

Ussuray SP009

Ussuray SP009 Shaft Type Seal Puller User Manual

Brand: Ussuray | **Model:** SP009

1. INTRODUCTION

The Ussuray SP009 Shaft Type Seal Puller is an essential tool for automotive maintenance, specifically designed for the efficient and safe removal of shaft seals. This tool is engineered to extract camshaft and crankshaft seals without causing damage to the shaft, thanks to its adjustable design and robust construction. Its ergonomic handle ensures comfortable and secure operation.

2. PRODUCT OVERVIEW AND COMPONENTS

The SP009 Shaft Type Seal Puller consists of several key components working in conjunction to facilitate seal removal.

- **Ergonomic Handle:** Provides a comfortable and secure grip during operation.
- **Shaft:** The main body connecting the handle to the working end.
- **Adjustable Locking Fulcrum:** A pivotal point that can be adjusted to contact a flat surface, providing leverage for seal removal. This feature allows the tool to adapt to various seal sizes.
- **Pivoting Seal Hook End:** Designed to engage behind the seal for effective pulling.



Figure 2.1: Overview of the SP009 Shaft Type Seal Puller, showing its main components including the handle, shaft, and adjustable working end.



- Easily adjustable fulcrum allows this tool to be used on a variety of seal sizes.
- Easy to engage, adjust, and operate.

Figure 2.2: Detailed view of the adjustable locking fulcrum, highlighting its mechanism for adapting to different seal sizes.

3. KEY FEATURES

- **Function:** Specifically designed for cam and crankshaft seal removal, ensuring quick and easy extraction without shaft damage.
- **Adjustable Locking Fulcrum:** Allows for easy engagement, adjustment, and operation, accommodating a variety of seal sizes.
- **Material:** Constructed from sturdy and durable hardened steel components for long service life.
- **Ergonomic Handle:** Designed for comfortable and secure use, reducing user fatigue.
- **Damage Prevention:** Engineered to remove seals cleanly, protecting the shaft from scratches or other damage.

SHAFT TYPE SEAL PULLER FEATURE

- Hardened steel Material
- Sturdy& durable
- Perfect for camshaft or crankshaft seals
- Remove shaft seals quickly and easily
Protect the shaft, no damaged



Figure 3.1: Visual representation of the SP009's key features, emphasizing its material, durability, and protective function.

4. SPECIFICATIONS

Attribute	Value
Model	SP009 Shaft type seal puller
Item Weight	5.8 ounces
Product Dimensions	9.13 x 2.05 x 1.3 inches
Material	Hardened Steel
Special Features	Sturdy and durable, Adjustable Locking Fulcrum

PRODUCT DIMENSION



Figure 4.1: Dimensional drawing of the SP009 tool, indicating its overall length and width measurements.

5. SETUP

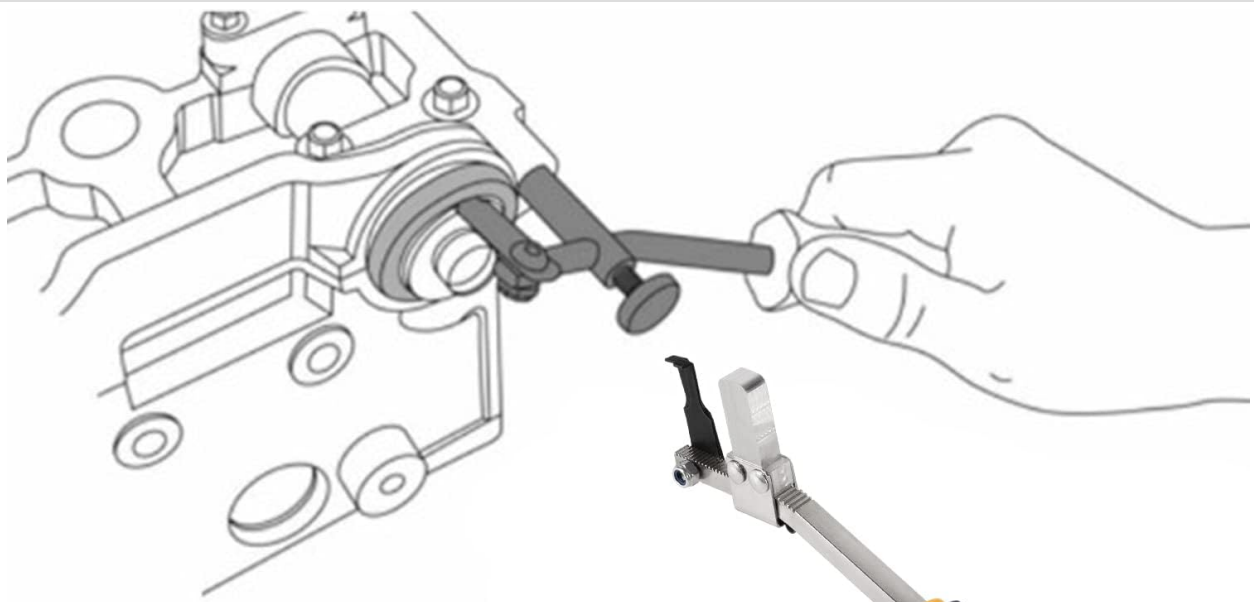
The Ussuray SP009 Shaft Type Seal Puller requires minimal setup before use. Ensure the work area is clean and well-lit. Identify the seal to be removed and ensure there is sufficient access around it for the tool's operation.

