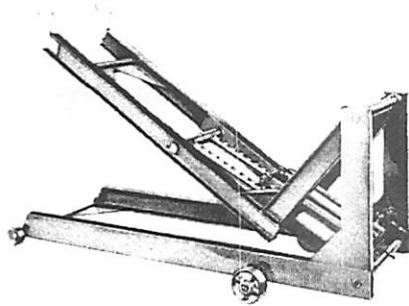


**INSTRUCTION MANUAL
REPAIR PARTS LIST**



WARRANTY

OPERATION

MAINTENANCE

TROUBLESHOOTING

LIMITED WARRANTY

Hein-Werner warrants its jacks and component parts to be free from defects in materials and workmanship for a period of 90 days from the date of purchase. Any jack or component part proved to Hein-Werner's satisfaction to be defective during that 90-day period will be repaired or replaced, at Hein-Werner's option, if returned to the nearest Hein-Werner official service station, transportation charges prepaid. A full and complete explanation of the complaint, and proof of purchase date, must accompany the jack. Hein-Werner's sole obligation and your exclusive remedy under this warranty is limited to such repair or replacement.

Limitations. This warranty does not apply to jacks or component parts subjected to negligence, accident, damage by circumstances beyond Hein-Werner's control, improper operation, maintenance or storage, or to commercial use or other than normal application, use or service.

HEIN-WERNER SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THE 90-DAY EXPRESS WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

HEIN-WERNER CORPORATION
1005 PERKINS AVENUE
WAUKESHA, WISCONSIN 53186

INTRODUCTION

Certain in-shop maintenance procedures should be performed to assure continued efficient operation of this equipment. Simple maintenance procedures can add many years of life to your jack, as well as provide top performance during this time. Specific maintenance information is discussed within this Instruction Manual.

Should any adjustments beyond simple maintenance be required, we recommend that you contact the Factory Authorized Service Depot nearest you.

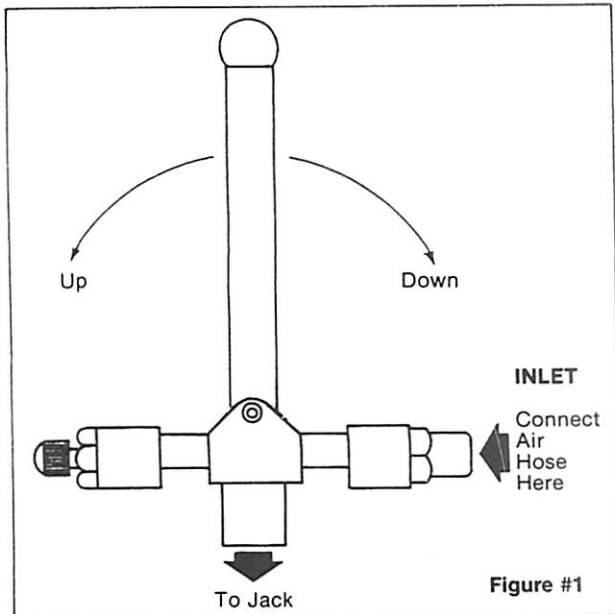
This equipment complies with OSHA Standards, where applicable.

