

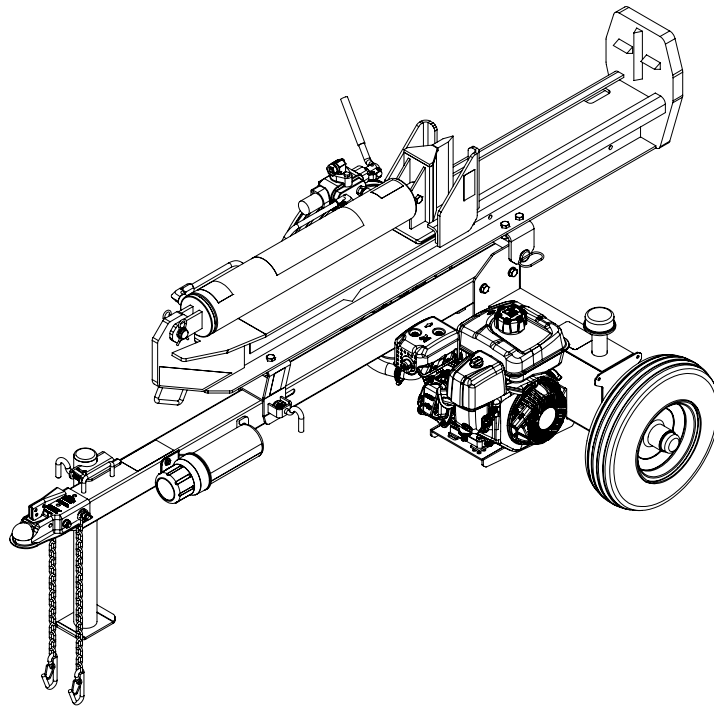


OPS227

27-TON HORIZONTAL & VERTICAL HYDRAULIC LOG SPLITTER

POWERED BY KOHLER®

USER MANUAL



DK2 USA WEST

3311 MEADE AVENUE STE
E DOCK 13, LAS VEGAS, NEVADA
89102 USA

DK2 CORPORATE HEAD OFFICE

5330 MAINWAY
BURLINGTON, ONTARIO
L7L6A4 CANADA

DK2 USA EAST

3750 SOUTH AVENUE
NORTH UNIT, TOLEDO, OHIO
43615 USA

NOTE: If you find any damaged or missing parts please call **DK2 Customer Service** or contact us via our **website**. We will replace any damaged or missing parts to you for free. **Please do not return to the store.**

CUSTOMER SERVICE 1 (888) 277-6960 | WWW.DK2.COM

WARRANTY

PLEASE DO NOT RETURN TO THE STORE. YOU HAVE A 1 YEAR WARRANTY AND DK2 WILL REPLACE A DEFECTIVE PART FOR FREE. CALL US AT 1 (888) 277-6960 FOR FAST WARRANTY PARTS AND QUESTIONS.

WHAT IS COVERED – 2-YEAR ENGINE AND 1 YEAR COMMERCIAL WARRANTY INCLUDED

Detail K2 Inc. warrants to the original purchaser that product will be free and clear of manufacturing defects in workmanship and materials under normal use and service for a period of one (1) year from the date of the original purchase. If within one (1) year from the original date of purchase this product fails due to defect in material or workmanship, Detail K2 will repair, replace, or supply any covered defective part at our option. DK2 POWER is 1-year parts only warranty no labor. KOHLER® 2-year warranty is PARTS and LABOR.

Upon expiry of one (1) year, Detail K2 will have no further liability related to the product. Detail K2 does not authorize any party, including its authorized distributors or dealers, to offer any other warranty on behalf of Detail K2 Inc.

SERIAL NUMBERS MUST BE REGISTERED ONLINE AT WWW.DK2POWER.COM, WARRANTY NON-TRANSFERABLE.

KOHLER® ENGINES –KOHLER® CH SERIES ENGINES COMMERCIAL 3 YR PARTS AND LABOR WARRANTY

KOHLER® ENGINES –KOHLER® SH SERIES ENGINES RESIDENTIAL 2 YR PARTS AND LABOR WARRANTY

See your KOHLER® manual for specific warranty.

DK2–1-Year parts only, no labor. 2-year KOHLER® warranty.

THIS WARRANTY DOES NOT COVER OR APPLY TO:

- (a) Damage to the product due to misuse, mishandling and abuse
- (b) Improper installation, maintenance and storage
- (c) Expendable parts such as nuts and bolts, pins and springs, wiring and switch components, hydraulic hoses and fittings, cutting teeth, cutting chains, cutting blades, throttles, belts and tires.
- (d) Normal wear and tear
- (e) Consequential damage & incidental damages such as damage to persons or property

Your 1-year warranty DOES NOT cover “expendable” such as blades, teeth, hardware (nuts, bolts, springs, etc.), winch straps, cable or rope (winches), electrical (charging cables), belts, chains, tires, bearings or hub assemblies, plow springs, plow markers, plow snow deflectors, dust caps and scraper blades, as well as labor and installation charges, and delivery and/or shipping charges (unless due to DK2 error).

PROCEDURE FOR OUTDOOR POWER EQUIPMENT WARRANTY

Within the one (1) year warranty period, the purchaser of the product can CALL **1 (888) 277-6960** or contact us on WWW.DK2.COM. Notify us of the claimed defect and provide proof of original purchase. At this time the validity of the claim will be determined, and if approved replacement parts will be issued. No returned product will be accepted under warranty unless accompanied by an RGA# issued by Detail K2 Inc.

DAMAGED FREIGHT

Damage to your product caused by freight mishandling is NOT covered under warranty. If your freight arrives damaged, REFUSE it. **Inspect your product when it arrives**, otherwise if you accept it, you will be responsible for filing any freight claims with the delivery company. DK2 warranty excludes damage to product.

RETURNS BEFORE GAS AND OIL

Follow the return policy from the retailer you purchased the equipment from.

RESOLUTION FOR A DEFECTIVE PRODUCT AFTER GAS AND OIL HAS BEEN ADDED.

Call us at 1 (888) 277-6960 between 8am-4pm Monday to Friday EST.

BY REGISTERING YOUR DK2 PRODUCT FOR WARRANTY, YOU ACKNOWLEDGE AND UNDERSTAND THE WARRANTY POLICY PROVIDED WITH YOUR PRODUCT.

Failure to follow any and all instruction in this user manual can result in serious injury or even death. The operator of any DK2 product must read and understand the complete user manual provided with their purchased DK2 product before assembly or operation.

TABLE OF CONTENTS

WARRANTY.....	2
TABLE OF CONTENTS	3
TECHNICAL SPECIFICATIONS.....	4
SECTION I • SAFETY	5
SAFETY CONVENTIONS	6
IMPORTANT SAFETY INFORMATION.....	6
SAFETY DECALS	7
SECTION II • ASSEMBLY	12
ASSEMBLY OVERVIEW	13
HARDWARE KIT	15
LOG CATCHER KIT.....	16
STEP 1: TANK AND ENGINE	17
STEP 2: WHEELS	18
STEP 3: TONGUE.....	19
STEP 4: BEAM BRACKET	20
STEP 5: BEAM.....	21
STEP 6: HYDRAULIC LINE	22
STEP 7: LOG CATCHER.....	23
STEP 8: FINAL INSTALLATION CHECK	23
SECTION III • OPERATION.....	24
OPERATING INSTRUCTIONS.....	25
SECTION IV • PARTS & SCHEMATICS	28
SCHEMATICS: TANK	29
SCHEMATICS: BEAM.....	30
SCHEMATICS: TONGUE	31
SCHEMATICS: COMPLETE DIAGRAM	32
SCHEMATICS: COMPLETE PARTS LIST	34

TECHNICAL SPECIFICATIONS

MODEL NUMBER	OPS227 (27-TON)
ENGINE	KOHLER® SH265 6.5 HP 196cc
MAXIMUM LOG LENGTH	25" (63.5cm)
CYCLE TIME	13 seconds
CYLINDER	Ø4" (Ø10.2cm) x 24" (61cm) stroke
PUMP, TWO-STAGE	15 GPM (56.8 LPM)
WEDGE, HEAT-TREATED STEEL	8" (20.3cm) high
BEAM	8" (20.3cm) foot plate
HYDRAULIC CAPACITY	6.5 gallons (24.6 litres) max
ASSEMBLED DIMENSIONS	87.4" (L) x 49.2" (W) x 35.8" (H) 222cm (L) x 125cm (W) x 91cm (H)
ASSEMBLED WEIGHT	507lb (230kg)
SHIPPING DIMENSIONS	70.9" (L) x 31.5" (W) x 19.7" (H) 180cm (L) x 80cm (W) x 50cm (H)
SHIPPING WEIGHT	551.2lb (250kg)
VALVE	Auto return with adjustable detent
WHEELS	D.O.T. approved 16" (40.6cm) O.D. road tires (Not highway towable and 25mph (40km/h) maximum)
COUPLER	2" (5.08cm) ball with safety chains

SECTION I • SAFETY

SAFETY CONVENTIONS



DANGER: This indicates a hazardous situation, which, if not avoided, will result in death or serious injury.



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



CAUTION: This indicates a hazardous situation, which, if not avoided, may cause minor or moderate injury.

ADDITIONAL INFORMATION AND POTENTIAL CHANGES

We reserve the right to discontinue, change, and improve our products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your machine.

IMPORTANT SAFETY INFORMATION



WARNING: Read and understand the complete User Manual before assembling or using this product. Failure to comprehend and comply with warnings, cautions and instructions for assembly and operation could result in serious injury or death.



WARNING: Do not permit children to operate this equipment at any time. Do not permit others that have not read and understood the complete User Manual to operate this equipment. Operation of power equipment can be dangerous. It is the sole responsibility of the operator to understand the assembly and safe operation of this product.



DANGER: INTENDED USE

Do not use this machine for any purpose other than splitting wood, for which it was designed. Any other use is unauthorized and may result in serious injury or death.



DANGER: PERSONAL PROTECTIVE EQUIPMENT

When operating this machine, it is essential that you wear safety gear including goggles or safety glasses, steel-toed shoes and tight-fitting gloves (no loose cuffs or draw strings). Always wear ear plugs or sound-deafening headphones to protect against hearing loss when operating this log splitter.



CAUTION: Do not wear loose clothing or jewelry that can be caught by moving parts of the machine. Keep clothing and hair away from all moving parts of the machine.

**DANGER: GENERAL SAFETY**

Failure to follow warnings, cautions, assembly and operation instructions in the User Manual may result in serious injury or death.

