# U.S.SAWS"





# U.S.SAWS BREAK 'N TAKE & ROBOTRON MAGNETIC MANHOLE LIFTERS 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

U.S.SAWS WATERWORKS

09-09-2024

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 &	Introduction2
Symbols & Decals	
Safety Instruction	
Operation	
Warranty & Service	

# Foreword/Introduction

This manual outlines the maintenance and operation of the Break 'N Take & Robotron Magnetic Manhole Lifting Devices. 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. U.S.SAWS Robotron & Break N' Takes magnetic manhole lifter that lifts larger diameter and heavier manhole covers with ease. Our Magnetic Lifting Systems are versatile tools with the power to get the heavy lifting done while avoiding back injuries associated with lifting manhole covers.

### \*150 - 350 lbs Magnetic Manhole Lifting Capacity

### Features:

- · Uses rare neodymium magnets that won't wear out
- Up to 350 lb lifting capacity
- Impact protection guards around the magnets
- Affordable, durable, and portable
- Storage base protects magnets during transportation

# **A**WARNING

- DO NOT modify this equipment as it will void warranty benefits.
- The Lifting capacity for this equipment, as shown in the specification 2.0 is based upon a clean flat steel iron surface. Manhole covers in general will be uneven and coated. For this reason, the magnets may not lift their full rated capacity.
- This equipment limits the height that the manhole cover or cover plate can be lifted for safety reasons. DO NOT attach this equipment to any form of device such as a crane or bachoe. This types of cranes require additional safety features as specified by OSHA and othersafety organizations.

## Disclosure

By purchasing and using the Break 'N Take & Robotron Magnetic Manhole Lifting Devices, 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.



# WARNING Read and fully understand

operator's manual before using this machine. Failure to follow operating instructions could result in death or serious injury.

# 2.0 SPECIFICATIONS

Model	3 Magnet Robotron	4 Magnet Robotron	Utility 4 Magnet Robotron
Lifting Capacity	250 lbs	300 lbs	325 lbs
Magnets Used	3 Magnets	4 Magnets	4 Magnets
Aluminum Chassis	Yellow	Yellow	Yellow
Unit Weight	15 lbs	18 lbs	22 lbs
Base Dimensions	13" x 6"	<b>1</b> 6" x 7"	16" x 7"
Unit Height	34"	34"	42"
Part Number	US30178RT	US30188RT	US30188UTILITY

Model	3 Magnet Break N' Take	4 Magnet Break N' Take	5 Magnet Megatron
Lifting Capacity	150 lbs	225 lbs	350 lbs
Magnets Used	3 Magnets	4 Magnets	5 Magnets
Aluminum Chassis	Orange	Orange	Orange
Unit Weight	15 lbs	17 lbs	29 lbs
Base Dimen- sions	10" x 5"	10" x 5"	16" x 7"
Unit Height	34"	34"	34"
Part Number	US30178	US30188	US30198

# U.S.SAWS WATERWORKS

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



# **SYMBOLS & DECALS**

#### 3.0 **SYMBOLS & DECALS**

# **For Safe Operation**

You must be qualified for safe operation of the U.S.SAWS Break 'N Take & Robotron Magnetic Manhole Lifting Devices machine. You must clearly understand the written instructions supplied by U.S.SAWS, be trained (including actual operation) & know the safety rules and regulations for the job site. It is a safety practice to point out & explain safety signs and 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, drugs or alcohol, to name a few. You can avoid serious injury or death caused by these and 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.

# **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.



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



Wear appropriate clothing



Please be advised that in and around the application of magnetic equipment. Strong Magentic Field Interactiuon with metallic objects may produce Pinch Hazards.

- Persons with medical implants KEEP BACK 36 inches during operations
- Can be harmful with pacemaker wearers



Wear hand protection

Individuals that has sensitive medical devices should use caution when they are around or handling magnets. For more information, the wearer should contact their physician.



Wear safety boots when operating this machine



Beware of pinch points from sudden attraction and unexpected movement between magnets and ferrous metal equipment components or tools.

# U.S.SAWS WATERWORKS

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



# SAFETY INSTRUCTIONS

#### 4.0 SAFETY INSTRUCTIONS

#### 4.1 **KNOW THE RULES & YOUR EQUIPMENT.**

Most job sites have rules governing equipment use and 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.

Use safe lifting practices when removing the lid to reduce muscle load or pressure on your back. At no time should the entire weight of the lid be suspended by the magnetic tool. The tool is designed to lift only the edge of a manhole cover so that the lid can be slid off the opening.

Do not operate this equipment 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.

#### **PROTECT YOUR FEET.** 4.3

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

#### **PROTECT YOUR EYES.** 4.4

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

#### PROTECT YOUR HEARING. 4.5

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.

#### **AVOID A DANGEROUS ENVIRONMENT.** 4.7

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.

#### AVOID ANY AREAS OR ACTIONS THAT EXPOSE YOU TO CAR-4.8 **BON 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 let children or visitors contact machine or extension cord. Keep children and visitors away from the work area.

#### 4.11 **DO NOT OVERREACH.**

Keep proper footing and balance at all times.

#### MAINTAIN EQUIPMENT WITH CARE. 4.12

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.

#### 4.13 **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.

#### 4.14 STAY ALERT.

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

#### 4.15 DO NOT USE DRUGS, ALCOHOL, MEDICATION.

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

#### 4.16 **KEEP THE RIGHT PARTS IN THE RIGHT POSITIONS.**

Do not operate machine with parts missing or improperly mounted.

#### 4.17 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.

#### 4.18 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.

#### 4.19 LOAD AND UNLOAD SAFELY.

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

#### 4.20 SAVE THESE INSTRUCTIONS.

Refer to this operations and maintenance manual as well as any additional instructions included from other manufacturers and organizations such as Honda® and the Masonry and Concrete Saw Manufacturers Institute®. Never permit anyone to operate the machine without proper instructions.

# U.S.SAWS WATERWORKS

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



# OPERATION

# 5.0 OPERATION CHECKLIST



# **A WARNING**

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



Warning label - read and understand manual





Beware of pinch points from sudden attraction and unexpected movement between magnets and ferrous metal equipment components or tools.

# A DANGER

**DANGER**: If you use a pacemaker or similar device, you must never approach the equipment because your device may malfunction in the magnetic field with consequence up to and including death.

# **A**WARNING

**WARNING:** The magnets used on the Break 'N Take tool are neodymium or rare earth magnets. They are among the strongest magnets available and exert enormous force. The energy in these magnets cannot be seen or felt by a person or on nonmetallic objects; however, caution should be taken around these tools. Use caution around credit cards, electronic devices, and metal objects.



Persons with medical implants KEEP BACK 36 inches during operations Can be harmful with pacemaker wearers

# 

**CAUTION:** If sharp tugging motions are used during the removal process, the magnets may release without warning. Use a safe stance/body position to ensure you do not fall backward if the magnets do release.

## 5.1 BREAK N' TAKE OPERATION

## 5.1.1 Step 1

Remove the maintenance hole remover from protective shoe. This prevents the tool from sticking to metal objects unexpectedly. Place magnets on outer edge of manhole lid. It is recommended to place the lifter on the cleanest area; avoiding dirt, asphalt, and heavy build up. \* *Before use wipe magnets clean to remove debris.* 



## 5.1.2 Step 2

Lower the handle so that the breaking fulcrum is touching the ground. Gently press/ bump the handle with your hands until the edge of the lid begins to free itself. Pressing the handle all the way to the ground or forcefully kicking the handle typically results in the magnets pulling away from a well-sealed lid and failing to lift the lid.



### 5.1.3 Step 3

Once the lid is moving in it's seat, raise the handle into a comfortable standing position. Pull the edge of the lid free of the opening.





# U.S.SAWS WATERWORKS DIVISION

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



# **OPERATION**

### 5.1.4 Step 4

Now drag the lid backwards. Drag the lid to a safe location and leave the maintenance hole remover attached to the lid. Lower the handle to the ground to prevent it from falling unexpectedly.



## 5.1.5 Step 5

Once you drag the lid back in place, remove the maintenance hole remover. To remove, lift the handle to it's full upright position until it contacts the stopping pin. Then, in a quick and forceful motion, push the handle against the stop, the magnets will release, and the tool will tip backwards. Lift the tool from the lower handle/fulcrum, again in a sharp motion and the tool will release from the lid.



## 5.1.6 Step 6

Replace the maintenance hole remover in the protective shoe for transport. The maintenance hole remover should be stored in the shoe until ready for operation. The shoe disrupts the magnetic force produced by the rare earth magnets.



# U.S.SAVS WATERWORKS

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



# **OPERATION**

## 5.2 MAINTENANCE HOLE REMOVER OPERATION

## 5.2.1 Step 1

Place magnet on edge of manhole lid.



## 5.2.2 Step 2

Position handle pivot in the lifting position (as shown below). Push down on handle to "break" manhole seal. Push handle down fully. This will lift the cover up to the edge of the manhole opening.



## 5.2.3 Step 3

Reposition lifting handle pivot to the drag position (see below). Pull towards you to slide lid out of the manhole opening.



5.2.4 Step 4

Pull lid back to manhole original covering opening.



## 5.2.4a Step 4a (ONLY FOR UTILITTY ROBOTRON)

Extend the handle for extra distance from the manhole or for taller people. This will allow operator to handle equipment more efficiently.



5.2.5 Step 5 Reposition pivot to the remoal position. Push forward to remove magnet.



# U.S.SAWS WATERWORKS

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



# 10.0 WARRANTY AND SERVICE

## 10.1.1 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.

## 10.1.2 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.

## 10.1.3 Warranty Policy

**10.1.3.1** 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.

**10.1.3.2** 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.

**10.1.3.3** 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 .

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

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

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

**10.1.3.7** 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.

**10.1.3.8** 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.

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

**10.1.3.10** 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.

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

**10.1.3.12** UNDER NO CIRCUMSTANCES SHALL US SAWS BE LIABLE TO CUSTOMER OR ANY OTHER PERSON FOR ANY DIRECT, INCI-DENTAL, 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.

**10.1.3.13** 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.



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



# 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. 714-434-7299

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 1-866-987-7297 Verify the following before operating the equipment:

# CHANGE OF OWNER OR NEW ADDRESS REGISTRATION CARD

DIVISION

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. 714-434-7299

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

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

