



Air Operated End Lift

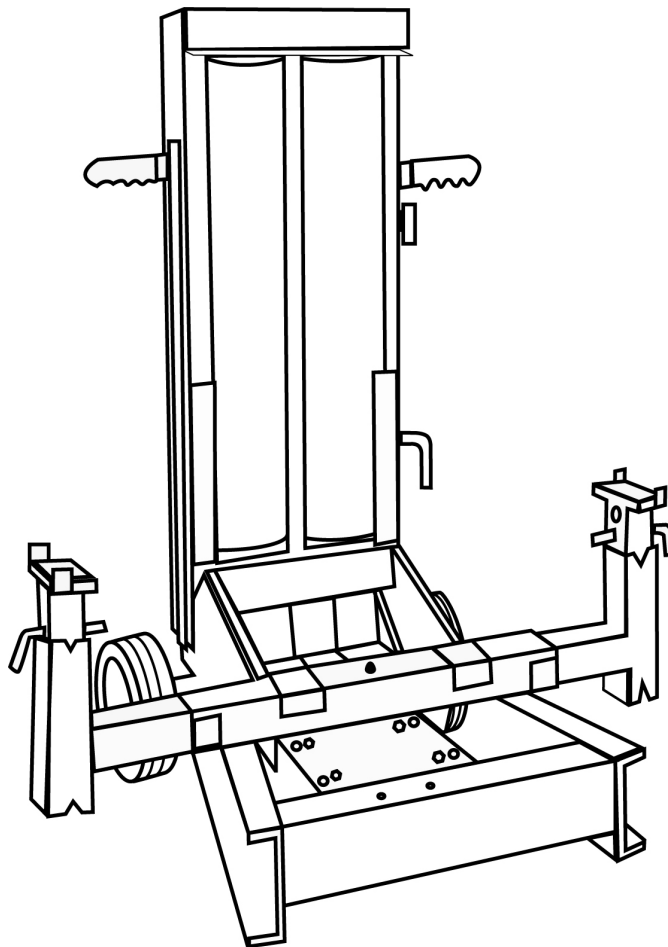
Operating Instructions & Parts Manual

Model Number
HW93692

Capacity
7 Ton



**Made in
North America**



SFA Companies ©2004
10939 N. Pomona Ave. Kansas City, MO 64153
816-891-6390
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-Before using this product, read this manual and follow all its Safety Rules and Operating Instructions
HW93692-M0

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TWO YEAR LIMITED WARRANTY

For a period of two (2) years from date of purchase, SFA Companies will repair or replace, at its option, without charge, any of its products which fails due to a defect in material or workmanship, or which fails to conform to any implied warranty not excluded hereby.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, to SFA Companies Warranty Service Department, 10939 N. Pomona Ave., Kansas City, MO 64153.

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Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SAVE THESE INSTRUCTIONS

For your safety, *read, understand, and follow* the information provided with and on this jack. The owner and operator of this equipment shall have an understanding of this jack and safe operating procedures before attempting to use. The owner and operator shall be aware that use and repair of this product may require special skills and knowledge. Instructions and safety information shall be conveyed in the operator's native language before use of this jack is authorized. If any doubt exists as to the safe and proper use of this jack, remove from service immediately.

Inspect before each use. Do not use if there are broken, bent, cracked, or damaged parts (including labels). Any jack that appears damaged in any way, operates abnormally or is missing parts, shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue to use until jack has been inspected by a Hein-Werner authorized service center. It is recommended that an annual inspection be done by qualified personnel. Labels and Operator's Manual are available from manufacturer.

PRODUCT DESCRIPTION

The Hein-Werner Air Operated End Lift is designed to lift, but not sustain, rated capacity loads. The dual hydraulic dampers provide safety restraint if load is suddenly removed. **Intended use:** To engage the metal bumper of a vehicle and raise for the purpose of service and/or repair of vehicle components. After lifting, loads must be immediately supported by appropriately rated jack stands. Check vehicle's factory service and/or repair manual for proper lift points.

