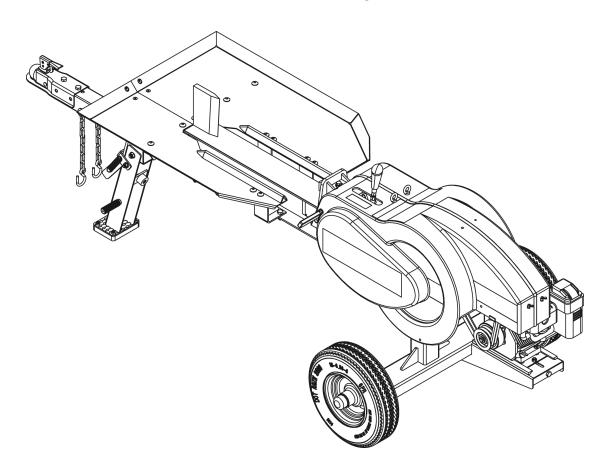
T30 KINETIC LOG SPLITTER

Instruction & Assembly Manual



Patent Pending

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

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READ and UNDERSTAND this manual completely before using T30 Log Splitter.

Operator must read and understand all safety and warning information, operating instructions, maintenance and storage instructions before operating this equipment. Failure to properly operate and maintain the log splitter could result in serious injury to the operator or bystanders.

Operation Warnings

- Do not at any time carry passengers, sit or stand on the log splitter.
- Do not allow children to play on, stand upon or climb on the log splitter.
- Always inspect the log splitter before using to assure it is in a good working condition.
- Replace or repair damaged or worn parts immediately.
- Always check and tighten hardware and assembled parts before operation.
- Avoid large holes and ditches when towing the equipment.
- Always operate the log splitter on clear and level ground.
- Do not operate the log splitter at night, only during daylight hours.
- Always tow at reduced speed in rough terrain, along creeks, ditches and on hillsides.
- To avoid personal injury and/or equipment damage DO NOT EXCEED 45 MPH.
- Always refer to the vehicle owner's manual for proper towing.
- Always secure and lock the log splitter to the vehicle hitch before towing.

Crush and Cut Hazards

- Always keep hands and feet clear from moving partswhile operating the equipment.
- Always clear and keep work area clean and free of debris when operating.
- Always wear safety gear, eye protection, gloves and work boots when operating the log splitter.

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WARNING

The warnings, cautions, and instructions outlined in this instruction manual cannot cover all possible conditions or situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product and must be supplied by the operator.



PROP 65 WARNING

The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Assembly Is Required

This product requires assembly before use. See "Assembly" section for instructions. Because of the weight and/or size of the log splitter, it is recommended that another adult be present to assist with the assembly. **INSPECT ALL COMPONENTS** closely upon receipt to make sure no components are missing or damaged.

Hazard Signal Word Definitions



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



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



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



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Technical specifications on the log splitter are provided in the "Specifications" section of this manual.

MARNING

Read and follow all instructions for assembly and operation. Failure to properly assemble this equipment could result in serious injury to the user or bystanders, or cause equipment damage.



Engine Shipped Without Oil.

Before starting engine, fill with SAE 10W-30 motor oil. See engine manual for engine oil capacity.

Inspect all Log Splitter Components.

If you have damaged components: Contact the freight company that delivered the log splitter and file a claim.

T30 LOG SPLITTER ASSEMBLY

Set the shipping crate on a solid flat surface and carefully remove the lid. Use two people and take all parts out of the shipping crate and inspect the components to ensure there are no missing pieces before starting to assemble the log splitter follow steps 1 through 10.

TOOLS REQUIRED

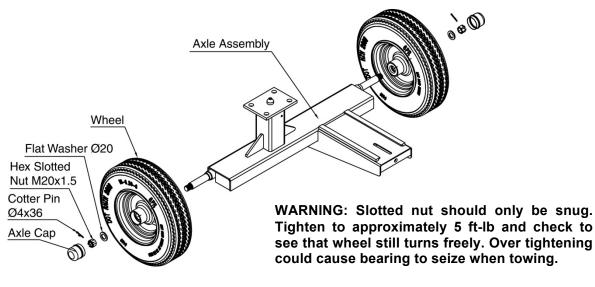
- 13mm, 15mm, 16mm, 17mm, 18mm & 19mm Wrenches
- 5mm, 8mm Allen Wrenches
- Adjustable Wrench
- Needle Nose pliers

FLAT WASHERS ALWAYS GO ON NUT SIDE.

