

# MEGABYTE™

BUILT WITH QUALITY AND DESIGN FIRST

## MEGABYTE™ OPERATING & PARTS MANUAL

### ATTENTION:

Depending on what replacement parts you are ordering, we will need the following information:

**SERIAL NUMBER  
OF MEGABYTE™**

**EXCAVATOR MAKE  
AND MODEL**

Model No: **MEGABYTE™**

Serial No: \_\_\_\_\_

DEALER:

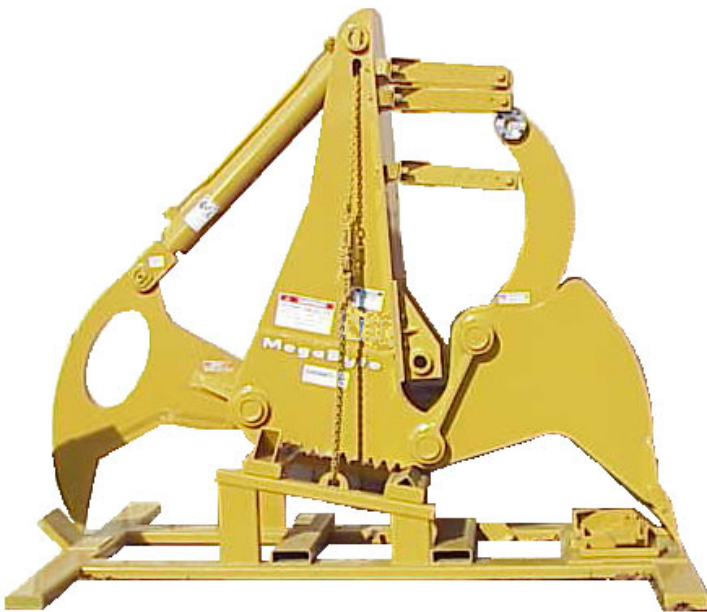
Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State: \_\_\_\_\_

Phone No: \_\_\_\_\_

Delivery Date: \_\_\_\_\_



PRINTED 2/01

MANUFACTURED BY  
**SMORACY, LLC**  
6750 Millbrook Road  
REMUS, MICHIGAN 49340  
PHONE: (517) 561-2270 OR 561-2272  
FAX: (517) 561-2273 ~ SALES DEPT.  
FAX: (517) 561-2962 ~ PARTS/SERVICE



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**NOTE- ANY PART, PORTION, DESIGN, NUMBER, SPECIFICATION, AND/OR DIMENSION IN THIS MANUAL IS SUBJECT TO CHANGE WITHOUT NOTICE BY THE MANUFACTURER.**

# INTRODUCTION

The purpose of this manual is to provide the user with specifications and procedures for the operation, maintenance and repair of the Megabyte™. As with any piece of equipment, safety should always be a constant thought while the equipment is being operated, serviced or stored. In order to highlight this consideration, the material which addresses safety is preceded by the following signal words:

Signal Word	Likelihood of Occurrence	Degree of Potential Injury or Damage
<b>⚠ DANGER!</b>	Will occur if warning is ignored	Severe
<b>⚠ WARNING!</b>	Can occur if warning is ignored	Severe
<b>⚠ CAUTION!</b>	Will or can occur if warning is ignored	Minor to Severe
<b>NOTICE</b>	Important, but not hazard related	Minor

The Megabyte™ is designed and manufactured in accordance with the latest industry standards. This alone does not prevent injury. It is the operator's responsibility to use good judgement and follow the warnings and instructions as indicated in this manual.

## **⚠ WARNING!**

Improper use of the Megabyte™ can result in severe personal injury. Personnel using the Megabyte™ must be qualified, trained and familiar with the operating procedures as defined in this manual.

## **⚠ WARNING!**

It is the responsibility of the owner or employer to insure that the operator is trained and practices safe operation while using and servicing the equipment. It is also the owner's responsibility to provide and follow a regularly scheduled preventative maintenance and repair program on the Megabyte™, using only factory approved replacement parts. Any unapproved repairs or modifications may not only damage the machine and its performance, but could result in severe personal injury. Consult the equipment manufacturer!!!

Each machine is shipped with a manual, a customer's check sheet on the Megabyte™, and any available parts & service manuals on component parts not produced by this manufacturer. Additional copies of these manuals and check sheets can be purchased from the manufacturer, or through the dealer.




**NOTE** - The producer of the Megabyte™ reserves the right to make any modifications or revisions to the design or specifications of its equipment without advance notice. The producer also reserves the right to change equipment and part prices as needed without advance notice.





# SAFETY PROCEDURES

## DANGER!

The words  Danger!,  Warning!,  Caution!, and Notice are used on the safety decals and throughout this manual, to make you aware of the safety procedures. These procedures are very important, read and obey them.

### **YOUR SAFETY IS VERY IMPORTANT TO US!**

This equipment is equipped with safety decals, and designs for your protection.

Don't ever take the equipment for granted, always be cautious and careful when operating your equipment.

Read and follow all the instructions in your manual thoroughly. Your safety is dependent on your knowledge of how to operate and maintain this equipment. You may obtain additional copies of this manual from your Smoracy, LLC Dealer.

Before operating Megabyte™, you must have all potential operators; read and understand manual, and follow the recommendations.

## DANGER!

Before using the equipment, take a minute to check a few things. The Megabyte™ should be in an area restricted from people passing by. This area around the Megabyte™ must be free of all objects that can obstruct your movement when working with the equipment.

## WARNING!

Most of the nuts used on the Megabyte™ are self locking. After the nut has been removed five times, it should be replaced to insure proper tightness.

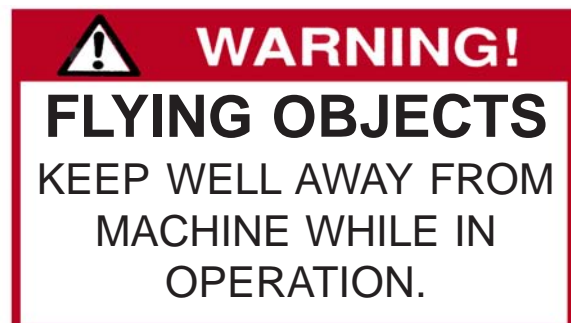
Regardless of how hard a manufacturer tries to produce a safe machine, accidents still happen. Normally accidents are caused by people making mistakes. They do not read the manual, they ignore warning decals or do not use lockouts provided for their safety. This normally happens after the person has become accustomed to the machinery. In the initial start up and operation of the machinery, they are cautious, they are very careful because they do not understand the machine.

Never split any materials that might contain wires, stones, nails, or other metal objects which may damage the blades and become dangerous projectiles.

## DANGER!

Never check for hydraulic leaks by touching hoses or fittings with your bare hands. Hydraulic fluid under pressure can penetrate the skin. Use a piece of cardboard to find leaks. Never use your bare hands.

To obtain the most from your Megabyte™, for the least amount of cost, it is a good practice to set and follow a scheduled preventative maintenance program. It will eliminate many possible problems and down time.



# SAFETY PROCEDURES

## ⚠ DANGER!

### ⚠ DANGER!

Torn or loose clothing is more likely to get caught in moving machinery parts or tree branches. Keep such items as long hair, shirt sleeves, and shirt tails properly contained. Avoid wearing necklaces, rings, watches, and especially neckties while operating this machinery. Make sure the machine is in excellent condition.

