

# **E10 Motor**

## **Safety, Operation, Maintenance & Parts Manual**

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**034812 Motor, LT15 10Hp 3Ph            rev. A-B**  
**017957 Motor, LT15 10Hp 3Ph 575V   rev. A-B**

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**Safety is our #1 concern!**

*April 2010*

*Form #1100*

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### **Used with**

<b>LT15E10H</b>	<b>rev. E2.00 - E8.13</b>
<b>LT15E10HW</b>	<b>rev. A1.00 - A1.14</b>
<b>LT15E10L</b>	<b>rev. E2.00 - E8.13</b>
<b>LT15E10L-ICE</b>	<b>rev. E2.10- E8.13</b>
<b>LT15E10LW</b>	<b>rev. A1.00 - A1.14</b>
<b>LT15E10C</b>	<b>rev. E2.00 - E6.05</b>

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**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](http://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](http://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](http://woodmizer.com/patents)

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## SECTION 1 SAFETY

This manual is provided as a supplement to the equipment manufacturer's manuals.

This manual provides information specific to the use of this equipment on the Wood-Mizer® sawmill. Refer to the sawmill operator's manual and manufacturer's manual before attempting to operate this equipment.

**NOTICE** Read the sawmill operator's manual and engine manufacturer's manual for instructions and safety precautions before operating this equipment.

The information and instructions given in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

Refer to the manufacturer's manual for maintenance intervals and procedures unless otherwise instructed in this manual. Follow the manufacturer's recommendations for dusty conditions.

**NOTICE** This manual only provides information about additional procedures or procedures to be performed at different time intervals than found in the manufacturer's manuals. Refer to the manufacturer's manual for complete maintenance instructions.



**WARNING!** Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather **after every shift**. Failure to do so may result in fire, causing death or serious injury.



### 1.1 Safety

Use caution when performing maintenance or service to the engine.



**DANGER!** Take proper protective measures against rotating shafts, pulleys, fans, etc.

Ensure loose clothing or long hair does not engage rotating members.

**DANGER!** Do not touch or perform service functions on a hot engine. Allow the engine to cool sufficiently before beginning any service function. Hot engine components will cause serious burns.



**WARNING!** Remove the blade before performing any engine service.

**WARNING!** Wear eye, hand, and foot protection equipment when performing service functions.

## SECTION 2 OPERATION

### 2.1 Starting The Motor



**DANGER!** Ensure the blade is disengaged and all persons are out of the path of the blade before starting. Failure to do so will result in death or serious injury.

Turn the main switch on the starter box to the ON position.

Press the green START button located on the starter box to start the motor.

#### **MOTOR SHUTOFF**

Press the red STOP button on the starter box to stop the motor.

Turn the main switch to the OFF position.

## SECTION 1 MAINTENANCE

Refer to the manufacturer's manual for maintenance intervals and procedures unless otherwise instructed in this manual. Follow the manufacturer's recommendations for dusty conditions.

**NOTICE** This manual only provides information about additional procedures or procedures to be performed at different time intervals than found in the manufacturer's manuals. Refer to the manufacturer's manual for complete maintenance instructions.



**WARNING!** Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather **after every shift**. Failure to do so may result in fire, causing death or serious injury.

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### 1.1 Safety

Use caution when performing maintenance or service to the motor.



**DANGER!** Take proper protective measures against rotating shafts, pulleys, fans, etc.

Ensure loose clothing or long hair does not engage rotating members.

**DANGER!** Ensure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

**DANGER!** Hazardous voltage inside the disconnect box, starter box, and at the motor can cause shock, burns, or death. Disconnect and lock out power supply before servicing! Keep all electrical component covers closed and securely fastened during mill operation.



