



ATD-7437A

1-1/2 Ton Heavy-Duty Hydraulic Floor Style Transmission Jack Owner's Manual



Features:

- The adjustable head can be tilted forward, backward and side-to-side for optimum alignment of transmission bolt patterns and pins
- Load restraining chain for safe raising and lowering of load
- (4) swivel casters allow easy movement and positioning of transmission jack
- Rugged steel wheels and full swivel ball bearing casters
- User-friendly 360° rotating pumping socket for maximum multi-directional operation
- Meets or exceeds ASME/PASE 2014 standards

Specifications:

- Capacity: 1-1/2 Tons
- Minimum Height: 8.75"
- Maximum Height: 37.01"
- Handle Length: 25.5"
- Saddle Base: 15.75" x 11.81"
- Expanded Saddle Area: 19.7" x 12.6"
- Shipping Weight: 341 lbs.

Save these instructions

For your safety, read, understand, and follow the information provided with and on this jack. The owner and operator of this equipment should have an understanding of this jack and safe operating procedures before attempting to use. The owner and operator should be aware that 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 jack is authorized. Make certain that the operator thoroughly understands the inherent dangers associated with the use and misuse of the product. If any doubt exists as to the safe and proper use of this jack, remove from service immediately.

Inspect before each use. Do not use if broken, bent, cracked or damaged parts are noted. Any jack that appears damaged in any way, or operates abnormally should be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until jack has been checked by a factory authorized service center. It is recommended that an annual inspection be done by qualified personnel. Labels and operator's manuals are available from manufacturer.

PRODUCT DESCRIPTION

ATDTools Hydraulic Transmission Jacks are designed to be used as an aid in the removal and installation of automotive and light truck transmissions, transfer cases and transaxles. They are intended for use under an overhead lift or in a garage pit. This jack meets or exceeds ASME/PASE 2014 standards.

SPECIFICATIONS

Model	Capacity	Minimum Height	Maximum Height	Saddle Base	Expanded Saddle Area	Handle Length	Weight
ATD-7437A	3,000 lbs.	8.75"	37.01"	15.75" x 11.81"	19.7" x 12.6"	25.5"	341 lbs.

CAUTION! Read carefully before unpacking product

SAFETY INSTRUCTIONS

BEFORE USE

1. Inspect jack before each use. Do not use if bent, broken or cracked components are noted. Ensure that casters move freely. Check for and tighten any loose assemblies.
2. Verify that the product and the application are compatible.
3. Remove oil filler plug/screw prior to initial use to confirm oil level is at or just above the inner cylinder as seen from the reservoir, fill as needed and reinstall oil filler plug/screw.

WARNING

- Study, understand, and follow all printed materials provided with/on this product before use.
- Do not exceed rated capacity.
- Use only on hard, level surfaces capable of supporting rated capacity loads.
- Use of this jack is limited to the removal, installation and transportation of transmissions, transfer cases and transaxles. Do not use a transmission jack to tilt or support a vehicle.
- Ensure the center gravity of load is centered on the saddle.
- For your safety, do not exceed 10° tilt angle of the saddle assembly in all directions.
- Adequately support the vehicle before starting repairs.
- Use only chains and slings provided.
- If loaded jack must be moved, make sure that the load is secured, stable and in lowest position.
- This is a lifting and lowering device only.
- Transfer load immediately to appropriate support device for service or repair.
- Shock loads may cause the sudden loss of load and/ or cause the jack to tip or flip over violently, bend or break.
- No alterations shall be made on this product
- Failure to heed these markings may result in personal injury and/or property damage.

ASSEMBLY

Little assembly is required. Refer to the figures in the manual for details in understanding the assembly and the components of your product.

- Install brackets (part #3-7 and part #3-13) into saddle plate (part #3-8) with the bolts (part #3-6), washers (part #3-9) and wing nuts (part #3-10).
- Attach the chains (part #3-4) to the brackets (part #3-7). Secure to brackets with the bolts (part #3-1), washers (part #3-2), lock washers (part #3-3) and nuts (part #3-5).
- Assemble the chain hooks (part #3-16) hooks to the adapter bolts (part #3-15) with the wing nuts (part #3-14).
- Secure the adapter bolts (part #3-15) to the two remaining brackets (part #3-13) using the washers (part #3-12) and nuts (part #3-11).

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 premature failure of the jack and the potential for sudden and immediate loss of load. We recommend Mobil DTE 13M or equivalent.

Adding oil

1. With saddle fully lowered, set jack in its upright, level position. Remove oil filler plug/ screw.
2. The oil level should be within 3/8" of the filler plug hole.

Changing oil

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

1. With saddle fully lowered, set jack in its upright, level position. Remove the oil filler plug/ 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 level upright position.
4. Fill with oil until just below the rim of oil filler hole.
5. Reinstall oil filler plug/ screw.

