MITSUBISHI MOTORS

Workshop Manual

electrical wiring

L300 '90

Pub. No. PHWE8907

MITSUBISHI L300

ELECTRICAL WIRING

FOREWORD

This Electrical Wiring Manual contains information necessary for inspection and servicing of electrical wiring in the Mtsubishi L300 edited in the form of wiring harness configuration diagrams and function-separated circuit diagrams.
It is recommended that all service mechanics engaged in the servicing of the vehicle refer to the following publications as well as this manual.

WORKSHOP MANUAL	
ENGINE GROUP	PWEE□□□□ (Looseleaf edition)
CHASSIS GROUP	PWWE8608
PARTS CATALOGUE	B6031809AA

MITSUBISHI MOTORS CORPORATION

GROUP INDEX

HOW TO USE THIS MANUAL

CONTENTS

The preceding page contains GROUP INDEX which lists the group title and group number.

PAGE NUMBERS

All page numbers consist of two sets of digits separated by a dash. The digits preceding the dash identify the number of the group. The digits following the dash represent the consecutive page number within the group. The page numbers can be found on the top left or right of each page.

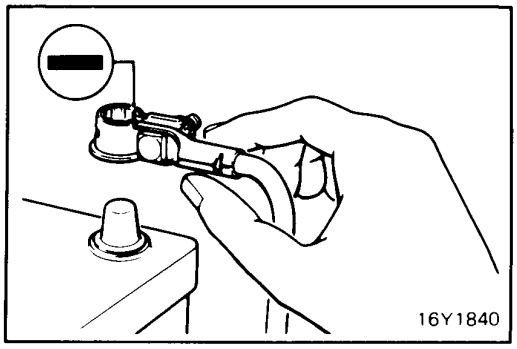
OPERATION AND TROUBLESHOOTING HINTS

In the GROUP 4 circuit diagrams, the operation and troubleshooting hints are given on the previous page or following page for each circuit where necessary.

0 GENERAL

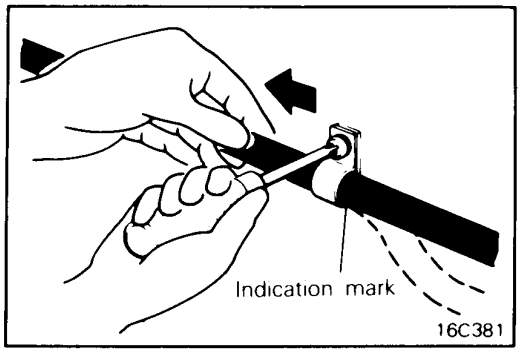
SERVICING THE ELECTRICAL SYSTEM

1. When servicing the electrical system, pay attention to the following.
   Never attempt to modify an electrical unit or to change wirings, which may otherwise cause not only a vehicle failure but a vehicle fire due to over-capacity load or short-circuit.

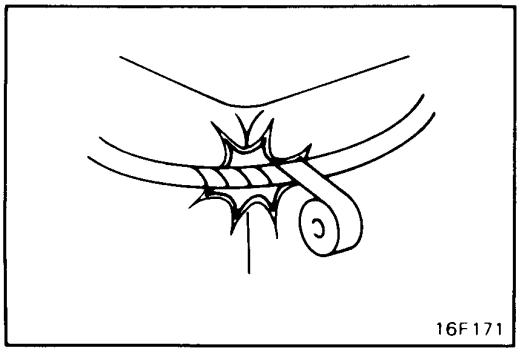


2. When servicing the electrical system, disconnect the negative cable from the terminal of the battery.

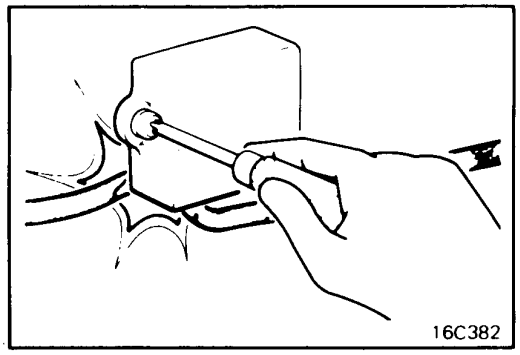
   Caution
   - **Before connecting or disconnecting the negative cable, be sure to turn off the ignition switch and the lighting switch.**
     (If this is not done, there is the possibility of the semi-conductor parts being damaged.)
   - **On vehicles with multi-point injection engine on ECI-turbo engine, after completion of work (connection of the cable to the battery negative terminal), warm up the engine and then let it idle for approx. five minutes in the following conditions to make sure that the engine is normally idling.**
     (a) Engine coolant temperature:
     80 – 95°C (176 – 203°F)
     (b) Lamps, electric fan and accessories: OFF
     (c) Transmission: Neutral
     (Automatic transmission: N or P)
     (d) Steering wheel: in straight-ahead position



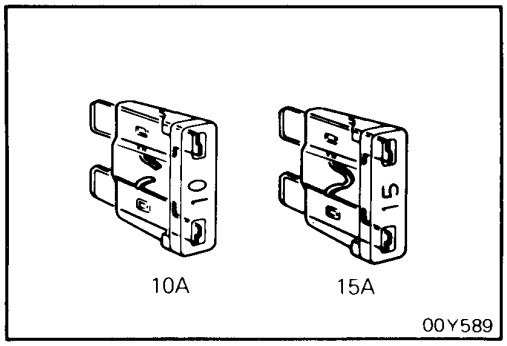
3. Secure the wiring harnesses by using clamps so that there is no slack. However, for any harness which passes to the engine or other vibrating parts of the vehicle, allow some slack within a range that does not allow the engine vibrations to cause the harness to come into contact with any of the surrounding parts, and then secure the harness by using a clamp.
   In addition, if a mounting indication mark (yellow tape) is on a harness, secure the indication mark in the specified location.



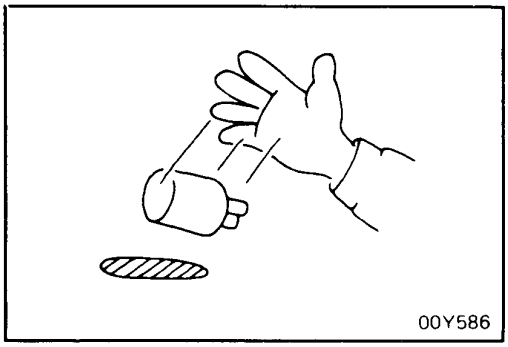
4. If any section of a wiring harness interferes with the edge of a part, or a corner, wrap the section of the harness with tape or something similar in order to protect it from damage.



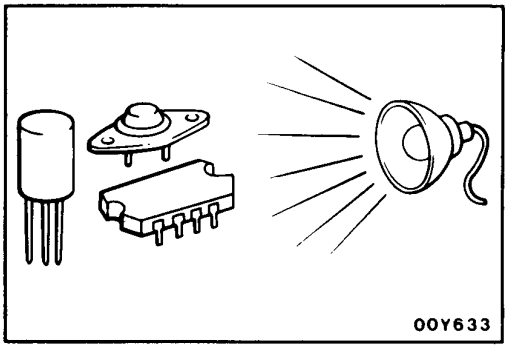
5. When installing any of the vehicle parts, be careful not to pinch or damage any of the wiring harnesses.



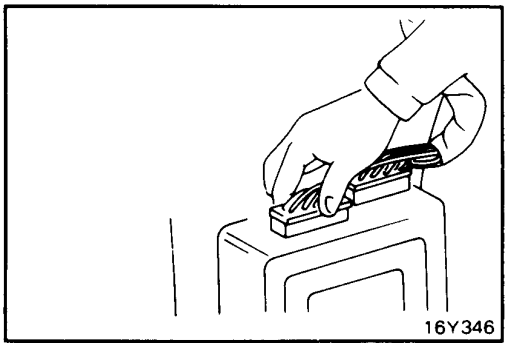
6. If a burned-out fuse is to be replaced, be sure to use only a fuse of the specified capacity. If a fuse of a capacity larger than that specified is used, parts may be damaged and the danger of fire also exists.



7. The sensors, relays, etc. must never be subjected to strong shocks. Do not allow them to fall and do not throw them when handling.



8. The electronic parts used in the computer, relays, etc. are readily damaged by heat. If there is a need for service operations that may cause the temperature to exceed 80°C (176°F), remove the electronic parts beforehand.

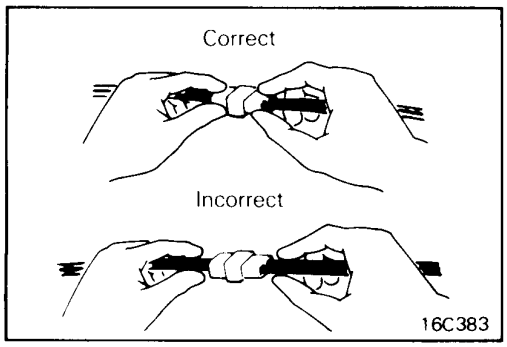


9. Loose connectors could cause troubles. Make sure that the connectors are connected securely.

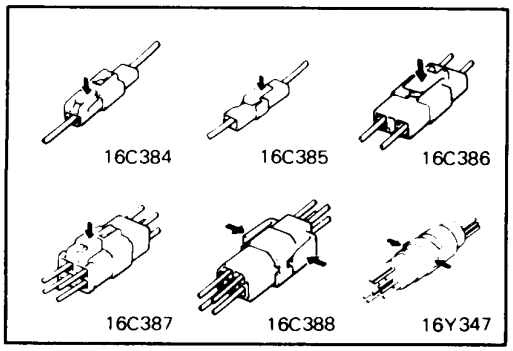
Nominal size (designated by SAE gauge No. sectional area in mm^2 of wire)	Permissible current	
	Within engine compartment	Other areas
0.3 mm^2		5A
0.5 mm^2	7A	13A
0.85 mm^2	9A	17A
1.25 mm^2	12A	22A
2.0 mm^2	16A	30A
3.0 mm^2	21A	40A
5.0 mm^2	31A	54A

Circuits using shielded wires prevent the effects of ignition noise, radio interference, etc. If shielded wires are defective, replace as a harness assembly.
If additional optional equipment is to be installed in the vehicle, follow the procedure listed in the appropriate instruction manual; however, be sure to pay careful attention to the following points:

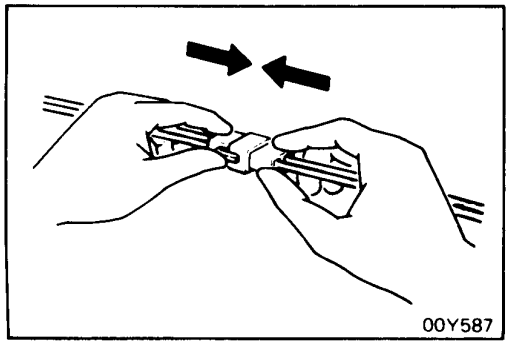
(1) In order to avoid overloading the wiring, take the electrical current load of the optional equipment into consideration, and determine the appropriate wire size.
(2) Where possible, route the wiring through the existing harness.
(3) If an ammeter or similar instrument is to be connected to a live-wire circuit, use tape to protect the wire, use a clamp to secure the wire, and make sure that there is no contact with any other parts.
(4) Be sure to provide a fuse for the load circuit of the optional equipment.
(5) The 0.3 mm^2 size cables are intended for use in limited applications such as the electrical signal circuits, indicator lamp and illumination lamp circuits. They must not be used in the other applications.



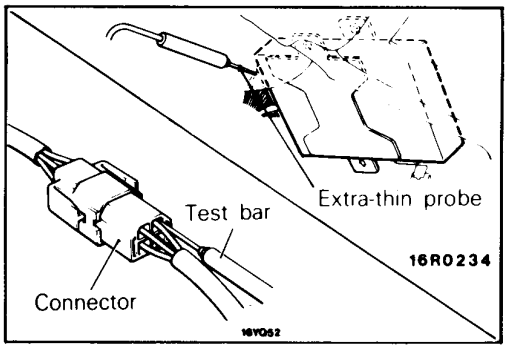
10. When disconnecting a connector, be sure to pull only the connector, not the harness.



11. Disconnect connectors which have catches by pressing in the direction indicated by the arrows in the illustration.



12. Connect connectors which have catches by inserting the connectors until they snap.



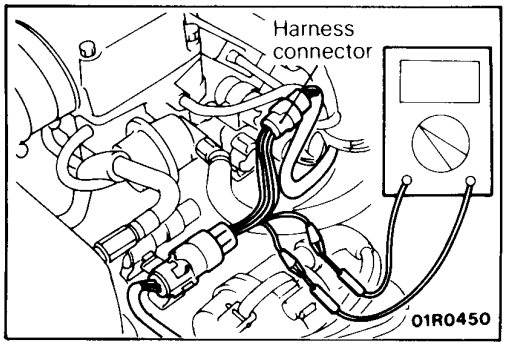
INSPECTION OF HARNESS CONNECTOR

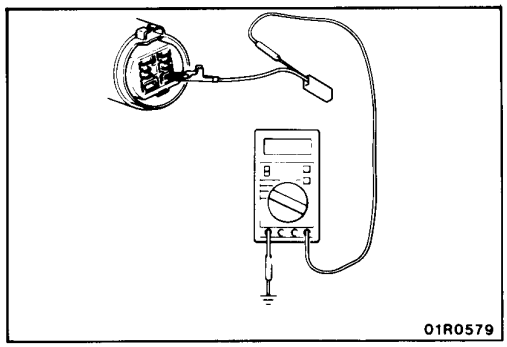
VOLTAGE/CONTINUITY CHECK AT CONNECTOR

Follow the steps below to avoid causing poor connector contact and/or reduced waterproof performance of connectors when checking continuity and/or voltage at connectors.

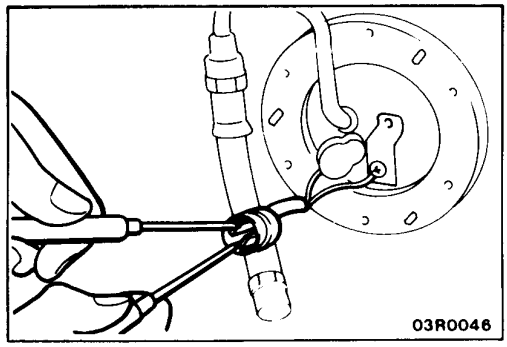
(1) Ordinary (non-waterproof) connectors
Check by inserting the test bar from the harness side. Note that if the connector (control unit, etc.) is too small to permit insertion of the test bar, it should not be forced; use a special tool (the extra-thin probe in the harness set for checking) for this purpose.

(2) Waterproof connectors
If checking is performed with the circuit in the state of continuity, be sure to use the special tool (harness connector).
Never insert a test bar from the harness side, because to do so will reduce the waterproof performance and result in corrosion.



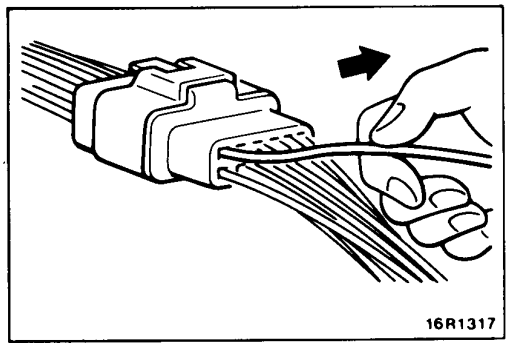


(3) If the connector is disconnected for checking and the facing part is the female pin side, a special tool (the harness for checking the contact pressure of connector pins, provided in the harness set for checking) should be used.
Never force the insertion of a test bar, because to do so will cause poor or improper contact.

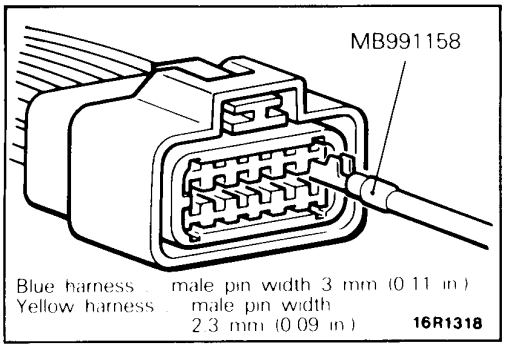


(4) If the facing part is the male pin side, contact the test bar directly to the pins.
Care must be taken not to short-circuit the connector pins.

CHECK FOR IMPROPER ENGAGEMENT OF TERMINAL



When terminal stopper of connector is out of order, engagement of male and female terminals becomes improper even when connector itself is engaged perfectly and terminal sometimes slips out to rear side of connector. Ascertain, therefore, that each terminal does not come off connector by pulling each harness wire.



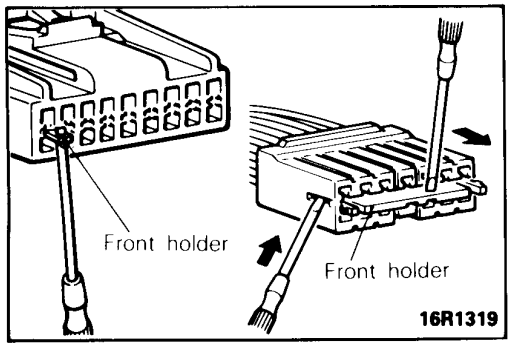
CHECKING CONNECTOR CONNECTIONS

When checking connectors, follow the procedures described below.
Using the special tool (the harness for checking the contact pressure of connector pins, provided in the harness set for checking), check the connection and fit of the male and female pins.
(Pin pull-out force: 100g (3.5 oz) or more)

Caution
There are two types of harnesses for checking the connection pressure, depending on the width of the connector pin; use the correct size for the connector to be checked.

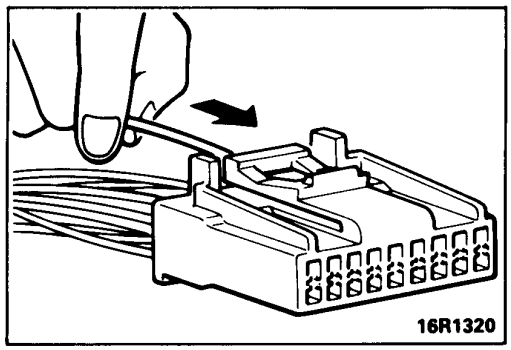
ENGAGING AND DISENGAGING OF CONNECTOR TERMINAL

Connector which gives loose engagement shall be rectified by removing female terminal from connector housing and raise its lance to establish securer engagement. Removal of connector housing and raise its lance to establish securer engagement. Removal of connector terminal used for ECI and ELC 4 A/T control circuit shall be done in the following manner.

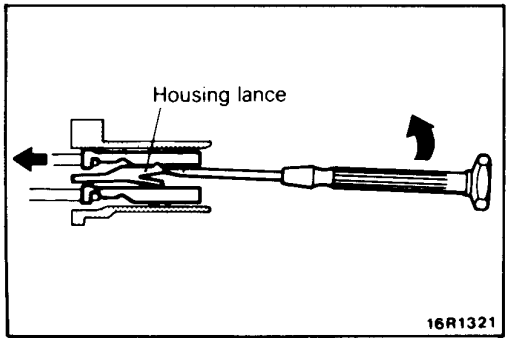


COMPUTER CONNECTOR

(1) Insert screwdriver [1.4 mm (0.06 in.) width] as shown in the figure, disengage front holder and remove it.

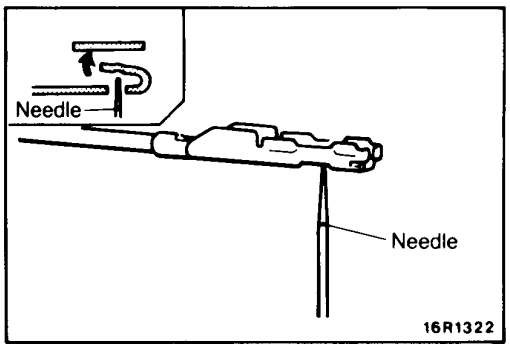


(2) Insert harness of terminal to be rectified deep into connector from harness side and hold it there.

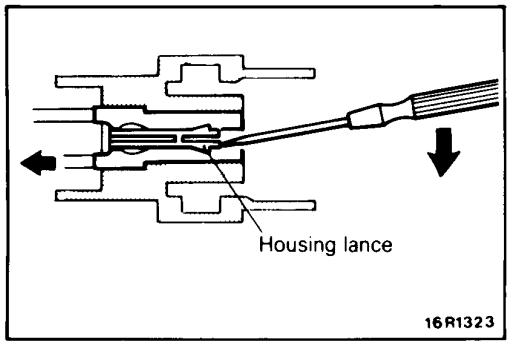


(3) Insert tip of screwdriver [1.4 mm (0.06 in.) width] into connector in a manner as shown in the figure, raise housing lance slightly with it and pull out harness.

NOTE
Tool No. 753787-1 supplied by AMP can be used instead of screwdriver.

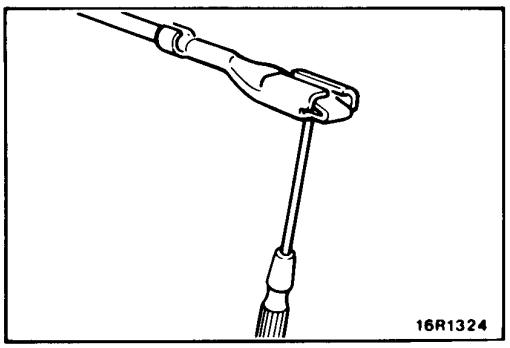


(4) Insert needle through a hole provided on terminal and raise contact point of male terminal.

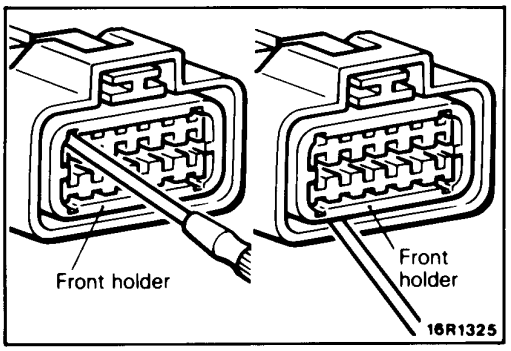


ROUND WATERPROOF CONNECTOR

(1) Remove waterproof cap by using a screwdriver.
(2) Insert tip of screwdriver [1.4 mm (0.06 in.) or 2.0 mm (0.08 in.) width] as shown in the figure, raise housing lance slightly with it and pull out harness.

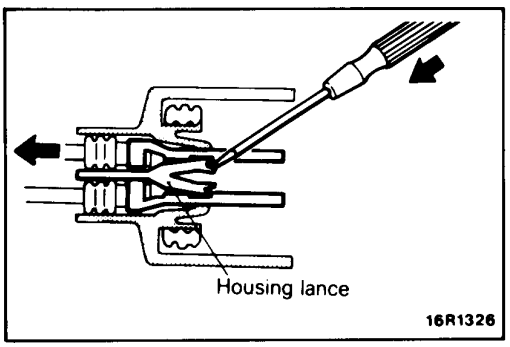


(3) Insert screwdriver through a hole provided on terminal and raise contact point of male terminal.

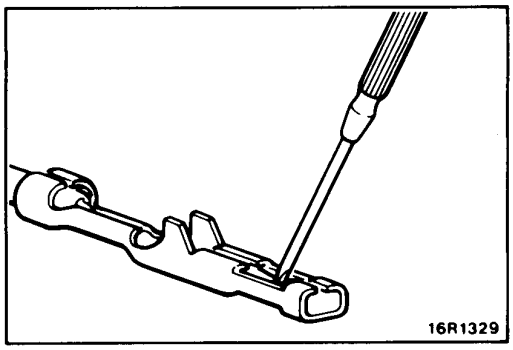


RECTANGULAR WATERPROOF CONNECTOR

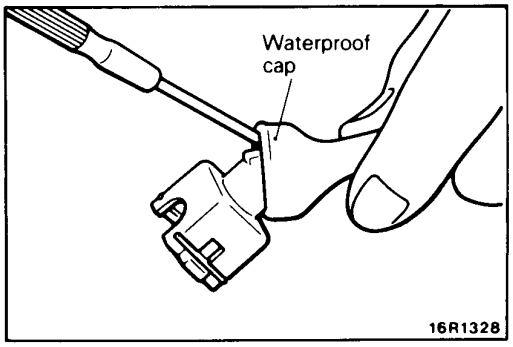
(1) Disengage front holder by using a screwdriver and remove it.



(2) Insert tip of screwdriver [*0.8 mm (0.03 in.) width] into connector in a manner as shown in the figure, push it lightly to raise housing lance and pull out harness.
*If right size screwdriver is not available, convert a conventional driver to suit the size.

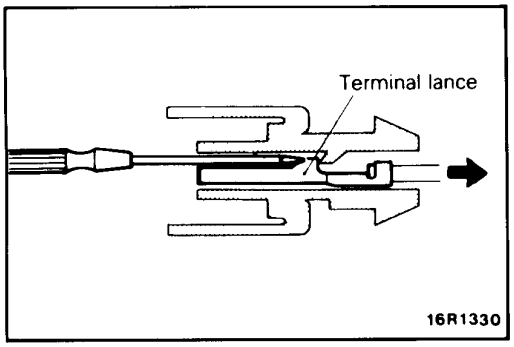


(3) Press contact point of male terminal down by holding a screwdriver [1.4 mm (0.06 in.) width] in a manner as shown in the figure.

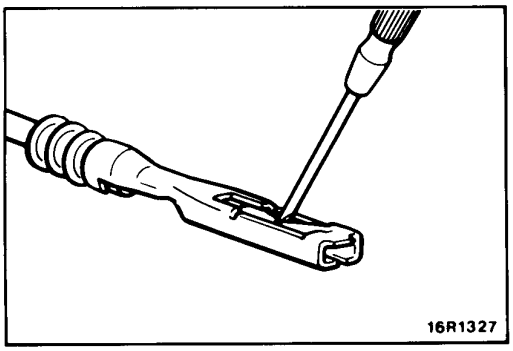


INJECTOR CONNECTOR

(1) Remove waterproof cap.



(2) Insert tip of screwdriver [1.4 mm (0.06 in.) width] into connector in a manner as shown in the figure, press in terminal lance and pull out harness.



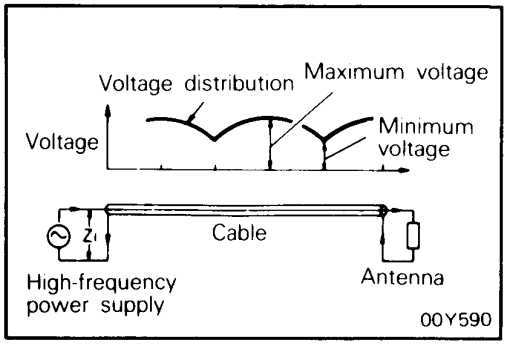
(3) Press contact point of male terminal down by holding a screwdriver [1.4 mm (0.06 in.) width] in a manner as shown in the figure.

Caution
Correct lance to be in proper condition before terminal is inserted into connector.

NOTE ON INSTALLATION OF RADIO EQUIPMENT

The computer of the electronic control system has been designed so that external radio waves will not interfere with its operation. However, if antenna or cable of amateur transceiver etc. is routed near the computers, it may affect the operation of the computers, even if the output of the transceiver is no more than 25W.
To protect each of the computers from interference by transmitter (hum, transceiver, etc.), the following should be observed.

1. Install the antenna on the roof or rear bumper.
2. Because radio waves are emitted from the coaxial cable of the antenna, keep it 200 mm (7.9 in.) away from the computers and the wiring harness. If the cable must cross the wiring harness, route it so that it runs at right angles to the wiring harness.
3. The antenna and the cable should be well matched, and the standing-wave ratio* should be kept low.



***Standing-wave ratio**

If an antenna and a cable having different impedances are connected, the input impedance Zi will vary in accordance with the length of the cable and the frequency of the transmitter, and the voltage distribution will also vary in accordance with the location.
The ratio between this maximum voltage and minimum voltage is called the standing-wave ratio. It can also be represented by the ratio between the impedances of the antenna and the cable.
The amount of radio waves emitted from the cable increases as the standing-wave ratio increases, and this increases the possibility of the electronic components being adversely affected.

4. A transmitter having a large output should not be installed in the vehicle.
5. After installaiton of transmitter, perform the following test and make sure that there is no abnormality.
   (a) Run the engine at idle, emit radio waves from the transmitter and make sure that the engine is not affected.
   (b) Set the vehicle speed at about 50 km per hour (31 mph) by speed control system, emit radio waves from the transmitter and make sure that the vehicle speed does not change.

TROUBLESHOOTING

The most important point in troubleshooting is to determine "Probable Causes". Once the probable causes are determined, parts to be checked can be limited to those associated with such probable causes. Therefore, unnecessary checks can be eliminated. The determination of the probable causes must be based on a theory and be supported by facts and must not be based on intuition only.

TROUBLESHOOTING STEPS

If an attempt is made to solve a problem without going through correct steps for troubleshooting, the problem symptoms could become more complicated, resulting in failure to determine the causes correctly and making incorrect repairs. The four steps below should be followed in troubleshooting.

1 Observation of Problem Symptoms

Observe the symptom carefully. Check if there are also other problems.

2 Determination of Probable Causes

In determining the probable causes, it is necessary to check the wiring diagram to understand the circuit as a system. Knowledge of switches, relays and other parts is necessary for accurate determination. The causes of similar problems in the past must be taken into account.

3 Checking of Parts Associated with Probable Causes and Determination of Faulty Parts

Troubleshooting is carried out by making step by step checks until the true cause is found. Always go through the procedures considering what check is to be made where for the best results.

4 Repair and Confirmation

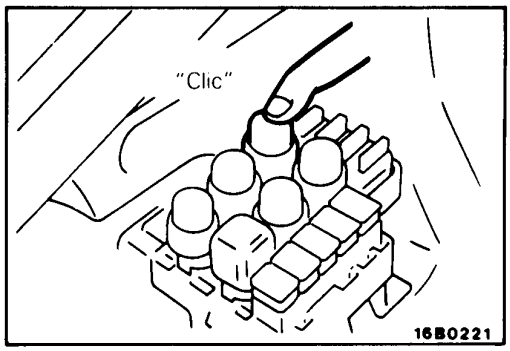
After the problems are corrected, be sure to check that the system operates correctly. Also check that new problems have not been caused by the repair.

INFORMATION FOR DIAGNOSIS

This manual contains the cable diagrams as well as the individual circuit drawings, operational explanations, and troubleshooting hints for each component required to facilitate the task of troubleshooting. The information is compiled in the following manner:

(1) Cable diagrams show the connector positions, etc., on the actual vehicle as well as the harness path.
(2) Circuit drawings show the configuration of the circuit with all switches in their normal positions.
(3) Operational explanations include circuit drawings of voltage flow when the switch is operated and how the component operates in reaction.
(4) Troubleshooting hints include numerous examples of problems which might occur, traced backward in a common-sense manner to the origin of the trouble. Problems whose origins may not be found in this manner are pursued through the various system circuits.

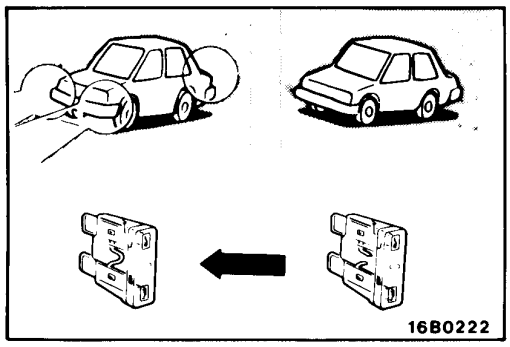
NOTE
Components of ECI, ETACS, ECS, etc. with ECU do not include 3 and 4 above. For this information, refer to a manual which includes details of these components.



INSPECTION

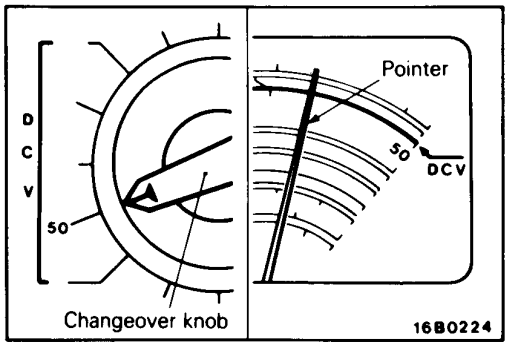
1. Visual and aural checks

Check relay operation, blower motor rotation, lamp illumination, etc. visually or aurally. The flow of current is invisible but can be checked by the operation of the parts.



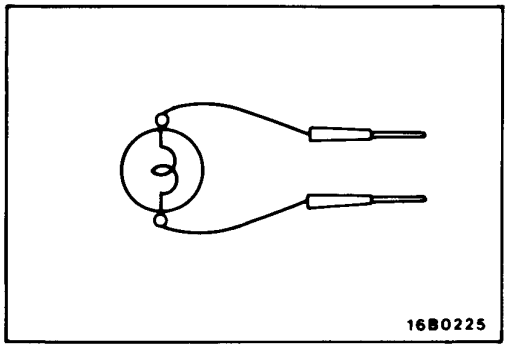
2. Simple checks

For example, if a headlamp does not come on and a faulty fuse or poor earthing is suspected, replace the fuse with a new one or earth the lamp to the body by a jumper wire to determine which part is responsible for the problem.



3. Checking with instruments

Use an appropriate instrument in an adequate range and read the indication correctly. You must have sufficient knowledge and experience to handle instruments correctly.

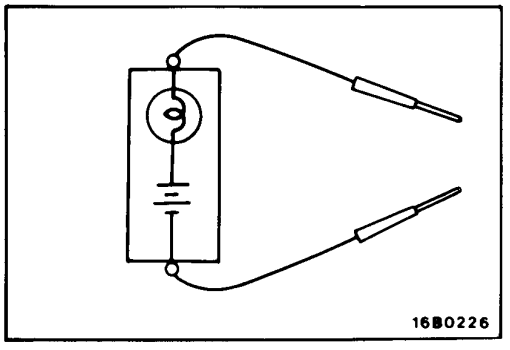


INSPECTION INSTRUMENTS

In inspection, make use of the following instruments.

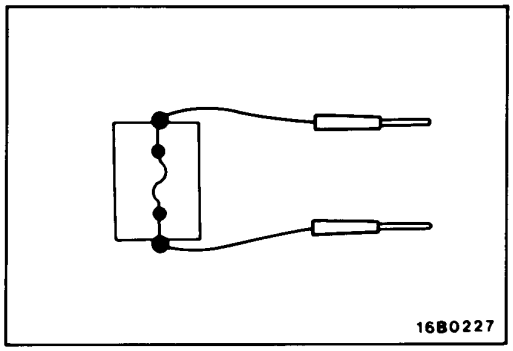
1. Test lamps

A test lamp consists of a 12V bulb and lead wires. It is used to check voltages or shortcircuits.



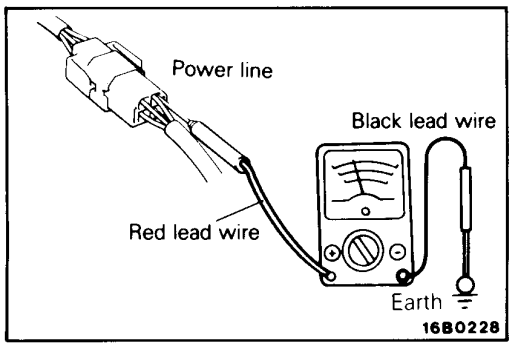
2. Self-power test lamp

A self-power test lamp consists of a bulb, battery and lead wires connected in series. It is used to check continuity or earthing.



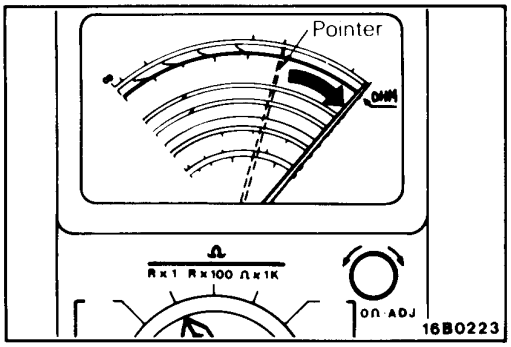
3. Jumper wire

A jumper wire is used to close an open circuit. Never use one to connect a power supply directly to a load.



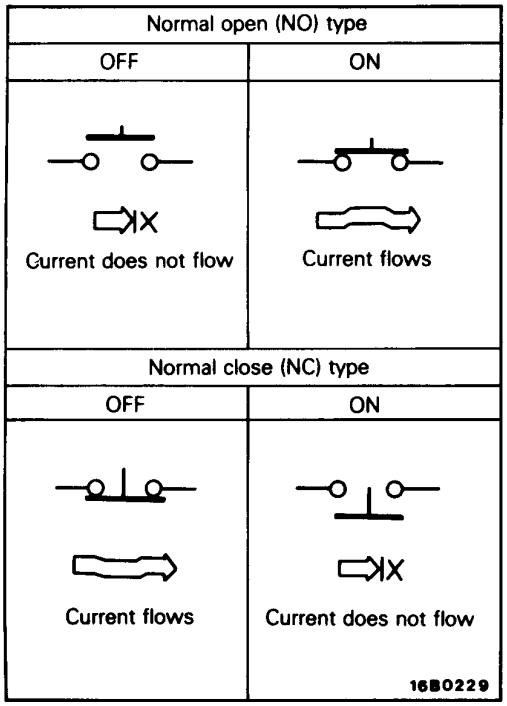
4. Voltmeter

A voltmeter is used to measure the circuit voltage. Normally, the positive (red lead) probe is applied to the point of voltage measurement and the negative (black lead) probe to the body earth.



5. Ohmmeter

An ohmmeter is used to check continuity or measure resistance of a switch or coil. If the measuring range has been changed, the zero point must be adjusted before measurement.

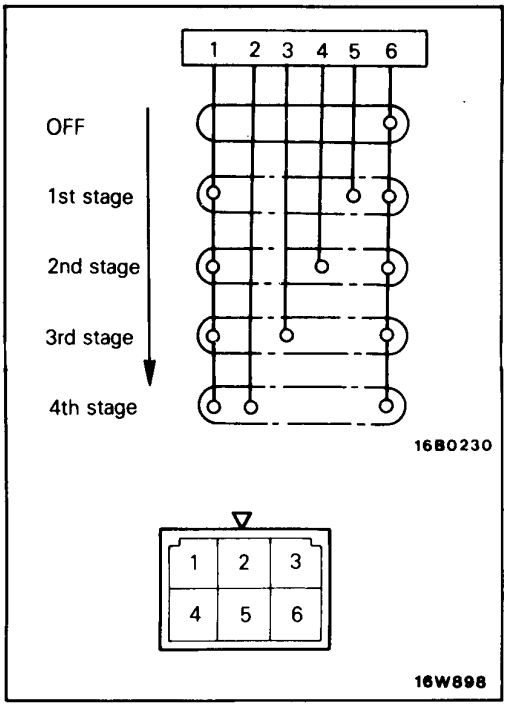


CHECKING SWITCHES

In a circuit diagram, a switch is represented by a symbol and in the idle state.

1. Normal open or normal close switch

Switches are classified into those which make the circuit open and those which make the circuit closed when off.

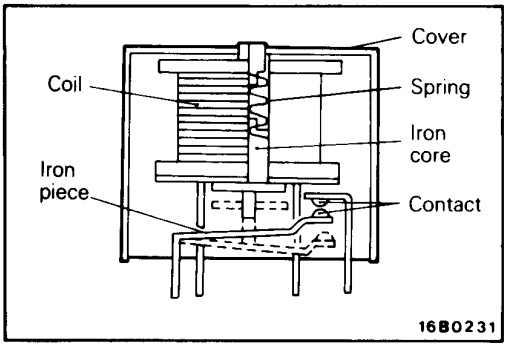


2. Switch connection

This figure illustrates a complex switch.
The continuity between terminals at each position is as indicated in the table below.

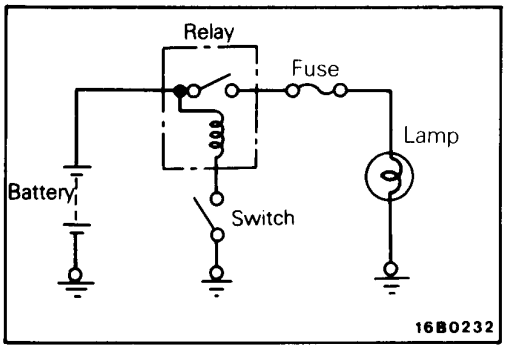
Position \ Terminal No.	1	2	3	4	5	6
OFF						
1st stage	○				○	○
2nd stage	○			○		○
3rd stage	○		○			○
4th stage	○	○				○

NOTE
○—○ denotes continuity between terminals.

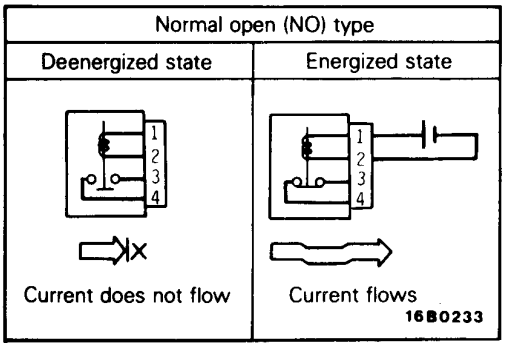


CHECKING RELAYS

1. When current flows through the coil of a relay, its core is magnetized to attract the iron piece, closing (ON) the contact at the tip of the iron piece. When the coil current is turned off, the iron piece is made to return to its original position by a spring, opening the contact (OFF).

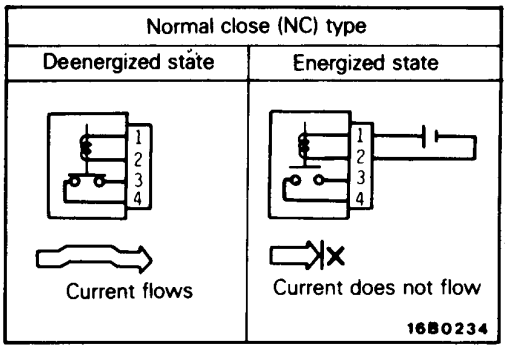


2. By using a relay, a heavy current can be turned on and off by a switch of small capacity. For example, in the circuit shown here, when the switch is turned on (closed), current flows to the coil of the relay. Then, its contact is turned on (closed) and the lamp comes on. The current flowing at this time to the switch is the relay coil current only and is very small.

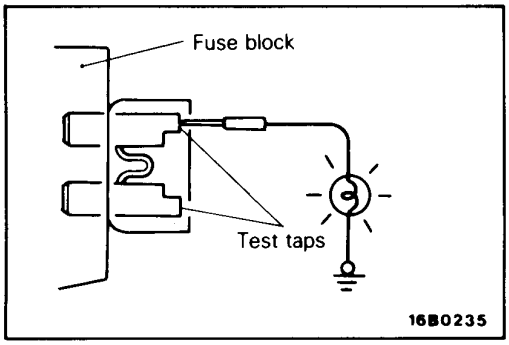


3. The relays may be classified into the normal open type and the normal close type by their contact construction.

NOTE
The deenergized state means that no current is flowing through the coil and the energized state means that current is flowing through the coil.

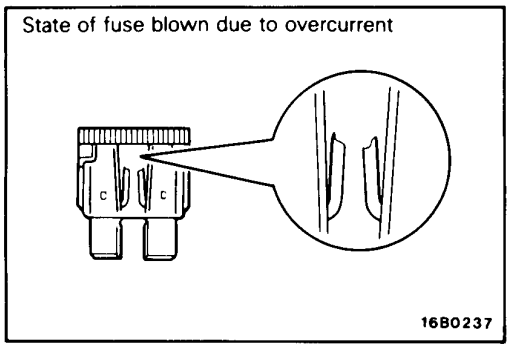


When a normal close type relay as illustrated here is checked, there should be continuity between terminals (1) and (2) and between terminals 3 and 4 when the relay is deenergized, and the continuity should be lost between terminals 3 and 4 when the battery voltage is applied to the terminals 1 and 2. A relay can be checked in this manner and it cannot be determine if a relay is okay or faulty by checking its state only when it is deenergized (or energized).



CHECKING FUSES

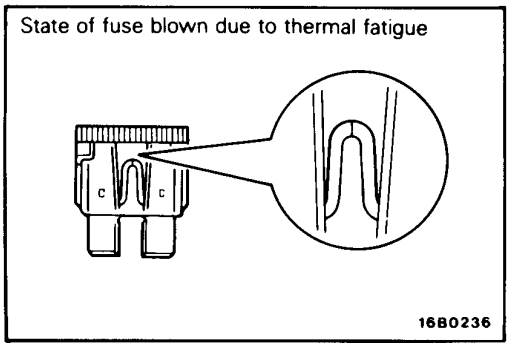
A blade type fuse has test taps provided to allow checking of the fuse itself without removing it from the fuse block. The fuse is okay if the test lamp comes on when its one lead is connected to the test taps (one at a time) and the other lead is earthed. (Change the ignition switch position adequately so that the fuse circuit becomes live.)



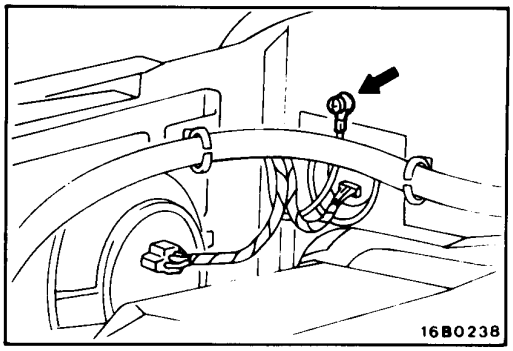
CAUTIONS IN EVENT OF BLOWN FUSE

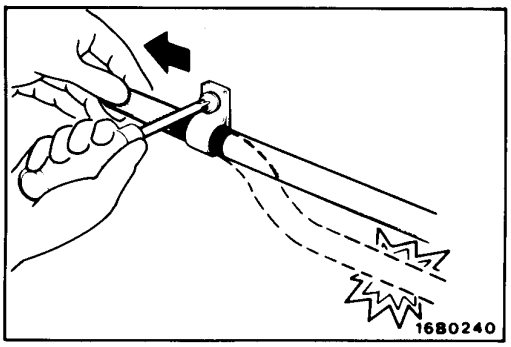
When a fuse is blown, there are two probable causes as follows: One is that it is blown due to flow of current exceeding its rating. The other is that it is blown due to repeated on/off current flowing through it. Which of the two causes is responsible can be easily determined by visual check as described below.

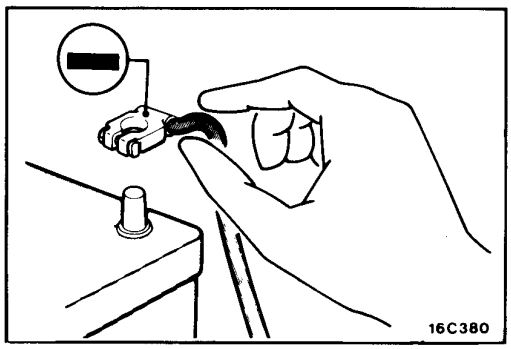
(1) Fuse blown due to current exceeding rating
The illustration shows the state of a fuse blown due to this cause. In this cause, do not replace the fuse with a new one hastily since a current heavy enough to blow the fuse has flowed through it. First, check the circuit for shorting and check for abnormal electric parts. Only after the correction of such shorting or parts, fuse of the same capacity should be used as a replacement. Never use a fuse of larger capacity than the one that has blown. If such a fuse is used, electric parts or wirings could be damaged before the fuse blows in the event an overcurrent occurs again.



(2) Fuse blown due to repeated current on/off
The illustration shows the state of a fuse blown due to repeated current on/off. Normally, this type of problem occurs after fairly long period of use and hence is less frequent than the above type. In this case, you may simply replace with a new fuse of the same capacity.







CHECKING CABLES AND WIRES

1. Check connections for looseness, rust and stains.
2. Check terminals and wires for corrosion by battery electrolyte, etc.
3. Check terminals and wires for open circuit or impending open circuit.
4. Check wire insulation and coating for damage, cracks and degrading.
5. Check conductive parts of terminals for contact with other metallic parts (vehicle body and other parts).
6. Check earthing parts to verify that there is complete continuity between attaching bolt(s) and vehicle body.
7. Check for incorrect wiring.
8. Check that wirings are so clamped as to prevent contact with sharp corners of the vehicle body, etc. or hot parts (exhaust manifold, pipe, etc.).
9. Check that wirings are clamped firmly to secure enough clearance from the fan pulley, fan belt and other rotating or moving parts.
10. Check that the wirings between the fixed parts such as the vehicle body and the vibrating parts such as the engine are made with adequate allowance for vibrations.

HANDLING ON-VEHICLE BATTERY

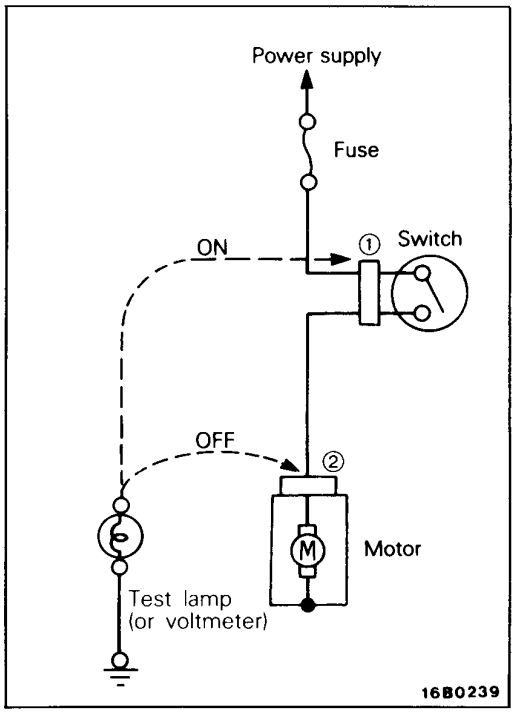
When cheking or servicing does not require power from the on-vehicle battery, be sure to disconnect the cable from the battery (−) terminal. This is to prevent problems that could be caused by shorting of the circuit. Disconnect the (−) terminal first and reconnect it last.

Caution

- **Before connecting or disconnecting the negative cable, be sure to turn off the ignition switch and the lighting switch. (If this is not done, there is the possibility of the semi-conductor parts being damaged.)**
- **On vehicles with multi-point injection engine on ECI-turbo engine, after completion of work (connection of the cable to the battery negative terminal), warm up the engine and then let it idle for approx. five minutes in the following conditions to make sure that the engine is normally idling.**
  (a) Engine coolant temperature:
  80–95°C (176–203°F)
  (b) Lamps, electric fan and accessories: OFF
  (c) Transmission: Neutral
  (Automatic transmission: N or P)
  (d) Steering wheel: in straight-ahead position

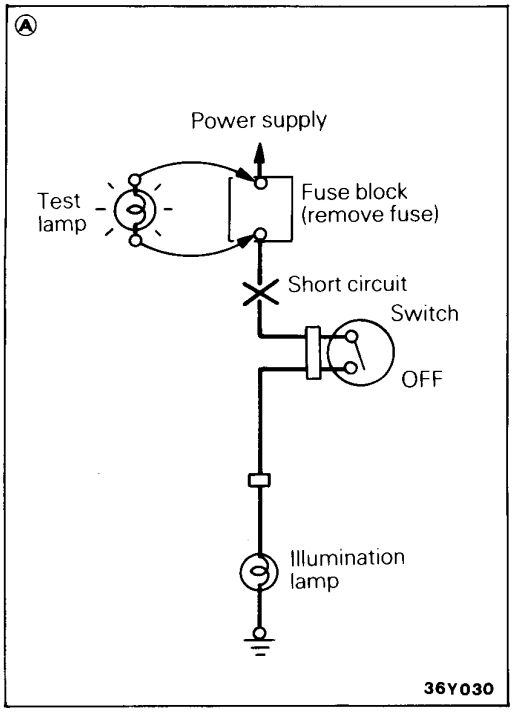
TROUBLESHOOTING

A circuit consists of the power supply, switch, relay, load, earth, etc. There are various methods to check a circuit including an overall check, voltage check, shortcircuit check and continuity check. Each of these methods is briefly described in the following.



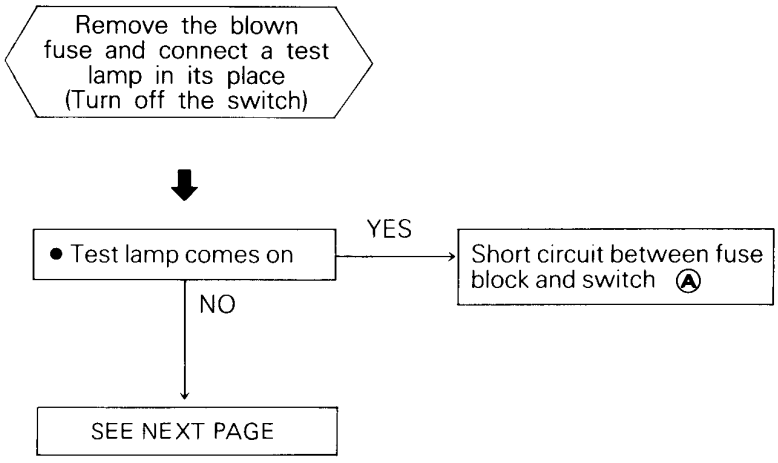
1. VOLTAGE CHECK

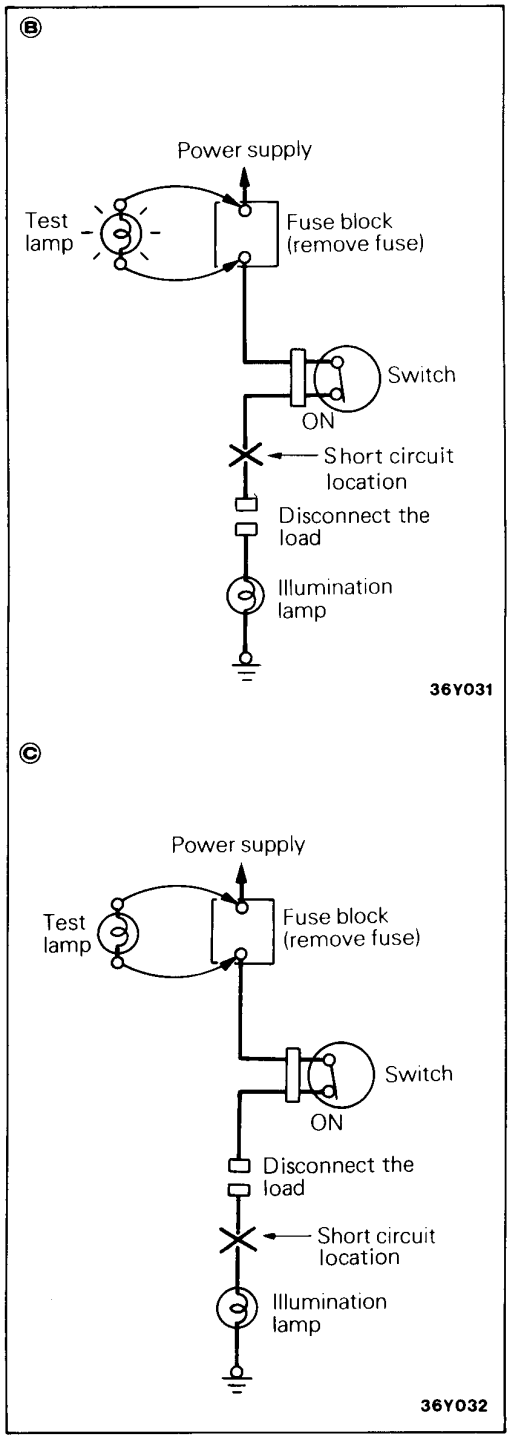
(1) Earth one lead wire of the test lamp. If a voltmeter is used instead of the test lamp, earth the earthing side lead wire.
(2) Connect the other lead wire of the test lamp to the power side terminal of the switch connector. The test lamp should come on or the voltmeter should indicate a voltage.
(3) Then, connect the test lamp or voltmeter to the motor connector. The test lamp should not come on or the voltmeter should indicate no voltage. When the switch is turned on in this state, the test lamp should come on, or the voltmeter should indicate a voltage, with the motor starting to run.
(4) The circuit illustrated here is normal but if there is any problem such as the motor failing to run, check voltages beginning at the connector nearest to the motor until the faulty part is identified.

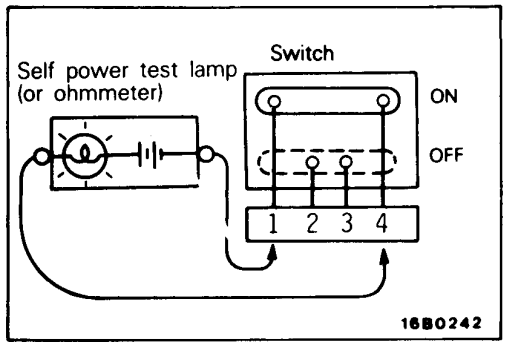


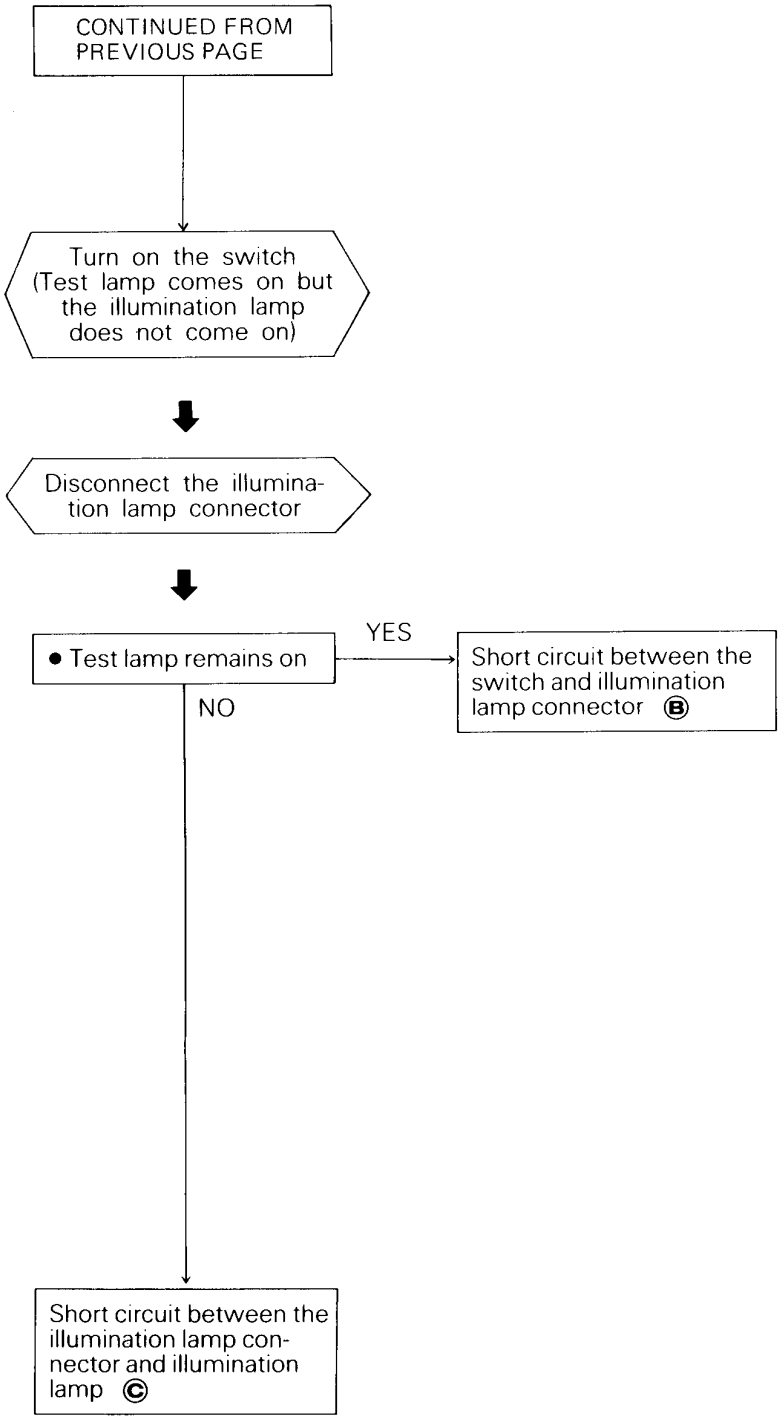
2. CHECKING SHORT CIRCUITS

A blown fuse indicates that a circuit is shorted. The circuit responsible can be determined by the following procedures.









3. CHECKING CONTINUITY

(1) When the switch is in the OFF position, the self power test lamp should come on or the ohmmeter should read 0 ohm only when the terminals 1 and 2 are interconnected.

(2) When the switch is the ON position, the self power test lamp should come on or the ohmmeter should read 0 ohm only when the terminals 3 and 4 are interconnected.

1 HOW TO READ THE WIRING DIAGRAMS

MODELS

Model code	Engine model	Transmission model	Body type
P02VGLZL6	4G32	R5M21	Panel van
P02VGLZR6	4G32	R5M21	Panel van
P02VLZL6	4G32	R5M21	Window van
P03VGLZAL6	4G63	R5M21	Panel van
P03VLZAL6	4G63	R5M21	Window van
P03WLZXL6	4G63	R5M21	Mini-bus
P03WSNPAL6	4G63	R5M21	Mini-bus
P03WLZXAL6	4G63	R5M21	Mini-bus
P03WLZUL6	4G63	R5M21	Mini-bus
P03WLZUAL6	4G63	R5M21	Mini-bus
P03WLNXAL6	4G63	R5M21	Mini-bus
P03WHSNPAL6	4G63	R5M21	Mini-bus
P05VLZL6	4D56	R5M21	Window van
P05VGLZL6	4D56	R5M21	Panel van
P05VGLZR6	4D56	R5M21	Panel van
P05WLZXL6	4D56	R5M21	Mini-bus
P12VJLZL6	4G32	R5M21	Panel van (Long body)
P12VJLZR6	4G32	R5M21	Panel van (Long body)
P13VJLZL6	4G63	R5M21	Panel van (Long body)
P13VJLZAL6	4G63	R5M21	Panel van (Long body)
P13VHLZL6	4G63	R5M21	Window van (Long body)
P15VJLZL6	4D56	R5M21	Panel van (Long body)
P15VJLZR6	4D56	R5M21	Panel van (Long body)
P23VLNL6	4G63	V5M21	Window van <4WD>
P23WLNXL6	4G63	V5M21	Mini-bus <4WD>
P24VLNAL6	4G64	V5M21	Window van <4WD>
P24WLNXAL6	4G64	V5M21	Mini-bus <4WD>
P25VGLNTL6	4D56	V5M21	Panel van <4WD>
P25WLNXTL6	4D56	V5M21	Mini-bus <4WD>

COMPOSITION AND CONTENTS OF WIRING DIAGRAMS

This manual consists of wiring harness diagrams, installation locations of individual parts, circuit diagrams, and wiring diagram.

Section	Basic contents
Wiring harness diagrams	Connector locations and harness wiring configurations on actual vehicles are illustrated.
Installation locations of individual parts	Locations are shown for earth points of relays, control units, sensors, diodes, check terminals, spare terminals, fusible links, fuses, etc. In the parts lists, parts are listed in alphabetical order.
Circuit diagrams	Circuits from power supply to earth are shown completely, classified according to system. There is a main division into power circuits, and circuits classified by system. The circuits classified by system also include operation and troubleshooting hints. ● Circuits classified by system For each system, the circuits are shown from battery to earth. ● Operation The normal operation of each system is briefly described, following the route of current flow. ● Troubleshooting hints Check points are briefly described as an aid in troubleshooting. Circuits controlled by the electronic control unit (such as FBC circuits, MPI circuit, etc.) are omitted.
Wiring diagram	The circuit diagram for the entire vehicle is provided.

HOW TO READ CONFIGURATION DIAGRAMS

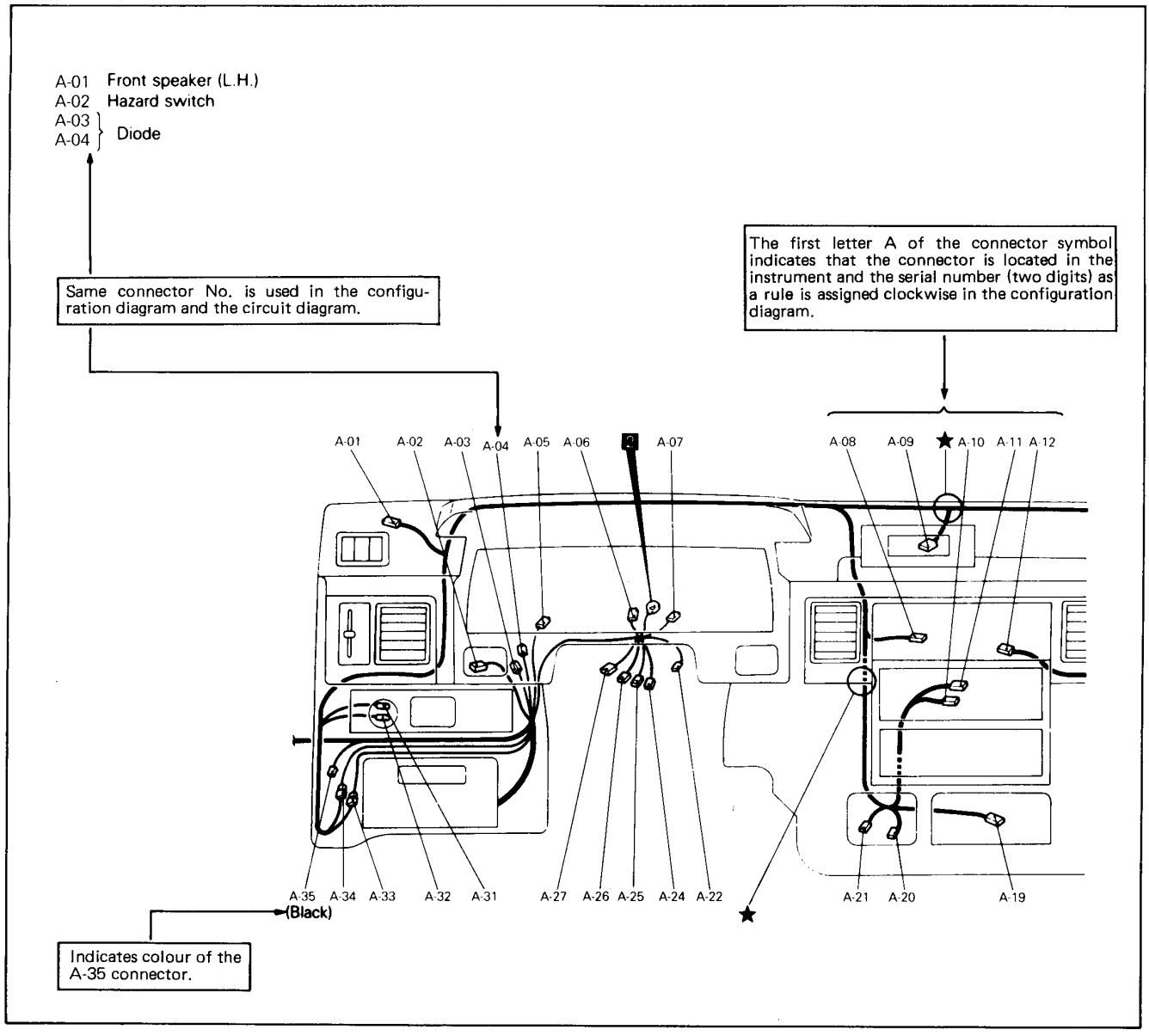
(1) Connector symbols

A configuration diagram shows the installed condition of each connector in a schematic style. The connectors are shown and classified as follows, depending on their locations and are marked by connector symbols.

In case connectors of the same shape (same number of wires) are centralized, their colours are indicated for identification.

Example : A—12 (Black)

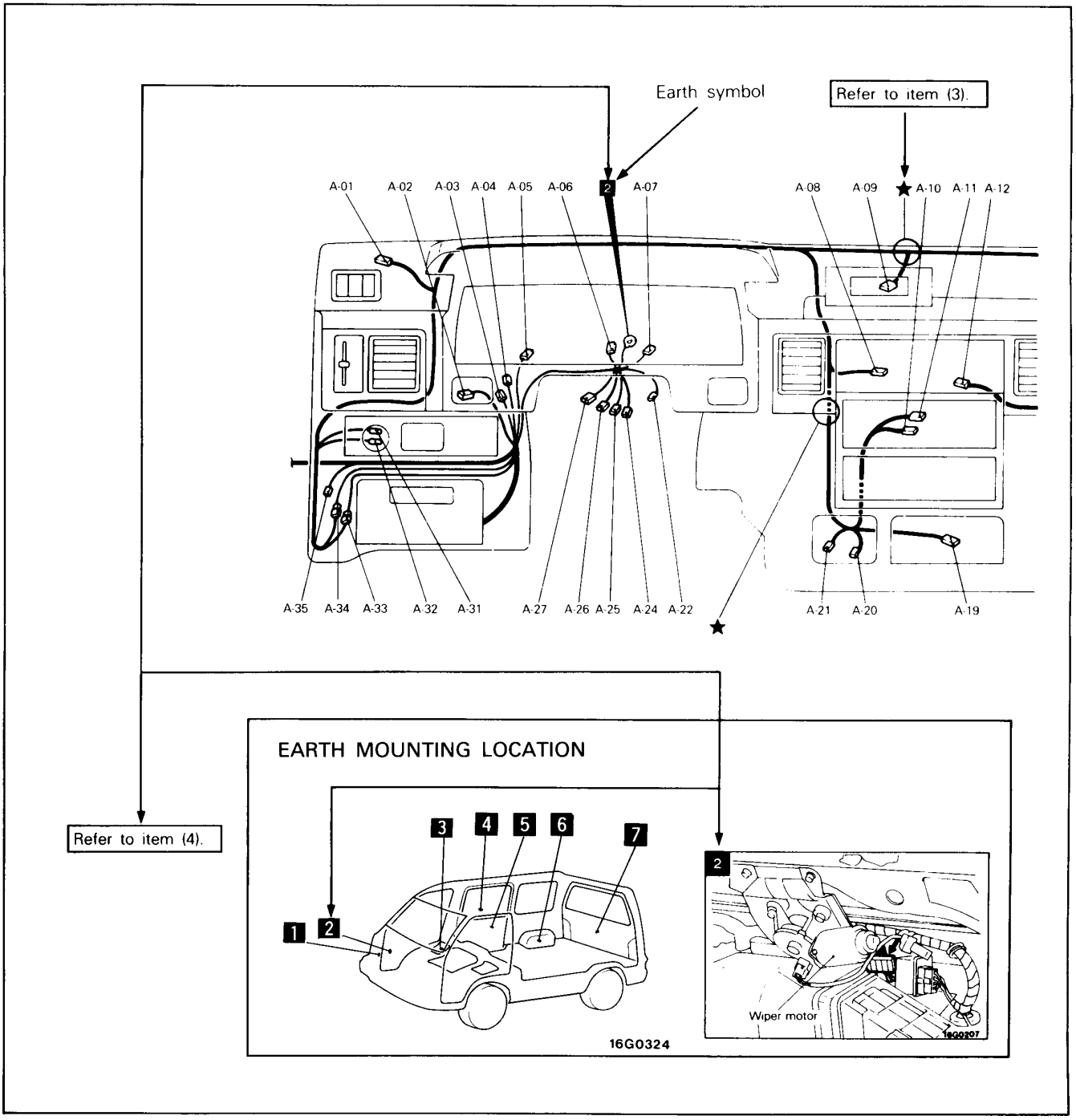
- Connector colour
- Connector's unique number (serial number)
- Connector symbol
  - A : Instrument
  - B : Engine room and Under floor
  - C : Roof · Tailgate and Rear side



(2) Identification of connectors differing according to different vehicle specifications
Without wiring harness connectors, the inter-device or -wiring harness connectors which vary in shape or position on different vehicle specifications are given the specification-dependent connector identification symbol (lower case alphabet) after a serial number.
For detailed information on this specification-dependent symbol, refer to "HOW TO READ CIRCUIT DIAGRAMS".

(3) Indication of standard mounting positions of harnesses
The standard mounting positions of harnesses are shown with the mark ★ in wiring harness configuration diagrams.

(4) Indication of earth point
The position of earth points are shown in wiring harness configuration diagrams. For detailed information on the earth portion, refer to EARTH MOUNTING LOCATIONS.



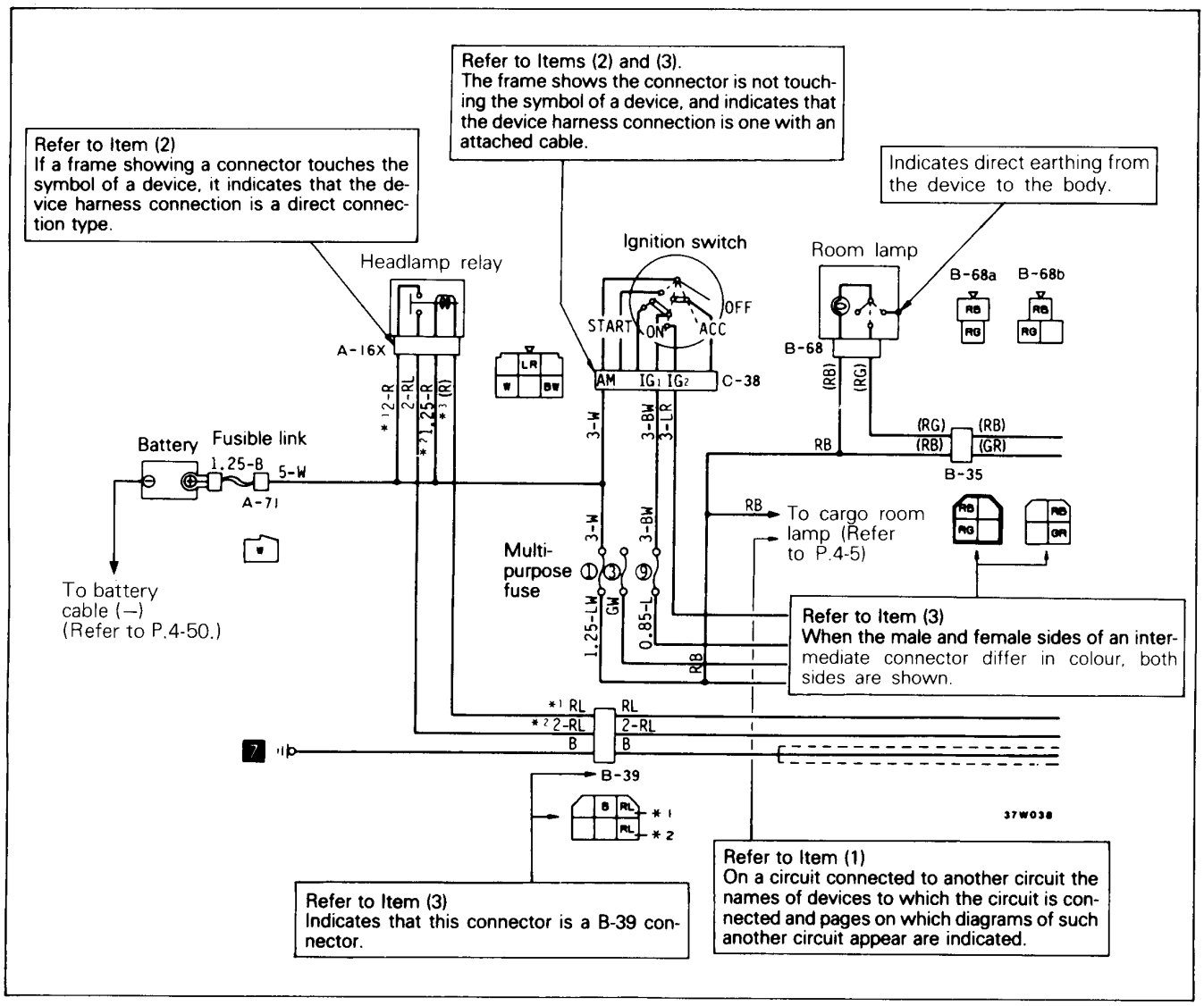
HOW TO READ CIRCUIT DIAGRAMS

The circuit diagrams are functionally separated.

(1) Indication of circuit connected to another circuit
When the circuit in a circuit diagram connected to another circuit in a different diagram, the page number of that different diagram is indicated so that it can be referred to.

(2) Indication of device connections
The circuit diagram shows whether a device harness connection is one with an attached cable or is a direct connection type.

(3) Indication of connectors in circuit diagrams
A connector in a circuit diagram is shown in a frame and is assigned a connector symbol. This symbol corresponds to the symbol in a configuration diagram so that the connector location can be known easily. An intermediate connector has its female side only shown as a rule. However both of the male and female sides are shown when they differ in wiring colour.

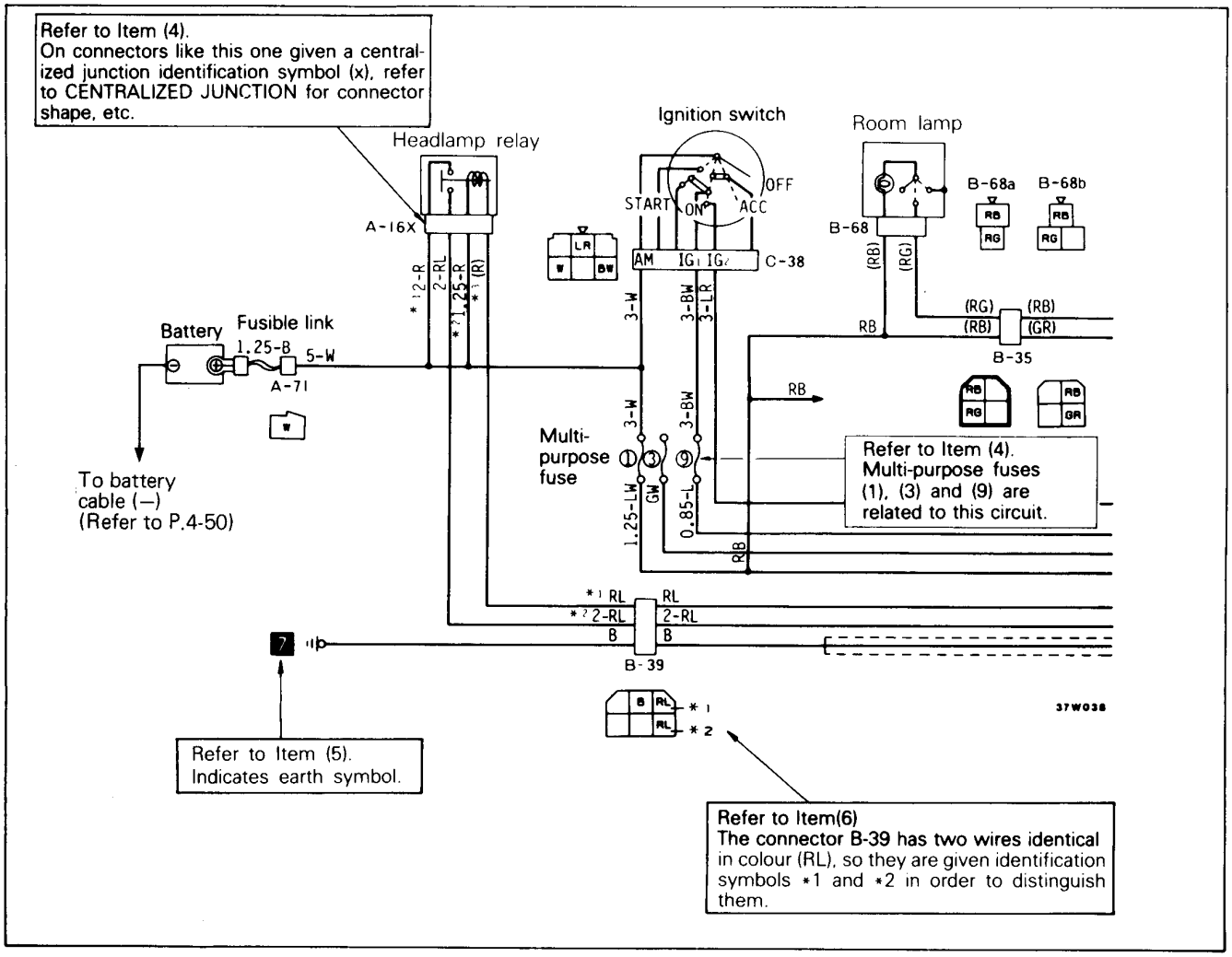


(4) Indication of fuses, fusible links are centralized relays
The fuses and fusible links in a circuit diagram are indicated by a wave symbol (~) and a double wave symbol (≈) respectively. At a centralized junction, the fuses are given fuse numbers and centralized relays are given connector symbols.

Example of centralized junction symbol: A – 01 X
- X — Centralized junction indication symbol
- 01 — Connector's unique number (serial number)
- A — Connector symbol

(5) Indication of earth point
The earth point in a circuit diagram is marked by a earth symbol, making it possible for you to refer to a configuration diagram and to EARTH MOUNTING LOCATIONS.

(6) Indication of wires
In a circuit diagram, the wire diameter and wire color are shown for each wire. If there are several wires of the same colour in a connector, their wire colour indication symbols should be such symbols as *1 and *2 for identification.



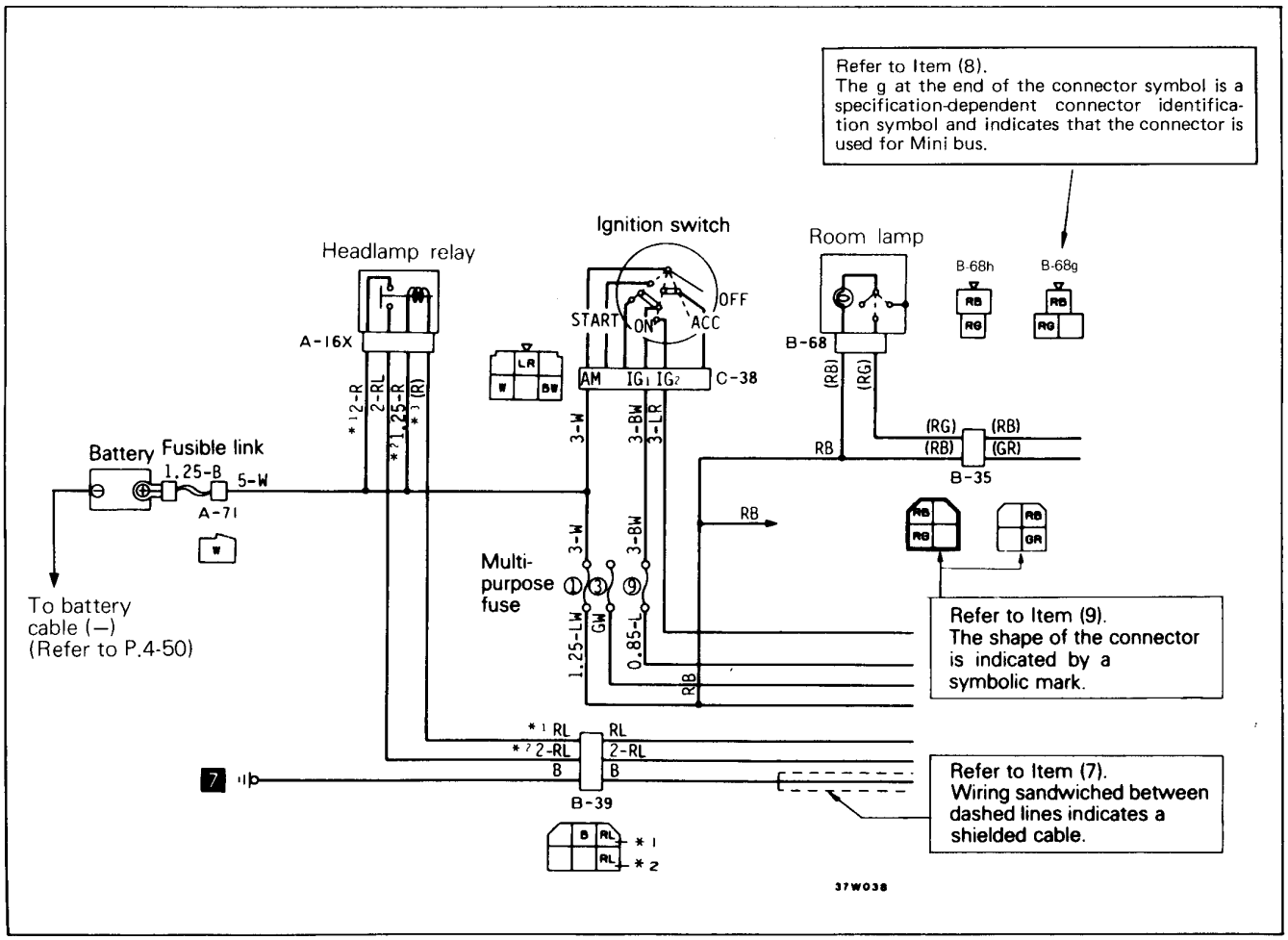
(7) Indication of shielded cables
A shielded cable used, for example, in an electronic control circuit for prevention of malfunctions that may otherwise be caused by radio interference is indicated by a solid line sandwiched between dashed line (═══).

