



## **ATD-7307 22-Ton Low Profile Axle Jack Owner's Manual**



### **Features:**

- High speed air turbo motor quickly raises the load to the desired height
- Heavy-duty spring return for faster and controlled self-retraction
- Welded pump for trouble free performance
- Heat-treated extension screw allows for maximum lift height
- Heavy-duty wheels with bearings for easy movement
- (3) Adapters included: .8", 2.4", 3.9"
- (3) Handle positions allow for easy storage, movement and access to lift point
- Meets or exceeds ASME/PASE 2019 standards

### **Specifications:**

- Capacity (Tons): 22
- Minimum Height: 8.75"
- Maximum Height with Adapters: 21.5"
- Hydraulic Range: 4.75"
- Extension Screw: 4"
- Handle Length: 48.37"
- Air Pressure: 110-120 PSI
- Shipping Weight: 76.5 lbs.



The safety alert symbol is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or property damage.

## SAFETY AND GENERAL INFORMATION

**Save these instructions.** For your safety, read, understand, and follow the information provided with and on this device before using. The owner and/or operator of this equipment should have an understanding of the device, its operating characteristics and safe operating instructions before operating the equipment. The owner and/or operator should be aware that the use and repair of this product may require special skills and knowledge. Instructions and safety information should be read to and discussed with 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 should be removed from service immediately. If the equipment has been or is suspected to have been subjected to an abnormal load or shock (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until it has been inspected by a hydraulic repair facility. It is recommended that an annual inspection be made by an authorized repair facility. Labels and Owner's manuals are available from manufacturer.

## PRODUCT DESCRIPTION

Hydraulic Axle Jacks are designed to lift, but not support, rated capacity partial vehicle loads consisting of one end of a vehicle. Immediately after lifting, support loads with a pair of appropriately rated jack stands.

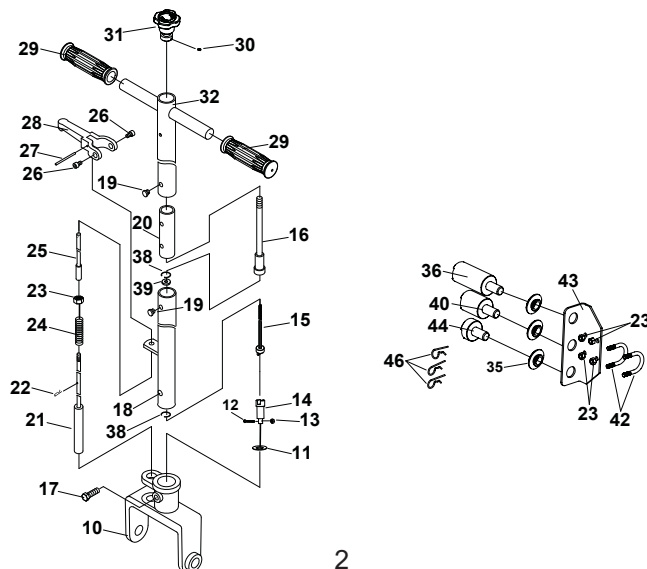
## PREPARATION

Reference assembly instructions on pages 2-3 and replacement parts pages 6-8 for parts location and assembly sequence. Assemble, align and insert the handle assembly and handle position bar into the handle sleeve, then tighten the bolt on handle fork to prevent accidental removal of handle while in use.

## ASSEMBLY

See illustration below for detail

1. Assemble Lower Handle (18) and Upper Handle (32) and secure with Bolt (19)
2. Pass the Lower Tie Rod (21) through the bracket on the Lower Handle (18)
3. Thread the Nut (23) onto the Lower Tie Rod (21) then screw the Lower Tie Rod (21) into the Upper Tie Rod (25)
4. Tighten the Nut (23) then put the R-Pin (22) through the hole in the Lower Tie Rod (21). Ensure that the R-Pin is above the bracket on the Lower Handle (18)
5. Slide the Handle Assembly into Handle Fork (10) ensure that you slide the Tie Rod assembly through the locking bracket guides. Use Bolt (17) to lock the Handle Assembly into the Handle Fork (10)
6. Using the U-Bolts (42) and Nuts (23), mount the Adapter Holder (43) around the Handle Assembly
7. Place Adapters (36, 40, 44) into the Adapter Holder (43)



