ATTENTION: This notice is being issued to advise you of the requirement to update certain Caterpillar ("CAT") Telehandlers that were manufactured by JLG Industries, Inc. ("JLG"). This program must be completed as soon as possible on all affected machines.

PROBLEM:
Reports indicate that the boom chains are being incorrectly adjusted during boom servicing. Incorrect adjustment of the chains may cause premature failure of the chain shackles. The failure of both chain shackles will result in the inability to retract the boom or uncontrolled restraint of the outer boom sections when the boom angle is below horizontal. This could result in a crushing hazard or loss of load.

AFFECTED PRODUCTS:
This issue affects certain CAT Telehandlers Model TH580B manufactured by JLG. The affected machines have the following serial numbers:

<table>
<thead>
<tr>
<th>Model</th>
<th>Affected Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH580B</td>
<td>TBJ00100 to TBJ00230, TBJ00232 to TBJ00236, TBJ00238 to TBJ00241, TBJ00243 to TBJ00245, TBJ00247 to TBJ00249, TBJ00252 to TBJ00263, TBJ00268 to TBJ00273, TBJ00275, TBJ00277 to TBJ00279</td>
</tr>
</tbody>
</table>
PARTS NEEDED:
The following parts must be ordered to accomplish this update:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Cotter</td>
<td>3B4605</td>
</tr>
<tr>
<td>2</td>
<td>Pin</td>
<td>3072248</td>
</tr>
<tr>
<td>2</td>
<td>Shackle</td>
<td>3072247</td>
</tr>
<tr>
<td>1</td>
<td>Operation and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maintenance Manual</td>
<td>Reference the enclosed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Manual Order Form”</td>
</tr>
</tbody>
</table>

ACTION REQUIRED:
Parts Stock
Remove all original shackles (#2197084) from dealer parts stock.

Affected Machines:
- Perform the enclosed Chain Shackle Replacement Procedure:
- Replace the original boom retract chain shackles with new chain shackles designed to reduce the risk of incorrect adjustment.
- Adjust the chain shackles using the new adjustment procedure.
- Remove and discard the original Operation and Maintenance Manual. Install the new Operation and Maintenance Manual on the machine prior to returning it to service.

SERVICE CLAIM ALLOWANCES:
To receive reimbursement, file a service claim through the normal CAT service claims process. When filing this claim through the CAT system, please use the following codes in the appropriate input fields:
- Part Causing Failure: C107C1
- Group Number: 771J
- Problem Description Code: AA

The reimbursement terms of this program are as follows:

<table>
<thead>
<tr>
<th>Caterpillar</th>
<th>Dealer Suggested</th>
<th>Customer Suggested</th>
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</thead>
<tbody>
<tr>
<td>Parts %</td>
<td>Labor Hrs %</td>
<td>Parts %</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
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</table>

NOTE: This is a 3.0 hour job
PARTS DISPOSITION:
Handle the parts in accordance with your Warranty Bulletin on warranty parts handling.

CONTACTS:
A copy of this Service Letter will be available on the JLG-CAT Alliance website. If you have any questions or need further information, please contact the JLG Product Safety and Reliability Department by:

Email: productsafety@jlg.com
Telephone: +1 717 485 6591

Enclosures:
Chain Shackle Replacement Procedure
Manual Order Form
PROCEDURE: Chain Shackle Replacement, Service Letter #C107C1
MODELS: CAT Telescopic Material Handlers Model TH580B

Parts/Material Required:
- Cotter, #3B4605, quantity 4
- Pin, #3072248, quantity 2
- Shackle, #3072247, quantity 2
- Updated Operation and Maintenance Manual, quantity 1

<table>
<thead>
<tr>
<th>Operation and Maintenance Manual</th>
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<tr>
<td>English</td>
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</tr>
<tr>
<td>French</td>
<td>31200295</td>
</tr>
<tr>
<td>Turkish</td>
<td>31200315</td>
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<tr>
<td>Portuguese</td>
<td>31200323</td>
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<tr>
<td>Spanish</td>
<td>31200322</td>
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<td>German</td>
<td>31200339</td>
</tr>
<tr>
<td>Czech</td>
<td>31200398</td>
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</tbody>
</table>

Figure 1

CAUTION: USE ALL APPlicable SAFETY PRECAUTIONS WHILE WORKING ON, UNDER OR AROUND ANY MACHINERY.

Procedure:

1. Position machine on a firm and level surface. Fully retract and raise the boom to approximately 5 degrees above horizontal. Turn off engine and apply park brake.

2. Locate and remove the locking nut (outer nut) from the single extension chain shackle. Reference Figure 1. Loosen, but do not remove the adjusting nut from the same shackle. Leave adjusting nut engaged on the last two threads of the shackle.
3. Loosen and remove the fastening nuts from the two boom retract chain shackles located on the underside of the second boom section toward the front of the machine. Reference Figure 2.

![Figure 2](image)

**Figure 2**

4. Remove the service cover from the rear of the machine to access the boom retract chain pulleys.

5. Locate the retract chain pulleys in the rear of the boom. Reference Figure 3.

![Figure 3](image)

**Figure 3**
6. Remove the pulley pin retaining bolts (A) and the pulley pins (B). Reference Figure 4.

7. Remove the pulleys (C). Reference Figure 5.
8. Push the threaded end of the shackles through the holes toward the center of the boom. Reference Figure 6.

