

# LS5T

## 5 TON ELECTRIC LOG SPLITTER

### INSTRUCTION MANUAL



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,  
DO NOT OPERATE THIS PRODUCT!

DO NOT RETURN THIS PRODUCT TO THE RETAILER - CONTACT CUSTOMER SERVICE.

If you experience a problem, have questions or need parts for this product, call Customer Service at **1-888-287-6981, Monday-Friday, 8 AM - 4 PM Central Time.** A copy of the sales receipt is required.

Visit online <http://www.sportsmanseriesbrand.com> or email [info@sportsmanseriesbrand.com](mailto:info@sportsmanseriesbrand.com)

FOR CONSUMER USE ONLY - NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR REFERENCE.



**WARNING:** Your responsibility - Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

## SAVE THESE INSTRUCTIONS!

## SPECIFICATIONS

|                         |  |
|-------------------------|--|
| Max. Output             | 2.0 HP                                       |
| Max. Splitting Force    | 5 Ton  |
| Ram Diameter:           | 2 1/2"                                       |
| *Log Capacity Diameter: | 2"-10"                                       |
| *Log Length:            | 20 1/2"                                      |
| Hydraulic Oil Capacity  | 3.3 Quarts (3.2 Liter) AW All Weather ISO 32 |
| Electrical :            | 120 V~ / 60 Hz                               |
| Circuit Protection :    | 20 Amps                                      |
| Maximum PSI :           | 2,300 PSI                                    |

\*A small log can be difficult to split when it contains knobs or a particularly tough fiber. On the other hand, it may not be difficult to split logs with regular fibers even if its diameter exceeds the maximum diameter described in the specifications chart. The Log Capacity Diameter are general guidelines and may differ depending upon log type.

## LOOSE PARTS

### Unpacking



**WARNING!** Use extreme caution when unpacking this machine. Some components are very heavy and will require additional people or mechanical handling equipment.

**Note:** If any parts are damaged or missing, do not attempt to operate this machine until the damaged or missing parts are obtained and are installed correctly

### Loose Parts

Check all loose parts from the box with the list below. Assemble according to the instructions.

## IMPORTANT SAFE OPERATION PRACTICES



**WARNING!** This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in injury. When you see this symbol. **HEED ITS WARNING!**



### CALIFORNIA PROPOSTION 65

**WARNING:** You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.

**WARNING:** This product or its power cord may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.



**DANGER!** This machine was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error can result in serious injury. **This machine is capable of amputating hands and feet and throwing debris. Failure to observe the safety instructions could result in serious injury or death.**

### Training

1. Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference.
2. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage.
3. Never allow children under 16 years of age to operate this machine. Children 16 and over should read and understand the instructions and safe operation practices in this manual and on the machine and be trained and supervised by an adult.
4. Never allow adults to operate this machine without proper instruction. Do not use if under the influence of alcohol or drugs.
5. Many accidents occur when more than one person operates the machine. If a helper is assisting in stacking logs, never activate the control until the helper is a minimum of 10 feet from the machine.
6. Keep bystanders, pets, and children at least 20 feet from the machine while it is in operation.
7. Never allow any one to ride on this machine.
8. Never transport cargo on this machine.
9. Hydraulic fluids are made up of chemicals and additives. They can be extremely irritating to the skin. Protect exposed skin from the liquid. Immediately use soap and water to wash any areas that came into contact with the fluid.
  - a. Do not operate machine with frayed, kinked, cracked, or damaged hoses, fittings, or tubing.
  - b. Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing, or other system components.
  - c. Do not adjust the pressure settings of the pump or valve.

## IMPORTANT SAFE OPERATION PRACTICES

10. Leaks can be detected by passing cardboard or wood, while wearing protective gloves and safety glasses, over the suspected area. Look for discoloration of cardboard or wood.
11. If injured by escaping fluid, see a doctor immediately. Serious infection or reaction can develop if proper medical treatment is not administered immediately.
12. Keep the operator zone and adjacent area clear for safe, secure footing.
13. This machine should be used for splitting wood only, do not use it for any other purpose.
14. Following the instructions in the manual(s) provided with any attachment(s) for this machine.

