



PERSONAL SERVICE LAB

MASTERS OF CARE

Knock Sensor Moisture Burn-Off Procedure

DATE: JULY 31, 2025

This bulletin provides a corrective procedure for addressing false knock sensor DTCs caused by moisture accumulation. The procedure involves performing a controlled warm-up cycle to burn off the moisture from the sensor area, helping to resolve DTCs such as P0327, P0332, P032C, and P033C without unnecessary sensor replacement.

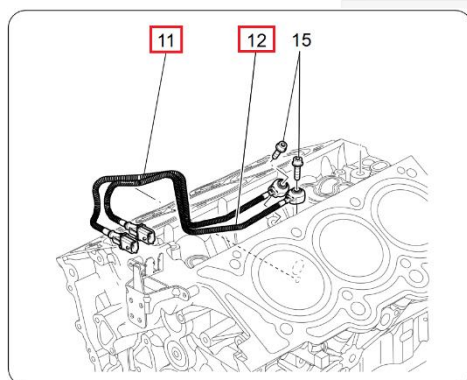
Models Involved: (M156) Quattroporte, (M157) Ghibli, (M161) Levante (V6 & V8 engines) ALL MY

TECHDOCS SECTION: 01.90-2 – Electronic Management: Injection and Engine Phase Control.

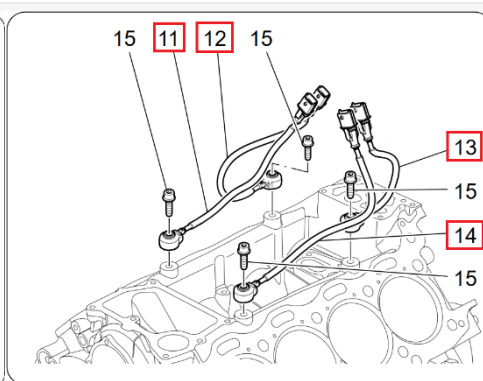
Affected Fault Codes

DTC	Description	V6	V8
P0327	Knock Sensor 1 Circuit Low	X	X
P0332	Knock Sensor 2 Circuit Low	X	X
P032C	Knock Sensor 3 Circuit Low		X
P033C	Knock Sensor 4 Circuit Low		X

COMPONENT DETAILS:



V6 Engine Knock Sensors




V8 Engine Knock Sensors


Conditions

The DTCs listed above may be triggered in cold or humid conditions due to condensation affecting knock sensor operation. Before replacing components, perform the warm-up procedure outlined below.

Knock Sensor Burn-Off Procedure

Perform the following procedure to remove moisture and validate knock sensor functionality:

1. Connect the EVO and save a ECM parameter and DTC report.
 2. From the DTC environmental parameter(Freeze frame) data , note the engine temperature at which the faults were recorded.
 3. Clear all DTCs.
 4. Start the engine and monitor engine temperature via ECM parameters.
 5. Run the heating cycle as follows:
 - With the gear selector in **Park**, accelerate to **3000 RPM** and hold until engine temperature reaches **at least the temperature recorded in Step 2**.
 - ⚠ Do **not** exceed **110°C (230°F)** .
 - Reduce RPM to idle and wait for the **cooling fan to turn off**.
 6. Recheck for DTCs.
 7. If no DTCs are present, perform a **short road test**. If the vehicle operates normally, it can be released to the customer.
 8. If the same DTCs reappear:
 - Save the new ECM/DTC reports.
 - Repeat the entire procedure starting from Step 2.
-  Repeat up to **5 cycles** as needed. If DTCs persist after 5 cycles, proceed with **sensor replacement**. Be sure to document and photograph the sensor, including its identifying marks. (Attach to warranty claim or BOL)

 **Note:** The number of warm-up cycles required may **vary from vehicle to vehicle**, depending on environmental conditions and moisture accumulation. Perform up to **five full cycles** as needed before proceeding with sensor replacement.

Tip: This warm-up cycle can often resolve moisture-related knock sensor faults without the need for part replacement. Ensure proper diagnostics are completed before performing any repair.

Warranty Information

Description	Code
Fault Code	63-NOT TO SPECIFICATIONS
Component Code	1.90.0XX.X (indicate the sensor(s) involved in the DTC(s))
Operation Code <ul style="list-style-type: none"> • Heating cycle 	1.90.124.A (0.50 h)

If the DTCs clear after performing the warm-up procedure and do not return, sensor replacement is not required. Claims submitted for unnecessary sensor replacement may be subject to audit. Always attach pre- and post-scan reports when submitting a warranty claim.

Documentation Requirement:

To be eligible for warranty reimbursement, dealers must provide clear evidence that all diagnostic steps outlined above have been completed. This includes attaching ECM parameter data, DTC reports, and any related documentation to the corresponding **Blue On Line case** (if required by current Blue On Line policies), or directly to the **warranty claim**—in accordance with the procedures described in bulletins **MAS004777**