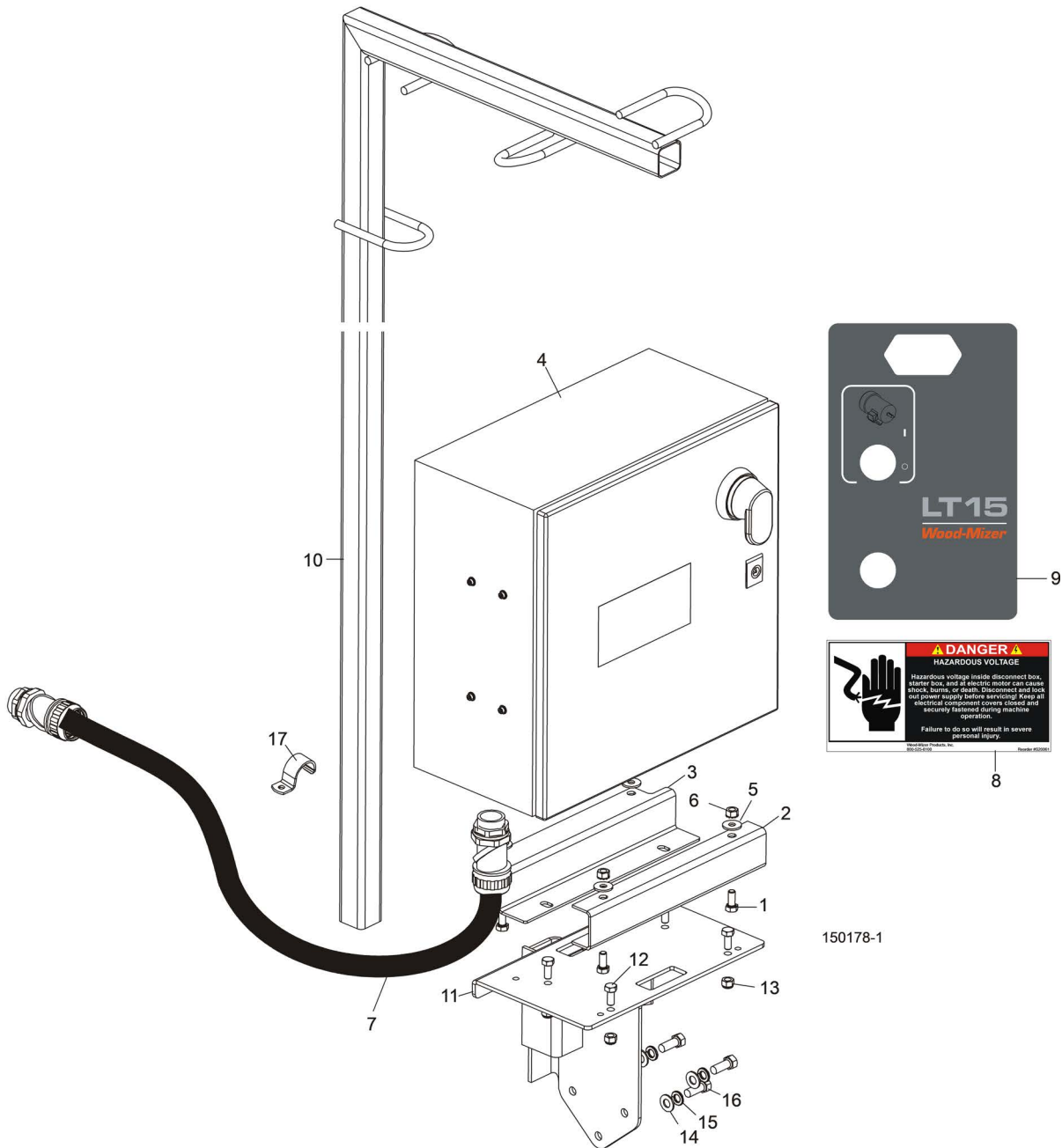
**WARNING!** Remove the blade before performing any engine service.

