

D12
FORM NO. 769-01847F



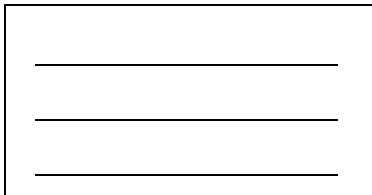
English	3
(Original operating instructions)	
Français	12
(Notice d'instructions d'origine)	
Deutsch	23
(Originalbetriebsanleitung)	
Dansk	32
(Originale driftsvejledning)	
Norsk	41
(Originale driftsanvisningen)	
Español	50
(Instrucciones de funcionamiento originales)	

Table of Contents

Safe operating practices 3
 Assembling the unit 4
 Preparing the unit 6
 Controls 7
 Operating the unit 8
 Transporting the unit 9
 Maintenance/Cleaning 9
 Shutting down the unit 10
 Warranty 10
 Information about the engine 10
 Troubleshooting 10

Information on the rating plate

This information is very important for subsequent identification when ordering spare parts and for customer service. Enter all information on the rating plate of your unit in the following field.



Safe operating practices

Using the unit correctly

This wood splitter is designed to be used – for splitting firewood for private use – in accordance with the descriptions and safety instructions indicated in this operating manual.

Any other use is not as intended. The user is liable for all injuries to third parties and damage to their property. Arbitrary changes to the unit will exclude the manufacturer from any liability for resulting injury and/or damage.

General safety instructions

Before switching on the unit for the first time, please carefully read and then comply with this operating manual. Inform other users how to operate the unit correctly. Do not operate the unit unless it is in the technical condition as stipulated and supplied by the manufacturer. Keep this operating manual in a safe place and always ready to hand. If the owner of the unit changes, always include the operating manual.

Before working with the unit

Persons who are under the influence of intoxicants, such as alcohol, drugs or medication must not use the unit. Persons under 18 years of age must not operate the unit. Local regulations may specify the minimum age of the user. The unit may be operated by one person only.

Before starting work, familiarise yourself with all equipment and controls as well as their functions. Before using the unit, always check that all controls, safety devices and guards are in perfect working order and that all threaded connections are tight. Before using the unit, have all damaged, worn or incorrectly functioning parts replaced. Store the fuel in designated containers only and never near heat sources (e.g. ovens or hot water tanks). Replace a damaged exhaust, fuel tank or fuel cap. Spare parts must satisfy the requirements specified by the manufacturer. Therefore use only original spare parts or those spare parts authorised by the manufacturer. Have repairs carried out by a repair shop only.

While operating the unit

When operating or working on the unit, wear appropriate work clothes such as: long trousers, hard-toed boots, ear protection, protective gloves, tight-fitting clothing, goggles.

Do not operate the unit unless it is in the technical condition as stipulated and supplied by the manufacturer. Operate the unit on a level, firm surface only and secure it against unintentional movements. Never fuel the unit while the engine is running or hot. Fuel the unit outdoors only. Avoid naked flames and sparks and do not smoke. Operate the unit in daylight or adequate artificial lighting only. Always ensure that all persons, particularly children, and animals are outside the working area (minimum distance 15 metres). When inserting a piece of wood, always hold it at the sides, never at the ends; never steady the wood by supporting it with your foot or leg. Otherwise, this may result in the crushing or amputation of fingers, toes, hands or feet. Operate all controls with your hands only. Never attempt to split more than one piece of wood at a time unless the splitting head has pulled itself all the way back and a second piece of wood is required to complete the splitting of the first. If an assistant is passing pieces of wood, he must be at least 5 metres from the unit before the unit is switched on. Pieces of wood should have straight cutting surfaces; if not, the least straight end and longest section of the wood should be laid towards the splitting column and splitting wedge, and the straight end towards the stop plate.

When splitting wood, always keep fingers away from cracks in the wood; cracks can close quickly and trap or crush fingers.

Always keep the work area clean. To prevent tripping hazards, immediately remove split wood from the area of the unit. Never move the unit while the engine is running. Exercise extreme caution when pulling/pushing the unit. Never sit or lie down on the unit. Never transport people or cargo on the unit. During operation hydraulic wood splitters build up high fluid pressures. Leaking hydraulic fluid may damage skin and result in septicaemia or even death. Always observe the following instructions:

- Never attempt to locate leaks with your hand.
- Do not use the unit if hoses, hose connections or pipelines are frayed, kinked, cracked or damaged.
- Stop the engine and relieve the hydraulic pressure before changing or adjusting hose connections, hoses, pipelines or other system components.
- Never change the pressure settings of the pump or valve.

Before detecting leaks, put on goggles and protective gloves and then move a piece of cardboard or wood over the suspected area and ascertain whether the cardboard or wood has changed colour. If escaping liquid causes injury, immediately cause a doctor. Serious inflammation or reactions may occur if medical treatment is not implemented immediately. To ensure a secure footin /safe working environment, always keep the work area and the area around the unit free of objects. Ensure that all statutory regulations are observed.

