UPX 2800
UNIVERSAL PROCESSOR

CE Operating and Maintenance Manual

Part Number 516353
4/2024 Ver. 3

PREFACE

This manual contains information for the safe and proper operation and maintenance of the LaBounty UPX Universal Processor. 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 the LaBounty website.

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 or 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.

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SAFETY

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE This signal word indicates a situation which, if not avoided, will result in damage to the equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

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.

OPERATIONAL SAFETY

⚠ DANGER

- If the attachment is not functioning properly, shut down the machine, follow proper lock out / tag out procedures and follow proper repair procedures.
- **NEVER** operate equipment without the original safety guards in place.
- 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). 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. Lack of proper FOPS may result in injury or death.
- **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.
- 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.
- 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.

⚠ WARNING

- 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** 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.
- **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.

- 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.

⚠CAUTION

- **DO NOT** weld on any structural member unless specifically authorized by LaBounty.

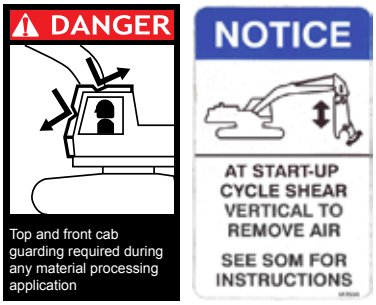
- **ALWAYS** wear close-fitting clothing and safety equipment appropriate to the job. Safety equipment should be worn at all times when viewing, operating or maintaining the attachment. Safety equipment includes eye protection, hard hat, steel toe shoes, gloves, hearing protection and respirator.

- Keep clear of potential pinch points, including the moving upper jaw, cylinder connections, bucket linkages and other moving parts.

DECALS & TERMS

MODEL DESCRIPTION

The Universal Processor is the ideal solution for contractors in demolition, reconstruction and concrete processing applications. Multiple interchangeable jaw options provide true multitasking capability.

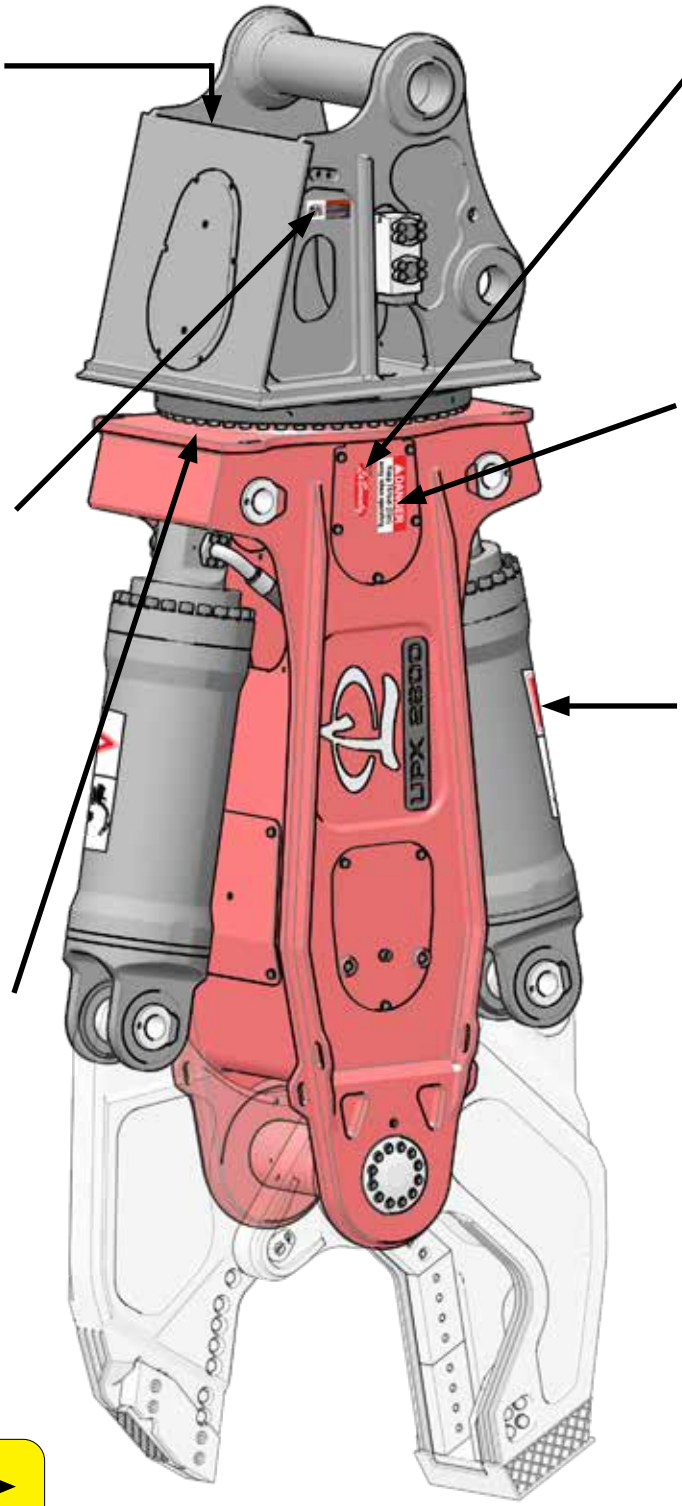


CAB GUARD WARNING & CYLINDER BLEED NOTICE
503647 & 512554
FIGURE 1

PRESSURE RELIEF WARNING
512572
FIGURE 2

MODEL/SERIAL NUMBER & PATENT PLATE
P/N 116404 & 511045
FIGURE 3

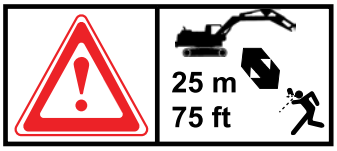
GREASE DECAL (AT EACH GREASE FITTING)
116388
FIGURE 4