(8) Indication of specification-dependent connectors
With regard to harness connectors, the inter-device and -harness connectors which vary in shape or position on different vehicle specifications, such as those with auto-cruise control and door lamp and those rear speaker, are given a specification-dependent connector identification symbol (lower case alphabet) following the connector symbol.

Example: A — 01a
└——Specification — dependent connector identification symbol

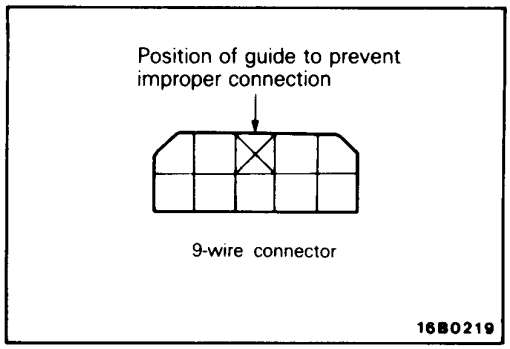
a	L.H. drive vehicles	i	Vehicles with rear speaker
b	R.H. drive vehicles	j	Vehicles without rear speaker
c	Vehicles with auto-cruise control system	k	Vehicles with headlamp leveling system
d	Vehicles without auto-cruise control system	l	Vehicles without headlamp leveling system
e	Vehicles with door lamp	m	5-door models
f	Vehicles without door lamp	n	4-door models
g	Mini bus	o	Vehicles with crystal-light roof
h	Panel van, window van	p	Vehicles without crystal-light roof

(9) Shapes of connectors
The connector shapes are indicated by simplified symbolic marks. For distinction between male and female connectors, refer to HOW TO IDENTIFY CONNECTORS.

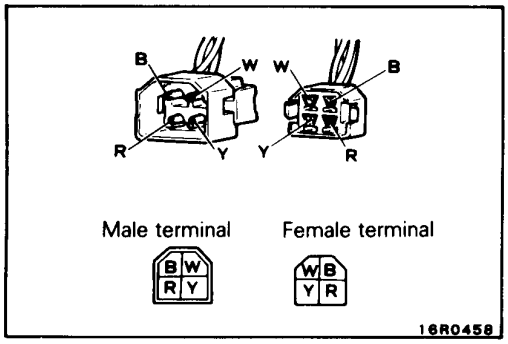


IDENTIFYING CONNECTORS

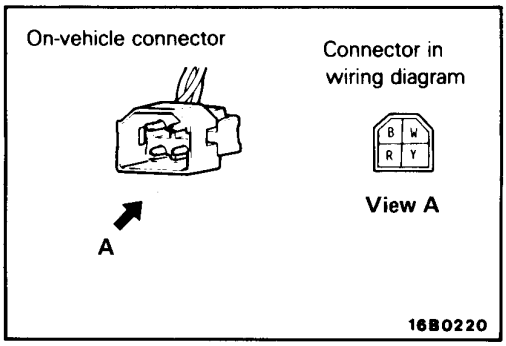
In circuit diagrams, the connectors are indicated by symbolic marks which show the number of their wires and whether they are male or female connectors.



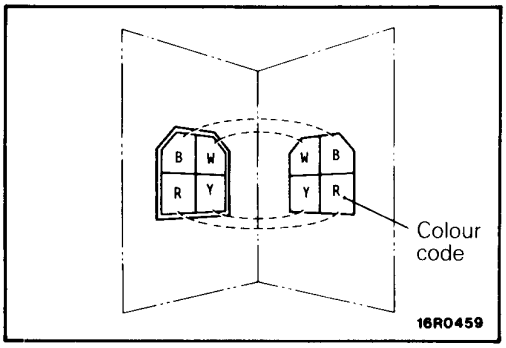
(1) Number of connector wires
The number of divisions in the connector diagram indicates the number of wires. A cross in a division, however, indicates the position of a guide to prevent improper connection. The connector shown here, therefore, is a 9-wire connector.



(2) Identification of male and female connectors
Connectors drawn with double outer lines are male, and those with single outer lines are female.

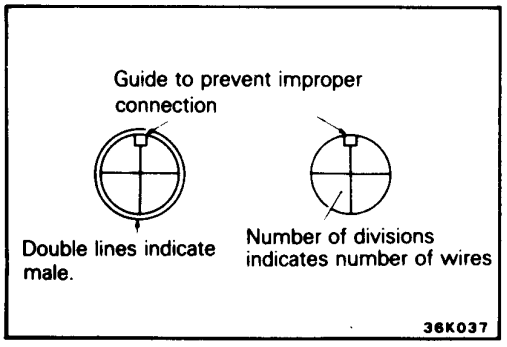


(3) Connector direction
The connector marks show on-vehicle connectors as viewed from the direction shown here.



(4) Identification of connector terminals
The colour codes of a pair of connectors (male and female), if viewed at their joining surfaces, will appear symmetrical as illustrated here. When the connectors are connected, their joining surfaces are put together in the way a book is closed, so the terminals of identical codes are connected together.

NOTE
The colour codes of male and female connectors are not always identical.



(5) Identification of sealed connectors
Identification of round, sealed connectors (water-proof pin terminal connectors) used in radiator fan motor circuits, turbo circuits, etc. is accomplished by the same method as described above.

SYMBOLIC MARKS

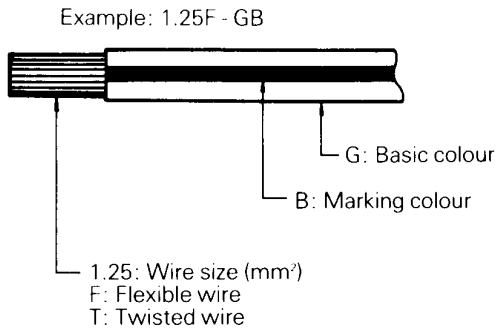
Devices appearing in circuit diagrams are indicated by the following symbols.

Battery	Body earth	Single bulb	Resistor	Diode	Capacitor
Fuse	Equipment earth	Dual bulb	Variable resistor	Zener diode	Crossing of wires without connection
Fusible link	Motor	Speaker	Coil	Transistor	Crossing of wires with connection

16B0243

WIRE COLOUR CODES

Wire colours are identified by the following colour codes.



16B0244

(1) No code indicates 0.5 mm² (0.0008 in.²).
(2) Cable colour code in parentheses indicates 0.3 mm² (0.0005 in².).

Code	Wire colour	Code	Wire colour
B	Black	Ll	Light blue
Br	Brown	O	Orange
G	Green	P	Pink
Gr	Gray	R	Red
L	Blue	Y	Yellow
Lg	Light green	W	White
Sb	Silver	—	—

NOTE
If a cable has two colours, the first of the two colour code characters indicates the basic colour (colour of the cable coating) and the second indicates the marking colour.

ABBREVIATION SYMBOLS

The abbreviation symbols used in wiring diagrams are defined below.

Abbreviation symbols used for combination meters

Abbreviation symbol	Meaning	Abbreviation symbol	Meaning
BEAM	Upper beam indicator lamp	OIL	Oil pressure warning lamp
BRAKE	Brake warning lamp	REED	Reed switch (vehicle speed sensor)
CHG	Charging warning lamp	START	Start indicator lamp
DOOR	Door warning lamp	TACHO	Tachometer
F/GA	Fuel gauge	T/GA	Engine coolant temperature gauge
FILTER	Fuel filter warning lamp	T/L	Turn signal indicator lamp (L.H.)
FUEL	Fuel (remaining) warning lamp	T/R	Turn signal indicator lamp (R.H.)
GLOW	Pre-heat indicator lamp	WASHER	Headlamp washer indicator lamp
HAZARD	Hazard warning indicator lamp	4WD	4 wheel drive indicator lamp
OVER HEAT	Overheat warning lamp	–	–

Abbreviation symbols used for switches

Name of switches and relays	Abbreviation symbol	Operation
Dimmer/passing switch	LO	Low beams ON
	HI	High beams ON
Lighting switch	TAIL	Position, tail, licence-plate and instrument panel lamps ON
	HEAD	Headlamps ON
Room lamp switch	DR	Room lamp ON when a door is open
Front heater blower	LO	Blower operates at low speed
	ML	Blower operates at medium high speed
	MH	Blower operates at medium high speed
	HI	Blower operates at high speed
Rear heater blower switch or rear heater blower control or air conditioner blower switch	LO	Blower operaees at low speed
	M	Blower operates at medium speed
	HI	Blower operates at high speed
Wiper switch	LO	Wipers operate at low speed
	HI	Wipers operate at high speed
	INT	Wipers operate intermittently

APPLICABLE MODEL CATEGORIES

The applicable model categories are indicated below for easy identification.

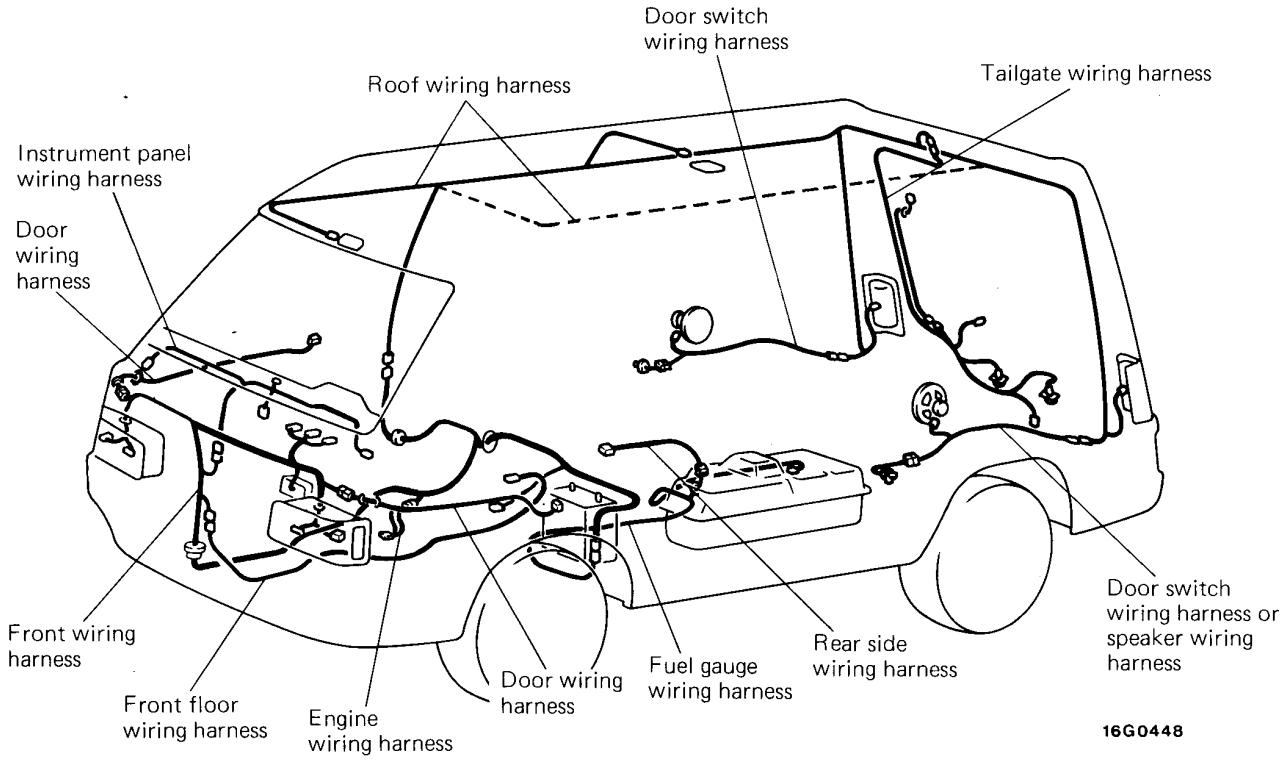
Division	Contents
FBC	Indicates vehicles with feedback carburettor
MPI	Indicates vehicles with multi-point injection
LHD	Indicates L.H. drive vehicles
RHD	Indicates R.H. drive vehicles

2 WIRING HARNESS CONFIGURATION DIAGRAMS

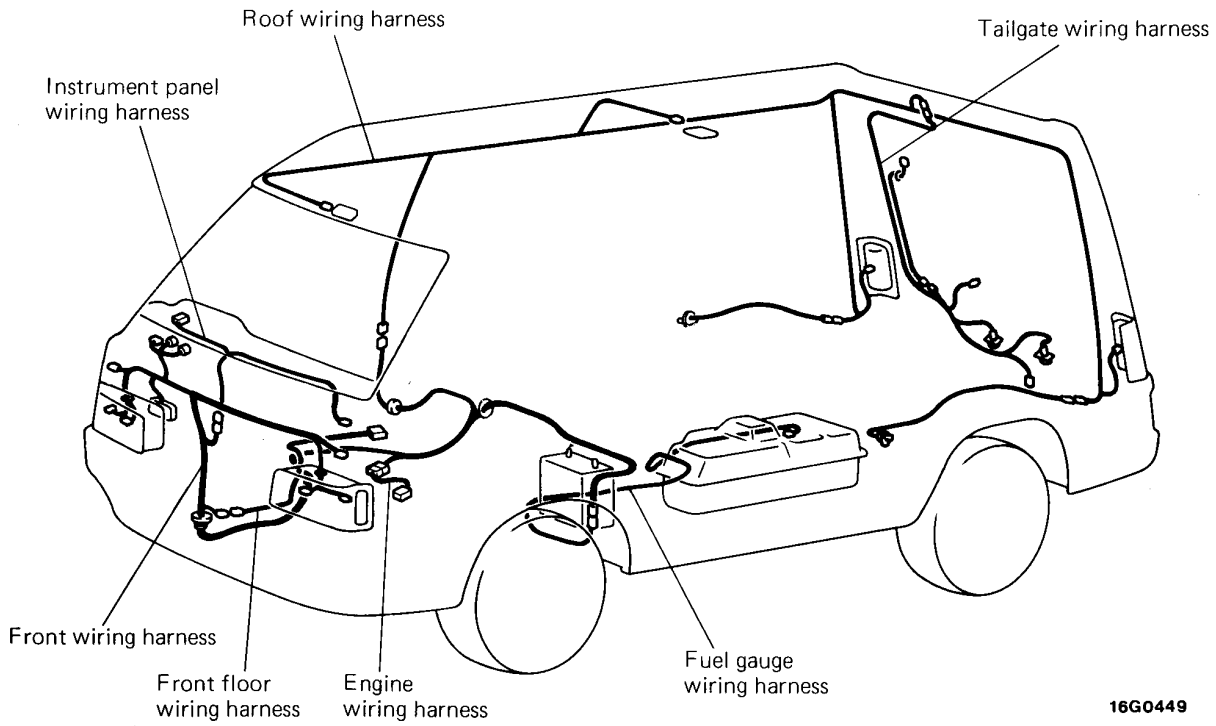
NOTES

1 OVERALL WIRING DIAGRAM

1-1 L.H. drive vehicles



1-2 R.H. drive vehicles

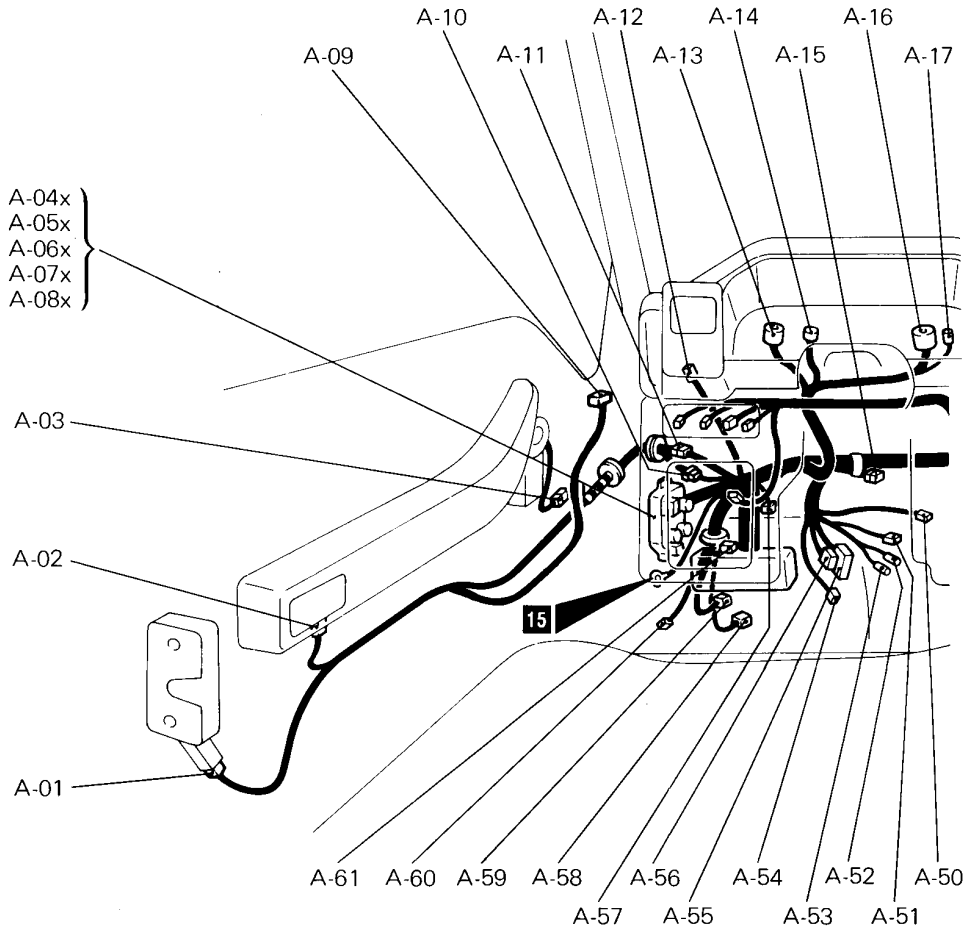


Remarks
(1) This figure shows only the major wiring harness.
(2) The wiring harness indicated by the broken line is applicable to models with the crystal light roof.

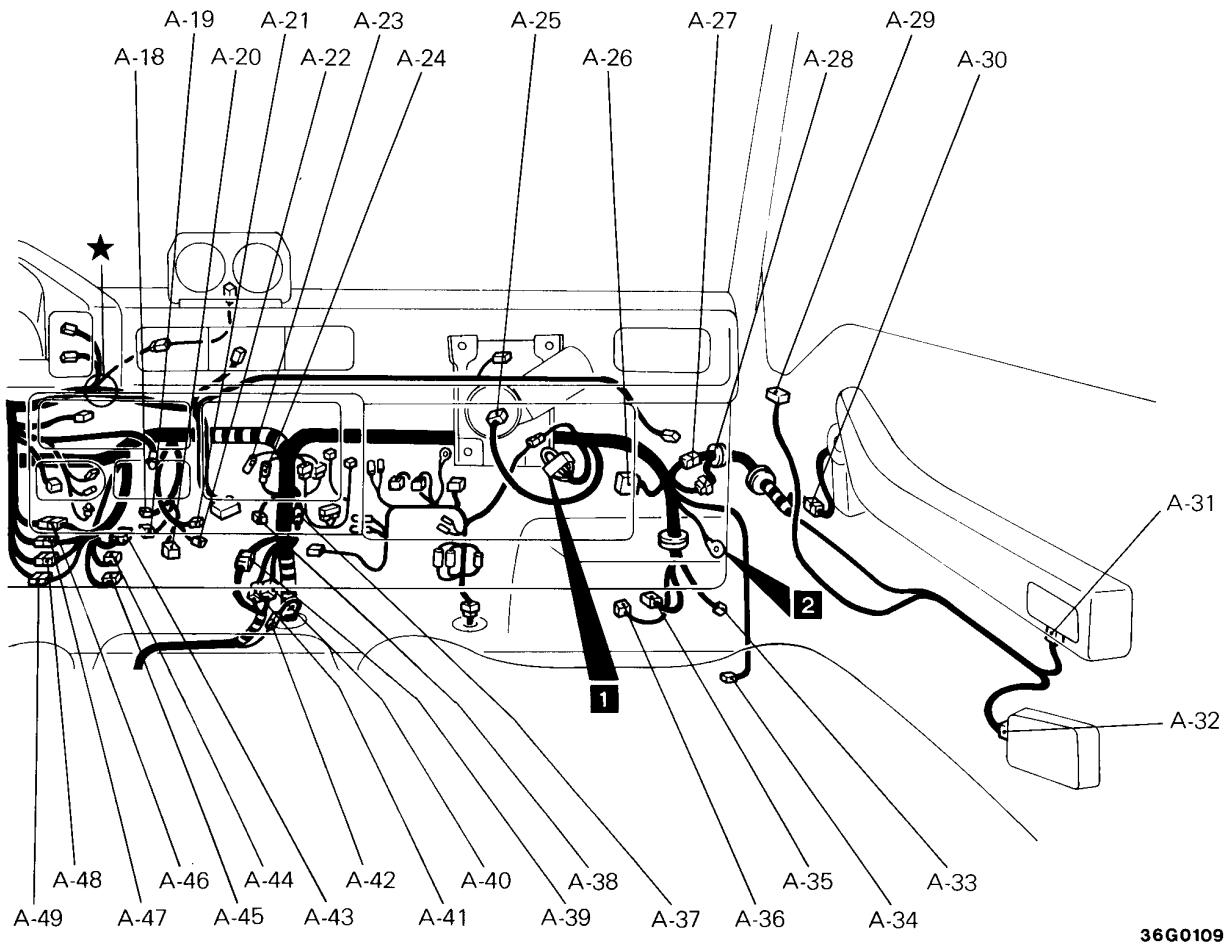
2 INSTRUMENT PANEL

2-1 L.H. drive vehicles

Connector symbol
A -01 thru -61



A-01 Front door lock actuator (L.H.)
A-02 Front door lamp (L.H.)
A-03 Power window motor (L.H.)
A-04x Rear fog lamp relay
A-05x Rear heater relay
A-06x Headlamp relay
A-07x Defogger relay
A-08x Turn signal and hazard flasher unit
A-09 Remote controlled mirror motor (L.H.)
A-10, A-11 Front wiring harness and door wiring harness (L.H.) combination
A-12 Brake fluid level switch
A-13, A-14 Combination meter
A-15 Condenser
A-16, A-17 Combination meter
A-18 Power window relay
A-19 Alternator relay or auto choke relay
A-20 Door lock power relay
A-21 Front heater blower resistor
A-22 Front heater blower motor
A-23 No connection
A-24 Jumper connector
A-25 Front wiper motor
A-26 M.P.I. control relay
A-27, A-28 Front wiring harness and door wiring harness (R.H.) combination
A-29 Remote controlled mirror motor (R.H.)
A-30 Power window motor (R.H.)
A-31 Front door lamp (R.H.)
A-32 Front door lock actuator (R.H.)
A-33 Front combination lamp (R.H.)
A-34 Front washer motor
A-35 Headlamp (R.H.)
A-36 Headlamp leveling unit (R.H.)
A-37 Dedicated fuse (Illumination lamp)
A-38 Diode (Door lamp)

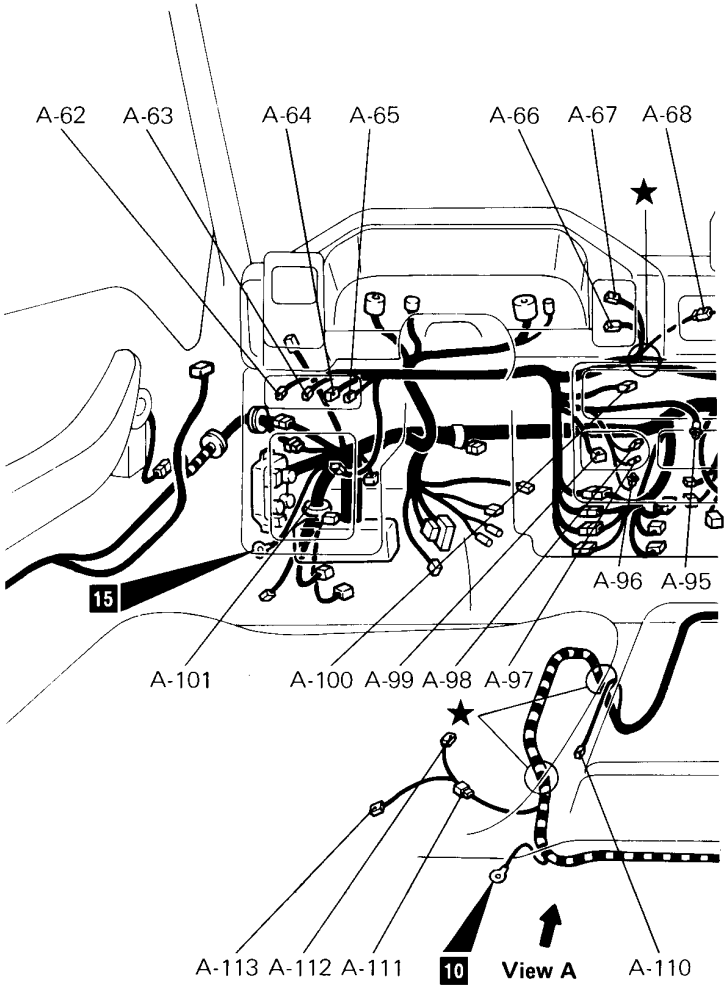


A-39, A-40, A-41, A-42: Front wiring harness and front floor wiring harness combination
A-43 Auto-cruise control unit
A-44 Headlamp washer relay
A-45 Door lock control unit
A-46, A-47, A-48, A-49: Front wiring harness and instrument panel wiring harness combination
A-50 Vacuum switch (Diesel-powered vehicles)
A-51 Stop lamp switch (Vehicles with auto-cruise control)
A-52, A-53: Stop lamp switch
A-54 Clutch switch (Vehicles with auto-cruise control)
A-55 Column switch
A-56 Ignition switch
A-57 Dedicated fuse (Headlamp leveling)
A-58 Headlamp leveling unit (L.H.)
A-59 Headlamp (L.H.)
A-60 Front combination lamp (L.H.)
A-61 Self-diagnosis check connector

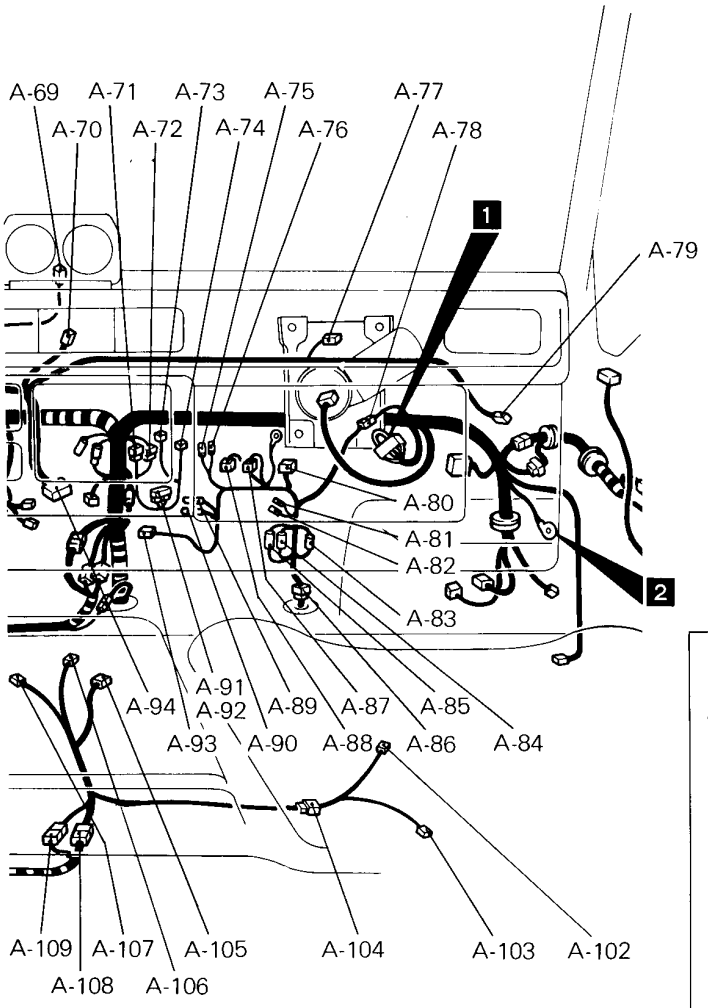
Remarks
(1) The mark ★ shows the standard mounting position of wiring harness.
(2) For details of earth points (example 1), refer to P.3-13.

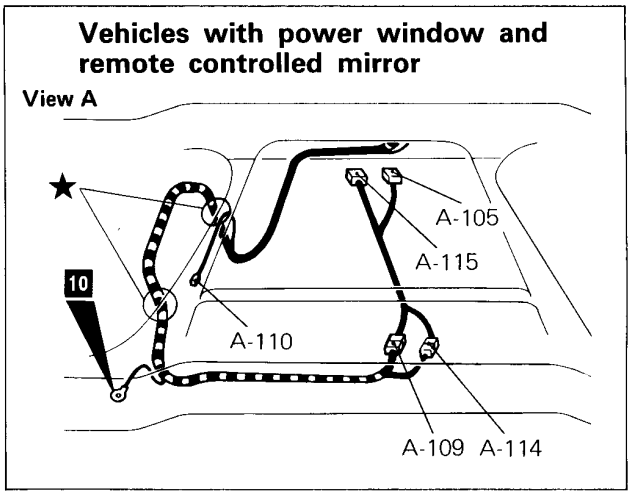
2-1 L.H. drive vehicles

Connector symbol
A -62 thru -117X



A-62 Tailgate lock/unlock switch
A-63 Defogger switch
A-64 Rear heater blower main switch
A-65 Rear fog lamp switch
A-66 Rear wiper and washer switch
A-67 Hazard warning switch
A-68 Instrument panel wiring harness and inclinometer wiring harness combination
A-69 Inclinometer
A-70 Clock
A-71, A-72 Front wiring harness and daytime running lamp wiring harness combination
A-73 Daytime running lamp relay 2
A-74 Daytime running lamp relay 1
A-75, A-76 Fin thermostat (Air conditioner)
A-77 Rear intermittent wiper relay
A-78 Front wiring harness and air conditioner wiring harness combination
A-79 Front speaker (R.H.)
A-80 Air conditioner relay C
A-81, A-82 Capacitor (Side)
A-83, A-84, A-85 Dedicated fuse (Air conditioner)
A-86 Joint (Air conditioner wiring harness)
A-87 Air conditioner relay A
A-88 Air conditioner relay B
A-89, A-90 Capacitor (Tandem)
A-91 Diode 1 (Daytime running lamp)
A-92 Diode 2 (Daytime running lamp)
A-93 Air conditioner switch
A-94 Radio
A-95 Ashtray illumination lamp
A-96 Cigarette lighter illumination lamp



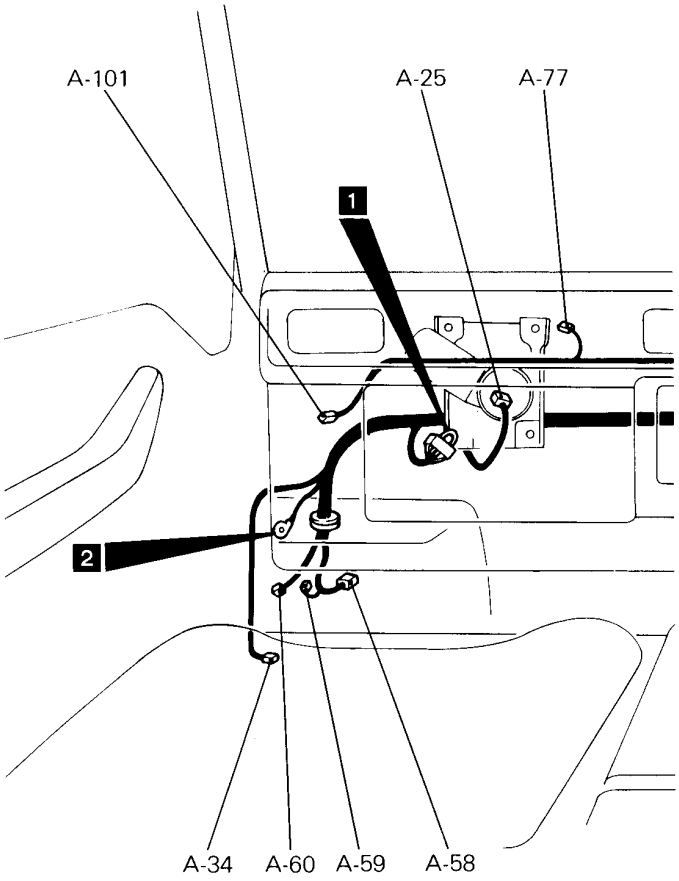


A-97, A-98	Cigarette lighter
A-99	Headlamp leveling switch
A-100	Front heater blower switch
A-101	Front speaker (L.H.)
A-102	Seat cushion (R.H.) [Heated seat]
A-103	Seat back (R.H.) [Heated seat]
A-104	Heated seat wiring harness and front floor wiring harness combination
A-105	Remote controlled mirror switch
A-106	Heated seat switch (R.H.)
A-107	Heated seat switch (L.H.)
A-108, A-109	Front floor wiring harness and console wiring harness combination
A-110	Parking brake switch
A-111	Heated seat wiring harness and front floor wiring harness combination
A-112	Seat cushion (L.H.) [Heated seat]
A-113	Seat back (L.H.) [Heated seat]
A-114	Front wiring harness and console wiring harness combination
A-115	Power window switch
116x, 117x	–

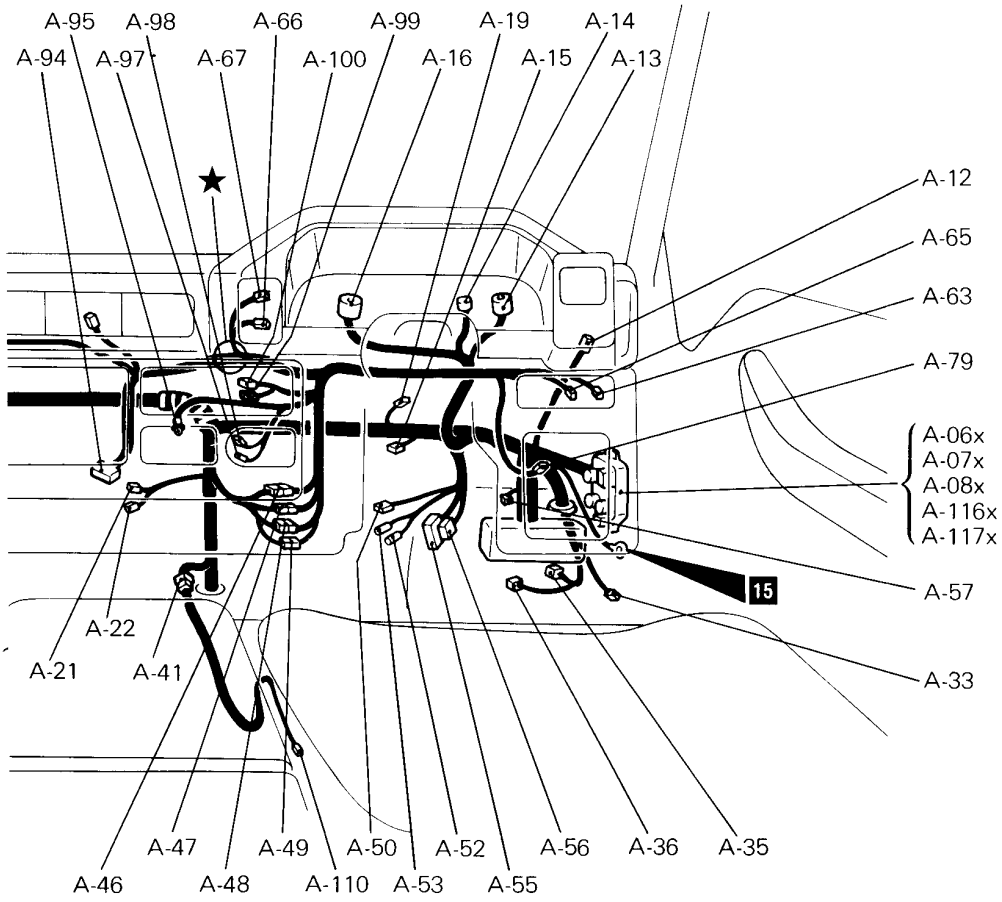
Remarks
(1) The mark ★ shows the standard mounting position of wiring harness.
(2) For details of earth points (example 1), refer to P.3-13.

2-2 R.H. drive vehicles

Connector symbol
A -01 thru -117X



A-01 thru A-05x	–
A-06x	Headlamp relay
A-07x	Defogger relay
A-08x	Turn signal and hazard flasher unit
A-09 thru A-11	–
A-12	Brake fluid level switch
A-13	Combination meter
A-14	Combination meter
A-15	Condenser
A-16	Combination meter
A-17	–
A-18	–
A-19	Alternator relay
A-20	–
A-21	Front heater blower resistor
A-22	Front heater blower motor
A-23	–
A-24	–
A-25	Front wiper motor
A-26 thru A-32	–
A-33	Front combination lamp (R.H.)
A-34	Front washer motor
A-35	Headlamp (R.H.)
A-36	Headlamp leveling unit (R.H.)
A-37 thru A-40	–
A-41	Front wiring harness and front floor wiring harness combination
A-42 thru A-45	–
A-46	Front wiring harness and instrument panel wiring harness combination
A-47	Front wiring harness and instrument panel wiring harness combination
A-48	Front wiring harness and instrument panel wiring harness combination
A-49	Front wiring harness and instrument panel wiring harness combination
A-50	Vacuum switch (Diesel-powered vehicles)
A-51	–
A-52	Stop lamp switch
A-53	Stop lamp switch



36G0110

A-54 –
A-55 Column switch
A-56 Ignition switch
A-57 Dedicated fuse (Headlamp leveling)
A-58 Headlamp leveling unit (L.H.)
A-59 Headlamp (L.H.)
A-60 Front combination lamp (L.H.)
A-61 –
A-62 –
A-63 Defogger switch
A-64 –
A-65 Rear fog lamp switch
A-66 Rear wiper and washer switch
A-67 Hazard warning switch
A-68 thru A-76 –
A-77 Rear intermittent wiper relay
A-78 –
A-79 Front speaker (R.H.)
A-80 thru A-93 –

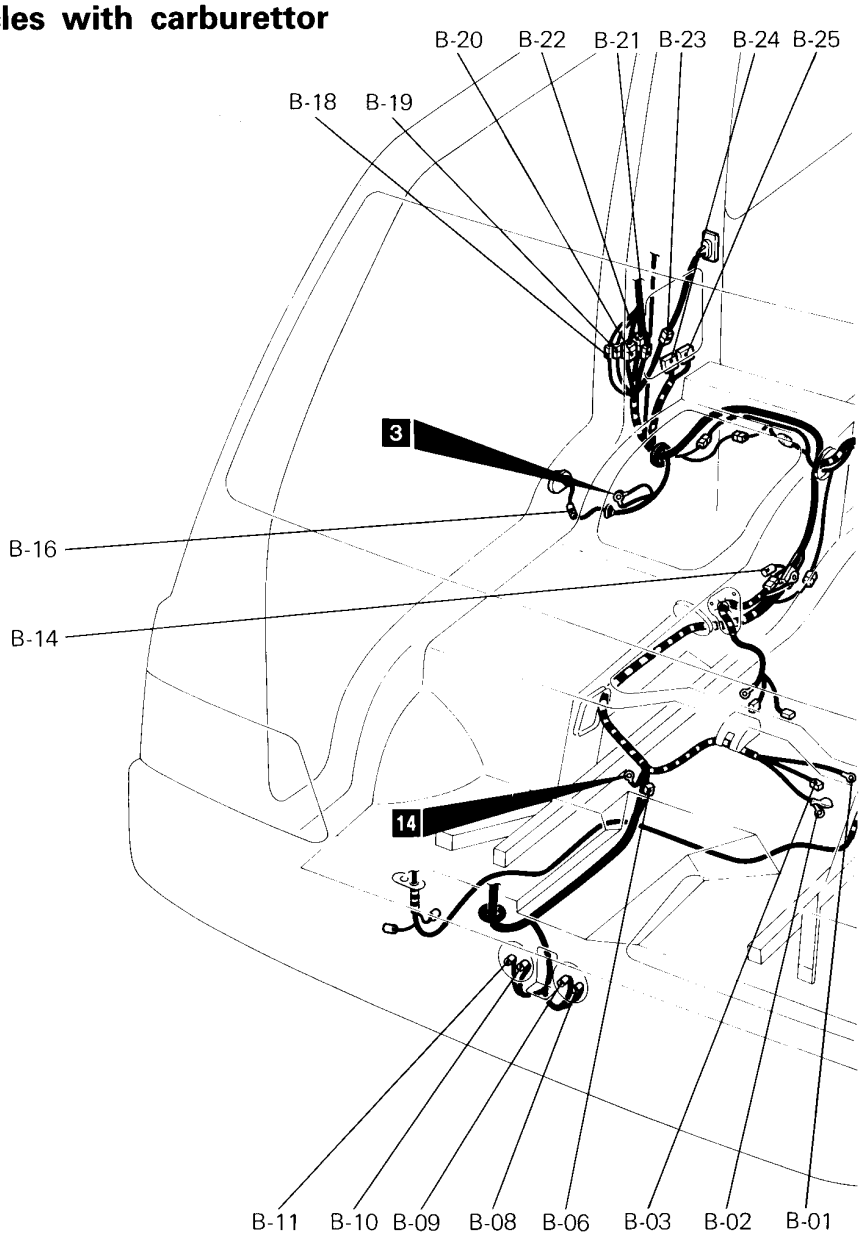
A-94 Radio
A-95 Ashtray illumination lamp
A-96 –
A-97, A-98 Cigarette lighter
A-99 Headlamp leveling switch
A-100 Front heater blower switch
A-101 Front speaker (L.H.)
A-102 thru A-109 –
A-110 Parking brake switch
A-111 thru A-115 –
A-116x Dim-dip lamp relay 1
A-117x Dim-dip lamp relay 2

Remarks
(1) The mark ★ shows the standard mounting position of wiring harness.
(2) For details of earth points (example 1), refer to P.3-13.
(3) "–" means that the connector with corresponding code-number is not used.

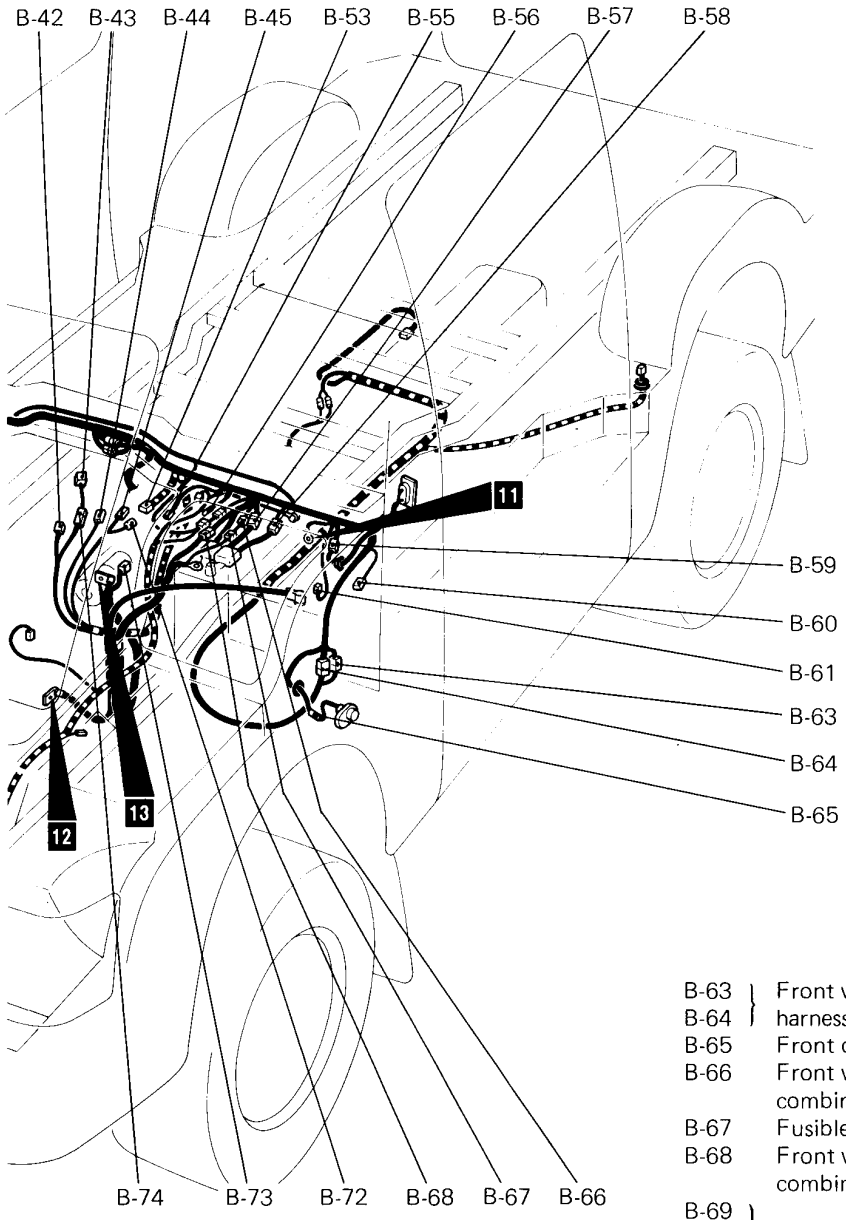
3 ENGINE ROOM · UNDER FLOOR

3-1 Petrol-powered vehicles <L.H. drive 2WD vehicles with carburettor –5 door models>

Connector symbol
B -01 thru -75



B-01, B-02, B-03	Ignition coil
B-04	–
B-05	–
B-06	Tachometer filter
B-07	–
B-08 thru B-11	Horn
B-12	–
B-13	–
B-14	Oxygen sensor
B-15	–
B-16	Front door switch (R.H.)
B-17	–
B-18 thru B-22	Front wiring harness and roof wiring harness combination
B-23	Contact switch (Vehicles with central locking system)
B-24, B-25	FBC control unit
B-26 thru B-41	–
B-42	Cold mixture heater
B-43	Thermo switch
B-44	Fuel cut solenoid valve
B-45	Engine coolant temperature gauge unit
B-46 thru B-52	–
B-53	Over vent valve
B-54	–



36G0115

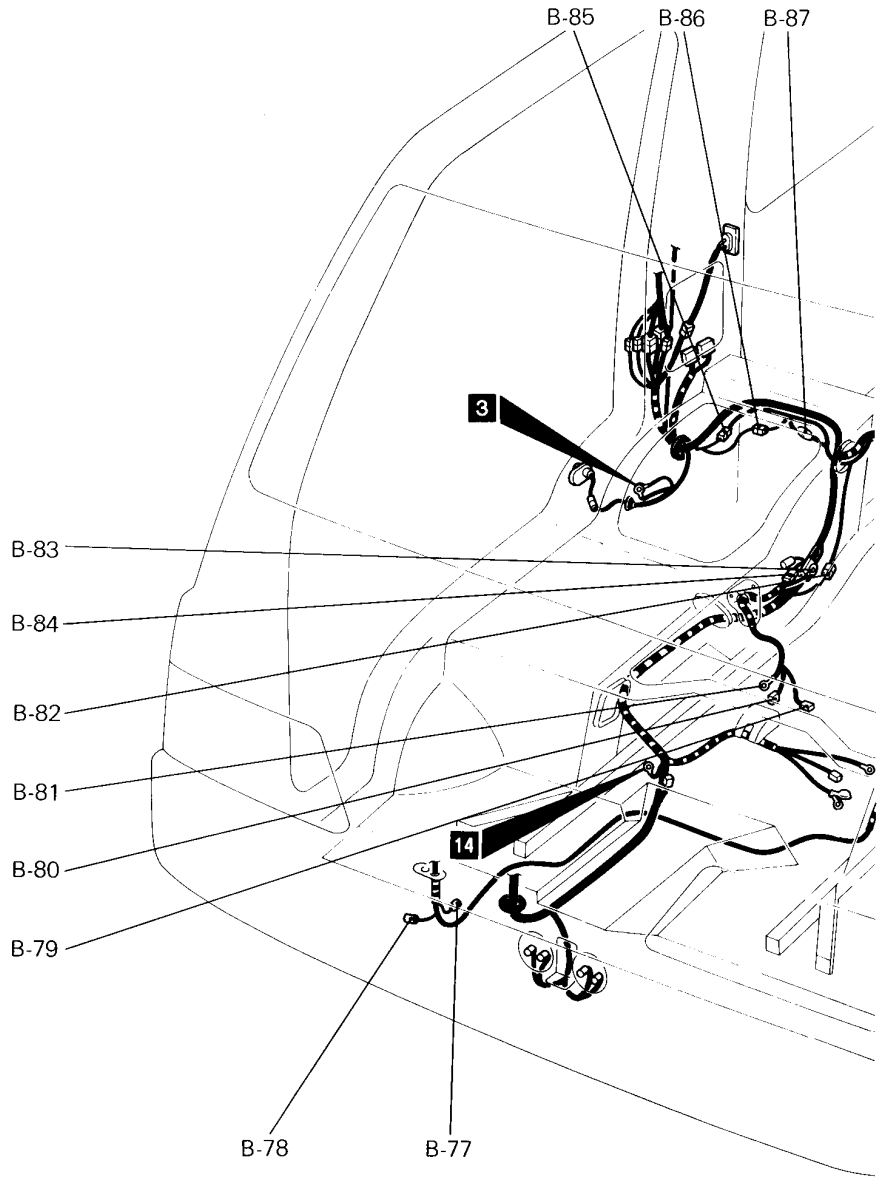
B-55 Secondary air control valve
B-56 Vacuum switch
B-57, B-58 Front wiring harness and fusible link box combination
B-59 Contact switch (Vehicles with central locking system)
B-60 Headlamp washer motor
B-61 Cold mixture heater relay
B-62 —

B-63, B-64 Front wiring harness and fuel gauge wiring harness combination
B-65 Front door switch (L.H.)
B-66 Front wiring harness and fusible link combination
B-67 Fusible link and battery cable (+) combination
B-68 Front wiring harness and battery cable (+) combination
B-69 thru B-71 —
B-72 Engine coolant temperature sensor
B-73 Starter
B-74 Front wiring harness and engine wiring harness combination
B-75 —

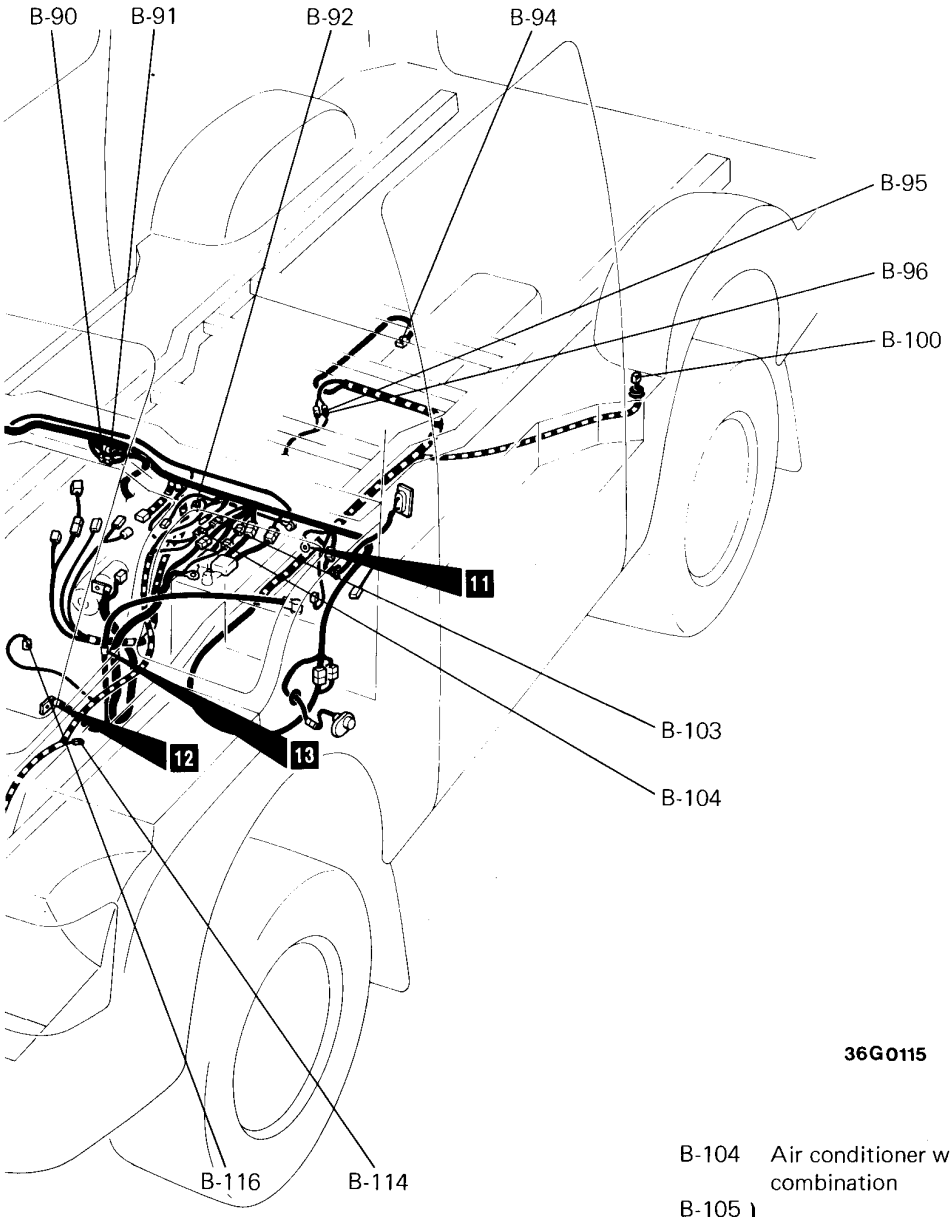
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.

3-1 Petrol-powered vehicles <L.H. drive 2WD vehicles with carburettor –5 door models>

Connector symbol
B -76 thru -119



B-76 —
B-77 Pressure switch (Dual) (Air conditioner)
B-78 Condenser fan motor (Air conditioner)
B-79 Oil pressure switch
B-80, B-81 Alternator
B-82 Front wiring harness and air conditioner wiring harness combination
B-83, B-84 Front wiring harness and engine wiring harness combination
B-85, B-86 Overhead air conditioner wiring harness and air conditioner harness combination
B-87 Dedicated fuse (Air conditioner)
B-88 —
B-89 —
B-90 Throttle position sensor
B-91 Auto choke heater and solenoid valve
B-92 Solenoid valve (Air conditioner)
B-93 —
B-94 Fuel gauge unit



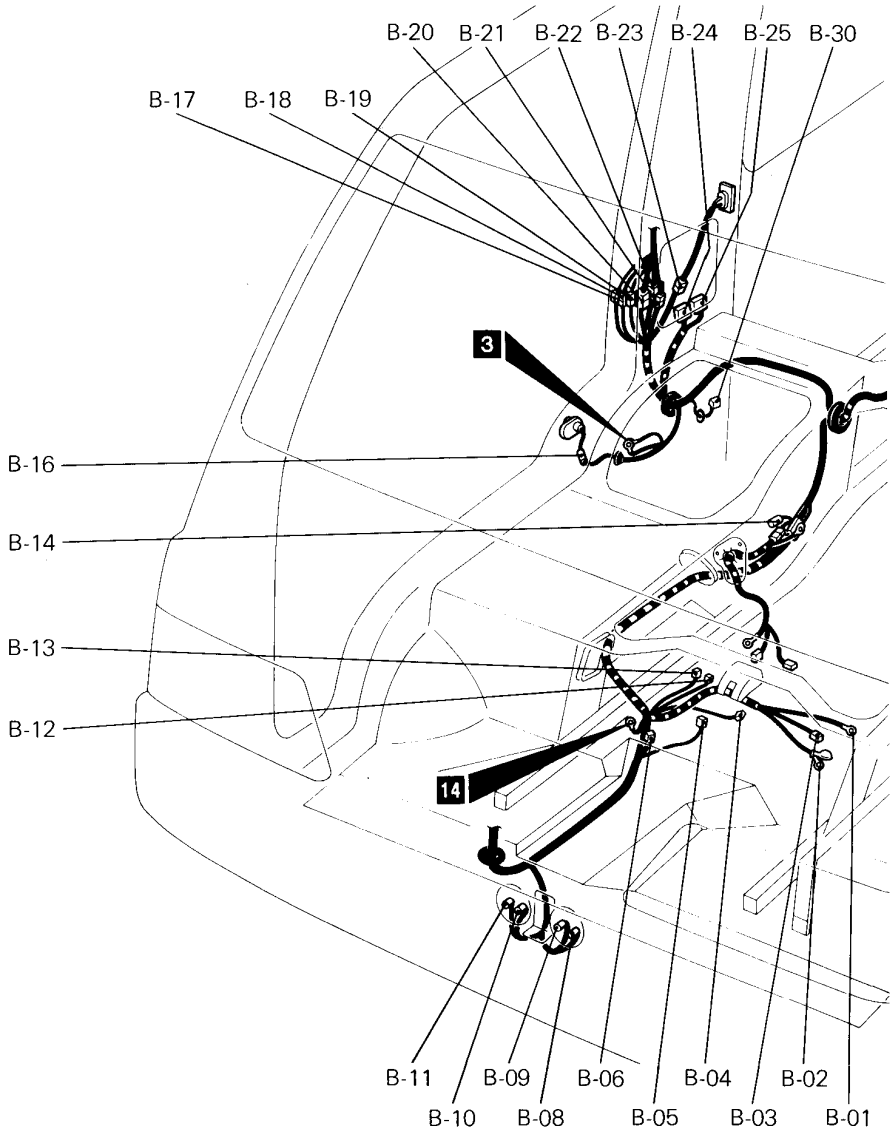
36G0115

B-95, B-96	Back-up lamp switch
B-97 thru B-99	–
B-100	Rear heater blower motor
B-101	–
B-102	–
B-103	Front wiring harness and fusible link combination
B-104	Air conditioner wiring harness and fusible link combination
B-105 thru B-113	–
B-114	Magnet clutch (Air conditioner)
B-115	–
B-116	Engine coolant temperature switch (Air conditioner)
B-117 thru B-119	–

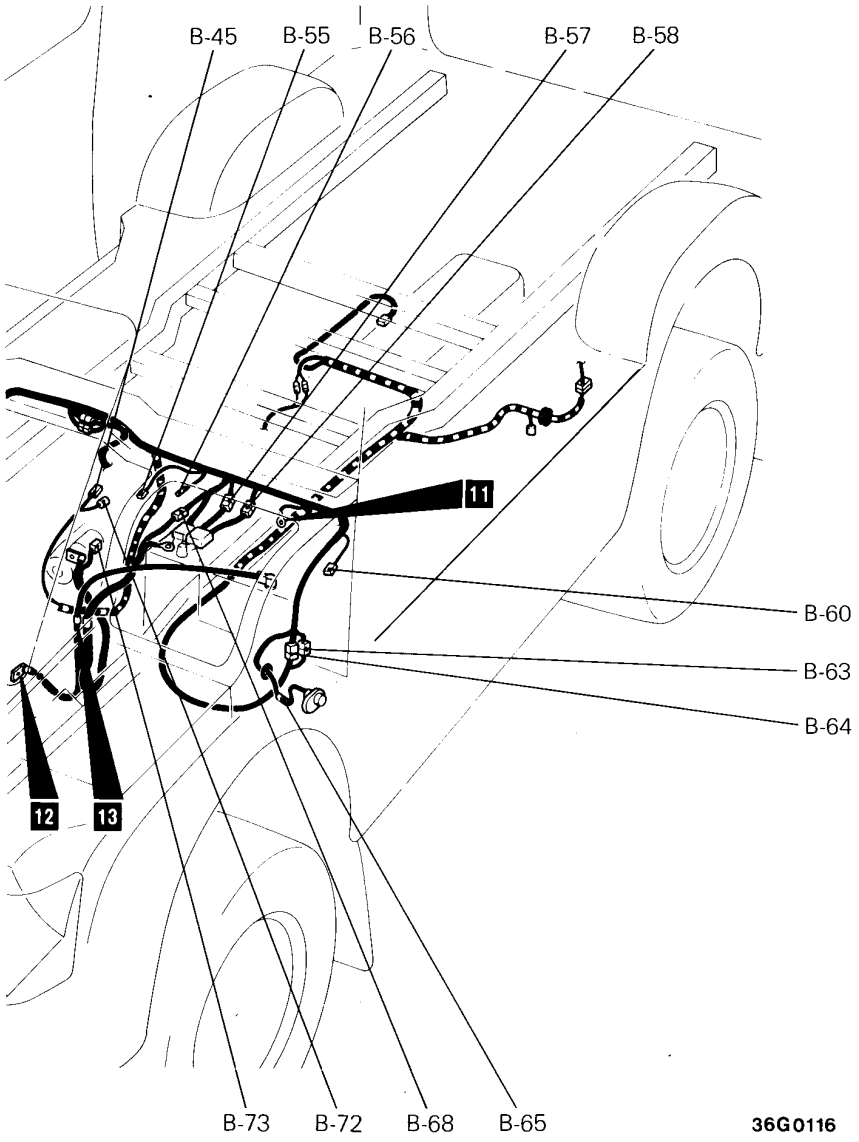
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "–" means that the connector with corresponding code-number is not used.

3-2 Petrol-powered vehicles <L.H. drive 2WD vehicles with carburettor –4 door models>

Connector symbol
B -01 thru -75



B-01, B-02, B-03	Ignition coil
B-04	Vacuum switch (Vehicles with auto-cruise control)
B-05	Vacuum pump relay (Vehicles with auto-cruise control)
B-06	Tachometer filter
B-07	—
B-08 thru B-11	Horn
B-12	Actuator (Vehicles with auto-cruise control)
B-13	Vacuum pump (Vehicles with auto-cruise control)
B-14	Oxygen sensor
B-15	—
B-16	Front door switch (R.H.)
B-17 thru B-22	Front wiring harness and roof wiring harness combination
B-23	Contact switch (Vehicles with central locking system)
B-24, B-25	FBC control unit
B-26 thru B-29	—
B-30	Step lamp
B-31 thru B-44	—
B-45	Engine coolant temperature gauge unit



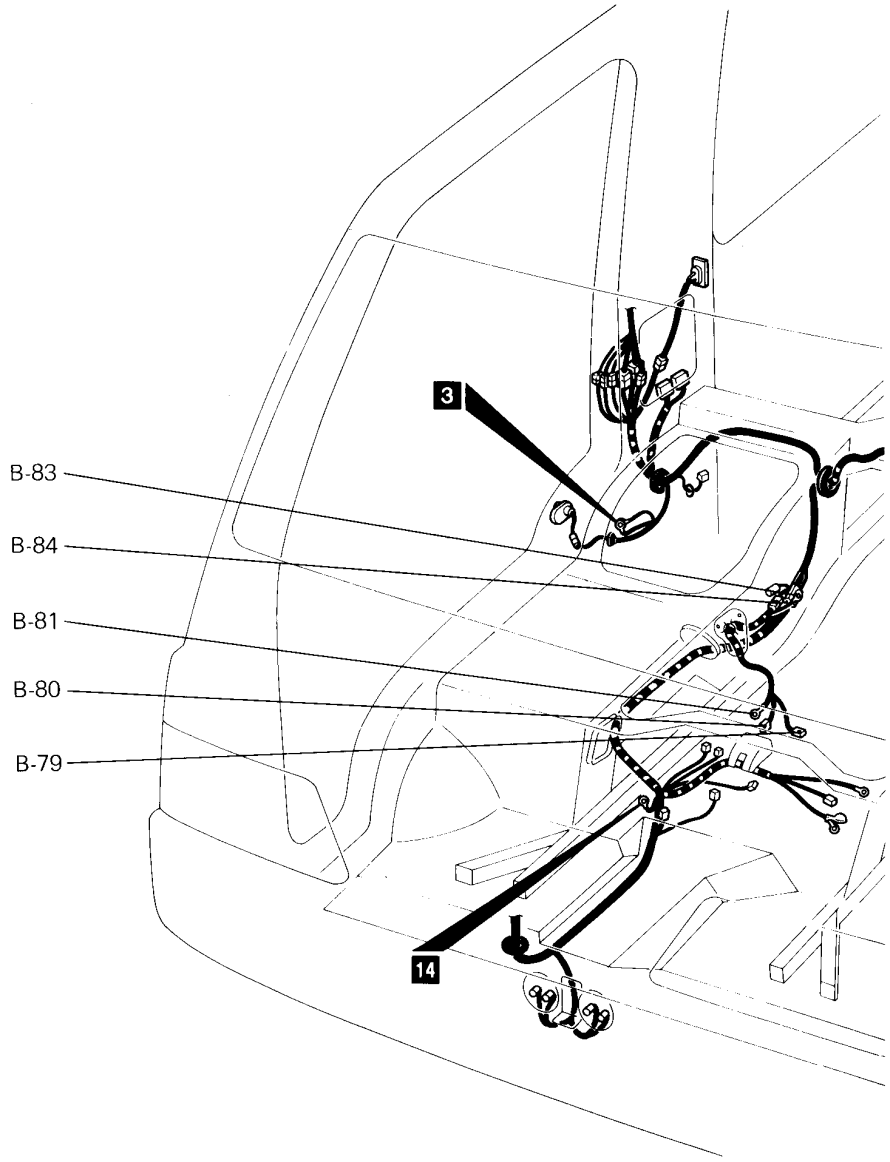
36G0116

B-46 thru B-54 —
B-55 Secondary air control valve
B-56 Vacuum switch
B-57, B-58 Front wiring harness and fusible link box combination
B-59 —
B-60 Headlamp washer motor
B-61 —
B-62 —
B-63, B-64 Front wiring harness and fuel gauge wiring harness combination
B-65 Front door switch (L.H.)
B-66 —
B-67 —
B-68 Front wiring harness and battery cable (+) combination
B-69 thru B-71 —
B-72 Engine coolant temperature sensor
B-73 Starter
B-74 —
B-75 —

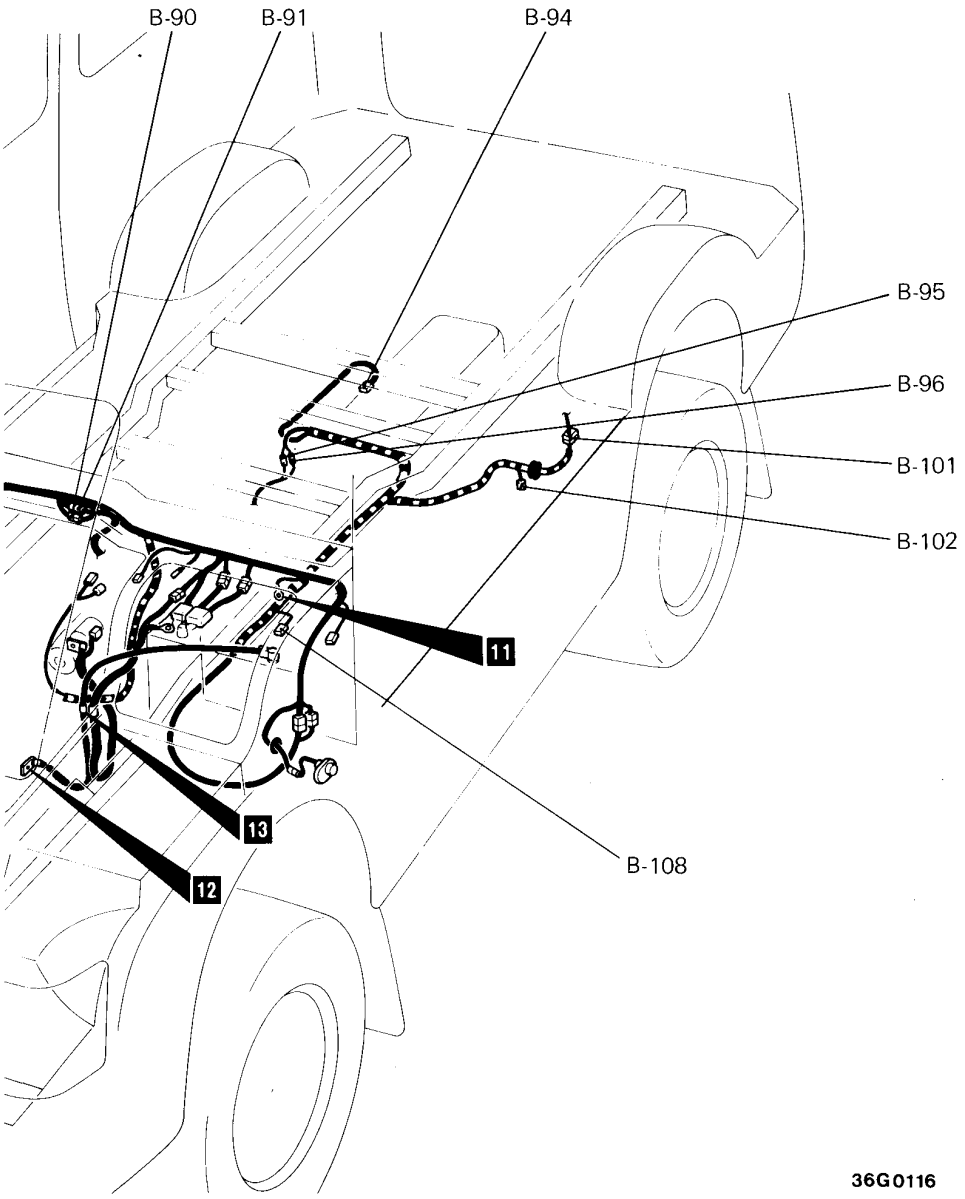
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.

3-2 Petrol-powered vehicles <L.H. drive 2WD vehicles with carburettor –4 door models>

Connector symbol
B -76 thru -119



B-76 thru B-78	–
B-79	Oil pressure switch
B-80, B-81	Alternator
B-82	–
B-83, B-84	Front wiring harness and engine wiring harness combination
B-85 thru B-89	–
B-90	Throttle position sensor
B-91	Auto choke heater and solenoid valve
B-92	–
B-93	–
B-94	Fuel gauge unit
B-95, B-96	Back-up lamp switch
B-97 thru B-100	–



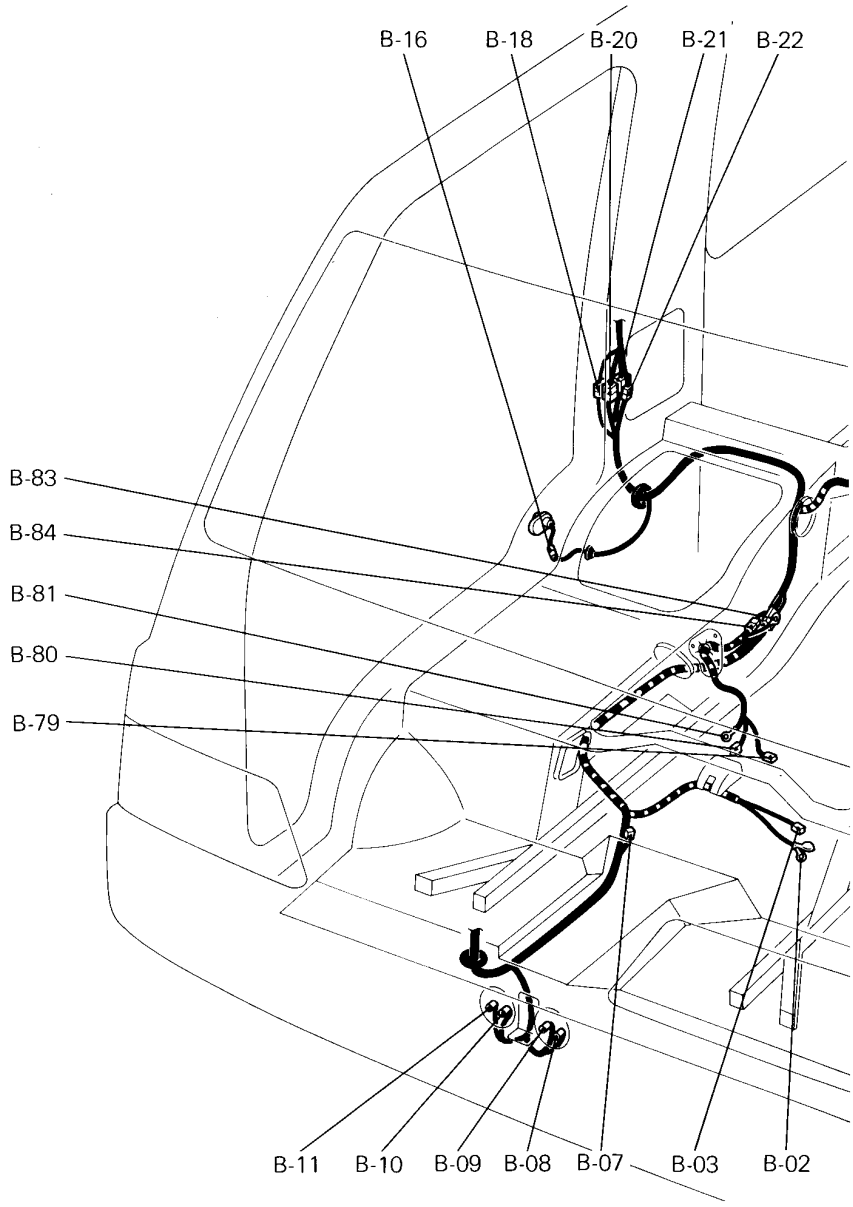
B-101	Fuel gauge unit wiring harness and rear side wiring harness combination
B-102	Rear heater blower motor
B-103 thru B-107	—
B-108	No connection
B-109 thru B-119	—

Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.

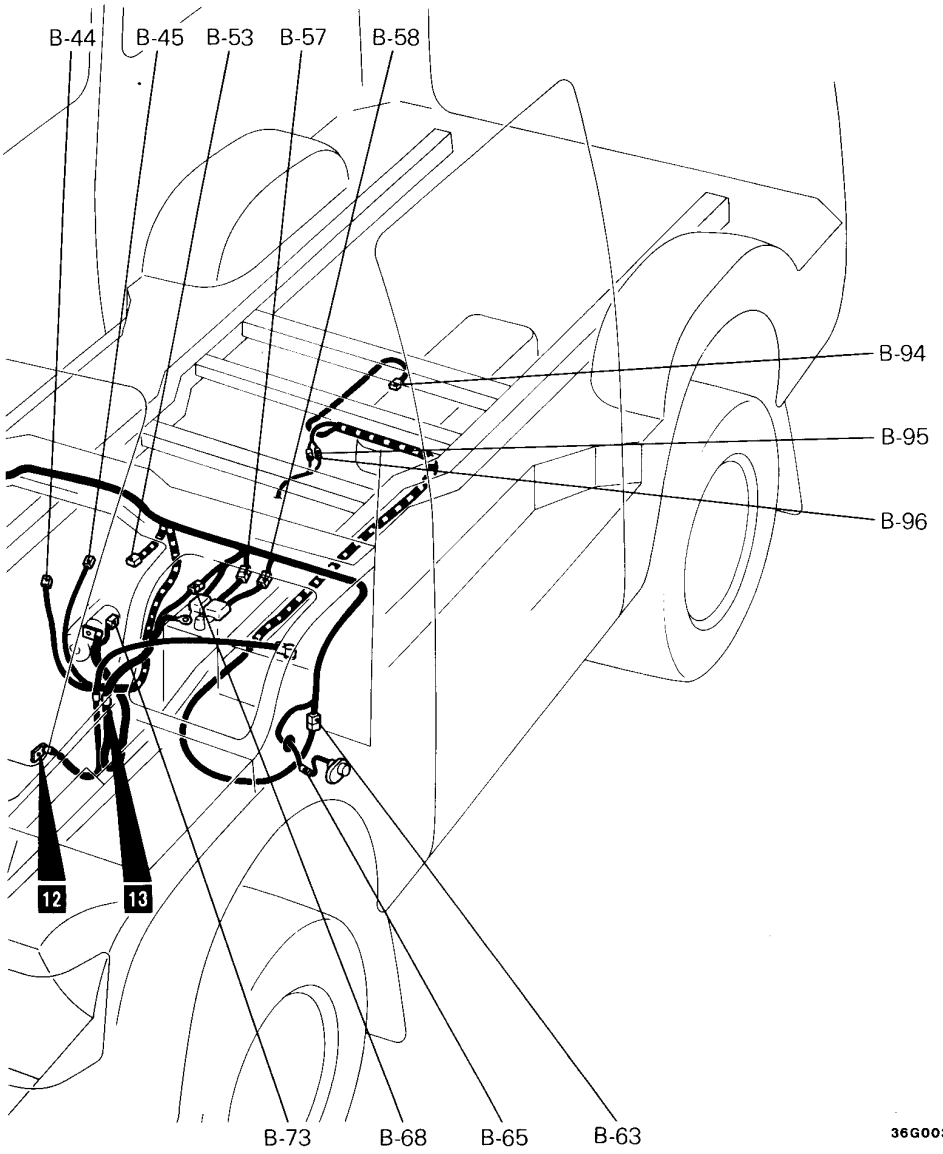
3-3 Petrol-powered vehicles <R.H. drive 2WD vehicles with carburettor>

Connector symbol

B



B-01	–
B-02, B-03	Ignition coil
B-04 thru B-06	–
B-07	Resistor (Vehicles with dim-dip lamp)
B-08 thru B-11	Horn
B-12 thru B-15	–
B-16	Front door switch (R.H.)
B-17	–
B-18	Front wiring harness and roof wiring harness combination
B-19	–
B-20, B-21, B-22	Front wiring harness and roof wiring harness combination
B-23 thru B-43	–
B-44	Fuel cut solenoid valve
B-45	Engine coolant temperature gauge unit
B-46 thru B-52	–
B-53	Over vent valve
B-54 thru B-56	–
B-57, B-58	Front wiring harness and fusible link box combination
B-59 thru B-62	–
B-63	Front wiring harness and fuel gauge wiring harness combination
B-64	–



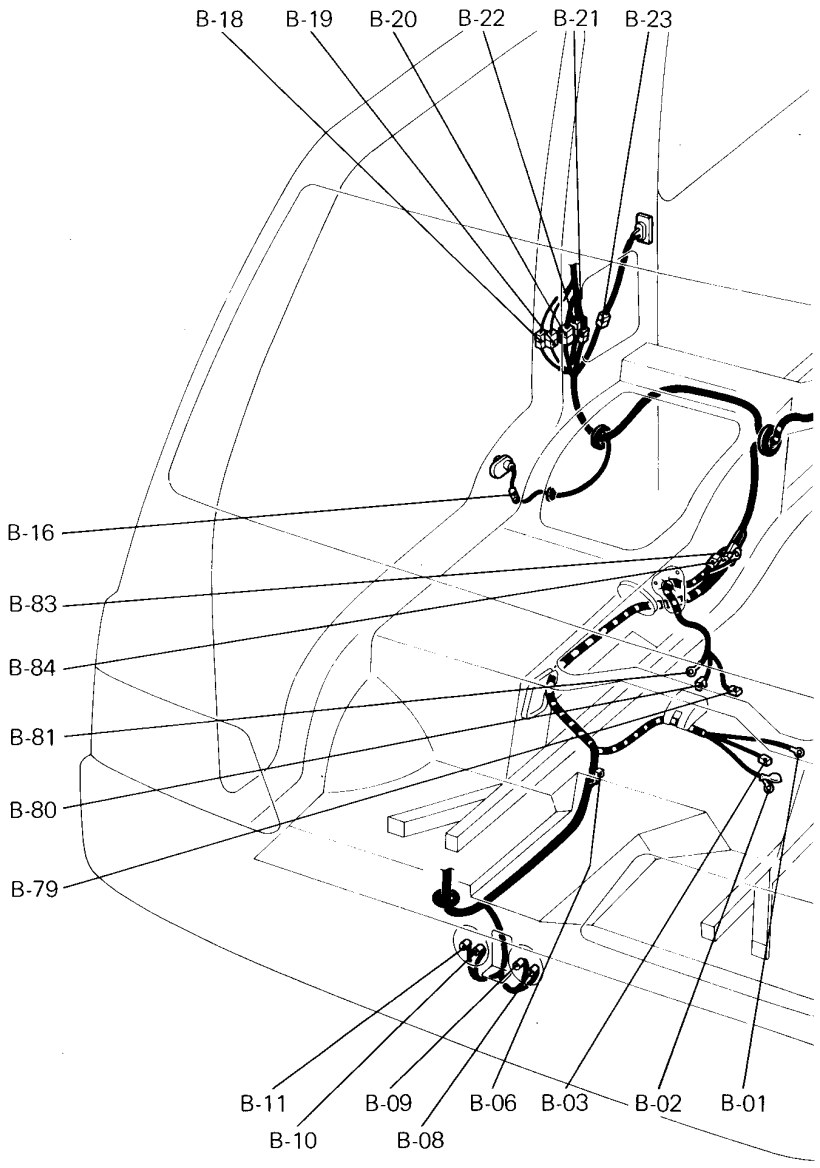
B-65	Front door switch (L.H.)
B-66	–
B-67	–
B-68	Front wiring harness and battery cable (+) combination
B-69 thru B-72	–
B-73	Starter
B-74 thru B-78	–
B-79	Oil pressure switch
B-80 B-81	Alternator
B-82	–
B-83 B-84	Front wiring harness and engine wiring harness combination
B-85 thru B-93	–
B-94	Fuel gauge unit
B-95 B-96	Back-up lamp switch
B-97 thru B-119	–

Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "–" means that the connector with corresponding code-number is not used.

