



Porto-Power Blackhawk Automotive is a licensed trademark

2 Speed Hydraulic Hand Pump

Operating Instructions & Parts Manual

B65122
B65421

SFA Companies
10939 N. Pomona Ave. Kansas City, MO 64153
816-891-6390
sales@blackhawk-automotive.com

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

Made in Taiwan
B65122-M0 rev 10/05

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 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.

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(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.

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(4) ANY MODIFICATION, ALTERATION, ABUSE, UNAUTHORIZED SERVICE OR ORNAMENTAL DESIGN VOIDS THIS WARRANTY AND IS NOT COVERED BY THIS WARRANTY.

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.



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SAVE THESE INSTRUCTIONS

For your safety *read, understand, and follow* the information contained within. The owner and operator shall have an understanding of this product and safe operating procedures before attempting to use this product. Make certain that the operator thoroughly understands the inherent dangers associated with the use and misuse of the product. If any doubt exists as to the safe and proper use of this product as outlined in this factory authorized manual, remove from service immediately.

Inspect before each use. It is recommended that, prior to each use, an inspection be done by qualified personnel and that any missing or damaged parts, decals, warning / safety labels or signs be replaced with factory authorized replacement parts only. Any pump that appears to be damaged in any way, is worn, leaking or operates abnormally shall be removed from service immediately until such time as repairs can be made. Owners and operators of this equipment shall be aware that the use and subsequent repair of this equipment may require special training and knowledge. Labels and operator's manuals are available from the manufacturer (see Replacement Parts Page 6).

PRODUCT DESCRIPTION

Porto-Power Blackhawk Automotive Hand Pumps are engineered to meet or exceed ANSI B30.1 Standards for Performance and Safety. Its unique two-stage hydraulic circuit allows quick displacement of hydraulic fluid under no load conditions and easy pumping in loaded conditions. These lever operated pumps supply compressed hydraulic fluid to compatible applications i.e. rams, presses, spreaders, compactors and crimping machines, anywhere that 10,000 PSI of fluid pressure is needed. Special skill, knowledge and training may be required for a specific task and the product may not be suitable for all the jobs described above. Unsuitable applications would include applications that call for a device to move, level or support persons, animals, hazardous materials, mobile homes/ dwellings in general, mirrors and/or plate glass, and/or to connect/secure hatches, components, etc. between bulkheads. The user must make the decision regarding suitability of the product for any given task and assume the responsibility of safety for him/her and others in the work area.

Note: Always check connections before using. Alteration of these products is strictly prohibited. Use only those adapters and attachments provided and approved by the manufacturer.

SPECIFICATIONS

Model Number	Usable Oil Capacity (in ³)	Oil Displacement per Stroke (in ³)		Operating Force (lbs)	Piston Stroke (in)	Oil Outlet Port	Weight (lbs)
		1st Stage	2nd Stage				
B65122	21.4	0.18	0.05	87.5	0.38	1/4" - 18NPTF	6.6
B65421	61	0.81	0.14	131.5	0.82	3/8" - 18NPTF	13.2

