

# HOW TO TROUBLESHOOT ECU CONTROLLED SYSTEMS

## GENERAL INFORMATION

There are many ECU controlled systems used in 4RUNNER. In general, ECU controlled systems are considered to be very intricate and require a high level of technical knowledge and expert skill to troubleshoot. The fact is, however, that if you proceed by inspecting the circuits one by one, troubleshooting of these systems is not complex. If you have adequate understanding of the system and basic knowledge of electricity, the problem can be accurately diagnosed and fixed. This manual is designed based on the above principle to help service technicians perform accurate and effective troubleshooting, and is compiled for the following major ECU controlled systems:

The troubleshooting procedures are described on the following pages.

System	Page
1. SFI System (1GR-FE)	<a href="#">05-1</a>
2. ABS with EBD & BA & TRAC & VSC System (1GR-FE)	<a href="#">05-256</a>
3. Electronically Controlled Automatic Transmission [ECT] (1GR-FE)	<a href="#">05-267</a>
4. Air Conditioning System (1GR-FE)	<a href="#">05-315</a>
5. Combination Meter (1GR-FE)	<a href="#">05-333</a>
6. Cruise Control System (1GR-FE)	<a href="#">05-343</a>

### FOR USING OBDII SCAN TOOL OR HAND-HELD TESTER

- Before using the scan tool or tester, the scan tool's instruction book or tester's operator manual should be read thoroughly.
- If the scan tool or tester cannot communicate with the ECU controlled systems when you have connected the cable of the tester to the DLC3 with the ignition switch and tester turned ON, there is a problem on the vehicle side or tester side.
  - (1) If the communication is normal when the tester is connected to another vehicle, inspect the diagnosis data link line (Bus $\oplus$ line) or ECU power circuit of the vehicle.
  - (2) If the communication is still impossible when the tester is connected to another vehicle, the problem is probably in the tester itself, so perform the Self Test procedures outlined in the Tester Operator's Manual.