



Connection offline

Technical product information

Topic	Mulsanne front suspension 'chattering' noise
Market area	Worldwide Bentley (1WBE)
Brand	Bentley
Transaction No.	2035688/1
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
Running gear -> Shock absorber/suspension control -> Jounce	Noise, vibration -> noise	front
Running gear -> Brakes, brake control -> Service brake	Noise, vibration -> rattle	
Running gear -> Brakes, brake control	Noise, vibration	
Running gear -> Self-levelling suspension, pitch and roll compensation	Noise, vibration	
Running gear -> Self-levelling suspension, pitch and roll compensation	visual appeal / surface	
Running gear -> Self-levelling suspension, pitch and roll compensation	functionality	
Overall vehicle -> Vehicle areas -> Front-end	Noise, vibration -> noise	> not specified <
Overall vehicle -> Vehicle areas -> Front-end	Noise, vibration -> noise	right
Overall vehicle -> Vehicle areas -> Front-end	Noise, vibration -> noise	left
Overall vehicle -> Vehicle areas -> Engine compartment	Noise, vibration -> noise	
Overall vehicle -> Vehicle areas -> Engine compartment	Noise, vibration -> clank	
Overall vehicle -> Vehicle areas -> Engine compartment	Noise, vibration -> judders	
Overall vehicle -> Vehicle areas -> Engine compartment	Noise, vibration -> Chatters	
Overall vehicle -> Vehicle areas -> Front-end	Noise, vibration -> rattle	> not specified <

New workshop code

Object of complaint	Complaint type	Position
Running gear -> Running gear, springs, shock absorbers -> Suspension mount bracket	Noise, vibration -> noise	front left
Running gear -> Running gear, springs, shock absorbers		front

-> Suspension mount bracket	Noise, vibration -> noise	right
Running gear -> Running gear, springs, shock absorbers -> Suspension mount bracket	dimensional accuracy -> diameter too large	front left
Running gear -> Running gear, springs, shock absorbers -> Suspension mount bracket	dimensional accuracy -> diameter too large	front right
Body -> Front-end, rear-end -> Wheel arch	Noise, vibration -> crackle	front left
Body -> Front-end, rear-end -> Wheel arch	Noise, vibration -> crackle	front right

Vehicle data

Mulsanne

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3Y2*	2011	E		*	*	*
3Y2*	2012	E		*	*	*
3Y2*	2013	E		*	*	*
3Y2*	2014	E		*	*	*

Chassis numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
SCB	*	3Y	*	*	C	000001	018768		
SCB	*	ZH	*	*	C	000001	018768		

Documents

Document name
master.xml



Technical product information

Transaction No.: 2035688/1

Mulsanne front suspension 'chattering' noise

Customer statement / workshop findings

There is a 'chattering' noise which is audible from the front end/engine compartment when braking or when driving on rough road surfaces.

Technical background

The right and left hand front upper wishbone levers have been identified as the source of the 'chattering' noise which is audible within the cabin particularly when driving on rough road surfaces or when braking.

IMPORTANT: Inspect the right and left upper front wishbone levers and brackets for evidence of contact/clashing between the two components (Figure 1). Should there be any evidence of contact/clashing and the 'chattering' noise is evident as described please commence with this TPI

