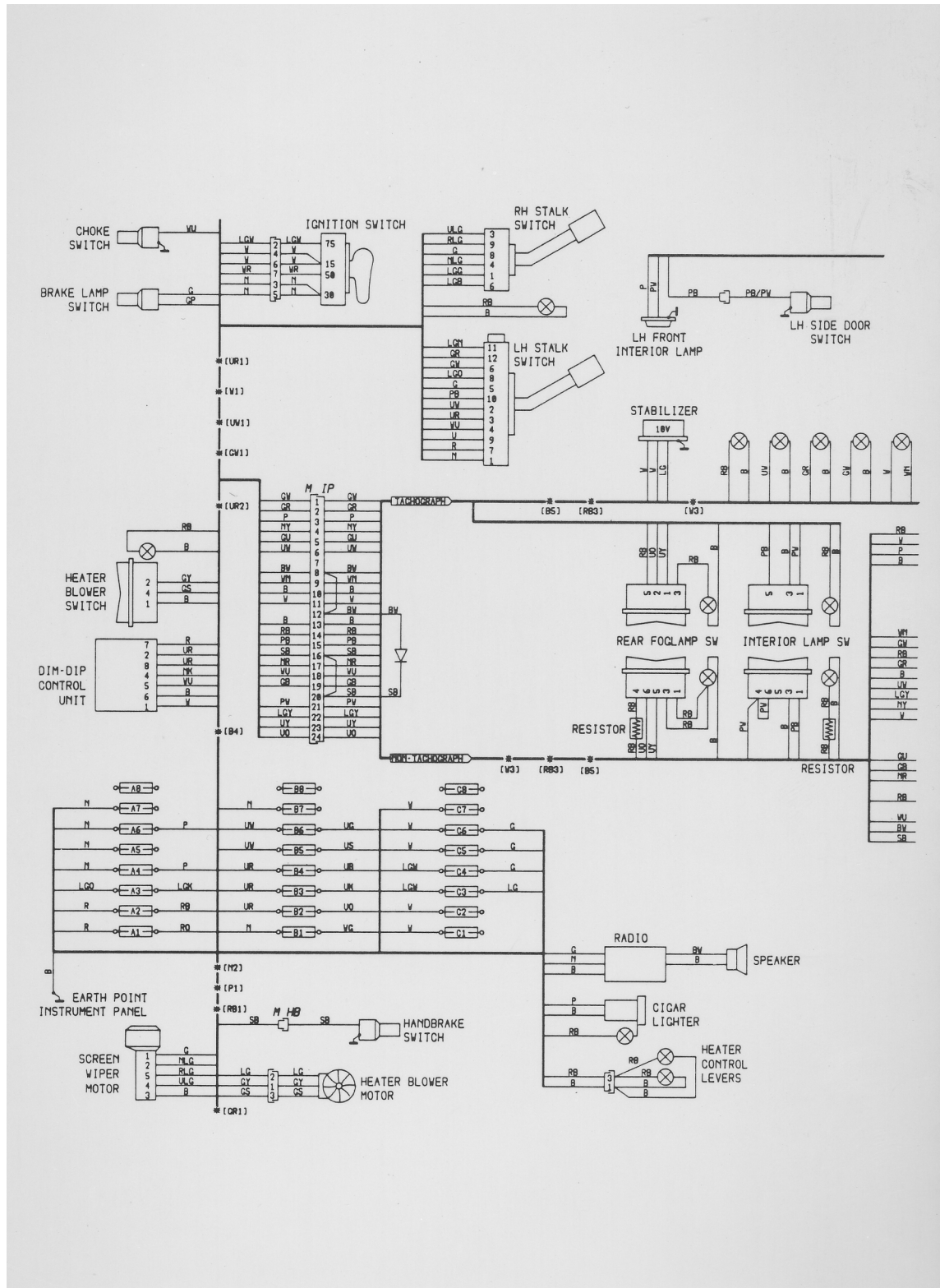


# Service Workbook

## Electrics 1

### Vehicle Wiring 1987-1992



# KEY TO CIRCUIT DIAGRAMS

## Codes

CABLE CODE	CABLE COLOUR	CONN. CODE	HARNESS NAME
B	Black	AS1	Air suspension 1
G	Green	AS2	Air suspension 2
K	Pink	BC	Rear body / chassis
LG	Light green	CL	Cab lamp
N	Brown	E	Engine
O	Orange	ED	Engine secondary (Diesel)
P	Purple	HB	Handbrake
R	Red	IL	Interior lamp
S	Slate	IP	Instrument panel
U	Blue	LS	Load space (2 x side door)
W	White	M	Main
Y	Yellow	P	Petrol pump supp. (when fitted)
		T	Fuel tank supp. (when fitted)
		CC	Centre console
		SL	Step lamp

## Basic Symbols

	Diode		Resistor		Bulb
	Cable splice		Fuse		Earth via cable
	Circuit continues on another page		Connected to an unrelated circuit		Electronic function
	Harness inter-connector		Component multi-way connector		Component single-way connector
	Earth point		Gauge		Earth via component fixing
	10 volt stabiliser		Circuit breaker		Current flow direction
	Light emitting diode (LED)				Fusible link

## Warning and Illumination Lamps

	Air suspension		Front fog lamp		Main beam
	Brake failure		Glow plug		Oil pressure
	Choke		Handbrake		Towing flasher
	Direction ind. LH		Hazard flasher		Parking lamps
	Direction ind. RH		Ignition		Rear fog lamp
	Illumination lamps		Low fuel level		High engine temperature
	Brake systems				

## Model / Types

	Van		Van/Crewbus		Van/Crewbus/Minibus
	Minibus		Chassis Cab		
	Diesel engines		Petrol engines		V8 petrol engine
	Non-tachograph		Tachograph		Model/Type specified in parentheses

# **ELECTRICS 1 - VEHICLE WIRING**

## **Service Workbook**

### **RIGHT HAND DRIVE MODELS - 1987 TO 1992**

This Service Workbook details the wiring circuits of all right hand drive LDV Vans from 1987 to 1992 (except Special Vehicle Orders). It is primarily designed to assist skilled technicians in the efficient diagnosis of electrical problems, but can also be used as a reference workbook for training purposes.

This Service Workbook should always be consulted prior to servicing or repair work.

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## INTRODUCTION

This Service Workbook details the wiring circuits of right hand drive LDV Vans from 1987 to 1992. To obtain maximum benefit, it is strongly recommended that time is taken to study the section 'How to use this Workbook', to become familiar with the concept, layout and symbols used throughout the Workbook.

**WARNINGS** and **CAUTIONS** are given throughout this Service Workbook in the following form:

**WARNING:** Procedures which must be followed precisely to avoid the possibility of personal injury.

**CAUTION:** This calls attention to procedures which must be followed to avoid damage to components.

**NOTE:** This calls attention to methods which make a job easier to perform.

## REFERENCES

References to the left and right hand side in this Service Workbook are made when viewing the vehicle from the rear.

## GENERAL PRECAUTIONS

1. Before commencing work on the electrical system, always remove rings, watches, chains etc., even if the battery is disconnected.
2. Always stop the engine before disconnecting the battery or alternator.
3. Always disconnect the vehicle battery(s) before commencing any electrical test / repair work which does not require the battery to be connected.
4. When disconnecting the vehicle battery, always disconnect the earth return (negative) cable first, and then the positive cable. On twin battery installations, disconnect both earth return (negative) cables first, and then the positive cables.  
Ensure that all electrical systems are switched off before reconnecting the battery, to avoid causing sparks or damage to sensitive electrical equipment.  
When reconnecting the battery(s), connect the positive cable(s) first then the negative cable(s).
5. Battery acid:
  - a. Battery acid is an irritant and corrosive to the skin, eyes, nose and throat, and causes burns. Avoid splashes to the skin, eyes and clothing, and wear suitable protective goggles and gloves when working with batteries. The acid can destroy ordinary protective clothing.
  - b. Ensure access to water and soap is readily available for splashing accidents.
  - c. Gases released during charging are explosive, and can be harmful if inhaled; never use naked flames or allow sparks near charging or recently charged batteries.
  - d. Ensure adequate ventilation.
  - e. If handling batteries/acid, wash hands before job breaks, before eating, smoking, drinking or using toilet facilities.





6. Alternator leads must be disconnected before arc welding any part of the vehicle.
7. Never guess the polarity of connections or wiring, use a voltmeter and refer to circuit diagrams.
8. Jump starting.
  - a. If the slave battery is mounted on another vehicle, ensure that the vehicles are not touching.
  - b. Ensure the slave battery voltage is compatible with the vehicle battery.
  - c. To connect jump leads, first connect a jump lead to the slave battery positive, and then to the vehicle battery positive. Next connect the other jump lead to the slave battery negative and then to a vehicle earth point which is at least 300mm (12 in.) away from the vehicle battery.
  - d. To disconnect jump leads, first disconnect the negative lead from the slave battery and then from the vehicle. Next disconnect the positive jump lead from the slave battery and then from the vehicle.
9. Disconnection and reconnection of components.
  - a. Before disconnecting any components, ensure the battery is disconnected or the circuit otherwise isolated.
  - b. Note the position of the various connectors before they are removed.
  - c. When reconnecting components, ensure connectors are refitted in the same positions as noted on removal. If in doubt refer to the relevant circuit diagram.
10. If renewing headlamp bulbs do not touch the bulb glass with the fingers. If necessary, wipe the glass clean using a cloth moistened in denatured alcohol (methylated spirit).
11. If renewing fuses, always switch off the affected circuit first and fit a new fuse of the correct ampere rating, (refer to label on fuse box cover or fuse list in vehicle handbook if in doubt). If the new fuse also fails, investigate the cause and rectify.

**CAUTION: DO NOT use a fuse with a higher ampere rating than specified, and under no circumstances bridge the fuse terminals with anything other than a fuse. Non-observance of the latter may cause components to be damaged and/or wiring to overheat, leading to a fire.**

**Similarly, contact breakers which regularly 'trip out' should not be prevented from doing so by mechanical means; investigate the cause and rectify.**
12. Do not work under the vehicle when supported only by a jack; always use safety stands.

## EQUIPMENT

The minimum requirement for electrical test equipment is as follows:

Digital multi-meter

Discharge tester - up to 300 amps.

Hydrometer - 200 to 300mm Mercury with temperature conversion.

Battery charger - 12 volts, 0 to 10 amps.

## REPAIRS AND REPLACEMENTS

When replacement parts are required, it is essential that only genuine Leyland DAF Parts are used.

### HOW TO USE THIS WORKBOOK

This Service Workbook is a comprehensive document, providing not only detailed circuit diagrams for each LDV model and type, but also diagrams and illustrations to assist with the location of harnesses and connectors on each vehicle.

We strongly recommend that you take time to read the following instructions and become familiar with the workbook.

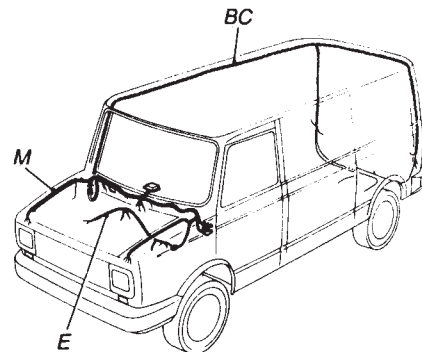
### DESCRIPTION OF ELECTRICAL DIAGRAMS

There are three types of diagram in this Workbook:

- A. Harness routing.
- B. Circuit diagrams.
- C. Vehicle wiring diagrams

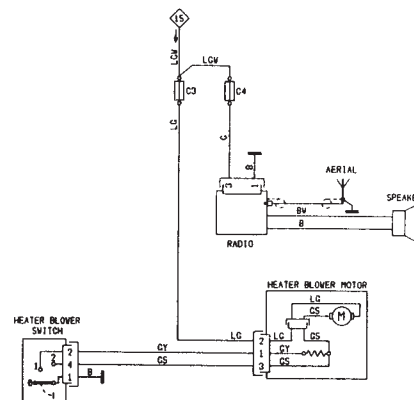
#### Harness Routing (pages 10 to 13)

These illustrations show the main harness runs in each model, together with other useful information including relay identification. The example opposite includes the following harnesses: main (M), engine (E) and rear body/ chassis (BC).



#### Circuit Diagrams (pages 15.02 on)

These are individual diagrams, one for each electrical function, and sub-divided where necessary to cater for model types. They show components and their internal functions, wiring and colour codes, cable splices, connectors and numbering, and interconnecting page numbers. To simplify the diagrams, circuit feeds generally start from the relevant fuse or switch, and the routing of earth cables is omitted. Feeds to the fuse or switch are found by referring to the page number in the diamond .



The example opposite illustrates the heater and radio circuits.

Routing of earth cables are found on page group 31. These show how individual earth cables are routed from a component to their eventual earth point.

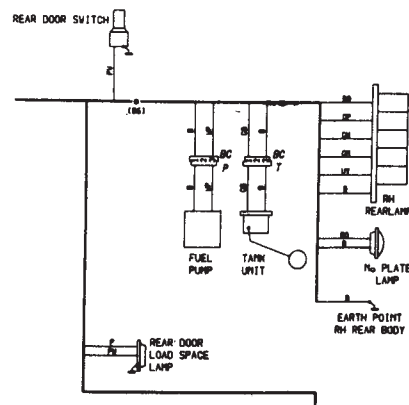
#### Vehicle Wiring Diagrams (in rear cover pocket)

These diagrams show all the wiring, connectors and components in the electrical system.

The layout of the diagrams is such that the location of the components corresponds with their location on the vehicle.

It is not intended that these diagrams be used for circuit tracing, but only to give an overall view of the complete system for reference.

The example opposite shows a section of one of these diagrams.



**KEY TO CIRCUIT DIAGRAMS**

**Codes**

CABLE CODE	CABLE COLOUR	CONN. CODE	HARNESS NAME
B	Black	AS1	Air suspension 1
G	Green	AS2	Air suspension 2
K	Pink	BC	Rear body / chassis
LG	Light green	CL	Cab lamp
N	Brown	E	Engine
O	Orange	ED	Engine secondary (Diesel)
P	Purple	HB	Handbrake
R	Red	IL	Interior lamp
S	Slate	IP	Instrument panel
U	Blue	LS	Load space (2 x side door)
W	White	M	Main
Y	Yellow	P	Petrol pump supp. (when fitted)
		T	Fuel tank supp. (when fitted)
		CC	Centre console
		SL	Step lamp

**Basic Symbols**

	Diode		Resistor		Bulb
	Cable splice		Fuse		Earth via cable
	Circuit continues on another page		Connected to an unrelated circuit		Electronic function
	Harness inter-connector		Component multi-way connector		Component single-way connector
	Earth point		Gauge		Earth via component fixing
	10 volt stabiliser		Circuit breaker		Current flow direction
	Light emitting diode (LED)				Fusible link

**Warning and Illumination Lamps**

	Air suspension		Front fog lamp		Main beam
	Brake failure		Glow plug		Oil pressure
	Choke		Handbrake		Towing flasher
	Direction ind. LH		Hazard flasher		Parking lamps
	Direction ind. RH		Ignition		Rear fog lamp
	Illumination lamps		Low fuel level		High engine temperature
	Brake systems				

**Model / Types**

	Van		Van/Crewbus		Van/Crewbus/Minibus
	Minibus		Chassis Cab		
	Diesel engines		Petrol engines		V8 petrol engine
	Non-tachograph		Tachograph	( )	Model/Type specified in parentheses



## Page Numbering

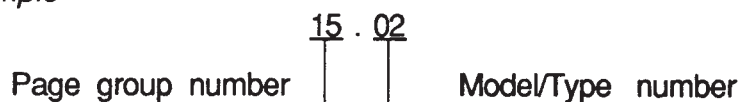
Two styles of page numbering are used as follows, to distinguish between the main section containing circuit diagrams and the remainder of the workbook.

All sections except circuit diagrams - **3**  
(white number in black square)

Circuit diagrams section - 15.02

## CIRCUIT DIAGRAM PAGE NUMBERING

### Example



The page group number before the dot point uses the DIN standard for electrical functions wherever possible, and refers to the page or group of pages which cover that function.

e.g.. Page group 15 = Ignition Circuit  
Page group 30 = Battery Circuit  
Page group 31 = Earth circuit

Thus when looking at a diagram which shows a feed from Diamond 30  it may be deduced that it is a battery feed, thus avoiding having to refer to page group 30.

The number after the dot point is used to identify the Model / Types within that function. Model / Type numbering is sequential starting from 1987 model year.

To keep the number of diagrams to a manageable quantity, several Model / Types may be shown on one page. Symbols are used to identify the Model / Type and, where these appear on a diagram, the details shown apply only to that Model / Type.

**NOTE:** The circuit diagrams and the vehicle wiring diagrams may show circuits which have not been fitted on a given vehicle. This is because the diagrams must give a complete view of all installations that may possibly be found on a vehicle.

**EXPLANATION OF ELECTRICAL DIAGRAMS**

These pages give additional information to expand on the 'Key to Circuit Diagrams' summary shown inside the front cover and on page 4.


**Cable Colour Codes** (additional information)


Cables are either single colour or two colour. Two-colour cables have a Main and a Tracer colour. All single colours used and their code letters are listed in the chart on page 4.


Where a two-colour cable is used, the code for the Main colour is shown first followed by the code for the Tracer colour.


- e.g. R = Red - single colour
- B = Black - single colour
- RB = Red with Black tracer - two colour

**Basic Symbols** (additional information)

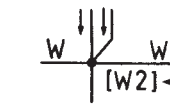
 Diode Current flows in one direction only, from left to right in the symbol shown. Current trying to flow from right to left is blocked by the diode.


 Fuse The text adjacent to the fuse gives its position in the fusebox. Fuse shown is in Row B, Position number 6.

 Where an extra supplementary fusebox is fitted, this is identified by 'X' followed by the fusebox number, with the fuse position number shown directly below. Fuse shown is in eXtra fusebox number 1, Position number 4.

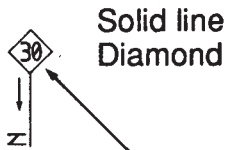
 Where a single in-line fuse is fitted, this is identified by 'LF' followed by the fuse number. Fuse shown is Line Fuse number 2.

**Cable Splice** These are part of the wiring harness and are used where, for example, a feed from a single terminal on a switch has to go to several locations on the vehicle. The text within the brackets gives the cable colour code and identification number of the splice. By referring to the Vehicle Wiring Diagram their approximate location on the vehicle may be found.

 Splice shown is White number 2.

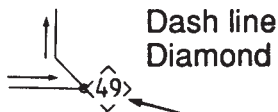
 Splice shown is Black number 3.

An arrow indicates the direction of current flow. A splice in the 'Live' side of a circuit will have arrows indicating where current flows into the splice, as [W2] splice above. A splice in the 'Earth' side of a circuit will have arrows indicating where current flows out of the splice, as in [B3] splice above. If a splice has no arrows shown, current flow may be in either direction depending on the status of the circuit at the time.



Solid line Diamond

The number within the diamond indicates the page number on which further details of the circuit may be found. An arrow indicates direction of current flow at this point. If no arrow is shown, current flow may be in either direction depending on the status of the circuit at the time. Diamond shown thus indicates that current is flowing into the circuit at this point, and further details may be found on page group 30.

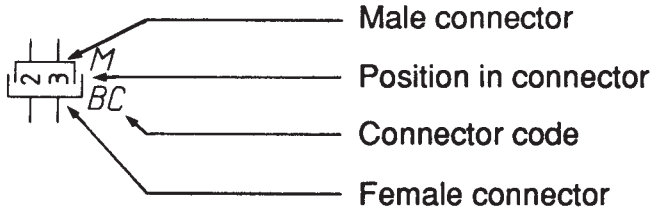


Dash line Diamond

As for Solid line Diamond above, but this is a connection point to an unrelated circuit, and is shown only to give a complete picture of the cable routing. Diamond shown indicates that this cable makes a connection to an unrelated circuit shown on page group 49.

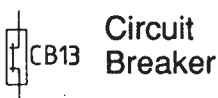
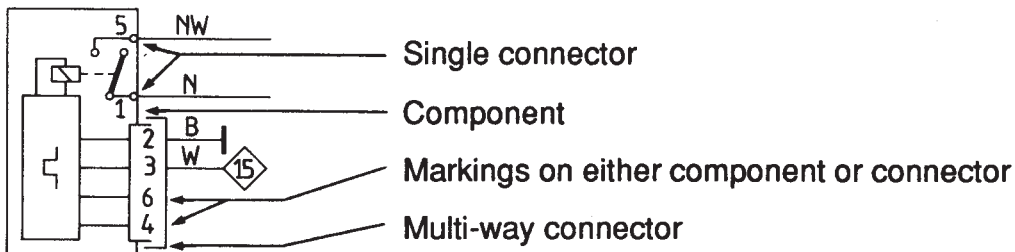
Harness Inter-Connector

Harness inter-connectors are identified by connector codes (see page 4 for full listing). By referring to the appropriate Harness Routing illustration or Vehicle Wiring Diagram, their approximate location on the vehicle may be found. Position numbers given correspond to the numbers printed on the actual connector. If no position is given the connector is either a single pole type, or the actual connector has no markings.



Component Connectors

Markings shown where cables meet components are generally those that appear on the actual component. If the component has no markings, those that appear on the actual connector are shown instead.



Circuit Breaker

Where a circuit breaker is fitted, this is identified by 'CB' followed by the circuit breaker number. Circuit breaker shown is Circuit Breaker number 13.



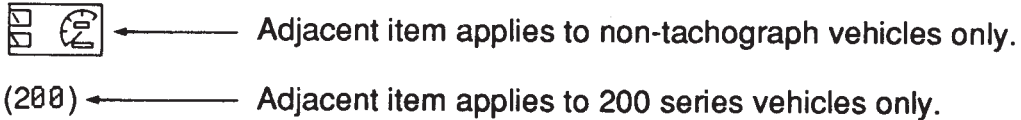
## Switch and Relay Positions

Switches and relays etc. are drawn in the 'Off' position.

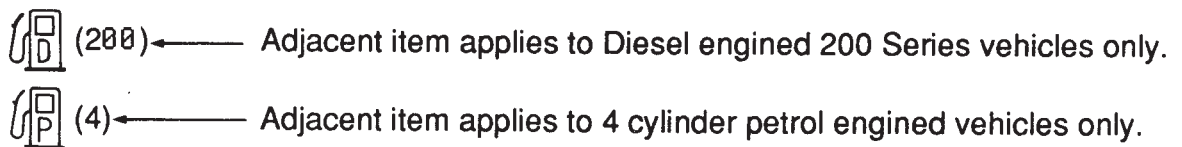
General driver operable switches are marked	'0' for Off position '1' for On position
Ignition switch is marked	'O' for Off position 'I' for Accessory position 'II' for Ignition position 'III' for Start position
Direction indicator switch is marked	'L' for LH flashers 'R' for RH flashers
Wiper switch is marked	'O' for Off position 'I' for Intermittent position 'I' for Slow position 'II' for Fast position
Light switch is marked	'O' for Off position 'P' for Parklamp position 'H' for Headlamp position
Dip switch is marked	'M' for Main beam position 'D' for Dip beam position 'F' for Flash position
Heater blower switch is marked	'0' for Off position '1' for 1st speed position '2' for 2nd speed position

**Model/Type** (additional information)

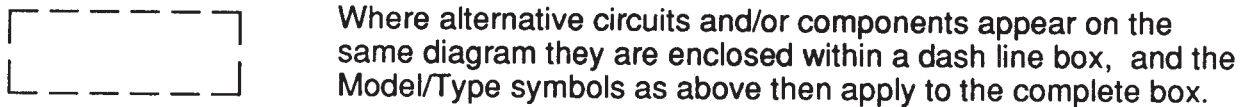
In their simplest form the Model/Type symbols indicate that the adjacent item is applicable to that Model/Type only.



In some cases, the Model/Type needs to be more specific and symbols may be combined.



In other cases there may be more than one Model/Type, and two or more symbols will be shown separated by a '+' sign.



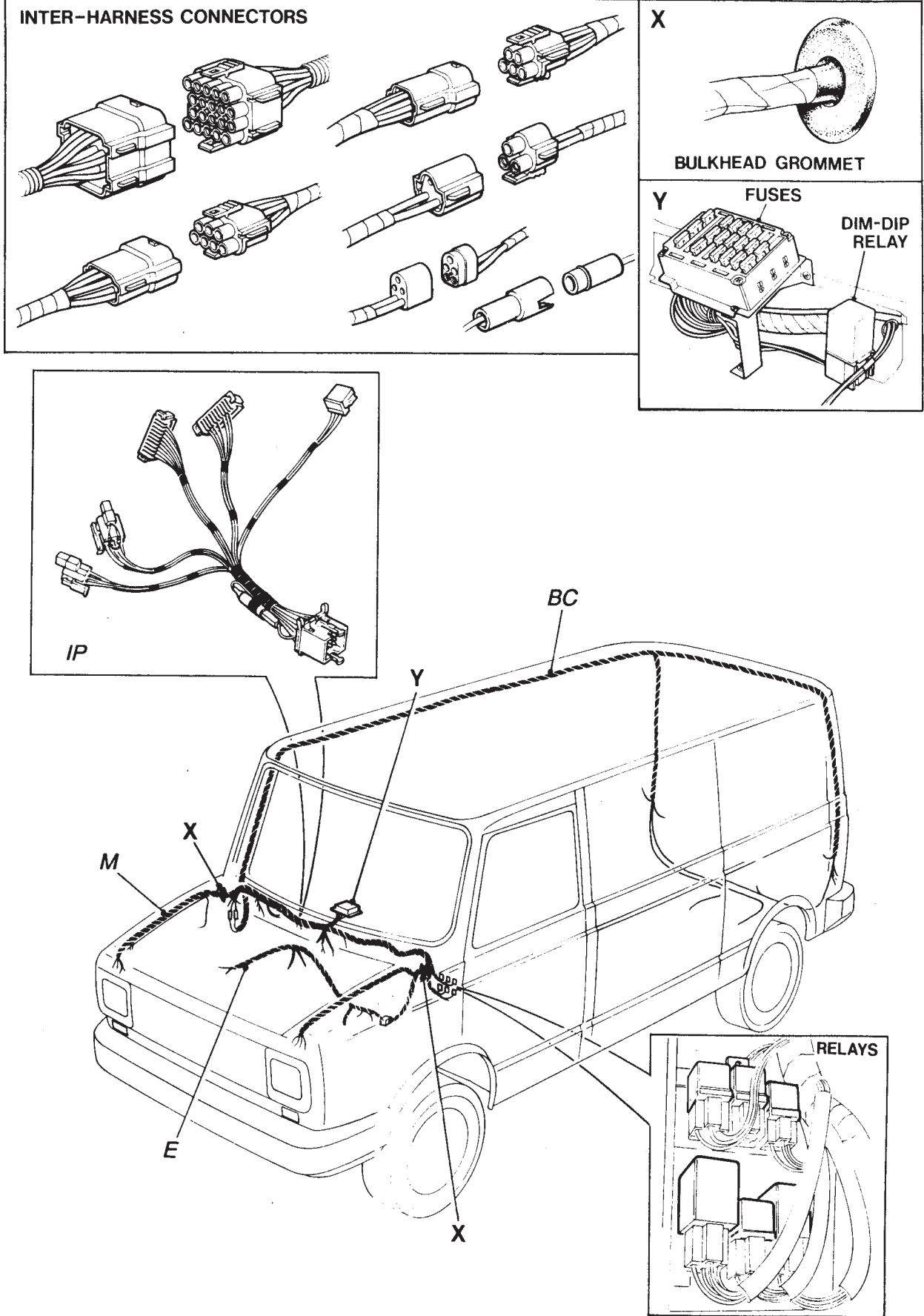
**NOTE:** Some diagram pages are Model/Type specific ( see circuit diagram page index), and in these cases that Model/Type symbol does not appear on the diagram.

**Accessories / Dealer-fit Diagrams**

**NOTE:** Diagrams for accessories or dealer-fit equipment (as opposed to factory-fit options) show the complete circuit from feed point to earth point. These diagrams indicate the recommended wiring and connection points but, as the equipment is installed after the vehicle has left the factory, LDV Vans cannot warrant that the vehicle will be wired exactly as shown in the diagram.

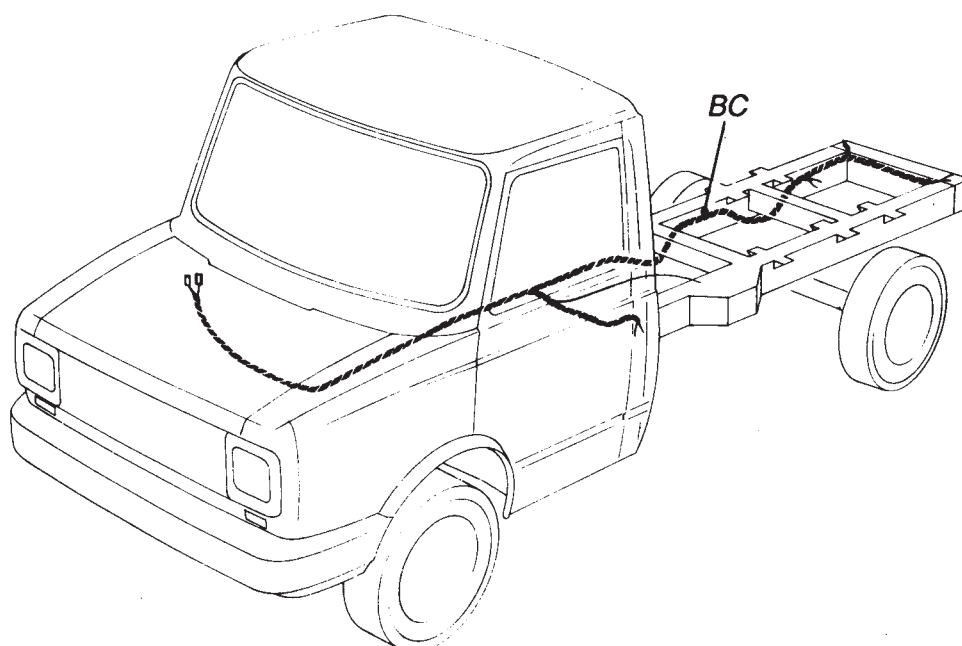
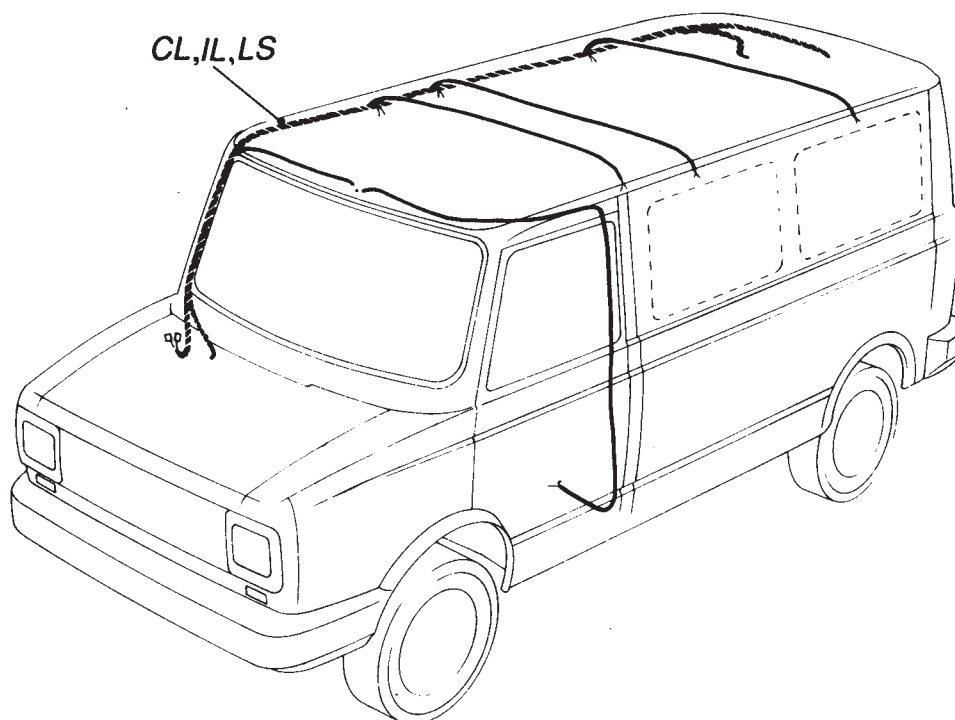


**HARNESS ROUTING - 200 MODELS**

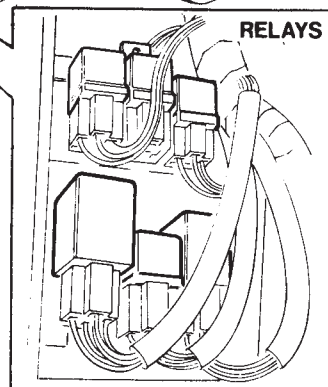
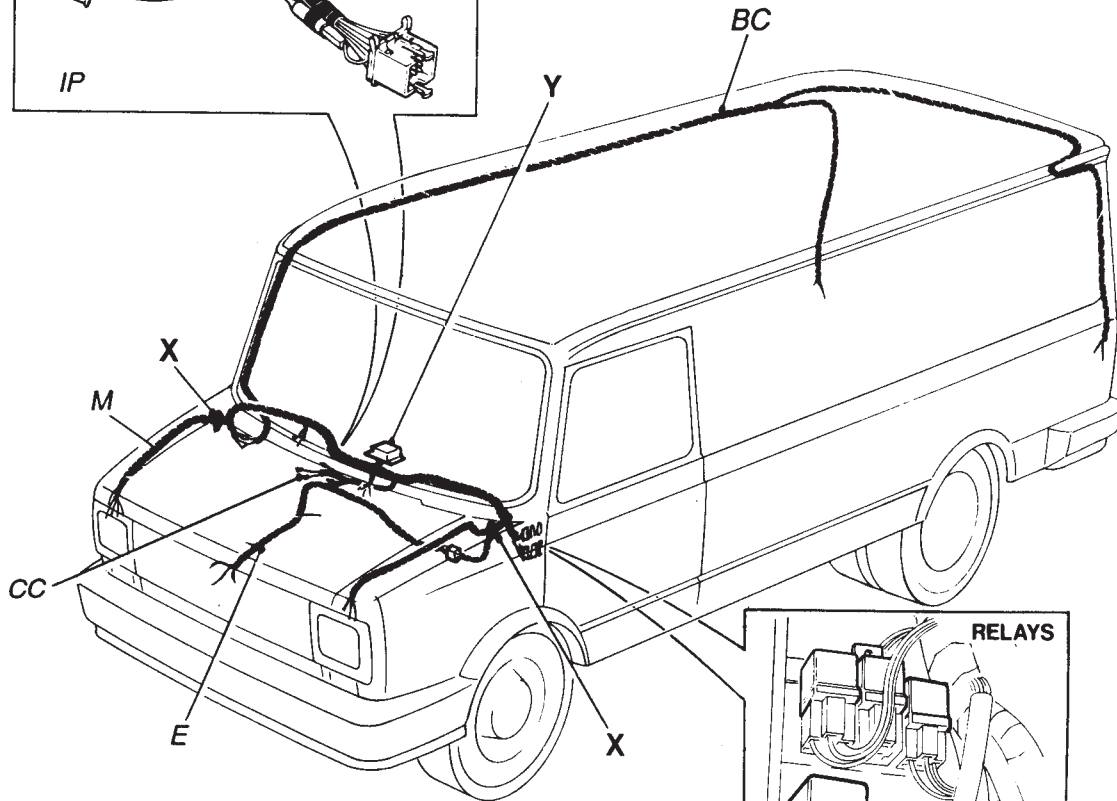
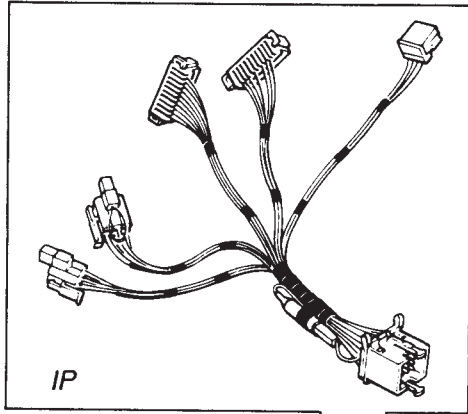
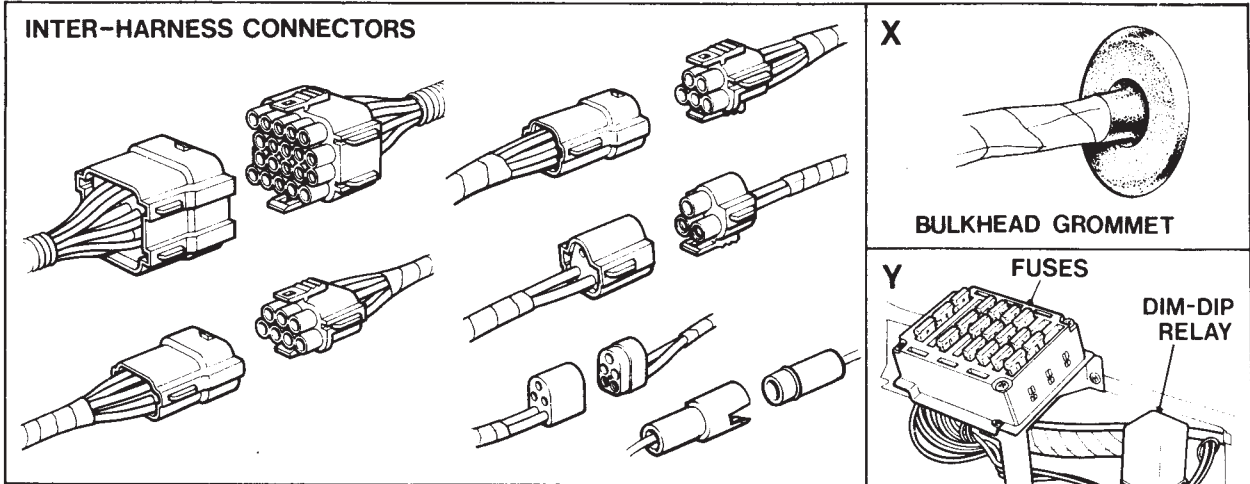


CONNECTOR CODE	HARNESS NAME
BC	Rear body / chassis
CL	Cab lamp
E	Engine
IL	Interior lamp
IP	Instrument panel
LS	Load space (2 x side door)
M	Main

NOTE: These diagrams are to be used only as a guide to harness runs; variations do occur from model to model.

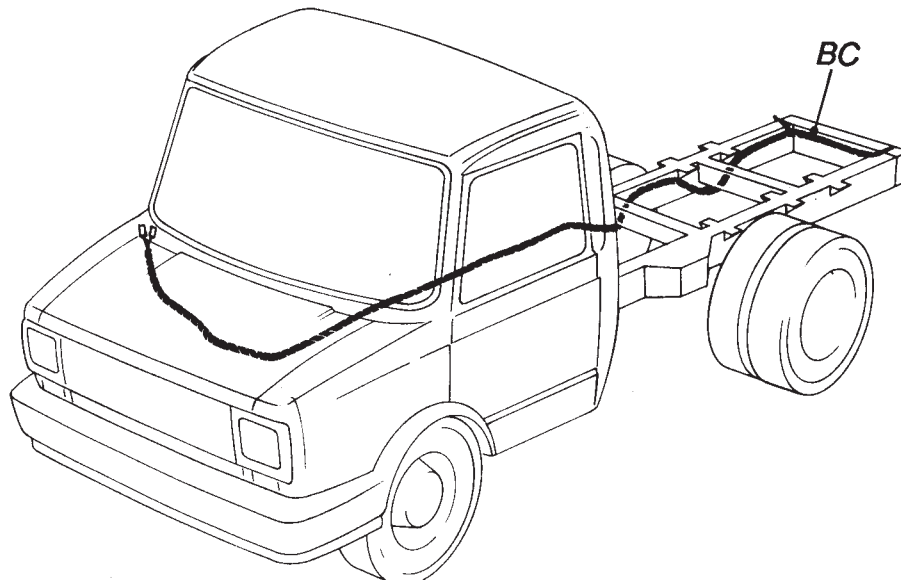
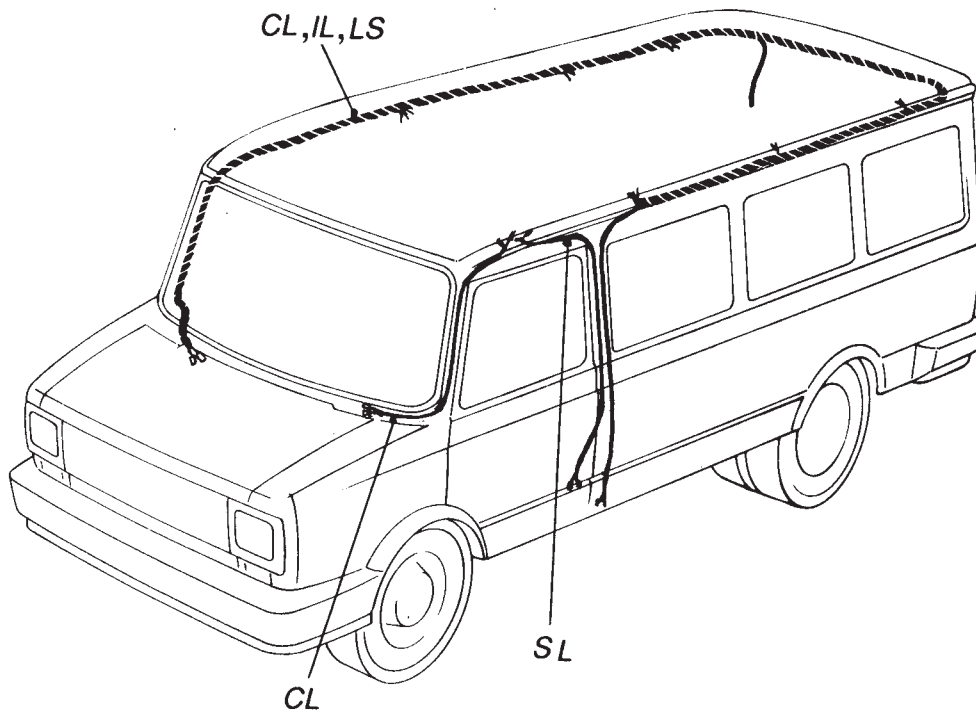


HARNESS ROUTING - 400 MODELS (1991/92 MY illustrated)

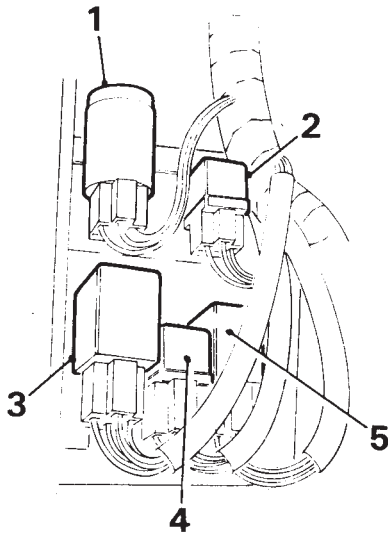


CONNECTOR CODE	HARNESS NAME
BC	Rear body / chassis
CC	Centre console
CL	Cab lamp
E	Engine
IL	Interior lamp
IP	Instrument panel
LS	Load space (2 x side door)
M	Main
SL	Step lamp

NOTE: These diagrams are to be used only as a guide to harness runs; variations do occur from model to model.



