

LT70 Laser Sight

Safety, Operation, Maintenance & Parts Manual

LS LT60/70 Laser Kit, LT70 rev. A.00 - E.00

Safety is our #1 concern!

February 2012

Form #1081

USED WITH:

**LT70HD
LT70HD REMOTE
LT70HD WIRELESS**

***FOR LT70 DCS OR SUPER HYDRAULIC
MILLS, SEE MANUAL 1786***



WARNING! Read and understand this manual before using this machine.

California

Proposition 65 Warning



WARNING: Breathing gas/diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always start and operate the engine in a well-ventilated area.
If in an enclosed area, vent the exhaust to the outside.
Do not modify or tamper with the exhaust system.
Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov.



WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to www.P65Warnings.ca.gov/wood.

Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: woodmizer.com/patents

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SECTION 1 LASER INSTALLATION

Before installing the laser option, be aware that the laser beam can not be seen in direct sunlight. The laser option is best for indoor cutting applications.

1.1 Laser Installation

1. Locate the four square mounting holes on the saw head near the bottom of the drive-side blade housing.

2. Mount the laser/bracket assembly to the saw head using the four carriage head bolts, flat washers and lock nuts..

3. **Rev. A.00 - D.01 Only:** Place star lock washers between the laser bracket and the saw head to ensure proper grounding of the unit

4. Remove the drive belt guard.

5. Route the cable: **See Fig. 1-2.**

a. Route the laser cable under the saw head along the brace plate and secure the cable with the three provided wire clamps.

b. Bolt the wire clamps to the brace plate with the three 1/4-20 x 1/2" hex head bolts, flat washers and self-locking nuts provided.

c. Continue routing the laser cable along the up/down motor wire harness.

d. **Rev. E.00+:** Connect the laser cable to the accessory cable.

Rev. A.00 - D.01: Connect the red laser cable wire to red accessory wire #25. Connect the black laser cable wire to the black accessory wire #26.

e. Use the two provided wire ties to secure the laser cable to the up/down motor wire harness.

f. Reinstall the drive belt guard.

