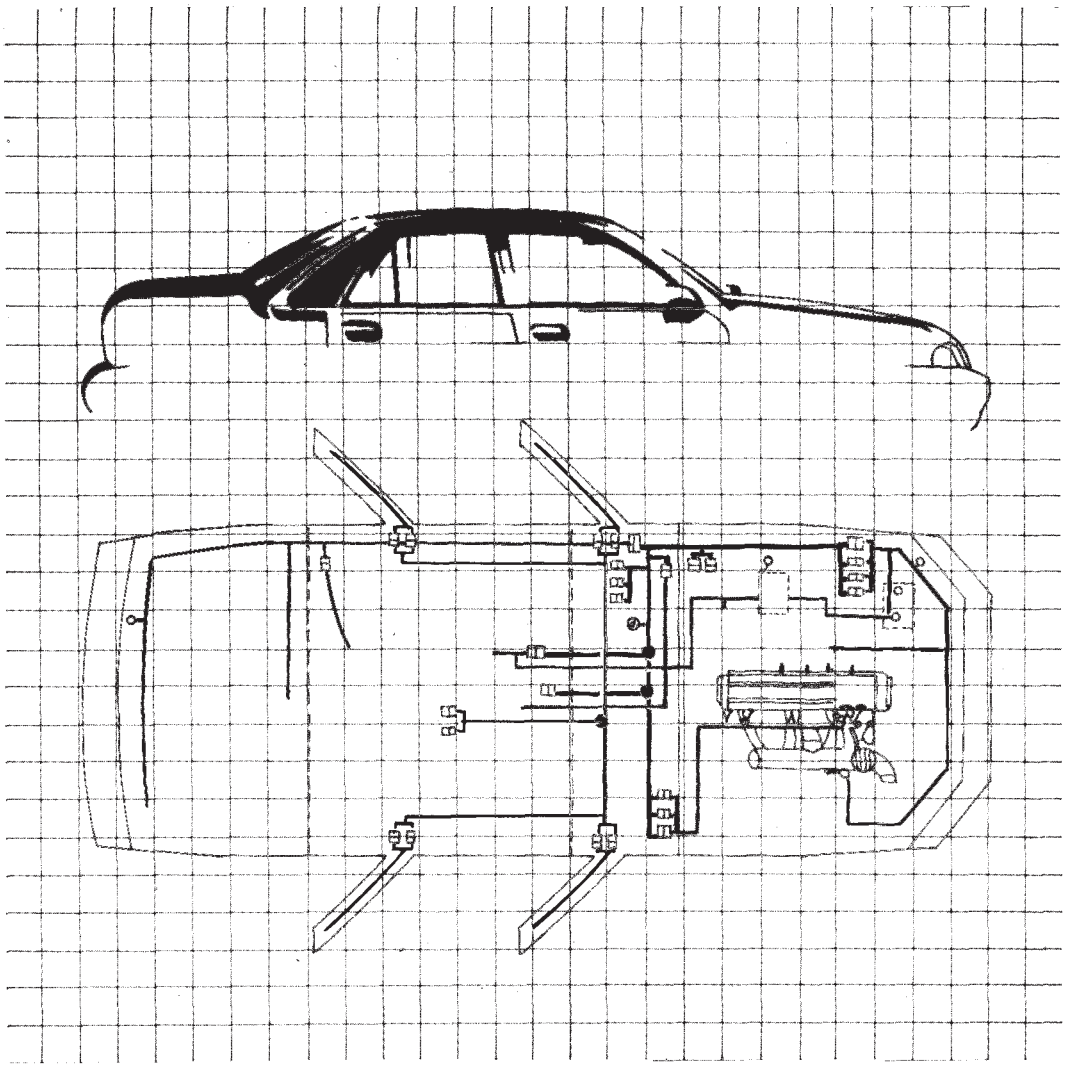
ELECTRICAL WIRING DIAGRAM

ESPERO
ARANOS



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FOREWORD

All information illustrations and specifications contained in this manual are based on the latest product information available at the time of manual approval.
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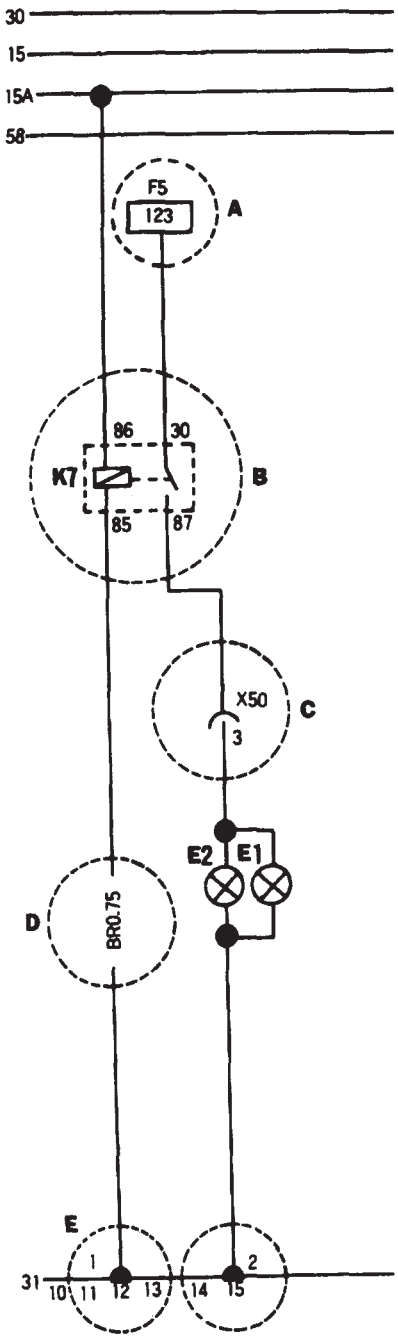
DAEWOO MOTOR CO., LTD.
SEOUL, KOREA

A. GENERAL DESCRIPTION

1. HOW TO READ WIRING DIAGRAM

Ex) E1: Head Lamp(Left)
E2: Head Lamp(Right)
K7: Head Lamp Relay



"30" Line: Battery Positive(+) Line
"15" Line: Ignition ON
"15A" Line: Ignition ON
(But, when cranking engine(Ignition 3 position), power is not supplied.)
"58" Line: Light Switch ON

A. 123: A number(123) indicates the location of connecting wiring in this diagram.
F5: Component connected with this wiring

B. Components and Terminal Number.
K7: Head lamp Relay
86, 30, 85, 87: Terminal Number

C. Connector No. and Terminal No. of the two connecting harness.
– Terminal #3 of X 50 Connector

D. Cable Color and Wiring Sectional Area
First Letter: Basic Color
Second Letter: Identification Color
Figure: Cross Sectional Area

E. Ground Location

"B A ": A and B lines are connected.

"B A ": A and B lines are not connected, but different lines.

2. CIRCUIT IDENTIFICATION CODE

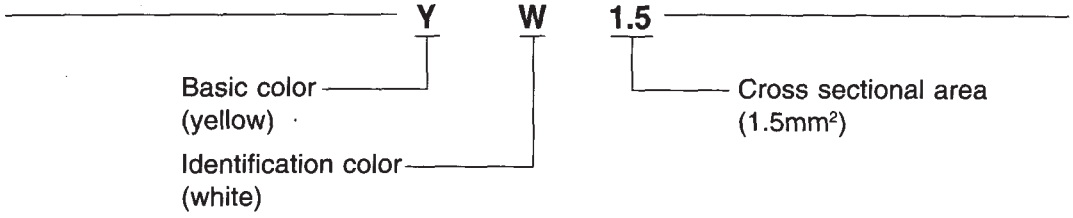
IDENTIFICATION	COMPONENT	PART NAME(EXAMPLE)
E	Lamp	Head Lamp, Fog Lamp
F	Protector	Fuse
G	Power Supply	Alternator, Battery
H	Transfer	Horn, Speaker, Turn Signal Lamp
K	Relay	Relay
L	Sensor	Ignition Coil
M	Motor	Wiper Motor, Window Motor
D	Meter	Tachormetor, Volt Meter
R	Resistor	Blower Resistor
S	Switch	Wiper Switch: Defroster Switch
X	Connector	Connectors Between Harnesses
Y	Electrical	Driving Unit Solenoid Valve

3. WIRING COLOR

As the wiring harness includes a large number of cables to complete individual circuits, the insulator of each cable is color coded to prevent wrong wiring. The alphabetical symbols in the following table represent the color of cables and the same symbols are also used the wiring. The cable identification symbol consists of a figure and letters.

Symbol	Color	Symbol	Color
L	blue	Br	brown
Y	yellow	Gr	grey
G	green	R	red
W	white	B	black
VIO	violet		

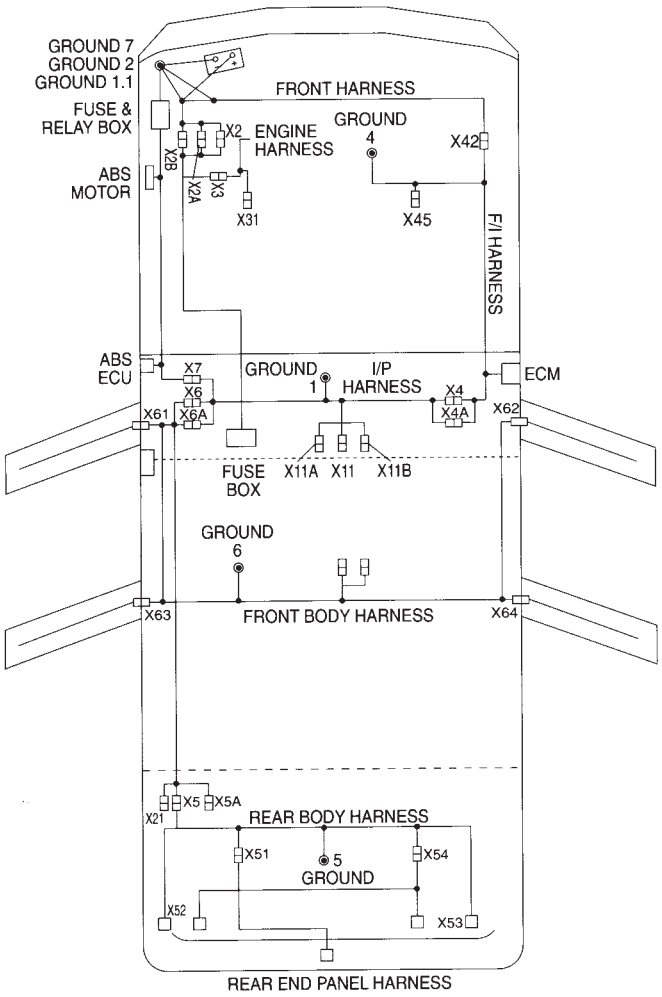
The figure indicates the size of wire and the first and second letters denote the basic color and identification color, respectively.
The size of wire is indicated in terms of sectional area.



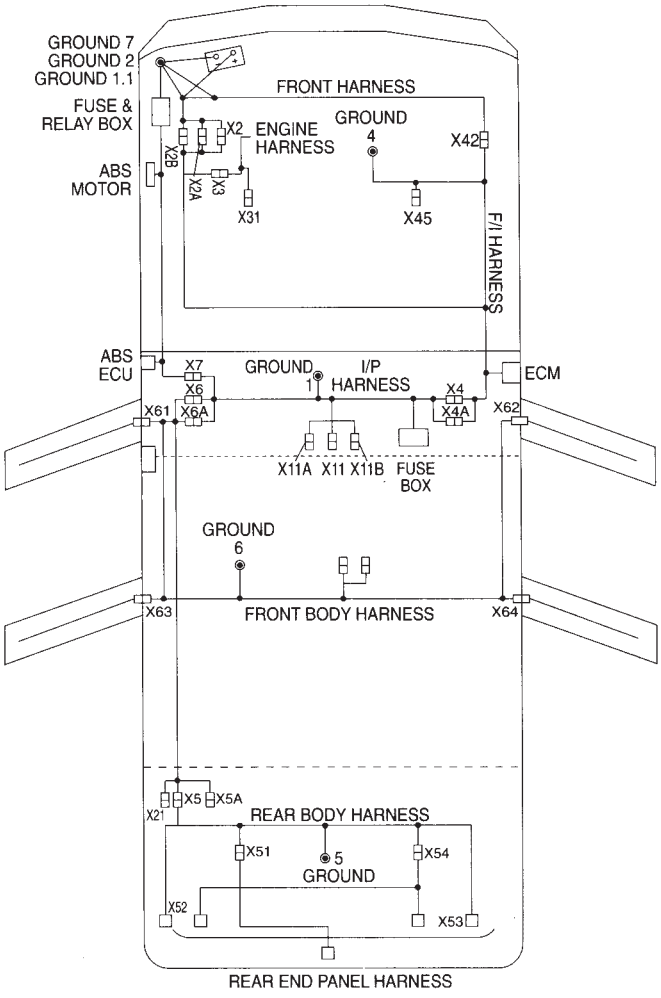
B. HARNESS CONNECTORS AND FUSE, RELAYS

1. HARNESS CONNECTOR LOCATION VIEWS (1.5 DOHC/1.8, 2.0 MPFI)

LHD



RHD



*** LEGEND**

I/P (Instrument panel)
F/I (Fuel injection)
H.REF. (Harness reference)

1-1. EVERY CONNECTOR DESCRIPTION

X2	Connector for I/P and Front Harness(14 pin)	
X2A	Connector for I/P and Front Harness(12 pin)	
X2B	Connector for I/P and Front Harness(4 pin)	
X3	Connector for I/P and Engine Harness(10 pin)	
X31	Connector for Engine Harness and Selector Position Switch(11 pin A/T)	
X32	Connector for I/P and Air Bag Harness(4 pin)	
X4	Connector for I/P and F/I Harness(20 pin)	
X4A	Connector for I/P and F/I Harness(9 pin A/T)	
X5	Connector for Front Body and Rear Body Harness(14 pin)	
X5A	Connector for Front Body and Rear Body Harness(1 pin)	
X51	Connector for Rear Body Harness and Trunk LID Harness(8 pin)	
X52	Connector for Rear Body Harness and Left Combination Lamp(4 pin)	
X53	Connector for Rear Body Harness and Right Combination Lamp(4 pin)	
X54	Connector for Rear Body Harness and Rear End Panel Harness(3 pin)	
X6	Connector for I/P and Front Body Harness(21 pin)	
X6A	Connector for I/P and Front Body Harness(9 pin)	
X61	Connector for Front Body Harness and Front-Left Door Harness(14 pin) female Connector	* only L.H.D vehicle
X61A	Connector for Front Body Harness and Front-Left Door Harness(14 pin) male Connector	* only L.H.D vehicle
X62	Connector for Front Body Harness and Front-Right Door Harness(14 pin)	* only L.H.D vehicle
X63	Connector for Front Body Harness and Rear-Left Door Harness(7 pin)	* only L.H.D vehicle
X64	Connector for Front Body Harness and Rear-Right Door Harness(7 pin)	* only L.H.D vehicle
X61	Connector for Front Body Harness and Front-Light Door Harness(14 pin)	* only R.H.D vehicle
X62	Connector for Front Body Harness and Front-Right Door Harness(14 pin) female Connector	* only R.H.D vehicle
X62A	Connector for Front Body Harness and Front-Right Door Harness(14 pin) male Connector	* only R.H.D vehicle
X63	Connector for Front Body Harness and Rear-Right Door Harness(7 pin)	* only R.H.D vehicle
X64	Connector for Front Body Harness and Rear-Left Door Harness(7 pin)	* only R.H.D vehicle
X42	Connector for F/I Harness and Front Harness(3 pin)	
X43	Connector for ALDL(12 pin)	
X45	Connector for F/I Harness and Selector Position Switch(4 pin A/T)	
X48	Connector for F/I Harness and Injector(2 pin, DOHC)	

X7 Connector for F/I Harness and ABS Harness(8 pin)

X11 Connector for Analog I/P(16 pin)

X11A Connector for Analog I/P(14 pin)

X11B Connector for Analog I/P(10 pin, A/T)

X12 Connector for IP and Center Console Harness(5 pin)

X21 Connector for Front Body and Antenna Harness(3 pin)

1-2. GROUND LOCATION

1. I/P Harness Ground - I/P Rear Side

1.1 Battery Main Ground - End part of Front-Left Fender

2. Battery Main Ground - End part of Front-Left Fender

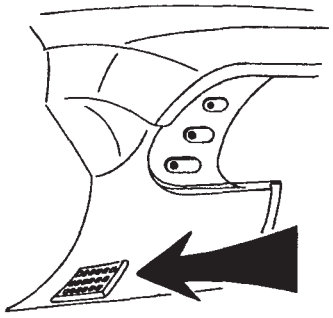
4. F/I Harness Ground - Intake Manifold

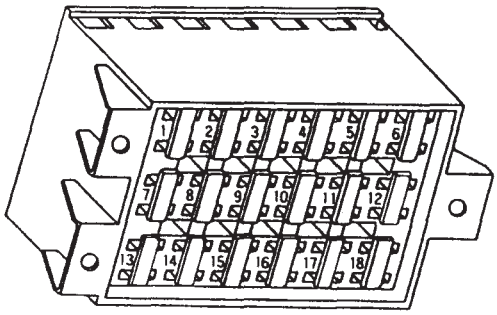
5. Rear Body Harness Ground - License Plate of the Trunk Inside

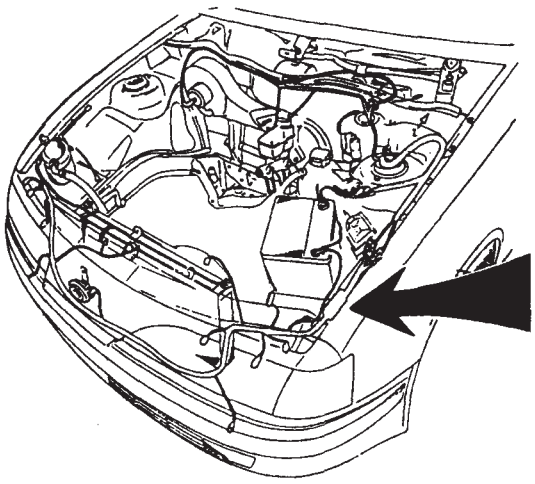
6. Front Body Harness Ground - under the Driver Seat

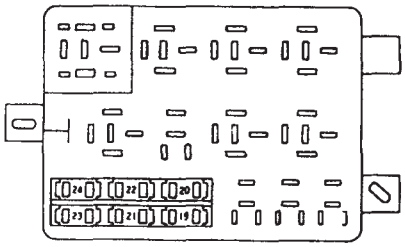
7. ABS Ground - Front Left Fender End

2. FUSE LOCATION AND USAGE(1.5 DOHC/1.8, 2.0 MPFI)



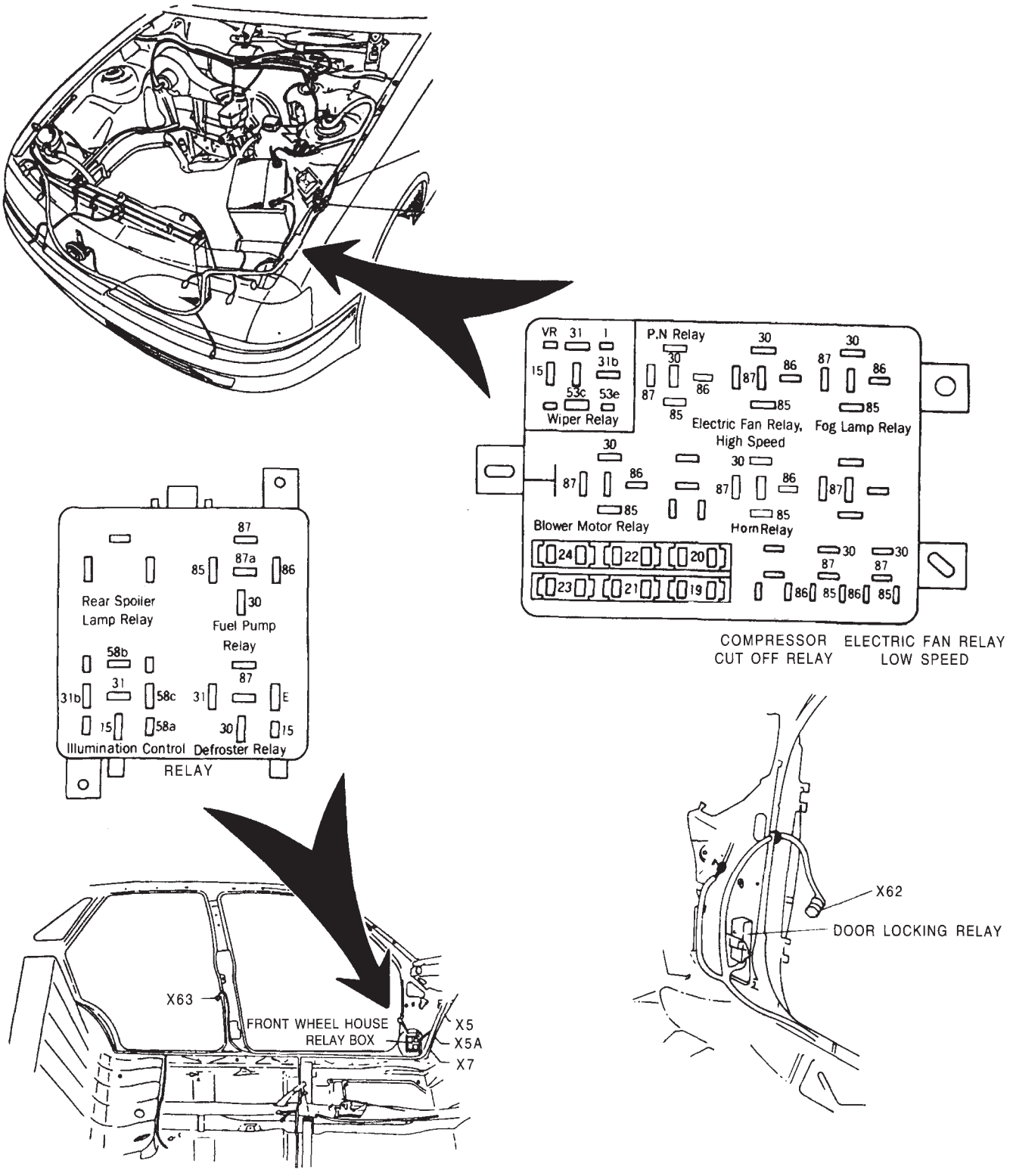






Fuse No.	Capacity	Usage	Fuse No.	Capacity	Usage	Fuse No.	Capacity	Usage
1	10A	ECM Power, TCM Power(A/T)	9	20A	OSRV mirror and Rear Window Defroster D.R.L Relay	17	10A	ABS Power, IMMO unit
2	20A	Fuel Pump Relay, Oil Pressure Switch, IMMO. unit	10	30A	Radiator Electric Fan Relay(High Speed) Radiator Electric Fan Relay(Low Speed)	18	30A	Horn, Central Locking Device, Auto Trunk Switch
3	20A	Brake Switch, Turn Signal Lamp, Electric OSRV Mirror Switch, Selector Position Switch	11	10A	Illumination Lamp	19	20A	Front Fog Lamp Relay
4	30A	Wiper	12	10A	ECM IG Power, Speed Sensor, Injector, TCM Power	20	30A	Blower Motor Relay
5	30A	Radiator Temperature Switch	13	20A	Alternator F Terminal, D.R.L unit, Rear Spoiler Control Lamp, Defroster, Digital Clock, Chime Bell, Cigar Lighter.	21	10A	Head Lamp High Beam(Left)
6	20A	Fan cycling switch, A/C mode switch, Compressor Cut-off Relay, Electric Fan Relay high Speed, ABS Power	14	10A	Analog I/P	22	10A	Head Lamp High Beam(Right)
7	30A	Power Window	15	20A	D.R.L unit, Reading Lamp, Hazard Lamp, Digital Clock, Room Lamp, Auto Antenna, Car Audio, Chime Bell, Trunk Lamp	23	10A	Head Lamp Low Beam(Left)
8	10A	Car Audio	16	10A	Air Bag	24	10A	Head Lamp Low Beam(Right)
						25	40A	ABS Main Power

RELAY LOCATION (1.5 DOHC/1.8, 2.0 MPFI)



o Engine Room Fuse Box

PART NAME	PART NO.	REMARKS
Wiper Time Relay	94788146	
Electric Fan Relay High Speed	90244312-A	
Fog Lamp Relay	90057745	
Blower Motor Relay	90244312-A	
Horn Relay	90376920	
Compressor Cut-off Relay	90244312-A	Micro Relay
Electric Fan Relay Low Speed	90229206	Micro Relay

o Inside of driver side panel

PART NAME	PART NO.	REMARKS
Fuel Pump Relay	90191753-A	5 pin
Illumination Control Relay	96098561	Blue Case
Defroster and OSR V Mirror Defroster Time Relay	96116223	Brown Case
Rear Spoiler Lamp Relay	96149299	3 pin

o Inside of driver door

PART NAME	PART NO.	REMARKS
One Touch Power Relay	96149297	

o Left side of Kaul Panel(coolant auxiliary tank cap left side)

PART NAME	PART NO.	REMARKS
ABS Relay	12135010	

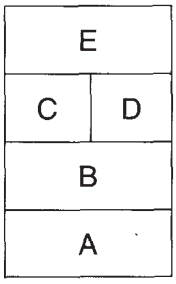
o Inside of co-driver side panel

PART NAME	PART NO.	REMARKS
Central Door Locking Relay	90191825	

o Lower side of Glove Box: T.C.M

PART NAME	PART NO.	REMARKS
1.5 DOHC/SOHC MPFI	N96160086	DF
1.8, 2.0 SOHC MPFI	96111009	DC

o Relay Box at the upper side of a Clutch Pedal



NO	PART NAME	PART NO.	REMARKS
A	Chime Bell	96187783	
B	Turn Signal Lamp Relay	90240050-A	
C	Illumination Lamp Relay	90229206	
D	Head Lamp Relay	90229206	
E	DRL Relay	90340520	
	ABS Computer(EBCM)	16207489	

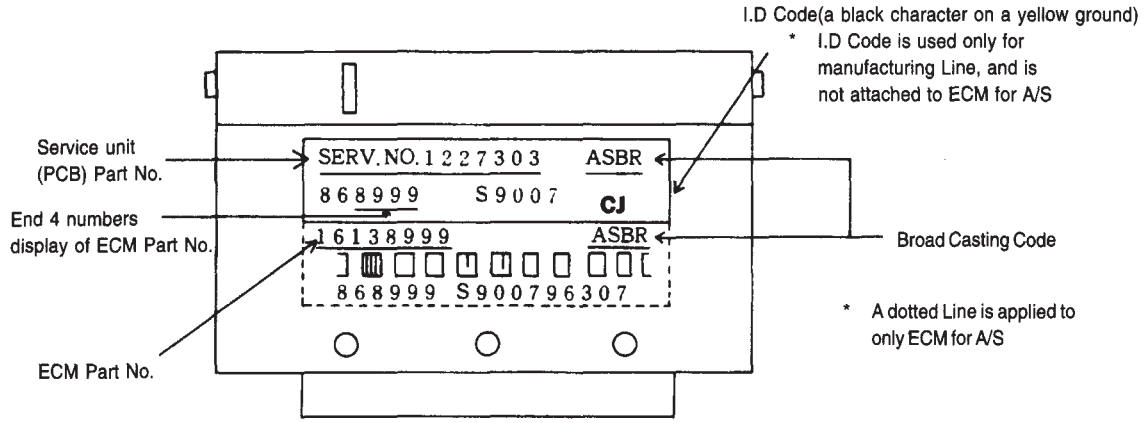
* Note that the relay location may be changed without notice.

3. ECM CLASSIFICATION

○ ECM Part Number

ENGINE	EMIS-SION	T/M	ECM			LOOP	IMMO.	AREA
			TYPE	PART/NO.	I. D			
1.5 DOHC	Leaded	M/T	IEFI—6	16219839	GR	CLOSE		Intense cold area
		A/T	IEFI—6	16219339	NM	CLOSE		Intense cold area
	Unleaded	M/T	IEFI—S	16214609	PH	CLOSE		General area
			IEFI—6	16216539	JF	CLOSE	O	Europe IMMO.
				16216699	NC	CLOSE		Europe non immo.
		A/T	IEFI—6	16216589	JG	CLOSE	O	Europe IMMO.
				16216599	ND	CLOSE		Europe non immo.
1.8 MPI	Unleaded	M/T	IEFI—6	16216609	QG	CLOSE	O	Europe IMMO.
				16220109	HR	CLOSE		High altitude area
				16216619	QJ	CLOSE		Europe, General area
		A/T	IEFI—6	16216629	QF	CLOSE	O	Europe IMMO.
				16220099	HS	CLOSE		High altitude area
				16216639	QK	CLOSE		Europe General area
2.0 MPI	Leaded	M/T	IEFI—6	16209819	XD	OPEN		High altitude area
				16209839	XG	OPEN		Intense heat/cold area
		A/T	IEFI—6	16209829	XE	OPEN		High altitude area
				16209849	XH	OPEN		General area
	Unleaded	M/T	IEFI—S	16199999	DH	CLOSE		Guatemala
				16200019	DF	CLOSE		Chile
			IEFI—6	16199749	EE	CLOSE		Brazil
				16216659	QL	CLOSE		Israel, Australia
				16216649	QC	CLOSE	O	Europe IMMO.
			IEFI—S	16200009	EH	CLOSE		Guatemala
				16200029	DG	CLOSE		Chile
		A/T	IEFI—6	16199729	DE	CLOSE		Brazil
				16216729	GN	CLOSE		Europe non immo.
				16216669	QB	CLOSE	O	Europe IMMO.

o ECM Identification Method

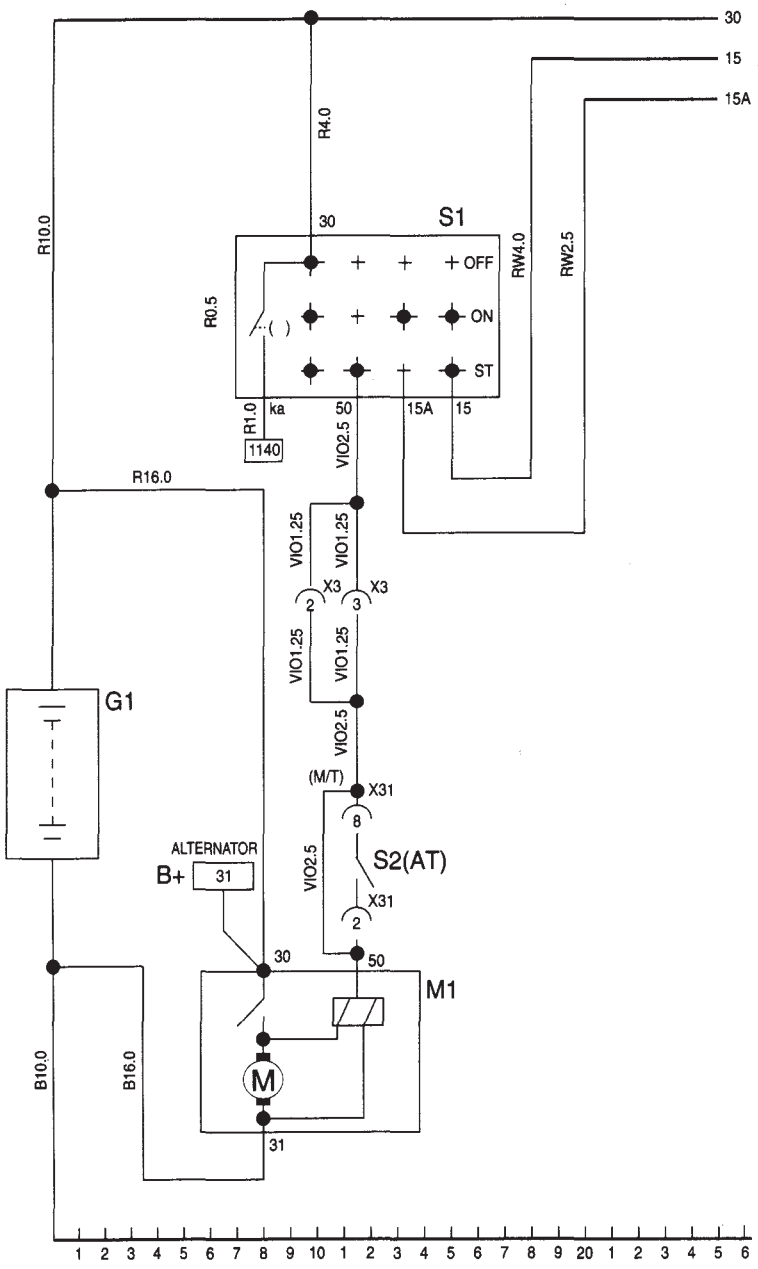


o You can not exchange IEFI-S ECM, and IEFI-6 ECM each other because those are different.

4. ELECTRICAL WIRING DIAGRAMS

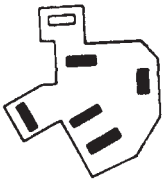
1) IGNITION SWITCH AND STARTER WIRING(1.5 DOHC/1.8, 2.0 MPFI)

G1 BATTERY
M1 STARTING MOTOR
S1 IGNITION SWITCH
S2 P/N SWITCH

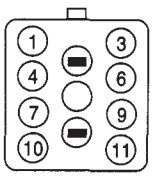


- Number 30, 15A, 15, Ka and 50 are indexed on the S1 ignition switch.
- S2 P.N Switch(Selector Position Switch) and X31 Connector are for only A/T Vehicle When the PN Switch 2 is at the position of P or N.
  PN switch S2 is contacted so that starter motor operates because the current is feeded to the terminal 50 of the ignition motor when the PN switch is at the driving position(R,D,3,L) the starter motor stops because the switch is off.

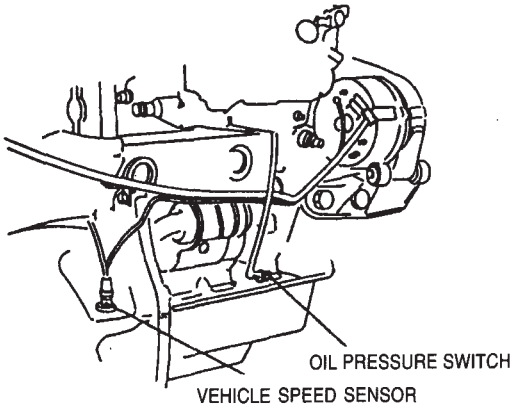
X3—ENGINE HARNESS CONNECTOR (I/P HARNESS REF.)

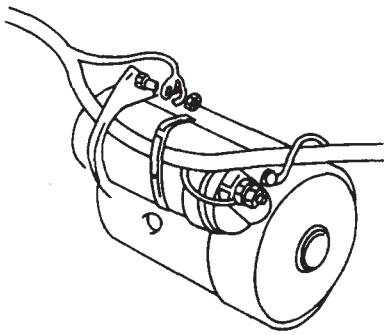


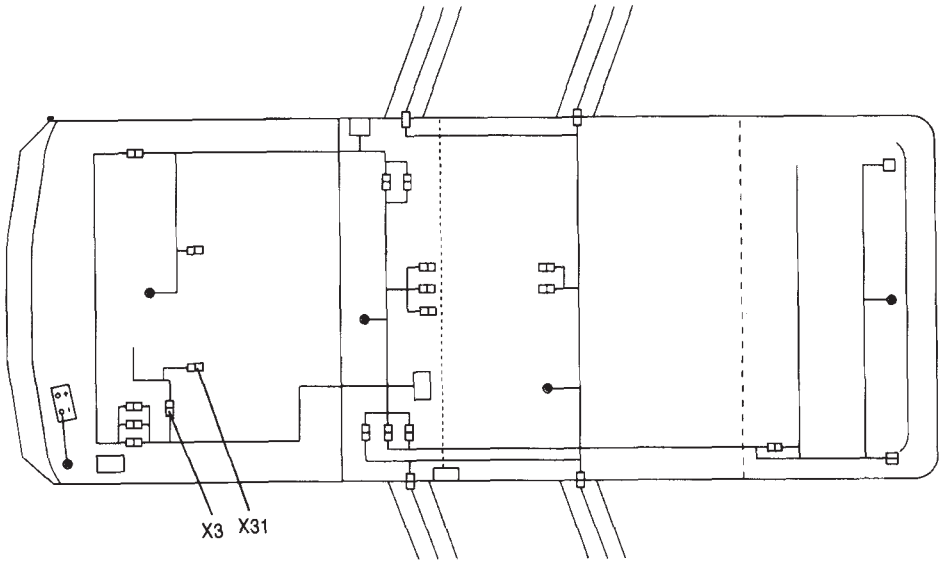
IGNITION SWITCH

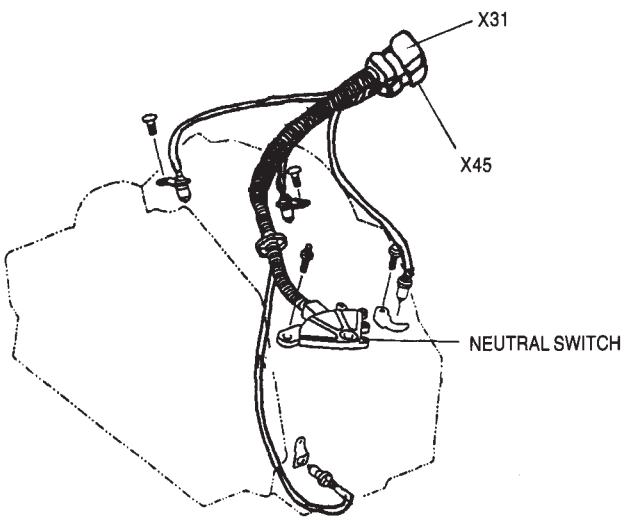


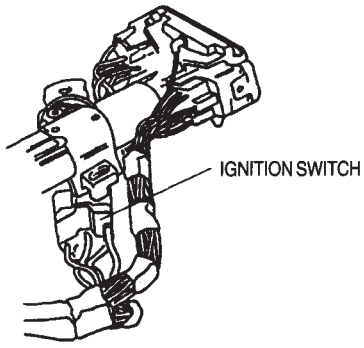
X31
SELECTOR POSITION SWITCH CONNECTOR (ENGINE HARNESS REF.)


