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› BC Racing BR Series Coilovers Instruction Manual for 2009-2013 Honda Fit (Model A-28-BR)

BC Racing A-28-BR

BC Racing BR Series Coilovers Instruction Manual

Model: A-28-BR | Compatible with 2009-2013 Honda Fit

1. INTRODUCTION

This manual provides essential information for the installation, adjustment, and maintenance of your BC Racing BR Series Coilovers. The BR Series is engineered for street driving and is suitable for occasional road course or autocross use. Proper installation and adjustment are crucial for optimal performance and safety.

Please read this manual thoroughly before attempting any installation or adjustments. If you are unsure about any part of the process, it is recommended to seek assistance from a qualified professional.

2. PRODUCT COMPONENTS

The BC Racing BR Series Coilover kit includes the following primary components:

- Four (4) complete coilover assemblies (front and rear)
- Two (2) separate rear springs (for specific applications)
- Two (2) spanner wrenches for adjustment
- Associated hardware (washers, bushings, etc.)



Image 1: Overview of the complete BC Racing BR Series Coilover kit, showing all major components including front and rear coilover assemblies, separate rear springs, and adjustment wrenches.



Image 2: An alternative perspective of the BC Racing BR Series Coilover kit, highlighting the individual coilover units and associated hardware.

3. KEY FEATURES

The BR Series Coilovers incorporate several design features for performance and adjustability:

- **Mono-Tube Shock Design:** Provides consistent damping performance and improved heat dissipation.
- **Linear Piston and Damping Curve:** Ensures predictable and responsive handling characteristics.
- **Height Adjustment via Shock Body:** Allows ride height adjustment independent of shock stroke and spring preload, preserving suspension travel.
- **30-Clicks of Damping Adjustment:** Simultaneous compression and rebound adjustment for fine-tuning ride comfort and handling.
- **Front Camber Plates:** Standard on applicable kits, allowing for precise alignment adjustments.
- **Rear Camber Plates:** Available on applicable kits for further alignment customization.
- **Custom Spring Rates and Swift Springs:** Available for most applications to meet specific performance requirements.
- **Custom Valving:** Valving can be paired for custom spring rates.



Image 3: Diagram illustrating key features of the BC Racing BR Series Coilover, including damping adjustment, height adjustment, and camber plate details.

4. SETUP AND INSTALLATION

Installation of coilovers requires specialized tools and knowledge. It is strongly recommended that installation be performed by a certified automotive technician or a professional suspension shop.

General Installation Steps (Consult a professional for detailed instructions):

1. Safely lift and support the vehicle.

2. Remove wheels and existing suspension components.
3. Install the new BC Racing coilover assemblies, ensuring all mounting points are correctly aligned.
4. Secure all bolts to the manufacturer's specified torque settings.
5. Reinstall wheels and lower the vehicle.
6. Perform a full wheel alignment after installation to ensure proper vehicle handling and tire wear.



Image 4: A close-up view of the lower mounting bracket of a BC Racing coilover, showing the robust construction and attachment points.

5. OPERATING AND ADJUSTMENT

Ride Height Adjustment:

The BR Series allows for ride height adjustment independent of the shock stroke and spring preload. This is achieved by adjusting the lower mount of the coilover. Use the provided spanner wrenches to loosen the lower locking ring and rotate the lower mount to achieve the desired ride height. Ensure both sides of the vehicle are adjusted evenly. Always re-tighten the locking ring securely after adjustment.

Damping Adjustment:

Damping force can be adjusted via the knob located at the top of the coilover shaft (or bottom for some rear applications). The BR Series offers 30 clicks of adjustment, simultaneously affecting both compression and rebound. Turn the knob clockwise for stiffer damping and counter-clockwise for softer damping. Start with a neutral setting (e.g., 15 clicks from full soft) and adjust incrementally to suit your driving preferences and road conditions.



Image 5: A detailed view of the coilover's top hat, showing the damping adjustment knob and the mounting bolts for the camber plate (if applicable).

Camber Adjustment (if applicable):

For kits equipped with front (and optional rear) camber plates, camber can be adjusted by loosening the bolts on the top hat and sliding the shock shaft relative to the mounting plate. This adjustment should be performed by an alignment specialist to ensure correct geometry.

6. MAINTENANCE

Regular maintenance helps prolong the life and performance of your coilovers:

- **Regular Inspection:** Periodically inspect coilovers for any signs of damage, leaks, or loose components.
- **Cleaning:** Keep the coilover bodies and threads clean, especially in environments with salt or dirt, to prevent corrosion and ensure smooth adjustment.
- **Torque Check:** Verify that all mounting bolts and locking rings remain securely tightened.
- **Dust Boots:** Ensure dust boots are intact to protect the shock shaft from contaminants.

7. TROUBLESHOOTING

If you experience issues with your coilovers, consider the following:

- **Unusual Noises:** Check for loose mounting bolts, worn bushings, or components rubbing. Ensure spring preload is correctly set.
- **Poor Ride Quality:** Adjust damping settings. If too stiff, reduce damping. If too soft, increase damping. Verify ride height is set appropriately and not causing bottoming out or topping out.
- **Uneven Ride Height:** Re-measure and adjust ride height on all four corners. Ensure locking rings are tight.
- **Leaking Shock:** A small amount of oil residue is normal, but significant oil leakage indicates a seal

failure. Contact support for rebuild or replacement options.

For persistent issues, consult a professional suspension technician.

8. SPECIFICATIONS

- **Model:** A-28-BR
 - **Front Spring Rates:** 62-180-5 Kgf/mm
 - **Rear Spring Rates:** 62-80-190-3-V Kgf/mm
 - **Damping Adjustment:** 30 clicks (compression/rebound simultaneous)
 - **Shock Design:** Mono-tube
 - **Height Adjustment:** Independent of shock stroke and spring preload
 - **Compatibility:** 2009-2013 Honda Fit
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9. WARRANTY AND SUPPORT

BC Racing offers a **1-year limited warranty** against manufacturer defects for the BR Series Coilovers. This warranty covers defects in materials and workmanship under normal use.

The coilovers are fully rebuildable, and all individual parts are available for purchase. For warranty claims, technical support, or to order replacement parts, please contact BC Racing customer service or your authorized dealer.

For further assistance, please refer to the official BC Racing website or contact their support channels.
