



ATD-31177

1/2" x 50' Retractable Air Hose Reel

Owner's Manual



FEATURES

- Heavy-duty 20-gauge, powder-coated steel construction
- 12-position ratchet mechanism locks the reel at the desired hose length
- Adjustable roller outlet arm and ball stop
- Slotted mounting bolt holes allow easy mounting to ceilings, walls, floors, workbenches, vehicles, etc.
- 50 ft. premium rubber hose with high-strength polyester woven braid reinforcement and solid brass fittings
- 3 ft. lead-in hose included

SPECIFICATIONS

- Maximum pressure: 300 psi
- Hose: 1/2" x 50 ft.
- Max airflow: 25 CFM
- Inlet air connection: 1/2" NPT (M)
- Hose connections: 1/2" NPT (M)

SAFETY INSTRUCTIONS

The purpose of safety symbols is to attract our attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The symbol warnings do not by themselves eliminate any danger. The instructions and warnings they give are no substitutes for common sense and proper accident prevention measures.

WARNING

Be sure and read and understand all safety instructions in this manual, including all safety alert symbols such as “DANGER”, “WARNING” and “CAUTION”, before using this hose reel. Failure to follow all instructions listed may result in electric shock, fire and/or serious personal injury.

SYMBOL DEFINITION



SAFETY ALERT SYMBOL: Indicates “DANGER”, “WARNING” or “CAUTION”.
May be used in conjunction with other symbols or pictographs.

DANGER

Failure to obey this warning **WILL** result in death or serious injury to yourself or others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

CAUTION

Failure to obey this warning **CAN** result in death or serious injury to yourself or others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

WARNING

Failure to obey this warning **MAY** result in death or serious injury to yourself or others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

IMPORTANT SAFETY CONSIDERATIONS

WARNING

1. Read and understand all instructions. Failure to follow all instructions may result in serious injury.
2. The warnings, cautions and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using the reel. Always be aware of the environment and ensure that the reel is used in a safe and responsible manner.
3. **DO NOT** allow persons to operate or assemble the reel until they have read this manual and developed a thorough understanding of how it works.
4. **DO NOT** modify the reel in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the reel.
5. Use the right tool for the job. **DO NOT** attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which this equipment was intended. **DO NOT** use this equipment for a purpose for which it was not intended.
6. Industrial or commercial applications **MUST** follow OSHA requirements.

SAFETY INSTRUCTIONS

WORK AREA SAFETY

- Inspect the work area before each use.
- Keep the work area clean, dry, free of clutter, and well lit. Cluttered, wet, or dark work areas can result in injury.
- Using the reel in a confined work area may put you dangerously close to other cutting tools and rotating parts.
- Do not use the reel when there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The reel can create sparks, which may ignite the dust or fumes.
- Keep children and bystanders away from the work area while operating the reel. Do not allow children to use the reel.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be below the work surface and may result in electric shock, fire and/or serious personal injury.

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the reel. Do not use the reel while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Use ANSI compliant safety goggles or safety glasses with side shields, or, when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. Do not overreach. Keep proper footing and balance at all times.
- Secure the work with clamps or a vise instead of your hand when practical. This safety precaution allows for proper tool operation using both hands.

REEL USE AND CARE



- **BE SURE** to read and understand all instructions before operating this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.
- Check for damaged parts before each use. Carefully check that the reel will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the reel with a damaged part.
- Disconnect the air supply from the reel before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Use only accessories that are recommended by the manufacturer for use with the reel. Accessories that may be suitable for one reel may create a risk of injury when used with another reel. Never use an accessory that has a higher operating pressure than the reel itself.
- Inspect the reel, hose, and accessories for damage or excessive wear before each use. If you find damage do not use the reel.

SAFETY INSTRUCTIONS CONTINUED

SPECIFIC OPERATION WARNINGS

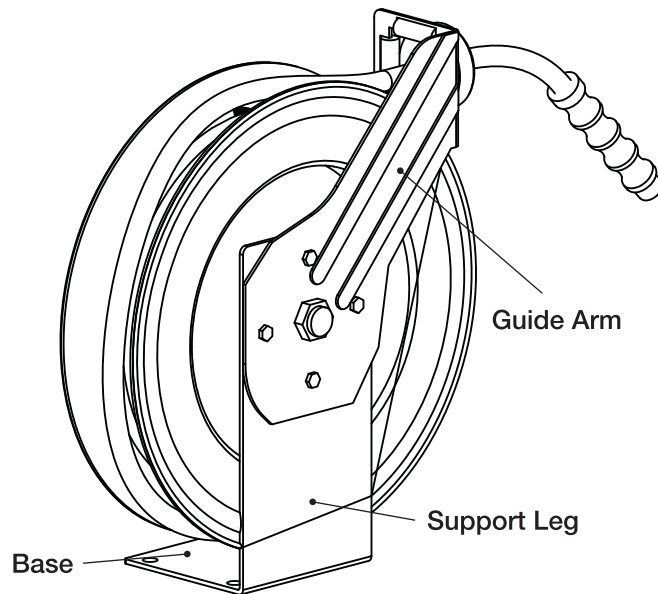
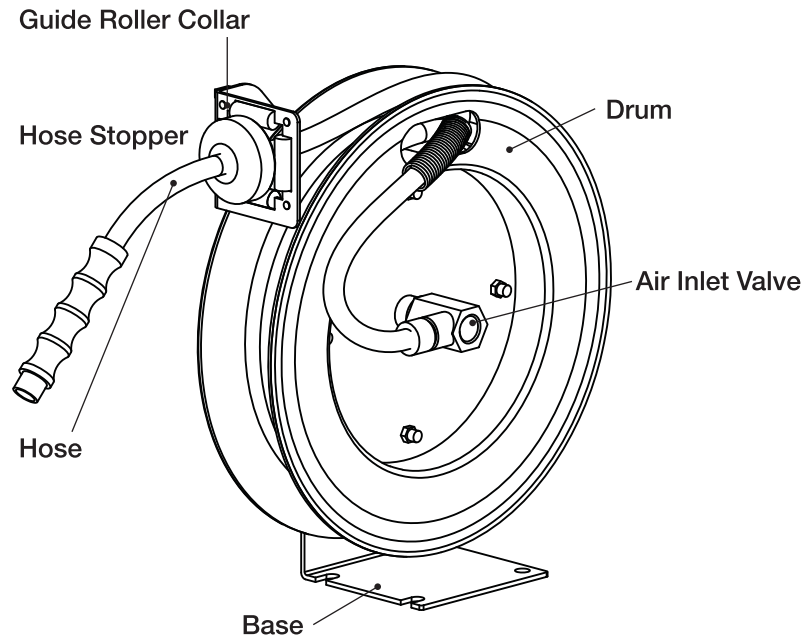
- Wear ANSI Z87.1 compliant safety goggles or safety glasses with side shields when assembling and using the hose reel.
- Assemble the hose reel on a clean workbench.
- Keep children away from the work area. If not in use, store out of the reach of children.
- Ensure that reel is properly installed before connecting input and output hoses.
- Make sure incoming pressure does not exceed the rated pressure (300 PSI) for reel.
- Before connecting a pressure source, ensure that supply pressure does not exceed maximum working pressure rating of reel.
- Never attach any tool or accessory to the hose unless it is capable of safely operating at a pressure greater than the supply pressure.
- If a leak occurs in the hose or reel, remove system pressure immediately.
- If reel ceases to unwind or rewind, remove system pressure immediately.
- Do not kink the hose. Do not step on the hose or drive or drag objects over the hose. Do not place any objects on the hose or hose reel.
- Pull the hose from the reel by grasping the hose itself, not the valve.
- Bleed pressure from reel before servicing it.
- Use soap and water when checking for air leaks. Exposure of skin directly to pressurized air could result in severe bodily injury.
- Remember, even low pressure is very dangerous and can cause personal injury or death.

