Orion Motor Tech ATL-5214-00

Orion Motor Tech 2-in-1 Bushing Driver and Bearing Press Kit Instruction Manual

Model: ATL-5214-00

Product Overview

This Orion Motor Tech 2-in-1 kit provides a comprehensive solution for automotive maintenance tasks, including handling bushings, seals, and removing bearings, gears, pulleys, and steering wheels. It is designed for wide compatibility with most cars, ATVs, and light trucks, offering exceptional strength and long-term durability.

Figure 1: Orion Motor Tech 2-in-1 Bushing Driver and Bearing Press Kit components in their blue storage cases.

Kit Contents

The complete kit includes the following components, neatly organized in custom blow-molded cases for convenient transport and storage:

- 2x Bearing Separator Jaws (2" and 3")
- 2x Puller Legs
- 1x Yoke
- 8x Extension Screws
- 1x Lead Screw
- 1x Long Handle Shaft
- 1x Quick-Connect Shaft
- 49x Bushing Discs
- 2x Bolts
- 1x M4 Hex Wrench
- 4x Rubber O-Rings
- 2x Storage Cases
- 1x Instructions Manual

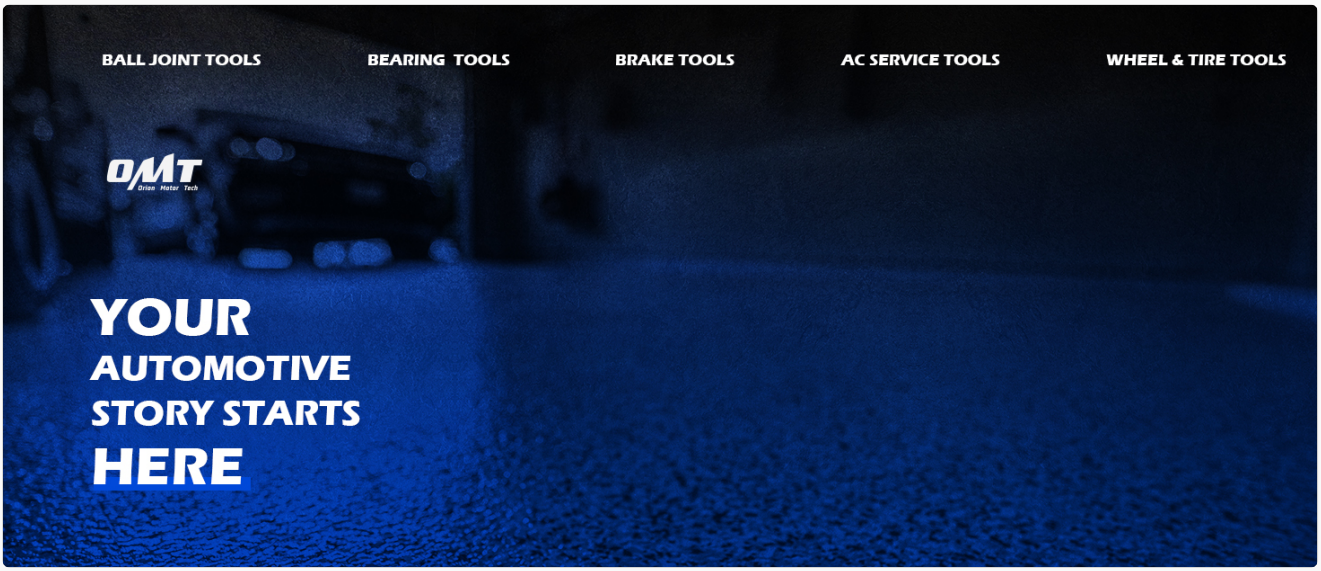

Figure 2: All components of the Orion Motor Tech 2-in-1 Bushing Driver and Bearing Press Kit laid out in their respective cases.

Important Safety Precautions

Always prioritize safety when using automotive tools. Failure to follow these precautions may result in injury or damage to property.

- Always wear appropriate personal protective equipment (PPE), such as safety glasses and gloves.
- Ensure the vehicle is properly supported and secured before beginning any work.
- Use the correct size tool for each application to prevent damage to components or injury.
- Do not use damaged or modified tools.
- Keep hands and fingers clear of moving parts during operation.
- Refer to your vehicle's service manual for specific procedures and torque specifications.

Setup and Assembly

The kit includes various components for both bushing driving and bearing pulling. Proper assembly is crucial for effective and safe operation.

Bushing Driver Assembly

1. Select the appropriate bushing disc (18mm to 65mm, plus 74mm) for your application.
2. Attach the selected disc to the long handle shaft or quick-connect shaft using the provided M4 Hex Wrench.
3. Ensure the disc is securely fastened to the shaft.