STANLEY LaBounty

LABOUNTY LOGO DECAL
P/N 510896
FIGURE 5

DANGER DECAL
P/N 503706
FIGURE 6

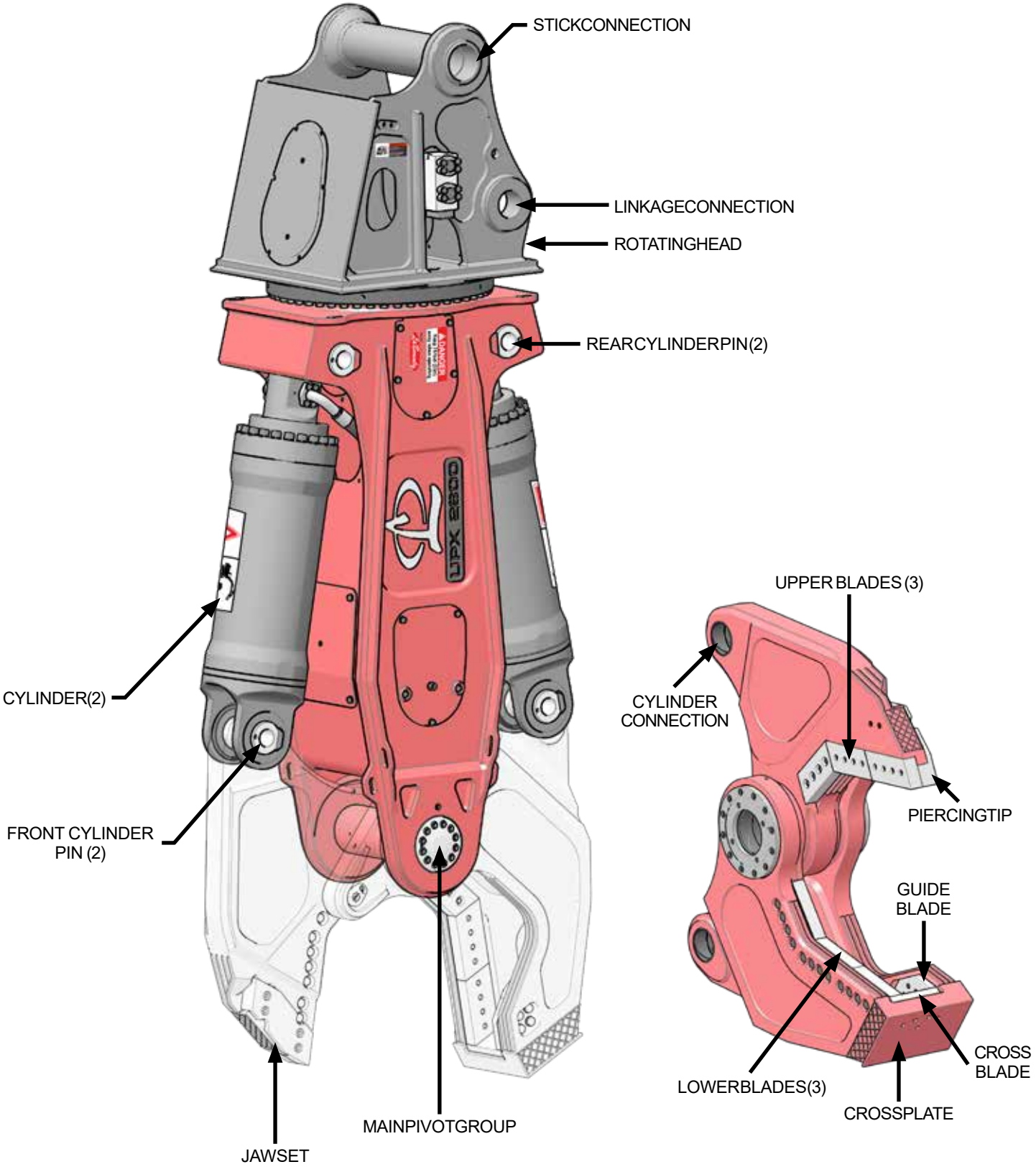


KEEP CLEAR WARNING
P/N 116389
FIGURE 7

DECALS & TERMS

DECAL MAINTENANCE

Ensure safety decals are installed and visible. Keep decals clean and promptly replace decals that are damaged. Replacement decals are available through your LaBounty Service Department. Place replacement decals in the same position as the original decals.



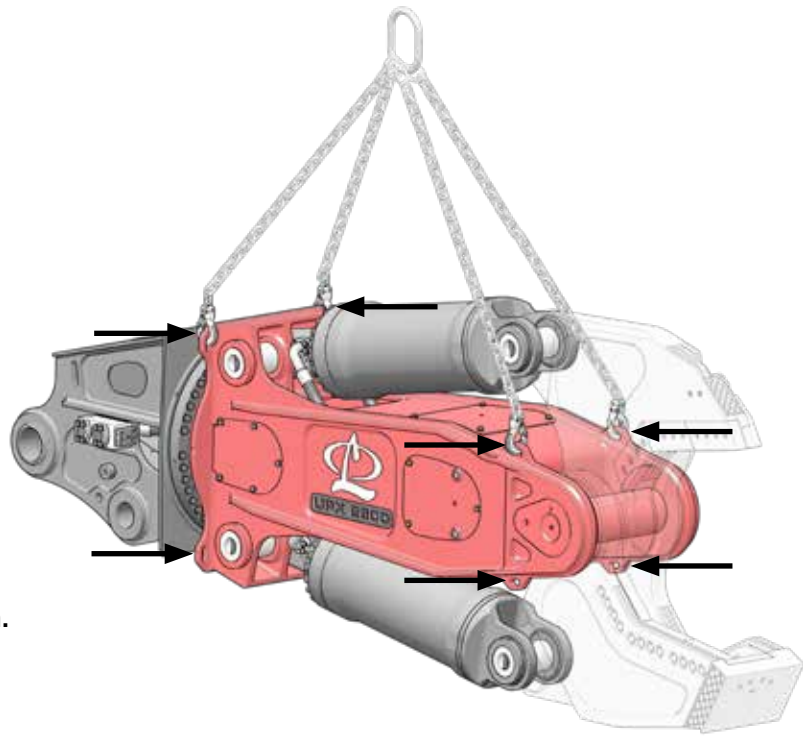
INSTALLATION

⚠WARNING

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

1. Locate flat, hard ground (e.g., concrete floor) for installation. Lift and place the attachment on the ground as shown. Use blocking if necessary.
2. Remove the bucket (third member attachment) or the excavator stick (second member attachment). Follow the manufacturer's recommended procedure.

Note: Plug hydraulic hoses to prevent contamination.



HOOKING POINTS FOR LIFTING
FIGURE 8

THIRD MEMBER INSTALLATION

1. Bring the excavator into position, carefully lining up the stick tip with the UPX mounting bracket. Pin the stick tip to the UPX mounting bracket using the pin provided.
2. Carefully extend the bucket cylinder to move the bucket linkage. Position the link into the mounting bracket linkage connection.

Note: It may be necessary to use a lifting device (overhead hoist, forklift, etc.) to position the link.

3. Pin the linkage connection using the pin provided.

SECOND MEMBER INSTALLATION

1. Pin the excavator boom and attachment boom pivot together using the same pin that was used for pinning on the stick.
2. Clear all personnel and instruct the operator to slowly lift the attachment so there will be enough clearance to pin the excavator cylinder to the cylinder connection on the mounting bracket.
3. Extend the cylinder rod and connect the cylinder connection. Install the pin provided with the mounting bracket.

Note: It may be necessary to use a lifting device (overhead hoist, forklift,etc.) to position the cylinder.

INSTALLATION

HYDRAULIC INSTALLATION

Note: Refert to “UPX Hydraulic Schematic” on page 26.

⚠WARNING

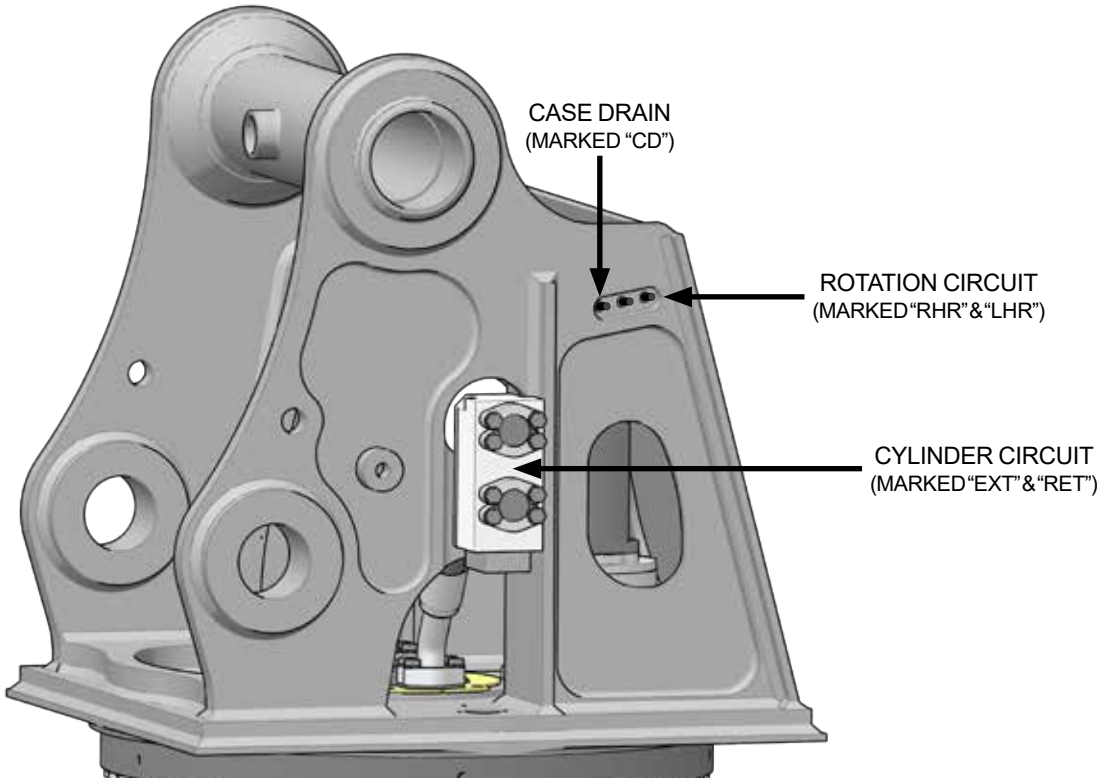
- **DO NOT** install hydraulic lines while they are pressurized. Escaping fluid under pressure can penetrate the skin, causing serious injury.

Hydraulic Circuit Requirements

Model	Cylinder Circuit (Max)	Rotation Circuit	Connection
UPX 2800	250 GPM (946 LPM) 5000 PSI (345 Bar)	8-12 GPM (30-45 LPM) 2000-2500 PSI (138-172 Bar)	Cylinder - 2” Code 62 Flange Rotation - .5” Flat Face O-Ring

1. Connect the hydraulic hoses to the connections located on each side of the upper head (Figure 9).
Note: Remember to cap all hydraulic hoses and fittings immediately to prevent contamination of the oil.
2. After installing the hydraulic circuit on the base machine, install additional hydraulic lines up the boom
   - One 1/2 inch (13 mm) diameter case drain line

Note: These lines will terminate at the end of the boom.
3. Install jump lines from these hydraulic lines to the attachment bulkhead or manifold fittings.
Note: Check to make sure all bolts and nuts are properly installed and torqued.
4. Check for any hydraulic oil leaks or interference.
Note: Hydraulics will need to be bled before putting into service (see “Bleed the Hydraulic Cylinders” on page 12).



HYDRAULICCONNECTIONS
FIGURE 9

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.

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.
- UPX is for processing materials. **DO NOT** use for unapproved purposes or warranty may be voided.
- **DO NOT** continuously process oversized materials by forcing them into the shear throat. This will shorten shear life.
- If UPX stalls during processing, scale back the amount of material being processed at one time. Overloading the shear can cause overheating and has adverse effects on the hydraulic system.
- Cycle the UPX cylinder completely when processing. Fully cycling UPX will allow hydraulic fluid to circulate and prevents overheating.
- Maintain a safe distance.
- **NEVER** leave UPX 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 15 feet (5 meters) between UPX and any nearby power lines.
- **ALWAYS** lower UPX 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 UPX.
- Avoid collision of the boom or jaws, especially when working with limited visibility or inside buildings. Know the height and reach of UPX during operation, transport and when swinging the excavator.
- Use attachment rotation for positioning only. **DO NOT** use UPX as a jack hammer or wrecking ball.

OPERATION

- **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.
- **DO NOT** attempt to shear material stuck through the lower jaw.
- Before shearing thin material, ensure that blades are sharp and properly adjusted. Thin material may jam in the blades.
- Lifting lugs are for shipping and installation. **DO NOT** use in cable-hung applications.
- The rotation function is for positioning only. **DO NOT** use it for bending, breaking or prying.
- **DO NOT** use the excavator to force the shear into a pile.
- **DO NOT** apply excavator force at the ends of the upper shear in an attempt to un-jam the shear or cut materials that are too large for the shear.

ATTACHMENT CONTROLS

⚠WARNING

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

UPX uses the existing hydraulic circuits on your excavator. The following table details each excavator function and what the corresponding UPX movement will be.

SECOND MEMBER CONTROL	
Excavator Control	**UPX Action**
Bucket Dump	Opens UPX jaws.
Bucket Curl	Closes UPX jaws.
THIRD MEMBER CONTROL	
Excavator Control	**UPX Action**
Auxiliary Excavator Control	Opens and Closes UPX jaws.
Bucket Dump	Moves UPX out.
Bucket Curl	Moves UPX in.

START-UPPROCEDURE

BLEED THE HYDRAULIC CYLINDERS

Air must be bled out of the cylinders prior to operation. Air in the hydraulic system leads to cavitation and 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 cylinders fully retracted. Shut off the excavator and operate the jaw controls in order to relieve any existing hydraulic pressure to the attachment cylinders.

2. Position the attachment so the cylinders are as horizontal as possible. Set the excavator at idle speed.

3. Slowly open the jaws until a noticeable change in tone of the excavator is heard, indicating

full cylinders. Release the controls and do not continue to apply full operating pressure to the cylinders.

4. Slowly close the jaws until the rods are extended approximately 1/4 stroke.

5. Retract the cylinder rods all the way.

6. Repeat steps 3 and 4. Extend the rod 1/4 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 cylinders at this time.

8. Check the base machine hydraulic fluid level.

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 getting damaged in any way. Contact your dealer immediately if interference occurs.

OPERATING TIPS

- Start processing smaller materials and work up to larger materials. This will help you to learn the limitations of the machine and will allow the machine to warm up properly.
- When handling materials, keep the load as close to the base machine as safely possible. This will provide the greatest machine stability.
- Avoid handling long, heavy materials off center. Excessive weight held out to one side can force the attachment to rotate or "Back-drive". Back-driving puts increased strain on the rotation system and, if done continually, can lead to rotation component problems. The rotator is for positioning only.
- When processing oversized concrete, make partial bites to start the breakage and then back off before making the next partial bite. This will allow the broken material to fall away between bites.
- When shearing large steel members, such as I-beams or tubing, try doing it in two cuts rather than one. Pierce the material about halfway through with the first cut, and then finish it off with the second cut.
- The shear jaws are best capable of processing light, thinner gauge materials immediately after blade maintenance. When processing larger materials, the condition of the blades are not as critical. See "Blade Maintenance" on page 19.
- Sort your scrap to get the highest capacity from the attachment.
- Understand that the attachment does have limits. Sometimes it may be necessary to downsize very large material by another method before the attachment can process it effectively.
- Keep the attachment properly maintained. Jaws with excessive blade gaps or dull teeth are much less effective. Lack of maintenance can lead to greater problems and potential downtime.

CHANGING JAWS

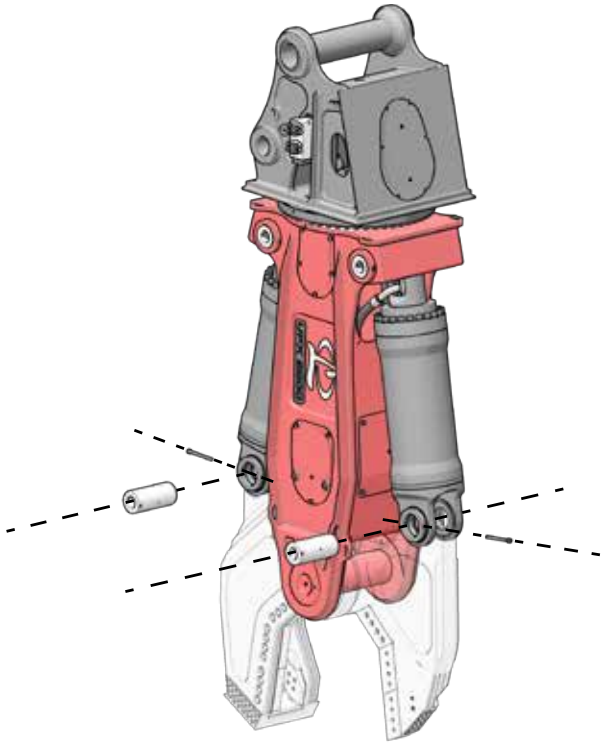
WARNING

- **Removal of the attachment pins can be hazardous. Never release the weight of the jaw unless it is secured.**
- **Avoid all potential pinching points when exchanging jaws.**

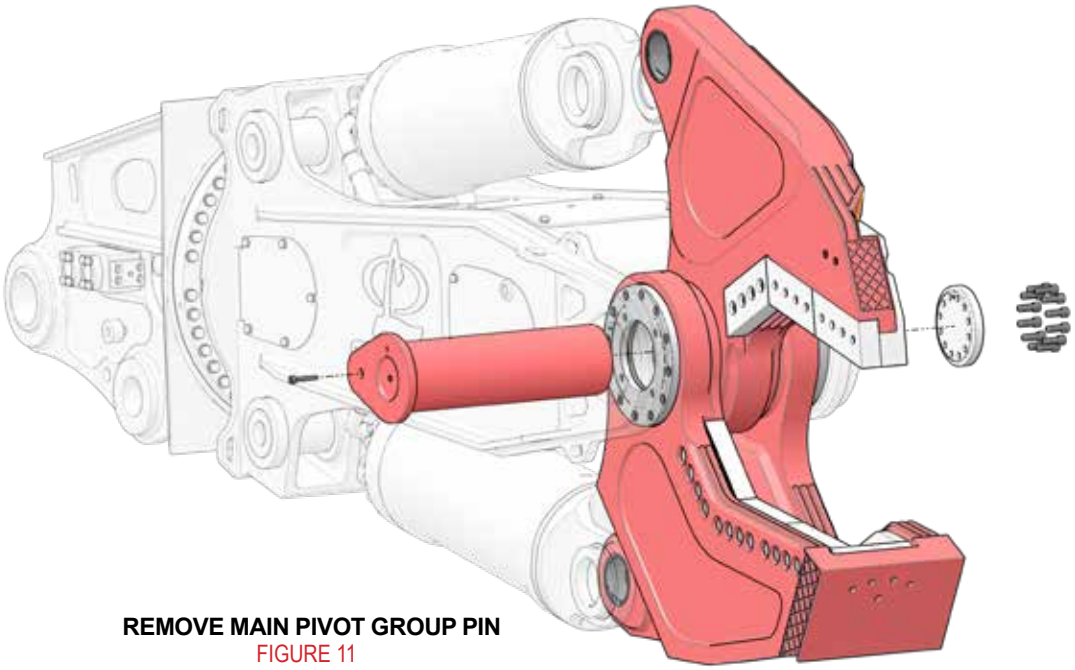
1. Park the excavator on solid, level ground.
2. Remove the front cylinder pins (Figure 10). Retract the cylinders.
3. Place the jaws in a stand or blocking. Ensure the jaws will not move when disconnected from the UPX.

Note: Secure the upper and lower jaws to prevent them from tipping or falling.

4. Remove the main pivot group pin (Figure 11).
5. Slowly raise UPX to separate from the jaws.
6. Insert UPX into another set of jaws.
7. Insert the main pivot group pin and front cylinder pins.



REMOVE FRONT CYLINDER PINS
FIGURE 10



REMOVE MAIN PIVOT GROUP PIN
FIGURE 11

8-HOUR INSPECTION CHECKLIST

Inspect all safety devices

_____ Safety decals are in place an legible (see Decals & Terms on page 7).

_____ Cab protection is in good condition.

_____ Excavator warning systems are working.

Visually inspect for damage

_____ Check for physical damage to the attachment, jaws, hoses and fittings.

Lubricate all points

_____ Lubricate attachment and jaws (see Lubrication on page 16).

Inspect bolts and hydraulic fittings

_____ Inspect bolts and fittings on attachment and jaws (see Inspect / Torque Bolts on page 18).

Inspect connecting pins and retaining hardware

_____ Stick connection / boom pivot pin.

_____ Link connection / cylinder connection pin.

_____ Front and rear cylinder pins.

_____ Main pivot group pin.

Inspect pivot group & jaw blades

_____ Check main pivot group for play (see Main Pivot Group Maintenance on page 19).

_____ Inspect blade gap & shear jaw guide blade gap (see Blade Maintenance on page 19).

80-HOUR INSPECTION CHECKLIST

Build-up, hard-surfacing & Blade Rotation

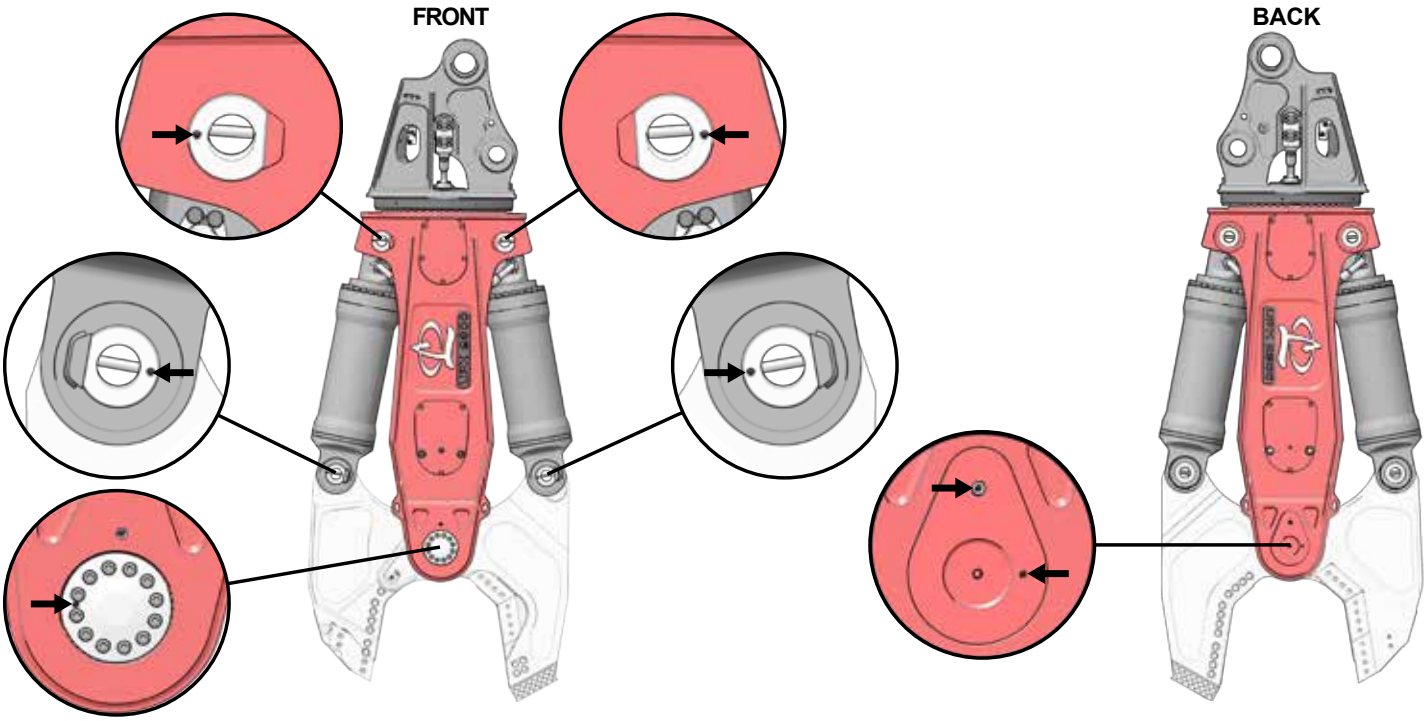
_____ Build-up jaws & check wear plates (see Build Up & Wear Plates on page 23).

_____ Rotate blades (see Blade Maintenance on page 19).

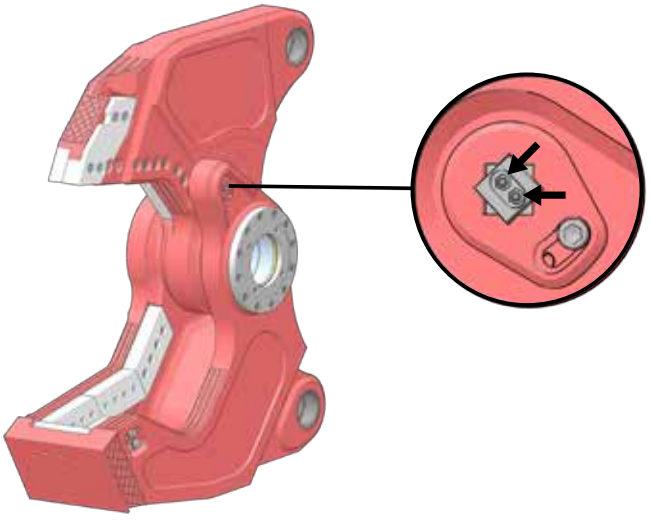
Inspected By:_____ Date:_____

LUBRICATION

Use premium grease, No. 2EP. Grease fittings are indicated on the attachment by yellow “GREASE” decals. Each grease fitting requires .6 oz (16 g) of grease. This is 12 shots of grease from an average grease gun.



ATTACHMENT LUBRICATION
FIGURE 12



SHEAR JAW LUBRICATION
FIGURE 13

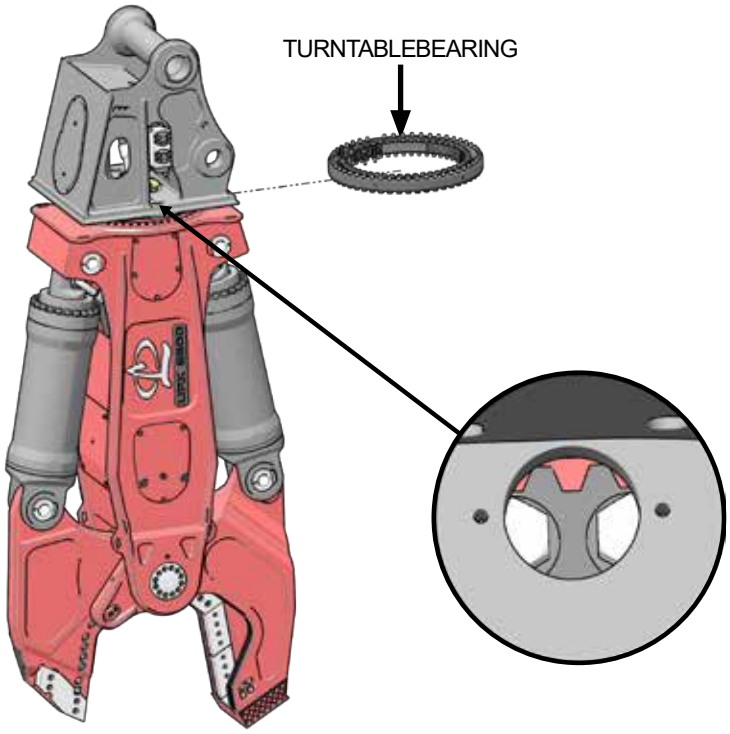
TURNTABLE BEARING LUBRICATION

WARNING

- **Stand clear of UPX during rotation.**

The turntable bearing has 1 to 4 grease fittings, depending on model type. Use lithium Grade 2 extreme pressure grease.
Note: For operation below 0° F, use Grade 0 grease.

