

XENTRY TIPS

BR213/BR222 E63/S63 Check Engine Light on with Misfire DTC's

Topic number	LI07.61-P-067717
Version	2
Function group	07.61 ME fuel injection/ ignition system
Date	03-02-2018
Validity	BR213 E63 Models BR222 S63 Models
Reason for change	Added "Graphical Readout of Fault Counter" to required attachments upon PTSS case creation. Added 222 to validity
Reason for block	

Complaint:

Check engine light illuminated.

Engine may be running rough.

Possible fault codes:

P030022 - Combustion misfiring was detected

P030185 - Combustion misfiring of cylinder 1 was detected.

P030285 - Combustion misfiring of cylinder 2 was detected.

P030385 - Combustion misfiring of cylinder 3 was detected.

P030485 - Combustion misfiring of cylinder 4 was detected.

P030585 - Combustion misfiring of cylinder 5 was detected.

P030685 - Combustion misfiring of cylinder 6 was detected.

P030785 - Combustion misfiring of cylinder 7 was detected.

P030885 - Combustion misfiring of cylinder 8 was detected.

Cause:

Under Investigation

Attachments	
File	Description
M177LS2 Intake Manifold Leak Area.jpg	M177LS2 Intake Manifold Leak Area

Remedy:

Perform the Following:

1) Smoke test intake/exhaust and check for leaks.

XENTRY TIPS

- Repair as necessary.
 - If no leaks are found, or repair does not remedy complaint proceed to step (2).
- 2) Check driver's side intake manifold for cracks near the rear (see attachments) of the engine.
- If damage is found, order a new manifold for the driver's side bank from EPC and OPEN PTSS case with pictures of damage.
 - If no damage is found, or repair does not remedy complaint proceed to step (3).
- 3) Inspect ignition coils and verify they are PN: A 177 906 95 00.
- Replace as necessary.
 - If all coils are PN A 177 906 95 00 or replacement does not remedy complaint proceed to step (4).
- 4) Measure the following grounds. If any reading is above 0.5 ohm, check grounding locations per attachments.
- ME Connector F, Pin 1 to ground
 - ME Connector F, Pin 2 to ground
 - ME Connector F, Pin 4 to ground
 - ME Connector M, Pin 6 to ground
 - ALL Coils, Pin 1 to ground
 - Rework grounding locations and/or replace ground wires as necessary.
 - If rework/replacement does not remedy complaint, proceed to next steps and open PTSS case.

Open PTSS Case if Above do not Remedy the Complaint

Include in the case:

- 1) MED1775 Control Unit Log
 - 2) Quick Test with Freeze Frame Data
 - 3) Engine Performance Data
 - 4) Injector Performance Data
 - 5) Graphical Readout of Fault Counter from Cold Start
 - 6) Mechanical Compression Test of ALL cylinders
 - 7) Leakdown Test of ALL cylinders
 - 8) Boroscope of MISFIRING Cylinder(s)
- Important: Before performing the boroscope examination, it is imperative that the engine be left to sit until cold and that the piston is at BDC.

Attachments	
File	Description
Ground points LS2_BR213_englx.pdf	M177LS2 BR213 Ground Check
Ground Points LS2_BR222 (002).pdf	M177LS2 BR222 Ground Check

Symptoms
Power generation / Engine management / Engine running / Runs rough/shakes

XENTRY TIPS

Power generation / Engine management / Indicator lamp / Engine diagnosis / lit

Control unit/fault code

Control unit	Fault code	Fault text
N3/10 - Motor electronics 'MED1775' for combustion engine 'M177' (ME)	-	-

Attachments

M177LS2 Intake Manifold Leak Area.jpg:

