



Ball Joint (2411-41) Binds

Product: Multiple products

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Affected Units:	Models:	Serial Numbers:
Reelmaster 3100-D	03206, 03207	270000101 – 270009999
Greensmaster 3150, 3250-D	04357, 04383	270000101 – 270009999
Groundsmaster 3500-D	30839	270000101 – 270009999
MultiPro 5700	41582	270000101 – 270009999
ProCore 648	09200	270000101 – 270009999

Situation:

The traction linkage system may bind causing an extended stopping distance. Inspect the traction linkage system for proper operation whenever servicing any machine. For the machines listed above, this is especially important.

Ball Joint (2411-41) can bind, causing sluggish traction operation, and if allowed to go unrepaired, could cause loss of traction control.

Instructions:

Inspect and test traction operation, with the engine off, to verify free and proper operation.

Verify that the Ball Joint (2411-41) is not binding and replace any Ball Joints that do not rotate or move freely.

If the source of binding is not apparent, follow these Troubleshooting Tips:

- 1) Inspect linkage
 - a. It should be possible to rotate the linkage attached to the Ball Joint.
 - b. Verify the ball joints are perpendicular to the attaching hardware while in use.

If no issue with the linkage is apparent, yet operation appears stiff or sluggish, continue with troubleshooting steps.

- 2) Test-drive the unit on flat ground away from any obstacles and at transport speed; take your foot off the traction pedal.
 - a. If the unit stops normally (within a short distance), there is no problem. You may want to compare to a different unit that operates as expected.
 - b. If the unit takes too long to stop, go to step 3.
- 3) Loosen the hardware retaining both Ball Joints until the bolts rotate easily. (Do not remove at this time) Retest (see step 1).
 - a. If the unit stops normally, replace any Ball Joints that do not rotate freely.
 - b. If the unit still takes too long to stop, go to step 4.

- 4) Verify the cable/linkage is free by pushing and pulling while disconnected from the load:
 - a. If cable/linkage moves freely, go to step 5.
 - b. If cable/linkage binds or sticks, replace the cable/linkage.
- 5) Remove the dampener (if applicable) and retest.
 - a. If unit stops normally, replace dampener.
 - b. If unit still takes too long to stop, repair hydrostat.

For additional information or assistance, contact your local authorized Toro Commercial Products Distributor.