

Hahn & Sohn GmbH

Janahof 53 93413 Cham Deutschland hahn@hahn-sohn.de

Hydraulic Log Splitters

Operator's Manual

MODEL NUMBER:∟	CEDLS08V/CEDLS09V
SERIAL NUMBER:	

Both model number and serial number may be found on the main label. You should record both of them in a safe place for future use.

FOR YOUR SAFETY

READ AND UNDERSTAND THE ENTIRE MANUAL BEFORE OPERATING MACHINE

TABLE OF CONTENTS

Introduction

Symbols

Safety

Safety Warnings & Instructions

Specifications

Contents Supplied Assembly

Transport

Deliverying Log Splitter To Work

Site Splitter Operation

Free a Jammed Log

Replacing Oil Sharpening Wedge

Trouble Shooting Wiring Diagram

Hydraulic System Diagram Parts

Schematic

ENVIRONMENTAL



Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be resorted, taken to the local recycling center and disposed of in an environmentally safe way.

SYMBOLS

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



Read these instructions in full before using the machine.



Wear safety footwear!



Wear protective gloves!



Wear eye protection!
Wear hearing protection!



Keep your work space tidy! Untidiness may result in accidents.



Do not remove or tamper with any protection or safety devices.



Dispose of the used oil in an environment-friendly way.



Do not use in the rain.



Danger! Keep clear of moving parts!

INTRODUCTION

Your new log splitter will more than satisfy your expectations. It has been manufactured under stringent quality standards to meet superior performance criteria. You will find your new unit easy and safe to operate, and with proper care, it will give you many years of dependable service.



Carefully read through this entire operator's manual before using your new log splitter. Take special care to heed the cautions and warnings.



Do not remove jammed logs with your hands.



Caution! Thrown objects.



Before starting any repair maintenance or cleaning, always disconnect the power.



Avoid injury from the movement of the splitting blade.



Keep bystanders away from the working area.



Do not split wood when machine is transporting.



Do not split wood when machine is leaning.

SAFETY

Safety Warnings & Instructions UNDERSTAND YOUR LOG SPLITTER

Read and understand the owner's manual and labels affixed to the log splitter. Learn its application and limitations as well as the specific potential hazards peculiar to it. Be thoroughly familiar with the controls and their proper operation.

DRUGS, ALCOHOL AND MEDICATION

Do not operate the log splitter while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.

•AVOID DANGEROUS CONDITIONS

Always operate your log splitter on dry, solid, level ground. Never operate your log splitter on slippery, wet, muddy, or icy surfaces. The location you choose should be free from any tall grass, brush, or other interferences. There should be plenty of room for handling, and help the operator stay alert. Keep your work area clean and well lighted. Cluttered areas invites injuries. To avoid tripping, do not leave tools, logs,or other components laying

around the work area. Do not use the log splitter in wet or damp areas or expose it to rain. Do not use it in areas where fumes from paint, solvents or flammable liquids pose a potential hazard.

•INSPECT YOUR LOG SPLITTER

Check your log splitter before turning it on. Keep guards in place and in working order. Form a habit of checking to see that keys and adjusting wrenches are removed from tool area before turning it on. Replace damaged, missing or failed parts before using it. Make sure all nuts, bolts, screws, hydraulic fittings, hose clamps, etc. are securely tightened. Always check the oil level in the hydraulic oil tank. Never operate your log splitter when it is in need of repair or is in poor mechanical condition. Before starting work, test the stopping devices to keep them in safe working condition.

•DRESS PROPERLY

Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can be caught in moving parts. Protective electrically non-conductive gloves, non-skid footwear and hearing protection are recommended when working. Wear protective hair covering to contain long hair, preventing it from get caught in machinery.

•PROTECT YOUR EYES AND FACE

Any log splitter may throw foreign objects into the eyes. This can cause permanent eye damage. Always wear safety goggles. Everyday eyeglasses have only impact resistant lenses. They are not safety glasses.

EXTENSION CORDS

•

Improper use of extension cords may cause inefficient operation of the log splitter which can result in overheating. Be sure the extension cord is no longer than 10m and its section is no less than 2.5mm2 to allow sufficient current flow to the motor. Avoid use of free and inadequately insulated connections. Connections must be made with protected material suitable for outdoor use.

