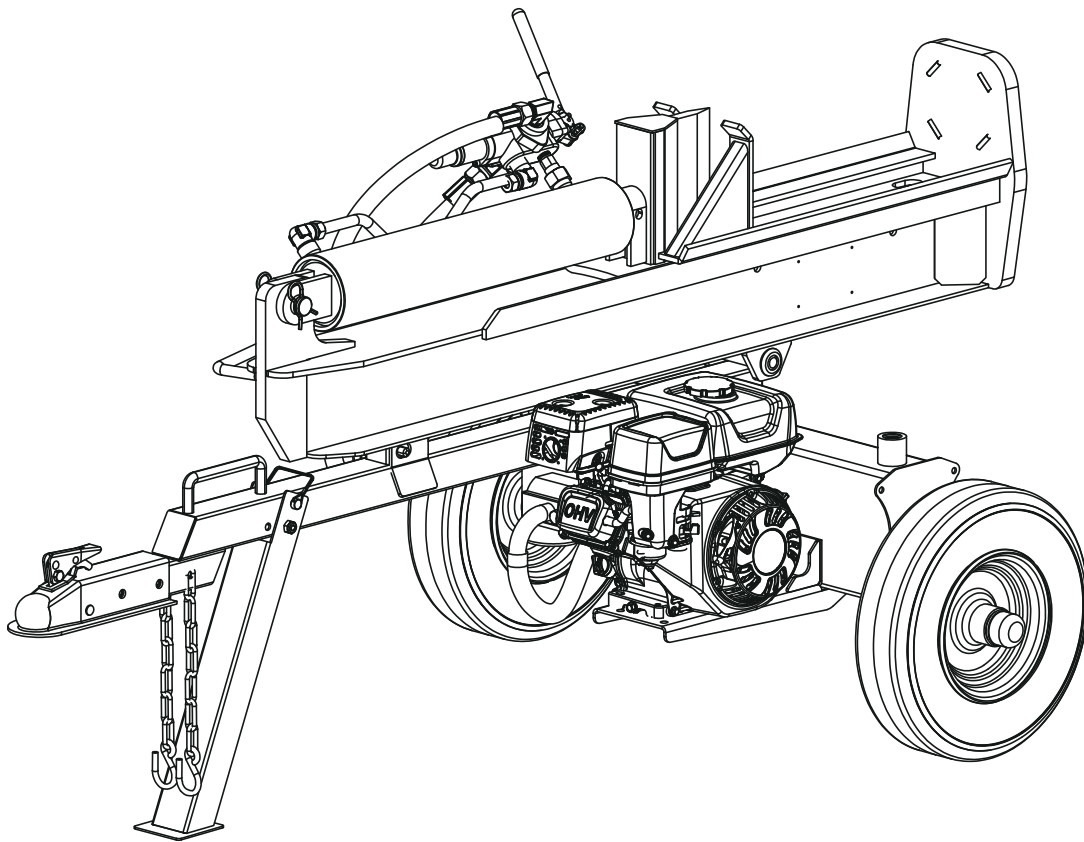




22-TON VERTICAL/HORIZONTAL LOG SPLITTER



Operation Manual

MODEL # BDR22T (22-Ton)



This safety alert symbol identifies important safety messages in this manual. Failure to follow this important safety information may result in serious injury or death.



For Service or Questions:

Call 888-376-7375



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IMPORTANT SAFETY INFORMATION



WARNING

WARNING: Read and understand the complete Operation 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.



Do not permit children to operate this equipment at any time. Do not permit others that have not read and understood the complete Operation 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.

Call our customer service department at **888-376-7375** if you have any questions or concerns about the safe operation of this equipment.



DANGER

INTENDED USE

Do Not Use the log splitter 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.

PERSONAL PROTECTIVE EQUIPMENT

When operating this log splitter 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

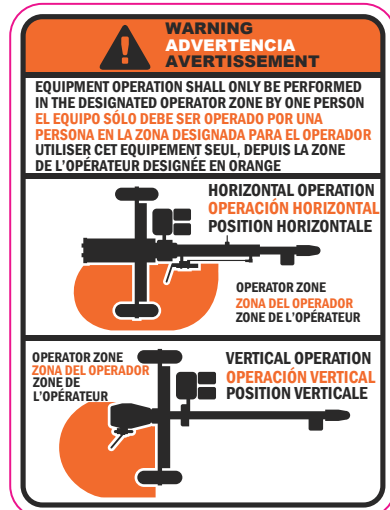
Do Not wear loose clothing or jewelry that can be caught by moving parts of the log splitter. Keep clothing and hair away from all moving parts when operating this log splitter.



IMPORTANT SAFETY INFORMATION

SAFETY DECALS

Make sure all safety warning decals are attached and in readable condition. Replace missing or defaced decals. Call **888-376-7375** for replacement decals.



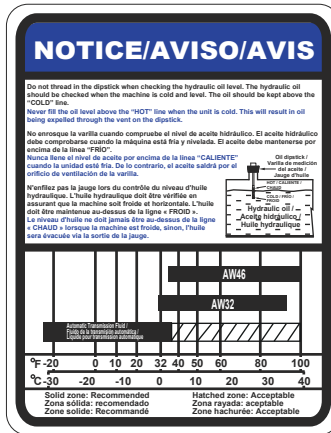
Operator Zone Decal Part # 205003



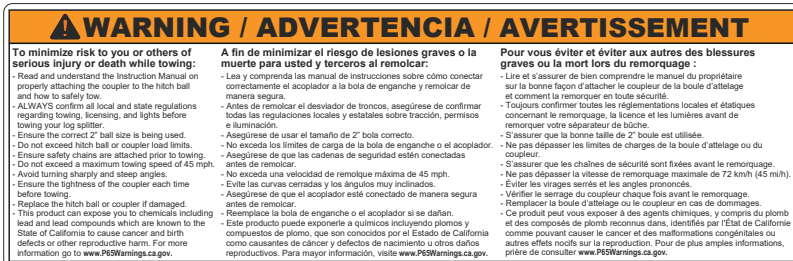
Hydraulic Fluid Decal
Part # 205004



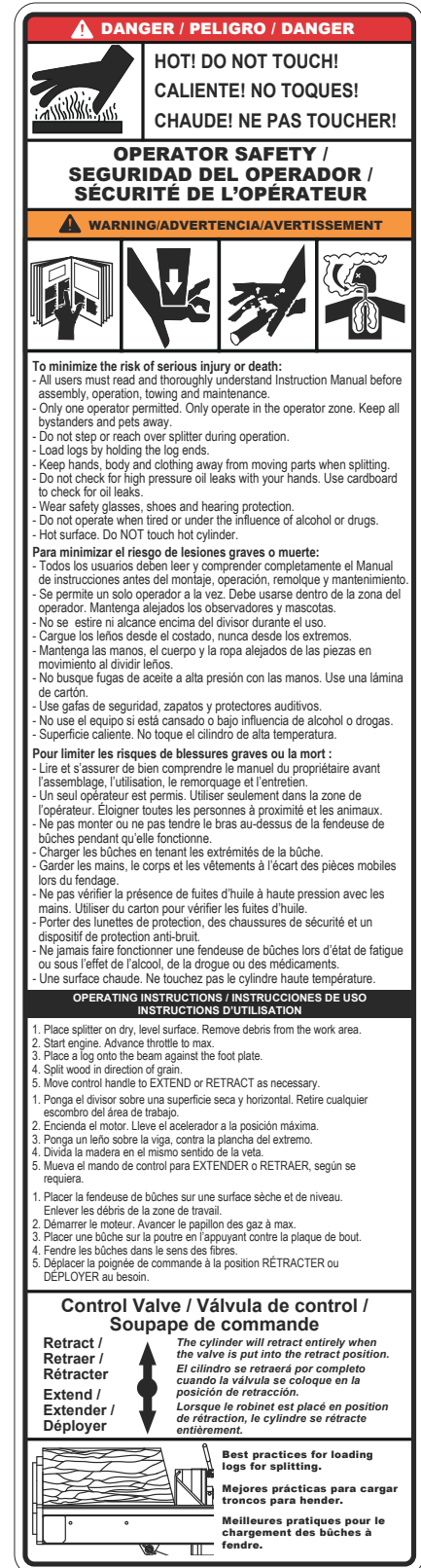
Pinch Point Decal Part # 205002



Oil Level Decal Part # 205005



Tongue Decal Part # 205006



Operation Decal Part #205001

IMPORTANT SAFETY INFORMATION



DANGER

GENERAL SAFETY

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

Read the Operation 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 Operation Manual to operate this equipment.
- Keep all people and pets a minimum of 10 feet away from the work area when operating this log splitter. Only the operator is to be near the log splitter during use.
- **Do not** operate the log splitter 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 the log splitter.

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 20 in. in length.



DANGER

WORK AREA

- **Do not** operate the log splitter on icy, wet, muddy or otherwise slippery ground. **ONLY** operate your log splitter on level ground.
Operating on a slope could cause the log splitter 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 log splitter over hilly or uneven terrain without a tow vehicle or adequate help.
- Use a tire chock or block on the 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.

