



Connection offline

Technical product information

Topic	Air spring fault finding
Market area	Russische Föderation (5RU), Russian Federation 935 Volkswagen Group RUS (6935), United Kingdom E01 Bentley UK (6E01), Germany E02 Bentley rest Europe (6E02), Australia E04 Bentley rest Asia and Australia (6E04), United States E05 Bentley USA and rest America (6E05), United Arab Emirates E06 Bentley Middle East and Africa (6E06)
Brand	Bentley
Transaction No.	2030217/2
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
Running gear -> Shock absorber/suspension control -> Self-levelling suspension	functionality -> without function / defect	
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	rear left
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	rear right
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	front left
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	front right
Running gear -> Shock absorber/suspension control -> Automatic shock absorber adjustment	functionality -> without function / defect	
Running gear -> Running gear, springs, shock absorbers	leaks	
Running gear -> Self-levelling suspension, pitch and roll compensation	functionality	

New workshop code

Object of complaint	Complaint type	Position
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	front left
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	rear left
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	front right
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	rear right
Running gear -> Running gear, springs, shock absorbers -> Shock absorber	leaks -> leaking	> not specified <

Running gear -> Self-levelling suspension, pitch and roll compensation -> Ride height / shock absorber control unit	functionality -> without function / defect
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Vehicle data

Continental Series and Flying Spur

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
39*	2012	E		*	*	*
39*	2013	E		*	*	*
39*	2014	E		*	*	*
39*	2015	E		*	*	*
3W*	2004	E		*	*	*
3W*	2005	E		*	*	*
3W*	2006	E		*	*	*
3W*	2007	E		*	*	*
3W*	2008	E		*	*	*
3W*	2009	E		*	*	*
3W*	2010	E		*	*	*
3W*	2011	E		*	*	*
3W*	2012	E		*	*	*
3W*	2013	E		*	*	*
3W*	2014	E		*	*	*
3W*	2015	E		*	*	*
4W21*	2014	E		*	*	*
4W21*	2015	E		*	*	*

Chassis numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
SCB	*	3W	*	*	*	020001	999999		
SCB	*	ZA	*	*	*	020001	999999		

Documents

Document name
master.xml
master_702839_en-gb.doc



Connection offline

Technical product information

Transaction No.: 2030217/2

Air spring fault finding

Customer statement / workshop findings

The front and/or rear suspension appears to have dropped

Technical background

The Continental Series suspension system is fitted with air springs. Should air leak from the air springs, this will cause the suspension to drop. However, the dropping of the suspension does not necessarily mean that the air spring is faulty.

The Measure section of this TPI describes how and where to check for air leaks on the front and rear air springs, this includes potential air leak points on the air spring and also the locations of an air leak that can be repaired without the need to replace an air spring.

Please follow and complete the check list within the Measure section of this TPI to help in diagnosing the issue, (The check list does not need to be sent as an attachment should a DISS ticket be raised) should a leak be found from an air spring please raise a DISS ticket and include as much information as possible including photograph/s of the leaks location to support your Warranty claim, once the DISS ticket has been submitted please await clarification from your TSC before commencing with replacing any of the suspected faulty air springs.

NOTE: Mandatory reporting is applicable for all air spring related issues.

Production change

Not applicable

Measure



**Always select Jack Mode before raising the vehicle and exhausting air from the suspension system
Refer to Workshop Manual Rep - Gr 43 Jack mode - To set**

Front suspension air spring fault finding

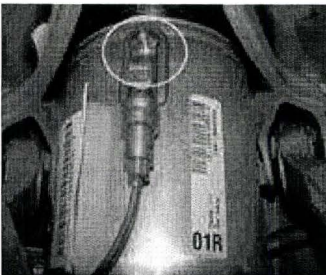
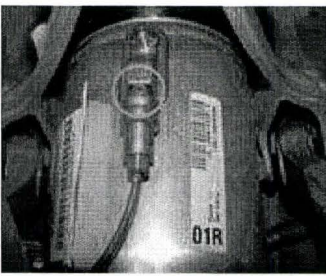
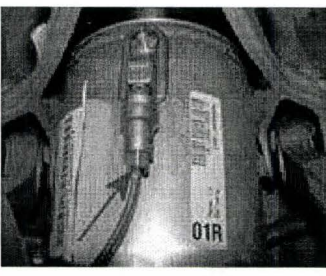
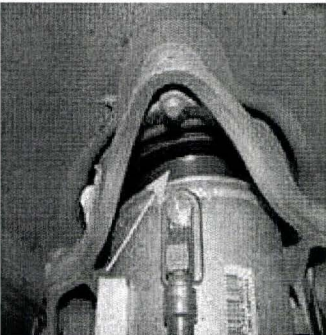
Note: Before any other checks are made to the front air springs push check to confirm the pipes are fully inserted home within the brass fitting

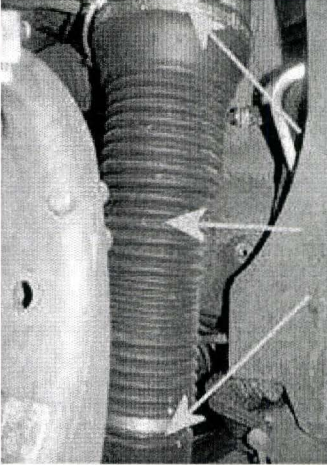

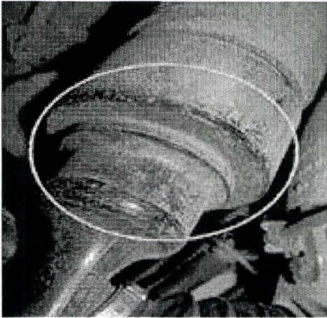
Air leakage may not be audible. A possible symptom of air leakage is excessive operation of the air pump located above the rear diffuser. If no air leakage is apparent at the pipe unions and there is excessive operation of the air pump located above the rear diffuser, there may be a damaged air supply pipe to an air spring.

