

SECTION HA

MODIFICATION NOTICE:

- The circuit diagram and wiring diagrams for air conditioner and wiring diagram for heater have been changed.

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Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER (Mechanically activated type)” used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. The SRS system composition which is available to NISSAN MODEL N15 is as follows (The composition varies according to the destination and optional equipment.):

- For a frontal collision
The Supplemental Restraint System consists of driver air bag module (located in the center of the steering wheel), front passenger air bag module (located on the instrument panel on passenger side), seat belt pre-tensioners (Mechanically activated type), a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.
- For a side collision
The Supplemental Restraint System consists of front side air bag module (located in the outer side of front seat), satellite sensor, diagnosis sensor unit (which is one of components of air bags for a frontal collision), wiring harness, warning lamp (which is one of components of air bags for a frontal collision).

Information necessary to service the system safely is included in the **RS section** of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance should be performed by an authorized NISSAN dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by intentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the RS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. Spiral cable and wiring harnesses covered with yellow insulation either just before the harness connectors or for the complete harness are related to the SRS.

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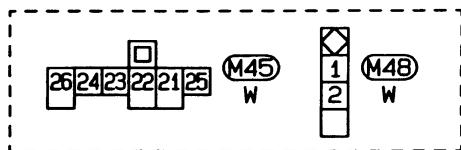
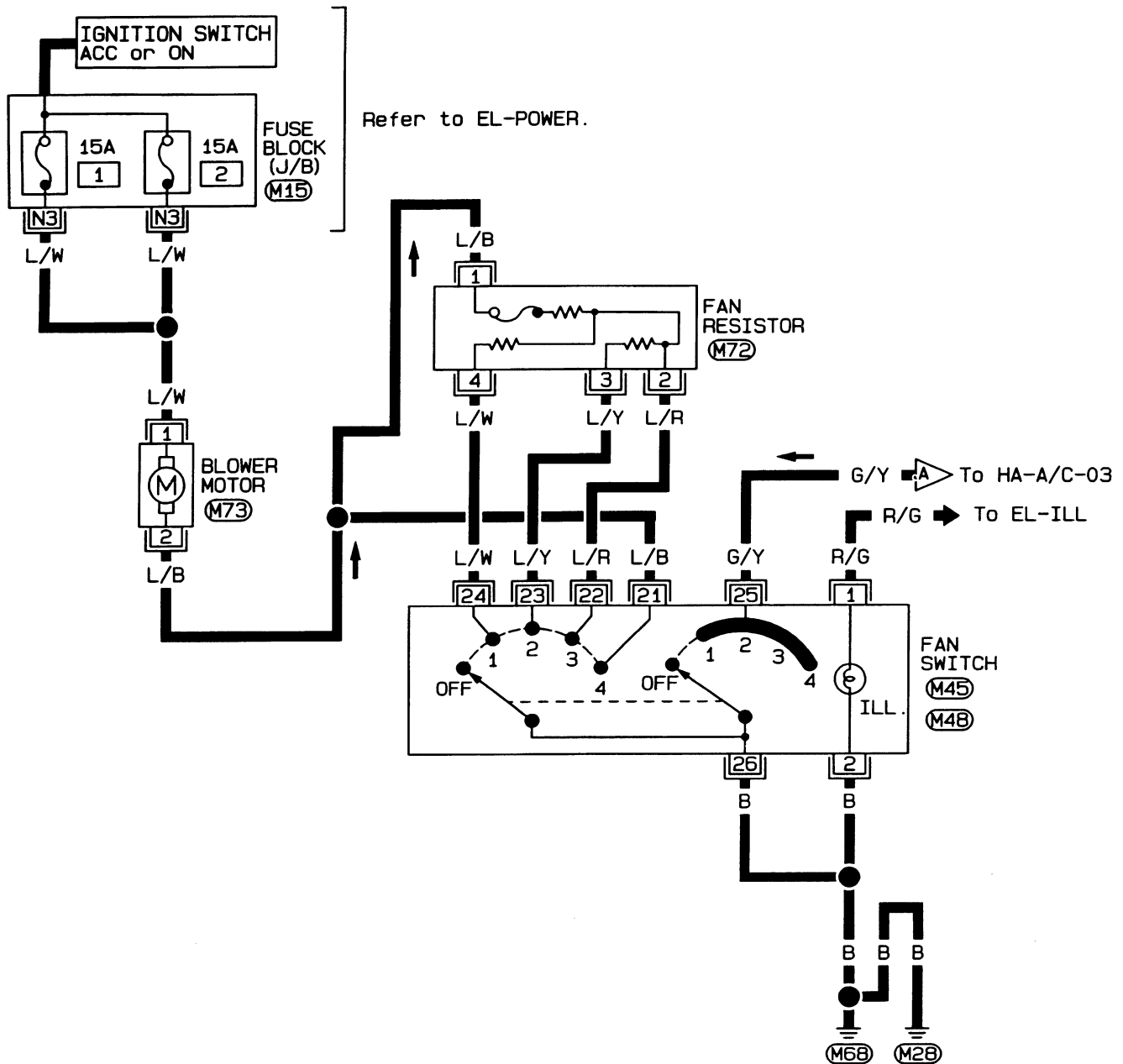
HA



TROUBLE DIAGNOSES

Wiring Diagram — A/C —/LHD Models

HA-A/C-01



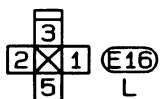
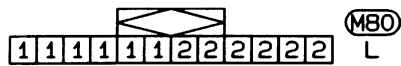
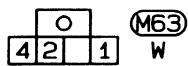
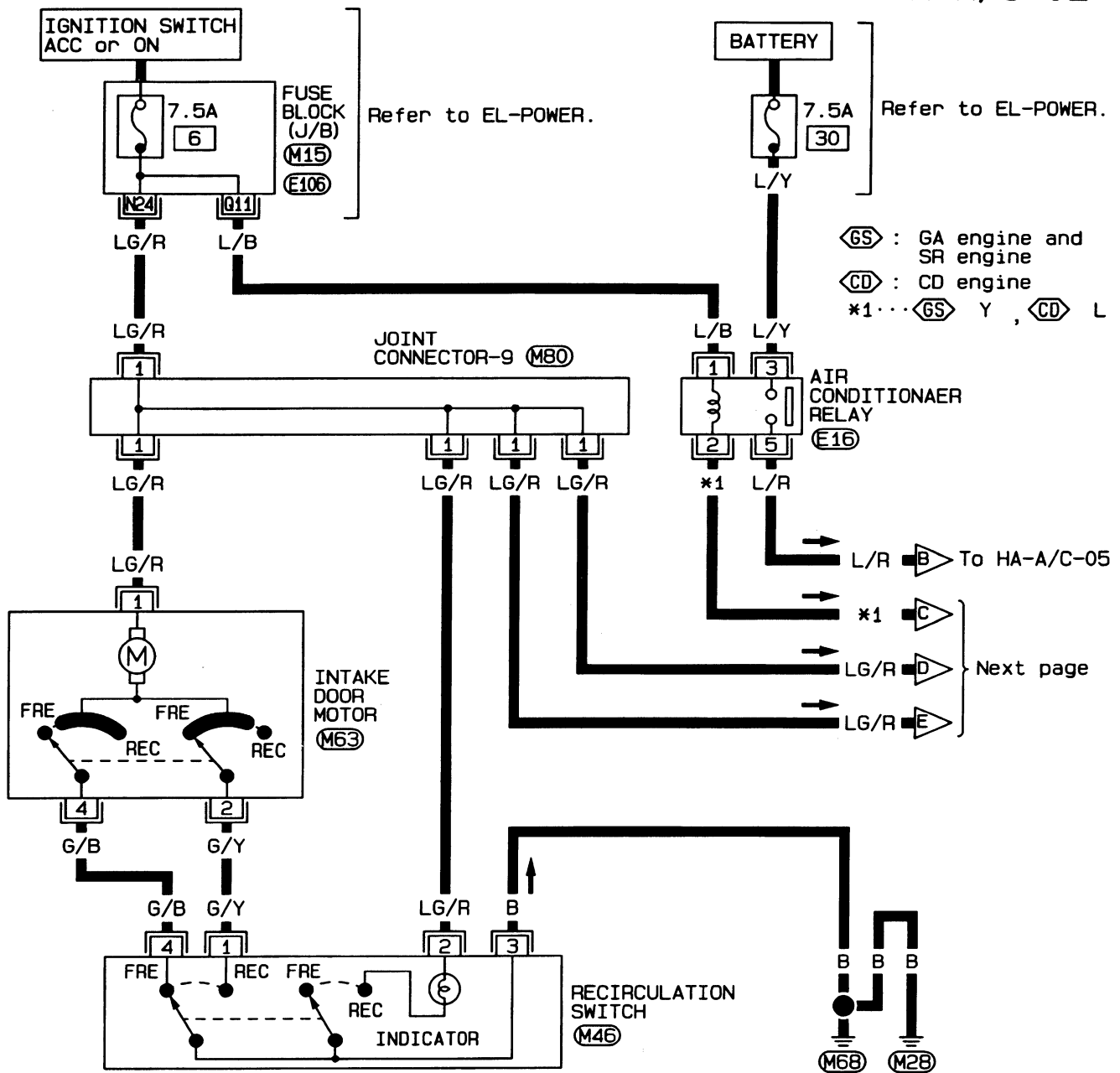
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(M15)

TROUBLE DIAGNOSES

Wiring Diagram — A/C —/LHD Models (Cont'd)

HA-A/C-02



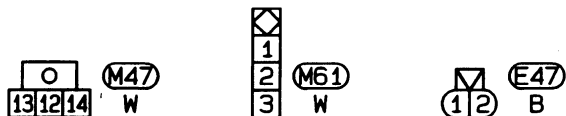
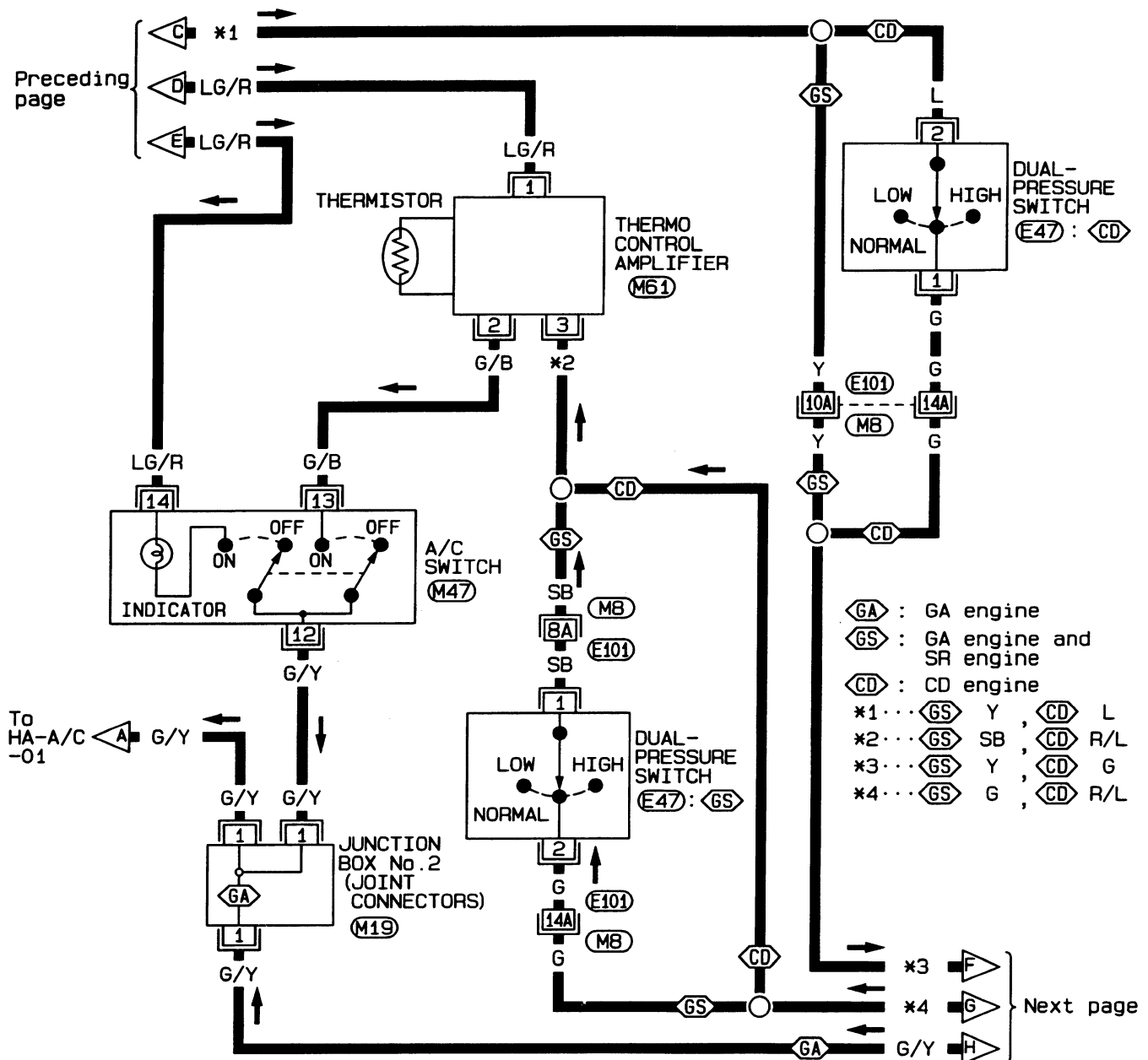
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(M15), (E106)

TROUBLE DIAGNOSES

Wiring Diagram — A/C —/LHD Models (Cont'd)

HA-A/C-03



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(M8), (E101)

