Safety, Operation & Maintenance Manual

Concrete Pulverizers

STANLEY

LaBounty®

INTELLECTUAL PROPERTY – PATENT INFORMATION

This product is covered by one or more of the following patents.

U.S. PATENT NUMBERS:

5,474,242	7,240,869
5,531,007	7,487,930
5,992,023	7,578,461
7,322,273	7,832,130
8,146,256	8,104,384

EPO Patent Numbers

435,702
737,107
1,682,299
1,789,225

PREFACE

This manual contains information for the safe and proper operation and maintenance of the concrete pulverizer. 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.

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SECTION 1 INTRODUCTION TO SAFETY

INTRODUCTION

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.

UNDERSTAND SIGNAL WORDS

When you see the following symbols and signal words on your equipment or in this manual, be alert to the potential for personal injury or equipment or property damage. Follow recommended precautions and safe operating practices.

⚠ DANGER

Indicates immediate hazards that WILL result in severe personal injury or death.

⚠ WARNING

Indicates hazards or unsafe practices that CAN result in severe personal injury or death.

⚠ CAUTION

Indicates hazards or unsafe practices that could result in personal injury.

NOTICE

Indicates notes of importance to a procedure or part.

SAFETY SUMMARY

DANGER

If the attachment is not functioning properly, you must shut the machine down and follow proper lockout, tag, and repair procedures.

DANGER

Ensure that the cab is equipped with the proper safety guards for LaBounty applications. In addition, it is required that the cab be equipped with an approved Falling Object Protection Structure (FOPS) when processing materials. 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.**

DANGER

DO NOT process or handle material with the attachment over the operator's cab.

DANGER

DO NOT attempt to shear brittle materials such as axles and railroad rail. Brittle material breaks or shatters instead of shearing. The material being processed could become a projectile and cause injury or death. **DO NOT** process any material in any position that may propel it toward operator, other workers, buildings or equipment.

DANGER

DO NOT close the attachment on a structure and reverse the excavator in an attempt to pull down material.

DANGER

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 (22.9 meters).

DANGER

NEVER approach power lines with any part of the machine. Keep clear at a minimum of 15 feet (5 meters).

DANGER

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. Carry loads in recommended positions for maximum stability. Use the recommended excavator counterweight. Use short slings and lift the load only as high as necessary.

DANGER

DO NOT allow riders on the machine.

SAFETY SUMMARY continued

⚠ WARNING

NEVER remove any pins unless the attachment is on the ground and blocked up or 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. Keep people clear when removing or installing pins.

⚠ WARNING

NEVER operate equipment without the original equipment safety guards in place. If the cab glass is missing or damaged, check with your dealer or manufacturer for proper replacement.

⚠ WARNING

Under no circumstances should any modifications be made to LaBounty equipment without factory authorization.

⚠ WARNING

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. **DO NOT** work under a machine that is supported only by a jack.

⚠ WARNING

DO NOT let hot hydraulic oil get in contact with the skin as it could cause severe burns. Wear adequate protective clothing and safety equipment. **DO NOT** tamper with any hydraulic line or component while it is pressurized. Escaping fluid under pressure can penetrate the skin, causing serious injury. Relieve pressure before unhooking hydraulic or other lines. Tighten all connections before applying pressure. 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. Any unauthorized welding or welding procedures may result in personal injury.

⚠ CAUTION

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 to prevent injury. Safety equipment includes eye protection, hard hat, steel toe shoes, gloves, and hearing protection.

⚠ CAUTION

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

⚠ CAUTION

Before operating the attachment, read and observe all safety instructions in the Operation and Maintenance sections of this manual. If you are unfamiliar with any operation or maintenance procedure, seek instruction before proceeding.

ATTACHMENT DECALS

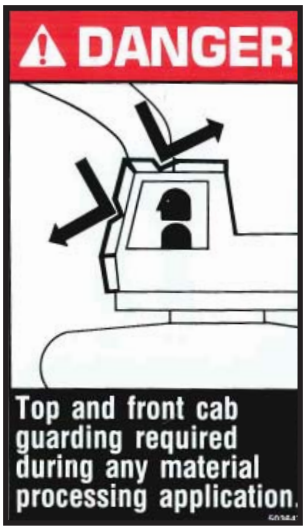
STANLEY LABOUNTY BRAND DECALS
(REPLACEMENT DECALS AVAILABLE UPON REQUEST)
FIGURE 1-1

SAFETY FIRST DECAL PART NUMBER 503590
(INCLUDED WITH MANUALS)
FIGURE 1-2

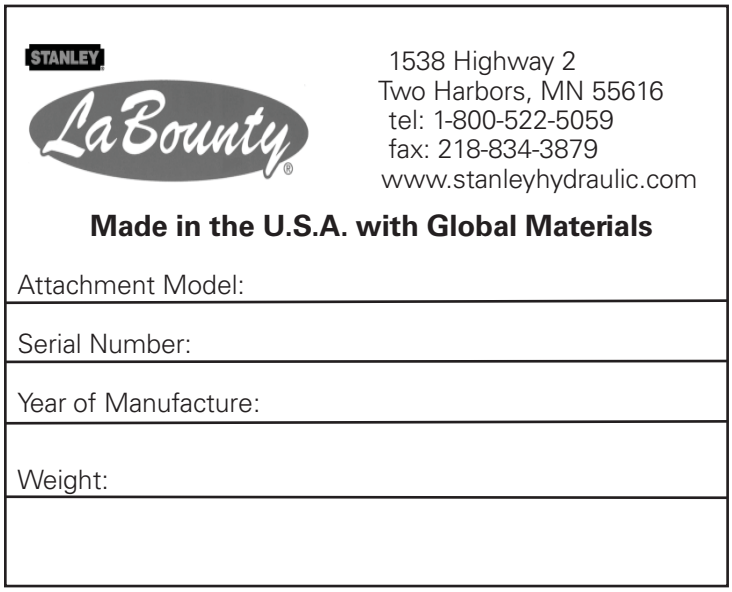
ATTACHMENT DECALS CONTINUED

GREASE DECAL
PART NUMBER 116338
FIGURE 1-3

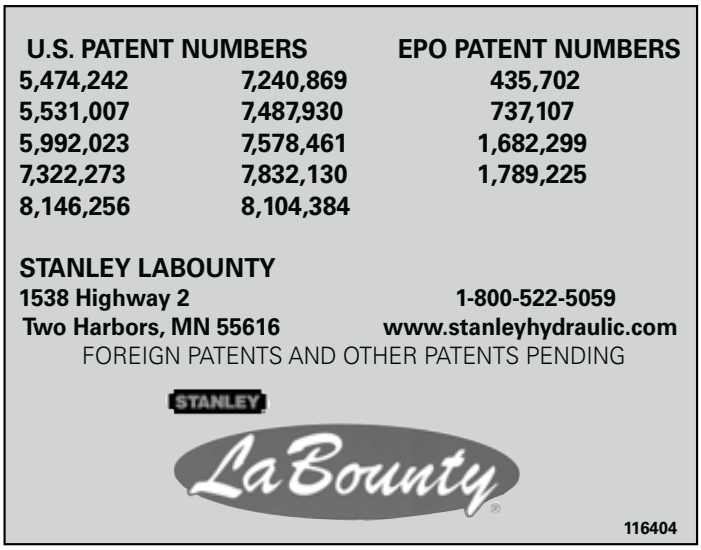
SAFE VIEWING DISTANCE DECAL
PART NUMBER 116389
FIGURE 1-4



SAFETY DECAL
PART NUMBER 503647
FIGURE 1-5



MODEL/SERIAL NUMBER PLATE
PART NUMBER 511045
FIGURE 1-6



PATENT PLATE
PART NUMBER 116404
FIGURE 1-7

SECTION 2 ABOUT THE ATTACHMENT

MODEL DESCRIPTION

The LaBounty Concrete Pulverizer (CP) is a simple yet powerful tool that excels at separating rebar and concrete, turning these two waste materials into recyclable, profitable products. It is a quiet alternative to traditional demolition and concrete processing methods, such as hydraulic hammers and wrecking balls.

Concrete Pulverizers are available in sizes for base machines ranging from 25,000 to 160,000 pounds (11,500 to 73,000 kg) and openings from approximately 28 to 54" (0.7 to 1.4 meters).

The LaBounty Concrete Pulverizer mounts in place of the excavator bucket. The bucket cylinder and linkage provide the crushing force—no additional circuits are required. Each CP is designed to get maximum power and productivity from the excavator. Depending on the mounting option of your CP, it may be possible to mount it on other excavator makes and models within the same weight class by installing a new mounting kit. Conctact your LaBounty representative with the serial number to evaluate other mounting options for your CP.

Concrete Pulverizers include LaBounty's patented Swift-Lock pin-on replaceable teeth. These teeth offer long wear, impact resistance, and simple maintenance. Each tooth segment is secured to the jaw with one pin making it possible to replace a complete set of teeth in as little as a half an hour.

FEATURES

- Patented Swift-Lock pin-on replaceable teeth offer fast and easy maintenance as well as long wear and impact resistance.
- Made with high-strength, abrasion-resistant steel for durability.
- Multimachine mounting is possible among some excavator models within the same weight class.
- Mounting pad may also be used with LaBounty Grapples, BLS Shears, and MWS Wood Shears.
- Installs in as little as 30 minutes.
- At-factory upgrading and rebuilding services available for extended life.