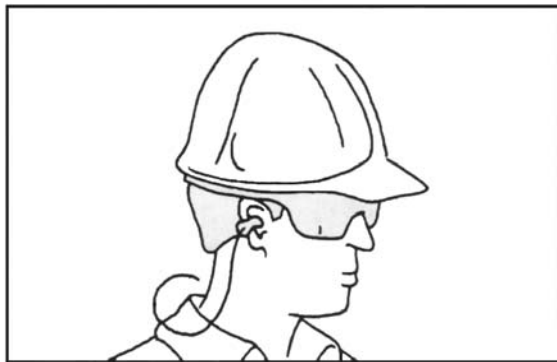
Keep children, bystanders and animals clear of working area. Never operate equipment that is in need of repair or adjustment.

### ⚠ WARNING!

Operators **must** at all times be located within easy reach of all feed control and shut-off devices when the unit is running.

### ⚠ DANGER!

NEVER work on the Megabyte™ unless the excavator engine is shut off, the ignition key is removed and in your pocket, and the battery cables are disconnected.



### ⚠ DANGER!


Wear all applicable safety equipment examples: hard hat, safety glasses, gloves, ear protection, etc. You should always keep a fully charged fire extinguisher with you while operating or servicing the equipment.

### ⚠ WARNING!

**DO NOT GO NEAR HYDRAULIC LEAKS!** High pressure oil easily punctures skin causing serious injury, gangrene, or death.

**DO NOT** use fingers or skin to check for leaks. Lower load or relieve hydraulic pressure before loosening fittings.

WARNING!



**DO NOT GO NEAR LEAKS!**

- High pressure oil easily punctures skin causing serious injury, gangrene or death.
- If injured, seek emergency medical help. Immediate surgery is required to remove oil .
- Do not use finger or skin to check for leaks.
- Lower load or relieve hydraulic pressure before loosening fittings.



# SAFETY DECALS

Safety Decals located on your Megabyte™ contain useful information to assist you in operating your equipment safely. Some of the decals on your equipment and their location are shown in this section.

It is very important that all decals remain in place and in good condition on your equipment. Please follow the care and instructions given below:

- 1) You should use soap and water to keep your decals clean. Never use mineral spirits or any other abraasive cleaners.
- 2) Replace immediately any missing or damaged decals. The location the decal is going to be applied to must be clean and dry, and at least 40° F (5°C) before applying decal.
- 3) When the need arises to replace a machine component with a decal attached, be sure and replace the decal.
- 4) Replacement decals are available, and can be purchased from the manufacturer or your Smoracy, LLC Dealer.
- 5) Spanish, Portuguese and other foreign language decals are available.

## EXAMPLES:

**NOTICE**

THIS MACHINE IS COVERED  
BY ONE OR MORE OF THE  
FOLLOWING PATENTS:

5,362,004	6,016,855
5,372,316	6,032,707
5,413,286	6,036,125
5,863,003	6,047,912
5,988,539	6,059,210
6,000,642	6,176,572

**DANGER!**

**KEEP HANDS CLEAR**

**GREASE  
DAILY**

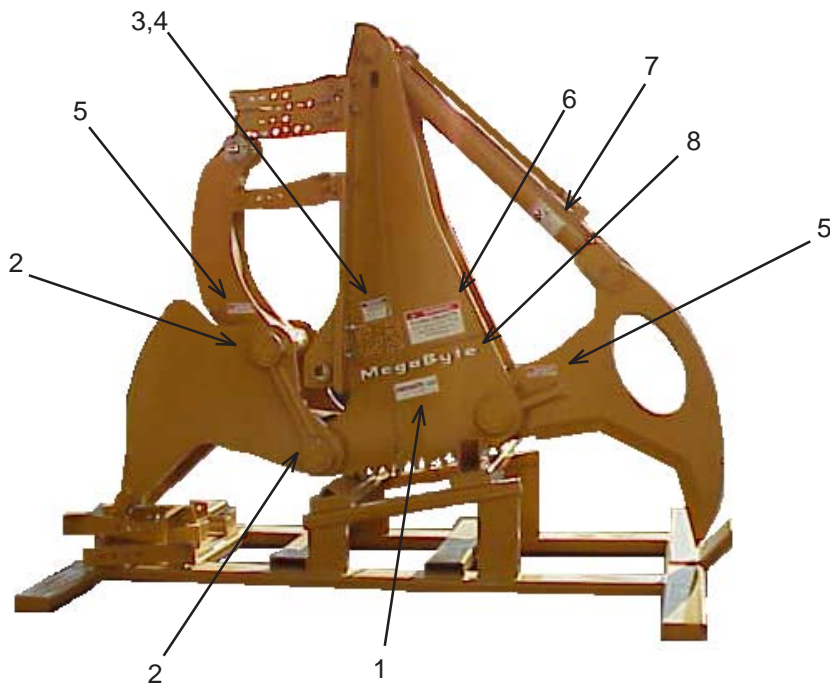
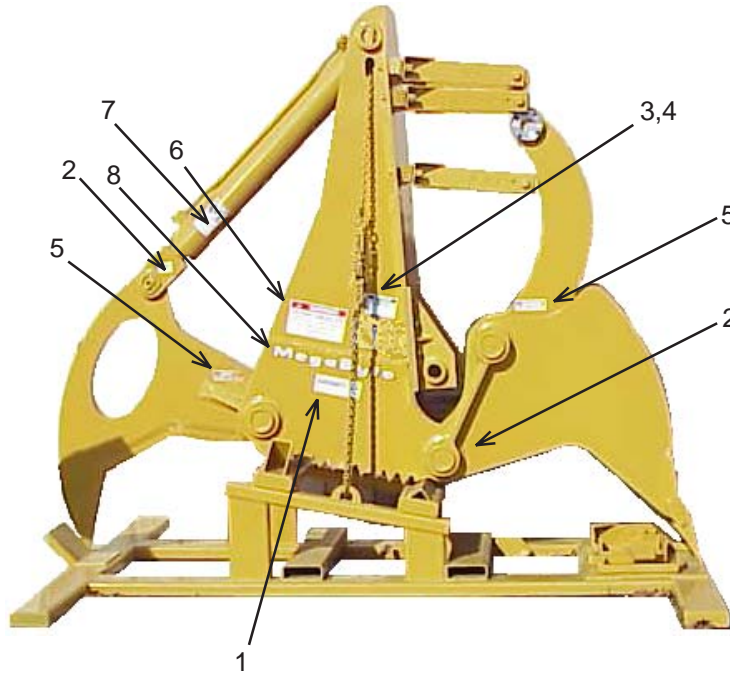
**NOTICE**

THE OWNER IS RESPONSIBLE  
TO REPLACE ANY REMOVED  
OR DAMAGED DECALS.

You may also purchase decals in another language.  
Mail the translated decals you require to:  
**PARTS DEPARTMENT**  
6750 MILLBROOK RD., REMUS, MI 49340.  
We will contact you with cost and availability  
of the translated decals.

# DECAL LOCATIONS - MEGABYTE™

ALTHOUGH LOCATIONS MAY VARY, ALL DECALS MUST BE ON EQUIPMENT DURING OPERATION  
IF ANY DECALS BECOME DAMAGED, REPLACE IMMEDIATELY.



## DECAL LOCATIONS - MEGABYTE™

Modifications and/or additions of decals to this list will happen.  
Consult Megabyte™ dealer or manufacturer for most current decal package.

LOCATION	NUMBER	DESCRIPTION
1.	OOB-150	Smoracy, LLC...
2.	OOB-275	Grease Daily
3.	OOB-287	Notice Patent Pending
4.	OOB-2003	Notice The Owner Is...
5.	OBR-400	⚠ Danger! Keep Hands Clear...
6.	OBR-436	⚠ Danger! Flying Objects...
7.	OBR-4031	⚠ Warning! Do Not Go Near...
8.		Megabyte™ Vinyl

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# OPERATING PROCEDURES

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## **⚠ DANGER!**

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Do not let anyone operate or maintain this machine until they have thoroughly read this manual. You can purchase additional Megabyte™ manuals for a nominal fee.

