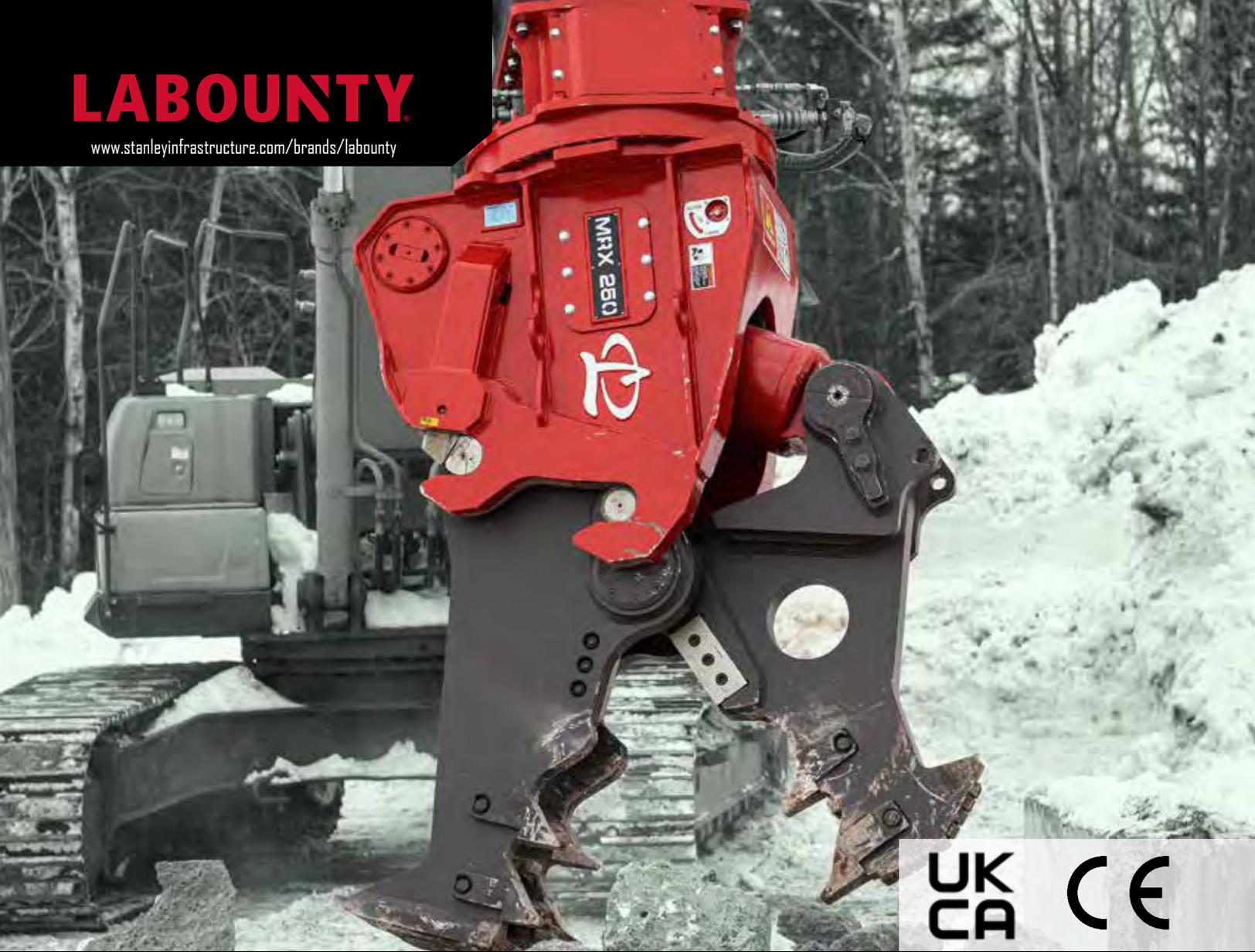


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UK  
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## MRX

# MULTI-JAW DEMOLITION TOOL

## SAFETY, OPERATION & MAINTENANCE

520706 User Manual 5/2022 Ver. 12

# PREFACE

This manual contains information for the safe operation and maintenance of the LaBounty MRX MULTI-JAW DEMOLITION TOOL. Read the entire manual before the initial start-up of the attachment. It is important to know the correct operating procedures of the attachment and all safety precautions to prevent the possibility of property damage and personal injury.

The LaBounty attachment has been designed and manufactured with high quality materials and care in workmanship. The instructions in this manual have been prepared to ensure that, when followed properly, the attachment will provide efficient and reliable service. Continuing product development and improvement may have caused changes in the attachment that are not reflected in this manual. If a question arises regarding the operation or maintenance of the attachment, contact a LaBounty dealer for the most current information available.

## IMPORTANT

This operator's manual must accompany the attachment at all times and be readily available to the operator.

## MANUAL REPLACEMENT

Should this manual become damaged, lost or additional copies are required, immediately contact any authorized LaBounty dealer. You may also download a PDF copy at [www.stanleyinfrastructure.com](http://www.stanleyinfrastructure.com).

## REGISTRATION FORM

The Warranty Registration Form must be filled out by the dealer or customer and returned to LaBounty indicating the date the machine went into service.

## POSSIBLE VARIATIONS

LaBounty cannot anticipate every possible circumstance that might involve a potential hazard, as the owner's requirements and equipment may vary. Therefore, the warnings in this publication and on the product may not be all-inclusive and you must ensure that the procedure, application, work method and operating technique is safe for you, and others, before operation.

## PUBLIC NOTICE

LaBounty reserves the right to make changes and improvements to its products and technical literature at any time, without public notice or obligation. LaBounty also reserves the right to discontinue manufacturing any product at its discretion, at any time.

## WARRANTY

All work or repairs to be considered for warranty reimbursement must be authorized by the LaBounty Service Department before work is started. Any alterations, modifications or repairs performed before authorization by the LaBounty Service Department will render all warranty reimbursement consideration null and void without exception. Improper operation or improperly performed maintenance may render any warranty null and void.

# CONTENTS

<b>DECALS.....</b>	<b>7</b>
<b>ATTACHMENT DESCRIPTION.....</b>	<b>8</b>
<b>TERMS .....</b>	<b>8</b>
<b>INSTALLATION .....</b>	<b>9</b>
Attach to Excavator.....	9
Hydraulic Installation.....	10
Adjust Rotation Flow.....	11
Jaw Installation & Removal.....	12
Storing the Attachment.....	23
<b>OPERATION.....</b>	<b>24</b>
Before You Start .....	24
Safety Devices .....	24
Technical Specifications .....	25
Operation Temperatures and Conditions .....	26
Controls.....	26
Jaw Set Functions.....	26
Bleed the Attachment Hydraulic Circuit.....	27
<b>MAINTENANCE .....</b>	<b>29</b>
Prepare MRX for Maintenance.....	29
8 Hours Inspection Checklist.....	29
Daily Inspection Checklist.....	29
40 Hour Inspection Checklist.....	30
6 Month Inspection Checklist.....	30
12 Month Inspection Checklist.....	30
Lubrication.....	31
Inspect / Torque Bolts .....	33
Blade Maintenance.....	33
Cracker Jaw .....	33
Pulverizer Jaw .....	34
Shear Jaw .....	35
Tooth Maintenance.....	37
Build up & Hardsurfacing.....	37
Pulverizer Jaw .....	38
Cracker Jaw .....	38
<b>TROUBLESHOOTING.....</b>	<b>40</b>
<b>HYDRAULIC SCHEMATIC.....</b>	<b>41</b>
MRX Hydraulic Schematic.....	41
Rotation Hydraulic Schematic.....	42
Hydraulic Test Ports .....	42

# SAFETY

	The Safety Alert Symbol alerts you to potential personal injury hazards. Obey all safety messages that follow to avoid possible injury or death.
	Indicates an imminently hazardous situation which will result in death or serious injury.
	Indicates a potentially hazardous situation which could result in death or serious injury.
	Indicates hazards that could result in damage to the equipment or personal injury
	Indicates important procedures



Your safety and the safety of others is a direct result of how you operate and maintain your equipment. Read and understand this manual and other safety information provided with the base machine and be sure that you understand all controls and operating

instructions before attempting to operate this equipment. Failure to follow the safety precautions can result in personal injury, death or property damage.

Carefully read all safety messages in this manual and on your equipment safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.

Because LaBounty cannot foresee all hazardous circumstances, the precautions listed in this manual and on the equipment are not all-inclusive. If a procedure, method, tool or part is not specifically recommended by LaBounty, determine whether it is safe for you and others, and that the equipment will not be damaged or made unsafe as a result of your decision to implement it.

The basic rules are summarized in this section of the manual. They also appear throughout the manual along with additional specific rules for safety and operation.

## GENERAL

- If the attachment is not functioning properly, shut down the machine, follow proper Lock-out / Tag-out procedures and follow proper repair procedures.
- Remove and replace any damaged or worn parts

with parts recommended by LaBounty. Use of parts that are not factory approved may cause damage or unnecessary downtime and may void the warranty.

- NEVER operate equipment without the original safety guards in place.
- DO NOT process material with the attachment over the operator's cab. Doing so will result in severe personal injury or death from falling debris.
- DO NOT attempt to process brittle materials, such as axles and railroad rail. DO NOT process any material in a position that may propel it toward the operator, other workers, buildings or equipment.
- Clear all persons and equipment from the area of operation and machine movement. NEVER move loads over people or equipment. When viewing the operation of the attachment, maintain a safe distance of at least 75 feet (23 meters).
- NEVER approach power lines with any part of the machine. Keep clear at a minimum of 15 feet (5 meters).
- DO NOT close the attachment on a structure and reverse the excavator in an attempt to pull down material.
- DO NOT use the attachment in explosive, or potentially explosive, environments. Use in a well ventilated area.
- Use of this tool on certain materials could generate dust potentially containing a variety of hazardous substances, such as, asbestos, silica or lead. Inhalation of dust containing these, or other hazardous substances could result in serious injury, cancer or death. Protect yourself and those around

you. Research and understand the materials you are processing. Follow safety procedures and comply with all applicable national, state or provisional health and safety regulations relating to them. If appropriate, arrange for the safe disposal of the materials by a qualified person.

- Disassembly of any pin-connected attachment can be hazardous. NEVER remove any pin unless the attachment is on the ground and blocked up. Serious injury or death could result. Metal chips or debris may fly when a connecting pin is struck. Use a brass drift when striking pins and always wear protective clothing and proper eye protection. Pins may fly when struck with force to drive them in or out. Always keep people clear when removing or installing pins.
- Do not operate this, or any other equipment, under the influence of drugs or alcohol.
- DO NOT modify LaBounty equipment without factory authorization. This equipment is designed to do a specific job and alterations could result in injury.
- ALWAYS lower the boom to the ground before leaving the cab. If it is necessary to work on an attachment off the ground, securely support the machine and attachment. DO NOT support the machine on cinder blocks, hollow tiles or props that may crumble under continuous load. DO NOT rely on a cylinder to hold the attachment in the air. If a control is moved or hydraulic pressure is otherwise released, the attachment may drop. DO NOT work under a machine that is supported only by a jack.
- DO NOT weld on any structural member unless specifically authorized by LaBounty. Unauthorized welding will void the warranty, may cause structural failure and could result in personal injury.
- Keep clear of potential pinch points, including the moving upper jaw, cylinder connections, bucket linkages and other moving parts.
- Before operating the attachment, read and observe all safety instructions in the Operation & Maintenance manual. If you are unfamiliar with any operation or maintenance procedure, seek instruction before proceeding.
- Inspect the attachment daily. Do not operate a poorly maintained or damaged attachment.
- Never operate a machine if an unsafe condition exists. Attach a "Do Not Operate" tag to the machine.

## **SAFELY OPERATE EQUIPMENT**

- Establish a training program for all operators to ensure safe operation.
- Do not operate the tool or attachment unless thoroughly trained or under the supervision of a qualified operator or instructor.
- Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation.
- Know your work site safety rules. When in doubt on

any safety issue, contact your supervisor or safety coordinator.

- Assess risks to yourself and others around you before operating the tool or attachment. Start in a work area without bystanders and assess the risks to bystanders including, but not limited to, the risk of serious injury or death caused by the tool or accessories dropped from an elevated height.
- Do not operate the equipment from anywhere other than the correct operator's position.
- Do not alter or remove any safety feature from the prime mover or tool.
- Stay alert, watch what you are doing and use common sense when operating the tool. Do not operate the tool or attachment if you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating the tool may result in serious injury.

## **BASE MACHINE**

- Ensure that the cab is equipped with the proper safety guards for LaBounty applications. The cab MUST be equipped with an approved Falling Object Protection Structure (FOPS) and cab guarding. The FOPS must meet the requirements of SAE standard J1356. A transparent, shatter-resistant shield covering the front of the cab, is also required. Contact your base machine equipment dealer or manufacturer for more information on the availability of FOPS and cab guarding. Lack of proper FOPS and guards may result in injury or death.
- Avoid tipping. The attachment will alter the lift capacities of the base machine. DO NOT overload the excavator or serious injury could result. Lift capacities will vary if the base machine is not on level ground. Lifting incorrectly can cause severe injury or machine damage. Use the recommended excavator counterweight. Use short slings and lift the load only as high as necessary.
- DO NOT allow riders on the machine. Riders are subject to serious injuries, such as being struck by foreign objects or being thrown off the machine. Riders also distract and obstruct the operator, resulting in the machine being operated in an unsafe manner. NEVER use the attachment as a work platform or personnel carrier.
- Check ground conditions before operating. Avoid unstable or slippery areas and position the base machine on firm, level ground. If level ground is not possible, position the base machine to use the attachment to the front or back of the carrier. Avoid working over the side of the base machine.

## **HYDRAULIC**

- Hydraulic oil becomes hot during operation. DO NOT come in contact with hot hydraulic oil as it could cause

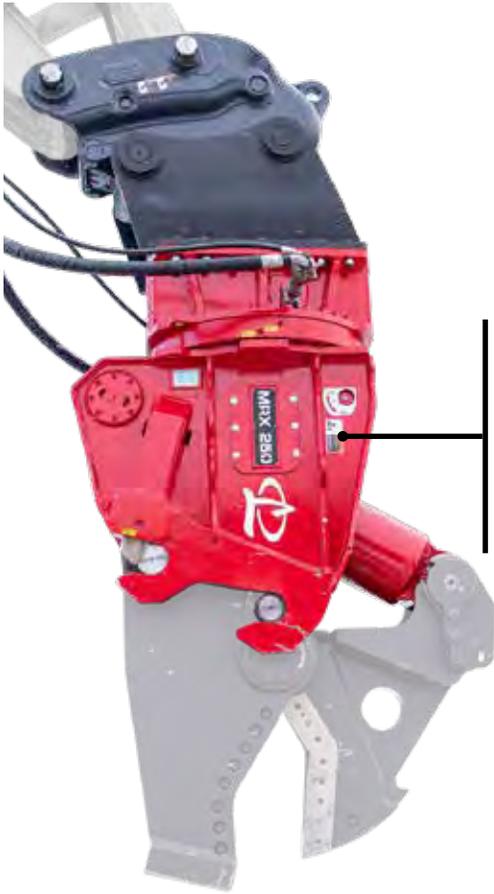
severe burns. Wear adequate protective clothing and safety equipment.