Assembly Instructions

STEP 1: Install Wheels on the Axle Assembly

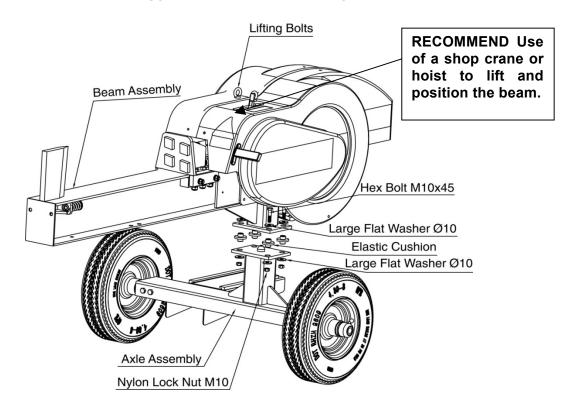
- 1. Remove the hardware from the axle. Attach the wheels to the axle assembly using the flat washer Ø20 (x1) and hex slotted nut M20x1.5(x1), ensuring nipple is outward.
- 2. After hex slotted nut is tightened, turn back 1/4 cycle to make sure the wheel can rotate smoothly. Lock the hex slotted nut M20x1.5 in place using cotter pin Ø4x36(x1). Install the axle cap on the end using rubber hammer. Repeat on the other wheel.



STEP 2: Attach Beam Assembly

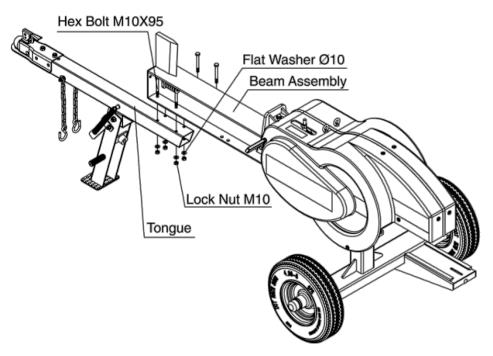
1. Attach the beam assembly to the axle assembly using hex bolt M10x45(x4), large flat washer Ø10(x8), elastic cushion (x4) and nylon lock nut M10(x4).

Note: Axle assembly bolts should be tightened 1/2 turn past snug for best performance of vibration dampeners, suggested torque is at the range of 12 to 13 lb. ft. (16-18 N. m.)



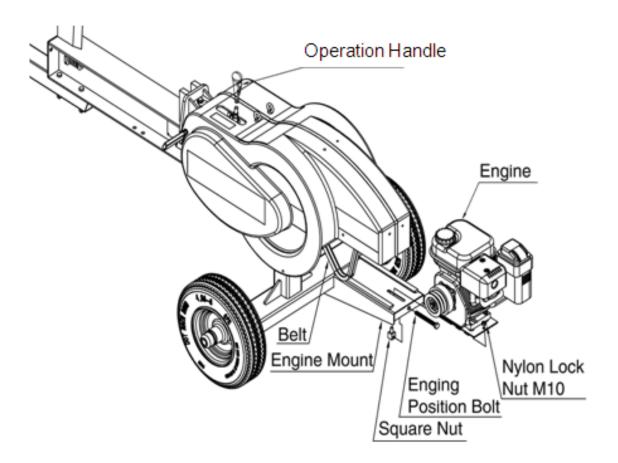
STEP 3: Attach the Tongue to the Beam Assembly

