



ATD-7455A

25-Ton Hydraulic Shop Press with Hand Pump

Owner's Manual



Features:

- Ideal for the removal or installation of gears, bearings, universal joints, pulleys, wrist pins and other various press jobs
- Multi-position bed for work height adjustment
- Heavy steel, welded construction
- Hydraulic system is protected from internal damage by a by-pass mechanism
- Excellent for bending, bonding or straightening operations
- Meets or exceeds ASME / PASE 2019 standards

Specifications:

- Capacity (Ton): 25
- Ram Stroke: 7.88"
- Minimum Working Height: 1"
- Maximum Working Height: 38.88"
- Maximum Working Width: 20"
- Column (Bed) Width: 4"
- Bed Positions: 8
- Press Size: 27.38" x 27.56" x 70.38"



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 shop press before using. The owner and/or operator of this equipment should have an understanding of the use of this equipment and safe operating procedures before attempting to use. The owner and operator should be aware that the use and repair of this product may require special skills and knowledge. Instructions and safety information should be conveyed in the operator's native language before use of this equipment is authorized. If any doubt exists as to the safe and proper use of this product, remove from service immediately.

Inspect before each use. Do not use if broken, bent, cracked or damaged parts (including labels) are noted. Any shop press that appears damaged in any way, or operates abnormally or is missing parts should be removed from service immediately. If you suspect that any component of this product has been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until it has been checked by a service center. It is recommended that an annual inspection be done by qualified personnel. Labels and owner's manuals are available from the manufacturer. Contact your distributor to obtain them.

PRODUCT DESCRIPTION

ATD Tools Shop Presses are 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 fixture stand used to secure a large, final component. Unlike presses equipped with a separately mounted pump, the power unit on this press can not be equipped with a pressure gauge, therefore monitoring the load must be done by other means, such as a load cell w/ digital indicator. Whatever means is chosen, the load measuring means should be calibrated annually.

SPECIFICATIONS

Model	Capacity	Press Size (L x W x H)	Max. Working Space	Min. Working Space
ATD-7455A	25 Ton	27-3/8" x 27-9/16" x 70-3/8"	38-7/8"	1"

