

ATD-15217 Trolley Mounted Grease Pump Kit Owner's Manual



Features:

- 50:1 Air-Operated Grease Pump for efficient greasing
- · Portable design for easy use at routine greasing points
- Includes drum cover to protect grease from contamination and maintain Pump stability
- Follower Plate ensures effective pumping of heavy grease
- Includes Grease Control Valve and a set of fluid transfer accessories
- 1/4 in. x 7 ft. Delivery Hose for versatile application
- All-metal, CNC-machined with hardened wear-resistant parts

Specifications:

- Working Pressure: 30-150 psi
- Max. Air Pressure: 150 psi
- Max. Outlet Pressure: 7,500 psi
- Air Inlet Connection: 1/4" NPT (F)
- Pump Outlet: 1/4" NPT (F)
- Air Consumption: 230 LPM
- Max Grease Output: 2.42 lbs./min.
- Noise Level: 81 db

ATD-15217

Trolley Mounted Grease Pump Kit

Trolley Mounted kits are ideal for use in workshops and garages where complete portability for everyday greasing jobs is needed

CONTENTS

- 1. 50:1 Air Operated Grease Pump
- 2. Steel Drum Cover
- 3. Rubber Lined Follower Plate
- 4. 84" × 1/4" SAE R2 hose
- 5. Grease Control Valve fitted with Z-Swivel
- 6. Steel Drum Trolley with premium powder coated finish

Heavy Duty Rear Casters with toe locks for higher safety & stability.



SPECIFICATIONS

| PUMP TYPE | Air operated 50:1 |
|-----------------------------------|--|
| MAXIMUM AIR INLET PRESSURE | 150 PSI (10 BAR) |
| MAXIMUM OUTLET PRESSURE | 7,500 PSI (500 BAR) |
| AIR INLET/ PUMP OUTLET CONNECTION | 1/4" (F) NPT |
| AIR CONSUMPTION | 230 LPM |
| GREASE CONTROL VALVE | Professional Grease Control Valve fitted with 360° Z-Swivel comes complete with 6" steel extension & coupler |
| RECOMMENDED USE | Up to NLGI No. 2 |
| SUCTION TUBE LENGTH | 28-3/4" (730mm) |

| | | DRUM (| COVER | | FOLLO\ | WER PLATE | DIMENSI | ONS | | DOV |
|-----------|----------|---------------|-------|------------------------|--------|-------------------|---------|-------------|------|------|
| MODEL | THREAD | READ DIAMETER | | O.D. STEEL END O.D. PL | | LATE I.D. GROMMET | | BOX QTY. | | |
| | | (INCH) | (MM) | (INCH) | (MM) | (INCH) | (MM) | (INCH) | (MM) | QII. |
| ATD-15217 | 1/4" NPT | 15 | 381 | 12-11/16 | 322 | 15 | 380 | 1.16 | 29.5 | 1 |

SAFETY INFORMATION

- Follow all of your workshop health & safety rules, regulations and conditions when using the Trolley Mounted Grease Pump Kit.
- During their period of use, accessories must be checked for wear, cracks and other damage, replace any damaged or worn parts.
- Use genuine parts only. Unauthorized parts may be dangerous and will void the warranty.
- Wear approved safety gloves and eye and ear protection.
- Keep the Trolley Mounted Grease Pump Kit clean and in good working order for best and safest performance.

WARNING!

- **DO NOT** use the Trolley Mounted Grease Pump Kit for a task it is not designed to perform.
- **DO NOT** use the trolley kit if damaged or thought to be faulty. Contact your local service agent.
- Grease is delivered at high pressure. DO NOT point the grease outlet at yourself or others.

PACKAGE CONTENT

| DESCRIPTION | QUANTITY |
|------------------------------------|----------|
| 50:1 Grease ratio Pump | 1 |
| Follower plate | 1 |
| Drum cover with thumb screws | 1 |
| Grease Control Valve with Z-Swivel | 1 |
| Trolley base plate | 1 |
| Handle assembly | 1 |
| Holder assembly | 1 |
| Grease hose | 1 |
| Hardware set & Fastener | 1 |
| Owner's Manual | 1 |

TOOLS NEEDED

- 10mm wrench
- 12mm wrench
- 13mm / 1/2" wrench
- 14mm / 9/16" wrench
- 17mm / 11/16" wrench
- 19mm / 3/4" wrench
- 5mm Hex key

BEFORE INSTALLATION

- Use only the original accessories compliant with this Trolley Mounted Grease Pump Kit.
- Keep hose away from heat, oil and sharp edges.
 Check hose for wear and make sure that all connections are secure.

