

TM 9-4910-710-14&P

TECHNICAL MANUAL

OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT
AND GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS LIST

FOR

TRUCK LIFT, WHEEL
MODEL 80-G
(HEIN-WERNER CORP.)
(NSN 4910-00-554-5983)

HEADQUARTERS, DEPARTMENT OF THE ARMY

APRIL 1981

WARNINGS

1. Do not use hydraulic brake fluid. Use only hydraulic fluid MIL-H-6083.
2. Model 80-G Wheel Dolly is NOT designed to lift vehicle, and must be used to lift only the wheel assembly.
3. Lift vehicle with appropriate lifting device, and support vehicle with safety stands (trestles, motor vehicle) before starting work, inspection, or getting under the vehicle for any reason.

CAUTIONS

1. Do not load wheel dolly beyond its rated capacity.
2. Use on hard level surfaces only.
3. Always center load on carriage assembly.

FAILURE TO HEED THESE WARNINGS AND CAUTIONS MAY RESULT IN LOSS OF LOAD, DAMAGE TO EQUIPMENT AND/OR FAILURE RESULTING IN PERSONAL INJURY OR PROPERTY DAMAGE.

Technical Manual }
No. 9-4910-710-14&P }

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 30 April 1981

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and General Support Maintenance Manual
Including Repair Parts List
For
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(NSN 4910-00-554-5983)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL.61299. A reply will be furnished directly to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this truck wheel lift is issued.

Manufactured by: Hein-Werner Corp.
1200 National Ave.
Waukesha, WI 53187

Procured under Contract No. DAAA09-79-C-4062

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number - 28047
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number - Model 80-G
- 5 - Manufacturer's Serial Number (End Item)
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

(a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 28047 followed by a colon and manufacturer's Part Number for the repair part.

(b) Complete Remarks field as follows:
Noun: (nomenclature of repair part)
For: NSN: 4910-00-554-5983
Manufacturer: Hein-Werner Corp.

Model: 80-G
Serial: (of end item)

Any other pertinent information such as Frame Number, Type, Dimensions, etc.

INTRODUCTION

The model 80-G wheel dolly is a lifting device designed to facilitate the removal and installation of heavy dual or single wheel assemblies on such vehicles as trucks and buses. A hydraulic jack raises the carriage assembly of the wheel dolly up to the wheel after the vehicle has been raised and properly supported. A large adjusting screw located above the rear caster provides exact tilt positioning of wheels. The lift arms roll on oilite bearings to make wheel rotation effortless. Complete maneuverability of the wheel dolly is provided by large rubber tired casters.

DIMENSIONAL DATA

Capacity	1500 lbs.	Lifting roller length	30"
Hydraulic lift	5 1/2"	Lifting arm spread	24"
Extension screw adjustment	1 3/4"	Caster diameter	4"
Chassis height	29 3/4"	Net weight	150 lbs.
Chassis width	37 1/2"	Wheel diameter range	9.00 x 16
Chassis length	39 3/4"		to 14.00 X 24

LUBRICATION INSTRUCTIONS

1. Keep wheel dolly clean and well lubricated. Every part of this wheel dolly has been accurately machined and assembled, but frequent lubrication is necessary.
2. Lubricate carriage rollers, lift arm rollers, casters and caster wheels regularly with SAE 30 weight motor oil or equivalent.

OPERATING INSTRUCTIONS



1. DO NOT USE HYDRAULIC BRAKE FLUID. USE ONLY HYDRAULIC FLUID MIL-H-6083.
2. MODEL 80-G WHEEL DOLLY IS NOT DESIGNED TO LIFT VEHICLE, AND MUST BE USED TO LIFT ONLY THE WHEEL ASSEMBLY.
3. LIFT VEHICLE WITH APPROPRIATE LIFTING DEVICE, AND SUPPORT VEHICLE WITH SAFETY STANDS (TRESTLES, MOTOR VEHICLE) BEFORE STARTING WORK, INSPECTION, OR GETTING UNDER VEHICLE FOR ANY REASON.

CAUTION

1. DO NOT LOAD WHEEL DOLLY BEYOND ITS RATED CAPACITY.
2. USE ON HARD LEVEL SURFACES ONLY.
3. ALWAYS CENTER LOAD ON CARRIAGE ASSEMBLY.