WARNING

This product may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

OVERVIEW

Hose Reel Nomenclature



INTENDED USE

This reel incorporates metal forms to ensure strength and function equally well in both mobile and permanent-mount situations that are suitable for a variety of heavy-duty applications in the mining, construction, service, and marine industries.

This industrial-grade reel includes:

- Hose with a maximum working pressure of 300 PSI
- Automatic rewind
- Easy installation on a wall, floor, or ceiling
- An adjustable guide arm that allows for a variety of mounting orientations

ASSEMBLY



To avoid a dangerous sudden release of pressure that can cause severe injury, ensure that the hose reel is turned off and the supply hose is not pressurized.

NOTE: Before beginning assembly or installation, purchase appropriate hardware for mounting the reel. The mounting base has holes for mounting on a suitable flat surface.

NOTE: For overhead ceiling mounting: Install the reel at most 10 feet (3m) above the floor.

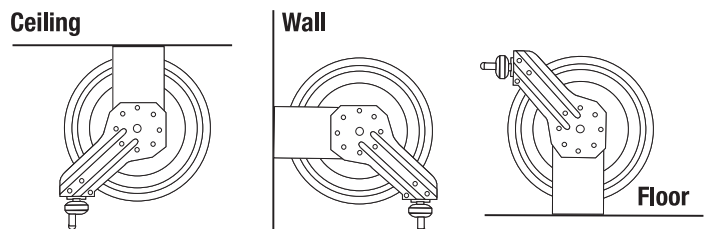
Assembly Steps

1. Prior to mounting the hose reel, ensure the incoming supply hose pressure does not exceed the maximum working pressure (300 PSI) of the hose reel. Also check that the pressure from the supply hose does not exceed the rating for the reel if not pressurized.
2. Unpack the reel and check that all parts are present. Inspect for damage. Check reel function for smooth rotation.
3. Fasten the mounting base (4) in the desired location. Reel dimensions, the direction of reel installation, and more detailed instructions are shown on the next pages. Tighten all hardware securely.

Repositioning the Hose Guide Arm

NOTE: The arm (5) that guides the hose on and off the reel can be repositioned for better function as shown in the diagram. If desired, follow steps 4–6 to reposition the arm.

4. Pull out the hose until the reel latches.
5. Remove the four sets of nuts and washers holding the arm (5) to the base (4).
6. Turn the arm to a desired position, aligning the arm mounting holes with the holes in the flange of the base, and re-tighten the nuts and washers.