- DO NOT tamper with hydraulic lines or components while they are pressurized. Escaping fluid under pressure can penetrate the skin, causing serious injury. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard to search for leaks. If ANY fluid is injected into the skin, seek immediate medical assistance.

## **PPE**

- ALWAYS wear close-fitting clothing and safety equipment appropriate to the job. Safety equipment should be worn at all times when viewing, operating or maintaining the attachment. Safety equipment includes eye protection, hard hat, steel toe shoes, gloves, hearing protection and respirator.

# DECALS



	<b>⚠ WARNING</b>
	Servicing while pressurized can cause sever injury <b>LOCK OUT</b> source and <b>RELIEVE PRESSURE</b> before servicing


<b>SAFETY FIRST</b>
Read the Safety, Operation and Maintenance Manual before operating or servicing the equipment. Keep the manual with the attachment so it is available for reference.

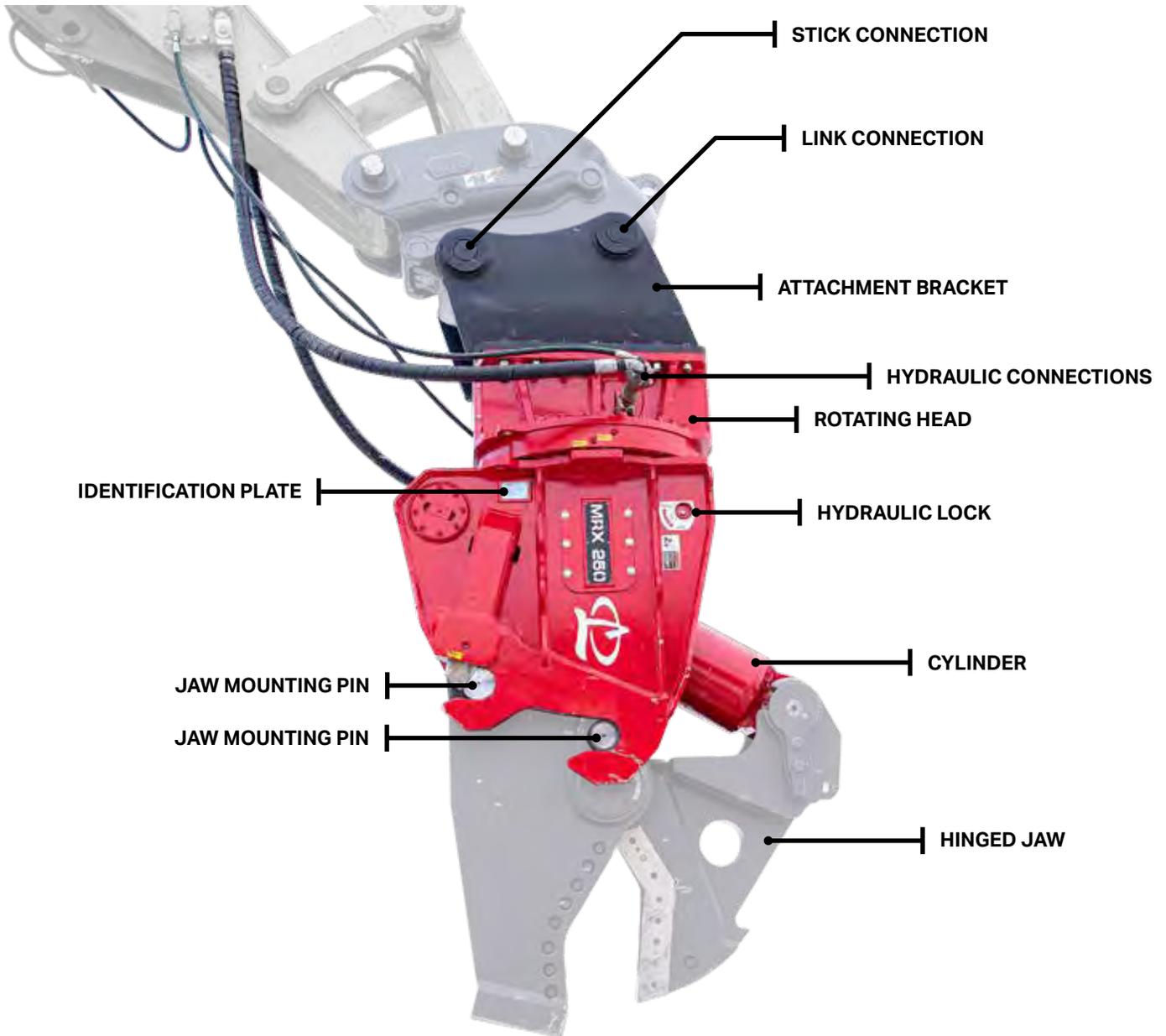


<b>⚠ DANGER</b>
Top and front cab guarding required during any material processing application

# ATTACHMENT DESCRIPTION

The MRX is the answer to most primary and secondary demolition applications. The interchangeable jaws' designs facilitate improved penetration and rapid material downsizing. MRX is used to process concrete and certain metals, using the proper jaw set. Do not use MRX for high tensile steel, or other non-approved applications. Use in non-approved applications is considered misuse.

## TERMS



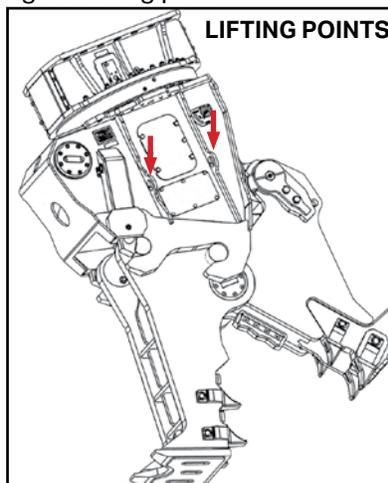
# INSTALLATION

## ATTACH TO EXCAVATOR

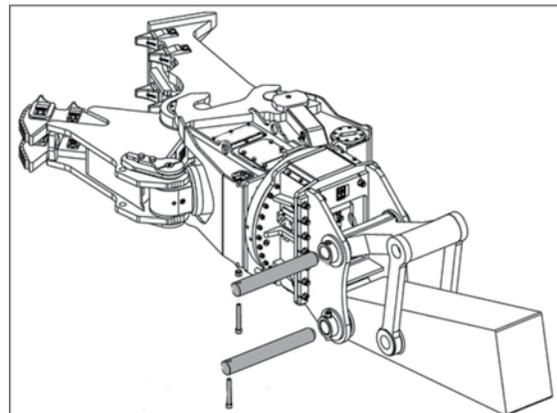
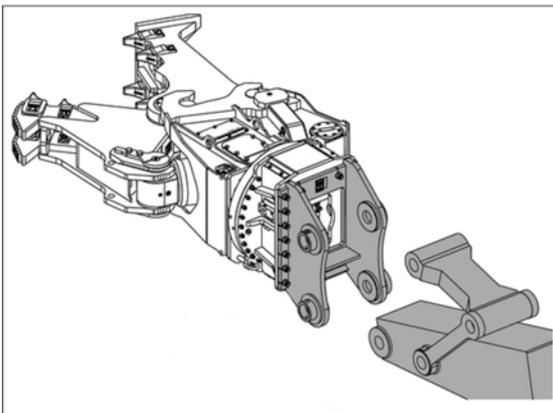
### **WARNING**

Use only approved rigging hardware rated for loads greater than the weight of the attachment. Lifting points are for moving the attachment only. Do not lift other objects or use the attachment in a cable-hung application.

1. Locate flat, hard ground (e.g., concrete floor) for installation.
2. Using lifting devices that are rated for the weight of the MRX (See "Technical Specifications" on page 25), lift and place the attachment on the ground using the lifting points.



3. Ensure the attachment bracket is positioned vertically.
  4. Remove the excavator bucket. Follow the manufacturer's recommended procedure.
- Note: Plug hydraulic hoses to prevent contamination.**
5. Clean the inside surface of the attachment bracket and all attachment pins. Remove all dirt and debris.
  6. Bring the excavator in position, carefully lining up the stick tip with the stick connection on the attachment bracket.
  7. Pin the excavator stick to the stick connection.
  8. Carefully extend the excavator bucket cylinder to move the bucket linkage. Position the link into the attachment bracket linkage connection.
  9. Pin the linkage connection to the attachment bracket.



10. Remove the transport pin.

## HYDRAULIC INSTALLATION

Model	Jaw Cycle Circuit (Max)	Rotation Circuit (Max)	Connection		Case Drain
			Attachment	Rotation	
MRX70	31 GPM (120 LPM) 4060 PSI (280 Bar)	1 GPM (3.28 LPM) 2030 PSI (140 Bar)	3/16-16 UNF ORFS	-8 ORFS	-
MRX100	47 GPM (180 LPM) 4060 PSI (280 Bar)	2.6 GPM (9.84 LPM) 2030 PSI (140 Bar)	3/4 In Code 62	-8 ORFS	-
MRX130	47 GPM (180 LPM) 4495 PSI (310 Bar)	2.6 GPM (9.84 LPM) 2030 PSI (140 Bar)	3/4 In Code 62	-8 ORFS	-
MRX180	52 GPM (200 LPM) 4495 PSI (310 Bar)	3.9 GPM (14.8 LPM) 2030 PSI (140 Bar)	1 In Code 62	-8 ORFS	-
MRX220	74 GPM (280 LPM) 5075 PSI (350 Bar)	3.9 GPM (14.8 LPM) 2030 PSI (140 Bar)		-8 ORFS	-
MRX260	79 GPM (299 LPM) 5075 PSI (350 Bar)	4.8 GPM (18 LPM) 2030 PSI (140 Bar)		-8 ORFS	-
MRX360	92 GPM (348 LPM) 5075 PSI (350 Bar)	9.7 GPM (36.7 LPM) 2030 PSI (140 Bar)		-8 ORFS	-
MRX500	105.5 GPM (400 LPM) 5075 PSI (350 Bar)	11 GPM (43 LPM) 2030 PSI (140 Bar)	1 1/4 in Code 62	-8 ORFS	-8 ORFS
MRX750	145 GPM (550 LPM) 5075 PSI (350 Bar)	17 GPM (64 LPM) 2030 PSI (140 Bar)	1 1/2 in Code 62	-8 ORFS	-8 ORFS

1. Turn off the excavator and relieve any trapped pressure in the hydraulic system. Lock-out / Tag-out the hydraulic power source.



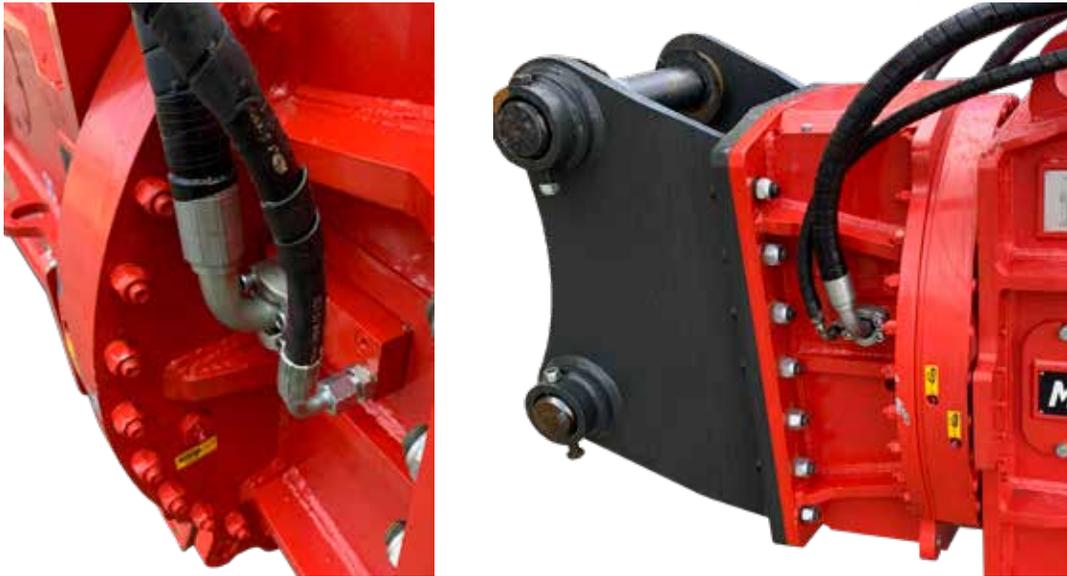
**Trapped hydraulic pressure may be present after the excavator is shut off. Extreme caution must be taken when removing hydraulic hoses or lines. Injury or death could result.**



**Do not connect or disconnect hydraulic lines while they are pressurized. Escaping fluid under pressure can penetrate the skin, causing serious injury.**

2. Clean the excavator hydraulic hose fittings.
3. Route each hydraulic hose so that they will not rub on the attachment bracket or will otherwise become damaged.
4. Connect the excavator hoses to the hydraulic connections located on each side of the MRX head. Each hydraulic port is labeled.

Label	Function
EXT	Cylinder extend. Closes the jaw.
RET	Cylinder retract. Opens the jaw.
ROT CW	Clockwise rotation
ROT CCW	Counter clockwise rotation
Drain	Case drain (if equipped)



5. Torque all hydraulic fittings to values shown in "Inspect / Torque Bolts" on page 28.

## ! **WARNING**

**Do not check for hydraulic leaks with your hands. Hydraulic oil could inject into the skin. Seek immediate medical attention if an injection injury occurs.**

6. Visually check for hydraulic oil leaks or hydraulic hose interference.  
**Note: The hydraulic circuit must be bled before putting the attachment into service (see "Bleed the Attachment Hydraulic Circuit" on page 27).**

## ADJUST ROTATION FLOW

MRX has two rotation flow controls, one accessed from the rotating head cover and another accessed from the top of the attachment.

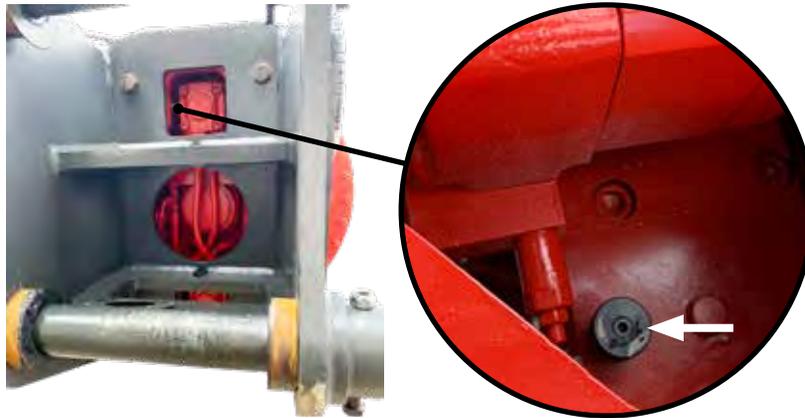
1. Remove the cover from the rotating head. The flow control port will be attached to the port block.
  - Turn the rotation flow control knob counter clockwise to increase flow.
  - Turn the rotation flow control knob clockwise to decrease flow.



