

maXpeedingrods KS75OC

maXpeedingrods Coilover Suspension Kit for Subaru Impreza WRX STI GDF (2005-2007) - Installation and Adjustment Manual

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1. INTRODUCTION

This manual provides detailed instructions for the installation, adjustment, and maintenance of your maXpeedingrods Coilover Suspension Kit, Model KS75OC. This kit is specifically designed for Subaru Impreza WRX STI GDF models from 2005 to 2007 (RIM P.C.D.=114.3). Please read this manual thoroughly before attempting any installation or adjustment. Proper installation is crucial for vehicle safety and performance.

It is highly recommended that installation be performed by a qualified professional mechanic. Incorrect installation can lead to serious injury or damage to your vehicle.

2. SAFETY INFORMATION

- Always wear appropriate personal protective equipment, including safety glasses and gloves, when working on your vehicle.
- Ensure the vehicle is securely supported on jack stands on a level surface before beginning any work. Never rely solely on a jack.
- Disconnect the vehicle's battery before working on electrical components, if applicable.
- Use the correct tools for each step of the installation process.
- Do not modify any components of the coilover kit. Modifications can compromise safety and performance.
- After installation, have a professional alignment performed to ensure proper vehicle handling and tire wear.
- Regularly inspect all suspension components for wear, damage, or loose fasteners.

3. PACKAGE CONTENTS

Please verify that all components listed below are present and undamaged before proceeding with installation. If any parts are missing or damaged, contact maXpeedingrods customer support immediately.

- Complete Coilover Assemblies (2 Front, 2 Rear)

- Height Adjustment Wrenches (Pair)
- C Spanners (2x)
- Installation Instructions (Printed Manual)



Image 3.1: Overview of the maxpeedingrods Coilover Suspension Kit, including four coilover units, two adjustment wrenches, and the instruction manual.

4. SETUP & INSTALLATION

The installation of coilovers requires specialized tools and knowledge. It is strongly recommended to have this procedure performed by a certified automotive technician. The following steps are a general guide and may vary depending on your specific vehicle model and existing suspension setup.

4.1 Pre-Installation Checks

- Confirm vehicle compatibility (Subaru Impreza WRX STI GDF 2005-2007, RIM P.C.D.=114.3).
- Inspect all coilover components for any shipping damage.

- Gather all necessary tools, including jacks, jack stands, wrenches, sockets, and torque wrenches.

4.2 Component Overview



Image 4.1: Detailed component breakdown of a maxpeedingrods coilover, highlighting the Camber Plate Top Mount (6061-T6 Aluminum), Upper Spring Seat with Radial Bearing, Full-Length Dust Boot, High Rigidity 55CrSi Steel Cold-Bent Coil Springs, 6061-T6 AL Perch, Anodized Shock Body with Anti-Corrosion Coating, and Powder-Coated Lower Mount.

Perches And Locking Rings

CNC Billet Aluminum Parts/Hardware



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Image 4.2: Close-up view of the CNC Billet Aluminum Perches and Locking Rings, essential for height and preload adjustment.

Adjustable Camber Plates

Light Weight & Less Noise



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Image 4.3: Adjustable Camber Plates, designed for lightweight construction and reduced noise, allowing for fine-tuning of wheel alignment.

Full Length Dust Boot

Protect Rod & Piston From Dust



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Image 4.4: The high rigid piston rod, featuring a 22mm front rod diameter and constructed from high-frequency heat-treated steel for enhanced durability and toughness.

Lower Mount

Fully Anodized Rust Resistant Sleeves



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Image 4.5: The lower mount of the coilover, fully anodized for rust resistance and long-term durability.

4.3 General Installation Steps (Professional Installation Recommended)

1. **Prepare the Vehicle:** Lift the vehicle safely and support it with jack stands. Remove the wheels.
2. **Remove OEM Suspension:** Carefully disconnect and remove the original shock absorbers and springs. Note the orientation of all components.
3. **Install New Coilovers:** Mount the new maXpeedingrods coilovers. Ensure all bolts are tightened to the manufacturer's specified torque settings. Pay attention to the orientation of the top hats and lower mounts.
4. **Initial Height Adjustment:** Before fully tightening, set the coilovers to an approximate desired ride height. Fine-tuning will be done after the vehicle is on the ground.
5. **Reassemble:** Reinstall wheels and lower the vehicle.
6. **Final Checks:** Bounce the vehicle to settle the suspension. Re-check all fasteners for tightness.
7. **Professional Alignment:** A professional wheel alignment is mandatory after coilover installation to correct camber, caster, and toe settings for optimal handling and tire longevity.

5. ADJUSTMENT

Your maXpeedingrods coilovers offer adjustable ride height and spring preload. Adjustments should be made with the vehicle safely supported or with the suspension unloaded, depending on the specific adjustment being made.

5.1 Ride Height Adjustment

The ride height can be adjusted by rotating the lower mount on the threaded shock body. This allows for a lowering range of 1-3 inches from the original ride height. Always adjust both sides of an axle equally to maintain balance.

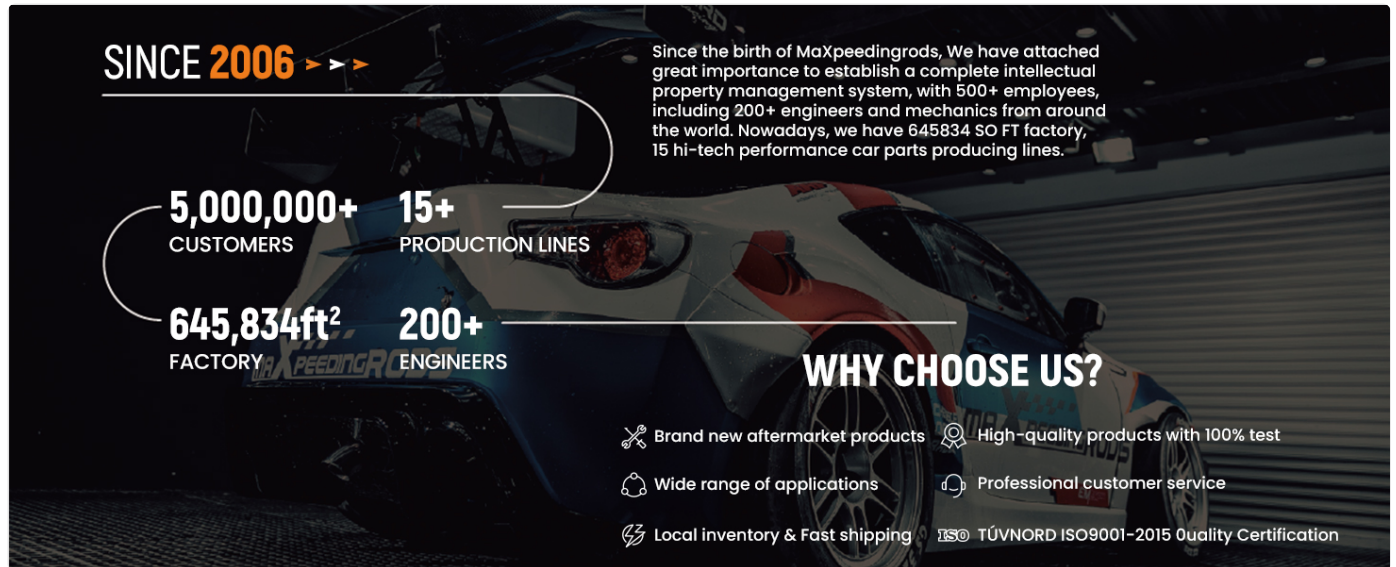


Image 5.1: Diagram illustrating the process of ride height adjustment. Loosen locking ring B, rotate lower mount A to adjust thread distance (D), then re-tighten locking ring B. Locking ring C is for preload adjustment.

1. Loosen the lower mount (A) and the locking ring (B) using the provided C spanners.
2. Rotate the lower mount (A) to increase or decrease the threaded distance (D) to achieve the desired ride height.
3. Once the desired height is set, tighten the lower mount (A) and locking ring (B) securely against each other to prevent movement.

5.2 Spring Preload Adjustment

Spring preload can be adjusted by rotating the locking ring (C) shown in Image 5.1. This adjustment affects the initial compression of the spring and should be set according to your driving preferences and vehicle weight. Incorrect preload can affect ride quality and handling. Consult a professional for optimal preload settings.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your maXpeedingrods coilovers.

- **Regular Inspection:** Periodically inspect the coilovers for any signs of damage, leaks, corrosion, or loose components. Check the dust boots for tears.
- **Cleaning:** Keep the coilovers clean, especially the threaded sections and piston rods. Dirt and debris can cause premature wear. Use mild soap and water, avoiding harsh chemicals.
- **Torque Checks:** After initial installation and periodically thereafter, re-check the torque of all mounting bolts and locking rings.
- **Dust Boots:** The full-length dust boots protect the rod and piston from dust and debris, contributing to a longer lifespan. Ensure they are intact.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your coilover suspension. For complex problems, always consult a professional mechanic.

