

# OPERATORS' GUIDE



## REL-2000SA

SINGLE ACTING HYDRAULIC CUTTING TOOL

### WARNING



All information found in this guide must be read and understood before use or testing of this tool.

Failure to read and understand these warnings and safe handling instructions could result in severe personal injury and or death.



# RELIABLE EQUIPMENT & SERVICE CO., INC.

REL-2000SA Manual 12-08

# DISTRIBUTED BY



CAUTION

The information in this manual is intended to guide the user in the use and application of this tool. It is not intended as a substitute for proper training and experience in safe work practices for this type of equipment.

Consult your supervisor or safety personnel if you have any questions regarding the safe operation of this tool.

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**THIS SYMBOL INDICATES ITEMS OF EXTREME IMPORTANCE.**  
Safety of user and others may be in jeopardy if these instructions are not read and understood.

## REGISTRATION

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW.

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

PHONE \_\_\_\_\_ FAX \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

DATE OF PURCHASE \_\_\_\_\_

DEALER NAME \_\_\_\_\_



# RELIABLE EQUIPMENT & SERVICE CO., INC.

**Weight:** 16.5 lb.  
**Length:** 17.5 in.  
**Width:** 6.5 in.

Head opens for cable insertion along the line.



## REL-2000SA

### DOUBLE ACTING HYDRAULIC CUTTING TOOL

This guillotine style cutter features up to a 2 inch cutting capacity, 360° rotating head, and a built-in auxiliary handle.

These cutters can be used for cutting cable, wire rope, soft steel bolts, guy strand, ground rods, anchor bolts, and rebar.

The **REL-2000SA**

<b>System</b>	<b>Double-Acting</b>
<b>Capacity (Jaw Opening)</b>	<b>2 inch.</b>
<b>Force @ 10,000 psi (690 bar)</b>	<b>28,048 lb.</b>
<b>Max Operating Pressure</b>	<b>10,000 psi (690 bar)</b>
<b>High Pressure Couplers</b>	<b>Female Screw Type</b>

### 2000 SERIES - MAXIMUM CONDUCTOR CAPACITY

<b>Soft Copper Jacket</b>	<b>2"</b>
<b>Aluminum Jacket</b>	<b>2"</b>
<b>Lead Sheathed Cable</b>	<b>2"</b>
<b>Communication Cable</b>	<b>2"</b>
<b>ACSR</b>	<b>2"</b>
<b>Wire Rope</b>	<b>1"</b>
<b>Soft Steel Bolts</b>	<b>7/8"</b>
<b>Guy Strand</b>	<b>3/4"</b>
<b>Ground Rod</b>	<b>3/4"</b>
<b>Anchor Bolts</b>	<b>3/4"</b>
<b>Rebar Grade 40</b>	<b>3/4"</b>

### RELIABLE EQUIPMENT & SERVICE CO., INC.

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 Phone: 800-966-3530 • Fax: 215-357-9193  
 Visit us on the web at [www.Reliable-Equip.com](http://www.Reliable-Equip.com)



**WARNING**

**BEFORE USING THIS TOOL, READ THE WARNINGS and the recommended practices described in this manual. Failure by the operator to read and fully understand these warnings will leave this person unqualified to use and operate this tool. Property damage, severe personal injury, and/or death could result by not following these warnings.**

These warnings will appear in appropriate locations when they are pertinent to the particular subject being shown. Read each one carefully and follow them strictly.