Before carrying out any work on the unit

Protect yourself from injury. Before carrying out any work on this unit:

- Switch off the engine,
- Wait until all moving parts have come to a standstill; leave the engine to cool down,
- Remove spark-plug terminal from the engine to prevent the engine from starting unintentionally,
- Before repairing, adjusting or checking hoses, hose connections, pipelines or other components, depressurise the hydraulics.

After operating the unit

Before leaving the unit, switch off the engine and remove the spark-plug terminal. Leave the engine to cool down before putting the unit away or in storage.

Safety devices

Safety devices, e.g. controls and protective devices and guards, are for your protection and must always be functional. Never modify safety devices or bypass their function.

Symbols on the unit

Various symbols are stuck on the unit. Below is an explanation of the symbols:

-  Attention!
Before switching on the unit, read the operating instructions.
-  Keep third parties out of the danger area.
-  Keep hands and other body parts from leaking hydraulic lines.
-  Never place hands or feet between splitting wedge and wood or near moving parts.
-  Wear eye and ear protection.
-  Wear protective gloves.
-  Working on steep slopes may be dangerous.
-  Before carrying out any work on the unit: follow instructions in the operating manual.

Always keep these symbols on the unit in a legible state.

Symbols in this manual

The following symbol is used in this manual:

Caution Danger

These symbols refer to dangers associated with the described activity which may cause injury and/or damage.

Graphical representations

The graphical representations may deviate slightly in detail from the purchased unit.

Assembling the unit

Attention!

When unpacking this unit, exercise extreme caution. Some components are very heavy and several persons or a hoist are required

Attaching the wheels

Fig. 1

Jack up the tank module by approx. 20–30 cm. Remove the plastic transportation caps from the outsides of the wheels. Remove cotter pin, hexagon castellated nut and washer from each axle.

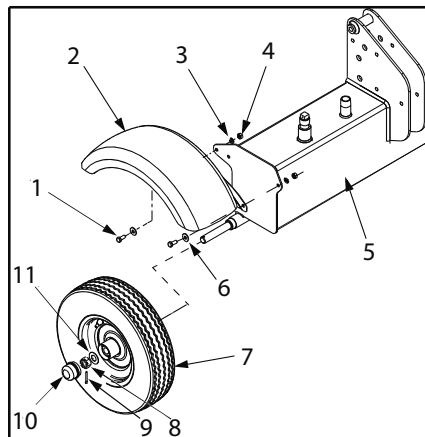


Fig. 1

- 1 Bolts
- 2 Mudguard (optional)
- 3 Lock washer
- 4 Hexagon nut
- 5 Hydraulic tank
- 6 Washer
- 7 Wheel
- 8 Castellated nut
- 9 Cotter pin
- 10 Cap
- 11 Washer

Note: Before attaching the wheels, it is recommended to polish the axles with emery cloth.

- Place the wheels, with the tyre valve on the outside, onto the respective axle ends. Push on the washer and secure with a castellated nut.
- Tighten the castellated nut until it is tight, then slacken it by approx. $\frac{1}{3}$ revolution and until one of the slots in the nut is facing the hole in the axle.
- On both wheels insert a cotter pin through the slot in the nut and through the hole in the axle and secure by bending out the ends.

Note: The wheels should rotate freely and there should be no lateral play. Place the caps on the hubs and tap into place with a rubber mallet.

Attention!

The maximum tyre pressure is 2 bar. The tyre pressure should always be the same for both tyres.

Attaching the mudguards (optional)

Fig. 1

- Remove nuts, lock washers, washers and hexagon bolts from the mudguards.
- Attach mudguards to the hydraulic tank with bolts, washers, lock washers and nuts from step 1.

Attaching the connecting rod

Fig. 2a and 2b

- Remove the bolts (2) and nuts (4) from the front of the hydraulic tank.
- Position the connecting rod (3) and attach with the bolts and nuts from step 1.
- Lower the hydraulic tank (1) and place on the attached wheels.
- Fold out the support:
 - Remove the spring cotter (7) and pin (8).
 - Fold out the support (5) and fix to the connecting rod with the pin and spring cotter.

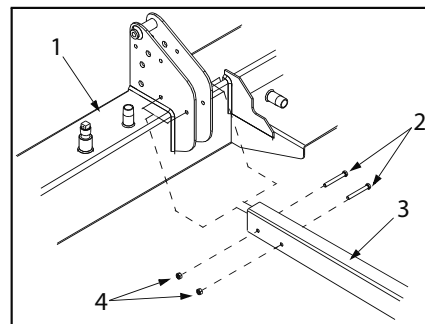


Fig. 2a

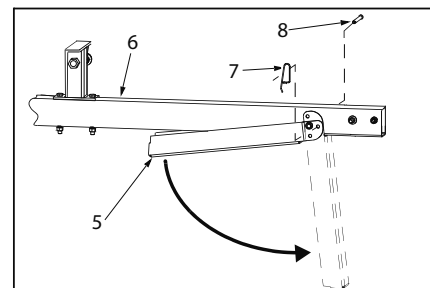


Fig. 2b

Attaching the splitting column

Fig. 3

Place the unit consisting of the splitting wedge, splitting column and cylinder in an upright position.

