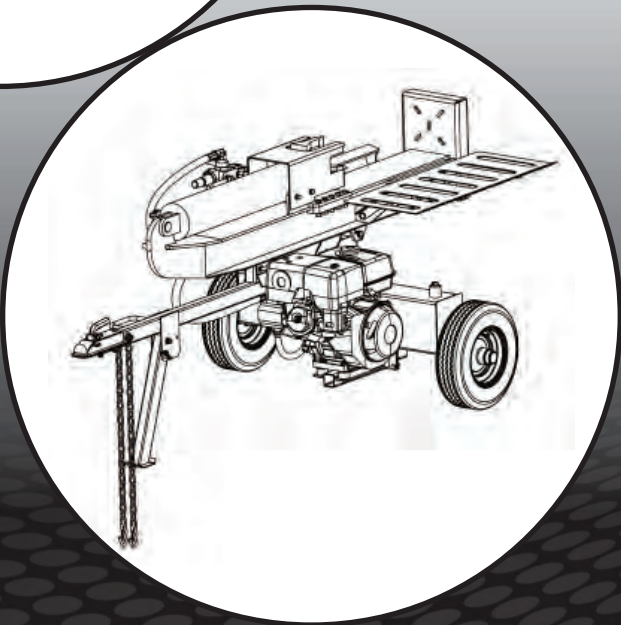
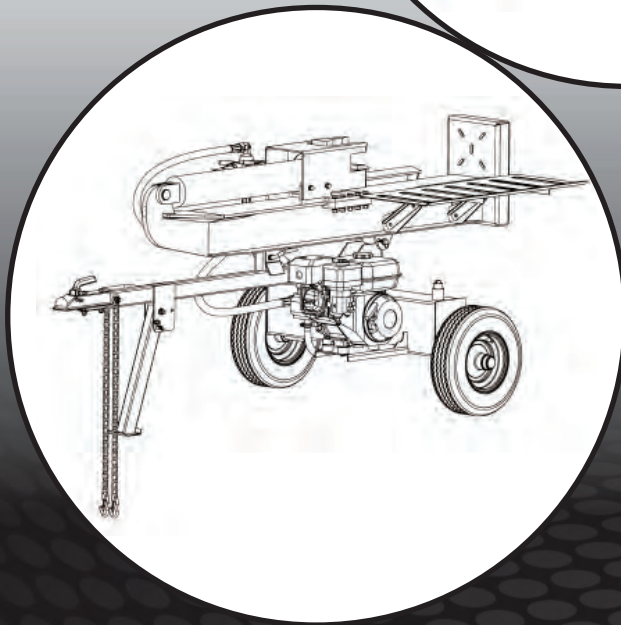
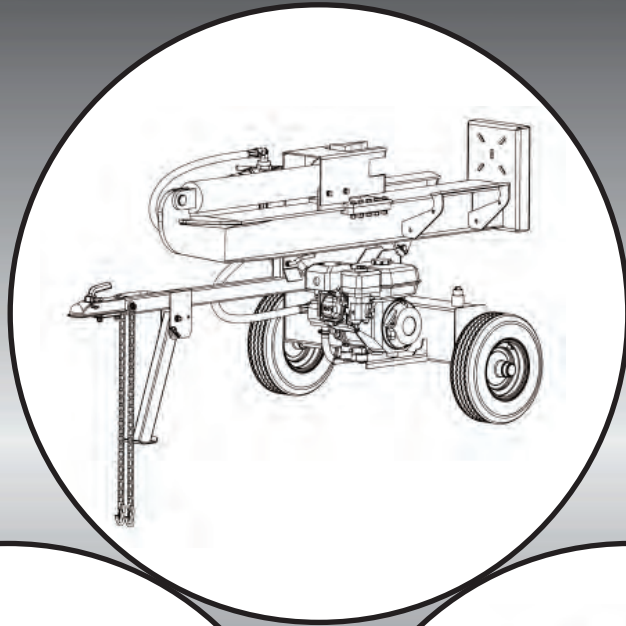


DUCAR

HYDRAULIC LOG SPLITTERS OPERATOR'S MANUAL

25 TON



28 TON 35 TON

Instruction & Assembly

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

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SPECIFICATIONS

Model #	25 Ton	28 Ton	35 Ton
Log Capacity	26"	26"	26.5"
Control Valve	Auto Return with Adjustable Detent		
Pump Size	14 GPM	14 GPM	17 GPM
Hydraulic Cylinder Bore	4"	4.5"	5"
Hydraulic Cylinder Stroke	24"	24"	24"
Hydraulic Rod Diameter	1.75"	1.75"	2"
Cylinder Cycle Time*	9.5 seconds	12.9 seconds	12.7 seconds
Hydraulic Capacity	6.4 Gallon	6.85 Gallon	6.85 Gallon
Replacement Filters	Built-in, Sealed, Return Filter, Suction Screen		
Hoses	High pressure with wire braid ; Coil-wrapped		
Beam	Heavy duty U-shape formed construction		
Wedge Size	8"		
Wedge Style	2-way		
4-Way Wedge	Not Included	Included	
Rear Wheels	4.80-8, DOT Approved 16" O.D. Road Tires		
Hitch Coupler	2" Ball with Safety Chains		
Safety Chains	Standard		
Max Towing Speed	72 km/h		
Hitch Handle	Standard		
Horizontal/Vertical Splitting	Standard		
Open Operating Zone	Standard		
Log Cradle	Standard		
Log Table	Optional	Standard	
Weight (kg)	232 kg	242 kg	272 kg
Dimensions (L x W x H)	90" x 46" x 39"		90" x 48" x 39"

*Splitting force and cycle times may vary depending on mechanical and environmental conditions.

General Warnings and Rules

⚠ GENERAL WARNINGS ⚠

READ and UNDERSTAND this manual completely before using your 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 good working condition.
- Replace or repair damaged or worn parts immediately.
- Always check and tighten hardware and assembled parts before operation.
- Do not exceed equipment maximum load capacity.
- 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 reduce speed in rough terrain, along creeks, ditches and on hillsides.
- To avoid personal injury and/or equipment damage **DO NOT EXCEED 72 km/h (maximum speed suggested by the manufacturer). Please check the current standards according to your territory or province. This equipment does not have a vehicle identification number (V.I.N.)**
- 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 parts while 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.

⚠ 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

	<p>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.</p>
	<p>DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</p>
	<p>WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</p>
	<p>CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</p>
	<p>CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.</p>

ABOUT YOUR LOG SPLITTER

This hydraulic log splitter has a heavy -duty steel construction. When there's work to be done, you need outdoor power equipment you can rely on, this log splitter will get the job done fast. It is designed to work in both the horizontal and vertical position. It is easy to tow, easy to use and maintain. Never exceed the rated capacity when operating your log splitter.

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

Safety and Instructional Decals

The rating plate on your machine may show symbols. These represent important information about the product or instructions on its use.

⚠ Warning/Avertissement

- Split wood in the direction of the grain only. • Pieces can fly out while splitting. • Always keep work area clean from debris./
- Fendre le bois uniquement dans le sens du grain. • Les morceaux peuvent s'envoler en se séparant. • Gardez toujours la zone de travail propre des débris.

Splitting log/Fendre le bois

- Load a log onto the beam and against the end plate./ Chargez une bûche sur la poutre et contre la plaque d'extrémité.
- Push control valve handle FORWARD to split log./ Poussez la poignée de la soupape de commande vers l'avant pour fendre le billot.
- Push control valve handle backward to RETURN wedge to its original position./ Poussez la poignée de la soupape de commande vers l'arrière pour ramener le coin à sa position d'origine.
- Clear the split wood from the work zone./ Dégagez le bois fendu de la zone de travail.

OPERATING INSTRUCTIONS / MODE D'EMPLOI

If log becomes stuck on wedge. / Si la bûche reste prise sur le coin.

If this happens, NEVER attempt to remove a stuck log by:
/ Si cela se produit, n'essayez JAMAIS de bouger une bûche bloquée en:

- Using the hydraulic force of the splitter./ Utilisant la force hydraulique de la fendeuse
- Modifying the splitter./ Modifiant la fendeuse.
- Adding attachments to the splitter./ Ajoutant des accessoires à la fendeuse.

The log splitter may become damaged./ La fendeuse peut être endommagée.

Always remove the log manually by following this procedure. / Enlever toujours la bûche manuellement en suivant la procédure ci-bas.

1. Retract ram completely./ Rétracter complètement le vérin.
2. Turn the engine off./ Couper le moteur.
3. Remove stuck log from wedge with a pry bar or a sledge hammer./ Retirez la bûche coincée avec un levier ou un marteau.

Caution : log piece can fly off as they separate from wedge./ Attention: un morceau de bûche peut s'envoler lorsqu'il se sépare du coin.

4. DO NOT attempt to re-split a stuck log once it has been removed from wedge./ N'essayez PAS de séparer à nouveau une bûche coincée une fois qu'elle a été retirée du coin.

WARNING ⚠ AVERTISSEMENT

Read and follow Operating Instructions before running or servicing engine.		Lire et suivre les Instructions d'utilisation avant de démarrer ou effectuer l'entretien du moteur.
Gasoline is flammable. Allow engine to cool at least 2 minutes before refueling.		L'essence est inflammable. Laissez refroidir le moteur pendant au moins 2 minutes avant de faire le plein.
Engines emit carbon monoxide, DO NOT run in enclosed area.		Les moteurs émettent du monoxyde de carbone. NE PAS faire tourner le moteur dans des espaces clos.
Muffler area temperature may exceed 65°C. Do not touch hot parts.		Autour du silencieux, la température peut dépasser 65°C. Ne pas toucher les pièces chaudes.

⚠ Warning/Avertissement

Do not transport with objects on the machine./
Ne pas transporter avec des objets sur la machine.

⚠ Warning/Avertissement

Maximum speed suggested by the manufacturer /
Vitesse maximum suggérée par le fabricant : 72 km/h
Please check the current standards according to your territory or province.
Veuillez vérifier les normes en vigueur selon votre territoire ou province.

⚠ DANGER

Do not touch – Hot cylinder/
Ne pas toucher – Cylindre chaud

⚠ Caution/Mise en garde

Always lock the u-shape safety pin when operating the log splitter in the vertical position./
Verrouillez toujours la goupille de sécurité en forme de U lorsque vous utilisez la fendeuse en position verticale.

⚠ Warning/Avertissement

Make sure the safety pin is completely locked when the splitter is in the horizontal position and towing mode./
Assurez-vous que la goupille de sécurité est complètement verrouillée lorsque la fendeuse est en position horizontale et en mode de remorquage.

