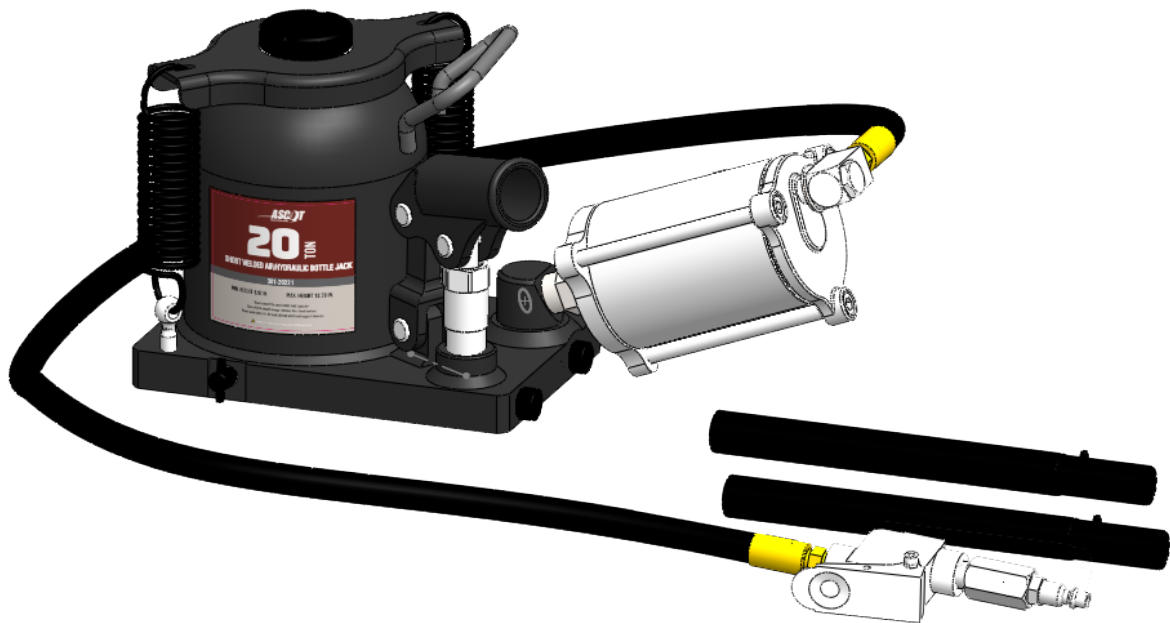


## OPERATING MANUAL

# ASCOT SUPPLY 20-TON SHORT WELDED AIR/HYDRAULIC BOTTLE JACK



**301-20221**  
**AS2022S**

MAKE SURE TO READ AND FULLY UNDERSTAND THE INSTRUCTION MANUAL BEFORE USING THIS PRODUCT

**ASCOT**<sup>TM</sup>  
Supply Corporation

**⚠ WARNING:** For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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## Product Description

20-Ton Air/Hydraulic Bottle Jack is designed for commercial use with a lifting range of 7" to 12 5/8". Its fully welded cylinder and frame provide superior strength and an extended service life. Additionally, it features a heavy-duty aluminum air motor, overload and bypass device, quick-connect feature, cast steel handle socket and linkage, and heavy-duty return springs for faster and controlled retraction.

## Specifications

Capacity	20-Ton
Minimum Height	7"
Maximum Height	12 5/8"
Hydraulic Lift Range	3 3/8"
Air Pressure	90-110 PSI
Air Inlet Fitting	1/4" NPT
Weight	30.6 lbs.

## Safety Information

Important: Read these instructions carefully.

**NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS JACK CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED.** Failure to do so may cause damage or personal injury and will invalidate the warranty. Retain THESE INSTRUCTIONS for future use.

To avoid personal injury or property damage during operation, read and follow all CAUTIONS, WARNINGS and INSTRUCTIONS, included with or attached to each product.

**WE CANNOT BE RESPONSIBLE FOR DAMAGE OR INJURY RESULTING FROM UNSAFE USE OF PRODUCT, LACK OF MAINTENANCE OR INCORRECT PRODUCT AND SYSTEM APPLICATION.**

Contact us when in doubt as to safety precautions or applications.

