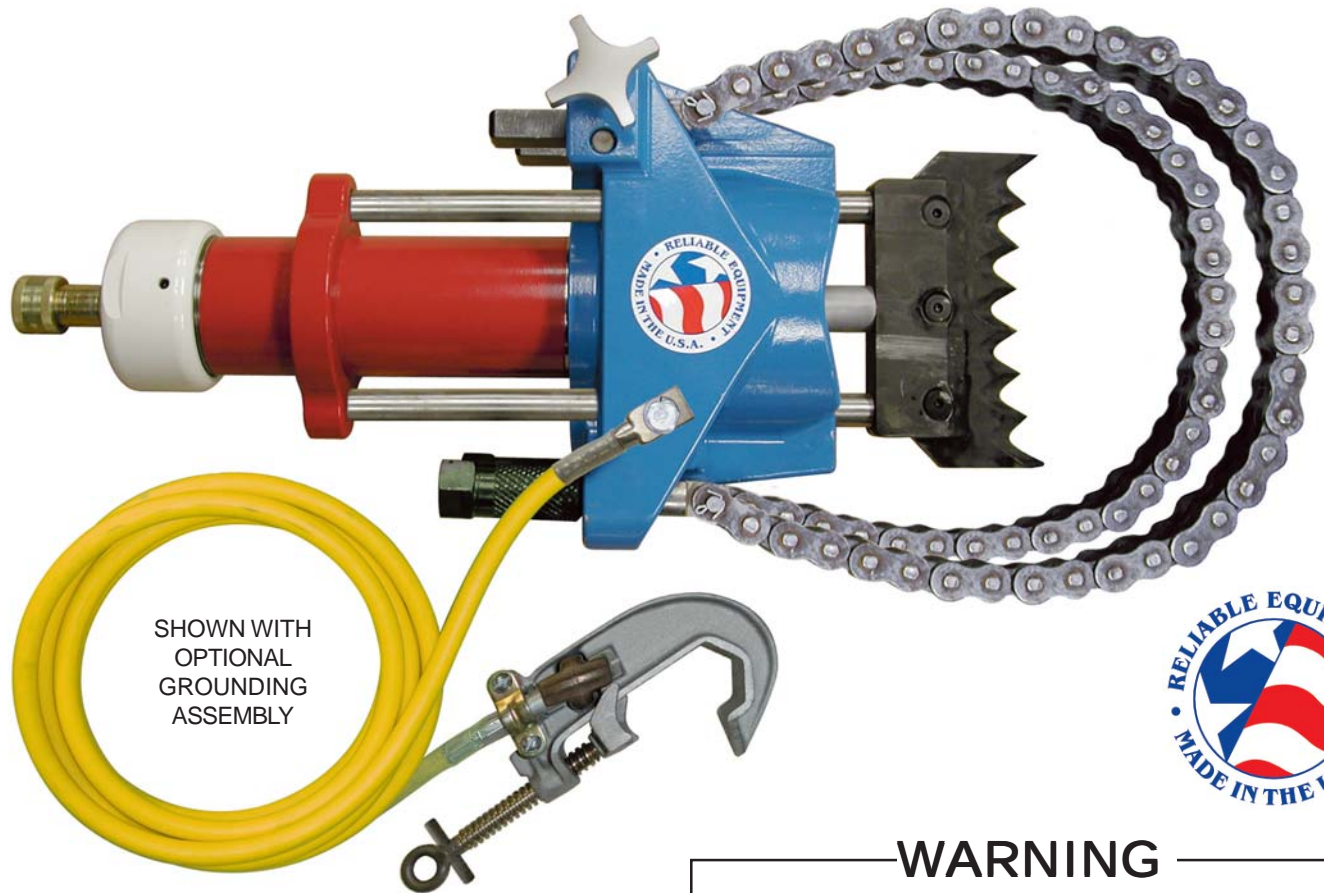


OPERATORS' GUIDE

REL-ST-10

DOUBLE ACTING HYDRAULIC SPEARING TOOL



SHOWN WITH
OPTIONAL
GROUNDING
ASSEMBLY



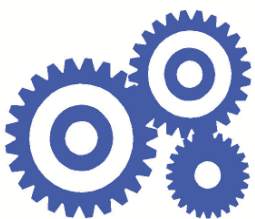
WARNING



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.