Control valve operation/
Fonctionnement de la vanne de régulation

← N →

<p>Forward (Splitting mode)/ Vers l'avant (Mode de coupe)</p>	<p>Backward (Return mode)/ Vers l'arrière (Mode retour)</p>
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PG25T

Recommended hydraulic oil type:
10W AW32 ASLE H-150 ISO32/
Type d'huile hydraulique recommandée :
10W AW32 ASLE H-150 ISO32

Recommended hydraulic oil quantity:
5.0 Gallons/19.0L / Quantité
d'huile hydraulique recommandée:
5.0 Gallons/19.0L

PG28T
PG35T

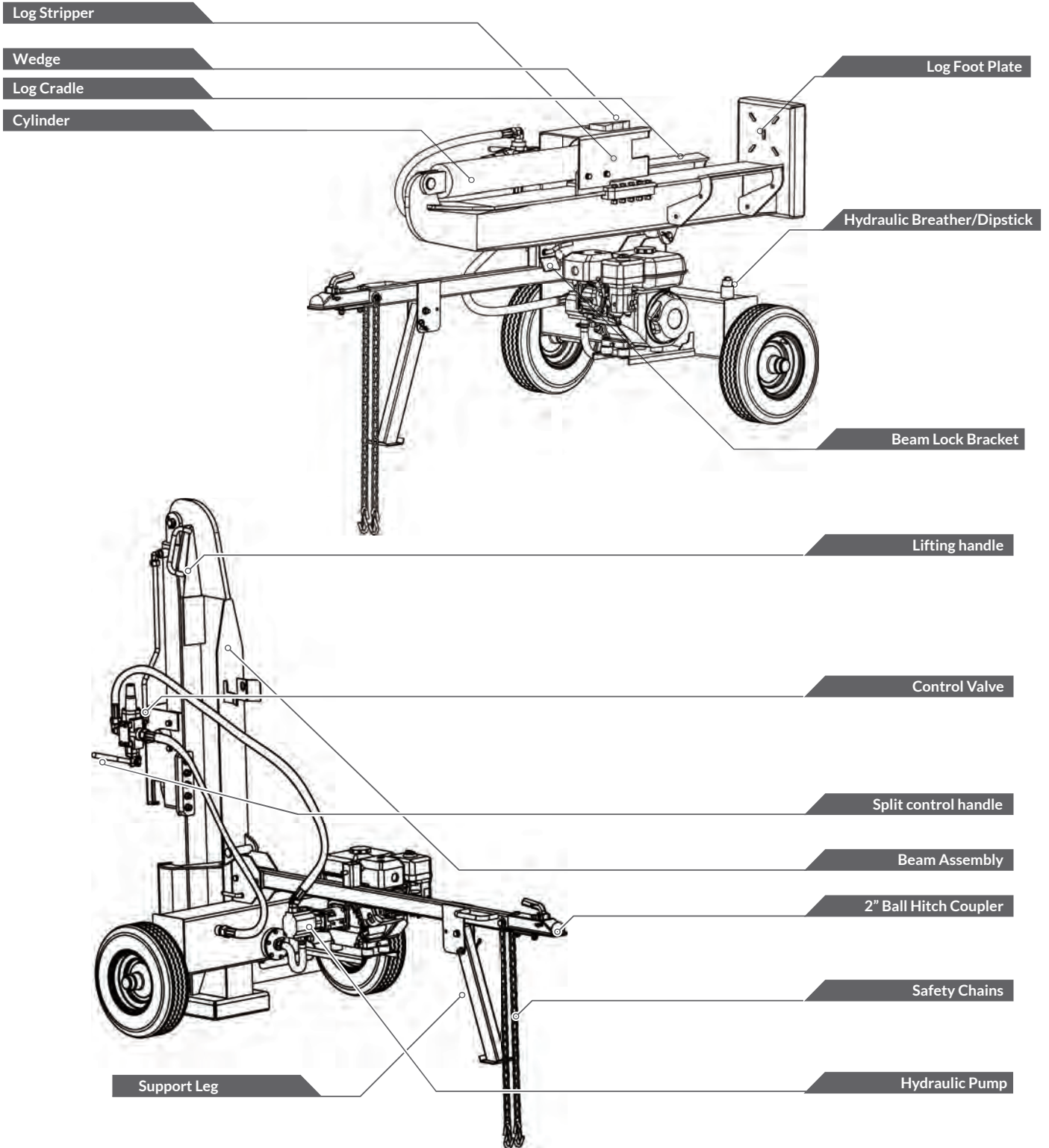
Recommended hydraulic oil type:
10W AW32 ASLE H-150 ISO32/
Type d'huile hydraulique recommandée :
10W AW32 ASLE H-150 ISO32

Recommended hydraulic oil quantity:
5.5 Gallons/21.0L / Quantité
d'huile hydraulique recommandée:
5.5 Gallons/21.0L

