



Ferrari North America

Technical Information

Date: July 2016
Bulletin #: 2328
Campaign #:
Supersedes:
Section: 3

Model Type: California T
Model Year: All
Subject: Replacing Gearbox speed sensor – Level 3

- Applicable ONLY for authorized service centers -

Please find attached the **Level 3** procedure for replacing the **DCT gearbox speed sensor** for **Ferrari CaliforniaT** vehicles.

▪ **Protocol for Managing Repairs on a DCT Gearbox received from another Dealer**

A) You will receive the DCT gearbox from the Dealer (dealer NOT authorized to perform Level 3 operations) accompanied by the relevant supporting technical documentation (“DCT Gearbox Pre-Diagnosis Form”, provided in Technical Information **2327** and a copy of which is included from page **6** to **8** of this document).

B) After verification of the information received in the “DCT Gearbox Pre-Diagnosis Form”, the relevant kit necessary may be ordered from our Spare Parts Department, subject to prior authorization from SAT.

C) After completing the repair work, you will be authorized to issue an invoice to the dealer for reimbursement of the work done, structured as follows:

- Labor cost according to ST Schedule in relation to vehicle model;
- Spare parts costs relative to kits ordered (net cost only).

Note: Any applicable transport costs must not be sustained by you.

Replaced parts must be kept for at least 6 months, so that they may be returned if requested, or authorized for scrapping by SAT.



Ferrari North America

- Protocol for Managing Repairs on a DCT Gearbox in a vehicle sold and supported by you
 - Prior to any procedure, a ROL must be opened and approved by the FNA Helpdesk
 - The Dealer must complete in full the “DCT Gearbox Pre-Diagnosis Form” on pages 6 to 8 of this document.
 - This form must be sent together with the order request by e-mail to our Spare Parts Department, at the address dealerservices@ferrariusa.com.

Replaced parts must be kept for at least 6 months, so that they may be returned if requested or authorized for scrapping by SAT.

- IMPORTANT -

The Authorized Service Center must complete the repair work on the DCT gearbox within three working days of receiving the gearbox.

- IMPORTANT -

Before starting any repair, you are required to complete in full the “DCT Gearbox Pre-Diagnosis Form” on page 6 to 8 of this document, and attach it to the ROL
In the event of a gearbox received from another dealer, print the aforementioned document and attach it to the return shipping documentation of the gearbox itself.

- IMPORTANT -

The S.T. Schedule for the model in question includes a specific table, available from the July 2016 update to the Technical Documentation, indicating the corresponding operation codes for the procedures performed, which are necessary to request reimbursement under warranty.



Ferrari North America

In addition to the tools and equipment already specified for Level 1 and Level 2 procedures, the following tools and equipment are necessary to perform this procedure:

- Extractor cup for 7th gear wheel needle bearing cage **Part No. 95978627 (AV 8627)**;
- Extractor cup for 1st, 2nd and Reverse gear wheel needle bearing cage **Part No. 95978628 (AV 8628)**;
- Punch for extractor cup for 1st, 2nd and Reverse gear wheel needle bearing cage **Part No. 95978630 (AV 8630)**;
- Punch for extractor cup for 7th gear wheel needle bearing cage **Part No. 95978816 (AV 8816)**;
- Conical guide tip for installing synchroniser rod in oil seal **Part No. 95978817 (AV 8817)**;
- Cone for gear set housing assembly rods **Part No. 95978820 (AV 8820)**;
- Park Lock locking tool **Part No. 95978823 (AV 8823)**;
- Reverse shaft height measuring tool **Part No. 95978824 (AV 8824)**.

The part to be installed is:

- STEP 3 SPEED SENSOR KIT _ CaliforniaT **Part No. 70003853 Q.ty 1**

This spare part number may be ordered **for vehicles** with a valid manufacturer's warranty or for vehicles for which an extended warranty has been purchased, **ONLY after opening an ROL (Red On Line) and receiving authorization from the Technical Service Department (relevant ABM).**

