

OPERATORS' GUIDE

REL-2000SA



PDC-2000

SINGLE ACTING HYDRAULIC CUTTING TOOLS

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.

2000 Series Manual 02-15

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 _____

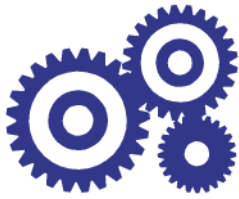
ADDRESS _____

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

SINGLE ACTING HYDRAULIC CUTTING TOOL

2000 SERIES MAXIMUM CAPACITY

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 will make a straight, clean cut every time.

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

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



RELIABLE EQUIPMENT & SERVICE CO., INC.

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



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



PDC-2000 SHOWN
PCU-2000 INCLUDES COUPLERS

PDC-2000

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 PDC-2000 cuts straight & clean cut every time.

MAXIMUM CAPACITY

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

System	Double-Acting
Capacity (Jaw Opening)	2 inch.
Force @ 10,000 psi (690 bar)	28,048 lb.
Return @ 5,000 psi (345 bar)	10,445 lb.
Max Operating Pressure	10,000 psi (690 bar)
Max Return Pressure	5,000 psi (345 bar)
Couplers	Direct Connect



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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 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 & 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 utility 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-2000 SERIES 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.

Important: 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.

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

DA: Use Valve or pump to retract the blade.

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.

RELIABLE EQUIPMENT & SERVICE CO., INC.

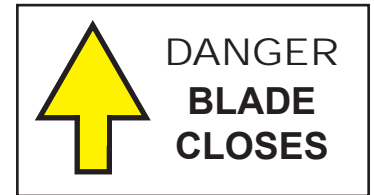
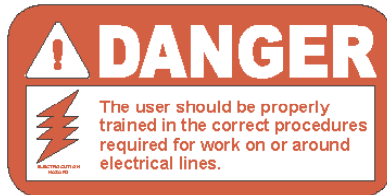
92 Steamwhistle Drive • Ivyland, PA 18974 • USA
Phone: 215-357-3500 • Fax: 215-357-9193

MODEL: | 2000

MAX. PRESSURE: 10,000 PSI

SERIAL NO.: _____

YEAR: _____



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

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.

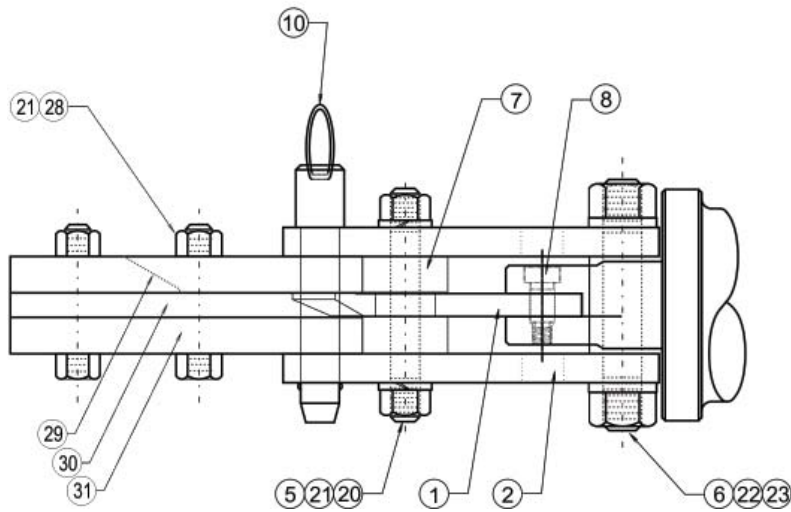
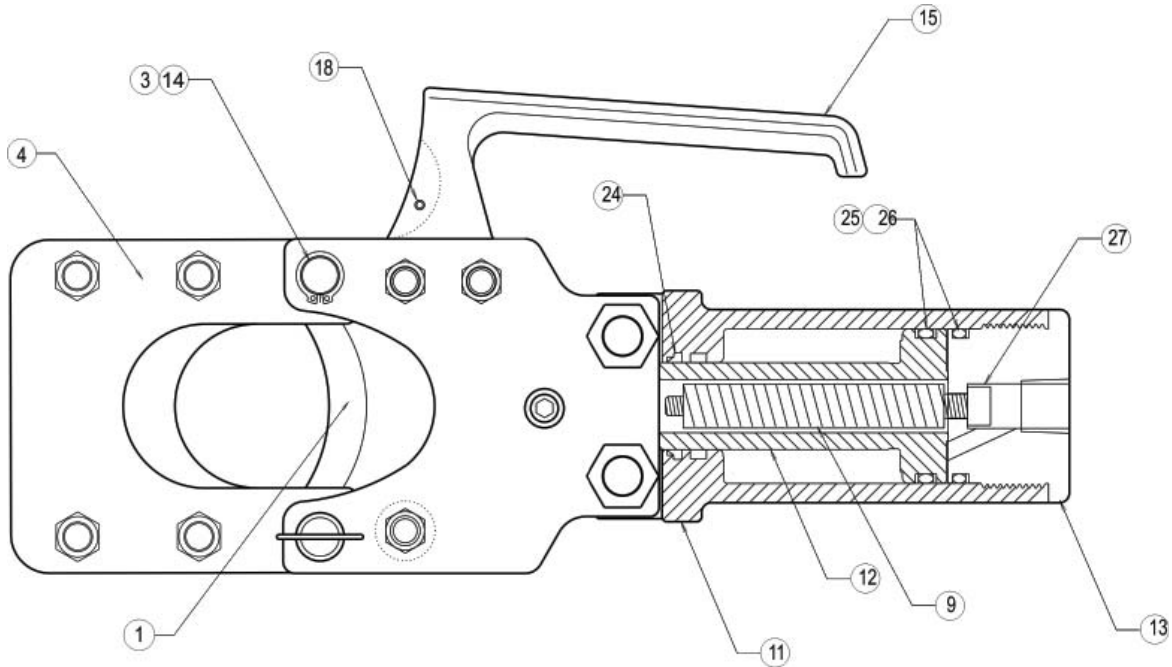
Inspect each part during disassembly for wear, scratches, and cuts. Discard the worn or damaged parts and replace with new factory authorized parts.

