



Tiiger®

OPERATION AND SAFETY MANUAL

The Tiiger® Pole Puller is designed for the removal of wood utility poles and is not intended for any other use. Tiiger will not assume responsibility for injury or damage to equipment resulting from improper applications, use of parts other than manufacturer, or modification to this equipment.

Tiiger® Pole Puller

Part Number	Description
4001D	Pole Puller (Hydraulic Cylinder, Base Plate, Swivel Plate Assembly, 6 foot - 1/2" Chain, Back Plate) <i>(Does not include Pad)</i>
NOTE: The unit is designed to operate with open or closed center lower pressure (300-2800psi) hydraulic pumps.	



Part Number	Additional Component Part Descriptions
HA0040	Pole Puller Pad (Optional)
HA0016	Swivel & Hook Assembly (No chain or back plate)
HA0030	Back Plate - Standard
4041B	Back Plate - Long Tooth
HA0008	Base Plate
HA0015	Hydraulic Cylinder
EF0001	Chain, 1/2" x 6'
KA0003	Flat Face Coupler Kit

Specifications For 4001D Pole Puller

Hydraulic Cylinder	57 lbs.
Base Plate	25 lbs.
Back Plate	7 lbs.
Swivel Chain Hook Assembly	36 lbs
Chain - 6 feet - 1/2" Alloy	15 lbs.
Pole Puller Pad	14 lbs.

Hydraulic System Requirements

Operating Pressure	1200 - 2800 PSI (70-193 bar)	
Max. Relief Setting	2800 PSI (193 bar)	
Life at Maximum Pressure	50,120 lbs.	
Flow Range	4-8 GPM	
Max. Back Pressure	250 PSI (17 BAR)	
Cooling System	RECOMMENDED	
Min. Filtration	25 MICRON	
Sound Pressure	<85DBA @ 1M	
Hydraulic Fluids	All hydraulic fluids that meet these listed specifications or listed htna specifications may be used for this tool.	
Operating Pressure	S.U.S.	
	@100°F (38°C)	140 TO 225
	@210°F (99°C)	40 Min.
	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 htna. Hydraulic tool manufacturers association).	



⚠ WARNING

SAFETY AND OPERATING GUIDELINES

Always follow the safety and operating procedures required by your employer. Consult training staff, safety personnel, or your supervisor if unsure. Before using this tool, read and understand all warnings and recommended practices in this manual. Failure to do so may result in property damage, serious injury, or death. Warnings appear throughout the manual—read and follow each carefully.

OPERATING PROCEDURE

1. Pole that is to be removed must be supported or secured before and during pole pulling operation with derrick boom. **WARNING: DO NOT** use Derrick to pull the pole, it is only to be used to stabilize and remove pole once it have been removed from the dirt.
2. Place optional Pole Puller Pad on ground with curved portion around the pole, pad should not be placed on ground between the pole and the Derrick. Place base plate on pad in between the 4 bushings, these will prevent the unit from sliding while pulling the pole.
3. Place the cylinder upright with curved ram end secured about base plate centering mount. If necessary, rotate the cylinder about the piston so the couplers are pointed away from the pole.
4. Place the swivel plate assembly around the cylinder until it rests on the shoulder at the base of the cylinder.
5. Raise the chain hook swivel bar which supports the chain hook castings until the latch hook locks in place (this could already be in place).
6. Install the chain with minimum slack by attaching to each of the chain hook castings. Then insert the back plate between the pole and chain.
7. Release the latch hook (mentioned in Step# 5), allowing the chain bar to drop into lower lifting position. This creates pre-tension in the chain and secures back plate and chain about the pole.
8. Connect the couplers to the hydraulic hoses from the pump. **CAUTION: DO NOT** exceed 2800 psi
9. Operate the cylinder to maximum extension, secure pole with Derrick, and then retract. To be sure swivel plate is disengaged from pole before retracting, pull the top handle of the black cylinder away from the pole. Be sure to reposition the swivel plate assembly and back plate to complete the next cycle.
10. Repeat Step# 9 until the pole is free enough to remove with derrick, usually 2-3 cycles. During this process add or subtract slack to the chain as needed.

NOTE: If the chain becomes bound (too tight to unhook) pull the clip and remove pin on the chain castings to release chain. **DO NOT** cut chain.

