REL-PL-P
Hydraulic Pole Puller

The REL-LP-P will make Pole Pulling with a boom a thing of the PAST. Reduce boom damage and potential for injury related to pole pulling. Simple installation and operation combined with RELIABLE performance will make the REL-PL-P (Pole Puller) a “Must Have Accessory” for pole pulling operations.

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

Quick Disconnect Coupling Set Included
Back Plate Included
2 Person Lift Recommended
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.

A digital copy of this manual is available online at www.Reliable-Equip.com
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REGISTRATION

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW.

COMPANY ........................................................................................................
ADDRESS ......................................................................................................

PHONE _______________________  FAX____________________________________
SERIAL NUMBER _______________________________________________________
DATE OF PURCHASE ___________________________________________________
DEALER NAME __________________________________________________________
REL-PL-P
Hydraulic Pole Puller
Operating Pressure 2,800 psi

Includes:
- Hydraulic Cylinder with Flush Face Coupler Set
- Swivel Chain Hook Assembly
- Chain (1/2” X 6’ Alloy)
- Base Plate
- Back Plate

Optional:
- Pole Puller Pad

The REL-LP-P will make Pole Pulling with a boom a thing of the PAST. Reduce boom damage and potential for injury related to pole pulling. Simple installation and operation combined with RELIABLE performance will make the REL-PL-P (Pole Puller) a “Must Have Accessory” for all of your pole pulling operations.

SPECIFICATIONS
- Operating Pressure: 2,800 psi
- Recommended Flow: 4-8 gpm
- Lift at Max. Pressure: 50,120 lbs.

<table>
<thead>
<tr>
<th>Part</th>
<th>Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Cylinder</td>
<td>57 lbs.</td>
</tr>
<tr>
<td>Base Plate</td>
<td>25 lbs.</td>
</tr>
<tr>
<td>Back Plate</td>
<td>7 lbs.</td>
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<td>Swivel Chain Hook Assy.</td>
<td>36 lbs.</td>
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<td>Chain (1/2” X 6’ Alloy)</td>
<td>15 lbs.</td>
</tr>
<tr>
<td>Pad (optional)</td>
<td>25 lbs.</td>
</tr>
</tbody>
</table>
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 & cloths. Failure to do so can result in serious personal injury.
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.

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 adjust, inspect, or clean any 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.

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.
**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.

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

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 or death.

**UNIT/HOSE CONNECTIONS**

**ALWAYS DISCONNECT** pump/power source and turn the key to the OFF position before connecting or disconnecting any components.

**ALWAYS DEPRESSURIZE** hydraulic system, before connecting or disconnecting any of the systems components.

**ALWAYS TIGHTEN COUPLINGS COMPLETELY**. Loose or improperly connected couplings may 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.

Connect hoses and confirm proper flow direction to & from tool.

**SERIOUS BURN HAZARD**

**HOT SURFACES MAY CAUSE SERIOUS BURN INJURY**

The hydraulic motor 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.

**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**
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 & APPLICABLE PERSONAL SAFETY EQUIPMENT as required by the operating company.

DO NOT USE DERRICK TO PULL OR ASSIST IN THE PULLING OPERATION. The derrick boom is to be used to capture, stabilize, and remove the loosened pole.

ALWAYS INSPECT TOOL for wear or deterioration or damage every day. Worn or damaged parts may cause malfunction of tool or unsafe circumstance.

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

MOVE OUTSIDE DANGER ZONES BEFORE OPERATING.

MAKE SURE THERE IS NO PERSON IN CLOSE PROXIMITY to you, the tool, who could be injured by any operation being performed, tool malfunction, falling or flying debris.

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

USE THIS TOOL FOR THE MANUFACTURERS’ INTENDED PURPOSE ONLY.

OBSERVE CLOSELY ALL SAFETY RULES FOR A PARTICULAR JOB CLASS

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.
HYDRAULIC SYSTEM REQUIREMENTS

Operating Pressure: 1,200-2,800 PSI (70-193 bar)
Max. Relief Setting: 2,800 psi (193 bar)
Lift at Max. Pressure: 50,120 lbs.
Flow Range: 6-8 gpm
Max. Backpressure: 250 psi (17 bar)
Cooling System: Recommended
Min. Filtration: 25 Micron
Sound Pressure <85 dBA @ 1m
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: 2500 psi (175 bar) min. working pressure (Ref. J517) Hose assembly should include flush face quick dis-connect couplers as recommended by the HTMA.