Look through the top of the mounting bracket. The flow control will be attached to the port block.

- Turn the rotation flow control knob clockwise to increase flow.

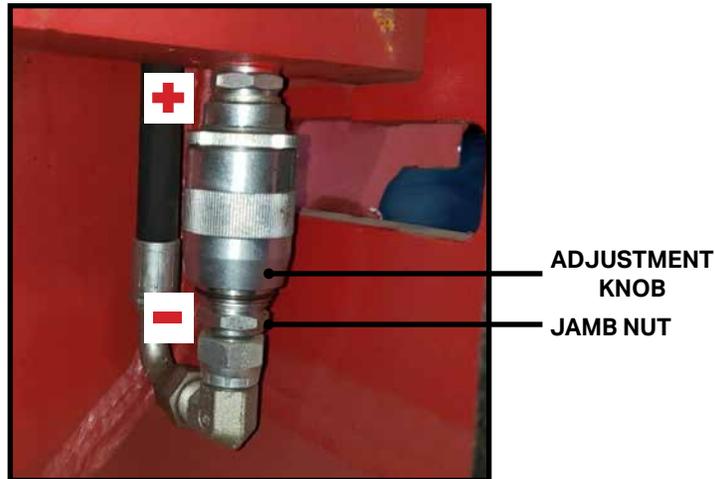
- Turn the rotation flow control knob clockwise to decrease flow.



## ⚠ NOTICE

MRX500 has a conical style flow adjustment. To adjust...

1. Loosen the jamb nut.
2. Turn the knurled knob to adjust the flow. Thread the knob towards the top to increase flow. Thread the knob towards the bottom to decrease flow.
3. Tighten the jamb nut.



## JAW INSTALLATION & REMOVAL

MRX is shipped without the jaw installed. Follow the instructions for your MRX model.

### ⚠ CAUTION

Wear personal protection equipment at all times. This includes eye protection, hard hat, steel toe shoes, leather gloves and hearing protection.

### ⚠ WARNING

Clear all persons and equipment from the area of operation and machine movement. NEVER move loads over people or equipment. When viewing the operation of the attachment, maintain a safe distance of at least 75 feet (23 meters).

## MODELS

“MRX70” on page 13

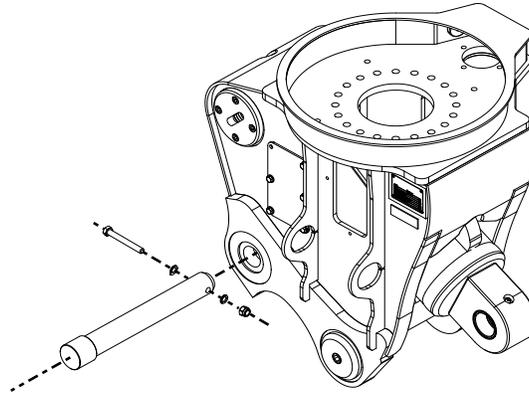
“MRX100” on page 14

“MRX130” on page 16

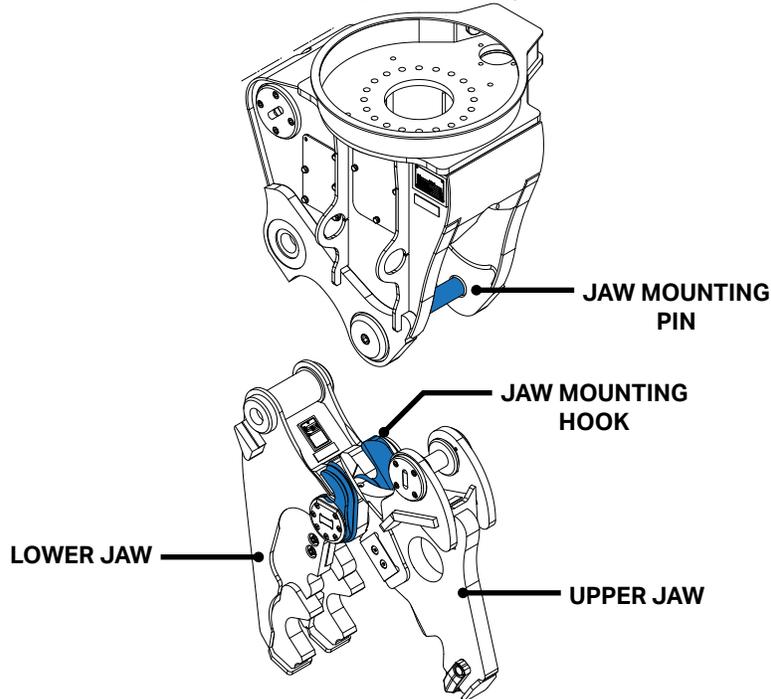
“MRX180 - 750” on page 18

### MRX70

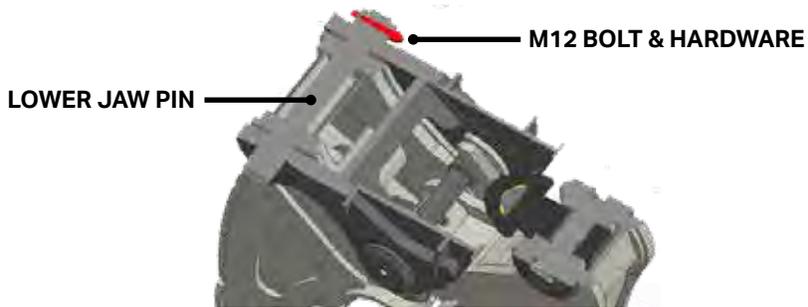
1. Place the jaw horizontally on the ground.
2. Curl MRX under the excavator and position it so that it can be accessed from the ground.
3. Remove the lower jaw mounting pin from the MRX base using a 12 mm wrench.



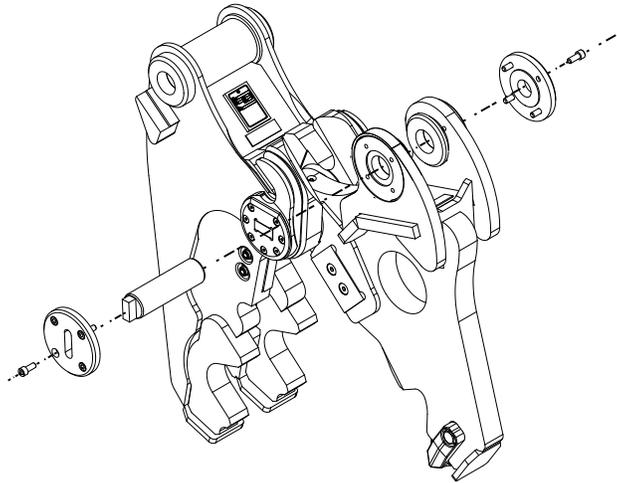
4. Hook the jaw mounting pin on the MRX base onto the jaw mounting hook.



5. Align the lower jaw mounting hole with the MRX base lower jaw mounting hole.
6. Insert the lower jaw mounting pin and secure using the M12 bolt and hardware removed previously. Torque to 51 Ft. Lbs. (69 Nm).



7. Remove the upper mounting pin from the upper jaw mounting hole using a 10 mm Allen wrench.



8. Align the upper mounting hole with the MRX base upper mounting hole.

**Note: Move the MRX cylinder slowly and carefully. Do not allow the cylinder to hit the bumpers.**

9. Insert the upper jaw mounting pin removed previously. Torque bolts to 29 Ft. Lbs. (39 Nm).

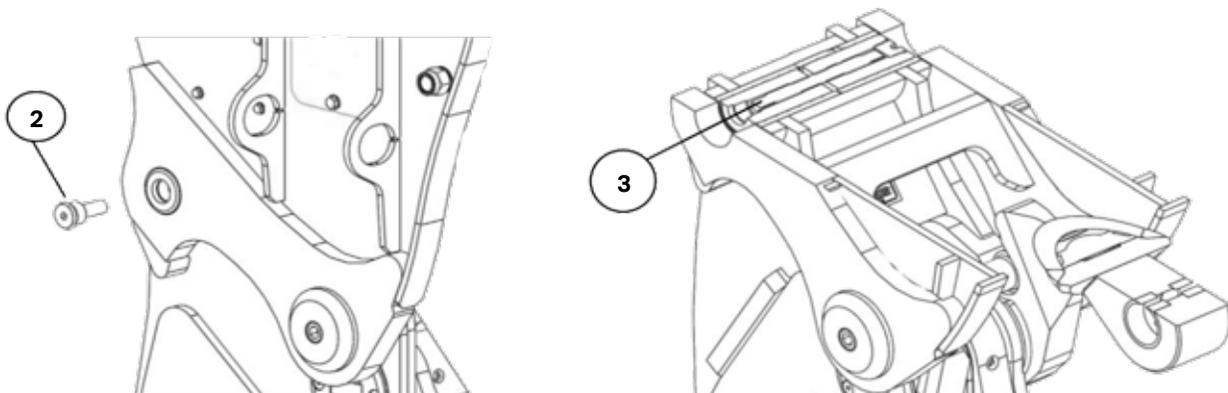
### MRX100

1. Place the jaw horizontally on the ground.

2. Remove the pin stop from the lower jaw mounting hole using a 10 mm Allen wrench.

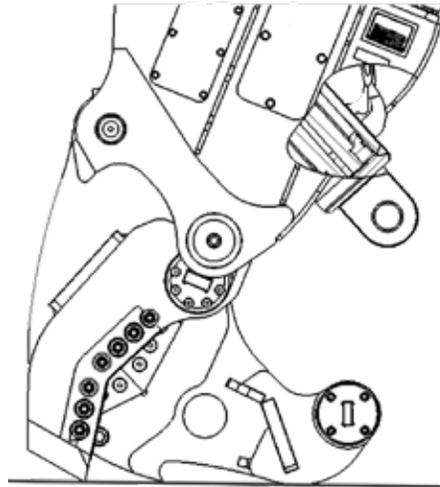
**Note: The plug on the opposite side of the pin from the pin stop must remain in place.**

3. Using a 17 mm socket, turn the bolt inside the lower jaw mounting hole until the lower jaw mounting pins have retracted.





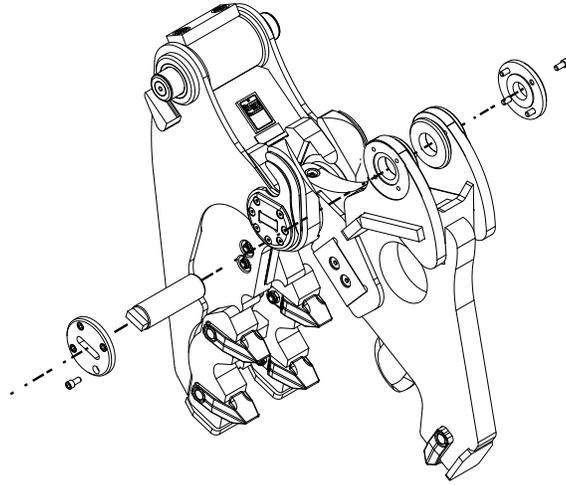
4. Curl MRX under the excavator and position it so that it can be accessed from the ground.
5. Hook the jaw mounting pin on the MRX base onto the jaw mounting hook.
6. Align the lower jaw mounting hole with the MRX base lower jaw mounting hole.



7. Using a 17 mm socket, turn the bolt inside the lower jaw mounting hole until the jaw mounting pins have fully extended.

**Note: Do not grease the pins while extended. This will cause the pins to not retract. Remove the pin grease fitting to remove excess grease from the pin.**

8. Replace the pin stop removed previously. Torque to 108 Ft. Lbs. (147 Nm).
9. Remove the upper mounting pin from the upper jaw mounting hole using an 12 mm Allen wrench.



10. Align the upper mounting hole with the MRX base upper mounting hole.

**Note: Move the MRX cylinder slowly and carefully. Do not allow the cylinder to hit the bumpers.**

11. Insert the upper jaw mounting pin removed previously. Torque to 51 Ft. Lbs. (69 Nm).

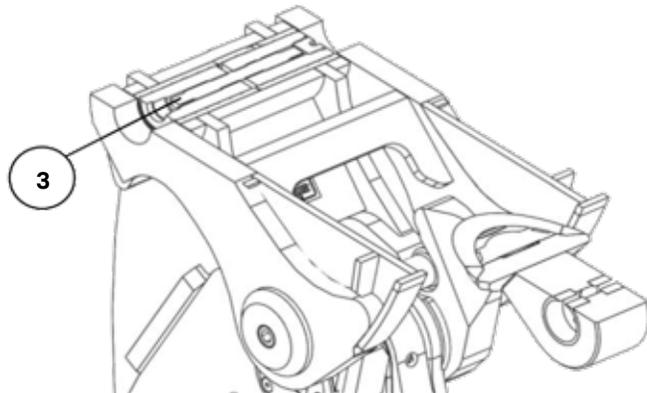
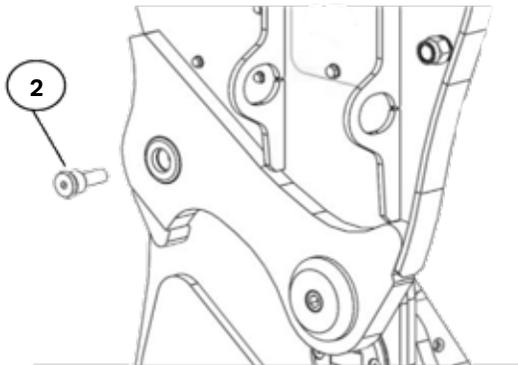
### MRX130

1. Place the jaw horizontally on the ground.

2. Remove the pin stop from the lower jaw mounting hole using a 10 mm Allen wrench.

**Note: The plug on the opposite side of the pin from the pin stop must remain in place.**

3. Using a 17 mm socket, turn the bolt inside the lower jaw mounting hole until the lower jaw mounting pins have retracted.

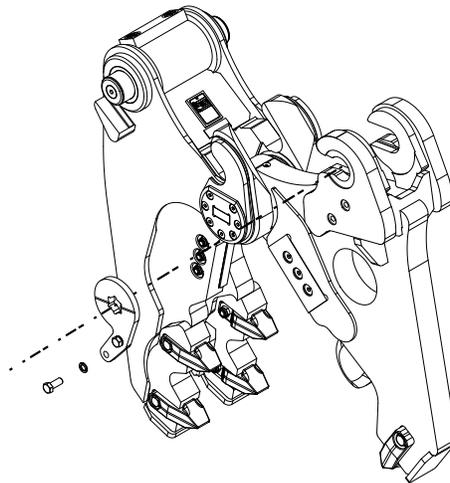




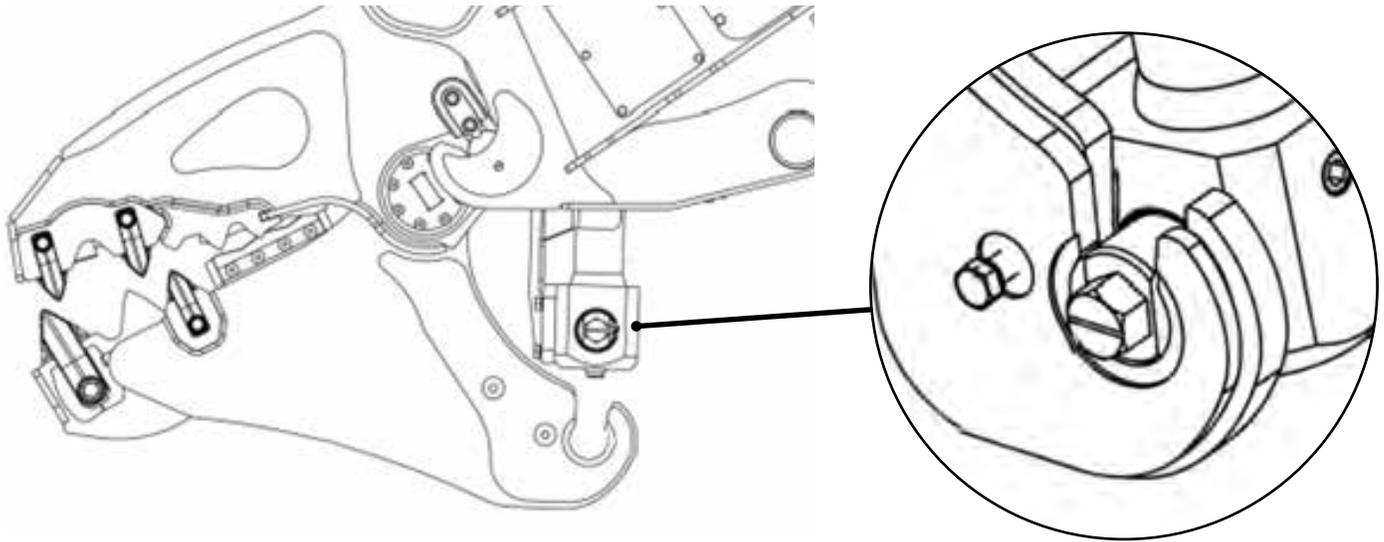
4. Curl MRX under the excavator and position it so that it can be accessed from the ground.
5. Hook the jaw mounting pin on the MRX base onto the jaw mounting hook.
6. Align the lower jaw mounting hole with the MRX base lower jaw mounting hole.
7. Using a 17 mm socket, turn the bolt inside the lower jaw mounting hole until the jaw mounting pins have fully extended.

**Note: Do not grease the pins while extended. This will cause the pins to not retract. Remove the pin grease fitting to remove excess grease from the pin.**

8. Replace the pin stop removed previously. Torque to 108 Ft. Lbs. (147 Nm).
9. Remove the pin lock from the upper jaw mounting hole using a 16 mm wrench.



10. Turn the cylinder pin until it is aligned to the upper jaw mounting hole.



**Note: Do not extend the cylinder into the lower jaw mounting hole until the face of the cylinder pin and the jaw slot are in alignment. Forcing the cylinder pin into the upper jaw slot may cause damage to the jaw.**

11. Slowly extend the cylinder until the cylinder pin goes into the upper jaw mounting hole

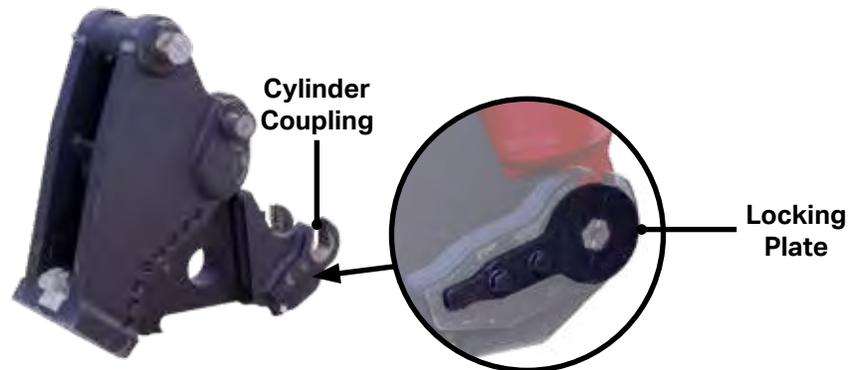
**Note: Move the MRX cylinder slowly and carefully. Do not allow the cylinder to hit the bumpers.**

12. Rotate the cylinder pin 90°.

13. Re-install the pin lock removed previously and torque to 122 Ft. Lbs. (166 Nm).

### MRX180 - 750

1. Locate flat, hard ground (e.g., concrete floor) for installation.
2. Place the jaw horizontally on this ground, with the jaw cylinder coupling is near the ground.



3. Remove the two bolts that hold the locking plate onto the jaw. Set aside the locking plate and the bolts.
4. Curl MRX under the excavator and position it so that it can be accessed from the ground.

# NOTICE

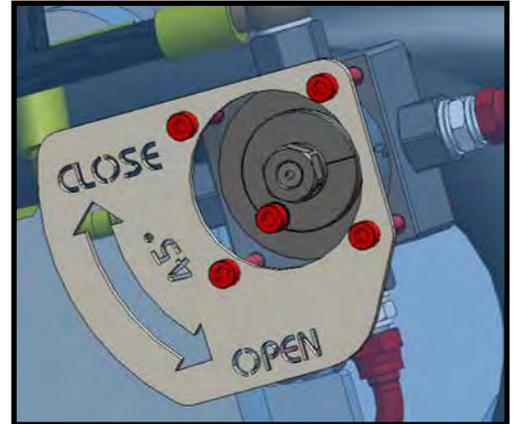
## How the Hydraulic Lock Works

### CLOSE

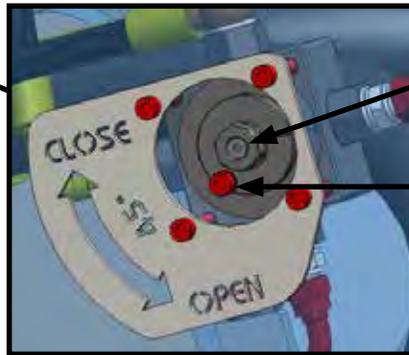
When the hydraulic lock is in the closed position, the jaw open / close controls in the excavator control the jaw cylinder, which makes the jaw open and close.

### OPEN

When the hydraulic lock is in the open position, the jaw open / close controls in the excavator control the jaw locking wedges, which allow the jaws to be changed.



5. Remove the locking screw from the hydraulic lock using a 5 mm hex wrench.
6. Using a 19 mm socket, turn the hydraulic lock to the open position.



Hydraulic Lock  
(19 mm)

Locking Screw  
(5 mm)

7. Use the auxiliary circuit control to retract the jaw locking wedges.
8. Release the auxiliary circuit control, then have a helper quickly turn the hydraulic lock to the closed position. If performed correctly, the jaw locking wedge will be fully retracted.

**Note: Do not continue if the jaw locking wedge is not fully retracted.**

Retracted Jaw  
Locking Wedges



Jaw Mounting  
Pins

Jaw Mounting  
Hooks

9. Slowly move the MRX body so that the hooks on the body grab the mounting pins on the jaw.

## **⚠ NOTICE**

### **Installation Check Point [#1 of 4]**

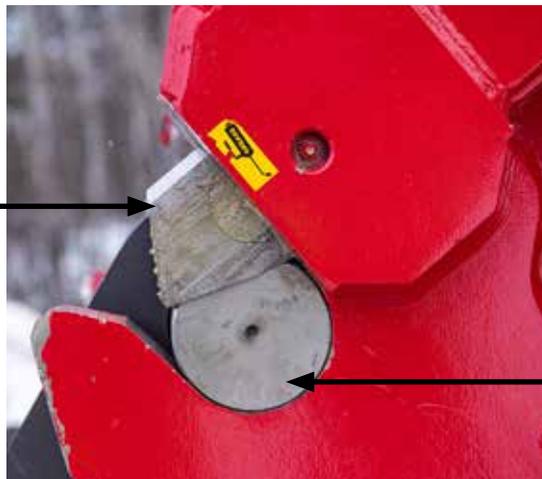
Look at each jaw pin in each MRX body hook. Ensure each jaw pin makes full contact with the base of the body hook. A properly seated pin will have no space between the jaw pin and the base of the body hook. Do not continue until the pin is seated properly.

Properly seated jaw pin



10. Turn the hydraulic lock to the open position.
11. Use the auxiliary circuit control to retract the MRX cylinder. This will extend the jaw locking wedge.
12. Release the auxiliary circuit control, then have a helper quickly turn the hydraulic lock to the closed position. If performed correctly, the jaw locking pin will be fully extended.

Fully extended jaw locking pin



Jaw mounting pin

## **⚠ NOTICE**

### **Installation Check Point [#2 of 4]**

Ensure the locking pin is fully extended and covers all of the jaw mounting pin. If the pin is not fully extended, repeat the pin locking procedure. Do not continue until the locking pin is fully extended.

13. Insert the locking screw into the hydraulic lock and torque to 8 Ft. Lbs. (10.3 Nm).

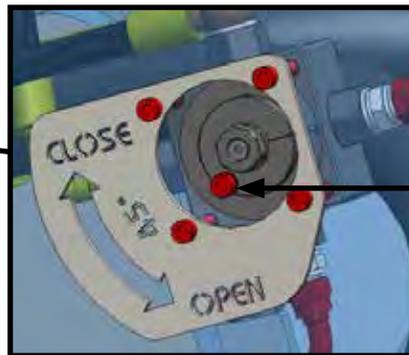
## ⚠️ WARNING

Jaw can become unhooked from the MRX base if locking screw is missing. Ensure the locking screw is in place and properly torqued. Jaws can fall and crush bystanders and damage equipment.

## ⚠️ NOTICE

### Installation Check Point (#3 of 4)

Ensure the hydraulic lock is set to the closed position and that the locking screw is inserted and properly torqued. Do not continue until the hydraulic lock is properly engaged.



Locking Screw  
(5 mm)

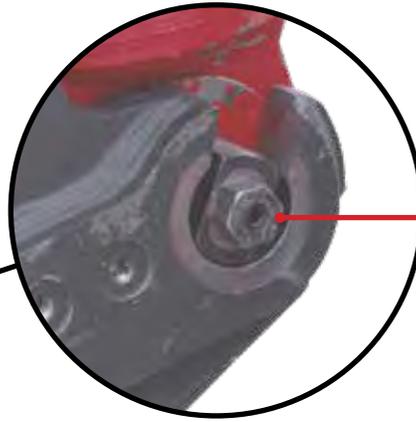
## ⚠️ WARNING

Clear all persons and equipment from the area of operation and machine movement. **NEVER** move the attachment over people or equipment. When viewing the operation of the attachment, maintain a safe distance of at least 75 feet (23 meters). Risk of severe personal injury.

14. Clear the area of bystanders, then slightly lift the attachment so that the hinged jaw is floating and the cylinder is vertical.

**Note: The cylinder and the hinged jaw will not be attached. The hinged jaw will be free hanging. Use caution when moving.**

15. Slowly extend the cylinder until the end of the cylinder fully engages into the cylinder coupling.



Cylinder fully engaged into the coupling

16. Place the hole of the locking plate on the cylinder adjustment nut so that the line in the locking plate aligns with the line on the nut.
17. Using the locking plate as a spanner, turn the cylinder adjustment nut until the bolt holes on the locking plate line up with the threaded holes in the jaw.
18. Thread the two locking plate bolts through the locking plate and into the jaw. Torque the bolts using the torque table below.



Align locking plate on the cylinder nut



Turn the locking plate and line up bolt holes



Torque locking plate bolts

Locking Plate Bolt Torque Table	
Attachment	Torque
MRX180	221 Ft. Lbs. (299.2 Nm)
MRX220	738 Ft. Lbs. (1000.5 Nm)
MRX260	738 Ft. Lbs. (1000.5 Nm)
MRX360	738 Ft. Lbs. (1000.5 Nm)

## NOTICE

### Installation Check Point (#4 of 4)

Ensure the locking plate line aligns with the line on the cylinder nut and that locking plate bolts are properly torqued. Do not continue until the locking plate is properly installed.



## NOTICE

### Review all Installation Check Points

- Look at each jaw pin in each MRX body hook. Ensure each jaw pin makes full contact with the base of the body hook. A properly seated pin will have no space between the jaw pin and the base of the body hook. Do not continue until the pin is seated properly (page 20).
- Ensure the locking pin is fully extended and covers all of the jaw mounting pin. Do not continue until the locking pin is fully extended. If the pin is not fully extended, repeat the pin locking procedure on page 20.
- Ensure the hydraulic lock is set to the closed position and that the locking screw is inserted and properly torqued (page 21).
- Ensure the locking plate line aligns with the line on the cylinder nut and that locking plate bolts are properly torqued (page 22).

Do not use MRX until all check points have been inspected and the jaw is properly installed.

## STORING THE ATTACHMENT

1. Lubricate all parts. See "Lubrication" on page 31.
2. Insert the transport pin.
3. Secure the attachment on two wooden supports on the ground, orienting it horizontally.
4. Turn the excavator off and relieve any trapped pressure in the hydraulic system. Lock-out / Tag-out the hydraulic power source.

## WARNING

**Trapped hydraulic pressure may be present after the base machine is shut off. Extreme caution must be taken when removing hydraulic hoses or lines. Injury or death could result.**

## WARNING

**Do not connect or disconnect hydraulic lines while they are pressurized. Escaping fluid under pressure can penetrate the skin, causing serious injury.**

5. Remove and plug all hydraulic lines.
6. Store the MRX body and jaws in a protected place where they will be isolated from shock, stress, damage and corrosive substances.

**Note: Do not store the attachment in a high humidity environment or in an environment with extreme temperature shifts.**

# OPERATION

## BEFORE YOU START

### Know Your Safety Program

- Read and understand this manual and the base machine manual.
- Know the employer's safety rules. Consult your foreman for instructions and safety equipment.
- Learn the traffic rules at the work site. Know the hand signals used on the job and who is responsible for signaling. Take signals from only **ONE** person.
- Wear personal protection equipment. This includes eye protection, hard hat, steel toe shoes, gloves, hearing protection and respirator.



Wear Eye Protection



Wear Ear Protection



Wear a Mask

### Know Your Equipment

- Learn and test the function of all controls. If malfunctions are found, shut the machine down and report the malfunction for repair.
- Be familiar with safety devices, indicators, warning devices and caution instructions. They will alert you to conditions that are hazardous.
- Know the clearances in the work area.