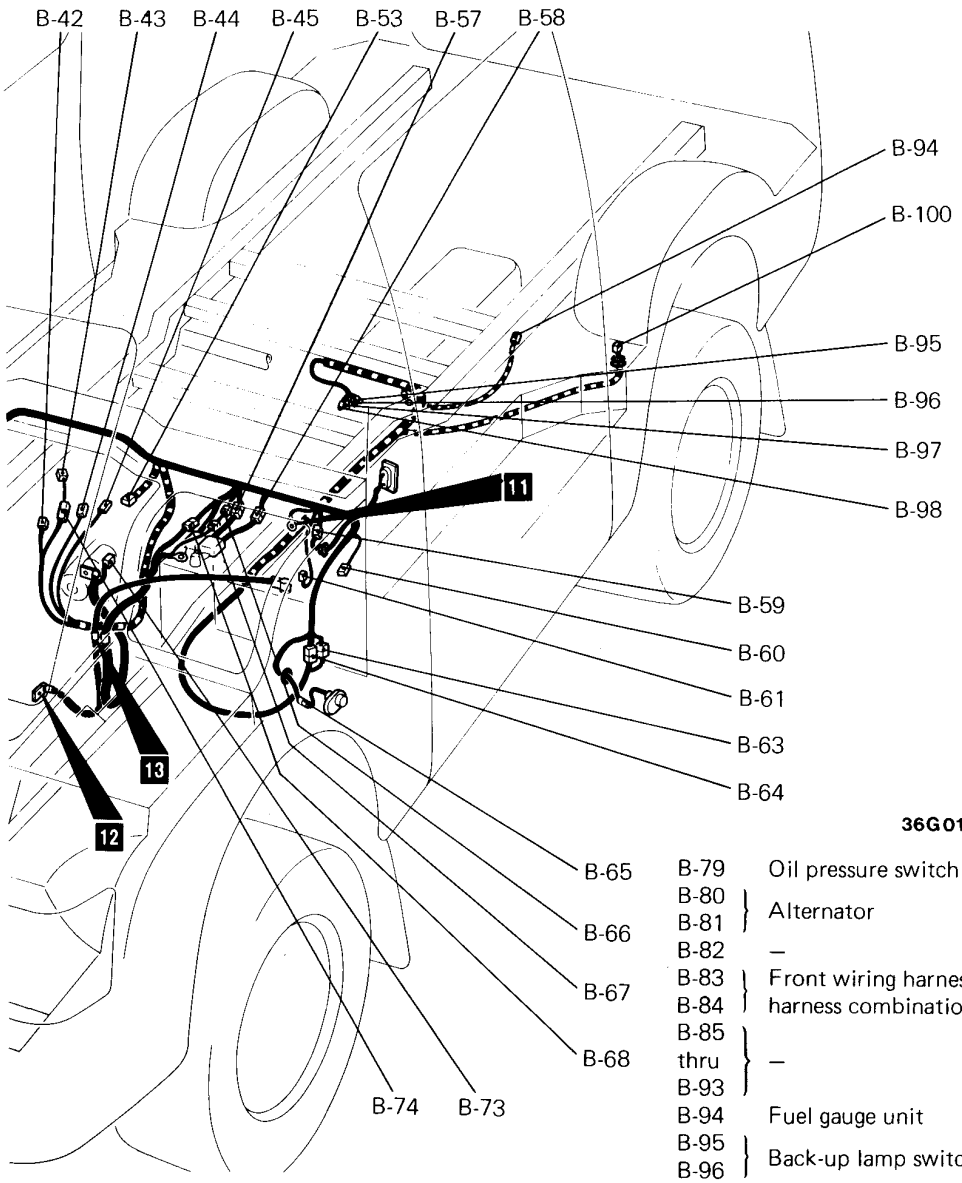
3-4 Petrol-powered vehicles <4WD vehicles with carburettor>

Connector symbol

B



B-01, B-02, B-03 } Ignition coil
B-04 —
B-05 —
B-06 Tachometer filter
B-07 —
B-08 thru B-11 } Horn
B-12 thru B-15 } —
B-16 Front door switch (R.H.)
B-17 —
B-18 thru B-22 } Front wiring harness and roof wiring harness combination
B-23 Contact switch (Vehicles with central locking system)
B-24 thru B-41 } —
B-42 Cold mixture heater
B-43 Thermo switch
B-44 Fuel cut solenoid valve
B-45 Engine coolant temperature gauge unit
B-46 thru B-52 } —
B-53 Over vent valve
B-54 thru B-56 } —
B-57, B-58 } Front wiring harness and fusible link box combination
B-59 Contact switch (Vehicles with central locking system)
B-60 Headlamp washer motor
B-61 Cold mixture heater relay
B-62 —
B-63, B-64 } Front wiring harness and fuel gauge wiring harness combination
B-65 Front door switch (L.H.)
B-66 Front wiring harness and fusible link combination
B-67 Fusible link and battery cable (+) combination



36G0114

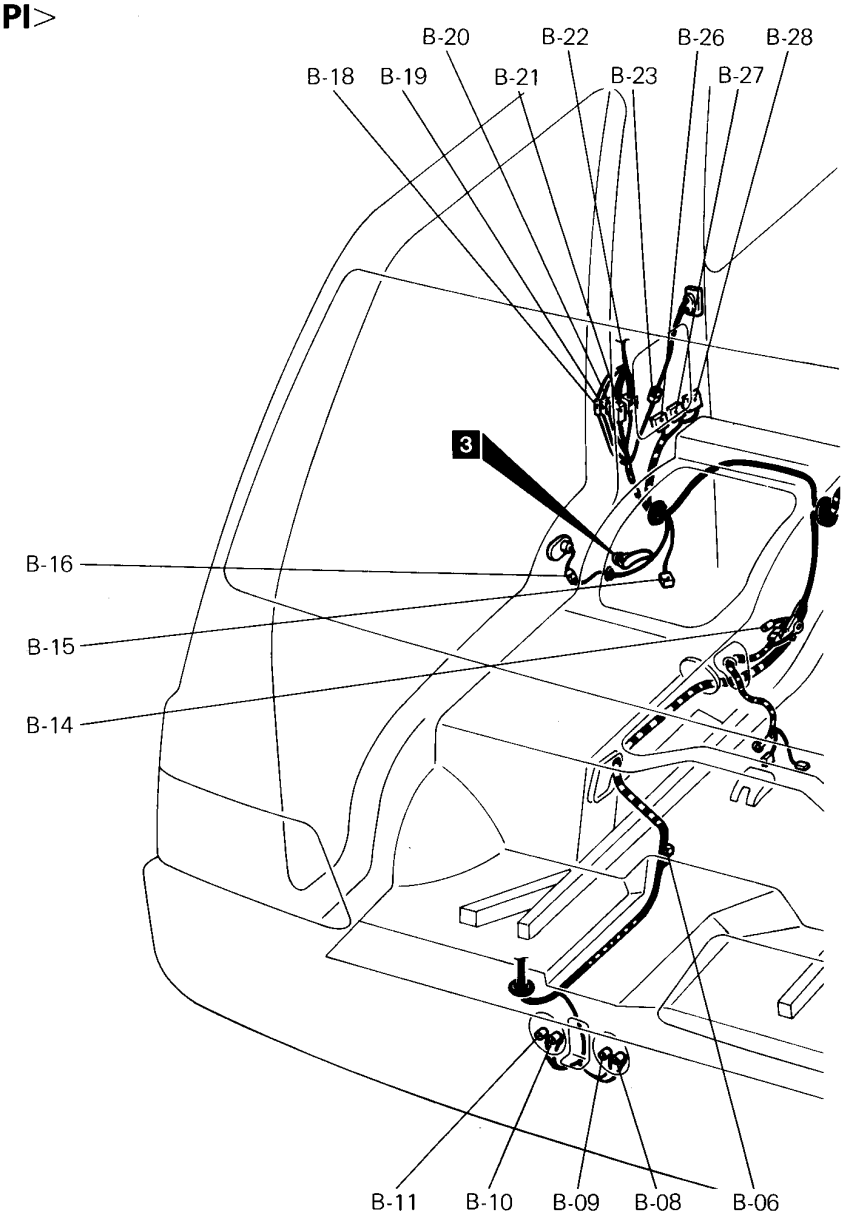
B-68 Front wiring harness and battery cable (+) combination
B-69 thru B-72 —
B-73 Starter
B-74 Front wiring harness and engine wiring harness combination
B-75 thru B-78 —

B-79 Oil pressure switch
B-80, B-81 Alternator
B-82 —
B-83, B-84 Front wiring harness and engine wiring harness combination
B-85 thru B-93 —
B-94 Fuel gauge unit
B-95, B-96 Back-up lamp switch
B-97, B-98 4WD indicator lamp switch
B-99 —
B-100 Rear heater blower motor
B-101 thru B-119 —

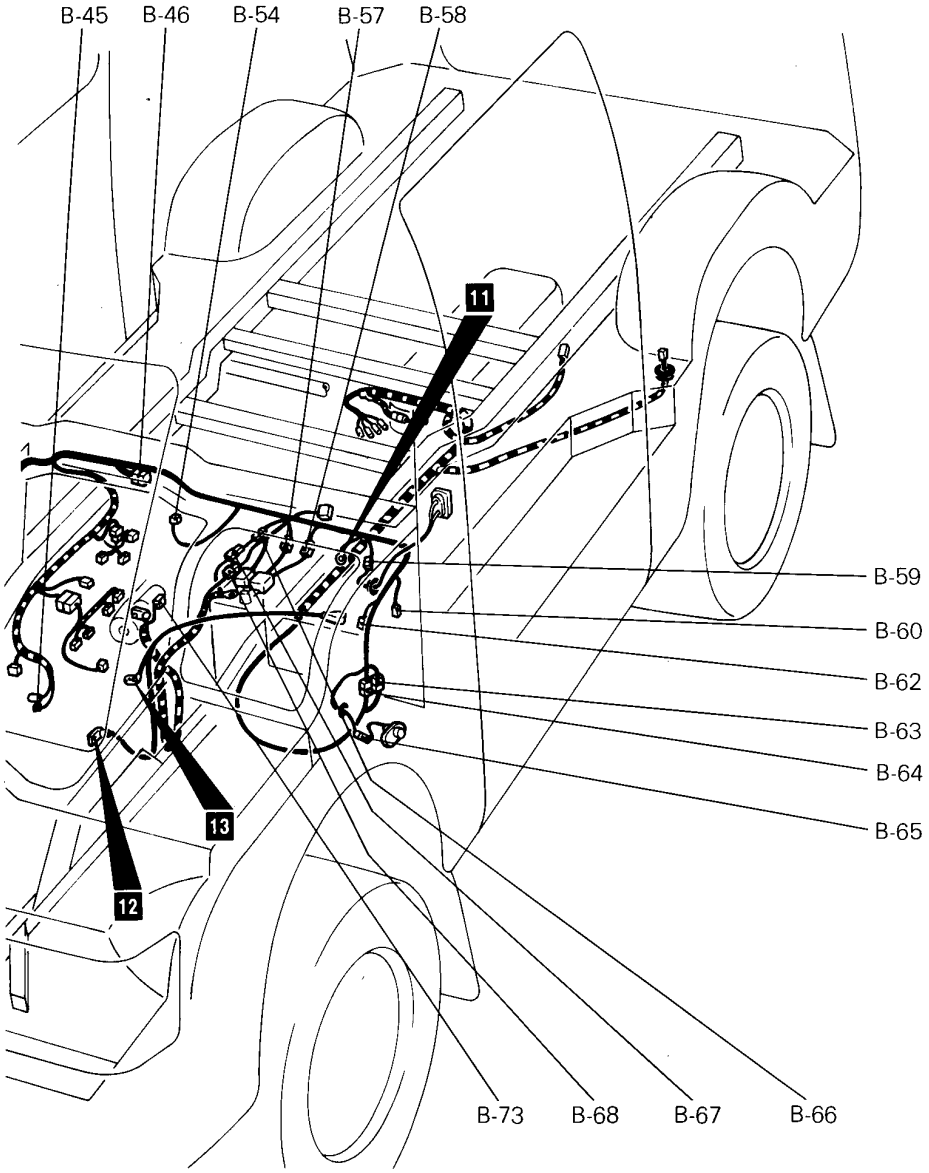
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.

3-5 Petrol-powered vehicles <4WD vehicles with MPI>

Connector symbol **B -01 thru -75**



B-01 thru B-05 —
B-06 Tachometer filter
B-07 —
B-08 thru B-11 Horn
B-12 —
B-13 —
B-14 Oxygen sensor
B-15 Air flow sensor
B-16 Front door switch (R.H.)
B-17 —
B-18 thru B-22 Front wiring harness and roof wiring harness combination
B-23 Contact switch (Vehicles with central locking system)
B-24 —
B-25 —
B-26 B-27 B-28 M.P.I. control unit
B-29 thru B-44 —
B-45 Engine coolant temperature gauge unit
B-46 Ignition timing adjustment connector
B-47 thru B-53 —
B-54 Purge solenoid valve
B-55 —
B-56 —



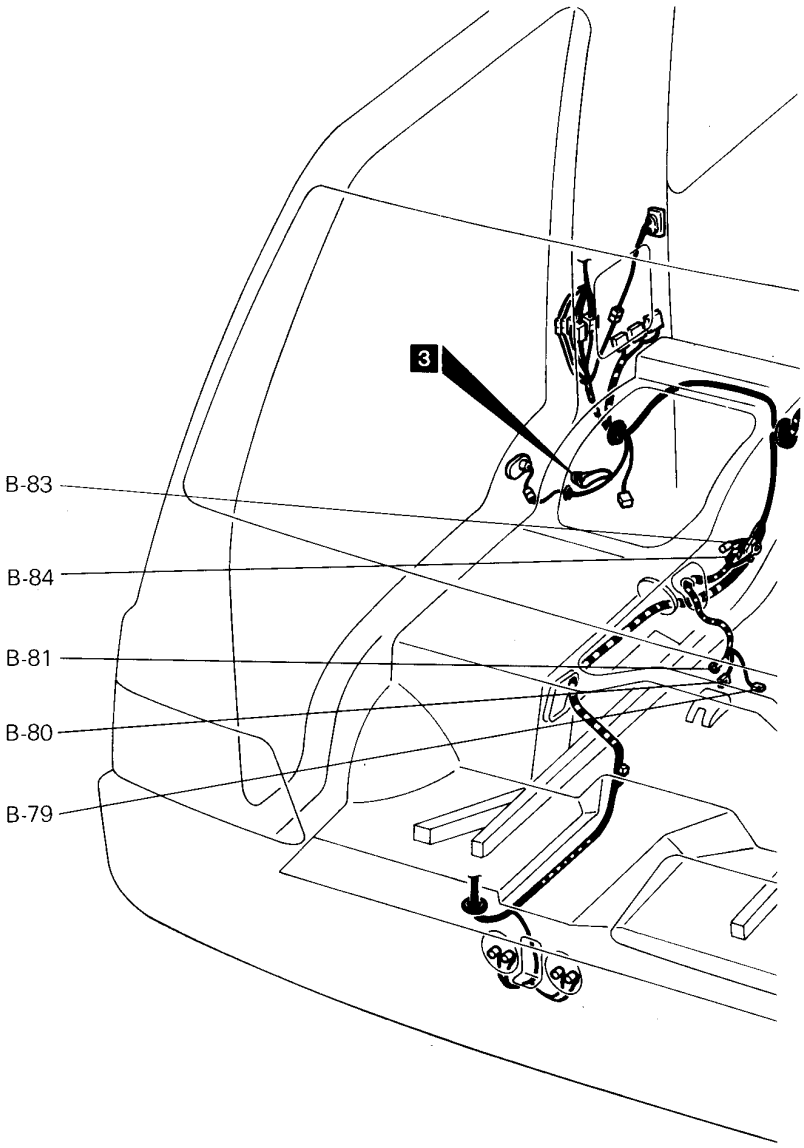
36G0108

B-57, B-58 — Front wiring harness and fusible link box combination
B-59 — Contact switch (Vehicles with central locking system)
B-60 — Headlamp washer motor
B-61 — –
B-62 — Fuel pump check connector
B-63, B-64 — Front wiring harness and fuel gauge wiring harness combination
B-65 — Front door switch (L.H.)
B-66 — Front wiring harness and fusible link combination
B-67 — Fusible link and battery cable (+) combination
B-68 — Front wiring harness and battery cable (+) combination
B-69 thru B-72 — –
B-73 — Starter
B-74 — –
B-75 — –

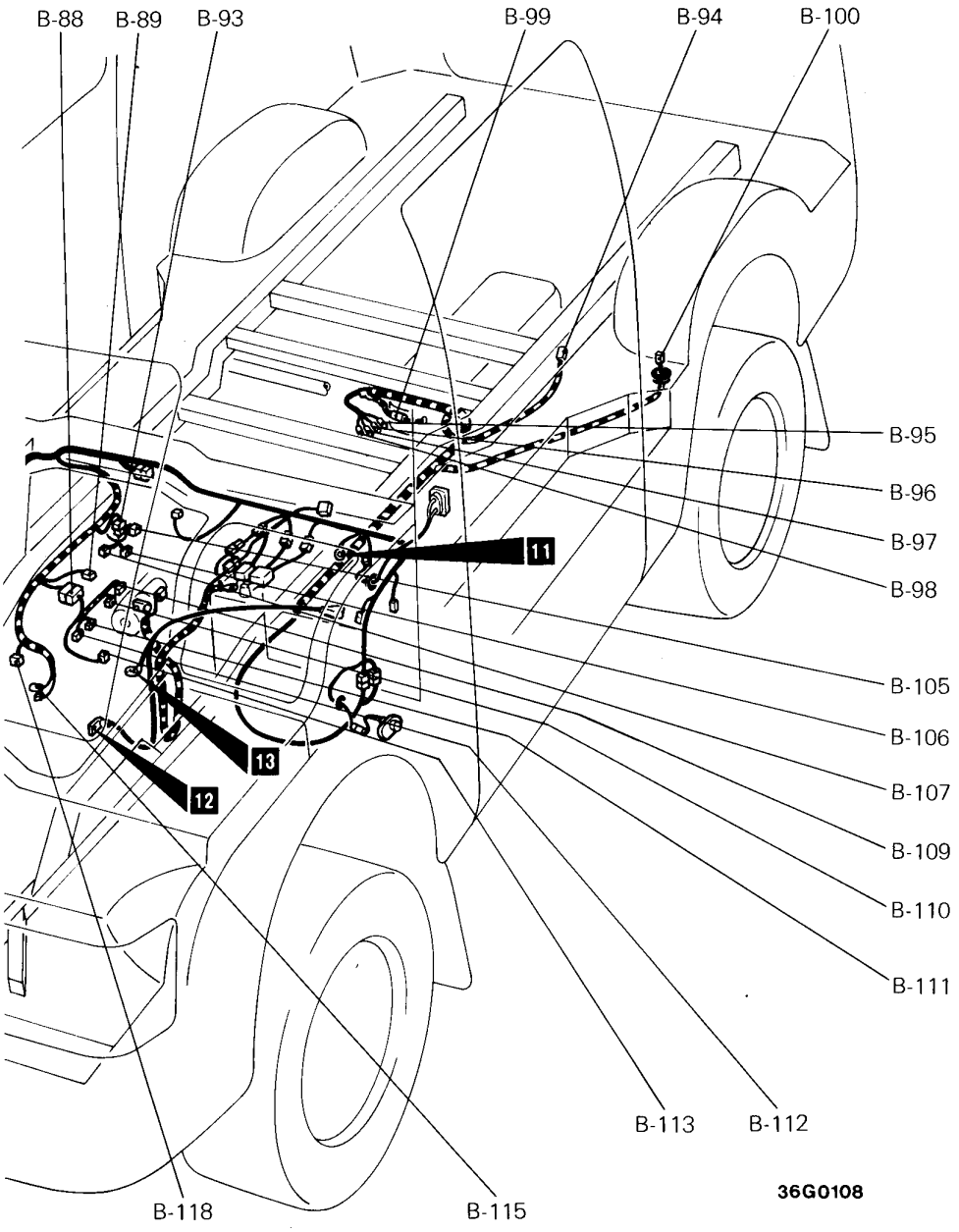
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "–" means that the connector with corresponding code-number is not used.

3-5 Petrol-powered vehicles <4WD vehicles with MPI>

Connector symbol
B -76 thru -119



B-76 thru B-78 —
B-79 Oil pressure switch
B-80, B-81 Alternator
B-82 —
B-83, B-84 Front wiring harness and engine wiring harness combination
B-85 thru B-87 —
B-88 Front wiring harness and engine wiring harness combination
B-89 Throttle position sensor
B-90 thru B-92 —
B-93 Front wiring harness and engine wiring harness combination
B-94 Fuel gauge unit
B-95, B-96 Back-up lamp switch
B-97, B-98 4WD indicator lamp switch
B-99 Fuel pump
B-100 Rear heater blower motor
B-101 thru B-104 —
B-105 Power transistor
B-106 Idle speed control actuator
B-107 Motor position sensor



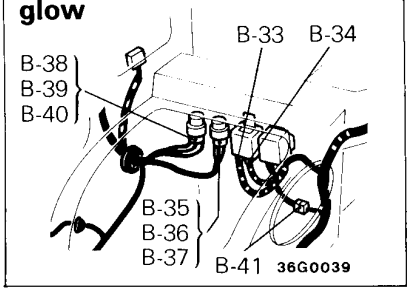
B-108 –
B-109 Injector 1
B-110 Injector 2
B-111 Injector 3
B-112 Injector 4
B-113 Ignition coil
B-114 –
B-115 Engine coolant temperature sensor
B-116 –
B-117 –
B-118 Distributor (Crank angle sensor and top dead centre sensor)
B-119–

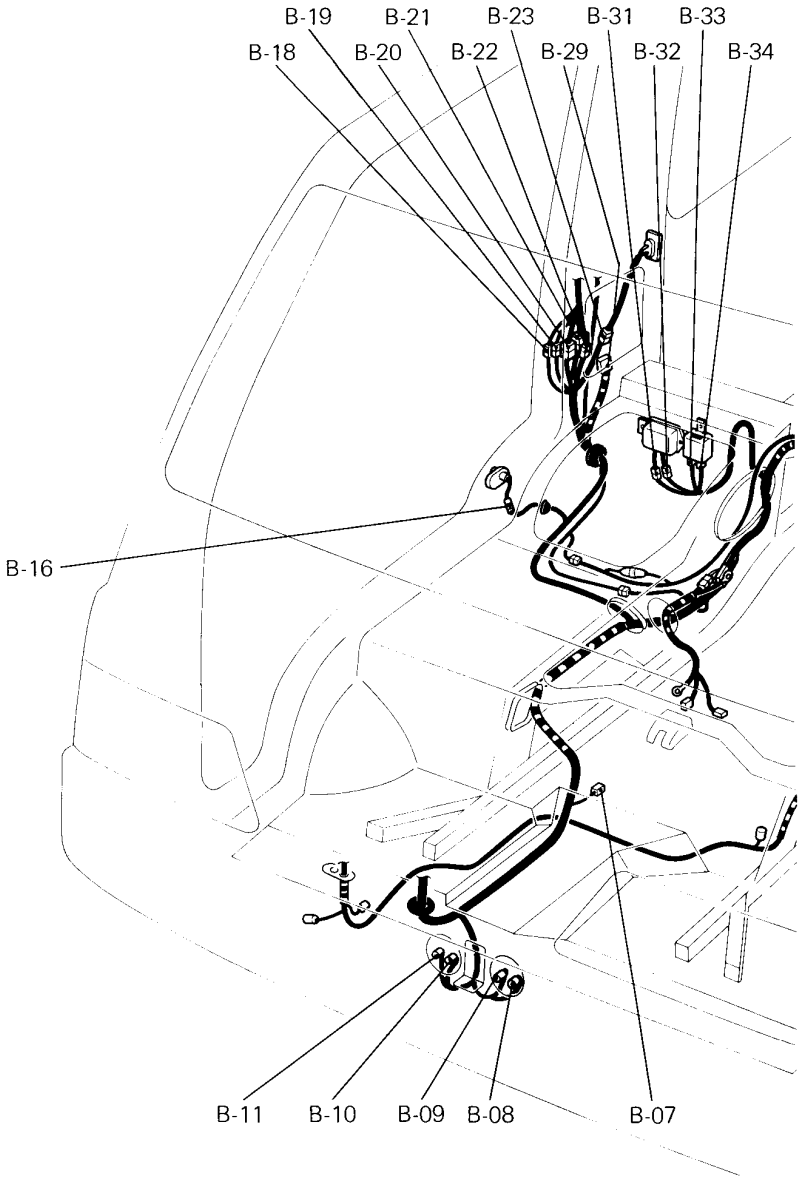
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "–" means that the connector with corresponding code-number is not used.

3-6 Diesel-powered vehicles <2WD>

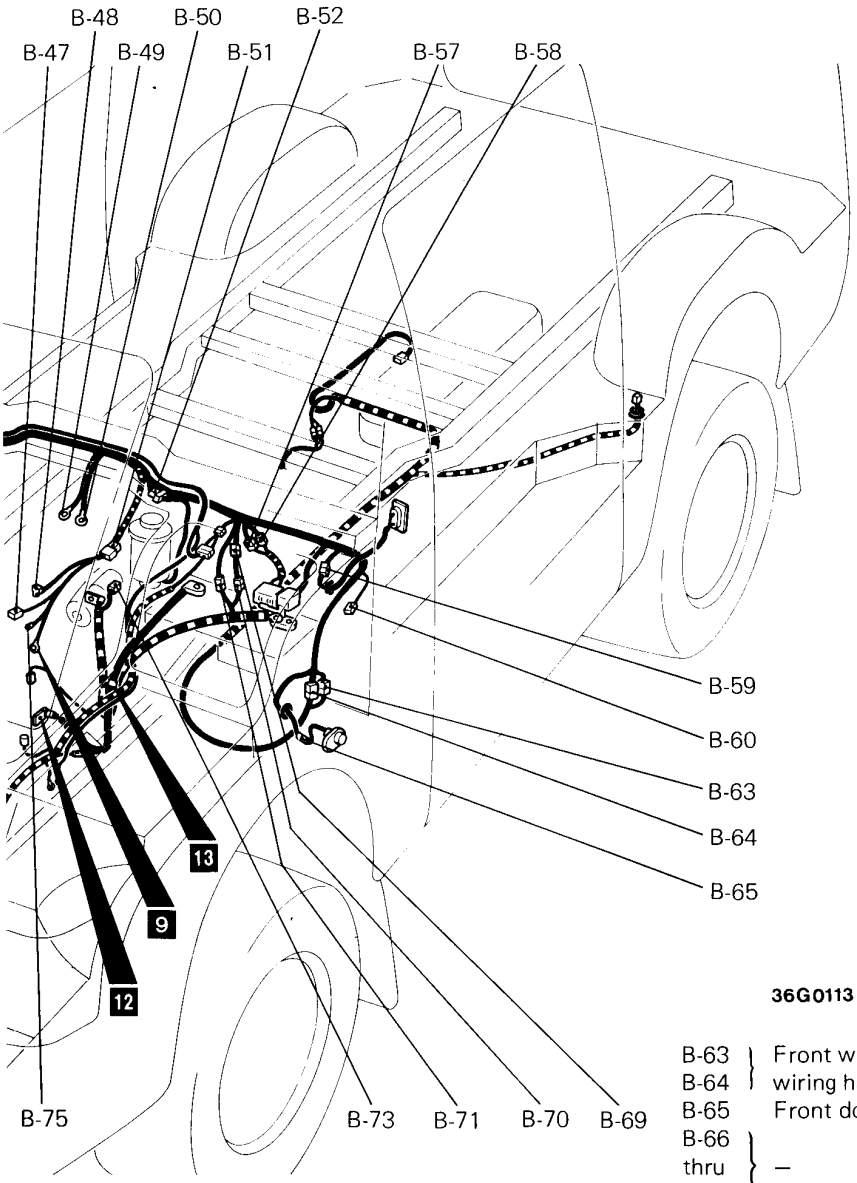
Connector symbol
B -01 thru -75

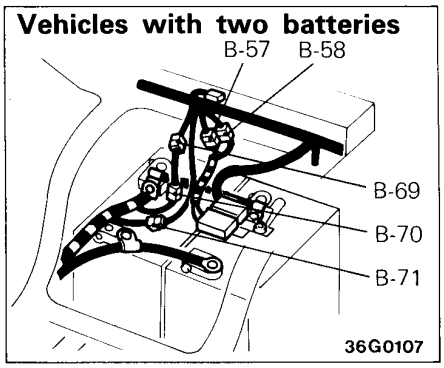
Vehicles with super quick glow





B-01 thru B-06 —
B-07 Resistor (R.H. drive vehicles with dim-dip lamp)
B-08 thru B-11 Horn
B-12 thru B-15 —
B-16 Front door switch (R.H.)
B-17 —
B-18 thru B-22 Front wiring harness and roof wiring harness combination
B-23 Contact switch (Vehicles with central locking system)
B-24 thru B-28 —
B-29 Glow control unit
B-30 —
B-31 B-32 Glow relay
B-33 B-34 Starter relay
B-35 B-36 B-37 Glow relay 1
B-38 B-39 B-40 Glow relay 2
B-41 Resistor
B-42 thru B-46 —
B-47 Revolution pick up
B-48 Engine coolant temperature gauge unit (Sensor)





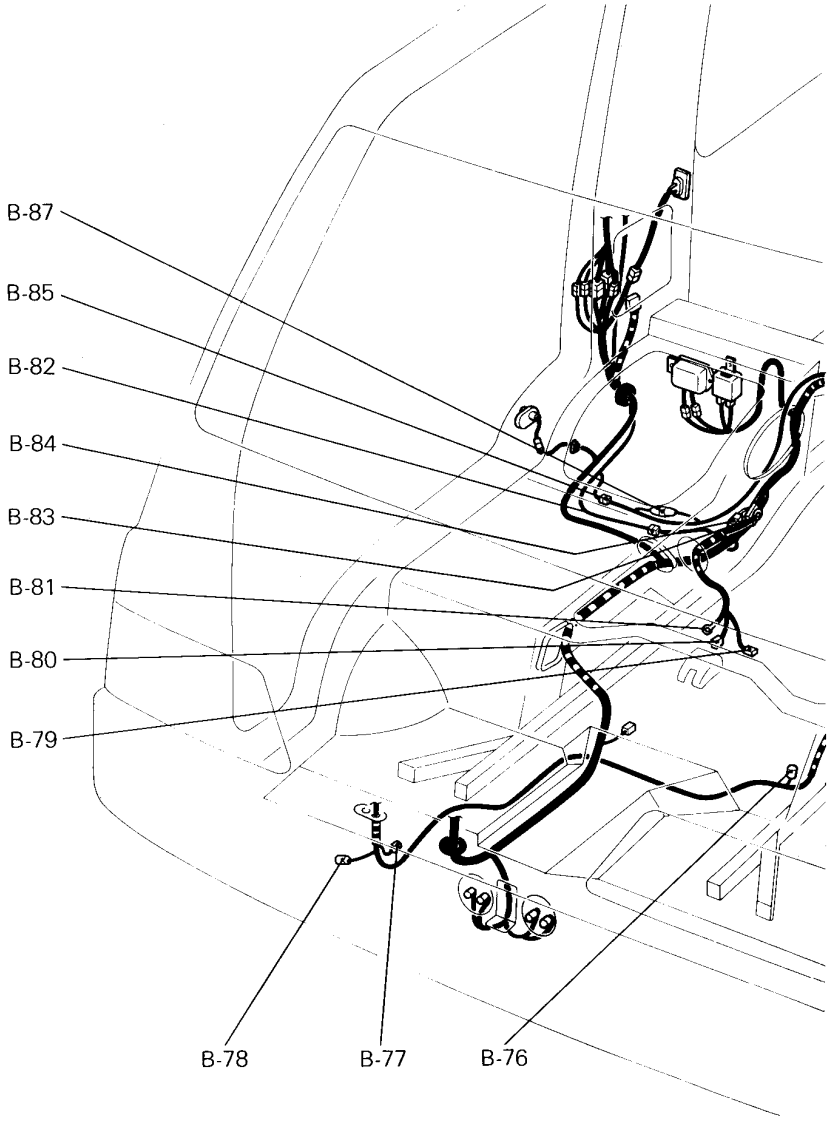
36G0113

B-49, B-50	Glow plug
B-51	Front wiring harness and injection pump wiring harness combination
B-52	Water level switch
B-53 thru B-56	—
B-57, B-58	Front wiring harness and fusible link box combination
B-59	Contact switch (Vehicles with central locking system)
B-60	Headlamp washer motor
B-61	—
B-62	—
B-63, B-64	Front wiring harness and fuel gauge wiring harness combination
B-65	Front door switch (L.H.)
B-66 thru B-68	—
B-69	Front wiring harness and fusible link combination
B-70	Fusible link and battery cable (+) combination
B-71	Front wiring harness and battery cable (+) combination
B-72	—
B-73	Starter
B-74	—
B-75	Fuel cut solenoid valve

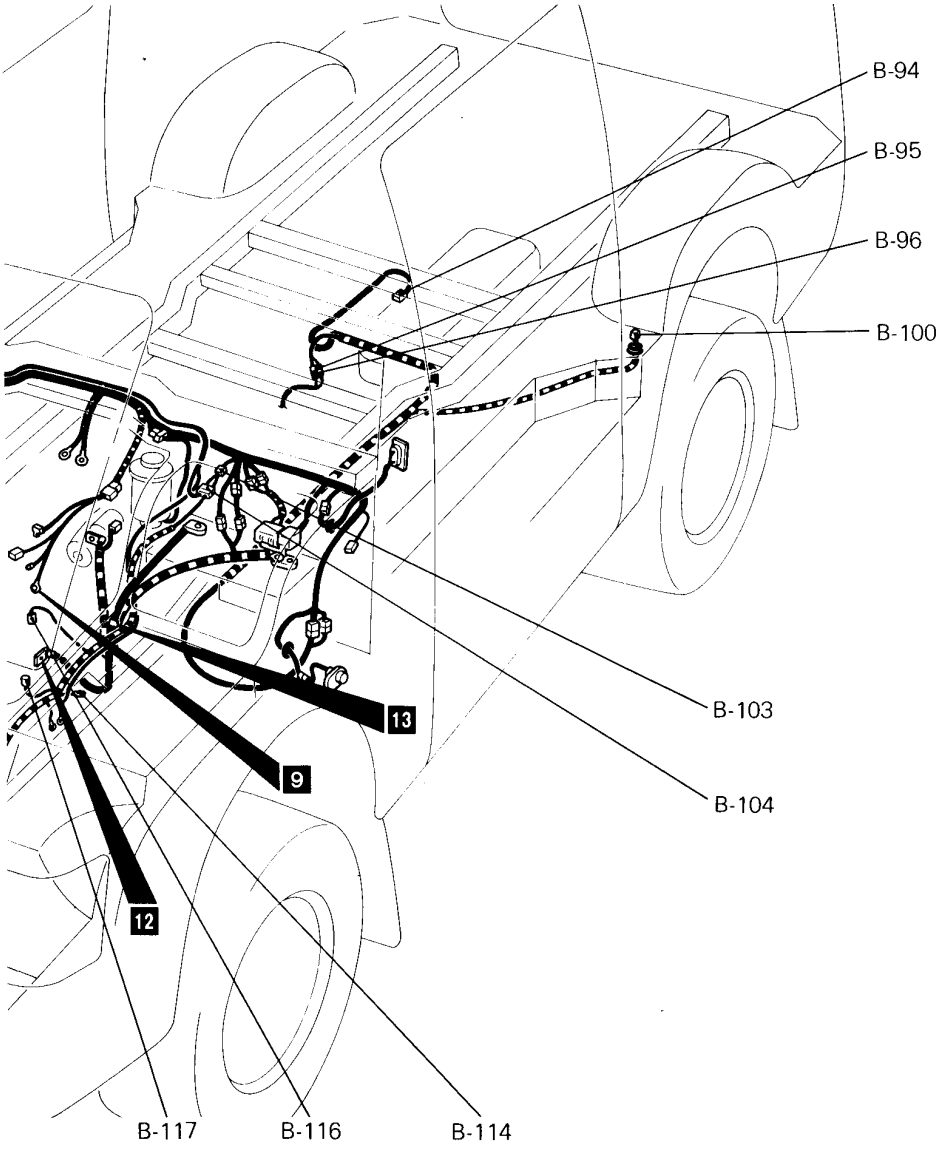
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.

3-6 Diesel-powered vehicles <2WD>

Connector symbol
B -76 thru -119



B-76 Condenser fan motor (Air conditioner)
B-77 Pressure switch (Dual) (Air conditioner)
B-78 Condenser fan motor (Air conditioner)
B-79 Oil pressure switch
B-80, B-81 Alternator
B-82 Front wiring harness and overhead air conditioner wiring harness combination
B-83, B-84 Front wiring harness and engine wiring harness combination
B-85 Overhead air conditioner wiring harness and air conditioner wiring harness combination
B-86 —
B-87 Dedicated fuel (Air conditioner)
B-88 thru B-93 —
B-94 Fuel gauge unit
B-95, B-96 Back-up lamp switch
B-97 thru B-99 —
B-100 Rear heater blower motor
B-101 —
B-102 —
B-103 Front wiring harness and fusible link combination (Air conditioner)
B-104 Air conditioner wiring harness and fusible link combination



36G0113

B-105 thru B-113	–
B-114	Magnet clutch (Air conditioner)
B-115	–
B-116	Engine coolant temperature switch (Air conditioner)
B-117	Vacuum solenoid valve
B-118	–
B-119	–

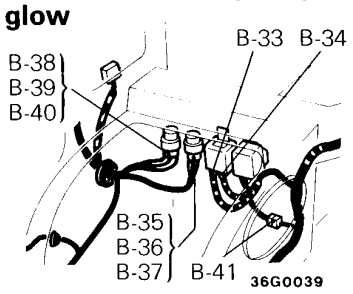
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "–" means that the connector with corresponding code-number is not used.

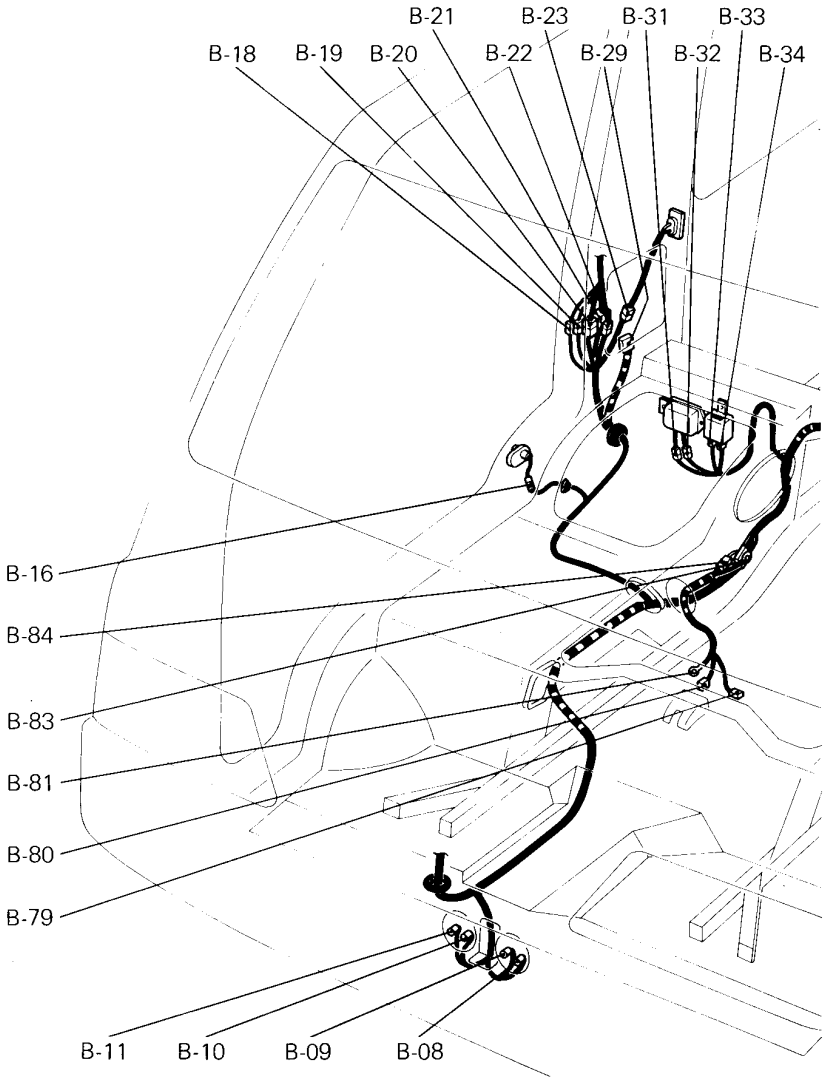
3-7 Diesel-powered vehicles <4WD>

Connector symbol

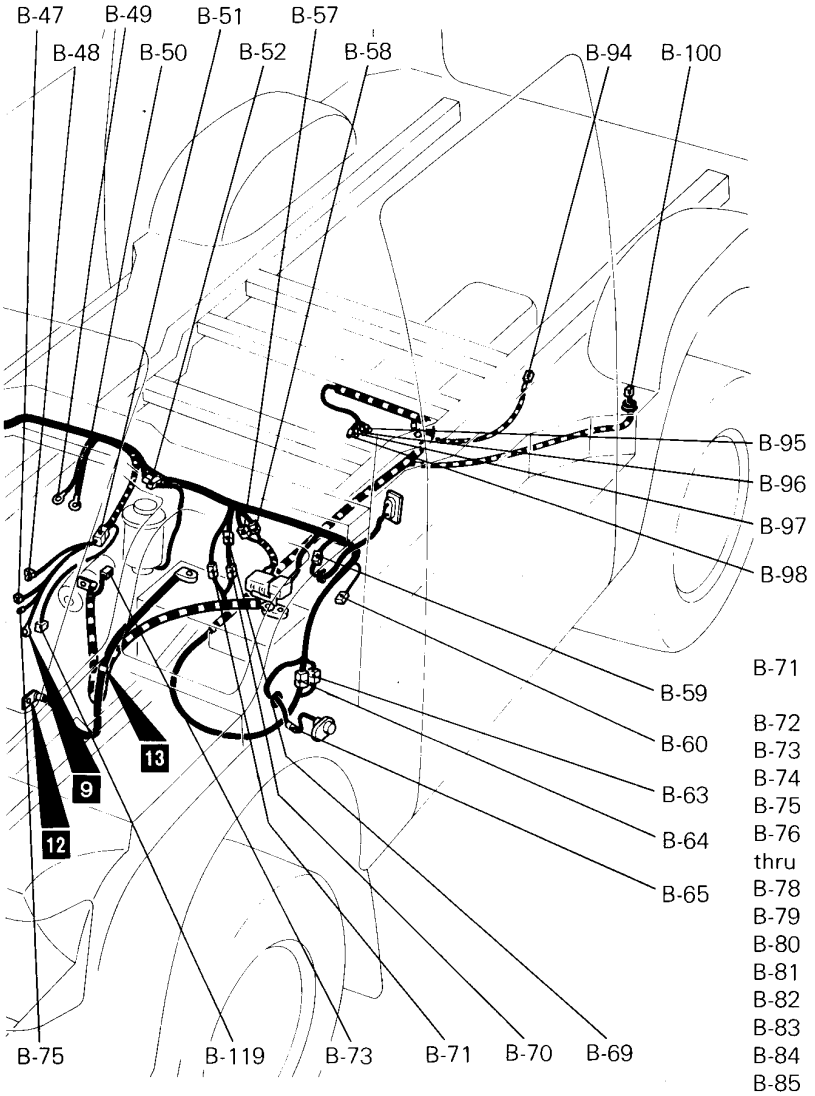
B

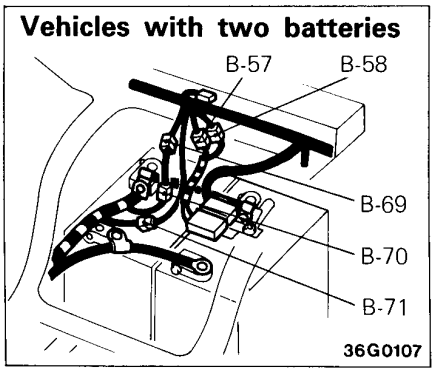
Vehicles with super quick glow





B-01 thru B-07	—
B-08 thru B-11	Horn
B-12 thru B-15	—
B-16	Front door switch (R.H.)
B-17	—
B-18 thru B-22	Front wiring harness and roof wiring harness combination
B-23	Contact switch (Vehicles with central locking system)
B-24 thru B-28	—
B-29	Glow control unit
B-30	—
B-31 B-32	Glow relay
B-33 B-34	Starter relay
B-35 B-36 B-37	Glow relay 1
B-38 B-39 B-40	Glow relay 2
B-41	Resistor
B-42 thru B-46	—
B-47	Revolution pick up
B-48	Engine coolant temperature gauge unit (Sensor)
B-49 B-50	Glow plug
B-51	Front wiring harness and injection pump wiring harness combination





36G0112

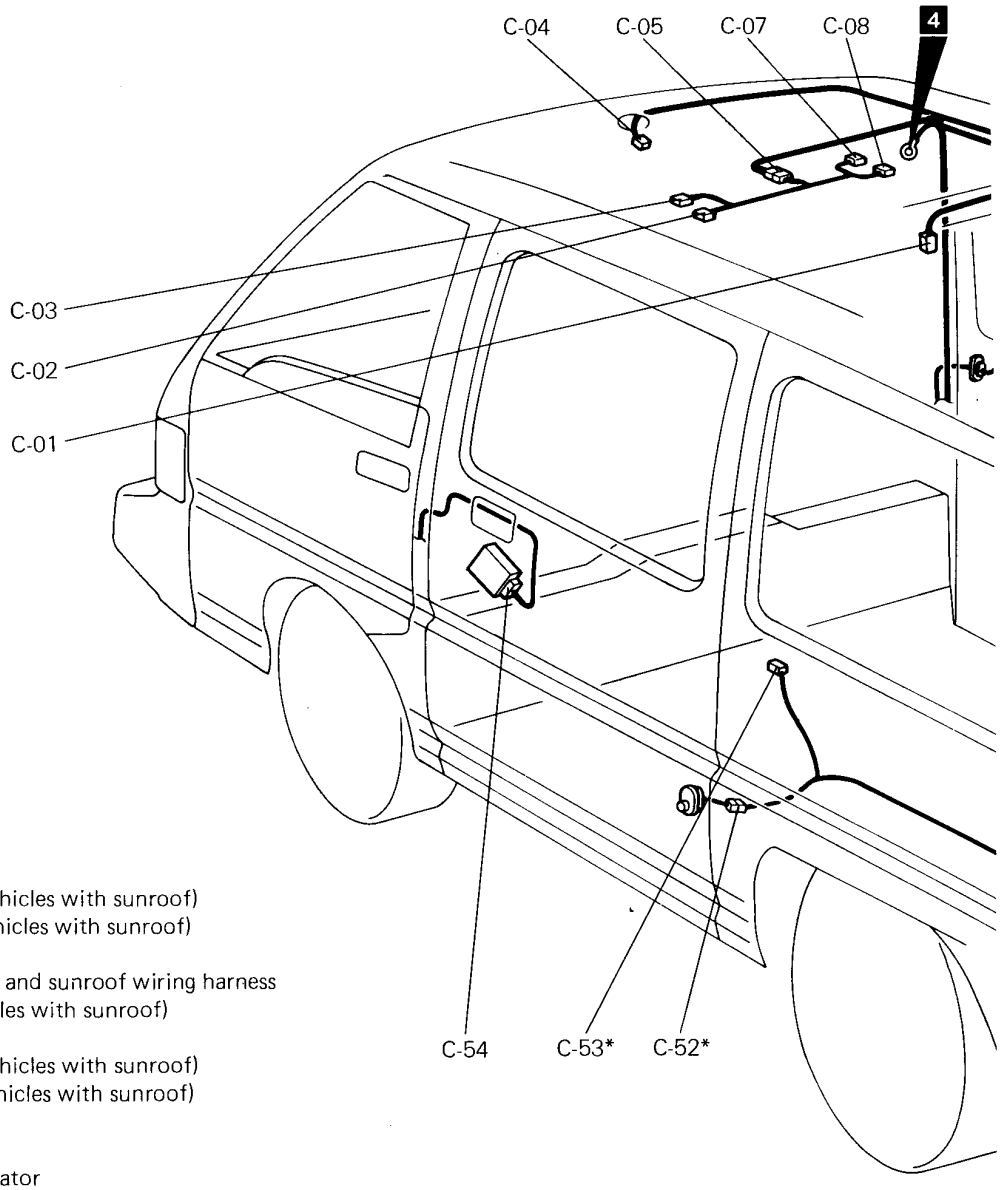
B-52 Water level switch
B-53 thru B-56 —
B-57, B-58 Front wiring harness and fusible link box combination
B-59 Contact switch (Vehicles with central locking system)
B-60 Headlamp washer motor
B-61 —
B-62 —
B-63, B-64 Front wiring harness and fuel gauge wiring harness combination
B-65 Front door switch (L.H.)
B-66 thru B-68 —
B-69 Front wiring harness and fusible link combination
B-70 Fusible link and battery cable (+) combination
B-71 Front wiring harness and battery cable (+) combination
B-72 —
B-73 Starter
B-74 —
B-75 Fuel cut solenoid valve
B-76 thru B-78 —
B-79 Oil pressure switch
B-80, B-81 Alternator
B-82 —
B-83, B-84 Front wiring harness and engine wiring harness combination
B-85 thru B-93 —
B-94 Fuel gauge unit
B-95, B-96 Back-up lamp switch
B-97, B-98 4WD indicator lamp switch
B-99 —
B-100 Rear heater blower motor
B-101 thru B-118 —
B-119 Engine coolant temperature switch

Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.

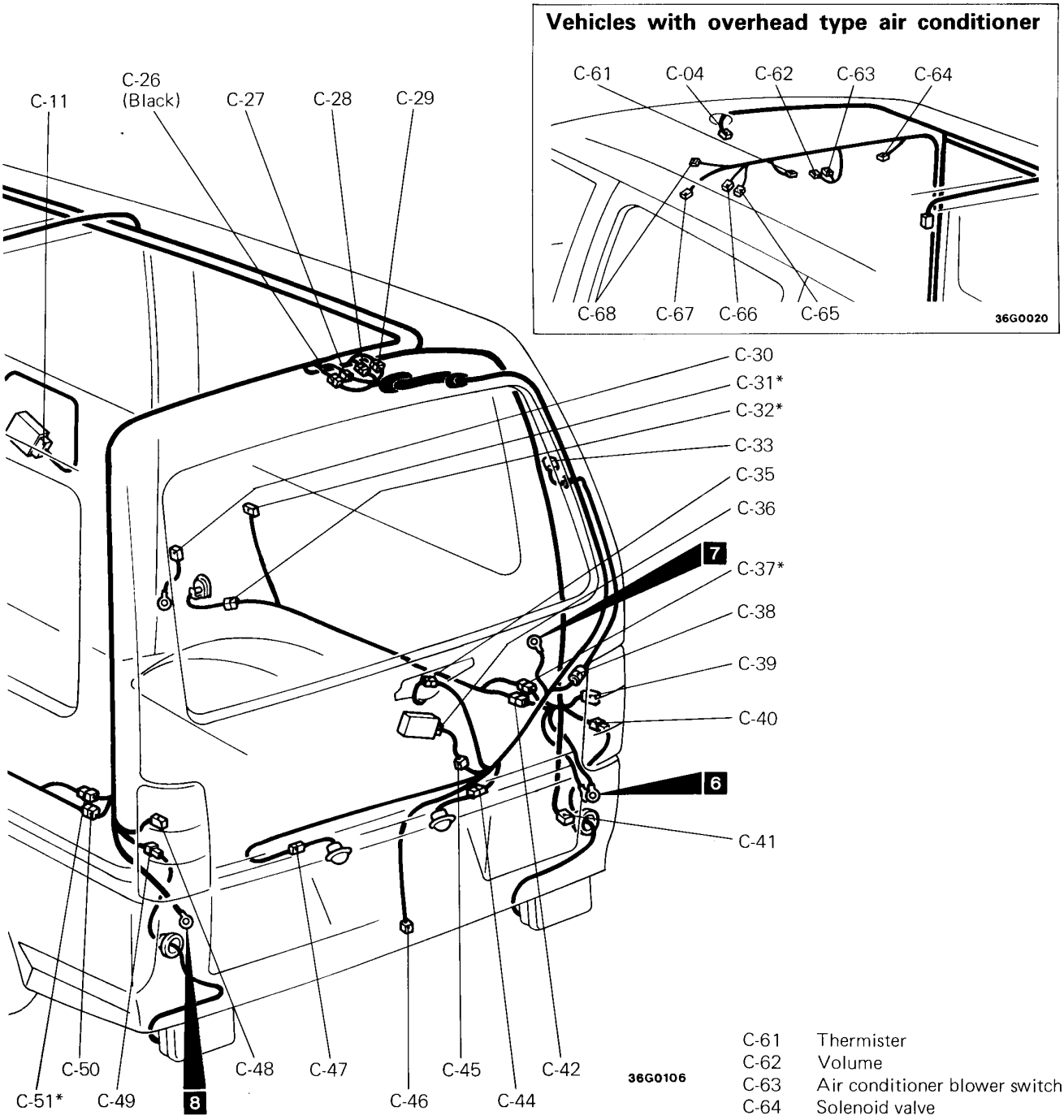
4 ROOF · TAILGATE · REAR SIDE

4-1 5-door models

Connector symbol **C**



C-01 Rear room lamp
C-02 Sunroof relay 2 (Vehicles with sunroof)
C-03 Sunroof motor (Vehicles with sunroof)
C-04 Front room lamp
C-05 Roof wiring harness and sunroof wiring harness combination (Vehicles with sunroof)
C-06 —
C-07 Sunroof relay 1 (Vehicles with sunroof)
C-08 Sunroof switch (Vehicles with sunroof)
C-09 —
C-10 —
C-11 Rear door lock actuator
C-12 thru C-25 —
C-26 thru C-29 Roof wiring harness and tailgate wiring harness combination
C-30 Defogger (—)
C-31 Rear speaker (R'H.)
C-32 Rear door switch (R.H.)
C-33 Defogger (+)
C-34 —
C-35 Rear wiper motor
C-36 Tailgate lock actuator
C-37 Door switch wiring harness and roof wiring harness combination
C-38 Tailgate wiring harness and defogger cable (+) combination
C-39 Rear combination lamp (R.H.)
C-40 Rear fog lamp (R.H. drive vehicles)
C-41 Rear washer motor
C-42 Door switch wiring harness and roof wiring harness combination or rear door switch
C-43 —
C-44 Licence plate lamp (R.H.)
C-45 Tailgate lock wiring harness and tailgate wiring harness combination
C-46 Tailgate switch
C-47 Licence plate lamp (L.H.)
C-48 Rear combination lamp (L.H.)



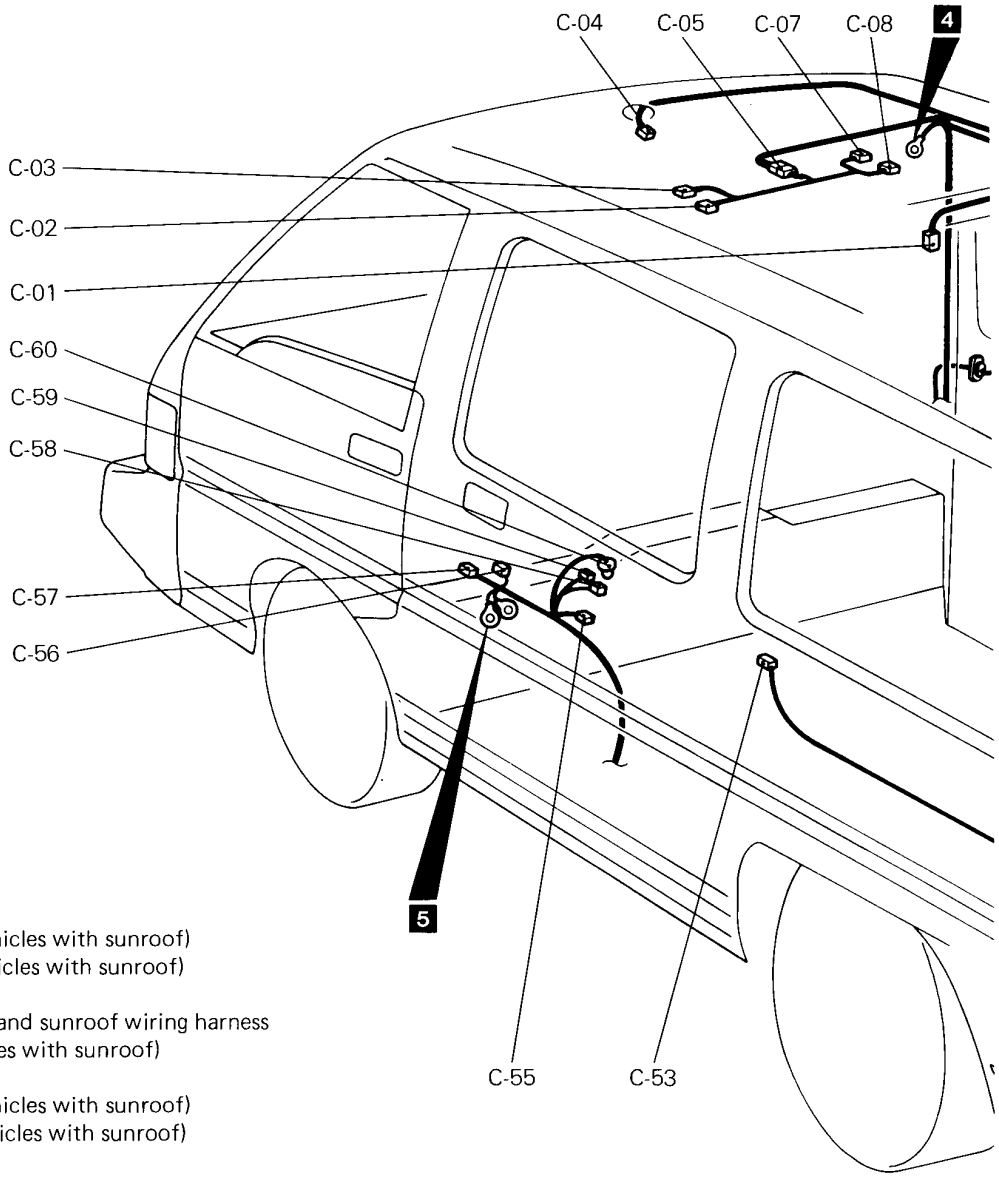
C-49 Rear fog lamp (L.H. drive vehicles)
C-50 Door switch wiring harness and roof wiring harness combination* or rear door switch
C-51 Door switch wiring harness and roof wiring harness combination
C-52 Rear door switch (L.H.)
C-53 Rear speaker (L.H.)
C-54 Rear door lock actuator
C-55 thru C-60 —

C-61 Thermister
C-62 Volume
C-63 Air conditioner blower switch
C-64 Solenoid valve
C-65 Resistor
C-66 Air conditioner relay D
C-67 Air conditioner blower motor
C-68 Thermo relay

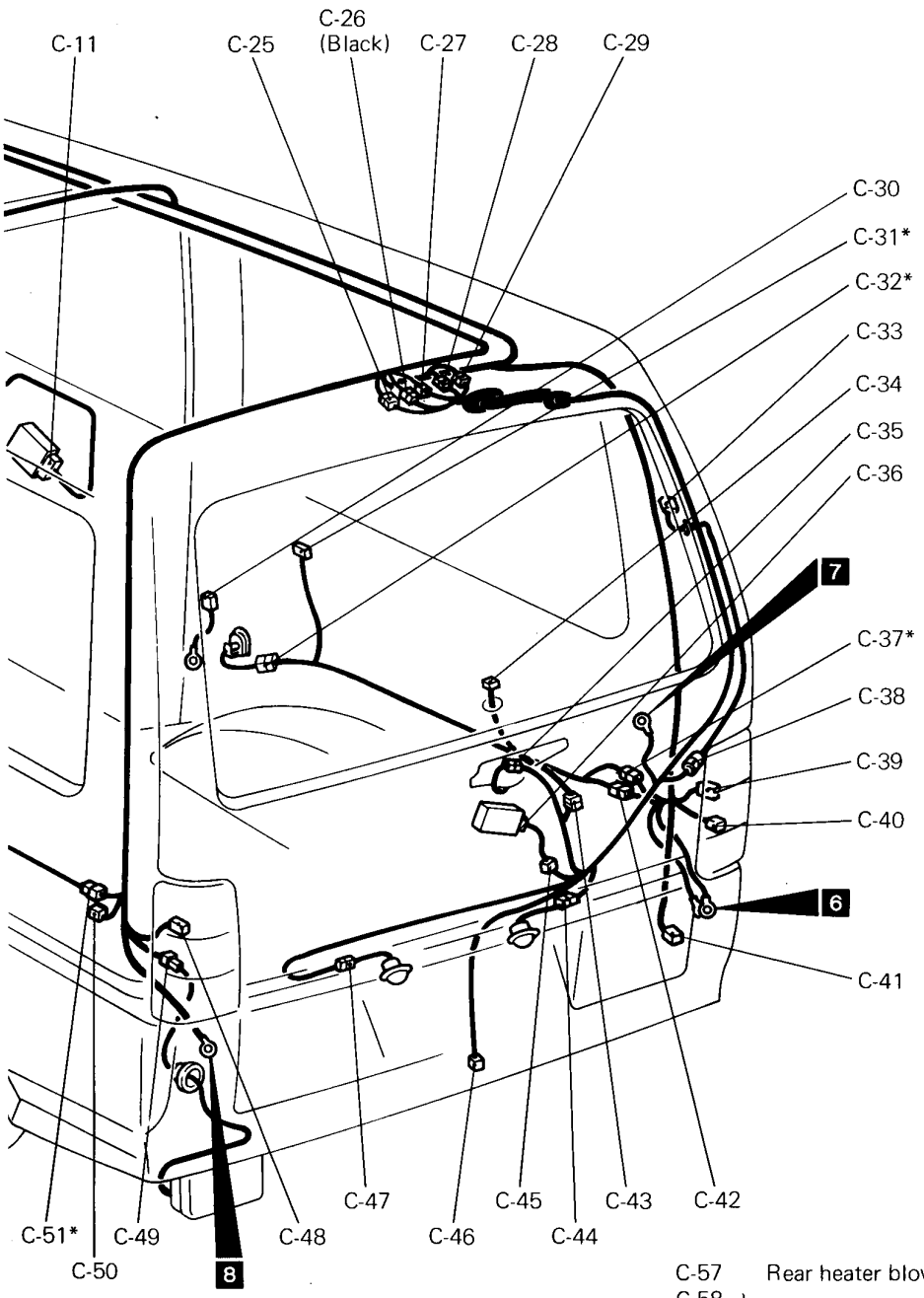
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.
(3) The * symbol indicates vehicles with rear speaker.

4-2 4-door models (without crystal light roof)

Connector symbol **C**



C-01 Rear room lamp
C-02 Sunroof relay 2 (Vehicles with sunroof)
C-03 Sunroof motor (Vehicles with sunroof)
C-04 Front room lamp
C-05 Roof wiring harness and sunroof wiring harness combination (Vehicles with sunroof)
C-06 —
C-07 Sunroof relay 1 (Vehicles with sunroof)
C-08 Sunroof switch (Vehicles with sunroof)
C-09 —
C-10 —
C-11 Rear door lock actuator
C-12 thru C-24 —
C-25 thru C-29 Roof wiring harness and tailgate wiring harness combination
C-30 Defogger (—)
C-31 Rear speaker (R.H.)
C-32 Rear door switch (R.H.)
C-33 Defogger (+)
C-34 High-mounted stop lamp
C-35 Rear wiper motor
C-36 Tailgate lock actuator
C-37 Door switch wiring harness and roof wiring harness combination
C-38 Tailgate wiring harness and defogger cable (+) combination
C-39 Rear combination lamp (R.H.)
C-40 No connection
C-41 Rear washer motor
C-42 Door switch wiring harness and roof wiring harness combination or rear door switch
C-43 Tailgate wiring harness and high mounted stop lamp wiring harness combination
C-44 Licence plate lamp (R.H.)
C-45 Tailgate lock wiring harness and tailgate wiring harness combination
C-46 Tailgate switch
C-47 Licence plate lamp (L.H.)
C-48 Rear combination lamp (L.H.)

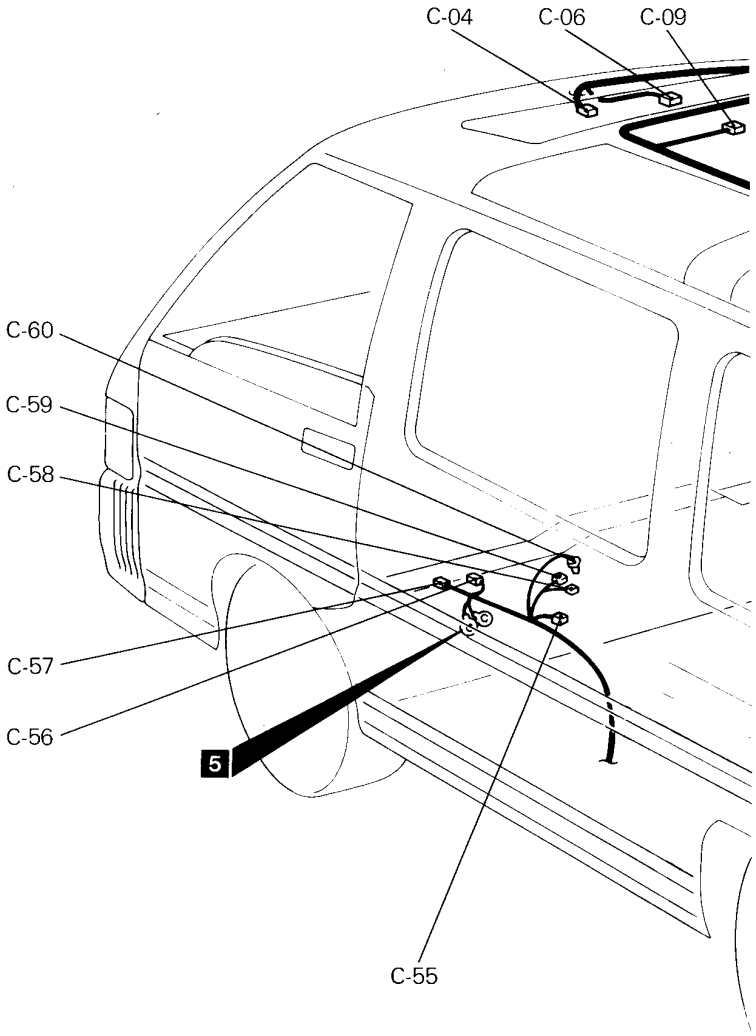


C-49 Rear fog lamp
C-50 No connection
C-51 Rear speaker wiring harness and roof wiring harness combination
C-52 —
C-53 Rear speaker (L.H.)
C-54 —
C-55 No connection
C-56 Rear heater blower control
C-57 Rear heater blower sub switch
C-58, C-59 Rear cigarette lighter
C-60 Rear cigarette lighter illumination lamp
C-61 thru C-68 —

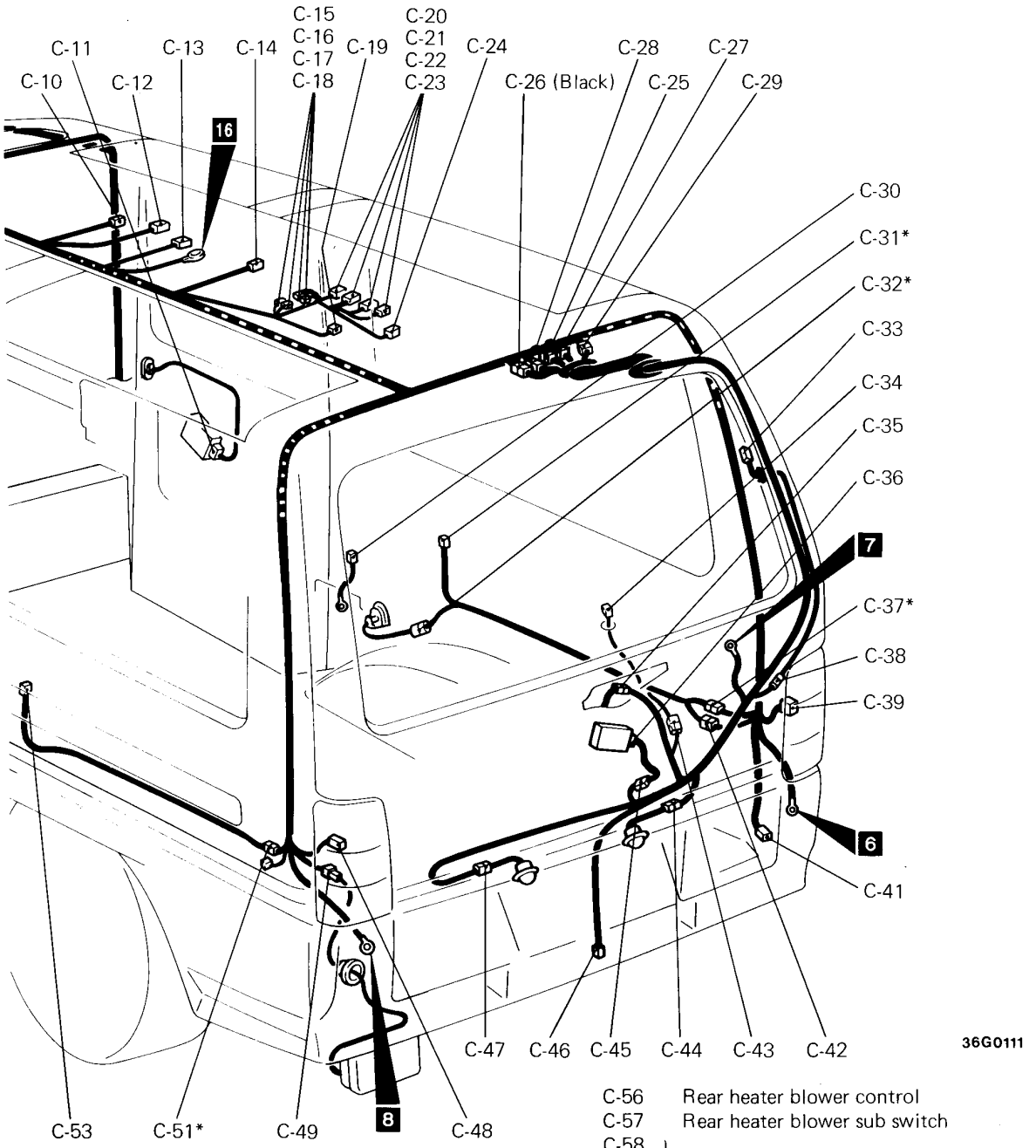
Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.
(3) The * symbol indicates vehicles with rear speaker.

4-3 4-door models (with crystal light roof)

Connector symbol **C**



C-01 thru C-03 —
C-04 Front room lamp
C-05 —
C-06 Motor-driven roof blind main switch (Front)
C-07 —
C-08 —
C-09 Motor-driven roof blind motor (Front-L.H.)
C-10 Overhead console lamp
C-11 Rear door lock actuator (Mini-bus)
C-12 Motor-driven roof blind motor (Front-R.H.)
C-13 Motor-driven roof blind sub switch (Rear)
C-14 Spot lamp
C-15 thru C-18 Diode (for motor-driven roof blind)
C-19 Motor-driven roof blind motor (Rear-L.H.)
C-20 thru C-23 Motor-driven roof blind relay
C-24 Motor-driven roof blind motor (Rear-R.H.)
C-25 thru C-29 Roof wiring harness and tailgate wiring harness combination
C-30 Defogger (–)
C-31 Rear speaker (R.H.)
C-32 Rear door switch
C-33 Defogger (+)
C-34 High-mounted stop lamp
C-35 Rear wiper motor
C-36 Tailgate lock actuator
C-37 Door switch wiring harness and roof wiring harness combination
C-38 Tailgate wiring harness and defogger cable (+) combination
C-39 Rear combination lamp (R.H.)
C-40 —
C-41 Rear washer motor
C-42 Door switch wiring harness and roof wiring harness combination or rear door switch
C-43 Tailgate wiring harness and high mounted stop lamp wiring harness combination
C-44 Licence plate lamp (R.H.)
C-45 Tailgate lock wiring harness and tailgate wiring harness combination
C-46 Tailgate switch



C-47 Licence plate lamp (L.H.)
C-48 Rear combination lamp (L.H.)
C-49 Rear fog lamp
C-50 —
C-51 Rear speaker wiring harness and roof wiring harness combination
C-52 —
C-53 Rear speaker (L.H.)
C-54 —
C-55 No connection
C-56 Rear heater blower control
C-57 Rear heater blower sub switch
C-58, C-59 Rear cigarette lighter
C-60 Rear cigarette lighter illumination lamp
C-61 thru C-68 —

Remarks
(1) For details of earth points (example 13), refer to P.3-13.
(2) "—" means that the connector with corresponding code-number is not used.
(3) The * symbol indicates vehicles with rear speaker.

3 SINGLE PART INSTALLATION POSITION

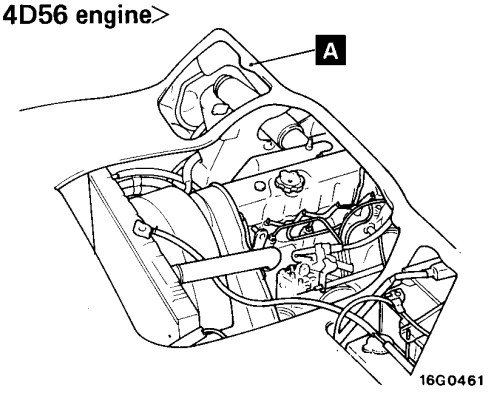
RELAY MOUNTING LOCATIONS

Name	Symbol	Name	Symbol
Air conditioner relay A	I	Glow relay 2 (for super quick glow)	A
Air conditioner relay B	I	Headlamp relay	D
Air conditioner relay C	I	Headlamp washer relay	J
Air conditioner relay D	N	Motor driven roof blind relay	M
Alternator relay or auto choke relay (FBC)	J, K*	MPI control relay	H
Cold mixture heater relay	B	Power window relay	J
Daytime running lamp relay 1	F	Rear fog lamp relay	D
Daytime running lamp relay 2	F	Rear heater relay	D
Defogger relay	D	Rear intermittent wiper relay	G
Dim-dip lamp relay 1	D	Starter relay (Diesel-powered vehicles)	A
Dim-dip lamp relay 2	D	Sunroof relay 1	L
Door lock relay	J	Sunroof relay 2	L
Front intermittent wiper relay	E	Thermo relay	N
Glow relay (for auto glow)	A	Turn signal and hazard flasher unit	D
Glow relay 1 (for super quick glow)	A	Vacuum pump relay	C

Remarks
(1) The "Name" column is arranged in alphabetical order.
(2) The * symbol indicates for R.H. drive vehicles.

Engine compartment

<4D56 engine>



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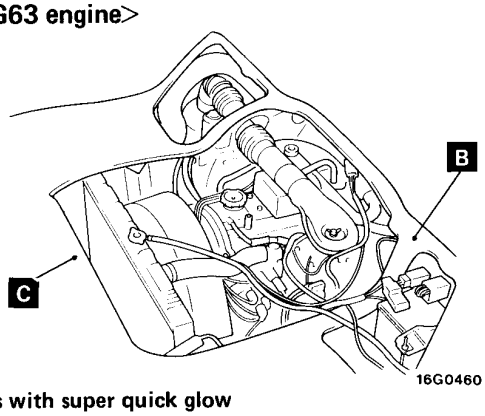
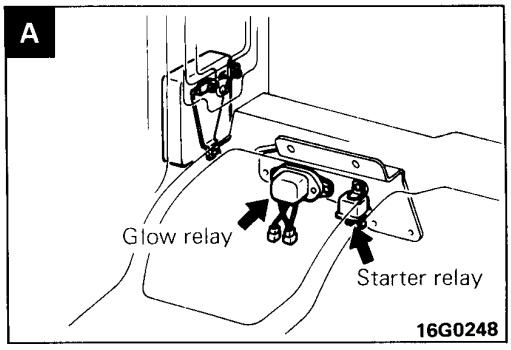
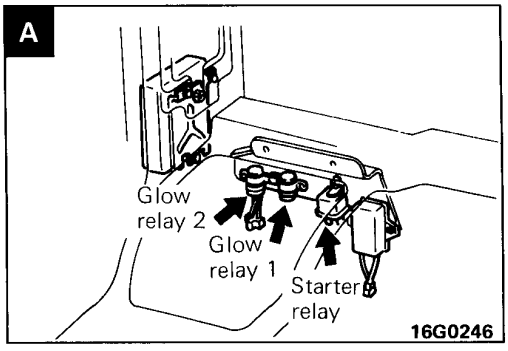
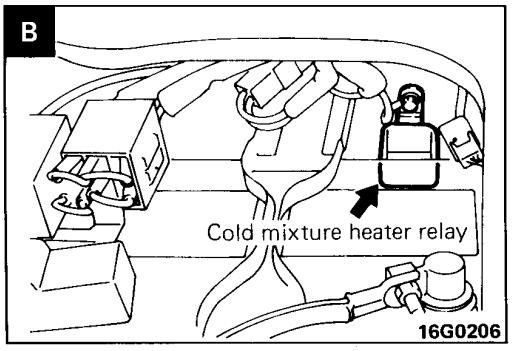


Vehicles with auto glow system

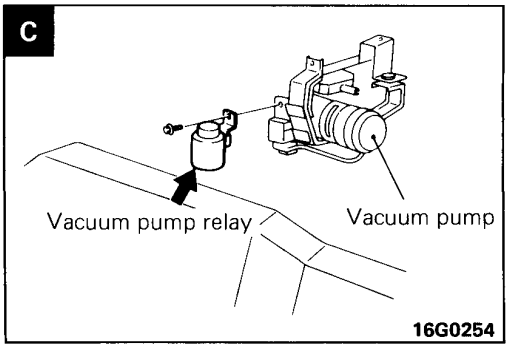


Vehicles with super quick glow

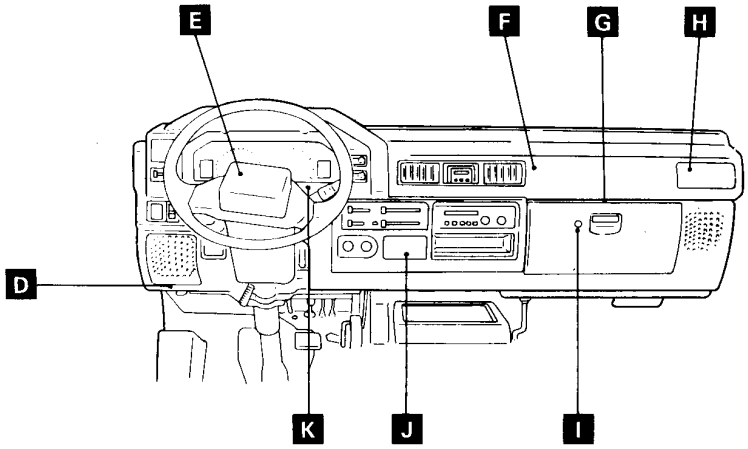




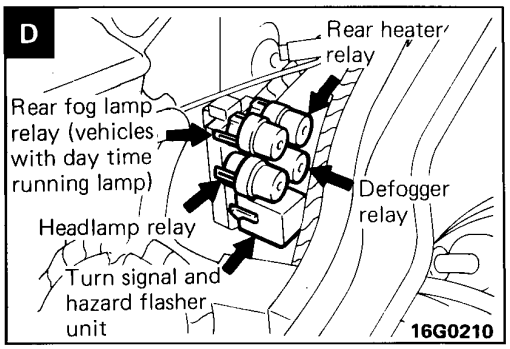
Vehicles with auto-cruise control



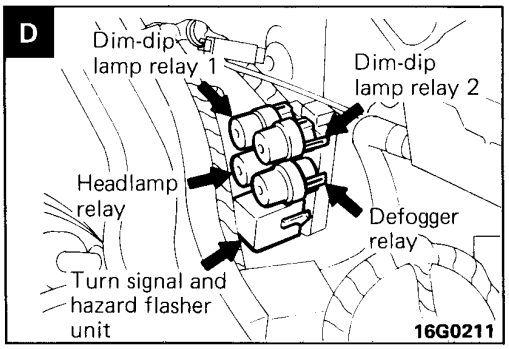
Interior

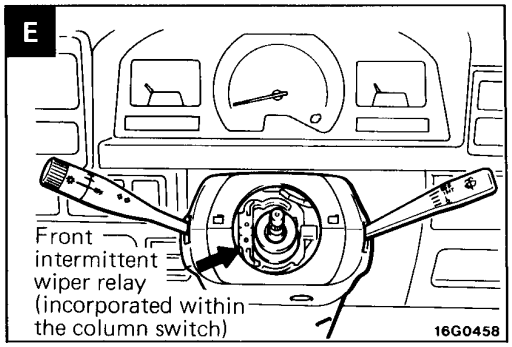


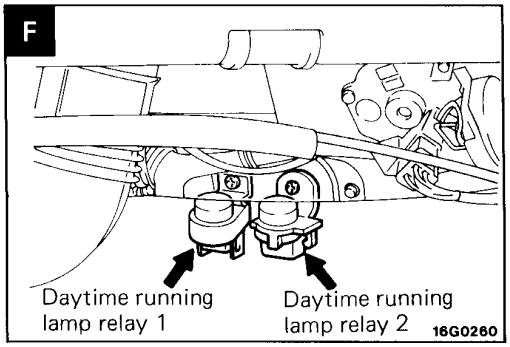
L.H. drive vehicles



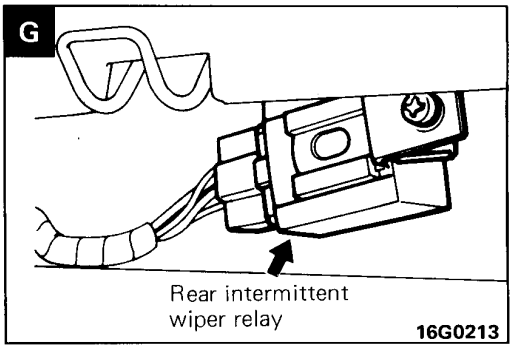
R.H. drive vehicles



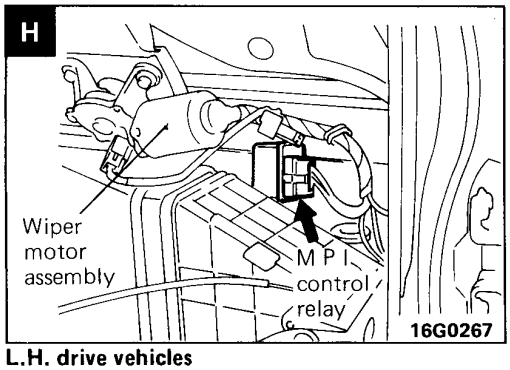




G

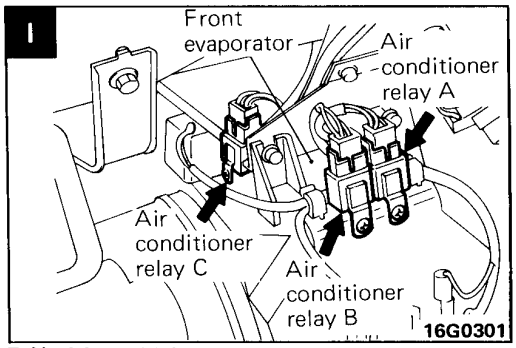


H

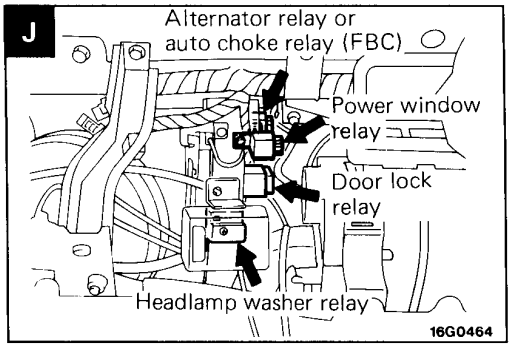


L.H. drive vehicles

I

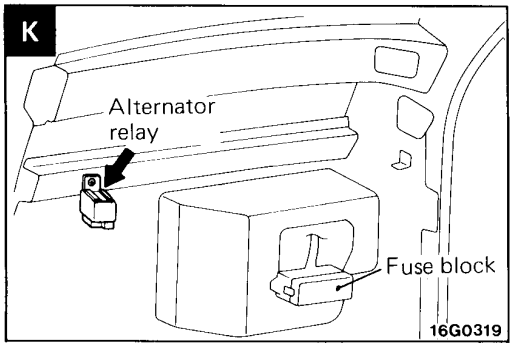


J

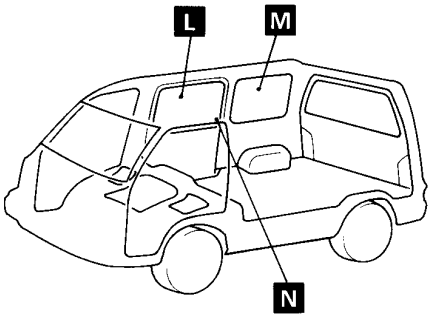


R.H. drive vehicles

K



Roof



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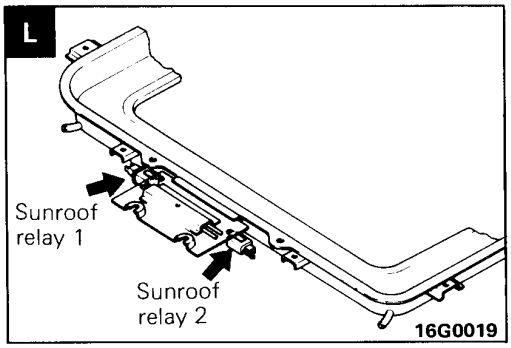

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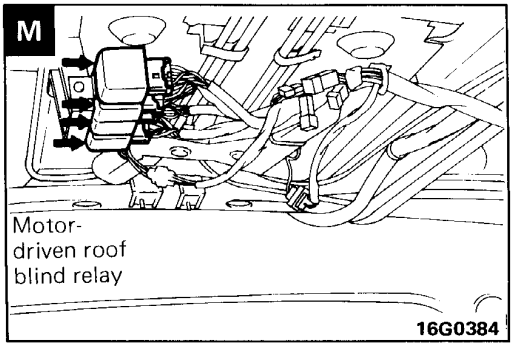

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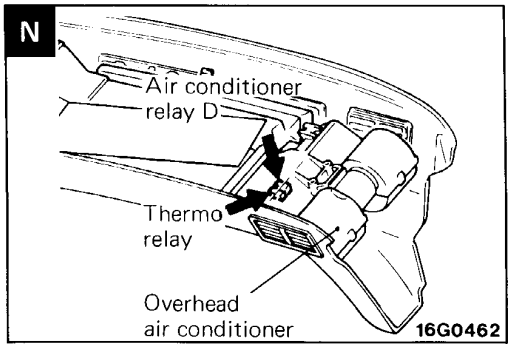
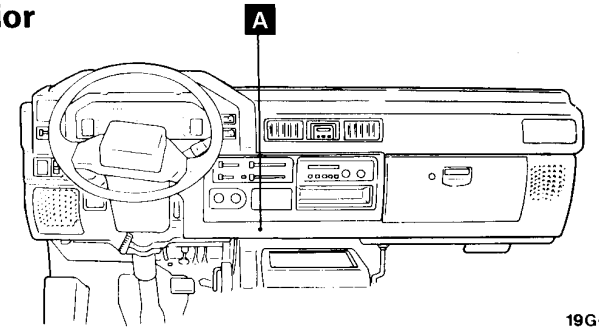


CONTROL UNIT MOUNTING LOCATIONS

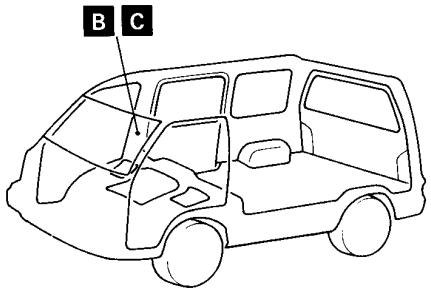
Name	Symbol	Name	Symbol
Auto-cruise control unit	A	Glow control unit	C
Door lock control unit	A	MPI control unit	B
FBC control unit	B	–	–

Remark
The "Name" column is arranged in alphabetical order.

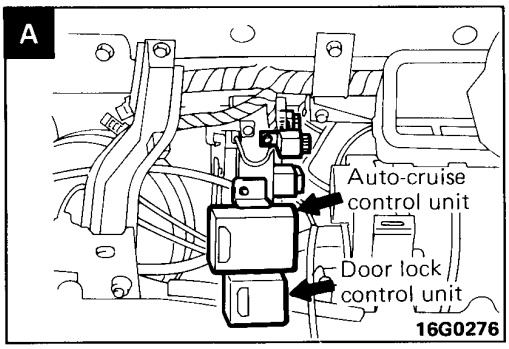
Interior

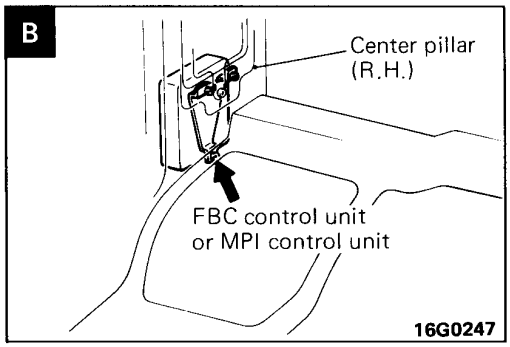


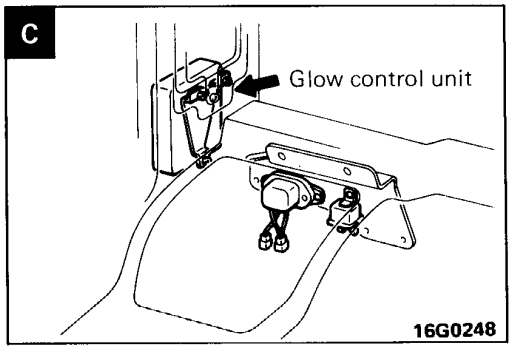
19G0361



16G0324







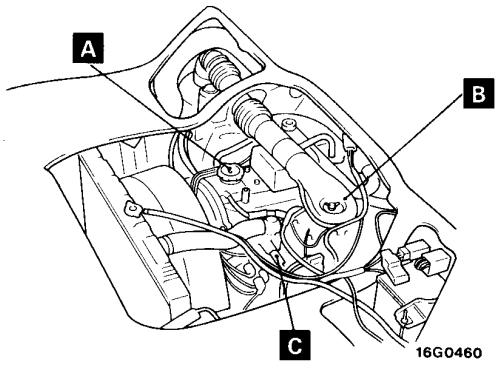
SENSOR MOUNTING LOCATIONS

F B C

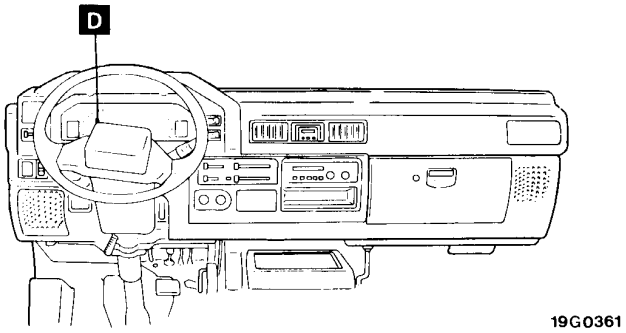
Name	Symbol	Name	Symbol
Engine coolant temperature gauge unit	C	Throttle position sensor	B
Engine coolant temperature sensor	C	Vehicle-speed sensor (reed switch)	D
Oxygen sensor	A	–	–

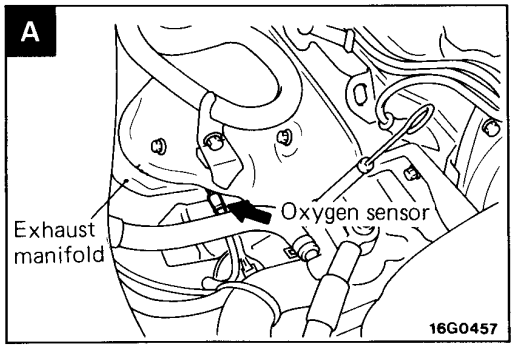
Remark
The "Name" column is arranged in alphabetical order.

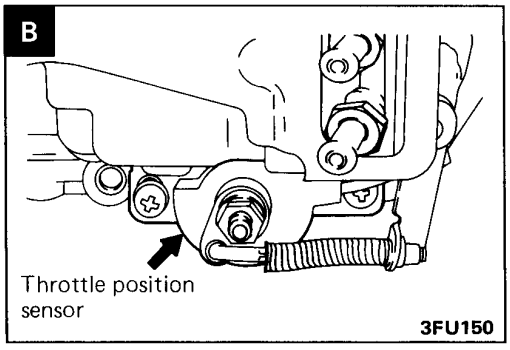
Engine compartment

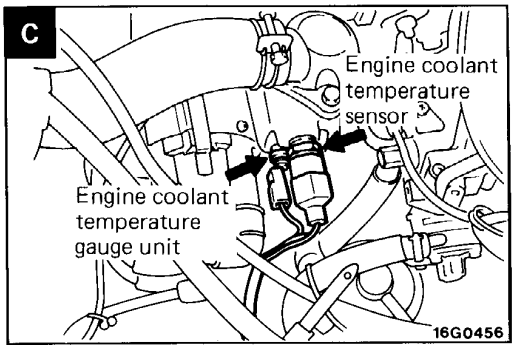


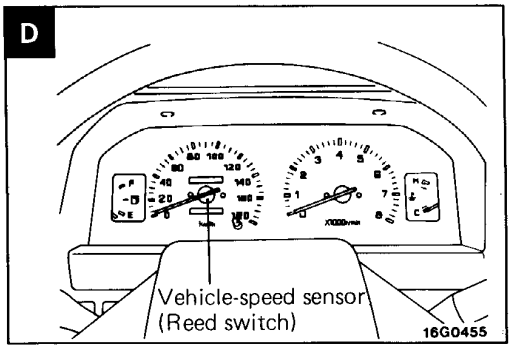
Interior









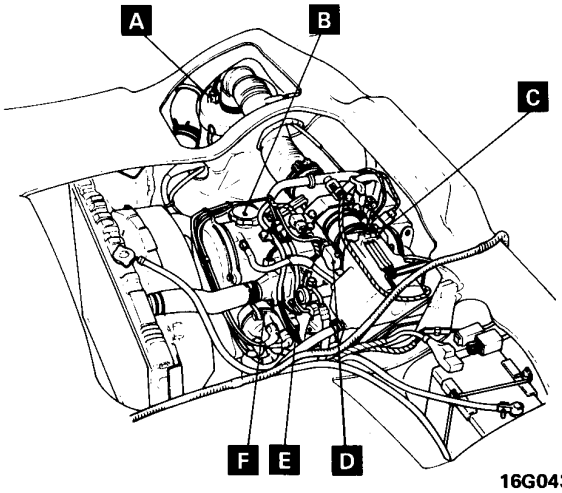


M P I

Name	Symbol	Name	Symbol
Air-flow sensor (incorporating intake air temperature sensor and atmospheric pressure sensor	A	Motor position sensor	C
Crank angle sensor and top dead centre sensor	F	Oxygen sensor	B
Engine coolant temperature gauge unit	E	Throttle position sensor	D
Engine coolant temperature sensor	E	Vehicle-speed sensor (reed switch)	G

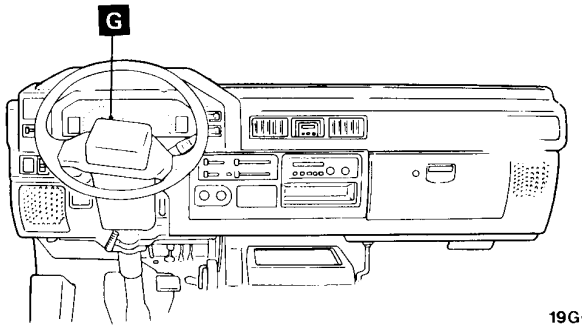
Remark
The "Name" column is arranged in alphabetical order.

Engine compartment

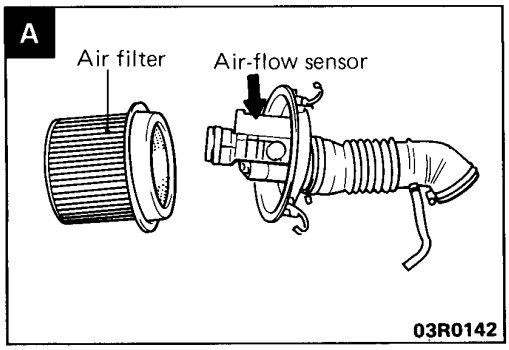


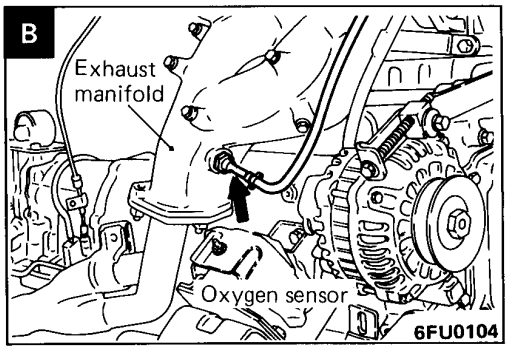
16G0436

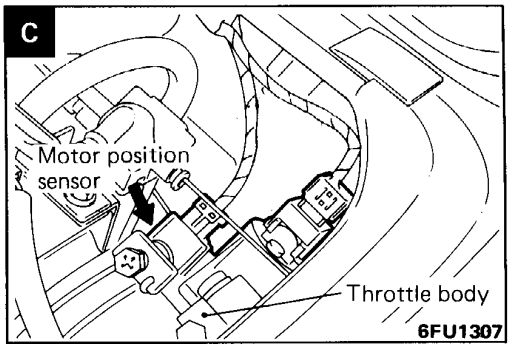
Interior

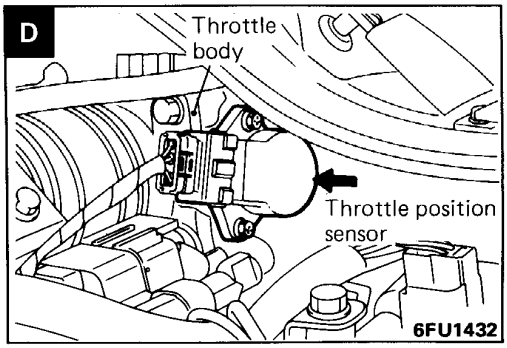


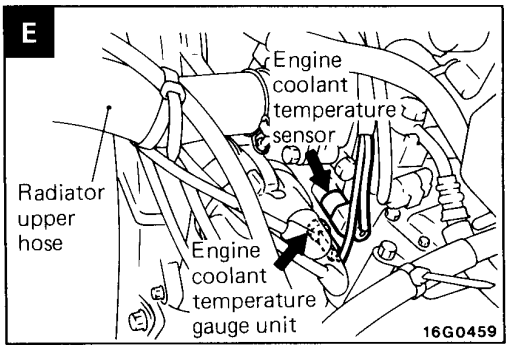
19G0361

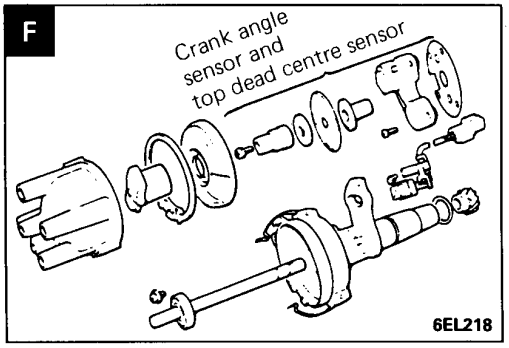


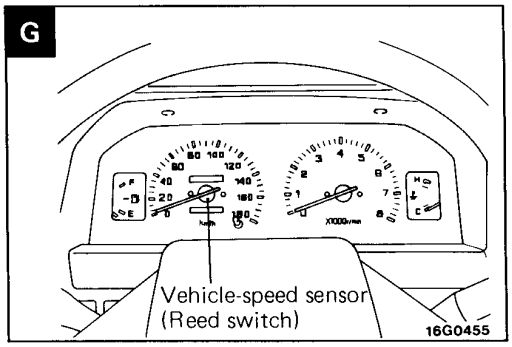








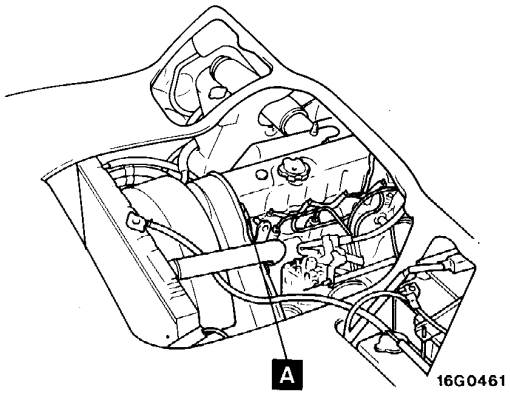


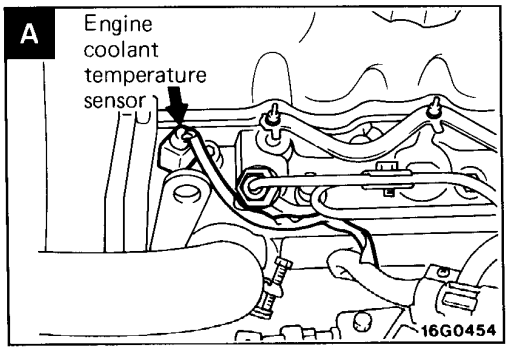


DIESEL-POWERED VEHICLES

Name	Symbol
Engine coolant temperature sensor	A

Engine compartment



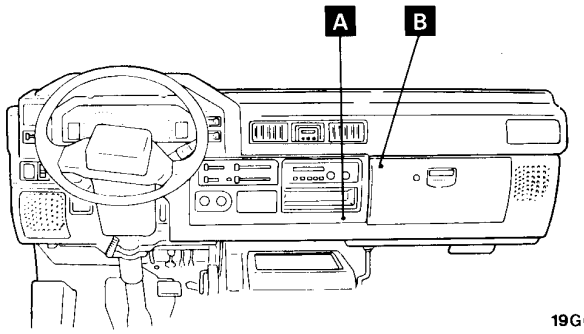


DIODE MOUNTING LOCATIONS

Name	Symbol	Name	Symbol
Diode (for daytime running lamp circuit)	B	Diode (for motor-driven roof blind circuit)	C
Diode (for door lamp circuit)	A	–	–

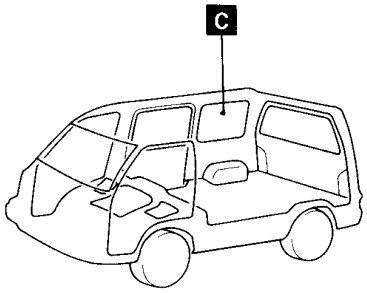
Remark
The "Name" column is arranged in alphabetical order.

Interior



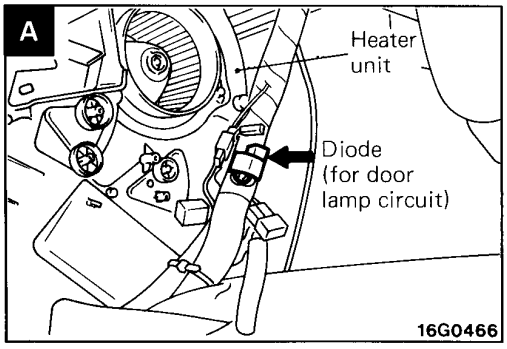
19G0361

Roof

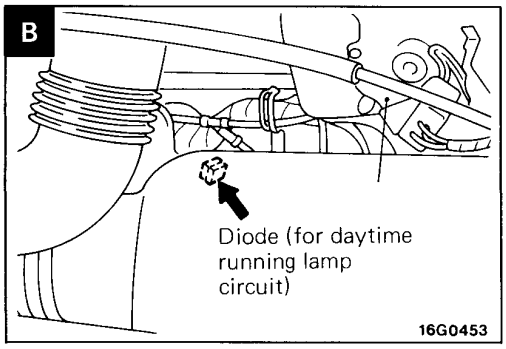


16G0324

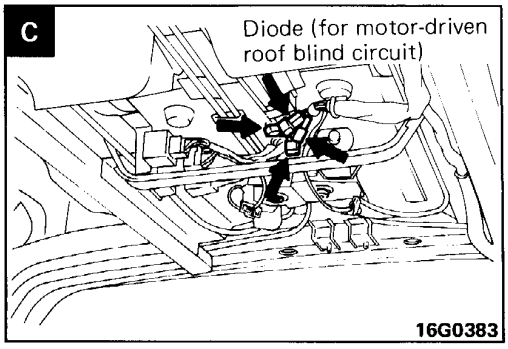
Vehicles with crystal-light roof



16G0466



16G0453



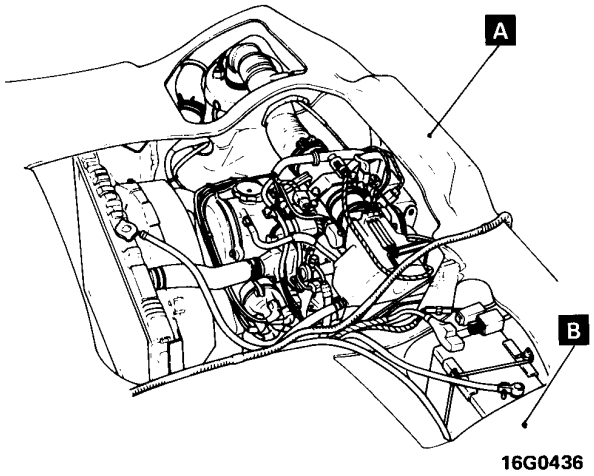
16G0383

INSPECTION TERMINAL MOUNTING LOCATIONS

Name	Symbol	Name	Symbol
Fuel pump check connector	B	Self-diagnosis check connector	C
Ignition timing adjustment connector	A	–	–

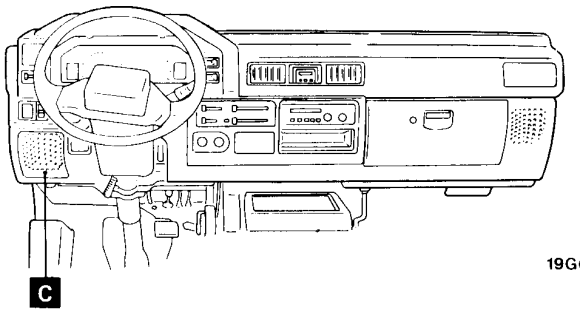
Remark
The "Name" column is arranged in alphabetical order.

Engine compartment

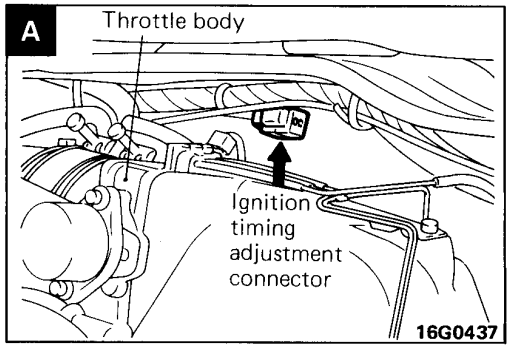


16G0436

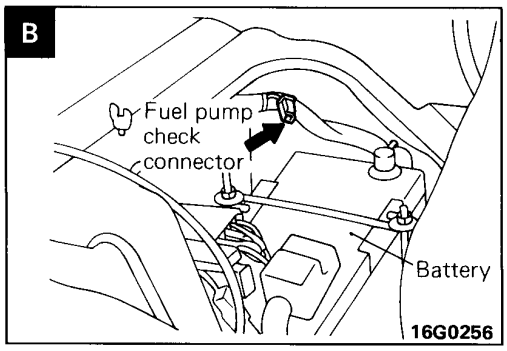
Interior



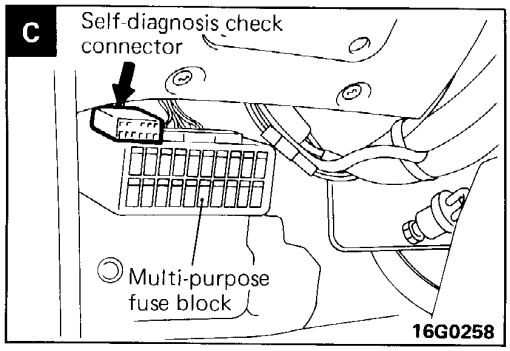
19G0361



16G0437



16G0256



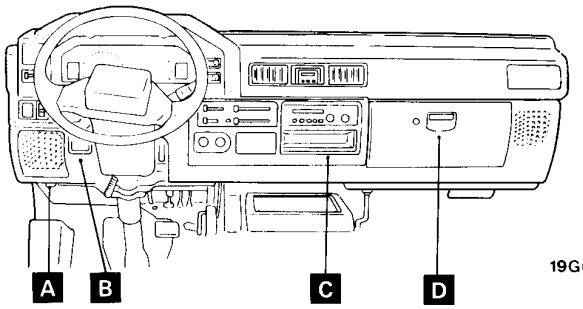
16G0258

FUSIBLE LINK AND FUSE MOUNTING LOCATIONS

Name	Symbol	Name	Symbol
Dedicated fuse (for air conditioner circuit)	D	Dedicated fusible link (for glow system circuit)	G
Dedicated fuse (for headlamp leveling circuit)	B	Dedicated fusible link (for M P I circuit)	F
Dedicated fuse (for illumination lamp circuit)	C	Fusible link box (sub fusible links)	F, G*
Dedicated fusible link (for air conditioner circuit)	E, G*	Main fusible link	F, G*
Dedicated fusible link (for cold mixture heater circuit)	F	Multi-purpose fuse block	A

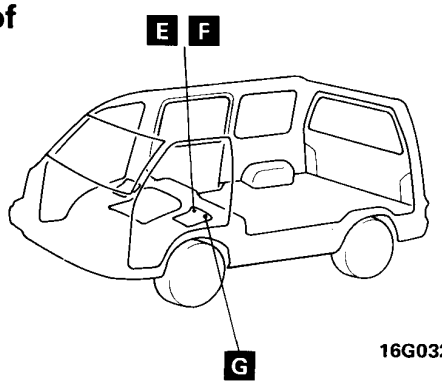
Remarks
(1) The "Name" column is arranged in alphabetical order.
(2) The * symbol indicates diesel powered vehicles.

Interior

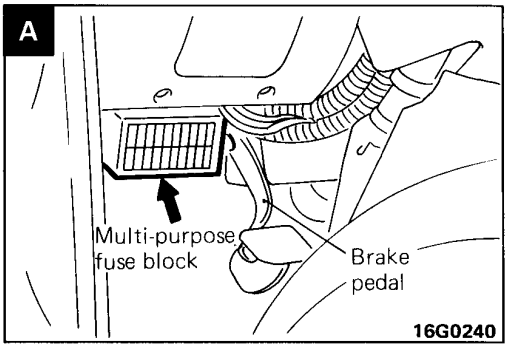


19G0361

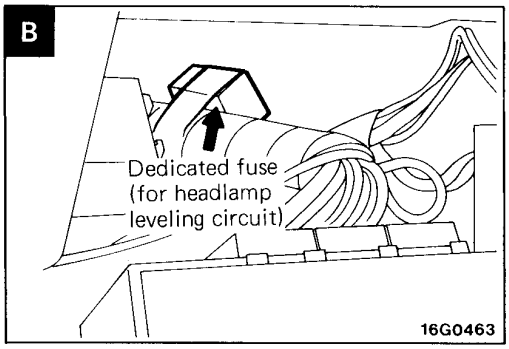
Roof



16G0324

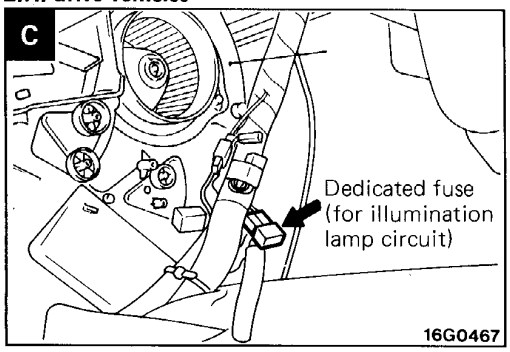


16G0240

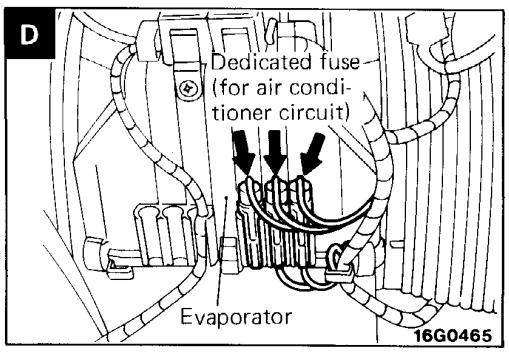


16G0463

L.H. drive vehicles

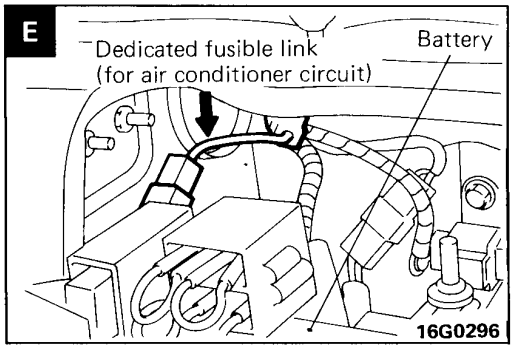


16G0467

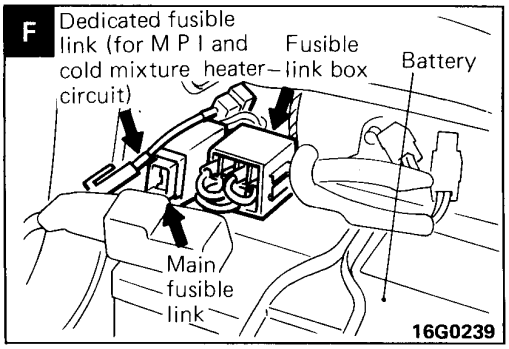


16G0465

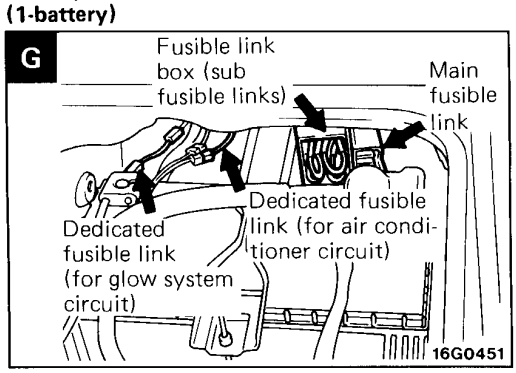
Petrol-powered vehicles



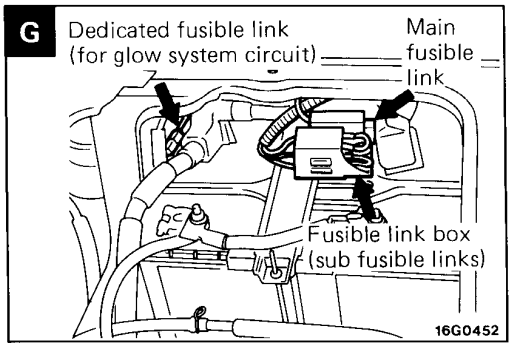
Petrol-powered vehicles



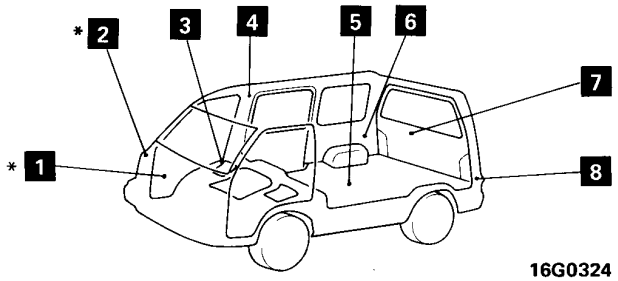
Diesel-powered vehicles (1-battery)



Diesel-powered vehicles (2-batteries)



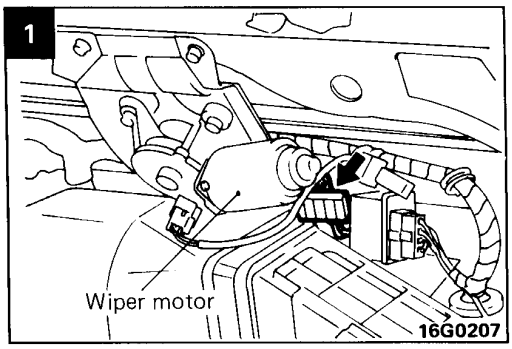
EARTH MOUNTING LOCATIONS



16G0324

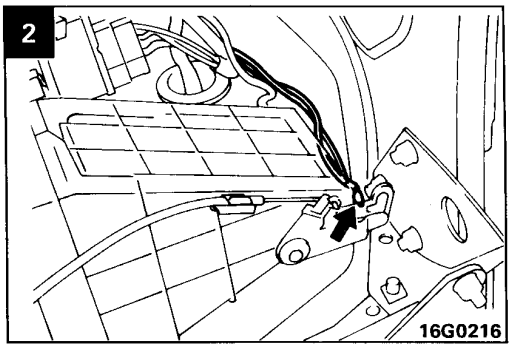
Remark
For R.H. drive vehicles, only the positions indicated by the * are symmetrical.

1



16G0207

2


16G0216

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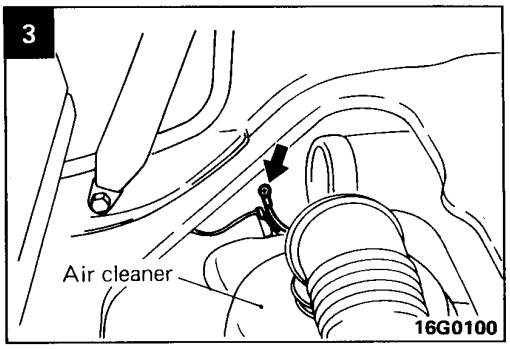
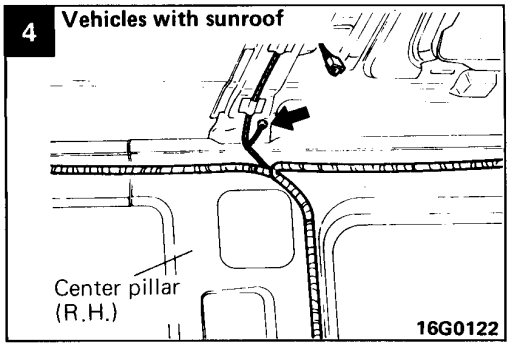


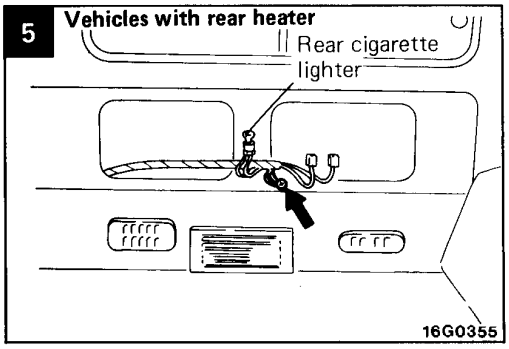
16G0100

4 Vehicles with sunroof



16G0122

5 Vehicles with rear heater



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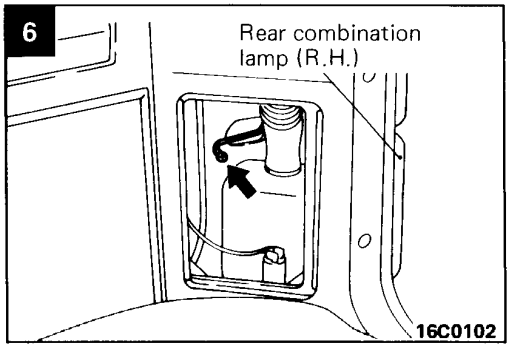

16C0102

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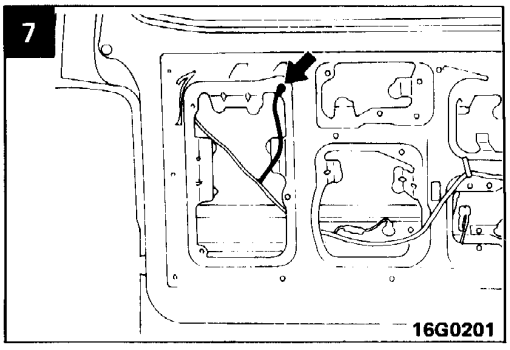
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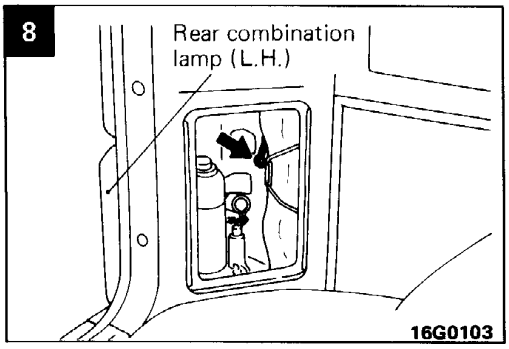
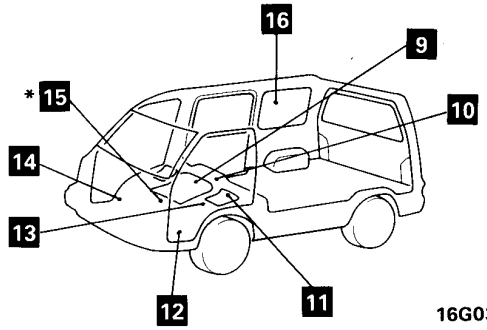


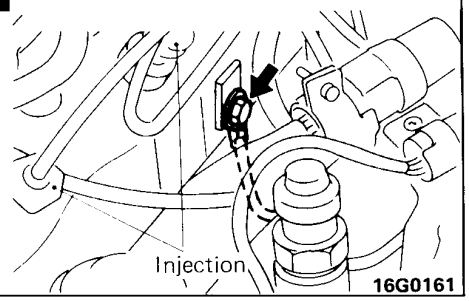
16G0103



16G0324

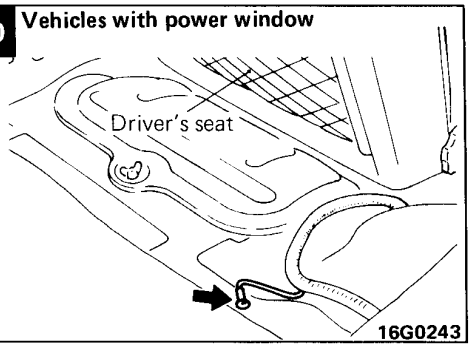
Remark
For R.H. drive vehicles, only the positions indicated by the * are symmetrical.

9 Diesel-powered vehicles



16G0161

10 Vehicles with power window



16G0243

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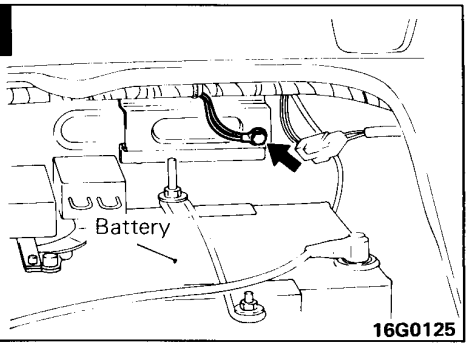
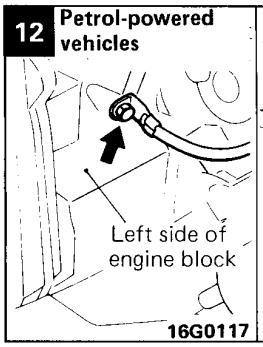


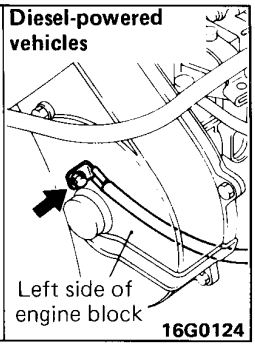
16G0125

12 Petrol-powered vehicles



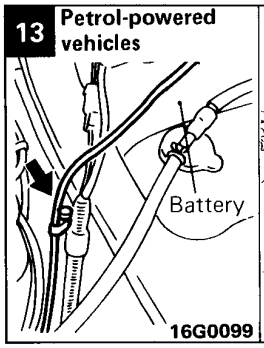
16G0117

Diesel-powered vehicles



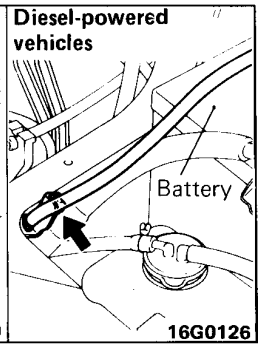
16G0124

13 Petrol-powered vehicles



16G0099

Diesel-powered vehicles



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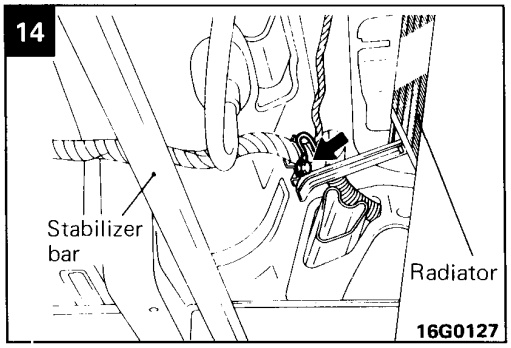

16G0127

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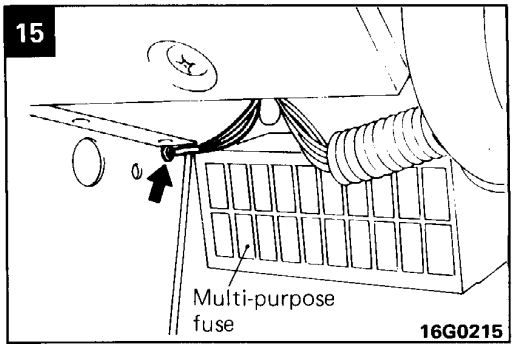
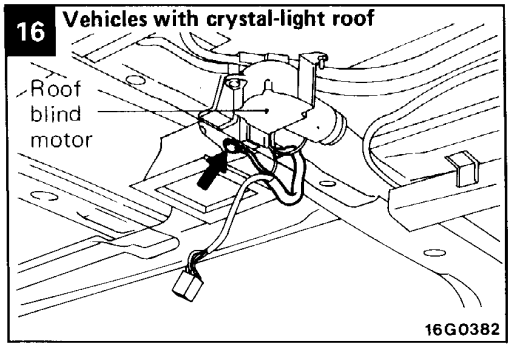


16G0215

16 Vehicles with crystal-light roof



16G0382

4 CIRCUIT DIAGRAM

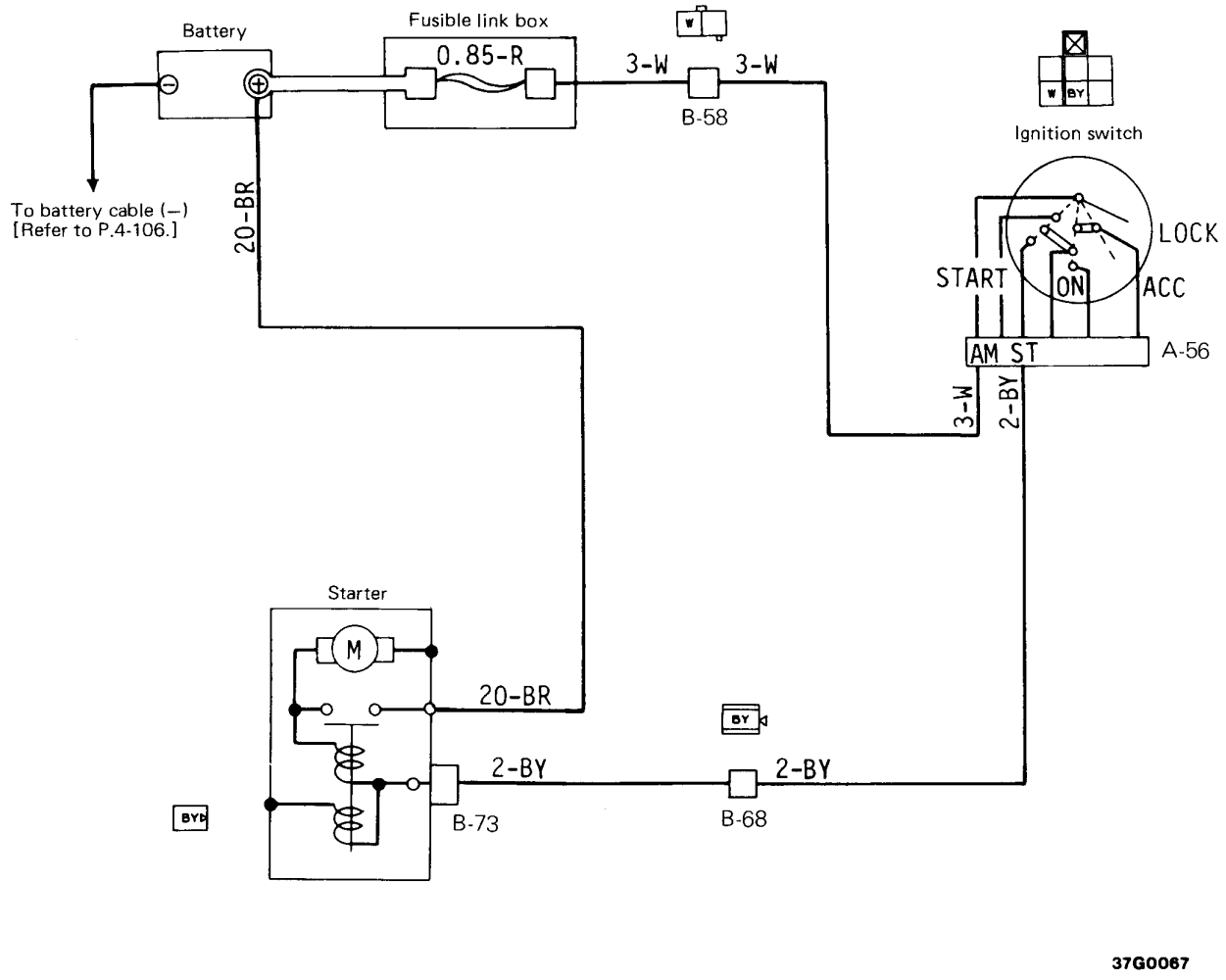
GENERAL DESCRIPTION

Each circuit diagram also contains the operation and troubleshooting hints. "OPERATION" gives a brief description of the circuit and operation of each system. "TROUBLESHOOTING HINTS" provide tips for isolating and identifying the causes of electrical troubles.
Note that this manual does not contain the operations of and troubleshooting hints for the following circuits controlled by the electronic control unit (ECU). For these, see WORKSHOP MANUAL.

- 2-2 Ignition circuit <Vehicles with M P I>
- 4 Glow circuit
- 6 F B C circuit
- 7 M P I circuit
- 32 Auto-cruise control circuit

1 STARTING CIRCUIT

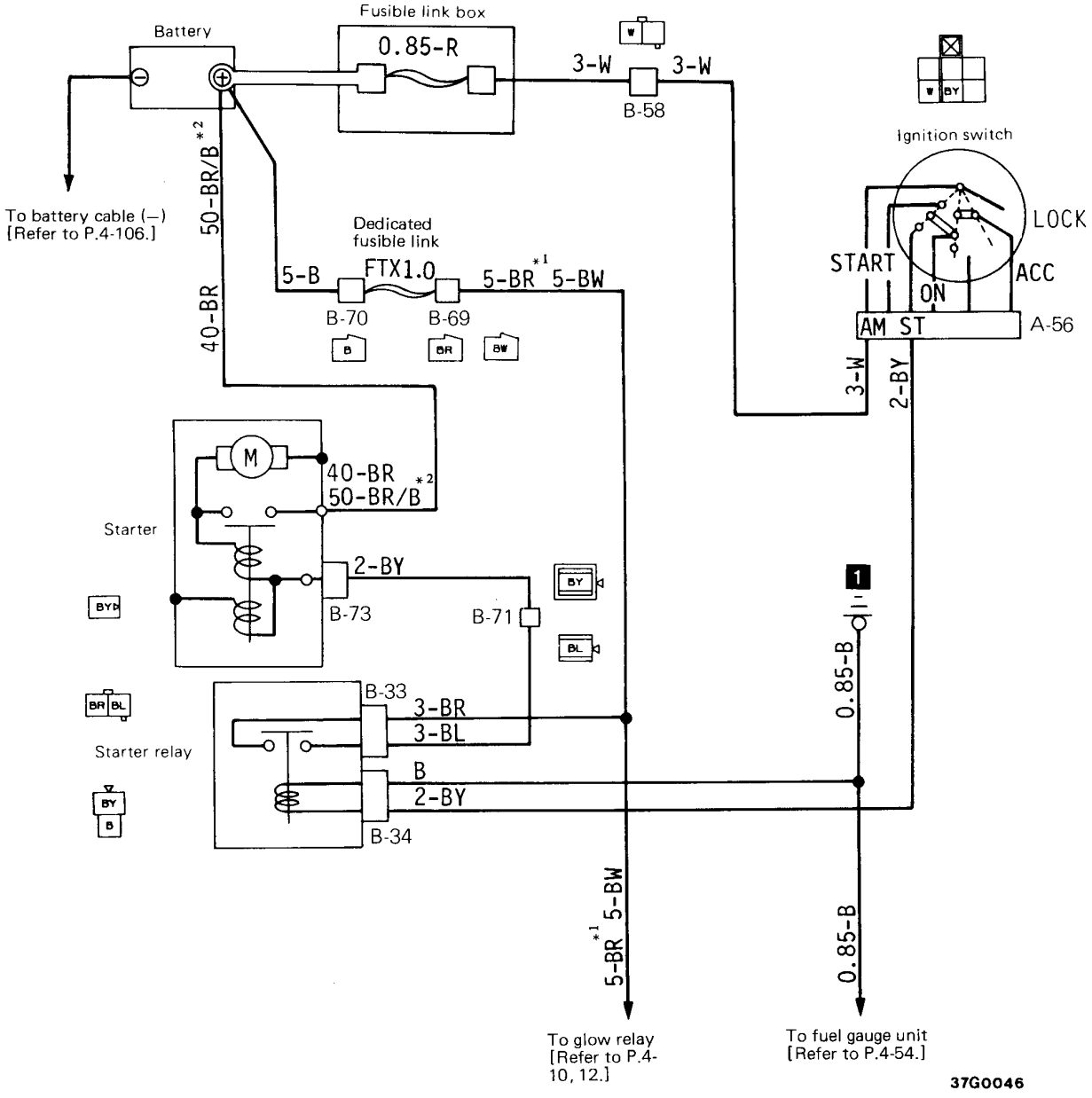
1-1 Petrol-powered vehicles



Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

1-2 Diesel-powered vehicles



Remarks
(1) The *1 symbol wire diameters and colour codes are applicable to vehicles with super-quick glow.
(2) The *2 symbol wire diameters and colour codes are applicable to vehicles with 2 batteries.
(3) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

STARTING CIRCUIT (See P.4-3,4.)

OPERATION

<Diesel-powered vehicles>

- When the ignition switch is turned to the "ST" position, the starter relay becomes on. This will turn on the contacts of the starter (magnetic switch) to revolve the starter motor.

TROUBLESHOOTING HINTS

1. Starter motor does not turn over at all.
   - Check starter (coil).
   - Check battery terminals for proper contact.
   - Starter relay inspection (diesel-powered vehicles)
2. Starter motor does not stop rotating.
   - Check starter (magnetic switch).

IGNITION CIRCUIT <VEHICLES WITH CARBURETOR> (See P.4-6,7.)

OPERATION

- When the ignition switch is turned to the START position to start the engine, the battery voltage is applied to the primary winding of the ignition coil through the ignition switch (R terminal), bypassing the resistor.
- As the distributor shaft rotates, it causes current to be allowed and cut off to the primary winding of the ignition coil.
- This induces a high voltage in the ignition coil secondary winding which is then distributed to the proper spark plugs.
- When the ignition switch is returned to the ON position after the engine has been started, the battery voltage is applied to the ignition coil primary winding through the ignition switch (IG1) and resistor.
- An engine rotating signal is detected by the negative terminal of the ignition coil primary winding.

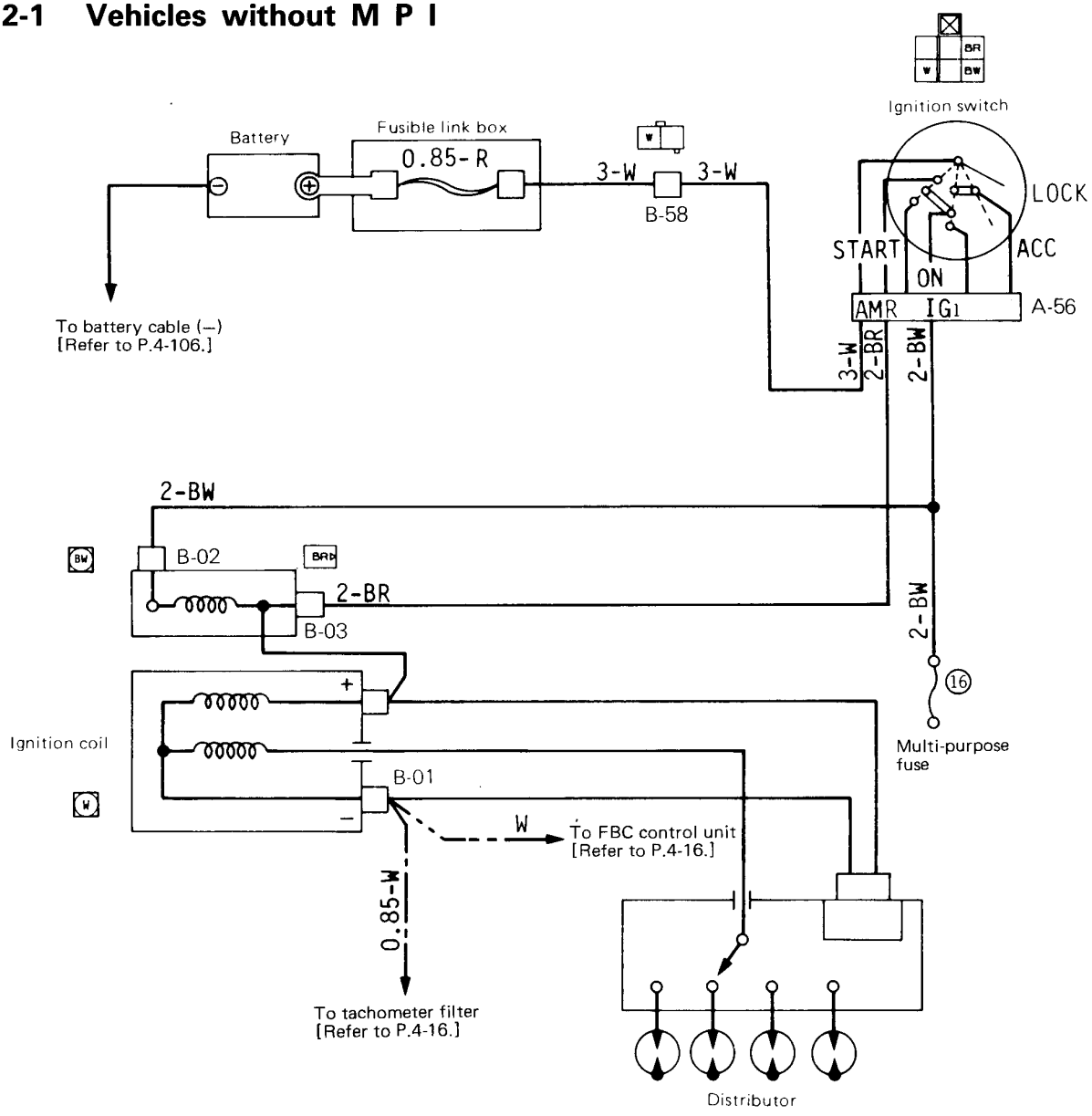
TROUBLESHOOTING HINTS

1. Engine cranks, but does not start.
   1) Spark is insufficient or no spark occurs at all (on spark plug).
      - Check ignition coil.
      - Check distributor.
      - Check spark plugs.
   2) Spark is good.
      - Check ignition timing.
2. Engine does not start when ignition switch is in START position, but does start the instant it is returned to ON position.
   - Check resistor harness for connection.
3. Engine starts when ignition switch is in START position, but stops as it is returned to ON position.
   - Check resistor.
4. Engine idles roughly or stalls.
   - Check spark plugs.
   - Check ignition timing.
   - Check ignition coil.
5. Poor acceleration
   - Check ignition timing.
   - Check spark plugs.

6 Engine overheats or consumes excessive fuel.
   - Check ignition timing.
   - Check spark plugs.

2 IGNITION CIRCUIT

2-1 Vehicles without M P I

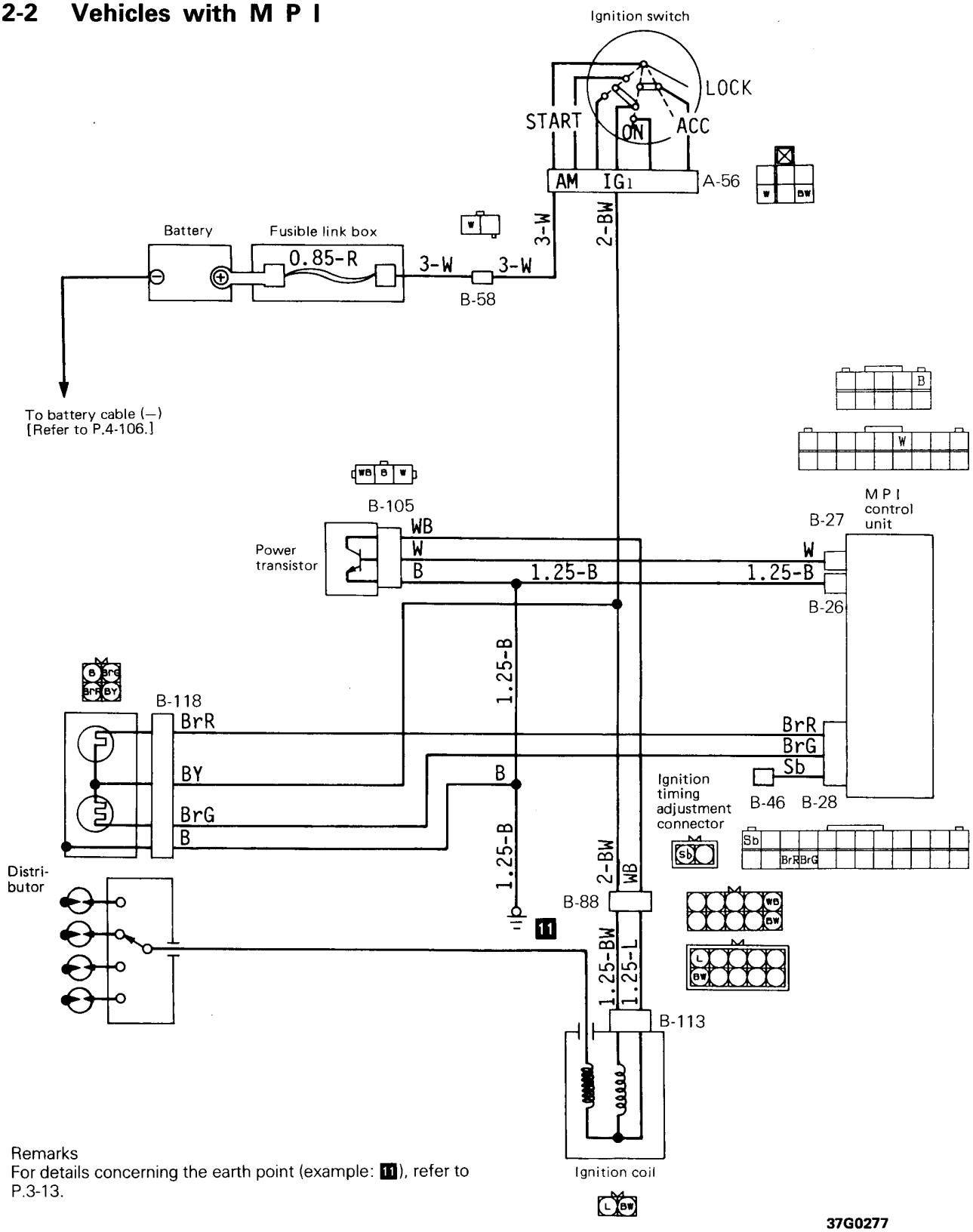


Remarks
(1) The chain line (–·–) is applicable to vehicles with tachometer.
(2) The two-point chain line (–··–) is applicable to vehicles without tachometer.

Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue	Lg:	Light green
Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red	Sb:	Silver	Y:	Yellow	W:	White

2-2 Vehicles with M P I



Remarks
For details concerning the earth point (example: 11), refer to P.3-13.

37G0277

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

CHARGING CIRCUIT (See P.4-9.)

OPERATION

Before engine starts

- First, when the ignition switch is turned to "ON", and before the engine starts, current flows through fuse No.16, charging warning lamp, then to alternator, and earth, causing the charging warning lamp to go on.

When alternator is generating current

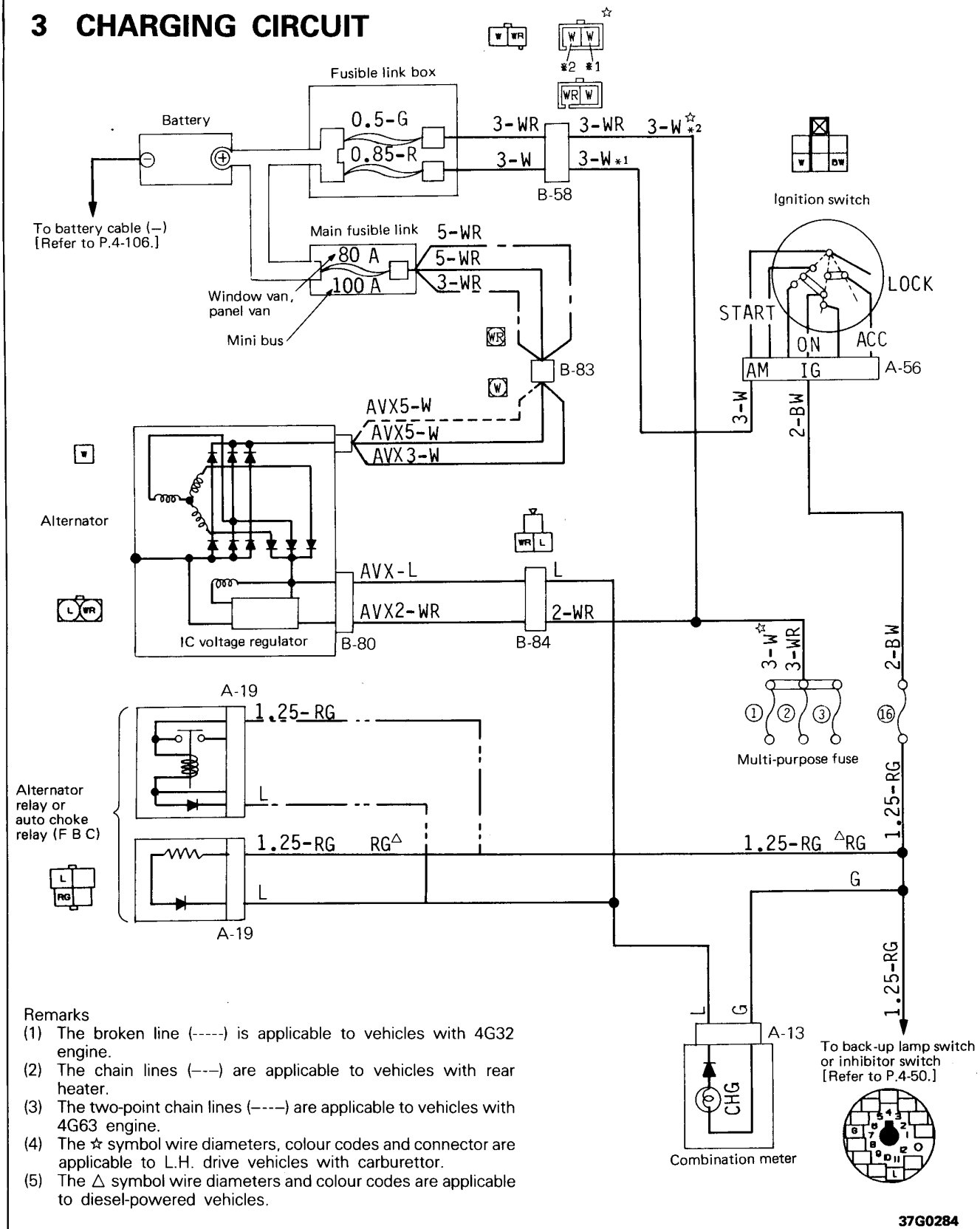
- Once the engine starts, battery voltage is applied to alternator S terminal. The battery voltage imposed on this terminal is monitored by the IC voltage regulator, and according to the voltage detected, the IC voltage regulator regulates the alternator field coil current, thus controlling the current the alternator generates.
- Once the alternator starts generating current, a voltage, slightly higher than battery voltage is applied to L terminal. This prevents current from flowing to the charging warning lamp and the lamp goes off.
- At alternator B terminal, a load current proportional to the battery voltage is produced and is sent to any load.

  Remarks
  The alternator relay is to ensure charging the battery even when the charging warning lamp bulb is burnt out.

TROUBLESHOOTING HINTS

1. Charging warning lamp does not go on when the ignition switch is turned to "ON", before the engine starts.
   - Check the bulb.
2. Charging warning lamp fails to go off once the engine starts.
   - Check drive belt tension.
   - Check the IC voltage regulator.
3. Discharged or overcharged battery.
   - Check the IC voltage regulator.

3 CHARGING CIRCUIT



Remarks
(1) The broken line (-----) is applicable to vehicles with 4G32 engine.
(2) The chain lines (—·—) are applicable to vehicles with rear heater.
(3) The two-point chain lines (—··—) are applicable to vehicles with 4G63 engine.
(4) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(5) The △ symbol wire diameters and colour codes are applicable to diesel-powered vehicles.

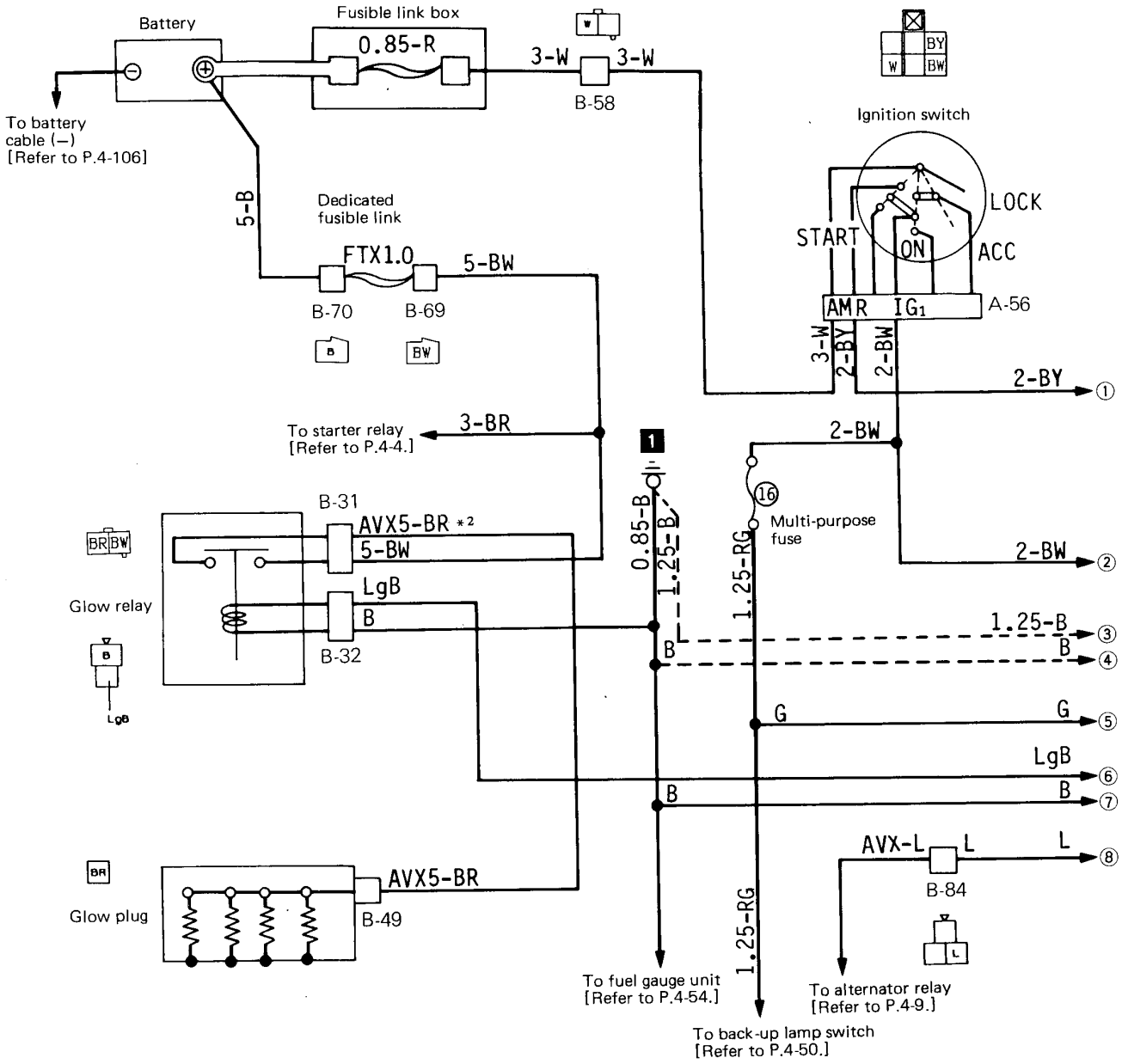
37G0284

Wire colour code

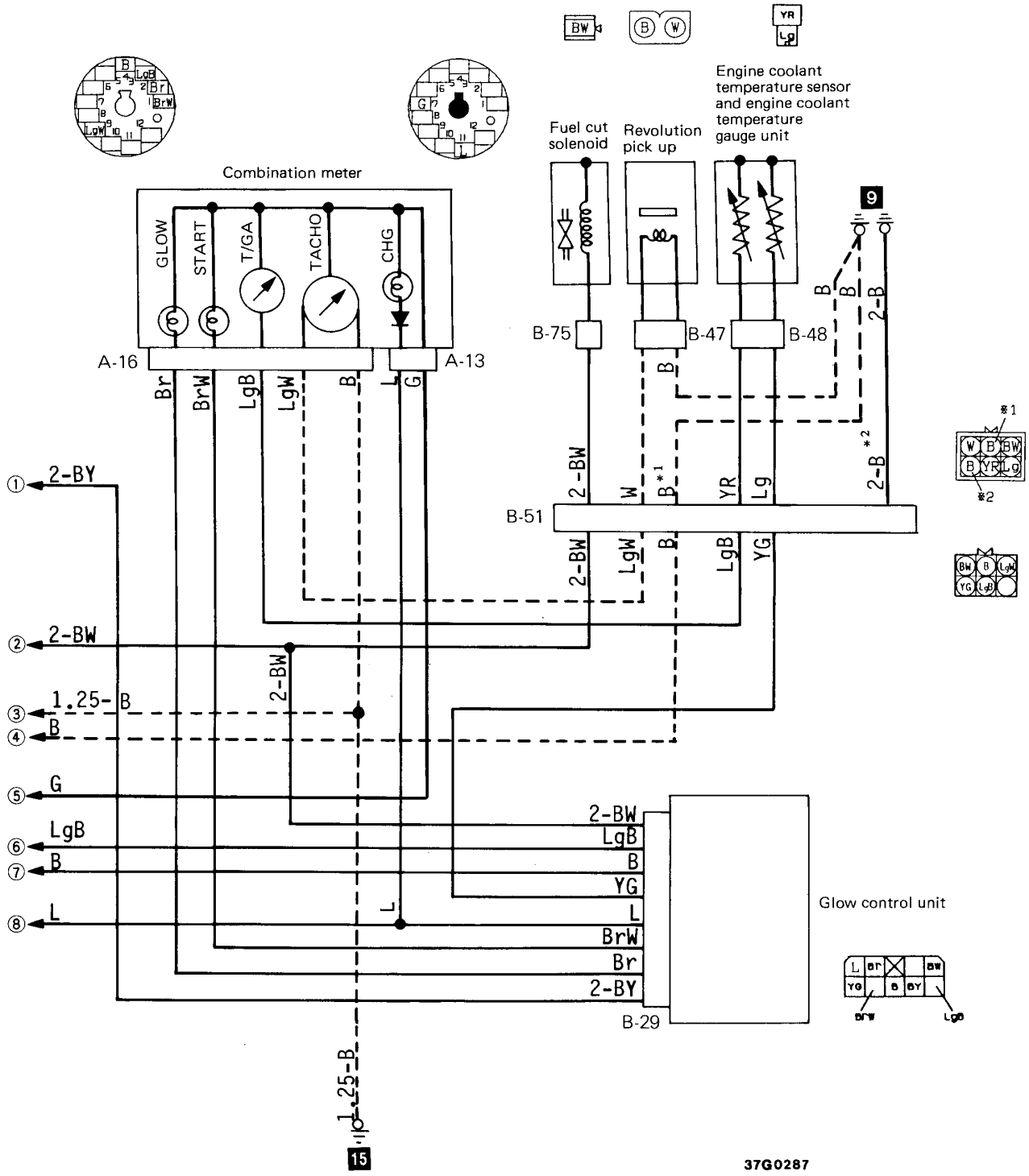
B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

4 GLOW CIRCUIT

4-1 Auto glow type



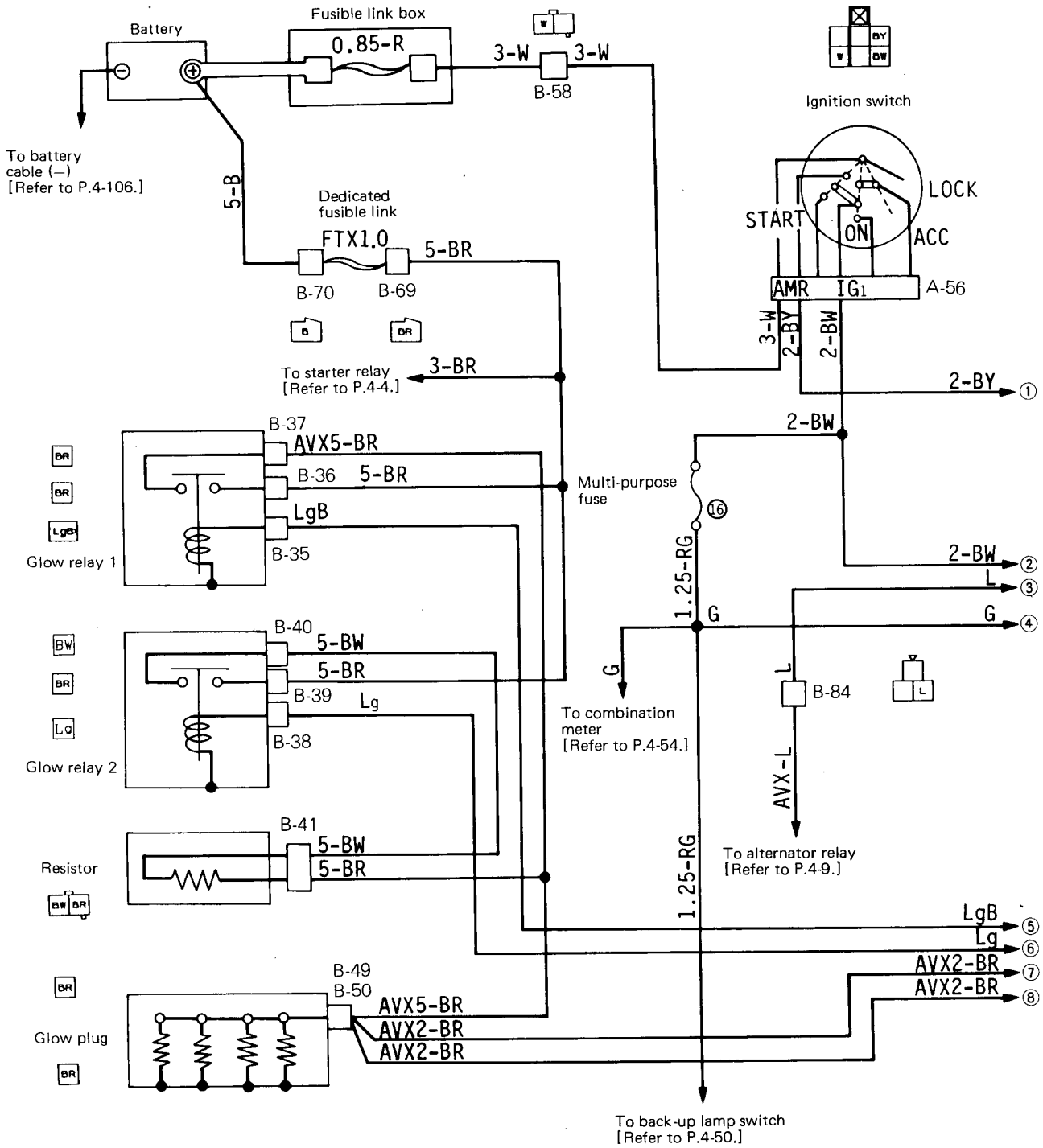
Remarks
(1) The broken lines (-----) are applicable to vehicles with tachometer.
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(3) For details concerning the earth point (example: 1), refer to P.3-13.



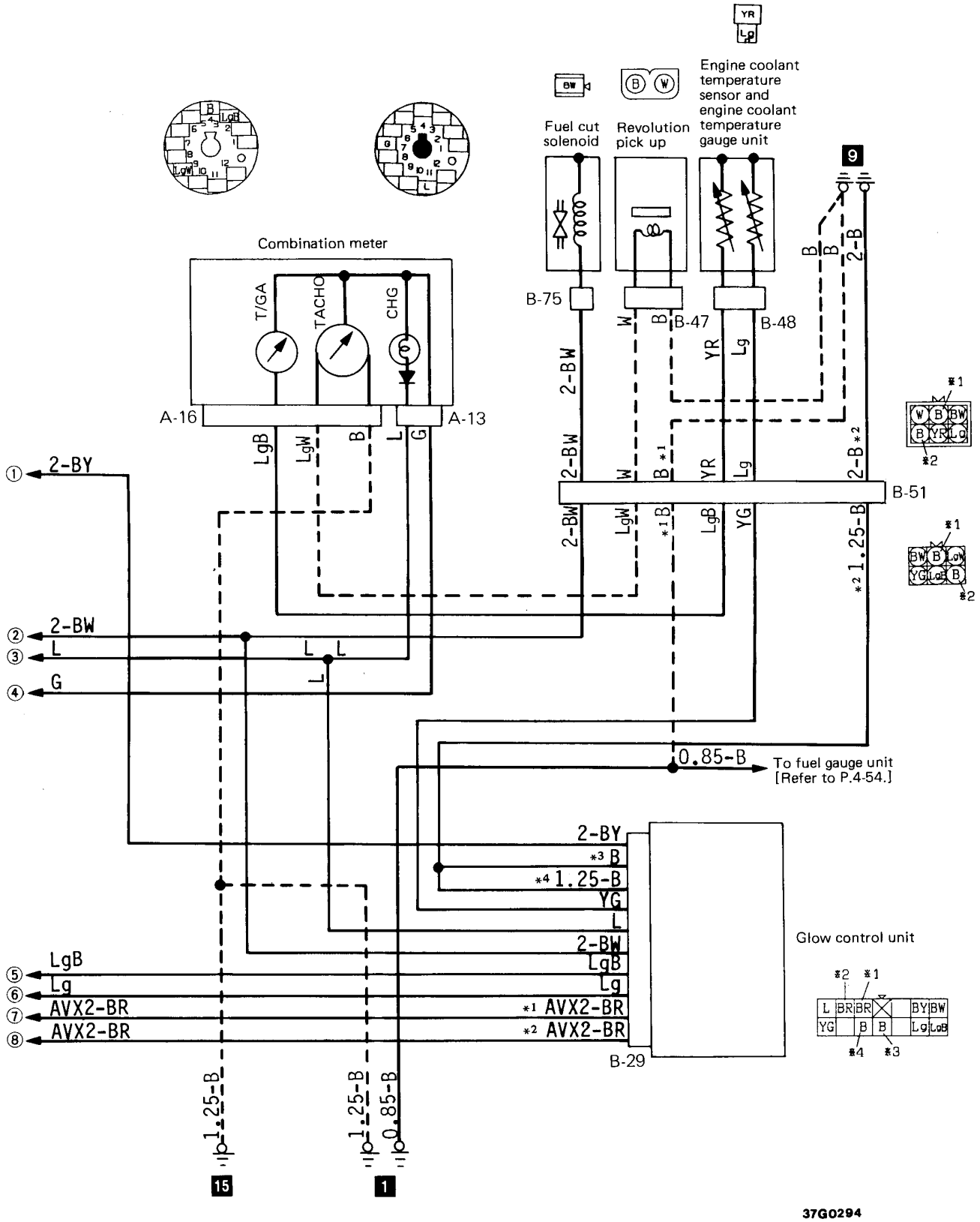
Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

4-2 Super quick glow type



Remarks
(1) The broken lines (-----) are applicable to vehicles with tachometer.
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(3) For details concerning the earth point (example: 1), refer to P.3-13.

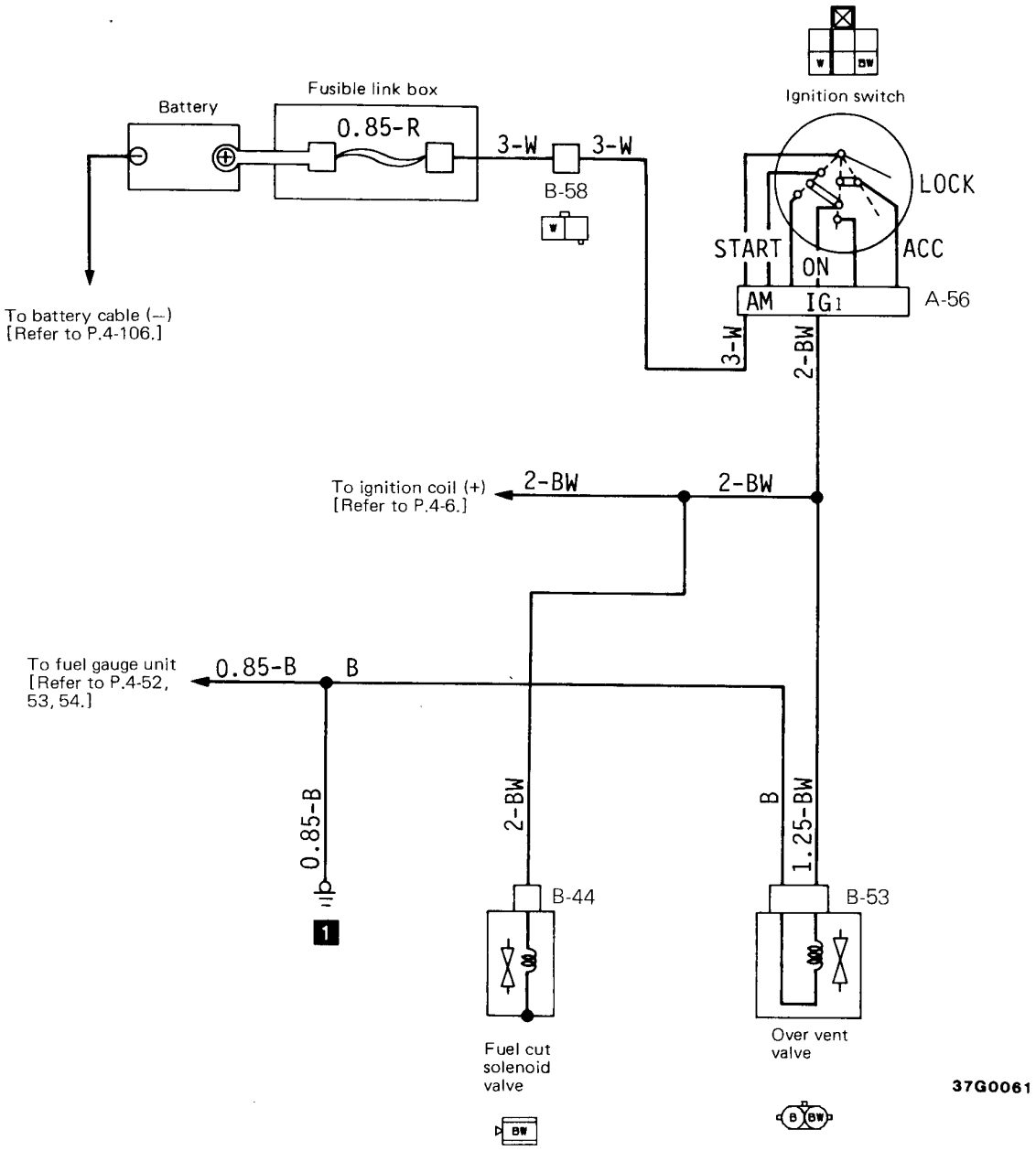


Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

5 CARBURETOR CONTROL CIRCUIT

5-1 Vehicles without cold mixture heater

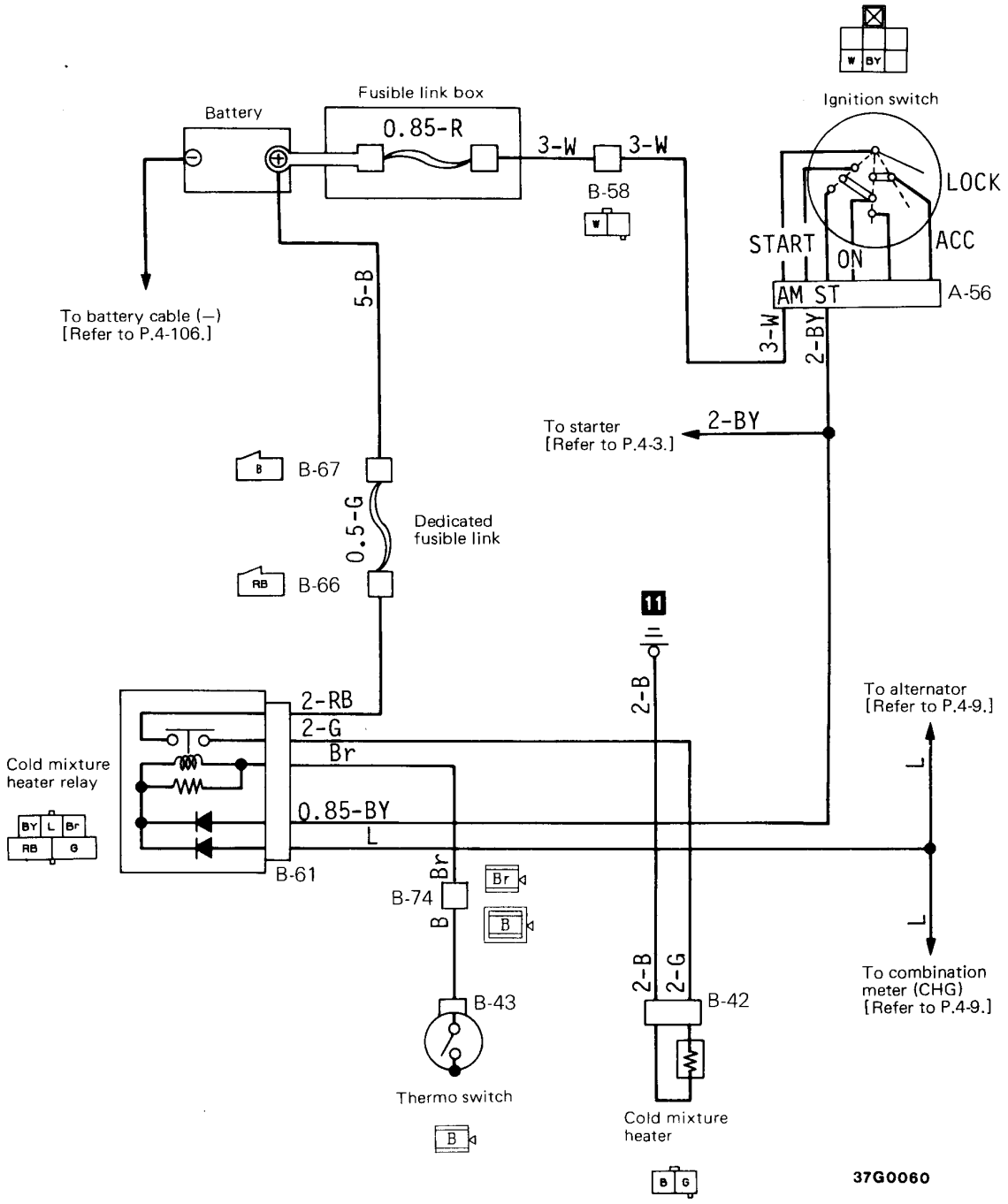


Remark
For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

5-2 Vehicles with cold mixture heater

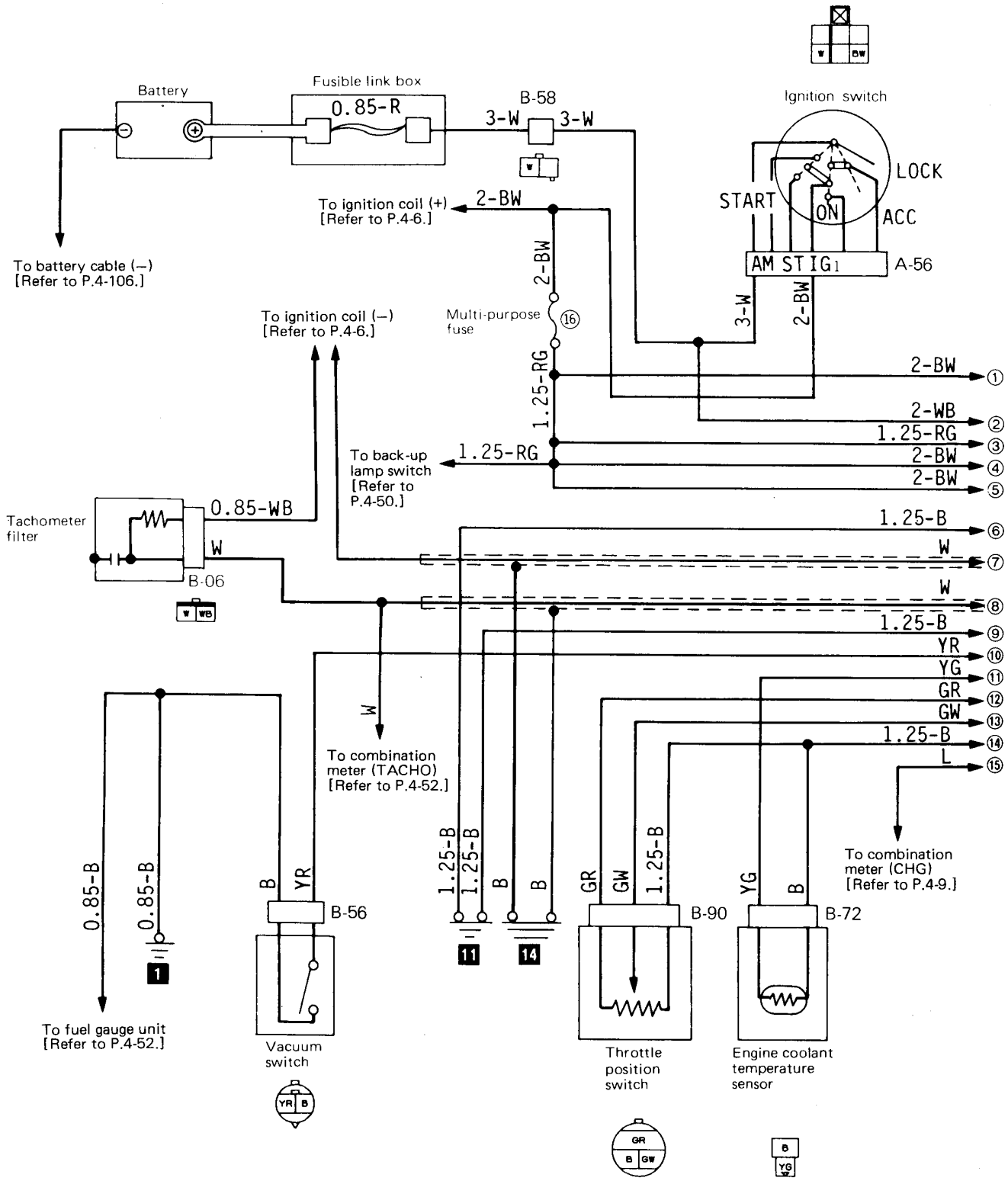


Remark
For details concerning the earth point (example: 11), refer to P.3-13.