---

## **⚠ DANGER!**

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Before operating the equipment make sure that no one is within fifty feet of the Megabyte™.

---

## **⚠ DANGER!**

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Always wear a hard hat, safety glasses, gloves, ear protection, etc.

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## **⚠ DANGER!**

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It is very important after you have operated the new equipment for approximately an hour, shut down the equipment and recheck all nuts and bolts. It is normal for bolts to loosen once on a new piece of machinery. If you tighten



them now there's a good possibility they won't loosen again. In cold weather situations let your hydraulic

system idle for approximately 15 minutes to allow the system to warm up to operating temperature.

This equipment is intended for use by personnel who are experienced with similar equipment. Always operate equipment safely. It is also recommended that someone else is present while splitting or servicing in case an injury occurs. Never operate any equipment while under the influence of drugs or alcohol.

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# INSTALLATION PROCEDURES

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## **⚠ DANGER!**

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### **AT ALL TIMES OBSERVE ALL STANDARD SAFETY PRACTICES!**

The Megabyte™ must be sitting on its stand for proper installation. When installing your Megabyte™ you must follow these instructions.

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## **NOTICE**

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Auxiliary valve hookup is required, if your excavator does not have this accessory, see the excavator manufacturer for ordering and installation information.

Step 1: Detaching Bucket and Setting Up Megabyte™.

Step 2: Positioning Excavator Stick.

Step 3: Pin Installation.

Step 4: Saddle Clamp Installation.

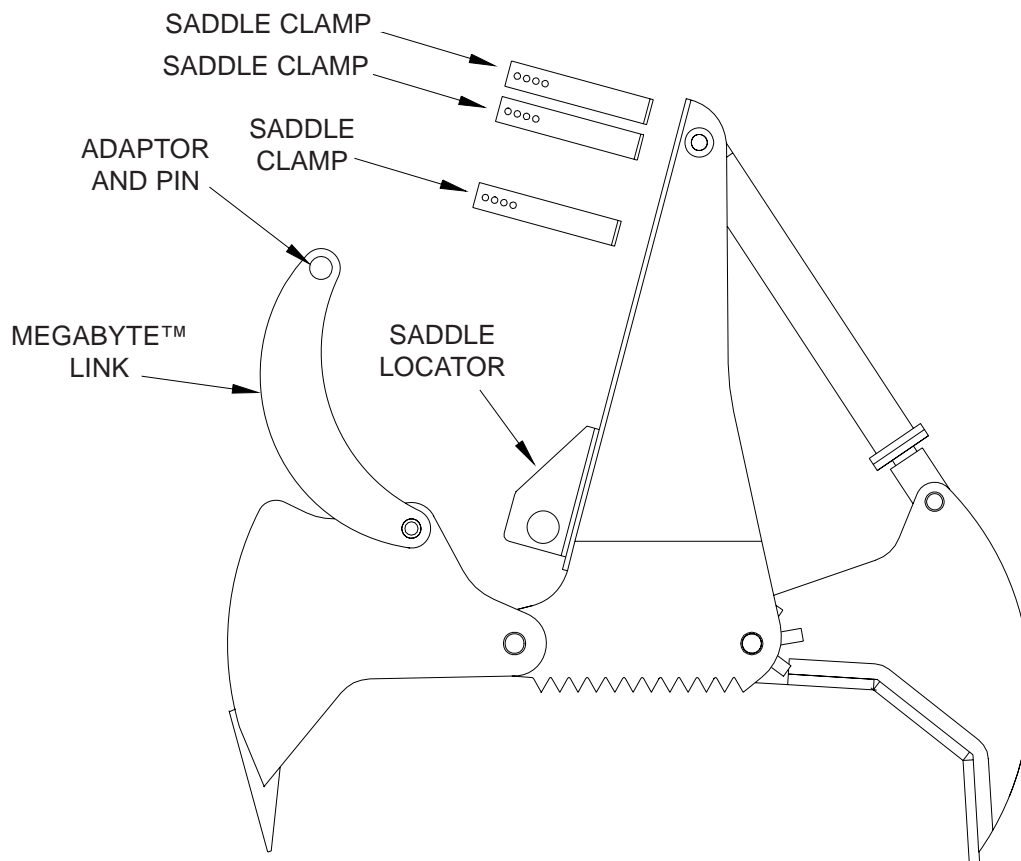
Step 5: Attaching Megabyte™ Link, Excavator Link, and Excavator Hydraulic Cylinder.

Step 6: Auxiliary Hydraulic Installation.

# STEP 1

## DETACHING BUCKET & MEGABYTE™ SET UP

- 1) Lower bucket and rest on ground.
- 2) Shut machine off.
- 3) Remove pin attaching “Dogbone” on bucket and to stick.
- 4) Remove pin holding bucket to end of stick. Leaving upper links attached to stick.
- 5) Remove bucket.
- 6) Start machine and raise stick high enough to fit the Megabyte™ on its stand under stick.
- 7) Position Megabyte™ in place.
- 8) Remove saddle clamps and lay the Megabyte™ link back.

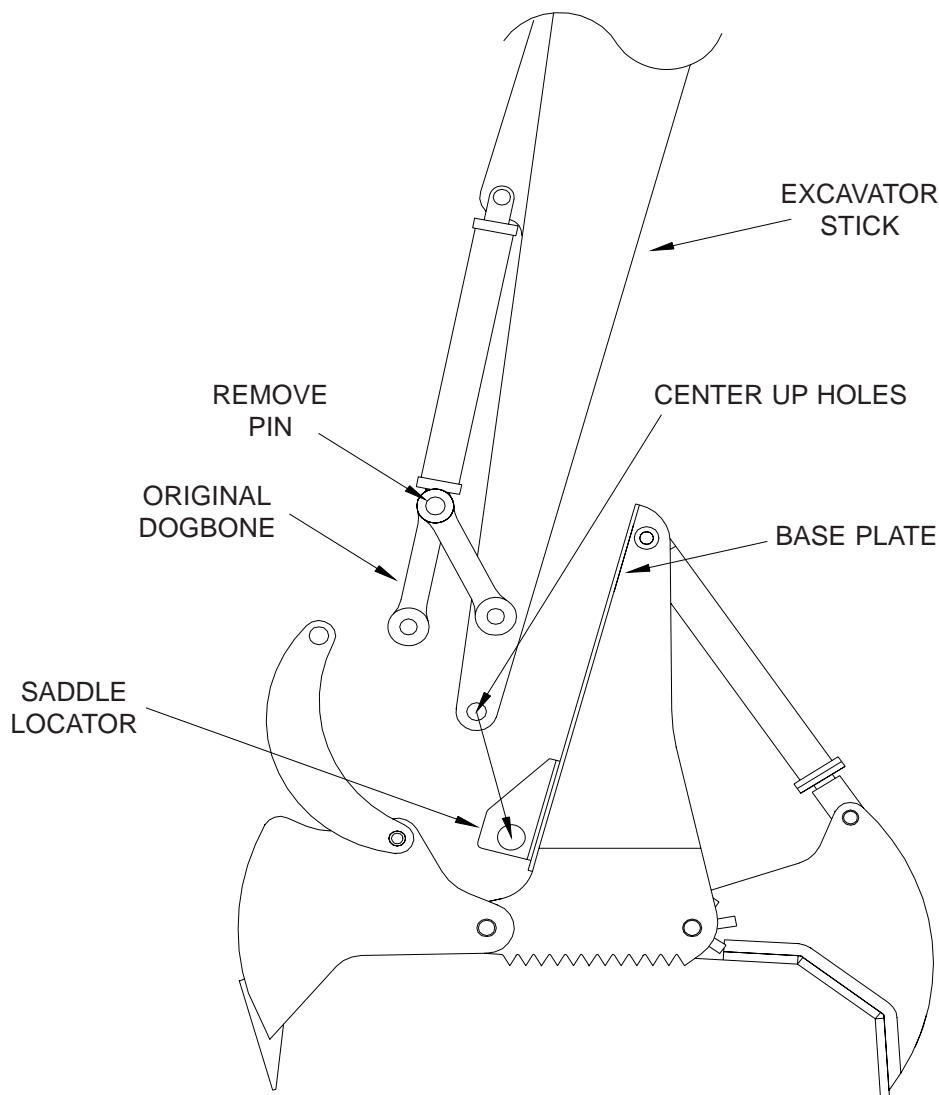
**FIGURE 1**

## STEP 2

### POSITIONING EXCAVATOR STICK

- 1) Lower the excavator stick down in between the saddle locators. The excavator stick must be located to where the center of the pin hole on the bottom of the excavator is centered with the pin holes on the saddle locators. Make sure that the excavator stick is centered on the Megabyte™ base plate.
- 2) Remove the original dogbone from the excavator stick by removing the pin connecting the dogbone to the excavator cylinder. Do not reinstall pin at this time.