**RELAY IDENTIFICATION**



**Typical relay cluster  
(1990 MY, 400 Diesel shown)**

1. Coolant temperature buzzer
2. Headlamp relay
3. Wiper / delay relay
4. Starter relay
5. Flasher unit

**NOTE:** The layout and application of relays etc. varies dependent on vehicle specification e.g. model year, diesel or petrol.

The relays can be identified by the colour of the connector blocks into which they are fitted, the number of terminals used in each block and by the wiring colour codes (see following data).

**1987 - 1988 MY vehicles**

Connector block colour	Relay / component	Terminals used	Wire colour codes
Yellow	Manifold heater relay (4 cyl. petrol)	4	GK, WP, WG, B
Blue	Fuel pump relay (Petrol)	5	WR, W, WP, WN, W
White	Headlamp relay	4	WU, B, W, U
Black	Wiper delay/relay	5(+1†)	G, B, NLG, LGB, NLG (+LGG†)
Blue	Starter relay (all Diesel, V8)	4	NU, B, N, WR
Red	Flasher unit	4	LGN, B, LGY, LGK

† Single connection, direct to relay.

**1989 - 1990 MY vehicles**

Connector block colour	Relay / component	Terminals used	Wire colour codes
Yellow	Coolant temp.buzzer (400 Diesel)	2	G, BO
Yellow	Manifold heater relay (4 cyl. petrol)	4	GK, WP, WG, B
Blue	Fuel pump relay (Petrol)	5	WR, W, WP, WN, W
White	Headlamp relay	4	WU, B, W, U
Black	Wiper delay/relay	5(+1†)	G, B, NLG, LGB, NLG (+LGG†)
Blue	Starter relay (all Diesel, V8)	4	NU, B, N, WR
Red	Flasher unit	4	LGN, B, LGY, LGK

† Single connection, direct to relay.



1990 - 1991 MY vehicles

Connector block colour	Relay / component	Terminals used	Wire colour codes
Yellow	Coolant temp.buzzer (400 Diesel)	2	G, BO
Yellow	Manifold heater relay (4 cyl. petrol) or Fuel heater relay (400 Diesel '91 MY)	4	GK, WP, N, B
Blue	Fuel pump relay (Petrol)	5	WR, W, WP, WN, W
White	Headlamp relay	4	WU, B, W, U
Black	Wiper delay/relay	5(+1†)	G, B, NLG, LGB, NLG (+LGG†)
Blue	Starter relay (all Diesel, V8)	4	NU, B, N, WR
Red	Flasher unit	4	LGN, B, LGY, LGK

† Single connection, direct to relay.

1991 - 1992 MY vehicles

Connector block colour	Relay / component	Terminals used	Wire colour codes
Yellow	Coolant temperature buzzer (400 Diesel with tachograph)	2	G, BO
Yellow	Manifold heater relay (4 cyl. petrol) or Fuel heater relay (400 Diesel)	4	GK, WP, N, B
Blue	Fuel pump relay (Petrol)	5	WR, W, WP, WN, W
White	Headlamp relay	4	WU, B, W, U
Black	Wiper delay/relay	5(+1†)	G, B, NLG, LGB, NLG (+LGG†)
Blue	Starter relay (all Diesel, V8)	4	NU, B, N, WR
Red	Flasher unit	4	LGN, B, LGY, LGK

† Single connection, direct to relay.



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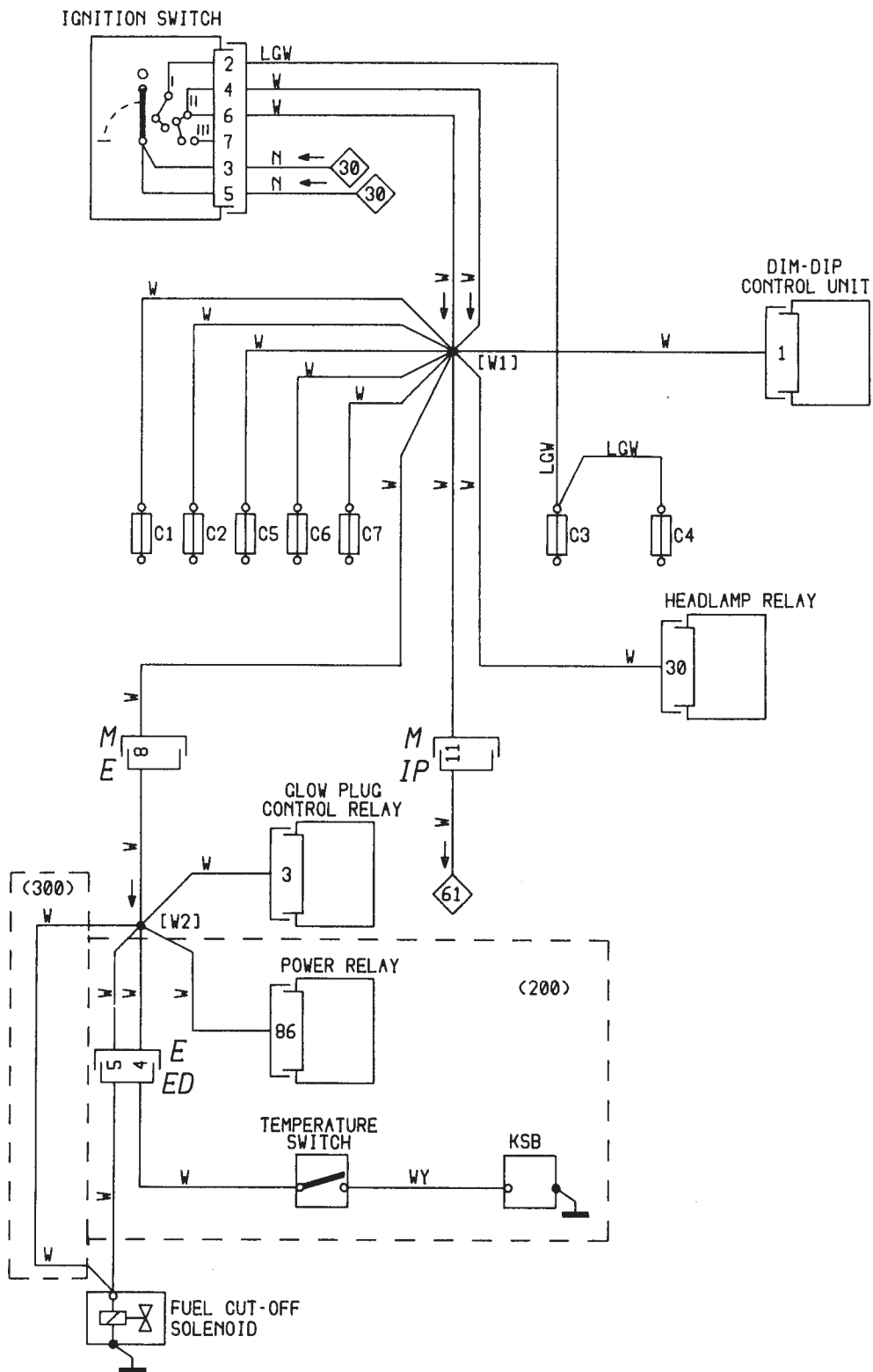


MODEL/TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
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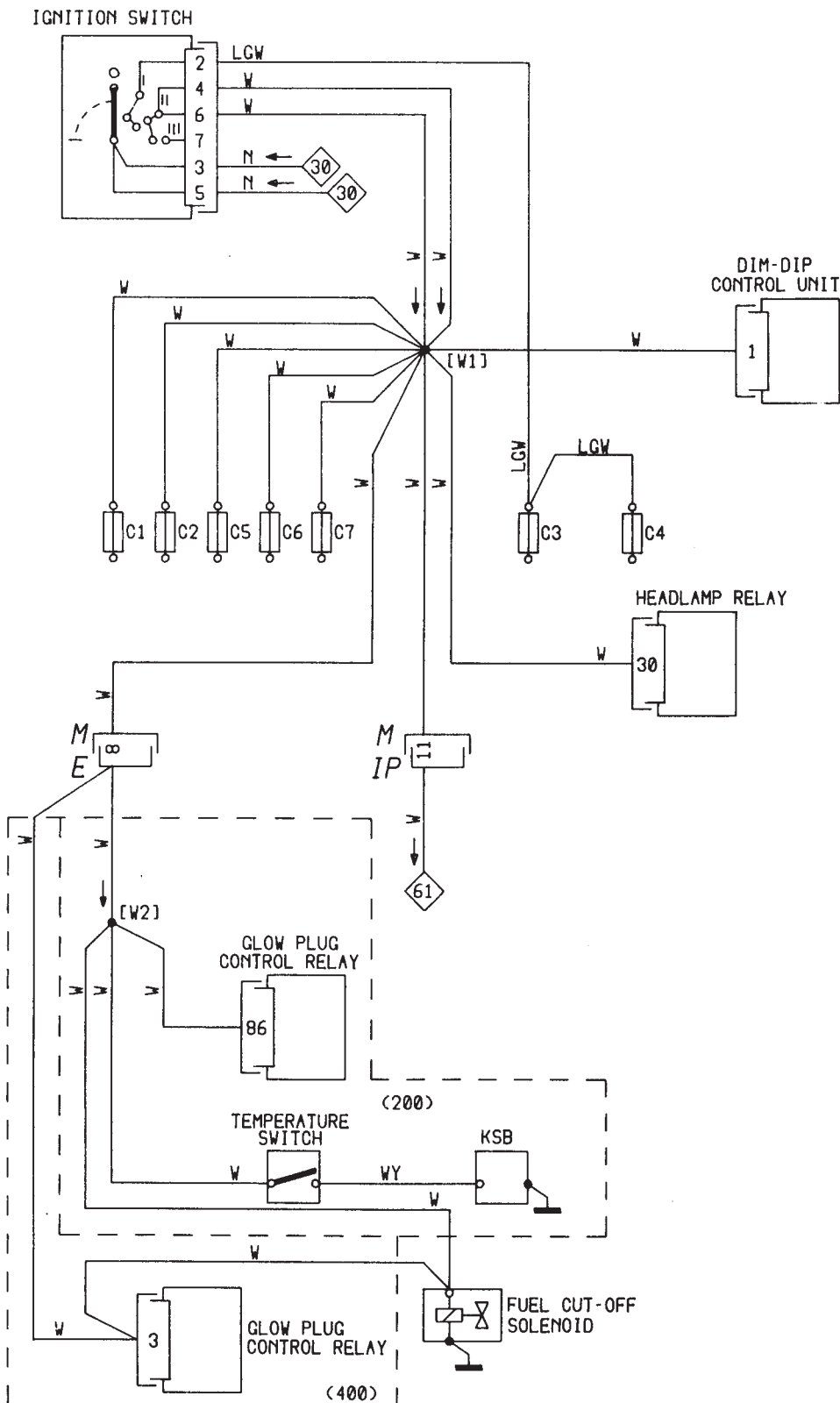




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL ALL	1987-88	UNFUSED IGNITION POWER ENGINE STOPPING	15.02

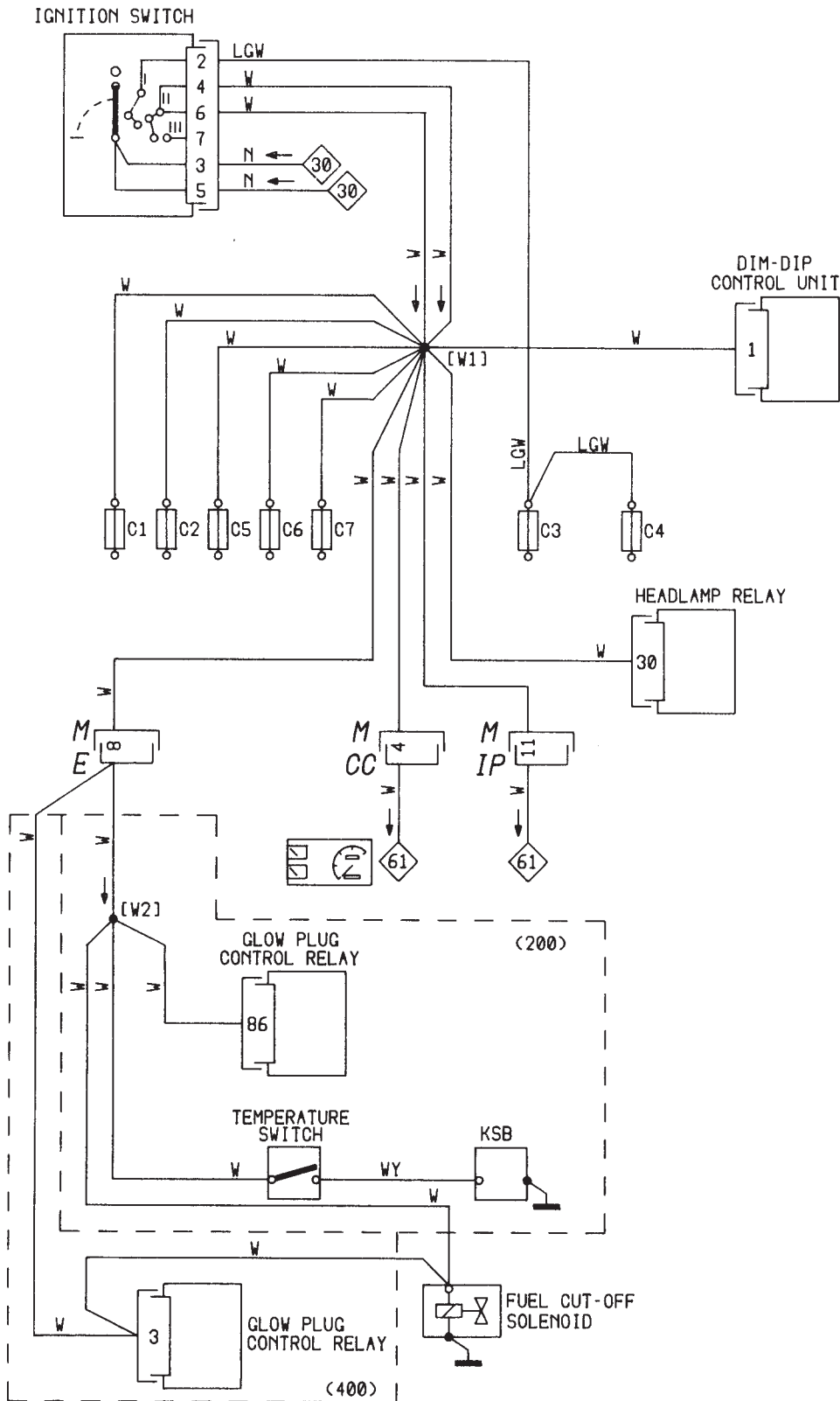


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL ALL	1989-91	UNFUSED IGNITION POWER ENGINE STOPPING	15.03

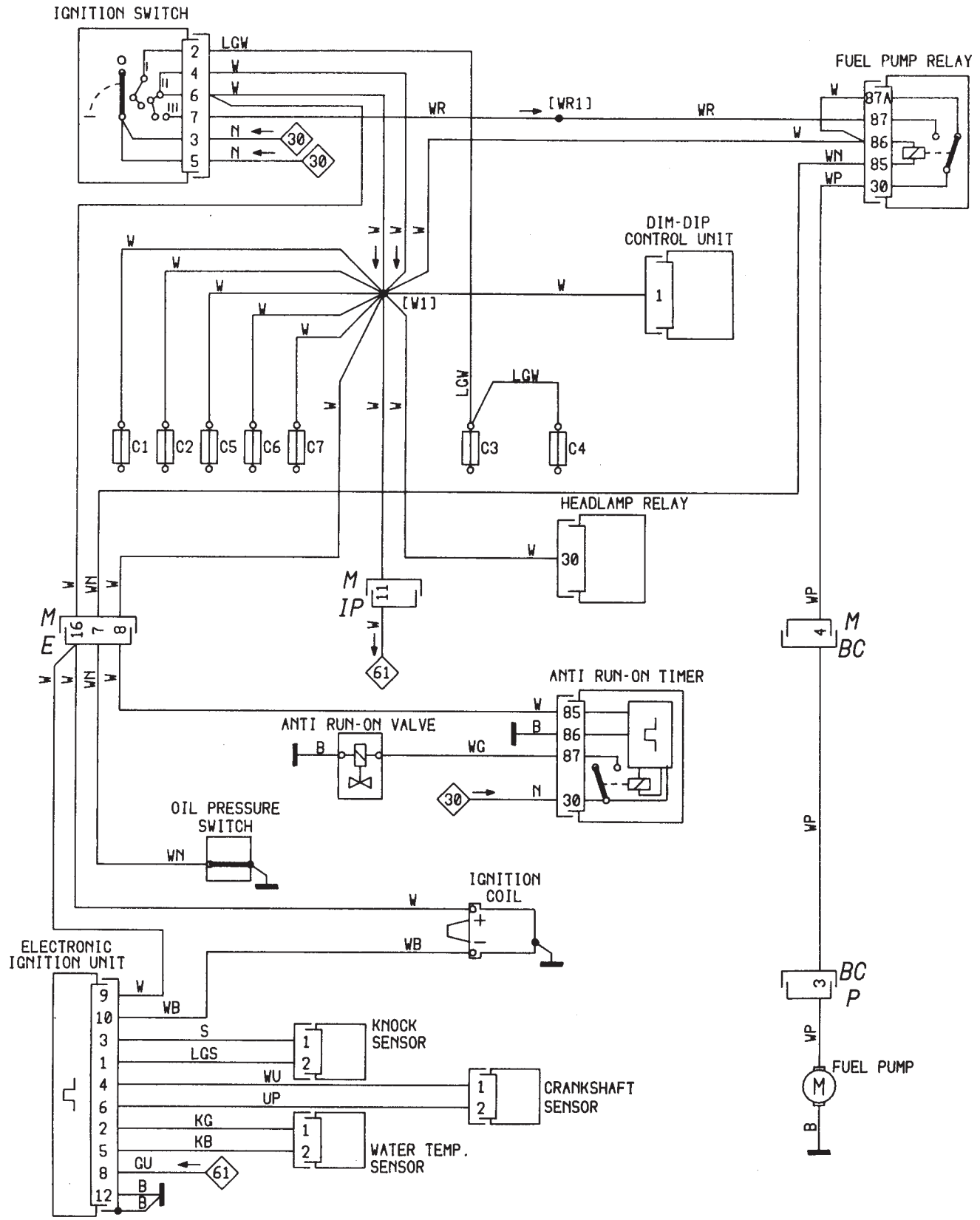




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL ALL	1991-92	UNFUSED IGNITION POWER ENGINE STOPPING	15.05

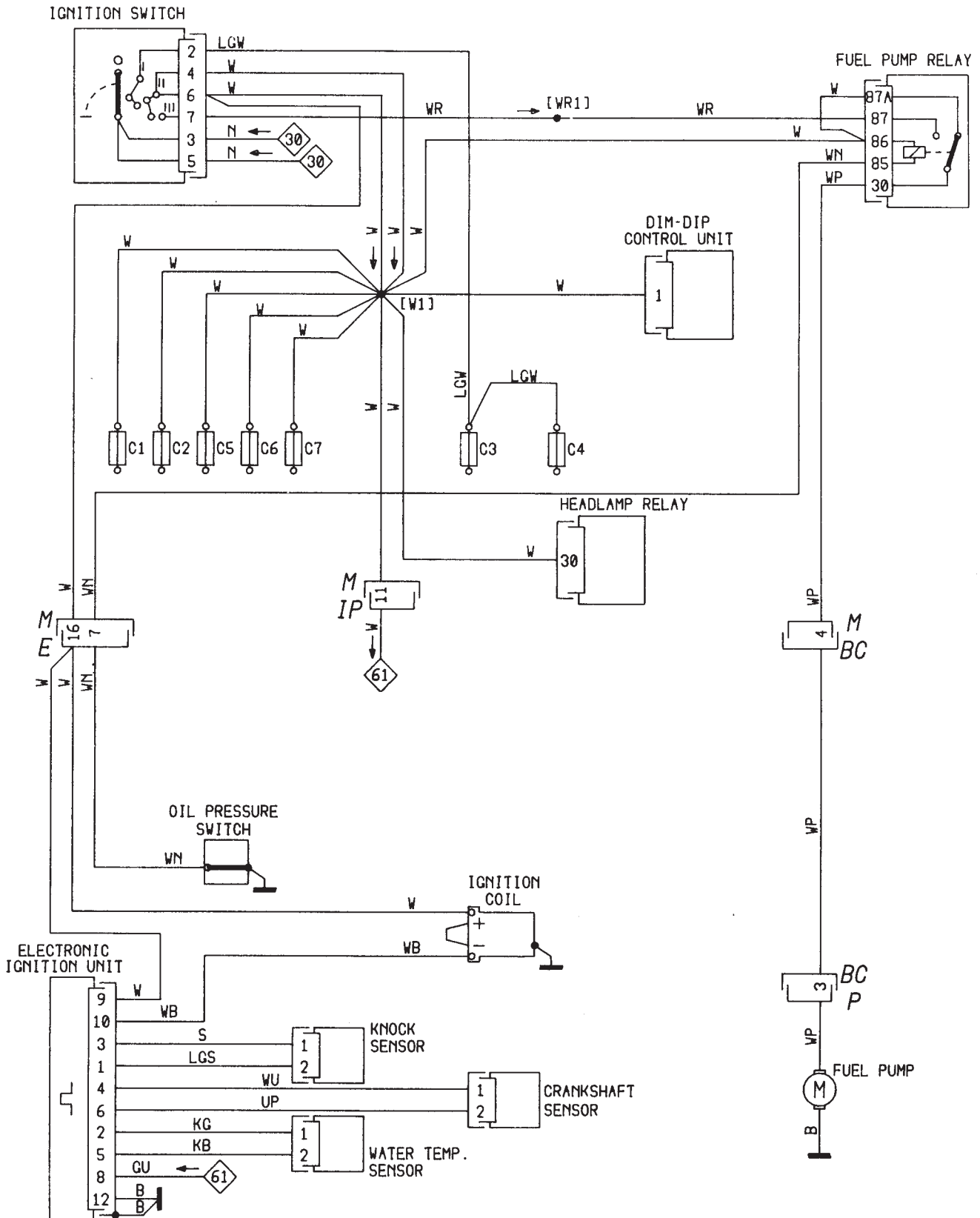


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1987-90	UNFUSED IGNITION POWER ENGINE STOPPING / FUEL PUMP	15.22

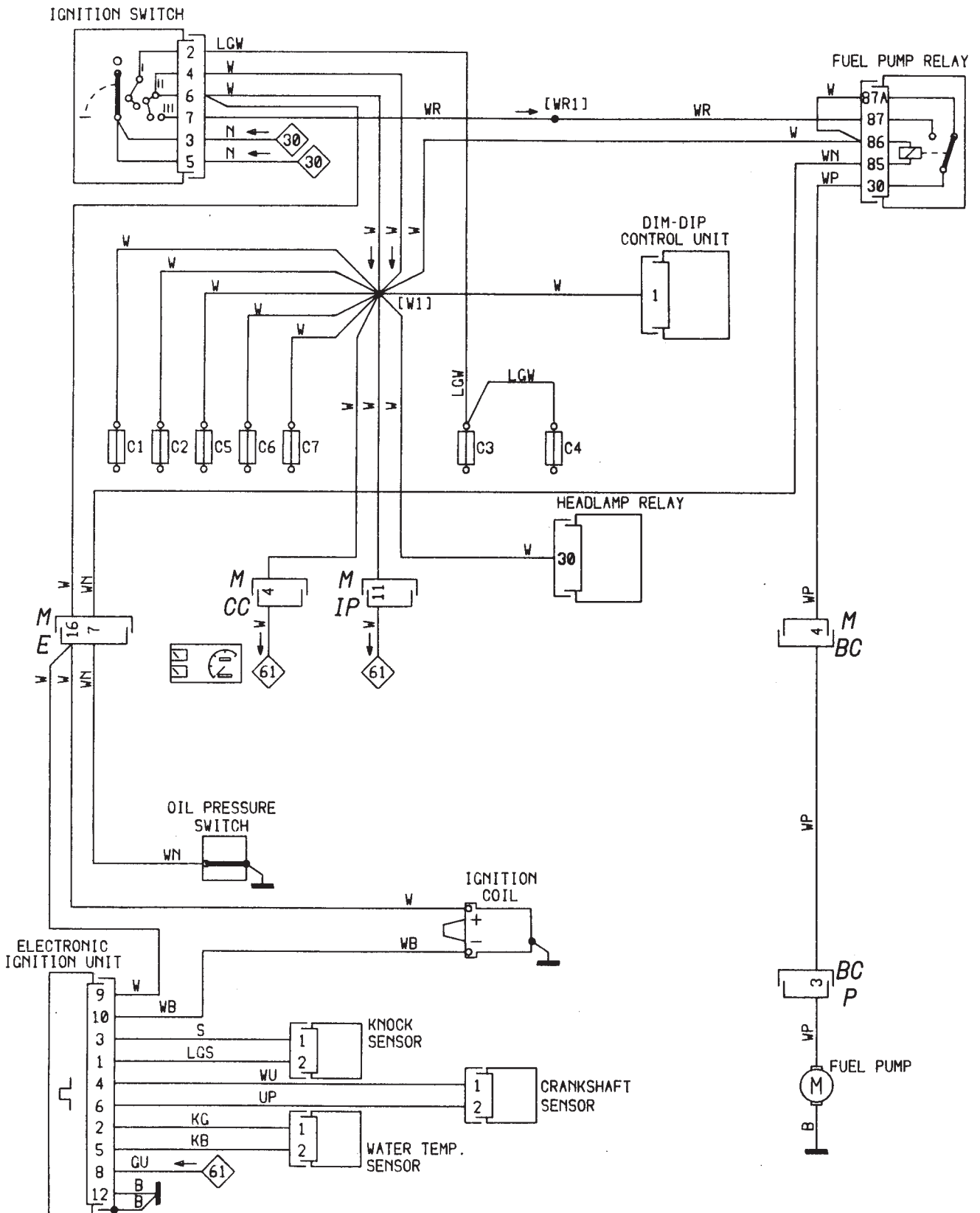




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1990-91	UNFUSED IGNITION POWER FUEL PUMP	15.23



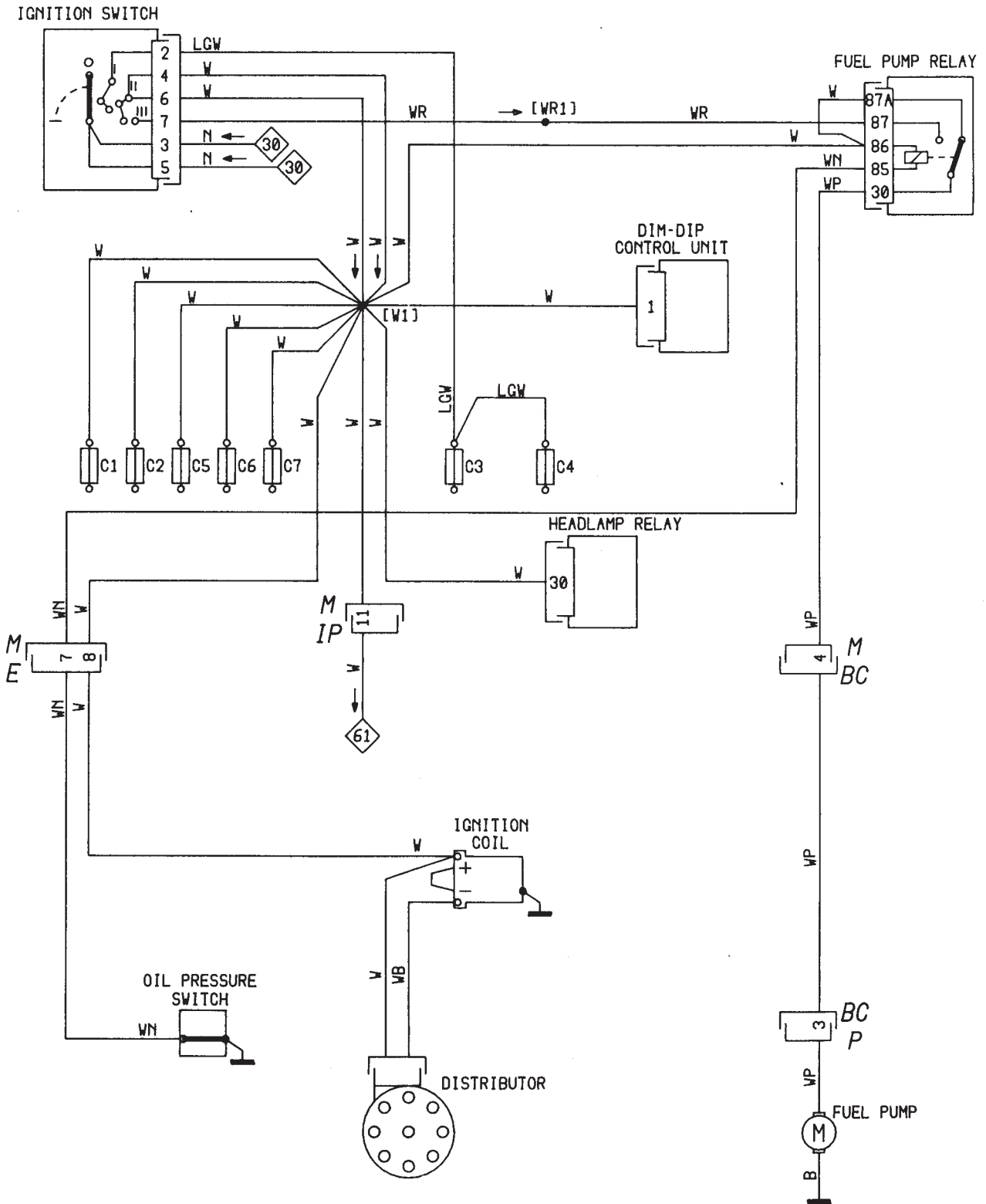
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1991-92	UNFUSED IGNITION POWER FUEL PUMP	15.24





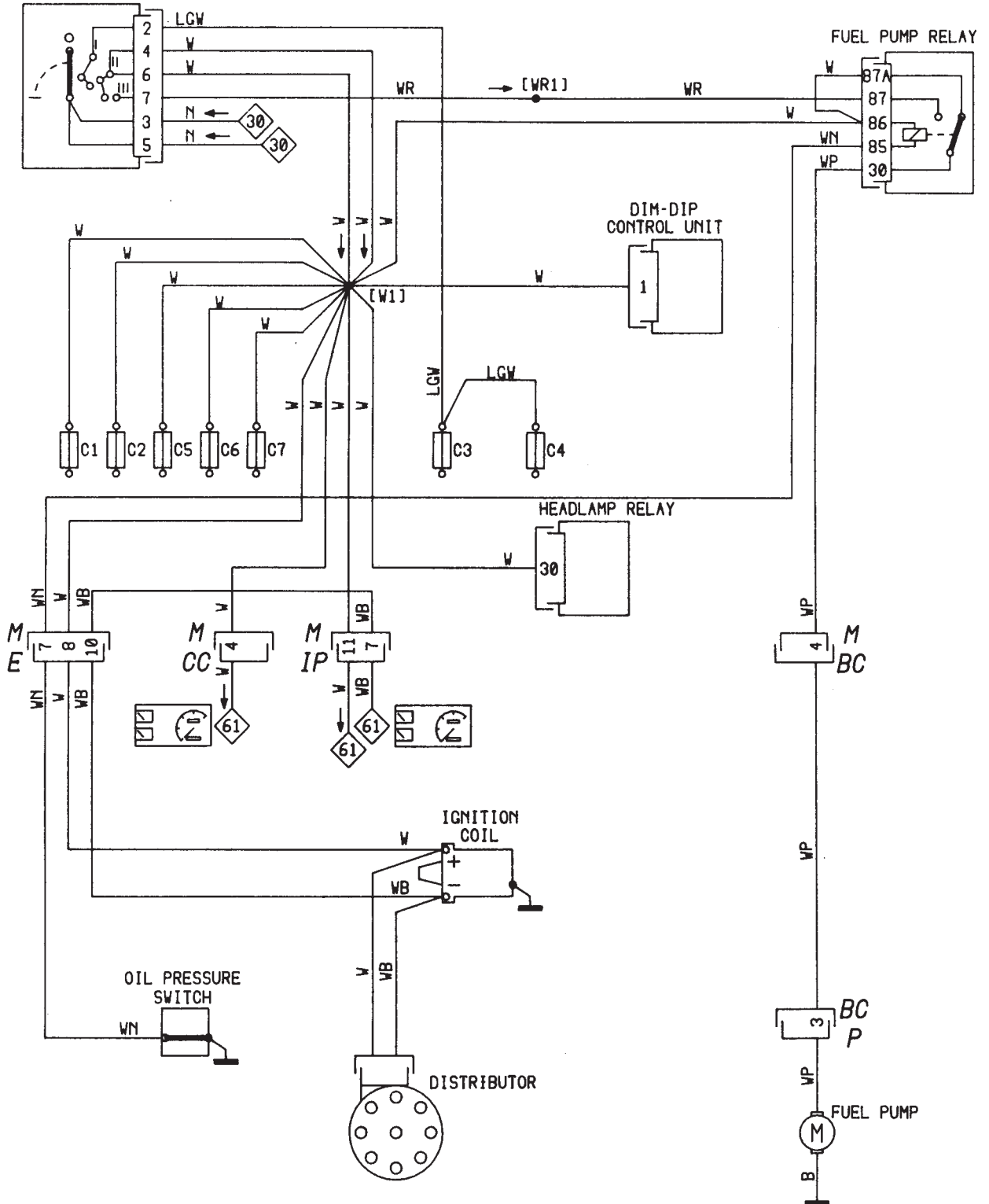


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
V8 PETROL	1987-91	UNFUSED IGNITION POWER FUEL PUMP	15.42



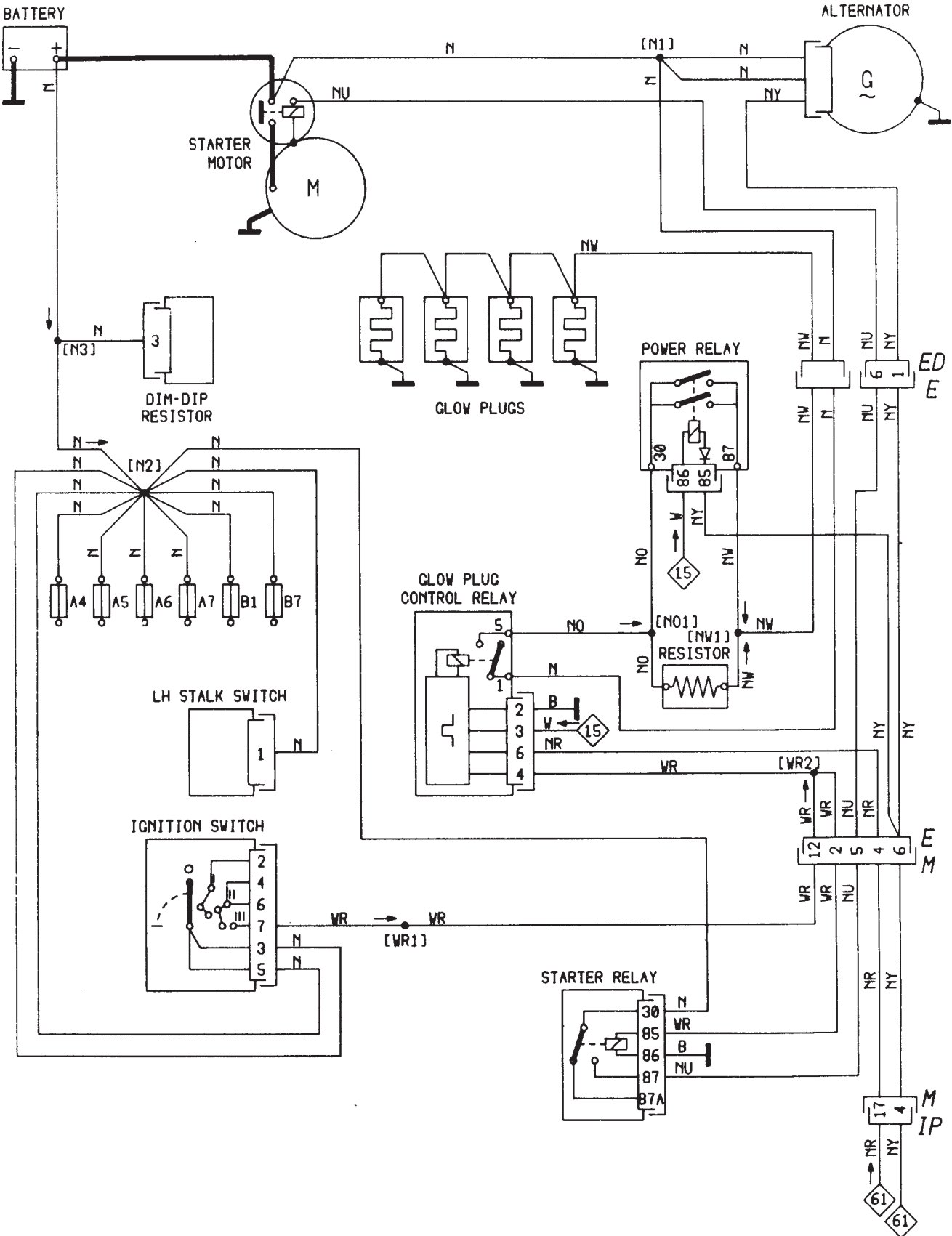
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
V8 PETROL	1991-92	UNFUSED IGNITION POWER FUEL PUMP	15.44