ASSEMBLY CONTINUED

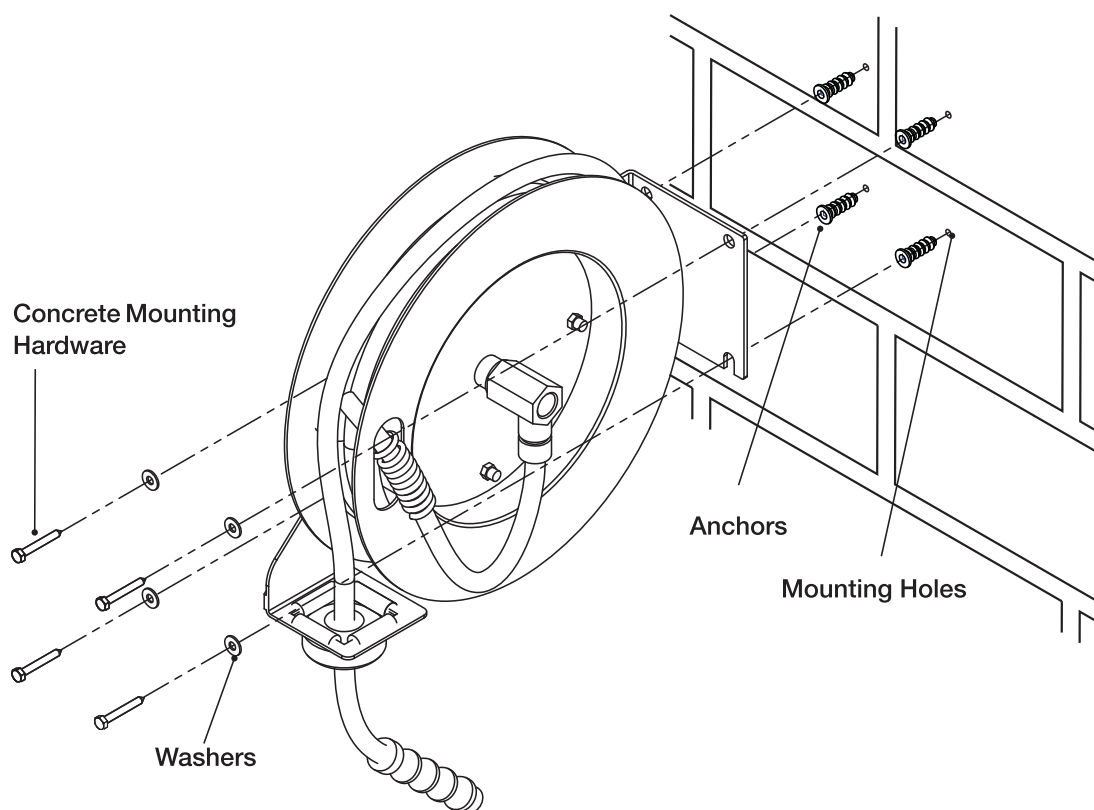
CONCRETE WALL INSTALLATION

- Use Mounting Template to mark installation holes for reel.

CAUTION

Do not drill into concrete joints.

- Drill four mounting holes. Use manufacturer's recommendations for drill bit size depending on the concrete mounting hardware you choose and drill the four mounting holes. Make sure anchors are rated to hold a **minimum** of 75 lbs.
- Install the two bottom anchors first. Leave enough of each bottom anchor exposed and then lift and slide the reel over the anchors. The bottom two holes in the reel have cutouts. Then install the top two anchors.
- **Tighten all of the anchors completely.**



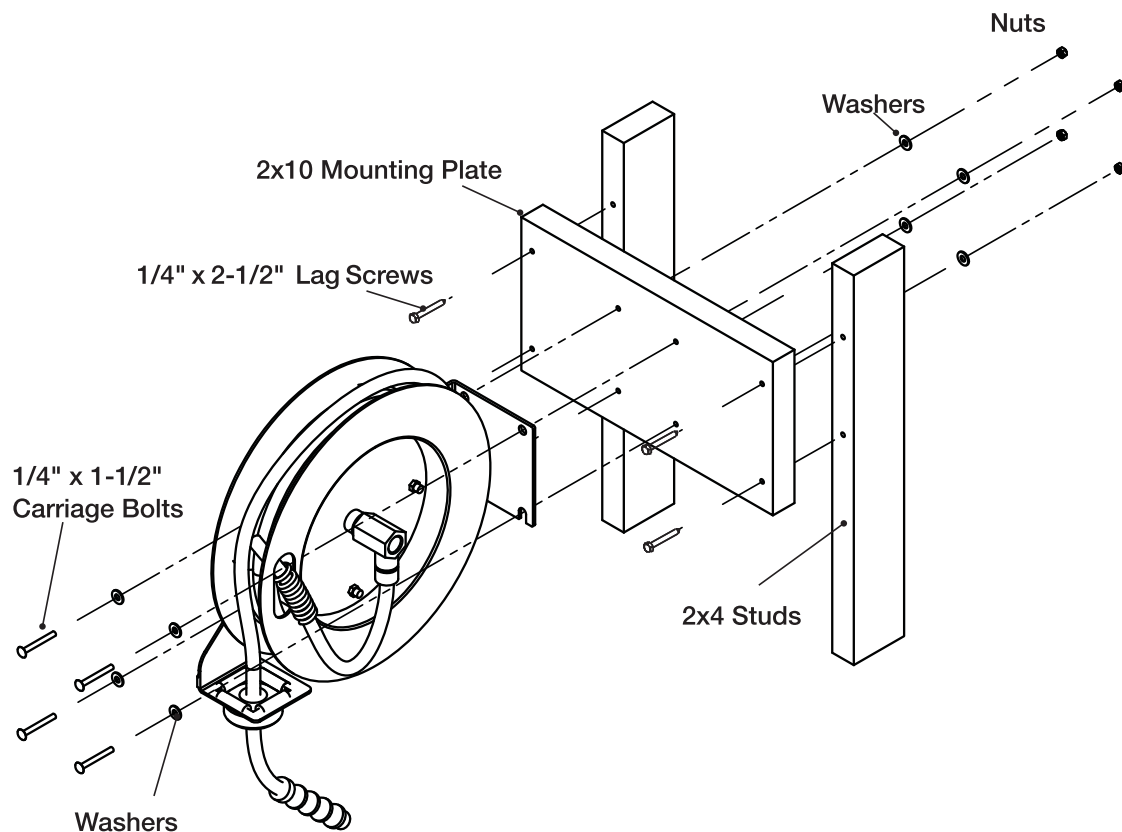
ASSEMBLY CONTINUED

WOOD STUD WALL INSTALLATION

- Attach a 2 x 10 wood mounting plate across existing 2 x 4 studs using 1/4" x 2-1/2" lag screws.

CAUTION

- **BEWARE** of existing plumbing and electrical lines in the wall that you are mounting this to **BEFORE** drilling holes.
- Use Mounting Template to mark and drill installation holes for reel.
- Use (4) 1/4" x 1-1/4" carriage bolts and washers to mount reel to the wood mounting plate.