OIL PRESSURE SWITCH
VEHICLE SPEED SENSOR



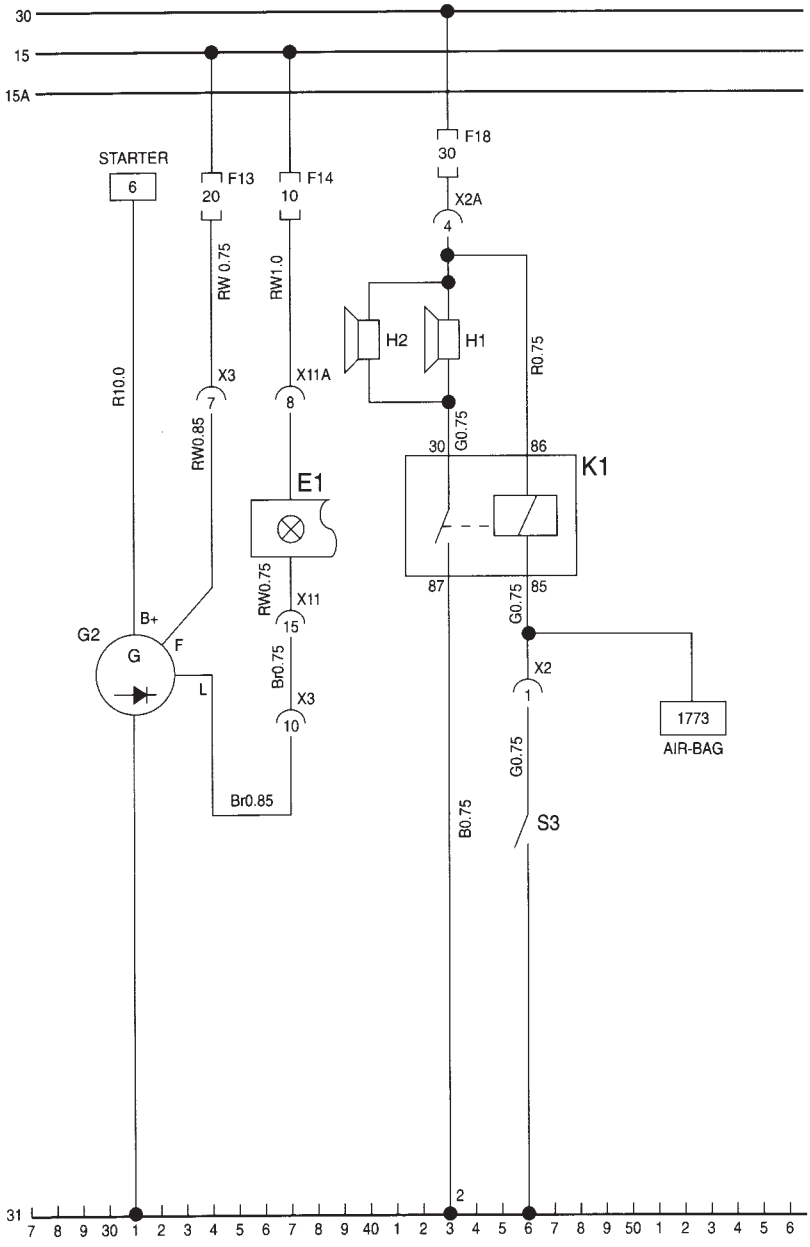

X3
X31


X31
X45
NEUTRAL SWITCH


IGNITION SWITCH

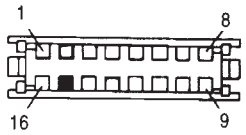
2) CHARGING AND HORN WIRING(1.5 DOHC/1.8, 2.0 MPFI)

E1 CHARGING WARN LAMP
G2 ALTERNATOR
H1 HORN
H2 HORN
K1 HORN RELAY
S3 HORN SWITCH

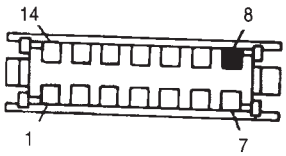


E1 is connected to the battery charging lamp on I/P (refer to I/P wiring)

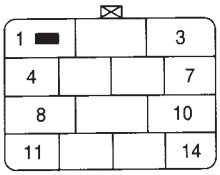
- If the alternator connector is connected normally, the power of "L" terminal is 0.6V~2V when an ignition switch is ON and is equal to the battery charging voltage on operating an engine (over about 800 rpm)
- When a terminal "L" is disconnected or cut off, the terminal "F" is an compensating circuit to magnetize a rotor coil instead of the terminal "L".
- H1 and H2 are for low tone and high tone.



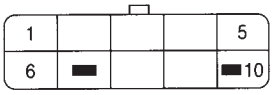
X11
ANALOG I/P
(I/P HARNESS REFERENCE, NO. INDEXED)



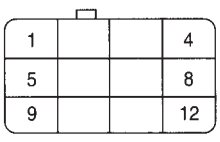
X11A
ANALOG I/P
(I/P HARNESS REFERENCE, NO. INDEXED)



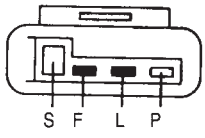
X2
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)



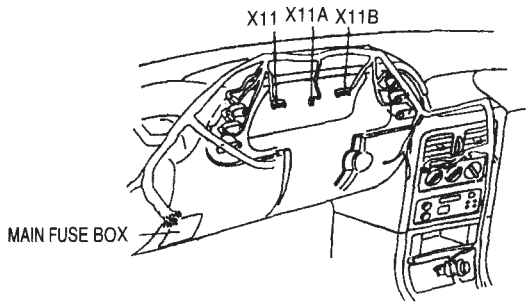
X3
ENGINE HARNESS CONNECTOR
(I/P HARNESS REF.)

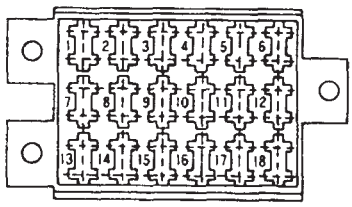


X2A
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)

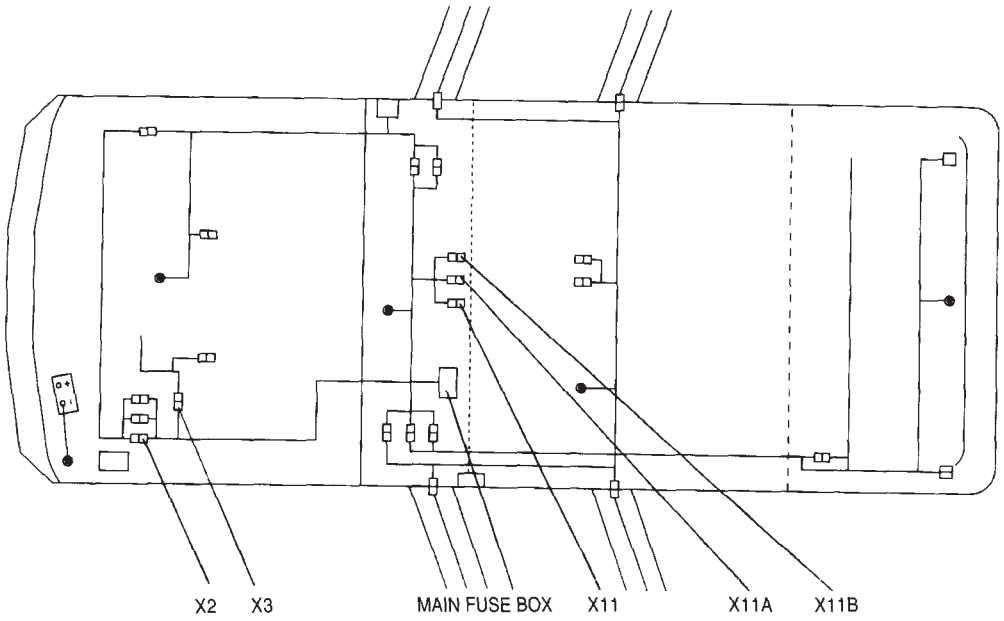


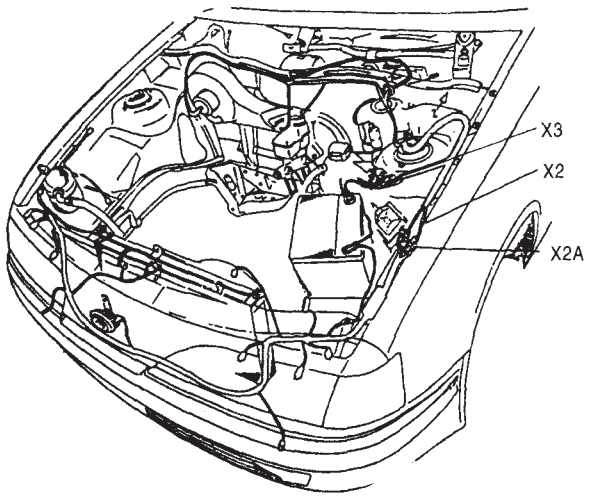
ALTERNATOR CONNECTOR
(ENGINE HARNESS REF.)

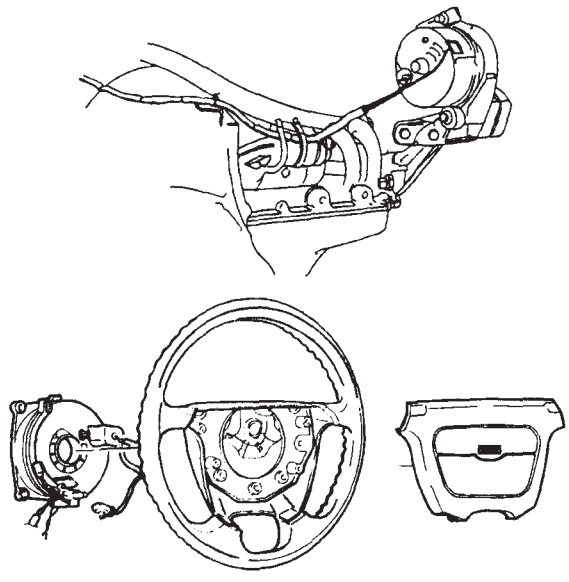




MAIN FUSE BOX



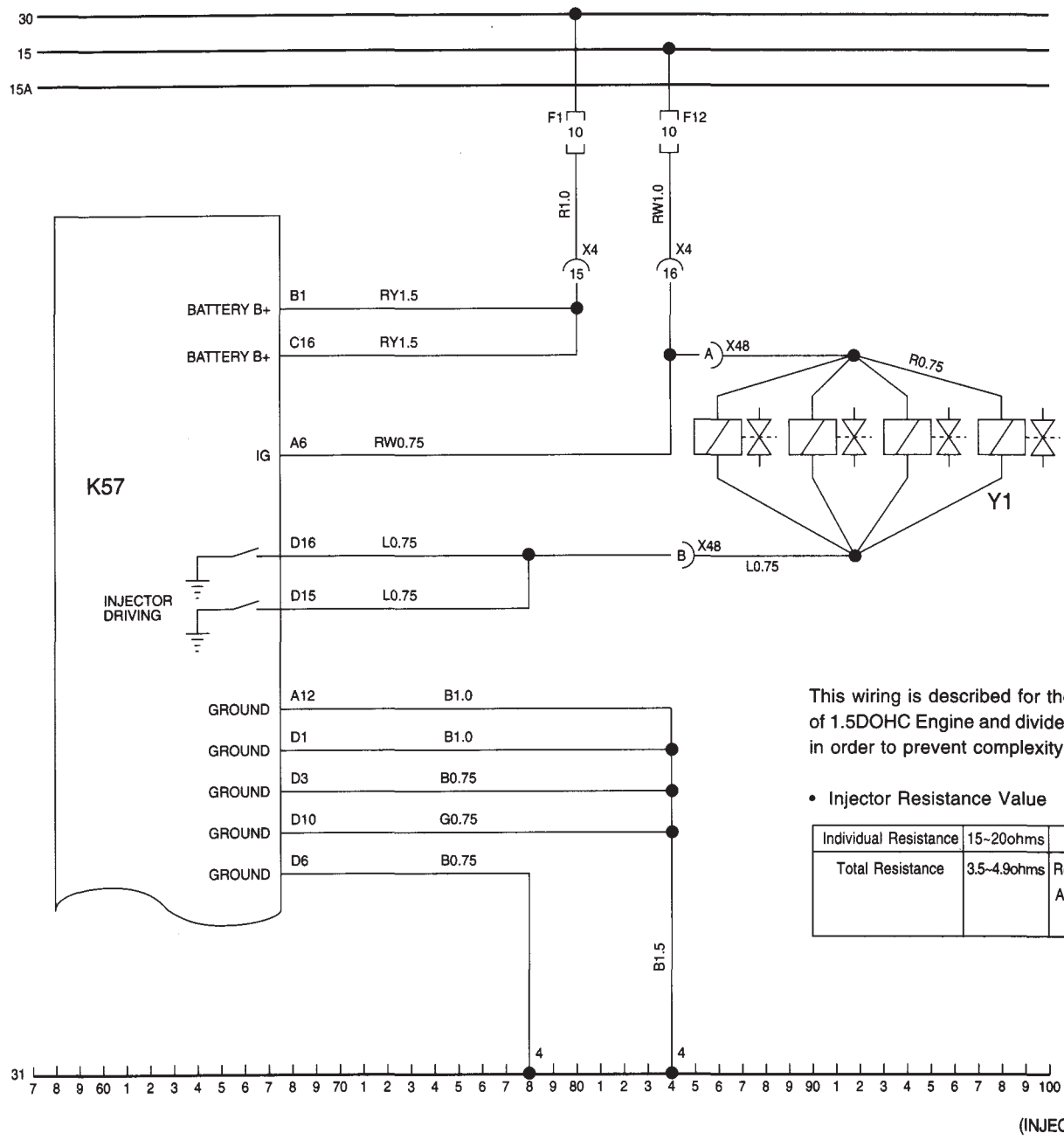




HORN SWITCH OF AIR BAG TYPE VEHICLE

3) ECM MAIN POWER AND GROUND, INJECTOR WIRING(1.5 DOHC, IEFI-S TYPE)

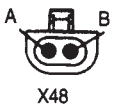
K57 ECM(CONTROL UNIT)
Y1 INJECTOR



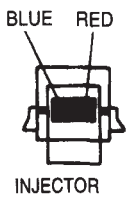
This wiring is described for the fuel injection of 1.5DOHC Engine and divided at each page in order to prevent complexity.

- Injector Resistance Value

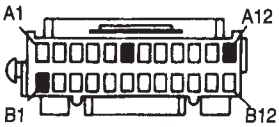
Individual Resistance	15~20ohms	For each item
Total Resistance	3.5~4.9ohms	Resistance between A6 and D16 or D15 of ECM



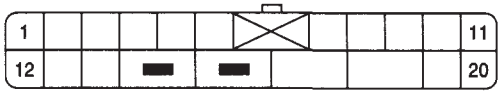
X48
(INJECTOR HARNESS REF.)



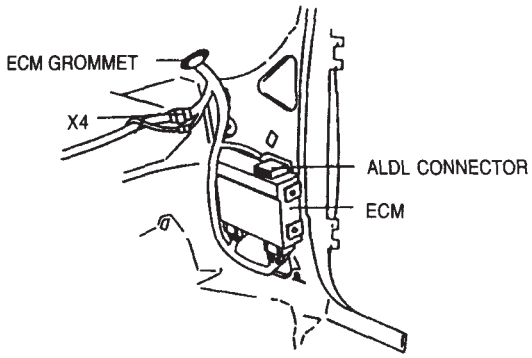
INJECTOR

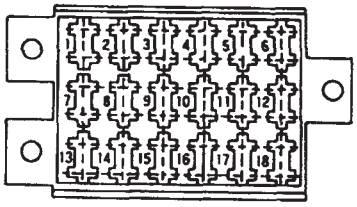


ECM TERMINAL (INJECTION HARNESS REF.)

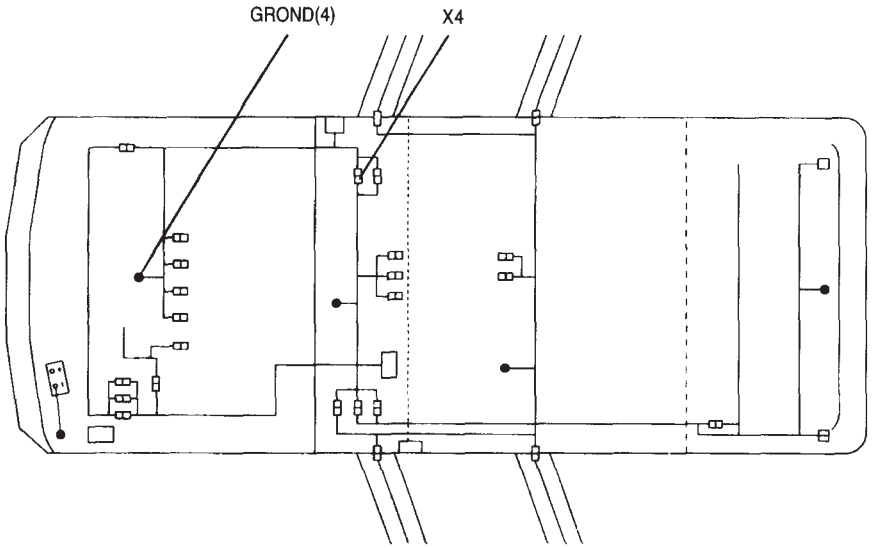


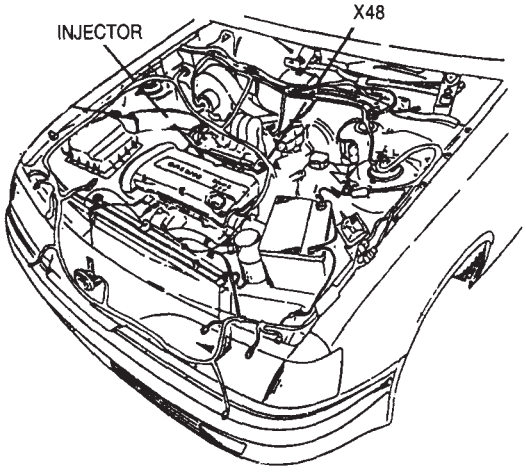
X4
F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

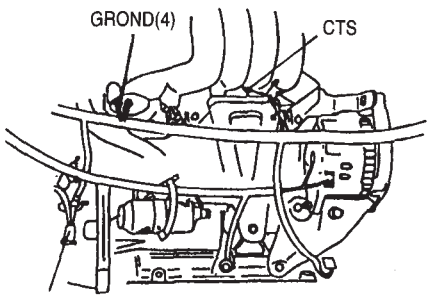




MAIN FUSE BOX





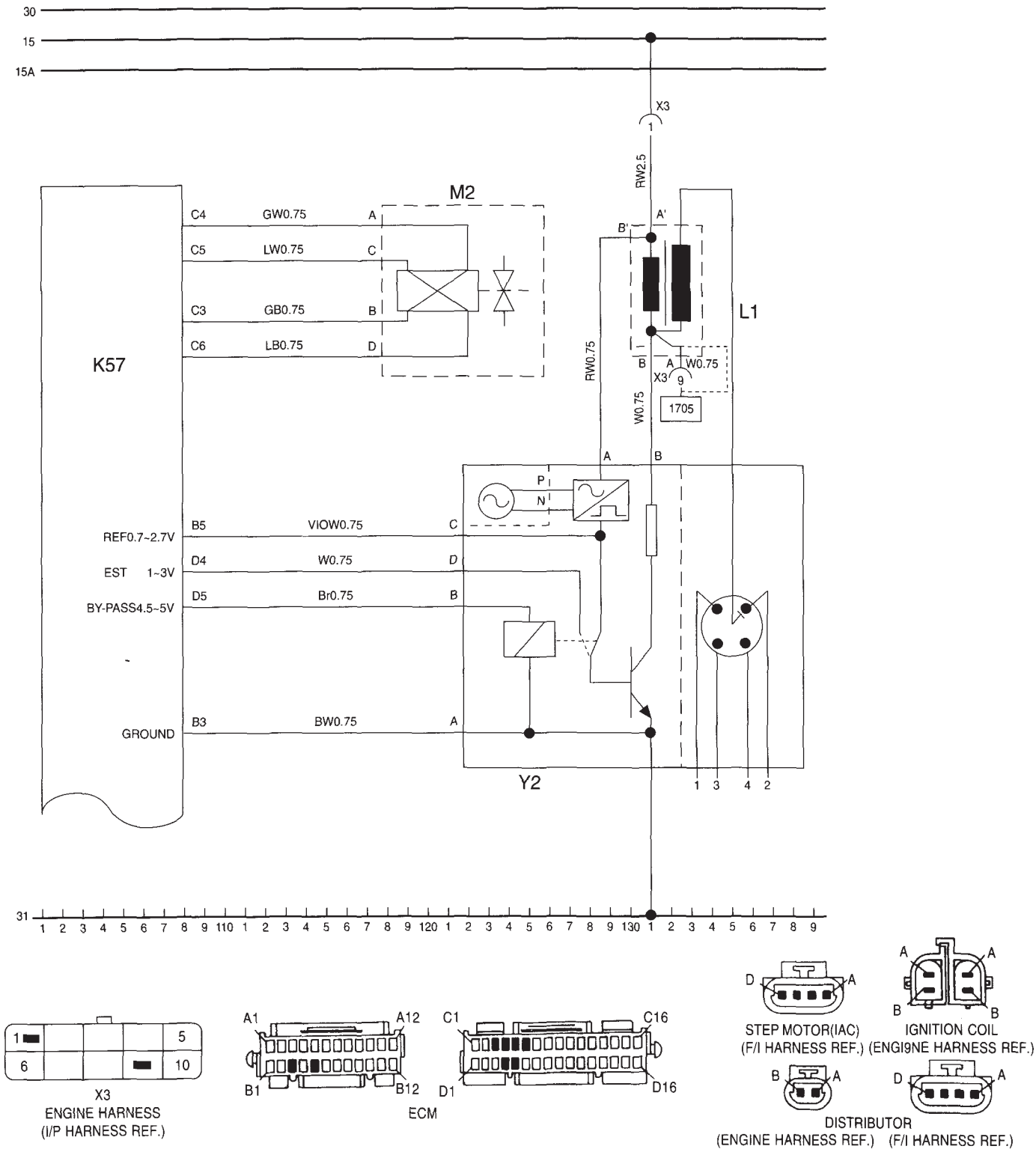


VEHICLE SPEED SENSOR

- This diagram is for a power supply to operate-ECM. That is, when an ignition switch is "ON", B^+ power should be measured at the ECM terminal B_1, C_{16}, A_6, D_{15} and D16: and the following terminals are connected to the engine ground; D_1, D_3, D_6, D_{10}, A_{12} terminals.

4) STEP MOTOR, IGNITION COIL, DISTRIBUTOR WIRING(1.5 DOHC, IEFI-S TYPE)

L1 IGNITION COIL
M2 STEP MOTOR
K57 ECM
Y2 DISTRIBUTOR



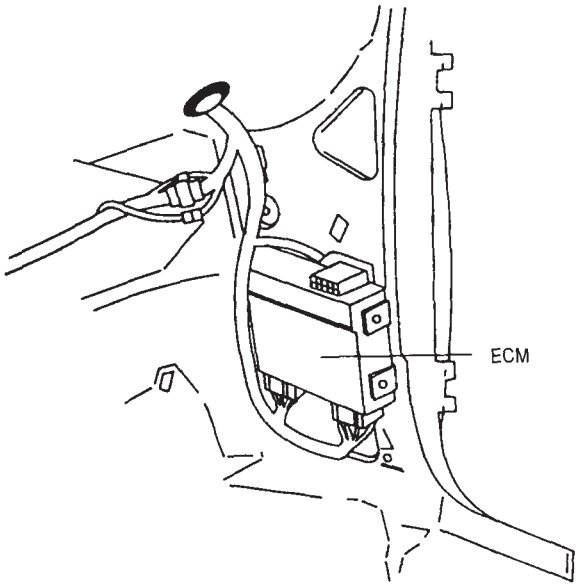
X3
ENGINE HARNESS
(I/P HARNESS REF.)

ECM

STEP MOTOR(IAC)
(F/I HARNESS REF.)

IGNITION COIL
(ENGI9NE HARNESS REF.)

DISTRIBUTOR
(ENGINE HARNESS REF.) (F/I HARNESS REF.)



- Pick-up Coil

Resistance	500 ~ 1500 ohms
Insulation resistance	∞

- Ignition Coil

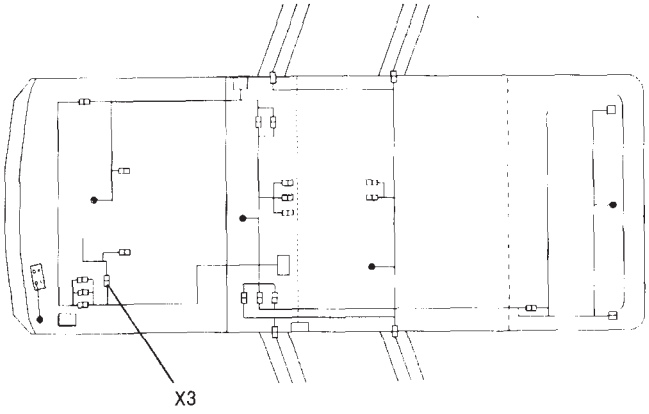
1st Resistance	0.35 ~ 0.45
2nd Resistance	7.5 ~ 9.5
Insulation resistance	∞

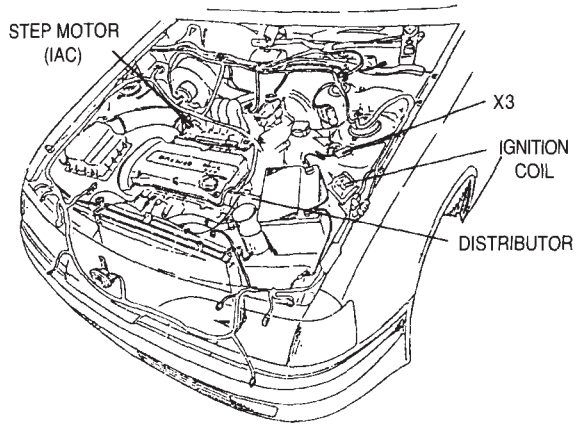
- Step motor M2 controls air quantity to be by-passed to inlet manifold in order to keep an appropriate engine RPM a in accordance with the engine operating condition.

- Step motor resistance

40 ~ 80 ohms	A ⟷ B terminal
	C ⟷ D terminal

Idle Revolution speed	800 ~ 850RPM(Heating)



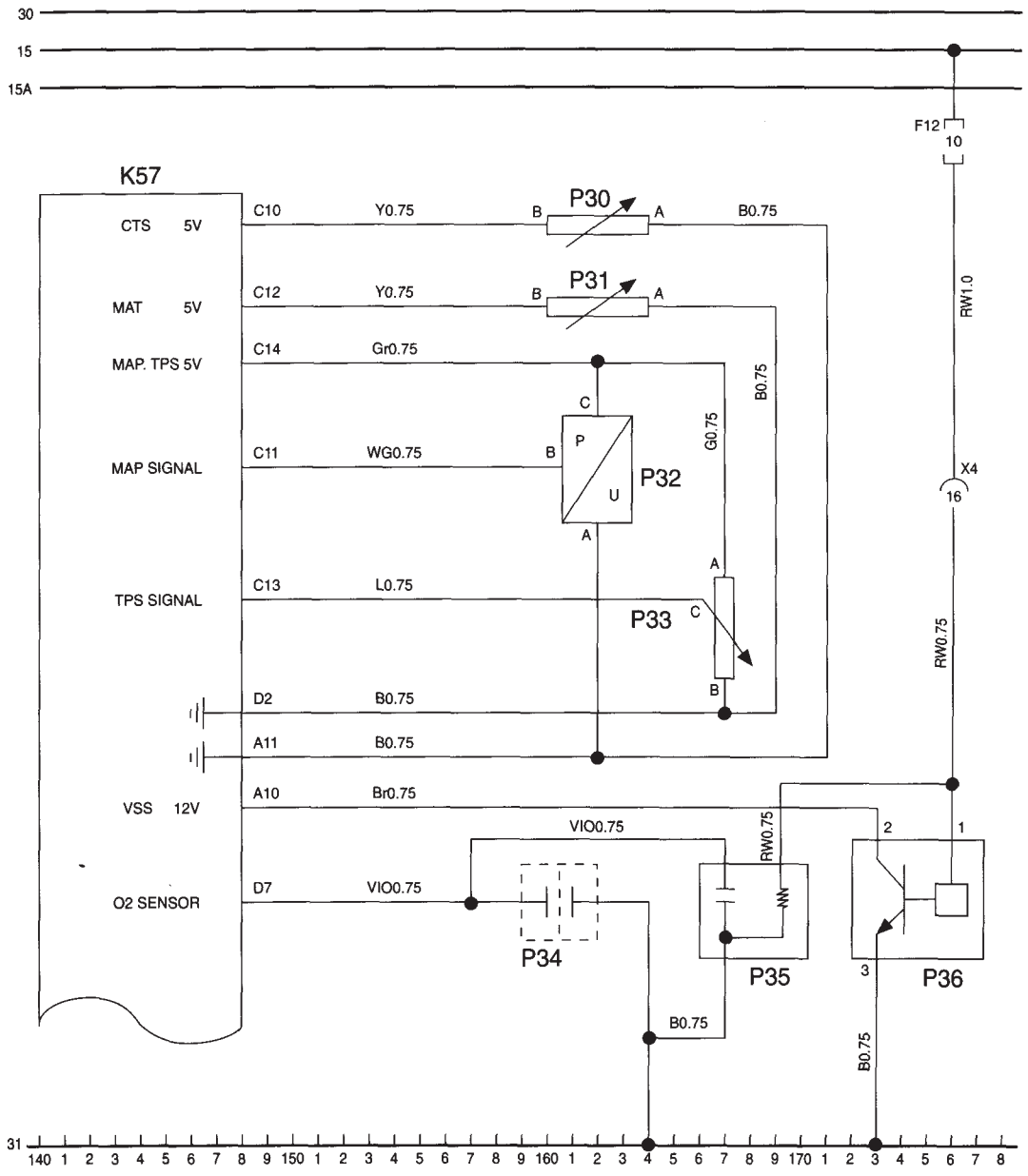


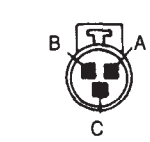
- A distributor has a two pin connector and a four pin connector. Because a two pin connector is connected to an "+" and "–" terminal s. "B+" voltage should be measured when an ignition switch is "ON". A four pin connector is connected to ECM and supply the most appropriate ignition timing in accordance with the operating condition the regular voltage between each terminal connected to ECM and vehicle ground is as follows;

ECM TERMINAL	DISTRIBUTOR TERMINAL	CHECK CONDITION		
		IGNITION SWITCH "ON"(ENGINE STEP)	ON STARTING	AFTER STARTING
B3	A(Ground)	0V	0V	0V
D5	B(by-pass)	0V	0V	4.5~5V
B5	C(REF)	below 0.3V	0.5~1.5V	0.7~2.7V
D4	D(EST)	below 0.3V	below 0.3V	1~3V

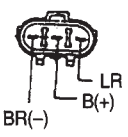
5) SENSOR AND ECM WIRING(1.5 DOHC, IEFI-S TYPE)

P30 COOLANT TEMPERATURE SENSOR(CTS)
P31 INTAKE MANIFOLD AIR TEMPERATURE SENSOR(MAT)
P32 INTAKE MANIFOLD AIR PRESSURE SENSOR(MAP)
P33 THROTTLE POSITION SENSOR(TPS)
P34 OXYGEN SENSOR(UNLEADED TYPE)
P35 OXYGEN SENSOR(LEADED TYPE)
P36 VEHICLE SPEED SENSOR(VSS)
K57 ECM





THROTTLE POSITION SENSOR CONNECTOR

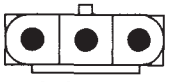


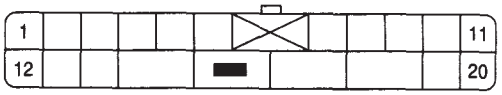
VSS CONNECTOR


O2 SENSOR

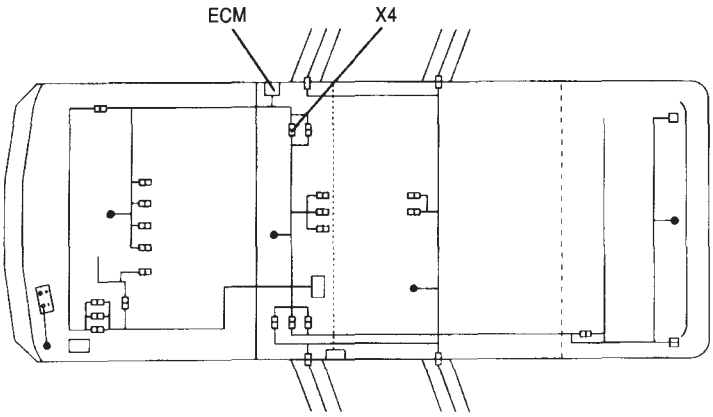
CTS MAT CONNECTOR

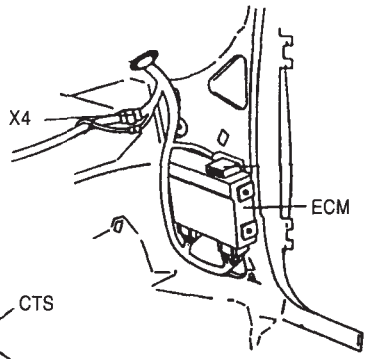
MAP SENSOR CONNECTOR

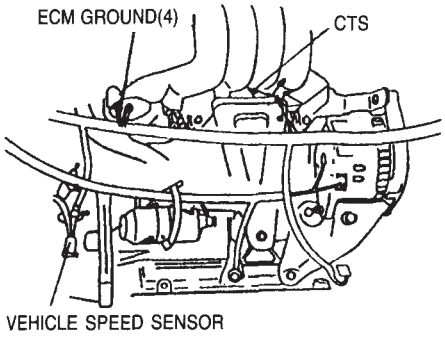

O2 SENSOR (LEADED TYPE)

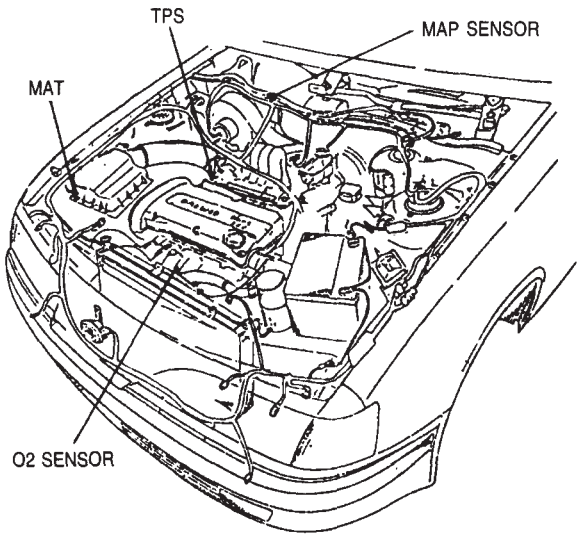


X4
F/I HARNESS CONNECTOR
(I/P HARNESS REF.)



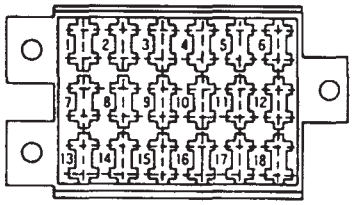






- Resistance for CTS and MAT sensor

100°C	0.185 Kilo-ohms
90°C	0.240 Kilo-ohms
80°C	0.332 Kilo-ohms
70°C	0.450 Kilo-ohms
40°C	1.46 Kilo-ohms
20°C	3.4 Kilo-ohms
10°C	5.67 Kilo-ohms
-10°C	16.1 Kilo-ohms



MAIN FUSE BOX

- Temperature Sensor: Temperature Sensor voltage supplied +5V through ECM inner resistor is as follows and ECM check this voltage to notice the engine temperature;

Engine Temp.	Resistance	Signal Voltage
Cooling	Higher	Rising
Heating	Lower	Falling

- MAP Sensor: This sensor has a function converting the inlet manifold pressure change to voltage and measure the voltage between the MAP sensor "B" terminal and the vehicle body ground.

Inlet manifold pressure	Signal voltage
Air pressure (IG "ON")	4.8~5.2 V
-0.2 bar	3.5~3.9 V
-0.4 bar	2.3~2.7 V
-0.6 bar	1.3~1.7 V
-0.8 bar	0.3~0.7 V

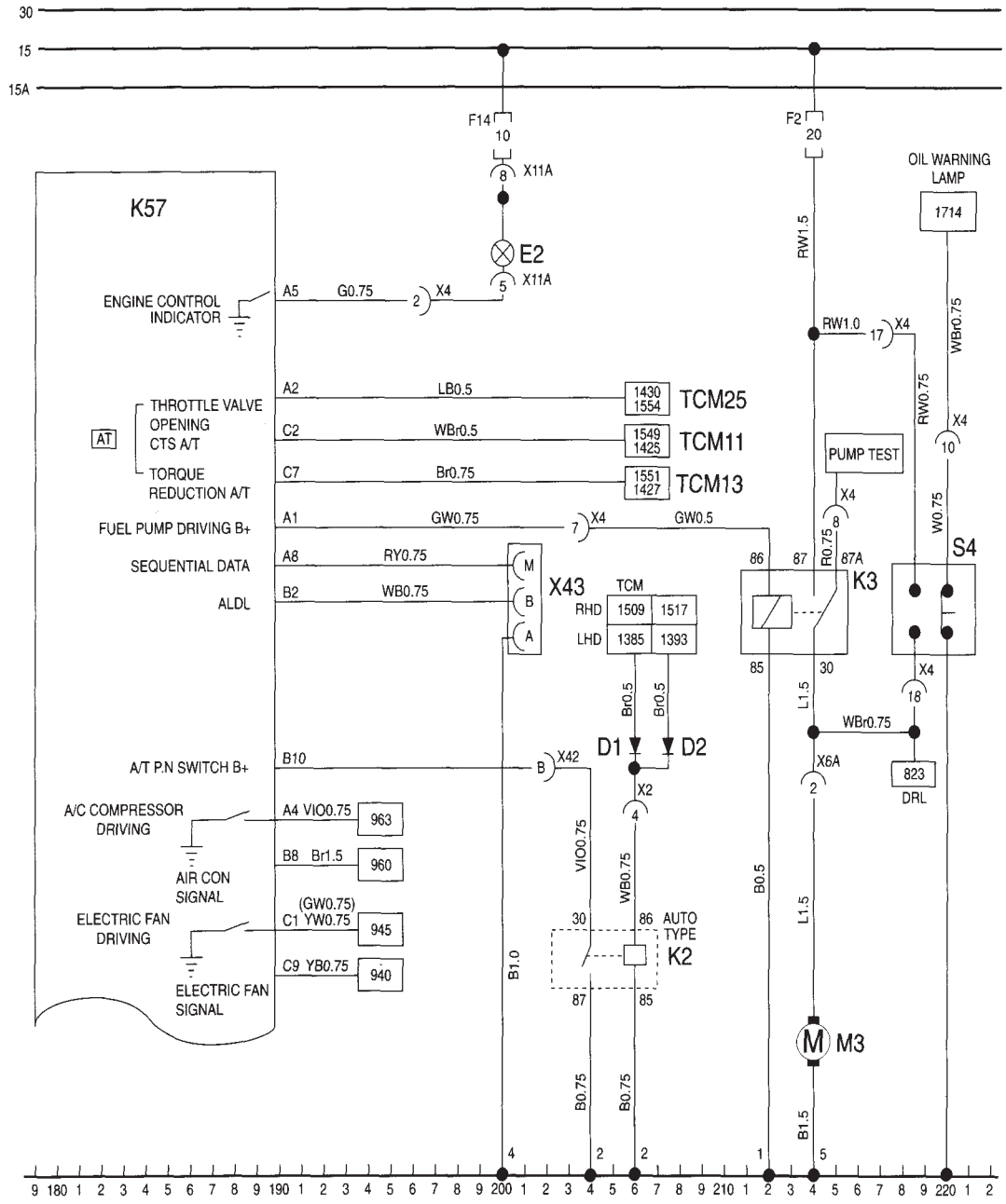
- TPS(Throttle Position Sensor): Measure the voltage between TPS "C" terminal and the vehicle body ground.

