# **Technical product information**

Торіс	Continental Series and Flying Spur - Luggage Compartment Lid - Check and Setting Guide
Market area	Bentley: worldwide (2WBE)
Brand	Bentley
Transaction No.	2059884/1
Level	EH
Status	Approval
Release date	

#### New customer code

Object of complaint	Complaint type	Position
body fixtures and fittings -> door, closures operation -> electrically open rear lid	functionality -> defective function sequence	
body fixtures and fittings -> door, closures operation -> electrically close rear lid	functionality -> without function / defect	
body fixtures and fittings -> door, closures operation -> electrically close rear lid	functionality -> partially without function	
body fixtures and fittings -> door, closures operation -> electrically close rear lid	functionality -> defective function sequence	
body fixtures and fittings -> door, closures operation -> rear lid power latching	functionality -> without function / defect	

# Vehicle data

# **Continental Series**

#### Sales types

Туре	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
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		*	*	*

# **Continental GT / GTC**

#### Sales types

Туре	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
39*	2011	E		*	*	*
39*	2012	E		*	*	*
39*	2013	E		*	*	*
39*	2014	E		*	*	*
39*	2015	E		*	*	*
39*	2016	E		*	*	*
39*	2017	E		*	*	*
39*	2018	E		*	*	*

# **Documents**

Document name master.xml

# Customer statement / workshop findings

Luggage Compartment Lid (Boot Lid) has sporadic functionality, fails to latch when closing, bounces back when closing or fails to open or close fully.

# Technical background

This Technical Product Information (TPI) document has been developed to resolve various boot lid concerns, it provides a series of checks and updates to ensure robust boot lid operation.

It is important the TPI is followed exactly to ensure maximum benefit.

#### Production change

Not applicable.

# Measure

#### **Required Tools**

Part number	Description
WT10372	Boot hinge setting tool LH GT
WT10373	Boot hinge setting tool RH GT
WT10374	Boot hinge setting tool LH GTC
WT10375	Boot hinge setting tool RH GTC
WT10354	Force measurement gauge

Work

Note: Some items within this TPI are model specific, where this is the case it is clearly identified. For clarity, vehicle models within this document are identified as follows:

Continental GT - 2004 to 2013

Continental GTC – 2007 to 2013

Continental Flying Spur – 2005 to 2013

New Continental GT – 2014 to 2017

New Continental GTC - 2014 to 2018

Prior to continuing with this document, ensure the right hand hinge (motor driven hinge – item 1) is serviceable, manipulate the open hinge whilst checking for excessive play. Ensure the hinge function is uncompromised and no misalignment exists in the hinge elements, replace the driven hinge where necessary - *Figure 1*.



#### Check Lis t A – Routine check

Ensure the boot lid seal is correctly fitted - Figure 2-specifically, the knock-on strip element of the seal must be fully engaged on the lip of the boot aperture and not as shown in figure 3 where it is displaced by the boot trim.

Ensure the obscuration tape fitted to the boot aperture flange is not restricting seal fitment - Figure 4.

Check the seal is correctly orientated, the vulcanised joint -1- should be to the centre line (+/- 10mm) of the ball joint -2- on the boot lid gas strut-Figures 5 and 6.



Figure 2





Figure 4







Over check the torque on the bolts securing the boot hinge to the body, for all cars at this stage the over check torque is 28Nm + 2Nm.

IMPORTANT: Ensure the socket used to over check the fasteners is 'as new' and that it fully engages within the fastener. Tapping the socket with a small dead blow hammer to assist the tool in *cutting into* the paint to aid engagement is recommended. Releasing harness conduit clips from each hinge will assist in access. When applying specific torques to fasteners ensure any adaptors or extensions used on the torque wrench are accounted for in your calculation for applied torque.

Ensure the boot aperture finishers are secure, correctly fitted, and not compromising boot lid seal fitment, rectify and replace damaged clips where necessary – figure 7.



#### Figure 7

#### Boot lid function and force gauge test

Ensure the boot lid will perform three consecutive power open / close cycles.

