ECCPP C-163 S612

ECCPP Timing Chain Kit Instruction Manual

Brand: ECCPP | **Model:** C-163 S612

1. Introduction and Overview

This manual provides essential information for the ECCPP Timing Chain Kit, Model C-163 S612. This kit is designed to replace critical components of your vehicle's engine timing system, ensuring proper engine operation and longevity. It is crucial to understand the components and their function for correct installation and maintenance.

2. Compatibility Information

The ECCPP Timing Chain Kit (C-163 S612) is compatible with various Ford and Mercury vehicles. Please verify your vehicle's make, model, and engine specifications against the list below to ensure proper fitment.



Image: Detailed compatibility chart for the timing chain kit.

Compatible Vehicle Models:

- **Ford Bronco:** 1984-1993 (5.0L/V8, 5.8L/V8), 1995-1996 (5.8L/V8)
- **Ford Club Wagon:** 1988-1991 (5.0L/V8, 5.8L/V8)
- **Ford Country Squire:** 1988-1993 (5.0L/V8, 5.8L/V8)
- **Ford E-150 Econoline:** 1988-1993 (5.0L/V8, 5.8L/V8)
- **Ford E-150 Econoline Club Wagon:** 1988-1993 (5.0L/V8, 5.8L/V8)
- **Ford E-250 Econoline:** 1988-1993 (5.0L/V8, 5.8L/V8)

- **Ford E-250 Econoline Club Wagon:** 1988-1993 (5.0L/V8, 5.8L/V8)
- **Ford E-350 Econoline:** 1988-1993 (5.0L/V8, 5.8L/V8)
- **Ford E-350 Econoline Club Wagon:** 1988-1993 (5.0L/V8, 5.8L/V8)
- **Ford F-150:** 1984-1996 (5.0L/V8, 5.8L/V8)
- **Ford F-250:** 1984-1996 (5.0L/V8, 5.8L/V8)
- **Ford F-350:** 1984-1996 (5.0L/V8, 5.8L/V8)
- **Ford LTD:** 1984-1986 (5.0L/V8)
- **Ford LTD Crown Victoria:** 1984-1991 (5.0L/V8)
- **Ford Mustang:** 1987-1989 (5.0L/V8)
- **Ford P-350:** 1996 (5.8L/V8)
- **Ford Thunderbird:** 1988-1993 (5.0L/V8)
- **Lincoln Mark VII:** 1989-1992 (5.0L/V8)
- **Lincoln Town Car:** 1989-1990 (5.0L/V8)
- **Mercury Capri:** 1986 (5.0L/V8)
- **Mercury Colony Park:** 1987-1991 (5.0L/V8)
- **Mercury Grand Marquis:** 1984-1991 (5.0L/V8, 5.8L/V8)

3. Kit Contents

The ECCPP Timing Chain Kit includes the following components, essential for a complete timing system overhaul:



Image: All components included in the timing chain kit.

- **1 x Timing Chain (Double):** A high-quality link-belt type chain designed for exceptional durability and quiet operation.
- **1 x Crankshaft Sprocket:** Precision-engineered gear for the crankshaft.
- **1 x Camshaft Sprocket:** Precision-engineered gear for the camshaft.

4. Product Features

This timing chain kit is manufactured to meet or exceed OEM performance requirements, incorporating advanced design and material technology for reliable engine timing.



Image: Core internal structure of the timing chain and sprocket.

Key Features:

- **High-Quality Materials:** Made from premium alloy steel for high hardness, excellent wear resistance, and superior corrosion resistance.
- **Precision Grinding:** Components undergo precision grinding for enhanced durability and reduced friction.
- **Reduced Noise and Vibration:** Engineered to minimize operational noise and vibration, contributing to a quieter engine.
- **High Accuracy:** Designed for high accuracy to minimize timing errors and ensure optimal engine performance.
- **Precision Transmission:** Sprockets ensure precise power transmission.
- **Good Shock Resistance:** Components are built to withstand operational stresses.