IGNITION SWITCH

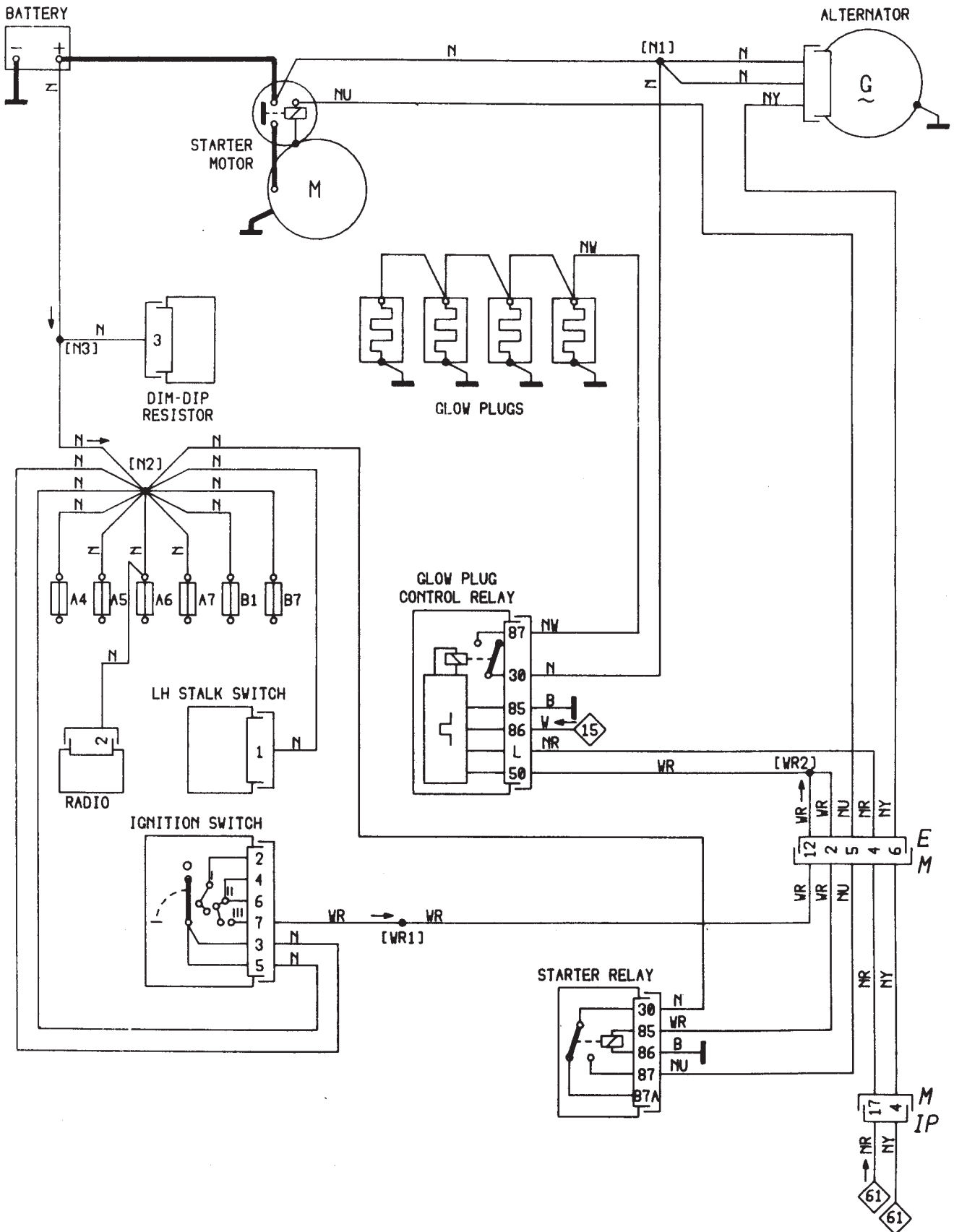




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 200 TN44	1987-88	UNFUSED BATTERY POWER STARTING / CHARGING	30.02

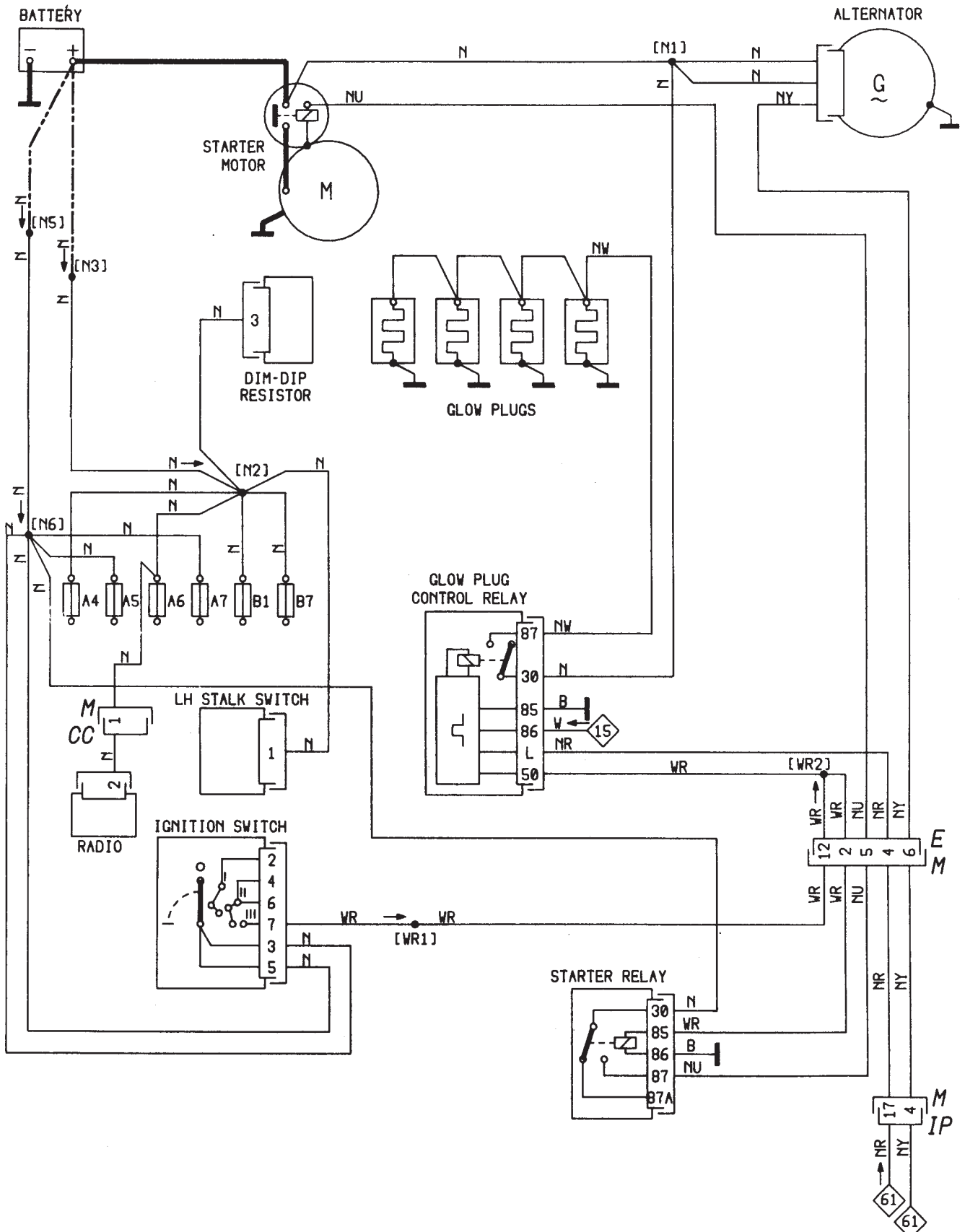


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 200 TN44	1989-91	UNFUSED BATTERY POWER STARTING / CHARGING	30.03

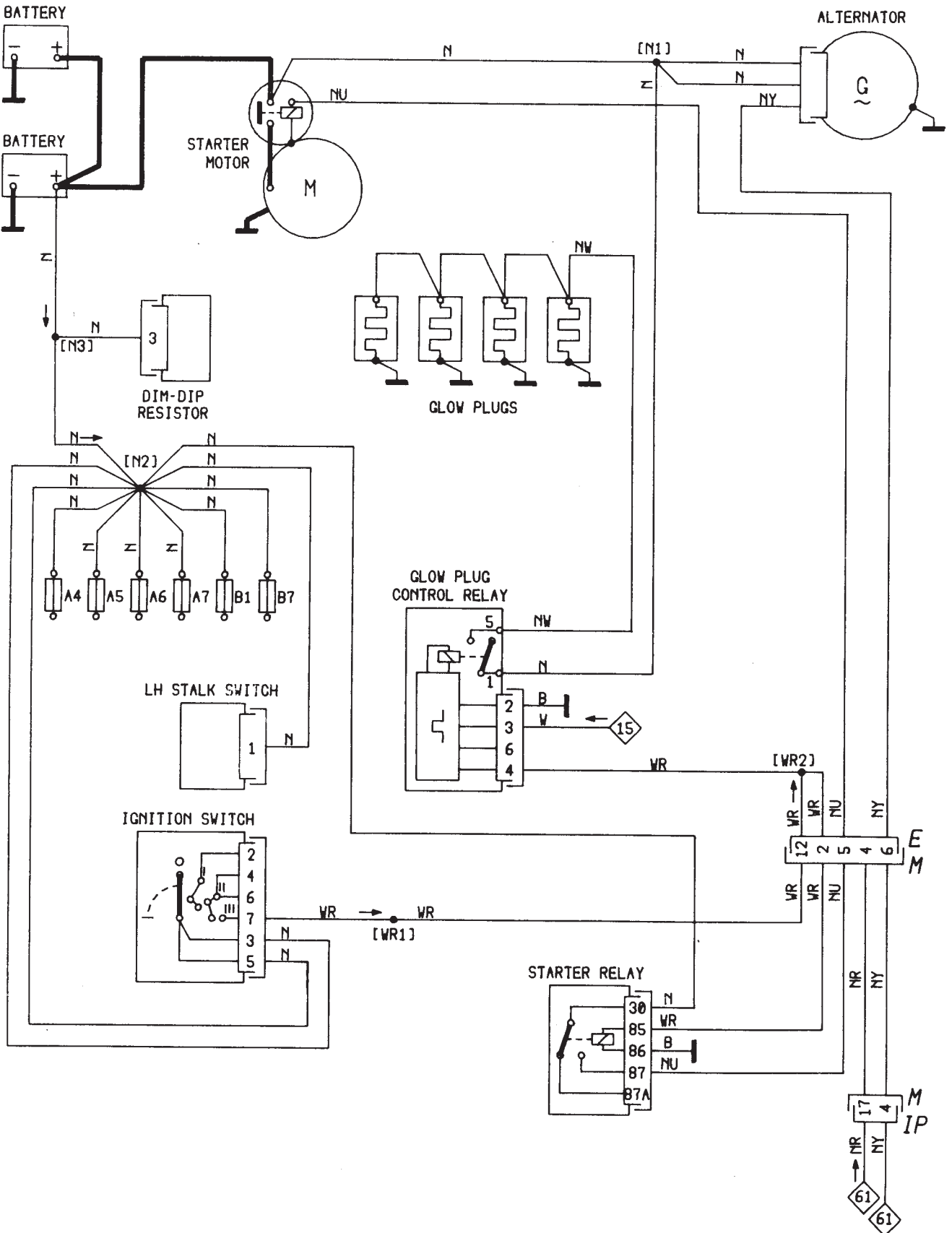




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 200 TN44	1991-92	UNFUSED BATTERY POWER STARTING / CHARGING	30.04



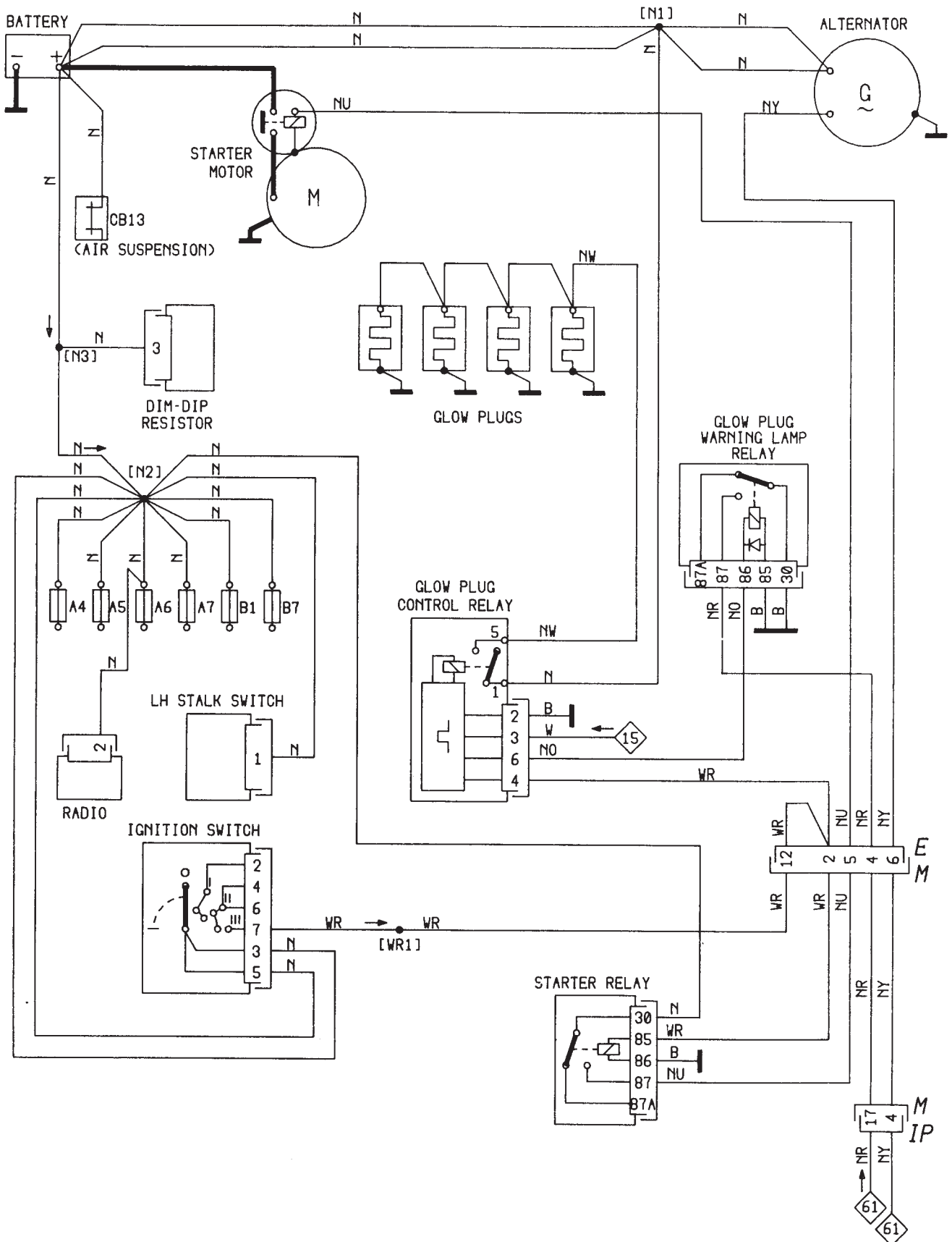
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 300 BN52 (15J)	1987-88	UNFUSED BATTERY POWER STARTING / CHARGING	30.22





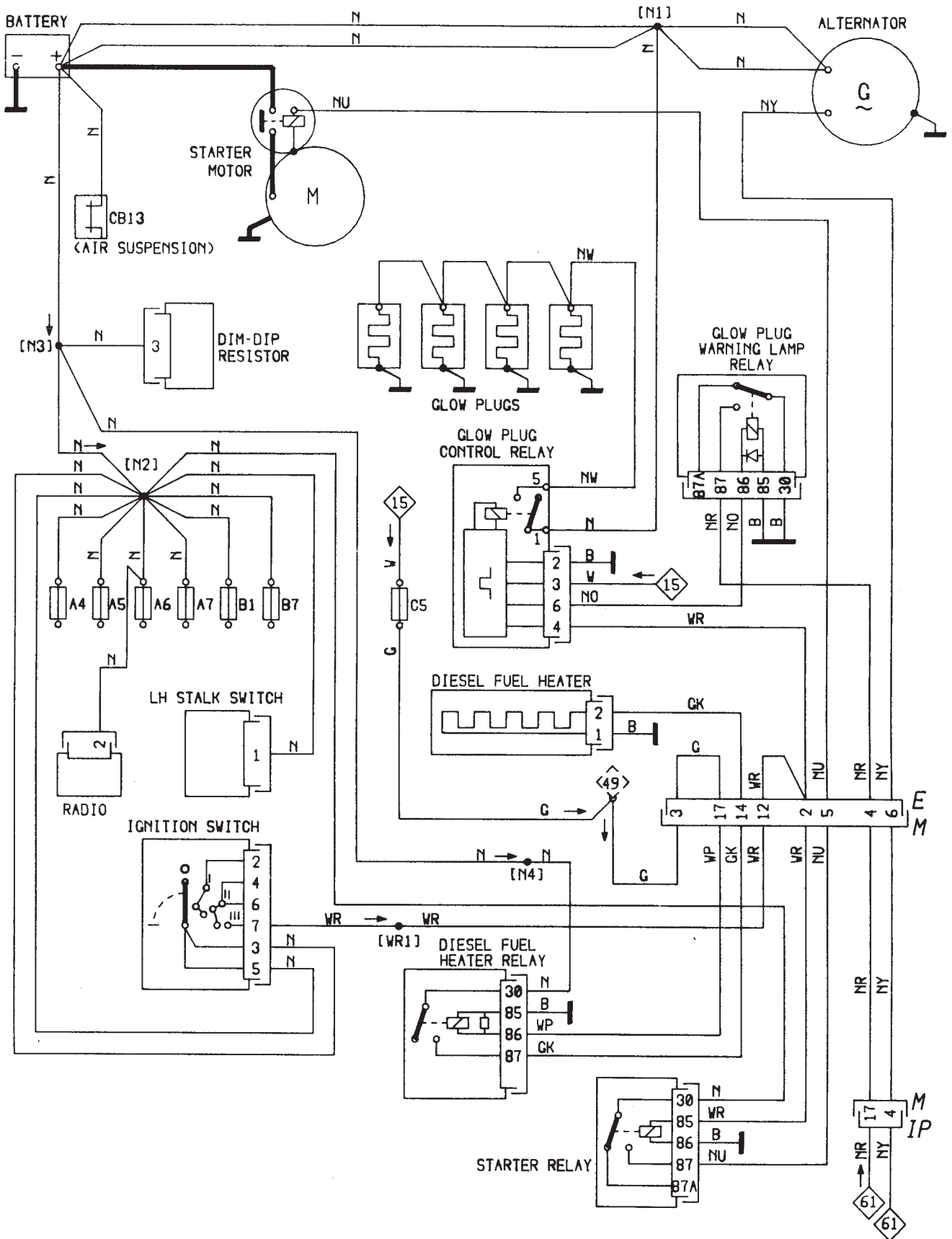


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 400 EN/ET	1989-90	UNFUSED BATTERY POWER STARTING / CHARGING	30.23



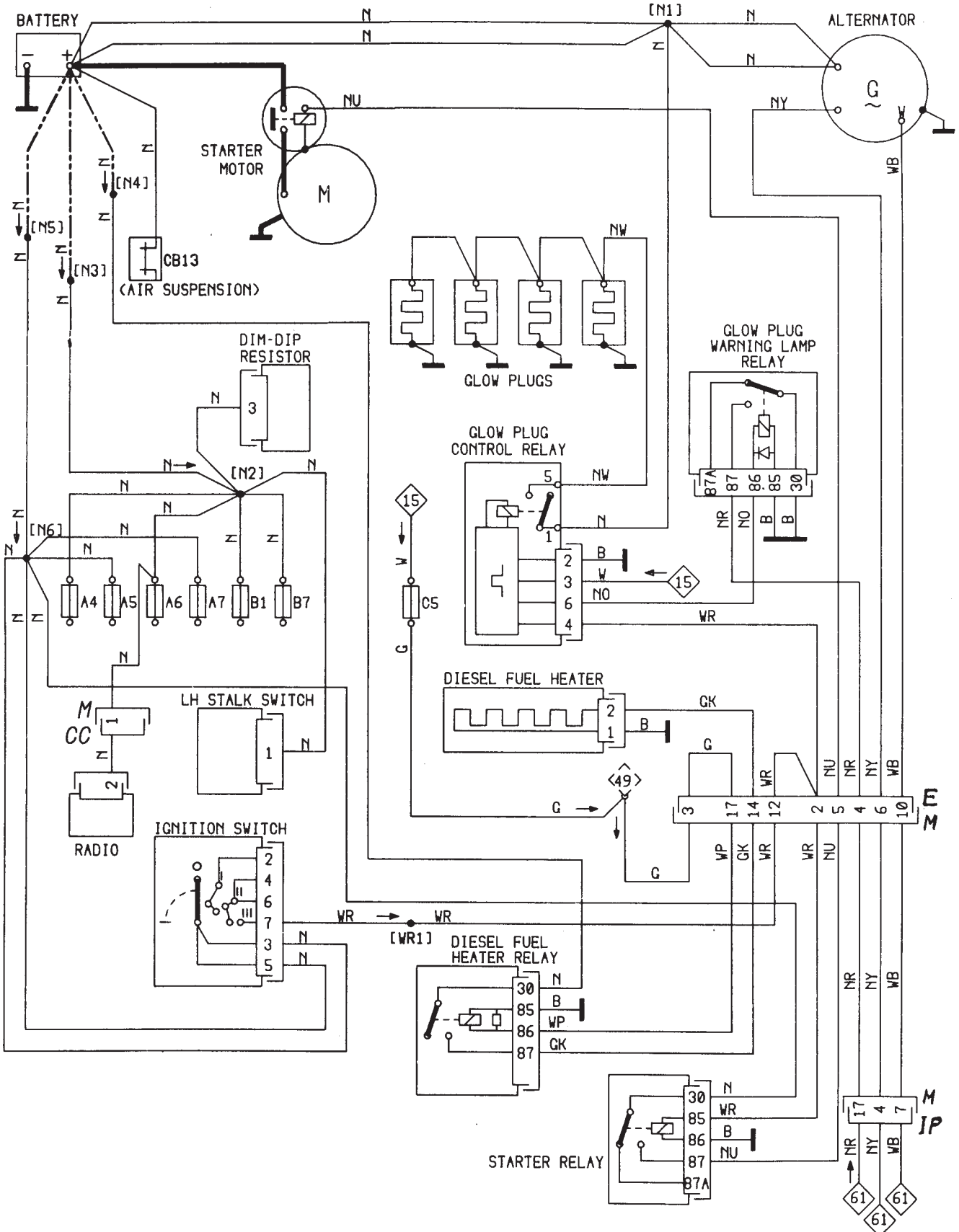


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 400 EN/ET	1991	UNFUSED BATTERY POWER STARTING / CHARGING	30.25



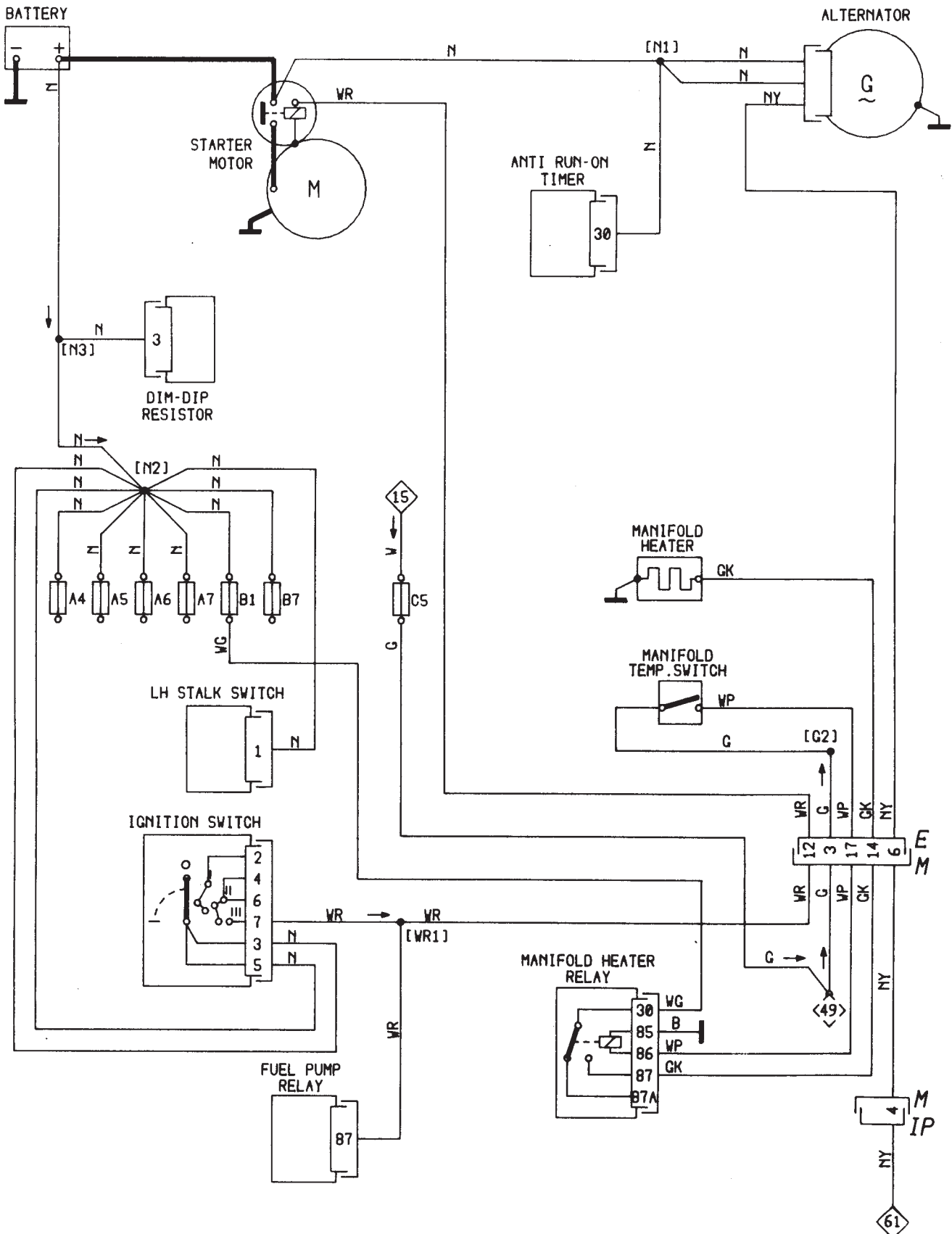


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 400 EN/ET	1991-92	UNFUSED BATTERY POWER STARTING / CHARGING	30.26



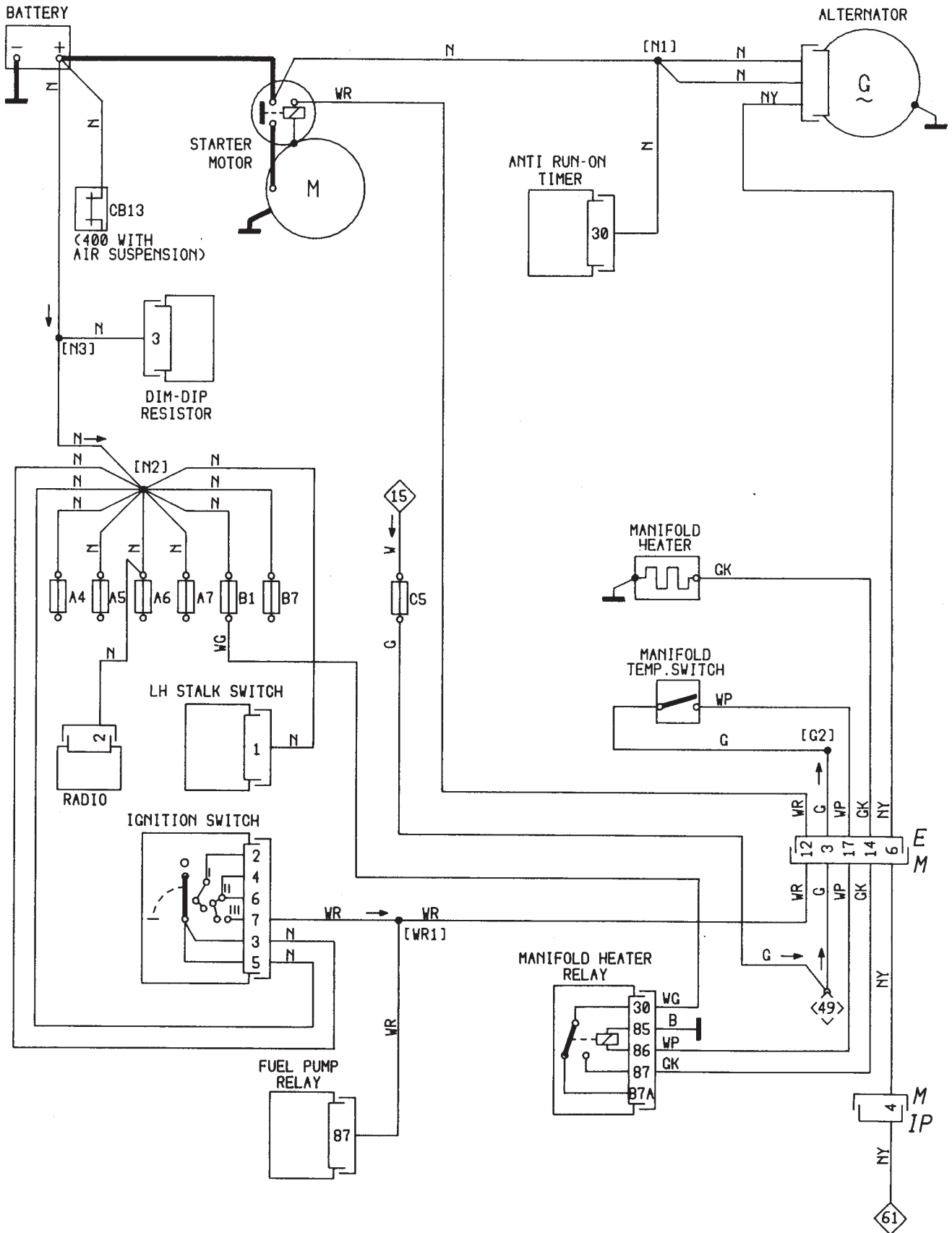


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1987-88	UNFUSED BATTERY POWER STARTING / CHARGING	30.42

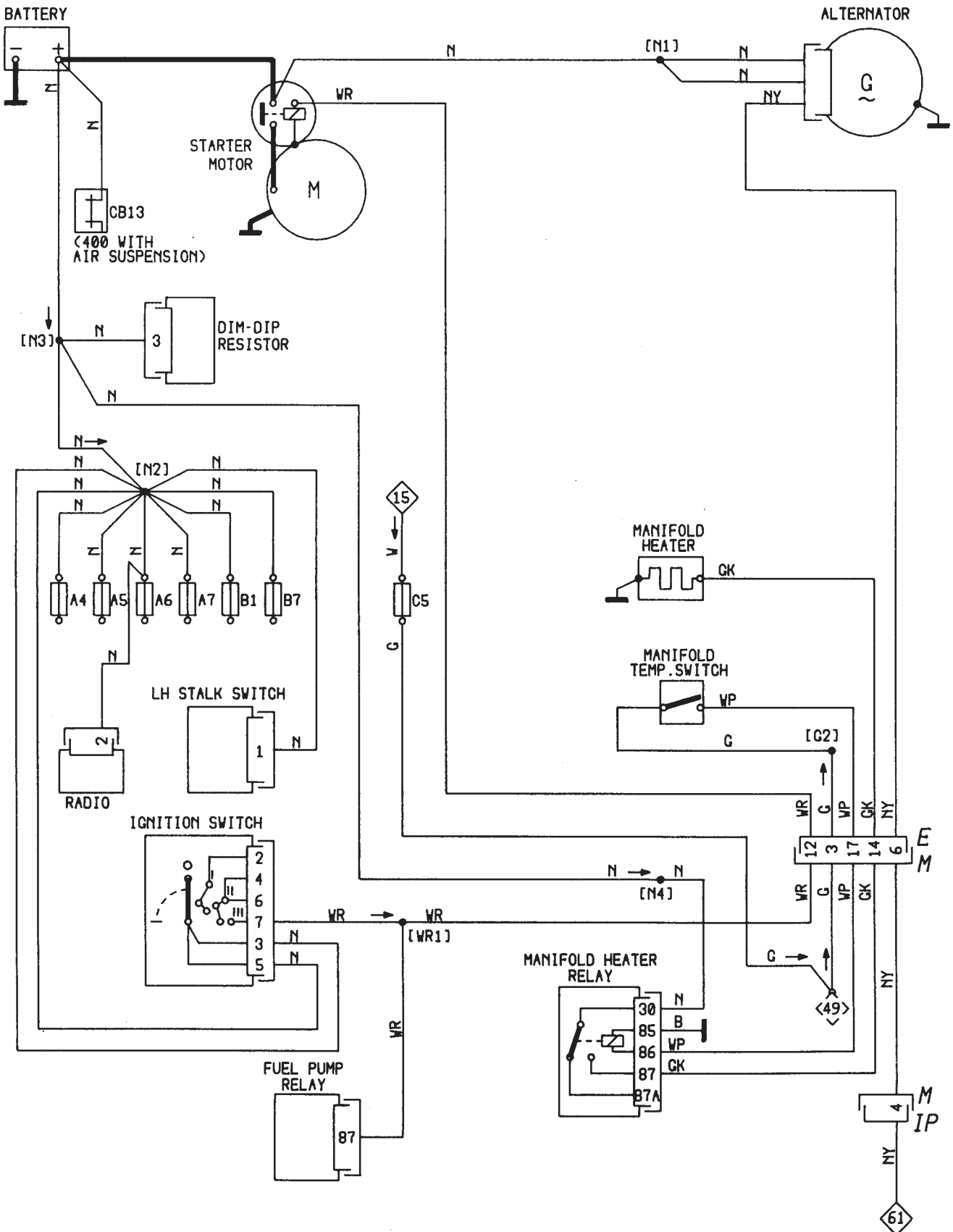




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1989-90	UNFUSED BATTERY POWER STARTING / CHARGING	30.43



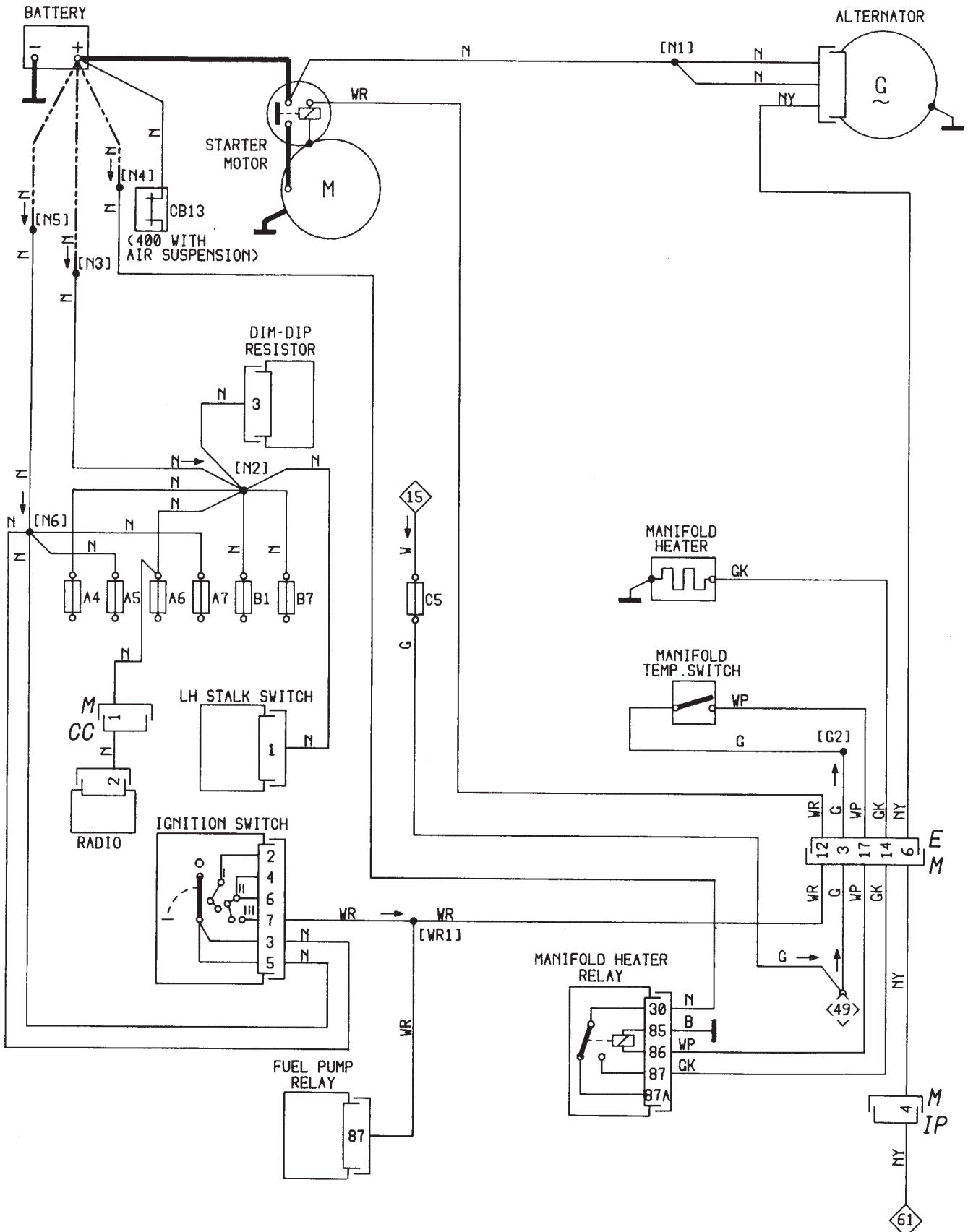
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1990-91	UNFUSED BATTERY POWER STARTING / CHARGING	30.44



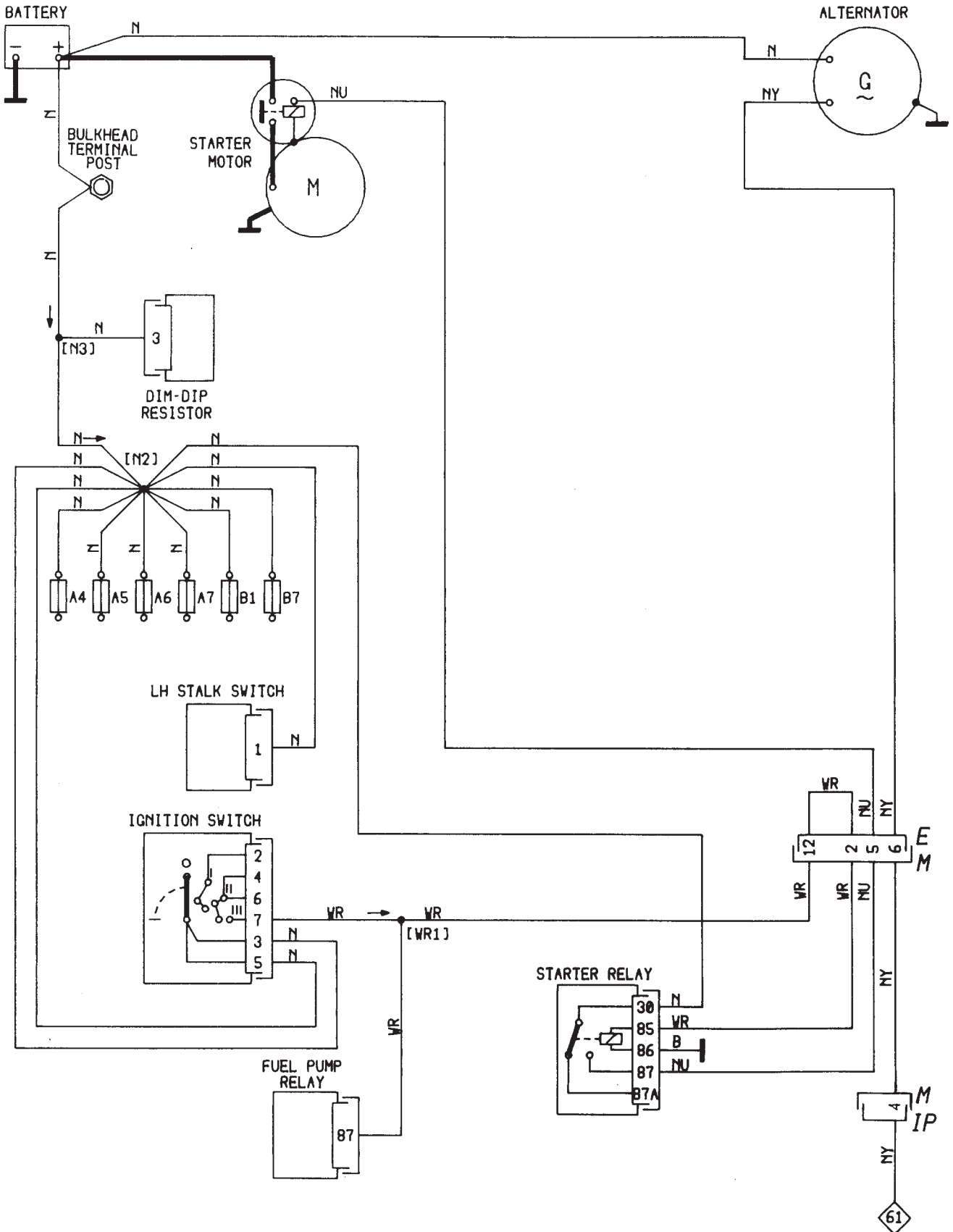




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1991-92	UNFUSED BATTERY POWER STARTING / CHARGING	30.45

