U.S.SAWS™

U.S.SAWS CORE PRO-4 HAND-HELD CORE DRILL

5-13-2025

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INTRODUCTION

Introduction
The owner's manual is intended to point out some of the basic safety situations that maybe encountered during the normal operation & maintenance of the Traditional Core Drill Machine & to instruct you in safety practices for dealing with these conditions. Keep all manuals provided with your machine in a safe place at all times.

The information and specifications included in this publication were in effect at the time of approval for printing. U.S.SAWS reserves the right, however, to discontinue or change specifications or design at any time without notice and without incurring any obligation.

The Core Pro 4 hand-held core drill is a high-performance tool designed to deliver fast, accurate, and efficient results when drilling clean, precise holes in concrete and a wide range of other materials. Built with the professional contractor in mind, this unit combines powerful performance with user-friendly features to streamline the coring process. The Core Pro 4 can quickly drill hole sizes ranging from 1" to 4" in diameter, making it a versatile solution for a variety of job site needs.

Disclosure
By purchasing and using the Hand-Held Core Drill you agree to release U.S.SAWS of any and all liability. Under no circumstances will U.S.SAWS be held liable for incidental or consequential damages resulting from the use of this product and/or defective parts or products associated with this product.

- It is the responsibility of the owner/user to ensure that the operating instructions have been read and understood by the operator before the operation of the equipment begins.
- It is the responsibility of the owner/user to understand and perform the maintenance and storage procedures as explained in the operating instructions.

CORE PRO 4 HAND-HELD CORE DRILL	
Capacity	1" to 4"
Electrical Requirements	110 V
Cord Length	12'
RPM	1700
Package Size	40"x14"x9"
Weight	22/30 lbs
Part Number	US28605

This tool creates an enormous amount of force.
Beware of crushing your fingers or other body parts.

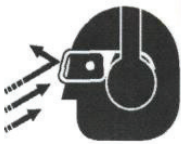
SYMBOLS & DECALS

For Safe Operation
You must be qualified for safe operation of the U.S.SAWS Hand-Held Core Drill machine. You must clearly understand the written instructions supplied by U.S.SAWS, be trained - including actual operation - & know the safety rules & regulations for the job site. It is a safety practice to point out & explain safety signs & practices to others & to make sure they understand the importance of following these instructions.

Be Safe
Human error is the result of many factors: carelessness, fatigue, sensory overload, pre-occupation, unfamiliarity with the machine or attachments, or drugs or alcohol, to name a few. You can avoid serious injury or death caused by these & other unsafe work practices. Be safe and never assume accidents cannot happen to you.

For your safety and the safety of others, act safely and encourage your fellow workers to act safely as well.

Read and understand operator's manual before using this machine.
Failure to follow operating Instructions could result in injury or damage to equipment.



Always wear protective glasses or full face protection

Wear Head Protection, breathing protection, and the use of hearing protection is mandatory

Wear safety boots when operating this machine

SYMBOLS & DECALS

Dangers, Warnings and Cautions.
The purpose of safety symbols and explanations are to attract your attention to possible hazards and how to avoid them. The safety symbols and explanations do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

⚠ DANGER

DANGER: Indicates an imminently hazardous situation that if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

⚠ WARNING

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION: Indicates a potentially hazardous situation that, if not avoided may result in minor or moderate injury. It may also be used to alert against unsafe practices that may cause property damage.

Wear appropriate clothing

Wear hand protection

Wear proper electrostatic grounding equipment at all times.

Wear proper electrostatic grounding equipment at all times.

SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS – PLEASE READ CAREFULLY BEFORE USE

TO AVOID THE RISK OF ELECTRIC SHOCK, FIRE, OR OTHER SERIOUS INJURIES WHILE OPERATING THIS ELECTRIC TOOL, PLEASE FOLLOW THESE SAFETY GUIDELINES CLOSELY. KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.

1. MAINTAIN A CLEAN WORK AREA
Keep your work environment tidy. Cluttered or disorganized spaces increase the risk of accidents.

