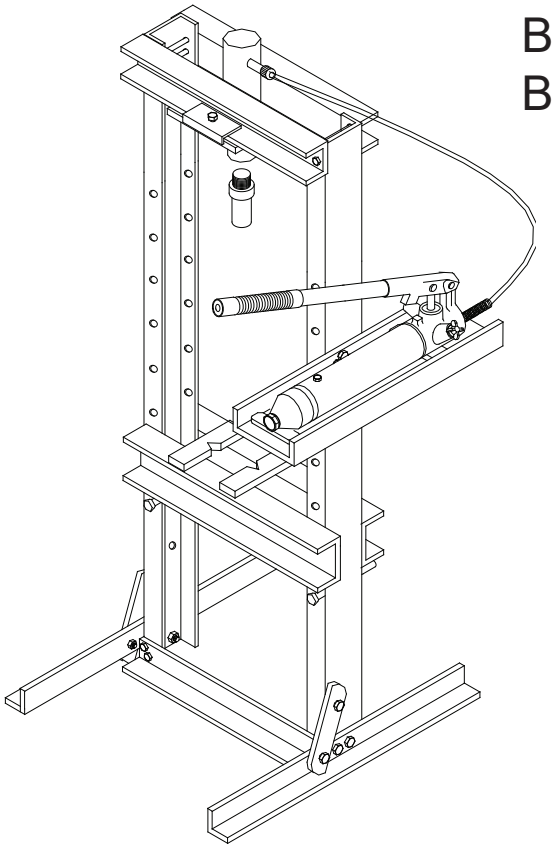
Shop Press

Operating Instructions & Parts Manual

Model	Capacity
BH8122	12 Ton
BH8202	25 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.

⚠ **WARNING:** Cancer and Reproductive Harm.
www.P65Warnings.ca.gov

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

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

Made in PRC
BH8122-M0_102018

SAFETY and GENERAL INFORMATION

Save these instructions. For your safety, read, understand, and follow the information provided with and on this product before using. The owner and operator of this equipment shall have an understanding of this product 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 are noted. Any press that appears damaged in any way, or operates abnormally shall be removed from service immediately. If any component of this product has been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until 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. Labels and Operator's Manuals are available from manufacturer.

PRODUCT DESCRIPTION

This Shop Press is designed for automotive, truck, implement, fleet, and industrial repair shops where pressing, bending, straightening and forming, is required. Typical applications include installation and removal of alternator and power steering pump bearings, axle bearings, transmission bearings, seals, u-joints and others. It is not intended for use as an assembly table or as fixture stand used to secure a large, final assembly component. The pump on this press **must** be equipped with a pressure gauge so that loading may be monitored at all times. This gauge shall be calibrated annually.

To reduce the risk of personal injury and/or property damage, ensure that the rated working pressure of each pressurized attachment be equal to or greater than the rated working pressure developed by the hydraulic pump.

SPECIFICATIONS

Model	Capacity	Dimensions (W x D x H)	Min. Working Space	Max. Working Space	Bed Position	Hydraulic Stroke
BH8122	12 Ton	28" x 28" x 59"	4 5/8"	36 3/8"	8	6"
BH8202	25 Ton		2 1/2"	34 1/4"		