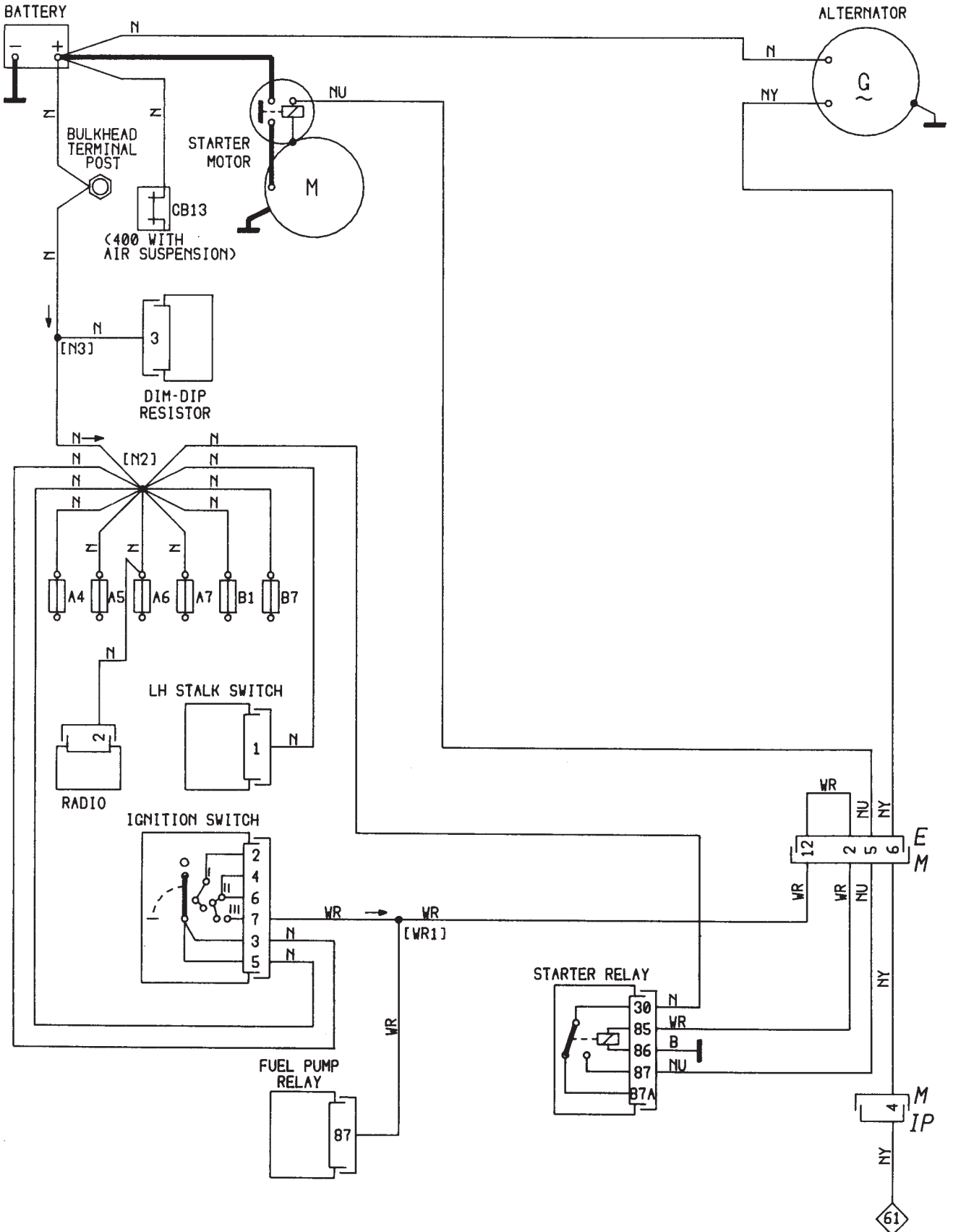


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
V8 PETROL	1987-88	UNFUSED BATTERY POWER STARTING / CHARGING	30.62

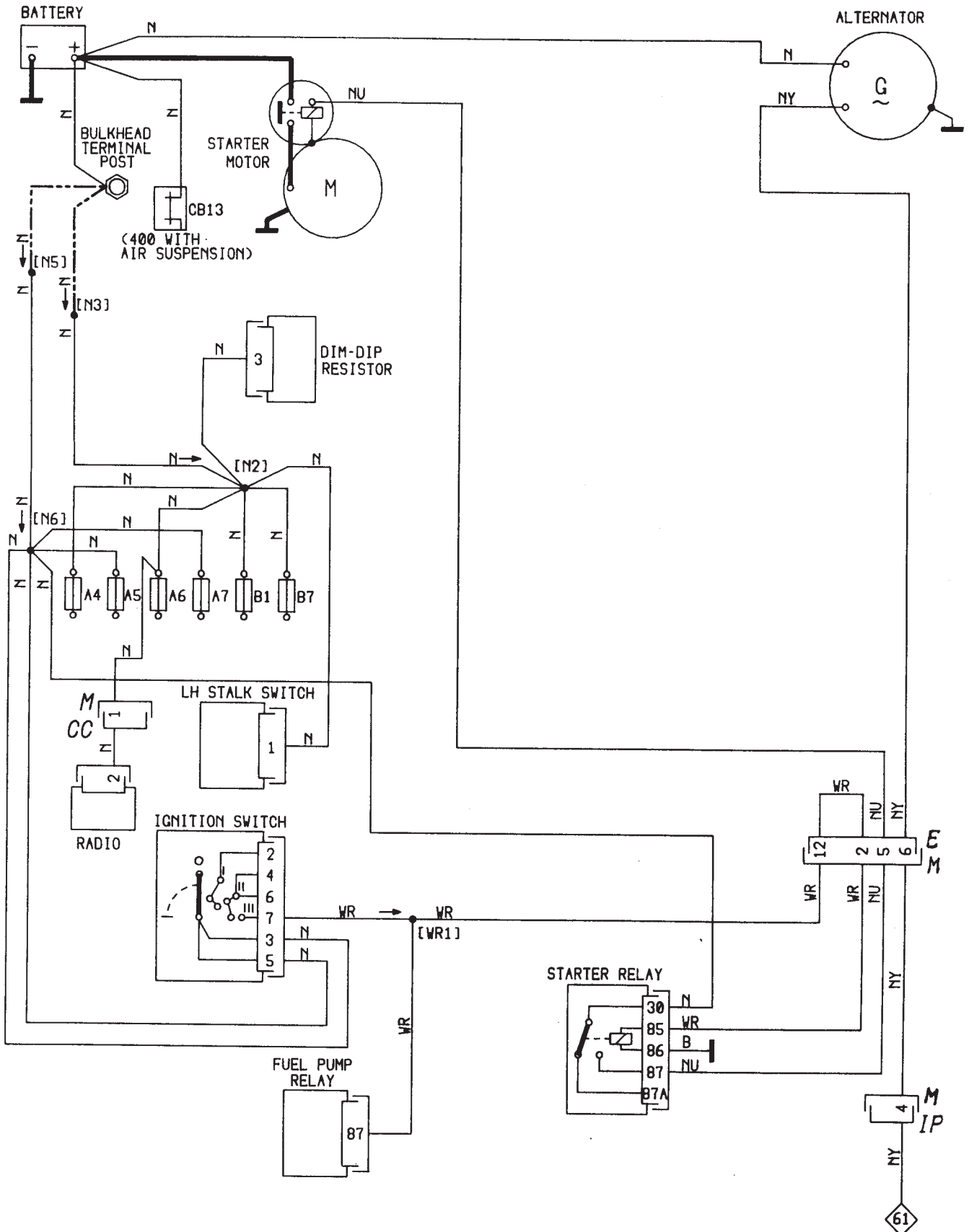




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
V8 PETROL	1989-91	UNFUSED BATTERY POWER STARTING / CHARGING	30.63

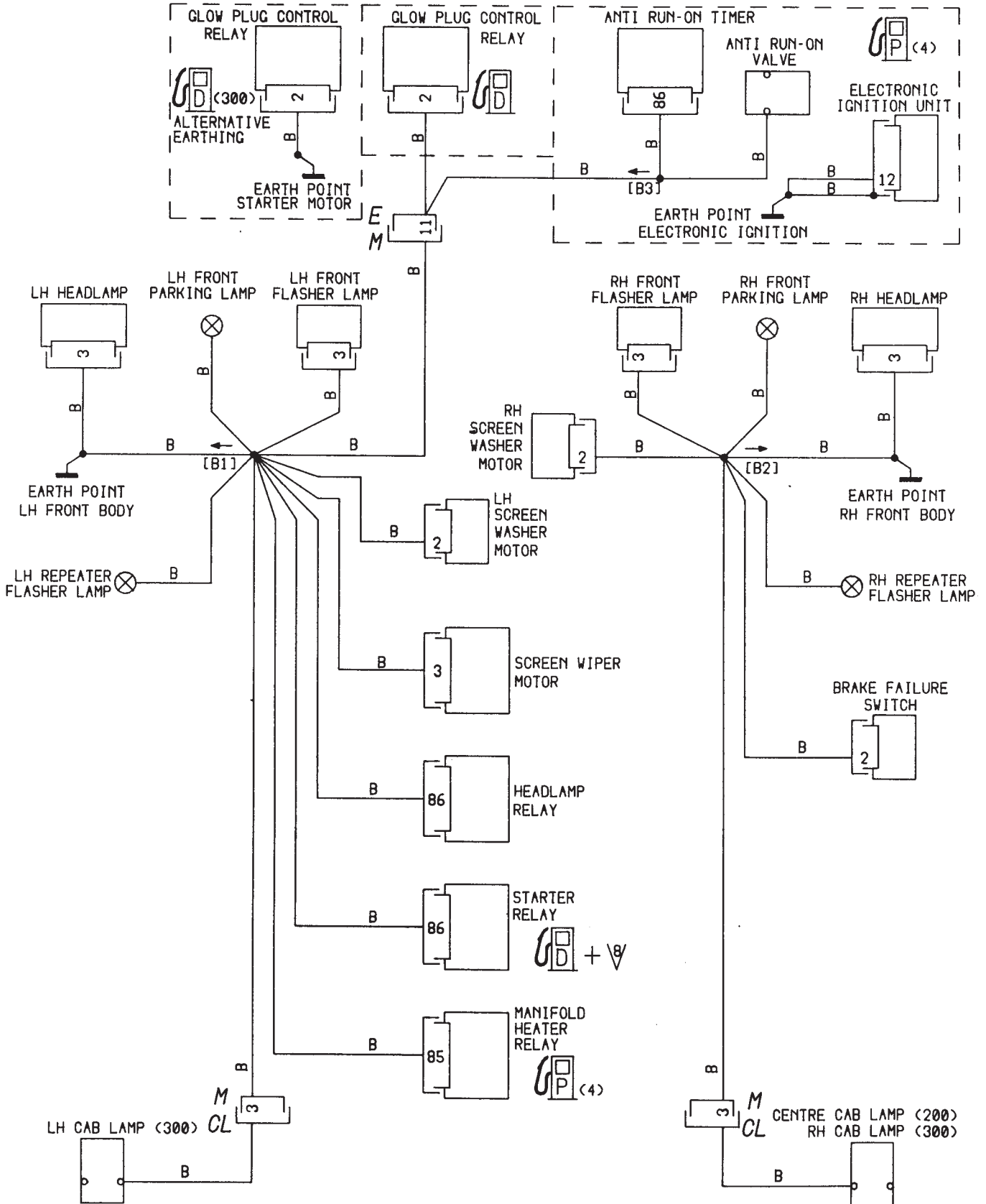


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
V8 PETROL	1991-92	UNFUSED BATTERY POWER STARTING / CHARGING	30.65

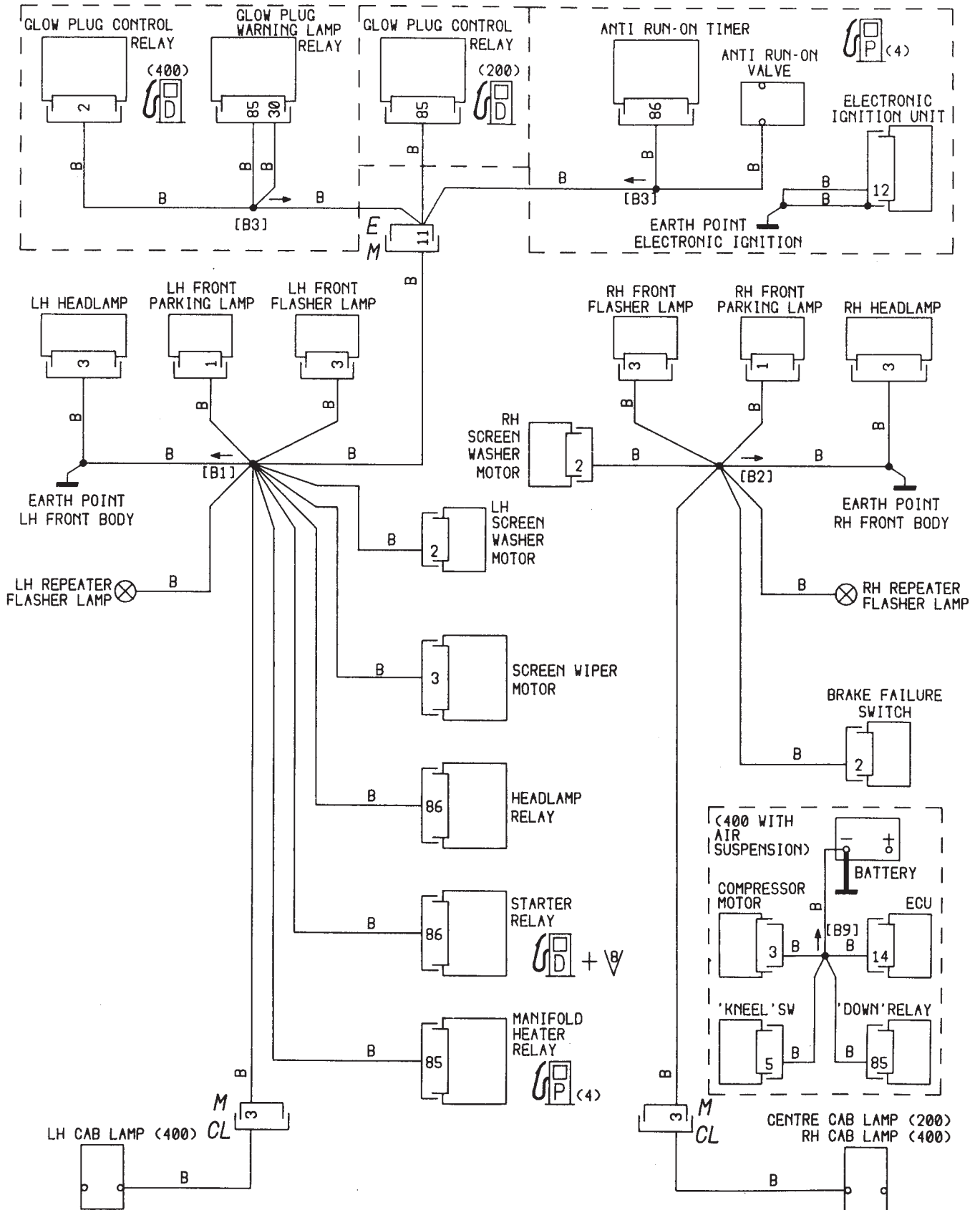




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-88	EARTHING FRONT END	31.02



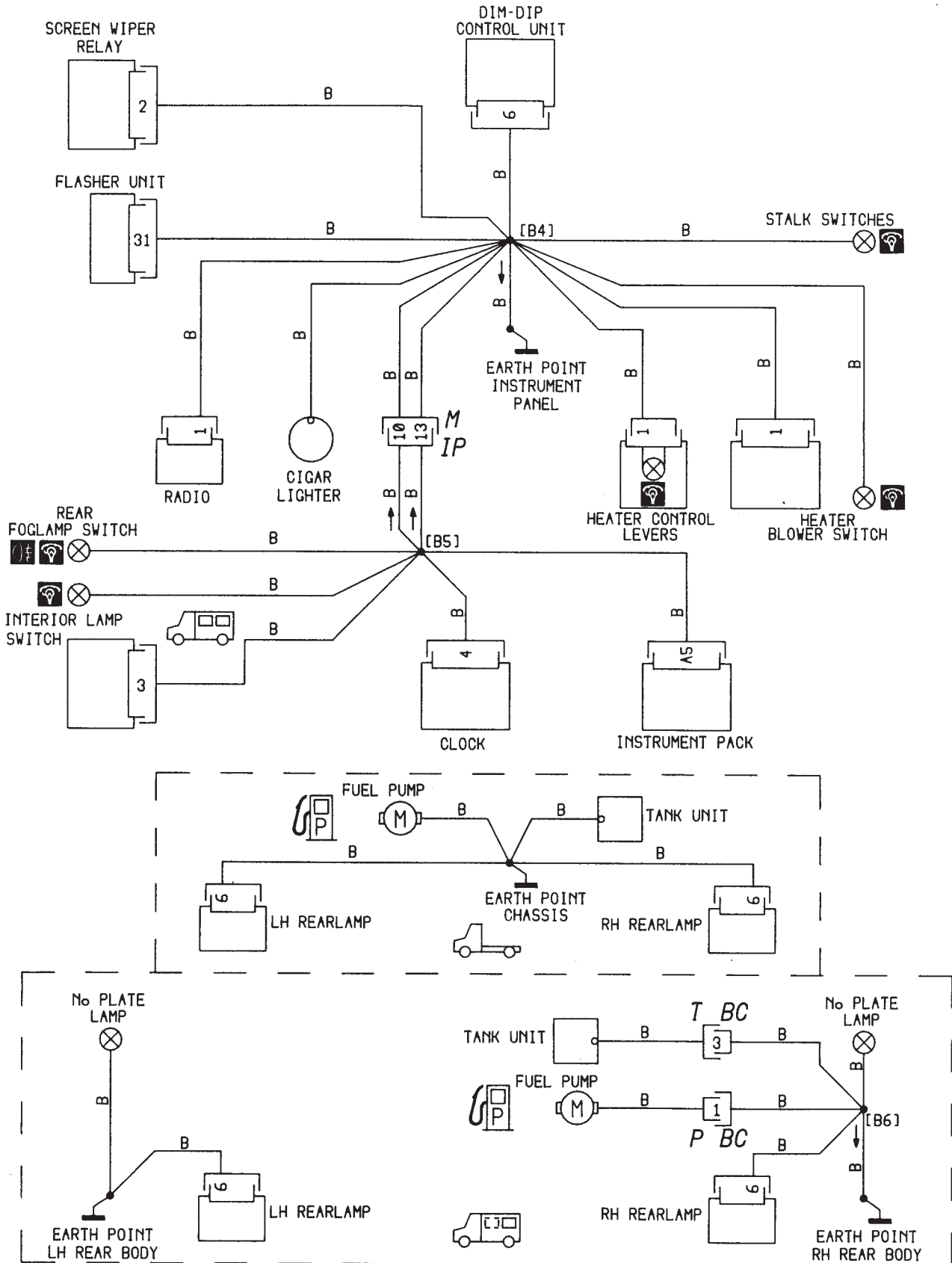
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1989	EARTHING FRONT END	31.03



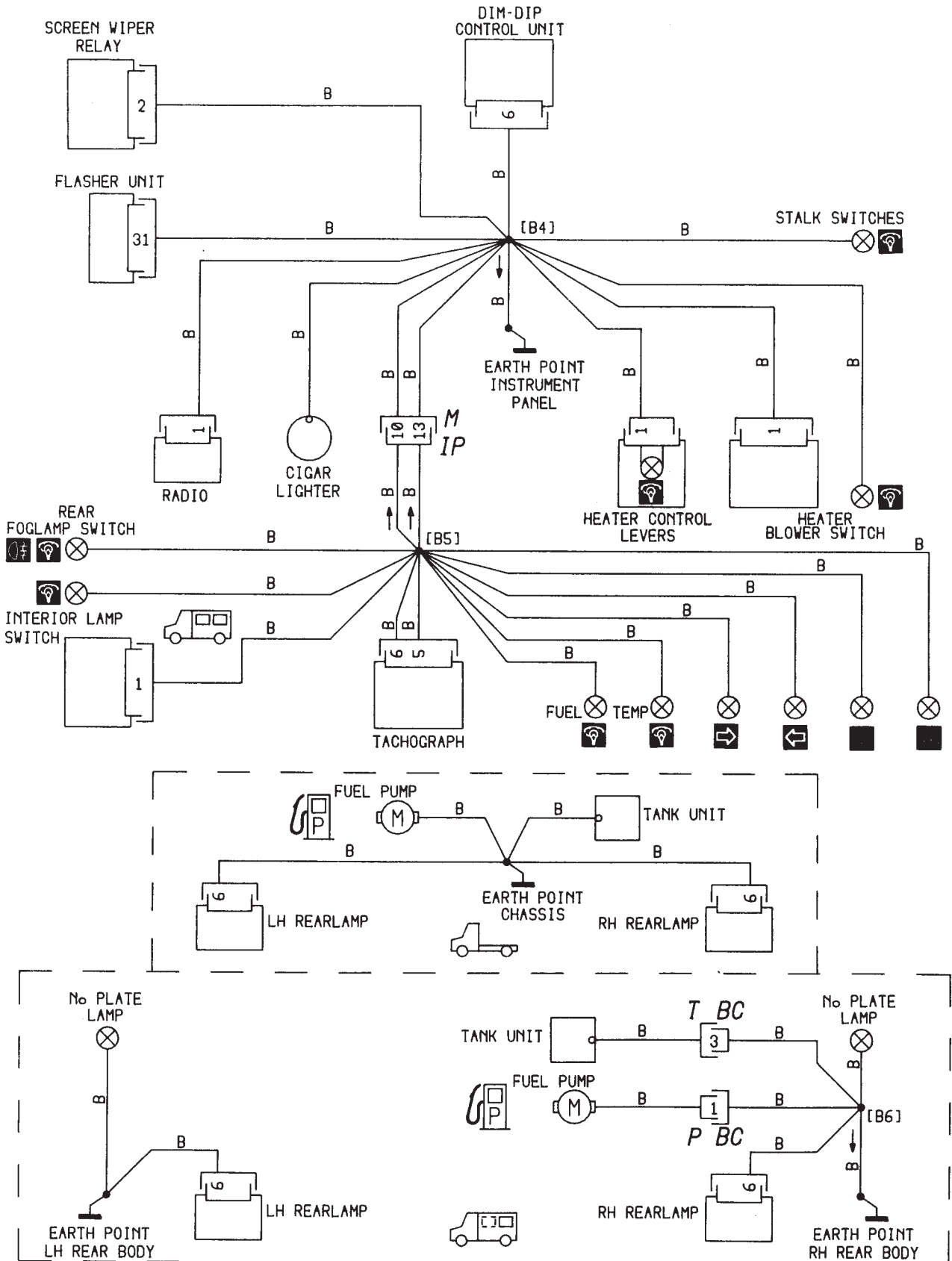




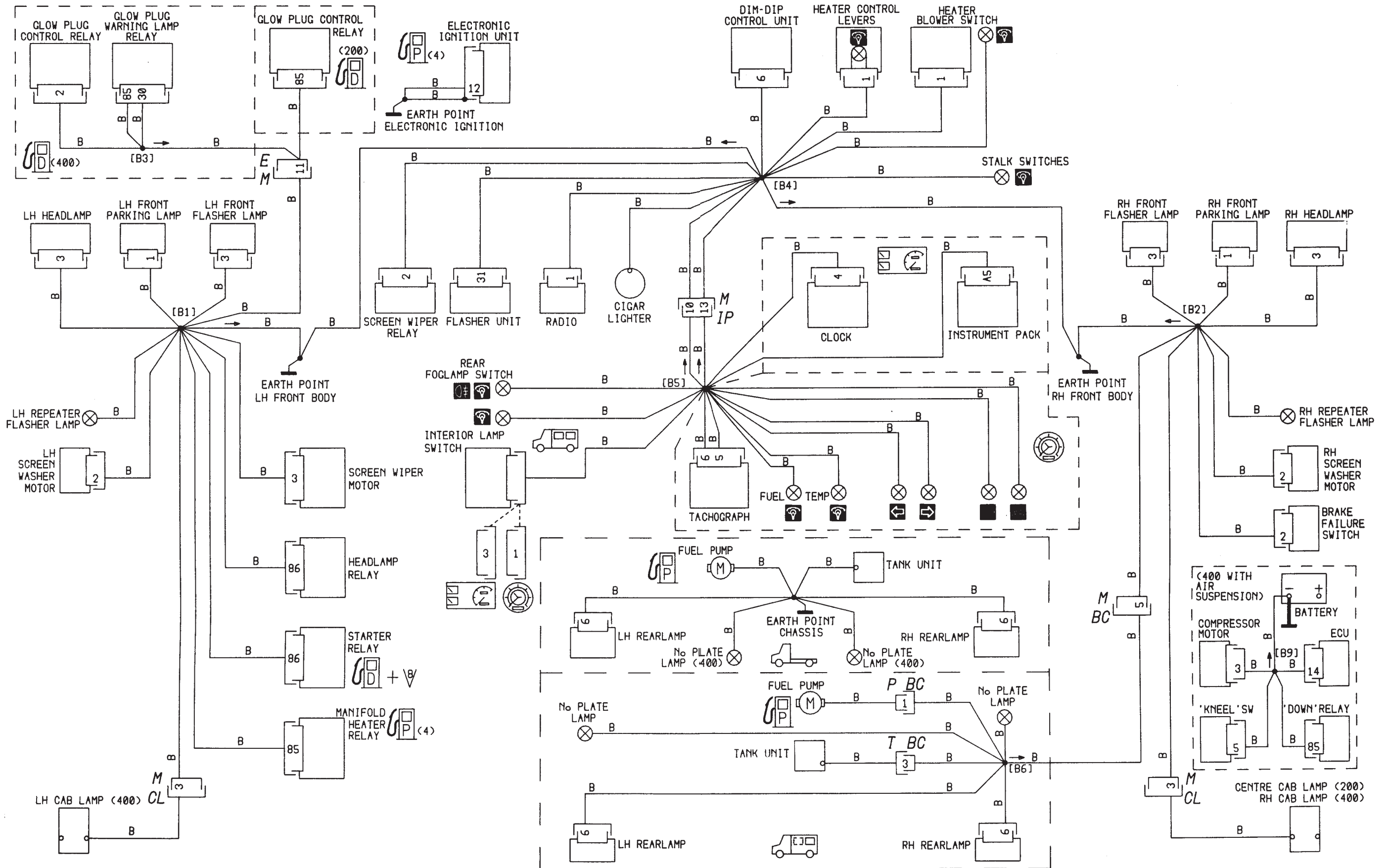
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
NON-TACHOGRAPH	1987-89	EARTHING - INSTRUMENT PANEL AND REAR END	31.22



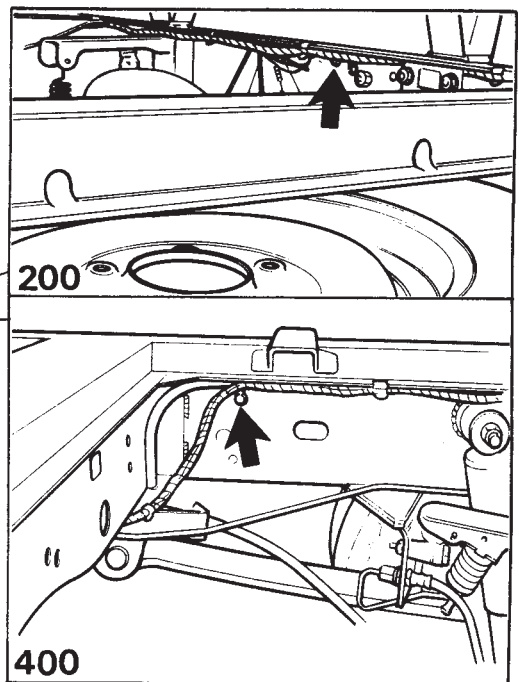
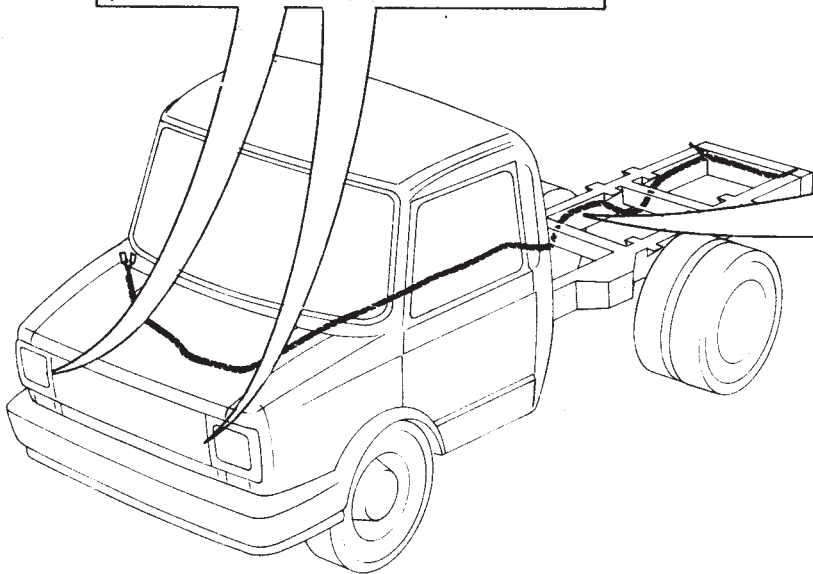
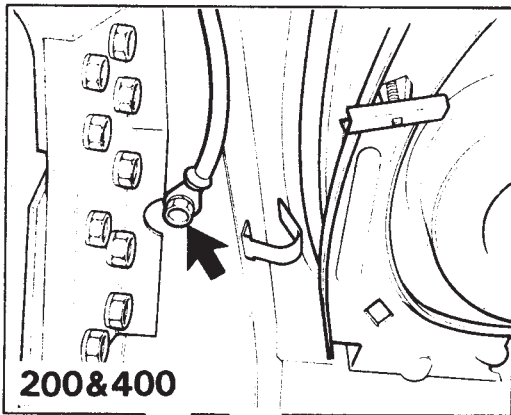
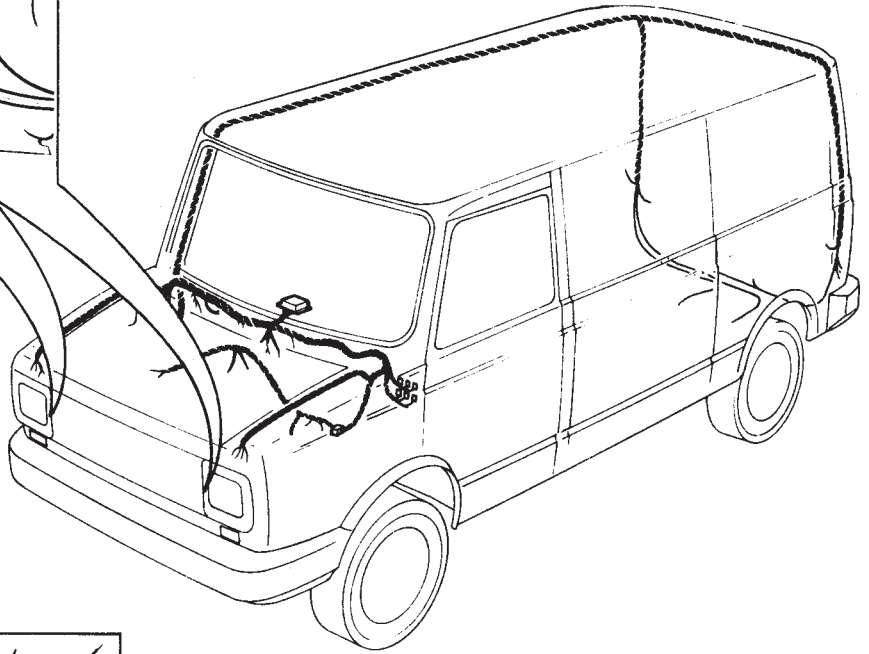
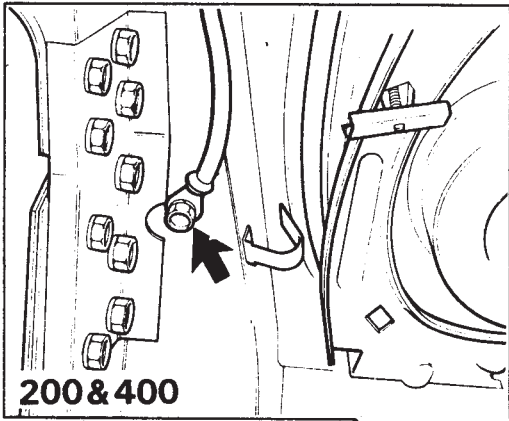
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
TACHOGRAPH	1987-89	EARTHING - INSTRUMENT PANEL AND REAR END	31.42



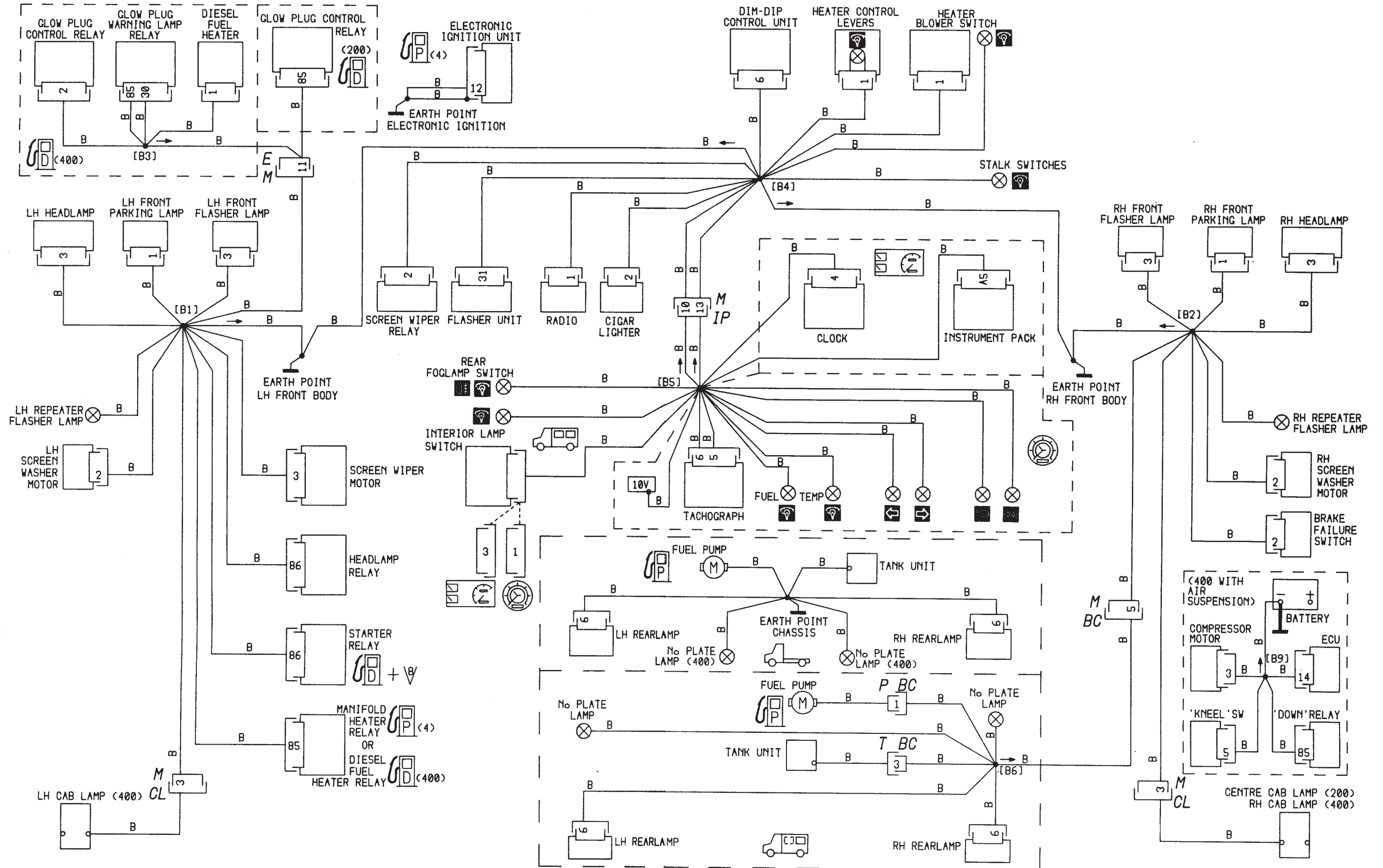
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1990	EARTHING COMPLETE VEHICLE	31.61



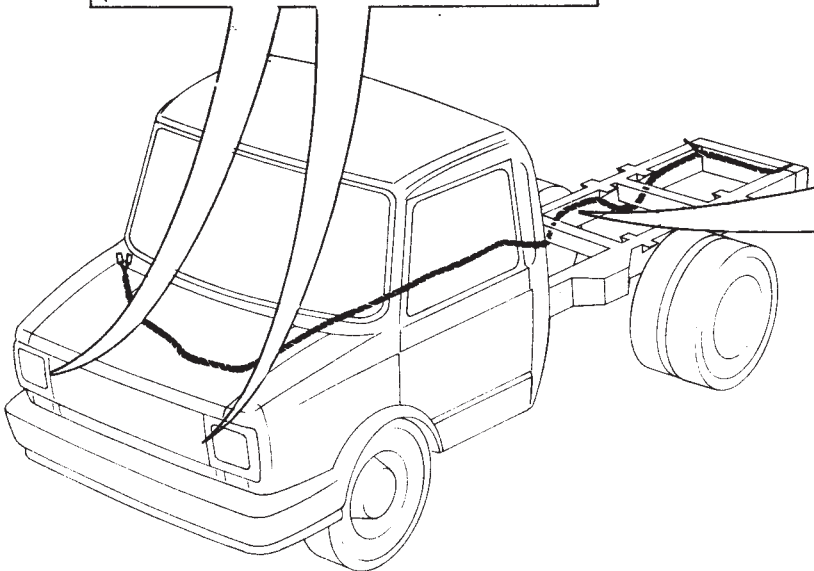
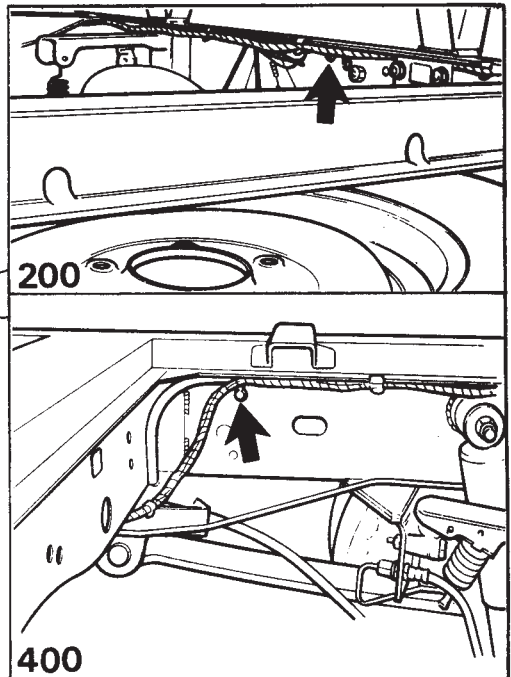
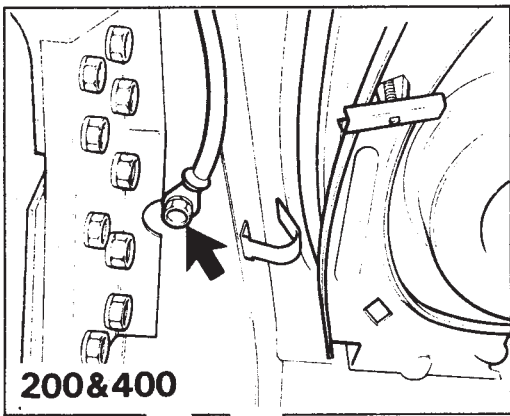
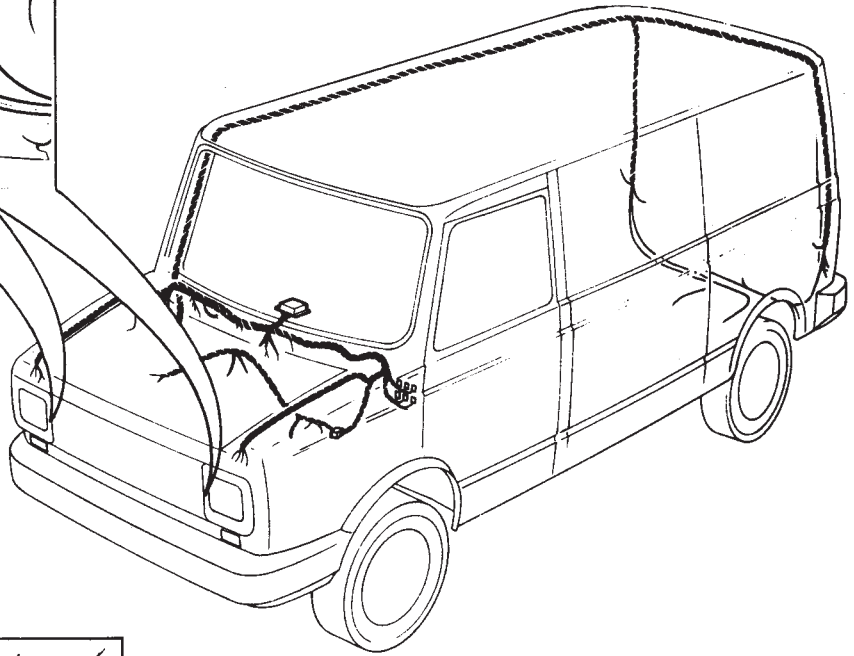
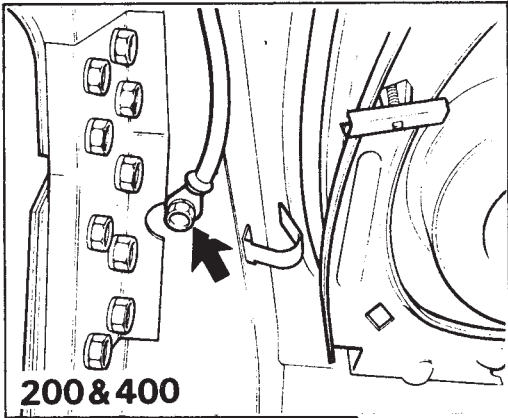
**EARTH POINTS - ALL MODELS 1990**



MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1991	EARTHING COMPLETE VEHICLE	31.62

