



***Blackhawk  
Automotive***™

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# **8 Ton Air/Manual Long Jack**

## **Operating Instructions & Parts Manual**

**BH2081**

SFA Companies ©2004  
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-Before using this product, read this manual and follow all its Safety Rules and Operating Instructions

Made in Taiwan

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### ONE YEAR LIMITED WARRANTY

For a period of one (1) year 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.

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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, or operates abnormally shall be removed from service immediately. If the jack has been or is 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 Blackhawk Automotive authorized service center. It is recommended that an annual inspection be done by qualified personnel. Labels and Operator's Manuals are available from manufacturer.

**DO NOT USE TO MOVE OR DOLLY VEHICLE**

**DO NOT USE FOR ANY OTHER PURPOSE THAN THOSE OUTLINED ABOVE**

## PRODUCT DESCRIPTION

The Blackhawk Automotive Hydraulic Lift is designed to be used only with corresponding Blackhawk Automotive Engine Cranes. Its intended use is as an aid in the removal and installation of vehicle component parts and assemblies, particularly vehicle engines and those vehicle transaxles designed to be removed from above the engine compartment.

## SPECIFICATIONS

Model	Capacity	Jack Size (L x H)	Min. Height	Max. Height
BH2081	8 Ton	7 1/8" x 5"	23 5/8"	42 3/4"

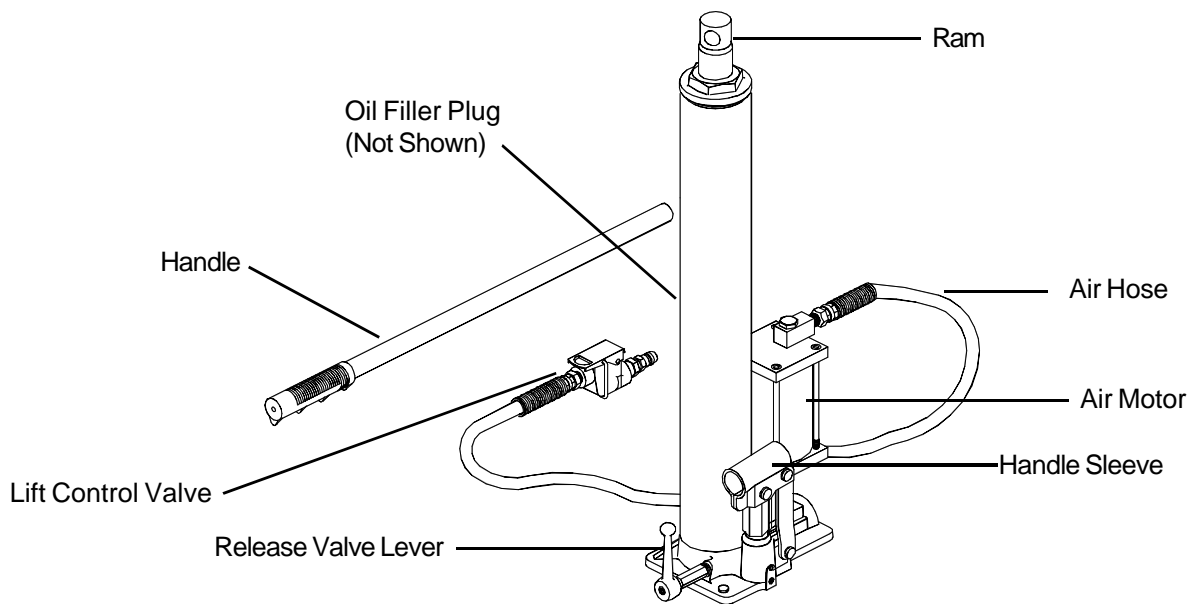


Figure 1 - Model BH2081 Components

## BEFORE USE

1. Verify that the product and the application are compatible, if in doubt call Blackhawk Automotive Technical Service (816)891-6390.
2. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product and the hazards associated with its improper use.
3. With ram fully retracted, locate and remove the oil filler plug. Insert the handle into the handle sleeve, then pump 6 to 8 strokes. This will help release any pressurized air which may be trapped within the reservoir. Ensure the oil level is just below the oil filler plug hole. Reinstall the oil filler plug.
4. Check to ensure that the pump operates smoothly before putting into service. Replace worn or damaged parts and assemblies with Blackhawk Authorized Replacement Parts only. (See Replacement Parts Section). Lubricate as instructed in Maintenance Section.
5. Inspect before each use. Do not use if bent, broken or cracked components are noted.

