

Checking speed signal

The speed signal transmitted from the speedometer sender (G 22) is then passed on by the speedometer (G 21) to the following systems:

- cruise control system
- radio
- idling speed stabilisation
- air conditioner
- differential lock control system
- on-board computer
- auto-check system

The on-board computer and auto-check system are internally connected to the speed signal in the dash panel insert. All other systems dependent on the speed signal are connected in parallel to the 2 outputs - speed signal - on the dash panel insert.

If a short circuit is present for instance in the control unit for cruise control (E 46), the speed signal from the speedometer (G 21) will not be transmitted.

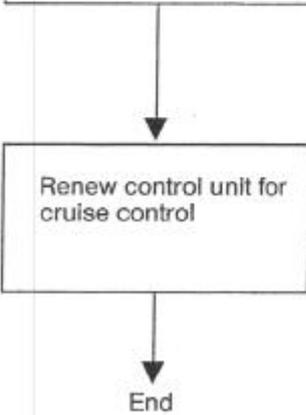
This means that the idling speed stabilisation, speed-dependent volume control function of the radio, the on-board computer etc. will not work.

A safety circuit in the speedometer (G 21) ensures that it continues to work.

The speed signal cannot be tested using conventional workshop equipment – carry out fault finding as follows:

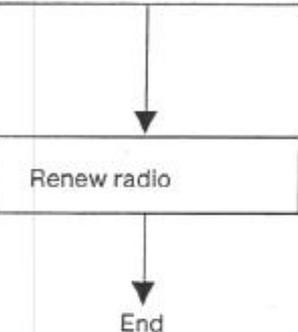
(If particular systems are not fitted in car, do not carry out corresponding test)

Control unit for cruise control system (E 46) defective	
Disconnect plug from control unit for cruise control	
Other systems work	Other systems do not work



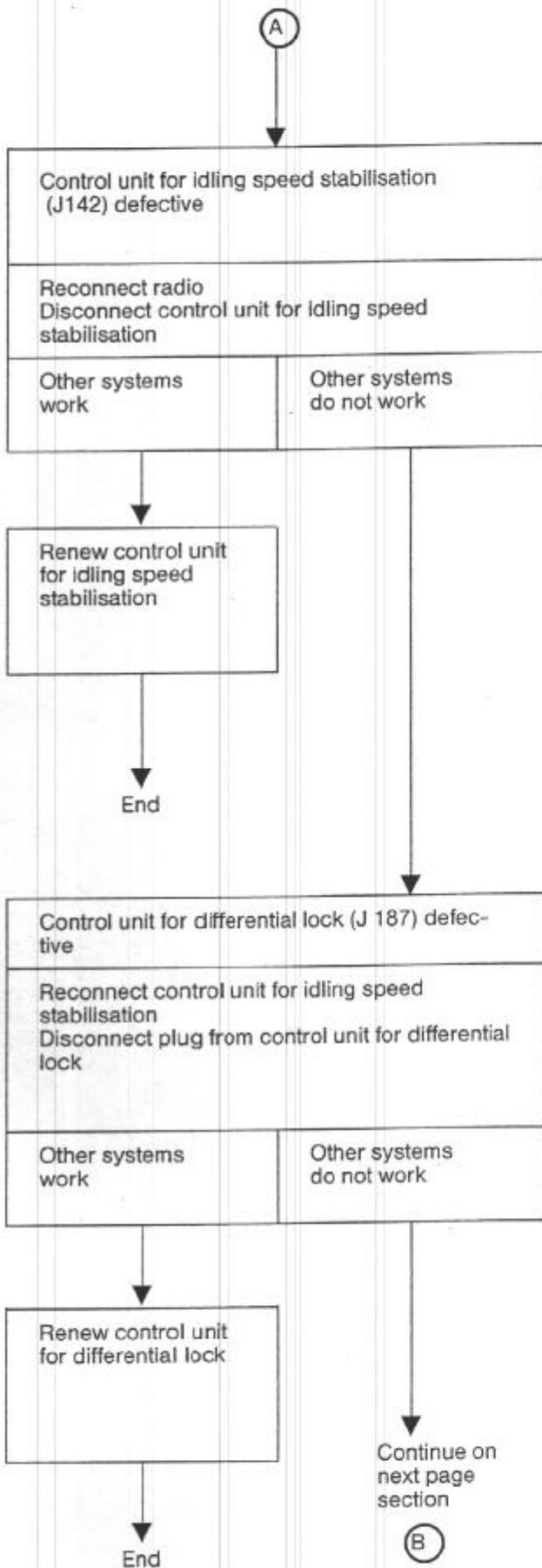
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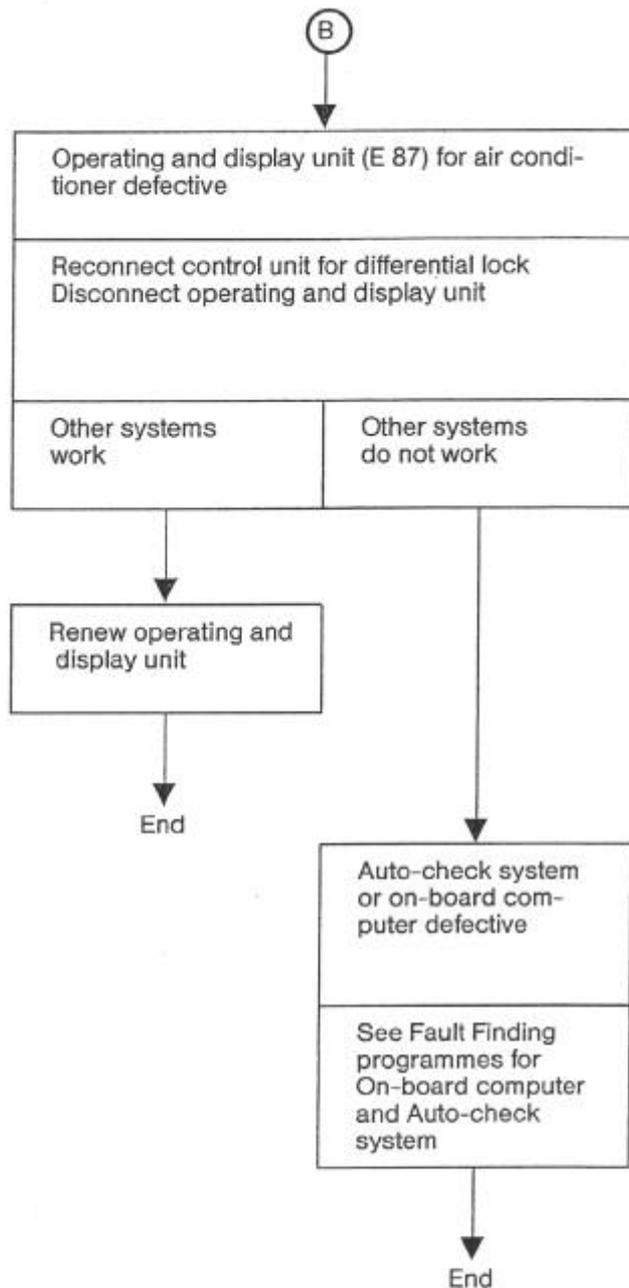
Radio (R) is defective	
Reconnect plug for cruise control control unit, disconnect radio	
Other systems work	Other systems do not work



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(A)



**Note:**

If the systems dependent on the speed signal still do not work after systematically disconnecting the individual systems, this means that the fault is in the wiring. Use current flow diagram to repair short circuit or short to earth.