### Preparation

1. Always wear safety shoes or heavy boots.
2. Always wear safety glasses or safety goggles when operating this machine.
3. Never wear jewelry or loose clothing that might become entangled in moving or rotating parts of the machine.
4. Make sure machine is on a level surface before operating.
5. Always block wheels to prevent unintended movement, and lock beam in either the horizontal or vertical position.
6. Logs should be cut with square ends prior to splitting.
7. Use log splitter in daylight or under good artificial light.

### Operation

1. Never leave this machine unattended with the engine running.
2. Do not operate machine while under the influence of alcohol, drugs, or medication.
3. Never allow anyone to operate this machine without proper instruction.
4. Always operate this machine with all safety equipment in place and working. Make sure all controls are properly adjusted for safe operation.
5. When loading a log, always place your hands on the sides of the log, not on the ends, and never use your foot to help stabilize a log. Failure to do so, may result in crushed or amputated fingers, toes, hand, or foot.
6. Use only your hand to operate the controls.
7. Never attempt to split more than one log at a time unless the ram has fully extended and a second log is needed to complete the separation of the first log.
8. For logs which are not cut square, the least square end and the longest portion of the log should be placed toward the beam and wedge, and the square end placed toward the end plate.
9. Always keep fingers away from any cracks that open in the log while splitting. They can quickly close and pinch or amputate your fingers.

## IMPORTANT SAFE OPERATION PRACTICES

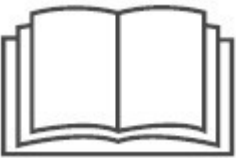






10. Keep your work area clean. Immediately remove split wood around the machine so you do not trip over it.
11. Do not change the engine governor settings or overspeed the engine. The governor controls the maximum safe operating speed of the engine.
12. This machine should not be towed on any street, highway or public road.

### **Maintenance and Storage**

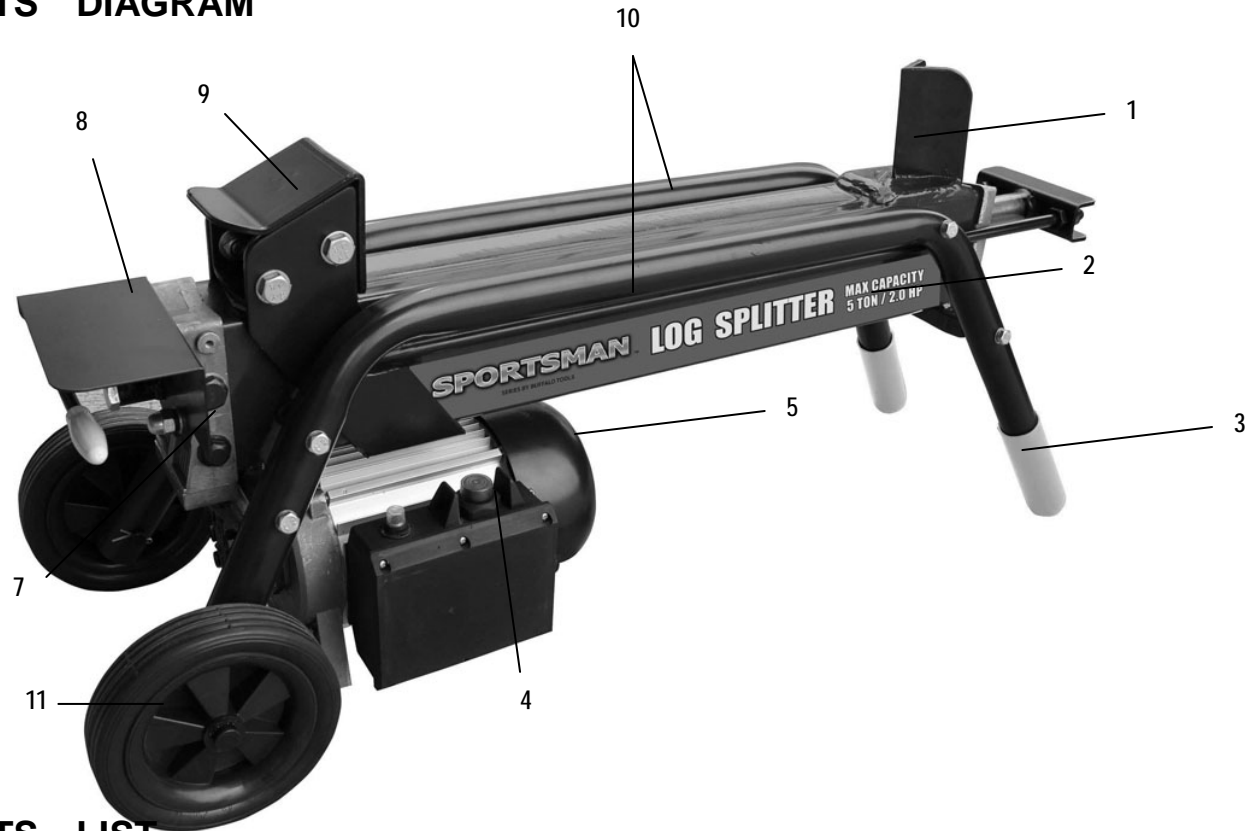
1. Stop the engine, disconnect the spark plug and ground it against the engine before cleaning or inspecting.
2. Stop the engine and relieve hydraulic system pressure before repairing or adjusting fittings, hoses, tubing, or other system components.
3. To prevent fires, clean debris and chaff from the engine and muffler areas. If the engine is equipped with a spark arrester muffler, clean and inspect it regularly according to manufacturers' instructions. Replace if damaged.
4. Periodically check that all nuts and bolts, hose clamps, and hydraulic fittings are tight to be sure equipment is in safe working condition.
5. Check all safety guards and shields to be sure they are in the proper position. Never operate with safety guards, shields, or other protective features removed.
6. The pressure relief valve is preset at the factory. Do not adjust the valve.
7. Never attempt to move this machine over hilly or uneven terrain without a tow vehicle or adequate help.
8. For your safety, replace all damaged or worn parts immediately with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
9. Do not alter this machine in any manner, alterations such as attaching a rope or extension to the control handle, or adding to the width or height of the wedge may result in personal injury.