**DANGER: READ THE USER MANUAL BEFORE OPERATION**

- **Do not** permit children to operate this equipment at any time. Do not permit others that have not read and understood the complete User Manual to operate this equipment.
- Keep all people and pets a minimum of 10 feet (3.04m) away from the work area when operating this machine. Only the operator is to be near the machine during use.
- **Do not** operate the machine when under the influence of alcohol, drugs, or medication.
- **Do not** allow a person who is tired or otherwise impaired or not completely alert to operate this machine.

**DANGER: PREPARATION OF THE LOG**

Both ends of the log should be cut as square as possible to prevent the log from rotating out of the splitter during operation. Do not split logs greater than 25 inches (63.5cm) in length.

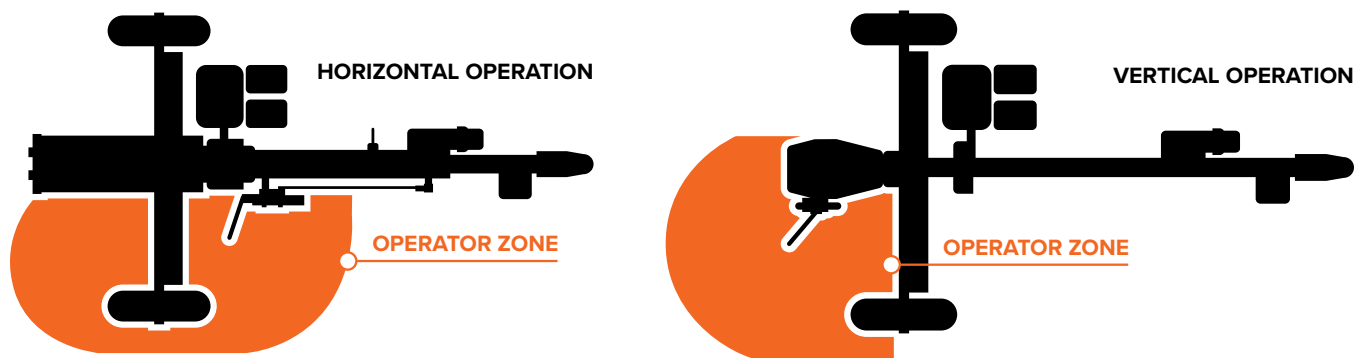
**DANGER: WORK AREA**

- **Do not** operate the machine on icy, wet, muddy or otherwise slippery ground. **ONLY** operate your machine on level ground. **Operating on a slope could cause the machine to roll over or logs to fall off of the equipment, which could result in injury.**
- **Do not** operate the log splitter in an enclosed area. Exhaust fumes from the engine contain carbon monoxide which can be harmful or deadly when inhaled.
- **Do not** move the machine over hilly or uneven terrain without a tow vehicle or adequate help.
- Use a tire chock or block on wheels to prevent movement of the log splitter while in operation.
- Operate the log splitter in daylight or under good artificial light.
- Keep the work area free of clutter. Remove split wood from around the log splitter immediately after each use to avoid potential tripping.

OPERATION OF THE LOG SPLITTER

Operate the log splitter from within the operation zone as shown in the diagrams below. The operator has the safest and most efficient access to the control valve and the beam in these locations.

! **DANGER: FAILURE TO OPERATE THE LOG SPLITTER IN HIGHLIGHTED ORANGE POSITION BELOW CAN RESULT IN SERIOUS INJURY OR DEATH.**



! **DANGER**

- **Make sure the operator knows how to stop and disengage the controls before operating.**
- **Do not place hands or feet between the log and splitting wedge during forward or reverse stroke. Serious injury or death could result.**
- **Do not** straddle or step over the log splitter during operation.
- **Do not** reach or bend over the log splitter to pick up a log.
- **Do not** attempt to split two logs on top of each other.
- **Do not** attempt to cross split a log.
- **Do not** Attempt to load your log splitter when the ram or wedge is in motion.
- Use your hand to operate the control lever on the valve. Do not use your foot, a rope or any extension device.
- **Do not** move the log splitter while the engine is running
- **Never leave the equipment unattended while the engine is running.** Shut off the engine even if you are leaving the log splitter for a short period of time.
- Avoid contact with the muffler and other hot areas of the engine during operation or after running to prevent burns.

**WARNING: REPAIR AND MAINTENANCE**

- **Do not operate the log splitter when it is in poor mechanical condition or in need of repair.** Frequently check that all nuts, bolts, screws, hydraulic fittings and hose clamps are tight.
- **Do not** alter the log splitter in any manner. Any alteration will void the warranty and could cause the log splitter to be unsafe to operate. Perform all recommended maintenance procedures before using the log splitter. Replace all damaged or worn parts immediately.
- **Do not** tamper with the engine to run it at excessive speeds. The maximum engine speed is preset by the manufacturer and is within safety limits. See KOHLER® Engine manual for more information.
- Remove the spark plug wire before performing any service or repair on the log splitter.
- **Always check the level of hydraulic oil and engine oil before operation.**
- Replacement parts must meet manufacturer's specifications.

**WARNING: HYDRAULIC SAFETY**

The hydraulic system of the log splitter required careful inspection along with the mechanical parts. Be sure to replace frayed, kinked, cracked or otherwise damaged hydraulic hoses or hydraulic components.

- **Check for hydraulic fluid leaks** by passing a piece of paper or cardboard underneath or over the area of the leak. **Do not check for leaks with your hand. Fluid escaping from the smallest hole, under pressure, can have enough force to penetrate the skin causing serious injury or death.**
- **Seek professional medical attention immediately if injured by escaping hydraulic fluid.** Serious infection or reaction can develop if medical treatment is not administered immediately.
- Relieve all pressure by shutting off the engine and moving the valve control handle back and forth should it become necessary to loosen or remove any hydraulic fitting.
- **Do not** remove the cap from the hydraulic tank or reservoir while the log splitter is running. **The tank could contain hot oil under pressure which could result in serious injury.**
- **Do not** adjust the hydraulic valve. The pressure relief valve on the log splitter is preset at the factory. **Only a qualified service technician should perform this adjustment.**

**CAUTION: FIRE PREVENTION**

- **Do not** operate the log splitter near an open flame or spark. **Hydraulic oil and gasoline are flammable and can explode.**
- **Do not** fill the gas tank while the engine is hot or running. Allow the engine to cool before refueling.
- **Do not** smoke while operating or refueling the log splitter. Gas fumes can easily explode.
- Refuel the log splitter in a clear area with no gas fumes or spilled gas. Use an approved fuel container. Replace the gas cap securely. If gas has spilled, move the log splitter away from the area of the spill and avoid creating any source of ignition until the spilled gas has evaporated.

- Keep a Class B fire extinguisher on hand when operating this log splitter in dry areas as a precautionary measure against possible flying sparks.
- Drain the fuel tank prior to storage to avoid the potential fire hazard. Store gasoline in an approved, tightly sealed container. Store the container in a cool, dry place.
- Turn the fuel shut off valve on the engine to the “OFF” position before towing the log splitter. Failure to do so may result in flooding the engine.

**CAUTION: IMPORTANT NOTE**

This log splitter is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine’s exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the state of California a spark arrester is required by law. Other states have similar laws.

Federal laws apply on federal lands. A spark arrester muffler is available as an accessory at your nearest engine dealer. Always check legal requirements in your area.

**CAUTION: TOWING SAFETY**

- Check all local and state regulations regarding towing, licensing, and lights before towing your log splitter.
- Check before towing to make sure that the log splitter is correctly and securely attached to the towing vehicle and that the safety chains are secured to the hitch or bumper of the vehicle with enough slack to allow turning. Always use a Class I, 2” ball with this log splitter.
- **Do not** carry any cargo or wood on the log splitter.
- **Do not** allow anyone to sit or ride on the log splitter.
- Disconnect the log splitter from the towing vehicle before operating it.
- Use care when backing up with the log splitter in tow to avoid jack-knifing. Allow for added length of the log splitter when turning, parking, crossing intersections and in all driving situations.
- **Do not exceed 25mph (40km/h) when towing your log splitter.** Towing the log splitter at speeds higher than 25mph (40km/h) could result in loss of control, damage to the equipment, serious injury or death. Adjust towing speed for terrain and conditions. Be extra cautious when towing over rough terrain.

**CALIFORNIA PROPOSITION 65 WARNING**

Engine exhaust, some of its constituents and certain product components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

SECTION II • ASSEMBLY

ASSEMBLY OVERVIEW

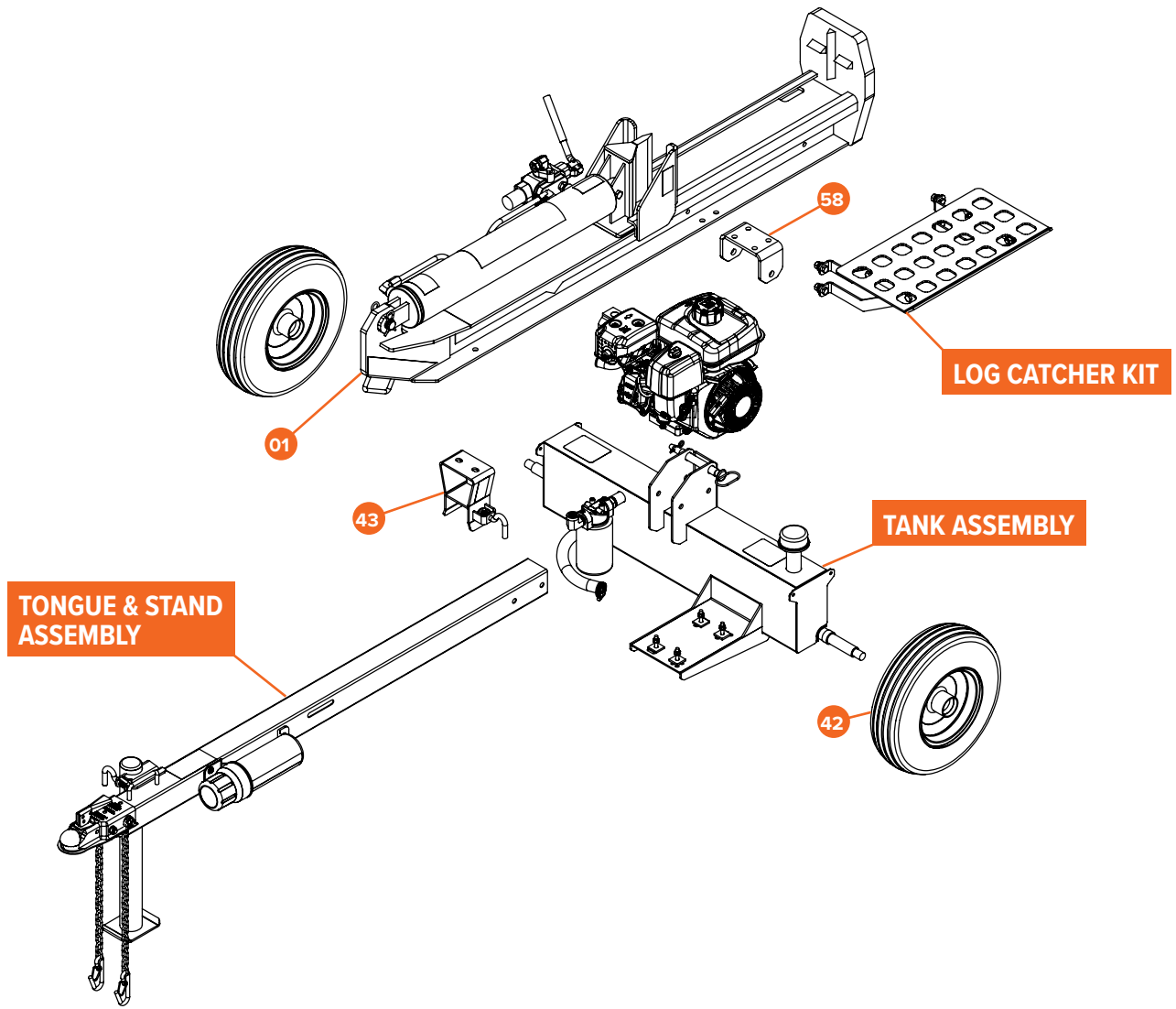
LIST OF TOOLS NEEDED FOR ASSEMBLY:

TOOL #	DESCRIPTION
A	Hammer
B	Needle-nose pliers
C	Box cutter
D	#2 Phillips screw driver
E	6mm hex key wrench
F	8mm driver
G	13mm wrench or socket wrench
H	17mm wrench or socket wrench
I	19mm wrench or socket wrench
J	22mm and 24mm wrenches or socket wrench
K	28mm socket wrench



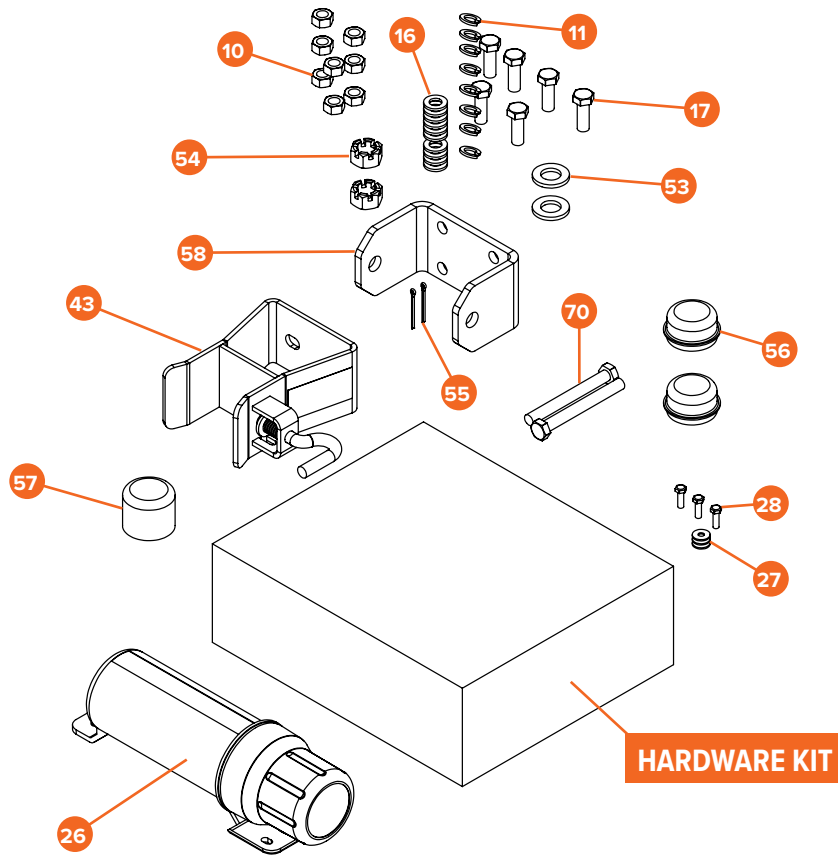
CAUTION

On pre-filled log splitters, **DO NOT REMOVE** the end caps from the hydraulic hoses until **STEP 6**.



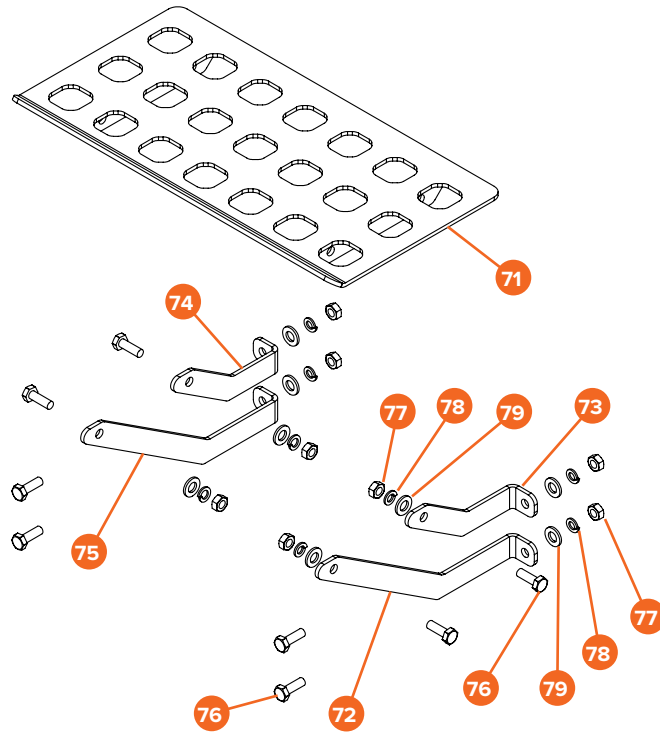
ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
01	OPS22701Y22	Integrated Beam		1
42	OPS22742Y22	Wheel Assembly	4.80 x 8	2
43	OPS22743Y22	Beam Lock Assembly		1
58	OPS22758Y22	Beam Pivot Plate		1

HARDWARE KIT



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
10	OPS22710Y22	Hex Nut	G8.8, M12 x 1.75	8
11	OPS22711Y22	Lock Washer	M12	8
16	OPS22716Y22	Flat Washer	M12	10
17	OPS22717Y22	Hex Bolt	G8.8, M12 x 1.75 x 35mm	6
26	OPS22726Y22	Manual Canister		1
27	OPS22727Y22	Fender Washer	M6	3
28	OPS22728Y22	Hex Bolt	G8.8, M6 x 1.0 x 20mm	3
43	OPS22743Y22	Beam Lock Assembly		1
53	OPS22753Y22	Flat Washer	3/4"	2
54	OPS22754Y22	Castle Nut	3/4-16, Clear Zinc	2
55	OPS22755Y22	Cotter Pin	1/8" x 1-1/2"	2
56	OPS22756Y22	Hub Cap		2
57	OPS22757Y22	Hub Cap Tool		1
58	OPS22758Y22	Beam Pivot Plate		1
70	OPS22770Y22	Hex Bolt	G8.8, M12 x 1.75 x 110mm	2

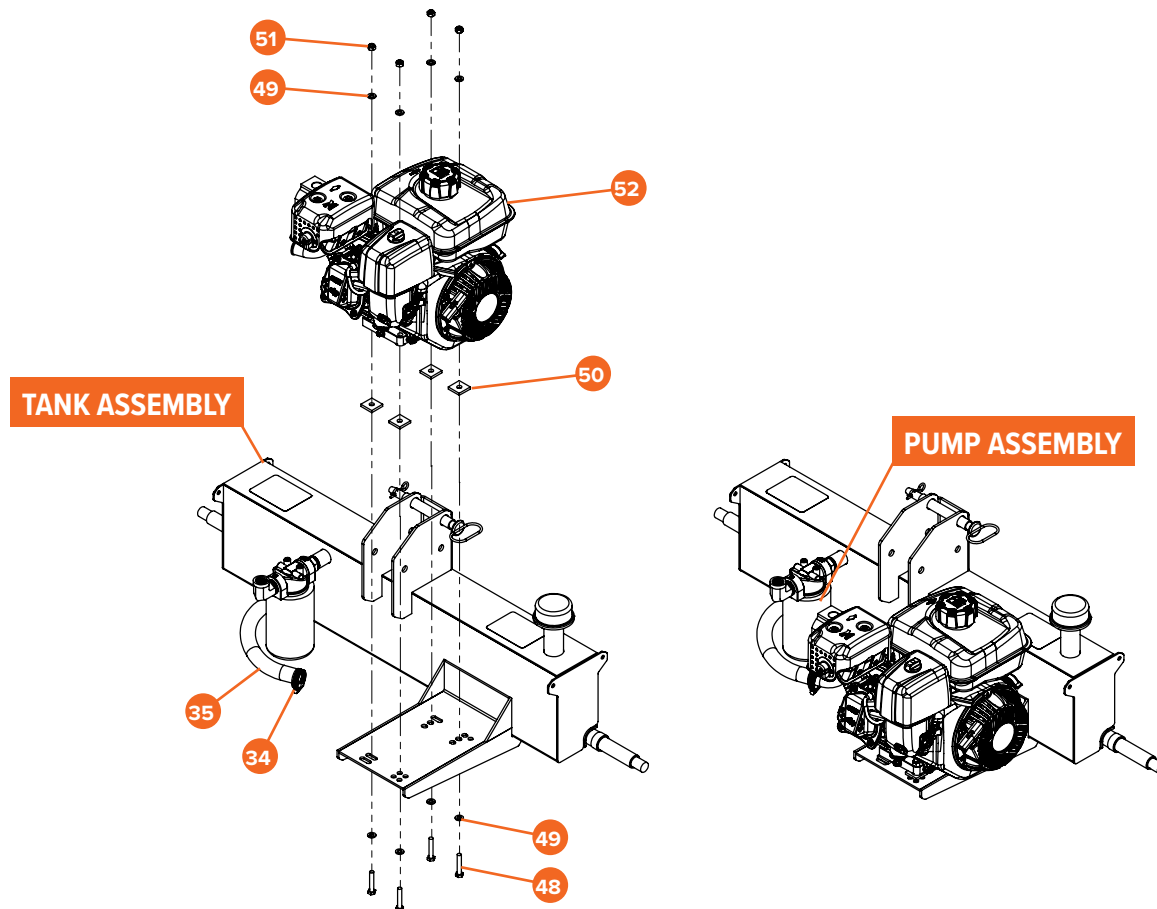
LOG CATCHER KIT



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
71	OPS22771Y22	Log Catcher Grate		1
72	OPS22772Y22	Support Arm	Large, Right	1
73	OPS22773Y22	Support	Right	1
74	OPS22774Y22	Support	Left	1
75	OPS22775Y22	Support Arm	Large, Left	1
76	OPS22776Y22	Hex Bolt	G8.8, M10 x 30mm	8
77	OPS22777Y22	Hex Nut	M10	8
78	OPS22778Y22	Lock Washer	M10	8
79	OPS22779Y22	Flat Washer	M12	8

