DI3WV–03

DTC	71	EGR System Malfunction

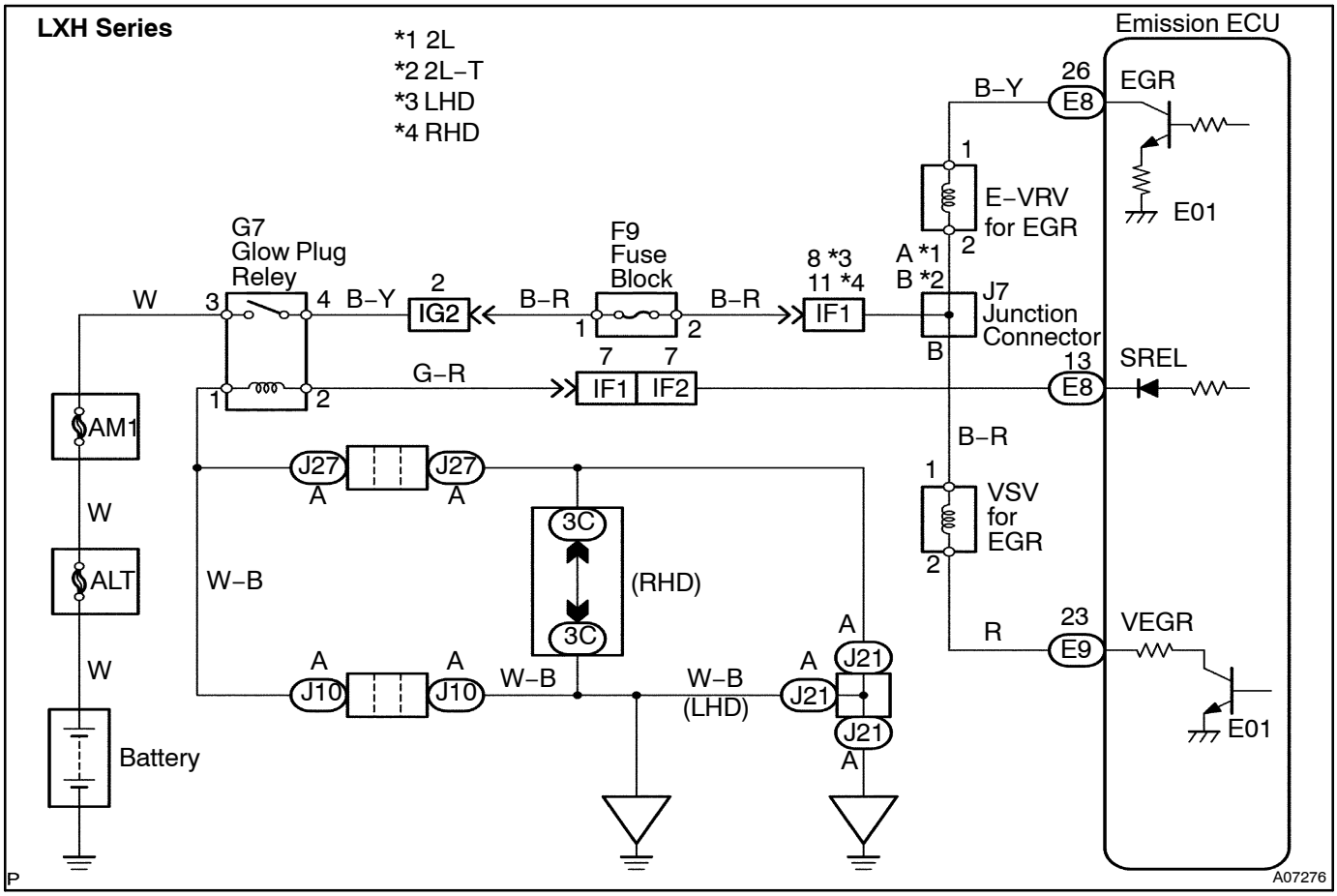
CIRCUIT DESCRIPTION

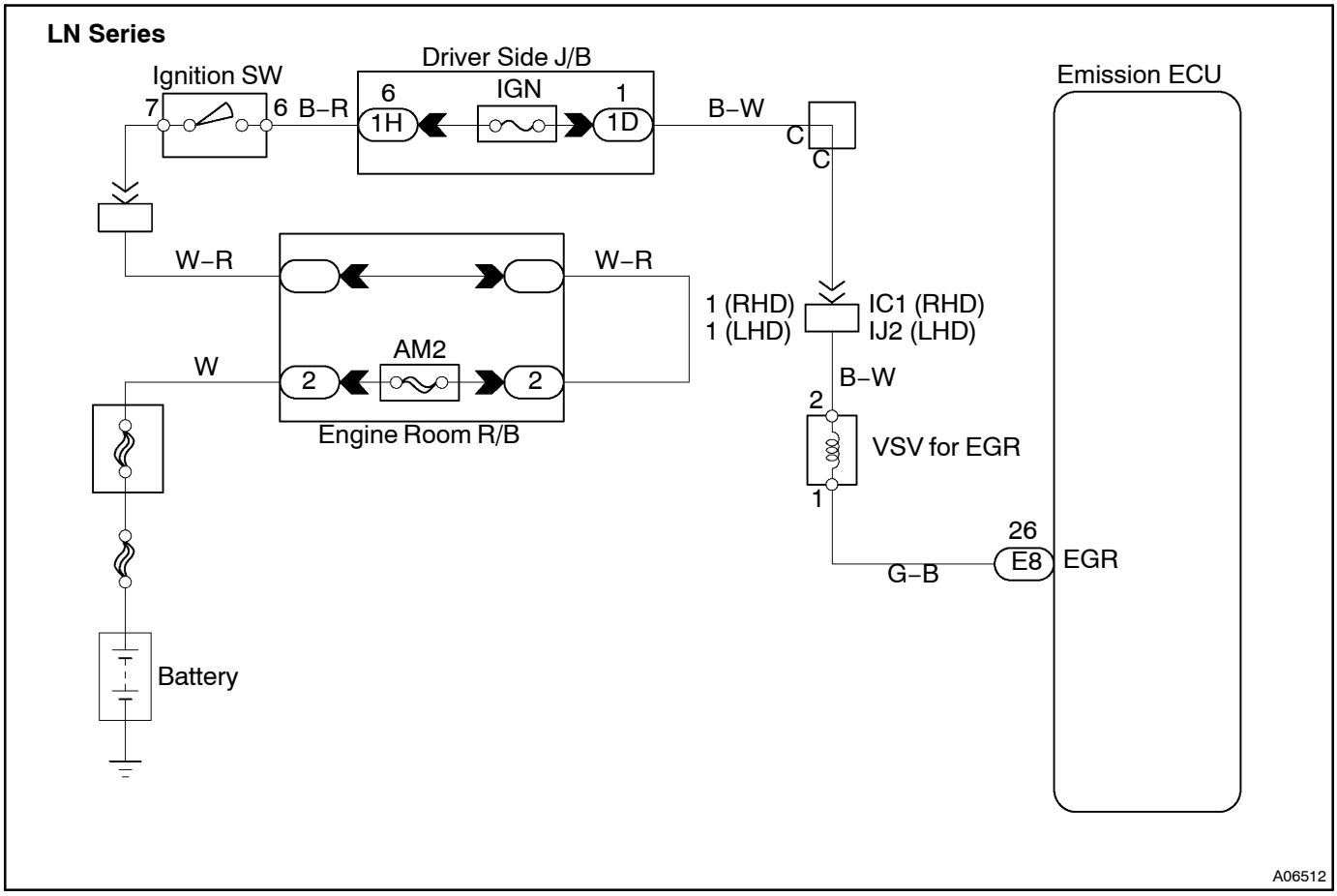
The EGR system recirculates exhaust gas, which is controlled to the proper quantity to suit the driving conditions into the intake air mixture to slow down combustion, reduce the combustion temperature and reduce NOx emissions,
The lift amount of EGR valve is controlled by the vacuum which is regulated by the E–VRV operated by the emission ECU.
Under the following conditions, EGR is cut to maintain driveability.