(Hydraulic Tool Manufacturers Association)

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL-PP-50-000K</td>
<td>Hydraulic Cylinder</td>
<td>57 lbs.</td>
</tr>
<tr>
<td>R81519</td>
<td>Base Plate</td>
<td>25 lbs.</td>
</tr>
<tr>
<td>R81532</td>
<td>Back Plate</td>
<td>7 lbs.</td>
</tr>
<tr>
<td>R81533</td>
<td>Swivel Chain Hook Assy.</td>
<td>36 lbs.</td>
</tr>
<tr>
<td>140408006</td>
<td>Chain (1/2” X 6’ Alloy)</td>
<td>15 lbs.</td>
</tr>
<tr>
<td>REL-PL-PAD</td>
<td>Pad (optional)</td>
<td>25 lbs.</td>
</tr>
</tbody>
</table>

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.
**OPERATION**

Do not use this tool under unsafe working conditions or locations. Use this tool only for its intended purpose. Read Entire Manual prior to use of this tool. (Refer to Safety, Notes & warnings) Observe ALL safety precautions & procedures required by the operating company. Follow practices as established by the Utility or Contractor for this operation. Secure the pole with the boom of a derrick truck or appropriate alternative

**WARNING** DO NOT use the derrick to pull or assist in the pulling operation. The derrick boom is to be used to capture, stabilize, and remove the loosened pole.

Place the Pole Puller Base at the base of the pole.

**NOTE:** Use of the optional REL-PL-PAD (Polyethylene Pad) or acceptable alternative is highly recommended to provide a strong, stable surface under soft ground conditions, and to distribute the extreme force of the pulling operation.

**Pad in use:** Place the Pad with the curved section around the pole base. (Fig. 1)

Place the puller Base Plate within the (4) control pegs. (Fig. 2) These pegs will help to prevent the base from moving away from the pole during the operation.

Seat the Cylinder onto the Pivot Rod at the center of the Base Plate with the couplers facing away from the pole. (FIG. 3) Cylinder should pivot.

Lower the Swivel Chain Hook Assembly onto the Cylinder until it sets on the shoulder at the base of the Cylinder. (Fig. 4)

Install Chain through Back Plate. (*Included* with REL-PL-P) (Fig. 5)

Raise Chain Swivel Bar and secure into Support Hook. (Fig. 6)

Install Chain into Chain Seat. (Included with REL-PL-P) (Fig. 7)

Wrap chain around base of pole, with teeth of the Back Plate on the inside (toward the pole) leaving minimal slack and install the chain into the chain seat. (Fig. 8)

**NOTE:** Ensure that the chain has been securely installed into the swivel assembly.

Release the Support Hook from Chain Swivel Bar to increase tension. (Fig. 9)

**WARNING:** Turn OFF hydraulic source and move valve to the OFF position.

Connect appropriate Hydraulic Hose to the tools’ 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:** Select an appropriate pressure & flow for the tool.

**NOTE:** In colder weather allow hydraulic fluid to warm 3-5 min. before operating.

Activate the Control Valve moving the Cylinder to its full extension and stop.

Retract the Cylinder. Ensure that Swivel Hook Assembly retracts with Cylinder.

**NOTE:** You may need tap the Back Plate or Weldment to free the teeth from the pole. If the chain becomes too tight remove a cotter ring from the Chain Swivel Assembly. Repeat the operation adding slack when needed until the pole has been freed.
Pre-Operation On-site Assembly

**Figure 1**
Optional Base Pad provides a strong, stable surface under soft ground conditions, and distributes the extreme force of the pulling

**Figure 2**
Seat Base Plate within the Control Pegs.

**Figure 3**
Install Cylinder onto Pivot Bar in Base Plate. Cylinder should Pivot.

**Figure 4**
Wrap Chain around pole with Teeth of the Back Plate facing pole. Secure the loose end of chain, removing as much slack as possible.

**Figure 5**
Standard Chain is 6 ft. in length. Contact Reliable for lengths up to 9 ft.

**Figure 6**
Secure Chain Swivel Bar into Support Hook.

**Figure 7**
Install supplied Chain into Chain Seat of Swivel Assembly

**Figure 8**
Wrap Chain around pole with Teeth of the Back Plate facing pole. Secure the loose end of chain, removing as much slack as possible.

**Figure 9**
Release Support Hook to increase chain tension.
DAILY MAINTENANCE

**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.

The life, reliability, and safety of the tool is dependent on proper maintenance. Maintenance must be performed by authorized and trained personnel ONLY. Inspect tool for wear or damage. Worn/damaged parts may malfunction during operation. All parts must be replaced with new parts if signs of wear or damage are evident. Inspect the fittings, and hydraulic lines. (i.e. kinks, leaks, dirt, etc.) *Do Not use hands!*
Inspect Hoses. Worn or damaged and aged hoses may malfunction during operation.

