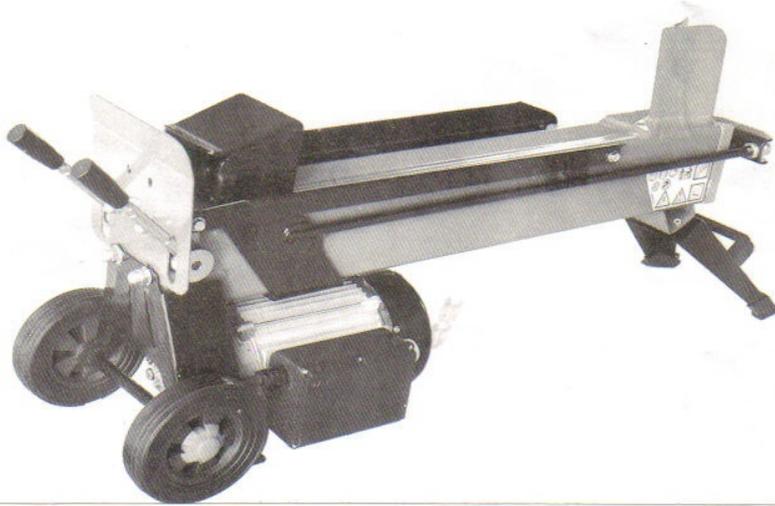


# LS7T-52 LOG SPLITTER

## Operation Manual



**POWERHOUSE**

---

Please carefully read this operation manual before starting work.

## **IMPORTANT! READ BEFORE REMOVING LOG SPLITTER**



**Always use CAUTION when working with machinery.**

**CAUTION:** Oil may leak during the assembly process. It is advised to lay down cardboard or newspaper prior to assembly in case this happens.

1. Carefully *remove* the Main Body (part no. 45 in manual) and Motor Assembly (part no. 41, packed in a separate polyfoam box) from the packaging box. **Turn over** the main body and place it on the foam block, which is inside the packaging box with the machine.

**MAKE SURE THE WEDGE FACES TOWARDS THE GROUND (the log splitter will be upside-down).**

2. Remove the hexangular spanner (alan wrench) from the spare parts bag. Unscrew the THREE (3) silvery inner hexangular bolts on the end of the main body.

Remove the YELLOW QUADRATE IRON PLATE (this piece will *not* be re-attached).

Remove the two (2) O-ring oil seals *inside* the YELLOW QUADRATE IRON PLATE.

Take the O-ring oil seals and insert them into the two (2) holes on top of the oil pump cover (part no. 40) which is attached to the Motor Assembly (part no. 41). (These two (2) wholes are the same size as the holes inside the yellow quadrate iron plate). **Install** the O-ring oil seals on the pump cover in the same fashion they were when they were on the yellow quadrate iron plate.

3. Connect the Motor Assembly (part no. 41) onto the main body (part no. 45). These parts will be connected in the same manner they were prior to removing the yellow quadrate plate.

Align the three (3) holes on top of the Oil Pump Cover (part no. 40) with the three (3) holes on the Main Body. Tighten the holes with the three silvery inner hexangular bolts. *\*Accurate alignment will ensure against spilling oil\**

4. To complete assembly of WHEELS, SUPPORT FEET, AND OPERATING HANDLE, see Operation Manual.

# WARRANTY



We warrant this product against any manufacturing defects in material and workmanship for a period of one (1) year from date of purchase. This warranty is valid only by completion of the warranty card AND original or photocopy of sales receipt.

This warranty does not cover any defects or damages caused by the following:

- Misuse of the product.
- Negligence or lack of maintenance.
- Normal wear on parts.
- Use of parts not manufactured by the manufacturer.
- Modification or removal of parts.

NOTE: Do Not Return This Product To The Store Where It Was Purchased. To make a claim, write to Sylvan Company, Inc. at the address below. Customer Service will inform you of the appropriate procedure to follow. The Warranty Card must be attached to the sales receipt and be presented when Warranty Services are required.

The purchaser is responsible for all related expenses if product is not covered under warranty.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STORE WHERE PURCHASED: \_\_\_\_\_

DATE OF PURCHASE: \_\_\_\_\_

MODEL: \_\_\_\_\_

**SCH Imports**  
**5958 Snow Hill Road**  
**Suite #144 P126**  
**Ooltewah, TN, 37363**

IMPORTANT: KEEP FOR FUTURE REFERENCE!