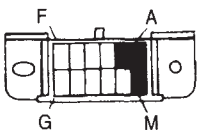
Throttle valve closing	0.4~0.8 V
100% opening	4.1~4.5 V

- VSS(Vehicle Speed Sensor):
  It uses the hole sensor theory so that below 0.5 V is detected when a current flows by closing the transistor and 12V is detected by opening.
- Oxygen Sensor:
  is to detect the mixed ratio and voltage should be changed between 0.1 and 0.9 V when an engine is warming-up fully. (when the harness is connected normally)

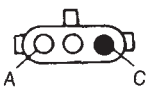
6) "SERVICE ENGINE SOON" LIGHT, FUEL PUMP WIRING(1.5 DOHC, IEFI-S TYPE)

E2 "SERVICE ENGINE SOON" LIGHT
K2 P·N RELAY(AT)
K3 FUEL PUMP RELAY
K57 ECM
M3 FUEL PUMP
S4 OIL PRESSURE SWITCH
X43 ALDL CONNECTOR

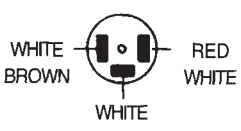




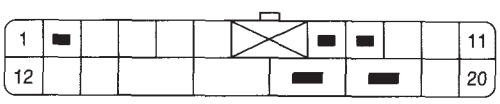
X43
ALDL CONNECTOR
(F/I HARNESS REF.)



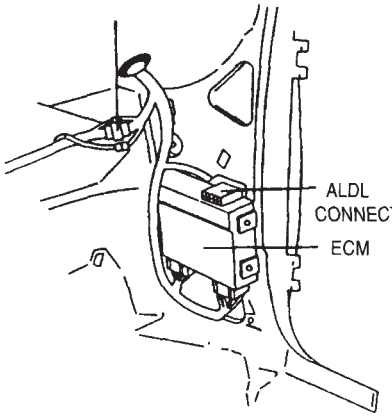
X42 FRONT
H. CONNECTOR
(F/I HARNESS REF.)

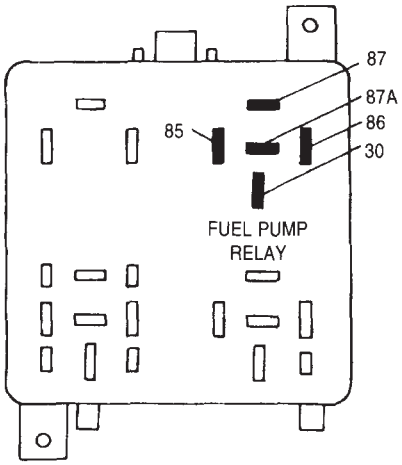


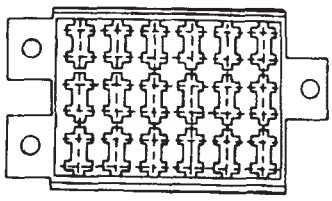
OIL PRESSURE SWITCH
CONNECTOR

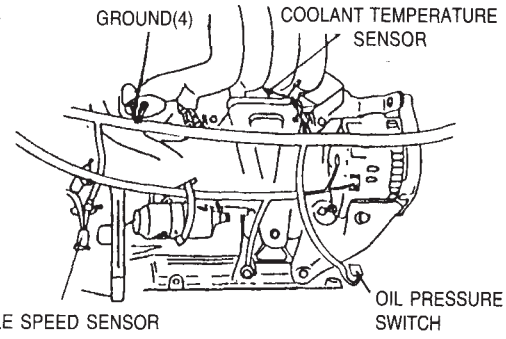


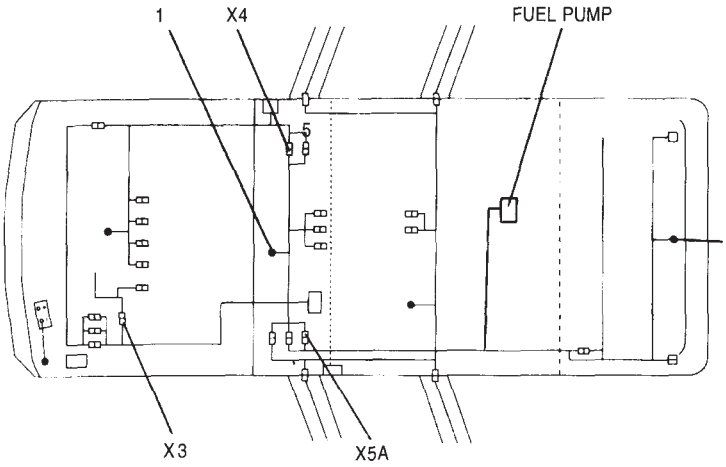
X4
F/I HARNESS
(I/P HARNESS REF.)











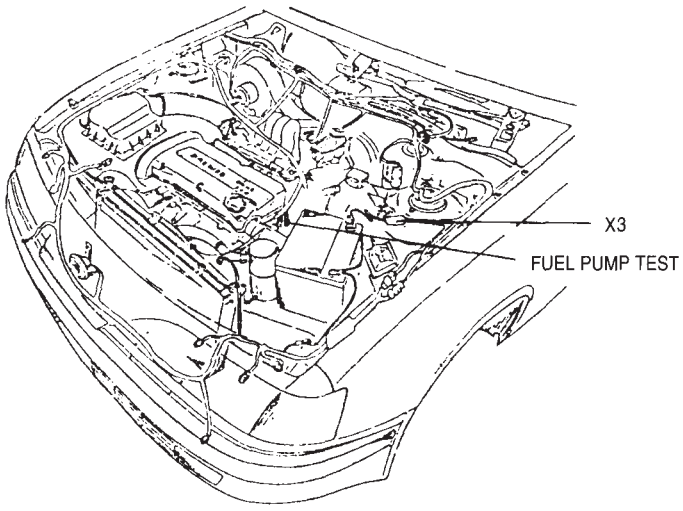
A1: B+ power is feeded to K3 fuel pump relay for 2 seconds when on ignition switch is "ON"

- The operating status of fuel pump relay

Engine status	ECM terminal V	Pump operation
Ignition switch is "ON"(engine stop)	A1: over 10V (For 2 seconds)	2 seconds of operation
On starting	A1: over 10V	Continuously operating
After starting	A1: over 10V	Continuously operating

- The regular pressure of fuel line

Idle RPM	2.3 ~ 2.7 kg/cm²
Engine Stop(Wire jumped)	2.8 ~ 3.2 kg/cm²

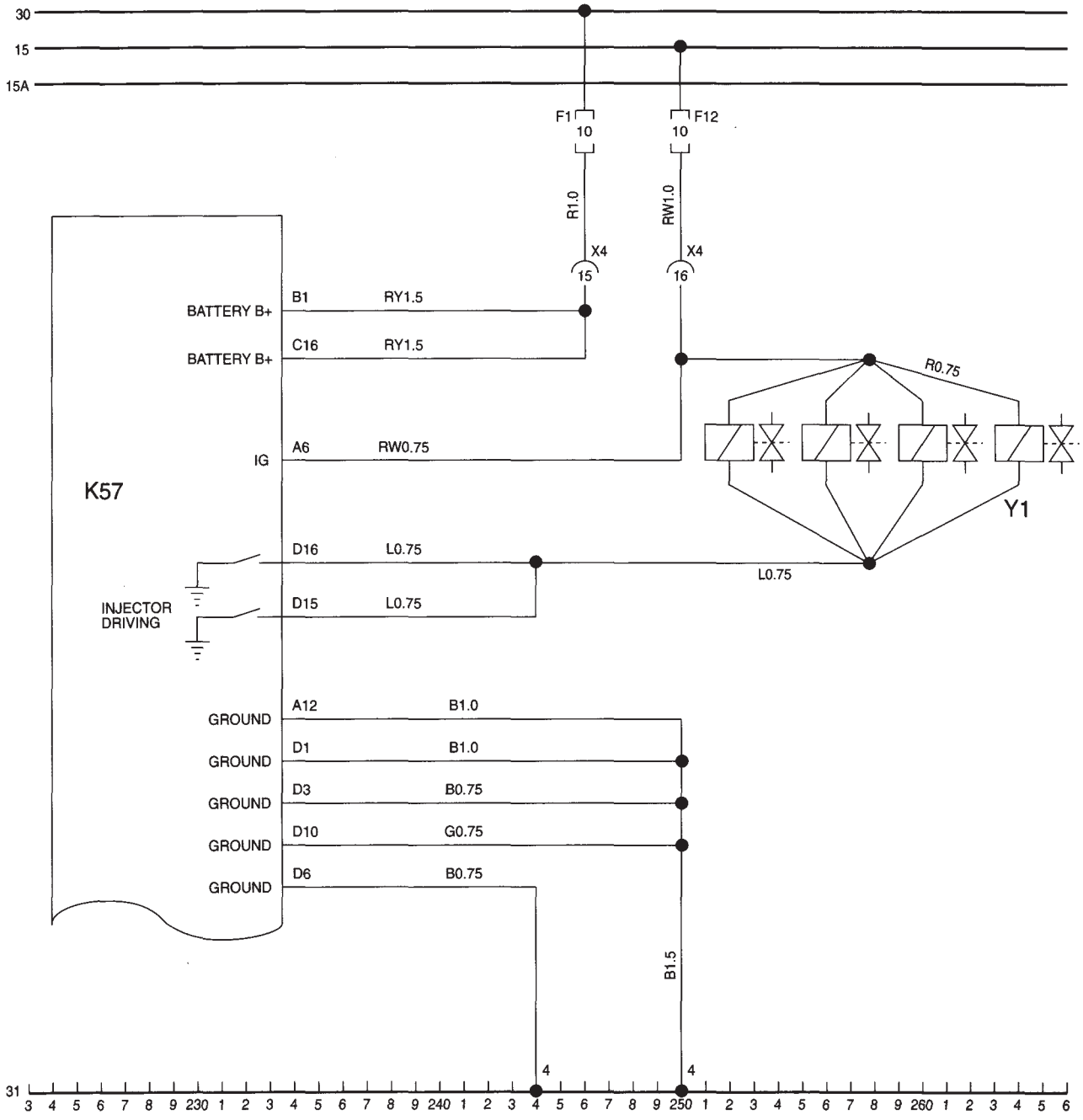


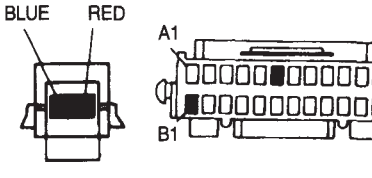
- At the A/T vehicle. P·N switch is installed on the upper side of auto transmission and ECM detects the driving position(D, R, 3, L) from the switch and compensates the idle rpm reduction generated from load increase.
- ECM terminal voltage when ignition switch "ON" or idle rpm.

Selector lever	ECM "B10" terminal
P·N	0 V
D, R, 3, L	Battery voltage(over 12 V)

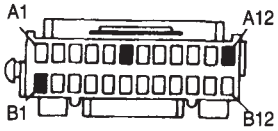
7) ECM MAIN POWER AND GROUND(1.8/2.0 L MPFI, IEFI-S TYPE)

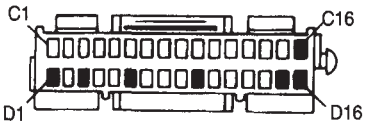
K57 ECM
Y1 INJECTOR



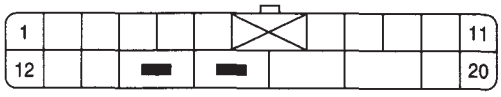


INJECTOR





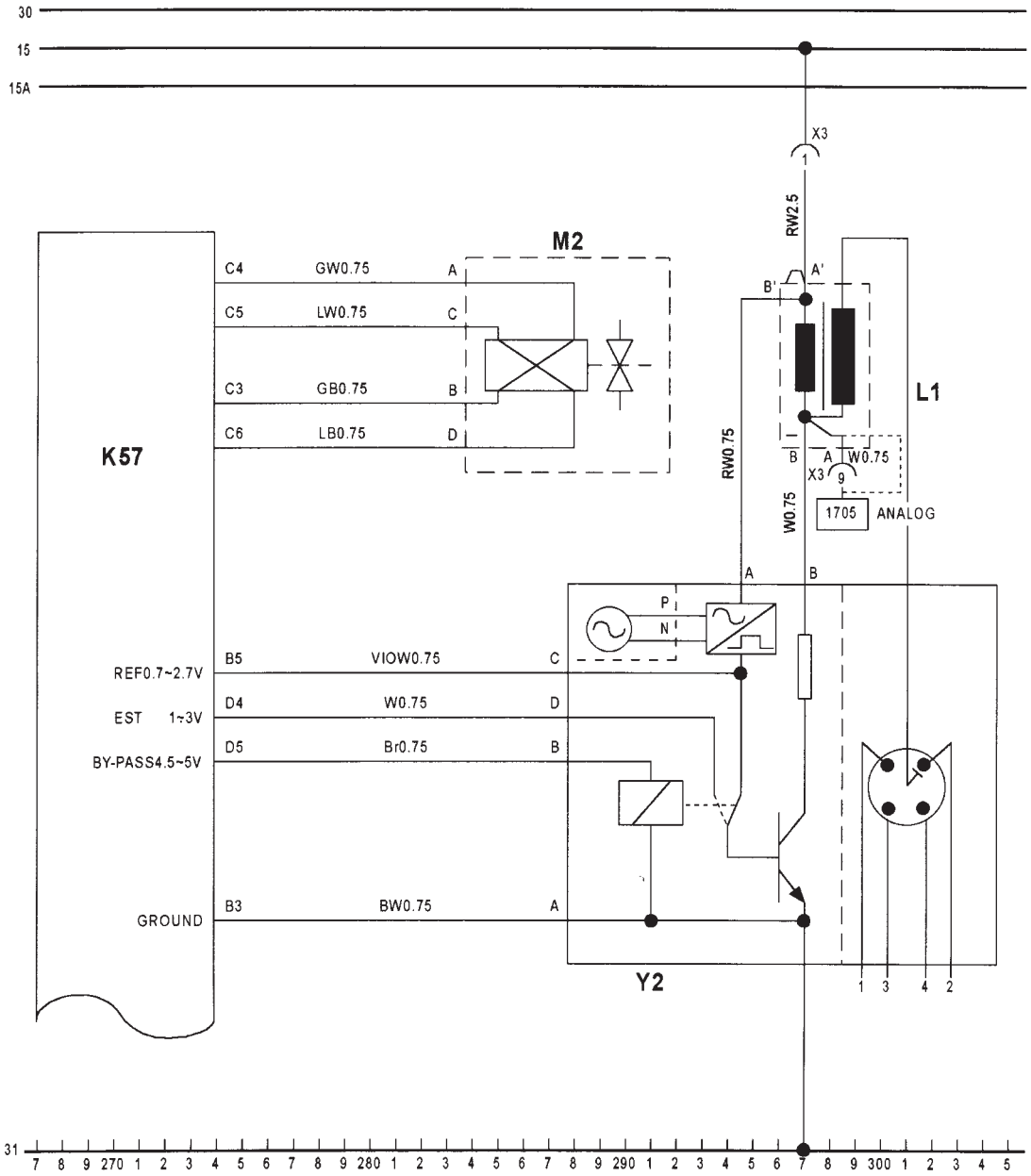
ECM TERMINAL CONNECTOR
(INJECTION HARNESS REF.)

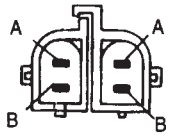


X4
F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

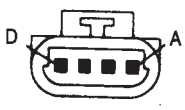
8) STEP MOTOR, IGNITION COIL, DISTRIBUTOR WIRING(1.8/2.0 L MPFI, IEFI-S TYPE)

L1 IGNITION COIL
M2 STEP MOTOR
K57 ECM
Y2 DISTRIBUTOR

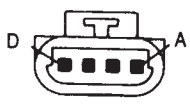




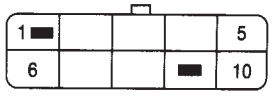
IGNITION COIL
CONNECTOR
(E/G HARNESS REF.)



DISTRIBUTOR CONNECTOR
(E/G HARNESS REF.) (F/I HARNESS REF.)



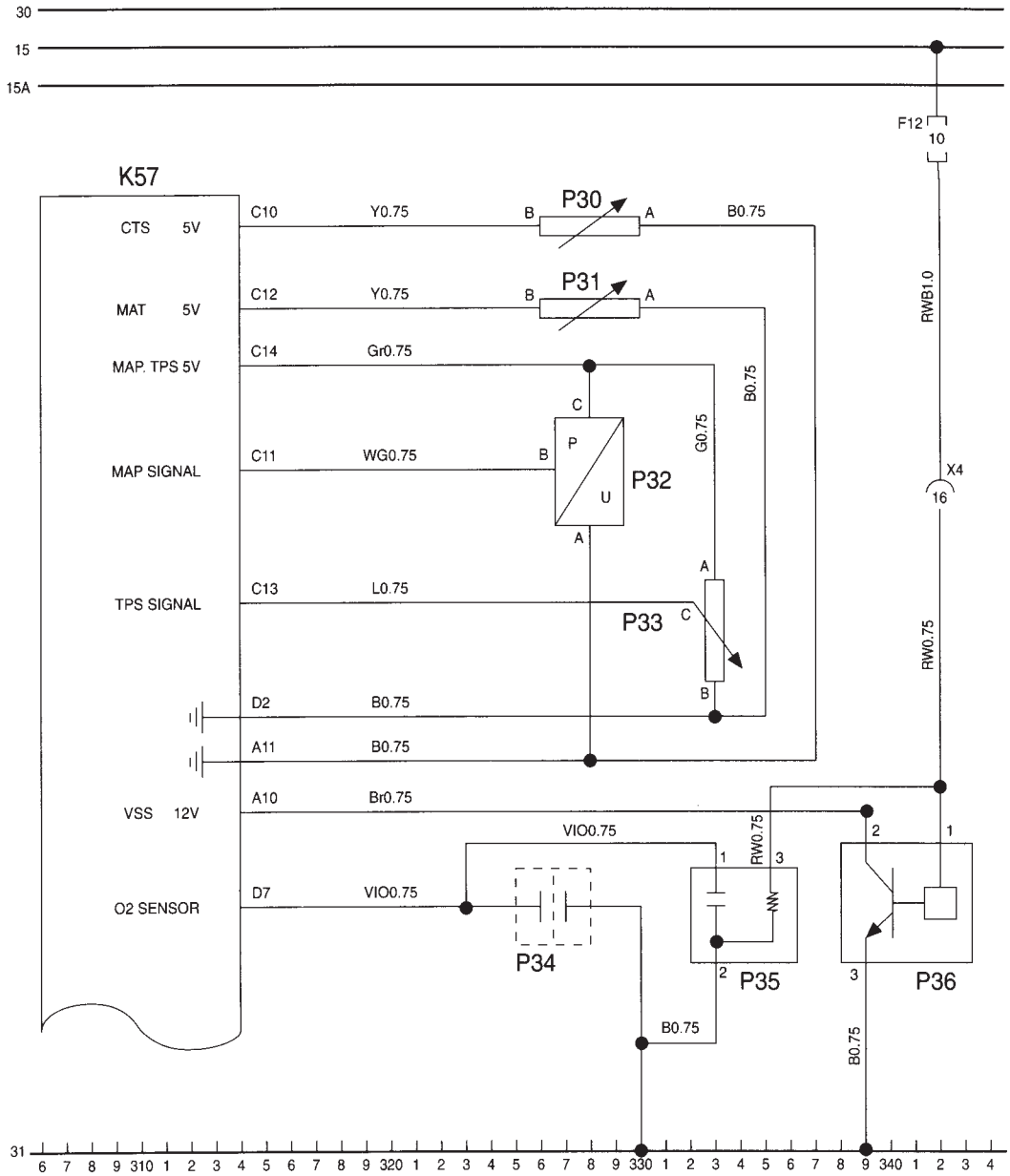
STEP MOTOR(IAC) CONNECTOR
(F/T HARNESS REF.)



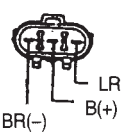
X3
ENGINE HARNESS
(I/P HARNESS REF.)

9) SENSOR AND ECM WIRING(1.8/2.0 L MPFI, IEFI-S TYPE)

P30 COOLANT TEMPERATURE SENSOR(CTS)
P31 INTAKE MANIFOLD AIR TEMPERATURE SENSOR(MAT)
P32 INTAKE MANIFOLD AIR PRESSURE SENSOR(MAP)
P33 THROTTLE POSITION SENSOR(TPS)
P34 OXYGEN SENSOR(UNLEADED TYPE)
P35 OXYGEN SENSOR(LEADED TYPE)
P36 VEHICLE SPEED SENSOR(V.S.S)
K57 ECM



THROTTLE POSITION SENSOR CONNECTOR

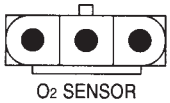


VSS CONNECTOR

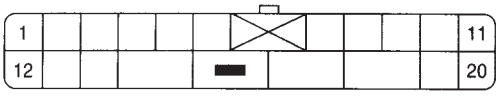
O2 SENSOR

CTS
MAT
CONNECTOR

MAP SENSOR CONNECTOR



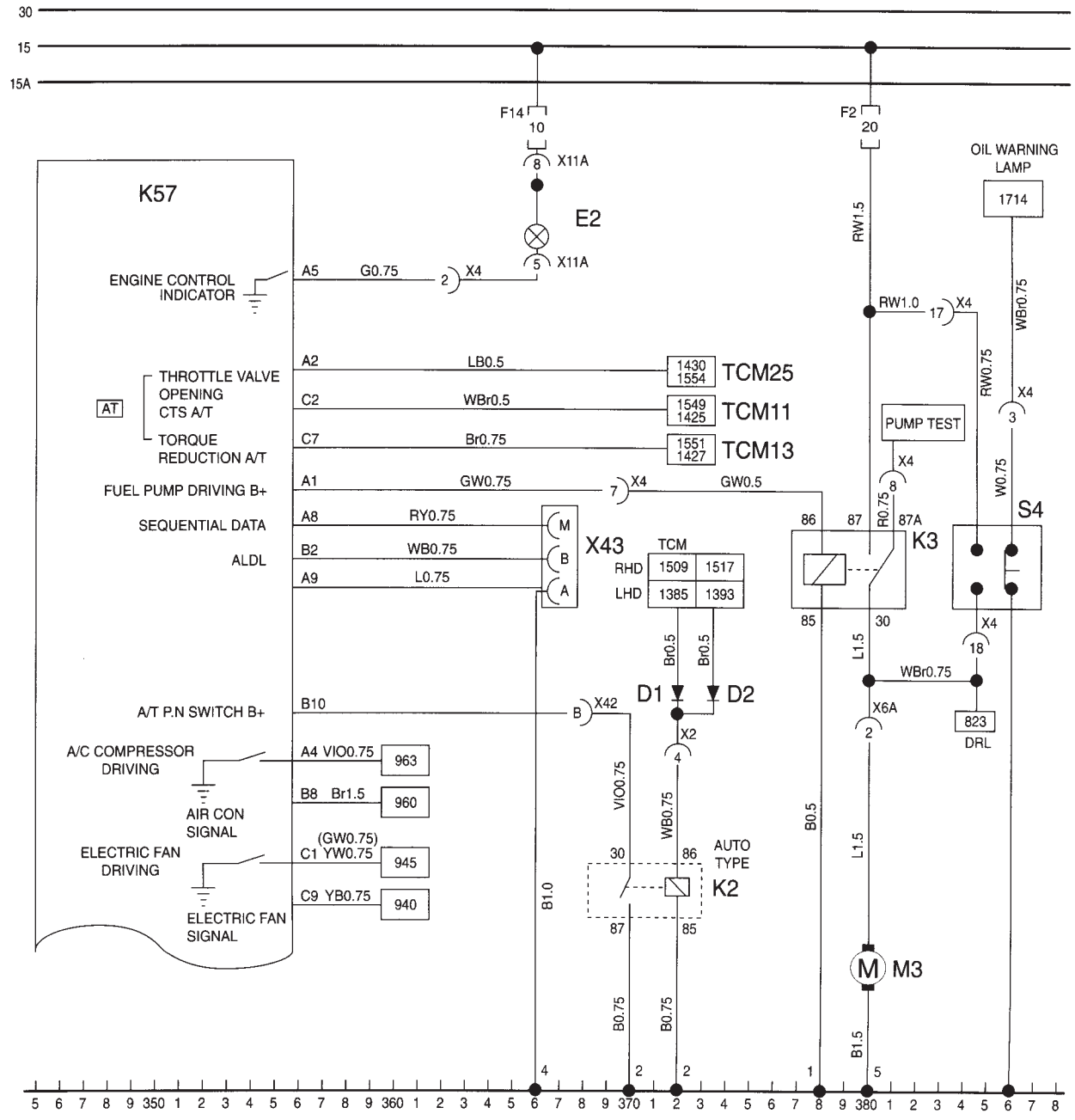
O2 SENSOR (LEADED TYPE)

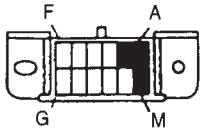


X4
F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

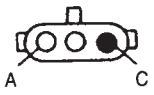
10) "SERVICE ENGINE SOON" LIGHT, FUEL PUMP WIRING(1.8/2.0 L MPFI, IEFI-S TYPE)

E2 "SERVICE ENGINE SOON" LIGHT
K2 P·N RELAY(AT)
K3 FUEL PUMP RELAY
K57 ECM
M3 FUEL PUMP
S4 OIL PRESSURE SWITCH
X43 ALDL CONNECTOR



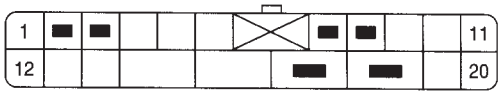


X43
ALDL CONNECTOR
(F/I HARNESS REF.)



X42 FRONT
H. CONNECTOR
(F/I HARNESS REF.)

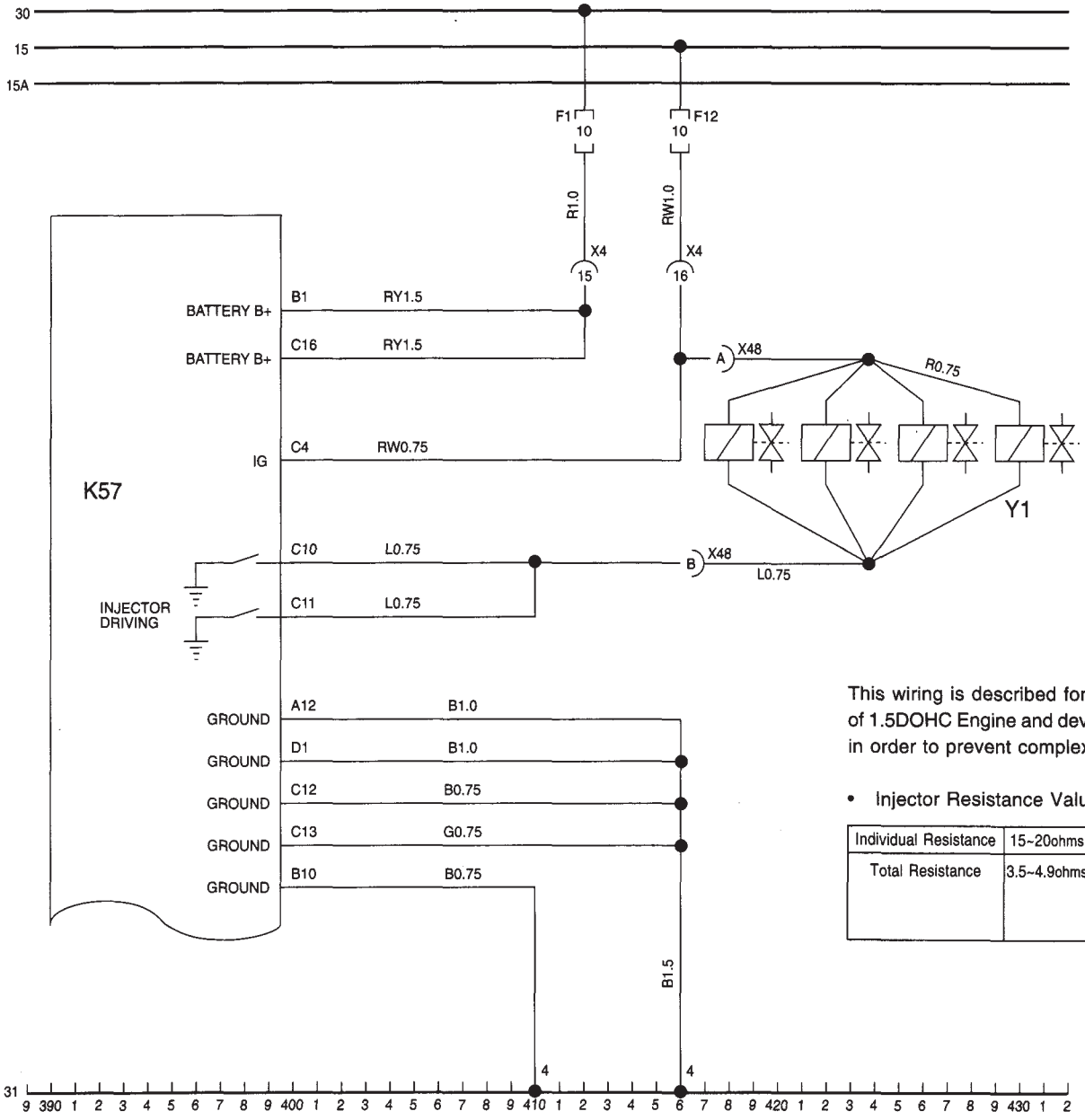
OIL PRESSURE
SWITCH
CONNECTOR



X4 F/I HARNESS
(I/P HARNESS REF.)

11) ECM MAIN POWER AND GROUND(1.5 DOHC, IEFI-6 TYPE)

K57 ECM
Y1 INJECTOR

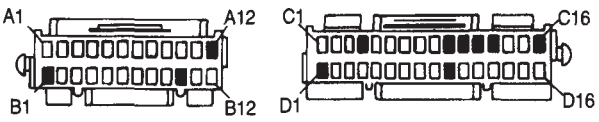


This wiring is described for the fuel injection of 1.5DOHC Engine and devided at each page in order to prevent complexity.

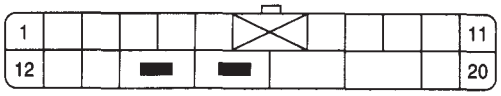
- Injector Resistance Value

Individual Resistance	15~20ohms	For each item
Total Resistance	3.5~4.9ohms	Resistance between A6 and 216 or D15 of ECM

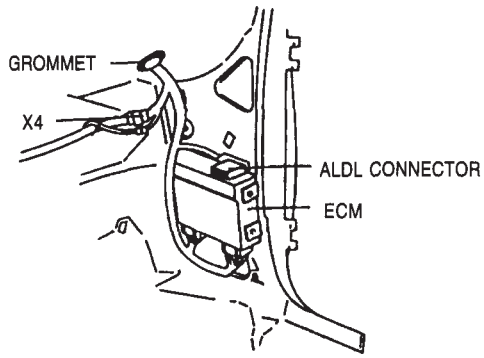
X48
INJECTOR
CONNECTOR

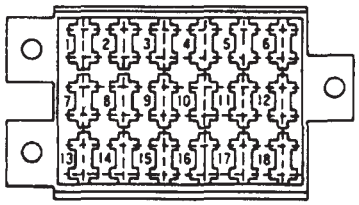


ECM TERMINAL CONNECTOR
(INJECTION HARNESS REF.)

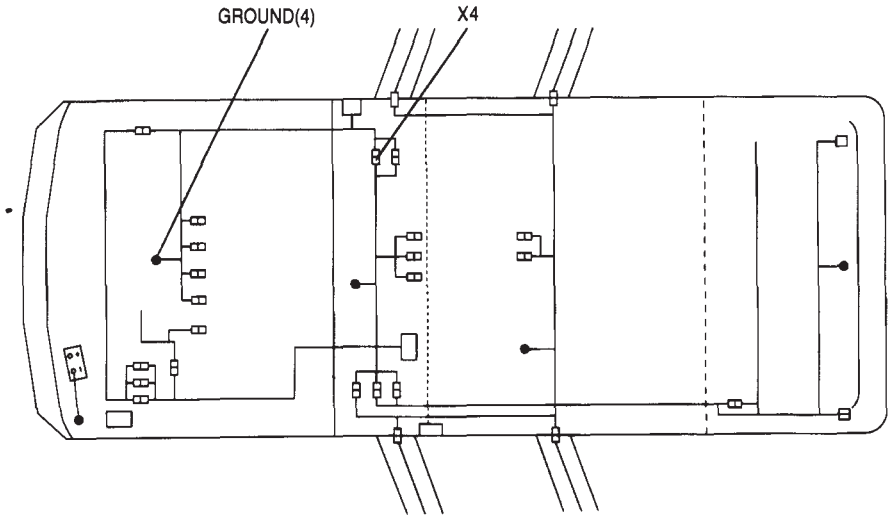


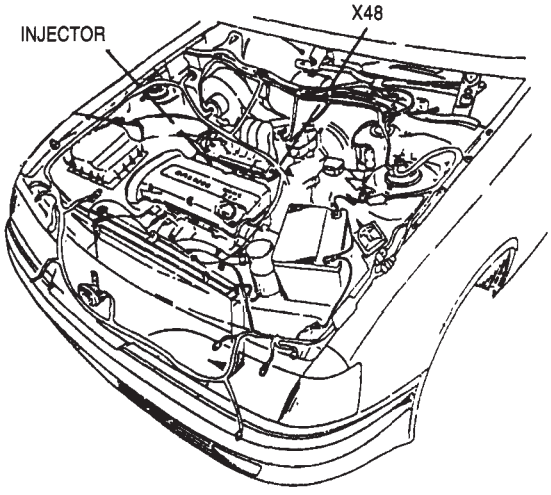
X4 F/I HARNESS
(I/P HARNESS REF.)

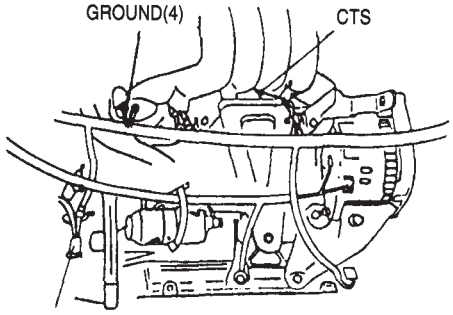




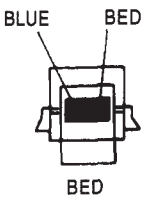
MAIN FUSE BOX







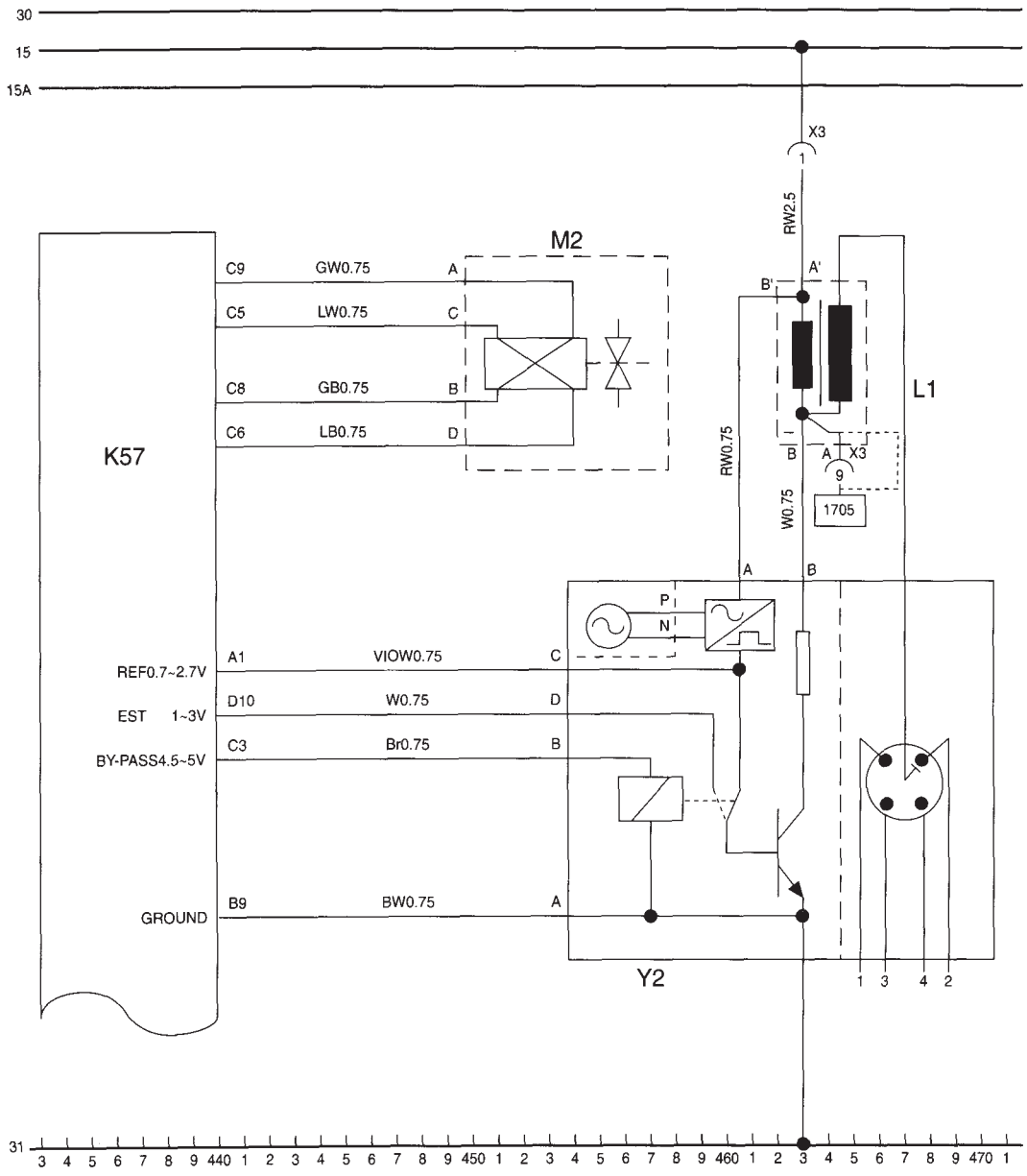
VEHICLE SPEED SENSOR

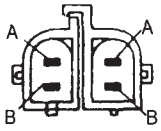


- This diagram is for a power supply to operate-ECM. That is, when an ignition switch is "ON". B^+ power should be measured at the ECM terminal B_1, C_{16}, C_4, C_{11} and C_{10}: and the following terminals are connected to the engine ground; D_1, C_{13}, C_{13}, B_{10}, A_{12} terminals.

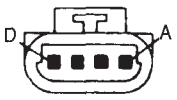
12) STEP MOTOR, IGNITION COIL, DISTRIBUTOR WIRING(1.5 DOHC, IEFI-6 TYPE)

L1 IGNITION COIL
M2 STEP MOTOR
K57 ECM
Y2 DISTRIBUTOR

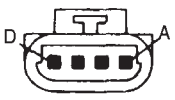




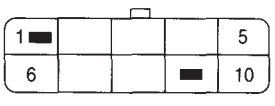
IGNITION COIL CONNECTOR (E/G HARNESS REF.)



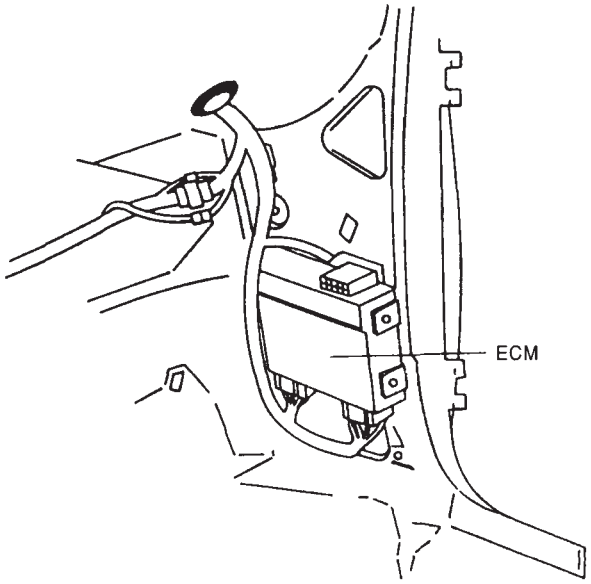
DISTRIBUTOR CONNECTOR (E/G HARNESS REF.) (F/I HARNESS REF.)



STEP MOTOR(IAC) CONNECTOR (F/T HARNESS REF.)



X3
ENGINE HARNESS CONNECTOR (I/P HARNESS REF.)



- Pick-up Coil

Resistance	500 ~ 1500 ohms
Insulation resistance	∞

- Ignition Coil

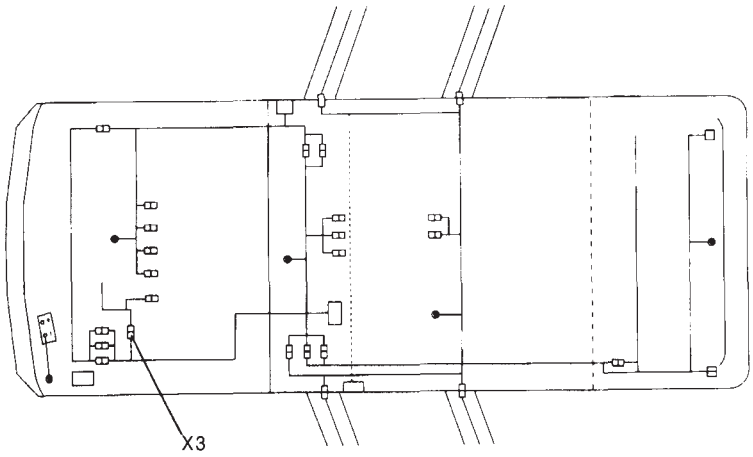
1st Resistance	0.35 ~ 0.45 ohms
2nd Resistance	7.5 ~ 9.5 ohms
Insulation resistance	∞

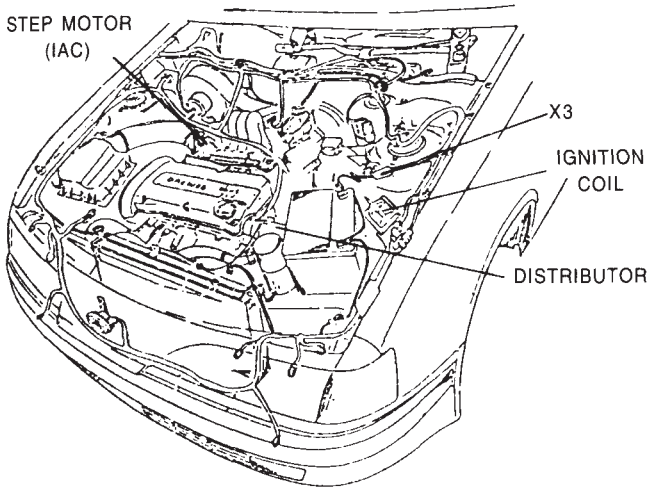
- Step motor M2 controls air quantity to be by-passed to inlet manifold in order to keep an appropriate engine RPM a in accordance with the engine operating condition.

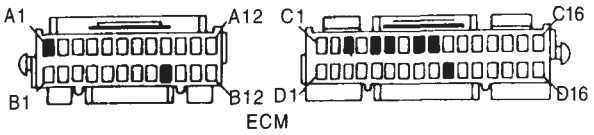
- Step motor resistance

40 ~ 80 ohms	A ⟷B terminal
	C ⟷ D terminal

Idle Revolution speed	800 ~ 850RPM(Heating)





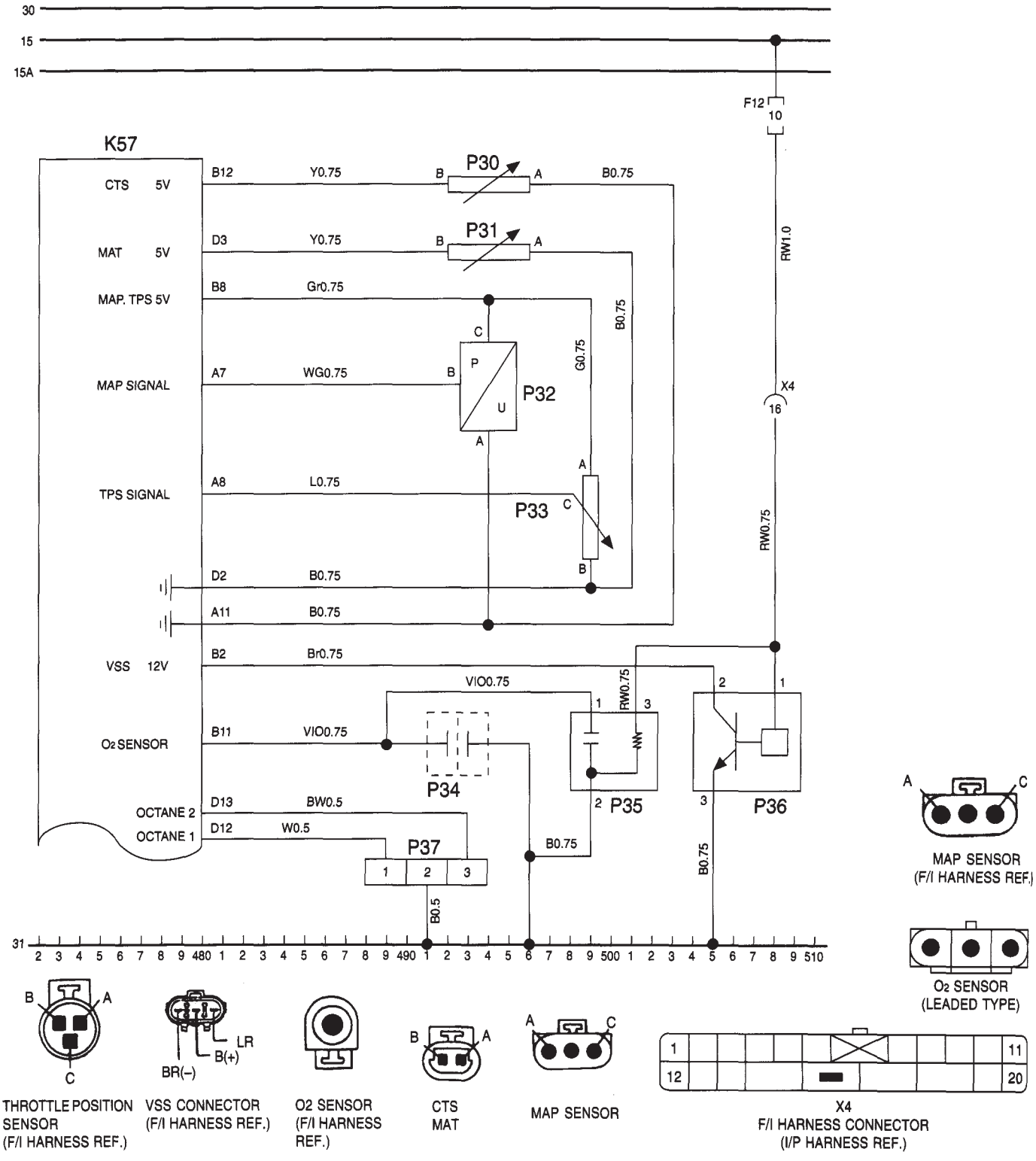


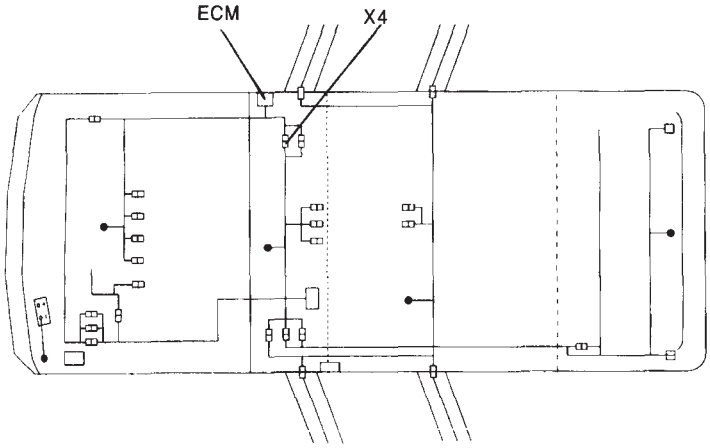
- A distributor has a two pin connector and a four pin connector. Because a two pin connector is connected to an "+" and "–" terminal s. "B+" voltage should be measured when an ignition switch is "ON". A four pin connector is connected to ECM and supply the most appropriate ignition timing in accordance with the operating condition the regular voltage between each terminal connected to ECM and vehicle ground is as follows;

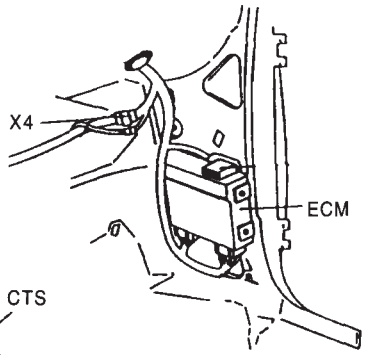
ECM TERMINAL	DISTRIBUTOR TERMINAL	CHECK CONDITION		
		IGNITION SWITCH "ON"(ENGINE STEP)	ON STARTING	AFTER STARTING
B9	A(Ground)	0V	0V	0V
C3	B(by-pass)	0V	0V	4.5~5V
A1	C(REF)	below 0.3V	0.5~1.5V	0.7~2.7V
D10	D(EST)	below 0.3V	below 0.3V	1~3V

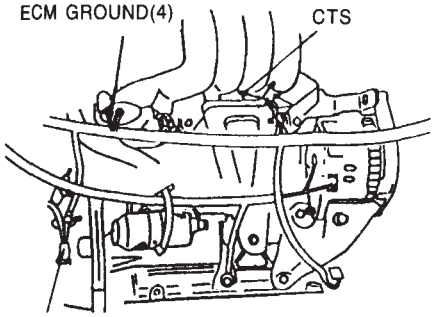
13) SENSOR AND ECM WIRING(1.5 DOHC, IEFI-6 TYPE)

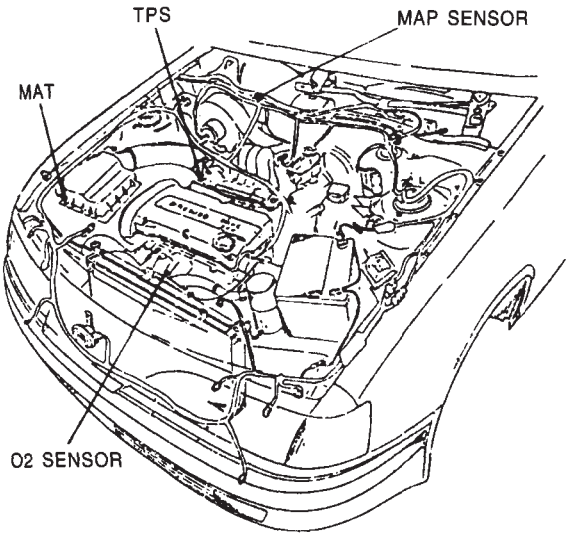
P30 COOLANT TEMPERATURE SENSOR(CTS)
P31 INTAKE MANIFOLD AIR TEMPERATURE SENSOR(MAT)
P32 INTAKE MANIFOLD AIR PRESSURE SENSOR(MAP)
P33 THROTTLE POSITION SENSOR(TPS)
P34 OXYGEN SENSOR(UNLEADED TYPE)
P35 OXYGEN SENSOR(LEADED TYPE)
P36 VEHICLE SPEED SENSOR(VSS)
P37 OCTANE SWITCH CONNECTOR





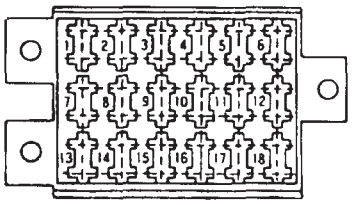






- Resistance for CTS and MAT sensor

100°C	0.185 Kilo-ohms
90°C	0.240 Kilo-ohms
80°C	0.332 Kilo-ohms
70°C	0.450 Kilo-ohms
40°C	1.46 Kilo-ohms
20°C	3.4 Kilo-ohms
10°C	5.67 Kilo-ohms
-10°C	16.1 Kilo-ohms



MAIN FUSE BOX

- Temperature Sensor: Temperature Sensor voltage supplied +5V through ECM inner resistor is as follows and ECM check this voltage to notice the engine temperature;

Engine Temp.	Resistance	Signal Voltage
Cooling	Higher	Rising
Heating	Lower	Falling

- MAP Sensor: This sensor has a function converting the inlet manifold pressure change to voltage and measure the voltage between the MAP sensor "B" terminal and the vehicle body ground.

Inlet manifold pressure	Signal voltage
Air pressure (IG "ON")	4.8 ~ 5.2 V
-0.2 bar	3.5 ~ 3.9 V
-0.4 bar	2.3 ~ 2.7 V
-0.6 bar	1.3 ~ 1.7 V
-0.8 bar	0.3 ~ 0.7 V

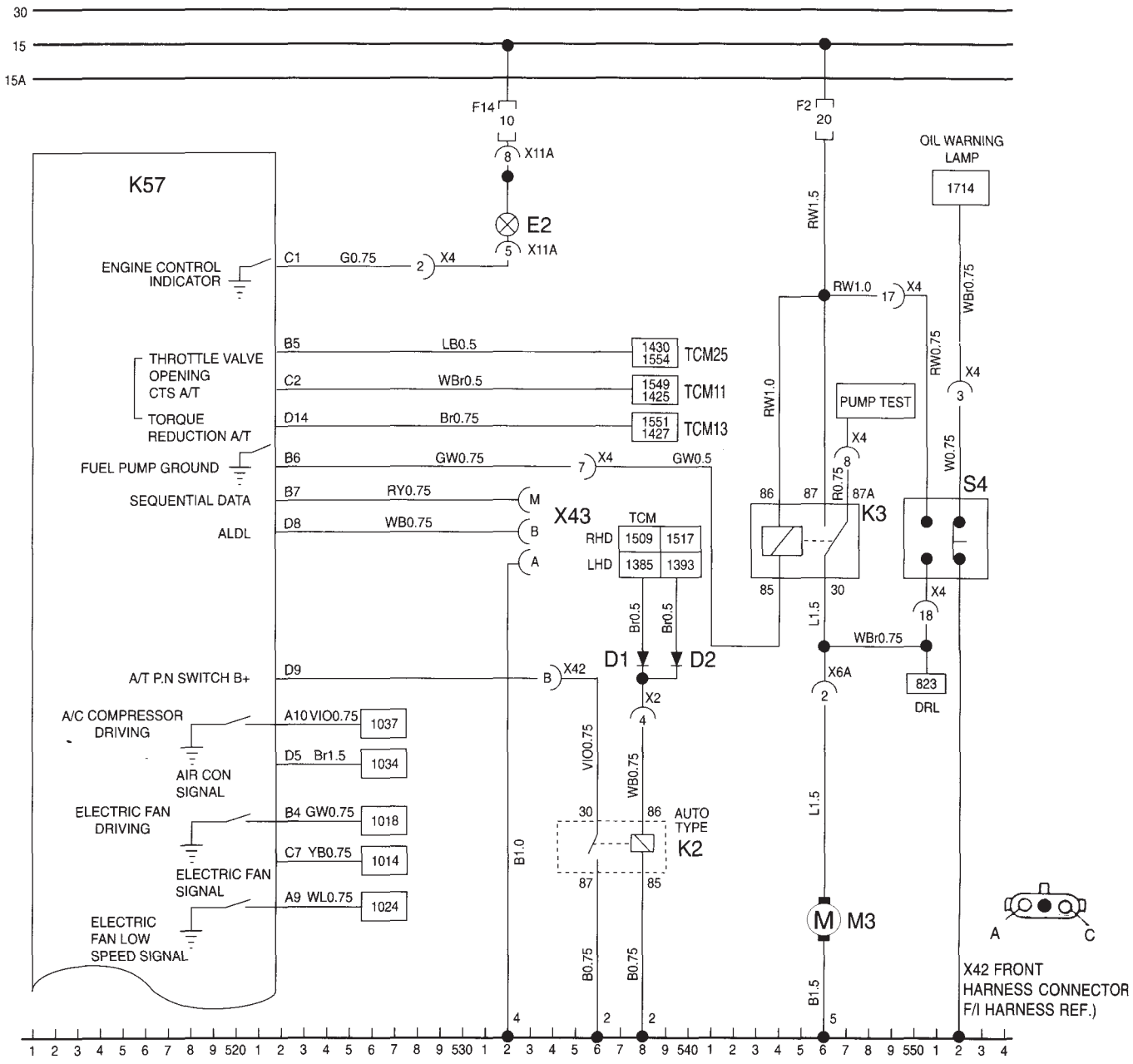
- TPS(Throttle Position Sensor): Measure the voltage between TPS "C" terminal and the vehicle body ground.

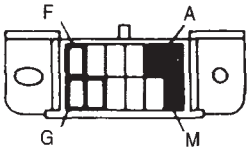
Throttle valve closing	0.4~0.8 V
100% opening	4.1~4.5 V

- VSS(Vehicle Speed Sensor):
  It uses the hole sensor theory so that below 0.5 V is detected when a current flows by closing the transistor and 12V is detected by opening.
- Oxygen Sensor:
  is to detect the mixed ratio and voltage should be changed between 0.1 and 0.9 V when an engine is warming-up fully. (when the harness is connected normally)

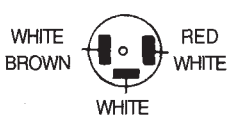
14) "SERVICE ENGINE SOON" LIGHT, FUEL PUMP WIRING(1.5 DOHC, IEFI-6 TYPE)

E2 "SERVICE ENGINE SOON" LIGHT
K2 P·N RELAY(AT)
K3 FUEL PUMP RELAY
K57 ECM
M3 FUEL PUMP
S4 OIL PRESSURE SWITCH
X43 ALDL CONNECTOR

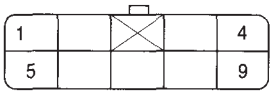




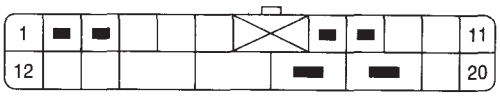
X43
(ALDL CONNECTOR)



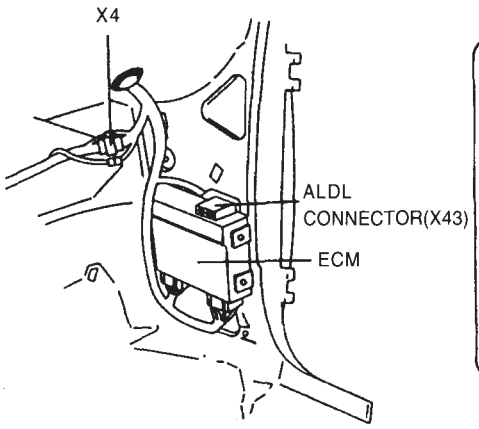
OIL PRESSURE SWITCH CONNECTOR

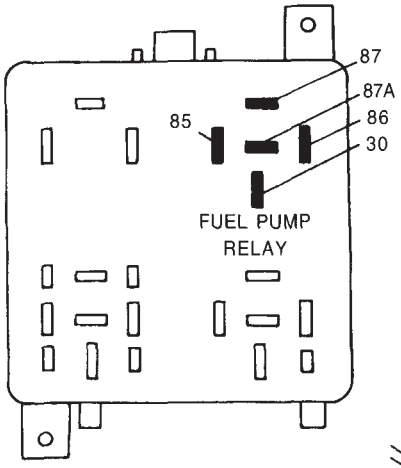


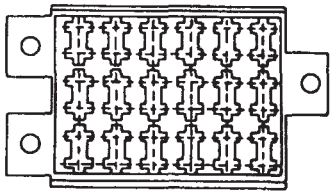
X6A FRONT BODY HARNESS CONNECTOR
(I/P HARNESS REF.)

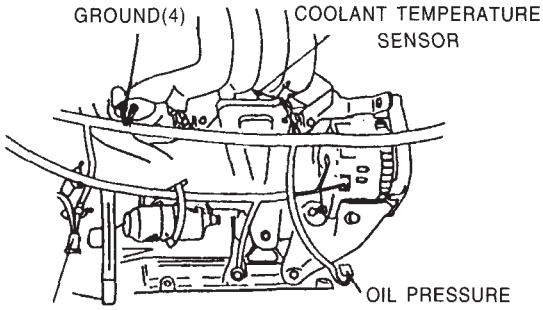


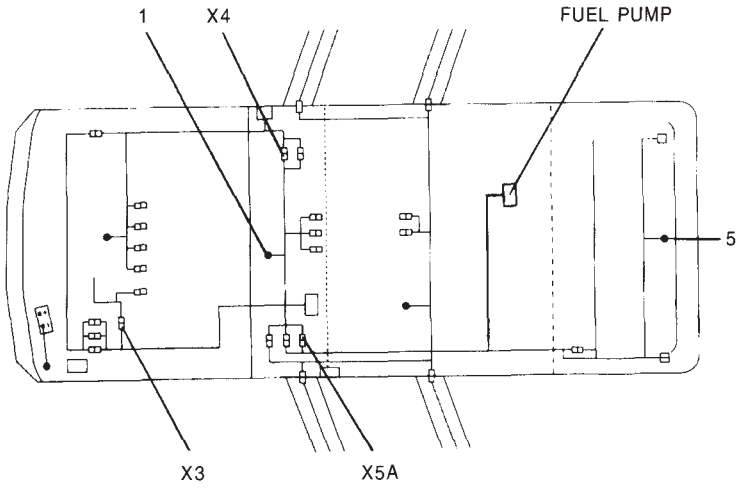
X4 F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

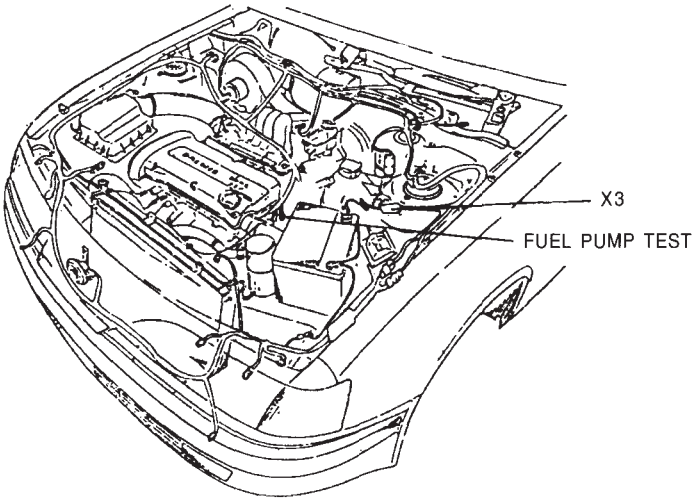


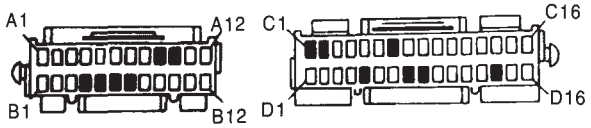












- B6: Ter B6 is grounded from K3 fuel pump relay Ter, 85 for 2 seconds when an ignition switch is "ON".

- The operating status of fuel pump relay

Engine status	ECM terminal V	Pump operation
Ignition switch is "ON"(engine stop)	B6: over 0V (For 2 seconds)	2 seconds of operation
On starting	B6: over 0V	Continuously operating
After starting	B6: over 0V	Continuously operating

- The regular pressure of fuel line

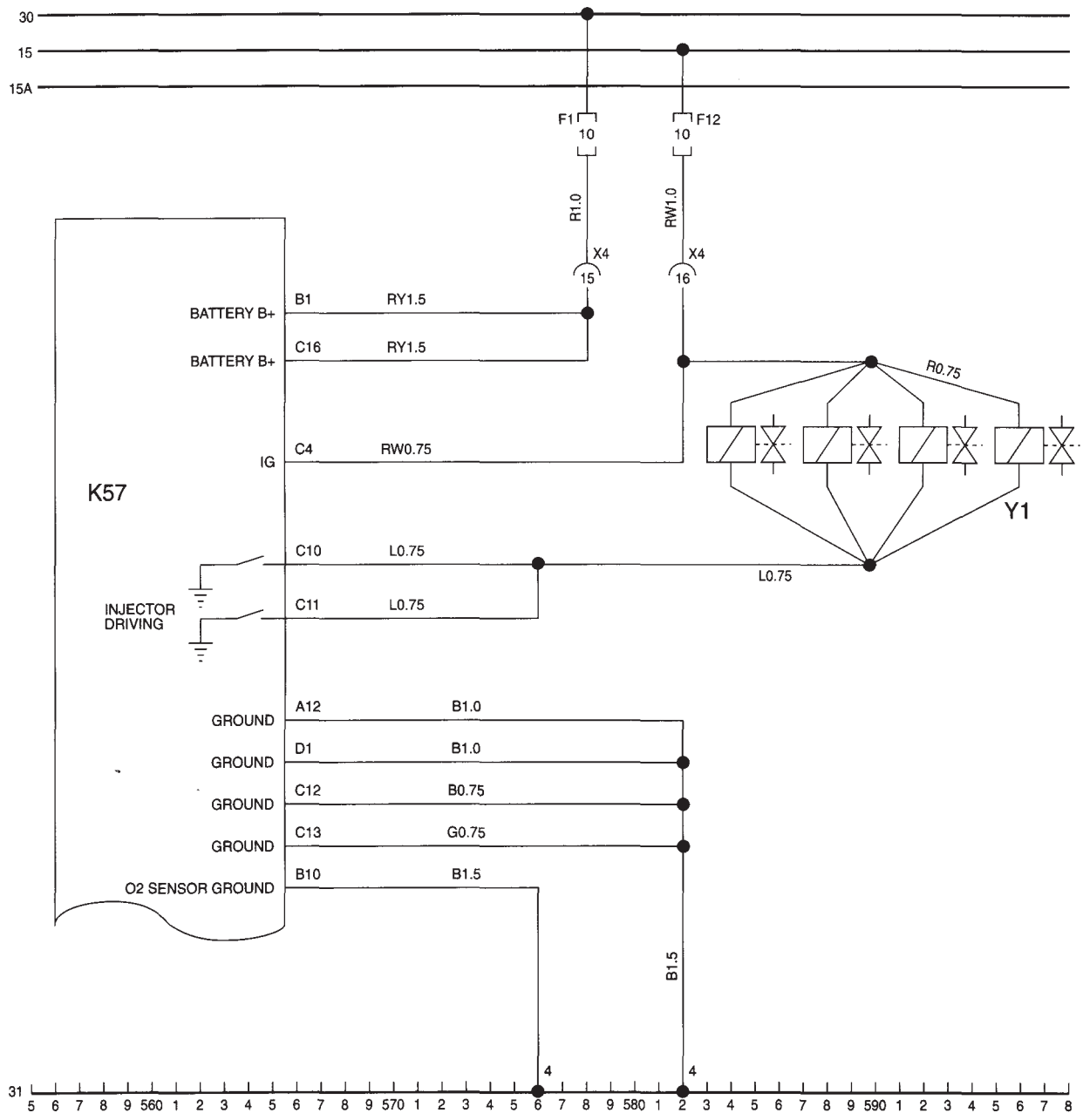
Idle RPM	2.3 ~ 2.7 kg/cm^2
Engine Stop(Wire jumped)	2.8 ~ 3.2 kg/cm^2

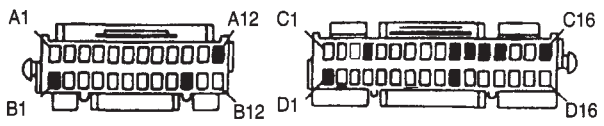
- At the A/T vehicle. P·N switch is installed on the upper side of auto transmission and ECM detects the driving position(D, R, 3, L) from the switch and compensates the idle rpm reduction generated from load increase.
- ECM terminal voltage when ignition switch "ON" or idle rpm.

Selector lever	ECM "B10" terminal
P·N	0 V
D, R, 3, L	Battery voltage(over 12 V)

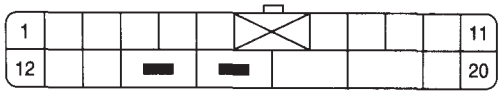
15) ECM MAIN POWER AND GROUND(1.8/2.0 L MPFI, IEFI-6 TYPE)

K57 ECM
Y1 INJECTOR





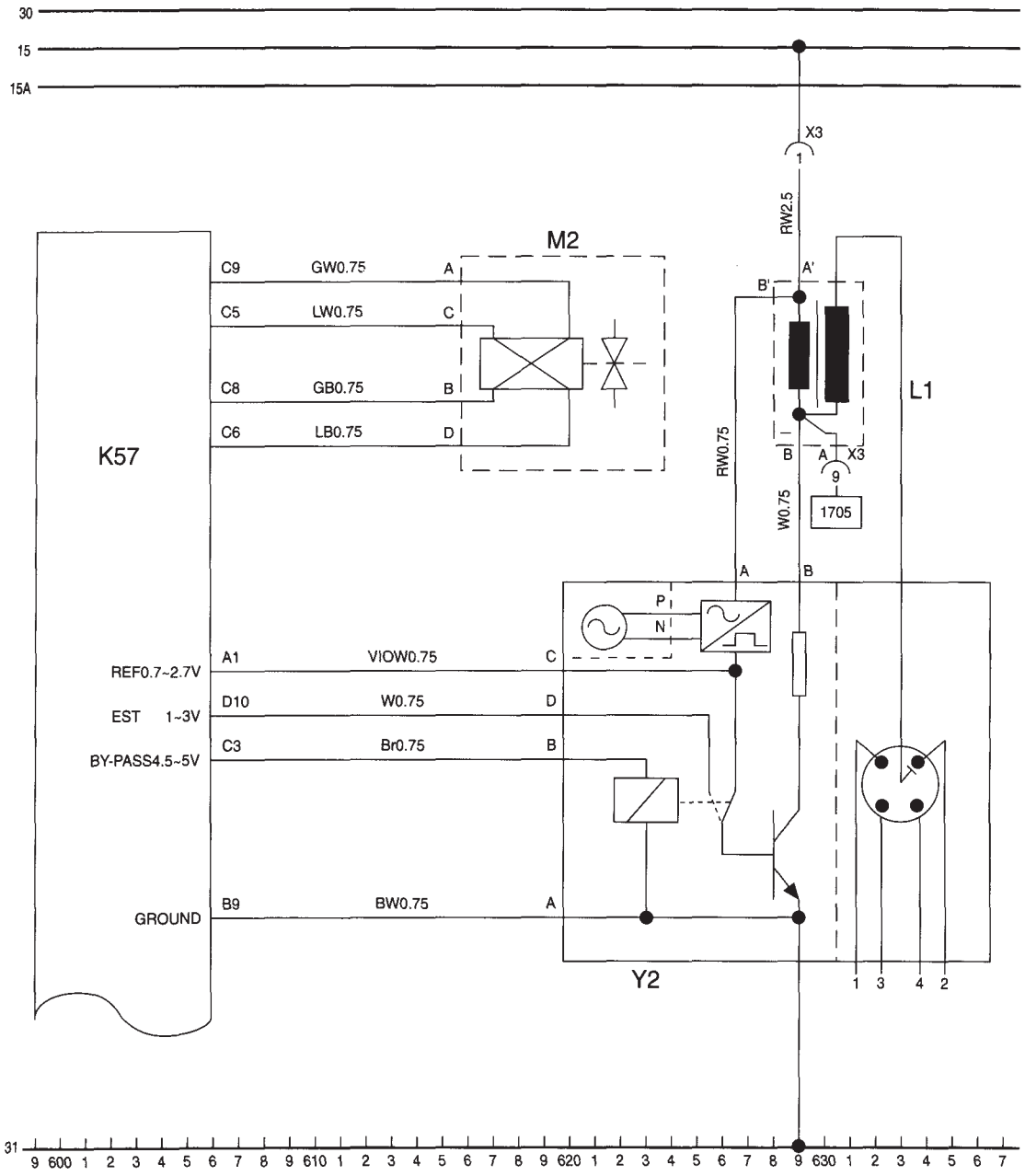
ECM TERMINAL CONNECTOR
(INJECTION HARNESS REF.)

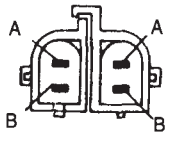


X4 F/I HARNESS
(I/P HARNESS REF.)

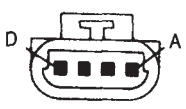
16) STEP MOTOR, IGNITION COIL, DISTRIBUTOR WIRING(1.8/2.0 L MPFI, IEFI-6 TYPE)

L1 IGNITION COIL
M2 STEP MOTOR
K57 ECM
Y2 DISTRIBUTOR

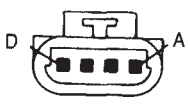




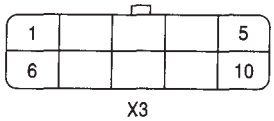
IGNITION COIL
(E/G HARNESS REF.)



DISTRIBUTOR CONNECTOR
(E/G HARNESS REF.) (F/I HARNESS REF.)



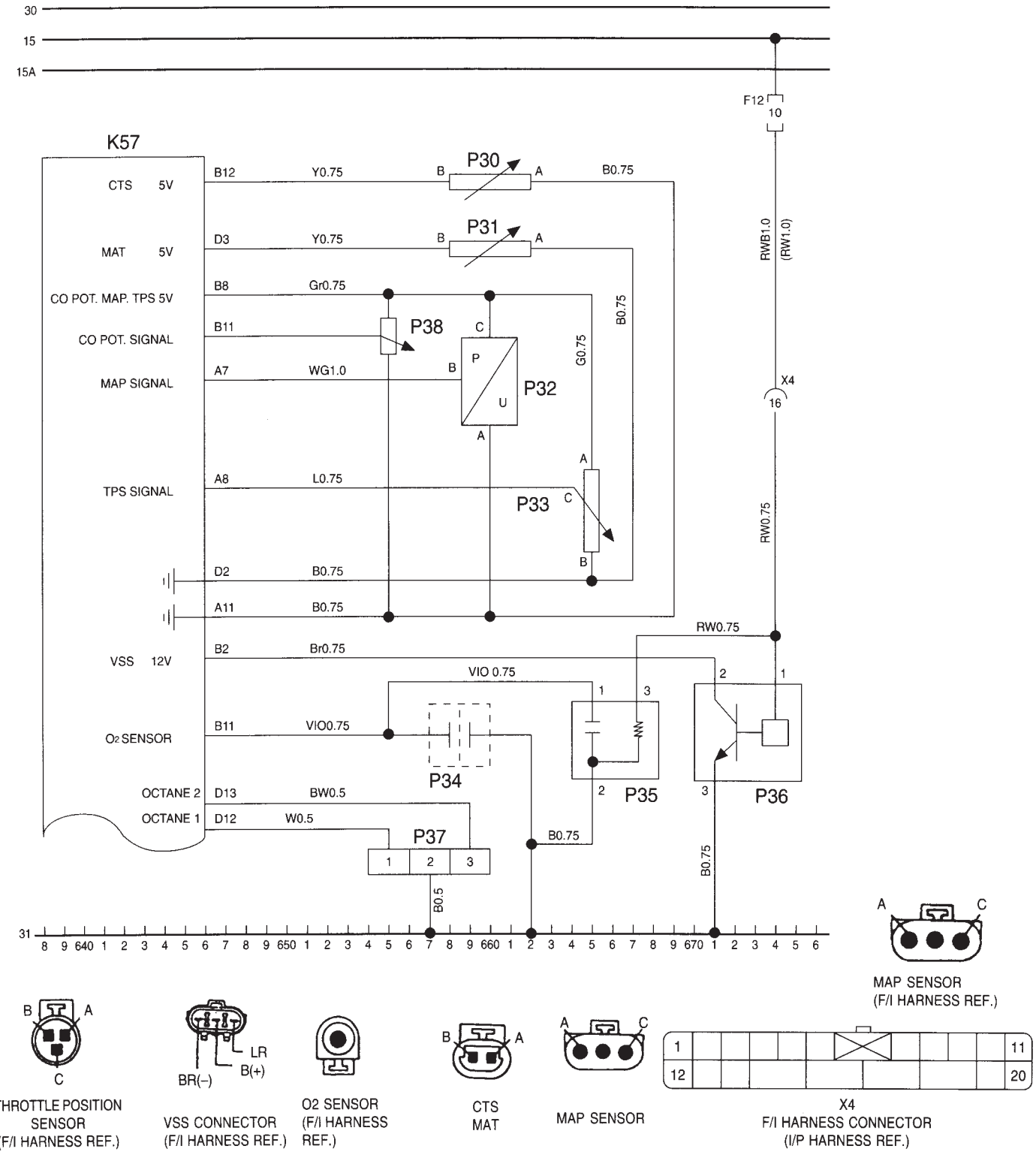
STEP MOTOR(IAC)
(F/T HARNESS REF.)



X3
ENGINE HARNESS
(I/P HARNESS REF.)

17) SENSOR AND ECM WIRING(1.8/2.0 L MPFI, IEFI-6 TYPE)

P30 COOLANT TEMPERATURE SENSOR(CTS)
P31 INTAKE MANIFOLD AIR TEMPERATURE SENSOR(MAT)
P32 INTAKE MANIFOLD AIR PRESSURE SENSOR(MAP)
P33 THROTTLE POSITION SENSOR(TPS)
P34 OXYGEN SENSOR(UNLEADED TYPE)
P35 OXYGEN SENSOR(LEADED TYPE)
P36 VEHICLE SPEED SENSOR(VSS)
P37 OCTANE SWITCH CONNECTOR
P38 CO POTENTIOMETER(LEADED TYPE VEHICLE ONLY)



THROTTLE POSITION SENSOR (F/I HARNESS REF.)

VSS CONNECTOR (F/I HARNESS REF.)

O2 SENSOR (F/I HARNESS REF.)