NOTE: This tool MUST be used in accordance with the safety guidelines established by your respective utility.



RELIABLE EQUIPMENT & SERVICE CO., INC.

REL-ST-10 Manual 03-09

DISTRIBUTED BY

REGISTRATION

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW.

COMPANY _____

ADDRESS _____

PHONE _____ FAX _____

SERIAL NUMBER _____

DATE OF PURCHASE _____

DEALER NAME _____



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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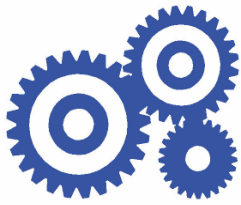
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If you have any questions regarding the information found in this manual please contact RELIABLE EQUIPMENT at 800-966-3530 or FAX 215-357-9193.



THIS SYMBOL INDICATES ITEMS OF EXTREME IMPORTANCE.

Safety of user and others may be in jeopardy if these instructions are not read and understood.



RELIABLE EQUIPMENT & SERVICE CO., INC.

REL-ST-10



The REL-ST-10 double acting hydraulic spearing tool was designed to drive a serrated piercing blade into the conductor or joint ensuring that the conductor is out of service prior to beginning work.

Designed to accommodate electrical cables from 6 to 10" O.D. This double acting tool has the ability to advance and retract, eliminating hang-up. The specially designed serrated piercing blade guarantees contact when a multi-bundled conductor is spiked.

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92 Steamwhistle Drive • Ivyland, PA 18974
Phone: 800-966-3530 • Fax: 215-357-9193
Visit us on the web at www.Reliable-Equip.com

WEIGHT: 35 LBS.
LENGTH: 14 INCHES
WIDTH: 7 INCHES

NOTE: This tool MUST be used in accordance with the safety guidelines established by your respective utility.



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

Oil and lubricants 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 personal 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.



CAUTION

HOSE INSTALLATION

ALWAYS ENSURE CONNECTORS ARE CLEAN

DOUBLE ACTING - Care must be taken to assure the correct connection of the hoses to the pressure and return (tank) ports. Connect the return hose to the return (tank) port on the power source, then to the return port on the tool.

Connect the pressure hose to the pressure port on the tool, then to the "P" pressure port on the power source.

Operation with hydraulic flow reversed can cause malfunction. Failure to fully comply can result in severe injury or death.



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.

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.** Keep Label Set clean and legible. Replace decals when necessary.

REL-ST-10 OPERATION

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.

Before spearing, ensure conductor 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.

Use threaded ground lug holes to attach grounding set (If required by intended application)

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

Turn chain adjusters counter clockwise until adjuster reaches the end of travel.

Position tool against cable or joint.

Wrap chains around cable or joint and insert lugged ends into chain lock.

Pull both chains tight and rotate locking knob 180° to secure chains in position.

Tighten chain adjusters to remove any remaining slack.

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

To ensure completion, continue operation until control valve pops back to neutral position. If you are using a hand operated pump, operate pump until bypass occurs and handle operation becomes very easy.

Continue until spearing operation is complete.

Use valve or pump to retract blade.



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

MAINTENANCE

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.

IF YOU HAVE QUESTIONS REGARDING THE REPAIR AND MAINTENANCE OF THIS TOOL CONTACT RELIABLE EQUIPMENT AT 800-966-3530



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.

CAUTION

Operation and safety methods may vary in accordance with the guidelines established by each utility. For your safety, ensure that you fully comply with all safe operation guidelines established by your respective power utility.

REL-SM

DANGER



The user should be properly trained in the correct procedures required for work on or around electrical lines.

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

Maintenance Records

Date	Parts or Service Required

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.