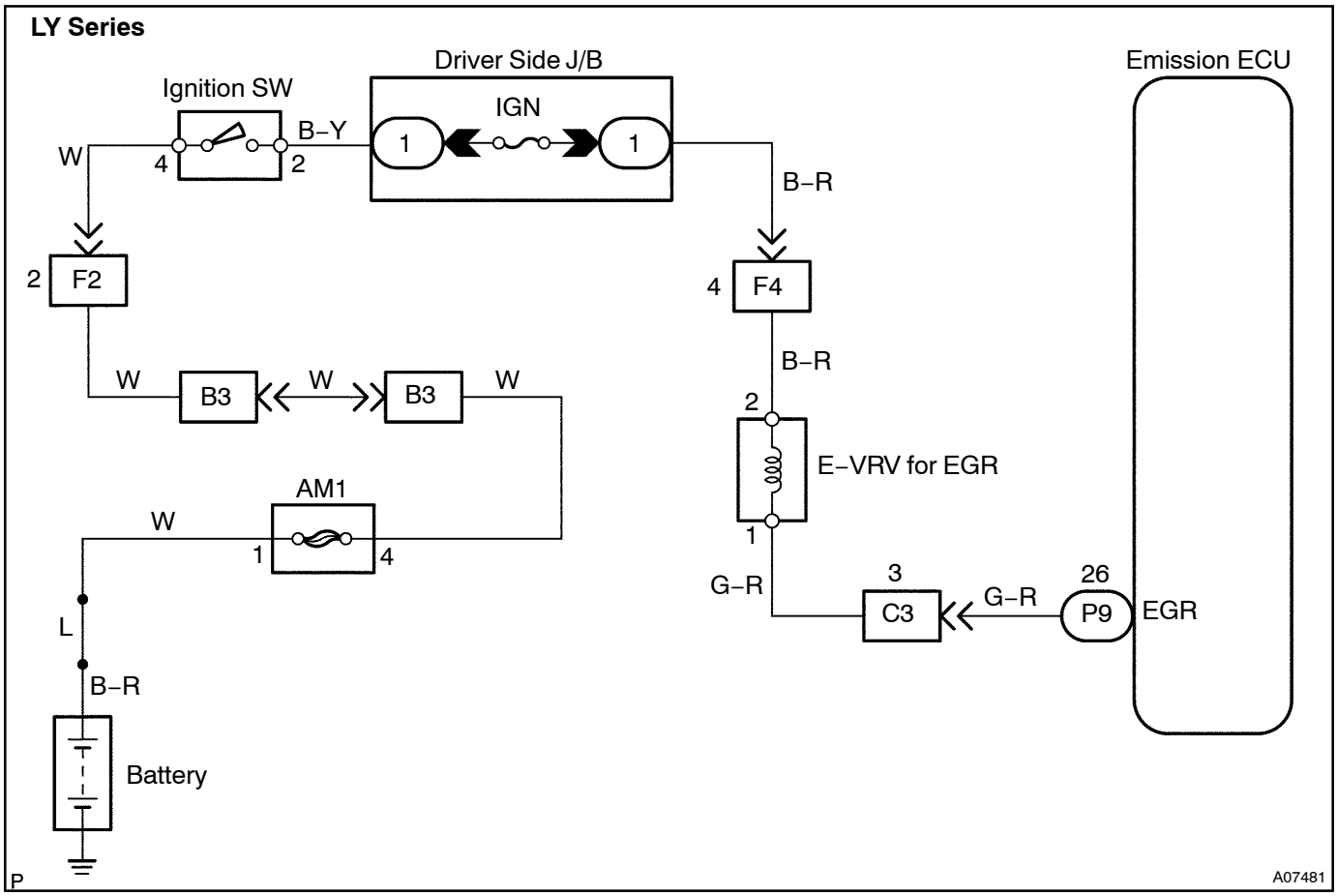
- Before the engine is warmed up
- During deceleration (Diesel throttle valve closed)
- Light engine load (amount of intake air very small)
- Engine speed over 4,000 rpm