DO NOT USE TO DOLLY OR MOVE VEHICLE. DO NOT USE FOR ANY PURPOSE OTHER THAN THOSE USES OUTLINED ABOVE!

SPECIFICATIONS

Model	Capacity	Min. Height	Max. Height	Power Raise	Saddle Spread	Min. PSI for Rated Load
HW93692	7 Ton	13-1/2"	58-1/2"	32-1/2"	29" to 41"	200

SAFETY INSTRUCTIONS

BEFORE USE

1. Verify that the product and the application are compatible, if in doubt call Hein-Werner Technical Service (816)891-6390.
2. Read this manual completely and familiarize yourself thoroughly with the product, its components and recognize the potential hazards associated with its misuse **before** using this product.
3. Ensure that jack rolls freely, the air cylinder and control valve operates smoothly, raises and lowers the unloaded saddle throughout the lift range before putting into service.
4. Loosen air vent screws (upper screws) on each hydraulic damper located on side of air cylinders.
5. Ensure the jack is loaded on center with the saddles placed equal distance from the center.
6. Replace worn or damaged parts and assemblies with Hein-Werner Replacement Parts only. (See Replacement Parts Section). Lubricate as instructed in Maintenance Section.
7. Connect lift control valve as shown in Figure 1. Connect air nipple to air input port before connecting air hose.

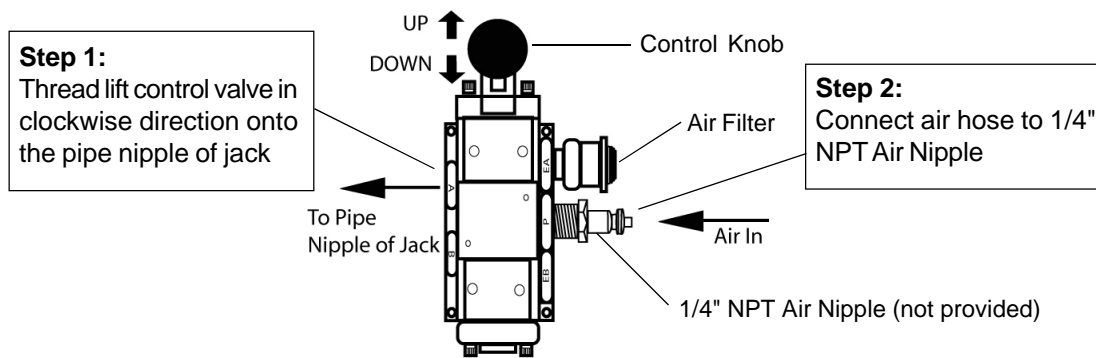


Figure 1. Lift Control Valve Illustration

Note: Use only NPT thread size air nipple. Tighten securely to prevent accidental removal of components while in use. Take care not to introduce compound into port orifices.

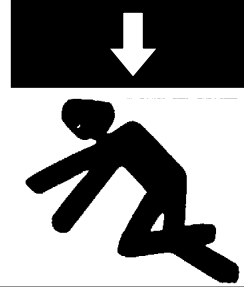
⚠️ WARNING

- Study, understand, and follow all instructions provided with and on this device before operating this device.
- Do not exceed rated capacity.
- This is a lifting device only.
- Center load on saddle.
- Never lift vehicle which cannot roll freely forward and backward during lift.
- After lifting, immediately transfer the load to appropriately rated vehicle stands.
- Never work on, under, or around a load supported by this device.
- Use only on hard, level surfaces capable of sustaining rated capacity loads.
- Do not move or dolly loads with this device.
- Do not modify this device.
- Do not use adapters or accessories that are not provided initially.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- Failure to heed these markings may result in personal injury and/or property damage.

⚠️ ADVERTENCIA

- Leer, comprender, y seguir las instrucciones antes de utilizar el aparato.
- El manual de instrucciones y la información de seguridad deben estar comunicado en lengua del operador antes del uso.
- No seguir estas indicaciones puede causar daños personales o materiales.

⚠️ WARNING



To avoid crushing and related injuries: NEVER work on, under or around a load supported only by a jack. Immediately transfer the load to adequately rated jack stands.

