

DUNLOP

TYRE SERVICE EQUIPMENT

The Dunlop Company Limited desires that purchasers of Dunlop Tyre Service Equipment shall obtain the utmost satisfaction from its use. Attention is called to the operating instructions enclosed, but should any difficulty arise please communicate with your local Dunlop Depot.

IMPORTANT

To enable The Dunlop Company Limited to provide after-sales service you are asked to complete the perforated card and return it at your earliest convenience.

We acknowledge receipt of the undermentioned
Tyre Service Equipment purchased through:—

.....
.....
AIR COMPRESSOR

Type..... Pump Serial No.....

Voltage

AIR METER

Type

GARAGE JACK

Type..... Serial No.....
 LS/150

WHEEL BALANCING MACHINE

Type..... Serial No.....

TYRE REMOVER

Type..... Serial No.....

OTHER TYRE SERVICE EQUIPMENT

.....
.....
Name.....

Address.....
.....

Operating and Servicing Instructions for DUNLOP No. LJ 150 GARAGE JACK Mark II

1. For convenience of handling, etc., the Jack is despatched, partially dismantled and contained in a stout pack. To put the Jack into service, these **HANDLE ASSEMBLY INSTRUCTIONS** should be carefully followed—
 - (a.) Remove spring clip (67) from handle tube (68).
 - (b.) Assemble two halves of handle (66) and (68) with two small holes at centre in-line, and lock together using spring clip (67).
 - (c.) Lift spring catch (73) and fit grooved end of handle (66/68) into handle base (72). Rotate handle until it engages with release valve boss (71), then allow spring catch (73) to return.
 - (d.) Rotate handle through a small angle to ensure that release valve is operating. Lightly turn handle fully in clockwise direction until resistance is felt. Release will now be closed and jack is ready for testing and subsequent use.

GENERAL OPERATING INSTRUCTIONS

1. Airlocks are often unavoidably created by the jostling received whilst the Jack is in transit and it is essential that **BEFORE PUTTING THE JACK INTO OPERATION THE FOLLOWING PROCEDURE IS CARRIED OUT—**
 - (a.) REMOVE AIR VENT PLUG FROM THE HOLE IN COVER PLATE (1) AND DISCARD
 - (b.) Rotate operating handle (66/68) anti-clockwise approximately $\frac{1}{4}$ turn and allow lifting arm (3) to lower. With handle (66/68) in approximate horizontal position pump for a short while. Any air trapped in the unit will be expelled via the release valve (72).
 - (c.) Check that oil level is approximately $\frac{1}{2}$ " below level of filler plug (37) with lifting arm lowered.
2. This is an Arc Lift Jack and care should be taken when lifting to ensure that the castor wheels are in line with lifting arm, so enabling the Jack to move under the load, otherwise the lifting pad is liable to slip or put an undue strain on the part being lifted.
3. **Safety Devices.** To prevent accidental lowering of Jack under load — lift spring catch (73) and raise operating handle (66/68) approximately $\frac{1}{4}$ turn, release catch (73) into 'safety groove' and release valve (71) cannot now be operated. An integral relief valve is built into the Jack to prevent overloading.
Car stands should be always used for greater safety.
4. **Lowering the Load.** Remembering the heavy load being dealt with, care should be taken not to lower too quickly. Carefully turn handle (66/68) in anti-clockwise direction to lower load under perfect control.
5. **The correct amount of oil** must be maintained in the oil box. To check level, lower Jack fully, remove oil filler plug and fill with oil to $\frac{1}{2}$ " under filler plug hole and replace plug.

IMPORTANT—HYDRAULIC BRAKE FLUID, OR OIL WITH AN ALCOHOLIC CONTENT MUST NOT BE USED as it may prove disastrous to the sealing arrangements of the Jack. The use of any other than **Petrol, Castrolite, Universal Grease, Single Shot, Grease's Hydraulic Oil, Excludes 20/30 or Vacuum Grease** renders our guarantee null and void.

6. **Regular attention** should be given to your jacks. Periodically clean and lubricate all moving parts, inspect oil box, external joints, nuts, etc. Dirt and grit are the common enemies of hydraulic operated equipment.

MAINTENANCE AND ADJUSTMENTS

1. **Chassis**—Grease nipples are provided for lubrication of the castor bracket spindles and oil holes in lifting arm bosses, front wheels, etc., require periodical attention.
2. **Hydraulic Unit**—A Service Unit Exchange System is in operation—details on request.
3. **To remove Hydraulic Unit from Chassis**—commence with lifting arm in lowest position. Lift handle catch (73) and remove handle (66/68). Take off cover plate (1) turn the Jack over on one side so that the filler plug is uppermost. Remove return spring (2) and ram securing pin (85) in that order. Manually raise lifting arm to clear the outer cylinder, unscrew trunnion retaining screw (51), tap out trunnion pin complete (49), and unit may now be removed from underside of chassis. Replace unit using reverse procedure.

Removal of Valves and Seals for cleaning, inspection or replacement

Delivery and Suction Valve—Unscrew hexagon plug (45) and the delivery valve ball ($\frac{3}{8}$ " dia.) (47) will be seen immediately below. After removing this the suction valve ball ($\frac{1}{2}$ " dia.) (48) will be seen. Remove these, clean and inspect both valves and seatings, renew valve balls if necessary and replace plug (45).

