SUSUCAR 3.6l timing chain kit

SUSUCAR 3.6 Pentastar Timing Chain Kit Instruction Manual

Model: 3.6l timing chain kit

Product Overview

This SUSUCAR 3.6 Pentastar Timing Chain Kit is designed for specific 3.6L V6 engines in Chrysler, Jeep, Dodge, and RAM vehicles from 2011-2015. It provides essential components for maintaining proper engine timing and performance.

Included Components:

- 1 Timing Chain (Primary, 44 Link)
- 2 Timing Chain (Secondary, 120 Link - 2 Req)
- 1 Tensioner Left (Secondary)
- 1 Tensioner Right (Secondary)
- 1 Guide Rail Primary (For Lower Timing Chain)
- 1 Idler Shaft (No Bolt)
- 1 Idler Sprocket (Tooth Count 28/22/22)
- 1 Guide Rail Secondary (Left, Tensioner Rail)
- 1 Guide Rail Secondary (Left, Fixed Guide Rail)
- 1 Guide Rail Secondary (Right, Tensioner Rail)
- 1 Guide Rail Secondary (Right, Fixed Guide Rail)
- 1 Crank Sprocket (Tooth Count 31/21)
- 1 Oil Pump Chain (68 Link - Lower Chain For Pump)
- 1 Tensioner (For Oil Pump Chain)
- 1 Tensioner Primary (Primary)
- 1 Oil Pump Sprocket (Mounts On Pump)



Image: Overview of the complete timing chain kit components.

Safety Information

Working on automotive components requires caution. Please adhere to the following safety guidelines:

- Always wear appropriate personal protective equipment (PPE) including safety glasses and gloves when handling parts or working on the vehicle.
- Ensure the vehicle is properly supported on sturdy jack stands and the battery is disconnected before beginning any work to prevent accidental starting or electrical hazards.
- Refer to a professional service manual for your specific vehicle model for detailed procedures, torque specifications, and any model-specific warnings.
- Engine components can be extremely hot. Allow the engine to cool completely before servicing to prevent burns.
- Handle all parts with care to avoid damage to the components or personal injury.

Vehicle Compatibility

This timing chain kit is compatible with the following 3.6L V6 DOHC (24-Valve) vehicle models:

- For 2011-2015 Chrysler 200 3.6L V6
- For 2011-2014 Chrysler 300 3.6L V6
- For 2011-2015 Chrysler Town & Country 3.6L V6
- For 2011-2014 Dodge Avenger 3.6L V6
- For 2011-2015 Dodge Challenger 3.6L V6
- For 2011-2015 Dodge Charger 3.6L V6
- For 2011-2015 Dodge Durango 3.6L V6
- For 2011-2015 Dodge Grand Caravan 3.6L V6

- For 2011-2015 Dodge Journey 3.6L V6
- For 2011-2014 Jeep Grand Cherokee 3.6L V6
- For 2012-2015 Jeep Wrangler 3.6L V6
- For 2013-2015 RAM 1500 3.6L V6
- For 2011-2014 Volkswagen Routan 3.6L V6



Image: Visual representation of compatible vehicle models.

Installation Guide

Replacing a timing chain is a complex procedure that requires specialized tools and significant automotive knowledge. Professional installation is highly recommended to ensure proper function and safety.
If you choose to proceed with self-installation, follow these general steps. Always consult your vehicle's specific service manual for detailed instructions, precise torque specifications, and any model-specific requirements.

General Installation Steps:

1. You will need to disassemble and reassemble different engine parts.

2. Disconnect the radiator by removing the radiator cap.
3. Use the owner's manual to locate the routing diagram to remove the components of the drive belt.
4. Removing the timing chain, unbolt its cover from the engine block.
5. Install new timing chain and make sure that you align the new chain exactly with the marks on the gears from the old chain.
6. Replace the crankshaft seal, use a punch and a hammer, tapping the new timing cover with the new crankshaft seal.
7. Reassemble the cooling system and the components of the drive belt.