## Safety Symbols

Read, understand, and follow all instructions & safety symbols before attempting to assemble and operate.

| Symbol  | Description  |
|---|--|
|    | <b>READ THE OPERATOR'S MANUAL(S)</b><br>Read, understand, and follow all instruction in the manual(s) before attempting to assemble and operate.   |
|    | <b>WARNING----CRUSHING HAZARD</b><br>Keep hands away from wedge, end plate, partly split wood and moving parts   |
|    | <b>BYSTANDERS</b><br>Keep bystanders, helpers and children at least 10 feet away.  |
|   | <b>SINGLE OPERATOR</b><br>Only one person should operate the machine at a time. The adult who loads and holds log must be the one who operates control handle.   |
|  | <b>WARNING----PRESSURIZED FLUID</b><br>Never check for hose leaks with your hands. High pressure fluid can escape through a pin hole leak and cause serious injury by puncturing the skin and causing blood poisoning. |
|  | <b>EYE PROTECTION</b><br>Always wear safety glasses or safety goggles when operating this machine.   |
|  | <b>WARNING----MOVING WEDGE</b><br>Keep hands away from wedge and moving parts.   |

## PARTS DIAGRAM



## PARTS LIST

| No. | Description                             | No. | Description                              |
|-----|---|-----|--|
| 1   | Wedge                                   | 7   | ZHB hydraulic control lever              |
| 2   | Oil Tank                                | 8   | Safety guard for hydraulic control lever |
| 3   | Carrying handle                         | 9   | Log pusher                               |
| 4   | Switch                                  | 10  | Log retention brackets                   |
| 5   | Motor w/push switch and circuit breaker | 11  | Rolling wheels                           |

### WARNING

READ AND UNDERSTAND ALL ASSEMBLY, SAFETY, & MAINTENANCE INSTRUCTIONS.

BECOME FAMILIAR WITH YOUR LOG SPLITTER FOR YOUR OWN SAFETY. FAILURE TO DO SO MAY CAUSE SERIOUS INJURY AND/OR DEATH.

DO NOT ALLOW ANYONE TO OPERATE YOUR LOG SPLITTER WHO HAS NOT READ THIS MANUAL. READ EACH STEP COMPLETELY BEFORE PROCEEDING.

WEAR SAFETY GLASSES DURING OPERATION. WEAR STEEL TOE BOOTS DURING ASSEMBLY.

