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› ACROPIX Car Drive Belt Tension Pulley User Manual

ACROPIX fccar240808003156

ACROPIX Car Drive Belt Tension Pulley User Manual

Model: fccar240808003156

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your ACROPIX Car Drive Belt Tension Pulley. This product is a non-OEM replacement part designed to meet the specifications of the original equipment. Please read this manual thoroughly before installation to ensure proper function and safety.



Image 1.1: ACROPIX Car Drive Belt Tension Pulley, a direct replacement component.

2. SAFETY INFORMATION

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when working on vehicle engines.
- Ensure the vehicle is turned off, the engine is cool, and the battery is disconnected before beginning any installation or maintenance work.
- Refer to your vehicle's specific service manual for detailed instructions and torque specifications.
- If you are unsure about any step, seek assistance from a qualified automotive technician.
- Keep all tools and parts away from moving engine components during operation.

3. PRODUCT OVERVIEW

The ACROPIX Car Drive Belt Tension Pulley is a critical component in your vehicle's serpentine belt system. Its primary function is to maintain proper tension on the serpentine belt, preventing slippage and ensuring efficient operation of engine accessories such as the alternator, power steering pump, and air conditioning compressor.

3.1 Key Features

- **Direct Replacement:** Manufactured to original dimensions for a precise fit, requiring no modifications.
- **Durable Construction:** Made from high-quality metal, treated for rust-proof, sturdy, and wear-resistant performance, ensuring a long service life.
- **Smooth Operation:** Designed for smooth activities without lag, contributing to optimal engine performance.



Drive Belt Idler Pulley

guides the serpentine belt and the timing belt on a car engine, to limit the belt slip.



Image 3.1: Illustration of the drive belt idler pulley's role in guiding the serpentine belt and limiting slip.

• Detail



Metal material - the surface is treated, rust-proof, sturdy and wear-resistant, with a long service life.

Image 3.2: Close-up view highlighting the metal construction and surface treatment for durability.

• Details

Good craftsmanship - smooth activities without lag, providing you with a good driving experience.

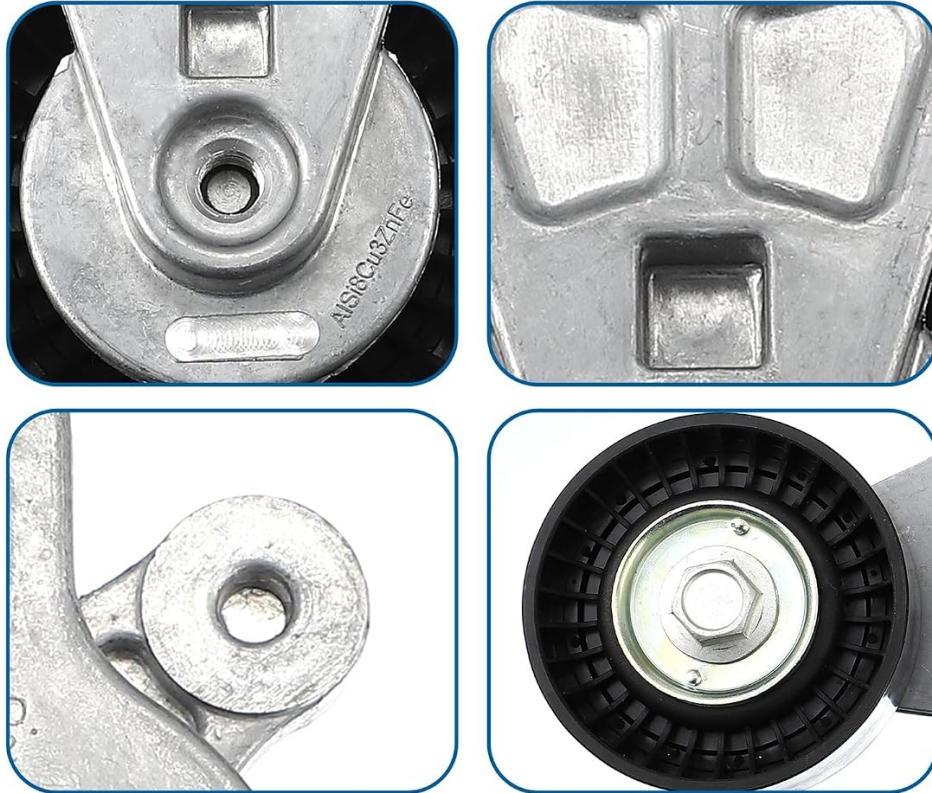


Image 3.3: Detailed views showcasing the craftsmanship and smooth operational components of the tensioner.

4. SPECIFICATIONS

Attribute	Detail
Type	Belt Tensioner
Material	Metal
Condition	Brand New
Fitment Type	Direct Replacement
Item Weight	1.73 pounds
Package Dimensions	7.09 x 4.53 x 3.74 inches
Manufacturer Part Number	fccar240808003156

Attribute	Detail
Position	Inner

• Size



Image 4.1: Dimensional drawing of the belt tensioner, showing key measurements.

5. COMPATIBILITY AND OE NUMBERS

This ACROPIX Car Drive Belt Tension Pulley is designed as a direct replacement for specific vehicle models and OE (Original Equipment) numbers. Please verify your vehicle's compatibility and the OE number before purchase and installation.