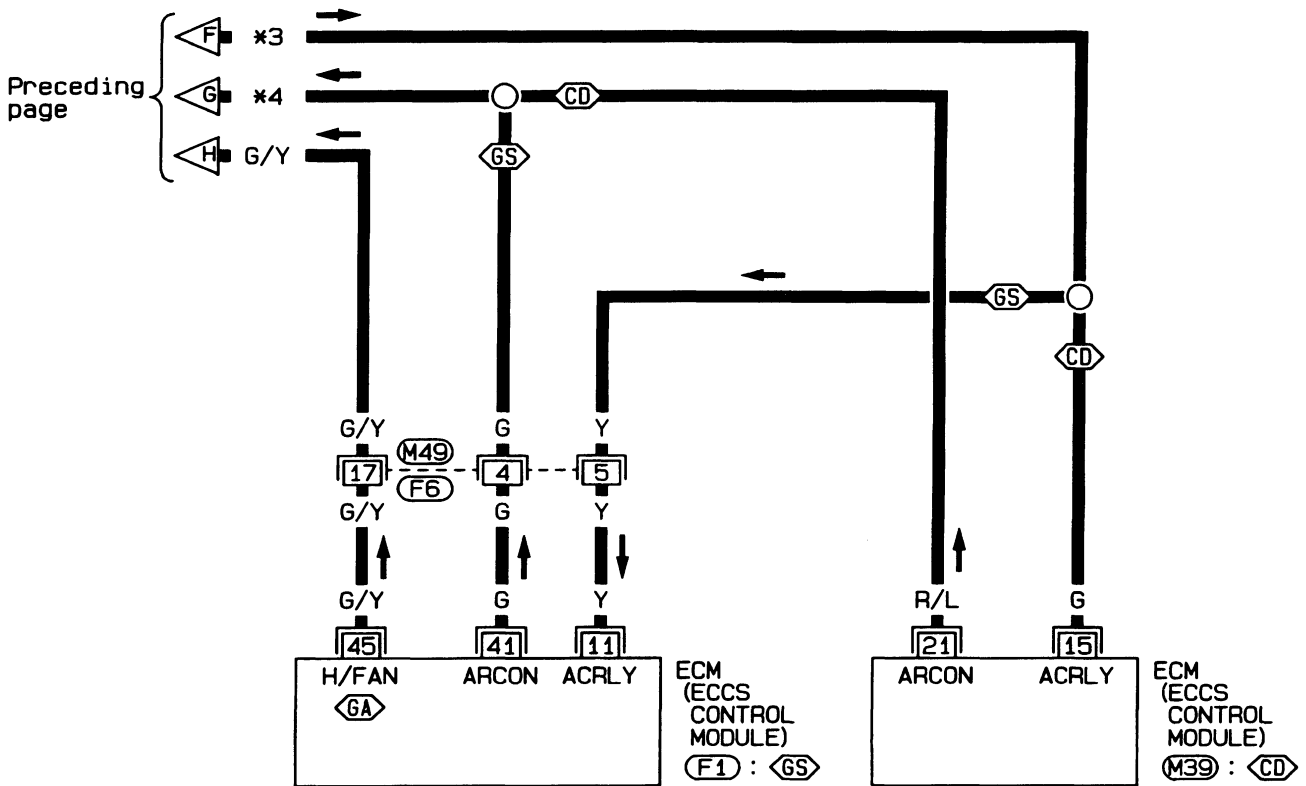
(M19)

TROUBLE DIAGNOSES

Wiring Diagram — A/C —/LHD Models (Cont'd)

HA-A/C-04

- GA : GA engine
 GS : GA engine and SR engine
 CD : CD engine
 $\ast 3 \cdots \text{GS}$ Y , CD G
 $\ast 4 \cdots \text{GS}$ G , CD R/L



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9	10	11	12	13	14	15	16	17
18	19	20						W

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(M39)

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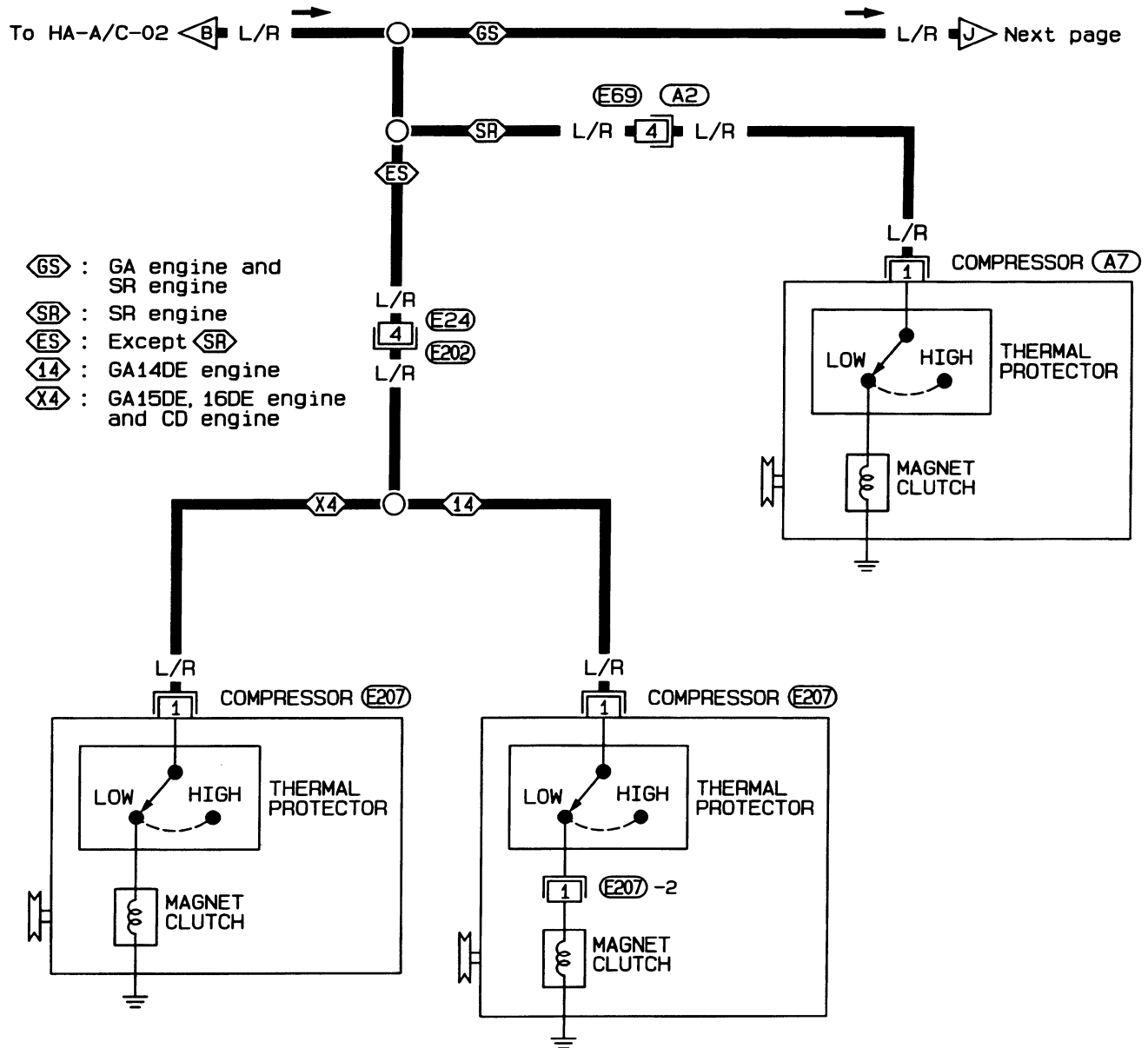
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TROUBLE DIAGNOSES

Wiring Diagram — A/C —/LHD Models (Cont'd)

HA-A/C-05



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(E207) -2,
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(A7)
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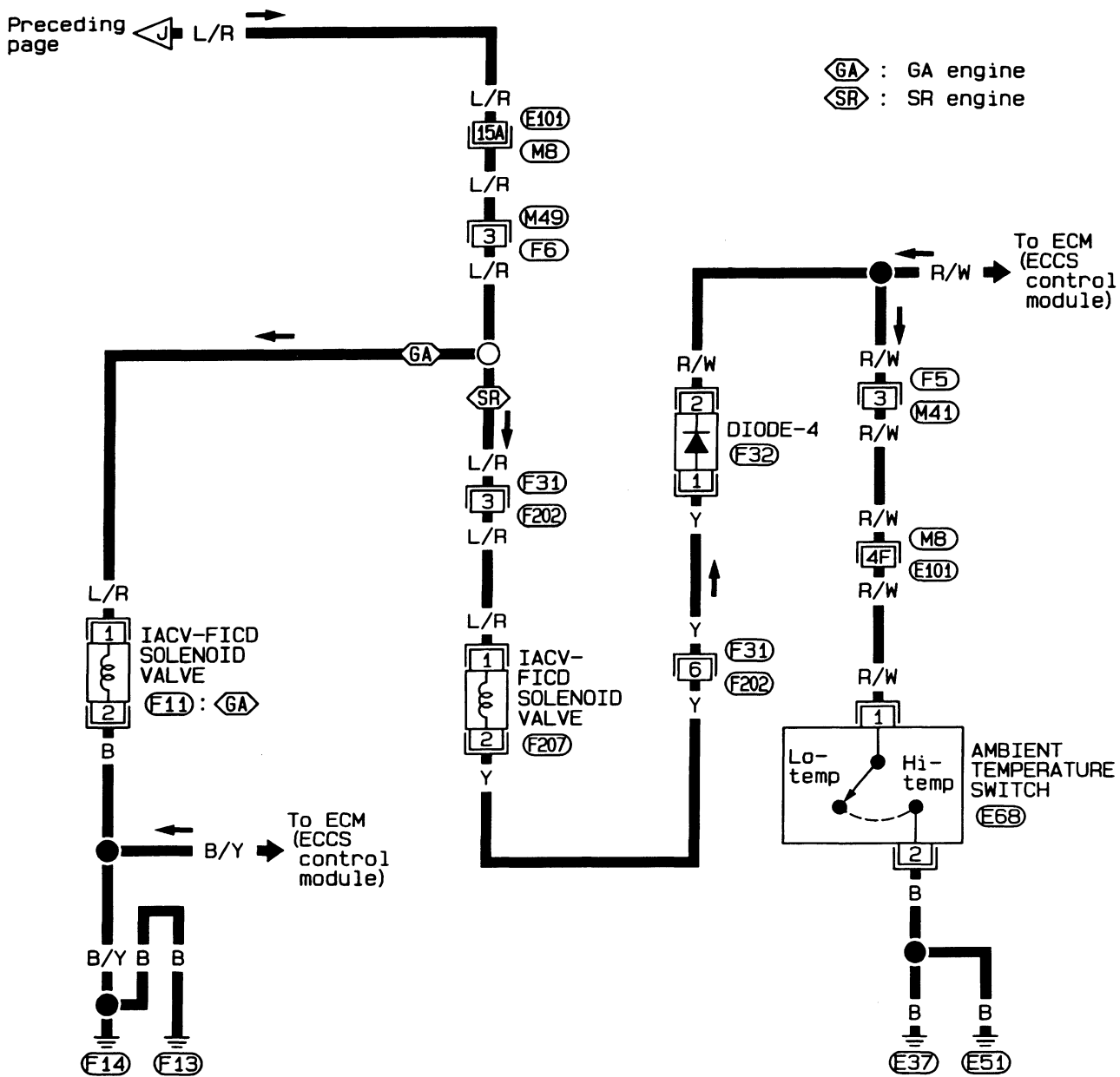
1	2
3	4

(A2)
GY

TROUBLE DIAGNOSES

Wiring Diagram — A/C —/LHD Models (Cont'd)

HA-A/C-06



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9	10	11	12	13	14	15	16	W

1	2	E68
1	2	GY

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4	5	6	W

1	2	F11	F207
1	2	PU	PU

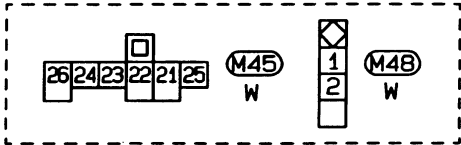
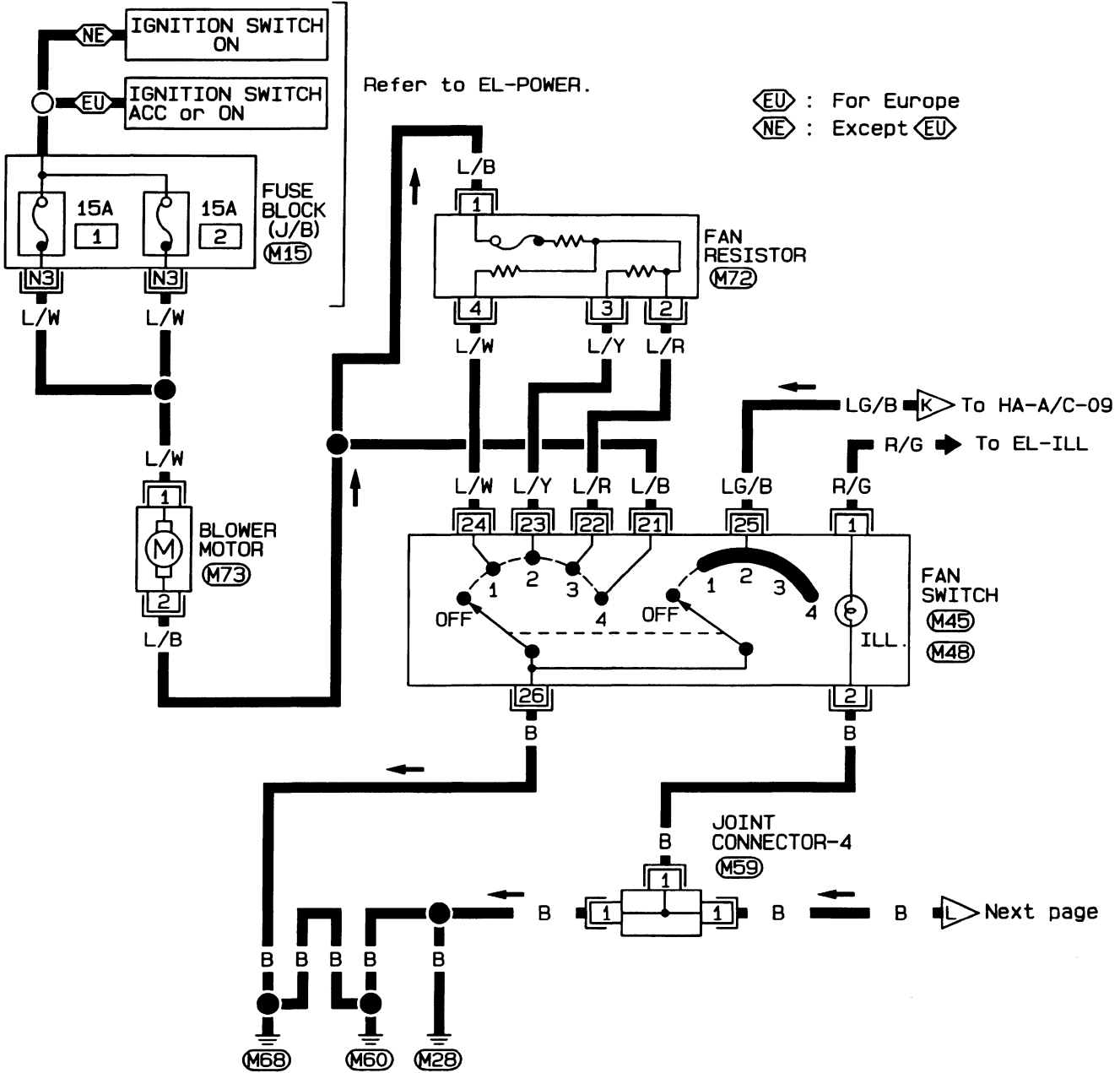
1	2	3	F31
4	5	6	GY

