



Ferrari North America

Technical Information

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Reminders

*You can contact the helpdesk at technicalsupport_fna@ferrari.com

Tech info on ROL

When submitting an ROL please remember to add a phone number where the Helpdesk can reach the technician directly (Not the dealership Phone #). In addition, the name of the technician performing the repairs should be listed in the “Diagnoser Name and Last Name” section of the ROL. If the technician’s name cannot be found, post the first and last name of the technician in the “First Level Diagnosis” section along with the first level diagnosis. Always put your initials at the end of every ROL response so it is clear who the Help desk is in contact with.

Challenge Code Password Inquiries

When contacting the Helpdesk for challenge codes, be sure to include the following information:

- Model
- VIN
- Challenge code
- Name of cycle to be performed.

Getrag Marriage Inquiries

To receive marriage files for Getrag gearboxes, email the helpdesk and include the vehicle VIN, ROL number, and a Picture of the gearbox 10-digit serial number.

New Engine Tools

Please be advised that there are new tools available for turbo engine overhauling. The tools include brackets, a support, cam pins, crank block, TDC checker, and a seal installer.

Refer to Bulletin 2444 for more details.



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Rear View Mirror Tool

As per campaign 452, there is a special tool required to remove the rear view mirror. If you need this tool, email technical support with your ABM and parts department in copy. Refer to [Bulletin 2437](#) for more information.

Electrical Issues & Diagnosis

When diagnosing potential electrical issues, be sure to check Voltage (V), ground, resistance (Ω), pin drag, and harness condition. Always record the values measured and if an ROL is open for the vehicle be sure to include that information in a clear and concise way.

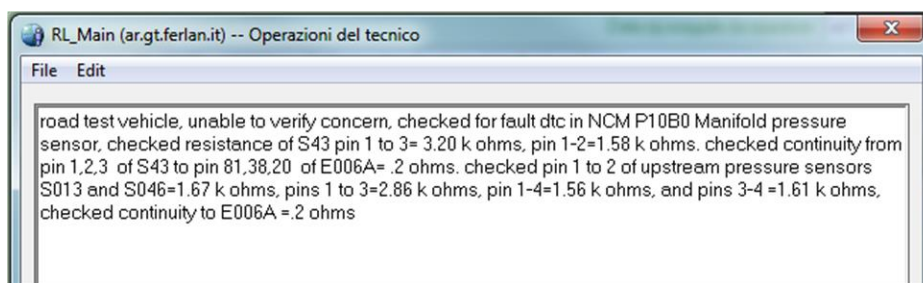


Figure 1: An Example of a Proper first Level Electrical Diagnosis

Locating Technical Information and Bulletins

All technical information, bulletins, references, tech tips, and helpdesk newsletters can be accessed in NewModis. If you are having any issues with your MODIS profile, immediately open an ICT ticket. We recommend using Chrome as your web browser when using Modis.

References, Tech-tips, NIT SW, & Newsletter

Modis > Aftersales Services > FNA-HD Downloads

Bulletins

Modis > Communications > Bulletins



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Technical Documents

Modis > Documents – After Sales > FNA Bulletins Archive

** (FNA Bulletins Archive are all bulletins up to Bulletin 2312 of Nov 2015) **

Older Campaigns and Recalls

Modis > External Applications> FNA Policy Aftersales>Campaigns and Bulletins

Pre-Diagnosis Checks

When receiving a vehicle in the workshop there are several checks that must be performed before traditional diagnosis. These checks may reduce diagnosis and repair time.

1. **Verify complaint** – When the vehicle is received, the customer complaint needs to be confirmed. If the customer complaint cannot be confirmed, communicate with the customer for a better understanding on the conditions in which the symptom occurred. If the vehicle is being used improperly, please educate the customer on proper use.
2. **Check vehicle history** – Always check the repair and service history of a vehicle when it arrives at your workshop. If a previous repair is found relating to the current issue; it may be fruitful to investigate the repair performed before starting your diagnosis.
3. **Search for bulletins** – It is a good habit to look for technical information or bulletins. Time spent diagnosing a “unique” issue may be saved with a quick bulletin search.



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Submitting Component Pictures

RHT Polystyrene Pictures

When encountering retractable hard top (RHT) issues, follow the instructions in bulletin 2407. Fill out the checklist at the end of the bulletin and take pictures as requesting, including the polystyrene components shown. When attaching pictures to a ROL be sure to label them appropriately. An example of the polystyrene can be found in Figure 2.



Figure 2 : Polystyrene location and damage

Interior Component Pictures

For interior pieces that are broken, damaged, defective, or missing parts; take pictures of the components as received from the customer. If a repair attempt is made, take pictures after the attempt even if the repair was not sufficient.



