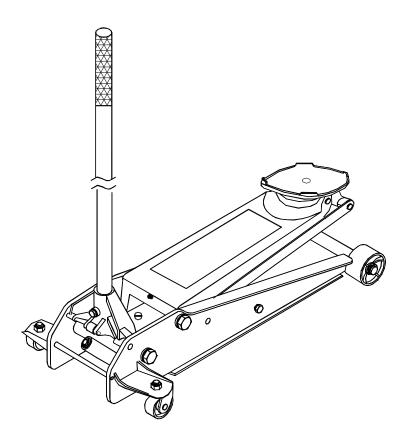


Service Jacks

Operating Instructions & Parts Manual

Model Number Capacity
HW93642 2 Ton
HW93652 3 Ton





SFA Companies ©2005 10939 N. Pomona Ave. Kansas City, MO 64153 816-891-6390 customerservices@heinwerner-automotive.com

-Before using this product, read this manual and follow all its Safety Rules and Operating Instructions HW93642-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.

Except where such limitations and exclusions are specifically prohibited by applicable law:

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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 the 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 checked 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

Hein-Werner Hydraulic Service Jacks are designed to lift, **not** sustain, rated capacity loads. They are designed to be used in conjunction with jack stands. **Intended use:** To lift one wheel or one axle of a vehicle for the purpose of service and/or repair of vehicle components. After lifting, loads must be immediately supported by appropriately rated jack stands. Check with vehicle owner's 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	Jack Size (LxH)	Min. Height	Max. Height
HW93642	2 Ton	26-3/4" x 6-3/4"	3-3/4"	20"
HW93652	3 Ton	30-3/4" x 7-1/4"	4"	23"

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 the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the potential hazards associated with its use **before** using this product.
- 3. Assemble handle, then secure it in the handle fork with provided bolt.
- 4. Open the release valve by turning the handle counterclockwise.
- 5. Remove shipping screw on power unit.
- 6. Lower saddle fully.
- 7. Pump the handle 6 to 8 full strokes. Ensure the oil level is within ~3/16" from the inner cylinder as viewed from the air vent screw hole.
- 8. Install the air vent screw provided.
- Close release valve by turning the handle clockwise until firm resistance is felt.
- 10. Roll the jack to ensure that it rolls freely and smoothly.
- 11. Raise and lower the unloaded saddle throughout the lift range to ensure proper operation of the pump and release valve before placing any load on the product.
- 12. Replace worn or damaged parts and assemblies with Hein-Werner Replacement Parts only. (See Replacement Parts Section). Lubricate as instructed in Maintenance Section.

A WARNING

- Study, understand, and follow all instructions provided with and on this device beforeoperating this device.
- Do not exceed rated capacity.
- This is a lifting device only.
- After lifting, immediately transfer the load to appropriately rated vehicle stands.
- Never work on, under, or around a load supported only 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.

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ASSEMBLY

Familiarize yourself with the illustrations in the operator's manual. Know your jack and how it operates before attempting to use. Refer to Figure 1 below for components location. Tighten securely to prevent accidental removal of handle while in use.

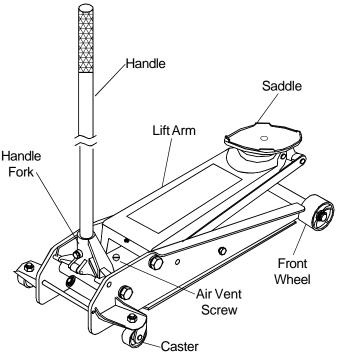


Figure 1: Typical Service Jack Components

ADVERTENCIA

- Leer, comprender, y seguir las instrucciónes antes de utilizar el aparato.
- El manual de instrucciónes y la información de seguridad deben estar comunicado en lengua del operador antes del uso.
- No seguir estas indicaciónes 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. ALWAYS use adequately rated jack stands. Immediately tranfer the load to adequately rated jack stands.

OPERATION

Lifting

Safety Message! Only attachments and/or adapters supplied by the manufacturer shall be used. Lift only on areas as specified by the vehicle manufacturer.

- 1. Place the vehicle in the park gear, with emergency brake on and wheels securely chocked to prevent inadvertent vehicle movement.
- 2. Close release valve by turning handle clockwise firmly. Center jack saddle under lift point. Refer to the vehicle manufacturer's owner's manual to locate approved lifting points on the vehicle.
- 3. Verify lift point, then pump handle to contact lift point. Continue to pump handle until load reaches desired height.
- 4. Transfer the load immediately to appropriately rated jack stands.

Lowering

Safety Message! Be sure all tools and personnel are clear before lowering load.

- 1. Raise load high enough to clear the jack stands, then carefully remove jack stands (always used in pairs).
- 2. Slowly turn the handle counterclockwise, but no more than 1/2 turn. If the load fails to lower:
 - a. Use another jack to raise the vehicle high enough to reinstall jack stands.
 - b. Remove the malfunctioning jack and then the jack stands.
 - c. Using the other jack, lower the load by turning the operating handle counterclockwise, but no more than 1/2 turn.
- 3. After removing jack from under the load, push saddle down to reduce ram exposure to rust and contamination.

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MAINTENANCE

Important: Use only a good grade hydraulic jack oil. Avoid mixing different types of fluid and **Never** use brake fluid, turbine oil, transmission fluid, motor oil or glycerin. Improper fluid can cause failure of the jack and the potential for sudden and immediate loss of load. We recommend Hein-Werner hydraulic jack oil HW93291.

Adding oil

- 1. With saddle fully lowered set jack in its upright, level position. Locate and unscrew air vent screw.
- 2. Fill with oil until ~3/16" above the inner cylinder as seen from the air vent screw hole. Reinstall the air vent screw.

Changing oil

For best performance, replace the hydraulic fluid completely annually.