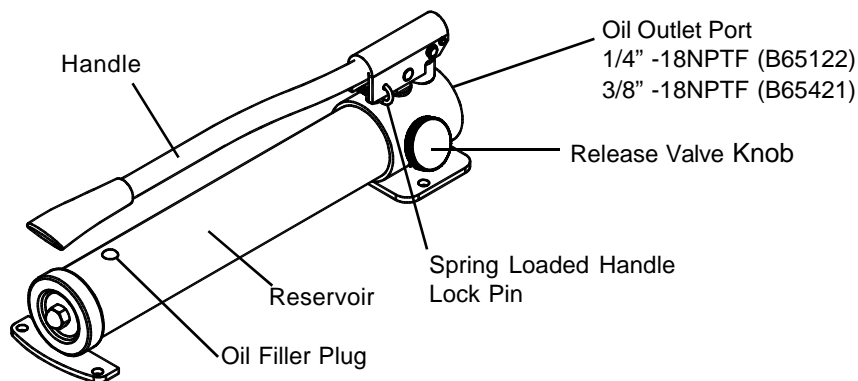


Figure 1 - B65122 & B65421 Components

SAFETY INSTRUCTIONS

BEFORE USE

1. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the hazards associated with its use. Prepare the pump for use (see Figure 2).
2. Verify that the product and the application are compatible. Inspect before each use. Do not use if bent, broken, leaking or damaged components are noted.
3. Carefully remove the threaded plug in oil output port.
4. Connect coupler or hose of matching threads (refer to specifications on page 3).
5. Check for leaks in the system and have repaired by qualified personnel as needed. Before repairs are made, depressurize system by opening the release valve counterclockwise, but no more than 2 full turns.
6. Replace worn or damaged parts and assemblies with Porto-Power Blackhawk Authorized Replacement Parts only (See Replacement Parts Section). Lubricate as instructed in Maintenance Section.
7. Ensure method of confirming load is accurate and working properly. Have gauge or load cell accuracy verified by qualified personnel on a yearly basis.
8. Pumps should be stored where protected from the elements, abrasive dust, and damage. Pumps can be stored horizontally or vertically, but preferably not upside down. Storing or using a pump upside down increases the risk of losing fluid from the reservoir through the vented oil filler plug. If application calls for use in upside down position, it may be advisable to reinstall the shipping plug.

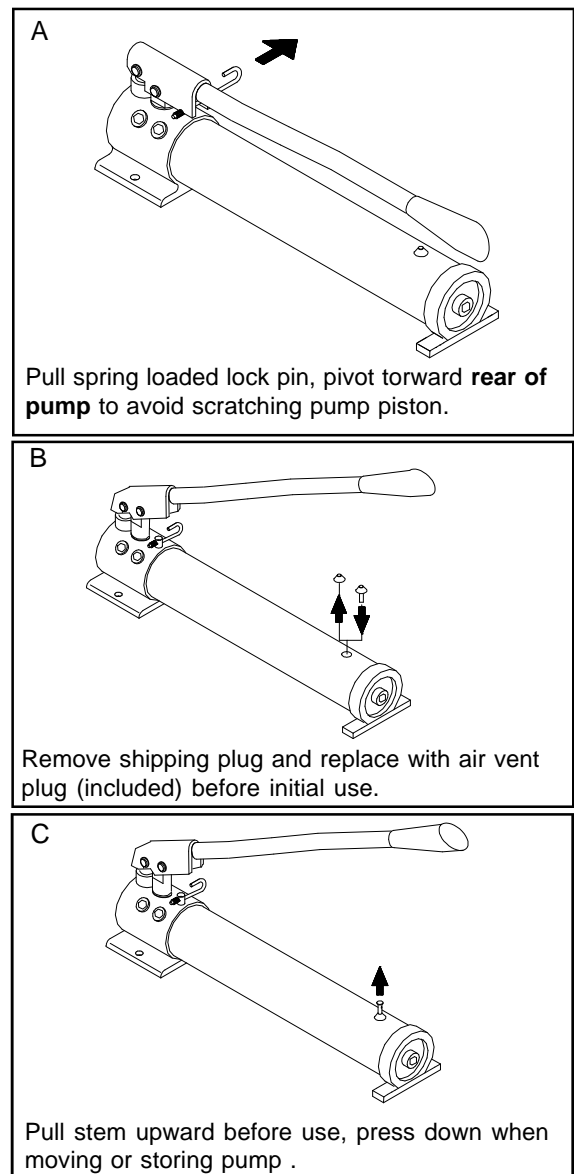


Figure 2 - Before Use Illustration

WARNING

- Study, understand, and follow all instructions provided with and on this device before use.
- Do not exceed rated capacity.
- Burst hazard exists if hose or connection pressure exceeds rated pressure.
- Use gauge or other load measuring instrument to verify load.
- Always inspect hoses and connections for damage prior to use.
- Always wear protective clothing and eye protection when operating this equipment.
- Always ensure that the chosen application is stable to work on and around.
- Do not work under a lifted load without adequately rated support devices such as jack stands.
- This device is not suitable for use as support device!
- Do not subject the pump and its components to shock loads.
- Do not connect to application, which can return more oil to the reservoir than the pump reservoir can hold.
- Failure to heed these warnings may result in personal injury as well as property damage.

ASSEMBLY

Little, if any, assembly is required of this device. Always secure threaded connections with pipe thread compound. Tighten securely to prevent accidental removal of components while in use. Familiarize yourself with the specifications and illustrations in this owner's manual. Know your pump, its limitations and how it operates before attempting to use. Refer to Specification chart on page 3 for details of oil port thread size, usable oil capacity, and more.

