

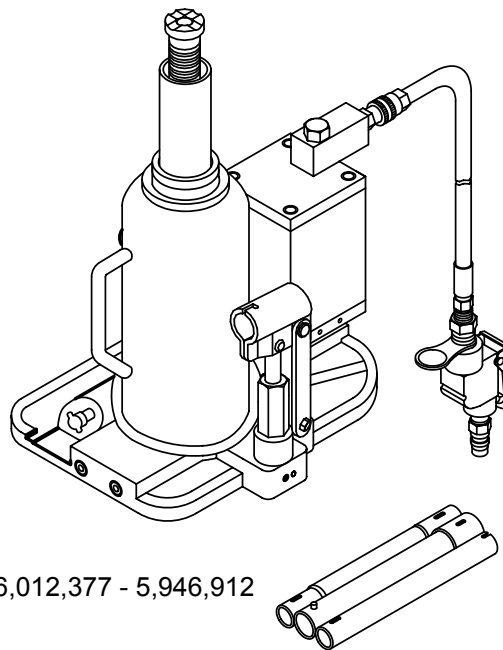
# Operating Instructions & Parts Manual



## Air/Manual Hydraulic Bottle Jacks

**Model**  
**J18124**  
**J18204**

**Capacity**  
**12 Ton**  
**20 Ton**



U.S. Patent Nos. 6,012,377 - 5,946,912



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.

**SFA Companies**  
<http://www.bvahydraulics.com>

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

Printed in China  
 J18124-M0 03/15

## **SAFETY and GENERAL INFORMATION**

**Save these instructions.** For your safety, read, understand, and follow the information provided with and on this jack before using. The owner and/or operator shall have an understanding of the device, its operating characteristics and safety operating instructions before operating the equipment. The owner and/or operator shall be aware that use and repair of this product may require special skills and knowledge. Instructions and safety information shall be read to and discussed with the operator in the operator's native language, making sure that the operator comprehends their contents, before use of this equipment is authorized. If any doubt exists as to the safe and proper use of this device, remove from service immediately.

**Inspect before each use.** Do not use if abnormal conditions such as cracked welds, damaged, loose or missing parts are noted. Any equipment that appears damaged in any way, is found to be worn, or operates abnormally shall be removed from service until repaired. If the equipment has been or is suspected to have been subjected to an abnormal load or shock, immediately discontinue use until inspected by a factory authorized repair facility (contact distributor or manufacturer for list of authorized repair facilities). It is recommended that an annual inspection be made by an authorized repair facility. Labels and Operator's Manuals are available from the manufacturer.

## **PRODUCT DESCRIPTION**

BVA Air Bottle Jacks are designed to lift, not support, rated capacity loads consisting of one end of a vehicle. Immediately after lifting, the load must be supported by a pair of appropriately rated jack stands. Ensure that air source can dedicate 7.8 CFM @ 110-175 psi to each jack operated. A minimum of 150 psi air pressure is required to raise rated capacity load.



**Never use hydraulic jack as a stand alone device. After lifting, immediately support the lifted load with a pair of appropriately rated jack stands.**

## **PREPARATION**

### **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.
2. Verify that the product and application are compatible, if in doubt call Omega Technical Service (888) 332-6419.
3. Assemble handle, ensure spring clips align with slots.
4. To familiarize yourself with basic operation, use the notched end of provided handle to engage and turn the release valve:
  - a. *Clockwise* until firm resistance is felt to further turning. This is the '**CLOSED**' release valve position used to raise the ram plunger.
  - b. *Counter-clockwise*, but no more than 1 turn from the closed position. This is the '**OPEN**' release valve position used to lower the ram plunger.
5. With saddle fully lowered, and release valve closed, pump the operating handle. If lift arm responds immediately, jack is ready for use. If jack does not respond, follow **Bleeding/Venting Trapped Air** procedure below.
6. Pour a teaspoon of good quality, air tool lubricant into the air supply inlet of the lift control valve. Connect to air supply and squeeze lift control valve for 3 seconds to evenly distribute lubricant.
7. This product is equipped with the popular 1/4" NPT air coupler. When installing a different air coupler of your choice, ensure that thread tape or compound is used when servicing connections. To ensure dependable, trouble free operation an in-line air dryer and oiler is recommended.
8. Check that the pump operates smoothly and that the extension screw will thread up/down easily before putting into service. Replace worn or damaged parts and assemblies with Omega authorized replacement parts only.