### **Eye Protection**

**WARNING**

**Always wear eye protection to avoid injury from flying debris or hydraulic oil leaks. Failure to do so can result in serious personal injury.**



### **Skin Irritation**

**WARNING**

**Hydraulic oil may cause irritation. Use care to prevent contact with skin. In case of accidental contact, wash affected area immediately**



### **Hard Hat**

**WARNING**

**Always wear a hard hat to avoid injury from falling debris. Failure to do so can result in serious personal injury.**



### **Foot Protection**

**WARNING**

**Always wear foot protection. Failure to do so can result in serious personal injury.**



### **Hearing Protection**

**WARNING**

**Always wear hearing protection, to avoid hearing loss due to long term exposure to high noise levels.**



### **Protective Gloves**

**WARNING**

**Always wear protective gloves. Failure to do so can result in serious personal injury.**



WARNING

## SAFE OPERATION & CARE

**USE THIS TOOL FOR ITS INTENDED PURPOSE ONLY**  
Any other use can result in injury or property damage.

**INSPECT TOOL BEFORE USE.** Replace any worn, damaged or missing parts. A damaged or improperly assembled tool may malfunction, injuring operator and/or nearby personnel.

**INSPECT HYDRAULIC HOSES AND COUPLINGS** before each use. Repair or replace if any cracking, leakage, wear or damage is found. Worn or damaged hoses may fail resulting in personal injury or property damage.

**CLEAR WORK AREA** of all bystanders and unnecessary personnel before operating this tool.

**KEEP ALL PARTS OF THE BODY AWAY FROM MOVING PARTS.**

Failure to observe this warning could result in serious injury.



WARNING

## HYDRAULIC POWER SUPPLY

**DO NOT** attempt to make any changes to any of the component parts or accessories when connected to the power source.

**DO NOT** adjust, inspect, or clean tool while the tool is connected to the power source. The tool could accidentally start up and cause serious injury.

**DO NOT** lock the tool in the On Position. In an emergency, serious damage or injury could occur during the time required to stop the tool.



WARNING

## OIL INJECTION INJURY

Hydraulic oil or fluid under the skin is a serious injury. Oil under pressure can penetrate the skin and may cause dismemberment or loss of life. Seek medical assistance immediately if such an injury should occur.

Always wear safety gloves, eye protection and all required safety equipment when operating or handling this tool.

**DO NOT** use fingers or hands to attempt to locate a leak.

**DO NOT** handle hoses or couplers while system is pressurized.

**NEVER** open or service the system before depressurizing.



WARNING

## HOSES AND FITTINGS

There exists the potential for shock in using anything other than certified nonconductive hoses and hydraulic oil with dielectric properties, when using system components near energized electrical lines. Failure to recognize these conditions could cause electrocution.

Hoses and fittings used with this tool must comply with S.A.E. J1273 which covers recommended practice for selection, installation, and maintenance of hose and hose assemblies. The **correct hoses and fittings are available from your supplier.**

**WARNING:** Failure to comply with these warnings could result in severe bodily injury.



WARNING

## UNIT/HOSE CONNECTIONS

**ALWAYS DISCONNECT** pump/power source and move toggle switch to **OFF** before connecting or disconnecting any components.

**ALWAYS DEPRESSURIZE** hydraulic system, before slowly disconnecting this unit or any of the systems components.

**ALWAYS TIGHTEN** couplings completely. Loose or improperly tightened couplings will not allow fluid to pass through the hose creating a blockage in the supply or return line.

**ALWAYS INSPECT HOSES AND CONNECTORS** before connection to tool. Replace or repair if any leakage is evident. Leakage is a sign of deterioration in component parts. Worn or leaking parts must be repaired or replaced, or tool damage or severe injury could result.



WARNING

## SERIOUS BURN HAZARD

**HOT SURFACES MAY CAUSE SERIOUS BURN OR INJURY**

The hydraulic cylinder may be hot during and after operation.

**CAUTION: HYDRAULIC FLUID MAY CAUSE SERIOUS BURNS**

Never disconnect tool, hoses, or fittings while the hydraulic power source is running or if the hydraulic fluid is hot.

Failure to observe this warning could result in serious injury.

**IF YOU HAVE ANY QUESTIONS REGARDING THE SAFE USE AND/OR OPERATION OF THIS TOOL, CONSULT YOUR AREA SUPERVISOR, OR CONTACT RELIABLE EQUIPMENT AT 800-966-3530**



WARNING

Operation/Safety methods may vary in accordance with the working guidelines established by each utility or contractor.