1	2	F32
1	2	

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MB, E101

HA-A/C-07



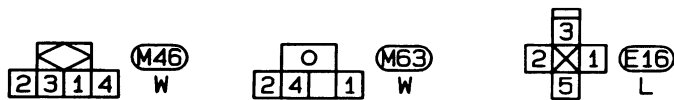
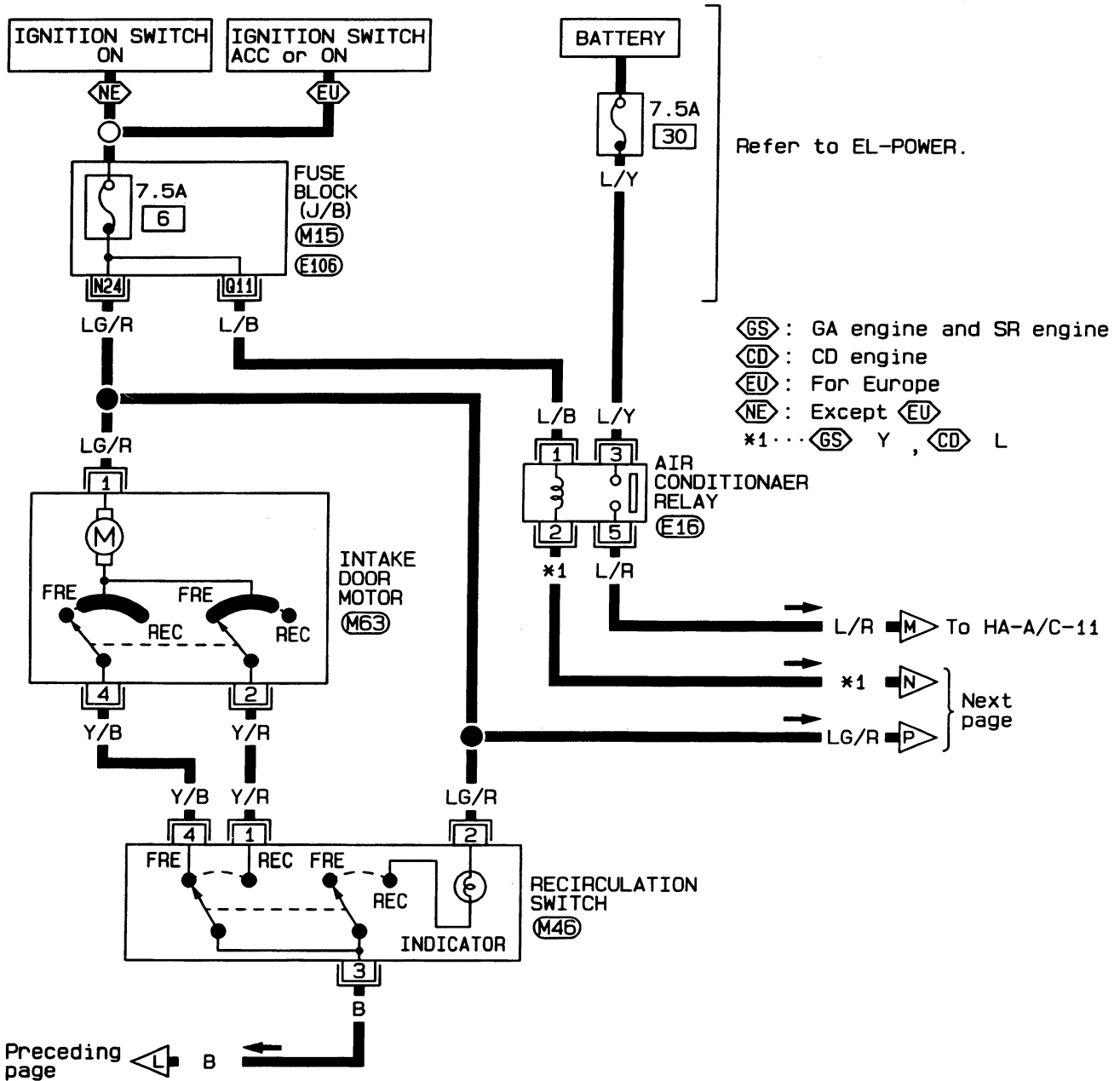
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TROUBLE DIAGNOSES

Wiring Diagram — A/C —/RHD Models (Cont'd)

HA-A/C-08



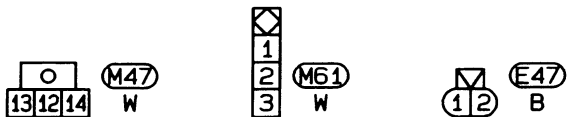
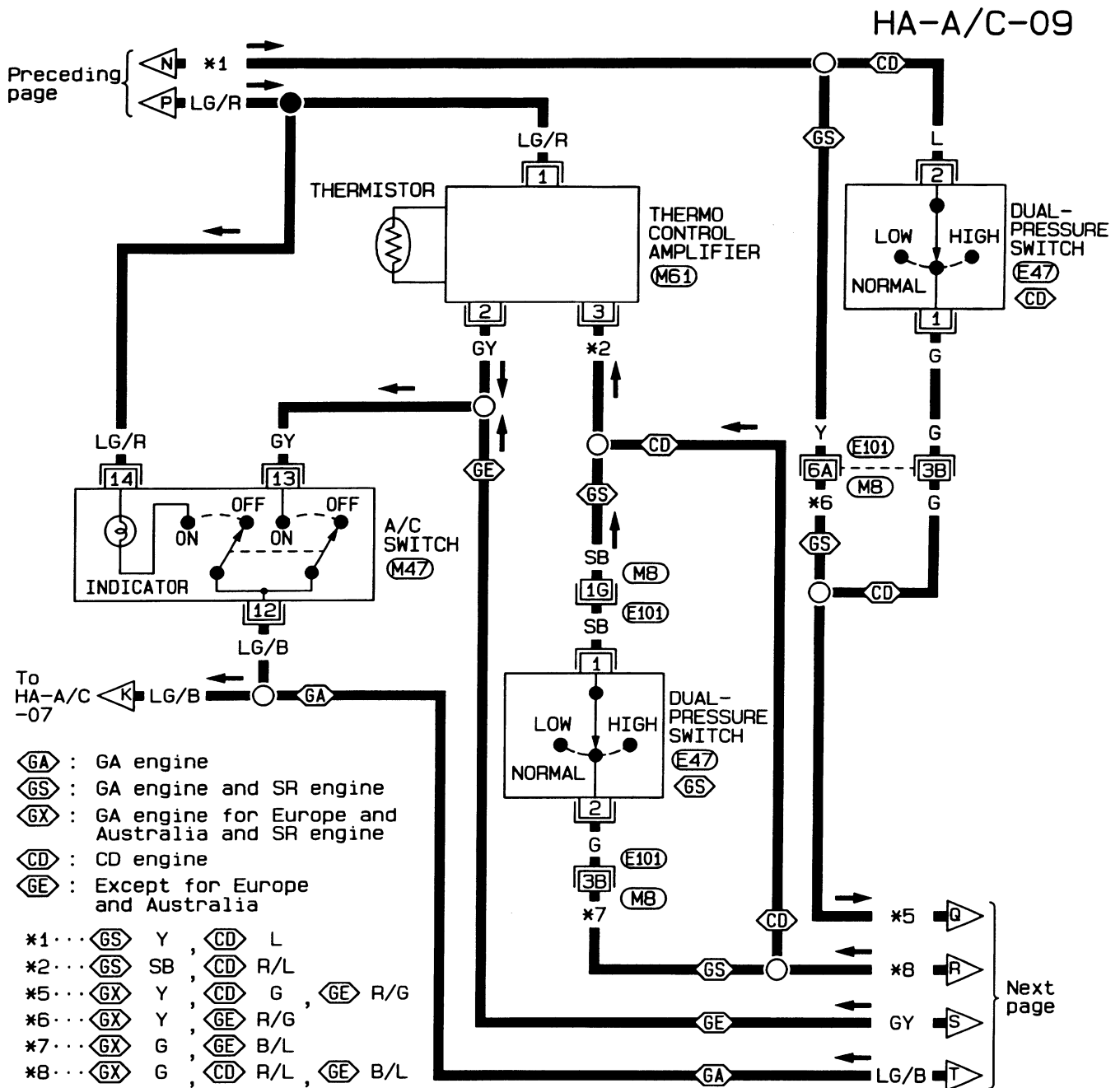
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(M15), (E106)

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TROUBLE DIAGNOSES

Wiring Diagram — A/C —/RHD Models (Cont'd)



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(MB), (E101)

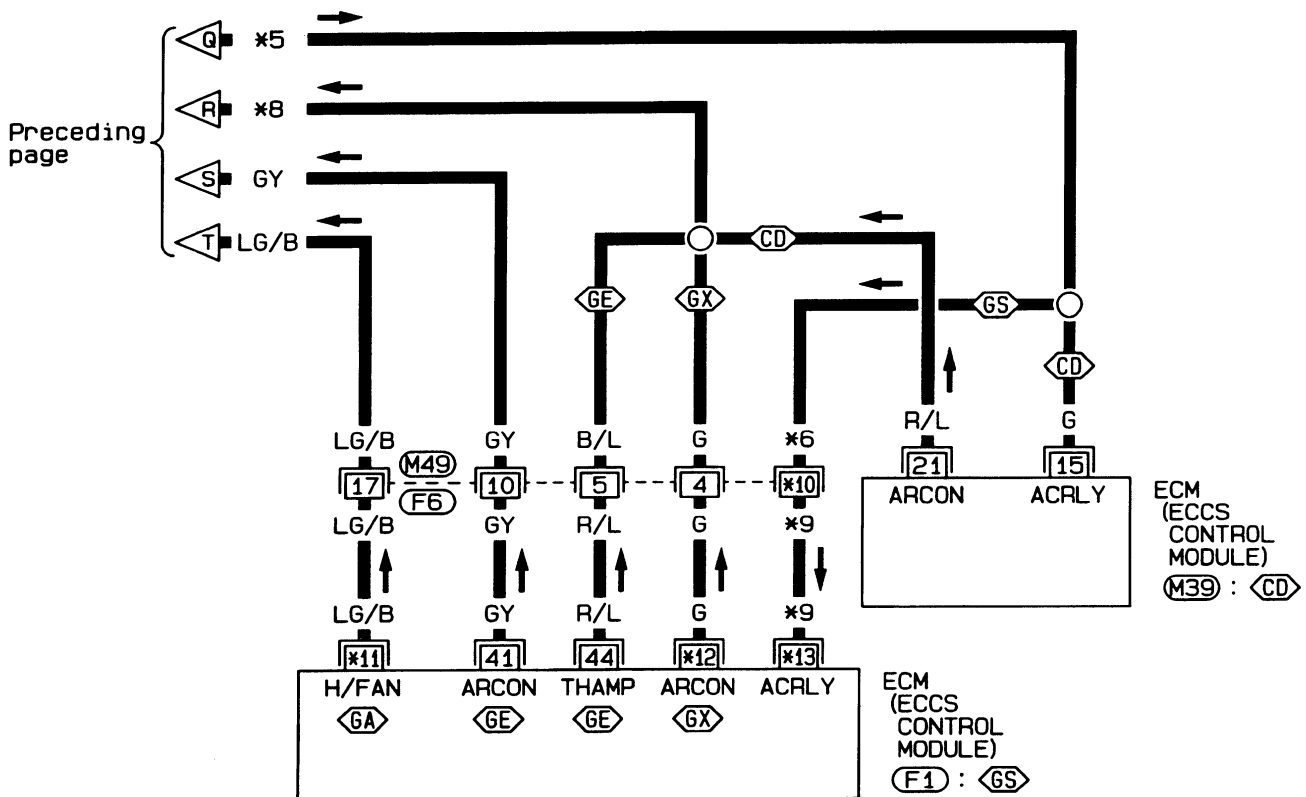
TROUBLE DIAGNOSES

Wiring Diagram — A/C —/RHD Models (Cont'd)

HA-A/C-10

GA : GA engine
CD : CD engine
AG : GA engine for Australia
EA : Except **AG**
GS : GA engine and SR engine
GE : Except for Europe and Australia
GX : GA engine for Europe and Australia
 and SR engine

*5... **GX** Y , **CD** G , **GE** R/G
 *6... **GX** Y , **GE** R/G
 *8... **GX** G , **CD** R/L , **GE** B/L
 *9... **GX** Y , **GE** G
 *10... **GX** 5 , **GE** 4
 *11... **EA** 45 , **AG** 35
 *12... **EA** 41 , **AG** 21
 *13... **EA** 11 , **AG** 15