ASSEMBLY CONTINUED

WOOD CEILING JOIST INSTALLATION

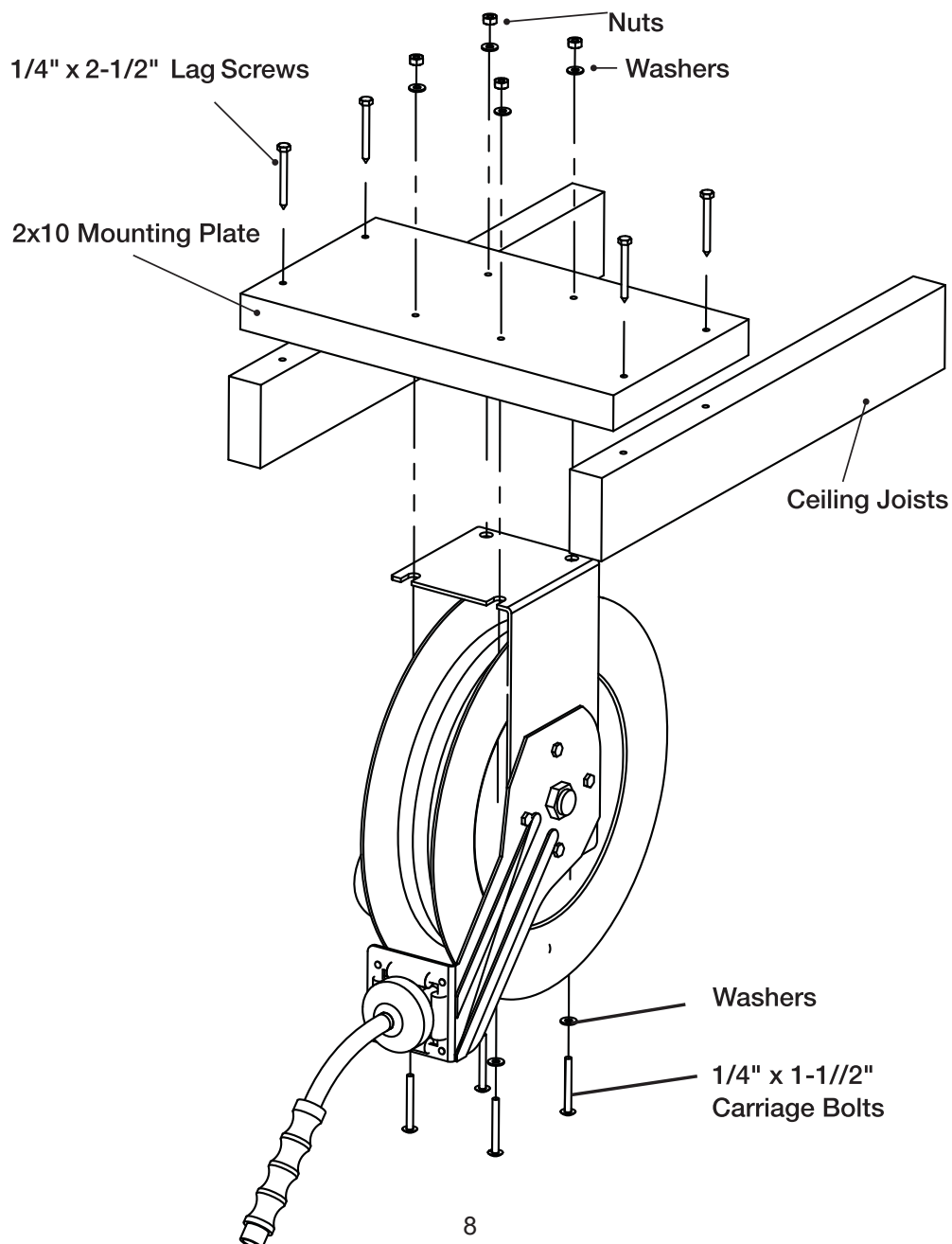
- Attach a 2 x 10 wood mounting plate above the existing 2 x 4 joists using 1/4" x 2-1/2" lag screws as shown below.



CAUTION

BEWARE of existing plumbing and electrical lines in the ceiling that you are mounting this to **BEFORE** drilling holes.

- Drill holes for mounting reel using the template guide.
- Use (4) 1/4" x 1-1/4" carriage bolts and washers to mount reel to the wood mounting plate.

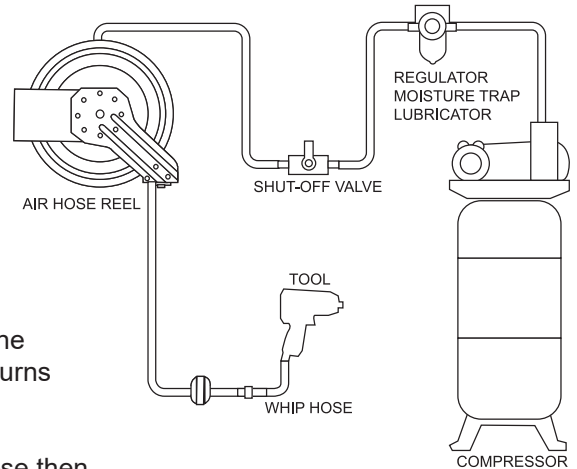


ASSEMBLY CONTINUED

CONNECT THE HOSES

- Apply Teflon tape or pipe sealant to the supply hose threads. Then attach it to end fitting of the reel's swivel (7) and tighten. If not already connected, the unpressurized supply hose can now be connected to the air supply. If the reel was supplied with hose already wound on it, continue with the next step. If not, continue with the next step.
- Turn the reel drum by hand until the rewind spring is tight, and drum has latched. As an extra precaution while installing the new hose, secure the drum in its latched position.
- Insert the end of the delivery hose through roller bracket (24) and feed it through the opening in the drum flange.
- Use Teflon tape or pipe sealant on the hose fitting threads then screw it into the fitting of the short hose attached to the swivel (7) and tighten. Note: To avoid damage to the swivel, use a wrench to support the swivel while tightening the hose.
- Attach the ball stop (25) to the outer end of delivery hose.
- Carefully release the drum latch, and slowly allow hose to wind onto the reel in a controlled way making sure the hose winds in even, straight turns on the reel.
- Apply Teflon tape or pipe sealant to the outlet fitting on the delivery hose then attach it to a desired tool, or nozzle. Pressurize the reel and check all the connectors for leakage. Also check the hose reel for correct retraction/latching and that system pressure is adequate to perform the intended function (see Operating Instructions).
- If a final adjustment to the ball stop (25) is required, pull the hose from the reel and allow it to latch at a desired length. Loosen the ball stop bolts and slide it to a position close to the roller bracket (24). Re-tighten the ball stop bolts.