1. Use a qualified technician to maintain the jack in good condition. Keep it clean for best and safest performance.
2. The maximum load is 20 tons. **DO NOT** exceed this rated capacity.
3. Use this jack for lifting purpose only. **DO NOT** use it for any other purpose it is not designed to perform.
4. Keep children and unauthorized persons away from the work area.
5. Remove ill fitting clothing. Remove ties, watches, rings and other loose jewelry and contain long hair.
6. Wear ANSI approved safety goggles when operating the jack.
7. Keep proper balance and footing, do not overreach. Wear nonslip footwear.
8. Only use this jack on a surface that is stable, level, dry, not slippery, and capable of sustaining the load. Keep the surface clean, tidy and free from unrelated materials and ensure that there is adequate lighting.
9. When lifting a vehicle, apply the emergency brake and block all wheels.
10. Immediately after lifting, support the load with appropriate supporting equipments such as jack stands of adequate capacity! **DO NOT** work under a load which is supported only by a jack.
11. Before lowering load, ensure that there are no obstructions underneath and that all persons are standing clear.
12. **DO NOT** attempt to move the load while on the jack. The jack must only be used in a static position for lifting and lowering loads. Ensure that the load remains stable at all times.
13. **DO NOT** use the jack if damaged, if any suspect parts are noted or it has been subjected to a shock load.
14. **DO NOT** operate the jack when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
15. **DO NOT** allow untrained persons to operate the jack.
16. **DO NOT** make any modifications to the jack.
17. **DO NOT** use brake fluid or any other improper fluid and avoid mixing different types of oil when adding hydraulic oil. Only a good quality hydraulic jack oil should be used.
18. **DO NOT** expose the jack to rain or any other kind of incimate weather.
19. If the jack needs repairing or there are any parts that need to be replaced, have it repaired by authorized technicians and only use the replacement parts supplied by the manufacturer.
20. **WARNING:** The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur.

**WARNING!** Ensure that you read, understand and apply the safety instructions and warnings before use.

**WARNING!** Ensure that you have familiarized yourself thoroughly with the product and the hazards associated with its improper use.

1. Before first use of this product, pour a teaspoon of good quality air tool lubricant into the hose quick coupler-male of the air quick coupler-female, then connect it to air source and turn on the air valve and work for 3 seconds to evenly distribute lubricant.
2. Use the slotted end of the handle to turn the release valve clockwise until it is firmly closed.
3. Apply the emergency brake and use wheel chocks to block all wheels to prevent any movement of the vehicle being lifted.
4. Place the jack into position and adjust the extension screw on part as needed.

**NOTE:** Check in your vehicle owner's manual for the location of recommended lift point.

5. Connect the air quick coupler-male into the shop air supply hose quick coupler-female, then turn on the air valve.
6. Raise the load to desired height, turn off the air valve and immediately USE JACK STAND PAIR with adequate capacity to support the load.
7. When air source is not available, insert the big end of the handle into the handle bracket, pump it manually to raise the load to desired height. Then immediately transfer the load to appropriate support devices such as jack stands.

**WARNING! Be sure all tools and personnel are clear before lowering load.**

8. When work is done, raise load enough to carefully remove the jack stands. Then SLOWLY and CAREFULLY lower the load by turning the release valve counterclockwise (use the slotted end of the handle) in extremely small increments, then lower the extension screw by turning it clockwise as needed and remove the jack.

**WARNING! Dangerous dynamic shock loads are created by quick opening and closing the release valve when the load is being lowered. The resulting overload may cause hydraulic system failure which could cause severe personal injury and/or property damage.**