CAREFULLY READ AND FOLLOW THE INSTRUCTIONS OUTLINED IN THIS MANUAL

OPERATING INSTRUCTIONS

BEFORE USING THE JACK

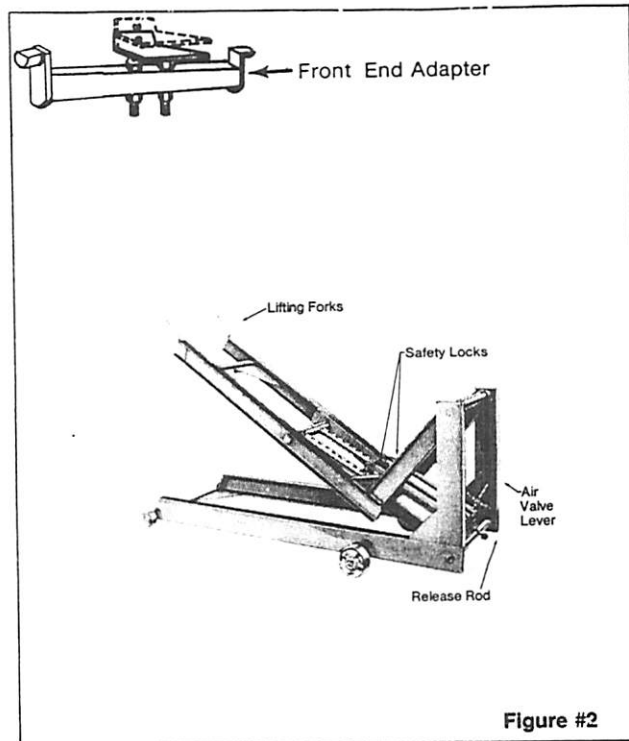
1. Assemble air valve to nipple at top of cylinder with air valve inlet toward the operator (see Figure #1.)



2. TO RAISE JACK, connect an air hose to the air valve and move the valve lever to the "up" position (push lever away from you). The speed of raise is controlled by the degree of lever movement and the restraining action of the hydraulic damper mounted below the cylinders. It is normal for the lifting frame to coast upward a small amount after the air valve is released (when jack is unloaded). With a little practice the coast will not interfere with the accurate positioning of the lifting forks.
3. TO LOWER JACK, move the valve lever to the "down" position (toward you) while simultaneously pushing the release rod forward (see Figure #2) to disengage the safety locks.

If the safety locks are difficult to disengage, admit more air to raise jack slightly. This action removes the load from the locks, which can then be easily disengaged from the rams.

Raise and lower the jack unloaded several times to get the feel of the controls before raising a vehicle.



TO LIFT A VEHICLE

1. Release the vehicle's brakes and put transmission in neutral so that the vehicle is free to roll toward the jack during the lift.
2. Align the jack with the center of the car and position the lifting forks (see Figure #2) under the axle or frame crossmember.

When raising the front end of cars without crossmembers suitable for engaging the lifting forks, use the Front End Adapter provided (see Figure #2). Place the Adapter in the lifting forks with the raised lip of the adapter forward, as shown in Figure #2. (The Adapter top plate can be raised or lowered as necessary to accommodate differences in the suspension systems of various cars.) Position the top plate under the frame to which the control arms are attached. Then carefully raise the jack until light contact is made and the lip is behind the crossmember. Then, pull the jack toward you until the lip "snags" the back side of the crossmember.

After making certain that the jack has a good grip on the vehicle, proceed with lift by opening the air valve the appropriate degree until the vehicle is at the desired height.

CAUTION: When raising the vehicle from either end, care must be taken that the opposite end does not suffer damage from ground contact. Adequate working height is obtained before reaching this point.

3. AFTER RAISING THE VEHICLE. ALWAYS SUPPORT IT WITH JACK STANDS BEFORE WORKING ON THE VEHICLE OR GETTING UNDER IT FOR ANY REASON. THE JACK SHOULD BE USED ONLY TO RAISE AND LOWER THE VEHICLE, NOT TO SUPPORT IT DURING REPAIRS.

MAINTENANCE INSTRUCTIONS

1. The cylinders were lubricated with water-resistant grease at the factory and will not usually require any further lubrication. However, it is recommended that a water separator be used in the air supply line to avoid dumping damaging raw water into the cylinders.
2. Lubricate the front wheels frequently with a medium or heavy-weight oil.

3. Occasionally, grease the rear wheels and the two large cross pins through the grease fittings provided.
4. The Hydraulic damper should be kept filled to the proper level. To fill, remove the damper from the jack and hold it in an upright position with the piston rod resting on the floor and retracted fully into the cylinder. In this position fill the cylinder up to the level of the filler hole. Use only 10W40 Motor Oil.