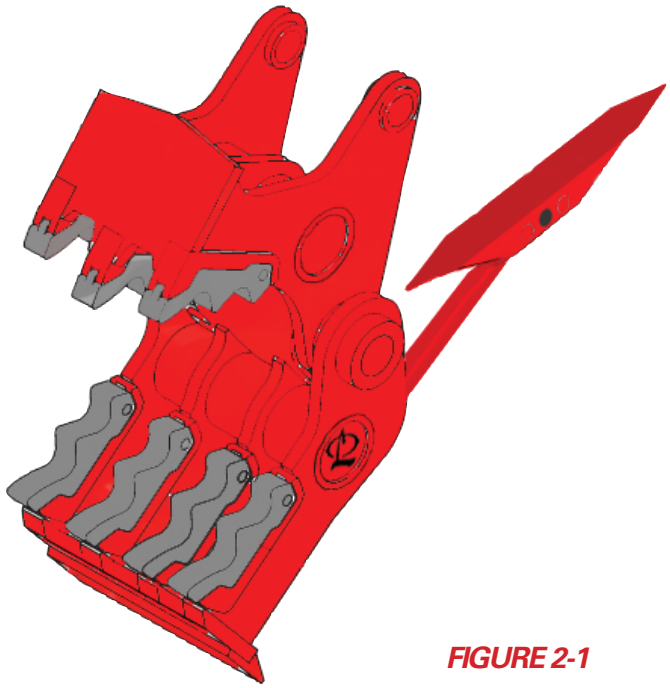


FIGURE 2-1

ATTACHMENT TERMS

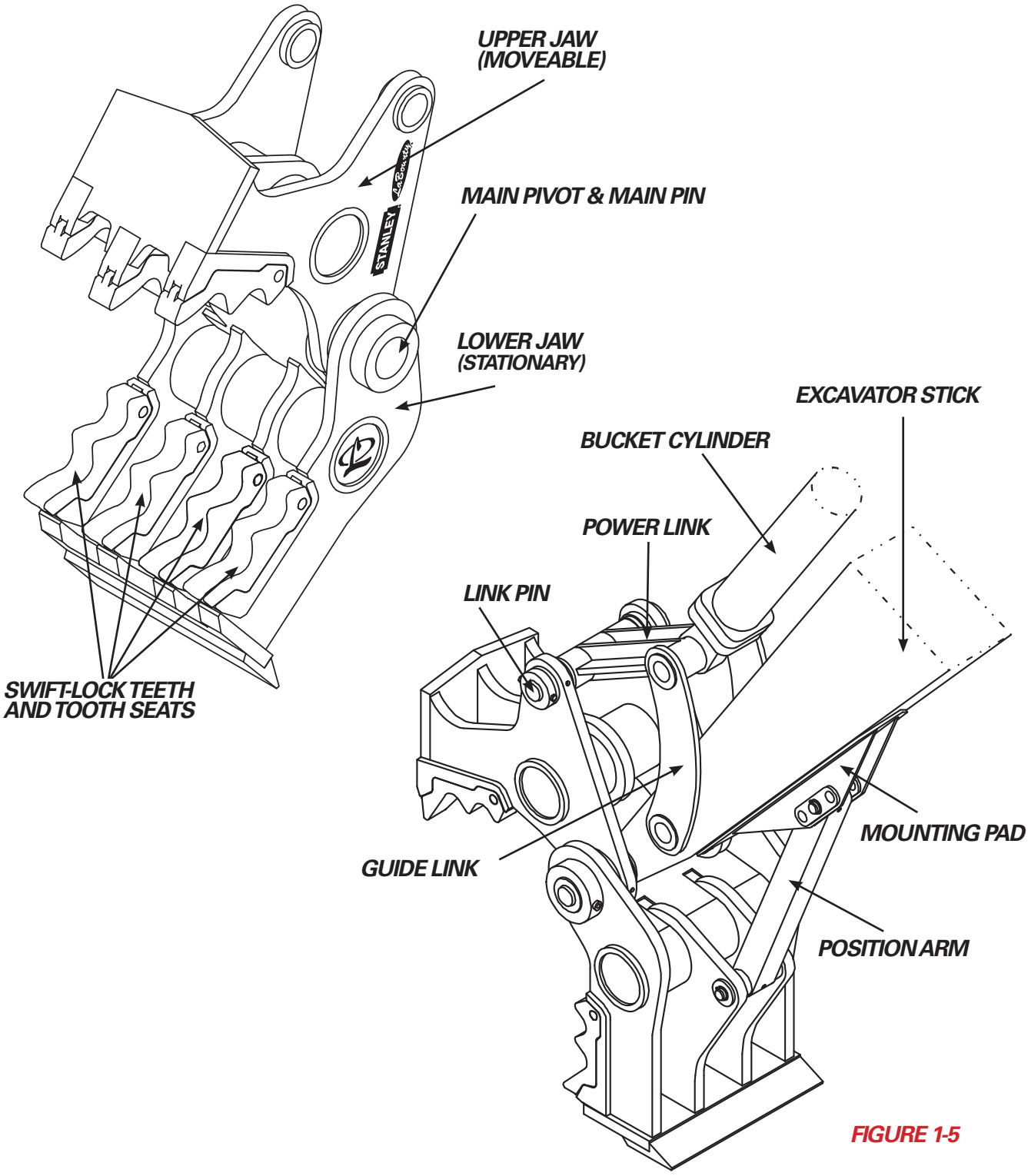


FIGURE 1-5

ATTACHMENT GLOSSARY

Build-up	Welding process where worn off parent material is replaced with new metal. A very important maintenance procedure to extend the life of the pulverizer.
Guide Link	Part of the excavator bucket linkage that pins at one end to the excavator stick and pins at the other end to the bucket cylinder and the power link.
Hardsurface	Welding process to protect the parent material of the pulverizer. The hardsurface acts as a wear surface.
Link Pin	The pin that connects the upper jaw of the pulverizer that is held stationary by the position arm.
Lower Jaw	The lower half of the pulverizer that is held stationary by the position arm.
Main Pin	The pin that connects the upper and lower jaws to the excavator stick tip. The main pin is a component of the main pivot group.
Mounting Pad	A bracket welded to the bottom of the excavator stick at a specific location. The position arm pins between the mounting pad and the pulverizer to hold the lower jaw stationary. The mounting pad properly positions the lower jaw and distributes stresses evenly through the stick during operation.
Position Arm	A structural member pinned between the lower jaw and mounting pad to support the lower jaw and hold it stationary.
Power Link	Part of the excavator bucket linkage that pins at one end to the upper jaw of the pulverizer and pins at the other end to the guide link and bucket cylinder.
Spool	A flanged tube that holds the two jaws together and creates a pivot for the upper jaw. There are two spools in the main pivot of a pulverizer.
Swift-Lock Teeth	Easily replaceable, pin-on wear parts on the upper and lower jaws for pulverizing concrete. Each tooth fastens to its tooth seat with a pin and retainer ring.
Thrust Washers	Wear components in the main pivot between the upper and lower jaws that act as a wear surface between the jaws as they pivot.
Tooth Pins & Retainer Rings	The hardware that fastens each tooth to its seat. The tooth pin is held in place by the retainer ring.
Tooth Seats	Receptacles that are welded in place on the upper and lower jaws. Each Swift-Lock tooth attaches to its seat with a single pin and retainer.
Upper Jaw	The upper half of the pulverizer that is connected to the bucket linkage of the excavator. It pivots against the lower, stationary jaw to crush concrete.

SECTION 3 INSTALLATION

CONCRETE PULVERIZER MOUNTING INSTRUCTIONS

It is recommended that the mounting bracket not be welded to the excavator stick until the pulverizer is installed. Mount the attachment as follows:

1. Postion the pulverizer on a flat, level surface as shown in figure 3-1. Remove the main pin and link pin.
2. With all personnel standing clear, walk the excavator into position and line up the excavator stick tip with the main pivot of the pulverizer as shown in figure 3-1.
3. Install the main pin through the main pivot of the CP and the stick tip of the excavator. Make sure to install the spacers on each side of the stick tip as you slide the main pin through the main pivot.
4. Install the washer and slotted nut on the threaded end of the main pin. Turn the slotted nut until it is snug against the washer and the spool head. Tighten the nut further until the next available slot line sup with the hole in the main pin. Install the cotter pin (see figure 3-2).

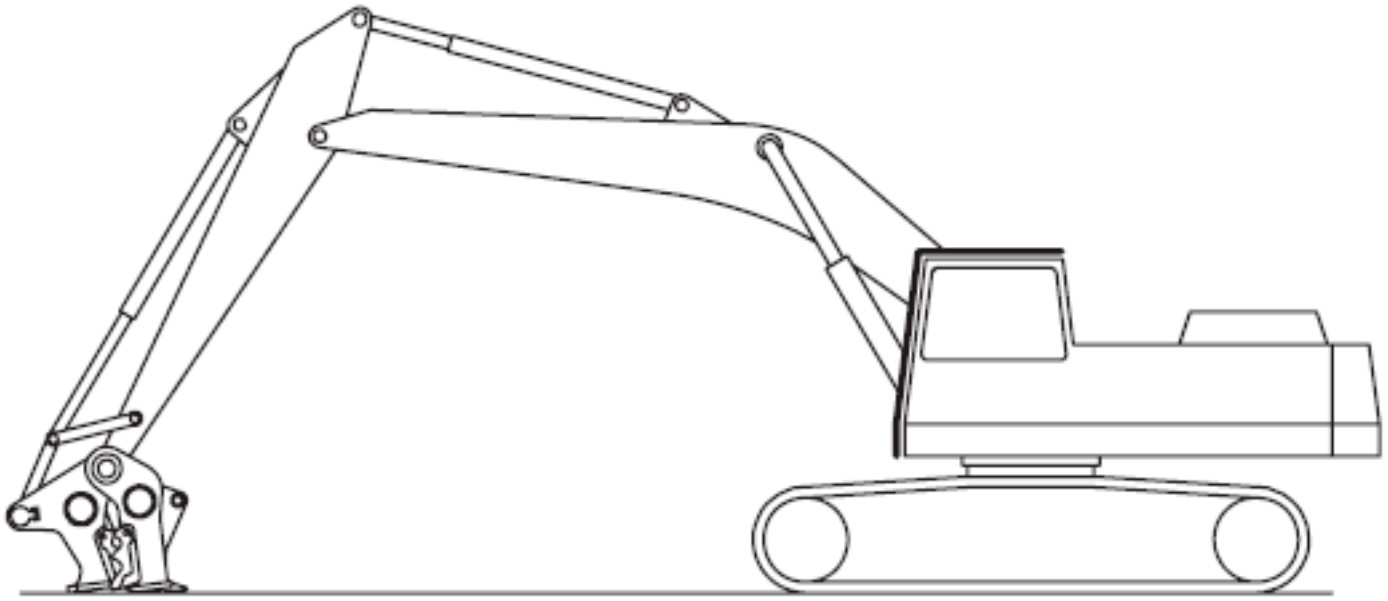


FIGURE 3-1

CONCRETE PULVERIZER MOUNTING INSTRUCTIONS continued

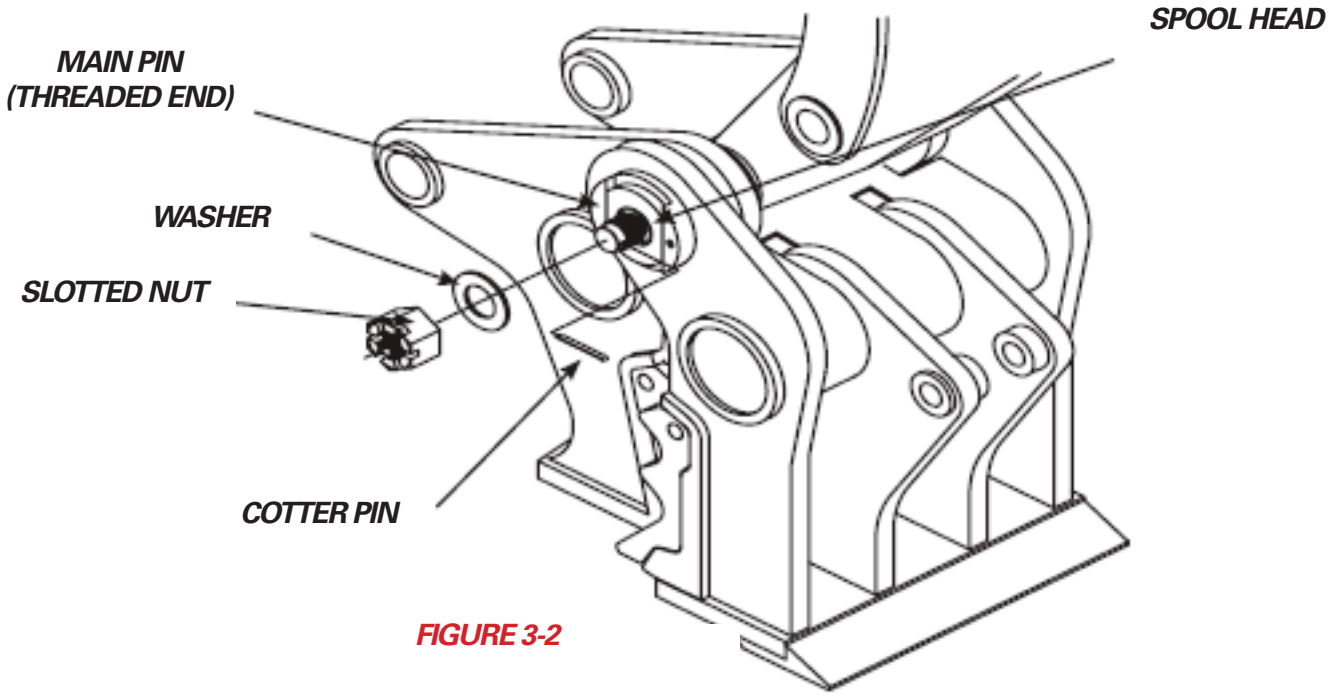


FIGURE 3-2

5. Extend the bucket cylinder and line up the power link with the linkage connection of the pulverizer. Install the link pin. Place the collar on the end of the link pin and secure it with the bolt and nut provided.
6. With all personnel standing clear, curl the excavator stick and extend the bucket cylinder to position the lower jaw as shown in figure 3-3.