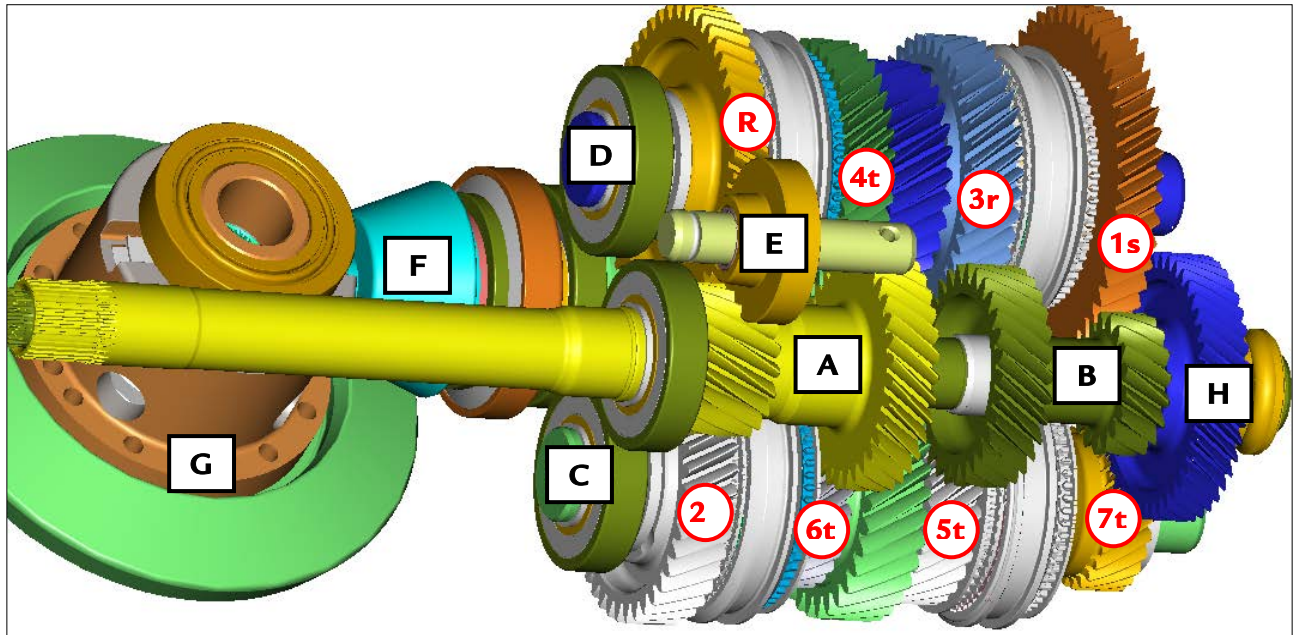
- IMPORTANT -

The Level 3 operation may only be performed by technicians at Authorized Ferrari Dealers that have completed the “Level 3 DCT Gearbox” course.

Dealers still without authorization must send gearboxes for repair to the geographically closest Authorized Service Center.



GEARBOX GEARSET OVERVIEW



- A. Even gear primary shaft
- B. Odd gear primary shaft
- C. Secondary shaft, 2nd-6th-5th-7th gear
- D. Secondary shaft, R-4th-3rd-1st gear
- E. Reverse idler gear
- F. Output pinion shaft
- G. Differential
- H. Primary 7th speed gear



Ferrari North America

[Gearbox speed sensor replacement](#)

For the detailed operating procedure, see the last Technical Information on this topic, referring to models prior to the California T.

Thank you for your co-operation.



DCT Gearbox Pre-Diagnosis Form

Page 01 of 03

Model	Updated on
	February 2016

VEHICLE FILE	
Date:	Chassis number:
Model:	Dealer:
Market:	Vehicle Km/mi:
Gearbox No.:	ROL No. (if available):
Warranty start date:	Warranty end date:
Prior procedures on DCT gearbox (date and type of procedure):	
DIAGNOSTIC FILE	
Provide description of oil leakage found (attach photos), specifying number of leaks, in reference to the drawings from page 2 to 4 of Technical Information 2149:	
List any DTC errors in NCR (in reference to the list from page 7 to 15 of Technical Information 2149):	
<u>In the event of NOISE from gearbox/differential, specify:</u>	
Conditions in which noise occurs:	
Vehicle speed:	
Gear selected:	N 1st 2nd 3rd 4th 5th 6th 7th R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
During gear shift?	YES NO <input type="checkbox"/> <input type="checkbox"/>
If noise occurs during gear shifting, specify:	Upshifts <input type="checkbox"/> Downshifts <input type="checkbox"/> Automatic Manual Performance mode <input type="checkbox"/> mode <input type="checkbox"/> mode <input type="checkbox"/>



DCT Gearbox Pre-Diagnosis Form

Page 02 of 03

Model	Updated on
	February 2016

If noise occurs with gear engaged, specify when:	Under acceleration <input type="checkbox"/>	When lifting off throttle <input type="checkbox"/>	Constant throttle (cruise) <input type="checkbox"/>
	Driving straight <input type="checkbox"/>	Turning right <input type="checkbox"/>	Turning left <input type="checkbox"/>
Noise is heard when:	Negotiating traffic circle <input type="checkbox"/>	Negotiating tight bend <input type="checkbox"/>	Negotiating wide bend <input type="checkbox"/>
	Whistle <input type="checkbox"/>	Rumble <input type="checkbox"/>	Gear noise <input type="checkbox"/>
Describe the type of noise heard:	Differential bevel gear <input type="checkbox"/>	Vibration <input type="checkbox"/>	Clunking <input type="checkbox"/>
	Check the levels of the clutch hydraulic oil system (ATF) and the gearbox gear oil system (GL)		
Oil level (ATF)	Too high <input type="checkbox"/>	Too low <input type="checkbox"/>	OK <input type="checkbox"/>
Oil level (GL)	Too high <input type="checkbox"/>	Too low <input type="checkbox"/>	OK <input type="checkbox"/>
Is metal debris found on plug?			
JOB FILE			
Procedure performed (from operation list on page 1):			
Kit Part Nos. ordered:			



DCT Gearbox Pre-Diagnosis Form

Page 03 of 03

Model	Updated on
Ferrari <i>California</i> T	February 2016

Job performed on:	
<u>CCP</u>	<u>SAP</u>
Identification No. of old CCP:	Identification No. of old SAP:
Identification No. of new CCP:	Identification No. of new SAP:
Any faults noted during repair procedure:	

Task performed by (Dealer):

Technical Manager:

First name _____
(Print)

Surname _____
(Print)

Company stamp

Full signature