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9	10	11	12	13	14	15	16	W

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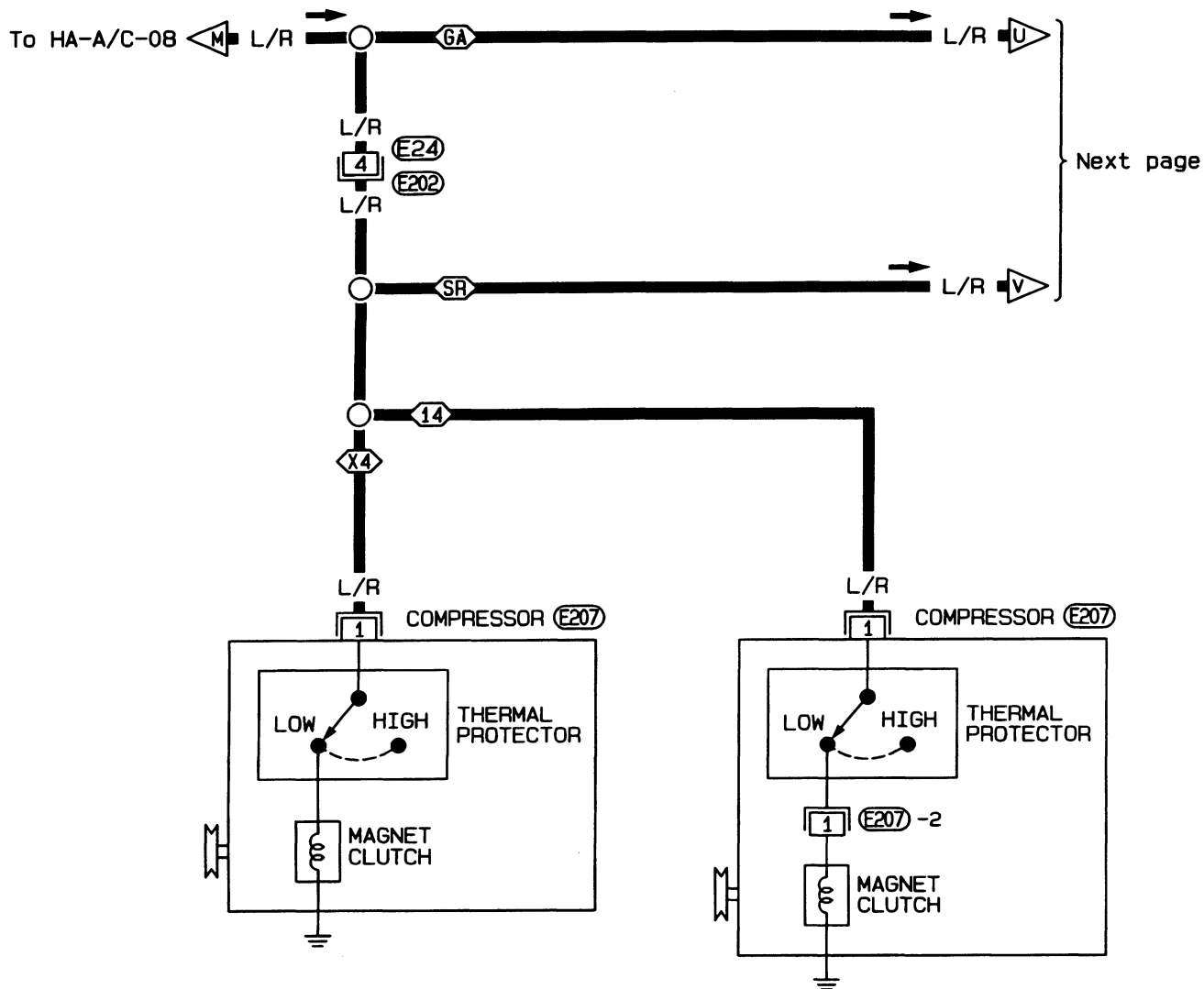
M39

TROUBLE DIAGNOSES

Wiring Diagram — A/C —/RHD Models (Cont'd)

HA-A/C-11

- GA : GA engine
- SR : SR engine
- 14 : GA14DE engine
- X4 : Except GA14DE engine



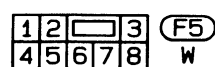
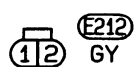
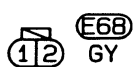
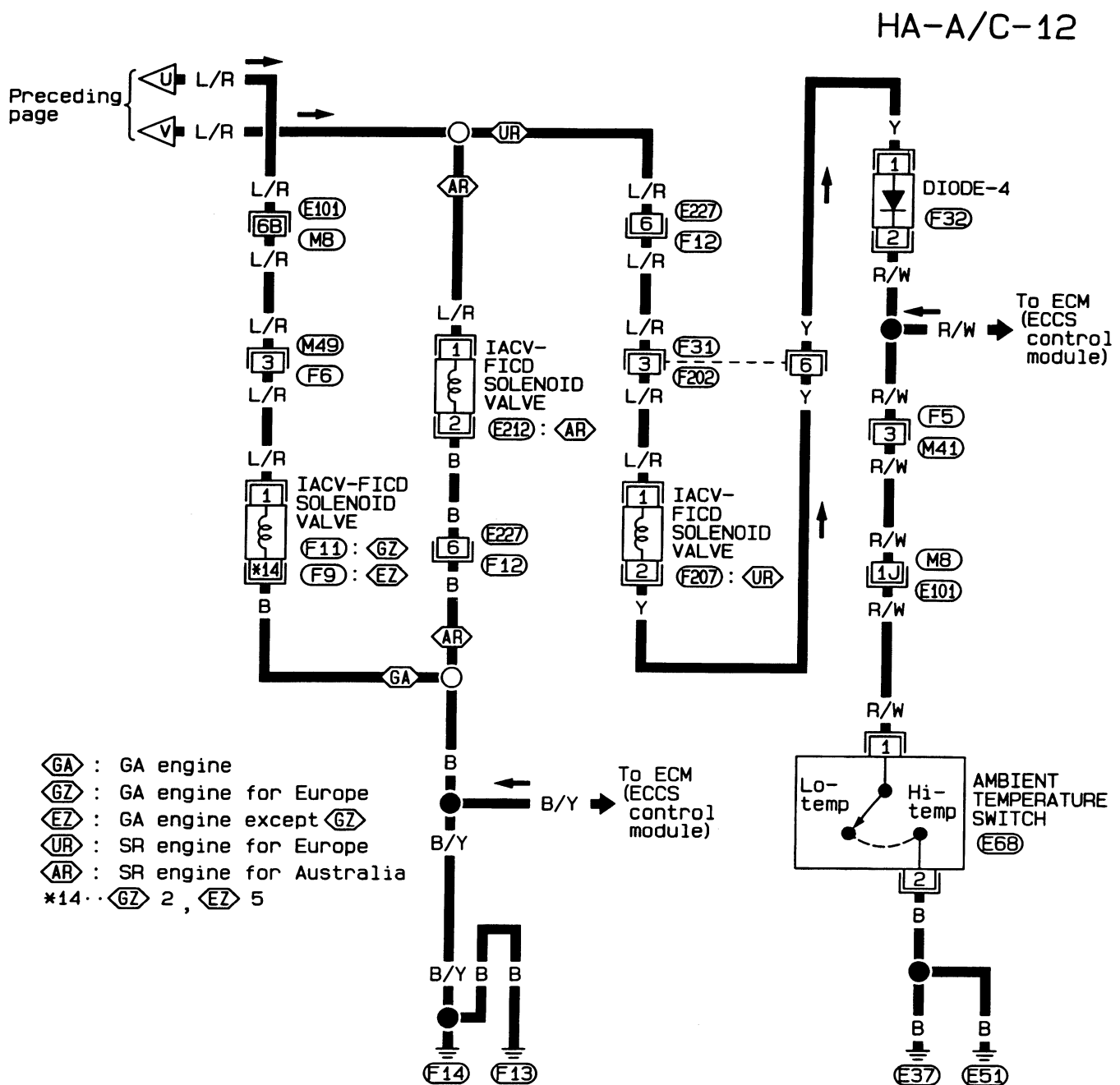
1	2	3	4
5	6	7	8

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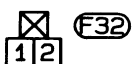
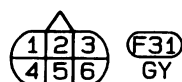
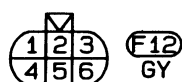
(E207), (E207)-2
B, B

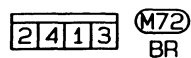
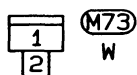
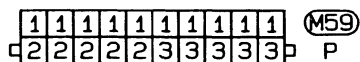
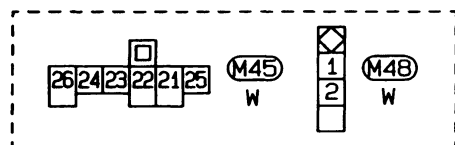
Wiring Diagram — A/C —/RHD Models (Cont'd)



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M8 E101



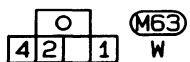
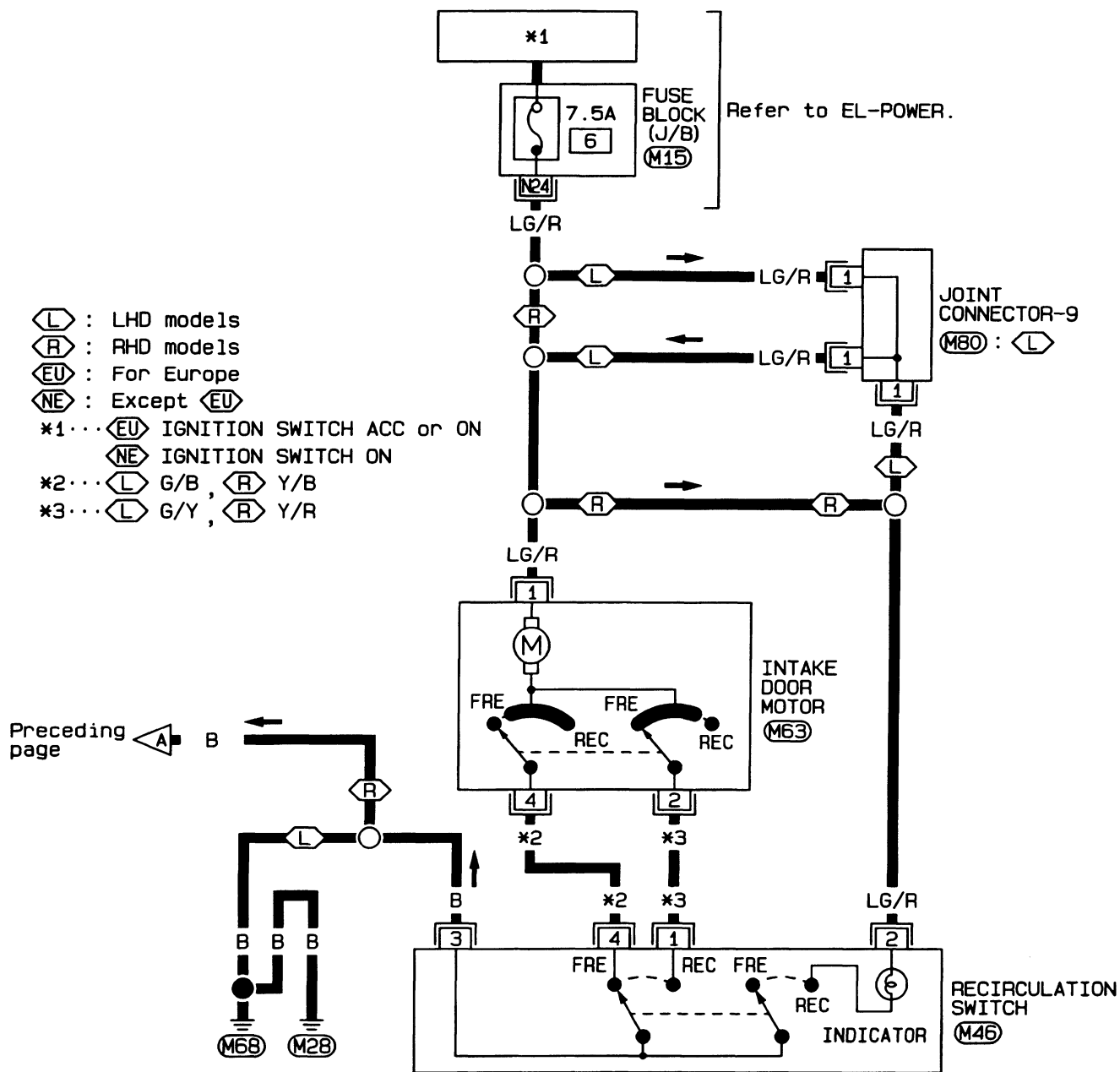
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TROUBLE DIAGNOSES

Wiring Diagram — HEATER — (Cont'd)

HA-HEATER-02



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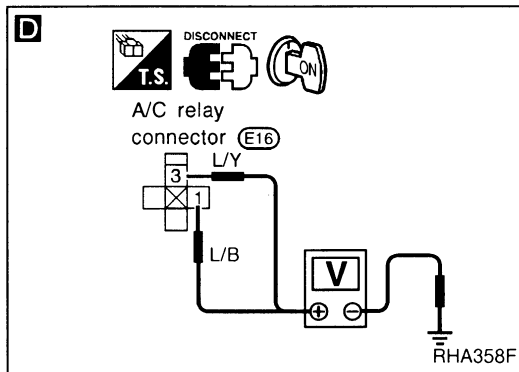
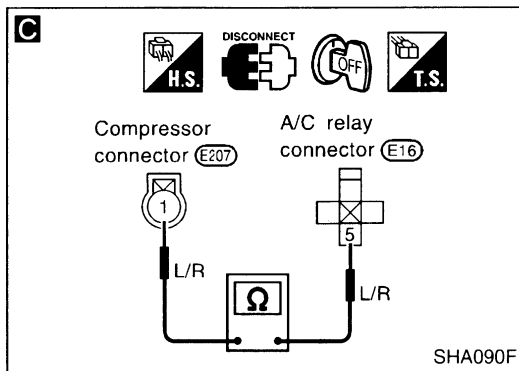
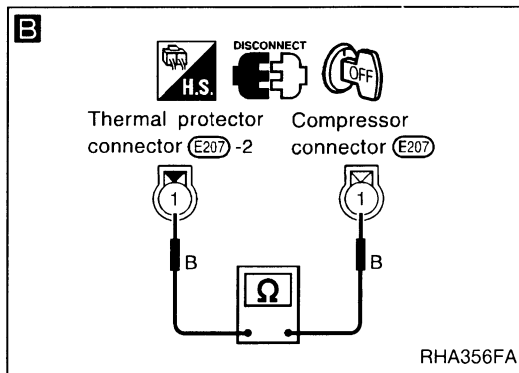
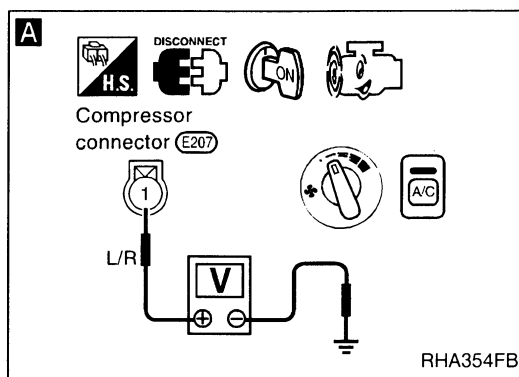
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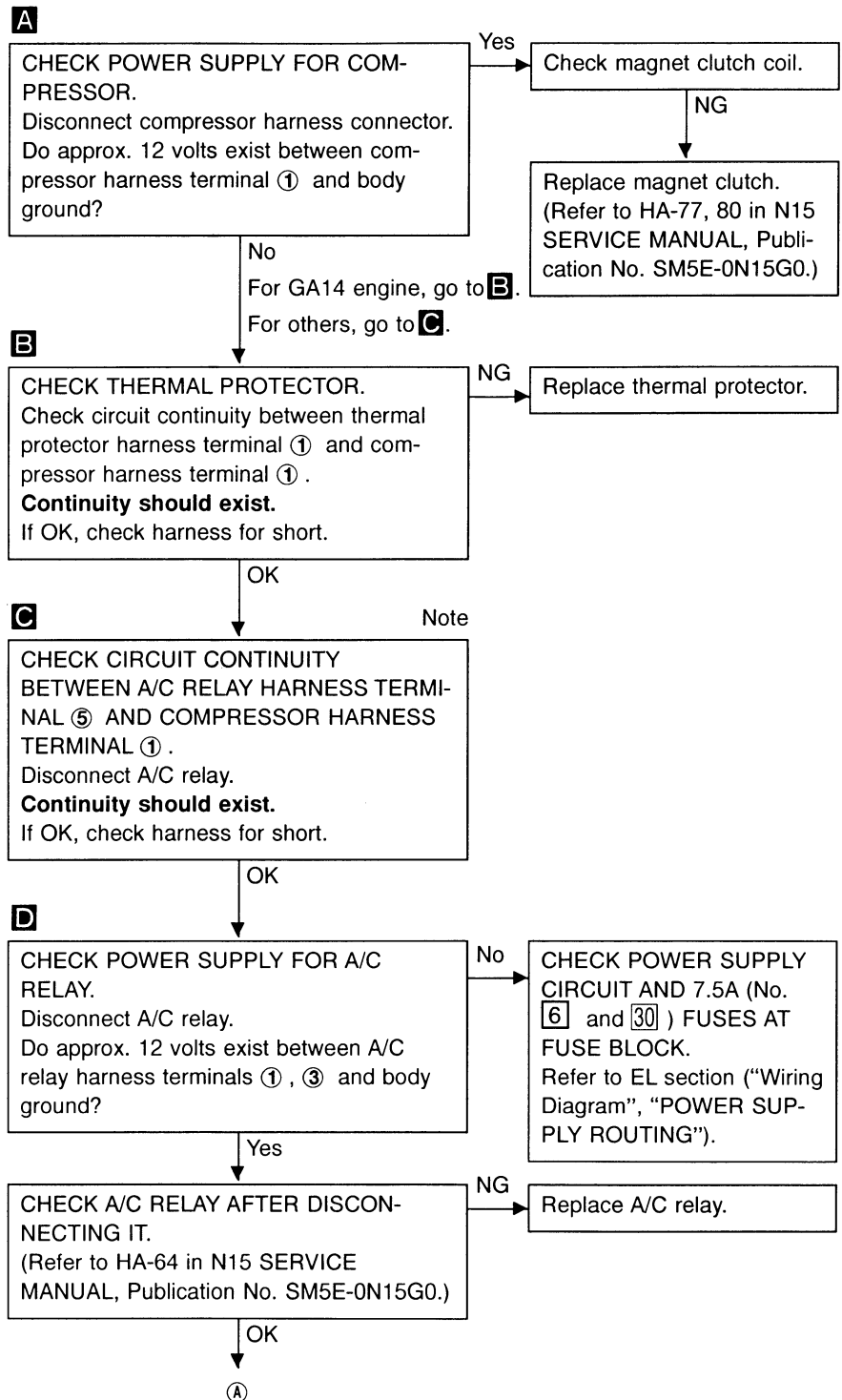
TROUBLE DIAGNOSES