1. Grease a fitting with 8 shots (.4 oz) of grease.
2. Stand clear and rotate the attachment 360°.
3. Grease the same fitting with 8 more shots (.4 oz) of grease, or until grease starts to escape from the bearing seals.
4. Perform steps 1 through 3 for every grease fitting.

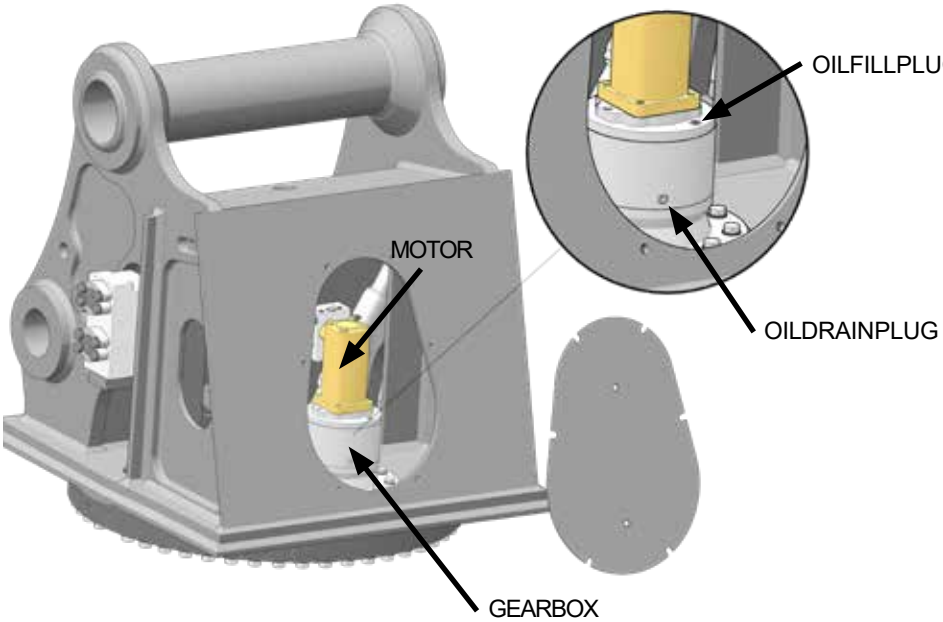


TURNTABLE LUBRICATION ACCESS
FIGURE 14

PLANETARY GEARBOX LUBRICATION (SELECT MODELS ONLY)

Some models use a planetary gearbox to rotate the attachment. The gearbox oil must be changed regularly, based on the Planetary Gearbox Oil Change Schedule.

Planetary Gearbox Oil Change Schedule		
FIRST 500 hours / 1 year	FIRST 1000 hours / 2 years	EACH 1000 hours / 2 years
SAE 80W - 90	Synthetic ISO 150 @ 104° F	Synthetic ISO 150 @ 104° F



SWIFT LOCK TOOTH REPLACEMENT
FIGURE 15

1. Access the gearbox.
2. Remove the oil fill plug.
3. Remove the oil drain plug. Drain oil into a container larger than 2 quarts.
Note: The plugs are magnetic and will collect metal filings. Discard the filings.
4. Install the oil drain plug.
5. Fill the gearbox with oil, as specified in the parts manual.
6. Install oil fill plug.

MAINTENANCE

INSPECT / TORQUE BOLTS

Inspect all bolts for damage. Check the torque of all bolts and replace any bolt that is damaged or has been re-torqued more than once. Always use replacement bolts of the same size and class as the one removed. Unless otherwise specified, use class 10.9 metric hex head capscrews, class 10.9 metric flat head capscrews and class 12.9 metric socket head capscrews. When installing new bolts, ensure that the bolt is clean and dry.
Note: Some bolts have unique torque specifications. Refer to the parts manual.

⚠WARNING

- **Never use an inferior class fastener. Fastener failure can cause damage, injury or death.**

⚠ NOTICE

- **Replace Rotation bolts after 1500 hrs / 2 years.**
- **You may need to rotate UPX to access bolts.**

GENERALFASTENER

	Torque	
Size	Class 10.9	Class 12.9
M10	41 ft/lbs (56 Nm)	49 ft/lbs (66 Nm)
M12	71 ft/lbs (96 Nm)	85 ft/lbs (115 Nm)
M14	112 ft/lbs (152 Nm)	136 ft/lbs (184 Nm)
M16	173 ft/lbs (235 Nm)	207 ft/lbs (281 Nm)
M20	335 ft/lbs (454 Nm)	403 ft/lbs (546 Nm)
M24	579 ft/lbs (785 Nm)	693 ft/lbs (940 Nm)
M30	1164 ft/lbs (1578 Nm)	1391 ft/lbs (1886 Nm)

GENERAL FASTENER TORQUE
FIGURE 16

BLADEFASTENER

Size	Class	Torque
M20	10.9	500 ft/lbs (678 Nm)
M24	10.9	900 ft/lbs (1220 Nm)
M30	10.9	1200 ft/lbs (1627 Nm)

BLADE FASTENER TORQUE
FIGURE 17

TURNTABLE&ROTATION

	Size	Class	Torque
Metric	M10	12.9	64 ft/lbs (87 Nm)
	M12	10.9	92 ft/lbs (125 Nm)
	M16	10.9	224 ft/lbs (304 Nm)
	M20	10.9	435 ft/lbs (590 Nm)
	M24	10.9	752 ft/lbs (1020 Nm)
	M30	10.9	1511 ft/lbs (2049 Nm)
Standard	0.38”	Gr. 8	44 ft/lbs (60 Nm)
	0.50”	Gr. 8	154 ft/lbs (209 Nm)
	0.75”	Gr. 8	380 ft/lbs (515 Nm)
	1.00”	L9	900 ft/lbs (1220 Nm)
	1.50”	ZN-L9	2600 ft/lbs (3525 Nm)

TURNTABLE&ROTATIONHEADFASTENERTORQUE
FIGURE 18

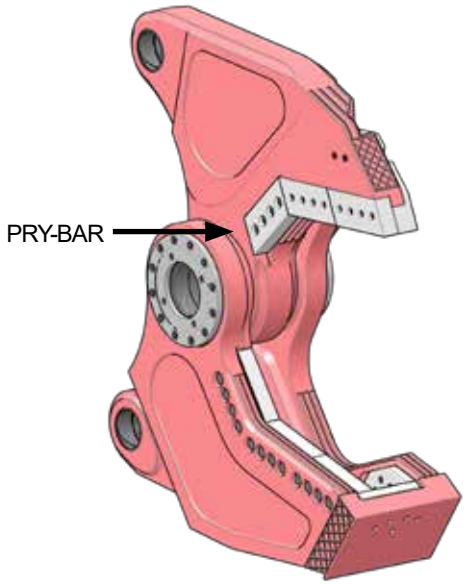
HYDRAULIC FLANGES

Flange	Flange Code	Bolt Size	Torque
0.75”	61	M10 x 1.50	42 ft/lbs (57 Nm)
1.00”	61	M10 x 1.50	42 ft/lbs (57 Nm)
1.00”	62	M12 x 1.75	70 ft/lbs (95 Nm)
1.25”	61	M12 x 1.75	70 ft/lbs (95 Nm)
1.25”	62	M12 x 1.75	70 ft/lbs (95 Nm)
1.25”	62	M14 x 2.00	112 ft/lbs (152 Nm)
1.50”	61	M12 x 1.75	70 ft/lbs (95 Nm)
1.50”	62	M16 x 2.00	224 ft/lbs (304 Nm)
2.00”	61	M12 x 1.75	70 ft/lbs (95 Nm)
2.00”	62	M20 x 2.25	435 ft/lbs (590 Nm)

HYDRAULIC FLANGE FASTENER TORQUE
FIGURE 19

MAIN PIVOT GROUP MAINTENANCE

1. Check for play in the main pivot group **BEFORE** performing maintenance on jaw blades.
2. Fully open the UPX jaws.
3. Lower UPX so the lower jaw is on the ground. Turn off the base machine.
4. Using a pry-bar between the upper and lower jaw (Figure 20), attempt to move the jaws.
5. Measure the movement using a dial indicator. If movement is detected, contact your LaBounty Dealer or LaBounty Customer Service.



MAIN PIVOT GROUP PRY-BAR LOCATION
FIGURE 20

BLADE MAINTENANCE

⚠CAUTION

- **Wear leather work gloves at all times during blade maintenance.**

Cracker and Pulverizer Jaws

1. Remove the blades.
2. Grind all rough edges from each blade and clean the blade seat.
3. Rotate the blade.

Note: Each blade has four edges, as shown in Figure 24 & Figure 25. Each time you rotate the blade, you use a different edge. Replace blades when all edges are rounded to .25" radius.