STEP 1: TANK AND ENGINE

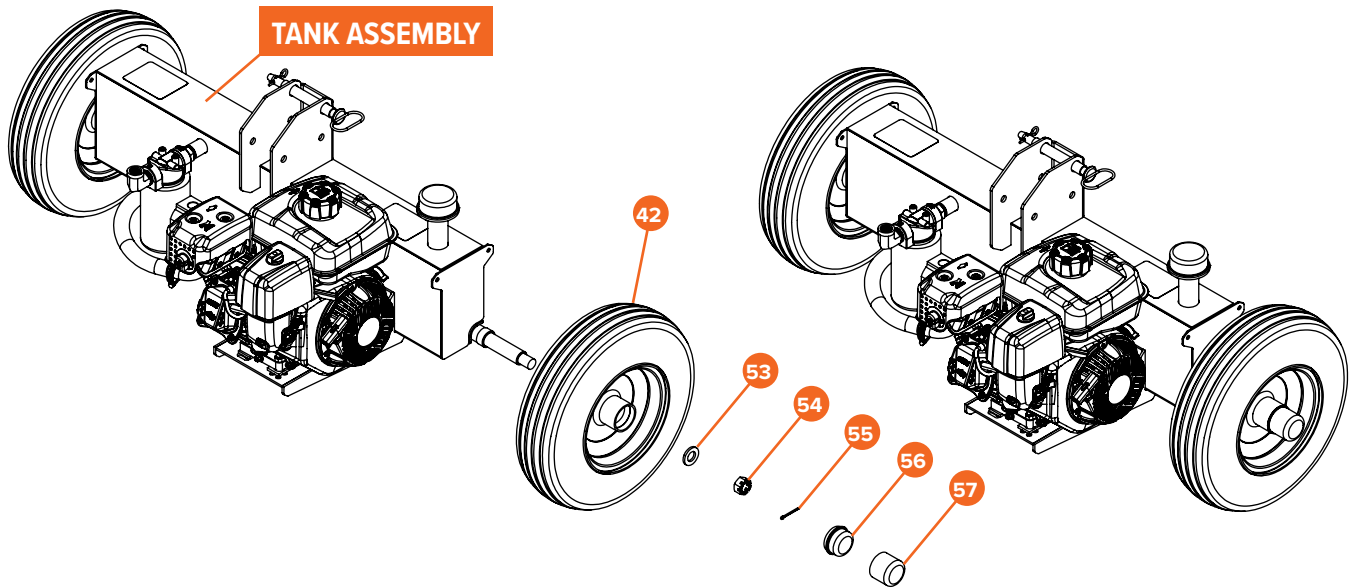
1. Remove M8 x 1.25 x 45mm Hex Bolts (48) from the **Tank Assembly**.
2. Place Engine (52) on the **Tank Assembly**.
3. Secure Engine (52) on **Tank Assembly** in 4 places with M8 x 1.25 x 45mm Hex Bolts (48), M8 Flat Washer (49) and M8 x 1.25 Nylock Hex Nut (51).
4. Attach Suction Line Tube (35) to Pump.
5. Fasten the Suction Line Tube (35) to the **Pump Assembly** with the Hose Clamp (34).



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
34	OPS22734Y22	Hose Clamp	15/16" to 1-1/4"	2
35	OPS22735Y22	Suction Line Tube	Wire Reinforced	1
48	OPS22748Y22	Hex Bolt	G8.8, M8 x 1.25 x 45mm	4
49	OPS22749Y22	Flat Washer	M8	8
50	OPS22750Y22	Rubber Damper	B&S, LS	4
51	OPS22751Y22	Nylock Hex Nut	G8.8, M8 x 1.25	4
52	OPS22752Y22	Engine	KOHLER® SH265 6.5 HP 196cc	1

STEP 2: WHEELS

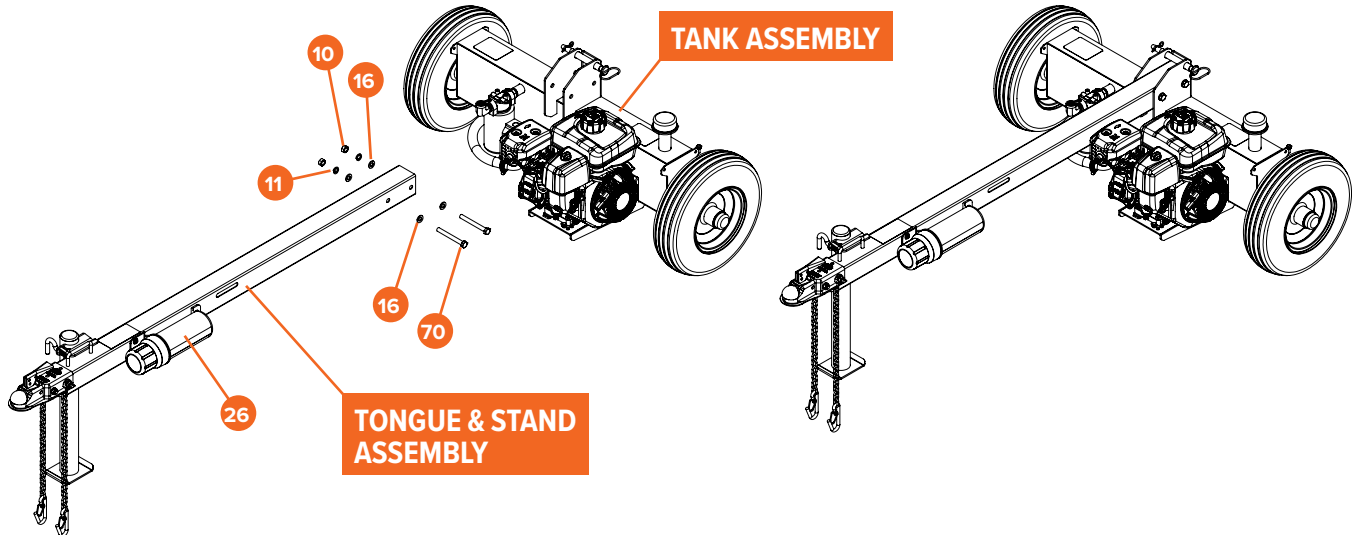
1. Remove disposable spindle covers and wheel bearing covers.
2. Slide Wheel Assembly (42) on to the spindle with valve stem of tire facing outwards.
3. Install 3/4" Flat Washer (53) on to the spindle.
4. Thread the slotted 3/4-16 Castle Nut (54) on to the spindle. The slotted nut should be attached with a 28mm Socket Wrench (K) tight enough to eliminate the free-play of the wheel assembly and not tighter. Make sure the wheels can freely rotate. The 3/4-16 Castle Nut (54) needs to be oriented to allow for the installation of the 1/8" x 1-1/2" Cotter Pin (55).
5. Install the 1/8" - 1-1/2" Cotter Pin (55) through the 3/4-16 Castle Nut (54) and spindle. Bend pin ends around the spindle to secure its position.
6. Install the Hub Cap (56) using the Hub Cap Tool (57). Gently tap on the hub cap tool with a hammer to drive the hub cap into place.
7. Repeat these steps to install the second wheel.



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
42	OPS22742Y22	Wheel Assembly	4.80 x 8	2
53	OPS22753Y22	Flat Washer	3/4"	2
54	OPS22754Y22	Castle Nut	3/4-16, Clear Zinc	2
55	OPS22755Y22	Cotter Pin	1/8" x 1-1/2"	2
56	OPS22756Y22	Hub Cap	4.80 x 8	2
57	OPS22757Y22	Hub Cap Tool		1

STEP 3: TONGUE

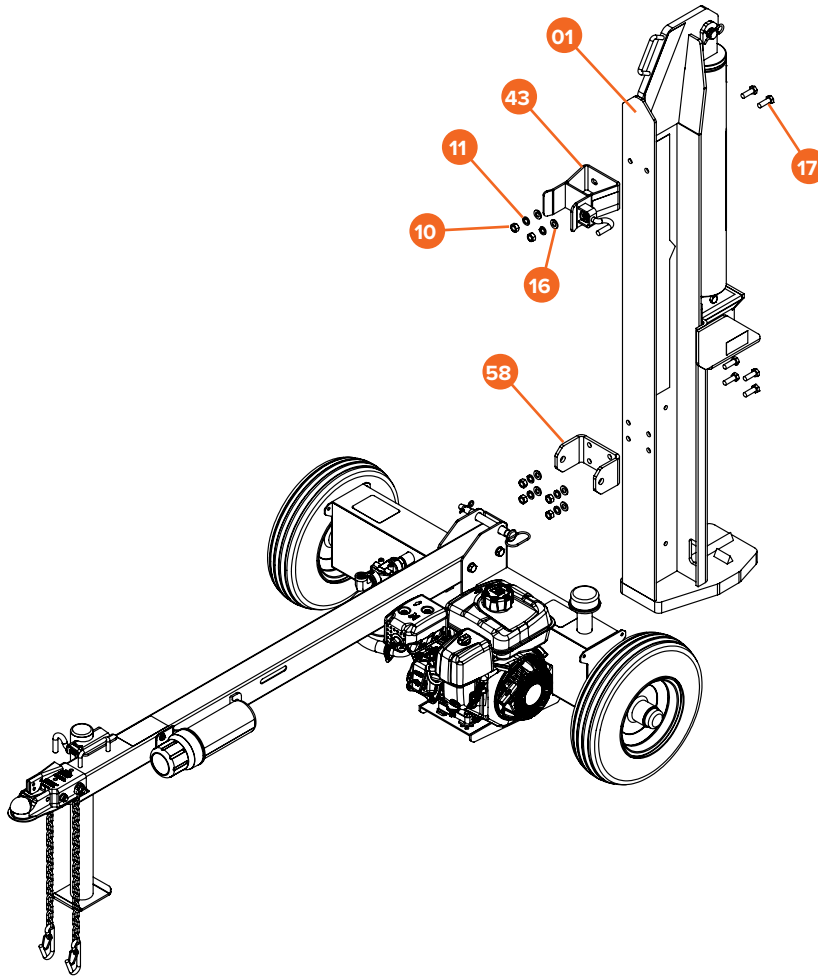
Attach the **Tongue & Stand Assembly** to the **Tank Assembly** with M12 x 1.75 x 1.10mm Hex Bolt (**70**), M12 Flat Washer (**16**), M12 Lock Washer (**11**), and M12 x 1.75mm Hex Nut (**10**) in two places. Tighten securely using a 19mm Socket Wrench (**I**).



