

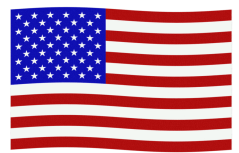


# Telescopic Transmission Jack

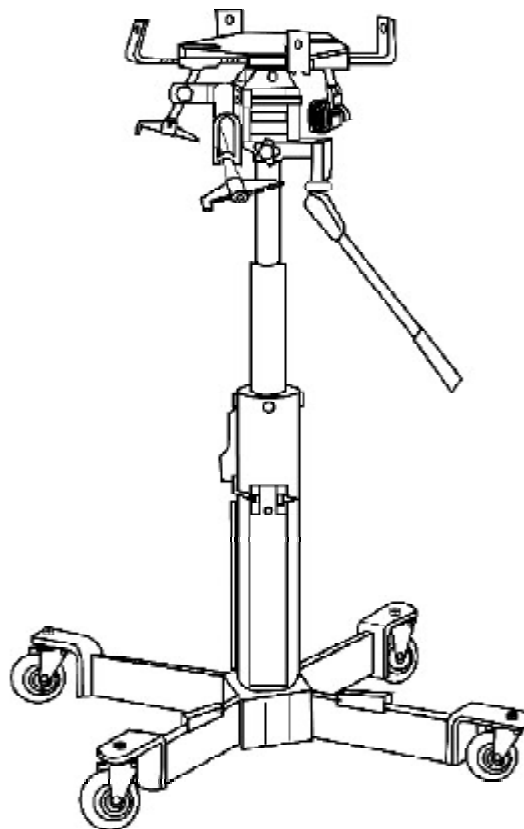
## Operating Instructions & Parts Manual

Model Number  
HW93720

Capacity  
1/2 Ton



**Made in the USA**



SFA Companies ©2004  
10939 N. Pomona Ave. Kansas City, MO 64153  
816-891-6390  
[customerservices@heinwerner-automotive.com](mailto:customerservices@heinwerner-automotive.com)

-Before using this product, read this manual and follow all its Safety Rules and Operating Instructions  
HW93720-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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(2) SFA COMPANIES SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGE OR LOSS WHATSOEVER.

(3) THE DURATION OF ANY AND ALL EXPRESSED AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO A PERIOD OF TWO (2) YEARS FROM DATE OF PURCHASE.

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

Hein-Werner Telescopic Transmission Jack is designed to be used as an aid in the removal and installation of automotive and light truck transmissions, transfer cases and transaxles. It is intended for use under an overhead lift or in a garage pit. Its air actuated features require an air source of 90-160 psi. To ensure dependable, trouble free operation an inline air dryer and oiler is recommended.

## SPECIFICATIONS

Model	Capacity	Min. Height	Max. Height	Lifting Head Size	Forward Tilt	Rearward Tilt	Sideways Tilt	Chassis Size (L x W)
HW93720	1/2 ton	34-1/2"	75"	11-1/2" x 11-1/2"	50°	20°	10° L & R	41" x 41"

## 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.

## WARNING

- Read and understand all printed materials provided with and on this device before use.
- Do not exceed rated capacity.
- Ensure the center of gravity is centered on the saddle.
- Use only on hard, level, seamless surface.
- Use of this jack is limited to the removal, installation and transportation of transmissions, transfer cases and transaxles.
- Do not allow any part of your body under the load while jack is supporting a load.
- Use only the saddle assembly to lift. Never use any other part of the jack as a lifting surface.
- No alterations shall be made to this product.
- This is a lifting and lowering device only. Transfer load immediately to appropriate support device for service or repair.
- Only attachments and/or adapters supplied by the manufacturer shall be used.
- Keep transmission at the lowest position when moving the transmission from one place to another.
- Adequately support the vehicle before starting repairs
- Use the straps to secure the transmission until ready to remove transmission from jack.
- When transferring a load to the lift, the air stage should be fully lowered or fully raised and pawl (locked). If a load is transferred to the lift when the air cylinder is only partially raised, the lift may drop suddenly.
- 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.

### ! 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.

## ! WARNING



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

## ASSEMBLY

Little, if any, assembly is required of this jack. Familiarize yourself with the illustrations in the operator's manual. Know your jack and how it operates before attempting to use.

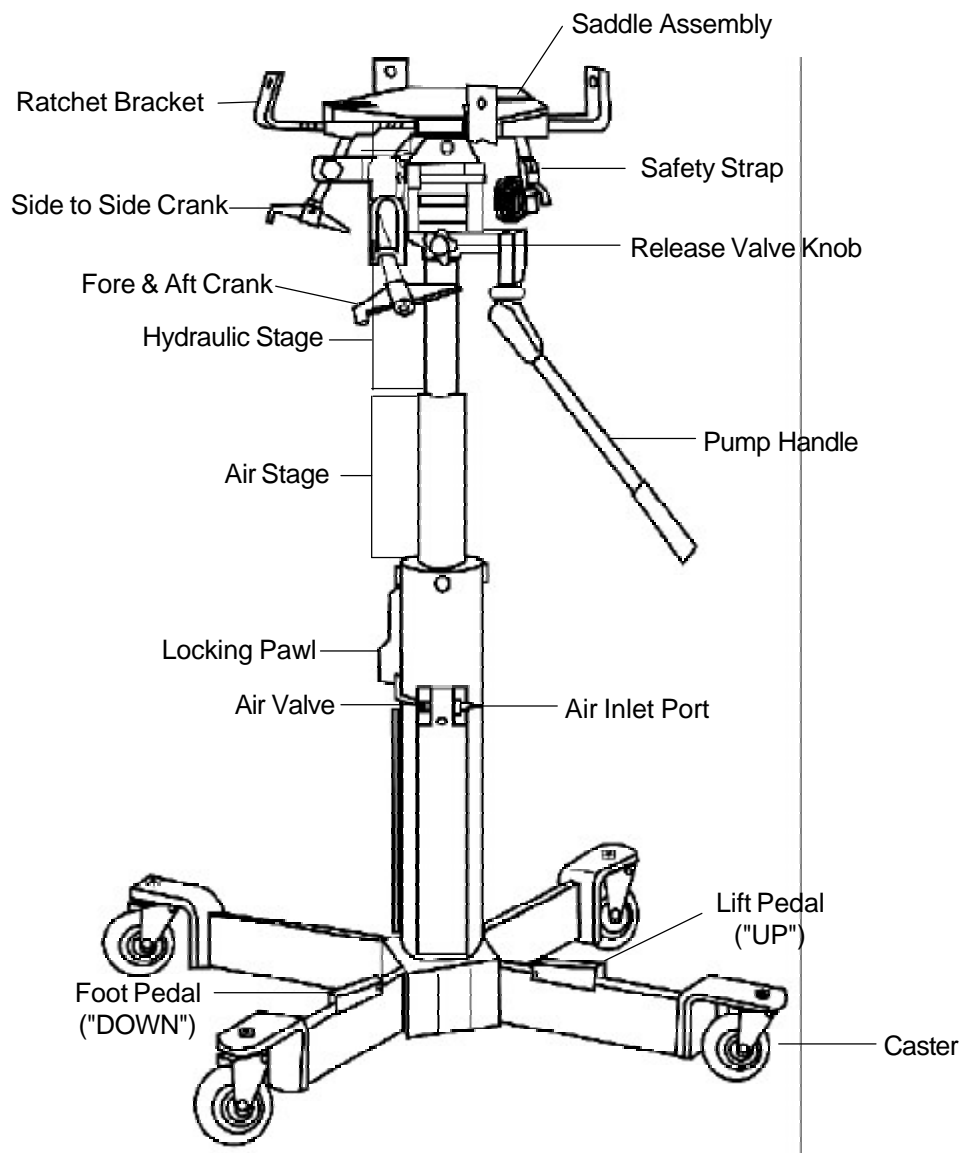


Figure 1. Telescopic Transmission Jack Components

## OPERATION

### Priming Instructions (refer to Figure 2)

1. Tilt the entire transmission jack over two casters so that the pump and handle are below the hydraulic cylinder as shown in Figure 2.
2. Open the release valve knob "COUNTERCLOCKWISE" and pump handle until "resistance" is felt.
3. Close the release valve "clockwise" and continue pumping while restoring the jack to its upright position

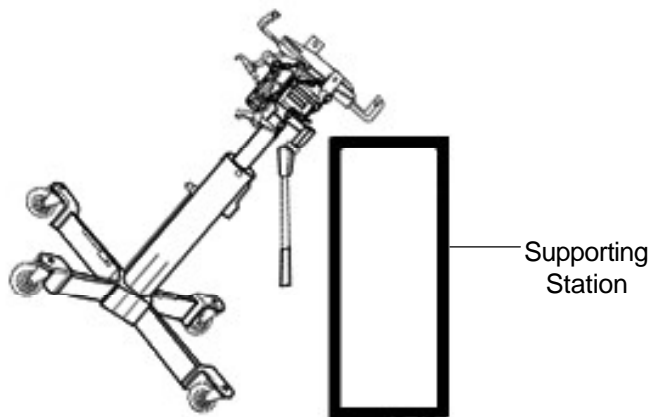


Figure 2

The transmission saddle assembly is raised and lowered by means of an air operated stage and a hydraulic stage. A locking pawl automatically engages at the end of the air cylinder travel to mechanically lock the cylinder and prevent drop when the transmission is loaded onto the saddle assembly.

### Transmission Removal

1. With vehicle elevated on lift, position the jack under transmission to be removed.
2. Connect 1/4" air nipple to air inlet port. Connect air hose to the air nipple. Depress the lift pedal that marked "UP" and raise air stage to its fully extended position. The air stage will stop automatically by the locking pawl at its full height. Air hose can be removed.
3. Close the release valve by turning the release valve knob in clockwise direction. Pump the handle until saddle reached desired position
4. Make sure saddles are centered and positioned directly under the transmission to be removed.
5. Adjust the position of the saddle assembly side to side and tilt forward or backward to get a firm contact at the bottom of transmission.
6. Slowly pump the handle with a small strokes so the saddle assembly raised slowly to contact with the transmission.
7. Push in the 4 ratchet brackets on saddle assembly firmly to grab the edges of transmission housing. (see Figure 3)

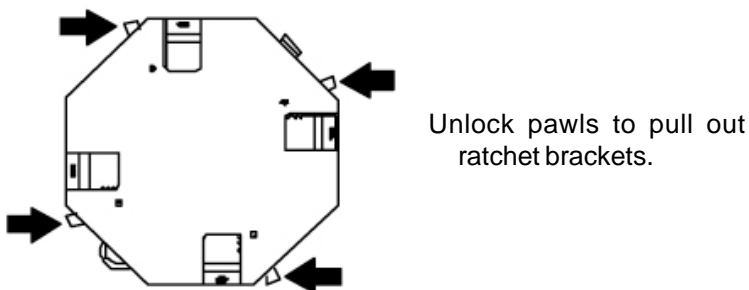


Figure 3

## OPERATION (Continued)

8. Secure the transmission to the jack by placing the strap over the trasmission, hook it in the hook ring, and then pull the strap tight. (see Figure 4)

