NISSAN 200SX

MODEL S13 SERIES
SUPPLEMENT-I

SERVICE MANUAL

NISSAN 200SX

MODEL S13 SERIES

FOREWORD

This supplement contains information concerning necessary service procedures and relevant data for the model S13 series face-lift.

All information, illustrations and specifications contained in this supplement are based on the latest product information available at the time of publication. If your NISSAN model differs from the specifications contained in this supplement, consult your NISSAN dealer for information.

The right is reserved to make changes in specifications and methods at any time without notice.

QUICK REFERENCE INDEX

HOW TO USE THIS MANUAL

▶ This Service Manual contains the new service procedures, service data and specifications for the face-lifted model S13 series which has been in production since September, 1989.

▶ This Service Manual does not contain the service procedures, etc. which are the same as those for former models.*
Please use this manual in conjunction with the NISSAN model S13 series Service Manual (Pub. No. SM9E-0S13G0).

Servicing of model S13 series which was manufactured in and after September, 1989.

Specific section titles are printed white on a black background in the QUICK REFERENCE INDEX.

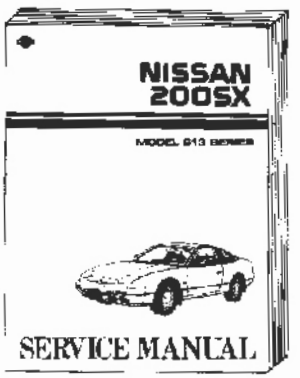
Those sections which are printed black on a white background are not contained in this manual.

YES

Service procedures and service data are added or changed.
Only the added or changed points are introduced in these chapters.

NO

Service procedures are the same as those for the former models*.
Refer to the NISSAN model S13 series Service Manual (Pub. No. SM9E-0S13G0).



*Former models: Models before the model S13 series introduced in September, 1989.

IMPORTANT SAFETY NOTICE

The proper performance of service is essential for both the safety of the mechanic and the efficient functioning of the vehicle.
The service methods in this Service Manual are described in such a manner that the service may be performed safely and accurately.

Service varies with the procedures used, the skills of the mechanic and the tools and parts available. Accordingly, anyone using service procedures, tools or parts which are not specifically recommended by NISSAN must first completely satisfy himself that neither his safety nor the vehicle's safety will be jeopardized by the service method selected.

SECTION GI

APPLIED FROM :

For Europe	Except for Europe
JN100RS13U0100001	RS13-501501

OUTLINE OF MODIFICATIONS :

- A viscous coupling type L.S.D. has been added to models for Europe.
- An anti-lock braking system has been added to R.H.D. models except those for Europe.
- A low-back seat with lumber support has been added to models for Europe.
- A headlamp aiming control has been added to models for West Germany.

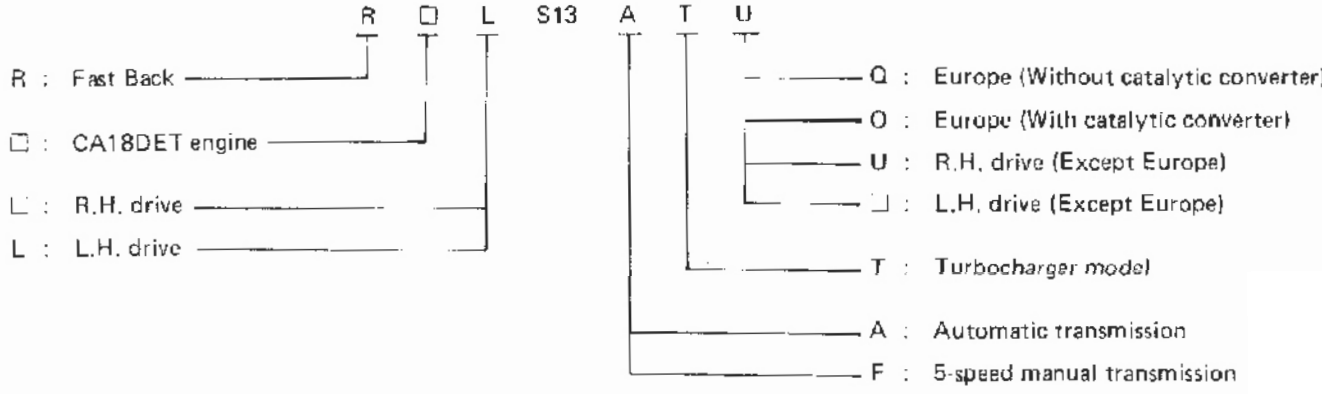
CONTENTS

Model Variation

Destination	Body	Model			Engine	Transmission	Differential carrier
		L.H. drive		R.H. drive			
		With catalytic converter	Without catalytic converter				
Europe	Fast Back	–	–	RS13FTQ	CA18DET	FS5W71C	R200 R200V*
		–	–	RS13ATQ		RE4R01A	
		RLS13FTQ	–	–		FS5W71C	
		RLS13ATQ	–	–		RE4R01A	
		–	RLS13FTQ	–		FS5W71C	
		–	RLS13ATQ			RE4R01A	
Except Europe		–		RS13FTU		FS5W71C	R200
		–		RS13ATU		RE4R01A	
		–	RLS13FT	–		FS5W71C	
		–	RLS13AT	–		RE4R01A	

*: With viscous L.S.D.

Prefix and suffix designations



□ : means no indication.

Wheels and Tires

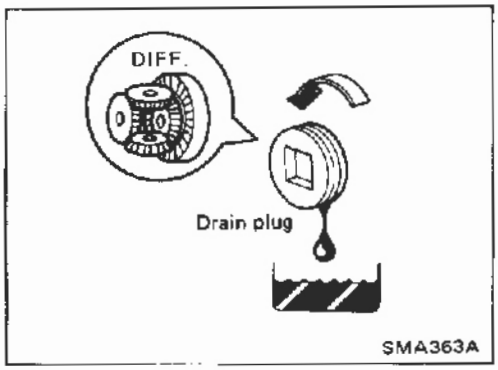
		Conventional	T type*2
Road wheel			
Steel		6JJ x 15	4T x 15
Aluminum		6JJ x 15*1	4T x 16*3
Offset	mm (in)	40 (1.57)	40 (1.57)
Tire size		195/60 R15 86H	T125/70D15
		195/60 R15 87V*2	T135/70D16*3

*1: Option
*2: For Europe
*3: With viscous L.S.D.

MAINTENANCE

SECTION MA

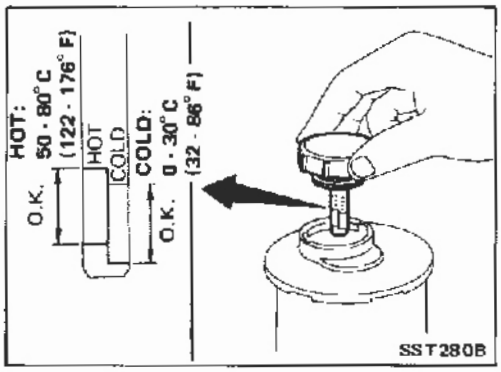
CONTENTS



Changing Differential Gear Oil

1. Drain oil and refill with new gear oil.
2. Check oil level.

Oil capacity:
Europe
1.8 ℓ (3-1/8 Imp pt)
Except Europe
1.2 ℓ (2-1/8 Imp pt)
Drain plug:
: 39 - 59 N·m (4 - 6 kg-m, 29 - 43 ft-lb)



Checking Power Steering Fluid Level

Check fluid level.
Fluid level should be checked using "HOT" range on dipstick at fluid temperatures of 50 to 80°C (122 to 176°F) or using "COLD" range on dipstick at fluid temperatures of 0 to 30°C (32 to 86°F).
CAUTION:

- **Do not overfill.**
- **Recommended fluid is Automatic Transmission Fluid "DEXRON™" type.**

Chassis and Body Maintenance

INSPECTION AND ADJUSTMENT

Wheel bearing

	Front	Rear
Wheel bearing axle end play mm (in)	0.03 (0.0012) or less	0.05 (0.0020) or less
Wheel bearing lock nut Tightening torque N·m (kg-m, ft-lb)	147 - 216 (15 - 22, 108 - 159)	206 - 275 (21 - 28, 152 - 203)

TIGHTENING TORQUE

Unit	N·m	kg-m	ft-lb
Final drive			
Drain plug	39 - 59	4 - 6	29 - 43
Filler plug	39 - 59	4 - 6	29 - 43
Front axle and front suspension			
Tie-rod lock nut	37 - 46	3.8 - 4.7	27 - 34
Rear axle and rear suspension			
Toe adjusting pin	69 - 88	7.0 - 9.0	51 - 65
Camber adjusting pin	69 - 88	7.0 - 9.0	51 - 65

ENGINE FUEL & EMISSION CONTROL SYSTEM

SECTION EF & EC

MODIFICATION NOTICE :

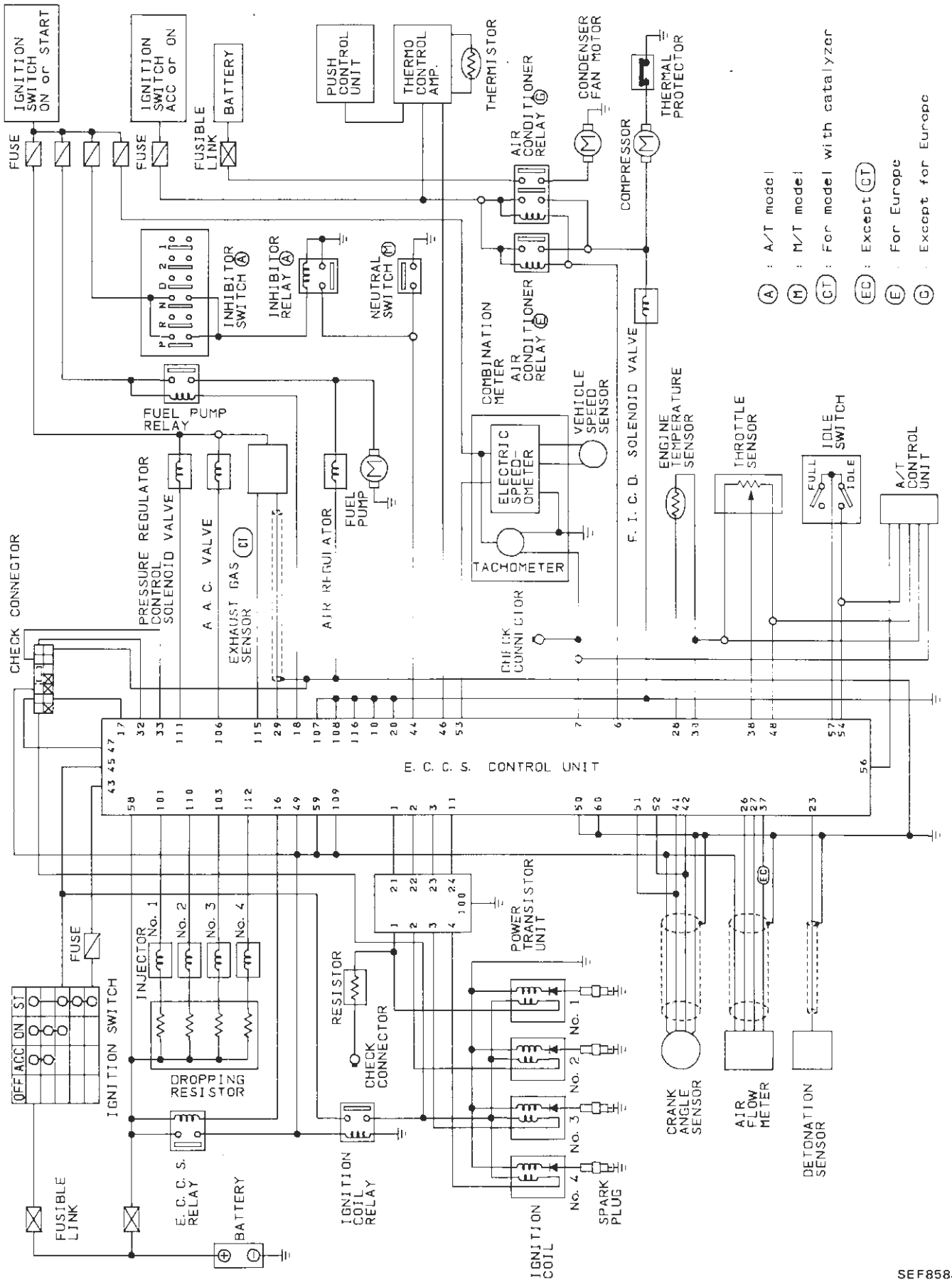
The following wiring diagrams have been changed.

- Power source and ground circuit for E.C.U.
- Crank angle sensor
- Acceleration cut control

CONTENTS

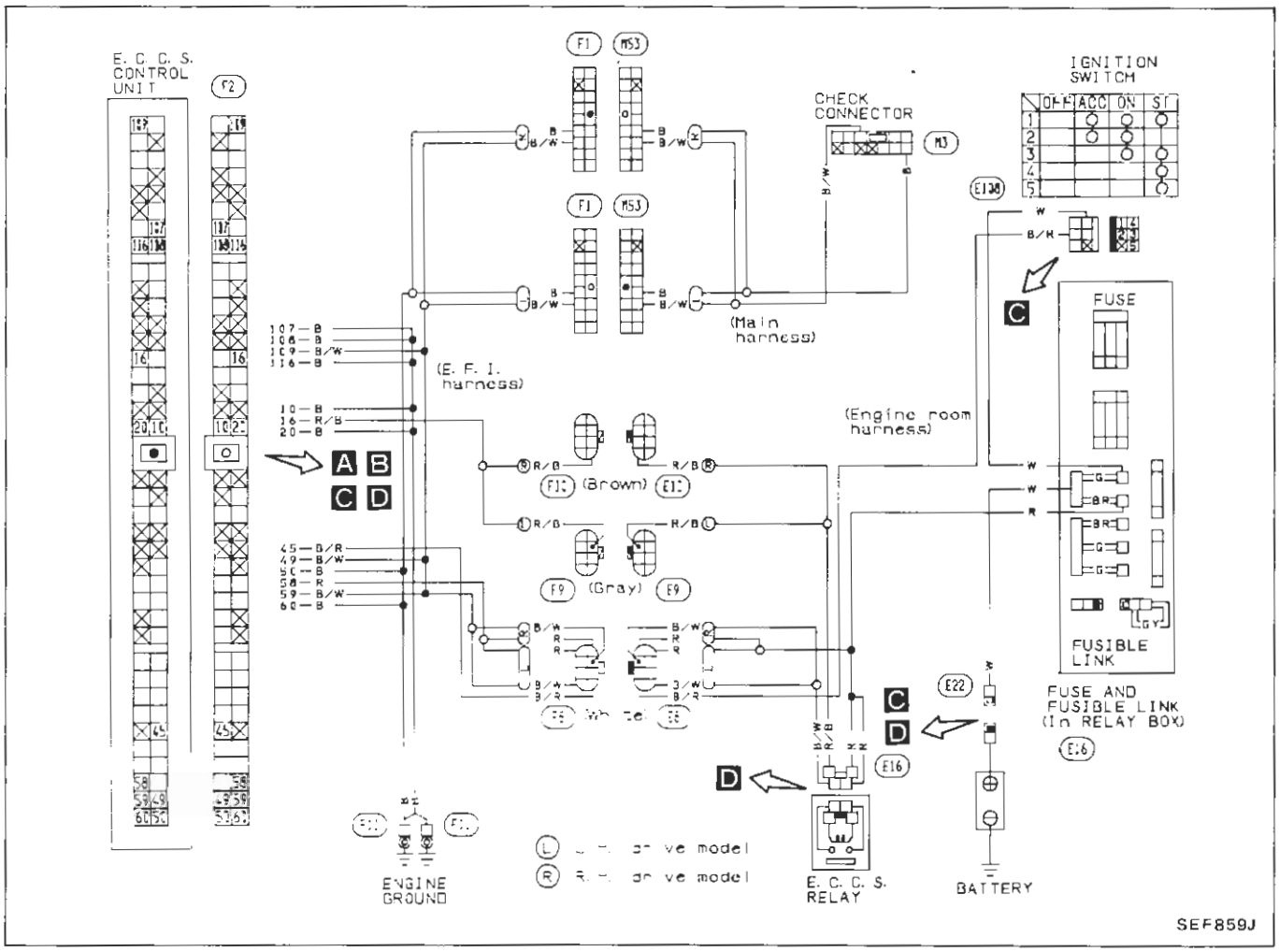
E.C.C.S Wiring Diagram - **See pull-out following EL section.**

Circuit Diagram

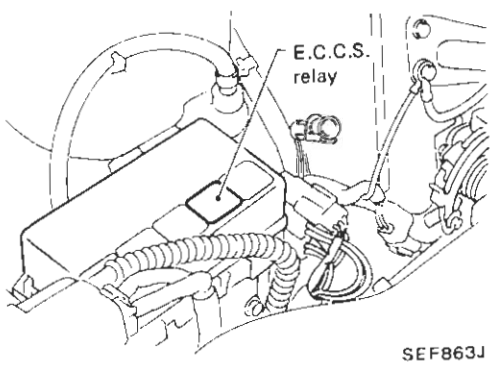


Diagnostic Procedure 1

POWER SOURCE & GROUND CIRCUIT FOR E.C.U. (Not self-diagnostic item)

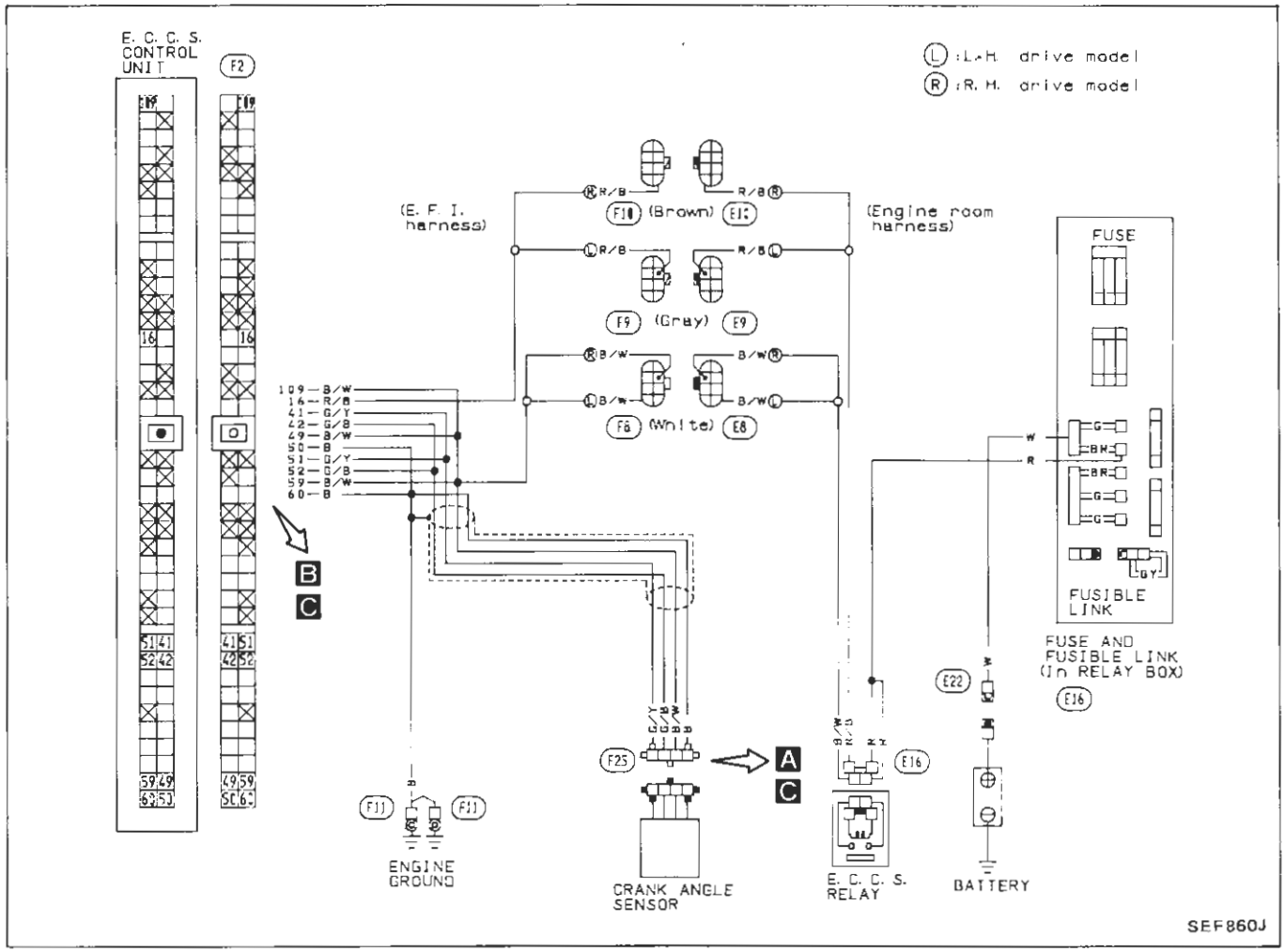


Component location

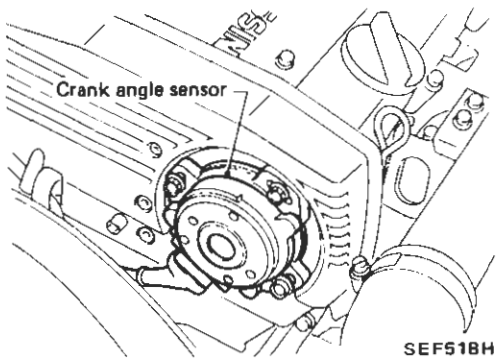


Diagnostic Procedure 2

CRANK ANGLE SENSOR (Code No. 11)

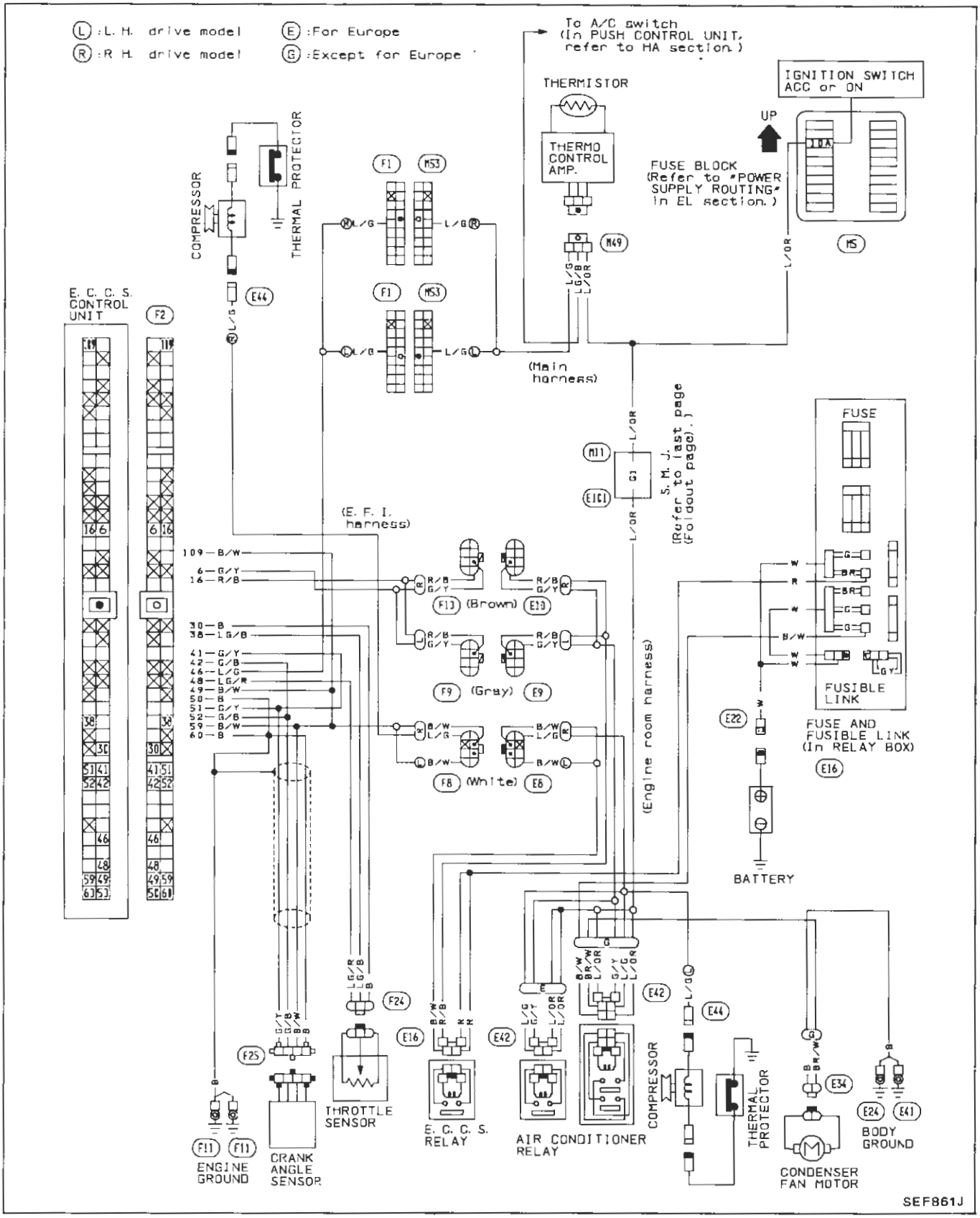


Component location



Diagnostic Procedure 18

ACCELERATION CUT CONTROL (Not self-diagnostic item)



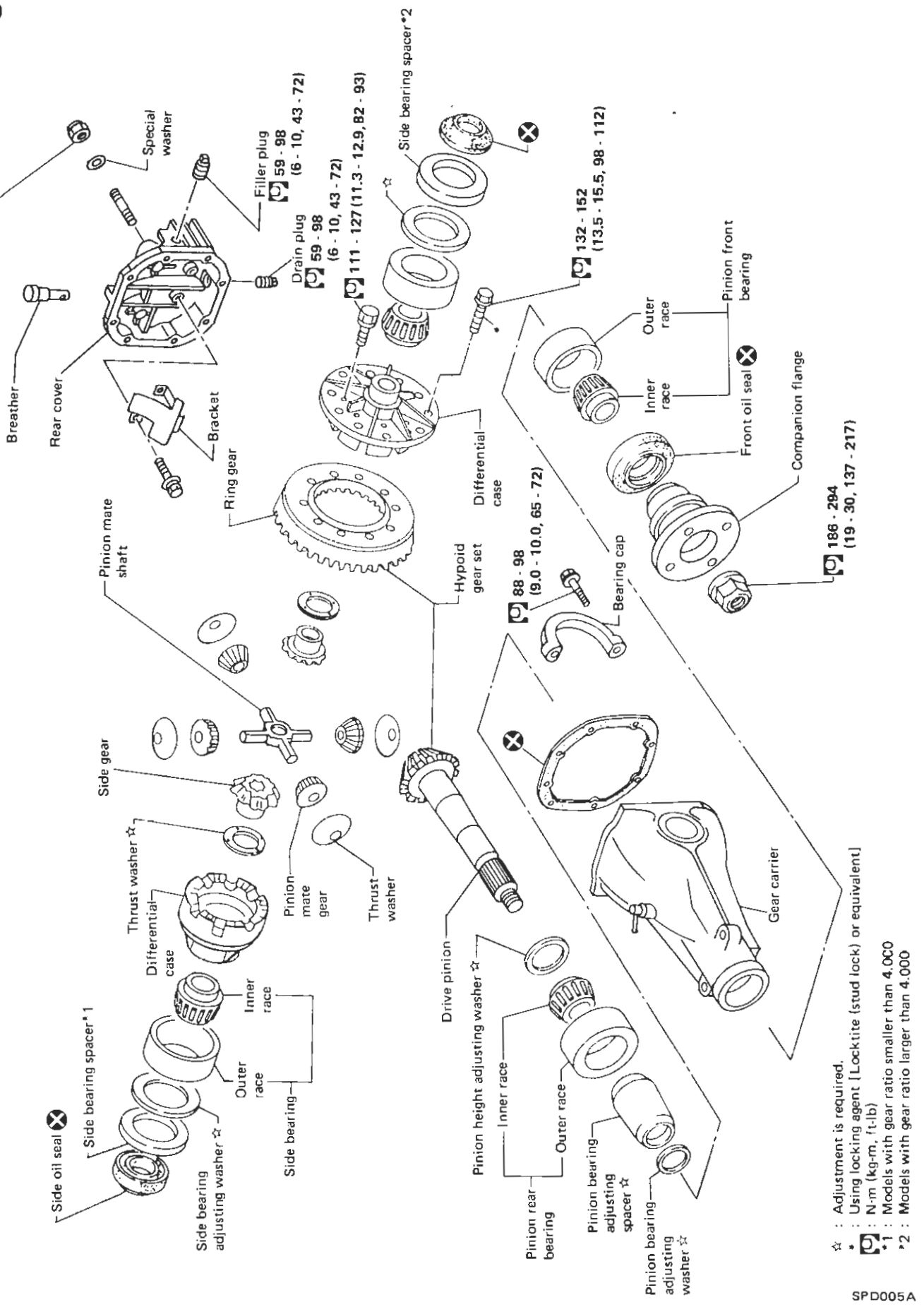
For inspection of this system, refer to HA section.

PROPELLER SHAFT & DIFFERENTIAL CARRIER

SECTION PD

CONTENTS

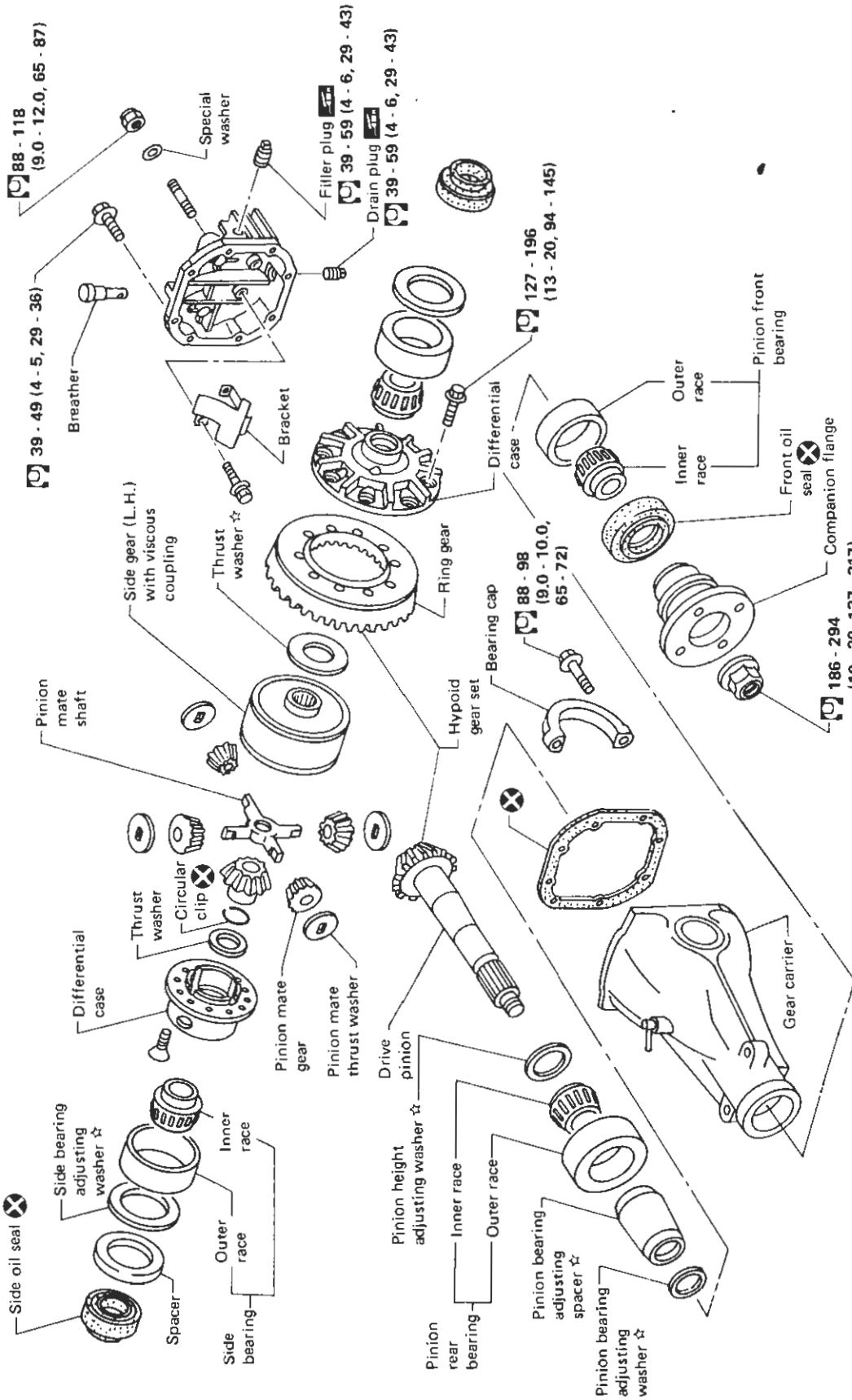
R200



☆ : Adjustment is required.
• : Using locking agent [Locktite (stud lock) or equivalent]
: N·m (kg-m, ft-lb)
*1 : Models with gear ratio smaller than 4.000
*2 : Models with gear ratio larger than 4.000

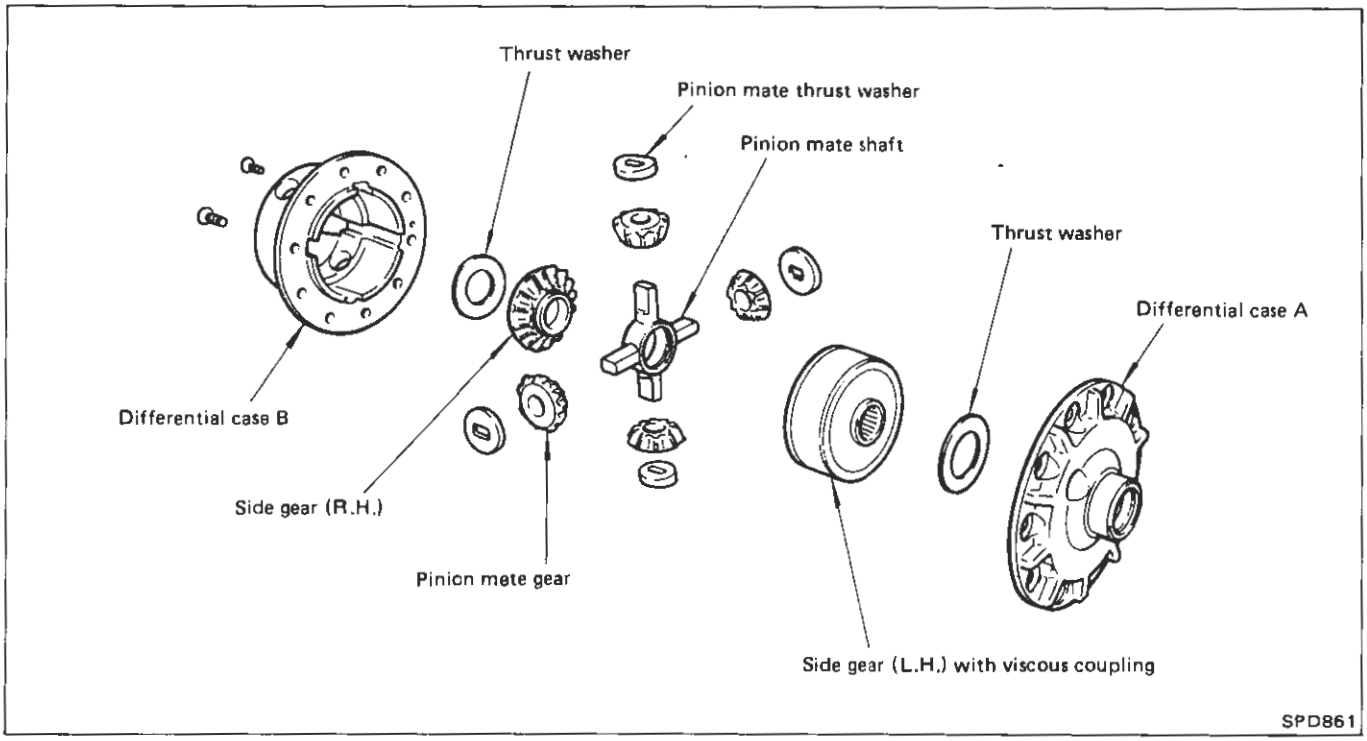
SPD005A

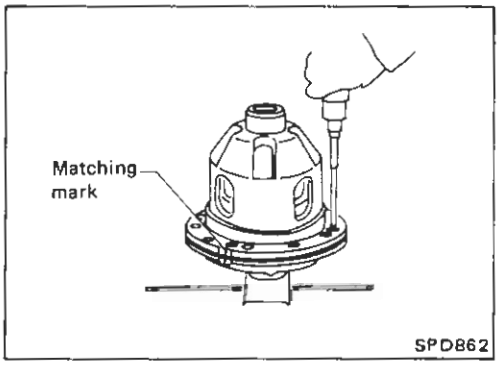
R200V



☆ : Adjustment is required.
• : Using locking agent [Locktite (stud lock) or equivalent]
: N·m (kg-m, ft-lb)

SPD993





Disassembly

1. Loosen screws on differential cases A and B.
2. Separate differential cases A and B.

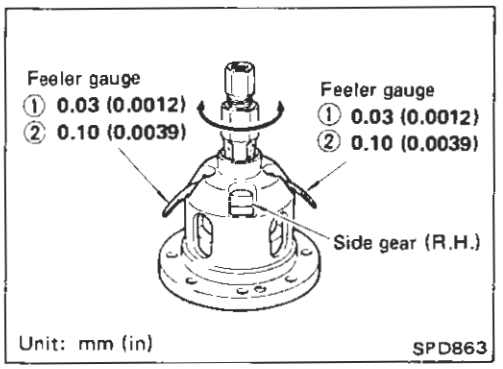
Inspection

CONTACT SURFACES

1. Clean the disassembled parts in suitable solvent and blow dry with compressed air.
2. If following surfaces are found to be burred or scratched, smooth with oil stone.

- Differential case A
- Differential case B
- Side gear
- Pinion mate gear
- Pinion mate shaft

3. Check viscous coupling for oil leakage. If it is faulty, replace it with new one.



Adjustment

THRUST WASHER SELECTION

Whenever side gears or pinion mate gears are replaced, select suitable thrust washers as follows:

1. Clean side gears and pinion mate gears using white gasoline.
2. Before assembling gears, apply hypoid gear oil to frictional surfaces.
3. Install the previously removed thrust washer on right side gear. On left side gear, install a suitable thrust washer. Temporarily tighten differential cases using two screws.
4. Position differential assembly so that right side gear is on the upper side. Place a 0.03 mm (0.0012 in) feeler gauge (for example) between right side gear and thrust washer.

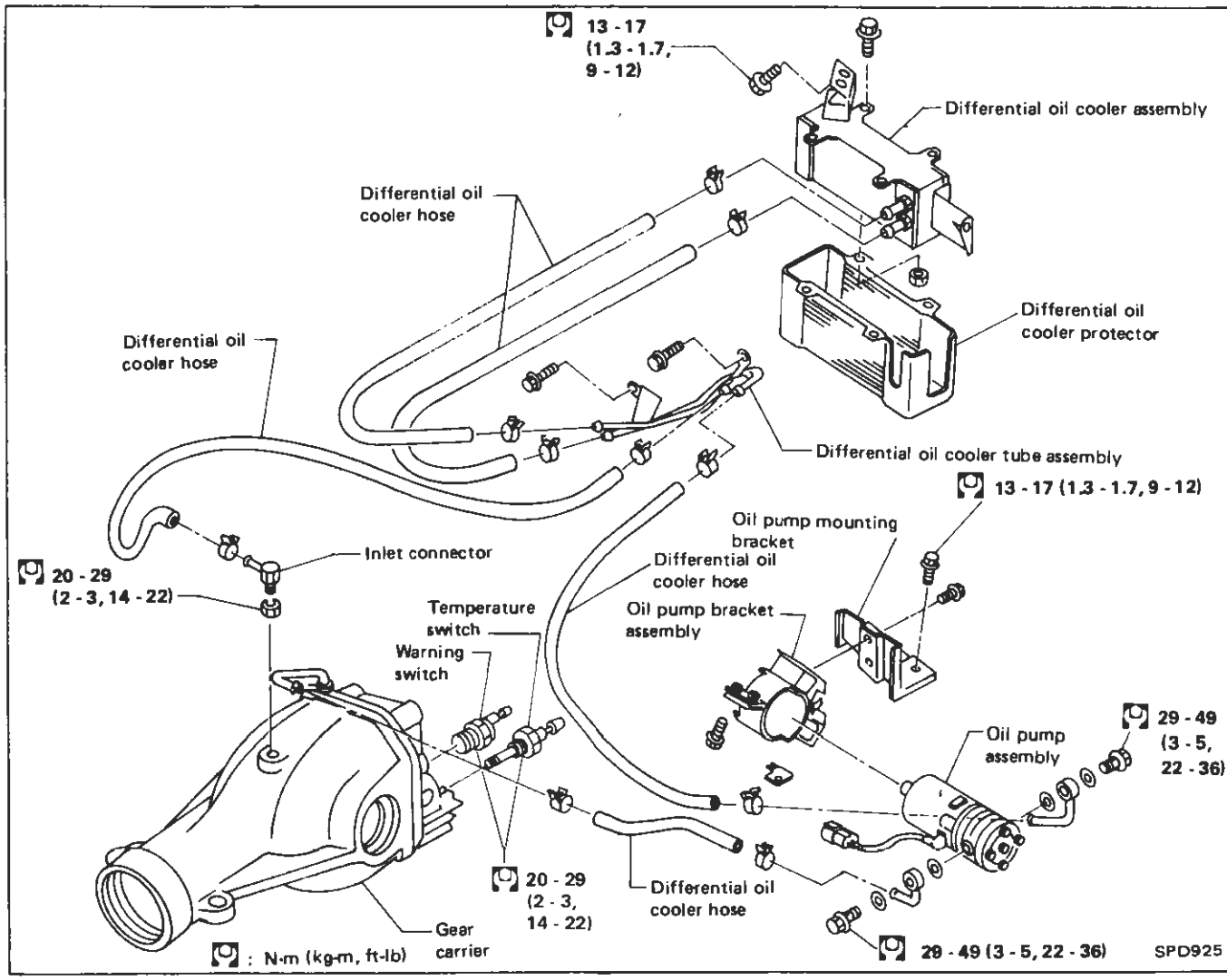
Do not place feeler gauge at groove side of differential case.

5. Also place a 0.03 mm (0.0012 in) additional feeler gauge between right side gear and thrust washer so that it is positioned diagonal to (180° apart from) the feeler gauge described previously.
6. Rotate right side gear with a suitable tool attached to splines. If right side gear cannot be rotated, replace thrust washer used on left side gear with a thinner one.
7. Replace both 0.03 mm (0.0012 in) feeler gauges with 0.10 mm (0.0039 in) gauges. At this point, make sure right side gear does not rotate. If it does, replace thrust washer on left side gear with a thicker one so that right side gear does not rotate.
8. As explained in above example, select suitable thrust washers to ensure that:

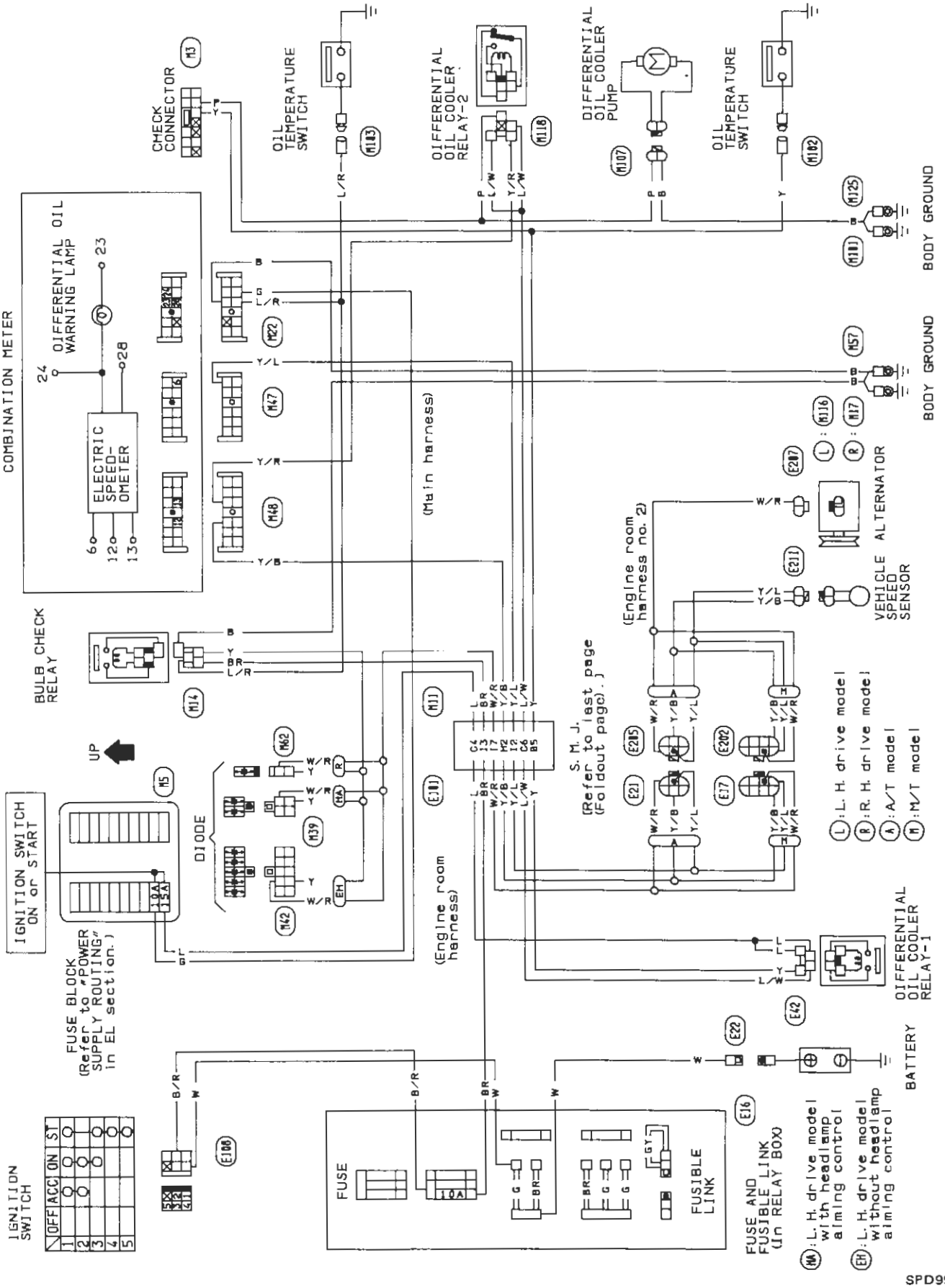
a) Both side gears rotate. [0.03 mm (0.0012 in) feeler gauges are used in this case.]

b) Side gear is held stationary. [0.10 mm (0.0039 in) gauges are used in this case.]
(Refer to S.D.S.)

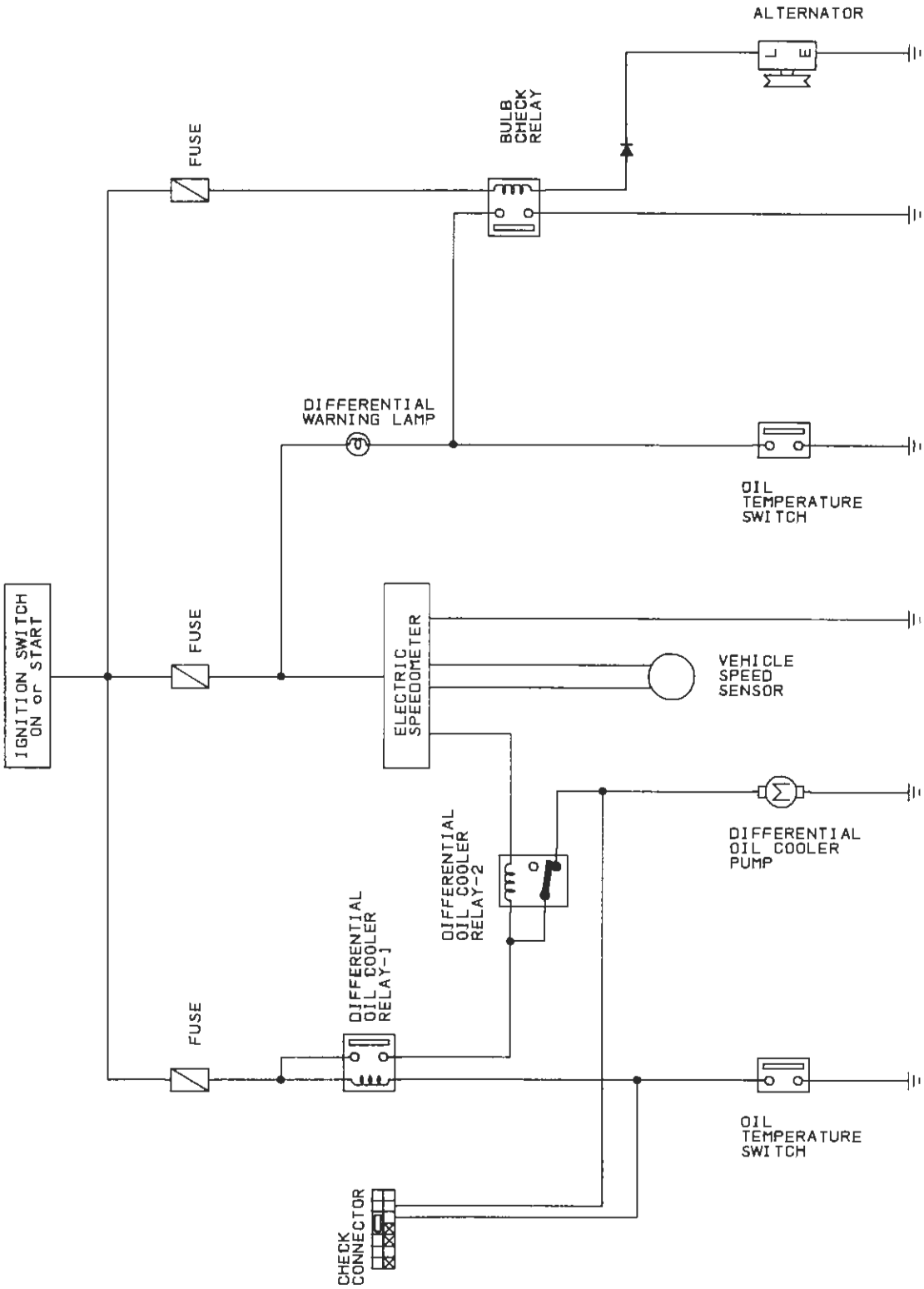
Removal and Installation



Wiring Diagram/Differential Oil Cooler System



Schematic/Differential Oil Cooler System



SPD995

Final Drive

GENERAL SPECIFICATIONS

Applied model	Europe		Except Europe		
			R.H.D.		L.H.D.
	Standard	Optional	Standard	Optional	
Final drive model	R200	R200V	R200	R200	
Ring gear pitch diameter mm (in)	205 (8.07)				
Number of pinions	4				2
Gear ratio	3.916		4.363	3.916	4.083
Number of teeth Ring gear Drive pinion	 47 12		 48 11	 47 12	 49 12
Oil capacity (approx.) ℓ (Imp pt)	1.8 (3-1/8)		1.2 (2-1/8)		

INSPECTION AND ADJUSTMENT

Side gear adjustment

Side gear backlash (Clearance between side gear and differential case) mm (in)	0.03 - 0.09 (0.0012 - 0.0035)

Available side gear thrust washers (R200)

Thickness mm (in)	Part number
0.775 (0.0305)	38424-E3000
0.825 (0.0325)	38424-E3001
0.875 (0.0344)	38424-E3002
0.925 (0.0364)	38424-E3003

Available side gear thrust washers (R200V)

Thickness mm (in)	Part number
0.80 (0.0315)	38424-40F00
0.85 (0.0335)	38424-40F08
0.90 (0.0354)	38424-40F01
0.95 (0.0374)	38424-40F09
1.00 (0.0394)	38424-40F02
1.05 (0.0413)	38424-40F10
1.10 (0.0433)	38424-40F03
1.15 (0.0453)	38424-40F11
1.20 (0.0472)	38424-40F04
1.25 (0.0492)	38424-40F12
1.30 (0.0512)	38424-40F05
1.35 (0.0531)	38424-40F13
1.40 (0.0551)	38424-40F06
1.45 (0.0571)	38424-40F14
1.50 (0.0591)	38424-40F07

Drive pinion preload adjustment

Drive pinion bearing preload adjusting method	Adjusting washer end spacer
Drive pinion preload N·m (kg-cm, in-lb) With front oil seal	1.1 - 1.4 (11 - 14, 9.5 - 12.2)

Available drive pinion bearing preload adjusting washers

Thickness mm (in)	Part number
3.80 - 3.82 (0.1496 - 0.1504)	38125-61001
3.82 - 3.84 (0.1504 - 0.1512)	38126-61001
3.84 - 3.86 (0.1512 - 0.1520)	38127-61001
3.86 - 3.88 (0.1520 - 0.1528)	38128-61001
3.88 - 3.90 (0.1528 - 0.1535)	38129-61001
3.90 - 3.92 (0.1535 - 0.1543)	38130-61001
3.92 - 3.94 (0.1543 - 0.1551)	38131-61001
3.94 - 3.96 (0.1551 - 0.1559)	38132-61001
3.96 - 3.98 (0.1559 - 0.1567)	38133-61001
3.98 - 4.00 (0.1567 - 0.1575)	38134-61001
4.00 - 4.02 (0.1575 - 0.1583)	38135-61001
4.02 - 4.04 (0.1583 - 0.1591)	38136-61001
4.04 - 4.06 (0.1591 - 0.1598)	38137-61001
4.06 - 4.08 (0.1598 - 0.1606)	38138-61001
4.08 - 4.10 (0.1606 - 0.1614)	38139-61001

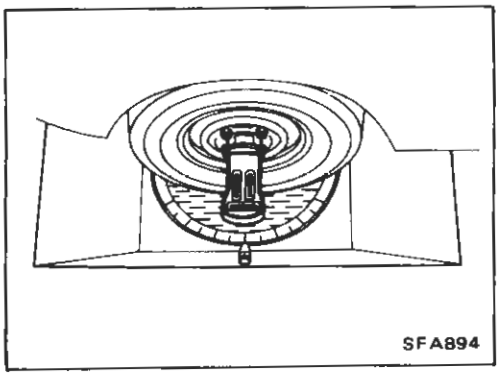
Available drive pinion bearing preload adjusting spacers

Length mm (in)	Part number
54.50 (2.1457)	38165-B4000
54.80 (2.1575)	38165-B4001
55.10 (2.1693)	38165-B4002
55.40 (2.1811)	38165-B4003
55.70 (2.1929)	38165-B4004
56.00 (2.2047)	38165-61001

FRONT AXLE & FRONT SUSPENSION

SECTION FA

CONTENTS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Front Wheel Alignment

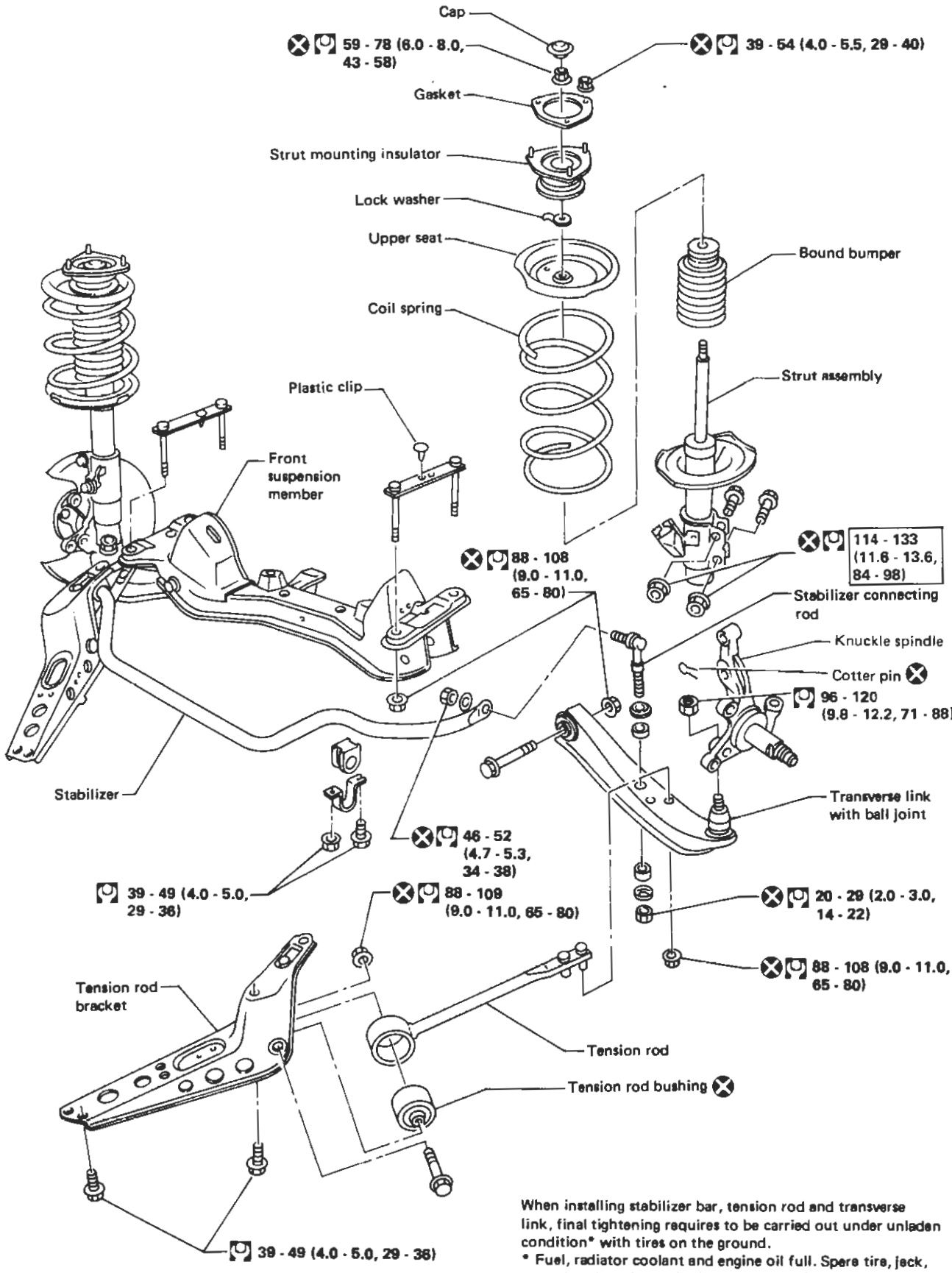
CAMBER, CASTER AND KINGPIN INCLINATION

Camber, caster and kingpin inclination are preset at factory and cannot be adjusted.

1. Measure camber, caster and kingpin inclination of both right and left wheels with a suitable alignment gauge.

   Camber:
   –1°25′ to 5′
   Caster:
   5°55′ - 7°25′
   Kingpin inclination:
   12°25′ - 13°55′

2. If camber, caster and kingpin inclination are not within specification, inspect and replace any damaged or worn front suspension parts.



When installing stabilizer bar, tension rod and transverse link, final tightening requires to be carried out under unladen condition* with tires on the ground.

* Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.