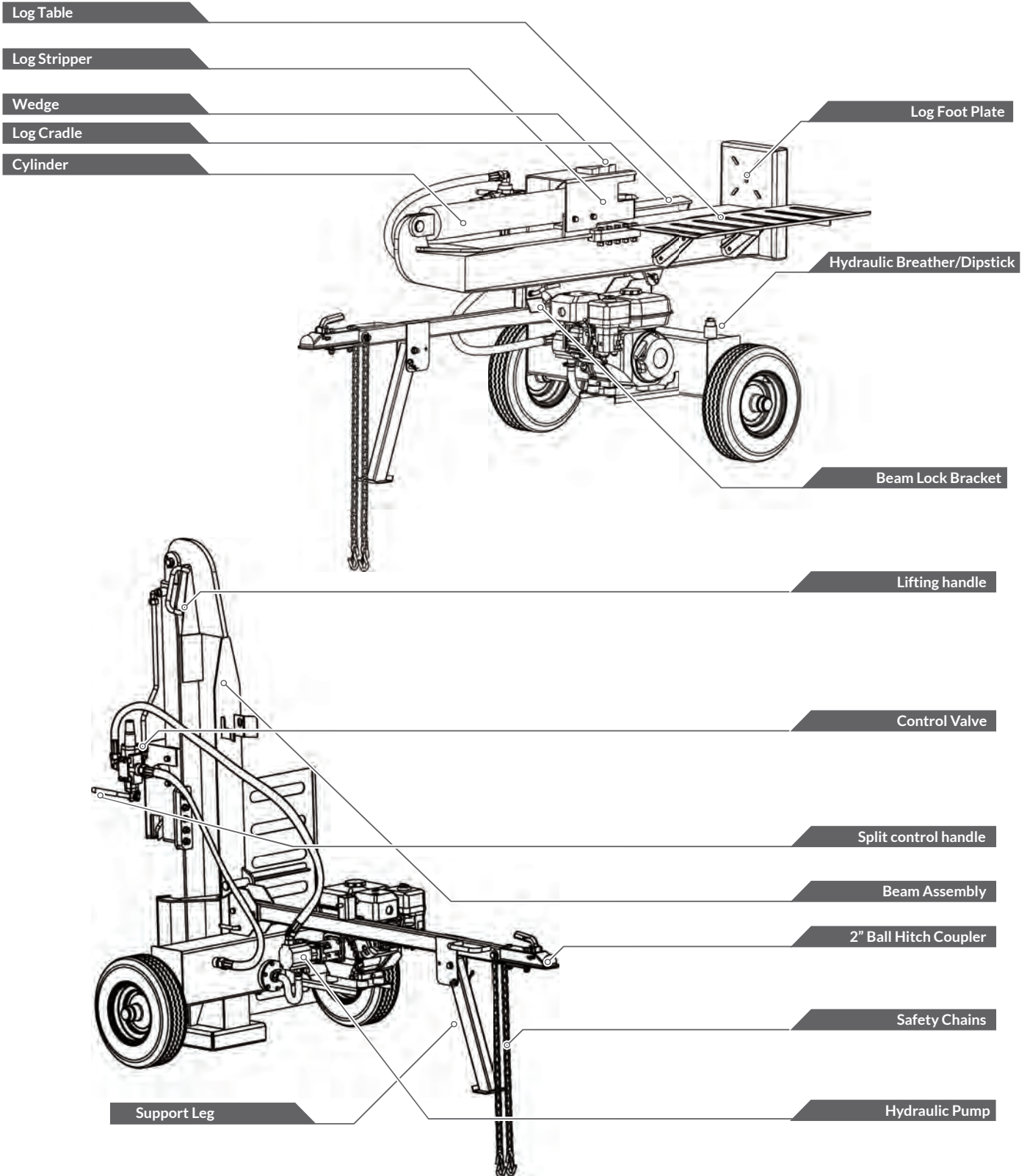
Stop/ Arrêt

Do not touch
HOT /
Ne pas toucher
CHAUD

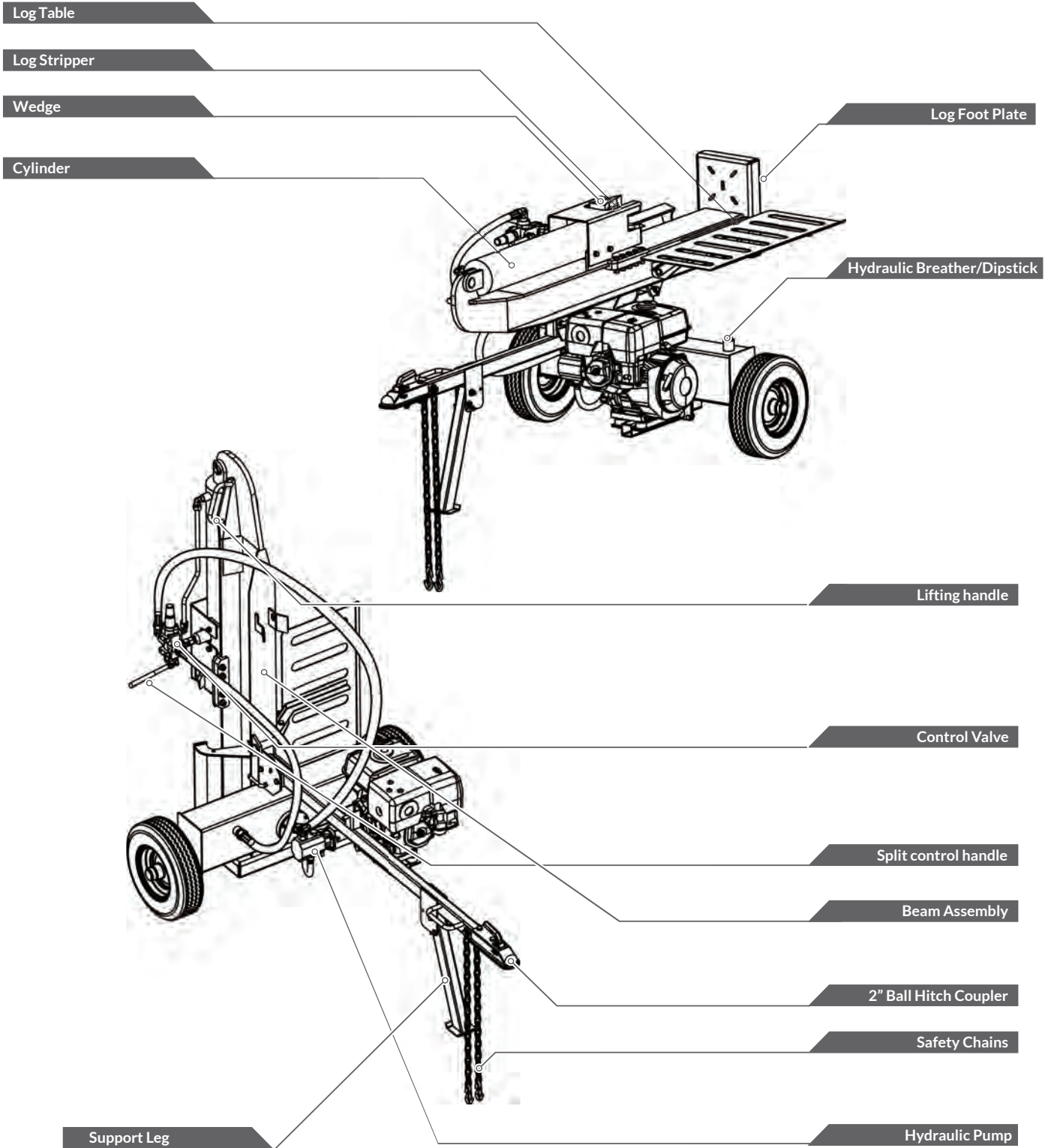
25-Ton Features and controls

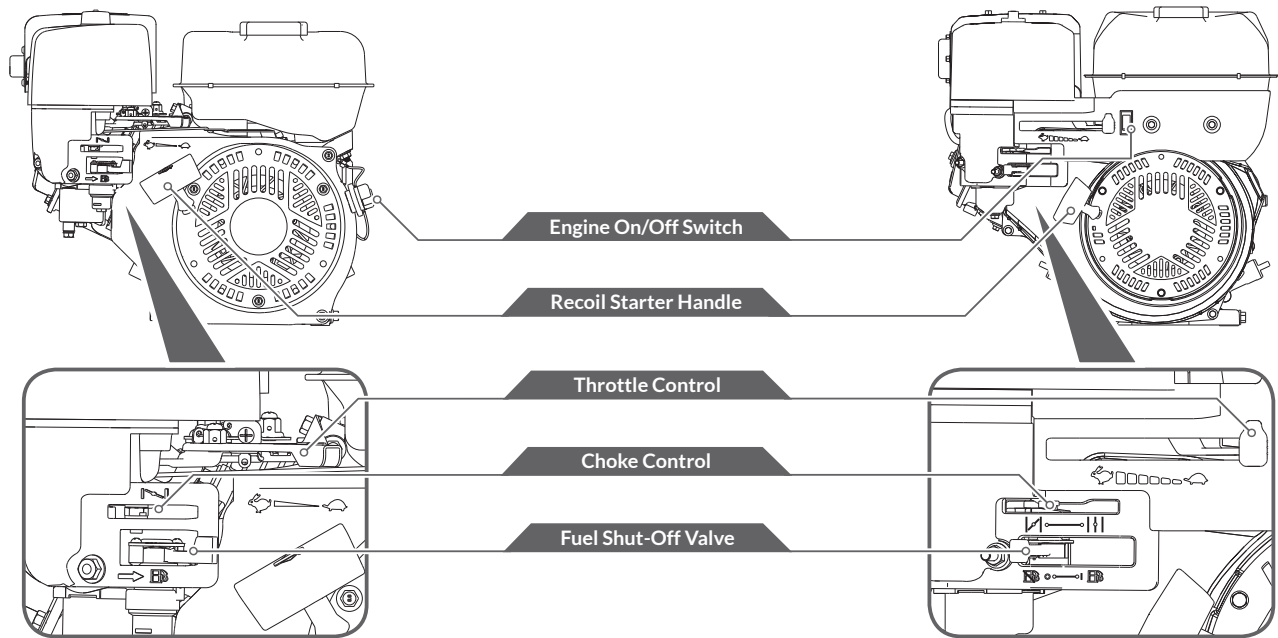


28-Ton Features and controls



35-Ton Features and controls





LOG SPINNER FOOT PLATE

- » The foot plate holds the log in place while the wedge splits the log.
- » The foot plate allows the operator to easily spin a log in prep for splitting and allows the log to rotate when splitting instead of causing unnecessary stress on the beam.
- » It is easy to replace when the grip teeth are damaged. No repair welding is required.

2-POSITION LOG CRADLE

- » The log cradles are designed to catch the log after it is split.
- » 2-position function – The first position is to center logs on the beam. The second position provides a flat surface and worktable on which to put logs.

SPLIT CONTROL HANDLE

- » The control handle is used to move the wedge up and down to split logs. The control handle has three positions: Forward, Neutral, and Reverse. See the “operation” section for instruction.

MANUAL TUBE

- » Keep manuals safely in the tube.

BEAM LOCK BRACKET

- » The beam lock bracket is used to secure the beam in the horizontal position.

LIFTING HANDLE

- » The lifting handle is included for easy transition from horizontal to vertical.

2" BALL HITCH COUPLER

- » The coupler hitch is at the end of the tow bar and attaches to a tow ball for transportation purposes.

LOG STRIPPER

- » The log stripper is designed to remove any partially split wood from the wedge. This may occur while splitting large diameter wood or freshly cut wood.

BEAM ASSEMBLY

- » The U-beam structural design is significantly stronger than a typical I-beam design.

LOG TABLE (OPTIONAL)

- » A log table/platform can be mounted on the log cradle directly.



ENGINE ON/OFF SWITCH

- » The engine switch has two positions. OFF - engine will not start or run. ON - engine will start and run.



RECOIL STARTER HANDLE

- » The handle is used to start the engine.



FUEL SHUT-OFF VALVE

- » The fuel shut - off has two position **CLOSED**  - use this position to service, transport, or store the unit.
- » **OPEN**  - use this position to run the unit.

CHOKE CONTROL

- » The choke control is used to choke the carburetor and assist in starting the engine. The choke control slides between the **CHOKE CLOSED**  and **CHOKE OPEN**  positions.

THROTTLE CONTROL

- » The throttle control regulates the speed of the engine and will shut off the engine when it is moved to the **STOP** position. The throttle control moves between **FAST** , **SLOW** , and **STOP** positions.

⚠ CAUTION

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.

Hydraulic Oil Tank is Shipped Without Oil.

When adding oil verify the oil level reads 1 from the top of hydraulic oil tank if marking is not shown fill to the neck.

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 the steps.

TOOLS REQUIRED

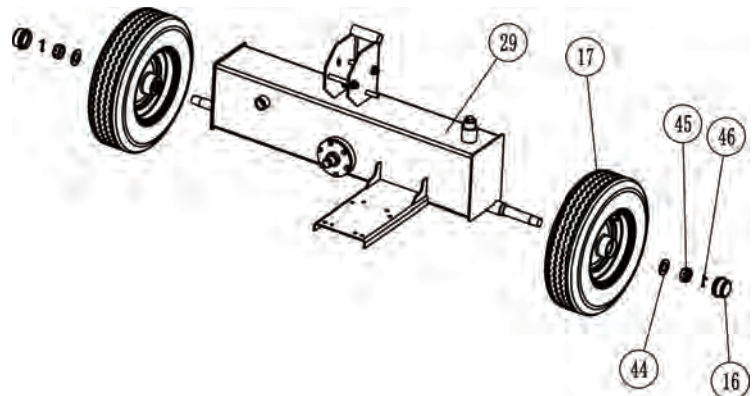
- Rubber or Wooden Hammer
- 13mm, 16mm, 17mm, 18mm, 19mm, 24mm, 27mm Wrenches
- Large Adjustable Wrench
- Phillips S crewdriver
- Pliers

Assembly Instructions 25-Ton

STEP 1: Wheel Assembly

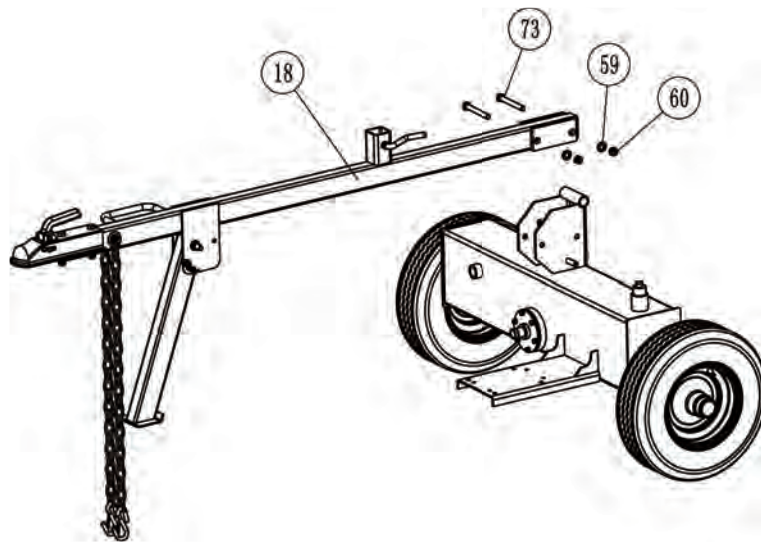
1. Attach the wheel (#17) to the oil tank (#29) axle using a flat washer $\varnothing 24$ (#44) and tighten the wheel with the hex slotted nut M24x1.5 (#45). Lock the hex slotted nut M24x1.5 (#45) in place using the cotter pin $\varnothing 3.2 \times 32$ (#46). Install the axle cap (#16) on the end using rubber hammer.

WARNING: After the slotted nut is tightened, then turn back 1/4 circle to make sure the tire can rotate smoothly and well without any wobbling. Without turning back 1/4 circle of the slotted nut may cause tire can't work normally.



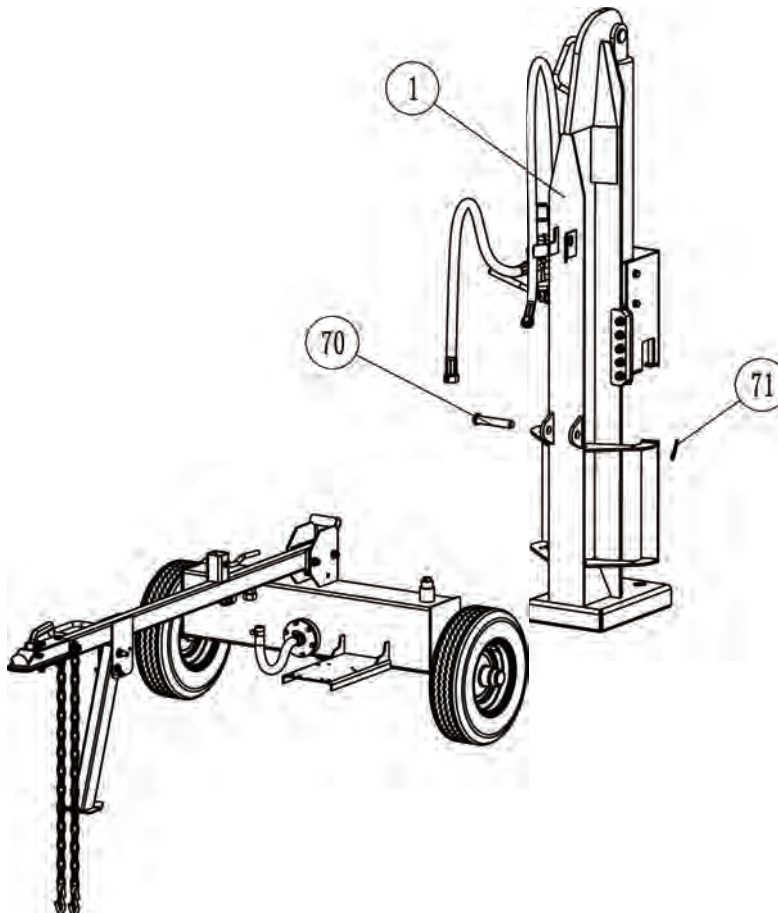
STEP 2: Attach Tow Bar to the Wheel Assembly