![Figure 6](image)

9. Start the machine. Telescope the boom out by approximately 150 mm and shut down the machine. Reference Figure 7.

![Figure 7](image)
10. Pull both shackles out from the front of the boom. Reference Figure 8.

![Figure 8](image1)

11. Remove the cotters and chain attachment pins from both shackles and remove the shackles.

12. Install the new shackles (#3072247), chain attachment pins (#3072248), and cotters (#3B4605).

13. Replace the shackles through the locating holes. Place a string through the shackle between the chain attachment pin and the end of the shackle. Use the string to pull the shackle back through the locating hole. Reference Figures 9 and 10.

![Figure 9](image2)
14. Once the shackles are through the positioning holes, add the washers and nuts to prevent the shackles from slipping back through the anchor point. Only attach the nuts by 5 mm of thread.

15. Start the machine and slowly raise the boom to approximately 45 degrees. Then fully telescope the boom inward.

16. Lower the boom to 5 degrees above horizontal and shut down the machine.

17. Replace the retract chain pulleys and pulley pins at the rear of the boom. Ensure that the grease fittings are facing outward, and the fastening bolts are located on the flat part of the pin.

18. Grease the retract chain pulleys with the type and amount of grease specified in the Operation and Maintenance Manual for the machine.

19. Before beginning the boom chain adjustment procedure, ensure the machine is on firm, level ground with the park brake applied.

20. Lower the stabilizer legs (outriggers) and fully extend the boom. If necessary, raise it to an appropriate height to allow access to the retraction chain shackles on the underside of the boom.

21. Place a suitable stand underneath the boom for additional support, and turn off the engine.

22. Remove the locknuts from all seven (7) of the boom chain shackles.

23. Loosen the adjustment nuts on all chain shackles until the end of the shackle is flush with the end of the nut. Ensure no threads are protruding from any of the adjustment nuts.
24. Start the engine and retract the boom 200 mm (7.87 in). Once the boom is retracted, turn off the engine.

25. Adjust the retraction chains underneath the first boom section such that 30 mm (1.18 in) of thread is exposed between the outer face of the nut and the end of the thread on the shackle. Reference Figure 11.

![Figure 11]

**IMPORTANT! ENSURE THE CHAIN SHACKLES ARE LYING STRAIGHT WITHIN THE BOX SECTION OF THE BOOM AND ARE NOT TWISTED.**

26. Adjust the retraction chain shackles underneath of the second boom section until 15 mm (0.59 in) of thread is exposed between the outer face of the nut and the end of the thread on the shackle. Reference Figure 12.
IMPORTANT! ENSURE THE CHAIN SHACKLES ARE LYING STRAIGHT WITHIN THE BOX SECTION OF THE BOOM AND ARE NOT TWISTED.
27. Tighten the extension chain nuts on the first section evenly, regularly switching from left to right, until the clearance between each chain and the boom section is 90 mm (3.54 in). Reference Figures 13 and 14.
28. Tighten the extension chain on the second section until the clearance between the chain and the boom section is 90 mm (3.54 in). Reference Figures 14 and 15.

![Figure 15](image)

29. Remove the stand and all tools from the working area and start the machine.

30. Fully retract the boom and then fully extend the boom. Retract the boom again, only by 200 mm (7.87 in).

31. Turn off the machine, and replace the stand beneath the boom.

32. Check the clearance between all extension chains and the boom sections. For each extension chain, the proper adjustment measurement is 90 mm (3.54 in). Reference Figure 14.

33. If the adjustment is less than 90 mm (3.54 in), tighten the appropriate extension chain shackles to achieve the required adjustment (90 mm). Reference Figures 13 and 15.

34. Fully retract the boom and then fully extend the boom.

35. With the boom at full extension, verify the clearance between the chain and the boom is, at minimum, 90 mm (3.54 in).
36. If this is not the case, repeat the adjustment procedure, until proper adjustment in each chain is consistently achieved.

37. Add and tighten the lock nuts on all chain shackles.

   **IMPORTANT! DO NOT USE ANY THREAD LOCK ON THE SHACKLE LOCK NUTS. SHACKLE THREADS MUST BE CLEAN AND DRY.**

38. Before the machine is returned to service, ensure all shackles are lying straight within the box section if the boom and are not twisted.

39. Reinstall the rear boom cover.


41. Confirm proper operation of all boom functions.

42. The machine may be returned to service once proper operation is confirmed.

Should any further discrepancies be discovered during the accomplishment of this procedure, please contact JLG for further evaluation.
**Machine Serial Number(s):**

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Specify Operation and Maintenance Manual (Limit one per serial number):

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</tbody>
</table>

Fax, email, or mail the completed form to:

JLG Manufacturing Europe BVBA
Caterpillar Alliance Group
Industrieterrein Oude Bunders 1034
Breitwaterstraat 12A
B-3630 Maasmechelen
Belgium
Fax: +32 (0) 89 77 85 37
Email: eamecatps@JLG.com

Submitted by:

Name: ____________________________________________________________

Company: _________________________________________________________

Address: _________________________________________________________

Address: _________________________________________________________

Address: _________________________________________________________

Country: _________________________________________________________ Tel #: ____________________________

Signature: _________________________________________________________ Date: ____________________________