Log Splitter

Safety, Operation, Maintenance & Parts Manual

FS500 C1.00

Safety is our #1 concern!

Form #2096



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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Wood-Mizer, LLC 8180 West 10th Street Indianapolis, Indiana 46214

SECTIO	N 1 INTRODUCTION	
1.1	About This Manual	1-1
1.2	Getting Service	
1.3	Specifications	
1.0	~F************************************	
SECTIO	N 2 SAFETY	
2.1	Safety Instructions	2-1
	Owner's Responsibility2-1	
2.2	Safety Symbols	
2.3	Engine Safety	2-3
	Use Caution When Working With Batteries2-4	
SECTIO	N 3 SETUP AND OPERATION	
3.1	Uncrating	3-1
3.2	General Transportation	
3.3	Onsite setup	
3.4	Operation	
SECTIO	N 4 HYDRAULICS	
4.1	Hydraulic schematic	4
4.1	Hydraulic layout	
4.2	Hydraulic components	
7.5	Trydraune components	····· T -、
SECTIO	N 5 MAINTENANCE	
5.1	General maintenance after each use	5-1
5.2	Hydraulics	
5.3	Changing the wedges	
5.4	Wedge sharpening	5-2
SECTIO	N 6 PARTS	
6.1	How To Use The Parts List	6-1
6.2	Sample Assembly	6-1
6.3	Torque Values	
6.4	Equipment Overview	
6.5	Splitter Head	
6.6	Hydraulic Control Assembly	6-5
6.7	Splitter Output	6-6
6.8	Wedge	6-7
6.9	Log Lift	6-8
6.10	Hydraulic and Fuel Tank	6-9
6.11	Engine Control and Battery Box	6-11
6.12	Engine and Hydraulic Pump	6-12
6.13	Trailer	6-13
6.14	Trailer Tongue	6-15
6.15	Decals	
6.16	Hydraulic hoses	
6 17	Flectrical	6-19



SECTION 1 INTRODUCTION

1.1 About This Manual

This manual replaces any previous information received on your Wood-Mizer® equipment.

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

1.2 Getting Service

For contact information, sales, service, parts, and additional manuals, sign into your account on https://woodmizer.com, or call inside the USA: 1-800-553-0182 or from outside the USA: 317-271-1542

1.3 Specifications

FS-500	Power:	Kohler Gas 19HP Engine
	Hydraulics:	28 GPM, 2-stage pump
	Rate:	42 ton @ 3,000 psi, 4.5 sec cycle
	Hydraulic fluid:	ISO-32, such as Conoco MV32
	Hydraulic tank capacity:	20 gal (System capacity 25 gal)
	Operational dimensions:	139" (long) x 177" (wide) x 47" (high)
	Log capacity:	24" long, 26" diameter, 300 lbs.
	Machine weight with fluids:	2,605 lbs

2,420 lbs

1,210 lbs

1,360 lbs at 50 psi

Weight on axle:

Weight per tire:

Tire weight rating:

SECTION 2 Safety

2.1 Safety Instructions

Owner's Responsibility

NOTICE It is always the **owner's responsibility** to comply with all applicable safety instructions, as well as federal, state and local laws, rules and regulations regarding the ownership, operation, and towing of your Wood-Mizer Wood Splitter. All Wood-Mizer Wood Splitter owners should be thoroughly familiar with all applicable safety instructions and laws and comply with them fully while using or towing the wood splitter.

NOTE: ONLY safety instructions regarding **personal injury** are listed in this section. Safety instructions regarding only equipment damage appear where applicable throughout the manual.



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.



2.2 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



DANGER! indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



WARNING! suggests a potentially hazardous situation which, if not avoided, could result in serious injury or death.



CAUTION! refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.

NOTICE indicates vital information.

NOTE: gives helpful information.

OBSERVE SAFETY INSTRUCTIONS

NOTICE

- Keep children away from the area.
- Read the entire operator's manual before operating the wood splitter.
- Take notice of all safety warnings throughout this manual and those posted on the machine.
- Keep this manual with this machine at all times, regardless of ownership.
- Read all additional manufacturer's manuals.
- Obey all applicable safety instructions including dangers, warnings, and cautions.
- Only persons who have read and understood the entire operator's manual should operate the wood splitter.



WEAR SAFETY CLOTHING



WARNING! Secure all loose clothing, hair, and jewelry before operating the wood splitter.

Always wear hand, eye, ear, and foot protection when operating or servicing the wood splitter.

KEEP WOOD SPLITTER AND AREA AROUND WOOD SPLITTER CLEAN



DANGER! Maintain a clean and clear path for all necessary movement around the wood splitter and stacking areas.





WARNING! Do not allow children in the area of the wood splitter. Failure to follow this may result in serious injury or death

DISPOSE OF WOOD BY-PRODUCTS PROPERLY

NOTICE Always properly dispose of all wood by-products, including sawdust, chips, and other debris, including operation waste such as coolant, oil, fuel, oil filters, fuel filters, etc.

KEEP SAFETY LABELS IN GOOD CONDITION

NOTICE Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

If replacing a component which has a safety decal affixed to it, make sure the new component also has the safety decal affixed.

CAUTIONS FOR WOOD SPLITTER SETUP



WARNING! Set up the wood splitter on solid, level ground.

If unhitching the wood splitter, chock the trailer wheels to prevent movement before unhitching it from the towing vehicle. Failure to follow this may result in serious injury or death.

USE CAUTION WHEN WORKING WITH HEAVY LOGS



WARNING! Do not load logs in excess of **300 lbs** without a counterbalance on the tongue to prevent unit tipping.

Having the wood splitter properly hitched to the towing vehicle is a sufficient counterbalance.



Be aware of possible crushing points when handling large logs.

KEEP PERSONS AWAY



WARNING! Keep all persons out of the path of log moving equipment and logs when operating or loading the log splitter.

2-2 WM doc 3/27/24

KEEP HANDS AWAY



DANGER! Always keep hands away from moving wood.



WARNING! Avoid contact with any hot parts (hydraulic hoses, fittings, engines, as applicable).

Allow the system to cool sufficiently before beginning any service function, including debris removal.

Avoid contact with sharp edges of the cutting wedges.

2.3 Engine Safety

HANDLE FUEL/LUBRICANTS SAFELY



DANGER! Keep all fuel and lubricants away from children.

Never smoke, weld, grind or allow sparks near your engine or storage tanks.

Never spill fuel on a hot engine.



WARNING! Store gasoline away from flammable materials.

Never use flammable fuels or liquids to clean the wedge.



OPERATION



DANGER! Operate your engine/machine only in well ventilated areas.

Do not operate your engine/machine indoors or within a confined space.

Do not operate an engine with a fuel or oil leak, which can result in fire.





USE CAUTION WHEN WORKING WITH BATTERIES

EMERGENCY TREATMENT FOR CONTACT WITH BATTERY COMPONENTS (LEAD/SUL-FURIC ACID) per SDS (Safety Data Sheet):

EYE CONTACT	Sulfuric Acid and Lead: Flush eyes immediately with large amounts of water for at least 15 minutes while lifting lids. Seek immediate medical attention if eyes have been exposed directly to acid.
SKIN CONTACT	Sulfuric Acid: Flush affected area(s) with large amounts of water using deluge emergency shower, if available, shower for at least 15 minutes. Remove contaminated clothing, including shoes. If symptoms persist, seek medical attention. Wash contaminated clothing before reuse. Discard contaminated shoes. Lead: Wash immediately with soap and water.
INGESTION	Sulfuric Acid: Administer large amounts of water. Do NOT induce vomiting or aspiration into the lungs may occur and can cause permanent injury or death; consult physician.
INHALATION	Sulfuric Acid: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician. Lead: Remove from exposure, gargle, wash nose and lips; consult physician.



DANGER! Keep sparks, flames, burning cigarettes, or other ignition sources away from batteries at all times.

Always wear safety goggles and a face shield when working near batteries.



WARNING! Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

Charge the battery in a well ventilated area.

Disconnect the negative battery terminal cable before performing any service to the 12-Volt electrical system.

Do not attempt to charge a frozen battery.



CAUTION! Do not overcharge the battery.

Be sure the battery is fully charged before transporting the wood splitter. If the battery is not fully charged, excessive vibration could reduce the overall service life of the battery.