Pump construction: The Pump is made up of two sections

- The Drive Section consists of an Air Motor Assembly driven by compressed air. The Piston diameter of the Air Motor is 2.5" (63mm). The Motor consists of an Air Cylinder with Piston and one Reciprocal Valve with a Nylon Slider. The Valve directs the compressed air alternately to the top or bottom of the Piston, thus producing a reciprocating motion of the Piston Rod.
- The Pumping Section consists of a Pump in which a Piston lifts grease through Non-Return Valves by reciprocating inside the Pump Cylinder. Grease is discharged with pressure (from the outlet located at bottom of Air Motor) into the Delivery Hose / Pipe.
- The Air Motor of this Pump starts automatically when the Grease Control Valve is opened. When the Grease Control Valve is closed, Air Motor builds up a back-pressure and stops operating the Pumping section.
- Pressure ratio of the Pump states the ratio of the output grease pressure to the incoming air pressure. When the pressure ratio is 50:1, we achieve an output grease pressure up to 7500 PSI (500 BAR) when the incoming air pressure is 150 PSI (10 BAR).

WARNING!

 Defective accessories can lead to personal injury and material damage

INSTALLATION

Refer to "Exploded View (Trolley)" on page 10

1. Insert Holder Assembly (9) & Clamp (5) onto the Handle (3) and hand tighten the Knob (8)



 Lock the Trolley in place using Toe Lock (10) and insert the Handle (3) into the hole provided on the Trolley Base Plate (1)



3. Secure the Handle (3) on the Trolley Base Plate (1) using Grub Nut (6)



Mounting the drum on Trolley

 Lift the drum from one side and slide the Drum Trolley beneath the drum simultaneously.

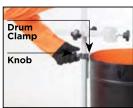


2. Lift the drum from other side and slide it over the Trolley Base Plate (1) until it is against the rear rail of the Base Plate (1).



Adjust the Drum Clamp

 (5) according to the height
 of the drum and rotate
 the Knob (8) in clockwise
 direction to lock the drum
 in place



Mounting the Pump over drum

1. Fill the drum with grease leaving empty space of about 2" from the top rim. Shake the drum after it is filled to remove air pockets. Place the Follower Plate in the grease drum with the Lift Handle facing upwards. Push the Follower Plate



down, until some grease is forced through the center hole on the Plate.

 Place the Drum Cover on the drum. Lift the Pump Assembly & slide the Suction Tube through the Drum Cover & center hole in the Follower Plate.



 Push the Pump Assembly down until the bottom of the Pump touches the base of the drum. Adjust the Drum Cover and tighten it with the Thumb Screws provided along with the Drum Cover.



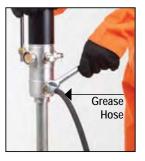


4. Tighten the Drum Cover with the Pump Suction Tube with the help of Thumb Screws.

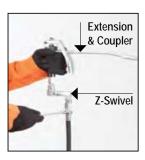




 Connect one end of Grease Hose to the Pump Outlet & use a wrench to tighten it.



6. Connect Grease Control Valve at the other end of the Grease Hose & use a wrench to tighten it. Tighten the Outlet Extension & Coupler to the Control Valve Outlet. Use thread sealant on all connections to ensure leak-proof operation.



7. With the air supply turned off, connect the air line into air inlet of the Pump.



CAUTION!

 An FRL (Filter-Regulator-Lubricator)* unit must be used in the air supply, before it is connected to the Pump. Set the regulator to 90 PSI (6 Bar) or any required inlet pressure, but NEVER more than 150 PSI (10 Bar) or less than 30 PSI (2 Bar).
 *Not supplied with the kit

- When not in use & at the end of each day, air supply to the Pump must be switched off.
- Tighten the nuts and bolts for rigid assembly.
- Apply thread sealant on all threaded connections to ensure leak-proof operation.
 - *Not supplied with the kit

OPERATING INSTRUCTIONS

- Partially open the On/Off Air Valve (It helps in creating initial vacuum when filling a totally dry Pump). Pump will start operating automatically until it gets primed. Pump is said to be primed when grease is available at the Pump Outlet, making the Pump ready to use. Once primed, the Air Motor will stop. Open the On/Off Air Valve fully.
- Hold the Grease Control Valve near a container & pull the Trigger. Pump will start operating with continuous grease discharge as long as the Trigger is pulled. Release the Trigger & this will stop the Pump. Check for any leaks from any of the connections & tighten again if required.