2. PREPARE THE ENVIRONMENT
Before starting work, ensure the area is clean and dry. Do not use electric tools in the rain or near flammable materials.

3. AVOID ELECTRIC SHOCK
Do not touch grounded surfaces such as metal pipes, radiators, stoves, or appliances with bare hands while operating the tool.

4. KEEP CHILDREN AND UNTRAINED INDIVIDUALS AWAY
Do not allow children or untrained persons to operate or be near the tool during use.

5. STORE TOOLS SAFELY
When not in use, store tools in a dry place away from children to prevent unauthorized use or injury.

6. AVOID OVERLOADING THE TOOL
Operate the tool within its designed load capacity to ensure optimal performance and longevity.

7. WEAR PROPER PROTECTIVE GEAR
Avoid loose clothing and jewelry that may get caught in moving parts. Use ear protection, rubber gloves, slip-resistant shoes, and secure long hair with a helmet when necessary.

8. USE PROPER DUST COLLECTION
If available, connect the tool to a dust extraction system for a cleaner and safer working environment.

9. HANDLE THE POWER CORD WITH CARE
Never use the cord to carry the tool or unplug it. Keep the cord away from heat, oil, and sharp edges.

10. MAINTAIN PROPER POSTURE
Avoid overreaching. Stand firmly and maintain proper balance at all times.

11. KEEP YOUR TOOL IN GOOD CONDITION
Regularly inspect the tool, including the power cord and plug. Replace damaged parts immediately. Keep the handles clean and dry.

12. UNPLUG WHEN NOT IN USE
Disconnect the tool from the power source before servicing, changing accessories, or when not in use.

13. REMOVE WRENCHES BEFORE USE
Ensure all adjustment tools (e.g., spanners) are removed before turning on the machine.

14. AVOID ACCIDENTAL STARTS
Keep your fingers off the switch while carrying the tool. Ensure the power switch is in the "off" position before plugging it in.

15. USE APPROPRIATE EXTENSION CORDS
For outdoor use, only use extension cords rated for outdoor use and marked accordingly.

16. OPERATE ONLY IN GOOD CONDITION
Do not use the tool if you are overly tired, under the influence of alcohol, or taking medication that affects alertness.

17. USE COMPATIBLE ACCESSORIES
Select the correct bit or accessory for your tool. Always run the tool at an appropriate speed. If the tool vibrates or rocks during use, stop immediately and check alignment.

18. USE GENUINE ACCESSORIES ONLY
For safety and optimal performance, always use original manufacturer accessories. Using non-original parts may cause injury or damage to the tool.

PREPARATORY STAGE
Before beginning any work, follow these preparation steps to ensure safe and proper operation of the diamond drilling machine.

Important: Always ensure the main power switch is in the OFF position before connecting any components.

STEP 1: UNPACKING & INSPECTION
Unpack the machine and components, and verify all parts are included according to the packing list.

Inspect the machine for any damage that may have occurred during transport.

Confirm that the site voltage matches the voltage indicated on the machine's nameplate.

STEP 2: POWER CONNECTION
Connect the machine to a properly grounded power source in compliance with EN61029 and IEC1029-2-6 safety standards.

A residual current device (RCD) is included with the machine to protect against electric shock and under-voltage. The RCD has a leakage current rating of 30mA.

Ensure the RCD switch is in the ON position before operating.

In case of a voltage drop, the RCD will shut off power automatically. Once voltage is restored, press the RESET button to reactivate.

Note: Do not operate the machine if the RCD is not functioning correctly. Never submerge the RCD in water. Regularly press the TEST button to verify proper function.

STEP 3: WATER SUPPLY CONNECTION
Connect the water supply using the flexible tube and quick-connect fitting provided.

Only use clean water. Impurities such as grit can damage the machine's sealing components.

Do not exceed a maximum water pressure of 3 BAR.

STEP 4: SAFETY TEST
Turn on the machine using the soft-start switch to confirm smooth startup.

Press the TEST button on the RCD to ensure it stops power flow. Then press RESET to restore power.

REMINDER: Operators should never use the machine without a properly functioning RCD.