: N·m (kg-m, ft-lb)

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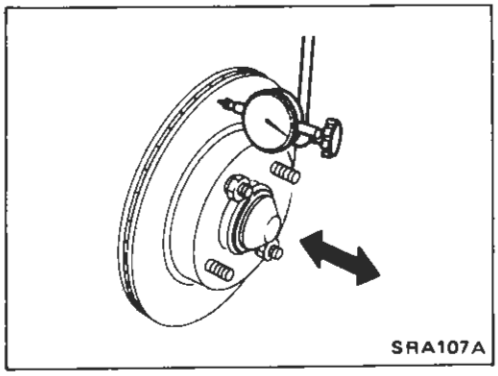
REAR AXLE & REAR SUSPENSION

SECTION RA

CONTENTS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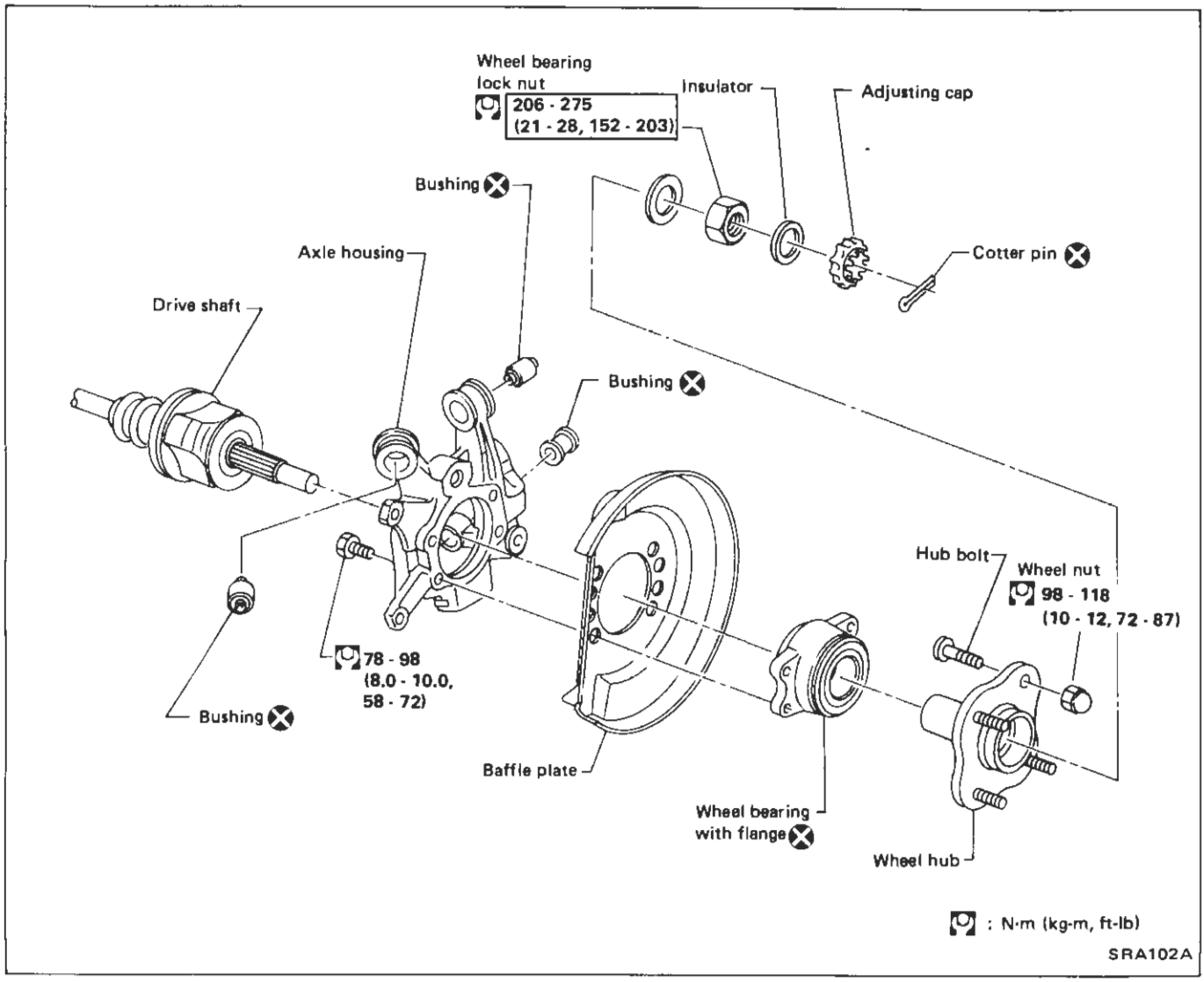
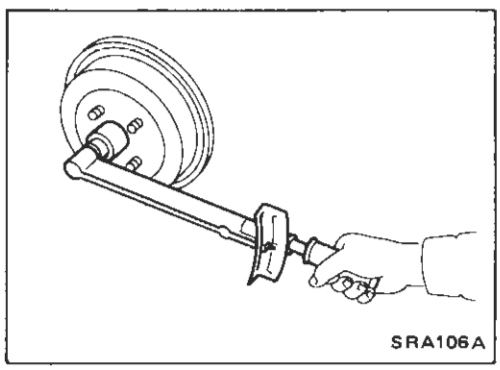
Rear Wheel Bearing

- Check tightening torque of wheel bearing lock nut.
  [O]: **206 - 275 N·m (21 - 28 kg-m, 152 - 203 ft-lb)**
- Check that wheel bearings operates smoothly.
- Check axial end play.
  Axial end play:
  0.05 mm (0.0020 in) or less

If axial end play is not within specification or wheel bearing does not turn smoothly, replace wheel bearing assembly.
Refer to REAR AXLE — Wheel Hub and Axle Housing.

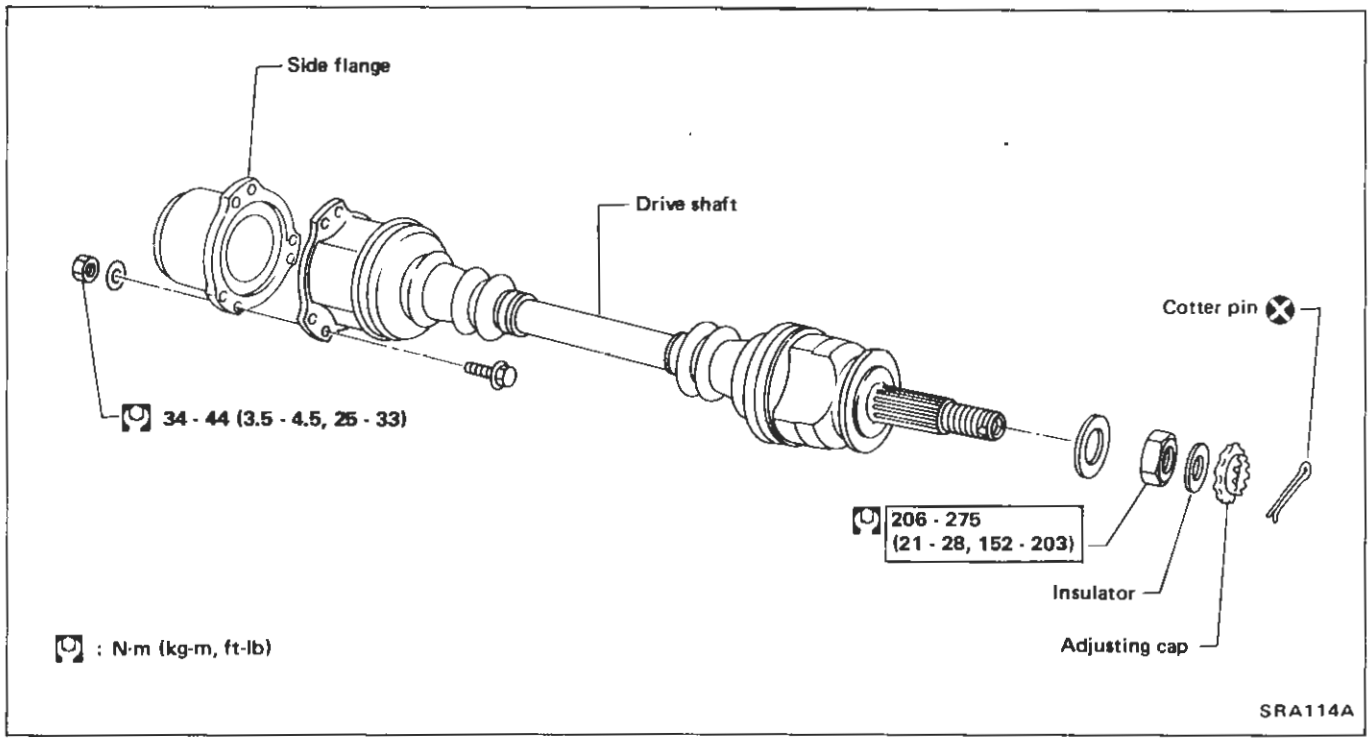


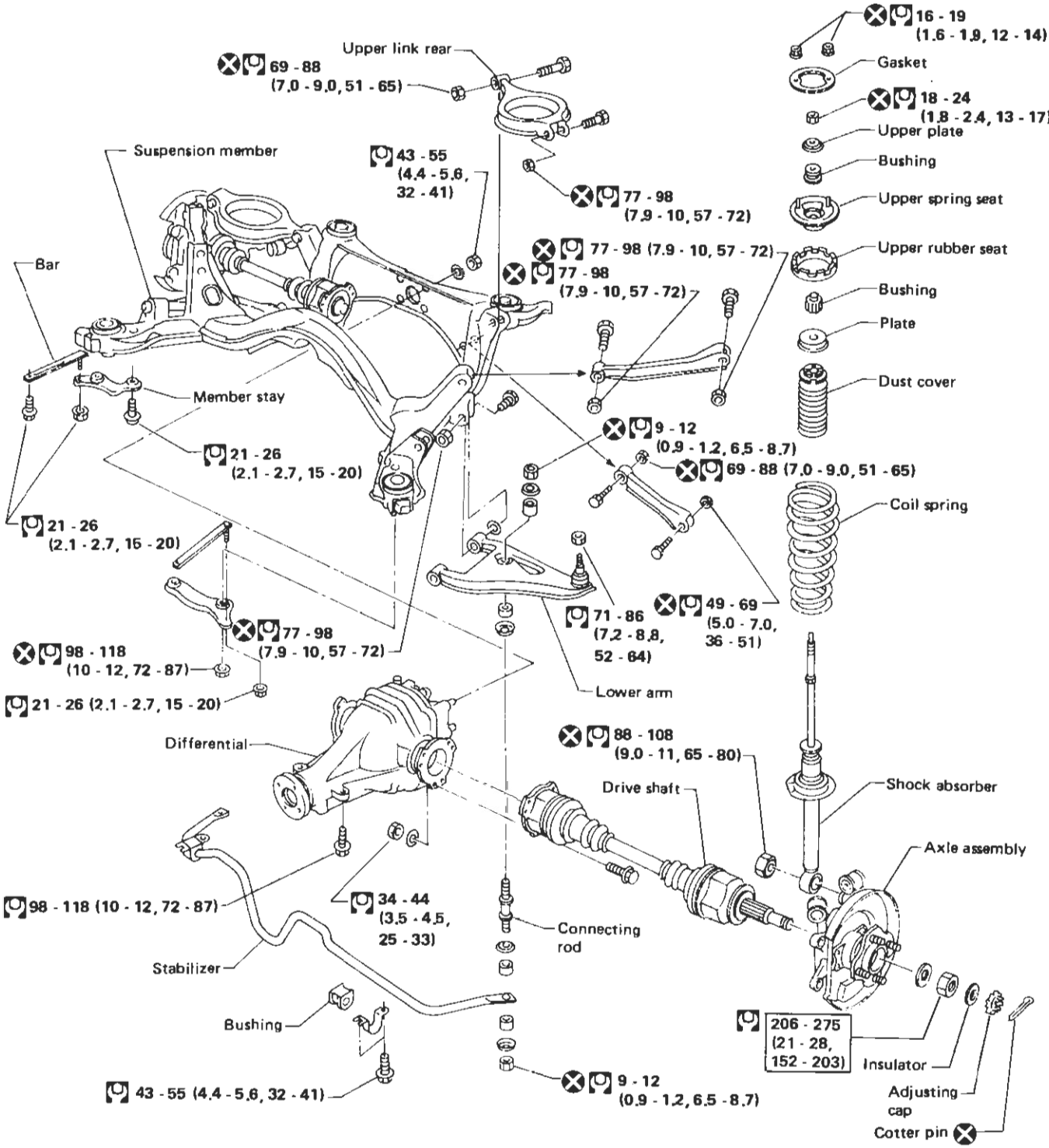


Installation

- Install axle housing with wheel hub.
- Tighten wheel bearing lock nut.

: **206 - 275 N·m (21 - 28 kg-m, 152 - 203 ft-lb)**


Side flange
Drive shaft
Cotter pin
34 - 44 (3.5 - 4.5, 25 - 33)
206 - 275
(21 - 28, 152 - 203)
Insulator
Adjusting cap
: N·m (kg-m, ft-lb)
SRA114A



CAUTION:
Do not jack up at lower arm.
When installing each rubber part, final tightening must be carried out under unladen condition* with tires on ground.

* Fuel, radiator coolant and engine oil full. Spare tire, jeck, hand tools end mats in designated positions.

: N·m (kg-m, ft-lb)

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Inspection and Adjustment

WHEEL BEARING

Wheel bearing axial end play mm (in)	0.05 (0.0020) or less
Wheel bearing lock nut Tightening torque N·m (kg-m, ft-lb)	206 - 275 (21 - 28, 152 - 203)

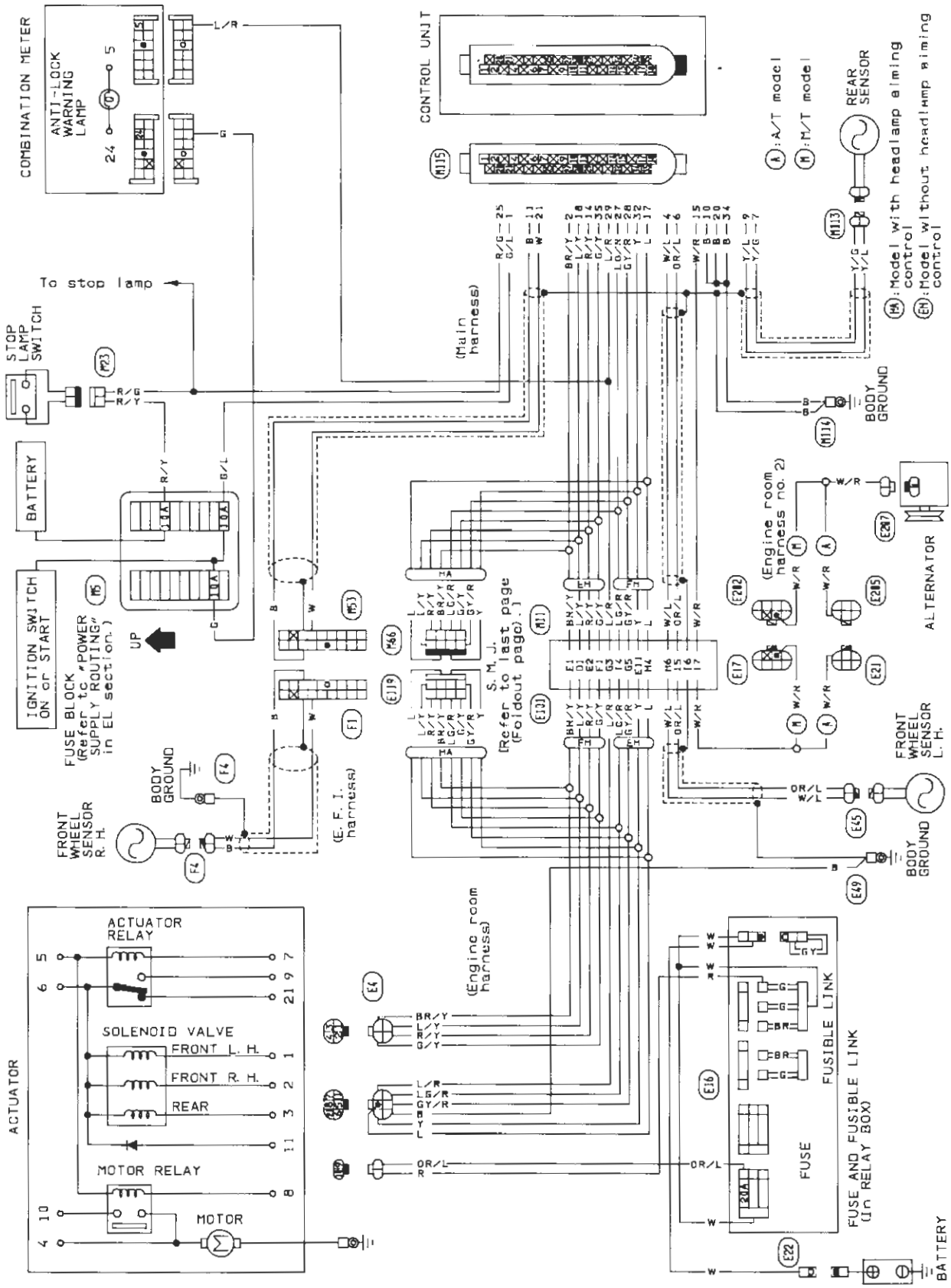
BRAKE SYSTEM

SECTION BR

CONTENTS

Wiring Diagram

L.H.D. MODEL



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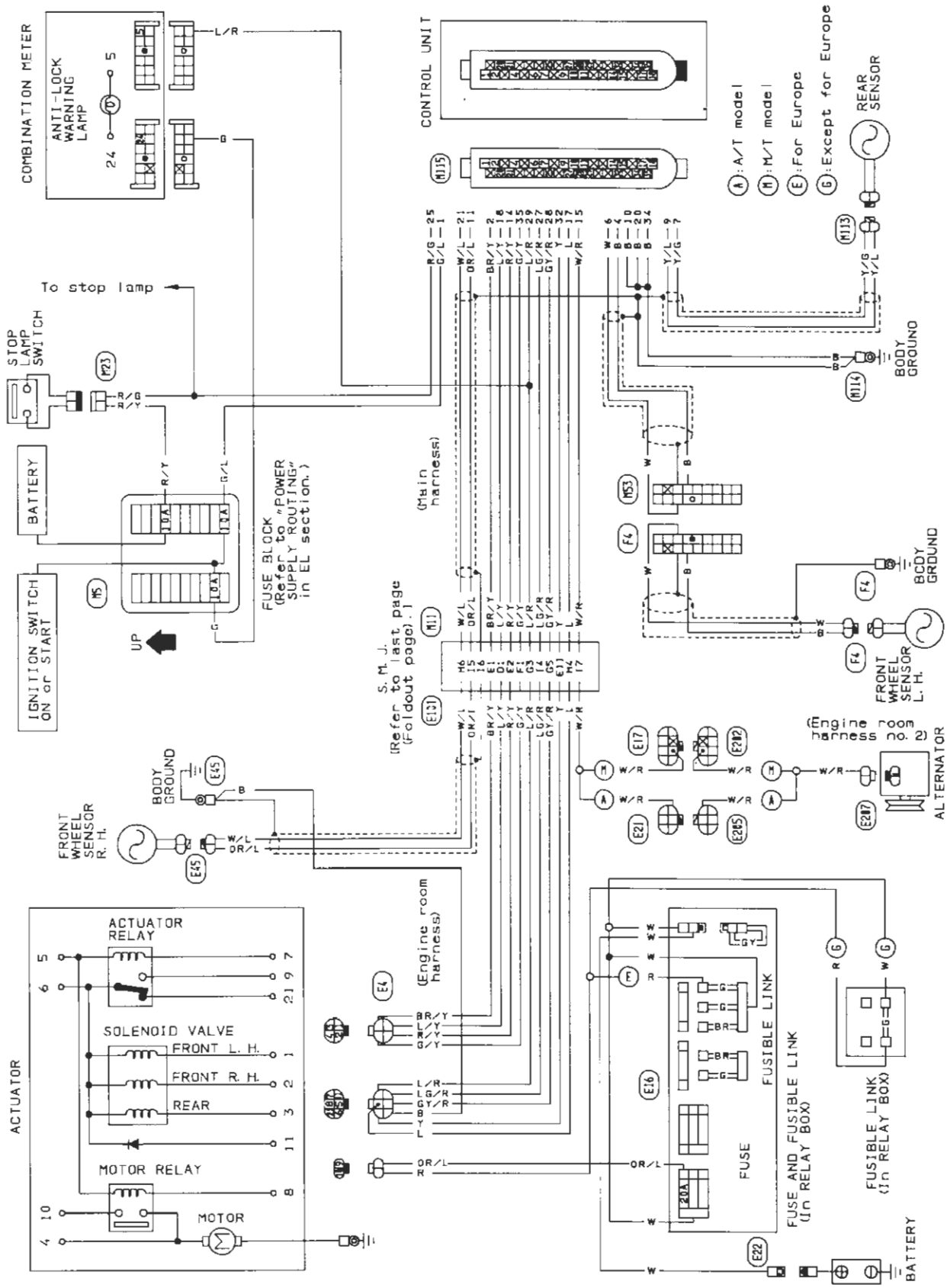
Wiring Diagram (Cont'd)

R.H.D. MODEL



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General Specifications

Destination	Except Europe		Europe (Without A.B.S.*)	Europe (With A.B.S.*)
Front brake Brake model	CL18VB		CL25VA	
Cylinder bore diameter mm (in)	48.1 (1.894)		57.2 (2.252)	
Pad length x width x thickness mm (in)	100.8 x 44.3 x 10.0 (3.97 x 1.744 x 0.394)		134.1 x 45.3 x 11.0 (5.28 x 1.783 x 0.433)	
Rotor outer diameter x thickness mm (in)	250 x 18 (9.84 x 0.71)		257 x 22 (10.12 x 0.87)	
Rear brake Brake model	CL9H		AD9	
Cylinder bore diameter mm (in)	33.96 (1.3370)		34.93 (1.3752)	
Pad length x width x thickness mm (in)	75.0 x 40.0 x 9.5 (2.953 x 1.575 x 0.374)		93.8 x 33.4 x 10.0 (3.693 x 1.315 x 0.394)	
Rotor outer diameter x thickness mm (in)	258 x 9 (10.16 x 0.35)		266 x 9 (10.47 x 0.35)	
Master cylinder Cylinder bore diameter mm (in)	20.64 (13/16)	22.22 (7/8)*	22.22 (7/8)	23.81 (15/16)
Control valve Valve model	Proportioning valve (within master cylinder)			
Sprit point x reducing ratio kPa (bar, kg/cm², psi)	3,923 (39.2, 40, 569) x 0.4			
Brake booster Booster model	M23, G23			M195T
Diaphragm diameter mm (in)	230 (9.06)			Primary 205 (8.07) Secondary 180 (7.09)
Brake fluid Recommended brake fluid	DOT 3			
Parking brake Control type	Center lever			
Parking drum brake Brake model	–		DS17HD	
Lining Width x thickness x length mm (in)	–		154.1 x 25.0 x 3.0 (6.07 x 0.984 x 0.118)	
Drum inner diameter mm (in)	–		172.0 (6.77)	

*Anti-lock Braking System

Inspection and Adjustment

FRONT DISC BRAKE

Unit: mm (in)

Item \ Brake model	CL1BVB	CL25VA
Pad wear limit Minimum thickness	2.0 (0.079)	
Rotor repair limit Minimum thickness	16.0 (0.630)	20.0 (0.787)
Maximum runout	0.07 (0.0028)	

REAR DISC BRAKE

Unit: mm (in)

Item \ Brake model	CL9H	AD9
Pad wear limit Minimum thickness	1.5 (0.059)	2.0 (0.079)
Rotor repair limit Minimum thickness	8.0 (0.315)	
Maximum runout	0.07 (0.0028)	

PARKING DRUM BRAKE

Unit: mm (in)

Brake model	DS17H
Lining replacement limit Minimum thickness	1.5 (0.059)
Drum repair limit Maximum inner diameter	173.0 (6.81)

BRAKE PEDAL

Unit: mm (in)

Model	L.H.D.	R.H.D.
Free height M/T	177.0 - 187.0 (6.97 - 7.36)	178.0 - 188.0 (7.01 - 7.40)
A/T	186.0 - 196.0 (7.32 - 7.72)	188.0 - 198.0 (7.40 - 7.80)
Depressed height [under force of 490 N (50 kg, 110 lb) with engine running]	100 (3.94) or more	105 (4.13) or more
Clearance between pedal stopper and threaded end of stop lamp switch	0.3 - 1.0 (0.012 - 0.039)	
Clearance between pedal stopper and threaded end of A.S.C.D. switch	0.3 - 1.0 (0.012 - 0.039)	
Pedal free play at clevis	1 - 3 (0.04 - 0.12)	

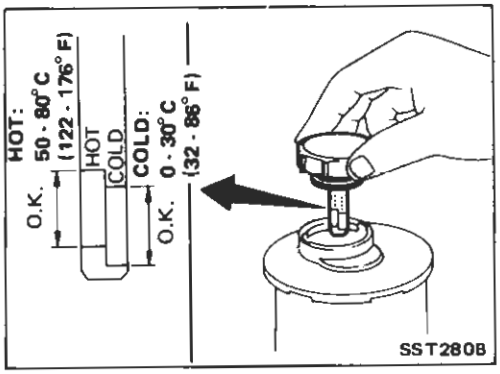
PARKING BRAKE

Item \ Control type	Center lever
Number of notches [under force of 196 N (20 kg, 44 lb)]	6 - 8
Number of notches (when warning switch comes on)	1

STEERING SYSTEM

SECTION ST

CONTENTS



Checking Fluid Level

Check fluid level.

Fluid level should be checked using "HOT" range on dipstick at fluid temperatures of 50 to 80°C (122 to 176°F) or using "COLD" range on dipstick at fluid temperatures of 0 to 30°C (32 to 86°F).