Thank you for purchasing Type LS7-52 7-Ton Log Splitter. Please carefully read this operation manual and strictly observe these instructions for your safety and those around you. Following these instructions will ensure long and satisfactory use of this product.

## **GENERAL SAFETY RULES**

### **Warning:**

Operation and use of this machine has risk but caution can reduce risk or personal injury. Negligence of basic safety precautions can result in injury to the operator or property damage.

1. Read and fully understand the operation manual, including the operation and scope of application as well as potential hazards.
2. Check for damaged parts before use. If a part appears to be damaged, determine if the damage will interfere with normal operation and intended function of the log splitter before taking further action. Note the function of moving parts and other conditions that may have a negative impact on the normal operating performance of this machine. Damaged parts must be fixed or replaced as required.
3. Make sure power cord is not damaged.
4. Before starting ANY maintenance, calibration, or part replacement on the machine, switch power OFF and UNPLUG machine from power outlet.
5. Maintain the machine so it is always ready for use.
6. It is strongly recommended for the operator and those nearby to wear ear protection, eye protection, and work gloves.
7. NEVER operate this machine under the influence of drugs, alcohol, or medicine.
8. NEVER stand on the machine or you risk injury due to falling.

9. NEVER operate this machine without supervision.

10. Turn off machine when it has completely stopped.

11. Take care to maintain a safe distance between your hands and the log, and between the pusher and wedge. If machine is turned ON, never place hands on moving parts of the machine.

12. NEVER wear loose clothing or jewelry when operating the machine. Keep long hair tied back to avoid getting it entangled in the machine.

## **ELECTRICAL CONNECTION**

Connect the power cord to a standard power supply via an approved plug or suitable protective isolated switch. The power supply should meet specifications stated on the receptacle cover.

### **Extension cord**

It is recommended to connect the machine's extension cord to a moisture-proof plug and avoid exposure to moisture.

This cord will produce a voltage drop, which can prevent the electrical motor from operating at full power, therefore decreasing the machine's performance. To prevent this, make sure the power cord satisfies the following specifications:

0 – 10 meters / 0 - 32.1 feet

Diameter of cord: 5 square millimeters / 05 centimeters squared.

**NEVER use extension cord exceeding 10 millimeters.**

If in doubt, contact a qualified electrician. Do not make an electrical repair yourself.

### **Symbols used**

Standard graphic symbols are used on all machines in order to ensure complete safety. Review these symbols to ensure your safety when operating the log splitter.



It is obligatory to read the machine's use and maintenance manual in full before using the machine.



It is obligatory to wear safety footwear at all times to provide protection against the risk of logs accidentally falling on feet.

It is obligatory at all times to wear gloves which protect the hands against chips and splinters which may be produced during work.



It is obligatory at all times to wear goggles or a visor to protect against chips or splinters which may be produced during work.



It is forbidden to remove or tamper with the protection and safety devices.



Apart from the Operator, it is forbidden to stand in the range of motion/action of this machine. No other person or animal may be present within 5 meters (16.5 feet) of the machine.



Dumping used oil in the environment is forbidden. Dispose of the oil according to current legislation in the country where this operation is carried out.



Danger of cutting or crushing of the hand. Never touch hazardous areas while the machine is in operation.

Warning! Always pay attention to the movement of the log pusher.



Warning! Never remove a log trapped in the wedge with your hands.



Warning! Before starting any maintenance described in this manual, disconnect the plug of the machine.



Warning! Voltage as indicated on the rating plate.

## USE OF CONTROL ROD

How to use control rod to vary the speed: with control rod in the first position (position under the middle), the speed of the log splitter is faster with less strength; with control fully depressed (fully extended towards the ground), the speed of the log splitter is slower but has more power.

## SPECIAL WARNINGS

Using this powerful machine may create special hazards. Take caution to safeguard yourself and those around you.

### Hydraulic systems

Never operate this machine if there is a hazard presented by the hydraulic system. Before using the splitter, check for hydraulic leaks. Be sure the machine and your work area are free of oil spills. Hydraulic fluid can create hazards, causing you to slip, fall, or lose control with your hands due to oil residue. Hydraulic fluid spills also present a fire hazard.