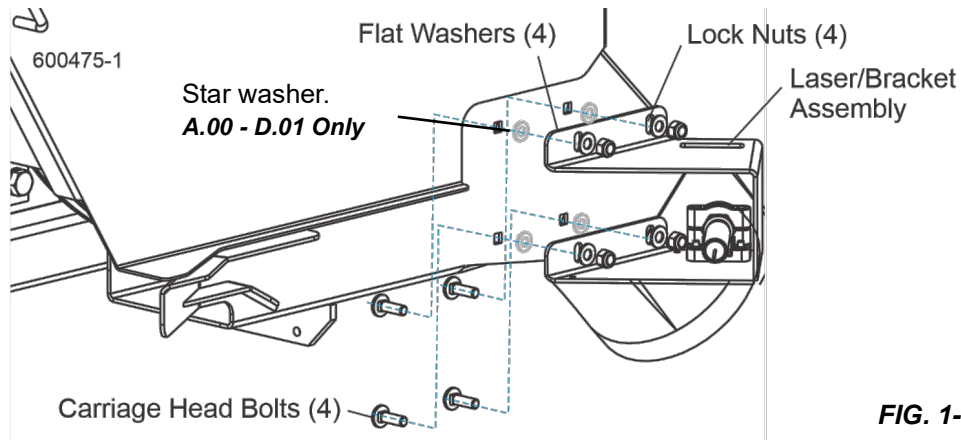


FIG. 1-1

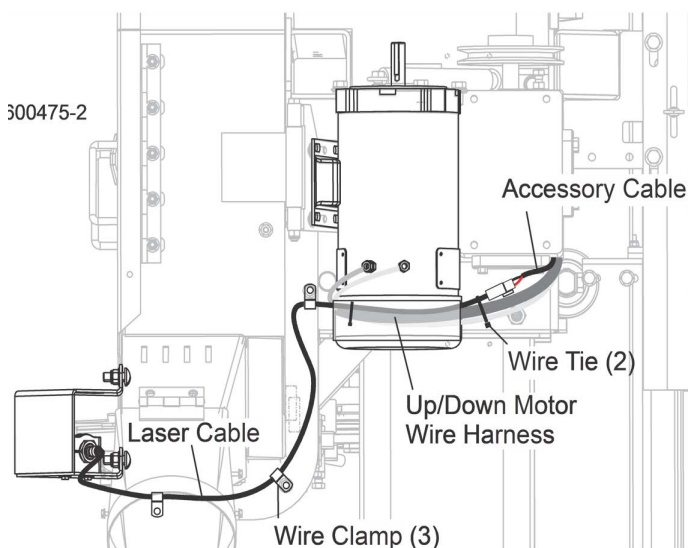


FIG. 1-2 REV. E.00+

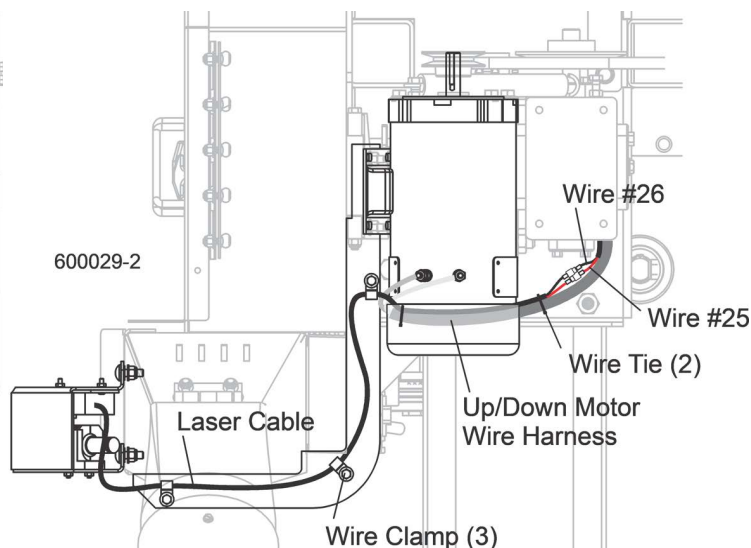


FIG. 1-3 REV. A.00 - D.01

1.2 Switch Installation

1. Unbolt the front panel from the control box. Use the hole in the front panel as a template to cut out a hole in the decal for the laser option switch.

NOTE: The cut hole will be slightly smaller than indicated by the dotted line on the decal.

Use hole in panel as a template to cut hole in lexan decal

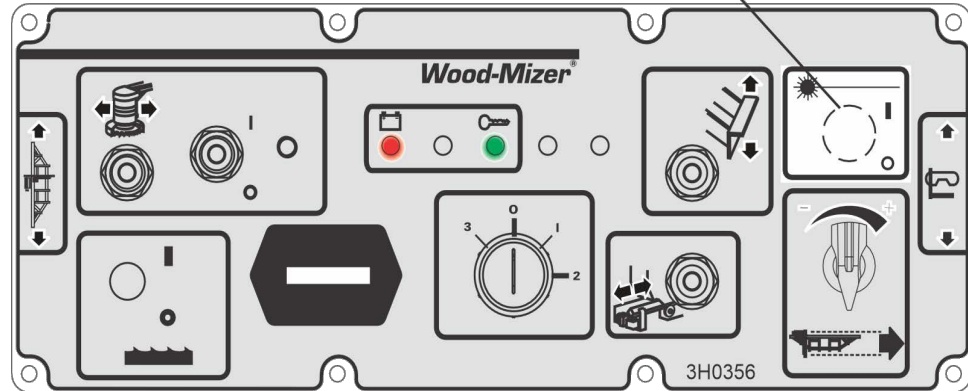


FIG. 1-4

2. Install the toggle switch, nylon washer, and rubber boot to the front panel as shown.
3. **DC Only:** Connect the quick connect terminal on the existing laser option wire (labeled #25) to the bottom tab on the toggle switch.

AC Only: Connect the quick connect terminals on the provided capacitor assembly to the bottom tab on the toggle switch and the existing laser option wire (labeled #25). Connect the capacitor assembly wire with ring terminal to the ground stud located at the bottom of the sawmill control box.