3

•AVOID ELECTRICAL SHOCK

Check that the electric circuit is adequately protected and that it corresponds with the power, voltage and frequency of the motor. Check that there is a ground connection. Ground the log splitter. Prevent body contact with grounded surfaces: pipes, radiators, ranges, and refrigerator enclosures. Never open the switch / plug box. Should this be necessary, contact a qualified electrician. Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the log splitter.

•PREVENT FIRES

Do not smoke or have open flames when operating or refilling the log splitter. Never operate the log splitter near a flame or spark. Oil is flammable and can be exploded.

•KEEP BYSTANDERS AWAY

Allow only one person to load and operate the log splitter. Always keep bystanders, including visitors, children and pets away from the work area, especially when the log splitter is under operations. Only the operator should stand near the machine and only within the safe operating area prescribed in this manual. Never use another people to help you with freeing jammed log. No one under the age of 16 should be allowed to operate the log splitter. Any individual under the age of 18 should has the necessary training, skills to perform the functions properly and safely and should always be under the supervision of adult.

•INSPECT YOUR LOG

Never attempt to split logs containing nails, wire or debris. Always make sure that both ends of the log you are splitting are cut as square as possible. This will prevent the log from sliding out of position while under pressure. Branches must be cut of flush with the trunk.

•DON'T OVERREACH

Keep proper footing and balance at all times. Never stand on log splitter. Serious injury could occur if the tool is tipped or if the cutting tools is unintentionally contacted. Do not store anything above or near the log splitter where anyone might stand on the tool to reach them.

AVOID INJURY FROM UNEXPECTED ACCIDENT Do not straddle or reach across the splitting area when operating the log splitter. Never pile logs to be split in a manner that will cause you to reach across the log splitter. Only use your hands to operate the control levers. Never use your foot, knee, a rope, or any other extension device. Always pay full attention to the movement of the wedge ram. Never attempt to load your log splitter while the ram is in motion. Keep hands out of the way of

all moving parts. Never try to split two logs on top of each other. One of them

•PROTECT YOUR HANDS

may fly up and hit you.

Keep your hands away from splits and cracks which open in the log. They may close suddenly and crush or amputate your hands. Do not remove jammed logs with your hands.

DON'T FORCE TOOL

It will do a better and safer job at its design rate. Don't use log splitter for a purpose for which it was not intended. Do not alter the equipment, or use the equipment in such a way as to circumvent its design capabilities and capacities. Never try to split logs larger than those indicated in the specifications table.

•DISCONNECT POWER

Unplug when not in use, before making adjustments, changing parts, cleaning, or working on the log splitter. Consult technical manual before servicing.

MAINTAIN YOUR LOG SPLITTER WITH CARE

Before cleaning, repair, inspecting or adjusting, shut off the machine and make certain all moving parts have stopped. Always clean the unit after each use. Keep the log splitter clean for best and safest performance. Follow instructions for lubricating. Inspect all hydraulic seals, hoses and couplers for leaks prior to use. Control levers and power switch must be kept clean, dry and free from oil and grease at all times.

•PROTECT THE ENVIRONMENT

Take used oil to an authorized collection point or follow the stipulations in the country where the log splitter is used. Do not discharge into drains, soil or water.

MAKE THE WORKSHOP CHILDPROOF

Lock the shop. Store the log splitter away from children and others not qualified to use it.

•DEAL WITH ACCIDENT

Always have a fire extinguisher and a first-aid kit available for use should the need arise. In emergency always know the location of the nearest phone or keep a phone on the job site. Also know the phone numbers of the nearest ambulance, doctor and fire department. This information will be invaluable in the case of an emergency.

SPECIAL WARNING

- The splitting operation of the machine is designed to be activated by one person. While there is the possibility that additional operators could be working with the machine (e.g. for loading and unloading), only one operator should activate splitting operations;
- The machine shall not be used by children;
- Description of functional tests of the machine;
- The installation and maintenance

requirements

including a list of those devices e.g. two-hand control device which should be verified, how frequently the verification shall be carried out and by what method;