DTC No.	DTC Detecting Condition	Trouble Area
71	When abnormal feedback values have been obtained during EGR control operation (2 trip detection)	• Disconnect clogging or damage of sensing pipe • Vacuum sensor • Open or short in E–VRV circuit • Emission ECU

WIRING DIAGRAM




LN Series
Ignition SW
Driver Side J/B
IGN
Emission ECU
7
6 B–R
6
1H
1
1D
B–W
C
C
W–R
W–R
1 (RHD)
1 (LHD)
IC1 (RHD)
IJ2 (LHD)
AM2
W
2
2
B–W
2
VSV for EGR
1
Engine Room R/B
26
E8
EGR
G–B
Battery
A06512


LY Series
Driver Side J/B
Ignition SW
IGN
Emission ECU
W
4
B–Y
2
1
1
B–R
2
F2
4
F4
W
B3
W
B3
W
B–R
2
E–VRV for EGR
1
AM1
W
1
4
G–R
3
C3
G–R
26
P9
EGR
L
B–R
Battery
P
A07481

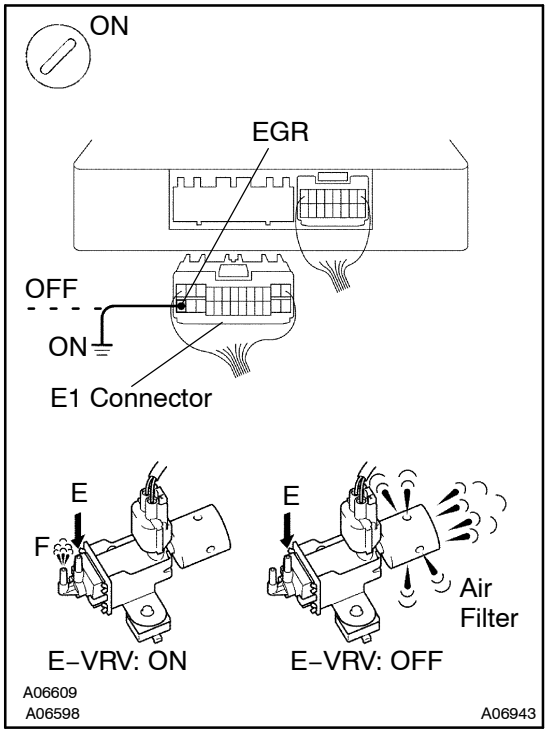
INSPECTION PROCEDURE

1	**Check connection of vacuum hose between vacuum pump and E–VRV for EGR, E–VRV for EGR and EGR valve.**

NG → **Repair or replace.**

OK

2	**Check operation of E–VRV for EGR.**



PREPARATION:

(a) Disconnect the emission ECU from the body panel (See page EC–6).
(b) Disconnect the E1 connector of the emission ECU.
(c) Turn the ignition switch ON.

CHECK:

Check the E–VRV operation.

(1) Connect between terminal EGR of the emission ECU connector and body ground (ON).
(2) Disconnect between terminal EGR of the emission ECU connector and body ground (OFF).

OK:

E–VRV ON :
Air from pipe E is flowing out through pipe F.
E–VRV OFF :
Air from pipe E is flowing out through air filter.

OK → **Go to step 5.**

NG

3	Check E–VRV for EGR (See page EC–10).

NG → Replace E–VRV for EGR.

OK

4	Check for open and short in harness and connector between E–VRV for EGR and emission ECU, E–VRV for EGR (See page IN–19).

NG → Repair or replace harness or connector.

OK

Check and replace emission ECU (See page EC–6).

5	Check EGR valve (See page EC–10).

NG → Replace EGR valve.

OK

6	Check EGR system (See page EC–10).

NG → Repair or replace.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–16).