



Chapter 7

Preventive Maintenance and Lubrication

This chapter provides inspection and preventive maintenance instructions for the EDL Bundler. Performing preventive maintenance, including regular lubrication, helps ensure that the equipment runs safely and efficiently. Regular preventive maintenance also reduces costs associated with unscheduled equipment downtime.

This chapter contains the following sections:

	<i>Page</i>
<i>7.1 Preventive Maintenance and Lubrication.....</i>	<i>7-2</i>



7.1 Preventive Maintenance and Lubrication Schedule

Perform the equipment preventive maintenance and lubrication tasks shown in the table below at the frequencies indicated.

Frequency	Task
Before Operation	<p>Inspect the equipment.</p> <ul style="list-style-type: none">• Check for and remove any tools, support equipment, parts, product, packaging materials, supplies, waste, and debris that might interfere with machine operation during startup and cause injury to personnel or damage to the equipment.• Check for and repair any equipment damage, secure loose components, and replace missing components.
Daily	Remove all dust, debris, and product lines from the equipment.
	Using a soft cloth, remove all traces of film from the seal jaw assemblies.
	Check all photo-eyes, proximity sensors, and limit switches for secure mounting and proper alignment.
	Check all interlocked guard doors for proper operation. With power on the machine, open each guard door, and ensure that the machine shuts down immediately and that air pressure is released. Ensure that the machine cannot be restarted.
	Check all emergency stop buttons for proper operation. With power on the machine, press each emergency stop button, and ensure that the machine shuts down immediately and that air pressure is released. Ensure that the machine cannot be restarted.
Weekly	Check that all fasteners on moving equipment components are tight.
	<p>Inspect the seal jaw assemblies.</p> <ul style="list-style-type: none">• Check for damage to the knife blade and heating elements.• Check that the heating element electrical connections are tight and that the wires are secured and remain clear of other machine components as the seal jaws open and close.• Check for product and debris caught in or sticking to the jaws. Use a soft cloth or compressed air to remove product and debris.• Check that the anvil rubbers are smooth, undamaged, and attached securely to the upper jaw. Check that they are not twisted or cut. Check that there are no gaps between the anvil rubbers and side cheeks when the seal jaws are closed.• Check the horizontal and lateral alignment of the seal jaws.
	Check all drive chains for proper tension. Adjust the chain tension, as necessary, using the chain tensioner jack screw. Check that the chain tensioner is attached securely to the machine.



Frequency	Task
Weekly (Continued)	<p>Clean and lubricate all Permaglide linear plain bearings. Use lithium soap greases with a mineral oil base.</p> <p>CAUTION Do not use molybdenum sulfide, zinc sulfide, or solvents/propellants (i.e., LPS, WD-40). These substances get into and degrade the linear bearing seals.</p>
Monthly	<p>Check the oil level in the gear boxes, and top off as necessary. Note that frequently adding oil to a gear box indicates a loss of oil that should be investigated and corrected. Refer to the manufacturer's recommendations for proper gear oil and oil levels.</p>
	<p>Gearheads are lubricated with NYE, NYOGEL 792D. Under working conditions gel grease will flow and then return to a gel consistency under static conditions.</p>
	<p>Clean and lubricate all drive chains. Use lithium soap greases with a mineral oil base.</p> <p>CAUTION Do not use molybdenum sulfide, zinc sulfide, or solvents/propellants (i.e., LPS, WD-40). These substances get into and degrade the linear bearing seals.</p>
	<p>Check the condition of the conveyor belts and product guides. Ensure that the product guides are attached securely.</p>
	<p>Replace and rebuild the seal jaw assemblies.</p>
	<p>Ensure that all film rollers move freely.</p>
	<p>Check all pneumatic cylinder seals (and gaiters where fitted) for signs of wear and damage.</p>
	<p>Check that all drive motors are mounted securely. Check the tightness of the mounting bolts.</p>
	<p>Check that all drive/driver sprockets are secure on the drive shafts.</p>
Every six months	<p>Check all drive chains and sprockets for wear, and replace as necessary.</p>
	<p>Drain and refill the gearbox oil, except on sealed units.</p>
	<p>Inspect the main electrical cabinet. Check the general condition of the cabinet. Check the cabinet doors and door seals for damage and excessive wear. Check that the main electrical connections and earth bonding straps are intact and fastened securely.</p>



NOTES: