

Engine Will Not Start: Checking Engine Ground Strap (174/21)

Model Lines: **718 Boxster (982) / 718 Cayman (982)**

Model Year: **As of 2019**

Concerns: **Engine ground strap**

Information: Component analyses of replaced starters have shown that the starter was generally free of faults and was not the cause of engine starting problems. Instead, the cause is usually due to poor electrical contact of the ground strap between the engine and body.

For this reason, the engine ground connection must always be checked first before replacing the starter. The starter should only be replaced if the ground connection is OK and the problem still exists.

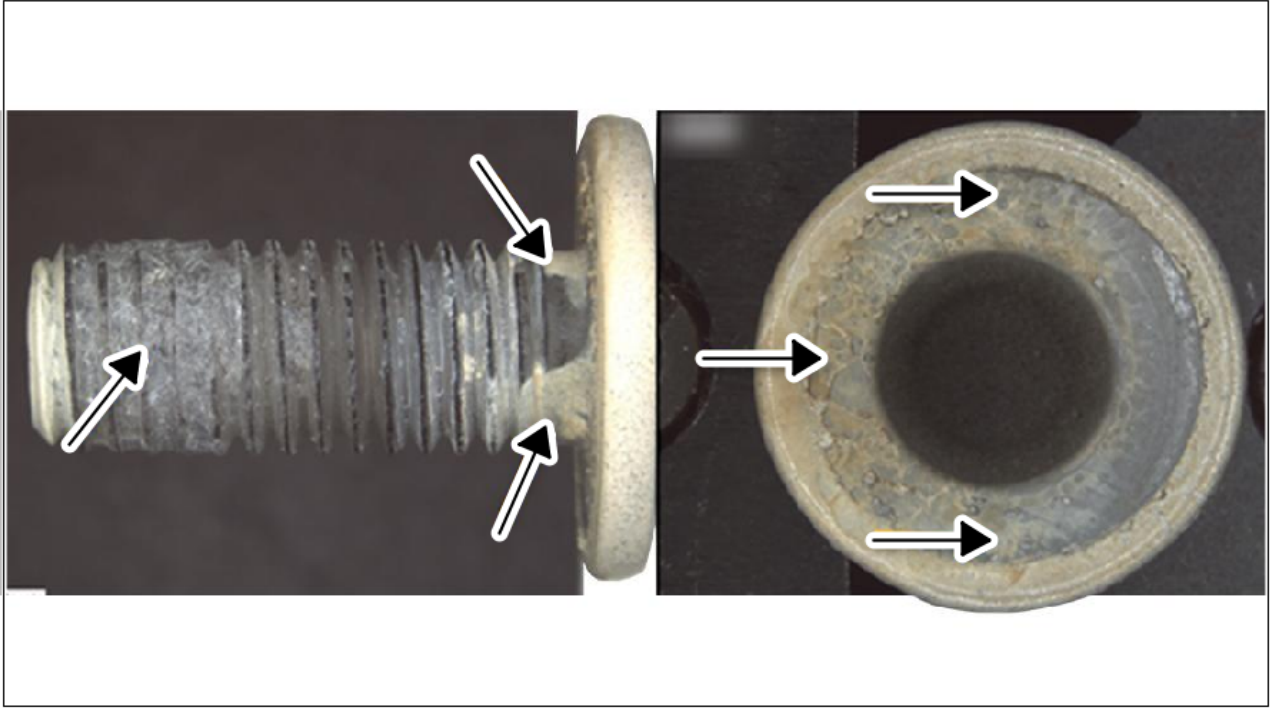
The following fault memory entries may be stored in the engine electronics control unit (DME) in connection with this fault type:

- P06EF00 - Start time too long (002E89)
- P167E00 - Start time too long (008F2A)
- P06E900 - Starter does not turn, is mechanically blocked or electrical fault (001550)

Action required: Check ground connection of the engine.

The following factors may be responsible for poor ground connection:

- Paint contamination and corrosion on ground screws or ground strap
- Ground screws not tightened properly



Paint contamination on ground screws



Fault type – ground strap and ground screws

Preparatory work

Work Procedure: 1 Remove underbody cover.
 ⇒ *Workshop Manual '519419 Removing and installing cover for rear underbody'*

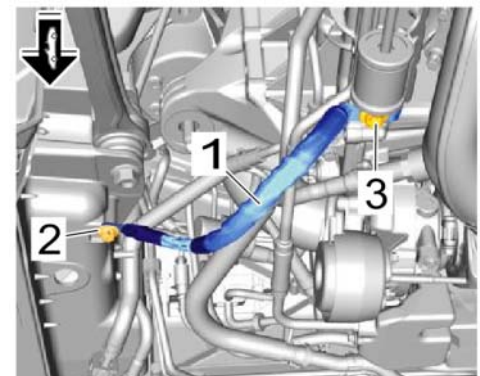
Checking ground strap



Information

Replace the starter only if the ground connection has been tested, a poor ground connection can be excluded and the problem still exists.

- Work Procedure: 1 Measure ground strap voltage drop.
- 2 Removing ground strap ⇒ *Engine ground strap -1-* for engine.
- 2.1 Unscrew screws ⇒ *Engine ground strap -2-* and ⇒ *Engine ground strap -3-*.



Engine ground strap

- 3 Check ground strap and fastening screw and brush off if necessary or clean with sandpaper.
- 4 Installing ground strap.
 Threaded joint on cylinder head: **Tightening torque 23 Nm**
 Threaded joint on body: **Tightening torque 23 Nm**

Concluding work

Work Procedure: 1 Install underbody cover.
 ⇒ *Workshop Manual '519419 Removing and installing cover for rear underbody'*

Invoicing

Invoicing: For documentation and warranty invoicing, enter the working position and PCSS encryption specified below in the warranty claim:

APOS	Labor operation	I No.
97870100	Check engine ground strap	
97870125	Check engine ground strap	

PCSS encryption:

Location (FES5)	97870	Engine ground strap
Damage type (SA4)	1414	charred

References: ⇒ *Workshop Manual '978719 Removing and installing ground strap for engine'*

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