## ⚠ WARNING

- Study, understand, and follow all printed materials provided with and on this jack before use.
- Do not use as an independent lifting device.
- Read, understand and follow all proper procedures specified in the engine crane's operator manual.
- Do not overload beyond rated capacity.
- Avoid shock loads caused by rapidly opening and closing release valve.
- Do not open oil filler plug unless ram is fully lowered.
- Move or dolly the load with crane in lowest position only and then only on hard level surfaces capable of sustaining the load.
- Ensure that all mounting hardware is tight before using.
- Failure to heed these warnings may result in personal injury as well as property damage.

## OPERATION

**Note:** Model BH2081 will fit on the Blackhawk's engine crane model BH8020.

1. Secure jack to suitable engine crane.
2. Locate and close release valve by turning lever clockwise firmly.
3. Operate by pumping handle or squeeze the lift control valve until engine crane hook reaches desired position. To end air operation, simply release the grip on the lift control valve. **DO NOT OPERATE BY AIR AND BY PUMPING AT THE SAME TIME.**
4. Lower hook by gently turning the release valve lever counter clockwise, **never more than 1/2 turn.**

**CAUTION:** Be sure all tools and personnel are clear before lowering load. Dynamic shock loads are created by quickly opening and closing the release valve as the load is being lowered. The resulting overload may cause hydraulic system failure.

## 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 premature failure of the jack and the potential for sudden and immediate loss of load. When used daily, pour a teaspoon of proper lubricant into the air inlet of the lift control valve. Connect valve to air supply and squeeze valve lever to operate. This will evenly distribute lubricant and properly prepare the hydraulic power unit for use. Periodically check for leaks at air connections. Use thread compound to repair. Avoid the use of thread tape when possible.

### Adding oil

1. With ram fully lowered and pump piston fully depressed, set jack in its upright, level position. Carefully remove from crane. Remove oil filler plug.
2. Fill until oil is level with the filler plug hole, reinstall oil filler plug.

## Changing oil

For best performance and longest life, replace the complete fluid supply at least once per year.

1. With ram fully lowered and pump piston fully depressed, remove the oil filler plug.
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. Set jack in its level upright position.
4. Fill with good quality jack oil. We recommend Hein-Werner HW93291 or equivalent.

## Lubrication

1. A coating of light lubricating oil to pivot points and hinges will help to prevent rust and assure that pump assemblies move freely.
2. Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

**Never use sandpaper or abrasive material on these surfaces !**

3. When not in use, store the jack with pump piston and ram fully retracted.

## TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	<ul style="list-style-type: none"><li>• Release valve not tightly closed</li><li>• Overload condition</li><li>• Air supply inadequate</li></ul>	<ul style="list-style-type: none"><li>• Ensure release valve tightly closed</li><li>• Remedy overload condition</li><li>• Ensure adequate air supply</li></ul>
Jack will lift, but not maintain pressure	<ul style="list-style-type: none"><li>• Release valve not tightly closed</li><li>• Overload condition</li><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Ensure release valve tightly closed</li><li>• Remedy overload condition</li><li>• Contact Blackhawk Tech. Service</li></ul>
Jack will not lower after unloading	<ul style="list-style-type: none"><li>• Reservoir overfilled</li><li>• Linkages binding</li></ul>	<ul style="list-style-type: none"><li>• Drain fluid to proper level</li><li>• Clean and lubricate moving parts</li></ul>
Poor lift performance	<ul style="list-style-type: none"><li>• Fluid level low</li><li>• Air trapped in system</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li><li>• With ram fully retracted, remove oil filler plug to let pressurized air escape, then reinstall oil filler plug</li></ul>
Will not lift to full extension	<ul style="list-style-type: none"><li>• Fluid level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li></ul>

## REPLACEMENT PARTS

**Available Parts:** Please refer to the Parts drawing when ordering 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, serial number and description below. Call or write for current pricing: SFA Companies. 10939 N. Pomona Ave. Kansas City, MO 64153, U.S.A. Tel:(816) 891-6390 Fax:(816) 891-6599 E-Mail: sales@blackhawk-automotive.com

