AUCERAMIC BZ-0001

AUCERAMIC Timing Chain Kit with Camshaft Adjuster Instruction Manual

Model: BZ-0001

1. Product Overview

This AUCERAMIC Timing Chain Kit is designed for specific Mercedes-Benz M271 engines. It includes essential components for the engine's timing system, such as the timing chain, camshaft adjusters, tensioner, and guides. The kit is manufactured to meet original equipment (OE) specifications, ensuring reliable performance and durability.



Image 1.1: Overview of the AUCERAMIC Timing Chain Kit components, including chains, sprockets, tensioner, guides, and gaskets.

2. Compatibility

This timing chain kit is compatible with the following Mercedes-Benz models equipped with the 1.8L L4 GAS DOHC Turbocharged M271 engine (engine codes M271.820, M271.860, M271.861):

- 2011-2012 Mercedes C180 (W204) 1.8L
- 2010-2014 Mercedes C200 (W204) 1.8L
- 2012-2015 Mercedes C250 (W204) 1.8L
- 2012-2013 Mercedes E200 (W212) 1.8L
- 2011-2014 Mercedes E250 (W212) 1.8L
- 2012-2016 Mercedes SLK200 (R172) 1.8L
- 2012-2015 Mercedes SLK250 (R172) 1.8L

Part Numbers: 2710501400, 2710502547, 2710503347, 2710501400, 2710502647, 2710503447, 2710501500, 2710301163, A2710501400, A2710502547, A2710503347, A2710501500, A2710502647, A2710503447, A2710301163.



Image 2.1: Visual representation of compatible vehicle models and years.

3. Package Contents

Upon opening the package, please verify that all the following components are present and undamaged:

- 1 Timing Chain (142L) - Part A0009931078
- 1 Oil Pump Chain (106L) - Part 0009932076
- 2 VVT Timing Sprockets (Camshaft Adjusters) - Parts A2710503347, A2710502647, A2710502547
- 1 Timing Chain Tensioner - Part A2710500911
- 3 Timing Chain Guides
- 1 Set of Cylinder Head Cover Gasket



Image 3.1: Detailed view of the package contents.

4. Installation (Setup)

Installation of a timing chain kit is a complex procedure that requires specialized tools, knowledge, and experience. Incorrect installation can lead to severe engine damage.

- **Professional Installation Recommended:** It is strongly recommended that this timing chain kit be installed by a certified automotive technician.
- **Consult Service Manual:** Always refer to the specific Mercedes-Benz service manual for your vehicle model for detailed, step-by-step installation instructions, torque specifications, and timing procedures.
- **Pre-Installation Inspection:** Before installation, thoroughly inspect all components for any manufacturing defects or shipping damage. Ensure all mating surfaces are clean and free of debris.
- **Timing Marks:** Pay close attention to all timing marks on the crankshaft, camshafts, and timing chain to ensure correct engine timing.
- **Tensioner Installation:** Install the timing chain tensioner according to the manufacturer's specifications to ensure

proper chain tension.



Image 4.1: Illustrative view of timing components within an engine.

5. Component Details and Function

Each component in this kit plays a critical role in the engine's timing system:

- **Timing Chain:** Made from durable steel and precision machined for reliable performance. It synchronizes the rotation of the crankshaft and camshafts.



Image 5.1: Timing Chain.

- **Camshaft Adjusters (VVT Timing Sprockets):** These components adopt powder metallurgy technology for stable and durable performance. They allow for variable valve timing, optimizing engine efficiency and power output.



Image 5.2: Camshaft Adjusters.

- **Timing Chain Guides:** Designed for precise transmission, high plasticity, and toughness. They feature surface treatment for friction and temperature resistance, guiding the timing chain smoothly.



Image 5.3: Timing Chain Guides.

- **Cylinder Head Cover Gasket:** Ensures a proper seal for the cylinder head cover, preventing oil leaks.

