

OPERATORS' GUIDE

Operate from any
2,000 PSI Hydraulic
Power Source

REL-EA250 HYDRAULIC AUGER

POST HOLE
DIGGER



Safety Trigger stops
Auger upon release

Shown with
Optional Auger

The **RELIABLE REL-EA250** Hydraulic Earth Auger can be used in boring applications for pole, post, and fence installations.

The **REL-EA250** "X" handles offer easy two person operation.

The torque anchor (included) offers safe one person operation.

Max. Drilling Capacity:

2 to 18" Dia. (8-35 cm)

42" Length (91 cm)



NOTICE

Sizes, weights and specifications listed in this manual are subject to change without notice.

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.

DISTRIBUTED BY

REGISTRATION

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW.

COMPANY _____

ADDRESS _____

PHONE _____ FAX _____

SERIAL NUMBER _____

DATE OF PURCHASE _____

DEALER NAME _____

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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.

Failure to observe these warnings could result in serious injury or death.



WARNING

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.

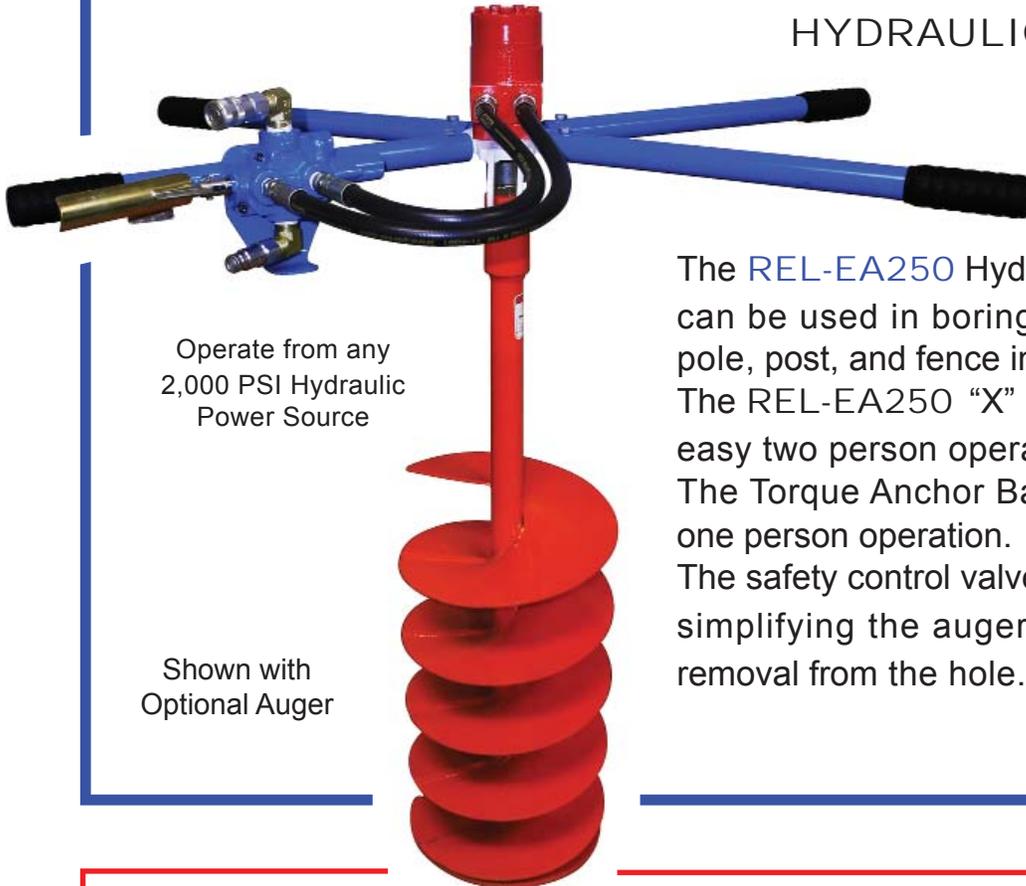
Consult your supervisor or safety personnel if you have any questions regarding the safe operation of this tool.