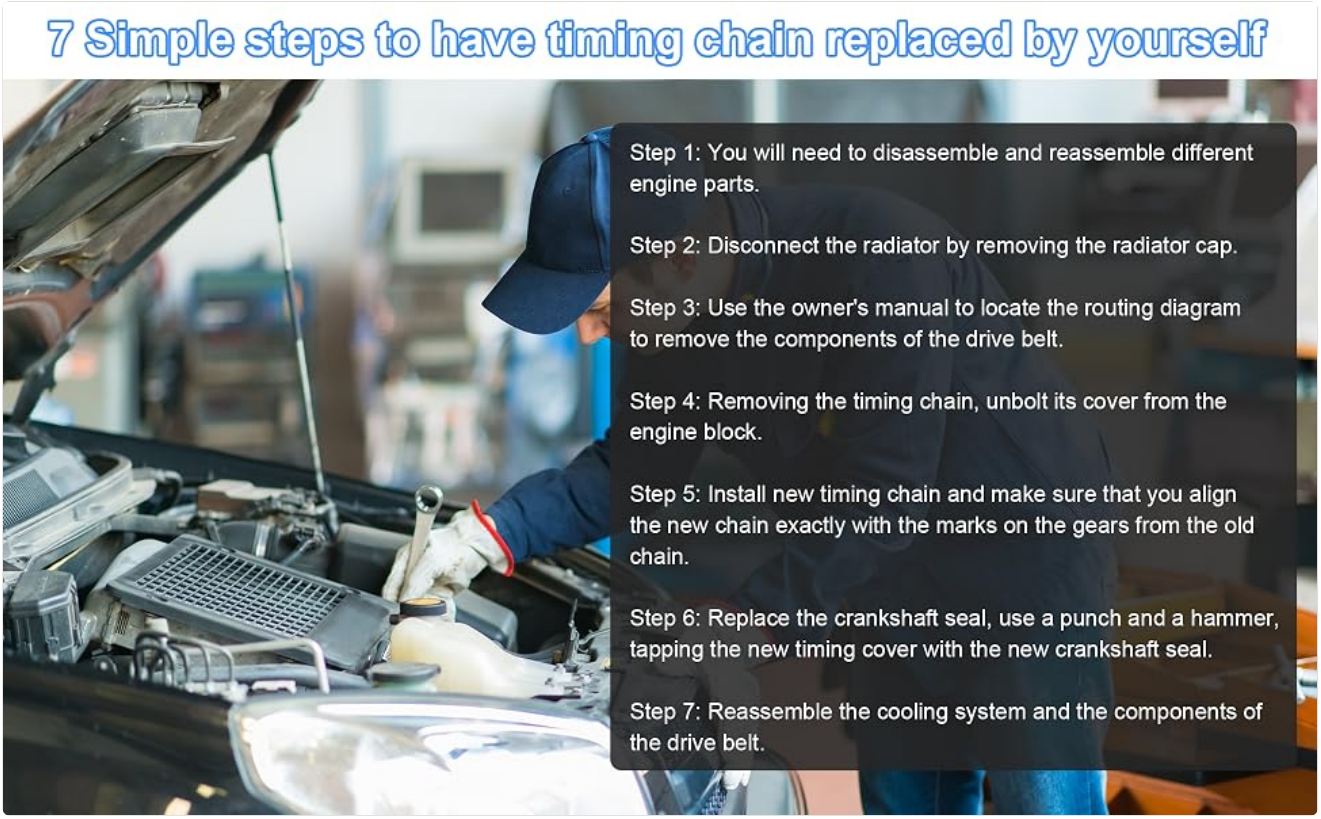


Image: Visual guide to general timing chain replacement steps.

Component Details

The timing chain kit includes several critical components that work in conjunction to maintain engine timing:



Image: Key components of the timing chain kit.

- **Sprockets:** Gears with an accurate design for efficient chain load reduction and precise timing.
- **Timing Chains:** High-quality alloy steel chains with clear markings for correct alignment during installation.
- **Tensioners:** Manufactured with reliable damping behavior to maintain proper chain tension and prevent slack.
- **Guide Rails:** Made of durable material with optimized surface structure to guide the timing chain smoothly and reduce wear.



Image: Assortment of timing chain kit parts.



Image: Different angles of the timing chain kit components.



Image: Detailed view of gears and chain assembly.

Function and Operation

The timing chain is a vital component in your engine, responsible for synchronizing the rotation of the crankshaft and camshafts. This synchronization ensures that the engine's valves open and close at the precise correct times during each cylinder's intake and exhaust strokes. This precise timing is critical for optimal engine performance, fuel efficiency, and emission control. A properly functioning timing chain ensures smooth engine operation and prevents costly internal engine damage.