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



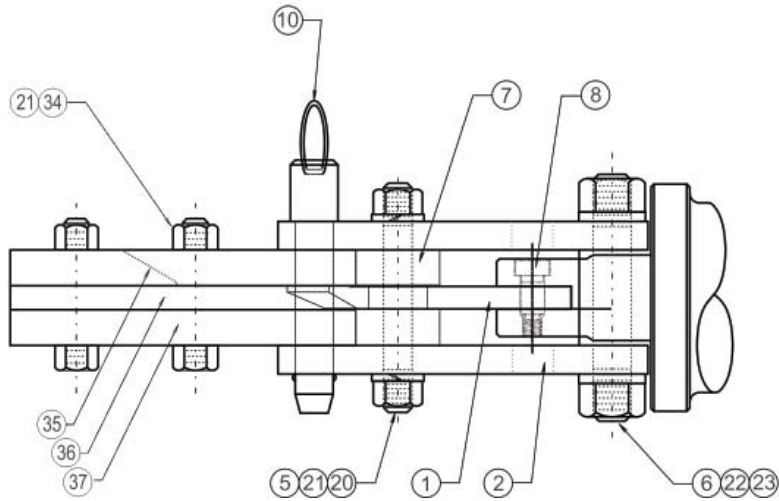
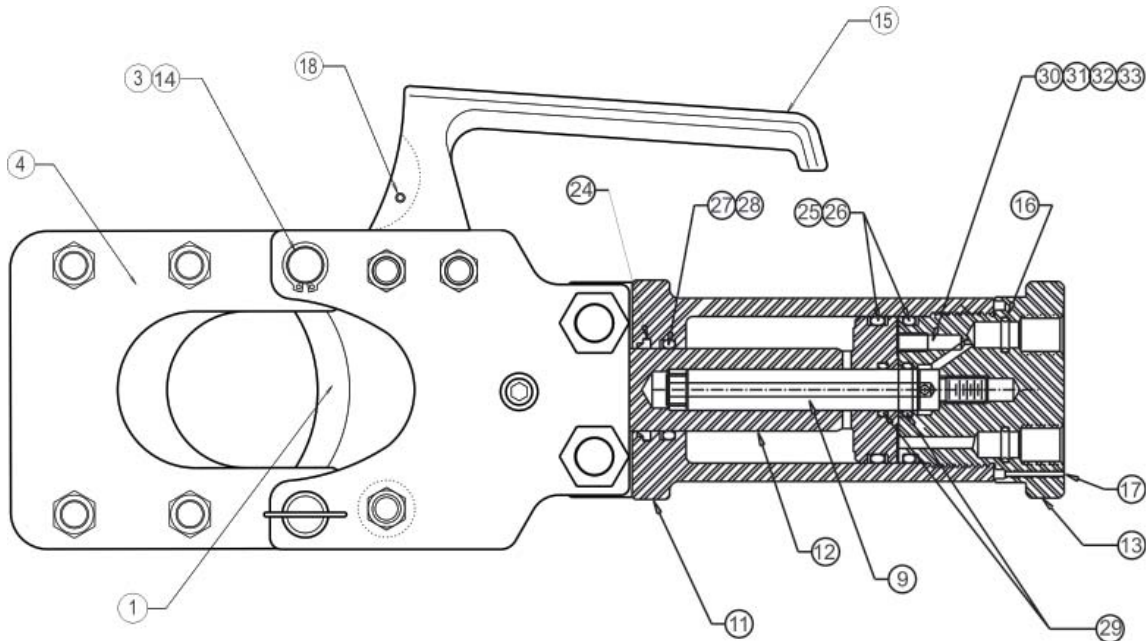
NOTE: # 21 & 28 have been tightened to 30-40 Foot Pound of torque, and secured using Blue LOCTITE on the nuts.

