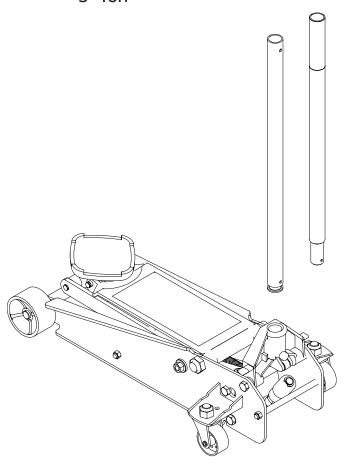


Service Jacks

Operating Instructions & Parts Manual

Model Number Capacity
HW93642W 2 Ton
HW93652W 3 Ton







This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

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Read this manual and follow all the Safety Rules and Operating Instructions before using this product.

SAFETY AND GENERAL INFORMATION

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 broken, bent, cracked, or damaged parts (including labels) are noted. Any jack that appears damaged in any way, operates abnormally or is missing parts, shall be removed from service immediately and the manufacturer notified. If you suspect that the jack was subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until the jack has been checked by a factory authorized service center (contact distributor or manufacturer for list of Authorized Service Centers). It is recommended that an annual inspection be done by qualified personnel. Replace worn or damaged parts with Hein-Werner Authorized Replacement Parts only. Labels and owner's manuals are available from manufacturer.

PRODUCT DESCRIPTION

Hein-Werner Hydraulic Service Jacks are designed to lift, not support, rated capacity loads consisting of one end of a vehicle. Immediately after lifting, the load must be supported by a pair of appropriately rated jack stands.



WARNING: Never use hydraulic jack as a stand alone device. After lifting, immediately support the lifted load with a pair of appropriately rated jack stands.

SPECIFICATIONS

Model	Capacity	Min. Height	Max. Height	Jack Size (L x W)	
HW93642W	2 Ton	4-1/2"	20"	28-1/2" x 14-7/8"	
HW93652W	3 Ton	5"	23"	31-1/4" x 15-1/2"	

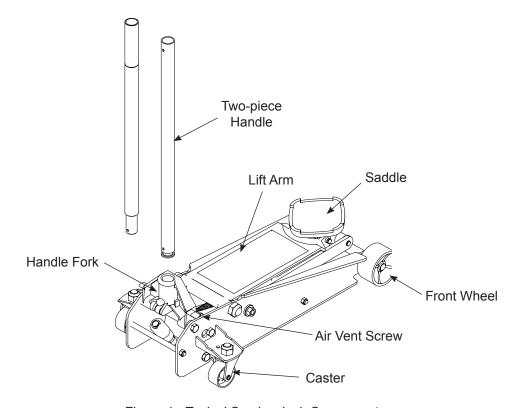


Figure 1 - Typical Service Jack Components

WARNING

- · Study, understand, and follow all instructions before operating this device.
- Do not exceed rated capacity.
- Use only on hard, level surface
- This is a lifting device only. Immediately after lifting, support the vehicle with appropriate means.
- Do not move or dolly the vehicle while on the jack.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- No alterations shall be made to this product.
- Failure to heed these markings may result in personal injury and/or property damage.

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.

PREPARATION (ref. Figure 1)

Before Use

- 1. Verify that product and application are compatible, if in doubt call Hein-Werner technical service.
- 2. Before use, read this operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the potential hazards associated with its use.
- 3. Insert handle to handle fork. Tighten the bolt on handle fork to prevent accidental removal of handle while in use.



MARNING: Do not lift or carry jack by handle. Handle could dislodge and jack fall, resulting in possible injury or property damage.