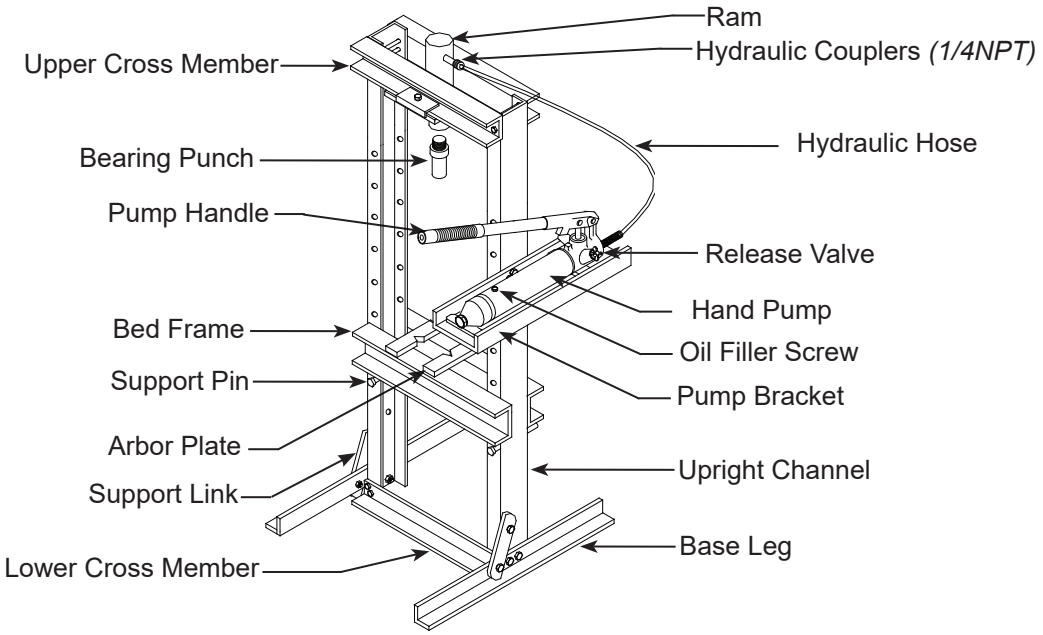


Figure 1 - Shop Press Components *(BH8202 shown)*

PREPARATION

Before Use

1. Verify that the product and application are compatible, if in doubt call Blackhawk technical service (888) 332-6419.
2. 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.
3. To familiarize yourself with basic operation of hand pump, turn the release valve:
   a. Clockwise until firm resistance is felt to further turning. This is the '**CLOSED**' release valve position used to **extend** the ram.
   b. Counter-clockwise, but no more than 1 full turn from the closed position. This is the '**OPEN**' release valve position used to **retract** the ram.
4. With release valve opened, remove the oil filler screw. Ensure the oil level is within 1/4" (6mm) of the opening. Reinstall the oil filler screw.

Assembly *(Refer to Figure 2)*

Note: Do not tighten any bolts unless told to do so.

1. Attach base legs (1) to upright channels (2) with bolts, lock washers and nuts (3). Hand tighten only.
2. Attach lower cross member (4) to upright channels (2) with bolts, lock washers and nuts (3).
3. Attach support links (5) to the base (1) and upright channels (2) with bolts, lock washers and nuts (3).
4. Carefully slide bed frame (6) down to lowest possible position between the upright channels (2).
5. Slide head plate (7) to into upper cross members (8). Then, secure with bolts (9).
6. Attach the upper cross members assembly (8) to the upright channels (2) with bolts, flat washers, lock washers and nuts (10).
7. Thread the ram (11) to head plate (7) on upper cross members (8).
8. Attached pump support bracket (12) to upright channel (2) with three bolts, lock washers and nuts (3).
9. **Tighten all aplicable nuts and bolt assemblies**.
10. Place the hand pump (13) on pump support bracket (12).
11. To hold the pump, attach the fixed backets (14) and secure with bolts, lock washers and nuts (3).
12. Connect the male coupler end of hydraulic hose (15) to the female coupler of the ram (11) to complete the connections.
13. Carefully bring the bed frame (6) up and secure it with pins (16).
14. Place the Arbor Plates (17) on Bed Frame (6).
15 When necessary, replace the saddle of ram (11) with the bearing punch (18).
16. The press is now ready to use.

NOTICE*: *Before **disassembly**, carefully slide bed to its fully lowered position.

Model BH8122 Size of Hardware Kits			Qty
3	bolt	M10x25	19
	lock washer	M10	19
	nut	M10	19
9	bolt	10x25	2
10	bolt	M16x115	4
	flat washer	M16	8
	lock washer	M16	4
	nut	M16	4

Model BH8202 Size of Hardware Kits			Qty
3	bolt	M10x25	19
	lock washer	M10	19
	nut	M10	19
9	bolt	10x25	2
10	bolt	M16x150	4
	flat washer	M16	8
	lock washer	M16	4
	nut	M16	4

