

OPERATING INSTRUCTIONS PARTS LIST

MODEL 1500 MKII TROLLEY JACK



OPERATING INSTRUCTIONS

When this Jack leaves the factory, the air release valve is closed to prevent the oil being spilled when the Jack is in transit. Before using the Jack, remove cover plate by unscrewing two side screws. Unscrew knurled ring (Part No. 1573) until there is a 1/16" gap between knurled ring and hexagon filler plug (Part No. 1572). Replace cover plate and side screws.

To operate, tighten release valve spindle (Part No. 847) by turning in clockwise direction. Place handle in operating lever (Part No. 1561) and move handle up and down. To lower Jack turn release valve spindle, VERY SLOWLY, in anti-clockwise direction.

To manoeuvre Jack into position under a car, place handle in socket which is situated on the right-hand side of the Jack. UNDER NO CIRCUMSTANCES should the Jack be manoeuvred when the handle is in the operating lever, as a side thrust may bend the piston (Part No. 1554).

The operating handle is in two parts. A special rivet is attached to one half and the two half handles should be joined together by knocking the rivet into the holes provided.

The wheels should be occasionally oiled, and a grease gun applied to the two nipples on the lifting arm spindle. A diagrammatic drawing is supplied with each Jack, and all the parts likely to be required for servicing are numbered.

OIL

The oil used in the Jack is specially blended, and is available in 8-fl. oz. plastic bottles. If our oil is not readily obtainable, the equivalent international oil specification is SAE 10.

N.B. To "top up" Jack with oil, first remove filler plug (Part No. 1572) and then take out oil level plug (Part No. 264). The correct oil level is up to the bottom of the thread in the oil level hole (264).

NOTE

When ordering spares, besides quoting the relevant part number, please state serial number of Jack.

SERVICE INSTRUCTIONS FOR TROLLEY JACKS (Model No. 1500 Mk II)

If Jack fails to lift make sure that the release valve (Part No. 847) is tightened in a clockwise direction. Secondly, check that the Jack has sufficient oil. This can be done by unscrewing the oil level plug (Part No. 264). The correct oil level should be up to the bottom of the thread in the filler plug hole. ON NO ACCOUNT REFILL OR TOP UP THE JACK WITH SHOCK ABSORBER OR BRAKE FLUID. Preferably use our specially blended oil which can be purchased in 8-fl. oz. plastic bottles, or if unable to obtain this, transformer or thin machine oil may be used. The equivalent international specification is SAE10

Note: To "top up" Jack with oil, first remove filler plug (Part No. 1572) and then take out oil level plug (Part No. 264). The correct oil level is up to the bottom of the thread in the oil level hole. (264)

Yet another reason for the Jack not working is if it gets "air-locked". To remedy this make sure that the knurled locking ring (Part No. 1573) has been unscrewed to enable the air vent screw (Part No. 1578) to move up and down thus ensuring that air can enter the oil chamber. Then slacken the release valve and pump the handle socket (Part No. 1561) up and down a few times and close the release valve.

If the Jack still does not function, it is probably because a small particle of foreign matter is preventing one of the ball valves from making an oil tight joint on its seating. In this case it will be easier to remove the heart which is a simple operation. First remove the return spring (Part No. 1540), remove three nuts (Part No. 1531) and one front wheel (Part No. 1532). One side can now be removed from the Jack. Then withdraw body anchor bolt (Part No. 1538) which secures the heart to the chassis. The heart is now free and should be turned anti-clockwise until the unit unscrews from the crosshead (Part No. 1516). On later models the crosshead (Part No. 1516) has been incorporated in the ram (Part No. 1602) and it will be necessary to remove circlip (Part No. 1567) and withdraw crosshead pin (Part No. 1539).

Note: The spacing collars should be placed in position on the body anchor bolt so that there is one collar on either side of the body. The side that has been removed can now be reassembled on the three bolts. One washer (Part No. 1536) fits over the front wheel spindle (Part No. 1533) before the wheel is reassembled. All three nuts and washers should be well tightened and the return spring should be reassembled on its two securing studs.