4. Reinstall each blade and torque bolts as shown in Figure 19 on page 18.

⚠ DANGER

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

5. Cycle the jaws closed. Measure the gap between the upper and lower blade using a feeler gauge. If the gap is larger than .060", shim the blade.

Shimming the Blades

1. Measure the blade gap.
2. Shim each blade so that the blade gap is approximately .040" - .060". Fit the shims between the blade and the blade seat, as shown in Figure 27.

Note: Do not shim out a blade more than .125". Doing so may cause structural damage and will void the warranty.

MAINTENANCE

Shear Jaws

1. Loosen the bolts holding the lower primary and secondary blades in place. Ensure the blades are loose before removing each blade bolt, one at a time (Figure 21).

⚠WARNING

- **Never strike a UPX blade with a hardened steel tool. The blade may chip and cause severe injury.**

Note: If the blades are not loose, try the following;

- **Lightly tap on the blade and blade bolt with a soft-faced mallet.**
- **Insert a soft metal punch into one of the bolt holes and lightly tap against the back of the blade.**

2. Remove the piercing tip, then the upper primary and secondary blades.

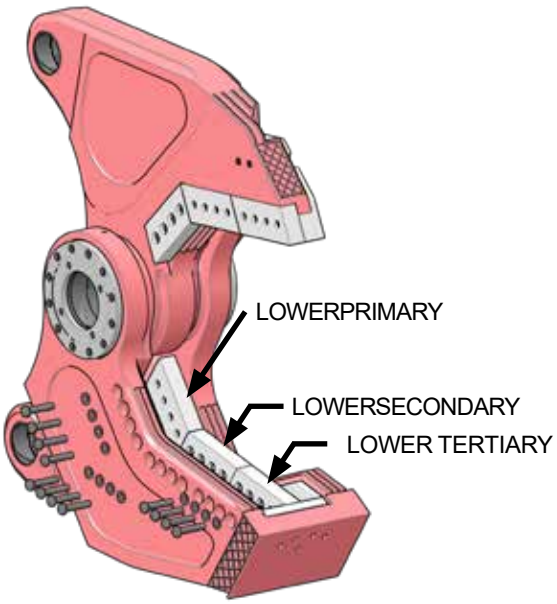
3. Remove the guide blade as shown in Figure 22.

4. Place a soft metal punch through the two outer most holes in the nose plate and remove the pins that hold the cross blade in place. Remove the cross blade.

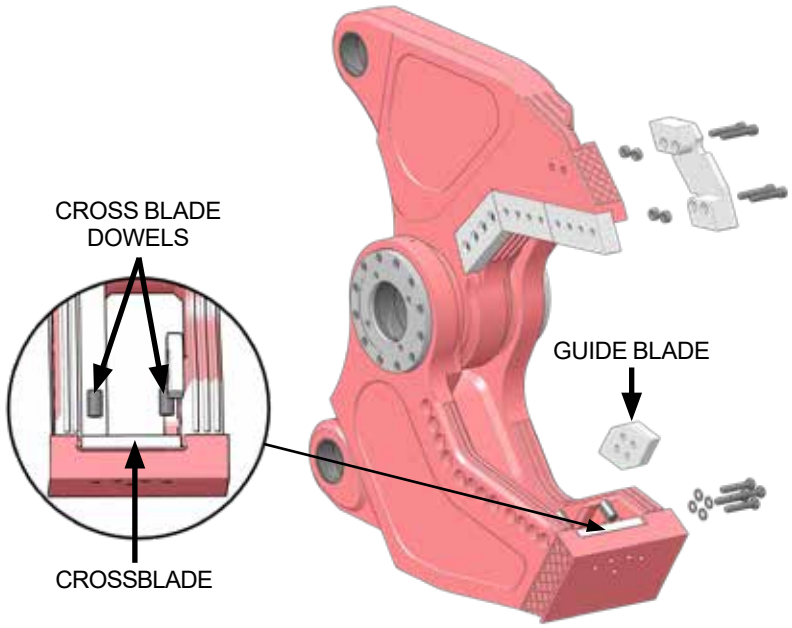
5. Grind the rough edges from the blades and clean the blade seats.
6. Rotate the blades.

Note: Each blade has four edges, as shown in Figure 24 & Figure 25. Each time you rotate the blade, you use a different edge. Replace blades when all edges are rounded to .25" radius.

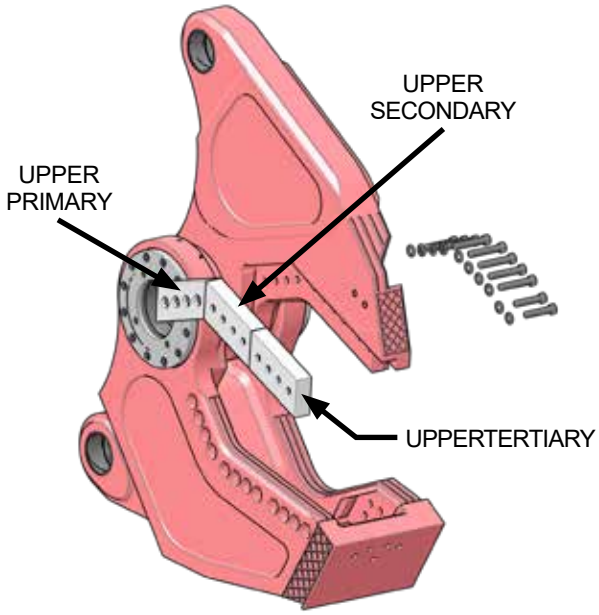
7. Reinstall each blade and torque bolts as shown in Figure 19 on page 18.



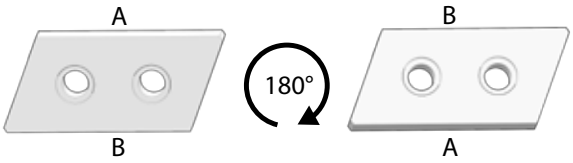
REMOVE LOWER BLADES
FIGURE 21



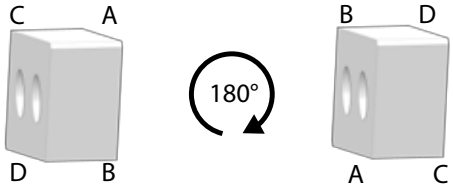
REMOVE GUIDE, CROSS BLADE & PIERCING TIP
FIGURE 22



REMOVE UPPER BLADES
FIGURE 23



BLADE PITCH ROTATION
FIGURE 24



BLADE ROLL ROTATION
FIGURE 25

Shimming the Guide Blade

The guide blade supports the upper jaw. The gap must be checked daily.

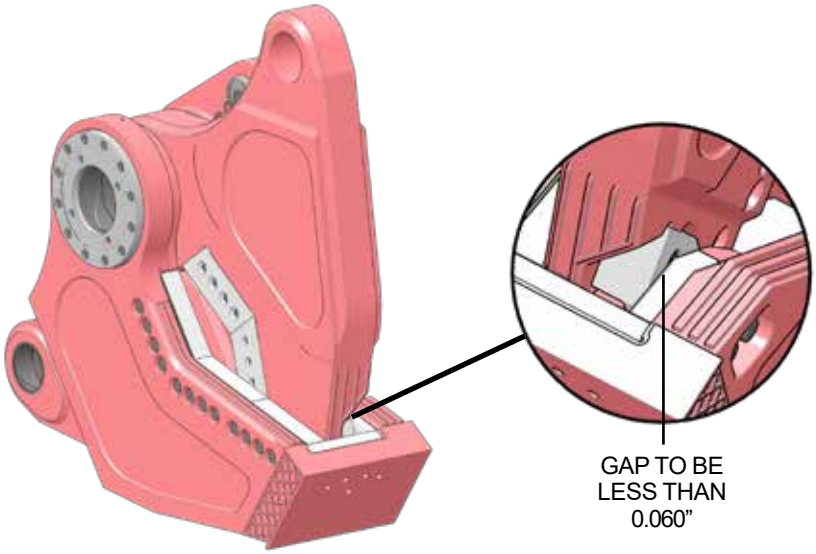
DANGER

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

1. Cycle the tool until the side of the piercing tip begins to bypass the guide blade.

2. Measure the blade gap in multiple spots. If the gap is larger than .060”, add shims, supplied by LaBounty, between the guide blade and blade seat until the gap is .040” - .060”.

Note: When all of the provided shims have been used, rotate the guide blade, end over end, and shim. Once all provided shims have been used again, replace the guide blade.