2-4 WM doc 3/27/24

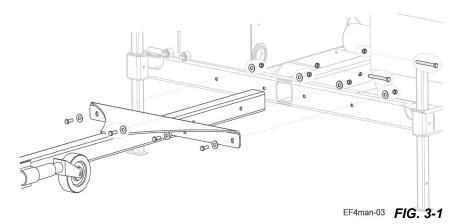
SECTION 3 SETUP AND OPERATION

3.1 Uncrating

Your Wood-Mizer Wood Splitter arrives mostly assembled. If any parts are missing, please contact Wood-Mizer support at 1-800-525-8100.

NOTICE Install the tongue **first** to stabilize the entire unit before unloading the main frame. The tongue serves as a counterbalance.

 Unfasten the trailer tongue from the crate and install it with the six bolts and hardware provided. The hardware is on the frame.



- 2. Unbolt the Hydraulic control panel from the shipping frame. Discard shipping hardware.
- 3. Unscrew the two nuts directly above the control panel.
- Position the panel over the bolts and re-tighten the nuts.
- **5.** Unpack the engine key and manuals which are attached to the engine.
- **6.** Release the straps and chocks holding the frame to the crate and roll the unit off the crate.

EF5MAN-23

FIG. 3-2

3.2 General Transportation

IF PREVIOUSLY WORKING UNHITCHED FROM THE TOWING VEHICLE:

1. Hitch the tongue to the towing vehicle.



CAUTION! Make sure the hitch coupler fits **entirely** over the hitch ball on the towing vehicle before latching.

- 2. Pin the hitch latch closed.
- 3. Cross the safety chains and attach the chains to the towing vehicle at the proper site for that vehicle.
- 4. Connect the light plug to the towing vehicle.

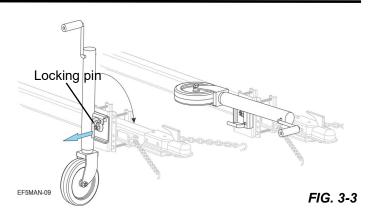
- 5. Raise the jack by pulling the spring loaded pin and rotating the jack 90 degrees. The pin will lock in to another hole at the 90 degree location.
- 6. Raise the two stand legs.

3.3 Onsite setup



DANGER! Do not operate this unit indoors or in an enclosed area or carbon monoxide poisoning will occur.

Maintain a clean and clear path for all necessary movement around the wood splitter and stacking areas.





WARNING! Do not allow children in the area of the wood splitter.

Do not set up the wood splitter on ground with more than a 10 degree incline.

1. Park the log splitter on a solid, level surface.

NOTE: The log splitter may be used either hitched or unhitched to the transport vehicle.

- 2. Chock both tires on both sides; use a total of four tire chocks.
- 3. If working unhitched, lower the jack and two stand legs. Ensure that they are on a firm, level surface.

NOTE: For best practices when operating the unit unhitched from the towing vehicle, place counterbalance weights on the tongue for added stability. Operating while hitched to the towing vehicle offers the best stability.

3.4 Operation



DANGER! Do not operate this unit indoors or in an enclosed area. Carbon monoxide poisoning will occur.



WARNING! Do not load logs greater than 300lbs.

Avoid contact with sharp edges of the cutting wedges.

- 1. Fill the gas tank.
- **2.** Start the engine.

See the engine manual for proper starting technique for your model of engine.

3. Move the pusher to the right by moving the log splitter handle to the right.



WARNING! Ensure the area is clear before lowering the log lift platform.

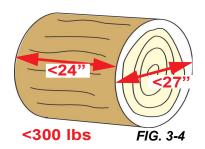
4. Unpin the log lift platform from the transport position and pin in the down position.

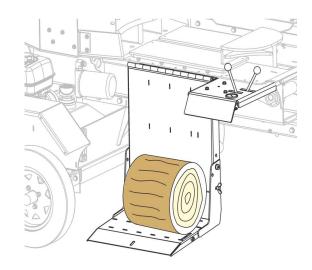




The log must be less than 24" long, 27" in diameter, and 300 lbs.

LESS THAN 24 INCHES IN LENGTH LESS THAN 27 INCHES IN DIAMETER LESS THAN 300 LBS





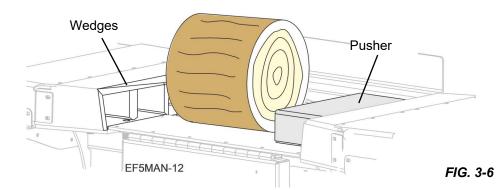
- **5.** Position a log onto the log lift platform.
- **6.** Raise the log lift platform by moving the log lift handle to the up position.

NOTE: Ensure cut end is towards the wedges.

- Roll the log onto the cutting table between the wedges and the pusher.
- **8.** Lower the log lift platform as stated in Step 4.

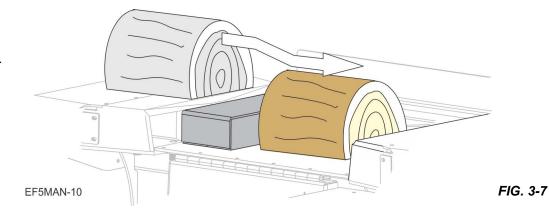
NOTE: The operator stands on the log lift platform during operation.

Move the pusher to the left by moving the log splitter handle to the left. This cuts the first round of firewood.



SINGLE LOG OPERATION

- 1. After the first cut, move the log back onto the cutting table.
- Move the pusher to the right by moving the log splitter handle to the right.
- **3.** Repeat these two steps until finished.



DUAL LOG OPERATION

1. Load another log by repeating Step 5. through Step 9.

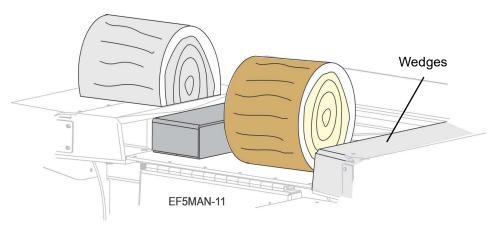


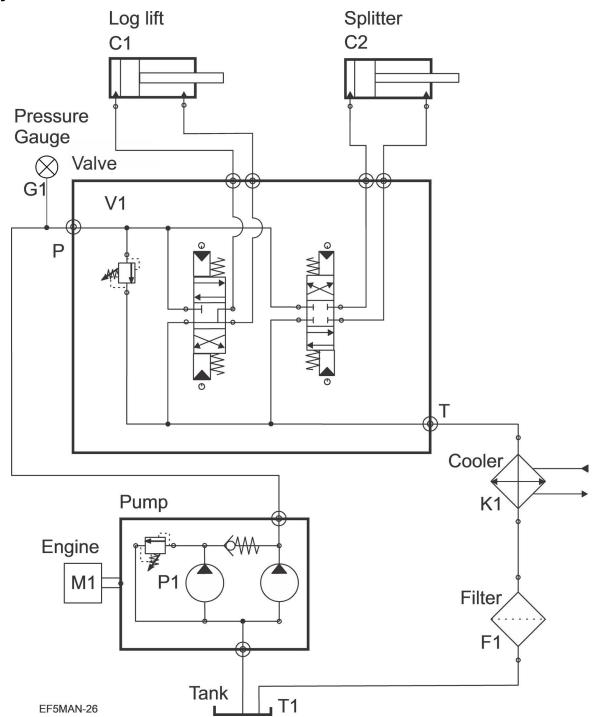
FIG. 3-8

- 2. Alternate cuttings by repositioning the logs onto the cutting table after each cut.
- 3. Repeat these steps until finished.