Carry out closing force gauge test-to perform this test the boot lid is operated to close and stopped short of closing on the power close cycle by pressing the close button again and manually catching the boot lid in the final centimetres of the close cycle, just before it engages with the striker pin. At this point the boot lid is resting on the boot lid seal, once in this state the force gauge (WT10354) should be set in position \*A on the boot lid. Apply load to the boot lid via the force gauge recording the load at which the boot lid power latched, record results - *Figure 8.* 



Note: Position (A) for the force gauge is the intersection on the centre line of the boot lid and the rear lip of the boot lid. Place protection between the boot lid painted surface and the gauge foot at position (A) to avoid paint damage, an offcut of leather will suffice.

The load measured should be less than 1kg. If the load measured to initiate the close cycle is less than 1kg or the boot latches under its own weight and the boot successfully completed three consecutive power open and close cycles then the TPI is complete.

If the measured load required to initiate the close cycle is 1kg or higher and / or the boot lid fails to perform three consecutive power close and open cycles then reference *table 1* below.

Action when closing force measured at a load of 1kg or greater and / or function failure

Continental GT	Raise a DISS detailing load reading and failure mode. If other dynamic anomalies are observed during the boot test cycle a video clip should be attached – Product Support will advise next steps	
Continental GTC		
Continental Flying Spur		
New Continental GT	Raise a DISS detailing load reading and failure mode. If other dynamic	
New Continental GTC	be attached—For vehicles covered by the manufacturer's warranty Product Support authorisation required to carry out Check list B - High closing force	

Table 1

# Check Lis t B (s tage 1) – High c los ing force section

IMPORTANT: For vehicles that are within the manufacturer warranty period Product Support authorisation is required to progress at each of the 3 stages that make up *Check list B - High closing force.* 

#### Check and adjust boot lid hinge

Prior to adjusting the boot lid hinge ensure the hinge (1) is serviceable, check for excessive play in pivots, ensure the hinge function is uncompromised and no misalignment exists in the hinge elements. Replace individual hinges where necessary – *figure 9*.

Check the striker pin (2) is serviceable, the pin surface should be undamaged and must rotate freely by hand, free off and lubricate where necessary, in extreme cases a replacement may be required – *Figure* 9.

The position of the bootlid can be set by adjusting the hinges (1) or the striker (2). The locking latch (3) is attached directly to the bootlid. It does not have slotted holes and therefore has no means of adjustment. Before any adjustments are made the car must be resting on its road wheels and on level ground. Ensure the socket used to release the fasteners is 'as new' and that it is fully engaged with the fastener. Tapping the socket with small dead blow hammer to assist the tool in *cutting into* the paint to aid engagement is recommended. Releasing the harness conduit clips from the each hinge will assist in access. When applying specific torque to fasteners ensure any adaptors or extensions used on the torque wrench are accounted for in your calculation for applied torque–figure 9.



Remove the plastic caps and wind down the boot lid hinge bump stops located on each hinge assembly, these are adjusted back after the setting procedure – figure 10.



#### Figure 10

For New Continental GT – use gauge part number WT10372 left hand or WT10373 right hand - Gauge setting hinge. Clean the drain channel to ensure the gauge will fully engage with the channel surface.

The gauge is loaded into the drain channel from the front of the hinge in direction *L*. With the gauge correctly positioned the full length of the gauge will be in contact with both vertical sides of the drain channel whilst sitting on the channel bottom – *figure 11*.

In this position the rearward section of hinge should be touching the gauge at point K. If the gauge is tight, loose or not touching at K then slacken both fasteners and adjust hinges to achieve the base setting at K. The gauge adjustment at K is achieved at the hinge rear mounting bolt, therefore, although the front mounting bolt has to be slackened, the hinge should only rotate at the front bolt with the vertical adjustment performed at the rear bolt. Re-tighten the fasteners - *figure 11*.

Note: New Continental GT torque figure of 28Nm + 2 is critical.



For New Continental GT Convertible – use gauge part number WT10374 left hand or WT10375 right hand - Gauge setting hinge. Clean the drain channel to ensure the gauge will fully engage with the channel surface.