### Daily Safety Checks

- Ensure all decals are installed and legible. Contact LaBounty for replacements as required.
- Have a **DAILY** safety dialog with all workers. Inform them of any abnormal work that is planned. Remind them of the safe working distance.
- Clear the area. **ALWAYS** look out for others. In any work area, people constitute a serious safety hazard. Before operating, walk around the machine to ensure no workers are next to, under or on it. Warn nearby workers that you are starting up. **DO NOT** start up until they are out of danger.
- Check the location of cables, gas lines and water mains before operation. Ensure work site footing has sufficient strength to support the machine. When working close to an excavation, position machine with the propel motors at the rear.
- Keep bystanders clear, especially before moving the boom, swinging the upper structure, or traveling. **ALWAYS** be alert for bystanders in or near the operating area.

## SAFETY DEVICES

- Seat belts
- Safety decals
- Flags and flares
- Signs and other markings
- Falling Objects Protective Structures (FOPS)
- Canopies
- Shields and guards
- Barricades
- Warning lights
- Visual or audible warning devices

### General Rules For Safe Operation

- **KNOW** the capacity of the excavator and it's attachments. **DO NOT** overload or serious injury could result. The attachment may have altered the machine's lift capabilities.
- This attachment is for processing materials. **DO NOT** use for unapproved purposes.
- **DO NOT** continuously process oversized materials by forcing them into the jaw. This will shorten the life of the attachment.
- If attachment stalls, scale back the amount of material being processed at one time. Overloading can cause overheating or damage to the hydraulic system.
- Cycle the cylinder completely when processing. Fully cycling will allow hydraulic fluid to circulate and prevents overheating.
- Maintain a safe distance.
- **NEVER** leave the attachment suspended or pass it over people, occupied vehicles or buildings.
- When working in confined spaces, keep watch on exposed parts, such as cylinder rods and hoses, to avoid damage.
- Maintain at least 50 feet (15 meters) between the attachment and any nearby power lines.
- **ALWAYS** lower the attachment to the ground and turn the base machine off when leaving the machine unattended.
- **DO NOT** close the jaws on a structure and reverse the excavator in an attempt to pull down material. This is dangerous and will damage the excavator and the attachment.
- Avoid collision of the boom or jaws, especially when working with limited visibility or inside buildings. Know the height and reach of the attachment during operation, transport and when swinging the excavator.
- **DO NOT** alter factory preset hydraulics. This may void the warranty.
- **DO NOT** shear high tensile steel, such as railroad rail, spring steel, axles and some types of wire. Jaw damage will result. This type of material breaks when processed and can become a projectile which could cause injury or death.

- Use attachment rotation for positioning only. Do not use if for bending, breaking or prying.
- DO NOT use attachment as a jack hammer or wrecking ball.
- DO NOT attempt to shear material stuck through the lower jaw.
- Before shearing thin material, ensure the blades are sharp and properly adjusted. Thin material may jam the blades.
- DO NOT apply excavator force at the ends of the upper shear in an attempt to un-jam the jaws or cut material that is too large for the shear.

## TECHNICAL SPECIFICATIONS

Model	Jaw	Weight w/ Jaw	Jaw Opening	Jaw Depth	Reach	Minimum Excavator Weight - 3rd Member
MRX70	Shear	1,667 Lbs 760 Kg	9.8 in 250 mm	12.8 in 330 mm	5.2 ft 1.6 m	15,000 Lbs 7 mTons
	Concrete Pulverizer	1,755 Lbs 800 Kg	20.9 in 530 mm	20.1 in 510 mm	5.6 ft 1.7 m	15,000 Lbs 7 mTons
	Concrete Cracking	1,755 Lbs 800 Kg	20.7 in 530 mm	19.3 in 490 mm	5.7 ft 1.7 m	15,000 Lbs 7 mTons
MRX100	Shear	2,350 Lbs 1,070 Kg	12.6 in 320 mm	15.4 in 390 mm	6.1 ft 1.9 m	20,000 Lbs 9 mTons
	Concrete Pulverizer	2,460 Lbs 1,120 Kg	26 in 660 mm	24 in 610 mm	6.6 ft 2 m	20,000 Lbs 9 mTons
	Concrete Cracking	2,516 Lbs 1,140 Kg	23.6 in 600 mm	24 in 610 mm	6.7 ft 2 m	20,000 Lbs 9 mTons
MRX130	Shear	3,331 Lbs 1,070 Kg	15.7 in 400 mm	17.7 in 450 mm	6.6 ft 2 m	26,000 Lbs 12 mTons
	Concrete Pulverizer	3,453 Lbs 1,570 Kg	28.3 in 720 mm	24.8 in 630 mm	7.1 ft 2.2 m	26,000 Lbs 12 mTons
	Concrete Cracking	3,320 Lbs 1,510 Kg	29.1 in 740 mm	28 in 710 mm	7.3 ft 2.2 m	26,000 Lbs 12 mTons
MRX180	Shear	4,520 Lbs 2,050 Kg	17 in 430 mm	18.4 in 470 mm	7.5 ft 2.3 m	40,000 Lbs 18 mTons
	Concrete Pulverizer	4,740 Lbs 2,150 Kg	28.2 in 720 mm	26 in 660 mm	7.9 ft 2.4 m	40,000 Lbs 18 mTons
	Concrete Cracking	4,620 Lbs 2,100 Kg	29.4 in 750 mm	27.3 in 690 mm	8.3 ft 2.5 m	40,000 Lbs 18 mTons
MRX220	Shear	6,070 Lbs 2,753 Kg	19.1 in 480 mm	20.1 in 510 mm	8.3 ft 2.5 m	48,000 Lbs 26 mTons
	Concrete Pulverizer	6,270 Lbs 2,844 Kg	32.7 in 830 mm	29.8 in 760 mm	8.8 ft 2.7 m	48,000 Lbs 26 mTons
	Concrete Cracking	6,180 Lbs 2,800 Kg	33.1 in 840 mm	30.3 in 790 mm	9.1 ft 2.8 m	48,000 Lbs 26 mTons
MRX260	Shear	8,220 Lbs 3,700 Kg	19.5 in 500 mm	2.42 in 570 mm	8.9 Ft 2.7 M	79,000 Lbs 36 mTons
	Concrete Pulverizer	8,600 Lbs 3,900 Kg	33.1 in 840 mm	31.5 in 800 mm	9.4 ft 2.9 m	79,000 Lbs 36 mTons
	Concrete Cracking	8,290 Lbs 3,800 Kg	32.3 in 820 mm	31.9 in 810 mm	9.4 ft 2.9 m	79,000 Lbs 36 mTons
MRX360	Shear	9,270 Lbs 4,200 Kg	21.1 in 540 mm	22.2 in 570 mm	8.8 ft 2.7 m	79,000 Lbs 36 mTons
	Concrete Pulverizer	10,100 Lbs 4,600 Kg	37.4 in 950 mm	36.1 in 920 mm	9.5 ft 2.9 m	79,000 Lbs 36 mTons
	Concrete Cracking	9,630 Lbs 4,400 Kg	35.5 in 900 mm	35.5 in 900 mm	9.7 ft 3.0 m	79,000 Lbs 36 mTons
MRX500	Shear	13,598 Lbs 6,170 Kg	22.6 in 570 mm	26 in 660 mm	9.8 ft 3 m	132,000 Lbs 60 mTons
	Concrete Pulverizer	15,031 Lbs 6,820 Kg	43.3 in 1,100 mm	40.6 in 1,030 mm	10.8 ft 3.3 m	132,000 Lbs 60 mTons
	Concrete Cracking	14,612 Lbs 6,630 Kg	45.3 in 1,150 mm	42.1 in 1,070 mm	11 ft 3.4 m	132,000 Lbs 60 mTons

Model	Jaw	Weight w/ Jaw	Jaw Opening	Jaw Depth	Reach	Minimum Excavator Weight - 3rd Member
MRX750	Shear	19,815 Lbs 9,000 Kg	27.6 in 700 mm	30 in 760 mm	11.1 ft 3.4 m	165,000 Lbs 75 mTons
	Concrete Pulverizer	21,315 Lbs 9,680 Kg	46.3 in 1,180 mm	43.4 in 1,100 mm	11.8 ft 3.6 m	165,000 Lbs 75 mTons
	Concrete Cracking	20,665 Lbs 9,380 Kg	46.3 in 1,180 mm	45.7 in 1,160 mm	11.8 ft 3.6 m	165,000 Lbs 75 mTons

## OPERATION TEMPERATURES AND CONDITIONS

- Operate MRX at temperatures between -4°F (-20°C) and 122°F (50°C).
- Operate at a relative humidity between 30%-95%.
- Operate at altitudes no higher than 9,843 Ft (3,000 M) above sea level.
- MRX may not be used in environments that are explosive, corrosive or subject to high fire risk.

## CONTROLS

MRX uses the existing controls of the excavator it is installed on. The operator will sit in the excavator cab and will use the controls as described in the excavators user manual. Ensure the operator has read the excavators manual and is familiar with its use before attempting to use MRX.



**Learn the control for each movement of the attachment before attempting to operate.**

Control	Attachment Function
Bucket Curl	Attachment Curl
Bucket Dump	Attachment Out
Auxiliary Cylinder Circuit	Jaw Open/Close
Auxiliary Control	Rotate Attachment

To immediately stop the attachment, leave the hydraulic excavator controls in the idle position.



**Clear all persons and equipment from the area of operation and machine movement. NEVER move the attachment over people or equipment. When viewing the operation of the attachment, maintain a safe distance of at least 75 feet (23 meters). Risk of severe personal injury.**

## JAW SET FUNCTIONS

Each MRX jaw set has a specific function and a maximum size of material that it can process. Do not use an MRX jaw for any other use besides these uses approved by LaBounty.

### Concrete Cracker & Pulverizer Jaw

The concrete cracker jaw and the pulverizer jaw are designed to process concrete and rebar.

Concrete Cracker & Pulverizer Jaw Material Guide***		
Model	Concrete	Rebar
MRX70	6-10 inches	0.75 inches
MRX100	10-14 inches	1 inches
MRX130	14-18 inches	1.13 inches
MRX180	18-22 inches	1.38 inches
MRX220	22-26 inches	1.5 inches
MRX260	26-30 inches	1.75 inches
MRX360	28-32 inches	1.88 inches
MRX500	32-36 inches	2.25 inches
MRX750	36-40 inches	3.00 inches

\*\*\*These are "up to" estimates shown for 3000-5000 psi concrete. The shear's actual capacity can vary dependent on the condition of the concrete, aggregate type, rebar size and spacing, carrier performance, operator competency, maintenance of the shear, etc.

### Shear Jaw

The shear jaw is used to cut certain sizes of solid round steel, plate steel, I beams, H beams and pipe. It can also be used to process concrete.

Shear Jaw Material Guide*						
Model	Solid Round	Plate (Piercing)**	I Beam*	H Beam	Pipe	Concrete***
MRX70	1.19 inches	1/4" inches	3.25 inches	-	4.75 inches	8 inches
MRX100	1.38 inches	5/16" inches	4.75 inches	4 inches	6.5 inches	10 inches
MRX130	1.5 inches	3/8" inches	5.5 inches	4.75 inches	7 inches	12 inches
MRX180	1.88 inches	7/16" inches	8.25 inches	5.50 inches	9 inches	13 inches
MRX220	2.25 inches	1/2" inches	14 inches	9 inches	12 inches	15 inches
MRX260	2.5 inches	5/8" inches	15 inches	9.75 inches	14 inches	16 inches
MRX360	2.75 inches	11/16" inches	15.75 inches	10.25 inches	15 inches	17 inches
MRX500	3.5 inches	3/4" inches	19.5 inches	11.75 inches	16 inches	18 inches
MRX750	4.33 inches	13/16" inches	23.00 inches	15.00 inches	18 inches	20 inches

\*Beams larger than the shear can process in one cut can be processed, in most cases, by piercing the web on the first cut and finishing with a second cut. Please note there are many different styles of beams with varying web, flange and plate thicknesses; all which may affect these appetite estimates.

\*\*Plate thickness dimensions reflect the capacity of the shear to pierce plate at the tip that occurs in many various applications (tank processing, railcar processing, etc). Each model can cut thicker material, provided it will fit in the jaws without having to pierce it.

\*\*\*These are "up to" estimates shown for 3000-5000 psi concrete. The shear's actual capacity can vary dependent on the condition of the concrete, aggregate type, rebar size and spacing, carrier performance, operator competency, maintenance of the shear, etc.

## BLEED THE ATTACHMENT HYDRAULIC CIRCUIT

Air must be bled out of the hydraulic circuit prior to operation. Air in the hydraulic system leads to cavitation, oxidation of the oil and excessive heat. These conditions promote hydraulic oil break-down, contamination, noise, sluggish operation, reduced component life and potential cylinder damage.

1. Start with the attachment in the vertical position.

2. Set the excavator at idle speed.
3. Slowly open the jaws until a noticeable change in tone of the excavator is heard, indicating a full cylinder. Release the controls and do not continue to apply full operating pressure to the cylinder.
4. Slowly close the jaws until the cylinder rod is extended approximately 1/4 stroke.
5. Open the jaws to retract the cylinder all the way.
6. Repeat steps 3 and 4. Extend the cylinder a quarter stroke more each time, until you reach full stroke.
7. Slowly cycle back and forth, at least five times, to full stroke. Be careful not to apply full operating pressure to the cylinder at this time.
8. Check the base machine hydraulic fluid level and fill if necessary.
9. Slowly extend and retract the excavator cylinder to it's limits. Check for interference between the attachment and the excavator boom or stick. Check the hydraulic lines that connect to the attachment. Ensure they are not rubbing or becoming damaged in any way. Contact your dealer immediately if interference occurs.

# MAINTENANCE

## PREPARE MRX FOR MAINTENANCE

1. Before performing maintenance, place the attachment on the ground, so that the part being maintained is closest to the ground. When performing maintenance on the upper jaw curl the attachment under the stick so that the upper jaw is on the ground. Ensure the attachment is secure and will not move once hydraulic pressure is removed.
2. Secure the excavator so that it will not move when powered down and relieved of hydraulic pressure. Refer to the manufacturers manual.
3. Depresurize the excavator hydraulic system as described in the manufacturers manual.
4. Operate the jaw open / close control several times while the excavator engine is off and the hydraulic system is depressurized.



**Wear personal protection equipment at all times. This includes eye protection, hard hat, steel toe shoes, leather gloves and hearing protection.**

## 8 HOURS INSPECTION CHECKLIST

### Lubrication

\_\_\_\_\_ Lubricate, as shown on page 31.

\_\_\_\_\_ Inspect the grease fittings and replace if damaged.

### Inspect Hardware

\_\_\_\_\_ Inspect the locking screw on the hydraulic lock. Ensure it is properly torqued and is not damaged (See "Jaw Installation & Removal" on page 12).

\_\_\_\_\_ Inspect all hardware on the attachment. Ensure they are properly torqued and are not damaged (See "Inspect / Torque Bolts" on page 33).