**WARNING!** Wear eye, hand, and foot protection equipment when performing service functions.

## SECTION 2 REPLACEMENT PARTS

### 2.1 Motor Starter Assembly

LT15Rev. E6.06+



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	017954	MOTOR MODULE, 10HP 3-PHASE 208-240V ELECTRIC MOTOR		1
	017955	MOTOR MODULE, 10HP 3-PHASE 380-500V ELECTRIC MOTOR		1
		Motor Parts ( )	<i>(See Section 4.4)</i>	
	053713	Control Assembly, LT15 E10 3-Phase 240V		1
	053738	Control Assembly, LT15 E10 3-Phase 460V		1

## 2 Replacement Parts

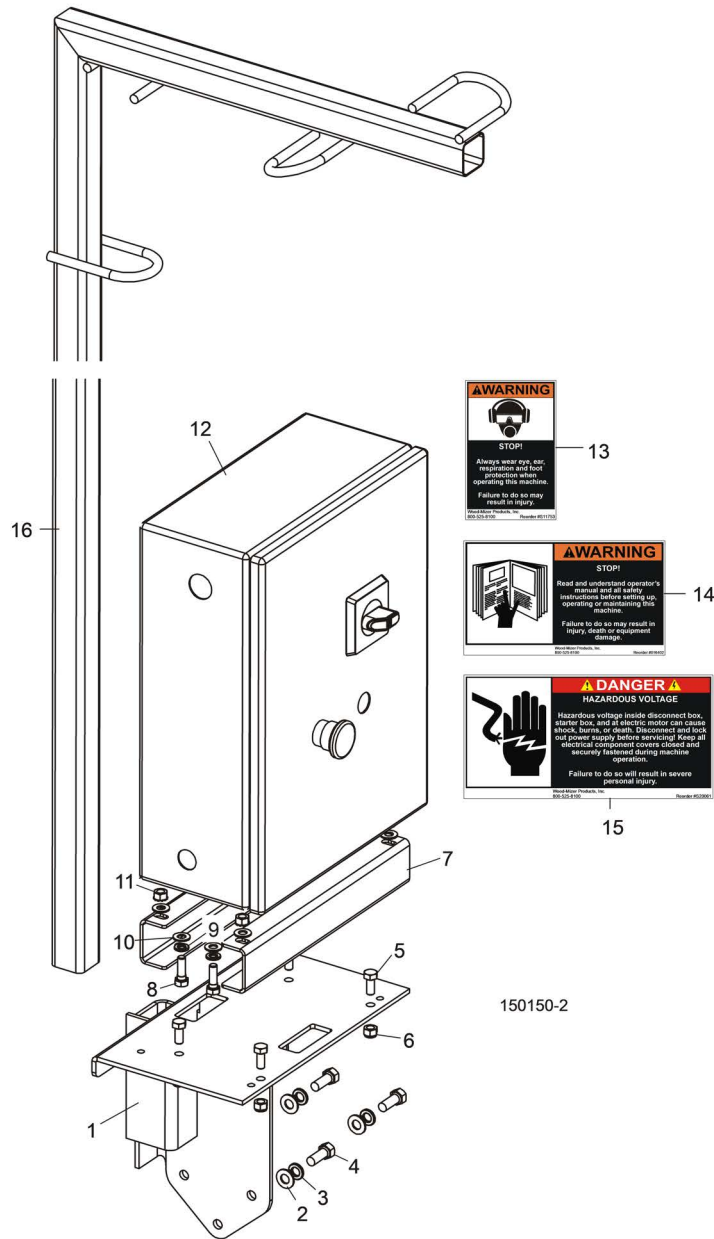
### Motor Starter Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	F05006-5	Bolt, 5/16-18 x 3/4 Hex Head		4
2	035991	Bracket, Front Electric Motor Mount		1
3	035992	Bracket, Rear Electric Motor Mount		1
4	053584	Enclosure, 16" x 16" x 8" Custom		1