OPERATION

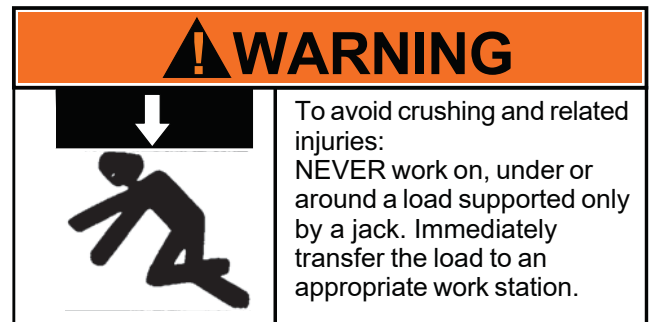
Raise saddle:

1. Locate and close release valve by turning knob clockwise firmly, then pump the pump handle until the load is contacted.
2. Follow vehicle manufacturer's recommended procedures for removing the load as outlined in vehicle service manual or repair guide. Position the transmission on the saddle plate, resting against the angle plates.
3. Secure load with provided chains. Ensure the load's center of gravity is centered on the saddle and load is stable before moving jack.

Lower saddle:

Caution! Be sure all tools and personnel are clear before lowering load. Dynamic shock loads are created by quickly opening and closing the release valve as the load is being lowered. The resulting overload may cause hydraulic system failure.

1. Slowly, gently turn the release valve knob counterclockwise, **never more than 1/2 full turn** until the load is completely lowered.
2. Immediately transfer the load to an appropriate repair fixture.



Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels, casters and pump assemblies move freely.

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 these surfaces!

Storage

When not in use, store the jack with pump piston and saddle in lowest position.

IMPORTANT: The use of alcohol, hydraulic brake fluid or detergent motor oil could damage the seals and result in jack failure.

Air Venting Procedures

- With the jack in the fully lowered position, release valve open, remove oil filler plug.
- Pump the handle rapidly several times. Reinstall oil filler plug.
- Turn the release valve knob clockwise to the closed position.
- Pump the handle until the lift arm reaches maximum height and continue to pump several times to remove trapped air in the system.
- Turn the release valve knob counterclockwise in one full turn and lower lift arm to the lowest position. Use force on saddle if necessary.
- Carefully and slowly loosen oil filler plug to release pressurized air.
- Repeat above steps until trapped air is completely vented.

Damaged Equipment

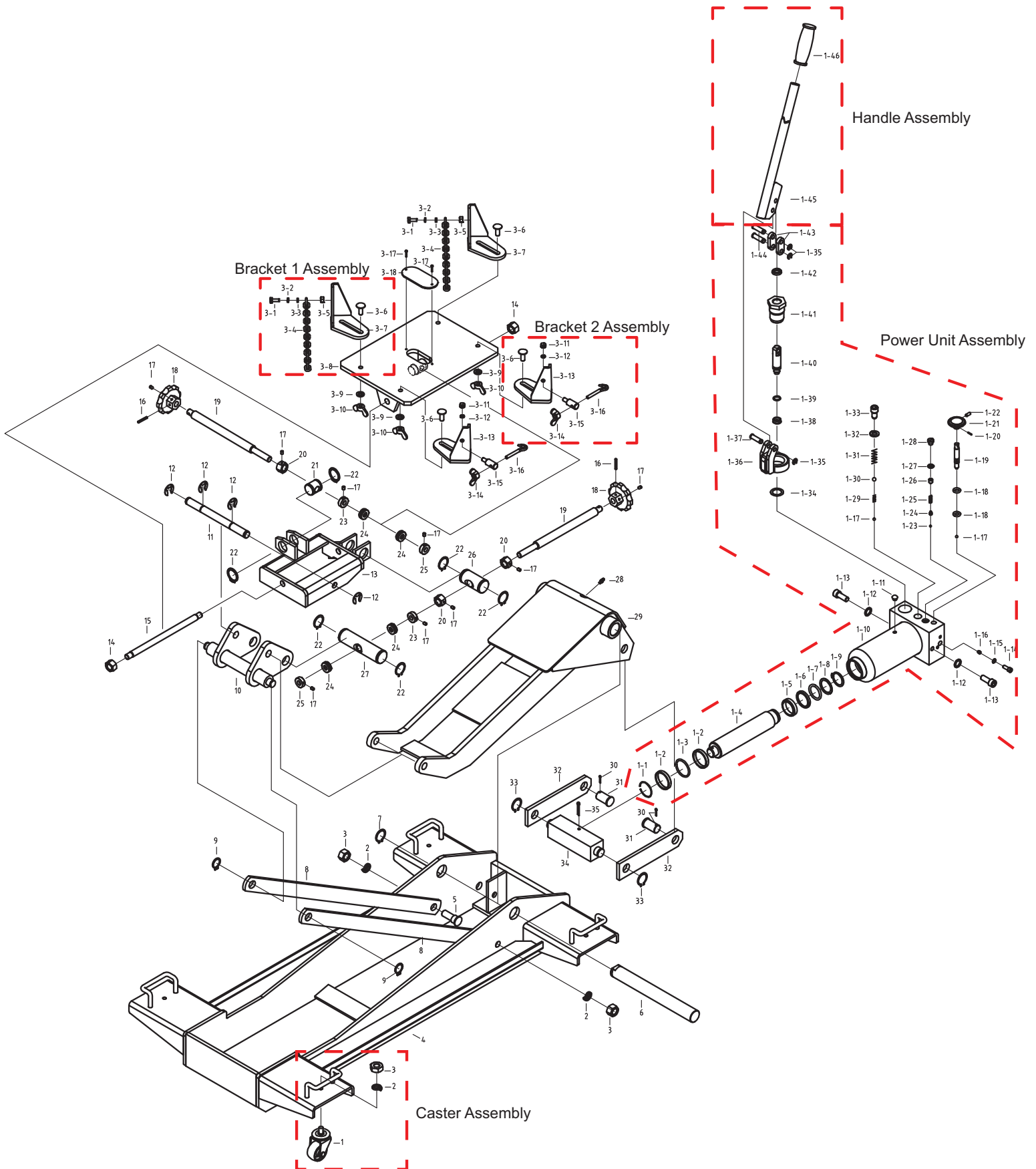
Any jack that appears to be damaged in any way, is found to be worn, or operates abnormally **SHOULD BE REMOVED FROM SERVICE UNTIL REPAIRED**. It is recommended that necessary repairs be made by a manufacturer’s or supplier’s authorized repair facility if repairs are permitted by the manufacturer or supplier.

