Technical product information

Topic	Poor Engine Running Complaints (Misfires)
Market area	Bentley: worldwide (2WBE),China 796 VW Import Comp. Ltd (Vico), Beijing (6796)
Brand	Bentley
Transaction No.	2074950/2
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
engine -> engine operation -> power development -> throttle response	functionality -> misfire	

New workshop code

Object of complaint	Complaint type	Position
engine -> operation, engine control -> engine control unit	functionality -> misfire	

Vehicle data

New Continental GT / C and New Flying Spur

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
Z23*	2025	E		*	*	*
Z24*	2025	E		*	*	*
Z32*	2025	E		*	*	*

Documents

Document name
master.xml

Customer statement / workshop findings

- Poor engine running
- Reduced power
- Engine warning lamp illuminated
- Symptom related DTC's evident within the applicable engine control unit(s)

Technical background

Technical Product Information (TPI) to assist retailers when diagnosing poor engine running or misfires

VERY IMPORTANT: In the event the misfires are multiple random misfires which are found during PDI with the following symptoms:

Multiple random cylinder misfire DTC's evident found during PDI with DTC P030000: Random/Multiple Cylinder Misfire Detected (misfires on multiple cylinders) within the following control units

- **V8 - ECM 1 (Address 01) ECM control unit**

The operative must first refer to TPI 2074952/- (New Continental GT/C 25 M/Y only) before conducting any other diagnosis or repair work

Production change

Not Applicable

Measure

NOTICE

The following instructions should be carried out sequentially to ensure the root cause and analysis of the concern are identified without unnecessary work or repetitive actions taking place

Section 1 - Vehicle History and Current Status

If possible ask the customer for a precise description of the concern, noting when the concern occurs and if any particular conditions have a direct influence on the engine running or misfire(s), for example, "*The concern only occurs with a low fuel level within the fuel tank*" or, "*Occurs only under hard acceleration*". Ask the customer if the vehicle has been modified or updated in any way including non approved software modifications to the engine control unit(s)

Ensure the customer is using the correct minimum fuel octane rating (refer to fuel filler flap label for the minimum grade in your region). Check the customer is using the correct engine lubrication oil type if and when topping up, and if advised on the service schedule is using G17 fuel additive

Check the vehicle service history, pay particular attention to recent work that may potentially cause poor engine running or a misfire

Conduct a vehicle diagnostic check, note all Diagnostic Trouble Codes (DTC) present.

Check if the vehicle is currently exhibiting the reported concern, a road test may be required to confirm. If a misfire or poor engine running is evident DO NOT test drive the vehicle

Please record as much information as possible including the driving style and environmental conditions up to and at the time of the failure, this may be required if a DISS query is raised

If no relevant fault codes are stored and poor engine running or a misfire is not present ask the Customer to demonstrate the concern, if the concern cannot be replicated do not continue with this TPI, explain to the customer that since the concern is not present and fault codes are not stored it is not possible to carry out any diagnosis or repair

If fault codes are stored but poor engine running or misfire is not present continue to section 2 only, ask the Customer to demonstrate the concern. If the concern cannot be recreated and no issue is detected during the visual check or road test do not continue with this TPI, explain to the customer that since the concern is not present it is not possible to carry out any diagnosis or repair, explain what analysis has actually been carried out

If the Customer complains for a second separate instance of poor engine running or misfire and a relevant fault code is present but the vehicle does not have poor engine running or misfire continue to work through this document, during *Section 3 - Analysis / Component Substitution* it is only possible to conduct a visual inspection of any removed component, it would not be advisable to exchange components unless poor running or a misfire is actually present

Section 2 - Initial Visual Checks

Complete a "*Battery Condition Check*" Refer to Rep.Gr 27

Conduct a visual check within the engine bay, engine covers should be removed to allow a thorough inspection. If visible, pay particular attention to the condition of Ignition Coils, Fuel Injectors, Electrical Connectors and Wiring loom condition, do not remove any additional parts at this stage unless an issue is observed and further analysis is required

Check vehicle fluid levels, including - fuel, engine lubricating oil, engine coolant, look for signs of contamination or leaks

Any observations that may be the cause of poor engine running / misfire should be investigated and corrected at this point