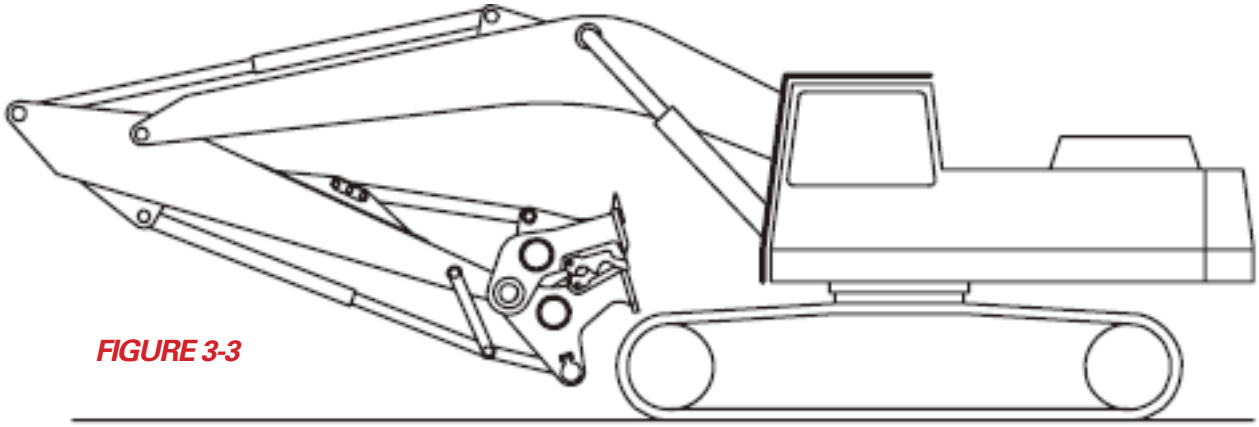


FIGURE 3-3

7. Place the mounting pad on the bottom of the excavator stick. Connect the position arm to the lower jaw of the puliverizer. Make sure the position arm grease fittings will be accessible.
8. Connect the position arm to the mounting bracket at the center hole.
9. Position the mounting pad along the bottom of the stick to obtain the proper distance from the main pin to the center hole of the mounting pad. This distance is shown in the Parts Catalog.

CONCRETE PULVERIZER MOUNTING INSTRUCTIONS continued

10. Weld the pad in position using E7018 low hydrogen welding rod. Make 1/2" (12.7 mm) fillet welds, 3" (78 mm) long, 6" ((150 mm) on center (see figure 3-4). Run out welds 1-1/2" (40 mm) on ends and grind to taper in both the side view as shown in figure 3-5 and in the top view figure 306.

NOTICE

Under no circumstances should the mounting pad be welded around the ends (see figure 3-4).

NOTICE

If the pulverizer is equipped with a custom mounting pad, refer to the Parts Catalog for special mounting instructions.

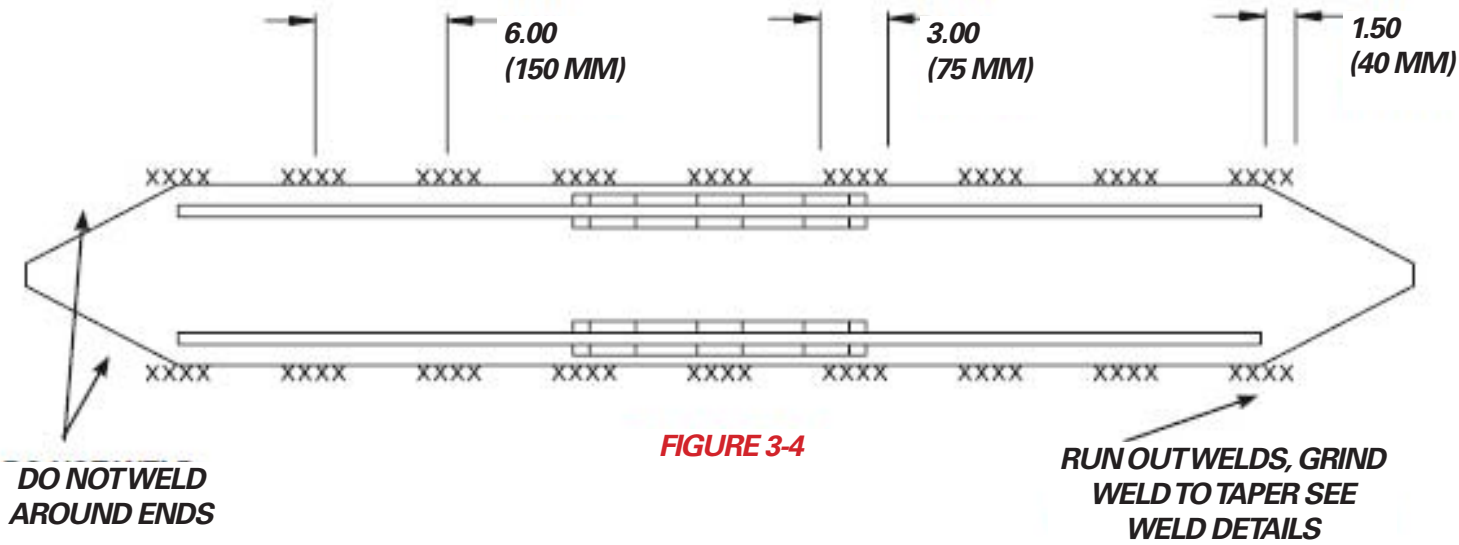


FIGURE 3-4

SIDE VIEW WELD DETAILS
FIGURE 3-5

TOP VIEW WELD DETAILS
FIGURE 3-6

CONCRETE PULVERIZER REMOVAL

1. Fully close the pulverizer and place it on a solid, level surface in the position shown in figure 3-7.
2. Support the position arm while removing the pin from the mounting pad then lower the position arm to the ground.
3. Remove the pin from linkage connection.
4. Remove the pin from the main pivot. With all personnel standing clear, carefully raise the excavator stick away from the puliverizer.

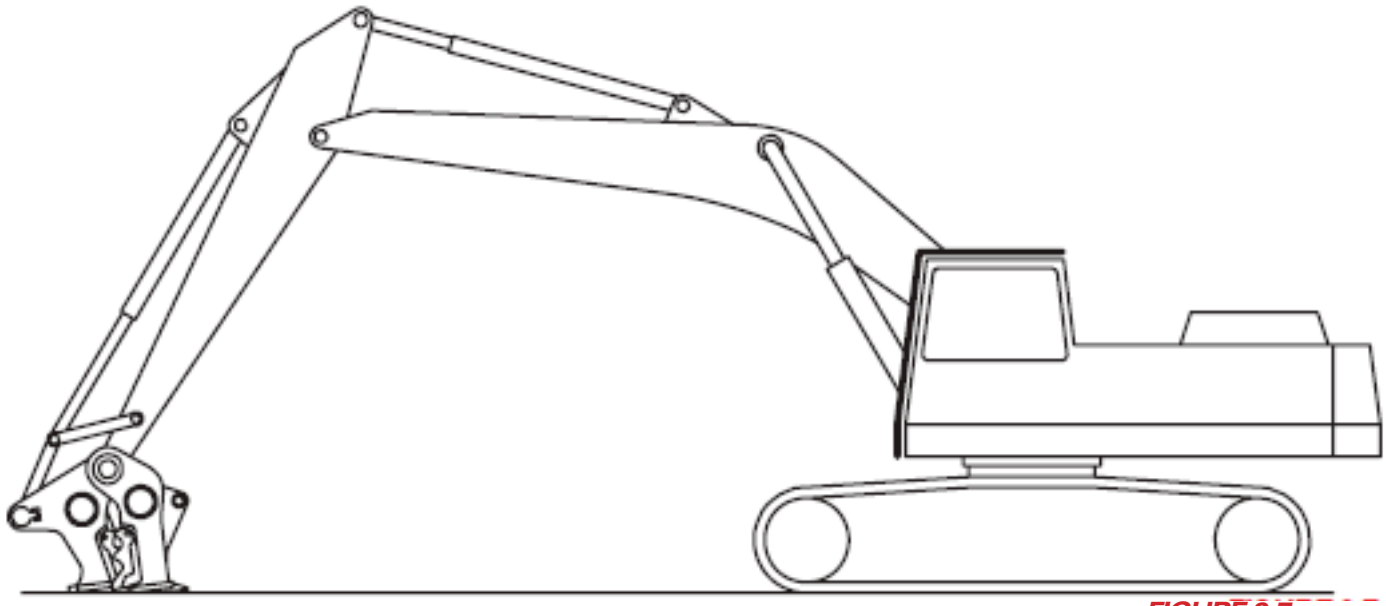


FIGURE 3-7

CONCRETE PULVERIZER STORAGE

1. Place the attachment on a solid, level surface.
2. Apply a coating of grease to the bores, pins, and any other exposed, unpainted surface.
3. Replace all pins in their bores to prevent misplacing them.
4. Grease at all locations (refer to the lubrication instructions in the maintenance section of this manual).

SECTION 4 OPERATION

BEFORE YOU START

KNOW YOUR SAFETY PROGRAM

1. Read and understand the safety section of this manual and the base machine manual.
2. Know the employer's safety rules for your job. Consult your foreman for specific instructions and safety equipment required.
3. Learn the traffic rules at the work site.
4. Know the hand signals used on the job and who is responsible for signaling. Take signals from only ONE person.

KNOW YOUR EQUIPMENT

- Learn the location and function of all controls. Test all controls to ensure proper operation. If any malfunctions are found, shut the machine down and report the malfunction for repair.
- Be familiar with the safety devices on the machine, indicators, warning devices and caution instructions. They will alert you to conditions that may make it hazardous to continue operating.
- Wear proper protective clothing including hard hat, safety shoes, ear protectors, reflective clothing, safety goggles and work gloves. Loose clothing can get caught in machinery and cause injury. Wrist watches, rings and other accessories can be dangerous, as well.
- Know the clearances in the work area.

