



Air Actuated Axle Jacks

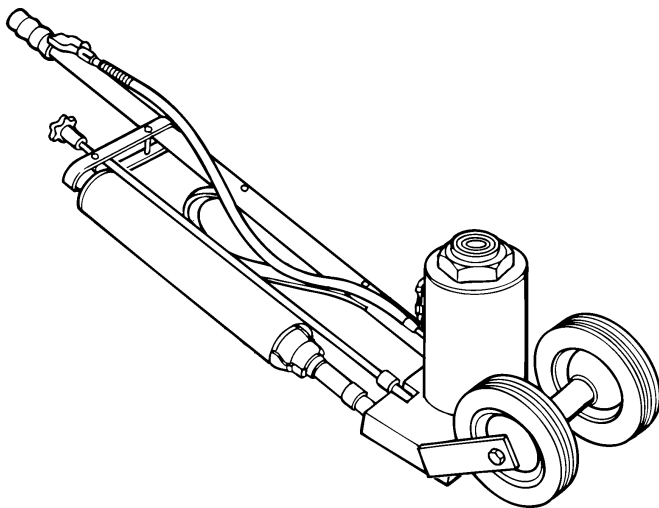
Operating Instructions & Parts Manual

Model Number
HW93731
HW93733 (Low Height Pick Up)

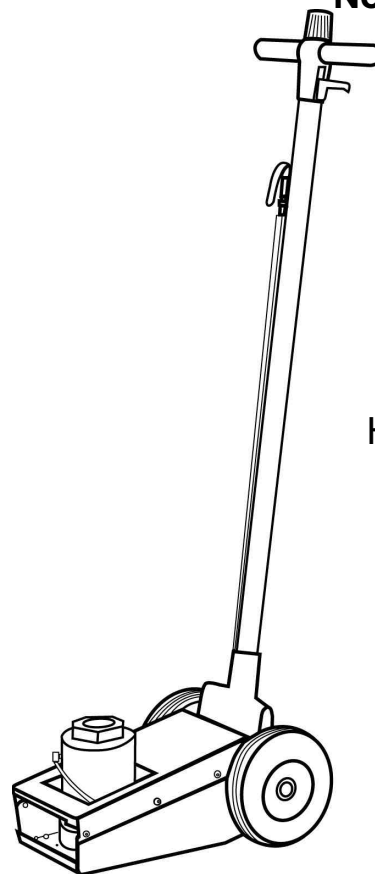
Capacity
20 Ton
20 Ton



**Made in
North America**



HW93731



HW93733

SFA Companies ©2004
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
HW93731-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:

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

(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 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 product is authorized. Make certain that the operator thoroughly understands the potential dangers associated with the use and misuse of the product. If any doubt exists as to the safe and proper use of this jack as outlined in this factory authorized manual, remove from service immediately.

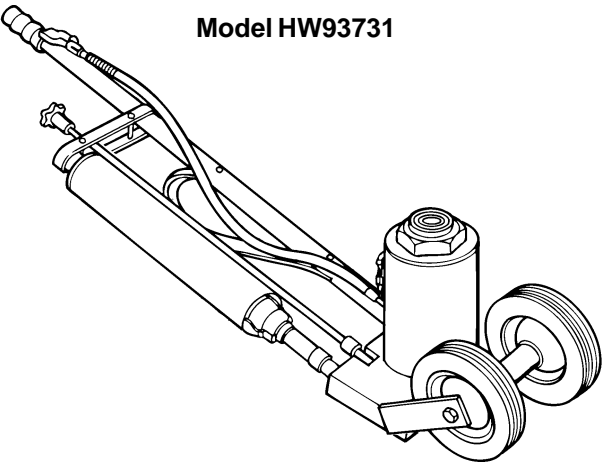
Inspect before each use. Do not use if there are broken, bent, cracked or damaged parts (including labels) are noted. Any jack that appears damaged in any way, or operates abnormally, shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue 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 Manuals are available from manufacturer.

PRODUCT DESCRIPTION

Hein-Werner Air Actuated Hydraulic Axle Jacks are designed to lift, but not sustain, rated capacity loads. They are designed to be used vertically. After lifting, loads must be **immediately** supported by appropriate mechanical means (as opposed to hydraulic means), such as vehicle stands. These jacks are **not appropriate** for use in lifting or positioning construction trailers, mobile homes, houses and/or other building structures.