FAILURE TO HEED THESE WARNINGS AND CAUTIONS MAY RESULT IN LOSS OF LOAD, DAMAGE TO EQUIPMENT AND/OR FAILURE RESULTING IN PERSONAL INJURY OR PROPERTY DAMAGE

TO REMOVE WHEEL

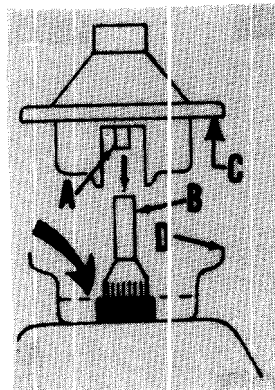
1. Lift vehicle until wheel clears the floor, and support vehicle with safety stands (trestles, motor vehicle). Do not lift vehicle with wheel dolly.
2. Place wheel dolly in position with lifting arms straddling the underside of the tire.
3. Close release valves and pump handle to raise carriage assembly until it just contacts the tire.
4. Adjust adjusting screw above rear caster to align lifting arms parallel to axle or spindle.
5. Place chain around tire and fasten securely.
6. Pump handle until weight of tire is on lifting arms.
7. Pull dolly and wheel away from vehicle and lower carriage by slowly turning release valve counterclockwise.

TO REPLACE WHEEL

1. Secure wheel to carriage assembly with chain provided.
2. Position wheel dolly under vehicle and raise wheel to appropriate height.
3. Adjust adjusting screw above rear caster to align wheel with spindle or axle.

1. Preparation for Use and Installation Instructions.

a. **DAMPENING OIL:** Remove the chrome balancer head out of the dampener basin and fill the basin to the top of the step on the center post with SAE 20 (MIL-L-2104) motor oil, approx. 6 fluid ounces. Replace the head . . . be sure that pivot post A fits into tube B and flange C rests on rim of dampener basin D. This oil has no lubricating value. It will not wear out nor will it need to be changed. The oil is an oscillation dampener to stabilize the balancer without interfering with specified sensitivity or accuracy.



b. Required Setup Procedure: To be performed at time of installation and whenever Balancer is moved.

(1) Place a tire and wheel assembly on the Balancer (make sure that the foot pedal is in the "OFF" position).

(2) Using the leveling legs, CENTER the bubble on the CROSS HAIRS.

(3) Turn the Balancer on, using the foot pedal.

(4) Balance the tire and wheel assembly.

(5) Rotate the tire and wheel assembly $\frac{1}{2}$ turn WITHOUT LIFTING IT FROM THE BALANCER (to ensure that the Head remains engaged).

(6) IF the bubble has moved from dead center, use the leveling legs to bring it HALF-WAY back from dead center.

The unit is now ready for use.

2. General Theory of Operation.

a. Static and dynamic unbalance result from an uneven distribution of weight. To correct static and dynamic unbalance you must first locate the heavy area, then counterbalance. This resolves itself to a simple weighing procedure. The degree of accuracy to which you can balance depends entirely upon the accuracy of the weighing device, in this case, the wheel balancer. This is precisely what your wheel balancer is -- a sensitive and accurate weighing device.

Its operation meets the following specifications:

release screw for scratches and damage. If old release screw is reinstalled in the jack, it is recommended that new packing be used. New release screws are shipped complete with packing.

II. JACK LOWERS UNDER LOAD

1. Be sure release valve is closed.
2. Release valve may need cleaning or replacement. Refer to instruction 6, Section I.
3. Valves may not be closing. Refer to instruction 4, Section I.
4. Ram cup may be worn. If the ram (6) lowers under load, it is an indication of oil leaking past a worn, damaged, or defective ram cup (8). Check the condition of the ram cup by removing the top nut (4) and extracting the ram (6) from the cylinder (11). While the ram is removed from the cylinder, the cylinder should be checked for scoring or any other damage.

Before reassembly, remove old shellac from top of reservoir tube (5). Top of reservoir tube should then be brushed with shellac, and top nut (4) installed securely.