3-4 WM doc 3/27/24

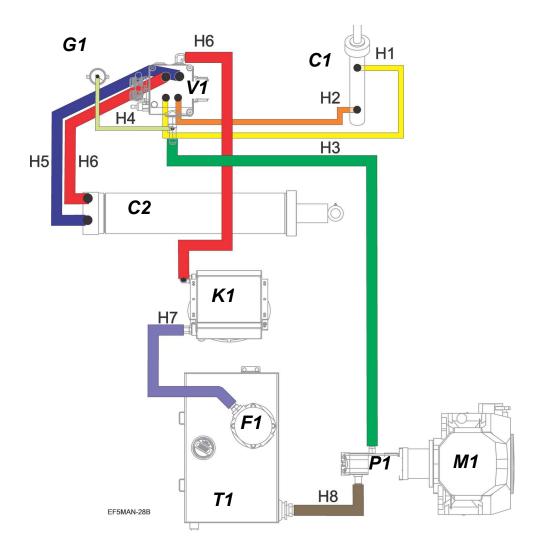
SECTION 4 HYDRAULICS

4.1 Hydraulic schematic





4.2 Hydraulic layout



REF	DESCRIPTION (+ Indicates Parts Available in Assemblies Only)	PART #	QTY.	COLOR
H1	Hose, 44" #4 F JIC & F JIC	079303	1	yellow
H2	Hose, 47-1/2" #4 F JIC & F JIC	079302	1	orange
Н3	Hose, 57" #12 F-JIC & 45 Deg F JIC	079300	1	green
H4	Hose, 14-1/2" #4 F JIC & F JIC	079301	1	lt. green
H5	Hose, 42" #12 90 Deg F JIC & 90 F JIC	075452	1	blue
H6	Hose, 39" #12 F JIC & 90 Deg F JIC	079304	2	red
H7	Hose, 25-3/4" #12 F JIC & F JIC	079307	1	purple
Н8	Hose, Inlet 20R4-20FJX-20MP x 14.38	130750	1	brown
	Fluid, Hydraulic HVI32 (Gal) All Weather	006397	1 gal	

4.3 Hydraulic components

	Hydraulic component reference ¹					
Ref	Description	Part Number				
C1	Cylinder, Hydraulic Log Lift	079046				
	Fitting, 4SAE-4JIC 90° Elbow	074543				
C2	Cylinder, Hydraulic 3x6x24	079048				
	Fitting, Long Stght 12 SAEM - 12 JICM	079434				
	Fitting, 90 Deg Ex Lg 12 Swvl F x 12 JIC M	079435				
F1	Filter, In tank Hydraulic	079057				
	Fitting, 12SAE-12JIC Straight	074534				
	Reducer, 20 SAE M - 12 SAE F	079104				
G1	Gauge, Hydraulic Pressure	079049				
	Fitting, #04 NPT F - #04 JIC M 90 Deg	079117				
K1	Oil Cooler w/Fan	079035				
	12 SAE x 12 JIC 90 Elbow	079108				
M1	Engine, Honda G630, w/muffler, control	079041				
P1	Pump, Hydraulic	079053				
	Fitting, 10 SAE M x 12 JIC M	079449				
	Fitting, 20 JIC M x 16 SAE M 45 Elbow	130751				
T1	Weldment, Hydraulic Reservoir/Fuel Tank	TS-0080				
	Plug, 3/4 NPT Pipe	P20277				
	Screen, 2" NPT in tank	079056				
V1	Valve, Prince 2 Spool Hydraulic	079438				
	Fitting, 12 SAE Mx12 JIC Mx04 SAE F Tee	079116				
	Fitting, 45 Deg Elbow 12 Swvl x 12 JIC	079308				
	Fitting, #12 SAE M - #12 JIC M x 90 Deg	079108				
	Fitting, 4SAE-4JIC 90° Elbow	074543				
	Fitting, 04 SAE x 04 JIC Orifice	079217				
	Fitting, 10 SAE M x 12 JIC M Straight	079449				
	Fitting, 10 SAE M x 12 JIC M 90 Deg Elbo	079450				
	Fitting, 10 SAE M x 4 SAE F Redx Bush	079451				

 $^{^{\}rm 1}$ See Part section for more detail of the location and fittings.

SECTION 5 MAINTENANCE



WARNING! Before performing service turn the engine key switch to the OFF position and remove the key.

5.1 General maintenance after each use

- 1. Check for debris impeding any moving parts.
- 2. Clean debris off of the engine, hydraulic tank, and fuel tank, and/or oil cooler.
- 3. Check engine oil per engine manual specifications.
- 4. Check tire pressure as printed on tires.
- 5. Check for hydraulic leaks.
- **6.** Check the oil cooler for any obstructions or leaks.

5.2 Hydraulics

- 1. Check the hydraulic fluid level before each use. Add fluid up to the black level line on the fill gage.
- 2. Replace the hydraulic system cartridge filter every 500 hours of operation.
- 3. Use an all-weather hydraulic fluid conforming to ISO-32, such as Conoco MV32 for operating temperatures -20° to 100° F (-29° to 38° C).

For alternate operating conditions and temperature ranges:

TEMPERATURE

F -30° -20° -10° 0° 10° 20° 30° 40° 50° 60° 70° 80° 90° 100° 110° 120° C -35° -29° -23° -18° -12° -7° -1° 5° 10° 16° 21° 27° 32° 38° 44° 49° DEXRON lie or III ATF AMOCO RYCON OIL - MV Level A Fluid SHELL TELLUS T32 HYDRAULIC FLUID SHELL DONAX TG (ATF) Level B Fluid CONOCO MV32 Level C Fluid 50/50 mixture of "A" and "C" fluids SHELL TELLUS T22 MOBIL AERO HFA EXXON/ESSO UNIVIS HVI13 HD0049D SHELL TELLUS T15 FIG. 5-1

5.3 Changing the wedges

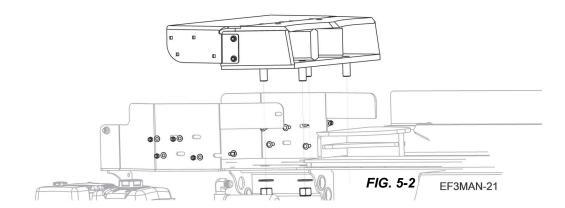


WARNING! Use proper lifting equipment; wedges are heavy. Failure to follow this could result in serious injury or death.

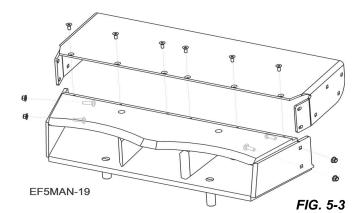
5-1 WM doc 3/27/24

5-2

- 1. Unbolt the four (4) carriage bolts on each side that hold the wedge extension plate to the unit.
- 2. Remove the two nuts and their washers at the bottom of the cutting table on each side.
- 3. Lift the wedges and their extension plates straight up.



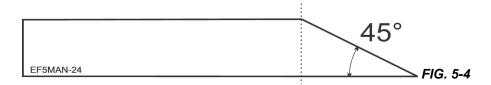
- **4.** Retain hardware for reapplication.
- **5.** Remove and retain all hardware holding the wedge and the wedge extension plate together.
- To re-install the wedges, reverse the order of this procedure.



5.4 Wedge sharpening

Use a *hand file* to sharpen the wedges after 80 hours of use. An angle grinder may take off too much material at once.

NOTE: DO NOT CHANGE THE ANGLE OF THE WEDGE.



NOTE: DO NOT FILE ON THE UNDERSIDE OF THE WEDGE. THIS WILL CAUSE THE WOOD TO JAM.



WM doc 3/27/24

SECTION 6 PARTS

6.1 How To Use The Parts List

- Use the table of contents 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.

TO ORDER PARTS

- From the continental US, call **1-800-525-8100** 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.

6.2 Sample Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	012345	SAMPLE ASSEMBLY, COMPLETE (INCLUDES ALL INDENTED PARTS BELOW)		1
1	F02222-22	Sample Part		1
2	F03333-33	Sample Part		2
	098765	Sample Subassembly (Includes All Indented Parts Below)		1
3	S04444-44	Subassembly Sample Part		1
4	K55555	Subassembly Sample Part		1
	054321	Sample Sub-Subassembly (Includes All Indented Parts Below)		2
5	022222	Sub-Subassembly Sample Part		1
6	F10234-56	Sub-Subassembly Sample Part		1

The Sample Assembly, Complete, part number 02345 (top level assembly) includes two parts (F0222-22 and F0333-33) and the 098765 subassembly.

Subassembly 098765 contains two parts(S04444-44 and K55555) and two copies of sub-subassembly 054321.

Each sub-subassembly 054321 contains two parts (022222 and F10234-56).