DO NOT START OR RUN THE ENGINE WITHOUT OIL IN THE HYDRAULIC RESERVOIR AND ENGINE.

# INSTRUCTIONS



## CAUTION

**ALWAYS WEAR SAFETY GLASSES DURING OPERATION. DO NOT START OR RUN THE ENGINE WITHOUT OIL IN THE HYDRAULIC RESERVOIR AND ENGINE.**

## ASSEMBLY

- 1) Attach the rolling wheel on the supporting shaft by inserting the wheels into the shaft and block it using the washer and fasten it with a lock nut.
- 2) Assemble the supporting leg on the machine body by using the two bolts and washers.
- 3) Use the bolts to fasten the safety guard onto the supporting bracket to protect the control lever.

## OPERATING INSTRUCTIONS

**WARNING:** Before operation, ensure the bleed screw is loosened slightly so air can release and enter from the tank smoothly. Air flow through the screw hole should be detectable while the log splitter is operating. Failure to loosen the bleed screw can cause the seals of the hydraulic system to blow out and cause permanent damage to the log splitter. Before moving the splitter, ensure the screw is tightened to avoid oil from leaking from the screw.

This log splitter is equipped with a control system that requires the user to operate the log splitter with two hands. The log splitter will freeze if both controls are not operated at the same time.

Do not attempt to run this log splitter for more than 5 seconds at a time; the log splitter could become damaged if done so. Instead, rotate the log 90 degrees to see if the log can be split by positioning it in a different direction.

Always place the logs firmly on the log retaining plates and work table. Ensure the log will not twist, split or rock while being split.

Break the log in the direction of its grown grain. Do not place a log across the splitter. Do not attempt to split two logs at the same time.

- 1) Load a log onto the beam and against the endplate.
- 2) Make sure hands are clear of the splitter.
- 3) Press and HOLD the Start Engine Switch for approximately 5 seconds (#4 on diagram).
- 4) Push control valve handle forward by one hand to split log.
- 5) Push control valve handle backward by one hand to return wedge to original position.
- 6) Clear split wood from work area.



## Clearing Jams

- 1) Release both controls.
- 2) After the log pusher moves back and completely stops, insert a wedge of wood under the jammed log.
- 3) Start the log splitter to push the wedge of wood under the jammed log.
- 4) Repeat with sharper slope wedges of wood until the log is completely free. Do not attempt to knock off the jammed log. It can cause damage to the machine or operator.

## Replacing the Hydraulic Oil

Replace the hydraulic oil after 150 hours of use.

- 1) Ensure all moving parts are stopped and the splitter is unplugged.
- 2) Unscrew the oil drain plug cap (See Image A).
- 3) Place a container on the ground and turn the log splitter over its motor side to drain the oil. Return to its proper position after the oil has drained.
- 4) Refill the splitter with fresh oil.
- 5) Clean the dipstick of oil and place it back into the tank.
- 6) Ensure the level of oil is between the two grooves on the dipstick.
- 7) Re-screw the drain bolt, ensure it is tightened to avoid leakage.



Image A



### **WARNING**

**ALWAYS WEAR SAFETY GLASSES DURING OPERATION AND KEEP HANDS AND FEET CLEAR OF RAM, STRIPPER CHANNELS AND FOOT PLATE AT ALL TIMES.**

## STUCK LOG PROCEDURE

If a log does not split completely and becomes stuck on the wedge, remove the log. A log can become stuck to the wedge if the wedge becomes embedded in the log and the log doesn't split and separate. This can happen if the log is too stringy or tough to split completely. A stuck log will move back with the wedge on the initial attempt to retract the wedge. If this happens, retract the wedge completely to allow the splitter to strip the log from the wedge. Keep hands clear of log and wedge while wedge is retracting.

