



OPERATING INSTRUCTIONS & PARTS LIST

1-1/2 to 20-TON

HYDRAULIC JACKS

FORM
5S1170B

DAYTON ELECTRIC MANUFACTURING CO. CHICAGO, ILLINOIS 60648

PROPER USE

April 1972

1. Center the cap under the load.
2. Whenever possible have the jack lift in a perpendicular position. Lifting at an angle will place an excessive side strain on the ram.

3. Do not push the load off the jack.
4. CAUTION: To avoid possible accident and possible personal injury, always use jack stand or other proper device to support load or vehicle before working under equipment.

OPERATING INSTRUCTIONS

A. TO OPERATE

1. Open release valve by engaging the slotted end of the handle with the head of the release screw, turning screw to left and pump handle several times. This will eliminate any airbound condition that may have occurred during shipment.
2. Close release valve by turning to right.
3. Insert handle in handle socket and operate the pump.

B. IF JACK WILL NOT OPERATE

1. Release valve may be open -- turn to right to close.
2. No oil in reservoir -- with jack in closed position, place in upright position and add Hydraulic Jack Oil through filler plug until oil is level with filler hole. DO NOT USE ALCOHOL, GLYCERINE, BRAKE FLUID, THICK OR DIRTY OIL.
3. Intake and pressure valves may be held open by foreign matter. Use operating instructions A-1.
4. Jack will not operate on side. Jack may have been placed on wrong side. The side to which the handle socket is attached must be down for proper horizontal operation.
5. Too much oil in reservoir may cause a vacuum bound jack. The oil should be brought to the level of the filler plug.

C. IF JACK WILL RAISE TO LOAD BUT WILL NOT LIFT IT

1. Release screw may be closed tight enough to raise ram, but not closed tight enough to lift load. Check by turning to right (clockwise direction).
2. Ram may be at maximum extended height. Shim jack up to gain added height.

MAINTENANCE INSTRUCTIONS

1. IMPORTANT -- refill only with Hydraulic Jack Oil. Never use a substitute; substitutes such as brake fluid, glycerine, alcohol, drain oil, etc., will harm jack parts and void the guarantee.
2. Use every precaution to prevent entrance of dirt when refilling jack.