SPECIFICATIONS

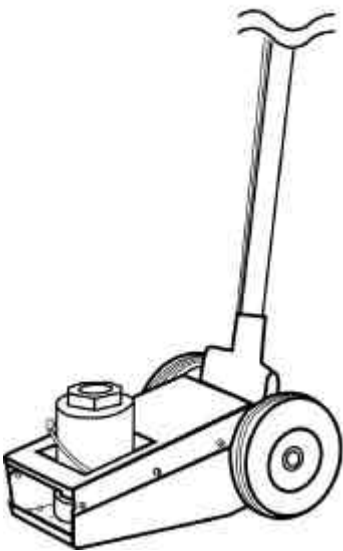
Model HW93731



Rated Load Capacity	20 tons (40,000 lbs)
Low Pick Up Height	9-1/2"
High Lifting Point	17-1/2"
Power Raise	5-1/2"
Screw Extension	2-1/2"
Base Size	8" x 5-1/2"
Ram Diameter	2-3/16"
Handle Length	50"
Wheel Diameter	6"
Maximum Air Pressure Supply	150 psi
Required Air Pressure For Lifting Loads	140 psi for 40,000 lbs 125 psi for 35,400 lbs 100 psi for 27,900 lbs 75 psi for 19,700 lbs

Model HW93733

Rated Load Capacity	20 tons (40,000lbs)
Low Height	9"
High Height With Extension	19-3/4"
Screw Extension	4 3/4"
Lift Cap Diameter	2"
Wheel Diameter	8"
Chassis Overall Length	20"
Width at Wheels	13-1/4"
Handle Length	45"
Base Size	8" x 17"
Min. PSI for Rated Load	150 psi
Typical Lift Time - Full Raise (20 ton, 150 psi)	2 min. 15 sec



SAFETY INSTRUCTIONS

BEFORE USE

1. Inspect the jack before each use. Do not use if there are bent, broken or cracked components (including labels).
2. Verify that the product and the application are compatible, if in doubt call Hein-Werner Technical Service (816) 891-6390.
3. 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.
4. Open the release valve (counterclockwise but no more than 2 full turns).
5. Locate and remove the oil filler screw/plug (Ref # 13 for Model HW93731, Ref # 36 for Model HW93733, on replacement parts section) with ram fully retracted. This will help release any pressurized air which may be trapped within the reservoir.

NOTE: For HW93731, please remove the shipping screw and replace it with the air vent screw provided before use.

6. Ensure the oil level is just below the oil filler screw hole.
7. Reinstall the oil filler screw.
8. Pour a teaspoon of good quality air tool lubricant, such as #630-AAA Lubriplate, into the air supply inlet of the lift control valve.
9. Connect to air supply and operate for 3 seconds to evenly distribute lubricant.
10. Ensure that the jack rolls freely and that the air pump operates smoothly before putting into service. Replace worn or damaged parts and assemblies with Hein-Werner Authorized Replacement Parts only.
11. When installing the air nipple, ensure that thread tape or compound is used when servicing connections.

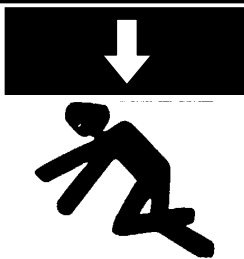
NOTE: This product is fitted to accept the common 1/4" PT air nipple.

NOTE: To ensure dependable, trouble free operation, an inline air dryer and oiler is recommended.

! WARNING

- Study, understand, and follow all instructions provided with and on this device before operating this device.
- Do not exceed rated capacity.
- Use only on hard, level surfaces capable of sustaining rated capacity loads.
- This is a lifting device only.
- Never wire, clamp or otherwise disable the lift control valve to function by other than operator's hand.
- Immediately after lifting, support the vehicle with appropriate means such as jack stands.
- Do not modify or alter this device.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- Only attachments and/or adapters supplied by the manufacturer shall be used.
- Do not use the device for any purpose other than that for which it is intended.
- Failure to heed these markings may result in personal injury and/or property damage.

! WARNING



To avoid crushing and related injuries:

- NEVER work on, under or around a load supported only by hydraulic jack(s).
- Transfer the load immediately to appropriately rated vehicle stands

! 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.

ASSEMBLY

Little, if any, assembly is required of these jacks. Familiarize yourself with the illustrations in the operator's manual. Know your jack and how it operates before attempting to use. Ensure that the quick connect and lift control valve are secured tightly. Use of non-hardening thread sealant is recommended. DO NOT introduce thread sealant into the hose connection, as damage to air motor and related components may occur.

For model HW93733 (see Figure 2), remove square headed shipping plug, then install the tube to the reservoir. Assemble handle to the handle fork and secure with provided bolt to prevent inadvertent removal. Connect 1/4" air nipple (not provided) to air supply inlet and to adequate air source.

OPERATION

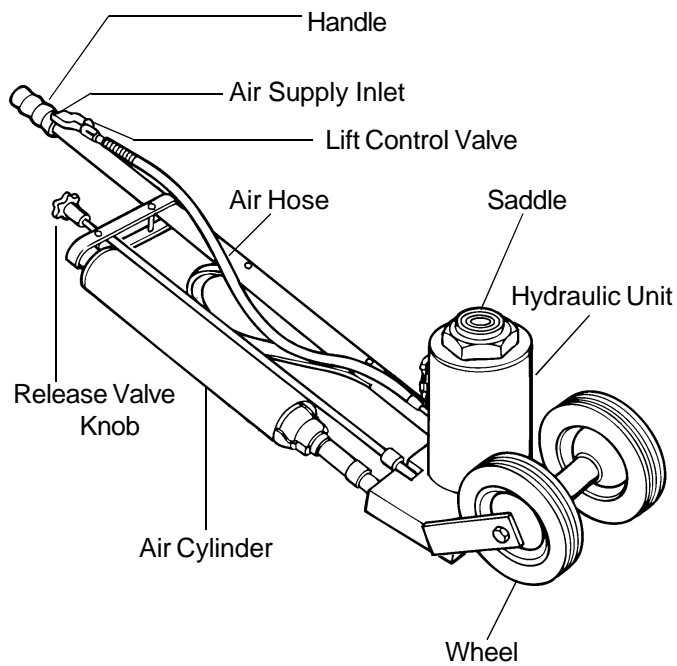


Figure 1: Model HW93731 Components

Lifting

1. Connect the air supply inlet to adequate air source.
2. Use wheel chocks to help prevent inadvertent shifting and movement of vehicle being lifted.
3. Consult vehicle service manual for the location of recommended lift points. Position the jack near lift point.
4. Close the release valve by turning the release valve knob, clockwise until it is firmly closed.
5. Squeeze the lift control valve until saddle contacts load.
6. Verify proper saddle/lift point alignment.

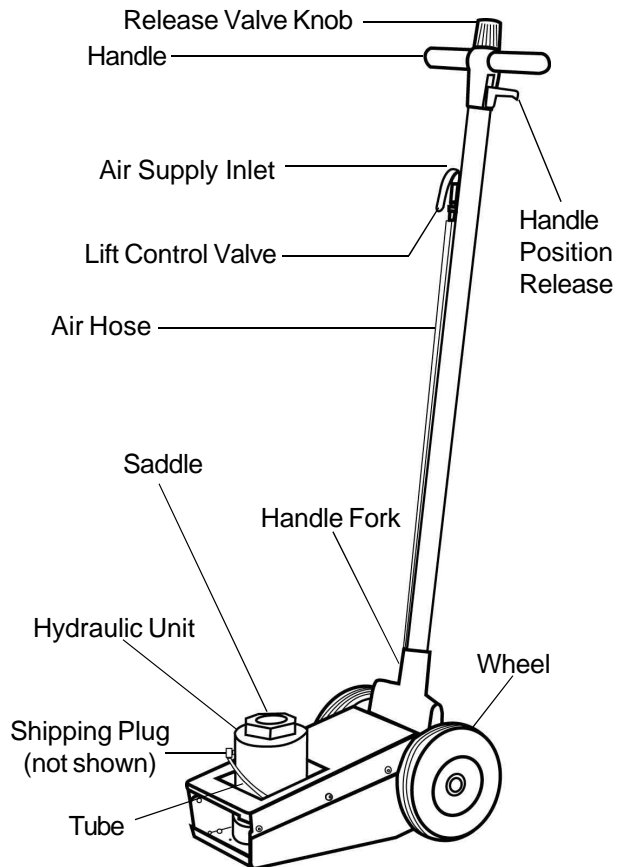


Figure 2: Model HW93733 Components

7. Release the grip on the lift control valve when load reaches desired height.
8. Transfer the load to appropriately rated support devices such as vehicle stands immediately.

NOTE: Use only saddle extenders (if equipped) provided and recommended by the manufacturer of the jack. Lift only on the manufacturer's recommended lift points and in accordance with the published guidelines in your vehicle owners manual.

Lowering

1. Raise load high enough to clear the jack stands, then carefully remove jack stands (**always** used in pairs).
2. Turn the release valve knob counterclockwise slowly, 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 stands.
 - c. Using the non-malfunctioning jack, lower the load by turning the operating handle counterclockwise, but no more than 1/2 turn.
3. After removing, push saddle down to reduce ram exposure to rust and contamination.

