# HOW TO TROUBLESHOOT ECU CONTROLLED SYSTEMS

IN00Z–03

## GENERAL INFORMATION

A large number of ECU controlled systems are used in the HILUX. In general, the ECU controlled system is considered to be a very intricate system requiring a high level of technical knowledge and expert skill to troubleshoot. However, the fact is that if you proceed to inspect the circuits one by one, troubleshooting of these systems is not complex. If you have adequate understanding of the system and a basic knowledge of electricity, accurate diagnosis and necessary repair can be performed to locate and fix the problem. This manual is designed through emphasis of the above standpoint to help service technicians perform accurate and effective troubleshooting, and is compiled for the following major ECU controlled systems:
The troubleshooting procedure and how to make use of it are described on the following pages.

| System | Page |
|---|---|
| 1. Automatic Transmission | DI–1 |
| 2. Anti–Lock Brake System | DI–50 |
| 3. Supplemental Restraint System | DI–107 |

### FOR USING HAND–HELD TESTER

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