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Optional Auger

The REL-EA250 Hydraulic Earth Auger can be used in boring applications for pole, post, and fence installations. The REL-EA250 "X" Handles offer easy two person operation. The Torque Anchor Bar offers safe one person operation. The safety control valve is reversible, simplifying the augers' removal from the hole.



PERFORMANCE	250 ft. lb. (339 Nm)
CAPACITY (Long Auger)	2 to 18 in. Dia. x 42 in. (46 X 107 cm) + Extensions
FLOW RANGE	7 - 9 gpm (26 - 34 lpm)
PRESSURE	up to 2,000 psi (up to 138 bar)
PORTS / CONNECTION	-8 SAE O-Ring / 3/8 in. FF Quick Couplers
TORQUE ANCHOR BAR	75 - 141 in. (190 - 358 cm)
SPEED (at 8 gpm/30 lpm)	165 rpm

Weight: 47 lbs. (21 kg) w/o torque bar
Height: 11.7 inch (30 cm) w/o auger
Width: 46 inch (119 cm) w/ handles

RELIABLE EQUIPMENT & SERVICE CO., INC.
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Visit us on the web at www.Reliable-Equip.com



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.

WARNING

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 & cloths. 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. **DO NOT USE HANDS TO INSPECT HOSES.**

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

TURN HYDRAULIC SOURCE OFF before making any connection.

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

DO NOT CONNECT, ADJUST, INSPECT, OR CLEAN ANY TOOL WHILE THE TOOL IS CONNECTED TO THE POWER SOURCE.

The tool could accidentally start up and may 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.



DANGER

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.

TOOL REQUIRES A HOSE ASSEMBLY RATED AT 2,250 PSI WORKING PRESSURE



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 SHUT DOWN pump/power source and move selector 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.



CAUTION

HOSE INSTALLATION

ALWAYS ENSURE CONNECTORS ARE CLEAN

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.



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.



DANGER

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 THIS TOOL FOR THE MANUFACTURERS' INTENDED PURPOSE ONLY. OBSERVE CLOSELY ALL SAFETY RULES FOR A PARTICULAR JOB CLASS USE ALL APPROPRIATE & APPLICABLE PERSONAL SAFETY EQUIPMENT as required by the operating company.

DO NOT WEAR LOOSE FITTING CLOTHING. Cloths may become entangled with moving parts, and/or hinder the tool operation, posing a serious hazard to property and personnel.

ALWAYS INSPECT TOOL for wear or deterioration. **NEVER OPERATE A DAMAGED TOOL.** Replace all parts that show signs of wear or damage.

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

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.

HANDS & FEET SHOULD BE OUTSIDE DANGER ZONE PRIOR TO ACTIVATING AUGER.

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



CALL BEFORE YOU DIG! The presence of underground utilities present a variety of hazards which include, but are not limited to possible ELECTROCUTION and/or EXPLOSION.

WARNING

Wear ALL appropriate Protective Clothing and Accessories.

WARNING

Always install the Torque Anchor Bar before operating digger.

WARNING

KEEP ALL BODY PARTS AWAY FROM ALL MOVING PARTS.

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



SERIOUS BURN HAZARD

HOT SURFACES MAY CAUSE SERIOUS BURN INJURY

The hydraulic motor may be hot during and after operation.

WARNING

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.

PRE-OPERATION

Do not use this tool under unsafe working conditions or locations.

Read entire manual prior to operation of this tool.

(Refer to all safety recommendations and warnings)

Assemble/Inspect Tool Handles, Torque Anchor Bar & Appropriate Auger Bit before connecting to hydraulic Source. (refer to assembly instructions provided)

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

Attach Torque Anchor Bar to an appropriate (stable, weighted or fixed) object.