If the ram fails to move the cause of failure is due to the inlet valve (Part No. 267) not making an oil tight joint. To remedy this, remove the sealing plug (Part No. 1586) with a screwdriver, (the sealing plug is a $\frac{1}{2}$ " diameter steel plug situated under the boss in the body casting which fits over the body anchor bolt), and take out the hair spring and ball, and clean the ball seating. This is best done by blowing with compressed air if available. Wipe ball and replace on its seat. To make sure that it is making a proper seating, you require a $\frac{1}{4}$ " diameter punch. This can easily be made by cutting off a piece of $\frac{1}{4}$ " diameter silver steel or mild steel about 3" long. Having inverted the heart (that is base upwards) place the punch on the ball and give the punch a light tap with a small hammer. This will have the effect of reseating the ball on its seat. Next replace the hair spring (smallest diameter touching the ball) and then screw in the sealing plug and well tighten.

If you commence pumping and the ram lifts a short distance and sinks back to its original position when the handle is again lifted this indicates that the non-return valve at the bottom of the ram cylinder is not seating. To remedy this fault it is necessary to partly disassemble the Jack. Before commencing to disassemble the Jack, remove filler plug (Part No. 1572) and empty oil into a clean vessel. Then remove top nut (Part No. 1502) and oil chamber (Part No. 1528) and withdraw ram assembly. It is now possible to undo the ram cylinder (Part No. 1526) by using chain grips. At the bottom of the ram cylinder there is a gauze filter (Part No. 1527). This must be carefully removed and if damaged a new one fitted. Now remove the $\frac{1}{4}$ " diameter ball and blow out with a compressed air gun. Next wipe ball and replace and reseat by using the same punch as described above. Replace copper and gauze washers, screw in ram cylinder and well tighten.

Note: One end of the ram cylinder has the thread turned away, this is the end to be screwed into the base. Replace oil chamber with fibre washers top and bottom and well tighten the top nut.

If oil leaks past the piston (Part No. 1554) it generally indicates that a new piston seal is required. To remove piston, take off circlip (Part No. 1563) and withdraw pivot pin (Part No. 1562). The lever will now swing out of the way enabling the piston to be withdrawn from the sleeve. If the piston sleeve (Part No. 830) has to be removed it is important to replace piston gauze filter (Part No. 485).

Front Wheel Assembly—The front wheels (Part No. 1532) are fitted with roller bearings. Each wheel has 25 rollers (Part No. 1534).

Castor Wheel Assembly—Each castor is fitted with eighteen $\frac{1}{4}$ " diameter ball bearings (Part No. 267). To adjust the castor, slacken lock nut (Part No. M216) and adjust, with a screwdriver, bolt (Part No. 1568). Having adjusted the castor so that it rotates freely without side play, tighten lock nut (Part No. M216).

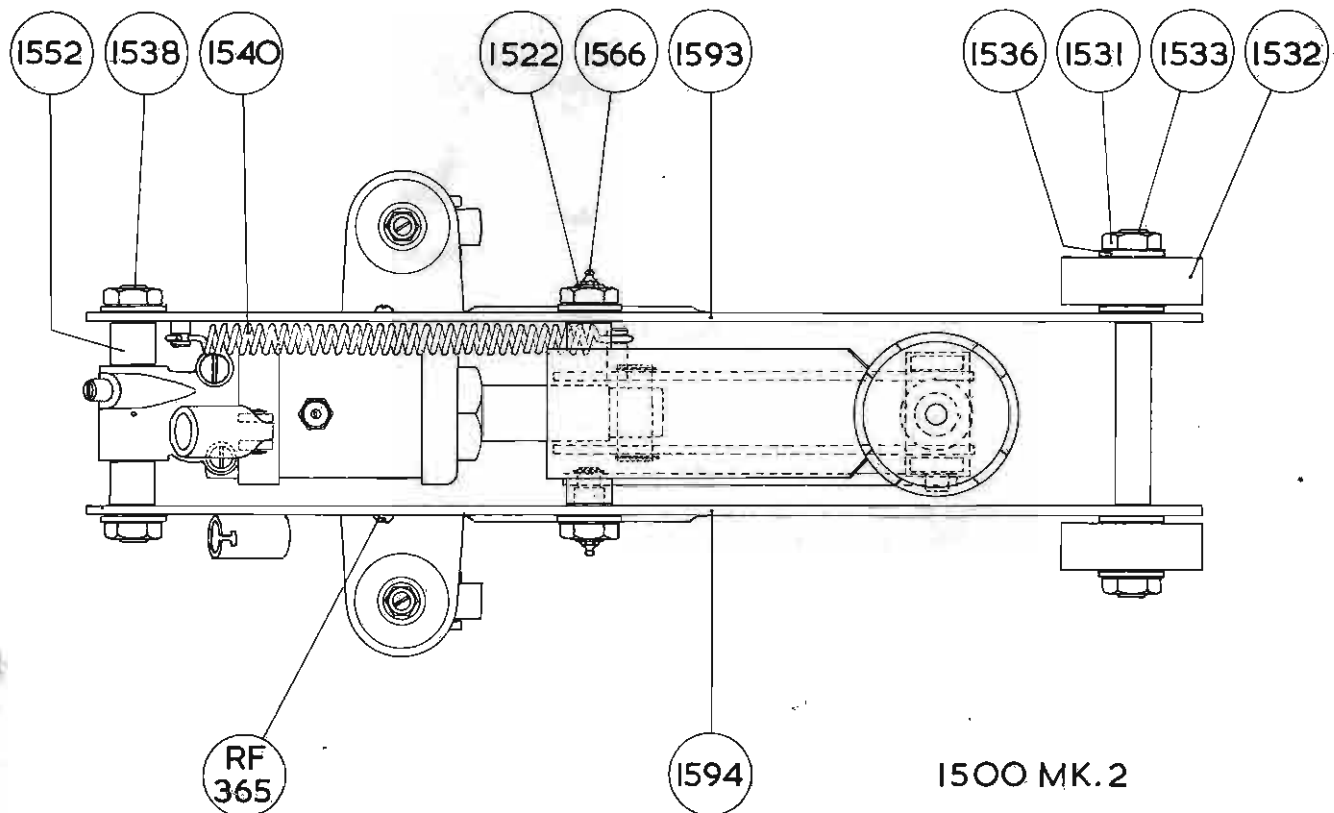
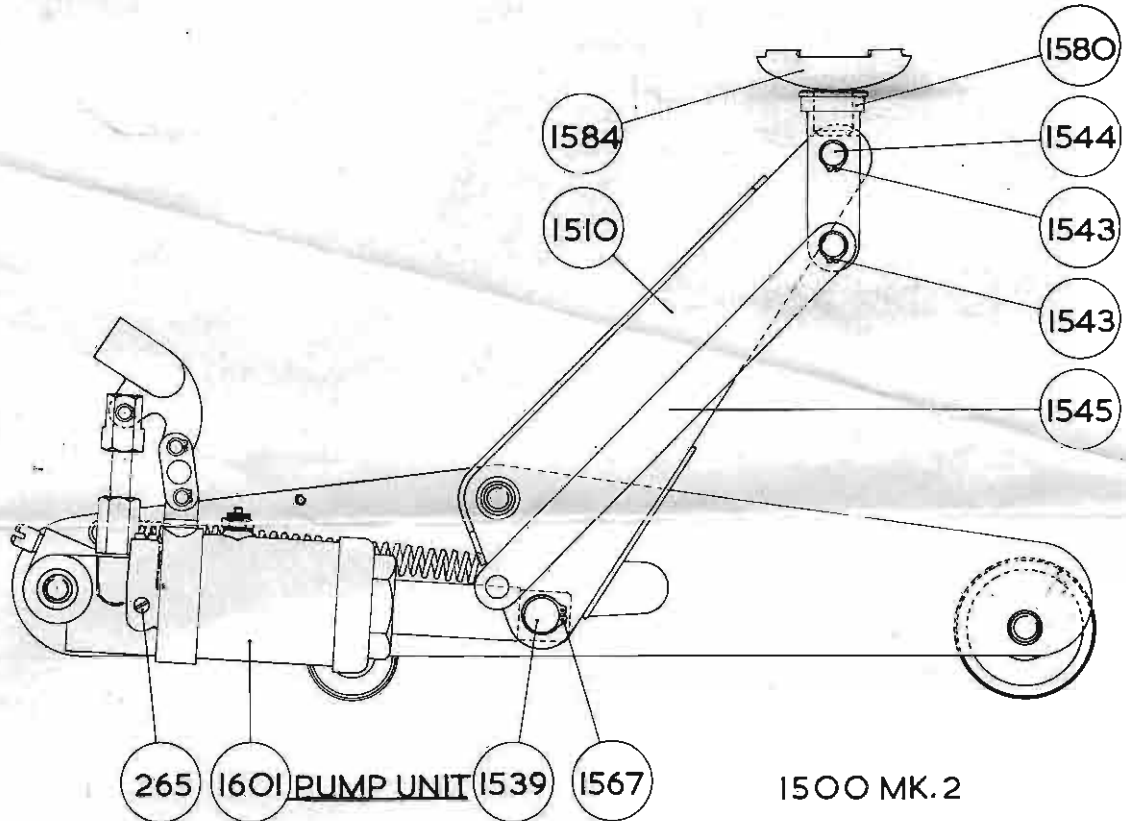
Service Kits—These are available and comprise the necessary washers and seals that would be required for a general overhaul of the heart. Should any other parts be required please refer to the sectional drawing and quote the appropriate part number and serial number of the Jack when ordering.