3. Connect Coupler fitted onto the Control Valve Extension with the grease Fitting and pull Trigger. Be careful not to overlubricate as the Pump will keep dispensing grease

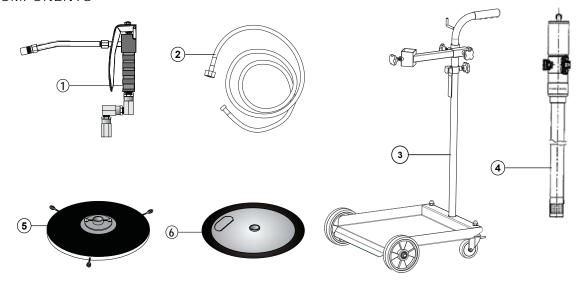


- as long as the Trigger is pulled. Once the Trigger is released, Pump will stop dispensing grease & the Air Motor will stop.
- 4. When not in use & at the end of each day, air supply to the Pump must be switched off.

MAINTENANCE

- Grease Pump and Hose should be kept clean and checked for damage before each use.
- Use an air supply system that incorporates a FRL (Filter-Regulator-Lubricator)*.
- Every week clean the FRL (Filter-Regulator- Lubricator)* unit, Hose & Grease Control Valve so the Pump remains free from contamination.
 - *Not supplied with the kit

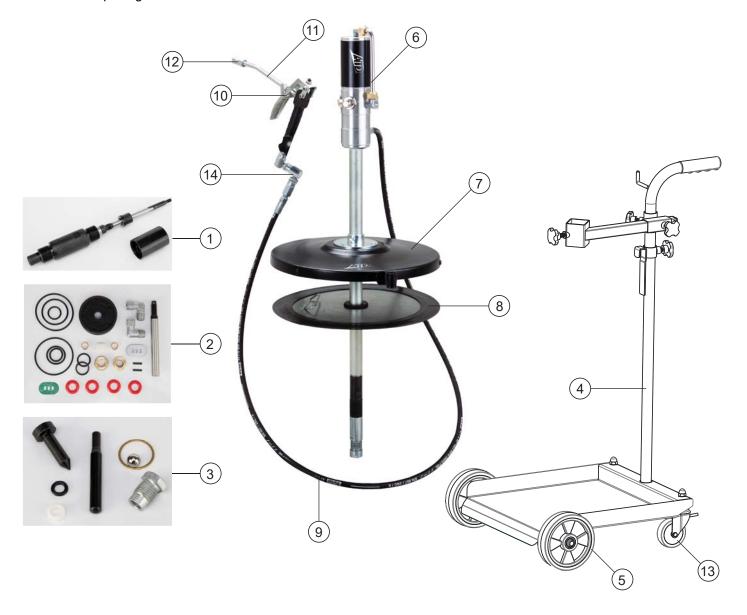
COMPONENTS



| REF NO. | PARTS DESCRIPTION | QUANTITY |
|---------|--|----------|
| 1 | Grease Control Valve with Z-Swivel (Complete parts list on page 7) | 1 |
| 2 | Grease Hose | 1 |
| 3 | Trolley (Complete parts list on page 10) | 1 |
| 4 | 50:1 Ratio Grease Pump (Complete parts list on pages 8 & 9) | 1 |
| 5 | Drum Cover With Thumb Screw | 1 |
| 6 | Follower Plate | 1 |

REPLACEMENT PARTS

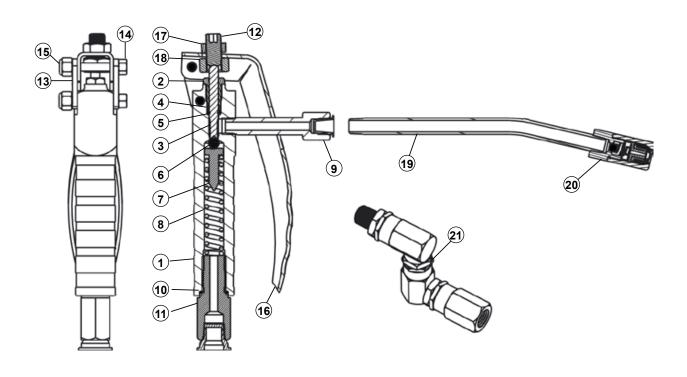
Not all components of this product are replacement items, but are illustrated as a convenient reference for position in the assembly sequence. When ordering parts, give model number, part number and description. Call your distributor for current pricing:



| ITEM# | ORDERING PART# | PART DESCRIPTION | QTY |
|-------|----------------|--|-----|
| 1 | PRT15217-01 | BOTTOM REPAIR KIT (SA/KIT/BTM/RP-G) | 1 |
| 2 | PRT15217-02 | TOP REPAIR KIT (SA/KIT/TP/RP-G) | 1 |
| 3 | PRT15218-01 | GREASE CONTROL VALVE REPAIR KIT (KIT/APG-04) | 1 |
| 4 | PRT15217-04 | TROLLEY (TRL/120) | 1 |
| 5 | PRT15217-05 | TROLLEY FRONT WHEEL (ZWEL/TRL/180H) | 2 |
| 6 | PRT15217-06 | GREASE PUMP ASSEMBLY (ZSA/GP2/N) | 1 |
| 7 | PRT15217-07 | DRUM COVER (ZSA/DC/GP2/BL) | 1 |
| 8 | PRT15217-08 | FOLLOWER PLATE (FLP/322-380/6) | 1 |
| 9 | PRT15217-09 | GREASE HOSE (ZHOS/GRP/84/NPT) | 1 |
| 10 | ATD-15218 | GREASE CONTROL VALVE WITH Z-SWIVEL (APG/04/Z/1-4F/N) | 1 |
| 11 | PRT15218-03 | GREASE BEND PIPE (6") (GBP/6/N) | 1 |
| 12 | PRT15218-02 | GREASE COUPLER (HC/12/4/N) | 1 |
| 13 | PRT15217-13 | REAR CASTER (ZWEL/TRL/120 | 2 |
| 14 | ATD-5253 | Z-SWIVEL (HFC/1-4F/1-4M/N) | 1 |

EXPLODED VIEW

(Grease Control Valve)



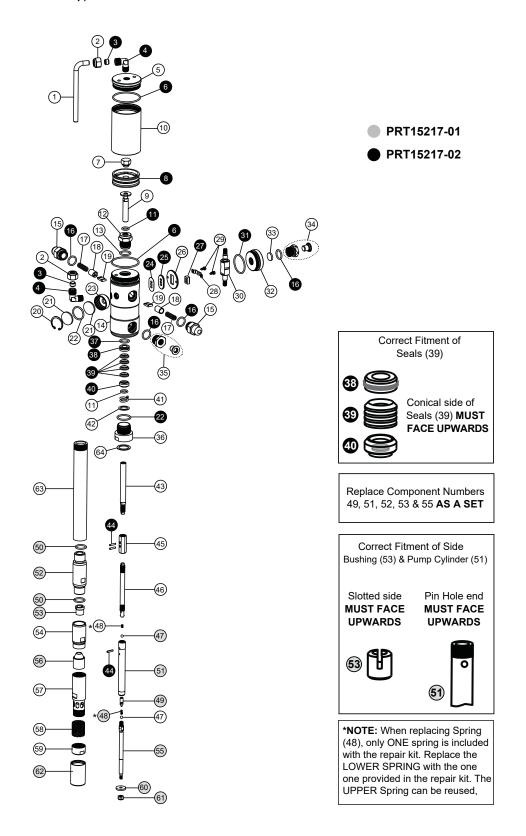
PARTS LIST (Grease Control Valve)

| REF NO. | PARTS DESCRIPTION | QUANTITY |
|---------|-------------------|----------|
| 1 | Valve Body | 1 |
| 2 | Rod Guide | 1 |
| 3 | Piston | 1 |
| 4 | Teflon Washer | 1 |
| 5 | O-Ring | 1 |
| 6 | Steel Ball | 1 |
| 7 | Ball Retainer | 1 |
| 8 | Straight Spring | 1 |
| 9 | Valve Outlet | 1 |
| 10 | Brass Washer | 1 |
| 11 | Valve Inlet | 1 |

| REF NO. | PARTS DESCRIPTION | QUANTITY |
|---------|-------------------|----------|
| 12 | Grub Screw | 1 |
| 13 | Side Clip | 2 |
| 14 | Rivet | 2 |
| 15 | Nyloc Nut | 2 |
| 16 | Handle | 1 |
| 17 | Lock Nut | 1 |
| 18 | High Nut | 1 |
| 19 | Extension (Rigid) | 1 |
| 20 | Coupler | 1 |
| 21 | Z- Swivel | 1 |

