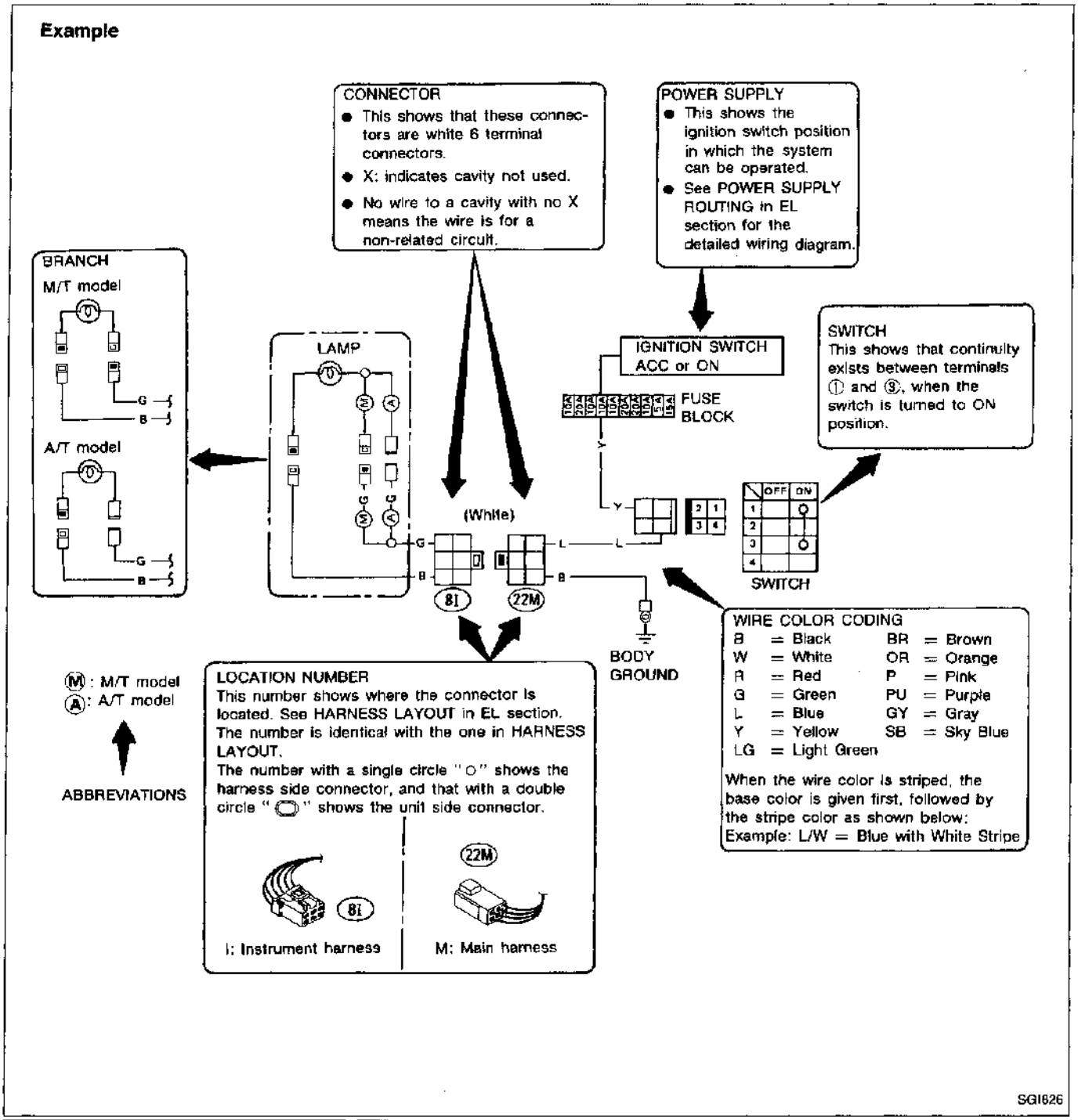
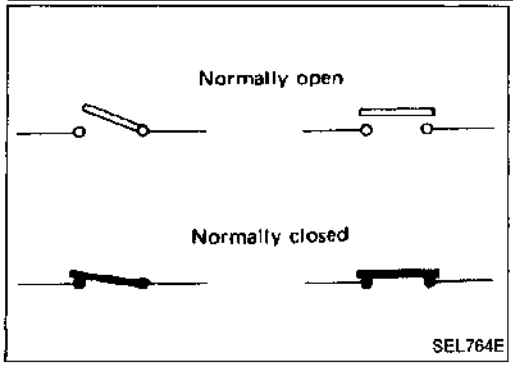
WIRING DIAGRAM

Symbols used in WIRING DIAGRAM are shown below:

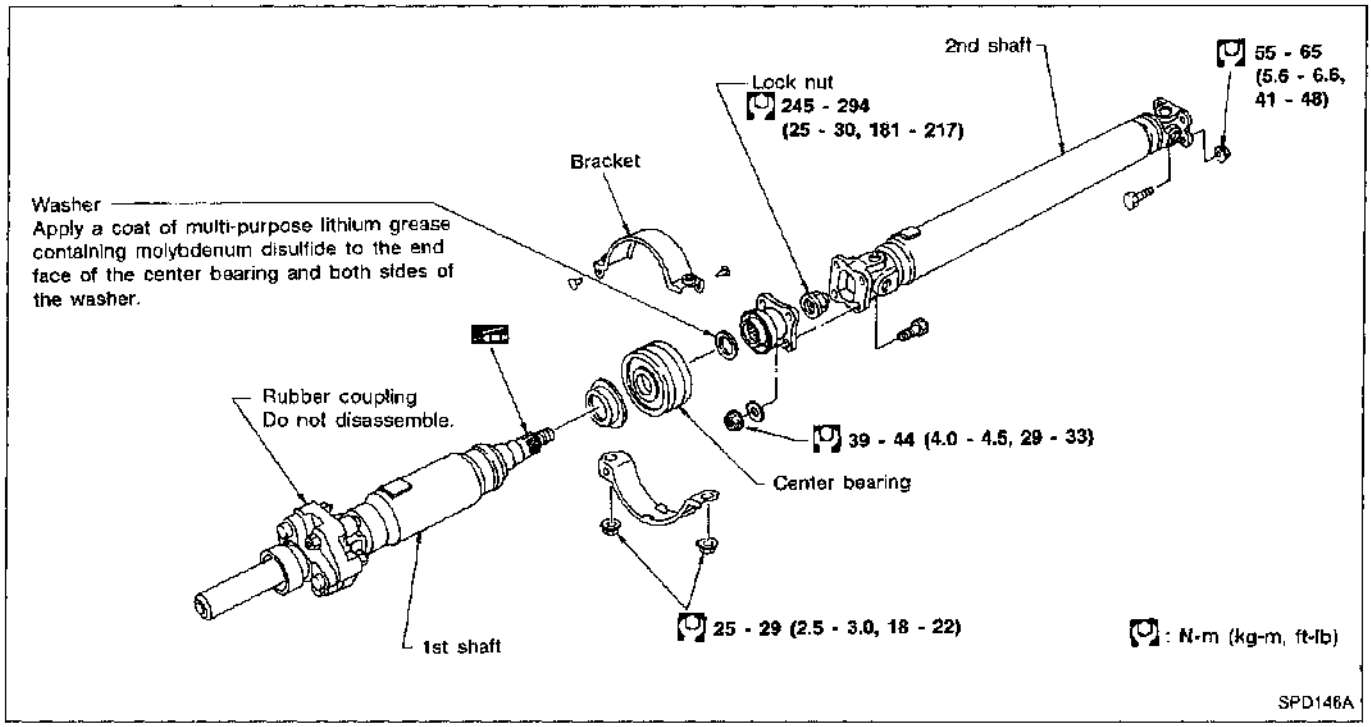


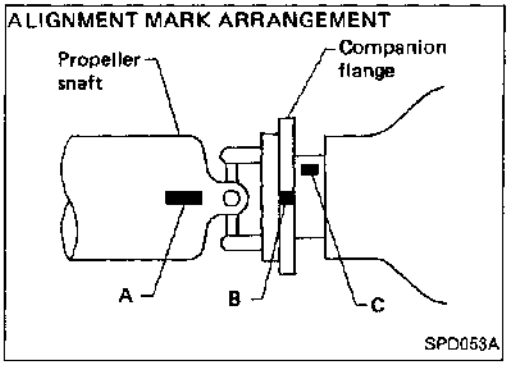


SWITCH POSITIONS

Wiring diagram switches are shown with the vehicle in the following condition.