### Electrical safety

Never operate this machine if there is an electrical hazard, or in wet conditions. Never operate this machine with an improper electrical cord or extension cord. Never operate this machine unless

it is plugged into a properly grounded power outlet, which supplies specified power and is protected by a 20 Amp circuit breaker.

### **Physical Hazards**

Log splitting creates special physical hazards. Never operate this machine unless you are wearing proper safety gloves, hard-toed shoes, and approved eye protection. Be careful of splinters that will be produced during the log splitting process. To avoid puncture injury or jamming of the machine, never try to split logs that are too small to properly fit on the machine. Never attempt to split logs containing nails, wire, or other debris. Clean up as you work; accumulated split wood and chips can create a hazardous work environment. Never continue to work in a cluttered work area, which may cause you to slip or fall. Keep onlookers away from this machine, and never allow unauthorized persons to operate this machine.

### **NOTICE:**

**No list of warnings is all-inclusive. The operator must use commonsense and operate this machine in a safe manner.**

### **FEATURES OF THIS LOG SPLITTER**

- 1. Portable** – Small size, lightweight and built-in wheels make it easy to deliver this powerful machine to the work site.
- 2. Powerful** – 7-ton power delivered by a sturdy hydraulic ram will make short work of your log splitting task.
- 3. Electric Powered** – Convenient and reliable electric powered hydraulic system avoids the expense and hassle of

maintaining a small gas engine. Just plug it in and start splitting.

**4. Hydraulic Ram** – Powerful hydraulic ram splits logs in a safe, controlled manner, without axes or sledge hammers.

**5. 2-Hand Safety Control** – Built-in safety design keeps hands away from the log and helps avoid coming in contact with splintering that may occur.

**6. Durable Steel Construction** – Welded steel construction and enclosed hydraulic ram, make this a tough, durable machine you will use for years.

### **KEY SPECIFICATIONS**

**LS7T-52**

Electrical motor:

110 volts – 120 volts/60 hertz 3340 rpm

3 horsepower (2200 Watts)

Max. force: 7 tons

Log size capacity: 520 mm / 20.47”

(length) 50 – 300 mm / 1.96” – 11.81”  
(diameter)

Ram Travel: 300 mm / 11.81”

Ram Diameter: 30mm / 1.18”

Hydraulic Oil Capacity: 3.1 Liters

Overall Dimensions: 1070 mm / 42.12”

(length) x 300 mm / 11.81” (Width) x

490 mm / 19.29” (height)

Net Weight: 49 kg / 107.8 lbs.

### **Special safety regulations for the Log Splitter**

#### **Warning:**

This powerful log splitter presents some hazardous risks. Take precaution to protect yourself and those around you. Observe basic safety precautions to reduce risk of injury. Please carefully read this operation manual before starting work.

1. This machine must always be used by one operator only.

2. Never split logs bigger than the specified log size capacity. Do not attempt to split logs with debris such as nails, staples, etc as this may cause a jam or damage the machine. The end of the log must be level and all branches must be removed prior to splitting. All logs must be split along the direction of the vein on the trunk. Failure to cut the log following the direction of the log could damage the log splitter.
3. The operator must use both hands on the control rod and should never attempt to use other means to control the control rod.
4. The log splitter is to only be operated by adults who have read this operation manual.
5. Position the machine on a support of 60-75 cm (2.63" – 2.95") high, free from any objects that could prevent freedom of movement for the operator while working. It is recommended to operate the log splitter on a log splitter platform. Never operate this machine on the ground because this may increase the risk of injury to the face as a result of splintering or debris that may occur during the log splitting process.
6. **Danger!** Never split more than one log at a time because doing so may cause the logs to jump.
7. **Danger!** Never place a new log or change a log when the machine is in use.
8. When the machine is in use, all other people and animals with the exception of the operator must maintain a minimum five (5) meters / 16.4'ft. distance.
9. Never tamper with the protective device on the log splitter or work without it.
10. When trying to split a hard log, never force the log splitter for more than five seconds. The high temperature of the oil may damage the machine under pressure. If this occurs, stop the machine and turn the log 90 degrees, then resume splitting. If the log still cannot be split,

then the hardness of the log exceeds the capacity of the machine and must not be used on the log splitter.