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
10	OPS22710Y22	Hex Nut	G8.8, M12 x 1.75	2
11	OPS22711Y22	Lock Washer	M12	2
16	OPS22716Y22	Flat Washer	M12	2
26	OPS22726Y22	Manual Canister		1
70	OPS22770Y22	Hex Bolt	G8.8, M12 x 1.75 x 110mm	2

STEP 4: BEAM BRACKET

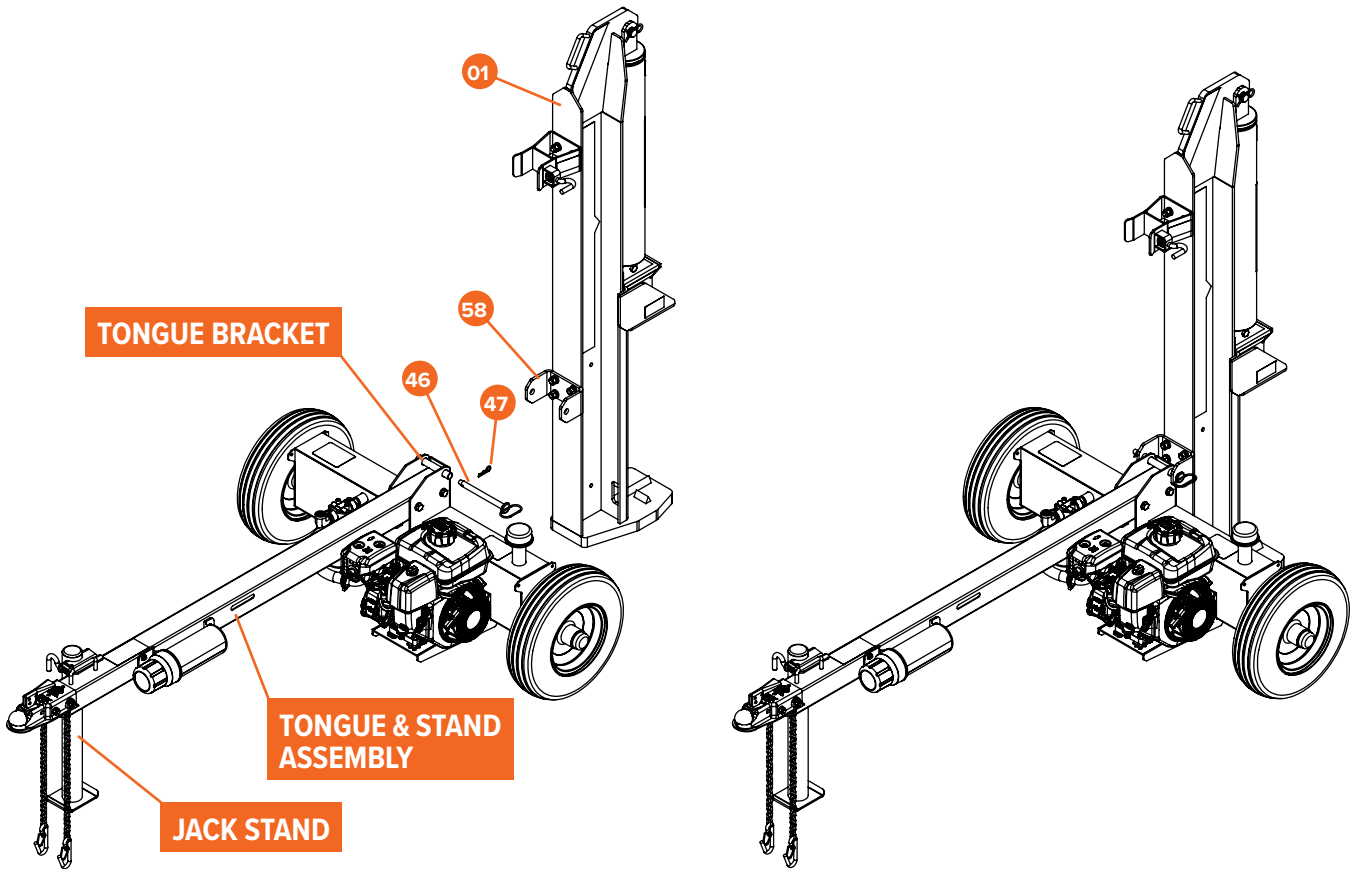
1. Attach the Beam Lock Assembly (**43**) to the Integrated Beam (**01**) with M12 x 1.75 x 35mm Hex Bolt (**17**), M12 Flat Washer (**16**), M12 Lock Washer (**11**), M12 x 1.75 Hex Nut (**10**) in two places. Tighten securely using a 19mm Socket Wrench (**I**).
2. Attach the Beam Pivot Plate (**58**) to the Integrated Beam (**01**) using the four bottom holes with M12 x 1.75 x 35mm Hex Bolt (**17**), M12 Flat Washer (**16**), M12 Lock Washer (**11**), and M12 x 1.75 Hex Nut (**10**) in four places. Tighten securely using a 19mm Socket Wrench (**I**).



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
1	OPS22701Y22	Integrated Beam		1
10	OPS22710Y22	Hex Nut	G8.8, M12 x 1.75	6
11	OPS22711Y22	Lock Washer	M12	6
16	OPS22716Y22	Flat Washer	M12	6
17	OPS22717Y22	Hex Bolt	G8.8, M12 x 1.75 x 35mm	6
43	OPS22743Y22	Beam Lock Assembly		1
58	OPS22758Y22	Beam Pivot Plate		1

STEP 5: BEAM

1. Rotate the **Jack Stand** attached to the side of the **Tongue & Stand Assembly** downwards into position by releasing the pin and then securing the release pin.
2. Remove the 1/8" R-Clip (**47**) and 5/8" x 6-1/4" Hitch Pin (**46**) from the assembled unit (as shown below).
3. Slowly back the assembled unit up to the Integrated Beam (**01**). Align the **Tongue Bracket** of the assembled unit to the Beam Pivot Plate (**58**) of the Integrated Beam (**01**).
4. Once the brackets are aligned, install the 5/8" x 6-1/4" Hitch Pin (**46**) through the brackets then install the 1/8" R-Clip (**47**) into the 5/8" x 6-1/4" Hitch Pin (**46**).



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
01	OPS22701Y22	Integrated Beam		1
46	OPS22746Y22	Hitch Pin	5/8" x 6-1/4"	1
47	OPS22747Y22	R-Clip	1/8" (Fits 1/2" to 3/4")	1
58	OPS22758Y22	Beam Pivot Plate		1

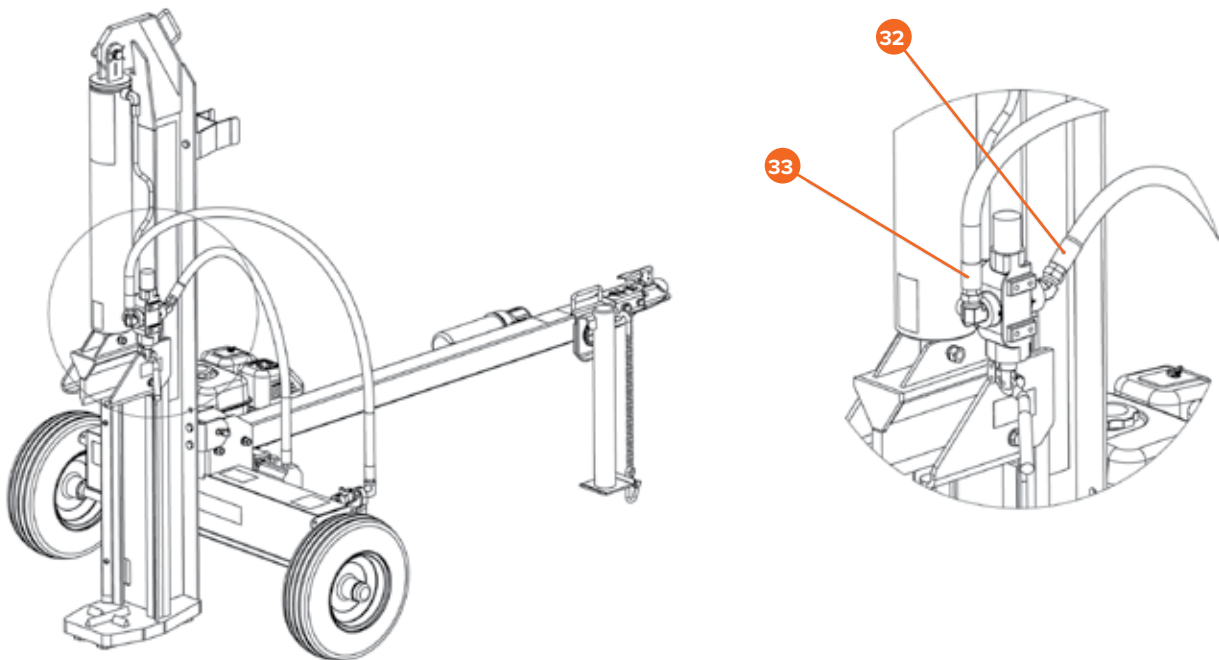
STEP 6: HYDRAULIC LINE



CAUTION

On pre-filled log splitters, hold hoses above the level of the hydraulic tank before removing end caps.