- Ignition switch "OFF".
- Doors, hood and trunk lid/back door closed.
- Pedals are not depressed and parking brake is released.





On-vehicle Service

PROPELLER SHAFT VIBRATION

If vibration is present at high speed, check mounting between propeller shaft and companion flange.

Make sure alignment marks A and B are located as close to each other as possible.

If not, change mounting as indicated in "Installation".

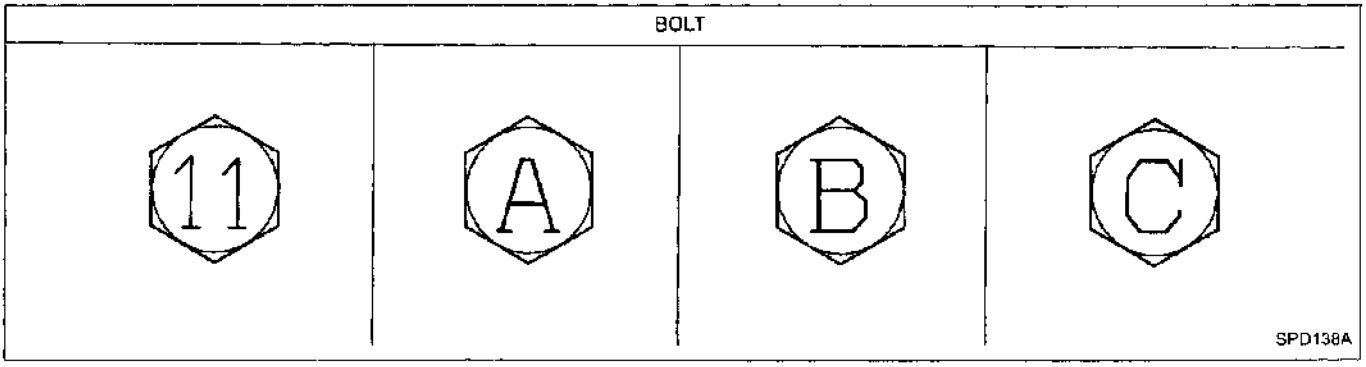
APPEARANCE CHECKING

- Inspect propeller shaft tube surface for dents or cracks. If damaged, replace propeller shaft assembly.
- If center bearing is noisy or damaged, replace center bearing.

Removal

Before removing propeller shaft from vehicle, check marks on bolt heads so that bolts can be reused in their original positions.

If propeller shaft is replaced with a new one, replace all bolts with "11" bolts. Do not use "A", "B" or "C" bolts.



Supplemental Restraint System "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System "Air Bag" and "Seat Belt Pre-tensioner" help to reduce the risk or severity of injury to the driver and front passenger in a frontal collision. The Supplemental Restraint System consists of air bags (located in the center of the steering wheel and on the instrument panel on the passenger side), seat belt pre-tensioners, sensors, a diagnostic unit, warning lamp, wiring harness and spiral cable. Information necessary to service the system safely is included in the **BF section** of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal collision, all maintenance must be performed by an authorized INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.**
- **All SRS air bag electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS SYSTEM.**

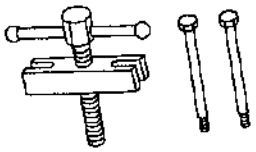
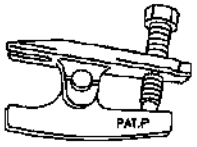
STEERING SYSTEM

- **Before disassembly, thoroughly clean the outside of the unit.**
- **Disassembly should be done in a clean work area. It is important to prevent the internal parts from becoming contaminated by dirt or other foreign matter.**
- **When disassembling parts, be sure to place them in order in a parts rack so they can be reinstalled in their proper positions.**
- **Use nylon cloths or paper towels to clean the parts; common shop rags can leave lint that might interfere with their operation.**
- **Before inspection or reassembly, carefully clean all parts with a general purpose, non-flammable solvent.**
- **Before assembly, apply a coat of recommended ATF* to hydraulic parts. Vaseline may be applied to O-rings and seals. Do not use any grease.**
- **Replace all gaskets, seals and O-rings. Avoid damaging O-rings, seals and gaskets during installation. Perform functional tests whenever designated.**

*: **Automatic transmission fluid**

Preparation

SPECIAL SERVICE TOOLS

Tool number (Kent-Moore No.) Tool name	Description	
KV48100700 (J26364) Torque adapter	 NT169	Measuring pinion rotating torque
ST27180001 (J25726-A) Steering wheel puller	 NT170	Removing steering wheel
HT72750000 (J24319-01) Ball joint remover	 NT146	Removing ball joint

Oil Pressure Switch:

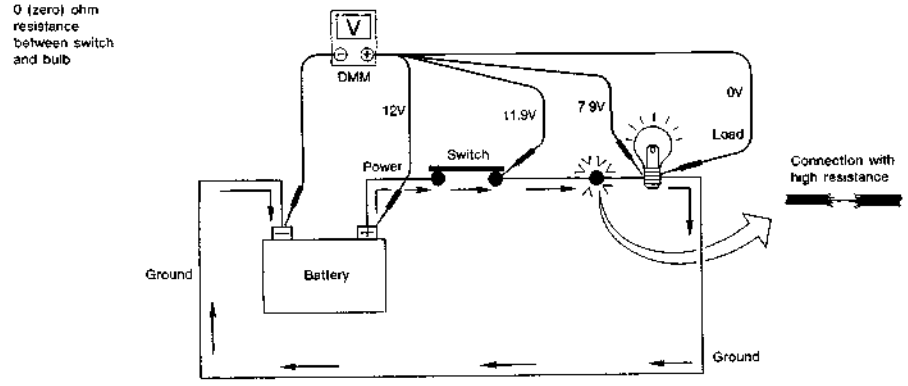
Oil pressure PSI	Continuity
More Than 10 - 20	NO
Less Than 10 - 20	YES

Bulb Specifications:

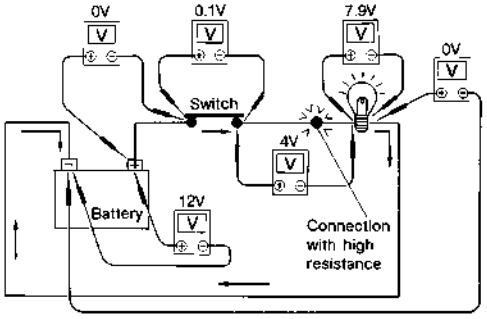
Item	Wattage (12V).	Bulb No.
Headlamp		
Outside Low Beam	55	9006
Inside High Beam	65	9005
Front Turn Signal/Park	27/8	1157NA
Front Side Marker	5	
Rear Side Marker	3.8	194
Rear Turn Signal	27	1156
Stop/Tail Lamp	27/8	1157
Center Stop Lamp	18	921
Back-up Lamp	27	1156
License Plate Lamp	5	
Interior Lamp	10	
Spot Lamp (type A)	10	
Spot Lamp (type B)	8	
Step Lamp	3.4	
Trunk Room Lamp	3.4	