With the air suspension fully charged, use leak detector spray or a mild soap solution to check the connections for leaks (Place an X in the appropriate box)

Air spring check points

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<p>Brass fitting to the air spring</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Brass intermediate connection</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Air feed hose to brass fitting connection</p>  <p>If this part is leaking Refer to the workshop manual Rep.Gr 43 – Air supply pipe to repair</p>	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Top of the air spring</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>

<p>Air spring gaiter</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Air canister and canister to air spring</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Bottom of the air spring</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Top of the air spring</p>	<p>Yes</p>	<p>No</p>	<p>Comment</p>

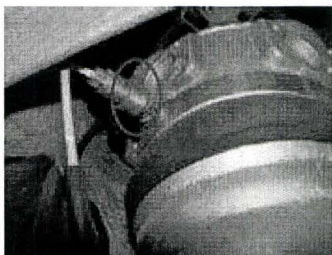
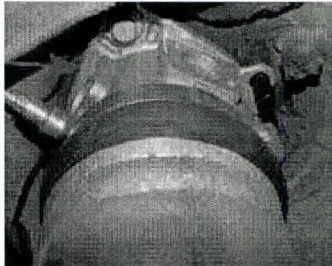


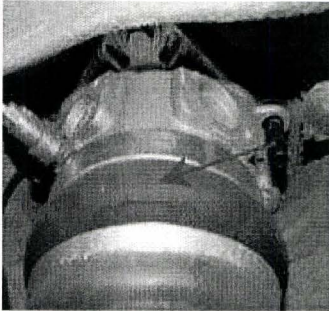
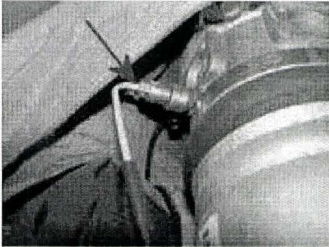
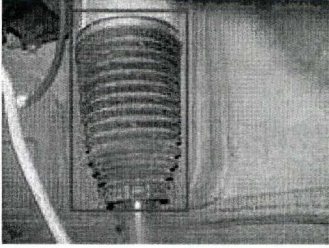
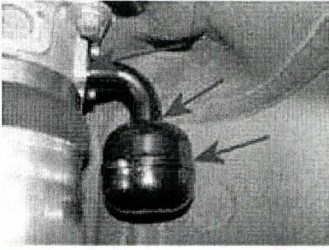
Rear suspension air spring fault finding

Note: Before any other checks are made to the rear air spring push check to confirm the pipes are fully inserted home within the brass fitting

Which part of the rear air spring is leaking? (Place an X in the appropriate box) with the air suspension charged use leak detector spray or a mild soap solution to determine exactly where the air spring is leaking

Air spring check points

Brass fitting to air Spring	Yes	No	Comment
			
Top of the air spring to body	Yes	No	Comment
			
Air spring bellows	Yes	No	Comment

			
<p>Air feed hose to brass fitting connection</p>  <p>If this part is leaking Refer to the workshop manual Rep.Gr 43 – Air supply pipe to repair</p>	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Air spring gaiter</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>
<p>Air canister (If Applicable)</p> 	<p>Yes</p>	<p>No</p>	<p>Comment</p>

Section 2 - Air Supply unit check points:

-Are there any air leaks on or around the air supply unit? (Figure 1)

(Place an X in the appropriate box)

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Yes	No	Comment
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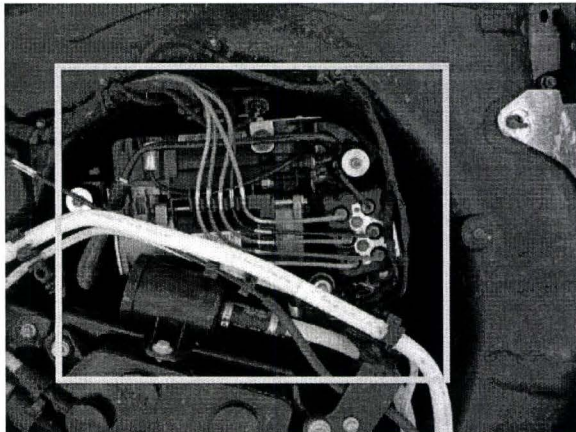


Figure 1

NOTE: In the event of an air leak from the air pipe/brass fittings on the supply unit the brass fittings and internal olive can be replaced individually, please follow instructions below



The air that is released is under high pressure.

Ensure Jack mode is selected

If the car is standing on its wheels, the loss of air within the levelling system will lower the cars standing height. Remove any obstructions.

- Unscrew the leaking brass connection from the air supply unit and remove the brass nut and olive from the pipe and discard NOTE: to prevent dirt ingress, the air supply unit ports must be capped when the brass connection has been removed
- Caution: The next procedure involves cutting the air pipe, check before cutting the pipe that the pipe will refit into the air supply unit without any kinks or bends, cut no more than 5MM from the end of the pipe
- Using Part number 3W0 616 335 unscrew one end of the union (Figure 2) ensure the white bung is not removed from the assembly until fitted



Figure 2

-Fit and secure the brass connection into the air supply pump and remove the white bung

-Refit the air pipe until fully home

-Recharge the air system using Offboard Diagnostic Information System – Guided Functions>Axle
Fill/Drain