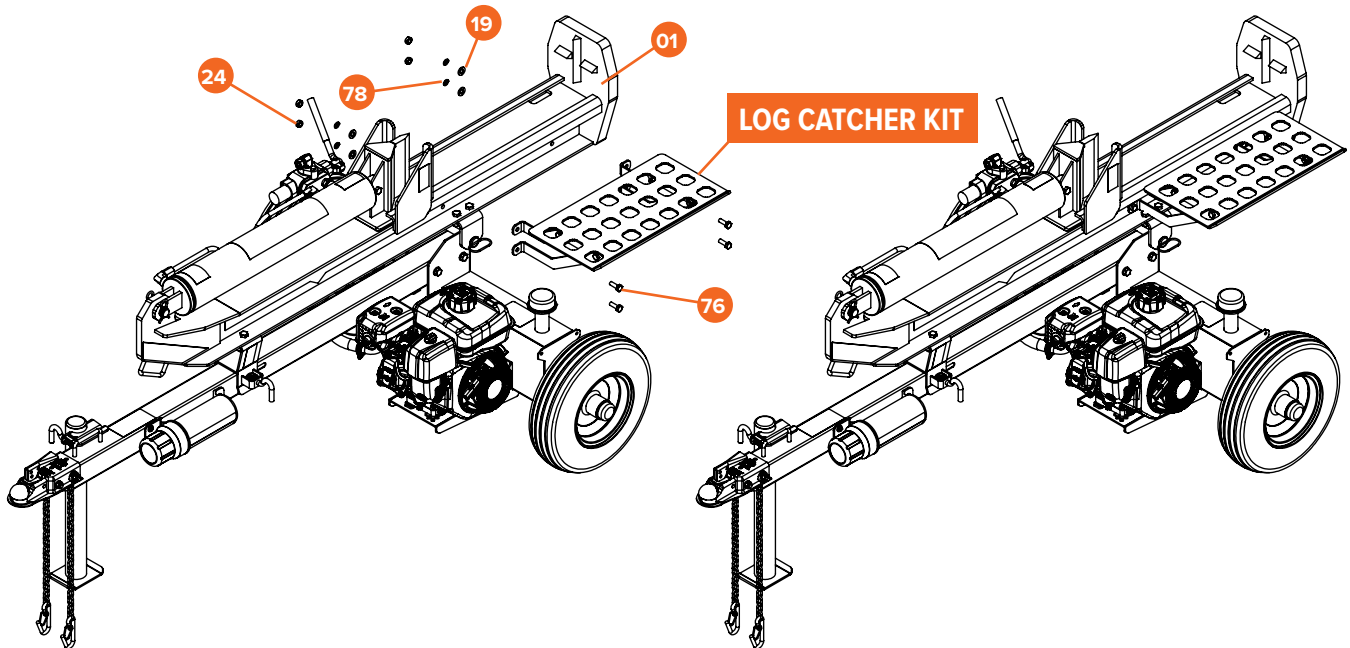
1. Hold Hydraulic Hoses (**32, 33**) above the level of the hydraulic tank to prevent fluid leakage and remove the end caps.
2. Apply Teflon tape or pipe sealant on to the hose fitting threads. Install the ends of the two Hydraulic Hoses (**32, 33**) to the Valve (as shown in detail drawing). Securely tighten the fitting connections using 22mm and 24mm wrenches (**J**).
3. Remove tank cap and install the vent cap.



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
32	OPS22732Y22	Hydraulic Hose	1/2" x 38"	1
33	OPS22733Y22	Hydraulic Hose	1/2" x 56"	1

STEP 7: LOG CATCHER

1. Rotate the Integrated Beam **(01)** Down from upright position and lock in place with the release pin.
2. Install the **Log Catcher Kit** with M10 x 1.5 x 30mm Hex Bolts **(76)**, M10 Flat Washers **(19)**, M10 Lock Washers **(78)**, and M10 x 1.5 Locking Hex Nuts **(24)** in 2 places. Tighten the M10 x 1.5 Locking Hex Nuts **(24)** securely with a 17mm Socket Wrench **(H)**.



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
01	OPS22701Y22	Integrated Beam		1
19	OPS22719Y22	Flat Washer	M10	4
24	OPS22724Y22	Locking Hex Nut	G8.8, M10 x 1.5	4
76	OPS22776Y22	Hex Bolt	G8.8, M10 x 30mm	4
78	OPS22778Y22	Lock Washer	M10	4

STEP 8: FINAL INSTALLATION CHECK

Check tightness of all fittings, nuts and bolts prior to filling the log splitter with fluids.

SECTION III • OPERATION

OPERATING INSTRUCTIONS



DANGER: Read and understand the complete User Manual before assembling or using this product! Failure to comprehend and comply with warnings, cautions, and instructions for assembly and operation could result in serious injury or death.



DANGER: Do not permit children to operate this equipment at any time.



DANGER: Do not permit others that have not read and understood the complete User Manual to operate this equipment. Operation of power equipment can be dangerous. It is the sole responsibility of the operator to understand the assembly and safe operation of this product.



CAUTION: Oil must be added to the hydraulic reservoir and the engine before starting or operating.

STEP 1: Please add approximately 4 gallons of hydraulic fluid. The remaining hydraulic fluid will be added after the cylinder is cycled. AW32 or AW46 hydraulic oil is recommended. Automatic transmission fluid can be substituted instead of hydraulic oil when temperatures are below 32°F. Use only clean oil and take care to prevent dirt from entering the hydraulic reservoir.

ENGINE OIL RECOMMENDATIONS

Use 4-stroke automotive detergent oil. SAE 10W-30 is recommended for general use. Refer to the SAE Viscosity Grades chart in your engine owner's manual for average temperature ranges. The engine manufacturer recommends using API SERVICE category SE or SF oil. The engine oil capacity is 20oz. for the OPS227. Always check oil levels before starting engine and keep level full.

STEP 2: After the hydraulic reservoir and the engine crankcase are filled with oil, start the engine. The hydraulic pump is self-priming. With the engine running, move the hydraulic valve lever toward the foot plate. This will cause the cylinder to extend and expel air. When the cylinder is fully extended, retract it. Repeat this procedure several times. An erratic movement of the cylinder indicates that there is still air in the system. Add about 1.0 to 1.5 gallons of hydraulic fluid. Five gallons will register just above the top fill line on the dip stick. The total capacity of the entire hydraulic system is 6.5 gallons for the OPS227 with 5 gallons of hydraulic fluid being the minimum required to operate.

NOTE: If the tank is overfilled it will expel oil from the breather cap when the cylinder is retracted. Cycle the cylinder again until it has a constant speed which indicates that all air has been expelled.

STARTING INSTRUCTIONS

NOTE: Refer to the Engine Owner's Manual for complete information on starting, maintenance and troubleshooting.

1. Move the fuel valve lever to the ON position.
2. To start a cold engine, move the choke lever to the CLOSE position. To restart a warm engine, leave the choke lever in the OPEN position.
3. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.
4. Turn the engine switch to the ON position.
5. Pull the starter grip until you feel resistance, then pull briskly. Return the starter grip gently.
6. If the choke lever has been moved to the CLOSE position to start the engine, gradually move it to the OPEN position as the engine warms up.
7. To stop the engine in an emergency, simply turn the engine switch to the OFF position. Under normal conditions, move the throttle lever to the SLOW position and then turn the engine switch to the OFF position. Then turn the fuel valve lever to the OFF position.

For further information on starting and stopping the engine, refer to your Engine Owner's Manual.



CAUTION: Turn Fuel Shut Off Valve to the "OFF" position before towing to avoid flooding the engine.

NOTE: The engine's maximum speed is factory preset at 3,600 RPM as the no load speed. The throttle should be set at the maximum speed for wood splitting to reach the horsepower required for the pump.



WARNING

Review the safety information related to operation of the log splitter on pages 6-9 of this manual. Make sure that you have the recommended personal protective equipment described on page 6.

1. Set up the log splitter in a clear, level area and block the wheels. Make sure that the suction port on the tank is always on the lower side of the log splitter.
2. For horizontal operation place a log on the beam against the foot plate. Make sure the log is securely on the foot plate and against the beam. To split wood in the vertical position, release the pin on the beam latch located on the front end of the beam. Carefully tilt the beam up until the foot plate is sitting squarely on the ground and the log splitter is stable. Place the log on the foot plate against the beam. When the beam is returned to the horizontal position make sure the beam latch is securely locked down.
3. When the engine is running, depress the valve handle so that the cylinder will drive the wedge into the log. Extend the cylinder until the log splits or to the end of its stroke. If the log has not completely split after the cylinder has reached the end of its extension, retract the cylinder.

**CAUTION: IMPORTANT**

Leaving the valve in the “ACTUATE” position at the end of the stroke may damage the pump. Always use extra care when splitting logs with unsquare ends.



CAUTION: Store manuals in the Manual Canister attached to the tongue of the log splitter or file in a safe place for future reference.

**WARNING: NOTE**

For operation in wooded areas, obtain a spark arrestor for the exhaust system. See the engine operating and maintenance manual and check with your authorized service center. See also Fire Prevention on page 10 of this manual.

IMPORTANT: To extend the life of the hydraulic cylinder avoid bottoming out the wedge plate to the foot plate. To conform with industry safety recommendations the wedge stops 1/2 inches from the end of the stroke.

**WARNING: TOWING**

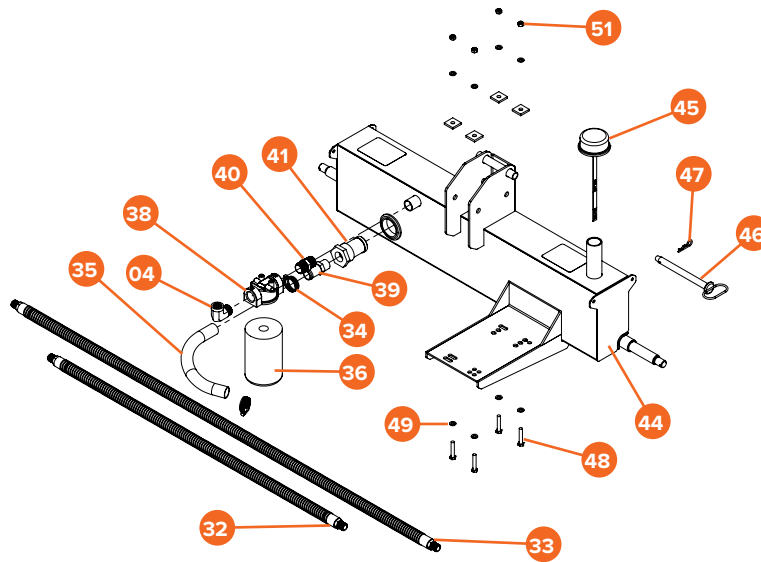
This log splitter is equipped with pneumatic tires, a Class I coupler (2” in diameter ball required) and safety chains. Before towing, the safety chains must be secured to the hitch or bumper of the vehicle. Local regulations should be checked regarding licensing, lights, towing, etc. Turn fuel shut off valve on the engine to the “OFF” position prior to towing. Failure to do so may result in flooding the engine. Do not exceed 25mph (40km/h) when towing this log splitter. *See also Towing Safety on page 11 of this manual.*

MAINTENANCE

1. Consult the operating and maintenance instructions of the engine manufacturer for engine care and maintenance.
2. **Always check the oil level of the hydraulic reservoir before operation.** Operating the log splitter without an adequate oil supply will cause severe damage to the pump.
3. Change the oil filter after the first 25 hours of operation. There after change the oil filter every 100 hours or seasonally, whichever comes first.
4. To drain the hydraulic oil, loosen the clamp on the hose coming from the fitting on the bottom of the tank. It is located just to the right of the oil filter.
5. If the wedge becomes dull or nicked, it can be removed and sharpened. Remove the bolt that connects the wedge to the cylinder. The hose from the valve may need to be removed. Carefully lift the cylinder to allow the wedge to slide forward. The wedge can now be lifted off and sharpened.
6. Clean the breather cap after 25 hours of operation. Clean it more often when operated in dusty conditions. To clean, remove the breather cap from the tank and flush with kerosene or liquid detergent to remove the dirt.
7. *See Repair and Maintenance on page 10 of this manual.*
8. All replacement parts must meet manufacturer’s specifications.