1. Attach the tow bar (#18) to the oil tank using hex bolt M12x100 (#73), flat washer Ø12 (#59) and lock nut M12 (#60).



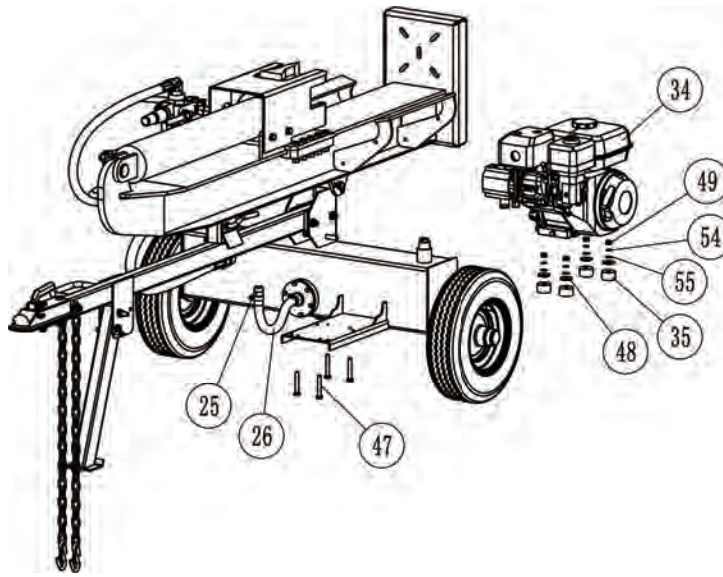
STEP 3: Attach the Beam Assembly

1. Connect the Beam (#1) and Oil Tank using Hitch Pin (#70), then lock the Hitch Pin (#70) using R Pin Ø3.2 (#71).



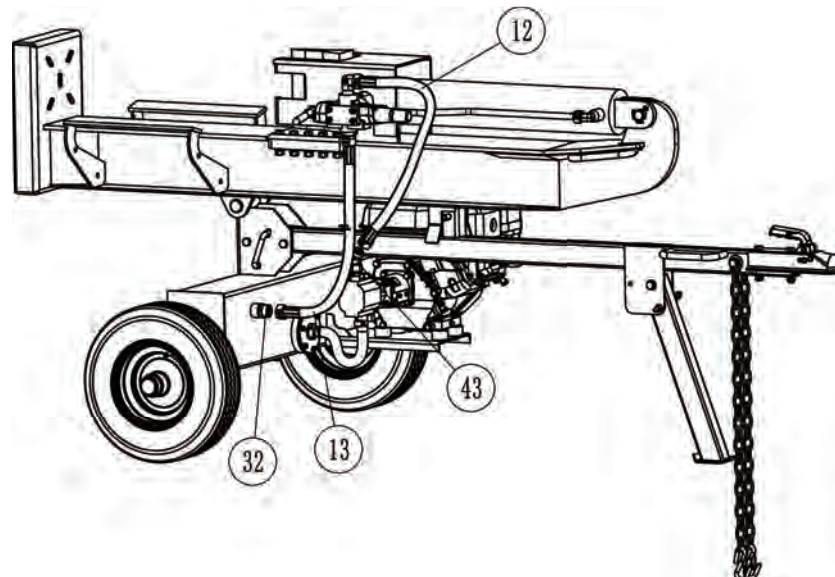
STEP 4: Attach Engine to Mounting Plate

1. Place the polyurethane block (#35) and large flat washer $\varnothing 8$ (#48) between the mounting plate and engine.
2. Position the engine (#34) over the blocks and secure it to the mount plate put the hex bolt M8x55 (#47) through the bottom of the plate (bolt should go through blocks, flat washer and engine base). Place a flat washer $\varnothing 8$ (#55), lock washer $\varnothing 8$ (#54) and tighten the nylon lock nut M8(#49)
3. Attach the clean oil pipe (#26) to the bottom of the gear pump and secure with clamp (#25).



STEP 5: Attach Hydraulic Hose


1. Attach the hydraulic hose (Connector-valve) (#12) to the gear pump connector (#43).
2. Attach the hydraulic hose (#13) to the end of the connector (#32).



STEP 6: 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 the amount needed of SAE10W -30 engine oil; 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 7: 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 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 ¼" 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.

STEP 8: Add Hydraulic Oil

1. The log splitter needs to be on a flat, level surface before adding the hydraulic oil.
2. Remove the oil cap from the hydraulic oil tank.
3. Add 4.76 gallons of hydraulic oil 10WAW32, ASLE H -150, ISO 32 are all acceptable types of fluid (all units are tested and have excess oil in the ram).
4. Check the hydraulic oil level.
5. Start engine and use the control lever to extend and retract wedge several times to remove air from the lines.
6. With the wedge retracted, check hydraulic oil level again and fill if necessary.

⚠ WARNING

DO NOT remove the hydraulic oil fill cap when the engine is running or hot. Hot oil can escape causing severe burns. Always allow the log splitter to cool completely before removing the hydraulic oil cap.

High fluid pressure and temperatures are created in the hydraulic log splitters. Hydraulic fluid will escape through a pin-size hole opening and can puncture skin and cause severe blood poisoning. Inspect hydraulic system regularly for possible leaks. **Never check for leaks with your hand while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.**

Make sure all fittings are tight and secure before applying pressure. Relieve system pressure before servicing.

Make sure the hydraulic hoses do not touch any hot surfaces or cutting areas.

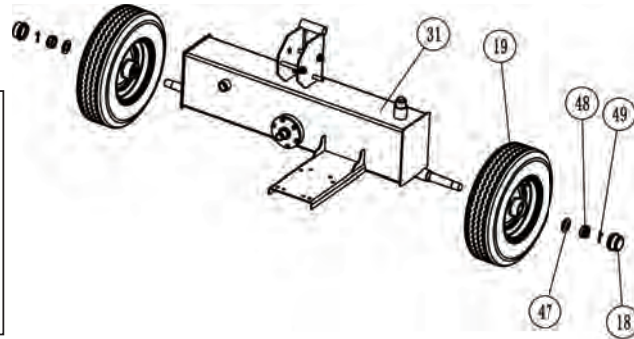
Hoses need to be positioned where they are clear from the engine and cutting wedge. To avoid serious bodily injury always inspect the hoses before operating the log splitter.

Assembly Instructions 28-Ton

STEP 1: Wheel Assembly

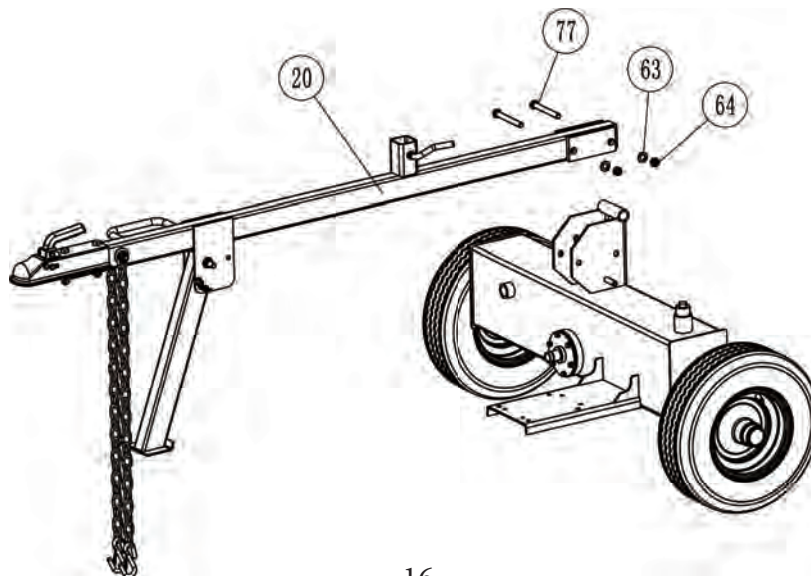
1. Attach the wheel (#19) to the oil tank (#31) axle using a flat washer $\varnothing 24$ (#47) and tighten the wheel with the hex slotted nut M24x1.5 (#48). Lock the hex slotted nut M24x1.5 (#48) in place using the cotter pin $\varnothing 3.2 \times 32$ (#49). Install the axle cap (#18) on the end using rubber hammer.

WARNING: After the slotted nut is tightened, then turn back 1/4 circle to make sure the tire can rotate smoothly and well without any wobbling. Without turning back 1/4 circle of the slotted nut may cause tire can't work normally.



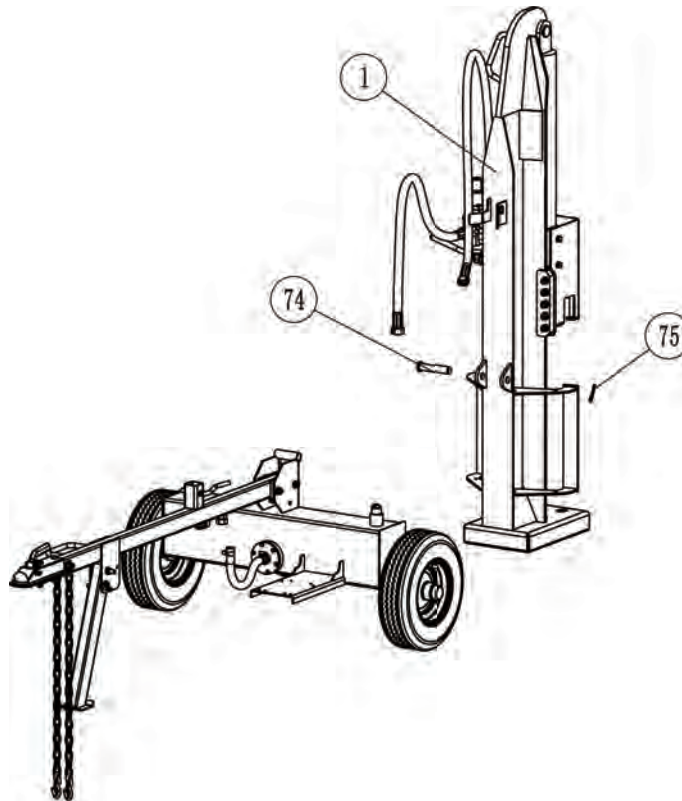
STEP 2: Attach Tow Bar to the Wheel Assembly

1. Attach the tow bar (#20) to the oil tank using hex bolt M12x100 (#77), flat washer $\varnothing 12$ (#63) and lock nut M12 (#64).



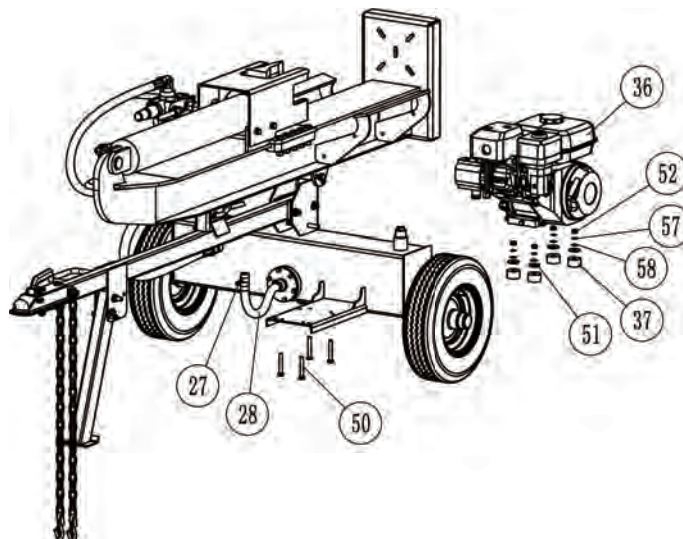
STEP 3: Attach the Beam Assembly

1. Connect the Beam (#1) and Oil Tank using Hitch Pin (#74), then lock the Hitch Pin (#74) using R Pin Ø3.2 (#75).



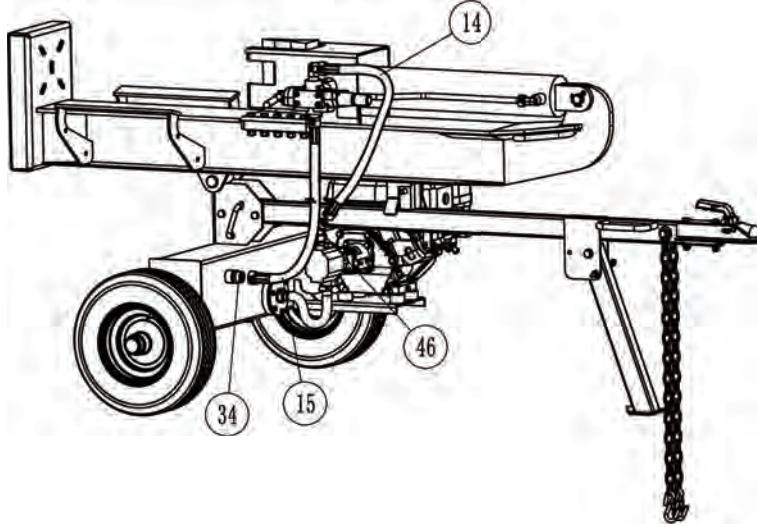
STEP 4: Attach Engine to Mounting Plate

1. Place the polyurethane block (#37) and large flat washer Ø8 (#51) between the mounting plate and engine.
2. Position the engine (#36) over the blocks and secure it to the mount plate put the hex bolt M8x55 (#50) through the bottom of the plate (bolt should go through blocks, flat washer and engine base). Place a flat washer Ø8 (#58), lock washer Ø8(#57) and tighten the nylon lock nut M8(#52)
3. Attach the clean oil pipe (#28) to the bottom of the gear pump and secure with clamp (#27).