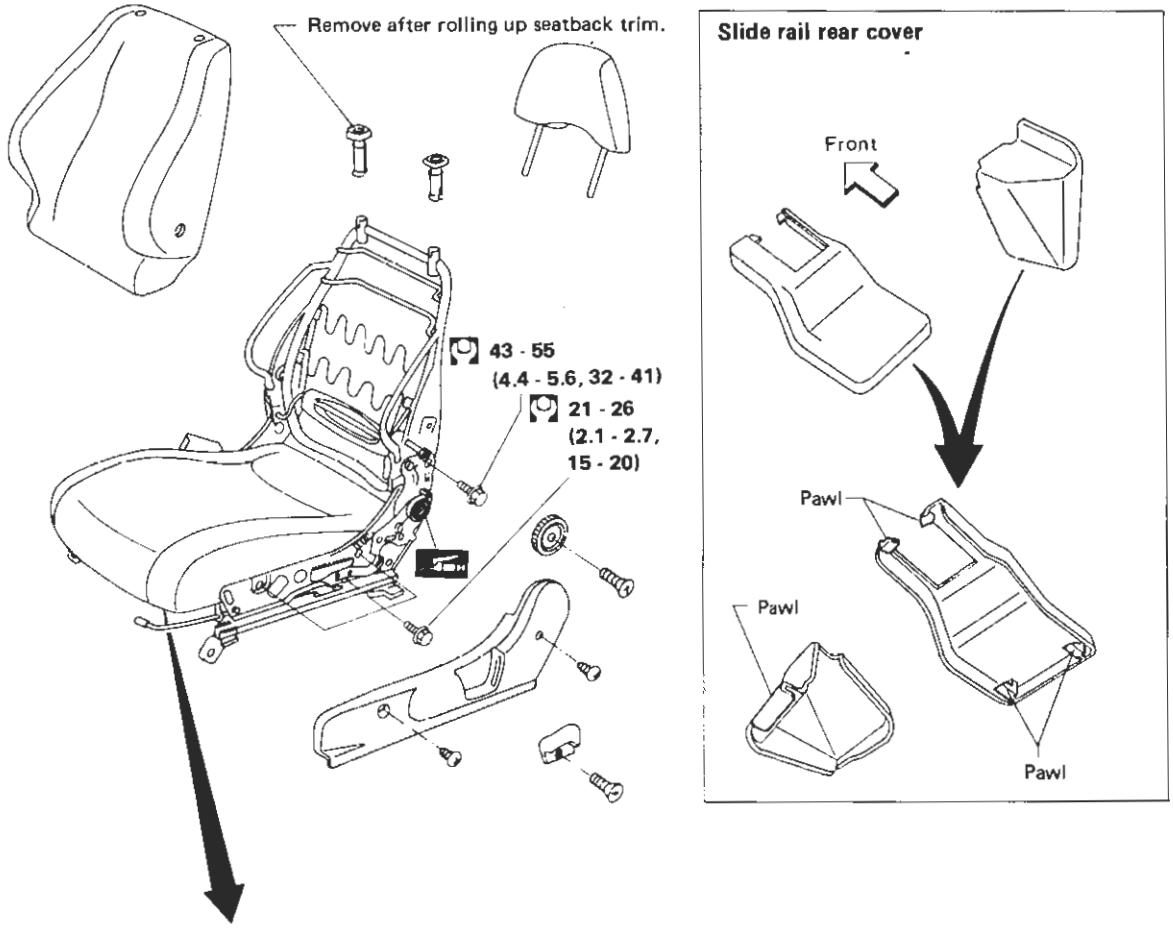
CAUTION:

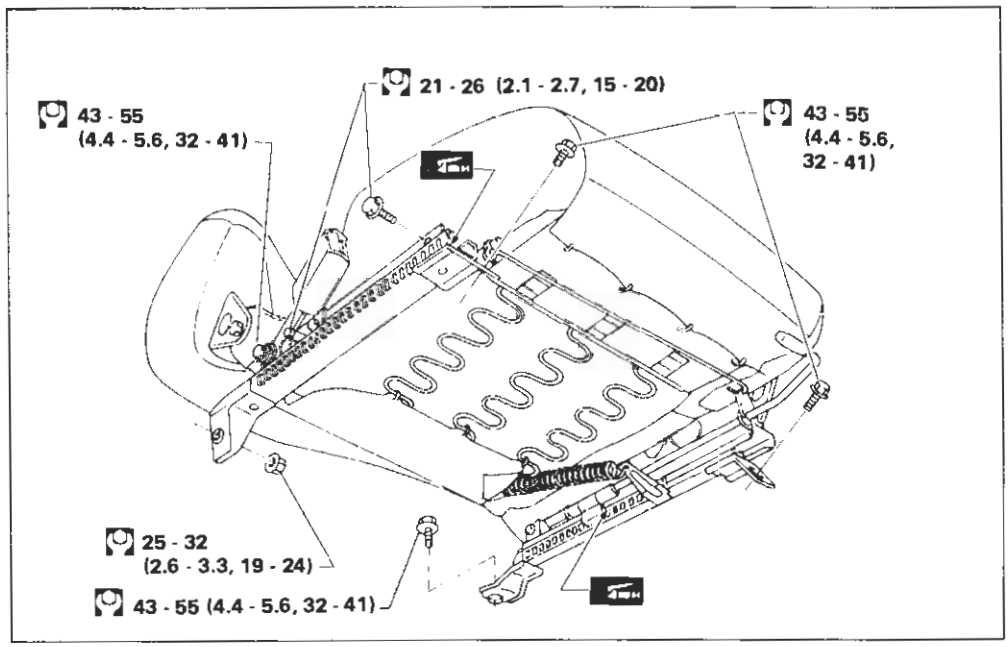
- **Do not overfill.**
- **Recommended fluid is Automatic Transmission Fluid "DEXRON™" type.**

SECTION BF

CONTENTS

Front Seat





: N·m (kg-m, ft-lb)

SBF258F

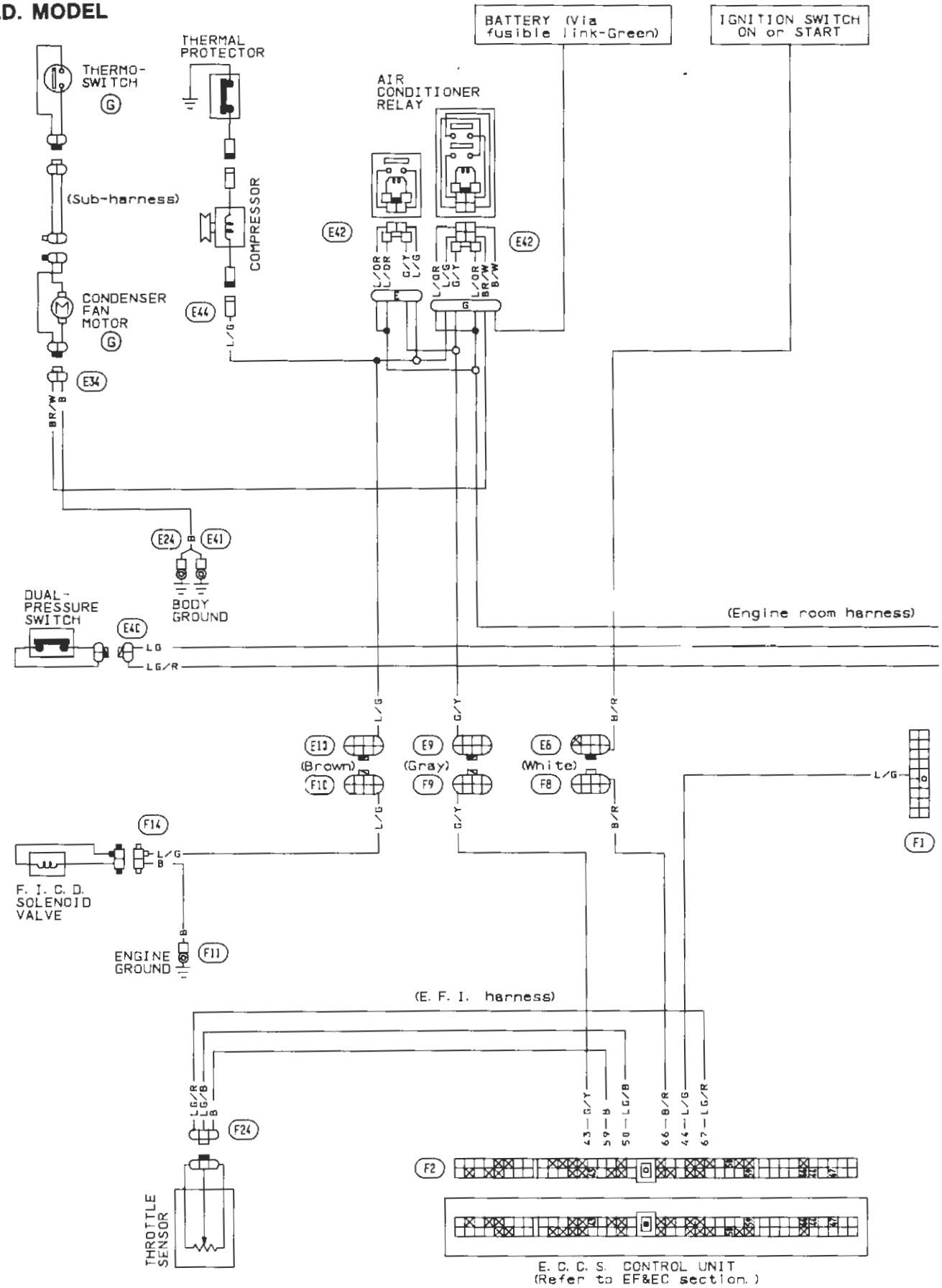
HEATER & AIR CONDITIONER

SECTION HA

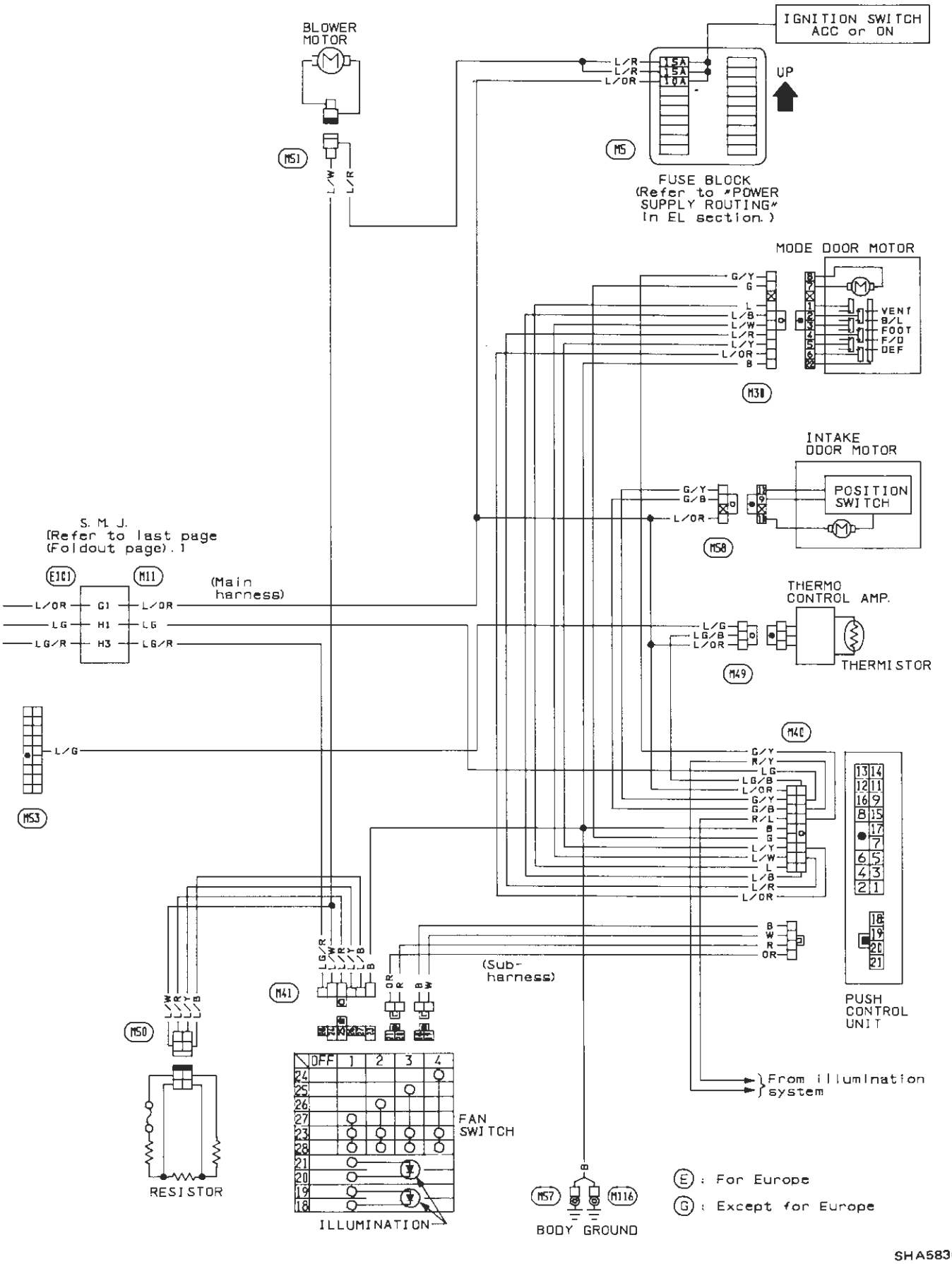
CONTENTS

Wiring Diagram

L.H.D. MODEL

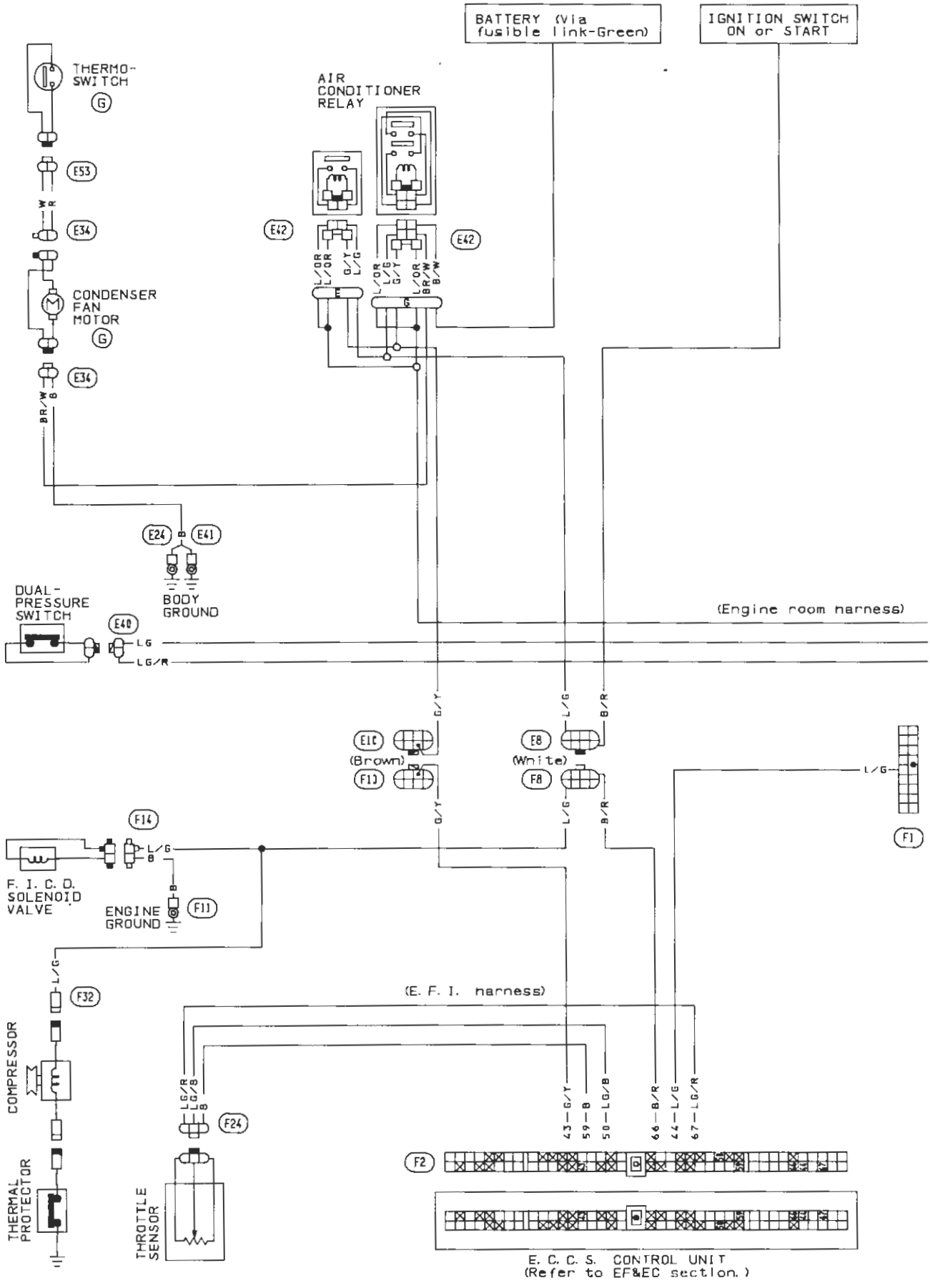


Wiring Diagram (Cont'd)

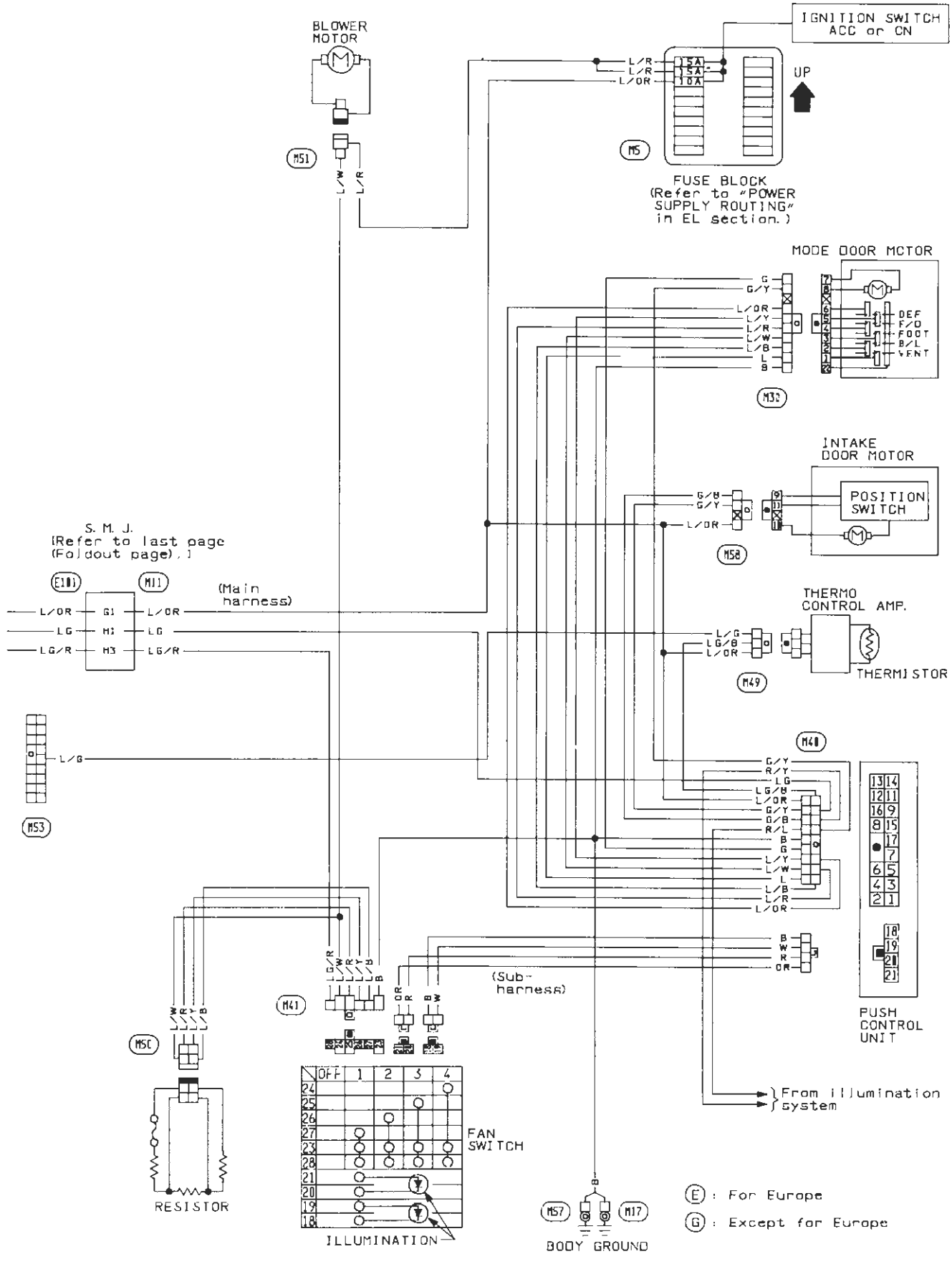


Wiring Diagram (Cont'd)

R.H.D. MODEL



Wiring Diagram (Cont'd)



SHA584C

ELECTRICAL SYSTEM

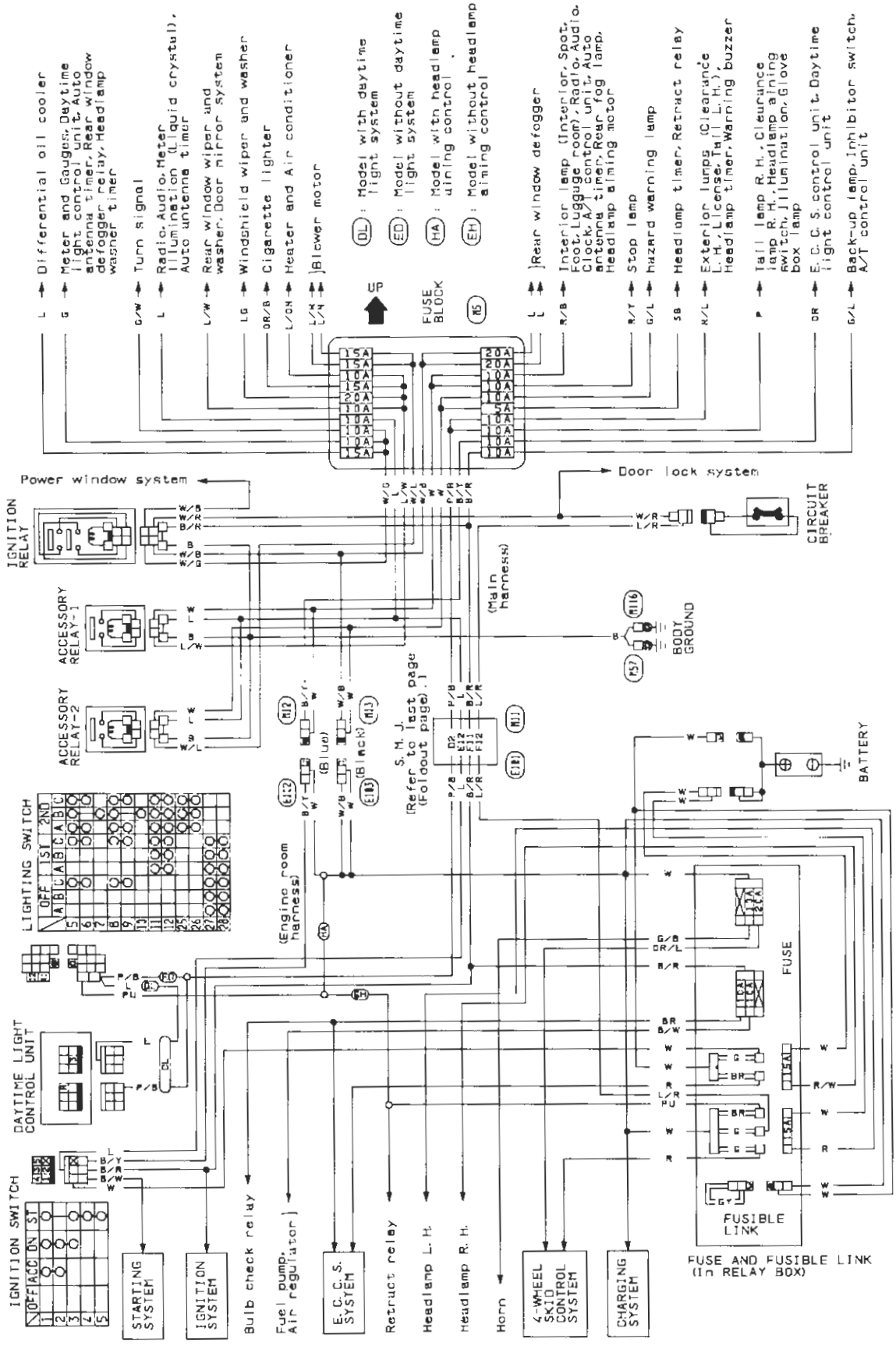
SECTION EL

CONTENTS

WIRING DIAGRAM REFERENCE CHART

Wiring Diagram

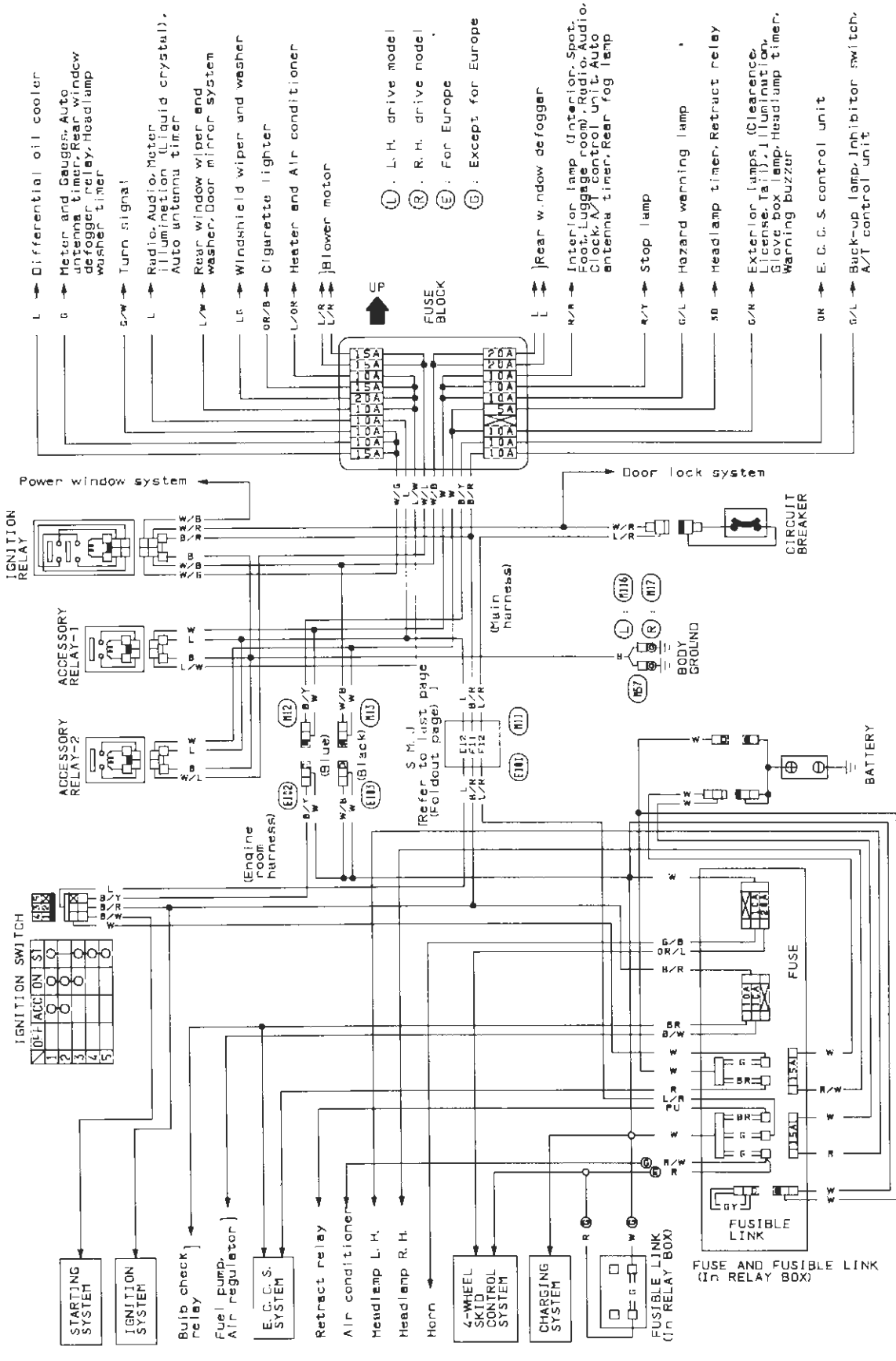
L.H. DRIVE MODEL FOR EUROPE



SEL845N

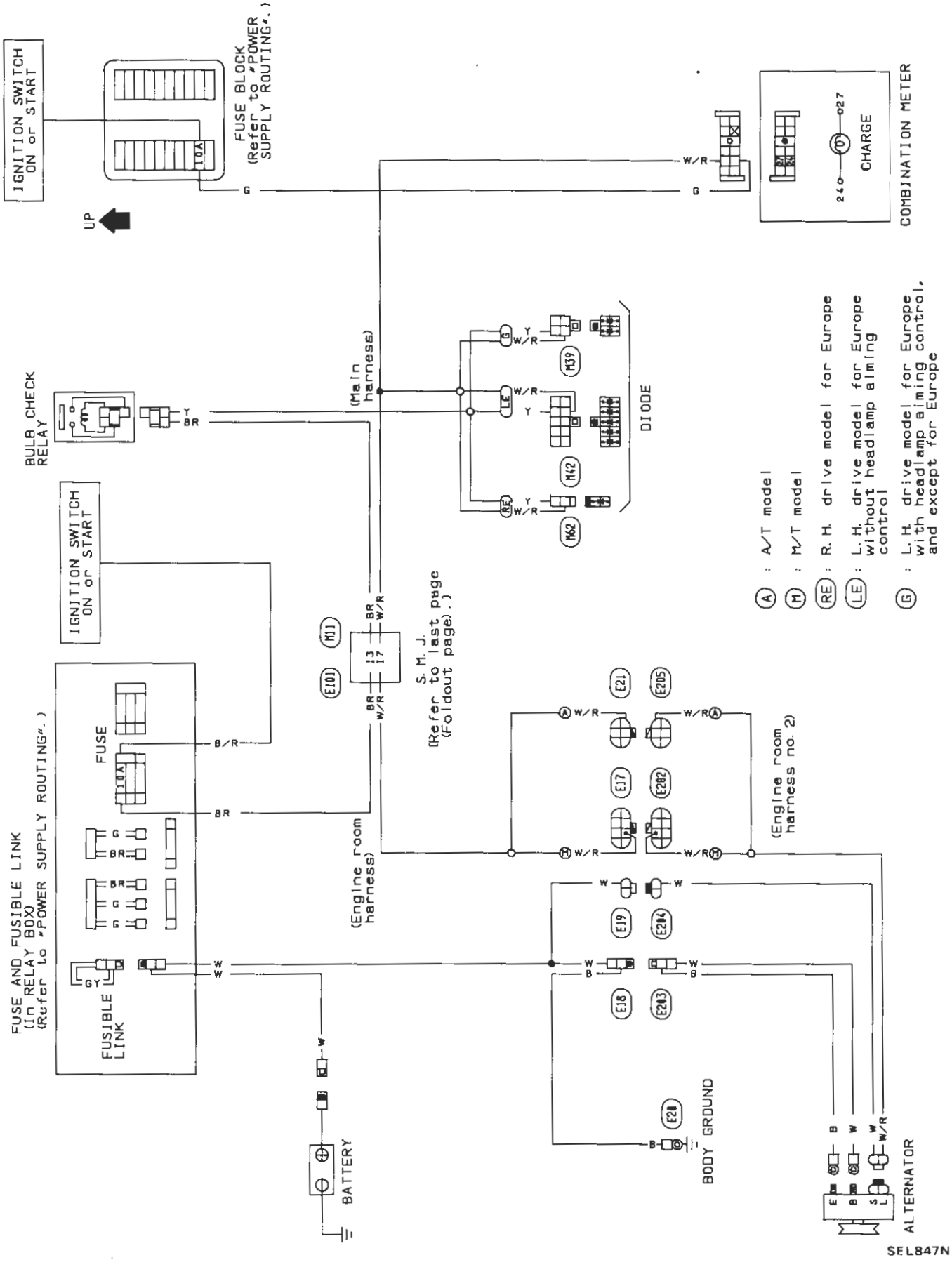
Wiring Diagram (Cont'd)

