# **PRO**TIPS

# Blue Print ADBP140015

#### To fit:

Nissan Dualis 2007 > 2014, Note 1 2006 > 2013, Pathfinder 3 2005 > 2014, Qashqai 1 2006 > 2014





## **Clock Spring**

#### Problem

Upon starting the vehicle, the airbag warning light stays illuminated and there is a partial or full loss of functionality of steering wheel controls such as the horn or cruise control. Using a suitable diagnostic tester, the airbag control unit shows the fault code B1049 - 'drivers side front air bag igniter circuit/ open circuit open'.

#### Cause

A coiled strip cable inside the clock spring results in constant contact being made between the wiring loom and the moving components on the centre of the steering wheel. Constant movement and climatic variations can cause fatigue, which ultimately leads to failure of the clock spring.

#### Solution

- Disconnect the battery and wait at least two minutes before starting work on any part of the airbag system.
- Make sure that the steering wheel is in the 'straight ahead' position.
- Remove the airbag module from the steering wheel. There are two holes on the reverse of the steering wheel; one on each side. Insert a blade-type screwdriver into each hole to release the internal clip and gently pull the airbag unit until it is free. Disconnect the yellow electrical connector and the connector with a green wire. The airbag module can now be placed in a safe location with the pad side facing upwards.
- Before removing the steering wheel, make sure that the indicator mark on the steering column is aligned with the 'V' marked on the steering wheel. If you cannot see these indicators, it is advised to add the marks yourself this will make it easier to align when refitting the steering wheel later.

For more technical information please visit: partsfinder.bilsteingroup.com

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### Clock Spring (Continued)

- To remove the steering wheel, take out the 19mm nut holding the steering wheel in place.
- Unscrew the three screws holding the shroud. Carefully 'part' the shroud, allowing access to the steering column.
- Remove the two multi-function switches by squeezing the top and bottom clips.
- Remove the two screws holding the clock spring to the steering column. You may need to release a wire clip at the top to fully release the unit and disconnect the electrical connectors from the back of the unit, with the grey connector disconnected first.
- Before fitting your new Blue Print ADBP140015 clock spring, you will need to transfer the steering-angle sensor (marked as 47945-JD000/JD00A) from the old clock spring. This is held in place by two screws.

#### Installation of the new clock spring (reverse of the removal process)

- Firstly, reconnect the yellow electrical connector to the clock spring this interconnects with the grey one next to it.
- When the clock spring is attached to the steering column, remove the transportation lock.
- Refit the steering wheel, making sure that it is aligned correctly with the shaft. Feed the wires through the steering wheel.
- Tighten the steering wheel nut to 34 Nm.
- Refit the air bag unit.
- Reconnect the battery.
- Clear the fault code from the ECU and retest.
- To ensure that the correct level of resistance is maintained, it is advised that a small amount of dielectric grease is used on all electrical connections of the clock spring.

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