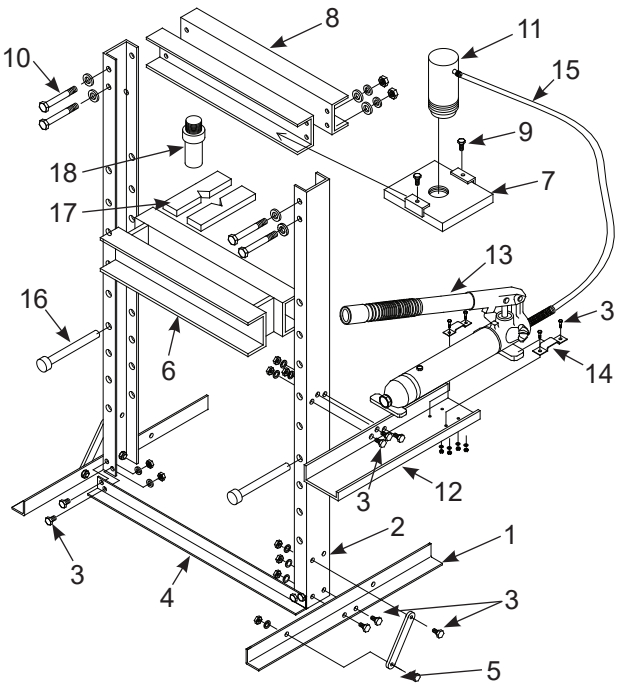


Figure 2 - Assembly Illustration

⚠WARNING

- **Study, understand, and follow** all printed materials provided with/on this product before use.
- **Do not** exceed rated capacity.
- Burst hazard exists if hose or connection pressure exceeds rated pressure.
- Use the device only on a hard, level surface.
- Always wear safety goggles when working on or near this equipment.
- **Always** install **and** monitor an in-line, calibrated pressure gauge while operating.
- Always inspect hoses and connections for damage prior to use.
- Keep hands, feet and all other body parts away from loading area.
- Never leave loaded press unattended.
- Projectile hazard! Ensure workpiece is center loaded, and a safety shield is installed around workpiece to protect against projectiles.
- Do not modify this device beyond installing a shield to protect against projectiles.
- Ensure the user is familiar with the controls and operational characteristics of this product and aware of the potential hazards associated with its use.
- **Failure** to heed these markings may **result** in **personal injury and/or property damage**.

OPERATION

Projectile Hazard! *Wear ANSI approved eye protection. Never stand directly in front of loaded press. Ensure that workpiece is center-loaded and secure. Reduce risk of flying debris by carefully following all operating instructions. Know your press and hazards associated with its use.*

Crush Hazard! *Keep hands and feet from bed area at all times.*

1. Insert the support pins to desired height, then lower the bed. Ensure bed frame is fully rested on the support pins.
2. Place arbor plates on the bed frame as needed.
3. Place workpiece on bed frame, using every precaution necessary to ensure your safety and prevent property damage. Position workpiece in a manner which will not allow it to inadvertently fall from bed.
4. Close release valve by turning it clockwise firmly, and pump the handle to extend the ram until ram nears workpiece.
5. Align ram and workpiece to ensure center-loading.
6. Apply load to workpiece by pumping handle. **Do not overload workpiece**, monitor the pressure gauge and calcualte the applied load using the following formula as basic guideline: ***Force = Pressure X Area***

1. Effective **Area** of models BH8122= 2.41 in²

2. Effective **Area** of model BH8202= 5.14 in²

Problem 1: Determine the applied load in lbs. force on a workpeice being pressed by a 60123 whose pressure gauge is reading 5000 psi.
Solution 1: 9000 X 2.41= **21,690 lbsf**

Problem 2: Determine the applied load in lbs. force on a workpeice being pressed by a 60253 whose pressure gauge is reading 2200 psi.
Solution 2: 2200 X 5.14= **11,308 lbsf**

7. Stabilize workpiece in a manner which will not allow it to inadvertently fall from the bed once the load is removed, then turn release valve counter-clockwise to retract the ram and remove workpiece. Do not turn the release valve counter-clockwise more a 1 full turn.

Note: To protect your ram, do not continue to operate pump after it is fully extended or retracted.

⚠ *To reduce the risk of personal injury and/or property damage, ensure that the rated working pressure of each pressurized attachment be* ***equal to or greater than*** *the rated working pressure developed by the hydraulic pump.*

MAINTENANCE

Before each use, inspect press for damage. Do not use if bent, broken, cracked, leaking or otherwise damaged components are noted. Periodically, lightly oil all moving parts, including the pump piston and ram.

Adding/Changing oil to hand pump

Important: Use only good grade hydraulic 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 ram and pump and the potential for sudden and immediate loss of load. Mobil DTE 13M or equivalent recommended.

For best results, change fluid once a year.

1. Depressurize and disconnect hydraulic hose from application.
2. Remove oil filler screw located on top of the reservoir.
3. Pour used fluid into a sealable container.
   Note: Dispose of hydraulic fluid in accordance with local regulations.
4. With pump in its upright, horizontal position, use a small funnel to fill reservoir to within 1/4” (6 mm) of the opening.
5. Wipe up any spilled fluid and reinstall the vented oil filler plug.

R**ust prevention**

Check ram and hand pump piston for signs of rust on a regular basis. Clean as needed with a lint free, oil saturated cloth. ***Never*** use sandpaper or abrasive material on these surface.

How to remove faulty coupler:

If ram does not retract: Depressurize pump and hose, then remove the ram from application. Disconnect and replace with new coupler.