ASSEMBLY

Little, if any, assembly is required of this jack. Make sure lift control valve is secured into the pipe nipple of the jack. Familiarize yourself with the illustrations in the operator's manual. Know your jack and how it operates before attempting to use.

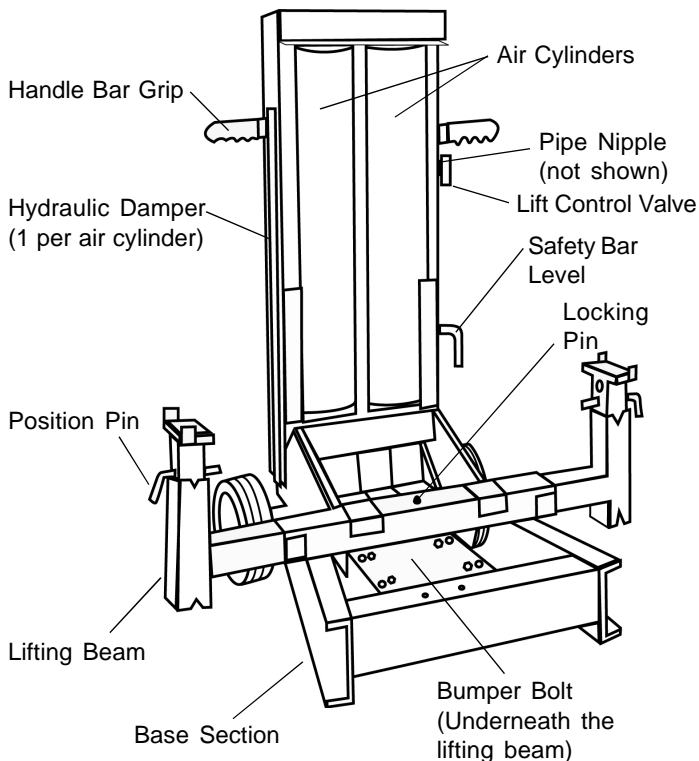


Figure 2. Air Operated End Lift Components
HW93692-M0

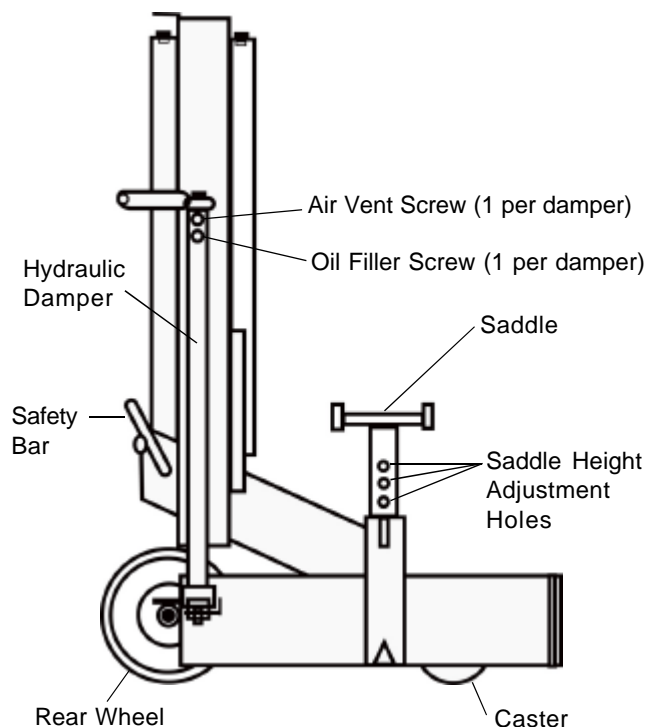


Figure 3. Air Operated End Lift Components (side view)

OPERATION

Lifting

1. Ensure that the vehicle is on a flat, hard and level surface and is free to roll forward and backward during the lift.
2. Connect 1/4" NPT air nipple and air hose to lift control valve air inlet port. (See Figure 1 on page 3)
3. Loosen air vent screws (upper screws) on each hydraulic damper located on side of air cylinders.
4. Insert lifting beams fully to engage lock. For low pickup height, rotate the beams 180 degrees.
5. To adjust the location of the lifting beams, push the locking pin upward from underneath and pull out the lifting beams. (see Figure 4)