Diagnostic Procedure 3

SYMPTOM: Magnet clutch does not engage when A/C switch and fan switch are ON. — For GA and SR engines, RHD models.

- Perform PRELIMINARY CHECK 1 before referring to the following flow chart.

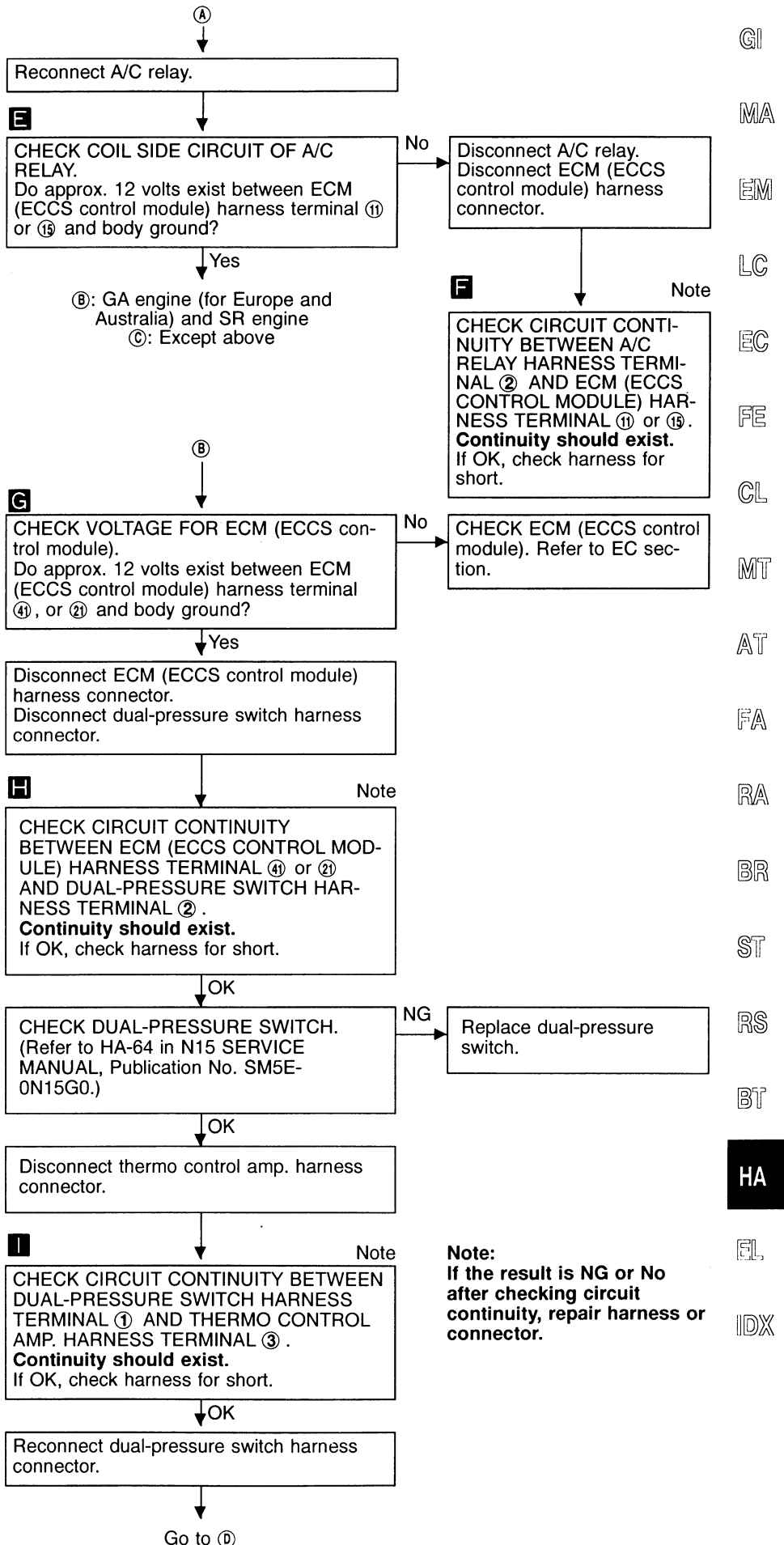
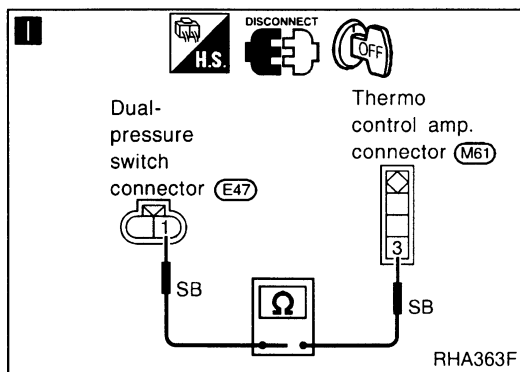
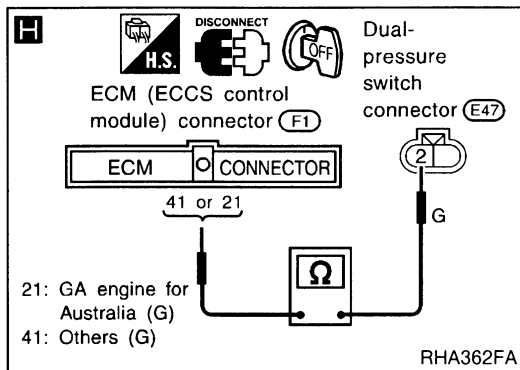
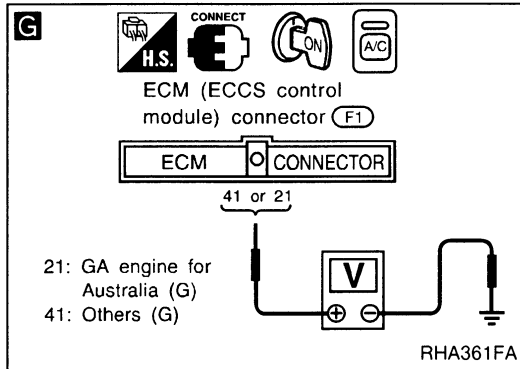
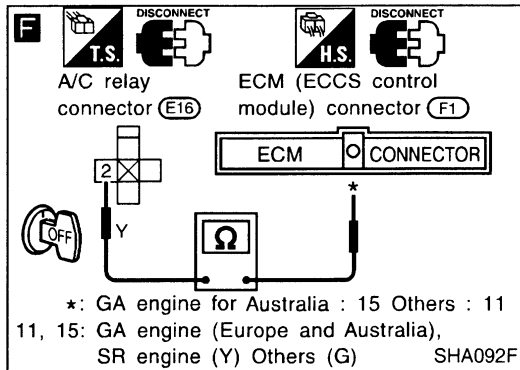
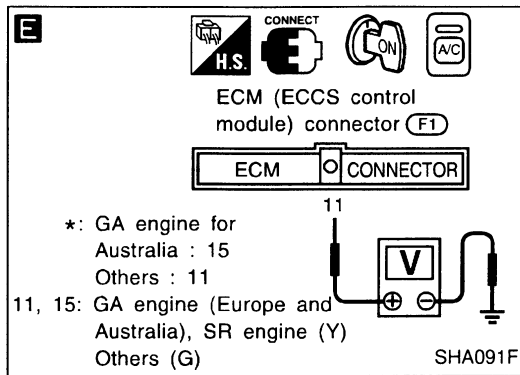


Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

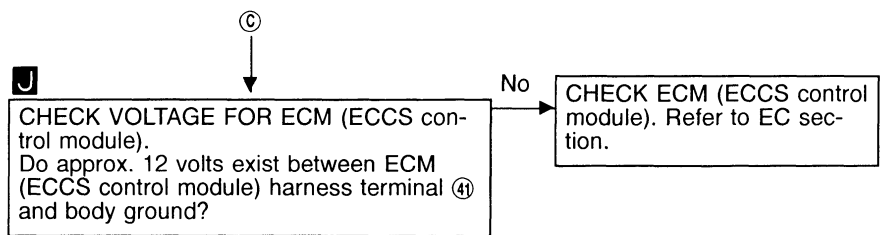
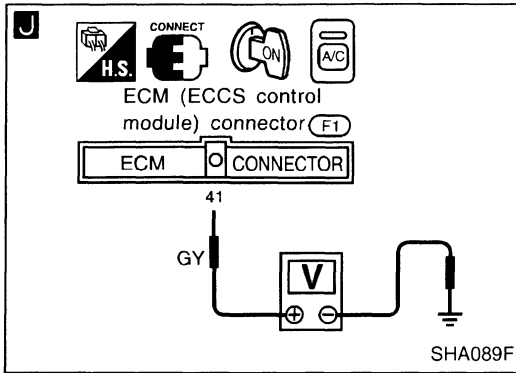
TROUBLE DIAGNOSES

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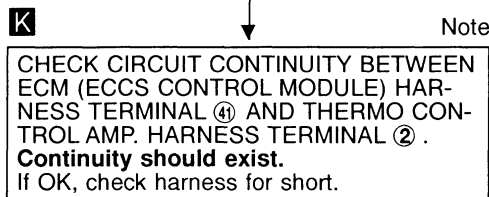
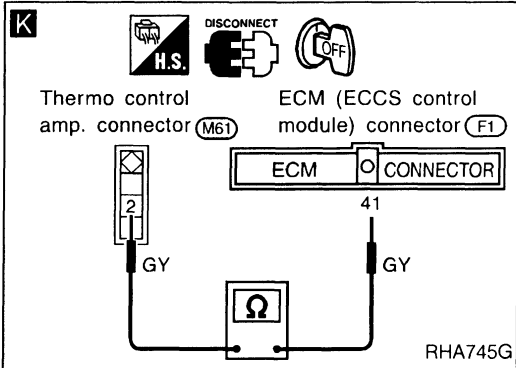


TROUBLE DIAGNOSES

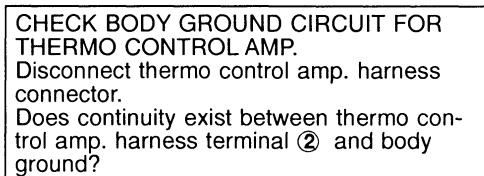
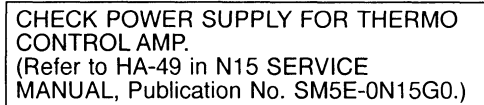
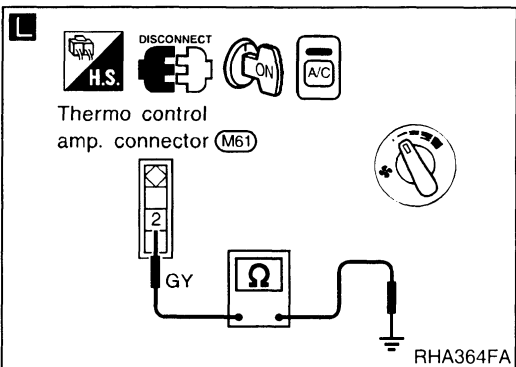
Diagnostic Procedure 3 (Cont'd)



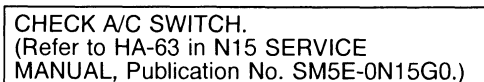
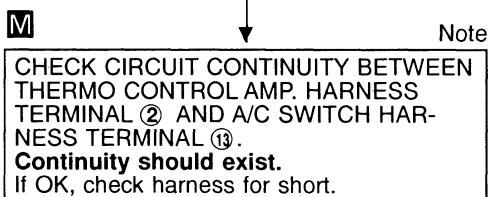
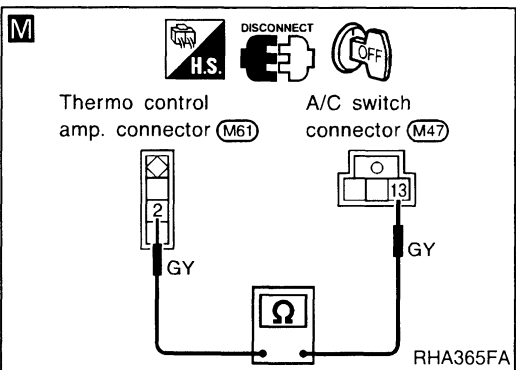
Disconnect ECM (ECCS control module) harness connector.
Disconnect thermo control amp. harness connector.