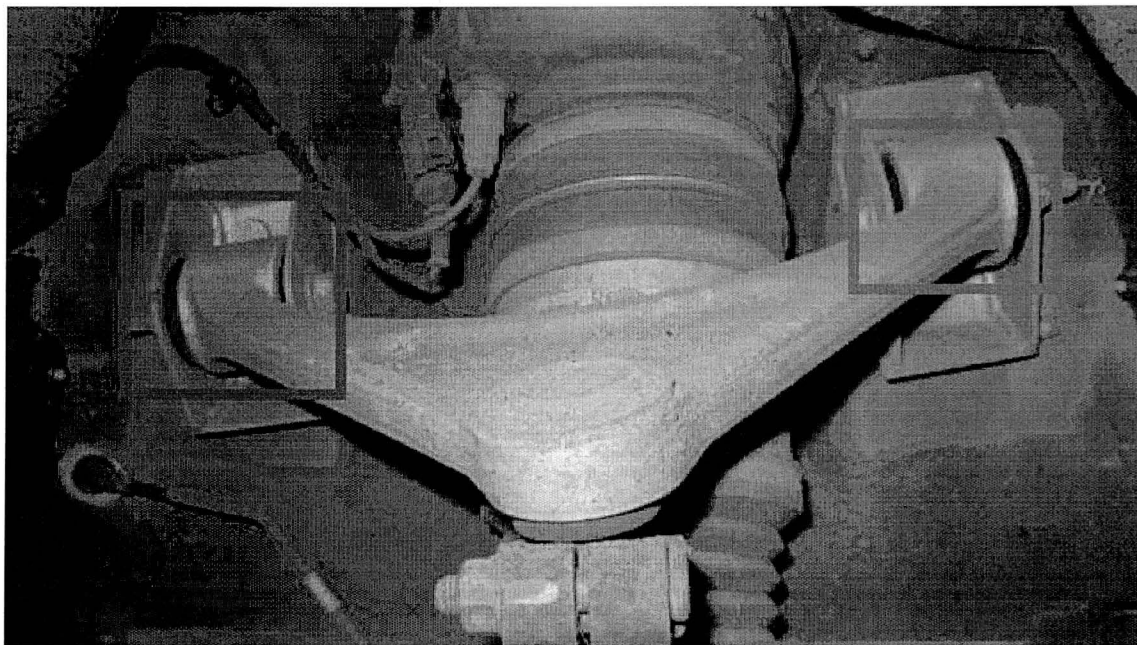


Figure 1

New specification brackets are now available, the latest specification brackets are wider which increases the distance between the upper wishbone and the bracket, the increased distance eliminates contact between the two components.

The right and left hand side front upper wishbones brackets and upper wishbones must be replaced along with all applicable fixings.

Referring to Figure 2 (box A) the inner dimension of the mounting brackets have increased

The original bracket internal measurement was 60 mm (box B)

Referring to (box C) the new specification bracket internal measurement is 64.5 mm -1- this to allow clearance for any potential fore and aft movement of the upper wishbone lever.

Two spacer washers of 4.5 mm in thickness -2- are also fitted between the inner leaf of each mounting bracket and the upper suspension lever -3- to take up the additional clearance.