How to perform voltage drop test: See Illustrations

Symptom: Dim bulb or no operation



AGI069



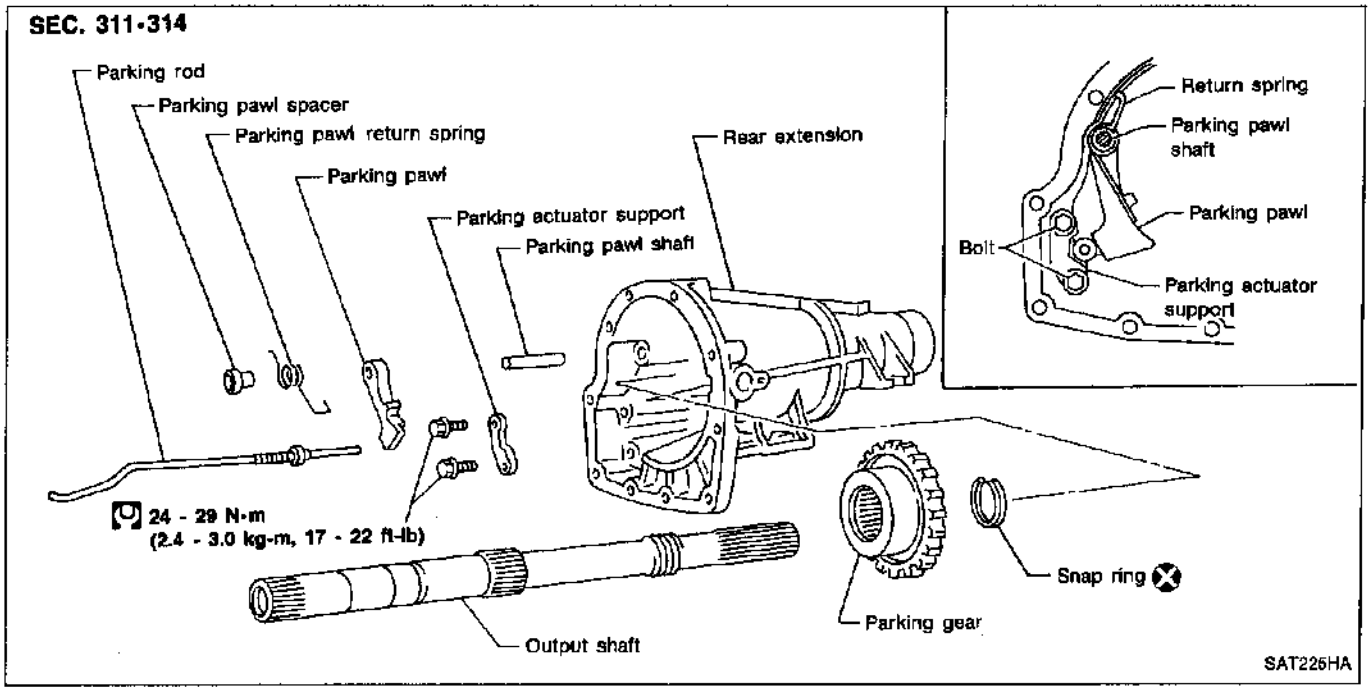
1. Connect the voltmeter as shown, starting at the battery and working your way around the circuit.
2. An unusually large voltage drop will indicate a component or wire that needs to be repaired. In the illustration, the poor connection causes a 4 volt drop.

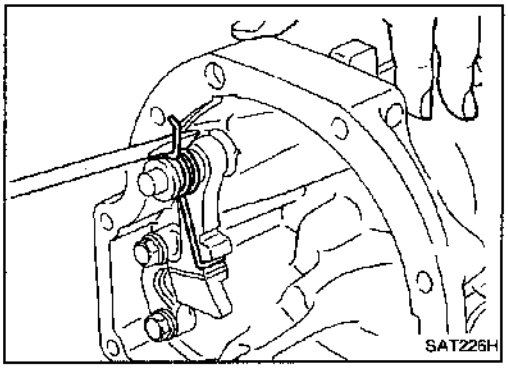
The chart that follows illustrates some maximum allowable voltage drops. These values are given as a guideline, the exact value for each component may vary.

COMPONENT	VOLTAGE DROP
Wire	negligible <.001 volts
Ground Connections	Approx. 0.1 volts
Switch Contacts	Approx. 0.3 volts

AGI055

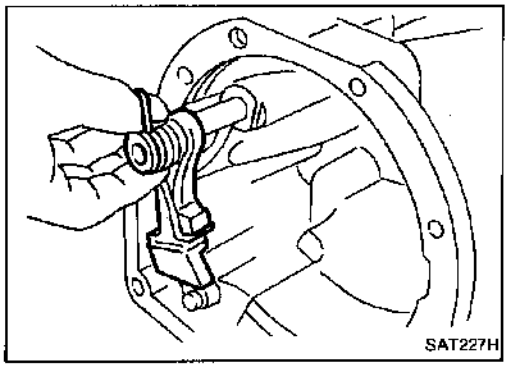
Parking Pawl Components



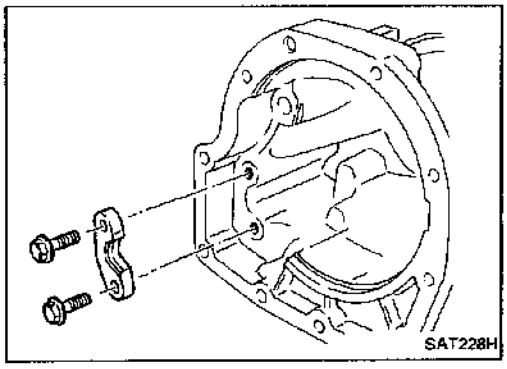


DISASSEMBLY

1. Slide return spring to the front of rear extension flange.



2. Remove return spring, pawl spacer and parking pawl from rear extension.
3. Remove parking pawl shaft from rear extension.

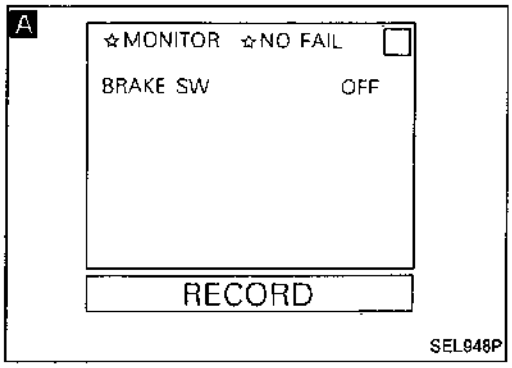


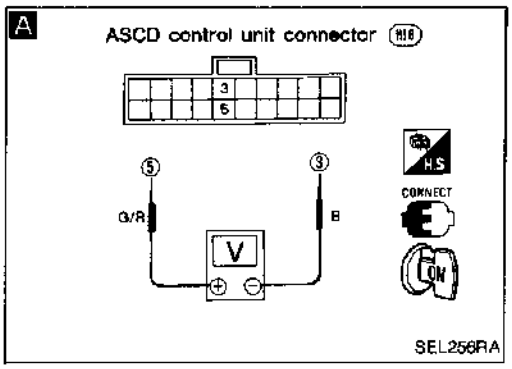
4. Remove parking actuator support from rear extension.

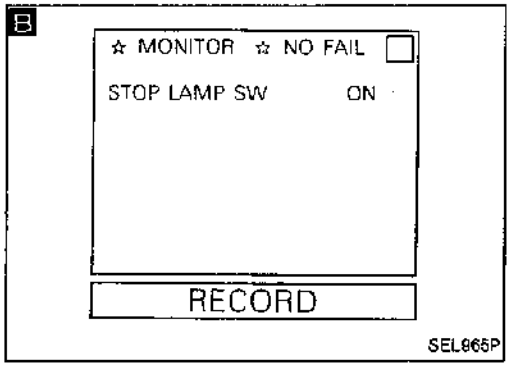
Trouble Diagnoses (Cont'd)

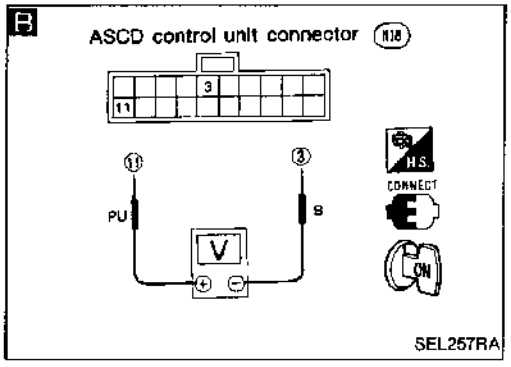
DIAGNOSTIC PROCEDURE 7

SYMPTOM: Set speed cannot be cancelled.