11. Never leave the machine running unintended. Always keep the machine turned off and unplugged from the electrical outlet when not in use.
12. Never use this machine near natural gas, a gasoline tank, or other flammable materials.
13. Never open the switch box or electrical motor cover. Always contact a qualified electrician if a problem is suspected.
14. Always keep the machine and power cord a safe distance away from water. Handle the power cord with care to prevent it from being damaged. Keep the power cord away from high temperatures, oil and sharp objects.

### **Recommended log size**

Log size capacity: 520 mm / 20.47"  
(length) 50 – 300 mm / 1.96" – 11.81"  
(diameter)

1. The specified diameter is just for reference. If the log has a knot or the log fiber is too hard, it will be difficult to split.
2. Never use the cam pressure to force the log splitter to split an unusually hard log and do not attempt to do so for over 5 seconds.

It is important to stop the machine if a log cannot be split after the first attempt. When the machine is stopped, turn the log 90 degrees and then resume splitting. If the log still cannot be split, then the hardness of the log exceeds the capacity of the machine and must not be used on the log splitter.

### **Recommended hydraulic oil**

The following hydraulic oil is recommended for use in the hydraulic ram:

**SHELL TELLUS T22**

**ARAL VITAM Gf22**

**SP ENGERGOL HCP22**

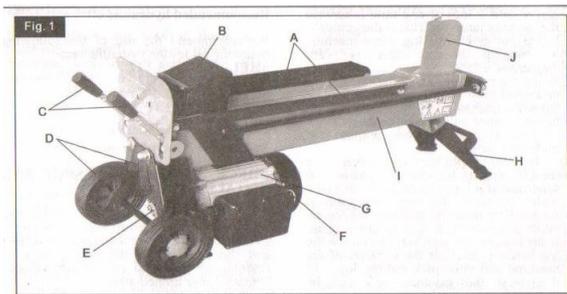
**MOBILE DTE11**

**Or equivalent oils**

Never use other kinds of oils.

### **CHECK BEFORE UNCASING AND INSTALLATION**

Remove all components from the packaging box and check each item to ensure it has not been damaged in the shipping process. If damage from shipping is found, contact the dealer immediately.



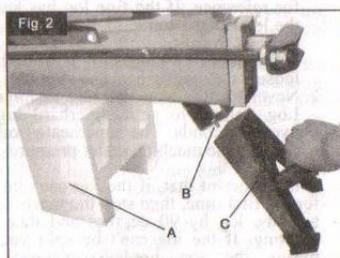
**Figure 1: List of all major components**

Check these components according to the following list and Figure 1.

- A. Log guiding plates
- B. Log pusher
- C. Operating handle assembly
- D. Wheel and frame
- E. Oil pump
- F. Electrical motor switch
- G. Electrical motor assembly
- H. Supporting feet
- I. Main body
- J. Splitting wedge

All the screws, bolts, washers, and jig are in the packing box. (The complete list is on the attached part list).

### **INSTALLATION OF WHEELS & SUPPORTING FEET**

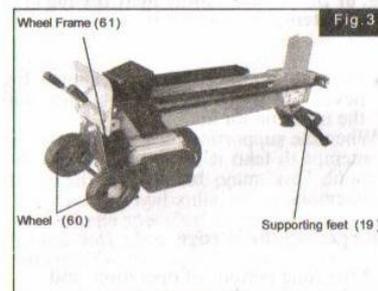


Carefully remove the log splitter from the packaging box, with the help of another able person, and place it on the foam material (block) that came in the packaging box. (See Figure 2).

Place the main part of the machine on the foam material (block) and assemble

the supporting feet (Part 19) using 2 screws (Part 21) and 2 nuts (Part 20). Tighten the screws and nuts. (See Figure 3).

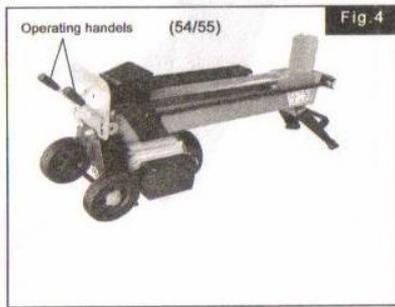
With the main part on the foam block and supporting feet attached, use the safety ring (Part 59) to attach 2 wheels (Part 60) onto the shaft of the wheel frame (Part 61), and then use the wheel shaft cover (Part 58) to cover the wheels. Once in place, check the wheels to make sure they rotate properly. (See Figure 3).