			TROUBLESHOOTING CHECKLIST
Jack Will Not Lift Load	Jack Will Not Lower	Jack Is Very Bouncy	
X			Air pressure might not be sufficient, (140 psi is needed).
		X	The cylinders might need lubrication. Remove the short air hose joining the two cylinders and add STP through the two elbows.
X			The safety locks might be engaged. Admit air until the jack raises slightly, then disengage the locks.

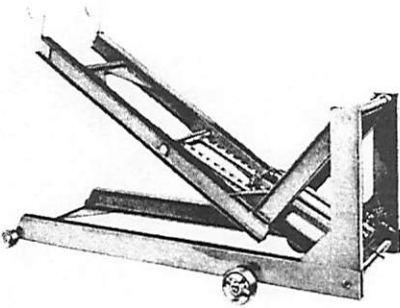
IF THE ABOVE PROCEDURES DO NOT CORRECT THE PROBLEM, CONTACT YOUR NEAREST SERVICE DEPOT. WHEN SUBMITTING ANY JACK OR EQUIPMENT TO BE REPAIRED, BE SURE TO STATE THE NATURE OF THE PROBLEM AND INDICATE WHETHER AN ESTIMATE OF THE REPAIR COST IS NEEDED.

Capacity (lbs.)	Low Pickup Height		High Lifting Point		Power Raise	Distance Between Lifting Hooks	Max. Reach	Chassis Length	Chassis Height	Max. Width	Min. psi for Rated Load	Shipping Weight (lbs.)
	w/Adapter	w/o Adapter	w/Adapter	w/o Adapter								
3500	6"	7½"	55"	53½"	47½"	19½"	66¼"	80¼"	35"	35"	145	570

FOR YOUR SAFETY - USE JACK STANDS TO SUPPORT VEHICLE BEFORE GETTING UNDER IT.
Save these instructions for future reference.

**CAPACITY 1¾ TON
AIR-OPERATED ONE-END LIFT**

Jack Parts Sheet



**Date of
Manufacture Code**
A letter indicating month
(¼" high). 2 numbers giving
day of the month and 1
number showing last number
of decade.

Code No.	Part No.	Description	No. Required
1	228112	Air Valve	1
2	223965	Air Hose - Cyl.	1
3	223964	Elbow - Cyl. Air Hose	2
4	226318	Grease Fitting	4
5	225999	Knob - Safety Release	1
7	223967	Shaft - Cyl. Pivot	2
8	223575	"U" Cup - Piston	2
9	223960	Piston	2
10	223619	Pin - Piston	2
11	220018	Retaining Ring - Piston Ring	2
12	223969	Wheel - Rear	2
13	221788	Washer - Rear Wheels	4
14	204465	Cotter Pin - Front & Rear Wheels	4
15	209970	Lockwasher - Cyl. to Cyl. Cap	8
16	212688	Screw - Cyl. to Cyl. Cap	8
17	204582	Cotter Pin - Lifting Frame Shaft	2
18	223968	Shaft - Lifting Frame	1
19	223982	Side Frame Assy. - L.H.	1
20	226614	Front Wheel	2
21	204324	Washer - Front Wheels	4
22	226006	Adapter Assy. - Front End	1
23	223980	Axle - Front	1
24	223981	Side Frame Assy. - R.H.	1
25	223970	Lift Assy.	1
26	225852	Ram & Sleeve Assy.	2
27	225850	Safety Dog Handle	1
28	225849	Safety Dog	2
29	204426	Cotter Pin - Safety Dog	4
30	224011	Pin - Safety Dog	1
31	225649	Cylinder Cap	2
32	223991	Cylinder & Sleeve Assy. (Two cylinders in one welded Assy.)	1
	224923	Logo Label	
	226430	Instruction Plate	
	227384	Caution & Instruction Plate	

