

U.S.SAWS™



	<p>WARNING</p> <p>Read and fully understand operator's manual before using this machine.</p> <p>Failure to follow operating instructions could result in death or serious injury.</p>	
--	--	--

U.S.SAWS CORE EZ OPERATING MANUAL

Notice of Copyright Protection

Copyright 2020, by U.S.SAWS. All rights reserved. This work may not be reproduced or disseminated in whole or in part by any means without the prior written permission of U.S.SAWS

08-29-2023

U.S.SAWS™

**WATERWORKS
DIVISION**

P: 866-987-7297 F: 813-621-7125
Visit us at www.ussaws.com
sales@ussaws.com



INTRODUCTION & SPECIFICATIONS

1.0 INSTRUCTIONS FOR USE OF MANUAL SECTIONS

Section	Page
Table of Contents & Introduction	2
Symbols & Decals	3
Safety Instruction	4 - 5
Pre-Operation	6
Operation	7 - 9
Parts	10 - 12
Related Products & Accessories	13
Warranty & Service	14 - 15

Foreword/Introduction

This manual outlines the maintenance and operation of the Core EZ. This is a professional tool and is intended for use by trained and experienced operators. To get maximum benefit from your tool and to ensure maximum safety, be sure to read this manual thoroughly. You should also periodically review safety instructions. Keep all manuals provided with your equipment 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.

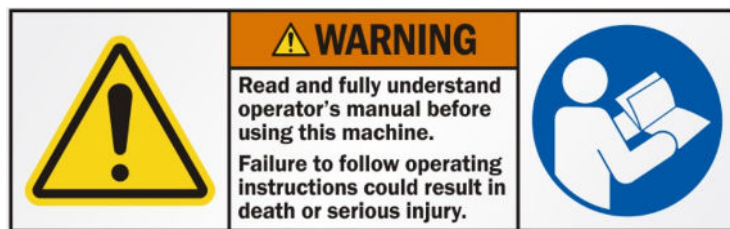
The U.S.SAWS Core EZ Core® makes core drilling easy by utilizing standard 110 V power. U.S.SAWS Core EZ offers a new way of core drilling. The entire unit and a selection of bits fit into a wheeled case that weighs under 50 pounds. The Core EZ drills holes from 3 into 10 in with ease. The entire unit is mounted on a central guide shaft rigidly anchored to the wall that supports the weight of the tool during the drilling process. Having the system's anchor in the middle of the hole eliminates damage to the wall.

Read this entire operations and maintenance manual before using your new tool. Pay close attention to the Rules for safer operation,

Disclosure

By purchasing and using the Core EZ, 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.



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



2.0 SPECIFICATIONS

Model	Core EZ
Part Number	US28000
Capacity	3" - 10" Core Bits (not included)
Electrical Requirements	115V (minimum 15 amps)
Motor	W24-230 9" Metabo Grinder
Dimensions	24" x 17" x 11"
Weight	65 lbs



SYMBOLS & DECALS

3.0 SYMBOLS & DECALS

For Safe Operation

You must be qualified for safe operation of the U.S.SAWS Core EZ 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.

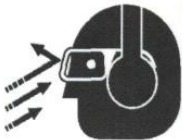
Be Safe

Human error is the result of many factors: carelessness, fatigue, sensory overload, preoccupation, 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

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



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

4.0 SAFETY INSTRUCTIONS

4.1 KNOW THE RULES & YOUR EQUIPMENT.

Most job sites have rules governing equipment use & maintenance. Before starting at a new work location, check with the supervisor or safety coordinator. Ask about any rules or regulations you need to abide.

OSHA enforces federal laws within the United States that apply to the safe operation, application, & maintenance of equipment on job sites. It is the employer's responsibility to comply with these laws.

Do not operate this machine unless you have read the operations and maintenance manual carefully.

4.2 RECEIVE PROPER TRAINING.

Do not operate this machine unless you have received operational and maintenance training from a U.S.SAWS representative or from an authorized distributor for U.S.SAWS.