This tool creates an enormous amount of force.
Beware of crushing your fingers or other body parts.

SAFETY INSTRUCTIONS

⚠ WARNING

DUST WARNING

Cutting, especially when DRY cutting, generates dust that comes from the material being cut, which frequently contains silica.

Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Exposure to excessive amount of such dust can cause:

- Respiratory diseases (affecting your ability to breath), including chronic bronchitis, silicosis and pulmonary fibrosis from exposure to silica. These diseases may be fatal;
- Skin irritation and rash; and
- Cancer according to NTP* and IARC*

* National Toxicology Program, International Agency for Research on Cancer

Take precautionary steps

- Avoid inhalation of and skin contact with dust, mist and fumes;
- Wet cut when feasible, to minimize dust;
- Wear and ensure that all bystanders wear appropriate respiratory protection such as dust masks designed to filter out microscopic particles. (See OSHA 29 CFR Part 1910.1200)

California Prop 65 Warning: Use of this product can cause exposure to materials known to the State of California to cause cancer and/or birth defects or other reproductive harm.

OPERATION

BEGIN OPERATION

1. SELECT A SUITABLE DIAMOND BIT

Our machines are compatible with four common spindle types. Always use a high-quality diamond bit.

Ensure the bit has adequate clearance — the cutting head must be thicker than the wall of the metal tube to allow smooth drilling.

Apply waterproof lubricant or oil-based paint to the bit to simplify future removal.

Check for bit runout (wobble); it should not exceed 1 mm.

2. SECURE THE DRILL FRAME

Use one of the following methods to secure the frame firmly to the work surface:

Expansion Bolts (Recommended): Use bolts at least 12 mm in diameter for maximum stability.

Vacuum Suction: Ensure the vacuum pump is working properly and that the sealing ring is intact and undamaged.

Support Stand: If using a frame support, verify that the setup is stable and secure before drilling.

SECURING THE MACHINE WITH EXPANSION BOLTS

The recommended method for securing the machine is by using expansion bolts. Follow these steps:

Ensure that the drilling surface and the machine base are level. If the surface is uneven, use the provided spanner to adjust the four leveling screws on the machine base until it sits flat and balanced.

Once leveled, firmly secure the machine to the surface using expansion bolts. Ensure the bolts are positioned close to the direction of the support column (pillar) for maximum stability.

After securing, verify that the machine does not slide or move on the rack. Apply pressure around the column to confirm there is no side-to-side movement. A stable pillar is essential for safe and precise drilling.

Important: U.S.SAWS strongly recommends using expansion bolts to secure the machine. Improper installation may result in unsafe operation. U.S.SAWS is not liable for any damage caused by insecure mounting.

When drilling vertically upward, ensure a water collection basin is used to prevent water from entering the motor. Never allow water to come into contact with the generator.

OPERATION

FRICTION CLUTCH
The built-in friction clutch protects the operator, machine, and bit from damage during sudden or high-force overloads.

If the clutch engages during work, allow it to operate in the disengaged (slipping) state for no more than 3–4 seconds.

Prolonged slipping can cause the clutch temperature to rise quickly, leading to excessive friction plate wear.

MASTER SWITCH AND OVERLOAD PROTECTION
The machine is equipped with a soft-start switch for smooth startup.

In the event of overload, the electronic overload protection will activate. You may notice fluctuations or interruptions in power—this is a warning.

If the load is not reduced, the machine will automatically shut off after a few seconds.

To restart, first reduce the load and ensure the bit can spin freely without obstruction in the hole.

⚠WARNING

Voltage Warning: If using a generator, make sure the voltage does not exceed 260V. Operating the machine with higher voltage can cause serious damage or even burn out the motor.

GEAR SPEED ADJUSTMENT

There are various ranges to suit the bit size and work piece hardness. Choose the slowest speed for large diameter bits and hard materials. If when cutting the bit stalls repeatedly, then you must change to a lower gear. If you are already in the lowest gear and the bit stalls repeatedly, then you are using the machine over its maximum capacity.

