

Troubleshooting

DTC 12, 14, 16, 18: Wheel Sensor (Electrical Noise/Intermittent Interruption)

NOTE: If the ABS indicator comes on for the reasons described below, the indicator should go off when you test drive the vehicle at speeds above 19 mph (30 km/h).

- Only the drive wheels rotated
- The vehicle spun
- Electrical noise

Visually check for appropriate wheel sensor and pulser installation (see table).

DTC	Appropriate Wheel Sensor
12	Right-front
14	Left-front
16	Right-rear
18	Left-rear

Are they installed correctly?

NO

Reinstall or replace the appropriate wheel sensor or pulser.

YES

VSA CONTROL UNIT 42P CONNECTOR

1	2	3	4	5	6	7	8	9	10
11	13	14	15	16	17	18	20	21	23
27	28	29	30	31	32	33	36	38	39

Wire side of female terminals

Check for a short to wire in the one wheel sensor circuit:

1. Disconnect the VSA control unit 42P connector.
2. Measure the resistance between the appropriate wheel sensor (+) and (-) circuit terminals (see table).

DTC	Appropriate Terminal	
	(+) Side	(-) Side
12 (Right-front)	No. 16:FRS(+)	No.15:FRS(-)
14 (Left-front)	No. 28:FLS(+)	No. 13:FLS (-)
16 (Right-rear)	No. 31:RRS(+)	No. 30:RRS (-)
18 (Left-rear)	No. 14:RLS(+)	No. 29:RLS (-)

Is there less than 450 Ω ?

YES

Repair short to wire between the appropriate wheel sensor (+) and (-) circuits.

NO

Check for a short to another wire in the wheel sensor circuit:

Check for continuity between the appropriate wheel sensor (+) circuit terminal and other wheel sensor (+) circuit terminals (see table).

DTC	Appropriate Terminal	Other Terminal			
12 (Right-front)	No. 16:FRS(+)	No.28:FLS(+)	No. 31:RRS(+)	No. 14:RLS(+)	
14 (Left-front)	No. 28:FLS(+)	No. 16:FRS(+)	No. 31:RRS(+)	No. 14:RLS(+)	
16 (Right-rear)	No.31:RRS(+)	No. 16:FRS (+)	No. 28:FLS (+)	No. 14:RLS (+)	
18 (Left-rear)	No. 14:RLS(+)	No. 16:FRS (+)	No. 28:FLS (+)	No. 31:RRS (+)	

Is there continuity?

YES

Repair short to wire between the appropriate wheel sensor and the other wheel sensor.

NO

Clear the DTC, and test-drive the vehicle. If the ABS indicator comes on and the same DTC is indicated, replace the VSA modulator-control unit.