## SHARPENING WEDGE

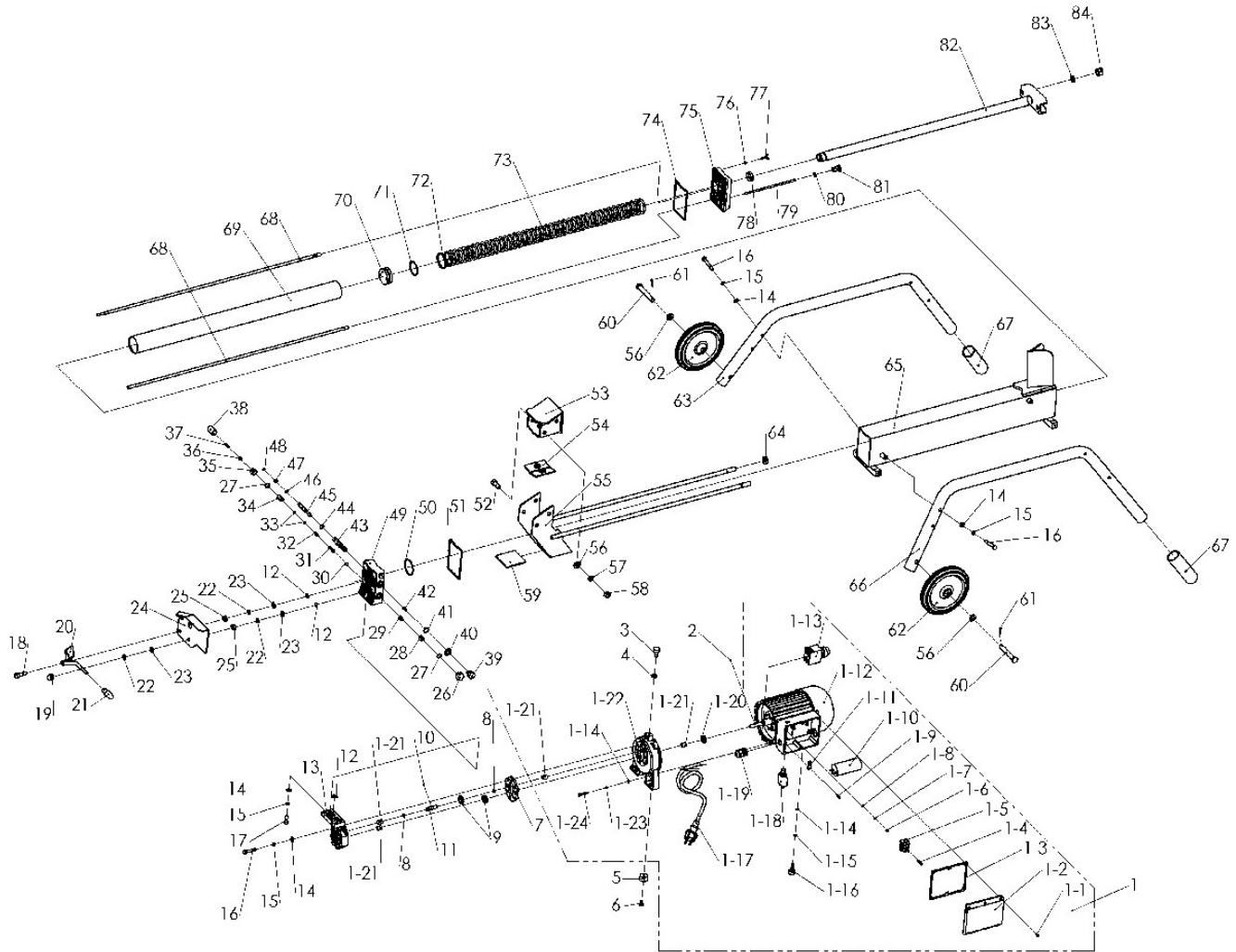
When the log splitter wedge becomes dull and/or worn, sharpen the wedge using a fine-toothed file and smooth any burrs or crushed areas along the cutting edge.



### **WARNING**

**Split the log in the direction of its grain. Placing logs across the log splitter for splitting is dangerous and may seriously damage the machine. Do not attempt to split two logs at the same time.**