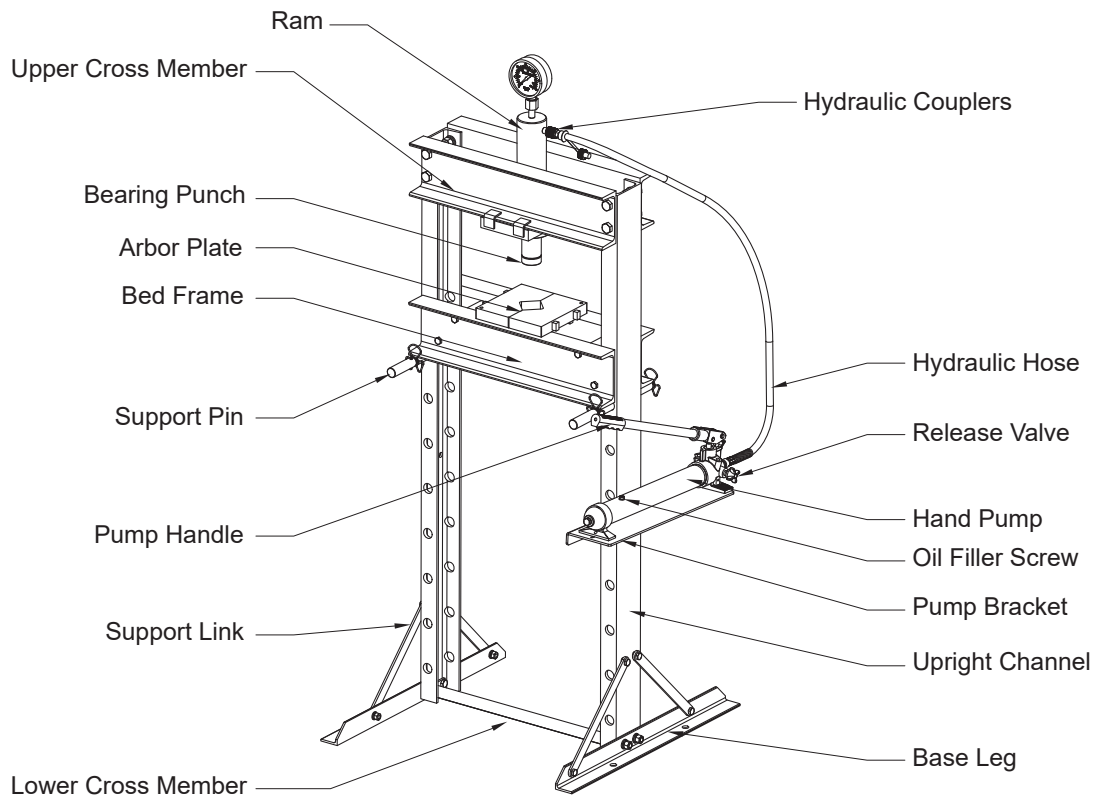


Figure 2 - ATD-7455A Shop Press Components

PREPARATION

Before Use

1. Verify that the product and application are compatible.
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 and 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. Counterclockwise 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 ram fully retracted, remove the oil filler plug. Insert the handle sleeve and pump 6 to 8 strokes. This will help release any pressurized air, which may be trapped within the reservoir. Ensure that the oil level is just below the oil filler hole. Reinstall the oil filler plug.
5. For model ATD-7455A: With release valve opened, remove oil filler screw. Ensure that the oil level is within 1/4" (6mm) of the opening. Reinstall the oil filler plug.
6. 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 ATD Tools authorized replacement parts only.

Bleeding / Venting Trapped Air

With the release valve in the OPEN position (3b above) and with the ram fully lowered, remove the oil filler plug. Insert 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 plug.

ASSEMBLY

(Refer to Figure 4)

Note: During assembly, **ONLY HAND TIGHTEN BOLTS** until step 12.

1. Attach Base Legs (21) and Lower Cross Member (26) to Upright Channels (20) with Flat Washer (22), Lock Washer (23) Nut (24) and Bolt (25). Remember to **HAND TIGHTEN ONLY**.
2. Attach Support Links (34) to the Base Legs (21) with Flat Washer (22), Lock Washer (23) Nut (24) and Bolt (25). Remember again - **HAND TIGHTEN ONLY**.
3. Attach Support Links (34) to the Upright Channels (20) with Flat Washer (14), Lock Washer (15) Nut (16) and Bolt (33). **HAND TIGHTEN ONLY**.
4. Assemble both Bed Frames (18) with Flat Washer (14), Lock Washer (15) Nut (16) and Bolt (27) with Tube (28) in between them. **HAND TIGHTEN ONLY**.
5. Carefully slide Bed Frame assembly down to lowest possible position between the Upright Channels (20).
6. Attach the Upper Cross Members (10) to the Upright Channels (20) with Flat Washer (11), Lock Washer (12) Nut (13) and Bolt (9). Yes, **HAND TIGHTEN ONLY**.
7. Screw the Upper Round Nut (6) onto the threads of the Ram (3). Then, slide the Ram (3) with Upper Round Nut (6) through the Head Plate (7), until the threads are exposed. Screw on the Lower Round Nut (8) on the ram threads just until the nut engages all the threads. Raise the Ram up until the top of the Lower Round Nut (8) is up against the bottom of the Head Plate (7) and then screw down the Upper Round Nut (6) until Plate (7) is sandwiched between the Upper and Lower Round Nuts. Tighten set screws in the Upper and Lower Round Nuts.
8. Insert the Nylon Ring (2) into the fitting on the top of the Ram (3) and install the Gauge (1) into the fitting. Tighten the Gauge (1) into the fitting so the face of the Gauge (1) is pointing towards the operating side of the Shop Press.
9. Install the Coupler (39) on the end of the Oil Hose (38) and into the Coupler (40) in the Ram (3) and **HAND TIGHTEN ONLY**.
10. Install the bearing punch (5) in the bottom of the ram (3) and tighten the screw (4).
11. Attached the Pump Support Bracket (31) to the Upright Channels (20) with Flat Washer (22), Nut (24) and Bolt (36).
12. The moment you've been waiting for - **TIGHTEN ALL APPLICABLE NUT AND BOLT ASSEMBLIES**.
13. **IMPORTANT** - Pump (32) MUST BE SECURED to the Pump Support Bracket (31) with the Flat Washers (30) and Bolts (29).
14. Carefully, slide the Bed Frame (18) up and secure it with the Pins (19) and Rings (35).
15. Place the arbor plate (17) on the bed frame assembly (18).
16. Your ATD-7455A Shop Press is now ready to use.