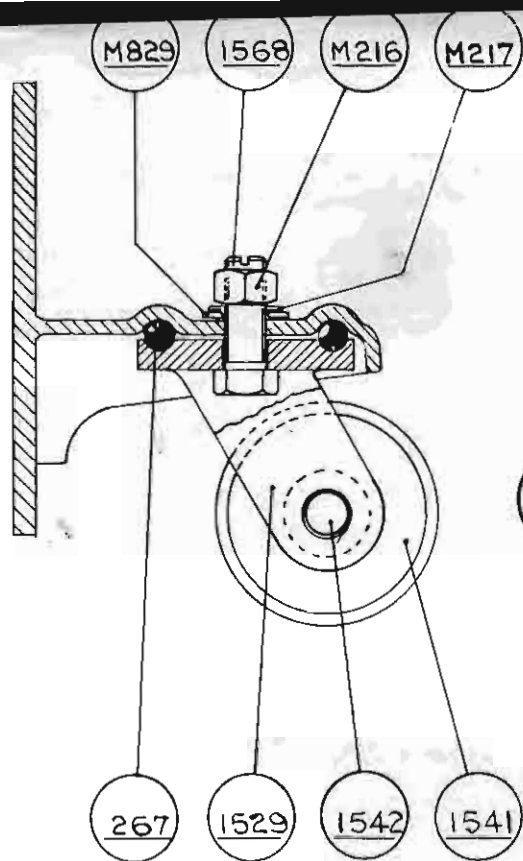
SPECIFICATION OF MODEL 1500 Mk II TROLLEY JACK

1510	LIFTING ARM ASSEMBLY	1550	Name Plate
1522	Lifting Arm Spindle	1551	Cover Plate
1529	CASTOR FORK ASSEMBLY, 2 off	1552	Spacing Collar, 2 off
1531	16 mm Nut, 6 off	1558	Knurled Handle
1532	Front Wheel, 2 off	1559	Front End Handle
1533	Front Spindle	1560	$\frac{3}{16}$ " x 1" Bissell Pin
1534	Spacing Bush for Front Wheel, 2 off	1566	Grease nipple, 2 off
1536	Plain Washer, 8 off	1567	$\frac{3}{4}$ " diameter Circlip, 2 off
1537	Rollers for Front Wheel, 50 off	1568	Bolt for Castor Fork, 2 off
1538	Body Anchor Bolt	1569	Box
1539	Cross Head Pin	1580	CRUTCH MOUNTING BRACKET ASSEMBLY
1540	Return Spring	1584	SWIVELLING CRUTCH ASSEMBLY
1541	Castor Wheel, 2 off	RF365	$\frac{1}{4}$ " BSF Screw, 2 off
1542	Spindle for Castor, 2 off	M216	$\frac{3}{8}$ " UNF Nut, 2 off
1543	$\frac{1}{2}$ " diameter Circlip, 4 off	M217	$\frac{3}{8}$ " Shake Proof Washer, 2 off
1544	Spindle for Crutch	M829	Steel Washer, 2 off
1545	Crutch Radius Link	267	$\frac{1}{4}$ " Ball, 36 off
1593	LEFT HAND SIDE MEMBER ASSEMBLY	1601	PUMP ASSEMBLY
1594	RIGHT HAND SIDE MEMBER ASSEMBLY		