NOTE: **Use of the Torque Anchor Bar is ALWAYS recommended.**

Ensure that a compatible Hydraulic Source has been prepared and tested for this application. (Refer to page 11 and appropriate Manuals as needed)

Ensure that hydraulic source is OFF and Control Valve is in the OFF position before making any connections.

Connect appropriate hydraulic hose to the tool's return and pressure ports. (Length may vary) Use a length of hose that will not restrict free movement, or pose any hazard to the operator or other personnel on the work site.

Turn ON hydraulic source and select an appropriate flow for the tool. (7-9 gpm)

OPERATION

Move the Hydraulic Source Control Valve to the ON position.

Colder Weather - Allow hydraulic fluid to warm for 3-5 minutes before operating.

The first operator should trigger the Throttle Control Valve using the right hand.

The second operator should stand directly opposite, holding the auxiliary handles.

CAUTION: Do not overextend your position by overreaching or unbalancing the footing necessary to maintain physical control of the tool and your body.

Always maintain a firm grip on the tool to avoid loss of control during an operation.

Raise the REL-EA250 slightly OFF the ground and perpendicular to the Dig Location.

Actuate Throttle Control Valve (full throttle) to begin Digging Operation. (see below)

WARNING: Torque is increased when the Throttle Valve is not fully compressed. This may cause kickback resulting in loss of control and/or injury to the operator(s).

Lower the REL-EA250 until the auger engages the soil. Different soil types will require the operators to apply lift (soft soil) or pressure (hard soil) to control the speed of the operation.

WARNING: DO NOT OPERATE TOOL AT OIL TEMPERATURES ABOVE 140° F (60° C)

Raise the auger straight up for removal when the desired depth has been achieved.

Release the Valve/Trigger before the tip of the auger reaches the surface.

Move the Control Valve on the Hydraulic Source to the OFF position.

Return the Flow Selector to the OFF position, and Turn KEY to the OFF position.

TROUBLESHOOTING TIPS AND FIELD SOLUTIONS

WARNING: ALL tool repair and service must be performed by authorized and trained personnel ONLY. Improper maintenance or tampering could result in malfunction causing damage to equipment and/or injury to personnel.

**EA250
Will Not
Run**

No Hydraulic Flow or Pressure
Improper or Defective Coupling
Flow Reversed

Check Hydraulic Supply - Pressure and Flow
Check Coupler Connections and Flow Direction
Check Coupler Connections and Flow Direction

**Poor/Slow
Performance**

Low Hydraulic Flow or Pressure
Hydraulic Fluid Too Hot
Auger Not Matched to Application
Excessive Back Pressure

Check Hydraulic Supply - Pressure and Flow
Hydraulic System Cooler may be insufficient.
Check Job Requirements and Tool Capacities
Check Hydraulic System & Hose Connections.

HYDRAULIC SYSTEM REQUIREMENTS

Operating Pressure: Up to 2,000 PSI
Max. Relief Setting: 2,100 PSI (145 bar) *Recommended*
Flow Range: 7-9 GPM
Max. Backpressure: 250 psi / 17 bar
Cooling System: Required
Min. Filtration: 25 Micron
Hydraulic Fluids: All hydraulic fluids that meet these listed specifications or listed HTMA specifications may be used for this tool.

S. U. S.

@ 100° F (38° C).....140 TO 225

@ 210° F (99° C)..... 40 minimum

FLASH POINT 340° F min. (170° C min.)

POUR POINT -30° F min. (-34° C min.)

Hydraulic Hoses: 2,250 psi minimum working pressure (Ref. J517)
Hose assembly should include flush face quick disconnect couplers as recommended by the HTMA*.

CAPACITY

Auger 1-3/8 inch Female Hex Connection
2 to 18 in. Dia. x 42 in. (46 X 107 cm)

WEIGHT & CLEARANCE

Weight: 47 lbs. (21 kg) w/o Torque Anchor Bar
Height: 11.7 inch (30 cm) w/o Auger
Width: 46 inch (119 cm) w/ Handles

* HTMA - Hydraulic Tool Manufacturers Association



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.