MAINTENANCE

(See Replacemnet parts section from page 8 to page 12 for detail parts list as reference)

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 premature failure of the jack and the potential for sudden and immediate loss of load. We recommend HW93291 or equivalent

Adding oil

1. Set jack in its upright, level position. After lowering saddle fully, remove the oil filler plug (for HW93733) or air vent screw (for HW93731). It may be necessary to remove cover plate on model HW93733.
2. Fill with oil until just below the rim of the oil filler screw hole. Reinstall the oil filler plug/air vent scw and cover plate.

Changing oil

For best performance, replace the complete hydraulic fluid at least once per year.

1. Remove the oil filler plug (for HW93733) or air vent screw (for HW93731) with saddle fully lowered. It may be necessary to remove cover plate on model HW93733.
2. Lay the jack on its side and drain the fluid into a suitable container.
3. Fill with oil until just below the rim of the oil filler screw hole. Reinstall the oil filler screw and cover plate.

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

Lubrication

1. A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels move freely and the pump function smoothly.
2. When used on a daily basis, air pump should be internally lubricated before each use. Use **only** good quality air tool lubricant such as #630 - AAA Lubriplate. If no inline oiler is used, pour a teaspoon of air tool oil into the inlet of the air control valve. Simply operate the jack using the air feature in order to fully distribute the oil.

Cleaning

Periodically check the 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

When not in use, store the jack(s) with saddle fully retracted and upright (normal use position).

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	<ul style="list-style-type: none"> • Release valve not tightly closed • Air supply inadequate 	<ul style="list-style-type: none"> • Ensure release valve tightly closed • Ensure adequate air supply
Jack will lift, but not maintain pressure	<ul style="list-style-type: none"> • Release valve not tightly closed • Hydraulic unit malfunction 	<ul style="list-style-type: none"> • Ensure release valve tightly closed • Contact Hein-Werner Tech. Service
Jack will not lower after unloading	<ul style="list-style-type: none"> • Reservoir overfilled 	<ul style="list-style-type: none"> • Ensure load is removed, then drain fluid to proper level
Poor lift performance	<ul style="list-style-type: none"> • Fluid level low • Air trapped in system (does not apply for HW93731 with air vent screw installed) 	<ul style="list-style-type: none"> • Ensure proper fluid level • With ram fully retracted, remove oil filler screw to let pressurized air escape, then reinstall oil filler screw
Will not lift to full extension	<ul style="list-style-type: none"> • Fluid level low 	<ul style="list-style-type: none"> • Ensure proper fluid level

REPLACEMENT PARTS

Not all components of the axle jacks 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 8 to 12. 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