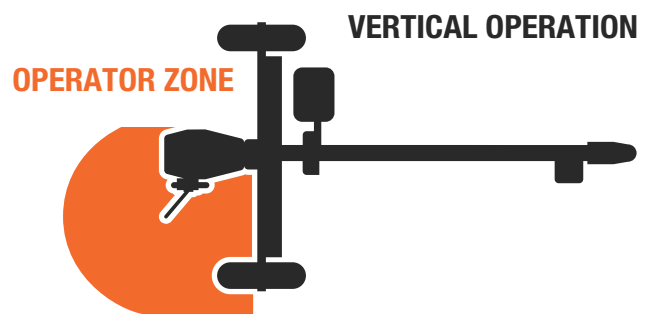
IMPORTANT SAFETY INFORMATION

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.



Failure to operate the log splitter in this position can result in serious injury or death.



- **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.

IMPORTANT SAFETY INFORMATION

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 engine manual.
- 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.

HYDRAULIC SAFETY

The hydraulic system of the log splitter requires 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.

IMPORTANT SAFETY INFORMATION

FIRE PREVENTION



CAUTION

- **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 gasoline 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 (optional by manufacturer) is available as an accessory at your nearest engine dealer. Always check the legal requirements in your area.

IMPORTANT SAFETY INFORMATION



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 45 mph when towing your log splitter.**
Towing the log splitter at speeds higher than 45 mph 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 especially railroad crossings.

CALIFORNIA PROPOSITION 65 WARNING

This product can expose you to chemicals including lead and lead compounds which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

UNPACKING & ASSEMBLY

List of tools needed for assembly:

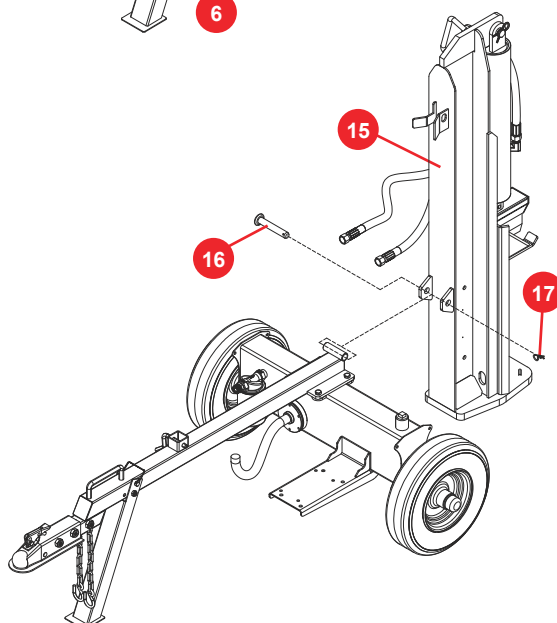
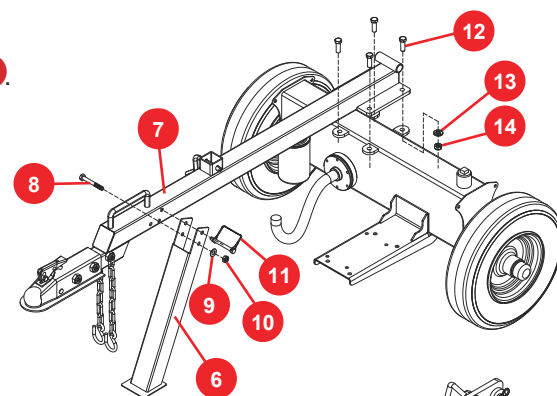
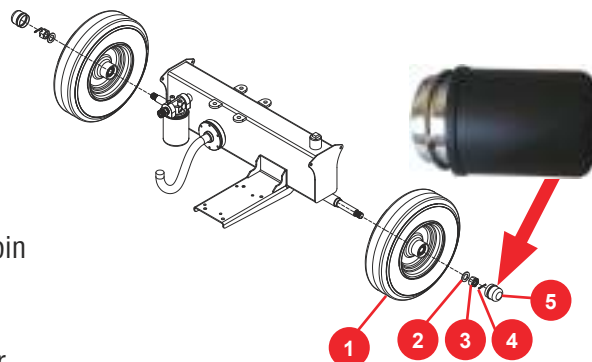
- Needle nose pliers • Scissors • Hammer or crowbar • Straight screwdriver
- (2) 13mm wrenches • (2) 18mm wrenches • (2) 19mm wrenches
- (1) Adjustable wrench



CAUTION

Two (2) people may be required for assembly.

1. Cut and remove banding using scissors.
2. Cut and remove sides and top of crate using hammer or crowbar, then take all parts out of the crate.
3. Attach tire **1** to the tank axle using flat washer, castle nut and cotter pin **2, 3, 4**. Install the hub cap **5** on the end using hub cap tool and rubber hammer (see arrow).
4. Attach the support leg **6** to the tongue **7** using hex bolt, flat washer, lock nut and drive pin **8, 9, 10, 11**.
5. Attach the tongue **7** to the tank using hex bolt, flat washer and lock nut **12, 13, 14**.
6. Connect the beam **15** and tank assembly using hitch pin and R-Clip **16, 17**.

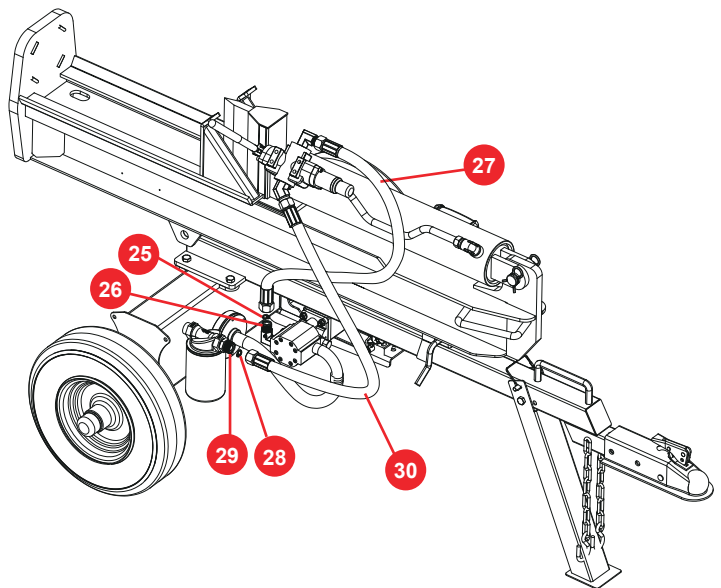
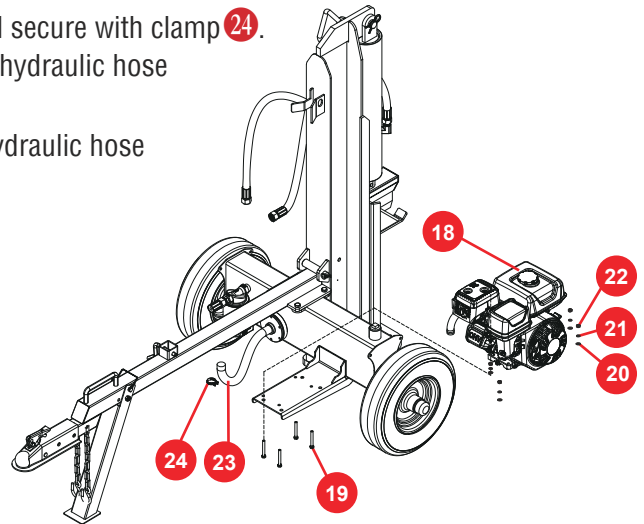


Item	Description	Qty.
1	Tire	2
2	Flat Washer, Ø20	2
3	Castle nut, M20 x 1.5	2
4	Cotter pin, Ø4 x 35	2
5	Hub Cap	2
6	Support Leg	1
7	Tongue	1
8	Hex Bolt, M10 x 85mm, G8.8	1
9	Flat Washer, Ø10	1
10	Nylon Lock Nut, M10	1
11	Drive Pin	1
12	Hex Bolt, M12 x 35mm, G8.8	4
13	Flat Washer, Ø12	4
14	Nylon Lock Nut, M12	4
15	Beam	1
16	Hitch Pin	1
17	R-Clip	1

UNPACKING & ASSEMBLY

7. Put the engine **18** on the mounting plate, tighten with hex bolt, flat washer, lock washer and nylon lock nut **19**, **20**, **21**, **22**.
8. Attach the suction line tube **23** to the bottom of the gear pump and secure with clamp **24**.
9. Put the O ring **25** on the gear pump connector **26**, then attach the hydraulic hose (valve-gear pump) **27** to the gear pump connector **26**.
10. Put the O ring **28** on the oil filter connector **29**, then attach the hydraulic hose (valve-oil filter) **30** to the oil filter connector **29**.

Item	Description	Qty.
18	Engine	1
19	Hex Bolt, M8 x 40mm, G8.8	4
20	Flat Washer, Ø8	4
21	Lock Washer, Ø8	4
22	Nylon Lock Nut, M8	4
23	Suction Line Tube	1
24	Hose Clamp	1
25	O Ring, Ø11 x 2.5	1
26	Gear Pump Connector	1
27	Hydraulic Hose (valve-gear pump)	1
28	O Ring, Ø17 x 2.5	1
29	Oil Filter Connector	1
30	Hydraulic Hose (valve-oil filter)	1



OPERATING INSTRUCTIONS



DANGER

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Do not permit others that have not read and understood the complete Operation 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.

Call our customer service department at **888-376-7375**, if you have any questions or concerns about the safe operation of this equipment.



CAUTION

The hydraulic reservoir should be filled with hydraulic fluid and the engine should be filled with engine oil before starting or operation.

