

## SYSTEM DESCRIPTION

### 1. DYNAMIC LASER CRUISE CONTROL SYSTEM DESCRIPTION

- (a) This system maintains the vehicle running at the fixed speed that the driver has set, as long as there are no vehicles ahead in the same lane. Then, the system maintains the vehicle distance that has been set by the driver.

If the system detects a vehicle moving at a slower speed ahead while the driver is driving at a fixed speed, it closes the throttle valve to decelerate. If further deceleration is required, the system controls the brake actuator in order to apply the brakes.

Thereafter, if there are no front vehicles within the set vehicle-to-vehicle distance because either the vehicle ahead or the driver has changed lanes, the system accelerates slowly to reach the set vehicle speed and resumes driving at the fixed speed.

- (b) Fixed speed cruise control mode is designed to maintain a fixed cruising speed. The vehicle-to-vehicle distance control mode is designed to control cruising at a fixed speed function, deceleration cruising function, follow-up cruising function and acceleration cruising function.
- (c) A steering pad switch (Distance control switch) for setting the distance to the front vehicle is provided on the steering wheel pad.  
With this switch, the vehicle distance can be set in the following three stages: LONG, MIDDLE, and SHORT.

## HOW TO PROCEED WITH TROUBLESHOOTING

The intelligent tester can be used at step 4, 5, 10.

**1** VEHICLE BROUGHT TO WORKSHOP



**2** PROBLEM SYMPTOM CONFIRMATION



**3** CHECK BODY MULTIPLEX COMMUNICATION SYSTEM

(a) Check that the DTCs output.

HINT:

The ECM of this system is connected to the multiplex communication system. Therefore, before starting troubleshooting, make sure to check that there is no trouble in the multiplex communication system.



**MULTIPLEX DTC OUTPUTS (PROCEED TO "BODY MULTIPLEX COMMUNICATION SYSTEM")**



**NO MULTIPLEX DTC (GO TO STEP 5)**

**4** DTC CHECK (OTHER THAN MULTIPLEX DTC)



**MALFUNCTION CODE (GO TO STEP 6)**



**NORMAL CODE (GO TO STEP 7)**

**5** DTC CHART



**GO TO STEP 10**

**6** PROBLEM SYMPTOM SIMULATION

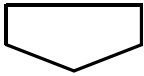


**SYMPTOM DOES NOT OCCUR (GO TO STEP 8)**



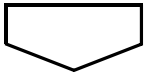
**SYMPTOM OCCURS (GO TO STEP 9)**

**7 SYMPTOM SIMULATION**



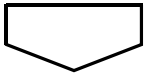
**GO TO STEP 10**

**8 PROBLEM SYMPTOMS TABLE**

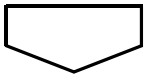


**9 CIRCUIT INSPECTION**

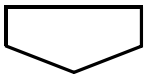
**CC**



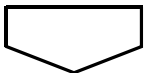
**10 TERMINAL OF ECU**



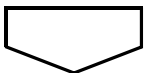
**11 IDENTIFYING PROBLEM**



**12 REPAIR OR REPLACE**



**13 CONFIRMATION TEST**



**END**