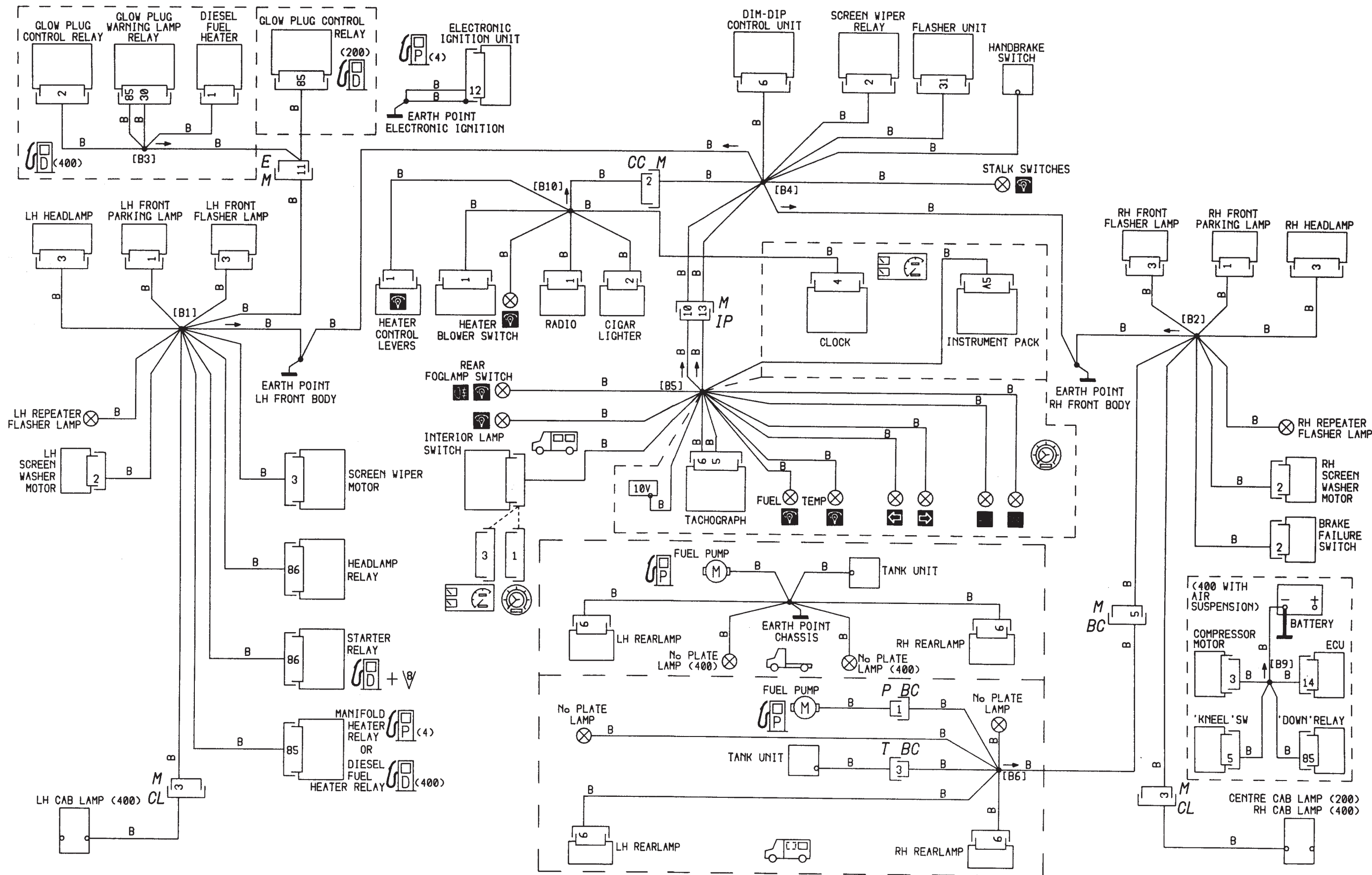


**EARTH POINTS - ALL MODELS 1991**

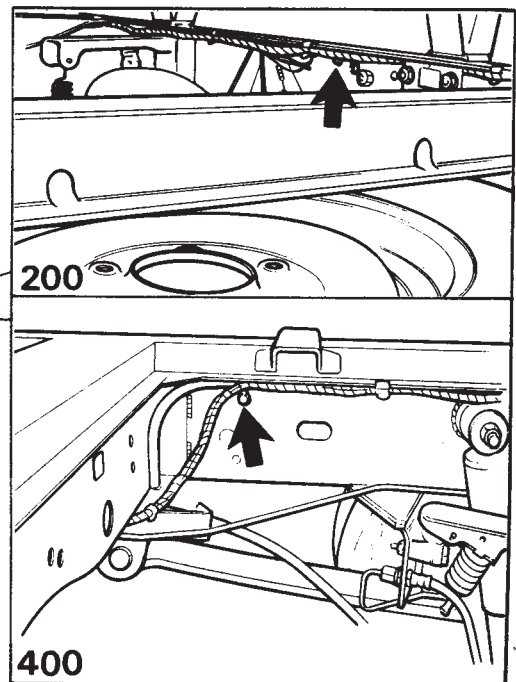
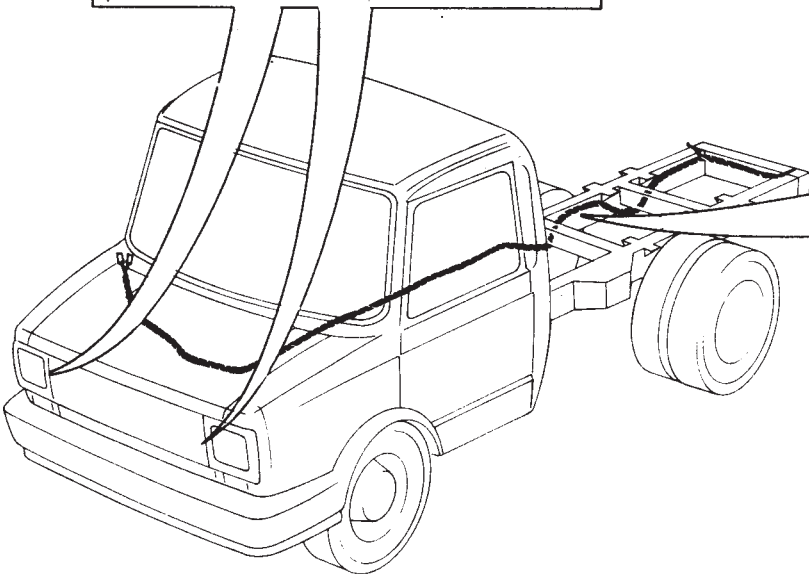
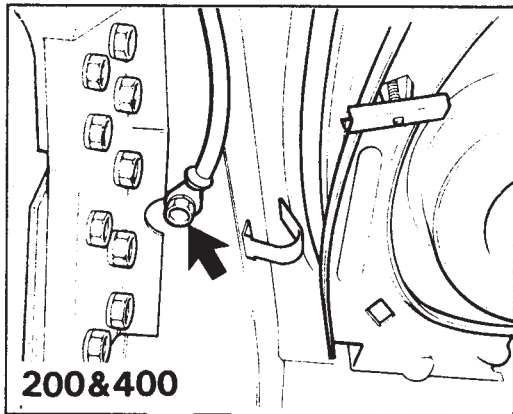
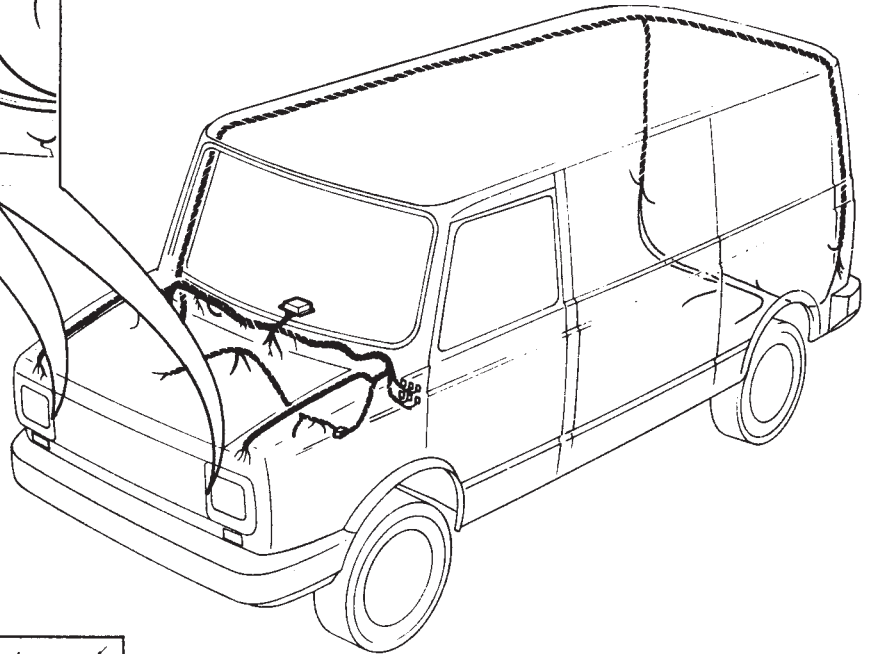
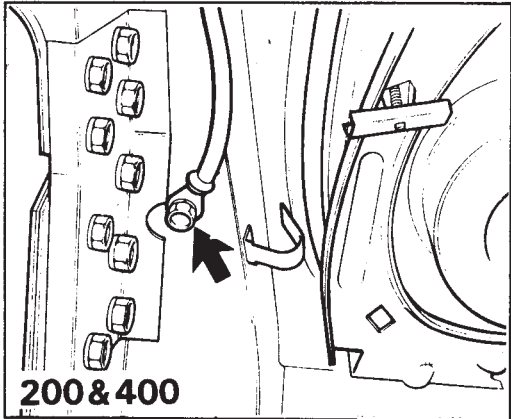




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1991-92	EARTHING COMPLETE VEHICLE	31.63

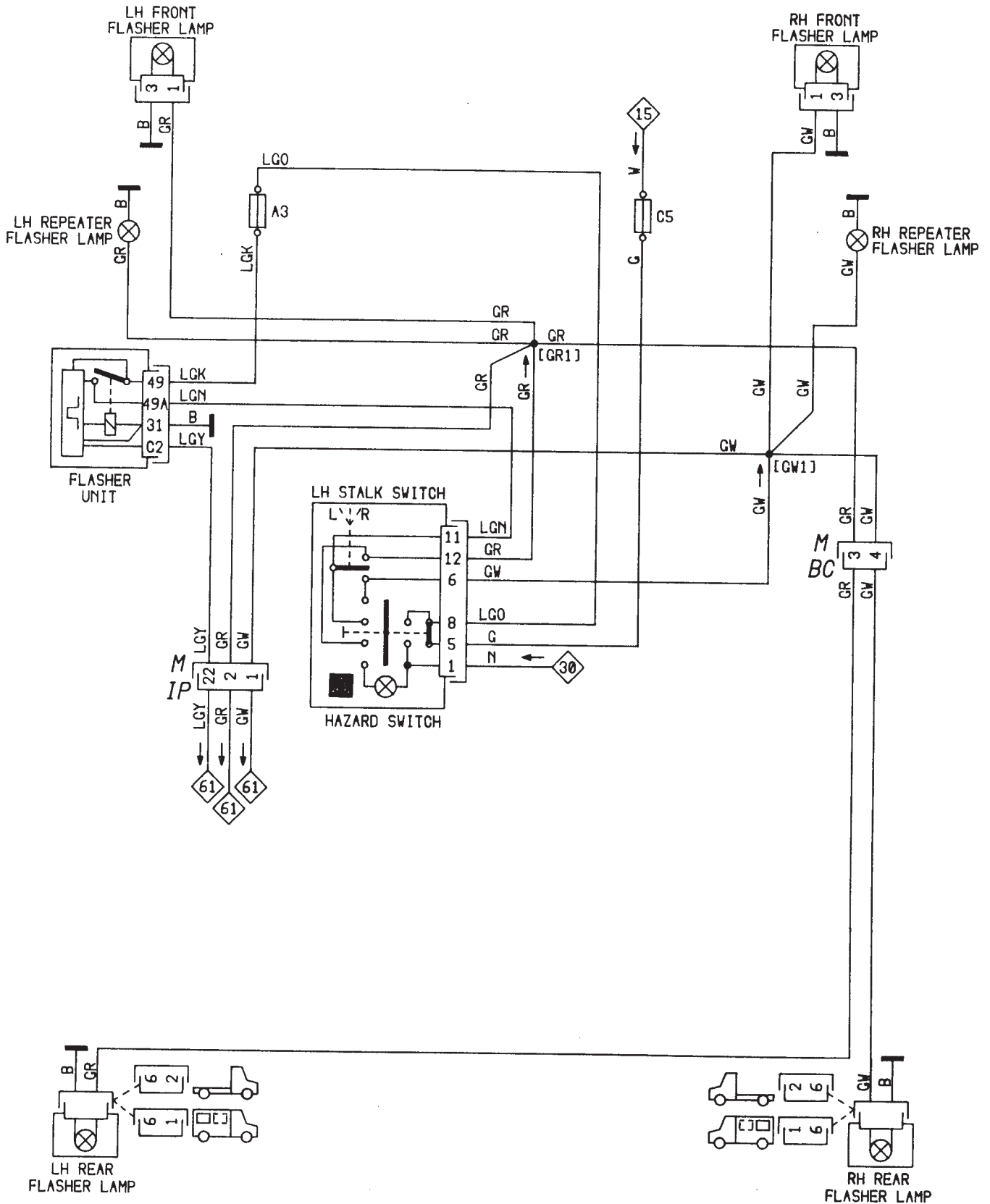


**EARTH POINTS - ALL MODELS 1991-92**



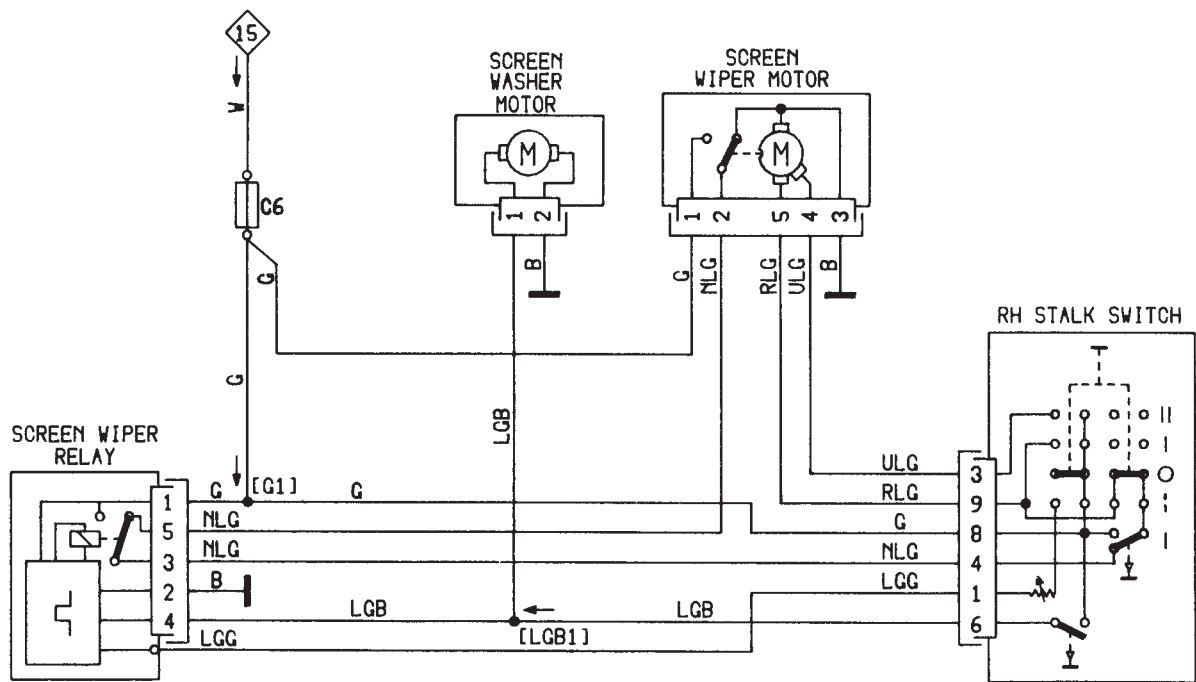


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-92	DIRECTION INDICATORS HAZARD WARNING	49.01

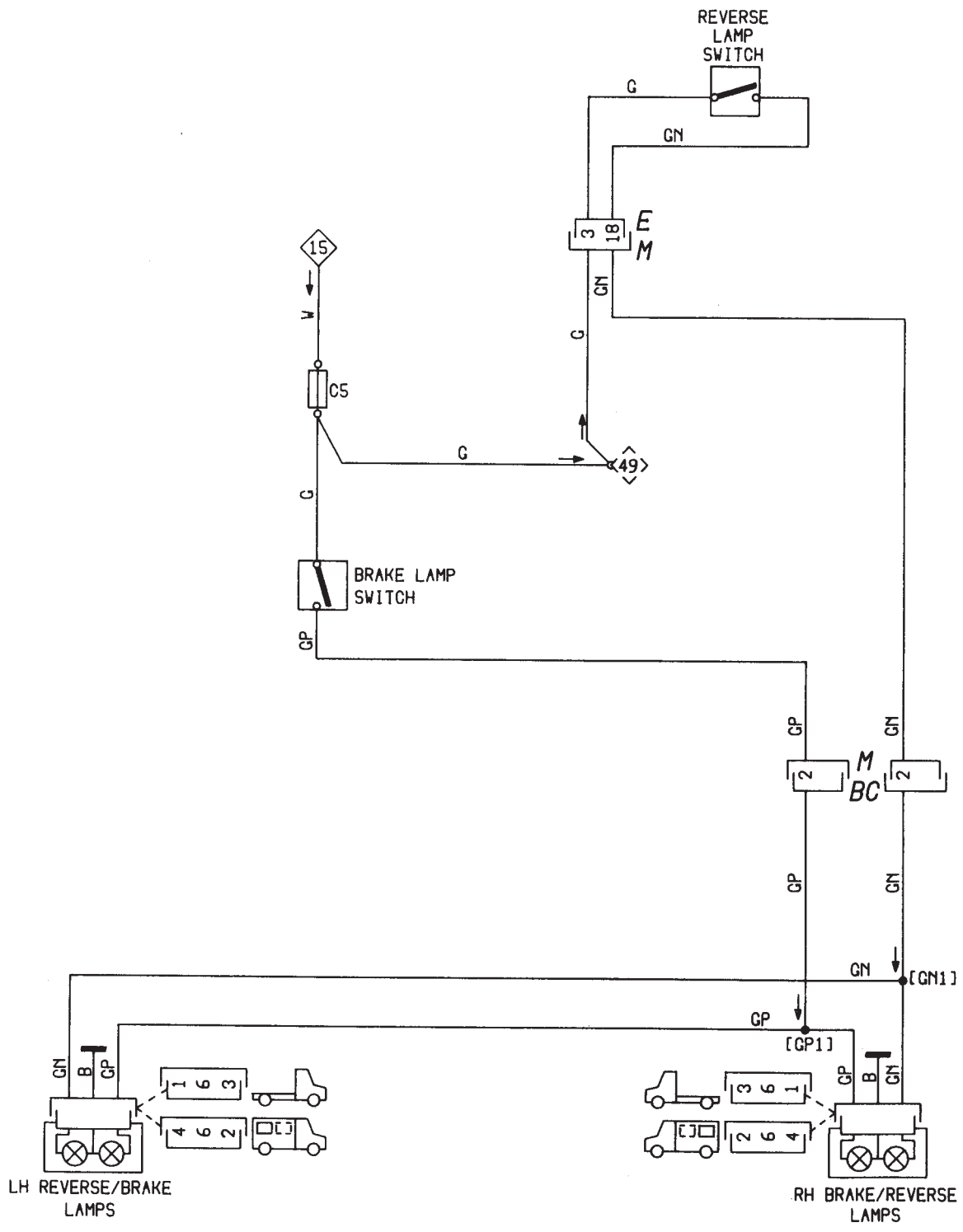




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-92	WIPERS / WASHERS	53.02

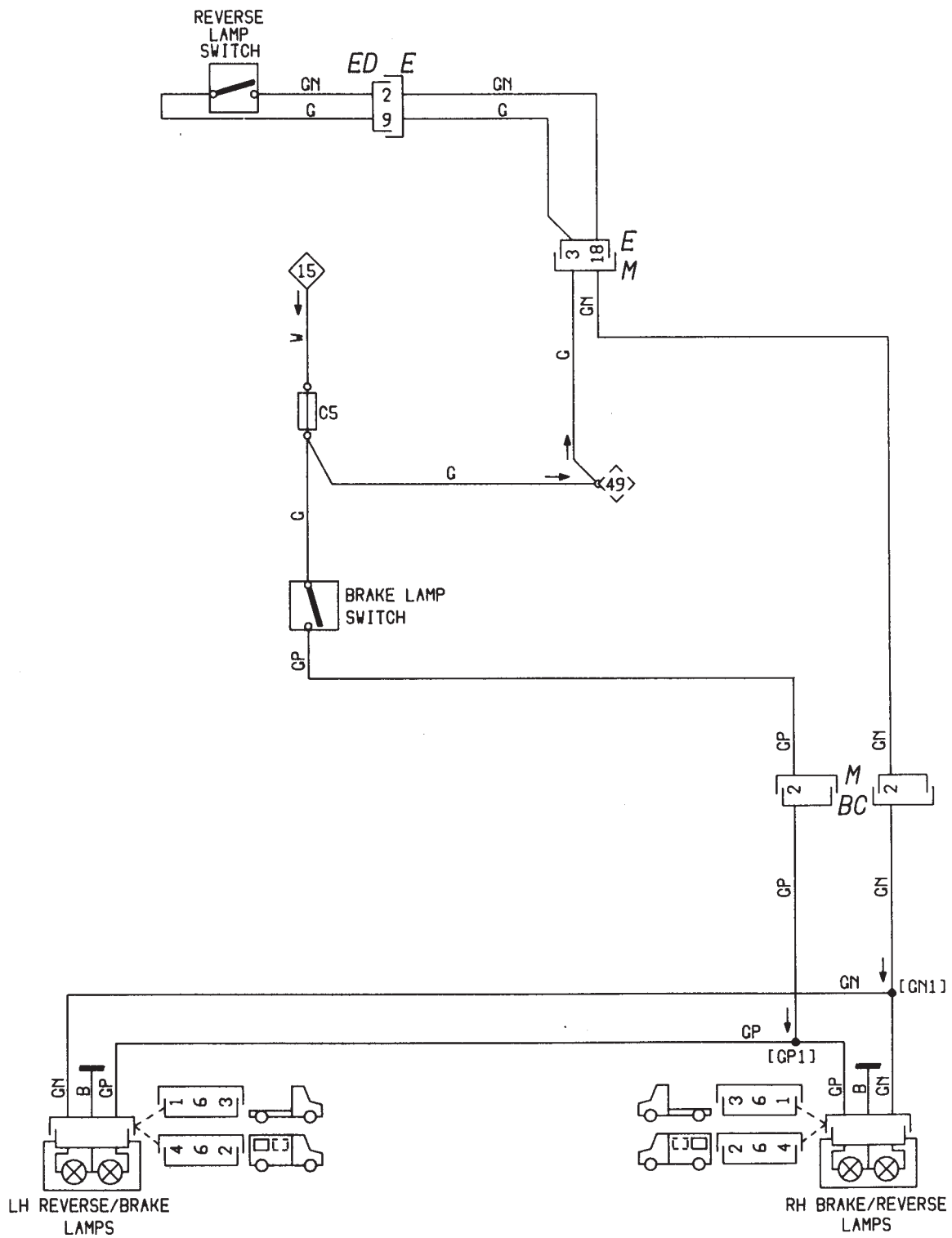


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIE 300/400	1987-90	BRAKE LAMPS / REVERSE LAMPS	54.01
V8	1987-92		
DIESEL 200	1989-92		

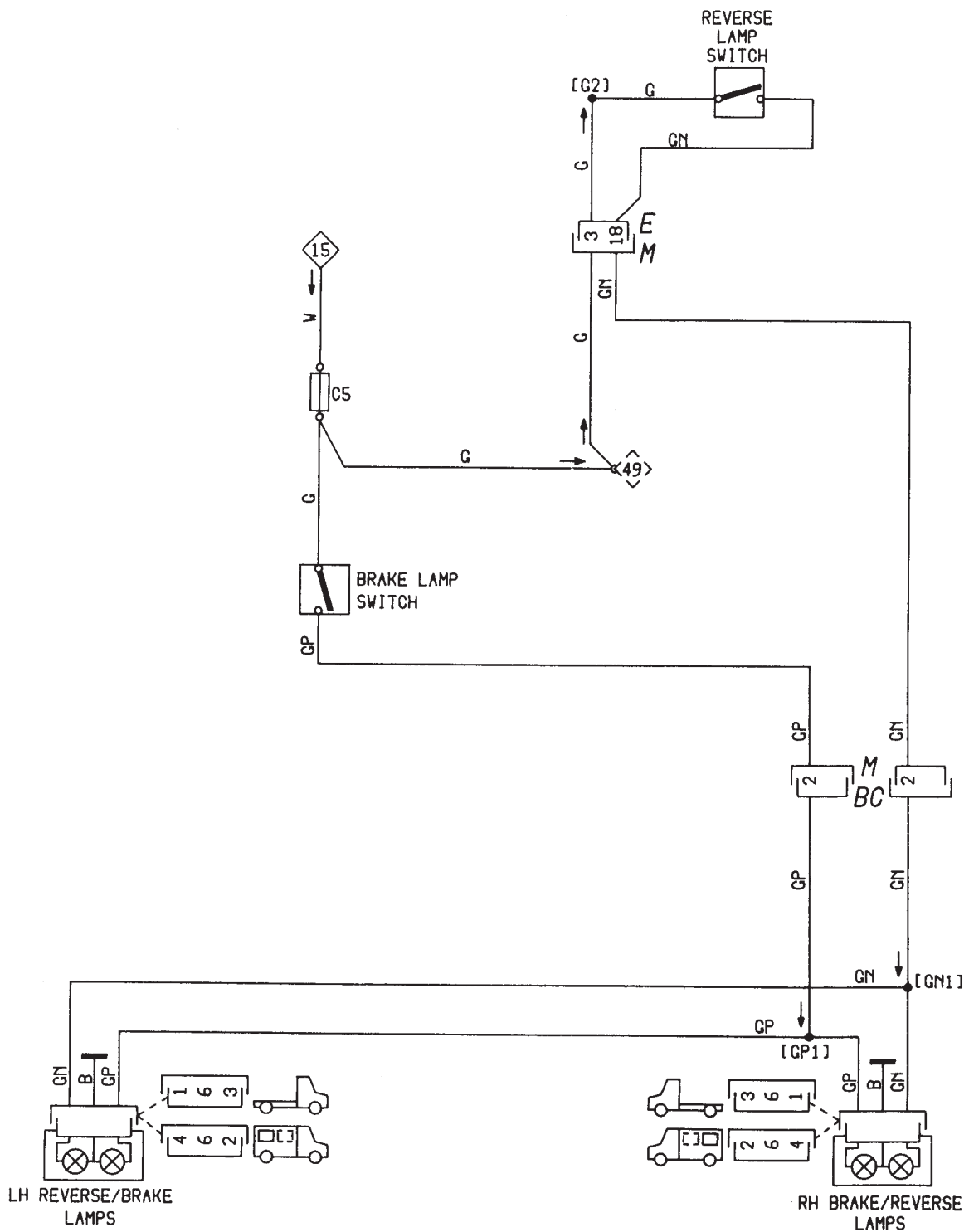




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 200	1987-88	BRAKE LAMPS / REVERSE LAMPS	54.02

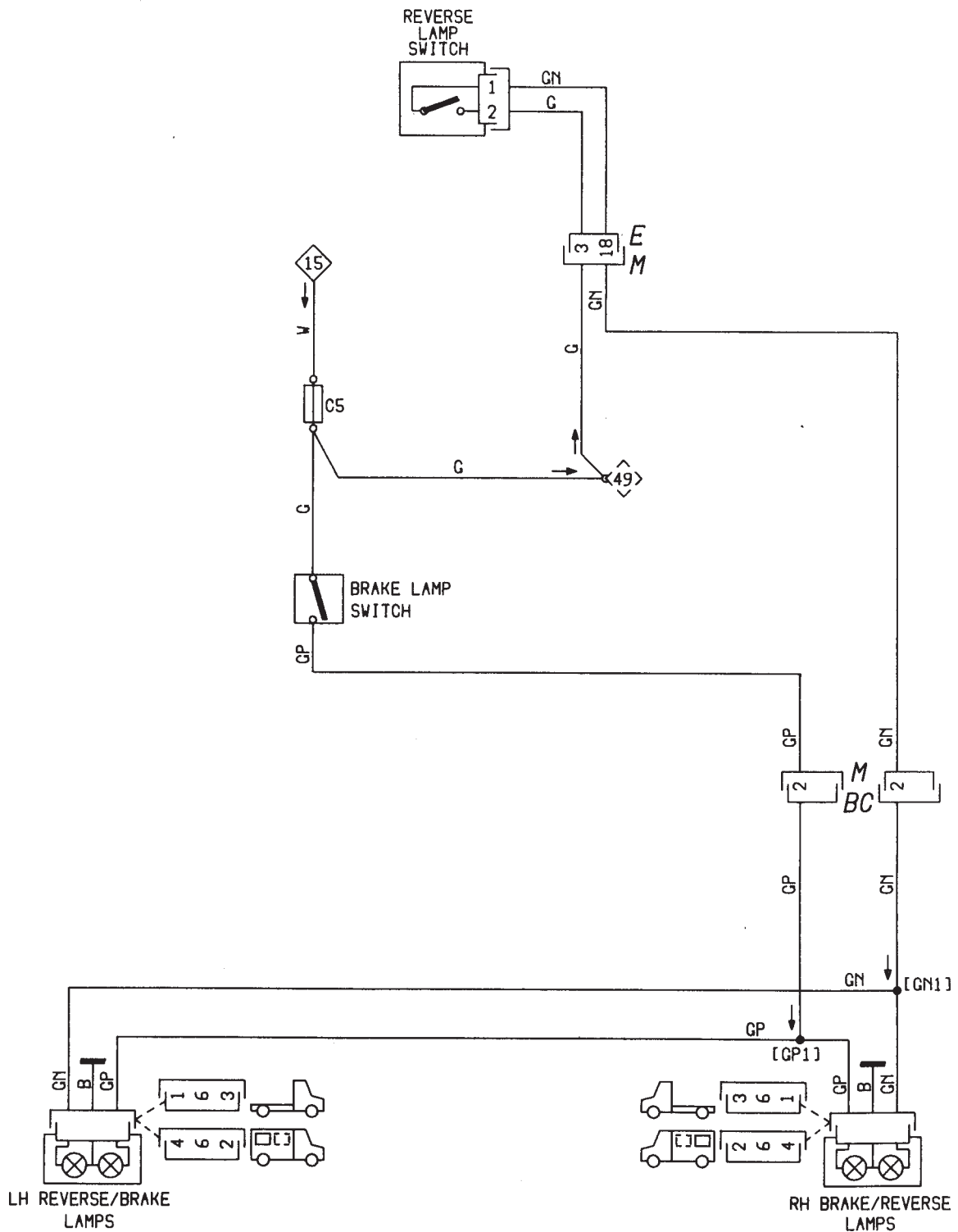


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 CYL PETROL	1987-92	BRAKE LAMPS / REVERSE LAMPS	54.03

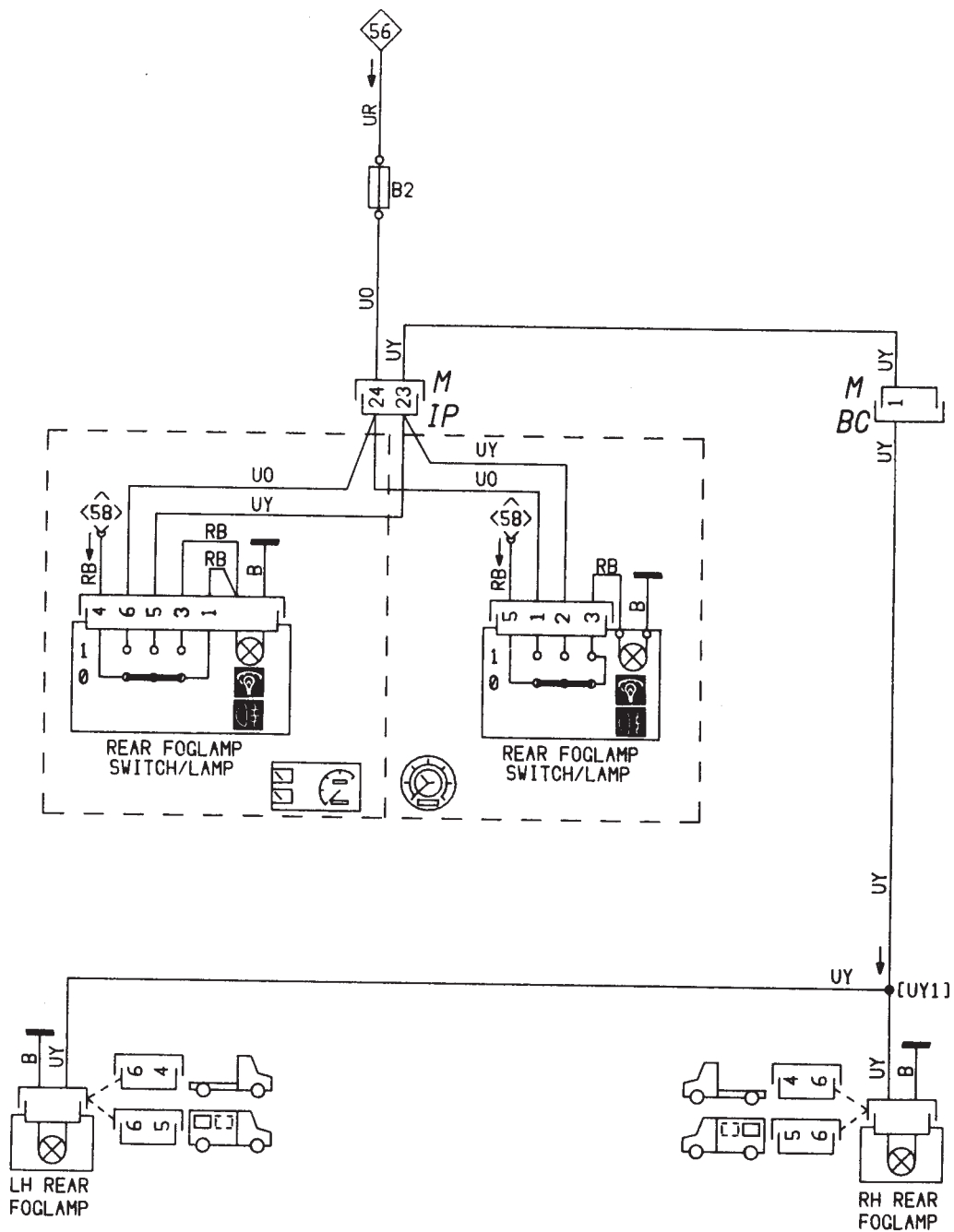




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 400	1991-92	BRAKE LAMPS / REVERSE LAMPS	54.05