A

CHECK ASCD CANCEL AND PARK/NEUTRAL POSITION SWITCH CIRCUIT.

1. Turn ASCD main switch "ON".
2. See "BRAKE SW" in "Data monitor" mode.
   BRAKE SW
   When brake pedal is released: ON
   When brake pedal is depressed: OFF

NG → CHECK ASCD CANCEL and PARK/NEUTRAL POSITION SWITCH. Refer to "Electrical Components Inspection" (EL-138).

OR

2. Check voltage between control unit harness terminals ⑤ and ③.

Condition		Voltage [Ω]
ASCD CANCEL switch	Depressed	0
	Released	Approx. 12
A/T shift lever position is at any position except N or P.		Approx. 12
A/T shift lever position is at N or P.		0

OK ↓

B

CHECK STOP LAMP SWITCH CIRCUIT.

See "STOP LAMP SW" in "Data monitor" mode.
STOP LAMP SW
When brake pedal is released: OFF
When brake pedal is depressed: ON

NG → CHECK STOP LAMP SWITCH. Refer to "Electrical Components Inspection" (EL-138).

OR

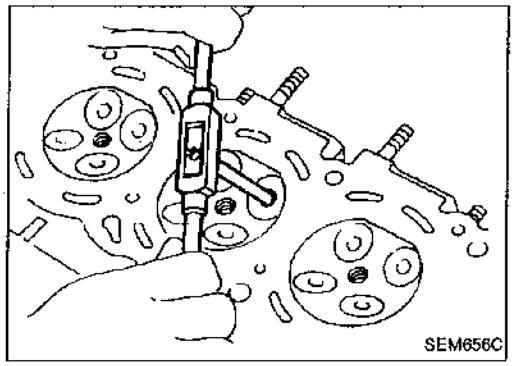
Check voltage between control unit harness terminals ⑪ and ③.

Condition		Voltage [V]
Stop lamp switch	Depressed	Approx. 12
	Released	0

OK ↓

Ⓐ
(Next page)

Inspection (Cont'd)

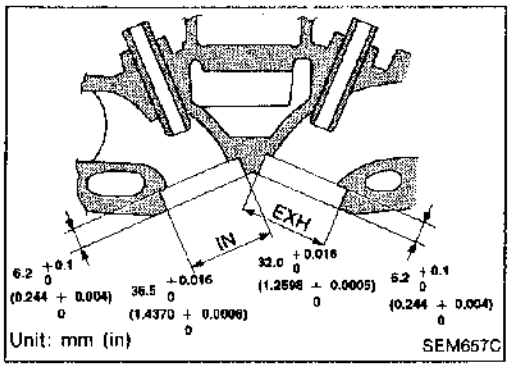

SEM656C

5. Ream valve guide.
   Finished size:
   Intake and Exhaust
   6.000 - 6.018 mm (0.2362 - 0.2369 in)

VALVE SEATS

Check valve seats for evidence of pitting at valve contact surface, and reseat or replace if it is worn excessively.

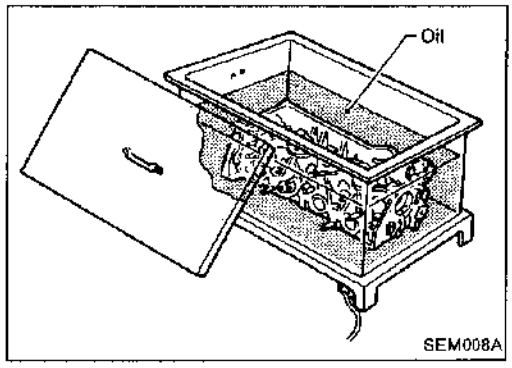
- **Before repairing valve seats, check valve and valve guide for wear. If they have worn, replace them. Then correct valve seat.**
- **Cut with both hands to assure a uniform surface.**



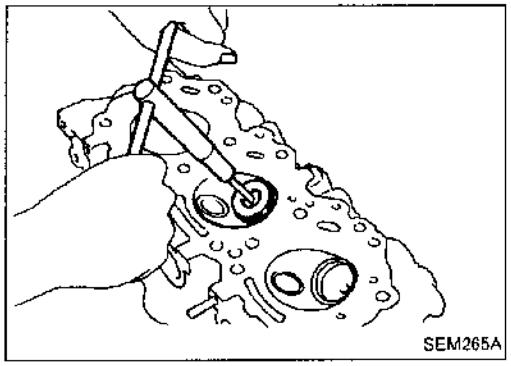
REPLACING VALVE SEAT FOR SERVICE PARTS

1. Bore out old seat until it collapses. Boring should not continue beyond the bottom face of the seat recess in cylinder head.
2. Ream cylinder head recess.
   Reaming bore for service valve seat
   Oversize [0.5 mm (0.020 in)]:
   Intake 36.500 - 36.516 mm (1.4370 - 1.4376 in)
   Exhaust 32.000 - 32.016 mm (1.2598 - 1.2605 in)

Be sure to ream in circles concentric to the valve guide center. This will enable valve seat to fit correctly.