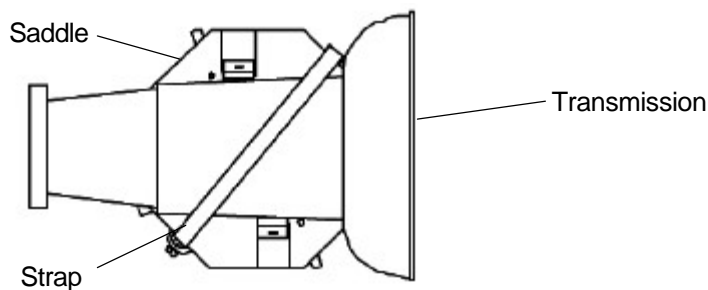


Figure 4

9. Support engine with appropriate stand before removing transmission from engine. (see Figure 5)

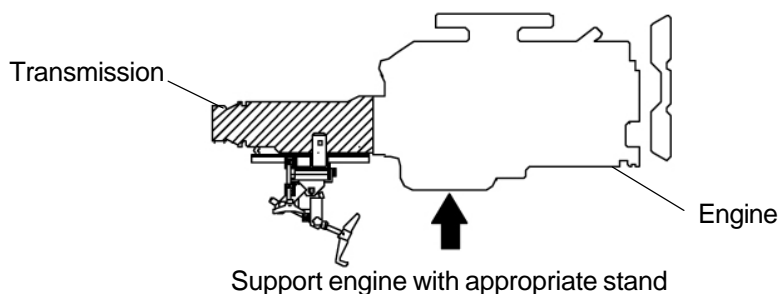


Figure 5

10. When component is free, slowly lower the jack by turning the release valve knob **counterclockwise**. Then follow by the air stage by depressing foot pedal marked "**DOWN**".
11. If the lowering process was caught by the locking pawl, depress "UP" lift pedal briefly so locking pawl will release. Depress "**DOWN**" foot pedal to lower the jack.



## WARNING

- Never pry locking pawl to release the load because the load will drop unexpectedly.
- Before removing or placing a transmission on the jack platform the air cylinder must be either fully elevated (UP) and pawl "locked" or fully retracted (DOWN) with air pressure released.
- Keep safety strap secured.
- Failure to heed this warning may result in personal injury and/or property damage.

## 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.
2. Remove the 4 bolts attaching the saddle assembly to the hydraulic unit. (see Figure 6)
3. Remove oil filler plug and release valve knob assembly to vent the reservoir.
4. Add hydraulic oil until it overflows. Reinstall the oil filler plug, release valve and saddle assembly.

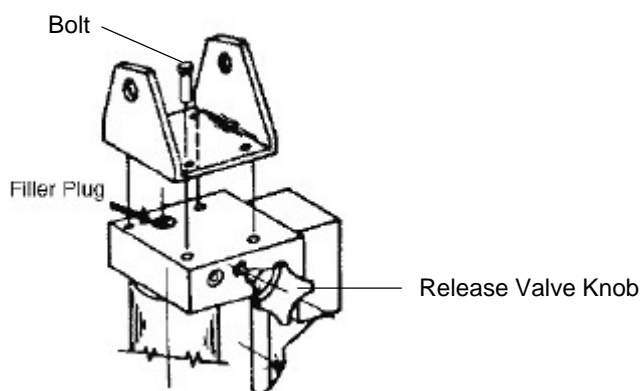


Figure 6

### Changing oil

For best performance, replace the hydraulic fluid completely at least once a year.

1. With saddle fully lowered, remove the 4 bolts attaching the saddle assembly to the hydraulic unit.
2. Remove the oil filler plug. Lay the jack on its side and drain the fluid into a suitable container.
3. Fill with oil until it overflows. Reinstall the oil filler plug and saddle assembly.

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

### Lubrication

1. A periodic coating of light lubricating oil to all moving parts will help to prevent rust and assure that casters and pump assemblies move freely.
2. When used on a daily basis, The air pump should be internally lubricated before each use. Use only good quality air tool lubricant. If no inline oiler is used, pour a teaspoon of air tool oil into the inlet of the air supply inlet. Simply operate the jack using the air feature in order to fully distribute the oil.

