DI8RH–01

Door closer position switch circuit

CIRCUIT DESCRIPTION

The closer position switch is built in the door lock assembly and detects the position of the closer.
The condition of the HALF/FULL/POLE switches and the door for each case is as follows.

1. CONDITIONS FOR STARTING DOOR CLOSER OPERATION

- Door closer detection switch: original position
- Full latch switch ON
- Half latch switch ON

After detecting the conditions mentioned above, if the following conditions continue for 300msec, the door closer motor starts rotating in the regular direction.

- Door closer detection switch: original position
- Full latch switch ON
- Half latch switch OFF
- Pole switch: ON

2. CONDITIONS FOR CANCELING DOOR CLOSER OPERATION

If the following conditions are detected during the door closer motor's regular rotation, the door closer operation is stopped. After 100msec, the door closer motor is start rotating in the reverse direction to move to the original position.

- Door closer detection switch: reverse rotation range
- Half latch switch ON
- The motor receives voltage for 3 sec. or more.
- Door unlock detection switch: LOCK

3. CONDITIONS FOR FINISHING DOOR CLOSER OPERATION

If the following conditions are detected during the door closer motor's regular rotation, the door closer operation is stopped. After 100msec., it makes reverse rotation to move the door closer for 150 ± 20msec.

- Full latch switch OFF
- Half latch switch OFF
- Pole switch: OFF

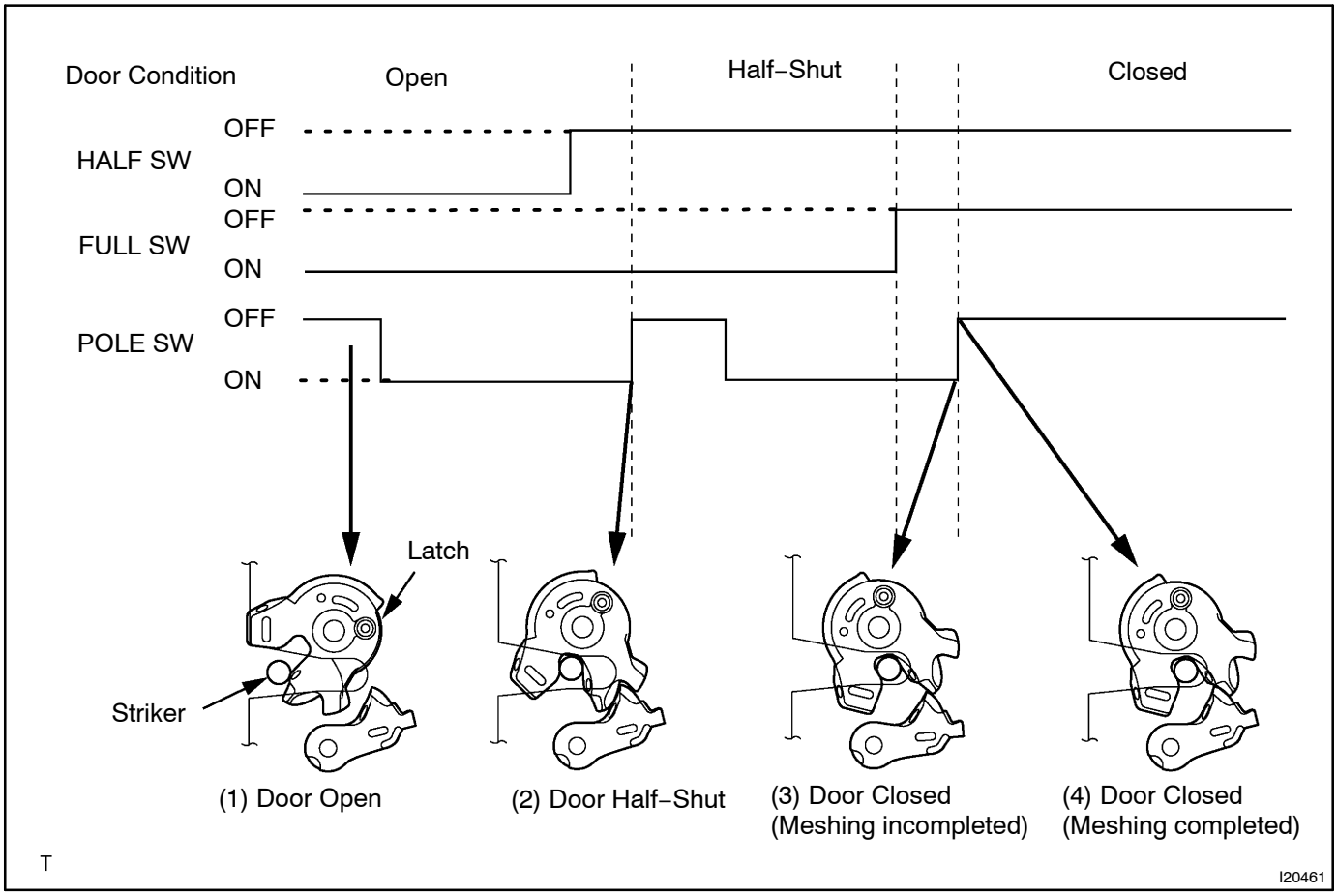
4. CONDITIONS FOR CANCELING DOOR CLOSER REVERSE ROTATION

If the following conditions are detected during the door closer motor's reverse rotation, the door closer is moved to the original position.