6-1 WM doc 3/27/24 Replacement Parts

6.3 Torque Values

Grade		Units	SAE 5	SAE 8
Grade Ma	ark			
Bolt Dia.	Threads. Per In.	Units	SAE 5	SAE 8
6	32	in-lbs (Nm)	20 (2.3)	30 (3.4)
8	32	in-lbs (Nm)	24 (2.7)	
10	24	in-lbs (Nm)	35 (4.0)	45 (5.1)
10	32	in-lbs (Nm)	40 (4.5)	50 (5.7)
12	24	in-lbs (Nm)	50 (5.7)	65 (7.3)
1/4	20	in-lbs (Nm)	95 (10.7)	125 (14.1)
1/4	28	in-lbs (Nm)	95 (10.7)	150 (17.0)
5/16	18	ft-lbs (Nm)	17 (22.6)	23 (31.2)
5/16	24	ft-lbs (Nm)	20 (27.1)	25 (33.8)
3/8 3/8 7/16	16 24 14	ft-lbs (Nm) ft-lbs (Nm)	30 (40.7) 35 (47.5)	40 (54.2) 45 (61.0)
7/16 7/16 1/2	20 13	ft-lbs (Nm) ft-lbs (Nm) ft-lbs (Nm)	50 (67.8) 55 (74.6) 75 (101.7)	65 (88.1) 70 (94.9) 100 (135.6)
1/2	20	ft-lbs (Nm)	85 (115.3)	110 (149.2)
9/16	12	ft-lbs (Nm)	105 (142.4)	135 (183.1)
9/16	18	ft-lbs (Nm)	115 (155.9)	150 (203.4)
5/8	11	ft-lbs (Nm)	150 (203.4)	195 (264.4)
5/8	18	ft-lbs (Nm)	160 (217.0)	210 (284.8)
3/4	10	ft-lbs (Nm)	170 (230.5)	220 (298.3)
3/4	16	ft-lbs (Nm)	175 (237.3)	225 (305.1)
7/8	9	ft-lbs (Nm)	302 (409.5)	473 (640.9)
7/8		ft-lbs (Nm)	300 (406.8)	400 (542.4)
1	8	ft-lbs (Nm)	466 (631.8)	714 (967.4)



Metric Bolt Head Identification 8.8

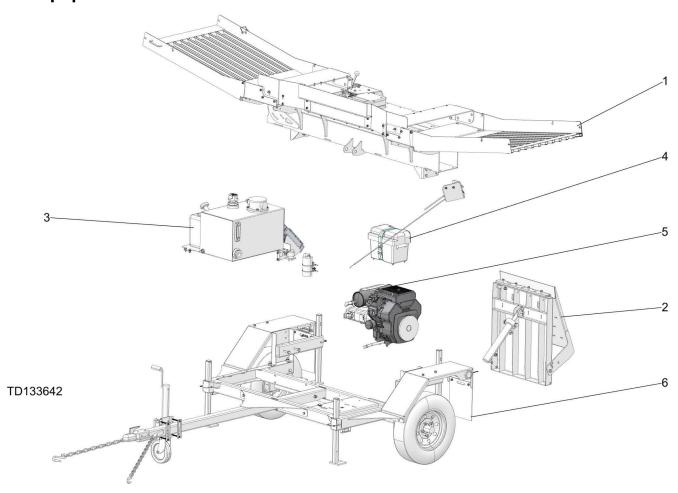
Metric Grade 8.8 10.9

Metric Grade 10.9

	COARSE THREAD					FINE THREAD				
Diameter & Thread	Metri	ic 8.8	Metri	c 10.9	Diameter & Thread	Metr	ic 8.8	Metri	c 10.9	Wrench Size
Pitch	N-m	lbs-ft	N-m	lbs-ft	Pitch	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	8	6	11	8						10 mm
8 x 1.25	20	15	27	20	8 x 1.0	21	16	29	22	13 mm
10 x 1.5	39	29	54	40	10 x 1.25	41	30	57	42	16 mm
12 x 1.75	68	50	94	70	12 x 1.25	75	55	103	76	18 mm
14 x 2.0	109	80	151	111	14 x 1.5	118	87	163	120	21 mm
16 x 2.0	169	125	234	173	16 x 1.5	181	133	250	184	24 mm
18 x 2.5	234	172	323	239	18 x 1.5	263	194	363	268	27 mm
20 x 2.5	330	244	457	337	20 x 1.5	367	270	507	374	30 mm
22 x 2.5	451	332	623	460	22 x 1.5	495	365	684	505	34 mm
24 x 3.0	571	421	790	583	24 x 2.0	623	459	861	635	36 mm
30 x 3.0	1175	867	1626	1199	30 x 2.0	1258	928	1740	1283	46 mm



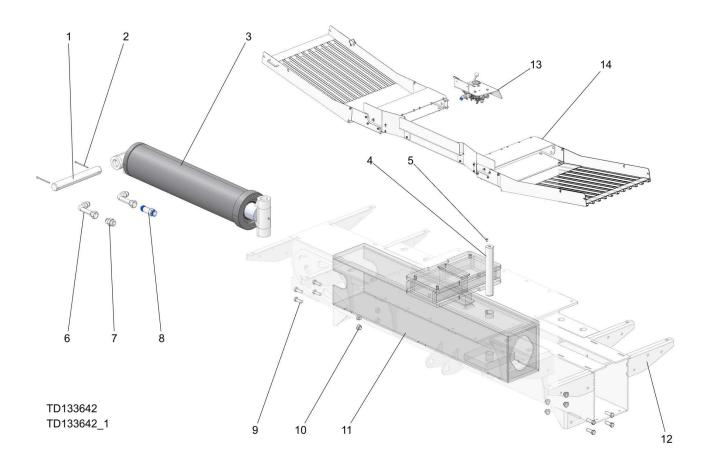
6.4 Equipment Overview



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	FS500G19	SPLITTER, 2 DIR FS500 GAS 19 HP		1
1	TS-0024	Assembly, Splitter Head	(See Section 6.5)	1
2	079459	Assembly, Log Lift FS500	(See Section 6.9)	1
3		Hydraulic and Fuel Tanks	(See Section 6.10)	1
4		Battery Box and Engine Control	(See Section 6.11)	1
5	133630	Assembly, Kohler CH620 Engine - Hyd Pump	(See Section 6.12)	1
6	TS-0082	Trailer Assy, FS500	(See Section 6.13)	1

6-3 WM doc 3/27/24 Replacement Parts

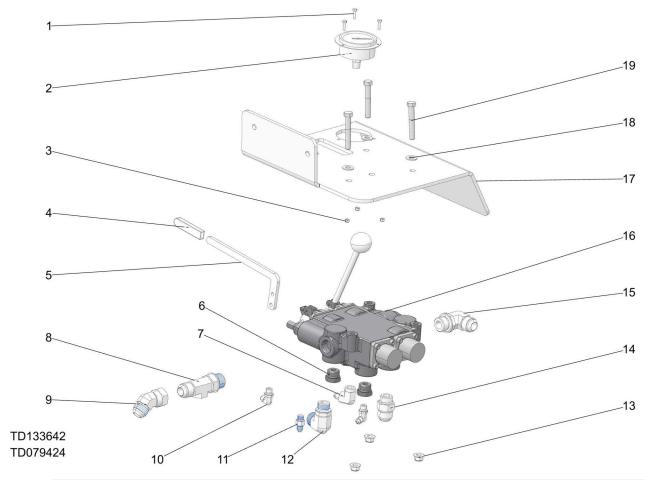
6.5 Splitter Head



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	TS-0024	ASSEMBLY, SPLITTER HEAD		1
1	079818	Pin, 1-1/2 Hyd. Cylinder		1
2	F05012-158	Pin, Cotter 3/16 Dia x 3"		2
3	079048	Cylinder, Hydraulic 3x6x24		1
	061246	Kit, FS500 6" Cylinder Seal (HC-3x6x24"CT)		1
4	TS-1271	Pin, Cylinder Rod End		1
5	F05007-12	Screw, 3/8-16x1/2 SH Cup Pt Set		1
6	079435	Fitting, 90 Deg Ex Lg 12 Swvl F x 12 JIC M		2
7	074534	Fitting, 12SAE-12JIC Straight		1
8	079434	Fitting, 12-SAE-M x 12-JIC-M Long		1
9	F05008-33	Bolt, 1/2-13x1 1/2 HH Gr5		8
10	F05010-223	Nut, 1/2-13 Flanged Hex Nylock		8
11	110210	Weldment, FS500 Pusher		1
12	110079	Weldment, FS500 Outer Tube		1
13	079424	Assembly, Hydraulic Valve Bracket	(See Section 6.6)	1
14		Splitter Output Components	(See Section 6.7)	1