1. Attach the tongue to the beam assembly using hex bolt M10x95(x4), flat washer Ø10(x4) and lock nut M10(x4).



STEP 4: Mounting Engine, Connecting Belts and Operation Handle

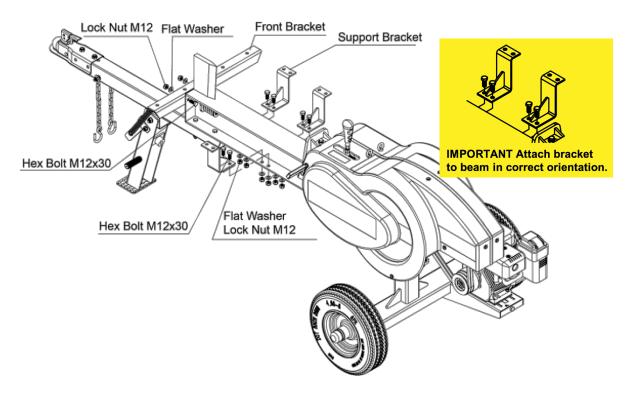
- 1. Insert the engine assembly into slot, push the engine forward and install square nut(x1) and nylon lock nut M10(x1). Loosen the nylon lock nut M10 until belt tension is correct.
- 2. Put the inner loose belt into inner groove on engine clutch, making sure the belt stays in corresponding groove on fly wheel, clockwise turn the fly wheel until the belt is in place. Repeat the process for the outer groove.
- 3. Insert the engine position bolt(x1), adjust the belt tension by pushing down on the belt to ensure the dent is less than 0.4inch. Once the belt tension is correct, lock engine position bolt in place. After belt tension is correct, tighten the nylon lock nut M10.
- 4. Install operation handle.



STEP 5: Attach Support Brackets for Worktable

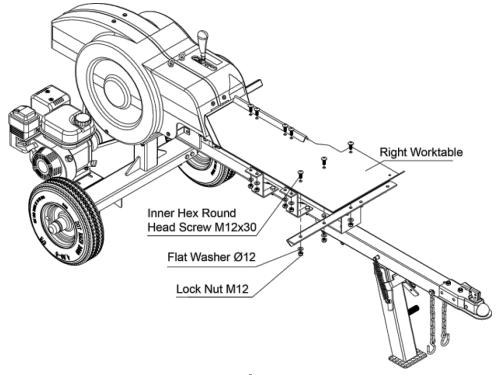
Note: Leave all bolts loose for steps5,6, 7 and 8 until all parts are installed.

- 1. Attach the three support brackets to the beam using hex bolt M12x30(x6), flat washer \emptyset 12(x6)and lock nut M12(x6).
- 2. The front bracket attaches to front of the beam using hex bolt M12x30(x2), flat washer \emptyset 12(x2) and lock nut M12(x2).



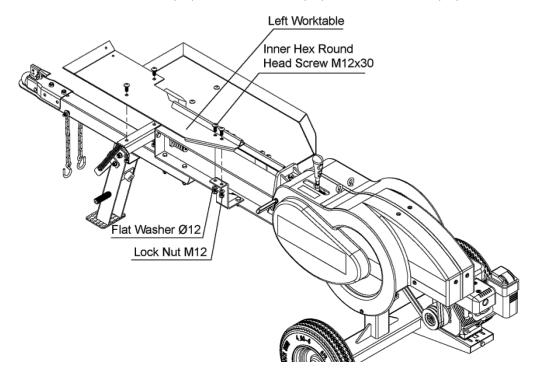
STEP 6: Attach the Right Side of the Worktable

1. Attach the right side of the worktable to the front bracket and support brackets using inner hex round head screw M12x30(x7), flat washer \emptyset 12(x7) and lock nut M12(x7).



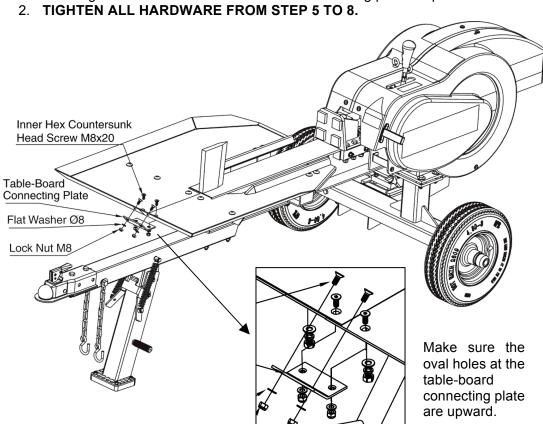
STEP 7: Attach the Left Side of the Worktable

1. Attach the left side of the worktable to the front bracket and support bracket using inner hex round head screw M12x30(x4), flat washer Ø12(x4) and lock nut M12(x4).



STEP 8: Connect the Right and Left Sides of the Worktable

1. Connect the right and left sides of the worktable using the table-board connecting plate(x1), inner hex countersunk head screw M8x20(x4), flat washer $\emptyset8(x4)$ and lock nut M8(x4), ensuring the oval holes at the table-board connecting plate is upward.