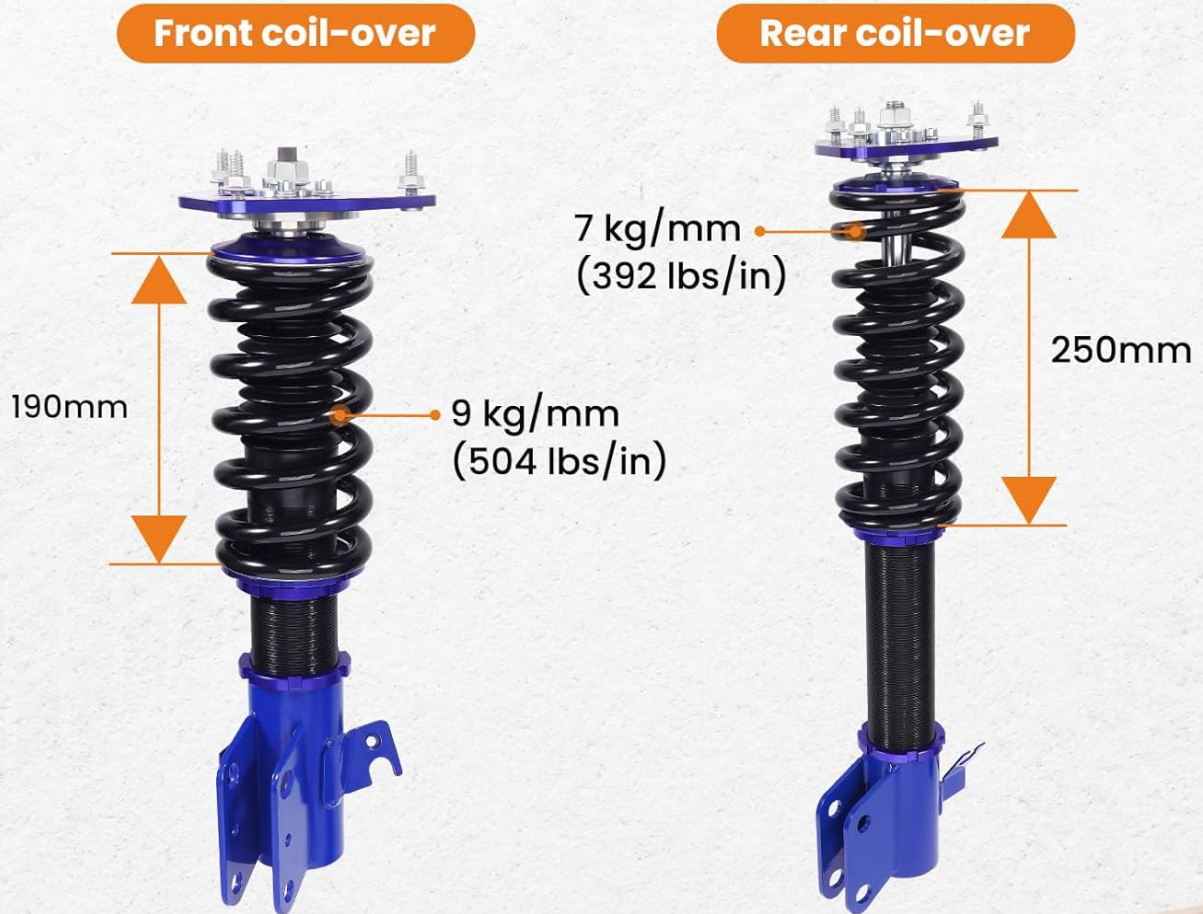
Issue	Possible Cause	Solution
Unusual Noises (clunking, squeaking)	Loose mounting bolts, worn bushings, incorrect preload, debris.	Check all fasteners for proper torque. Inspect bushings for wear. Verify preload settings. Clean components.
Uneven Ride Height	Incorrect height adjustment on one side, uneven spring preload.	Measure ride height from a consistent point on all four corners. Adjust height evenly.
Poor Handling / Instability	Incorrect alignment, improper height settings, damaged components.	Ensure professional wheel alignment has been performed. Re-check height settings. Inspect for damaged parts.
Leaking Shock Absorber	Seal failure, damage to shock body.	Contact maXpeedingrods customer support for assistance. Replacement may be necessary.

8. SPECIFICATIONS

Key technical specifications for the maXpeedingrods Coilover Suspension Kit (Model KS75OC):

- **Application:** Subaru Impreza WRX STI GDF 2005-2007 (RIM P.C.D.=114.3)
- **Model Number:** KS75OC
- **Front Spring Rate:** 9 kg/mm (504 lbs/in)
- **Rear Spring Rate:** 7 kg/mm (392 lbs/in)
- **Adjustable Ride Height:** 1-3 inches lowering (from original ride height)
- **Front Rod Diameter:** 22mm
- **Material (Top Mount):** 6061-T6 Aluminum
- **Material (Springs):** High Rigidity 55CrSi Steel
- **Shock Body Coating:** Anodized with Anti-Corrosion Coating
- **Lower Mount Coating:** Powder-Coated

Dimension Details



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Image 8.1: Dimension details for the front and rear coilover units. Front coil-over: approximately 190mm height. Rear coil-over: approximately 250mm height.

9. SUPPORT

For technical assistance, warranty inquiries, or to report missing/damaged parts, please contact maXpeedingrods customer support. Refer to your purchase documentation for specific contact information or visit the official maXpeedingrods website.

maXpeedingrods is committed to providing quality products and support to ensure your satisfaction.