TROUBLESHOOTING

Symptom	Possible Cause	Corrective Action
Jack does not lift	1. Release valve is open	1. Close release valve
	2. Low/no oil in reservoir	2. Fill with oil and bleed system
	3. Air-locked system	3. Bleed system
	4. Load is above capacity of jack	4. Use correct equipment
	6. Packing worn out or defective	6. Install seal kit
Jack lifts only partially	1. Too much or not enough oil	1. Check oil level
Jack advances slowly	1. Pump not working correctly	1. Install seal kit, or replace power unit
Jack lifts load, but doesn't hold	1. Cylinder packing is leaking	1. Install seal kit
	2. Valve not working correctly (suction, delivery, release, or bypass)	2. Inspect valves. Clean and repair seat surfaces
	3. Air-locked system	3. Bleed system
Jack leaks oil	1. Worn or damaged seals	1. Install seal kit
Jack will not retract	1. Release valve is closed	1. Open or clean release valve

REPLACEMENT PARTS

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



ITEM#	ORDERING PART#	PART DESCRIPTION	QTY	
1		WHEEL ASSY.	4	Caster Assy
2	PRT7437A-01	WASHER	6	
3		NUT	6	
4	PRT7437A-04	FRAME	1	
5	PRT7437A-05	BOLT	2	
6	PRT7437A-06	SHAFT	1	
7	PRT7437A-07	WASHER	1	
8	PRT7437A-08	ROD LINK	2	
9	PRT7437A-09	WASHER	2	
10	PRT7437A-10	SADDLE SEAT	1	
11	PRT7437A-11	SHAFT	1	
12	PRT7437A-12	WASHER	4	
13	PRT7437A-13	BRACKET	1	
14	PRT7437A-14	NUT	2	
15	PRT7437A-15	SHAFT	1	
16	PRT7437A-16	PIN	2	
17	PRT7437A-17	BOLT	7	
18	PRT7437A-18	HAND WHEEL	2	
19	PRT7437A-19	ADJUSTMENT ROD	2	
20	PRT7437A-20	NUT	3	
21	PRT7437A-21	SHAFT	1	
22	PRT7437A-22	RETAINING RING	6	
23	PRT7437A-23	NUT	2	
24	PRT7437A-24	BEARING	4	
25	PRT7437A-25	NUT	2	
26	PRT7437A-26	SHAFT	1	
27	PRT7437A-27	SHAFT	1	
28	PRT7437A-28	GREASE FITTING	1	
29	PRT7437A-29	LIFT ARM	1	
30	PRT7437A-30	PIN	2	
31	PRT7437A-31	SHAFT	2	
32	PRT7437A-32	ROD LINK	2	
33	PRT7437A-33	WASHER	2	
34	PRT7437A-34	ROD LINK	1	
35	PRT7437A-35	PIN	1	
36	PRT7437A-36	PIN	2	
1-1		SNAP RING	1	Power Unit Assembly
1-2		WASHER	2	
1-3		O-RING	1	
1-4		PISTON ROD	1	
1-5		PISTON RING	1	
1-6		SEALING WASHER	1	
1-7		O-RING	1	
1-8	PRT7437A-37	WASHER	1	
1-9		WASHER	1	
1-10		BODY	1	
1-11		OIL FILLER PLUG	1	
1-12		WASHER	2	
1-13		BOLT	2	
1-14		BOLT	1	