OPERATION

COMMON FAULT AND THE METHOD OF REMOVING

Fault	Reason	The method of removing
Generator does not turn	Power source is obstructed, or contacts to loosen to fall	Resume power source, inspect all joints and tighten
	Carbon brush blocks, take off open commutator	New installation carbon brush
	After the protector movement of leakage of electricity, do not reset	Press reset button to start generator again
	The protector damage of leakage of electricity	Change the protector of leakage of electricity
Drill hole is too slow	Bit life has arrived	Change bit
	Feed pressure is too low	Increase feed pressure
	Bit knife first surface is pasted by thin bits	Clean bit, increase hydraulic pressure
	Rotational speed is too high	Switch the files position of low speed
	It is slippery to cut thick reinforcing bar to hit	Feed pressure reduces is little after, will cross reinforcing bar increase pressure again
	In processing hole, amass bits	Put in order hole bottom. Pressurization
	Current does not be obeied, leakage or have no reflux	Inspect into the valve of water polo, inspect current
	Bit sharp degree reduces	Using fire-resistant brick or emery wheel open edge again
Bit blocks	The leather or broken bits piece of reinforcing bar blocks, is geting into core between bit or between bit and hole wall, frame fixes, is not firm, it is exceptional to produce displacement frame pillar and the gap of sliding sleeve.	Stop machine, turn bit around spanner, or pull out bit to knock broken get into heart to fix the frame adjustment gap of sliding sleeve again.
Bit wall wear is rapid	Main shaft not just	Repair or change main shaft
	Bit not just	Change bit
	Reinforcing bar or thin bits can not remove hole outside	Improvement current, take out bit, clean hole
Water set leakage	The skeleton wear or ageing of sealing ring	Change skeleton sealing ring

OPERATION

MAINTENANCE AND REPAIR

ATTENTION: You must remove the main plug from the supply socket before beginning any maintenance or repair work.

Clean the machine with a dry or moist cleaning-rag and not with a jet of water. Make sure that no water gets into the motor or the switch box. Ensure that the ventilation slots are always clean. Clean and greases the tool thread , too.

- Oil bath gear

The gear oil should be changed after the first 300 hours of operation. Ensure that this work is carried out in a specialist workshop, or proceed as follow: Clamp the machine vertically in the vice. Remove the three hexagon socket screws. Take off motor and inter-mediate cover. Change gear oil-use only original oil. The filling quantity is 300-310ml.To reassemble, proceed vice versa and ensure that the shim ring is on the front shaft.

ATTENTION: if gear oil escapes, stop the machine immediately. Leakage of oil damages the gear. Water connection

If water escapes from the overflow hole on the water connection ring, the rotary shaft seals must be replace immediately. This should only be done in an authorized specialist workshop.