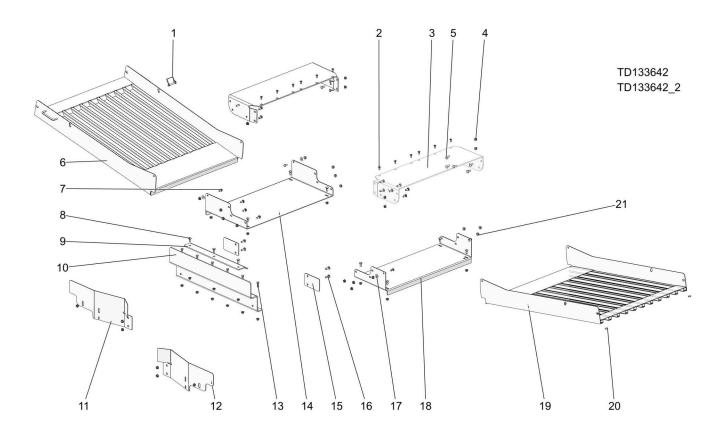
6.6 Hydraulic Control Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	079424	ASSEMBLY, HYDRAULIC VALVE BRACKET		1
1	F05020-10	Bolt, M47 x 16 Class8 HH		3
2	079775	Gauge, 4000 PSI Panel Mnt		1
3	F05027-8	Nut, M47 Class 8 Nylock		3
4	P08072	Grip, 3/8x5/8x2 27/32 Vinyl		1
5	110231	Plate, Log Lift Valve Handle		1
6	079451	Fitting, 10 SAE M x 4 SAE F Redx		2
7	079117	Fitting, 04 JIC M x 1/4 NPT M 90 Deg		1
8	079116	Gauge Port 12SAE x 12JIC x 04SAE F		1
9	079308	Fitting, 45 Deg Elbow 12 Swvl x 12 JIC		1
10	074543	Fitting, 4SAE-4JIC 90° Elbow		2
11	079217	Fitting, 04 SAE x 04 JIC .062 Orifice		1
12	079450	Fitting, 10 SAE M x 12 JIC M 90 Elbow		1
13	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		3
14	079449	Fitting, 10 SAE M x 12 JIC M		1
15	079108	12 SAE x 12 JIC 90 Elbow		1
16	079438	Valve, Prince 2 Spool Hyd		1
17	079423	Plate, Prince Valve Mount		1
18	F05011-3	Washer, 3/8 Flat SAE		3
19	F05007-125	Bolt, 3/8-16x 2-1/2 HH Gr5		3

6-5 WM doc 3/27/24 Replacement Parts

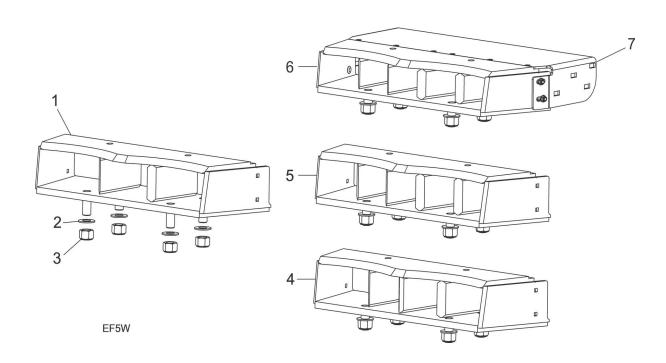
6.7 Splitter Output



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	014151	Pin, 3/8x2 1/4 SQ Wire Lock		1
	079287	Assy, Wdge Extension		2
2	F05006-95	Bolt, 5/16-18x3/4 FHS Zinc		6
3	TS-1159	Plate, Wedge Extension		1
4	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		4
5	F05007-11	Bolt, 3/8-16x1 1/4 Carriage		4
6	079189	Weldment, Right Debris Tray		1
7	F05007-118	Bolt, 3/8-16x3/4 HH Gr5		4
8	F05007-165	Bolt, 3/8-16x1 Carriage, Zinc Gr 5		23
9	079180	Plate, Backstop Deflector		1
10	079174	Plate, Splitting Table Backstop		1
11	079201	Plate, Debris Guard		1
12	079175	Plate, Debris Guard		1
13	F05007-123	Bolt, 3/8-16x 1 1/4 HH Gr5		6
14	TS-1095	Plate, Right Side Fixed Tray		1
15	110222	Plate, Debris Guard		2
16	F05007-11	Bolt, 3/8-16x1 1/4 Carriage		6
17	066114	Washer, .4 IDx1" ODx.06 Nylon		4
18	TS-1012	Plate, Left Side Fixed Tray		1
19	079188	Weldment, Left Debris Tray		1
20	079367	Bumper, 3/4Dia x 3/16H Poly U		2
21	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		39
		Wedge Assembly (3, 4, and 5 Way)	(See Section 6.8)	1



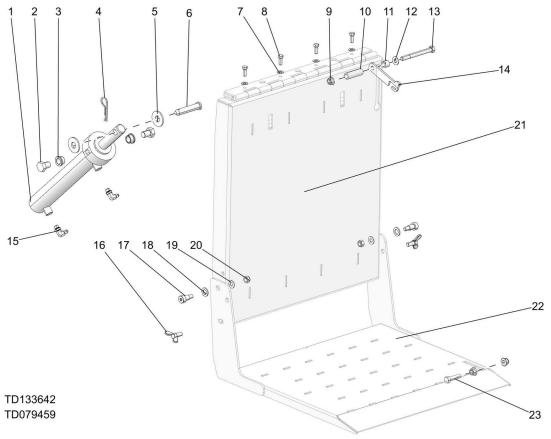
6.8 Wedge



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	FS3-A	Assembly, 3 Way Wedge Replacement (one)		1
1	079135	Weldment, 3 Way Wedge		1
2	F05011-28	Washer, 1 ID SAE Flat		4
3	F05010-109	Nut, 1-8 Hex Nylok, Zinc		4
4	FS4-A	Assembly, 4 Way Wedge, Replacement, (one)	(optional)	1
5	FS5-A	Assembly, 5 Way H Wedge, Replacement, (one)	(optional)	1
	TS-1159	Plate, Wedge Extension	(1) TS-1159 required for each FS4-A and FS5-A (not shown)	1
6	FS5B-A	Assembly, 5 Way 3.5"H Wedge Replacement (one)	(optional)	1
7	079793	Plate, Wedge Extension 3-1/2"		1

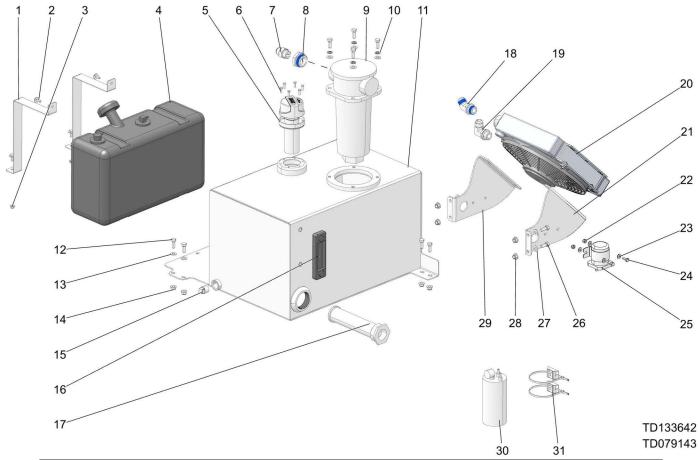
6-7 WM doc 3/27/24 Replacement Parts

6.9 Log Lift



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	079459	ASSEMBLY, LOG LIFT FS500		1
1	079046	Cylinder, Hyd Log Lift 2 X 12		1
2	F05009-141	Bolt, 3/4-16 X 1 Hh Gr 8		2
3	P786	Bushing,3/4idx1 Odx5/8 Lng Flgd		2
4	F05012-62	Pin, #210 Hitch		1
5	F05011-29	Washer, 3/4 Uss Flat		2
6	007347	Pin, 3/4x3 1/8		1
7	F05011-3	Washer, 3/8 Flat Sae		4
8	F05007-87	Bolt, 3/8-16x1 Gr5 Hh		4
9	F05010-223	Nut, 1/2-13 Flanged Hex Nylock		3
10	079199	Spacer, 1/2 Sch 80 X 2-21/32		1
11	079198	Spacer, 1/2 Sch 80 X 11/16		1
12	F05011-2	Washer, 1/2 Sae Flat		1
13	F05008-66	Bolt, 1/2-13 X 5 Gr5 Zinc Hex Head		1
14	079178	Plate, Log Lift Latch		1
15	074544	Fitting, 6sae-4jic 90° Elbow		2
16	F05023-17	Bolt, M12-1.75 X14mm Wing Thumb		2
17	F05025-9	Bolt, 16mm X 20l Shoulder-m12x1.75		2
18	F05026-6	Washer, M16 Flat		2
19	F05011-124	Washer, M12 Flat Zinc		2
20	F05010-209	Nut, M12x1.75 Hex Nylock		2
21	079458	Weldment, Log Lift Fs500 Upright		1
22	079416	Weldment, Log Lift Lower		1
23	F05008-8	Bolt, 1/2-13x2 Hh Ft		1