1. Inspect the tool for any signs of damage or wear. Do not use if the tool is compromised.
2. Ensure the adjustable locking fulcrum moves freely and can be secured in position.
3. Clean any debris from the tool before use to prevent contamination of the work area.

6. OPERATING INSTRUCTIONS

Follow these steps carefully to remove shaft seals using the SP009 tool:

1. **Engage the Seal:** Carefully position the pivoting seal hook end behind the seal you intend to remove. Ensure the hook is securely engaged with the seal's edge.
2. **Adjust the Fulcrum:** Adjust the locking fulcrum so that it makes firm contact with a stable, flat surface near the seal, such as the engine head or a sturdy part of the component housing. This provides the necessary leverage.
3. **Apply Pressure:** Once the hook is engaged and the fulcrum is set, firmly push down on the handle of the tool. This action will leverage the seal out of its housing.
4. **Remove the Seal:** Continue applying steady pressure until the seal is dislodged and removed. The design of the tool ensures the seal is removed without damaging the shaft.



Easy to Use:

- I .Engage the adjustable hook behind the seal.
- II .Brace the push rod against the engine head and push the handle to remove the seal.
- III .Removes the seal without damage to the shaft.
- IV .Finish.



Figure 6.1: Visual guide to the seal removal process, illustrating each step from engagement to final removal.

SHAFT TYPE SEAL PULLER

SP009 shaft type seal puller

is used as cam and crankshaft seal puller shaft seal removal tool and remove shaft seals quickly and easily without damaging the shaft



Figure 6.2: The SP009 tool being used to remove a seal, showing the practical application of the adjustable fulcrum and hook.



Figure 6.3: Detailed image showing the adjustment of the locking fulcrum, a critical step for proper leverage.

7. MAINTENANCE

Proper maintenance will extend the life of your Ussuray SP009 Shaft Type Seal Puller:

- **Cleaning:** After each use, wipe the tool clean with a dry cloth to remove any oil, grease, or debris. For stubborn grime, a mild degreaser can be used, followed by thorough drying.
- **Lubrication:** Periodically apply a light coat of machine oil to the adjustable fulcrum mechanism to ensure smooth operation and prevent rust.
- **Storage:** Store the tool in a dry place, away from moisture and corrosive materials, to prevent rust and damage. A tool box or drawer is ideal.
- **Inspection:** Regularly inspect the tool for any signs of wear, bending, or damage to the hook or fulcrum. Replace the tool if it shows significant wear that could affect its performance or safety.

8. TROUBLESHOOTING

If you encounter issues while using the SP009 Shaft Type Seal Puller, consider the following:

- **Seal Not Engaging:** Ensure the pivoting seal hook is fully behind the seal. Sometimes, rotating the seal

slightly or adjusting the angle of approach can help.

- **Difficulty Removing Seal:** Verify that the adjustable locking fulcrum is firmly braced against a stable, flat surface. Insufficient leverage is often due to improper fulcrum placement. Ensure you are applying firm, steady pressure.
- **Risk of Shaft Damage:** The tool is designed to prevent shaft damage. If you observe any scratching or marring, immediately stop and re-evaluate your technique. Ensure the hook is only contacting the seal and the fulcrum is on a non-critical surface.
- **Tool Slipping:** Ensure your grip on the ergonomic handle is firm. If the fulcrum is slipping, reposition it to a more stable contact point.

9. SAFETY INFORMATION

Always observe the following safety precautions when using the SP009 Shaft Type Seal Puller:

- **Eye Protection:** Always wear safety glasses or goggles to protect your eyes from flying debris or fluids.
- **Hand Protection:** Wear appropriate work gloves to protect your hands from sharp edges and provide a better grip.
- **Stable Work Area:** Ensure the vehicle or component you are working on is stable and securely supported.
- **Proper Tool Use:** Use the tool only for its intended purpose (removing shaft seals). Misuse can lead to injury or damage to the tool/component.
- **Keep Clear:** Keep hands and fingers clear of the seal and the tool's working end during operation to avoid pinching or crushing injuries.
- **Children and Pets:** Keep the tool out of reach of children and pets.

10. WARRANTY AND SUPPORT

Ussuray is committed to customer satisfaction. If you have any questions about your SP009 Shaft Type Seal Puller, or if you encounter any issues, please do not hesitate to contact our customer service. We are dedicated to actively assisting you in finding a solution.

For support, please refer to the contact information provided with your purchase or visit the official Ussuray website.