The gauge is loaded into the drain channel from the rear of the hinge in direction *L*. With the gauge correctly positioned the full length of the gauge will be in contact with both vertical sides of the drain channel whilst sitting on the channel bottom – *figure* 12.

In this position the rearward section of hinge should be touching the gauge at point K. If the gauge is tight, loose or not touching at K then slacken both fasteners and adjust hinges to achieve the base setting at K. The gauge adjustment at K is achieved at the hinge rear mounting bolt – figure 12.

Note: For New Continental GT Convertible - new bolts (increased length) must be fitted and the torque for these bolts is<//bymccrsh0122/aspshr02/VAOC/5. TPI requests/2020/KW36/Rotating display rattle/steves vid.mp4> critical at 20Nm + angle 45° new bolt part number is *N.910.097.01* x 4 off.



#### Figure 12

All Cars - Slacken the fasteners (A) securing the boot lid - figure 13.

Note: Do not slacken fastener B at this time. Allow the hinges to "float" ensuring that left and right hinges are not working against each other and operate in same plane without undue resistance. Re-tighten the four fasteners (A) 20Nm + 2 – figure 13.



Ensure the boot seal is fitted correctly before manually closing the boot lid. Manually closing will avoid damage in the event that a clash has been introduced during adjustment. Check the boot lid for aesthetic fit and profile.

#### Boot Adjustments - Reference Figure 14

- (H) Adjustment in height profile adjacent to the rear screen is achieved at the forward, nearest the rear screen, part of the hinge, slacken both hinge fasteners but make adjustments primarily around fastener (C) to raise or lower at point (H) – figure 14. Re-check hinge to maintain gauge setting - figure 12 (GT) figure 13 (GTC)

- (J) Adjustment in height profile at the rear of the boot lid is achieved at the striker plate, slacken both fasteners (D) then raise or lower at point (J) - figure 14.

-(G) To achieve panel gaps the boot lid surface can be moved in both axis at the hinge / boot lid connection, slacken fastener (B) and fasteners (A) to release the captive plate to allow adjustment – *figure 14*.



#### Figure 14

# Boot lid function and force gauge test

Ensure the boot lid will perform three consecutive power / open close cycles.

Carry out closing force gauge test – to perform this test the boot lid is operated to close and stopped short of closing on the power close cycle by pressing the close button again and manually catching the boot lid in the final centimetres of the close cycle, just before it engages with the striker pin. At this point the boot lid is resting on the boot lid seal, once in this state the force gauge (*WT10354*) should be set in position \*A" on the boot lid. Apply load to the boot lid via the force gauge recording the load at which the boot lid power latched – *figure 8.* 

Note: Position (*A*) for the force gauge is the intersection on the centre line of the boot lid and the rear lip of the boot lid. Place protection between the boot lid painted surface and the gauge foot at position (*A*) to avoid paint damage, an offcut of leather will suffice.

The load measured should be less than 1kg. If the load measured to initiate the close cycle is less than 1kg or the boot latches under its own weight and the boot successfully completed three consecutive power open and close cycles then the TPI is complete.

If the measured load required to initiate the close cycle is 1kg or higher and or the boot lid fails to perform three consecutive power close and open cycles then reference Table 2

Action when closing force measured at a load of 1kg or greater and or function failure

Update DISS detailing load reading and failure mode. If other dynamic anomalies are observed during the boot test cycle a video clip should be attached – For vehicles covered by the manufacturer's warranty Product Support authority required to continue Check list B (stage 2) - High closing force

Table 2

# Check list B (stage 2) High closing force

# Fit lighter springs - Boot lid striker doors

Remove the boot sill finisher cover. Refer to Rep.Gr.70 "Boot aperture finishers - To remove and fit"

Replace both boot lid striker door springs (A). First replace the left hand spring using the right hand as a reference – figure 15.



Figure 15 Detach plastic retaining cap and discard - *Figure 16*.



Figure 16

Slide door and spring off the bearing pin, discard the original spring - Figure 17.