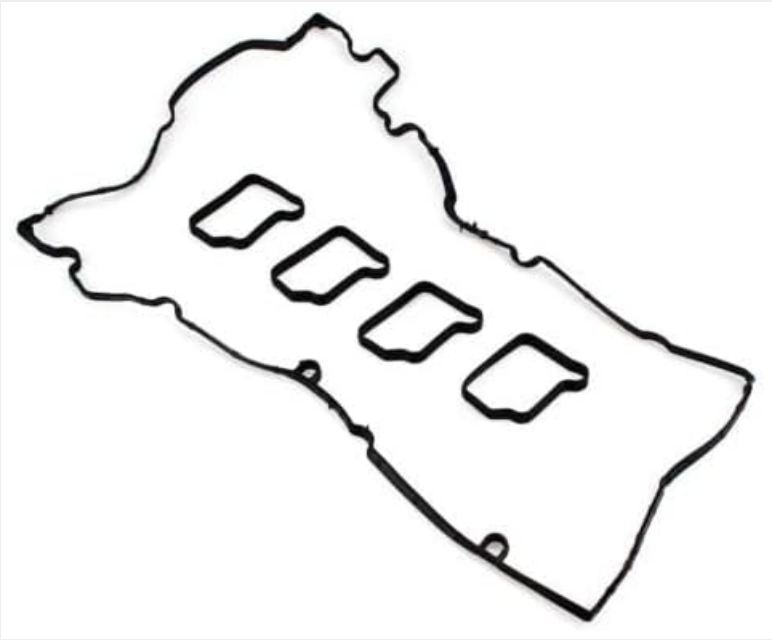


Image 5.4: Cylinder Head Cover Gasket.

- **Crankshaft Gear:** An accurate design for chain load reduction, transferring rotational motion from the crankshaft to the timing chain.



Image 5.5: Crankshaft Gear.

6. Maintenance

Proper maintenance of your engine's timing system is crucial for its longevity and performance.

- **Regular Oil Changes:** Use the manufacturer-recommended engine oil and adhere to the specified oil change intervals. Clean engine oil is vital for the proper operation and lifespan of timing chain components, especially hydraulic tensioners and camshaft adjusters.
- **Listen for Unusual Noises:** Pay attention to any rattling, ticking, or whining noises coming from the engine, especially during startup or at idle. These could indicate wear in the timing chain or related components.
- **Scheduled Inspections:** Have your timing system inspected by a qualified technician during routine service appointments, particularly if your vehicle has high mileage.
- **Address Warning Lights:** If your check engine light illuminates, have the vehicle diagnosed promptly. Issues with camshaft position sensors or variable valve timing can sometimes be related to timing chain wear.

7. Troubleshooting

If you experience issues after installation or suspect a problem with your timing chain system, consider the following:

- **Engine Noise:** A rattling noise, especially on cold start or at idle, may indicate a worn timing chain, a faulty tensioner, or worn guides.
- **Check Engine Light:** Diagnostic Trouble Codes (DTCs) related to camshaft position (e.g., P0016, P0017) or variable valve timing system performance often point to timing chain stretch or camshaft adjuster issues.
- **Reduced Engine Performance:** A stretched timing chain or malfunctioning camshaft adjusters can lead to incorrect valve timing, resulting in reduced power, poor fuel economy, and rough idling.
- **Oil Leaks:** Ensure all gaskets, especially the cylinder head cover gasket, are properly seated and torqued to prevent oil leaks.

For any persistent issues, it is recommended to consult a professional automotive technician for diagnosis and repair.

8. Specifications

Feature	Detail
Brand	AUCERAMIC
Model Number	BZ-0001
Item Weight	8.9 pounds
Product Dimensions	13.19 x 9.65 x 2.95 inches
Manufacturer Part Number	BZ-0001
Position	Front Inner
Special Features	All new material, Durable to use, OE standard, Perfect matching

9. Warranty and Customer Support

AUCERAMIC is committed to customer satisfaction. All components in this kit are produced in accordance with OEM specifications, utilizing high-quality raw materials and advanced manufacturing processes to ensure product quality and a long service life.
If you encounter any issues with the product, such as damage or concerns regarding its suitability for your vehicle, please contact AUCERAMIC customer support. They aim to resolve problems within 24 hours.
For support, please refer to the contact information provided with your purchase or visit the official AUCERAMIC store page: AUCERAMIC Store.

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