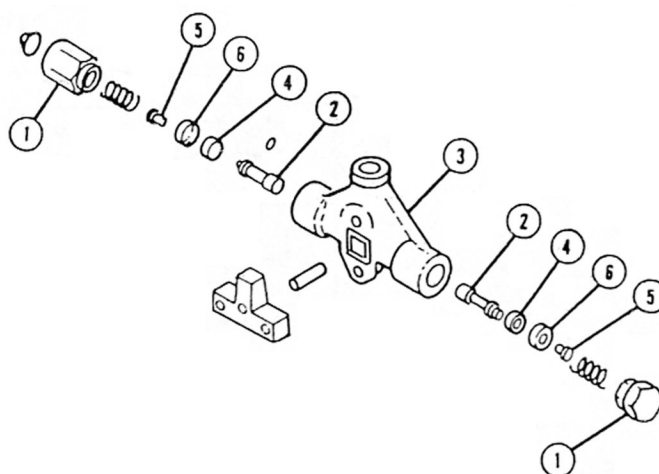


Figure 7. Valve Diagram

### Cleaning (refer to Figure 7 on Page 7)

Occasionally pieces of scale or rust from the airline will become lodged under the rubber seats of the air valve causing air leakage. This leakage is easily detected since the lift will raise slowly when you connect the airline to the quick coupler inlet even though the valve lever has not been touched. If this occurs, the inlet side of the valve needs cleaning. The lift may also lower slowly when you disconnect the airline from the quick coupler even though the valve lever has not been touched. If this occurs, either the inlet side or both sides of the valve needs cleaning. To clean, refer to Figure 7 on Page 7 and follow these instructions:

1. Remove fittings (1) from the ends of the air control valve.
2. Use a stiff wire or nail to push the valve spools (2) out of the valve body (3) from center to outside.
3. Carefully examine the valve seats (4) for any scale, dirt or foreign matter is embedded in the valve seat, remove the screws (5) and cap (6) from the ends of the spools and clean the seat and turn over and reassemble.
4. Lubricate the valve spool with light chassis grease.
5. Reassemble the valve in this order:
  - (I) Insert valve spools
  - (II) Insert the springs
  - (III) Assemble hexagonal fittings into the body
6. The valve should now operate like new.

### Storage

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

## TROUBLESHOOTING

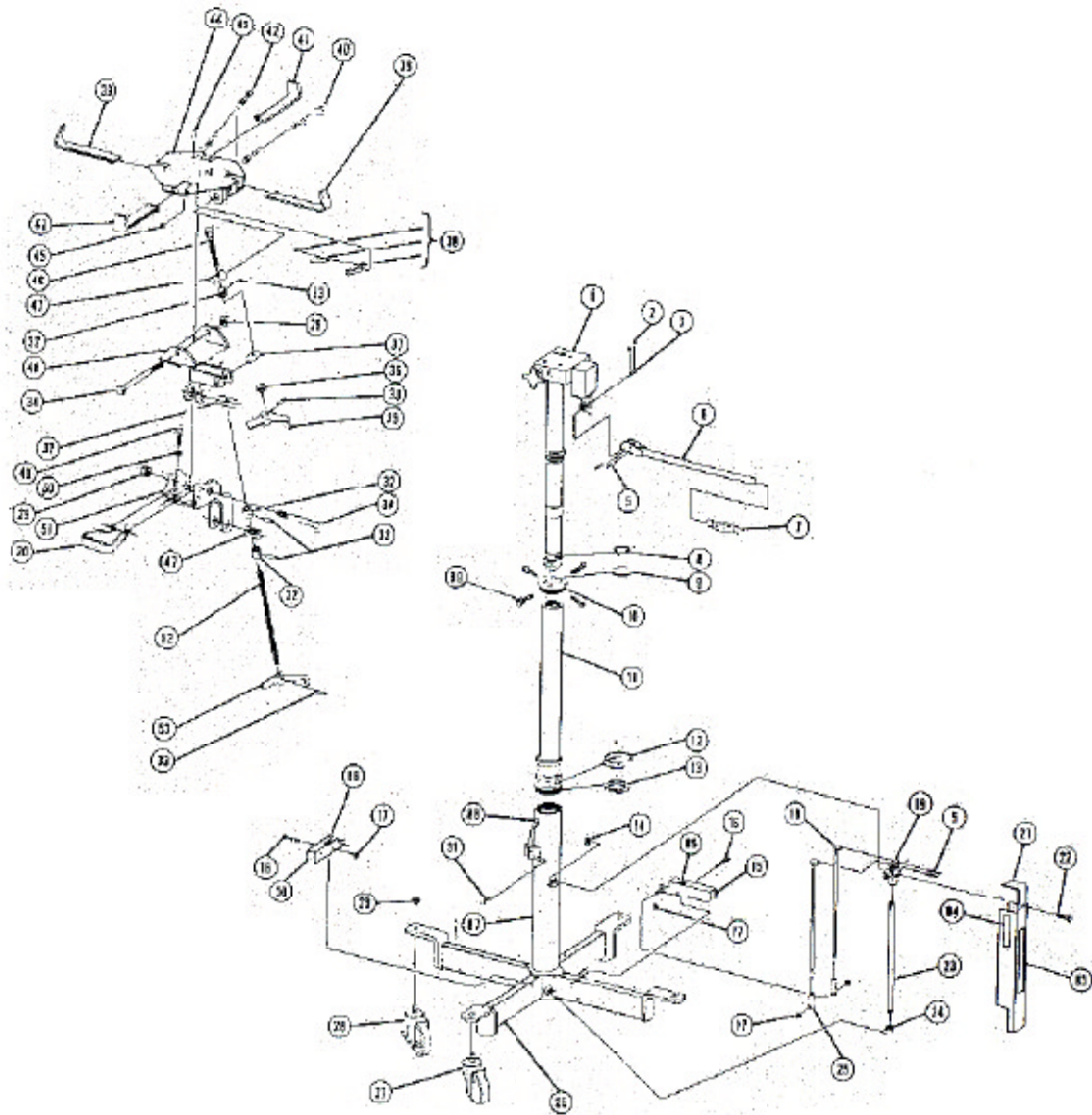
Symptom	Possible Causes	Corrective Action
Hydraulic stage will not lift load	<ul style="list-style-type: none"><li>• Overload condition</li><li>• Low oil level</li><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Remedy overload condition</li><li>• See Maintenance "Adding oil"</li><li>• Contact Hein-Werner Technical Service</li></ul>
Hydraulic stage will not lower after unloading	<ul style="list-style-type: none"><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Contact Hein-Werner Technical Service</li></ul>
Air stage will not lift load	<ul style="list-style-type: none"><li>• Air valve maybe dirty or leaking</li></ul>	<ul style="list-style-type: none"><li>• Clean the air valve (refer to "Cleaning" under Maintenance)</li></ul>
Air stage will not hold load	<ul style="list-style-type: none"><li>• Air leak</li></ul>	<ul style="list-style-type: none"><li>• Contact Hein-Werner Technical Service</li></ul>
Poor lift performance	<ul style="list-style-type: none"><li>• Oil level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper oil level</li></ul>
Will not lift to full extension	<ul style="list-style-type: none"><li>• Oil level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper oil level</li></ul>