5.1 OE Numbers

- BT4Z-6B209-B
- 8T4Z-6B209-A
- 7T4Z-6B209-AA

5.2 Compatible Vehicle Models

- **Mercury Sable:** 2008-2009 (3.5L V6 - Gas)
- **Lincoln MKS:** 2009-2016 (3.5L V6 - Gas, 3.7L V6 - Gas)
- **Lincoln MKT:** 2010-2019 (3.5L V6 - Gas, 3.7L V6 - Gas)
- **Lincoln MKX:** 2007-2010 (3.5L V6 - Gas), 2011-2018 (3.7L V6 - Gas)
- **Lincoln MKZ:** 2007-2012 (3.5L V6 - Gas), 2013-2016 (3.7L V6 - Gas)
- **Ford Edge:** 2007-2010, 2015-2018 (3.5L V6 - Gas), 2011-2014 (3.5L V6 - Gas, 3.7L V6 - Gas)
- **Ford Explorer:** 2011-2019 (3.5L V6 - Gas)
- **Ford Flex:** 2009-2019 (3.5L V6 - Gas)
- **Ford Fusion:** 2010-2012 (3.5L V6 - Gas), 2013 (1.6L L4 - Gas, 2.0L L4 - Gas, 2.5L L4 - Gas), 2014 (1.5L L4 - Gas, 1.6L L4 - Gas, 2.0L L4 - Gas, 2.5L L4 - Gas), 2015-2016 (1.5L L4 - Gas, 2.0L L4 - Gas, 2.5L L4 - Gas)
- **Ford Taurus:** 2008-2014 (3.5L V6 - Gas), 2015-2019 (3.5L V6 - Flex, 3.5L V6 - Gas)
- **Ford Taurus X:** 2008-2009 (3.5L V6 - Gas)

Drive Belt Tension Pulley



**OE Number: BT4Z-6B209-B
8T4Z-6B209-A
7T4Z-6B209-AA**

Please check the fitment table and
OE Number before purchasing.

Image 5.1: Visual representation of a compatible vehicle and the product, along with OE numbers for verification.

6. INSTALLATION (SETUP)

Replacing a belt tensioner requires mechanical aptitude and specific tools. If you are not confident in your ability to perform this installation, it is highly recommended to seek professional assistance from a certified mechanic.

6.1 General Installation Steps (Consult Vehicle Manual for Specifics)

1. **Preparation:** Park the vehicle on a level surface, engage the parking brake, and ensure the engine is cool. Disconnect the negative terminal of the battery.
2. **Access:** Locate the serpentine belt and the existing tensioner. You may need to remove other components (e.g., air intake, engine cover) to gain access.
3. **Relieve Tension:** Using a serpentine belt tool or a suitable wrench, rotate the tensioner to relieve tension on the belt. Carefully remove the serpentine belt from the pulleys.
4. **Remove Old Tensioner:** Unbolt the old tensioner from its mounting point. Note its orientation for correct installation of the new part.
5. **Install New Tensioner:** Position the new ACROPIX belt tensioner and secure it with the appropriate bolts. Tighten to the vehicle manufacturer's specified torque.
6. **Reinstall Belt:** Route the serpentine belt correctly around all pulleys, referring to a diagram if necessary. Use the tensioner tool to create slack and guide the belt onto the final pulley.
7. **Verify:** Double-check that the belt is properly seated on all pulleys and that the tensioner is holding the belt firmly.
8. **Final Steps:** Reinstall any components removed for access. Reconnect the battery. Start the engine and check for proper belt operation and any unusual noises.

Note: For detailed visual guidance, it is recommended to search for and review relevant operation videos specific to your vehicle's make and model.

7. OPERATION

Once installed, the ACROPIX Car Drive Belt Tension Pulley operates automatically as part of your vehicle's engine system. It continuously applies the correct amount of tension to the serpentine belt, ensuring that all belt-driven accessories function efficiently. There are no user-adjustable settings for this component during normal operation.

Proper operation is indicated by a smooth, quiet running serpentine belt without any squealing or slipping sounds, and consistent performance from accessories like the alternator and power steering pump.

8. MAINTENANCE

The belt tensioner is designed for long-term reliability. However, periodic inspection is recommended as part of your vehicle's routine maintenance schedule.

8.1 Inspection Guidelines

- **Visual Check:** Inspect the tensioner for any signs of wear, cracks, rust, or damage to the pulley or housing.
- **Belt Condition:** While inspecting the tensioner, also check the serpentine belt for cracks, fraying, or glazing. A worn belt can put undue stress on the tensioner.
- **Pulley Movement:** With the engine off and cold, gently try to move the tensioner pulley by hand. It should feel firm with minimal play. Excessive wobble or grinding sounds indicate a worn bearing.
- **Tensioner Arm Movement:** Observe the tensioner arm while the engine is running (from a safe distance). It should remain relatively steady. Excessive bouncing or vibration can indicate a failing tensioner.

If any issues are detected during inspection, consider replacing the tensioner to prevent further damage to the serpentine belt system or other engine components.

9. TROUBLESHOOTING

Common symptoms of a failing belt tensioner include:

- **Squealing or Chirping Noise:** Often heard from the engine bay, especially during startup or when accelerating. This indicates belt slippage due to insufficient tension.
- **Belt Wobble or Vibration:** The serpentine belt appears to wobble or vibrate excessively while the engine is running.
- **Loose or Damaged Belt:** A tensioner that is not maintaining proper tension can lead to premature wear or damage to the serpentine belt.
- **Accessory Malfunction:** If the belt slips significantly, accessories like the alternator (leading to battery drain) or power steering pump (leading to stiff steering) may not function correctly.

If you experience any of these symptoms, it is advisable to have your vehicle inspected by a qualified technician to diagnose the issue and replace the tensioner if necessary.

10. WARRANTY AND SUPPORT

For specific warranty information regarding your ACROPIX Car Drive Belt Tension Pulley, please refer to the product packaging or contact the seller directly. ACROPIX is committed to providing quality automotive replacement parts.

For further assistance or inquiries, you may visit the official ACROPIX store or contact their customer support channels. You can find more information and products at the [ACROPIX Store on Amazon](#).