CTS
MAT

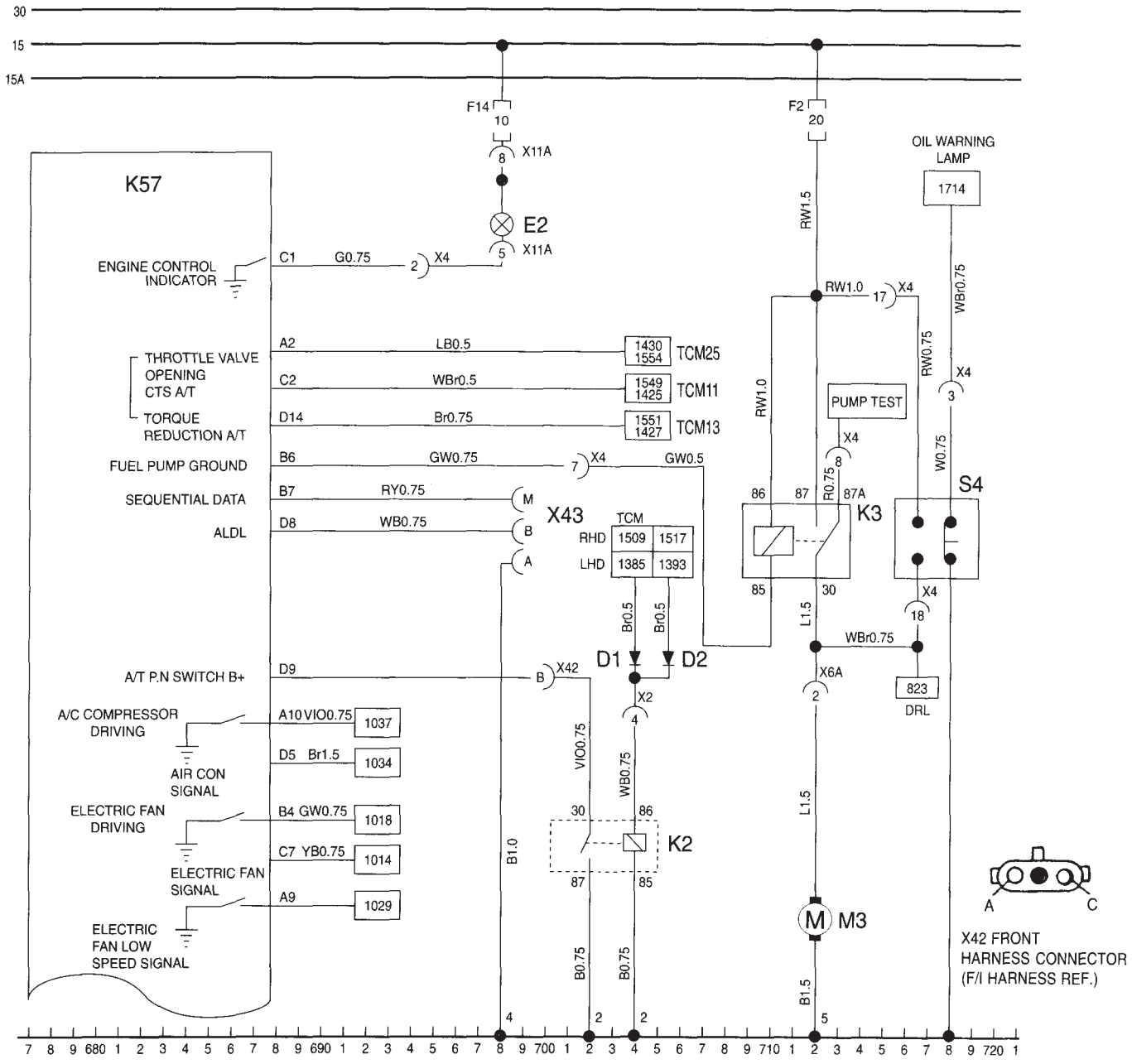
MAP SENSOR

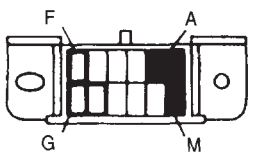
X4
F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

MAP SENSOR
(F/I HARNESS REF.)

18) "SERVICE ENGINE SOON" LIGHT, FUEL PUMP WIRING(1.8/2.0 L MPFI, IEFI-6 TYPE)

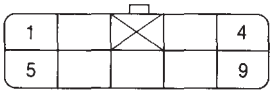
E2 "SERVICE ENGINE SOON" LIGHT
K2 P·N RELAY(AT)
K3 FUEL PUMP RELAY
K57 ECM
M3 FUEL PUMP
S4 OIL PRESSURE SWITCH
X43 ALDL CONNECTOR



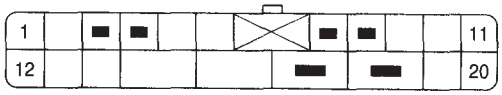


X43
(ALDL CONNECTOR)

OIL PRESSURE SWITCH CONNECTOR



X6A FRONT BODY HARNESS
(I/P HARNESS REF.)

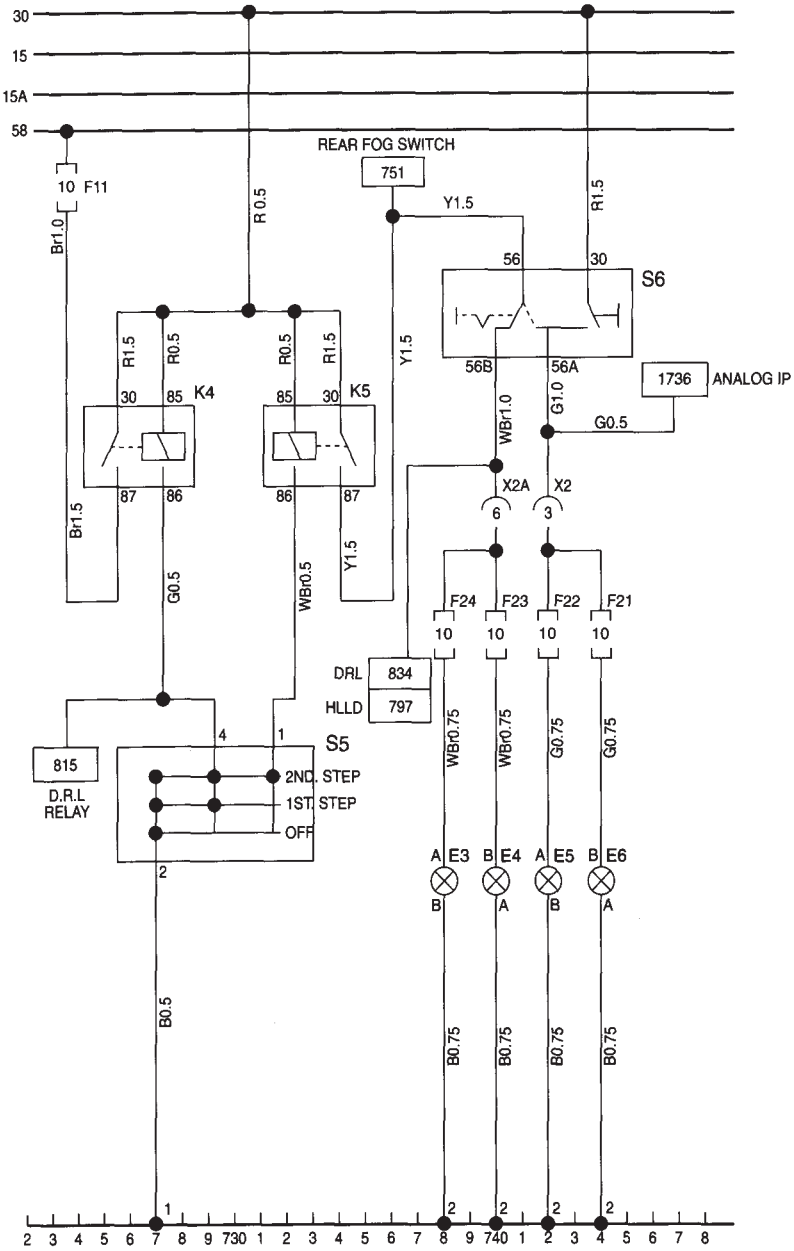


X4 F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

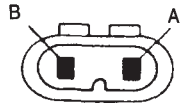
19) HEAD LAMP WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

E3 HEAD LAMP LOW BEAM RH
E4 HEAD LAMP LOW BEAM LH
E5 HEAD LAMP HIGH BEAM RH
E6 HEAD LAMP HIGH BEAM LH

K4 ILLUMINATION LAMP RELAY
K5 HEAD LAMP RELAY
S5 LIGHT SWITCH
S6 DIMMER SWITCH



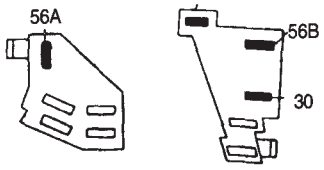
- *58 Line*
  After a light switch is set to 1st or 2nd step, a illumination relay is operating to feed power to fuse 11. The line connect to F2 is called a 58 line. The 58 line feeds power to various illumination lamps and clearance lamps, etc.
- S5 switch, S6 dimmer switch
  A light switch and A dimmer switch are displayed respectively on the wiring diagram.
  But these are assembled physically in a device.



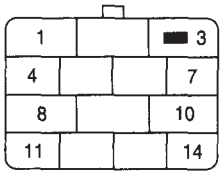
LOW BEAM
(FRONT HARNESS)
(GRAY CONNECTOR)

HIGH BEAM
(FRONT HARNESS)
(BLACK CONNECTOR)

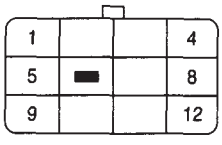
X2B
FRONT HARNESS
CONNECTOR
(I/P HARNESS REF.)



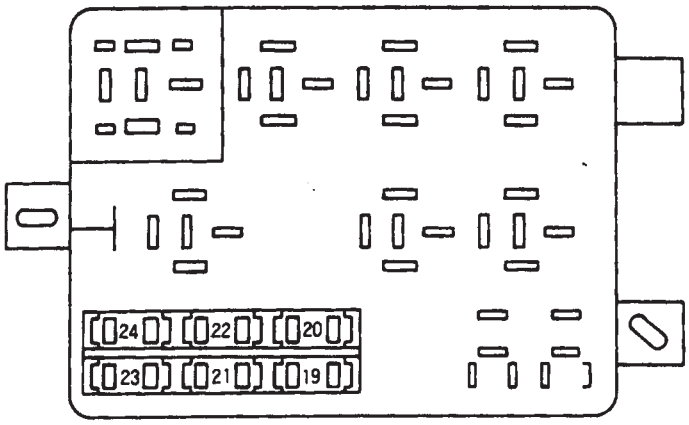
HEAD LIGHT DIMMER SWITCH
(I/P HARNESS REF.)



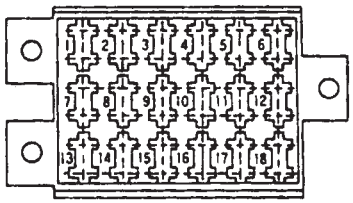
X2
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)



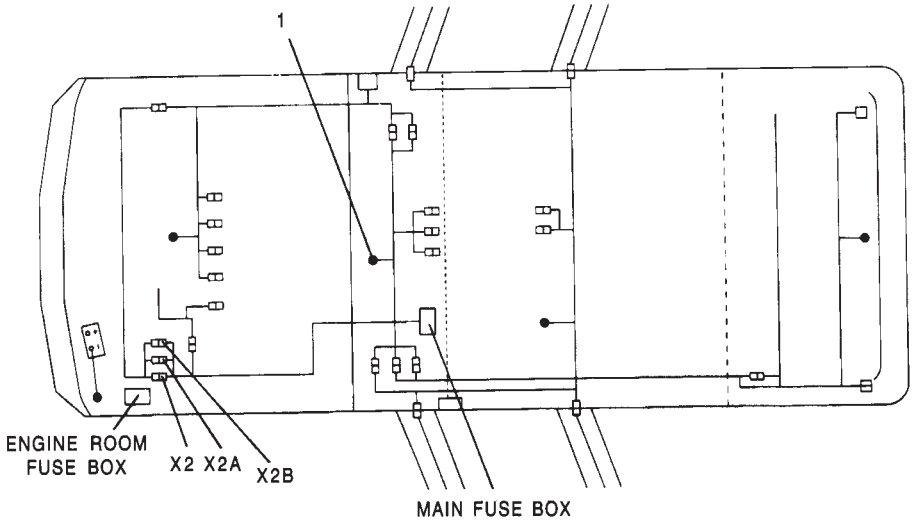
X2A
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)

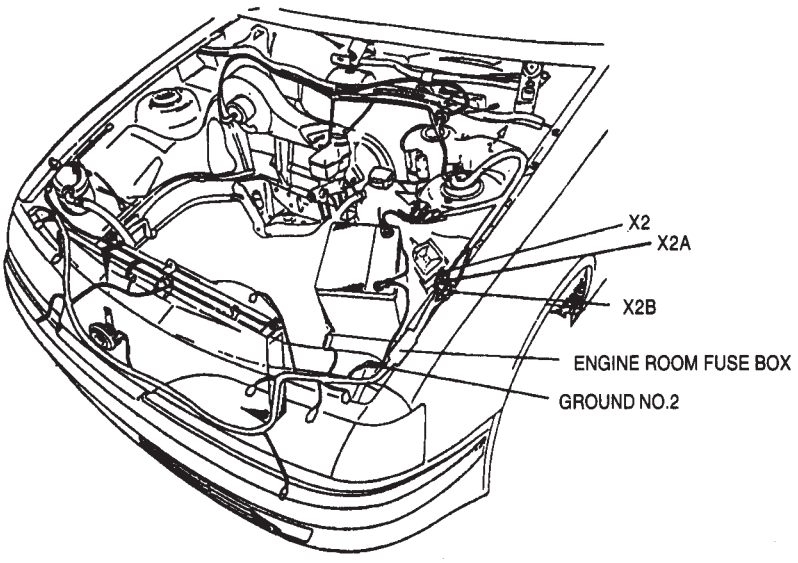


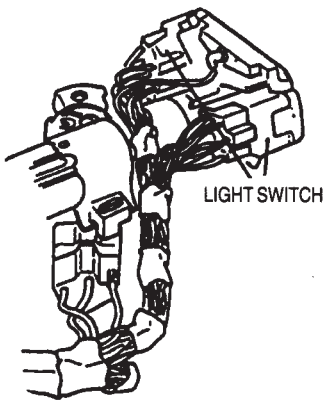
ENGINE ROOM FUSE BOX



MAIN FUSE BOX



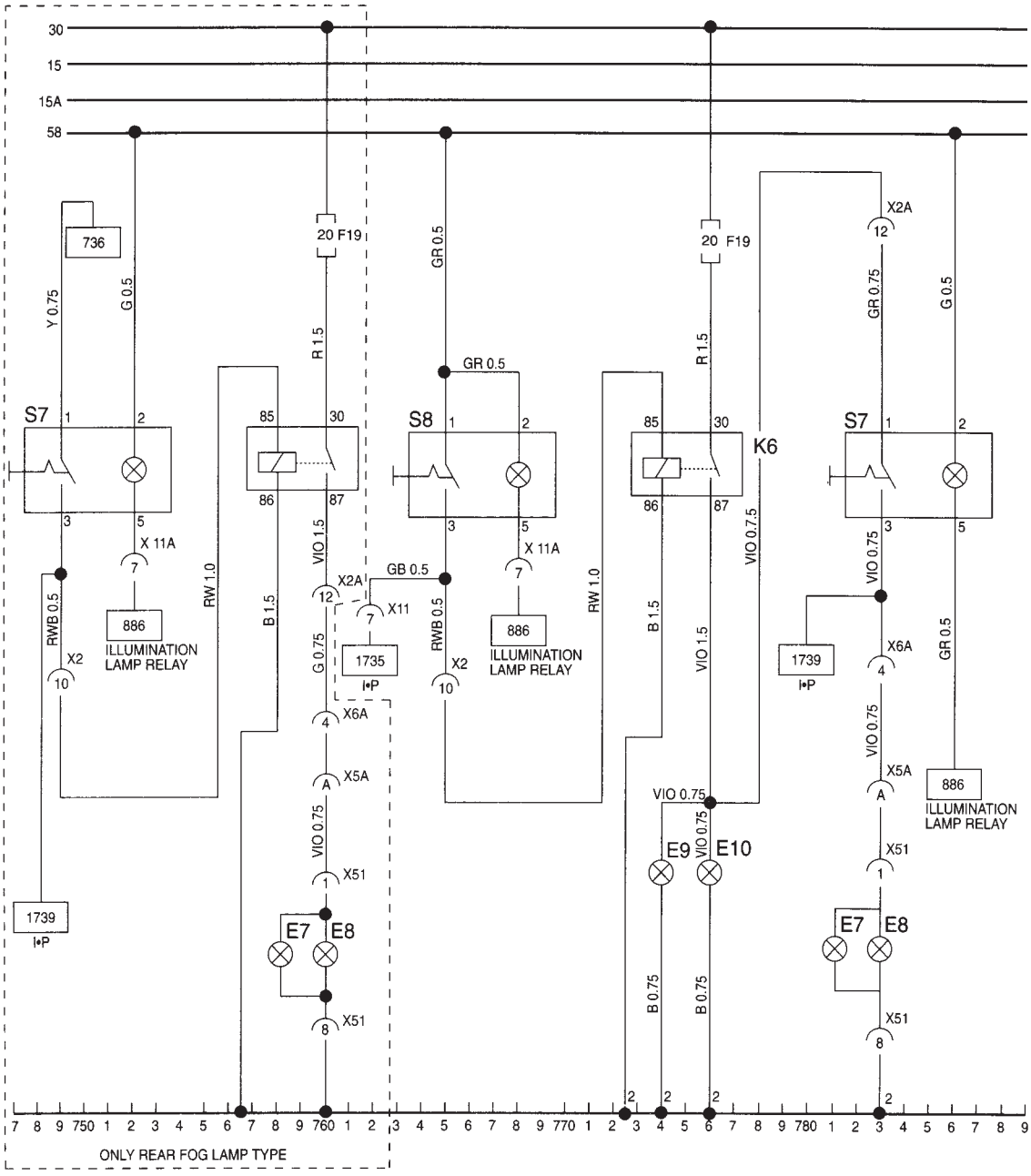


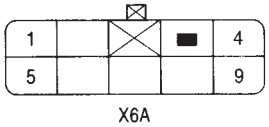


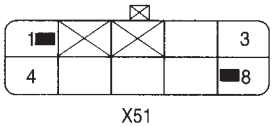
20) FRONT FOG AND REAR FOG LAMP WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

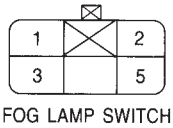
E7 REAR FOG LAMP LH
E8 REAR FOG LAMP RH
E9 FRONT FOG LAMP LH
E10 FRONT FOG LAMP RH

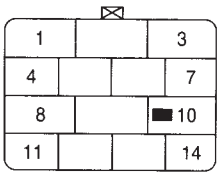
K6 FRONT FOG LAMP RELAY
S7 REAR FOG SWITCH
S8 FRONT FOG SWITCH




X6A

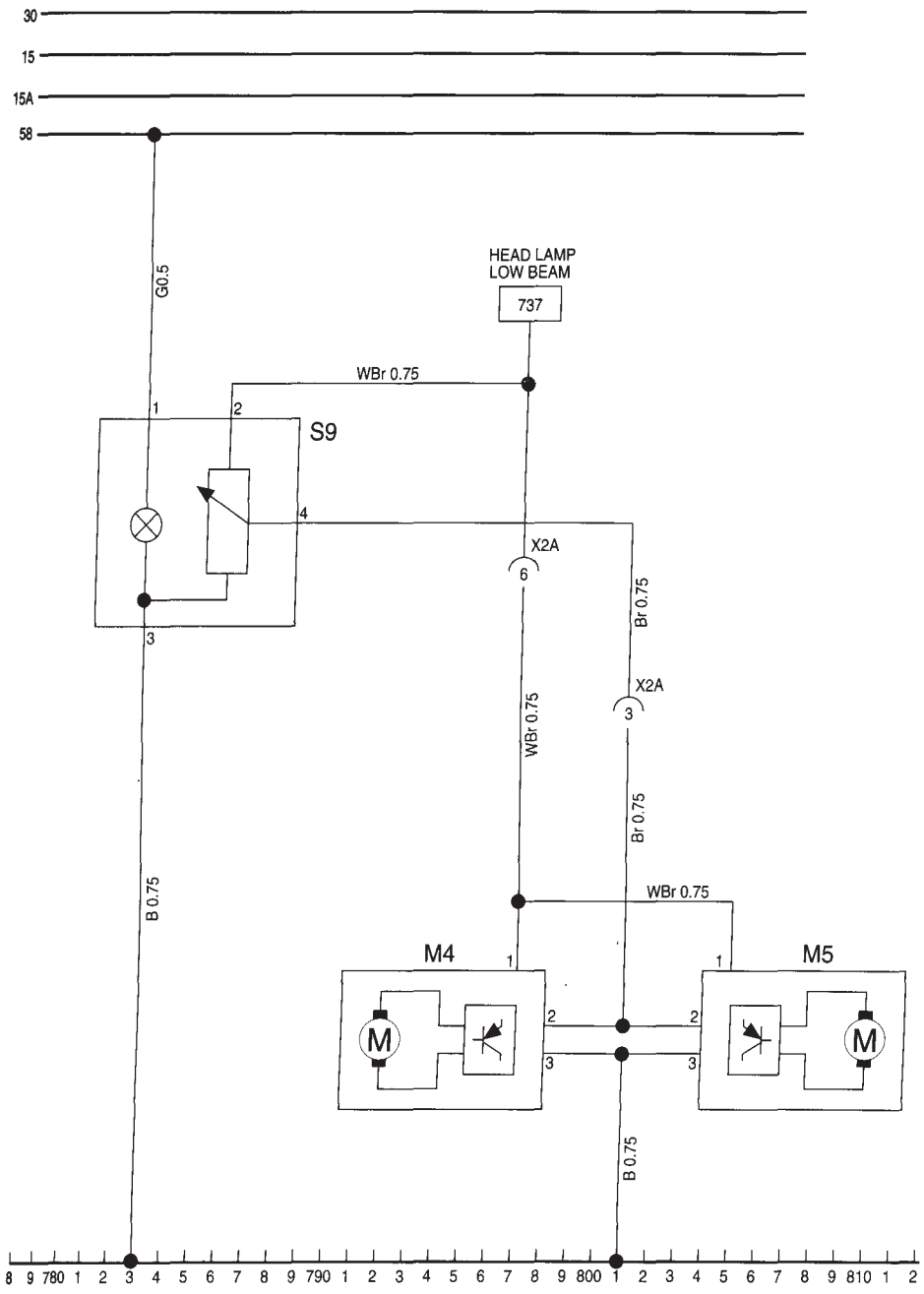

X51

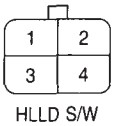

FOG LAMP SWITCH


X2

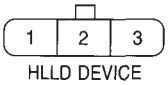
21) HEAD LAMP LEVELING DIVICE(HLLD) WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

M4 HLLD MOTOR LH
M5 HLLD MOTOR RH
S9 HLLD CONTROL SWITCH





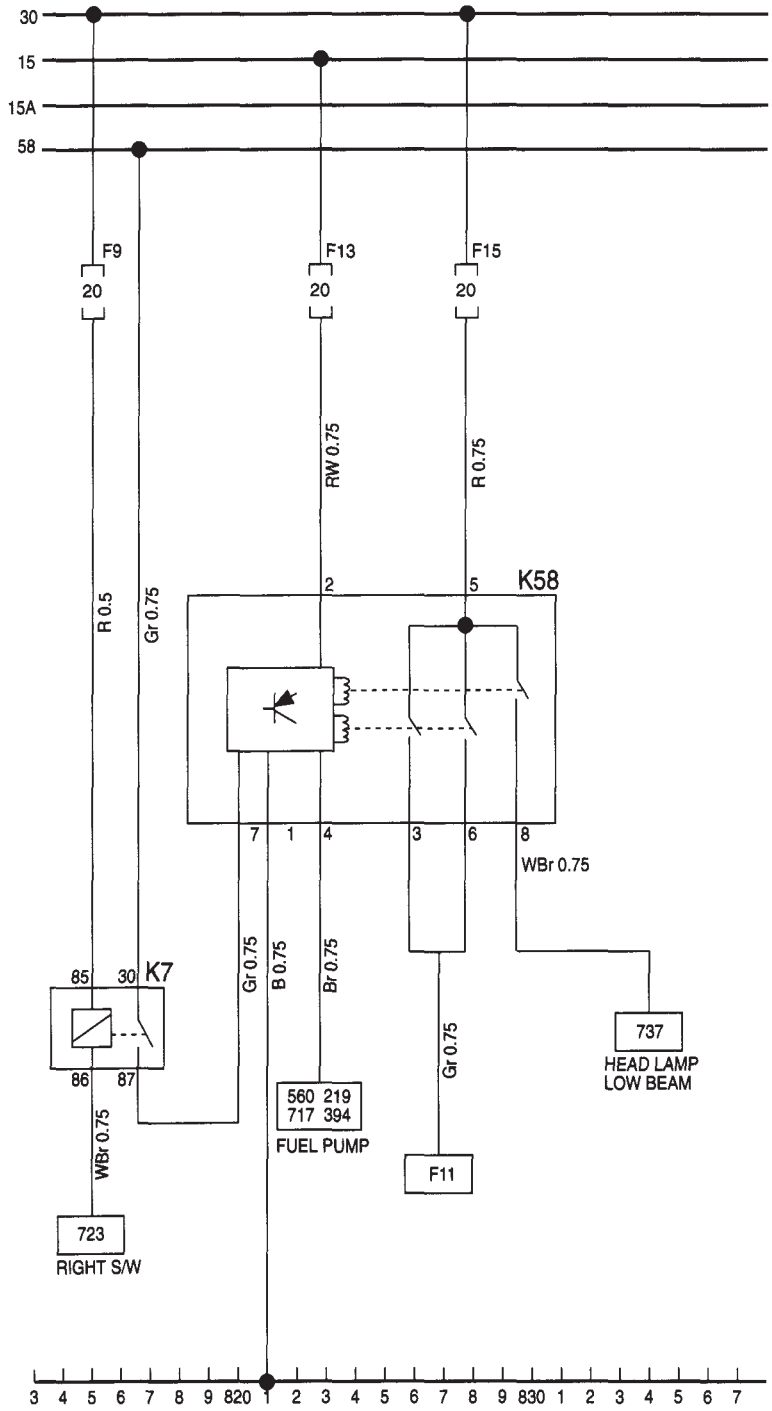
HLLD S/W



HLLD DEVICE

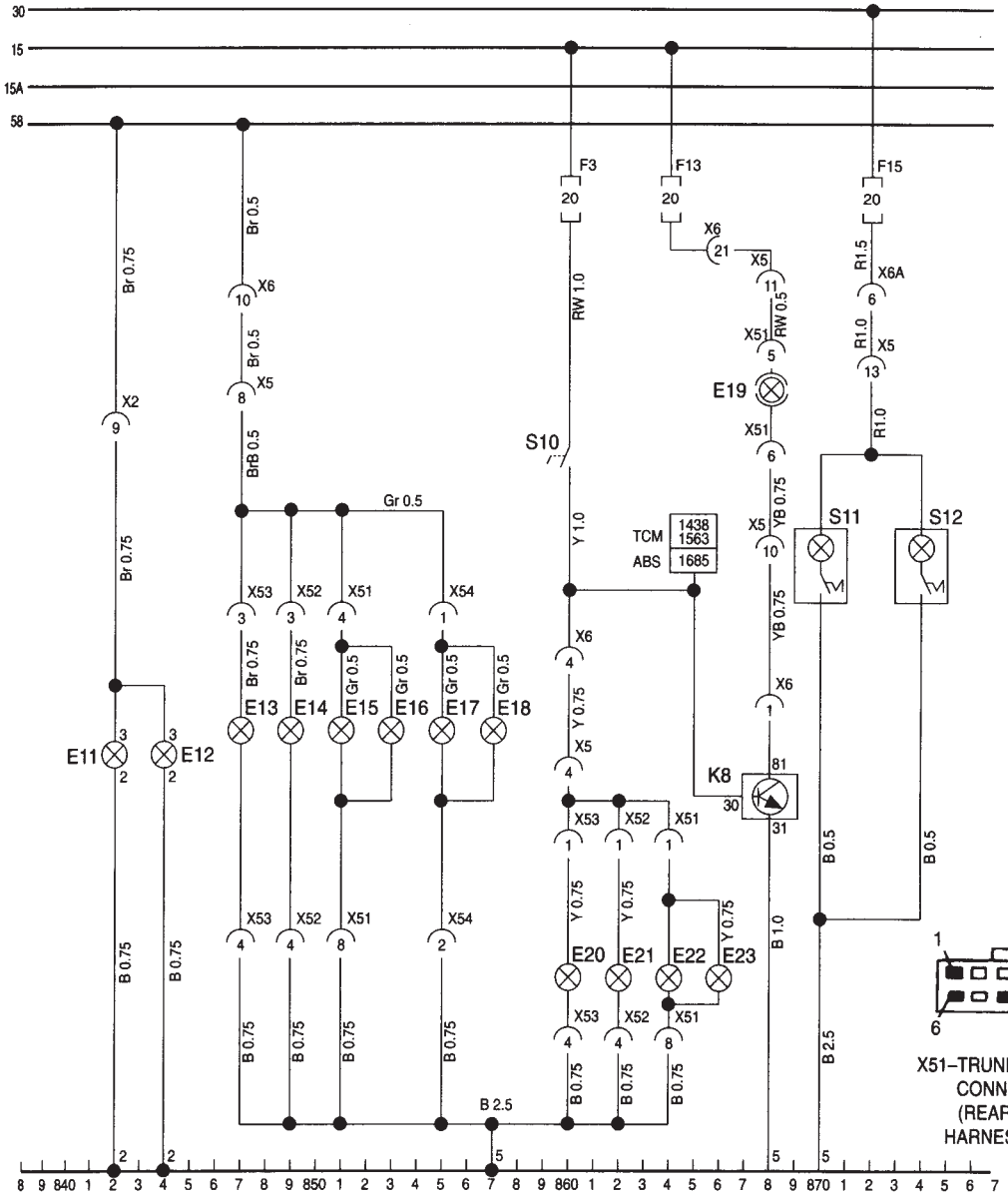
22) DAY TIME RUNNING LIGHT(DRL) WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

K7 DRL RELAY
K58 DRL UNIT



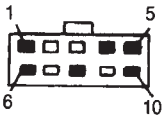
23) CLEARANCE LAMP, BRAKE SYSTEM LAMP, READING LAMP WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

E11 CLEARANCE LAMP(FR, LH)
E12 CLEARANCE LAMP(FR, RH)
E13 TAIL LAMP(RR, RH)
E14 TAIL LAMP(RR, LH)
E15 TAIL LAMP; TRUNK
E16 TAIL LAMP; TRUNK
E17 LICENCE PLATE LAMP
E18 LICENCE PLATE LAMP
E19 REAR SPOILER CONTROL LAMP
E20 BRAKE SYSTEM LAMP(RR, RH)
E21 BRAKE SYSTEM LAMP(RR, LH)
E22 BRAKE SYSTEM LAMP(TRUNK)
E23 BRAKE SYSTEM LAMP(TRUNK)
K8 REAR SPOILER RELAY
S10 BRAKE SYSTEM LAMP SWITCH
S11 READING LAMP(RR, LH)
S12 READING LAMP(RR, RH)

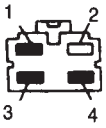


- 1438 , 1563 This supplies TCM "26" terminal with 12V when braking on the A/T vehicle and notice TCM that the vehicle is braked now.

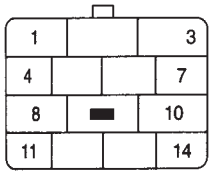
X54–REAR END HARNESS (REAR BODY HARNESS REF.)



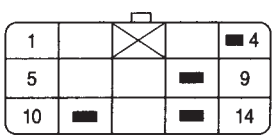
X51–TRUNK HARNESS CONNECTOR (REAR BODY HARNESS REF.)



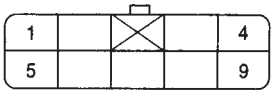
X52, 53 TAIL LAMP CONNECTOR(LR) (REAR BODY HARNESS REF.)



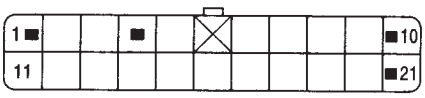
X2 FRONT HARNESS CONNECTOR (I/P HARNESS REF.)



X5 REAR BODY HARNESS CONNECTOR (I/P HARNESS REF.)



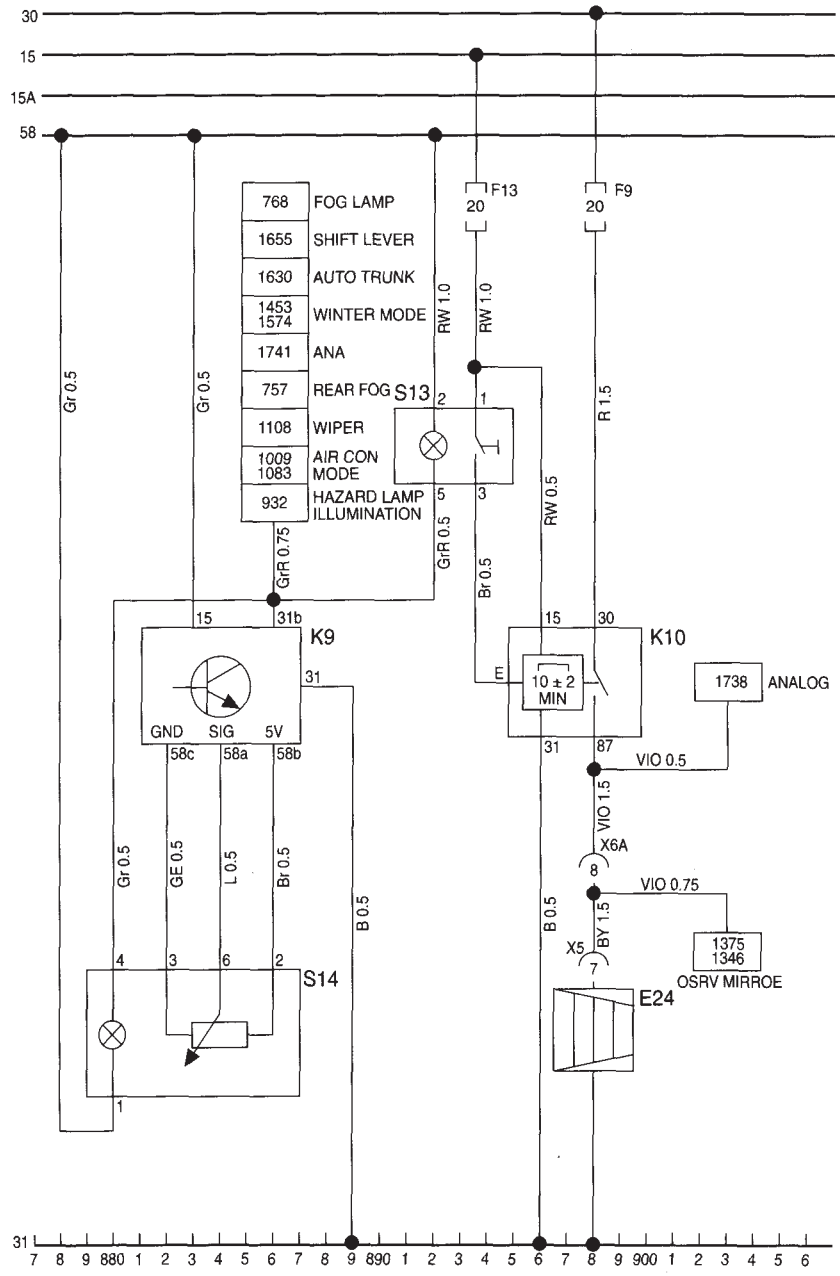
X6A–FRONT BODY HARNESS CONNECTOR (I/P HARNESS REF.)



X6 FRONT BODY HARNESS CONNECTOR (I/P HARNESS REF.)

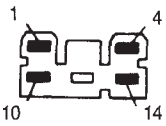
24) ILLUMINATION CONTROL AND REAR WINDOW DEFROSTER WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

E24 REAR WINDOW DEFROSTER
K9 ILLUMINATION CONTROL RELAY
K10 DEFROSTER TIME RELAY
S13 DEFROSTER SWITCH
S14 ILLUMINATION CONTROL SWITCH

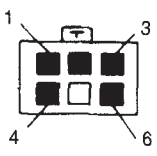


- Illumination control relay K9 controls the lightness of location indicator lamps on the IP and each switch according to the signal voltage of illumination control switch S14.
- All lamps connected to the 31b terminal of the illumination control relay should be routed to the ground only through the illumination control relay. That is, the current from the relay 31b to 31(ground) is controlled.
- The resistance between the illumination control switch terminal 2 and 3 is about 9kΩ. It is constant at any switch location.
- When the light switch is operated, the illumination control relay 58b terminal generals about 5V and 58C terminal is connected to the ground through the inner relay.
  The signal voltage of the illumination control relay 58a terminal changes according to the switch position(the most light position is 5V, the most dark position is 0V).
- The defroster switch S13 is a one touch type. That is, when it operates one time, the defroster time relay K10 is "ON" and the time relay operates for 10 minutes to be OFF auto matically. If reoperating the switch during operating(within 10 minutes), the defroster time relay is OFF.
- 1738 notice that the defroster is operating on IP
- 1375, 1346 is a defroster wiring diagram of electric back mirror

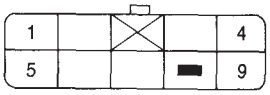
X5-REAR BODY HARNESS
(FRONT BODY HARNESS REF.)



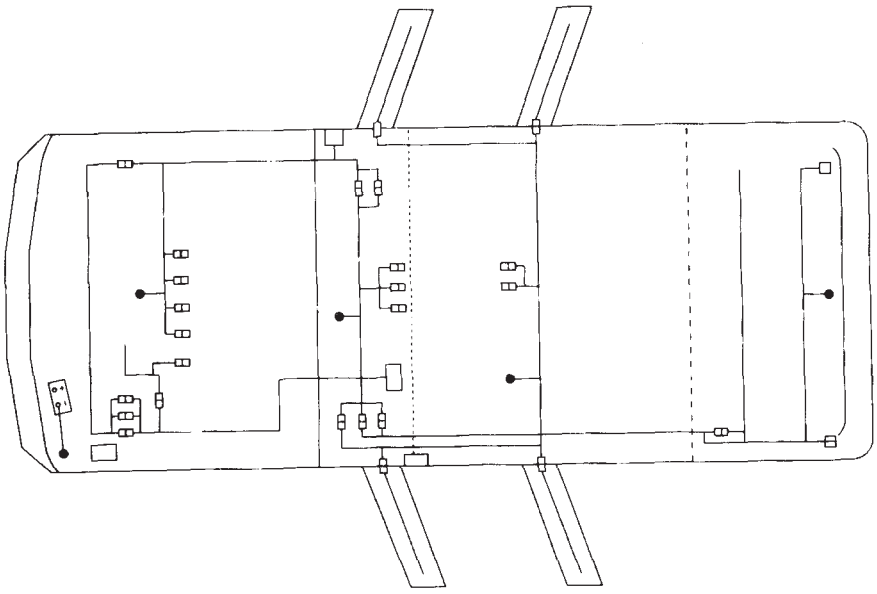
DEFROSTER SWITCH
(I/P HARNESS REF.)



ILLUMINATION CONTROL SWITCH
(II/P HARNESS REF.)