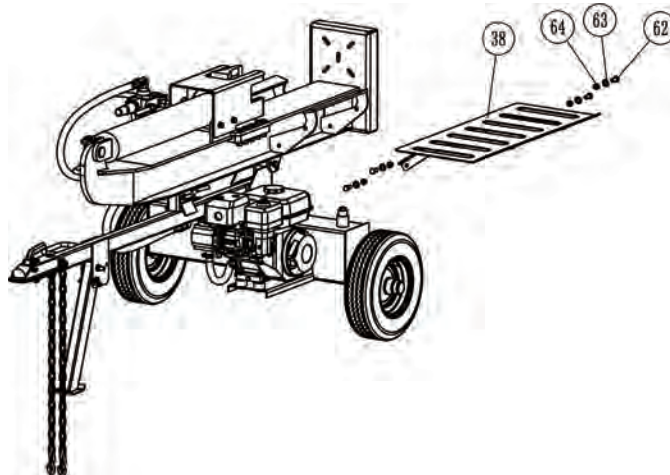
STEP 5: Attach Hydraulic Hose

1. Attach the hydraulic hose (Connector-valve) (#14) to the gear pump connector (#46).
2. Attach the hydraulic hose (#15) to the end of the connector (#34).



STEP 6: Attach Log Table

Attach the log table (#38) to the beam using Hex bolt M12x25 (#62), flat washer \varnothing 12 (#63) and M12 lock nut (#64).



STEP 7: 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 the amount needed of SAE10W -30 engine oil; 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 8: 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 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 ¼" 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.

STEP 9: Add Hydraulic Oil

1. The log splitter needs to be on a flat, level surface before adding the hydraulic oil.
2. Remove the oil cap from the hydraulic oil tank.
3. Add 4.76 gallons of hydraulic oil 10WAW32, ASLE H -150, ISO 32 are all acceptable types of fluid (all units are tested and have excess oil in the ram).
4. Check the hydraulic oil level.
5. Start engine and use the control lever to extend and retract wedge several times to remove air from the lines.
6. With the wedge retracted, check hydraulic oil level again and fill if necessary.

WARNING

DO NOT remove the hydraulic oil fill cap when the engine is running or hot. Hot oil can escape causing severe burns. Always allow the log splitter to cool completely before removing the hydraulic oil cap.

High fluid pressure and temperatures are created in the hydraulic log splitters. Hydraulic fluid will escape through a pin-size hole opening and can puncture skin and cause severe blood poisoning.

Inspect hydraulic system regularly for possible leaks. **Never check for leaks with your hand while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.**

Make sure all fittings are tight and secure before applying pressure. Relieve system pressure before servicing.

Make sure the hydraulic hoses do not touch any hot surfaces or cutting areas.

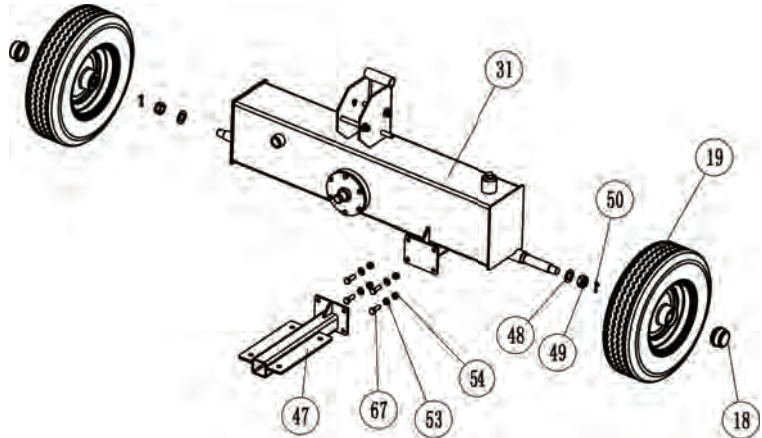
Hoses need to be positioned where they are clear from the engine and cutting wedge. To avoid serious bodily injury always inspect the hoses before operating the log splitter.

Assembly Instructions 35-Ton

STEP 1: Wheel Assembly

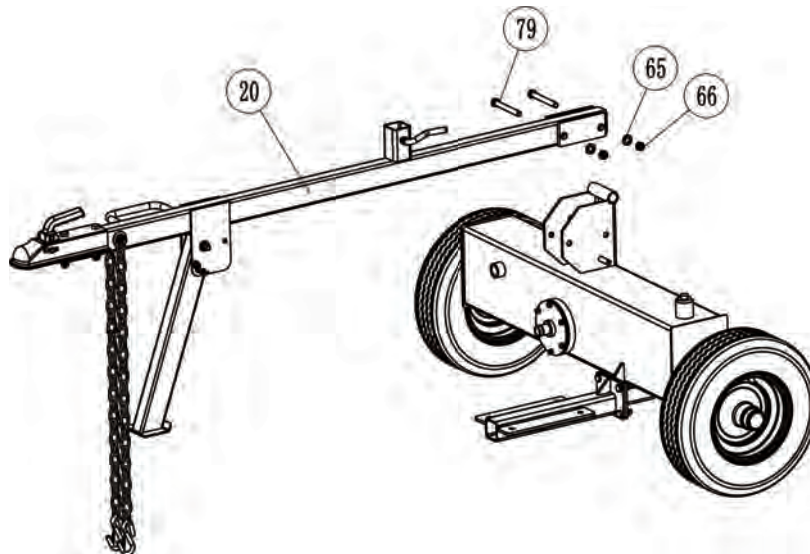
1. Attach the wheel (#19) to the oil tank (#31) axle using a flat washer $\text{Ø}24$ (#48) and tighten the wheel with the hex slotted nut M24x1.5 (#49). Lock the hex slotted nut M24x1.5 (#49) in place using the cotter pin $\text{Ø}3.2 \times 32$ (#50). Install the axle cap (#18) on the end using rubber hammer.

WARNING: After the slotted nut is tightened, then turn back 1/4 circle to make sure the tire can rotate smoothly and well without any wobbling. Without turning back 1/4 circle of the slotted nut may cause tire can't work normally.



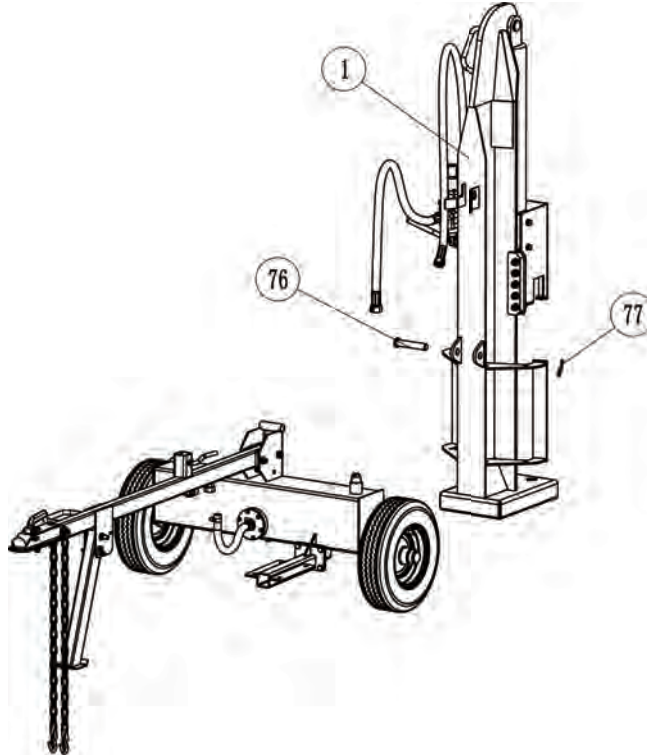
STEP 2: Attach Tow Bar to the Wheel Assembly

1. Attach the tow bar (#20) to the oil tank using hex bolt M12x100 (#79), flat washer $\text{Ø}12$ (#65) and lock nut M12 (#66).



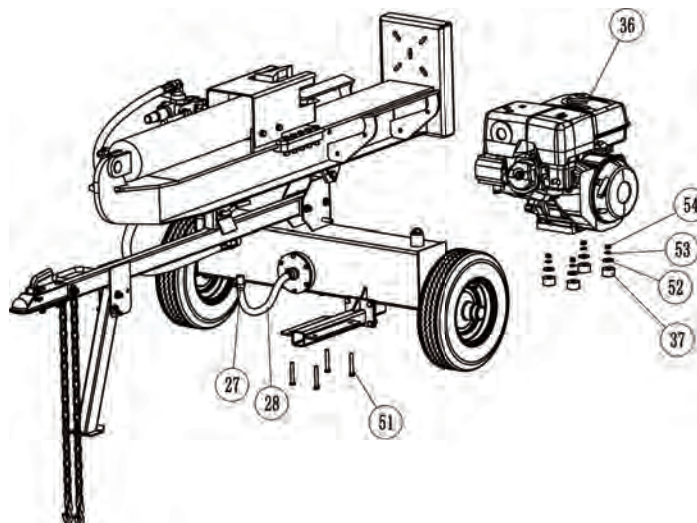
STEP 3: Attach the Beam Assembly

1. Connect the Beam (#1) and Oil Tank using Hitch Pin (#76), then lock the Hitch Pin (#76) using R Pin $\varnothing 3.2$ (#77).



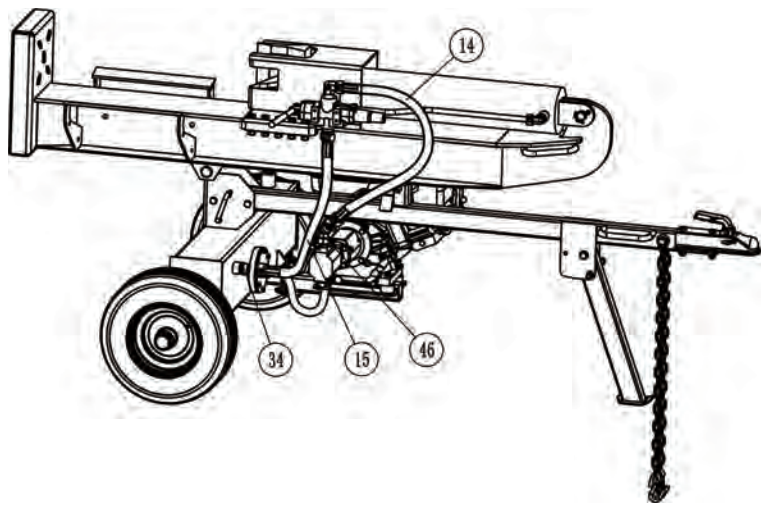
STEP 4: Attach Engine to Mounting Plate

1. Place the polyurethane block (#37) and large flat washer $\varnothing 10$ (#52) between the mounting plate and engine.
2. Position the engine (#36) over the blocks and secure it to the mount plate put the hex bolt M8x55 (#51) through the bottom of the plate (bolt should go through blocks, flat washer and engine base). Place a flat washer $\varnothing 10$ (#52), lock washer $\varnothing 10$ (#53) and tighten the nylon lock nut M10 (#54)
3. Attach the clean oil pipe (#28) to the bottom of the gear pump and secure with clamp (#27).