6.10 Hydraulic and Fuel Tank



REF	PART #	DESCRIPTION	COMMENTS	QTY.
KEF				
	079143	ASSEMBLY, HYDRAULIC AND FUEL TANK	Add pipe thread sealant to all pipe threads	1
1	079091	Strap, Fuel Tank		2
2	F05005-134	Bolt, 1/4-20x3/4 W/conical Washer		4
3	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		2
4	133635	Fuel Tank, Upright 5 Gallon Gas		1
5	078342	Assembly, Hyd Fill/breath Antisplash 3micron		1
6	F05004-152	Bolt, #10-32x5/8 Hh		6
7	074534	Fitting, 12sae-12jic Straight		1
8	079104	Reducer, 20 Sae M - 12 Sae F		1
9	079057	Filter, In-tank Hyd		1
10	F05011-4	Washer, 3/8 Split Lock		4
11	TS-0080	Weldment, Hydraulic Tank	Tank holds 20 gal; System, 25	1
12	F05007-87	Bolt, 3/8-16x1 Gr5 Hh		8
13	F05011-3	Washer, 3/8 Flat Sae		6
14	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		4
15	P20277	Plug, 3/4 Npt Steel Pipe		1
16	P20211	Gage, Hyd. Fluid Sight		1
17	079056	Filter, 2 Npt In-tank Suction		1
	R02423-1	Hose, Fuel 3/16" Epa 15g Carb	Not Shown	3.75 ft
	R02423-2	Hose, Fuel 1/4" Epa 15g Carb	Not Shown	13.5 ft
	P649	Hose Clamp, 7/32in-5/8in	Not Shown	6
	079269	Assembly, Oil Cooler Fs500		1

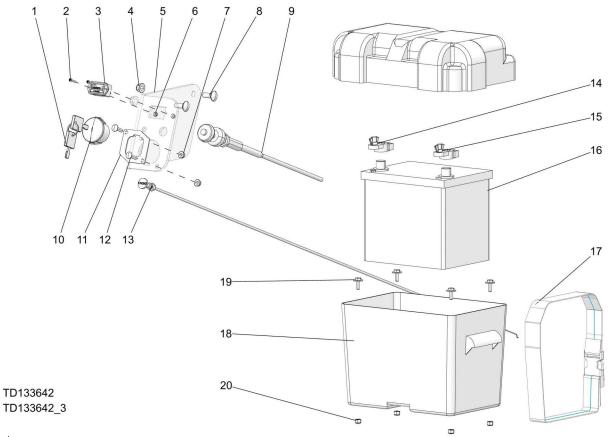
6-9 WM doc 3/27/24 Replacement Parts

REF	PART #	DESCRIPTION	COMMENTS	QTY.
18	079118	Fitting, 12 Sae X 12 Jic 45 Deg		1
19	079108	12 Sae X 12 Jic 90 Elbow		1
20	079035	Oil Cooler W/fan		1
21	TS-1293	Plate, Left Oil Cooler Mount		1
22	F05010-69	Nut, 1/4-20 Nylock		2
23	F05011-11	Washer, 1/4 Sae Flat		4
24	F05005-1	Bolt, 1/4-20x3/4 Ft Hhc		2
25	015470	Solenoid, 200a 12v Spst Hyd. Pump 1997		1
26	F05007-87	Bolt, 3/8-16x1 Gr5 Hh		4
27	F05011-3	Washer, 3/8 Flat Sae		4
28	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		4
29	TS-1294	Plate, Right Oil Cooler Mount		1
30	133646	Carbon Canister, 1/4" Inlet, 3/16" Outlet		1
31	079039	Assembly, Canister Mount		2

Replacement Parts WM doc 3/27/24 6-10



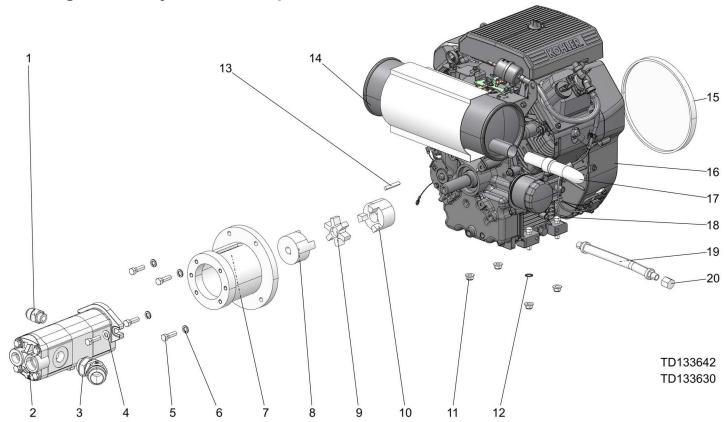
6.11 Engine Control and Battery Box



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	133640	Assembly, Engine Control		1
1	045693	Key For 046122		2
2	F05004-93	Screw, 6-32x3/4 Sbhc Ss		2
3	015401	Hour Meter, 9-64vdc Digital Lcd		1
4	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		2
5	133641	Bracket, Engine Control-kohler		1
6	F05010-59	Nut, #6-32 Keps		2
7	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		2
8	F05007-165	Bolt, 3/8-16x1 Carriage, Zinc Gr 5		2
9	047726	Cable, Throttle, G28 Edger		1
10	046122	Switch, Ignition Key		1
11	133633	Plate, Key Switch		1
12	F05005-34	Bolt, 1/4-20 X 1 Carr		2
13	073177	Cable, Choke 54" Commercial		1
14	033358	Clamp, Pos. Battery		1
15	033359	Clamp, Neg. Battery		1
16	028004	Battery, 12V 524/26A		1
	016413	Box, Battery, Modified		1
17	133570	Strap, 1 1/2 x 48 W/Buckle		1
18	033269	Box, Battery		1
19	F05005-134	Bolt, 1/4-20x3/4 W/Conical Washer		4
20	F05010-69	Nut, 1/4-20 Nylock		4
	110074	Cable, Negative Battery		1
	079284	Cable, Positive Battery	Not shown	1

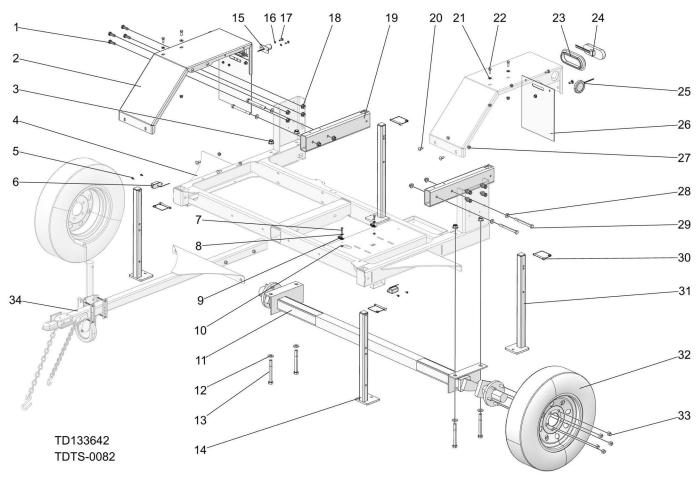
6-11 WM doc 3/27/24 Replacement Parts

6.12 Engine and Hydraulic Pump



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	133630	ASSEMBLY, KOHLER CH620 ENGINE - HYD PUMP		1
1	079449	Fitting, 10 SAE M x 12 JIC M		1
2	079053	Pump, Hydraulic 28.5/7.5 GPM		1
3	130751	Fitting, 20 JICM x 16 SAE 45 Elbow		1
4	F05011-3	Washer, 3/8 Flat SAE		2
5	F05007-123	Bolt, 3/8-16x 1 1/4 HH Gr5		6
6	F05011-4	Washer, 3/8 Split Lock		4
7	079043	Housing, Bell Eng-Hyd Pump		1
8	079042	Coupling Body, L100 x 5/8		1
9	042779	Coupling, L100 Spider		1
10	025816	Coupling Body, L100x1		1
11	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		4
12	F05011-36	Washer, 3/8 Star External		1
13	S04124	Key, 1/4 x 1 11/16		1
	133629	Engine Assembly, Kohler G19 CH620		1
14	130781	Muffler, Kohler CH620 Engine		1
15	133639	Kohler Fan Guard CH620		1
16	133628	Engine, Kohler CH620-3158/3193		1
17	036684	Spark Arrestor, Kohler 90 Deg		1
18	F05007-129	Bolt, 3/8-16X1 3/4 HH Gr5, Znc		4
19	P10082	Hose, 3/8NPTx9 5/8 Rubber		1
20	P04332	Cap, 3/8 Pipe Galvanize		1
	L04869-1	Oil, 10W30 Type CD		.5 gal