Note: Two persons may be required for this.

- Remove the pin (1) and cotter pin (2) from the holders and position the hydraulic tank (4) relative to the column.
- Insert the pin, which has just been removed, through the holders on the splitting column and the holder on the hydraulic tank unit. Secure with cotter pin (bend out the ends).

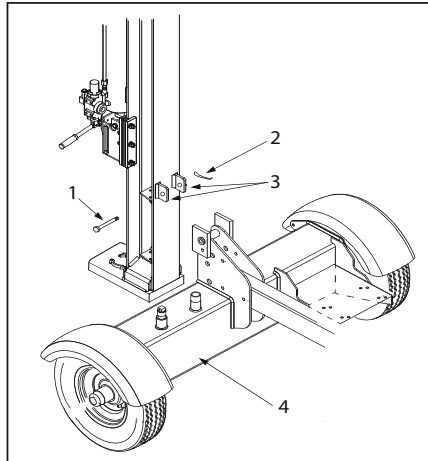


Fig. 3

Attaching the high-pressure hoses

Fig. 4

- Remove the protective cap from the connecting piece on the side of the pump (a little oil may flow out of the pump).

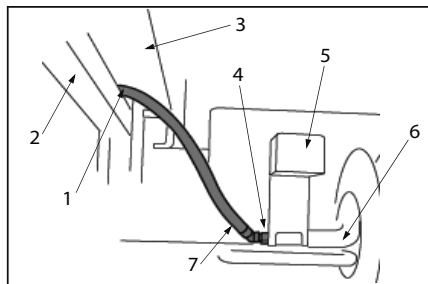


Fig. 4

- 1 Position of the high-pressure hose between connecting rod and column
 - 2 Connecting rod
 - 3 Splitting column
 - 4 Hose connecting piece
 - 5 Pump
 - 6 Intake hose
 - 7 High-pressure hose
- The high-pressure hose is connected to the control valve. Feed the hose between the column and the connecting rod and connect to the connecting piece on the pump.

Attaching the return-flow hose

Fig. 5

- Loosen the hose clip (2) on the free end of the return-flow hose and remove the protective insert from the end of the hose.
- Remove the protective cap from the connecting piece at the top of the filter head. Attach the end of the hose to the connecting piece (at the top of the filter head) and secure with the hose clip (tighten well).

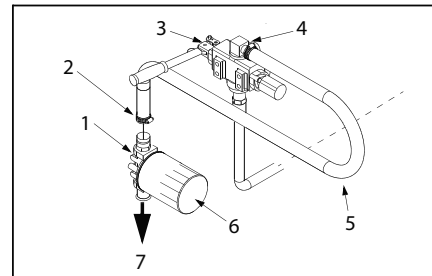


Fig. 5

- 1 Filter head
- 2 Hose clip
- 3 Control valve
- 4 Connected to the cylinder
- 5 Return-flow hose
- 6 Filter
- 7 To the hydraulic tank

Assembly work on the splitting column

Fig. 6-9

- Remove bolt and nut (A) from holder (B).
- Tilt the column (1) into a horizontal position (Fig. 6a).

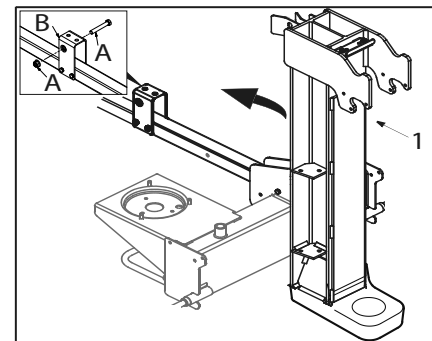


Fig. 6a

- Attach bolt and nut (A) and tighten (Fig. 6b).

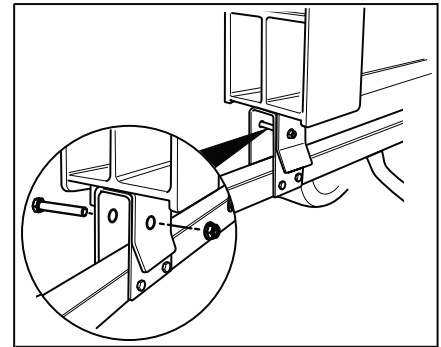


Fig. 6b

- Disconnect the stripper (5) – by removing the six bolts (3) and the washers (4) from the mount block (6) welded to the column (Fig. 7).

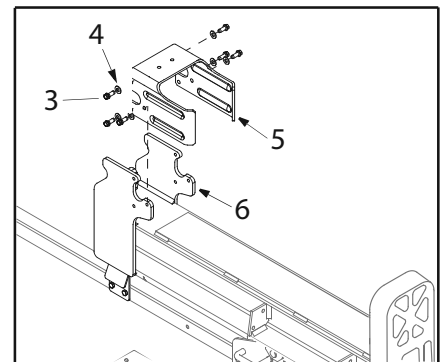


Fig. 7

- Unscrew the support (10) from the splitting column, on the side of the control valve (Fig. 8).