\_\_\_\_\_ Inspect the teeth and blade bolts. Ensure they are properly torqued and are not damaged (See "Inspect / Torque Bolts" on page 33).

### Inspect Blades

\_\_\_\_\_ Inspect blade wear. Rotate or replace if rounded more than 0.25" (See "Blade Maintenance" on page 33).

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

## DAILY INSPECTION CHECKLIST

### Visual Inspection

\_\_\_\_\_ Ensure the identification plate is present and legible. Replace if necessary.

\_\_\_\_\_ Inspect all tool decals and ensure they are legible. Replace if missing or illegible. Contact LaBounty customer

service for replacements.

\_\_\_\_\_ Visually inspect the structure of the attachment for damage. If damage is found, do not use the attachment and repair immediately.

\_\_\_\_\_ Inspect all welds and ensure there are no cracks or damage. If damage is found, do not use the attachment and repair immediately.

\_\_\_\_\_ Visually inspect all hydraulic hoses and connections. Ensure they are not damaged.

\_\_\_\_\_ Visually inspect the cylinder and valves. Ensure that the fittings are tight and the hydraulic hoses are undamaged.

### **Inspect Hardware**

\_\_\_\_\_ Check the play between the pins and bushings on the attachment bracket. If the play is greater than 0.6 mm, replace the bushings and pins.

\_\_\_\_\_ Check all hydraulic connection hardware. Ensure they are properly torqued and are not damaged (see "Inspect / Torque Bolts" on page 33).

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

## **40 HOUR INSPECTION CHECKLIST**

### **Inspect Hardware**

\_\_\_\_\_ Check the play between the pins and bushings on the rotating head. If the play is greater than 0.6 mm, replace the bushings and pins.

### **Lubrication**

\_\_\_\_\_ Grease the pinion and teeth of the rotation bearing (See "MRX Body Grease Fittings" on page 31).

### **Blade / Teeth Maintenance**

\_\_\_\_\_ Measure the play between the blades. Ensure the play is between 0.2 - 1.2 mm. If the play is greater, shim the blades (see "Blade Maintenance" on page 33).

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

## **6 MONTH INSPECTION CHECKLIST**

\_\_\_\_\_ Inspect the gaskets on the rotation thrust block.

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

## **12 MONTH INSPECTION CHECKLIST**

\_\_\_\_\_ Visually inspect the cylinder. Ensure there is no oil leakage.

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

# LUBRICATION

## Recommended Grease Types

Only use grease that is acid-free, does not contain resins, is not hygroscopic, resists aging and has a temperature range suitable for the application. After underwater use carefully clean the pins and bushings. Eliminate all trace of oxidation before lubricating again.

**Note: When greasing the rotation components, you must use different grease for the rollers and the teeth.**

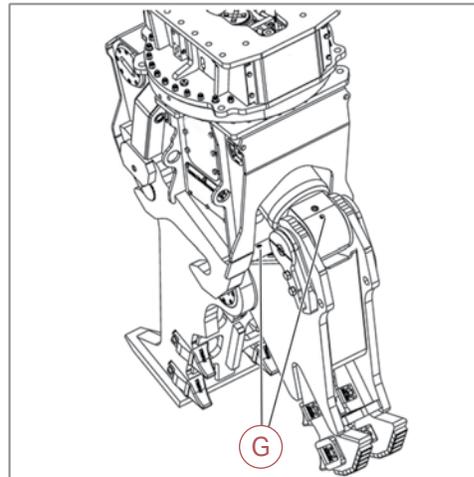
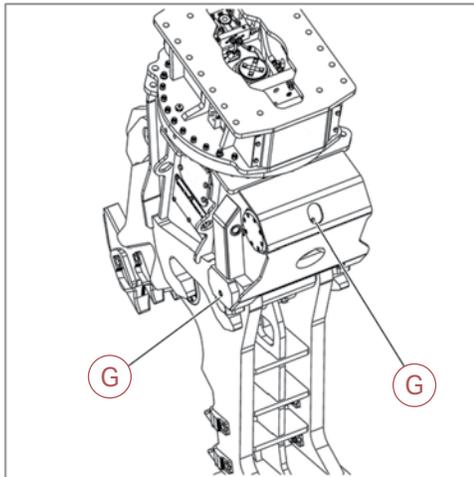
Roller Grease	
Grease Name	Operating Temperature
Energrease LS-EP 2	-4°F - 248°F (-20°C - 120°C)
Spheerol EPL 2	-22°F - 266°F (-30°C - 130°C)
EPEXA 2	-22°F - 266°F (-30°C - 130°C)
Beacon EP2	-22°F - 266°F (-30°C - 130°C)
Athesia EP 2	-13°F - 212°F (-25°C - 100°C)
Mobilux EP 2	-22°F - 266°F (-30°C - 130°C)
Centoplex 2 EP	-22°F - 266°F (-30°C - 130°C)
Shell Alvania EP (LF) 2	-22°F - 266°F (-30°C - 130°C)

Teeth Grease	
Grease Name	Operating Temperature
Energrease LC 2	-13°F - 320°F (-25°C - 160°C)
Castrol LZV-EP	-22°F - 266°F (-30°C - 130°C)
Cardrexa GR 1-AL	-22°F - 266°F (-30°C - 130°C)
Esso Multi-Purpose Grease (Moly)	-22°F - 266°F (-30°C - 130°C)
Viscum Fluids	14°F - 302°F (-10°C - 150°C)
Mobiltac 81	-22°F - 266°F (-30°C - 130°C)
Grafloscon C-SG 0 Ultra	-22°F - 266°F (-30°C - 130°C)
Shell Malleus GL 95	-22°F - 266°F (-30°C - 130°C)

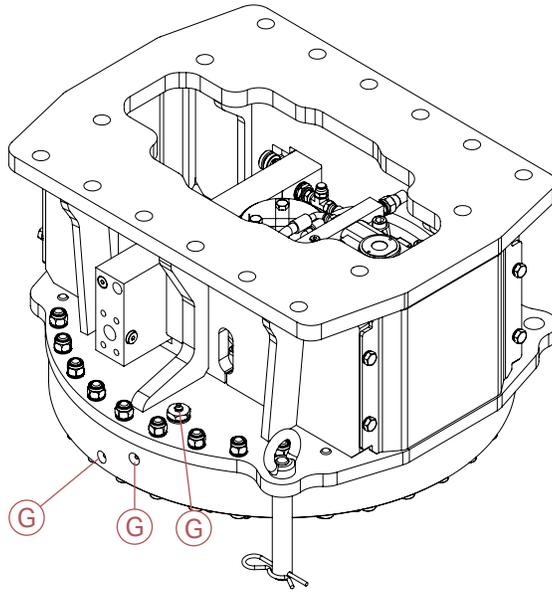
## Grease Fitting Locations

**Note: Grease fittings are indicated by a yellow "Grease" sticker on the attachment.**

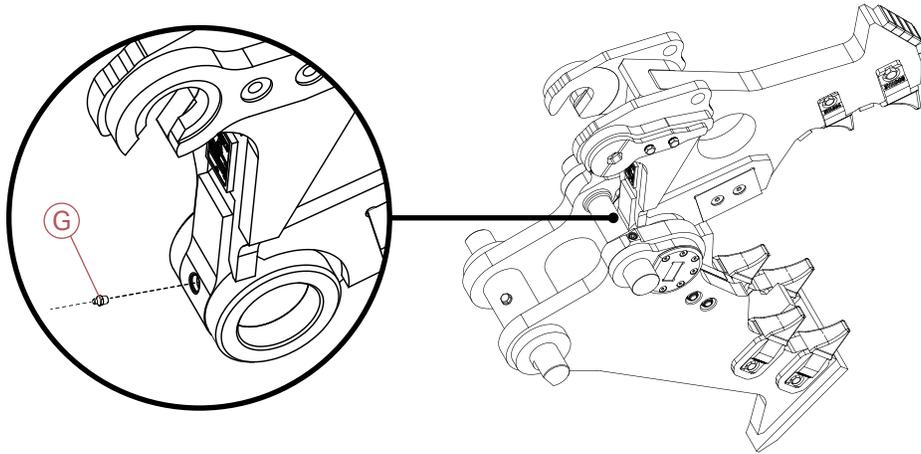
## MRX Body Grease Fittings



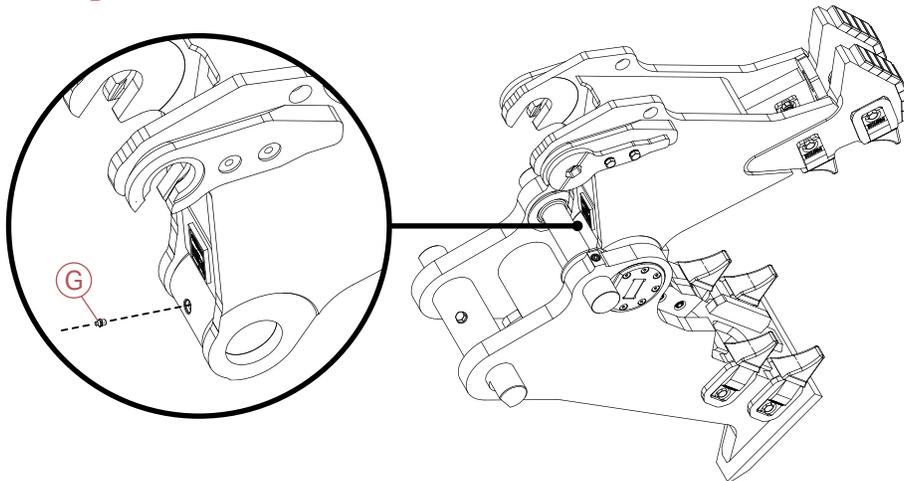
## MRX Rotation Grease Fittings



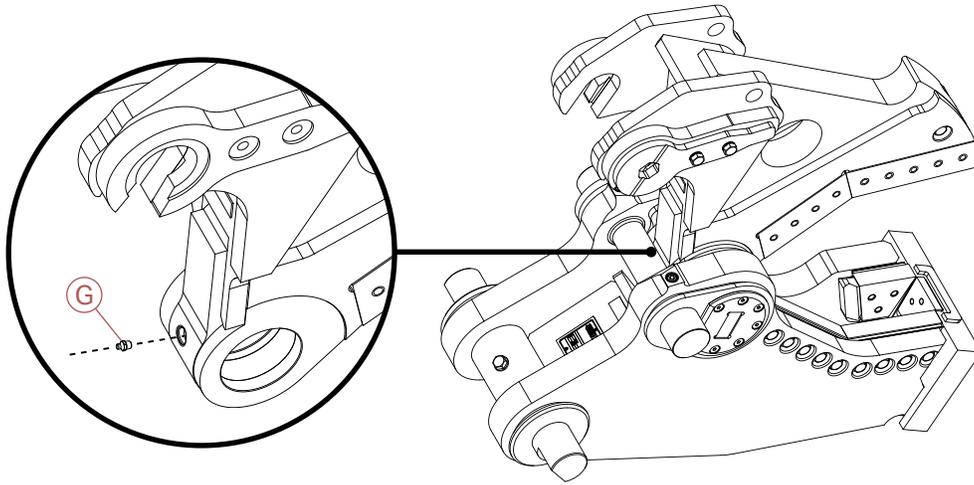
## Cracker Jaw Grease Fittings



## Pulverizer Jaw Grease Fittings



## Shear Jaw Grease Fittings



## INSPECT / TORQUE BOLTS

General Fastener Torque Table				
Size	6S	8.8 - (8G)	Class 10.9	Class 12.9
M5	4 Ft. Lbs. (5.10 Nm)	4 Ft. Lbs. (5.98 Nm)	6 Ft. Lbs. (8.5 Nm)	8 Ft. Lbs. (10.2 Nm)
M6	6 Ft. Lbs. (8.73 Nm)	8 Ft. Lbs. (10.3 Nm)	11 Ft. Lbs. (14.7 Nm)	13 Ft. Lbs. (17.6 Nm)
M8	16 Ft. Lbs. (21.58 Nm)	19 Ft. Lbs. (25.5 Nm)	26 Ft. Lbs. (35.3 Nm)	31 Ft. Lbs. (42 Nm)
M10	31 Ft. Lbs. (42.2 Nm)	37 Ft. Lbs. (50 Nm)	52 Ft. Lbs. (70.6 Nm)	63 Ft. Lbs. (85.5 Nm)
M12	54 Ft. Lbs. (73.6 Nm)	64 Ft. Lbs. (87.3 Nm)	90 Ft. Lbs. (122.6 Nm)	108 Ft. Lbs. (147 Nm)
M14	86 Ft. Lbs. (116.7Nm)	102 Ft. Lbs. (138.3 Nm)	143 Ft. Lbs. (194.2 Nm)	174 Ft. Lbs. (235.5 Nm)
M16	132 Ft. Lbs. (178.5 Nm)	156 Ft. Lbs. (210.9 Nm)	221 Ft. Lbs. (299.2 Nm)	264 Ft. Lbs. (358 Nm)
M18	181 Ft. Lbs. (245 Nm)	213 Ft. Lbs. (289.4 Nm)	304 Ft. Lbs. (412 Nm)	362 Ft. Lbs. (490.5 Nm)
M20	257 Ft. Lbs. (348.5 Nm)	304 Ft. Lbs. (412 Nm)	427 Ft. Lbs. (578.8 Nm)	514 Ft. Lbs. (696.5 Nm)
M22	347 Ft. Lbs. (471 Nm)	412 Ft. Lbs. (559.2 Nm)	579 Ft. Lbs. (784.8 Nm)	695 Ft. Lbs. (942 Nm)
M24	441 Ft. Lbs. (598.5 Nm)	525 Ft. Lbs. (711.2 Nm)	738 Ft. Lbs. (1000.5 Nm)	883 Ft. Lbs. (1197 Nm)
M27	655 Ft. Lbs. (888 Nm)	774 Ft. Lbs. (1049.7 Nm)	1092 Ft. Lbs. (1481 Nm)	1310 Ft. Lbs. (1776 Nm)
M30	890 Ft. Lbs. (1206.5 Nm)	1049 Ft. Lbs. (1422.4 Nm)	1483 Ft. Lbs. (2011 Nm)	1772 Ft. Lbs. (2403 Nm)
M33	1201 Ft. Lbs. (1628.5 Nm)	1425 Ft. Lbs. (1932.6 Nm)	2004 Ft. Lbs. (2717 Nm)	2410 Ft. Lbs. (3267 Nm)

## BLADE MAINTENANCE

Before performing blade maintenance, place the attachment on the ground, so that the part being maintained is closest to the ground. When performing maintenance on the upper jaw curl the attachment under the stick so that the upper jaw is on the ground.

### CAUTION

Wear personal protection equipment at all times. This includes eye protection, hard hat, steel toe shoes, leather gloves and hearing protection.

### WARNING

Blades are very heavy. Do not remove a blade if it's not supported. The blade may fall and cause injury.

## CRACKER JAW

### Measuring Blade Gap and Shimming

Note: Removing and handling blades can be hazardous if done incorrectly.



