



## SERVICE ACTION

<b>Reference number:</b>	SA-18-0252	<b>Issued:</b> 19 February 2016
<b>Subject:</b>	Modification to the Electrical Connections on the V12 Starter Solenoid	
<b>Model(s):</b>	Vanquish (13 MY onwards), DB9, Rapide S, V12 Vantage, Vantage GT12.	
<b>VIN range:</b>	Refer to the VIN list published on the DCS Portal	
<b>Applicable to:</b>	All Dealers	
<b>Distribute to:</b>	After Sales Manager Executive Manager Service Manager Sales Manager	Warranty Technician(s) Parts

### Reason for this Service Action

There are two modifications that you need to do to the starter solenoid electrical connections on some V12 engined models. The first problem is that there is a quantity of vehicles that have an incorrect nut installed that attaches the battery positive cable to the solenoid. The coating on the nut can corrode and cause a poor connection. The second problem is that it is possible that the signal wire to the solenoid coils has an acute angle. This can cause the insulation to fail and increase the risk of a short circuit or failure of the wire. The system fuse can also blow. The two problems can cause the engine not to start, or be difficult to start.

The list of affected VINs will tell you which parts of the Workshop Procedure you must do to the applicable vehicles. You can find the list of affected VINs on the new DCS Portal and on old DCS.

### Workshop Procedure

This Workshop Procedure has the parts that follow:

Part A - Preparation

Part B – Replace the nut that attaches the battery supply cable.

Part C – Examine the signal wire to the solenoid

Part D – Complete the procedure

**WARNING: THE ENGINE AND EXHAUST WILL BE HOT AFTER OPERATION AND CAN CAUSE INJURY. LET THE ENGINE AND EXHAUST BECOME COOL BEFORE YOU DO WORK.**

#### Part A - Preparation

1. Put the vehicle on a lift.
2. Disconnect the vehicle battery (refer to Workshop Manual procedure 14.01.CA).
3. Raise the vehicle and make it safe.
4. Remove the front under tray (refer to Workshop Manual procedure 01.02.NB).

**Part B – Replace the nut that attaches the battery supply cable.**

5. Remove the nut (1) that attaches the battery supply cable to the starter solenoid (solenoid) (refer to Figure 1).

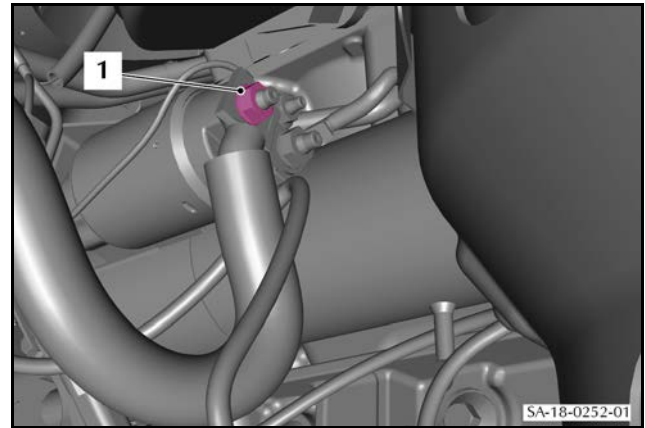


Figure 1

6. Remove the battery cable (1) from the stud on the solenoid (refer to Figure 2).

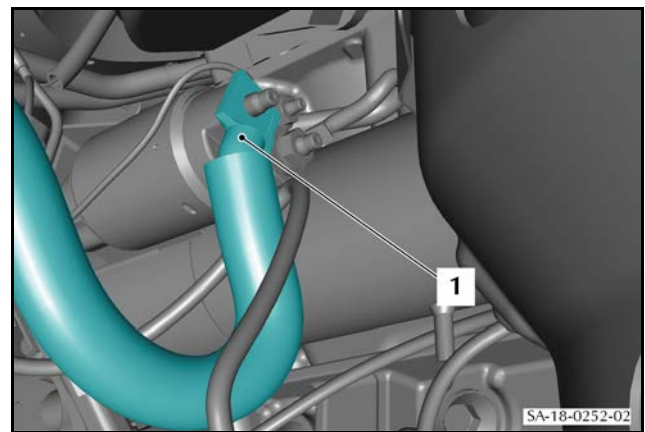


Figure 2

7. Examine the terminal on the battery cable. If necessary, clean the terminal.
8. Examine the stud on the solenoid. If necessary, clean the stud.
9. Put the battery cable back into position on the stud of the solenoid.
10. Install and tighten a new nut that attaches the cable to the stud of the solenoid.

**Part C – Examine the signal wire to the solenoid**

11. Examine the position and condition of signal wire to the solenoid.
12. If the wire is at an acute angle (1) (refer to Figure 3), failure of the wire insulation can occur.

