

2018 Mercedes Benz E63S AMG 4MATIC Sed (213.089) V8-4.0L Turbo (177.980)

Vehicle > Technical Service Bulletins

ALL MY18+ AMG-63 VEHICLES: ENGINE MAY NOT AUTOMATICALLY RESTART



Mercedes-Benz

- All MY18+ AMG-63 Vehicles: Engine May Not Automatically Restart -

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|-------------------|--|
| Topic number | LI07.61-P-070559 |
| Version | 4 |
| Function group | 07.61 ME fuel injection/ ignition system |
| Date | 01-15-2020 |
| Validity | All MY18+ AMG 63 Vehicles |
| Reason for change | typo |

Complaint

In ECO-stop/start mode, the engine may not automatically restart after shutting down at a complete stop. In such instances the engine requires another cycle of the ignition switch.

Cause

Individualized examination to include further information and analysis is needed. Complaint condition could be due to a variety of causes.

Remedy

Generate a PTSS case and escalate it immediately with the following:

- Control unit log of ME, VGS, PTCU, ESP, and F-Sam
- Transmission EEPROM
- Injector performance data
- Ring memory of ECO function
- Midtronics test from battery
- Results of checking all ground points and the START CIRCUIT/positive side terminal to starter with Voltage drop readings as outlined in attachment "Initial Electrical Check"
- Results after performing a road test to duplicate the complaint
 - Provide screen shots of the fuel rail / injector leak down (MEd_AV_Fuel system_ viewing rt/lt rail sensor)
 - Must have screen shot readings every 10 min and label as follows (t=0 , T=10, T=20, t=30)
- Perform a graphical misfire representation trace per the attachment "Fault Counter Instructions"
 - **NOTE:** Start the engine when RPM is green press continue
 - Wait 60s and stop Attach the screen shot of the graph and another injector performace data readout

File

Initial Electrical check.pdf

grafical representation of fault counter.pdf

Designation

Initial Electrical Check

Graphical Fault Counter Instructions

Symptoms

Symptom

Power generation / Engine management / Starter motor / Function / Does not engage
Power generation / Engine management / Engine running / Stalls/goes out
Power generation / Engine management / Engine running / Cuts out intermittently
Power generation / Engine management / Engine start/stop / Does not start
Power generation / Engine management / Engine performance / No/poor output
Power generation / Engine management / Engine start/stop / No automatic engine start

LI07.61-P-070559_1

Initial Electrical check "failure to start out of ECO "

Please perform the following as outlined and document your finding in case

- Starter connection to main battery (Provide Voltage drop from 12V positive post to front fuse box , V drop from F fuse box to starter) document readings found at from what points. –PROVIDE V. reading received **example: pos post to F34 = .58v , F34 to startermotor = .23v**
- 12V/Aux Battery terminal fit onto battery lug- physically grab wire and move (should not move on post)
- Ground connections (chassis specific locations are in the attachments) - check for painting , clean connections - all connections removed / inspected re- torqued - provide photo of paint
- Pre-fuse box connections (ensure connections are tight and not covered by shrink tubing. Provide photo if covered
- Main and aux battery (if equipped) via Midtronics (unless Li-ion)
- Provide screen shots of DTC processing (what does xentry say to check and of results)

LI07.61-P-070559_2

Misfiring detection

For reading out the misfiring detection, please have a look at the following pages.

Please choose at first the folder **actual values** and then **engine output** and **fault counter**, **Graphic representation of fault counter**

Selection

Test values while idling

Test values while driving in full load mode

Fuel system

Engine output

High pressure control

Boost pressure control

Test values of pressure sensors

Graphic illustration of position of camshafts

Compression test

Fault counter

Fault counter

Graphic representation of fault counter

Smooth running of combustion engine

Values of injector injection quantity adjustment

Exhaust system

System components

Adaptation data

Fault counter

Fault counter

Graphic representation of fault counter

1

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Misfiring detection

Now choose the selection of graphic illustration: **line graph**. You can select the recording time via the point **time interval** as **600 seconds**, if you did not get any other information for example via the TIPS case. After that press continue.

