

Valeo 836557

Valeo 836557 Premium Dual-Mass Flywheel

Installation and Maintenance Manual for BMW Models

1. INTRODUCTION

This manual provides essential information regarding the Valeo 836557 Premium Dual-Mass Flywheel (DMF). The DMF is a critical component designed to enhance driving comfort and reduce noise and vibration in the vehicle's drivetrain. It effectively filters dynamic vibrations between the engine and the gearbox, contributing to smoother operation and extended component life.

Valeo utilizes advanced engineering and innovative design to produce components that meet or exceed Original Equipment Manufacturer (OEM) specifications. This product incorporates high-grade spring wire for lasting performance, and its bearings and bushings are engineered for endurance, requiring no maintenance.

2. PRODUCT OVERVIEW

The Valeo 836557 is a premium dual-mass flywheel specifically designed for certain BMW models. Its primary function is to absorb engine torque fluctuations, preventing them from being transmitted to the gearbox and the rest of the drivetrain. This results in reduced gear rattle, improved shifting comfort, and enhanced overall driving refinement.



Image 2.1: The Valeo 836557 Dual-Mass Flywheel. This image displays the metallic, circular component with multiple bolt holes and a central hub, characteristic of a dual-mass flywheel.

Key features of the Valeo 836557 DMF include:

- **100% New Components:** Ensures optimal performance and durability, eliminating issues associated with remanufactured units.
- **OEM Specification Compliance:** Engineered to meet or exceed the stringent standards of Original Equipment Manufacturers.
- **Vibration Filtering:** Effectively dampens dynamic vibrations between the engine and gearbox.
- **Durable Construction:** Utilizes high-grade spring wire and robust bearings/bushings for long-lasting performance.
- **Friction Damping System:** Integrated design for enhanced durability.
- **Optimized Noise Reduction:** Engineered to maximize filtering performance for reduced noise.

3. INSTALLATION GUIDELINES

Installation of the Valeo 836557 Dual-Mass Flywheel requires specialized tools and technical expertise. It is strongly recommended that installation be performed by a qualified automotive technician in a professional workshop environment.

3.1. Pre-Installation Checks

- Verify that the Valeo 836557 is the correct part for your specific BMW model by cross-referencing OEM part numbers (e.g., 21207508456, 21217512474, 21211223610, 21217508556, 21217509078, 21217501379).
- Inspect the new flywheel for any signs of shipping damage.
- Ensure all mating surfaces on the engine crankshaft and transmission input shaft are clean and free from oil, grease, or debris.
- Confirm that all necessary associated components (e.g., clutch kit, pilot bearing, release bearing) are compatible and in good condition.

3.2. Installation Procedure (General Steps)

1. Safely lift and secure the vehicle.
2. Remove the transmission and existing clutch assembly.
3. Carefully remove the old flywheel.
4. Install the new Valeo 836557 Dual-Mass Flywheel onto the crankshaft, ensuring proper alignment.
5. Tighten flywheel bolts to the manufacturer's specified torque settings using a torque wrench. Adhere strictly to the tightening sequence.
6. Install the new clutch assembly according to the clutch manufacturer's instructions.
7. Reinstall the transmission and all other removed components.
8. Perform a functional check of the clutch and transmission system.

Warning: Incorrect installation can lead to premature component failure, vehicle damage, or unsafe operating conditions. Always consult the vehicle's service manual for specific torque values and procedures.

4. FUNCTION AND BENEFITS

The dual-mass flywheel plays a crucial role in modern vehicle drivetrains, particularly in vehicles with high-torque engines or those equipped with manual transmissions. Its design incorporates two masses connected by a spring and damping system, allowing for relative rotation between the engine and the transmission.

4.1. Key Functions

- **Vibration Damping:** Absorbs torsional vibrations generated by the engine's combustion cycles, preventing them from reaching the transmission.
- **Noise Reduction:** Minimizes gear rattle and other drivetrain noises, especially at low engine speeds.
- **Improved Driving Comfort:** Contributes to smoother acceleration, deceleration, and gear changes.
- **Component Protection:** Reduces stress on the transmission, clutch, and other drivetrain components, extending their lifespan.



Image 4.1: Valeo's commitment to Smart Technology for Smarter Mobility. This image displays the Valeo logo with the tagline, emphasizing the brand's focus on advanced automotive solutions.