### **Installation of operating handle**

Remove the operating handles (Parts 54/55) from the box, and screw them onto the corresponding hole of the handles. Tighten the screws. (See Figure 4).

**Now the log splitter is ready to use.**



## OPERATION

1. **Plan your work site.** Work safely and efficiently by planning your work before you begin splitting logs. Have your logs positioned where they can be easily reached. Choose a location near the split wood or transport the split wood to your worksite.

2. **Prepare the logs for splitting.** This log splitter accommodates logs up to 520 mm / 20.47" in length. When cutting up logs or limbs, do not cut the sections longer than the specified length. Do not attempt to split green logs. Dry, seasoned logs are much easier to split and will not jam as frequently as green wood might (due to its high level of moisture).

3. **Route the power cord.** Locate an appropriate power outlet and secure an extension cord if necessary. Route the cord from the splitter to the power source in a way that safeguards against tripping over the cord or having the cord being damaged in the works session. Be sure to avoid wet conditions.

4. **Position splitter securely.** Be sure the splitter is positioned firmly on a level, solid supporting platform, 60-75 cm (2.63" – 2.95") high. The splitter should be free from any objects that could prevent freedom of movement for the operator while working. Never operate this machine on the ground because this may increase the risk of injury to the face as a result of splintering or debris that may occur during the log splitting process. If necessary, block the wheels to prevent rolling.

5. **Open the air bleed.** (see A in Figure 5). Loosen the BLEED SCREW (part 14) about 3-4 turns whenever the splitter is being used. Retighten the screw when finished.



6. **Place log onto splitter.** Place the log onto the splitter, lengthwise and lying flat on the main body (I in Figure 1). The log should lie flat on the splitter, and be cradled by the log guiding plates (A in Figure 1). Never attempt to split a log at an angle. Be sure the wedge (J in Figure

1) and log pusher (B in Figure 1) will contact the log squarely on the ends.

**7. Two hand operation.** Depress the Electric Motor Start Switch (F in Figure 1) with one hand. Wait a few seconds as the motor warms up and creates pressure in the Hydraulic pump. Then, when it is safe to do so, depress the Operating Handle (C in Figure 1). The Log Pusher (B in Figure 1) will compress the log, pushing it against the Wedge (J in Figure 1), thus splitting the log. Once the log is split, release both the Electric Motor Start Switch (F in Figure 1) and the Operating Handle (C in Figure 1); this will allow the log pusher to retract.

**Warning: If the log does not split immediately, do not force it by maintaining the thrust for more than a few seconds. This can damage the machine. Instead, try repositioning the log on the splitter, or set the log aside.**

**8. Stack as you work.** This will provide a safer, uncluttered work area to avoid the danger of tripping over or damaging the power cord.

**9. Remember** to retighten the BLEED SCREW (Position 14 in Figure 5) when you are finished.

## **HOW TO FREE A JAMMED LOG**

1. Release both controls, so that the log pusher (Position B in Figure 1) will be fully retracted.
2. Insert a triangular wedge of wood under the log, and activate the log pusher to push the wedge under the jammed log.
3. Repeat this process using progressively larger wedges, until the jammed log is free.

**Warning: Never hammer on the jammed log, or place your hands near the log when attempting to free it.**

- When attempting to free the jammed log, never ask other people to tamper with the machine for help.
- When the supporting feet are blocked, never attempt to fix it by striking it with a tool. This may break the motor assembly.

## **Sharpening the Wedge**

1. After long periods of operation, and when required, sharpen the wedge using a fine-toothed file and carefully remove any burrs or flat spots on the edge.

### **Warning!**

Be sure to unplug the power before any maintenance work.

**Changing the Hydraulic Oil (The quantity of the hydraulic oil and recommended type have been previously indicated).**

1. Make sure the Log Pusher (B in Figure 5) is fully retracted.
2. Unscrew the Dip Stick (part 10) and remove it together with the O-type oil seal (part 11) (Figure 6).
3. Position a container under the log splitter that will hold at least 4 liters of oil. Then tilt the machine to empty the oil into the container.
4. Tilt the log splitter the other way, with the Oil Fill/Drain Port (see Figure 7) up. Using a clean funnel, pour the Hydraulic Oil into the hydraulic oil cylinder with the volume previously specified. (Be sure to use only clean, high quality hydraulic oil specifically made for this purpose).

