Bulletin No.: PIP5869B
Published date: 12/5/2023

Preliminary Information

PIP5869B 5.5L RPO (LT6) Engine Exchange (GMNA Only)

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Corvette	2023 - 2024	All	All	5.5L LT6	All

Involved Region or Country	North America
Condition	Engine Exchange
Cause	New Product Monitoring

Note: If the engine is exhibiting a ticking type noise from valvetrain area, please review the latest version of 23-NA-115 before proceeding with this PI.

This PI will cover the engine exchange program only for the 2023 model listed above.

Additional PIs will be published for each engine or component as they are introduced.

During the launch of the 2023 model year, the following engine will be under an exchange program:

5.5L (LT6)

Product teams continually seek valuable information for engineering improvements.

To assist in this effort, an engine exchange program will be used for the listed engine and vehicles.

Any repairs involving engine components not identified in the table below, engine noise concerns, oil consumption, or related symptoms may require an engine exchange.

Important: Engine block and internal components along with any component in which a cylinder head has to be removed to perform the repair will require an engine exchange.

Please note that this list is subject to change as the program progresses.

You will be notified by the PQC consultant if additional items are considered serviceable on a particular engine.

The 2023 model year engine exchange program will be administered by the GM Product Quality Center (PQC).

Dealerships are required to contact the PQC, not GM Technical Assistance (TAC), to request an exchange.

Prior to contacting the PQC, please make sure to complete the "OEM Engine Exchange" template in this PI.

Use of the templates will minimize the time spent in contact with the PQC and to avoid the need of a second interaction.

Guidelines for honoring exchange requests under this program are being strictly enforced.

The PQC may refer the dealer technician to TAC if additional diagnosis is required.

TAC will be available for product inquiries that do not require assembly replacement.

Please have the part number available prior to contacting TAC/PQC.

U.S. Dealers:

Please contact the Product Quality Center (PQC) by opening a new case via Dealer Case Management (DCM) From the DCM home page, click on "New PQC Case" found on the Technical Assistance tab.

Canadian Dealers:

If your diagnosis leads to a possible part replacement, please contact the PQC by email at PQC@gm.com or by calling 1-866-654-7654 to receive the PQC -Parts Restriction Template then, return the completed Parts Restriction Questions for engineering review.

Components that may be removed and serviced without exchange are identified by an "X" in the appropriate column of the table below.

Any repairs involving engine components not identified in the table below, engine noise concerns, oil consumption, or related symptoms may require an engine exchange.

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Please note that this list is subject to change as the program progresses.

You will be notified by the PQC consultant if additional items are considered serviceable on a particular engine.

Serviceable Components	5.5LL (LT6)
AC Compressor and Hardware	X
Camshaft Actuator Magnet and Seals	X
Camshaft Actuators	X
Camshaft Cover and Gaskets	X
Camshaft Position Sensor and Seals	X
Camshaft Solenoid Valves	X
Crankshaft Balancer	X
Crankshaft Position Sensor and Seal	X
Drive Belt Tensioners	X
Engine Coolant Sensor	X
Engine Front Cover and Gaskets	X
Engine Mounts	X
Engine Oil Cooler	X
Engine Oil Cooler Gasket to LCC	X
Engine Oil Cooler Gasket to Oil Pump	X
Engine Oil Cooler Hoses	X
Engine Oil Drain Plugs	X