Release Valve (71)—Unscrew and remove valve assembly. Clean and inspect 'O' seal (70) and valve seat and seating. Renew if necessary and replace.

Note: Release valve assembly may be removed through handle base (72) after handle (66/68) is withdrawn.

Overload Valve (26/28)—It is not advisable to dismantle this valve as special equipment is required for adjusting and setting the maximum Jack loading.

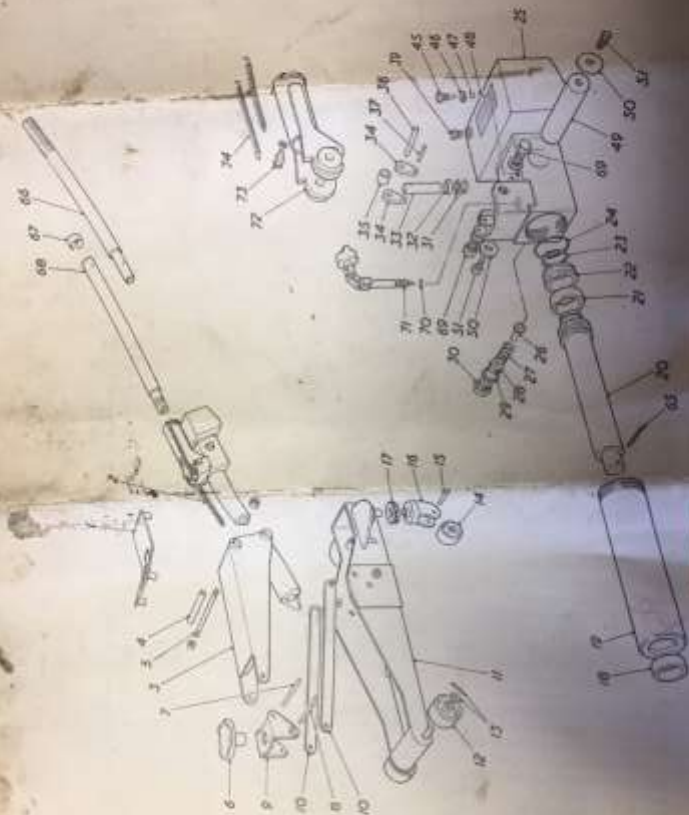
Ram Seal and Wear Rings—Unscrew pressure cylinder (19) and ram may be tapped out from open end. Clean cylinder and ram, inspect ram seal (22) and renew if required after first removing the end circlip (23). Inspect both ram and cylinder wear rings (21 and 18) and renew if required. Reassemble using reverse procedure, being careful to ensure that 'O' seal (14) is correctly positioned before screwing in cylinder.

Plunger Seal and Scraper Rings—With handle base (72) in upright position—unhook and remove springs (74), tap out pin (75) to clear release assembly and unscrew handle pivot bolts (69). Plunger (33) may now be removed from unit together with handle base. Clean and inspect the scraper ring (32) and plunger seal (31). If replacement is required, the old seals may be hooked out of their grooves using pointed instrument. Note position of seal backing washer before removing.

LIST OF PARTS FOR No. LJ 150 JACK MARK II

ITEM No.	DESCRIPTION	PRICE EACH £ s. d.
1	Cover Plate	3 0
2	Return Spring	3 9
3	Lifting Arm Assembly	5 2 0
4	Lifting Arm Sleeve	1 0
5	Lifting Arm Bolt c/w Nuts	6 6
6	Crutch	16 1
7	Crosshead — Lifting Arm Pin	1 9
8	Crosshead Strap Pin	3 5
9	Crosshead	16 6
10	Compensating Straps c/w Studs and Nuts (Pair)	11 6
11	Main Frame c/w Castor Brackets and Axle	5 18 9
12	Front Wheel	4 8
13	Wheel — Washer and Pin	1 1
14	Castor Wheel	5 0
15	Castor Wheel Spindle	1 3
16	Castor Fork	9 8
17	Castor Thrust Race c/w Balls (1 set)	5 5
18	Cylinder Wear Ring	1 4
19	Inner Cylinder	15 0
20	Ram	15 9
21	Ram Wear Ring	1 4
22	Ram Seal	9 4
23	O-ring	4
24	Cylinder Seal	1 7
25	Pump Block	4 13 6
26	Relief Valve	1 1
27	Relief Valve Spring	10
28	Relief Valve Collar	1 7
29	Sealing Washer	4
30	Relief Valve Plug	3 5
31	Punger Seal	4 4
32	Scraper Ring	2 6
33	Punger	4 0
34	Punger Link	4
35	Punger Roller	2 0
36	Handle Link Pin	9
37	Punger Pin	9
38	Filler Plug	3 0
39	Valve Plug	3 3
40	Sealing Washer	4
41	Delivery Valve	2
42	Summer Valve	3
43	Trunion Pin	4 3
44	Trunion Pin Washer	1 3
45	Trunion Pin Screw	4
46	Ram Securing Pin	3
47	Jack Handle (Upper half)	1 2 6
48	Spring Clip	1 6
49	Jack Handle (Lower half)	1 12 6
50	Handle Pivot Screw and Washer	3 6
51	Release Spindle Seal	3 1
52	Release Valve Assembly	1 7 6
53	Handle Base	1 15 0
54	Handle Catch Assembly	4 6
55	Handle Base Spring	2 4

Please quote model and serial number when ordering spares.



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