

Tat's a fact

problem solving

FORLA99215
FORD
LASER BJ
9-1999
4 cylinder



Customer complaint

Gear changing problems, even after gearbox overhaul. Worse when vehicle is turning right.

Problem summary

After extensive road testing and analysing of the problem, it was found the gearbox was violently down-shifting when turning right (indicator on) and when foot on brake (brake light on).

Diagnostic sequence

The main diagnostic tool was a more thorough investigative communication with the customer than might normally be required, followed by extensive road testing, trying many things to trigger the fault.

This case, due to previous repairs to the transmission, coupled with the customer's note that the condition was worse on turning right, pointed to a link which required detailed investigation.

Fault description

During road testing, it was discovered that the problem only occurred when the foot brake was applied, but worsened when the right hand indicator was activated at the same time.

After inspecting the driver side rear lamp assembly and testing its earth connections, it was discovered that the earth circuit had a poor connection to the vehicle body.

This was causing a voltage feed-back to the reverse light circuit back to the auto ECU.

This voltage was seen by the auto ECU as an indication that the vehicle was in reverse gear, therefore causing violent down-shifting.

Fault solution

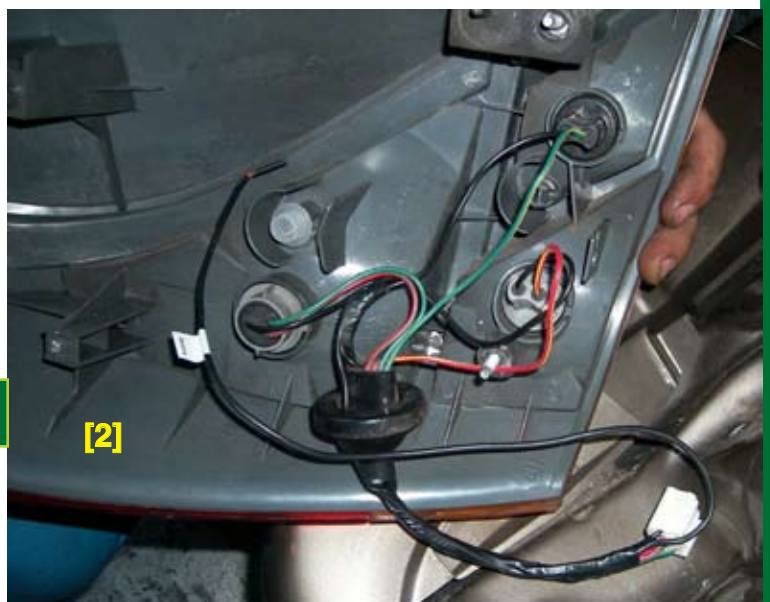
The removal of the driver's side rear lamp [1], and inspection of the wiring and globe holders [2].

An additional earth cable was run from the vehicle chassis to the globe holders.

Removal of the passenger side light and inspection of the connections is also recommended.

Recommended time

Total time was three and a half hours including customer liaison, extensive road testing,



research and actual time spent fixing the problem.

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This is one of those cases where, on the surface, there would appear to be no link between a rear light fault and harsh transmission gear changing.

This highlights the need for technicians to always keep an open mind to the possible causes of what might appear to be a mechanical fault.

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Service light reset

Audi
Model A3 and A4
1998 till 2001

- 1 Turn off the ignition
- 2 Press and hold the trip reset button on the instrument cluster while switching on the ignition

- 3 Oil Service should appear on display

- 4 Pull out the clock set button on the instrument cluster and hold in position until the message 'oil service' is cleared from the display

- 5 To reset inspection service, press the trip reset again to call up the next service message which should read 'service INSP'

- 6 Pull out the clock set button again until the message is cleared

- 7 Turn off the ignition