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› Bilstein B8 8100 (Bypass) 2003-2020 Toyota 4Runner Rear Left Monotube Shock Absorber User Manual

Bilstein 25-284584

Bilstein B8 8100 (Bypass) Shock Absorber User Manual

Brand: Bilstein | **Model:** 25-284584

For 2003-2020 Toyota 4Runner Rear Left Monotube Shock Absorber

PRODUCT OVERVIEW

The Bilstein B8 8100 (Bypass) is a direct-fit, position-sensitive damper designed for light trucks and SUVs. These shock absorbers incorporate a dual-tube externally adjustable bypass design, allowing for precise tuning. The B8 8100 (Bypass) features "Incremental Flow" bypass adjusters, enabling finite and incremental changes for both rebound and compression damping. A bottom hose, remote reservoir exit port, enhances compression control throughout the full cycle. The remote reservoir is supplied with a bolt-on aluminum anodized chassis mount for straightforward installation. This design aims to optimize the driving experience by providing exceptional ride comfort and superior bottom-out control.

KEY FEATURES

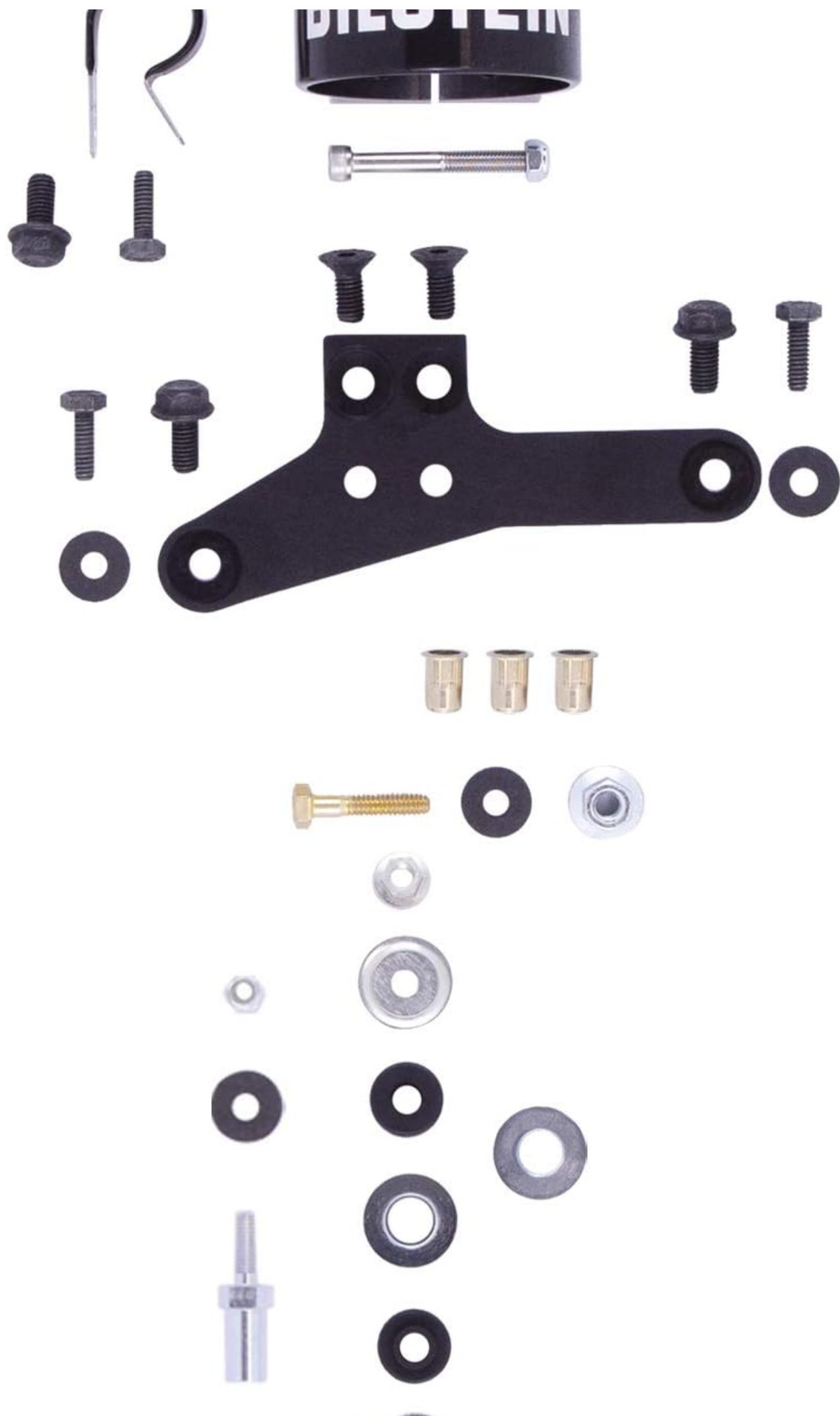
- The Bump Zone, located above the compression bypass tube, increases bottoming control and eliminates the need for a hydraulic bump stop.
- Dual tube external bypass offers position sensitive damping with independent adjustment for rebound and compression.
- Incremental flow adjuster offers finite and incremental changes in damping force for precise adjustments.
- Vehicle specific tuning with the ability to make a wide range of adjustments.
- 60mm large bore hard anodized aluminum piston offers a greater range of damping control and delivers exceptional long-term durability.
- Bottom port reservoir hose provides increased bottom out control during the compression cycle.
- 60mm remote reservoir with machined aluminum chassis mounts.
- 18mm piston rod provides brute tensile strength and reduces internal gas force ramp-up providing a smoother ride.
- Billet rod end with vulcanized mounts for an exact OE fit and long-term durability.
- Direct fit for easy installation.
- Owner rebuildable design.

PRODUCT COMPONENTS



This image displays the Bilstein B8 8100 (Bypass) shock absorber assembly, including the main shock body, remote reservoir with hose, and various mounting hardware components such as bolts, washers, and brackets. All parts are laid out clearly for identification.







A detailed view of the mounting hardware and adjustment components for the Bilstein B8 8100 (Bypass) shock absorber. This includes various bolts, nuts, washers, brackets, and the remote reservoir mounting clamp, essential for proper installation.



The official Bilstein brand logo, featuring the company name in blue alongside a yellow circular icon depicting a shock absorber. This represents the manufacturer of the product.

INSTALLATION GUIDELINES

The Bilstein B8 8100 (Bypass) shock absorber is designed for direct fitment on specified Toyota 4Runner models (2003-2020). While designed for ease of installation, professional installation by a qualified technician is highly recommended to ensure proper function, safety, and to maintain vehicle integrity. Always refer to your vehicle's specific service manual for detailed removal and installation procedures of original equipment components.

- Ensure the vehicle is properly supported and secured before beginning any work.
- Carefully remove existing shock absorbers following manufacturer guidelines.
- Install the Bilstein B8 8100 (Bypass) shock absorber, utilizing the provided bolt-on aluminum anodized chassis mount for the remote reservoir.
- Confirm all fasteners are torqued to the vehicle manufacturer's specifications.
- Perform a thorough inspection of all suspension components after installation.

OPERATING PRINCIPLES

The Bilstein B8 8100 (Bypass) shock absorber operates on a sophisticated dual-tube external bypass system. This design allows for position-sensitive damping, meaning the damping force changes based on the shock's position in its travel. Independent adjusters for rebound and compression damping enable fine-tuning of the shock's performance. The "Incremental Flow" bypass adjusters provide precise, small changes to the damping characteristics. The remote reservoir, connected via a bottom hose exit port, plays a crucial role in managing fluid volume and temperature, delivering enhanced compression control, particularly during aggressive suspension movements and bottom-out events.

Maintenance

To ensure the longevity and optimal performance of your Bilstein B8 8100 (Bypass) shock absorbers, regular maintenance is recommended:

- **Regular Inspection:** Periodically inspect the shock absorbers for any signs of damage, leaks, or wear. Check the condition of the bushings, mounting points, and the remote reservoir hose.
- **Cleaning:** Keep the shock bodies and remote reservoirs clean from dirt, mud, and debris, especially after off-road use. Use mild soap and water, then rinse thoroughly.
- **Fastener Check:** Verify that all mounting bolts and nuts remain tight and secure. Re-torque to specifications if necessary.
- **Rebuildability:** These shock absorbers are owner rebuildable. For advanced maintenance or performance tuning, consult a qualified suspension specialist or refer to Bilstein's official service documentation for rebuild procedures and recommended service intervals.

Troubleshooting

If you experience issues with your Bilstein B8 8100 (Bypass) shock absorbers, consider the following common troubleshooting steps:

- **Unusual Noises (Clunking/Squeaking):**
 - Check all mounting bolts for proper torque.
 - Inspect bushings for wear or damage.
 - Ensure no components are contacting other parts of the vehicle.
- **Reduced Damping Performance (Bouncy Ride):**
 - Inspect for fluid leaks around the shock body or reservoir.
 - Verify bypass adjusters are set correctly and have not shifted.
 - Check for physical damage to the shock body or piston rod.
- **Uneven Ride Height:**
 - Confirm correct part application for your vehicle's specific side (left/right) and axle (front/rear).
 - Ensure proper installation and seating of all components.

For persistent issues or complex problems, it is strongly recommended to consult a certified automotive technician or contact Bilstein customer support.

Technical Specifications

Specification	Value
Brand	Bilstein

Specification	Value
Model Name	Bilstein B8 8100 (Bypass) 2003-2020 Toyota 4Runner Rear Left Monotube Shock Absorber (25-284584)
Part Number	25-284584
Auto Part Position	Rear
Vehicle Service Type	Truck
Style	Adjustable, Monotube
Exterior Finish	Painted
Material	Plastic (likely referring to some components, main body is metal)
Item Weight	20.1 Pounds
Item Dimensions (LxWxH)	32 x 14 x 6 inches
Package Weight	9253 Grams
UPC	651860844534
Global Trade Identification Number	00651860844534

WARRANTY AND SUPPORT

Warranty Information: This product is covered by a manufacturer’s warranty. For specific details regarding the terms, conditions, and duration of the warranty, please refer to the warranty documentation included with your purchase or visit the official Bilstein website. The warranty typically covers defects in materials and workmanship under normal use.

Customer Support: For technical assistance, installation questions, or warranty claims, please contact Bilstein customer service directly. Their official website usually provides contact information, including phone numbers and email addresses for support inquiries.

Note: Unauthorized modifications or improper installation may void the product warranty.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question