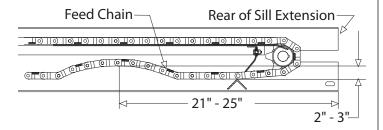


Spreader Maintenance

Check and maintain the correct oil level for both the engine crankcase (gasoline models) and the gearbox (all models). The engine crankcase is filled with 1 quart of SAE 5W-30 motor oil at the factory. The gearbox is filled with SAE 90 gear lubricant at the factory.

In-Season Maintenance

- **1.** Wash spreader after every use. Make sure no material is left under auger/ chain and/or inside trough.
- **2.** Inspect and retighten fasteners after every 7-10 hours of operation. Replace any loose or damaged fasteners.
- **3.** Lubricate your spreader every 7-10 hours of operation and/or following every snow event using a lithium NLGI
- #2 rated general purpose marine grade grease.
 - a. Idler Shaft Bearings (2)
 - **b.** Drive Shaft Bearing (1)
 - c. Feed Gate Jack
 - d. Gearbox Input Shaft (if equipped with a fitting)
 - **e.** Check the gearbox oil level and maintain the proper 3/4 full level by adding the appropriate lubricant. Use care to keep contaminants from getting in reservoir when checking and filling.
- **4.** Check the Feed Chain tension periodically. See the Chain Tension Diagram below. When adjusting the chain, be certain to adjust both sides equally. This adjustment is made on each side of the spreader at the Idler Bearing.
- **5.** Lubricate the conveyor chain at least once per week. Use Lucas Oil® 10014 chain lubricant or similar all-weather lubricant.
- **6.** If applicable, use dielectric grease on all electrical connectors before an electrical connection is made or after connector is disconnected
- **7.** It is recommended to cover spreader with the tarp during storage periods.



End of Season / Off-Season Storage Maintenance

- **1.** Wash spreader. Make certain no material or residue is left in or outside the hopper. Thoroughly dry all metal surfaces. Repaint and oil all previously painted surfaces and auger to protect from rust.
- **2.** Lubricate all bearings (see list above) using lithium NLGI #2 rated general purpose marine grade grease
- **3.** If applicable, inspect wire near connections checking for broken or missing insulation or corroded wires. Trim corroded wires and replace connectors if necessary. Apply dielectric grease on all electrical connections.

- **4.** Store hopper indoors, in a cool, dry place.
- **5.** If applicable, remove controller from truck. Store controller indoors, in a cool, dry place

Gasoline Engine Maintenance

To extend the life of the gasoline engine and electric clutch, the following procedures are recommended:

- Maintain the spreader engine according to the engine owner's manual. This manual is shipped with the spreader. The engine warranty is covered by the engine's manufacturer. If engine service is required, contact an authorized service center for the engine's manufacturer.
- At the end of the season, remove and clean the electric clutch.
 - After cleaning, coat both mating surfaces of the clutch with oil or light grease.
 - Remove oil and grease prior to using the clutch again.

Throttle Motor Replacement Instructions

(diagram on pg. 7)

Removal Instructions:

- Carefully observe the existing installation and mark the position of the throttle control bracket on the engine mount stand.
- Disconnect the wire connections.
- Remove the 1/4-20 fasteners that hold the throttle control bracket to the engine mount stand. Remove the throttle motor assembly.



Improper installation of the throttle motor assembly can result in damage to the engine choke/throttle linkage.

Installation Instructions:

- Connect the electrical wiring. Be certain to connect the brown wire to brown wire and red wire to red wire.
- Run the new throttle motor until the crank is within opening of the throttle control bracket.
- Fasten the new throttle motor to the throttle control bracket using the original hardware.
- Place the throttle pin assembly on the crank of the throttle motor using hole in the middle of plastic block.
- Place the assembly onto the engine mount stand by inserting the throttle pin into the engine choke/throttle linkage slider.
- Keeping the throttle pin assembly parallel to the engine choke/throttle linkage bolt the assembly to the engine mount stand with the existing hardware.
- Run throttle motor in both directions until the slider in choke/ throttle linkage stops against choke/throttle linkage bracket. Adjust position of throttle bracket if necessary.