Consult your training or safety personnel or supervisor as needed.

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.

Tighten fasteners (often) - Inspect periodically throughout the day under heavy usage.

Keep Label Set clean and legible. Replace decals when necessary . **Part # RL-EA250**



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.

Part # RL-EA250

NOTE: Keep Label Set clean and legible.

Replace decals when necessary.



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.



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



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

WARNING: ALL tool repair and service must be performed by authorized and trained personnel ONLY. Improper maintenance or tampering could result in malfunction causing damage to equipment and/or injury to personnel

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.

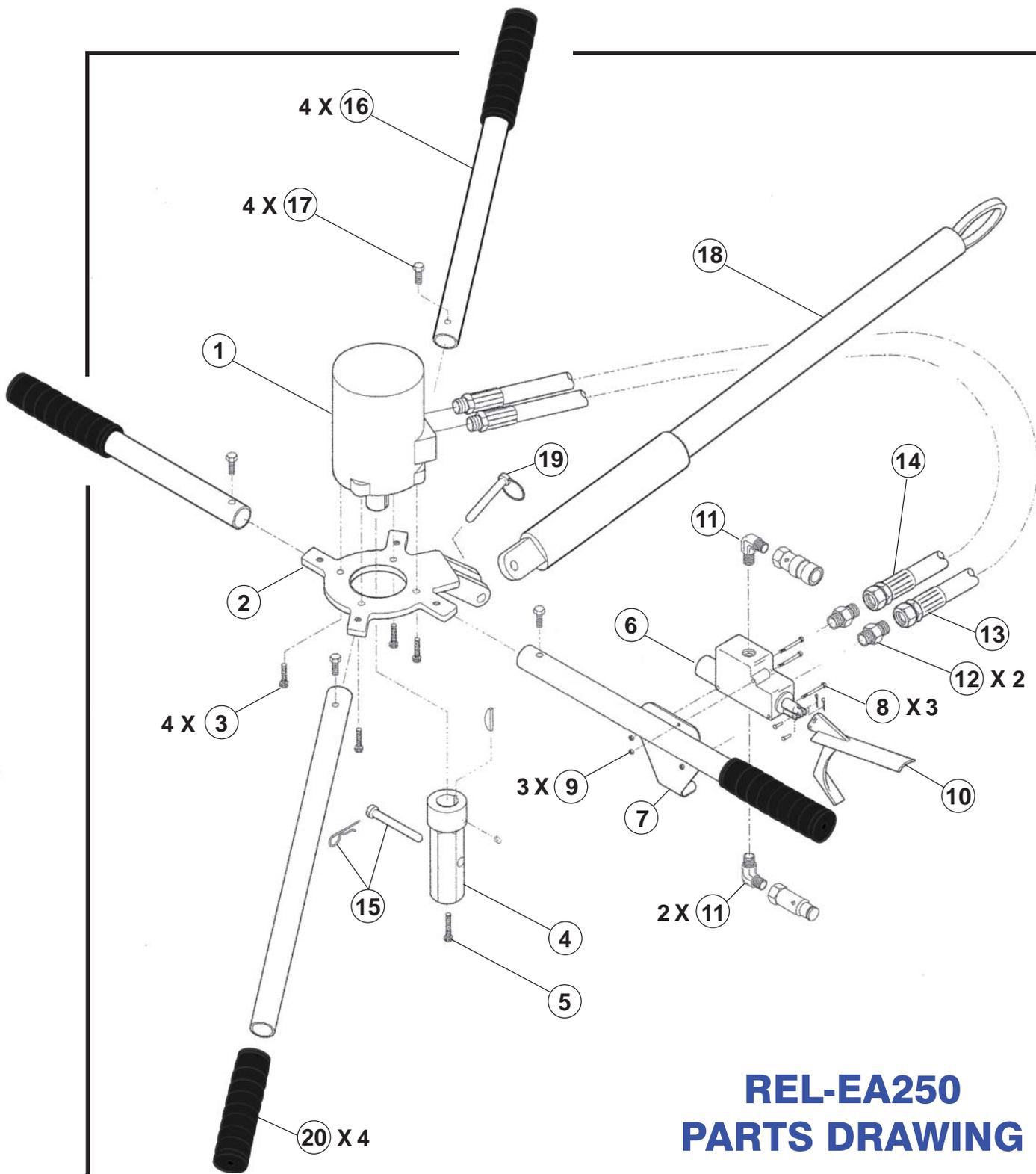
ACCESSORIES

DESCRIPTION	PART #
2 in.Dia x 42 in. OAL (Requires a # RAE1316 Coupler)	RAE02
3 in.Dia x 42 in. OAL (Requires a # RAE1716 Coupler)	RAE03
4 in.Dia x 42 in. OAL	RAE04
6 in.Dia x 42 in. OAL	RAE06
8 in.Dia x 42 in. OAL	RAE08
10 in. Dia x 42 in. OAL	RAE10
12 in. Dia x 42 in. OAL	RAE12
16 in. Dia x 42 in. OAL	RAE16
18 in. Dia x 42 in. OAL	RAE18
DIGGING TOOTH W HARD FACE	RAEDT
2 in.CENTER SCREW BIT, 6-12 IN.	RAECS2
3 in.CENTER SCREW BIT	RAECS3
4 in.CENTER SCREW BIT	RAECS4
13/16 X 1-3/8 in. Hex Coupler for use with RAE02	RAE1316
