Installation Instructions for 81532 & 81533 Hydraulic Porta-Power Ram Jack Kit 4 & 10 Ton

IMPORTANT!

PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFETY INSTRUCTIONS AND WARNINGS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE TO PROPERTY AND/OR SERIOUS PERSONAL INJURY. PLEASE KEEP THIS INSTRUCTION MANUAL SAFE FOR FUTURE USE.

1. SAFETY INSTRUCTIONS AND WARNINGS

- 1.1 The maximum ram capacity is 4 (10) ton. **DO NOT** exceed this rated capacity.
- 1.2 When extension tubes are used, the rated capacity is always reduced by 50% for each tube connected.
- 1.3 The maximum spreader capacity is 0.5 ton. And maximum ram toe and plunger toe capacity is 0.5 ton (4 ton jack kit) or 0.8 ton (10 ton jack kit). **DO NOT** exceed these rated capacities when using these attachments.
- 1.4 **DO NOT** use this equipment as a vehicle lifting device or as a vehicle support.
- 1.5 Keep children and unauthorized persons away from the work area.
- 1.6 Remove loose clothing. Remove ties, watches, rings and other loose jewelry, and contain long hair.
- 1.7 Always wear ANSI approved safety goggles when operating the repair kit.
- 1.8 Keep proper balance and footing, do not overreach and wear nonslip footwear.
- 1.9 Only use this equipment on a surface that is stable, level, dry and not slippery, and capable of sustaining the load. Keep the surface clean, tidy and free from unrelated materials and ensure that there is adequate lighting.
- 1.10 When using this equipment, open the breather valve (P09). Close it when not in use.
- 1.11 **DO NOT** allow the piston rod (R03) of ram to extend so far as to exceed the maximum ram stroke.
- 1.12 When coupler valves are disconnected, always use dust cap to keep the hydraulic system clean.
- 1.13 **DO NOT** drop any heavy objects onto the hose and **DO NOT** twist the hose. Always keep the hose clean to avoid damage to the hose and couplers.
- 1.14 Keep the equipment away from heat or fire, as this may cause damage or weaken the seals.
- 1.15 DO NOT operate this equipment when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
- 1.16 **DO NOT** allow untrained persons to operate the equipment and **DO NOT** make any modifications to it.
- 1.17 **DO NOT** expose the equipment to rain or any other kind of bad weather.
- 1.18 Use a qualified person to maintain the equipment in good condition. Keep it clean for best and safest performance.
- 1.19 If the equipment is in need of repairing and/or there are any parts that need to be replaced, have it repaired by authorized technicians and only use the replacement parts supplied by the manufacturer.
- 1.20 **WARNING:** The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

2. SPECIFICATIONS

Rated capacity:4 Ton10 TonRump output pressure:56.5MPa63MPaRam min height:267mm322mmStroke:120mm130mmOil being filled:350g500g



3. OPERATING, INSTRUCTIONS

3.1 Connect the hydraulic ram, hose and pump unit together, ensure that you have securely fastened the couplers before pumping.

Warning: Inspect before each use. Do not use if bent, broken, leaking, damaged components or any suspect parts are noted and/or it has been subjected to a shock load

- 3.2 Open the breather valve (P09).
- 3.3 Firmly close the release valve (P15) by turning it clockwise.
- 3.4 Adjust the ram slowly to make the load coaxial with the ram.

NOTE: The pump can be used in any position from horizontal to vertical. Always keep the hose end of the pump downward when it is not horizontal.

- 3.5 Pump the handle (P39) up and down to supply pressure.
- 3.6 When work is done, **SLOWLY** and **CAREFULLY** turn the release valve counterclockwise (never more than one turn) to release the pressure until ram retracts to desired position.
- 3.7 Close the breather valve.

4. MAINTENANCE

- 4.1 When not in use, store the equipment in a dry location with the pump piston (P34) and the ram fully retracted.
- 4.2 Periodically check the ram and pump piston for signs of rust or corrosion. Clean exposed areas with a clean oiled cloth.

