



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** 3.0 Twin TurboCharged Engine Exchange Program

**Models:** 2016–2017 Cadillac CT6

Equipped with a 3.0L Twin Turbo Charged Engine (Vin code 6 - RPO Code LGW)

This PI will cover the engine exchange program only for the 2016 models listed above.

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

**Note:** All HFV6 engines are now required to have calibrations verified per TSB 09–06–04–026L

During the first six months launch of the 2016 model year, the following engine(s) will be under an exchange program:

**Note:** This engine exchange will run until 12/31/2016

- 3.0L LGW Twin Turbo Gen 2 High Feature V6

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.

The 2016 model year engine exchange program will be administered by the GM Product Quality Center (PQC).

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

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

Use of the templates will minimize the time spent on the telephone and avoid the need of a second call to the PQC.

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.

Division	PQC Telephone Number
US Cars and Trucks	1-866-654-7654
Canada -- English and French	

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.

**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.

Serviceable Components	3.0 (LGW)
Accessory Drive	X

A/C Compressor	X
Brackets	X
Camshaft Cover	X
Water Manifold	x
Water Manifold Coolant Hoses	x
Manifold Absolute Pressure Sensor (MAP)	x
Intake Air Temperature & Pressure Sensor	x
Throttle Actuator Wire Assembly	x
(EVAP) Emission Canister Purge Tube Assembly	x
Cover Dowels, Seals and Insulators	x
Throttle Body Assembly	x
Lower Intake Manifold	x
Cooling System	x
Coolant Pump	X
Coolant Feed Pipe	x
Coolant Feed Hose	x
Bleed Air Pipe	x
Thermostat Housing	x
Thermostat	x
Water Outlet	x
Crankshaft Balancer	x
Engine Control Module	x
Engine Cover / Beauty Cover	x
Engine Wiring Harness	x
Flywheel / Flex Plate	x
Fuel System	x
Injectors	x

Injector Wiring Harness	x
Rail Assembly w / Injectors	x
Rail Assembly w/o Injectors	x
Rail Pressure Sensor	x
High Pressure Fuel Pump	x
Fuel Feed Pipe	x
Fuel Feed Intermediate Pipe	x
Ignition System	x
Coils	x
Spark Plugs	x
Oil	x
Oil Fill Cap	x
Oil Filter	x
Oil Filter Adapter	x
Oil Cooler	x
Oil Pressure Switch	x
Oil Level Indicator (Dipstick)	x
Upper Oil Pan	x
Lower Oil Pan	x
Oil Level Switch	x
PCV System	x
Foul Air Pipes	x
Fresh Air Pipes	x
PCV Tube fittings	x
PCV Check Valves	x
Sensors	x
Knock Sensors	x

Crankshaft Sensor	x
Crank Sensor Heat Shield	x
Mass Air Flow Sensors	x
Oxygen Sensors	x
Starter Motor and Solenoid	x
Coolant Feed Pipe	x
Coolant Return Pipe	x
Heat Shield	x
Air Inlet Adapter	x
Oil Feed Pipe	x
Oil Return Pipe	x

**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

### 3.0 (LGW) Generation 2

EUN Label



Front Cover Left Bank



Right Side Below Crank Position Sensor

As shown in the above photos, the engine broadcast code can be found on the front engine timing chain cover beneath the bank 2 exhaust camshaft location or the bank 1 location just beneath the crankshaft sensor.

## Procedures

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.

## 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.
10. Contact Julie Cumo at the Warranty Parts Center to arrange expedited pick-up of the unit at – (248) 371-9939

## Shipping Instructions:

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.

**Important:** Applicable miscellaneous items such as engine oil and coolant should be added to the part allowance amount and claimed in the Parts Cost column and not included in the Net Amount (DMN) column of the warranty claim.

Your cooperation is greatly appreciated. Prompt return of the original engine will increase the effectiveness of this program. If you have any questions regarding the exchange program administrative procedures, please contact the Product Quality Center.

## OEM Engine Exchange Worksheet

Caller's Name/Position:

Parts Manager name:

Technician Direct Phone:

Dealership's Fax Number:

Parts Dept fax number:

Customer Concern:

Has dealer completed the "OEM Engine Exchange" template in bulletin and reviewed Serviceable Components?

(If no, dealer MUST complete Bulletin and call back)

Has the vehicle been modified with non-production accessories?

What type of service is the vehicle being used in (police, taxi, towing, personal, etc.)?

Describe the failure of the engine:

Broadcast Code:

Engine Serial Number:

Replacement Cost = \$

Requested Labor Time:

Leaks (if applicable)

What type of leak?

Where is the leak located?

Noise (if applicable) Please record a sound file.

What kind:

Where is it:

Frequency of noise:

When does it occur:

How long does it last:

At what temperature does it occur:

Lubrication

Oil level when vehicle arrived

Last Oil Change (if applicable)

Oil pressure readings:

Results of oil consumption test:

Oil contamination?

Performance Concern (if applicable)

Low power?

Misfire?

Detonation?

Blue smoke?

White smoke?

Will not crank?

Vibration?

Did the engine show evidence of:

Overheating?

DTCs in the ECM/TCM/BCM? \*\*\*Note: GDS must be launched from TIS to make sure all the data is captured and can be retrieved.

Coolant consumption?

Coolant contamination?

Low compression?

Please provide the readings:

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time	Parts Allowance
4067490*	Engine Replacement	Use Published Labor Operation Time	\$400.00
Add	Administrative Allowance	0.2 hr	
*Use published labor operation time plus the administrative allowance indicated above.			

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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