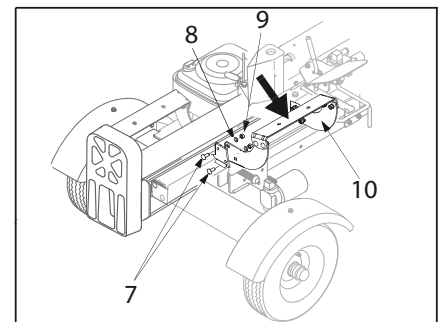


Fig. 8

- 7 Bolt
 - 8 Lock washer
 - 9 Hexagon nut
 - 10 Support
- Lift the cylinder up to the end of the splitting column and slide into the welded-on mount block (pin A must be situated in the recesses). (Fig. 9a)

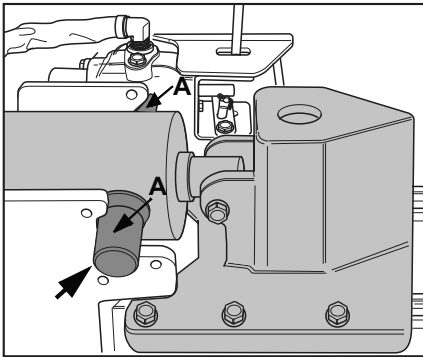


Fig. 9a

- Re-attach the stripper (5) above the wedge module and screw to the welded-on mount block with the previously removed small parts (see Fig. 7). **Fig. 9b**

Note: When the bolts have been tightened, there may be a small gap between the stripper and the welded-on mount block. This is normal.

- Re-attach support (10) to the control valve side of the splitting column, aligning the ends of the support with the column flanges. See **Fig. 9b**.

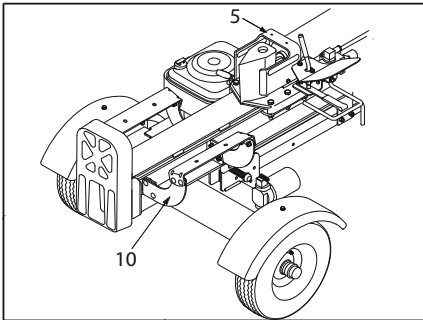


Fig. 9b

Preparing the unit

Engine

Fuelling and checking/topping up the oil level

Fill the engine with petrol and oil as described in the enclosed engine manual.
Note: The engine should already have been filled with oil at the factory – please check and, if required, top up (oil level must be between the “Full/Max.” and “Add/Min.” mark).

Never fill the petrol tank to overflowing, but to no more than 2 cm below the lower edge of the inlet nozzle.

Close the fuel tank securely.

Risk of suffocation from carbon monoxide.

Run the internal combustion engine outdoors only.

Risk of explosion and fire.

Fuel/petrol vapours are explosive and fuel is highly flammable. Before starting the engine, fill with fuel. Keep the fuel tank closed while the engine is running or still hot. Before refuelling, switch off the engine and leave to cool down.

Avoid naked flames and making sparks and do not smoke. Refuel the unit outdoors only. Do not start the engine if fuel has overflowed. Move the unit away from the spilled fuel and wait until the fuel vapours have evaporated.

To prevent the risk of fire, please keep the following parts free of foliage, small twigs and leaking oil: engine, exhaust, fuel tank.

Unit

Lubricating the splitting column

Lubricate the area of the splitting column (where the splitting wedge moves to and from) with engine oil; do not use lubricating grease.

Filling the hydraulic tank

Fig. 10

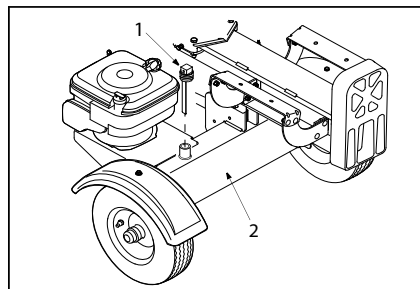


Fig. 10

The tank has a capacity of 13.2 l.

- Screw the vented dipstick (1) out of the inlet nozzle opening in the hydraulic tank (2).
- Fill the hydraulic tank with Dexron III automatic gear oil or 10W AW hydraulic fluid.
- Do not pour in too much oil.
- Check the level with the dipstick. The oil level must be between the “Full/Max.” and “Add/Min.” mark.
- Re-insert the vented dipstick and tighten until the upper side of the thread is flush with the upper side of the nozzle.
- Disconnect the spark-plug terminal from the engine.
- Slowly pull out the pull starter on the engine, approx. 10 times, in order to flood the hydraulic pump.
- Reconnect the spark-plug terminal to the engine and start the engine as indicated in the chapter “Operating the unit”.

⚠ Caution!

Please first read the whole operating manual for the unit and the engine.

- Using the operating levers, move the splitting wedge all the way backwards.
- Then let the splitting wedge move all the way forwards.
- Refill the hydraulic tank according to the level indicated on the dipstick.

⚠ Caution!

If the hydraulic tank is not refilled, the warranty for the unit will no longer be valid.

- Move the splitting wedge 12x all the way forwards and backwards in order to bleed the hydraulic system.
- Top up the hydraulic tank as far the mark on the dipstick.

