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Chevrolet 12557583

Chevrolet Performance Pilot Bearing, Roller, Steel, GM LS-Series User Manual

Model: 12557583

PRODUCT OVERVIEW

This manual provides essential information for the proper installation, operation, and maintenance of the Chevrolet Performance Pilot Bearing, Roller, Steel, GM LS-Series (Part Number 12557583). This component is designed to support the input shaft of the transmission, ensuring smooth engagement and disengagement of the clutch.



Image: The Chevrolet Performance Pilot Bearing, a roller-type bearing made of steel, designed for GM LS-Series applications. It features a metallic outer race and an inner race with visible roller elements, crucial for supporting the transmission input shaft.

SETUP AND INSTALLATION

Proper installation of the pilot bearing is critical for optimal performance and longevity. It is recommended that installation be performed by a qualified automotive technician.

Required Tools and Materials:

- Pilot bearing installation tool
- Grease (compatible lubricant, e.g., high-temperature bearing grease)
- Clean rags
- Appropriate wrenches and sockets for transmission removal/installation

Installation Steps:

1. Ensure the crankshaft bore is clean and free of debris or rust. Use a clean rag to wipe down the bore.
2. Apply a thin, even coat of compatible grease to the outer diameter of the pilot bearing and the inner surface of the crankshaft bore.
3. Carefully align the pilot bearing with the crankshaft bore.
4. Using a pilot bearing installation tool, gently tap the bearing into the crankshaft until it is fully seated. Ensure the bearing is installed squarely and not cocked.
5. Verify that the bearing is flush with the crankshaft face or recessed to the manufacturer's specification.
6. Remove any excess grease from the crankshaft face.

Caution: Do not use excessive force during installation, as this can damage the bearing or the crankshaft. Incorrect installation can lead to premature bearing failure and transmission issues.

OPERATING CONSIDERATIONS

The pilot bearing operates continuously when the engine is running and the transmission is engaged. Its primary function is to support the transmission input shaft, allowing it to spin independently of the crankshaft when the clutch is disengaged. While the pilot bearing itself does not require direct user operation, its proper function is integral to the smooth operation of the clutch and transmission system. Ensure that the clutch system is correctly adjusted and maintained to prevent undue stress on the pilot bearing.

MAINTENANCE

The Chevrolet Performance Pilot Bearing is a sealed roller bearing and typically does not require routine maintenance after installation. However, its lifespan can be extended by ensuring proper installation and by addressing any issues with the clutch or transmission system promptly.

Recommendations:

- **Clutch System Inspection:** During any clutch service or transmission removal, inspect the pilot bearing for signs of wear, such as excessive play, roughness when rotated, or visible damage.
- **Lubrication:** While the bearing is pre-lubricated, ensure that the crankshaft bore is adequately greased during installation to facilitate smooth seating and provide initial protection.
- **Replacement:** It is highly recommended to replace the pilot bearing whenever the clutch assembly is replaced or the transmission is removed for service, as it is a critical wear item.

TROUBLESHOOTING

Issues related to the pilot bearing often manifest as symptoms affecting clutch engagement or transmission noise. If you experience any of the following, the pilot bearing may be a contributing factor:

Symptom	Possible Cause	Resolution
Squealing or chirping noise when clutch pedal is depressed.	Worn or dry pilot bearing.	Inspect and replace pilot bearing. Ensure proper lubrication during installation.
Difficulty shifting gears, especially into first or reverse.	Pilot bearing seizing or binding, preventing full disengagement of the transmission input shaft.	Inspect and replace pilot bearing. Check for proper clutch adjustment.
Vibration or shudder during clutch engagement.	Damaged or improperly installed pilot bearing.	Inspect and replace pilot bearing. Verify correct installation procedure.

If troubleshooting steps do not resolve the issue, it is recommended to consult a professional automotive technician.

SPECIFICATIONS

Attribute	Detail
Brand	Chevrolet Performance
Part Number / Model Number	12557583

Attribute	Detail
Material	Steel
Bearing Type	Roller Bearing
Compatible Lubricant	Grease
Item Dimensions (L x W x H)	3.05 x 4.4 x 0.6 inches
Item Weight	3.28 ounces (0.21 pounds)
Outside Diameter	1.71 Inches
UPC	099998221993
Country of Origin	United States

WARRANTY AND SUPPORT

For information regarding warranty coverage for your Chevrolet Performance Pilot Bearing (Part Number 12557583), please refer to the official Chevrolet Performance warranty documentation provided with your purchase or visit the official Chevrolet Performance website.

