



ATD-70220

20-Ton Heavy-Duty Hydraulic Air-Actuated Bottle Jack Owner's Manual



Features:

- Fully welded cylinder and frame assures strength and eliminates leaks
- Extra thick jack base provides exceptional support and stability
- Release valve is recessed for easier accessibility and protection from accidental damage
- Cast steel handle socket and linkage provide exceptional strength/durability
- Flanged spring cover plate provides exceptional strength to prevent bending
- Dust rings on the ram and top of pump provide extra protection for cylinder and extended service life
- Heavy-duty aluminum air motor ensures efficient operation
- Chrome plated pump piston and ram for additional rust resistance and durability
- Extension screw provides height adjustment for maximum height
- Both manual and pneumatic for automotive applications
- Meets or exceeds ASME PASE 2019 standards

Specifications:

- Capacity: 20-Ton
- Min. Height: 10.375" (263 mm)
- Max. Height: 19.813" (503 mm)
- Net Weight: 36.4 lbs. (16.5 kg)

These instructions have been written to help the user more effectively use and maintain this jack. Some of the information applying to construction, installation, operation, inspection, and maintenance of hydraulic jacks was selected from ANSI B30.1 and ASME/ANSI PALD-1 safety standards for jacks.

Product Description

This ATD Air Bottle Jack is designed to lift, but not sustain, rated capacity loads. It's designed to be used vertically. After lifting, loads must be immediately supported by appropriate means. This ATD Air Bottle Jack is NOT recommended for use in positioning construction trailers, houses or other building structures.

Safety Precautions

WARNING: Failure to heed the following warnings can result in personal injury and/or equipment damage. These warnings cannot cover every situation, so have safety foremost in your mind when using this jack. It is the owner/operator's responsibility to properly use and maintain this equipment and the instruction labels. Carefully read and understand the instructions and warnings in this manual before operating this equipment. Keep this manual in a safe location for future reference.

- Read, understand, and follow the operating instructions, and the ANSI B30.1 and ASME PALD-1 safety standard for jacks. If the operator cannot read English, operating instructions and safety precautions must be read and discussed in the operator's native language.
- Wear eye protection that meets the requirements of ANSI Z87.1 and OSHA.
- Inspect the jack before each use; do not use the jack if it is damaged, altered, or in poor condition.
- To prevent tipping, set up the jack on a hard, level surface. Set vehicle parking brake and block tires.
- The load must not exceed the rated lifting capacity of the jack. Lift only dead weight.
- Center the load on the jack saddle, because off-center loads can damage seals and cause hydraulic failure.
- Use the jack for lifting purpose only. This jack is designed to LIFT loads, NOT SUPPORT loads. Immediately support a lifted load with jack stands.
- Stay clear of lifted loads.
- Use only approved hydraulic fluid, such as Mobil DTE13M or equivalent.

Operating Instructions

- Jack operation is controlled either manually or by external air pressure. Either insert the handle into the handle socket to manually operate or connect to an external air pressure source (clean connections prior to assembly). To raise the jack, turn the release valve clockwise until tight and either manually pump with the provided handle or while connected to an air supply, depress the air valve.
- To lower the jack, SLOWLY open the release valve knob by turning it counterclockwise (CCW). Be careful not to turn valve quickly or more than twice, as sudden and dangerous lowering may occur.

Preventive Maintenance

Important: Dirt is the greatest single cause of failure in hydraulic units. Keep the jack clean and well lubricated to prevent foreign matter from entering the system. If the jack has been exposed to rain, snow, or grit, it must be cleaned before it is used.

1. When the jack is not in use, keep the piston fully retracted. Store the jack on its base and in a well protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful elements.
2. Maintain the oil level at the bottom of the filler plug hole. If it is necessary to add oil, remove the filler plug, and fill the reservoir with Mobil DTE13M or equivalent.
3. Visually inspect the jack before each use. Take corrective action if any of the following problems are found:
 - a. Cracked or damaged housing
 - b. Excessive wear, bending, or other damage
 - c. Leaking hydraulic fluid
 - d. Scored or damaged piston rod
 - e. Incorrectly functioning swivel heads or adjusting screw
 - f. Loose hardware
 - g. Modified or altered equipment

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 failure of the jack and the potential for sudden and immediate loss of load. We recommend Mobil DTE13M or equivalent.