Specifications

		op com car	10110
Model Number Motor (S6 40%)*		CEDLS08 230V~ 50H 3000W 13	dz CEDLS09V
Log Size	Dia.	10-30 cm	10-30 cm
Capacity	Length	56~104 cm	56~104 cm
Maximum For	ce	11 Ton ± 10%	14 Ton ± 10%
Hydraulic Pressure		25.2 Mpa	24.6 Mpa
Hydraulic Oil Capacity		7.0 L	7.5 L
Ram Travel	Ram Travel		85 cm
		13.9 cm/s	21.8 cm/s
Speed	Forward	2.9 cm/s	4.2 cm/s
	Retract	3.7 cm/s	5.2 cm/s
Noise Pressure	e Level (LpA	≤80 db(A)	≤80 db(A)
Vibration		2.5m/s^2	2.5m/s^2
	Length	144 cm	144 cm
Overall Sizes	Width	133 cm	135 cm
	Height	228 cm	228 cm
Weight		178 kg	187 kg

^{*}S6 40%, continuous operation periodic duty: time of one load cycle is 10 minutes, operation time at constant load is 4 minutes, operation time at no-load is 6 minutes.

APPLICATION CONDITIONS

This log splitter is designed for operating under ambient temperatures between +5°C and 40°C and for installation at altitudes no more than 1000m above M.S.L. The surrounding humidity should less than 50% at 40°C. It can be stored or transported under ambient temperatures between -25°C and 55°C.

ELECTRICAL REQUIREMENTS

For model CEDLS09V

With 3 phase 400 Volt / 50Hz motor, the log splitter should be connected to standard 400V±10% / 50Hz±1%Hz.

Electrical supply which has protection devices of under-voltage, over-voltage, over-current as well as a residual current device (RCD) which maximum residual current rated at 0.03A.

The mains connection and extension cable must have 5 wires = 3P + N + PE (3/N/PE). The mains connection must have maximum 16 A fuse. Electrical connection rubber cables must comply with EN60245 which are always marked with symbol H 07 RN. Cables should be identified, as it is a legal requirement.

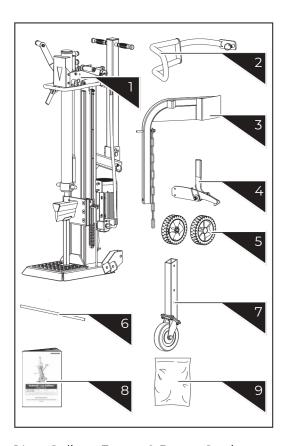
For model CEDLS08V

With 230 Volt / 50Hz motor, the log splitter should be connected to standard 230V±10% /50Hz±1%.

Electrical supply which has protection devices of under-voltage, over-voltage, over-current (16 A) as well as a residual current device (RCD) which maximum residual current ratedat 0.03A. Electrical connection rubber cables must comply with EN60245 which are always marked with symbol H 07 RN. Cables should be identified, as it is a legal requirement.

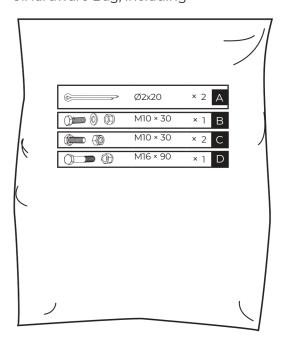


CONTENTS SUPPLIED



- 1.Log Splitter Frame & Power Station 2.Guard Arm 3.Log Lift
- 4.Retaining Hook

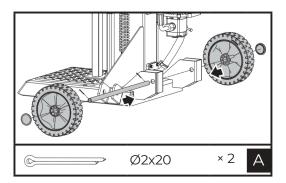
5. Wheel 6.Wheel Axle 7.Support Wheel 8.Operator's Manual 9.Hardware Bag, including



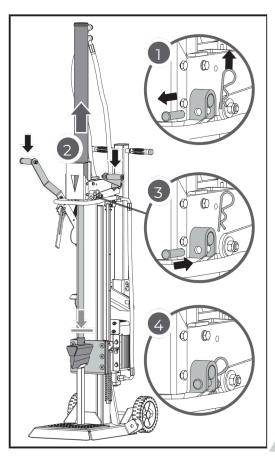


ASSEMBLY

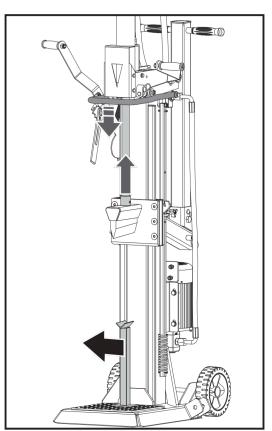
1. Insert the wheel axle into the holes of the mount bracket. Slide the wheels onto the axle and secure with Ø2x20 split pins from outside. Attach the wheel caps.