Section 3 - Analysis / Component Substitution

Considering the information gathered within sections 1 and 2, carry out a controlled component substitution for **any specific** cylinders that exhibit a concern, for example - if there is a fault code for cylinder five misfire exchange cylinder five Ignition coil with an ignition coil from another cylinder, check to see if the fault moves with the ignition coil. It is recommended to move only one component at any one time usually starting with the easiest component to change, for example move ignition coil first, then sparking plug and finally fuel injectors

If components are removed and show signs of significant carbon deposit or oil contamination please continue to section 4 - Figure 1

Figure 1

Section 4 – Raise a DISS Query

After completing sections 1, 2 and 3 if the root cause of the poor engine running / misfire has not been identified continue to raise a DISS query.

Images accompanying a DISS query must be of a quality shown in Figures 2 and 3

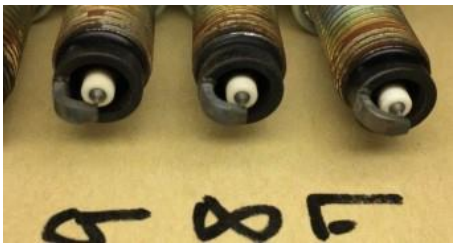

Figure 2

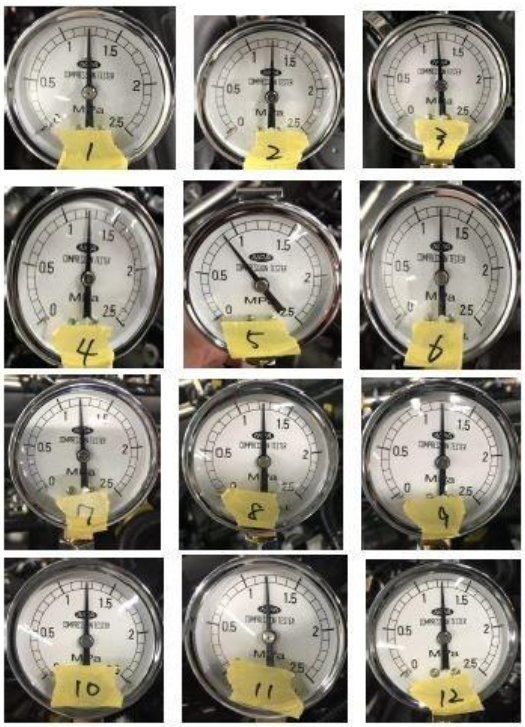

Figure 3

Warranty accounting instructions

Warranty type - 110 or 910

Damage service numbers

- Injectors 24 40
- Ignition Coils 28 20
- Spark Plugs 28 70

Damage code

00 55

Labour Operation times

Section 1 - Vehicle history and current status (all models)

06 89 00 00 - Review History (Vehicle preparation) - 20 TU

01 50 00 00 - Diagnosis time (Must not exceed 30 TU)

01 21 00 00 - Road test - 50 TU

Section 2 - Initial visual checks (all models)

27 06 01 00 - Battery Health Check - 10 TU

Section 3 - Analysis / component substitution

4.0 Litre V8

Fuel injectors remove and refit - x8

24 40 20 70: Injectors remove + reinstall x8 - 90 TU (Bank 1+2)

Fuel injectors remove and refit - x4

24 40 20 72: Injectors remove + reinstall x4 - 70 TU (Bank 1)

24 40 20 71: Injectors remove + reinstall x4 - 50 TU (Bank 2)

24 41 19 22: Fuel rail remove + reinstall - 440 TU (Bank 1)

24 41 19 21: Fuel rail remove + reinstall - 210 TU (Bank 2)

Sparking plugs remove and refit

28 70 20 20: Sparking plugs remove + reinstall x8 - 270 TU (Bank 1+2)

28 70 20 22: Sparking plugs remove + reinstall x4 - 150 TU (Bank 1)

28 70 20 21: Sparking plugs remove + reinstall x4 - 170 TU (Bank 2)

Ignition coils remove and refit

28 20 20 20: Ignition coils remove + reinstall x8 - 230 TU (Bank 1+2)

28 20 20 22: Ignition coils remove + reinstall x4 - 140 TU (Bank 1)

28 20 20 21: Ignition coils remove + reinstall x4 - 160 TU (Bank 2)