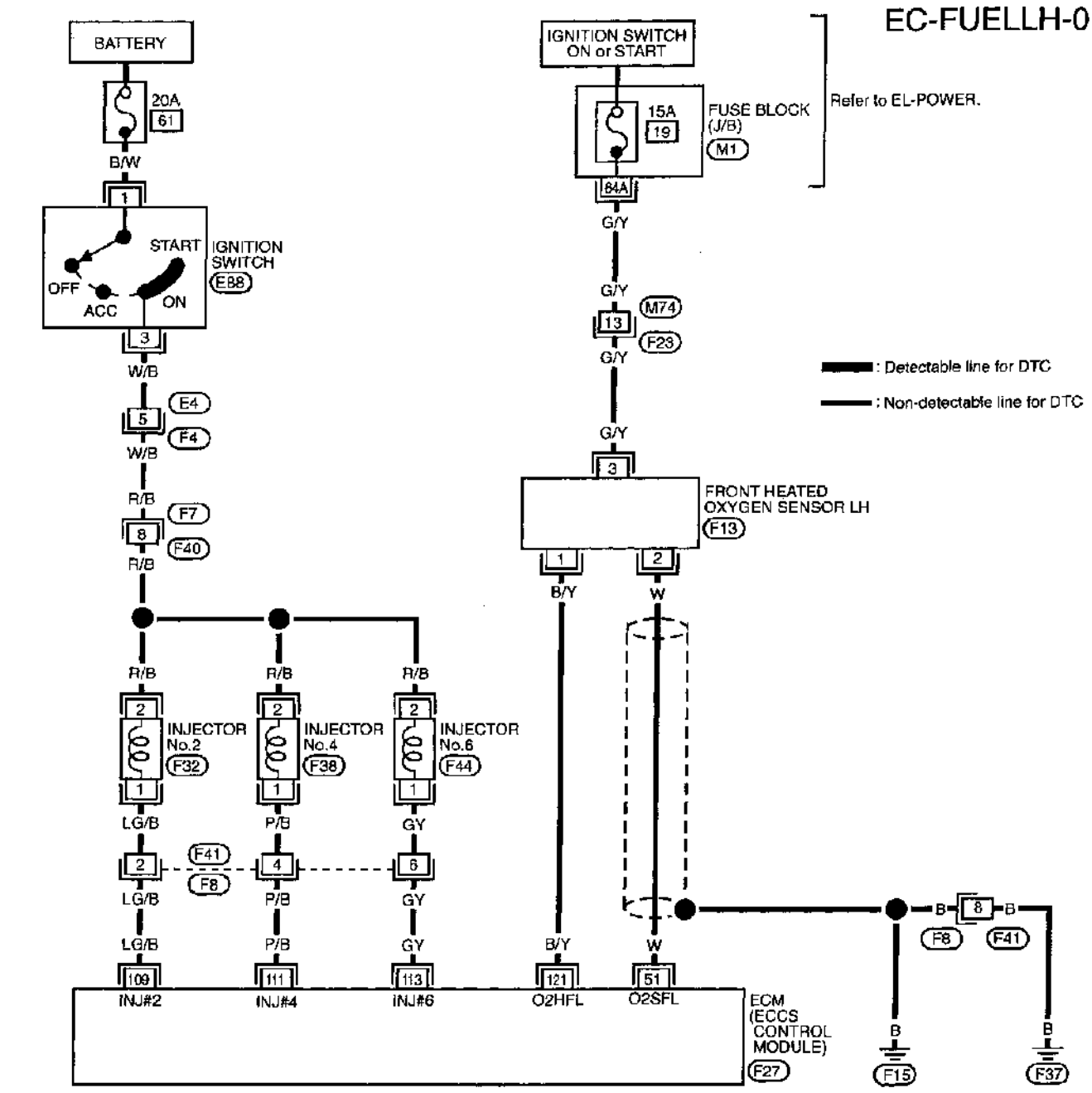


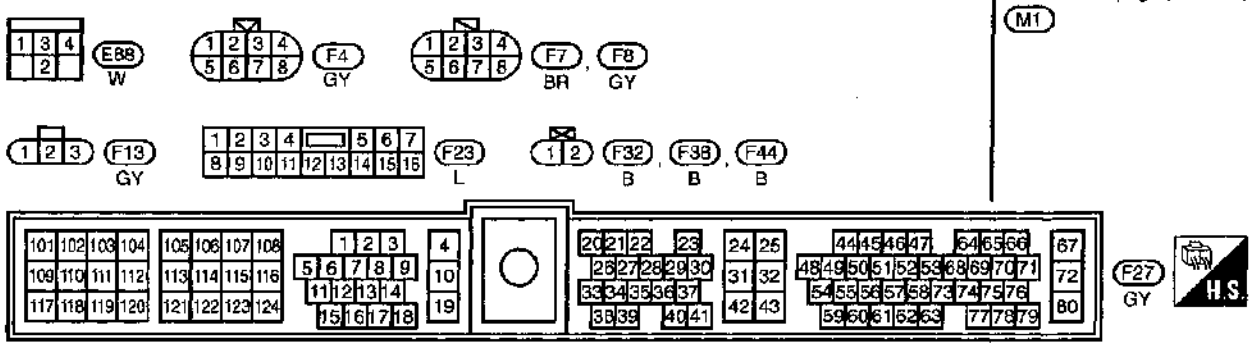
3. Heat cylinder head to 150 to 160°C (302 to 320°F).
4. Press fit valve seat until it seats on the bottom.


SEM265A

5. Cut or grind valve seat using suitable tool at the specified dimensions as shown in SDS (EM-54).
6. After cutting, lap valve seat with abrasive compound.
7. Check valve seat contact condition.

Fuel Injection System Function (Left bank) (Lean side) (DTC: 0210) (Cont'd)

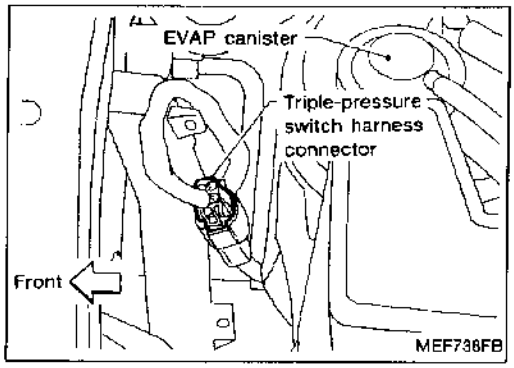




SEF693Q

Cooling Fan (DTC: 1308) (Cont'd)

DIAGNOSTIC PROCEDURE



INSPECTION START

A

CHECK COOLING FAN OPERATION.

1. Disconnect triple-pressure switch harness connector.
2. Turn ignition switch "ON".
3. Perform "COOLING FAN CIRCUIT" in "FUNCTION TEST" mode with CONSULT.

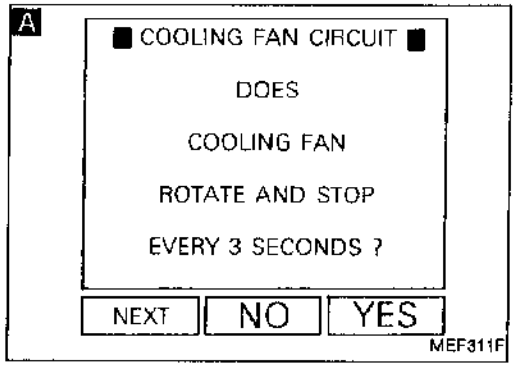
NG → Check cooling fan control circuit. (Go to PROCEDURE A.)

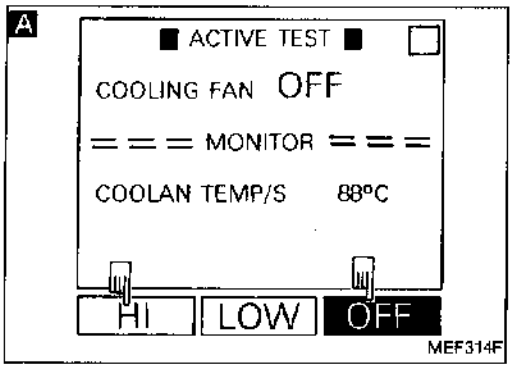
OR

2. Turn ignition switch "ON".
3. Perform "COOLING FAN" in "ACTIVE TEST" mode with CONSULT.
   - **The cooling fan control system carries out the 2-step control [ON/OFF] while "OFF", "LOW" and "HI" are being displayed on the CONSULT screen.**
4. Select "OFF" or "HI" and check the cooling fan operation.

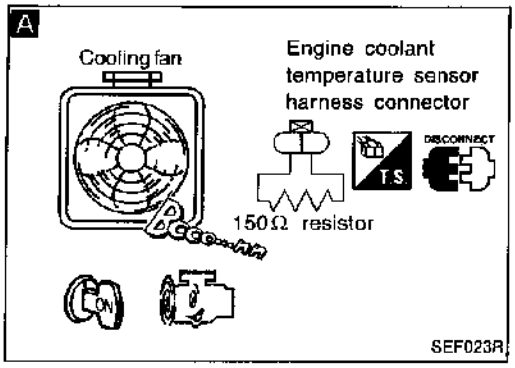
OR

2. Disconnect engine coolant temperature sensor harness connector.
3. Connect 150Ω resistor to engine coolant temperature harness connector.
4. Start engine and make sure that cooling fan operates.





OK



B

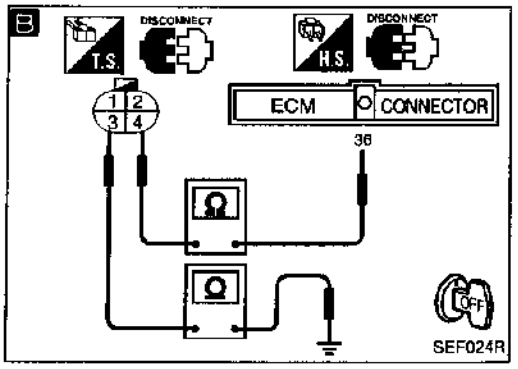
CHECK TRIPLE-PRESSURE SWITCH CIRCUIT.

1. Turn ignition switch "OFF".
2. Disconnect ECM harness connector.
3. Check harness continuity between ECM terminal (36) and terminal (4), terminal (3) and body ground.
   Continuity should exist.
   If OK, check harness for short.

NG → Check the following.
- Harness connectors (F4), (E4)
- Harness for open or short between ECM and triple-pressure switch
- Harness for open or short between triple-pressure switch and body ground

If NG, repair harness or connectors.