5. Setup and Installation

Installation of a timing chain kit is a complex procedure that requires specialized tools and automotive knowledge. **Professional installation by a certified mechanic is highly recommended.** Incorrect installation can lead to severe engine damage.

Pre-Installation Steps:

1. **Verify Compatibility:** Double-check that this kit is the correct part for your specific vehicle make, model, year, and engine size. Refer to Section 2.
2. **Consult Service Manual:** Always refer to your vehicle's official service manual for detailed, step-by-step installation procedures, torque specifications, and safety precautions.
3. **Inspect Components:** Before installation, carefully inspect all components in the kit for any signs of damage or manufacturing defects.



Image: Guide on how to confirm product fitment for your vehicle.

The image above illustrates a general method for confirming product fitment using an online tool. Always ensure your vehicle's year, make, and model are accurately entered to confirm compatibility.

6. Operating Principles

The timing chain kit is a critical part of your engine's internal combustion system. It synchronizes the rotation of the crankshaft and camshaft(s) to ensure that the engine's valves open and close at the correct times relative to the position of the pistons. This precise synchronization is vital for optimal engine performance, fuel efficiency, and emission control. Once installed, the timing chain operates continuously with the engine, requiring no direct user interaction. Its proper function relies on accurate installation and the integrity of its components.

7. Maintenance

Timing chain kits are designed for long-term durability, but their lifespan can be affected by engine oil quality, driving conditions, and vehicle maintenance history. While the kit itself does not require routine maintenance, adhering to your vehicle's recommended service schedule is crucial for its longevity.

General Maintenance Advice:

- **Regular Oil Changes:** Use the manufacturer-recommended engine oil and adhere to the specified oil change intervals. Clean engine oil helps lubricate the timing chain and sprockets, reducing wear.
- **Engine Inspections:** During routine vehicle inspections, a qualified mechanic can check for signs of timing chain wear, such as excessive slack or unusual noises.
- **Prompt Attention to Warning Signs:** Address any unusual engine noises (e.g., rattling from the timing cover area) or performance issues promptly, as these could indicate timing chain problems.

8. Troubleshooting

Issues related to the timing chain system typically manifest as significant engine problems. Due to the complexity and critical nature of these components, troubleshooting should always be performed by a qualified automotive technician.

Common Symptoms of Timing Chain Issues:

- **Engine Rattle:** A rattling noise, especially on cold starts or at idle, often originating from the front of the engine, can indicate a worn or loose timing chain.
- **Check Engine Light:** Illumination of the check engine light, often accompanied by diagnostic trouble codes (DTCs) related to camshaft/crankshaft position sensor correlation.

- **Engine Misfires or Rough Idling:** Incorrect valve timing due to a stretched chain can lead to misfires and rough engine operation.
- **Reduced Engine Performance:** Loss of power, poor acceleration, or decreased fuel economy.

If you experience any of these symptoms, cease operation of the vehicle if safe to do so and consult a professional mechanic immediately to prevent further engine damage.

9. Specifications

Attribute	Specification
Manufacturer	ECCPP
Model Number	C-163 S612 (Internal: 053956-5211-1436122)
OEM Part Number	TK4113
Product Dimensions	32 x 15 x 6 cm
Product Weight	0.28 g (Note: This value may be a typo in source data; actual weight may vary.)
Kit Contents	1 Double Timing Chain, 1 Crankshaft Sprocket, 1 Camshaft Sprocket

10. Warranty and Support

For specific warranty information regarding your ECCPP Timing Chain Kit, please refer to the documentation included with your purchase or contact ECCPP customer support directly. General return policies may include a 30-day free return period, but warranty coverage for defects or performance issues should be confirmed with the manufacturer.
If you require technical assistance or have questions about the product, please reach out to ECCPP customer service through their official channels.

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