⚠ Caution!

A part of the original hydraulic fluid was taken up by the cylinder and the hoses. Ensure that the tank is always refilled to prevent damage to the hydraulic pump.

Note: A little fluid may escape out of the ventilation screw; when the system warms up, the fluid expands.

Controls

Fig. 11

⚠ Caution!

Compare the diagram in Fig. 11 with the controls on your unit and familiarise yourself with their functions before you start work. In an emergency you must know how to switch off the unit quickly.

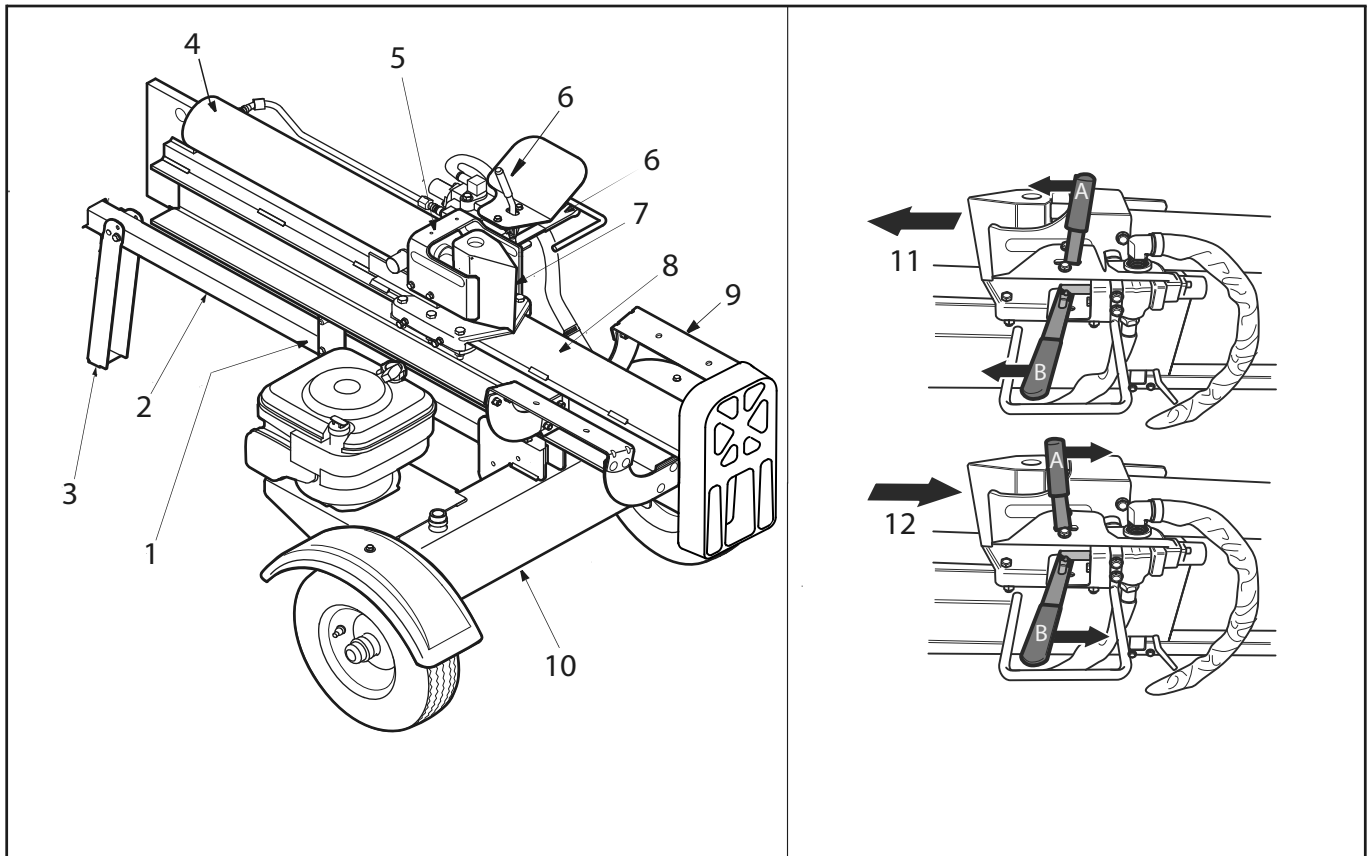


Fig. 11

- 1 Horizontal column lock
- 2 Connecting rod
- 3 Support block
- 4 Cylinder
- 5 Stripper
- 6 Operating levers
- 7 Splitting wedge
- 8 Splitting column
- 9 Wood support
- 10 Hydraulic tank
- 11 Feed position = forward movement of the splitting wedge to split the wood.
Note: Both levers (A and B) must be pressed simultaneously.
- 12 Reverse position = backward movement of the splitting wedge.
Note: Both levers (A and B) must be pressed simultaneously.

Operating levers

The operating levers (6 or A/B) have three positions.

Feed position: Press both operating levers to the left in order to drive the splitting wedge into the piece of wood.

Note: Both operating levers must be pressed simultaneously; as soon as one lever is released, the splitting wedge stops.