- 1. With saddle fully lowered, unscrew the air vent screw.
- 2. Lay the jack on its side and drain the fluid into a suitable container.

Note: Dispose of hydraulic fluid in accordance with local regulations.

3. Fill with oil until ~3/16" above the inner cylinder as seen from the air vent screw hole. Reinstall the air vent screw.

Lubrication

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

Cleaning

Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

Note: Never use sandpaper or abrasive material on these surfaces!

Storage

Lower the saddle to its lowest position when not in use.

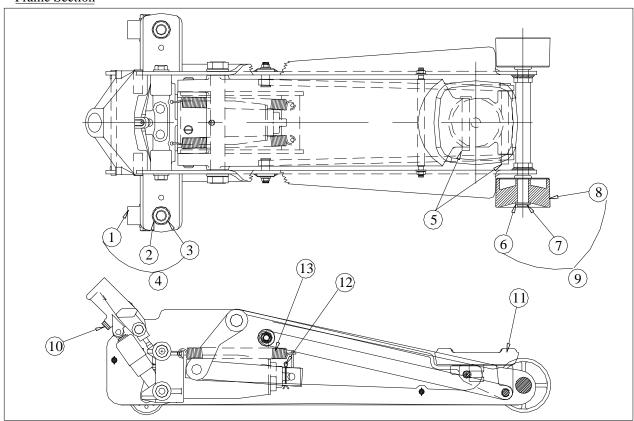
TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	Release valve not tightly closed Overload condition	Ensure release valve tightly closed Remedy overload condition
Jack bleeds off after lift	Hydraulic unit malfunction	Contact Hein-Werner Technical Service
Jack will not lower after unloading	Reservoir overfilled Linkages binding	Drain fluid to proper level Clean and lubricate moving parts
Poor lift performance	• Fluid level low	Ensure proper fluid level
Will not lift to full extension	• Fluid level low	Ensure proper fluid level

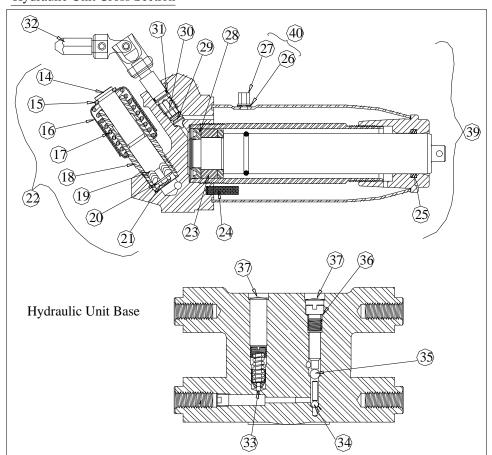
REPLACEMENT PARTS

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 6 and 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

Frame Section



Hydraulic Unit Cross Section



Handle Cross Section

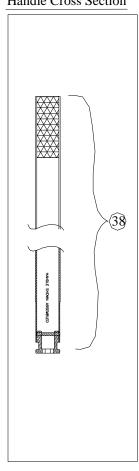


Figure 2: Parts Illustration for HW93642 and HW93652

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Replacement Parts List

Item#	Part# for HW93642	Part# for HW93652	Qty.	Description	
1 o	231583	231583	2	Caster, 2.5"x1.25"	
2 o	201115	201115	2	Lock Washer, 3/4"	
3 o	219451	219451	2	Hex Nut, 3/4"-10	
4	231584	231584	2	Caster Assembly (includes item# 1-3)	
5	201801	201801	2	Retaining Ring	
6 #	214557	214557	2	Retaining Ring	
7 #	204324	204324	2	Flat Washer, 3/4"	
8 #	234678	234678	2	Wheel, 3.75"x2"	
9	234677	234677	2	Front Wheel Assy.(includes item# 6-8)	
10	234956	234956	1	Hex. Head Bolt, 3/8"-24	
11	239304	239304	1	Saddle	
12	221408	221408	1	Cotter Pin, 1/8"	
13	243618	243618	2	Return Spring	
14 Δ	243626	243626	1	Pump Piston	
15 Δ *	201802	201802	1	Retaining Ring	
16 Δ	243628	243628	1	Pump Sleeve	
17 Δ	226348	226348	1	Spring	
18 Δ	243627	243627	1	Pump Cylinder	
19 Δ *	201828	201828	3	Packing	
20 Δ	204233	204233	1	Flat Washer	
21 Δ	224725	224725	1	Hex Nut #10-32	
22	890-021-666	890-021-666	1	Pump Assembly (includes item# 14-21)	
23 *	231301	230301	1	Heel Plate	
24 *	221318	221318	1	Screen	
25 *	221748	221748	1	Quad Ring	
26 *	200003	200003	1	Gasket	
27	231638	231638	1	Vent Screw	
28 *	228256	228256	1	U-cup	
29 *	218043	218043	1	Release Valve	
30 *	233917	233917	1	Plastic Spring	
31 *	216143	216143	1	Gland O-ring	
32	248731	248731	1	Universal Assembly	
33 *	203196	203196	1	Ball, 5/32"	
34 *	203198	203198	1	Ball, 7/32"	
35 *	203201	203201	1	Ball, 5/16"	
36 *	204842	204842	1	Gasket	
37 *	201733	201733	2	Plug	
38	234957	234957	1	Handle Assembly	
39	248721	890-005-010	1	Complete Hydraulic Unit	
40	231316	231316	1	Vent Screw Assembly	
	248949	248949	-	Repair Kit for Hydraulic Unit	

 $o\;\;$ - Only available in Caster Assembly 231584

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^{# -} Only available in Wheel Assembly 234677

 $[\]Delta~$ - Only available in Pump Assembly 890-021-666

^{* -} Included in Repair Kit 248949