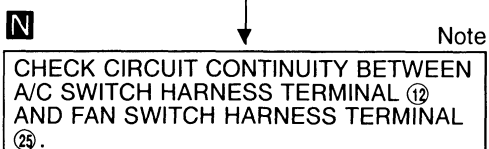
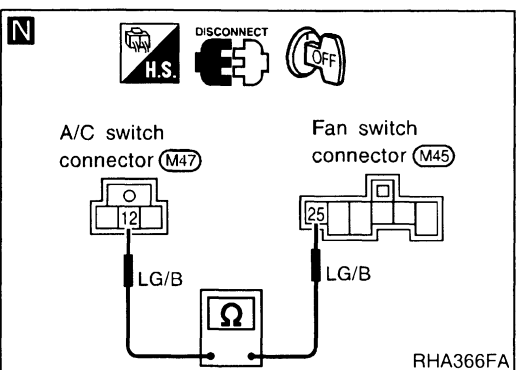
Reconnect thermo control amp. harness connector.



Disconnect A/C switch harness connector.



Disconnect fan switch harness connector.

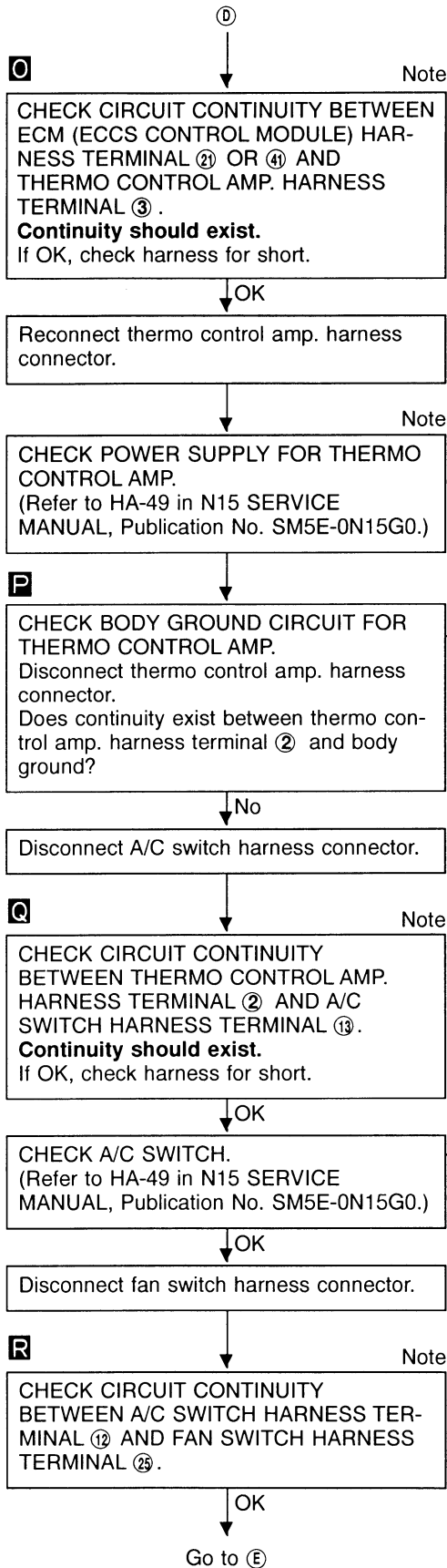
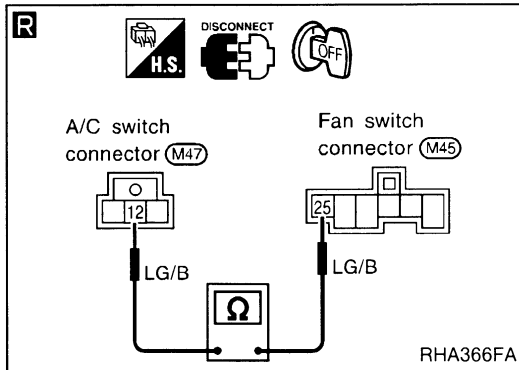
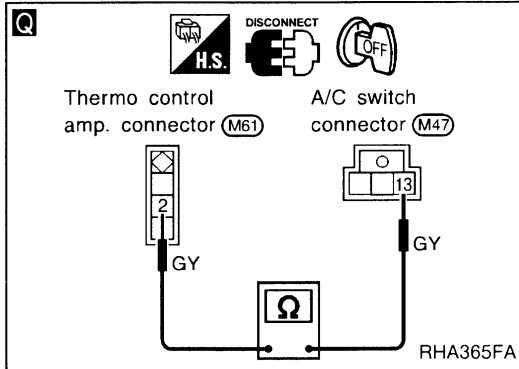
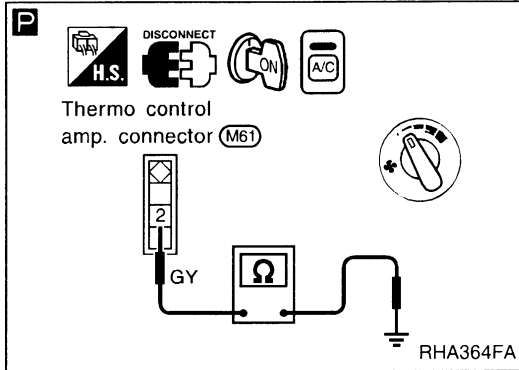
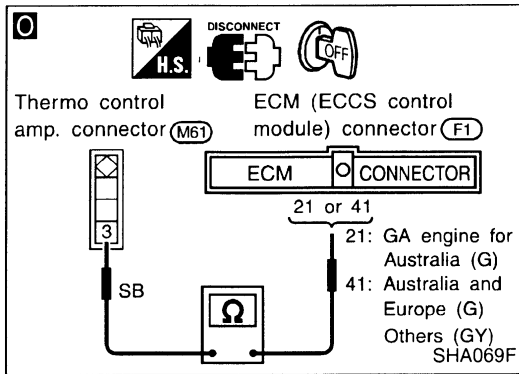


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Note:
If the result is NG or No after checking circuit continuity, repair harness or connector.

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)

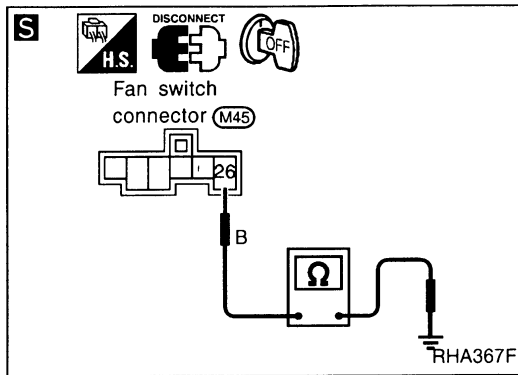


Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)



S

Note

CHECK BODY GROUND CIRCUIT FOR FAN SWITCH.
Does continuity exist between fan switch
harness terminal ②⑥ and body ground?

Yes

CHECK FAN SWITCH.
(Refer to HA-62 in N15 SERVICE
MANUAL, Publication No. SM5E-0N15G0.)

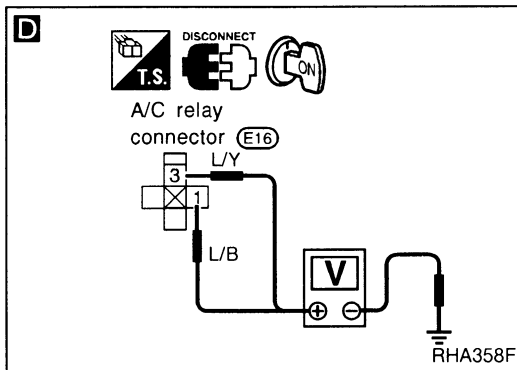
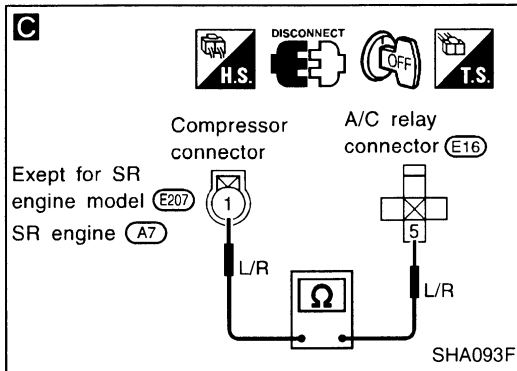
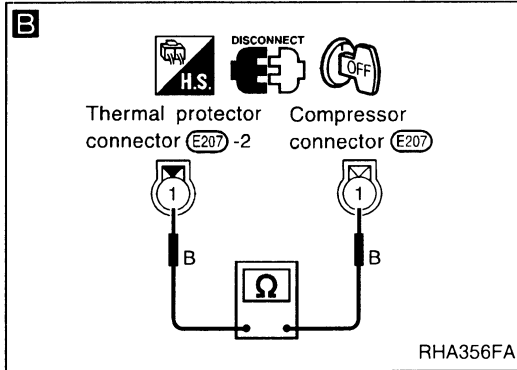
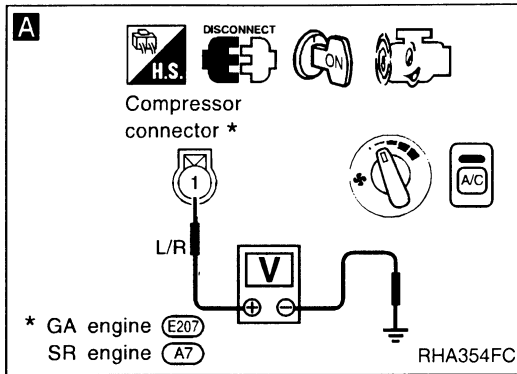
NG

Replace fan switch.

Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

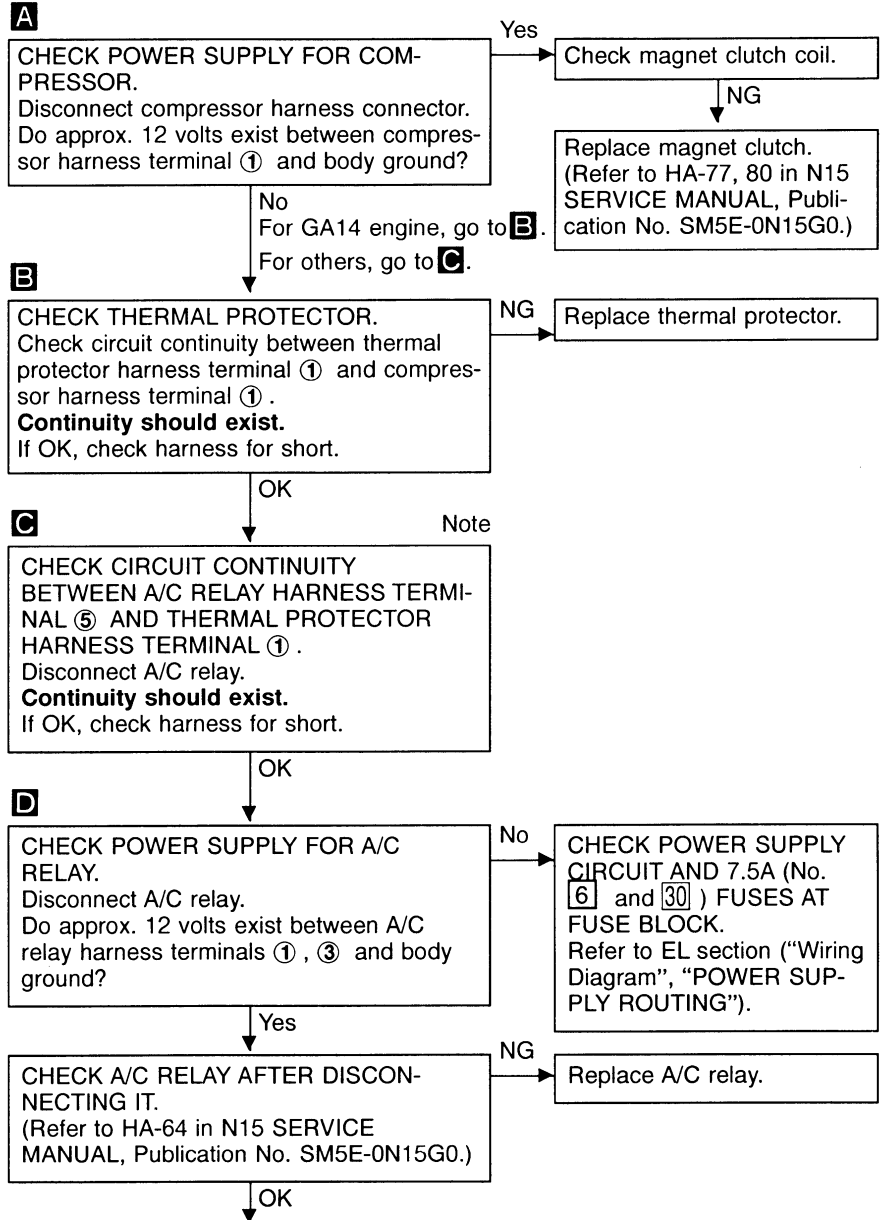
TROUBLE DIAGNOSES



Diagnostic Procedure 3

SYMPTOM: Magnet clutch does not engage when A/C switch and fan switch are ON. — For GA and SR engines, LHD models.

- Perform **PRELIMINARY CHECK 1** before referring to the following flow chart.