Position the new spring (part number 3W0827441 or 3W0827665) in the removed door. Whilst holding the spring tang back (1) partially fit door and new spring onto bearing pin - Figure 18.

Push the door and spring assembly (2) fully onto the bearing pin before releasing the spring tang (1) onto interlock – figure 18.



#### Figure 18

Fit the new retaining cap - part number 3W0837106.

# Boot lid gas s trut check

General integrity and serviceability check of boot lid gas strut - replace if defective.

- Check for signs of wear in the ball end of the gas struts.
- Ensure ball and sockets are clean and apply fresh grease where necessary (Shell Retinax "A")

• Ensure ball end clips are fitted correctly and gas struts are fitted the correct way up. The main body of the gas strut connects to the boot lid with the rod end connecting to the car body - *Figure 9.* 

Check correct gas strut part number and hand of use is fitted:

New Continental GT Convertible:

Correct left hand side strut 3W7827550F (560N) - marked in White writing - figure 19.



# Figure 19

Correct right hand side strut 3W7827550E (480N) - marked in Blue writing - figure 20.



Continental Flying Spur:

Both sides must be part number 3W5827550B.

Should any of the boot lid struts not be correct as detailed above, replace the incorrect strut/s according to ETKA.

# Latch cover check

Inspect the area of the latch cover that receives the striker pin, if damage is evident indicating a clash with the striker pin then replace the cover with the latest part which has a wider opening, refer to Rep. Gr. 70 "Boot lid trim panels - To remove and fit"

To replace, remove and discard latch plastic cover - figure 21.

Note: Figure 21 shows the new design cover, figure 22 shows the original cover.



Figure 21



Figure 22

With the original plastic cover removed modify the latch buffer by removing section (B) shown - figure 23.



With section (*B*) cut and discarded from the main buffer to form part (*A*) then the new latch plastic cover (*part number 3W0827520A*) can be fitted – *Figure 24*.



#### Figure 24

#### Boot s trik er alignment

With the fit and profile of the boot lid set, check and if necessary adjust the striker plate to ensure it is central in the boot latch striker plastic cover. To do this, apply chalk to the boot latch striker plastic cover and operate the boot close function. If chalk is deposited on the striker pin then adjust the striker assembly to the left or right to reduce this occurrence.

In the example below the chalk is deposited on the left hand side of the pin, this would necessitate the striker assembly being adjusted 1 or 2 mm to the right – *figure 25*. Once set remove chalk traces.

1. Operate the boot close function several times and if required make final adjustments to ensure the boot function is faultless and the aesthetics are acceptable to the eye

2. Note: If boot lid is seen to lift at the front corner after closing, adjust the striker plate down to increase engagement with boot lid seal and / or adjust striker across to introduce resistance via latch and striker interaction. Do not introduce failure to latch

3. Note: If on New Continental GT Convertible the boot overload switch is triggering the boot open warning in the drivers information panel then apply section 2 of Technical Product Information 2033742 - Continental GT and GTC boot lid adjustments and set the boot over load switch.



# Boot lid function and force gauge test

Ensure the boot lid will perform three consecutive power open / close cycles.

Carry out closing force gauge test – To perform this test the boot lid is operated to close and stopped short of closing on the power close cycle by pressing the close button again and manually catching the boot lid in the final centimetres of the close cycle, just before it engages with the striker pin. At this point the boot lid is resting on the boot lid seal, once in this state the force gauge (WT10354) should be set in position \*A on the boot lid. Apply load to the boot lid via the force gauge recording the load at which the boot lid power latched – Figure 8.

Note: Position (*A*) for the force gauge is the intersection on the centre line of the boot lid and the rear lip of the boot lid. Place protection between the boot lid painted surface and the gauge foot at position (*A*) to avoid paint damage, an offcut of leather will suffice.

The load measured should be less than 1kg. If the load measured to initiate the close cycle is less than 1kg or the boot latches under its own weight and the boot successfully completed three consecutive power open and close cycles then the TPI is complete.

If the measured load required to initiate the close cycle is 1kg or higher and or the boot lid fails to perform three consecutive power close and open cycles then reference *Table 3*.

