

E11, E15 & E20 Electric Option

Safety, Operation, Maintenance & Parts Manual

LT20 Series

Rev. E3.02



Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

Form #616

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Operation

Starting The Motor

SECTION 1 OPERATION

1.1 Starting The Motor



DANGER! Always be sure all persons are away from the blade before starting the motor.

DANGER! Push the emergency switch located on the LT20 control box, to stop the sawmill immediately.

LT20 Series

Turn on the main switch to start the motor. When the power is on the white control light located on the box door comes on. When all covers are closed white “ready” control light comes on.

1.2 Blade Rotation Change

Make sure the blade rotation is correct as shown in the motor housing after starting an electric motor sawmill.

Turn off the blade motor using the “Stop” switch located on the front of the control box. Disconnect the starter box using the main switch, and disconnect the plug located on the left side of the starter box.

Then, with the screwdriver turn the phase converter switch (red switch at the bottom of the connector) to the right or to the left, and rotate it about 180° - this converts the phases and changes the blade rotation.

SECTION 2 MAINTENANCE



This symbol identifies the interval (hours of operation) which each maintenance procedure should be performed. "AR" signifies maintenance procedures which should be performed as required.

2.1 Drive Belt



Periodically check all belts for wear. Replace any damaged or worn belts as needed.



Adjust the drive belt support as needed. The drive belt support is designed to extend belt life.



DANGER! Do not for any reason adjust the drive belt support with the motor running. Always stop the motor before reaching or looking into the drive belt area.

SECTION 3 REPLACEMENT PARTS

3.1 How To Use The Parts List

- Use the table of contents or the index to locate the assembly that contains the part you need.
- Go to the appropriate section and locate the part in the illustration.
- Use the number pointing to the part to locate the correct part number and description in the table.
- Parts shown indented under another part are included with that part.
- Parts marked with a diamond (◆) are only available in the assembly listed above the part.

See the sample table below. Sample Part #A01111 includes part F02222-2 and subassembly A03333. Subassembly A03333 includes part S04444-4 and subassembly K05555. The diamond (◆) indicates that S04444-4 is not available except in subassembly A03333. Subassembly K05555 includes parts M06666 and F07777-77. The diamond (◆) indicates M06666 is not available except in subassembly K05555.

3.2 Sample Assembly				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	SAMPLE ASSEMBLY, COMPLETE (INCLUDES ALL INDENTED PARTS BELOW)	A01111	1	
1	Sample Part	F02222-22	1	
	Sample Subassembly (Includes All Indented Parts Below)	A03333	1	
2	Sample Part (◆ Indicates Part Is Only Available With A03333)	S04444-4	1	◆
	Sample Subassembly (Includes All Indented Parts Below)	K05555	1	
3	Sample Part (◆ Indicates Part Is Only Available With K05555)	M06666	2	◆
4	Sample Part	F07777-77	1	

To Order Parts:

- From Europe call our European Headquarters and Manufacturing Facility in Kolo, Poland at **+48-63-2626000**. From the continental U.S., call **1-800-448-7881** to order parts. Have your customer number, vehicle identification number, and part numbers ready when you call.
- From other international locations, contact the Wood-Mizer distributor in your area for parts.