Neutral position: Release one or both operating levers to stop the movement of the splitting wedge.

Reverse position: Press both operating levers to the right in order to retract the splitting wedge.

Note: Both operating levers must be pressed simultaneously; as soon as one lever is released, the splitting wedge stops.

Engine controls

The positions and functions of the controls for the engine can be found in the enclosed engine manual.

Operating the unit

Also follow the instructions in the engine manual!



Danger

Risk of injury.

Persons, children and/or animals must be kept away from the unit while it is being operated. They could be injured by ejected objects, etc. Children must never operate the unit.

Always secure the unit to prevent it from rolling away.

When working on slopes, the unit may tip over and you may be injured. Therefore be especially careful if working in this situation. Never work on slopes which have a gradient of more than 16%.

If the unit is damaged: Immediately switch off the engine and contact a repair shop. When working, always wear protective gloves made of leather, hard-toed boots, ear protection, goggles and tight-fitting clothing.

Always split pieces of wood along the wood grain. Never attempt to remove partially split wood manually from the splitting wedge.

Risk of suffocation by carbon monoxide.

Run the internal combustion engine outdoors only.

Risk of explosion and fire.

Fuel/petrol vapours are explosive and fuel is highly flammable. Before starting the engine, fill with fuel. Keep the fuel tank closed while the engine is running or still hot. Before refuelling, switch off the engine and leave to cool down.

Avoid naked flames and making sparks and do not smoke. Refuel the unit outdoors only. Do not start the engine if fuel has overflowed. Move the unit away from the spilled fuel and wait until the fuel vapours have evaporated. To prevent the risk of fire, please keep the following parts free of foliage, small twigs and leaking oil: engine, exhaust, fuel tank.



Risk of injury from defective unit.

Do not operate the unit unless it is in perfect working order.

Before operating the unit, always carry out a visual inspection. Check in particular that the safety devices, covers, holders, controls, hydraulic hoses and threaded connections are undamaged and tight. Do not operate the unit if the hydraulic fluid is colder than $-6\text{ }^{\circ}\text{C}$ or warmer than $+65\text{ }^{\circ}\text{C}$.

Before operating the unit, have all damaged parts replaced or repaired by a repair shop.

Operating times

Observe the national/municipal regulations concerning times of use (if required, ask your local authority).

Before operating the unit

Check:

- all protective equipment.
- the engine oil level (see engine manual).
- the hydraulic fluid level.
- that hose clips on the hydraulic lines are tight.
- the tank is full (petrol).
- the tyre pressure (see "Maintenance" section or tyre wall).
- air filter area for dirt.
- lubrication of the splitting column – Lubricate the area of the splitting column (where the splitting wedge moves to and from) with engine oil; do not use lubricating grease. Remember to lubricate the front and rear stops as well.

Making settings before using the unit



Caution!

Do not make any settings while the engine is running

- Remove the spark-plug terminal.
- Park the unit on firm, level and dry ground.
- Secure both wheels at the front and rear with wedges to prevent the unit from rolling away.





Caution!

Always ensure that the splitting column is locked properly.




Starting the engine

Note: Some models have no throttle, the speed is set automatically.


The engine always runs at optimum speed.

- Connect the spark-plug terminal.
- Open the fuel tap (depending on the model).
- Set the engine stop switch on the engine (depending on the model) to "ON".
- Set the choke lever to "Choke / .
- Set the throttle (if featured) to "Fast / .
- Slowly pull the pull-starter handle until it begins to resist, then pull it through quickly and forcefully. Do not let the pull-starter handle spring back, but guide it back slowly.

Making settings after starting the engine

- Slowly reset the choke lever to "RUN/OFF" until the engine is running quietly.
- Push the throttle (if featured) between the "Fast / " and "Slow / " positions to warm up the engine briefly.
- **Note:** To operate the throttle (if featured), set to "Fast / .

Stopping the engine

- Set the throttle (if featured) to position " / 0" or the engine operating switch (depending on the model) to "OFF".
- Close the fuel tap.
- Before leaving the unit, remove the spark-plug terminal.

Splitting wood with the unit



Achtung!

Follow all safety instructions when operating the unit. Always secure the unit to prevent it from rolling away.

The pieces of wood which are to be split must not exceed or fall below the following dimensions:

Maximum length:	700 mm
Minimum length:	150 mm
Maximum diameter:	500 mm
Minimum diameter:	100 mm

Always split pieces of wood along the wood grain. Never remove incompletely split wood manually from the splitting wedge – your fingers could become trapped between the split pieces of wood.

- Start the engine as indicated.
- In cold weather, before work, run the wedge forwards and backwards 6–8 times to warm up the hydraulic fluid.
- Place a piece of wood on the stop plate (horizontal).

To steady the piece of wood, always grip the wood by the side.

Never take hold of the end between the piece of wood and splitting wedge.

- Only one person should steady the piece of wood and actuate the operating levers so that he always has control over the wood and the splitting wedge.

Note: Pieces of wood should have straight cutting surfaces. If pieces of wood have not been cut straight, the least straight end and longest section of the wood should be laid towards the splitting column and splitting wedge, and the straight end towards the stop plate.