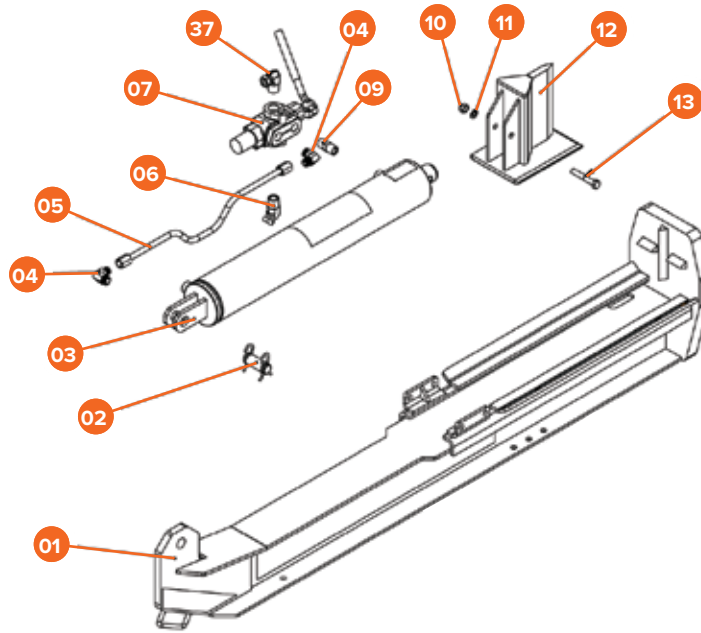
SECTION IV • PARTS & SCHEMATICS

SCHEMATICS: TANK



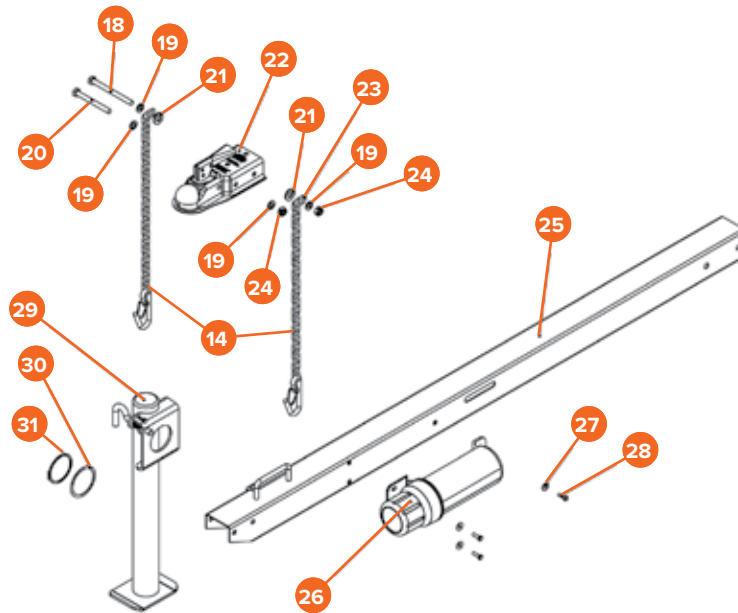
ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
04	OPS22704Y22	Elbow Fitting	M 3/4 NPT, 1/2 Flare Tube	1
32	OPS22732Y22	Hydraulic Hose	1/2" x 38"	1
33	OPS22733Y22	Hydraulic Hose	1/2" x 56"	1
34	OPS22734Y22	Hose Clamp	15/16" to 1-1/4"	2
35	OPS22735Y22	Suction Line Tube	Wire Reinforced	1
36	OPS22736Y22	Hydraulic Oil Filter	Paper Media, Generic	1
38	OPS22738Y22	Filter Base Assembly	3/4 NPT, 1-12 UNF	1
39	OPS22739Y22	Straight Fitting	M 3/4 NPT, M 3/4 NPT	1
40	OPS22740Y22	Straight Fitting	3/4 NPT to 1" Tube	1
41	OPS22741Y22	Suction Filter	16 GPM	1
44	OPS22744Y22	Tank		1
45	OPS22745Y22	Vent Cap Assembly	SM Tank	1
46	OPS22746Y22	Hitch Pin	5/8" x 6-1/4"	1
47	OPS22747Y22	R-Clip	1/8" (Fits 1/2" to 3/4")	1
48	OPS22748Y22	Hex Bolt	G8.8, M8 x 1.25 x 45mm	4
49	OPS22749Y22	Flat Washer	M8	8
51	OPS22751Y22	Nylock Hex Nut	G8.8, M8 x 1.25	4

SCHEMATICS: BEAM



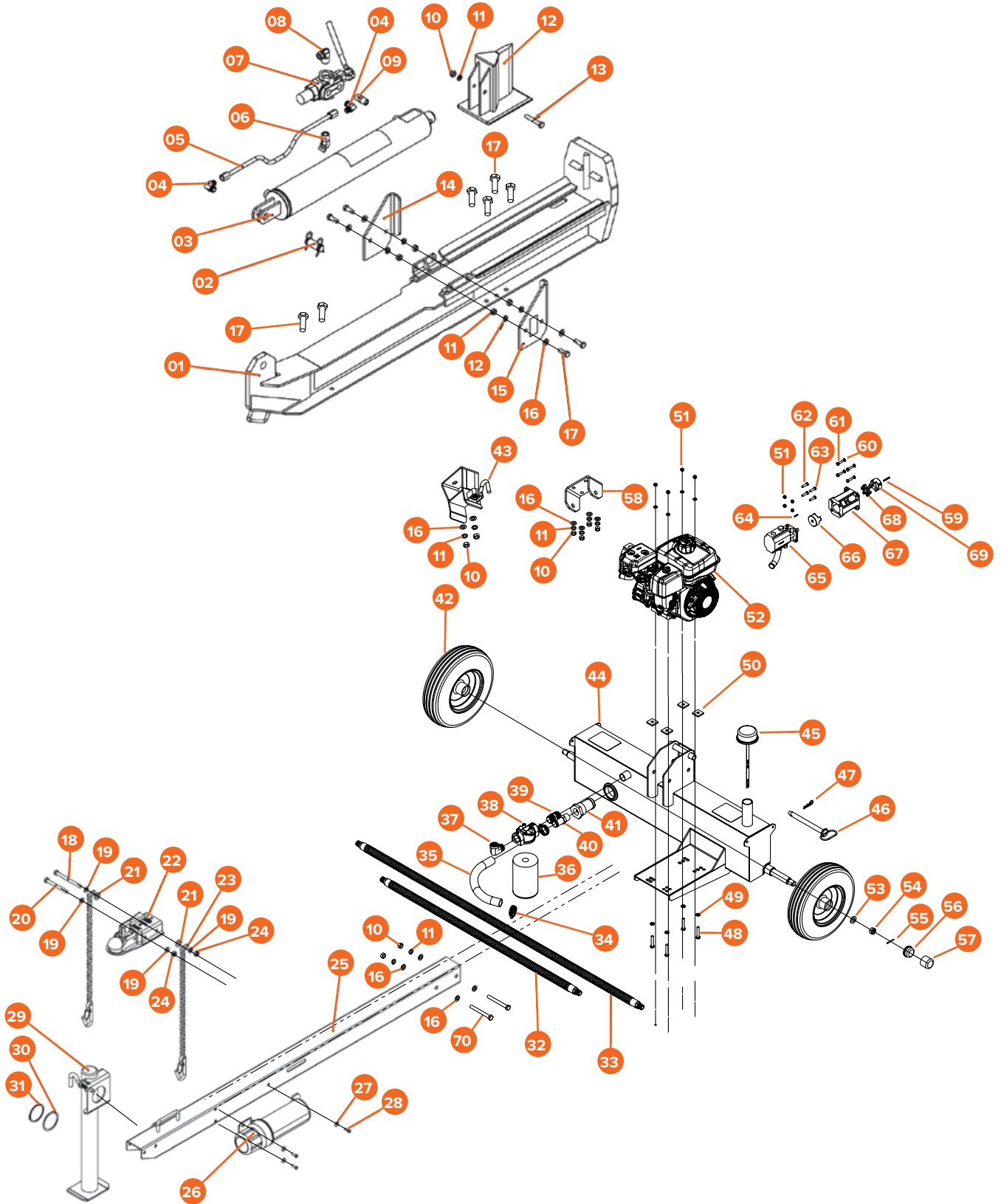
ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
01	OPS22701Y22	Integrated Beam		1
02	OPS22702Y22	Clevis Pin Assembly with Clips	1"	1
03	OPS22703Y22	Hydraulic Cylinder	4", F 1/2 NPT	1
04	OPS22704Y22	Elbow Fitting	M 3/4 NPT, 1/2 Flare Tube	2
05	OPS22705Y22	Tube	1/2 OD, Flared, 3/4-16 Nuts	1
06	OPS22706Y22	Fitting	45°, M 3/4 NPT to F 1/2 NPT	1
07	OPS22707Y22	Valve	4000 PSI, Adjustable Detent	1
09	OPS22709Y22	Nipple Fitting	1/2 NPT, 1/2 NPT	1
10	OPS22710Y22	Hex Nut	G8.8, M12 x 1.75	1
11	OPS22711Y22	Lock Washer	M12	1
12	OPS22712Y22	Wedge	8"	1
13	OPS22713Y22	Hex Bolt	M12 x 1.75 x 75mm	1
37	OPS22737Y22	Elbow Fitting	M 3/4 NPT, F 1/2 NPT	1