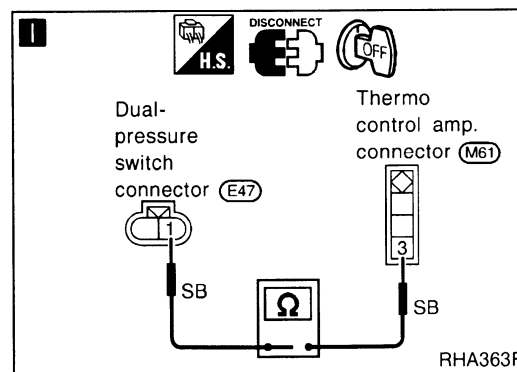
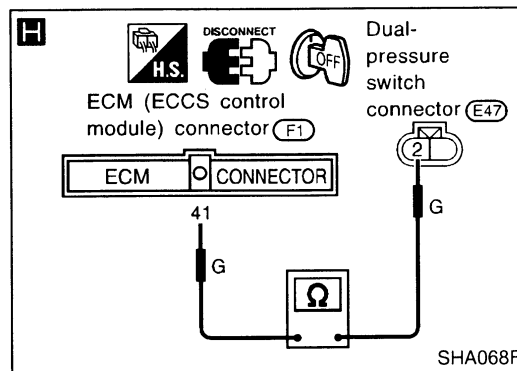
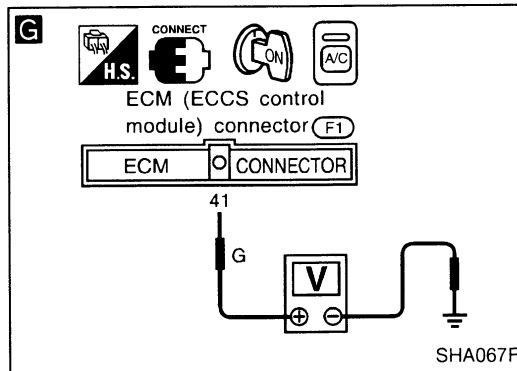
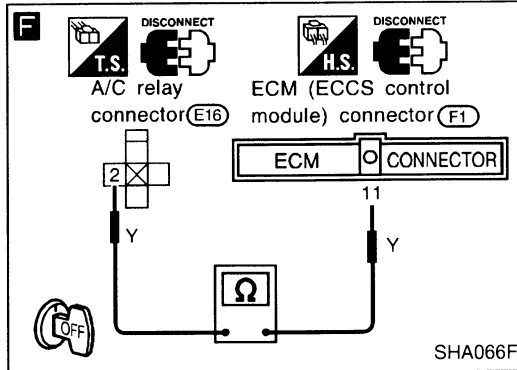
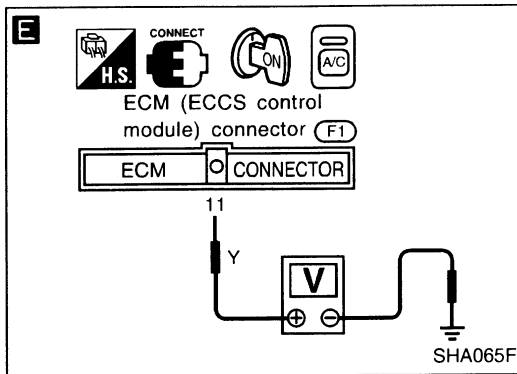
- ①: GA engine (for Europe, Israel and Australia) and SR engine
③: Except above

Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)



A

Reconnect A/C relay.

E

CHECK COIL SIDE CIRCUIT OF A/C RELAY.
Do approx. 12 volts exist between ECM (ECCS control module) harness terminal ⑪ and body ground?

No

Disconnect A/C relay.
Disconnect ECM (ECCS control module) harness connector.

F Note

CHECK CIRCUIT CONTINUITY BETWEEN A/C RELAY HARNESS TERMINAL ② AND ECM (ECCS CONTROL MODULE) HARNESS TERMINAL ⑪.
Continuity should exist.
If OK, check harness for short.

Yes

G

CHECK VOLTAGE FOR ECM (ECCS control module).
Do approx. 12 volts exist between ECM (ECCS control module) harness terminal ④ and body ground?

No

CHECK ECM (ECCS control module). Refer to EC section.

Yes

Disconnect ECM (ECCS control module) harness connector.
Disconnect dual-pressure switch harness connector.

H Note

CHECK CIRCUIT CONTINUITY BETWEEN ECM (ECCS CONTROL MODULE) HARNESS TERMINAL ④ AND DUAL-PRESSURE SWITCH HARNESS TERMINAL ②.
Continuity should exist.
If OK, check harness for short.

OK

CHECK DUAL-PRESSURE SWITCH.
(Refer to HA-64 in N15 SERVICE MANUAL, Publication No. SM5E-0N15G0.)

NG

Replace dual-pressure switch.

OK

Disconnect thermo control amp. harness connector.

I Note

CHECK CIRCUIT CONTINUITY BETWEEN DUAL-PRESSURE SWITCH HARNESS TERMINAL ① AND THERMO CONTROL AMP. HARNESS TERMINAL ③.
Continuity should exist.
If OK, check harness for short.

OK

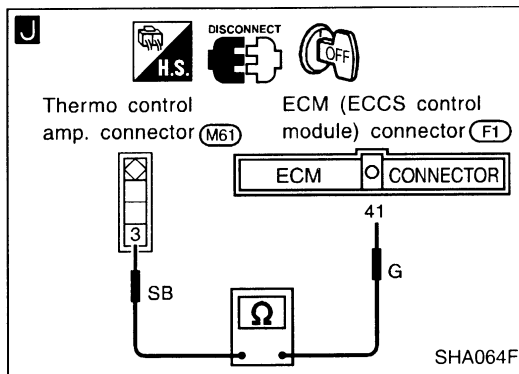
Reconnect dual-pressure switch harness connector.

Note:
If the result is NG or No after checking circuit continuity, repair harness or connector.

B (Go to next page.)

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)



J

Note

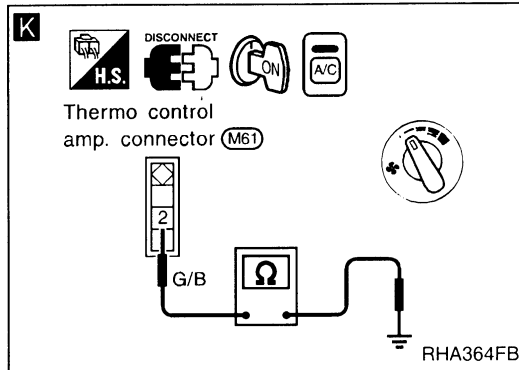
CHECK CIRCUIT CONTINUITY BETWEEN ECM (ECCS CONTROL MODULE) HARNESS TERMINAL ④ AND THERMO CONTROL AMP. HARNESS TERMINAL ③.

Continuity should exist.

If OK, check harness for short.

OK

Reconnect thermo control amp. harness connector.



Note

CHECK POWER SUPPLY FOR THERMO CONTROL AMP.

(Refer to HA-49 in N15 SERVICE MANUAL, Publication No. SM5E-0N15G0.)

K

CHECK BODY GROUND CIRCUIT FOR THERMO CONTROL AMP.

Disconnect thermo control amp. harness connector.

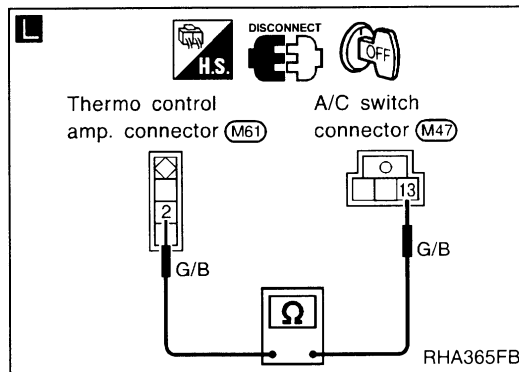
Does continuity exist between thermo control amp. harness terminal ② and body ground?

Yes

Replace thermo control amp.

No

Disconnect A/C switch harness connector.



Note

CHECK CIRCUIT CONTINUITY BETWEEN THERMO CONTROL AMP. HARNESS TERMINAL ② AND A/C SWITCH HARNESS TERMINAL ⑬.

Continuity should exist.

If OK, check harness for short.

OK

CHECK A/C SWITCH.

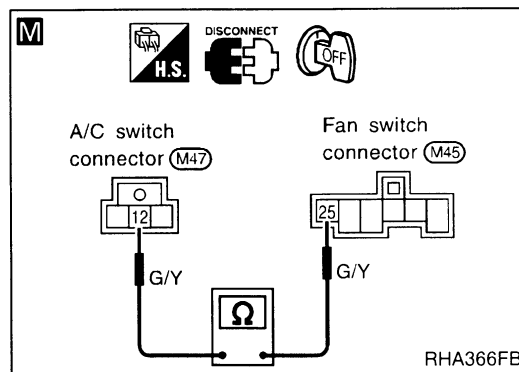
(Refer to HA-63 in N15 SERVICE MANUAL, Publication No. SM5E-0N15G0.)

NG

Replace A/C switch.

OK

Disconnect fan switch harness connector.



Note

CHECK CIRCUIT CONTINUITY BETWEEN A/C SWITCH HARNESS TERMINAL ⑫ AND FAN SWITCH HARNESS TERMINAL ⑫.

OK

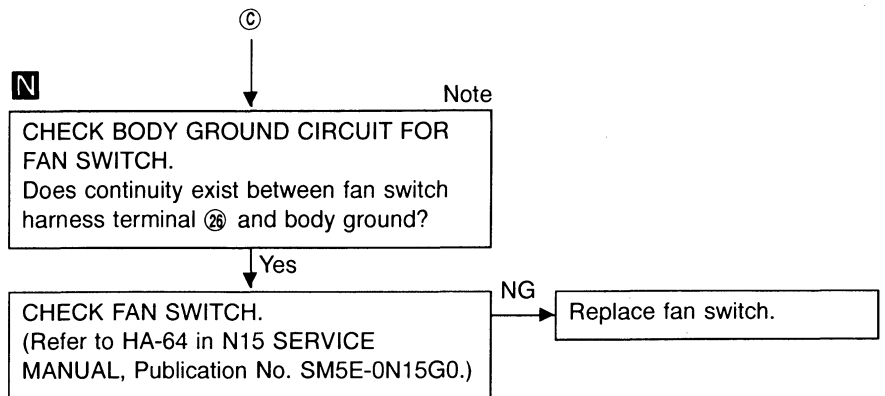
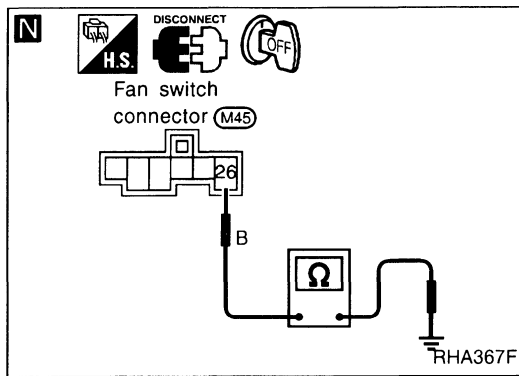
© (Go to next page.)

Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

TROUBLE DIAGNOSES

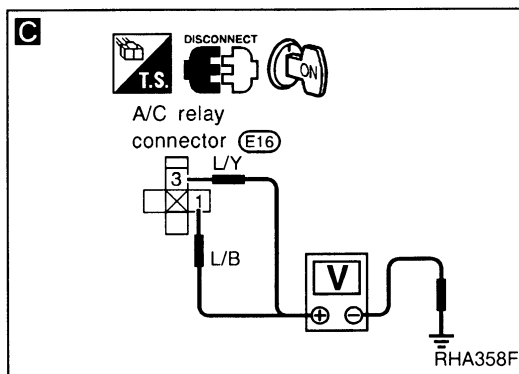
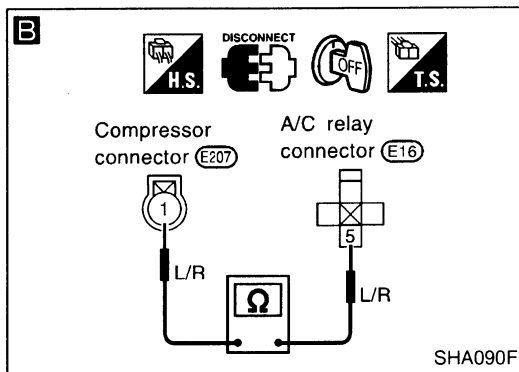
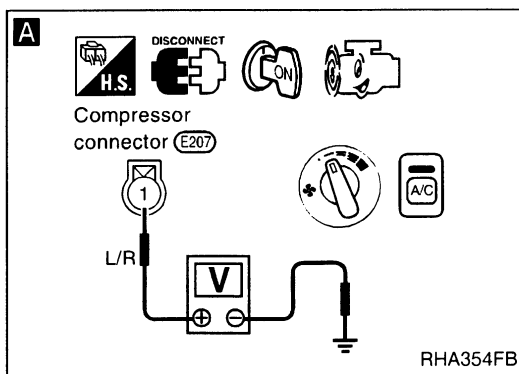
Diagnostic Procedure 3 (Cont'd)



Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

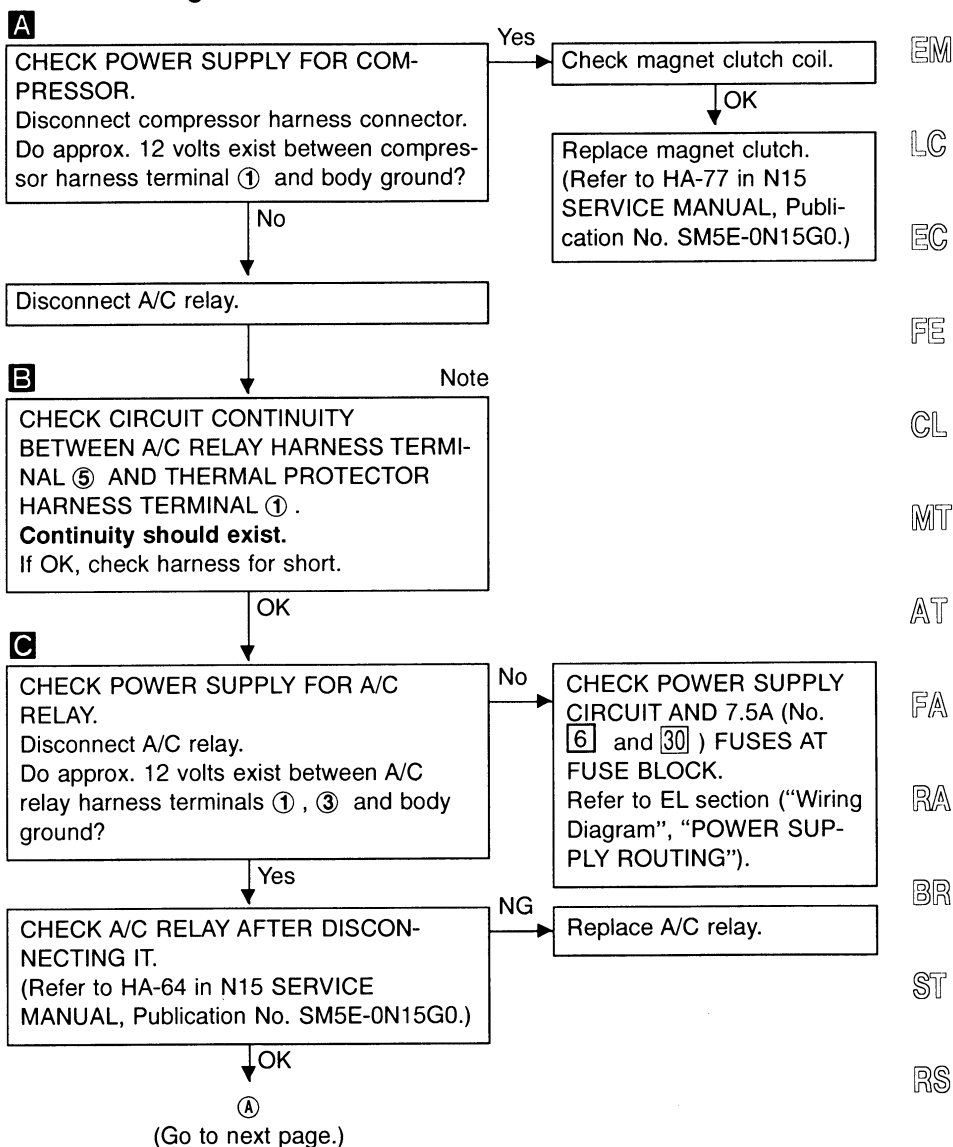
TROUBLE DIAGNOSES



Diagnostic Procedure 3

SYMPTOM: Magnet clutch does not engage when A/C switch and fan switch are ON. — For CD engine

- Perform **PRELIMINARY CHECK 1** before referring to the following flow chart.