		LT15E10L Electrical Components (	<a href="#">See Component List</a>	
		LT15E10H Electrical Components (	<a href="#">See Component List</a>	
		LT15E10S Electrical Components	<a href="#">(See Component List)</a>	
5	F05011-16	Washer, 5/16 Flat		4
6	F05010-20	Nut, 5/16-18 Keps		4
7	053714	Harness Assembly, LT15E10L Blade Motor (3-Phase 240V)		1
	053739	Harness Assembly, LT15E10H Blade Motor (3-Phase 460V)		1
8	S20061	Decal, Electrical Hazard Danger		1
9	069362	Decal, LT15E10 Control Cabinet		1
10	034906	<b>TUBE WELDMENT, WIRE HANGER LT15E</b>		1
11	034899	<b>MOUNT WELDMENT, BATTERY/CONTROL BOX</b>		1
12	F05006-102	<b>BOLT, 5/16-18 X 3/4" HEX HEAD</b>		4
13	F05010-58	<b>NUT, 5/16-18 NYLON LOCK</b>		4
14	F05007-7	<b>BOLT, 3/8-16 X 1" HEX HEAD</b>		3
15	F05011-4	<b>WASHER, 3/8" SPLIT LOCK</b>		3
16	F05011-3	<b>WASHER, 3/8" SAE FLAT</b>		3
17	P05436	<b>CLAMP, 1" EMT</b>		1