1. Clean the outside of the jack with a dry, clean, soft cloth and periodically lubricate the joints, extension screw and all moving parts with a light oil as needed.
2. When not in use, store the jack in a dry location with ram and extension screw fully lowered.
3. Purge the hydraulic system to eliminate any air in the system. If jack efficiency drops or jack doesn't work:
  - A. If manual operation performs poorly, use the slotted end of the handle to turn the release valve 1-1/2 turns counterclockwise and remove the oil filler plug by gently pulling, insert the handle into the handle bracket and pump it 10 to 15 times, then replace the filler plug.
  - B. If air operation performs poorly, connect the air inlet fitting to air source, use the slotted end of the handle to turn the release valve 1-1/2 turns counterclockwise and remove the oil filler plug by gently pulling, turn on the air valve to let the pump work for one minute, then replace the filler plug.
4. Check the hydraulic oil: place the jack in an upright position, completely lower the ram and remove the filler plug, if it is not adequate, fill with high quality hydraulic jack oil to the lower rim of the fill hole, purge away air from the hydraulic system, top off with more hydraulic oil, then replace the filler plug.
5. For best performance and longest life, replace the complete jack oil at least once per year: With the ram fully lowered, remove the oil filler plug, lay the jack on its side and drain the oil into a suitable container, then fill with high quality hydraulic jack oil, reinstall the filler plug.

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

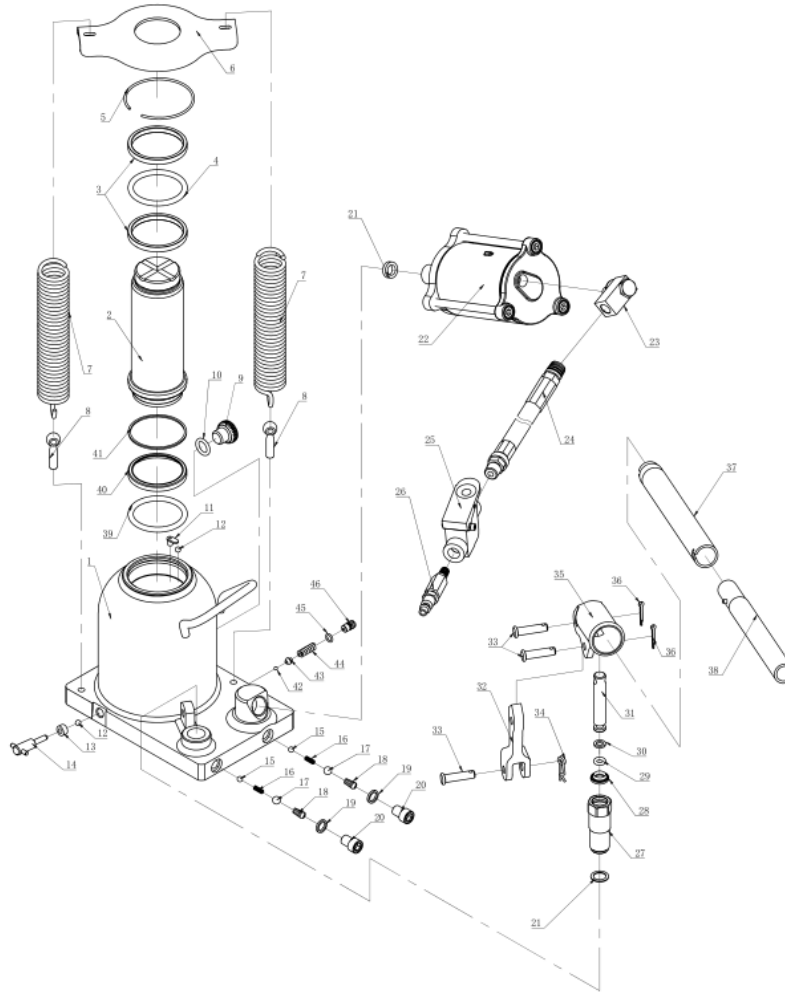
**NOTE:** It is recommended that an annual inspection be done by qualified technicians.