For your own safety, ensure that you fully comply with all safe operation guidelines required by your employer.



WARNING

## ELECTRICAL SHOCK HAZARD

Always wear and use the necessary clothing, equipment and safety practices to protect against electrical shock. Failure to follow these rules can result in serious personal injury or death.



## GENERAL SAFETY



**USE ALL APPROPRIATE AND APPLICABLE PERSONAL SAFETY EQUIPMENT** as required by the operating company.

**ALWAYS INSPECT TOOL** for wear or deterioration every day. Replace all parts that show signs of wear or damage.

**KEEP ALL PARTS OF THE BODY AWAY** from moving parts of the tool.

**KEEP HANDS OUT FROM BETWEEN FIXED AND MOVING BLADES AT TOOL HEAD.**

**HANDS SHOULD BE OUTSIDE DANGER ZONE PRIOR TO ACTIVATING BLADE.**

**MAKE SURE** there is no person in close proximity to you or the tool who could be injured by any operation being performed, tool malfunction or flying debris.

**DO NOT OVEREXTEND** your position by overreaching or unbalancing the footing necessary to maintain physical control of your body.

**ALWAYS MAINTAIN** a firm grip on the tool to avoid loss of control during an operation, causing property damage, serious injury or death.

**USE THIS TOOL FOR THE MANUFACTURERS' INTENDED PURPOSE ONLY.**

**OBSERVE CLOSELY ALL SAFETY RULES FOR A PARTICULAR JOB CLASS**

**FAILURE TO HEED THESE WARNINGS COULD RESULT IN PROPERTY DAMAGE, SERIOUS PERSONAL INJURY OR DEATH.**



WARNING

## CUTTING DANGER

This hydraulic cutting tool can cut, dismember and/or disable.  
**KEEP ALL PARTS OF THE BODY AWAY FROM MOVING PARTS.**

**DO NOT** lock the tool in the On Position. In an emergency, serious damage or injury could occur during the time required to stop the tool.

Failure to observe this warning could result in serious injury

# REL-2000SA OPERATION



WARNING

**Do not cut live conductors.**

**Hardened metals may fly when severed.**

**Take necessary precautions. wear safety glasses.**

**Keep all body parts away from cutting blades and moving parts.**

**Failure to follow these rules can result in serious personal injury or death.**

Read entire manual prior to using this tool.

(Refer to all safety recommendations and warnings)

Observe all safety precautions and procedures required by the operating company.

(Refer to GENERAL SAFETY on page 8)

Before cutting, ensure that material being cut is within the capacity listed for this tool.

Tool must be used in conjunction with a hydraulic system rated at, and adjusted to, 10,000 psi. Any system not operating at 10,000 psi may cause damage to the tool and result in serious injury to the operator.

Connect the tool head to the control valve or hose set. (Refer to warnings on page 6 & 7)

Open cutter by removing locking pin.

Insert material between cutter head and blade.

Close and secure cutter head using locking pin. Failure to secure head may result in severe tool damage and/or personal injury.

The material to be cut **MUST** be at a 90° angle to the blade. This will ensure a proper cut with minimal distortion. Severe blade damage may occur if material is cut at any other angle.

Operate pump or valve to slowly advance blade. If a hold feature is available, check for proper alignment (90° angle) of blade and material being cut.

Continue until cut is complete.

Return source to the OFF/RETRACT position and allow movable blade to retract completely.

# DAILY MAINTENANCE

The life, reliability, and safety of the tool is dependent on proper maintenance. **Clean** all surfaces including head, blade, couplers (if coupled), threads, and handles. **Inspect** for wear and damage. Worn or damaged parts may malfunction during operation. **All parts must be replaced with new parts if signs of wear or damage are evident.**



## WARNING

Failure to observe all warnings and instructions could result in property damage, severe personal injury, and/or death.