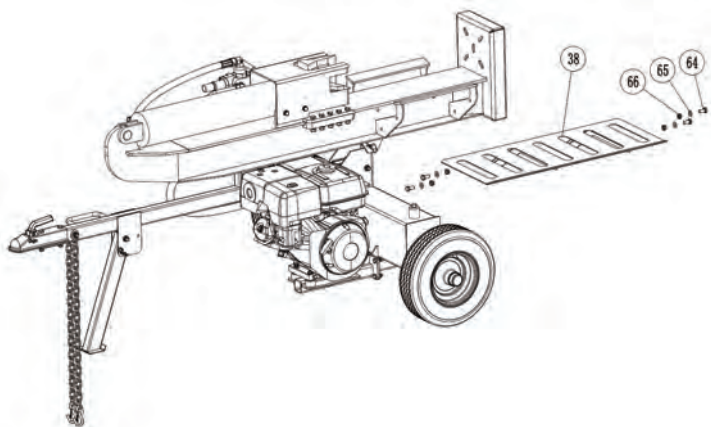
STEP 5: Attach Hydraulic Hose

1. Attach the hydraulic hose (Connector-valve) (#14) to the gear pump connector (#46).
2. Attach the hydraulic hose (#15) to the end of the connector (#34).



STEP 6: Attach Log Table

Attach the log table (#38) to the beam using Hex bolt M12x25 (#64), flat washer \varnothing 12 (#65) and M12 lock nut (#66).



STEP 7: 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 the amount needed of SAE10W-30 engine oil; 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 8: 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 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 ¼" 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.

STEP 9: Add Hydraulic Oil

1. The log splitter needs to be on a flat, level surface before adding the hydraulic oil.
2. Remove the oil cap from the hydraulic oil tank.
3. Add 4.76 gallons of hydraulic oil 10WAW32, ASLE H -150, ISO 32 are all acceptable types of fluid (all units are tested and have excess oil in the ram).
4. Check the hydraulic oil level.
5. Start engine and use the control lever to extend and retract wedge several times to remove air from the lines.
6. With the wedge retracted, check hydraulic oil level again and fill if necessary.

WARNING

DO NOT remove the hydraulic oil fill cap when the engine is running or hot. Hot oil can escape causing severe burns. Always allow the log splitter to cool completely before removing the hydraulic oil cap.

High fluid pressure and temperatures are created in the hydraulic log splitters. Hydraulic fluid will escape through a pin-size hole opening and can puncture skin and cause severe blood poisoning.

Inspect hydraulic system regularly for possible leaks. **Never check for leaks with your hand while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.**

Make sure all fittings are tight and secure before applying pressure. Relieve system pressure before servicing.

Make sure the hydraulic hoses do not touch any hot surfaces or cutting areas.

Hoses need to be positioned where they are clear from the engine and cutting wedge. To avoid serious bodily injury always inspect the hoses before operating the log splitter.

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.

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 control lever on the log splitter.
ONLY operate the log splitter in daylight.
NEVER leave the log splitter unattended while the engine is running.
DO NOT change the splitting position with the engine running. Contact with the muffler can cause serious burns.
ALWAYS make sure the beam is in the locked position.
DO NOT let the beam drop as it could crush fingers or cause damage to the log splitter.
NEVER operate or let anyone else operate, the log splitter while under the influence of alcohol, drugs, or medication.

USING YOUR LOG SPLITTER

1. DO NOT at any time carry passengers, sit or stand on the log splitter.
2. Check the hydraulic oil level and visually inspect all hoses and attachments for problems.
3. Inspect the engine and make sure the engine oil level is correct.
4. Before towing the log splitter the tires need to be fullyinflated.

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 72 km/h towing speed.

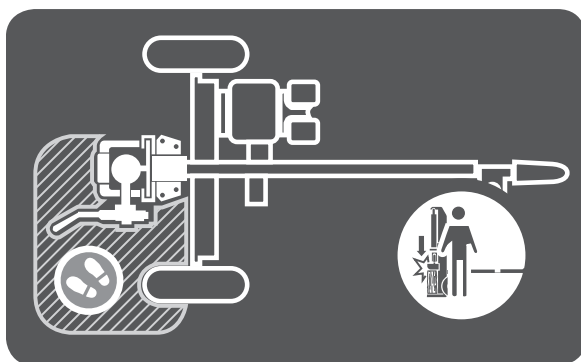
5. Refer to the vehicle owner's manual for proper safety and towing instructions.

⚠ TOWING WARNING

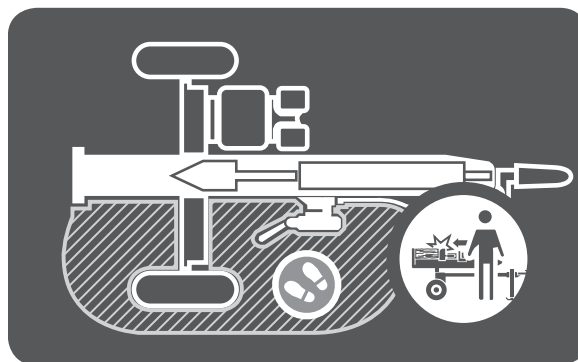
Serious injury or death can occur if towing safety rules are not followed.
Always use safety chains, secure and lock the log splitter to the vehicle hitch before moving.
Drive safely. Be aware of the added length of the log splitter.
Never exceed the maximum travel speed of 72 km/h.
Never ride or transport cargo on the log splitter.
Turn off the vehicle before leaving the log splitter unattended.
Block the log splitter wheels to prevent unintended movement.

6. The log splitter must have at least seven feet of clearance from combustable material. It 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.

VERTICAL OPERATING POSITION



HORIZONTAL OPERATING POSITION



NOTE: Serious accidents can happen when other people are allowed inside the work zone. Keep everyone else outside the work zone while operating the control lever.

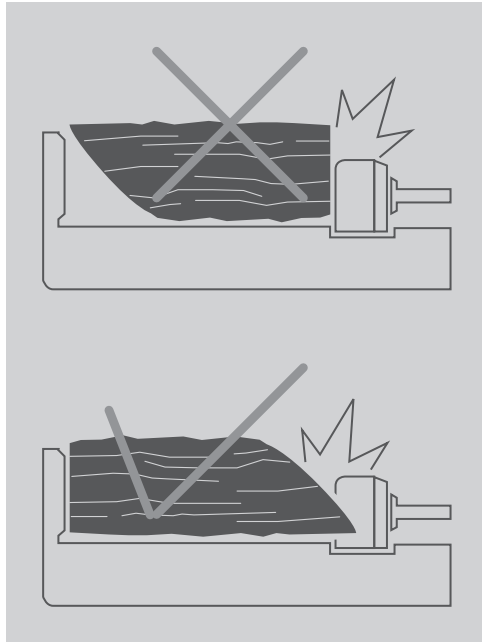
7. Always wear safety gear, eye protection, gloves and work boots when operating the log splitter.
8. Start the engine and make sure the log splitter is on level ground before operating.

NOTE: The hydraulic oil needs to be above 10°F (-12C°) before starting the engine. Cold hydraulic oil can damage the hydraulic pump. If outdoor air temperature is below 32°F (0C°) allow the log splitter to warm up by extending and returning the wedge several times before splitting wood.

9. Put the support leg in the down position to prevent the log splitter from moving during operation and block both tires.
10. Set the log splitter in either the horizontal or vertical position.

NOTE: HORIZONTAL position is used for lighter logs that can easily be loaded onto the beam. The VERTICAL position is used for either light logs or heavy logs that are difficult to load onto the beam. Back injury can result from lifting logs onto the log splitter if proper lifting techniques are not used.

11. Load a log onto the beam against the endplate (Max Log Length-26”).



For logs that are not cut square, the longest portion of the log should be rotated down and the most square end placed toward the end plate.

12. 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.
DO NOT 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.

13. Push control lever FORWARD by one hand to split the log.

14. Push control lever BACKWARD by one hand to return wedge to its original position.

⚠ CAUTION

If a log gets stuck, embedded or will not split completely, push the control lever in the reverse direction and allow the splitter to strip the log from the wedge.

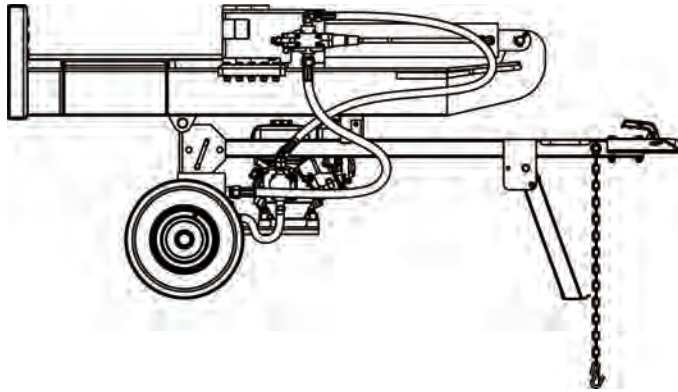
If the log still remains stuck, embedded or will not split, turn the machine off and use a sledge hammer and crow bar to remove the log.

ALWAYS keep hands clear of the log and wedge while it is retracting.

15. Always keep work zone clean and free of split wood and debris.

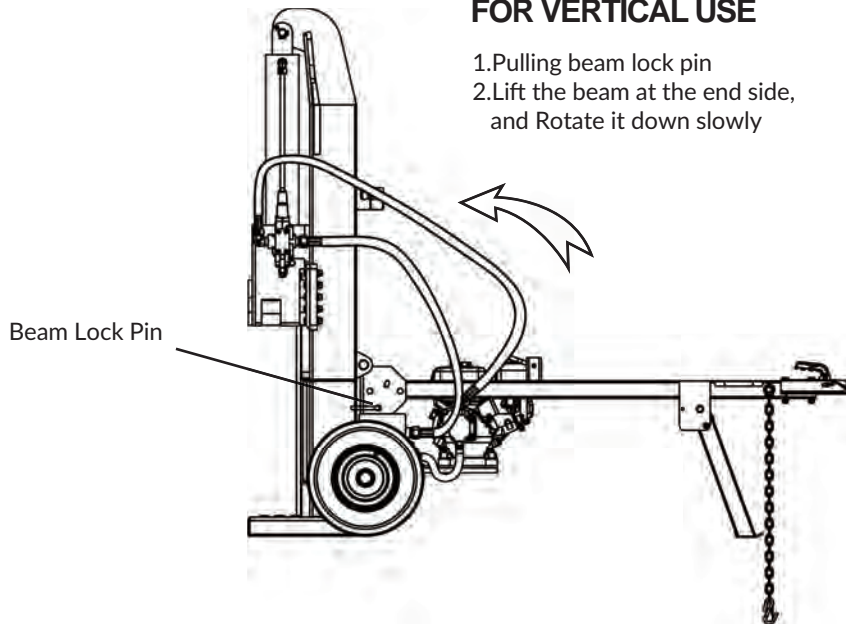
Operation Instructions

FOR HORIZONTAL USING

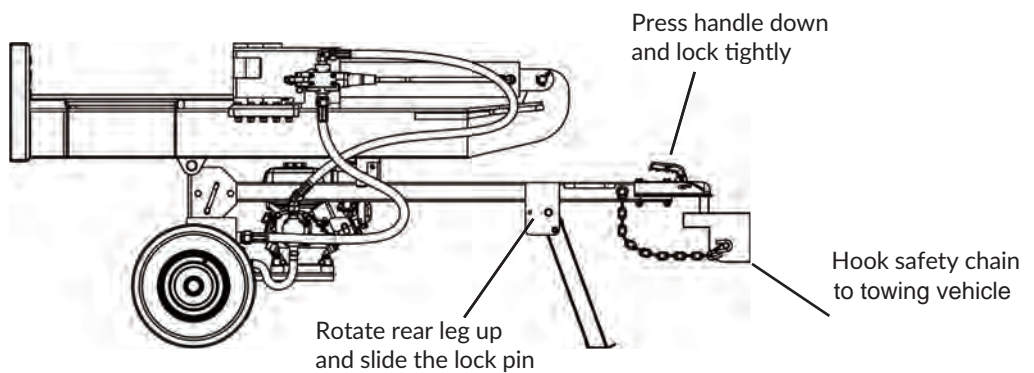


FOR VERTICAL USE

1. Pulling beam lock pin
2. Lift the beam at the end side, and Rotate it down slowly



FOR VEHICLE TOWING



Maintenance, Storage and Warranty

WARNING

Improper maintenance and storage of the log splitter may void your warranty.