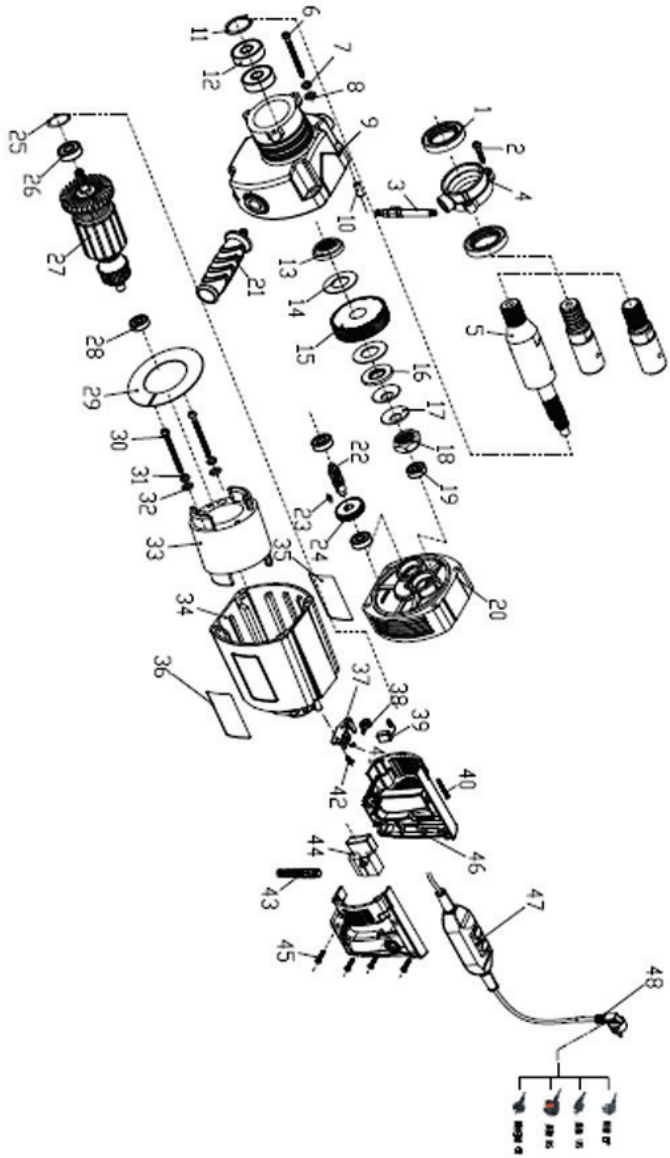
Carbon brushes

The carbon brushes should be examined for wear after about 300 hours in operation, and replaced if necessary. As with all other work on the motor, this should only be carried out by an electrician.

PARTS

No.	Parts Name	QTY
1	Oil seal 30 * 40 * 7	2
2	Hegonal screw M4 * 18	3
3	Water faucet 200A-EU	1
4	Water circle 911.	1
5	Spindle 911	1
6	Round head cross self-propelled screw M5 * 65	4
7	Pad M5	4
8	Pad M5	4
9	Gear box 911-S	1
10	Cylinder pin 4 * 12	1
11	Inner card 35	1
12	Bearing 6003	2
13	Hand-key pad 17 * 34 * 7	1
14	Segment 90	2
15	Spindle gear 911H-3	1
16	Hand-key pads 17 * 34 * 3.5	1
17	Curved bullet pad 90	2
18	Nut 130	1
19	Bearing 608	3
20	Cover 911 in the middle.	1
21	The assistant took 80	1
22	Class I tooth shaft 911H-2	1
23	Crescent pin 3 * 10	1
24	Class I gear 911H-1(7)	1
25	O-ring φ 31.5 * 1.8	1
26	Bearing 6000	1
27	Rotor OND-911	1
28	Bearing 608	1
29	Windscreen 911.	1
30	Round head cross self-propelled screw M4 * 65	2
31	Pad M4	2
32	Pad M4	2
33	Stator OND-915	1
34	Stator shell 911	1
35	Parameter Card 18-916(60.3 * 29.5)	1
36	Brand 40-80	1
37	Brush 911.	2
38	Bypass 1780	2
39	Carbon Brush 1780	2
40	Round head cross self-propelled screw M5 * 40	4
41	Round Head Cross Screw M4 * 6(Copper)	2
42	Round Head Cross Screw M4 * 10(Copper)	4
43	Fold proof connector M12 * 1.5	1
44	Speed switch 9/11 / 130	1
45	Round head cross self-propelled screw M4 * 20	5
46	Master, hold 911	1
47	Leakage protector PD16	1
48	Power cord 3 * 1.0 * 3.5 M	1