OPERATION

1. Connect to suitable application.
2. Operate pump until desired pressure, load or position is reached. Always monitor pressure, load or position using suitable equipment. Pressure may be monitored by means of an optional manifold and gauge (contact **Porto-Power Blackhawk Automotive**). Load may be monitored by means of a load cell and digital indicator. Correct application position can only be determined by the operator of the equipment.
3. Turn the release valve knob slowly counterclockwise (never more than 2 full turns) to retract application.

MAINTENANCE

1. Inspect hoses and connections daily. Replace damaged components immediately with Porto-Power Blackhawk replacement parts only.
2. Tighten connections as needed. Use non-hardening pipe thread compound when servicing connections.
3. Use only good quality hydraulic fluid. We recommend Hein-Werner HW93291 or equivalent.

Note: Use only good quality hydraulic oil. **Never** use brake fluid, transmission fluid, turbine oil, motor oil, alcohol, glycerin etc. Use of other than good quality hydraulic oil will void warranty and damage the pump, hose, and application.

Adding Hydraulic Fluid

1. Depressurize and disconnect hydraulic hose from application.
2. With pump in its upright, horizontal position, remove the air vent plug located on the top plate of the reservoir.
3. Use a small funnel to fill reservoir to within 1/4" (6mm) of the hole opening.
4. Wipe up any spilled fluid and reinstall the air vent plug.

Changing Hydraulic Fluid

For best results, change fluid once a year.

1. Remove the air vent plug from pump reservoir as above.
2. Lay the pump on its side and drain the fluid into a suitable container.

Note: Dispose of fluid in accordance with local regulations.

3. Set pump in its level upright position.
4. Fill with good quality hydraulic oil to within 1/4" (6 mm) of the hole opening.
5. Reinstall air vent plug.

Lubrication

Use a light machine oil to lubricate pivot points, hinges etc.

NOTE: Never operate pump with release valve closed and disconnected from application. If operated in this condition, the hose and connections become pressurized. This increases burst hazard. Damage may occur to pump and its components.

Storage

1. When not in use, depressurize and disconnect hydraulic hoses from application.
2. Wipe clean, thoroughly.
3. Store in clean, dry environment. Avoid extreme temperatures.
4. Lock handle into position using the spring loaded locking pin mechanism.
5. Shield pump with a protective cover.

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Application will not extend, move or respond to pressurized fluid	<ul style="list-style-type: none"> • Overload condition • Release valve not closed 	<ul style="list-style-type: none"> • Remedy overload condition • Ensure release valve closed
Application responds to pressurized fluid, but system does not maintain pressure	<ul style="list-style-type: none"> • Overload condition • Release valve not closed • Hydraulic unit malfunction 	<ul style="list-style-type: none"> • Remedy overload condition • Ensure release valve closed • Contact Service Center
Application will not return fluid to pump (i.e. cylinder will not retract)	<ul style="list-style-type: none"> • Malfunctioning coupler, damaged application • Reservoir overfilled 	<ul style="list-style-type: none"> • Secure load by other means. Open release valve, depressurize pump and hose, remove coupler and/or application, then renew or replace • Secure load by other means. Open release valve, depressurize pump and hose, remove application, then drain fluid to proper level
Application will not fully extend (cylinder or spreader)	<ul style="list-style-type: none"> • Fluid level low 	<ul style="list-style-type: none"> • Secure load by other means. Open release valve, depressurize pump and hose, remove application, then drain fluid to proper level
Poor performance	<ul style="list-style-type: none"> • Fluid level low • Air trapped in system 	<ul style="list-style-type: none"> • Ensure proper fluid level • Ensure air vent plug stem is in correct position to let pressurized reservoir air escape

REPLACEMENT PARTS

Available Parts: Please refer to the parts drawing when ordering parts. Not all components of the pump 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

Item#	Model B65122	Model B65421	Description	Qty.
1	H39-3-2100-204	H18-4-1700-307	Handle	1
2	H18-6-2101-100	H18-6-2101-100	Handle Grip	1
3	H53-6-1301-100	H53-6-1301-100	Release Valve Knob	1
4	H18-4-4000-102	H18-4-4000-102	Air Vent Plug	1
5	505-9-0092-207	505-9-0092-207	Oil Filler Plug	1
6	H39-6-1501-104	H18-5-1501-105	End Cap	1
-	H39-3-9901-102	H18-3-9902-101	Repair Kit (a to h)	1
-	B65122-L0	B65421-L0	Label (not shown)	-
-	B65122-M0	B65122-M0	Manual	-