Selection of graphic illustration

Time interval

Line graph

Bar chart mode

Line graph

Selection of graphic illustration

Time interval

Line graph

600s

120s

300s

600s

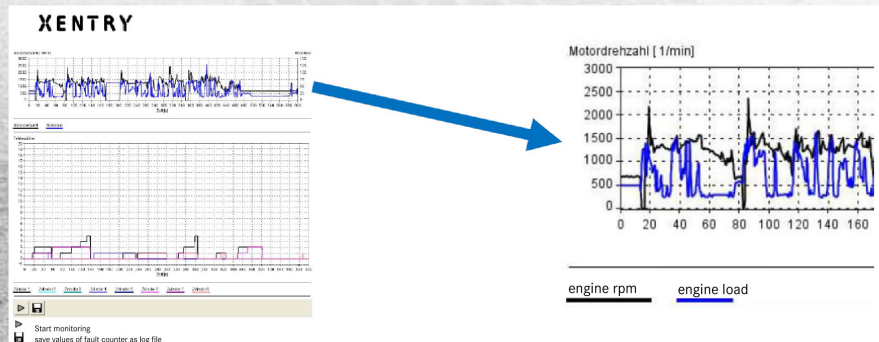
2

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Misfiring detection

Now the following figure is visible in XENTRY. Please start the measurement under observance of customers complaint. Normally the engine should be started at cold after starting the measurement and then the car should be driven at complaint circumstances. The engine load and the rpm is visible at the upper part of the diagram.

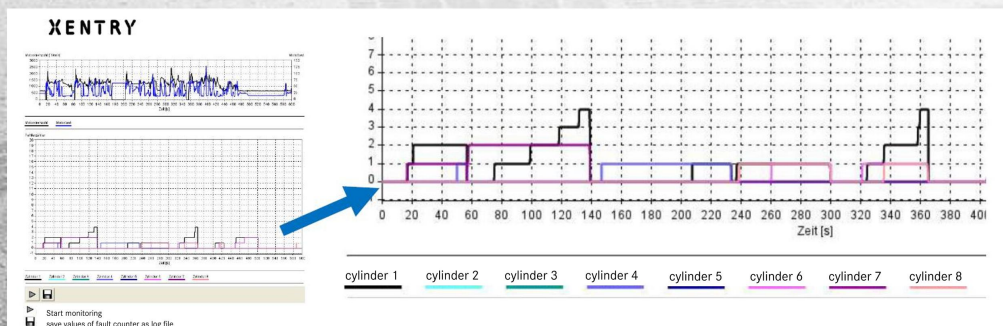


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Misfiring detection


Now the following figure is visible in XENTRY. Please start the measurement under observance of customers complaint. Normally the engine should be started at cold after starting the measurement and then the car should be driven at complaint circumstances. The measured misfiring will be shown at the lower part of the diagram and matched to every single cylinder.



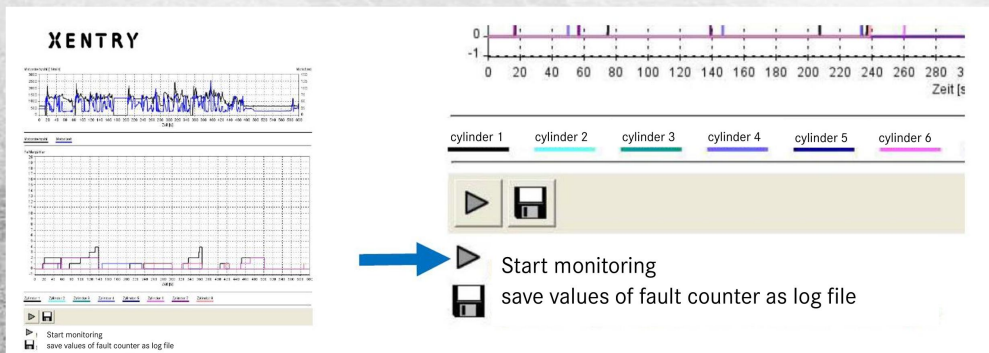
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Misfiring detection