NOTICE: Should you need to disassemble, before disassembly, carefully slide bed to its fully lowered position.

Item	Hardware		Qty
4	SCREW	M6x10	1
9	BOLT	M16x35	8
11	FLAT WASHER	M16	8
12	LOCK WASHER	M16	8
13	NUT	M16	12
14	FLAT WASHER	M10	12
15	LOCK WASHER	M10	12
16	NUT	M10	12
22	FLAT WASHER	M12	6
23	LOCK WASHER	M12	4
24	NUT	M12	6
25	BOLT	M12x35	4
27	BOLT	M10x140	4
29	BOLT	M8x16	3
30	FLAT WASHER	M8	3
33	BOLT	M10x25	8
36	BOLT	M12x30	2

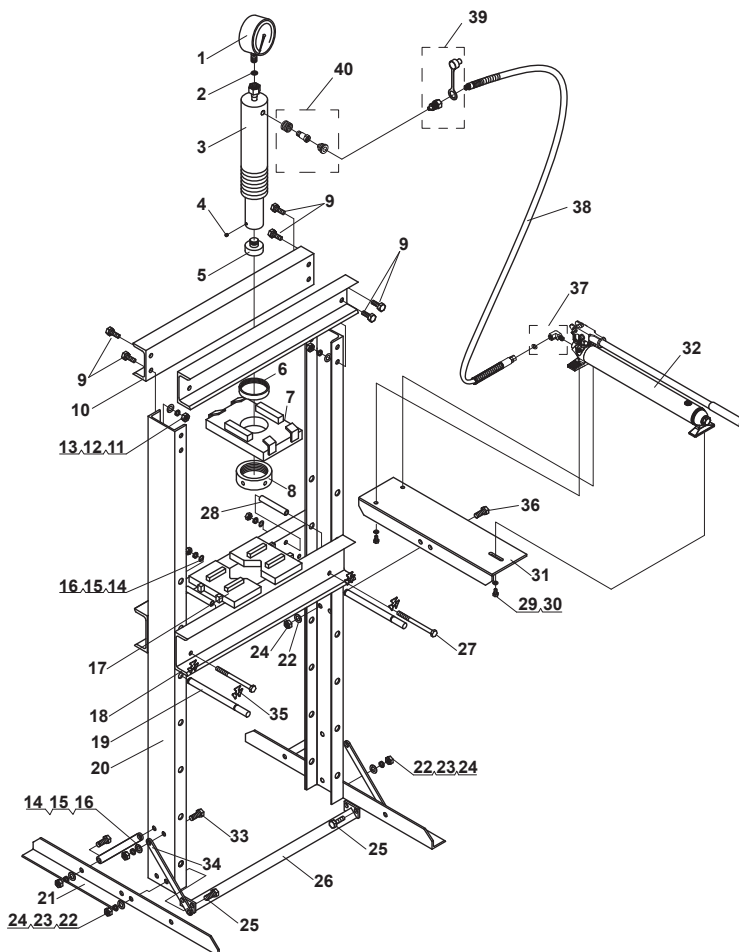


Figure 4 - Assembly Illustration for model ATD-7455A

WARNING

- **Study, understand, and follow** all printed materials provided with/on this product before use.
- **Always** use an adequately rated, calibrated load cell with digital indicator to monitor pressing force.
- **Do not** exceed rated capacity.
- Use the device **only** on a hard, level surface.
- **Always** wear safety goggles when working on or near this equipment.
- **Always** keep hands, feet and all other body parts away from loading area.
- **Never** leave loaded press unattended.
- **Projectile hazard!** Ensure workpiece and any attachment is centrally loaded and a safety shield is installed around workpiece to help 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 warnings 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.

Insert the support pins to desired height, then lower the bed. Ensure bed frame is fully rested on the support pins.

1. Place arbor plates on the bed frame as needed.
2. 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.
3. Close release valve by turning it clockwise firmly, insert jack handle into handle sleeve, and pump the handle to extend the ram until ram nears workpiece.
4. Align ram and workpiece to ensure center loading.
5. Apply load to workpiece by pumping handle. **Do not overload workpiece.**
6. Monitor the pressure gauge and calculate the applied load using the following formula as basic guideline:

Force = Pressure X Area

Effective Area of model ATD-7455A = 2.8 in²

Problem: Determine the applied load in lbs. force on a workpiece being pressed by an ATD-7455A whose pressure gauge is reading 2200 psi.

Solution: 2200 X 2.8= **6,160 lbs.**

8. 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 counterclockwise to retract the ram and remove workpiece. Do not turn the release valve counterclockwise more a 1 full turn.



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 pump.



Use only handle provided by manufacturer. The handle provided with this product will safely engage the release valve of bottle jack 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.



Unlike presses equipped with a separately mounted pump, the power unit on this press can not be equipped with a pressure gauge, therefore monitoring the load **must** be done by other means, such as a load cell with digital indicator. Whatever means is chosen, the load measuring means should be calibrated annually.



The hydraulic power unit provided with this device is intended to be used as an integral part of this press and not as a stand-alone jacking device separate of the press. **NEVER** use the hydraulic power unit provided with this press for any purpose other than that for which it is intended.

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 bottle jack

Important: Use only 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 premature failure of the jack and the potential for sudden and immediate loss of load. Mobil DTE 13M or equivalent recommended.

For model ATD-7455A:

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 screw.

Rust prevention

Check ram and 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 a 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 5
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. Reinstall after bleeding.

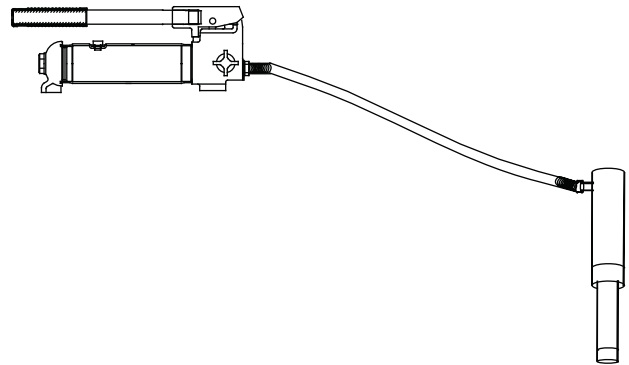
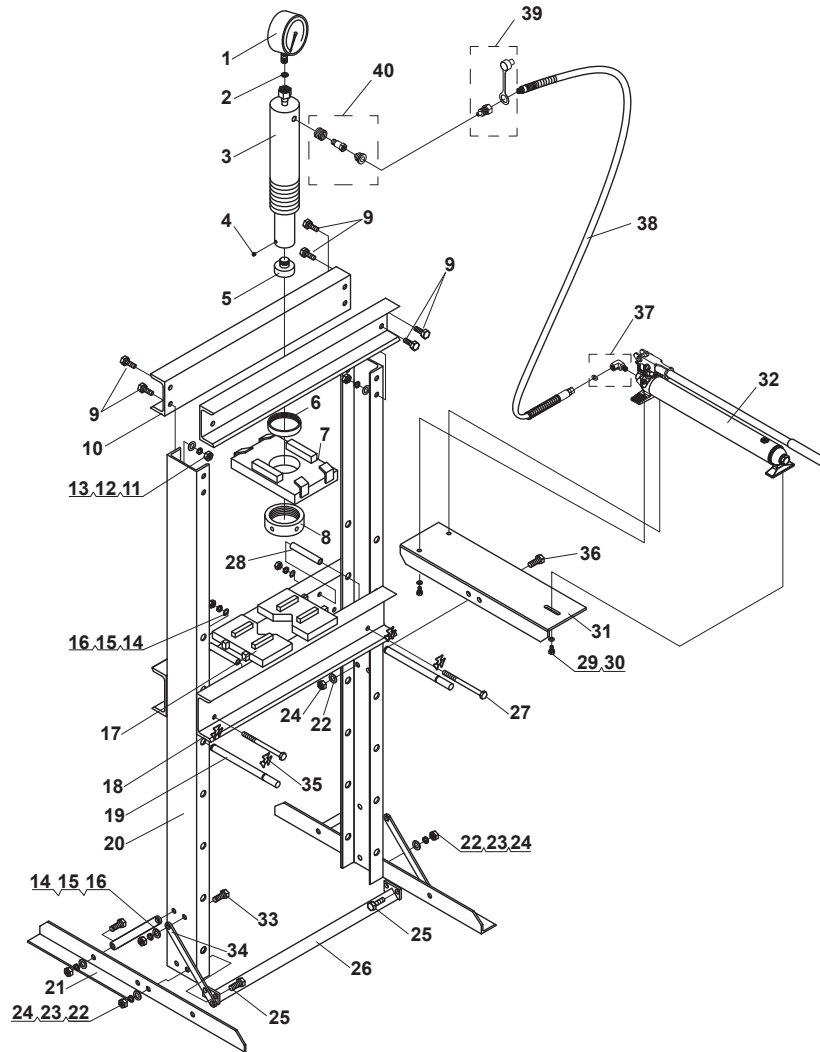