EXCEPT L.H. DRIVE MODEL FOR EUROPE



SEL846N

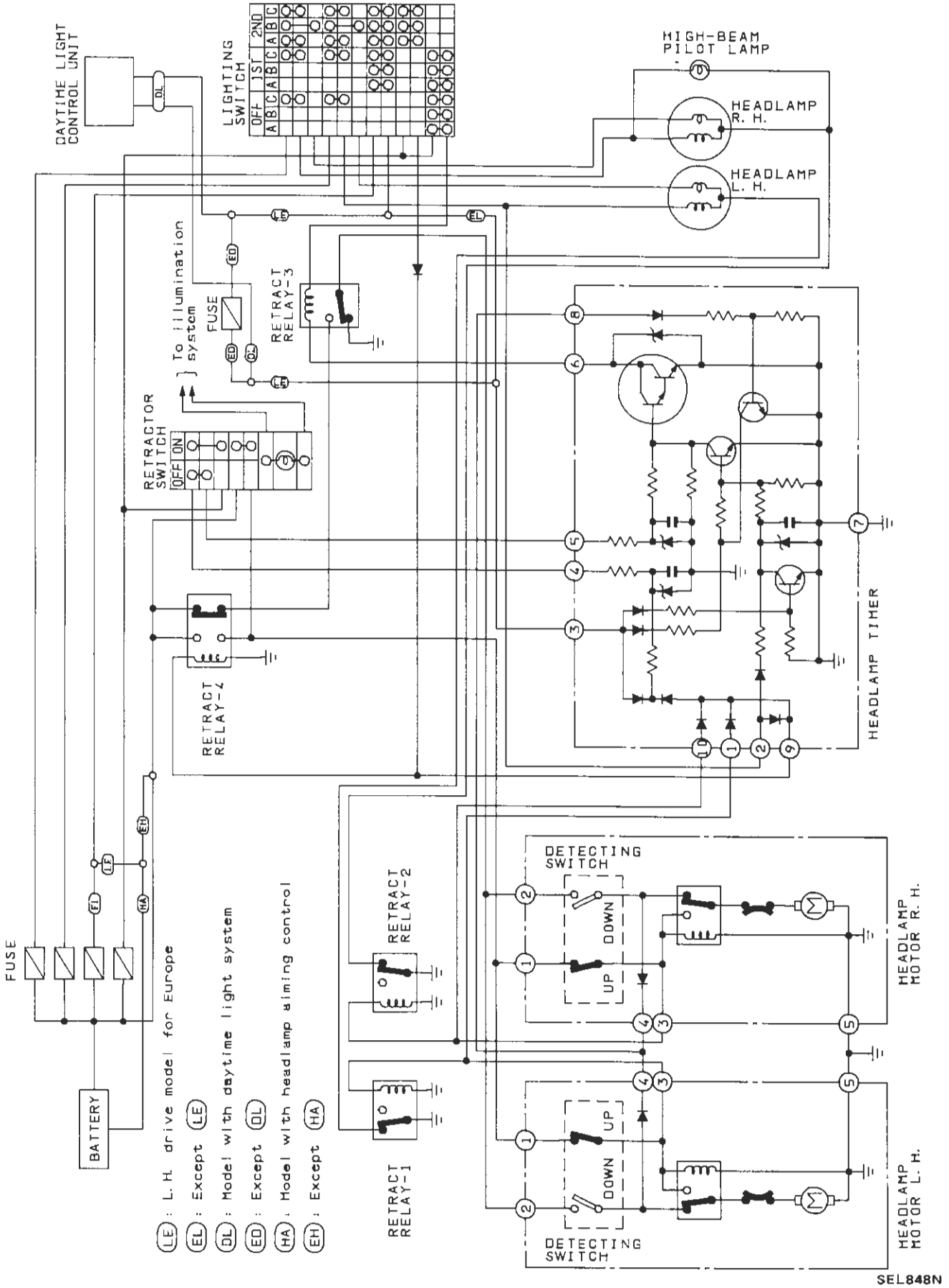
Wiring Diagram



SEL847N

Schematic

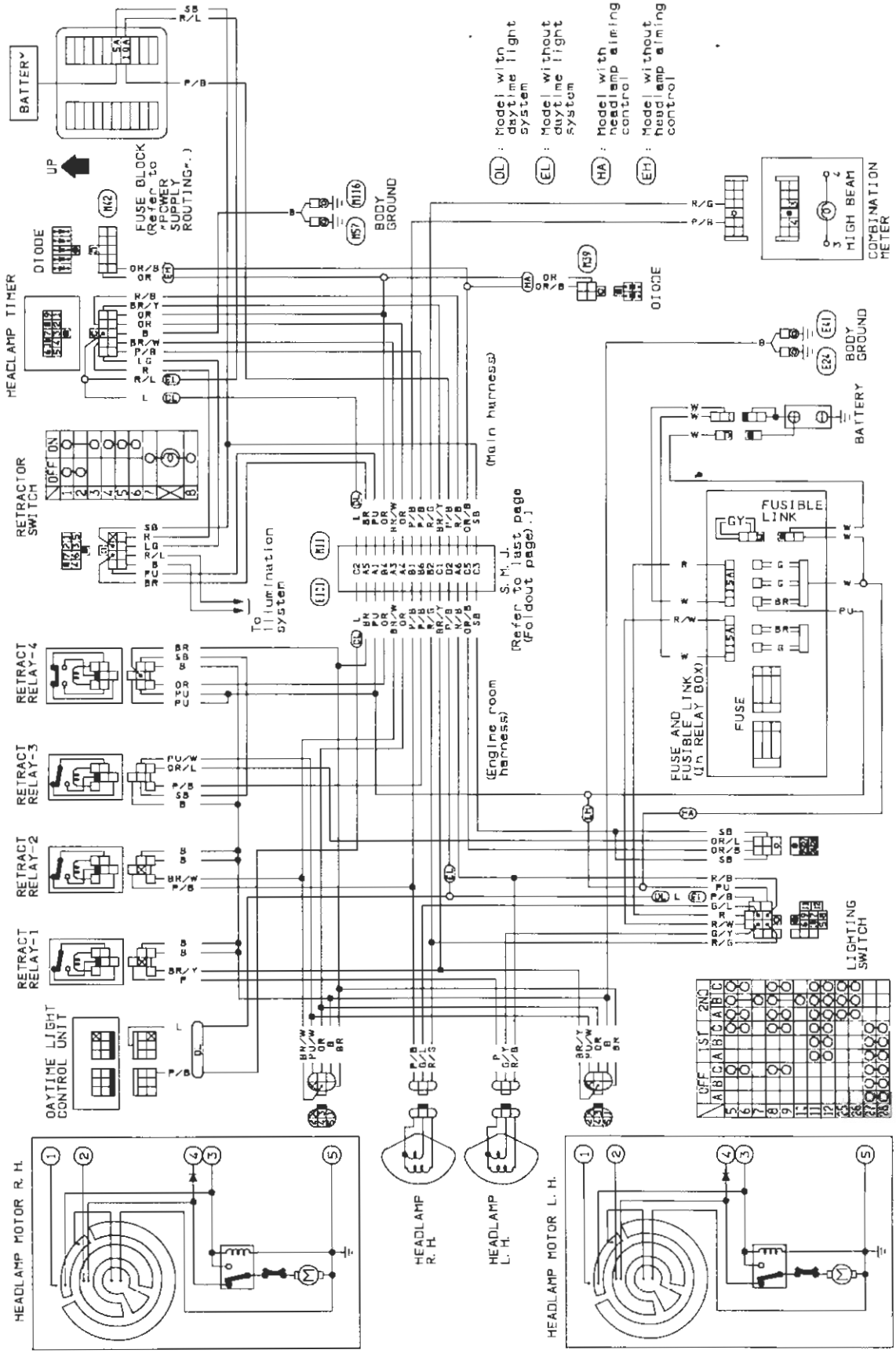
MODEL WITHOUT DIM-DIP LAMP SYSTEM



SEL848N

Wiring Diagram

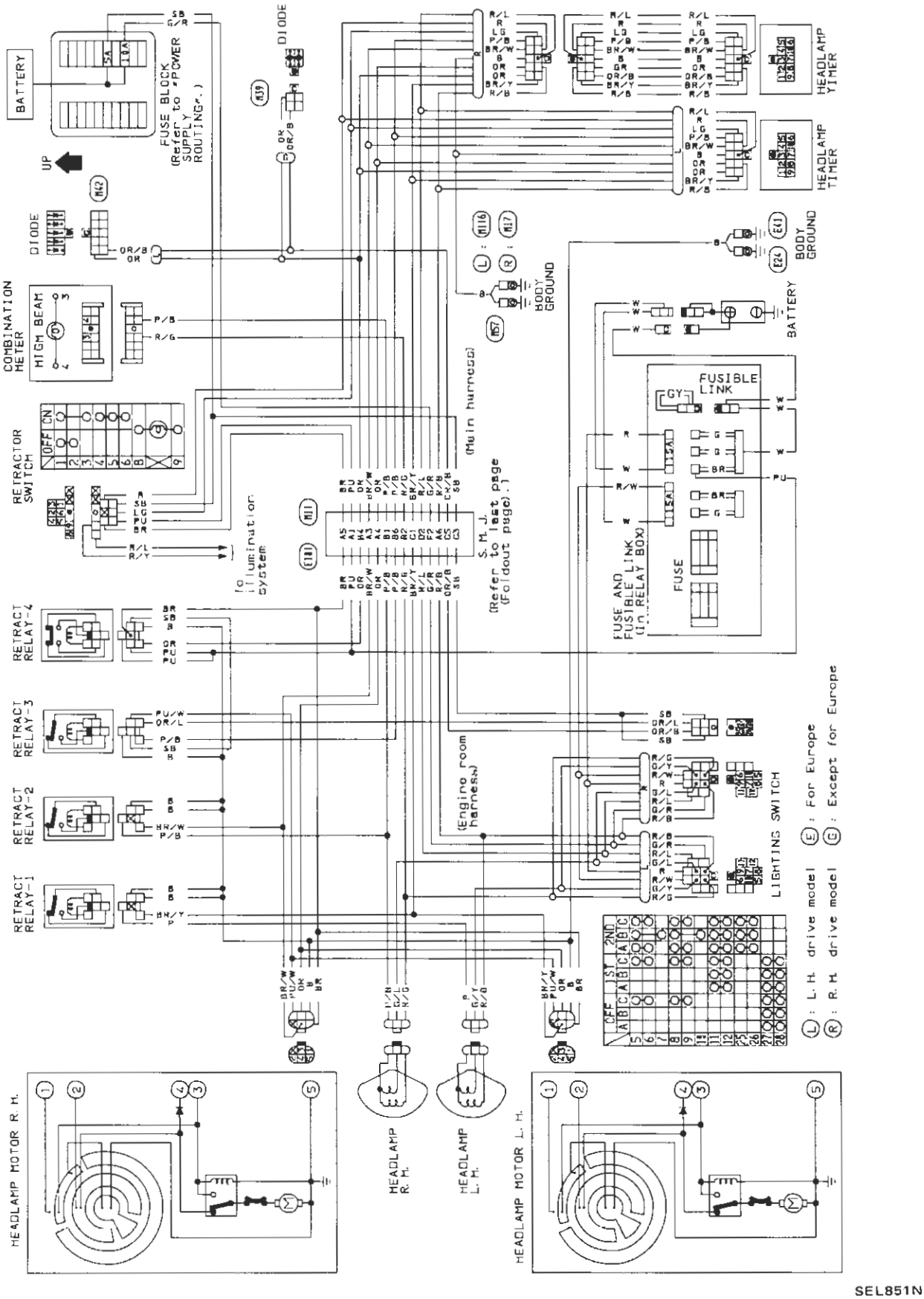
L.H. DRIVE MODEL FOR EUROPE



SEL849N

Wiring Diagram (Cont'd)

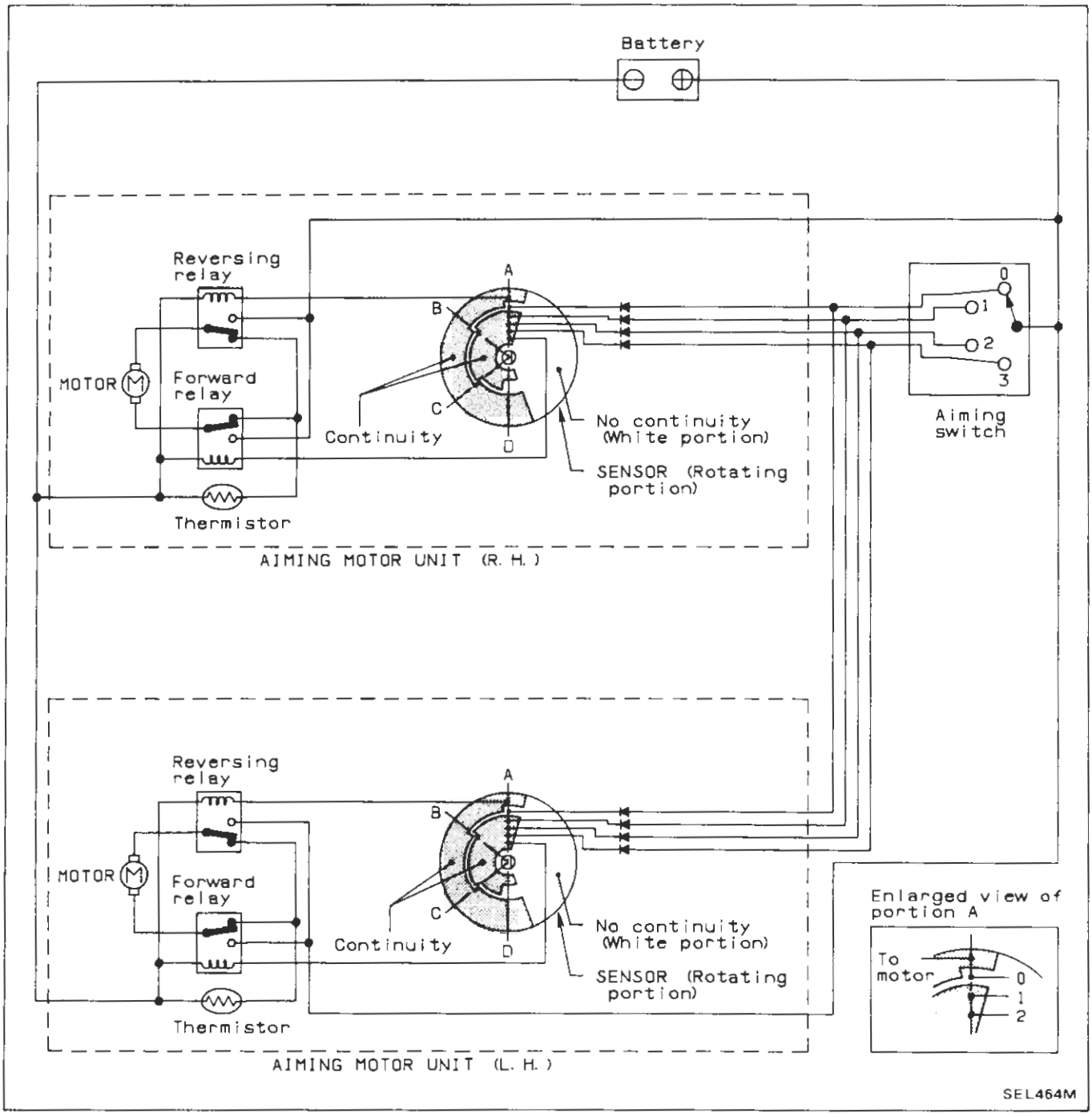
L.H. DRIVE MODEL EXCEPT FOR EUROPE AND R.H. DRIVE MODEL WITHOUT DIM-DIP LAMP SYSTEM

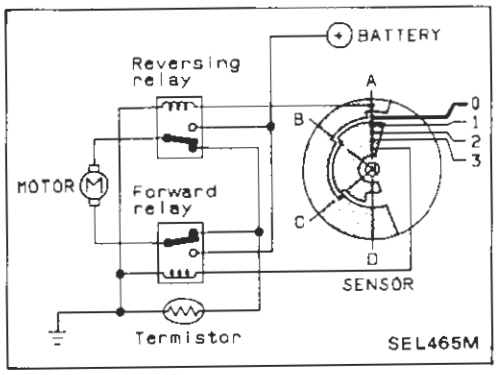


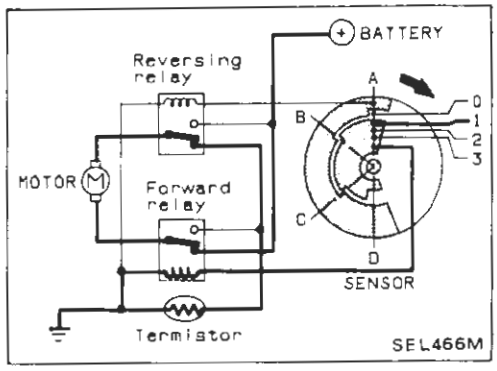
SEL851N

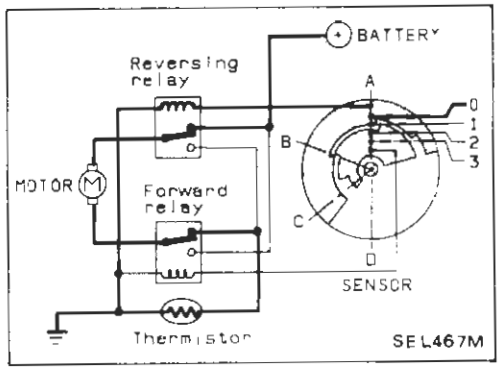
Description

- The vertical direction of the headlamp projection can be adjusted from inside the vehicle to prevent the headlight beam axis from facing upward due to a change in the number of occupants and load conditions in the vehicle.









CIRCUIT OPERATION

[Example]

Aiming switch "0"

- When the aiming switch is set to "0", the motor will not start because the power terminals are positioned at the non-conductive section of the sensor's rotary unit.

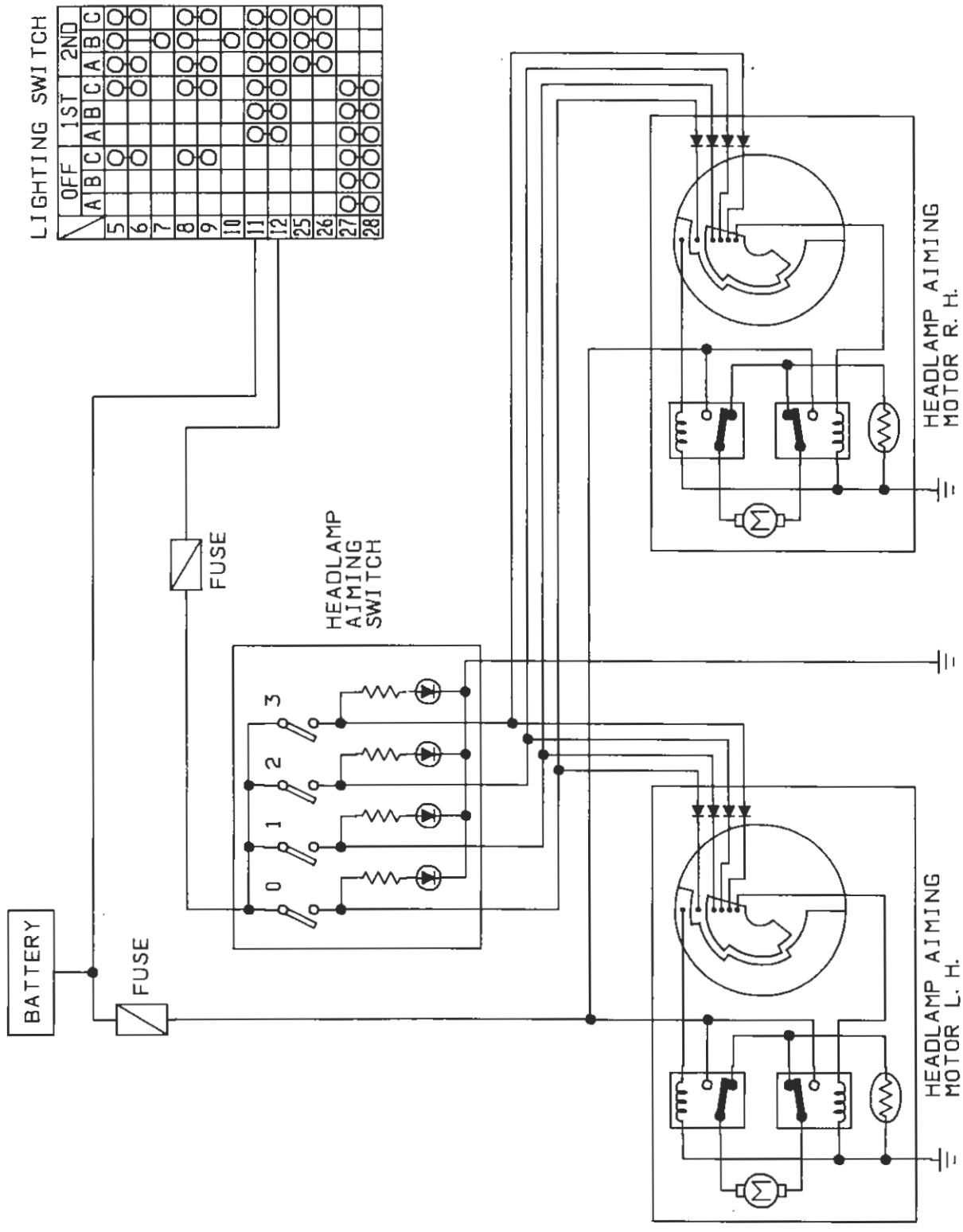
Aiming switch "0" → "1"

- When the aiming switch is moved from "0" to "1", power is applied to the motor through the relay operated by the sensor's conductive section. The headlamps will then move in the "DOWN" direction.
- The motor continues to rotate while the rotary unit of the sensor moves from point A to point B.
- The power terminals will then be positioned at the nonconductive section, disconnecting the power to the motor. Then motor then stops.

Aiming switch "1" → "0"

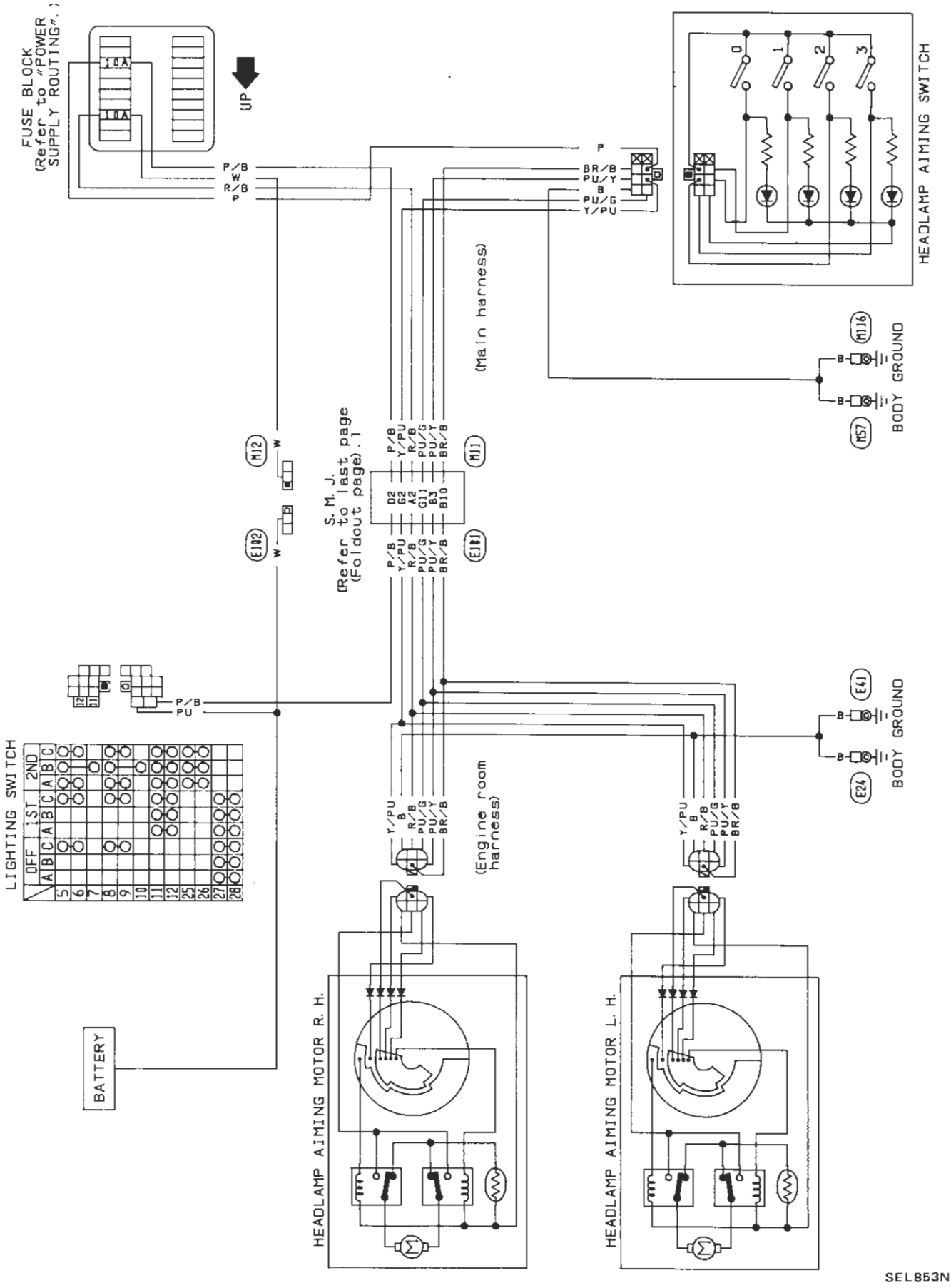
- When the aiming switch is moved from "1" to "0", power is applied to the motor through the relay operated by the conductive section of the sensor. The motor will rotate to move the headlamps in the "UP" direction.
- When the rotary unit of the sensor moves from point B to point A, the motor will stop.

Schematic



SEL852N

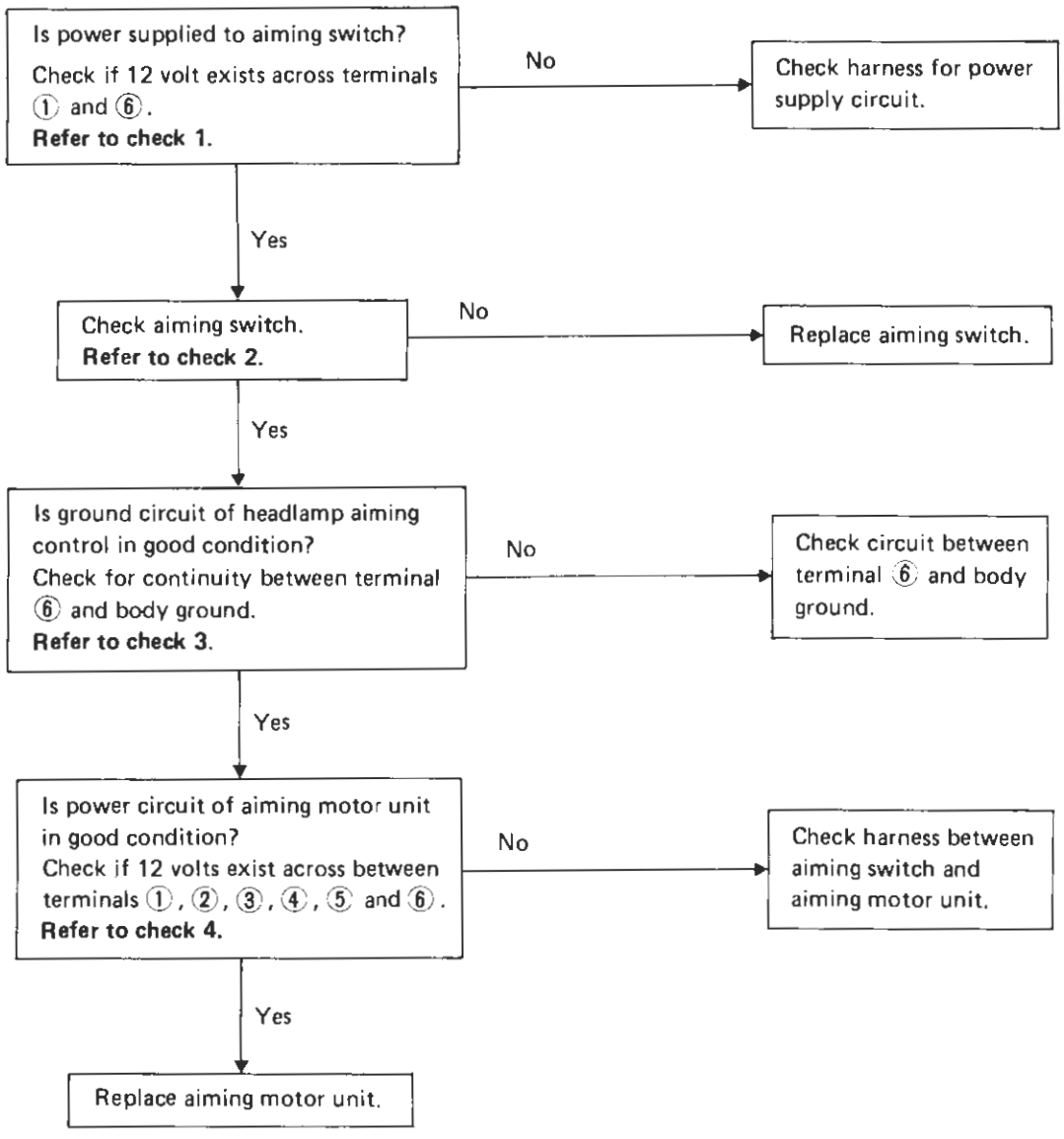
Wiring Diagram

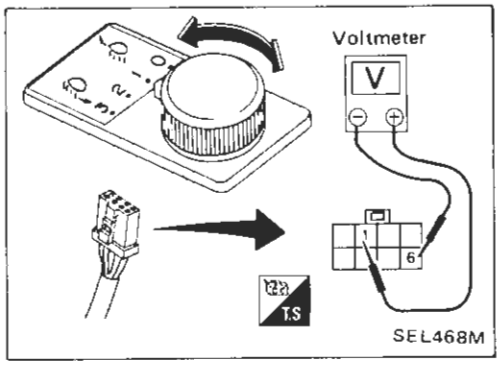


SEL853N

Trouble-shooting

SYMPTOM: Headlamp aiming does not operate.



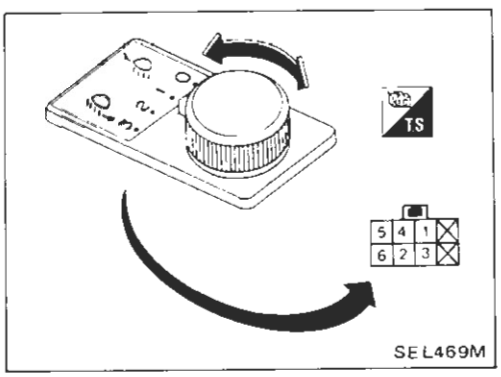


Terminal Check

CHECK 1 ..... POWER SUPPLY CIRCUIT CHECK
(For aiming switch)

1. Disconnect aiming switch connector, and connect a voltmeter.
2. Turn lighting switch to "1st".
3. Measure voltage across between terminals ① and ⑥ .