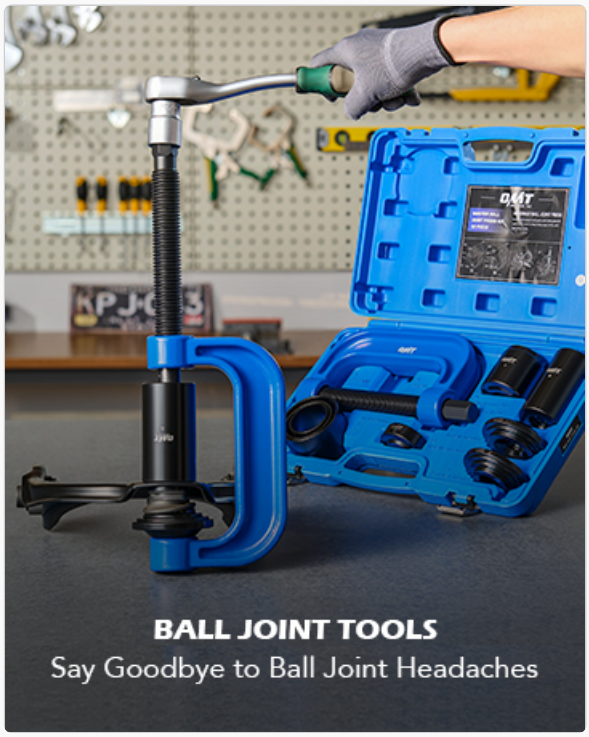

Figure 3: Attaching a bushing disc to the handle shaft.

Bearing Separator and Puller Assembly

1. Choose the correct size bearing separator jaws (2" or 3") based on the bearing size.
2. Assemble the jaws around the bearing, ensuring a secure fit.
3. Attach the L-type pullers or yoke with suitable extension screws as needed for the specific pulling task.
4. Insert the lead screw and tighten it to apply pressure.

Operating Instructions

Bearing Removal Procedure

This procedure outlines the steps for safely removing bearings using the bearing separator and puller components.

1. **Step 1: Prepare the Bearing**: Ensure the area around the bearing is clean and free of debris. If applicable, remove any retaining clips or fasteners.
2. **Step 2: Select Bearing Separator**: Choose the appropriate bearing separator jaws (2" or 3") that fit snugly underneath the bearing.
3. **Step 3: Position Separator**: Place the separator jaws firmly between the bearing and the component it's seated in (e.g., wheel hub, knuckle).

4. **Step 4: Assemble Puller**: Attach the L-type pullers or the yoke with suitable extension screws to the bearing separator. Ensure the lead screw is centered over the bearing.
5. **Step 5: Apply Pressure**: Gradually tighten the lead screw using a wrench or socket. This will apply even pressure, forcing the bearing out of its housing. Continue tightening until the bearing breaks loose and is fully removed.
6. **Step 6: Disassemble**: Once the bearing is removed, loosen the lead screw and disassemble the puller and separator.

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Video 1: This video demonstrates the process of removing a bearing from a vehicle component using the Orion Motor Tech bearing separator and puller kit. It shows the selection of appropriate jaws, assembly of the puller, and the gradual tightening of the lead screw to extract the bearing.

Figure 4: Using the bearing separator and puller to remove a wheel bearing.

Bushing Installation Procedure

Follow these steps to install new bushings accurately and without damage.

1. **Step 1: Prepare Housing**: Clean the bushing housing thoroughly. Ensure it is free of rust, dirt, or old bushing material.
2. **Step 2: Select Bushing Disc**: Choose a bushing disc that matches the outer diameter of the new bushing. The disc should sit flush on the bushing's outer edge.
3. **Step 3: Assemble Driver**: Attach the selected bushing disc to the long handle shaft or quick-connect shaft.

4. **Step 4: Position Bushing**: Place the new bushing into its housing, ensuring it is aligned correctly.
5. **Step 5: Drive Bushing**: Position the assembled bushing driver squarely over the bushing. Using a hammer, tap the driver handle with consistent, even blows. Ensure the bushing enters the housing straight and without cocking.
6. **Step 6: Seat Bushing**: Continue tapping until the bushing is fully seated in its housing. You will typically feel a change in resistance when it is properly seated.

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Video 2: This video illustrates the correct method for installing a bushing using the Orion Motor Tech bushing driver set. It highlights selecting the right size disc, assembling the driver, and applying controlled hammer blows to seat the bushing evenly into its housing.

Figure 5: Installing a new bushing with the bushing driver tool.

Maintenance and Care

Proper maintenance ensures the longevity and optimal performance of your tool kit.