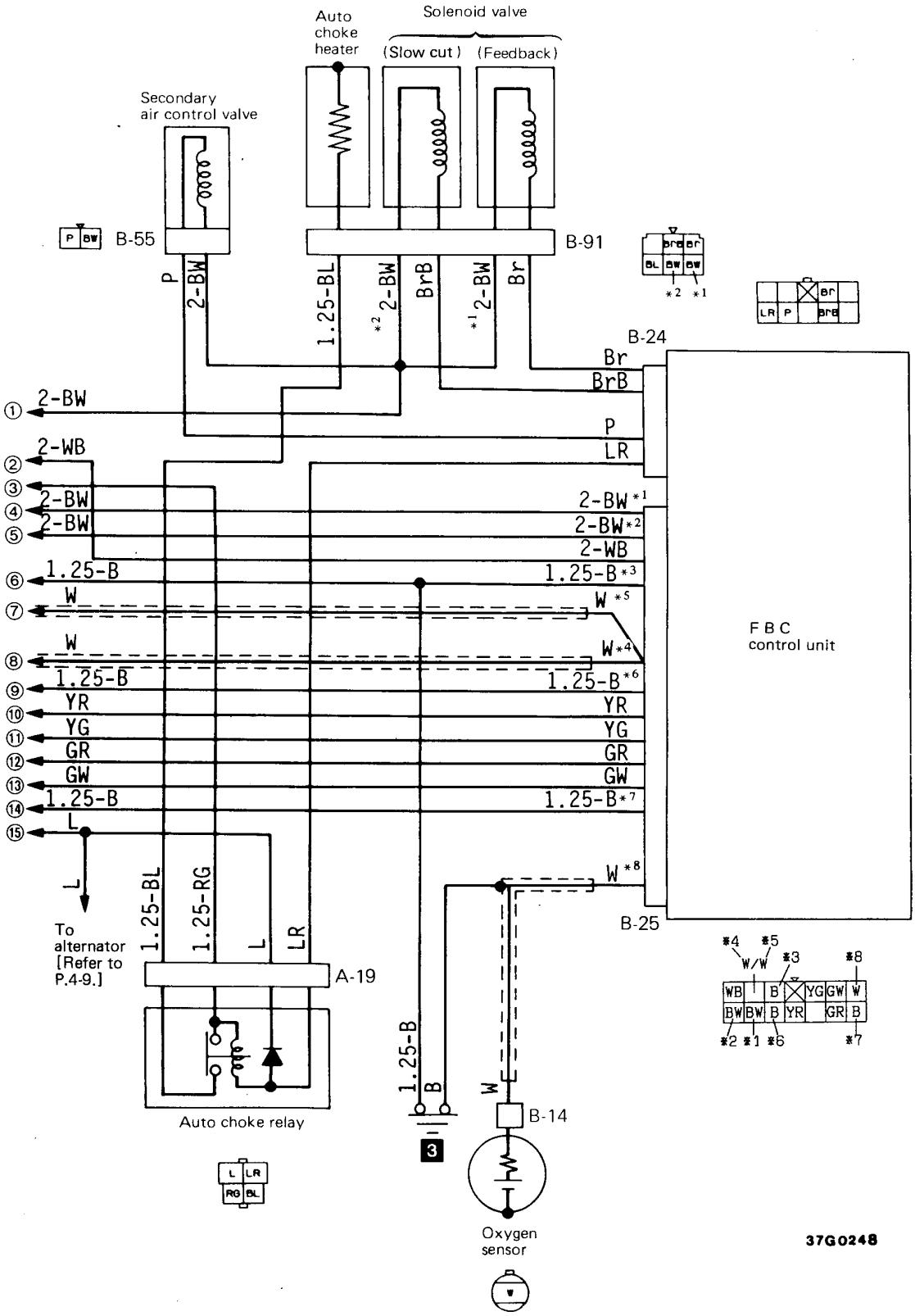
Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: · White			

6 FBC CIRCUIT



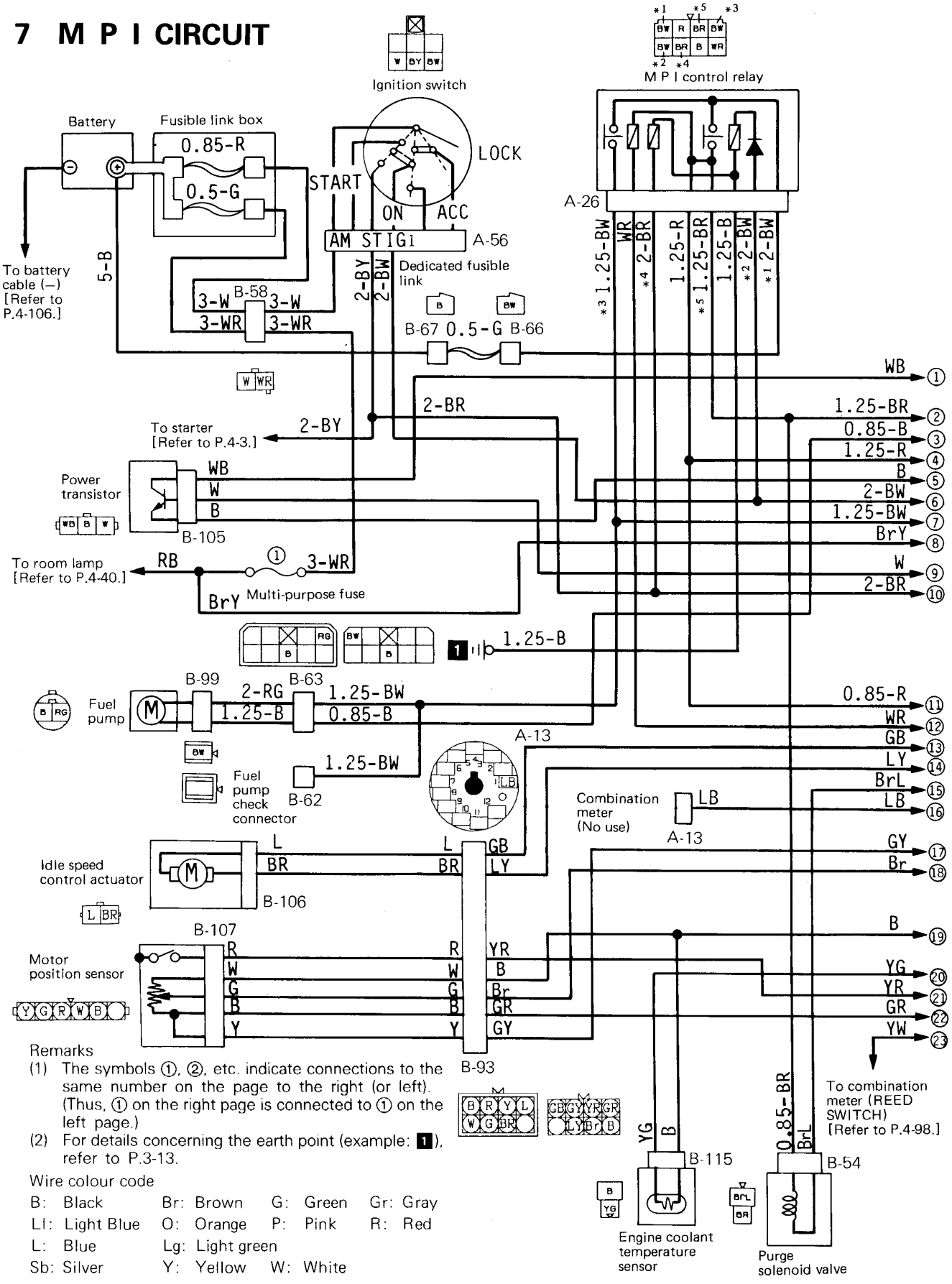
Remarks
(1) The *5 symbol wire diameter and colour code are applicable to vehicles without tachometer.
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(3) For details concerning the earth point (example: 11), refer to P.3-13.



Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

7 M P I CIRCUIT



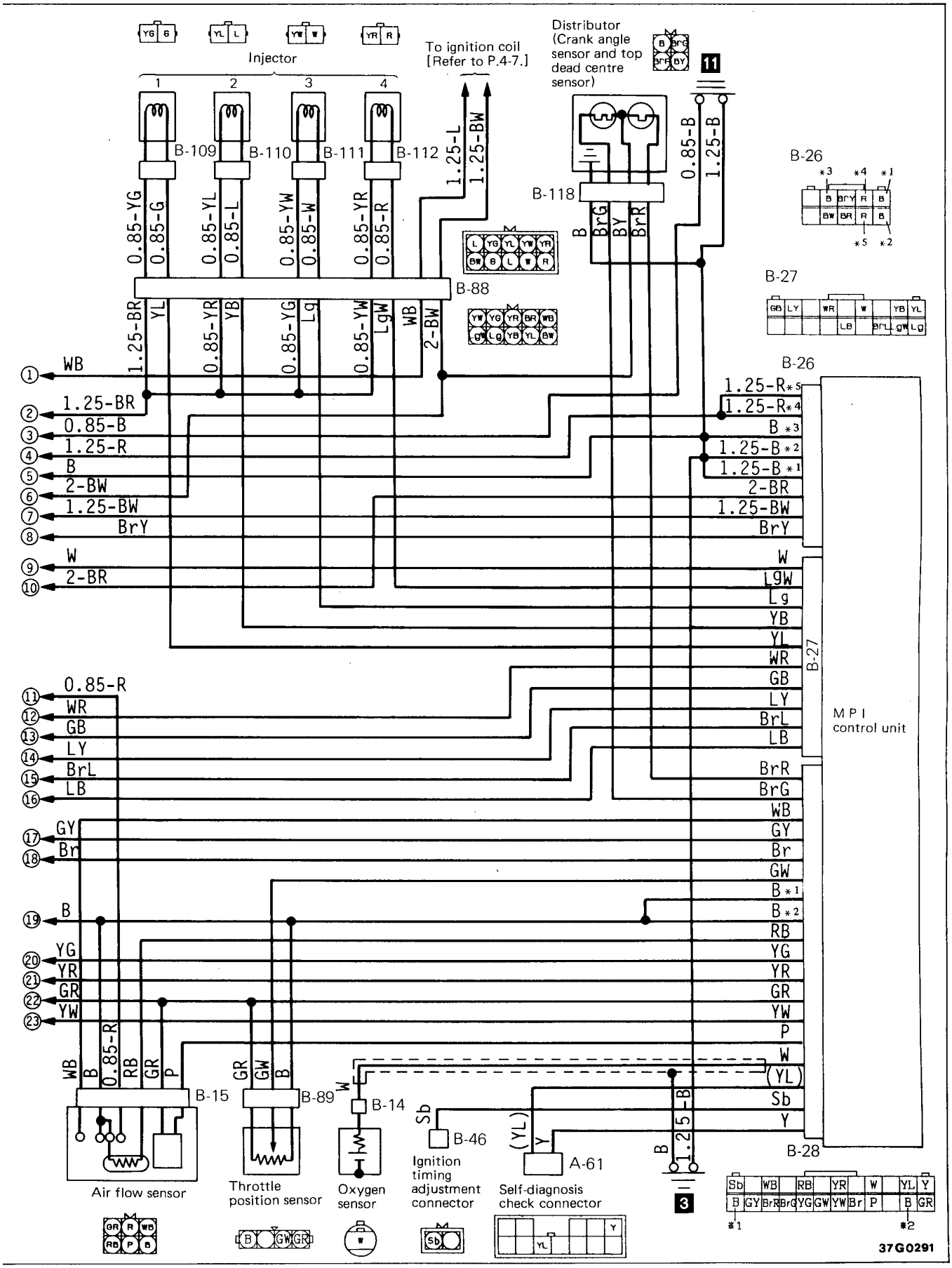
Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)

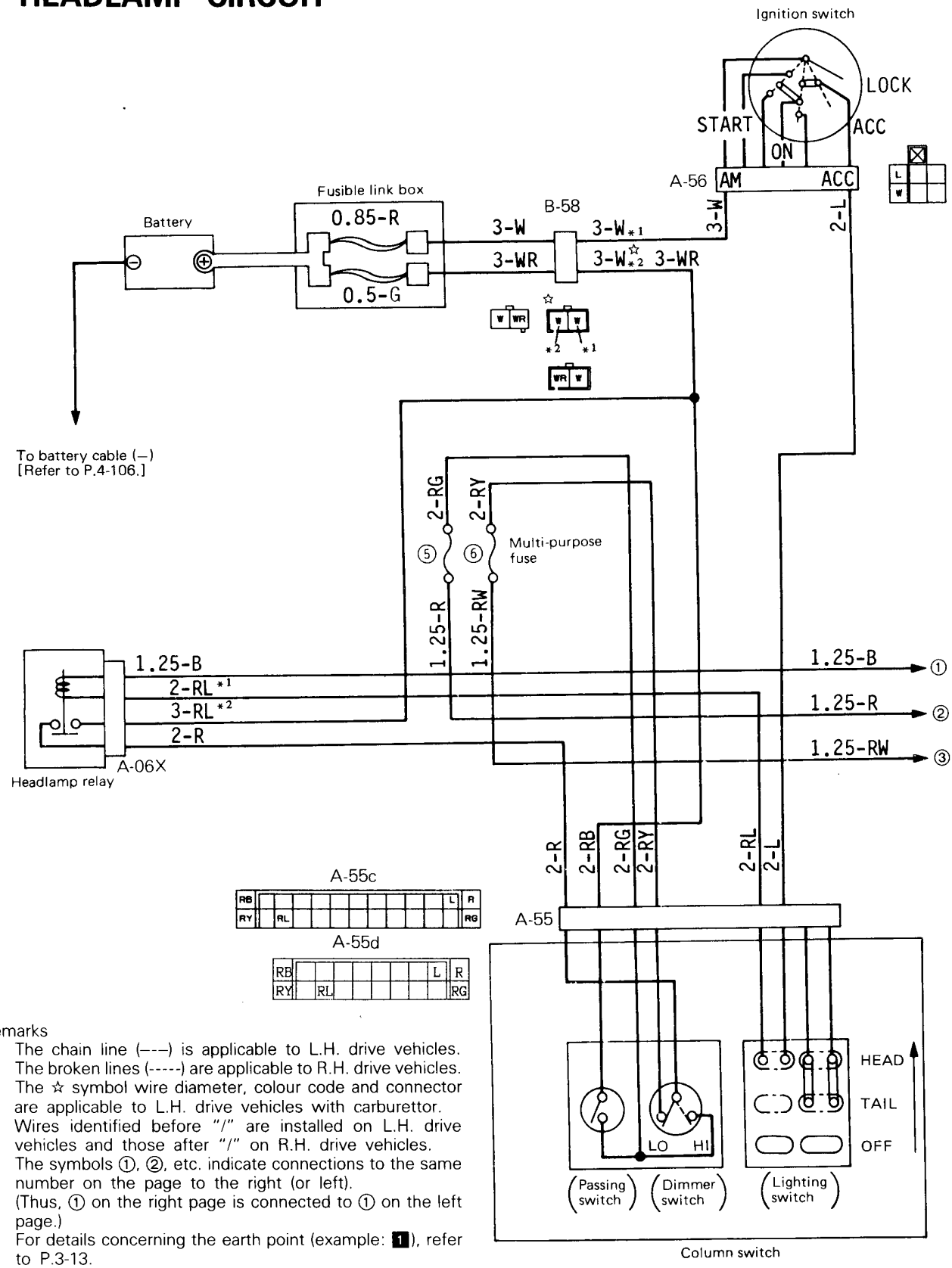
(2) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

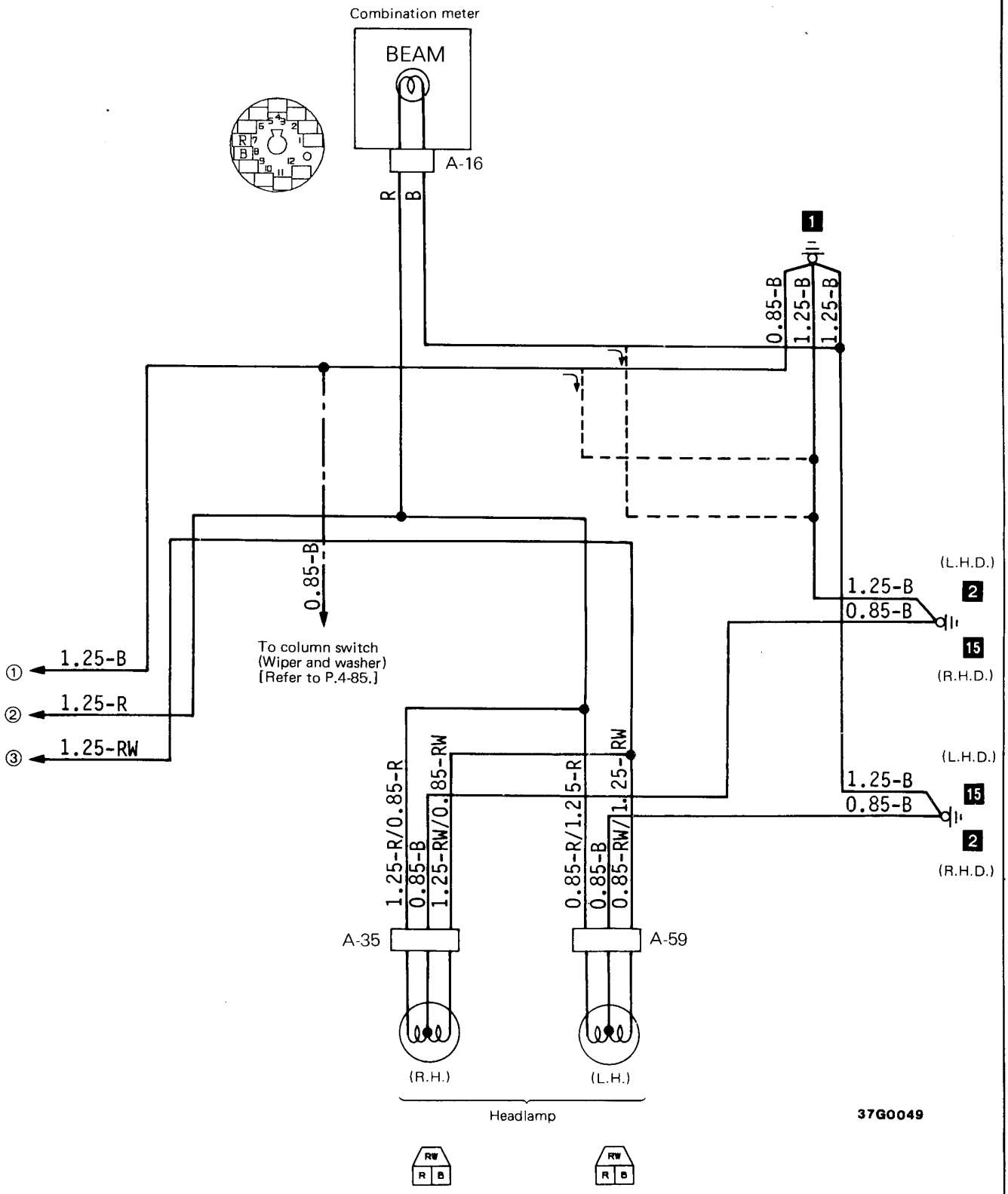
B:	Black	Br:	Brown	G:	Green	Gr:	Gray
Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
L:	Blue	Lg:	Light green				
Sb:	Silver	Y:	Yellow	W:	White		


Injector
To ignition coil [Refer to P.4-7.]
Distributor (Crank angle sensor and top dead centre sensor)
B-109
B-110
B-111
B-112
B-88
B-118
B-26
B-27
B-28
B-15
B-89
B-14
B-46
A-61
M P I control unit
Air flow sensor
Throttle position sensor
Oxygen sensor
Ignition timing adjustment connector
Self-diagnosis check connector
37G0291

8 HEADLAMP CIRCUIT



Remarks
(1) The chain line (–·–) is applicable to L.H. drive vehicles.
(2) The broken lines (-----) are applicable to R.H. drive vehicles.
(3) The ☆ symbol wire diameter, colour code and connector are applicable to L.H. drive vehicles with carburettor.
(4) Wires identified before "/" are installed on L.H. drive vehicles and those after "/" on R.H. drive vehicles.
(5) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)
(6) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

HEADLAMP CIRCUIT <Vehicles without daytime running lamp and dim-dip lamp> (See P.4-20.)

OPERATION

Headlamp Relay ON Conditions

Ignition switch	Lighting switch	Dimmer/ passing switch	Headlamp relay
"ACC" or "ON"	"HEAD"	–	ON
"ACC" or "ON"	–	"PASS"	ON

<Low-beam operation>

- Placing the lighting switch in the HEAD position causes the headlamp relay to be energized.
- If the dimmer/passing switch is placed in the LO position at this time, then the headlamps light up in low beam.

<Upper-beam operation>

- Placing the lighting switch in the HEAD position causes the headlamp relay to be energized.
- If the dimmer/passing switch is placed in the HI position at this time, then the headlamps light up in upper beam.

<Upper-beam indicator lamp>

- This lamp lights up when the upper/passing beams are on, indicating that the headlamps are on in upper beam.

TROUBLESHOOTING HINTS

1. Headlamps don't come on.
   1) But the tail lamps do illuminate.
      - Check the headlamp relay.
      - Check the lighting switch.
   2) The tail lamps also don't illuminate.
      - Check the main fusible link (0.5-G).
2. The low beam at both sides doesn't illuminate.
   - Check the dimmer switch LO contacts.
3. The upper beam at both sides doesn't illuminate.
   1) The passing signal functions OK.
      - Check the dimmer switch HI contacts.
   2) The passing signal doesn't function.
      - Check the dimmer switch.
4. One headlamp doesn't illuminate.
   - Check the bulb.
5. Can't switch from low to upper beam or vice-versa.
   - Check the dimmer switch.
6. Upper-beam indicator lamp does not come on.
   1) Headlamp upper beams are operational.
      - Check multi-purpose fuse No ⑤.
      - Check the indicator lamp bulb.

DAYTIME RUNNING LAMP CIRCUIT (See P.4-23.)

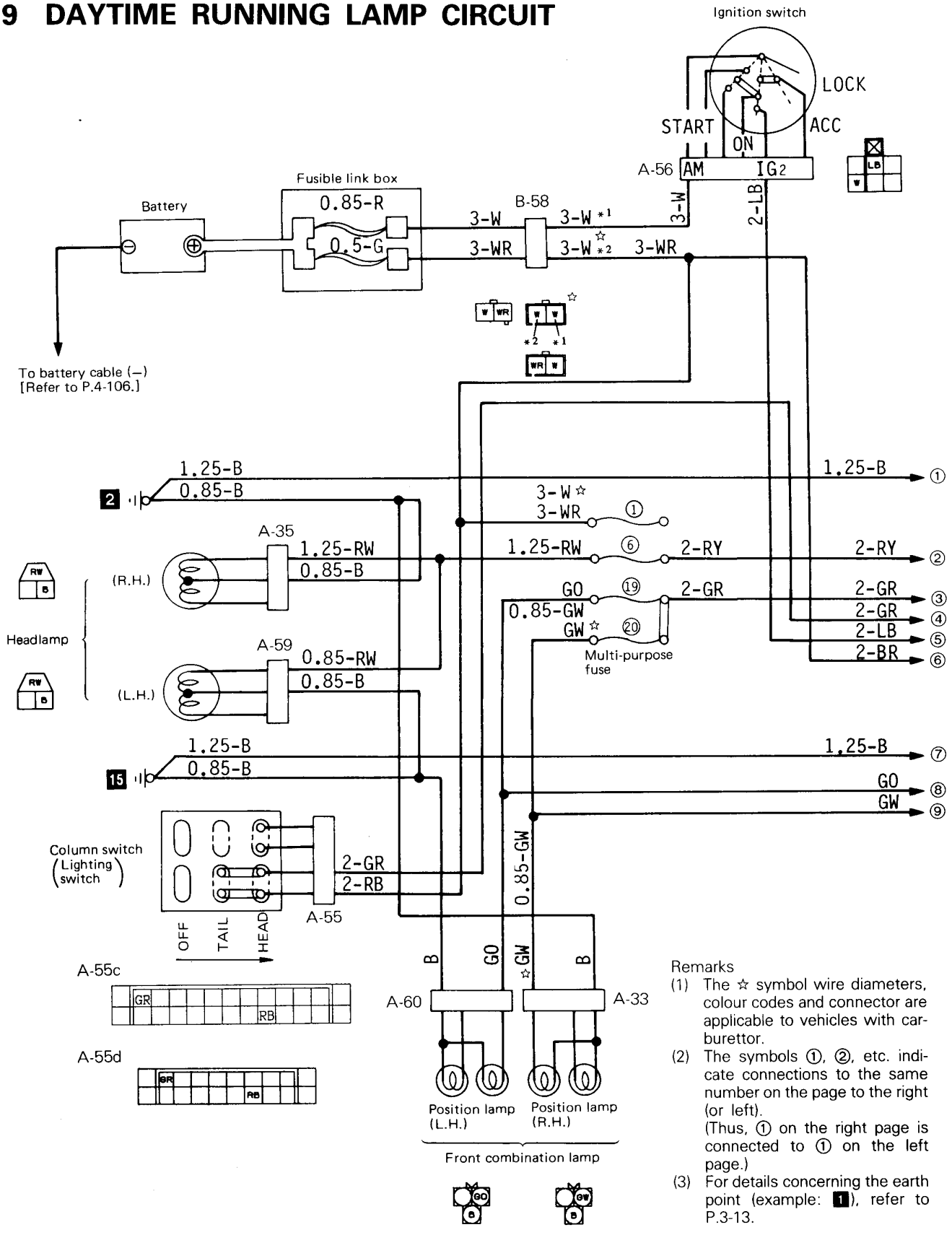
OPERATION

- Turning the ignition switch to the ON position causes daytime running lamp relay 1 to be energized, which causes the headlamps, tail lamps, etc. to come on.

TROUBLESHOOTING HINTS

1. With the ignition switch at the "ON" position, the headlamps' low beam does not illuminate.
   - Check the daytime running lamp relay 1.
2. The headlamp at one side doesn't illuminate.
   - Check the bulb.

9 DAYTIME RUNNING LAMP CIRCUIT

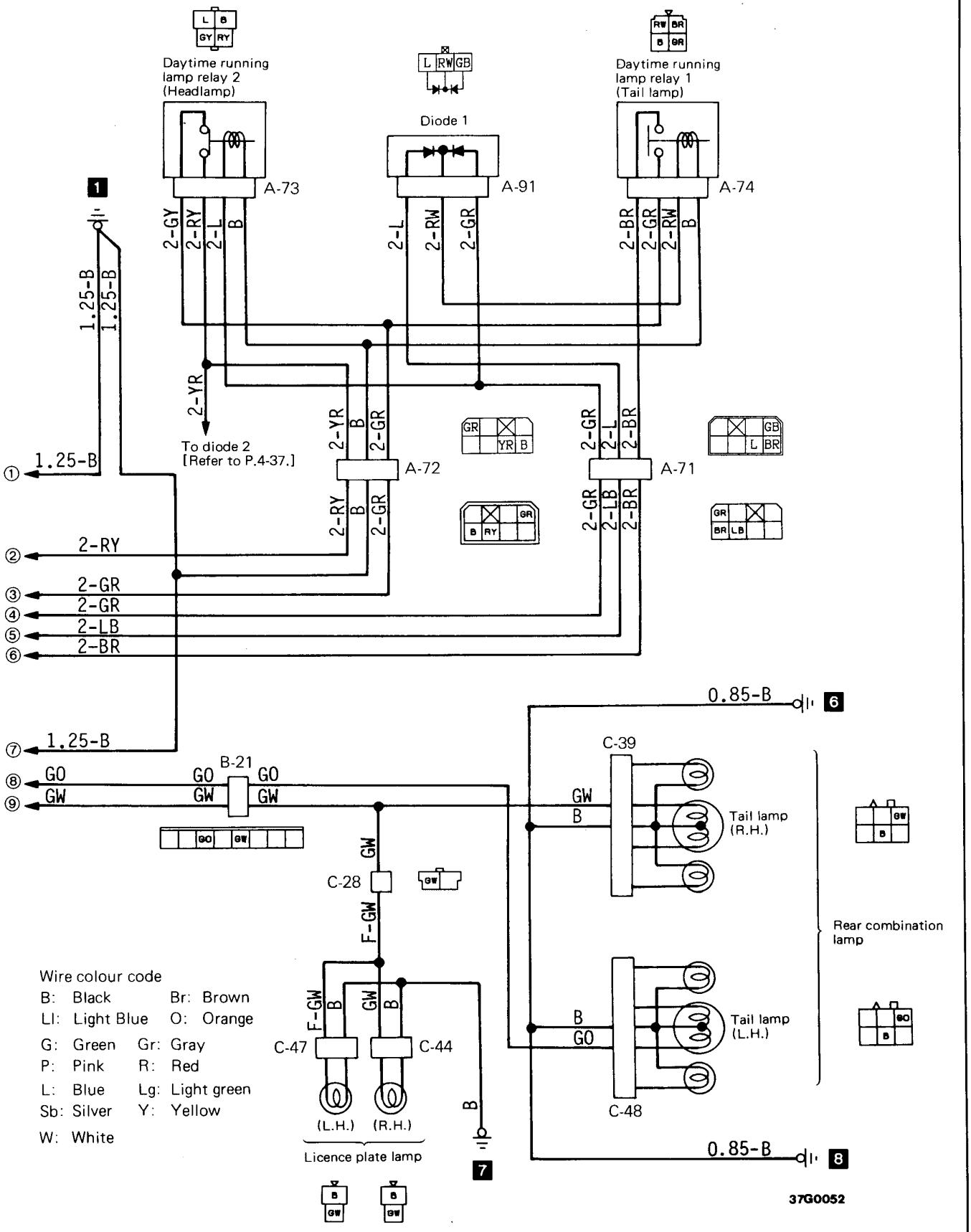


Remarks

(1) The ☆ symbol wire diameters, colour codes and connector are applicable to vehicles with carburettor.

(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)

(3) For details concerning the earth point (example: 1), refer to P.3-13.


Daytime running lamp relay 2 (Headlamp)
Diode 1
Daytime running lamp relay 1 (Tail lamp)
A-73
A-91
A-74
2-GY
2-RY
2-L
B
2-L
2-RW
2-GR
2-BR
2-GR
2-RW
B
1.25-B
1.25-B
2-YR
To diode 2 [Refer to P.4-37.]
2-YR
B
2-GR
A-72
2-GR
2-L
2-BR
A-71
2-RY
B
2-GR
2-GR
2-LB
2-BR
① 1.25-B
② 2-RY
③ 2-GR
④ 2-GR
⑤ 2-LB
⑥ 2-BR
⑦ 1.25-B
⑧ GO
⑨ GW
B-21
GO
GW
GO
GW
GW
C-28
F-GW
F-GW
B
GW
B
C-47
C-44
(L.H.)
(R.H.)
Licence plate lamp
B
7
0.85-B
6
C-39
GW
B
Tail lamp (R.H.)
Rear combination lamp
B
GO
Tail lamp (L.H.)
C-48
0.85-B
8
Wire colour code
B: Black
Br: Brown
Ll: Light Blue
O: Orange
G: Green
Gr: Gray
P: Pink
R: Red
L: Blue
Lg: Light green
Sb: Silver
Y: Yellow
W: White
37G0052

DIM-DIP LAMP CIRCUIT (See P.4-26.)

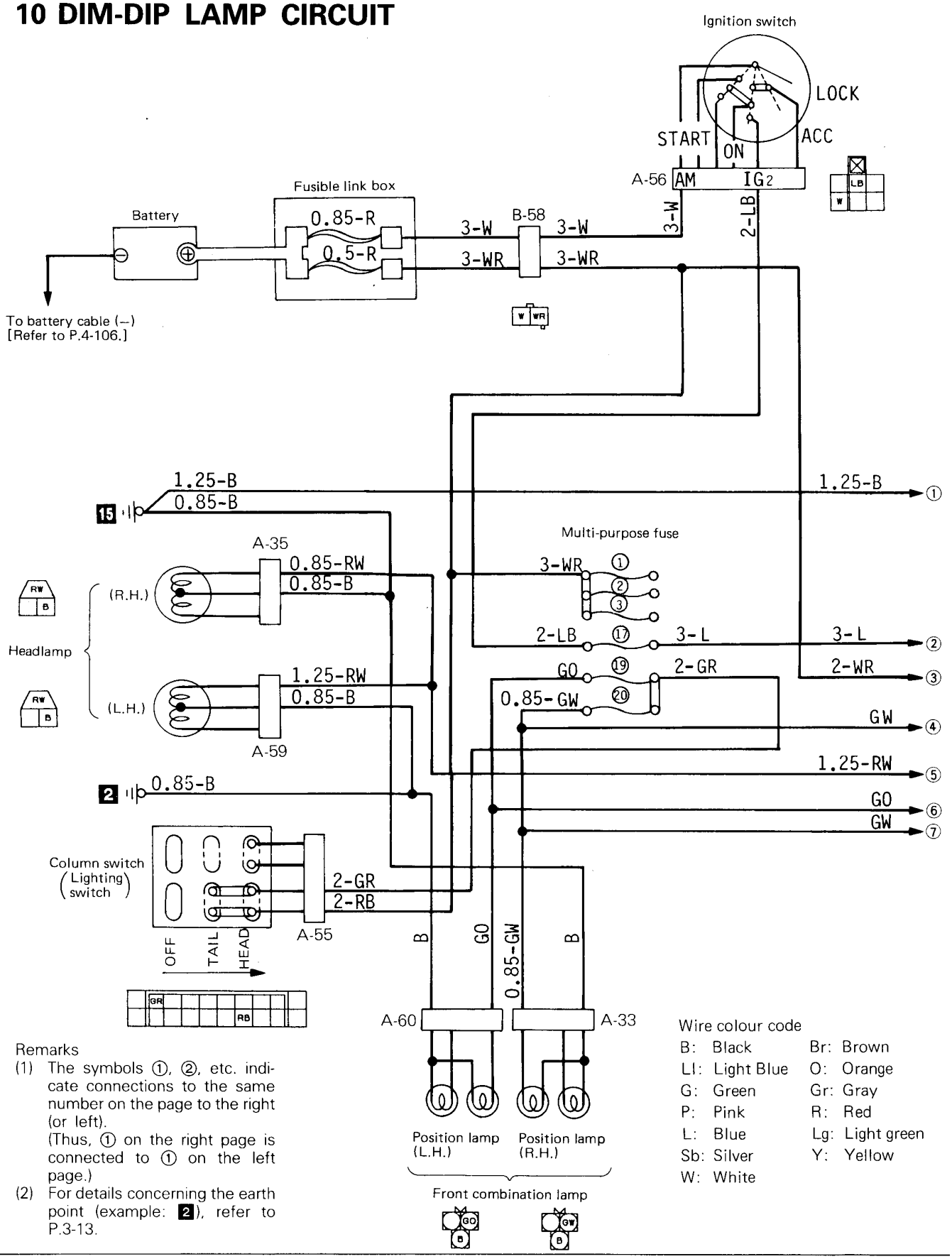
OPERATION

- When the ignition switch is turned to the "ON" position, the dim-dip lamp relay 1 will be energized.
- Placing the lighting switch in the TAIL position causes dim-dip lamp relay 2 to be energized.
- The headlamps come on dimly through the circuit by way of resistor.

TROUBLESHOOTING HINTS

1. The headlamps' low beam does not illuminate at the "TAIL" position of the lighting switch.
   1) The low beam does illuminate, however, when, with lighting switch at the "HEAD" position, the dimmer switch is set to "LO".
      - Check the dim-dip lamp relay 1.
      - Check the resistor.
   2) The headlamp at one side doesn't illuminate.
      - Check the bulb.

10 DIM-DIP LAMP CIRCUIT



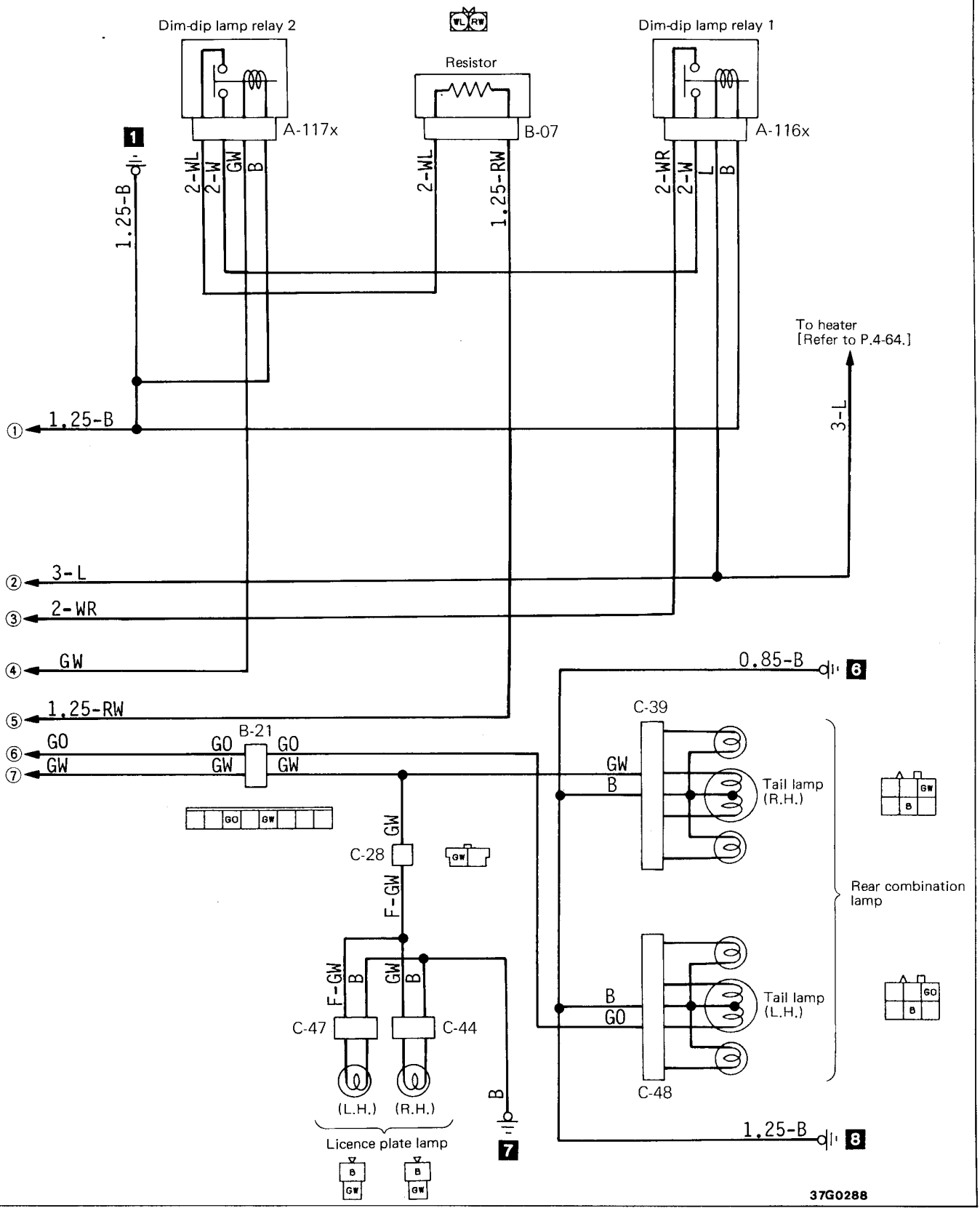
Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)

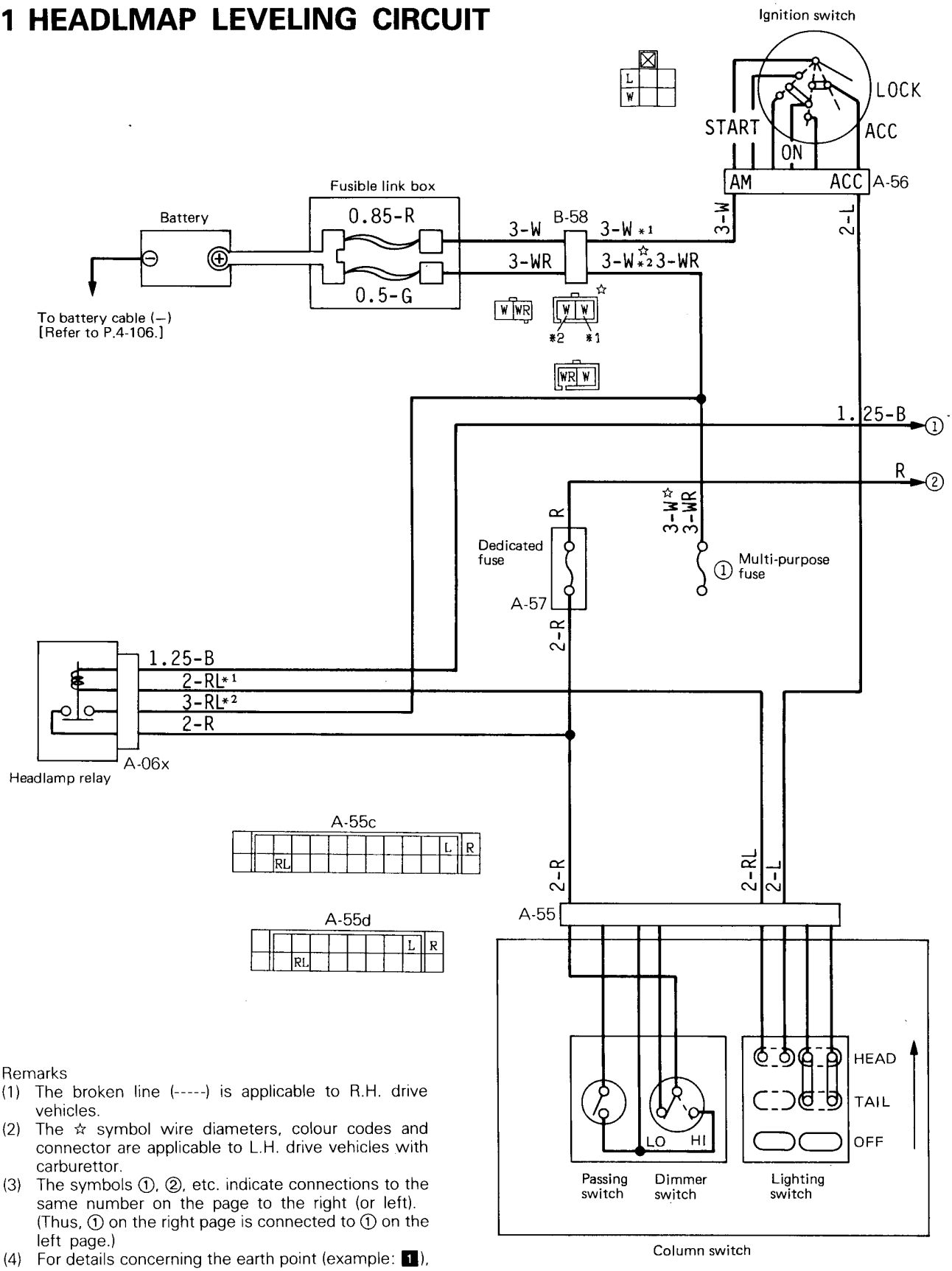
(2) For details concerning the earth point (example: 2), refer to P.3-13.

Wire colour code

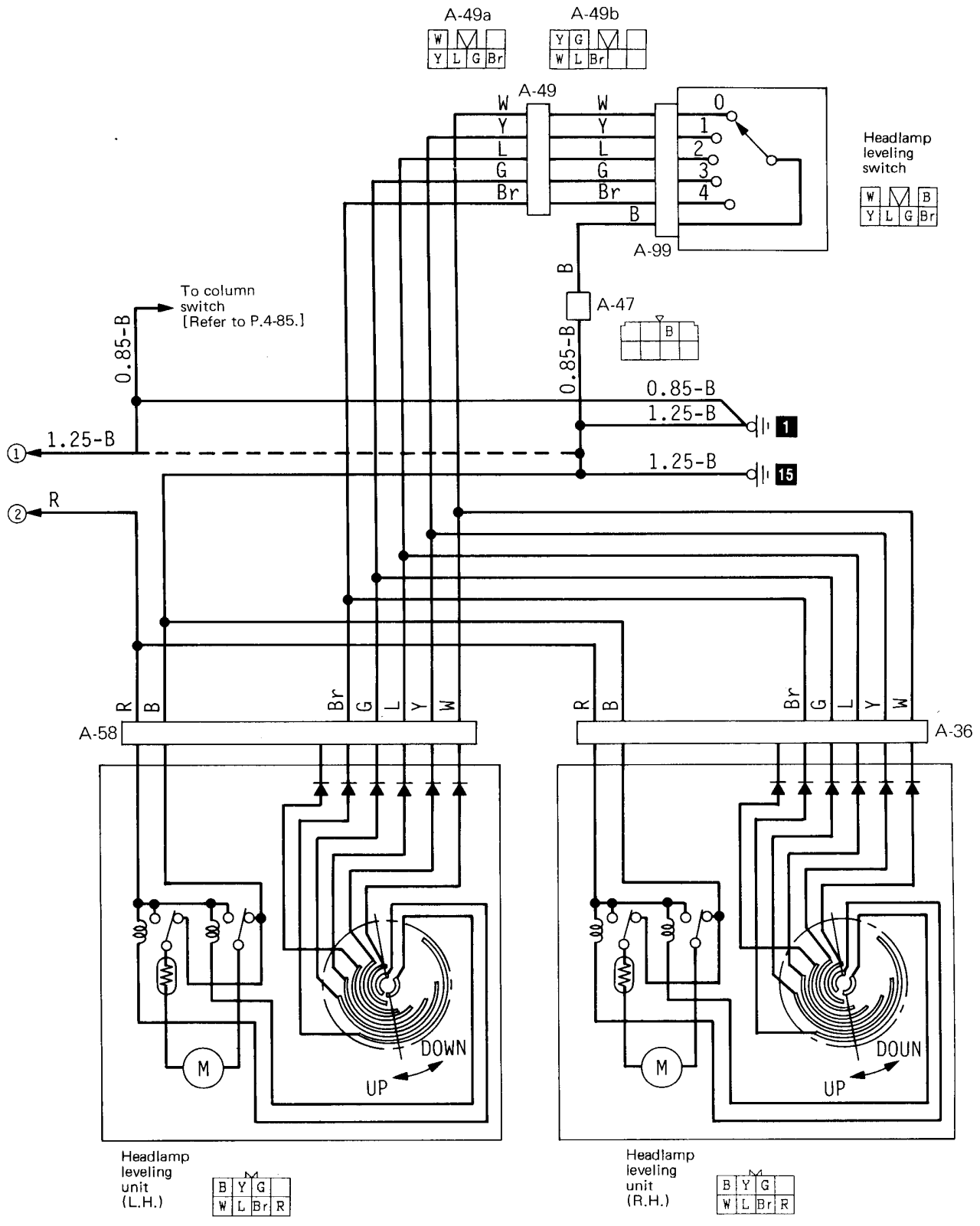
B:	Black	Br:	Brown
Ll:	Light Blue	O:	Orange
G:	Green	Gr:	Gray
P:	Pink	R:	Red
L:	Blue	Lg:	Light green
Sb:	Silver	Y:	Yellow
W:	White		


Dim-dip lamp relay 2
Resistor
Dim-dip lamp relay 1
A-117x
B-07
A-116x
2-WL
2-W
GW
B
1.25-B
1.25-RW
2-WR
L
To heater
[Refer to P.4-64.]
3-L
0.85-B
GO
B-21
C-39
Tail lamp
(R.H.)
C-28
F-GW
Rear combination
lamp
Tail lamp
(L.H.)
C-47
C-44
C-48
(L.H.)
(R.H.)
Licence plate lamp
37G0288

11 HEADLMAP LEVELING CIRCUIT



Remarks
(1) The broken line (-----) is applicable to R.H. drive vehicles.
(2) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(3) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(4) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

37G0318

HEADLAMP LEVELING SYSTEM (See P.4-28.)

OPERATION

1. Headlamps angle-downward operation

- When the lighting switch is set to the "HEAD" position, the headlamp relay is switched ON, and battery voltage is applied, through the dedicated fuse, to headlamp leveling unit.
- When the headlamp-leveling switch setting is changed from "0" to "1", the motor rotates in the forward direction.
- The rotation of the motor, after passing through the gears and the output shaft, causes the headlamp to move to a downward angle, thus changing the angle of headlamp illumination.

NOTE
The same operation occurs if the headlamp-leveling switch is set to another position.

TROUBLESHOOTING HINTS

1. Absolutely no change of the headlamp angle
   - Check dedicated fuse.
2. There is one setting of the headlamp-leveling switch at which the headlamp angle does not change.
   - Check the headlamp-leveling switch.

TAIL LAMP, POSITION LAMP AND LICENCE PLATE LAMP CIRCUIT (See P.4-31, 32.)

OPERATION

- When the lighting switch is set to the TAIL or HEAD position current flows by way of multi-purpose fuse No. ⑲ and No. ⑳ to each lamp, causing the lamp to come on.

TROUBLESHOOTING HINTS

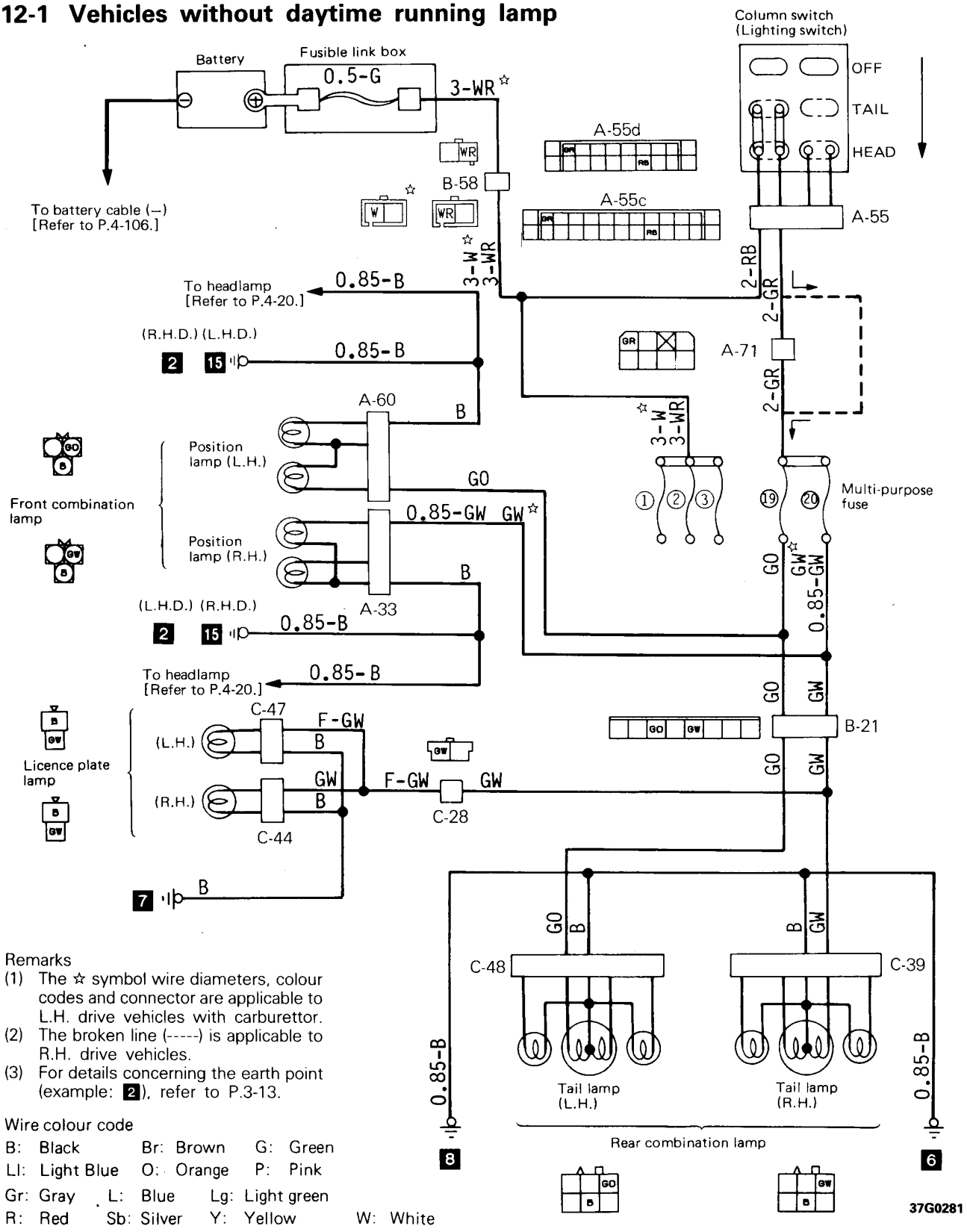
No lamp comes on.

1) Headlamps do not come on, either.
   - Check main fusible link (0.5-G).

2 Headlamps do come on.
   - Check multi-purpose fuse No. ⑲ and No. ⑳.

12 TAIL LAMP, POSITION LAMP AND LICENCE PLATE LAMP CIRCUIT

12-1 Vehicles without daytime running lamp



Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(2) The broken line (-----) is applicable to R.H. drive vehicles.
(3) For details concerning the earth point (example: 2), refer to P.3-13.

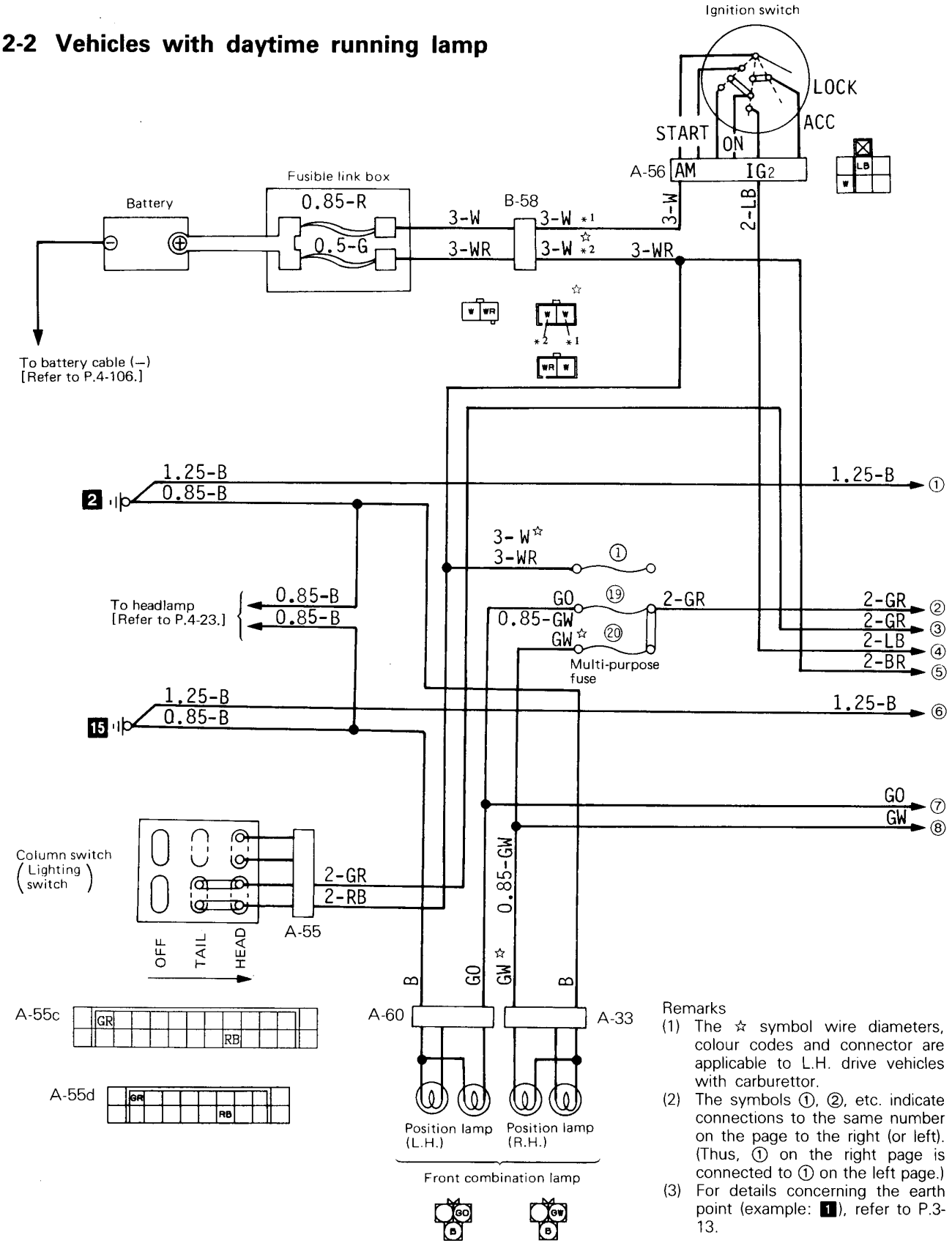
Wire colour code

B:	Black	Br:	Brown	G:	Green
Ll:	Light Blue	O:	Orange	P:	Pink
Gr:	Gray	L:	Blue	Lg:	Light green
R:	Red	Sb:	Silver	Y:	Yellow

W: White

37G0281

12-2 Vehicles with daytime running lamp

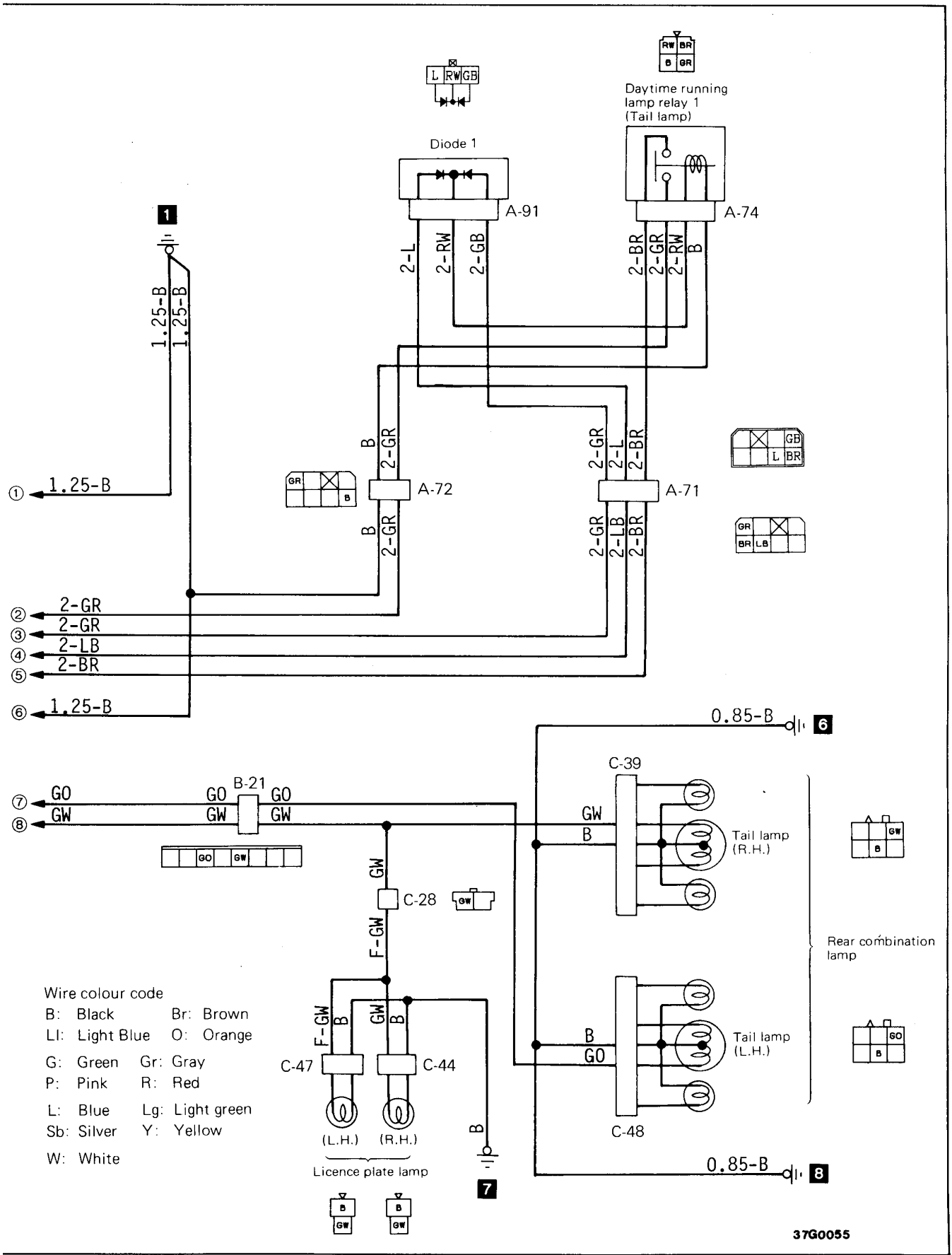


Remarks

(1) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.

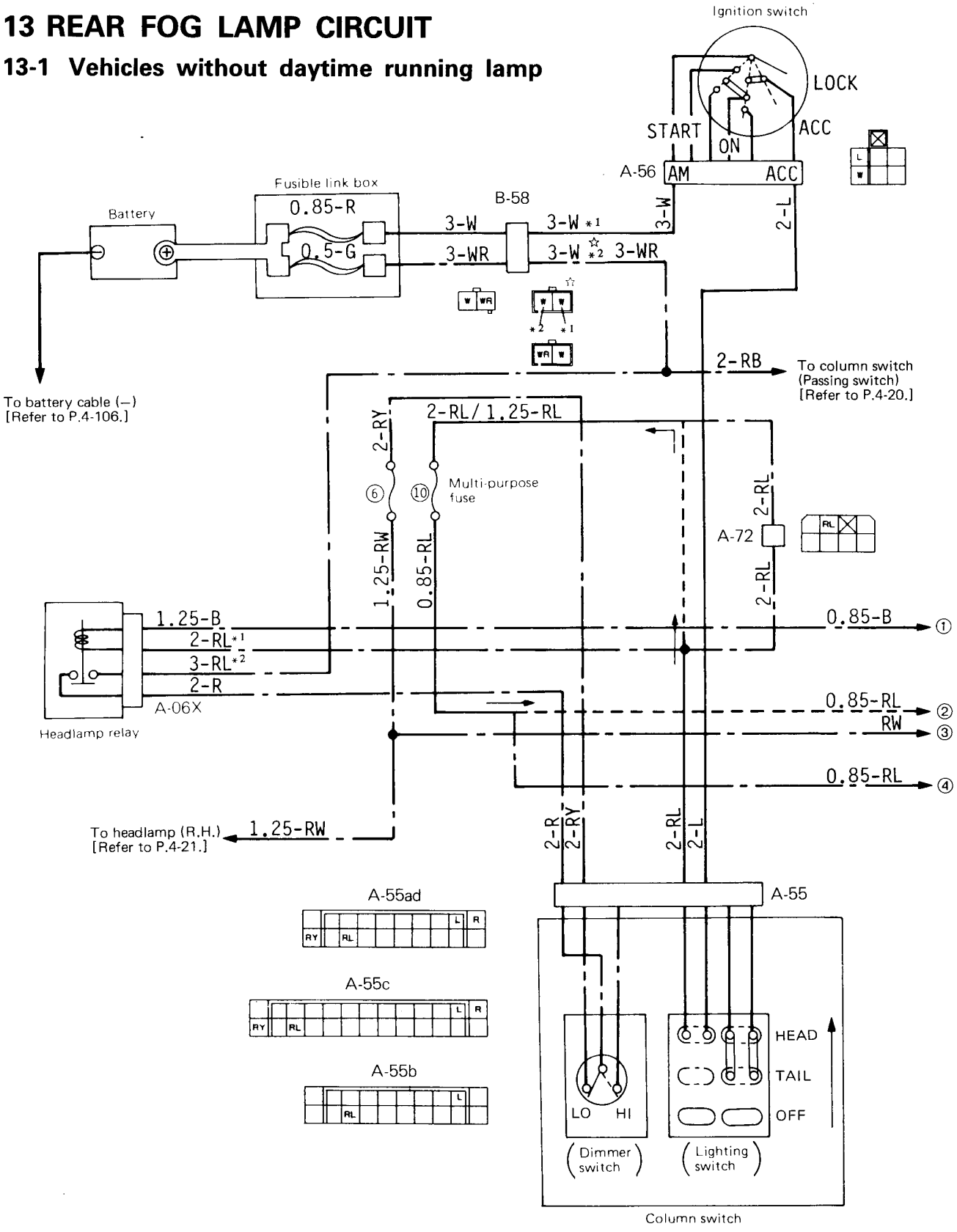
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)

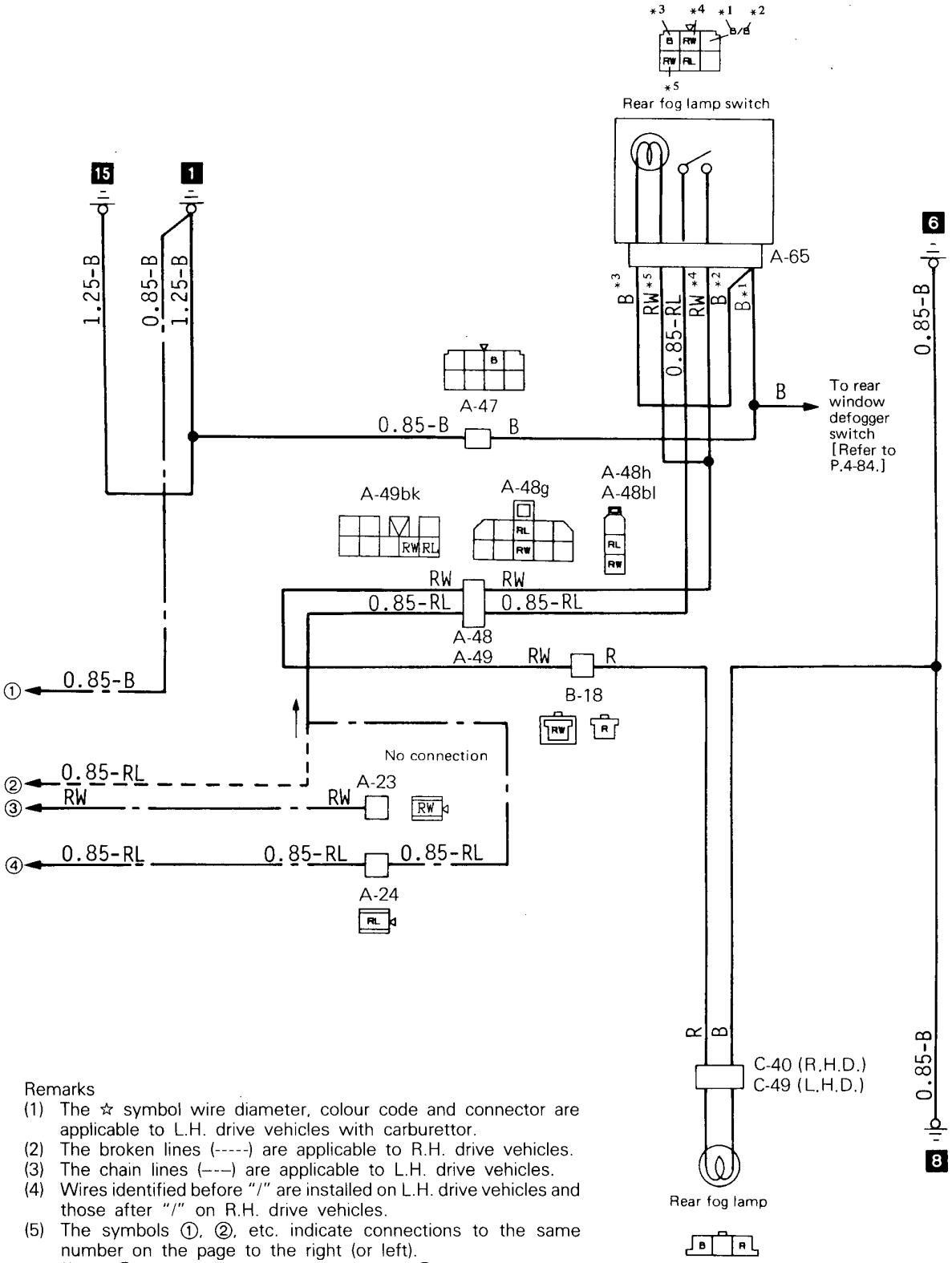
(3) For details concerning the earth point (example: 1), refer to P.3-13.


Daytime running lamp relay 1 (Tail lamp)
Diode 1
A-91
A-74
A-72
A-71
1.25-B
2-GR
2-LB
2-BR
2-L
2-RW
2-GB
B
GO
GW
F-GW
B-21
C-28
C-39
C-47
C-44
C-48
Tail lamp (R.H.)
Tail lamp (L.H.)
Rear combination lamp
(L.H.)
(R.H.)
Licence plate lamp
0.85-B
Wire colour code
B: Black
Br: Brown
LI: Light Blue
O: Orange
G: Green
Gr: Gray
P: Pink
R: Red
L: Blue
Lg: Light green
Sb: Silver
Y: Yellow
W: White
37G0055

13 REAR FOG LAMP CIRCUIT

13-1 Vehicles without daytime running lamp





Remarks

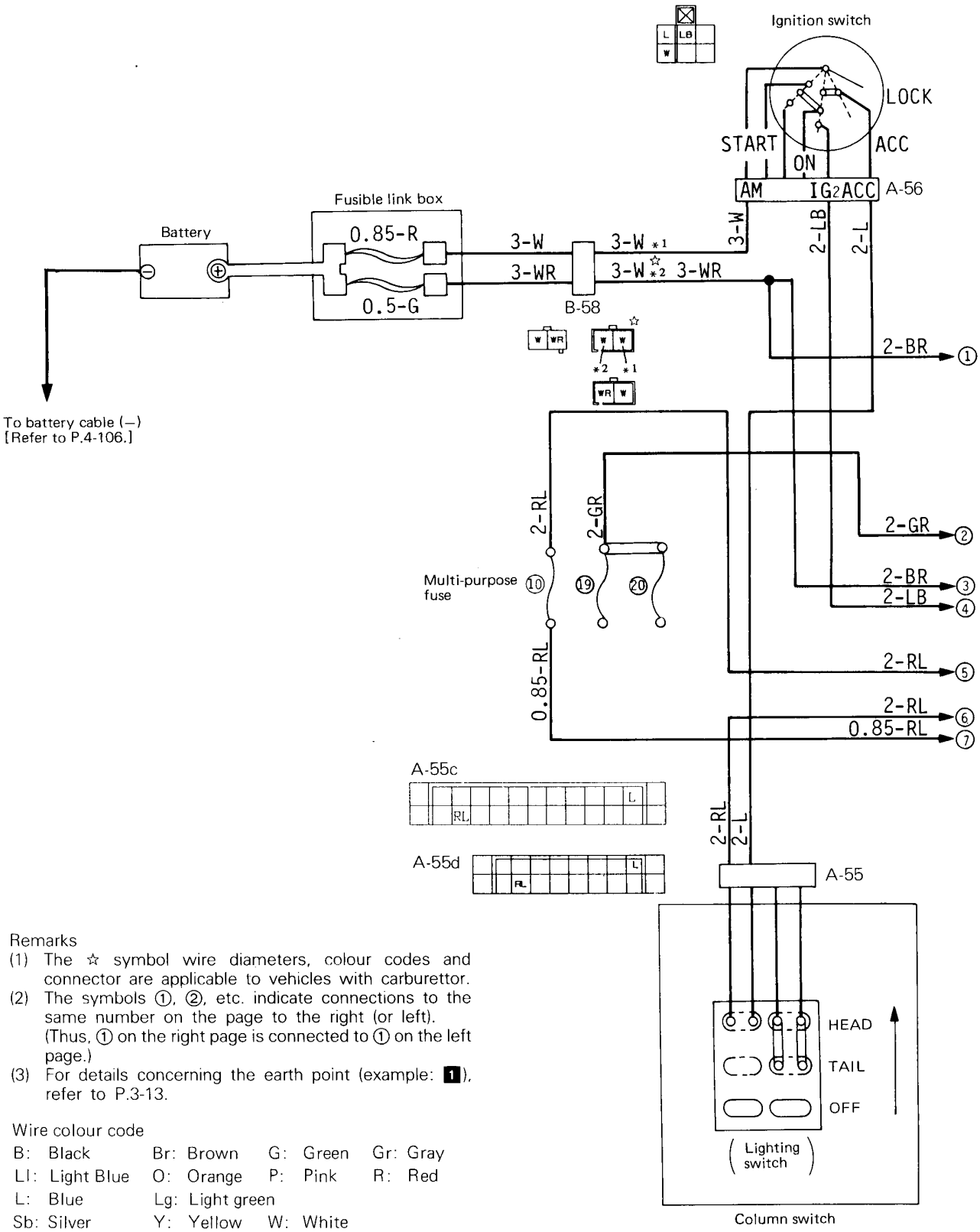
(1) The ☆ symbol wire diameter, colour code and connector are applicable to L.H. drive vehicles with carburettor.
(2) The broken lines (-----) are applicable to R.H. drive vehicles.
(3) The chain lines (—·—) are applicable to L.H. drive vehicles.
(4) Wires identified before "/" are installed on L.H. drive vehicles and those after "/" on R.H. drive vehicles.
(5) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)
(6) For details concerning the earth point (example: 1), refer to P.3-13.

37G0251

Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

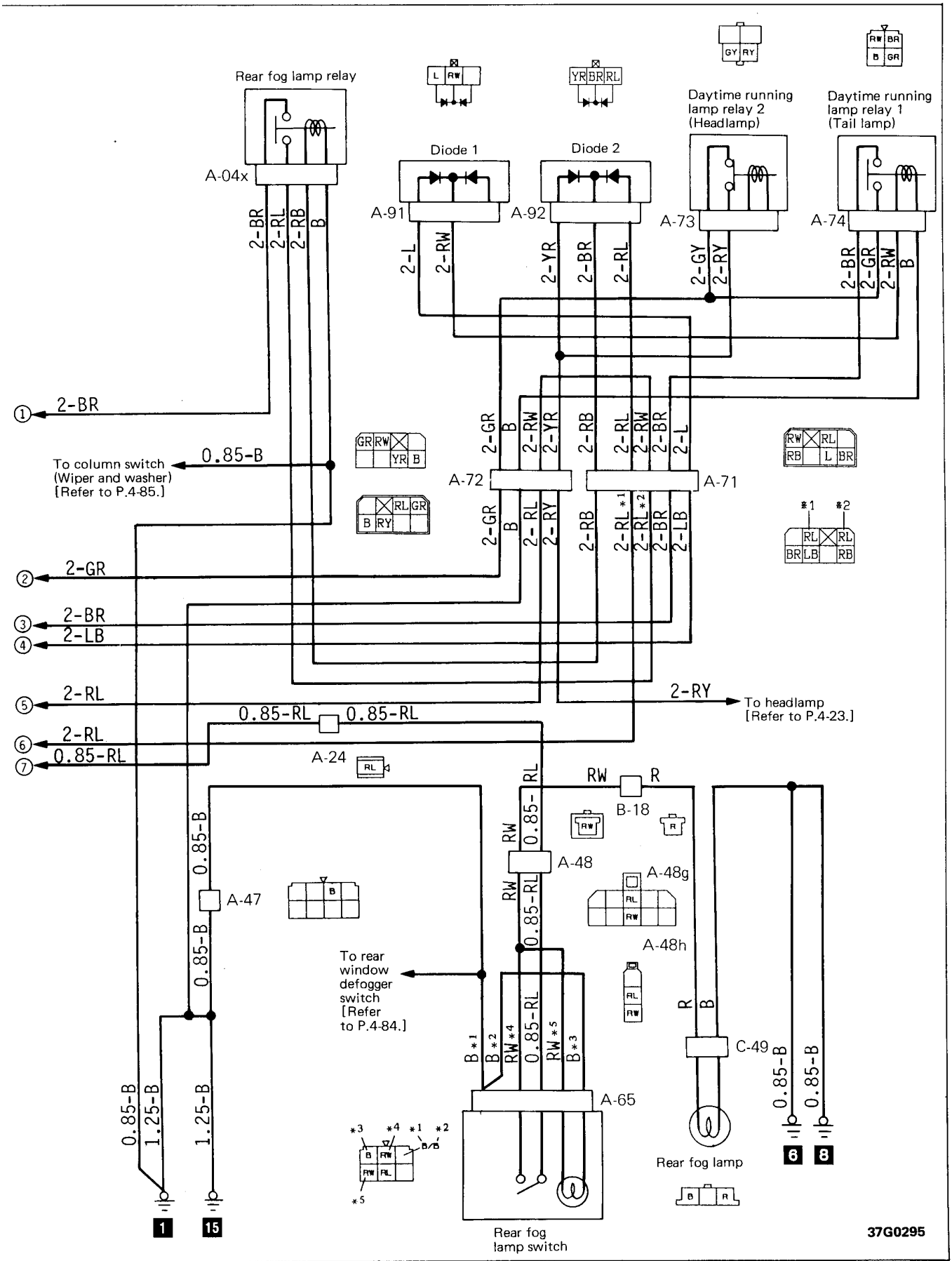
13-2 Vehicles with daytime running lamp



Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to vehicles with carburettor.
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(3) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray
Ll: Light Blue	O: Orange	P: Pink	R: Red
L: Blue	Lg: Light green		
Sb: Silver	Y: Yellow	W: White	


Rear fog lamp relay
A-04x
Diode 1
Diode 2
A-91
A-92
Daytime running lamp relay 2 (Headlamp)
Daytime running lamp relay 1 (Tail lamp)
A-73
A-74
2-BR
2-RL
2-RB
B
2-L
2-RW
2-YR
2-GY
2-RY
2-GR
① 2-BR
To column switch (Wiper and washer) [Refer to P.4-85.]
0.85-B
A-72
A-71
② 2-GR
③ 2-BR
④ 2-LB
⑤ 2-RL
2-RY
To headlamp [Refer to P.4-23.]
0.85-RL
⑥ 2-RL
⑦ 0.85-RL
A-24
RL
RW
R
B-18
A-48
A-48g
A-48h
A-47
0.85-B
To rear window defogger switch [Refer to P.4-84.]
A-65
C-49
Rear fog lamp
Rear fog lamp switch
1.25-B
1
15
6
8
37G0295

REAR FOG LAMP CIRCUIT <Vehicles without daytime running lamp> (See P.4-34.)

OPERATION

- When the ignition switch is turned to "ACC" or "ON", and the lighting switch is in the HEAD position, current flows through multi-purpose fuse No. ⑩ to rear fog lamp switch.
- When the rear fog lamp switch is pushed ON in this condition, the rear fog lamp comes on.

TROUBLESHOOTING HINTS

1. The rear fog lamp doesn't illuminate.
   1) Headlamps come on.
      - Check the rear fog lamp switch.
      - Check the multi-purpose fuse No. ⑩.
   2) Headlamps do not come on, either.
      - Check the lighting switch.
      - Check the main fusible link (0.5-G).

REAR FOG LAMP CIRCUIT <Vehicles with daytime running lamp> (See P.4-35.)