4. Connect the quick connect terminal on the provided fuse assembly to the side tab on the toggle switch.
5. **DC Only:** Connect the ring terminal on the fuse assembly to the 'BAT' terminal of the circuit breaker in the control box (CB7 on non-remote mills; CB6 on remote mills).

AC Only: Connect the ring terminal on the fuse assembly to the 'ACC' post on the key switch.

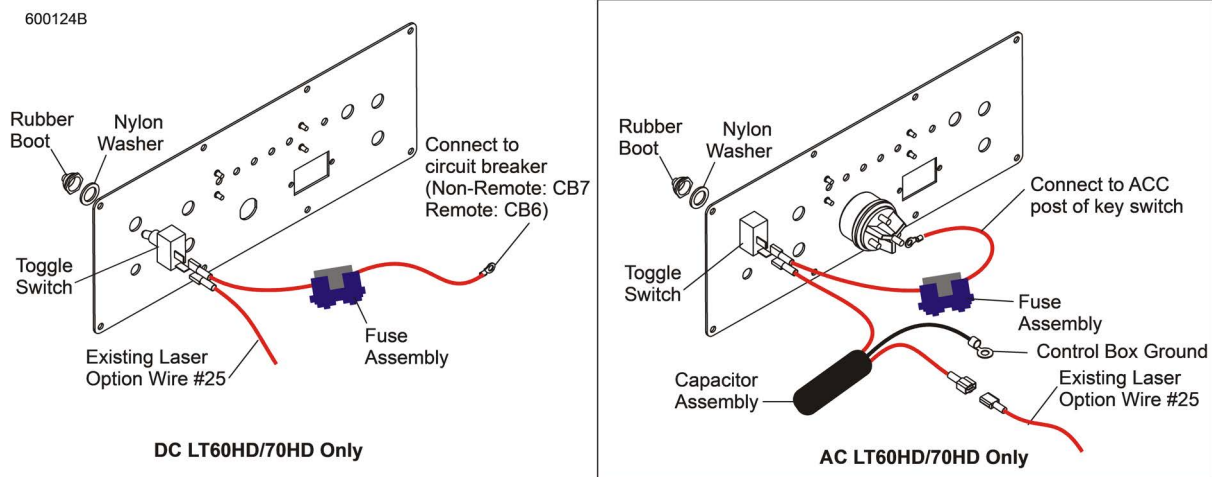


FIG. 1-5

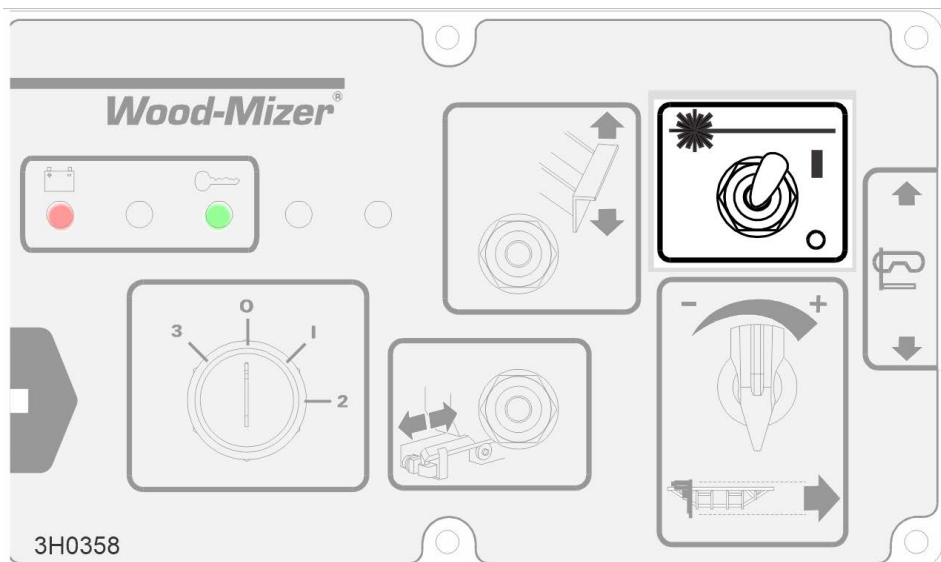
SECTION 2 OPERATION & ALIGNMENT

2.1 Laser Operation

When properly installed, the laser option will guide you in making cuts.