## 2.2 Motor Starter Assembly

LT15Rev. E6.00 - E6.05



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	034899	MOUNT WELDMENT, BATTERY/CONTROL BOX		1
2	F05011-3	WASHER, 3/8 FLAT		3
3	F05011-4	WASHER, 3/8 SPLIT LOCK		3
4	F05007-7	BOLT, 3/8-16 X 1 HEX HEAD		3
5	F05006-102	BOLT, 5/16-18 X 3/4 HEX HEAD		4
6	F05010-58	NUT, 5/16-18 NYLON LOCK		4
	052816	CONTROL ASSEMBLY, LT15 E10 3-PHASE 230V		1
	052817	CONTROL ASSEMBLY, LT15 E10 3-PHASE 460V		1
	052818	CONTROL ASSEMBLY, LT15 E10 3-PHASE 575V		1
		Electrical Components	( <a href="#">See Component List</a> )	

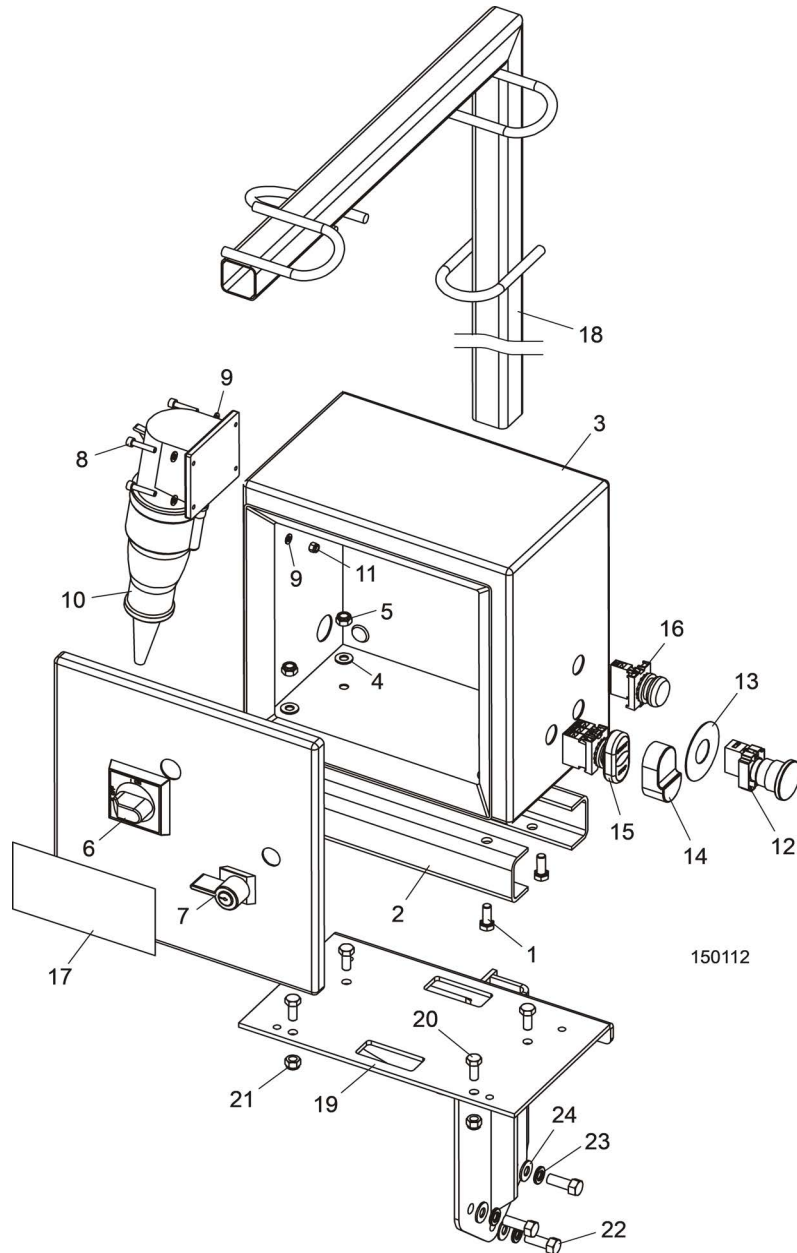
## 2 Replacement Parts

Motor Starter Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
7	038911	Bracket, Control Mount		2
8	F05006-1	Bolt, 5/16-18 x 1" Hex Head		4
9	F05011-13	Washer, 5/16" Split Lock		4
10	F05011-17	Washer, 5/16" SAE Flat		8
11	F05010-20	Nut, 5/16-18 Self-Locking Hex		4
12	055348	Enclosure, LT15 Control Box		1
13	S11753	Decal, Eye/Ear Protection Warning		1
14	016402	Decal, Read Manual Warning		1
15	S20061	Decal, Electrical Hazard Danger		1
	P05436	<b>CLAMP, 1 EMT</b>		1
16	034906	<b>TUBE WELDMENT, WIRE HANGER LT15E</b>		1