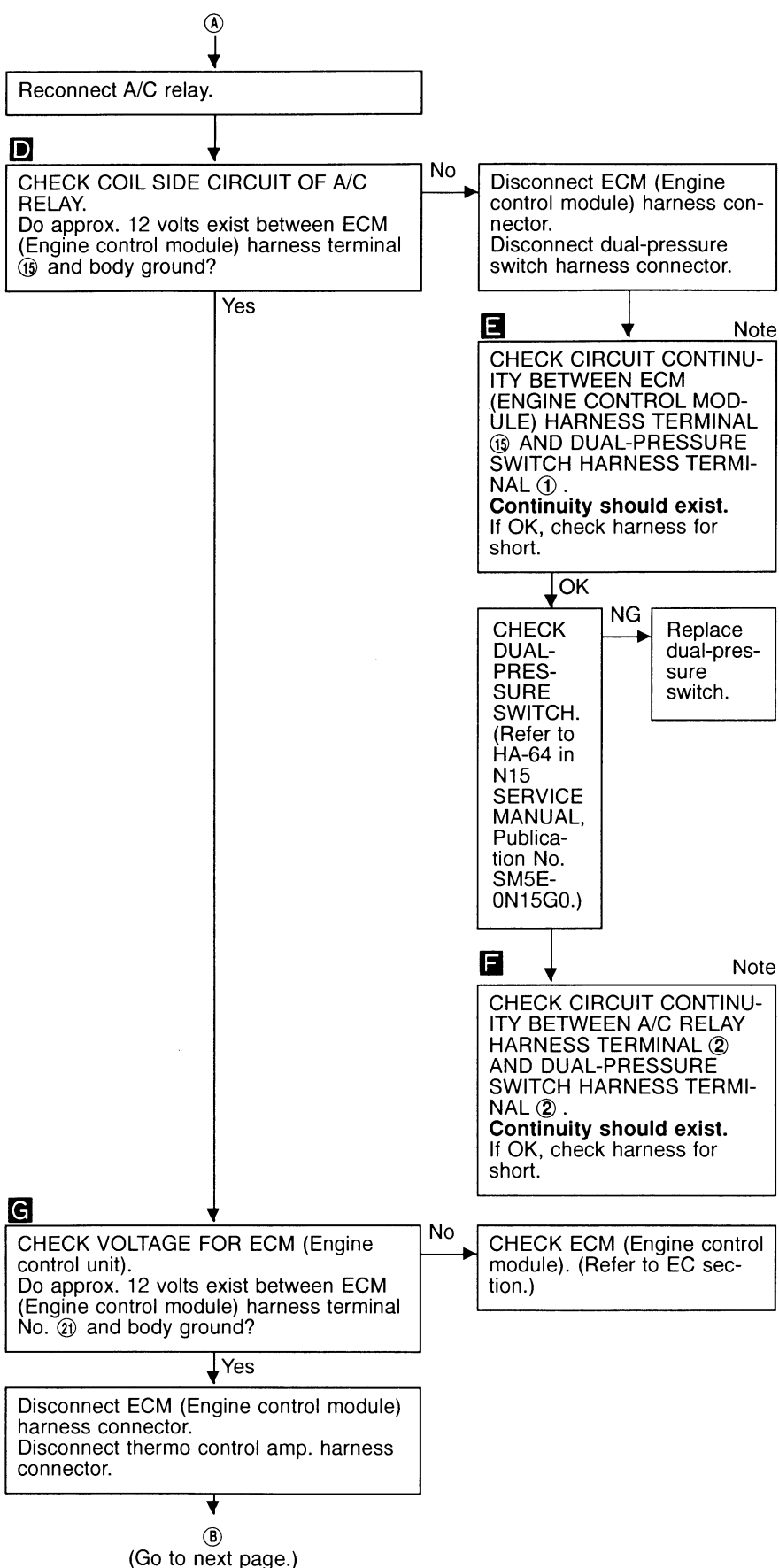
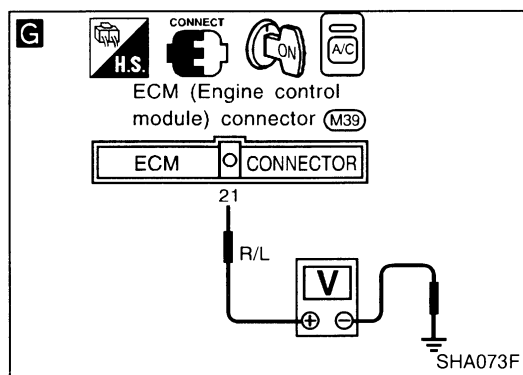
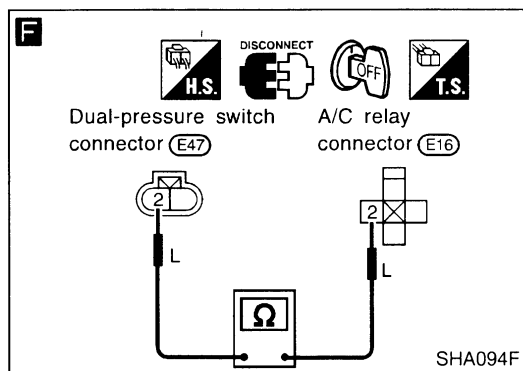
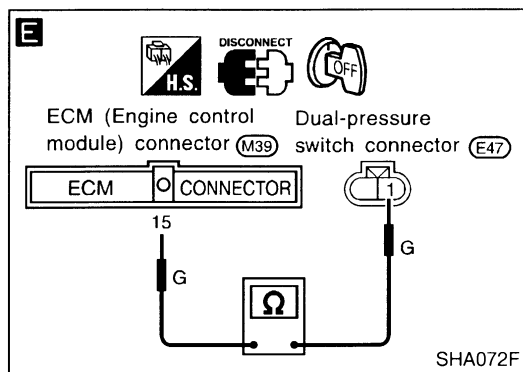
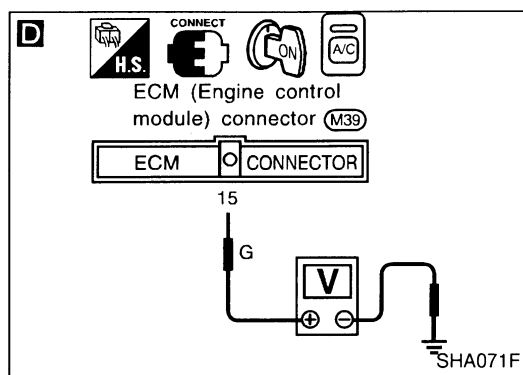


Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)

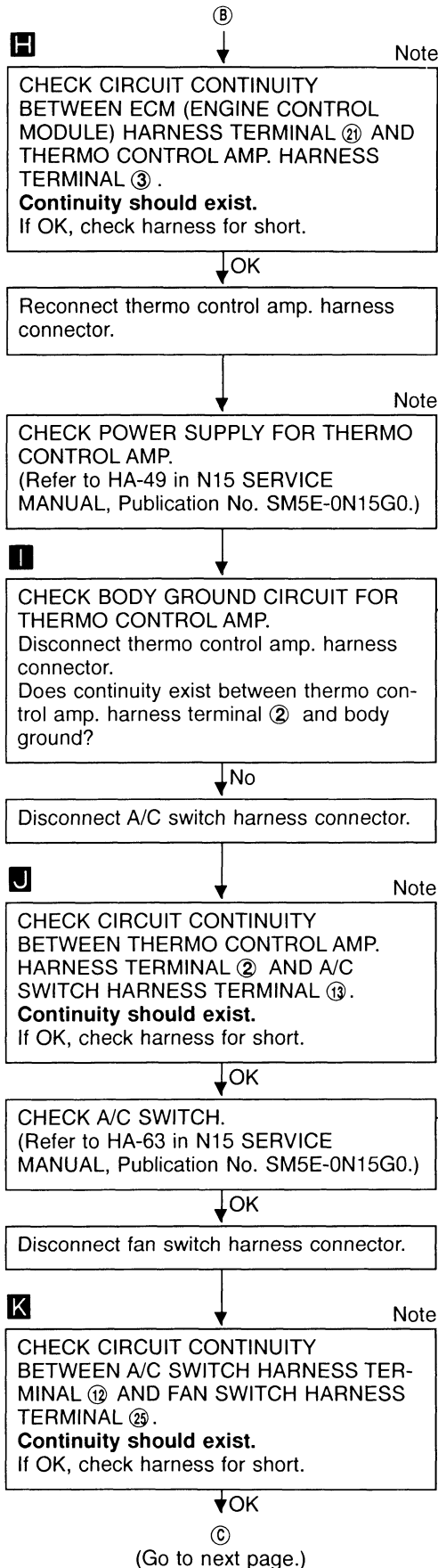
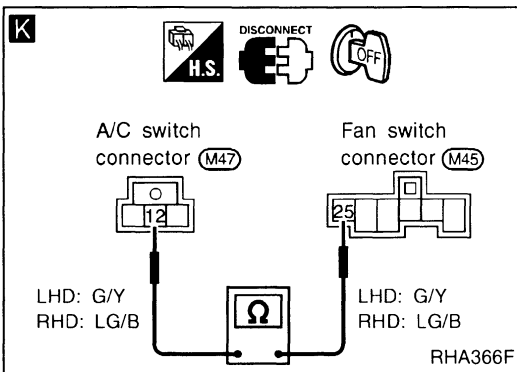
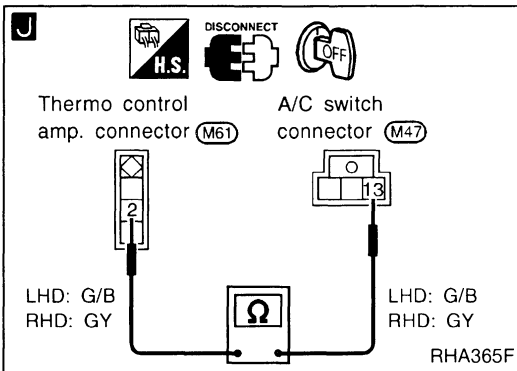
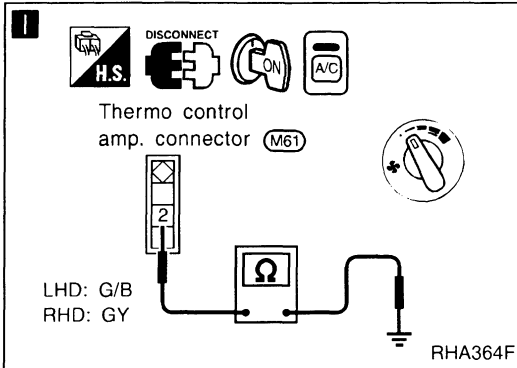
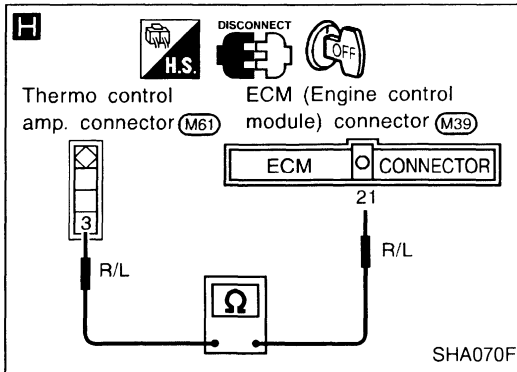


Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)



Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.

GI

MA

EM

LC

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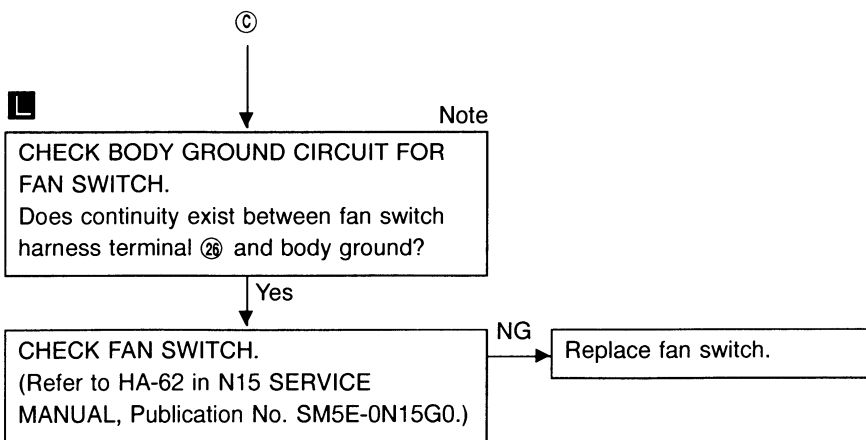
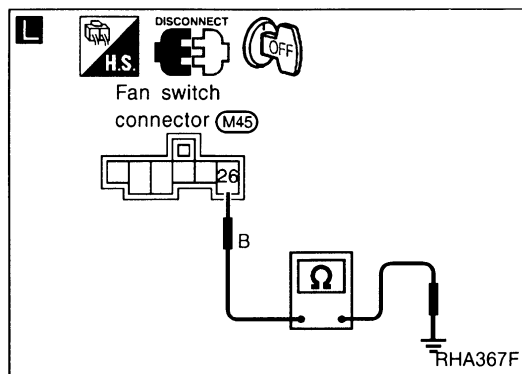
HA

EL

IDX

TROUBLE DIAGNOSES

Diagnostic Procedure 3 (Cont'd)



Note:

If the result is NG or No after checking circuit continuity, repair harness or connector.