When checking the hydraulic fluid or the engine oil, to get an accurate reading remove the dipstick, wipe it off and place it in the top of the threads without screwing it down.

On the Engine, you should see the oil at the top of the X's on the dipstick. If it is below or above this mark and the oil level is over or underfilled (by even one ounce), this will trip off the low oil engine sensor and prevent the engine from starting.

On the hydraulic dipstick, you want to read between minimum and maximum. If you are below Minimum, you can damage your hydraulic components. If you are above the Maximum level, this will kick the excess fluid out of the vented cap.

STEP 1: Add approximately 2.9 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.

OPERATING INSTRUCTIONS

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 17 oz. for Rato R210.

Always check oil level before starting the 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 4 gallons with 2.9 gallons of hydraulic fluid 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.

OPERATING INSTRUCTIONS



CAUTION

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 3800±100 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

WARNING: Review safety information related to operation of the log splitter on pages 4-10 of this manual. Make sure that you have the recommended personal protective equipment described on page 4.

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. With the engine 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.

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.

Store manuals in the Manual Cannister attached to the beam of the log splitter or file in a safe place for future reference.

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 9 of this manual.

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

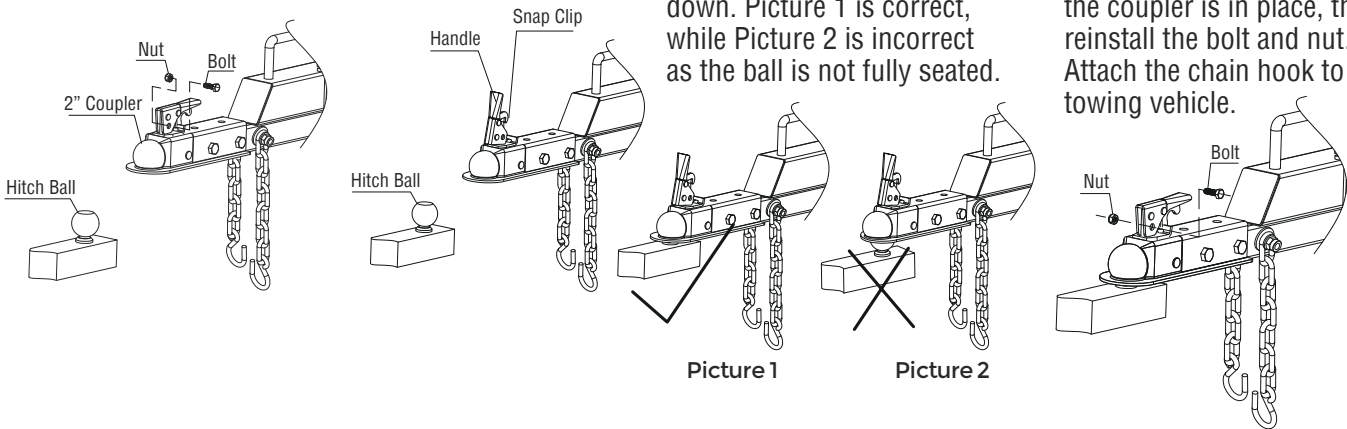
OPERATING INSTRUCTIONS

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 45 mph when towing this log splitter. See also Towing Safety on page 10 of this manual.

Installation Instructions of 2" Coupler

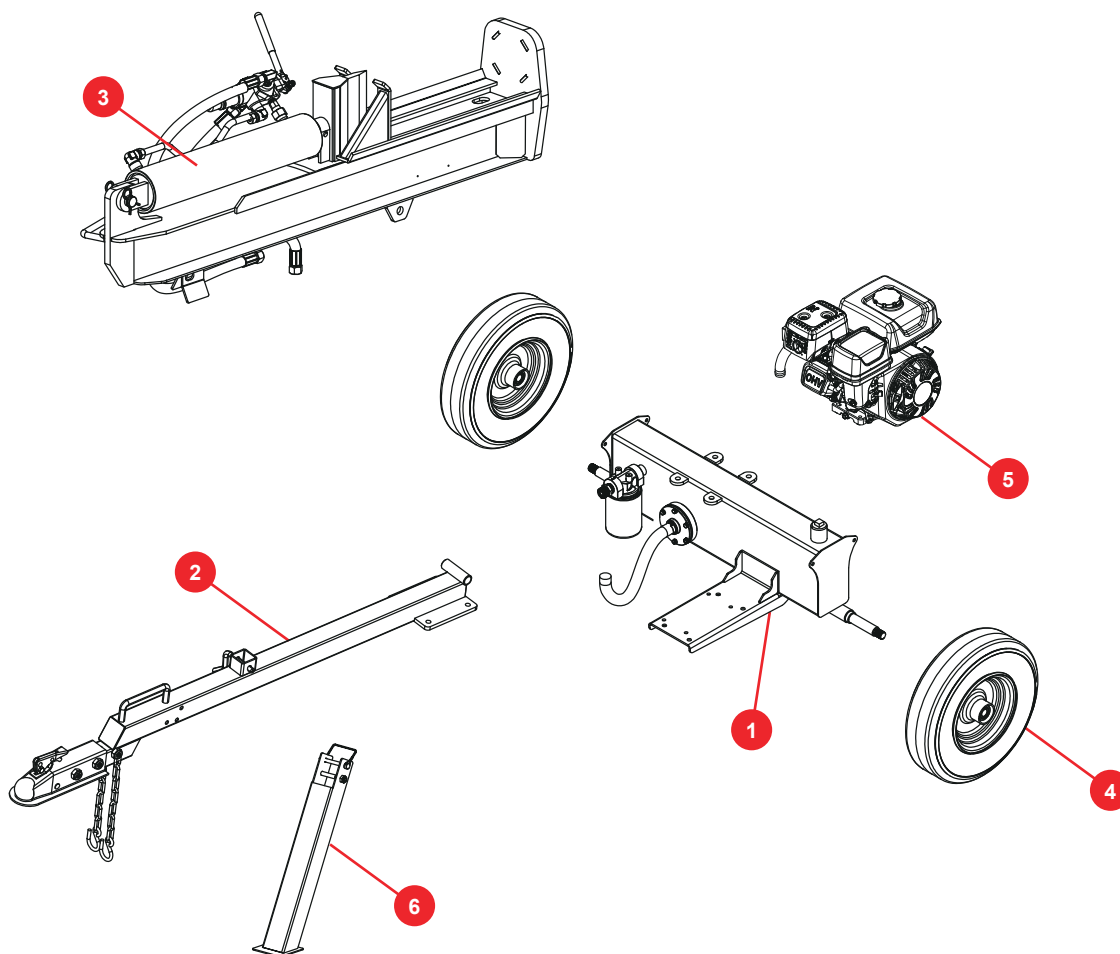
- 1) Remove the bolt and nut from the 2" coupler.
- 2) Flip up the snap clip and handle of the coupler.
- 3) Put the coupler on the hitch ball ensuring it is all the way down. Picture 1 is correct, while Picture 2 is incorrect as the ball is not fully seated.
- 4) Press down the handle of the coupler, check whether the coupler is in place, then reinstall the bolt and nut. Attach the chain hook to the towing vehicle.



MAINTENANCE

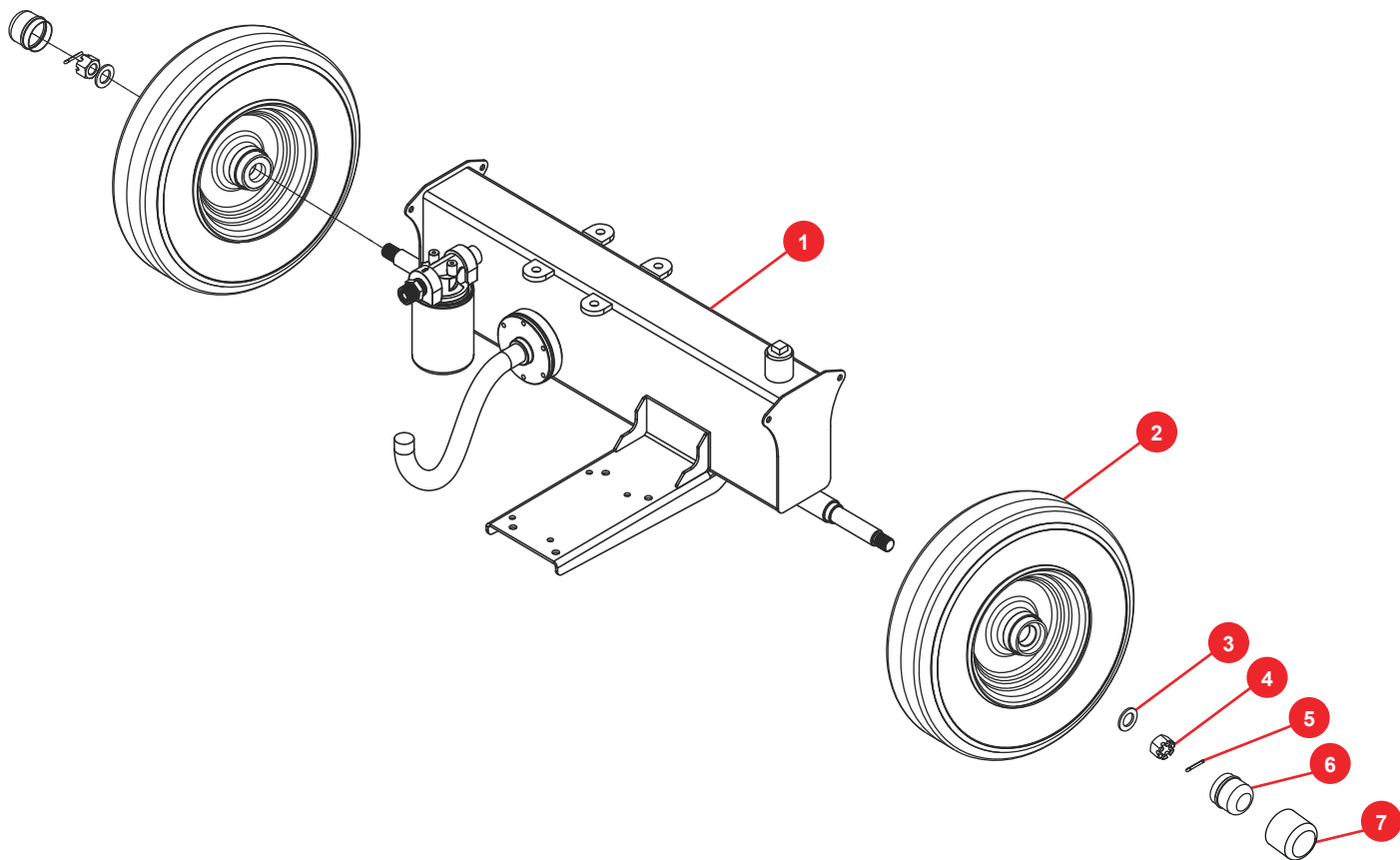
1. Consult the operating and maintenance instructions of the engine manufacturer for engine care and maintenance.
2. **Always check the oil level of the hydraulic reservoir before operation.** Operating the log splitter without an adequate oil supply will cause severe damage to the pump.
3. Change the 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 8 of this manual.
8. All replacement parts must meet manufacturer's specifications.
9. Grease Wheel Bearings and tighten all hardware seasonally.