PARTS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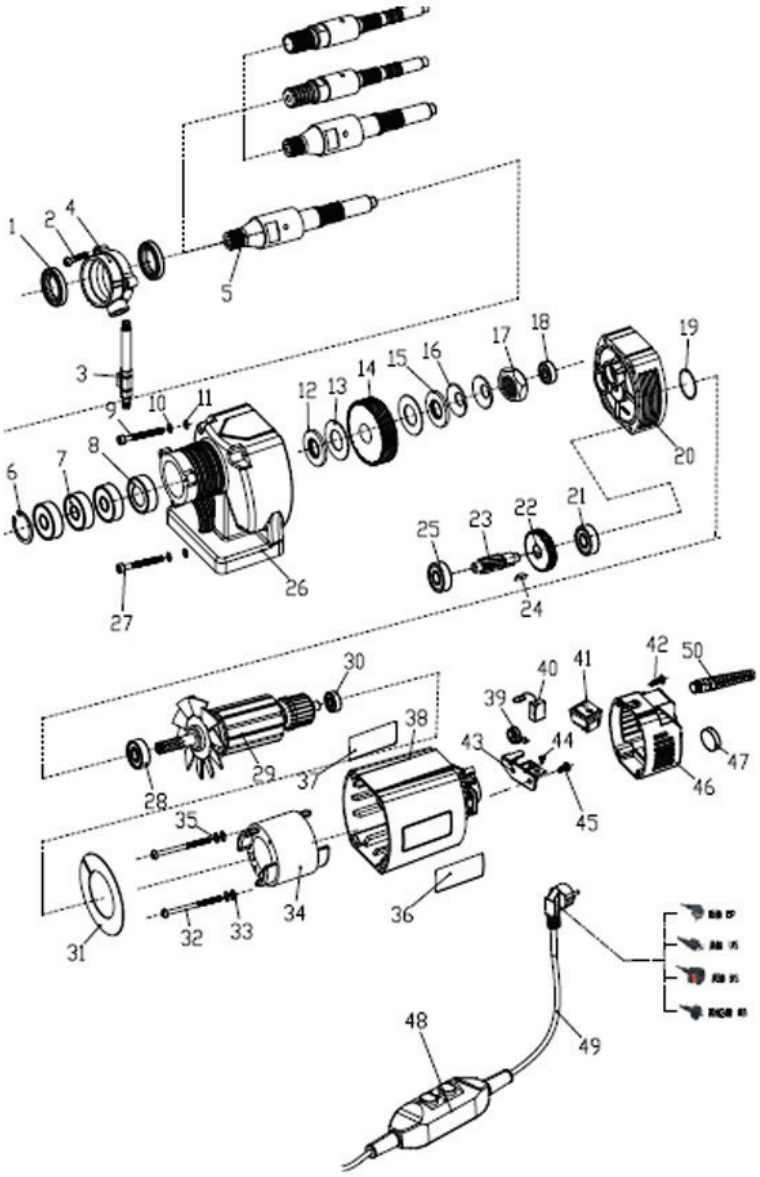
PARTS

No.	Parts Name	QTY
1	Oil seal 30 * 40 * 7	2
2	Hegonal screw M4 * 18	3
3	Water faucet 200-EU	1
4	Water circle 911.	1
5	Spindle 916	1
6	Inner card 35	1
7	Bearing 6003	3
8	Iron Circle 916-2	1
9	Hegonal screw M5 * 85(half tooth)	2
10	Pad M5	4
11	Pad M5	4
12	Sphinx 90	1
13	Segment 90	2
14	Spindle gear 916-3	1
15	Hand-key pads 17 * 34 * 3.5	1
16	Curved bullet pad 1780	2
17	Nut 130	1
18	Bearing 608	1
19	O-ring φ 31.5 * 1.8	1
20	Middle cover 916	1
21	Bearing 608	1
22	Class I gear 916-1(6)	1
23	Class I tooth axis 916-2	1
24	Crescent pin 3 * 10	1
25	Bearing 6000	1
26	Gear Box 916-L	1
27	Hegonal screw M5 * 75(half tooth)	2
28	Bearing 608	1
29	Rotor OND-916	1
30	Bearing 6001	1
31	Windscreen 916	1
32	Cross tapping screw M4 * 75	2
33	Pad M4	2
34	Stator OND-916	1
35	Pad M4	2
36	Brand 40-80	1
37	Parameter Card 18-916(60.3 * 29.5)	1
38	Stator shell 916	1
39	Curtain 19	2
40	Carbon Brush 19	2
41	Switch HY12-15	1
42	Round head cross self-propelled screw M5 * 40	4
43	Brush frame 19	2
44	Round Head Cross Screw M4 * 6 Copper	2
45	Round Head Cross Screw M4 * 10(Copper)	4
46	Top cover 916	1
47	Horizontal instrument φ 13 * 6	1
48	Leakage protector PD16	1
49	Power cord 3 * 1.0 * 3.5 M	1
50	Fold proof connector M16 * 1.5	1

PARTS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MAINTENANCE

Clean the machine with a dry or moist rag and not with a jet of water. Make sure that no water gets into the motor or the switch box. Ensure that the ventilation slots are always clean. Clean and greases the tool thread regularly.