3.3 Motor Starter Box Assembly

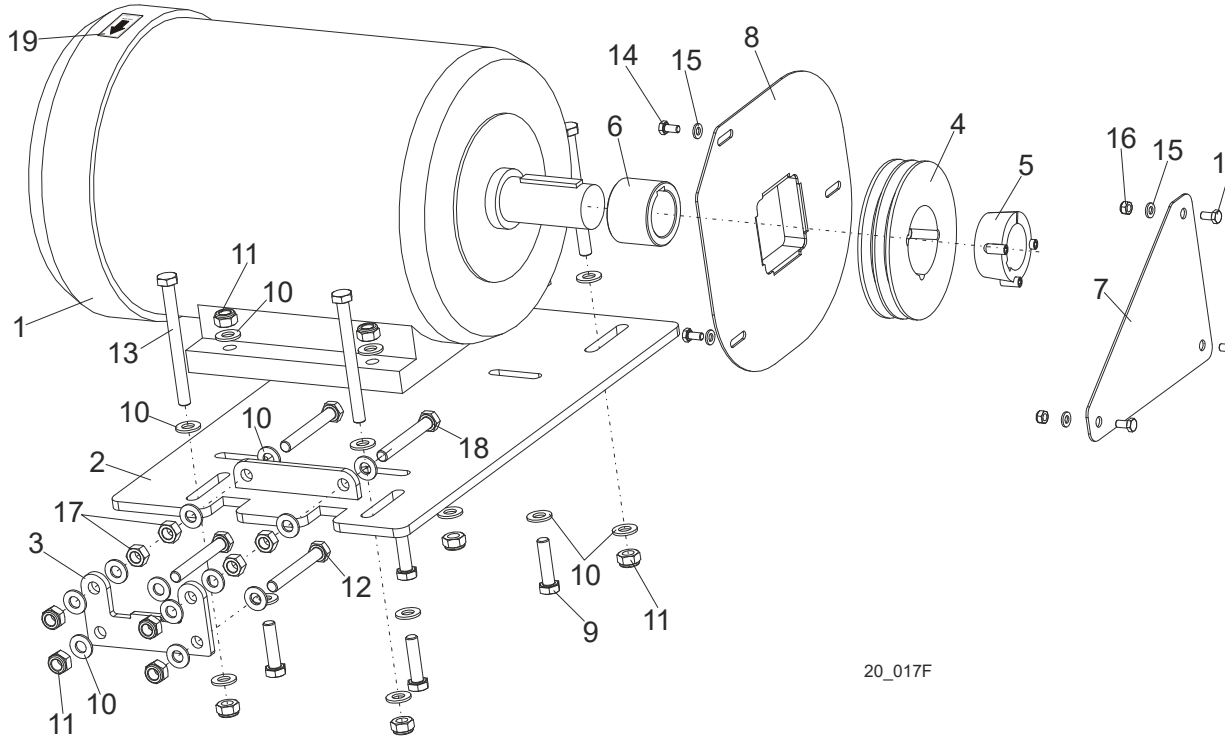


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	STARTER ASSEMBLY, LT20 11HP & 15HP 3-PHASE 50HZ ELECTRIC MOTOR	096017	1	
	BOX, LT20 AC ELECTRIC (NORWAY)	096017-2	1	
	CABLE, OLFLEX CLASSIC 400P 12G2,5	R80585-52	2.1m	
	CABLE GLAND, PG21 1060.21 BRASS	F81096-5	1	

3 Replacement Parts

Electric Motor Assembly

3.4 Electric Motor Assembly



20_017F

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	MOTOR, 11kW PSSg-132S -2 HM+132	089049	1
	MOTOR, ELECTRIC, 11KW,3-PHASE, 380V (PL)	P85186 ¹	1
2	MOUNT WELDMENT, E15 ELECTRIC MOTOR COMPLETE	097927-1	1
3	PLATE, BELT TENSIONER	097821-1	1
	PULLEY, KPL. SPZ125-2/FI38	538725	1
4	PULLEY, SPZ 125-2 F02173	538724	1
5	TAPER LOCK 1610-38 T31079	538723	1
6	BUSHING, E15 MOTOR MOUNT	091639-1	1
7	PLATE, MOUNTING CAP	094247-1	1
8	GUARD, E15 SHAFT	100908-1	1
9	BOLT, M10x40-8.8 ZINC	F81003-16	4
10	WASHER, M10 FLAT ZINC	F81055-1	26
11	NUT, M10 NYLON HEX ZINC LOCK	F81033-1	8
12	BOLT, M10x75-8.8 ZINC	F81003-15	4
13	BOLT, M10x110-8.8 ZINC	F81003-43	4
14	BOLT, M6x12-8.8 HEX HEAD ZINC	F81001-7	6
15	WASHER, M6 FLAT ZINC	F81053-1	6
16	NUT, M6 HEX NYLON LOCK ZINC	F81031-2	3
17	NUT, M10-8-B-FE	F81033-3	4
18	BOLT, M10x100-8.8 ZINC	F81003-91	2