Typical Compressed Air System



OPERATING INSTRUCTIONS

BEFORE EACH USE

- Ensure that the hose reel is in proper working order before use.
- Inspect the hose reel fittings, alignment, hoses and components periodically before use. Have damaged or worn components repaired or replaced by an authorized technician.
- Check the reel for correct operation by slowly pulling out the hose. A clicking* noise will be heard every half revolution of the drum.
- To latch the reel, pull out the hose then allow it to retract after hearing the first, second, third, forth, fifth, sixth, *click*
- To unlatch the reel, slowly pull out the hose until the clicking* noise stops then, holding on to the hose, let it retract in a controlled way until the stop/block rests against the hose guide/rollers.



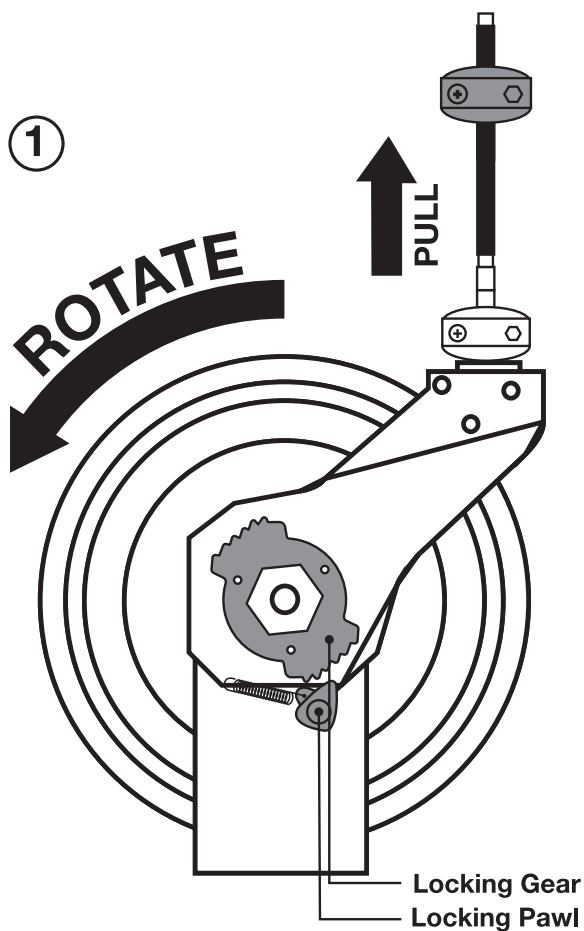
DO NOT pull hose out by grasping attached tool. This will damage air hose. Pull only by grasping air hose itself.

OPERATING INSTRUCTIONS CONTINUED

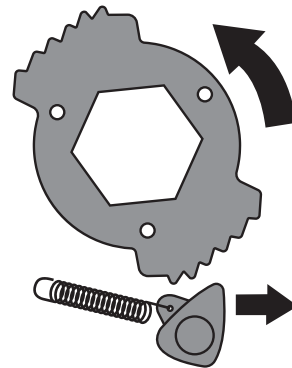
- Keep the hose and air-tools or nozzles dry, clean, and free from oil and grease.
- Periodically clean the hose with a cloth dipped in warm water to remove dirt or deposits and ensure correct winding on the reel. Do not use detergents or solvents which could prove incompatible with cable-winder materials.
- Also periodically check the hose condition for wear or damage, and check the swivel fitting for leakage. See the maintenance section for tips to replace any worn, damaged, or leaking parts.

CAUTION

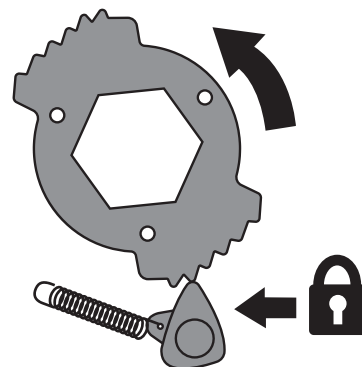
DO NOT pull hose out by grasping attached tool. This will damage air hose. Pull only by grasping air hose itself.



2



3



ADJUSTMENTS

SPRING TENSION ADJUSTMENT

WARNING

Avoid accidentally releasing the reel's latching mechanism. The reel is under tension and accidental release can cause a wildly spinning reel and personal injury. If necessary, adjust spring tension on reel by adding or removing wraps of hose from spool, one wrap at a time, until desired tension is obtained.

- Pull out approximately 6 or 8 feet of hose and allow the drum to latch.
- Remove hose stop from the hose and pull the hose back through guide rollers.

CAUTION

When adding wraps of hose to the reel, be careful not to exceed the winding mechanism's spring capacity. Add just enough wraps of hose to achieve the desired tension. Damage to winding mechanism will result if spring is over-tensioned.

- To increase spring tension, wrap the loose hose one extra turn around the drum; to decrease tension, unwrap the hose one turn from drum.
- Re-insert the hose through guide/rollers and install the stop/block at the desired distance from the hose neck.
- Unlatch the drum and check the tension. Readjust the tension by repeating these steps.

MAINTENANCE

GENERAL MAINTENANCE

Maintain your reel. It is recommended that the general condition of any tool be examined before it is used. Keep your reel in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual.

WARNING

If the rewind spring fails, for safety reasons, it is strongly recommended the replacement of the spring canister be performed by an authorized service technician. The spring is under high tension and accidental release could result in personal injury. User servicing of the reel limited to replacing input/output hoses and swivel maintenance only. Any other servicing should be performed by an authorized service technician. Failure to do so can result in personal injury or voiding of warranty.