## 2.3 Motor Starter Assembly

LT15Rev. E2.00 - E5.00



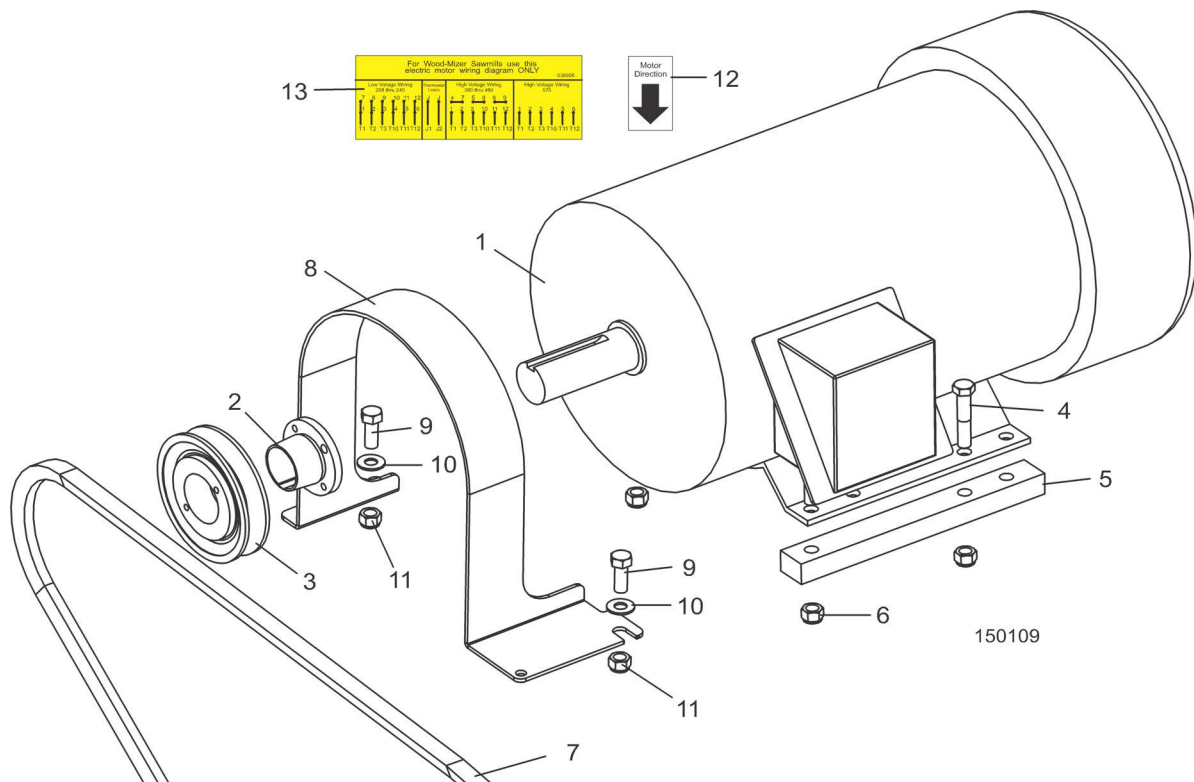
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	088280-4	<b>STARTER ASSEMBLY, 10HP 3-PHASE 50/60HZ ELECTRIC MOTOR</b>		1
1	F81002-4	Bolt, M8 x 20-8.8 Hex Head		4
2	N/A	Bracket, Electric Motor Starter		2
3	N/A	Box, Electric Motor Starter Enclosure		1
	084037	Timer, Y-Delta		1
	084305	Contact, LC1 D09 B7		1
	084306	Contact, LC1 D18 B7		1
	088278	Switch, Modular		1
	090562	Transformer, LT15		1