GUIDE BLADE GAP
FIGURE 26

Shimming the Primary, Secondary & Tertiary Blades

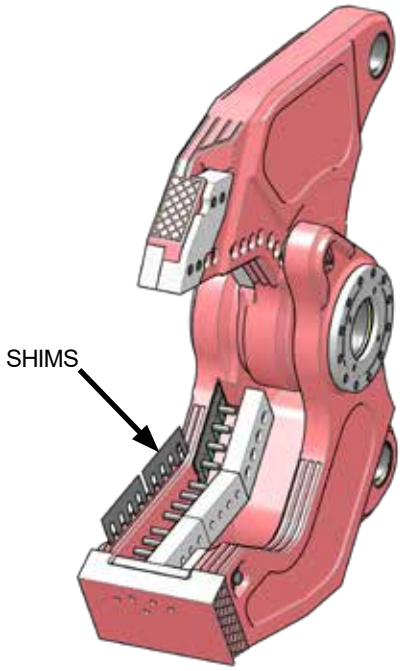
⚠ DANGER

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

1. Cycle the jaws closed. Measure the gap between the upper and lower blades using a feeler gauge. If the gap is larger than .060”, shim the blade.

2. Shim each blade so that the blade gap is approximately .040” - .060”. Fit the shims between the blade and the blade seat, as shown in Figure 26.

Note: Do not shim out a blade more than .125”. Doing so may cause structural damage and will void the warranty.



SHIMMING BLADES
FIGURE 27

BUILD UP & WEAR PLATES

As the jaws become worn from use, the worn areas will need to be built up to prolong the life of the attachment. Some jaws have wear plates that protect commonly worn surfaces and reduces the need to build up and hard-surfaced.

⚠CAUTION

- **Wear safety equipment when welding. This includes eye protection, hard hat, steel toe shoes, gloves, hearing protection and respirator protection.**
- **Do all work in a well ventilated area.**

CHECKING AND REPLACING WEAR PLATES

Wear bars are welded into the jaw and must be replaced after they have worn down to 1/4 their original thickness.

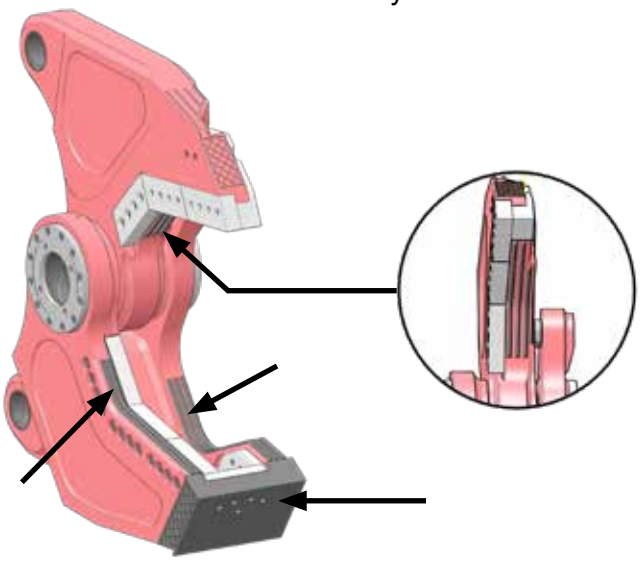
Using the UPX parts manual, ensure you have ordered the proper wear plate kits.

Installing Wear Bars

1. Preheat the area around the wear bar to 250° to 300° F.
2. Remove the worn wear bar.
3. Fit the new wear bar into the receptacle. Heat the bar locally and bend it into place.

Note: Wear bars are pre-cut to length and must be formed to the jaw in the field.

4. Weld the wear bar into place.
5. Cover the weld with a heat blanket and allow it to cool slowly.



SHEARWEARPLATELOCATIONS
FIGURE 28

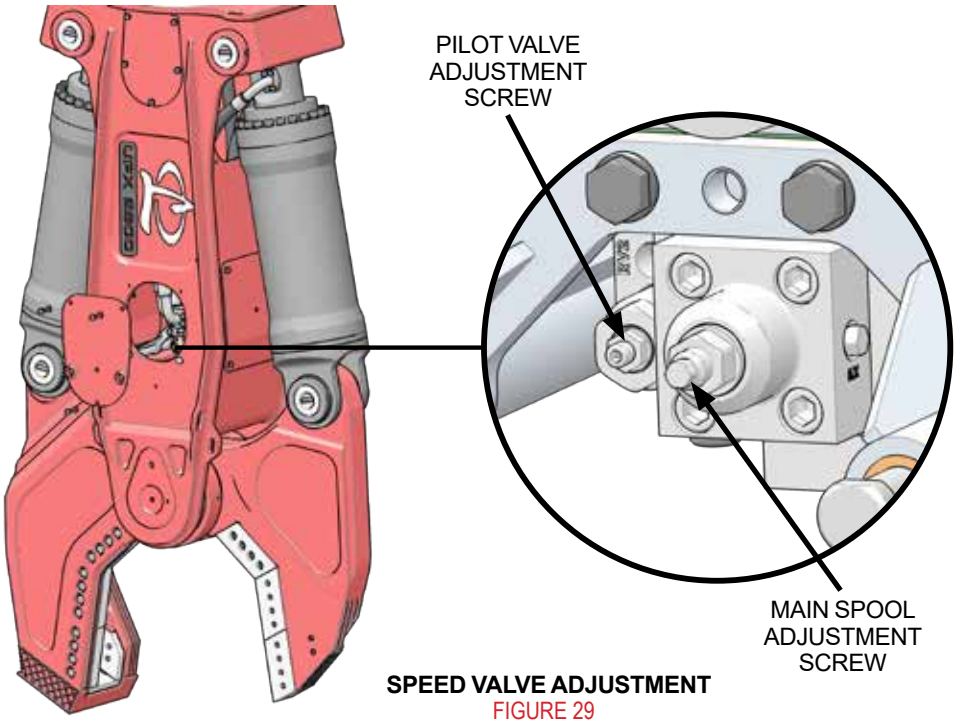
HYDRAULIC MAINTENANCE

Speed Valve

The speed valve allows the jaws to shift into high speed when the jaws are closing. Two valve spool screws control this speed change, the Main Spool Adjustment Screw and the Pilot Valve Adjustment Screw. Access the adjustments through the side access panel, as shown in Figure 29.

Testing the Speed Valve
Close the jaws and observe the movement. If the speed valve is working properly, the jaw closing speed will increase after 1-2 inches of movement.

Adjusting the Speed Valve
- Adjust the pilot valve adjustment screw clockwise until the jaws shift speed.