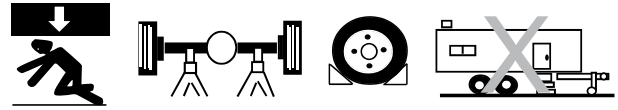
### **Bleeding / Venting Trapped Air**

With the release valve in the OPEN position (4b above) and with ram plunger fully lowered, locate and remove the oil filler screw. Insert the handle into the handle sleeve; then pump 6 to 8 full strokes. This will help release any pressurized air which may be trapped within the reservoir. Oil level should be even with the bottom of the oil filler hole. Reinstall the oil filler screw.

## ⚠ WARNING

- Study, understand, and follow all instructions before operating this device.
- Do not exceed rated capacity.
- Use only on hard, level surface.
- This is a lifting device only. Immediately after lifting, support the load with appropriate means.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- No alterations shall be made to this product.
- Only attachments and/or adapters supplied by the manufacturer shall be used.
- 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.
- Always use adequately rated jack stands.
- Chock each unlifted tire in both directions.
- Do not use this device to lift, level, lower, support nor move a house, mobile home, travel trailer, camper or any building structure.
- Be alert and sober when using this product. Do not operate under the influence of drugs or alcohol.

## SPECIFICATIONS

Model	Capacity	Base Size (L x W)	Saddle Diameter	Min. Height	Max. Height	Hydraulic Lift	Ext. Screw
J18124	12 Ton	7-7/8" x 6-1/4"	2"	9-1/2"	18-1/2"	5-1/2"	3-1/2"
J18204	20 Ton	8-1/2" x 7-1/8"	2"	9-3/4"	18-3/4"	5-1/8"	3-7/8"

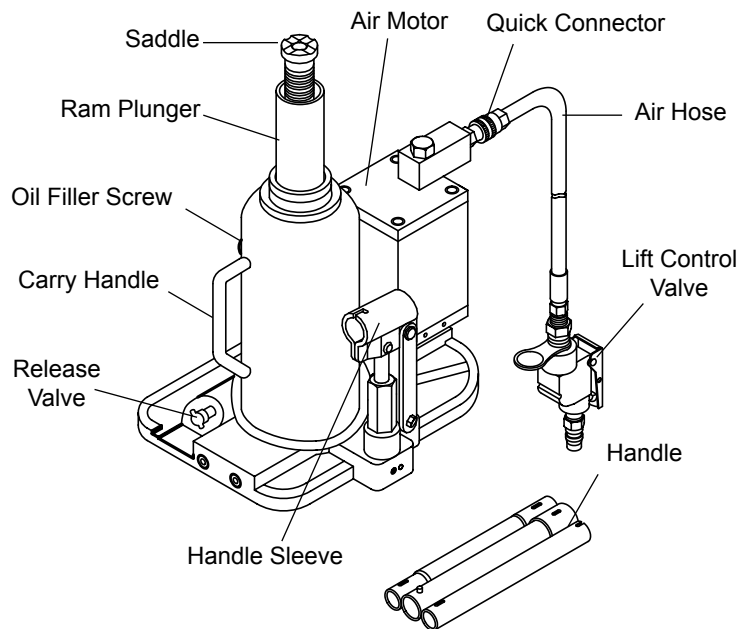


Figure 1 - J18124 & J18204 Nomenclature

## OPERATION

### Raising the Ram Plunger

1. Assemble handle, ensure that spring clips align with slots.
2. Place vehicle in park, with emergency brake on and wheel securely chocked to prevent inadvertent vehicle movement.
3. Locate and close release valve by turning handle clockwise until firm resistance is felt to further thread engagement.
4. Verify lift point, center jack saddle under lift point.
5. Squeeze the lift control valve or insert handle into handle sleeve and pump to contact lift point. To lift, continue pumping until load reaches desired height.


### DO NOT OPERATE BY AIR AND BY HAND PUMPING AT THE SAME TIME.

6. **Immediately** transfer the lifted load to a pair of appropriately rated jack stands.

**NOTICE:** Use the provided Pump Handle. The handle furnished with this jack will safely engage the release valve and operate the Handle Sleeve. If handle is worn, operates abnormally, or will not positively engage the release valve, STOP, discontinue use of the jack until a factory replacement handle can be acquired.