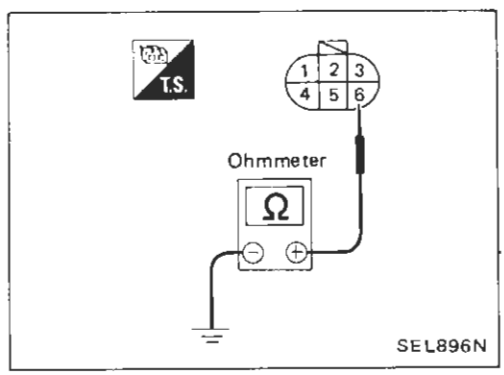
Voltmeter terminal		Voltage [V]
(+)	(−)	
①	⑥	Approx. 12



CHECK 2 ..... AIMING SWITCH OPERATION CHECK

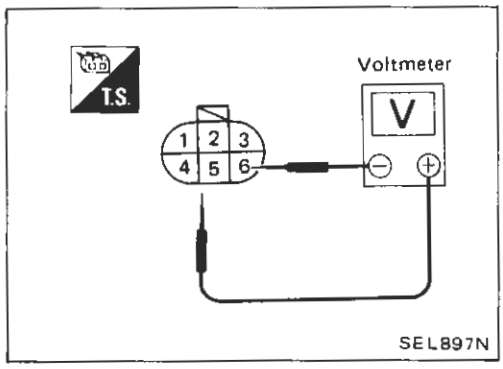
1. Disconnect aiming switch connector, and connect an ohmmeter to the switch.
2. Check for continuity between terminals at each switch position.

Switch position \ Terminal	1	2	3	4	5
0	○	○			
1	○		○		
2	○			○	
3	○				○



CHECK 3 ..... GROUND CIRCUIT CHECK

1. Disconnect aiming motor unit connector.
2. Check for continuity between terminal ⑥ and body ground.
   Continuity exists ..... O.K.



Terminal Check (Cont'd)

CHECK 4 ..... POWER SUPPLY CIRCUIT CHECK

(For aiming motor unit)

1. Disconnect aiming motor unit connector, and connect a voltmeter.
2. Turn lighting switch to "1ST".
3. Measure voltage across terminals ⑥ and ① , ② , ③ , ④ and ⑤ , respectively.

Voltmeter terminals		Voltage [V]	Aiming switch position
(+)	(−)		
①	⑥	Approx. 12	"0"
		0	Except "0"
②		Approx. 12	"1"
		0	Except "1"
③		Approx. 12	"2"
		0	Except "2"
④		Approx. 12	"3"
		0	Except "3"
⑤		Approx. 12	–

Aiming Adjustment

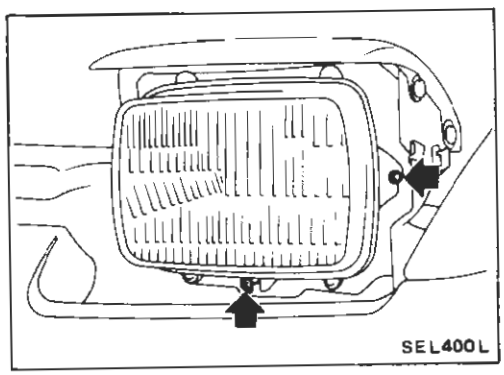
When performing headlamp aiming adjustment, use an aiming machine, aiming wall screen or headlamp tester. For operating instructions of any aimer, it should be in good repair, calibrated and used according to respective operation manuals supplied with the unit.

If any aimer is not available, aiming adjustment can be done as follows:

For details, refer to the regulations in your own country.

CAUTION:

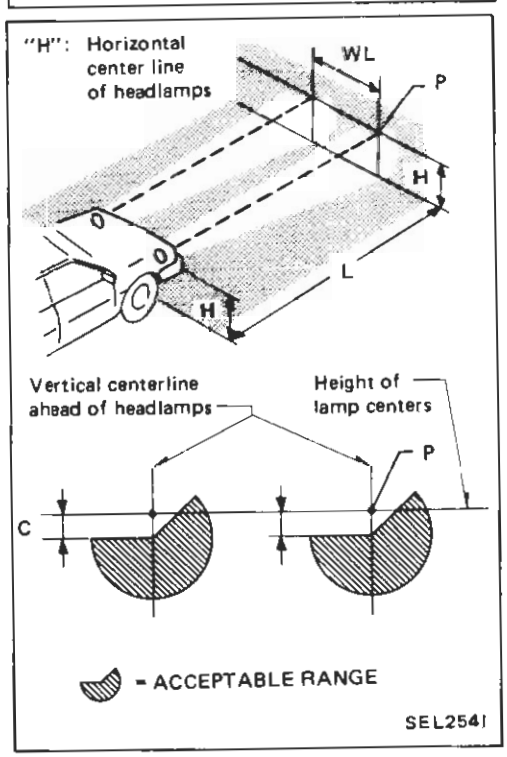
a. **Keep all tires inflated to correct pressures.**
b. **Place vehicle and tester on one and same flat surface.**
c. **See that there is no-load in vehicle (coolant, engine oil filled up to correct level and full fuel tank) other than the driver (or equivalent weight placed in driver's position).**



LOW BEAM

1. Turn headlamp low beam on.
2. Use adjusting screws to perform aiming adjustment.

- **First tighten the adjusting screw all the way and then make adjustment by loosening the screw.**



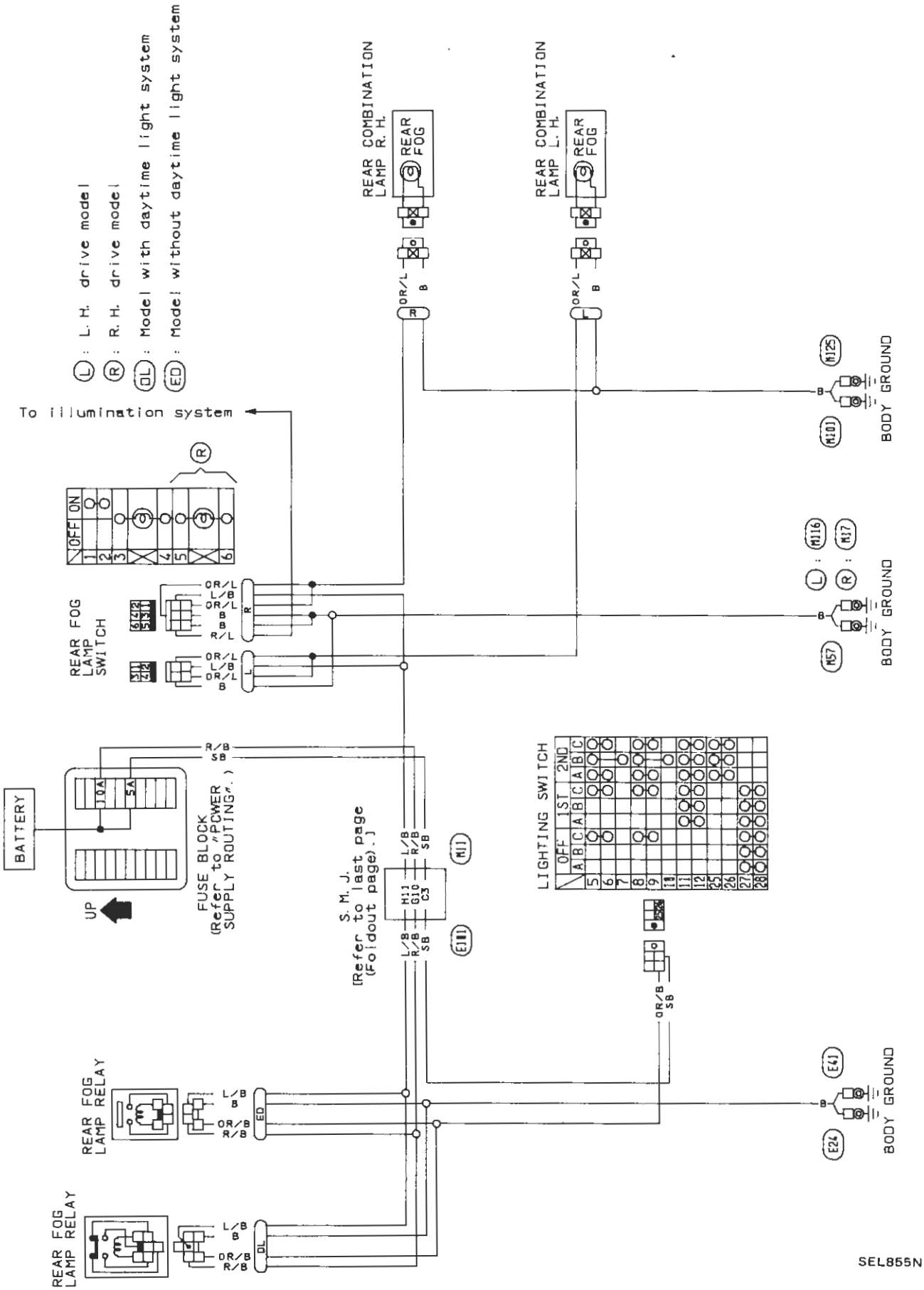
a. **Adjust headlamps so that main axis of light is parallel to center line of body and is aligned with point P shown in illustration.**
b. **Figure to the left shows headlamp aiming pattern for driving on right side of road; for driving on left side of road, aiming pattern is reversed.**
c. **Dotted lines in illustration show center of headlamp.**

"H": Horizontal center line of headlamps
"WL": Distance between each headlamp center
"L": 5,000 mm (196.85 in)
"C" 65 - 75 mm (2.56 - 2.95 in)

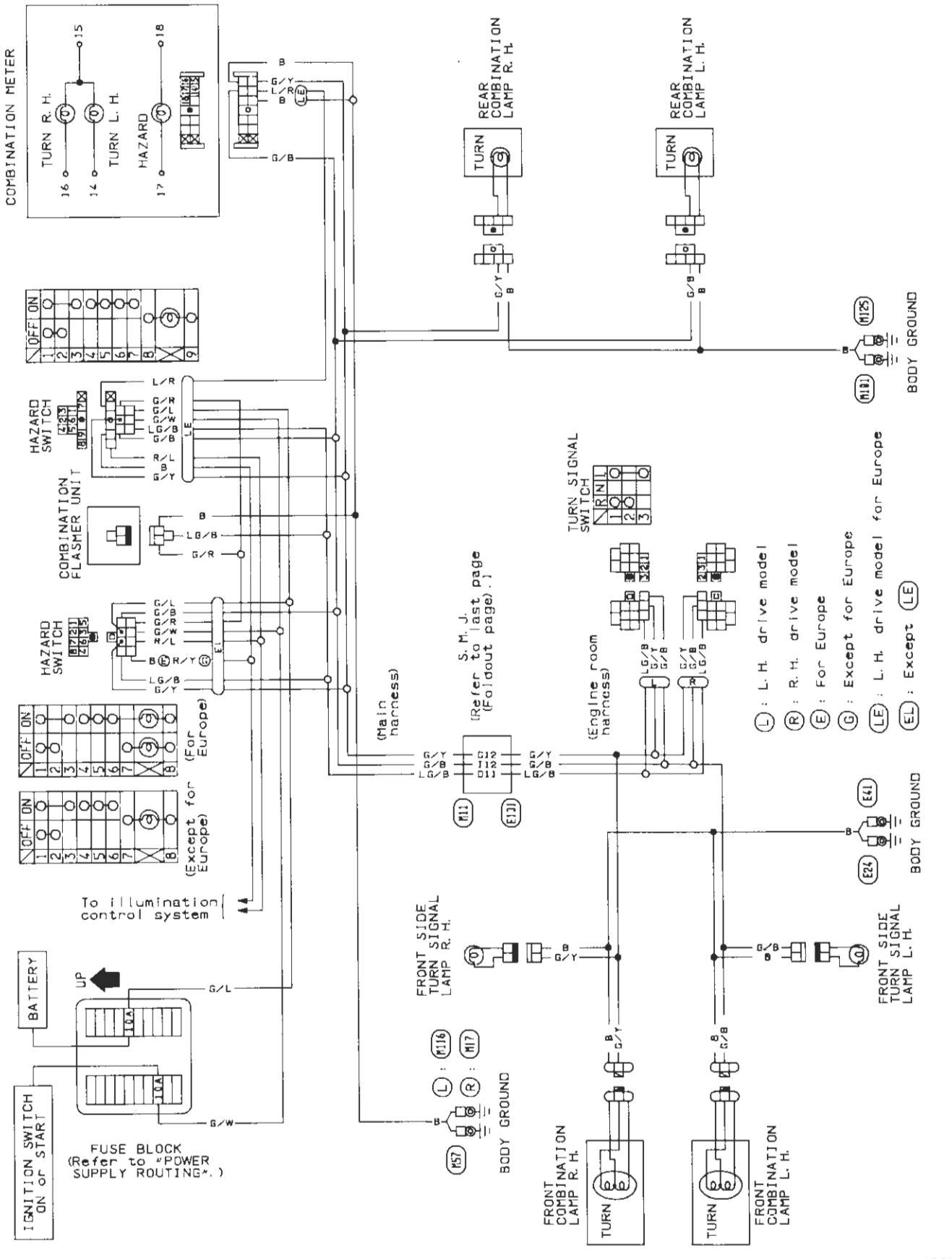
CAUTION:

Be sure aiming switch is set to "0" when performing aiming adjustment on vehicles equipped with headlamp aiming control.