Figure 3: Interior Component Pictures Properly Marked



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Exterior Damage/Defect Pictures

Regarding exterior damage and defects, take a close picture with a ruler, and take a picture zoomed out pointing to the issue for reference.



Figure 4: Exterior Issue Far and Close View with a Ruler for Reference

General Pictures & Attachments

All pictures for ROL attachments need to clearly show the affected component/area. Save the photo(s) in JPEG/JPG format and mark the photos with a title description before submitting to avoid having to re-attach photos.

When attaching forms to an ROL be sure to have all forms filled out completely. If there is a repair form used frequently, save the document to your desktop for quick access. If you are unsure if a form is required contact the help desk or attach the form in question just to make sure we have as much information as possible.



Electronic Parking Brake “EPB”

Models such as the Portofino and 812 Superfast are equipped with electronic parking brakes (EPB) which have their own caliper and pads opposed to a drum-style parking brake. When replacing brake discs or parking brake pads, the EPB must be released via the DEIS. The steps can be seen in figure 5. (Picture from 812 Superfast session)

Steps:

ECU List > NPB > Cycles > NPB Static Apply/Release > Apply or Release



Figure 5: EPB Apply or Release Screen for Servicing the Brake System

Once the service or repairs are completed the EPB can be re-activated via the DEIS or by holding parking brake button in the engage position for three seconds. If there is an issue activating the EPB, the initialization cycle should be performed.

**** When the initialization cycle is complete, the parking brake is not active. The parking brake must be activated with the parking brake button in the cockpit, otherwise vehicle may roll! ****

Whenever performing a service or repair be sure to reference the workshop manual. Note that the workshop manual on Modis is the first to receive any updates to Technical documentation, so any updates to procedures would be found there first.



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NIT Diagnosis

When encountering NIT issues concerning front/reverse cameras, sound, or display issues; Be sure to check the components connected to the NIT first.

TFT Display

Vehicles with a TFT radio/camera display in the cluster (488, 812, etc.) have an LVDS cable between the NIT and the display. If there is an issue with the screen display flickering or cutting out, turn the NIT off to see if the speedometer on the right TFT has the same anomaly. Check the cable and connections between the NIT and the display, and perform wiggle tests on both ends. Check the circuits for continuity and the pins for damage. If possible swap the cable with a known good part. If the cable is found to be ok, then continue diagnosis.

Cameras

Front and rear cameras are exterior components and as a result, may be affected by outside influences such as the elements. When checking the cameras be sure to check the harness, pins, connector, and camera housing for any signs of wear, corrosion, or water intrusion. In addition, unplugging and re-plugging the components to confirm the connector is fully secured is a step that is often overlooked.

Sound

For other components such as amplifiers, verify the input voltages and signals first. If there is no sound from the speakers, always check continuity of speaker wires to GND. These checks can be done with a multimeter and/or by connecting a test speaker directly to the NIT output. If swapping with another unit be sure that the part numbers are identical.

General

After completing physical checks of the system wiring, proceed with performing electrical checks. Electrical checks include voltage readings, ground verification, continuity/short diagnosis, and overall CAN system health check. Isolating the circuit in question is a good method of solving any electrical problem. When diagnosing vehicles with issues on the CAN systems, it is important to note **ANY** aftermarket products. There have been several cases where aftermarket equipment disrupted network communication and caused seemingly unrelated problems.



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Diagnostic Sheets

In the Vehicle Technical Documentation there are documents that give detailed information about components and systems called “Diagnostic Sheets”. Diagnostic sheets can be found in the “Functional Wiring Diagram” section of the “Electrical Systems” menu. The Diagnostic Sheet icon has the symbol for PDF as seen in the figure 6.

Functional Diagrams 			
FD00 - Fuel supply system and earths			
Symbol	Code	Description	Assembly No.
	FD0001	Fuel supply distribution	PDF
	FD0002	Earth distribution	PDF
FD01 - C.A.N. network connections			
Symbol	Code	Description	Assembly No.
	FD0101	B CAN network	PDF
	FD0102	C CAN network	PDF
FD02 - External lighting system			
Symbol	Code	Description	Assembly No.
	FD0201	Position/parking lights	PDF
	FD0202	Number plate lights	PDF
	FD0203	Low / High beam lights	PDF
	FD0205	Direction indicators/hazard lights	PDF
	FD0206	Stop lights	PDF
	FD0207	Reverse gear lights	PDF
	FD0209	Rear fog lights	PDF
	FD0210	Side Marker	PDF
FD03 - Internal lighting system			
Symbol	Code	Description	Assembly No.

Figure 6: Function Diagram List with Diagnostic Sheet Option

When the icon is clicked, a PDF will open giving details on the circuit, components, and associated systems. These sheets have pinout information, connector details, and an overview of system operations for that component.

****This feature is not available on all models****