DI0EO–05

CIRCUIT INSPECTION

DTC	11, 15	Actuator Motor Circuit

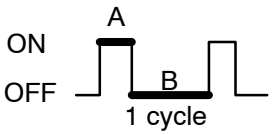
CIRCUIT DESCRIPTION

The actuator motor is operated by signals from the ECU. Acceleration and deceleration signals are transmitted by changes in the Duty Ratio (See below).

Duty Ratio

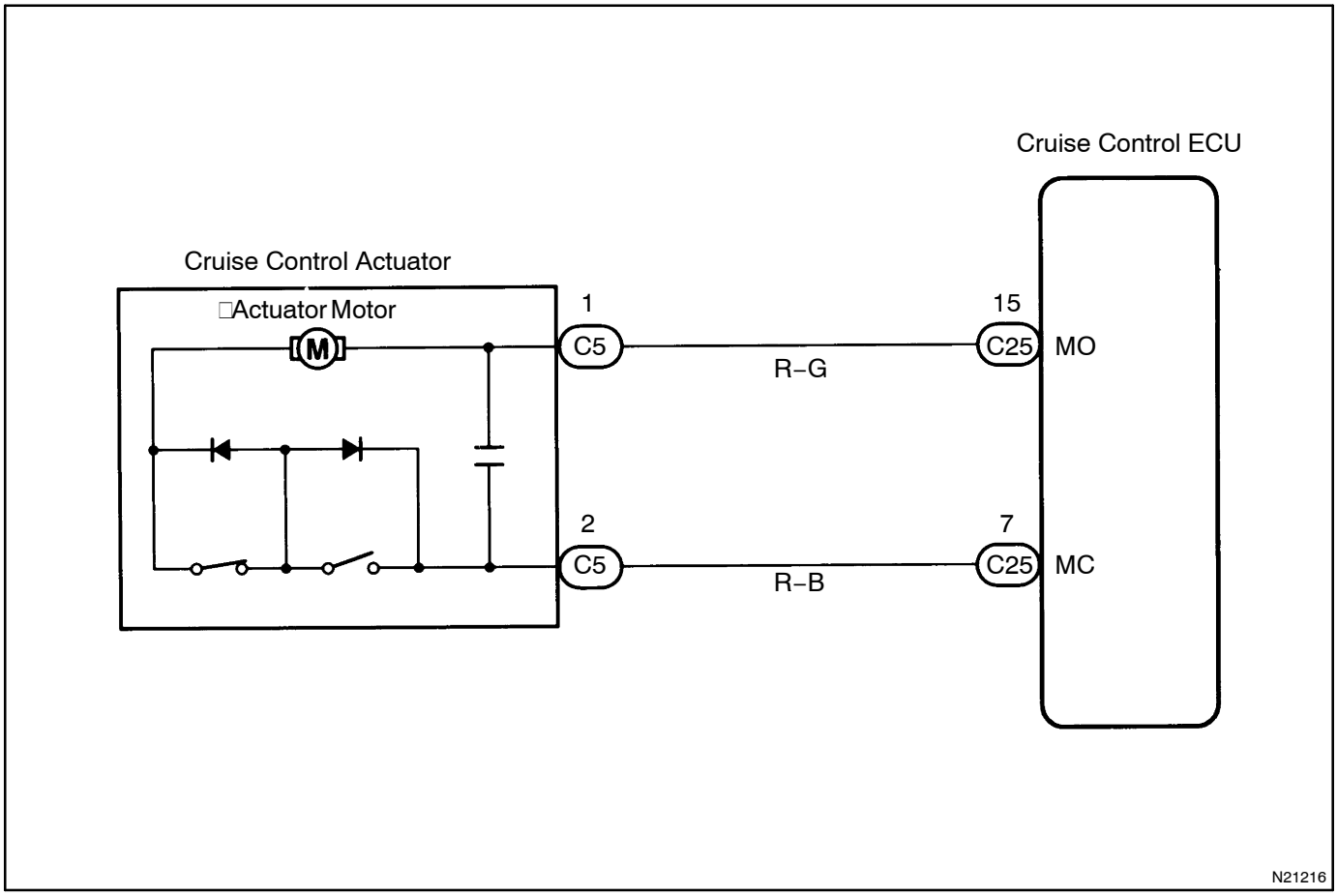
The duty ratio is the ratio of the period of continuity in one cycle. For example, if A is the period of continuity in one cycle, and B is the period of non –continuity, then.

$$\text{Duty Ratio} = \frac{A}{A + B} \times 100\ (\%)$$



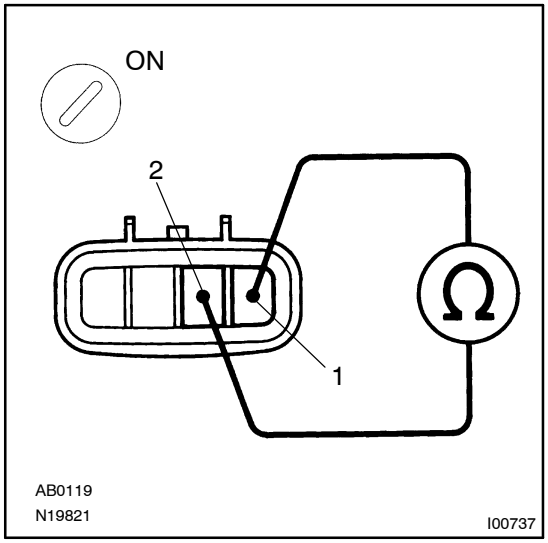
DTC No.	Detection Item	Trouble Area
11	Short in actuator motor circuit.	• Actuator motor • Harness or connector between cruise control ECU and actuator motor • Cruise control ECU
15	Open in actuator motor circuit.	Actuator motor

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check resistance between terminals MO and MC of actuator motor.**



PREPARATION:

(a) Turn ignition switch OFF.

(b) Disconnect the actuator connector.

CHECK:

Measure resistance between terminals 1 and 2.

HINT:

If control plate position is fully opened or fully closed, resistance can not be measured.

OK:

Resistance: more than 4.2 Ω

NG → **Replace cruise control actuator.**

OK

2	**Check for open and short in harness and connectors between cruise control ECU and actuator motor (See page IN–35).**

NG → **Repair or replace harness or connector.**

OK

Check and replace cruise control ECU. (See page IN–35).