BEFORE USING THIS PRODUCT READ THE SAFETY WARNINGS and recommended practices described in the manual. Failure by the operator to read and fully understand the warnings will leave this person unqualified to use and operate the tool.

## RELIABLE EQUIPMENT & SERVICE CO., INC.

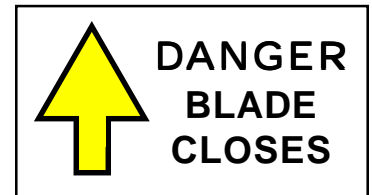
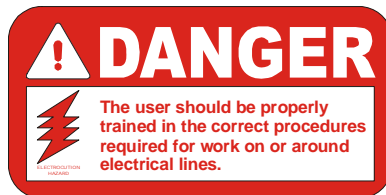
92 Steamwhistle Drive • Ivyland, PA 18974 • USA  
Phone: 215-357-3500 • Fax: 215-357-9193

MODEL: -2000

MAX. PRESSURE: 10,000 PSI

SERIAL NO.: \_\_\_\_\_

YEAR: \_\_\_\_\_



NOTE: Keep Label Set clean and legible. Replace decals when necessary. Part #RL23400

**Complete disassembly is not recommended. Return the unit to an authorized dealer for total disassembly and/or repair.**

All maintenance or disassembly should take place on a flat, clean work surface covered with towels or wipers so as to have a clean space for the disassembled parts.

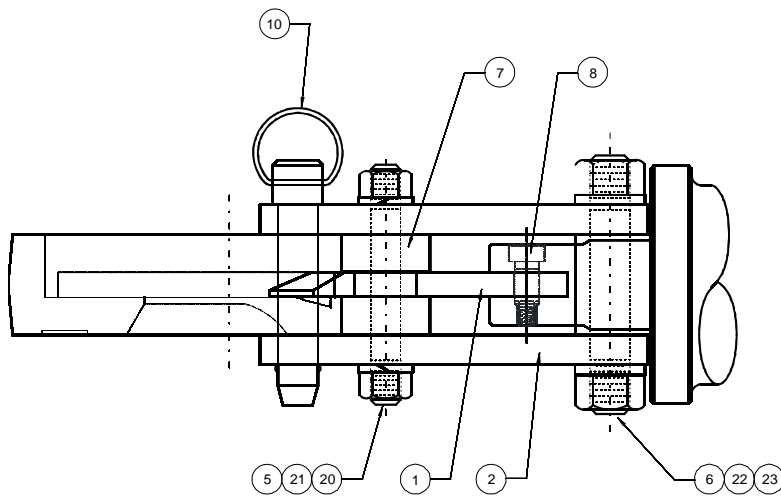
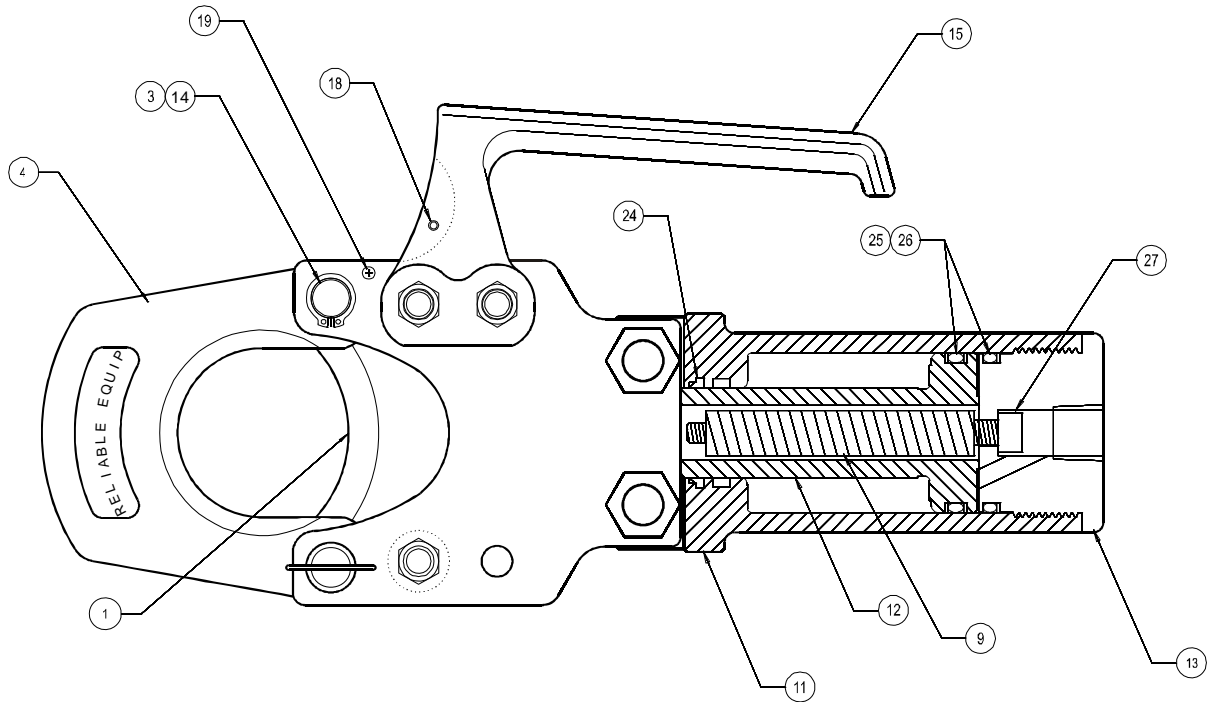
Inspect each part during disassembly for wear, scratches, and cuts. Discard the worn or damaged parts and replace with new factory authorized parts.