Figure 5 - Illustration to bleed air from system

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#	ORDERING PART#	PART DESCRIPTION	QTY
1	PRT7455A-01-02	GAUGE & NYLON RING	1
2	PRT7455A-01-02	GAUGE & NYLON RING	1
3	PRT7455A-03	RAM	1
4	PRT7455A-HK	SCREW, M6 x 10	1
5	PRT7455A-05	PUNCH	1
6	PRT7455A-06	UPPER ROUND NUT	1
7	PRT7455A-07	HEAD PLATE	1
8	PRT7455A-08	LOWER ROUND NUT	1
9	PRT7455A-HK	BOLT, M16 x 35	8
10	PRT7455A-10	UPPER CROSS MEMBERS	2
11	PRT7455A-HK	FLAT WASHER, M16	8
12	PRT7455A-HK	LOCK WASHER, M16	8
13	PRT7455A-HK	NUT, M16	12
14	PRT7455A-HK	FLAT WASHER, M10	12
15	PRT7455A-HK	LOCK WASHER, M10	12
16	PRT7455A-HK	NUT, M10	12
17	PRT7455A-17	ARBOR PLATES (PAIR)	1
18	PRT7455A-18	BED FRAME	2
19	PRT7455A-19	SUPPORT PIN	2
20	PRT7455A-20	UPRIGHT CHANNEL	2

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY
21	PRT7455A-21	BASE LEG	2
22	PRT7455A-HK	FLAT WASHER, M12	6
23	PRT7455A-HK	LOCK WASHER, M12	4
24	PRT7455A-HK	NUT, M12	6
25	PRT7455A-HK	BOLT, M10 x 140	4
26	PRT7455A-26	LOWER CROSS MEMBER	1
27	PRT7455A-HK	BOLT	4
28	PRT7455A-28	TUBE	4
29	PRT7455A-HK	BOLT, M8 x 16	3
30	PRT7455A-HK	FLAT WASHER, M12	3
31	PRT7455A-31	PUMP BRACKET	1
32	PRT7455A-32	HAND PUMP	1
33	PRT7455A-HK	BOLT, M10 x 25	8
34	PRT7455A-34	SUPPORT LINK	4
35	PRT7455A-35	RING	4
36	PRT7455A-HK	BOLT, M12 x 30	2
37	PRT7455A-37	PUMP ELBOW AND O-RING	1
38	PRT7455A-38	HOSE	1
39	PRT7455A-39	HOSE COUPLER	1
40	PRT7455A-40	RAM COUPLER	1

PRT7455A-HK HARDWARE KIT CONTAINS: 4, 9, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 27, 29, 30, 33 & 36

TROUBLESHOOTING:

Symptom	Possible Causes	Corrective Action
Ram will not press load	Release valve not tightly closed	Ensure release valve tightly closed
	Overload condition	Remedy overload condition
	Faulty / Loose couplers	Replace / tighten couplers
	Oil lever in pump is low	Fill and bleed system
Ram bleeds off after press operation	Release valve not tightly closed	Ensure release valve tightly closed
	Oil lever in pump is low	Fill and bleed system
	Ram or Bottle Jack malfunction	Contact your distributor to replace
Ram will not retract after unloading	Reservoir overfilled	Drain fluid to proper level
	Linkage binding	Clean and lubricate moving parts
Poor lift performance	Fluid level low	Ensure proper fluid level
	Air trapped in system	With ram fully retracted, remove oil filler plug/screw to let pressurized air escape, then reinstall oil filler plug/screw
Ram will not extend to full extension	Fluid level low	Ensure proper fluid level

PREVENTATIVE MAINTENANCE RECORD LOG

DATE	MAINTENANCE PERFORMED



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

PURCHASED FROM: _____

DATE PURCHASED: _____

INVOICE/RECEIPT NUMBER: _____

Your ATD-7455A 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]