## 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 9 to 10. 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



## HYDRAULIC UNIT

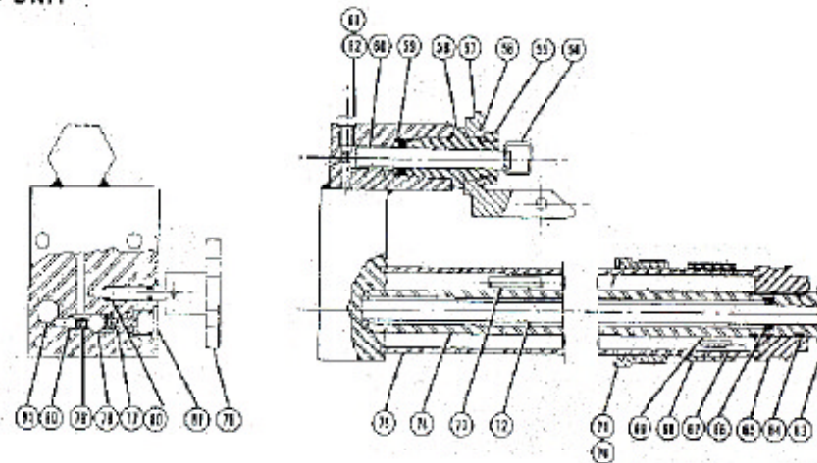


Figure 8: Replacement parts for HW93720

## SERVICE PARTS

Replacement Parts and Numbers for HW93720 (Refer to Figure 8 on Page 9)