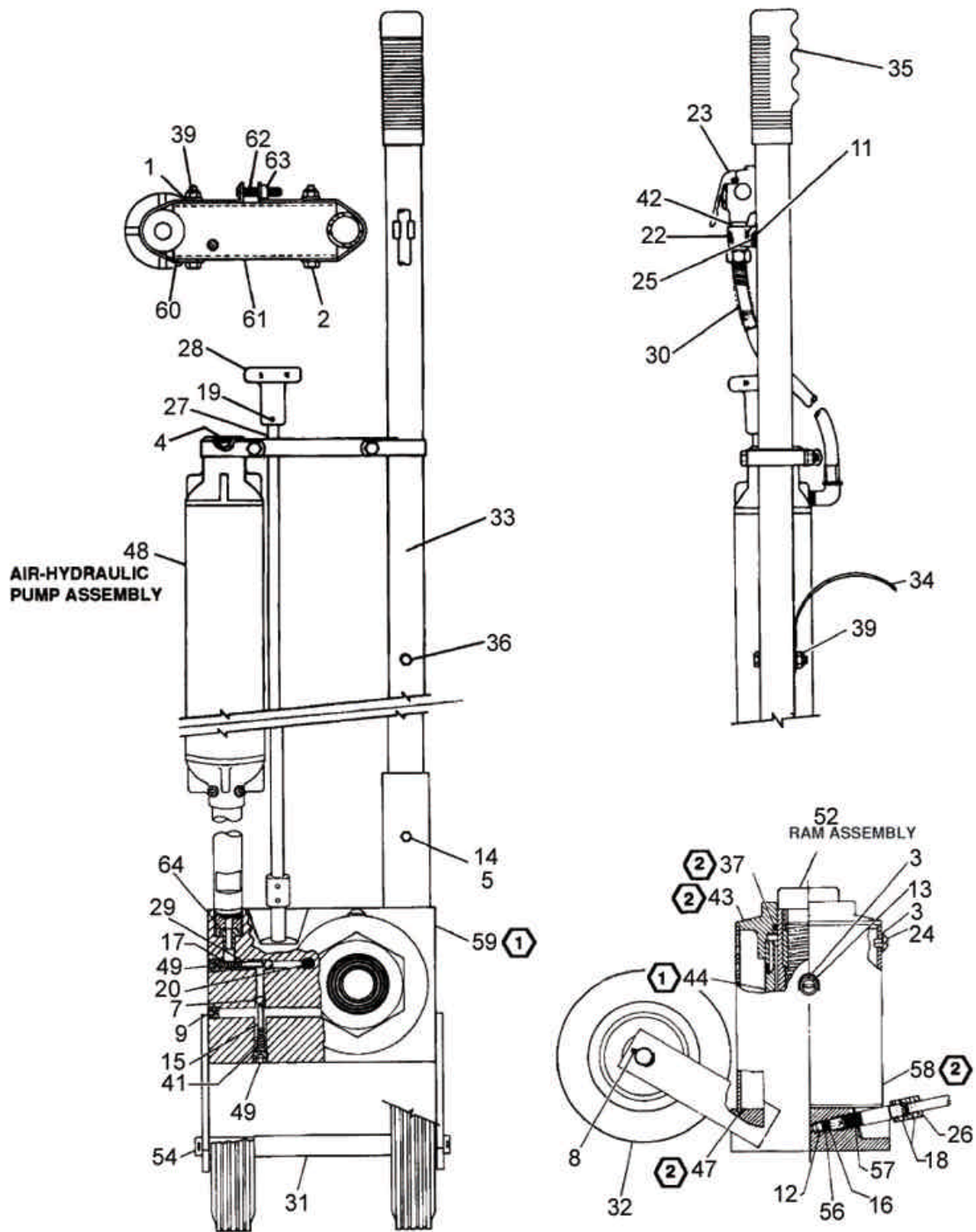


Figure 3: Replacement Parts for Model HW93731

- ① Apply Never-Seez (or equivalent) to threads and face at both ends of 227533 cylinder (Ref # 44) before assembling. Assemble to 234935 base (Ref # 59) and tighten to crush joint.
- ② Lubricate Ref # 47 O-ring, Ref # 37 O-ring and upper and lower Ref # 58 tank and Ref # 43 tank nut with Lubriplate (or comparable lubricant) before assembling. Tighten to a crush point.

RAM ASSEMBLY

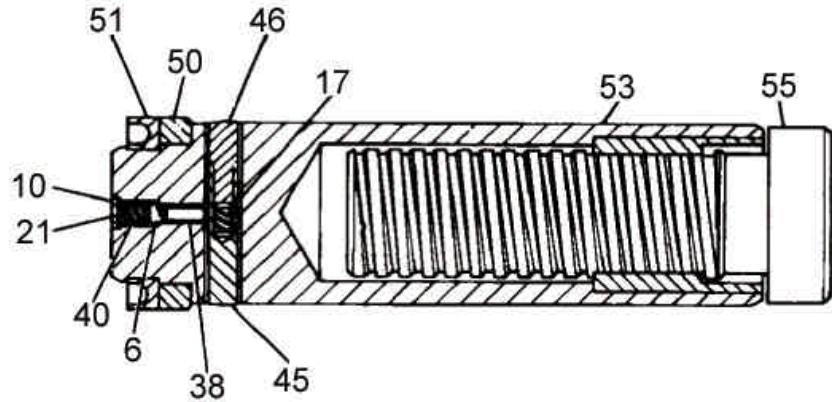


Figure 4: Replacement Parts for Model HW93731

Replacement Parts and Numbers for Model HW93731 (Refer to Figure 3 and Figure 4)