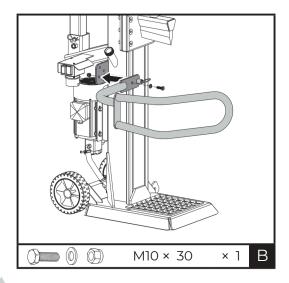
2. Keeping the support stand against the wedge, remove the R-Pin and bolt to release cylinder. Lower both control handles to raise the wedge ram to the top. Insert the bolt and R-Pin to secure the cylinder.



3. Release both control handles to retract the wedge ram. Remove the support stand.

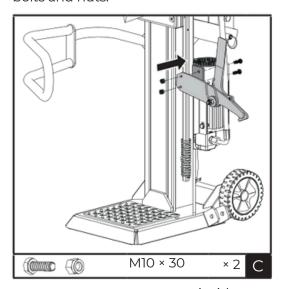


4.Align the hole and locking pin of the guard arm with the mount bracket. Secure the guard arm with a M10 \times 30 hex bolts, a washer and a nut from the hardware bag.

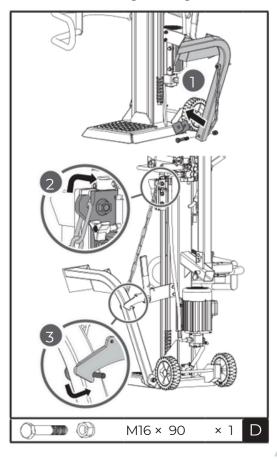




5. Position the retaining hook onto the frame and secure with two M10×30 hex bolts and nuts.

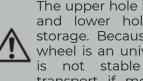


inside 6. Prosition the log lift mounting bracket and align with mounting bracket holes. Secure with a M16×90 hex bolt and nut. Hook the lift chain to wedge slide guide.

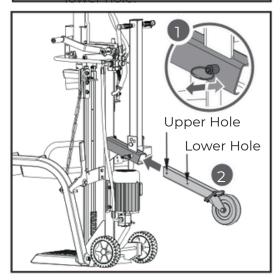


TRANSPORT

Pull the spring pin and slide the square tube of the support wheel into the holder. Loosen the spring pin to fix it after selecting the appropriate hole.

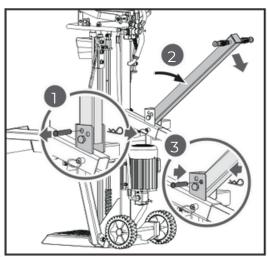


The upper hole is for transport and lower hole is only for storage. Because the support wheel is an universal wheel, it is not stable enough for transport if mounted at the



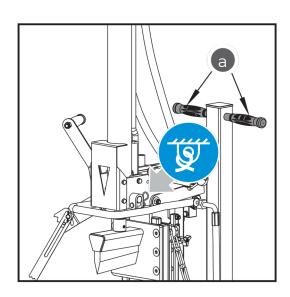
The transporting handle is fixed upright by the pin with clip for easier delivery.

Remove the clip and pin. lower the handle in the direction of the arrow as shown and secure it by fixing the pin with clip to the outer hole.



DELIVERYING LOG SPLITTER TO WORK SITE

The log splitter is equipped with 2 wheels for minor moving. To move the log splitter to the work site. Grip the handle (a) to tilt the log splitter slightly after making sure the oil tank cover is tightened.





If a crane is used, tie the rope at the lifting point below the blue bundling label, then hoist the machine with the crane.

SPLITTER OPERATION

Plan your work site. Work safely and save effort by planning your work before hand. Have your logs positioned where they can be easily reached. Have a site located to stack the split wood or load it onto a nearby truck or other carrier. Position the log splitter on solid level ground.

Apply a thin coat of grease to the surfaces of the ram before operation will lengthen the durability of the ram.



Bleed the air out of the hydraulic system before starting the log splitter. The cover of the hydraulic oil tank should be loosened by some rotations until air can go in and out of the oil tank smoothly.

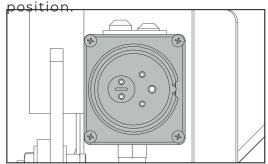
Air flow thru the oil tank filler should be detectable during the operations.
Before moving the log splitter, make sure the cover of the oil tank is tightened to avoid oil leaking from this point.