CHECKING FOR LEAKS

Use soap and water when checking for air leaks.

HOSE REPLACEMENT

WARNING

To avoid a dangerous sudden release of pressure that can cause severe injury, unthread the pressure source for the reel is turned off and the supply hose is not pressurized before performing any maintenance or adjustment on the reel.

MAINTENANCE CONTINUED

HOSE REPLACEMENT CONTINUED

CAUTION

Make sure reel drum is securely locked in the next step and cannot accidentally spin.

- Turn off the pressure supply to reel and release pressure from the system in a controlled way.
- Pull out all the old hose and lock the reel in position.
- Take note of the hose connection, any hose clamps, and the position of the stop/block on the hose.
- Remove any hose clamps from the hose.
- Carefully disconnect the hose from its connection and remove it.
- Route a new equivalent type and size hose through guide/rollers to the old hose connection point.
- Use Teflon tape or pipe sealant on the hose fitting threads then screw it into the connection fitting on the reel.

NOTE: To avoid damage to a swivel connection, use a wrench to support the swivel while tightening the hose.

- Re-install any hose clamps and the hose stop/block as noted in step 2.
- Carefully release the drum latch, and slowly allow the hose to wind onto the reel.
- Apply Teflon tape or pipe sealant to the outlet fitting on the new hose then attach it to a desired tool, or nozzle. Pressurize the reel and check all the connections for leakage.
- If needed, adjust the spring tension. See Spring Tension Adjustment in the Operation section.

SWIVEL SEAL REPLACEMENT

WARNING

To avoid a dangerous sudden release of pressure that can cause severe injury, ensure that the pressure source for the reel is turned off and the supply hose is not pressurized before performing any maintenance or adjustment of the reel.

- Turn off the pressure source, release pressure from the system, and remove the supply hose connection from the swivel.
- Remove the swivel assembly (6) from reel axle.

NOTE: Removal of the swivel is not absolutely necessary unless a new swivel is being installed.

- Remove the circlip from swivel, and take it apart. Please see the diagram for reference.
- Replace the seals and reassemble the swivel.
- Use Teflon tape or thread sealant on the swivel threads and reconnect the swivel with the axle.

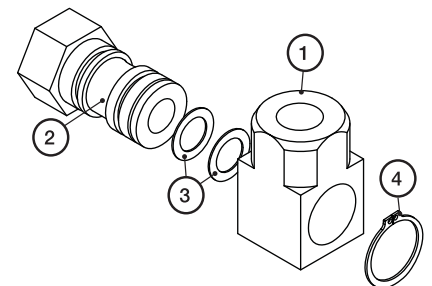
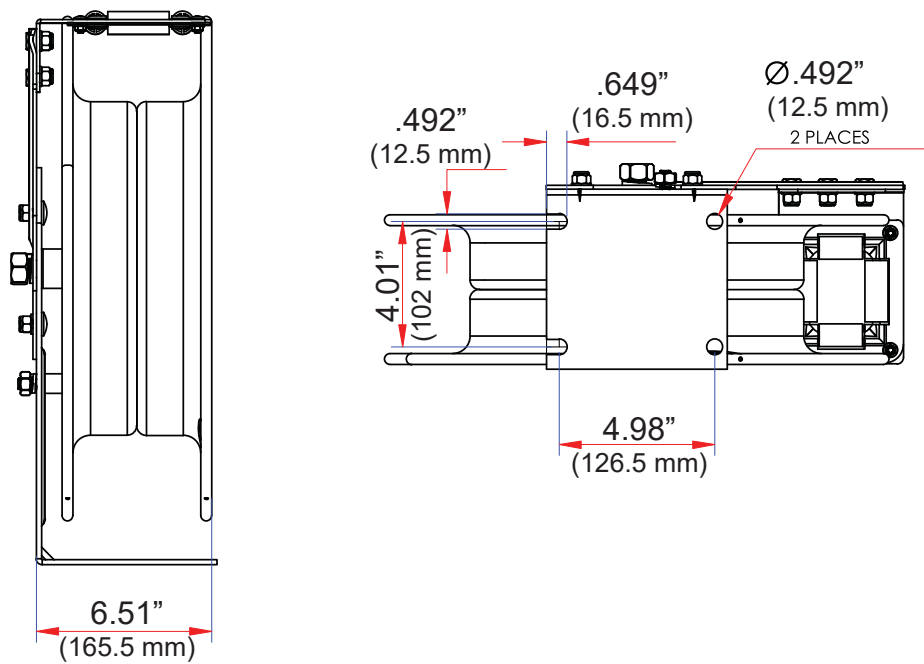
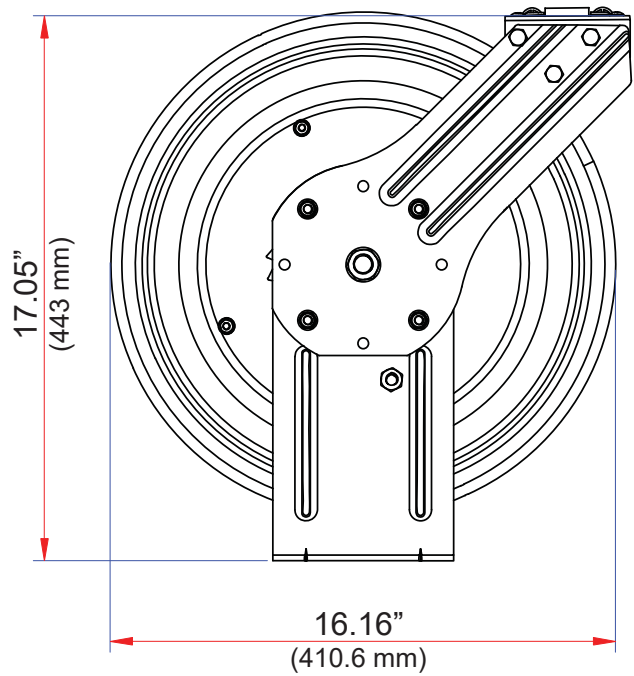