**FIGURE 2**



## STEP 3

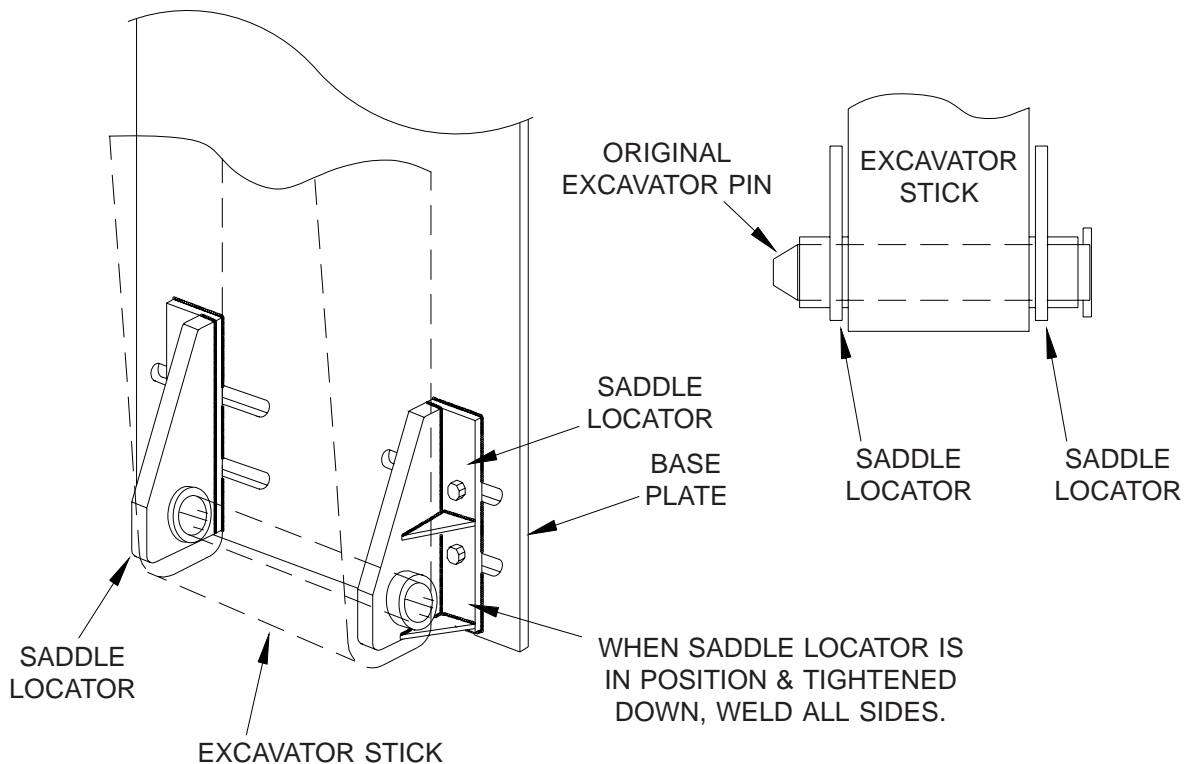
### PIN INSTALLATION

- 1) Position the saddle locator against the excavator stick.
- 2) Tighten down the bolts on the saddle locator. Torque these bolts to 700 ft./lbs.
- 3) Drive the pin through one saddle locator, through excavator stick, and into the saddle locator on the other side.
- 4) Check the alignment of saddle locator and excavator stick by sliding the pin in and out of the saddle locators. Make sure pin goes all the way through excavator stick and both saddle locators. Make sure the saddle locators are in the correct position before beginning to weld.
- 5) Use E-7018 stick electrodes to weld saddle locators in place to the base plate with full perimeter welds. (YOU MUST USE FULL PERIMETER WELDS TOP, BOTTOM, RIGHT AND LEFT SIDE.) NOTE: Mig process may be used using an equivalent E-70 series type wire. (See Darkened areas of Figure 3).

### NOTICE

Just Tightening bolts on saddle locators will not hold, full perimeter welds Must be done.

**FIGURE 3**



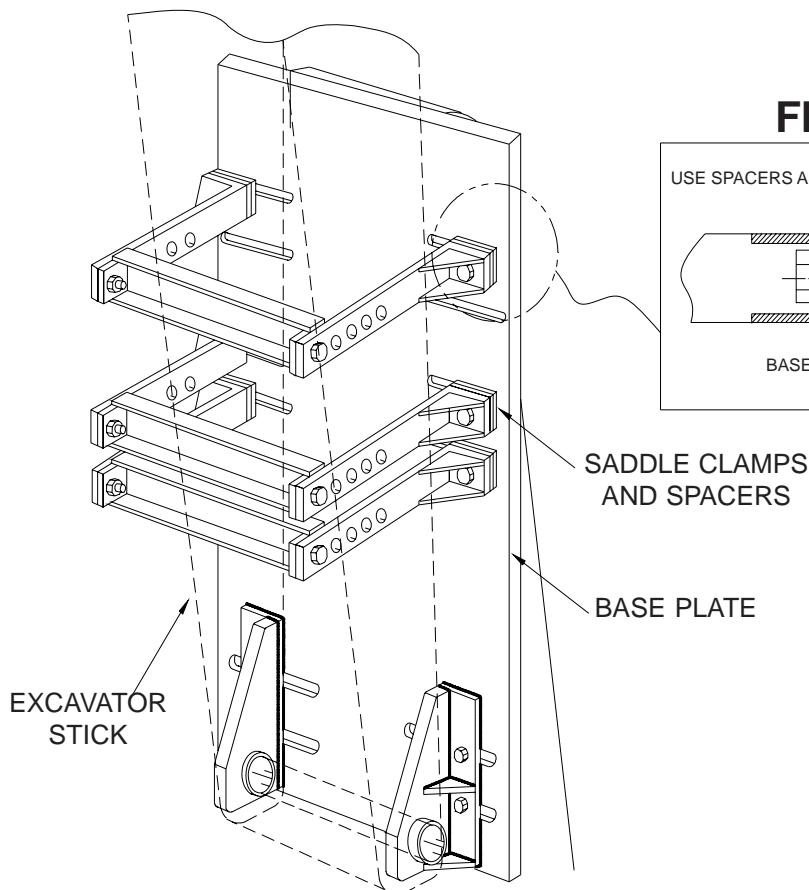


## STEP 4

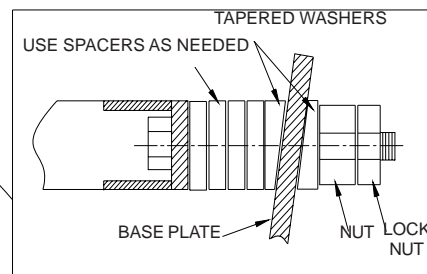
### SADDLE CLAMP INSTALLATION

- 1) After installing pin assembly at the end of the excavator stick and welding in place reattach the saddle clamps from where they were removed.
- 2) Loosely bolt together the three separate pieces of each clamp.
- 3) Install saddle clamps over excavator stick and bolt to base plate.
- 4) Use spacers and tapered washers provided. (See Figure 5)
- 5) Adjust clamps to fasten down as tight as possible against excavator stick. Once clamps are adjusted cut off any excess metal from the top of the saddle clamp arms.
- 6) **Tighten down clamps to eliminate any movement front to back and side to side of excavator stick.**
- 7) **Torque bolts to 700 ft./lbs.**
- 8) **The kit includes three different width cross-members, use the size needed to keep saddle clamps tight to excavator sides.**