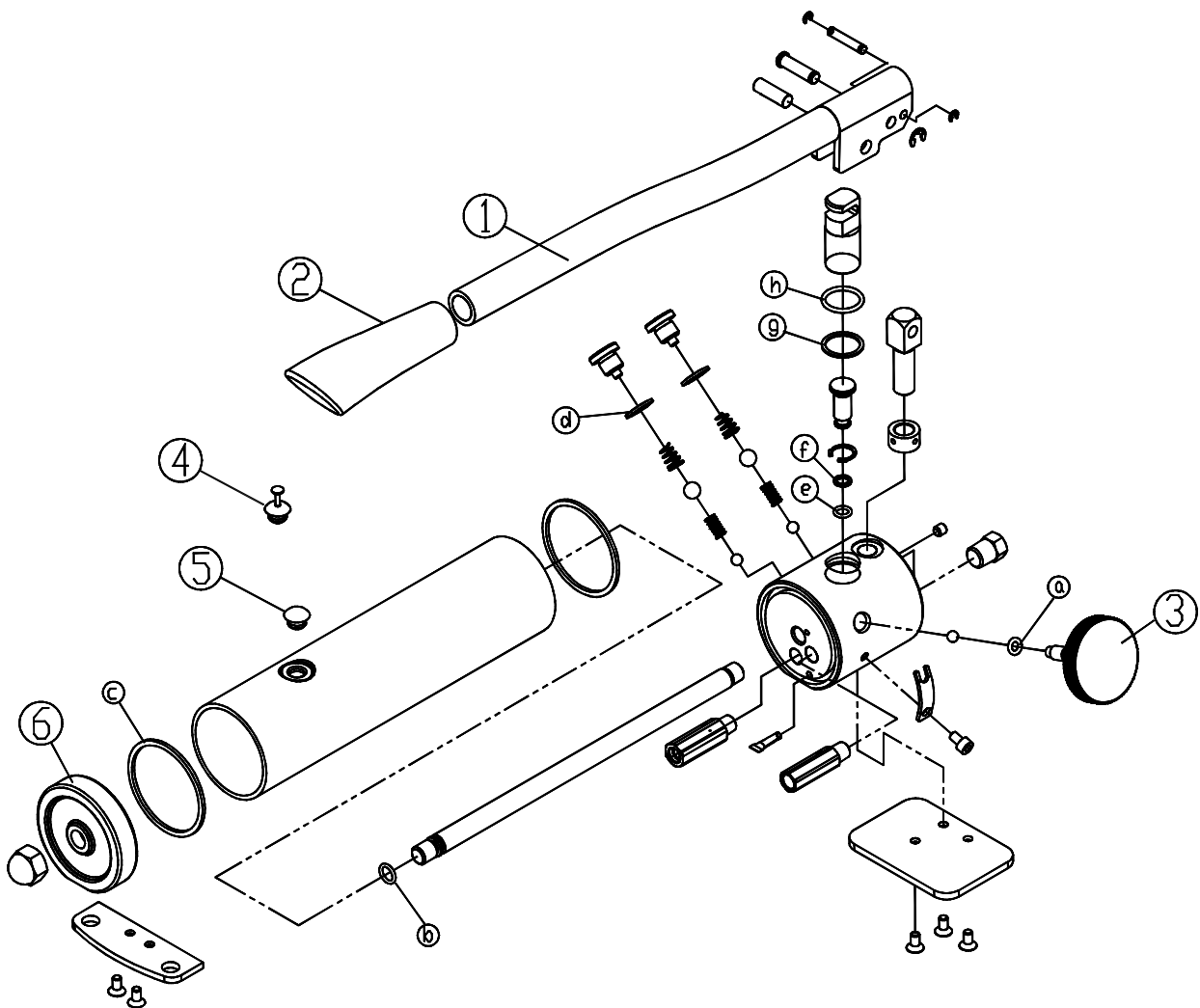


Figure 3 - Replacement Parts Illustration for Model B65122 and B65421