ASSEMBLY OVERVIEW



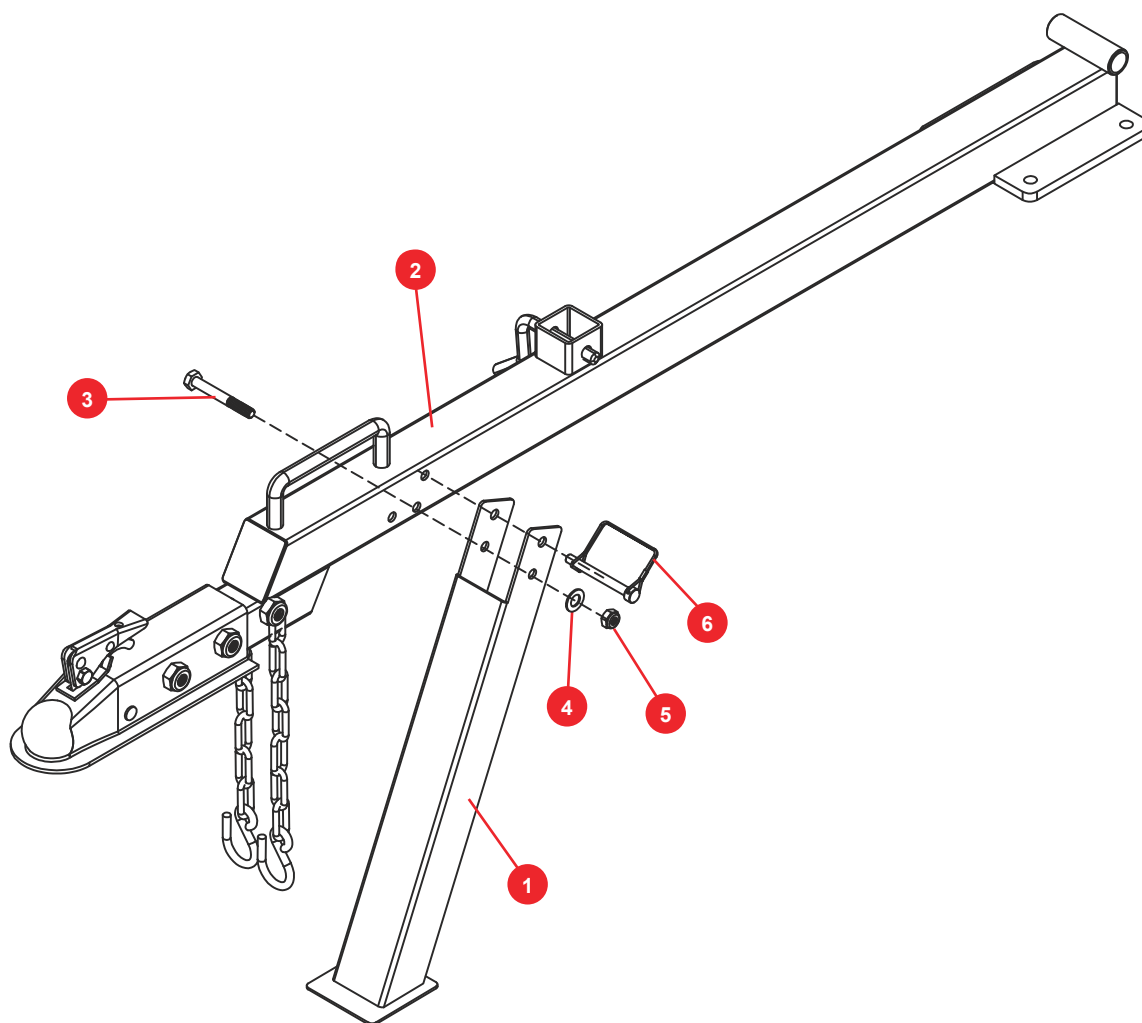
Item #	Part #	Description	Qty.
1	LSM22A-02000	Tank Assembly	1
2	LSP20-02000	Tongue Assembly	1
3	LSP20-01000 & LSP20-08000	Beam & Cylinder Assembly	1
4	LSP25-14000	Wheel/Tire Assembly, 4.80 x 8 in.	2
5	110371	Engine, Rato R210	1
6	LSP20-03000	Support Leg Assembly	1

TANK & WHEEL ASSEMBLY



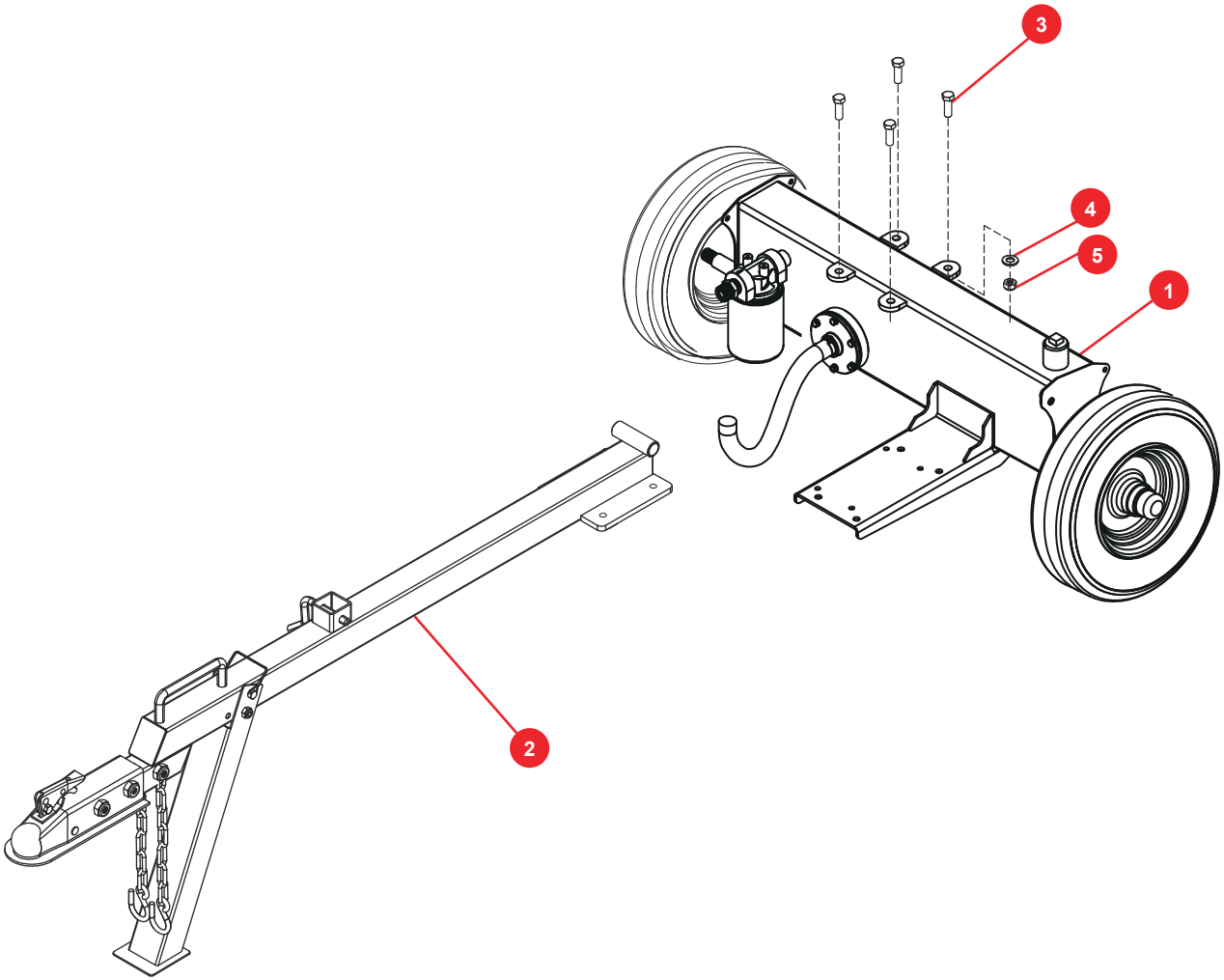
Item #	Part #	Description	Qty.
1	LSM22A-02000	Tank Assembly	1
2	LSP25-14000	Wheel/Tire Assembly, 4.80 x 8 in.	2
3	9301-20000-DX	Flat Washer, Ø20	2
4	LSP25-00020-DX	Castle Nut, M20 x 1.5	2
5	9404-04035-DX	Cotter Pin, Ø4 x 35	2
6	LSP25-00009-DG	Hub Cap	2
7	LSP25-WP0011	Hub Cap Tool	1