OK



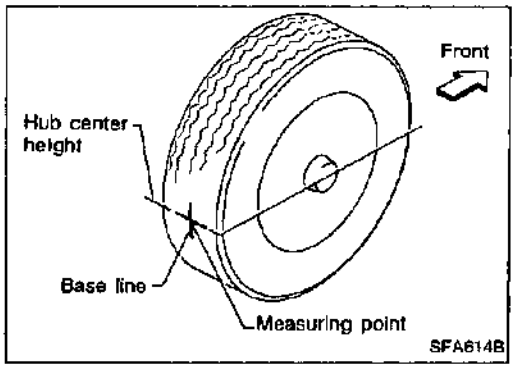
CHECK COMPONENT (Triple-pressure switch).
Refer to HA section ("Electrical Components Inspection", "TROUBLE DIAGNOSES").

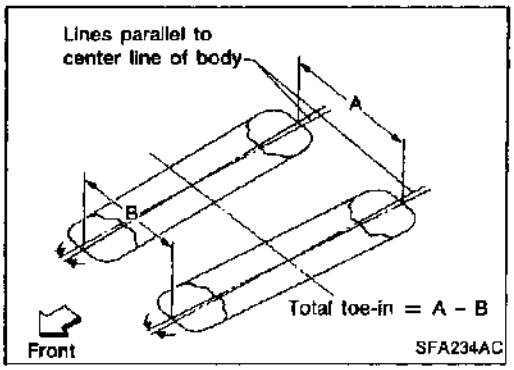
NG → Replace triple-pressure switch.

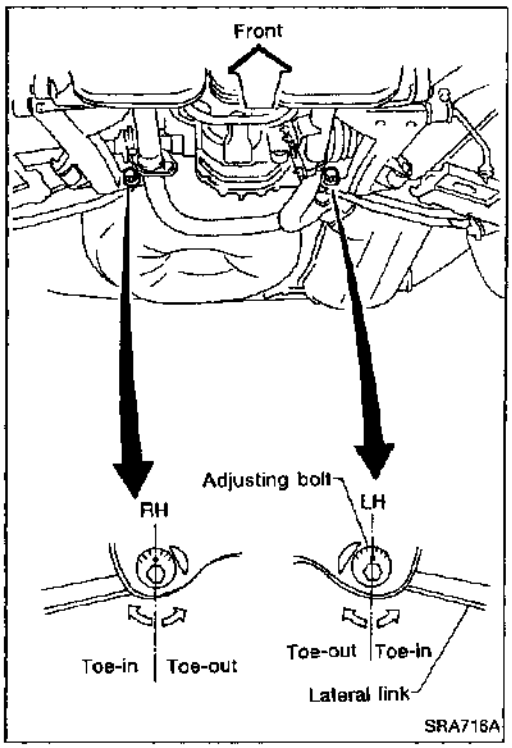
OK

Ⓐ

Rear Wheel Alignment (Cont'd)







TOE-IN

Measure toe-in using following procedure. If out of specification, inspect and replace any damaged or worn rear suspension parts.

WARNING:

- **Always perform following procedure on a flat surface.**
- **Make sure that no person is in front of the vehicle before pushing it.**

1. Bounce rear of vehicle up and down to stabilize the posture.
2. Push the vehicle straight ahead about 5 m (16 ft).
3. Put a mark on base line of the tread (rear side) of both tires at the same height of hub center. This mark is a measuring point.
4. Measure distance "A" (rear side).
5. Push the vehicle slowly ahead to rotate the wheels 180 degrees (1/2 turn).

If the wheels have rotated more than 180 degrees (1/2 turn), try the above procedure again from the beginning. Never push vehicle backward.

6. Measure distance "B" (front side).
   Total toe-in:
   Refer to SDS (RA-30).
7. Adjust toe-in by turning adjusting bolts.

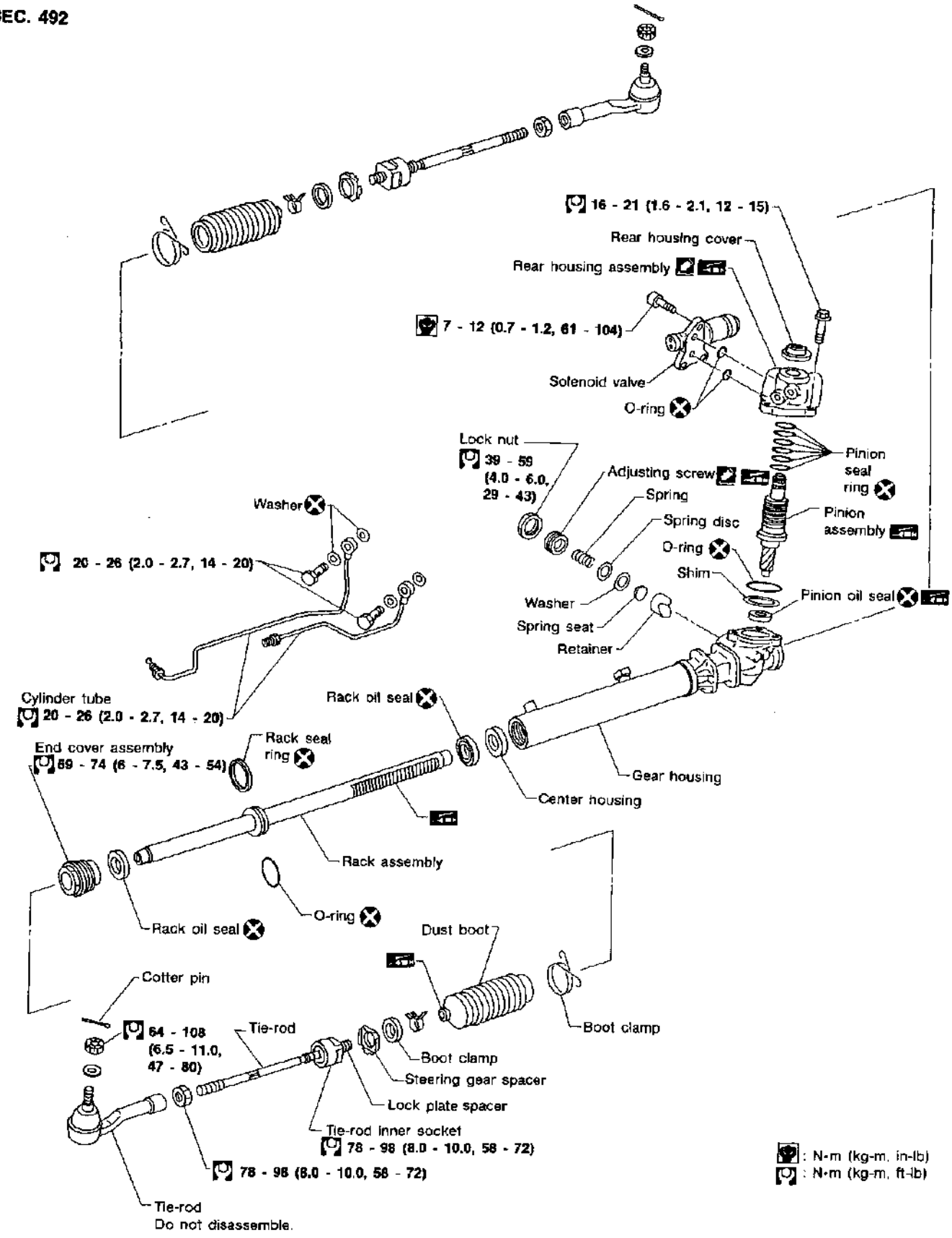
Toe changes about 1.5 mm (0.059 in) [One side] with each graduation of the adjusting bolt.

8. Tighten to the specified torque.
   69 - 88 N·m
   (7.0 - 9.0 kg-m, 51 - 65 ft-lb)

Drive Shaft

Check boot and drive shaft for cracks, wear, damage or grease leakage.