STEP 9:Add Engine Oil

- 1. Make sure the log splitter is on a level surface.
- 2. Remove oil fill cap/dipstick to add oil.
- 3. Refer to the separate owner's engine manual for oil capacity; replace oil fill cap/dipstick.
- 4. Check engine oil level daily and add as needed.

NOTE: During the break-in period check the engine oil level often.

CAUTION

DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the log splitter as a result of failure to follow these instructions will void your warranty.

STEP 10:Add Gasoline to the Engine

- 1. Use only clean, fresh, regular unleaded fuel with a minimum 85 octane rating.
- 2. DO NOT mix oil with fuel.
- 3. Remove the fuel cap and slowly add fuel to the tank. DO NOT overfill and allow approximately ¼ inch of space for fuel expansion.
- 4. Screw on the fuel cap and wipe away any spilled fuel.

DANGER

Log splitter engine exhaust contains carbon monoxide, a colorless, odorless, poison gas. Breathing carbon monoxide will cause nausea, dizziness, fainting or death. If you start to feel dizzy or weak, get to fresh air immediately.

Operate log splitter outdoors only in a well ventilated area.

DO NOT operate the log splitter inside any building, enclosure or compartment.

DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings.

DANGER CARBON MONOXIDE, using a log splitter indoors CAN KILL YOU IN MINUTES.

CAUTION

Fuel and fuel vapors are highly flammable and extremely explosive.

Fire or explosion can cause severe burns or death.

Unintentional startup can result in entanglement, traumatic amputation or laceration.

Only use regular unleaded gasoline with a minimum 85 octane rating.

DO NOT mix oil and gasoline together.

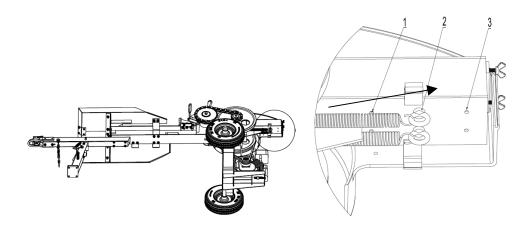
Fill tank approximately 1/4" below the top of the tank to allow for fuel expansion.

DO NOT fill fuel tank indoors or when the engine is running or hot.

DO NOT light cigarettes or smoke when filling the fuel tank.

General Information

- 1. Break in period Break in period of this unit is 500 cycles.
- 2. **Principle of operation -** This unit is designed to outperform the traditional hydraulic 30ton log splitter. Splitting power is derived from 2 spinning fly wheels. When actuation handle is moved to split position, the rotational energy stored in flywheel is converted to splitting force. This unit is fast and powerful. The result is a unit that splits wood up to 4 times faster than a conventional hydraulic unit without the need for hydraulic fluid.
- 3. Push plate return speed adjustment. –Holes are drilled at the bottom plate, pull the return spring down and adjust to the necessary position, #1 hole is the lowest speed, #2 is quicker and for the fastest use the #3 hole.



Operation Instructions



WARNING

Before operating or using the log splitter, review the instructions below and all safety information. Failure to follow these instructions may result in property damage or injury to the operator or bystanders.

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WARNING

ALWAYS use the log splitter for its intended use.

ONLY use the log splitter to split wood logs, length wise with the grain.

NEVER modify, alter or change the log splitter in anyway, modifications will void the warranty.

NEVER attach a rope, cable or other device to the handle on the log splitter.

ONLY operate the log splitter in daylight.

NEVER leave the log splitter unattended while the engine is running.

NEVER operate or let anyone else operate, the log splitter while under the influence of alcohol, drugs, or medication.

NEVER Operate unit without shrouds in place.

USING YOUR LOG SPLITTER

- 1. Start engine using instructions from engine manual.
- 2. Advance throttle control maximum speed.
- 3. Grab log by sides and place onto rails against wedge.
- 4. Push the safety handle down and move the control handle to the SPLIT position to initiate cycle, release handle and the push plate will retract.
- 5. Push plate automatically retracts at end of stroke. To retract the push plate before end of stroke, return lever to RETRACT position.

- 6. DO NOT at any time carry passengers, sit or stand on the log splitter.
- 7. Inspect the engine and make sure the engine oil level is correct.
- 8. Before towing the log splitter the tires need to be fully inflated.

TIRE WARNING

DO NOT over inflate tires. Serious injury can result if tires explode.