TONGUE & SUPPORT LEG ASSEMBLY



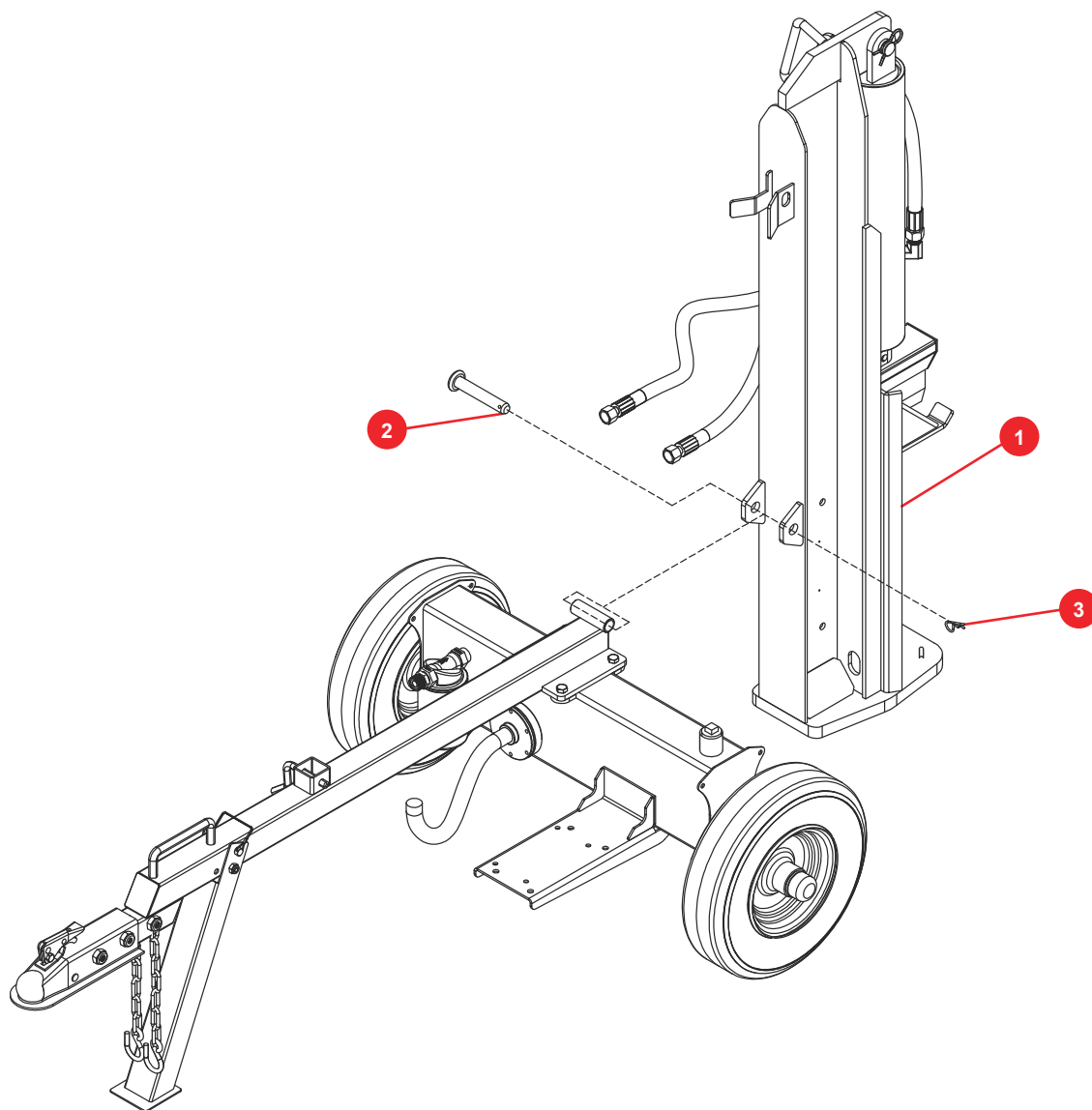
Item #	Part #	Description	Qty.
1	LSP20-03000	Support Leg	1
2	LSP20-02000	Tongue	1
3	9101-10085-DX	Hex Bolt, M10 x 85mm, G8.8	1
4	9301-10000-DX	Flat Washer, Ø10	1
5	9206-10000-DX	Nylon Lock Nut, M10	1
6	DS18-05000-DX	Drive Pin	1

TANK & TONGUE ASSEMBLY

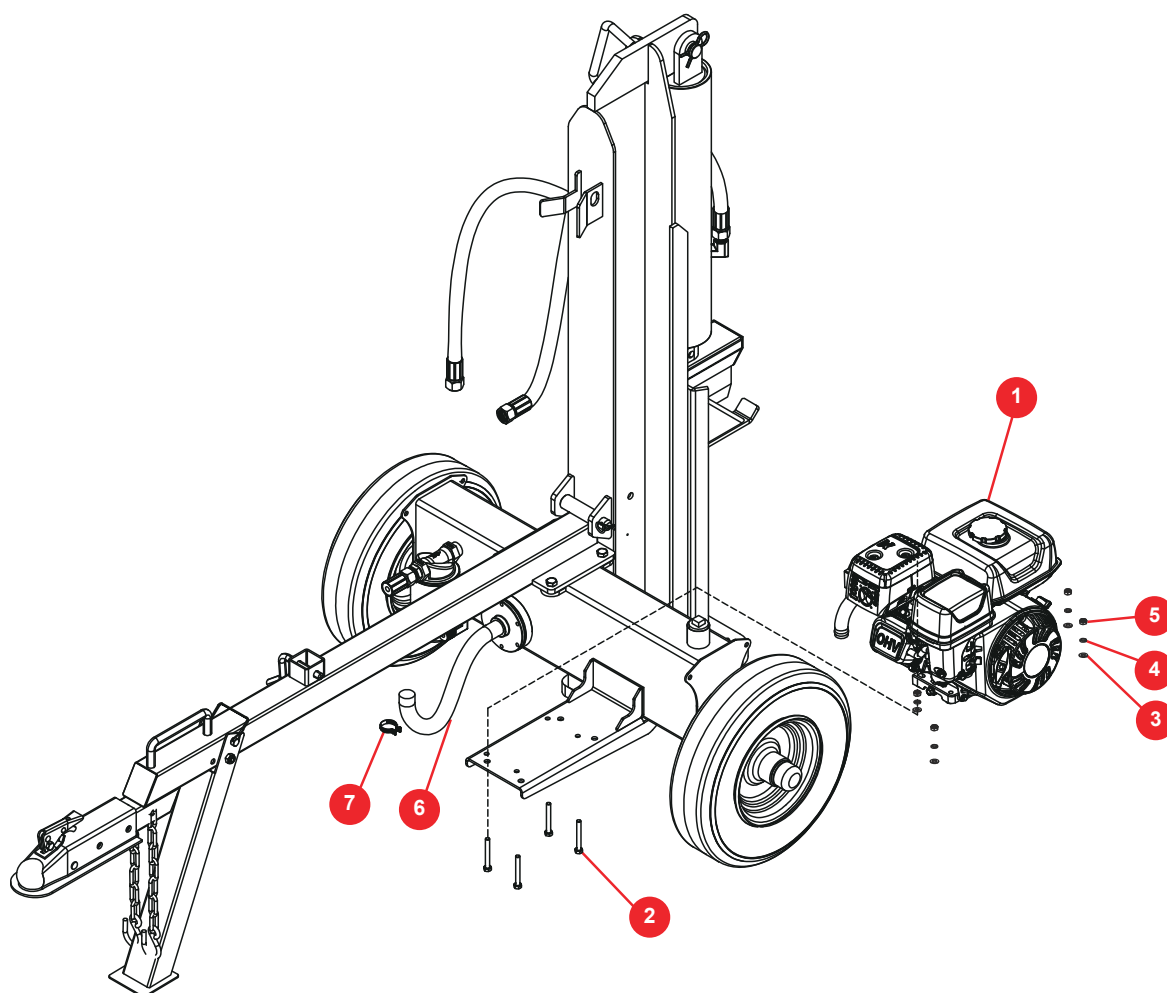


Item #	Part #	Description	Qty.
1	LSM22A-02000	Tank Assembly	1
2	LSP20-02000 & LSP20-03000	Tongue & Support Leg Assembly	1
3	9101-12035-DX	Hex Bolt, M12 x 35mm, G8.8	4
4	9301-12000-DX	Flat Washer, Ø12	4
5	9206-12000-DX	Nylon Lock Nut, M12	4