Caution!

Always operate the wood splitter from behind the hydraulic tank of the unit.

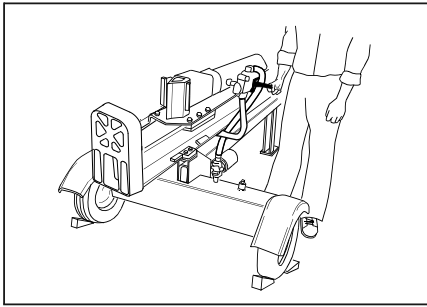


Fig. 12

- Simultaneously press both operating levers into the FORWARD position, i.e. to the left.

Note: To stop the wedge movement, release one or both operating levers.

To retract the splitting wedge, simultaneously press both operating levers into the BACKWARD position, i.e. to the right.

- When the splitting wedge is moving backwards, the stripper removes partially split wood from the splitting wedge. This may be required when splitting freshly cut wood or thick pieces of wood.

Note: Pieces of wood with ingrowing branches are always difficult to split. If a piece of wood becomes jammed in the splitting wedge, first switch the unit off. When removing the piece of wood, do not place hands between the two parts.

Then attempt to split the piece of wood at another point.

After working with the unit

Before leaving the unit, switch off the engine and remove the spark-plug terminal. Leave the engine to cool down before putting the unit away or in storage.

Transporting the unit

⚠ Caution!

Before transporting the unit, always:

- close the fuel tap
 - remove the spark-plug terminal
- Never manually pull or push the unit over hilly or uneven terrain.

To change the place of use, push or pull the unit over short distances only and on absolutely flat terrain/surfaces only. Otherwise use a suitable means of transport.

Short distances

⚠ Danger

Slowly and carefully move the unit over flat surfaces.

Long distances

⚠ Caution Damage in transit

The utilised means of transport (e.g. transportation vehicle, loading platform, etc.) must be used as intended (see associated operating manual).

If transported on a transportation vehicle, the unit must be secured to prevent it from slipping.

⚠ Leaking fuel is an environmental hazard.

Transport the unit in a horizontal position only.

Maintenance/Cleaning

⚠ Caution/Danger

Risk of injury from engine starting unintentionally.

Protect yourself from injuries.

Work carefully and always wear goggles and protective gloves.

Before carrying out any work on this unit

- Switch off the engine.
- Move the operating lever to Neutral.
- Wait until all moving parts have come to a standstill; leave the engine to cool down.
- Remove spark-plug terminal from the engine to prevent the engine from starting unintentionally.
- Before repairing, adjusting or checking hoses, hose connections, pipelines or other components, depressurise the hydraulics.

Cleaning

⚠ Caution

Risk of damaging the unit.

Do not clean the unit with a high-pressure cleaner, garden hose or water.

- If possible, clean the unit directly after work.
- Park the unit on firm and level ground.
- Secure the unit to prevent it from rolling away.

Maintenance

Disposal and the environment

⚠ Caution

Oil is an environmental hazard.

When changing the oil, hand over waste oil to a waste oil collection centre or a disposal company.

Servicing the unit

Hydraulic fluid and oil tank filter

- Before using the unit, always check the hydraulic fluid level in the oil tank of the wood splitter. Always maintain the level within the indicated area between “Min and Max” (see dipstick).
- Have a repair shop change the hydraulic fluid every 100 operating hours and clean the oil tank filter

Note: Contaminants in the hydraulic fluid may damage parts of the hydraulic system. Any work, maintenance and service work on the hydraulic system may be carried out by an authorised repair shop only.

Hydraulic filter

Change the hydraulic filter every 50 operating hours. Use a 10-micron hydraulic filter (original filter) only.

Splitting column and splitting wedge

Before using the unit, always lubricate both sides of the splitting column (where it comes into contact with the splitting wedge) with engine oil.

Hose clips

Before using the unit, always check that the hose clips on the intake hose and return-flow hose are tight.

Flexible pump coupling

The flexible pump coupling is a nylon insert designed like a cross coupling between the pump and engine shaft. Eventually the coupling hardens and the function deteriorates.

The coupling should be replaced if vibrations or noises can be detected in the area between the pump and engine.

⚠ Caution!

Never strike the engine shaft in any way, as the engine may be permanently damaged.

Tyres

Check the tyre pressure each month. The maximum tyre pressure is 2 bar (see also manufacturer's recommendation on the tyre walls) and should always be the same for both tyres.

Engine

Follow all instructions in the engine operating manual.

The complete unit with engine

Once per season have a repair shop inspect and service the unit. Also follow the instructions in the engine manual concerning maintenance of the engine.

Shutting down the unit



Caution

Material damage to the unit.

When the engine has cooled down, store the unit in a clean and dry location.

If storage is prolonged, always protect the unit, e.g. in winter, from rust.

After the season or if the unit is not used for more than a month:

- Clean the unit.
- Protect all metal parts from rust by wiping them with an oiled cloth or spraying them with oil.
- Drain fuel (outdoors only) and disconnect the engine as described in the engine manual.
- Inflate the tyres to the appropriate pressure.
- Store the unit in a clean, dry location.