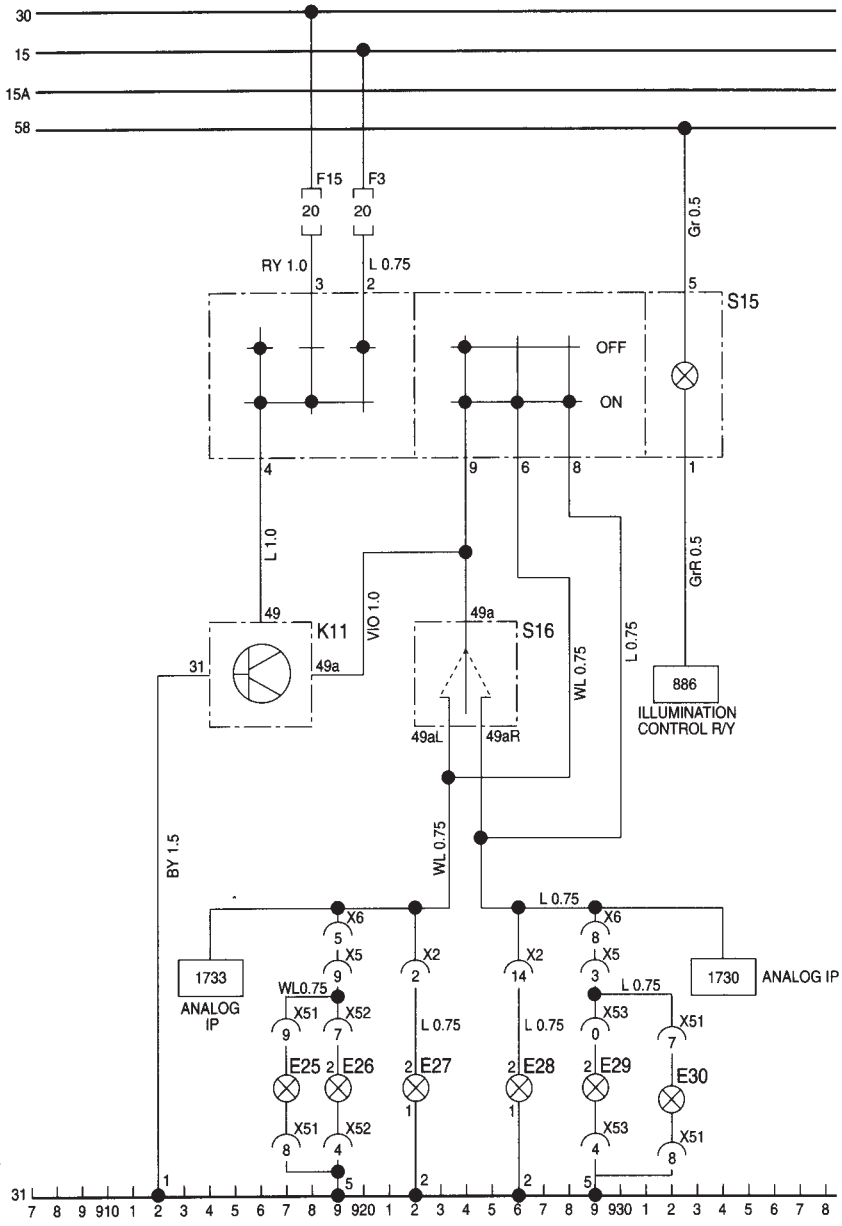


X6A FRONT BODY HARNESS
(I/P HARNESS REF.)

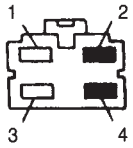


25) HAZARD LAMP AND TURN SIGNAL LAMP WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

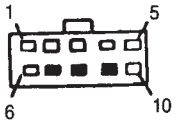
E25 TURN SIGNAL LAMP(TRUNK, L)
E26 TURN SIGNAL LAMP(R, L)
E27 TURN SIGNAL LAMP(F, L)
E28 TURN SIGNAL LAMP(F, R)
E29 TURN SIGNAL LAMP(R, R)
E30 TURN SIGNAL LAMP(TRUNK, R)
K11 TURN SIGNAL LAMP RELAY
S15 HAZARD LAMP SWITCH
S16 TURN SIGNAL LAMP SWITCH



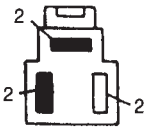
- When an hazard lamp switch is OFF, terminal 2 and 4 is connected and the other is disconnected.
- When an hazard lamp switch is On, terminal 6, 8, 9 are connected.
- 886 is connected to the illumination control relay 31b terminal.
- On the cover of turn signal lamp relay and switch a terminal no, like diagram are indexed.
- The current supplied to a turn signal lamp relay 49 terminal is feeded through an hazard lamp switch.
- Notice that an hazard lamp and a turn signal lamp is connected through individual fuse.
- Notice that a turn signal lamp switch S15 is drawn individually on the diagram but it is assembled in a unit acctually.
- 1733 , 1730 are connected to the operating indicator for LH, RH turn signal lamp on the IP.



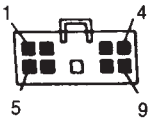
X52,X53
TAIL LAMP CONNECTOR
(REAR BODY HARNESS REF.)



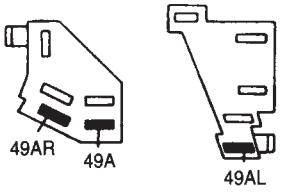
X51-TRUNK HARNESS
(CONNECTOR
(REAR BODY HARNESS)



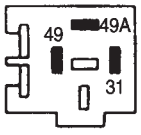
FRONT TURN SIGNAL LAMP
(FRONT HARNESS REF.)



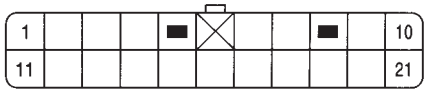
HAZARD LAMP SWITCH
(I/P HARNESS REF.)



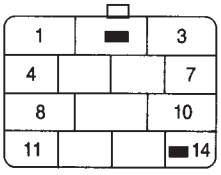
TURN SIGNAL LAMP SWITCH
(I/P HARNESS REF.)



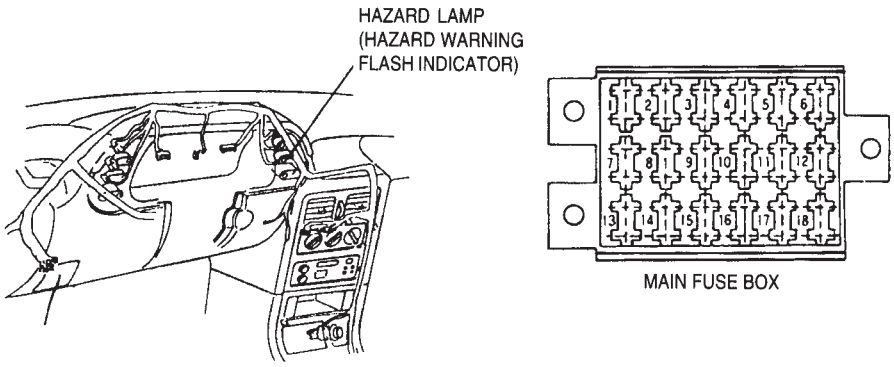
BLINKER UNIT
(I/P HARNESS REF.)

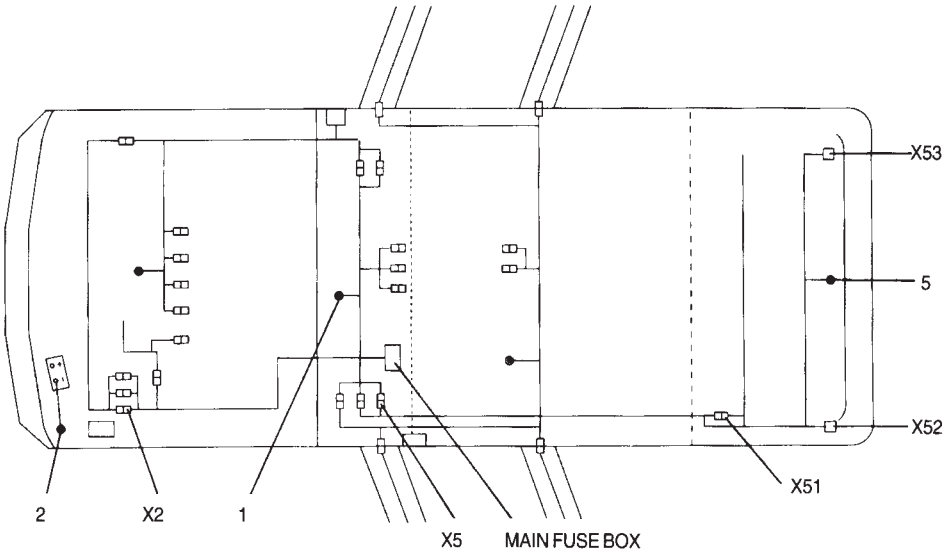


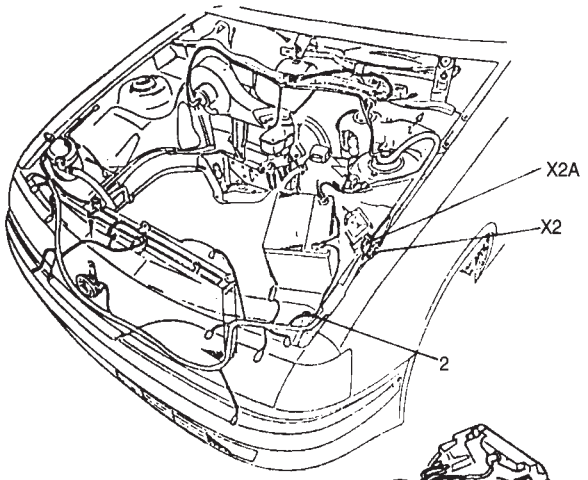
X6 FRONT BODY HARNESS CONNECTOR
(I/P HARNESS REF.)

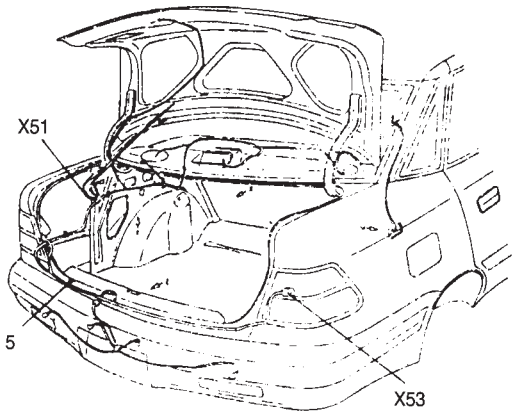


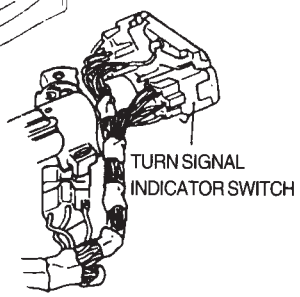
X2
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)

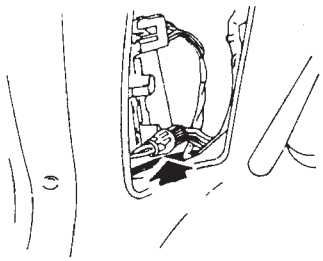

HAZARD LAMP
(HAZARD WARNING
FLASH INDICATOR)
MAIN FUSE BOX


X53
5
X52
X51
2
X2
1
X5
MAIN FUSE BOX


X2A
X2
2


X51
5
X53


TURN SIGNAL
INDICATOR SWITCH



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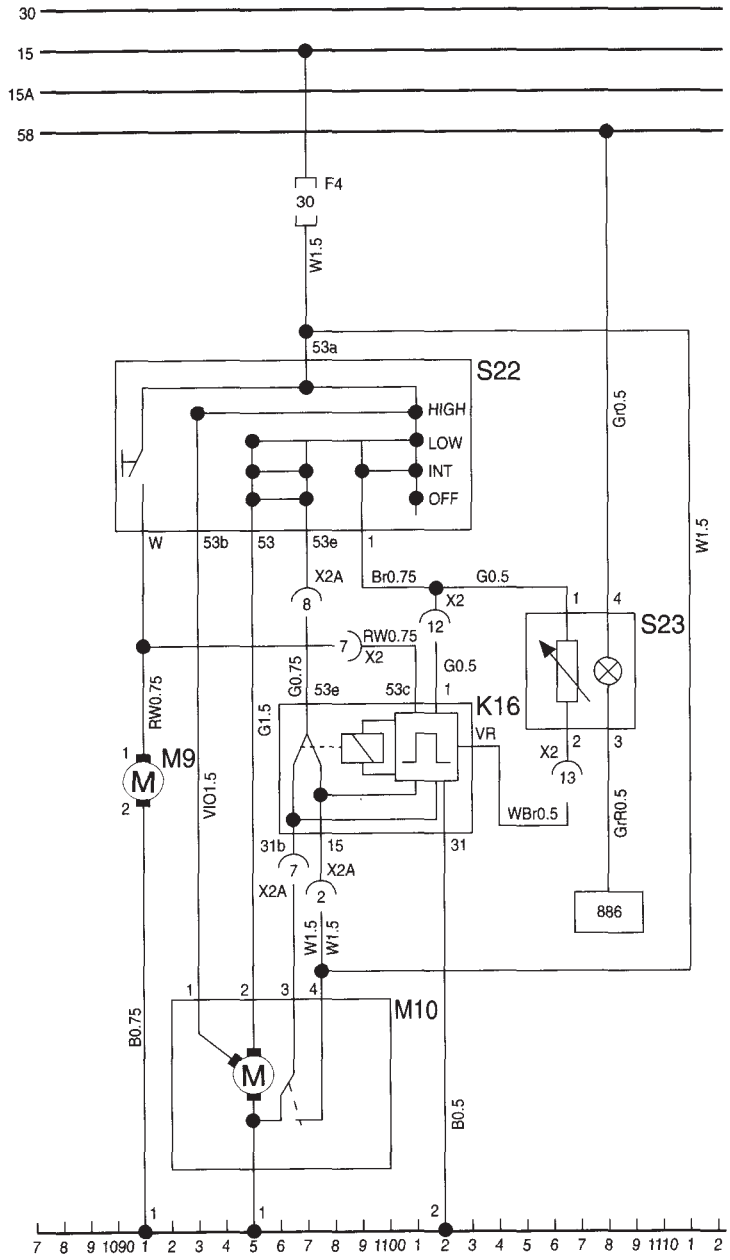
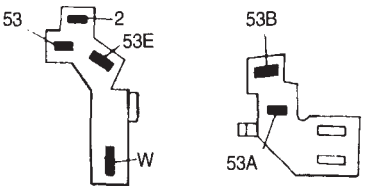
28) WIPER WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

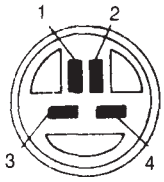
K16 WIPER RELAY
M9 WASHER PUMP MOTOR
M10 WIPER MOTOR
S22 WIPER SWITCH
S23 WIPER INTERVAL TIME CONTROL SWITCH



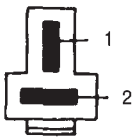
- Notice that low speed and high speed of an wiper motor have no relation with an wiper relay because these low and high speed is operated when a power is supplied from an wiper switch to wiper motor.
- The terminal number of an wiper switch is indexed on the switch cover and terminal 53, 53e are connected in case of "OFF" position and terminal 53, 53e, 53a are connected in case of "INT" position and etc.
- When an wiper switch is put at the "INT" position, an wiper switch terminal 53a and an terminal I are connected to supply a power to terminal I and operate an wiper relay for 4 to 21 seconds at one time according to a signal voltage feeded from an wiper interval control switch so that operate an wiper motor intervalley.
- When an washer switch operates, an washer motor operates and a signal voltage is feeded to an wiper relay terminal 53c, after the switch is "OFF" an wiper relay is operated for about 4 seconds.



WIPER/WASHER SWITCH CONNECTOR
(I/P HARNESS REF.)

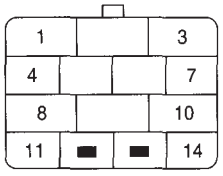


WIPER MOTOR
CONNECTOR
(I/P HARNESS REF.)

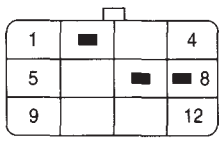


WASHER PUMP MOTOR
(I/P HARNESS REF.)

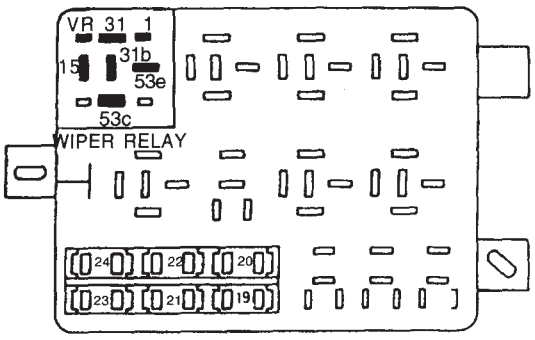
WIPER IN TERVAL TIME
CONTROL SWITCH
CONNECTOR
(I/P HARNESS REF.)



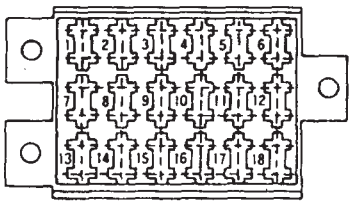
X2
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)



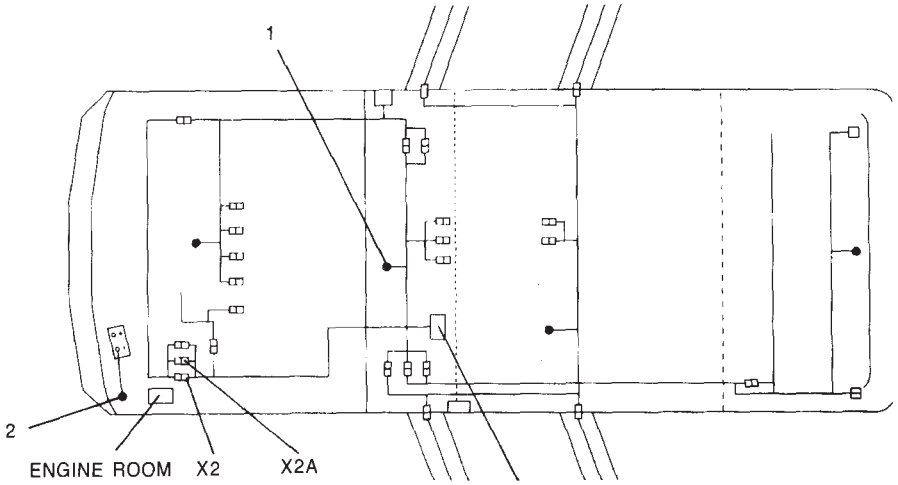
X2A
FRONT HARNESS CONNECTOR
(I/P HARNESS REF.)

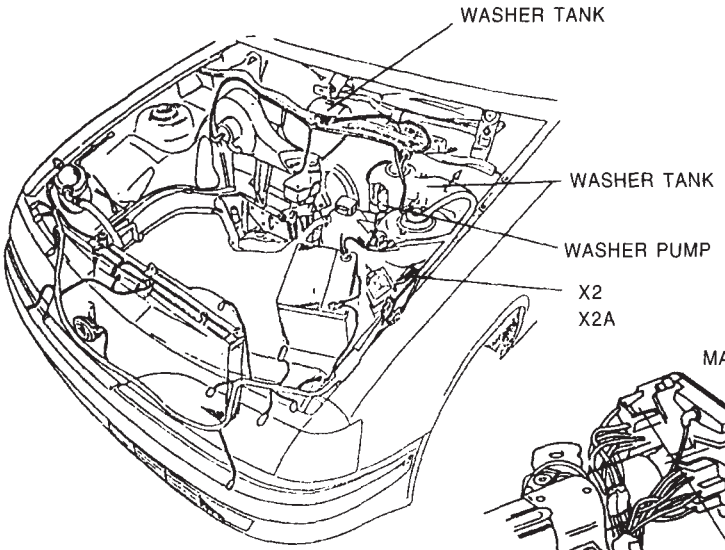


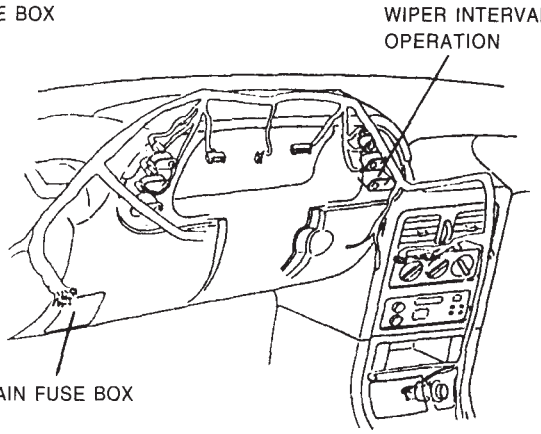
ENGINE ROOM FUSE BOX

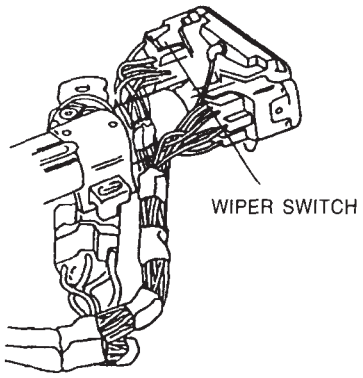


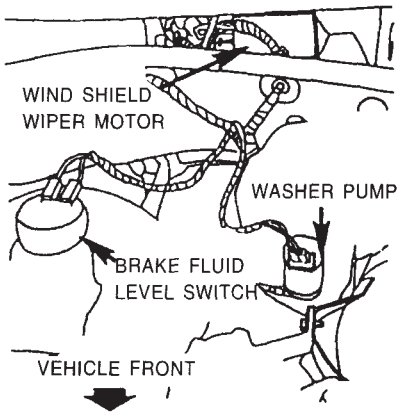
MAIN FUSE BOX





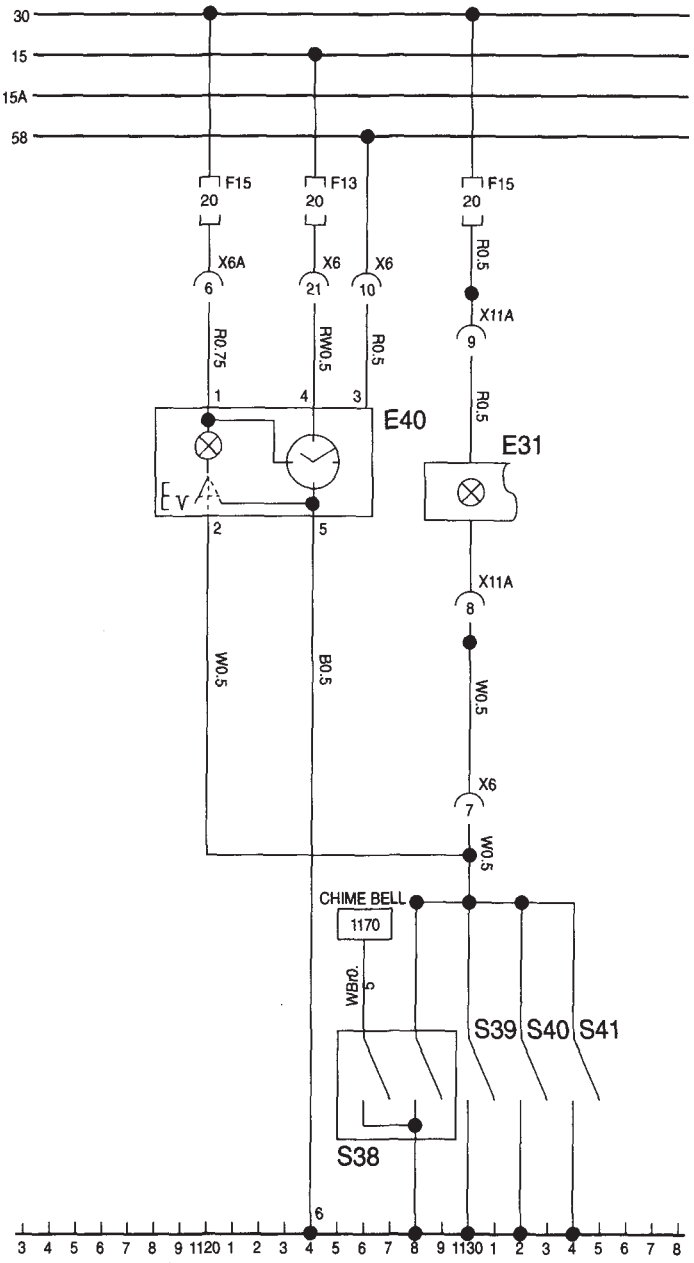




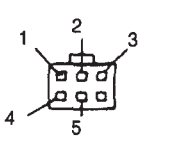


29) ROOM LAMP AND DIGITAL CLOCK WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

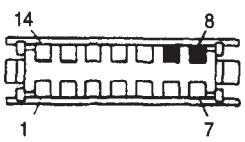
E31 DOOR WIRING LAMP
E40 ROOM LAMP AND DIGITAL CLOCK
S38 DOOR SWITCH(FRONT, LEFT)
S39 DOOR SWITCH(FRONT, RIGHT)
S40 DOOR SWITCH(REAR, LEFT)
S41 DOOR SWITCH(REAR, RIGHT)



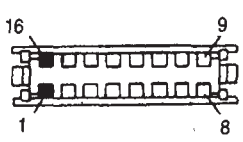
- A room lamp and a digital clock are assembled in a body.
- On the digital clock wiring a terminal No. 3 is for controlling the lightness of an illumination lamp darker when a light lamp switch is "ON".
- Terminal No.4 and a terminal No. 3 is only for illumination the power operating an watch is terminal 1 and 5.



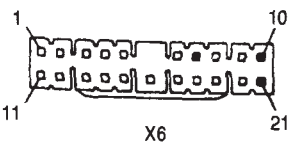
ROOM LAMP AND DIGITAL CLOCK (FRONT BODY HARNESS REF.)



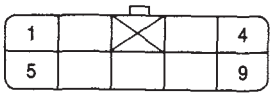
X11A (I/P HARNESS REF. NO INDEXED)



X11 (I/P HARNESS REF, NO INDEXED) FOR LCD



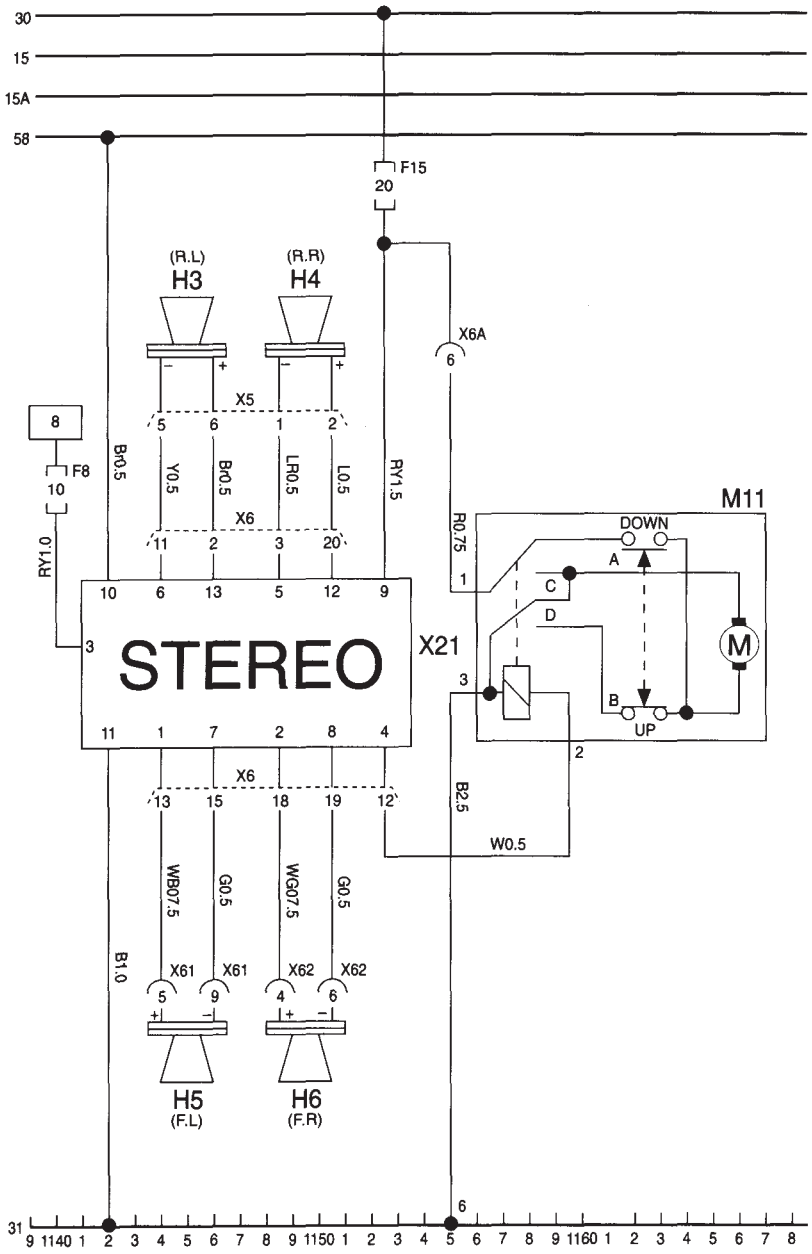
X6 FRT BODY HARNESS CONNECTOR (I/P HARNESS REF.)



X6A FRONT BODY HARNESS (I/P HARNESS REF.)

30) CAR AUDIO WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

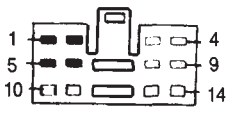
H3 SPEAKER(R.L)
H4 SPEAKER(R.R)
H5 SPEAKER(F.L)
H6 SPEAKER(F.R)
M1 AUTO ANTENNA MOTOR



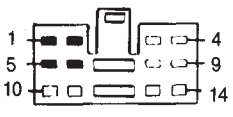
- When a radio switch is ON, an auto antenna inner relay is operated by 12V power supplied from a radio terminal 4. At this time, because a contact point of "C" is connected to "+", and a contact point of "D" is connected to "–", an antenna motor is operated.
  When an antenna arrives at the end part, a contact point of "A" is connected and at the same time a contact point of "B" is disconnected. So that the motor stop to operate and the antenna is kept on.
  When a radio switch is OFF, the power of the radio terminal 4 disappears so that the auto antenna inner relay is off and the contact point of "C" is connected to "C" and the contact point of "A" is connected.
  At this time, an antenna motor operates and the antenna falls.
  When the antenna arrive at the button, the contact point of A is disconnected and the contact point of B is connected to stop the antenna motor.

CAR AUDIO CONNECTOR
(I/P HARNESS REF.)

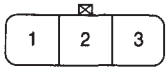
X61–FRT/LH DOOR
HARNESS
CONNECTOR
(FRONT BODY HARNESS REF.)



X5–REAR BODY
HARNESS
CONNECTOR
(FRONT BODY
HARNESS REF.)



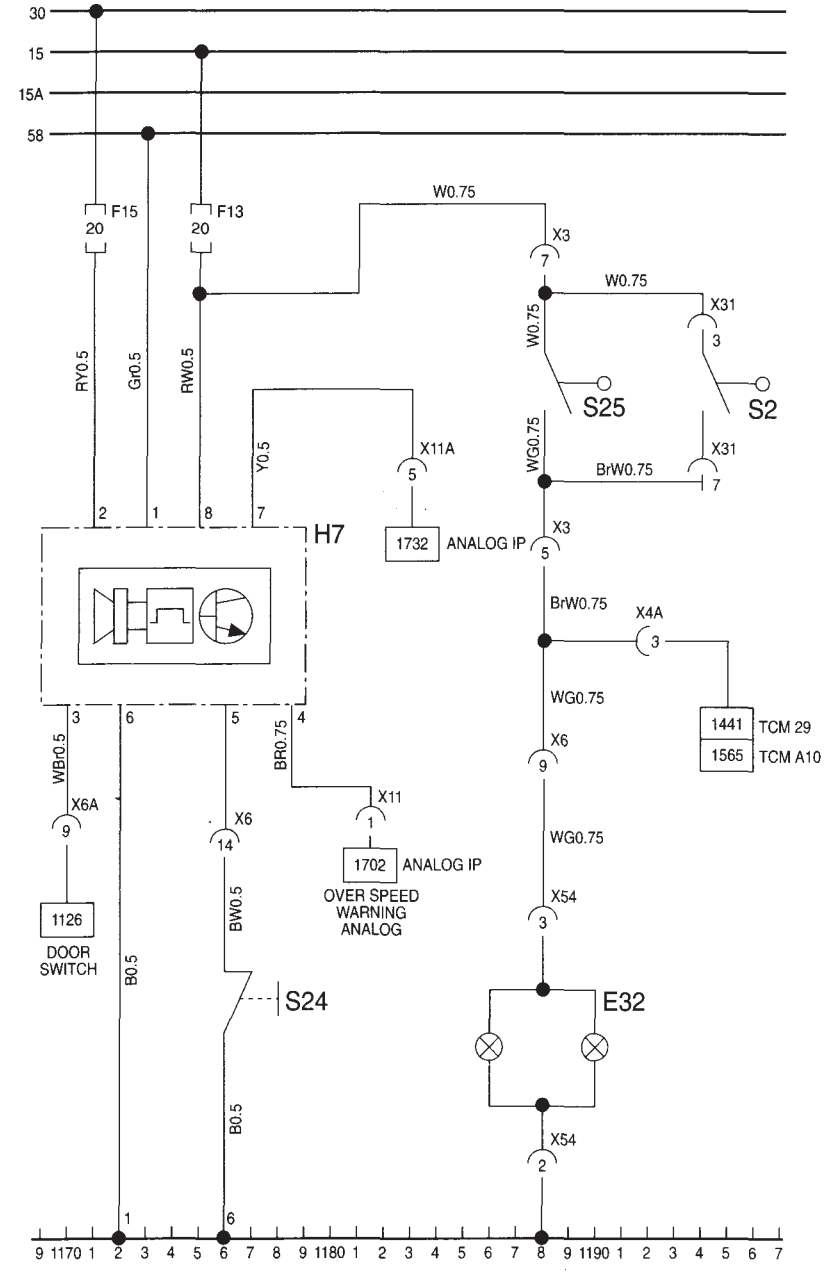
X11
(I/P HARNESS REF,
NO INDEXED) FOR LCD



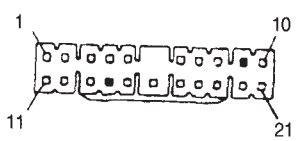
AUTO ANTENNA
CONNECTOR
(FRONT BODY HARNESS REF.)

31) CHIME BELL AND REVERSE LAMP WIRING(1.5 DOHC/1.8, 2.0 L MPFI)

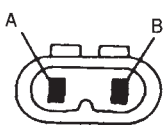
E32 REVERSE LAMP
H7 CHIME BELL
S2 SELECTOR POSITION SWITCH(A/T)
S25 REVERSE LAMP SWITCH(M/T)
S24 SEAT BELT SWITCH



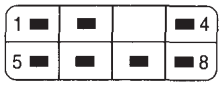
- A seat belt switch S24 is ON when not wearing it and off when wearing it.
- When an ignition switch is ON(power supplied to a terminal 8) and a seat belt is not weared(terminal is connected to the ground), 12V power is out put to the chime bell terminal 7 to stir up an seat belt warning lamp on and operate it 5 times for 1 second per one time.
- 1732 is connected to a seat belt warning lamp ON IP.
- When an ignition switch is off(a terminal 8 has no power), a chime bell announces quickly at the 1st step of a light switch(supply power to terminal 1) and opening of driver's door.
- The chime bell will sound when the vehicle speed exceeds above the specified speed. (supply power to terminal 4)
- The reverse lamp switch S25 is installed at the M/T vehicle and S2 is installed at the A/T vehicle
  1441 , 1565 supplies 12V to TCM 29 terminal on reversely driving to notice a reverse signal is generated.



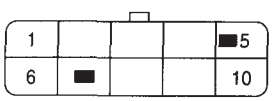
X6
FRT BODY HARNESS CONNECTOR
(I/P HARNESS REF.)



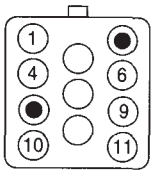
REVERSE LAMP SWITCH
CONNECTOR
(HARNESS REF.)



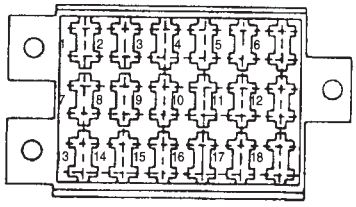
CHIME BELL
CONNECTOR
(HARNESS REF.)



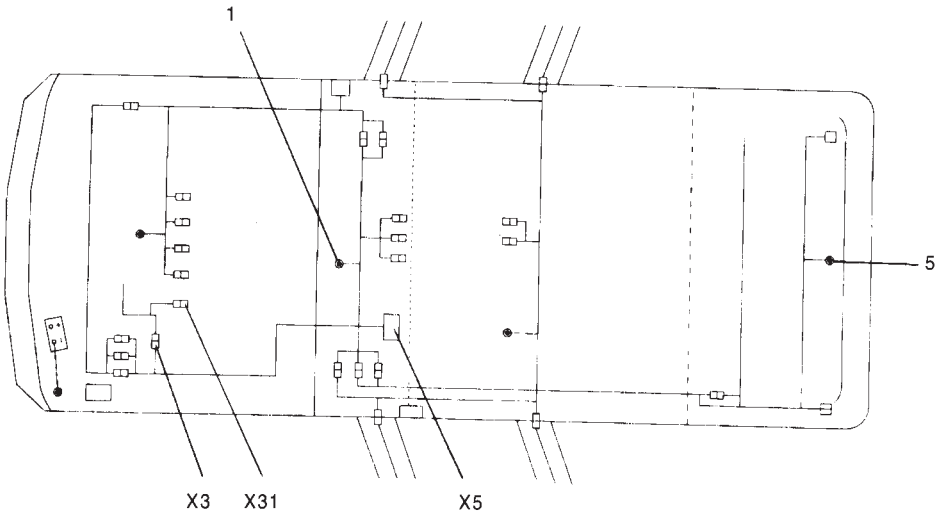
X3 ENGINE HARNESS
CONNECTOR
(I/P HARNESS REF.)

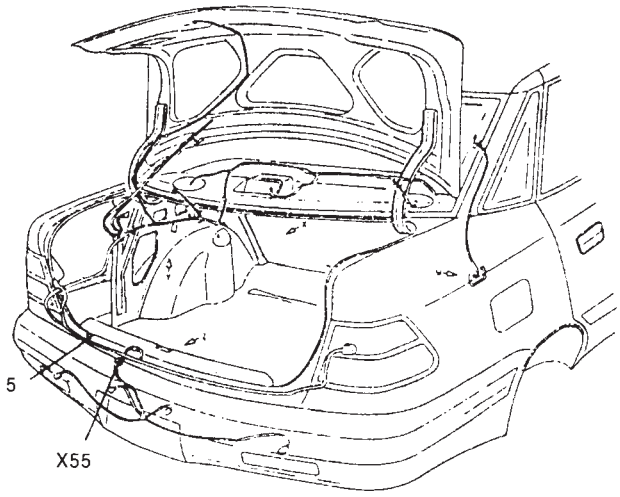


X31
SELECTOR POSITION
SWITCH CONNECTOR
(ENGINE HARNESS REF.)