Clean and inspect Entire Tool before storage.

**CAUTION:** Visually Inspect for hydraulic leaks, Chain damage, wear or elongation, Weldment bending, cracks, breakage, and/or excessive wear. *Replace as required.*

Inspect and clean hydraulic couplers before and after each use.

If you have any questions regarding the information in this manual please contact RELIABLE EQUIPMENT at the 215-357-3500.

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**EXTREME CAUTIONS SHOULD BE TAKEN TO ENSURE THE SAFETY OF ALL PERSONNEL**

Any attempt to resolve a performance related issue, or to repair a product that is not working as expected in the field, will require knowledge of the tool and the application being performed.

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**WARNING:** 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 damage, 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.
NOTE: Keep Label Set clean and legible. Replace decals when necessary.

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

CAUTION

REL-PL-P
Hydraulic Pole Puller
Operating Pressure 2,800 psi
Includes:
Hydraulic Cylinder
Base Plate
Back Plate
Swivel Chain Hook Assembly
Chain (6 Feet)
Optional:
Pole Puller Pad

RELiable EQUIPMENT
301 Ivyland Road • Warminster, PA 18974
Call: 215-357-3500 Fax: 215-357-9193
On the web at www.Reliable-Equip.com

Contact Parts@Reliable-Equip.com for Labels and Authorized Parts

CAUTION

DANGER

The user should be properly trained in the correct procedures required for work on or around electrical lines.
# REL-PL-P
## HYDRAULIC POLE PULLER

<table>
<thead>
<tr>
<th>#</th>
<th>DESCRIPTION</th>
<th>PART#</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>CYLINDER</td>
<td>R81539</td>
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<tr>
<td>2</td>
<td>BASE PLATE</td>
<td>R81519</td>
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<tr>
<td>3</td>
<td>HOOK WELDMENT</td>
<td>R81537</td>
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<td>4</td>
<td>CHAIN SWIVEL ASSY.</td>
<td>R81530A</td>
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<td>5</td>
<td>BACK PLATE</td>
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<td>6</td>
<td>CHAIN</td>
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<td>PAD (OPTIONAL)</td>
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<td>1</td>
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<td>BASE PLATE</td>
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<td>REL-PP-50-000K</td>
<td>CYLINDER (Includes #2-8)</td>
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<td>2</td>
<td>R81509</td>
<td>CYLINDER TUBE</td>
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<td>R81505</td>
<td>PISTON</td>
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<td>4</td>
<td>R81504</td>
<td>PISTON TUBE</td>
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<td>5</td>
<td>R81510</td>
<td>CYLINDER END RING</td>
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<td>6</td>
<td>R81550</td>
<td>FITTING, NIPPLE 1/2&quot; NPT</td>
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<td>7</td>
<td>R81547</td>
<td>FITTING(M), 90° 1/2&quot; NPT</td>
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<td>8</td>
<td>FF-370-8FP</td>
<td>COUPLER SET (NOT SHOWN)</td>
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<td>81533</td>
<td>HOOK WELDMENT (Incl. #9-11)</td>
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<td>HOOK</td>
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<td>COTTER PIN</td>
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<td>CHAIN SWIVEL ASSY. (#12-16)</td>
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<td>12</td>
<td>81531</td>
<td>SLIDING BLOCK</td>
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<tr>
<td>13</td>
<td>81530</td>
<td>CHAIN SWIVEL BAR</td>
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<tr>
<td>14</td>
<td>81521C</td>
<td>SWIVEL, CHAIN SEAT</td>
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<td>15</td>
<td>81529</td>
<td>CHAIN SWIVEL PIN</td>
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<td>16</td>
<td>81540</td>
<td>COTTER RING</td>
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<td>17</td>
<td>140408006</td>
<td>CHAIN - 6' OF 1/2'ALLOY</td>
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<td>18</td>
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<td>BACK PLATE</td>
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<tr>
<td>19</td>
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<td>SEAL KIT (Includes below)</td>
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<td>SPLIT BACK-UP RING</td>
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</tbody>
</table>

If you have questions regarding parts or assemblies for this tool contact Reliable Equipment at 800-966-3530.
If you have any questions regarding the information in this manual please contact RELIABLE EQUIPMENT at the address, phone or fax numbers shown below.

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