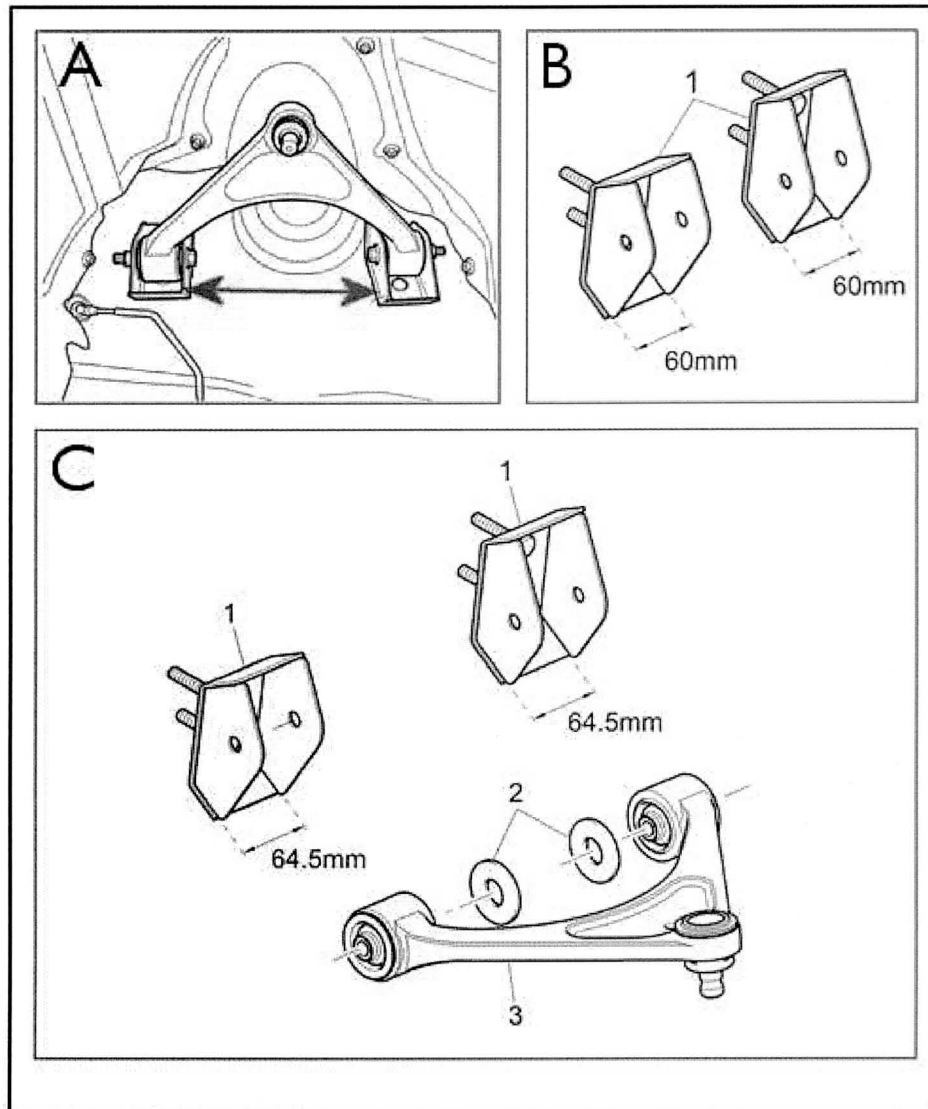


Figure 2

ATTENTION: During this TPI the workshop manual is quoted to help in carrying out various tasks, it is recommended that the procedures referenced are checked by the operative as the process within the workshop manual may have changed since last viewed.

Production change

From VIN SCBBA6ZH4EC018768 the latest specification front upper wishbone mounting brackets and spacers are fitted at the time of production

Measure

1. Referring to Figure 2 box C, replace the right and left hand side upper wishbone brackets -1-
- Fit new specification spacer washers -2- and replace the right and left hand wishbone upper levers -
- 3 - Refer to workshop manual Rep.Gr 40 – Front Suspension - Upper lever mounting bracket - To

remove and fit



Upon removal of the upper wishbone levers, capture any shims from behind the mounting brackets and ensure they are refitted in their original positions, renew all fixings as detailed in the parts information section of this TPI

When locating the right and left hand brackets back through the chassis ensure the spacer sleeves (Figure 3) are evident before securing

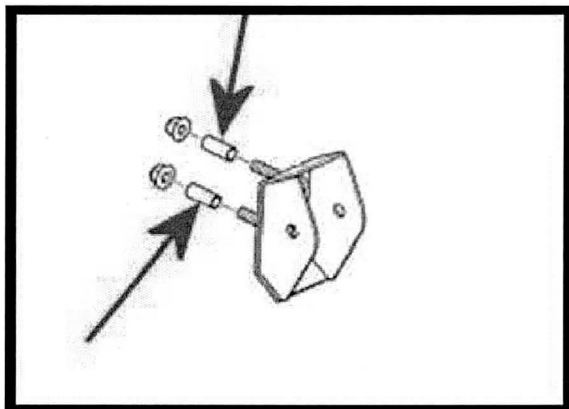


Figure 3

2. Check and adjust the wheel alignment, refer to workshop manual Rep.Gr 44 – wheel alignment - Vehicle Geometry - Wheel Alignment and Ride Heights

Warranty accounting instructions

Please Note: Normal Warranty policies are applicable

Time to replace the right and left hand upper front wishbone levers and brackets

Warranty Type	110
Labour operation code	40 15 20 14
Damage Service Number	40 15
Damage Code	01 00
Time	260 Time units

Time to check and set the vehicle geometry without ACC

Labour operation code	44 95 03 00
Time	80 Time units

Time to check and set the vehicle geometry with ACC

Labour operation code	44 95 03 10
Time	180 Time units

Parts information



The right and left hand front upper wishbones require replacement please refer to the ETKA parts catalogue to ensure the correct parts are ordered and received depending on VIN and specific market region

Part Number	Description	Quantity
3Y0 412 392B	Mounting block (right front)	1
3Y0 412 391B	Mounting block (left front)	1
3Y0 412 575B	Mounting block (right rear)	1
3Y0 412 576B	Mounting block (left rear)	1
3Z0 412 393	Sleeves	8
N102 861 11	Nut M10	8
N901 157 03	Spacer washers	8
N106 403 01	Bolts M12 x 95	4
N101 064 02	Nut M12	4