DO NOT tow the log splitter if the tires are worn or will not hold air.

DO NOT exceed the maximum 45 MPH towing speed.

9. Refer to the vehicle owner's manual for proper safety and towing instructions.

TOWING WARNING

Serious injury or death can occur if towing safety rules are not followed.

Always use safety chains, secure and lock the log splitter to the vehicle hitch before moving.

Drive safely. Be aware of the added length of the log splitter.

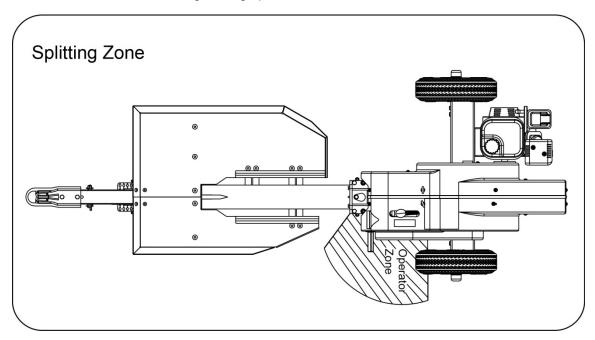
Never exceed the maximum travel speed of 45 MPH.

Never ride or transport cargo on the log splitter.

Turn off the vehicle before leaving the log splitter unattended.

Block the log splitter wheels to prevent unintended movement.

10. The log splitter needs to be on a dry and level surface with good footing. Do not work on mud, ice, brush or snow. When using the log splitter the work zone must be maintained at all times.



NOTE: Only one person operate the kinetic log splitter. Keep everyone else outside the splitting zone when operate the kinetic log splitter.

- 11. Always wear safety gear, eye protection, gloves and work boots when operating the log splitter.
- 12. Start the engine and make sure the log splitter is on level ground before operating.
- 13. Put the support leg in the down position to prevent the log splitter from moving during operation and block both tires.
- 14. Make sure hands are clear from the wedge and crush hazard areas.

CRUSH WARNING

Wedge can cut through skin and break bones. Keep both hands away from wedge and beam slide. Serious accidents can happen when other people are allowed inside the work zone. Keep everyone else out of the work zone while operating control lever.

DONOT wear loose clothing. It can get tangled in moving parts of log splitter.

Only use the log splitter in daylight so you can see what you are doing.

15. Always keep splitting area clean and free of split wood and debris.

Maintenance and Storage

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's owner's manual for maintenance procedures. Service intervals listed in the checklist below supersede those listed in the engine manufacturer's owner's manual.

WARNING

Before performing any maintenance procedure or inspection, stop the engine, wait five (5) minutes to allow all parts to cool.

MAINTENANCE

- Make sure engine is off before performing maintenance.
- After performing any maintenance, make sure all guards, shields and safety features are put back in place before operating the log splitter.
- Before operating make sure the tires have the **RECOMMENDED TIRE PRESSURE**.
- Regularly grease axle, wheel bearing area &check all axle nuts and pins are secure.
- Periodically check all fasteners, housing, chain and belts for tightness and wear.
- Annually clean and lightly lubricate all moving parts or when needed.
- Use a glossy enamel spray paint to touch up scratched or worn painted metal surfaces.
- Clean the debris from the beam if the push plate cannot return completely, lightly lubricate the beam using hydraulic oil. Move the push plate back and forth until it returns correctly.



What	When	How
Nuts and Bolts	Each Use	Check for loose bolts, tighten before operating.
Beam	Every 4 cords	Apply small amount of oil to beam surface.
Moving Parts	Each Use	Clear debris from log splitter.

Refer to the Engine Owner's Manual for engine maintenance.

IMPORTANT:

If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operations.