To start the measurement, please press 

Let the measurement run for the time you have chosen before (e.g. 600 seconds)



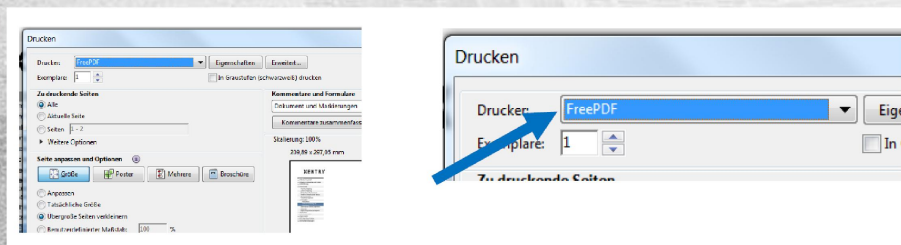
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Misfiring detection

At the end of the measurement, please proceed with the following steps:


Please print the screen view of the measurement firstly. Hereto choose „print“ and print it as pdf (not on paper). Save this pdf file. It is not possible to evaluate a normal printed out measurement on paper as black and white print out.



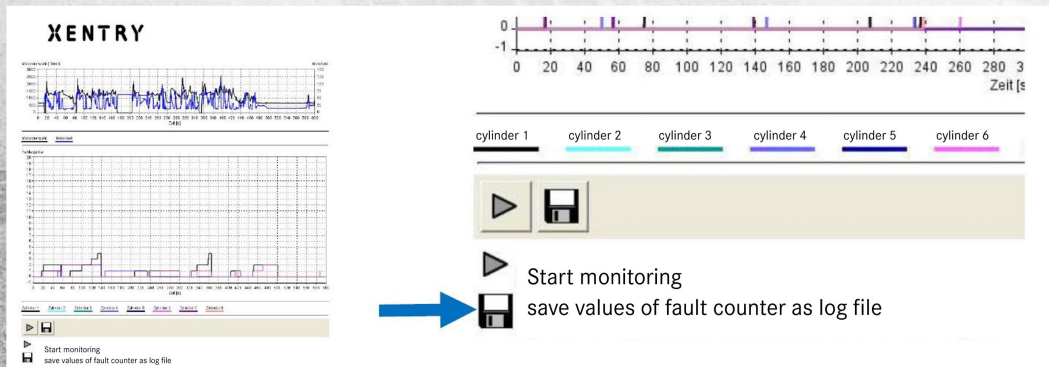
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Misfiring detection

Afterwards please save the values as log file via the button 


It is indispensable to follow the mentioned sequence because it is not possible to create a line graph after saving the log file.



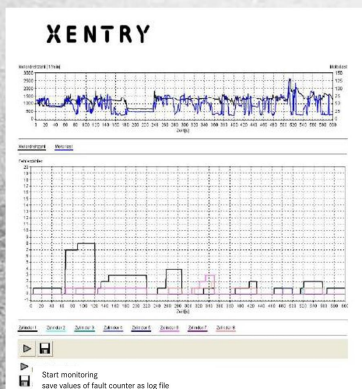
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Misfiring detection

To start an additional measurement, please press again 

Let the new measurement also run for the chosen time (e.g. 600 seconds)



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Misfiring detection

After the measurement you have the possibility to evaluate at what time the misfires were detected at every single cylinder.

You can also see under which circumstances they were visible: At idling, at load and at which rpm. If you were asked to attach them to a TIPS-case, please attach the diagram (screen view) as well as the log file to the case.