4.3 PROTECT YOUR FEET.

Observe all applicable local, state and federal safety regulations. Wear OSHA approved foot protection.

4.4 PROTECT YOUR EYES.

Observe all applicable local, state and federal safety regulations. Wear OSHA approved safety glasses.

4.5 PROTECT YOUR HEARING.

Observe all applicable local, state and federal safety regulations. Wear OSHA approved hearing protection.

4.6 DRESS PROPERLY.

Do not wear loose clothing or jewelry that can be caught in moving parts. Wear protective hair covering to contain long hair. Keep hair away from motor air vent. Rubber gloves and non-skid footwear are recommended when working outdoors.

4.7 AVOID A DANGEROUS ENVIRONMENT.

Do not expose machine to rain. Do not use machine in wet conditions. Water entering a power tool will increase the risk of electric shock. Keep work area well lit. When working at an elevated location, pay attention to articles and persons below. If operating the power tool in damp locations is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of an GFCI reduce the risk of electric shock.

4.8 AVOID ANY AREAS OR ACTIONS THAT EXPOSE YOU TO CARBON MONOXIDE.

Exhaust gas from gasoline engines contains dangerous carbon monoxide. Breathing it can cause unconsciousness and even kill you. Always operate gasoline engine machines in a well-ventilated area. Do not operate in areas where exhaust fumes could accumulate without wearing appropriate respiratory protection. Consult your employer and OSHA regarding use of appropriate respirator for dangerous carbon monoxide gases.

4.9 KEEP WORK AREA CLEAN. DO NOT RUN OVER ANYTHING.

Loose objects could be thrown from crack. Make sure area to be cut is clear from people and any loose objects, nuts, bolts, etc. Never run over any loose objects.

4.10 KEEP CHILDREN AND VISITORS AWAY.

Do not allow anyone to stand in line with the blade path. Do not let children or visitors contact machine or extension cord. Keep children and visitors away from the work area.

4.11 KEEP FIRM GRIP ON MACHINE.

During normal operation as instructed in Section 6.0, keep a firm hold on the handle grips and maintain control of the machine until the blade completely stops.

4.12 SHUT OFF MACHINE.

When not in use, before servicing and when changing accessories shut off engine. Release the lever switch and move the on/off switch to the OFF position. Move the fuel valve lever to the OFF position.

4.13 STORE IDLE EQUIPMENT.

The machine and tools should be stored in a dry and secure location when not in use. Keep equipment out of reach of children.

4.14 DO NOT OVERREACH.

Keep proper footing and balance at all times.

4.15 OBTAIN SAFETY DATA SHEET (SDS) FOR ALL WORK SURFACE MATERIALS.

This includes primers, all coatings, adhesives, tile and crack filling materials, etc. Do not attempt to cut, clean out or remove material without SDS information. Consult SDS sheet for hazards information. Be aware that some materials are explosive as a dust.

4.16 MAINTAIN MACHINE WITH CARE.

Keep machine clean and follow maintenance procedures for better and safer performance. Keep handles dry, clean, and free from oil and grease. Follow instructions for lubricating and changing accessories.

4.17 REMOVE ADJUSTING TOOLS.

Form a habit of checking to see that tools such as adjusting wrenches are removed from the machine and properly stored before starting the engine.

4.18 STAY ALERT.

Watch what you are doing. Use common sense. Do not operate machine when you are tired or fatigued.

4.19 DO NOT USE DRUGS, ALCOHOL, MEDICATION.

Do not operate machine while under the influence of drugs, alcohol, or any medication.

4.20 KEEP THE RIGHT PARTS IN THE RIGHT POSITIONS.

Do not operate machine with parts missing or improperly mounted.

4.21 CHECK DAMAGED PARTS.

Verify all machine guards are in good condition and will function properly before using the machine. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect machine operation. A guard, power switch or other part that is damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in this instruction manual. Do not operate machine if lever or engine on/off switch does not function properly.