MAIN FUSE BOX





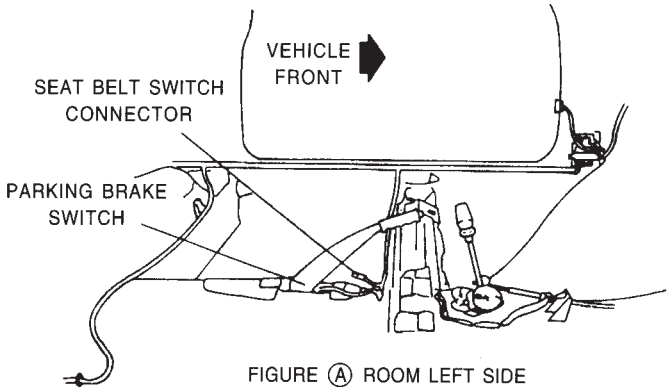
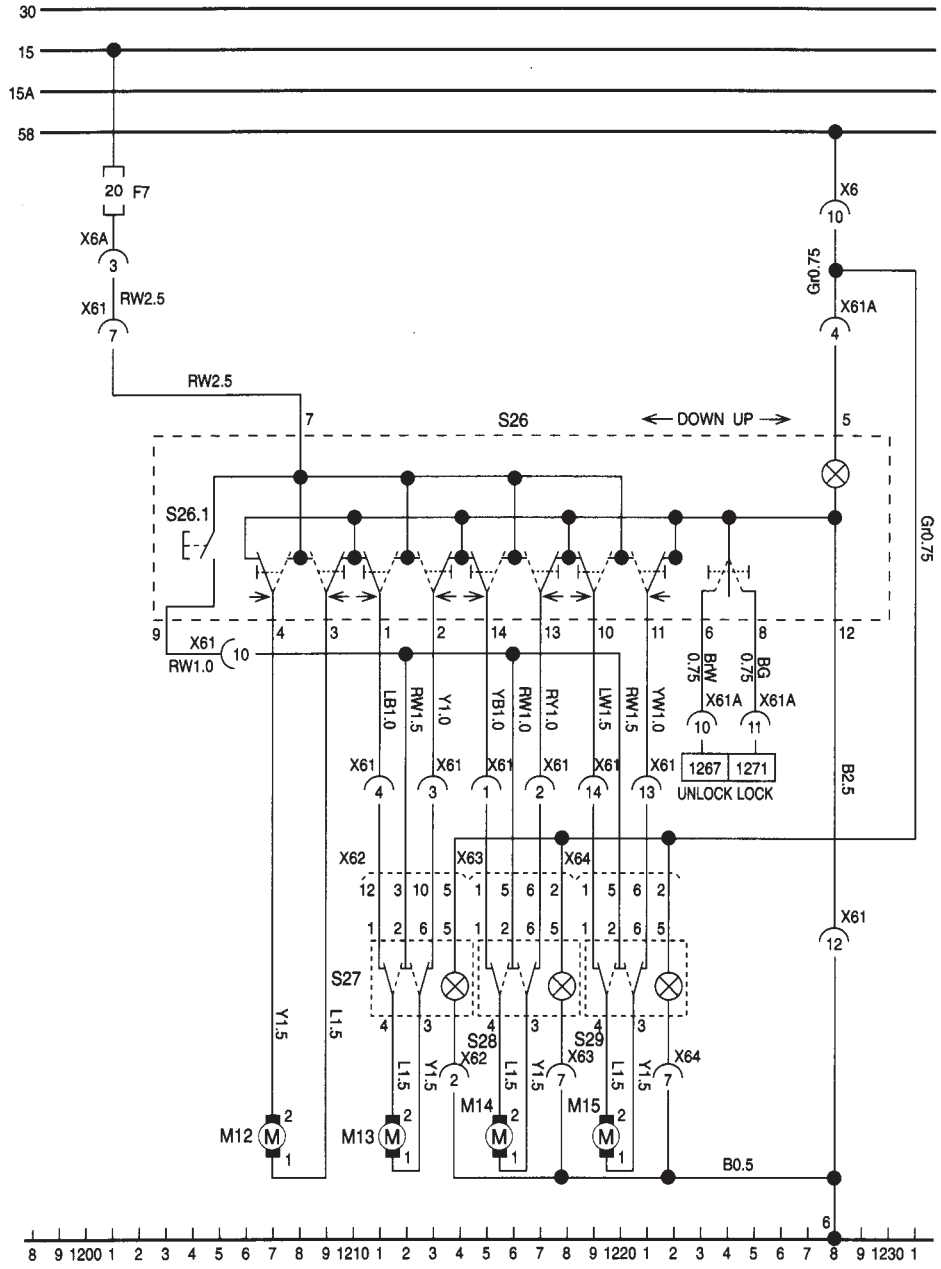


FIGURE Ⓐ ROOM LEFT SIDE

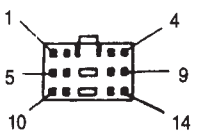
32) POWER WINDOW WIRING – LHD(1.5 DOHC/1.8, 2.0 L MPFI)

M12 POWER WINDOW MOTOR(FR, LH)
M13 POWER WINDOW MOTOR(FR, RH)
M14 POWER WINDOW MOTOR(RR, LH)
M15 POWER WINDOW MOTOR(RR, RH)

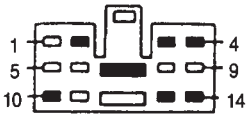
S26 POWER WINDOW MAIN SWITCH
S26.1 REAR POWER WINDOW LOCKING SWITCH
S27 POWER WINDOW SWITCH(FR, RH)
S28 POWER WINDOW SWITCH(RR, LH)
S29 POWER WINDOW SWITCH(RR, RH)



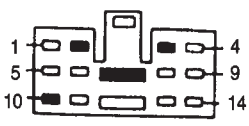
- When the power window main switch is not operated, All contact points are connected to a ground(12).
  When the front driver power window switch is set to down position, terminal 15 is connected to B+ and terminal 9 is connected to the ground of terminal 12 so that the power window falls down.
- The rear power window locking switch S26.1 make the main power of the rear power window switch on and off so that it be protected from solitary operating at the rear seat.(for example; when children seats at the rear seat, the rear power window switch does not operate if the switch is off)



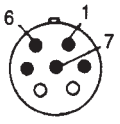
POWER WINDOW SWITCH
(FRONT DOOR-IEFT HARNESS REF.)



X61,X61A
FRT/LH DOOR HARNESS
(FRONT BODY HARNESS REF.)
X61 : FEMALE CONNECTOR
X61A : MALE CONNECTOR



X62-FRT/RH DOOR H.
(FRONT BODY HARNESS REF.)

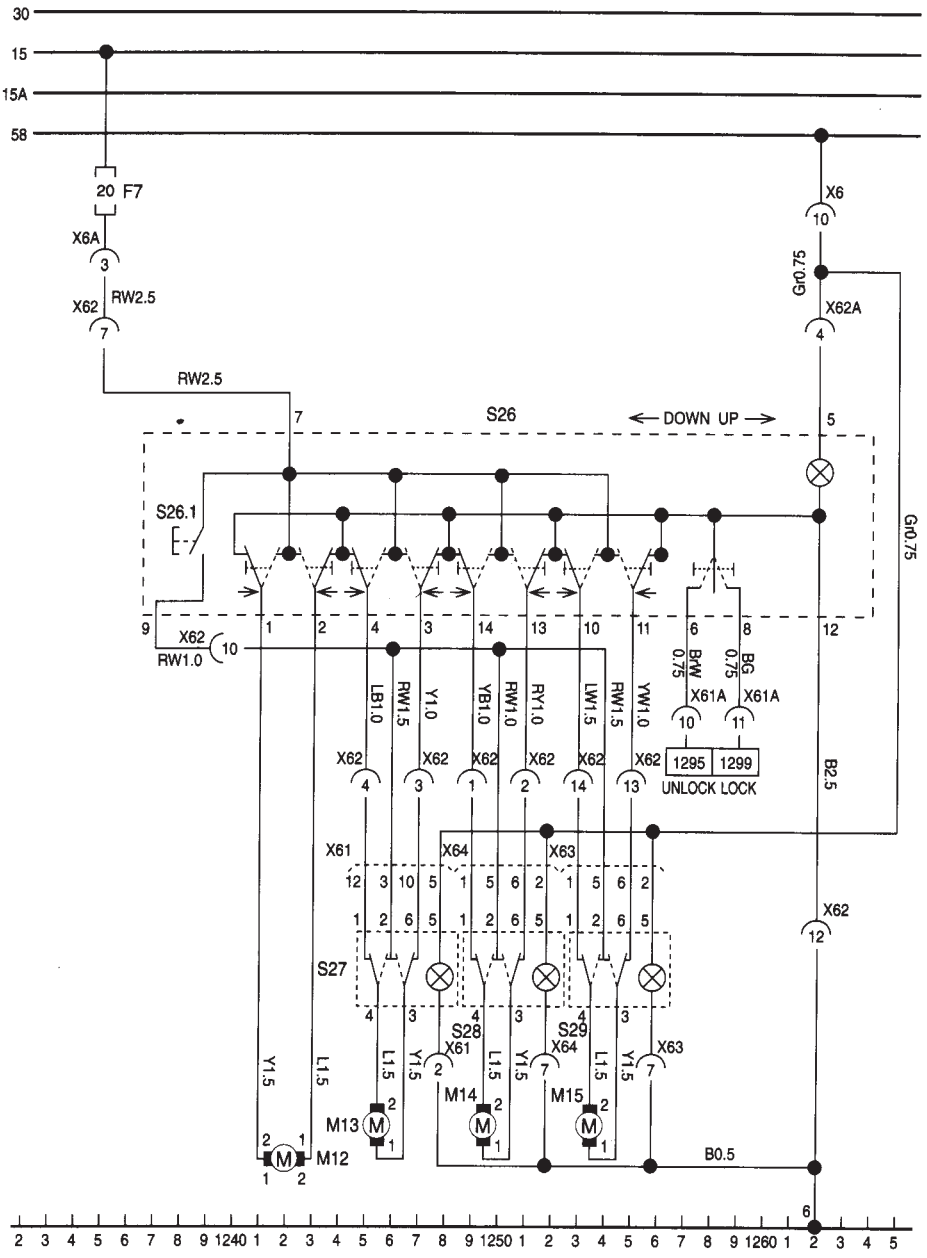


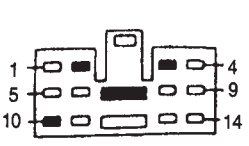
X63,X64
REAR POWER WINDOW SWITCH
(FRONT BODY HARNESS REF.)

33) POWER WINDOW WIRING – RHD(1.5 DOHC/1.8, 2.0 L MPFI)

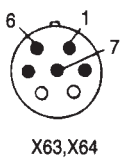
M12 POWER WINDOW MOTOR(FR, RH)
M13 POWER WINDOW MOTOR(FR, LH)
M14 POWER WINDOW MOTOR(RR, RH)
M15 POWER WINDOW MOTOR(RR, LH)

S26 POWER WINDOW MAIN SWITCH(FR, RH)
S26.1 REAR POWER WINDOW LOCKING SWITCH
S27 POWER WINDOW SWITCH(FR, LH)
S28 POWER WINDOW SWITCH(RR, RH)
S29 POWER WINDOW SWITCH(RR, LH)



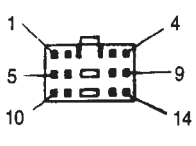


X61–FRT/LH DOOR H.
(FRONT BODY HARNESS REF.)

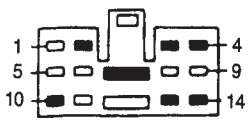


X63,X64

REAR POWER WINDOW SWITCH
(FRONT BODY HARNESS REF.)



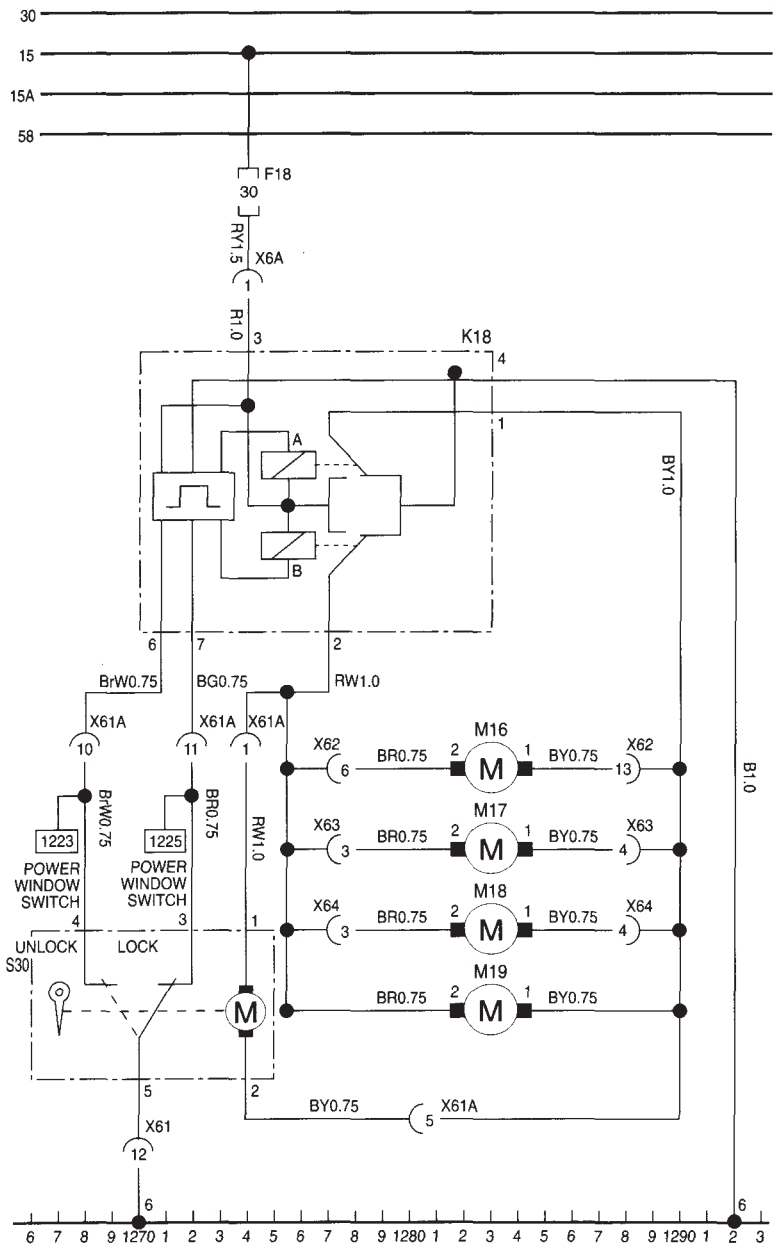
POWER WINDOW SWITCH
(FRONT DOOR–RIGHT HARNESS REF.)



X62,62A
FRT/RH DOOR HARNESS
(FRT BODY HARNESS REF.)
X62 : FEMALE CONNECTOR
X62A : MALE CONNECTOR

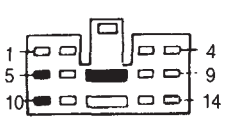
34) CENTRAL DOOR LOCKING WIRING – LHD(1.5 DOHC/1.8, 2.0 L MPFI)

K18 CENTRAL DOOR LOCKING RELAY
M16 ACTUATOR(FR, RH)
M17 ACTUATOR(RR, LH)
M18 ACTUATOR(RR, RH)
M19 ACTUATOR(FUEL INLET CAP)
S30 CENTRAL DOOR LOCKING SWITCH AND ACTUATOR (FR, LH)

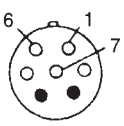


- When the central door locking relay K18 does not operate, the terminal 1 and 2 are connected to the ground 4.
  When the central door locking switch S30 is set to the locking position, the relay terminal 7 is connected to the ground and the inner relay "A" operates for 0.75 second. Therefore, because the relay terminal 1 is connected to "+" and the relay terminal 2 is connected to "–", four actuators operate simultaneously to be locked.
  When opening, the central door locking relay terminal 6 is connected to the ground and the inner relay "B" operate for 0.75 second so that because the terminal 1 is connected to "–" and the terminal 2 is connected to "+", four actuators operate simultaneously to be open.

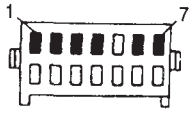
X61, X61A
FRT/LH DOOR HARNESS
(FRT BODY HARNESS REF.)
X61 : FEMALE CONNETOR
X61A: MALE CONNECTOR



X64 FRT BODY HARNESS
(I/P HARNESS REF.)



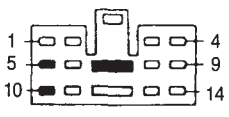
X63,X64
(FRONT BODY HARNESS REF.)



DOOR LOCKING RELAY
(FRONT BODY HARNESS REF.)

DOOR LOCKING SWITCH
(FRONT BODY HARNESS REF.)

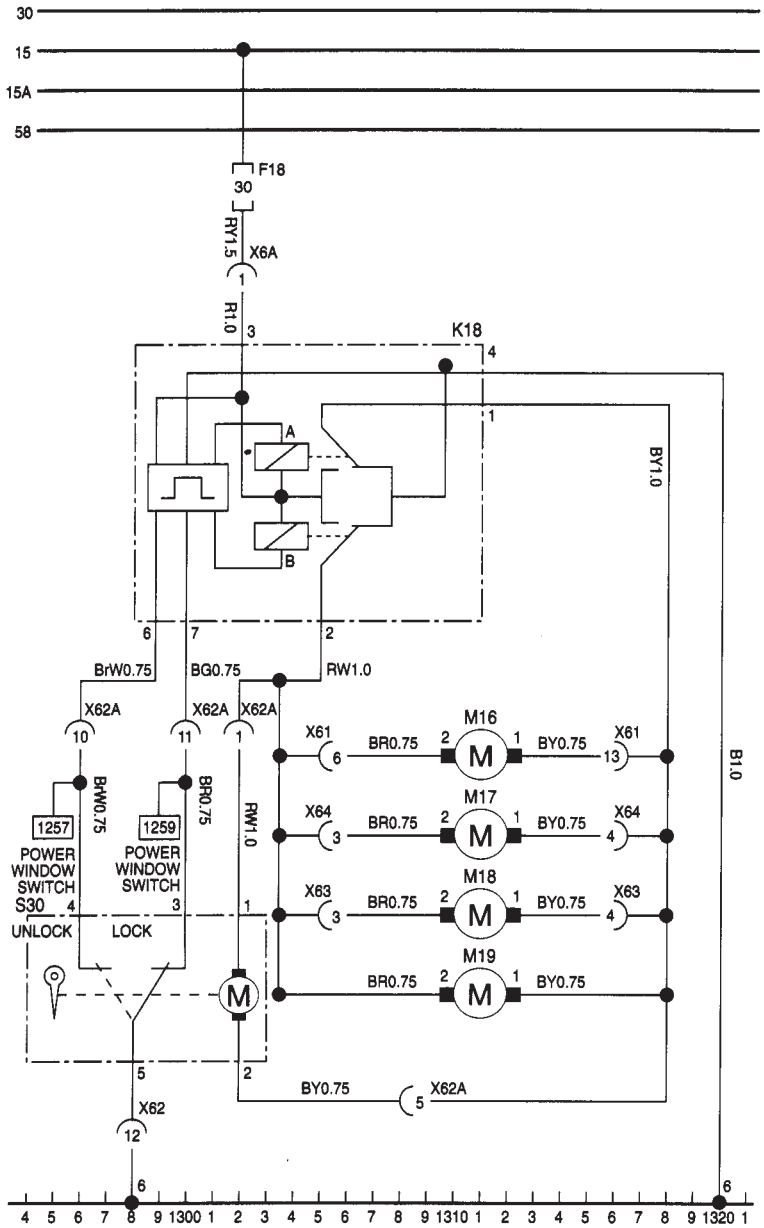
DOOR ACTUATOR



X62
FRT/RH DOOR H.
(FRONT BODY HARNESS REF.)

35) CENTRAL DOOR LOCKING WIRING – RHD(1.5 DOHC/1.8, 2.0 L MPFI)

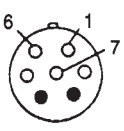
K18 CENTRAL DOOR LOCKING RELAY
M16 ACTUATOR(FR, LH)
M17 ACTUATOR(RR, RH)
M18 ACTUATOR(RR, LH)
M19 ACTUATOR(FUEL INLET CAP)
S30 CENTRAL DOOR LOCKING SWITCH AND ACTUATOR (FR, RH)



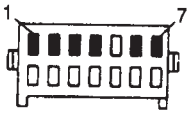
- When the central door locking relay K18 does not operate, the terminal 1 and 2 are connected to the ground 4.
  When the central door locking switch S30 is set to the locking position, the relay terminal 7 is connected to the ground and the inner relay "A" operates for 0.75 second. Therefore, because the relay terminal 1 is connected to "+" and the relay terminal 2 is connected to "–", four actuators operate simultaneously to be locked.
  When opening, the central door locking relay terminal 6 is connected to the ground and the inner relay "B" operate for 0.75 second so that because the terminal 1 is connected to "–" and the terminal 2 is connected to "+", four actuators operate simultaneously to be open.

X62, X62A
FRT/LH DOOR HARNESS
(FRT BODY HARNESS REF.)
X62 : FEMALE CONNETOR
X62A: MALE CONNECTOR

X64 FRT BODY HARNESS
(I/P HARNESS REF.)



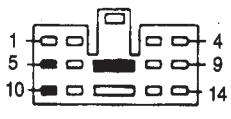
X63,X64
(FRONT BODY HARNESS REF.)



DOOR LOCKING RELAY
(FRONT BODY HARNESS REF.)

DOOR LOCKING SWITCH
(FRONT BODY HARNESS REF.)

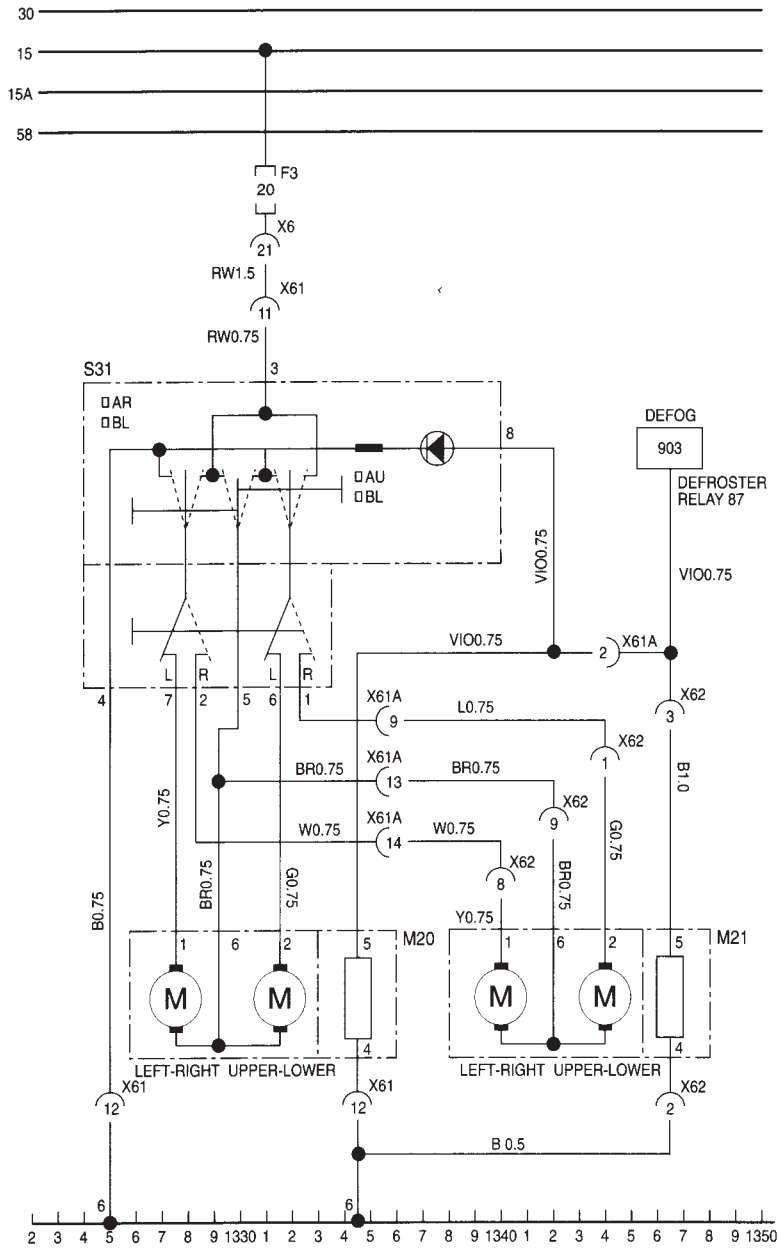
DOOR ACTUATOR



X61
FRT/RH DOOR H.
(FRONT BODY HARNESS REF.)

36) ELECTRIC OSRV MIRROR WIRING – LHD(1.5 DOHC/1.8, 2.0 L MPFI)

M20 ELECTRIC OSRV MIRROR(LEFT)
M21 ELECTRIC OSRV MIRROR(RIGHT)
S31 ELECTRIC OSRV MIRROR SWITCH

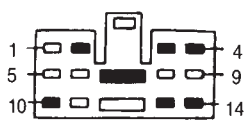


- This is the wiring that the electric OSRV mirror switch S31 is at the LH side.
- The electric OSRV mirror has two motors;
  One connected to yellow wiring is for controlling the horizontal angle and the other connected to green wiring is for controlling the vertical angle.
- When pushing the angle control switch to the right side, the terminal 7 is connected to "–" ground and the terminal 5 is connected to "+" so that the motor operate to the reverse side.
- When pushing the angle control switch to the upper side, the switch terminal 5 connected to "–" ground and the terminal 6 is connected to "+" so that the motor operate to the upper side.
- When pushing the switch to the lower side, the switch terminal 5 is connected to "+" and the terminal 6 is connected to "–" ground so that the motor operate to the reverse side.
- 903 is connected to a defroster time relay 87 so that the rear window defroster and the electric OSRV mirror defroster operate simultaneously.
- The switch checking is as follows; when the left to right conversion switch is at the "L" position.

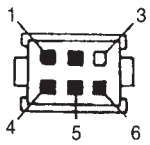
Switch operation	Terminal connected to the terminal 5(+)	Terminal connected to the terminal 8(–)
Upper	terminal 4(green)	terminal 5(black/green)
Lower	terminal 5(black/GE)	terminal 4(green)
Left	terminal 5(black/yellow)	terminal 7(yellow)
Right	terminal 7(yellow)	terminal 5(black/yellow)

- Left-right transfer switch is at "R" position.

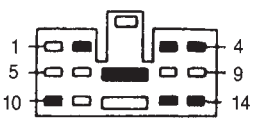
Switch operation	Terminal connected to the terminal 5(+)	Terminal connected to the terminal 8(–)
Upper	terminal 3(blue)	terminal 5(black/red)
Lower	terminal 5(black/red)	terminal 3(blue)
Left	terminal 5(blue)	terminal 6(gray)
Right	terminal 6(gray)	terminal 5(blue)



X62–FRONT/DOOR, RH H.
(FRONT BODY HARNESS REF.)

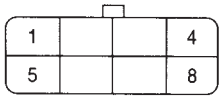


ELECTRIC OSVR MIRROR
(FRONT LH DOOR–IEFT
HARNESS REF.)



X61,X61A
FRT/LH DOOR HARNESS
(FRT BODY HARNESS REF.)

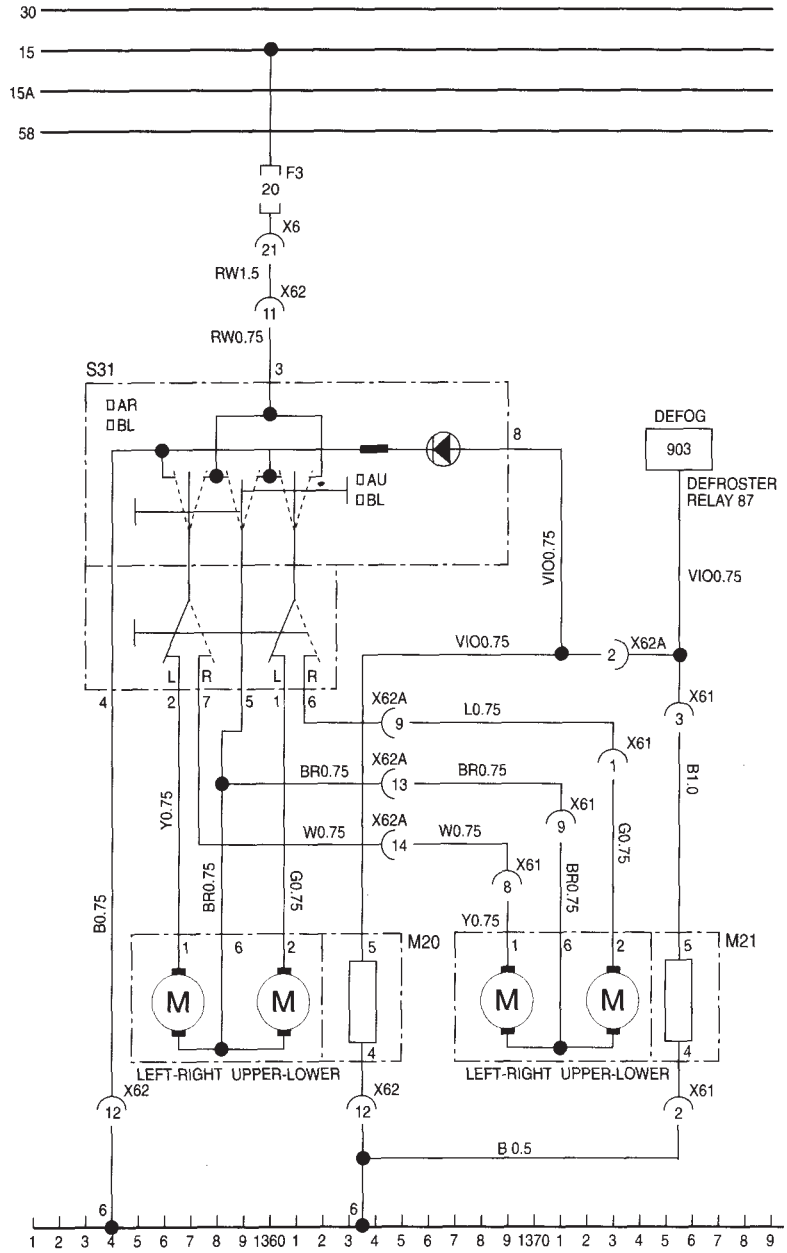
X61 : FEMALE CONNECTOR
X61A : MALE CONNECTOR



MIRROR CONTROL SWITCH
(FRONT DOOR-LEFT HARNESS REF.)

37) ELECTRIC OSRV MIRROR WIRING – RHD(1.5 DOHC/1.8, 2.0 L MPFI)

M20 ELECTRIC OSRV MIRROR(RIGHT)
M21 ELECTRIC OSRV MIRROR(LEFT)
S31 ELECTRIC OSRV MIRROR SWITCH

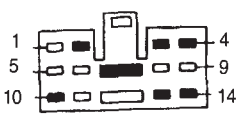


- This is the wiring that the electric OSRV mirror switch S31 is at the RH side.
- The electric OSRV mirror has two motors;
  One connected to yellow wiring is for controlling the horizontal angle and the other connected to green wiring is for controlling the vertical angle.
- When pushing the angle control switch to the right side, the terminal 2 is connected to "–" ground and the terminal 5 is connected to "+" so that the motor operate to the reverse side.
- When pushing the angle control switch to the upper side, the switch terminal 5 connected to "–" ground and the terminal 1 is connected to "+" so that the motor operate to the upper side.
- When pushing the switch to the lower side, the switch terminal 5 is connected to "+" and the terminal 6 is connected to "–" ground so that the motor operate to the reverse side.
- 883 is connected to a defroster time relay 87 so that the rear window defroster and the electric OSRV mirror defroster operate simultaneously.
- The switch checking is as follows; when the left to right conversion switch is at the "L" position.

Switch operation	Terminal connected to the terminal 5(+)	Terminal connected to the terminal 8(–)
Upper	terminal 1(green)	terminal 5(black/green)
Lower	terminal 5(black/GE)	terminal 1(green)
Left	terminal 5(black/yellow)	terminal 2(yellow)
Right	terminal 2(yellow)	terminal 5(black/yellow)

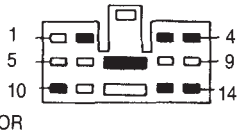
- Left-right transfer switch is at "R" position.

Switch operation	Terminal connected to the terminal 5(+)	Terminal connected to the terminal 8(–)
Upper	terminal 6(blue)	terminal 5(black/red)
Lower	terminal 5(black/red)	terminal 6(blue)
Left	terminal 5(blue)	terminal 7(gray)
Right	terminal 7(gray)	terminal 5(blue)

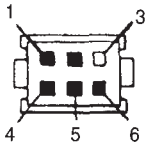


X62,X62A
FRT/RH DOOR HARNESS
(FRT BODY HARNESS REF.)

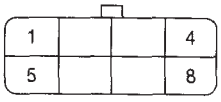
X61 : FEMALE CONNECTOR
X61A : MALE CONNECTOR



X61–FRONT/DOOR, RH,
(FRONT BODY HARNESS REF.)



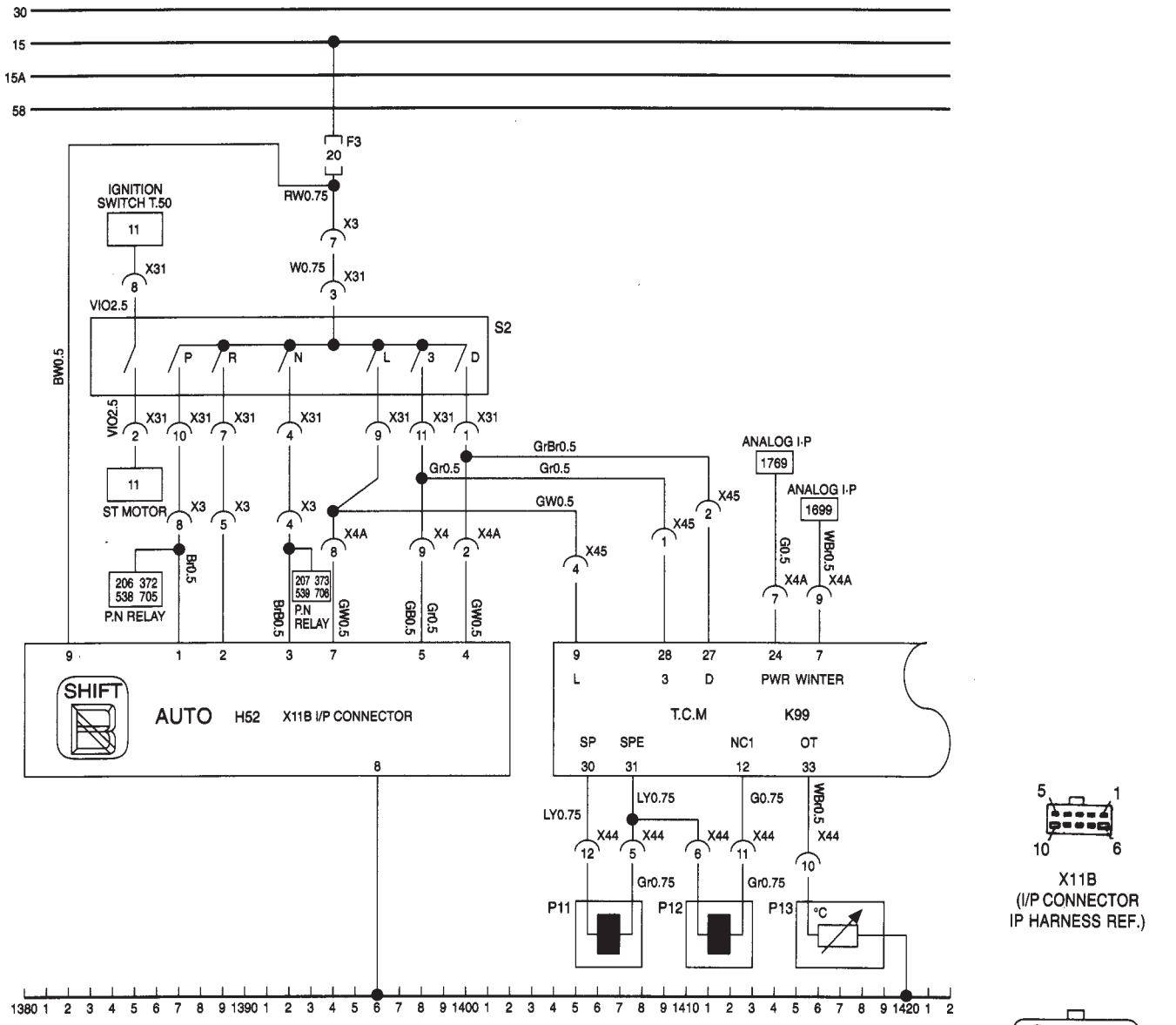
ELECTRIC OSVR MIRROR
(FRONT RH DOOR-RIGHT
HARNESS REF.)



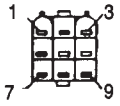
MIRROR CONTROL SWITCH
(FRONT DOOR-RIGHT HARNESS REF.)

38) SHIFT-UP LEVER LOCATION LAMP AND SENSOR WIRING – LHD(1.5 DOHC/1.8, 2.0 L MPFI)

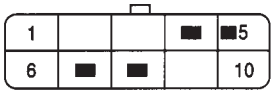
E31 POWER MODE INDICATOR
E32 WINTER MODE INDICATOR
H52 SHIFT-UP LEVER POSITION INDICATOR
K99 CONTROL UNIT T.C.M
P11 OUTPUT PULSE PICK-UP(OUTPUT SENSOR)
P12 INPUT PULSE PICK-UP(INPUT SENSOR)
P13 OIL TEMPERATURE SENSOR
S2 SELECTOR POSITION SWITCH



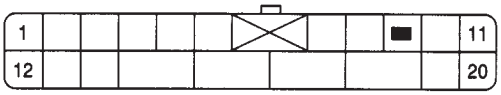
X11B
(I/P CONNECTOR
IP HARNESS REF.)



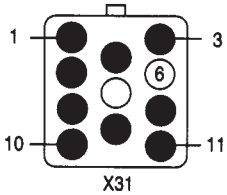
X4A–FI HARNESS
CONNECTOR
(I/P HARNESS REF.)



X3 ENGINE HARNESS
CONNECTOR
(I/P HARNESS REF.)



X4
F/I HARNESS CONNECTOR
(I/P HARNESS REF.)

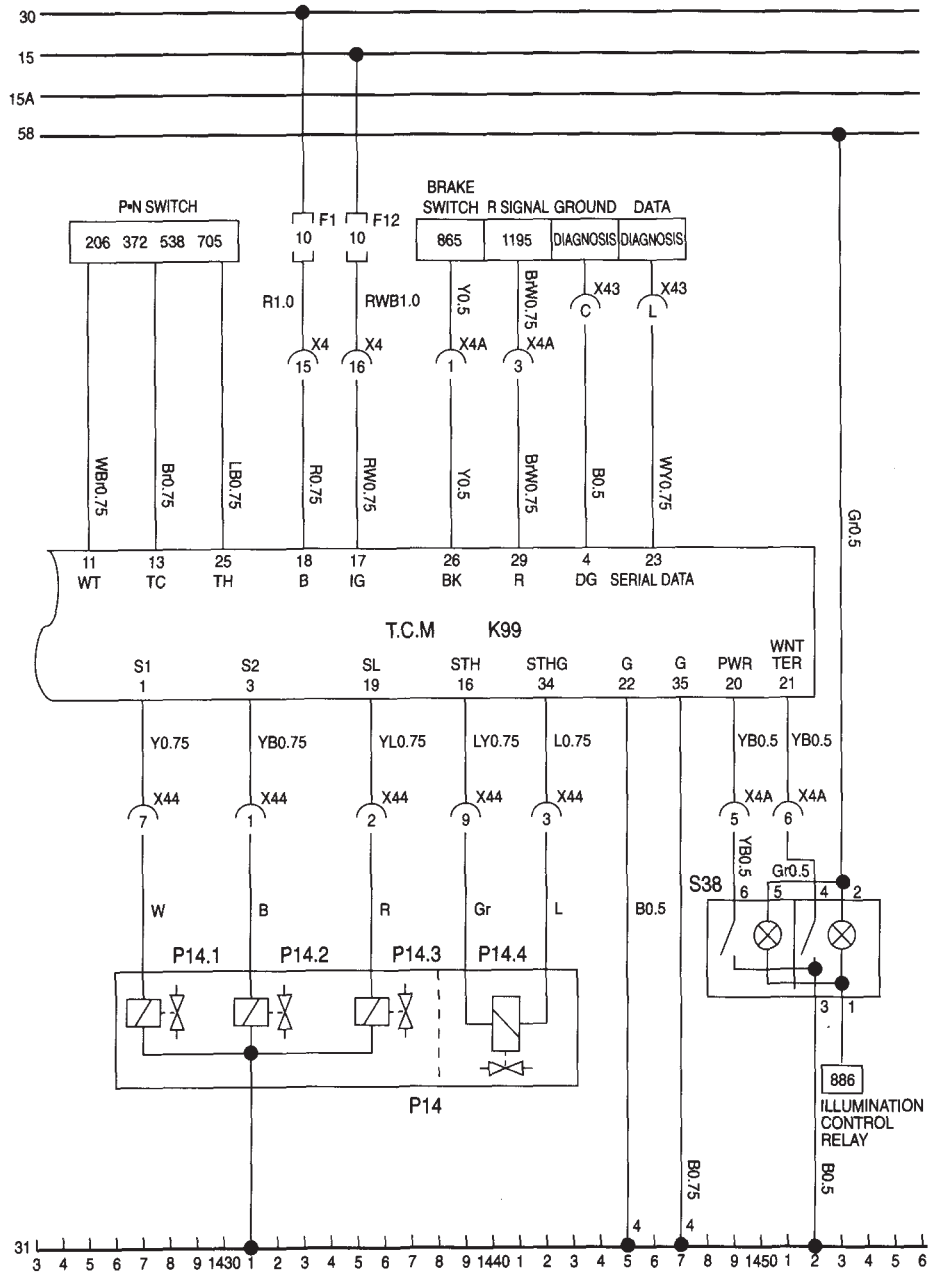


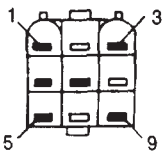
X31
SELECTOR POSITION
SWITCH CONNECTOR
(ENGINE HARNESS REF.)