Warning: Never use sandpaper or abrasive material on these surfaces!

- 4.3 A coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that pump assemblies move freely. Periodically lubricate the pivot points, axles and hinges with a light lubricating oil as needed.
- 4.4 With ram fully lowered, set pump unit in its normal, level position. Remove the oil filler screw (P07) to check the hydraulic oil level. If it is not adequate add high quality hydraulic jack oil as necessary.

Warning: DO NOT use brake fluid or any other improper fluid and avoid mixing different types of oil when adding hydraulic oil.

4.5 To ensure best performance and longer equipment life, replace the complete hydraulic oil at least once a year. With ram fully lowered, remove the oil filler screw (P07) and drain the oil into a suitable container. Ensure that no dirt gets into the system. Set the pump in its normal level position, fill with approved hydraulic jack oil, then replace the oil filler screw (P07).

Note: Dispose of hydraulic oil in accordance with local regulations.

- 4.6 When equipment efficiency drops, purge away air from hydraulic system: Tum the release valve counterclockwise by 1-1/2 tums, with ram fully retracted and release valve open, pump the handle rapidly for 10-20 times.
- 4.7 It is recommended that an annual inspection be done by qualified technicians.

5. TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Ram won't lift load	Release valve not tightly closed	Firmly close release valve
	Overload condition	Remedy overload condition
	Air trapped in system	Purge away air from system
Ram won't maintain load	Release valve not tightly closed	Firmly close release valve
	Hydraulic unit malfunction	Replace ram and/or pump
Ram won't lower after unloading	Reservoir overfilled	Drain oil to proper level
	Linkages binding	Clean & lubricate moving parts
Ram won't extend to full stroke	Oil level low	Add hydraulic oil
Poor performance	Oil level low	Add hydraulic oil
	Air trapped in system	Purge away air from system



6. PARTS LIST

Part No.	Description	Qty	Part No.	Description	Qty
01	Case	1	10	Rubber head	1
02	Tube	5 (4)	P01	Valve block	1
03	Flat base	1	P02	Oil filter	1
04	Ram toe	1	P03	O-ring	2
05	Plunger toe	1	P04	Reservoir	1
06	Wedge head	1	P05	Tie rod	1
07	V-base	1	P06	Nylon ring	1
08	Male connector	1	P07	Oil filler screw	1
09	Serrated saddle	1	P08	Sealing	1

P09	Breather valve	1	P41	Screw	1
P10	Screw	1	P42	Screw	1
P11	O-ring	4	P43	Spring	1
P12	Pump foot	1	P44	Ball	1
P13	Ball	2	R01	Cover	1
P14	O-ring	1	R02	Circlip	1
P15	Release valve	1	R03	Piston rod	1
P16	Hydraulic hose	1	R04	Circlip	1
P17	Coupler	1	R05	Bushing	1
P18	Hose dust cover	1	R06	Nylon ring	1
P19	Ball	1	R07	Sealing ring	1
P20	Ball cap	1	R08	Circlip	1
P21	Spring	1	R09	Nut	1
P22	Screw	1	R10	Spring	1
P23	O-ring	1	R11	Screw	1
P24	Screw	1	R12	Protection cap	1
P25	Screw protector	1	R13	Ring for ram	1
P26	Screw	1	R14	Cylinder	1
P27	Nylon ring	1	R15	Screw	1
P28	Sealing ring	1	S1	Pin	1
P29	O-ring	1	S2	Circlip	2
P30	Nylon ring	1	S3	Movable jaw	1
P31	Screw	1	S4	Spring	1
P32	O-ring	1	S5	Fixed jaw	1
P33	Nylon ring	1	S6	Piston	1
P34	Piston	1	S7	Cup seal	1
P35	Pin	1	S8	O-ring	1
P36	Retaining ring	2	S9	End cap	1
P37	Pin	1	S10	Coupling ring	2
P38	Handle socket	1	S11	Coupling bolt	2
P39	Handle	1	S12	Dust cap	2
P40	Handle sleeve	1			







