Roller Chain Inspection & Maintenance



Correct lubrication is the most effective way to extend the life of the lift chains on the Oshkosh AeroTech Commander® loader. Oil must be applied to the lift chains periodically with a brush or other lubrication applicator device. It is Oshkosh AeroTech's recommendation that the lift chains be lubricated in accordance with the Operation & Maintenance Manual, chapter 2.

The volume and frequency of oil application must be sufficient to prevent red brown (rust) discoloration of oil in the joints. This discoloration means that the lift chains have not been lubricated properly. If this condition is observed, the lift chains must be lubricated immediately.

During lift chain operation, some metal-to-metal contact does occur, and parts eventually wear. The lift chain is considered worn out when it has reached 3% elongation. To prevent the possibility of a catastrophic lift chain failure the manufacturer recommends that the chain be replaced before it reaches 3% elongation. The progressive joint wear elongates chain pitch, causing the lift chain to lengthen. This elongation can be measured by placing a certain number of pitches under tension. When elongation reaches a limit of 10.25" on Commander® 30/30i, 9.01" on Commander's® with Goal Post Lift System, or 7.73" on Commander's® with the Center Lift System over 5 pitches, the lift chain needs to be replaced as stated in the Operation, Maintenance Manual Chapter 2. Failure to do so may result in injury to personnel and damage to the loader. Refer to the following chart for the excessive length measurement for your model loader.

It is also necessary to check the lift chain clevis pins for wear. The lift chains are assembled so that the tapered faces of the clevis pins are in line. Rotation of the clevis pins is usually caused by shock loading. Shock loading is caused when the chain is loose and a sudden load is applied, the chain experiences a shock as it "snaps" under a tension load. This scenario, with the lack of lubrication, causes the pins to rotate in the chain's link. If this condition is observed, the lift chains need to be replaced. When replacing lift chains, always replace them in pairs.

How to measure Roller Chain		



If the lift chain on your:	Exceeds this length over 5 pitches	Replace with:
C-15, C-15 <i>i</i> w/center lift module	7.73" (19.56cm)	Qty 2 p/n 625-3602 (primary) & Qty 2 p/n 625-3601 (secondary)
C-15 or C-15 <i>i</i> w/161" Bridge Height	7.73" (19.56cm)	Qty 2 p/n 620-8931(primary) & Qty 2 p/n 620-8932 (secondary)
C-15 Goal Post Lift	9.01" (22.89cm)	Call with Unit serial number
C-30 or C-30 <i>i</i> w/single lift chains	10.25" (26.04cm)	Qty 2 p/n 621-5241 Lift Chain
C-30 or C-30 <i>i</i> w/dual chains (CE)	10.25" (26.04cm)	Qty 4 p/n 621-5241 Lift Chain



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