EXPLODED VIEW

(50:1 Ratio Grease Pump)

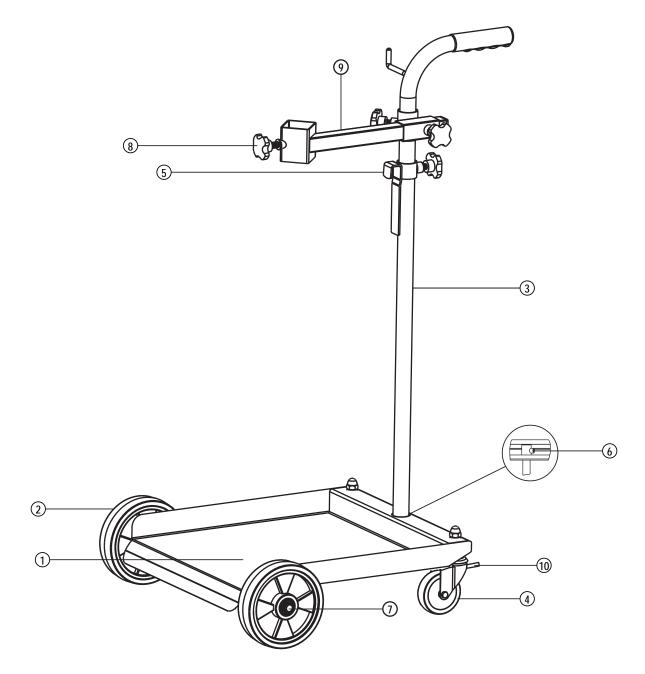


PARTS LIST (50:1 Ratio Grease Pump)

| REF. NO. | DESCRIPTION | QUANTITY | REF. NO. | DESCRIPTION | QUANTITY |
|----------|--------------------|----------|----------|--------------------|----------|
| 1 | Bend Pipe | 1 | 33 | Filter (S) | 1 |
| 2 | Coupling Nut | 2 | 34 | Air Inlet Adapter | 1 |
| 3 | Sealing Ring | 2 | 35 | Outlet Adapter | 1 |
| 4 | Bend | 2 | 36 | Adapter | 1 |
| 5 | Cylinder Cover | 1 | 37 | O-Ring (BS115) | 1 |
| 6 | O-Ring (BS141) | 2 | 38 | Seal Guide | 1 |
| 7 | Plunger Nut | 1 | 39 | Seal | 4 |
| 8 | Rubber Plunger | 1 | 40 | Seal Support | 1 |
| 9 | Plunger Rod | 1 | 41 | Spring (Seal) | 1 |
| 10 | Cylinder | 1 | 42 | Steel Washer | 1 |
| 11 | O-Ring (BS614) | 2 | 43 | Connecting Rod | 1 |
| 12 | Rod Guide | 1 | 44 | Slotted Spring Pin | 3 |
| 13 | O-Ring (BS116) | 1 | 45 | Connector | 1 |
| 14 | Housing | 1 | 46 | Extension Rod | 1 |
| 15 | Pusher | 2 | 47 | Steel Ball (7/32") | 2 |
| 16 | O-Ring BS617 | 4 | 48* | Non-Return Spring | 2 |
| 17 | Pusher Spring | 2 | 49 | Valve | 1 |
| 18 | Pusher Nut | 2 | 50 | O-Ring (BS812) | 2 |
| 19 | Pusher Button | 2 | 51 | Pump Cylinder | 1 |
| 20 | Circlip | 1 | 52 | Top Coupler | 1 |
| 21 | Filter (B) | 2 | 53 | Slide Bush | 1 |
| 22 | O-Ring (BS121) | 2 | 54 | Bottom Coupler | 1 |
| 23 | Exhaust Valve | 1 | 55 | Piston Rod | 1 |
| 24 | Paper Seal | 1 | 56 | Guide Bush | 1 |
| 25 | Seat | 1 | 57 | Filter Tube | 1 |
| 26 | Slider Guide | 1 | 58 | Filter | 1 |
| 27 | Nylon Slider | 1 | 59 | End Cap (Filter) | 1 |
| 28 | Clip | 1 | 60 | Piston Washer | 1 |
| 29 | Self Tapping Screw | 2 | 61 | Nyloc Nut | 1 |
| 30 | Slider | 1 | 62 | Filter Cap | 1 |
| 31 | O-Ring (BS129) | 1 | 63 | Barrel | 1 |
| 32 | Inlet Cover | 1 | 64 | Rubber Washer | 1 |

*NOTE: While there are two Springs (48) in the unit, only ONE spring is included with the PRT15217-01 repair kit. When replacing Spring (48), Replace the LOWER SPRING ONLY with the one provided in the repair kit. The UPPER Spring can be reused.