FIRST THINGS FIRST

1. Ensure all safe viewing distance decals are installed and legible; contact LaBounty for replacements as required.
2. Have a DAILY Safety Dialog with all those with whom you work. Inform them of any out-of-the-ordinary work that may be planned for the day. Remind them of the safe working distance.
3. Clear the area; inspect. **ALWAYS** look out for others. In any work area, people constitute a serious safety hazard. Before operating, walk completely around the machine to be sure there are no workers next to, under or on it. Warn nearby workers that you are starting up; **DO NOT** start up until they are out of danger.
4. Each day before starting, visually inspect the machine by walking around it entirely; check the location of cables, gas lines, and water mains before any operations. Make sure work site footing has sufficient strength to firmly support the machine. When working close to an excavation, position machine with the propel motors at the rear.
5. Once started, 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 YOU'LL NEED

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

GENERAL RULES FOR SAFE OPERATION

1. Read the Operator's Manual for the excavator that the grapple is on. Know the control levers and their functions. Also note **ALL** safety devices on the machine and ensure that they are working properly.
2. KNOW the capacity of the excavator and its attachments. **DO NOT** overload the machine or serious injury could result.
3. It is required that a Falling Objects Protection Structure be installed surrounding the excavator cab for all material handling applications.
4. DO NOT use attachment for anything except what it is intended for or warranty will be voided.
5. DO NOT operate a poorly maintained or damaged attachment.
6. ALWAYS maintain a safe operating distance between any material suspended and held by the attachment and the cab of the machine.
7. NEVER leave a load suspended in the air, pass it over people, occupied vehicles or buildings or serious injury could result.
8. ALWAYS keep a watchful eye on exposed parts, such as the position arm, so as to not damage them when working in confined spaces.
9. ALWAYS maintain at least 15 feet (5 meters) between the attachment and any nearby power lines or serious injury could occur.
10. When leaving the machine for any reason, **ALWAYS** lower the attachment to the ground.
11. DO NOT close the attachment on a structure and reverse the excavator in an attempt to pull down material.
12. AVOID collision of the boom or attachment, especially when working with limited visibility or inside buildings. Know the height and reach of the processor during operation, travel and swinging upper structure.
13. AVOID contacting machine with the attachment or any material held by it.
14. Use machine swing for positioning only. **DO NOT** use the attachment as a jack hammer or wrecking ball.
15. AVOID contact between boom arm or attachment and overhead obstacles when you operate, move or haul the machine.
16. The attachment is not a dozer. **DO NOT** position it on the ground and travel forward.

⚠ WARNING

Determine the control for each movement of the excavator before attempting to operate. Practice the machine movements as described in "Getting the Feel of the Attachment" on page 4-6.

ATTACHMENT CONTROLS

The LaBounty concrete pulverizer replaces the bucket of an excavator and operates with the same controls—no additional hydraulics are required. The bucket dump control opens the attachment and the bucket curl closes the attachment.

⚠ WARNING

Determine the control for each movement of the attachment before attempting to operate. Practice the machine movements as described in Getting the Feel of the Attachment section of this manual.

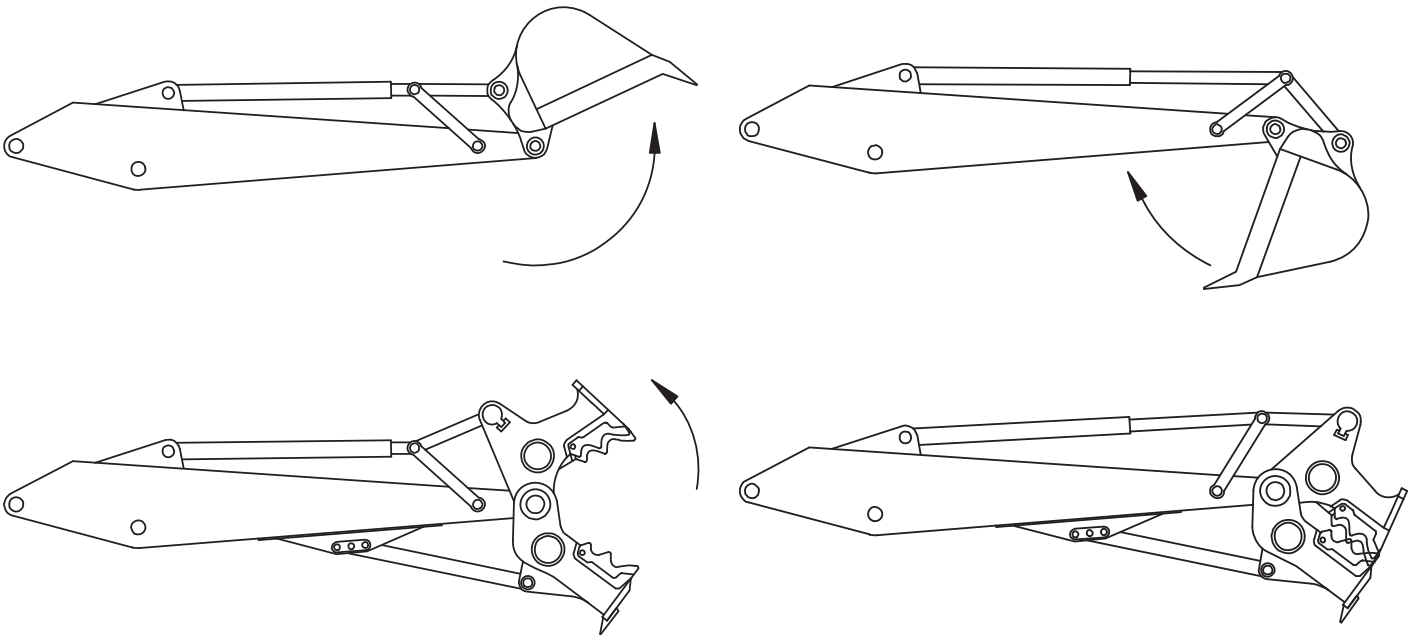


FIGURE 4-1

GETTING THE FEEL OF THE ATTACHMENT

Every operating part of any machine has a slightly different "operating feel"—an individual machine response to the movement of the controls. Before starting the first job with a new machine, it is suggested that the operator find an open spot on firm, level ground safely away from other people that's free of obstructions such as trees, buildings and other equipment. Move the machine to this area – and spend some time just getting to know the "operating feel" of the machine and the attachment (see figure 4-2).

This "get acquainted" time will allow the operator to become familiar with the control levers and attachment before beginning work.

The machine is exceedingly powerful. Do not operate carelessly; there is potential for personal injury and equipment damage. Be concerned about safety when preparing to operate the new machine. Ensure safe operation by inspecting the machine as explained in the Getting Started Safely section earlier in this chapter. This inspection amounts to a common sense visual check of the machine at the beginning of every operation. Follow a preventive maintenance program to reduce the possibility of costly downtime.

FEATHERING THE CONTROLS

The "fluid" nature of hydraulic power requires a special operating approach to the attachment that can be described as a smooth, even technique. The control levers should be moved in a gradual, deliberate way rather than with jerky, abrupt movements. Jerky operation can cause damage and early wear to various parts on the machine, and can also overheat the hydraulic system. For example, as each control lever is moved forward or backward from the center (or neutral) position, the oil flows to the cylinder or motor controlling a function. The component (boom, attachment, etc.) starts to move. The component moves faster as the control lever is moved further forward or backward. Holding the lever in the forward or backward position will hold that movement at a given rate of speed. To slow the movement down, gradually move the lever toward the neutral position. Movement is stopped at the neutral position. The position is maintained until the control lever is moved again.

Feathering the controls is a technique that will increase output and make operating the attachment easier. When starting any motion of the machine, move the control slightly from neutral until it starts to move then smoothly move the control to increase motion to desired speed. Do the same when stopping a motion.

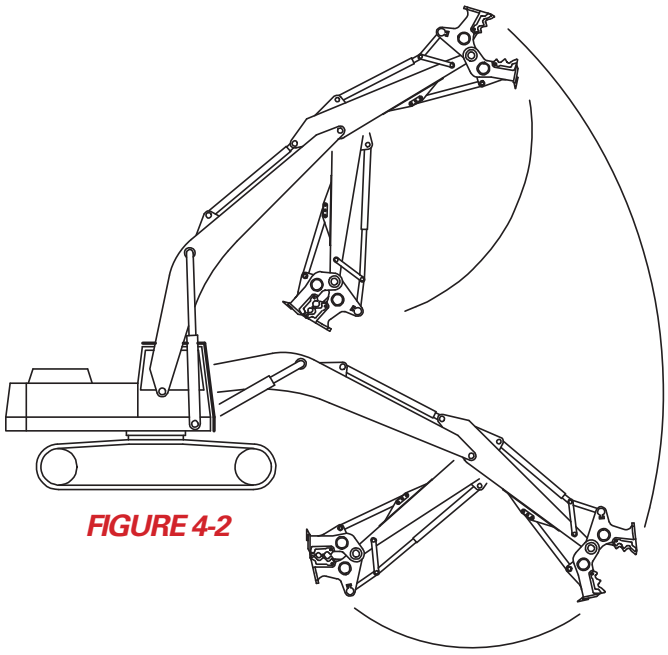


FIGURE 4-2

CONCRETE PULVERIZER OPERATING TIPS

1. To get the most crushing force from the pulverizer, pin the position arm in a mounting pad hole that allows the guide link to travel beyond 90° to the bucket cylinder before crushing begins (see figure 4-3).

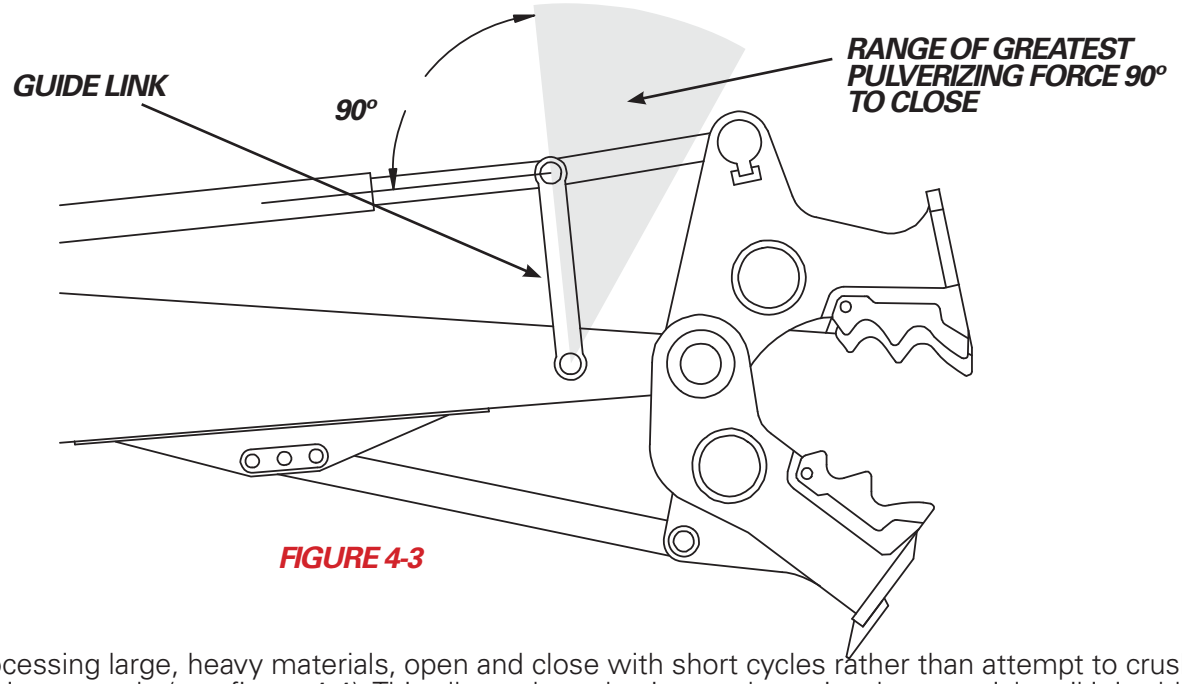


FIGURE 4-3

2. When processing large, heavy materials, open and close with short cycles rather than attempt to crush the material in one cycle (see figure 4-4). This allows the pulverizer to downsize the material until it is able to pulverize it completely. This technique creates less stress on the attachment and excavator hydraulics.

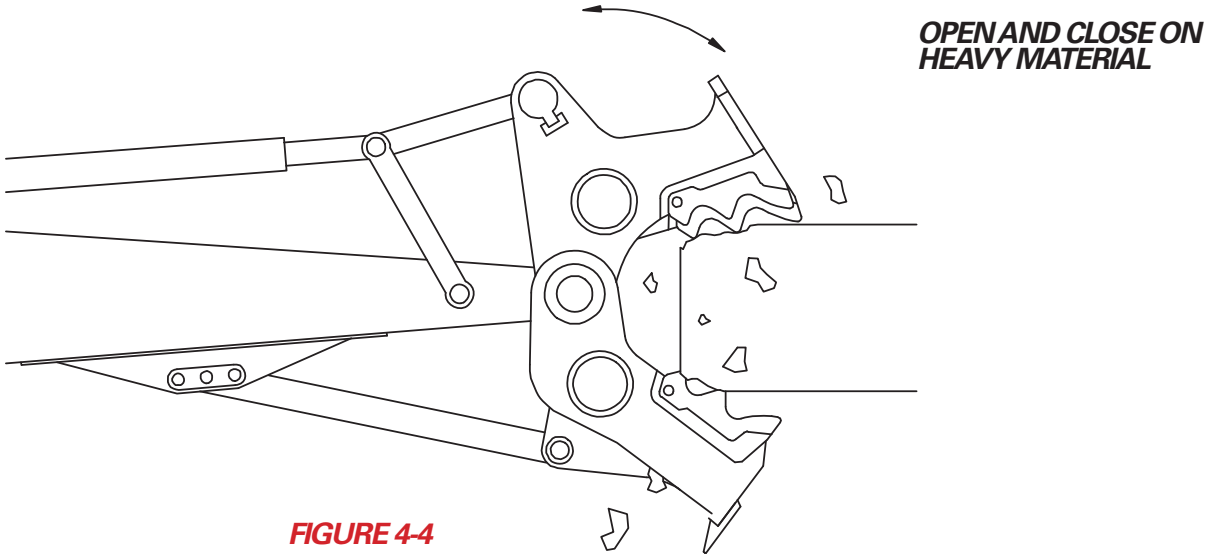


FIGURE 4-4

CONCRETE PULVERIZER OPERATING TIPS continued

3. The mounting pad of the LaBounty Concrete Pulverizer has three pin positions. By using the different positions, the angle of the lower (stationary) jaw can be adjusted (see figure 4-5). For each job, the lower jaw can be positioned to make the CP more productive or easier to use. Some experimentation may be necessary to learn the advantages of each position. Using the front position provides the least amount of total opening while the rear position provides the most. The center position is the best for general use.

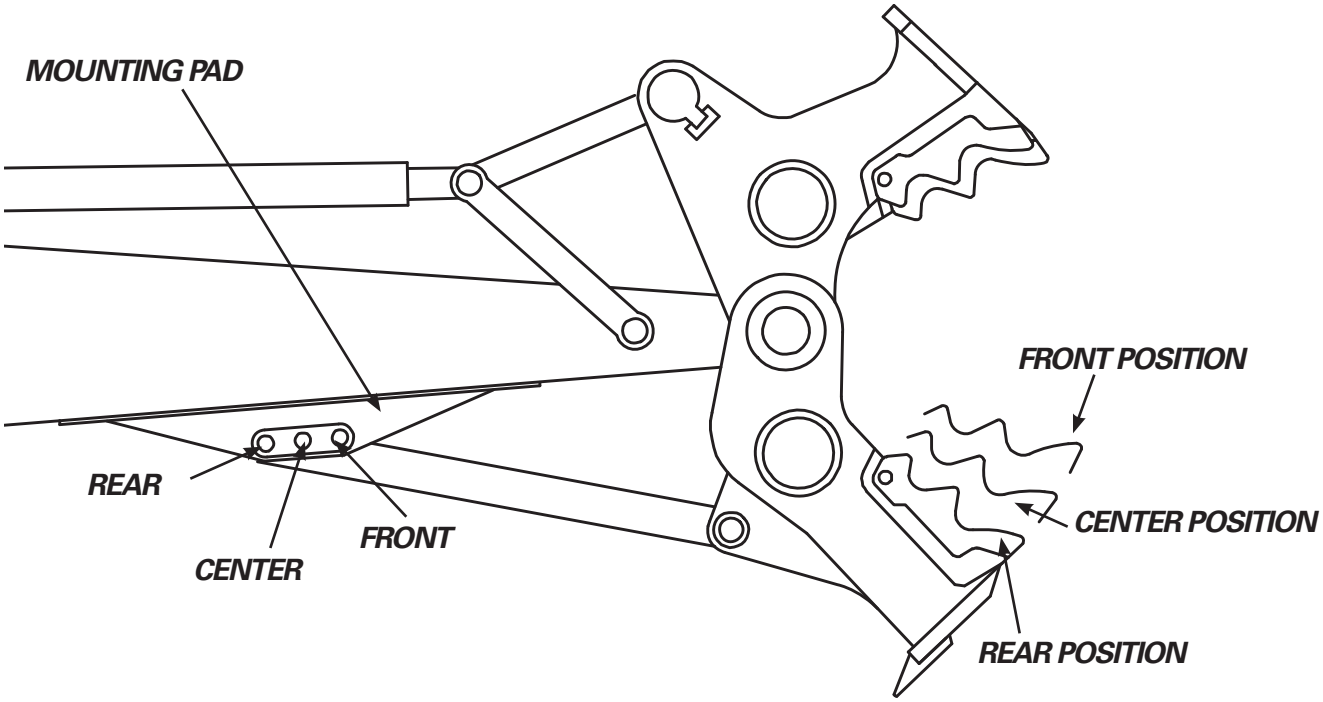


FIGURE 4-5

SECTION 5 MAINTENANCE

MAINTENANCE SAFETY PROCEDURES

Before attempting any maintenance procedure, read the entire Safety Manual carefully. If any question arises regarding a safety or maintenance procedure, contact your LaBounty dealer. For the nearest LaBounty dealer, see the Contact Information at the front of this manual.

- Inspect the attachment daily. **DO NOT** operate a poorly maintained or damaged attachment or major structural damage could result.
- **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 base 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 the cylinder to hold the attachment in the air. If a control is moved or hydraulic pressure is otherwise released, the attachment will drop. **DO NOT** work under a machine that is supported solely by a jack.
- **DO NOT** attempt to alter or change the physical, mechanical or hydraulic operation of the attachment during the warranty period without first consulting Stanley LaBounty as this could invalidate the Manufacturer's Warranty.
- **NEVER** operate the machine if an unsafe condition exists. Attach a "DO NOT OPERATE" tag to the machine.
- If more than one person is working on a machine, each must be familiar with the controls and aware of what the others are doing. Before working on a machine, **BE SURE TO TAG THE CONTROLS SO NO ONE ELSE WILL START IT.**
- **ALWAYS** use two people when making checks with the engine running – the operator at the controls must be able to see the person doing the checking.
- Keep hands away from moving parts. **NEVER** lubricate or work on a machine while it is moving.
- **ALWAYS** wear proper safety equipment when maintaining the attachment including safety glasses with side shields, hard hat, steel toe shoes, gloves, and hearing protection.
- Be sure you understand a service procedure before working on the machine. **DO NOT ATTEMPT REPAIRS YOU DO NOT UNDERSTAND. ASK FOR HELP BEFORE STARTING IF YOU ARE UNSURE.**

⚠ WARNING

During maintenance of the shear, it is imperative that the excavator is turned OFF to prevent injury.

⚠ CAUTION

Inferior parts can fail and cause equipment damage or personal injury.

GENERAL RULES FOR MAINTENANCE

1. Read the maintenance manual. Be sure all maintenance personnel read and understand all maintenance procedures before they are attempted.
2. Use factory approved parts. Use of parts that are not factory approved may cause damage or unnecessary downtime and may void the attachment warranty.
3. Lubricate daily; follow the lubrications schedule as outlined on page 5-5.
4. Use the included Inspection Checklist during inspections to make sure all maintenance is complete.
5. In extremely cold temperatures, work the attachment on lighter materials first before working up to heavier materials. This allows the attachment and jaws to warm up and makes them less susceptible to damage.
6. DO NOT weld on the excavator boom or stick without first consulting your dealer.
7. DO NOT exceed bolt torque specifications (see the Dry Bolt Torque Chart in this manual).
8. DO NOT disconnect hydraulic hoses or fittings without first relieving machine hydraulic pressure.
9. DO NOT exert the weight of the excavator on the shear in order to free the upper shear if it becomes jammed. Please consult the factory. **Jamming is the result of poor maintenance or improper operational techniques.**
10. DO NOT let hot hydraulic fluid get in contact with the skin as it could cause severe burns.
11. DO NOT use substitute parts unless you know that they are the identical to original factory parts in all characteristics.
12. Refer to the Parts Catalog for your attachment for LaBounty replacement part numbers. Be sure to reference the attachment model and serial number when ordering.

PERIODIC SERVICE SCHEDULE

SERVICE THE ATTACHMENT AT SPECIFIED INTERVALS

Inspect, lubricate, make service checks and adjustments according to the Daily Inspection Checklist reproduced from this manual. A program of regular service should be established, using the machine hour meter to determine when the attachment should be serviced. Use the intervals on the Service Schedule when operating in normal conditions. Service the attachment at shorter intervals when operating in extreme environmental or abrasive conditions. Use correct lubricants and bolt torques. Refer to the lubrication and bolt torque instructions in this manual when performing maintenance on the attachment.

DAILY SERVICE REQUIRED

Bolts: Check for looseness or damage.
Retorque if necessary. Refer to Bolt Torque tables in this manual. Bolts may be retorqued once, then must be replaced.
Connecting Pins and Pin Retaining Bolts: Inspect for looseness, damage and/or wear on main pivot pin and linkage pin. Check pinheads and pinstops.
Grease Fittings: Lubricate according to the instructions in this section. Replace broken fittings.
Swift Lock Teeth and Tooth Seats: Make sure all tooth pins are in place. Inspect for wear indicating build-up or hardsurfacing is required. Rotate or replace if necessary. Refer to page 5-6 for instructions.

DAILY INSPECTION CHECKLIST

Attachment Model _____Excavator Hour Meter_____

Attachment Serial Number _____ Date_____

_____ **1.** Visually inspect attachment for any damage.
- _____ **a.** Check for cracks or excessive wear that may cause structural failure

_____ **2.** Inspect the Swift-Lock teeth and tooth seats.
- _____ **a.** Check for excessive looseness or damage. It is acceptable for the teeth to move slightly from side to side on on their seats
- _____ **b.** Check the tooth pins for damage or looseness
- _____ **c.** If necessary, rework or replace the teeth as outlined in this manual

_____ **3.** Inspect all bolts.
- _____ **a.** Visually inspect all bolts and replace any that are loose or damaged

_____ **4.** Inspect pins and pin retaining hardware.
- _____ **a.** Main pivot pin
- _____ **b.** Link pin
- _____ **c.** Position arm pins (both ends)

_____ **5.** Grease all points until excess appears. Use premium grease no. 2EP or equivalent.
- _____ **a.** Link pin connection in upper jaw lugs
- _____ **b.** Main pin connection in upper jaw lugs
- _____ **c.** Main pivot in stationary jaw
- _____ **d.** Position arm ends
- _____ **e.** End of link pin and main (if required)
- _____ **f.** Check excavator for grease fittings at other connections

Inspected by: _____

CONCRETE PULIVERIZER LUBRICATION

Grease **all** points every **4 hours** of concrete pulverizer operation. Use Amoco Rykon premium grease No. 2EP or equivalent. Grease fitting locations are indicated on the illustration (see figure 5-1, below) and by yellow GREASE decals on the attachment. Fill with grease until excess appears.

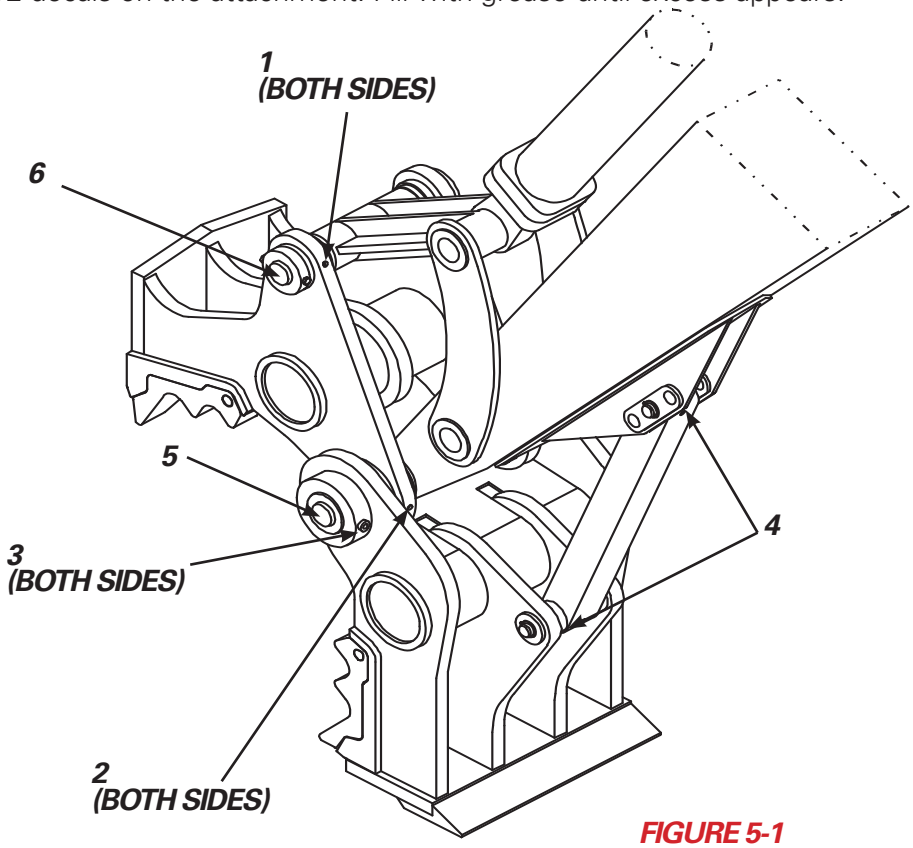


FIGURE 5-1

LOCATION ON ATTACHMENT	NUMBER OF SHOTS
1. Link pin connection- movable jaw	2
2. Main pin connection- movable jaw	2
3. Main pivot- stationary jaw	2
4. Position arm ends	2
5. Main pin (in end of pin)	(if needed)
6. Link pin (in end of pin)	(if needed)

SWIFT-LOCK TOOTH REPLACEMENT

When the teeth are badly worn or crushing performance is decreased, the teeth should be replaced. Depending on the type of concrete being processed, the interval between teeth changes will vary. It is recommended that the teeth be replaced as a set for even wear and the best performance.

⚠ CAUTION

Safety equipment should be worn at all times when maintaining the attachment to prevent injury. Safety equipment includes eye protection, hard hat, steel toe shoes, leather gloves, hearing protection, etc.

1. To change the teeth on the upper jaw, curl the attachment under and set it down on a firm and level surface with the jaws open (figure 5-2). Turn the base machine off. Make sure that the attachment and jaws are stable and will not drop or close. Block up if necessary.
2. Work only on the upper jaw with the pulverizer in this position (figure 5-2). With the teeth facing up, their weight will be properly supported when the pins are removed.

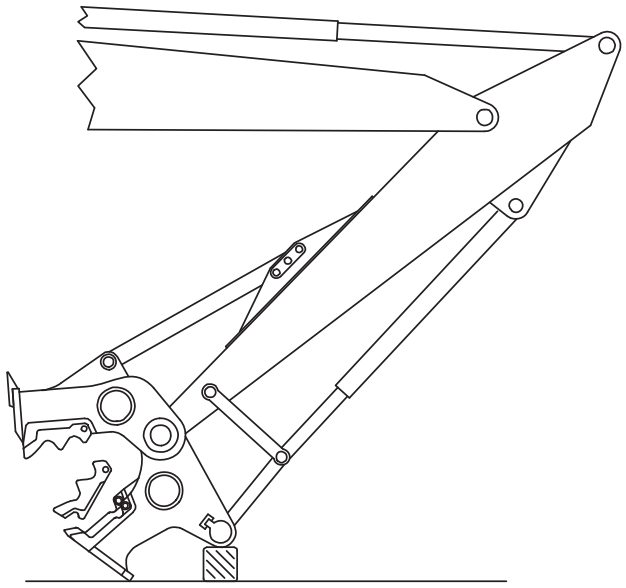


FIGURE 5-2

⚠ WARNING

Each tooth is very heavy. Removing a tooth pin when the tooth is not supported will cause the tooth to fall and could cause serious injury.

3. Use a soft metal drift (such as brass) and a mallet to drive out the tooth pins (figure 5-3).
4. If the tooth is loose on its seat, lift and slide it out. If necessary, use a pry bar to loosen the tooth from the seat. Do not lose the retainer ring.

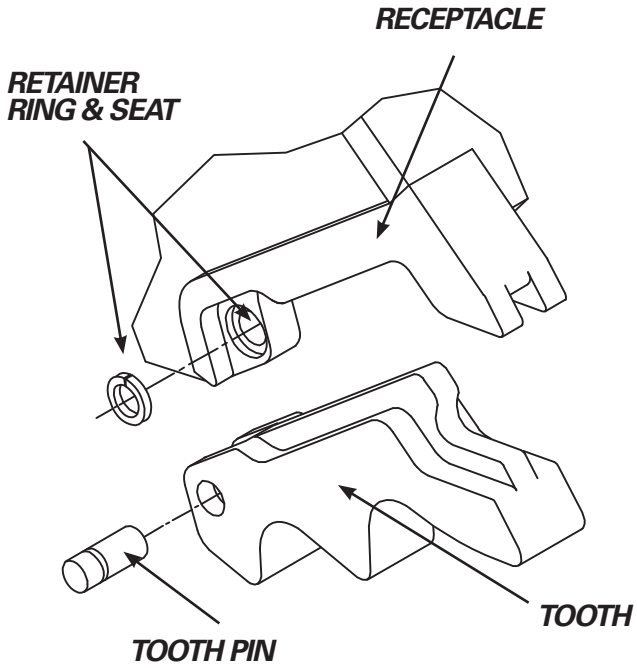


FIGURE 5-3

SWIFT-LOCK TOOTH REPLACEMENT continued

5. Insert the new tooth by sliding it into the slot in the seat. Make sure the retainer ring is located in its pocket in the tooth seat before installing the tooth (figure 5-3 on page 6).
6. Use a mallet to insert the pin through the holes in the tooth and seat. Be sure to install the pin so the groove in the pin will line up with the retainer ring inside the tooth seat. The retainer ring should seat in the pin groove.
7. Repeat this process for the other worn teeth on that jaw.
8. When this jaw is done, start up the base machine. With all personnel standing at a safe distance, lift the attachment and put it out in front of the excavator (figure 5-4). Set the attachment back down on the ground and make sure it will not drop or close.
9. Follow steps 3 through 7 to replace the teeth on this jaw.

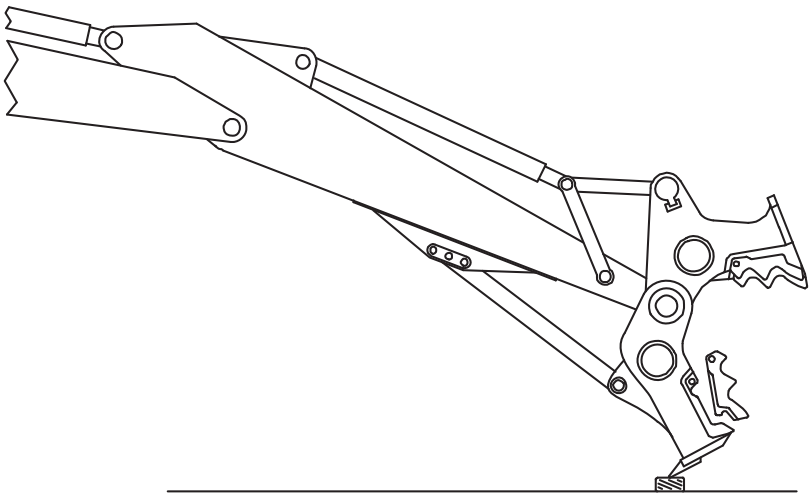


FIGURE 5-4

GENERAL GUIDELINES FOR BUILD UP AND HARDSURFACING

The steel used in LaBounty attachments is stronger and more durable than ever. However, this steel requires special attention during maintenance. Pay particular attention to the preheat and post-heat instructions and follow them exactly. Review the following guidelines for build-up and hardsurfacing the attachment—detailed instructions on maintaining specific areas of the attachment are on the following pages. Contact your Stanley LaBounty dealer or the Stanley LaBounty Service department for further information.

PREHEAT

Preheat the general surrounding area to at least 200°F (100°C) to remove moisture from the base material. Before ANY thermal process is applied to the concrete pulverizer steel, including welding, tack welding, torch cutting, and air-arcing, preheat the area within 6" (150 mm) of the local area to a minimum of 400°F (200°C) and a maximum of 450°F (230°C). Preheat must be uniform throughout the material thickness and maintained until all welding has been completed. Avoid cyclic heating and large temperature swings. Preheating may be done by localized gas torches or thermal strip blankets.