SEC. 492



SST986BA

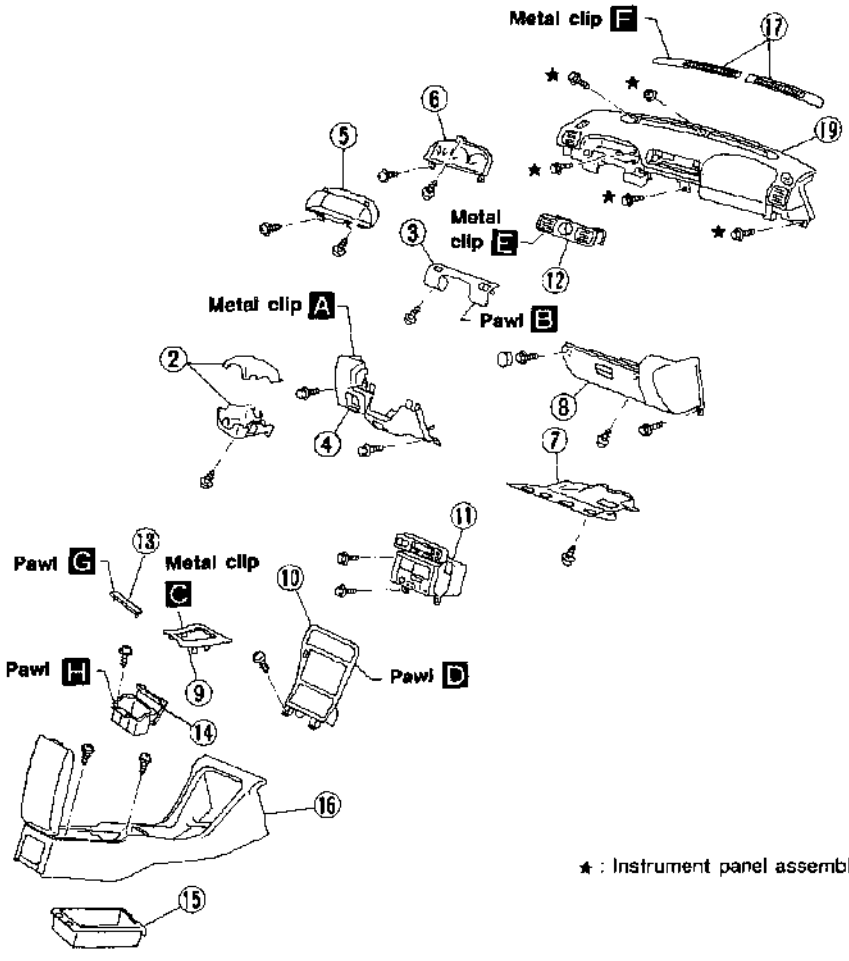
CAUTION:

- **Disconnect both battery cables in advance.**
- **Disconnect air bag system line in advance.**
- **Never force the air bag lid open or tamper with it as this may adversely affect air bag performance.**
- **Be careful not to scratch pad and other parts.**

REMOVAL — Instrument panel assembly

① Remove steering wheel. Disengage air bag system in advance. Refer to RS section.
② Remove steering column cover.
③ Remove cluster lid D.
④ Remove lower instrument panel on driver's side.
⑤ Remove cluster lid A.
⑥ Remove combination meter.
⑦ Remove lower instrument cover on passenger side.
⑧ Remove glove box assembly.
⑨ Remove A/T finisher.
⑩ Remove cluster lid C.
⑪ Remove A/C control and radio.
⑫ Remove center ventilator.
⑬ Remove console mask.
⑭ Remove cup holder.
⑮ Remove console pocket.
⑯ Remove lower instrument center panel.
⑰ Remove defroster grille.
⑱ Remove front pillar garnish. Refer to "Side and Floor Trim" in "INTERIOR TRIM" for details (BT-13).
⑲ Remove instrument panel and pads.

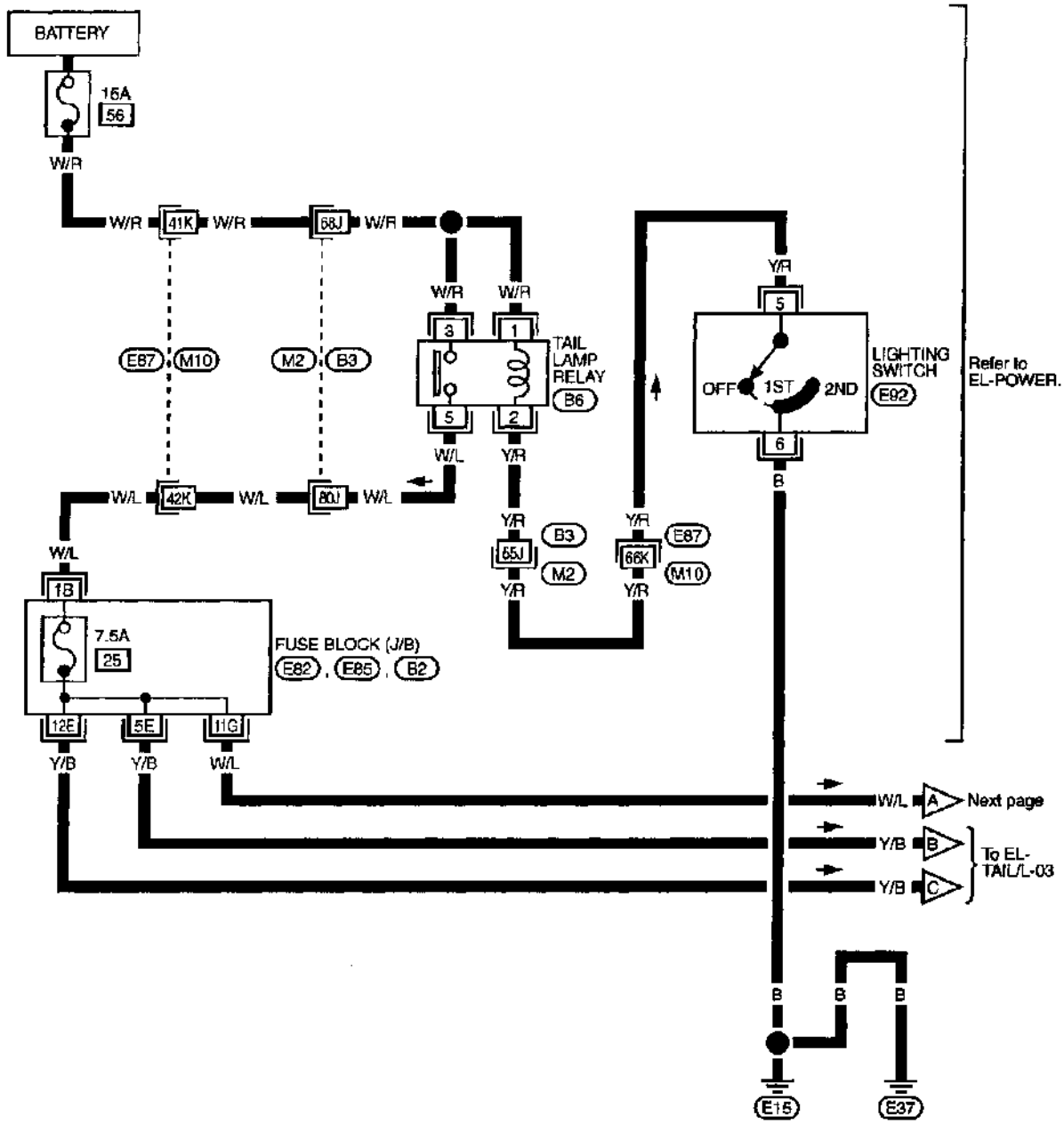
SEC. 248•272•280•487•680•685•969

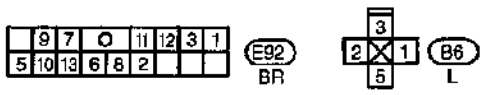


SBT031

Clearance, License and Tail Lamps/Wiring Diagram — TAIL/L —

EL-TAIL/L-01





Refer to last page (Foldout page).