Model BH2081

Item #	Part #	Description	Quantity
1	276-6-1701-108	Release Valve	1
2	273-6-1705-105	Release Valve Lever	1
3	602-1-0050-018	Release Valve Screw	1
4	505-9-0092-207	Oil Filler Plug	1
5	275-3-2100-102	Handle	1
-	BH2081-L0	Label	1
-	BH2081-M0	Manual	1

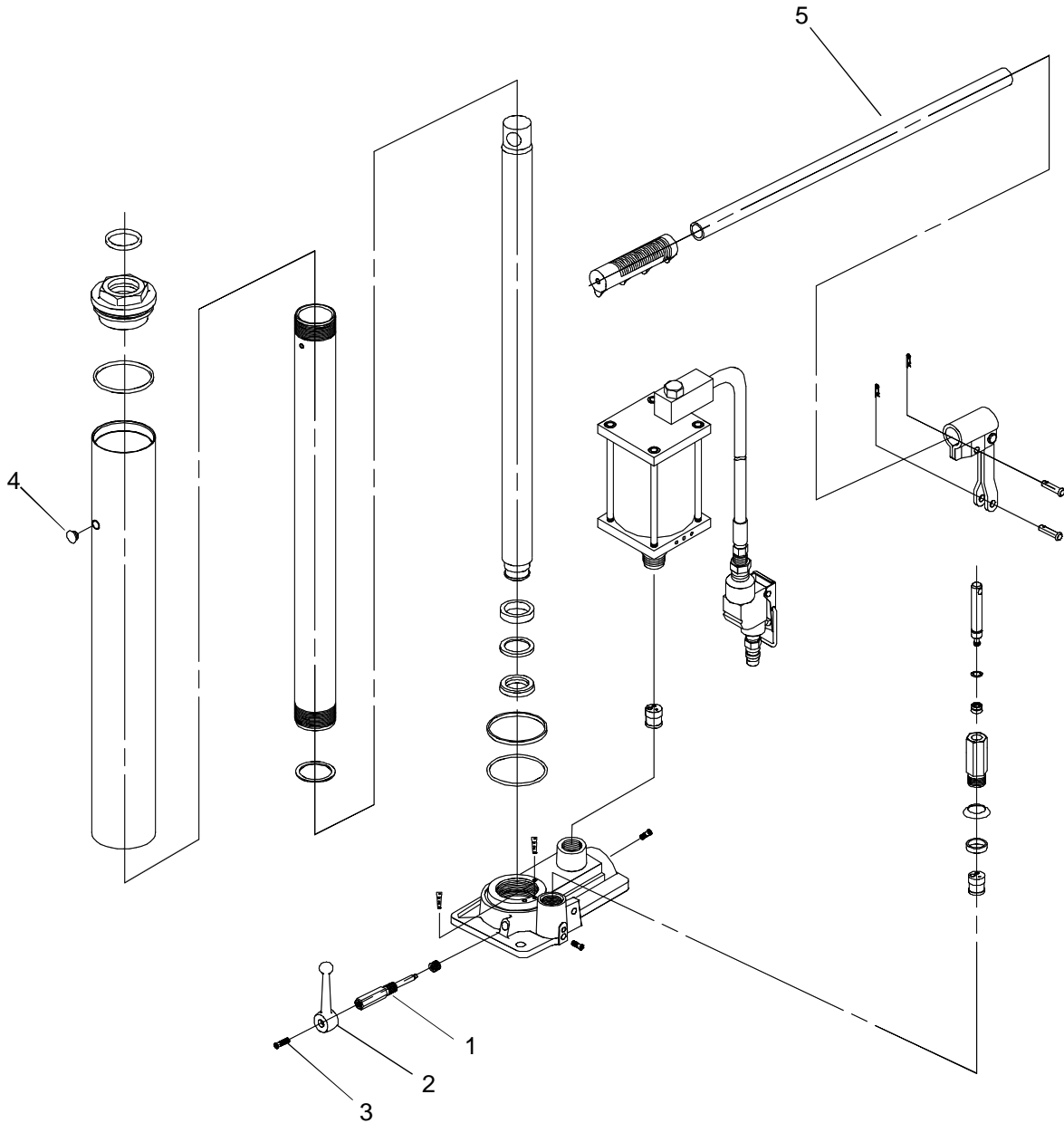


Figure 2 - Replacement parts Illustration for Model BH2081