Failed to loosen the oil tank cover will keep the sealed air in hydraulic system being compressed after being decompressed. Such continuous air compression and decompression will blow out the seals of the hydraulic system and cause permant damage to the log splitter.

CEDL09V Motor

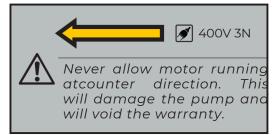
Turn the motor switch to the ON position to start the log splitter. To stop the machine, just turn the motor switch to the OFF





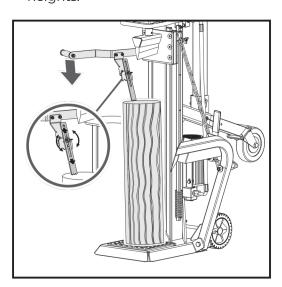
Make sure the direction of motor rotation. Turn the motor on, the wedge ram should rise to the highest position automatically. If the wedge ram is already at the highest position when the motor starts, grip both control levers and lower them, the wedge ram should start to move downward.

In case, no ram motion detected after the motor starts, power off the motor immediately to change motor polarity by turning the pole switching device inside the plug with a screwdriver.



Splitting

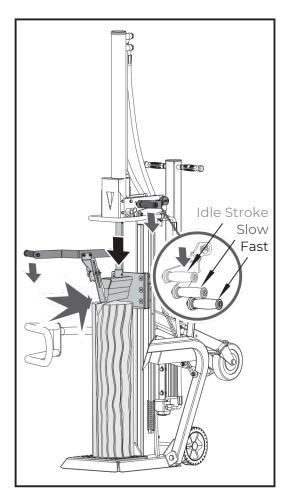
1.Place the log vertically on the support table, that it lies flat on its face. Press the left lever to lower the extended log fixing claw against the log to secure it. The extended log fixing claw can be adjusted to fit logs with different heights.



2.Hold the left press lever.

Meanwhile, move the splitter wedge down by pressing the right splitting lever to the half stroke to split the log slowly first and then press it to the end until the log is completely split.

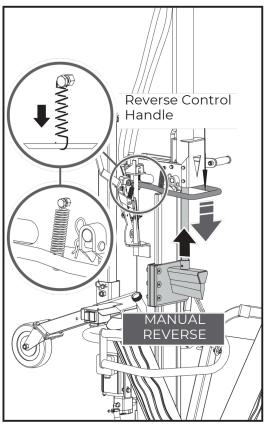




3.Return the splitter
wedge to the starting
position. Operate the
spring-loaded retract
control lever to lift
wedge above the height
of log to be split.







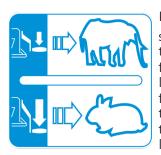


The spring is already connected to the handle in factory.

Splitting Lever

The splitting force and speed are governed by the splitting lever.

The first half stroke of the splitting lever is idle speed; press the splitting lever to the half stroke for maximum splitting force at slower speed to split the log at the beginning or particularly hard and seasoned logs;



Press the splitting lever to the end for faster speed at less splitting force to finish the splitting or to split usual logs.

It can be shifted by simply raising and lowering the splitting lever slightly.



Do not attempt to split green logs. Dry, seasoned logs split much more easily, and will not jam as frequently as green wood.



Break log in the direction of its growing grain. Do not place log across the log splitter for splitting. It may be dangerous and may seriously damage the machine.



Do not remove jammed logs with your hands. Never use another people to help you with freeing jammed log.

Stack as you work. This will provide a safer work area, by keeping it uncluttered, and avoid the danger of tripping, or damaging the power cord.



Accumulated split wood and wood chips can create a hazardous work environment. Never continue to work in a cluttered work area which may cause you to slip, trip or fall.

FREE A JAMMED LOG

Do not remove jammed logs with your hands. If jammed, stop the motor and loosen the log by a downward stroke on the log with a hammer.

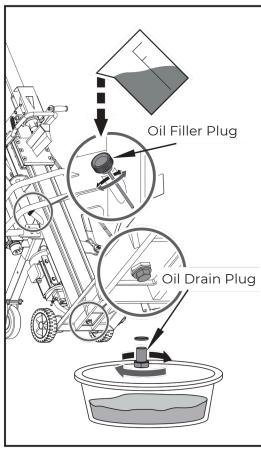


REPLACING OIL

The hydraulic system is a closed system with oil tank, oil pump and control valve. Low oil levels can damage the oil pump. Check oil level regularly with dipstick. The oil should be completely changed once a year.