### Before Use

1. Verify that the product and application are compatible, if in doubt call ATD Tools, Inc. Technical Service 636-327-9050.
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, locate the Release Valve Knob (31) on top of the handle and the lifting control valve at the end of the air hose (37) :
  - a. Squeeze the lift control valve to lift the load.
  - b. Rotate the release valve knob to the left to lower the load.
  - c. Rotate the release valve knob to the right to hold the load.
4. With ram fully lowered, remove the Oil Filler Plug (51). Check oil level. Proper oil level should be just below the rim of the opening. Reinstall the Oil Filler Plug (51).
5. Pour a teaspoon of good quality air tool lubricant into the air supply inlet of the lift control valve. Connect to air supply, then squeeze the lift control valve for 3 seconds to evenly distribute lubricant.
6. Ensure that jack rolls freely. Raise and lower the unloaded ram throughout the lifting range before putting into service to ensure the jack operates smoothly. Replace worn or damaged parts and assemblies with ATD Tools, Inc. authorized replacement parts only.

**NOTICE:** This model is equipped with a 1/4" NPT air coupler. If installing a different air coupler, use thread tape or compound on all air connections. To ensure dependable operation, install an inline air dryer and oiler.

### Bleeding/Venting Trapped Air

1. Open Oil Filler Plug (51).
2. Open the Air Valve slightly to activate the Air Motor for slow pumping.
3. Rotate the Release Valve Knob to the left slightly to activate the Air Motor for slow descending
4. Repeat steps 2 and 3 several times.
5. Rotate the Release Valve Knob to the left until the Ram is fully retracted.
6. Check oil level and reinstall Oil Filler Plug (51).

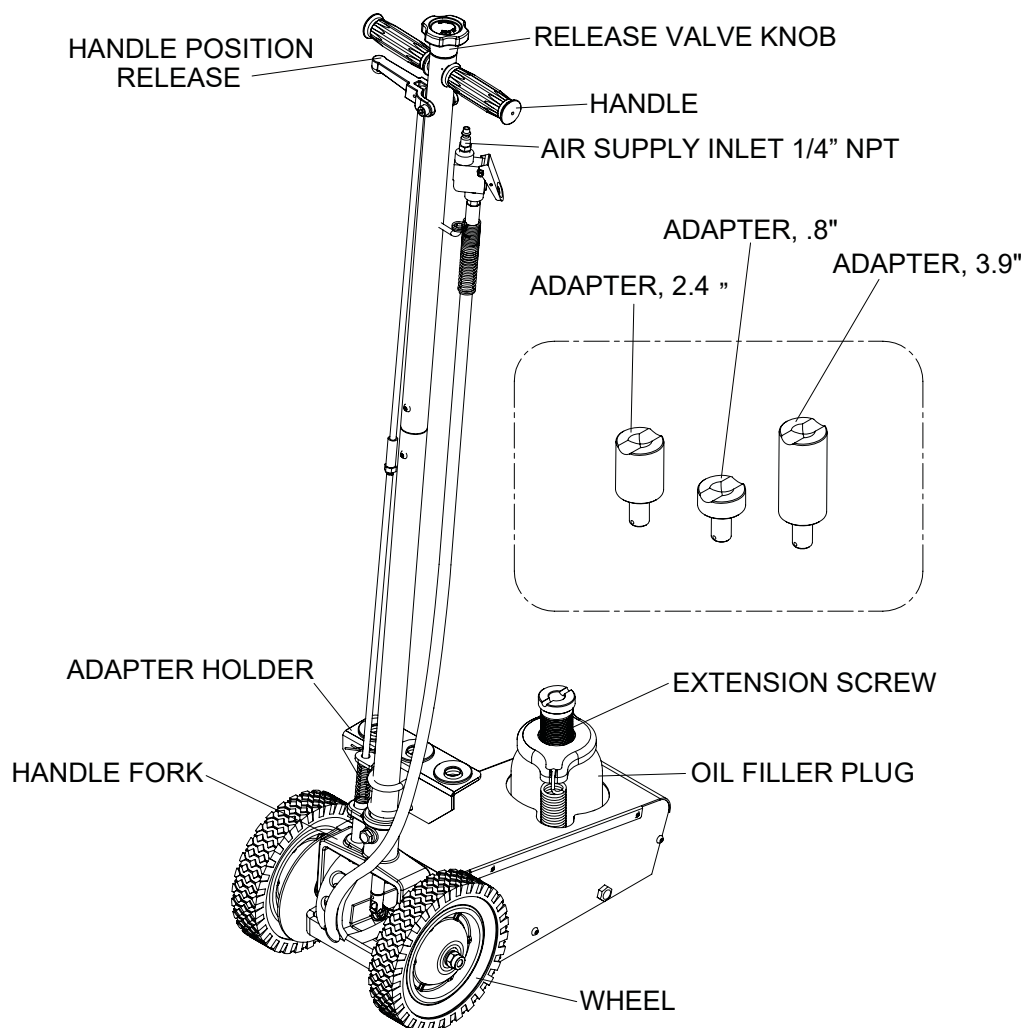
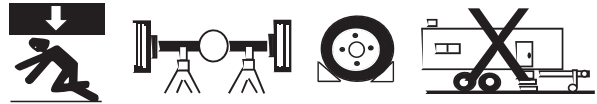