**NOTICE:** Do not use extensions on air hose or operating handle.

### Lowering

 **WARNING:** Clear all tools and personnel before lowering load. Open release valve slowly. The further handle is turned counter-clockwise, the faster the load will descend. Maintain control of the load at all times.

1. Raise load high enough to clear the jack stands, then remove jack stands.
2. Slowly turn the handle counter-clockwise, 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. Raise load high enough to clear the jack stands, remove the affected jack and then the stands.
  - c. Lower the load.
3. After removing jack from under the load, push ram and handle sleeve down to reduce exposure to rust and contamination.

## MAINTENANCE

**NOTICE:** Use only good quality 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. Premium hydraulic jack oil is recommended.

### Adding oil

1. With ram plunger fully lowered and pump piston fully depressed, set jack in its upright, level position. Remove oil filler screw.
2. Fill with oil until just below the rim of the oil filler plug hole. Reinstall the oil filler screw.

### Changing oil

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

1. With ram plunger fully lowered and pump piston fully depressed, remove the oil filler screw.
2. Lay the jack on its side and drain the fluid into a suitable container.

**NOTICE:** Dispose of hydraulic oil in accordance with local environmental regulations.

3. Fill with oil until just below the rim of the oil filler hole. Reinstall the oil filler screw.
4. Perform **Bleeding/Venting Trapped Air** procedure, pg. 2.

### Lubrication

1. A periodic coating of light lubricating oil to pivot points will help to prevent rust and assure that pump assemblies move freely.
2. Air pump should be internally lubricated before each use. Use good quality air tool lubricant. If no in-line oiler is used, pour a teaspoon of air tool oil into the air control valve inlet. Operate the jack with air pressure to fully distribute the oil inside the air motor.

### Cleaning

Periodically check the pump piston and ram for signs of rust/corrosion. Clean as needed and wipe with oily cloth.

**NOTICE:** Do not use sandpaper or abrasive material on ram and pump piston surfaces.

### Storage

When not in use, store the jack with pump piston and ram plunger fully retracted and air supply disconnected.

## 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 pressure 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 pressure</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 BVA Tech. Service</li> </ul>
Jack will not lower after unloading	<ul style="list-style-type: none"> <li>• Reservoir overfilled</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure load is removed, then drain fluid to proper level</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>• Follow <b>Bleeding/Venting Trapped Air</b> procedure on page 2</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>

## 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.

# REPLACEMENT PARTS

(refer to page 6 & 7)

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 parts description.

Call or write for current pricing: SFA Companies Inc. 10939 N. Pomona Ave. Kansas City, MO 64153, U.S.A.  
Tel:(888)332-6419 Fax:(816) 448-2142 E-mail: sales@bvahydraulics.com