BEAM & TANK ASSEMBLY

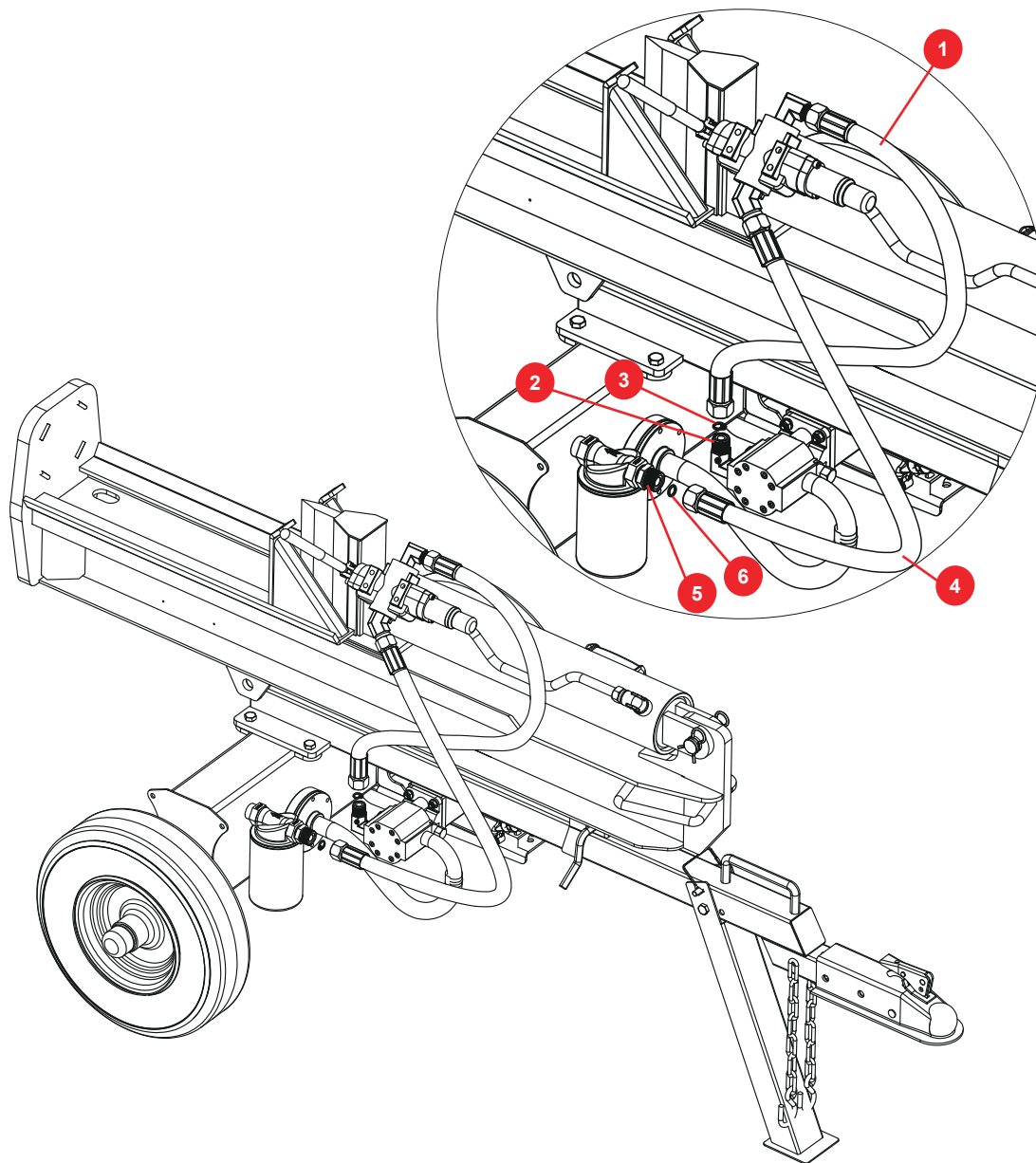


Item #	Part #	Description	Qty.
1	LSP20-01000 & LSP20-08000	Beam & Cylinder Assembly	1
2	LSP25-05000-DX	Hitch Pin	1
3	LSP25-00012-DX	R-Clip	1



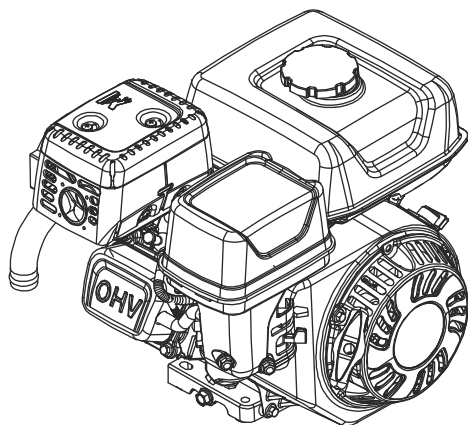
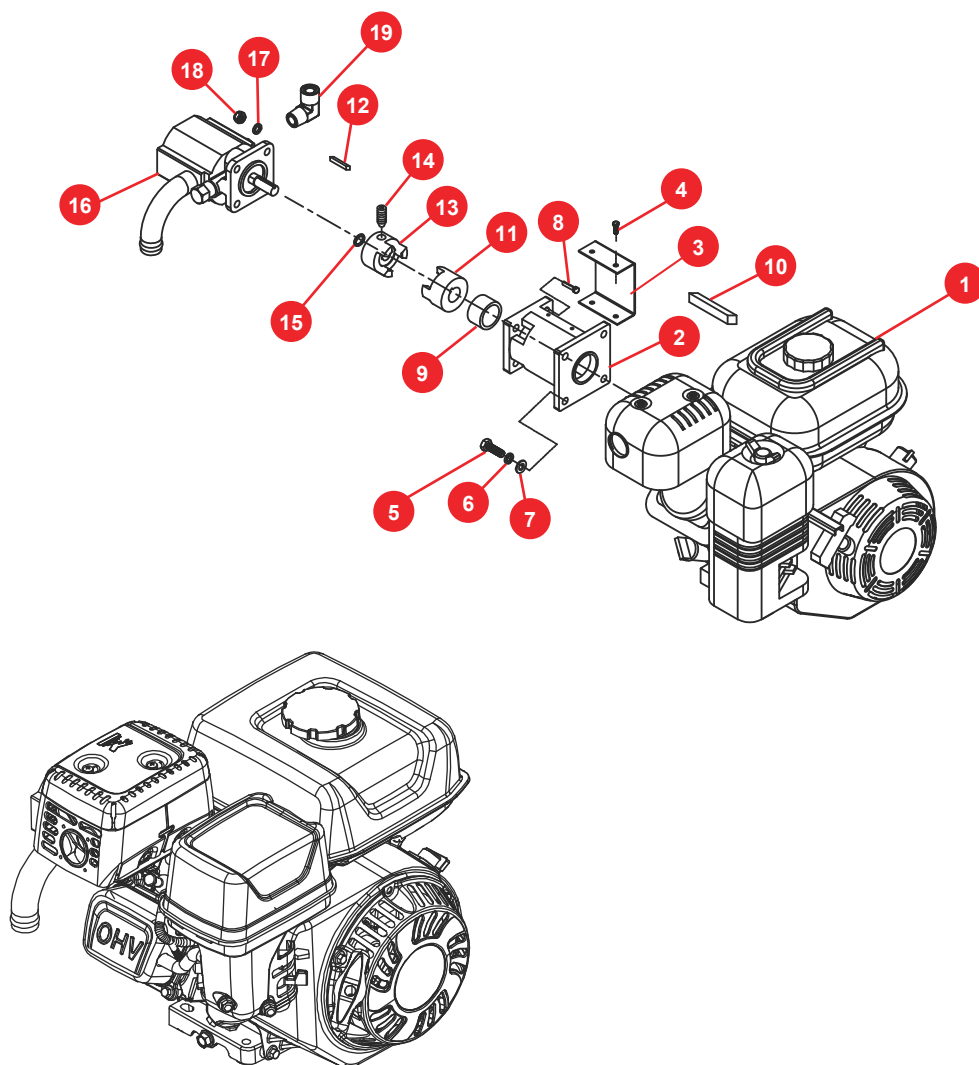
Item #	Part #	Description	Qty.
1	110371	Engine, Rato R210	1
2	9101-08040-DX	Hex Bolt, M8 x 40mm, G8.8	4
3	9301-08000-DX	Flat Washer, Ø8	4
4	9306-08000-DX	Lock Washer, Ø8	4
5	9206-08000-DX	Nylon Lock Nut, M8	4
6	DS18-00007	Suction Line Tube, Wire Reinforced	1
7	LSP25-00011	Hose Clamp	1

HYDRAULIC LINE ASSEMBLY



Item #	Part #	Description	Qty.
1	LSP25-00016	Hydraulic Hose, valve-gear pump	1
2	DS18-00008-DX	Gear Pump Outlet Connector	1
3	9901-11*2.5	O Ring, Ø11 x 2.5	1
4	LSP25-00017	Hydraulic Hose, valve-oil filter	1
5	LSP25-00007-DX	Oil Filter Straight Connector	1
6	9901-17*2.5	O Ring, Ø17 x 2.5	1