Oil bath gear
The gear oil should be changed after 300 hours of operation. Ensure that this work is carried out in a specialist workshop, or proceed as follow: Clamp the machine vertically in the vice. Remove the three hexagon socket screws. Take off motor and inter-mediate cover. Change gear oil use only original oil. The filling quantity is 300-310ml.To reverse disassembly procedures

ATTENTION: if gear oil escapes, stop the machine immediately. Leakage of oil damages the gear.

Water connection
If water escapes from the overflow hole on the water connection ring, the rotary shaft seals must be replace immediately. This should only be done in an authorized specialist workshop.

Carbon brushes
The carbon brushes should be examined for wear after about 300 hours in operation, and replaced if necessary. As with all other work on the motor, this should only be carried out by an electrician.

WARRANTY

Warranty

This document is to be used as a guide in determining warranty policies and procedures for U.S.SAWS and its U.S.SAWS products. It is to be used in determining whether a warranty is justified and as a procedural guide in completing a U.S.SAWS warranty claim form.

Warranty Responsibility

The distributor or the end user must prepare a Machine Warranty Information Card when the machine is delivered. Failure to comply will make any and all warranties on this equipment null and void. Credit for warranty repairs will be given only after receipt of the WARRANTY CLAIM FORM, properly completed with all the required details. Submittal details are described later in this document.

Warranty Policy

U.S.SAWS warrants its U.S.SAWS products against defects in material and workmanship under normal and proper use for a period of one year (365) days from the date of delivery; in the case of Rental Fleet Machines, date of assignment to Rental Fleet. Such warranty is extended only to the buyer who purchases the equipment directly from U.S.SAWS or its authorized distributor. This warranty does not include expendable parts such as, but not limited to, plugs, cutters, blades, blast wheel, wear parts, liners and seals.

The obligation under this warranty is strictly limited to the replacement or repair, at US SAWS's option, of machines and does not include the cost of transportation, loss of operating time, or normal maintenance services.

This warranty does not apply to failure occurring as a result of abuse, misuse, negligence, corrosion, erosion, normal wear and tear, alterations or modifications made to the machine without express written consent of U.S.SAWS .

Warranty request must be submitted in writing within thirty (30) days after failure.

Written authorization to return merchandise under warranty must first be obtained from U.S.SAWS .

U.S.SAWS reserves the right to inspect and make the final decision on any merchandise returned under warranty.

U.S.SAWS offers no warranty with respect to accessories, including but not limited to, engines, motors, batteries, electrical boards, tires and any other parts not manufactured by us but which the original manufacturer warrants.

U.S.SAWS reserves the right to make product changes or improvements without prior notice and without imposing any obligation upon itself to install the same on its products previously sold.

The above warranty conditions can only be altered by US SAWS. US SAWS must confirm alterations in writing for each specific transaction.

U.S.SAWS reserves the right to establish specific warranty terms for used or demo machines on an individual transaction basis. Invoices covering such merchandise will clearly state the provisions of the applicable warranty for each specific transaction.

WE DO NOT AUTHORIZE ANY PERSON, REPRESENTATIVE OR SERVICE OR SALES ORGANIZATION TO MAKE ANY OTHER WARRANTY OR TO ASSUME FOR US ANY LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS OTHER THAN THOSE CONTAINED HEREIN.

UNDER NO CIRCUMSTANCES SHALL US SAWS BE LIABLE TO CUSTOMER OR ANY OTHER PERSON FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF ANY WARRANTY OR FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER, INCLUDING WITHOUT LIMITATIONS, DAMAGES FOR ANY LOSS OF GOODWILL, WORK STOPPAGE, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES.

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