SYSTEM DESCRIPTION

1. **BRIEF DESCRIPTION**
   (a) The Controller Area Network (CAN) is a serial data communication system for real time applications. It is a vehicle multiplex communication system which has a high communication speed (500 kbps) and the ability to detect malfunctions.
   (b) By pairing the CANH and CANL bus lines, the CAN performs the communication based on the differential voltage.
   (c) Many ECUs (sensors) installed on the vehicle operate by sharing information and communicating with each other.
   (d) The CAN has 2 resistors of 120 Ω which are necessary to communicate with the main bus line.

2. **DEFINITION OF TERMS**
   (a) Main bus line
       (1) The main bus line is a wire harness between the two terminus circuits on the bus (communication line). This is the main bus in the CAN communication system.
   (b) Sub bus line
       (1) The sub bus line is a wire harness which diverges from the main bus line to an ECU or sensor.
   (c) Terminus circuit
       (1) The terminus circuit is a circuit which is placed to convert communication current of the CAN communication into bus voltage. It consists of a resistor and condenser. Two terminus circuits are necessary on a bus.

3. **ECUS OR SENSORS WHICH COMMUNICATE THROUGH CAN COMMUNICATION SYSTEM**
   (a) Skid Control ECU
   (b) Yaw Rate Sensor
   (c) Steering Sensor
   (d) ECM
   (e) A/C Amplifier

4. **DIAGNOSTIC CODES FOR CAN COMMUNICATION SYSTEM**
   (a) DTCs for the CAN communication system are as follows: U0073/94 (C1223/43), U0100/65, U0123/62, U0124/95 (C1223/43), U0126/63, B1499.

5. **REMARKS FOR TROUBLESHOOTING**
   (a) Trouble in the CAN bus (communication line) can be checked from the DLC3 (except when there is a wire break other than in the sub bus line of the DLC3).
   (b) DTCs of the CAN communication system can be checked using the intelligent tester via the CAN VIM.

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(c) The CAN communication system cannot detect trouble in the sub bus line of the DLC3 even though the DLC3 is also connected to the CAN communication system.

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