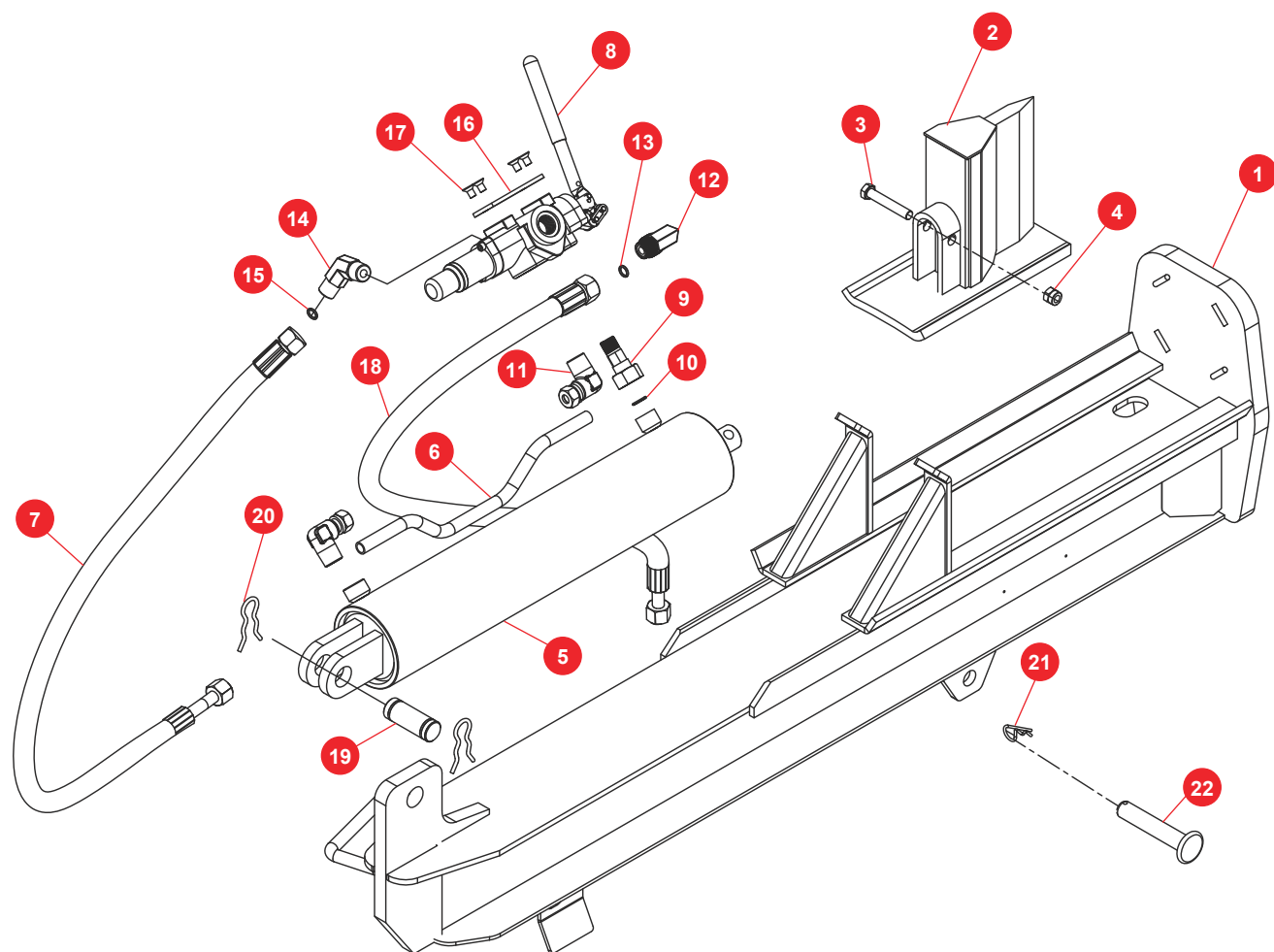
PUMP & ENGINE ASSEMBLY



PUMP & ENGINE ASSEMBLY

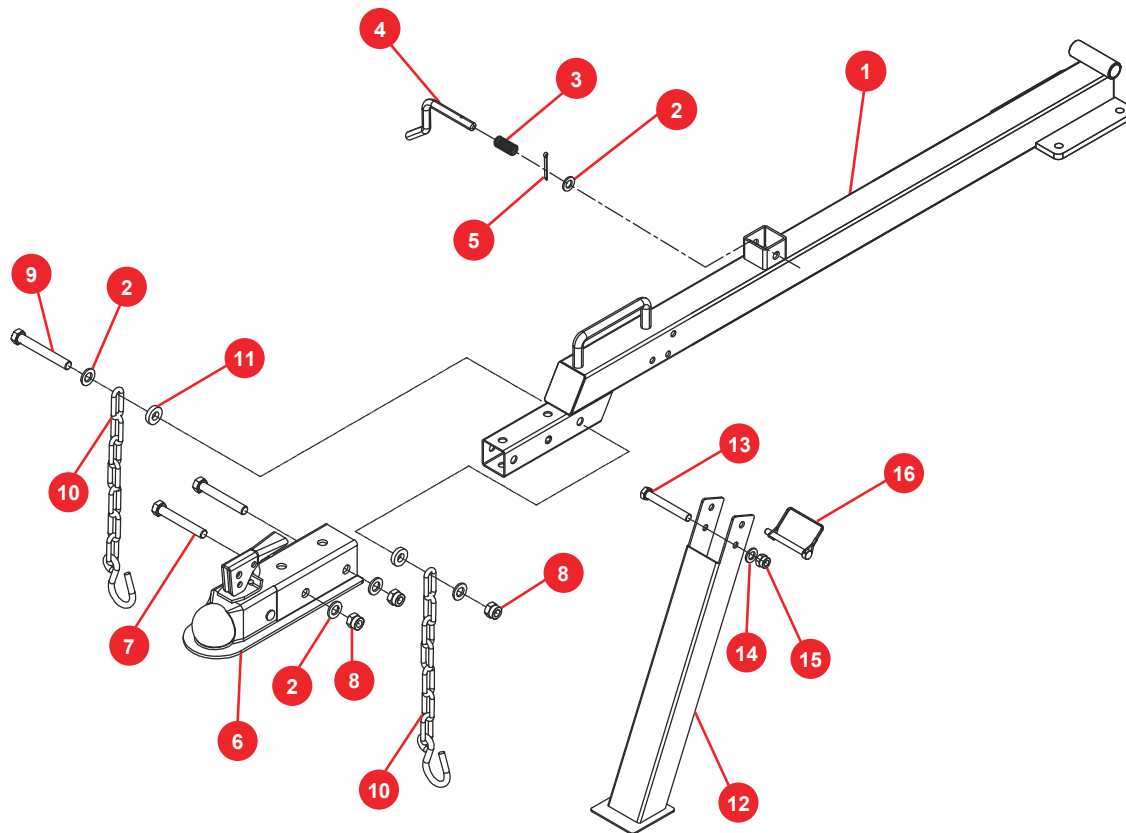
Item #	Part #	Description	Qty.
1	110371	Engine, Rato R210	1
2	LSP25-10005	Gear Pump Mount	1
3	LSP25-10006	Guard	1
4	9101-05010-DX	Hex Bolt, M5 x 10mm, G8.8	4
5	9101-08025-DX	Hex Bolt, M8 x 25mm, G8.8	4
6	9306-08000-DX	Lock Washer, Ø8	4
7	9301-08000-DX	Flat Washer, Ø8	4
8	9101-08030-DX	Hex Bolt, M8 x 30mm, G8.8	4
9	LSP25-10004-DX	Engine Bushing	1
10	8801-4.78x4.78x42	Engine Flat Key	1
11	LSP25-10002-FH	Engine Coupler	1
12	8801-3.2x3.2x25	Gear Pump Flat Key	1
13	LSP25-10003-FH	Gear Pump Coupler	1
14	9121-06010-FH	Screw, M6 x 10mm, G12.9	1
15	LSP25-10008-FH	Steel Wire Snap Ring for Shaft	1
16	LSM22A-07000	Gear Pump	1
17	9306-08000-DX	Lock Washer, Ø8	4
18	9206-08000-DX	Nylon Lock Nut, M8	4
19	DS18-00008-DX	Gear Pump Outlet Connector	1

