP 18

Before installing the leveling chains at the elbow area, inspect the chain tensioner idler sprockets. Make sure the bushings are in good condition and that they take grease.



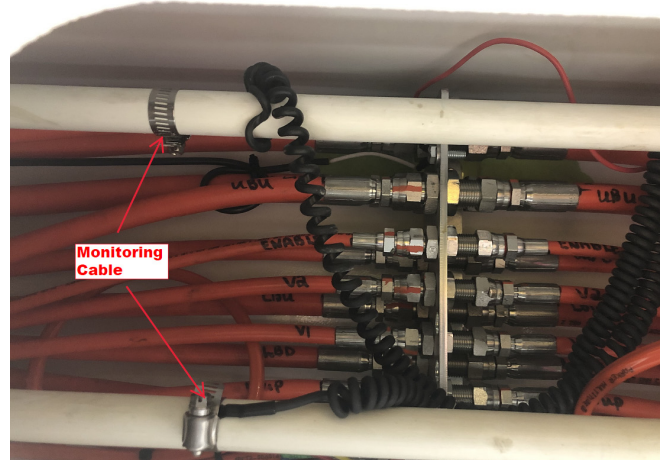
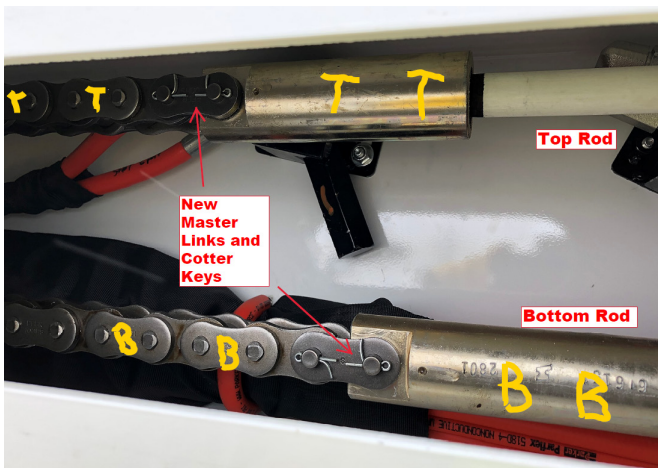
## STEP 19

Hook up the ropes and install the elbow leveling chains.



## STEP 20

Install the new master links and cotter keys to the leveling rods. If a half link is used, install it on the bottom rod and chain. Make sure to install the monitoring cables (if equipped).



## STEP 21

Once the chains are installed, tighten the tensioner bolt to the torque specified in the quick reference of the maintenance manual or the kit sheet for the leveling installation.



## STEP 22

Tighten the nuts for the tensioner assembly. Run the upper boom all the way up and back to the stored position. Loosen the tensioner lock nuts and recheck the torque on the tension adjustment bolt.

## STEP 23

Torque the lock nuts for the tensioner assembly. Reference the maintenance manual quick reference or the leveling assembly installation for the proper torque value.

## STEP 24

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





FOR FURTHER ASSISTANCE,  
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM  
PHONE: **1-844-TEREX4U (1-844-837-3948)** | EMAIL: **[UTILITIES.SERVICE@TEREX.COM](mailto:UTILITIES.SERVICE@TEREX.COM)**

---