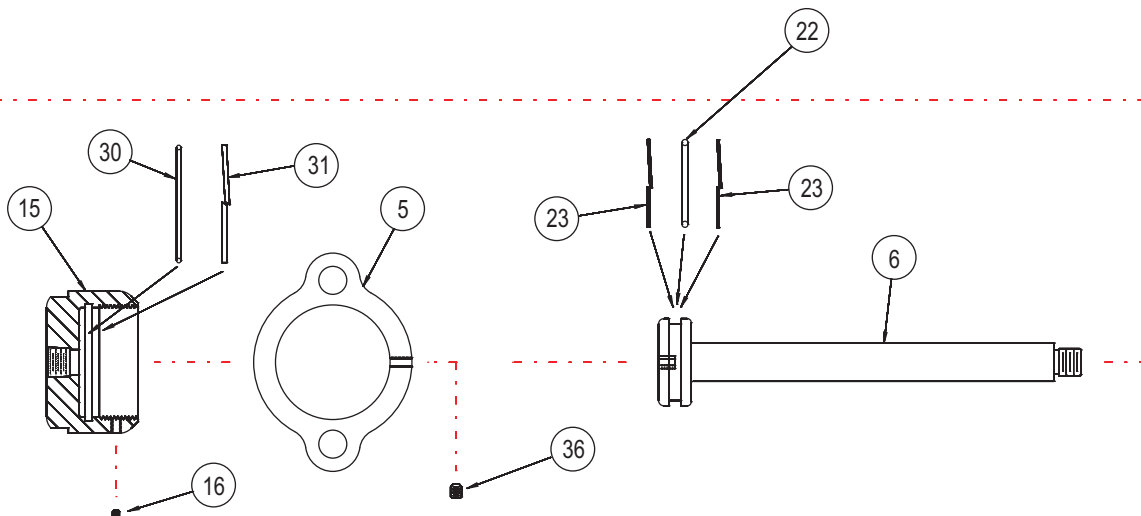
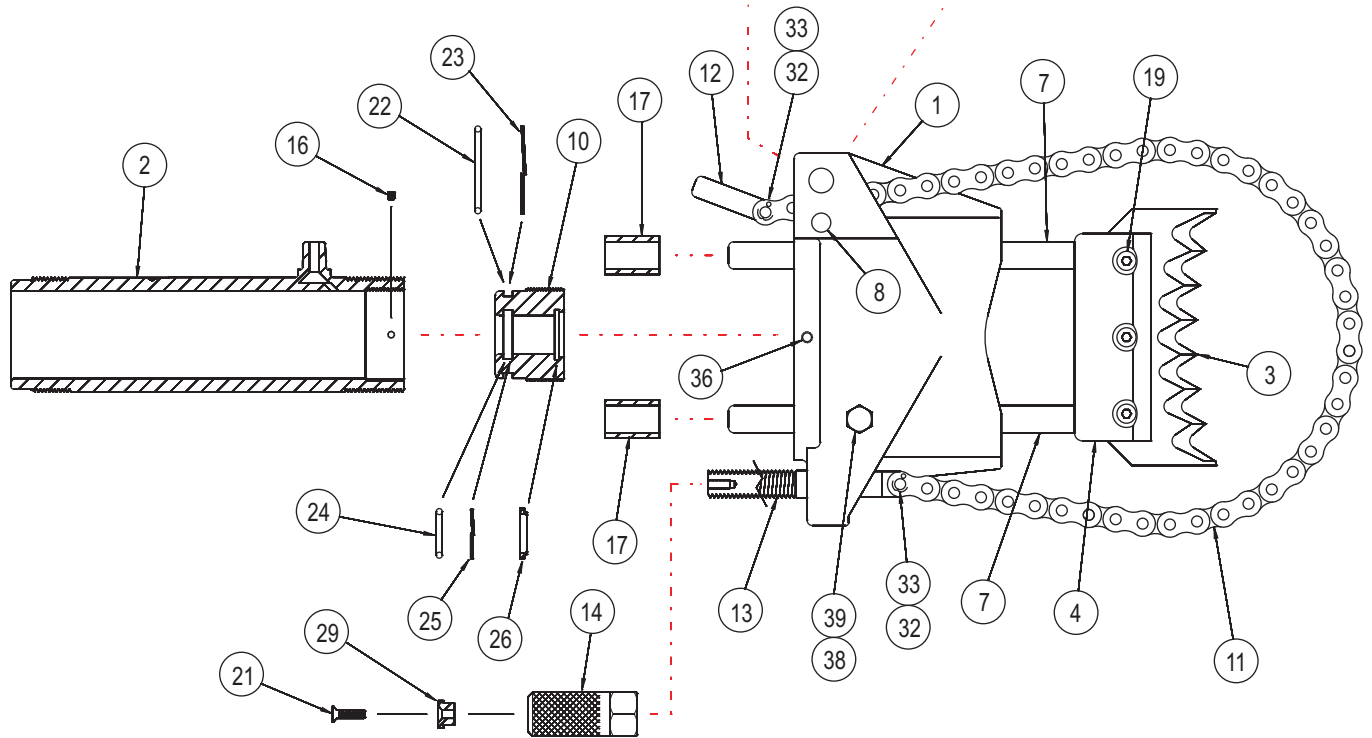
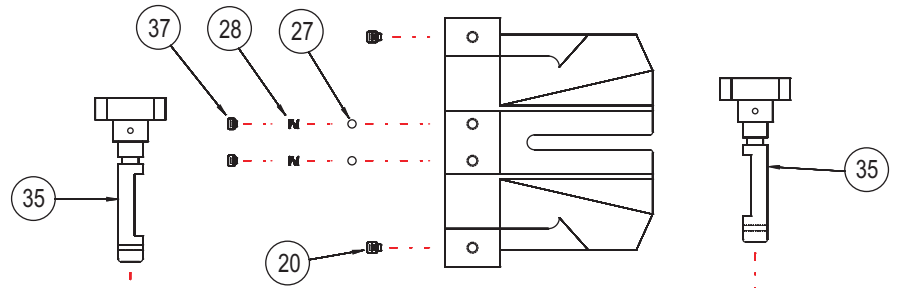