To turn on the laser, the switchlaser toggle switch to the ON^I position.

To turn off the laser, the switch to the OFF^o position.



2.2 Laser Alignment

1. Sawmills should be setup on firm, level ground before proceeding with alignment.
2. Shim the feet so the weight of the sawmill is evenly supported.
3. Adjust the two end outriggers on the main frame tube down just enough to lift weight from the trailer tire.
4. Adjust the two outer outriggers down just so they touch the ground but do not bear weight.
5. Make sure the sawmill is properly aligned (see the Alignment Section of your Sawmill Operator's Manual.)
6. Load a cant onto the bed of the sawmill.
7. Make a cut.
8. Without raising the carriage head, return it to the front of the sawmill so that blade remains level with the top of the cant and the carriage head is 1' behind the front of the cant
9. Align the laser. .

When the laser is properly aligned, approximately 10" of beam will show across the front of the cant.

1. To adjust the laser vertically, loosen the assembly mounting fasteners.
2. Move the entire laser assembly up or down as necessary.
3. Retighten the fasteners to secure the assembly in position.

FIG. 2-1

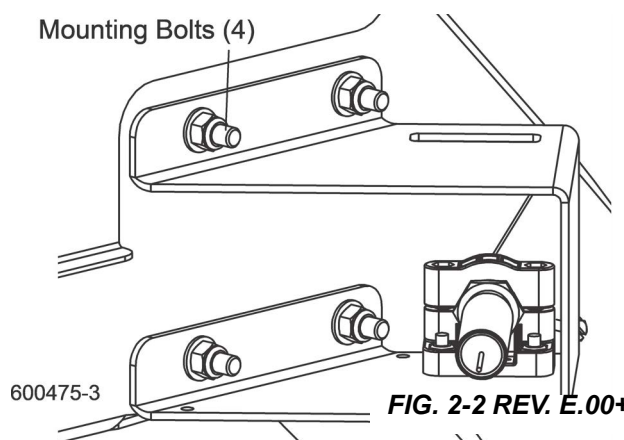


FIG. 2-2 REV. E.00+

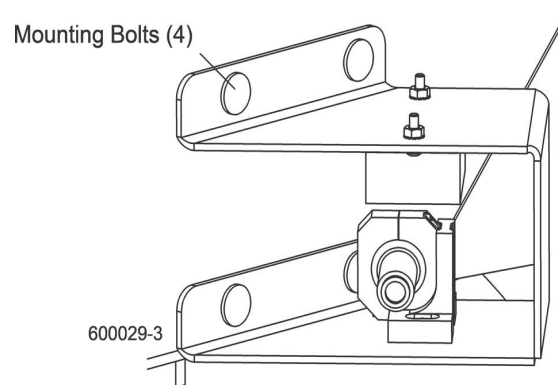


FIG. 2-3 REV. A.00 - D.01

If the laser beam is adjusted too low, it will show against the side of the cant. To see a beam that is adjusted too high, it may be necessary to extend the edge of the cant upward. Fold pieces of paper in half and position them so that the folds align with the outside edge of the cant as shown. Use a thumbtack to secure the bottom half of the papers to the cant.

To adjust the laser horizontally, loosen the laser pivot screws. Pivot the laser diode side to side, or up and down, as necessary. Retighten the pivot screws to secure the diode in place