**FIGURE 4**



**FIGURE 5**

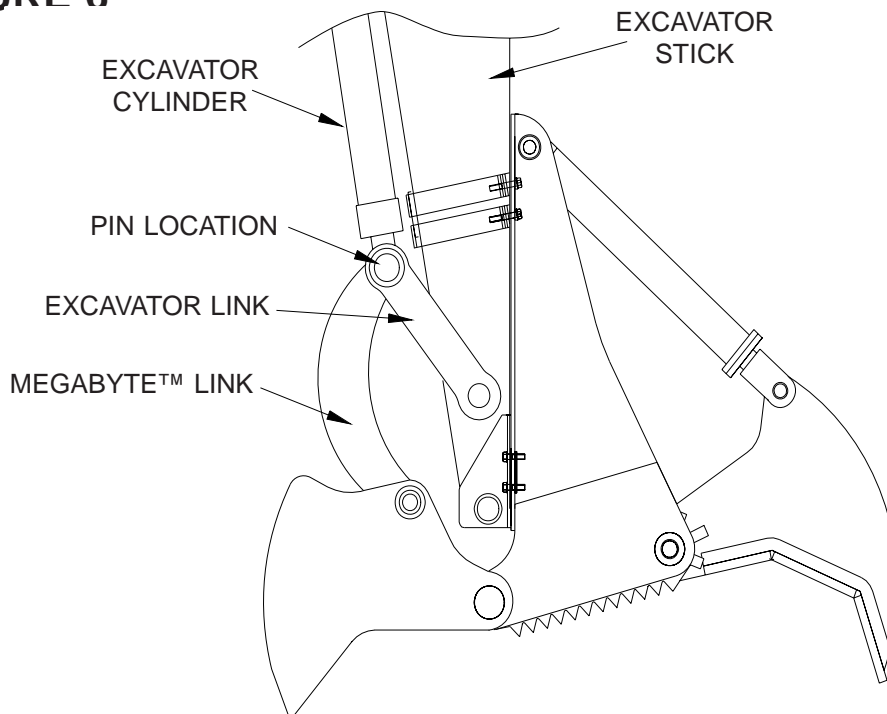


## STEP 5

### ATTACHMENT OF LINKS

- 1) Swing Megabyte™ Link so the pinhole can be aligned with excavator link holes.  
(See Figure 6).
- 2) Locate the Megabyte™ Link Pin through the excavator link and into the first bushing on the Megabyte™ Link.
- 3) Extend hydraulic cylinder rod until cylinder rod eye is aligned with pin.
- 4) Install pin through cylinder eye and into second Megabyte™ Link bushing.
- 5) Swing second excavator link up in line with pin and push pin through.
- 6) Lock pin in place with bolt on bushing (provided with pin).

**FIGURE 6**



## STEP 6

### AUXILIARY HYDRAULIC INSTALLATION

- 1) Auxiliary hydraulic valve set up should already be installed.  
(Per Manufacturers Specifications.)
- 2) Attach auxiliary hydraulic line from excavator to cylinder on Megabyte™.
- 3) Run machine to fill lines and cylinder. Check hydraulic fluid level, adjust as necessary.

# LUBRICATION POINTS

**EXCAVATOR** ..... Follow original equipment manufacturers requirements for proper lubrication procedures.

**CLYINDER REAR PIVOT BUSHING** ..... Grease this bushing daily.

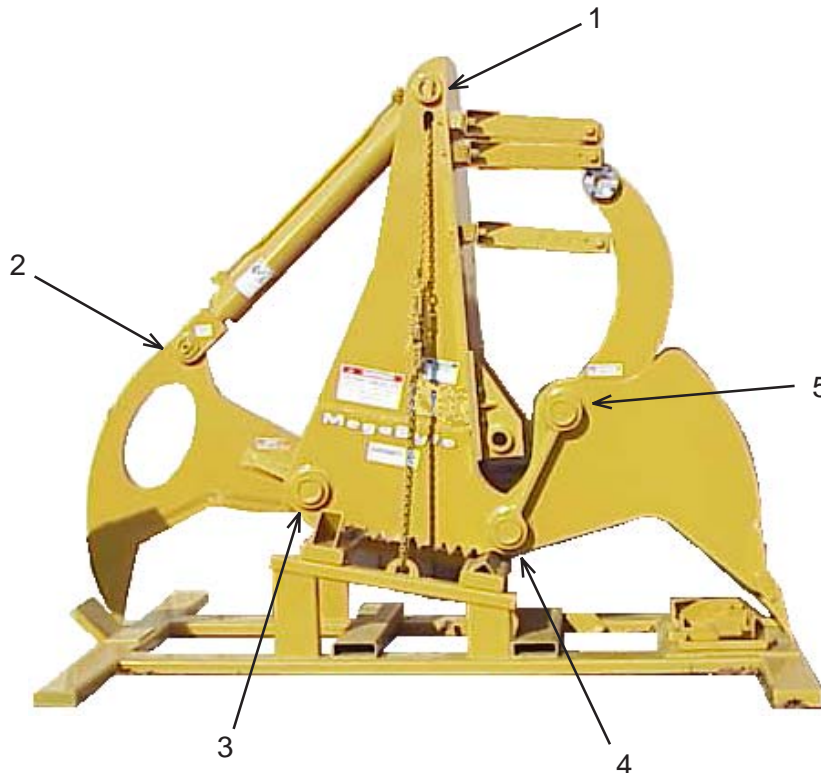
**CLYINDER CLEVIS PIN** ..... Grease this pin daily.

**KNIFE PIVOT BUSHING** ..... Grease this bushing daily.

**ANVIL PIVOT BUSHING** ..... Grease this bushing daily.

**ANVIL LINK BUSHING** ..... Grease this bushing daily.

LOCATION	DAILY	WEEKLY	MONTHLY	DESCRIPTION
1.	X			Cylinder Rear Pivot Bushing
2.	X			Cylinder Clevis Pin
3.	X			Knife Pivot Bushing
4.	X			Anvil Pivot Bushing
5.	X			Anvil Link Bushing



# MAINTENANCE SECTION

## DAILY

- |  | O.K.                     | Repaired                 |
|--|--------------------------|--------------------------|
| 1) Check entire machine for loose bolts, nuts, components. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2) Check hydraulic oil level, hoses, fittings.             | <input type="checkbox"/> | <input type="checkbox"/> |
| 3) Check the safety decals replace if damaged.             | <input type="checkbox"/> | <input type="checkbox"/> |
| 4) Check cutting blade assembly.                           | <input type="checkbox"/> | <input type="checkbox"/> |
| 5) Check for wear on teeth.                                | <input type="checkbox"/> | <input type="checkbox"/> |
| 6) Check for wear on wedge.                                | <input type="checkbox"/> | <input type="checkbox"/> |

## MONTHLY

- |   | O.K.                     | Repaired                 |
|---|--------------------------|--------------------------|
| 1) Check all hydraulic pressures, reset to correct P.S.I. | <input type="checkbox"/> | <input type="checkbox"/> |

# MAINTENANCE PROCEDURES

ITEMS TO BE SERVICED	CHECK			PROCEDURE <small>(Always Replace If Needed)</small>
	DAY	WEEK	MONTH	
Check Entire Machine	X			For any loose parts or components
Hydraulic Oil Leaks, Hoses, Fittings	X			Inspect, tighten, repair or replace
Safety Decals	X			Replace immediately if damaged
Check Blade, Bolts, and Nuts	X			SEE BOLT TORQUE CHART
Check Wear On Teeth	X			If worn out, replace
Check Wear On Wedge	X			If worn out, replace
Hydraulic Pressure			X	Check and reset to correct P.S.I

# MAINTENANCE SECTION

The Megabyte™ is a very simple machine to maintain. If you will follow a regular scheduled preventative maintenance program you should have years of trouble free operation.