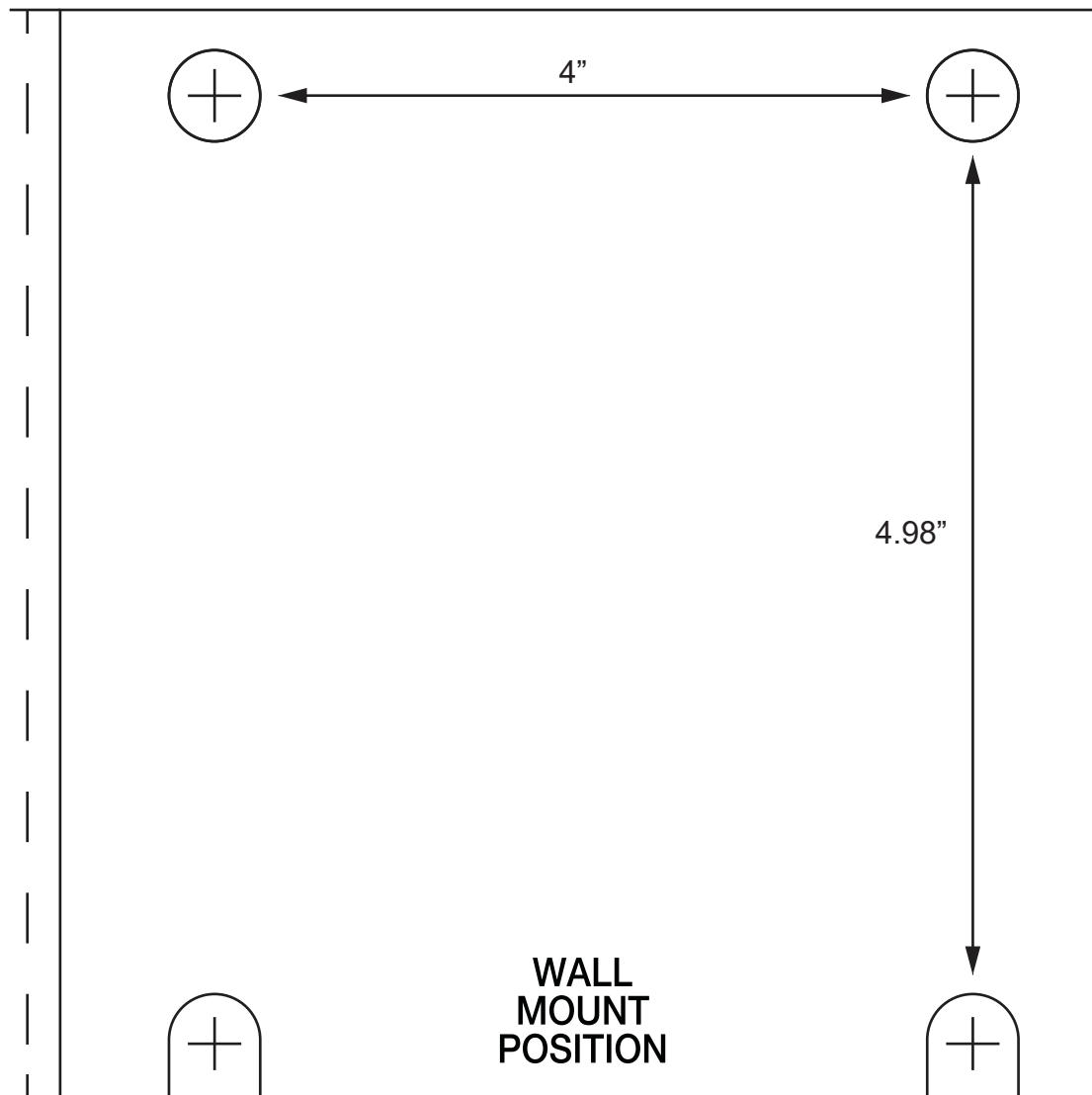
Illustration No.	SUBASSEMBLY	QTY
06-1	Bearing Cover	1
06-2	Swivel Shaft	1
06-3	O-Ring or Seal	2
06-4	Circlip	1

- Use Teflon tape or thread sealant on the inlet supply hose threads and reconnect it to the swivel.
- Pressurize the system and check for leaks.