SAFETY INSTRUCTIONS

4.22 SECURELY MOUNT ACCESSORIES TO THE MACHINE.

Extra care must be taken an elevated location to prevent injury to someone on a lower level in the event the tool or accessory should drop. Do not operate without fall protection for operator and debris protection for public.

4.23 NEVER TOUCH THE MOVING PARTS.

Never touch moving parts such as shaft and drill extensions.

4.24 STOP OPERATION IMMEDIATELY IF ANY ABNORMALITY IS DETECTED.

Stop using machine immediately if any abnormalities are observed during operation. Examples of abnormalities include unusual noise and vibration.

4.25 WHEN REPLACING A PART, USE THE SAME TYPE AND QUALITY.

When replacing a component part with a new one, use only the same type and quality of new part. Never attempt to repair a machine if you are unfamiliar with proper procedures and techniques required.

4.26 LOAD AND UNLOAD SAFELY.

Use proper heavy lifting procedures. Read & understand manuals before loading & unloading.

4.27 SAVE THESE INSTRUCTIONS.

Refer to this operations and maintenance manual as well as any additional instructions included from other manufacturers and organizations.

4.28 REFER TO METABO MANUAL

Refer to 36v Battery Operated Metabo 36LTX Grinder Owner's Manual included with your Core EZ kit for operations, maintenance and safety guidelines.

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



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)

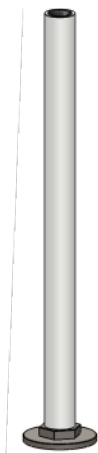
California Prop 65 Warning: Use of this product can cause exposure to materials known to the State of California to cause cancer and/or birth defects or other reproductive harm.



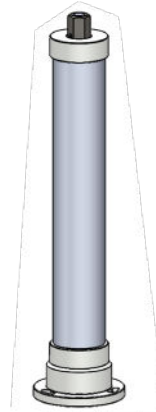
PRE-OPERATION

5.0 U.S.SAWS Core EZ is a battery-operated, portable, and powerful core drilling machine and the most versatile and complete unit available to-date.

5.1 Core EZ in Storage Case



Guide Post

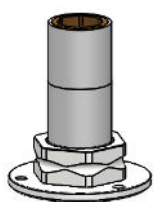


Water Feed Tube



Carry Case

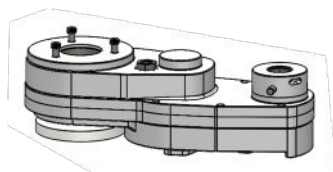
5.2 Package Contains:



Hex Core Bit Adapter



Core Bit



Gearbox



Grinder

Grinder Coupling*

5.3 Assembly

5.4 Mount hex core bit adapter to required size core bit.



5.5 Install grinder onto gearbox. Ensure that the pin is fully rotated into the locked position.



5.6 Secure a water supply (i.e.; water tank, water truck, garden hose).



OPERATION

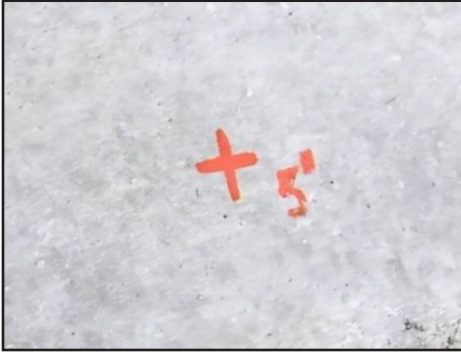
⚠ WARNING

WARNING: Always insure that the switch is in the “OFF” position before plugging the unit into electrical power.

⚠ CAUTION

CAUTION: Never leave the drill running unattended. Turn power off when not in use.

6.1 Mark center of core.



6.2 Drill anchor hole with 3/8" masonry bit a minimum of 5" deep, unless using toggle anchors.



6.3 Set anchor pin.



6.4 Remove nuts from anchor bolt.



6.5 Mount guide post.



6.6 Adjust anchor point.



⚠ CAUTION

CAUTION: Once the guide post is tight, push and pull on it several times by hand to stretch and seat the anchor into its tightest position, then, re-tighten the guide post. Repeat this complete procedure three times to ensure that the guide post is securely centered.