## **⚠ DANGER!**

Do not attempt any maintenance without removing the excavator engine ignition key and disconnecting the battery cables.

### DAILY MAINTENANCE

**1) Check the entire machine for loose bolts, nuts, parts, or components:**

Look for, find and tighten anything that has loosened up.

**2) Check for any hydraulic oil leaks:**

Inspect for any hydraulic oil leaks. Check all hoses, fittings, lines, repair or replace.

**3) Check the safety decals, replace if missing or damaged.**

**4) Check cutting blade assembly:**

Inspect cutting blade, torque bolts, and nuts properly.

**5) Check Teeth:**

Inspect teeth for wear. Replace if worn out.

**6) Check Wedge:**

Check wedge for wear. Replace if worn out.

### MONTHLY MAINTENANCE

**1) Check all hydraulic pressures:**

Reset all to correct P.S.I.

### BOLT TORQUE CHART

(THESE TORQUES ARE BASED ON DRY, CLEAN THREADS)

DESCRIPTION	BOLT SIZE	BOLT TORQUES
Saddle Clamp Bolts	1" - 8 TPI	700
Pivot Pin	5/8" - 11 TPI	160
Before tightening bolts be sure you have the correct size bolt for the correct amount of torque. All Bolts Must Be Premium Quality, Grade 8 Hardness!		

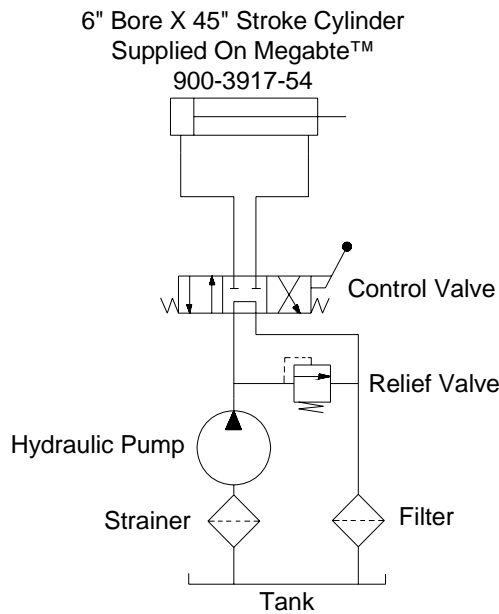
# HYDRAULIC SECTION

## THE MEGABYTE™ HYDRAULIC SYSTEM

The Megabyte™ hydraulic system consists of one hydraulic cylinder capable of a maximum working pressure of 5000 P.S.I. The cylinder produces a force of 70 tons at this pressure.

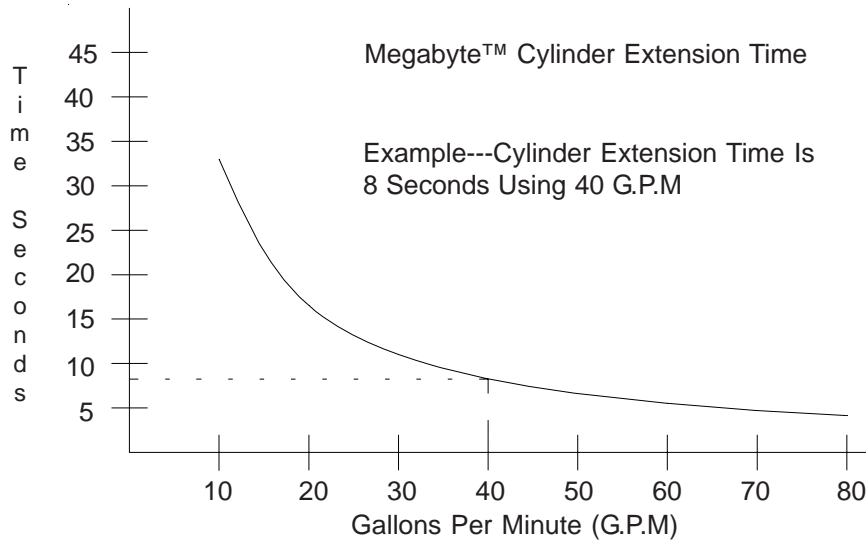
The remaining hydraulic components are supplied by the excavator hydraulics. The cylinder is controlled by the auxiliary control valve mounted on the excavator. Maximum cylinder force is controlled by the excavator relief valve setting.