<b><u>PROBLEM</u></b>	<b><u>CAUSE</u></b>	<b><u>REMEDY</u></b>
Jack will not lift load	<ol style="list-style-type: none"> <li>1. Release valve not tightly closed</li> <li>2. Overload condition</li> <li>3. Air supply inadequate</li> <li>4. Air trapped in system</li> </ol>	<ol style="list-style-type: none"> <li>1. Close release valve firmly</li> <li>2. Remedy overload condition</li> <li>3. Ensure adequate air supply</li> <li>4. Purge away air from system</li> </ol>
Jack will lift, but will not maintain pressure	<ol style="list-style-type: none"> <li>1. Release valve not tightly closed</li> <li>2. Overload condition</li> <li>3. Hydraulic unit malfunction</li> </ol>	<ol style="list-style-type: none"> <li>1. Close release valve firmly</li> <li>2. Remedy overload condition</li> <li>3. Contact your dealer</li> </ol>
Will not lower after unloading	<ol style="list-style-type: none"> <li>1. Reservoir overfilled</li> <li>2. Linkages binding</li> </ol>	<ol style="list-style-type: none"> <li>1. Drain oil to proper level</li> <li>2. Clean and lubricate moving parts</li> </ol>
Poor lift performance	<ol style="list-style-type: none"> <li>1. Hydraulic oil level low</li> <li>2. Air trapped in system</li> </ol>	<ol style="list-style-type: none"> <li>1. Add oil to proper level</li> <li>2. Purge away air from system</li> </ol>
Will not lift to max height	<ol style="list-style-type: none"> <li>1. Hydraulic oil level low</li> </ol>	<ol style="list-style-type: none"> <li>1. Add oil to proper level</li> </ol>

# EXPLODED VIEW & PARTS LIST



## MACHINE OVERVIEW



NO.	DESCRIPTION	QUANTITY
1	PUMP ASSY	1
2	PISTON ROD ASSY	1
3	LIMITING RING	2
4	O RING	1
5	RETAINER RING	1
6	SPRING BASE	1
7	SPRING	2
8	BOLT	2
9	SCREW	1
10	O RING	1
11	SEPARATION BLADE	1
12	STEEL BALL	2
13	SEAL RING	1
14	RELEASE VALVE ROD	1
15	STEEL BALL	2
16	<b>SPRING</b>	<b>2</b>

NO.	DESCRIPTION	QUANTITY
17	STEEL BALL	2
18	SPRING	2
19	WASHER	2
20	SCREW	2
21	WASHER	2
22	AIR PUMP	1
23	ROTATING JOINT	1
24	INTAKE-TUBE ASSY	1
25	AIR VALVE ASSY	1
26	PIPE CONNECTOR	1
27	PUMP CORE BASE	1
28	DUST RING	1
29	O RING	1
30	WASHER	1
31	PUMP CORE	1
32	CONNECTING ROD	1

NO.	DESCRIPTION	QUANTITY
33	PIN	3
34	R PIN	1
35	STIRRUP	1
36	PIN	2
37	HANDLE ASSY	1
38	HANDLE ASSY	1
39	O RING	1
40	BOWL WASHER	1
41	WASHER	1
42	STEEL BALL	1
43	STEEL BALL BASE	1
44	SPRING	1
45	O RING	1
46	SCREW	1



## ONE YEAR LIMITED WARRANTY

For a period of one (1) year from your purchase date, distributor will repair or replace (at its option), without charge, your product if it was purchased new and the product has failed due to a defect in material or workmanship which you experienced during normal use of the product. This limited warranty is your exclusive remedy.

To access the benefits of this warranty, contact your distributor for confirmation that this warranty applies. Thereafter, you may be advised to return the product under warranty, freight prepaid, to the distributor service department.

If this product is altered, abused, misused, modified or undergoes service by an unauthorized technician, your warranty will be void. We are not responsible for damage to ornamental designs you place on this product and such ornamentation should not cover any warnings or instructions or it may void the warranty. This warranty does not cover scratches, superficial dents and other abrasions to the paint finish that occur under normal use.

Subject to the law in your state:

- (1) Your sole and exclusive remedy is repair or replacement of the defective product as described above.
- (2) Distributor is not liable for any incidental damages, including but not limited to, lost profits and unforeseeable consequences.
- (3) The repair and replacement of this product under the express limited warranty described above is your exclusive remedy and is provided in lieu of all other warranties, express or implied. All other warranties, including implied warranties and warranties of merchantability or fitness for a particular purpose are disclaimed and, if disclaimer is prohibited, these warranties are limited to one year from your date of purchase of this product. Some states' laws do not allow limited durations on certain implied warranties and some states' laws do not allow limitations on incidental or consequential damages. You should consult the law in your state to determine how your rights may vary.