

Ground Strap Loose or Coated, Causes Starter Issues (P305400)

Attention: **Technicians, Parts Personnel, and Warranty Personnel**

Vehicle Type: **Panamera (971)**

Model Year: **2017 - 2018**

Customer Concern: The customer reports that the engine will not start as expected. Sometimes, the customer reports that the starter engages but the engine will not turn over. This is a breakdown.

Technical Concern: The technician confirms the customer's observation and also notes fault code P305400 stored in the DME.

This fault and failure combination often results from a faulty ground strap connection. (See figure 1.) The bolt at the ground strap could (a) be loose or (b) have an incidental coating of paint. Both of these defective conditions would have been present from the time of vehicle production at the assembly plant. Porsche has corrected the assembly process to prevent issue recurrence on future vehicles.



Figure 1

While this failure is most likely to occur on V8 and diesel engines, it will possibly occur on other engine variants as well.

Service Information: Please inspect for and correct the two conditions referenced above first. Clean the contact surfaces and remount the bolt using 15 ft lbs (20 Nm) of torque.

Typically, the starter is not defective and thus should not be replaced. You should only consider replacing it after inspecting the ground strap connection for the defects indicated above and verifying a starter defect.

As always, be sure to document the complaint completely in PQIS. If the defect is visible, include clear photos that show the defect area. For this repair, use the following coding for the cause:

Cause Location: 97870 Ground strap f engine
Cause Symptom: 2700 Electric screw connection; nut/screw loose, missing