Item No.	Part No.	Qty.	Description	Item No.	Part No.	Qty.	Description
1	239629	1	Hydraulic Unit	46	239674	2	Side Tilt Shaft
2	239630	2	Retaining Ring, 3/8"	47	239675	1	Trunnion Tilt
3	239631	1	Shaft, Pump	48	239676	4	Pivot Bracket
4	239632	1	Pump Handle Socket	49	239677	4	Capscrew 3/8 x 1
5	239633	4	Roll Pin, 1/4 x 1 1/2	50	239678	1	Lockwasher, 3/8
6	239634	1	Pump Handle Rod	51	239679	1	Hyd. Unit Bracket
7	239635	1	Handle Grip , 3/4 I.D.	52	239680	1	Long Tilt Shaft
8	239636	1	Wiper Ring, 2"	53	239681	1	Crank (Lower)
9	239637	1	Felt Ring, 2 3/4" O.D.	54	239682	1	Clip Pump
10	241082	1	Gland 4" I.D.	55	239683	1	Nut, Jam, 3/4-16 UNF
11	241078	1	Piston Rod	56	239684	1	Washer, Rim
12	241079	1	Seal 4" Dia.	57	239685	1	Swivel Pivot
13	241080	1	Wiper Ring, 4 "	58	239686	1	Pump Sleeve
14	239642	1	Nut, 1/4-20, Self Locking	59	239687	1	Seal, 13/16 O.D., X 7/16 I.D.X 1/4 Deep
15	239643	2	Pedal, "Up"	60	239688	1	Plunger
16	239644	4	Rivet 1/4 x 1-3/4	61	239689	1	Capscrew, SOC. HD, 5/16-18 UNC
17	239645	2	Slip nut, 1/4"	62	239690	1	Gasket, Metalic
18	239646	1	Control Rod	63	239691	1	Guide, Ram
19	239647	1	Air Valve	64	239692	1	O' Ring, 1 O.D. x 13/16 I.D., 3/32 Dia.
20	239648	1	Tow Handle	65	239693	1	Cap
21	239649	1	Valve Cover	66	239694	1	Seal, 11/16 O.D. x & 7/16 I.D., 3/16 Deep
22	239650	1	Capscrew, 1/4 x 1 3/4	67	239695	1	Magnet
23	239651	1	Pipe, 1/4 x 14 3/4	68	239696	1	Spacer
24	239652	2	Street Elbow 1/4	69	239697	1	Suction Tube, 22 5/8 Long
25	239653	2	Rod End	70	239698	1	Packing Gasket, Felt
26	241081	1	Base Weldment	71	239699	1	Packing Gland 2 " Bore
27	239655	2	Caster, 4"	72	239700	1	Ram
28	239656	2	Caster, 4" , with Brake	73	239701	1	Suction Tube, 6" Long
29	239657	6	Nut, 1/2-13, Self Locking	74	239702	1	Cylinder Tube
30	239658	1	Pedal "Down"	75	239703	1	Reservoir Tube
31	239659	1	Spring	76	239704	1	Release Knob Sub Assy.
32	239660	3	Spacer Drilled	77	239705	1	Spring Compression, .406 O.D.
33	239661	5	Roll Pin, 3/16 x 7/8	78	239706	1	Ball, 3/8 Dia., R.C.
34	239662	2	Capscrew, Special	79	239707	1	Spring Compression, .250 O.D.
35	239663	1	Crank, Side Tilt	80	239708	2	Ball, 1/4 Dia., RC
36	239664	1	Spacer not Drilled	81	239709	2	Plug
37	239665	2	Nut Tilt	82	239710	1	Block Hydraulic, Weldment
38	239666	4	Ratchet Assy.	83	239711	1	Warning Label
39	239667	3	Trans, Bracket, Long	84	239897	1	Nameplate
40	239668	1	Reel Assy.	85	239713	1	"Up" Label
41	239669	2	Tran. Bracket, Short	86	239714	1	"Down" Label
42	239670	4	Capscrew, Flat HD, 1/4 x 1/2	87	234947	1	Logo Label
43	239671	1	Roll Pin 1/4 x 7/8	88	239716	1	Capacity Label
44	239672	4	Adapter weldment	89	241083	4	Capscrew, 3/4 Self Lock
45	239673	1	Angle Stop				