

OPERATORS' GUIDE

REL-4000SA

HYDRAULIC 4" CUTTING TOOL



LIFTING RING

HIGH PRESSURE FEMALE COUPLER INSTALLED

FULL 4 INCH COPPER AND ALUMINUM CUTTING CAPACITY



The REL-4000SA cutter accommodates copper and aluminum conductors up to 4 inches.

The body and handle were provide comfort, and protect the operator from inadvertent contact with the blade or operation.

The hardened steel blades will provide a clean cut with minimal distortion.

A ring has bee added to aid in bringing the tool to the cut, with less operator strain.

NOTICE

Sizes, weights and tool specifications listed in this manual are subject to change without notice. Please consult factory for information and updates.

WARNING



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

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



RELIABLE EQUIPMENT & SERVICE CO., INC.

DISTRIBUTED BY



CAU-

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 _____

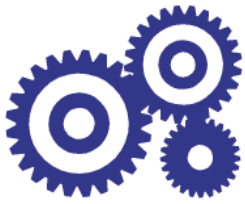
ADDRESS _____

PHONE _____ FAX _____

SERIAL NUMBER _____

DATE OF PURCHASE _____

DEALER NAME _____



RELIABLE EQUIPMENT & SERVICE CO., INC.



REL-4000SA
HYDRAULIC 4" CUTTING TOOL

LIFTING
EYE

HIGH PRESSURE
COUPLER INSTALLED

FULL 4 INCH
COPPER AND ALUMINUM
CUTTING CAPACITY



REL-4000SA

HYDRAULIC 4 INCH CUTTING TOOL

The **REL-4000SA** single acting hydraulic cutter has been designed to accommodate copper and aluminum conductor up to 4 inches in diameter.

The body and handle have been designed to provide comfort, and to protect the operator from inadvertent contact with the blade or mechanism.

The hardened steel blades will provide a clean cut with minimal distortion.

SPECIFICATIONS

Weight:	17.5 lbs.
Size:	15.6" x 10" x 4"
System	Hydraulic - 10,000 psi max.
Max. Cut	4 inch dia. (Cu. or Al.)
DO NOT CUT STEEL	



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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 non-conductive 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 coupling or disconnecting any component

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 personal injury and/or death.

REL-4000SA 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)

Insert material between cutter head and blade.

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.

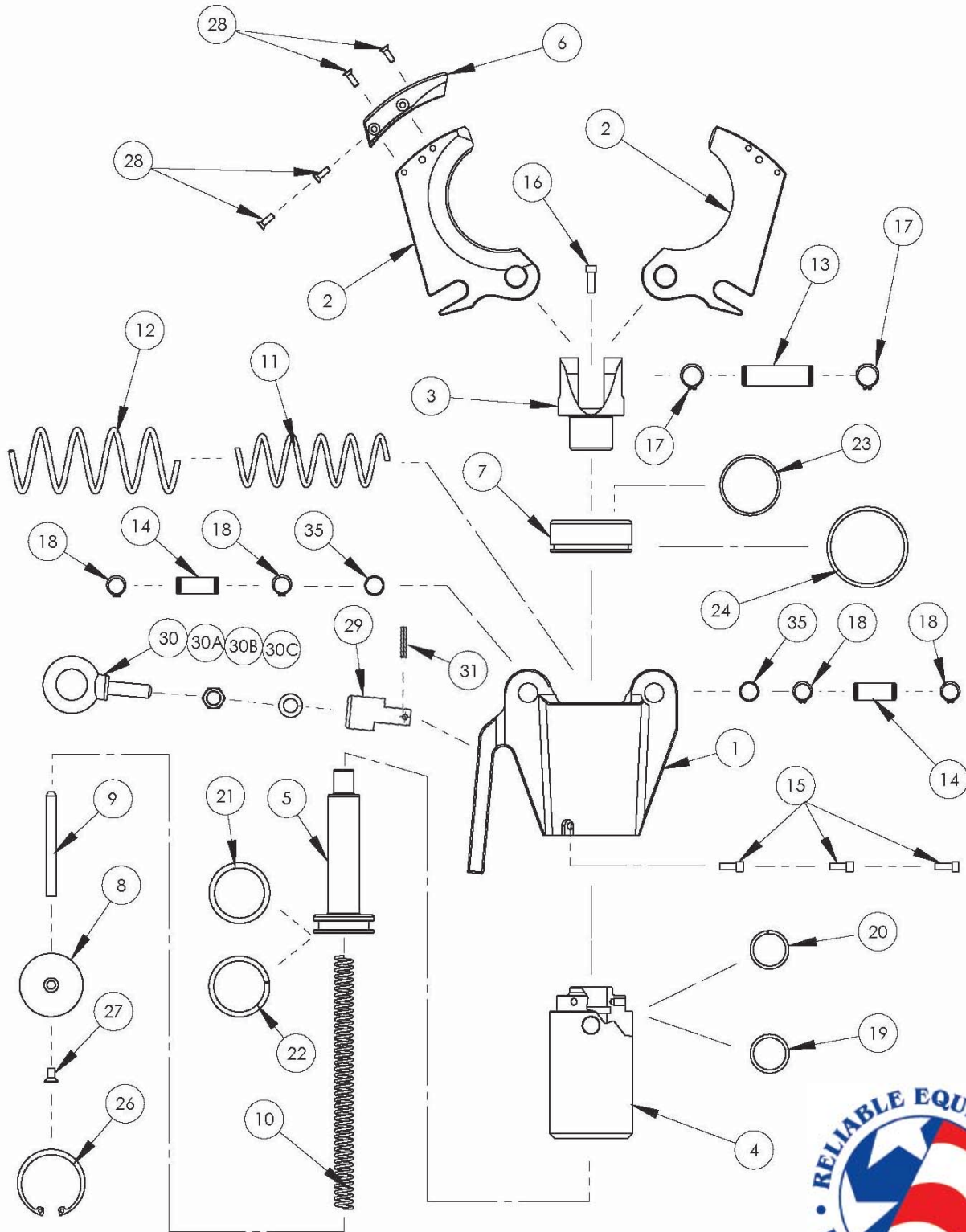
Continue until cut is complete.