### MEGABYTE™ HYDRAULIC SCHEMATIC



Excavator Hydraulics

### MEGABYTE™ HYDRAULIC FLOW CHART



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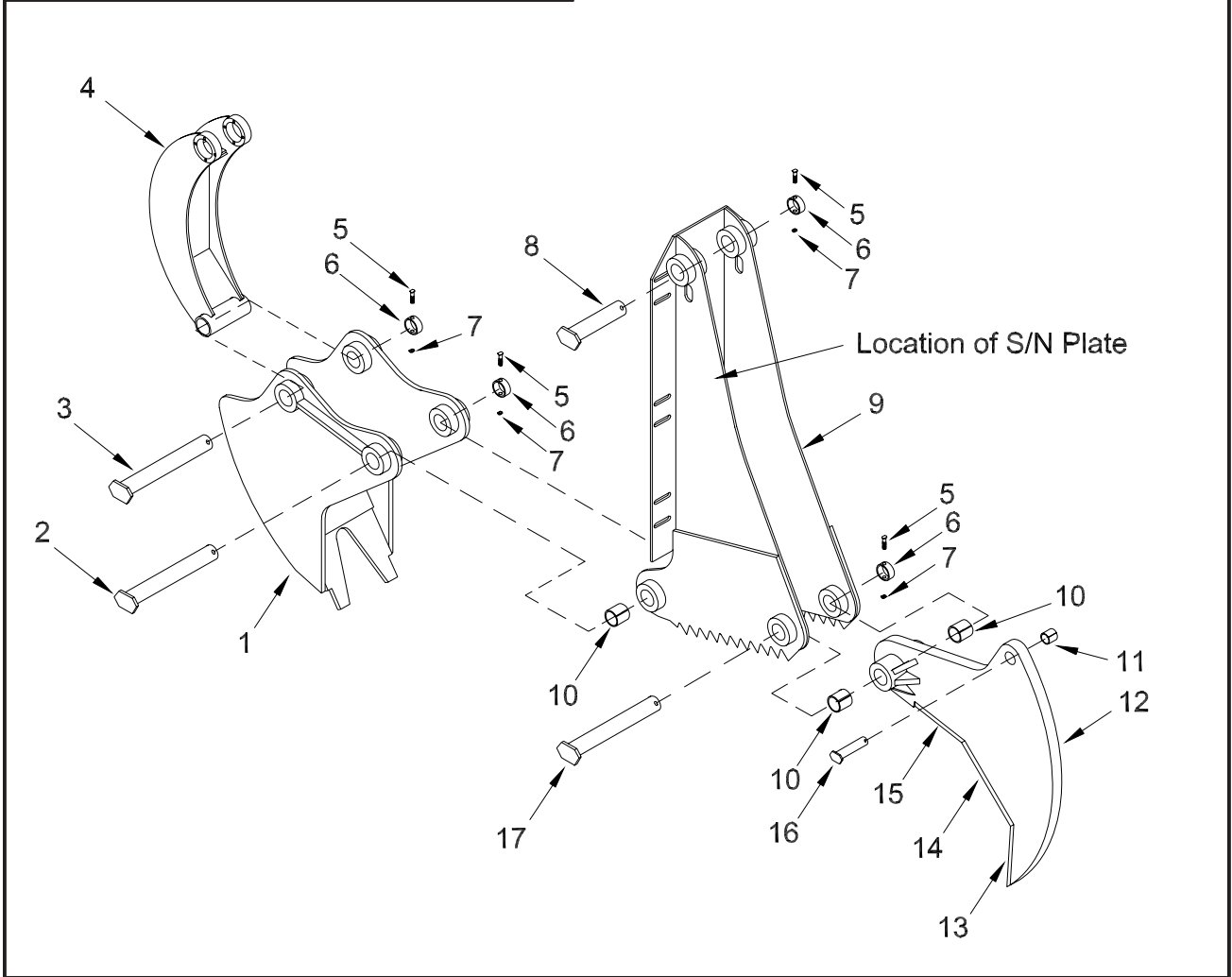
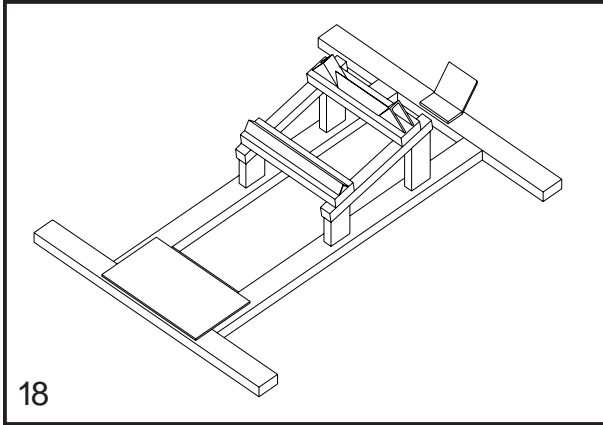
# REPLACEMENT PARTS SECTION

Depending on what replacement parts you are ordering  
we will need the following information:

SERIAL NUMBER  
OF MEGABYTE™  
EXCAVATOR MAKE  
AND MODEL

Smoracy, LLC reserves the right to make changes in models, size, design,  
installations and applications on any part without notification.

FOR EQUIPMENT BUILT BEFORE S/N 1016





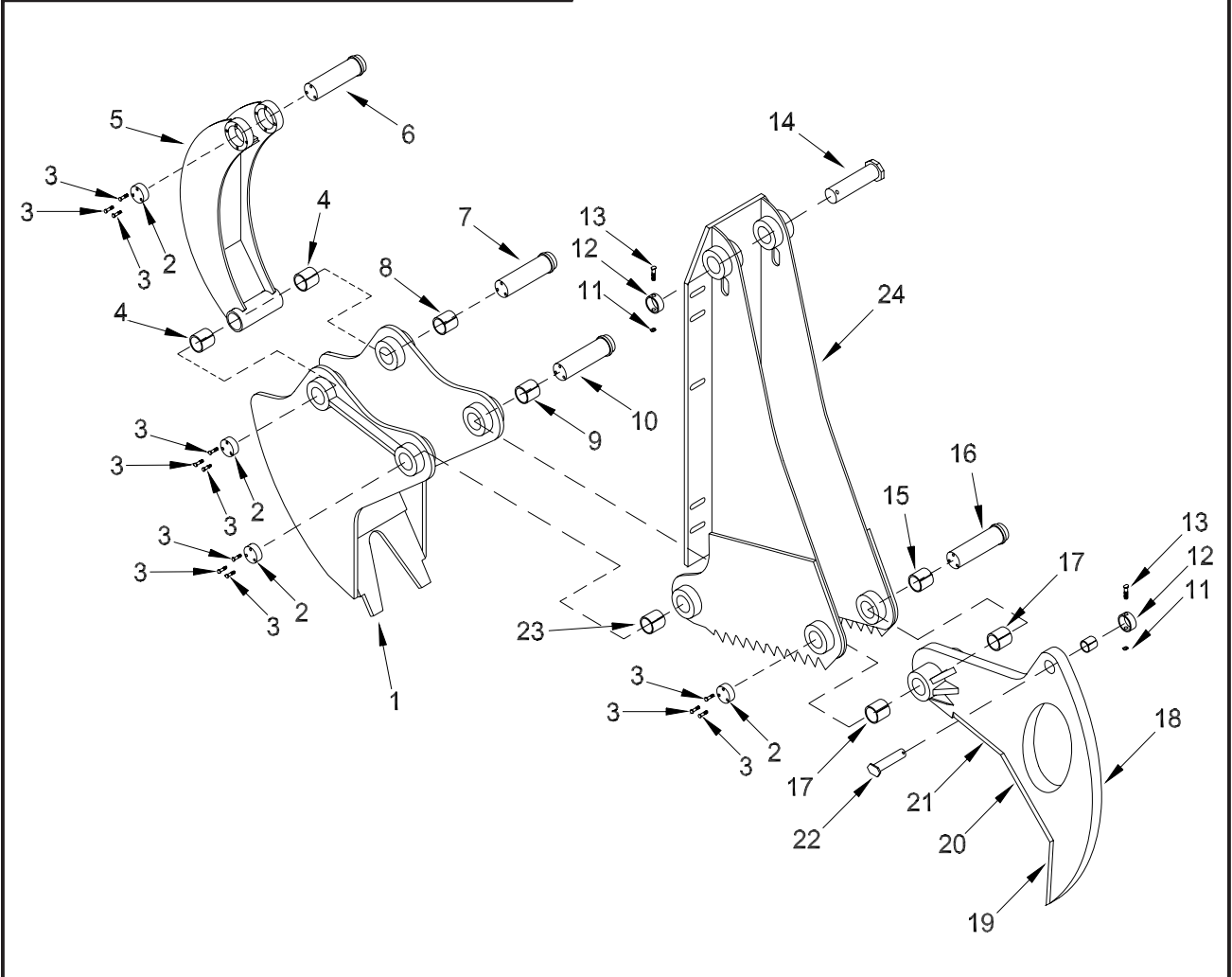
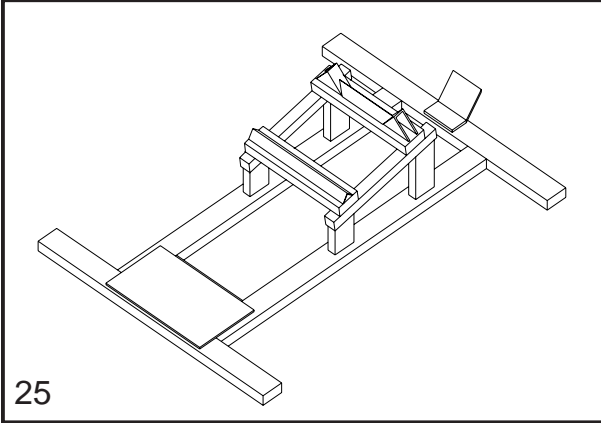
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**FOR EQUIPMENT BUILT BEFORE S/N 1016**