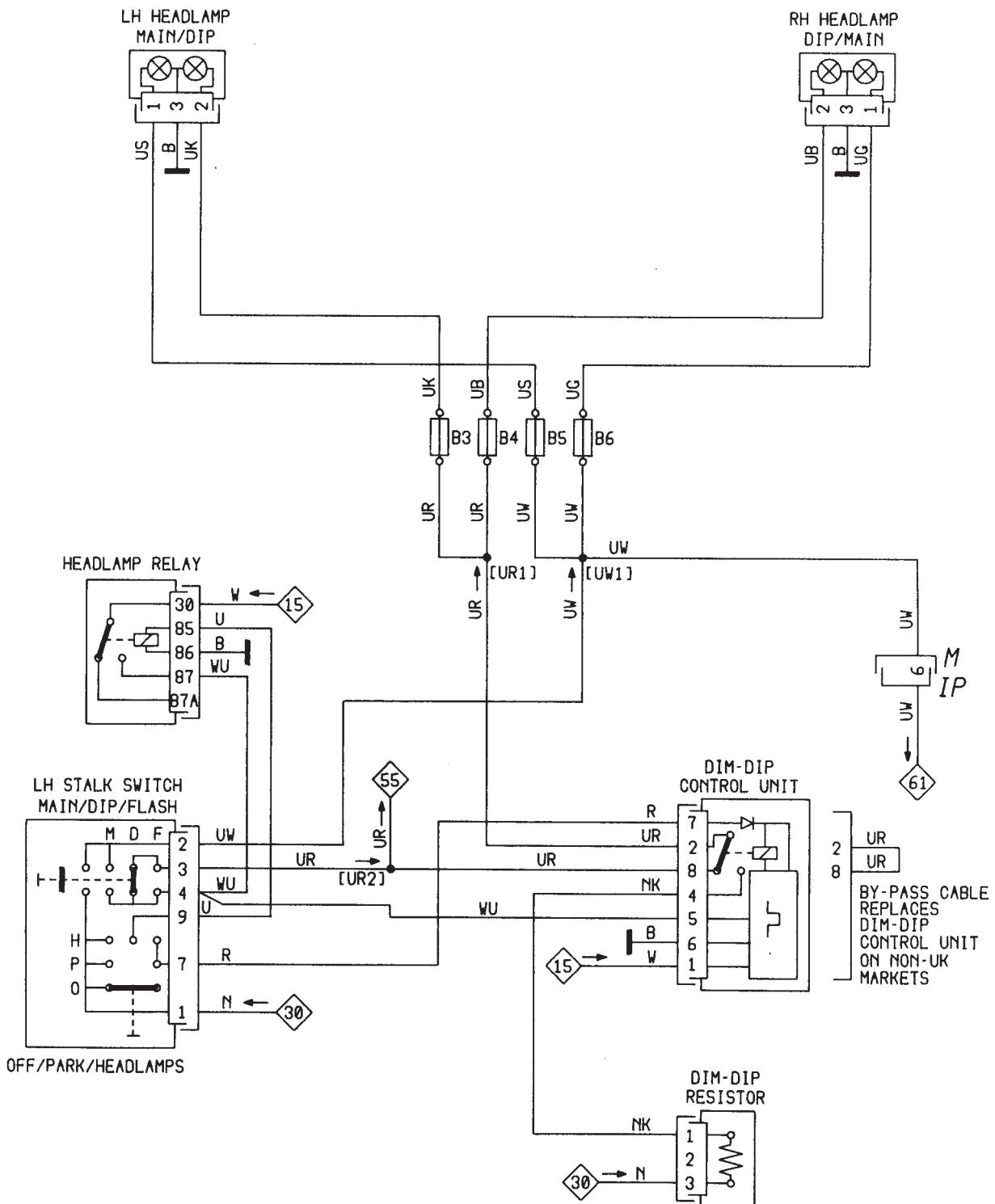


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-92	FOGLAMPS - REAR	55.01



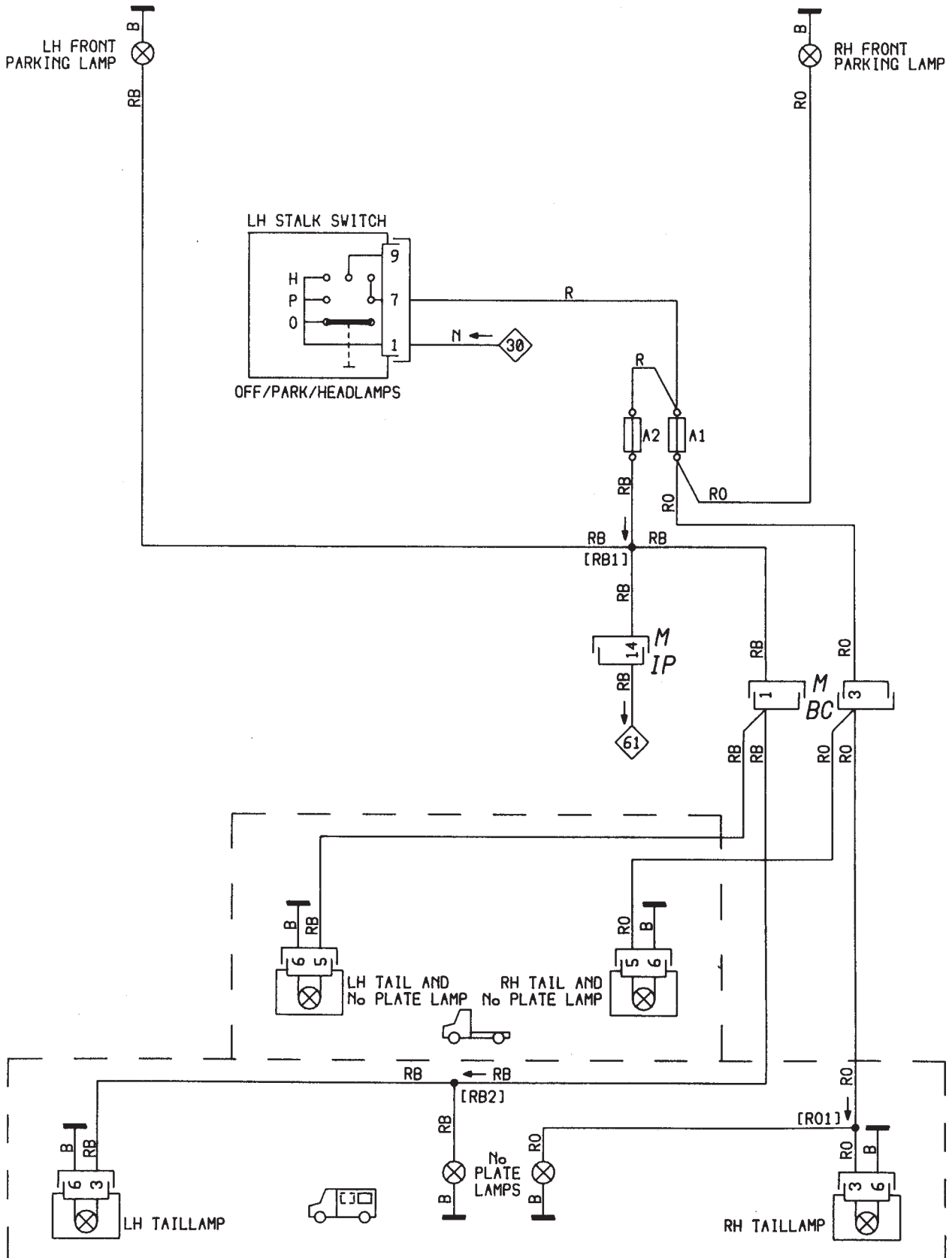


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-92	HEADLAMPS	56.02



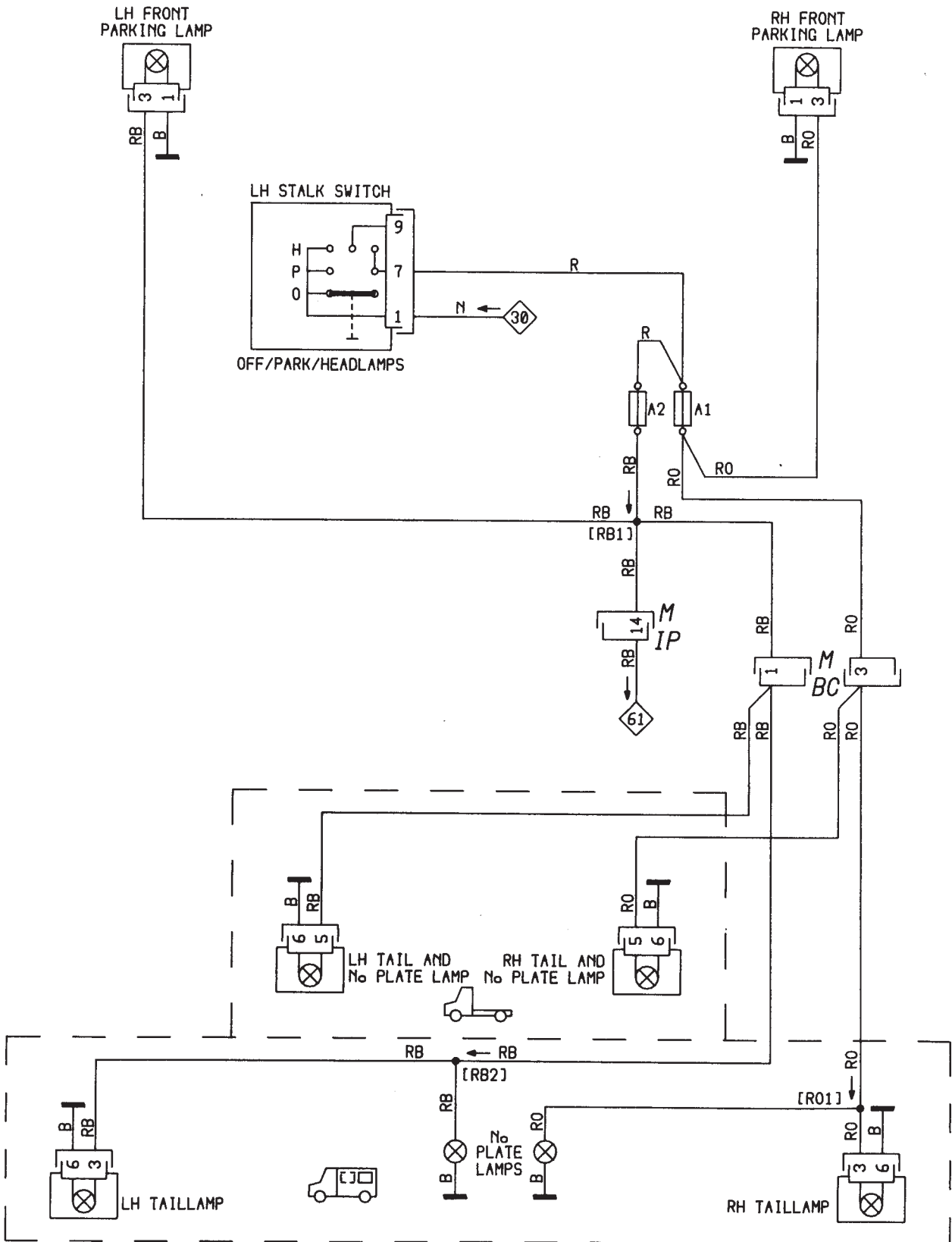


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-88	PARKING LAMPS	57.01

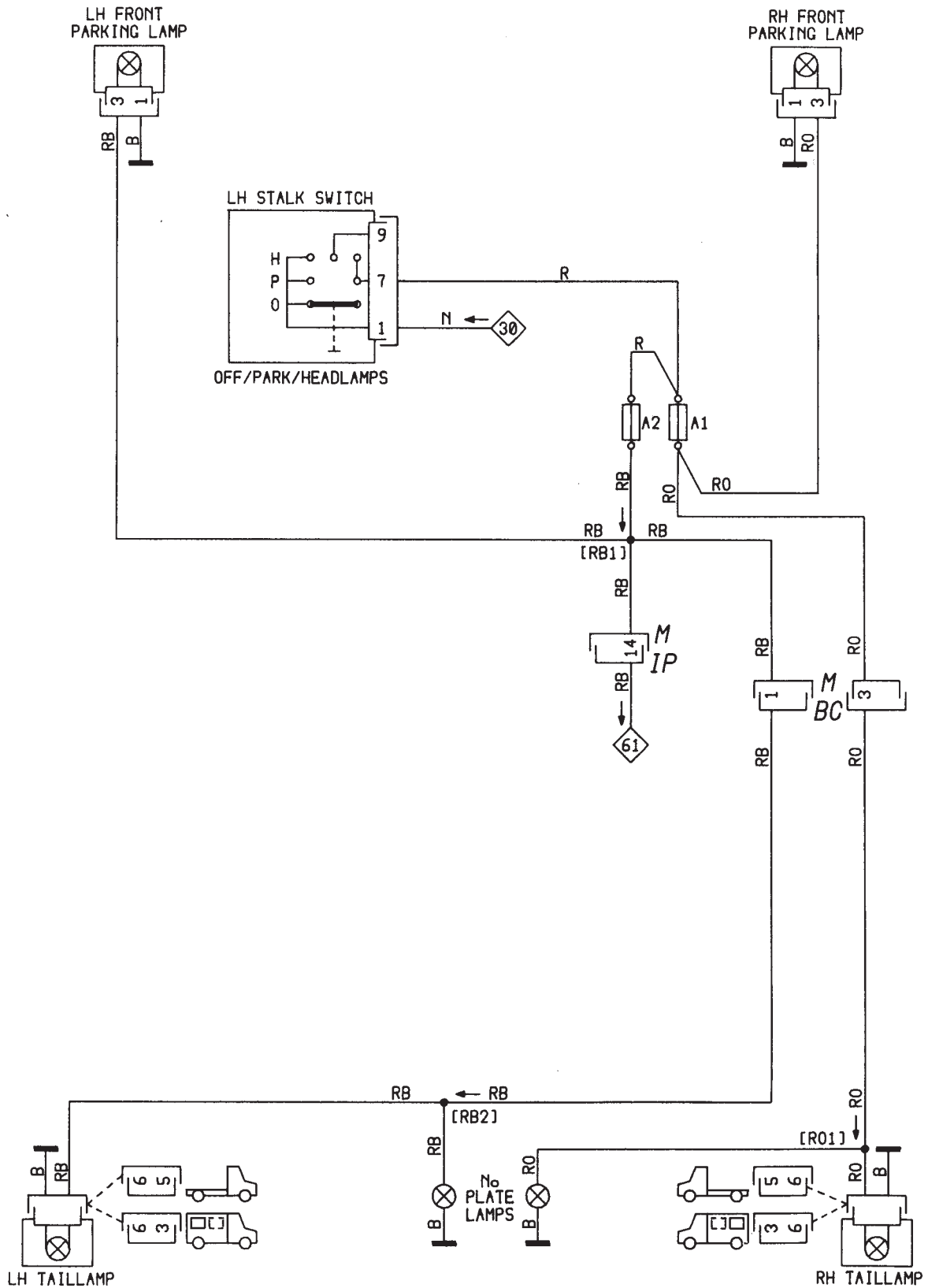




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
200 400	1989-92 1989-90	PARKING LAMPS	57.02

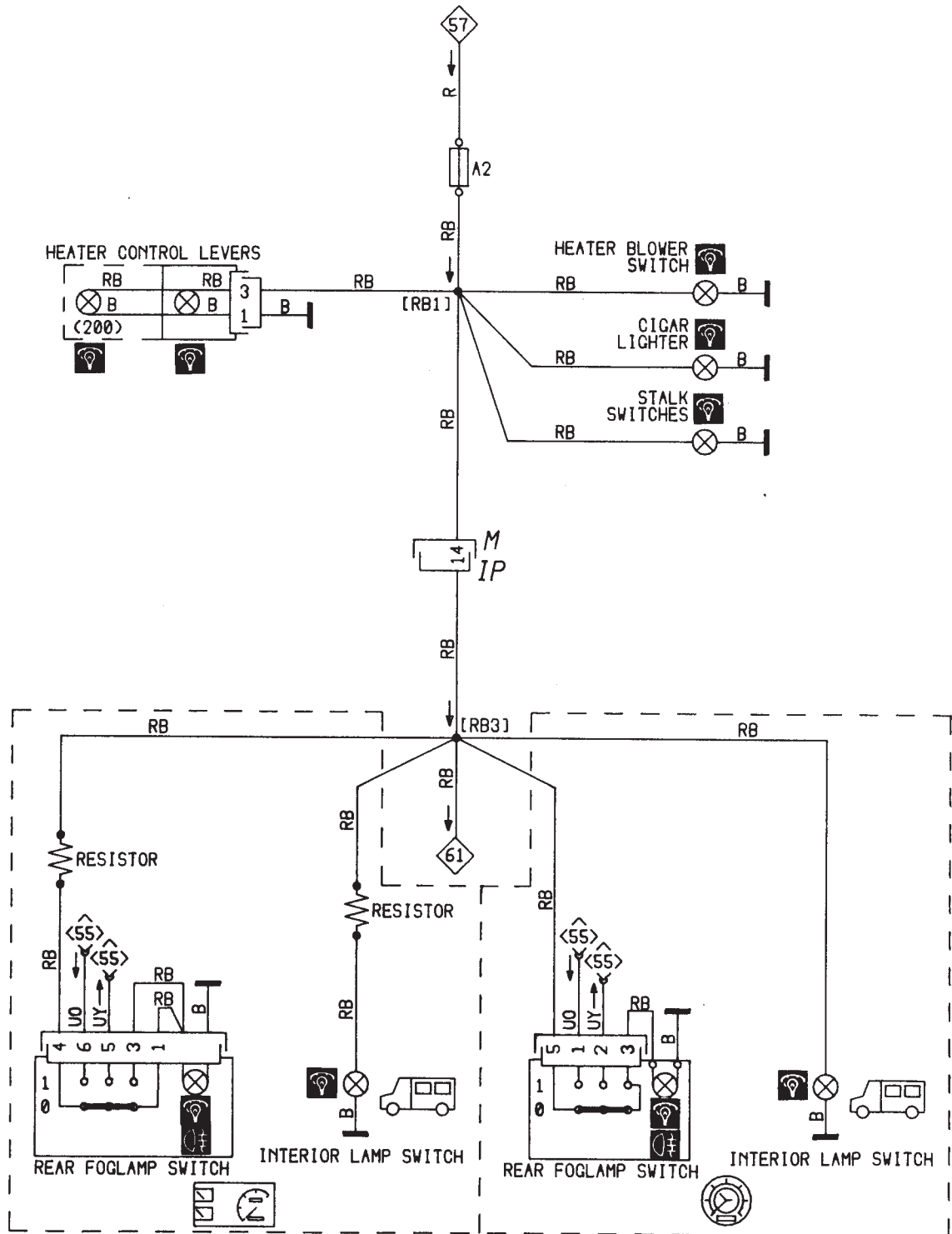


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
400	1990-92	PARKING LAMPS	57.04

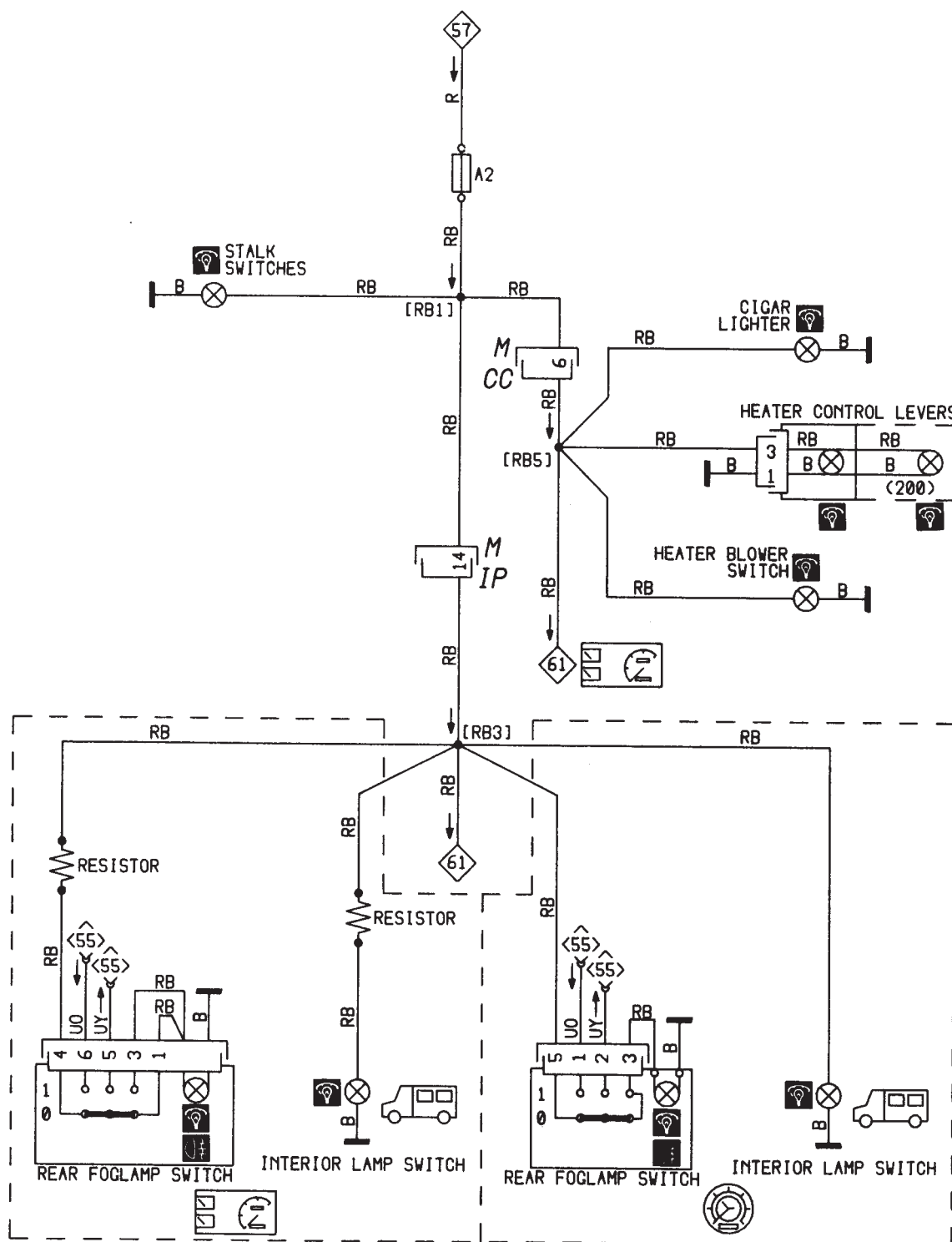




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-91	ILLUMINATION OF INSTRUMENTS AND CONTROLS	58.01

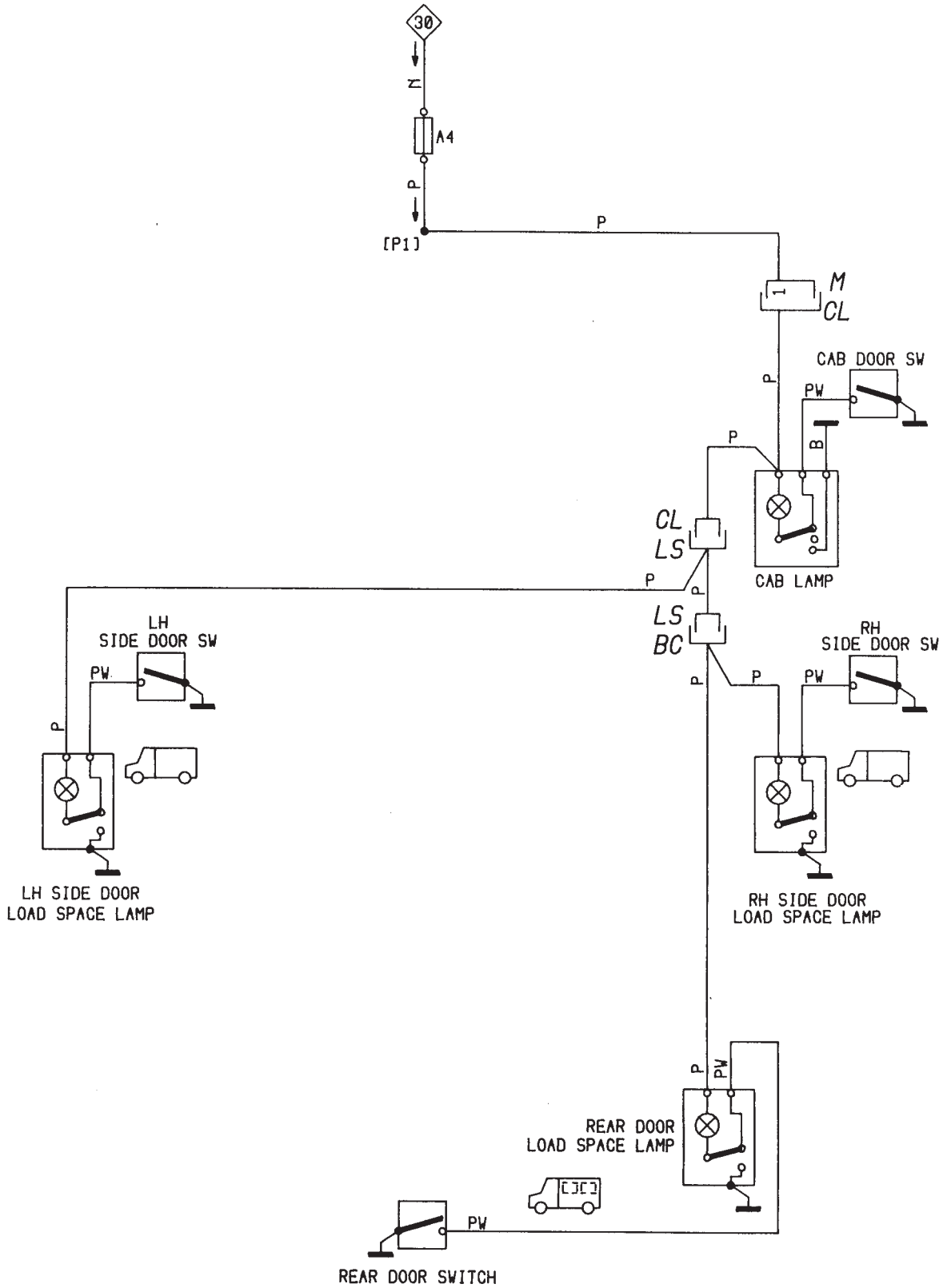


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1991-92	ILLUMINATION OF INSTRUMENTS AND CONTROLS	58.03

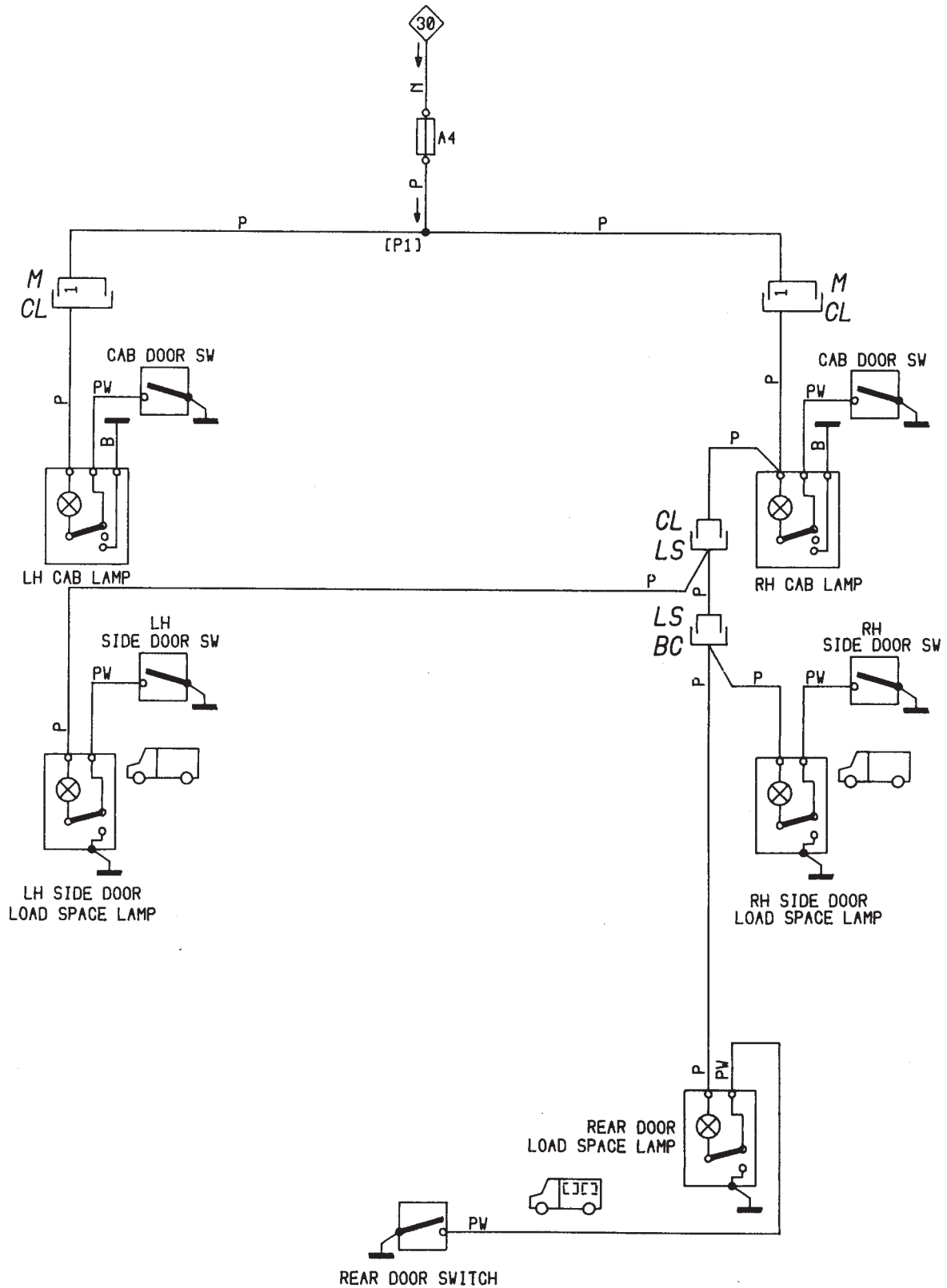




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
200	1987-92	INTERIOR LAMPS CAB / VAN / CREWBUS	60.01

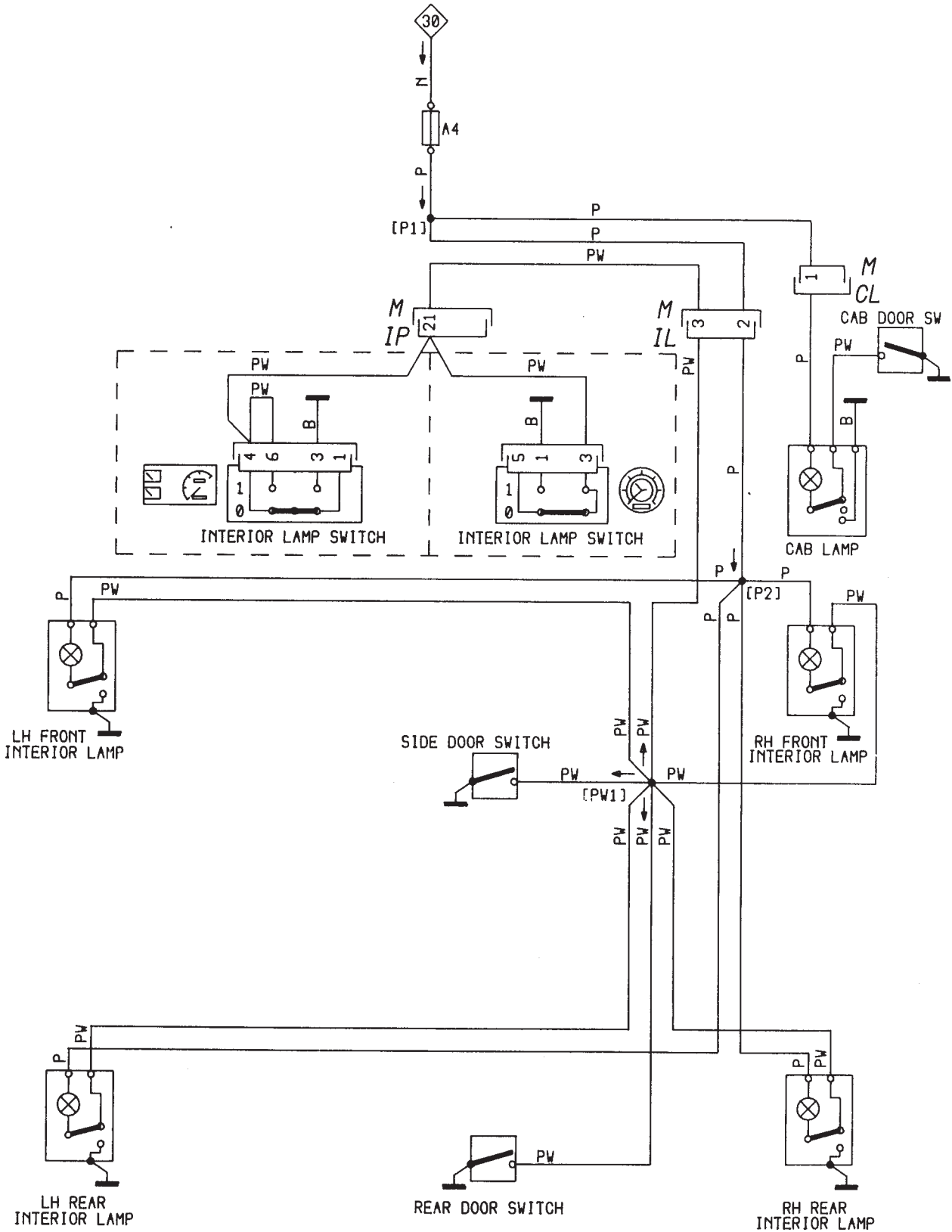


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
300/400	1987-92	INTERIOR LAMPS CAB / VAN / CREWBUS	60.02





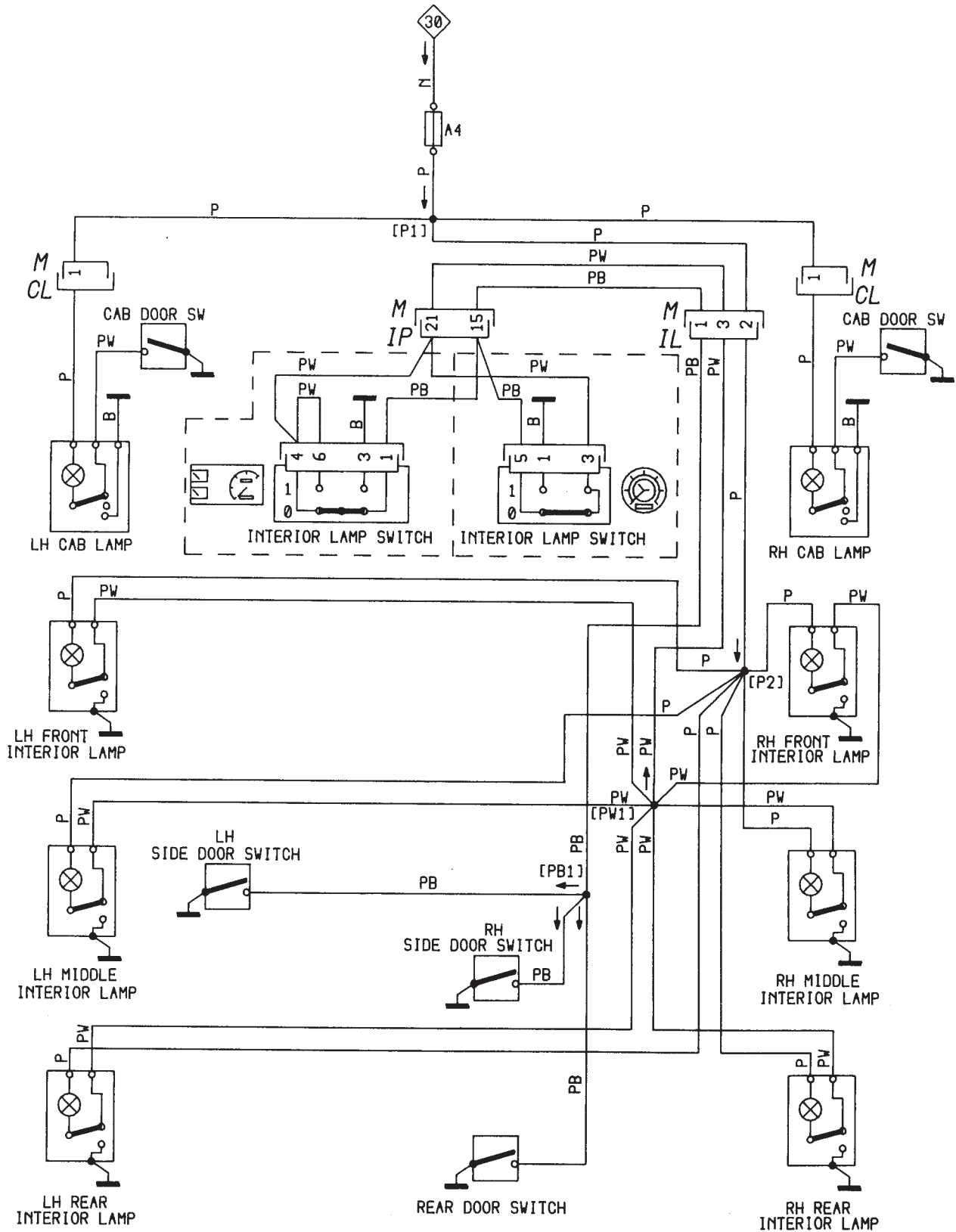
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
200	1987-88	INTERIOR LAMPS MINIBUS	60.21





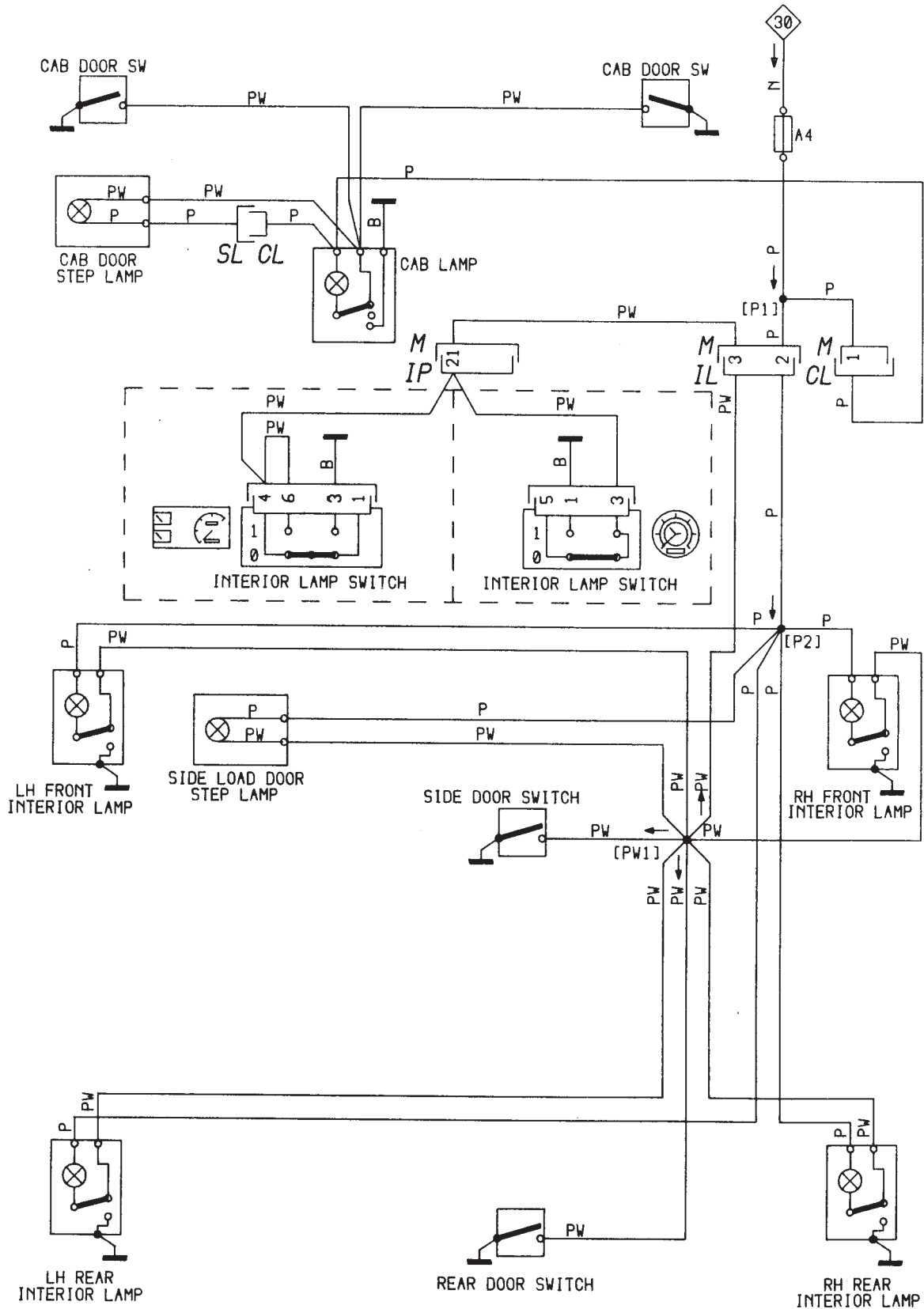


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
300	1987-88	INTERIOR LAMPS MINIBUS	60.22

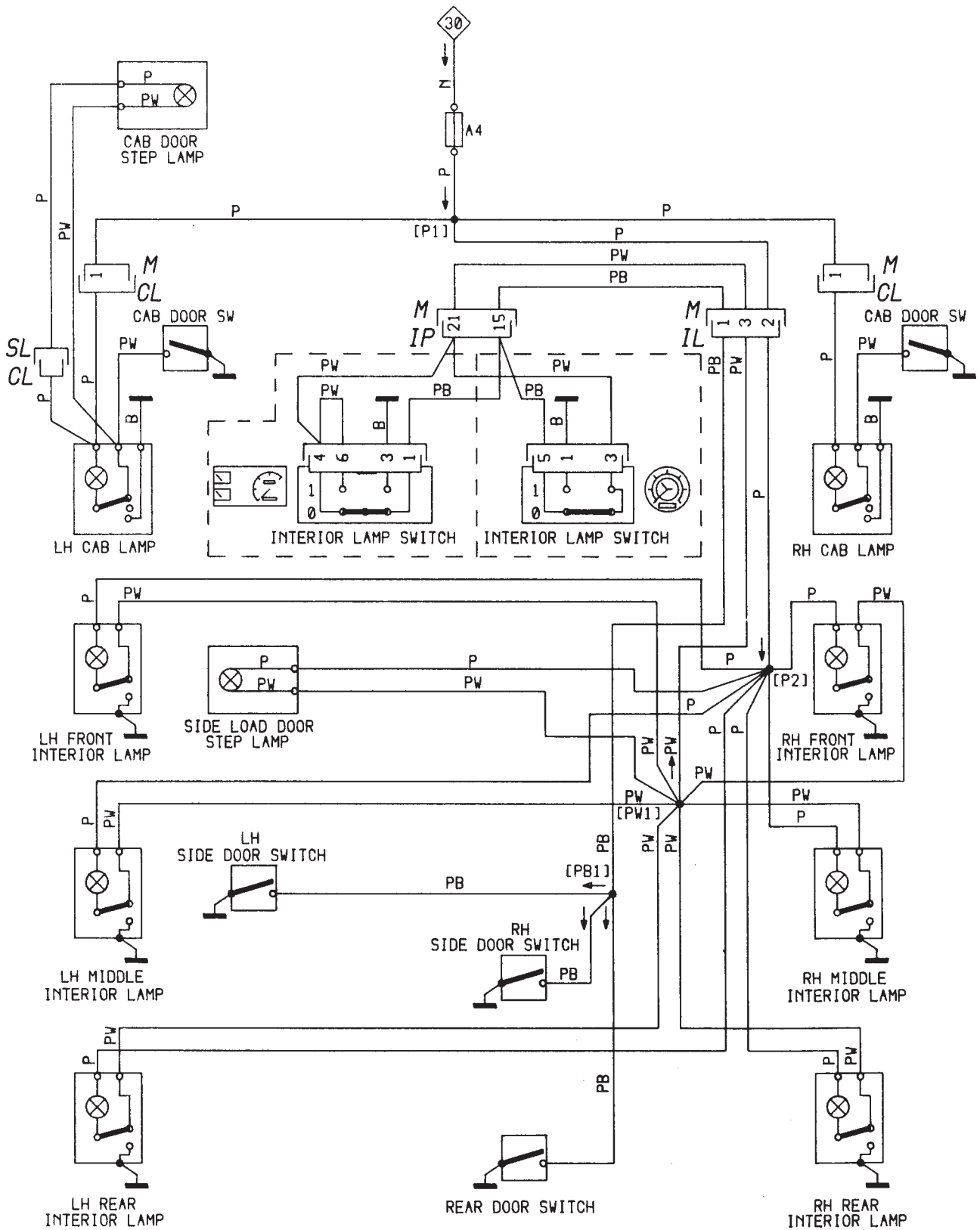




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
200	1988-92	INTERIOR LAMPS MINIBUS	60.23

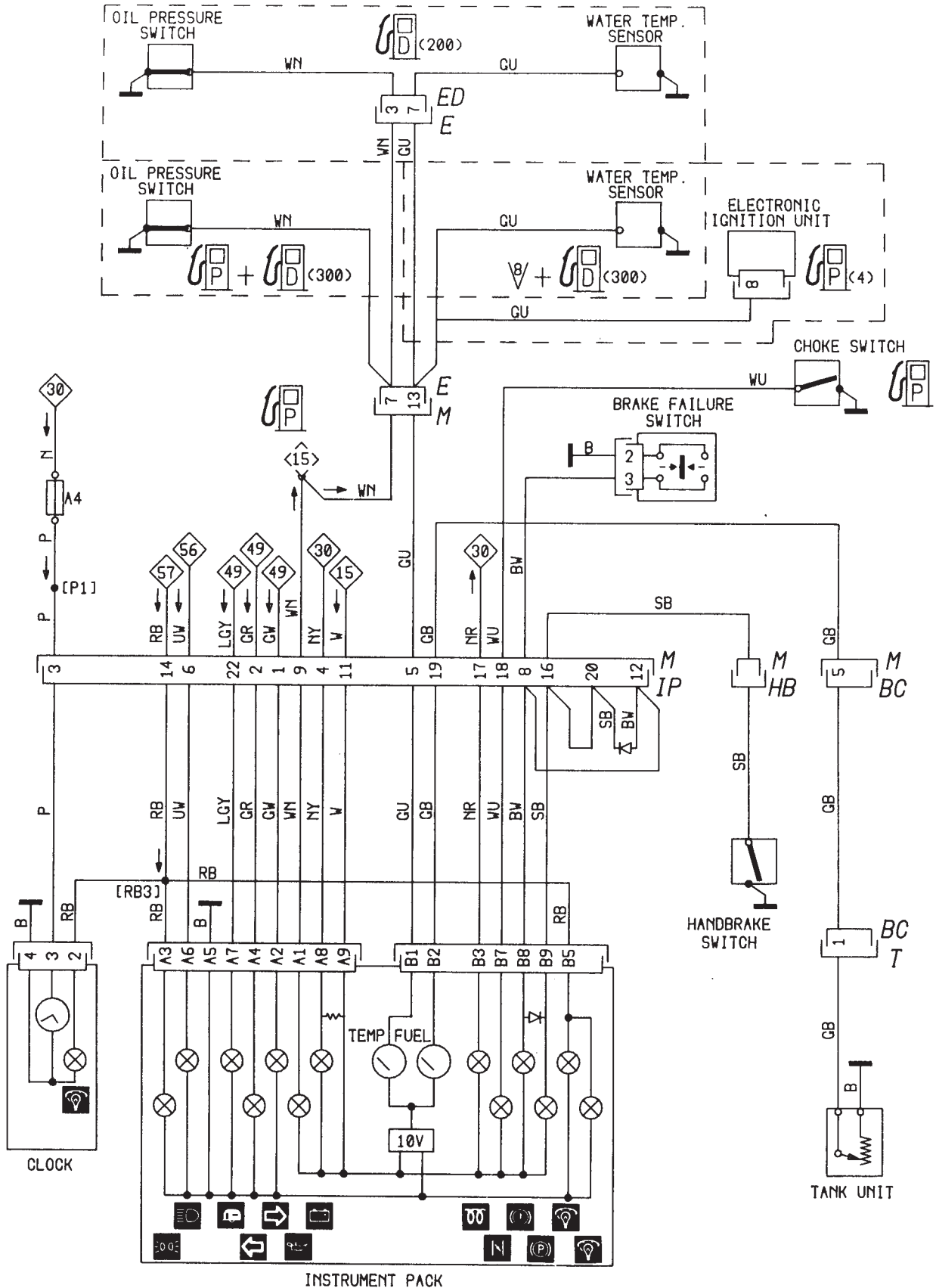


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
300/400	1988-92	INTERIOR LAMPS MINIBUS	60.24