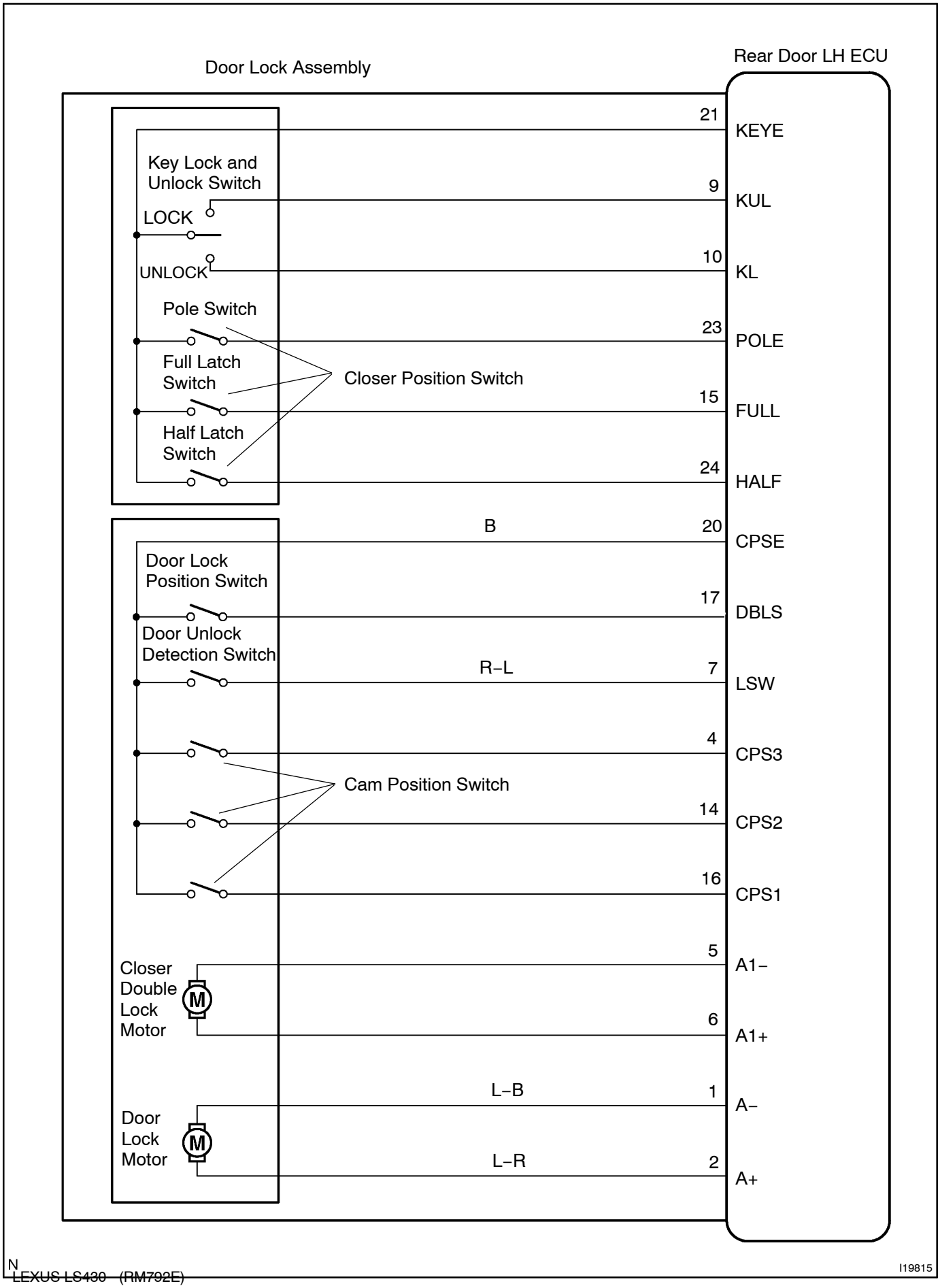
- Full latch switch ON
- Half latch switch ON
- Double locking operation command

5. DOOR LOCK AND CLOSER TIMING CHART

6. DOOR CONDITION AND CLOSER OPERATION TIMING CHART



WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
In case of using the LEXUS hand–held tester, start the inspection from step 1 and in case of not using the LEXUS hand–held tester, start from step 2.

1	**Check door closer position (POLE/FULLY/HALF) switch using LEXUS hand–held tester.**

PREPARATION:
Connect the LEXUS hand–held tester to DLC3.
CHECK:
Check the door closer position (POLE/FULLY/HALF) switch using DATA LIST.

OK → **Proceed to next circuit inspection shown on problem symptoms table (See page DI–1339).**

NG

2	**Check door closer position switch (See page BE–170).**

NG → **Replace door lock assembly.**

OK

3	**Check wireharness and connector between door closer position switch and rear door LH ECU (See page IN–35).**

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

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–1339).