Item no.	Part No.	Qty..	Description	Item no.	Part No.	Qty.	Description
1	48230	2	Washer	33	224521	1	Handle
2	50062	2	Bolt	34	224640	1	Balance Strap
3*	200003	2	Gasket	35	224641	1	Handle Grip
4	201733	1	Expansion Plug	36	224644	3	Bolt
5	201787	1	Lockwasher	37*	224648	1	O-ring
6*	203199	1	Ball	38	225483	1	Pin
7*	203202	3	Ball	39	226019	5	Locknut
8	204446	2	Cotter Pin	40	226331	1	Spring
9	210311	1	Pipe Plug	41	226401	2	Spring
10	210411	1	Washer	42	226483	1	Pipe nipple
11	211737	1	Lockwasher	43	227136	1	Tank Nut
12	212227	1	Poppet	44	227533	1	Ram Cylinder
13	212540	1	Filler Screw	45	228090	1	Cross pin
14	212566	1	Bolt	46	228091	1	Cross pin
15	213728	1	Spacer	47	228099	1	O-ring
16*	214555	1	O-ring	48	228929	1	Air-hydraulic Pump Assembly
17	216647	2	Spring	49	229131	2	Pipe Plug
18	217649	2	Roll Pin	50	230125	1	Heel Plate
19	217898	1	Roll Pin	51	230126	1	U-cup Packing
20	222533	1	Screen	52	230134	1	Ram Assembly
21	223166	1	Screen	53	230135	1	Ram
22	223172	1	Hose Clip	54	231102	1	Axle
23	223180	1	Air Valve	55	232618	1	Extension Screw Assembly
24	224073	1	Air Vent Screw	56*	233917	1	Plastic Spring
25	224081	1	Screw	57	233922	1	Release Stem
26	224164	1	Adapter	58	234933	1	Oil tank
27	224165	1	Rod	59	234935	1	Base
28	224166	1	Hand Knob	60	234990	2	Strap
29	224180	1	Spacer	61	234999	1	Support Bracket
30	224182	1	Air Hose	62	236717	1	Screw
31	224472	1	Spacer	63	236718	1	Nut
32	224475	2	Wheel	64	242876	1	Bushing

*Included in 240579 Repair Kit

**228929
AIR-HYDRAULIC
PUMP ASSEMBLY**

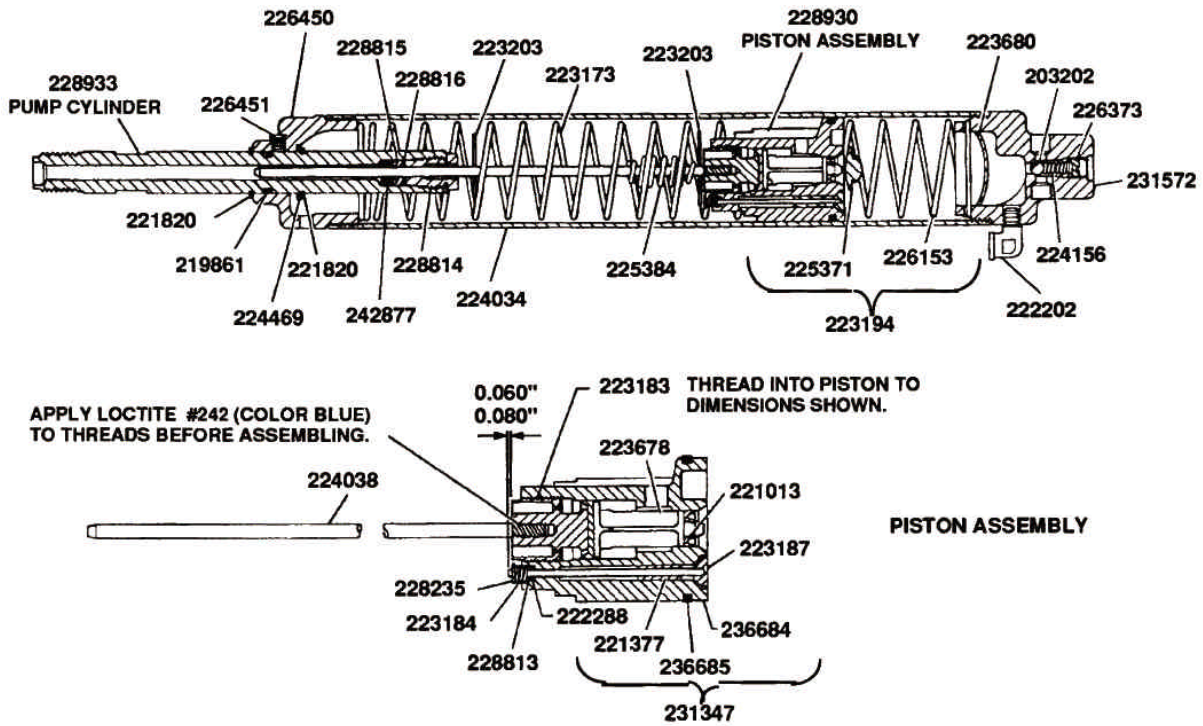


Figure 5: Replacement Parts for Model HW93731

Replacement Parts and Numbers (Refer to Figure 5)