Rear Fog Lamp/Wiring diagram

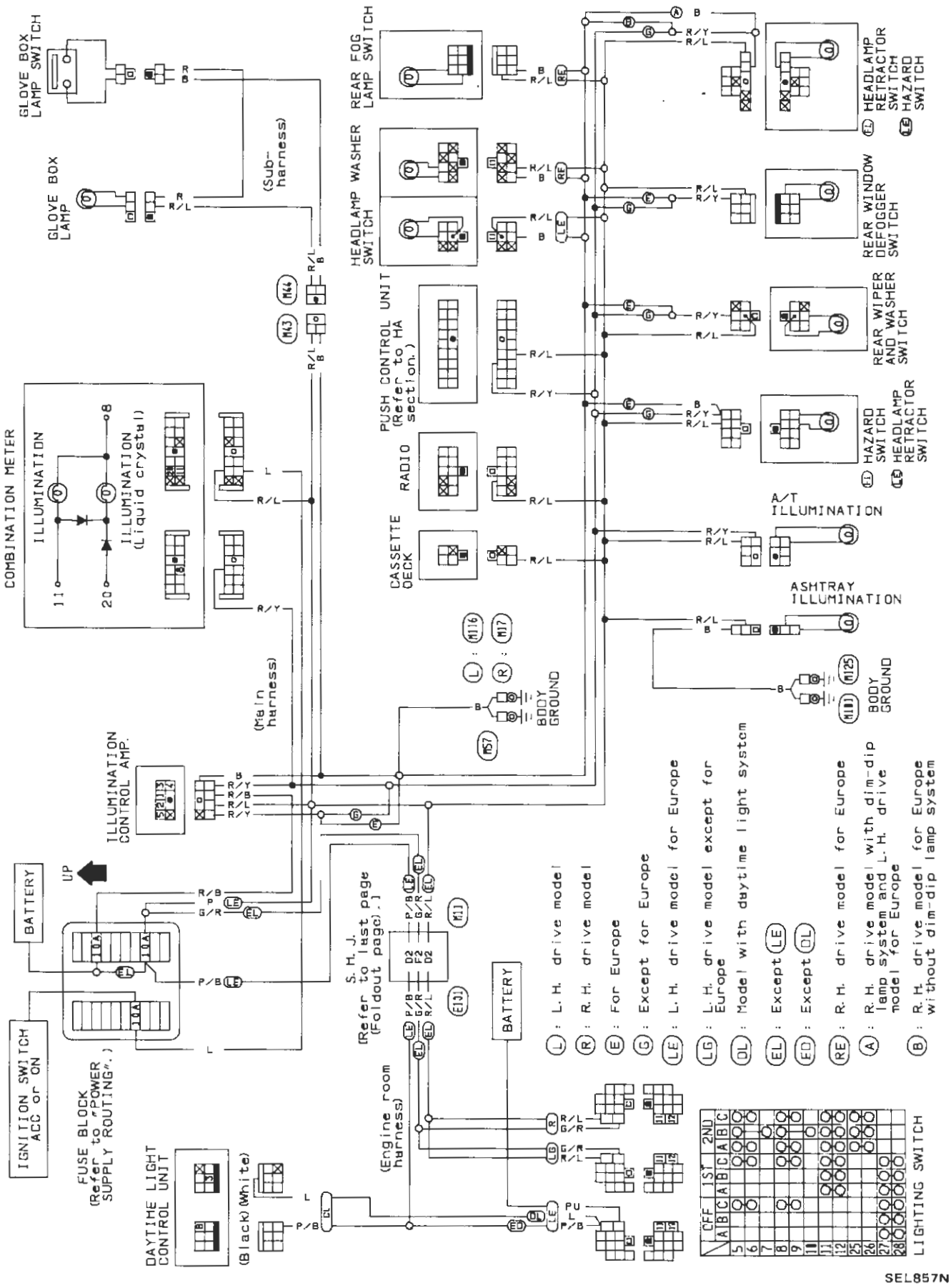


Turn signal and Hazard Warning Lamps/Wiring Diagram



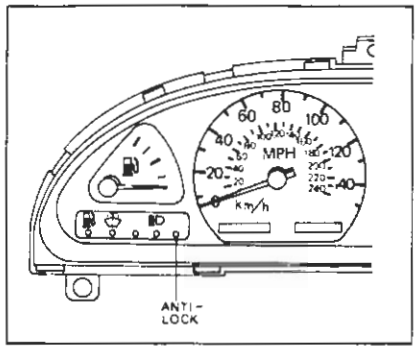
SEL856N

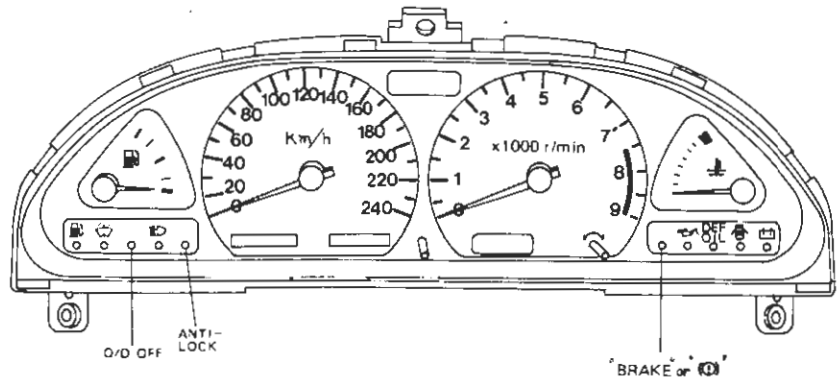
Illumination/Wiring Diagram

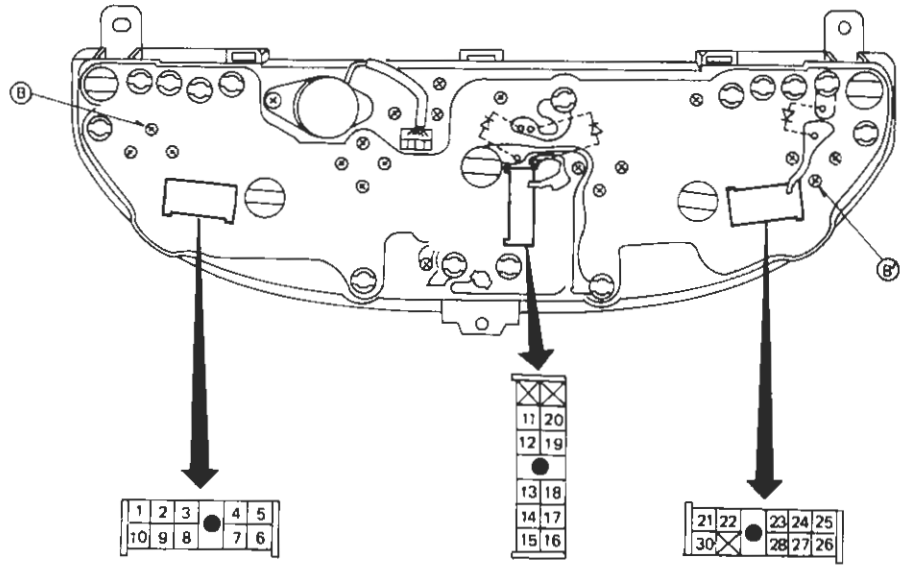


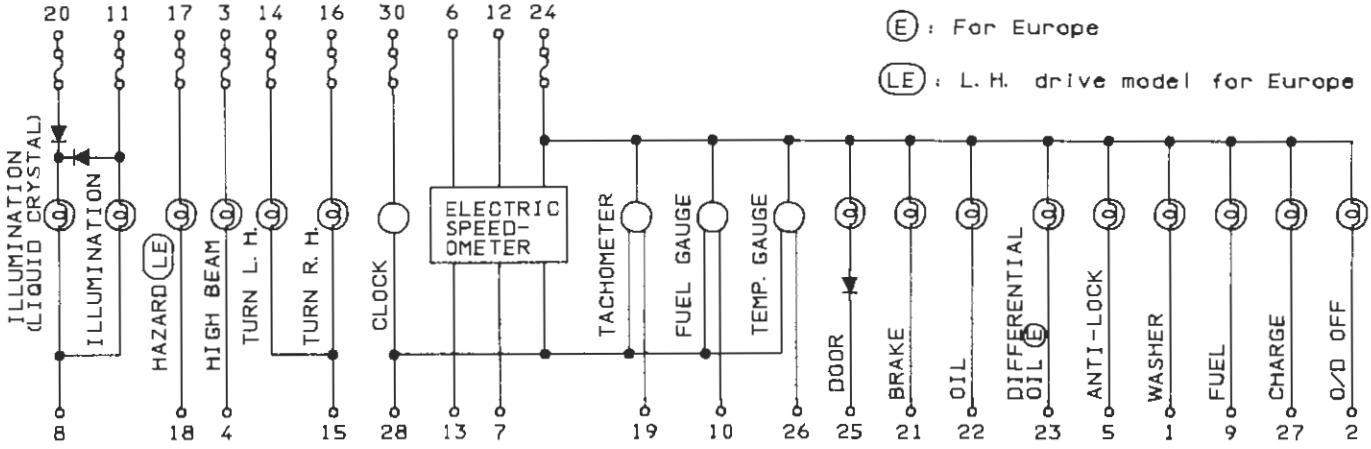
SEL857N

Combination Meter



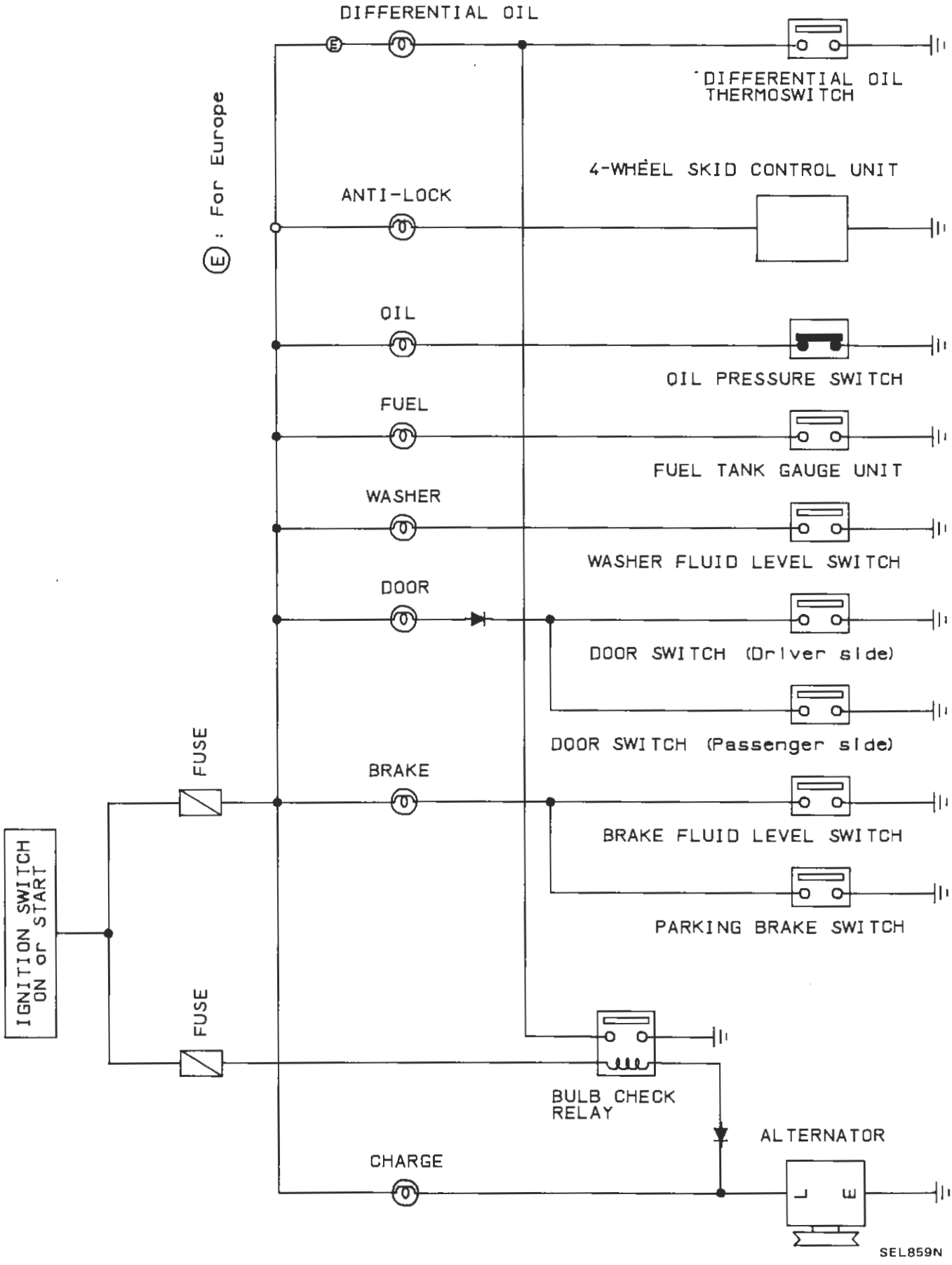




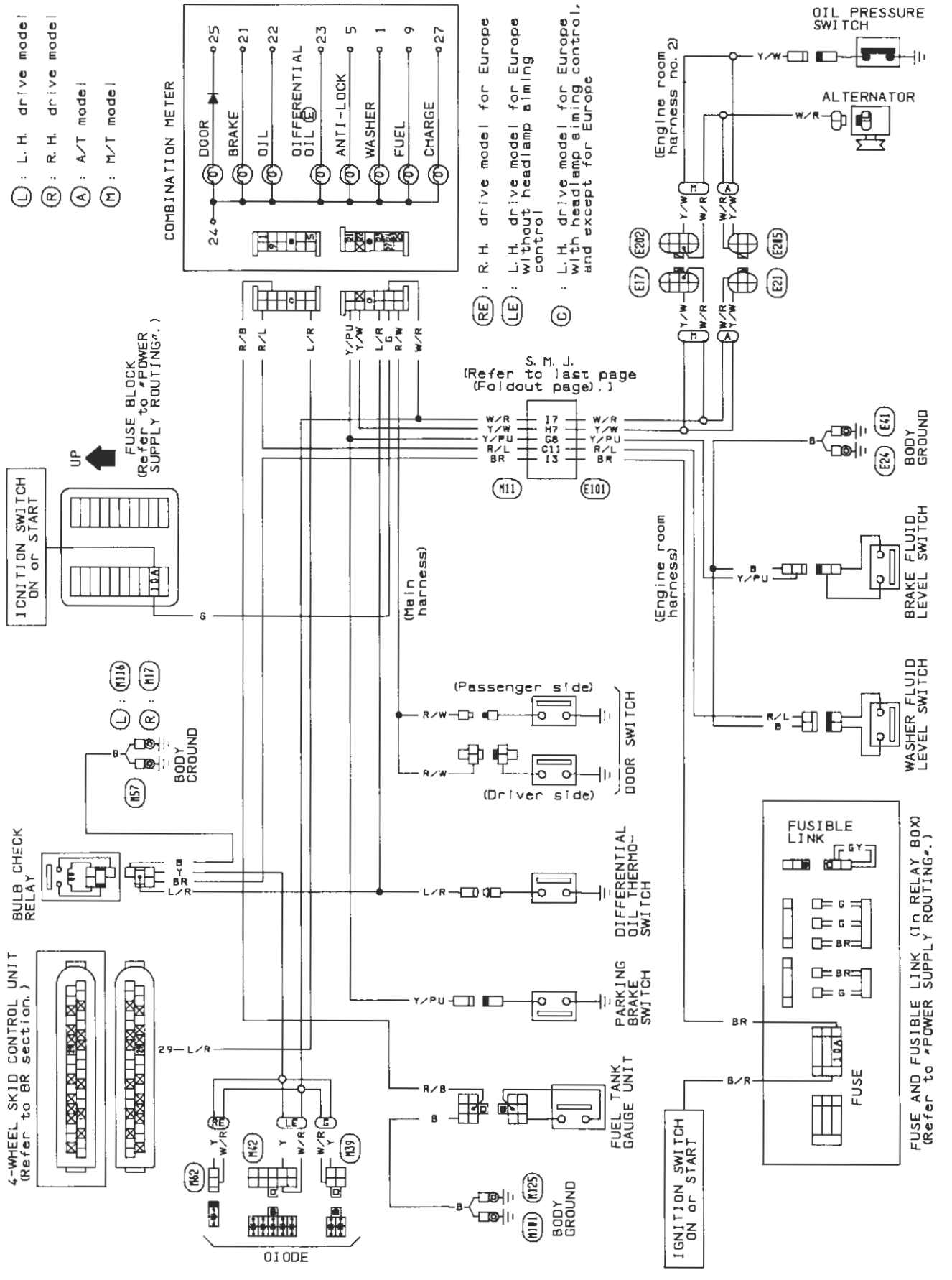


SEL858N

Warning Lamps/Schematic

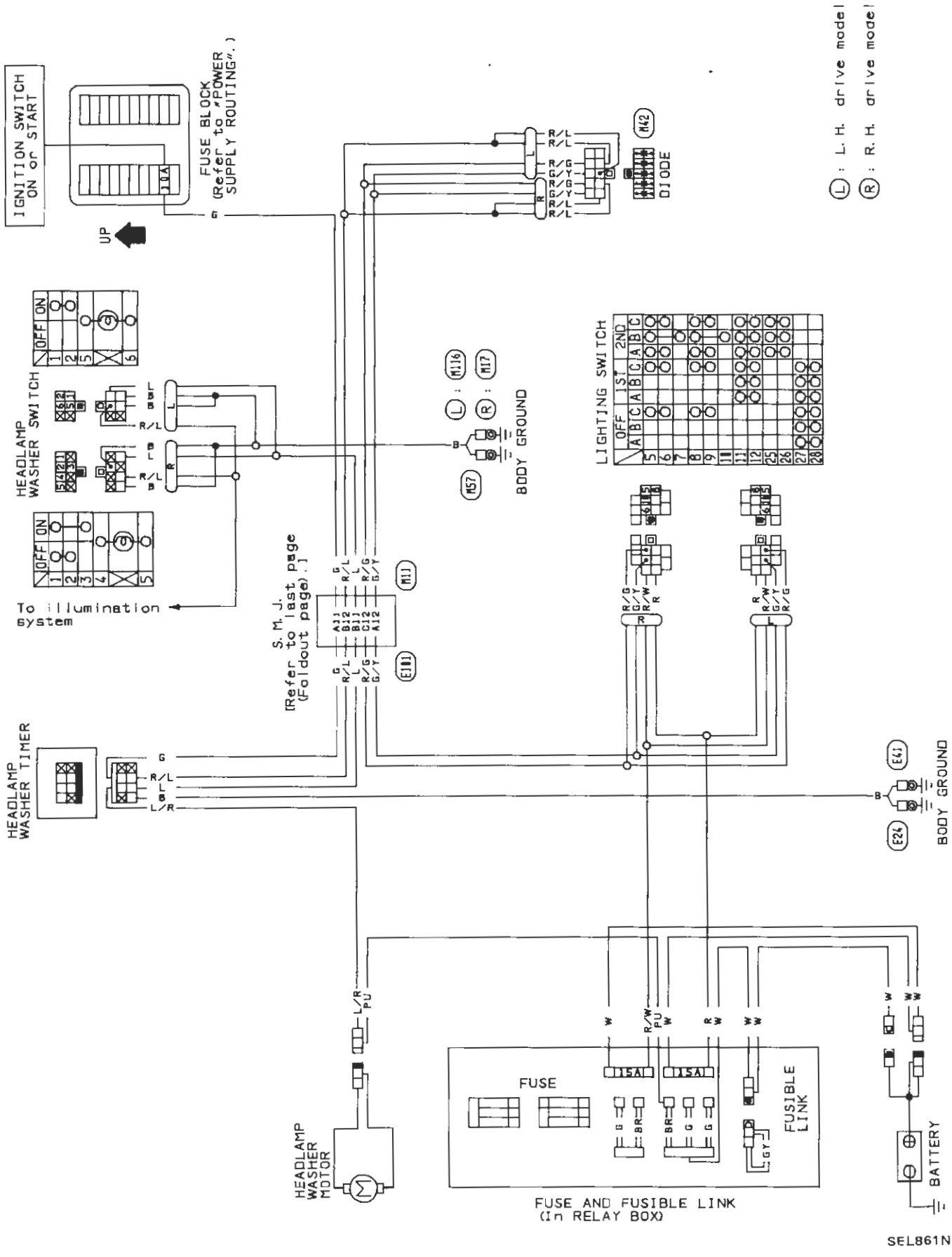


Warning Lamps/Wiring Diagram

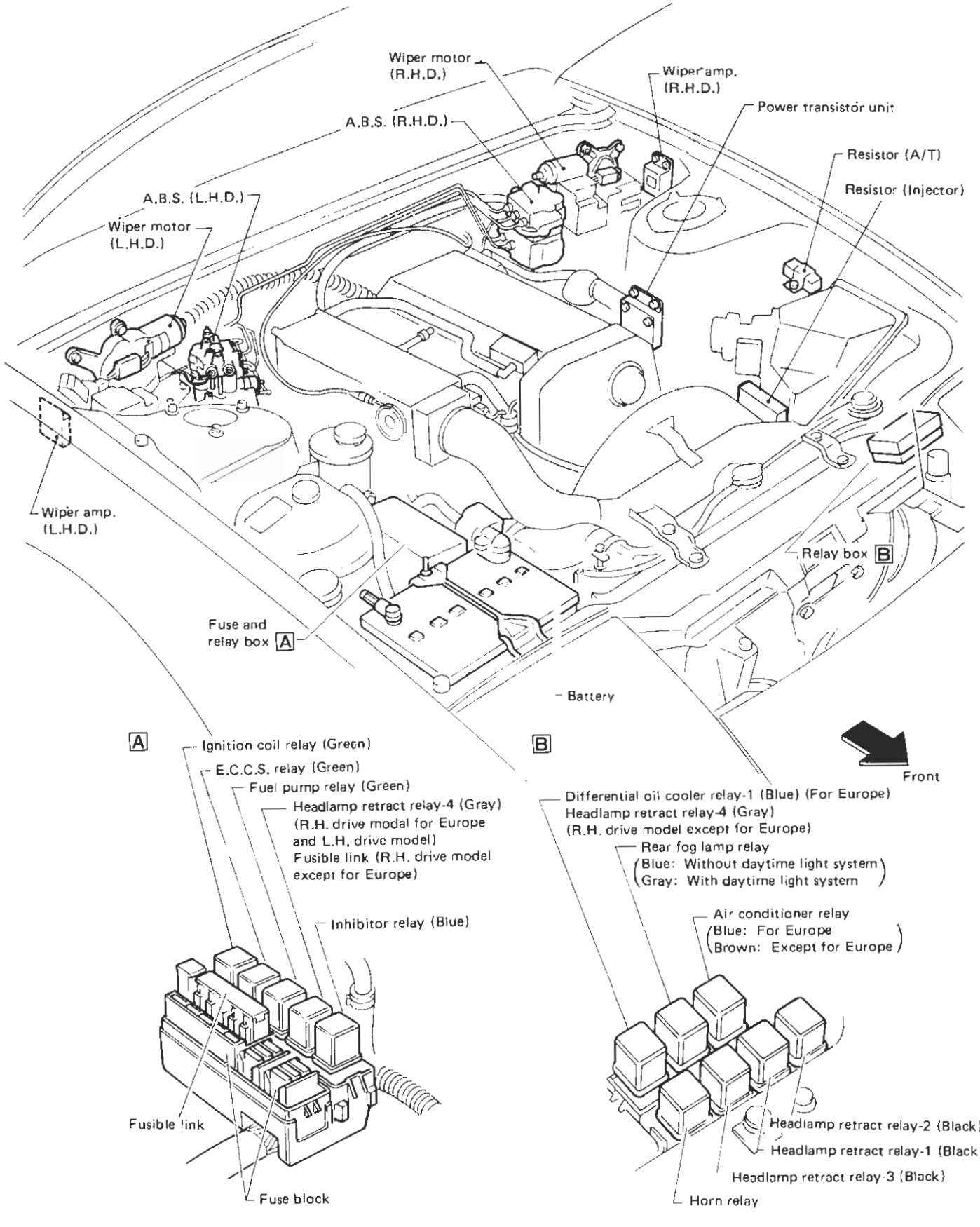


SEL860N

Headlamp Wiper and Washer/Wiring Diagram



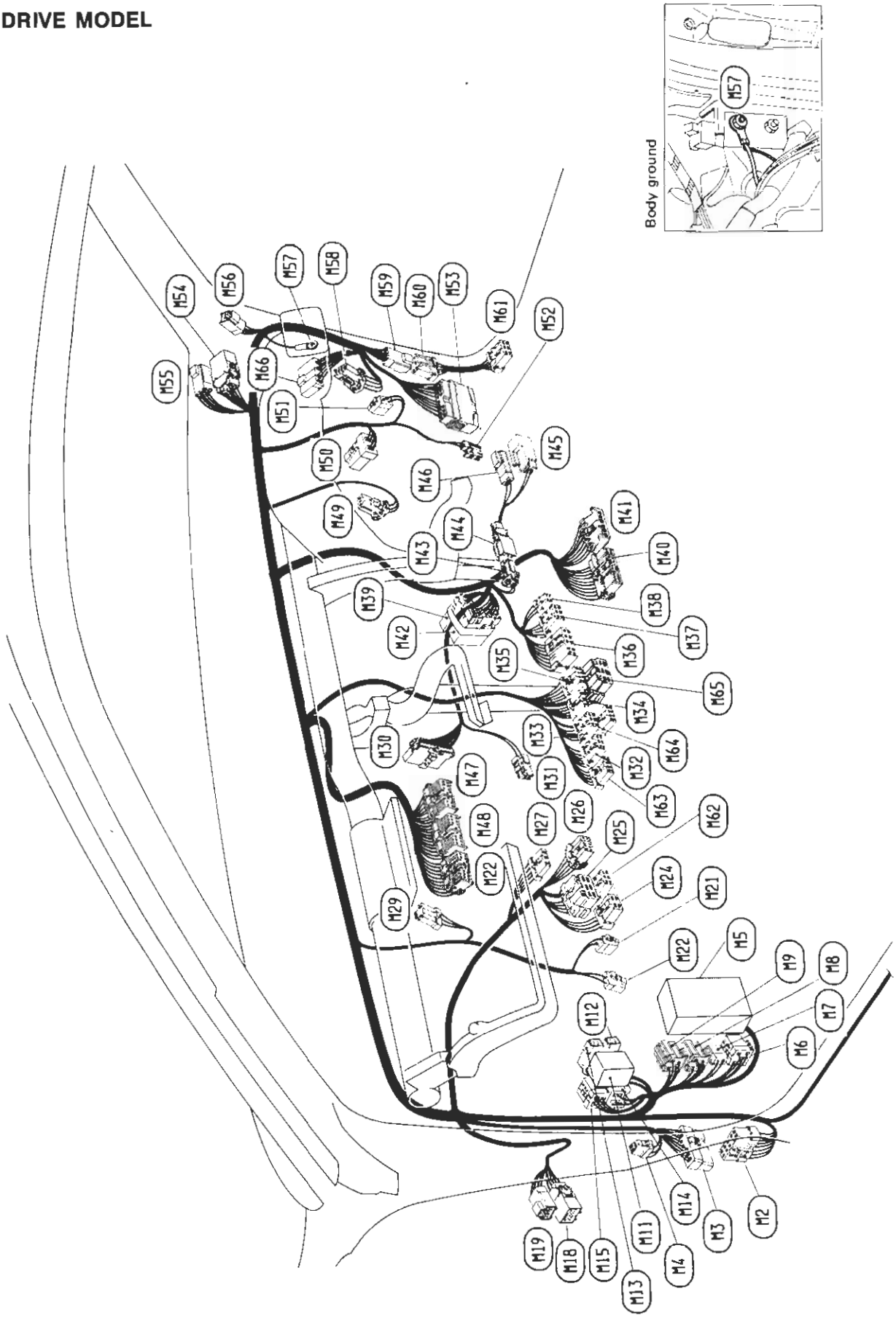
Engine Compartment



SEL850N

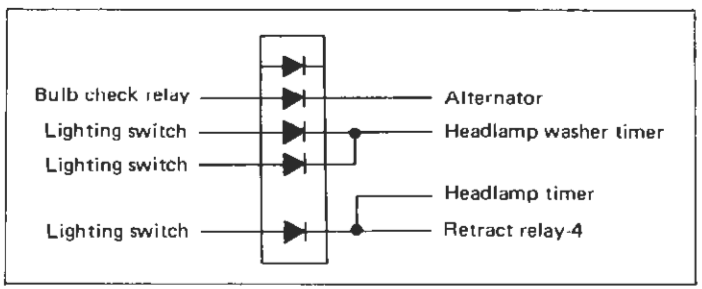
Main Harness

L.H. DRIVE MODEL

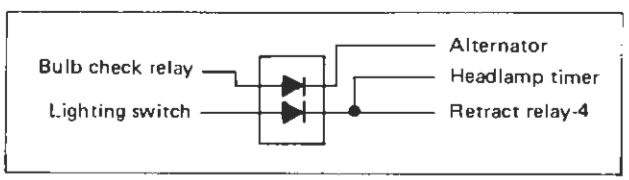


(M2) : Headlamp timer
(M3) : Check connector
(M4) : Warning buzzer
(M5) : Fuse block
(M6) : Ignition relay
(M7) : Circuit breaker (Model with power window system)
(M8) : Accessory relay-2
(M9) : Accessory relay-1
(M11) : To engine room harness (E101)
(M12) : To engine room harness (E102) (Blue)
(M13) : To engine room harness (E103) (Black)
(M14) : Bulb check relay
(M15) : Rear window defogger relay
(M18) : To door harness L.H. (D1)
(M19) : To door harness L.H. (D2)
(M21) : Kickdown switch (A/T model)
(M22) : Combination meter
(M23) : Stop lamp switch
(M24) : Rear fog lamp switch
(M25) : Headlamp retractor switch (Except for Europe)
(M26) : Illumination control amplifier
(M27) : Not used
(M29) : Combination flasher unit
(M30) : Mode door motor
(M31) : Foot lamp L.H.
(M32) : Headlamp washer switch
(M33) : Rear wiper and washer switch (Except for Europe)
(M34) : Rear window defogger switch
(M35) : Hazard switch (Except for Europe)
(M36) : Radio
(M37) : Radio
(M38) : Cassette deck
(M39) : Dioda (For Europe with headlamp aiming control and except for Europe)
(M40) : Push control unit
(M41) : Fan switch
(M42) : Dioda (For Europe without headlamp aiming control)
(M43) : To sub-harness (M44)
(M44) : To main harness (M43)
(M45) : Glove box lamp
(M46) : Glove box lamp switch
(M47) : Combination meter
(M48) : Combination meter
(M49) : Thermo control amplifier
(M50) : Heater resistor
(M51) : Blower motor
(M52) : Foot lamp R.H.
(M53) : To E.F.I. harness (F1)
(M54) : To door harness R.H. (D101)
(M55) : To door harness R.H. (D102)
(M56) : To room lamp harness (R1)
(M57) : Body ground
(M58) : Intake door motor
(M59) : To sub-harness (M60)
(M60) : To main harness (M59)
(M61) : Door lock timer
(M62) : Rear wiper and washer switch (For Europe)
(M63) : Headlamp aiming switch
(M64) : Headlamp retractor switch (For Europe)
(M65) : Hazard switch (For Europe)
(M66) : To engine room harness (E119) (For Europe with headlamp aiming control)

Diode (M42)



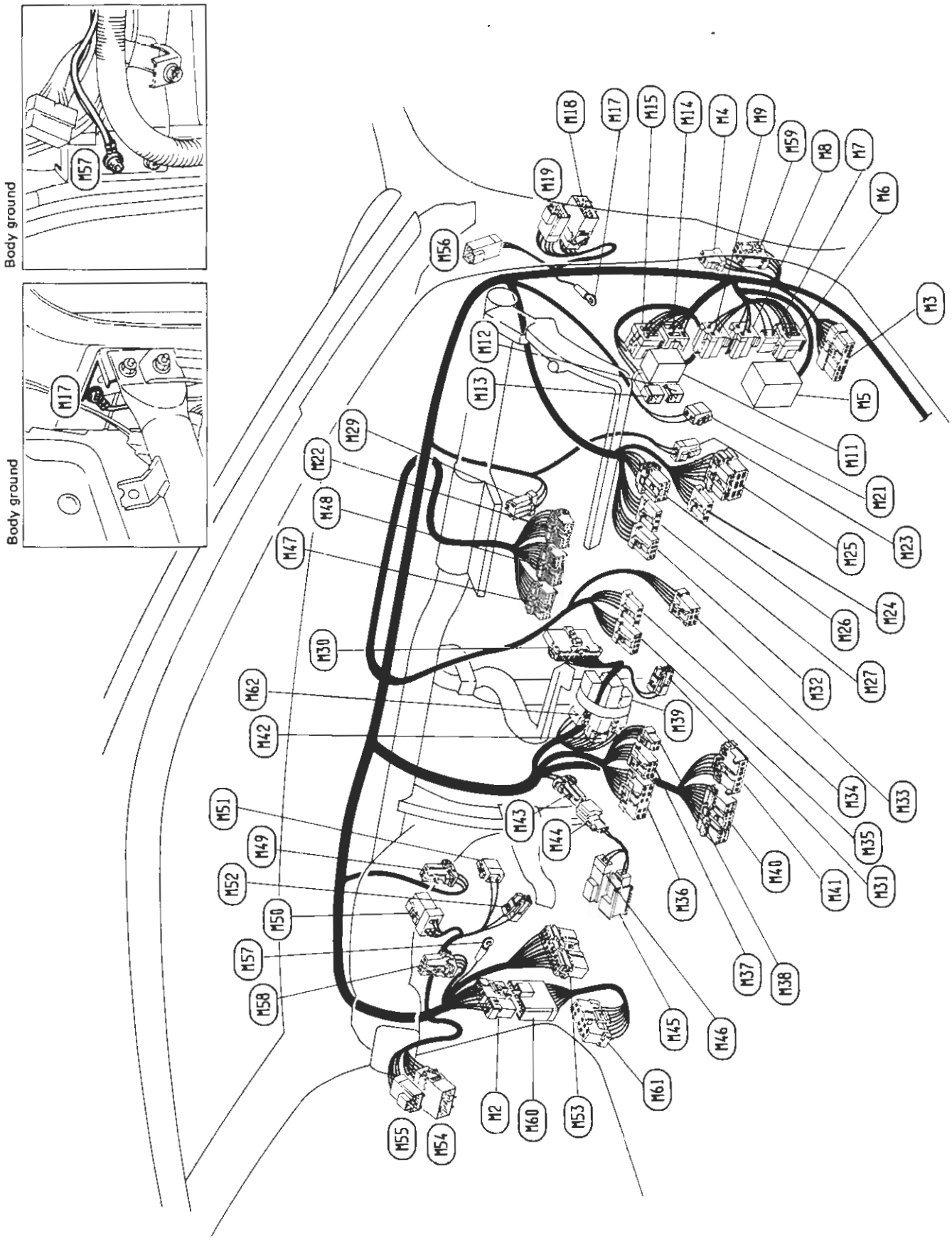
Diode (M39)



SEL862N

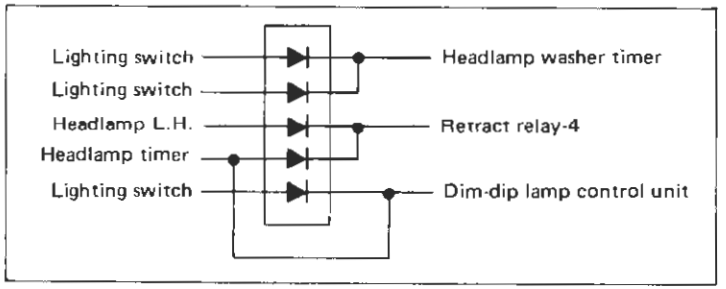
Main Harness (Cont'd)

R.H. DRIVE MODEL

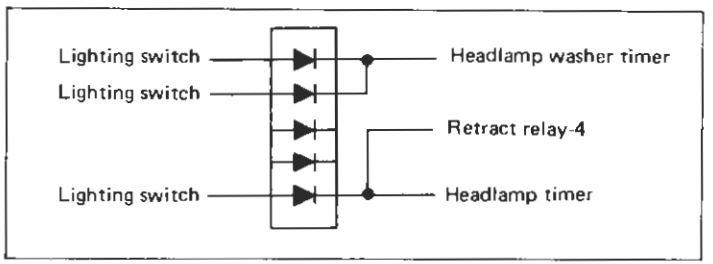


(M2) : To sub-harness (M68)
(M3) : Check connector
(M4) : Warning buzzer
(M5) : Fuse block
(M6) : Ignition relay
(M7) : Circuit breaker (Model with power window system)
(M8) : Accessory relay-2
(M9) : Accessory relay-1
(M11) : To engine room harness (E101)
(M12) : To engine room harness (E102) (Blue)
(M13) : To engine room harness (E103) (Black)
(M14) : Bulb check relay
(M15) : Rear window defogger relay
(M17) : Body ground
(M18) : To door harness R.H. (D111)
(M19) : To door harness R.H. (D112)
(M21) : Kickdown switch (A/T model)
(M22) : Combination meter
(M23) : Stop lamp switch
(M24) : Rear fog lamp switch
(M25) : Headlamp retractor switch
(M26) : Illumination control amplifier
(M27) : Not usad
(M29) : Combination flasher unit
(M30) : Mode door motor
(M31) : Foot lamp L.H.
(M32) : Headlamp washer switch
(M33) : Rear wiper and washer switch
(M34) : Rear window defogger switch
(M35) : Hazard switch
(M36) : Radio
(M37) : Radio
(M38) : Cassette deck
(M39) : Diode (Except for Europe)
(M40) : Push control unit
(M41) : Fan switch
(M42) : Diode (For Europe)
(M43) : To sub-harness (M44)
(M44) : To main harness (M43)
(M45) : Glove box lamp
(M46) : Glove box lamp switch
(M47) : Combination meter
(M48) : Combination meter
(M49) : Thermo control amplifier
(M50) : Heater resistor
(M51) : Blower motor
(M52) : Foot lamp R.H.
(M53) : To E.F.I. harness (F1)
(M54) : To door harness L.H. (D11)
(M55) : To door harness L.H. (D12)
(M56) : To room lamp harness (R1)
(M57) : Body ground
(M58) : Intake door motor
(M59) : Door lock timer
(M60) : To main harness (M2)
(M61) : Headlamp timer
(M62) : Diode (For Europe)

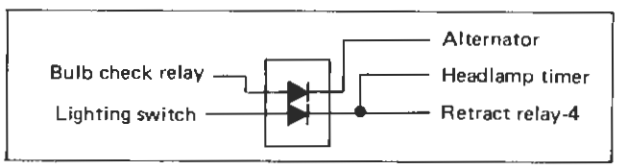
Diode (M42) (Model with dim-dip lamp system)



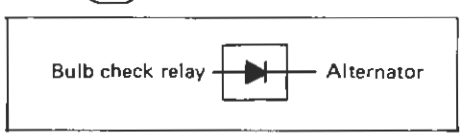
Diode (M42) (Model without dim-dip lamp system)



Diode (M39)



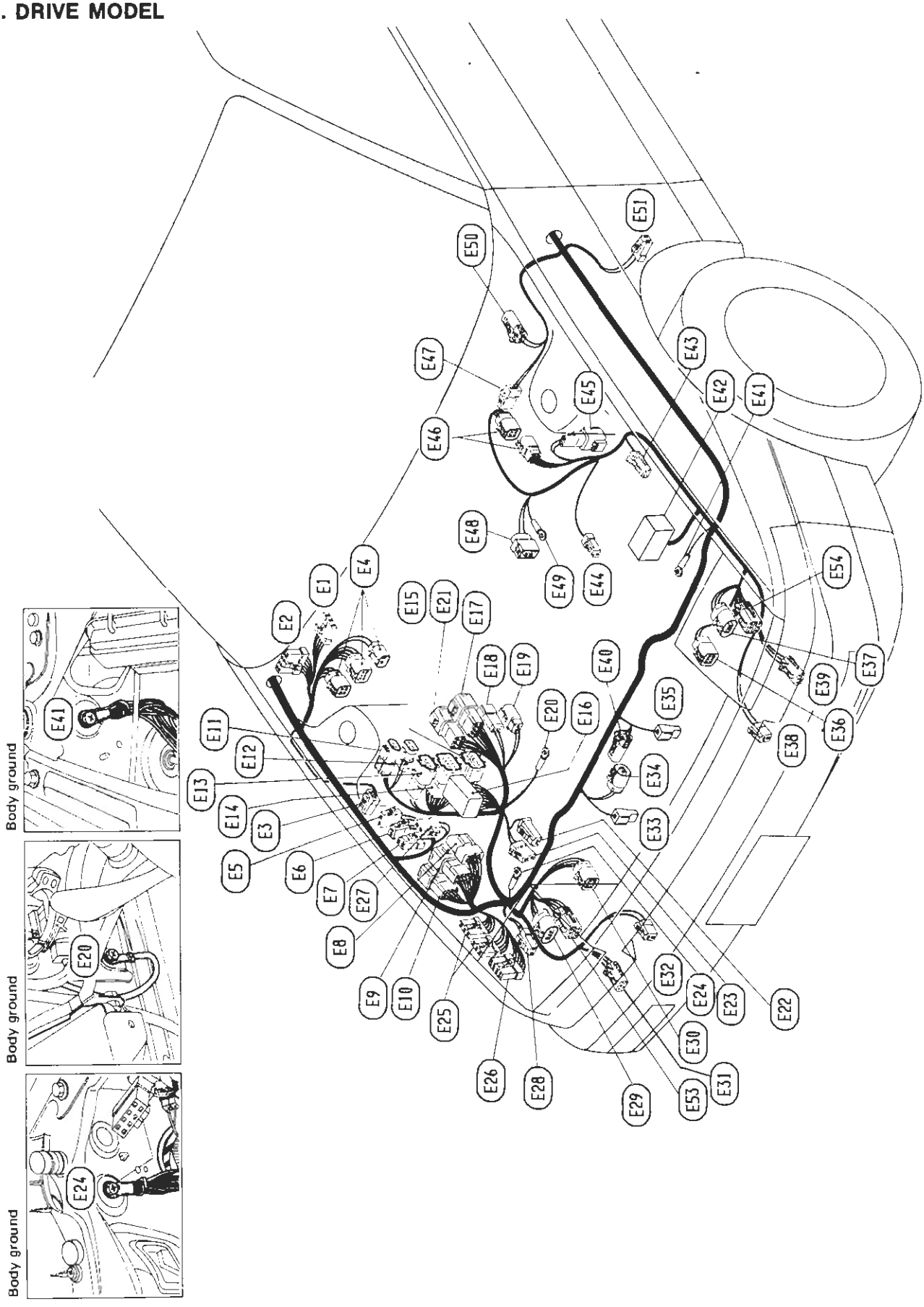
Diode (M62)



SEL864N

Engine Room Harness

L.H. DRIVE MODEL



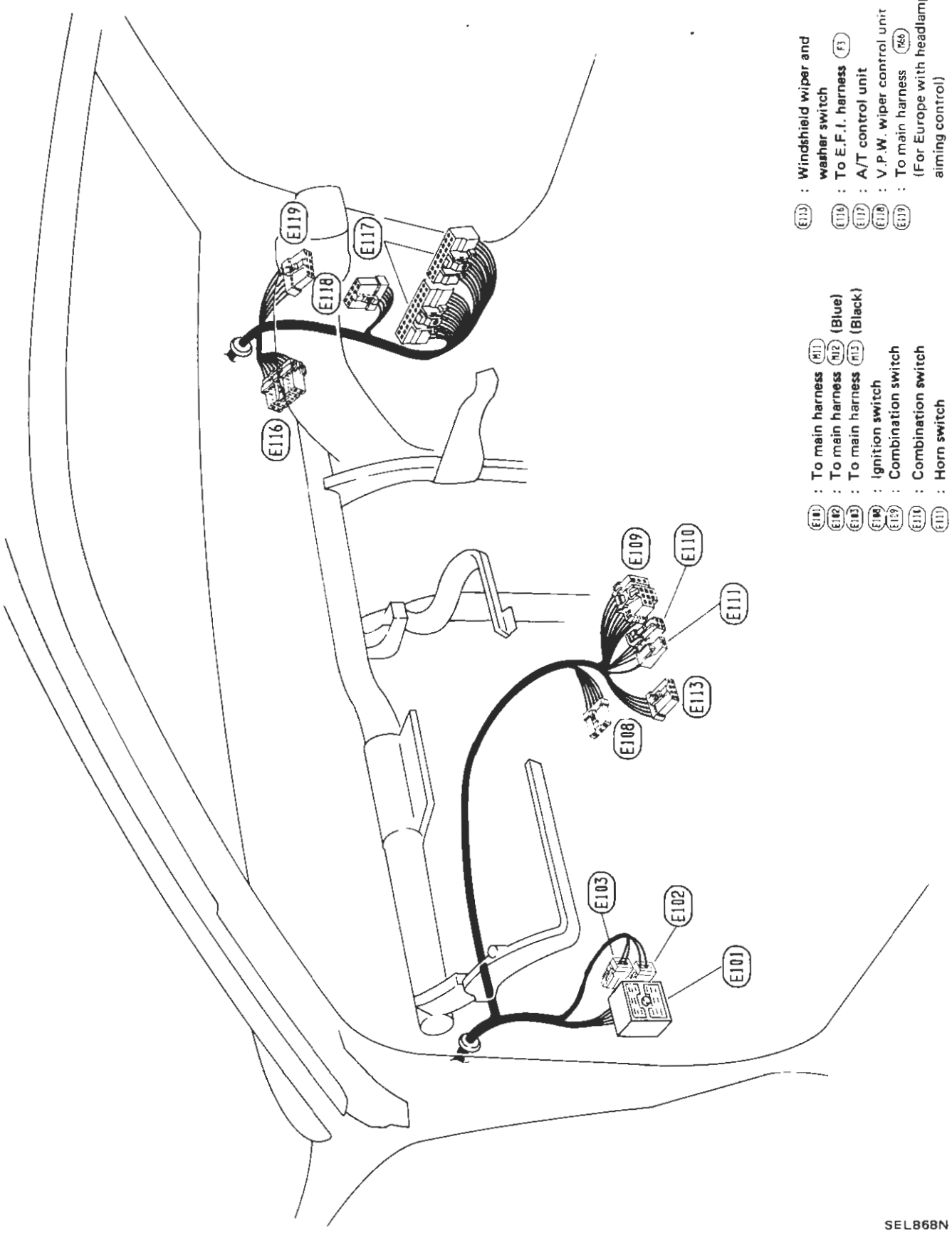
Engine Room Harness (Cont'd)

E1 : Windshield wiper motor
E2 : Windshield wiper amplifier
E3 : Side turn signal lamp R.H.
E4 : Anti-skid brake actuator
E5 : Rear washer motor
E6 : Front washer motor
E7 : Washer fluid level switch
E8 : To E.F.I. harness (E8) (White)
E9 : To E.F.I. harness (E9) (Gray)
E10 : To E.F.I. harness (E10) (Brown)
E11 : To engine room harness no. 2 (E21) (M/T model)
E12 : Inhibitor switch (A/T model)
E13 : Revolution sensor (A/T model)
E14 : Inhibitor switch (A/T model) (Gray)
E15 : To solenoid valve sub-harness (A/T model) (Brown)
E16 : Relay box (Refer to page EL-23.)
E17 : To engine room harness no. 2 (E22) (M/T model)
E18 : To engine room harness no. 2 (E23)
E19 : To engine room harness no. 2 (E24)
E20 : Body ground
E21 : To engine room harness no.2 (E25) (A/T model)
E22 : Battery
E23 : Battery
E24 : Body ground
E25 : Daytime light control unit
E26 : Headlamp washer amplifier
E27 : Headlamp washer motor
E28 : Not used
E29 : Headlamp R.H.
E30 : Headlamp motor R.H.
E31 : Front combination lamp R.H.
E32 : Daytime light R.H.
E33 : Horn-high
E34 : Condenser fan motor
E35 : Horn-low
E36 : Headlamp motor L.H.
E37 : Headlamp L.H.
E38 : Daytime light L.H.
E39 : Front combination lamp L.H.
E40 : Dual-pressure switch
E41 : Body ground
E42 : Relay box (Refer to page EL-23.)
E43 : Dropping resistor (A/T model)
E44 : Compressor
E45 : Front brake skid sensor L.H.
E46 : Power transistor unit
E47 : Brake fluid level switch
E48 : Pressure regulator control solenoid valve
E49 : Body ground for front brake skid sensor L.H.
E50 : V.P.W. wiper motor
E51 : Side turn signal lamp L.H.
E53 : Headlamp aiming motor R.H.
E54 : Headlamp aiming motor L.H.