III. JACK WILL NOT LIFT FULL CAPACITY

1. Ram cup may be worn. Refer to instruction 4, Section II.
2. Pump valves may not be closing. Refer to instruction 4, Section I.

IV. REFILLING INSTRUCTIONS

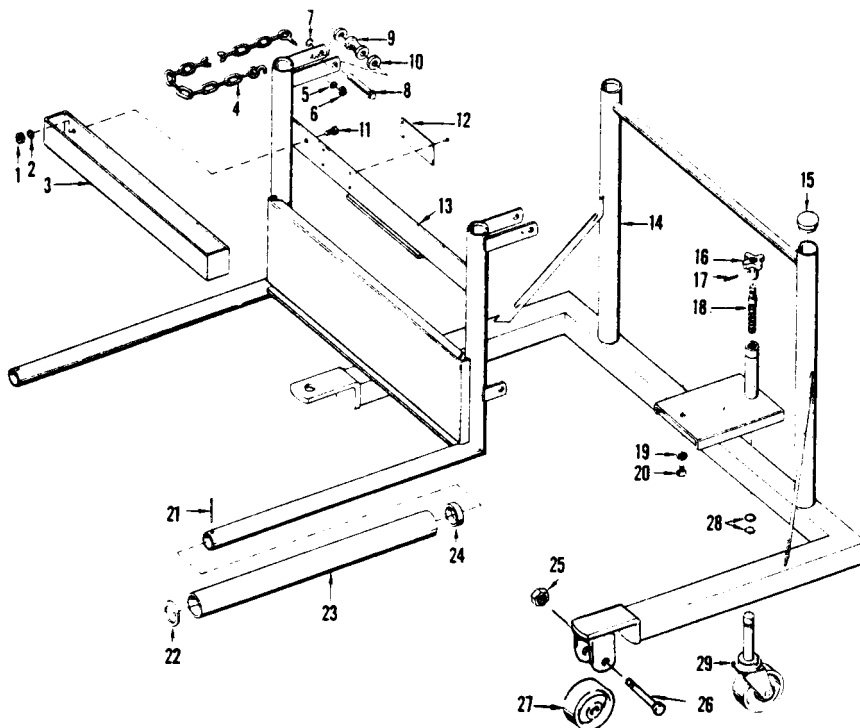
1. Jack should always be filled with oil to filler hole level. Filler hole is located on reservoir tube approximately 2/3 the way up the tube. Oil level should be checked with the ram fully retracted and the jack standing in the upright position. Make sure no dirt or other foreign matter enters the reservoir while checking oil level and refilling.

MODEL 80 - G

HYDRAULIC WHEEL DOLLY REPAIR PARTS LIST

FRAME ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
	64198	Decal - Warning	15	64206	Hole Plugs (4)
1	25445	1/4-20 Reg. Hex Nuts (2)	16	21540	Knob
2	25790	Shakeproof Lockwashers (2)	17	25965	3/16x1 Roll Pin
3	48044	Tool Box	18	48045	Adjusting Screw
4	64199	Chain	19	1915	Shakeproof Lockwashers (2)
5	1915	Shakeproof Lockwashers	20	26376	5/16-24x3/4 Hex Hd. Cap Screws (2)
6	26495	5/16-18 Reg. Hex Nuts (2)	21	25924	1/8x2-1/4 Cotter Pins (2)
7	21747	Retaining Rings (8)	22	48075	Sleeve Retaining Washers (2)
8	48072	Roller Axles (4)	23	64194	Wheel Roller Sleeves (2)
9	48067	Rollers (4)	24	48076	Wheel Roller Sleeve Bearings (4)
10	63187	Oilite Bearings (8)	25	64267	Axle Nut (2)
11	25466	1/4-20x3/4 Hex Hd. Cap Screw (2)	26	64266	Axle (2)
12	64197	Nameplate Decal	27	64268	Wheel (2)
13	80513	Carriage Assembly	28	47481	Spirolox Retaining Rings
14	64190	Base Assembly	29	48049	Caster