Engine Oil Fill Cap and Seal	X
Engine Oil Filter Element, Filter Cap and Seal	X
Engine Oil Level Indicator and Seal	X
Engine Oil Pressure Sensor	X
Engine Oil Tank	X
Engine Oil Tank Brackets	X
Engine Oil Temp Sensor	X
Engine Oil Transfer Tubes and Seals	X
Engine Wiring Harnesses and Brackets	X
Exhaust Manifold and Gaskets	X
Flywheel and Bolts	X
Front and Rear Crank Seals	X
Fuel Injector Hardware and Seals	X
Fuel Injector Wiring Harness	X
Fuel Injectors	X
Fuel Pump Insulator	X
Fuel Pump Seal	X
Fuel Pump Valve Lifter Followers	X
Fuel Pump(s)	X
Fuel Rail Assemblies	X
Fuel Rail Sensor	X
Fuel Rail Shields	X
Gasket - ENG FRT CVR	X
Generator	X
High Pressure Fuel Pipe(s)	X
Idler Pulleys	X
Ignition Coil Shields	X
Ignition Coils	X
Intake manifold and Seals	X
Knock Sensors	X
Low Pressure Fuel Pipe	X
MAP Sensor	X
Oil Flow Control Valve/Solenoid	X
Oil Gallery Plugs (Block), Coolant/Coe Plugs (Threaded Tapered)	X
Oil Gallery Plugs (Head)	X
Oil Separator and Tubes	X
PCV Tubes	X
Purge Valve and Tubes	X
Spark Plugs	X
Starter, Cables and Brackets	X
Thermostat	X
Throttle Body, Seal and Bracket	X
Transmission Locating Pins	X
Water Inlet and Seal	X
Water Pump Cartridge and Gaskets	X

Note: The above service parts list of components will be requested through the normal GM Parts return process for engineering evaluation for cause, through the WPC parts return process.

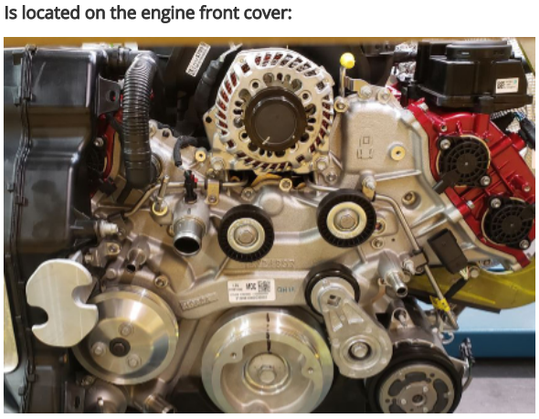
Important: Engine repairs or failures that are caused by components external to the engine do NOT fall under the exchange program. For example, if an engine failure is caused by incorrectly installed engine coolant lines, the engine assembly (or parts required to complete a repair) must be obtained from General Motors Customer Care and Aftersales (GMCC&A) through the normal parts ordering process.

The exchange program is created as a way to correct internal concerns and to take what is learned and find a way to eliminate these concerns. External components causing a failure do not provide any useful information in improving an engine. The engine received from GMCC&A through the normal parts ordering process will be a new service engine.

Engine Broadcast Code Location:

5.5L (LT6)

Is located on the engine front cover:



A thorough diagnosis must be performed on the condition in order to prevent unnecessary component replacements.
Contact the Product Quality Center (PQC) to verify the proper diagnosis has been performed.

Upon review of the diagnosis, the PQC will establish a case reference number and make arrangements for shipping an exchange unit to your dealership.

The replaced engine must be returned to the Warranty Parts Center (WPC)

DO NOT SHIP AN ENGINE TO THE (WPC) WITHOUT AN OFFICIAL WPC REQUEST

Important: Failure to return the replaced engine by the due date will result in the dealership being debited the entire warranty claim (parts and labor). The removed unit must be returned complete in the original exchange shipping container. For effective engineering analysis, please do not remove any components. Dress items on the removed unit must remain the same as the replacement engine (e.g., exhaust manifolds, throttle body, etc.). Dealerships returning engines/components that have been even partially disassembled will be judged as violating this procedure and, as such, will be billed for all materials furnished.

Notice: The exchange unit will be shipped with a quantity of oil; check oil level before starting the engine. Low oil level could result in internal engine damage.

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WPC Request:

The Warranty Parts Center (WPC) will fax a Special Part Request to your dealership requesting the return of the removed engine.

DO NOT wait for the warranty claim to be paid before returning the removed engine.

The Special Part Request will provide a request number

This request number must be written on the outside of the return container using a permanent marker.

Failure to write the request number on the return container may delay the processing of your return.

If you do not receive the WPC Special Part Request, contact Julie Cumo at 248-371-9939 (for French call PQC 1-866-654-7654) to obtain the proper paperwork in order to return the removed engine. Failure to return the engine may result in a debit.