- 4. To familiarize yourself with the basic operation of these jacks, locate and turn the release valve (handle):
 - a. Clockwise until firm resistance is felt to further turning. This is the 'CLOSED' release valve position used when raising the load.
 - b. Counter-clockwise, but no more than 1/2 full turn from the closed position. This is the 'OPEN' release valve position used to lower the load.
- 5. With saddle fully lowered, locate and remove air vent screw. Pump operating handle through 6 to 8 full strokes. Check oil level. Ensure oil level is within ~3/16" from the inner cylinder as viewed from air vent screw hole.
- Reinstall air vent screw.
- 7. Check to ensure that the jack rolls freely. Raise and lower the unloaded saddle throughout the lift range before putting into service to ensure the pump and release valve operate smoothly.
- 8. Replace worn or damaged parts and assemblies with Hein-Werner Replacement Parts only. Lubricate as instructed in Maintenance Section.

OPERATION

Lifting



WARNING: Lift only on areas of the vehicle as specified by the vehicle manufacturer.

- 1. Follow the vehicle manufacturer's recommended guidelines for lifting. Engage the emergency brake and chock each unlifted wheel in both directions to prevent inadvertent vehicle movement.
- 2. Locate and close the release valve by turning the handle clockwise until firm resistance is felt.
- 3. Refer to the vehicle manufacturer owner's manual to locate approved lifting points on the vehicle. Center jack saddle under lift point.
- 4. Verify lift point then use handle pump to contact lift point. To lift, pump handle until load reaches desired height.
- 5. Transfer the load to appropriately rated jack stands.



WARNING: Never work on, under or around a load supported only by a hydraulic jack.



MARNING: Overloading may cause hydraulic system failure.

Lowering



WARNING: Clear all tools and personnel before lowering vehicle. The more you turn the release valve (handle) counter-clockwise, the faster the load will come down. Maintain control of the rate of speed at which the load lowers at all times.

- 1. Raise load high enough to clear the jack stands.
- 2. Remove jack stands.
- 3. Slowly turn the release valve (handle) counter-clockwise, but no more than 1/2 full 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. Lower the vehicle using the functioning jack.
- 4. After removing jack from under the vehicle, push saddle down to reduce ram exposure to rust and contamination.

MAINTENANCE

NOTICE: Use only quality grade hydraulic jack fluid. 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 lack and the potential for sudden and immediate loss of load. Hein-Werner hydraulic jack oil HW93291 or equivalent is recommended.

Adding Fluid

- 1. Lower saddle fully.
- 2. Set jack in its upright, level position.
- 3. Locate and remove air vent screw.
- 4. Fill with fluid until ~3/16" above inner cylinder as seen from air vent screw hole.
- 5. Reinstall air vent screw.

Changing Fluid

NOTICE: For best performance and longest life, completely replace hydraulic fluid at least once a year.

- 1. Lower saddle fully.
- 2. Remove air vent screw.
- 3. Lay jack on its side and drain fluid into a suitable container.

NOTICE: Dispose of hydraulic fluid in accordance with local environmental regulations.

- 4. Fill with oil until ~3/16" above the inner cylinder as seen from air vent screw hole.
- 5. Reinstall 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 pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

NOTICE: Never use sandpaper or abrasive material on these surfaces.

Storage

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

TROUBLESHOOTING

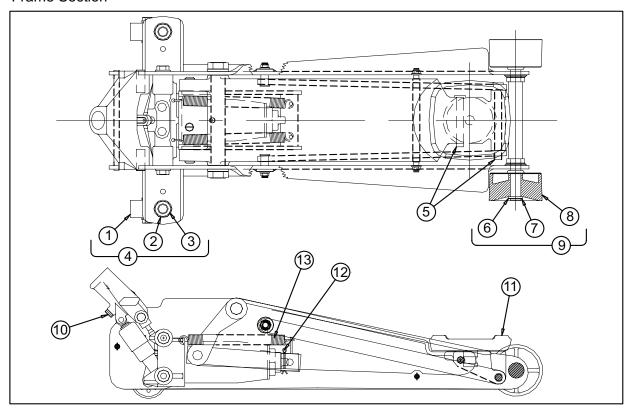
Symptom	Possible Causes	Corrective Action	
Jack will not lift load	Release valve not tightly closed Overload condition	Ensure release valve tightly closed Remedy overload condition	
Jack bleeds off after lift	Hydraulic unit malfunction	Discontinue use, contact Hein- Werner Technical Service	
Jack will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