DIMENSIONAL DRAWINGS



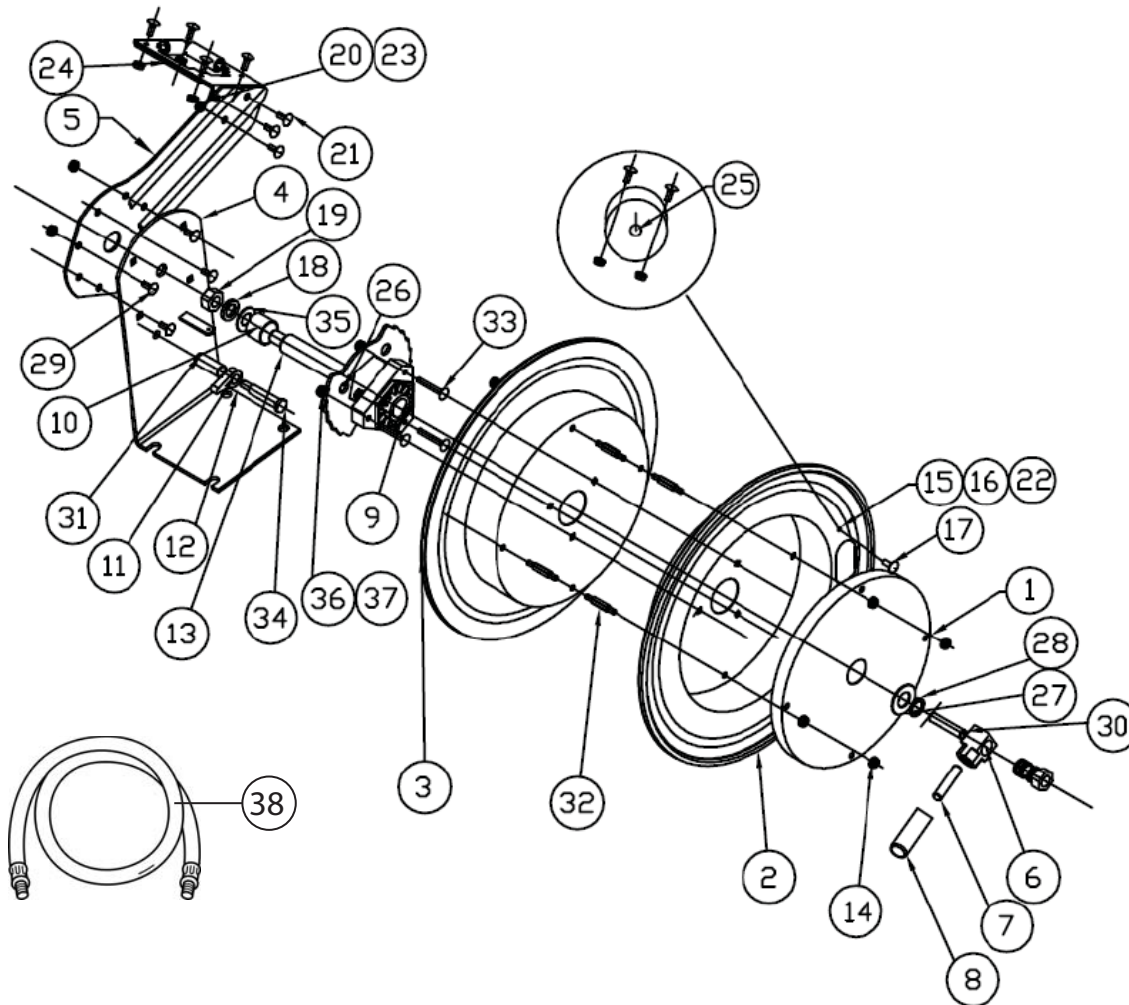
MOUNTING TEMPLATE



CAUTION: To Reduce The Risk Of Injury, User Must Read And Understand Operators Manual. Save These Instructions For Future Reference.

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
1	PRT31176-01	SPRING ASSEMBLY
2	PRT31177-02	DRUM (AIR INLETSIDE)
3	PRT31177-03	DRUM (MOUNTING BRACKET SIDE)
4	PRT31176-04	MOUNTING BRACKET
5	PRT31176-05	GUIDE ARM
6	PRT31177-06	1/2" SWIVEL ASSEMBLY
7	PRT31177-07	1/2" HOSE
8	PRT31177-08	SPRING HOSE GUARD 1/2"
9	PRT31176-09	HUB BEARING ASSEMBLY
10	PRT31176-10	SPACER
11	PRT31176-11	WASHER NUT
12	PRT31176-12	LATCHING PAWL
13	PRT31176-13	AXLE
14	PRT31176-14	NUT
15	PRT31176-15	CLAMP
16	PRT31176-16	CLAMP
17	PRT31176-17	BOLT
18	PRT31176-18	WASHER, BOLT
19	PRT31176-19	NUT

ITEM#	ORDERING PART#	PART DESCRIPTION
20	PRT31176-20	WASHER
21	PRT31176-21	BOLT
22	PRT31176-22	NUT
23	PRT31176-23	LOCK NUT
24	PRT31176-24	ROLLER BRACKET ASSEMBLY
25	PRT31177-25	1/2" BALL STOP ASSEMBLY
26	PRT31176-26	RATCHET
27	PRT31176-27	WASHER SPACER
28	PRT31176-28	RETAINING BOLT
29	PRT31176-29	RETAINING BOLT
30	PRT31176-30	SET SCREW
31	PRT31176-31	WASHER SPACER
32	PRT31176-32	SET SCREW
33	PRT31176-33	BOLT
34	PRT31176-34	BOLT
35	PRT31176-35	WASHER SPACER
36	PRT31176-36	LOCK NUT
37	PRT31176-37	WASHER SPACER
38	PRT31177-38	3' x 1/2" LEAD HOSE

TROUBLESHOOTING

TROUBLE	CAUSE	SOLUTION
Hose will not fully retract	1. Outlet nozzle, gun or tool is too heavy	1. Add spring tension. See Spring Tension Adjustment
	2. Spring is fatigued	2. Add spring tension. See Spring Tension Adjustment
	3. Field installed hose is too long	3. Call local distributor for correct hose length
Hose will not retract at all	1. Spring has lost all tension or has possibly broken	1. Reinstall spring tension
		2. Replace spring canister
Reel will not latch	1. Incorrect operation	1. Reel latches on first, second, third, fourth, fifth or sixth detent. Pull out hose until it automatically rewinds
	2. Pawl spring or locking cam is broken or worn	2. Replace pawl spring or locking cam
Fluid leaks from swivel	1. Swivel seals are damaged or worn	1. Replace swivel seals. See Swivel Seal Replacement
	2. Inlet hose is not flexible	2. Caution: Be sure leak is not at hose fitting
Hose locks up when fully extended	1. Hose clamp is in the incorrect position	1. Relocate hose clamp to optional location
Swivel assembly is not freely or locking up	1. Inlet hose fitting has been over-tightened	1. Remove and examine swivel assembly for damage. Replace as necessary
	2. Inlet hose is not flexible causing side force on swivel	2. Properly tighten inlet hose. Hand tighten fittings, plus 1/2 turn with wrench



WARRANTY

2 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-31177 is warranted for a period of 24 months from the original purchase date.

For a period of one (2) years 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]