Stay at least 75 ft. (23 m) when moving.

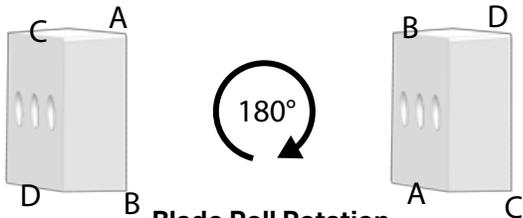
- 1. Cycle the tool until the upper jaw blade begins to overlap the lower jaw blade.
- 2. Measure the blade gap. If the gap is larger than 0.4 mm, add shims between the guide blade and blade seat until the gap is 0.4 mm - 0.4 mm.

**Blade Rotation**

Each cracker jaw blade has four edges. Each time you rotate the blade, use a different edge until all the edges are worn to .25" radius.



Blade Pitch Rotation



Blade Roll Rotation

**PULVERIZER JAW**

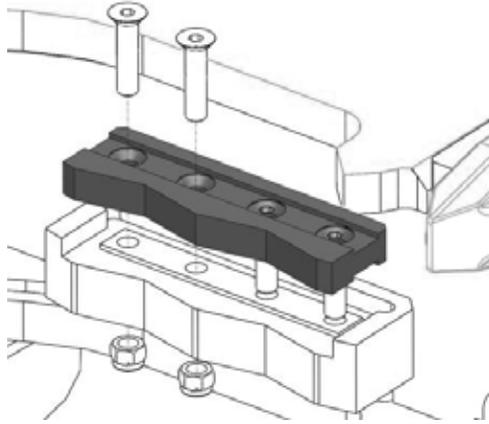
**Blade Rotation**

Each pulverizer jaw blade has two edges. Flip the blade when the cutting edge is worn to a .25" radius. Replace when both edges are worn.

Note: Removing and handling blades can be hazardous if done incorrectly.



Stay at least 75 ft. (23 m) when moving.



1. Remove the blade bolts and remove the blade from the blade seat.
- Note: Bolts may need to be removed by metal arc gouging.**
2. Ensure the blade seat is clean.
  3. Flip the blade or install a new blade.
  4. Insert the blade bolts and torque as specified in "Inspect / Torque Bolts" on page 33.

## **SHEAR JAW**

### **Measuring Primary / Secondary Blade Gap and Shimming**

**Note: Removing and handling blades can be hazardous if done incorrectly.**



**Stay at least 75 ft. (23 m) when moving.**

1. Cycle the tool until the upper jaw blade begins to overlap the lower jaw blade.
2. Measure the blade gap. If the gap is larger than 0.4 mm, add shims between the guide blade and blade seat until the gap is 0.4 mm.

### **Measuring Guide Blade Gap and Shimming**

**Note: Removing and handling blades can be hazardous if done incorrectly.**



**Stay at least 75 ft. (23 m) when moving.**

1. Slowly close the jaws until the tip blade meets the guide blade.
2. Measure the gap between the tip blade and guide blade. This gap should never exceed 0.4 mm.
3. If the gap is larger than 0.4 mm, remove the guide blade and insert shims until the gap is within 0.4 mm.
4. If you are unable to shim the blade within the 0.4 mm gap measurement, you must rotate the blade.

### **Measuring Cross Blade Gap and Shimming**

**Note: Removing and handling blades can be hazardous if done incorrectly.**

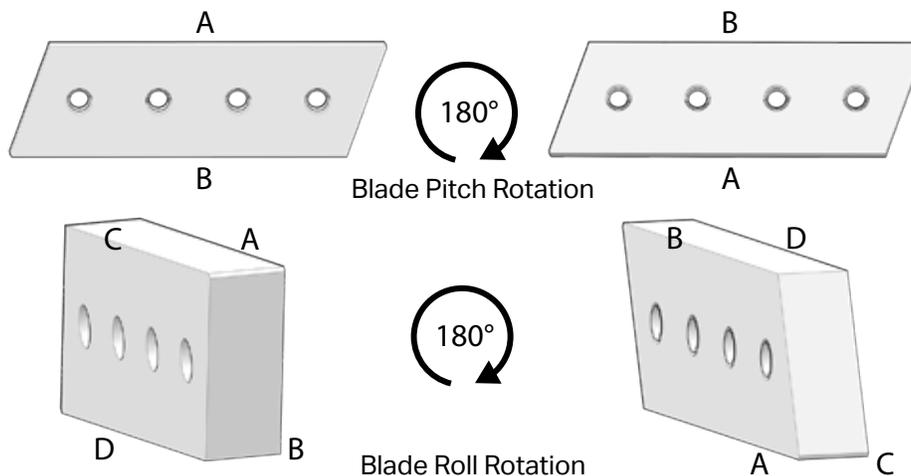


**Stay at least 75 ft. (23 m) when moving.**

1. Slowly close the jaws until the tip blade meets the cross blade.
2. Measure the gap between the tip blade and cross blade. This gap should never exceed 0.4 mm
3. If the gap is larger than 0.4 mm, remove the cross blade and insert shims until the gap is within 0.4 mm.
4. If you are unable to shim the blade within the 0.4 mm gap measurement, you must rotate the blade.

### Primary/Secondary Blade Rotation

Each shear jaw blade has four edges. Each time you rotate the blade, use a different edge until all the edges are worn to .25" radius.



### Guide Blade Rotation

Each guide blade has two edges. Rotate the blade when the cutting edge is worn to a .25" radius. Replace when both edges are worn.

1. Remove the blade bolts and remove the blade from the blade seat.
2. Ensure the blade seat is clean.
3. Rotate the blade end-over-end or install a new blade.
4. Insert the blade bolts and torque as specified in "Inspect / Torque Bolts" on page 33.

### Cross Blade Rotation

1. Remove the cross blade.
2. Rotate it end-over-end
3. Re-install the cross blade. Torque bolts as specified in "Inspect / Torque Bolts" on page 33.
4. Check the blade gap. Shim if necessary.

**Note: The guide blade can only be rotated once. Replace during the next rotation.**

### Tip Blade Rotation

The tip blades cannot be shimmed or rotated. Once worn, the blade must be replaced.

1. Loosen the blade tip bolts.
2. Remove the blade.
3. Clean the blade seat.
4. Install a new tip blade and replace the blade bolts. Torque as specified in "Inspect / Torque Bolts" on page 33.

## TOOTH MAINTENANCE

When the jaw teeth are worn or cracking, performance is decreased and the teeth need to be replaced.

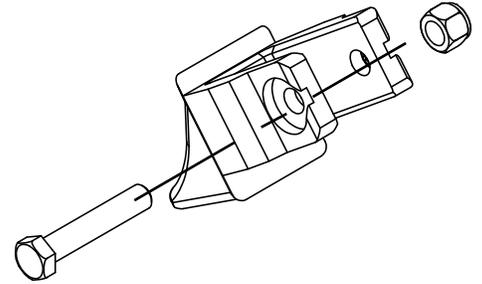
### CAUTION

Wear personal protection equipment at all times. This includes eye protection, hard hat, steel toe shoes, leather gloves and hearing protection.

1. Locate flat, hard ground and place the attachment on the ground.
- Note: Work only on the jaw closest to the ground, with the tooth facing up.**
2. Remove the bolt and nut that holds the tooth in the jaw.
  3. Remove the tooth from the receptacle.
  4. Insert a new tooth into the receptacle.
  5. Insert bolt and fasten the nut to secure the tooth. Torque as specified in "Inspect / Torque Bolts" on page 33.

### WARNING

Jaw teeth are very heavy. **DO NOT** remove a tooth pin if the tooth is not supported. The tooth may fall and cause injury.



## BUILD UP & HARDSURFACING

### NOTICE

Do not use stainless hardsurface rod or other improper build up and hardsurfacing products. Using improper products may result in premature wear or cracking of the base metal.

### CAUTION

Wear personal protection equipment (PPE) at all times. This includes eye protection, hard hat, steel toe shoes, leather gloves and hearing protection that conforms to standards ANSI Z87.1 (Eye and Face Protection), ANSI Z89.1 (Head Protection), ANSI Z41.1 (Foot Protection) and ANSI S12.6 (S3.19) (Hearing Protection).

### Material Recommendation

Choose a build up material that meets the following classifications.

Shielded Metal Arc Welding - Stick Electrodes

- E7018
- E8018-C3

Gas Metal Arc Welding - Solid Wire Electrodes

- ER70S-6

Gas Metal Arc Welding - Flux Cored Electrodes

- E71T-1
- E71T-1M
- E80T1-Ni1
- E80T1-Ni1M

Gas Metal Arc Welding - Metal Powder Cored Electrodes

- E70C-6M
- E80C-Ni1

### Hardsurfacing Recommendations

Hardsurfacing must be inspected and maintained.

For hardsurfacing, LaBounty recommends;

- FabTuf 960 or equivalent

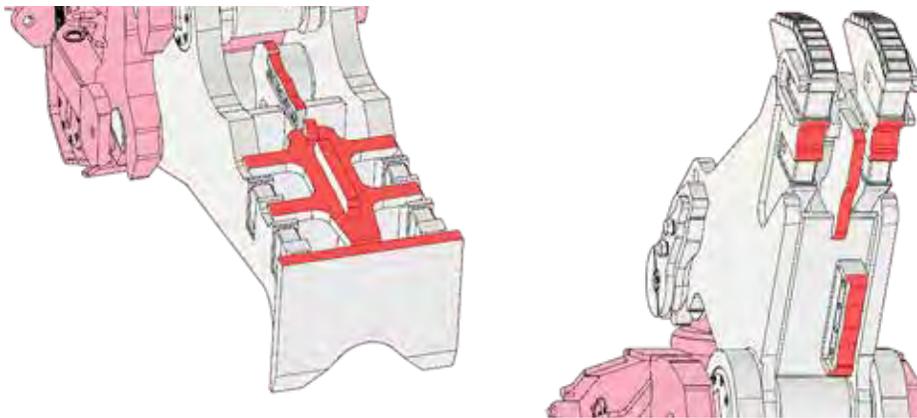
If you have questions about what hardsurface material to use, contact LaBounty Customer Service at 1-(800) 522-5059.

### Guidelines

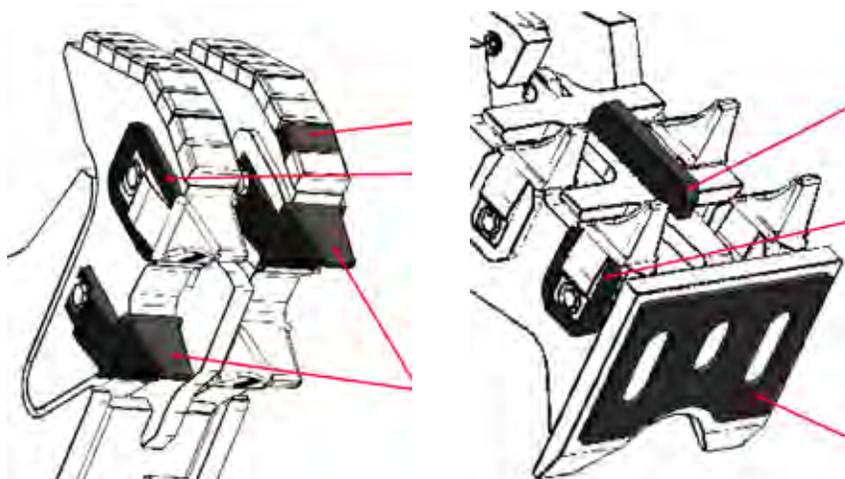
- Connect the ground pole of the welder to the part to be welded, as close as possible to the welding area. The ground pole must be connected so that the current does not cross the hinges or the hydraulic cylinder. If the attachment is mounted on the operation machine during welding, follow the instructions in the base machine manual to avoid damaging its battery or electronics.
- Carefully clean the area where material is to be added.
- Preheat to 302°F - 392°F (150°C - 200°C) and check the temperature frequently.
- Do not place more than two layers.
- Apply material with the grain of the parent material.
- Grind the ends of the fill material beads.
- After welding, cover the area with a heat blanket and allow to cool slowly.
- Carefully follow the application standards recommended by the manufacturer of the fill wire.

## PULVERIZER JAW

### Hard weld areas

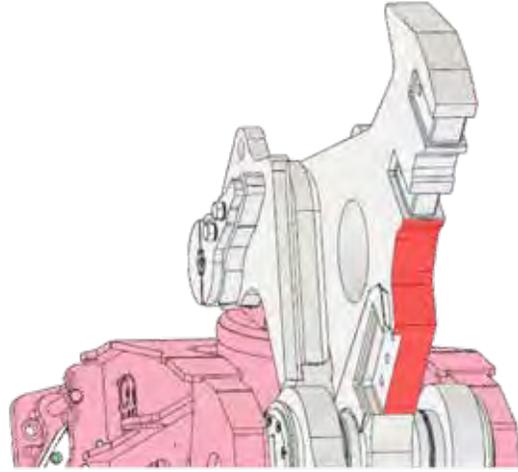
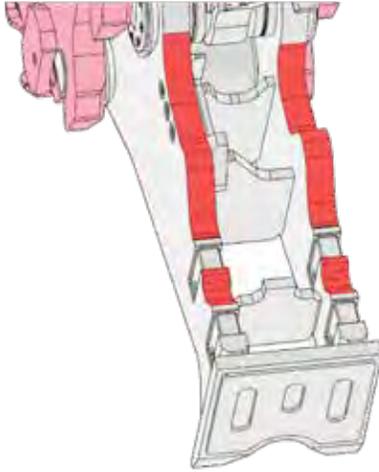


### Wear Plates

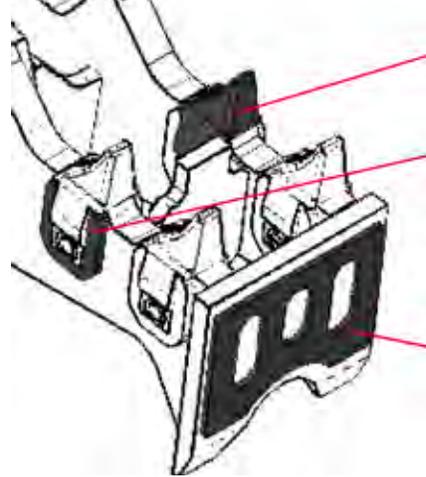
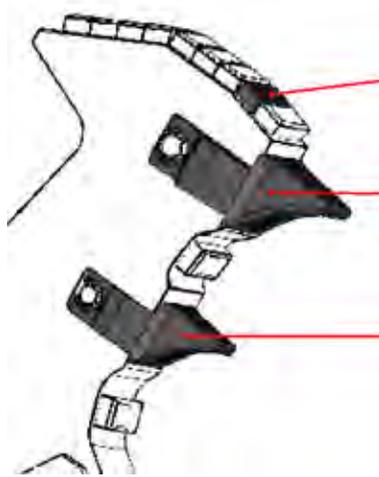