5. Clean the Dip Stick (part 10), and insert it to make sure the oil level is between the two marks on the dip stick.

6. Clean the Dip Stick (part 10) and O-type Seal (part 11) and re-install. Be careful not to damage the threads of the aluminum Oil Cylinder Cover.

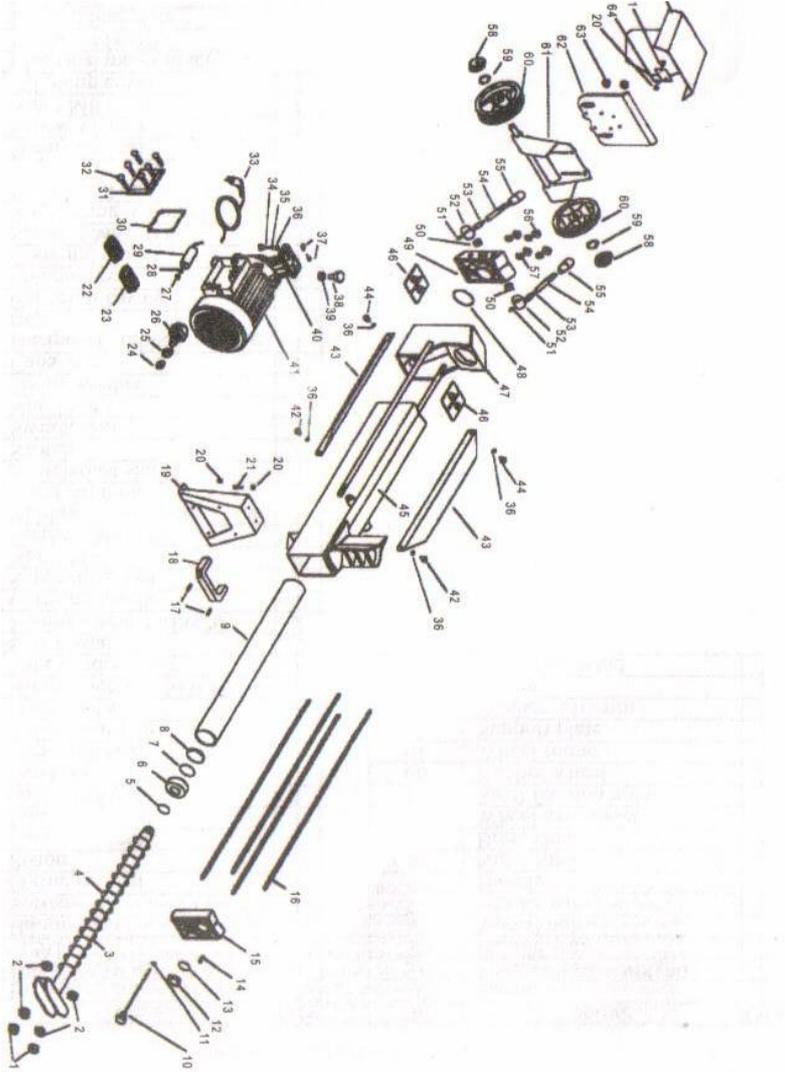
**Warning!**

**Be sure to dispose of the dirty oil properly. Take it to your local oil-recycling center. Never dump oil on the ground or mix it with trash.**

## Trouble-shooting

Problems that may arise when using the log splitter and recommended remedies are given in the table below. If operation of the machine is carried out by unauthorized persons, the warranty will be immediately null and void, and the manufacturer will be relieved of any responsibility for injury to persons or animals.

<b>PROBLEM</b>	<b>PROBABLY CAUSE</b>	<b>CORRECTIVE ACTION</b>
Log fails to split	Incorrect position of the log	Position the log correctly
	Log exceeds permitted dimensions or the wood is too hard for the capacity of the machine.	Try trimming the log or using other means to reduce the size of the log
	Wedge does not cut	Sharpen the wedge, check for burs or nicks, file if necessary.
	Oil Leak	Locate the leak using a piece of cardboard or wood.
Log Pusher/Cam advances jerkily or with strong upward vibrations	Hydraulic pressure is too low	Contact your dealer
	Air in the circuit	Check oil level. Fill oil if necessary. If problem remains, contact dealer.
Oil leak from the Cams or from other external parts	Leakage from the tank	Check that the bleed screw has been unscrewed before using the machine.
	Seals worn	Contact your dealer.



Parts Diagram