Figure 1 - Typical Truck Jack Nomenclature

## WARNING

- Study, understand, and follow all instructions before operating this device.
- Do NOT exceed rated capacity.
- Use only on hard, level surface.
- Lifting device only. immediately after lifting, support the vehicle with appropriate means.
- Do not move or dolly the vehicle while on the jack.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- No alterations shall be made to this product.
- Failure to heed these markings may result 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 or 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.



The wheels provided with this jack are for positioning the jack under a load **ONLY!** The wheels are **not** load wheels. Do not try to dolly or move the vehicle with the jack!

## OPERATION (see Fig 1)

### LIFTING

**Note:** The jack is equipped with handle position lock. To adjust the handle, release lock device by pulling the handle position release lever up, lever is spring loaded and will lock into desired position. Ensure lever locking mechanism is fully engaged before lifting.

1. Connect adequate air source to the lift control valve.
2. Follow the vehicle manufacturer's recommended guidelines for lifting. Engage the emergency brake and chock each unlifted wheel in both directions to prevent inadvertent vehicle movement.
3. Center jack saddle under lift point, then squeeze the lift control valve until saddle contacts the lift point. To lift, continue squeezing the lift control valve until load reaches desired height. Simply release your grip on the lift control valve to end lift event.
4. Transfer the load **immediately** to appropriately rated jack stands.



**WARNING:** Only attachments and/or adapters supplied by the manufacturer should be used. Lift only on areas of the vehicle as specified by the vehicle manufacturer. .



**WARNING:** Never use hydraulic jack as a stand alone device! **ALWAYS** transfer the lifted load **IMMEDIATELY** to a pair of appropriately rated jack stands. Use one pair of jack stands per vehicle. Rated capacity is per pair only! Do not exceed rated capacity.

### LOWERING



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

1. Raise load high enough to clear the jack stands.
2. Remove jack stands carefully (**always used in pairs**).
3. Rotate the Release Valve Knob to the left to lower the load.
4. After removing jack from under the vehicle, fully retract the jack to reduce ram exposure to rust and contaminant.

# MAINTENANCE

## ADDING/CHANGING OIL:

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

**IMPORTANT:** Use only good grade hydraulic jack oil. Avoid mixing different types of fluids 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. We recommend Mobil DTE 13M or equivalent.

1. With Saddle fully lowered, remove Cover Plate (41), then remove the Oil Filler Plug (51).
2. Lay jack on its side and drain fluid into a suitable container.
3. Set jack, in its upright, level position.
4. Fill with oil. Proper oil level is just below the rim of the opening. Reinstall the Oil Filler Plug (51).
5. Perform **Bleeding/Venting Trapped Air** procedure on page 3.

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

## LUBRICATION:

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels move freely and the pump functions smoothly. To help ensure trouble free operation, an inline air dryer and oiler is recommended.