#### Action when closing force measured at a load of 1Kg or greater and or function failure

Update DISS detailing load reading and failure mode. If other dynamic anomalies are observed during the boottest cycle a video clip should be attached – For vehicles covered by the manufacturer's warranty Product Support authority is required to continue Check list B (stage 3) - High closing force.

#### Table 3

# Check list B (stage 3) High closing force

# Check boot lid latch micro switch function

Check for boot lid lifting at front corner after closing – if this is the case then the boot lid latch micro switch is suspect – Check function of boot lid latch micro switches.

Connect the Bentley approved diagnostic tool to the vehicle On Board Diagnostic (OBD) socket.

Using Guided fault finding check and clear the vehicle of any fault codes.

Within Control units – Select (single touch) 46 Central Module Comfort System – Reveal drop down menu (extended touch and release), Select Guided functions - Figure 26.



Within Control units, Central Module Comfort System, select Monitor Inputs and then Execute - Figure 27.



# Figure 27

Within Rear lid (RBC)-Data Block Read select -2- Lock activation - Figure 28.



# Figure 28

The correct status for the boot lid micro-switch assembly in the closed position is highlighted in Figure 29.

Rear lid lock status locked

Pawl lock operated

Lock mechanism not operated



The correct status for the boot lid micro-switch assembly in the open position is highlighted in Figure 30.

# Rear lid lock status unlocked

# Pawl lock not operated

Lock mechanism operated

Offboard Diagnostic Int	formation System Service - 2.2.5			122	- 6 ×
Importer:	E01	Vehicle identification no.:	SCBDK23W1CC076453		
Dealer:	09014	Engine:	Twin-turbocharged W12, 630 PS	- I 🥔 📴 🏷 I	BENTLEY
Job:					
Convolunits Resul	ns Jobs DISS TPI Ter	It plan Process Special functions			Operating modes *
Rear lid (RBC) - D	ata Block Read			Done/Continue	😵 Diagnosis
Lock activation					() Self-diagnosis
Preparation steps	Rea	ar lid switches	. *		Flash re-programming
Selection	Rea	ar lid status: inactive	$\sim$		🙆 Test instrument
Lock activation	Pay	vi lock: not operated k mechanism: operated			lnformation
	Rea	ar lid rotary lock signal: 39 *			🜚 Admin
	- Pr	ess ► to continue the test.			Protocol ¥
					1100000
					Data ¥
					Extras ¥
					Help ×
			-		
			Help Cancel test		>
				Execution of the	e test
🕘 🈂 🚺	🗎 🖸 🔁	đ			- 🖹 i 🛋 🌗 4:23 PM 9/2/2015

# Figure 30

If either open or close status in relation to the micro switch is functioning incorrectly then replace boot latch assembly - Refer to Rep. Gr. 55 Boot lid and fittings - Boot lid latch - To Remove and Fit.

Carry out closing force gauge test-if the load measured to initiate the close cycle is less than 1kg and the boot successfully completed three consecutive power open and close cycles then the TPI is complete, otherwise continue with *stage* 3 checks.

Check boot motor serviceability - Check each item in turn followed by a boot lid function and force gauge test, record results.

# Torque check motor fixings

Not applicable to GT Convertible derivatives - Remove tail lamp (right hand) on boot motor side to enable check.

Check that the power boot motor is correctly aligned on to the hinge splines and that the locating peg is fully engaged in the body location and tapping plate - where necessary loosen motor and correct alignment – figure 31.



Carry out closing force gauge test-if the load measured to initiate the close cycle is less than 1kg and the boot successfully completed three consecutive power open and close cycles then the TPI is complete, otherwise continue with stage 3 checks

Remove motor and inspect motor spline drive and hinge spline for damage, replace damaged components where necessary - figure 32.



# Figure 32

Carry out boot lid function and force gauge test-if the load measured to initiate the close cycle is less than 1kg and the boot completed three consecutive power open and close cycles then the TPI is complete.