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REL-ST-10

8" HYDRAULIC SPEARING TOOL



ITEM	PART NO.	QTY	DESCRIPTION
1	33001	1	HOUSING, FIXTURE
2	33002A	1	CYLINDER ASSY
3	33003	1	CUTTER BLADE
4	33004	1	HOLDER
5	33005	1	SUPPORT
6	33006	1	RAM
7	33007	2	GUIDE POST
8	33008	1	STOP PIN
10	33010	1	COLLAR
11	33011	2	CHAIN
12	33012	2	END BLOCK (FOR CHAIN)
13	33013	2	STUD
14	33014	2	HAND NUT
15	33015	1	END CAP
16	33016	2	SET SCREW
17	33017	2	BEARING, BRONZE
19	33019	3	SCREW, HOLDER
20	33020	2	SET SCREW, CHAIN RELEASE PIN
21	33021	2	FLAT HEAD SCREW, STUD
22	33022	2	* ORING
23	33023	3	* BACKUP RING
24	33024	1	* ORING
25	33025	1	* BACKUP RING
26	33026	1	* WIPER
27	33027	2	BALL, DETENT
28	33028	2	SPRING, DETENT
29	33029	2	STOP WASHER
30	33030	1	* ORING
31	33031	1	* BACKUP RING
32	33032	4	PIN, (FOR CHAIN ENDS)
33	33033	4	COTTER PIN
35	33035	2	CHAIN RELEASE PIN ASSY
36	33036	2	SET SCREW
37	33037	2	SET SCREW
38	26060	1	BOLT 3/8-16 X 1/2 (FOR GROUNDING)
39	26066	1	LOCK WASHER, 3/8 DIA
	33070	1	SEAL KIT * DENOTES ITEMS IN SEAL KIT



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