## CLEANING:

Periodically check the Ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

**Note:** Never use sandpaper or abrasive material on Ram surfaces

## STORAGE:

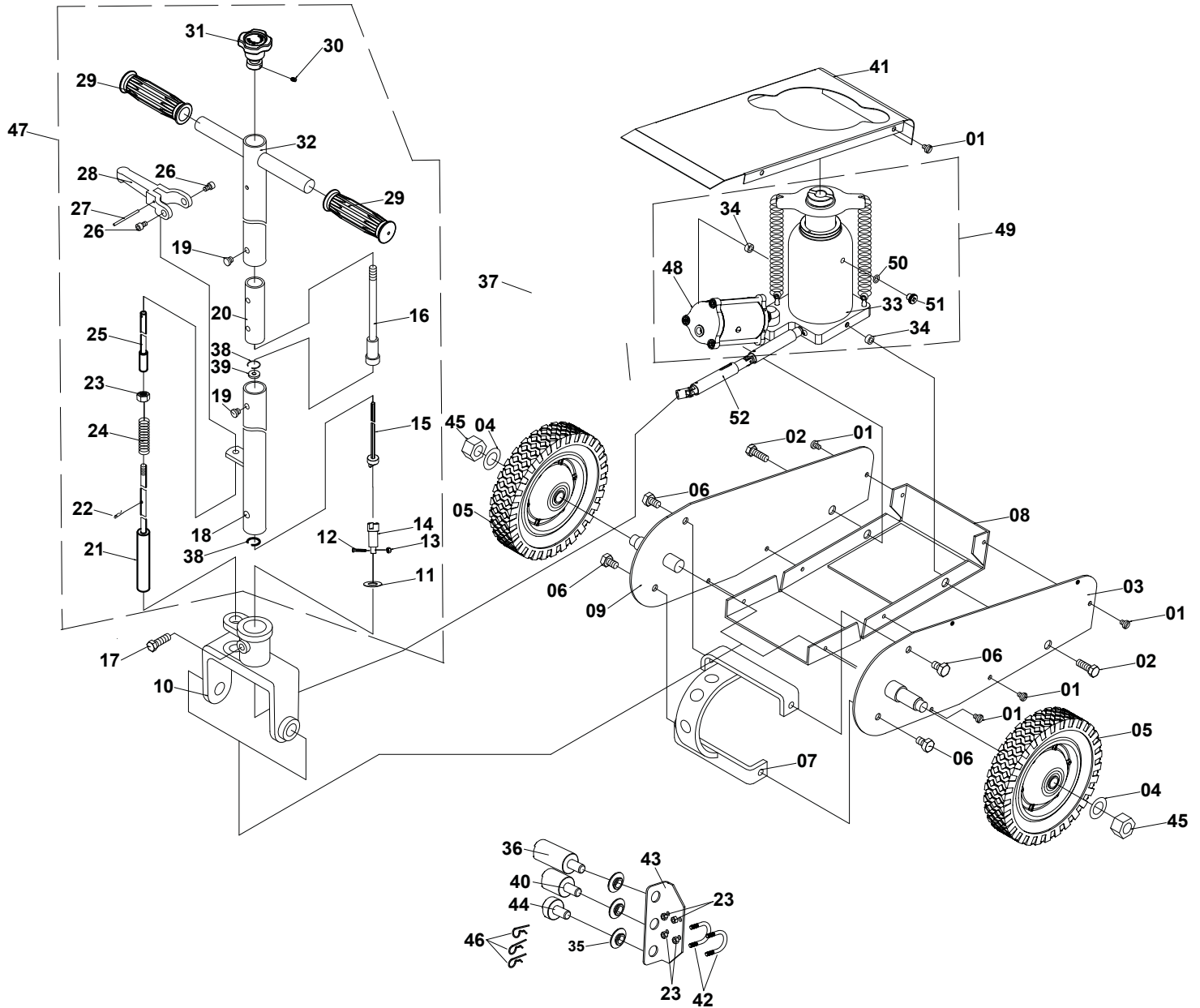
When not in use, store the jack with saddle fully lowered.