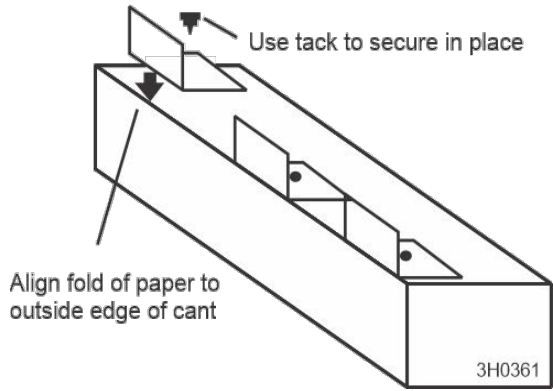


FIG. 2-4

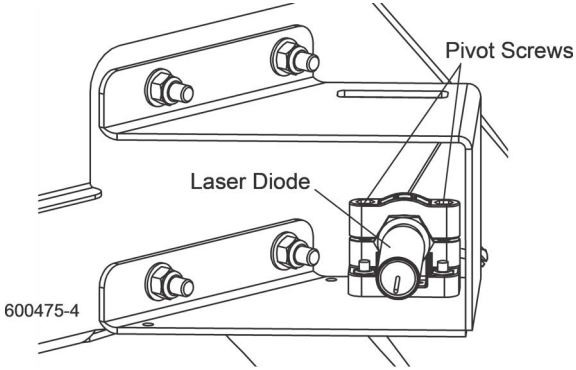


FIG. 2-5 REV. E.00+

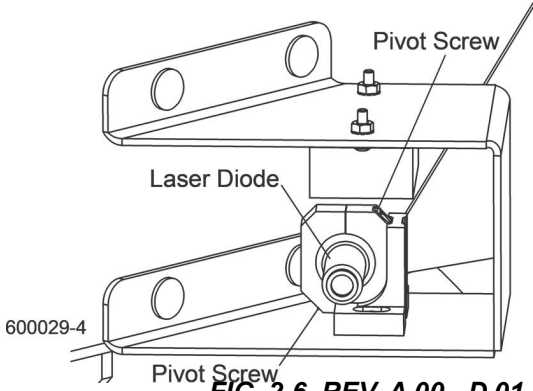
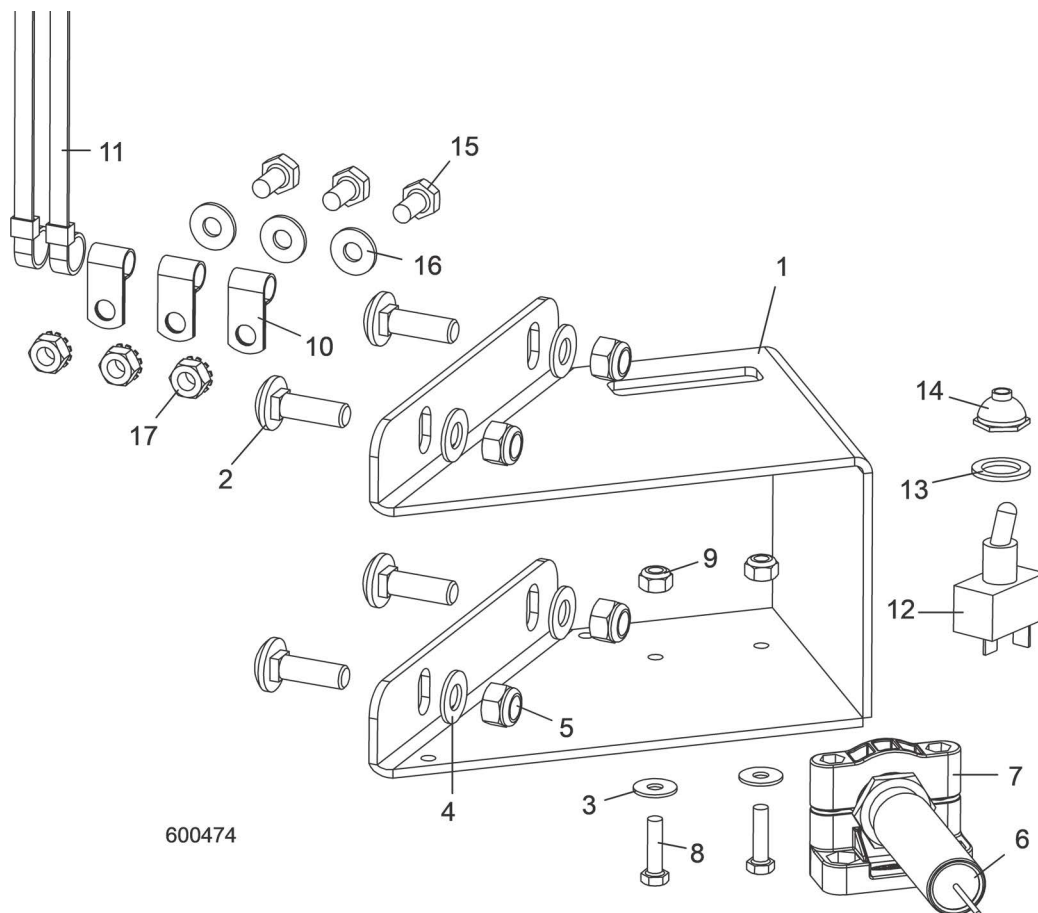