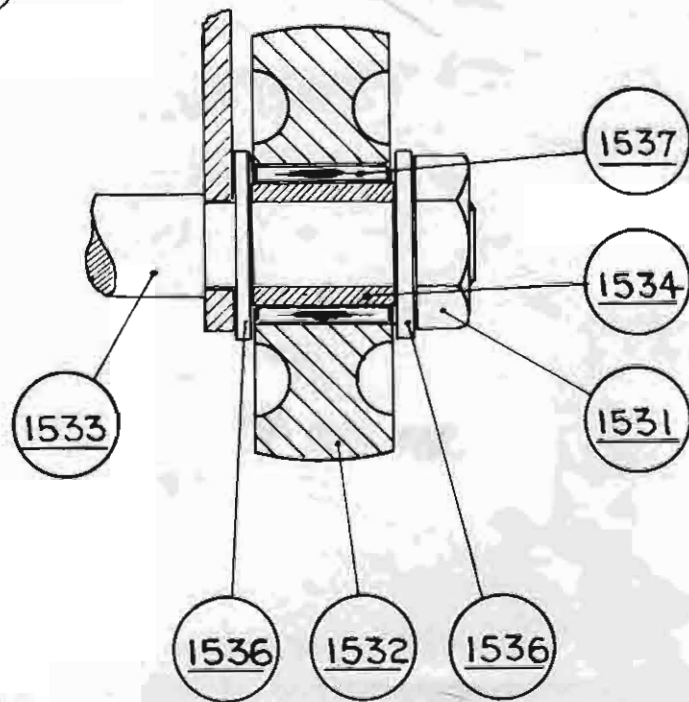
SPECIFICATION OF MODEL 1500 Mk II HYDRAULIC PUMP UNIT (Part No. 1601)

256	Sealing Plug Washer, 2 off	1528	Oil Chamber
264	Oil Level Plug	1554	Piston
265	2BA Side Screw	1555	Pivot Pin for Lever Link, 2 off
267	$\frac{1}{4}$ " Ball, 3 off	1556	Oil Chamber Fibre Washer, 2 off
281	Hair Spring	1561	Lever
282	Filler Plug Washer, 2 off	1562	Pivot Pin for Piston
485	Piston Gauze	1563	Circlip for Pivot Pin, 6 off
821	LEVER LINK ASSEMBLY	1564	Ram Sealing Ring
830	Piston Sleeve	1571	$\frac{3}{16}$ " o.d. O-ring
842	$\frac{7}{16}$ " sq. sect. O-ring	1572	Filter Plug
847	Release Valve Spindle	1573	Locking Ring
880	$\frac{3}{4}$ " o.d. Fibre Washer,	1578	2BA Screw
1502	Top Nut	1586	Sealing Plug, 2 off
1504	Eye Bolt	1589	Release Valve Distance Piece
1518	Collar for Cup Washer	1597	Body
1519	Cup Washer	1598	Overload Spring
1520	1" o.d. x 10g Washer	1599	Spring Plunger
1521	Bolt for Cup Washer	1602	Solid Ram
1526	Ram Cylinder	1625	$\frac{3}{16}$ " o.d. O-ring
1527	Gauze Washer		





1500 MK.2



MODEL 1500