OPERATION

Rear Fog Lamp Relay ON Conditions

Ignition switch	Lighting switch	Rear fog lamp relay
"ACC" or "ON"	"HEAD"	ON

- Turning the ignition switch to the ON position causes the rear fog lamp relay to be energized.
- When the rear fog lamp switch is turned ON in this condition, the rear fog lamp comes on.

TROUBLESHOOTING HINTS

1. The rear fog lamp doesn't illuminate.
   1) Headlamps come on.
      - Check the rear fog lamp relay.
      - Check the rear fog lamp switch.
      - Check the multi-purpose fuse No. ⑩.
   2) Headlamps do not come on, either.
      - Check the lighting switch.
      - Check the main fusible link (0.5-G).

ROOM LAMP CIRCUIT (See P.4-40, 42.)

OPERATION

Room lamp (Vehicles without crystal-light roof)

- Battery voltage is always applied to the room lamp through multi-purpose fuse No. ①.
- When the room lamp switch is set at "ON", current flows through multi-purpose fuse No. ①, room lamp, and earth, causing the room lamp to go on.
- When the room lamp switch is set at "DOOR", battery voltage is applied to the door switches and tailgate switch.
- If any door or tailgate is opened with the room lamp switch set at "DOOR", the door switch or tailgate switch contact close, causing current to flow through multi-purpose fuse No. ①, room lamp, door switch or tailgate switch and earth so the room lamp goes on.

Remark
The step lamp and door lamp are also actuated in the same way.

Room lamp and overhead console lamp (Vehicles with crystal-light roof)

- Battery voltage is always applied to the room lamp and overhead console lamp through multi-purpose fuse No. ①.
- When the room lamp switch or overhead console lamp is set at "ON", current flows through multi-purpose fuse No. ①, room lamp or overhead console lamp and earth, causing the room lamp or overhead console lamp to go on.
- When the room lamp or overhead console lamp switch is set at "DOOR", battery voltage is applied to the door switches and tailgate switch.
- If front door is opened with the room lamp switch set at "DOOR", the door switch contacts close, causing current to flow through multi-purpose fuse No. ①, room lamp, door switch, and earth so the room lamp goes on.
- If rear door or tailgate is opened with the overhead console lamp switch set at "DOOR", the door switch or tailgate switch contacts close, causing current to flow through multi-purpose fuse No. ①, overhead console lamp, door switch or tailgate switch and earth so the overhead console lamp goes on.

Remark
The door lamp is actuated in the same way as the room lamp; the step lamp is actuated in the same way as the overhead console lamp.

Door-ajar warning lamp

- Battery voltage is always applied to the door-ajar warning lamp through multi-purpose No. ①.
- Once any door is opened or remains ajar, the door switch contacts close causing current to flow through multi-purpose fuse No. ①, door-ajar warning lamp, door switch, and ground so the door-ajar warning lamp goes on.

TROUBLESHOOTING HINTS

1. Room lamp or overhead console lamp does not come on.
   (1) Clock also does not operate.
   - Check the multi-purpose fuse No. ①.

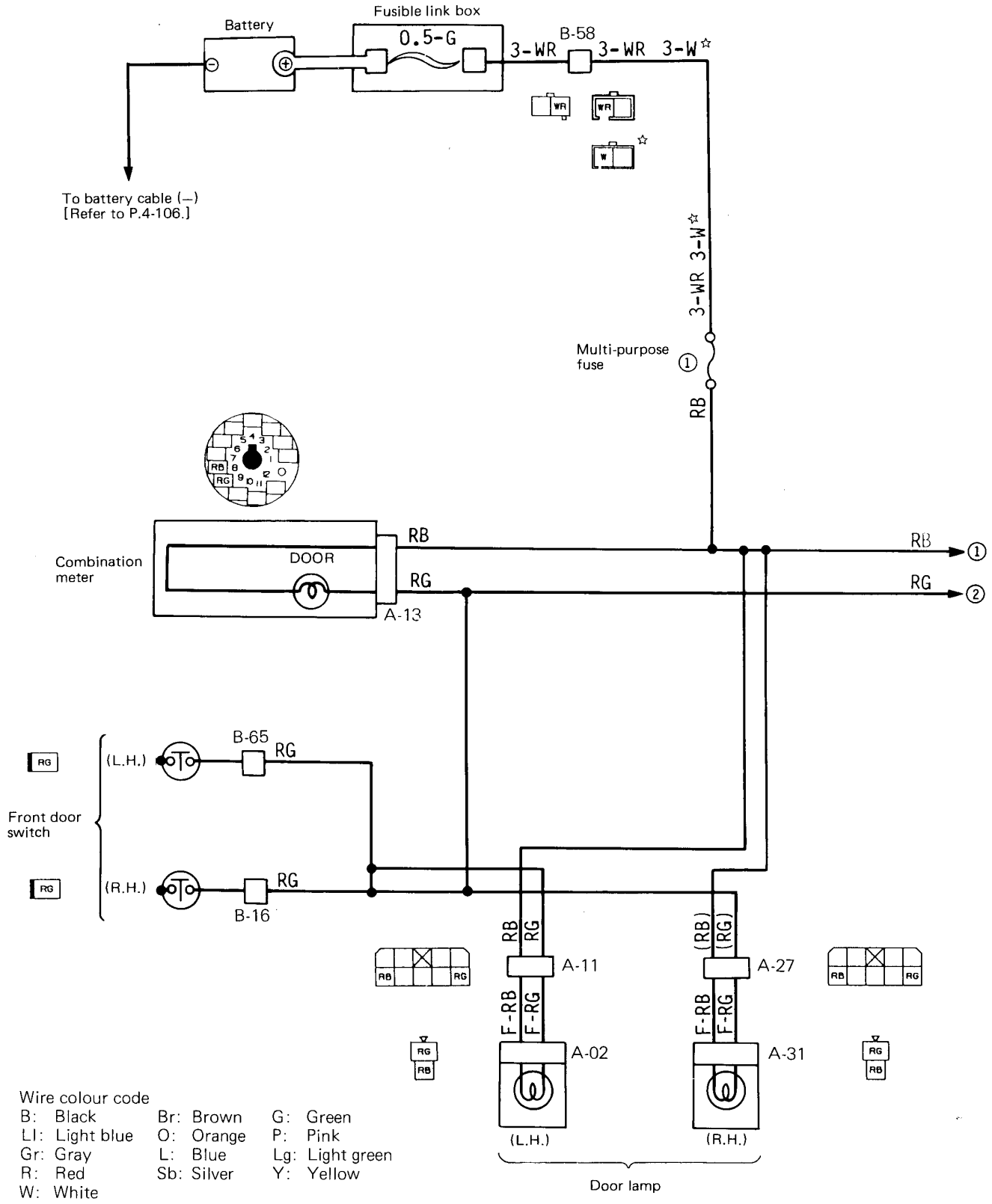
   (2) Room lamp or overhead console lamp does not come on even when door or tailgate is opened with room lamp or overhead console lamp switch at "DOOR" position.
   - Check bulb.

2. Room lamp or overhead console lamp does not come on when one or more doors are opened even with room lamp or overhead console lamp switch at "DOOR" position.
   - Check room lamp or overhead console lamp switch.

3. Room lamp or overhead console lamp does not come on when one door or tailgate is opened even with room lamp or overhead console lamp switch in "DOOR" position.
   - Check door switch or tailgate switch.

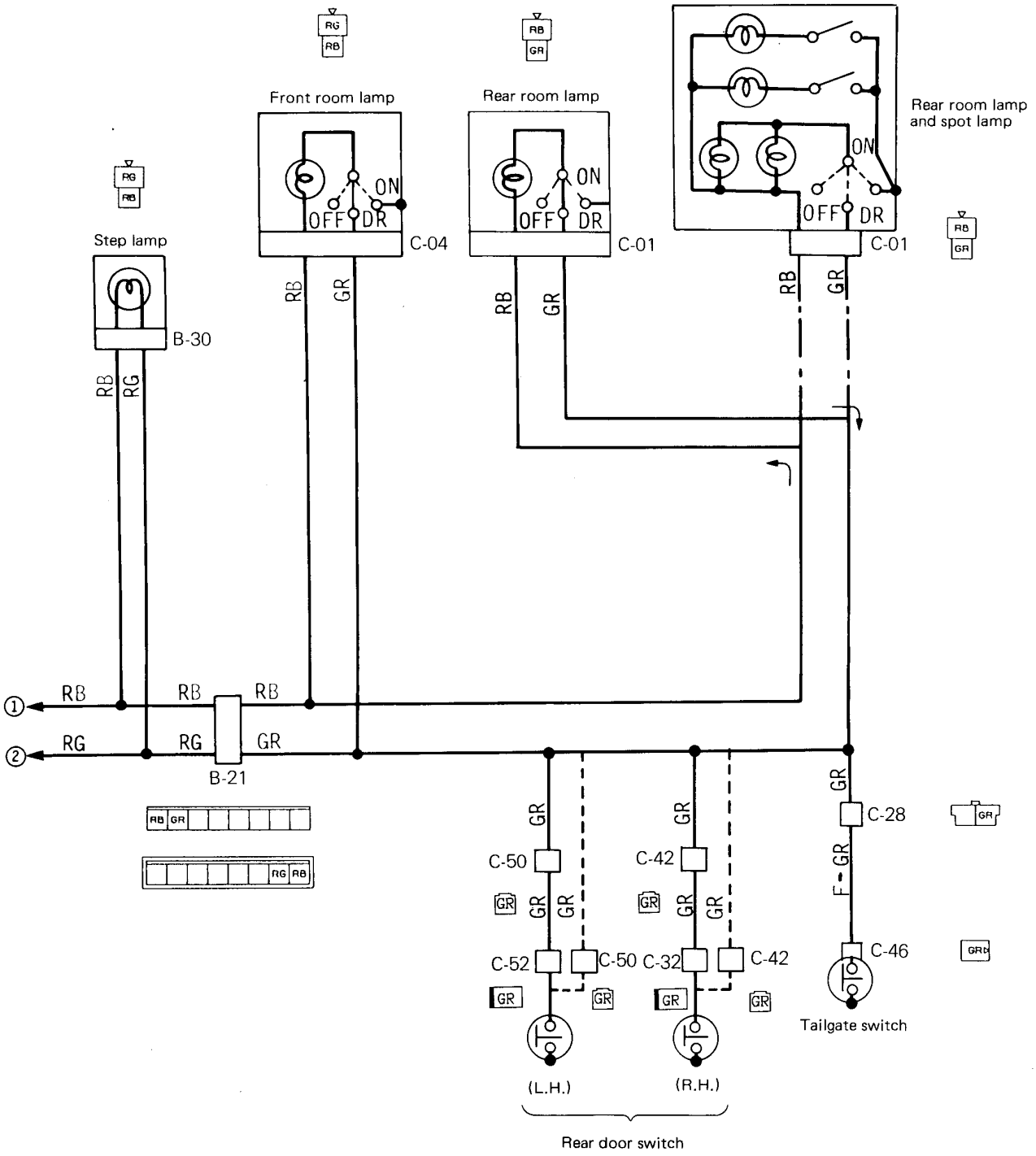
14 ROOM LAMP CIRCUIT

14-1 Vehicles without crystal-light roof



Wire colour code

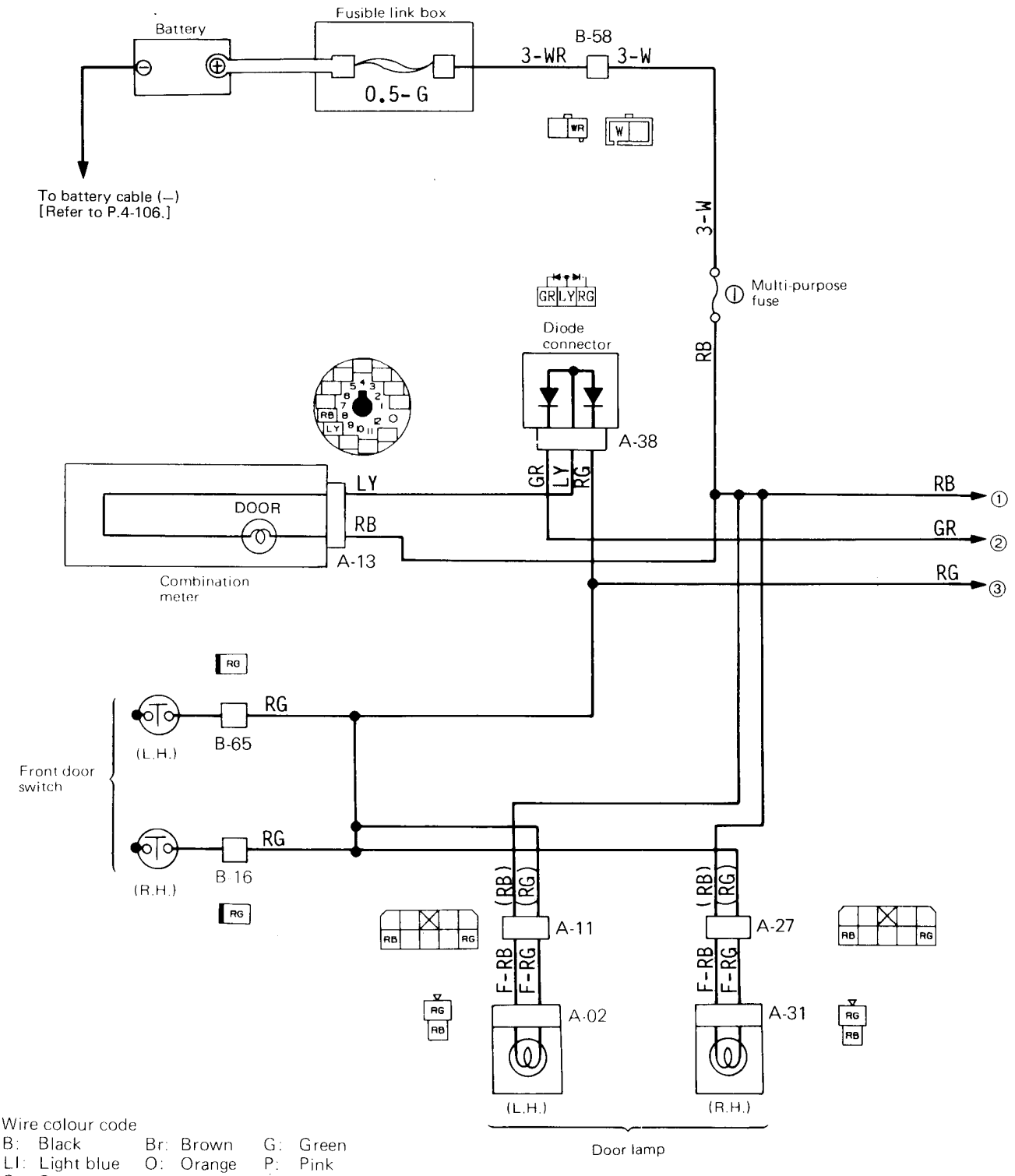
B:	Black	Br:	Brown	G:	Green
LI:	Light blue	O:	Orange	P:	Pink
Gr:	Gray	L:	Blue	Lg:	Light green
R:	Red	Sb:	Silver	Y:	Yellow
W:	White				



Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(2) The chain lines (—·—) are applicable to vehicles with rear room lamp and spot lamp.
(3) The broken lines (- - - - -) are applicable to vehicles with rear speaker.
(4) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)

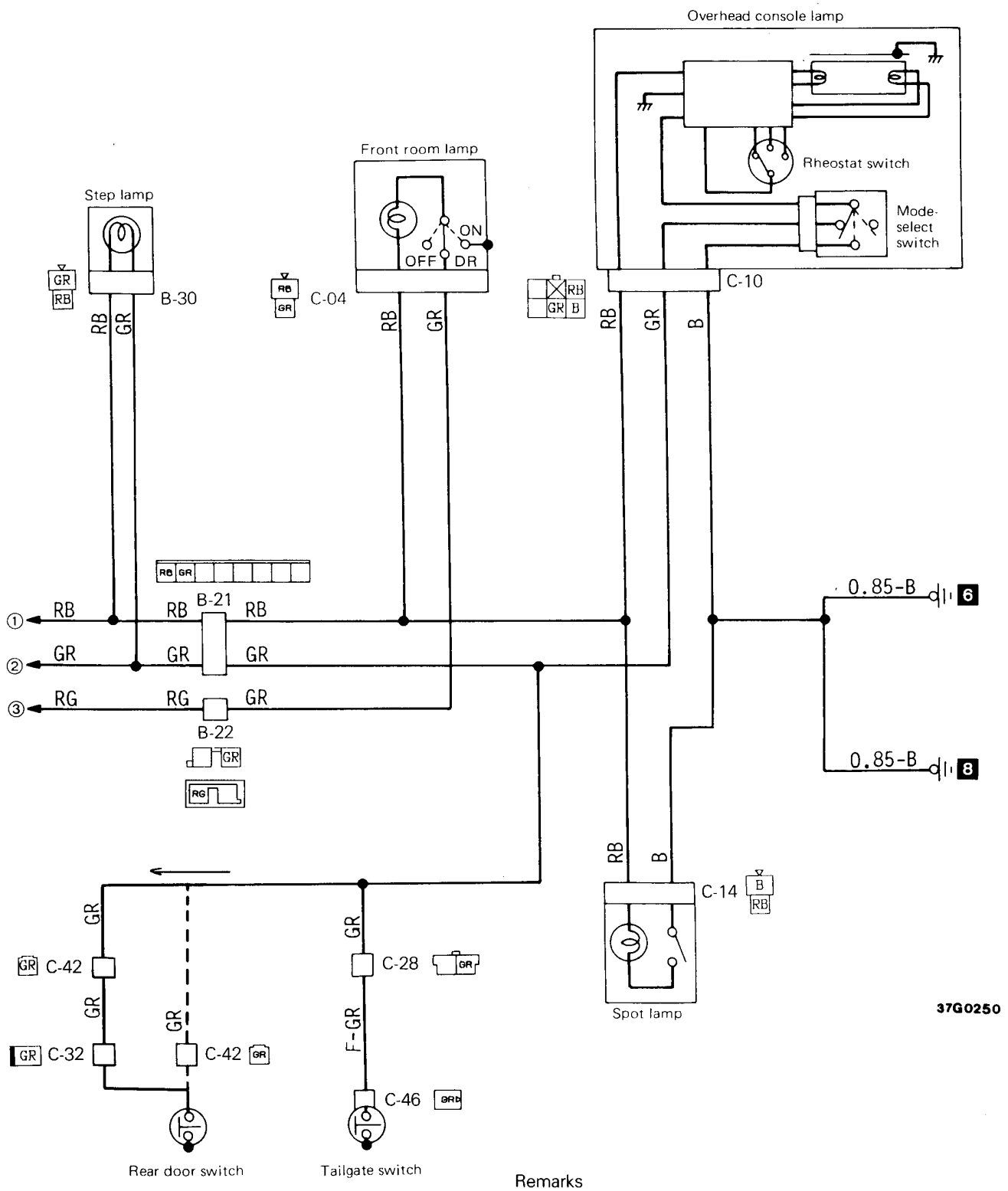
37G0289

14-2 Vehicles with crystal-light roof



Wire colour code

B:	Black	Br:	Brown	G:	Green
Ll:	Light blue	O:	Orange	P:	Pink
Gr:	Gray	L:	Blue	Lg:	Light green
R:	Red	Sb:	Silver	Y:	Yellow
W:	White				



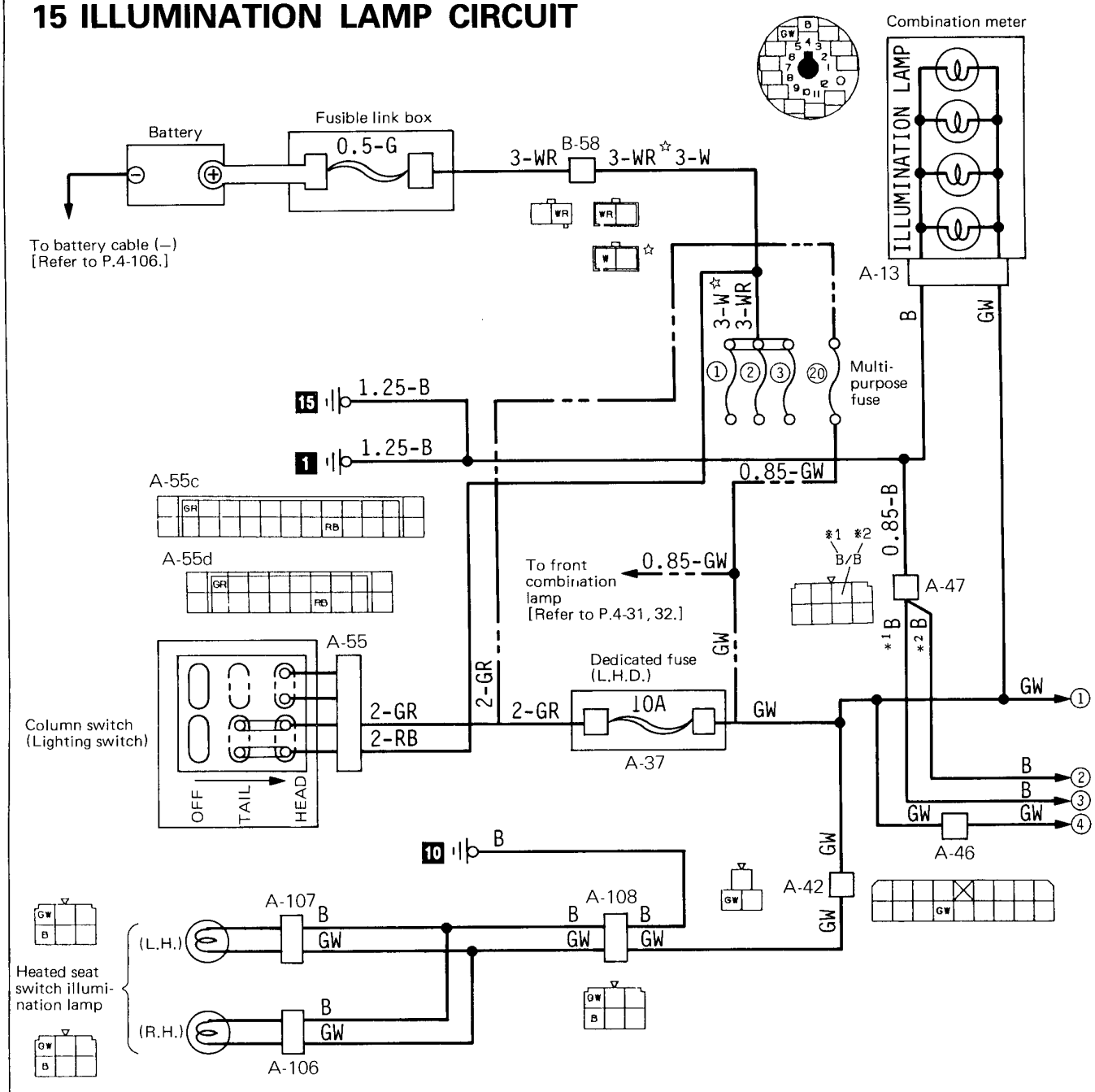
Remarks

(1) The broken line (-----) is applicable to vehicles without rear speaker.

(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)

(3) For details concerning the earth point (example: 6), refer to P.3-13.

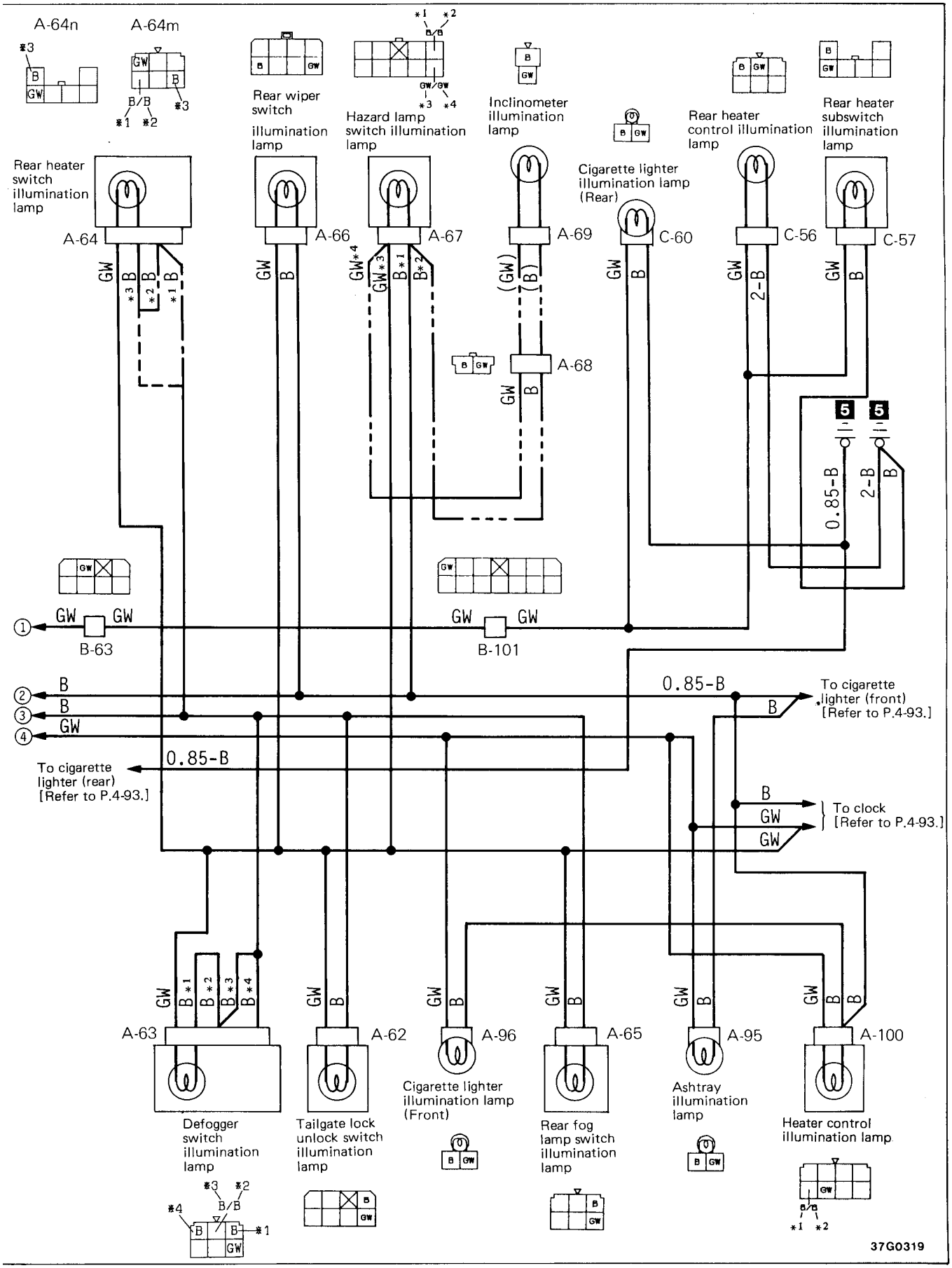
15 ILLUMINATION LAMP CIRCUIT



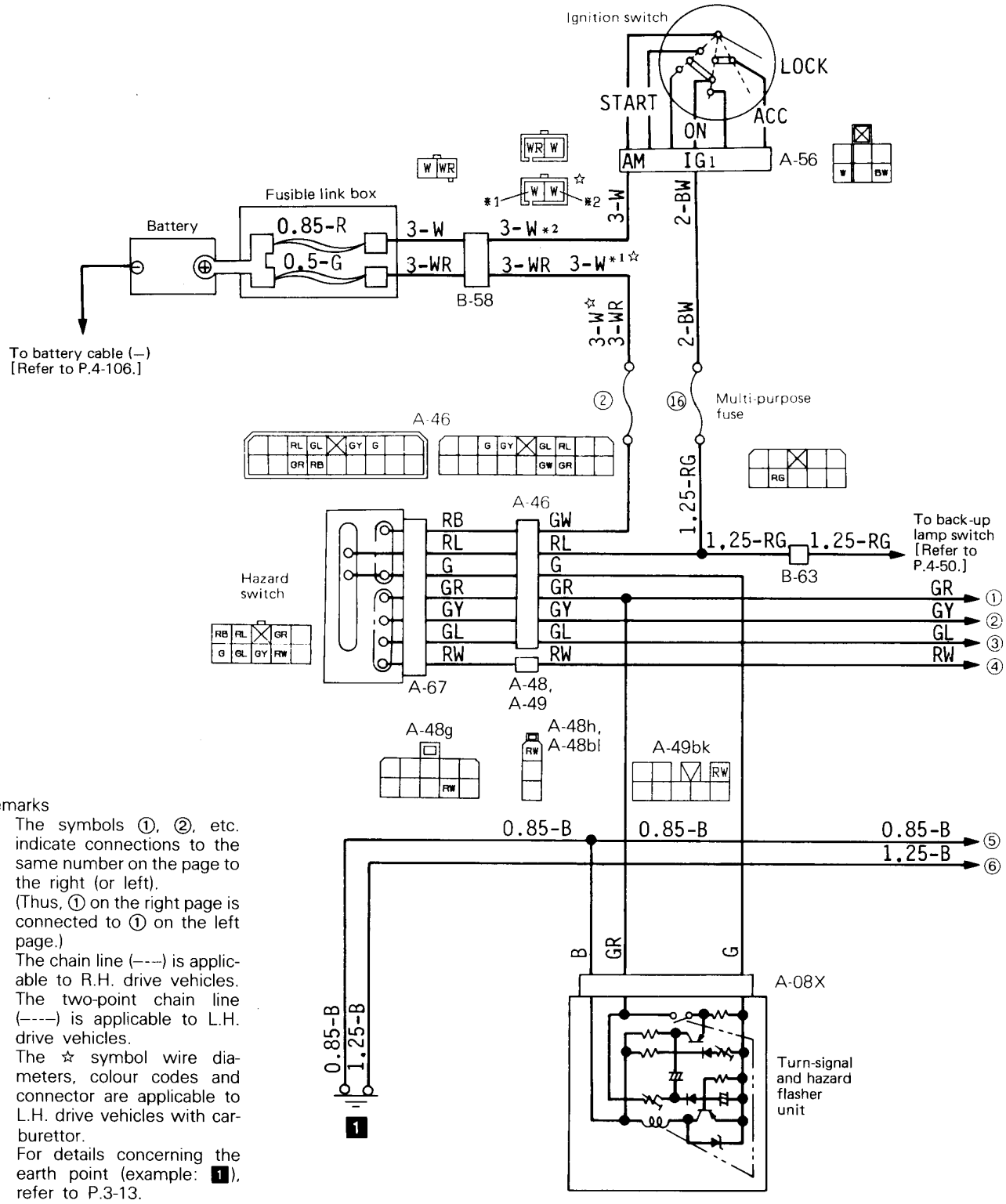
Remarks
(1) The broken line (-----) is applicable to 4-door models.
(2) The chain lines (—·—) is applicable to 5-door models.
(3) The two-point chain lines (—··—) are applicable to R.H. drive vehicles.
(4) The three point chain lines (—···—) are applicable to vehicles with inclinometer.
(5) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(6) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(7) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				


A-64n
A-64m
Rear wiper switch illumination lamp
Hazard lamp switch illumination lamp
Inclinometer illumination lamp
Rear heater control illumination lamp
Rear heater subswitch illumination lamp
Rear heater switch illumination lamp
Cigarette lighter illumination lamp (Rear)
A-64
A-66
A-67
A-69
C-60
C-56
C-57
A-68
B-63
B-101
To cigarette lighter (rear) [Refer to P.4-93.]
To cigarette lighter (front) [Refer to P.4-93.]
To clock [Refer to P.4-93.]
A-63
A-62
A-96
A-65
A-95
A-100
Defogger switch illumination lamp
Tailgate lock unlock switch illumination lamp
Cigarette lighter illumination lamp (Front)
Rear fog lamp switch illumination lamp
Ashtray illumination lamp
Heater control illumination lamp
37G0319

16 TURN-SIGNAL LAMP AND HAZARD LAMP CIRCUIT

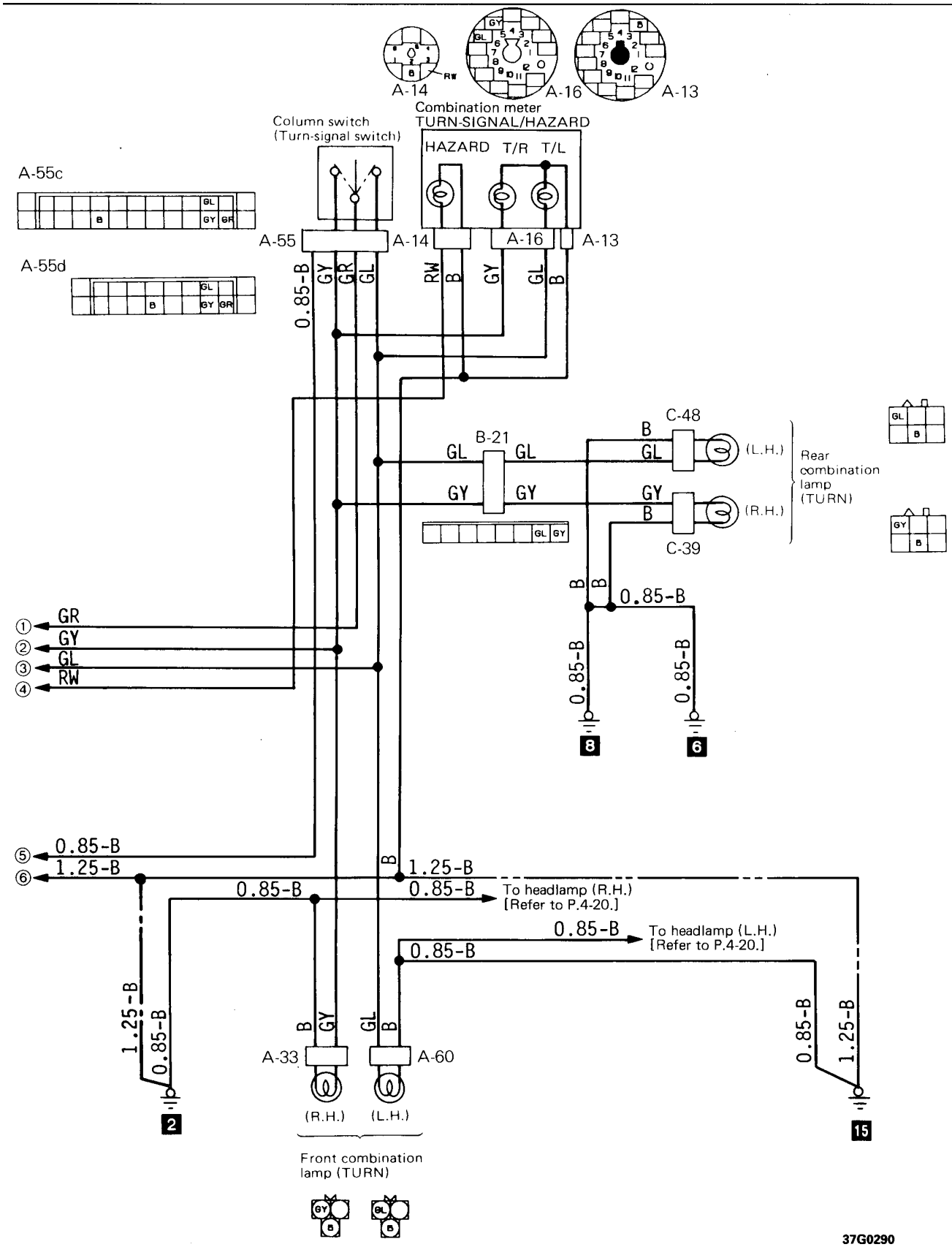


Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(2) The chain line (—·—) is applicable to R.H. drive vehicles.
(3) The two-point chain line (—··—) is applicable to L.H. drive vehicles.
(4) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(5) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			


A-14
A-16
A-13
Combination meter
TURN-SIGNAL/HAZARD
HAZARD T/R T/L
Column switch
(Turn-signal switch)
A-55c
A-55d
A-55
A-14
A-16
A-13
0.85-B GY GR GL RW B GY GL B
C-48
B-21
B GL GL (L.H.)
GY GY GY B (R.H.)
C-39
Rear combination lamp (TURN)
GL GY
B B 0.85-B
0.85-B 0.85-B
8
6
① GR
② GY
③ GL
④ RW
⑤ 0.85-B
⑥ 1.25-B
B 1.25-B
0.85-B 0.85-B
To headlamp (R.H.) [Refer to P.4-20.]
0.85-B
0.85-B
To headlamp (L.H.) [Refer to P.4-20.]
1.25-B 0.85-B
B GY GL B
A-33
A-60
(R.H.) (L.H.)
0.85-B 1.25-B
2
15
Front combination lamp (TURN)
37G0290

TURN-SIGNAL LAMP AND HAZARD LAMP CIRCUIT (See P.4-46.)

OPERATION

<Turn-signal lamp>

- When the turn signal lamp switch is at "L.H.", with the ignition switch turned to "ON", current flows through fuse No. ⑯, hazard switch, turn-signal and hazard flasher unit, and earth, causing the turn-signal and hazard flasher unit to alternately close and open its contacts.
- While the turn-signal and hazard flasher unit contacts are closed, current flows through the turn-signal and hazard flasher unit, turn signal switch (L.H.), turn signal lamps (L.H.) and earth so the turn signal lamps (L.H.) go on.
- When the turn-signal and hazard flasher unit contacts are open, the turn signal lamps (L.H.) go off.
- This cycle is repeated to flash the turn signal lamp (L.H.).
- The turn signal indicator lamp (L.H.) flashes at the same time as do the turn signal lamp.
- When the turn signal switch is at "R.H.", the turn signal lamps (R.H.) and turn signal indicator lamp flash in the same way as when the switch is at "L.H.".

NOTE
If one or more turn signal lamp bulbs are burnt out, the flasher unit closes and opens the contacts more frequently than when normal, to warn the driver that bulb replacement is required.

<Hazard lamp>

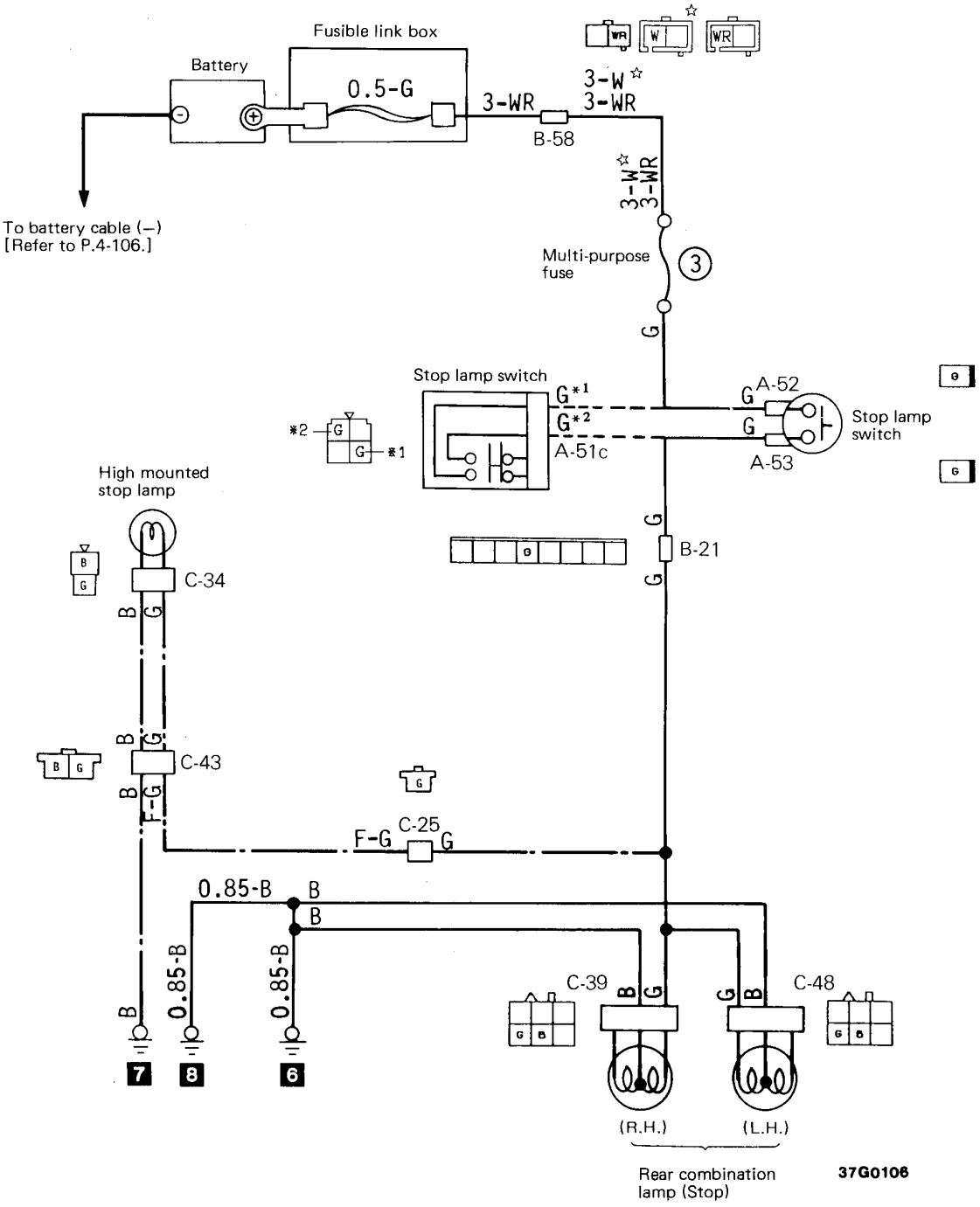
- When the hazard switch is placed in the ON position, the flasher unit relay contacts repeatedly close and open, which results in the RH and LH turn-signal lamps, turn-signal indicator lamps, flashing on and off at the same time.

Remarks
- The number of times the hazard lamps flash on and off does not change even when one bulb is out.

TROUBLESHOOTING HINTS

1. Neither the turn-signal lamps not hazard lamps operate.
   - Check hazard switch contacts (on power source end).
   - Check flasher unit.
2. All LH or RH turn-signal lamps do not operate.
   1) Hazard lamp is fully operational.
      - Check hazard switch contacts (on turn-signal end).
      - Check turn-signal switch.
3. Flashing cycle of turn signal lamps is shorter.
   - Check bulb.
4. Hazard lamp does not operate.
   1) Turn-signal lamps are operational.
      - Check hazard switch contacts (on hazard lamp end).

17 STOP LAMP CIRCUIT

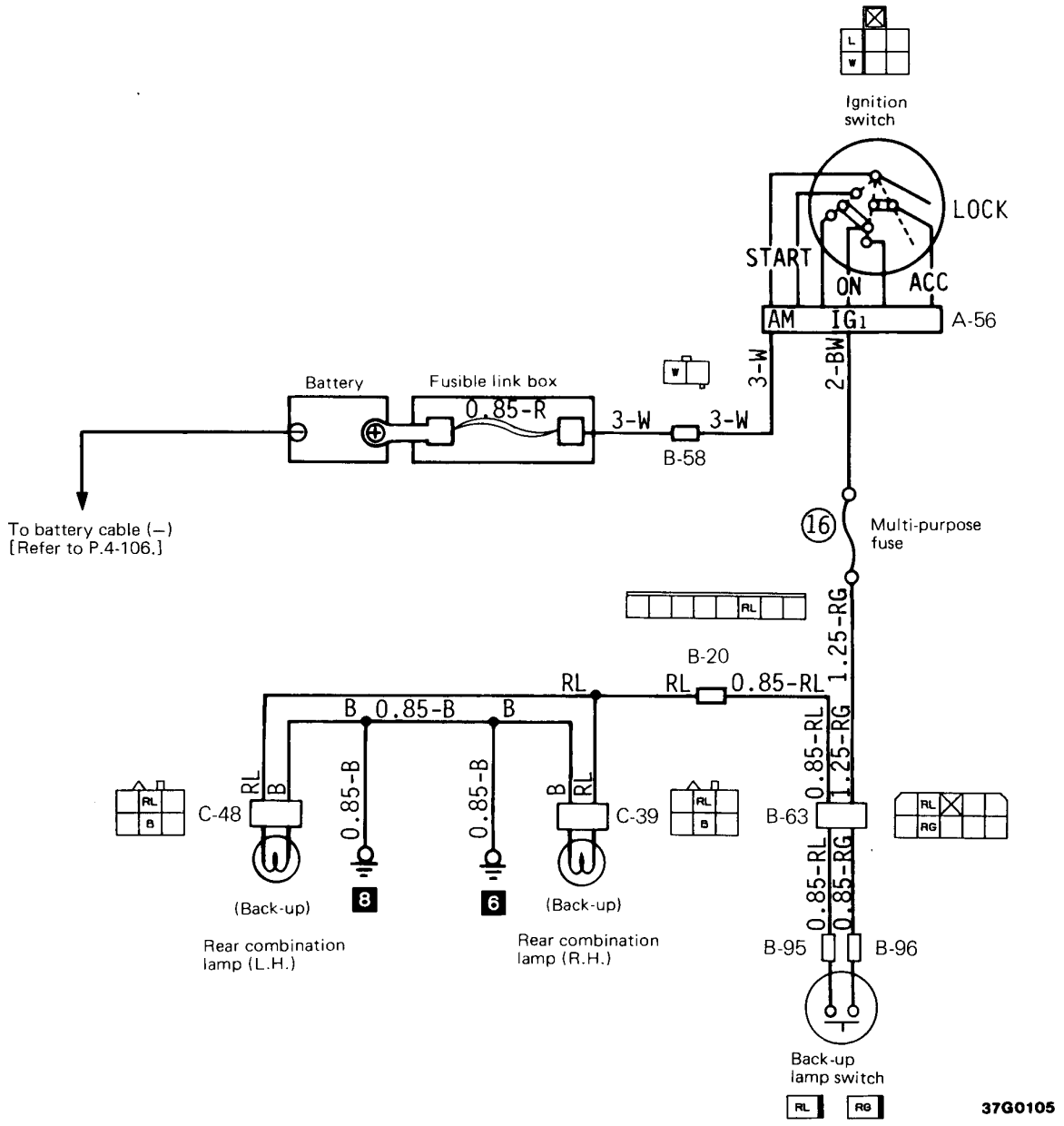


Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburettor.
(2) The broken lines (-----) are applicable to vehicles with auto-cruise control.
(3) The chain lines (–––––) are applicable to vehicles with high mounted stop lamp.
(4) For details concerning the earth point (example: 6), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

18 BACK-UP LAMP CIRCUIT

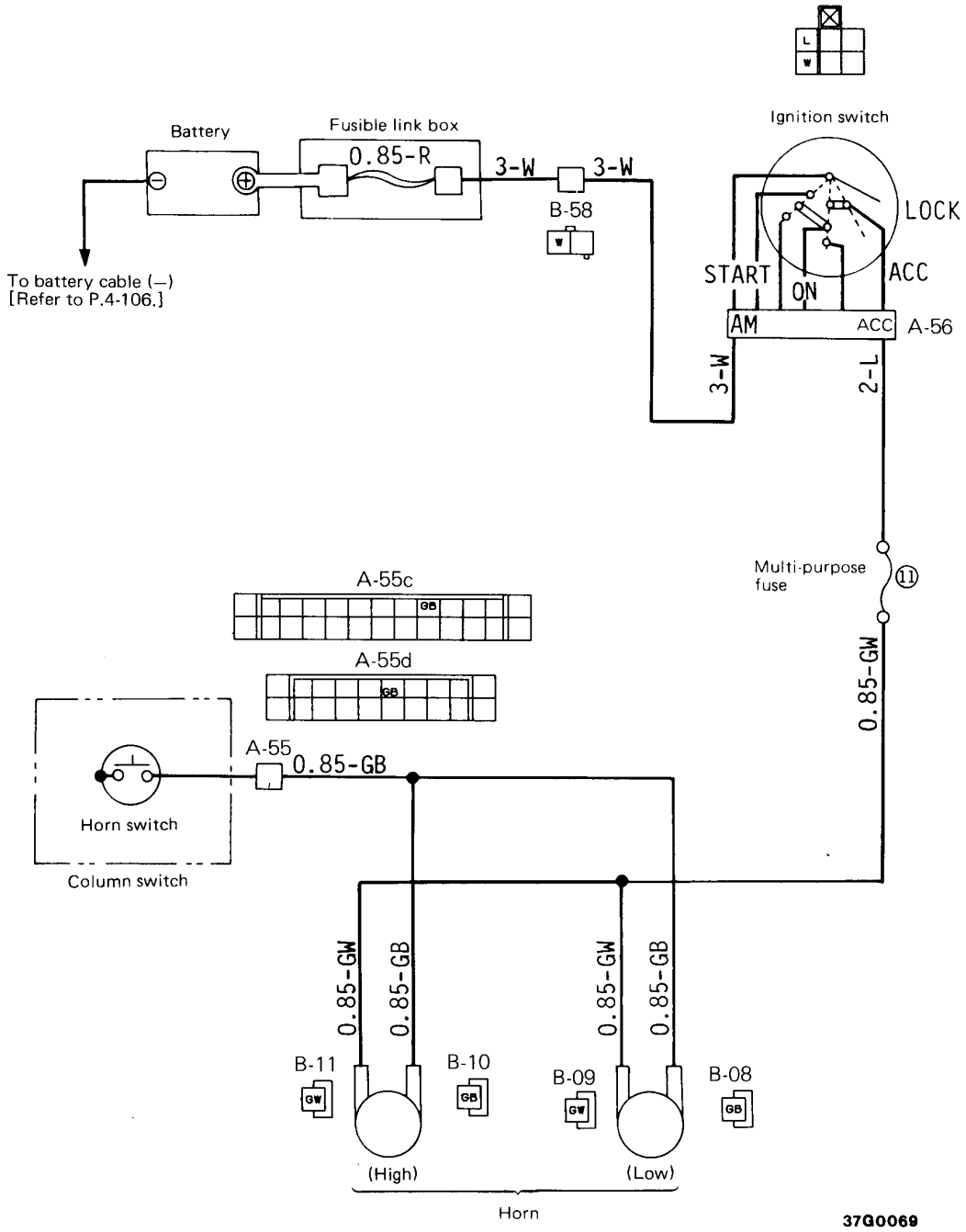


Remark
For details concerning the earth point (example: 6), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

19 HORN CIRCUIT

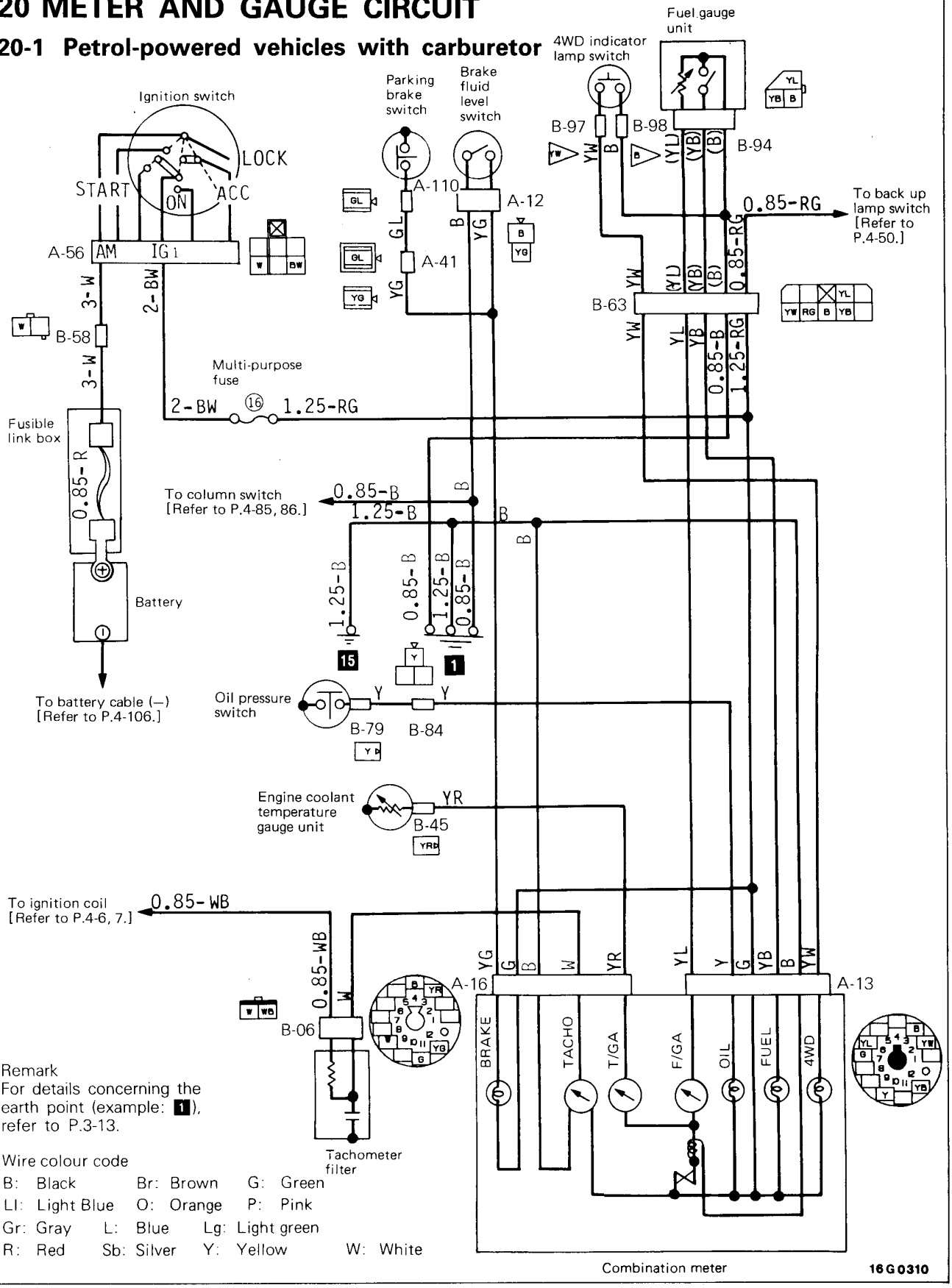


Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

20 METER AND GAUGE CIRCUIT

20-1 Petrol-powered vehicles with carburetor

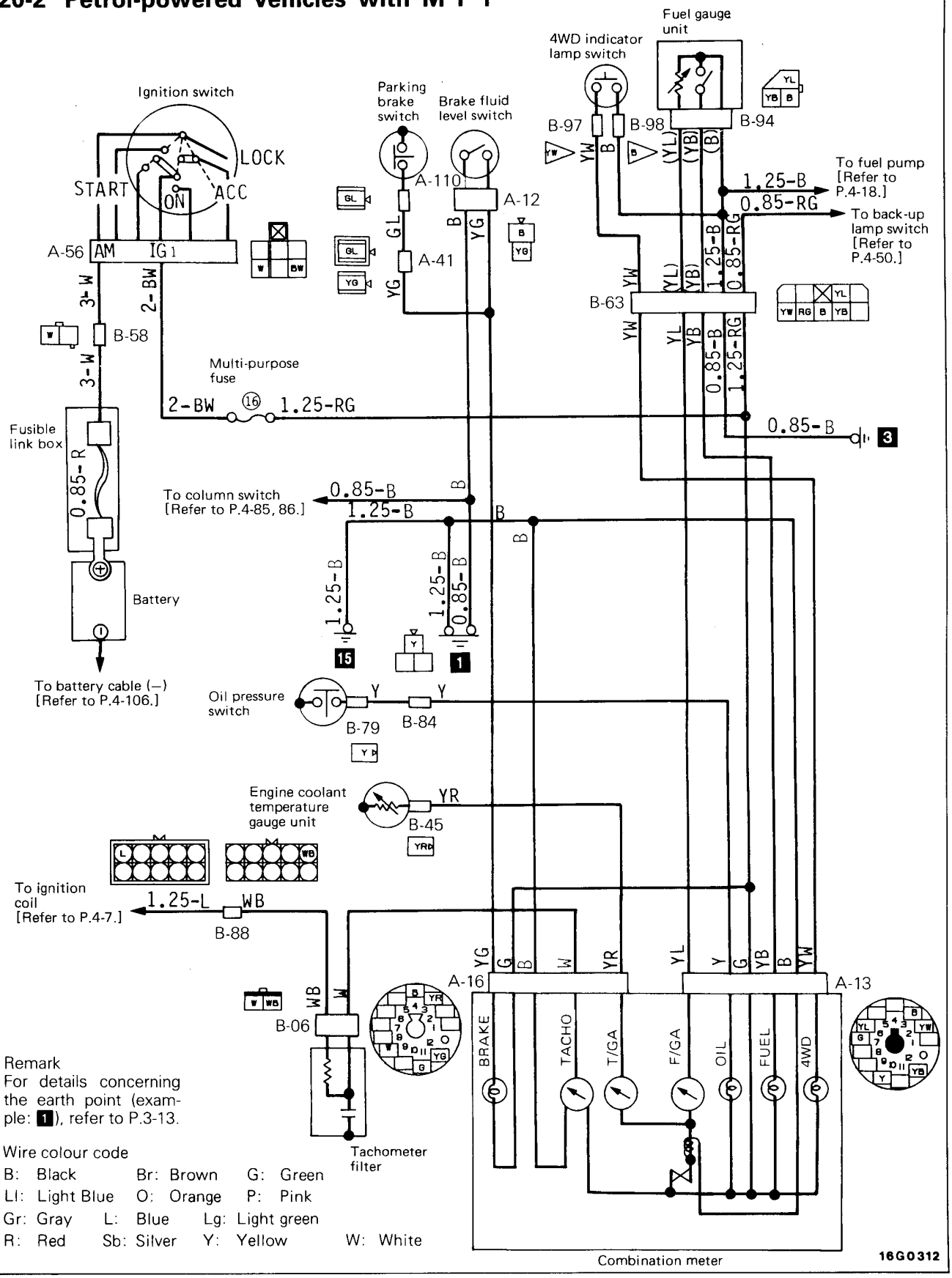


Remark
For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B:	Black	Br:	Brown	G:	Green
LI:	Light Blue	O:	Orange	P:	Pink
Gr:	Gray	L:	Blue	Lg:	Light green
R:	Red	Sb:	Silver	Y:	Yellow
W:	White				

20-2 Petrol-powered vehicles with M P I

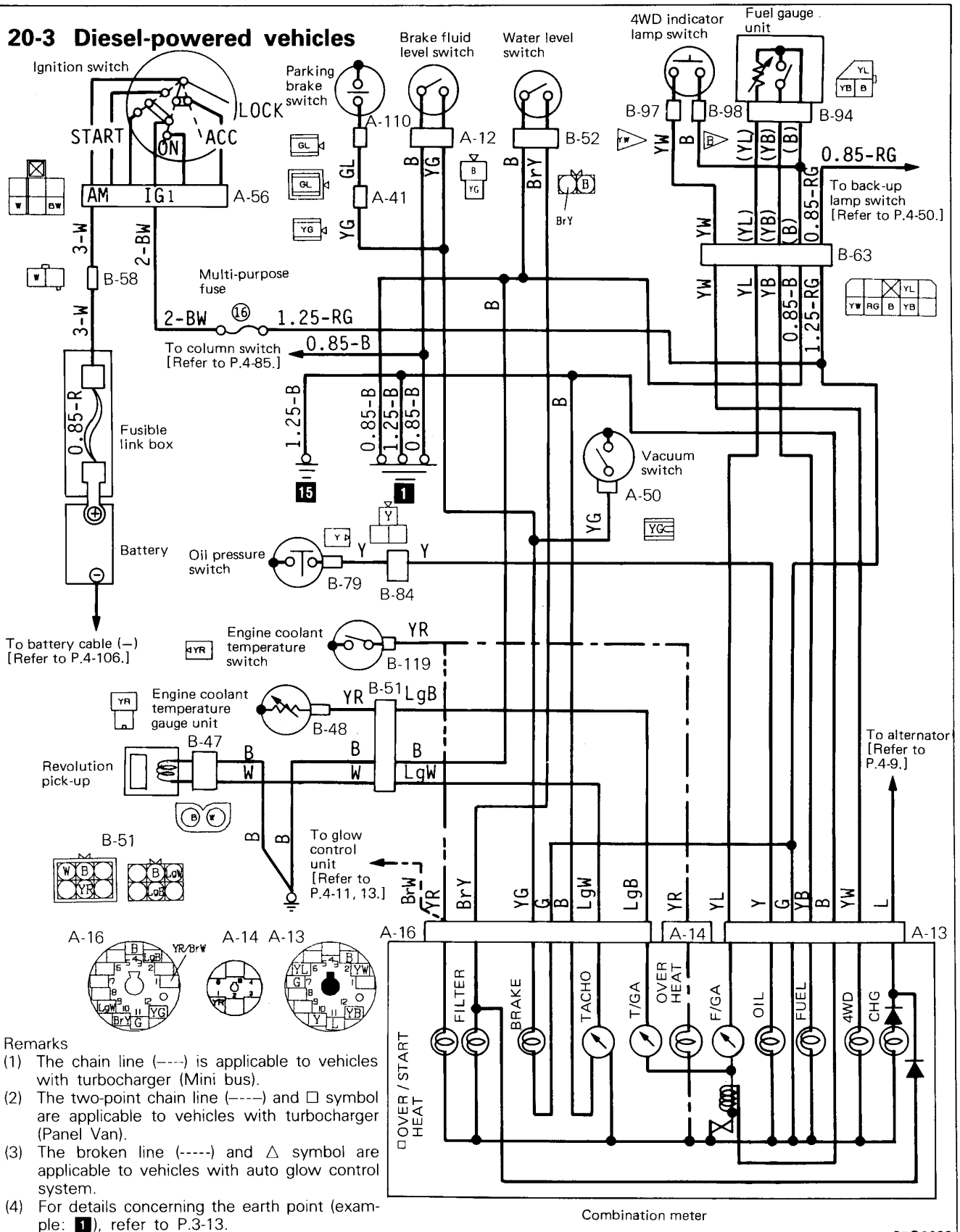


Remark
For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	
Ll: Light Blue	O: Orange	P: Pink	
Gr: Gray	L: Blue	Lg: Light green	
R: Red	Sb: Silver	Y: Yellow	W: White

20-3 Diesel-powered vehicles



Remarks
(1) The chain line (----) is applicable to vehicles with turbocharger (Mini bus).
(2) The two-point chain line (----) and □ symbol are applicable to vehicles with turbocharger (Panel Van).
(3) The broken line (-----) and △ symbol are applicable to vehicles with auto glow control system.
(4) For details concerning the earth point (example: 1), refer to P.3-13.

37G0282

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

METER AND GAUGE CIRCUIT (See P.52, 53, 54.)

OPERATION

<Fuel gauge>

- When the ignition switch is turned to "ON", current flows through multi-purpose fuse No. ⑯, fuel gauge, fuel gauge unit and earth, in turn, operating the fuel gauge.
- When fuel level is high, the fuel gauge unit internal resistance is small so that the current passing through the circuit is relatively large. This causes the gauge pointer to swing towards "F".
- When fuel level becomes low, the unit internal resistance is increased, so only a small current flows the circuit and the gauge pointer swings towards "E".
- Inside the fuel gauge, there is a voltage limiter which functions to maintain a constant output voltage (at 7V) to the gauge units (fuel gauge unit and engine coolant temperature gauge unit).

<Engine coolant temperature gauge>

- When the ignition switch is turned to "ON", current flow through multi-purpose fuse No. ⑯, engine coolant temperature gauge, engine coolant temperature gauge unit, and earth, in turn, operating the engine coolant temperature gauge.
- When coolant temperature is high, the gauge unit internal resistance is small so that the current passing through the circuit is relatively large. This causes the gauge pointer to swing towards "H".
- When coolant temperature is low, the unit internal resistance is increased so a small current flows in the circuit, and the gauge pointer swings towards "C".

<Fuel filter warning lamp>
(Diesel-powered vehicles)

- When the ignition switch is turned to the "ON" position (with the engine stopped), the fuel filter warning lamp comes on and the lamp switches OFF when the engine is started. This feature can be used to check for a failure of the lamp's bulb.
- When condensate has accumulated in the fuel filter, the water level switch turns ON causing the fuel filter warning lamp to light up.

<Oil pressure warning lamp>

- When the lubrication system fails with the ignition switch in the ON position, resulting in the oil pressure failing to build up, the oil pressure switch turns ON causing the oil pressure warning lamp to light up.

<Brake warning lamp>

- When the brake fluid level goes down below a predetermined level or parking brake lever is pulled, with the ignition switch in the ON position, the brake fluid level sensor is activated or the parking brake switch is turned ON, causing the brake warning lamp to light up.
- On diesel-powered vehicles, when the brake booster vacuum line fails, the vacuum switch is turned ON causing the brake warning lamp to light up.

<Fuel warning lamp>

- When the fuel level goes down causing the level sensor to be exposed, with the ignition switch in the ON position, the resistance of level sensor becomes small. When this resistance goes down below the predetermined level, the fuel warning lamp lights up to warn the driver that the amount of fuel still available for use is small.

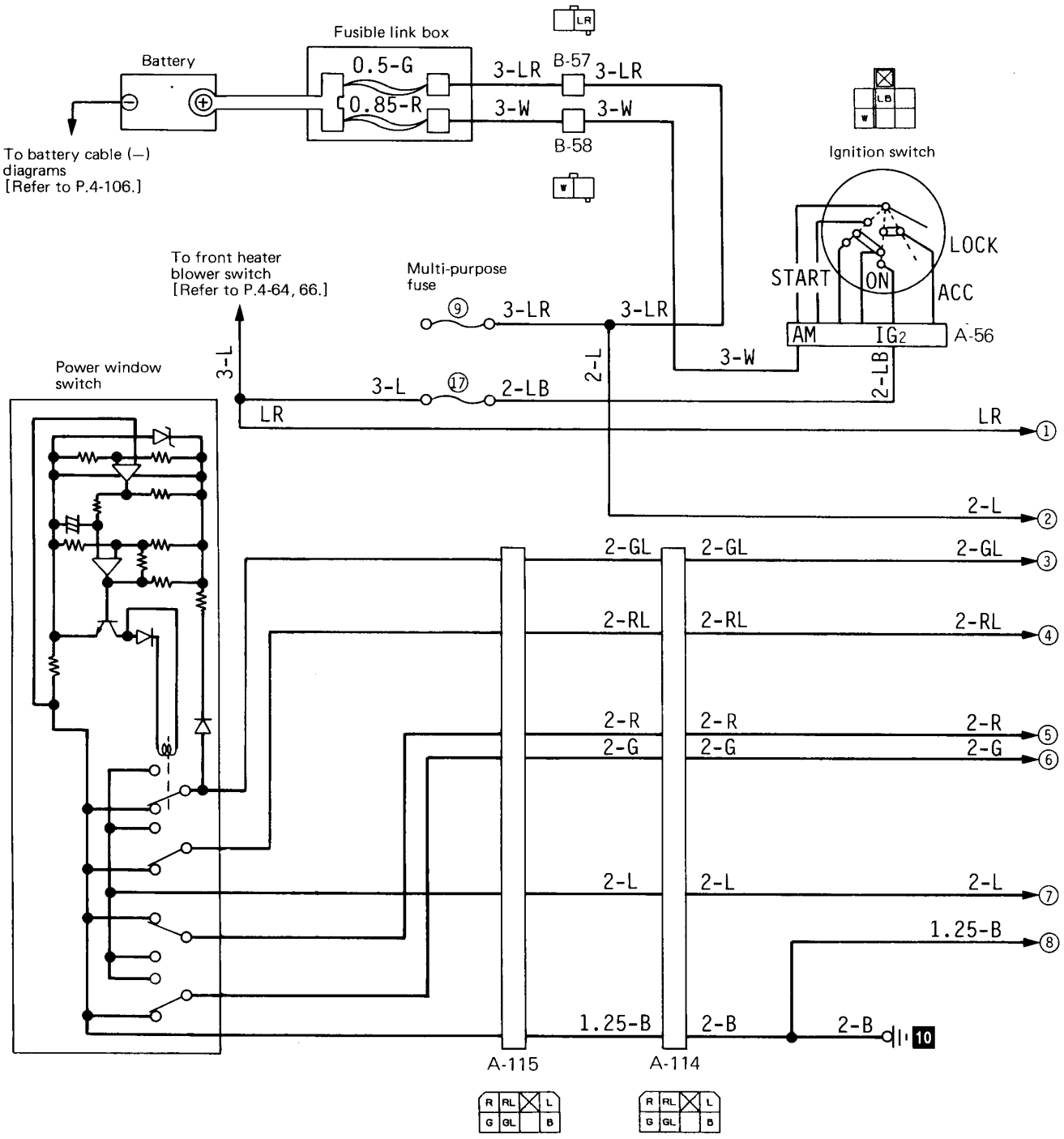
<Overheat warning lamp>
(Diesel-powered vehicles <turbocharger>)

- When the engine coolant temperature reaches 115°C (239°F), the engine coolant temperature switch is switched ON and the warning lamp illuminates.

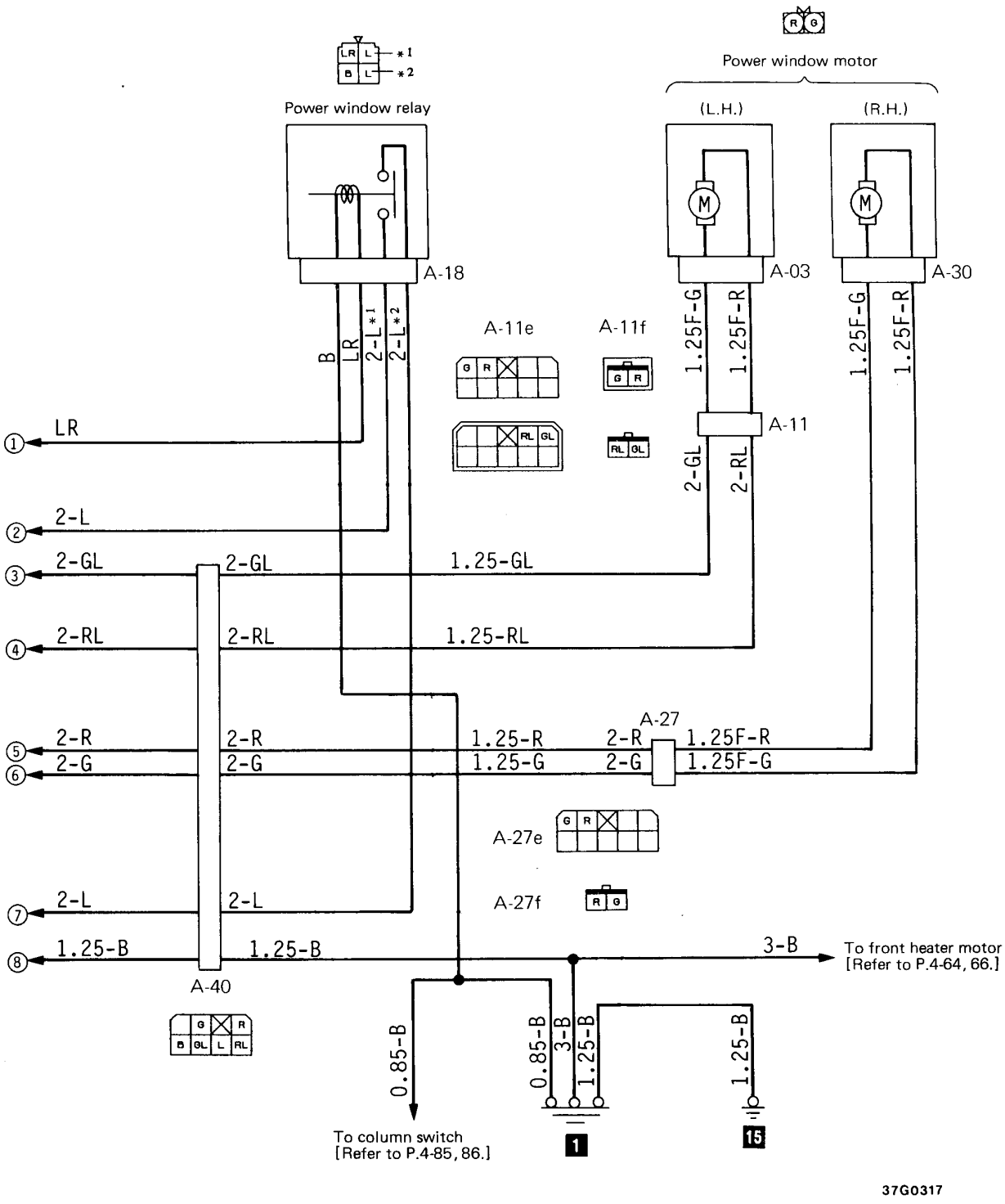
TROUBLESHOOTING HINTS

1. Fuel gauge does not operate, or registers incorrectly.
   1) When terminal "(YL)" is earthed with fuel gauge unit connector unplugged, the fuel gauge registers "F".
      - Check fuel gauge.
2. Engine coolant temperature gauge does not operate, or registers incorrectly.
   1) When the engine coolant temperature guage is earthed with its connector unplugged, it registers "H".
      - Check engine coolant temperature gauge unit.

21 POWER WINDOW CIRCUIT



Remarks
(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(2) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

POWER WINDOW CIRCUIT (See P.4-56.)

OPERATION

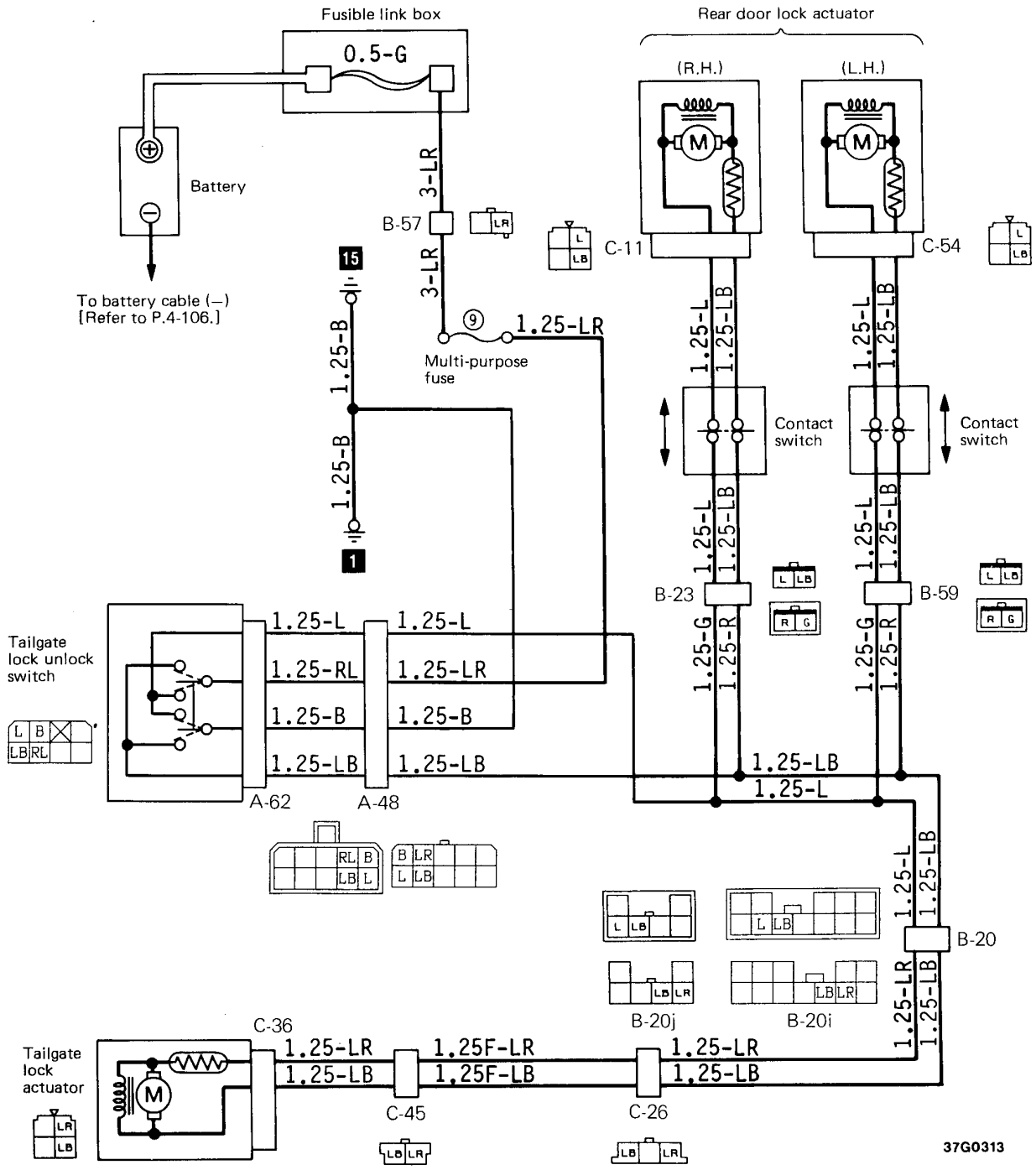
- When the ignition switch is turned to the "ON" position, current flows to multi-purpose fuse No.⑰, the power window relay (coil), and earth, thus causing the power window relay's points to close.
- When, in this condition, the power window switch is moved to the "UP" or "DOWN" position, current flows to the power window relay (points), the power window switch, the power window motor, the power window switch, and earth; the power window motor is then activated, opening or closing the door window glass.

TROUBLESHOOTING HINTS

1. Neither the left nor right door window glass can be opened.
   (1) The heater blower motor also do not operate.
      - Check the multi-purpose fuse No.⑰.
   (2) The heater blower motor operate.
      - Check the power window relay.
      - Power window switch.

22 CENTRAL LOCKING SYSTEM CIRCUIT

22-1 Rear Door and Tailgate

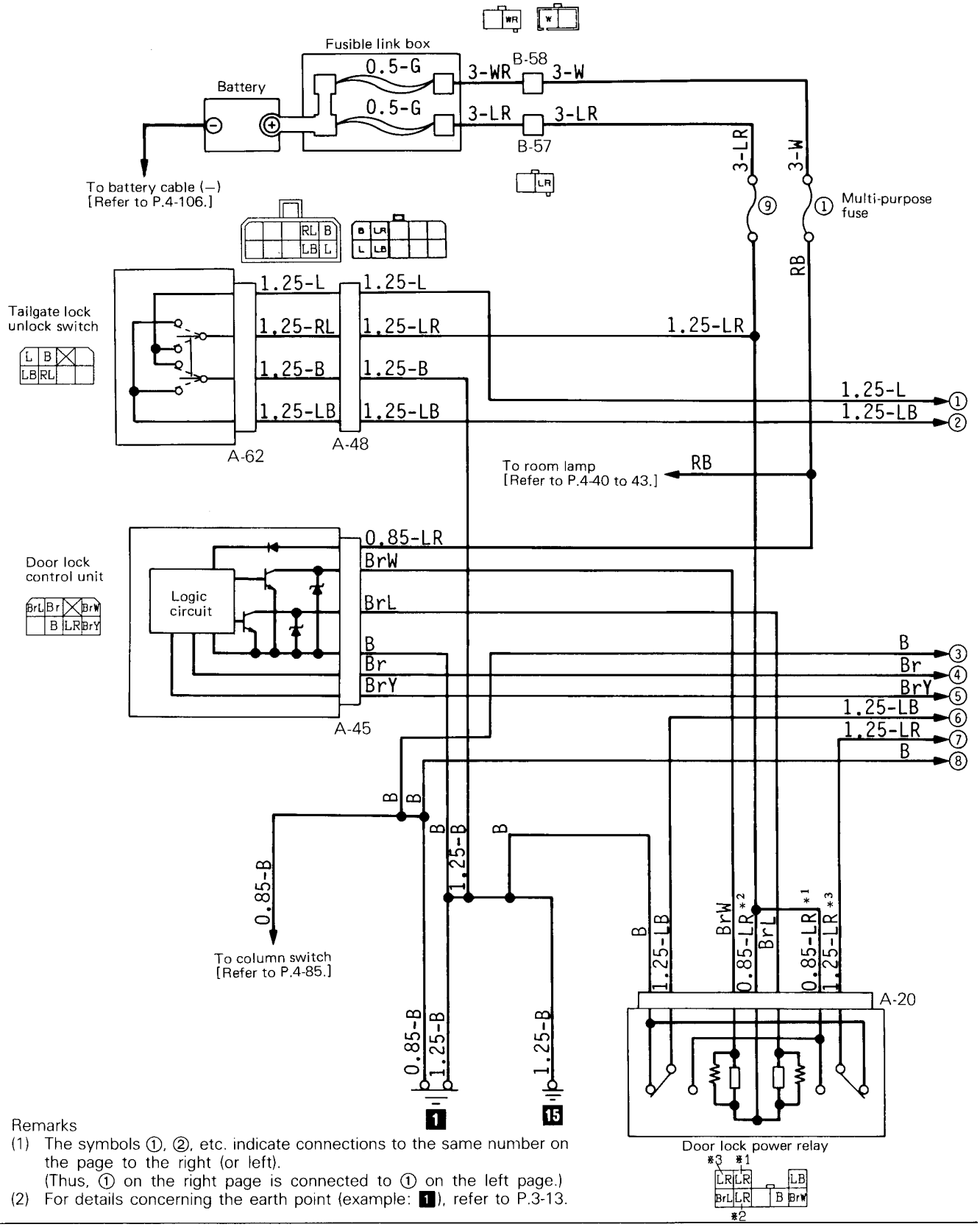


Remark
For details concerning the earth point (example: 1), refer to P.3-13.

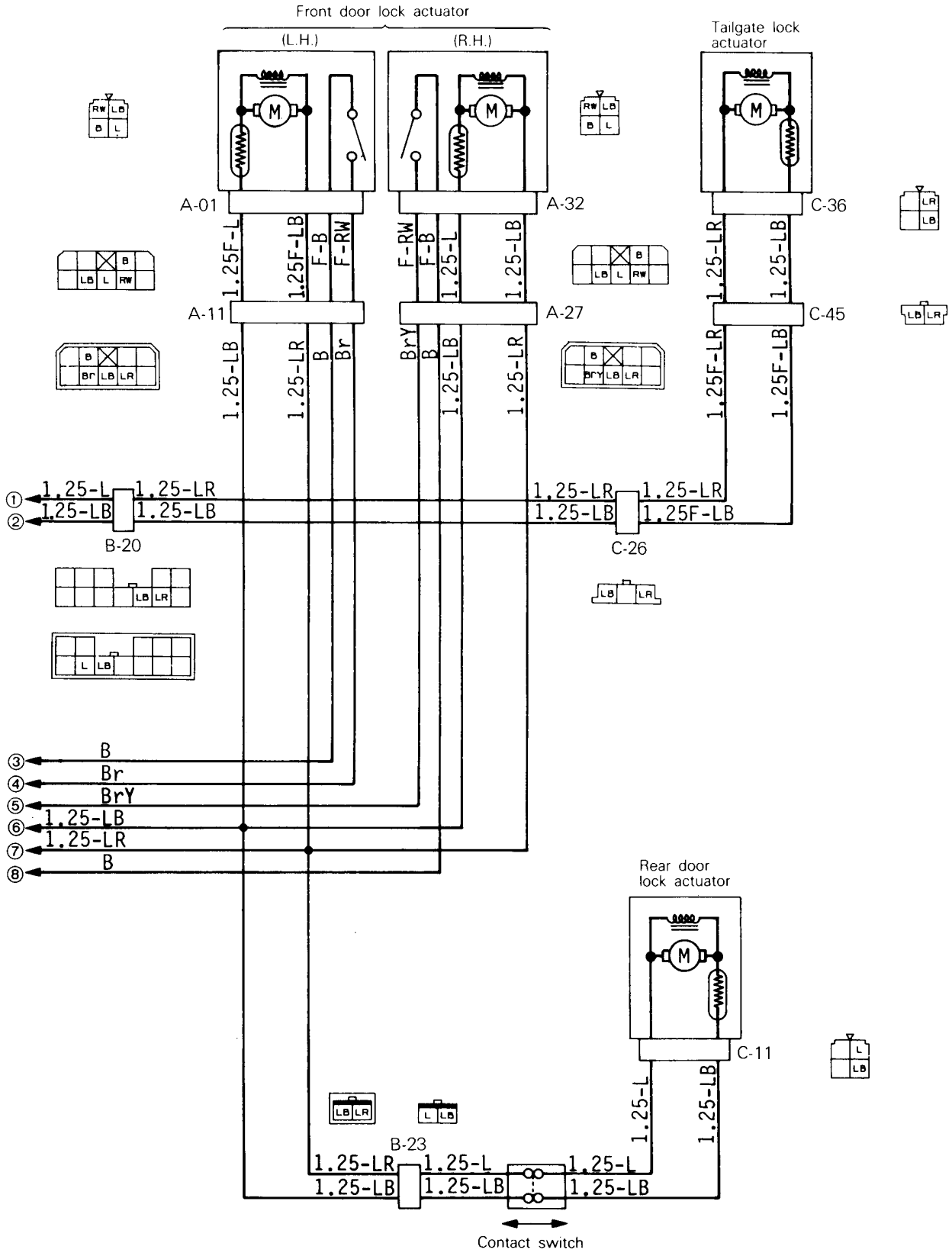
Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

22-2 All Doors and Tailgate



Remarks
(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)
(2) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

CENTRAL LOCKING CIRCUIT (See P.4-59, 60.)