## TROUBLESHOOTING

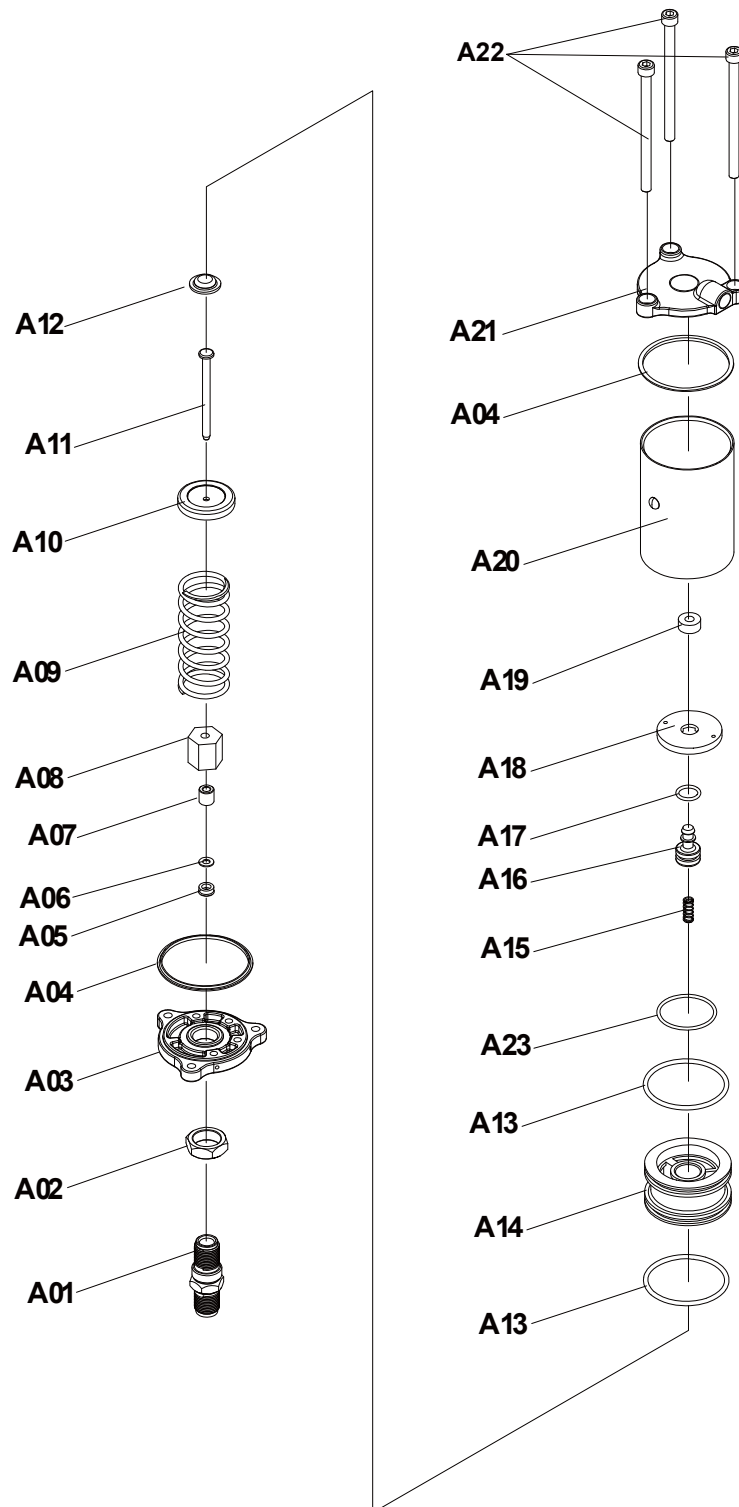
Symptom	Possible Causes	Corrective Action
Jack will not lift	<ol style="list-style-type: none"><li>1. Release valve in wrong position</li><li>2. Air trapped in system</li><li>3. Weight capacity exceeded</li><li>4. Air supply inadequate</li><li>5. Hydraulic unit malfunction</li></ol>	<ol style="list-style-type: none"><li>1. Ensure the release valve knob is closed tightly to the right</li><li>2. Follow Bleeding/Venting Trapped Air procedure on page 3</li><li>3. Consider higher capacity jack</li><li>4. Ensure air supply adequate</li><li>5. Discontinue use and contact your distributor</li></ol>
Jack will lift, but cannot maintain pressure	<ol style="list-style-type: none"><li>1. Universal joint malfunction</li><li>2. Hydraulic unit malfunction</li></ol>	<ol style="list-style-type: none"><li>1. Replace universal joint</li><li>2. Discontinue use and contact your distributor</li></ol>
Jack will not lower after loading	<ol style="list-style-type: none"><li>1. Oil reservoir is overfilled</li><li>2. Moving parts are stuck</li><li>3. Universal joint malfunction</li></ol>	<ol style="list-style-type: none"><li>1. Drain excess fluid to proper level</li><li>2. Clean and lubricate the moving parts</li><li>3. Replace universal joint</li></ol>
Poor lift performance	<ol style="list-style-type: none"><li>1. Low fluid level</li><li>2. Air trapped in system</li></ol>	<ol style="list-style-type: none"><li>1. Follow the Adding/Changing Oil procedure on page 5</li><li>2. Follow Bleeding/Venting Trapped Air procedure on page 3</li></ol>
Will not lift to full extension	<ol style="list-style-type: none"><li>1. Low fluid level</li></ol>	<ol style="list-style-type: none"><li>1. Follow the Adding/Changing Oil procedure on page 5</li></ol>

