1989 Dodge or Ram Truck Dakota 2WD V6-239 3.9L VIN X FI

Vehicle > ALL Diagnostic Trouble Codes (DTC) > Testing and Inspection > Manufacturer Code Charts > Driveability (DR) Tests

DR-1A CODE TO DR TEST CHART (CHECKING FOR FAULT CODES)

Perform VISUAL INSPECTION, before proceeding.

- 1. Ensure battery is fully charged.
- 2. Connect diagnostic readout box to engine diagnostic connector, then turn ignition switch to the Run position and observe display.
- 3. If any fault messages are displayed, proceed to step 4. If display reads ``No Faults," proceed to Test 2.
- 4. Start engine and accelerate to 2000 RPM for at least 10 seconds, then return to idle.

5. On models equipped with automatic transmission, cycle transmission between Park and 1st gear, then back to Park.

6. On models equipped with A/C, press A/C button on and off.

7. On all models, turn engine Off and note fault data display. If more than one fault is displayed, always repair the first fault message first, as it may not be necessary to perform any furthur diagnosis once the initial repair is performed.

8. If display reads ``Internal Self-Test," replace SMEC, then proceed to Test 44.

- 9. If display reads ``Vehicle Speed Signal," proceed to Test 12.
- 10. If display reads ``Low Engine Temp," test for faulty engine thermostat.
- 11. If display reads ``Oxygen Sensor Signal," proceed to Test 13.

12. If display reads ``A/C Clutch Relay CKT" proceed to Test 24 on vehicles with A/C and to Test 13 on vehicles less A/C.

13. If display reads ``Air Fuel At Limit," proceed to Test 35.

14. If display reads ``MAP Pneumatic Signal," and ``0 since last fault," proceed to Test 8. If display does not also read ``0 since last fault," proceed to Test 4.

15. If display reads ``MAP Pneumatic Change," and ``0 since last fault," proceed to Test 9. If display does not also read ``0 since last fault," proceed to Test 5.

16. If display reads ``MAP Voltage Too Low" and ``0 since last fault," proceed to Test 10. If display does not also read ``0 since last fault," proceed to Test 5.

17. If display reads ``MAP Voltage Too High," and ``0 since last fault," proceed to Test 11. If display does not also read ``0 since last fault," proceed to Test 5.

18. If display reads ``Battery Input Sense," check charging system operation.

19. If display reads ``Coolant Voltage Low," and ``O since last fault," proceed to Test 14. If display does not also read ``O since last fault," proceed to Test 5.

20. If display reads ``Coolant Voltage High," and ``O since last fault," proceed to Test 15. If display does not also read ``O since last fault," proceed to Test 5.

21. If display reads ``T/B Temp Voltage Low," and ``0 since last fault," proceed to Test 16. If display does not also read ``0 since last fault," proceed to Test 5.

22. If display reads ``T/B Temp Voltage High," and ``0 since last fault," proceed to Test 16. If display does not also read ``0 since last fault," proceed to Test 5.

23. If display reads ``TPB Temp Voltage Low," and ``0 since last fault," proceed to Test 18. If display does not also read ``0 since last fault," proceed to Test 5.

24. If display reads ``TPB Temp Voltage High," and ``0 since last fault," proceed to Test 19. If display does not also read ``0 since last fault," proceed to Test 5.

25. If display reads ``AIS Motor Circuits," and ``0 since last fault," proceed to Test 20. If display does not also read ``0 since last fault," proceed to Test 6.

26. If display reads ``Inj 1 Peak Current," and ``0 since last fault," proceed to No Start Test 6. If display does not also read ``0 since last fault," proceed to Test 6.

27. If display reads ``Inj 2 Peak Current," and ``0 since last fault," proceed to No Start Test 6. If display does not also read ``0 since last fault," proceed to Test 6.

28. If display reads ``Inj 1 Control Current," and ``O since last fault," proceed to No Start Test 8. If display does not also read ``O since last fault," proceed to Test 6.

29. If display reads ``Inj 2 Control Current," and ``O since last fault," proceed to No Start Test 9. If display does not also read ``O since last fault," proceed to Test 6.

30. If display reads ``Purge Solenoid Ckt," and ``0 since last fault," proceed to Test 21. If display does not also read ``(since last fault," proceed to Test 3.

31. If display reads ``EGR Solenoid Circuit," and ``0 since last fault," proceed to Test 22. If display does not also read ``0 since last fault," proceed to Test 3.

32. If display reads ``EGR System Failure," proceed to Test 23.

33. If display reads ``S/C Servo Solenoid," check speed control system operation.

34. If display reads ``Idle Switch Shorted," and ``0 since last fault," proceed to Test 25. If display does not also read ``0 since last fault," proceed to Test 7.

35. If display reads ``Idle Switch Opened," and ``0 since last fault," proceed to Test 26. If display does not also read ``0 since last fault," proceed to Test 7.

36. If display reads ``Air Switch Solenoid,"and ``O since last fault"on vehicles equipped with air pump, proceed to Test 27. If display does not also read ``O since last fault," proceed to Test 3.

37. If display reads ``PTU Solenoid Circuit," and ``0 since last fault" on vehicles equipped with lockup converter, proceed to Test 28. If display does not also read ``0 since last fault," proceed to Test 3.

38. If display reads ``Charging System CKT," check charging system operation.

39. If display reads ``Z1 Voltage Sense," repair dark green/black wire for open circuit between SMEC and auto shutdown relay. Check connector for possible damage, repairing as necessary.

40. If display reads ``FJ2 Voltage Sense," and ``0 since last fault," proceed to Test 30. If display does not also read ``0 since last fault," proceed to Test 5.

41. If display reads ``Overdrive Solenoid,"and ``O Since Last Fault" on vehicles equipped with overdrive transmission, proceed to Test 31. If display does not also read ``O Since Last Fault," proceed to Test 3.

- 42. If display reads ``Battery Voltage High," check charging system operation.
- 43. If display reads ``Battery Voltage Low," check charging system operation.
- 44. If display reads ``ERM Mileage Accumulator," proceed to Test 32.

45. If display reads ``Eeprom Write Denied," proceed to Test 32.