OPERATION

WARNING

WARNING: Do not over reach, maintain control. Keep proper footing and balance at all times. Maintain a firm grip. Use extra care using the tool on ladders, roofs, scaffolds, etc.

6.7 Final tightening procedure should be performed with the supplied 1-1/2" wrench. In some cases the wrench should be lightly hammered to insure tightness.



6.8 Be sure guide post is clean & lubricated before sliding core bit assembly into place on the guide post.



6.9 Slide gearbox and grinder over guide post, ensuring to engage the locking pin on hex drive.



6.10 To mount water feed tube, slide it over the guide post and thread the feed nut while aligning the mounting plate bolts on the back of the gearbox.



6.11 Turn on water. Minimize water usage, do not flood the cut with water. Typical water consumption should be under 1 gallon per minute.



6.12 Hold down grinder trigger and turn advancing nut with a 3/4" wrench to core hole.



OPERATION

Vertical Drilling Floors



- Remove the entire machine out of the drilling location (ex. cored hole) and place in a secure location for disassembly.
- Reverse feed nut, counterclockwise, to remove core bit and guide post.
- To remove core & anchor from guide post, strap chain wrench to core and apply opposite pressure with the 1

Horizontal Drilling Walls



- Unthread feed tube to remove the coring unit and leave the core and guide post in the hole.
- Re-stretch the anchor hole by pushing firmly on the guide post (similar to original tightening procedure).
- Unthread guide post.
- Remove core from hole.



WARNING: Do not over reach, maintain control. Keep proper footing and balance at all times. Maintain a firm grip. Use extra care using the tool on ladders, roofs, scaffolds, etc.

6.10 DISASSEMBLY STEPS

6.10.1 STEP 1

Stop motor, unplug unit from power, and turn off water.

6.10.2 STEP 2

Remove the core.

Based on job site conditions there are several ways to remove the core. See full instructions to the left.