Checking/Adding oil

1. With saddle fully lowered and pump piston fully depressed, set jack in its upright, level position. Open the release valve, turn counter-clockwise, and remove the oil filler plug. The oil level should be up to the hole. If not, proceed to step 2.
2. Fill until oil is level with the filler screw 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 saddle fully lowered, remove the oil filler screw.
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 upright, level position. Fill until oil is level with the filler screw hole, reinstall oil filler screw.

Purging the hydraulic system of air

During transit the unit may become “air-bound” causing a spongy ram action. To purge the system, close the release valve (turn clockwise). Manually pump the jack to full height. Open the release valve and push down on the ram. Repeat these steps if necessary to completely purge the system.

Lubrication

A periodic coating of light lubricating oil to pivot points and hinges will help to prevent rust and assure that pump assemblies move freely. Lubricate internal components. With the release valve open, manually pump the handle six times.

Cleaning

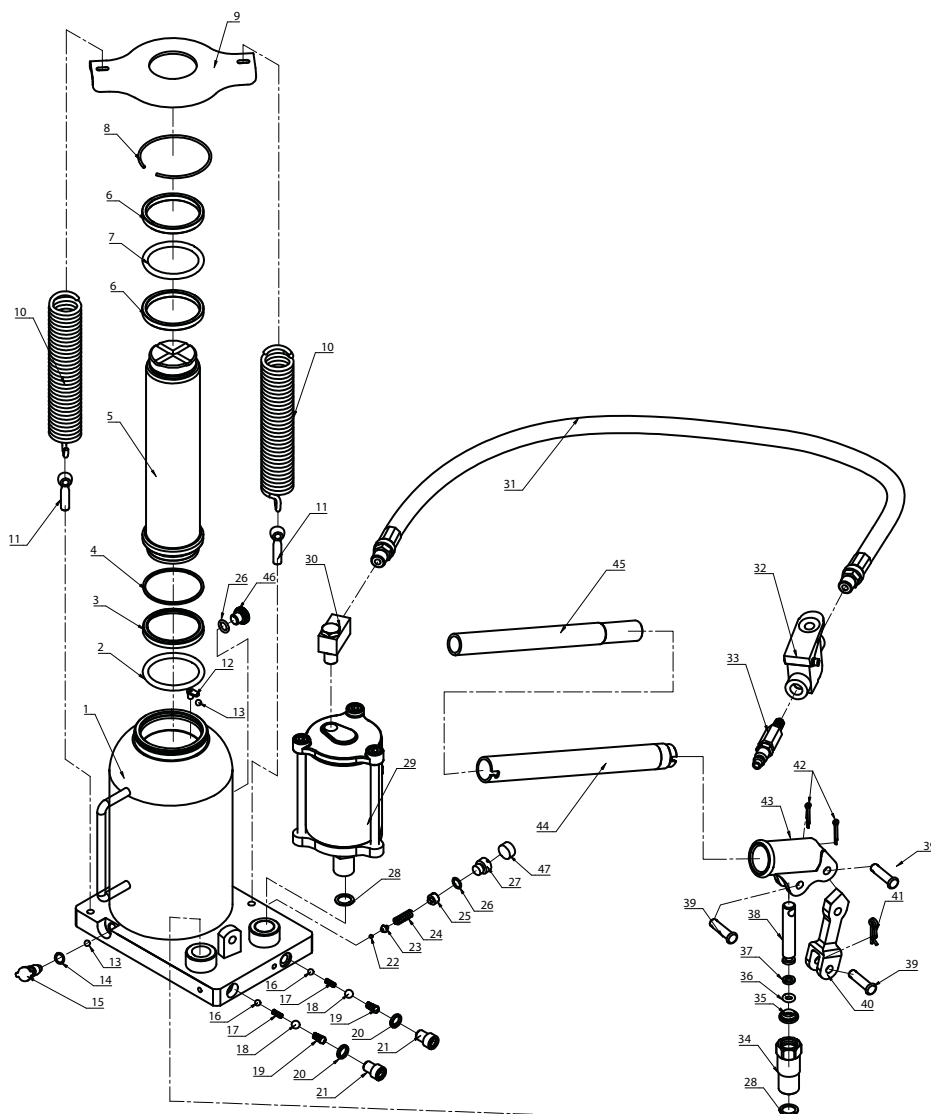
Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth. **Note:** Never use sandpaper or abrasive material on these surfaces.