POST HEAT

If preheat has dropped below 400°F (200°C) within 6" (150 mm) of the weld area, post heat to 400° (200°C) and wrap with heat blanket to allow it to cool slowly to the ambient temperature. Plan to perform build-up and hardsurfacing at the end of the day or when there will be adequate time for the welded areas to cool before putting the attachment back into service.

HANDLING AND STORAGE OF WELD MATERIALS

Follow the weld manufacturer's handling and storage instructions closely. Make sure the electrodes or wire are free of moisture. Moisture can cause cracks and porosity in the weld and possibly the base metal beneath the weld.

WELD QUALITY

Quality and attention to detail in welding can significantly affect the life of the attachment. Stanley LaBounty strongly recommends that only qualified and certified welders perform this work. Make sure the weld consumables and base material are clean, dry, and free of grease, paint, dirt, or any other foreign substance that may harm the weld.

NOTICE

Preheat and post-heat instructions must be followed exactly. Failure to do so can compromise warranty coverage.

BUILD UP RECOMMENDATIONS

Refer to the list of AWS classifications below to select a suitable build-up material for LaBounty concrete pulverizers. Weld products within these classifications meet the combined requirements for strength, toughness, and ductility that are essential for LaBounty applications.

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

Welding suppliers can assist in identifying products that meet these AWS classifications.

NOTICE

Using improper build-up and hardsurfacing products may result in premature wear or increased potential for cracking and may compromise warranty coverage.

NOTICE

Do not use stainless hardsurface rod. It is too brittle for LaBounty applications and has a tendency to crack, weakening the base metal.

HARDSURFACING RECOMMENDATIONS

For hardsurfacing, Stanley LaBounty recommends Amalloy 814H rod or equivalent. It is important to always use a hardsurfacing weld material with a chromium content of less than 10% and a severe impact-resistance rating to prevent cracking.

If in doubt about what hardsurface material to use, please contact the Stanley LaBounty Customer Service Department. Failure to adhere to LaBounty hardsurfacing recommendations may compromise the attachment warranty.

Hardsurfacing should be applied directly on top of the build-up welds. The build-up acts as a bonding or underlayment for the hardsurfacing. This reduces the chances that the hardsurfacing will crack.

Contact Information for Amalloy Welding and Industrial Supply:
- Phone: 800-735-3040 (toll free)
- Fax: 623-792-8706
- Website: www.amalloy.com

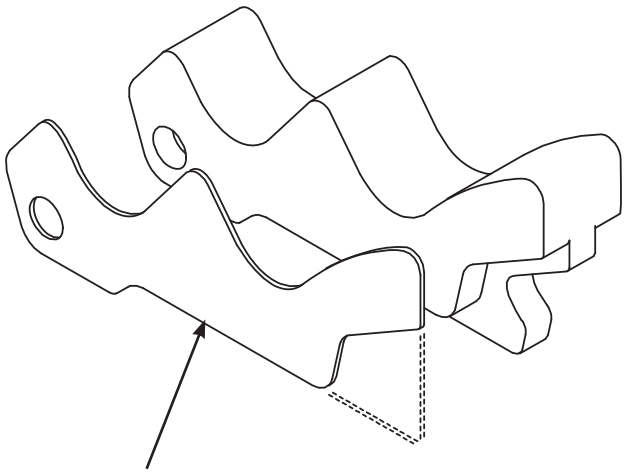
TOOTH BUILD-UP AND HARDSURFACING

See the table on page 5-15 for the part numbers for Swift-Lock build-up templates. If desired, Swift-Lock Teeth can be built up and hardsurfaced to increase their life. Depending on the situation, it may be more cost-effective to replace the teeth when they become worn rather than build them up. Build-up and hardsurface the teeth when there will be adequate time for them to cool slowly before they are put back into service. Use the following process to build up and hardsurface the teeth.

1. Clean all dirt and grease from the areas to be built up. If any old hardsurfacing still exists, remove it down to the base metal by grinding.
2. Place the build-up template along the tooth to determine the amount of build-up required (figure 4-5). Build-up templates can be ordered from LaBounty.
3. Preheat the tooth to about 200ºF (100ºC) to remove moisture. Preheat the area to be built up to 300-400ºF (150-200ºC). **DO NOT** exceed 450ºF (230ºC). Use a temperature stick to test the area frequently, because overheating can harm the tooth. Temperature sticks are available from LaBounty.
4. Using AWS E7018 welding rod or equivalent, make side-by-side passes down the face of the cutting edge until the area is covered. Stress relieve and remove slag after each pass by peening vigorously. Continue to do this until the profile of the tooth matches the template as closely as possible. Grind the edges square to match the template profile.

NOTICE

Check the temperature often during this procedure to maintain 300-400ºF (150-200ºC). Do not exceed 450ºF (230ºC).



BUILD-UP TEMPLATE

FIGURE 5-5

⚠ CAUTION

• Remove paint before welding or heating. Hazardous fumes can be generated when paint is heated.
• When sanding or grinding paint, do not breathe the dust. Wear an approved respirator.
• If you use solvent or paint stripper, remove the stripper with soap and water before welding.
• Remove solvent or paint stripper containers and other flammable material from the area.
• Have a fire extinguisher nearby during all cutting and welding operations. Clean areas to be cut or welded of oil and flammable materials. Protect all flammable areas from sparks.
• Do all work in a well ventilated area. Dispose of paint and solvent properly.

TOOTH BUILD-UP AND HARDSURFACING continued

5. Start hardsurfacing the tooth by applying parallel passes of AWS E7018 build-up running the length of the tooth (figure 5-6). These single passes should be 1/2" (13 mm) apart and will serve as an underlayment for the hardsurface rod.

NOTICE

DO NOT apply the hardsurface directly to the parent material.

6. Apply a bead of Amalloy 814H rod or equivalent directly on top of each of the underlayment beads. It is important to use an air-operated slag peener on each pass of weld to relieve stress.
7. Taper the ends of each hardsurface bead by grinding in line with the cutting edges. Do not undercut the weld with the grinder.
8. When welding and grinding is complete, peen the welded area until it is shiny or until your peener cannot dent the weld anymore (typically five to ten minutes). This will harden the welded area.
9. When finished, be sure to cover the reworked teeth with a heat blanket to allow them to cool slowly.

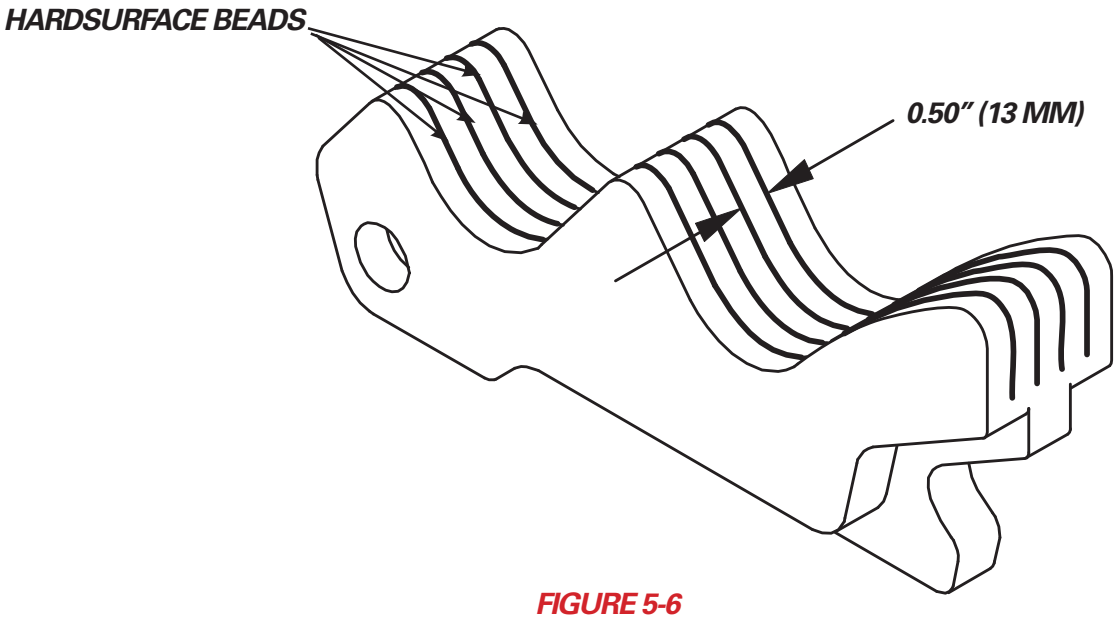


FIGURE 5-6

ATTACHMENT BUILD UP AND HARDSURFACING

If desired, additional areas of the lower and upper jaws may be built up and hardsurfaced to increase their life. Stanley LaBounty recommends that only certain areas of the attachment be hardsurfaced. Hardsurfacing applied to non-approved areas can cause serious damage to the attachment and limit its performance. See figure 5-7 for approved surfaces. Hardsurface these areas only when there will be adequate time for them to cool slowly before they are put back into service. Use the following process to build-up and hardsurface the desired area.

1. Clean all dirt and grease from the areas to be built up. If any old hardsurfacing still exists, remove it down to the base metal by grinding.
2. Preheat the area to approximately 200ºF (100ºC) to remove moisture then heat the area to be built up to 300-400ºF (150-200ºC). Do not exceed 450ºF (230ºC). Use a temperature stick to test the area frequently to avoid overheating and damaging the attachment. Temperature sticks are available from Stanley LaBounty.
3. Using AWS E7018 welding rod or equivalent, make side-by-side passes until the area is covered. Stress relieve and remove slag after each pass by peening vigorously. Continue to do this until the profile of the area matches the template.

NOTICE

Check the temperature often during this procedure to maintain 300-400ºF (150-200ºC). Do not exceed 450ºF (230ºC).

⚠ CAUTION

• Remove paint before welding or heating. Hazardous fumes can be generated when paint is heated.
• When sanding or grinding paint, do not breathe the dust. Wear an approved respirator.
• If you use solvent or paint stripper, remove the stripper with soap and water before welding.
• Remove solvent or paint stripper containers and other flammable material from the area.
• Have a fire extinguisher nearby during all cutting and welding operations. Clean areas to be cut or welded of oil and flammable materials. Protect all flammable areas from sparks.
• Do all work in a well ventilated area. Dispose of paint and solvent properly.