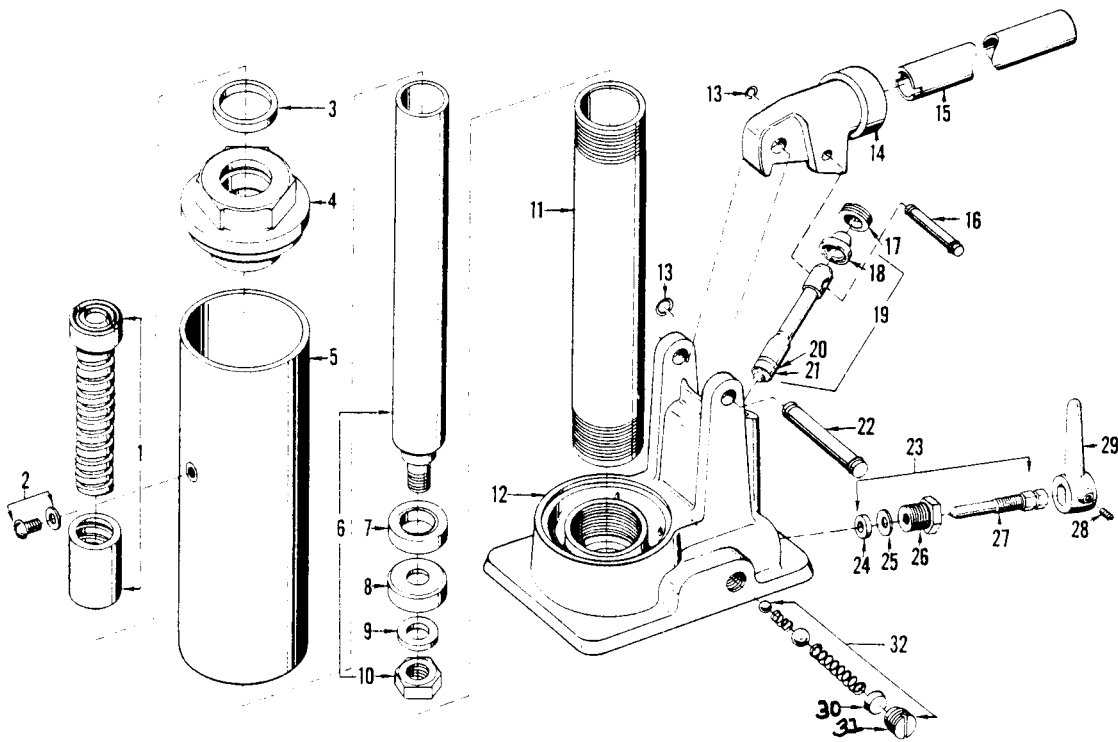


USE PART NUMBER ONLY WHEN ORDERING PARTS

JACK ASSEMBLY FOR MODEL 80-G

TM 9-4910-710-14&P

ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
	8240	Extension Screw Assembly	18	60621	Wiper
2	25620	Filler Screw W/139-3 Washer	19	61179	Piston Assembly
3	20625	Quad Ring	20	5945	Backup Washer
4	60205	Top Nut	21	3910	U-Cup
5	60207	Reservoir Tube	22	10860	Pin
6	8180	Ram Assembly	23	7826	Release Screw Assembly
	1720	Spacer	24	4520	Packing (2 req'd)
8	2525	Cup	25	6230	Washer
9	1970	Retainer	26	1290	Nut
10	26270	3/8-24 Jam Nut	27	1483	Release Screw Only
11	970	Cylinder	28	26793	3/16x1/4 Cone Point Set Screw
12	60392	Base	29	6667	Handle
13	12415	Pin Ring (2 req'd)	30	11520	Seal
14	62434	Handle Socket	31	11855	Plug
15	3491	Handle	32	80127	Pump Valve Complete
16	60287	Pin	33	64187	Complete Hydraulic Unit
17	60559	Packing Nut			



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By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

J. C. PENNINGTON
Major General, United States Army
The Adjutant General

Distribution:

To be distributed in accordance with Special List.

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PUBLICATION DATE

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for Truck Wheel Lift-Model 80-G

BE EXACT. PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
13	V.3		

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Says to refer to Section II, instruction 3. Should be Section III, instruction 3.

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

JOHN SMITH SP/4 XXX-XXXX

SIGN HERE:

John Smith

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