6.13 Trailer

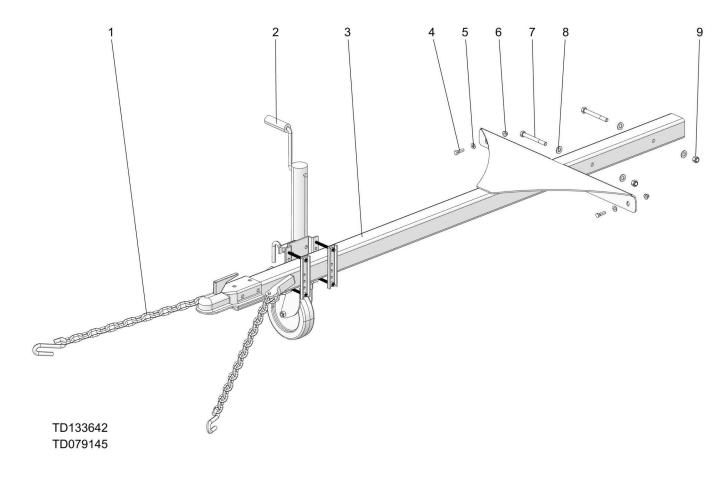


REF	PART #	DESCRIPTION	COMMENTS	QTY.
	TS-0082	Trailer Assy, FS500		1
1	F05008-33	Bolt, 1/2-13x1 1/2 Hh Gr5		8
2	079317	Plate, Right Side Fender		1
3	F05010-224	Nut, 5/8-11 Flanged Hex Nylock		4
4	TS-0083	Weldment, Trailer Frame		1
5	F05015-7	Bolt, #10-24x1/2 Self Tap		4
6	P12906	Lamp, Running Amber		2
7	F05005-101	Bolt, 1/4-20 X 1 Hex Head Gr5		2
8	F05011-11	Washer, 1/4 Sae Flat		2
9	P07584	Clamp, 1/2emt Coated		2
10	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		4
11	074990	Axle, 3500 Lbs Torsion		1
	P22610	Cover, Hub Bearing Dust		2
	P22612	Plug, Bearing Hub		1
12	F05011-5	Washer, 5/8 Sae Flat		4
13	F05009-11	Bolt, 5/8-11x5 1/2 Hh Gr5		4
14	TS-0085	Weldment, Outrigger		2
15	038161	Light, License Plate		1
16	F05011-37	Washer, 1/4 Star Et		2
17	F05005-34	Bolt, 1/4-20 X 1 Carr		2

REF	PART #	DESCRIPTION	COMMENTS	QTY.
18	F05010-223	Nut, 1/2-13 Flanged Hex Nylock		12
19	110719	Tube, Outrigger Fs500		2
20	F05007-165	Bolt, 3/8-16x1 Carriage, Zinc Gr 5		8
21	F05011-3	Washer, 3/8 Flat Sae		4
22	F05007-87	Bolt, 3/8-16x1 Gr5 Hh		4
23	006688	Grommet, 6 1/2 Light Mounting		2
24	006391	Light, Led Tail		2
25	P12913	Lamp, Running Red Recessed		2
26	079031	Mud Flap		2
27	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		12
28	F05011-2	Washer, 1/2 Sae Flat		4
29	F05008-28	Bolt, 1/2-13x5 1/2 Hex Head Gr5 Zinc		4
30	038472	Pin Assembly, 3/8x3 Wire Lock		4
31	110721	Weldment, Outrigger Fs500		2
32	133515	Tire/wheel Assembly, St175/80r13		2
33	P04646	Nut, 1/2-20 Lug		10
34	079145	Assembly, Trailer Tongue	(See Section 6.14)	1



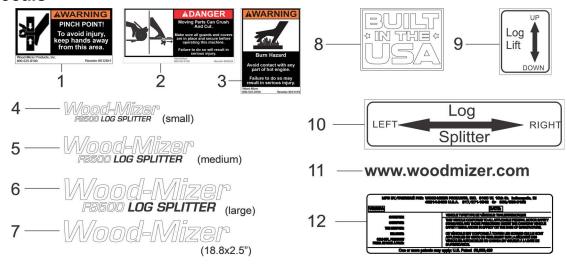
6.14 Trailer Tongue

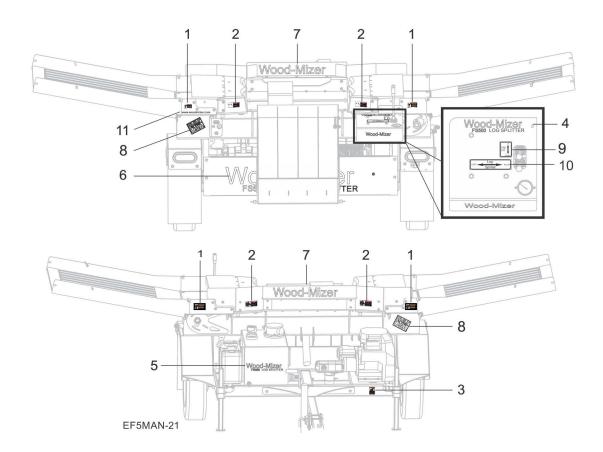


REF	PART #	DESCRIPTION	COMMENTS	QTY.
	079145	ASSEMBLY, TRAILER TONGUE		1
1	107163	Chain, 30 Inch Safety		2
2	074997	Jack, Trailer Wheel 1500 lbs		1
3	TS-0084	Weldment, Trailer Tongue		1
4	F05007-123	Bolt, 3/8-16x 1 1/4 HH Gr5		4
5	F05011-3	Washer, 3/8 Flat SAE		4
6	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		4
7	F05008-35	Bolt, 1/2-13x4 1/2 GR5 Hex Head		2
8	F05011-2	Washer, 1/2 SAE Flat		4
9	F05010-8	Nut, 1/2-13 Nyl Hex Lock		2
	079032	Wire Harness, Trailer Lights		1

6-15 WM doc 3/27/24 Replacement Parts

6.15 Decals



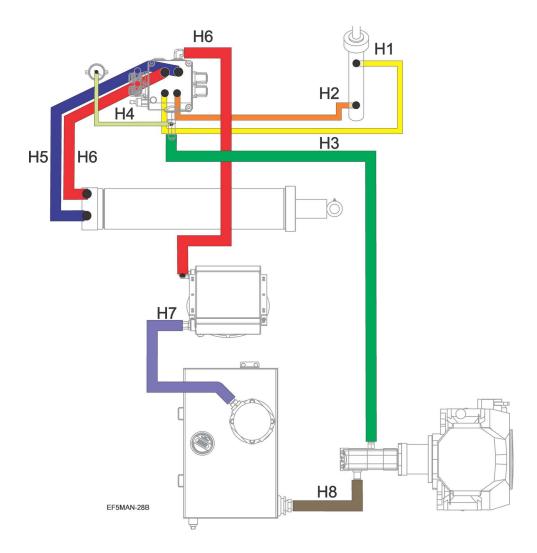


REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	S12641	Decal, Hand Pinch Point Warning Edger		6
2	033254	Decal, Moving Parts Danger		4
3	014419	Decal, Hot Engine Warning		1
4	074992	Decal, Small Wood-Mizer FS500		2
5	074993	Decal, Medium Wood-Mizer FS500		1
6	074994	Decal, Large Wood-Mizer FS500		1
7	065025	Decal, Wood-Mizer Logo Wht LT40,50		2