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

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

REL-4000SA - CUTTING TOOL

PARTS DRAWING



PARTS LIST - REL-4000SA

4" SINGLE ACTING HYDRAULIC CUTTING TOOL

ITEM	PART NO.	QTY	DESCRIPTION
1	R52001	1	HOUSING
2	R52002	2	BLADE
3	R52003	1	PULL YOKE
4	R52004	1	CYLINDER
5	R52005	1	RAM
6	R52006	1	BLADE GUIDE
7	R52007	1	CAP
8	R52008	1	LOWER DISC
9	R52009	1	LOWER DISC ROD
10	R52010	1	INNER SPRING
11	R52011	1	MIDDLE SPRING
12	R52012	1	OUTER SPRING
13	R52013	1	CENTER PIN
14	R52014	2	OUTER PIN
15	R52015	3	HOUSING SCREW
16	R52016	1	RAM LOCKING SCREW
17	R52017	2	CENTER PIN RETAINING RING
18	R52018	4	OUTER PIN RETAINING RING
19	R52019	1	* CYLINDER O RING
20	R52020	1	* CYLINDER BACKUP RING
21	R52021	1	* RAM O RING
22	R52022	1	* RAM BACKUP RING
23	R52023	1	* CAP FACE O RING
24	R52024	1	* CAP SIDE DUST SEAL
26	R52026	1	LOWER DISC RETAINING RING
27	R52027	1	LOWER DISC SCREW
28	R52028	4	BLADE GUIDE SCREW
29	R52029	1	HANGER
30	R52030	1	EYELET ASSEMBLY
31	R52031	1	ROLL PIN
35	R52035	4	BUSHING
	R36023	1	GRIP, RUBBER (NOT SHOWN)
	R52100		SEAL KIT * ITEMS INCLUDED IN SEAL KIT

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

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

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.

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

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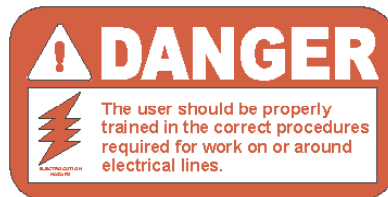
92 Steamwhistle Drive • Ivyland, PA 18974 • USA
Phone: 215-357-3500 • Fax: 215-357-9193

MODEL: REL-4000SA

MAX. PRESSURE: 10,000 PSI

SERIAL NO.: _____

YEAR: _____



NOTE: Keep Label Set clean and legible. Replace decals when necessary. Part #RL52000

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.

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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