MAINTENANCE

- Before performing maintenance, the log splitter must be placed in maintenance mode. Turn off the engine and move the control lever forward and backwards to relieve the hydraulic pressure.
- 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 and wheel bearing area or when needed.
- Periodically check all fasteners and hoses for tightness and leaks.
- 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.
- Never exceed load capacity rating, it will damage the log splitter.

What	When	How
Hoses	Each Use	Inspect hoses for exposed wire mesh and leaks. Replace all worn or damaged hoses before starting the engine.
Hydraulic Fittings	Each Use	Inspect fittings for cracks and leaks. Replace all damaged fittings before starting the engine.
Nuts and Bolts	Each Use	Check for loose bolts, tighten before operating.
Beam	Each Use	Apply grease 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.
- Lightly lubricate all log splitter surfaces and moving parts to prevent rust.
- Store indoors or protected area during severe weather and winter months.

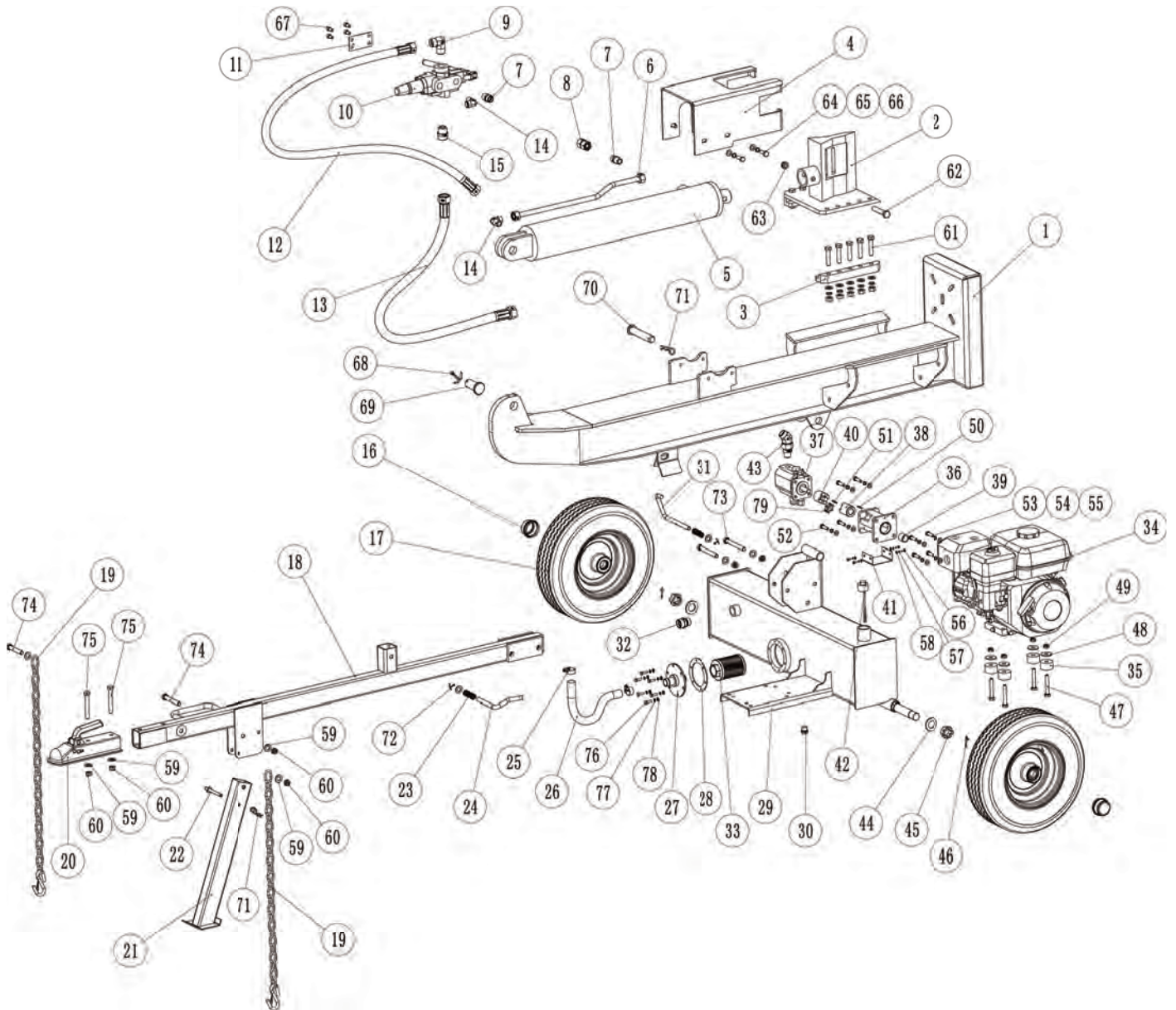
WARRANTY

Ducar log splitters are covered by a one-year limited consumer warranty.

Troubleshooting

Problem	Cause	Remedy
Wedge movement is slow or erratic	<ol style="list-style-type: none"> 1. Air in the hydraulic oil system 2. Debris lodged in beam guides 3. Low hydraulic oil 4. Clogged hydraulic filter 	<ol style="list-style-type: none"> 1. Purge air by extending and retracting the wedge several times until motion is smooth 2. Clear debris from beam 3. Check oil level and add as needed 4. Replace hydraulic filter
Oil leak from cylinder	<ol style="list-style-type: none"> 1. Faulty cylinder rod seal 2. Scored or bent cylinder rod 3. Loose hydraulic fitting 4. Faulty combination washer seal on cylinder hydraulic fitting 	<ol style="list-style-type: none"> 1. Contact customer service 2. Contact customer service 3. Tighten hydraulic fitting 4. Contact customer service
Oil leak from hose connection	Loose hose clamp or hydraulic fitting	Tighten hose clamp or hydraulic fitting
Wedge will not extend or retract	<ol style="list-style-type: none"> 1. Faulty control valve 2. Faulty hydraulic pump 3. Low hydraulic oil 	<ol style="list-style-type: none"> 1. Contact customer service 2. Contact customer service 3. Check oil level and add as needed
Wedge does not auto-return	<ol style="list-style-type: none"> 1. Low hydraulic oil 2. Faulty control valve 	<ol style="list-style-type: none"> 1. Check oil level and add as needed 2. Contact customer service
Excessive bouncing while towing	Underinflated	Inflate tires to proper pressure
Control valve handle does not return to neutral when released from forward position	<ol style="list-style-type: none"> 1. Hydraulic oil too cold 2. Hydraulic oil too thick 3. Hydraulic oil contaminated 4. Faulty control valve 	<ol style="list-style-type: none"> 1. Warm up engine 2. Replace hydraulic fluid 3. Replace hydraulic fluid 4. Contact customer service
Engine will not start	<ol style="list-style-type: none"> 1. Engine switch in OFF position 2. Fuel shut-off valve in OFF position 3. Fuel tank empty 4. Spark plug disconnected 5. Faulty spark plug 6. Choke lever in wrong position 7. Faulty engine 8. Not enough oil in engine 	<ol style="list-style-type: none"> 1. Move switch to ON position 2. Move valve to ON position 3. Fill fuel tank with fuel 4. Connect spark plug 5. Replace spark plug 6. Adjust choke lever position 7. Contact customer service 8. Add the recommended oil amount 0.16 gallons

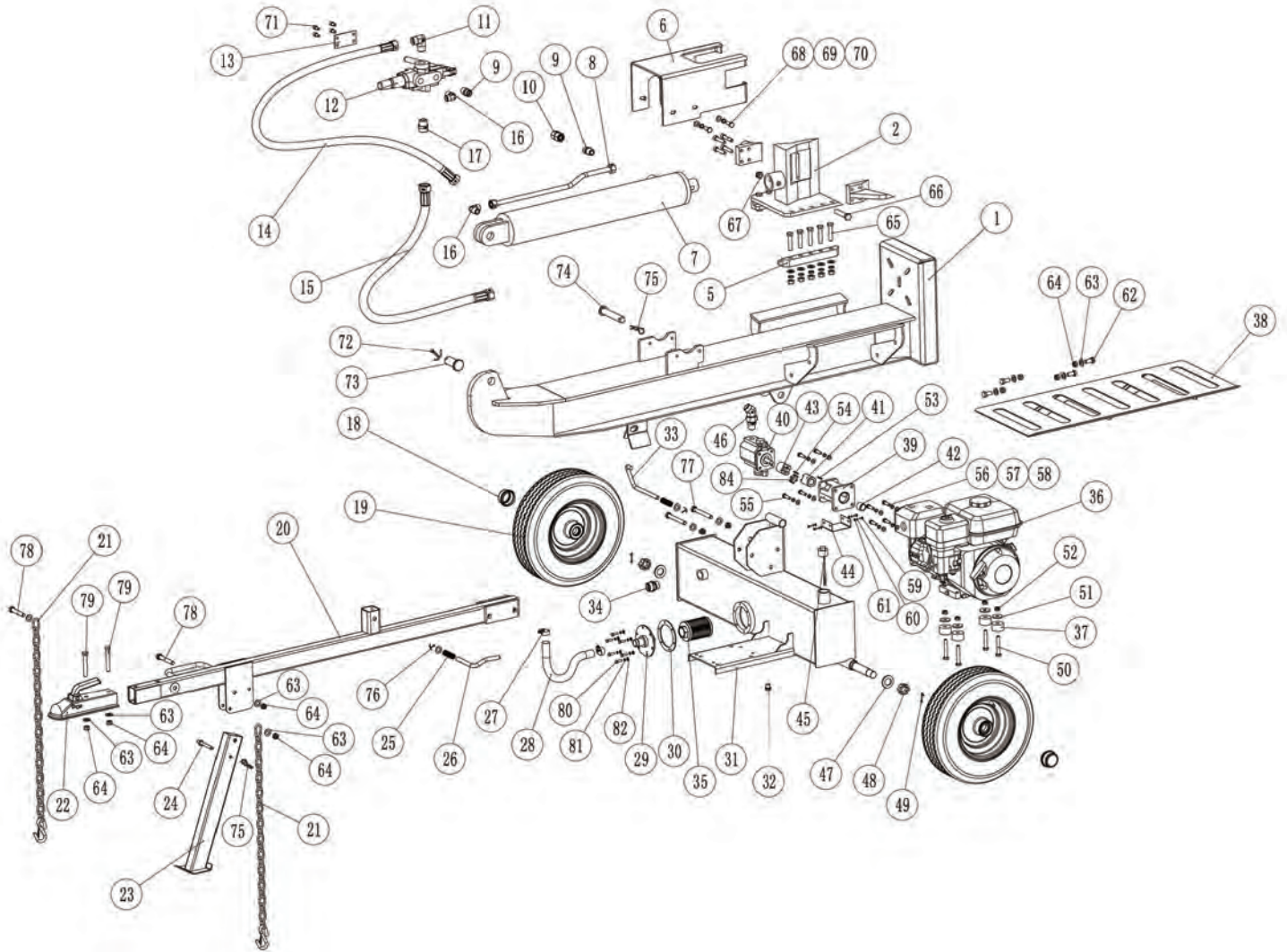
Parts Diagram PG25T



Spare parts for PG25T Hydraulic Log Splitter		
No.	Description	Qty
1	Beam	1
2	Wedge	1
3	Slide guide	2
4	Log stripper	1
5	Cylinder	1
6	Welded hose	1
7	Cylinder connector fitting	2
8	Transition joint fitting	1
9	90° Joint fitting	1
10	Control valve	1
11	Control valve backplate	1
12	Hydraulic hose (Oil return)	1
13	Hydraulic hose (oil inlet)	1
14	90° Joint fitting	2
15	Cylinder connector fitting	1
16	Bearing cover	2
17	4.8-8 DOT Road tire	2
18	Tow bar	1
19	Safety chain	2
20	2' Ball coupler hitch	1
21	Support leg	1
22	Safety pin	1
23	Spring	2
24	Safety pin	1
25	Hose clamp	2
26	Suction hose hyd.	1
27	Flange of filter	1
28	O-ring rubber washer	1
29	Hydraulic oil tank	1
30	Drain plug	1
31	Safety pin	1
32	Oil tank connector fitting	1
33	Return oil filter	1
34	Engine DJ168F	1
35	Engine shock pad	4
36	Pump bracket	1
37	Gear pump	1
38	Shaft coupling (engine side)	1
39	Engine axle sleeve	1
40	Shaft coupling (pump side)	1
41	Pump bracket back plate	1
42	Oil dipstick	1
43	45° Joint	1