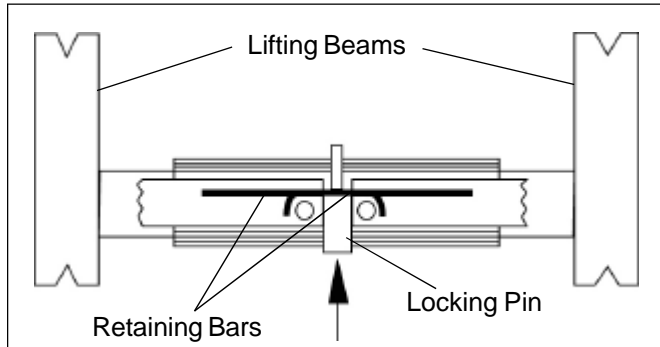


Figure 4.

WARNING

To reduce the risk of personal injury and property damage, **NEVER** extend lifting beams beyond locked position

6. Adjust bumper bolt to increase ground clearance. (see Figure 2 on page 4)
7. Make sure both saddles are positioned directly under the vehicle manufacturer's recommended lift points.
8. To raise jack, slowly press the lift control valve lever toward the position marked "UP" until saddles contact with the lift point. **!STOP! RELEASE GRIP ON THE LIFT CONTROL VALVE!** Confirm that the saddles are positioned correctly, then continue to press the lever until load reaches desired height. Simply release the lever to stop.
9. Transfer the load immediately to appropriately rated jack stands.

Lowering

1. Raise load high enough to clear the jack stands, then carefully remove jack stands (**always** used in pairs).
 2. Slowly lower the load by disengaging safety bar* and press lift control valve lever "DOWN".
- * **To disengage safety bar:** Push safety bar lever towards front end of the jack. (see Figure 5)

Note: Refer to Table 1 for for air pressure rating for different load application

AIR PRESSURE PSI	LOAD (LBS)
200	14,000
180	12,000
160	11,000
140	9,500
120	8,000

Table 1. Recommended Air Pressure for Different Load Application

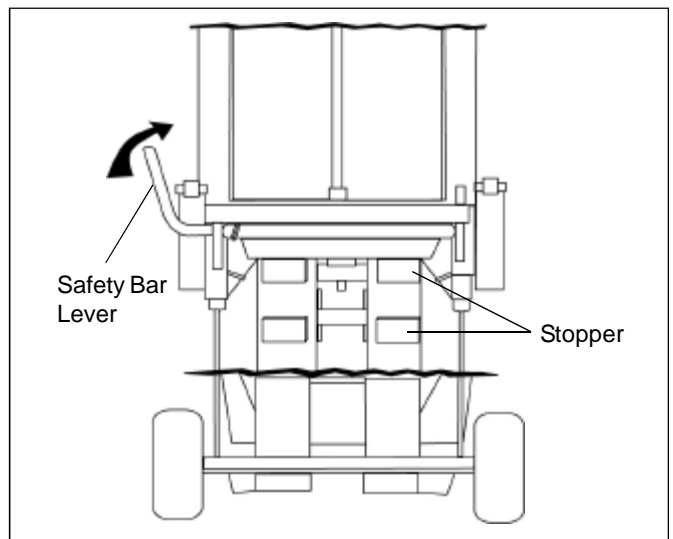


Figure 5. Air Operated End Lift Components (rear view)

! Safety Messages !

Be sure all tools and personnel are clear before lowering load. Only attachments and/or adapters supplied by the manufacturer shall be used. Lift only on areas of the vehicle as specified by the vehicle manufacturer.

MAINTENANCE

1. Lubricate all moving parts with oil/grease.
2. Fill the hydraulic damper with 10W40 motor oil only. Fill the oil through the lowest hole located on the hydraulic damper when jack is fully lowered.
Important: Use only 10W40 motor oil. Avoid mixing different types of fluid and **Never** use brake fluid, turbine oil, transmission fluid, or glycerin.
3. Fill with oil until level with the oil filler screw hole. Reinstall the oil filler screw.

Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels, and caster assemblies move freely.

Storage

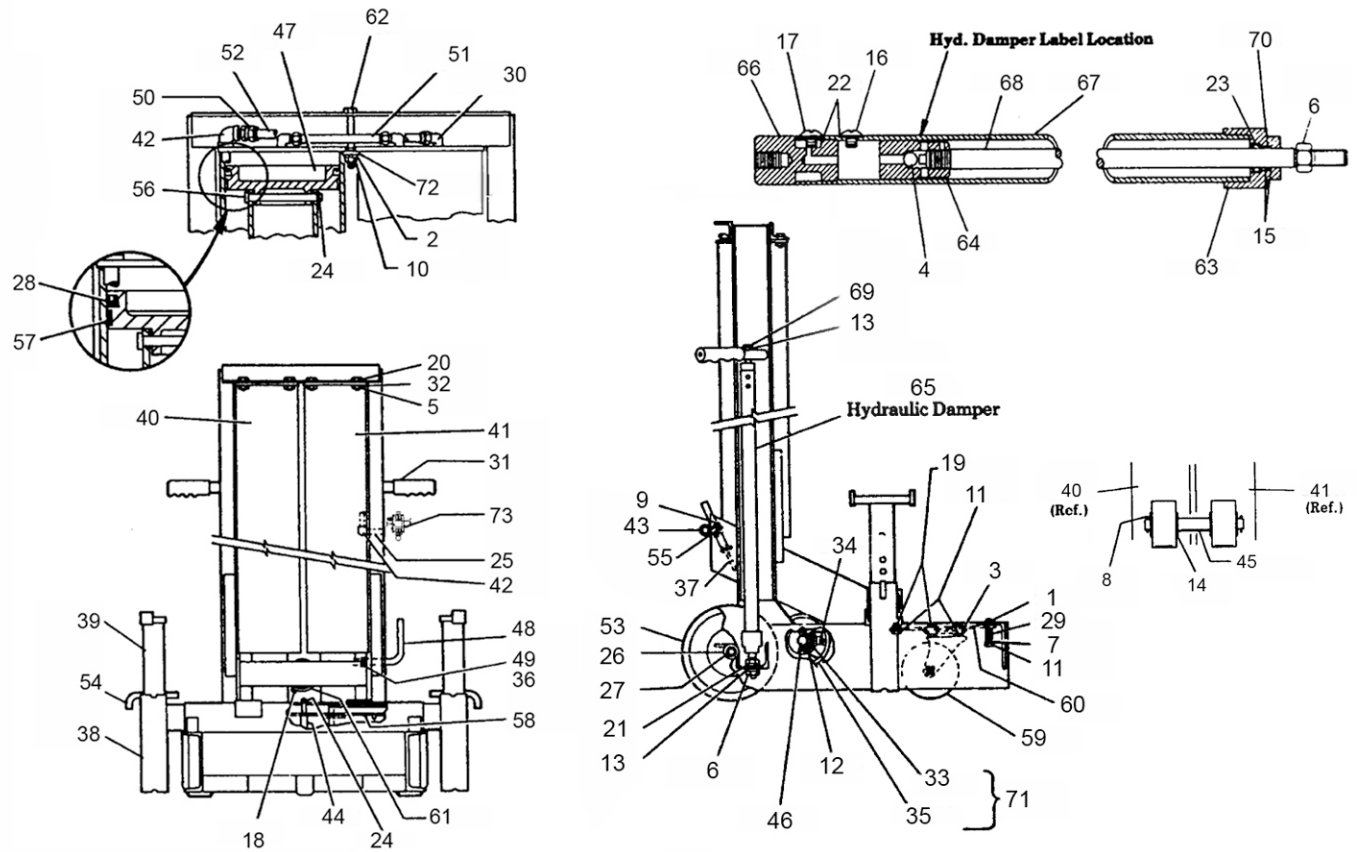
When not in use, store the jack with cylinder fully lowered.