Maintenance

Proper maintenance is key to extending the life of your timing chain and overall engine health:

- **Regular Oil Changes:** The timing chain operates within the engine's oil system. Regular oil changes with the manufacturer-recommended oil type and viscosity are crucial. Contaminated or low oil levels can accelerate wear on the chain and its components.
- **Listen for Unusual Noises:** Pay attention to any new or unusual noises coming from your engine, especially rattling or ticking sounds, which could indicate timing chain issues.
- **Adhere to Service Intervals:** Consult your vehicle manufacturer's recommended service intervals for timing chain inspection and replacement. While timing chains are designed for long life, they are not maintenance-free and may require attention based on mileage or age.

Troubleshooting

Recognizing the signs of a failing timing chain can prevent further engine damage:

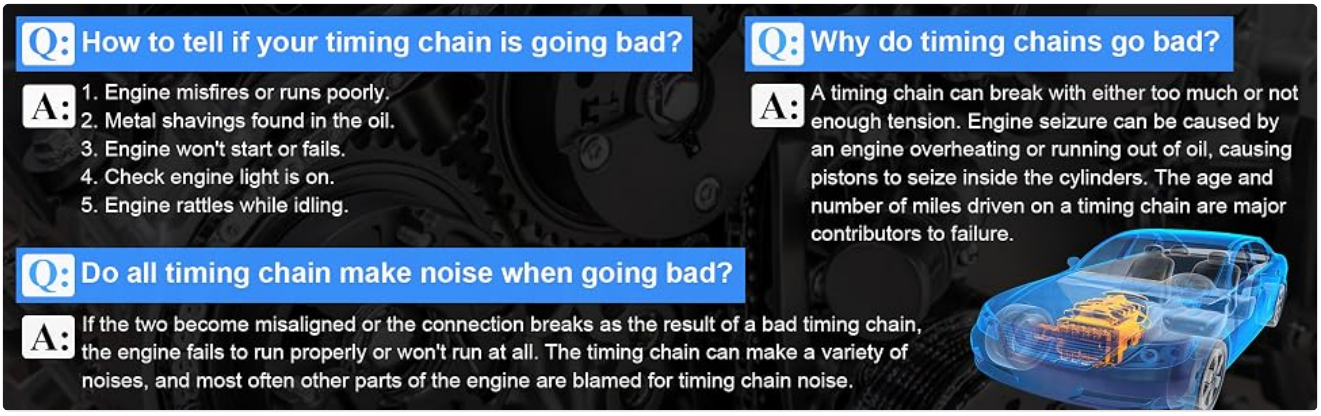


Image: Common questions and answers regarding timing chain issues.

How to tell if your timing chain is going bad?

- Engine misfires or runs poorly.
- Metal shavings found in the oil.
- Engine won't start or fails.
- Check engine light is on.
- Engine rattles while idling.

Why do timing chains go bad?

A timing chain can break with either too much or not enough tension. Engine seizure can be caused by an engine overheating or running out of oil, causing pistons to seize inside the cylinders. The age and number of miles driven on a timing chain are major contributors to failure.

Do all timing chains make noise when going bad?

If the two become misaligned or the connection breaks as the result of a bad timing chain, the engine fails to run properly or won't run at all. The timing chain can make a variety of noises, and most often other parts of the engine are blamed for timing chain noise.

Specifications

Attribute	Value
Manufacturer	SUSUCAR
Brand	SUSUCAR
Model	3.6l timing chain kit
Item Weight	8.53 pounds
Package Dimensions	15 x 8.86 x 4.02 inches
Item model number	3.6l timing chain kit
Exterior	Machined
Manufacturer Part Number	5184352AF-JC
ASIN	B0B81Y9B4J
Date First Available	July 29, 2022

Warranty and Support

Warranty information for this specific product was not provided in the available data. Please refer to the manufacturer's official website or contact their customer service for detailed warranty terms and conditions.
For technical support, product inquiries, or assistance with installation, please contact SUSUCAR customer service through their official channels or the retailer where the product was purchased. Always provide your product model number and purchase details when seeking support.