STORAGE

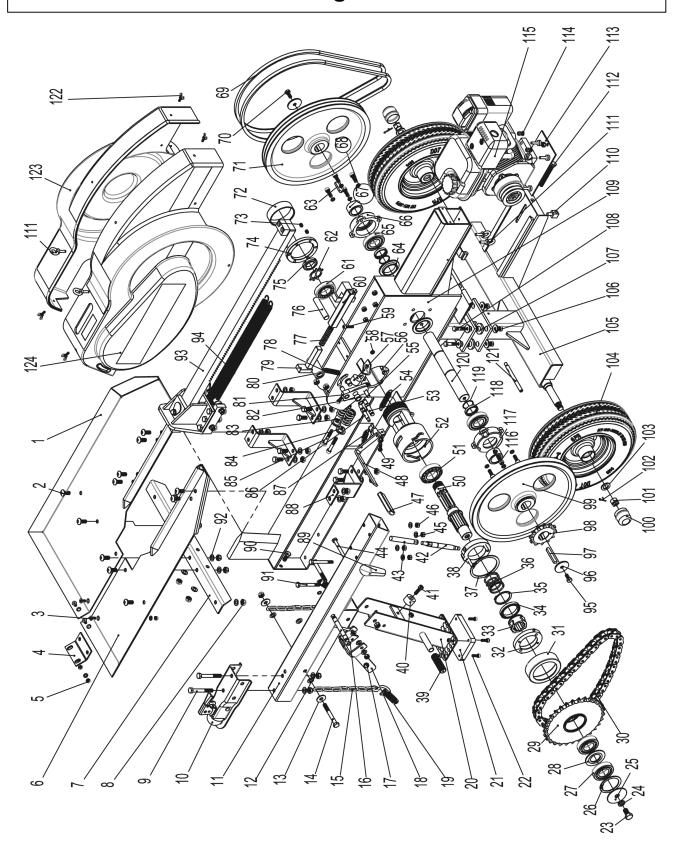
- Before storing make sure the log splitter is clean and dry for years of trouble free service.
- Before storing unit for an extended period of time (> 1 month), add fuel stabilizer or drain fuel.
- Lightly lubricate all log splitter surfaces and moving parts to prevent rust.
- Store indoors or protected area during severe weather and winter months.

Troubleshooting

No.	Problem	Cause	Solution
1	Engine will not start	Check gas level Check oil level Check fuel ON/OFF Check ON/OFF switch	Add gasoline Add oil Reference engine manual
2	Push plate cannot retract or retracts slowly	Wood chips or debris under push plate Retract springs too loose	Remove debris from the push plate Lubricate beam with oil. Adjust or replace retract spring.
3	Push plate retract too fast	Retract springs too tight	Adjust or replace retract springs
4	No force or little force during splitting	1. #57 Round Nut M40x1.5 is loose 2. Clutch spring deformed	1.Enlarge the clearance and tight the #57 Round Nut M40x1.5.2. Replace the clutch spring
5	Noise from engagement clutch	Clutch clearance is too small Clutch is not completely disengaged	Adjust the clutch clearance or replace clutch spring (See the website for instruction)

Specifications

Cycle Time	3 Sec
Wedge Size	7" Hardened Steel
Max. Log Length	23"
Wheel Size	18"
Working Height	28"
Hitch Type	2" Ball Coupler
Work Table Length	38"
Max. Towing Speed	45 MPH
Overall Size	106.6"x42.8"x42.5"