Troubleshooting

Symptom	Causes	Remedy
Jack will not lift the load	1. The release valve is not tightly closed 2. The jack is overloaded 3. Inadequate air supply	1. Tighten the release valve 2. Rectify the overload condition 3. Check and ensure adequate air supply
Jack bleeds off after lifting	1. The release valve is not tightly closed 2. The jack is overloaded 3. The hydraulics unit is malfunctioning	1. Tighten the release valve 2. Rectify the overload condition 3. Contact the local service center
Jack will not lower after unloading	1. The reservoir is overfilled with hydraulic fluid 2. Linkage binding	1. Drain fluid to the proper oil level 2. Clean and lubricate moving parts
Poor lifting performance	1. Low fluid level 2. Air is trapped inside the hydraulic system	1. Ensure proper fluid level 2. With the ram retracted, remove the oil filler plug. Pump the jack with the release valve open to pressurize the air, reinstall the oil filler plug
The jack will not lift to its maximum height	Low fluid level	Ensure proper fluid level

REPLACEMENT PARTS

Not all components of this product are replacement items, but are illustrated as a convenient reference for position in the assembly sequence. When ordering parts, give model number, part number and description. Call your distributor for current pricing:



ITEM#	PART#	DESCRIPTION
1	PRT70220-01	PUMP ASSY
2	PRT70220-SK	O RING
3	PRT70220-SK	BOWL WASHER
4	PRT70220-SK	NYLON WASHER
5	PRT70220-05	PISTON ROD ASSY
6	PRT70220-06	LIMITING RING
7	PRT70220-SK	O RING
8	PRT70220-08	RETAINER RING
9	PRT70220-09-10	SPRING BASE KIT
10	PRT70220-09-10	SPRING BASE KIT
11	PRT70220-11	BOLT
12	PRT70220-12	SEPARATION BLADE
13	PRT70220-13	STEEL BALL
14	PRT70220-SK	O RING
15	PRT70220-15	SCREW
16	PRT70220-16	STEEL BALL
17	PRT70220-17	SPRING
18	PRT70220-18	STEEL BALL
19	PRT70220-19	SPRING
20	PRT70220-20	COPPER WASHER
21	PRT70220-21	SCREW
22	PRT70220-22	STEEL BALL
23	PRT70220-23	STEEL BALL BASE
24	PRT70220-24	SPRING
25	PRT70220-25	SCREW

ITEM#	PART#	DESCRIPTION
26	PRT70220-SK	O RING
26	PRT70212-12-21	OIL PLUG KIT
27	PRT70220-27	SCREW
28	PRT70220-28	COPPER WASHER
29	PRT70212-42	AIR MOTOR
30	PRT70212-43-47	AIR HOSE ASSEMBLY
31	PRT70212-43-47	AIR HOSE ASSEMBLY
32	PRT70212-43-47	AIR HOSE ASSEMBLY
33	PRT70212-43-47	AIR HOSE ASSEMBLY
34	PRT70220-34	PUMP CORE BASE
35	PRT70220-SK	DUST RING
36	PRT70220-SK	O RING
37	PRT70220-SK	NYLON WASHER
38	PRT70220-38	PUMP CORE
39	PRT70220-39	PIN B
40	PRT70220-40	CONNECTING ROD
41	PRT70220-41	R PIN
42	PRT70220-42	PIN
43	PRT70220-43	HANDLE SOCKET
44	PRT70212-40-41	HANDLE ASSY
45	PRT70212-40-41	HANDLE ASSY
46	PRT70212-12-21	OIL PLUG KIT
47	PRT70220-47	CAP
48	PRT70220-SK	DUST RING



WARRANTY

1 YEAR LIMITED WARRANTY

THIS WARRANTY AND CONFIRMED RECEIPT(S) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

PURCHASED FROM: _____

DATE PURCHASED: _____

INVOICE/RECEIPT NUMBER: _____

Your ATD-70212 is warranted for a period of 12 months from the original purchase date.

For a period of one (1) year from your purchase date, ATD Tools Inc. will repair or replace (at its option) without charge, your ATD 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 supplier, or point of sale directly. You may be advised to return the product under warranty, freight prepaid, to your supplier for warranty determination.

If this ATD 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 ATD product and such ornamentation should not cover any warnings or instructions or they may void the warranty. This warranty does not cover scratches, superficial dents, and other abrasions to the paint finish that occur under normal use. It also does not cover normal wear items such as but not limited to brushes, batteries, drill bits, drill chucks, pads or blades.

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) ATD 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.

[Affix receipt or invoice here for safe keeping]