LUBRICATION INSTRUCTIONS

1. Oil all moving parts periodically.

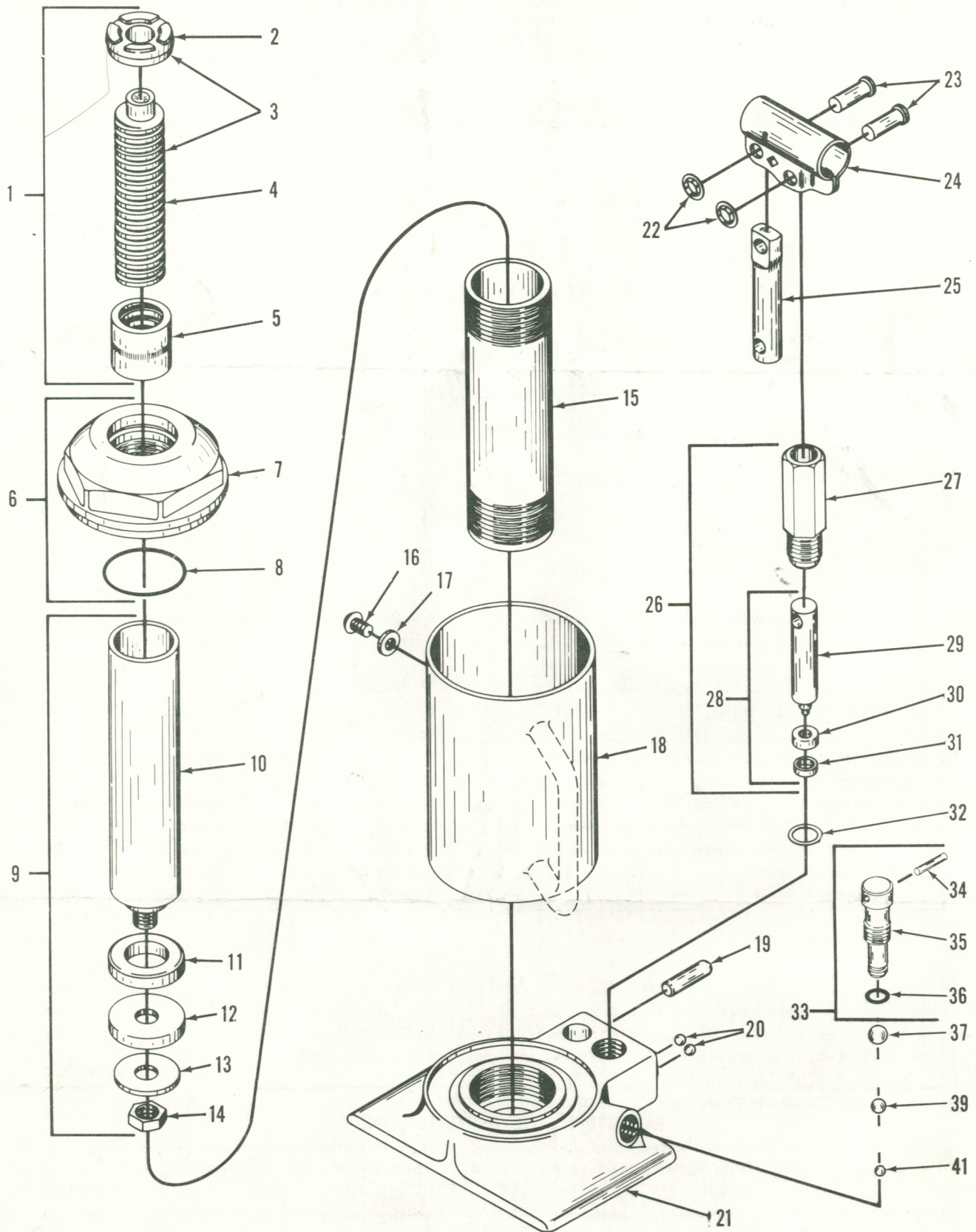
3. Ram cup may have become injured or porous, allowing oil to pass it.
4. Air under ram. When there is a quantity of air under the ram, the ram will raise until it hits the load, then it will stay there until there has been sufficient number of pump strokes to compress this air to the proper pressure to lift the load. If this happens, turn jack upside down with ram extended, open release screw and close jack ram completely. This will cause air to return to oil reservoir.
5. Sticky valves. Empty all oil from reservoir and refill with gasoline or naphtha. Flush as recommended in operating instructions A-1. Then fill with new Hydraulic Jack Oil.

D. IF JACK WILL NOT HOLD LOAD

1. Release valve may not be tight enough. Turn valve to right.
2. Ram cup may have become injured, allowing oil to pass it.
3. Ball valves may not be seated properly. Flush off as described in operating instructions A-1. The construction of this jack makes the ball valves readily accessible for cleaning. Remove release screw. Remove ball valves by tipping the jack forward and catching these parts in the hand or a container. Place jack on back side with label up to avoid loss of oil. After washing ball valves in kerosene, assemble in reverse order, inserting smallest size first, then middle size, and largest size last. Replace ball if flat spots or pitted surfaces are found.

3. Store in upright position in a dry place.
4. When stored, the ram should be lowered completely. The pump piston should be in lowest position and the release valve should be closed.