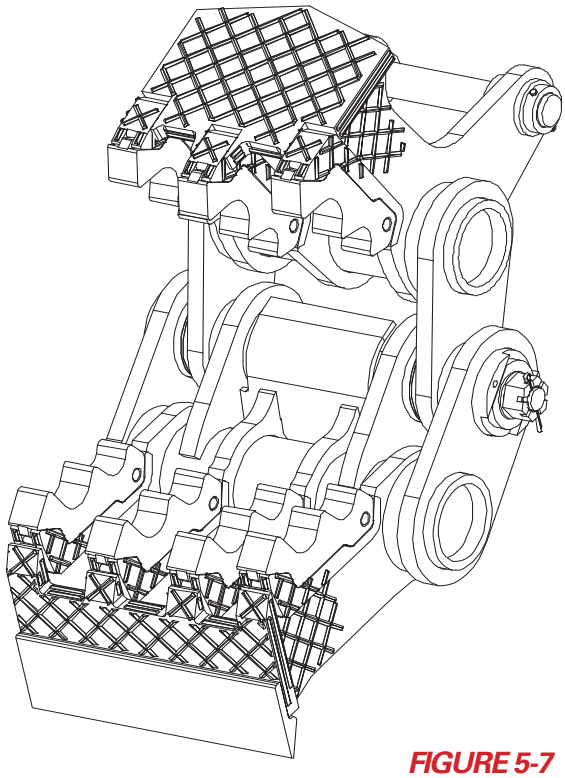


FIGURE 5-7

ATTACHMENT BUILD-UP AND HARDSURFACING (CONTINUED)

4. Apply a bead of Amalloy 814H rod or equivalent directly on top of each of the underlayment beads to create a 45° cross-hatch or "diamond" pattern on the approved surfaces of the attachment. Space the beads approximately 1½ to 2" apart. It is important to use an air-operated slag peener on each pass of weld to relieve stress.
5. Taper the ends of each hardsurface bead by grinding in line with the cutting edges. Do not undercut the weld with the grinder.
6. When welding and grinding is complete, peen the welded area until it is shiny or until the peener cannot dent the weld anymore (typically 5 to 10 minutes). This will harden the welded area.
7. When finished, be sure to cover the reworked teeth area with a heat blanket to allow it to cool slowly.

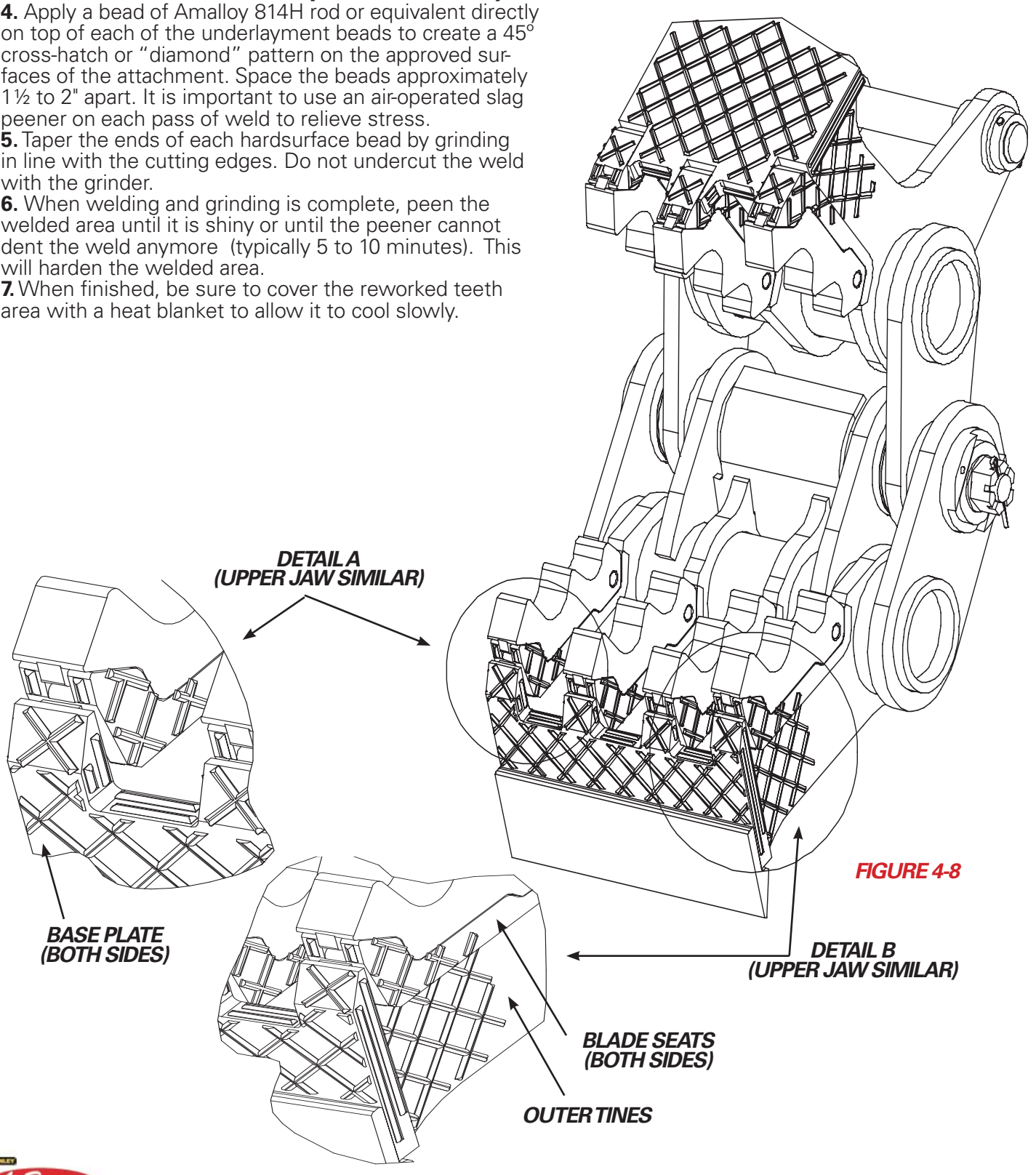


FIGURE 4-8

BOLT TORQUING GUIDELINES

Proper bolt installation is critical to ensure the safe and efficient operation of the attachment and jaw set. Carefully follow the steps below to properly install bolts.

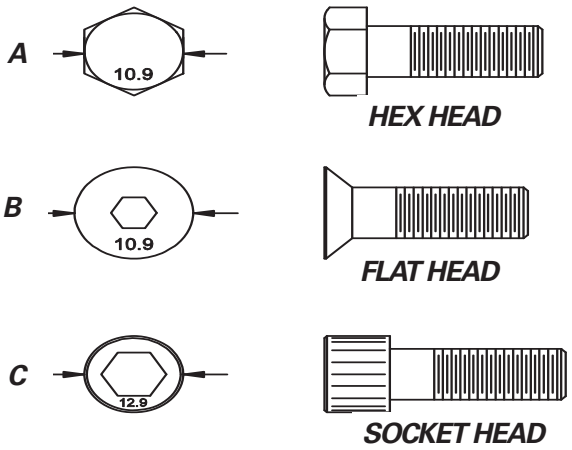
1. Always replace bolts and nuts with the same size and class of fastener. Replacement fasteners can be ordered from the LaBounty Parts Department to ensure the correct part is used. Unless otherwise specified, use class 10.9 metric hex head capscrews, class 10.9 metric flat head capscrews, and class 12.9 metric socket head capscrews.

2. Make sure bolts, nuts and bolt holes are free of dirt, oil, grease and other contaminants.

3. If necessary, use the Capscrew Size Guide, below, to determine the size of the bolt being installed.

4. Use the Dry Bolt Torque Chart, below, to find the proper torque. When possible, torque the nut rather than the bolt head.

METRIC CAPSCREW SIZE GUIDE



CAP-SCREW SIZE	A HEX HEAD	B FLAT HEAD	C SOCKET HEAD
M10 x 1.50	0.63" (16mm)	0.79" (20mm)	0.63" (16mm)
M12 x 1.75	0.71" (18mm)	0.94" (24mm)	0.71" (18mm)
M14 x 2.00	0.83" (21mm)	1.06" (27mm)	0.83 (21mm)
M16 x 2.00	0.94" (23mm)	1.18" (30mm)	0.94" (24mm)
M20 x 2.50	1.18" (30mm)	1.42" (36mm)	1.18" (30mm)
M24 x 3.00	1.42 (36mm)	N/A	1.42" (36mm)
M30 x 3.50	1.81 (46mm)	N/A	1.77" (45mm)

DRY BOLT TORQUE CHARTS

METRIC CLASS 12.9

SIZE	FT-LBS	NM
M10 x 1.5	53	72
M12 x 1.75	92	125
M14 x 2	146	198
M16 x 2	224	305
M20 x 2.5	435	590
M24 x 3	752	1020
M30 x 3.5	1511	2050

METRIC CLASS 10.9

SIZE	FT-LBS	NM
M10 x 1.5	64	87
M12 x 1.75	110	150
M14 x 1.75	177	240
M16 x 2	269	365
M20 x 2.5	523	710
M24 x 3	899	1220
M30 x 3.5	1806	2450

SWIFT-LOCK BUILD-UP TEMPLATE PARTS NUMBERS

CP MODEL NUMBER	PART NUMBER	DESCRIPTION	QTY
20	307988	Template	1
	307989	Outer Template	1
	307990	Inner Template	1
40	304884	Template	1
	304885	Build-up Template	1
	304886	Build-up Template	1
60	307569	Template	1
	307570	Template	1
	307571	Template	1
80	304644	Build-up Template	1
	304645	Build-up Template	1
	304646	Build-up Template	1
120	173249	Build-up Template	1
	173251	Build-up Template	1

LIMITED WARRANTY

New Attachment

Stanley LaBounty warrants its manufactured products against deficiency in material or workmanship for a period of 12 months from the date of first use, rental or sale, or 1500 hours of operation, whichever occurs first.

LIMITATIONS

- Remanufactured or used product or service repair are not warranted under this Limited Warranty.
- Product that is damaged by alteration, improper maintenance, unauthorized service, abuse, misuse, or contamination by the base machine is not warranted.
- This Limited Warranty is the exclusive warranty. Stanley LaBounty makes no representations, expressed or implied, of merchantability or fitness for a particular purpose.
- Agents of Stanley LaBounty have no authority to make representations beyond those contained herein.

EXCLUSIVE REMEDY

The exclusive remedy for a product Stanley LaBounty determines deficient in material or workmanship is repair or replacement at Stanley LaBounty's option. The following procedure governs a repair or replacement warranty claim:

1. All warranty claims require a claim number provided by Stanley LaBounty Service Department.
2. A factory-issued Return Material Authorization tag (RMA) must accompany returned product.
3. Returned product found deficient by Stanley LaBounty will be replaced or repaired without charge FOB Distributor/Customer or will be credited to account balance.
4. Authorized repair can occur at the Stanley LaBounty factory or authorized Stanley LaBounty Dealer. Labor for warranty repair will be paid under a formula determined by Stanley LaBounty.

Stanley LaBounty is not liable for incidental or consequential costs or losses incurred by the product, purchaser or user.

LIMITED WARRANTY

To validate the Limited Warranty, a completed warranty certificate and delivery inspection report must be returned to Stanley LaBounty. Prohibited operation and/or unauthorized adjustment or assembly will void this Limited Warranty. See the Operation, Maintenance and Safety Manual.

CONTACT INFORMATION

Contact your Stanley LaBounty Dealer or Stanley LaBounty regarding warranty questions. All requests for information, service or spare parts should include model and serial numbers. For the nearest Stanley LaBounty dealer contact:

Stanley LaBounty
1538 Highway 2
Two Harbors, MN 55616-8015 USA
Phone: (218) 834-2123 or (800) 522-5059
FAX: (218) 834-3879
E-mail: labounty@stanleyworks.com
Website: www.stanleyhydraulic.com