Shipping Preparation:

1. Remove the engine assembly/component as outlined in the applicable Service Manual.

2. Drain all fluids from the removed engine.

3. Retorque any fasteners that were loosened or removed to the original torque specification.

4. Remove any plastic shipping plugs and covers from the exchange unit and install them on the removed unit.

5. If the concerned engine leaks, mark the area directly on the engine with a permanent marker.

6. Write the PQC case reference number on the repair order form.

7. Write the PQC case reference number directly on the component in a visible location.

8. Insert a copy of the WPC Special Part Request, repair order with technician comments, and the completed OEM Engine Exchange Worksheet (template in this bulletin) into a plastic bag and securely fasten to the engine.

9. Place the removed engine into the original shipping container.

Shipping Instructions:

1. Write the WPC request number and the PQC case reference number on the outside of the container with a permanent marker.

2. U.S. Dealers - Please go to www.gmwpc.com, click on the UPS emblem, enter your BAC and select "dealer inquires." Select "available forms" located on the left side of the screen in blue,

then select "Central Transport BOL." A partially complete BOL will appear. Please print this Central Transport BOL and fill out "from" section with your dealer information and complete the description fields.

Canadian Dealers - Refer to the latest version of Corporate Bulletin Number 99-00-89-019 for detailed shipping information.

3. Contact the specified carrier to arrange for pick-up of the removed engine. If lift gate service is necessary, please request it at the time of arranging pick-up service.

4. Have the driver sign the bill of lading. Retain a copy of the signed bill of lading. Attach your copy to the original repair order. This will be your proof of returning the removed engine.

5. Ship all return exchanges/components Third Party Freight Collect with appropriate paperwork to:

GM Warranty Parts Center

45 Northpointe Drive

Orion, MI 48359

OEM Engine Exchange Worksheet

Contact's First and Last Name/Position:

Technician's Direct Phone:

Parts Manager's name:

Dealership's Shipping Address:

Q1: Customer Concern:

Q2: Has the vehicle been modified with non-production accessories?

Q3: Describe the failure of the engine:

Q4: Broadcast Code:

(The broadcast code is a 3-digit code found on the front engine cover / engine block below the intake manifold; see graphic in PIP5869 fro details)

Q5: Engine Serial Number:

[Broadcast code and serial number are located on the same label.]

Q6: Does the vehicle have any DTCs in the ECM/TCM/BCM?

Q7: Are any DTC's present? List codes and perform necessary diagnosis

- If no, indicate why diagnostics were not completed for these codes.

Q8: Are there any leaks (Y/N)

- If no, continue to next question

- If yes,
- What type of leak?
- Location of the leak?

Q9: Are there any Noises (Y/N)

- If no, continue to next question
- If yes, complete the following

- What kind of noise?
- Location and frequency of the noise?
- When does is occur?
- How long does it last?

Q10: Any Lubrication Concerns (Y/N)

If no, continue to next question

If yes, complete the following

- Oil level when vehicle arrived:
- Last oil change (if applicable):
- Oil pressure readings:
- Results of oil consumption test:
- Was the oil contaminated?
- If yes, what type of contamination?

Q11: **Is the vehicle being used for track purposes?** (Y/N)

If no, continue to next question

If yes, is there **documentation that 5w50 DexosR oil was being used.**

Q12: Any Performance Concerns (Y/N)

If no, continue to next question

If yes, List

- Low power?
- Misfire?
- Detonation?
- Blue smoke?
- White smoke?
- Will vehicle crank?
- Vibration?

Q13: Did the engine show evidence of:

- Overheating?
- Coolant consumption?
- Coolant contamination?
- Low compression?

Please provide the readings:

Parts Information

For vehicles repaired under warranty, use:

Description	Part Number	Quantity
Engine (LT6)	12725608 or 12729757	1

Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
4067490	Engine Replacement	Use Published Labor Operation Time
Add	Administrative Allowance	0.2 HR.
For engine exchange only: a $400.00 misc. net allowance for the engine can be claimed in the warranty transaction		

Version History

Version	3
Modified	09/13/2022 - Created on. 05/04/2023 - Update recommendations / instructions 12/04/2023 - Update model years and part numbers

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