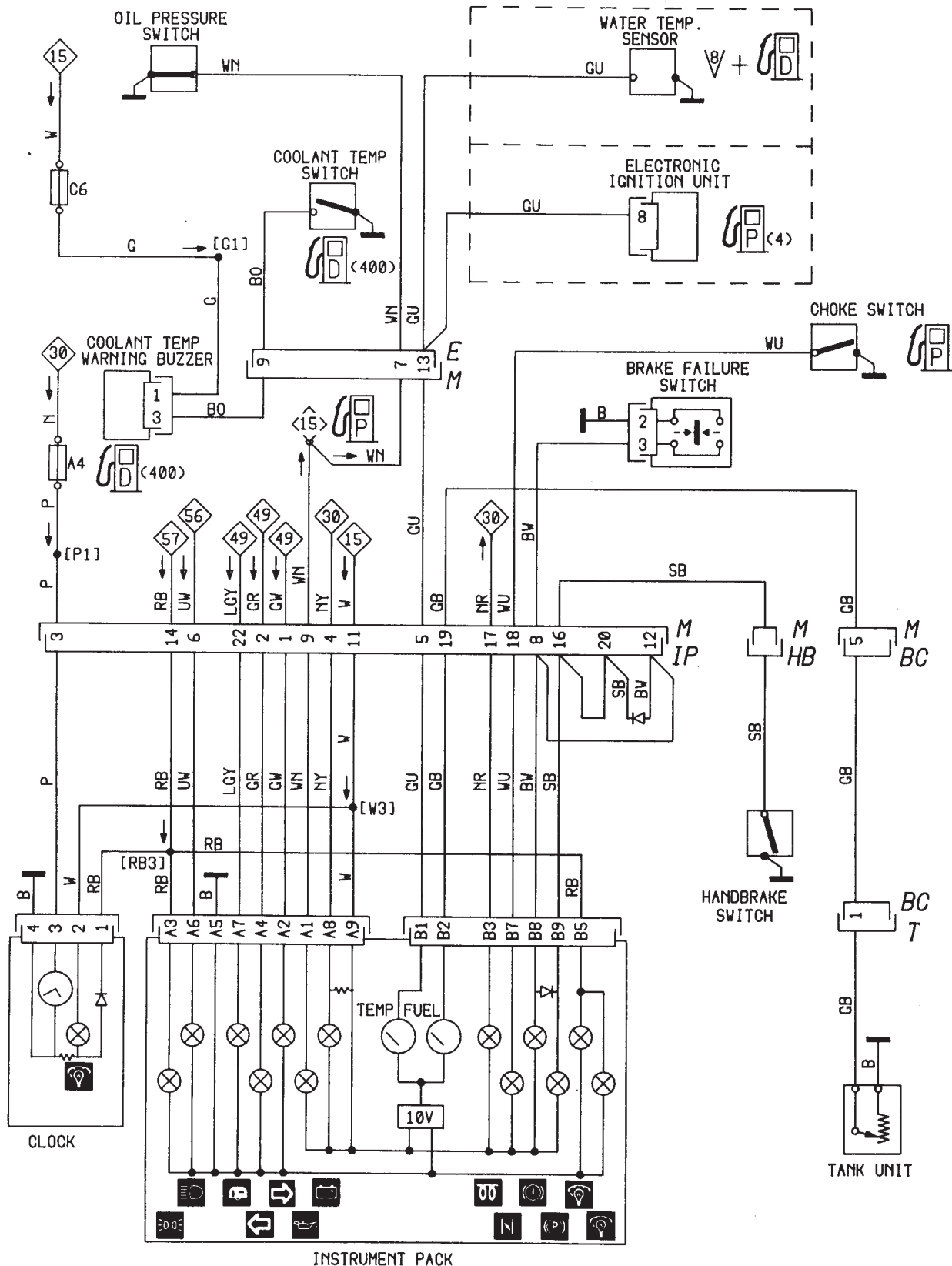




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
NON-TACHOGRAPH	1987-88	INSTRUMENTS AND WARNING LAMPS	61.02



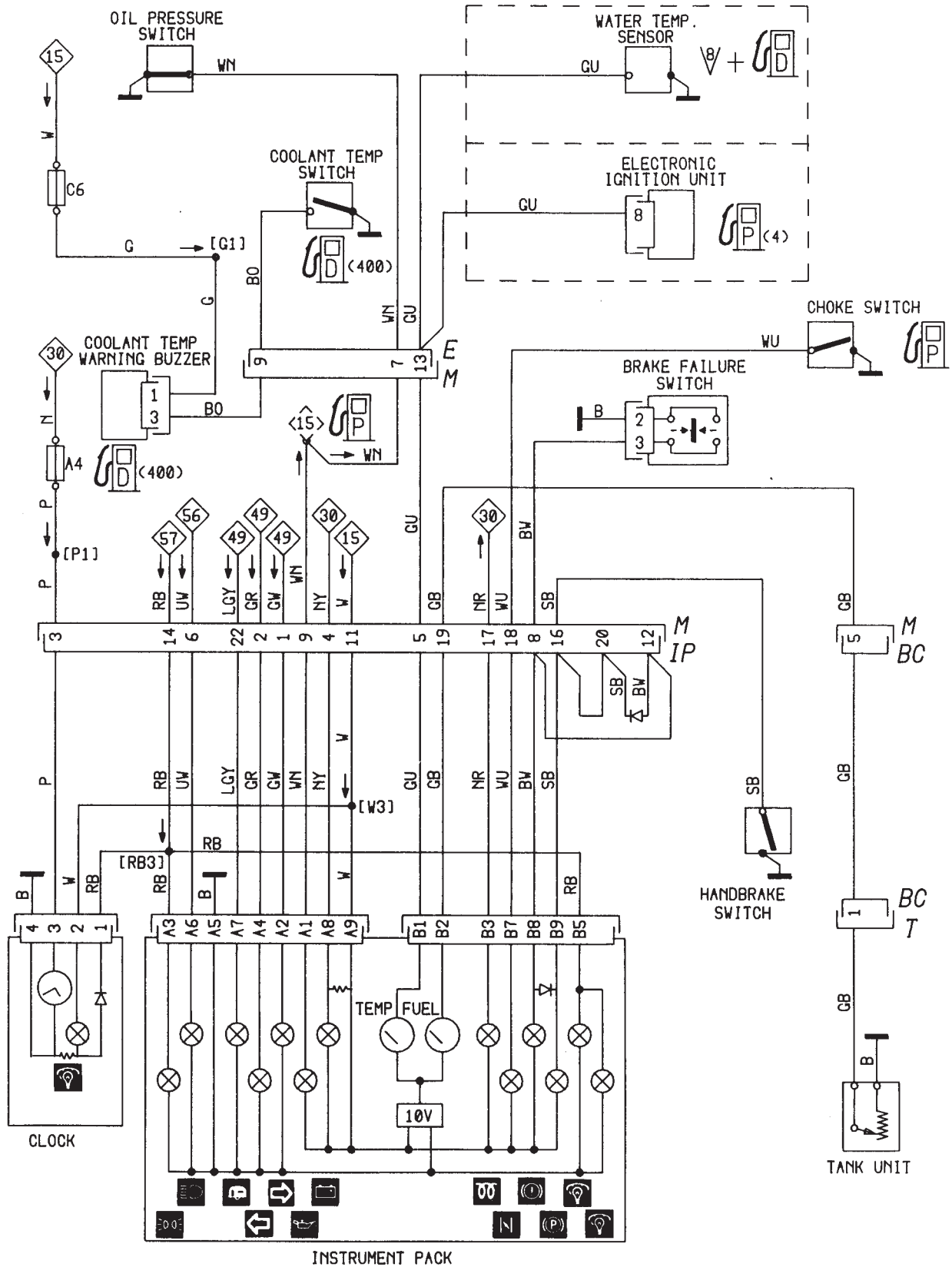
MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
NON-TACHOGRAPH	1989-90	INSTRUMENTS AND WARNING LAMPS	61.03



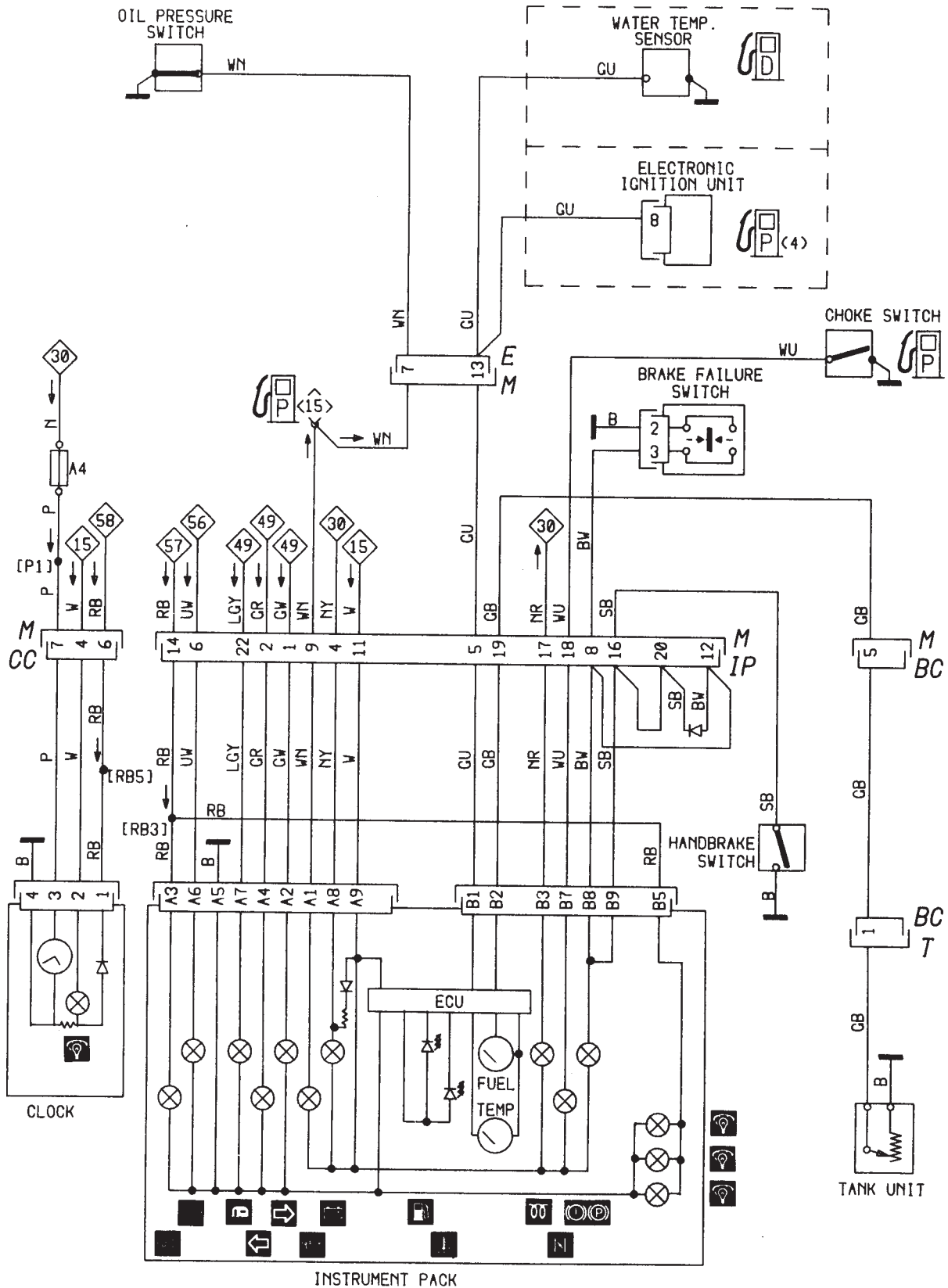
INSTRUMENT PACK



MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
NON-TACHOGRAPH	1991	INSTRUMENTS AND WARNING LAMPS	61.05

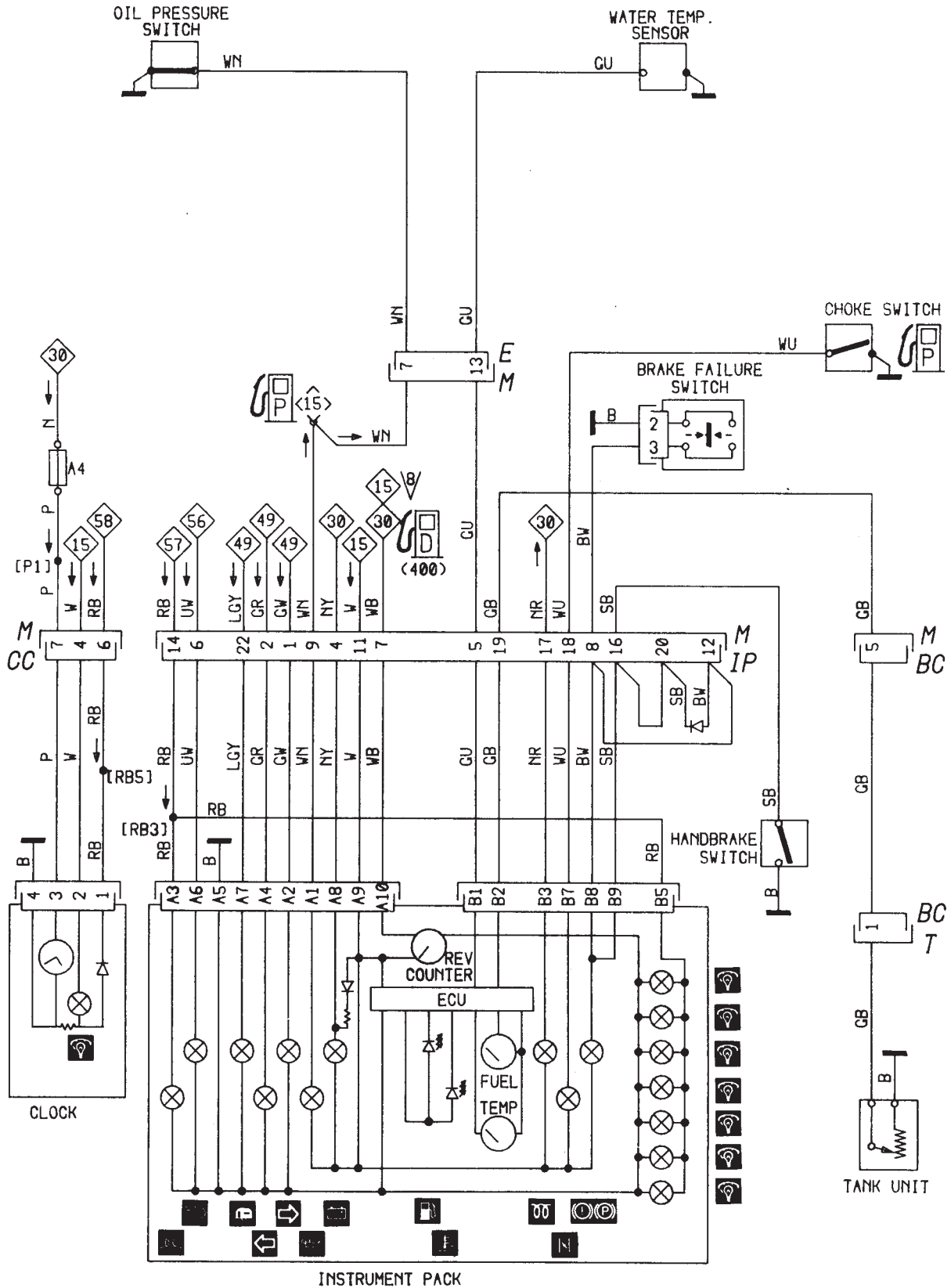


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
3 INSTRUMENT PACK	1991-92	INSTRUMENTS AND WARNING LAMPS	61.06



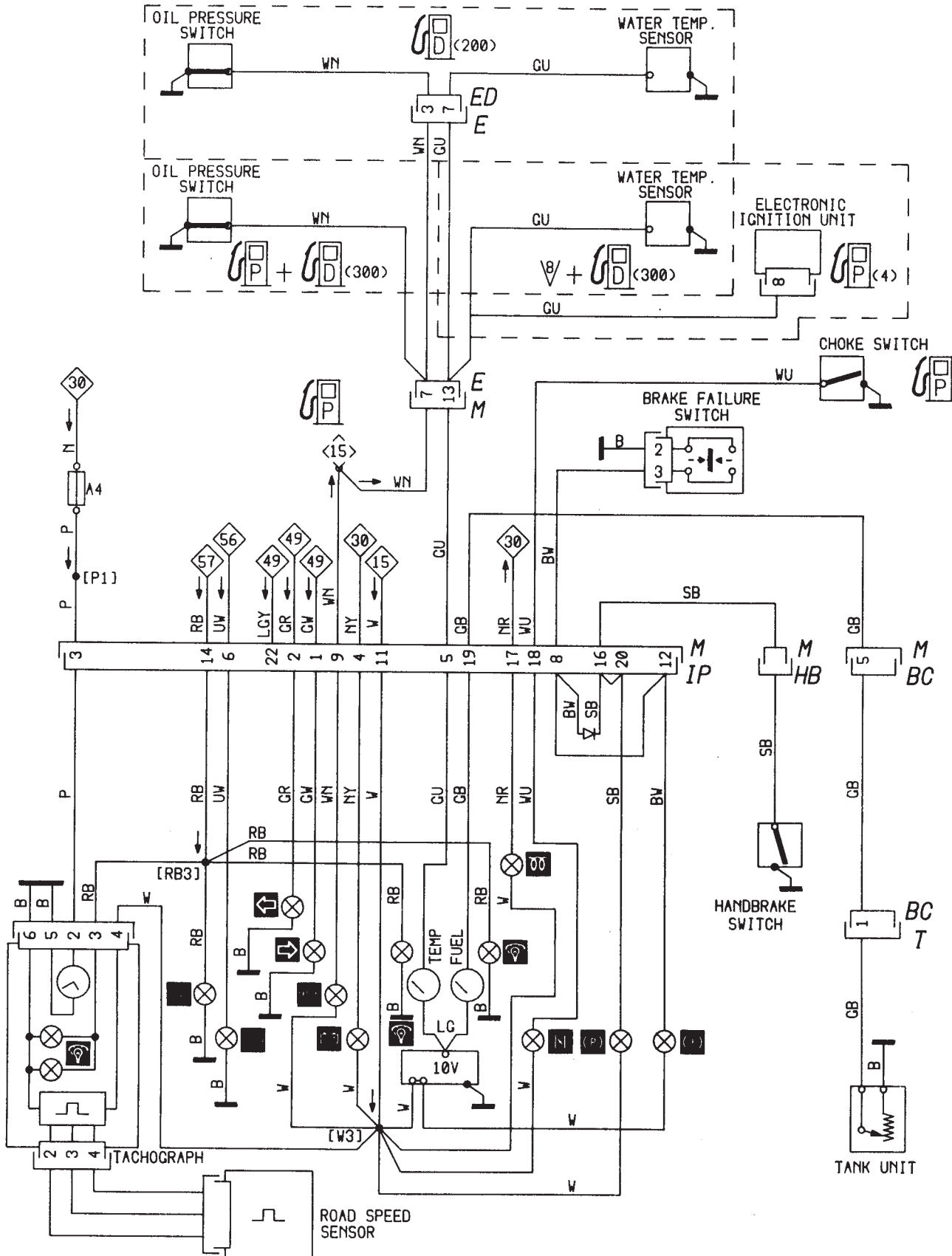


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
4 INSTRUMENT PACK	1991-92	INSTRUMENTS AND WARNING LAMPS	61.07



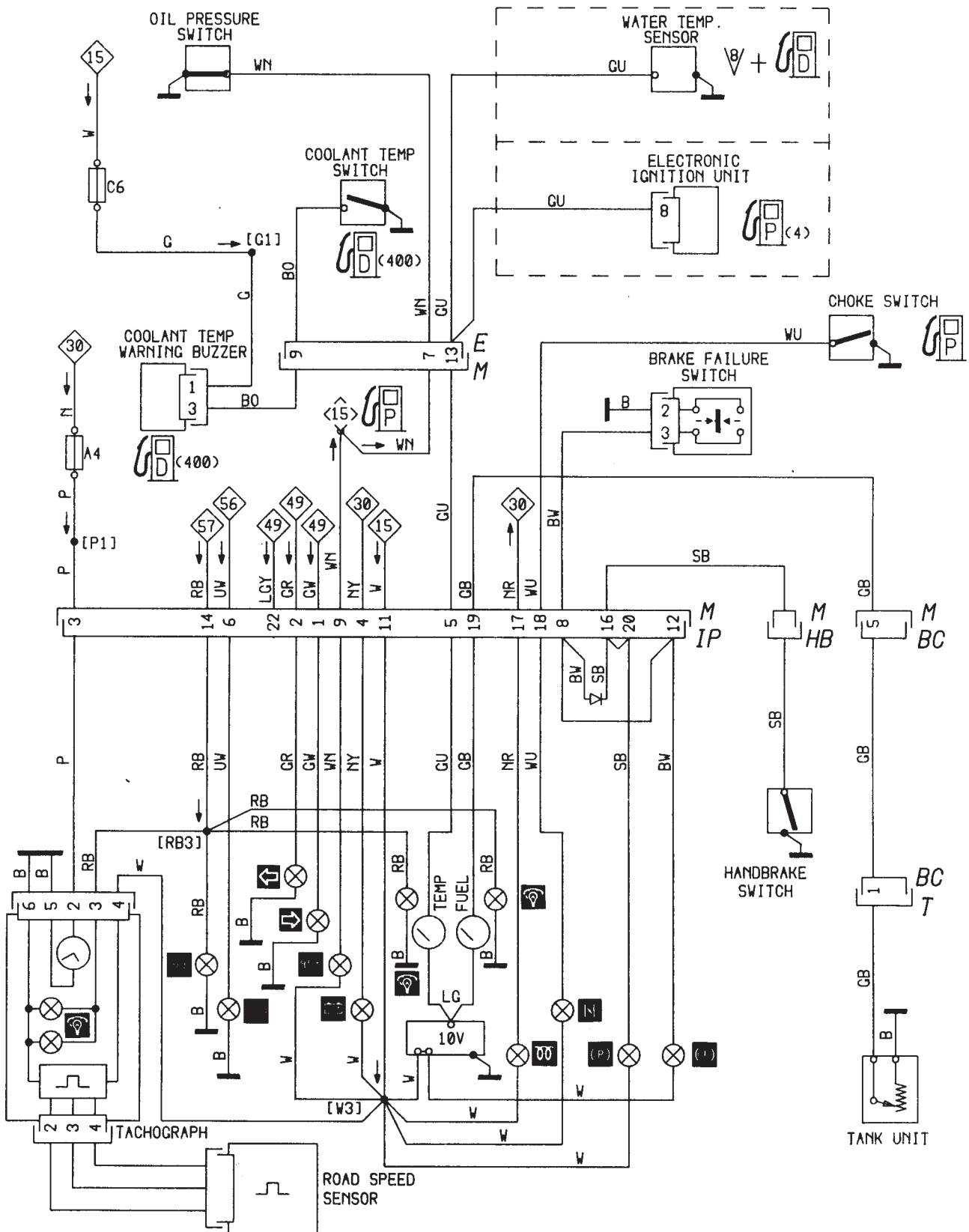


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
TACHOGRAPH	1987-88	INSTRUMENTS AND WARNING LAMPS	61.22

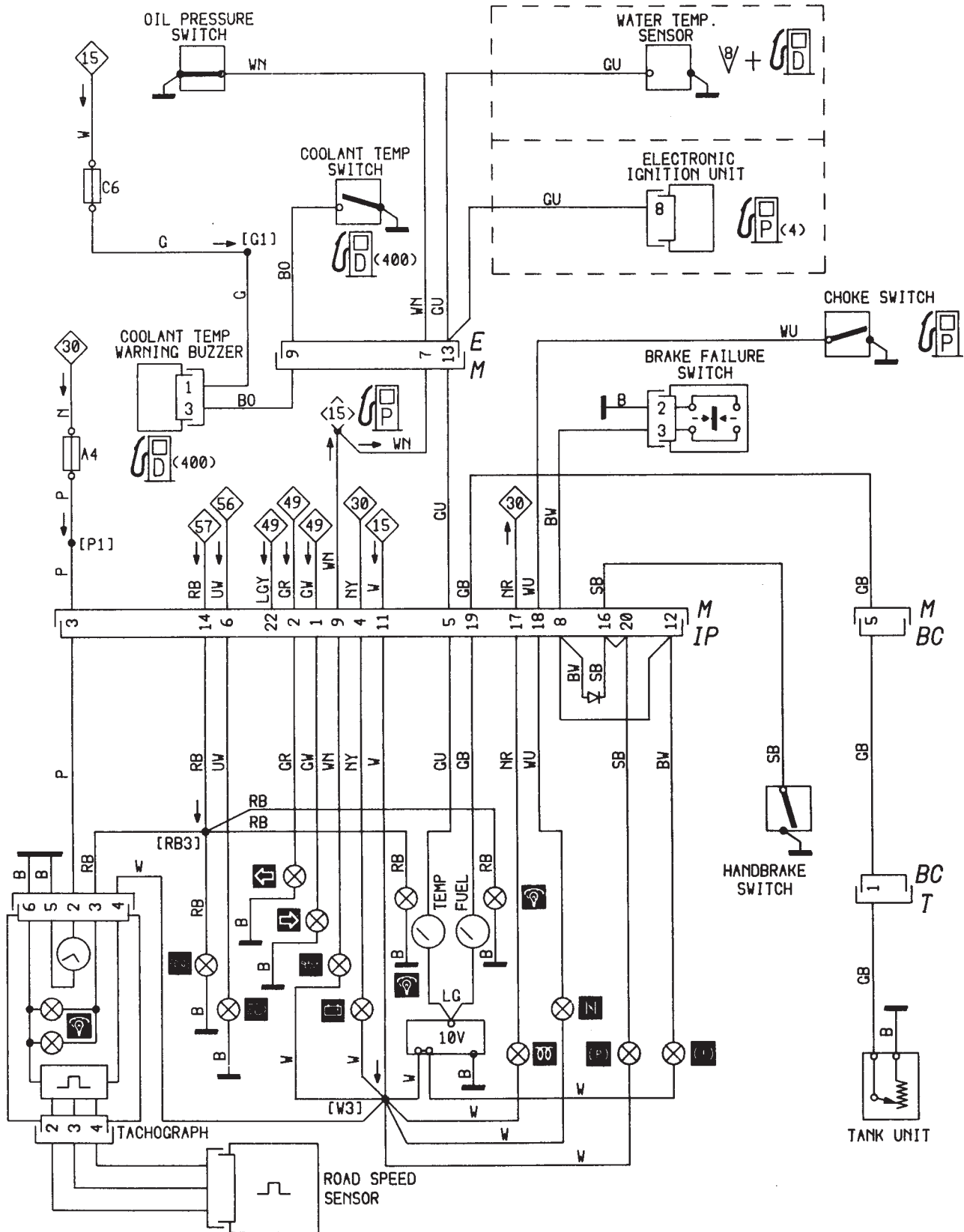




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
TACHOGRAPH	1989-90	INSTRUMENTS AND WARNING LAMPS	61.23

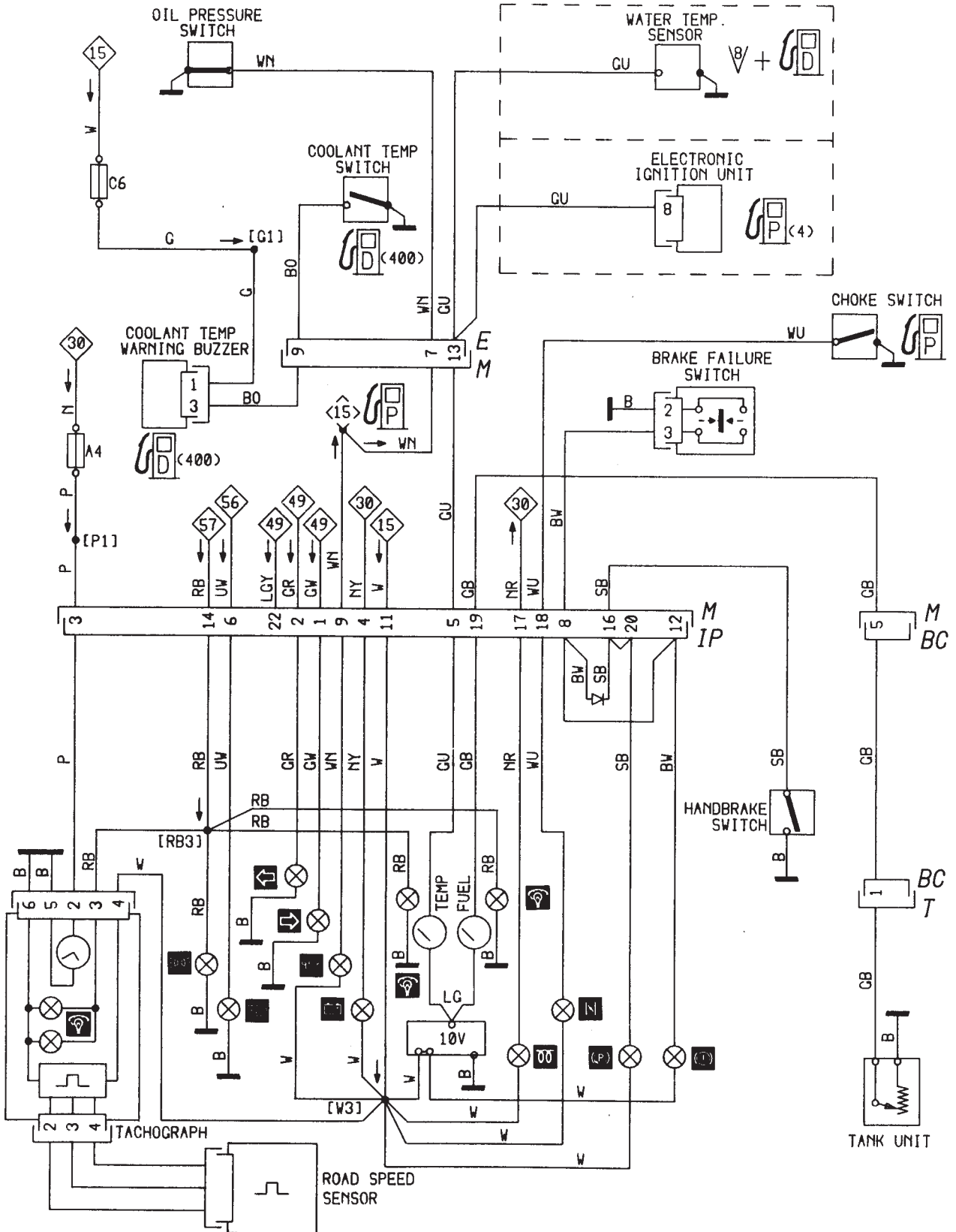


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
TACHOGRAPH	1991	INSTRUMENTS AND WARNING LAMPS	61.24

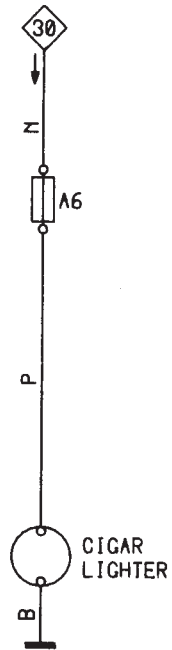
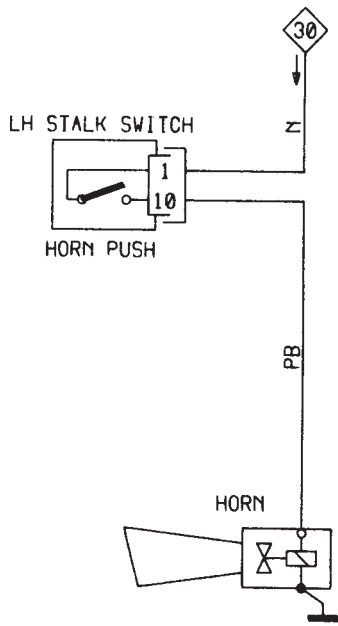




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
TACHOGRAPH	1991-92	INSTRUMENTS AND WARNING LAMPS	61.25

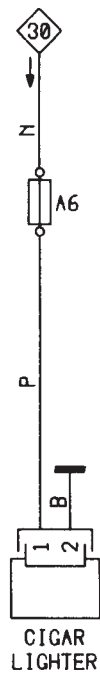
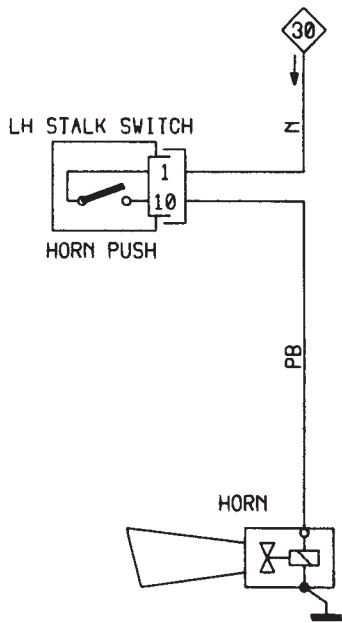


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-90	HORN / CIGAR LIGHTER	71.01

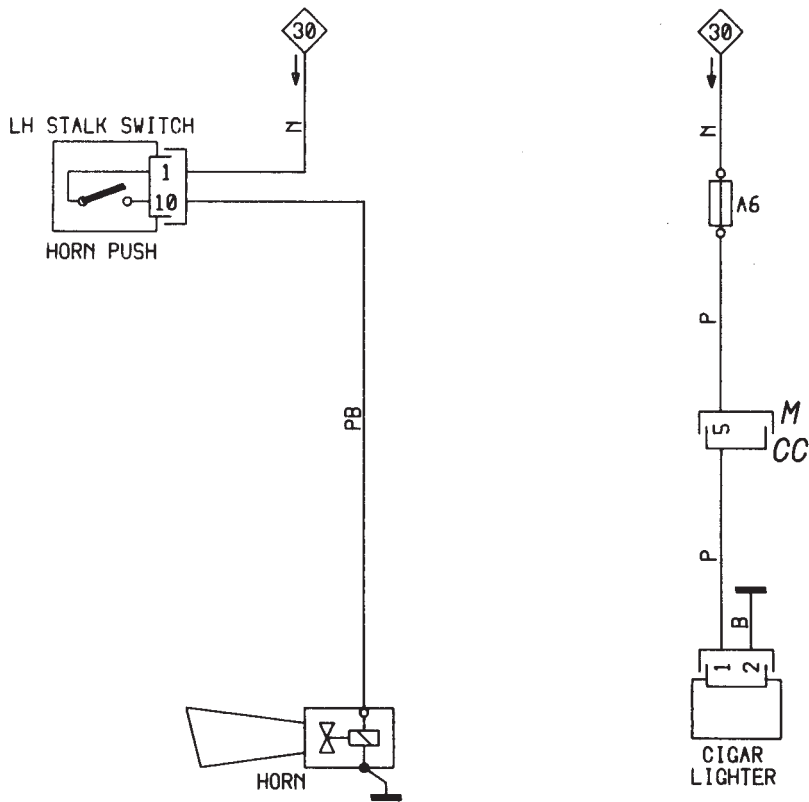




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1991	HORN / CIGAR LIGHTER	71.02

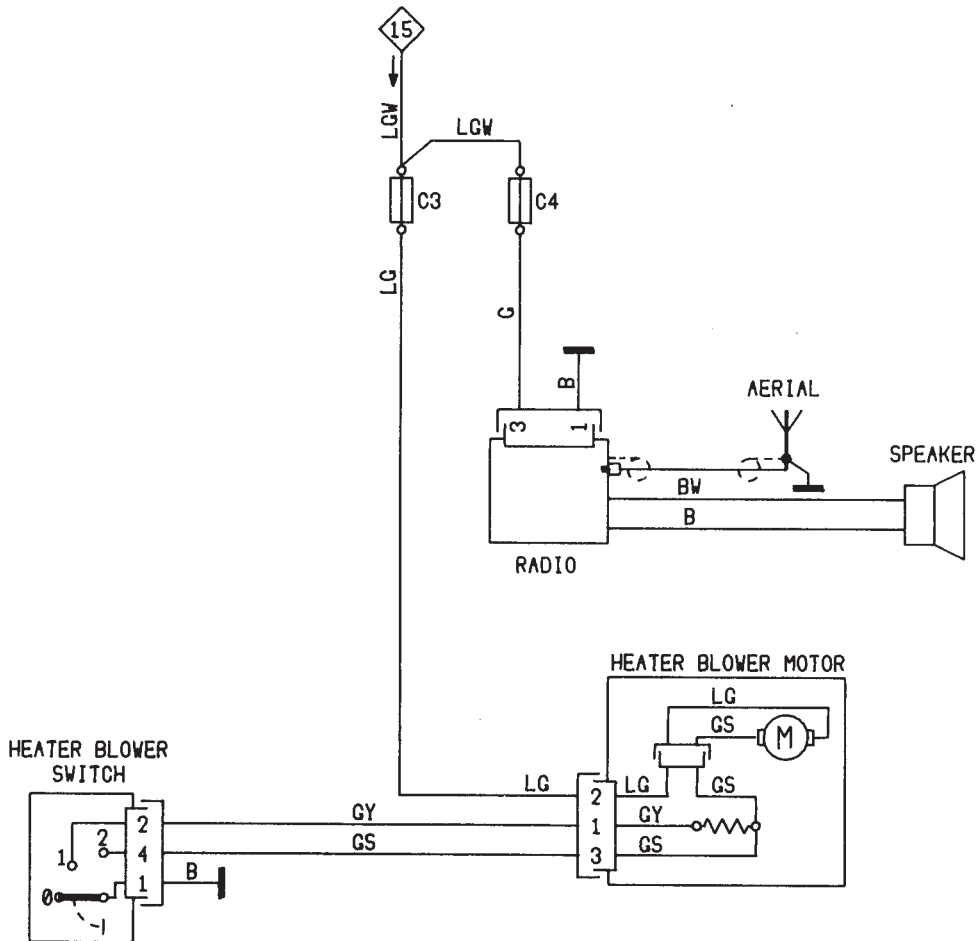


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1991-92	HORN / CIGAR LIGHTER	71.03