O-rings are sensitive to sharp edges. Inspect closely for cuts or damage. A small cut will cause a leak. When assembling or disassembling O-rings, use hydraulic fluid as a lubricant to help disassembly or installation.



**IMPORTANT:** The greatest cause of hydraulic system failure is dirt. Prevent the introduction of foreign matter into the unit via hydraulic fluid, dirty connections or accumulation of sediment.

# REL-2000SA - CUTTING TOOL PARTS DRAWING



**PARTS LIST - REL-2000SA**  
**2" SINGLE ACTING HYDRAULIC CUTTING TOOL**

ITEM	PART NO.	QTY	DESCRIPTION
1	23001	1	MOVING BLADE
2	23040	2	RETAINING PLATE
3	23003	1	PIVOT PIN
4	23004	1	HINGED CUTTER
5	23005	3	SMALL STUD
6	23006	2	LARGE STUD
7	23007	1	GUIDE ROLL
8	23008	1	CONNECTING PIN
9	20510	1	RETURN SPRING ASSY
10	23010	1	DETENT PIN W/ CABLE
11	23011	1	BODY
12	23501	1	S/A PISTON
13	23502	1	CAP
14	23014	2	RETAINING RING
15	23015	1	HANDLE
18	23018	1	SPRING PIN
19	23019	2	DOWEL
20	23020	6	SPLIT LOCK WASHER
21	23021	6	HEX NUT
22	23022	4	SPLIT LOCK WASHER
23	23023	4	HEX NUT
24	23024	1	* WIPER
25	23025	3	* BACK UP RING
26	23026	2	* O-RING
27	20509	1	SCREW, SPRING ASSY
	23550	1	SEAL KIT * ITEMS IN SEAL KIT

Contact RELIABLE EQUIPMENT at 800-966-3530 if you have any questions related to the instructional information found in this manual.



If you have any questions regarding the information found in this manual please contact RELIABLE EQUIPMENT at the address, phone or fax numbers shown below.



**RELIABLE EQUIPMENT  
& SERVICE CO., INC.**

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