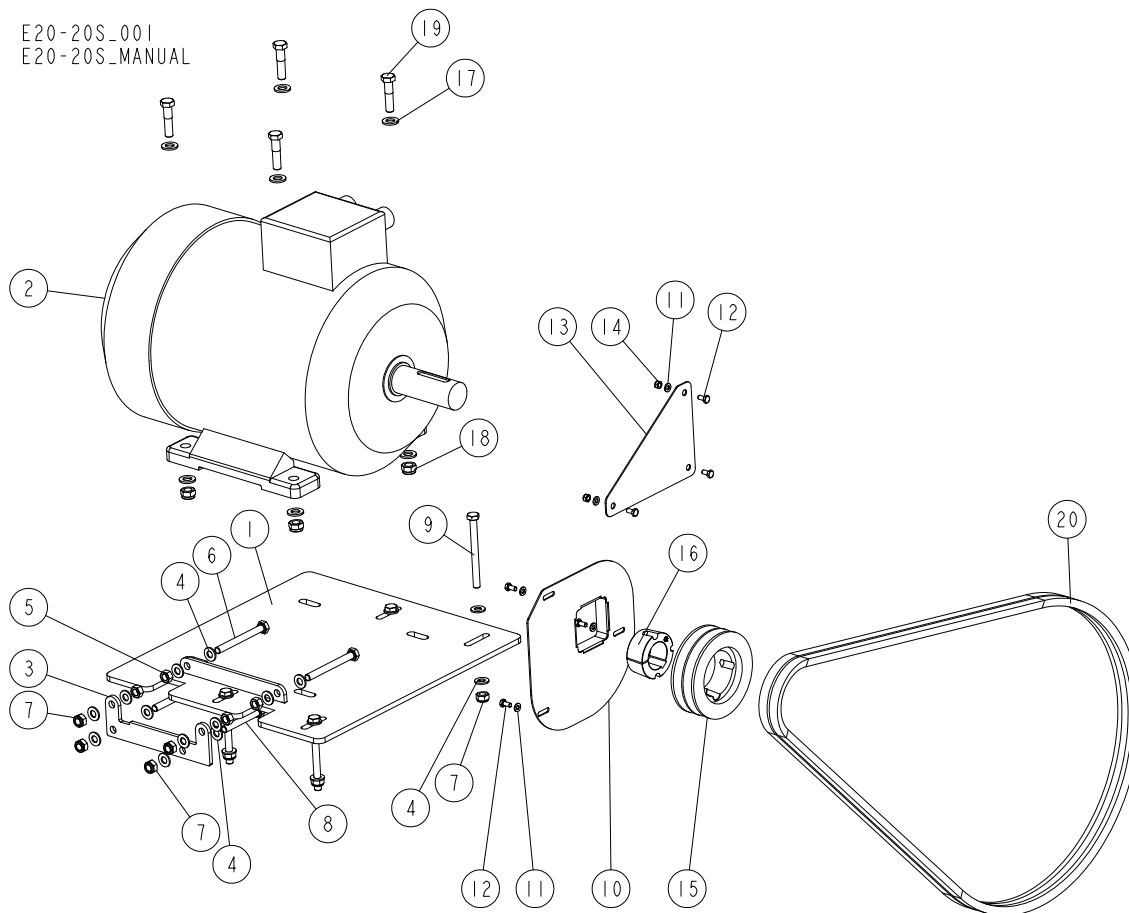
19	DECAL, 2925 RPM MOTOR ROTATION DIRECTION	S20097F	1	
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¹ LT20B-ECP