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

ITEM	PART NO.	QTY	DESCRIPTION
1	R23001	1	MOVING BLADE
2	R23040	2	RETAINING PLATE
3	R23003	1	PIVOT PIN
4	R23004A	1	HINGED CUTTER ASSY. (Incl. 21, 28, 29, 30, 31)
5	R23005	3	SMALL STUD
6	R23006	2	LARGE STUD
7	R23007	1	GUIDE ROLL
8	R23008	1	CONNECTING PIN
9	R20510	1	RETURN SPRING ASSY
10	R23010	1	DETENT PIN W/ CABLE
11	R23011	1	BODY
12	R23501	1	S/A PISTON
13	R23502	1	CAP
14	R23014	2	RETAINING RING
15	R23015	1	HANDLE
18	R23018	1	SPRING PIN
19	R23019	2	DOWEL
20	R23020	6	SPLIT LOCK WASHER
21	R23021	10	HEX NUT
22	R23022	4	SPLIT LOCK WASHER
23	R23023	4	HEX NUT
24	R23024	1	* WIPER
25	R23025	3	* BACK UP RING
26	R23026	2	* O-RING
27	R20509	1	SCREW, SPRING ASSY
28	R26024	4	BOLT, HEX 3/8-16X1.67LG
29	R23035	1	CUTTING HEAD (Incl. w/ #4 Cutter Assy.)
30	R23036	2	SPACER, BLADE (Incl. w/ #4 Cutter Assy.)
31	R23037	2	GUIDE, BLADE (Incl. w/ #4 Cutter Assy.)
	R23550	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.

PDC-2000 -CUTTING TOOL PARTS DRAWING



NOTE: # 21 & 28 have been tightened to 30-40 Foot Pounds of torque, and secured using Blue LOCTITE on the nuts.

PDC-2000 PARTS LIST

#	PART	QTY	PART #
1	MOVING BLADE.....	1	R23001
2	RETAINING PLATE.....	2	R23002
3	PIVOT PIN	1	R23003
4	HINGED CUTTER ASSY. (Incl. 21, 28, 29, 30, 31)	1	R23004A
5	SMALL STUD.....	3	R23005
6	LARGE STUD	2	R23006
7	GUIDE ROLL	1	R23007
8	CONNECTING PIN.....	1	R23008
9	INNER PISTON.....	1	R23009
10	DETENT PIN W/ CABLE.....	1	R23010
11	BODY	1	R23011
12	PISTON.....	1	R23012
13	END BLOCK	1	R23013
14	RETAINING RING.....	1	R23014
15	HANDLE	1	R23015
16	O-RING	2	*
17	STOP SCREW	1	R15006
18	SPRING PIN	1	R23018
19	HARD DOWEL.....	2	R23019
20	SPLIT LOCK WASHER.....	6	R23020
21	HEX NUT	10	R23021
22	SPLIT LOCK WASHER.....	4	R23022
23	HEX NUT	4	R23023
24	WIPER RING	1	*
25	BACKUP RING	3	*
26	O-RING	2	*
27	BACK UP RING	1	*
28	O-RING	1	*
29	O-RING	2	*
30	ADJUSTING SCREW	2	#
31	SPRING	2	#
32	BALL RETAINER	1	#
33	CHECK BALL.....	1	#
34	BOLT, HEX 3/8-16X1.67LG.....	4	R26024
35	CUTTING HEAD (Incl. w/ #4 Cutter Assy.)	1	R23035
36	SPACER, BLADE (Incl. w/ #4 Cutter Assy.).....	2	R23036
37	GUIDE, BLADE (Incl. w/ #4 Cutter Assy.).....	2	R23037
	THREAD PROTECTOR.....	1	R1220-19
*	SEAL KIT	1	R23100
#	ITEMS ARE INCLUDED AS PART OF THE END CAP ASSEMBLY		
PCU-2000 (Also includes couplers below)			
	HIGH PRESSURE COUPLER - MALE.....	1	130868
	HIGH PRESSURE COUPLER - FEMALE	1	130878

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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& SERVICE CO., INC.**

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