ITEM#	ORDERING PART#	PART DESCRIPTION	QTY		
1-15		COPPER WASHER	1	Power Unit Assembly	
1-16		VALVE	1		
1-17		STEEL BALL	2		
1-18		O-RING	2		
1-19		RELEASE VALVE	1		
1-20		PIN	1		
1-21		RELEASE KNOB	1		
1-22		BOLT	1		
1-23		STEEL BALL	1		
1-24		BALL SEAT	1		
1-25		SPRING	1		
1-26		SCREW	1		
1-27		SEALING WASHER	1		
1-28		SCREW	1		
1-29		SPRING	1		
1-30	PRT7437A-37	STEEL BALL	1		
1-31		SPRING	1		
1-32		COPPER WASHER	1		
1-33		SCREW	1		
1-34		COPPER WASHER	1		
1-35		WASHER	3		
1-36		BRACKET	1		
1-37		PIN	1		
1-38		Y-RING	1		
1-39		O-RING	1		
1-40		CYLINDER PUMP	1		
1-41		PUMP CYLINDER	1		
1-42		WIPER RING	1		
1-43		LINK PLATE	2		
1-44		PIN	2		
1-45	PRT7437A-45	HANDLE	1		Handle Assy
1-46		HANDLE SLEEVE	1		
3-1		BOLT	2		Bracket 1 Assembly
3-2		WASHER	2		
3-3		WASHER	2		
3-4	PRT7437A-31-37	CHAIN	2		
3-5		NUT	2		
3-6		BOLT	4		
3-7		BRACKET	2		
3-8		BRACKET	1		Bracket 2 Assembly
3-9		WASHER	4		
3-10		NUT	4		
3-11		NUT	2		
3-12	PRT7437A-38-316	WASHER	2		
3-13		BRACKET	2		
3-14		NUT	2		
3-15		BOLT	2		
3-16		HOOK	2		
3-17	PRT7437A-317	BOLT	2		
3-18	PRT7437A-318	BOARD	1		
N/A	PRT7437A-SK	SEAL KIT	1		

* - Seal Kit Includes:

1-3, 1-6, 1-7, 1-11, 1-15, 1-18, 1-27, 1-32, 1-34, 1-38 (x2), 1-39 (x2)

PREVENTATIVE MAINTENANCE RECORD LOG

DATE	MAINTENANCE PERFORMED



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-7437A 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.

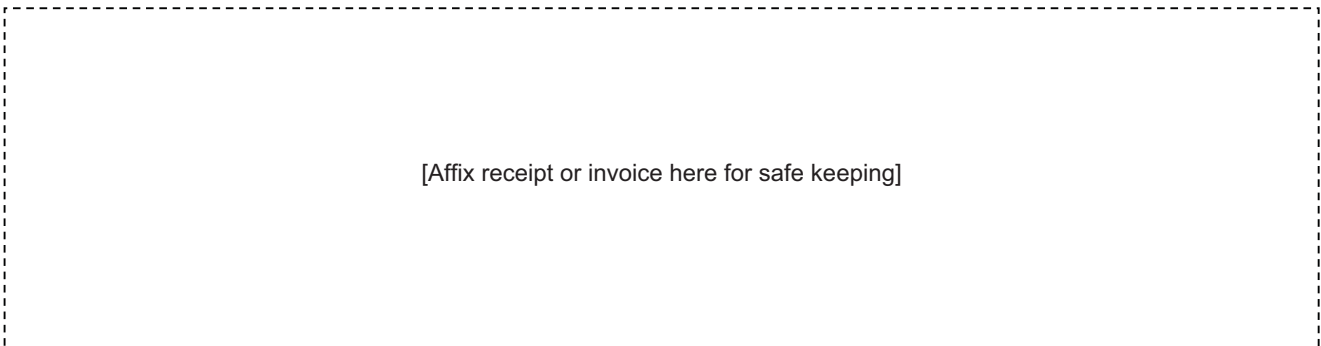
To access the benefits of this warranty, contact your supplier, or point of sale directly. You may be advised to return the product under warranty, freight prepaid, to your supplier for warranty determination.

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]