REPLACEMENT PARTS (ref. pages 6 & 7)

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, part number and parts description. Call or write for current pricing: Hein-Werner Customer Support, 10939 N. Pomona Ave. Kansas City, MO 64153. Phone: (816)891-6390; E-mail: customerservices@heinwerner-automotive.com

Replacement Parts Illustration for Model HW93642W & HW93652W (ref. to parts list on page 7)

Frame Section



Hydraulic Unit Cross Section

Handle Assemblies

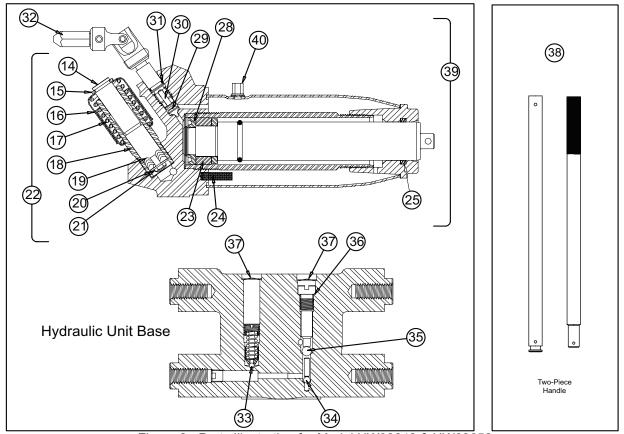


Figure 2 - Parts Illustration for Model HW93642 & HW93652

Replacement Parts List for Model HW93642W & HW93652W (ref. to parts drawing on page 6)

Item	Part No.		Description	Qty.	
1	231	583	Caster, 2.5"x1.25"	2	
2	201115		Lock Washer, 3/4"	2	
3	219451		Hex Nut, 3/4"-10	2	
4	231584		Caster Assembly (includes item# 1-3)	2	
5	201803		Retaining Ring	2	
6	214	557	Retaining Ring	2	
7	204324		Flat Washer, 3/4"	2	
8	234678		Wheel, 3.75"x2"	2	
9	234677		Front Wheel Assy.(includes item# 6-8)	2	
10	234956		Hex. Head Bolt, 3/8"-24	1	
11	239304		Saddle	1	
12	221408		Cotter Pin, 1/8"	1	
13	243618		Return Spring	2	
14	N/A		Pump Piston	1	
15*	N/A		Retaining Ring	1	
16	N/A		Pump Sleeve	1	
17	N/A		Spring	1	
18	N/A		Pump Cylinder	1	
19*	N/A		Packing	3	
20	N.	/A	Flat Washer	1	
21	N/A		Hex Nut #10-32	1	
22	890-021-666		Pump Assembly (includes item# 14-21)	1	
23*	230301		Heel Plate	1	
24*	221318		Screen	1	
25*	221748		Quad Ring	1	
28*	228256		U-cup	1	
29*	218043		Release Valve	1	
30*	233917		Plastic Spring	1	
31*	216143		Gland O-ring	1	
32	248731		Universal Assembly	1	
33*	203196		Ball, 5/32"	1	
34*	203	198	Ball, 7/32"	1	
35*	203	201	Ball, 5/16"	1	
36*	204842		Gasket	1	
37*	201	733	Plug	2	
00	HW93642W	928054	2 pc. Handle Assembly		
38	HW93652W	928055	2 pc. Handle Assembly	1	
39	HW93642W	248721		1	
	HW93652W	890-005-010	Power Unit		
40	6420-10000-000		Air Vent Screw Assembly	1	
*	231316		Repair Kit for Hydraulic Unit		



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 under normal usage. This limited warranty is a consumer's exclusive remedy.

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:

- (1) THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS AS DESCRIBED ABOVE
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