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	<ul style="list-style-type: none"> • Air pressure too low • Air hose kinked or plugged • Air hose inner diameter too small • Air cylinder / components damaged 	<ul style="list-style-type: none"> • 200 psi minimum air pressure required to lift rated load • Remove kinks and obstruction from air hose • Consult air compressor manufacturer for the correct size of hose • Contact Hein-Werner repair center
Jack will not lower after unloading	<ul style="list-style-type: none"> • Lift control valve improperly assembled and / or attached • Safety bar engaged • Structural damage to jack assy 	<ul style="list-style-type: none"> • Assemble as shown in Figure 1 on page 3 • Press lift control valve to raise jack slightly, then disengage safety bar • Contact Hein-Werner repair center
Jack raises or lowers with jerky motion	<ul style="list-style-type: none"> • Cylinder need lubrication 	<ul style="list-style-type: none"> • Apply #630-AAA LUBRIPLATE to cylinder wall

REPLACEMENT PARTS

Not all components of the jack are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give Model number, parts number and description on page 7. Call or write for current pricing: Phone:(816)891-6390 or contact Hein-Werner Customer Support, customerservices@heinwerner-automotive.com or 10939 N. Pomona Ave. Kansas City, MO 64153



SERVICE PARTS

Item no.	Part no.	Qty.	Description	Item no.	Part no.	Qty.	Description	Item no.	Part no.	Qty.	Description
1	200472	2	Screw	26	221778	4	Washer	50	227646	1	Hose coupling
2	201086	1	Lockwasher	27	221820	2	Retaining ring	51	227647	1	Air hose (short)
3	201789	4	Lockwasher	28	*223575	2	U-cup	52	227648	1	Air hose (long)
4	203202	1	Ball	29	223707	2	Spring	53	227649	2	Wheel (rear)
5	203272	4	Nut	30	223964	3	Elbow	54	227651	2	Position Pin
6	203273	3	Nut	31	224641	2	Handle Bar Grip	55	227652	1	Cross Pin
7	204271	2	Washer	32	225254	4	Lockwasher	56	227654	2	Pin
8	204530	2	Cotter Pin	33	226228	2	Bushing	57	*227655	2	Slip Ring
9	204543	2	Cotter Pin	34	226318	2	Grease Fitting	58	228061	1	Positioning Bar
10	207167	1	Nut	35	226503	2	Roller Wheel	59	228263	1	Caster
11	207169	8	Nut	36	226603	1	Roll Pin	60	228264	1	Caster Plate
12	209746	26	Roller	37	227616	1	Handle Stop	61	229456	1	Skid Ring
13	209967	4	Lockwasher	38	227619	2	Saddle Arm	62	229869	1	Bolt
14	210735	4	Washer	39	227622	2	Saddle	63	230438	1	Bottom Cap
15	†212374	2	Washer	40	227626	1	Air Cylinder Ass'y (R.H.)	64	230441	1	Piston Rod
16	212540	1	Screw	41	227629	1	Air Cylinder Ass'y (L.H.)	65	231136	2	Hydraulic Damper Ass'y
17	212562	1	Screw	42	227631	2	Elbow	66	231138	1	Cylinder Plug
18	212622	1	Bolt	43	227633	1	Tank Retainer	67	231139	1	Damper Cylinder
19	212624	5	Bolt	44	227637	1	Pin	68	231141	1	Piston Rod
20	212688	4	Bolt	45	227638	1	Spacer	69	231168	2	Bolt
21	214120	2	Spacer	46	227639	1	Axle	70	†231241	1	Quad Ring
22	†214555	2	O-ring	47	227640	2	Piston	71	233072	2	Wheel & Busing Ass'y
23	†216258	1	Pump Gland Cover	48	227643	1	Safety Stop Handle	72	234844	1	Washer
24	220018	3	Retaining Ring	49	227644	1	Safety Stop Spring	73	248799	1	Lift Control Valve
25	221356	1	Pipe Nipple								

* Included in 240513 Repair Kit.

† Included in 240512 Repair Kit for 231136 Hydraulic Damper Assembly