REF	PART #	DESCRIPTION	COMMENTS	QTY.
8	074008	Decal, Built In The USA		1
9	074995	Decal, Log Lift Control		1
10	074996	Decal, Log Splitter Direction		1
11	003235	Decal, Wood-Mizer Website		1
12	P09943	Decal, VIN		2
	P09971	Decal, VIN Overlay (clear)		2

6-17 WM doc 3/27/24 Replacement Parts

6.16 Hydraulic hoses

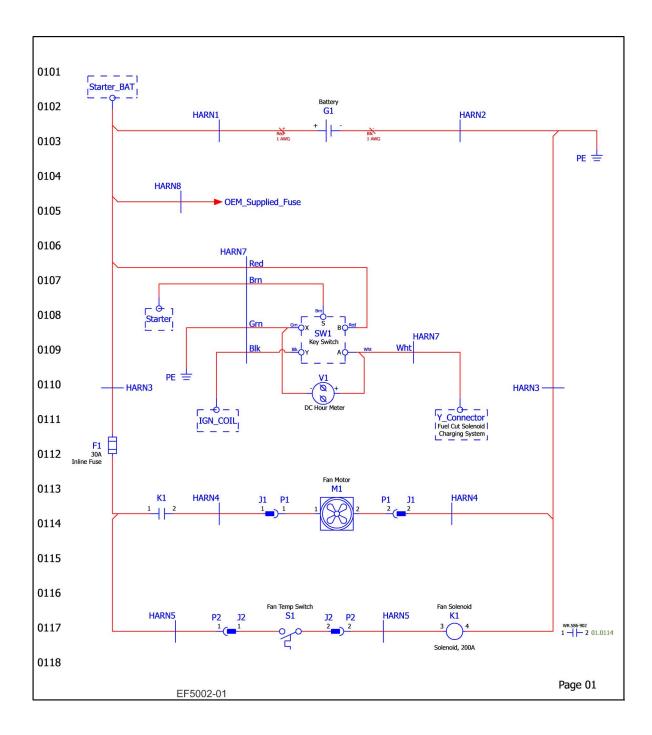


REF	PART #	DESCRIPTION	COMMENTS	QTY.
H1	079303	Hose, 44" #4 F JIC & F JIC	Available in assemblies only.	1
H2	079302	Hose, 47-1/2" #4 F JIC & F JIC	Available in assemblies only.	1
H3	079300	Hose, 57" #12 F-JIC & 45 Deg F JIC	Available in assemblies only.	1
H4	079301	Hose, 14-1/2" #4 F JIC & F JIC	Available in assemblies only.	1
H5	075452	Hose, 42" #12 90 Deg F JIC & 90 F JIC	Available in assemblies only.	1
H6	079304	Hose, 39" #12 F JIC & 90 Deg F JIC	Available in assemblies only.	2
H7	079307	Hose, 25-3/4" #12 F JIC & F JIC	Available in assemblies only.	1
H8	130750	Hose, Inlet 20R4-20FJX-20MP x 14.38	Available in assemblies only.	1
	006397	Fluid, Hydraulic HVI32 (Gal) All Weather	Tank holds 20 gal	1 gal

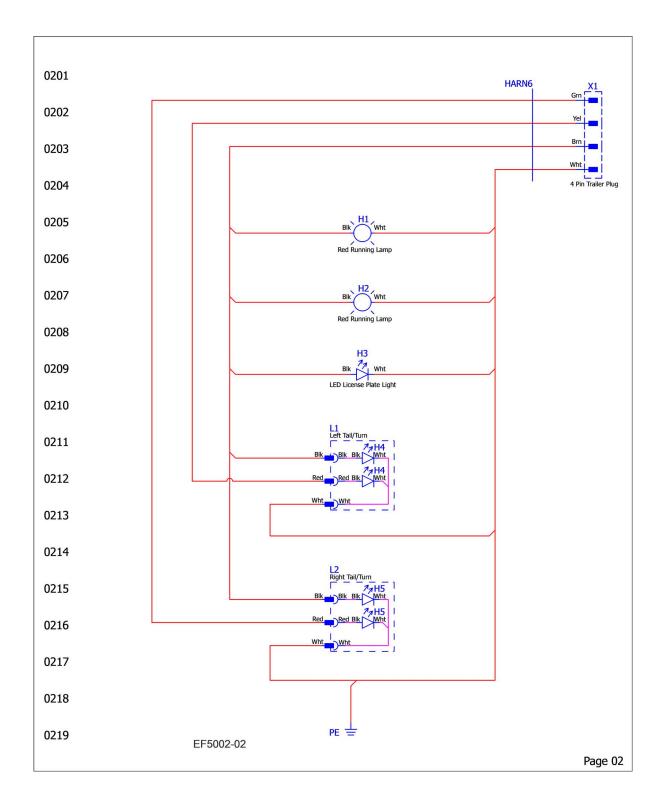
Replacement Parts WM doc 3/27/24 6-18



6.17 Electrical



6-19 WM doc 3/27/24 Replacement Parts



Device Tag/Parts List

	IST-Manual	

Device tag	Function	Nood-Mizer art Number	Wood-Mizer Description	Qty.	X-Ref (<page>.<line>)</line></page>
F1	Inline Fuse 0	24150-30	Fuse, 30A ATO Blade Green	1	01.0112
G1	Battery 0	28004	Battery, 12V 526MF (526MF)	1	01.0103
H1	Red Running Lamp	12913	Lamp, Running Red Recessed	1	02.0205
H2	= P	12913	Lamp, Running Red Recessed	1	02.0207
H3	LED License Plate Light 0	006391	Light, LED Tail	1	02.0209
K1	Fan Solenoid 0	15470	Solenoid, 200A 12V SPST Cont. Duty	1	01.0117
L1	Left Tail/Turn 0	74710	Light, 8 Diode LED Tail	1	02.0211
L1	= 0	74711	Right-Angle 3 Wire/3 Pin Plug	1	02.0211
L2	Right Tail/Turn 0	74710	Light, 8 Diode LED Tail	1	02.0215
L2	= 0	74711	Right-Angle 3 Wire/3 Pin Plug	1	02.0215
M1	Fan Motor 0	73810	Fan, 12 VDC Hydac Oil Cooler	1	01.0114
M1	= 0)52204	Connector, Deutsch 2P Female DT Series	1	01.0114
M1	= 0	52206	Wedgelock, Deutsch 2P Female DT Series	1	01.0114
M1	= 0	52943	Terminal, 16-20AWG Sz 16 Female Solid Deutsch Pin	2	01.0114
S1	Fan Temp Switch	73809	Switch, Hydac Thermostat Temp	1	01.0117
S1	= 0)52207	Connector, Deutsch 2P Male DT Series	1	01.0117
S1	= 0)52209	Wedgelock, Deutsch 2P Male DT Series	1	01.0117
S1	= 0)53429	Terminal, 16AWG Sz 16 Male Solid Deutsch Pin Gold	2	01.0117
V1	DC Hour Meter 0	15401	Digital Meter, Hour Rect Mount w/Gasket	1	01.0110
X1	4 Pin Trailer Plug	P04159	Connector, Trailer	1	02.0202

Cable Overview

Wood-Mizer_Cable_Overview

Cable Designation	Cable Part Number	Cable Description	Cable X-Ref (<page>.<line>)</line></page>		
HARN1	079284	Cable, Battery Pos - Engine FS500	01.0102		
HARN2	110074	Cable, Battery Neg - Engine FS500	01.0102		
HARN3	073764	Harness Assy, FS500G630 Hyd Fan SOL	01.0110		
HARN4	073770	Wire Assy, FS500G630 Hyd Fan Temp Switch	01.0113		
HARN5	073811	Wire Assy, FS500G630 Hyd Fan Switch	01.0117		
HARN6	073767	Harness, Trailer Light FS500	02.0201		
HARN7	073812	Cable Assy, FS500 Key Switch	01.0106		
HARN8	073769	Wire Assy, FS500G630 Hyd Fan SOL	01.0104		

EF5002-03

6-21 WM doc 3/27/24 Replacement Parts