Note: If at this point the boot lid system fails the boot lid function and force gauge test, then update DISS detailing load reading and failure mode. If other dynamic anomalies are observed during the boot test cycle, a video clip should be attached – Product Support will advise next steps.

#### On completion Re- set bump stops at the hinge

Each bump stop should be set just below the panel so as not to hinder boot lid closure. The bump stop should only come into contact with the panel when outside forces are applied to the boot lid

Ensure all fasteners are torque tightened and paint chips produced as a result of releasing the painted hinge fasteners and hinge plates receive anti-corrosion protection.

Refit any remaining removed trim items.

# Warranty accounting instructions

ONLY APPLICABLE TO VEHICLES THAT ARE WITHIN THE MANUFACTURERS WARRANTY PERIOD.

LOT 1 - Check list B (stage 1) New Continental GT:

Check and adjust boot lid hinge

Bootlidfunction and force gauge test

Warranty Type	110
Labour Operation Code	55904901
Damage Service Number	55 90

Damage Code	00 55	
Time	80TU	
LOT 2 - Check list B (	stage 1) New Conti	inental GTC:
Check and adjust boo	t lid hinge	

• Remove and replace hinge bolts (increase length)

 $\bullet \ Bootlid function \ and \ force \ gauge \ test$ 

Warranty Type		110
Labour Operation Code		55 90 49 02
Damage Service Numbe	ſ	55 90
Damage Code	00 55	
Time		70 TU

LOT 3 - Check list B (stage 2) New Continental GT:

- Fit lighter springs striker door
- Latch cover check and replace
- Adjust striker alignment
- Check and if necessary adjust boot lid for aesthetic alignment

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Bootlid function and force gauge test

Warranty Type	110
Labour Operation Code	55 90 49 03
Damage Service Number	55 90
Damage Code	00 55
Time	30 TU

LOT 4 - Check list B (stage 2) New Continental GTC:

- Fit lighter springs striker door
- Gas strut check
- · Latch and cover check and replace
- Adjust striker alignment
- · Check and if necessary adjust boot lid for aesthetic alignment
- · Check and if necessary adjust boot overload switch

Bootlid function and force gauge test

Warranty Type	110
Labour Operation Code	55 90 49 04
Damage Service Number	55 90
Damage Code	00 55
Time	30 TU

LOT 5 - Check list B (stage 3) New Continental GT & GTC:

- Check boot lid latch micro switch function
- Bootlid function and force gauge test

Warranty Type	110
Labour Operation Code	55 90 49 05
Damage Service Number	55 90

Damage Code	00 55
Time	40TU

LOT 6 - Check list B (stage 3	3) New Continental GT & GTC:
Replace boot lid latch assem	bly (latch micro switch function failed)
Boot lid function and force ga	luge
Warranty Type	110
Labour Operation Code	55 90 49 06
Damage Service Number	55 90
Damage Code	00 55
Time	50 TU

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LOT 7 - Check list B (stage 3) New Continental GT & GTC:

Check motor serviceability – torque over check motor fasteners

Bootlid function and force gauge test

Warranty Type	110
Labour Operation Code	55 90 49 07
Damage Service Number	55 90
Damage Code	00 55
Time	20 TU

LOT 8 - Check list B (stage 3) New Continental GT:

Check motor alignment and peg location

Bootlid function and force gauge test

Warranty Type	110	
Labour Operation Co	ode	55 90 49 08
Damage Service Nu	mber	55 90
Damage Code		00 55
Time		50 TU

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LOT 9 - Check list B (stage 3) New Continental GT:

Remove and inspect motor splines

 ${\scriptstyle \bullet} \, {\rm Bootlid} \, {\rm function} \, {\rm and} \, {\rm force} \, {\rm gauge} \, {\rm test}$ 

Warranty Type	110
Labour Operation Code	55 90 49 08
Damage Service Numb	er 55 90
Damage Code	00 55
Time	30 TU

# Parts information

The required replacement parts should be ordered from Bentley Motors Limited Crewe or through your regional Bentley parts distribution centre. See body of text for applicable part numbers, always refer to the electronic part manual (ETKA) for the latest information.