Warranty

The warranty regulations issued by our company or the importer are valid in all countries. We shall repair any faults on your unit free of charge in accordance with the warranty, provided the fault was due to defective materials or manufacturing. If claiming under the warranty, please contact your seller or your nearest branch.

Additional information concerning the warranty

The warranty will be deemed null and void with immediate effect if:

- there is too little or incorrect hydraulic fluid in the unit.
- settings of the pressure-relief valve or pressure of the control valve were changed without the knowledge and instruction of the factory.



Caution!

A higher pressure could cause the hoses to burst, the pump to crack and aggressive fluid to escape, resulting in serious injuries.

- The hydraulic pump was disassembled.
- Flexible pump coupling worn due to incorrect or irregular inspection/maintenance.
- No or improper lubrication of the splitting column or unit.
- The hydraulic system overheats.
- The unit was started at a temperature below $-6\text{ }^{\circ}\text{C}$ or above $+65\text{ }^{\circ}\text{C}$.
- Unnoticed leaks in the hydraulic system cause damage.

Information about the engine

The engine manufacturer is liable for all engine-related problems with regard to power, power measurement, technical specifications, warranty and service. Information can be found in the owner's/user's handbook supplied separately by the engine manufacturer.

Troubleshooting



Danger

Risk of injury from engine starting unintentionally.


Protect yourself from injury.

Before carrying out any work on the unit:


- Switch off the engine.
- Move the operating lever to Neutral.
- Wait until all moving parts have come to a standstill and the engine has cooled down.
- Remove spark-plug terminal from the engine to prevent the engine from starting unintentionally.
- Before repairing, adjusting or checking hoses, hose connections, pipelines or other components, depressurise the hydraulics.

Faults which occur while you are operating your unit often have simple causes which you should recognise and which to some extent you can eliminate yourself. If in doubt, please contact your repair shop.

Troubleshooting the engine

Problem	Cause	Solution
Engine does not start.	Ignition cable removed. Tank empty or fuel stale. Throttle/engine operating switch not in start position. Choke not actuated. Spark plug defective.	Reconnect ignition cable to spark plug. Top up tank with fresh, clean petrol. Set throttle to  or engine operating switch to "ON". Actuate choke. Clean, adjust or change.
Engine is misfiring.	Spark-plug terminal is loose. Choke still actuated. Fuel line blocked or petrol stale. Air filter dirty. Carburettor misaligned.	Connect spark-plug terminal. Set choke lever to OFF. Have fuel line cleaned. Top up tank with fresh, clean petrol. Clean or change air filter. Contact an authorised dealer.
Engine is overheating.	Too little engine oil. Air filter dirty. Carburettor incorrectly set.	Top up crankcase with correct oil. Clean or change air filter. Contact an authorised dealer.

Troubleshooting the hydraulics

Problem	Cause	Solution
Hydraulic splitting cylinder does not move.	Drive shaft broken. Shaft coupling slack. Gearwheel areas damaged. Pressure-relief valve damaged. Hydraulic lines blocked. Oil level too high/low. Control valve damaged/blocked.	Contact an authorised dealer. Contact an authorised dealer. Contact an authorised dealer. Contact an authorised dealer. Contact an authorised dealer. Check oil level. Contact an authorised dealer.
Hydraulic splitting cylinder moves slowly to and from.	Gearwheel areas damaged. Engine speed too low. Pressure-relief valve damaged. Oil level too high/low. Oil contaminated. Control valve leaking internally. Cylinder damaged internally.	Contact an authorised dealer. Set throttle on the engine to  . Contact an authorised dealer. Check oil level. Contact an authorised dealer. Contact an authorised dealer. Contact an authorised dealer.
Hydraulic cylinder leaking.	Seals broken. Cylinder run in.	Contact an authorised dealer. Contact an authorised dealer.
Engine is running, but wood is not being split or is being split too slowly.	Small gearwheel area damaged. Non-return valve of the pump leaking. Oil level too high/low. Oil contaminated. Control valve leaking internally. Cylinder overloaded. Cylinder damaged internally.	Contact an authorised dealer. Contact an authorised dealer. Check oil level. Contact an authorised dealer. Contact an authorised dealer. Do not attempt to split wood against the grain. Contact an authorised dealer.
Engine stalls during the splitting process.	Too little power/weak engine. Cylinder overloaded.	Contact an authorised dealer. Do not attempt to split wood against the grain.
Engine is not running or stalls under load.	Hydraulic pump defective. Engine has too little power. Hydraulic lines/control valve blocked.	Contact an authorised dealer. Contact an authorised dealer. Contact an authorised dealer.
Pump shaft seal leaking.	Drive shaft broken. Gearwheel areas damaged. Shaft seal defective. Vent hole in the oil tank blocked.	Contact an authorised dealer. Contact an authorised dealer. Contact an authorised dealer. Ensure that the tank has been vented correctly.

Note: Contact an authorised customer service for repairs which go beyond the measures mentioned above.