## 2 Replacement Parts

### Motor Starter Assembly

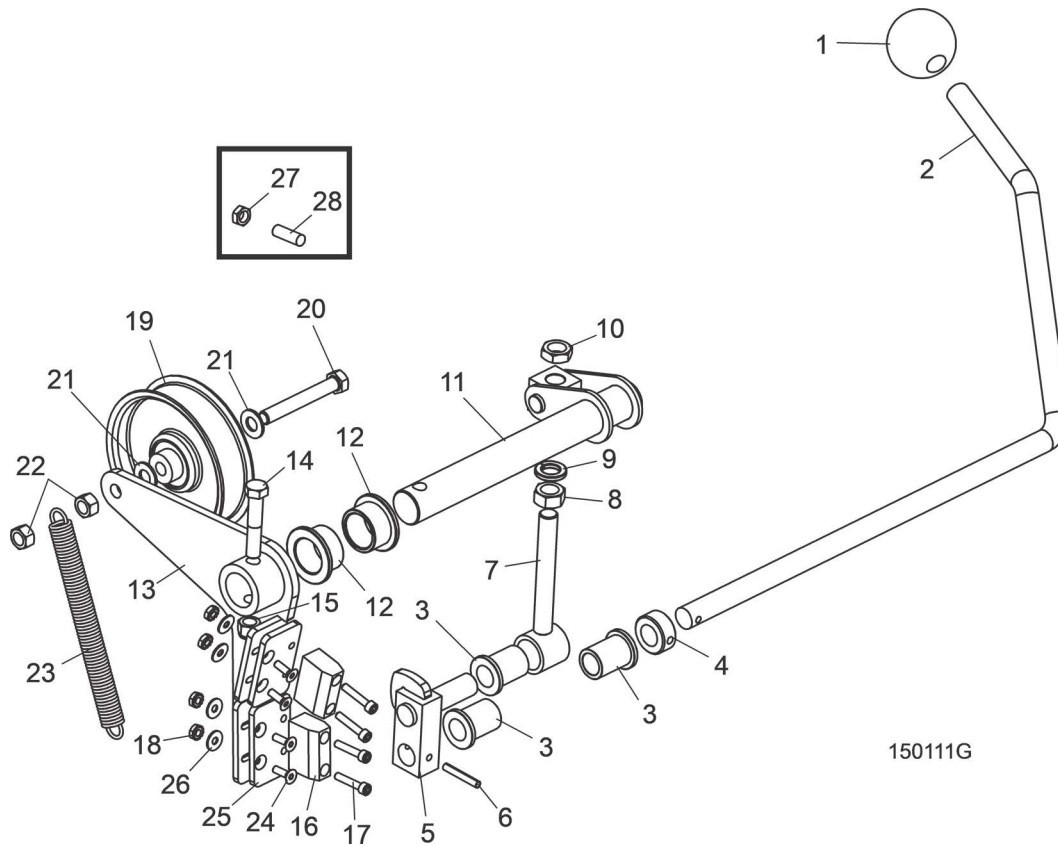
REF	PART #	DESCRIPTION	COMMENTS	QTY.
4	F81054-1	Washer, 8.4mm Flat		4
5	F81032-2	Nut, M8-8 Hex		4
6	088265-1	Switch, Electric Motor Starter Main		1
7	N/A	Latch, Starter Box Door		1
8	F81000-7	Bolt, M5 x 25 8.8 Socket Head		4
9	F81052-1	Washer, 5.3mm Flat		8
10	050942	Conn Plug, 60A 3P Watertight		1
	050943	Conn Socket, 60A 3P Watertight		1
11	F81030-2	Nut, M5-8 Hex		4
12	086556	Switch, Emergency Stop		1
13	086561	Decal, Emergency Stop Switch		1
14	090462	Membrane, Start-Stop Switch		1
15	090452	Switch, Start/Stop 24V		1
16	090448	Light, White LED Control		1
	088264	<b>STARTER, MANUAL MOTOR 24-32A (LT15E10L)</b>		1
	090561	<b>STARTER, MANUAL MOTOR 13-18A (LT15E10H)</b>		1
	090430	<b>STARTER, MANUAL MOTOR 9-14A (LT15E10C)</b>		1
17	S20061	<b>DECAL, ELECTRICAL HAZARD DANGER</b>		1
18	034906	<b>TUBE WELDMENT, WIRE HANGER LT15E</b>		1
19	034899	<b>MOUNT WELDMENT, BATTERY/CONTROL BOX</b>		1
20	F05006-102	<b>BOLT, 5/16-18 X 3/4 HEX HEAD</b>		4
21	F05010-58	<b>NUT, 5/16-18 NYLON LOCK</b>		4
22	F05007-7	<b>BOLT, 3/8-16 X 1 HEX HEAD</b>		3
23	F05011-4	<b>WASHER, 3/8 SPLIT LOCK</b>		3
24	F05011-3	<b>WASHER, 3/8 FLAT</b>		3
	P05436	<b>CLAMP, 1 EMT</b>		1