3 Replacement Parts

Electric Motor Assembly E20

3.5 Electric Motor Assembly E20



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	MOUNT WELDMENT, E20 ELECTRIC MOTOR COMPLETE	539306-1	1
2	MOTOR.15KW 380-420W 2SG160M-2B(B/HM) ELECTRIC	086856	1
3	PLATE, BELT TENSIONER	539309-1	1
4	WASHER, 10.5 FLAT ZINC	F81055-1	20
5	NUT, M10-8-B-FE	F81033-3	4
6	BOLT, M10X100-8.8 ZINC	F81003-91	2
7	NUT,M10-8-B NYLON HEX ZINC LOCK	F81033-1	8
8	BOLT, M10X75-8.8-FE/ZN5 PN-M/82101	F81003-15	2
9	BOLT, M10X110 8.8 HEX HEAD ZINC	F81003-43	4
10	GUARD, E20 SHAFT	539310-1	1
11	PODKLADKA 6.4 FE/ZN5 PN-78/M-82005	F81053-1	3
12	PODKLADKA 6.4 FE/ZN5 PN-78/M-82005	F81001-7	3
-	PULLEY, E20 MOTOR SPZ125-2/FI42, COMPLETE	538922	1
13	PULLEY. SPZ 125-2 (F02173)	538724	1
14	TAPER LOCK 1610-42 (T31081)	538921	1
15	WASHER, M12 , FLAT, ZINC	F81056-1	8

Replacement Parts
Electric Motor Assembly E20

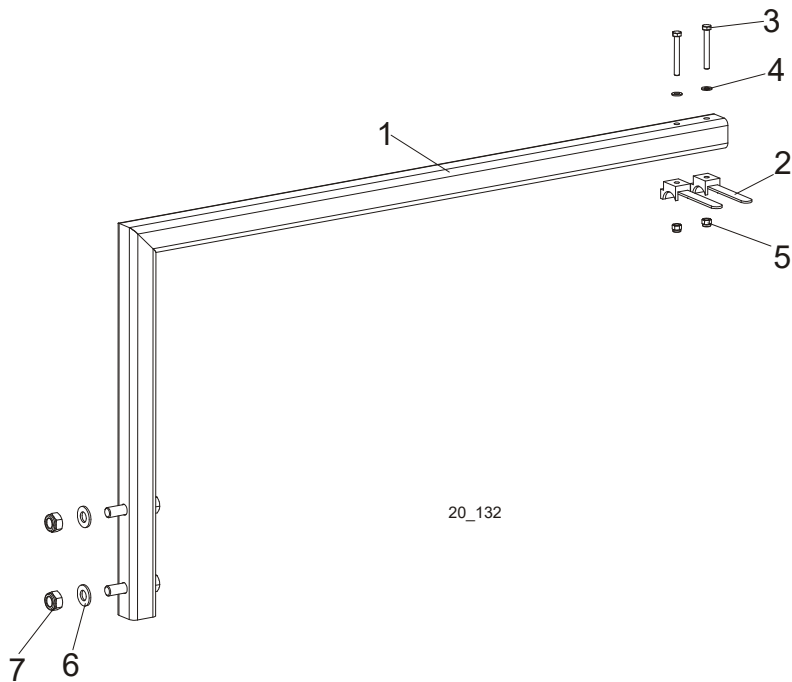
3

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
16	NUT,M12-8 ,HEX,NYLON,ZINC,LOCK	F81034-2	4	
17	BOLT M12X50 8.8	F81004-74	4	
18	BELT 2-XPZ2137/3VX843	538722	1	