SEL867N

Engine Room Harness (Cont'd)

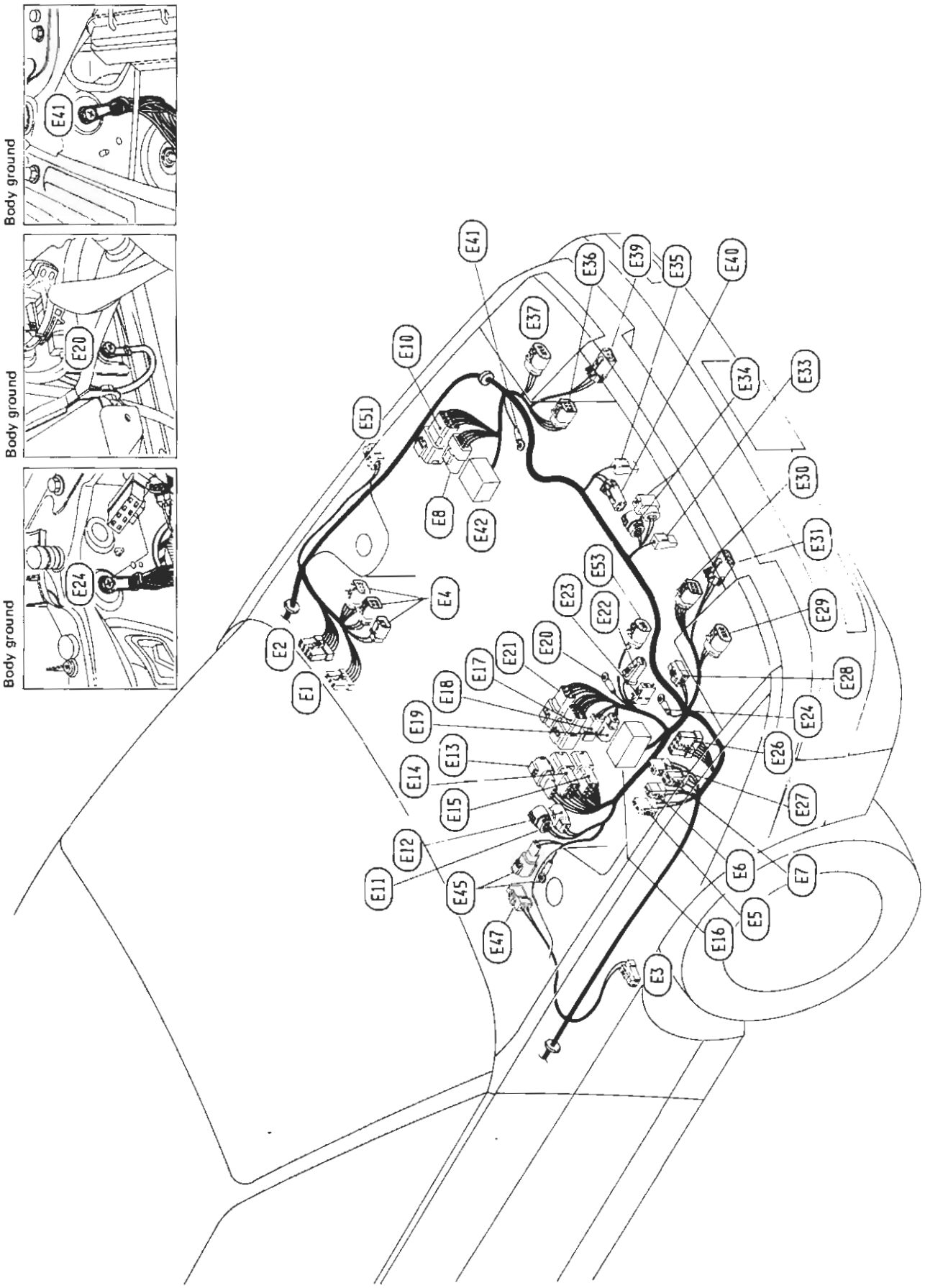
L.H. DRIVE MODEL



SEL868N

Engine Room Harness (Cont'd)

R.H. DRIVE MODEL



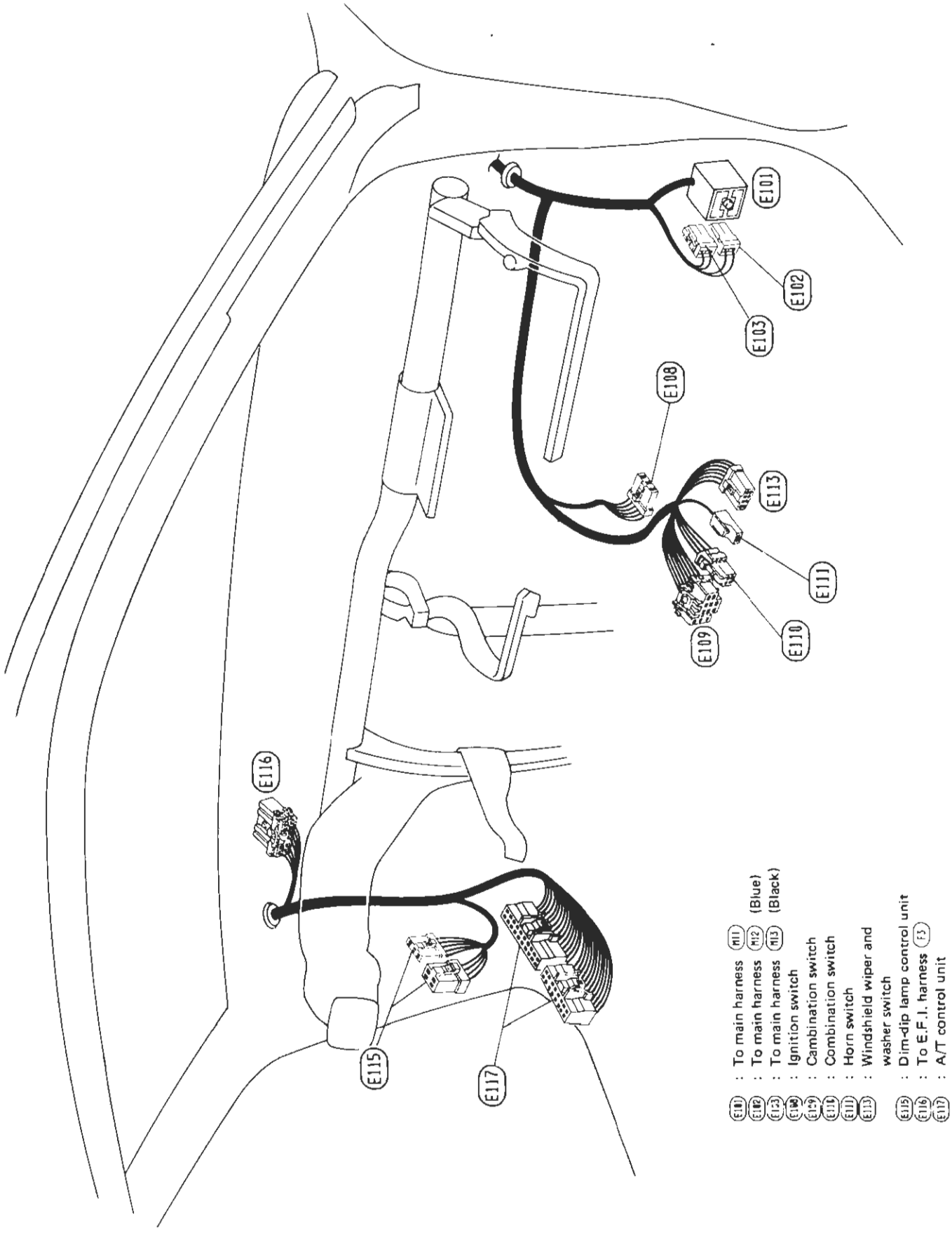
Engine Room Harness (Cont'd)

(E1) : Windshield wiper motor
(E2) : Windshield wiper amplifier
(E3) : Side turn signal lamp R.H.
(E4) : Anti-skid brake actuator
(E5) : Rear washer motor
(E6) : Front washer motor
(E7) : Washer fluid level switch
(E8) : To E.F.I. harness (F8) (White)
(E9) : To E.F.I. harness (F12) (Brown)
(E11) : To engine room harness no. 2 (E23) (M/T model)
(E12) : Inhibitor switch (A/T model)
(E13) : Revolution sensor (A/T model)
(E14) : Inhibitor switch (A/T model) (Gray)
(E15) : To solenoid valve sub-harness (A/T model) (Brown)
(E16) : Relay box (Refer to page EL-23.)
(E17) : To engine room harness no. 2 (E32) (M/T model)
(E18) : To engine room harness no. 2 (E33)
(E19) : To engine room harness no. 2 (E34)
(E20) : Body ground
(E21) : To engine room harness no.2 (E35) (A/T model)
(E22) : Battery
(E23) : Battery
(E24) : Body ground
(E26) : Headlamp washer amplifier
(E27) : Headlamp washer motor
(E28) : Not used
(E29) : Headlamp R.H.
(E30) : Headlamp motor R.H.
(E31) : Front combination lamp R.H.
(E32) : Horn high
(E33) : Condenser fan motor
(E34) : Horn low
(E36) : Headlamp motor L.H.
(E37) : Headlamp L.H.
(E39) : Front combination lamp L.H.
(E42) : Dual pressure switch
(E43) : Body ground
(E47) : Relay box (Refer to page EL-23.)
(E48) : Front brake skid sensor R.H.
(E49) : Brake fluid level switch
(E51) : Side turn signal lamp L.H.
(E55) : Thermoswitch

SEL869N

Engine Room Harness (Cont'd)

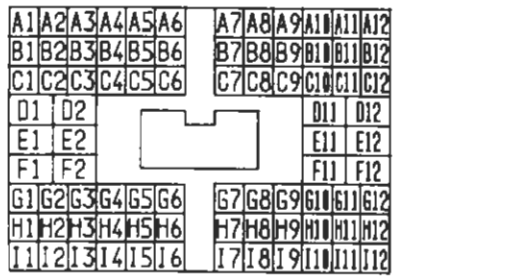
R.H. DRIVE MODEL



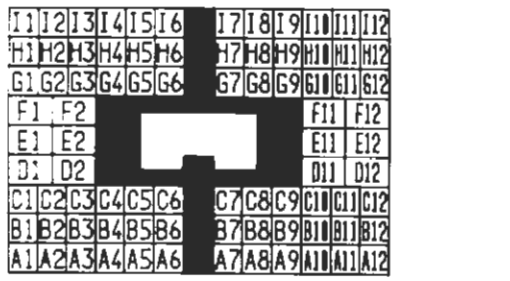
SEL870N

Terminal Arrangement

MAIN HARNESS

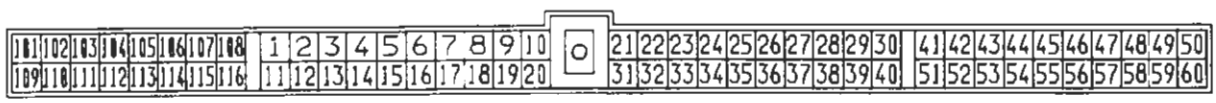


T.S.



ENGINE ROOM HARNESS

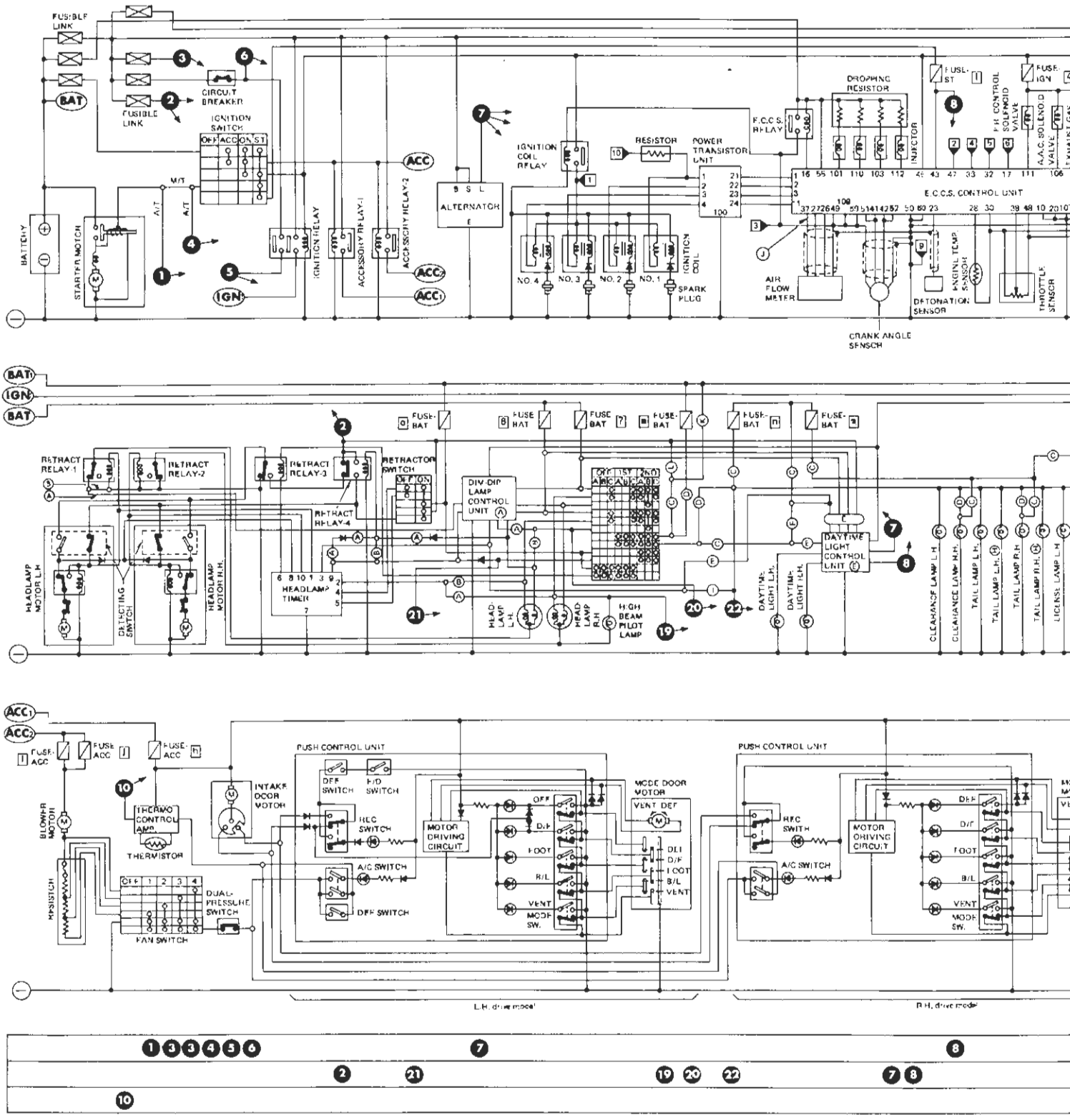
E.C.C.S. CONTROL UNIT

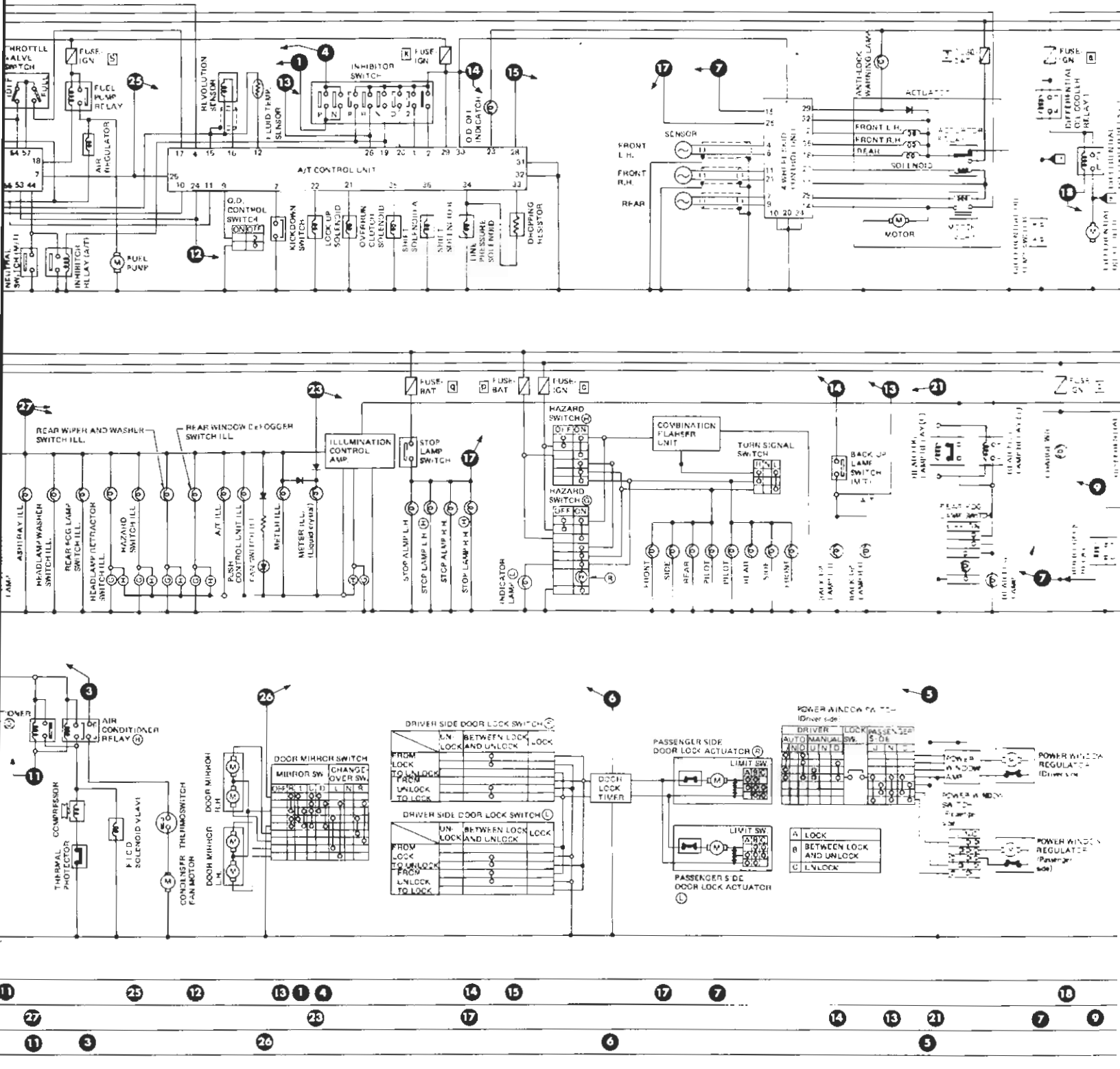


View from harness side

H.S.

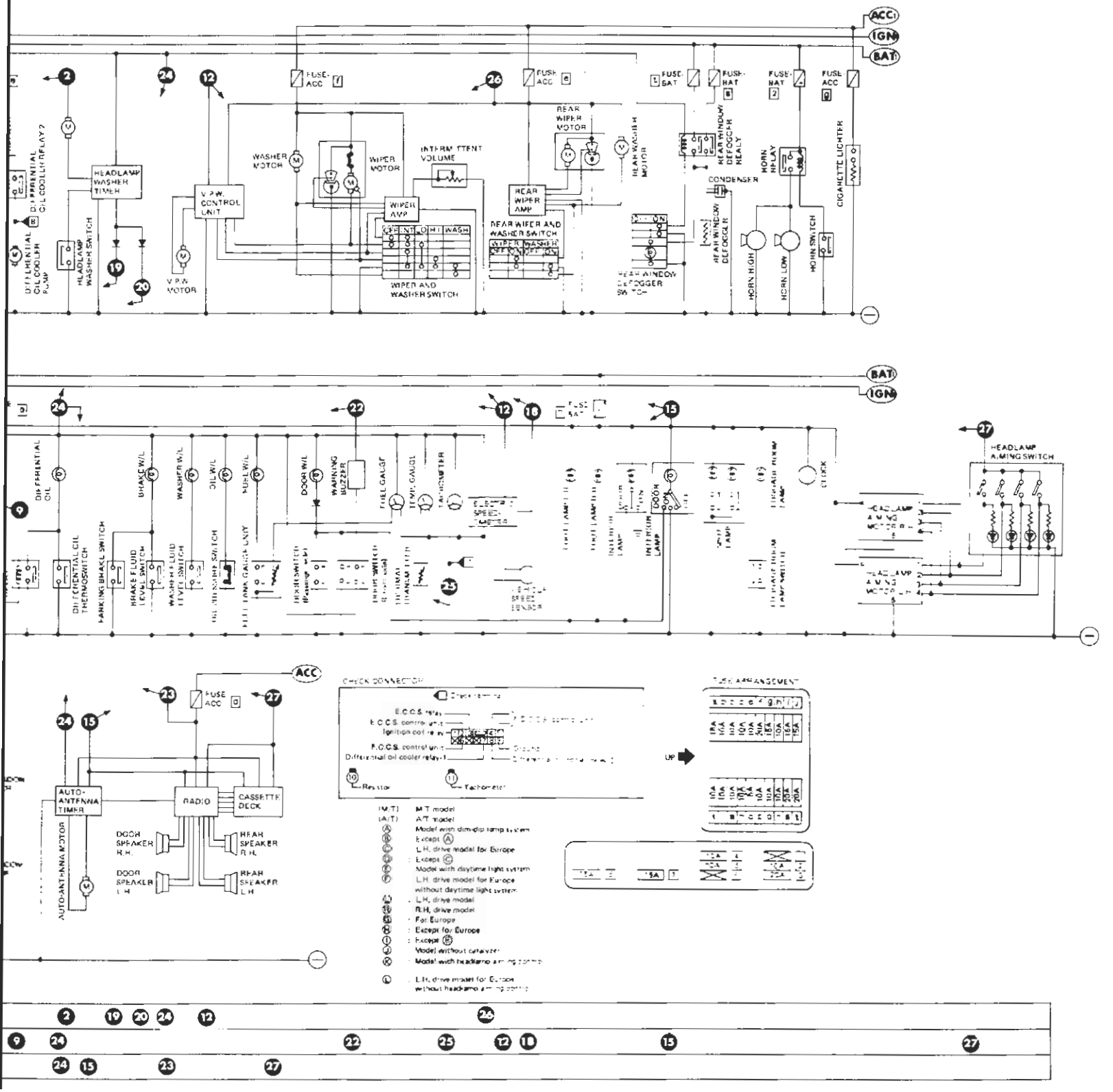
NISSAN 200SX (S13 series)
CIRCUIT DIAGRAM




THROTTLE VALVE SWITCH
FUSE IGN S
FUEL PUMP RELAY
AIR REGULATOR
REVOLUTION SENSOR
FLUID TEMP. SENSOR
INHIBITOR SWITCH
FUSE IGN R
O.D. ON INDICATOR
A/T CONTROL UNIT
O.D. CONTROL SWITCH
KICKDOWN SWITCH
LOCK UP SOLENOID
OVERRUN CLUTCH SOLENOID
SHIFT SOLENOID A
SHIFT SOLENOID B
LINE PRESSURE SOLENOID
DROPPING RESISTOR
NEUTRAL SWITCH
INHIBITOR RELAY (A/T)
FUEL PUMP
SENSOR
FRONT L.H.
FRONT R.H.
REAR
4 WHEEL CONTROL UNIT
ANTI-LOCK WARNING LAMP
ACTUATOR
SOLENOID
MOTOR
FUSE B
DIFFERENTIAL OIL COOLER RELAY
DIFFERENTIAL LOCK CONTROL UNIT

FUSE RAT Q
FUSE BAT D
FUSE IGN C
FUSE IGN N
REAR WIPER AND WASHER SWITCH ILL.
REAR WINDOW DEFOGGER SWITCH ILL.
ILLUMINATION CONTROL AMP.
STOP LAMP SWITCH
HAZARD SWITCH
COMBINATION FLASHER UNIT
TURN SIGNAL SWITCH
BACK UP LAMP SWITCH (M/T)
ASHTRAY ILL.
HEADLAMP WASHER SWITCH ILL.
REAR FOG LAMP SWITCH ILL.
HEADLAMP RETRACTOR SWITCH ILL.
HAZARD SWITCH ILL.
A/T ILL.
PUSH CONTROL UNIT ILL.
FAN SWITCH ILL.
M/T ILL.
METER ILL. (Liquid crystal)
STOP ALMP L.H.
STOP LAMP L.H.
STOP ALMP R.H.
STOP LAMP R.H.
INDICATOR LAMP
FRONT
SIDE
REAR
PILOT
PILOT
HEAD
SIDE
FRONT
BACK UP LAMP (L)
BACK UP LAMP (R)
HEATER (TAIL) LAMP RELAY
HEATER (TAIL) LAMP RELAY
REAR SIDE LAMP SWITCH

POWER
AIR CONDITIONER RELAY
COMPRESSOR
THERMAL PROTECTOR
M.I.C.D. SOLENOID VLAVE
CONDENSER THERMOSWITCH
CONDENSER FAN MOTOR
DOOR MIRROR R.H.
DOOR MIRROR L.H.
DOOR MIRROR SWITCH
MIRROR SW.
CHANGE-OVER SW.
DRIVER SIDE DOOR LOCK SWITCH
UN-LOCK
BETWEEN LOCK AND UNLOCK
LOCK
FROM LOCK TO UNLOCK
FROM UNLOCK TO LOCK
DOOR LOCK TIMER
PASSENGER SIDE DOOR LOCK ACTUATOR
LIMIT SW.
POWER WINDOW SWITCH (Driver side)
DRIVER
PASSENGER SIDE
LOCK
AUTO
MANUAL
SW.
UP
DOWN
POWER WINDOW REGULATOR (Driver side)
POWER WINDOW SWITCH (Passenger side)
POWER WINDOW REGULATOR (Passenger side)
A LOCK
B BETWEEN LOCK AND UNLOCK
C UNLOCK


ACC
IGN
BAT
HEADLAMP WASHER TIMER
V.P.W. CONTROL UNIT
WASHER MOTOR
WIPER MOTOR
INTERMITTENT VOLUME
WIPER AMP.
REAR WIPER AMP.
REAR WIPER MOTOR
REAR WASHER MOTOR
REAR WIPER AND WASHER SWITCH
WIPER AND WASHER SWITCH
V.P.W. MOTOR
HEADLAMP WASHER SWITCH
DIFFERENTIAL OIL COOLER RELAY
DIFFERENTIAL OIL COOLER PUMP
REAR WINDOW DEFOGGER RELAY
REAR WINDOW DEFOGGER SWITCH
CONDENSER
HORN RELAY
HORN HIGH
HORN LOW
HORN SWITCH
CIGARETTE LIGHTER
FUSE ACC
FUSE BAT
DIFFERENTIAL OIL
DIFFERENTIAL OIL THERMOSWITCH
PARKING BRAKE SWITCH
BRAKE FLUID LEVEL SWITCH
WASHER FLUID LEVEL SWITCH
OIL PRESSURE SWITCH
FUEL TANK GAUGE UNIT
BRAKE W/L
WASHER W/L
OIL W/L
FUEL W/L
DOOR W/L
WARNING BUZZER
FUEL GAUGE
TEMP. GAUGE
TACHOMETER
SPEEDOMETER
DOOR SW
INTERIOR LAMP
CLOCK
HEADLAMP AIMING SWITCH
HEADLAMP AIMING MOTOR
ACC
FUSE ACC
AUTO-ANTENNA TIMER
RADIO
CASSETTE DECK
AUTO-ANTENNA MOTOR
DOOR SPEAKER R.H.
REAR SPEAKER R.H.
DOOR SPEAKER L.H.
REAR SPEAKER L.H.
CHECK CONNECTOR
E.C.C.S. relay
E.C.C.S. control unit
Ignition coil relay
E.C.C.S. control unit
Differential oil cooler relay
Resistor
Tachometer
FUSE ARRANGEMENT
UP
(M/T) M/T model
(A/T) A/T model
Model with dim-dip lamp system
Except (A)
L.H. drive model for Europe
Except (C)
Model with daytime light system
L.H. drive model for Europe without daytime light system
L.H. drive model
R.H. drive model
For Europe
Except for Europe
Except (E)
Model without catalyzer
Model with headlamp aiming control
L.H. drive model for Europe without headlamp aiming control