OPERATION

<TYPE A>

Rear Door and Tailgate Lock

- Battery voltage is always applied, through multi-purpose fuse No. ⑨, to the tailgate lock/unlock switch.
- When the tailgate lock/unlock switch is set in the "ON" or "OFF" position, current flows to multi-purpose fuse No.⑨, the tailgate lock/unlock switch, the rear door lock actuator, the tailgate lock actuator, the tailgate lock/unlock switch, and earth. The rear door lock actuator's and the tailgate lock actuator's operate to lock or unlock the rear doors and tailgate.

<TYPE B>

All Doors and Tailgate

<UNLOCK>

- Battery voltage is always applied, via multi-purpose fuse No.①, to the door lock-control unit.
- When the front door is unlocked, the door lock switch incorporated within the door lock actuator is switched ON, and electricity flows to the door lock-control unit, the door lock switch, and earth.
- When this happens, electricity flows for 0.5 second to multi-purpose fuse No. ⑨, the door lock power relay (coil at UNLOCK side), the door lock-control unit, and earth, and the contacts at the UNLOCK side of the door lock power relay close.
- When this happens, electricity flows to the door lock power relay (contacts at UNLOCK side), the door lock actuators, the door lock power relay (contacts at LOCK side), and earth, and the door lock actuators are activiated to unlock the doors.

<LOCK>

- When the front door is locked, the door lock switch incorporated within the door lock actuator is switched OFF, and the earth circuit to the door lock-control unit is interrupted.
- When this happens, electricity flows for 0.5 second to multi-purpose fuse No. ⑨, the door lock power relay (coil at LOCK side), the door lock-control unit, and earth, and the contacts at the LOCK side of the door lock relay close.
- When this happens, electricity flows to the door lock power relay (contacts at LOCK side), the door lock actuators, the door lock power relay (contacts at UNLOCK side), and earth, and the door lock actuators are activated to lock the door.

Tailgate Lock

- Battery voltage is always applied, through multi-purpose fuse No. ⑨, to the tailgate lock/unlock switch.
- When the tailgate lock/unlock switch is set in the "ON" or "OFF" position, current flows to multi-purpose fuse No. ⑨, the tailgate lock/unlock switch, the tailgate lock actuator, the tailgate lock/unlock switch, and earth, and the tailgate lock actuator's operates to lock or unlock the tailgate.

TROUBLESHOOTING HINTS

Central Door Lock

1. The door lock actuators do not function for either locking of unlocking.
   (1) The power windows also do not operate.
      - Check the fusible link.
   (2) Room lamp do not light.
      - Check the multi-purpose fuse ①.
      - Check the door lock-control unit.
2. The door lock actuators operate for either locking or unlocking only.
   - Check the multi-purpose fuse ⑨.
   - Check the door lock power relay.

Tailgate Lock

Can't be locked or unlocked.

(1) The central door-locking system also doesn't function.
   - Check the multi-purpose fuse ⑨.

(2) The central door-locking system functions.
   - Check the tailgate lock/unlock switch.
   - Check the tailgate lock actuator.

Door Lock Control Unit Terminal Voltages (with connector plugged in position)

Terminal No. (wire colour)	Signal	Conditions	Terminal Voltage
1 (BrW)	Door lock relay driving signal	The instant the inside lock knob is depressed (approx. 0.5 second)	Approx. 1.4 V
		Normally	VB
2 (Br)	Inside door lock knob (L.H., front) signal	When inside lock knob is locked	VB
		When inside lock knob is unlocked	0 V
3 (BrL)	Door lock relay driving signal	The instant the inside lock knob is pulled (approx. 0.5 second)	Approx. 1.4 V
		Normally	VB
4 (BrY)	Inside door lock knob (R.H., front) signal	When inside lock knob is locked	VB
		When inside lock knob is unlocked	0 V
5 (LR)	Power source	At all times	VB
6 (B)	Earth	At all times	0 V

HEATER CIRCUIT (See P.4-64.)

OPERATION

<5-DOOR MODELS>

Front heater

- When, with the ignition switch at the "ON" position, the front heater blower switch is set to each position (LO, ML, MH and HI), current flows to multi-purpose fuse No. ⑰, the blower switch, the resistor, the blower motor, and earth, and the blower motor is activated.

Rear heater

- When the ignition switch is at "ON", current flows through multi-purpose fuse No. ⑰ heater relay (coil), and earth, causing the heater relay contacts to close.
- Then when the rear heater blower switch is switched ON, current flows through multi-purpose fuse No. ⑧, heater relay (contacts), rear heater blower switch, blower motor, and earth, causing the blower motor to rotate.

<4-DOOR MODELS>

Front heater

- When, with the ignition switch at the "ON" position, the front heater blower switch is to each position (LO, ML, MH and HI), current flows to multi-purpose fuse No. ⑰, the blower switch, the resistor, the blower motor, and earth, and the blower motor is activated.

Rear heater

- When, with the ignition switch at the "ON" position, the main or sub switch of the rear heater is switched ON, current flows to multi-purpose fuse No. ⑰, the rear heater power relay (coil), the rear heater sub switch (rear heater main switch), and earth, and the contacts of the rear heater power relay close.
- When this happens, current flows to multi-purpose fuse No. ⑧, the rear heater power relay (contacts), the rear heater blower motor, the rear heater blower switch, and earth, and the blower motor is activated.

TROUBLESHOOTING HINTS

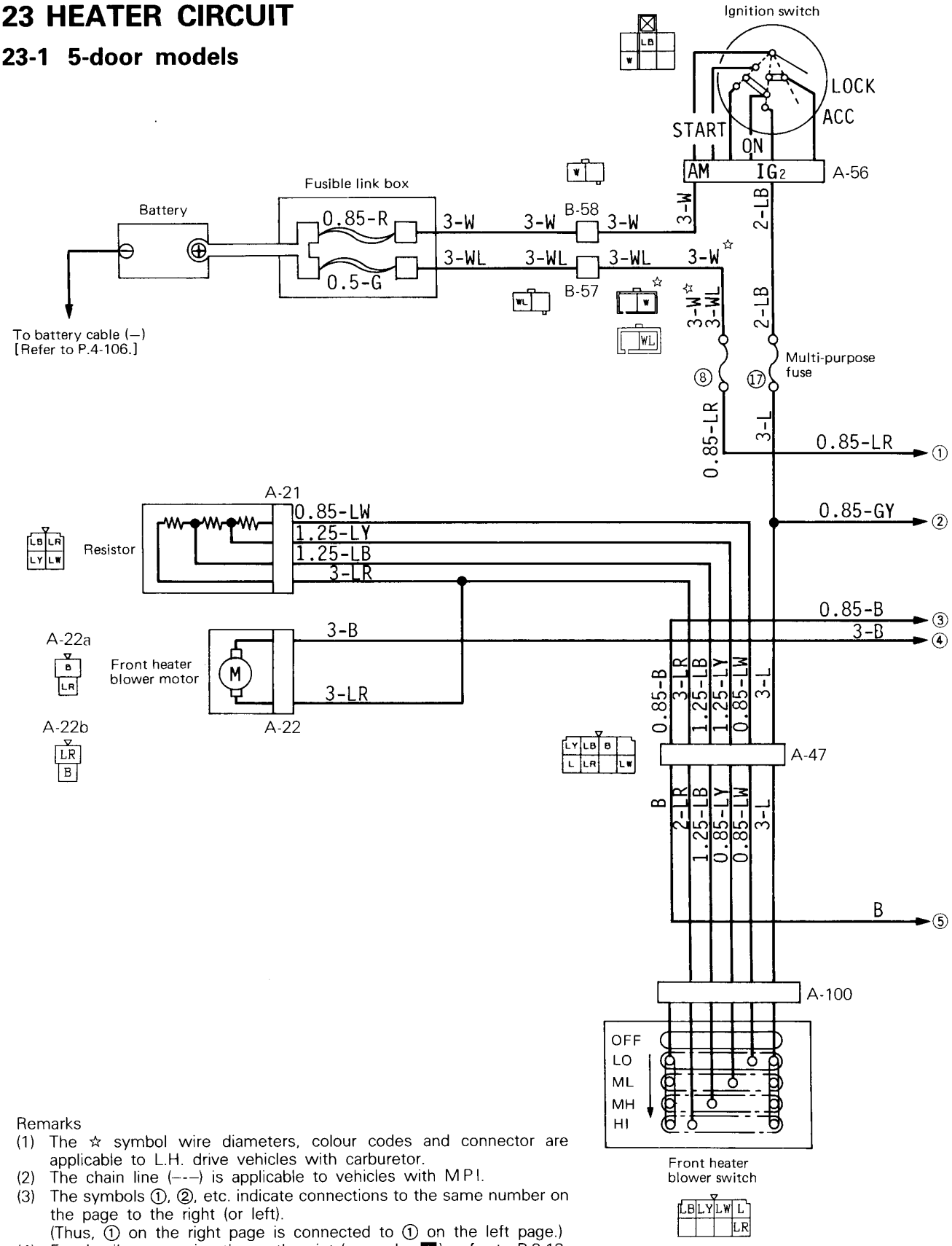
Front heater

Blower motor turns only at high speed.

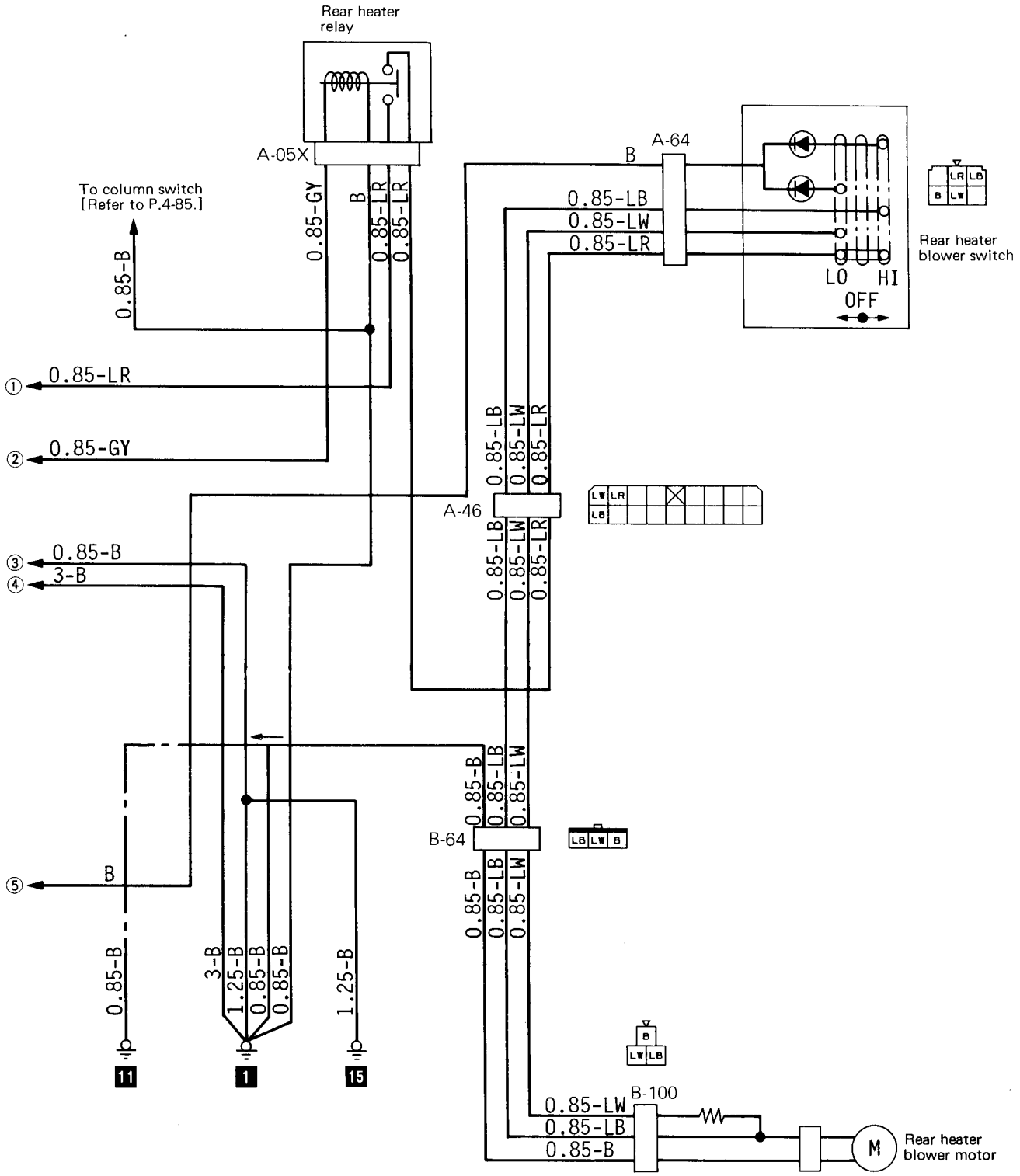
- Check resistor.

23 HEATER CIRCUIT

23-1 5-door models



Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburetor.
(2) The chain line (–·–) is applicable to vehicles with MPI.
(3) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)
(4) For details concerning the earth point (example: 1), refer to P.3-13.

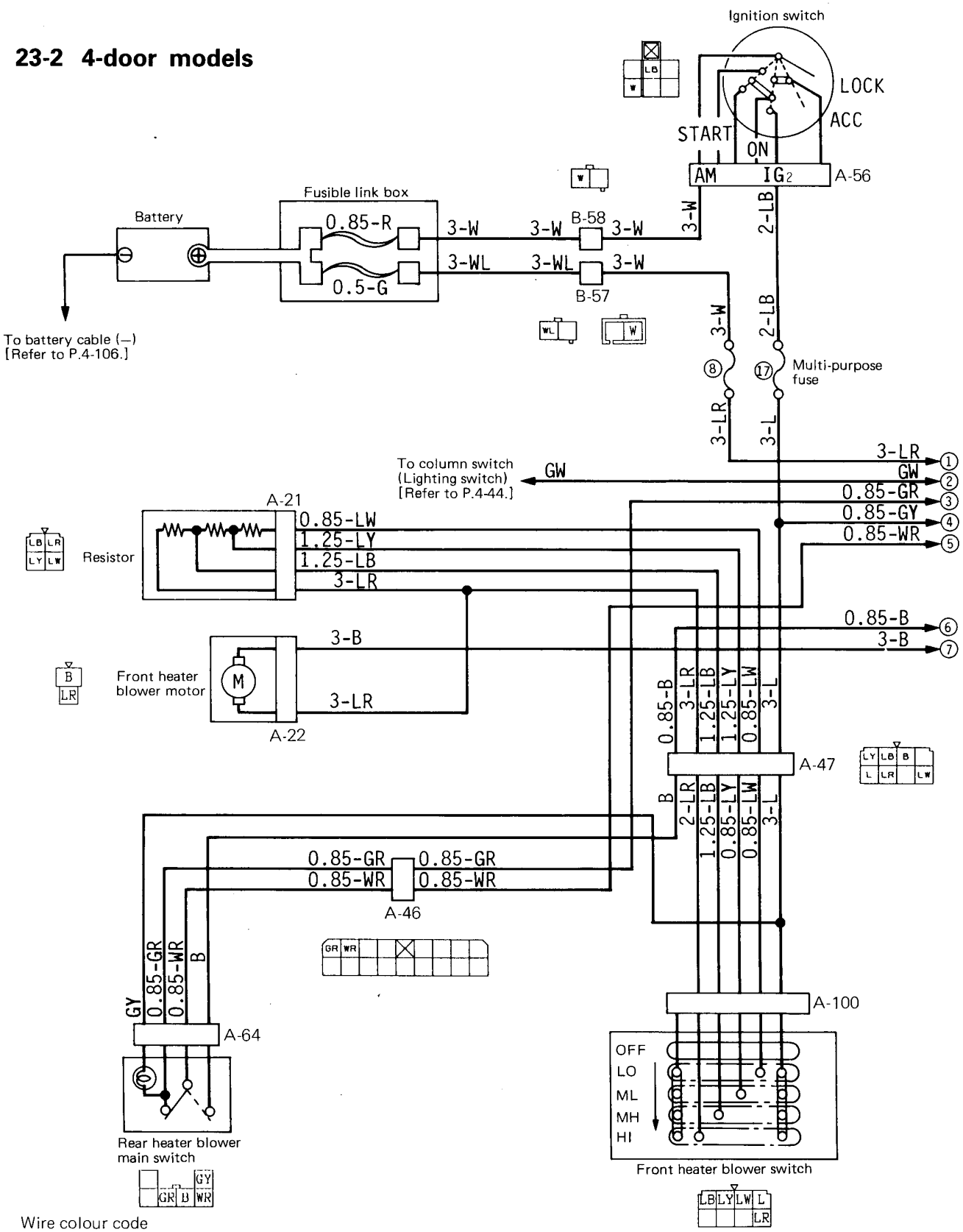


Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

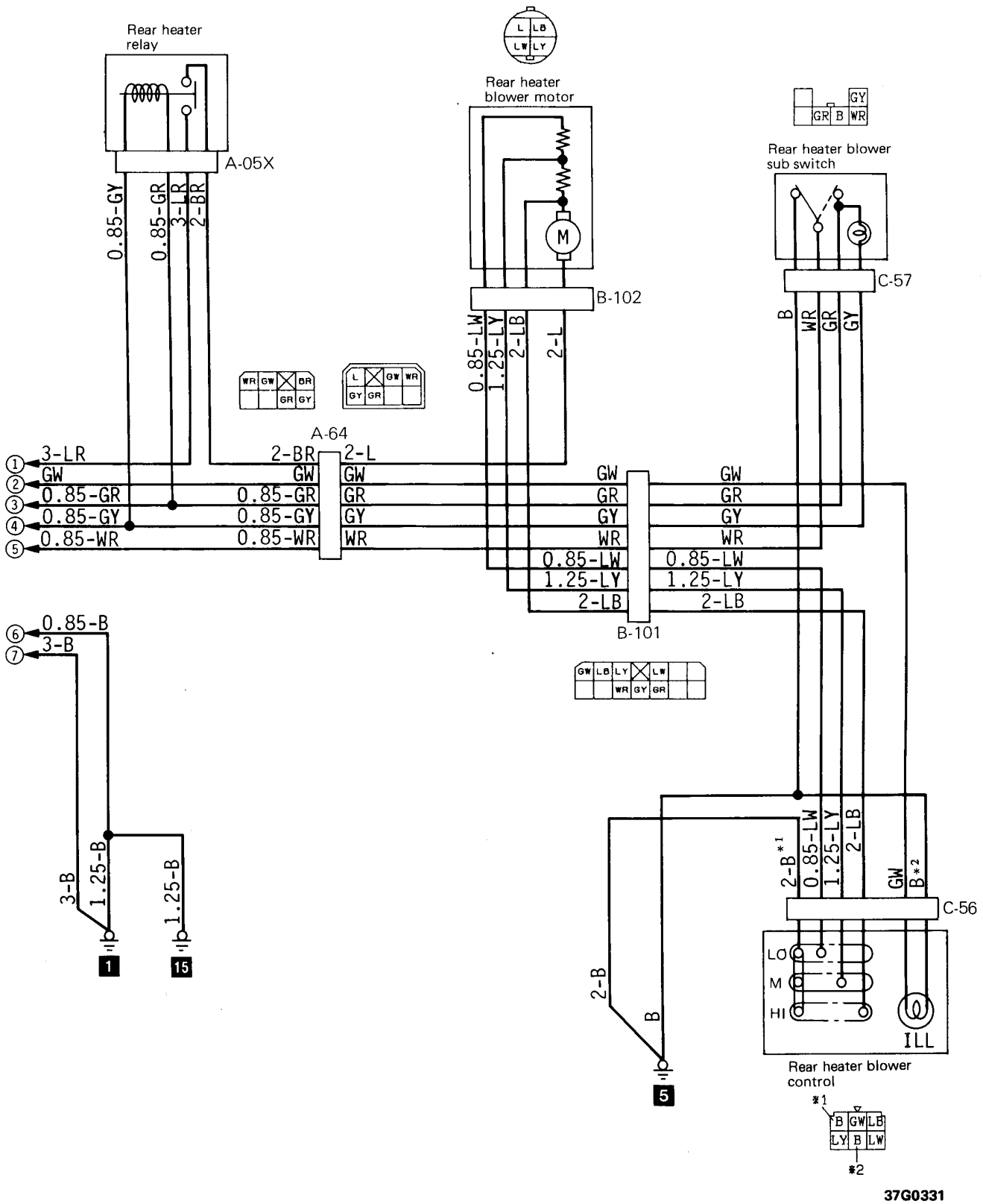
37G0116

23-2 4-door models



Wire colour code

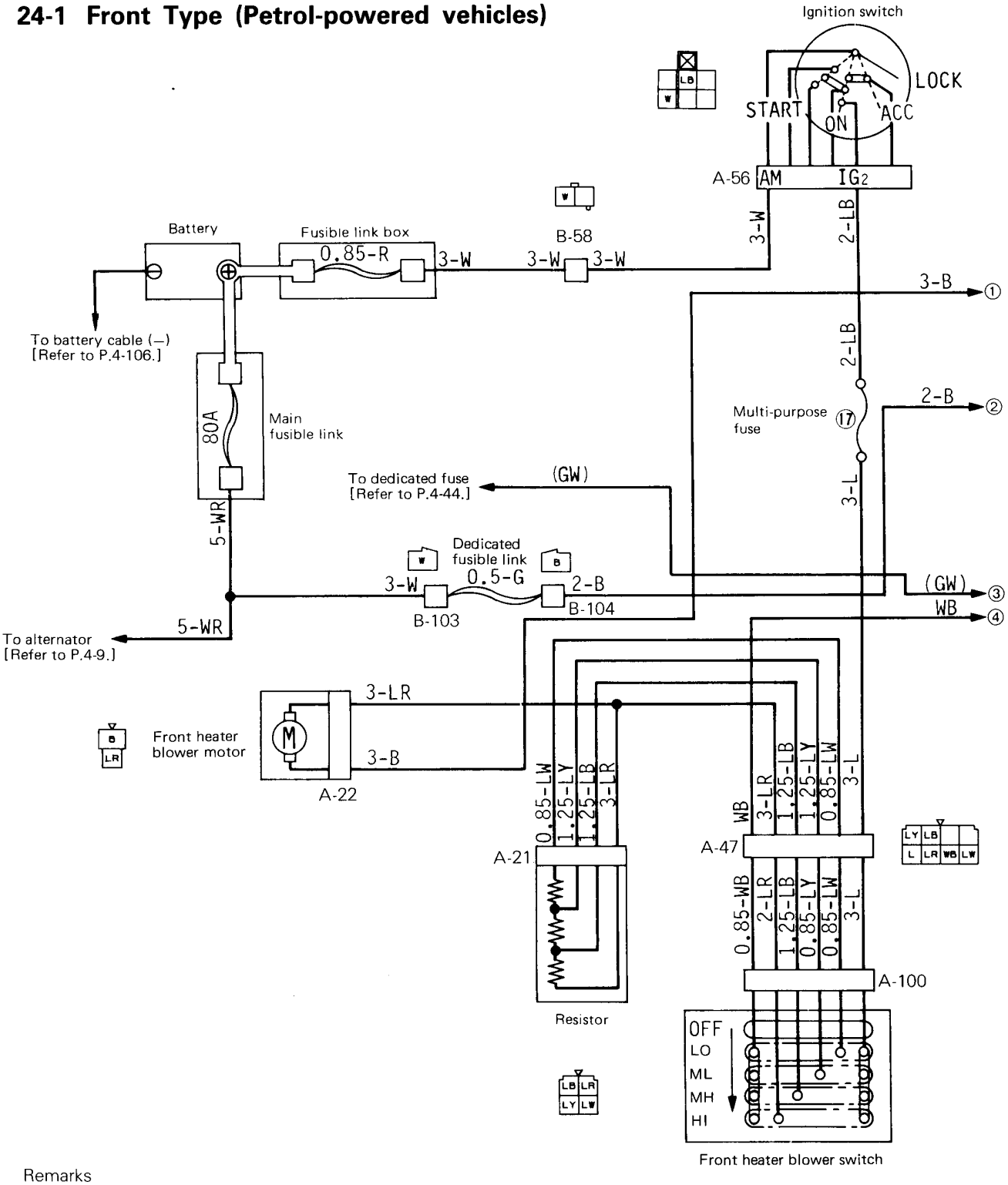
B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White



Remarks
(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(2) For details concerning the earth point (example: 1), refer to P.3-13.

24 AIR CONDITIONER CIRCUIT

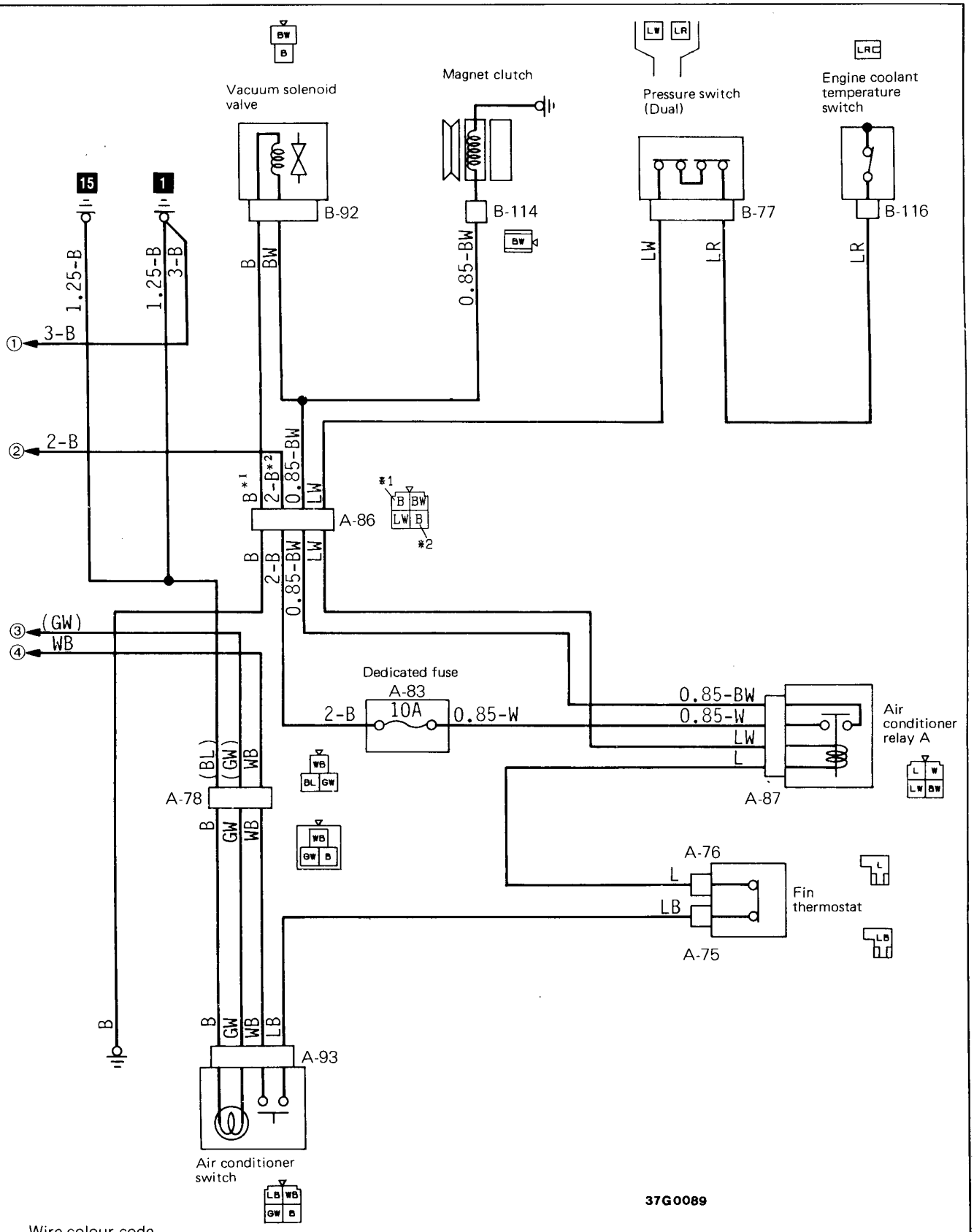
24-1 Front Type (Petrol-powered vehicles)



Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)

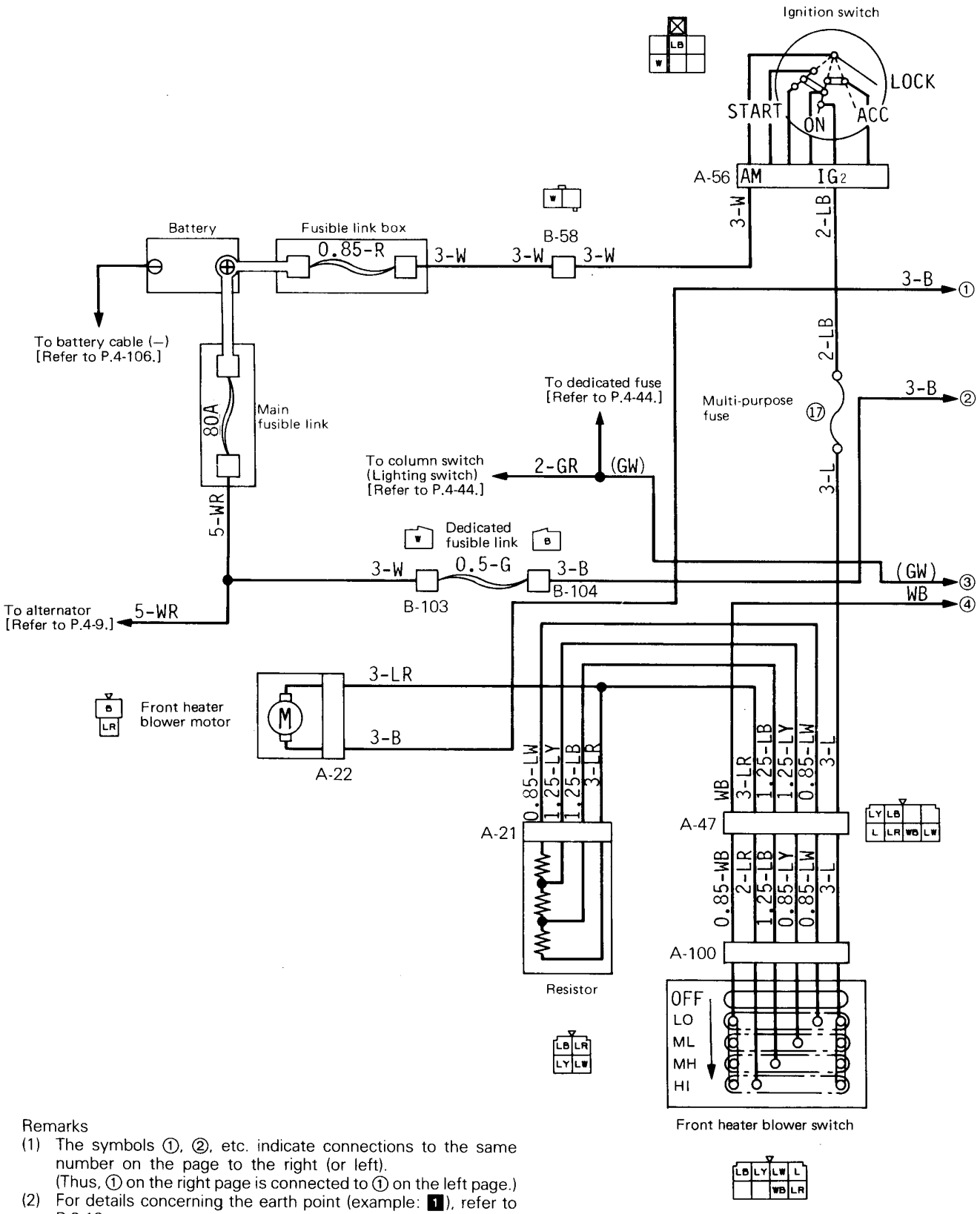
(2) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

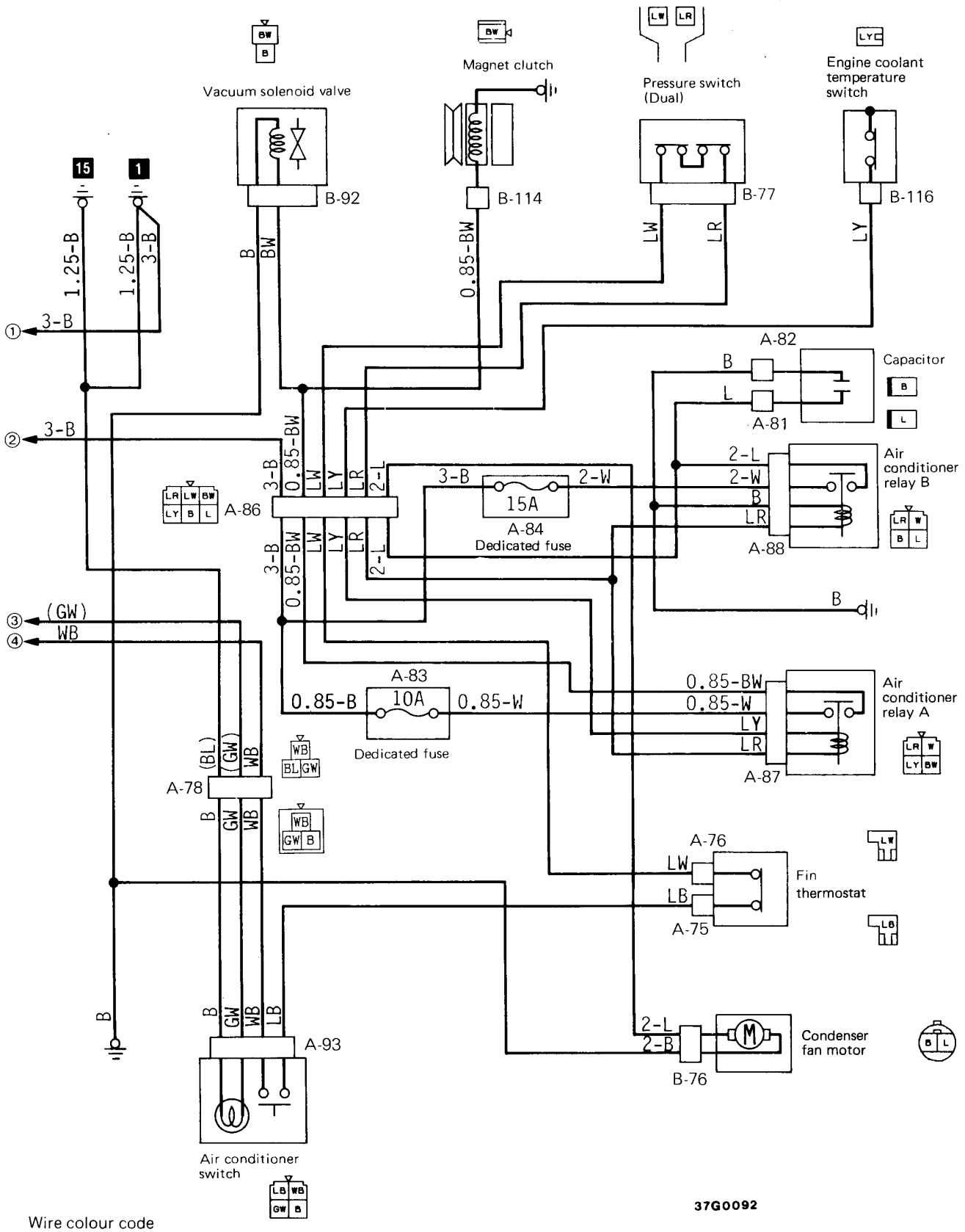
24-2 Front Type (Diesel-powered vehicles)



Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)

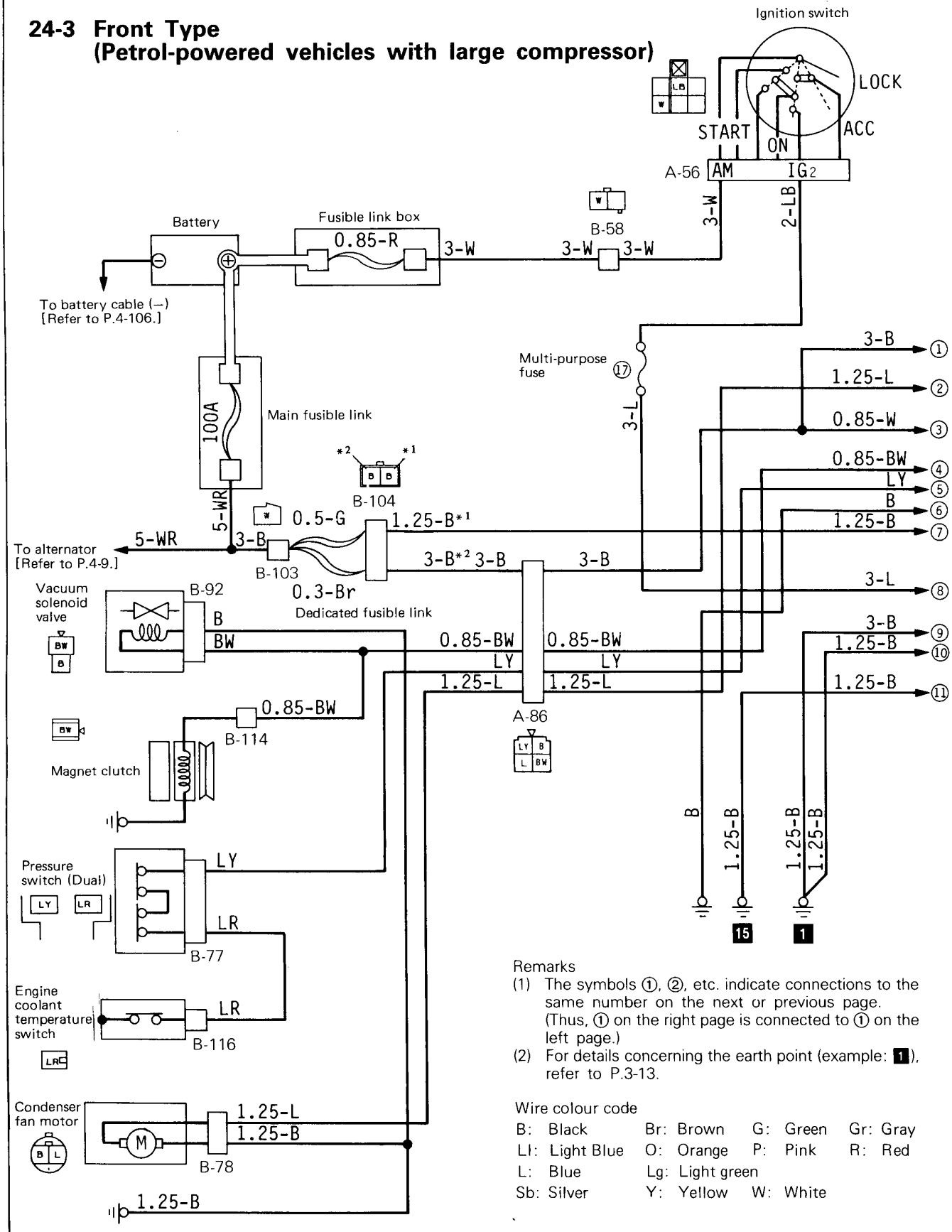
(2) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

24-3 Front Type (Petrol-powered vehicles with large compressor)



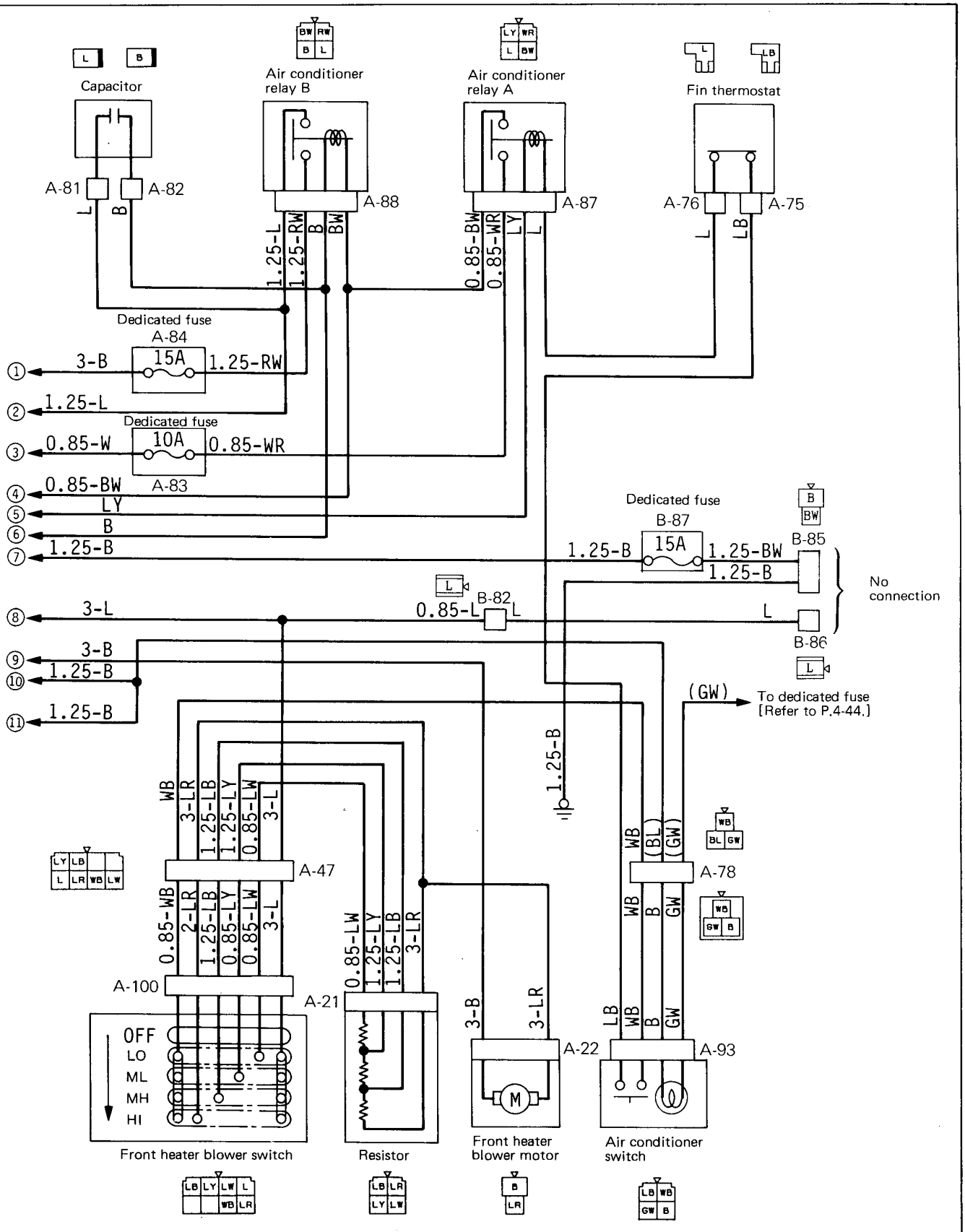
Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the next or previous page. (Thus, ① on the right page is connected to ① on the left page.)

(2) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray
Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
L:	Blue	Lg:	Light green				
Sb:	Silver	Y:	Yellow	W:	White		


Capacitor
Air conditioner relay B
Air conditioner relay A
Fin thermostat
A-81
A-82
A-88
A-87
A-76
A-75
Dedicated fuse
A-84
15A
3-B
1.25-RW
1.25-L
Dedicated fuse
10A
0.85-W
0.85-WR
A-83
0.85-BW
LY
B
1.25-B
Dedicated fuse
B-87
15A
1.25-B
1.25-BW
B-85
1.25-B
No connection
B-82
0.85-L
B-86
3-L
3-B
1.25-B
1.25-B
(GW)
To dedicated fuse [Refer to P.4-44.]
WB
3-LR
1.25-LB
1.25-LY
0.85-LW
3-L
A-47
A-78
0.85-WB
2-LR
A-100
A-21
0.85-LW
1.25-LY
1.25-LB
3-LR
OFF
LO
ML
MH
HI
3-B
3-LR
A-22
LB
WB
B
GW
A-93
Front heater blower switch
Resistor
Front heater blower motor
Air conditioner switch
37G0327

AIR CONDITIONER CIRCUIT

<Front type (petrol-powered vehicles)> (See P.4-68.)

OPERATION

Blower Control

See HEATER CIRCUIT (P.4-63.).

Compressor control

- The fin thermostat detects the temperature of the evaporator, and air conditioner relay A is switched ON and OFF accordingly.
  The pressure switch is switched ON and OFF according to the pressure of the refrigerant, thus protecting the compressor circuit.
- When, with the ignition switch at the "ON" position, the blower switch and the A/C switch are switched ON, current flows to multi-purpose fuse No. ⑰, the blower switch, the A/C switch, the fin thermostat, air conditioner relay A (coil), the pressure switch, the engine coolant temperature switch, and earth, and the contacts of air conditioner relay A close.
- When this happens, current flows to the air conditioner dedicated fuse, air conditioner relay A (contacts), the magnetic clutch, and earth, and the magnetic clutch is activated.

<Front type (diesel-powered vehicles)> (See P.4-70.)

OPERATION

Blower Control

See HEATER CIRCUIT (P.4-63.).

Condenser fan control

- When, with the ignition switch at the "ON" position, the blower switch and the A/C switch are switched ON, current flows to multi-purpose fuse No. ⑰, the blower switch, the A/C switch, the fin thermostat, the pressure switch, air conditioner relay B (coil), and earth, and the contacts of air conditioner relay B close.
- When this happens, current flows to the air conditioner dedicated fuse (15A), air conditioner relay B (contacts), the condenser fan motor, and earth, and the condenser fan motor is activated.

Compressor control

- The fin thermostat defects the temperature of the evaporator, and air conditioner relay A is switched ON and OFF accordingly.
  The pressure switch is switched ON and OFF according to the pressure of the refrigerant, thus protecting the compressor circuit.
- When, with the ignition switch at the "ON" position, the blower switch and the A/C switch are switched ON, current flows to multi-purpose fuse No. ⑰, the blower switch, the A/C switch, the fin thermostat, the pressure switch, air conditioner relay A (coil), the engine coolant temperature switch, and earth, and the contacts of air conditioner relay A close.
- When this happens, current flows to the air conditioner dedicated fuse (10A), air conditioner relay A (contacts), the magnetic clutch, and earth and the magnetic clutch is activated.

<Front type (vehicles with large compressor)> (See P.4-72.)

OPERATION

Blower Control

See HEATER CIRCUIT (P.4-63.)

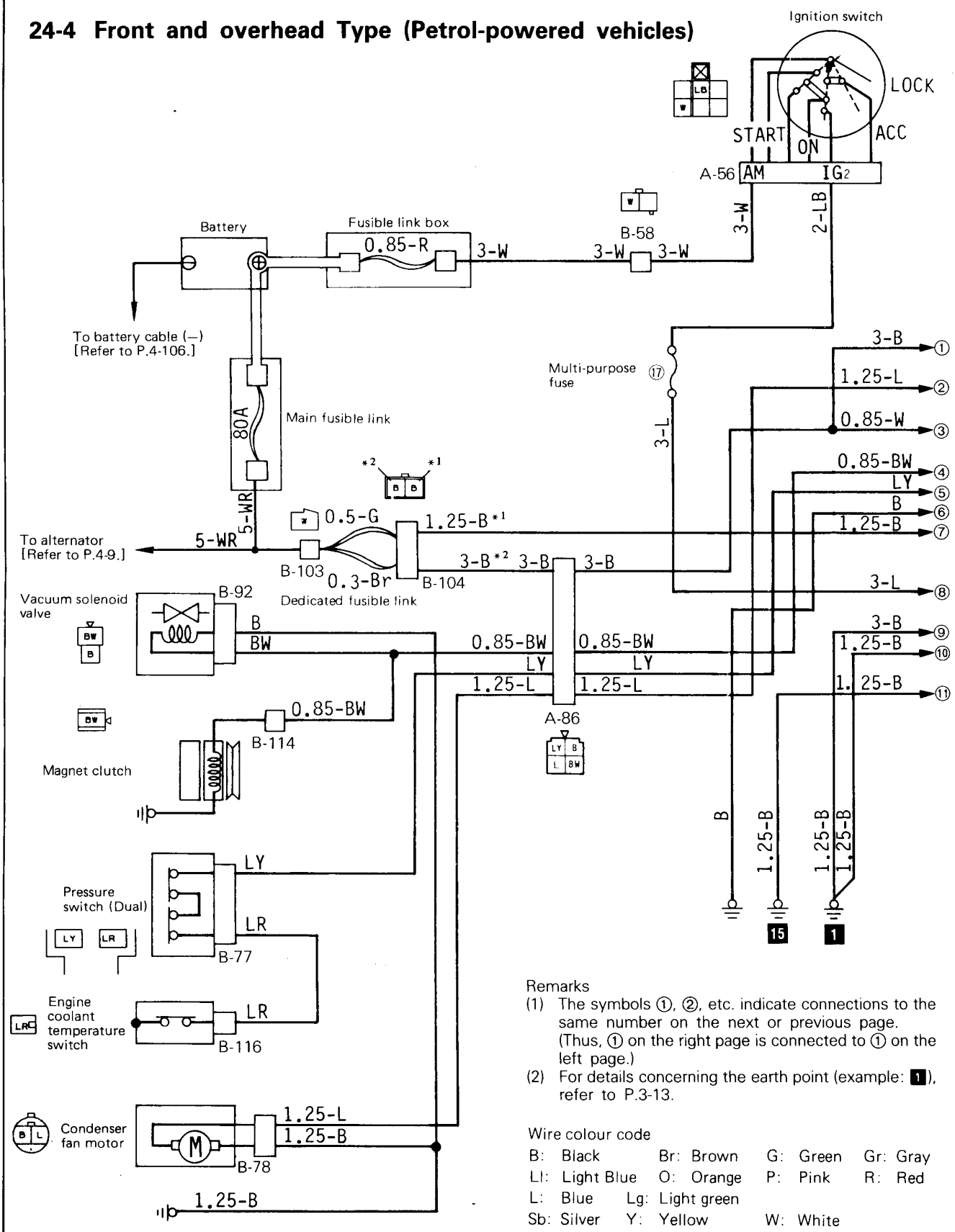
Condenser fan control

- When, with the ignition switch at the "ON" position, the blower switch and the A/C switch are switched ON, current flows to multi-purpose fuse No. ⑰, the blower switch, the A/C switch, the fin thermostat, air conditioner relay A (coil), the pressure switch, the engine coolant temperature switch, and earth, and the contacts of air conditioner relay A close.
- When this happens, current flows to the air conditioner dedicated fuse, air conditioner relay A (contacts), air conditioner relay B (coil), and earth, and the contacts of air conditioner relay B close.
- When this happens, current flows to the air conditioner dedicated fuse (15A), air conditioner relay B (contacts), the condenser fan motor, and earth, and the condenser fan motor is activated.

Compressor control

- The fin thermostat detects the temperature of the evaporator, and air conditioner relay A is switched ON and OFF accordingly.
  The pressure switch is switched ON and OFF according to the pressure of the refrigerant, thus protecting the compressor circuit.
- When, with the ignition switch at the "ON" position, the blower switch and the A/C switch are switched ON, current flows to multi-purpose fuse No. ⑰, the blower switch, the A/C switch, the fin thermostat, air conditioner relay A (coil), the pressure switch, the engine coolant temperature switch, and earth, and the contacts of air conditioner relay A close.
- When this happens, current flows to the air conditioner dedicated fusible (10A) air conditioner relay A (contacts), the magnetic clutch, and earth, and the magnetic clutch is activated.

24-4 Front and overhead Type (Petrol-powered vehicles)



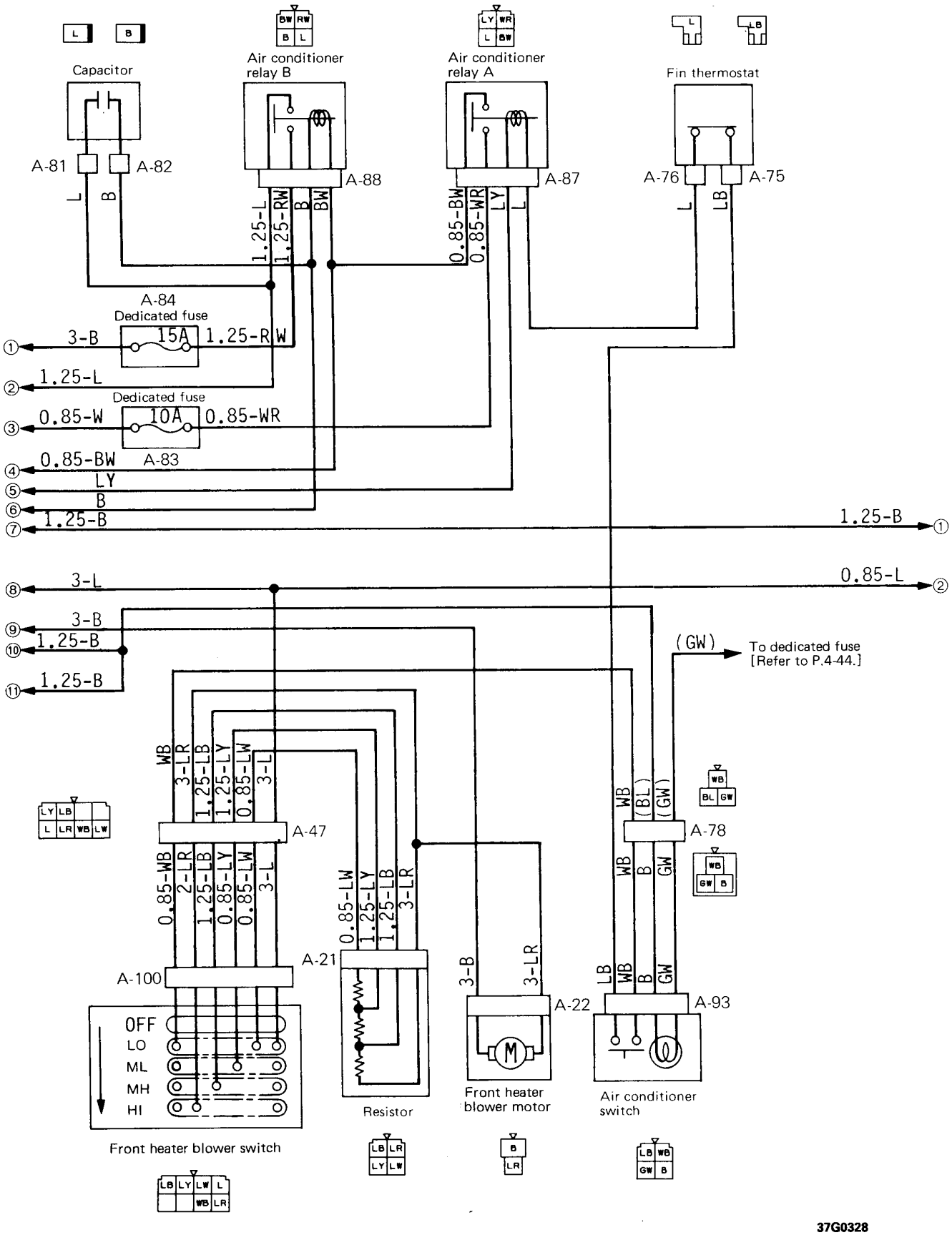
Remarks

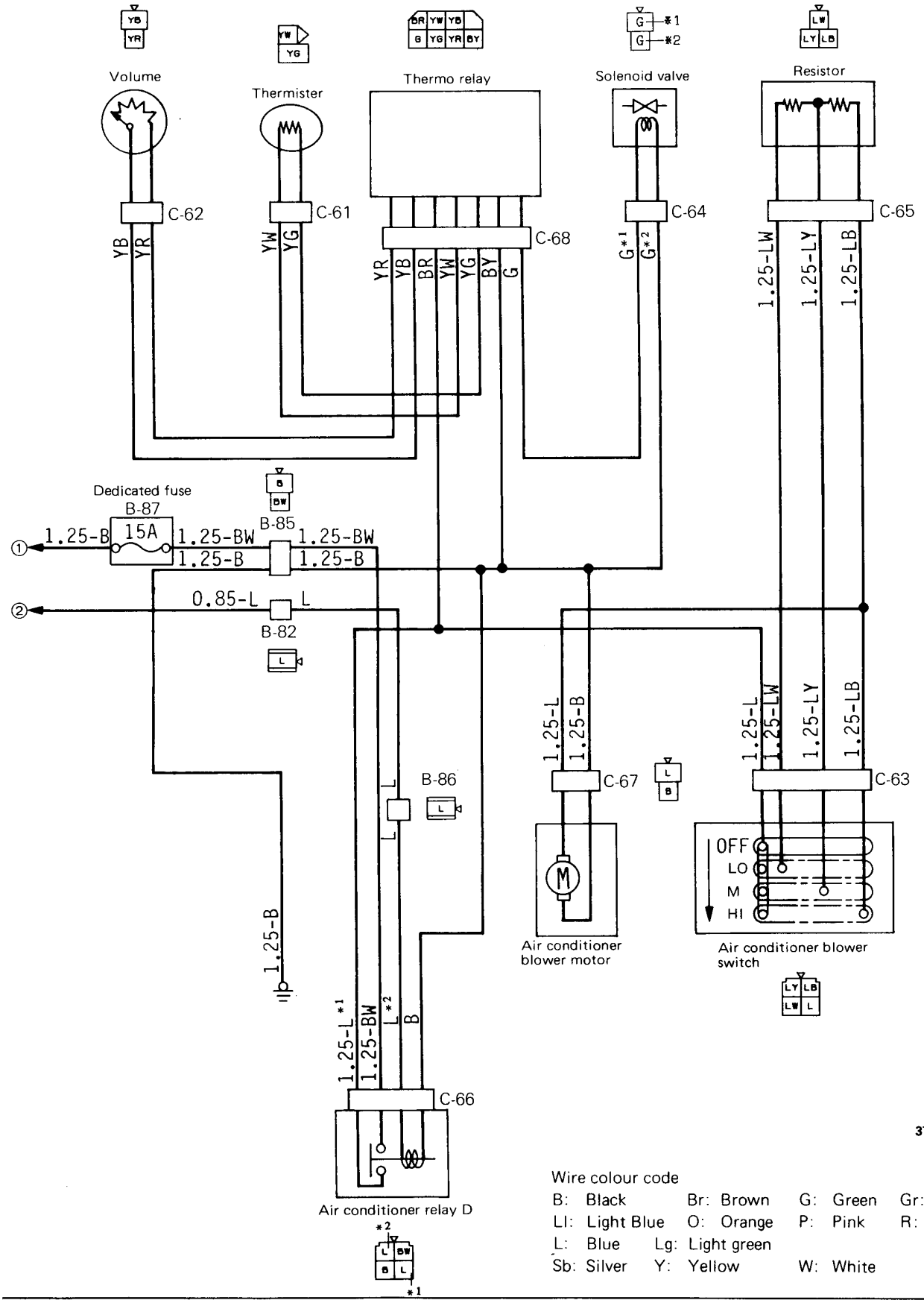
(1) The symbols ①, ②, etc. indicate connections to the same number on the next or previous page. (Thus, ① on the right page is connected to ① on the left page.)

(2) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray
Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
L:	Blue	Lg:	Light green				
Sb:	Silver	Y:	Yellow	W:	White		


Capacitor
Air conditioner relay B
Air conditioner relay A
Fin thermostat
A-81
A-82
A-88
A-87
A-76
A-75
A-84
Dedicated fuse
15A
Dedicated fuse
10A
A-83
3-B
1.25-R W
1.25-L
0.85-W
0.85-WR
0.85-BW
LY
B
1.25-B
3-L
0.85-L
(GW)
To dedicated fuse [Refer to P.4-44.]
A-47
A-78
A-100
A-21
A-22
A-93
OFF
LO
ML
MH
HI
Front heater blower switch
Resistor
Front heater blower motor
Air conditioner switch
37G0328



Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray
Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
L:	Blue	Lg:	Light green				
Sb:	Silver	Y:	Yellow	W:	White		

AIR CONDITIONER CIRCUIT

<Front and overhead type (petrol-powered vehicles)> (See P.4-76.)

OPERATION

Front Blower Control

See HEATER CIRCUIT (P.4-63.)

Rear Blower Control

- When the ignition switch is at "ON" position, current flows through multi-purpose fuse No. ⑰, air conditioner relay D (coil), and earth, causing the air conditioner relay D contacts to close.
- Then, when the rear blower switch is set at any of "LO", "M", or "HI", current flows through air conditioner dedicated fuse (15A), air conditioner relay D (contacts), blower switch, resistor, blower motor, and earth, causing the blower motor to rotate.

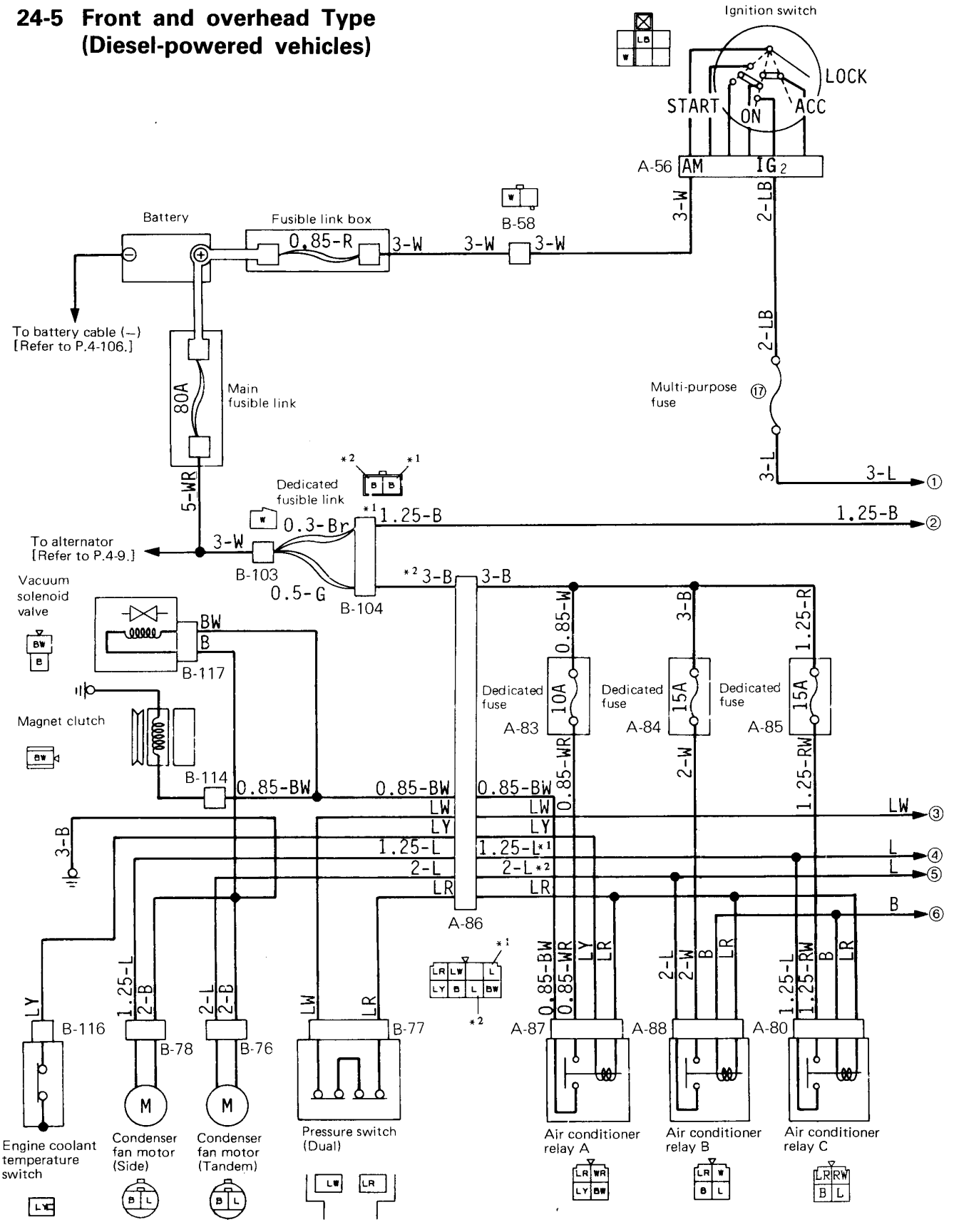
Condenser Fan Control

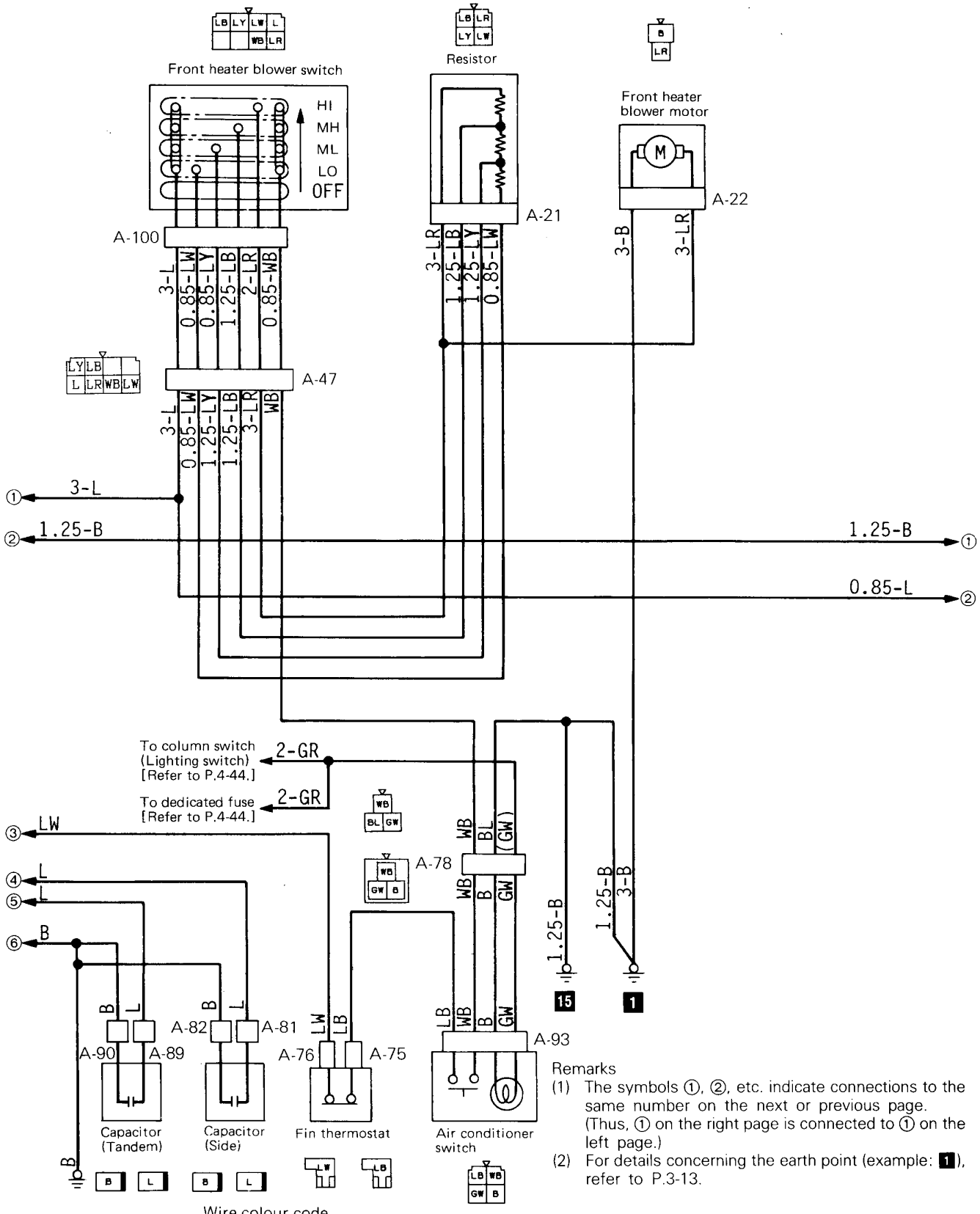
Refer to P.4-75 (OPERATION–condenser fan control).

Compressor Control

Refer to P.4-75 (OPERATION-compressor control).

24-5 Front and overhead Type (Diesel-powered vehicles)





Remarks

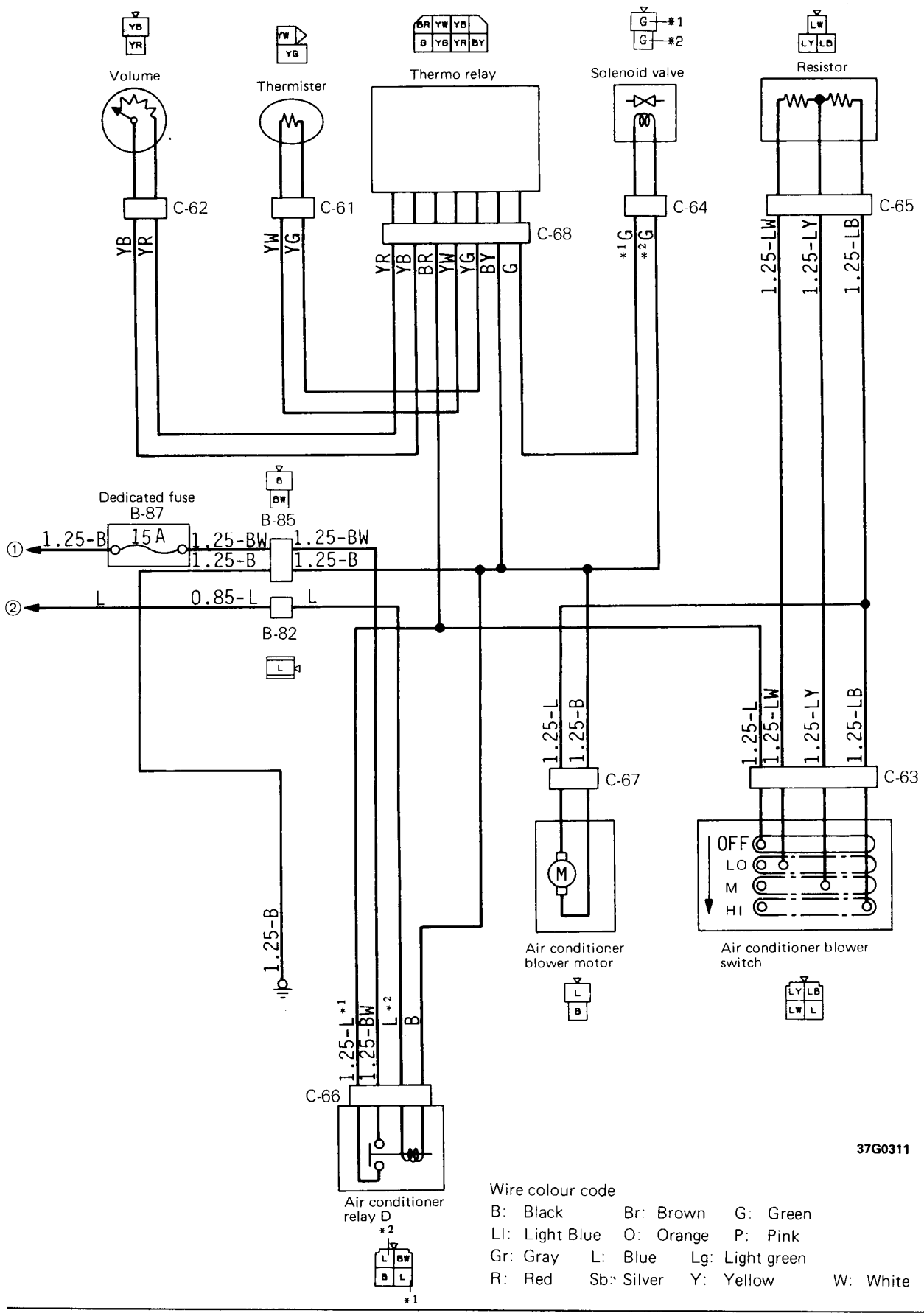
(1) The symbols ①, ②, etc. indicate connections to the same number on the next or previous page. (Thus, ① on the right page is connected to ① on the left page.)

(2) For details concerning the earth point (example: 1), refer to P.3-13.

37G0329

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			



Wire colour code

B:	Black	Br:	Brown	G:	Green
LI:	Light Blue	O:	Orange	P:	Pink
Gr:	Gray	L:	Blue	Lg:	Light green
R:	Red	Sb:	Silver	Y:	Yellow
				W:	White

AIR CONDITIONER CIRCUIT

<Front and overhead type (diesel-powered vehicles)> (See P.4-80.)

OPERATION

Front Blower Control

See HEATER CIRCUIT (P.4-63.)

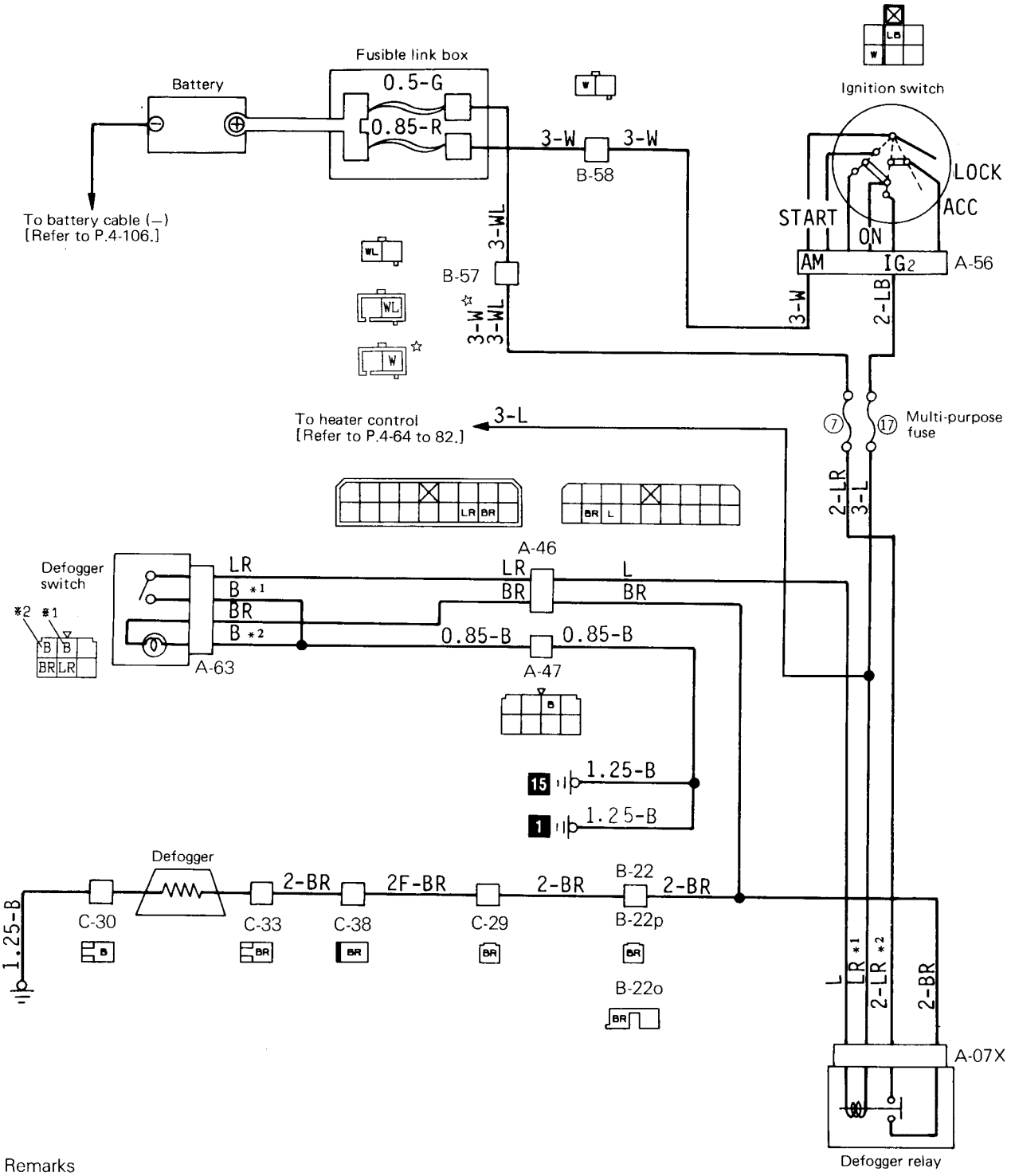
Rear Blower Control

Refer to P.4-79 (OPERATION—Rear blower control).

Condenser fan control

- When, with the ignition switch at the "ON" position, the blower switch and the A/C switch are switched ON, current flows to multi-purpose fuse No. ⑰, the blower switch, the A/C switch, the fin thermostat, the pressure switch, air conditioner relay B and C (coil), and earth. The contacts of air conditioner relay B and C close.
- When this happens, current flows to the air conditioner dedicated fuse (15A), air conditioner relay B and C (contacts), the condenser fan motor, and earth, and the condenser fan motor is activated.

25 DEFOGGER CIRCUIT



Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburetor.
(2) For details concerning the earth point (example: 1), refer to P.3-13.

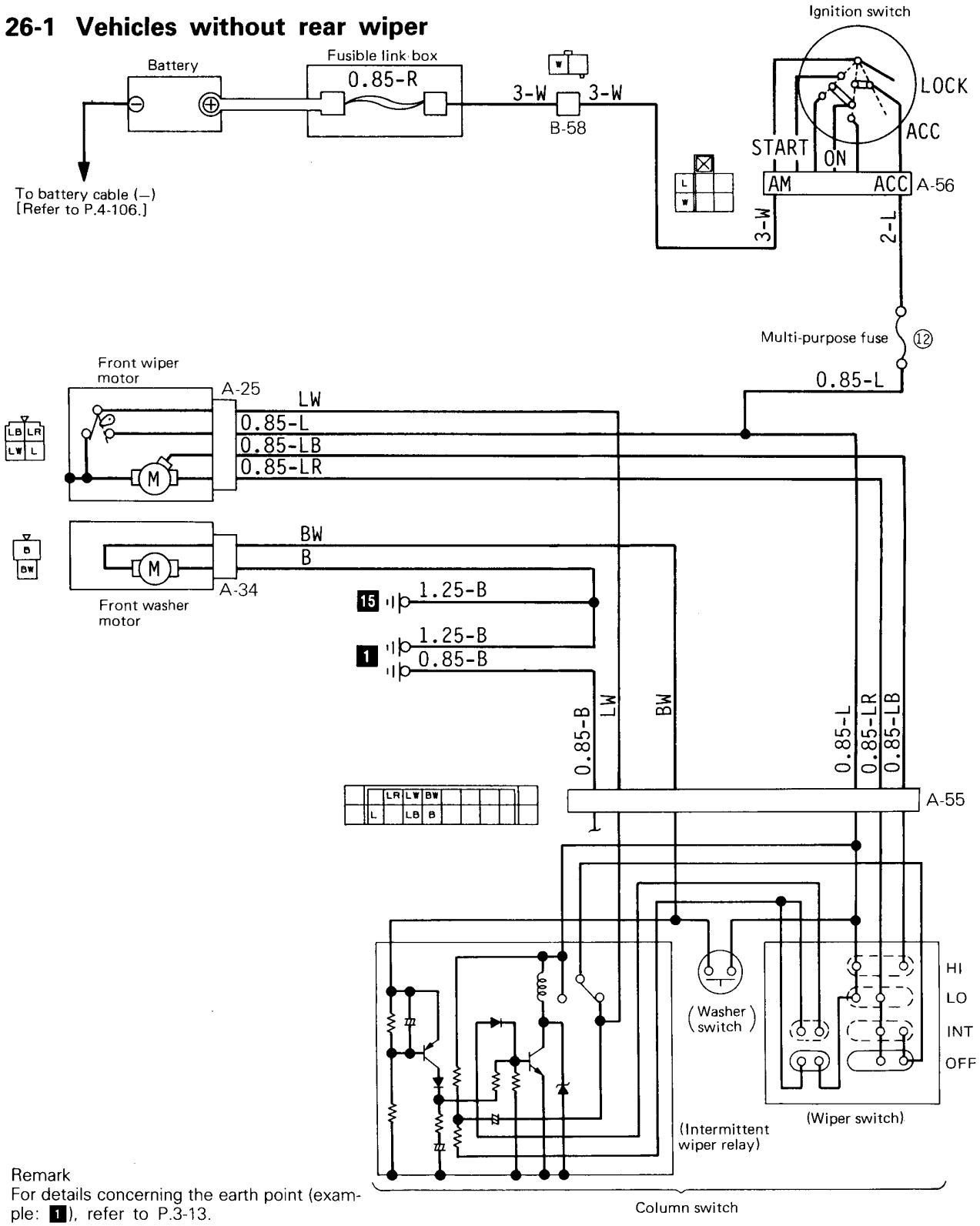
37G0300

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

26 WIPER AND WASHER CIRCUIT

26-1 Vehicles without rear wiper



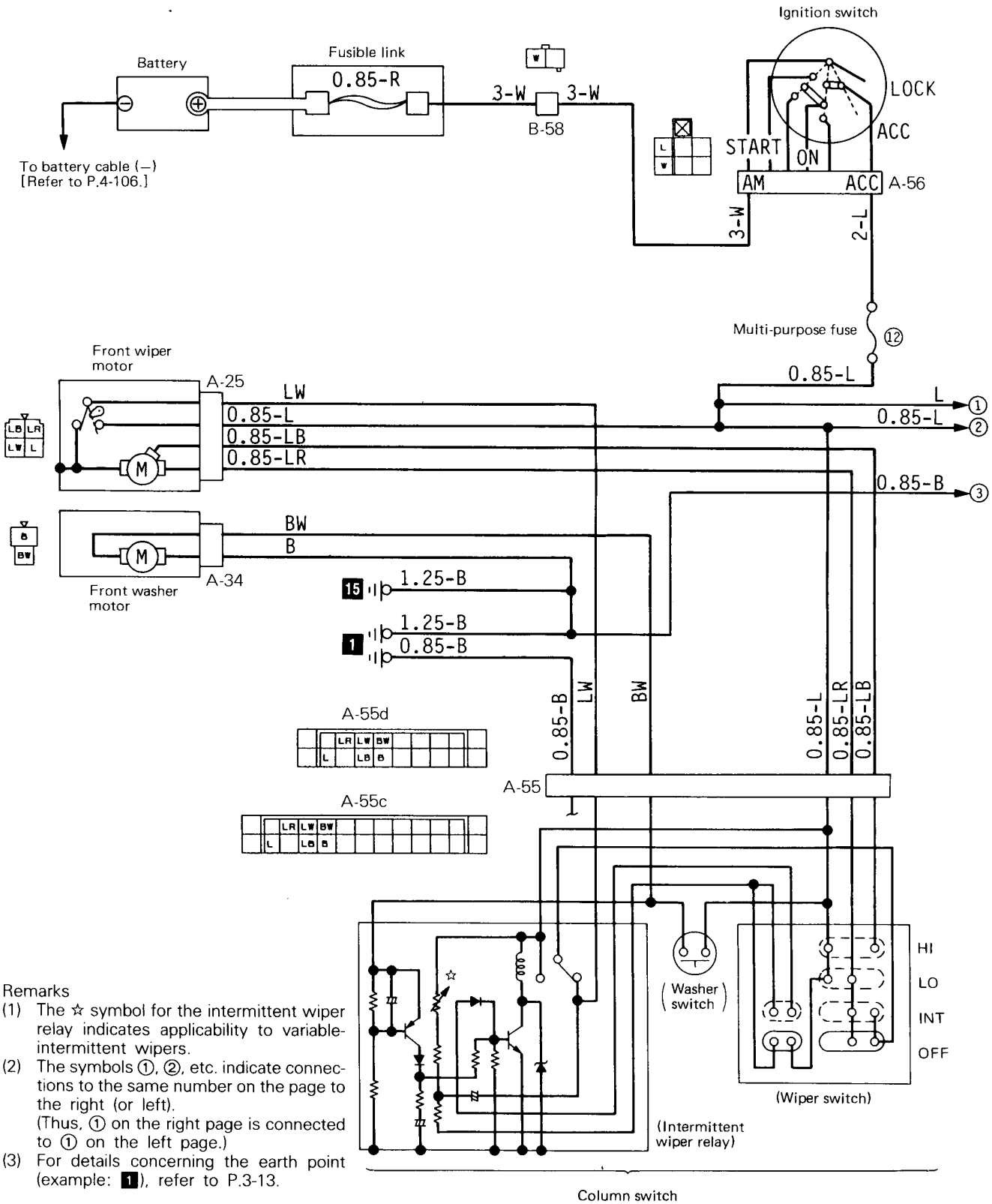
Remark
For details concerning the earth point (example: 1), refer to P.3-13.