- **Cleaning**: After each use, wipe down all tools with a clean cloth to remove grease, oil, and dirt.
- **Lubrication**: Lightly lubricate threaded components (e.g., lead screws, extension screws) with a suitable lubricant to ensure smooth operation and prevent corrosion.
- **Storage**: Store all components in their designated slots within the custom blow-molded cases. This protects the tools from damage and keeps them organized.
- **Inspection**: Periodically inspect tools for any signs of wear, damage, or corrosion. Replace any damaged components immediately.

Troubleshooting

Bearing or Bushing is Stuck

- **Issue**: Bearing or bushing does not move despite applying force.
- **Solution**:
  - Ensure the correct size tools are being used.
  - Verify that all retaining clips, bolts, or fasteners have been removed.
  - Apply penetrating oil to the area and allow it to soak for some time.
  - Increase force gradually, ensuring even pressure. Avoid excessive, sudden force which can damage components.
  - For stubborn bearings, consider using heat (e.g., heat gun) on the outer housing to expand it slightly, but exercise extreme caution and follow safety guidelines.

Tool Slipping

- **Issue**: The bearing separator or bushing driver is slipping during use.
- **Solution**:
  - Ensure the tool is properly seated and aligned.
  - Tighten all fasteners on the bearing separator securely.
  - Verify that the bushing disc is flush with the bushing for even contact.
  - Clean any grease or oil from the contact surfaces of the tools and components to improve grip.

Technical Specifications

- **Brand**: Orion Motor Tech
- **Model Number**: ATL-5214-00
- **Bearing Puller Capacity**: 5 Ton
- **Bushing Driver Sizes**: 18mm to 65mm, plus 74mm
- **Bearing Separator Jaw Sizes**: 2" (30-50mm) and 3" (50-70mm)
- **Material**: Heavy-duty steel with corrosion-resistant coatings
- **Item Weight**: 32.1 pounds

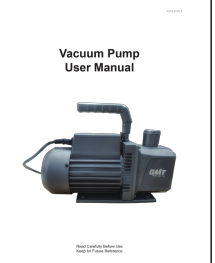
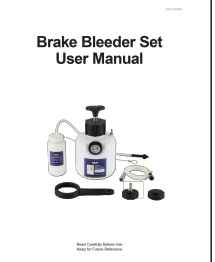
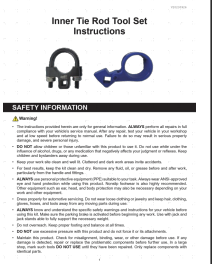
- **Package Dimensions**: 17.5 x 14 x 8 inches

Warranty and Support

Orion Motor Tech products are designed for durability and performance. This kit includes a lifetime warranty, ensuring long-term reliability. For specific warranty details or support, please refer to the documentation included with your product or contact Orion Motor Tech customer service.

For further assistance, visit the Orion Motor Tech Store.

Related Documents - ATL-5214-00

	Orion Motor Tech 10-Piece 3/8" Socket Set User Manual User manual for the Orion Motor Tech 10-Piece 3/8" Socket Set, providing safety information, package contents, operating instructions, and maintenance guidelines for automotive use.
	Orion Motor Tech Vacuum Pump User Manual - VPH-E001-00 Comprehensive user manual for the Orion Motor Tech VPH-E001-00 vacuum pump. Includes safety information, specifications, operation, maintenance, and troubleshooting guides for HVAC servicing.
	Orion Motor Tech Brake Bleeder Set User Manual - Automotive Maintenance Guide Comprehensive user manual for the Orion Motor Tech Brake Bleeder Set (Model BBT-D005-00). Includes safety information, specifications, parts list, operation instructions, and maintenance guidelines for automotive brake bleeding.
	Orion Motor Tech Inner Tie Rod Tool Set: Instructions and Safety Guide Comprehensive instructions and safety information for the Orion Motor Tech Inner Tie Rod Tool Set. Learn how to use, maintain, and safely operate this automotive tool.

Brake Bleeder Set User Manual 	[Orion Motor Tech Brake Bleeder Set User Manual] Comprehensive user manual for the Orion Motor Tech Brake Bleeder Set, covering safety precautions, detailed specifications, parts identification, step-by-step operation instructions, and essential maintenance tips for automotive brake bleeding.
OMT Metric Flex-Head Crows Foot Wrench Set User Manual 	[Orion Motor Tech Metric Flex-Head Crows Foot Wrench Set User Manual | OMT Tools] User manual for the Orion Motor Tech Metric Flex-Head Crows Foot Wrench Set. Provides detailed specifications, safe operation instructions, and maintenance guidelines for this automotive tool set.