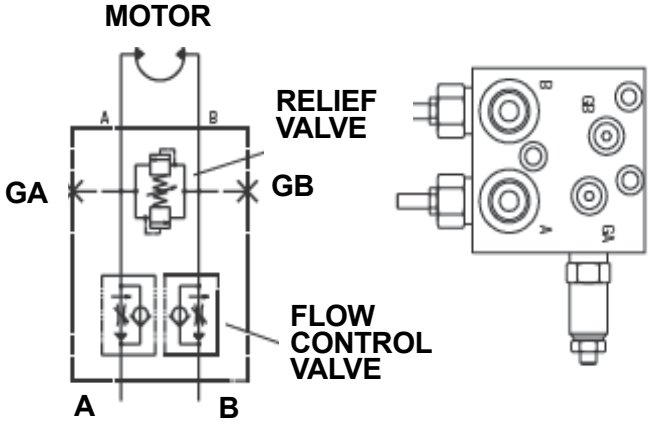
SPEED VALVE ADJUSTMENT
FIGURE 29

Control Valve Schematics and Descriptions

Crossover Relief Flow

Work Ports (A&B)
SAE #8 O-Ring Boss Ports for 5/8 OD Tube, 7/8-14UNF-2B

Gauge Ports (GA & GB)
SAE #4 O-Ring Boss Ports for 1/4 OD Tube, 3/8-24UNF-2B



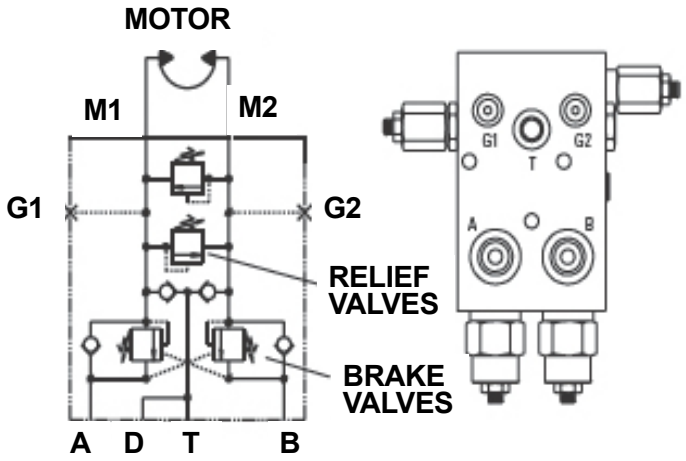
MAINTENANCE

Crossover Relief Flow Control Valve

Work Ports (A & B)
SAE #8 O-Ring Boss Ports

Gauge Ports (G1 & G2)
SAE #4 O-Ring Boss Ports

Drain Ports (D & T)
SAE #4 O-Ring Boss Ports

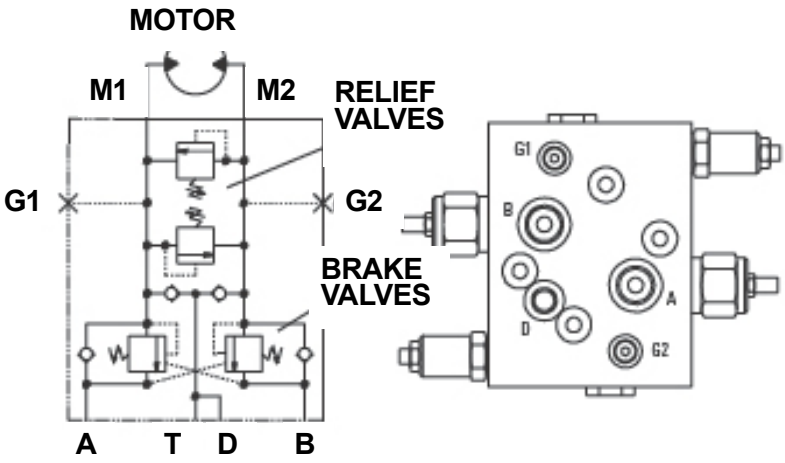


Motion Control Valve

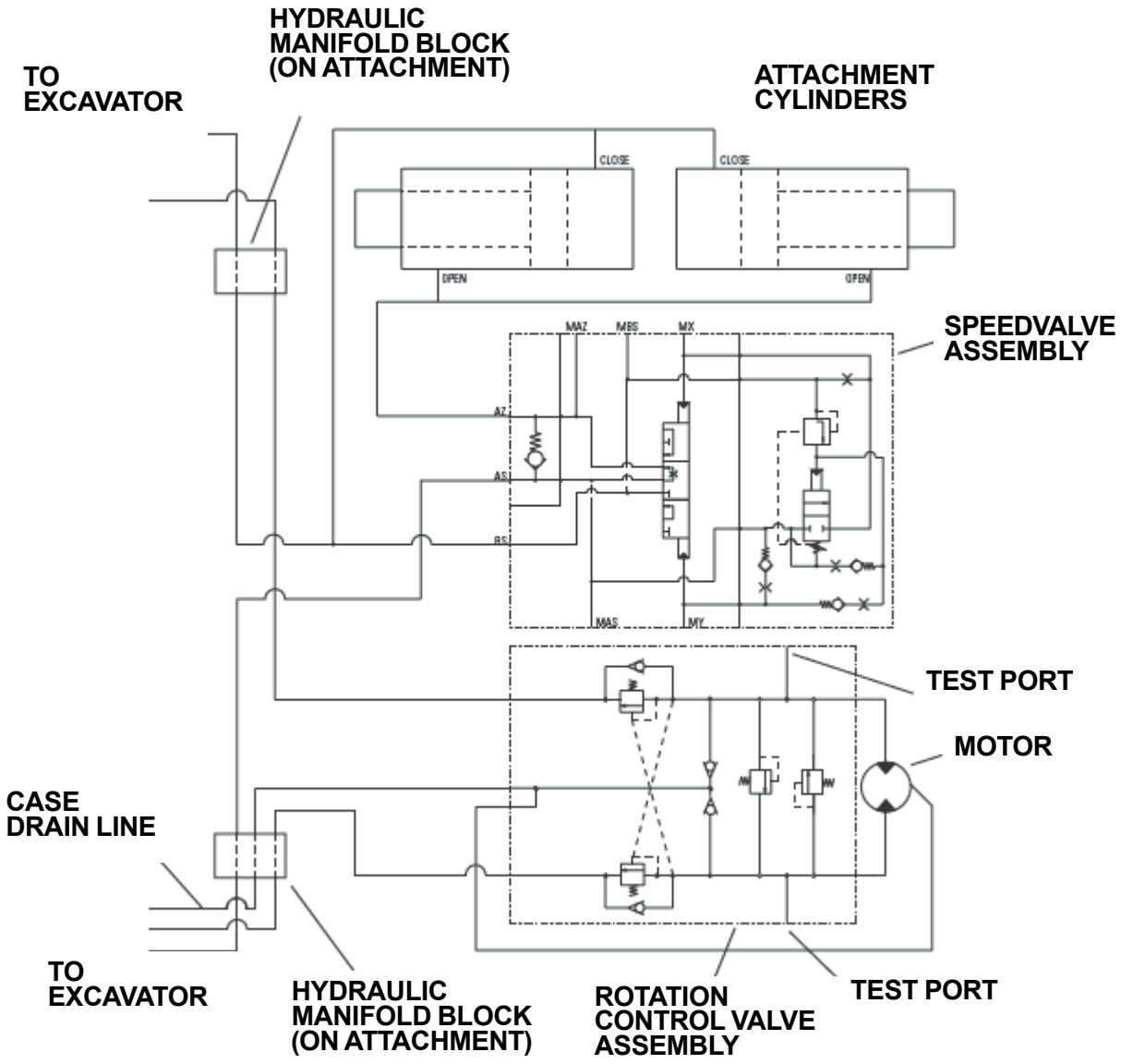
Work Ports (A & B)
SAE #10 O-Ring Boss Ports

Gauge Ports (G1 & G2)
SAE #4 O-Ring Boss Ports

Drain Ports (D & T)
SAE #6 O-Ring Boss Ports



UPX HYDRAULIC SCHEMATIC



TROUBLESHOOTING

FIRST STEPS

- Ensure the hydraulic flow and pressure from the base machine meets specifications (see “Hydraulic Circuit Requirements” on page 10).
- Inspect all hydraulic lines for kinks or damage. Replace any damaged hydraulic lines.

SYMPTOM	CAUSE	REMEDY
UPX jaws will not move, move too fast or move too slow.	Check speed valve operation.	Adjust if necessary (see “Adjusting the Speed Valve” on page 24).
UPX jaws will not rotate or rotation is very slow/fast.	Crossover relief valve is bypassing oil or the manifold block has internal leakage.	Replace the crossover valve. Replace the manifold block on the motor and check cartridge valve seals for damage.
	The rotation motor/gearbox is worn out or has a broken output shaft.	Replace or reseal the motor/ gearbox.
Jaw rotation movement is erratic.	Flow control valve is faulty.	Replace the flow control valve.
	The valve that supplies hydraulic oil is faulty.	Inspect the base machine hydraulic system.
	The control valve solenoid is working intermittently.	Replace the solenoid.
	Motor/gearbox is binding.	Disassemble motor from gearbox and inspect.
Jaw rotation drifts left or right.	Control valve ports are open with spool in the neutral position. There is leakage in the control valve spool.	Inspect the base machine hydraulic system.
	Crossover relief valve is leaking or is set too low.	Replace the crossover relief valve.
UPX jaws drift open or closed.	Base machine valve is open-center or is faulty.	Use a closed-center spool. Use the base machine manual to check the valve.
	Speed valve needs adjustment.	See “Adjusting the Speed Valve” on page 24.
UPX cannot process or hold material in the jaws.	The material is too big.	Consult the factory.
	Speed valve needs adjustment.	See “Adjusting the Speed Valve” on page 24.
	Back pressure is too high.	Check all hydraulic lines and ensure they are not kinked and are of the proper size. Check the base machine circuit for restrictor valves.
The jaws don’t shift speed when closing.	Pilot valve pressure is too high.	Adjust the pilot valve adjustment counter clockwise in small increments until issue is corrected (see “Adjusting the Speed Valve” on page 24).

TROUBLESHOOTING

SYMPTOM	CAUSE	REMEDY
Jaw speed wont shift when the jaws are partially opened.	Back pressure is too high in the base machine return line.	Use higher diameter hydraulic lines to minimize back pressure. Move the main spool adjustment screw clockwise in small increments until the issue is corrected (see “Adjusting the Speed Valve” on page 24).
Jaws continue to close after the operator has let go of the controls, after moving in speed mode.	The main valve spool isn’t fully shifting out of speed mode.	Move the main spool adjustment screw clockwise,in small increments, until the issue is corrected (see “Adjusting the Speed Valve” on page 24).
The jaws lack power.	The main valve spool isn’t fully shifting out of speed mode.	Move the main spool adjustment screw counter clockwise,in small increments, until the issue is corrected (see “Adjusting the Speed Valve” on page 24).

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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.