EXPLODED VIEW (Trolley)



PARTS LIST (Trolley)

| REF NO. | PARTS DESCRIPTION | QUANTITY |
|---------|--------------------|----------|
| 1 | Trolley Base Plate | 1 |
| 2 | Wheel | 2 |
| 3 | Handle | 1 |
| 4 | Rear Casters | 2 |
| 5 | Clamp | 1 |

| REF NO. | PARTS DESCRIPTION | QUANTITY |
|---------|-------------------|----------|
| 6 | Grub Nut | 1 |
| 7 | Flange Bolt | 2 |
| 8 | Knob | 4 |
| 9 | Holder Assembly | 1 |
| 10 | Toe Lock | 2 |

TROUBLESHOOTING

Refer "Exploded View (50:1 Ratio Grease Pump)"

| PROBLEM | POSSIBLE CAUSE | CORRECTIVE ACTION |
|---|---|--|
| Pump operates, but does | Grease is too thick / too cold | Store grease in a warm place |
| not dispense any grease | Air pockets in grease | Shake the Grease bucket & manually force down the Follower Plate (65) to remove air pockets |
| | Dent in the Grease Bucket restricting movement of Follower Plate (65) leading to formation of air pockets in the bucket and inefficient pumping | Get the dent removed to ensure proper movement of Follower Plate (65) |
| Pump not working / less | Inlet pressure is too less | Increase inlet pressure. It must be at least 30 PSI (2 BAR) |
| discharge | Nylon Slider (27) is jammed / over tight | Check for any build-up edge on Clip (28) & tighten it again. Make sure the movement of Nylon Slider (27) is neither very loose nor very tight If needed, replace Nylon Slider (27). Also replace the Paper Seal (24), Seat (25) & Slider Guide (26) to ensure the best fit |
| | Piston / Piston Rod / Plunger jammed. NOTE Especially check Extension Rod (46), Pump Cylinder (51), Top Coupler (52), Slide Bush (53) & Piston Rod (55) | Remove suction tube. Disconnect Air Motor assembly from Pumping section by removing the upper Slotted Spring Pin (44) from Connector (45) Supply input air to Air Motor. If it works properly without the barrel assembly, then the problem lies with the Pumping section. Otherwise check the Air Motor for smooth movement After locating the faulty section, check the respective Piston / Plunger & the associated washers & seals for any overlap or wear & tear. Replace the defective parts. Ensure to replace the moving parts having close tolerances (such as Piston & Cylinder along with Non Return Springs & balls) as a set to ensure the best fit |
| Pump continues to operate even after the Trigger of Grease Control Valve (69) has been released | Leakage in the assembly | Check all the connections to ensure they are air tight. Use thread sealant. Check O-Rings & seals for damage. Replace the defective parts |
| Grease comes through the air Exhaust Valve (23) | Grease leaks into the Air Motor | Check Seal Guide (38), O-Ring (37), lower O-Ring (11), Seals (39) & Seal Support (40) for wear & tear. Replace the damaged parts |
| Air passes directly from inlet to the outlet & Pump does not work | Nylon Slider (27) is jammed / over tight | Check for any build-up edge on Clip (28) & tighten it again. Make sure the movement of Nylon Slider (27) is neither very loose nor very tight If needed, replace Nylon Slider (27). Also replace the Paper Seal (24), Seat (25) & Slider Guide (26) to ensure the best fit |
| Discharge suddenly | Seals / O-Rings Damage | Check all seals / O-Rings & replace the damaged parts |
| stopped while the Pump was running | Chip / Other foreign particles get clogged at discharge coupler | Open the coupler, remove all foreign particles / chips & reassemble properly |
| | Clogging of Filter Tube (57) and Filter (58) | Open Filter Cap (62) & End Cap (59), clean Filter Tube (57), Filter (58) & reassemble it properly |



PURCHASED FROM:

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

| DATE PURCHASED: |
|--|
| INVOICE/RECEIPT NUMBER: |
| Your ATD-15217 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] |
| <u>'</u> |