1-1/8 X 1-3/8 in. Hex Coupler for use with RAE03	RAE1716



RELIABLE EQUIPMENT & SERVICE CO., INC.

301 Ivyland Road, Warminster, PA 18974
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 Visit us on the web at www.Reliable-Equip.com



REL-EA250 PARTS DRAWING

WARNING: ALL tool repair and service must be performed by authorized and trained personnel ONLY. Improper maintenance or tampering could result in malfunction causing damage to equipment and/or injury to personnel

REL-EA250 PARTS LIST

Dwg #	Description	Part #	Qty
1	HYDRAULIC MOTOR	REA01	1
2	BASE	REA02	1
3	CAP SCREW 3/8 X 16	REA03	4
4	COUPLER, AUGER 1-3/8 FEM. HEX	REA06	1
5	CAP SCREW	REA08	1
6	VALVE BODY	REA09	1
7	HANDLE, VALVE MOUNT	REA10	1
8	CAP SCREW 1/4 X 20	REA11	3
9	NUT, NYLOCK	REA12	3
10	TRIGGER	REA13	1
11	ADAPTER, ELBOW 3/4 X 1/2 CRS	REA16	2
12	ADAPTER, HOSE	REA19	2
13	HOSE, LONG 28-1/4 IN.	REA20	1
14	HOSE, SHORT 24-1/8 IN.	REA21	1
15	CLEVIS PIN & COTTER	REA22	1
16	HANDLE 1-3/8 O.D.	REA24	3
17	CAP SCREW 3/8 X 16	REA25	4
18	TORQUE ANCHOR BAR	REA26	1
19	PIN	REA27	1
20	RUBBER GRIP	R36022	4

**IF YOU HAVE QUESTIONS REGARDING PARTS & REPAIR
FOR THIS TOOL CONTACT YOUR RELIABLE SERVICE PROVIDER
OR RELIABLE EQUIPMENT AT 800-966-3530**

USER NOTES

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



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Read Manual



Protective Head Wear



Protective Eye Wear



Protective Clothing



Hearing Protection



Protective Foot Wear



Electrical Shock



Hot Surfaces



Hydraulic Injection