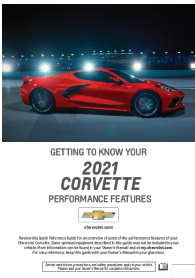
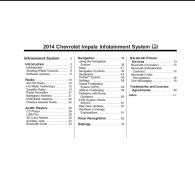
For technical support or further assistance, please contact Chevrolet Performance customer service or an authorized Chevrolet service center. Always provide the part number (12557583) when seeking support.

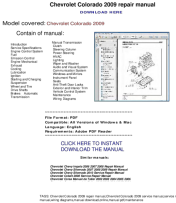

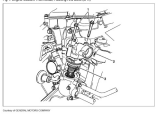
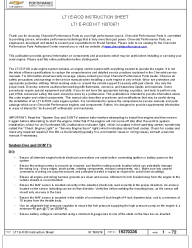
Note: The product is sold by third-party sellers on Amazon. Warranty claims should be directed to Chevrolet Performance or the authorized dealer from whom the product was purchased, not directly to Amazon or the third-party seller unless specified otherwise by the seller's policy.

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This manual is for informational purposes only. Always consult a qualified professional for installation and service.

Related Documents - 12557583

	<p>2021 Chevrolet Corvette Performance Features Quick Reference Guide</p> <p>Explore the advanced performance features of the 2021 Chevrolet Corvette, including instrument panel customization, driver modes, transmission options, and driver assistance systems.</p>
	<p>2014 Chevrolet Impala Infotainment System Guide</p> <p>Discover the features of the 2014 Chevrolet Impala's infotainment system, including audio, navigation, Bluetooth, and voice commands. Learn to maximize your driving experience with this comprehensive guide.</p>

 <p>Chevrolet Colorado 2009 repair manual Model covered: Chevrolet Colorado 2009 Content of manual: - Engine - Transmission - Drivetrain - Suspension - Brakes - Steering - Electrical - Body - Paint - Wheels and tires - Maintenance - Troubleshooting - Index</p> <p>Click HERE TO GET THE MANUAL CLICK HERE TO GET THE MANUAL CLICK HERE TO GET THE MANUAL</p>	<p>Chevrolet Colorado 2009 Repair Manual</p> <p>Comprehensive repair manual for the Chevrolet Colorado 2009, covering all major systems including engine, transmission, brakes, suspension, and electrical systems. Provides detailed information for maintenance and repair.</p>
 <p>2015 CHEVROLET MYLINK INFOTAINMENT SYSTEM DETAILS BOOK</p>	<p>2015 Chevrolet Corvette MyLink Infotainment System Details Book</p> <p>A comprehensive guide to the 2015 Chevrolet Corvette's MyLink infotainment system, detailing features such as OnStar 4G LTE Wi-Fi, Performance Data Recorder, Text Message Alerts, Siri Eyes Free, navigation, Bluetooth connectivity, radio functions, USB media playback, and customizable display themes for the reconfigurable cluster.</p>
 <p>PROCEEDINGS 2012 Chevrolet Camaro LS 3.6L Engine Coolant Thermostat Replacement (LFX)</p> <p>Fig. 1 Engine Coolant Thermostat Replacement (LFX)</p> <p>1. Remove the engine coolant thermostat (LFX).</p> <p>2. Install the engine coolant thermostat (LFX).</p> <p>3. Tighten the engine coolant thermostat (LFX).</p>	<p>Engine Coolant Thermostat Replacement (LFX) - 2012 Chevrolet Camaro LS 3.6L</p> <p>Detailed repair instructions for replacing the engine coolant thermostat on a 2012 Chevrolet Camaro LS equipped with the 3.6L engine (LFX). Includes preliminary procedures, component identification, and tightening specifications.</p>
 <p>LT1 E-ROD INSTRUCTION SHEET LT1 E-ROD INSTRUCTION SHEET</p> <p>1. Remove the engine coolant thermostat (LFX).</p> <p>2. Install the engine coolant thermostat (LFX).</p> <p>3. Tighten the engine coolant thermostat (LFX).</p>	<p>Chevrolet LT1 E-ROD Crate Engine Installation Instructions</p> <p>Comprehensive guide for installing and servicing the Chevrolet Performance LT1 E-ROD crate engine system, detailing components, procedures, system operations, and technical specifications.</p>