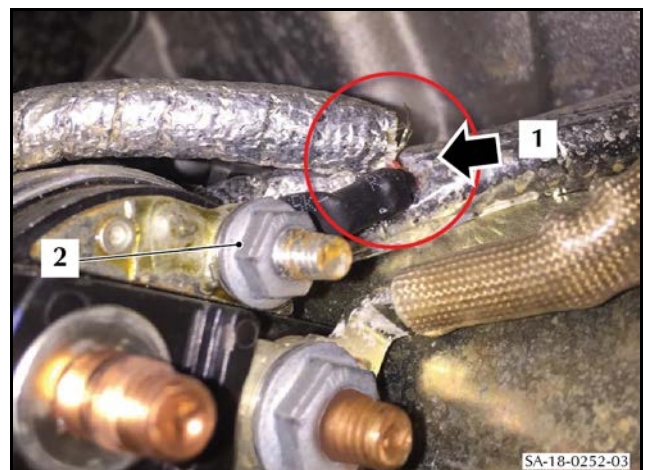
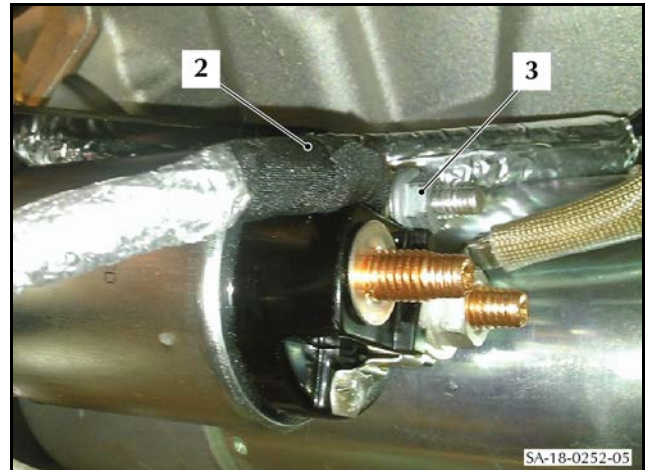


Figure 3

13. If the angle is too acute, remove the nut (2).
14. Remove the wire from the stud and examine the insulation.
15. Wind self-amalgamating harness tape around the wire from the terminal for approximately 4 cm (2) (refer to Figure 4).



**Figure 4**

16. Put the wire onto the stud with the routing shown in Figure 4.
17. Install and tighten the nut (3).

#### **Part D – Complete the procedure**

18. Install the front under tray (refer to Workshop Manual procedure 01.02.NB).
19. Do the battery connection procedure (refer to Workshop Manual procedure 14.01.CA).

#### **Part Data**

Description	Part Number	Quantity
M8 Nut, Hexagon Head	706889	1
Self-Amalgamating Harness Tape	Local Supply	As necessary

## Warranty Data

### Procedure and Labour Time

There are nine tiers in the Warranty database. Please make sure that you refer to the correct tier when you make the Warranty claim.

Description	Model	Task	Time	Tier
Examine and if necessary, repair the solenoid signal wire	V12 Vantage S, Vantage GT12, Rapide	Examine	1.00 hours	A
		Repair	1.10 hours	
	Vanquish 13 MY onwards - Coupe DB9 13 MY onwards - All	Examine	1.10 hours	B
		Repair	1.20 hours	
	13 MY Vanquish Volante, Taraf	Examine	1.25 hours	C
		Repair	1.35 hours	
Replace the nut for the solenoid battery cable	V12 Vantage S, Vantage GT12, Rapide	Repair	1.05 hours	D
	Vanquish 13 MY onwards - Coupe DB9 13 MY onwards - All	Repair	1.10 hours	E
	13 MY Vanquish Volante, Taraf	Repair	1.30 hours	F
Examine and if necessary, repair the solenoid signal wire, and replace the nut for the solenoid battery cable	V12 Vantage S, Vantage GT12, Rapide	Repair	1.15 hours	G
	Vanquish 13 MY onwards - Coupe DB9 13 MY onwards - All	Repair	1.25 hours	H
	13 MY Vanquish Volante, Taraf	Repair	1.40 hours	I

### Failure Mode Description

Select the failure modes that follow when you make a claim through the Warranty system:

Subsystem	Location	Component	Mode of Failure
ELECTRICAL	ENGINE – ANCILLARIES	ENGINE – STARTER MOTOR	POOR PERFORMANCE – LOOSE CONNECTION
POWERTRAIN	ENGINE – ANCILLARIES	ENGINE – STARTER MOTOR	INOPERATIVE

If you have any questions related to this Service Action, please contact: Aston Martin Technical Services on:  
+44 (0) 1926 644720, email: askamtech@astonmartin.com,  
or contact your After Sales Manager.

The English version of this Service Action is written in  
Simplified Technical English to ASD-STE100™.