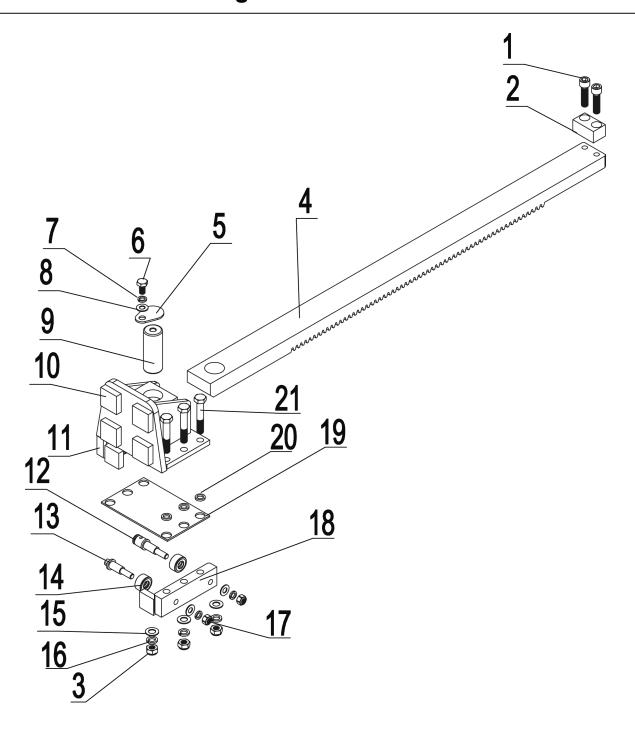
Ref#	Drawing No.	Description	Qty
1	LSF23S-06000	Right Worktable	1
2	9104-12030-10.9FH	Inner Hex Round Head Bolt M12x30	11
3	911608020	Inner Hex Countersunk Head Bolt M8x20	4
4	LSF23S-00001	Connecting Plate	1
5	9206-08000	Nylon Lock Nut M8	15
6	LSF23S-07000	Left Worktable	1
7	LSF23S-00002	Front Bracket	1
8	9206-12000	Nylon Lock Nut M12	25
9	9101-120958.8DX	Hex Bolt M12x95	3
10	LSP30-20000	2" Coupler	1
11	LSF23S-03000	Tongue	1
12	LSF23S-00003	Spring Pin	1
13	9302-12000-DX	Big Flat Washer Ø12	2
14	9101-12110DX-8.8	Hex Bolt M12x110	1
15	LSP25-11000-DX	Chain	2
16	9304-01500	Circlip for Shaft Ø15	2
17	LSF23S-00004	Spring Pendant	2
18	LSF23S-00005	Front Support Leg Latch	1
19	LSF23S-00006	Support Leg Spring	2
20	LSF23S-04000	Front Support Leg	1
21	LSF23S-00051	Elastic Cushion	1
22	9105-08025	Hex Socket Round Head Screw M8x25	5
23	9101-16030-8.8DX	Hex Bolt M16x30	1
24	9306-16000	Lock Washer Ø16	1
25	LSF23S-00007	Big Check Ring	1
26	9308-08000	Circlip for Hole Ø80	1
27	9603-6208	Bearing 6208	2
28	LSF23S-00008	Spacer	1
29	LSF23S-10000	Chain Wheel	1
30	GB1243.1-83	16A-1X23 Roller Chain	1
31	LSF23S-00017	Dust Cover	1
32	LSF23S-11000	Sliding block	1
33	LSF23S-00009	Clutch Outside Tooth	1
34	9602-61812	Bearing 61812	1
35	9304-06000	Circlip for Shaft Ø60	1

Ref#	Drawing No.	Description	Qty
36	LSF23S-00010	Clutch Spring	1
37	9308-110-000	Circlip for Hole Ø110	1
38	LSF23S-12000	Rotating Disk	1
39	E050-05002	Gum Cover	1
40	LSF23S-00050	Rubber Mat	1
41	9112-10030	Inner Hex Screw M10x30	1
42	LSF23S-00011	Tempering Handle	1
43	LSF23S-00012	Hollow Handle	1
44	9101-10110-8.8DX	Hex Bolt M10x110	1
45	9301-10000-DX	Flat Washer Ø10	7
46	9206-01000	Nylon Lock Nut M10	23
47	N560-00019	Handle Sleeve	1
48	LSF23S-15000	Safety Handle	1
49	9901-08030-8.8	Hex Bolt M8x30	1
50	LSF23S-00014	Gear Shaft	1
51	9604-30209	Tapered Roller Bearing 30209	1
52	LSF23S-00015	Clutch Cover	1
53	LSP23S-00016	Spring Bolt	1
54	LSF23S-00019	Handle Tension Spring	1
55	9304-00014	Circlip for Shaft Ø14	1
56	9119-08020-FH	Eye Bolt M8x20	1
57	LSF23S-00035	Cushion	1
58	9201-08000-DX	Hex Nut M8	2
59	9105-08035-8.8FH	Inner Hex Screw M8x35	1
60	LSF23S-14000	Small Square Tube	1
61	9604-30208	Tapered Roller Bearing 30208	1
62	GB585/T-85	Stop Washer Ø38	1
63	8801-12*8*50	Flat Key 12x8x50	1
64	LSF23S-00039	Bearing Bushing	2
65	9609-1208	Self-Aligning Ball Bearing 1208	2
66	LSF23S-00038	Bearing Seat	2
67	LSF23S-00048	Short Spacer	1
68	9306-10000FH	Lock Washer Ø10	8
69	GB13575.2	A-1549 Belt	2
70	9101-10025-8.8Z	Hex Bolt M10X25	1