Important: Do not attempt to grasp ram with pliers or wrench without first wrapping the jaws of such tool with rags or similar padding.

How to bleed air from system:

1. Place pump at a higher elevation than the hose and ram as shown in figure 3.
2. Operate pump to fully extend and retract the ram 2 or 3 times. The objective is to force the air bubbles up hill and back to the pump reservoir.
3. To bleed the air from pump reservoir, simply open the oil filler screw. Re-install after bleeding.

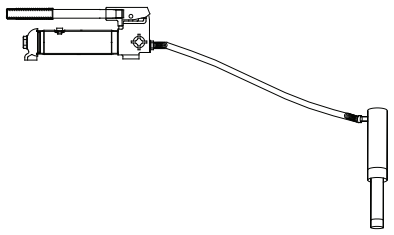


Figure 3 - Illustration to bleed air from system

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Ram will not press load	• Release valve not tightly closed • Overload condition • Faulty/ Loose couplers • Oil lever in pump is low	• Ensure release valve tightly closed • Remedy overload condition • Replace/ Tighten couplers • Fill and bleed system
Ram bleeds off after press operation	• Oil lever in pump is low • Ram malfunction	• Fill and bleed system • Contact Blackhawk Tech. Service
Ram will not retract after unloading	• Pump reservoir overfilled • Linkage binding	• Drain fluid to proper level • Clean and lubricate moving parts
Poor lift performance	• Oil level low • Air trapped in system	• Ensure proper oil level • Bleed system
Oil leak from ram	• Ram malfunction	• Contact Blackhawk Tech. Service

REPLACEMENT PARTS

Not all components of the press are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, please give the Model number and parts description. 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	Part# for model: BH8202	BH8122	Description	Qty
1	T125-00001-000	T184-00001-000	Upper Cross Member *(1pc for 65123)*	2
2	T125-00003-000	T184-00008-000	Punch	1
3	T125-00007-000	T184-00007-000	Arbor Plates *(pair)*	1
4	T125-02000-000	T184-02000-000	Bed Frame	1
5	T125-01000-000	T184-01000-000	Support Pin	2
6	T125-00002-000	T184-00002-000	Upright Channel	2
7	T184-00006-000		Lower Cross Member	1
8	T184-00004-000		Support Link	2
9	T184-00005-000		Base Leg	2
10	T184-00003-000		Pump Bracket	1
11	F100-90119-K02		Hand Pump	1
12	T125-00008-000		Fixed Bracket	2
13	F040-90107-K02		Oil Filler Screw	1
14	T125-03000-000	T184-03000-000	Head Plate	1
15	F250-30000-000	F100-30000-000	Ram	1
16	F040-90009-K04		Coupler, Female 1/4NPT	1
	F040-90009-K05		Coupler, Male 1/4NPT	1
17	F100-90009-K01		Pump Handle	1
-	BH8200	BH8120	Pump & Ram Assembly *(#11 & 15)*	-
-	T125-04000-000	T184-04000-000	Hardware Kit	-

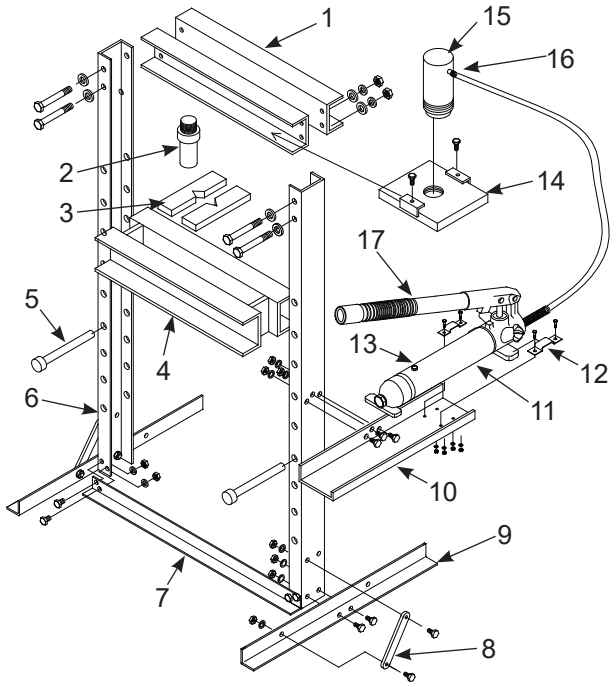


Figure 4 - Replacement Parts Illustration

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.

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) ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO ONE YEAR, OTHERWISE THE REPAIR, REPLACEMENT OR REFUND AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER, AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.
(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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