LOCATION	PART NUMBER	DESCRIPTION
1.	969-0502-00	Complete Anvil Assembly
2.	969-0000-17	Pivot Pin 3" Diameter x 27 3/4"
3.	969-0000-13	Pivot Pin 3" Diameter x 27 3/4"
4.	969-0508-00	Megabyte™ Link Assembly
5.	900-4905-12	Pivot Pin Bolt 5/8" - 11NC x 4 1/2"
6.	969-0000-14	Retaining Bushing
7.	900-4902-09	Pivot Pin Nut 5/8" - 11NC
8.	969-0000-33	Blade Cylinder Base Pin
9.	969-0500-23	Complete Stick Frame
10.	900-9902-41	Split Bearing Bushing
11.	900-9902-27	Split Bushing
12.	900-0501-01	Complete Blade Assembly
13.	969-0001-09	Lower Blade Cutting Edge
14.	969-0001-08	Middle Blade Cutting Edge
15.	969-0001-07	Upper Blade Cutting Edge
16.	969-0000-16	Blade Cylinder Pin
17.	969-0000-25	Blade Pivot Pin
18.	969-0510-00	Stand Assembly

**NOTE: Nuts, bolts, washers, and all other components  
can be ordered by physical description.**

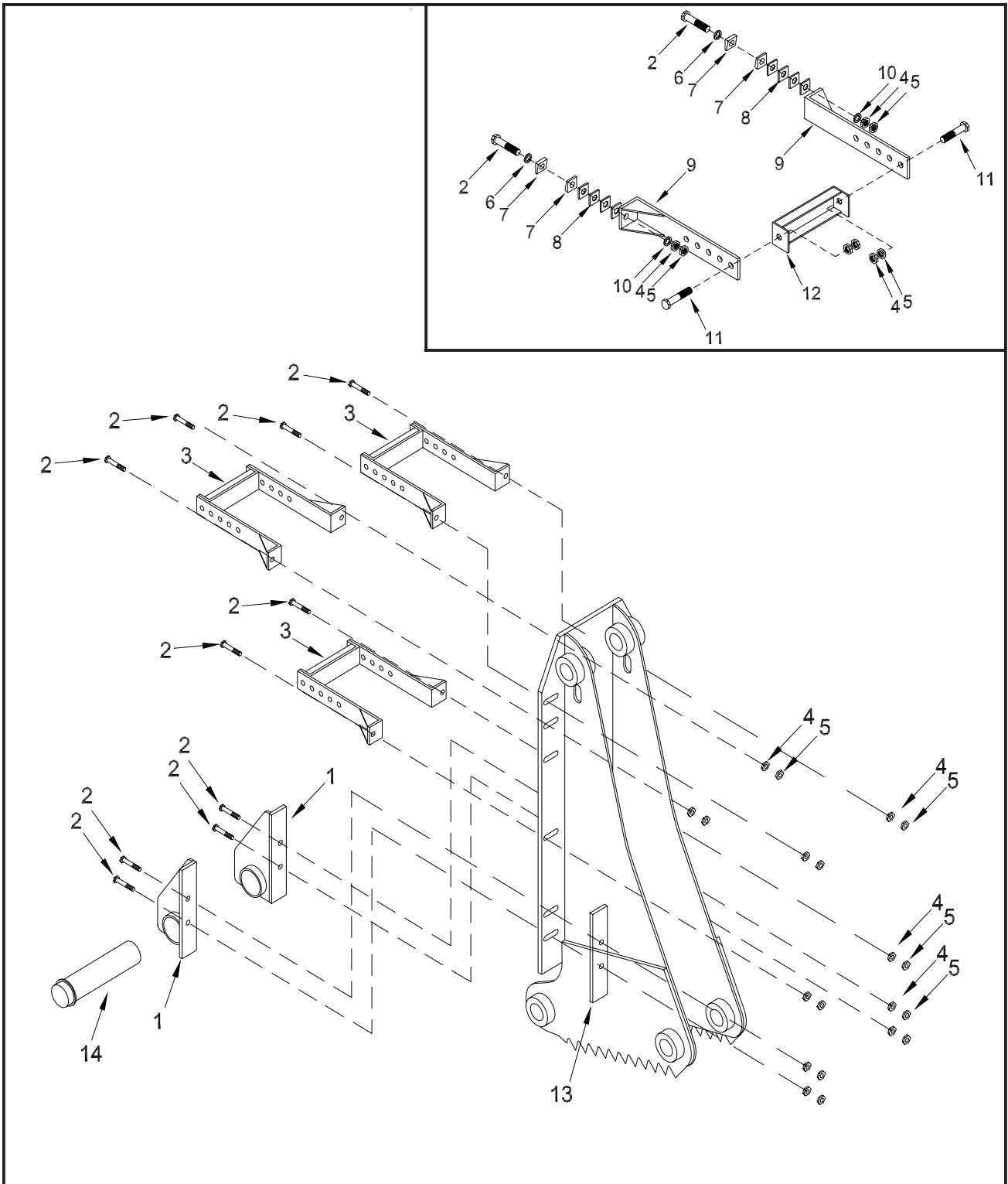
FOR EQUIPMENT BUILT S/N 1016 AND AFTER



## FOR EQUIPMENT BUILT S/N 1016 AND AFTER

LOCATION	PART NUMBER	DESCRIPTION
1.	969-0502-00	Complete Anvil Assembly
2.	969-0000-52	Pin Cap
3.	900-4901-21	5/8" - 11NC X 1 1/2" Hex Head Bolt
4.	969-0004-50	Split Bearing Bushing
5.	969-0508-00	Megabyte™ Link Assembly
6.	**	Use Existing Excavator Pin
7.	969-0000-50	Pivot Pin 4" Diameter X 26 1/2"
8.	969-0004-53	Split Bearing Bushing
9.	969-0004-51	Split Bearing Bushing
10.	969-0000-50	Pivot Pin 4" Diameter X 26 1/2"
11.	900-4902-09	Pivot Pin Nut 5/8" - 11NC
12.	969-0000-27	Retaining Bushing
13.	900-4905-12	Pivot Pin Bolt 5/8" - 11NC X 4 1/2"
14.	969-0000-10	Cylinder Base Pin
15.	969-0004-51	Split Bearing Bushing
16.	969-0000-25	Blade Pivot Pin
17.	969-0004-50	Split Bearing Bushing
18.	900-0501-01	Complete Blade Assembly
19.	969-0001-09	Lower Blade Cutting Edge
20.	969-0001-08	Middle Blade Cutting Edge
21.	969-0001-07	Upper Blade Cutting Edge
22.	969-0000-16	Blade Cylinder Pin
23.	969-0004-52	Split Bearing Bushing
24.	969-0500-23	Complete Stick Frame
25.	969-0510-00	Stand Assembly

**NOTE: Nuts, bolts, washers, and all other components  
can be ordered by physical description.**



LOCATION	PART NUMBER	DESCRIPTION
1.	**	Saddle Locator Assembly (See Note At Bottom)
2.	**	Bolt 1" - 8NC (Order By Physical Description)
3.	See Picture In Upper Right Corner	Saddle Clamp Assembly
4.	900-4901-45	Nut
5.	900-4900-44	Jam Nut
6.	900-4900-79	Flat Washer
7.	969-0008-19	Tapered Washer
8.	969-0008-18	Washer Kit
9.	969-0008-20	Clamp Support
10.	900-4900-79	Flat Washer
11.	900-4904-53	Bolt
12.	969-0008-**	Clamp (See Note At Bottom)
13.	969-0008-09	Saddle Clamp Washer
14.	**	Pin From Excavator

**\*\* NOTE:** When ordering saddle clamps, saddle clamp components, and saddle locators supply excavator make, model number, and S/N of Megabyte™.

**NOTE:** Nuts, bolts, washers, and all other components can be ordered by physical description.