FIG. 2-6 REV. A.00 - D.01

SECTION 3 REPLACEMENT PARTS

3.1 Laser Assembly

Rev. E.00+

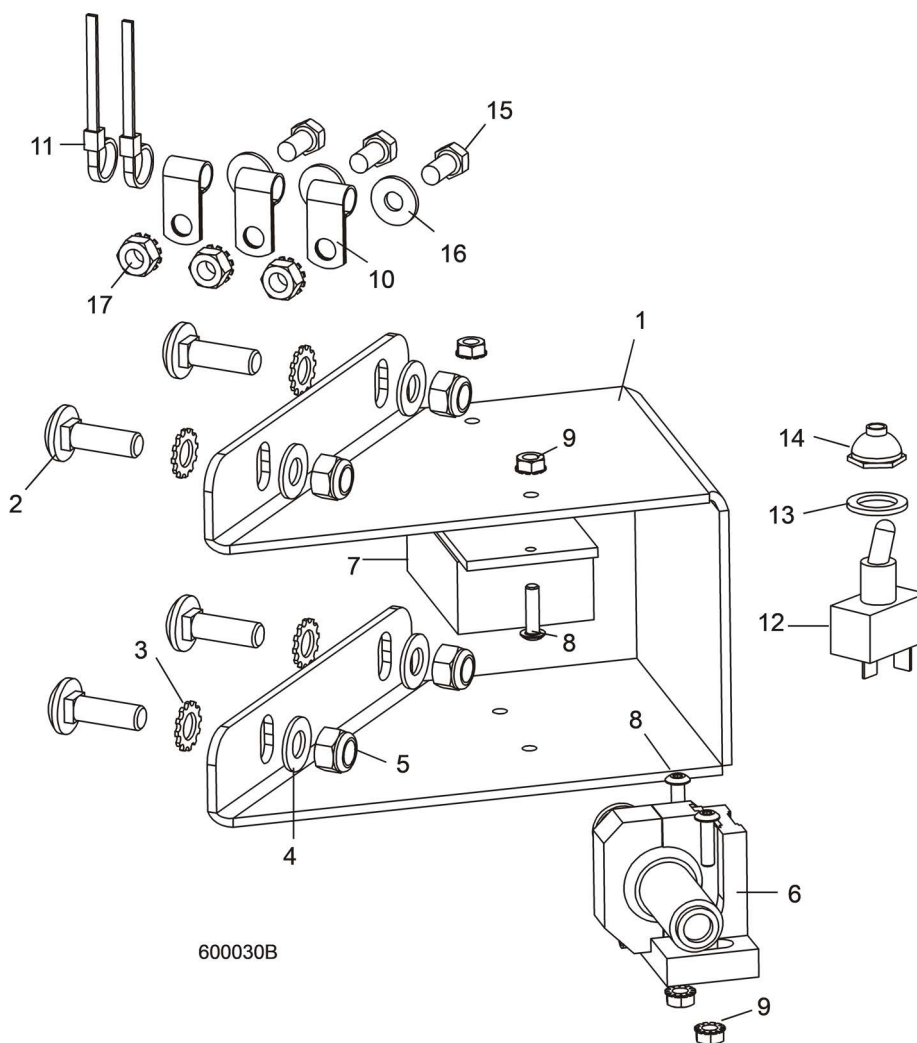


REF	PART #	DESCRIPTION	COMMENTS	QTY.
	LS LT60/70	LASER KIT, COMPLETE FOR LT70		1
	073701	Laser Assembly, 20 mW 638nm 90 Deg RED Line	Available in assemblies only.	1
1	073863	Mount Weldment, LT70 Laser		1
2	F05006-9	Bolt, 5/16-18 x 1" Carriage Head		4
3	F05011-18	Washer, #10 SAE Flat		2
4	F05011-17	Washer, 5/16" SAE Flat		4
5	F05010-58	Nut, 5/16-18 Hex Nylon Lock		4
6	073700	Laser, 20mW 638nm 90 Deg RED Line Z Laser		1
7	074051	Bracket, 18mm Swivel		1
	F05089-6	Tie Wrap, .100 x 4 Black		2
8	F05004-167	Bolt, 10-24 x 3/4" Unslotted Hex Head		2
9	F05010-160	Nut, 10-24 Hex Nylon Lock		2
	024195	Bag Assembly, LT70 Laser Parts		1
10	025671	Clamp, 1/4" Wire 9/32" Mounting Hole		3
11	F05089-1	Tie Wrap, 1/4" x 6"		2

REF	PART #	DESCRIPTION	COMMENTS	QTY.
12	P03027	Switch, Toggle		1
13	P05251-1	Washer, 1/2" x 3/4" x 1/16" Nylon		1
14	P02575	Boot, Toggle Switch		1
	050914	Capacitor Assembly, AC Laser		1
	024151	Fuse Assembly		1
	024150-1	Fuse, ATO 1A Dark Grey		1
15	F05005-15	Bolt, 1/4-20 x 1/2" Hex Head		3
16	F05011-11	Washer, 1/4" SAE Flat		3
17	F05010-9	Nut, 1/4-20 Hex Self-Locking		3
	078254	Adapter, Laser M12 4P Fml to Spade		1

3.2 Laser Assembly

Rev. A.00 - D.01



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	LS LT60/70	LASER KIT, COMPLETE FOR LT60/70		1