6.11 TROUBLESHOOTING

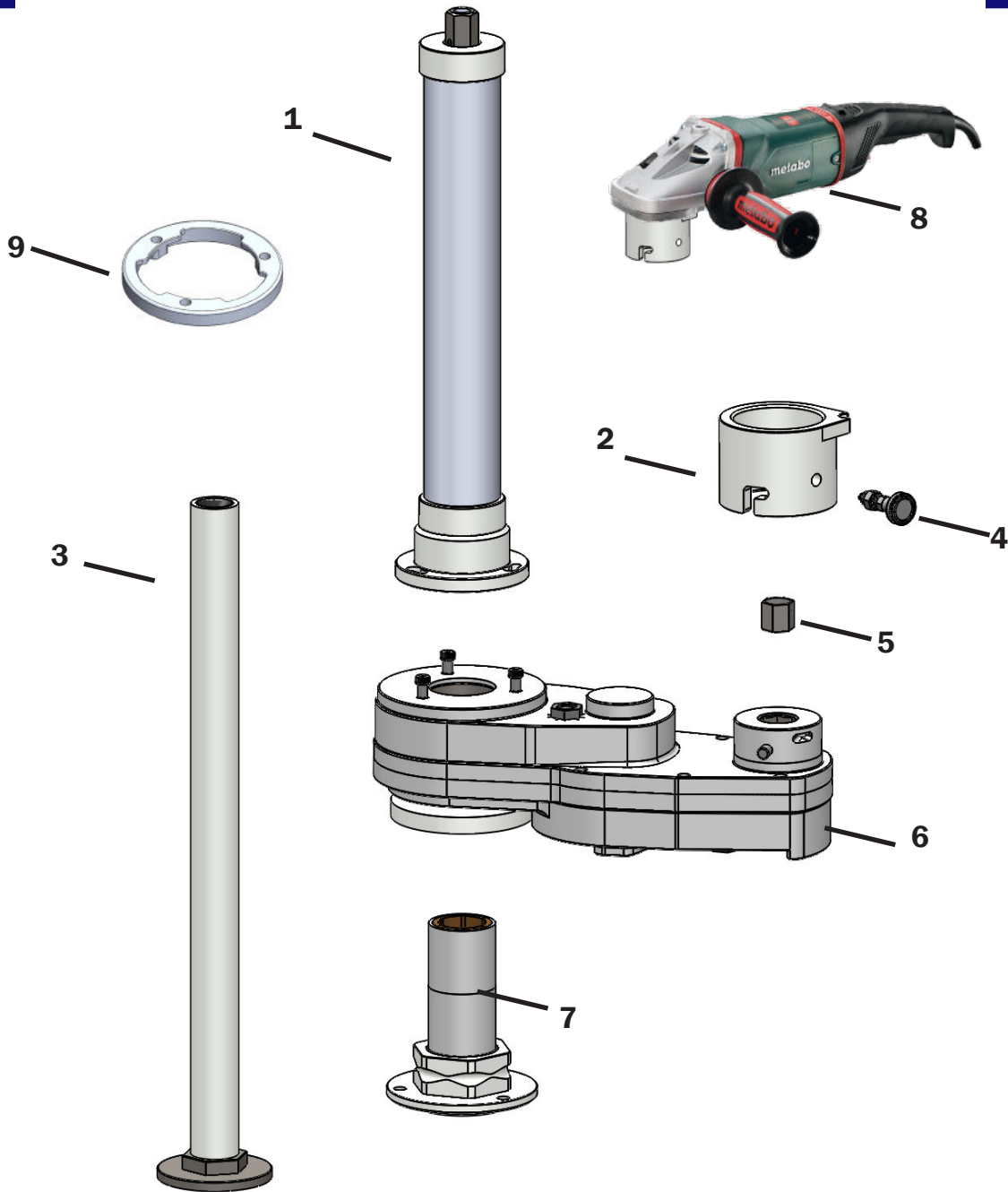
6.11.1 HOW TO REMOVE A JAMMED CORE BIT

Occasionally a sliver of steel/metal can jammed the core bit. For instructions on to remove a jammed core bit, go to <https://youtu.be/UOPYPoatK44> or scan the QR code below with your smart phone for a quick video "How To" instruction.