## 2.4 Motor Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	P12393	Cover, Engine		1
	034812	<b>MOTOR ASSEMBLY, LT15 10HP 3-PHASE ELECTRIC</b>		1
	017957	<b>MOTOR ASSEMBLY, LT15 10HP 575 VOLT ELECTRIC</b>		1
1	034903	Motor, 10HP 3-phase Lincoln	Available in assemblies only.	1
	034907	Motor, 10HP 3-phase 575V Lincoln		1
2	P04864	Bushing, 1 3/8 Split Taper		1
3	036057	Sheave, BK45QT		1
4	F05007-129	<b>BOLT, 3/8-16 X 1 3/4" HEX HEAD GRADE 5</b>		4
5	034807	Spacer, Motor LT15E		2
6	F05010-10	<b>NUT, 3/8-16 HEX NYLON LOCK</b>		4
7	P25301	BELT, BX85 DRIVE		1
8	034904	GUARD, MOTOR SHAFT LT15E		1
9	F05007-7	SCREW, 3/8-16 X 1 HEX HEAD		2
10	F05011-3	WASHER, 3/8 FLAT SAE		2
11	F05010-10	NUT, 3/8-16 HEX NYLON LOCK		2
12	S20097	DECAL, MOTOR DIRECTION		1
13	036058	DECAL, E10 ELECTRIC MOTOR WIRING		1

**2.5 Throttle/Clutch Assembly** LT15E10 Rev. E1.00+



150111G

REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	P04211	KNOB, 5/8-11 BALL		1
2	016487	HANDLE, LT15 CLUTCH	Clutch Handle 016487 modified Rev. E6.01 to eliminate possible pinch point with feed rope pulley with saw head at certain heights.	1
3	016486	BUSHING, 5/8 ID X 7/8 OD X 1 1/8 LONG FL BRONZE		3
4	P05035	COLLAR, 5/8 ID LOCK		1
5	065572	BLOCK WELDMENT, LINKAGE CLUTCH/BRAKE	Replaces 034612 to make clutch pivot stop adjustable Rev. E6.10.	1
6	F05012-16	PIN, 3/16 X 1 1/4 ROLL		1
7	034605	LINKAGE ASSEMBLY, W/BEARING		1
8	F05010-35	NUT, 1/2-13 FREE HEX, ZINC		1
9	F05011-9	WASHER, 1/2 SPLIT LOCK		1
10	F05010-31	NUT, 1/2-13 JAM		1
11	034608	PIVOT WELDMENT, CLUTCH/BRAKE		1
12	P737	BUSHING, 1 X 1 1/4 X 3/4 FLANGE BRONZE		2

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	065874	<b>BRAKE/CLUTCH ASSEMBLY, LT15</b>	Replaces Brake/Clutch Assembly 034603 to improve durability (Rev. E7.01). Brake/Clutch Assembly 034603 (including Clutch/Brake Arm Weldment 034613) modified 9/10. Spring mount hardware changed to provide more freedom of movement and prevent binding point in spring.	1
<b>13</b>	065873	Arm Weldment, Clutch/Brake LT15		1
<b>14</b>	F05007-124	Bolt, 3/8-16 x 2 Hex Head Gr5		1
<b>15</b>	F05010-10	Nut, 3/8-16 Hex Nylon Lock		1
<b>16</b>	016488	Block, LT15 Brake		2
<b>17</b>	F05004-2	Screw, 10-24 x 1 Socket Head	Replaces F05004-50 originally supplied before 4/03 (duplicate part numbers).	4
<b>18</b>	F05010-14	Nut, #10-24 Keps		8
<b>19</b>	034602	Idler, 4" O.D. x 3/8 Bore		1
<b>20</b>	F05007-230	Bolt, 3/8-16 x 2-3/4" Hex Head Gr5 Full Thread		1
<b>21</b>	F05011-3	Washer, 3/8 Flat		2
<b>22</b>	F05010-25	Nut, 3/8-16 Swaged Lock		2
<b>23</b>	034810	Spring, Idler Arm LT15/D/E/G		1
<b>24</b>	F05004-282	Screw, 10-24 x 5/8" FSHC		4
<b>25</b>	065872	Plate, Brake Adjustment		2
<b>26</b>	F05011-18	Washer, #10 SAE Flat		4