# PARTS DIAGRAM



# PARTS LIST

| Part No. | Description            | Qty | Part No. | Description       | Qty |
|----------|------------------------|-----|----------|-------------------|-----|
| 1        | Motor                  | 1   | 21       | Adjust handle cap | 1   |
| 1-1      | Self-tap screw         | 6   | 22       | Elastic washer    | 5   |
| 1-2      | Upper switch box cover |     | 23       | Flat washer       | 5   |
| 1-3      | Rubber pad             | 1   | 24       | Protecting guard  | 1   |
| 1-4      | Screw                  | 2   | 25       | Nut               | 2   |
| 1-5      | Connection block       | 1   | 26       | Hex nut           | 1   |
| 1-6      | Screw                  | 1   | 27       | Sealing ring      | 2   |
| 1-7      | Elastic washer         | 1   | 28       | Screw             | 1   |

|      |                    |    |    |                     |   |
|------|--------------------|----|----|---------------------|---|
| 1-8  | Tooth washer       | 1  | 29 | Oil cave            | 1 |
| 1-9  | Self-tap screw     | 2  | 30 | Cone cave           | 1 |
| 1-10 | Capacitor          | 1  | 31 | Adjusting spring    | 1 |
| 1-11 | Clamping clip      | 1  | 32 | Minor shaft         | 1 |
| 1-12 | Motor body         | 1  | 33 | Sealing ring        | 2 |
| 1-13 | Switch             | 1  | 34 | Tub for minor shaft | 1 |
| 1-14 | Flat washer        | 3  | 35 | Nut                 | 1 |
| 1-15 | Nut                | 1  | 36 | Nut                 | 1 |
| 1-16 | Rubber pad         | 1  | 37 | Locking screw       | 1 |
| 1-17 | Plug cord          | 1  | 38 | Plastic cap         | 1 |
| 1-18 | Overload protector | 1  | 39 | Position bolt       | 1 |
| 1-19 | Bushing            | 1  | 40 | Copper washer       | 1 |
| 1-20 | Gasket             | 1  | 41 | Sealing ring        | 1 |
| 1-21 | Spindle sleeve     | 4  | 42 | Spring              | 1 |
| 1-22 | Front cover        | 1  | 43 | Controlling valve   | 1 |
| 1-23 | Elastic washer     | 3  | 44 | Sealing ring        | 5 |
| 1-24 | bolt               | 3  | 45 | Traveling valve     | 1 |
| 2    | Pin                | 1  | 46 | Sealing ring        | 1 |
| 3    | Rubber pad         | 1  | 47 | Spring              | 1 |
| 4    | Nut                | 1  | 48 | e-ring              | 1 |
| 5    | Rubber pad         | 2  | 49 | Front cover         |   |
| 6    | Bolt               | 10 | 50 | Sealing ring        | 1 |
| 7    | Clapboard          | 1  | 51 | Front cover ring    | 1 |
| 8    | Steel ring         | 2  | 52 | Bolt                | 4 |
| 9    | Gear wheel         | 2  | 53 | Pressing head       | 1 |
| 10   | Steel ball         | 1  | 54 | Upper pad           | 1 |
| 11   | Gear axis          | 1  | 55 | Log pusher          | 1 |
| 12   | Sealing ring       | 6  | 56 | Flat washer         | 6 |
| 13   | Oil pump body      | 1  | 57 | Elastic washer      | 4 |
| 14   | Flat washer        | 17 | 58 | Nut                 | 4 |
| 15   | Elastic washer     | 17 | 59 | Lower pad           | 1 |
| 16   | Bolt               | 14 | 60 | Rolling wheel shaft | 2 |
| 17   | Bolt               | 3  | 61 | Pin                 | 2 |
| 18   | Screw              | 1  | 62 | Rolling wheel       | 2 |
| 19   | Nut                | 3  | 63 | Supporting leg      | 1 |
| 20   | Adjust handle      | 1  | 64 | Nut                 | 1 |

|    |                 |  |    |                     |    |
|----|-----------------|--|----|---------------------|----|
| 65 | Oil tank        |  | 76 | Sealing ring        | 76 |
| 66 | Supporting leg  |  | 77 | Butterfly screw     | 77 |
| 67 | Rubber tube     |  | 78 | Dust-proof ring     | 78 |
| 68 | 2-head rod      |  | 79 | Dip stick           | 79 |
| 69 | Cylinder tube   |  | 80 | Sealing ring        | 80 |
| 70 | piston          |  | 81 | Oil lever stick cap | 81 |
| 71 | Sealing ring    |  | 82 | Piston shank body   | 82 |
| 72 | Sliding ring    |  | 83 | Elastic washer      | 83 |
| 73 | Pressing ring   |  | 84 | Thick nut           | 84 |
| 74 | Back cover ring |  |    |                     |    |
| 75 | Back cover      |  |    |                     |    |
|    |                 |  |    |                     |    |