Item no.	Part no.	Qty.	Description	Item no.	Part no.	Qty.	Description
65	203202	1	Ball	83	224469	1	Washer
66	219861*#	1	O-ring	84	225371	1	Rubber Cushion
67	221013*#	1	U-cup Packing	85	225384	1	Trip Spring
68	221377	1	Roll Pin	86	226153	1	Spring
69	221820	2	Retaining Ring	87	226373	1	Adjusting Screw
70	222202	1	Elbow	88	226450	1	End Block
71	222288*#	1	O-ring	89	226451	2	Set Screw
72	223173	1	Return Spring	90	228235	1	Cotter Pin
73	223183	1	Plug	91	228813	1	Washer
74	223184	1	Spring	92	228814	1	Gland Unit
75	223187#	1	Valve & Plunger	93	228815	1	U-cup Packing
76	223194	1	Spring & Rubber Cushing Ass'y	94	228816	1	Washer
77	223203	2	Trip Washer	95	228930	1	Piston Assembly
78	223678	1	Pump Packing & Piston	96	228933	1	Pump Cylinder
79	223680	1	Screen	97	231347	1	Piston & Roll Pin Assembly
80	224034	1	Air Cylinder	98	231572	1	Cylinder Cap
81	224038	1	Pump Rod	99	236684	1	Piston
82	224156	1	Spring	100	236685	1	Sealing Ring
				101	242877	1	Bushing
*	Included in 240564 Air Hydraulic Pump Repair Kit.				228929	1	Air Hydraulic Pump Assembly
#	Included in 240579 Repair Kit.						