## CRACKER JAW

### Hard weld areas

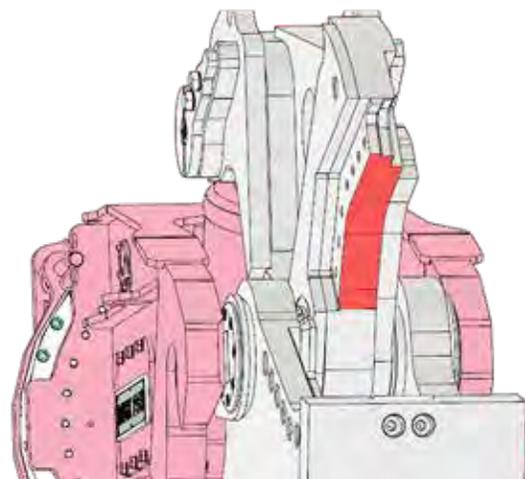
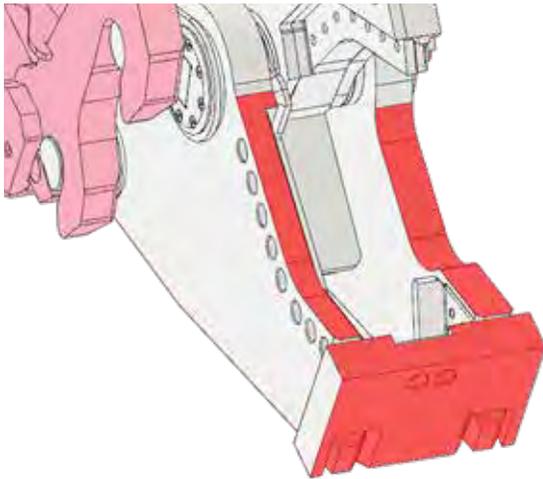


### Wear plates



## SHEAR JAW

### Hard wear areas

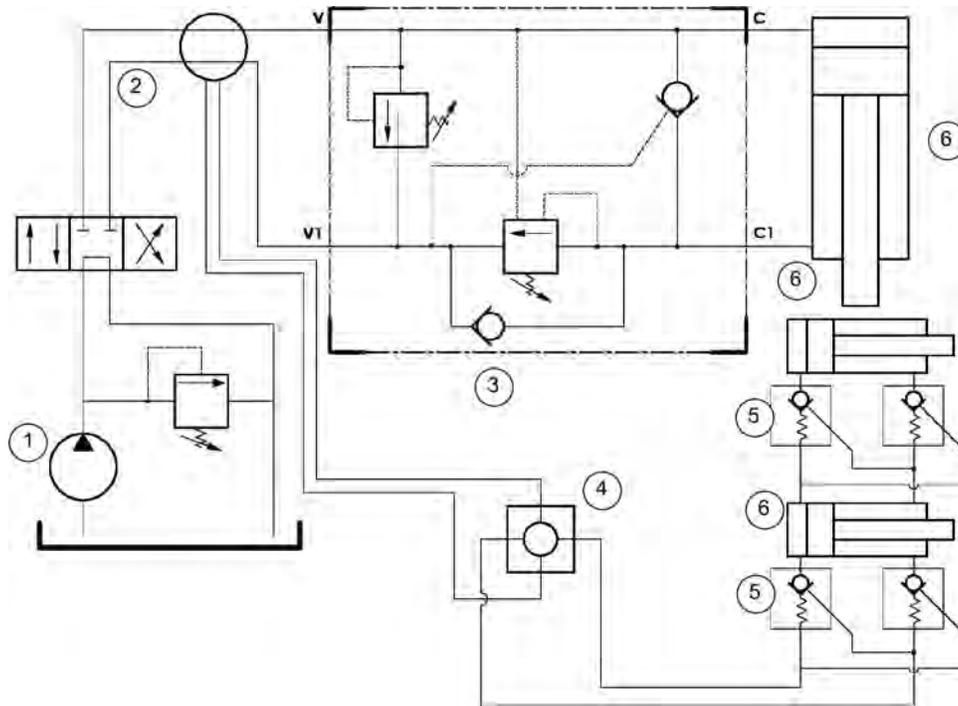


# TROUBLESHOOTING

Troubleshooting		
Problem	Cause	Solution
Crushing power is lower than expected	Excavator is not providing proper hydraulic flow or pressure to MRX	Using the excavators manufacturers manual, check the pressure and flow going to MRX. See "Hydraulic Installation" on page 10.
	The cylinder gaskets are damaged	Cylinder gaskets must be replaced. Contact LaBounty Customer Service.
	The rotating joint seals are damaged	Rotating joint seals must be replaced. Contact LaBounty Customer Service.
MRX is having difficulty processing material.	The dimensions or material type are greater than then capacity of the attachment or jaw	Ensure the material being processed is suitable for the attachment. See "Jaw Set Functions" on page 26.
	The jaw blades or teeth are worn	Check wear on the blades / teeth (See "Maintenance" on page 29). Replace if necessary.
	The blades are not properly adjusted.	Adjust the blades as shown in "Shear Jaw" on page 35.
The jaw will not open / close	The jaw has material between the cutting blades that prevent it from opening / closing	Prepare the attachment for maintenance (see "Maintenance" on page 29). Remove the material stuck between the blades.
The attachment will not rotate, or it rotates tool slow / too fast	Excavator is not providing proper hydraulic flow / pressure to MRX	Using the excavators manufacturers manual, check the pressure and flow going to MRX. See "Hydraulic Installation" on page 10.
	Rotation motor or motor valve is damaged.	Contact LaBounty Customer Service.
	Flow regulator valve is closed	Open the flow regulator valve (see "Adjust Rotation Flow" on page 11).
Attaching the jaw to the MRX body is difficult	Dirt, debris or other material is on the coupling surfaces	Ensure the coupling surfaces are clean.
	The cylinder wedge is not fully retracted	Fully retract the cylinder wedge, as shown in "Jaw Installation & Removal" on page 12.

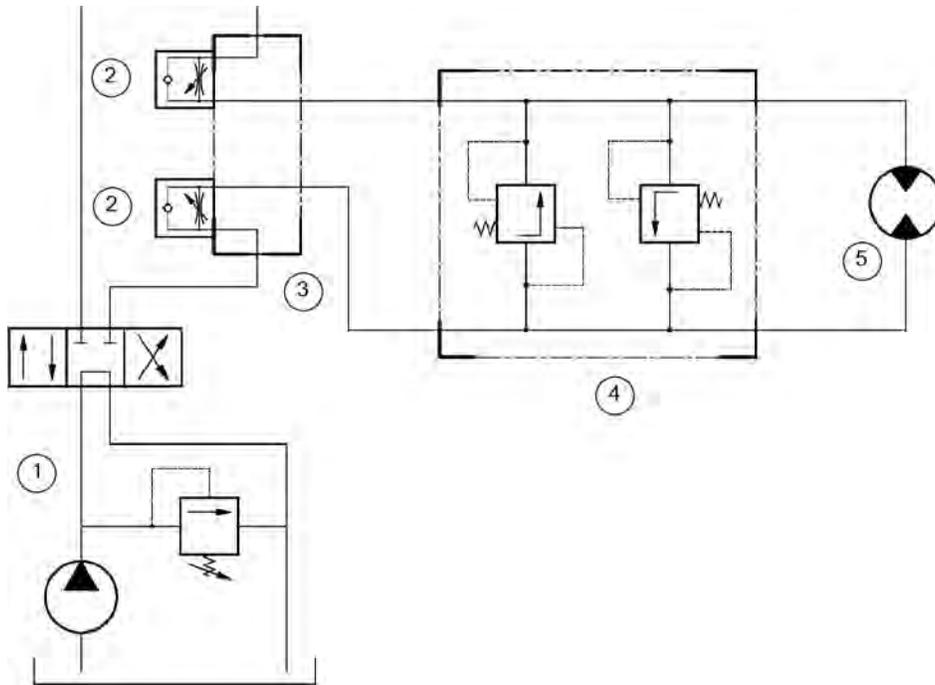
# HYDRAULIC SCHEMATIC

## MRX HYDRAULIC SCHEMATIC



MRX Hydraulic Schematic Key	
Item	Item
1	Machine system
2	Rotating joint
3	Speed multiplier valve
4	Diverter
5	Check valve
6	Hydraulic actuator

## ROTATION HYDRAULIC SCHEMATIC



Rotation Hydraulic Schematic Key	
Item	Item
1	Machine system
2	Flow regulator
3	Collector
4	Anti-shock valve
5	Hydraulic orbital motor

## HYDRAULIC TEST PORTS

The MRX is equipped with hydraulic test ports that will allow you to measure cylinder pressure for troubleshooting purposes.

### Accessing the Hydraulic Test Ports

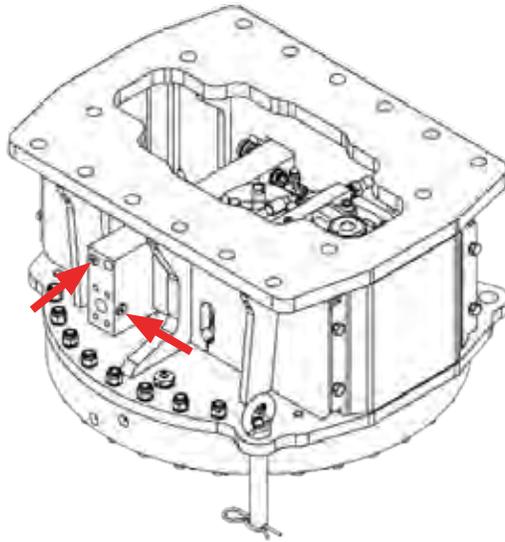


**Trapped hydraulic pressure may be present after the base machine is shut off. Extreme caution must be taken when removing hydraulic hoses or lines. Injury or death could result.**



**Do not connect or disconnect hydraulic lines while they are pressurized. Escaping fluid under pressure can penetrate the skin, causing serious injury.**

1. Before performing maintenance, place the attachment on flat, hard ground, so that the part being maintained is closest to the ground and the attachment will not move when hydraulic pressure is released.
2. Turn off the excavator and relieve any trapped pressure in the hydraulic system. Lock-out / Tag-out the hydraulic power source.
3. The hydraulic test ports are located on the incoming hydraulic port blocks on each side of the attachment head.



4. Remove the plug from the test port and connect a gauge.

Model	Diagnostic Test Port Fittings	
	Attachment	Rotation
MRX70	-	-
MRX100	-	
MRX130	-	
MRX180	1/4 In BSPP	
MRX220		
MRX260		
MRX360		
MRX500		1/4 In BSPP
MRX750		-



# STANLEY

## Hydraulic Tools



**EC DECLARATION OF CONFORMITY  
EG KONFORMITÄTSERKLÄRUNG  
DECLARATION CE DE CONFORMITE  
DECLARACION CE DE CONFORMIDAD  
DICHIARAZIONE CE DI CONFORMITA**

We: *Stanley Hydraulic Tools/LaBounty*  
Wir: *1538 Highway 2, Two Harbors, MN 55616, USA*  
Je soussigné:  
El abajo firmante:  
Io sottoscritto:

**hereby declare that the machine specified hereunder:  
bestätige hiermit, dass die nachfolgend beschriebene Maschine:  
déclare que l'équipement visé ci-dessous:  
Por la presente declaro que el equipo se especifica a continuación:  
Dichiaro che le apparecchiature specificate di seguito:**

- 1. Category: **Excavator Mounted Multi-Jaw Processor**  
Kategorie:  
Catégorie:  
Categoría:  
Categoria:
- 2. Make/Marke/Marque/Marca/Marca **LaBounty / Stanley**
- 3. Type/Typ/Type/Tipo/Tipo: **MRX 70, MRX 100, MRX 130, MRX 180, MRX 220, MRX 260, MRX 360, MRX 500, MRX 750**
- 4. Serial number of equipment:  
Seriennummer des Geräts:  
Numéro de série de l'équipement:  
Numero de serie del equipo:  
Matricola dell'attrezzatura:

SN:

**Has been manufactured in conformity with  
Wurde hergestellt in Übereinstimmung mit  
Est fabriqué conformément  
Ha sido fabricado de acuerdo con  
E' stata costruita in conformità con**

Directive/Standards Richtlinie/Standards Directives/Normes Directriz/Los Normas Direttiva/Norme	No. Nr Numéro No n.	Details:
EN Machinery Directive	12100:2010 2006/42/EC:	This Directive applies to Interchangeable Machinery. 'Interchangeable equipment' means a device which, after the putting into service of Machinery or of a tractor, is assembled with that machinery or tractor by the operator himself in order to change its function or attribute a new function,

- 5. Special Provision: For compilation of the technical file the person listed under No. 6 is responsible.  
Spezielle Bestimmungen: Für die Zusammenstellung der technischen Unterlagen ist die unter Nr.6 genannte Person verantwortlich  
Dispositions particulières: Pour la compilation du dossier technique de la personne inscrite sous le n ° 6 est responsable  
Provisiones especiales: Para la compilación del expediente técnico a la persona que aparece bajo el N ° 6 es responsable  
Disposizioni speciali: Per la compilazione della scheda tecnica della persona elencato sotto No. 6 è responsabile
- 6. Representative in the Union: **Patrick Vervier, Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France.**  
Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione

Done at/Ort/Fait à/Dado en/Fatto a: Stanley Hydraulic Tools, Two Harbors, Minnesota, USA

Date/Datum/le/Fecha/Data:

19 JANUARY 2022

Name and Signature/Name und Unterschrift/Signature/Firma/Firma **Michael W. Kaczowski**

# DECLARATION OF CONFORMITY



I, the undersigned:

**Vervier, Patrick**

Surname and First names

hereby declare that the equipment specified hereunder:

- 1. Category: **Excavator Mounted Multi-Jaw Processor**
- 2. Make: **LaBounty / Stanley**
- 3. Type: **MRX 70, MRX 100, MRX 130, MRX 180, MRX 220, MRX 260, MRX 360, MRX 500, MRX 750**

4. Serial number of equipment:

**SN: XXXXXX**

Has been manufactured in conformity with

Directive/Standards	No.	Approved body
EN ISO	12100:2010	Self
EN ISO	4413:2010	Self
EN ISO	28927-8:2009	Self
EN ISO	11148-12:2012	Self
EN ISO	13732-1:2008	Self
Supply of Machinery (Safety) Regulations 2008	S.I. 2008/1597	Self

5. Special Provisions: **None**

6. Representative in the Union: **Patrick Vervier, STANLEY Dubuis 17-19, rue Jules Berthonneau- CS 73406 41034 Blois CEDEX, France.**

Done at STANLEY Infrastructure, 1538 Highway 2, Two Harbors, Minnesota, USA 55616

Date 10/28/2021

Signature

Position \_\_\_\_\_ Engineering Manager





# LABOUNTY®

Additional copies of this manual are available by contacting your dealer or the LaBounty parts department, and requesting a CE Operation & Maintenance manual. You must include the attachment model number and serial number.