E67, M10

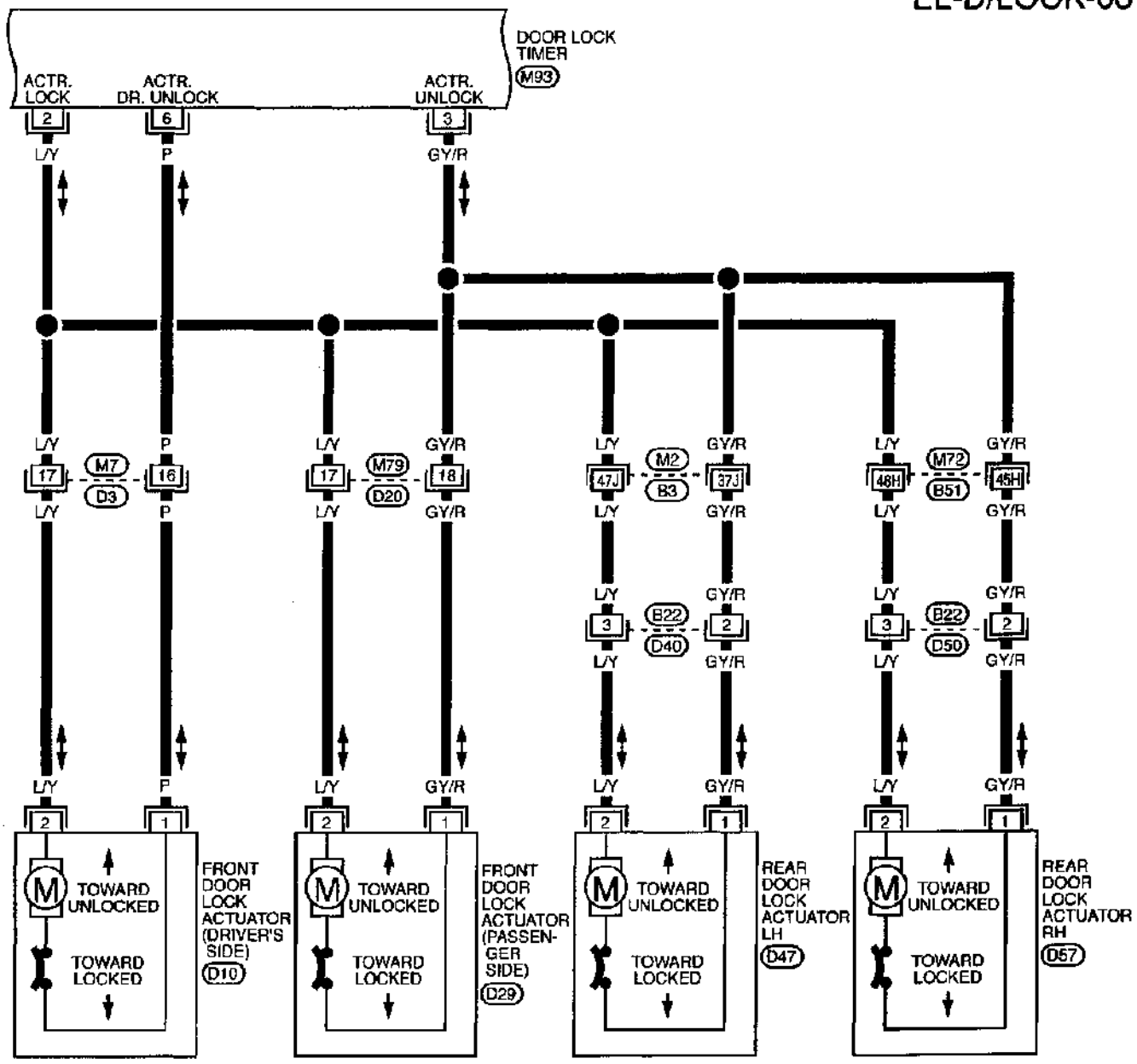
M2, B3

E82, E85, B2

TEL163

Wiring Diagram — D/LOCK — (Cont'd)

EL-D/LOCK-03



M93 W

D3 W, D20 W

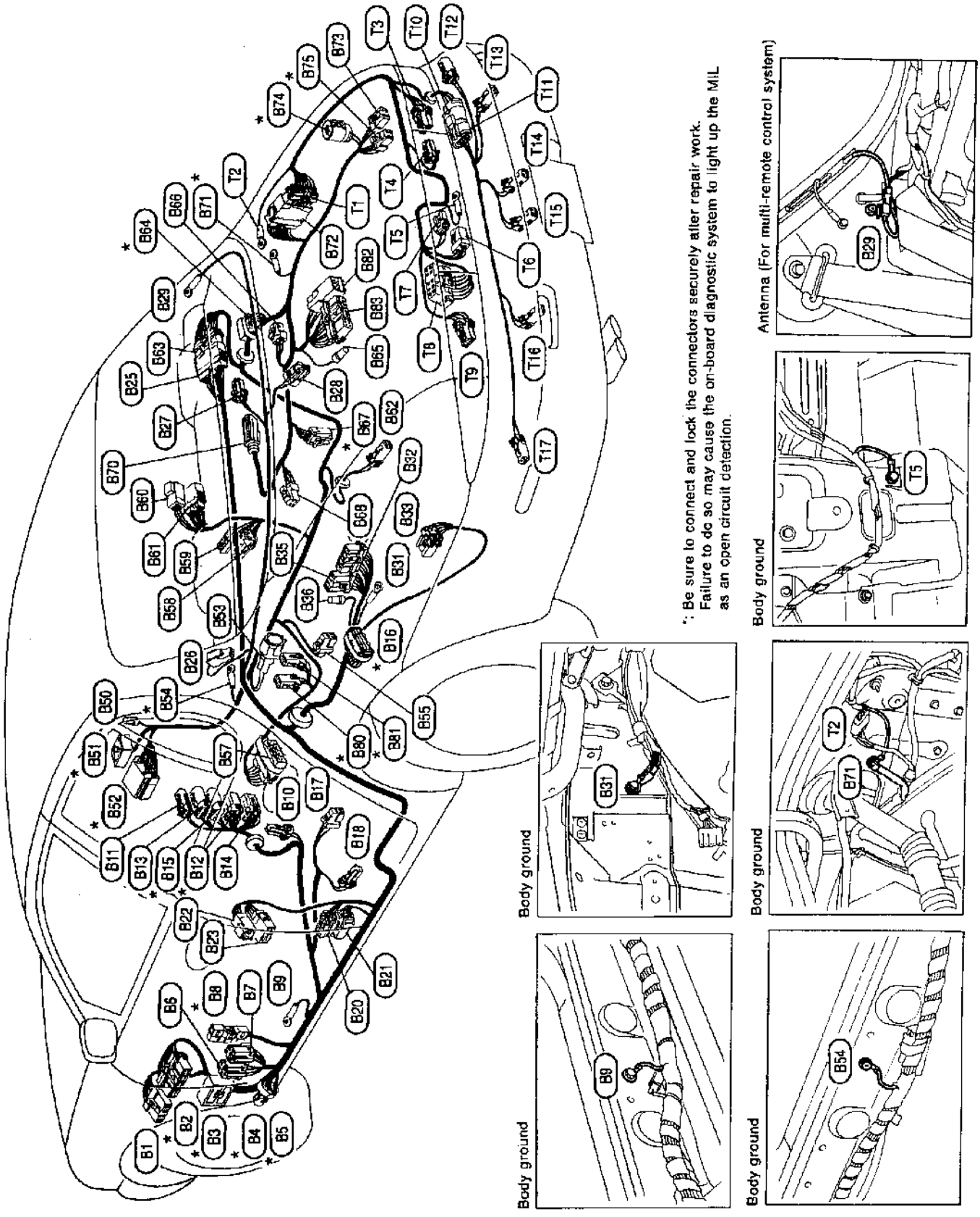
D10 GY, D29 GY, D47 GY, D57 GY

D40 W, D50 W

Refer to last page (Foldout page).
M2, B3
M72, B51

TEL230

Body Harness and Tail Harness



CEL100