Ref#	Drawing No.	Description	Qty
71	LSF23S-00036	Flywheel B	1
72	LSF23S-00021	Plastic Cap	1
73	9121-10016	Screw M10X16	6
74	LSF23S-00023	Round Nut M94	1
75	GB7T810	Round Nut M38x1.5	1
76	LSF23S-00022	Pressure Shaft	1
77	LSF23S-00024	Voltage-controlled Spring	1
78	LSF23S-00020	Springboard Tension Spring	1
79	LSF23S-13000	Upper Block	1
80	LSF23S-00025	Roller Wheel	1
81	LSF23S-08000	Springboard	1
82	LSF23S-00018	Teleflex	1
83	LSF23S-00026	Buffer Spring (short)	2
84	LSF23S-00030	Buffer Cap	2
85	9105-10065-8.8FH	Inner Hex Bolt M10x65	2
86	LSF23S-00027	Small Handle Bolt	1
87	LSF23S-00013	Safety Handle Spring	1
88	LSF23S-00017	Support Bracket	3
89	LSF23S-00028	Control Handle	1
90	9101-12030-8.8DX	Hex Bolt M12x30	8
91	9101-10095-8.8DX	Hex Bolt M10x95	4
92	9301-12000-DX	Flat Washer Ø12	25
93	LSF23S-05000	Push Plate	1
94	LSF23S-00032	Long Spring	2
95	9101-10025-8.8DX	Hex Bolt M10x25	1
96	LSF23S-00044	Washer	2
97	8801-12*8*75	Flat Key 12*8*75	1
98	LSF23S-00043	Small Chain Wheel	1
99	LSF23S-00042	Flywheel A	1
100	LSP25-00009-DX	Axle Cap	2
101	NS22-00012	Hex Slotted Nut M20x1.5	2
102	9404-04036DX	Cotter Pin Ø4x36	2
103	9301-20000	Flat Washer Ø20	2
104	LSF23S-18000	Wheel	2
105	LSF23S-02000	Axle Assembly	1

Ref#	Drawing No.	Description	Qty
106	9302-01000-DX	Big Flat Washer Ø10	8
107	LSF23S-00031	Elastic Cushion	4
108	9101-10045	Hex Bolt M10x45	4
109	LSF23S-01000	Beam	1
110	LSF23S-00029	Square Nut	1
111	9127-08020	Lifting Bolt M8x20	4
112	9101-12110-8.8DX	Engine Position Bolt	1
113	LSF23S-09000	Engine Seat Plate	1
114	9301-08000-DX	Flat Washer Ø8	8
115	LSF23S-16000	Engine with Clutch	1
116	9105-10030-8.8FH	Inner Hex Bolt M10x30	8
117	LSF23S-00037	Long Bushing	1
118	LSF23S-00046	Retainer Ring	2
119	LSF23S-00047	Circlip for Shaft Ø40	2
120	LSF23S-00041	Flywheel Shaft	1
121	LSF23S-00040	Connecting Rod	2
122	9101-06016	Wing Nut M6x16	4
123	LSF23S-00034	Outer Housing R.H.	1
124	LSF23S-00033	Outer Housing L.H.	1

Parts Drawing & Parts List for Push Plate



Parts Drawing & Parts List for Push Plate

Ref#	Drawing No.	Description	Qty
1	9105-12045-8.8FH	Inner Hex Screw M12x45	2
2	LSF23S-05005	Collision Block	1
3	9206-12000	Nylon Lock Nut M12	6
4	LSF23S-05004	Rack	1
5	LSF23S-05006	Pressing Plate	1
6	9101-10020-DX	Hex Bolt M10x20	1
7	9306-10000FH	Lock Washer Ø10	5
8	9301-10000-DX	Flat Washer Ø10	5
9	LSF23S-05007	Pushing Plate Pin	1
10	LSF23S-05100	Pushing Plate Assembly	1
11	LSF23S-05200	Pulley Fixed Plate (Right)	1
12	LSF23S-05009	Long Roller Shaft	2
13	LSF23S-05002	Short Roller Shaft	2
14	LSF23S-05001	Roller	4
15	9301-12000-DX	Flat Washer Ø12	6
16	9306-12000	Lock Washer Ø12	6
17	9206-01000	Nylon Lock Nut M10	4
18	LSF23S-05300	Pulley Fixed Plate (Left)	1
19	LSF23S-05003	Wear Resistance Lining	1
20	LSF23S-05008	Septum Mat	6
21	9101-12070	Hex Bolt M12x70	6