5. SPECIFICATIONS

The following specifications apply to the Valeo 836557 Dual-Mass Flywheel:

Specification	Value
Brand	Valeo
Model Number	836557
Item Weight	9.59 pounds
Product Dimensions	10.86 x 13.78 x 7.35 inches
Exterior Finish	Machined
Manufacturer Part Number	836557
OEM Part Numbers	21207508456; 21217512474; 21211223610; 21217508556; 21217509078; 21217501379
ASIN	B077MLYB98
Date First Available	February 27, 2018

6. MAINTENANCE AND CARE

The Valeo 836557 Premium Dual-Mass Flywheel is designed for long-lasting performance with minimal maintenance requirements. As per Valeo's engineering, the bearings and bushings are built for guaranteed endurance, meaning no routine maintenance is needed for the flywheel itself. However, it is crucial to ensure that the surrounding components, such as the clutch assembly and

transmission, are regularly inspected and maintained according to the vehicle manufacturer's recommendations. Any issues with these related parts can indirectly affect the performance and lifespan of the flywheel.

If any unusual noises or vibrations are detected from the drivetrain, it is advisable to have the vehicle inspected by a qualified technician promptly.

7. TROUBLESHOOTING

While the Valeo 836557 DMF is a robust component, issues in the drivetrain can sometimes manifest as symptoms that might be attributed to the flywheel. If you experience any of the following, professional diagnosis is recommended:

- **Excessive Vibration:** Unusual vibrations felt through the clutch pedal, gear lever, or chassis, especially at specific engine speeds.
- **Unusual Noises:** Rattling, clunking, or grinding noises coming from the transmission area, particularly when the clutch is engaged or disengaged, or at idle.
- **Difficulty Shifting Gears:** While often a clutch or transmission issue, a failing flywheel can contribute to poor gear engagement.
- **Clutch Pedal Pulsation:** A pulsating sensation in the clutch pedal.

A qualified technician will be able to accurately diagnose the source of these symptoms and recommend appropriate repairs.

8. WARRANTY AND SUPPORT


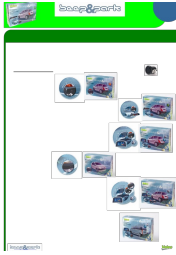



For information regarding the warranty coverage for your Valeo 836557 Dual-Mass Flywheel, please refer to the warranty documentation provided with your purchase or contact Valeo customer support directly. Valeo stands by the quality and durability of its products.

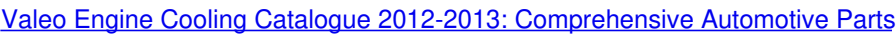
If you require technical assistance, have questions about product compatibility, or need to report an issue, please visit the official Valeo website or contact their customer service department. When contacting support, please have your product model number (836557) and purchase details readily available.



Image 8.1: Valeo's commitment to Technology and Comfort In Motion. These logos represent Valeo's dedication to advanced automotive technology and enhancing driving comfort.

Related Documents - 836557

	<p>Valeo PS2M-C1 Power Smart ECU Technical Specification and User Information</p> <p>Technical documentation for the Valeo PS2M-C1 Power Smart ECU (PEPS), detailing its functionality as a passive entry and passive start system, manufacturer information, and regulatory compliance statements.</p>
	<p>Valeo beep&park Parking Assistance System User Guide</p> <p>Comprehensive user guide for the Valeo beep&park parking assistance system, detailing product descriptions, kit configurations, utilization, alert activation, sensor diagnostics, and recommendations for safe and effective use.</p>
	<p>Valeo HFM2 Keyless Entry and Start System Owner's Manual</p> <p>Comprehensive owner's manual excerpt for the Valeo HFM2 system, detailing keyless entry, remote control functions, locking/unlocking procedures, alarm system operation, and engine starting/stopping for vehicles.</p>
	<p>Valeo Fitness Wristbands for Weightlifting Support</p> <p>Durable and supportive wristbands from Valeo Fitness, designed to enhance stability and prevent injury during weightlifting and other strenuous exercises. Features adjustable closure for a secure fit.</p>
	<p>Valeo Thermal System Control Catalogue 2014-2015 Automotive Parts</p> <p>Explore the Valeo Thermal System Control 2014-2015 catalogue, featuring a comprehensive range of high-quality automotive thermal components like water pumps, EGR valves, and thermostats for the aftermarket. Enhance engine performance and reliability with Valeo's O.E. quality parts.</p>



Explore the extensive Valeo 2012-2013 Engine Cooling catalogue, featuring a wide selection of radiators, condensers, oil coolers, and more for numerous vehicle makes and models. Find high-quality automotive replacement parts for optimal performance and reliability.