44	Flat washer M24	2
45	Hex slotted nut M24x1.5	2
46	Split cotter 3.2x32	2
47	Hex bolt M8x55	4
48	Flat washer M8	4
49	Lock nut M8	4
50	Flat key - Engine	1
51	Flat key - Gear pump	1
52	Hex bolt M8x20	4
53	Hex bolt M8x25	4
54	Spring washer M8	12
55	Flat washer M8	12
56	Hex bolt M5x10	4
57	Spring washer M5	4
58	Flat washer M5	4
59	Flat washer M12	14
60	Lock nut M12	14
61	Hex bolt M12x55	10
62	Hex bolt M14x70	1
63	Lock nut M14	1
64	Hex bolt M10x25	4
65	Spring washer M10	4
66	Flat washer M10	4
67	Hex socket screw M8x16	4
68	Split cotter 6.3x63	1
69	B-Pin 27x60	1
70	B-Pin 22x120	1
71	Lock pin 3.2	2
72	Split cotter 3.2x25	2
73	Hex bolt M12x100	2
74	Hex bolt M12x70	2
75	Hex bolt M12x80	2
76	Hex bolt M6x20	6
77	Spring washer M6	6
78	Flat washer M6	6
79	Flexible Insert (Spider)	1

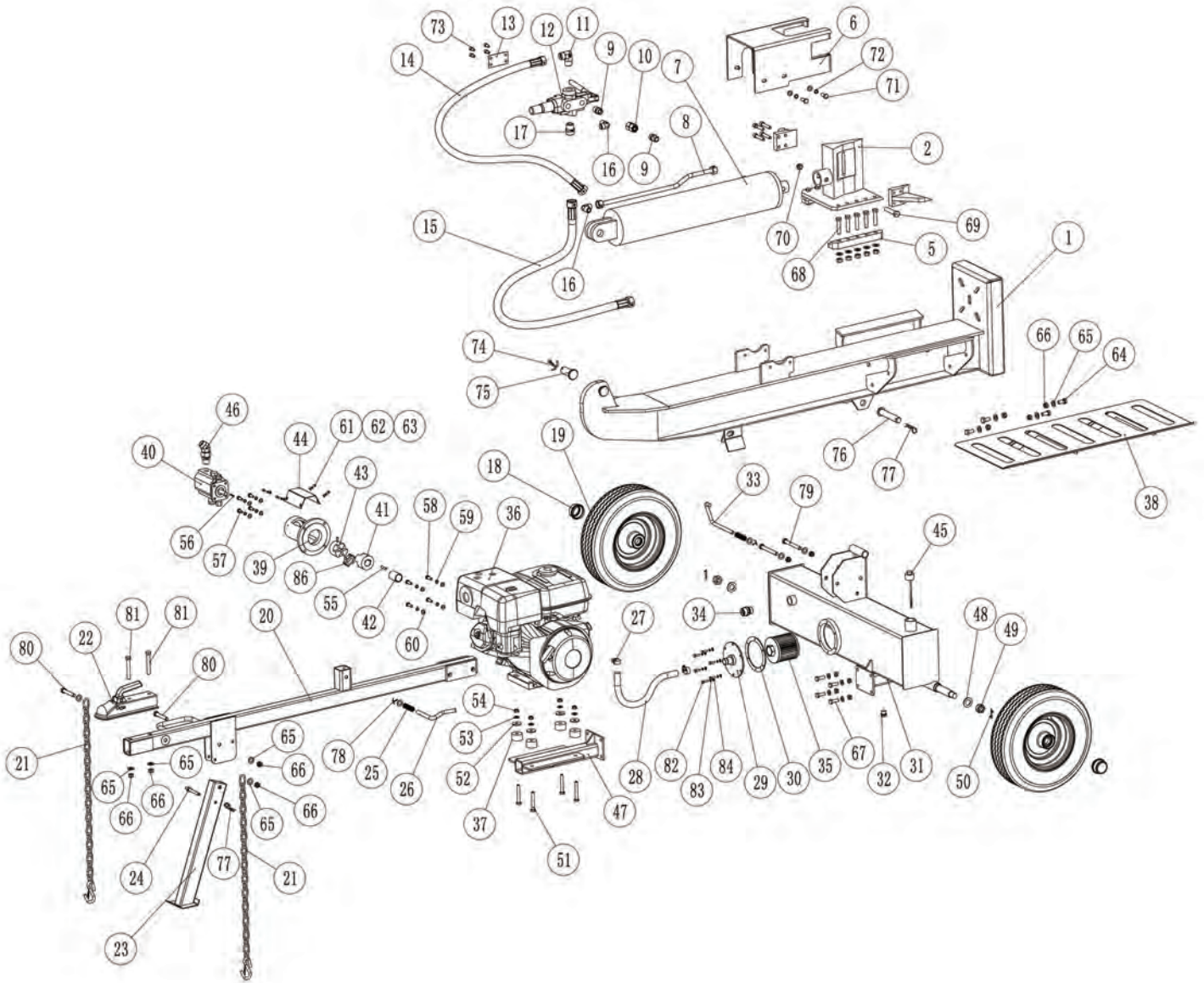
Parts Diagram PG28T



Spare parts for PG28T Hydraulic Log Splitter		
No.	Description	Qty
1	Beam	1
2	Main wedge	1
5	Slide guide	2
6	Log stripper	1
7	Cylinder	1
8	Welded hose	1
9	Cylinder connector fitting	2
10	Transition joint fitting	1
11	90° joint fitting	1
12	Control valve	1
13	Control valve backplate	1
14	Hydraulic hose (Oil return)	1
15	Hydraulic hose (Oil inlet)	1
16	90° joint fitting	2
17	Control valve connector	1
18	Bearing cover	2
19	4.8-8 DOT Road tire	2
20	Tow bar	1
21	Safety chain	2
22	2" Ball coupler hitch	1
23	Support leg	1
24	Safety pin	1
25	Spring	2
26	Safety pin	1
27	Hose clamp	2
28	Suction hose hyd.	1
29	Flange of filter	1
30	O-ring rubber washer	1
31	Hydraulic oil tank	1
32	Drain plug	1
33	Safety pin	1
34	Oil tank connector fitting	1
35	Return oil filter	1
36	Engine DJ168F	1
37	Engine shock pad	4
38	Log cradle	1
39	Pump bracket	1
40	Gear pump	1
41	Shaft coupling (engine side)	1
42	Engine axle sleeve	1
43	Shaft coupling (pump side)	1

44	Pump bracket backplate	1
45	Oil dipstick	1
46	45° joint fitting	1
47	Flat washer M24	2
48	Hex slotted nut M24x1.5	2
49	Split cotter 3.2x32	2
50	Hex bolt M8x55	4
51	Flat washer M8	4
52	Lock nut M8	4
53	Flat key-engine	1
54	Flat key- gear pump	1
55	Hex bolt M8x20	4
56	Hex bolt M8x25	4
57	Spring washer M8	12
58	Flat washer M8	12
59	Hex bolt M5x10	4
60	Spring washer M5	4
61	Flat washer M5	4
62	Hex bolt M12x25	4
63	Flat washer M12	18
64	Lock nut M12	18
65	Hex bolt M12x55	10
66	Hex bolt M14x70	1
67	Lock nut M14	1
68	Hex bolt M10x25	4
69	Spring washer M10	4
70	Flat washer M10	4
71	Hex socket screw M8x16	4
72	Split cotter 6.3x63	1
73	B-Pin 27x60	1
74	B-Pin 22x120	1
75	Lock pin 3.2	2
76	Split cotter 3.2x25	2
77	Hex bolt M12x100	3
78	Hex bolt M12x70	2
79	Hex bolt M12x80	2
80	Hex bolt M6x20	6
81	Spring washer M6	6
82	Flat washer M6	6
84	Flexible Insert (Spider)	1

Parts Diagram PG35T



Spare parts for PG35T Hydraulic Log Splitter		
No.	Description	Qty
1	Beam	1
2	Main wedge	1
5	Slide guide	2
6	Log stripper	1
7	Cylinder	1
8	Welded hose	1
9	Cylinder connector fitting	2
10	Transition joint fitting	1
11	90° joint fitting	1
12	Control valve	1
13	Control valve backplate	1
14	Hydraulic hose (Oil return)	1
15	Hydraulic hose (Oil inlet)	1
16	90° joint fitting	2
17	Control valve connector fitting	1
18	Bearing cover	2
19	4.8-8 DOT Road tire	2
20	Tow bar	1
21	Safety chain	2
22	2" Ball coupler hitch	1
23	Support leg	1
24	Safety pin	1
25	Spring	2
26	Safety pin	1
27	Hose clamp	2
28	Suction hose hyd.	1
29	Flange of filter	1
30	O-ring rubber washer	1
31	Hydraulic oil tank	1
32	Drain plug	1
33	Safety pin	1
34	Oil tank connector fitting	1
35	Return oil filter	1
36	Engine DJ190F	1
37	Engine shock pad	4
38	Log cradle	1
39	Pump bracket	1
40	Gear pump	1
41	Shaft coupling (engine side)	1
42	Engine axle sleeve	1
43	Shaft coupling (pump side)	1

44	Pump bracket backplate	1
45	Oil dipstick	1
46	45° fitting	1
47	Engine mounting plate	1
48	Flat washer M24	2
49	Hex slotted nut M24x1.5	2
50	Split cotter 3.2x32	2
51	Hex bolt M10x70	4
52	Flat washer M10	4
53	Flat washer M10	12
54	Lock nut M10	8
55	Flat key-engine	1
56	Flat key- gear pump	1
57	Hex bolt M8x20	4
58	Hex bolt M8x25	4
59	Spring washer M8	8
60	Flat washer M8	8
61	Hex bolt M5x10	4
62	Spring washer M5	4
63	Flat washer M5	4
64	Hex bolt M12x25	4
65	Flat washer M12	18
66	Lock nut M12	18
67	Hex bolt M10x30	4
68	Hex bolt M12x55	10
69	Hex bolt M14x70	1
70	Lock nut M14	1
71	Hex bolt M10x25	4
72	Spring washer M10	4
73	Hex socket screw M8x16	4
74	Hair pin 6.3x63	1
75	B-Pin 27x60	1
76	B-Pin 22x120	1
77	Hair pin 3.2	2
78	Split cotter 3.2x25	2
79	Hex bolt M12x100	3
80	Hex bolt M12x70	2
81	Hex bolt M12x80	2
82	Hex bolt M6x20	6
83	Spring washer M6	6
84	Flat washer M6	6
86	Flexible Insert (Spider)	1

DU CAR