## REPLACEMENT PARTS

Not all components of the jack 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:



## Air Motor Breakdown



ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
1	-	BOLT	10
2	-	BOLT	2
3	-	RIGHT SIDE PLATE	1
4	PRT7307-SK	FLAT WASHER	2
5	PRT7307-05	WHEEL	2
6	-	BOLT	4
7	-	HANDLE SEAT ASSEMBLY	1
8	-	BASE	1
9	-	LEFT SIDE PLATE	1
10	-	HANDLE FORK	1
11	-	FLAT WASHER	1
12	PRT7307-SK	SCREW	1
13	-	LOCK NUT	1
14	-	JOINT	1
15	-	LOWER CONNECTING ROD ASSY	1
16	-	UPPER CONNECTING ROD ASSY	1
17	-	BOLT	1
18	-	LOWER HANDLE	1
19	PRT7307-SK	SCREW	2
20	-	HANDLE CONNECTOR	1
21	-	SLOTTED ROD	1
22	-	R-PIN	1
23	-	NUT	5
24	-	SPRING	1
25	-	UPPER TIE ROD	1
26	-	SCREW	2
27	-	PIN	1

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
28	-	POSITIONING LEVER	1
29	-	HANDLE GRIP	2
30	-	SCREW	1
31	PRT7307-31	RELEASE VALVE KNOB	1
32	-	UPPER HANDLE	1
33	-	PUMP ASSY	1
34	PRT7307-SK	WASHER	2
35	-	RUBBER ADAPTOR COVER	3
36	PRT7328B-23	ADAPTER - 3.9"	1
37	PRT7307-37	AIR HOSE	1
38	-	RETAINER RING	2
39	PRT7307-SK	WASHER	1
40	PRT7328B-24	ADAPTER - 2.4"	1
41	PRT7307-41	COVER PLATE	1
42	-	U-BOLT	2
43	-	ADAPTOR HOLDER	1
44	PRT7328B-25	ADAPTER - .8"	1
45	-	LOCK NUT	2
46	-	R-PIN	3
47	PRT7307-47	HANDLE ASSEMBLY COMPLETE	1
48	PRT7307-48	AIR PUMP	1
49	PRT7307-49	HYDRAULIC UNIT W/AIR MOTOR	1
50	PRT7307-SK	O-RING	1
51	PRT7307-SK	OIL FILLER PLUG	1
52	PRT7307-52	UNIVERSAL JOINT	1
53	PRT7307-SK	SEAL KIT	1

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
A01	-	PUMP CORE SEAT	1
A02	-	ROUND NUT	1
A03	-	CYLINDER SEAT	1
A04	PRT7307-SK	NYLON RING	2
A05	PRT7307-SK	U-RING	1
A06	PRT7307-SK	NYLON RING	1
A07	PRT7307-SK	COPPER RING	1
A08	-	ROUND NUT	1
A09	-	SPRING	1
A10	-	CAP	1
A11	-	AIR PUMP CORE	1
A12	-	CAP	1

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
A13	-	O-RING	2
A14	PRT7307-SK	PISTON	1
A15	-	SPRING	1
A16	-	PISTON	1
A17	PRT7307-SK	O-RING	1
A18	-	PISTON CAP	1
A19	PRT7307-SK	SEAL RING	1
A20	-	CYLINDER	1
A21	-	CYLINDER CAP	1
A22	-	SCREW	3
A23	PRT7307-SK	O-RING	1

\* PRT7307-SK - SEAL KIT CONTAINS 4, 12, 19, 34, 39, 50, 51, 53, A04, A05, A06, A07, A14, A17, A19, A23





## 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-7307 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]