Following hydraulic oils or equivalent are recommend for the log splitter's hydraulic transmission system:

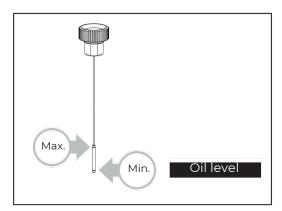
SHELL Tellus 22 MOBIL DTE 11 ARAL Vitam GF 22 BP Energol HLP-HM 22

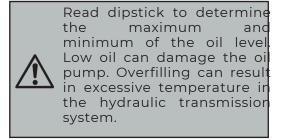


Use a drain pan to aid in the removal of all used oil and particles.

Remove oil drain plug to drain oil from the hydraulic transmission system. Examine oil for metal chips as a precaution to future problems.

After oil has been completely drained from the machine, reinstall drain plug. Add the hydraulic transmission system with recommended oil through filler plug opening.





Apply sealant to filler plug and reinstall it.

Following an oil change, activate the log splitter a few times without actually splitting.

SHARPENING WEDGE

This log splitter is equipped with reinforced splitting wedge which blade is specially treated. After long periods of operation, and when required, sharpen the wedge using a finetoothed file removing any burrs or flat spots on the edge.

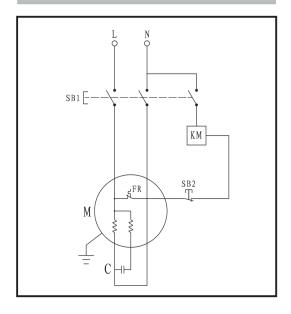
TROUBLE SHOOTING

PROBLEM	PROBABLE CAUSE	REMEDY SUGGESTED
Motor does not start	Switch is OFF	ON the switch
Incorrect motor rotation direction	Incorrect connection	Change pole switching device in the plug with a Reverse polarity by electrician
		Check and tighten the parts
	Valve is not opened owing to the connection parts cose for evers or connection parts bent	
Log Splitter does not work while motor running		Repair the bent parts
	Lower hydraulic oil level	Check and refill hydraulic oil
Log Splitter works with abnormal vibration and noise	Lower hydraulic oil level	Check and refill hydraulic oil

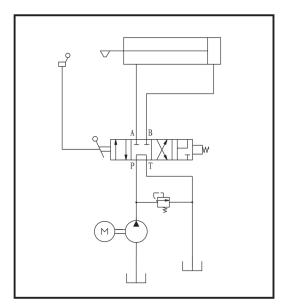


ATTENTION: ALL REPAIR WORK MUST BE DONE BY A SPECIALIST FOR THIS PRODUCT.