PARTS

Core EZ

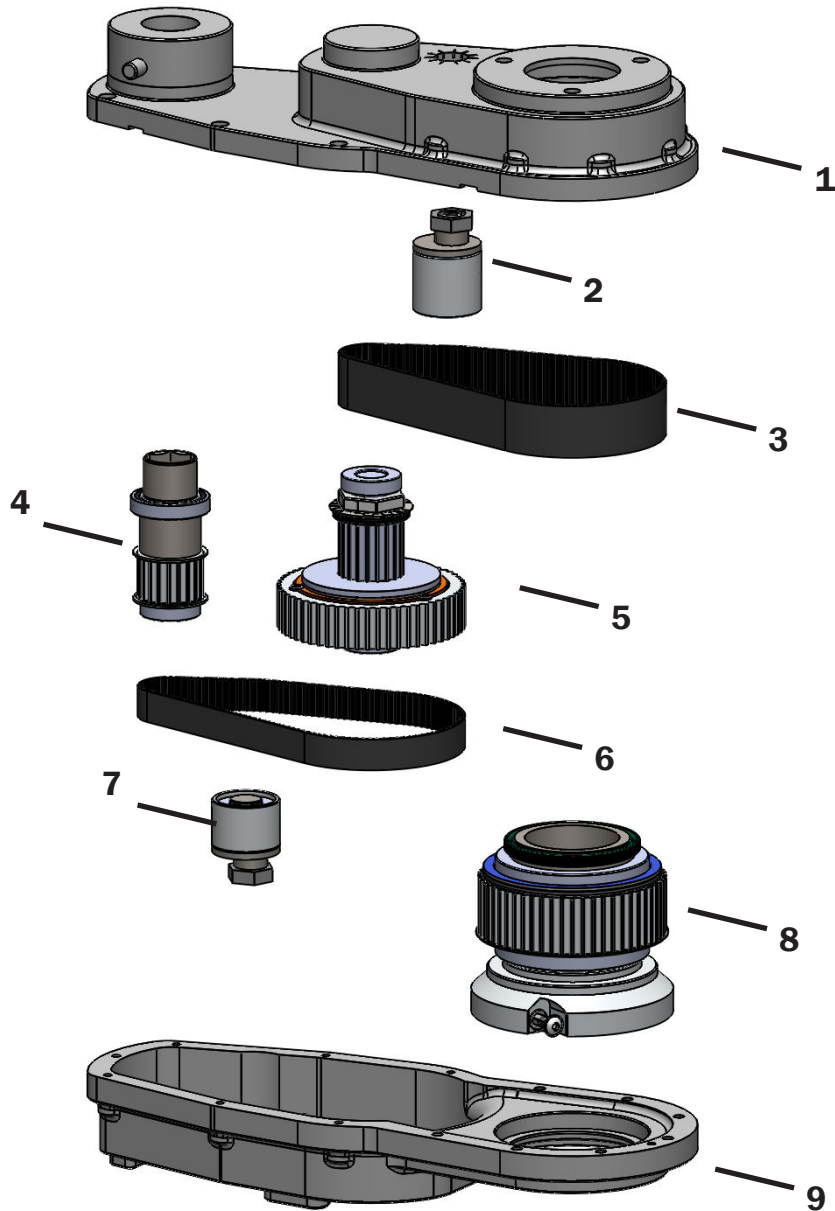


Number	Description	Part Number
1	Water Feed Tube	US28172
2	Grinder Coupler	US28591-8
3	Guide Post	US28152
4	Spring Locking Pin	US28191-8
5	Spindle Nut 5/8-11	US28191-6
6	Core Mate Gear Box	US28181
7	Hex Core Bit Adapter	US28561
8	Metabo Grinder with Adapter Assy for CoreEZ	US28181
9	Core EZ 3-tab Feed Tube Adapter with Clear Anodize	US28171-23



PARTS

Gearbox

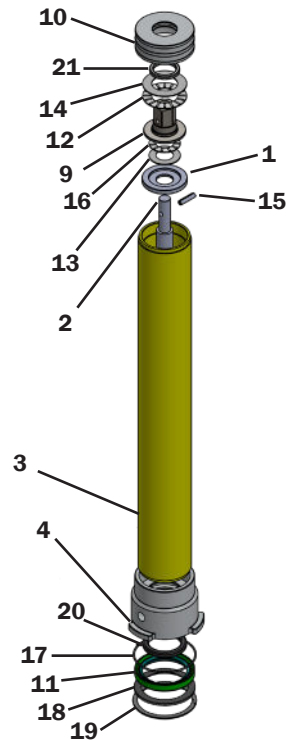


Number	Description	Part Number
1	Gearbox Top Housing	US28581-1
2	Reverse Idler Pulley (29 mm)	US28141-16
3	Polychain Belt 425-25	US28131-16
4	Input Shaft	US28111
5	Intermediate Shaft	US28121
6	Polychain Belt 425-15	US28111-11
7	Reverse Idler Pulley (20 mm)	US28141-15
8	Hex Output Shaft	US28131
9	Gearbox Bottom Housing	US28581-2