2. Grease should be used on exposed parts if jacks are constantly used under wet conditions.



ITEM NO.	NAME OF PART	1-1/2 TON 2Z238	3 TON 2Z169	5 TON 2Z170	8 TON 2Z171	12 TON 2Z194	20 TON 2Z195
1	Extension Screw Assembly	19-12042	4-50644	SA-2428	19-11899	19-11879	
2	Ram Head			D-2404A	D-2604A	D-2804A	10-11757
3	Extension Screw & Head	10-11906	2-50642				
4	Extension Screw			D-2428	10-11784	10-11801	
5	Extension Screw Bushing	D-2233	D-2233	D-2433	D-2633	D-2933	
6	Reservoir Head Assembly	19-11874	4-50516	4-50561	4-50563	4-50564	4-50565
7	Reservoir Head	10-11768	2-50421	2-50426	2-50430	2-50431	2-50432
8	"O" Ring*	D-2099-17	D-2099-17	D-2099-22	D-2099-25	D-2097-1	D-2097-3
9	Ram Assembly	SA-2205A	4-50517	SA-2405	19-11897	SA-2805	19-11903
10	Ram	D-2205A	2-50412	D-2405	10-11783	D-2805	10-11779
11	Ram Spacer	D-2235B	D-2235B	D-2435A	D-2635A	D-2835A	D-3035A
12	Ram Cup*	D-2234A	D-2234A	D-2434A	D-2634A	D-2834A	D-3034A
12A	Back Up Washer**	D-2240	D-2240				
13	Ram Cup Retainer	D-2236A	D-2236A	D-2436	D-2636	D-2836	D-3036
14	Ram Cup Nut	D-2237	D-2237	D-2237	D-2637	D-2637	D-2637
15	Ram Cylinder	D-2213	2-50411	D-2413	10-11782	D-2813	10-11802
16	Filler Screw*	D-2001	D-2001	D-2001	D-2001	D-2001	D-2001
17	Filler Screw Washer*	D-2015	D-2015	D-2015	D-2015	D-2015	D-2015
18	Reservoir	D-2223	10-11774	10-11775	10-11776	19-11823	19-11822
19	Link Pin	D-2248A	D-2848A	D-2848A	D-2848A	D-2848A	D-3248
20	Valve Ball 7/32 Dia. (2)	D-2074	D-2074	D-2074	D-2074	D-2074	D-2074
21	Base	10-11762	2-50422	2-50425	10-11765	10-11766	10-11767
22	Pushnut 5/16 (2) *	10-11758	10-11758	10-11758	10-11758	10-11758	10-11758
23	Hdle. Socket Link Pin (2) *	CH-1028	CH-1028	CH-1028	CH-1028	CH-1028	CH-1028
24	Handle Socket	10-11756	10-11755	10-11755	10-11755	10-11755	10-11755
25	Piston Link	10-11785	D-2547	D-2547	D-2547	D-2547	D-2547
26	Pump Assembly	4-50518	4-50518	4-50518	4-50518	4-50518	4-50518
27	Pump Cylinder	2-50423	2-50423	2-50423	2-50423	2-50423	2-50423
28	Piston Assembly*	4-50519	4-50519	4-50519	4-50519	4-50519	4-50519
29	Pump Piston	2-50513	2-50513	2-50513	2-50513	2-50513	2-50513
30	Piston Cup	10-11760	10-11760	10-11760	10-11760	10-11760	10-11760
31	Piston Cup Retainer	10-11761	10-11761	10-11761	10-11761	10-11761	10-11761
32	Piston Cylinder Washer*	D-2027	D-2027	D-2027	D-2027	D-2027	D-2027
33	Release Screw Assembly	4-50514	4-50514	4-50514	4-50514	4-50514	4-50514
34	Release Screw Pin	D-2051	D-2051	D-2051	D-2051	D-2051	D-2051
35	Release Screw	2-50418	2-50418	2-50418	2-50418	2-50418	2-50418
36	"O" Ring 5/16x7/16*	D-2099-6	D-2099-6	D-2099-6	D-2099-6	D-2099-6	D-2099-6
37	Valve Ball 13/32 Dia. *	D-2075	D-2075	D-2075	D-2075	D-2075	D-2075
39	Valve Ball 5/16 Dia. *	D-2070	D-2070	D-2070	D-2070	D-2070	D-2070
41	Valve Ball 7/32 Dia. *	D-2074	D-2074	D-2074	D-2074	D-2074	D-2074
	Label	2-50541	2-50542	2-50543	2-50544	2-50545	2-50546
	Repair Kit	5-577	5-577	5-578	5-579	5-580	5-583

* Denotes items in Repair Kit

** Not illustrated

LIMITED WARRANTY

Dayton Hydraulic Jacks are warranted against defects in workmanship or materials under normal use (rental service excluded) for 90 days from date of purchase to the original owner. Liability in all events is limited to the purchase price paid and liability under the aforesaid warranty is limited to replacing or repairing any part or parts which are defective in materials or workmanship and returned to our factory or Authorized Service Station, shipping costs prepaid.

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