37G0324

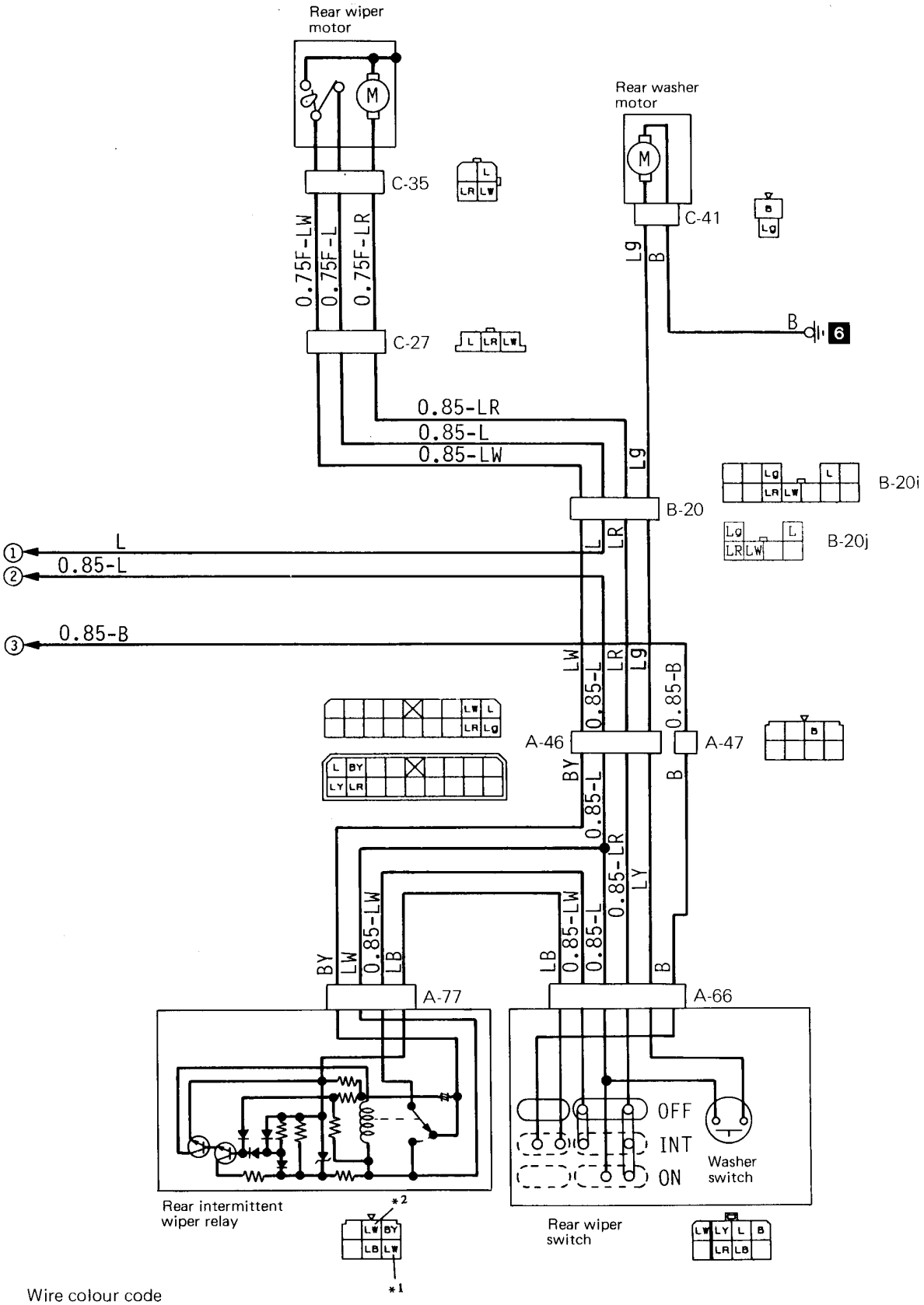
Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

26-2 Vehicles with rear wiper



Remarks
(1) The ☆ symbol for the intermittent wiper relay indicates applicability to variable-intermittent wipers.
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)
(3) For details concerning the earth point (example: 1), refer to P.3-13.



Wire colour code

B:	Black	Br:	Brown	G:	Green	Gr:	Gray	L:	Blue
Lg:	Light green	Ll:	Light Blue	O:	Orange	P:	Pink	R:	Red
Sb:	Silver	Y:	Yellow	W:	White				

37G0325

WIPER AND WASHER CIRCUIT <Front Wiper and Washer> (See P.4-85,86.)

OPERATION

<Low-speed (and high-speed) wiper operation>

- When the wiper switch is placed in the LO position with the ignition switch in the "ACC" or "ON" position, wipers operate continuously at low speed.
- Placing the wiper switch in the HI position causes the wipers to operate at high speed.

<Auto wiper stop operation>

- When the wiper switch is placed in the "OFF" position, the cam contacts of wiper motor causes current to flow through the auto wiper stop circuit, allowing the wiper blades to cycle before they reach to the stop positions.

<Intermittent wiper operation>

- When the wiper switch is placed in the "INT" position with the ignition switch in "ACC" or "ON" position, the intermittent wiper relay is energized causing the intermittent wiper relay contacts to close and open repeatedly.
- When the contacts are closed, the wiper motor is energized.
- When the wiper motor is energized, the relay contacts open; however, the cam contacts keep the wiper motor energized until the wiper blades return to their stop position.

<Washer-wiper operation>

- When the washer switch is turned ON, the intermittent wiper relay contacts close causing wipers to cycle two to three times.

TROUBLESHOOTING HINTS

1. Wipers do not operate.
   1) Washer is not operative, either.
      - Check multi-purpose fuse No. ⑫.
      - Check earth.
2. Low-speed (or high-speed) wiper operation only is inoperative.
   - Check wiper switch.
3. Wipers do not stop.
   - Check wiper motor.
   - Check intermittent wiper relay.
   - Check wiper switch.
4. Intermittent wiper operation is inoperative.
   - Check terminal voltage of steering-column switch (with a built-in intermittent wiper relay) with the intermittent wiper relay energized.

Terminal	Voltage	Check
Column switch (0.85-LR)	0 V	Intermittent wiper relay or wiper switch
	12 V	Intermittent wiper relay
	0 V ⟷ 12 V (alternating)	– (Normal)

5. Washer is inoperative.
   1) Wiper is operative on washer-wiper operation.
      - Check washer motor.
   2) Washer-wiper operation is inoperative also.
      - Check washer switch.
6. Washer-wiper operation is inoperative.
   - Check intermittent wiper relay.

<Rear Wiper and Washer> (See P.4-86.)

OPERATION

<Low-speed wiper operation>

- When the wiper switch is placed in the "ON" position with the ignition switch in the "ACC" or "ON" position, wipers operate continuously at low speed.

<Auto wiper stop operation>

- When the wiper switch is placed in the "OFF" position, the cam contacts of wiper motor causes current to flow through the auto wiper stop circuit, allowing the wiper blades to cycle before they reach to the stop positions.

<Intermittent wiper operation>

- When the wiper switch is placed in the "INT" position with the ignition switch in "ACC" or "ON" position, the intermittent wiper relay is energized causing the intermittent wiper relay contacts to close and open repeatedly.
- When the contacts are closed, the wiper motor is energized.
- When the wiper motor is energized, the relay contacts open; however, the cam contacts keep the wiper motor energized until the wiper blades return to their stop position.

TROUBLESHOOTING HINTS

1. Wipers do not operate.
   1) Washer is not operative, either.
      - Check multi-purpose fuse No. ⑫.
      - Check earth.
      - Check wiper switch.
2. Wipers do not stop.
   - Check wiper motor.
   - Check intermittent wiper relay.
   - Check wiper switch.
3. Intermittent wiper operation is inoperative.
   - Check terminal voltage of the intermittent wiper relay energized.

Terminal	Voltage	Check
Rear wiper switch (0.85-LW)	0 V	Intermittent wiper relay or wiper switch
	12 V	Intermittent wiper relay
	0 V ⟷ 12 V (alternating)	– (Normal)

4. Washer is inoperative.
   - Check washer motor.
   - Check washer switch.

HEADLAMP WASHER CIRCUIT (See P.4-90.)

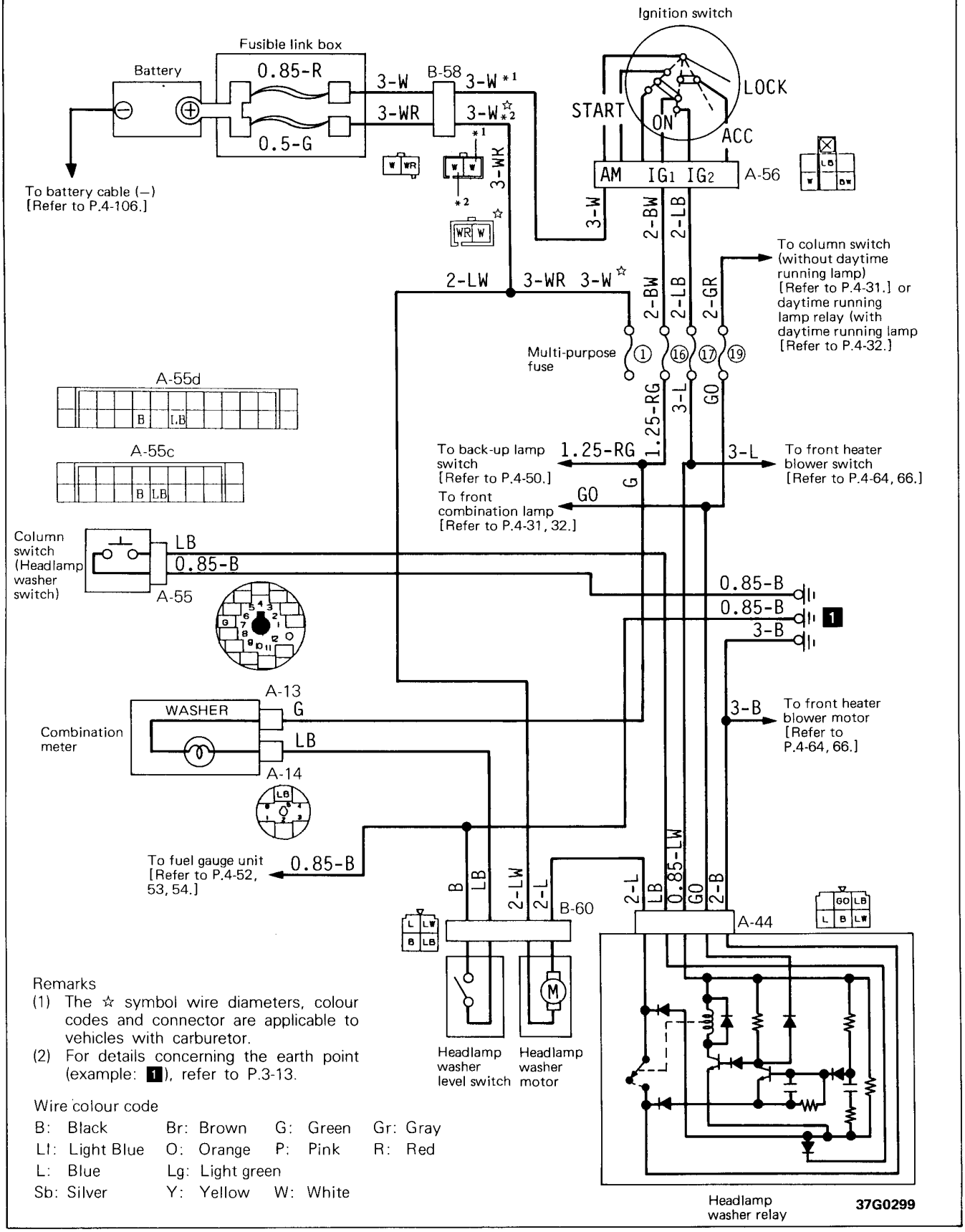
OPERATION

- When the headlamp washer switch is pushed ON with ignition switch in ON, the headlamp washer relay is energized causing the headlamp washer motor to start.

TROUBLESHOOTING HINTS

1. Headlamp washer motor does not start.
   1) Blower motor does not start, either.
      - Check multi-purpose fuse No. ⑰.
   2) Blower motor does not start.
      - Check headlamp washer motor.
      - Check headlamp washer relay.
      - Check headlamp washer switch.

27 HEADLAMP WASHER CIRCUIT (L.H. drive vehicles)



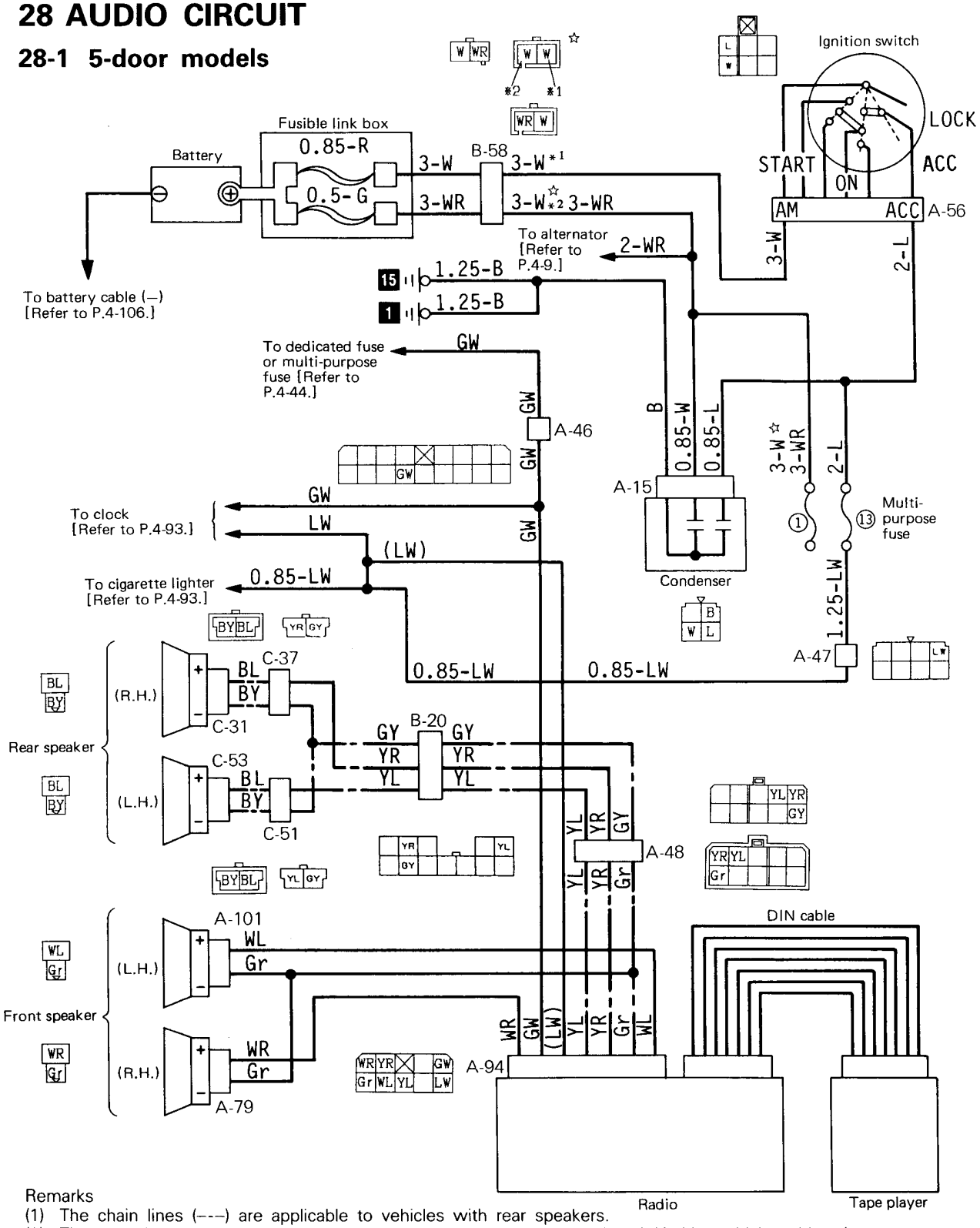
Remarks
(1) The ☆ symbol wire diameters, colour codes and connector are applicable to vehicles with carburetor.
(2) For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray
Ll: Light Blue	O: Orange	P: Pink	R: Red
L: Blue	Lg: Light green		
Sb: Silver	Y: Yellow	W: White	

28 AUDIO CIRCUIT

28-1 5-door models



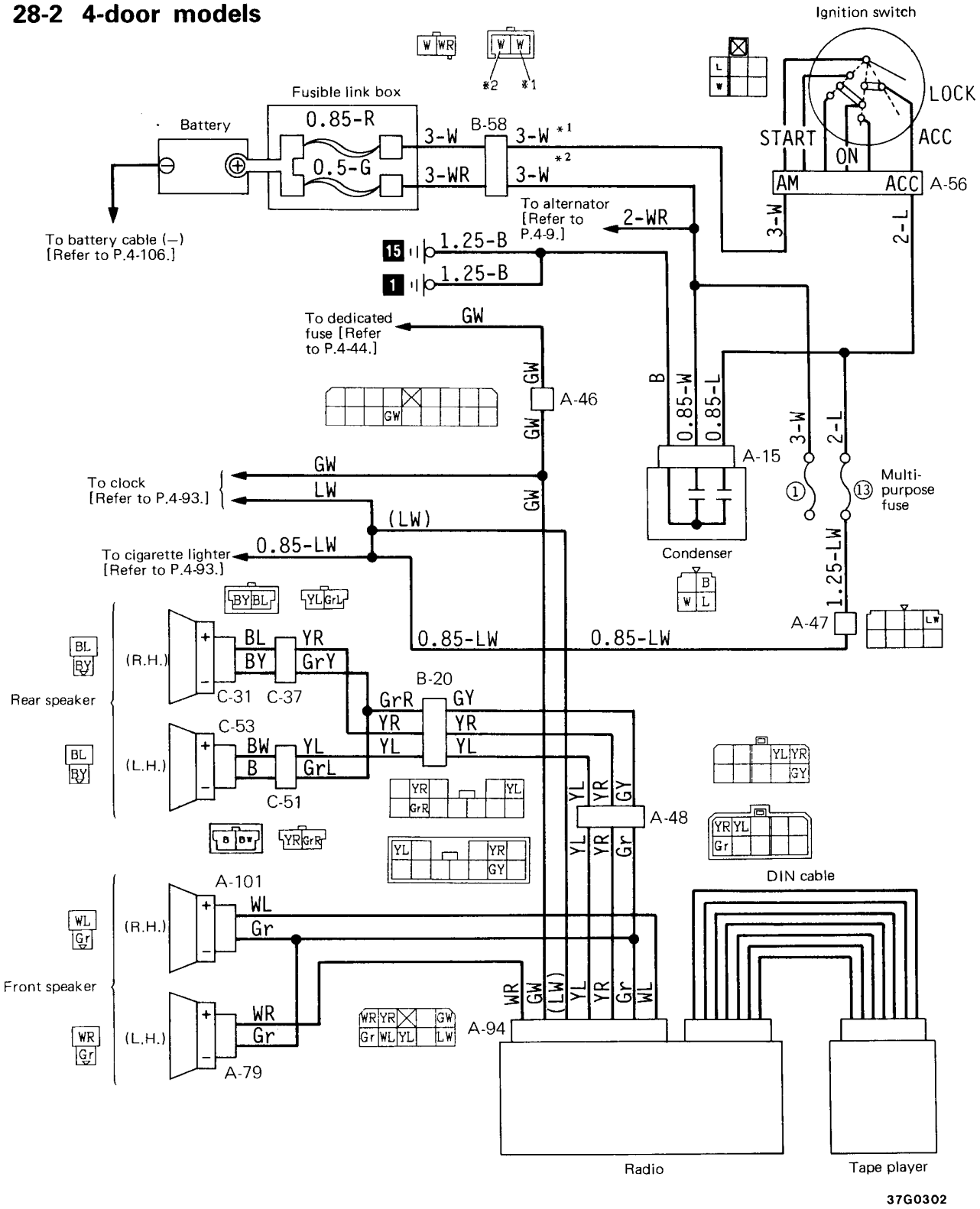
Remarks
(1) The chain lines (–·–) are applicable to vehicles with rear speakers.
(2) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburetor.
(3) For details concerning the earth point (example: 1), refer to P.3-13.

37G0301

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

28-2 4-door models

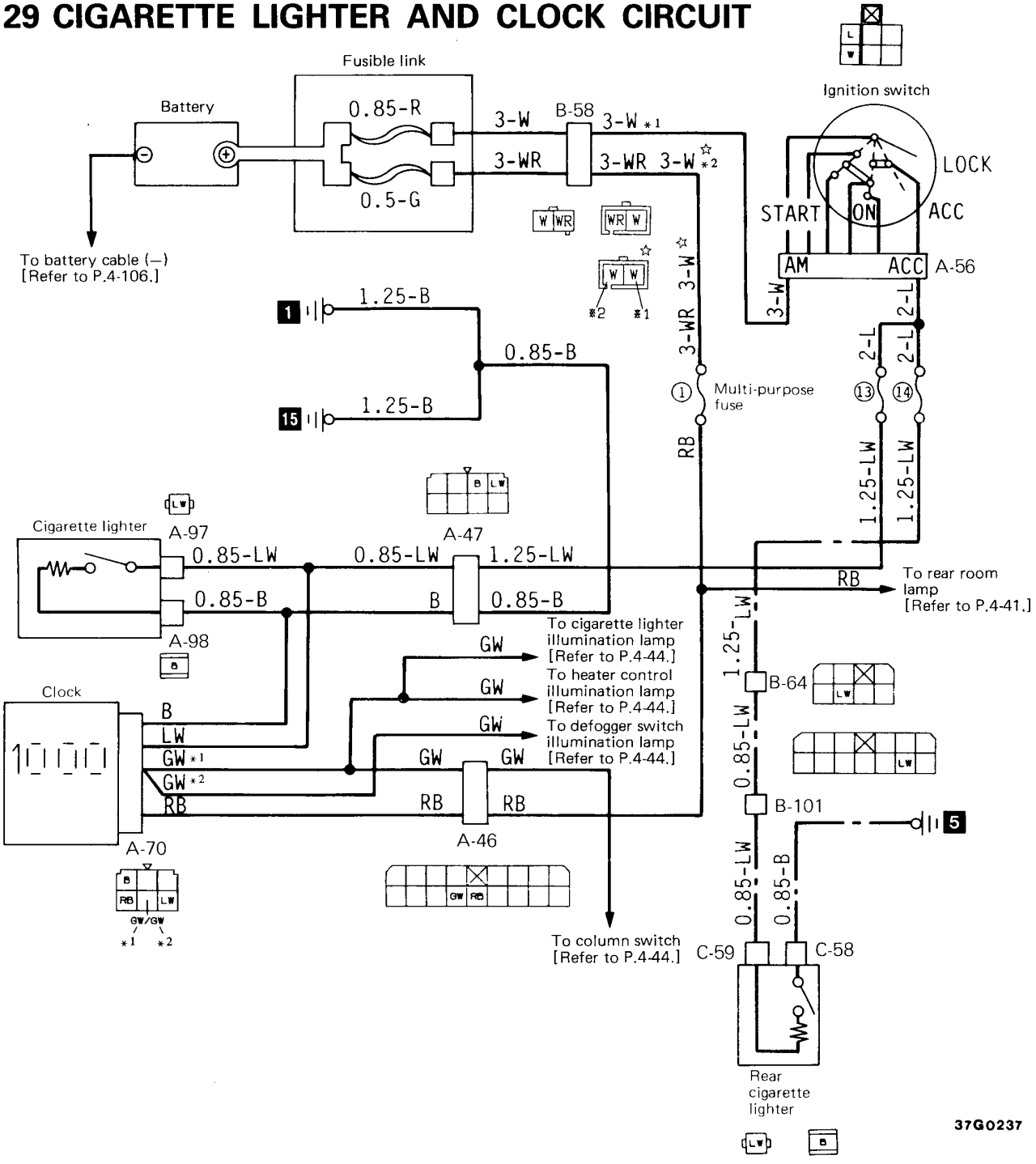


Remark
For details concerning the earth point (example: 1), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

29 CIGARETTE LIGHTER AND CLOCK CIRCUIT

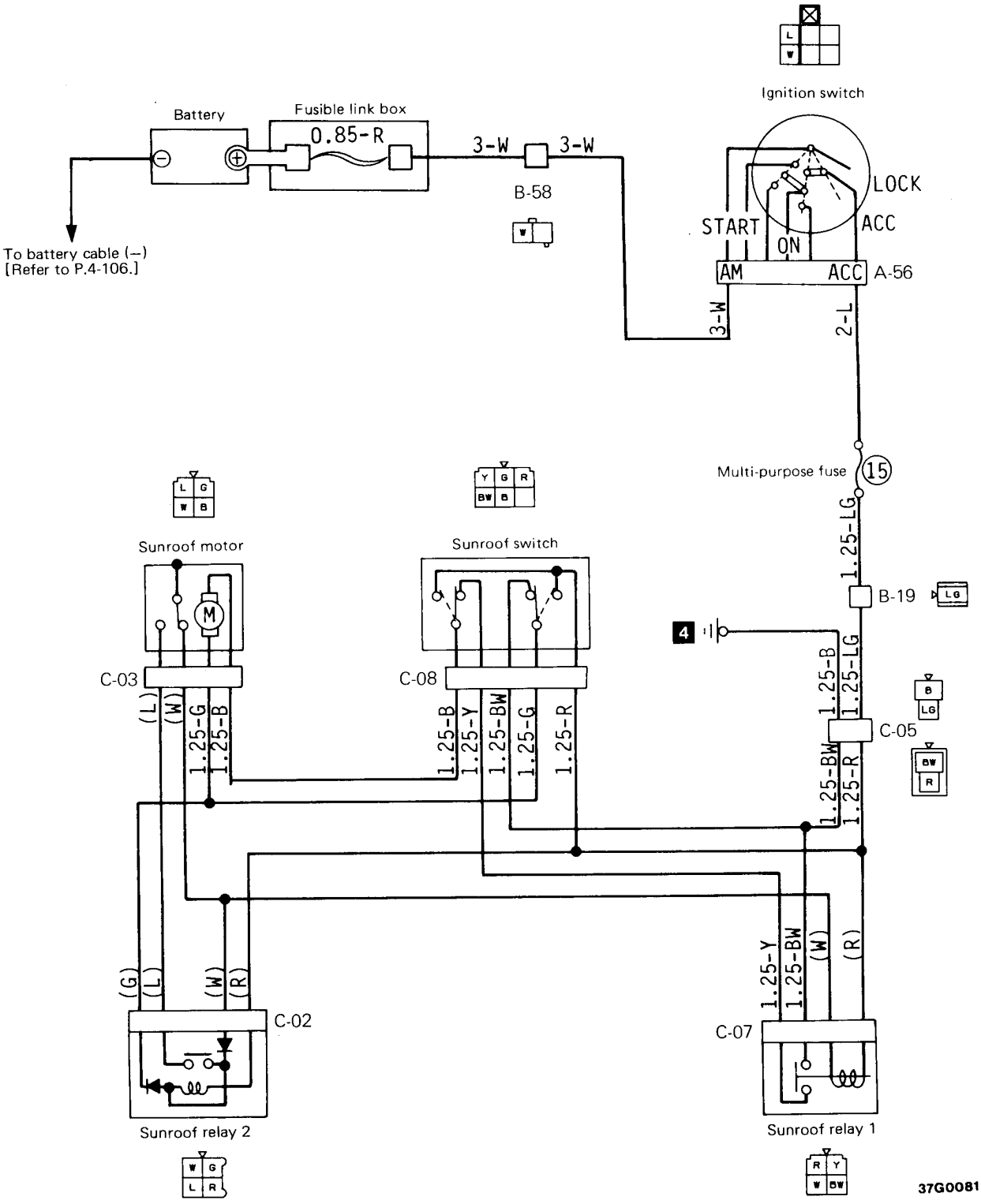


Remarks
(1) For details concerning the earth point (example: 1), refer to P.3-13.
(2) The chain lines (–·–) are applicable to vehicles equipped with the rear cigarette lighter.
(3) The ☆ symbol wire diameters, colour codes and connector are applicable to L.H. drive vehicles with carburetor.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
LI: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

30 SUNROOF CIRCUIT



Remark
For details concerning the earth point (example: 4), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

SUNROOF CIRCUIT (See P.4-94.)

OPERATION

- When, with the ignition switch at the "ACC" or "ON" position, the sunroof switch is set to the "OPEN" position, current flows to multi-purpose fuse No. ⑮, the sunroof switch, the sunroof motor, the sunroof switch, and earth, and the sunroof opens.
- When the sunroof switch is set to the "CLOSE" position, the process is the reverse of that for "OPEN"; electricity flows to the sunroof motor, and the sunroof closes.

MOTOR-DRIVEN ROOF BLIND CIRCUIT (See P.4-96.)

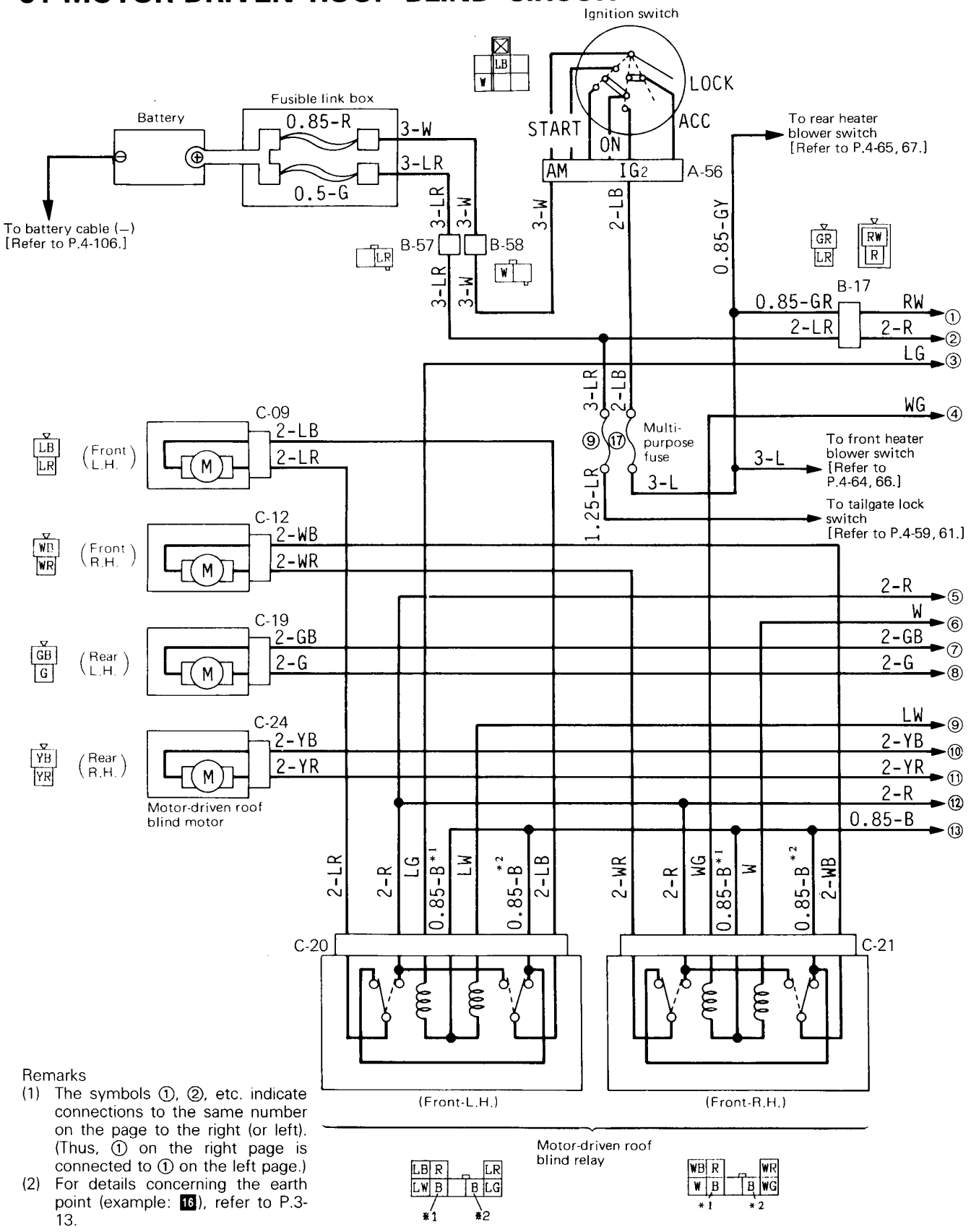
OPERATION

- When the roof blind switch is pushed "Open" or "Close", with the ignition switch turned to "ON", current flows through multi-purpose fuse No. ⑰, roof blind switch, diode, roof blind relay (coil), and earth, thus causing the roof blind relays contacts to close.
- While the roof blind relay contacts are closed, current flows to the roof blind relay, roof blind motor and earth; the roof blind motor is then activated to open or close the roof blind.

TROUBLESHOOTING HINTS

1. The roof blind can't be opened nor closed.
   (1) The front heater blower motor also do not operate.
      - Check the multi-purpose fuse No. ⑰.
   (2) The front heater blower switch can't operate.
      - Check the motor-driven roof blind main switch.
      - Check the motor-driven roof blind sub switch.
      - Check the diode.
      - Check the motor-driven roof blind relay.

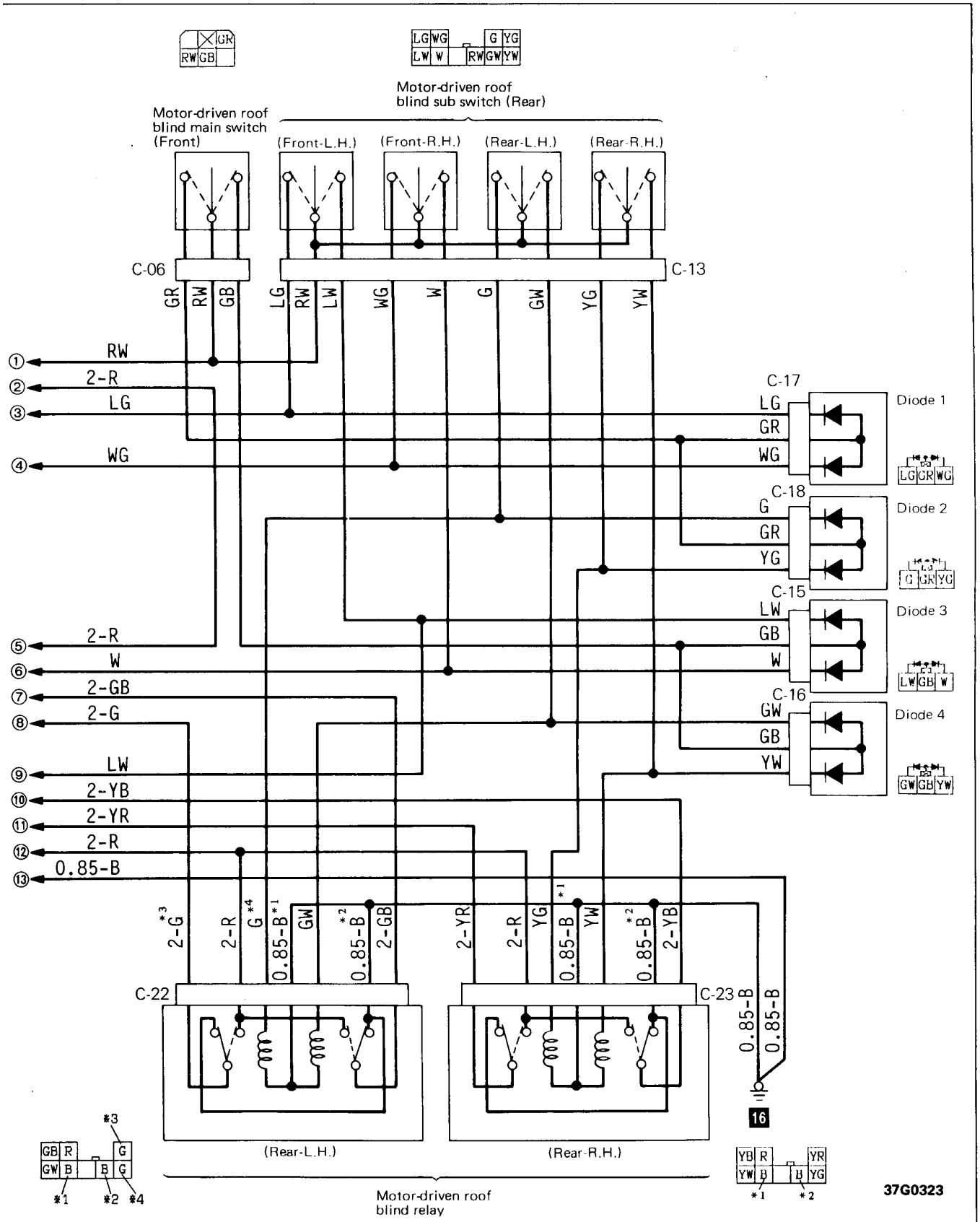
31 MOTOR-DRIVEN ROOF BLIND CIRCUIT



Remarks

(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)

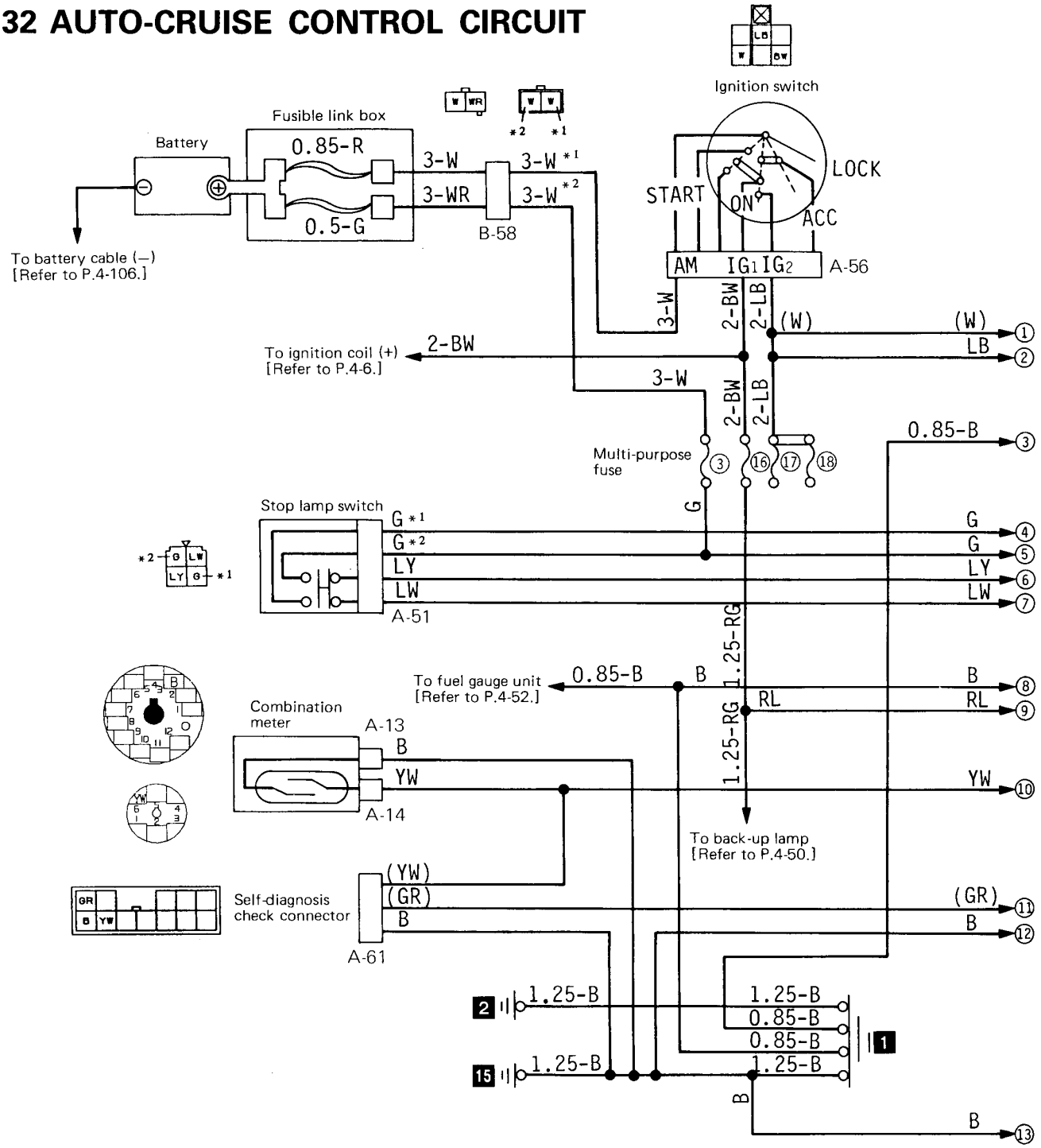
(2) For details concerning the earth point (example: 16), refer to P.3-13.



Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green				
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White			

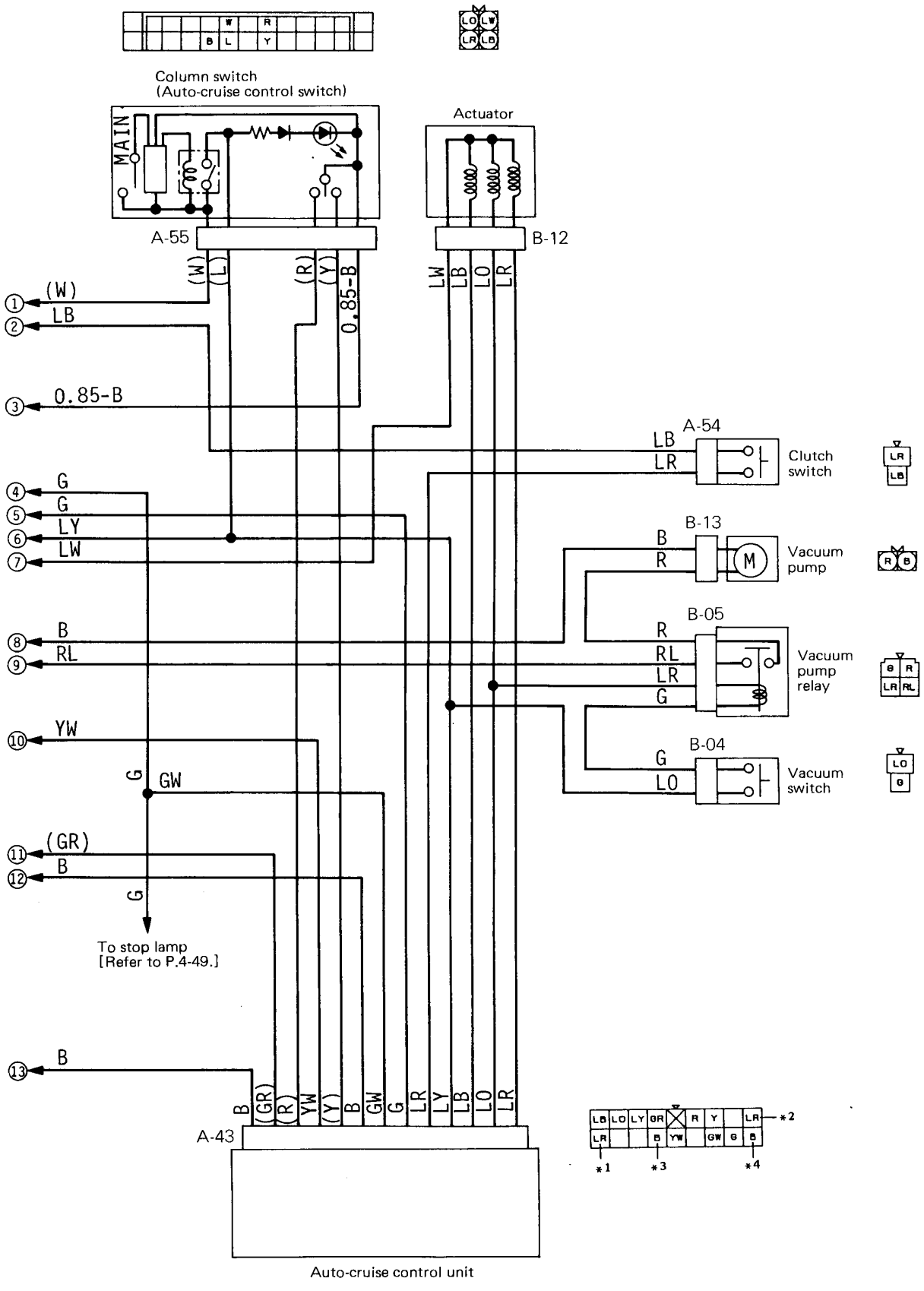
32 AUTO-CRUISE CONTROL CIRCUIT



Remarks
(1) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left). (Thus, ① on the right page is connected to ① on the left page.)
(2) For details concerning the earth point (example: 1), refer to P.3-13.

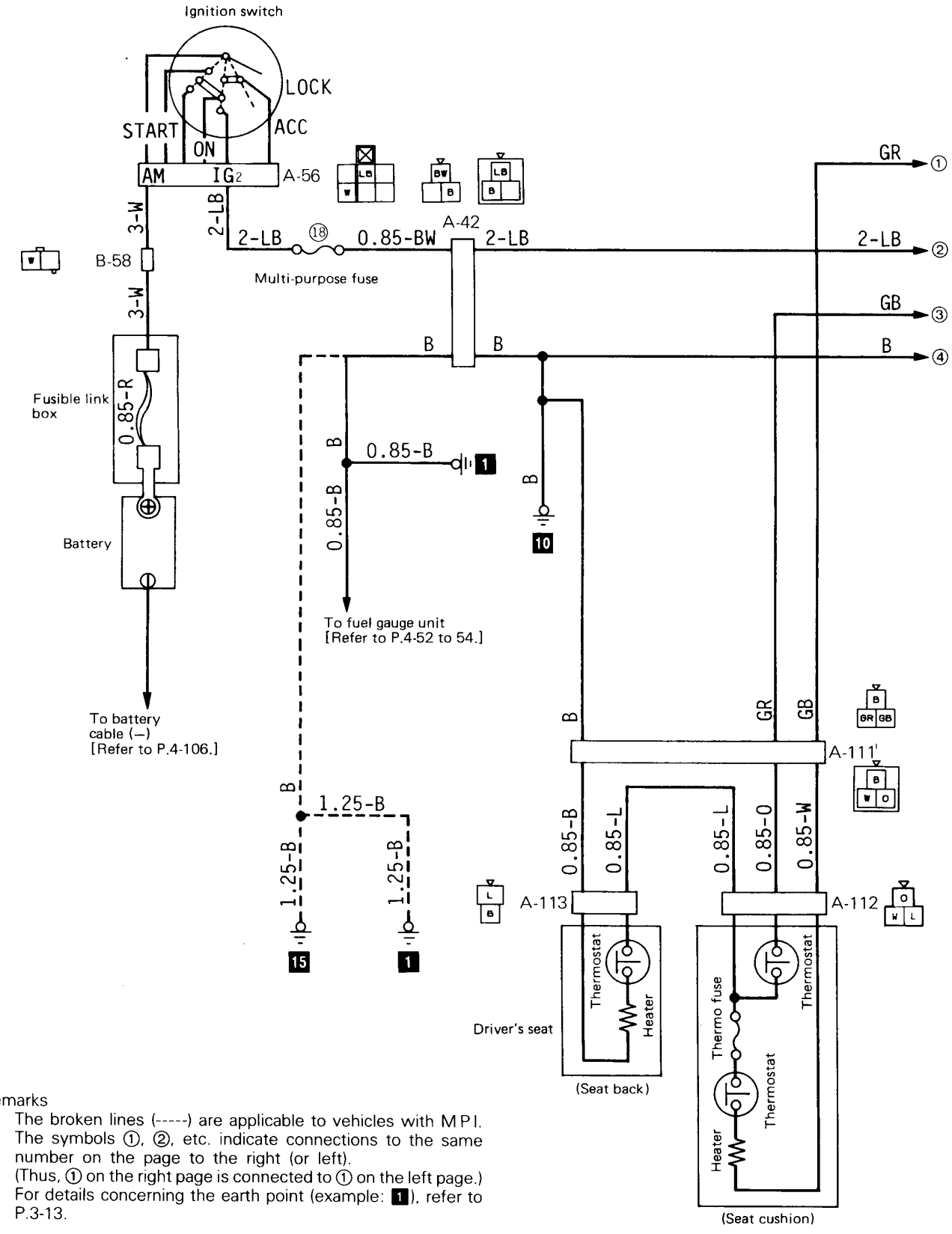
Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

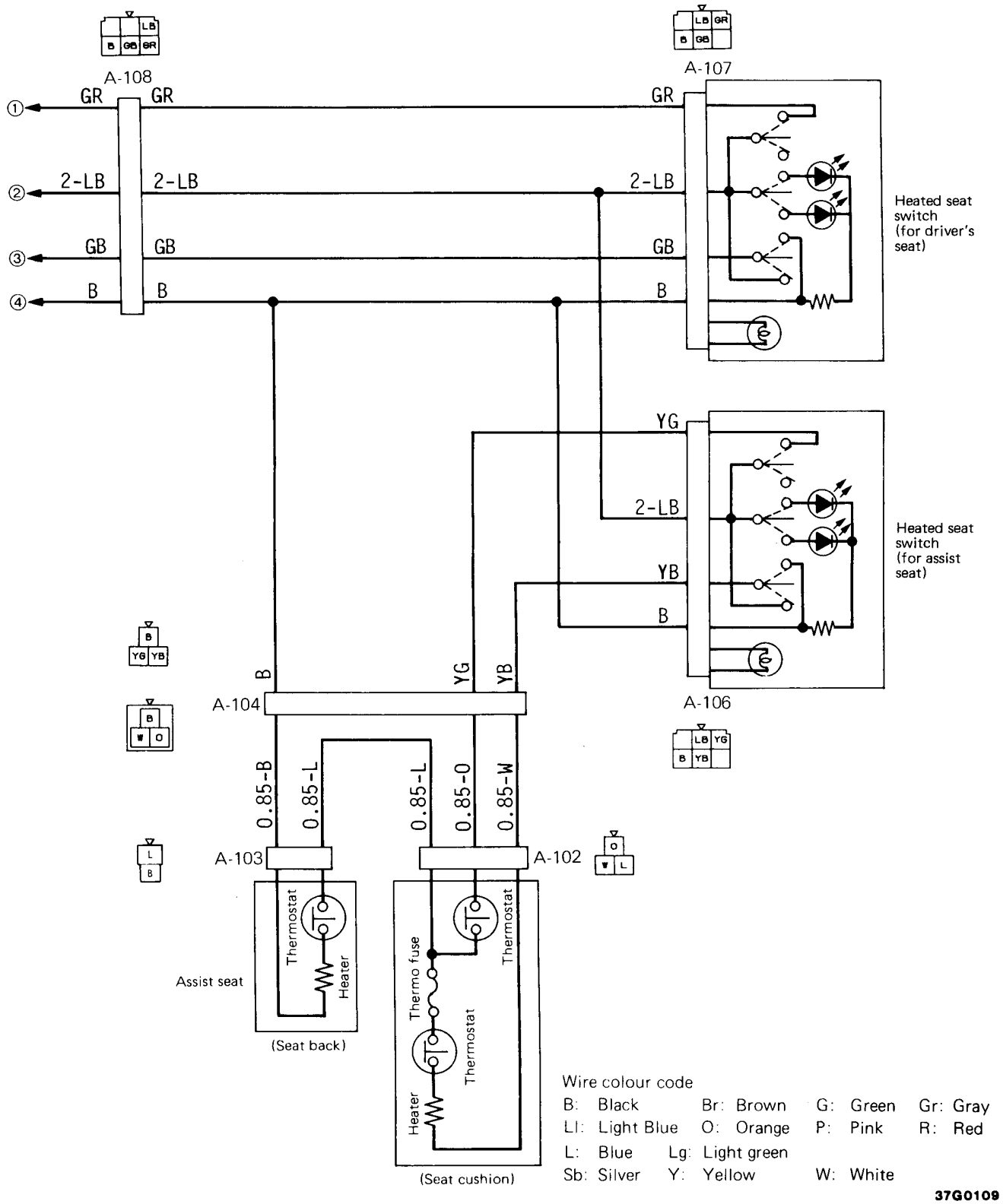

Column switch
(Auto-cruise control switch)
MAIN
Actuator
A-55
B-12
(W)
(L)
(R)
(Y)
0.85-B
LW
LB
LO
LR
① (W)
② LB
③ 0.85-B
④ G
⑤ G
⑥ LY
⑦ LW
⑧ B
⑨ RL
⑩ YW
G
GW
⑪ (GR)
⑫ B
G
To stop lamp
[Refer to P.4-49.]
⑬ B
A-54
LB
LR
Clutch switch
B-13
B
R
M
Vacuum pump
B-05
R
RL
LR
G
Vacuum pump relay
B-04
G
LO
Vacuum switch
A-43
B
(GR)
(R)
YW
(Y)
B
GW
G
LR
LY
LB
LO
LR
Auto-cruise control unit
LB LO LY GR R Y LR *2
LR B YW GW G B
*1 *3 *4

37G0322

33 HEATED SEAT CIRCUIT



Remarks
(1) The broken lines (-----) are applicable to vehicles with MPI.
(2) The symbols ①, ②, etc. indicate connections to the same number on the page to the right (or left).
(Thus, ① on the right page is connected to ① on the left page.)
(3) For details concerning the earth point (example: 1), refer to P.3-13.


A-108
A-107
GR
2-LB
GB
B
Heated seat switch (for driver's seat)
YG
YB
Heated seat switch (for assist seat)
A-104
A-106
A-103
A-102
0.85-B
0.85-L
0.85-L
0.85-O
0.85-W
Assist seat
Thermostat
Heater
(Seat back)
Thermo fuse
Thermostat
Thermostat
Heater
(Seat cushion)
Wire colour code
B: Black
Br: Brown
G: Green
Gr: Gray
Ll: Light Blue
O: Orange
P: Pink
R: Red
L: Blue
Lg: Light green
Sb: Silver
Y: Yellow
W: White

37G0109

HEATED SEAT CIRCUIT (See P.4-100.)

OPERATION

- When the heated seat switch is turned ON (either in LO or HI) with the ignition switch in ON position, the heated seat is activated with operation corresponding to the switch position.

TROUBLESHOOTING HINTS

1. The heated seat warms at one place only.
   - Check the heated seat.
2. The heated seat doesn't become warm.
   - Check the multi-purpose fuse No. ⑱.
   - Check the heated seat switch.

REMOTE CONTROL MIRROR CIRCUIT (See P.4-103.)

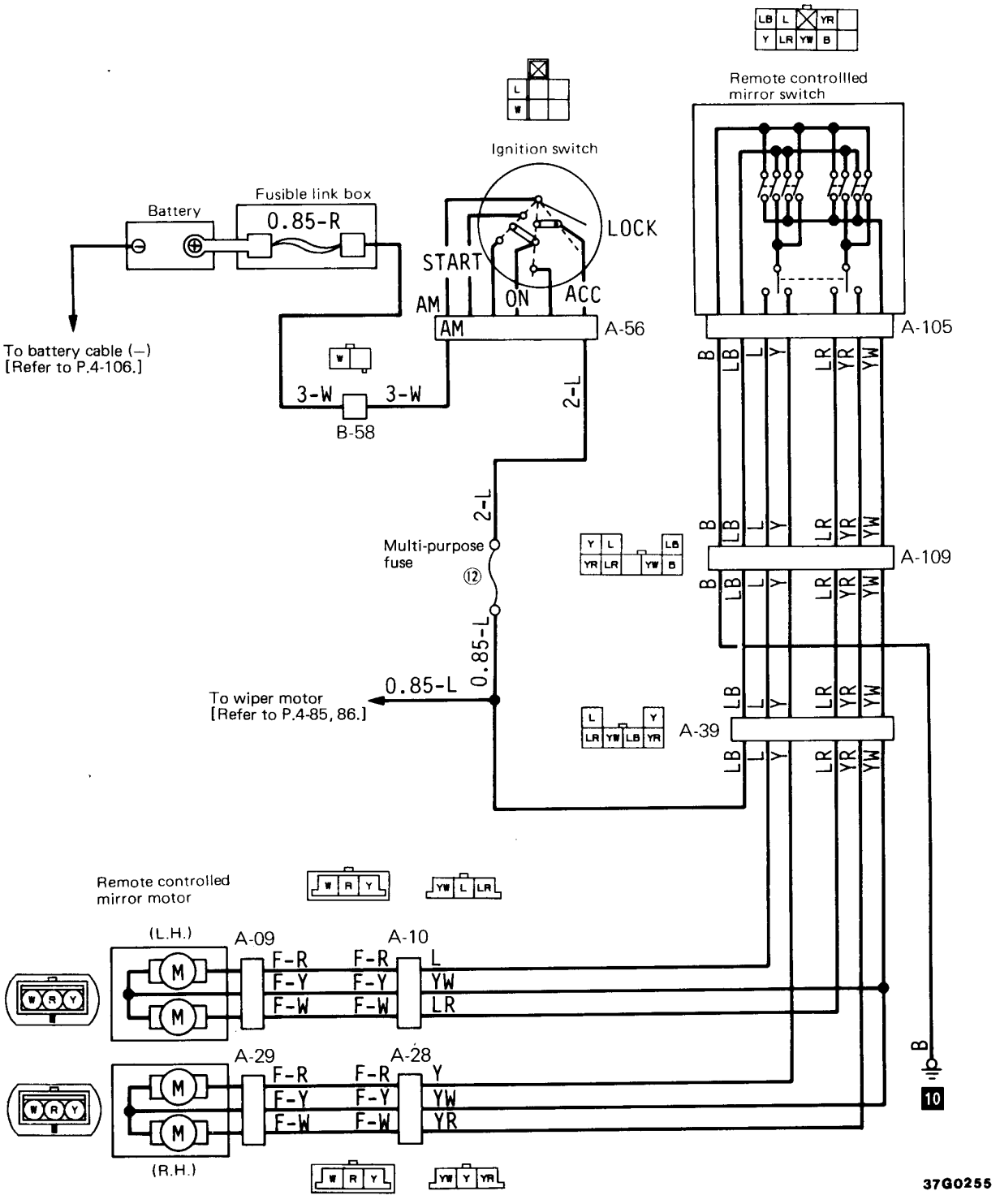
OPERATION

- When the remote control mirror switch is operated with the ignition switch in ACC or ON position, the motor is started allowing the driver to adjust the orientation of the mirror surface.

TROUBLESHOOTING HINTS

1. LH and RH mirrors do not move.
   1) Front wiper is also inoperative.
      - Check multi-purpose fuse No. ⑫.
   2) Front wiper is operative.
      - Check remote controlled mirror switch.

34 REMOTE CONTROLLED MIRROR CIRCUIT



Remark
For details concerning the earth point (example: 10), refer to P.3-13.

Wire colour code

B: Black	Br: Brown	G: Green	Gr: Gray	L: Blue	Lg: Light green	
Ll: Light Blue	O: Orange	P: Pink	R: Red	Sb: Silver	Y: Yellow	W: White

35 CENTRALIZED JUNCTION

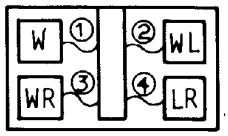
MAIN FUSIBLE LINK

Item		Housing colour	Rated capacity (A)
Alternator circuit	Mini bus	Blue	100
	Panel van, window van	Black or Blue*	80 or 100*

Remark
The * symbol is applicable to diesel-powered vehicles with air conditioner.

SUB FUSIBLE LINK

Item	Fusible link No.	Wire color	Size		Sub fusible link box
			mm^2	in^2	
Ignition switch power supply	1	Red	0.85	0.0013	
Defogger, rear heater circuit	2	Green	0.5	0.0008	
Lamp circuit	3	Green	0.5	0.0008	
Door lock, power window circuit	4	Green	0.5	0.0008	



37G0073

DEDICATED FUSIBLE LINK

Item		Wire colour	Size	
			mm^2	in^2
Glow circuit*		–	1.0	0.0015
Cold mixture heater circuit		Green	0.5	0.0008
M P I circuit		Green	0.5	0.0008
Air conditioner circuit	Front and overhead type or front type with large compressor	Brown	0.3	0.0005
		Green	0.5	0.0008
	Front type	Green	0.5	0.0008

Remark: The * symbol indicates fusible link with silicon rubber glass tube.

DEDICATED FUSE

Glass cylinder type

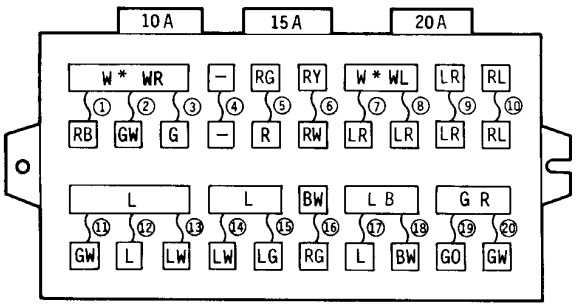
Item	Rated capacity (A)
Air conditioner circuit	10 or 15

Blade type

Item	Housing colour	Rated capacity (A)
Headlamp leveling circuit	Red	10
Illumination lamp circuit	Red	10

MULTI-PURPOSE FUSE

Power supply circuit		Fuse No.	Rated capacity (A)	Load circuit
Battery		1	10	Clock, Room lamps, M P I control unit, Door lock control unit
		2	10	Hazard warning lamps
		3	10	Stop lamps, Auto-cruise control unit
		4	–	–
Battery (via the column switch)		5	15	Headlamp (Upper)
		6	15	Headlamp (Lower)
Battery		7	15	Defogger
		8	20	Rear heater
		9	20	Tailgate lock, Rear door lock, Door lock power relay
Ignition switch	ACC (via the column switch)	10	10	Rear fog lamps
	ACC	11	15	Horn
		12	15	Wiper and washer, Remote controlled mirror
		13	15	Radio, Tape player, Cigarette lighter
		14	15	Rear cigarette lighter
		15	20	Sun roof
	IG1	16	15	Back-up lamp, F B C control unit, Alternator relay Combination meter, Turn signal and hazard flasher unit
	IG2	17	20	Dim-dip lamp relay 1, Power window, Rear heater, Front heater, Defogger, Headlamp washer, Motor-driven roof blind
		18	15	Heated seat
Battery (via the column switch)		19	10	Tail lamp, Position lamp, Headlamp washer
		20	10	Tail lamp, Position lamp, License plate lamp, Dim-dip lamp relay 2, Illumination lamps (R.H.D.)



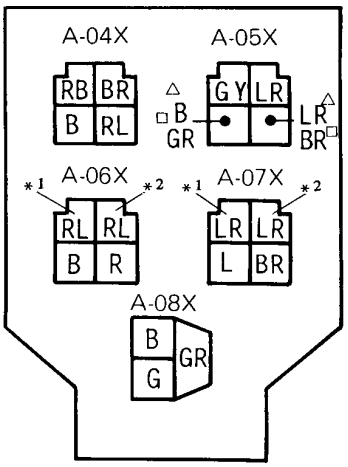
37G0123

Remark
The * symbol colour code applicable to L.H. drive vehicles with carburetor.

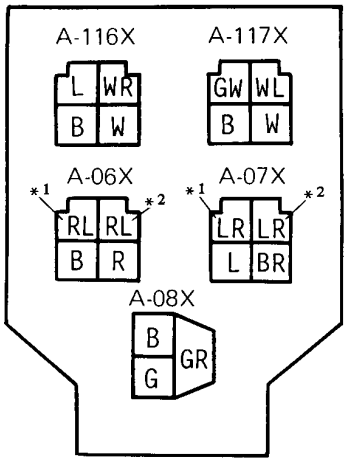
CENTRALIZED RELAY

Classification	Name
A-04X	Rear fog lamp relay (L.H. drive vehicles)
A-05X	Rear heater relay
A-06X	Headlamp relay
A-07X	Defogger relay
A-08X	Turn signal and Hazard flasher unit
A-116X	Dim-dip lamp relay 1 (R.H. drive vehicles)
A-117X	Dim-dip lamp relay 2 (R.H. drive vehicles)

L.H. drive vehicles



R.H. drive vehicles

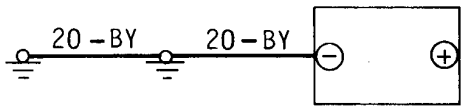


Remarks
(1) The △ symbol colour codes are applicable to vehicles with five-doors.
(2) The □ symbol colour codes are applicable to vehicles with four-doors.

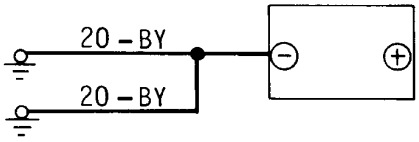
37G0120

BATTERY CABLE (–) DIAGRAM

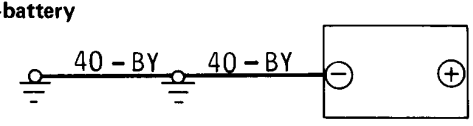
Petrol-powered vehicles (1600)



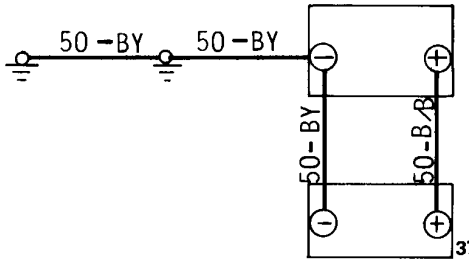
(2000, 2400)



Diesel-powered vehicles 1-battery



2-battery



37G0334

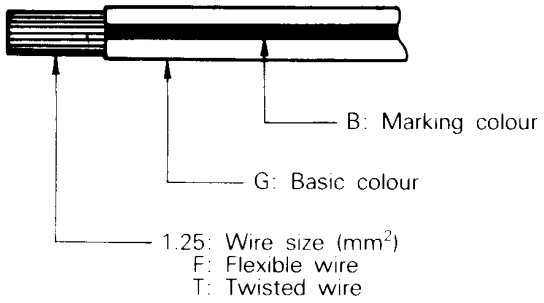
RJAK911007-190

Remarks for Wiring Diagram

WIRE COLOUR CODES

Wire colours are identified by the following colour codes.

Example: 1.25F – GB

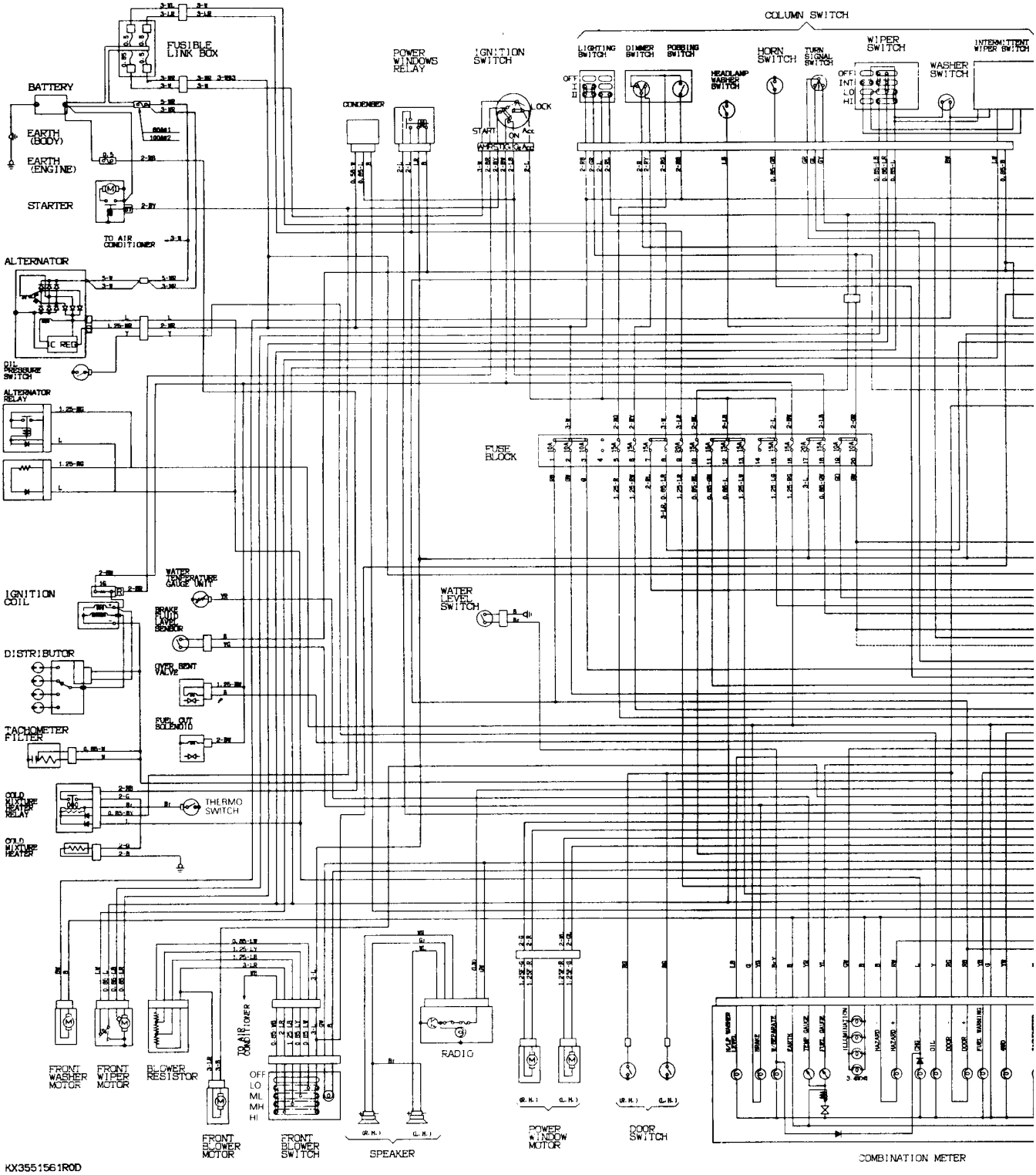


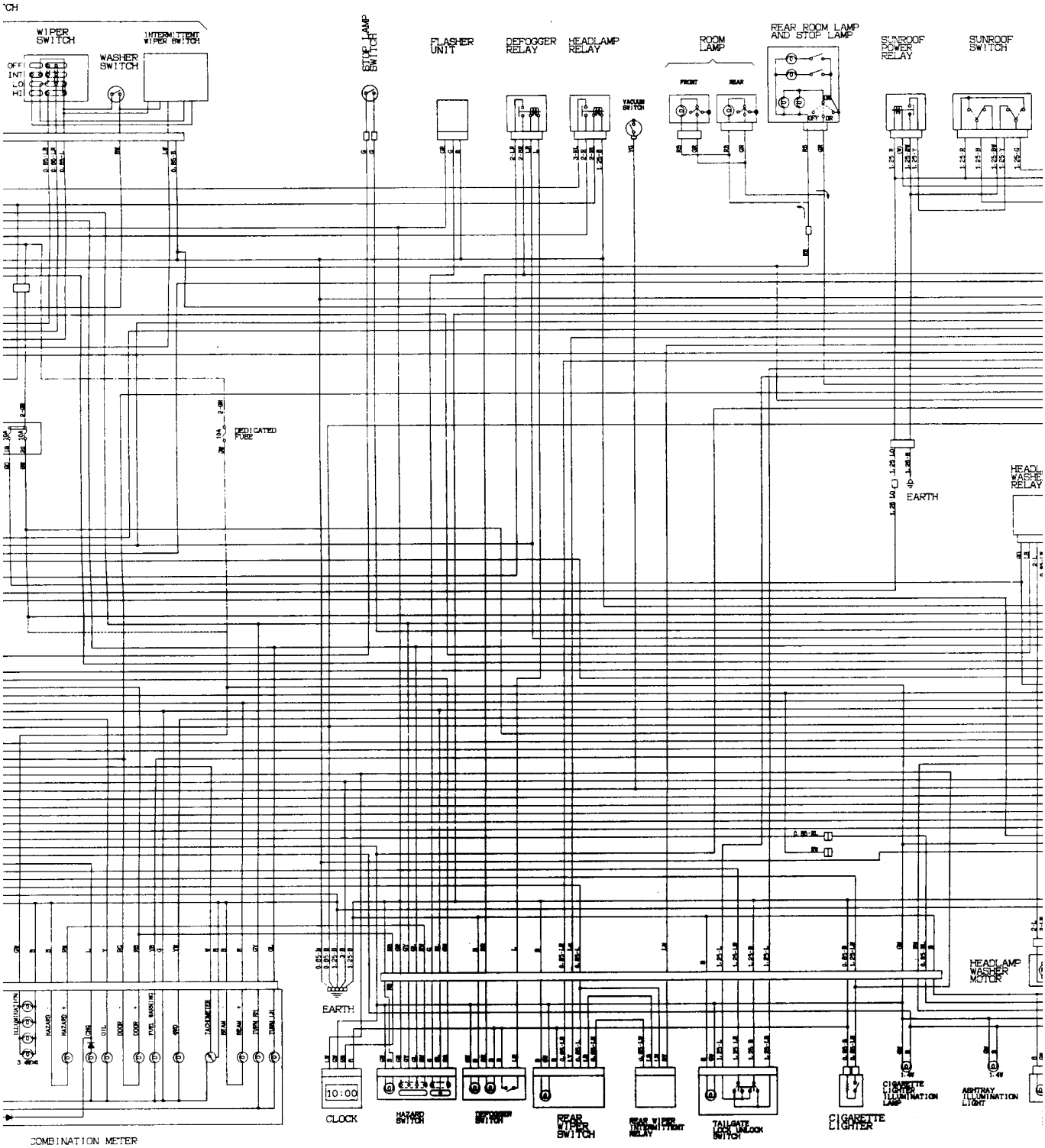
(1) No code indicates 0.5 mm^2 (0.0008 $in.^2$)
(2) Cable colour code in parantheses indicates 0.3 mm^2 (0.0005 $in.^2$).

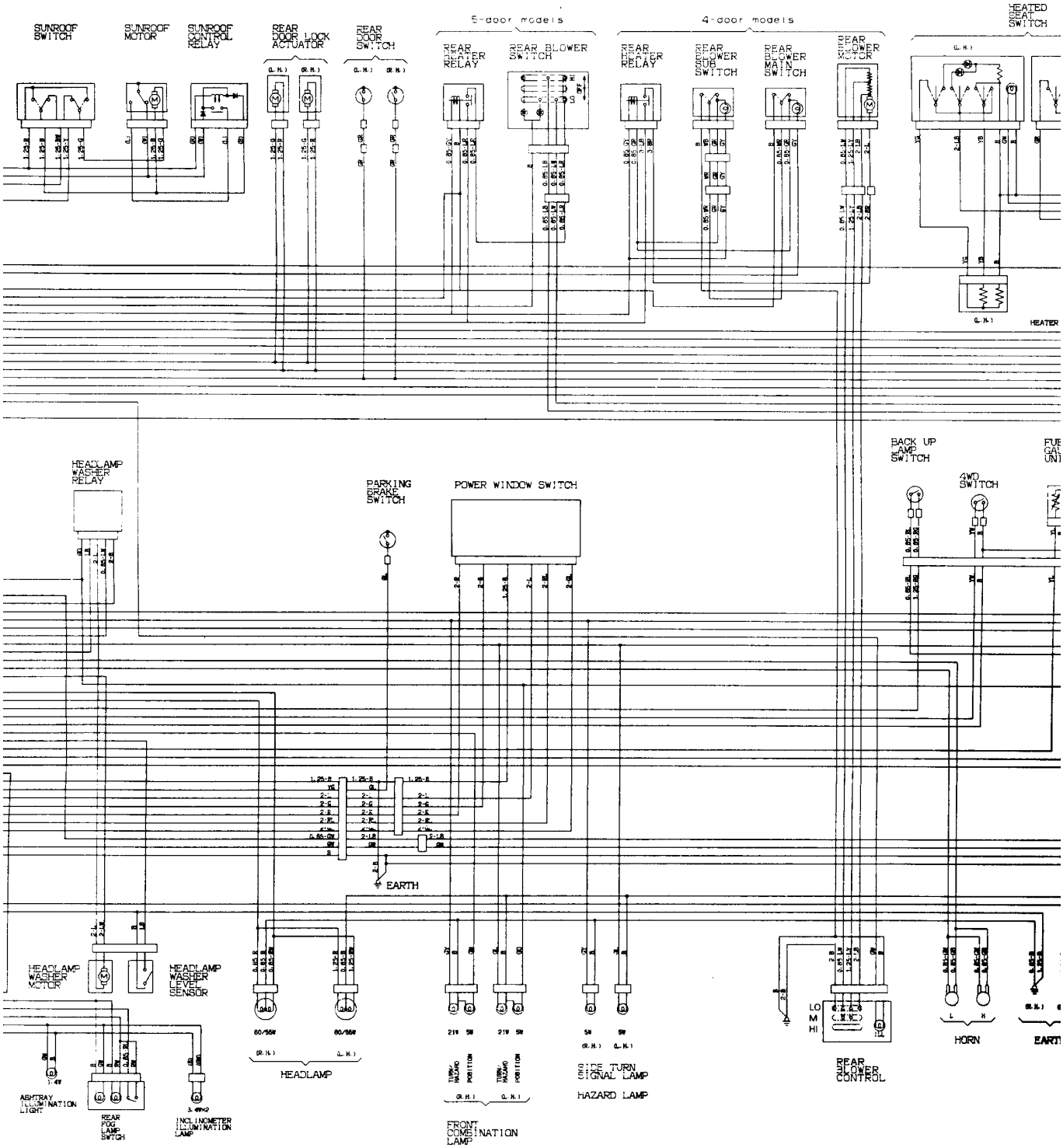
Code	Wire colour	Code	Wire colour
B	Black	O	Orange
Br	Brown	P	Pink
G	Green	R	Red
Gr	Gray	Sb	Silver
L	Blue	Y	Yellow
Lg	Light green	W	White
Ll	Light blue	–	–

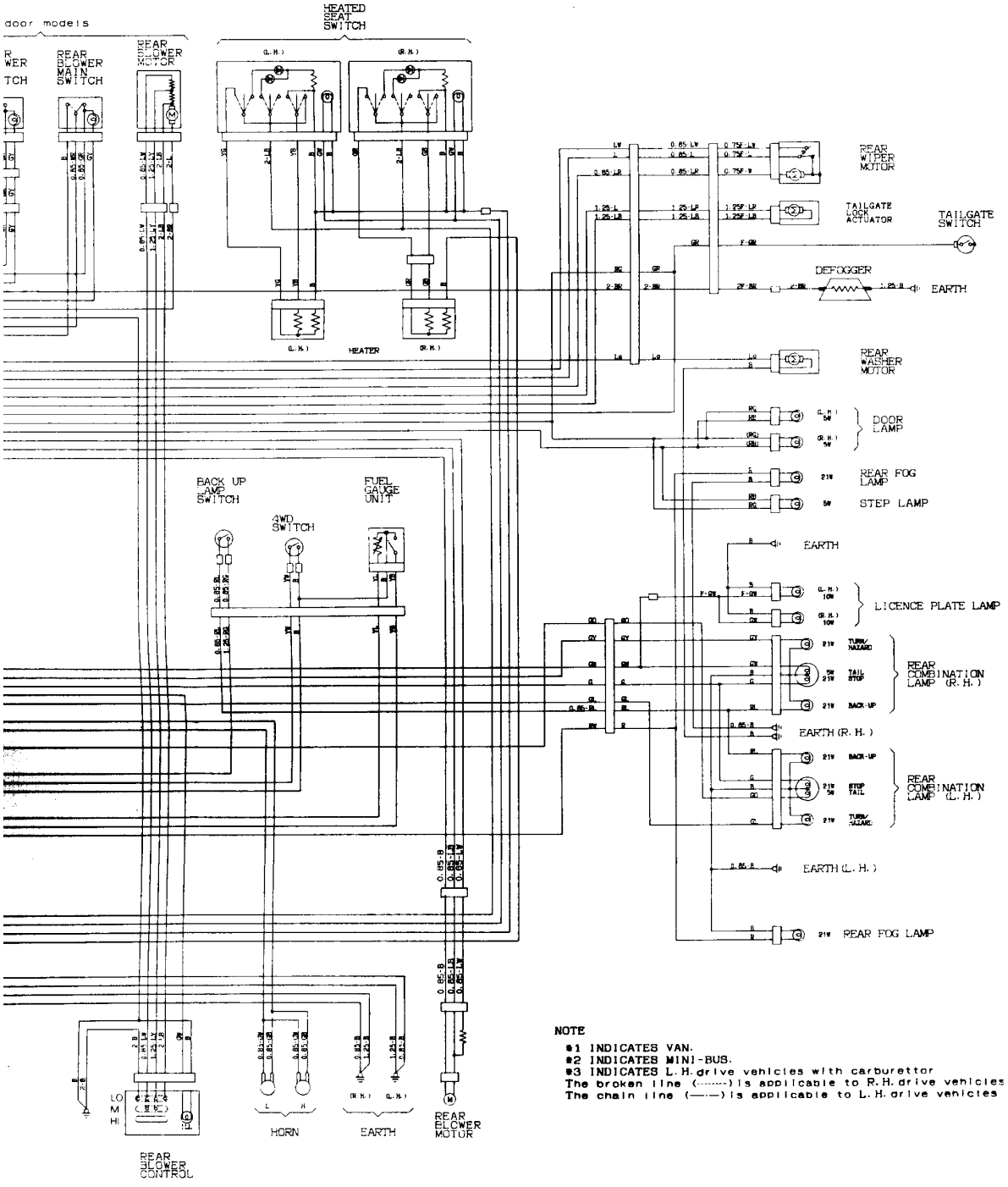
NOTE
If a cable has two colours, the first of the two colour code characters indicates the basic colour (colour of the cable coating) and the second indicates the marking colour.

Wiring Diagram
1990 model L300




WIPER SWITCH
INTERMITTENT WIPER SWITCH
WASHER SWITCH
OFF
INT
LO
HI
STOP LAMP SWITCH
FLASHER UNIT
DEFOGGER RELAY
HEADLAMP RELAY
VACUUM SWITCH
ROOM LAMP
FRONT
REAR
REAR ROOM LAMP AND STOP LAMP
SUNROOF POWER RELAY
SUNROOF SWITCH
DEDICATED FUSE
EARTH
HEADLAMP WASHER RELAY
HEADLAMP WASHER MOTOR
EARTH
CLOCK
10:00
HAZARD SWITCH
DEFOGGER SWITCH
REAR WIPER SWITCH
REAR WIPER INTERMITTENT RELAY
TAILGATE LOCK UNLOCK SWITCH
CIGARETTE LIGHTER
CIGARETTE LIGHTER ILLUMINATION LAMP
ASHTRAY ILLUMINATION LIGHT
COMBINATION METER


SUNROOF SWITCH
SUNROOF MOTOR
SUNROOF CONTROL RELAY
REAR DOOR LOCK ACTUATOR
REAR DOOR SWITCH
5-door models
4-door models
REAR HEATER RELAY
REAR BLOWER SWITCH
REAR HEATER RELAY
REAR BLOWER SUB SWITCH
REAR BLOWER MAIN SWITCH
REAR BLOWER MOTOR
HEATED SEAT SWITCH
HEATER
HEADLAMP WASHER RELAY
PARKING BRAKE SWITCH
POWER WINDOW SWITCH
BACK UP LAMP SWITCH
4WD SWITCH
EARTH
HEADLAMP WASHER MOTOR
HEADLAMP WASHER LEVEL SENSOR
60/55W
HEADLAMP
21W 5W
TURN/HAZARD POSITION
FRONT COMBINATION LAMP
5W
SIDE TURN SIGNAL LAMP
HAZARD LAMP
LO
M
HI
REAR BLOWER CONTROL
HORN
ASHTRAY ILLUMINATION LIGHT
REAR FOG LAMP SWITCH
INCLINOMETER ILLUMINATION LAMP



NOTE

- *1 INDICATES VAN.
- *2 INDICATES MINI-BUS.
- *3 INDICATES L.H.drive vehicles with carburettor

The broken line (------) is applicable to R.H.drive vehicles
The chain line (——·——) is applicable to L.H.drive vehicles