BEAM ASSEMBLY



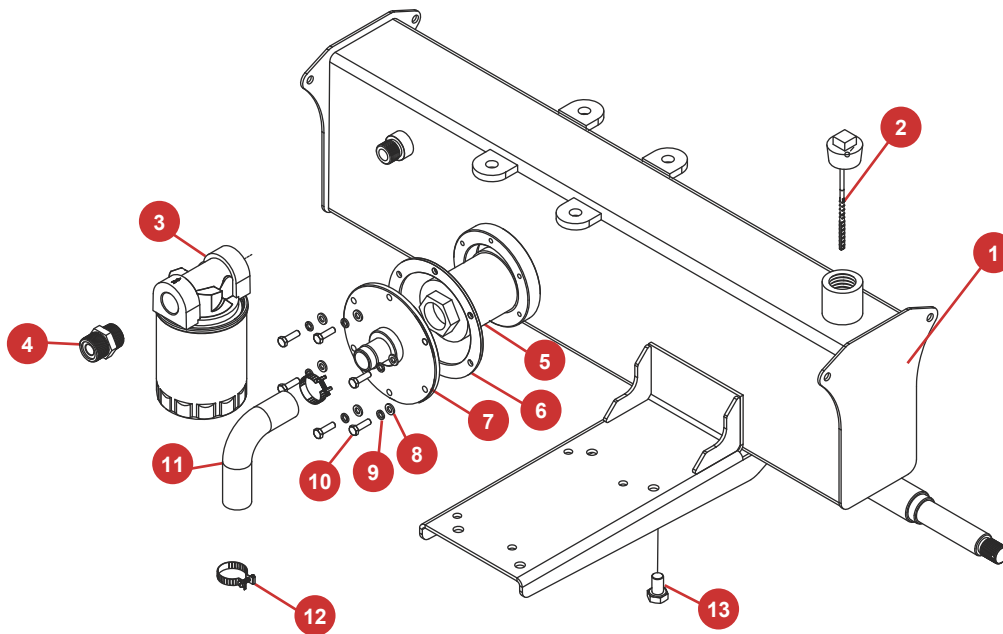
Item #	Part #	Description	Qty.
1	LSP20-01000	Beam	1
2	LSP20-04000	Wedge, 8 in.,	1
3	9101-12065-DX	Hex Bolt, M12 x 65mm, G8.8	1
4	9206-12000-DX	Nylon Lock Nut, M12	1
5	LSP20-08000	Hydraulic Cylinder	1
6	LSP20-00001-DX	Tube	1
7	LSP25-00017	Hydraulic Hose, valve-oil filter	1
8	LSA22-09000	Control Valve	1
9	LSP25-17000	Combination Connector	1
10	9901-15*2.5	O Ring, Ø15 x 2.5	1
11	LSP25-06000	Ferrule Connector	2
12	LSP25-00019-DX	Right-angle Connector	1
13	9901-11*2.5	O Ring, Ø11 x 2.5	1
14	LSP25-00002-DX	130° Elbow	1
15	9901-17*2.5	O Ring, Ø17 x 2.5	1
16	LSA22-00025	Plate	1
17	9110-08010-DX	Screw, M8 x 10mm	4
18	LSP25-00016	Hydraulic Hose, valve-gear pump	1
19	LSP25-00004-DX	Cylinder Pin	1
20	LSP25-00005-DX	R Pin	2
21	LSP25-00012-DX	R-Clip	1
22	LSP25-05000	Hitch Pin	1

TONGUE ASSEMBLY



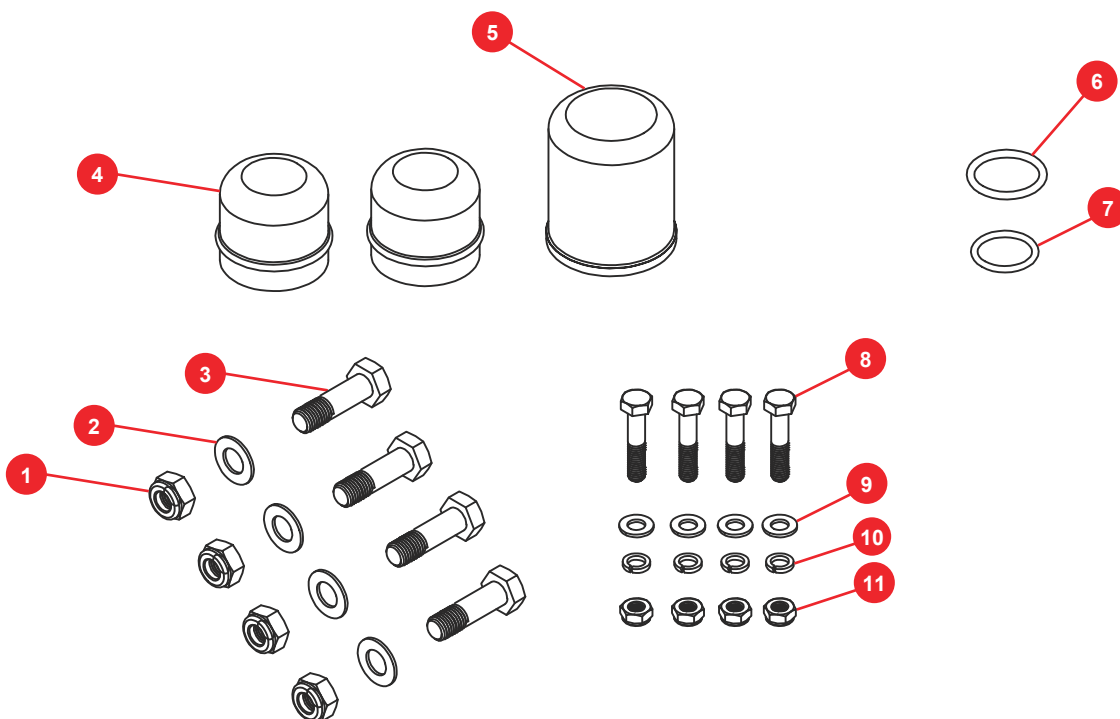
Item #	Part #	Description	Qty.
1	LSP20-02000	Tongue	1
2	9301-12000-DX	Flat Washer, Ø12	5
3	LSP25-00003-DX	Spring	1
4	LSP25-00008-DX	Hitch Pin	1
5	9404-03030-DX	Cotter Pin, Ø3 x 30mm	1
6	Z103	Ball Coupler Assembly, 2 in.	1
7	9101-12080-DX	Hex Bolt, M12 x 80, G8.8	2
8	9206-12000-DX	Nylon Lock Nut, M12	3
9	9101-12090-DX	Hex Bolt, M12 x 90mm, G8.8	1
10	LSP25-11000-DX	Safety Chain	2
11	LSP25-00015-DX	Thick Washer	2
12	LSP20-03000	Support Leg	1
13	9101-10085-DX	Hex Bolt, M10 x 85mm, G8.8	1
14	9301-1000-DX	Flat Washer, Ø10	1
15	9206-10000-DX	Nylon Lock Nut, M10	1
16	DS18-05000-DX	Drive Pin	1

TANK ASSEMBLY



Item #	Part #	Description	Qty.
1	LSM22A-02000	Tank with Decals	1
2	LSP25-13000	Vent Cap Assembly	1
3	LSP25-09000	Oil Filter	1
4	LSP25-00007-DX	Straight Connector	1
5	LSP25-00022	Suction Filter	1
6	LSP25-00021	Rubber Washer	1
7	LSP25-15000-DX	Suction Filter Mounting Plate	1
8	9301-06000-DX	Flat Washer, Ø6	6
9	9306-06000-DX	Lock Washer, Ø6	6
10	9101-06020-DX	Hex Bolt, M6 x 20, G8.8	6
11	DS18-00007	Suction Line Tube, Wire Reinforced	1
12	LSP25-00011	Hose Clamp	2
13	LSP25-00010-DX	Oil Plug	1

HARDWARE KIT



Item #	Part #	Description	Qty.
1	9206-12000-DX	Nylon Lock Nut, M12	4
2	9301-12000-DX	Flat Washer, Ø12	4
3	9101-12035-DX	Hex Bolt, M12 x 35mm, G8.8	4
4	LSP25-00009-DX	Hub Cap	2
5	LSP25-WP0011	Hub Cap Tool	1
6	9901-17*2.5	O Ring, Ø17 x 2.5	1
7	9901-11*2.5	O Ring, Ø11 x 2.5	1
8	9101-08040-DX	Hex Bolt, M8 x 40mm, G8.8	4
9	9301-08000-DX	Flat Washer, Ø8	4
10	9306-08000-DX	Lock Washer, Ø8	4
11	9206-08000-DX	Nylon Lock Nut, M8	4

NOTES

This image shows a full page of blank handwriting practice paper. It features approximately 28 evenly spaced horizontal red lines across the entire page, providing a guide for letter height and placement. The background is plain white, and there are no margins, text, or other markings present.

WARRANTY

IMPORTANT NOTICE

We, the manufacturer, reserve the right to change the product and/or specifications in this manual without notification. The manual is for information usage only and the pictures and drawings depicted herein are for reference only.

Warranty Repair and Service

Do not return this product to the store for warranty issues or repair. Call our customer service department at **1-888-376-7375**.

Record the information below for future reference.

Model No. _____

Serial No. _____

Date of Purchase _____

Place of Purchase _____

SPECIFICATIONS

SKU/Part No.	BDR22T (22-Ton)
Maximum Splitting Force	22-Tons ¹
Engine ²	209cc RATO R210 ³
Maximum Log Length	20"
Cycle Time, Down & Back	10.5 Seconds ¹
Cylinder	4" Dia. x 18.4" Stroke
Pump, Two Stage	11 GPM
Wedge, Heat-Treated Steel	8" High
Beam	5.9" Foot Plate
Hydraulic Capacity	2.9 Gallons Operational
Shipping Weight	449.7 Lbs.

Common Specifications

Valve	Auto Return
Wheels	D.O.T. Approved 16" O.D. Road Tires
Coupler	2" Ball with Safety Chains
Replacement Filters	Part # LSP25-09000 Return Filter Part # LSP25-00022 Suction Filter
Warranty	3 Year / 2 Year / 1 Year, Limited

¹ Tonnage and cycle times may vary dependent upon mechanical and environmental conditions.

² EPA 49 State Legal

³ As rated by engine manufacturer

For Service or Questions:

Call 1-888-376-7375