	017833	Bracket Assembly, LT60/LT70 Laser	Available in assemblies only.	1
1	034863	Mount Weldment, LT60/LT70 Laser		1
2	F05006-9	Bolt, 5/16-18 x 1" Carriage Head		4
3	F05011-33	Washer, 5/16" Exterior Star Lock		4
4	F05011-17	Washer, 5/16" SAE Flat		4
5	F05010-58	Nut, 5/16-18 Hex Nylon Lock		4
	050500	Laser Kit, Replacement w/Power Supply		1
6	050367	Laser, 60deg Line w/Std Bkt & Connector		1
	045250	Bracket, Laser Mount (Plastic)		1
7	050368	Power Supply, Laser w/Connector		1
	F05089-1	Tie Wrap, 1/4" x 6"		2
	050500-1069	Instruction Sheet, Laser Replacement		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
8	F05004-98	Screw, #8-32 X 5/8" Socket Button Head Stainless Steel		4
9	F05010-41	Nut, #8-32 Self Locking		4
	024195	Bag Assembly, LT60/LT70 Laser Parts		1
10	025671	Clamp, 1/4" Wire 9/32" Mounting Hole	Replaces 024148 1/8" Wire 9/32" Mounting Hole EMT Clamp (1/12).	3
11	F05089-1	Tie Wrap, 1/4" x 6"		2
12	P03027	Switch, Toggle		1
13	P05251-1	Washer, 1/2" x 3/4" x 1/16" Nylon		1
14	P02575	Boot, Toggle Switch		1
	050914	Capacitor Assembly, AC Laser	Capacitor Assembly 050914 added to bag assembly for use with AC sawmills (Rev. C.00).	1
	024151	Fuse Assembly		1
	024150-1	Fuse, ATO 1A Dark Grey		1
15	F05005-15	Bolt, 1/4-20 x 1/2" Hex Head		3
16	F05011-11	Washer, 1/4" SAE Flat		3
17	F05010-9	Nut, 1/4-20 Hex Self-Locking		3