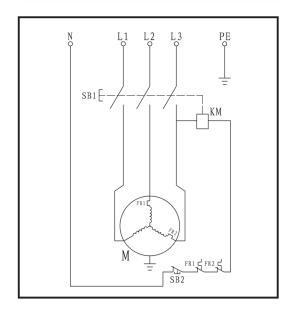
WIRING DIAGRAM CEDLS08V



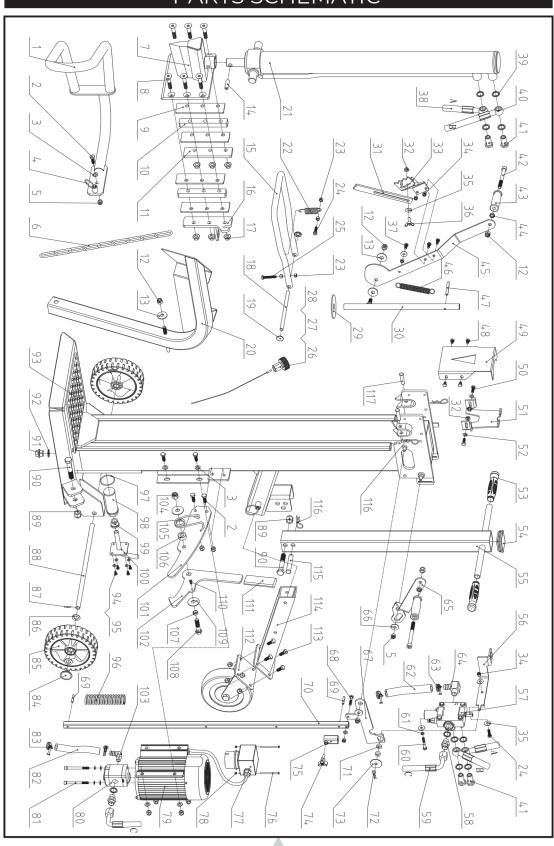
HYDRAULIC SYSTEM DIAGRAM



CEDLS09V



PARTS SCHEMATIC



Parts List

No.	Description	Q'ty
1	Left Guard Bracket	1
2	Bolt M10x30	7
3	Flat Washer 10	9
4	Locating Pin Handle	2
5	Locknut M10	13
6	Lift Chain Φ6	1
7	Wedge Weldment	1
8	Bolt M12x65	6
9	Friction Plate	4
10	Baffle Plate	2
11	Left Plate	1
12	Locknut M12	4
13	Large Washer 12	3
14	Cylindrical Pin 8x40	1
15	Control U-Handle	
16	Right Plate	1
17	Nut M12	6
-18-	Axis Pin	-
19	Wheel Cap 12	2
20	Lift Guard	1
	- Cylinder	1
21	Spring	1
22	Nut M8	_5_
23	Bolt M8x30	2
24	Bolt M8x80	1
25	Oil Cap	
26	O- Ring 25x2.65	1
27	Oil Dipstick	1
28	·	1
l	ylon Washer	1
30 9	haft	1
31	Extended Log Fixing Claw	3
32	Nut M8	1
33	Log Fixing Claw	

No.	Description	Q'ty
34	Locknut M8	4
35La	rge Washer 8	6
36W	ing Bolt M8x25	1
37 3	മാ യ്യാവരുക്കായിൽ ed Washer	3
20	Lower Hose	1
		10
40	Upper Hose	1
41	Valve Connecter	4
42	Screw M12x120	2
43	Operating Handle Grip	2
44	Thin Nut M12	2
45	Lever	Т
46	Reset Spring	
47	Cylindrical Pin 8x60	1
48	Bolt M8x12	4
49	Front Support Plate for Cylind	der
50	Bolt M8x25	2
51	Rear Support Plate for Cylind	er ¹
52F	at Washer 8	3
53	54 ar 55 le Grip Square Plug	1
56	Pull Tod Connecting Plate	1
Val	réor Valve	
		
		2
58	Hose Nipple	1
59	Inlet Hose	2
60	Bolt M8x50	4
61	Spring Washer 8	1
62	Oil Hose 19	2
63	Hose Clamp 28-36	1
64	Hose Connector	1
65	Right Operating Lever	2
66L	arge Washer 10	

No.	Description	Q'ty
67 (Connectin Lever	1
	Bolt 10/8/x40	1
	Cylin d ซีcal Pin 6x40	2
	Strok@OAdjusting Lever	1
	RounवाPlate	2
	Clip 2752	1
73	Large Washer 10	1
74 5	75ta Knob	1
Swi	tandjusting Sleeve	1
	Screw M4x60	2
		1
78	Locknut M4	2
79 N	Votor	
80	Gear Pump	
81	Screw M8x90	1
82	Oil Hose 16	1
83	Hose Clamp 20-26	2
840	Vheel Cap	2
85 \	Vheel	2
86F	lat Washer 16	4
87	Cotter Pin 2x20	2
887	Vheel Axle	
89	Locknut M16	2
90	Bolt M16x90	<u>2</u> 1
91	Screw Plug	1
920	ombined Washer 22	

No.	Description	Q'ty
93 94	Main Frame	1
95Fl	aBVVtalsheilia	4
		4
96 97	Buffer Spring	1
98 99	Buffer Spring O-Ring 50x2.65 Oil Filter K Bush K	1
100 101	Flange Locating Plate	1
	J	1
		1
		1
102	Hook	1
103	Rectangular Nozzle	1
	OCKITAL IVII—	
105	TOUS STONIAL SOURCE Spring	
Was	New String Wilshight Spring Herceting Bush	1
		2
110	Screw M6x10 Handle Grip	1
	Trandle Onp	
112S	upport Wheel Assy.	4
113 114	Bolt M10x25	1
115 116	Fixing Tube Pin B 16x85 Clip 3 Pin B 12x50	i
	Pin B 12x50	3
117		٦
117	Pin B 12x55 (Only for LS09V)	2