PARTS

Gearbox



Number	Description	Part Number
1	Feed tube insert	US28171-22
2	Feed screw 16.375"	US28172-1
3	Al feed tube	US28172-3
4	Feed tube adapter	US28571-8
5	(2) Hose clamp	SX27607
6	3/8 blue hose - 12"	US27610
7	Barbed hose fitting male	US27611
8	Brass barbed hose fitting female	US27612
9	3/4" Drive Nut	US28171-1
10	Upper end cap	US28171-10
11	Radial lip seal 1-3/4"ID x 2-1/4"OD	US28171-17
12	25mm Thrust Bearing	US28171-3
13	17mm Thrust washer	US28171-4
14	25mm Thrust washer	US28171-5
15	3/16x3/4 extra strength roll pin	US28171-18
16	17mm Thrust bearing	US28171-2
17	2-1/4"ID x 1/16"w o-ring	US28171-20
18	Polyurethane seal	US28171-16
19	2.250 internal spiral retaining ring	US28171-19
20	o-ring 1-1/4"ID x 1-5/8"OD x 3/16"w	US28171-11
21	7/8"ID x 1-1/8"OD x 1/8"w x-profile o-ring	US32108



RELATED PRODUCTS & ACCESSORIES



*Specialty Sizes Available upon request, call us at 866-987-7297

Part Number	Description
CBB0300M	3" x .165 Core Bit
CBB0400M	4" x .165 Core Bit
CBB0500M	5" x .165 Core Bit
CBB0600M	6" x .165 Core Bit
CBB0700M	7" x .165 Core Bit
CBB0800M	8" x .165 Core Bit
CBB1000M	10" x .165 Core Bit
US28210	3/8"-16 x 5" Anchors
US27538	10" Toggle Bolt

ANGLE DRILLING WASHER



Special washers for drilling at an angle

PART NUMBER: US28273

CONCRETE ANCHOR

Used for the Core EZ to mount the base.



PART NUMBER: US28210

SLURRY RING



Slurry water for clean coring removal, available in 6" and 10"

PART NUMBER: US28261 (6")

PART NUMBER: US28263 (10")

SOLO MANUAL PUMP



3.5 gallon manual water pump

PART NUMBER: US27810-1

EXTENDABLE CORE BIT



Tubing Extendable Core Bits for cuts over 12" deep, available sizes: 3" - 6"

PART NUMBER: CALL FOR MORE INFO

BATTERY OPERATED PUMP



5 gallon battery powered pump

PART NUMBER: US27815



WARRANTY AND SERVICE

9.0 WARRANTY AND SERVICE

9.1.1 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.

9.1.2 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.

9.1.3 Warranty Policy

9.1.3.1 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.

9.1.3.2 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.

9.1.3.3 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 .

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

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

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

9.1.3.7 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.

9.1.3.8 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.

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

9.1.3.10 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.

9.1.3.11 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.

9.1.3.12 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.

9.1.3.13 U.S.SAWS MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE US SAWS PRODUCTS SOLD PURSUANT THERETO.



MACHINE WARRANTY INFORMATION CARD

TO ENSURE THE PROPER WARRANTY COVERAGE IS EXTENDED TO THE OWNER OF THIS MACHINE, FILL OUT THE ATTACHED CARD COMPLETELY AND ACCURATELY.

WARRANTY REGISTRATION CARD

IMPORTANT! To ensure that your U.S.SAWS machine is covered under warranty, please fill in the following information and mail or fax it to U.S.SAWS, 8004B E. Broadway Ave. Tampa, FL 33619, Fax No. (813) 621-7125

COMPANY
NAME
ADDRESS
INTENDED USE
DATE OF PURCHASE
INTENDED USE
SERIAL NUMBER

If you are not the owner of record as shown on the manual copy of the warranty registration card, do not operate this machine before contacting U.S.SAWS at (866) 987-7297. Verify the following before operating the equipment:

CHANGE OF OWNER OR NEW ADDRESS REGISTRATION CARD

IMPORTANT! To ensure that your U.S.SAWS machine is covered under warranty, please fill in the following information and mail or fax it to U.S. SAWS, 8004B E. Broadway Ave. Tampa, FL 33619, Fax No. (813) 621-7125

COMPANY
NAME
ADDRESS
INTENDED USE
DATE OF PURCHASE
INTENDED USE
SERIAL NUMBER

15

U.S.SAWS™

**WATERWORKS
DIVISION**

P: 866-987-7297 F: 813-621-7125
Visit us at www.ussaws.com
sales@ussaws.com