DAILY MAINTENANCE

WARNING

MAINTENANCE MUST BE PERFORMED BY AUTHORIZED AND TRAINED PERSONNEL ONLY.

- The life, reliability, and safety of this tool is dependent on proper maintenance.
- Inspect tool for wear or damage. Worn/damaged parts may malfunction during operation, any parts showing signs of wear or damage must be replaced.
- While wearing appropriate PPE. Inspect the fittings and hydraulic lines for kinks, leaks, or dirt.
- Inspect Hoses. Worn/damage/aged hoses may malfunction during operation, any hoses that don't pass visual inspection should be replaced.
- 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.

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

EXTREME CAUTION 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.

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 wipes 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 with disassembly or installation.

MAINTENANCE AND INSPECTION OF HYDRAULIC CYLINDER (HA0015)

1. Ensure that hydraulic fluid is kept clean in the whole system. There should be no dirt or foreign materials in the fluid.
2. Visually inspect the couplings on the cylinder. Ensure couplings are not bent and free of corrosion, dirt, or foreign materials.
3. Examine the outer steel tubing, ensuring there are no punctures or dents in the wall.
4. Inspect the cylinder rod regularly. The condition of the rod should not be rough or show signs of corrosion, pitting, or uneven wear; any of these could damage seals or allow for leaks.
5. Visually inspect the cylinder rod and surrounding area for leaking hydraulic fluid and/or other contamination.
6. If cylinder shows any signs of damage or leaking seals, as stated above, remove from service for additional internal cylinder inspection.
7. Once ram is removed, inspect the inside of the cylinder barrel, piston, rod, and other polished parts for burrs and scratches. Smooth areas as needed with an emery cloth.
8. Examine all seals for wear, brittleness, or other damage. It is recommended that all seals be replaced whenever the cylinder is disassembled, however the seals may be reused if they are in like new condition.
9. Once cylinder is repaired check for proper operation and if passed, return for field use.

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.

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

HOSES AND FITTINGS there exists the potential for shock in using anything other than certified non-conductive hoses and hydraulic oil 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 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 system 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 if any leakage is evident. Leakage is a sign of deterioration in component parts. **Connect hoses and confirm proper flow direction to and from tool.**

SERIOUS BURN HAZARD - HOT SURFACES MAY CAUSE SERIOUS BURN INJURY. The hydraulic motor may be hot during and after operation.

SKIN IRRITATION Hydraulic oil can cause irritation. Use care to prevent contact with skin in case of accidental contact, wash affected area immediately.

PPE: EYE PROTECTION Always wear eye protection to avoid injury from flying debris or hydraulic oil leaks. Failure to do so can result in serious personal injury.

PPE: FOOT PROTECTION Always wear foot protection. Failure to do so can result in serious personal injury.

PPE: HARD HAT Always wear a hard hat to avoid injury from falling debris. Failure to do so can result in serious personal injury.

PPE: HEARING PROTECTION Always wear hearing protection to avoid hearing loss due to long term exposure to high noise levels.

PPE: PROTECTIVE GLOVES Always wear protective gloves. Failure to do so can result in serious personal 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 while connected to the power source. **DO NOT** adjust, inspect or clean any tool while tool is connected to the power source.

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 might cause dismemberment or loss of life. Seek medical assistance immediately if such an injury should occur. Always wear appropriate ppe, including gloves, eye protection, and all required safety equipment when operating or handling this tool. **DO NOT** use fingers or hands to locate a link. **DO NOT** handle hoses or couplers while system is pressurized. **DO NOT** open or service the system before depressurizing.

WARNING

EXTREME CAUTION 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.

Tiiger does not offer extensive repair parts. Most repairs will comprise of seal replacement (Seal Kit part # LS0010 and can be ordered at 800-860-6170)

MANUFACTURED BY



Tiiger®

Warranty

Tiiger products carry a warranty against any defect in material and workmanship for a period of one year from date of shipment unless failure is due to misuse or improper application.

Jameson shall in no event be responsible or liable for modifications, alterations, misapplications or repairs made to its products by purchaser or others.

This warranty is limited to repair or replacement of the product and does not include reimbursement for shipping or other expenses incurred. Jameson disclaims any other express or implied warranty.