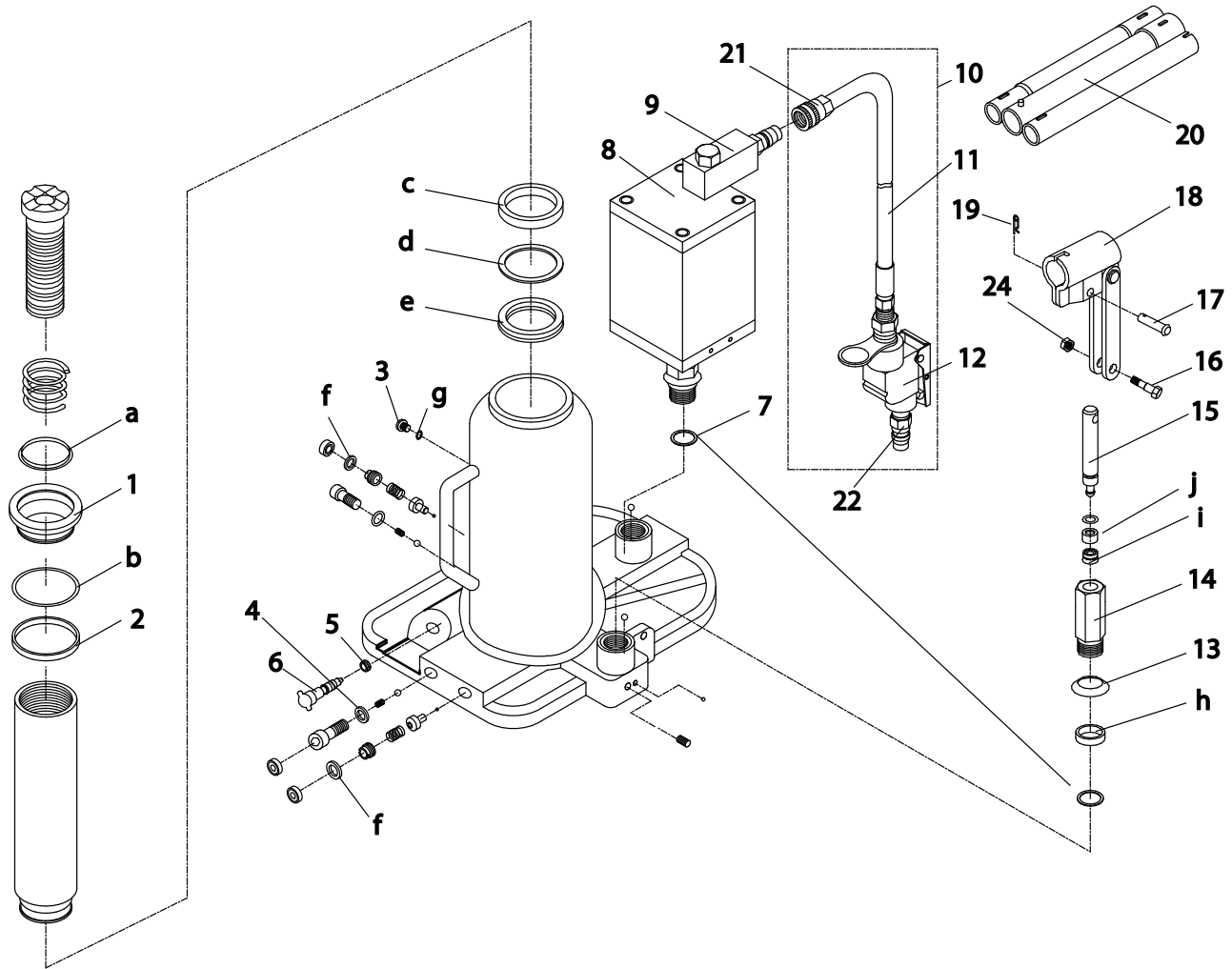


Figure 2 - Replacement Parts Illustration

**Replacement Parts List for Models J18124 & J18204**

Item	Part# for J18124	Part# for J18204	Description	Qty.
1	SQ12-1200-039	SQ20-2000-039	Cylinder Fastener	1
2	SQ12-1200-036	SQ20-2000-036	Guide Ring	1
3	SQ12-1200-040	SQ20-2000-040	Filler Screw	1
4	SQ20-2000-028	SQ20-2000-028	Special Washer	2
5	5905-00054-000	5905-00054-000	Seal	1
6	SQ20-2000-035	SQ20-2000-035	Release Valve	1
7	SQ20-2000-029	SQ20-2000-029	Gasket	2
8	G831-03200-000	G831-03200-000	Air Motor	1
9	A240-01000-000	A240-01000-000	Air Inlet Swivel	1
10	A240-02000-000	A240-02000-000	Hose Assy.	1
11	A240-02100-000	A240-02100-000	Air Hose	1
12	A240-02200-000	A240-02200-000	Lift Control Valve	1
13	SQ20-2000-017	SQ20-2000-017	Washer	1
14	SQ12-10000-000	SQ20-10000-000	Pump Cylinder	1
15	SQ20-2000-015	SQ20-2000-015	Pump Piston	1
16	SQ20-2000-011	SQ20-2000-011	Bolt	1
17	SQ20-2000-012	SQ20-2000-012	Pin	1
18	SQ20-2000-006	SQ20-2000-006	Handle Sleeve	1
19	SQ20-2000-010	SQ20-2000-010	Snap Pin	1
20	B10N-21000-000	B10N-21000-000	Handle Assembly	1
21	A240-02300-000	A240-02300-000	Air Coupler, Female 1/4 NPT	1
22	A240-02400-000	A240-02400-000	Air Coupler, Male 1/4 NPT	1
23	SQ20-2000-016	SQ20-2000-016	Piston, Air Motor (not shown in exploded drawing)	1
24	SQ20-2000-014	SQ20-2000-014	Nut	1
*	SQ12-2000-047	SQ20-2000-047	Seal Kit (includes #5, a~j)	-
-	G831-03210-000	G831-03210-000	Seal Kit, Air Motor	-

# Note Page

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