

Operating and Service Instructions for No. B 65 Jack No. B 60 Jack No. B 55 Jack

- OIL VENT SEAL. The vent hole in your Jack has been sealed to prevent the loss of hydraulic fluid during shipping and handling. Before using your Jack, remove the vent screw (59) in the filler plug (20).
- 2. ALWAYS USE a good grade of hydraulic oil containing rust and corrosion inhibitors. No other oil is entirely suitable and many types are definitely injurious. The use of any other oil invalidates the guarantee.
 Shortage of oil in the Jack is indicated by the fact that the Jack will not pump up to its maximum height.
- TO TOP UP WITH OIL. With Jack in lowest position, remove filler plug (20) and fill with hydraulic Jack
 oil. Very little oil should be required. When replacing Plug (20) tighten hard. Care should be taken not to overfill, although any surplus oil will escape through the air vent in Plug (20) when the Jack is released.
- 4. AIR LOCKS. Remove these by turning the handle slightly against the Cam (30) just sufficiently to open the release valve, and pump handle quickly. Air will then escape through the vent in Plug (20).
- SAFETY DEVICE. To prevent accidental manual lowering when under load always engage safety pin in handle bottom if Jack is left supporting load. <u>Better still, use Axle Stands</u>.

TROUBLE SHOOTING

Jack does not rise when handle is pumped.	Examine Oil Level — Top up if necessary. Is handle bearing on Cam? — Screw back. Dirt on Valves — Clean out.
Jack does not lower when handle is screwed down.	Release Cam not actuating Release Spindle - Adjust Lock Nuts on Spindle.
	See that all moving parts are free.
	Broken or fatigued Return Spring - Replace.
See-sawing of Lifting Arm when pumping.	●Foreign matter under Delivery Valve Ball (13) — Clean.
Jack Handle misses half a stroke.	•Oil too thick - Empty and recharge with lighter hydraulic oil.
Handle creeps to upright position when load is being raised	●Foreign matter under Delivery Valve Ball (13) - Clean.
Creeping down under load.	●Air Locks - Expel.
	Foreign matter under Release Spindle (26) or Delivery Ball (13)—Clean. Faulty Cup Leather — Replace.

MAINTENANCE AND ADJUSTMENTS

Periodically clean and oil all moving parts. Grease fittings and oil-holes are provided on: — Handle Base, Lifting Arm Fulcrum, Castor Brackets and all Wheels.

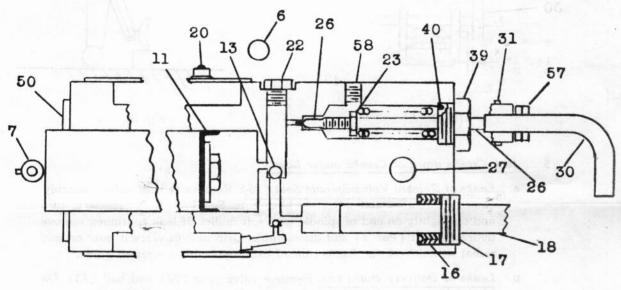
TO REMOVE UNIT FROM CHASSIS. Take off cover plate, remove Cam Lever (30), Plunger Link Pin (19), and remove handle by withdrawing Bott (29). Withdraw Trunnion Stud (27). Unhook Release Springs at handle end of Jack. Remove cotter and washer at Ram Crosshead (7). Complete Hydraulic unit can now be withdrawn and all valves are readily accessible.

TO ADJUST OVERLOAD RELEASE — Take off the cover plate, remove Seal Screw (58), insert a 1/8" dia. steel rod to prevent Release Adjusting Nut (23) from turning. Use a wrench on the Release Lock Nuts (57) to turn the Release Spindle (26). Turn clockwise to increase the pressure. This adjustment should not be used to increase the capacity of the Jack beyond its rated capacity.

SERVICE INSTRUCTIONS FOR HYDRAULIC UNITS



MODELS B 60, B 65 & B 55 SERVICE JACKS



- FIG. 1.
- Removing Unit from Chassis: Take off cover plate, unscrew locking nuts (57) on release spindle. Pull pin (31) and remove cam lever (30). Withdraw trunnion stud (27). Unhook release springs at handle end of jack. Remove cotter and washer at ram crosshead (7). Complete hydraulic unit can now be withdrawn and all valves are readily accessible.
- 2. Adjusting Overload Release: Take off cover plate, remove seal screw (58), insert \(\frac{1}{8}'' \) dia. steel rod to prevent release adjusting nut (23) from turning. Use a wrench on the release lock nuts (57) to turn the release spindle (26). Turn clockwise to increase pressure. This adjustment should not be used to increase the capacity of the jack beyond its rated capacity.
- 3. Oil Leaks at Release Spindle Housing (39): Unscrew locking nuts (57) on release spindle. Pull pin (31) and remove cam lever (30). Unscrew release spindle housing (39) and remove assembly. Install new "O" ring packing (40). Assemble carefully over threads on release spindle to avoid damage to "O" ring. Reassemble and adjust locking nuts (57) to allow 1/32 to 1/16 clearance between cam lever (30) and handle cam lever pin (47). See Fig. 2. Handle of jack must be fully turned in clockwise direction and in lowest position when making this adjustment.
- 4. Oil Leaks at Pump Plunger (18): Position jack on end as shown in Fig. 3. Disassemble the unit partially as directed in Par. 1, allowing the hydraulic unit to pivot on ram crosshead to the position shown in Fig. 3. Unscrew plunger gland (17) and remove plunger (18). Remove plunger gland packing (16). Install new packing (16) very carefully, one unit at a time, slotted washer first groove facing to bottom of hole. Replace and tighten plunger gland (17) very lightly, (finger tight). Plunger should slide in and out freely by hand. DO NOT OVERTIGHTEN as this destroys the sealing power of the packing and causes leaks.

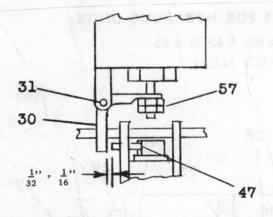


FIG. 2.

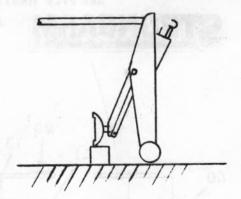


Fig. 3.

5. Jack Creeps down or Creaks under Load:

- a. Leaks at Release Valve Spindle Seat (26): Remove release valve assembly, clean, reassemble and adjust locking nuts. See Par. 3. If necessary, turn and tap lightly on end of spindle with soft mallet. If leak continues, remove hydraulic unit (Par. 1) and disassemble. Grip unit in vertical position and reseat with 17/64 dia. flat bottomed drill used with a screwed guide.
- b. Leaks at Delivery Ball (13): Remove valve plug (22) and ball (13). On Model 65, remove ball crank pin (6). Clean and reseat by tapping lightly with brass rod on ball. If necessary, reseat using 3/8" fine ball burr or 9/32" hand reamer. Inspect ball for damage or flat spots.
- c. Leaks at Ram Cup Leather (11): Remove unit from chassis (Par. 1). Remove gland plate (50) and pull out plunger. Replace leather (11) making sure it is centered on ram.
- 6. Handle Creeps up under Load: Clean delivery ball (13). See Par. 5b.
- 7. <u>Air Locks:</u> Remove air locks by turning the handle slightly against the cam (30) just sufficiently to open the release valve, and pump handle quickly. Air will then escape through the vent in plug (20).



SPARE PARTS FOR No. 65 JACK

Pt. No.	No. 55 JACK	Pt.	. 60 JACK
1	FRONT WHEEL	34	CASTOR FORK
2	PAD		CASTOR PORK
3	CROSSHEAD	36	CASTOR BALLS (set)
4	COMPENSATING STRAPS	10000	CASTOR BACE PLATES
1	c/w studs & nuts (pair)	37	CASTOR WHEEL SPINDLE
5	BELLCRANK LIFTING ARM	38	COVER PLATE
6.	BELLCRANK PIN		FRONT COVER PLATE
7	RAM CROSSHEAD	39	RELEASE SPINDLE HOUSING
8	RAM c/w spiggot, collar	*40	"O" RING PACKING
*11.	RAM CUP LEATHER	41	FRAME ASSEMBLY
*13	DELIVERY VALVE BALL-3/8 Dig.		c/w castor brackets & axle
*14	SUCTION VALVE BALL-3/16 Dig.	42	DRAG LINKS (pair)
15	RETURN SPRINGS (pair)	43	STRAP/CROSSHEAD PIN
*16	PLUNGER GLAND PACKINGS	44	BELLCRANK-CROSSHEAD PIN
17	PLUNGER GLAND	46	CAM LEVER BRACKET
18	PLUNGER	47	HANDLE CAM LEVER PIN
19	PLUNGER LINK PIN	48	HANDLE ECCENTRIC
20	FILLER PLUG WASHER	50	GLAND PLATE
*21	VALVE PLUG PACKING RING	*51	GLAND "O" RING
22	VALVE PLUG	52	CYLINDER & OIL JANK
23	RELEASE ADJUSTING NUT	53	HANDLE RETAINING SCREW
24	MAIN RELEASE SPRING	54	SAFETY PIN & CHAIN
25	OIL SEAL SLEEVE	55	CUP NUT & WASHER
26	RELEASE SPINDLE	56	FRONT WHEEL WASHER
27	TRUNNION STUD & NUT	57	RELEASE LOCK NUT &
29	HANDLE BOTTOM BOLT		WASHER
30	CAM LEVER	58	SEAL SCREW
31	CAM LEVER PIN	59	VENT SCREW
32	HANDLE SOCKET	60	NUT (for 60 only)
33	HANDLE	61	HYDRAULIC UNIT COMPLETE

IMPORTANT

Order by Part Number and Name. State Model No. and Serial No.