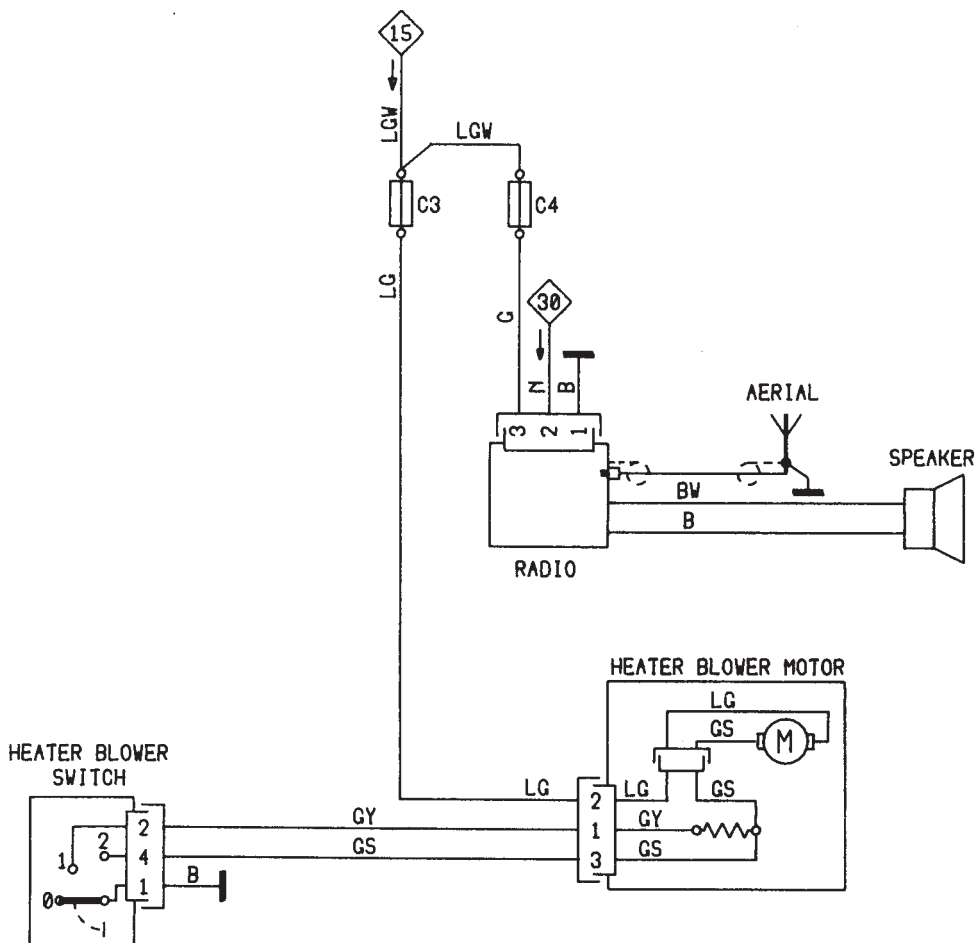


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1987-88	HEATER / RADIO	75.01



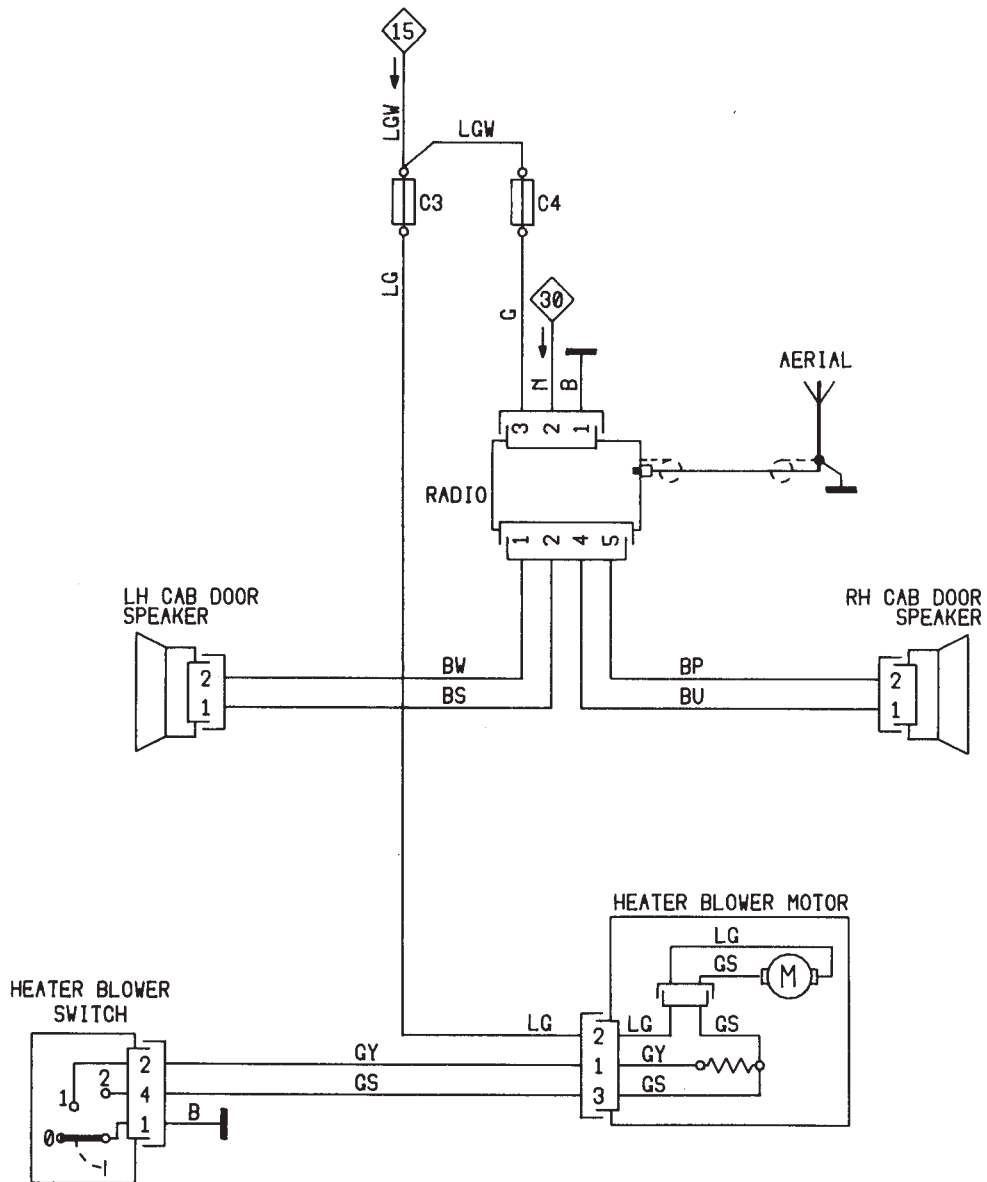


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1989	HEATER / RADIO	75.02

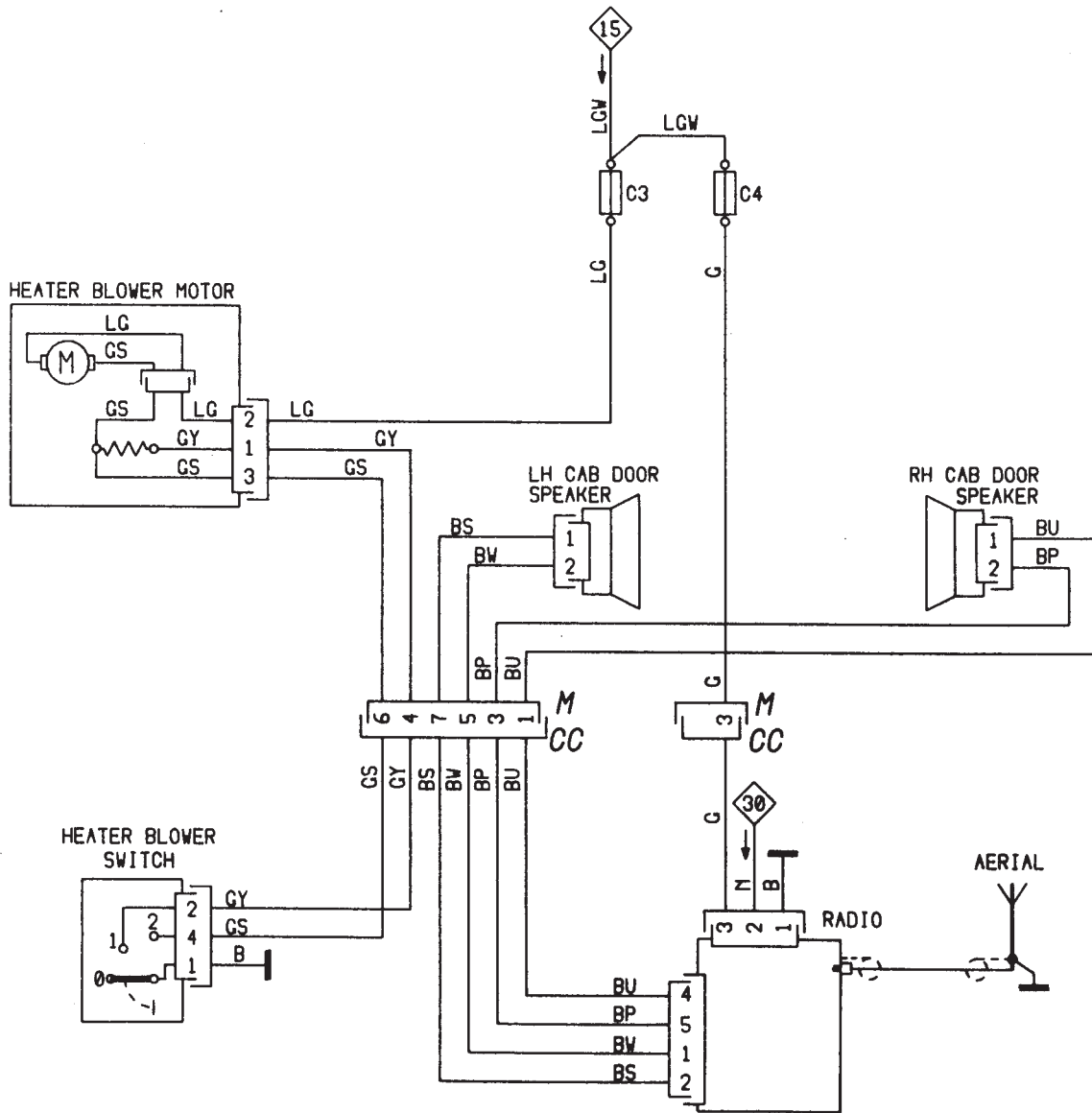




MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1990-91	HEATER / RADIO	75.03

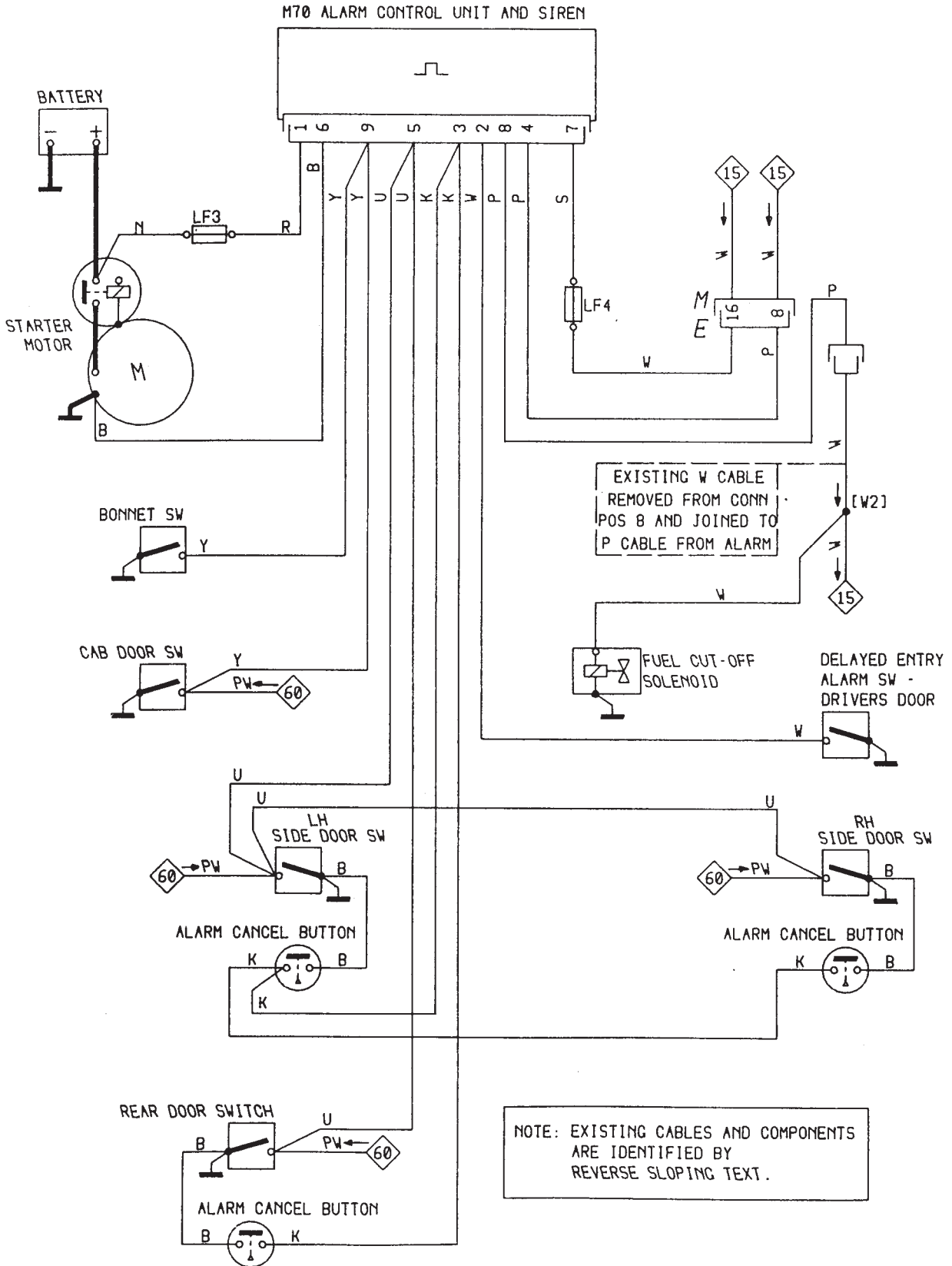


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
ALL	1991-92	HEATER / RADIO	75.04



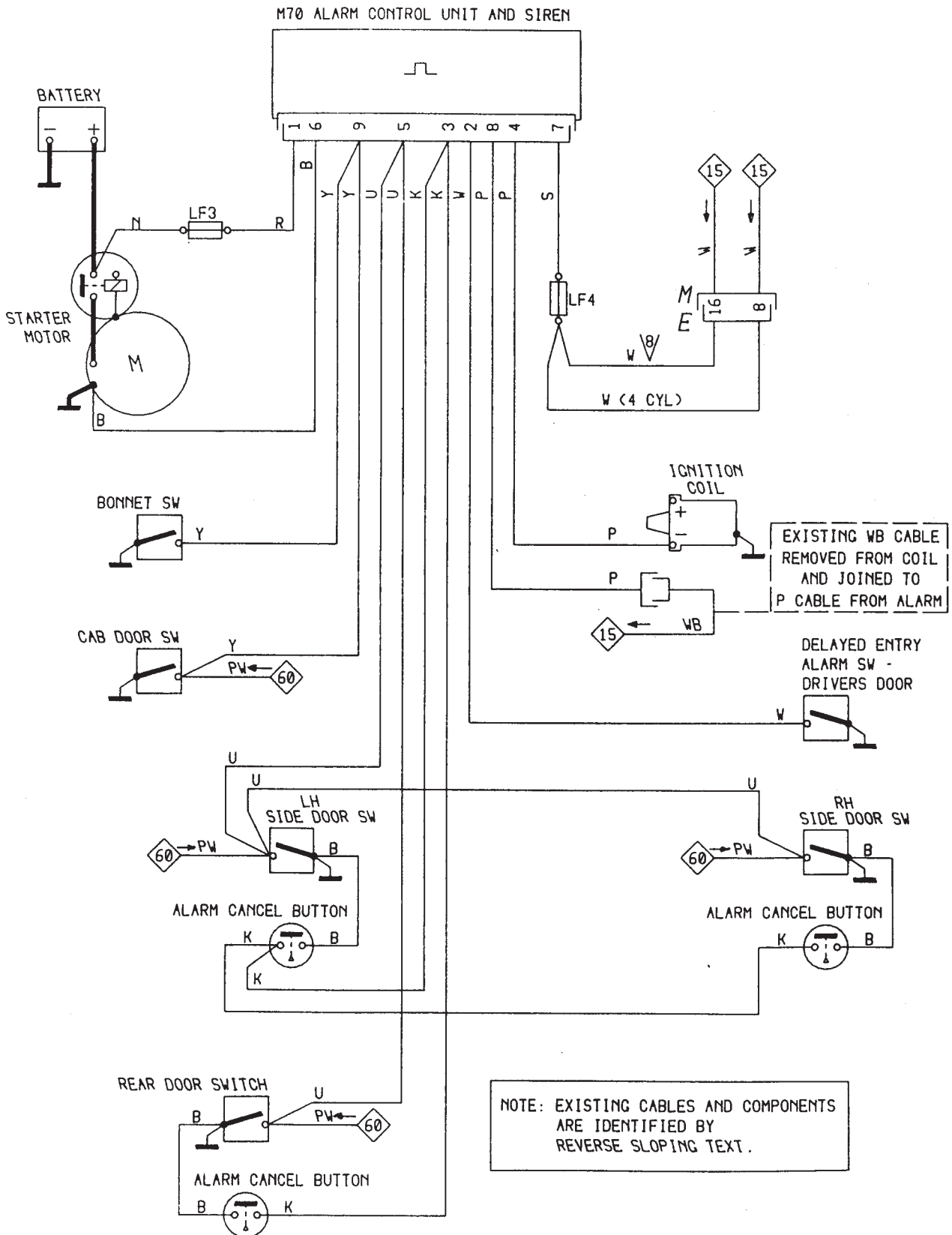


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
DIESEL 200	1990-92	M70 ALARM SYSTEM LEYLAND DAF PART No. BBU 8592	95.01



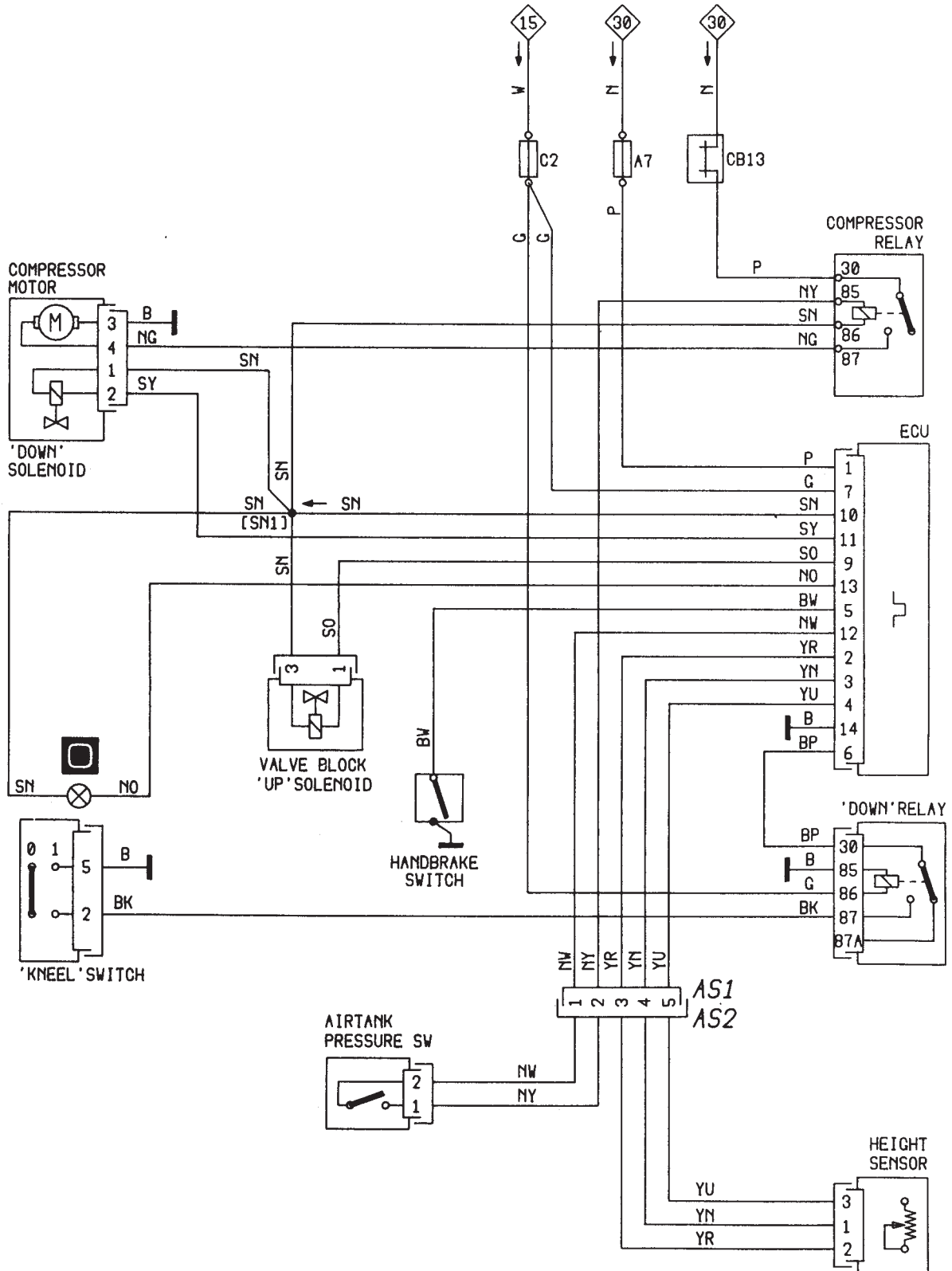


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
PETROL 200	1990-92	M70 ALARM SYSTEM LEYLAND DAF PART No. BBU 8592	95.02

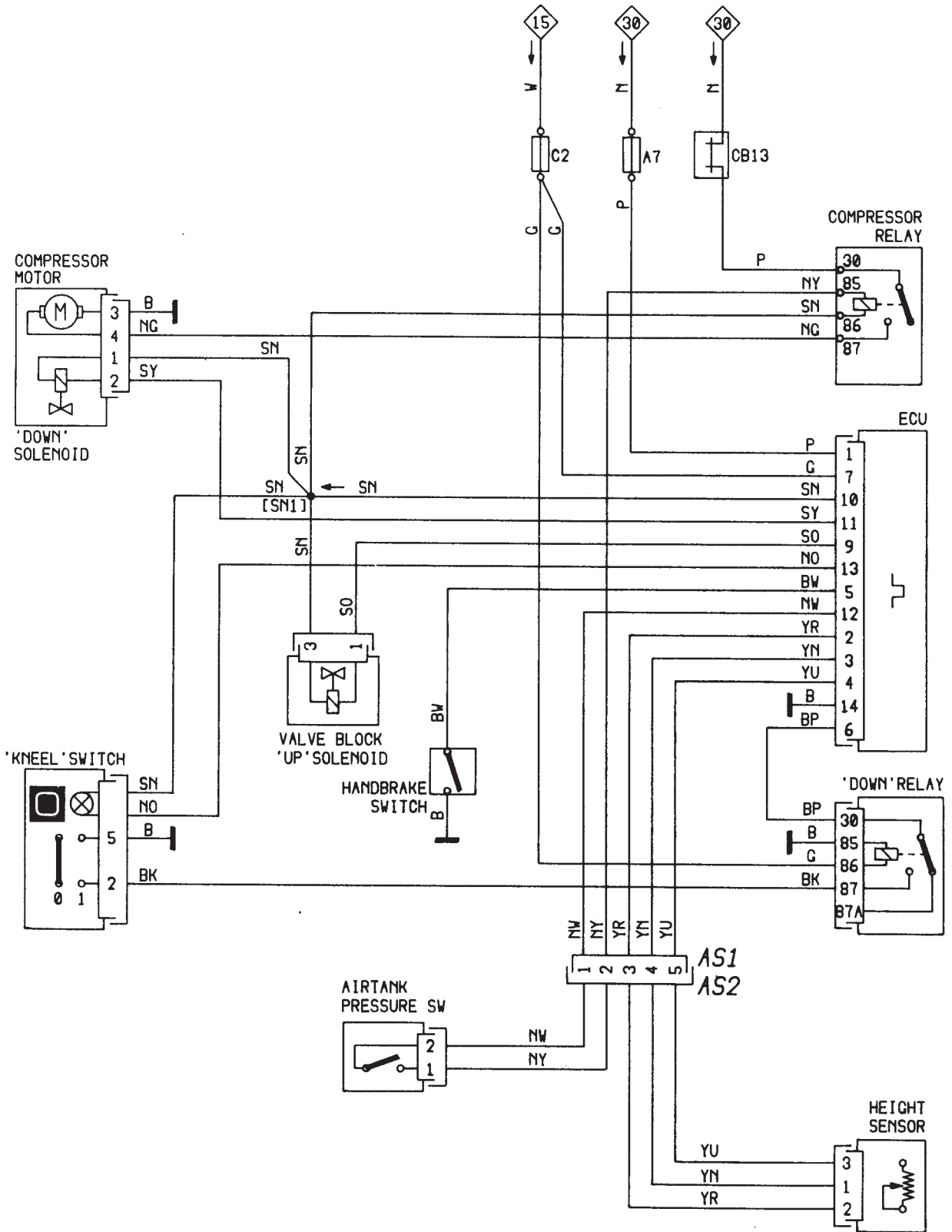


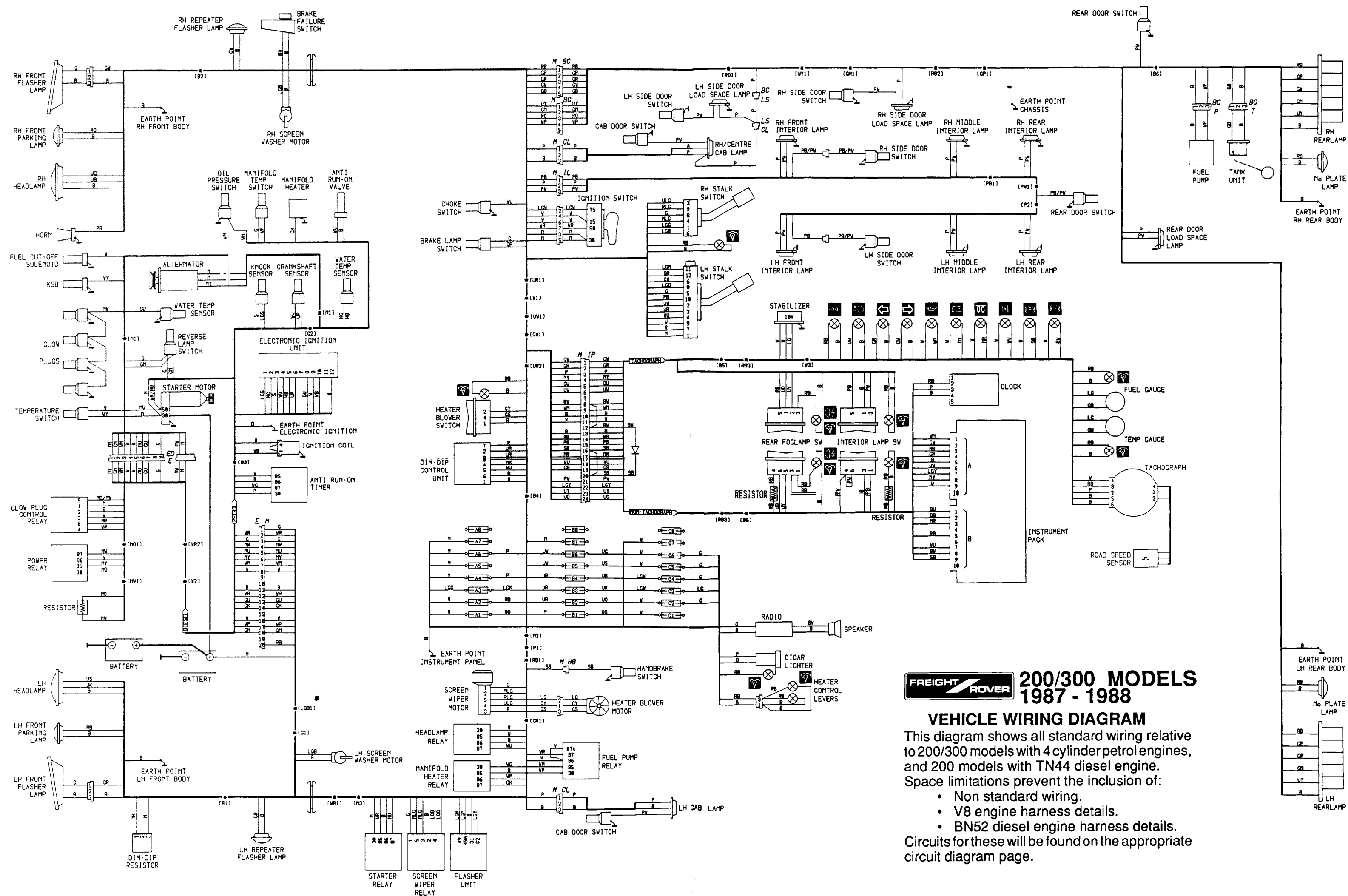


MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
400	1989-91	AIR SUSPENSION	96.01



MODEL TYPE	YEAR	CIRCUIT DIAGRAM	PAGE
400	1991-92	AIR SUSPENSION	96.02





**FREIGHT ROVER 200/300 MODELS 1987 - 1988**

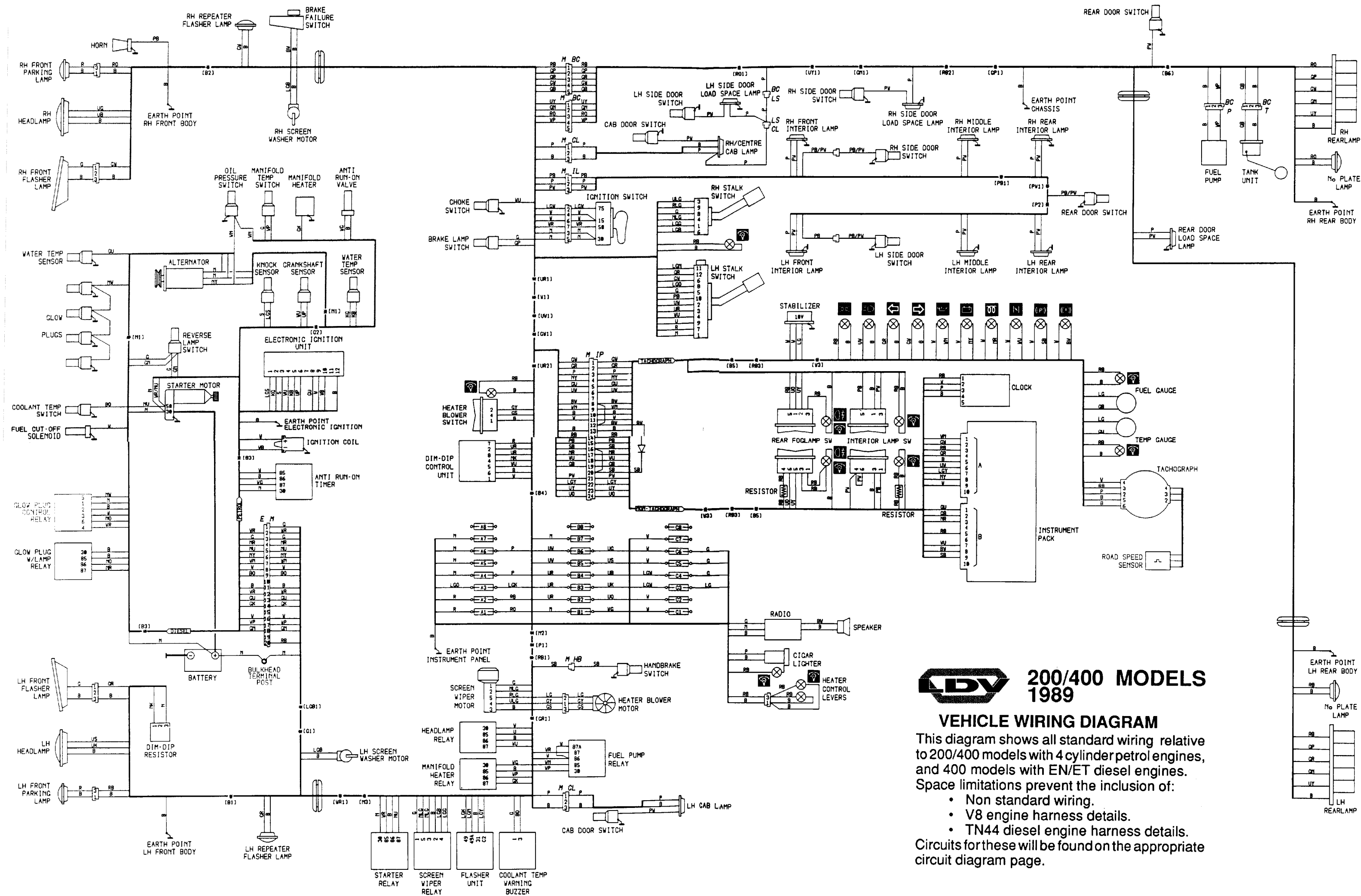
**VEHICLE WIRING DIAGRAM**

This diagram shows all standard wiring relative to 200/300 models with 4 cylinder petrol engines, and 200 models with TN44 diesel engine. Space limitations prevent the inclusion of:

- Non standard wiring.
- V8 engine harness details.
- BN52 diesel engine harness details.

Circuits for these will be found on the appropriate circuit diagram page.





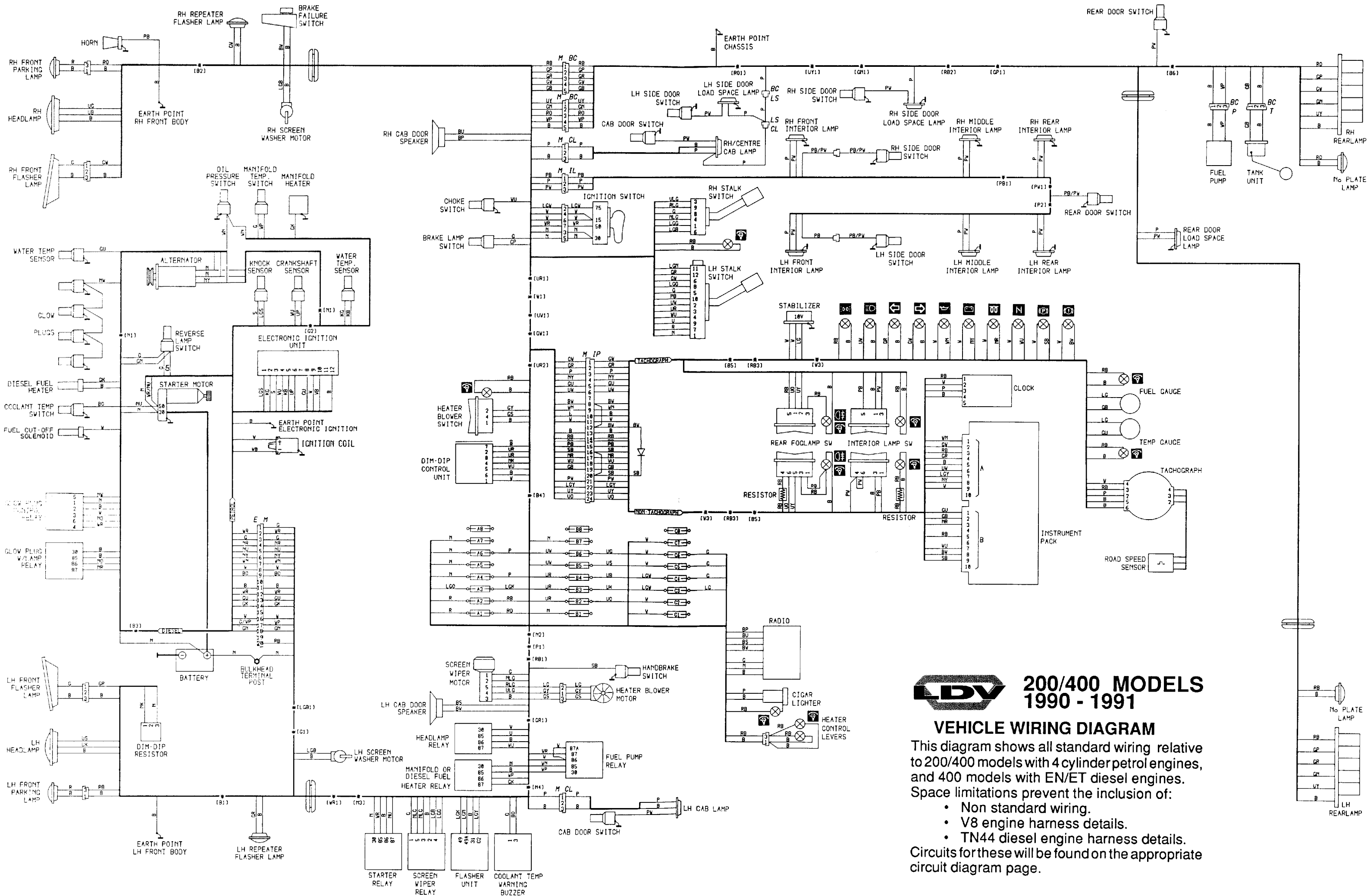
## 200/400 MODELS 1989

### VEHICLE WIRING DIAGRAM

This diagram shows all standard wiring relative to 200/400 models with 4 cylinder petrol engines, and 400 models with EN/ET diesel engines. Space limitations prevent the inclusion of:

- Non standard wiring.
- V8 engine harness details.
- TN44 diesel engine harness details.

Circuits for these will be found on the appropriate circuit diagram page.



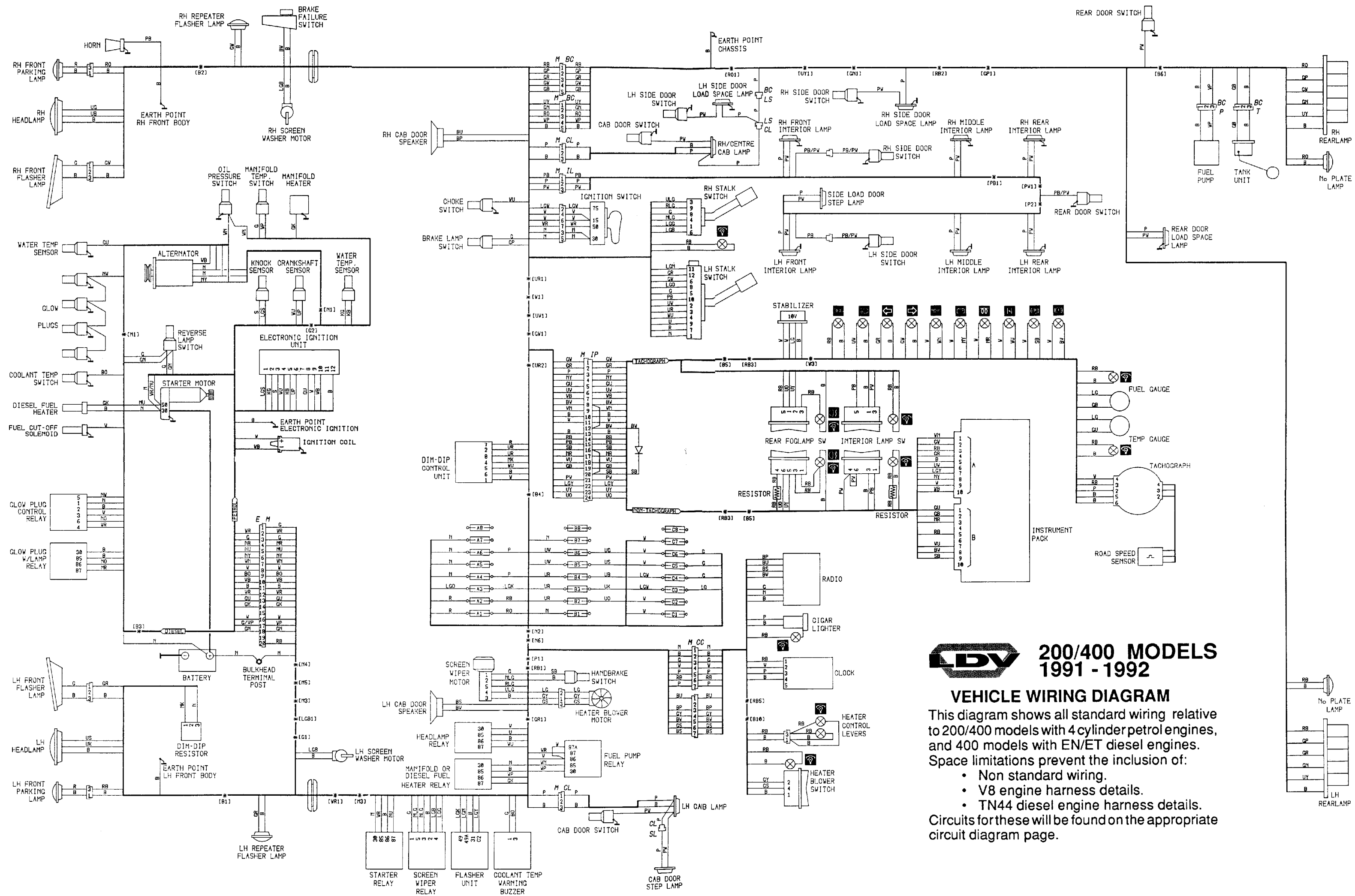
**LDV 200/400 MODELS 1990 - 1991**

**VEHICLE WIRING DIAGRAM**

This diagram shows all standard wiring relative to 200/400 models with 4 cylinder petrol engines, and 400 models with EN/ET diesel engines. Space limitations prevent the inclusion of:

- Non standard wiring.
- V8 engine harness details.
- TN44 diesel engine harness details.

Circuits for these will be found on the appropriate circuit diagram page.



## 200/400 MODELS 1991 - 1992

### VEHICLE WIRING DIAGRAM

This diagram shows all standard wiring relative to 200/400 models with 4 cylinder petrol engines, and 400 models with EN/ET diesel engines. Space limitations prevent the inclusion of:

- Non standard wiring.
- V8 engine harness details.
- TN44 diesel engine harness details.

Circuits for these will be found on the appropriate circuit diagram page.