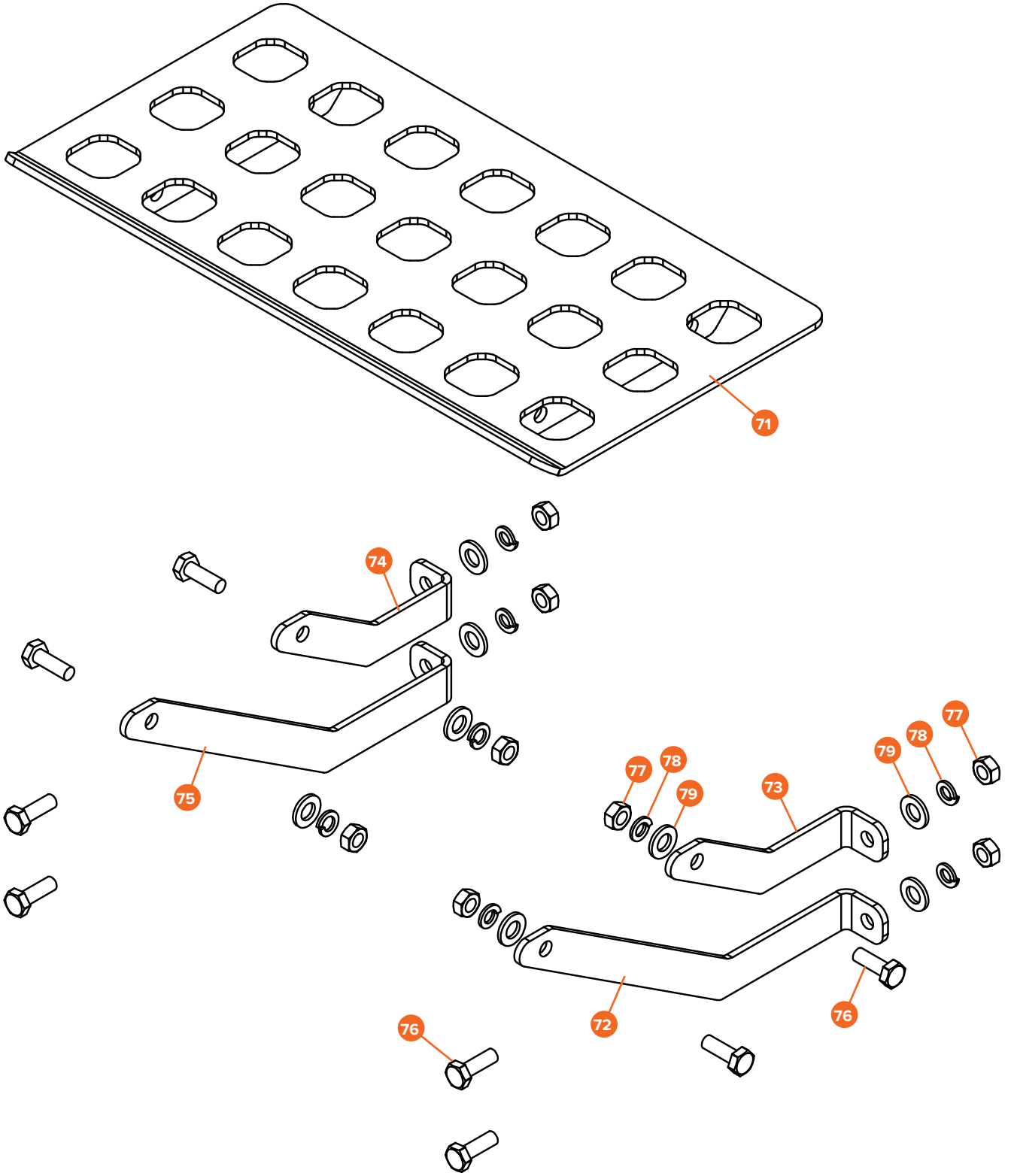
SCHEMATICS: TONGUE



ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
14	OPS22723Y22	Safety Chain		2
18	OPS22718Y22	Hex Bolt	G8.8, M10 x 1.5 x 120mm	1
19	OPS22719Y22	Flat Washer	M10	4
20	OPS22720Y22	Hex Bolt	G8.8, M10 x 1.5 x 100mm	1
21	OPS22721Y22	Flat Washer	1/2"	2
22	OPS22722Y22	Ball Coupler Assembly	2"	1
24	OPS22724Y22	Locking Hex Nut	G8.8, M10 x 1.5	2
25	OPS22725Y22	Tongue		1
26	OPS22726Y22	Manual Canister		1
27	OPS22727Y22	Fender Washer	M6	3
28	OPS22728Y22	Hex Bolt	G8.8, M6 x 1.0 x 20mm	3
29	OPS22729Y22	Tongue Stand		1
30	OPS22730Y22	Shim	OD 75mm, ID 64mm x 1mm	1
31	OPS22731Y22	External Retaining Ring	63mm	1

SCHEMATICS: COMPLETE DIAGRAM





SCHEMATICS: COMPLETE PARTS LIST

ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
1	OPS22701Y22	Integrated Beam		1
2	OPS22702Y22	Clevis Pin Assembly with Clips	1"	1
3	OPS22703Y22	Hydraulic Cylinder	4", F 1/2 NPT	1
4	OPS22704Y22	Elbow Fitting	M 3/4 NPT, 1/2 Flare Tube	2
5	OPS22705Y22	Tube	1/2 OD, Flared, 3/4-16 Nuts	1
6	OPS22706Y22	Fitting	45°, M 3/4 NPT to F 1/2 NPT	1
7	OPS22707Y22	Valve	4,000 PSI, Adjustable Detent	1
8	OPS22708Y22	Elbow Fitting	M 3/4 NPT to F 1/2 NPT	1
9	OPS22709Y22	Nipple Fitting	1/2 NPT, 1/2 NPT	1
10	OPS22710Y22	Hex Nut	G8.8, M12 x 1.75	13
11	OPS22711Y22	Lock Washer	M12	13
12	OPS22712Y22	Wedge	8"	1
13	OPS22713Y22	Hex Bolt	M12 x 1.75 x 75mm	1
14	OPS22714Y22	Stripper Plate	SM Beam, LT	1
15	OPS22715Y22	Stripper Plate	SM Beam, RT	1
16	OPS22716Y22	Flat Washer	M12	10
17	OPS22717Y22	Hex Bolt	G8.8, M12 x 1.75 x 35mm	10
18	OPS22718Y22	Hex Bolt	G8.8, M10 x 1.5 x 120mm	1
19	OPS22719Y22	Flat Washer	M10	16
20	OPS22720Y22	Hex Bolt	G8.8, M10 x 1.5 x 100mm	1
21	OPS22721Y22	Flat Washer	1/2"	1
22	OPS22722Y22	Ball Coupler Assembly	2"	1
23	OPS22723Y22	Safety Chain		2
24	OPS22724Y22	Locking Hex Nut	G8.8, M10 x 1.5	2
25	OPS22725Y22	Tongue		1
26	OPS22726Y22	Manual Canister		1
27	OPS22727Y22	Fender Washer	M6	2
28	OPS22728Y22	Hex Bolt	G8.8, M6 x 1.0 x 20mm	2
29	OPS22729Y22	Tongue Stand		1
30	OPS22730Y22	Shim	OD 75mm, ID 64mm x 1mm	1
31	OPS22731Y22	External Retaining Ring	63mm	1
32	OPS22732Y22	Hydraulic Hose	1/2" x 38"	1
33	OPS22733Y22	Hydraulic Hose	1/2" x 56"	1
34	OPS22734Y22	Hose Clamp	15/16" to 1-1/4"	2
35	OPS22735Y22	Suction Line Tube	Wire Reinforced	1
36	OPS22736Y22	Hydraulic Oil Filter	Paper Media, Generic	1
37	OPS22737Y22	Elbow Fitting	M 3/4 NPT, F 1/2 NPT	1
38	OPS22738Y22	Filter Base Assembly	3/4 NPT, 1-12 UNF	1
39	OPS22739Y22	Straight Fitting	M 3/4 NPT, M 3/4 NPT	1

ITEM #	PART #	DESCRIPTION	SPECIFICATION	QTY.
40	OPS22740Y22	Straight Fitting	3/4 NPT to 1" Tube	1
41	OPS22741Y22	Suction Filter	16 GPM	1
42	OPS22742Y22	Wheel Assembly	4.8 x 8	2
43	OPS22743Y22	Beam Lock Assembly		1
44	OPS22744Y22	Tank		1
45	OPS22745Y22	Vent Cap Assembly	SM Tank	1
46	OPS22746Y22	Hitch Pin	5/8" x 6-1/4"	1
47	OPS22747Y22	R-Clip	1/8" (fits 1/2" to 3/4")	1
48	OPS22748Y22	Hex Bolt	G8.8, M8 x 1.25 x 45mm	4
49	OPS22749Y22	Flat Washer	M8	8
50	OPS22750Y22	Rubber Damper	B&S, LS	4
51	OPS22751Y22	Nylock Hex Nut	G8.8, M8 x 1.25	8
52	OPS22752Y22	Engine	KOHLER® SH265 6.5 HP 196cc	1
53	OPS22753Y22	Flat Washer	3/4"	2
54	OPS22754Y22	Castle Nut	3/4-16, Clear Zinc	2
55	OPS22755Y22	Cotter Pin	1/8" x 1-1/2"	2
56	OPS22756Y22	Hub Cap	4.80 x 8	2
57	OPS22757Y22	Hub Cap Tool		1
58	OPS22758Y22	Beam Pivot Plate		1
59	OPS22759Y22	Key Stock Bar		1
60	OPS22760Y22	Lock Washer	M8	4
61	OPS22761Y22	Hex Bolt	G8.8, 5/16"-24UNF x 1"	4
62	OPS22762Y22	Hex Bolt	G8.8, M8 x 1.25 x 30mm	2
63	OPS22763Y22	Hex Bolt	G8.8, M8 x 1.25 x 30mm	2
64	OPS22764Y22	Key Stock Bar		1
65	OPS22765Y22	2-Stage Pump	15 GPM	1
66	OPS22766Y22	Jaw Coupler	1/2" Bore, L090	1
67	OPS22767Y22	Small Pump Mount	92mm BC	1
68	OPS22768Y22	Jaw Spider Coupler	L090	1
69	OPS22769Y22	Jaw Coupler	3/4" Bore, L090	1
70	OPS22770Y22	Hex Bolt	G8.8, M12 x 1.75 x 110mm	2
71	OPS22771Y22	Log Catcher Grate		1
72	OPS22772Y22	Support Arm	Large, Right	1
73	OPS22773Y22	Support	Right	1
74	OPS22774Y22	Support	Left	1
75	OPS22775Y22	Support Arm	Large, Left	1
76	OPS22776Y22	Hex Bolt	G8.8, M10 x 30mm	8
77	OPS22777Y22	Hex Nut	M10	8
78	OPS22778Y22	Lock Washer	M10	8
79	OPS22779Y22	Flat Washer	M12	8