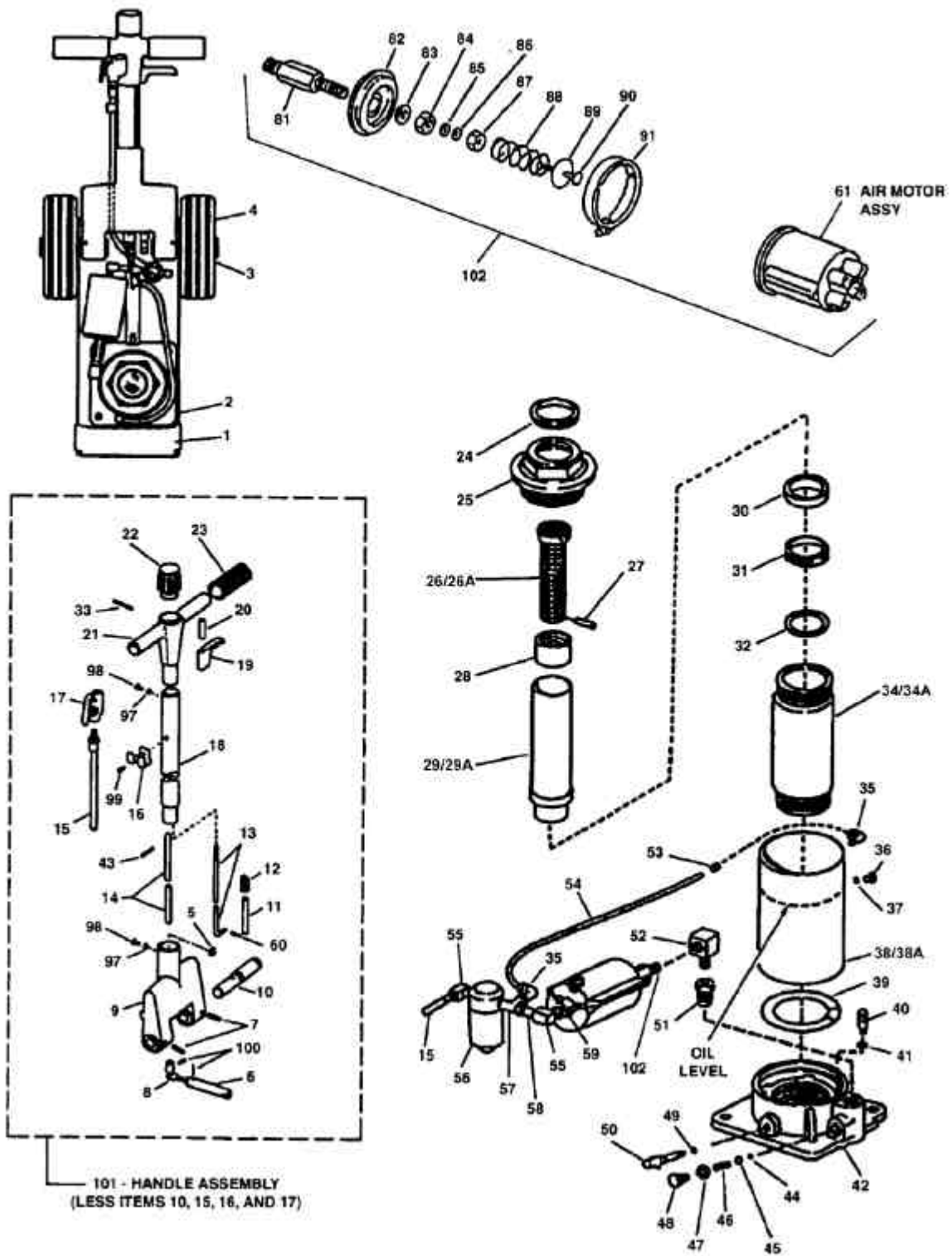


Figure 6: Replacement parts for HW93733

Replacement Parts and Numbers for Model HW93733 (Refer to Figure 6)

Item no.	Part no.	Qty.	Description	Item no.	Part no.	Qty.	Description
1	BK210980	1	Top Cover	38A	12500006	1	Reservoir B67413
2	BJ511626	1	Frame	39	BK810800	1	Washer
3	BB557523	4	Retaining Ring	40	BK876900	1	Relief Valve
4	BE587106	2	Wheel	41	BS303700	1	Washer
5	SJ100420	1	Nut	42	BK55005P	1	Base W/Plug
6	BK901038	1	Release Valve Adaptor	43	BD184061	1	Pin
7	BA812261	2	Handle Pin	44*	B1160000	1	Ball 7/32" dia.
8	BJ396900	1	Universal Joint	45*	BS116000	1	Ball 5/16" dia.
9	BA707133	1	Yoke	46*	AJ100040	1	Valve Spring
10	BJ395104	2	Axle	47*	AJ100039	1	Valve Plug Gasket
11	BA766061	1	Segment Pin	48*	BK300600	1	Valve Plug
12	BA768141	1	Segment Spring	49*	AJ100312	1	Release Valve O-ring
13	BA961142	1	Segment Pin Rod	50	BK490010	1	Release Spindle
14	BK110400	1	Release Rod	51	BJ580096	1	Pump Nipple
15	BJ354646	1	Air Hose	52	BK729100	1	Elbow
16	BK59110	1	Air Valve Bracket	53	BK102700	2	Ferrule
17	35100007	1	Air Valve	54	BK964600	1	Tube
18	17000003	1	Handle Tube	55	BJ479096	2	Street Elbow
19	BA963144	1	Segment Lever	56	BJ792018	1	Filter Assy. (complete)
20	BD894055	1	Segment Rod Nut	57	BK264096	1	Tee
21	BA962135	1	Cross Handle	58	BJ790096	1	Nipple
22	BK130800	1	Release Knob	59	BJ788039	1	Bushing
23	BA725550	2	Handle Grip	60	AJ100032	1	Cotter Pin
24*	NJ100046	1	Quad Ring	61	‡246488	1	Air Motor Assy.
25	BJ398020	1	Top Cap	81	BK520400	1	Plunger Body
26	BJ382028	1	Adj. Screw	82	BK261101	1	Plate
26A	21101313	1	Adj. Screw B67413	83	BK361080	1	Lockwasher
27	BD674061	1	Pin	84	BK350550	1	Hex nut
28	BJ385446	1	Plunger Sleeve	85*	CB918041	1	U-Cup
29	21100488	1	Plunger	86*	BK110390	1	Back-up Bushing
29A	14060011	1	Plunger B67413	87	BK340550	1	Hex Gland Nut
30*	36400011	1	Bearing	88	CH210110	1	Spring
31*	248428	1	U-Cup	89	BK110800	1	Spring Cap
32*	30600031	1	Retaining Ring	90	CB180040	1	Plunger
33	BA954058	1	Pin	91	CB219044	1	Body Retainer
34	BJ390030	1	Cylinder	97	BD914108	4	Washer
34A	13000011	1	Cylinder B67413	98	BA953252	4	Bolt
35	BJ990096	2	Male Elbow	99	SJ100374	1	Screw
36*	AJ100060	1	Filler Plug	100	BD374061	2	Pin
37*	AJ100020	1	Filler Plug Gasket	101	BK216950	1	Handle Assembly
38	BJ389025	1	Reservoir	102	BK210950	1	Pump/Air Motor

‡ Note: No kits are available for the air motor.
 Replace with complete assembly – part number 246488
 * Included in Hydraulic Jack Repair Kit B7001999
 A - for old model B67413 (eg. 26A)