3 Replacement Parts

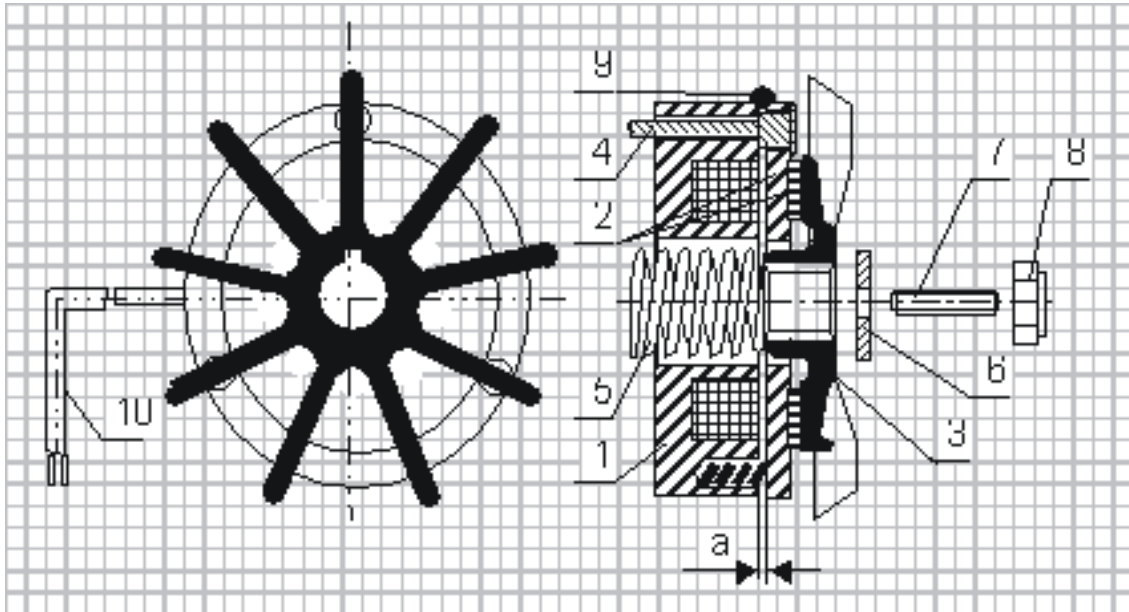
Power Cord Bracket

3.6 Power Cord Bracket



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BRACKET, LT20 POWER CORD COMPLETE	091599	1	
1	Bracket, LT20 Power Cord	091598-1	1	
2	Holder, Cable Plastic Tie	F81082-1	2	
3	Bolt, M5x40-8,8 Hex Head	F81000-11	2	
4	Washer, M5 Flat Zinc	F81052-1	2	
5	Nut, M5-8 Nylon Lock Zinc	F81030-2	2	
6	WASHER, M10 FLAT ZINC	F81055-1	2	
7	NUT, M10 NYLON HEX ZINC LOCK	F81033-1	2	

SECTION 4 DC ELECTROMAGNETIC BRAKE (CE ONLY), SIEMENS MOTORS



- 1 - Electromagnet,
- 2 - Armature complete with brake linings,
- 3 - Fan,
- 4 - Retaining bolt
- 5 - Central spring,
- 6 - Special washer,
- 7 - Set screw,
- 8 - Self-locking nut,
- 9 - Sealing ring,
- 10 - Output cable.

4.1 Design and principle of operation

The DC electromagnetic brake type H consists of 3 main subassemblies:

- electromagnet (1),
- armature complete (2)
- cast iron fan (3).

Electromagnet (1) energised: The DC voltage from the motor applied via the rectifying circuit causes the attraction of the armature (2) releasing the brake and thus the fan (3) is free to rotate.

Electromagnet (1) de-energised: The electromagnet stops to attract the armature (2) and spring

presses the armature with brake linings (2) against the fan and the brake is thus applied.

4.2 Service

During normal operation and at the routine inspections verify the air gap and check if all screws are tight. In case when any symptoms of inefficient braking are observed, then use the self-locking nut (8) to re-adjust the air gap to the value corresponding to Table 1.

Such readjustment may be repeated until the brake linings are completely worn out. When this will occur, a complete armature with brake linings (2) must be replaced.

If the air gap of the brake is correctly adjusted and despite of it the brake does not operate properly (the brake fails to release), it may be caused by:

- the electromagnet (1): burned coil or defected output cable (10),
- rectifying circuit (installed in the electric motor terminal box).

The above mentioned subassemblies should be checked and defected part replaced.

Table 1:

TYPE	H-63	H-71	H-80	H-90	H-100	H-112	H-132	H-160
Nominal Gap „a”	0.2 ±0,05	0.2 ±0,05	0.2 ±0,05	0.2 ±0,05	0.2 ±0,1	0.2 ±0,1	0.2 ±0,1	0.2 ±0,1