TCM CONNECTOR

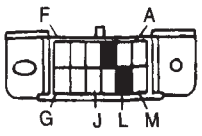
39) T.C.M AND SOLENOID VALVE WIRING – LHD(1.5 DOHC/1.8, 2.0 L MPFI)

K99 CONTROL UNIT T.C.M
P14 SOLENOID VALVE
P14.4 NO. 1 SOLENOID VALVE
P14.2 NO. 2 SOLENOID VALVE
P14.3 LOCK-UP SOLENOID VALVE
P14.4 OIL PRESSURE CONTROL SOLENOID VALVE
S38 POWER AND WINTER MODE SWITCH

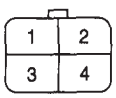




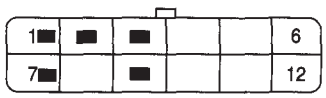
X4A–F.I HARNESS
(I/P HARNESS REF.)



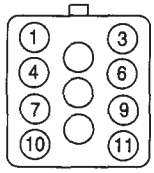
X43 ALDL CONNECTOR
(F/I HARNESS REF.)



X45
SELECTOR POSITION
SWITCH CONNECTOR
(I/P HARNESS REF.)

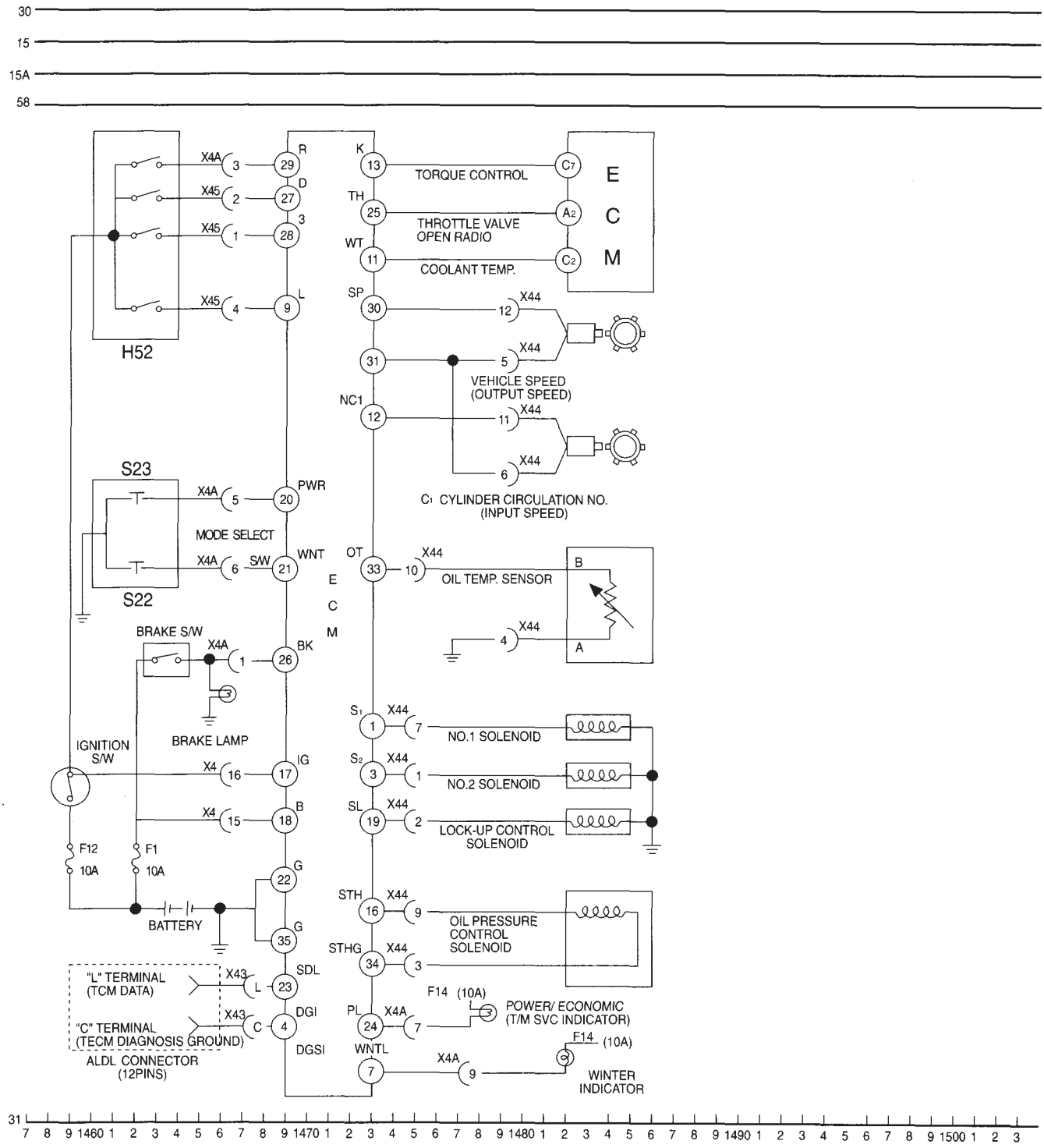


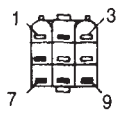
X44 A/T CONNECTOR
(I/P HARNESS REF.)



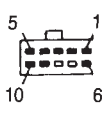
X31
SELECTOR POSITION
SWITCH CONNECTOR
(ENGINE HARNESS REF.)

40) T.C.M DIAGRAM – LHD





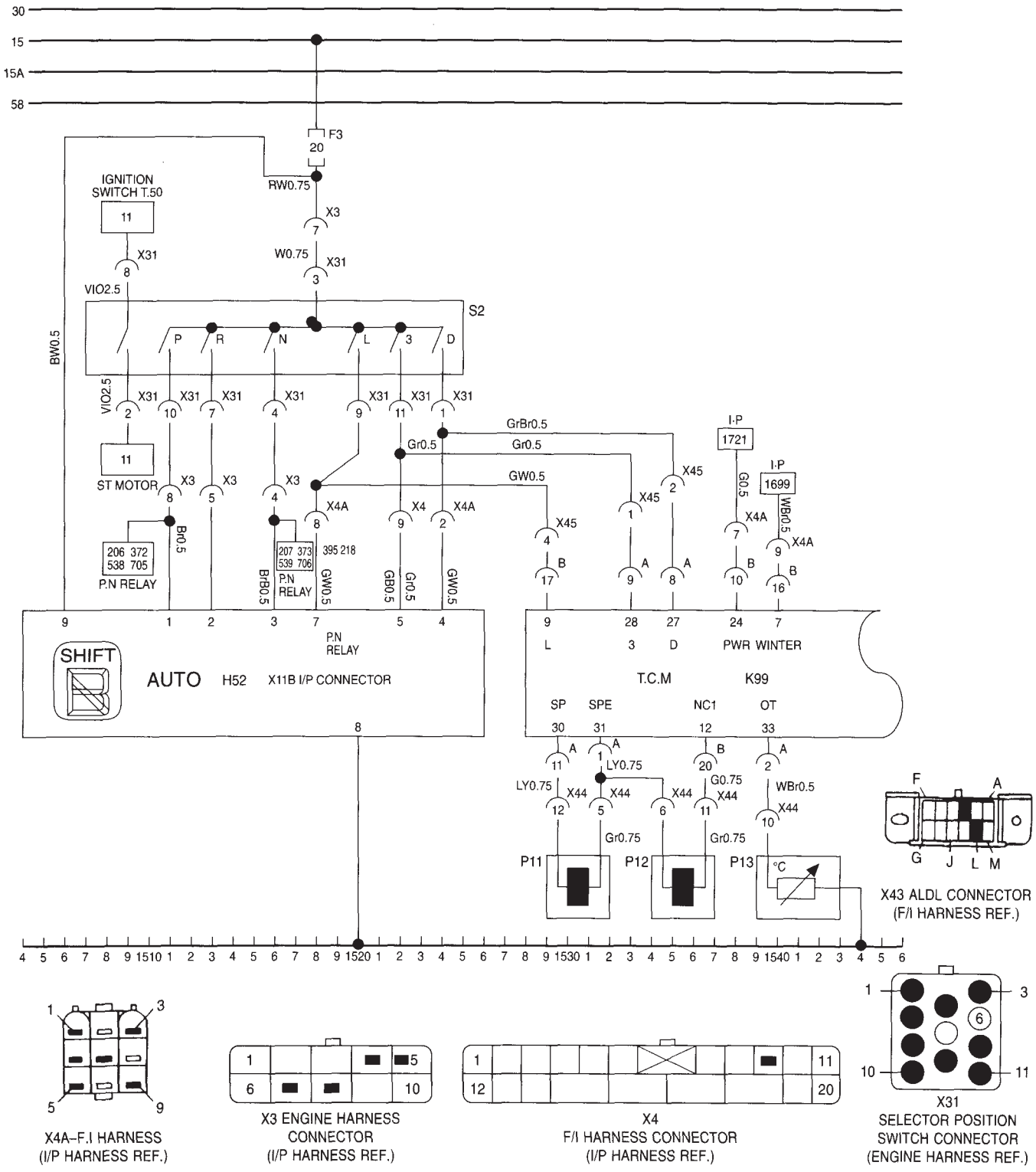
X4A–F.I HARNESS CONNECTOR (I/P HARNESS REF.)



X11B (I/P CONNECTOR IP HARNESS REF.)

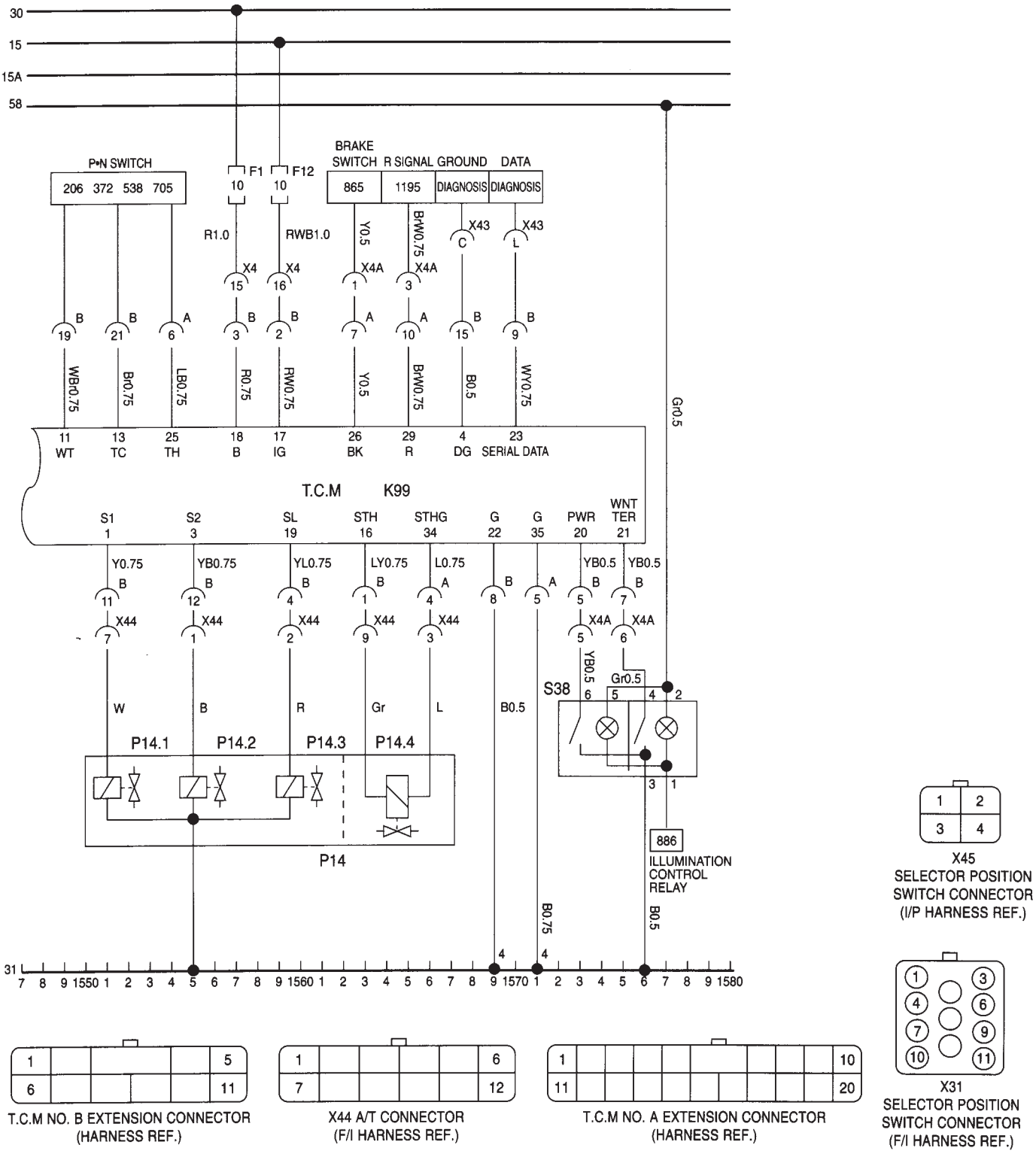
41) SHIFT-UP LEVER LOCATION LAMP AND SENSOR WIRING – RHD(1.5 DOHC/1.8, 2.0 L MPFI)

E31 POWER MODE INDICATOR
E32 WINTER MODE INDICATOR
H52 SHIFT-UP LEVER POSITION INDICATOR
K99 CONTROL UNIT T.C.M
P11 OUTPUT PULSE PICK-UP(OUTPUT SENSOR)
P12 INPUT PULSE PICK-UP(INPUT SENSOR)
P13 OIL TEMPERATURE SENSOR
S2 SELECTOR POSITION SWITCH



42) T.C.M AND SOLENOID VALVE WIRING – RHD(1.5 DOHC/1.8, 2.0 L MPFI)

K99 CONTROL UNIT T.C.M
P14 SOLENOID VALVE
P14.4 NO. 1 SOLENOID VALVE
P14.2 NO. 2 SOLENOID VALVE
P14.3 LOCK-UP SOLENOID VALVE
P14.4 OIL PRESSURE CONTROL SOLENOID VALVE
S38 POWER AND WINTER MODE SWITCH



X45
SELECTOR POSITION SWITCH CONNECTOR
(I/P HARNESS REF.)

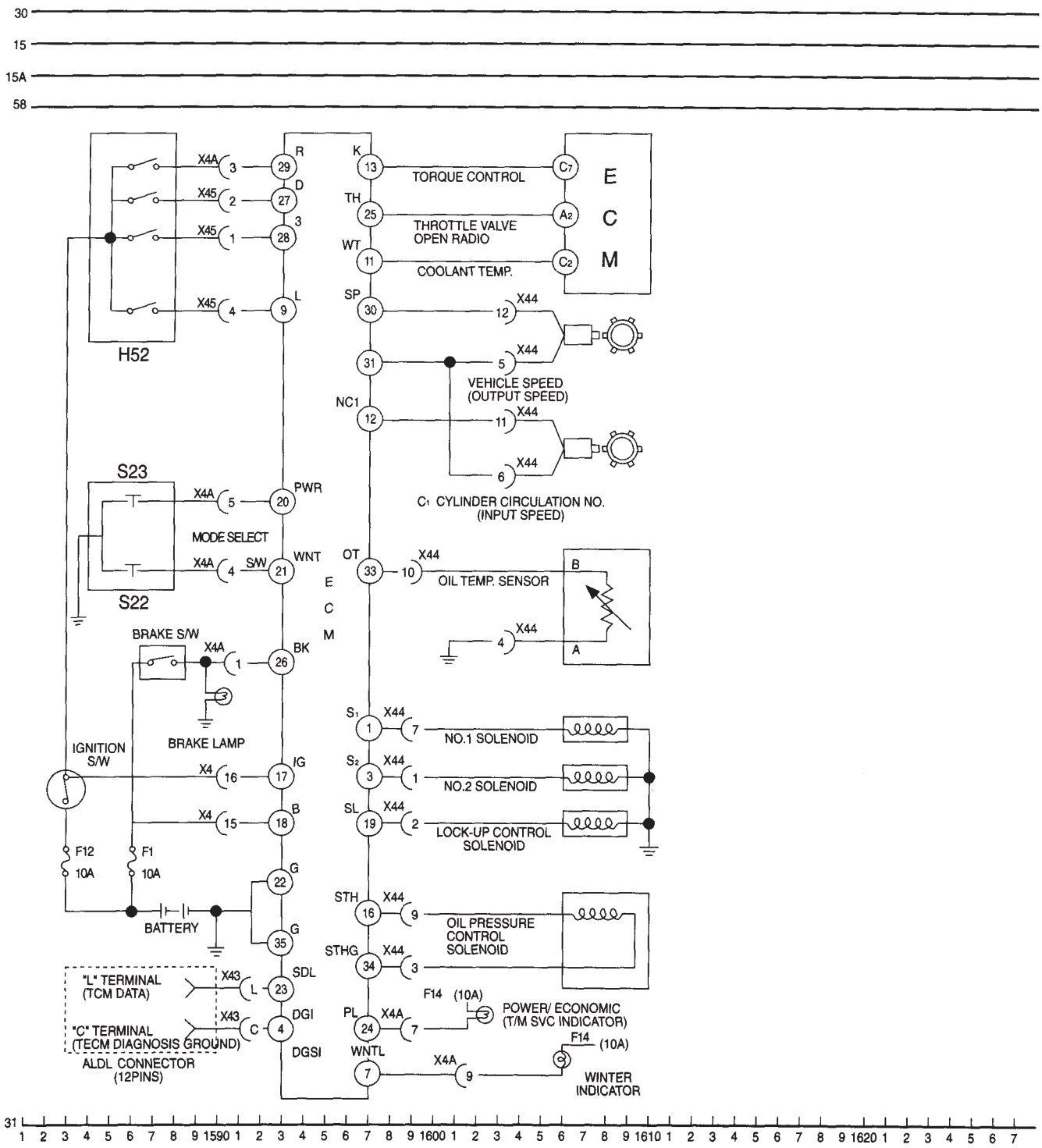
X31
SELECTOR POSITION SWITCH CONNECTOR
(F/I HARNESS REF.)

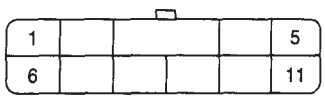
T.C.M NO. B EXTENSION CONNECTOR
(HARNESS REF.)

X44 A/T CONNECTOR
(F/I HARNESS REF.)

T.C.M NO. A EXTENSION CONNECTOR
(HARNESS REF.)

43) T.C.M DIAGRAM – RHD



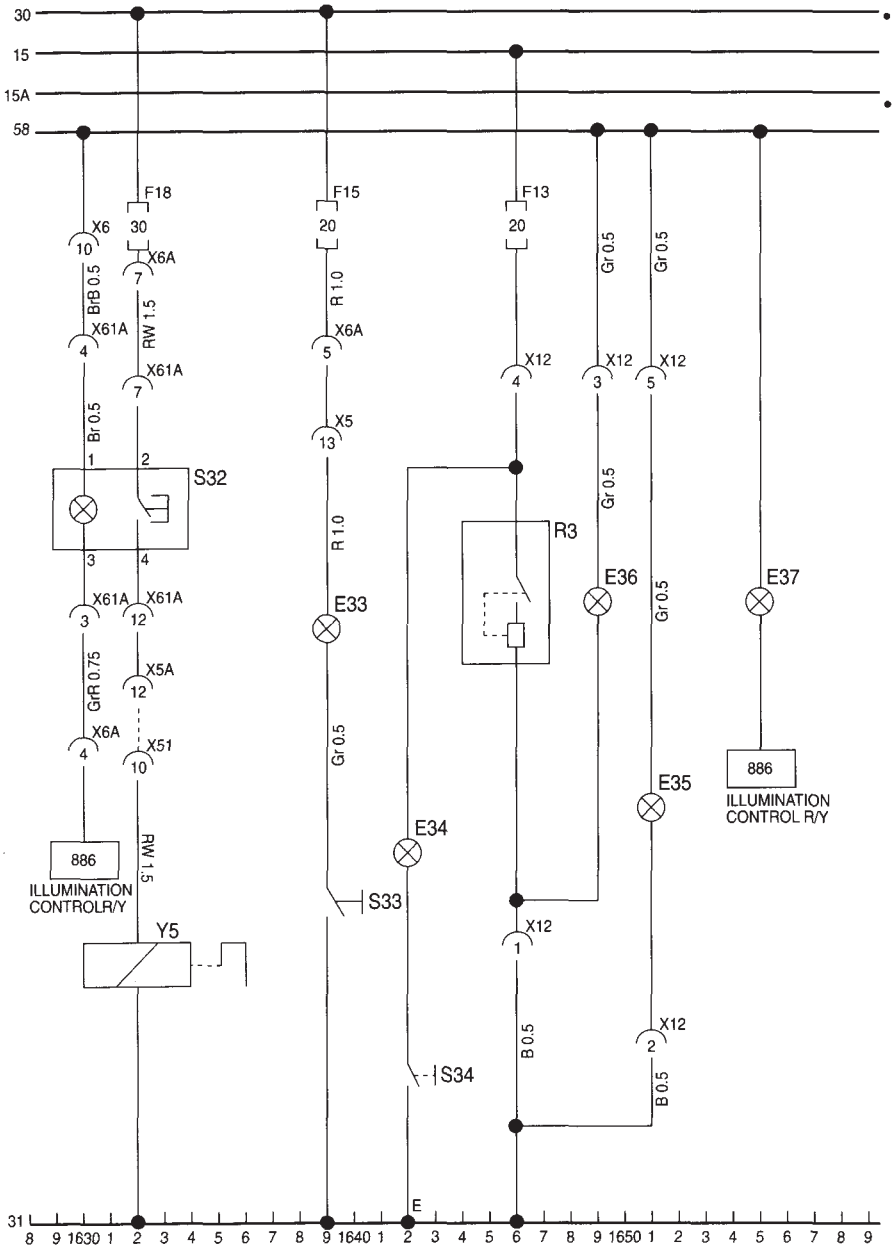


T.C.M EXTENSION CONNECTOR "A"

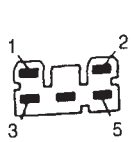
T.C.M EXTENSION CONNECTOR "B"

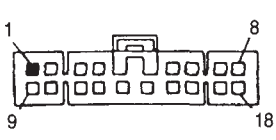
44) AUTO TRUNK, CIGARETTE LIGHTER, WIRING

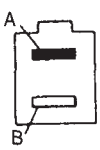
E33 TRUNK ILLUMINATION LAMP
E34 GLOVE BOX ILLUMINATION LAMP
E35 ASHTRAY ILLUMINATION LAMP
E36 CIGARETTE LIGHTER ILLUMINATION LAMP
E37 SELECTOR LEVER ILLUMINATION LAMP
S32 TRUNK SWITCH
S33 TRUNK ILLUMINATION LAMP SWITCH
S34 GLOVE BOX ILLUMINATION SWITCH
R3 CIGARETTE LIGHTER
Y5 AUTO TRUNK SOLENOID

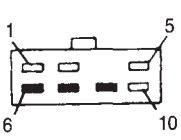


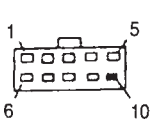
- A cigarette lighter illumination lamp and an ash tray illumination lamp have not illumination control function.
- 866 is connected to the illumination control relay terminal 31b.

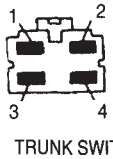

X12-CENTER CONSOLE H HARNESS CONNECTOR (I/P HARNESS REF.)

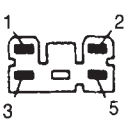

X2-FRONT HARNESS CONNECTOR (I/P HARNESS REF.)

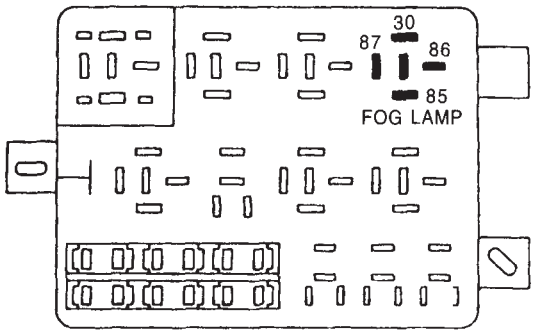

X2B-FRONT HARNESS CONNECTOR (I/P HARNESS REF.)


X6-FRT BODY HARNESS CONNECTOR (I/P HARNESS REF.)

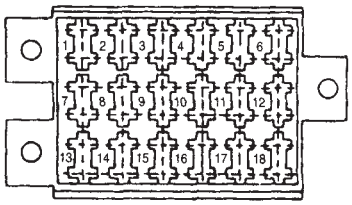

X51-TRUNK HARNESS CONNECTOR (REAR HARNESS REF.)


TRUNK SWITCH CONNECTOR (FRONT DOOR(LH) HARNESS REF.)

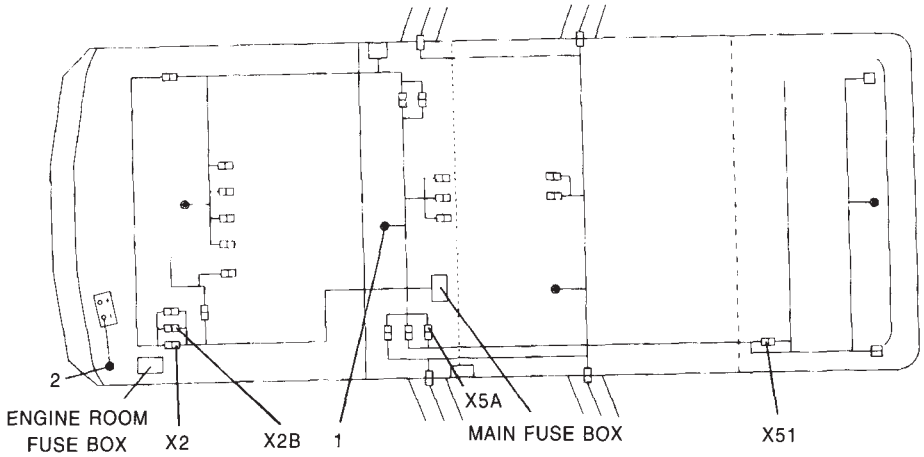

FOG LAMP SWITCH CONNECTOR (I/P HARNESS REF.)

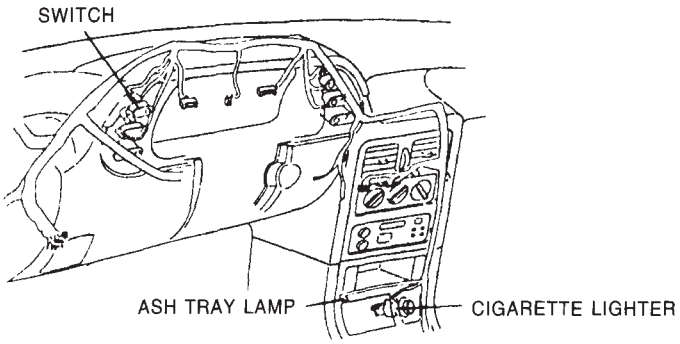


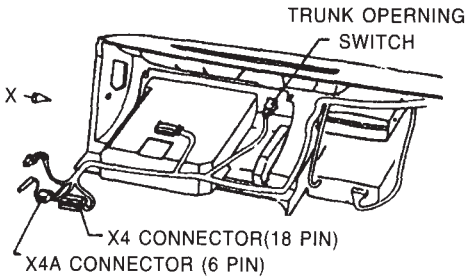
ENGINE ROOM FUSE BOX

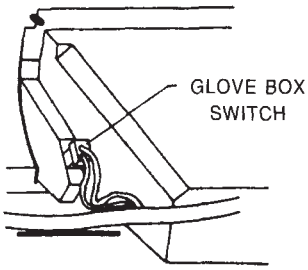


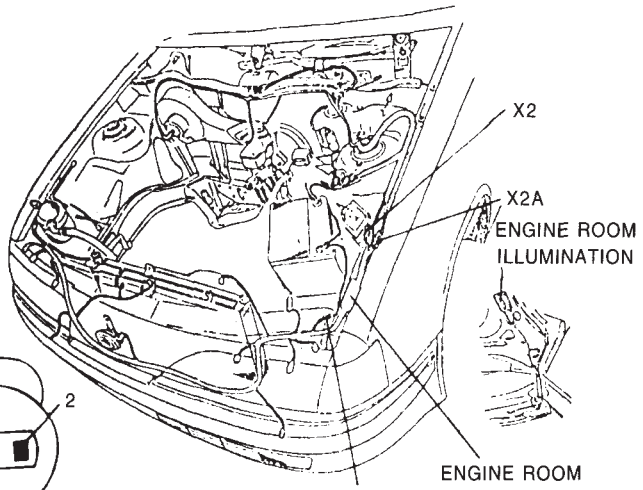
MAIN FUSE BOX

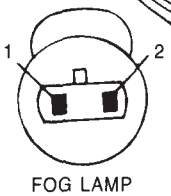




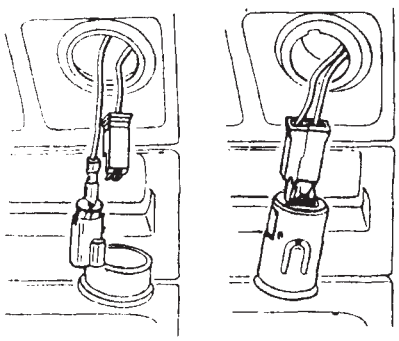






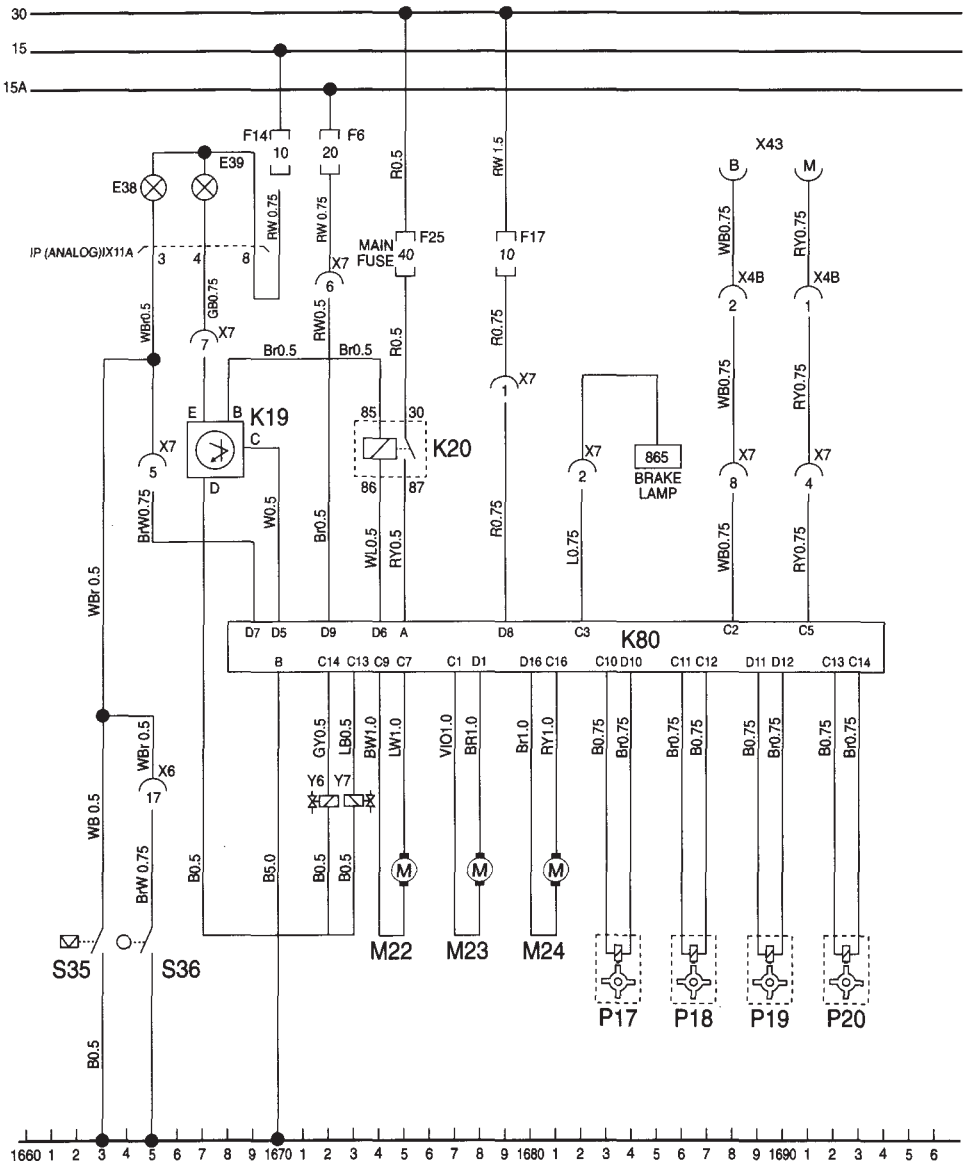


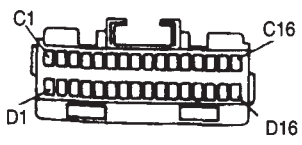
FOG LAMP



45) ABS WIRNING(1.5 DOHC/1.8, 2.0 MPFI)

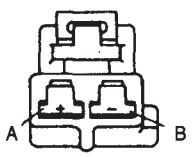
E38 PARKING BRAKE AND BRAKE FLUID SHORTAGE WIRING LAMP
E39 ABS WARNING LAMP
K19 ABS WARNING LAMP MODULE
K20 ABS RELAY
K80 ABS-ECM(EBCM)
M22 ABS MOTOR(FRONT, LEFT)
M23 ABS MOTOR(FRONT, RIGHT)
M24 ABS MOTOR(REAR)
P17 WHEEL SPEED SENSOR(FRONT, LEFT)
P18 WHEEL SPEED SENSOR(FRONT, RIGHT)
P19 WHEEL SPEED SENSOR(REAR, LEFT)
P20 WHEEL SPEED SENSOR(REAR, RIGHT)
S35 BRAKE FLUID WARING LAMP SWITCH
S36 PARKING BRAKE SWITCH
Y6 SOLENOID(FRONT, LEFT)
Y7 SOLENOID(FRONT, RIGHT)



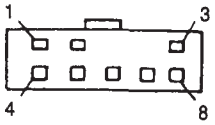


ABS - ECU

(ABS HARNESS REF.)



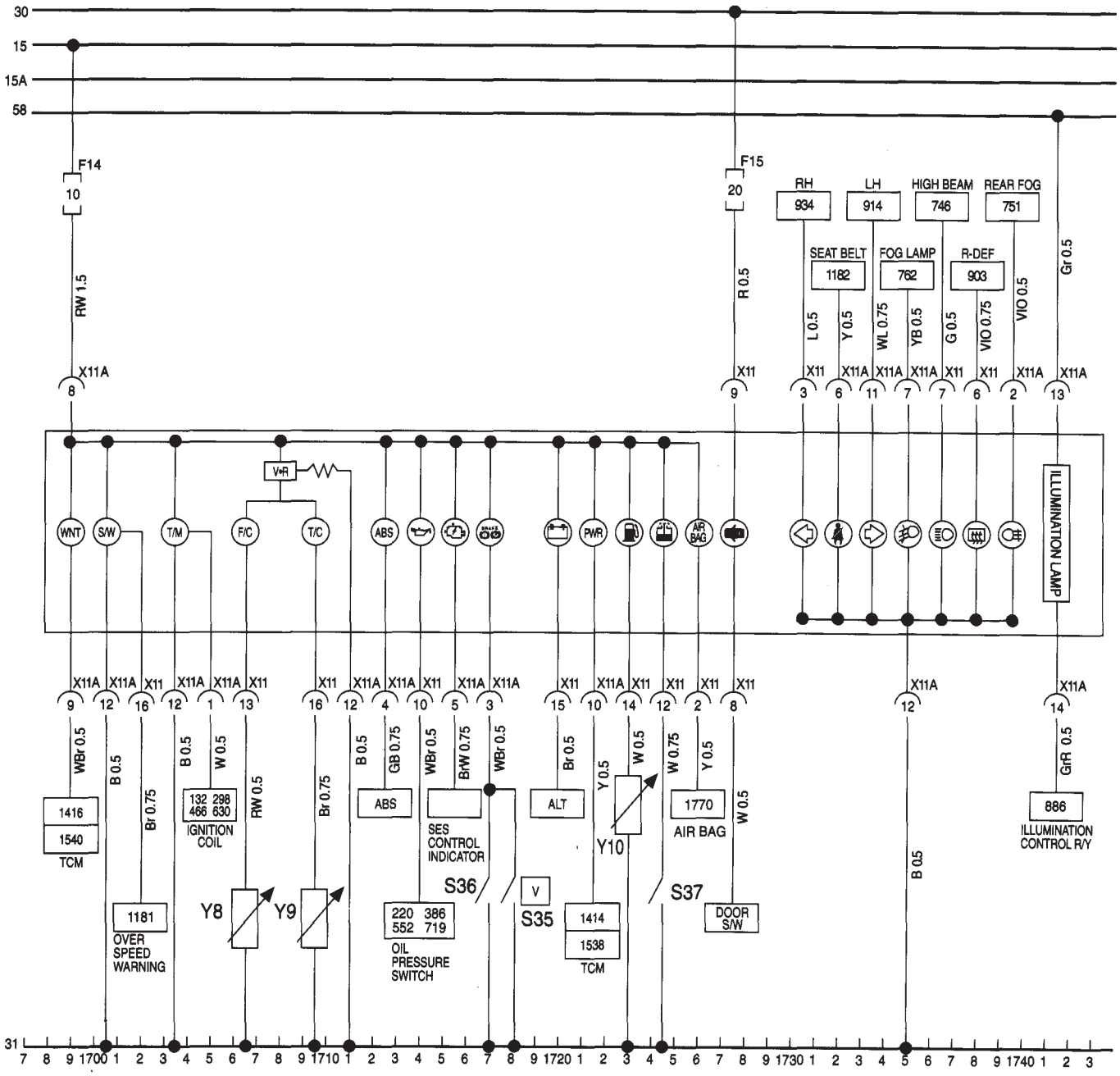
ABS - ECU POWER END GROUND
(ABS HARNESS REF.)



ABS CONNECTOR
(I/P HARNESS REF.)

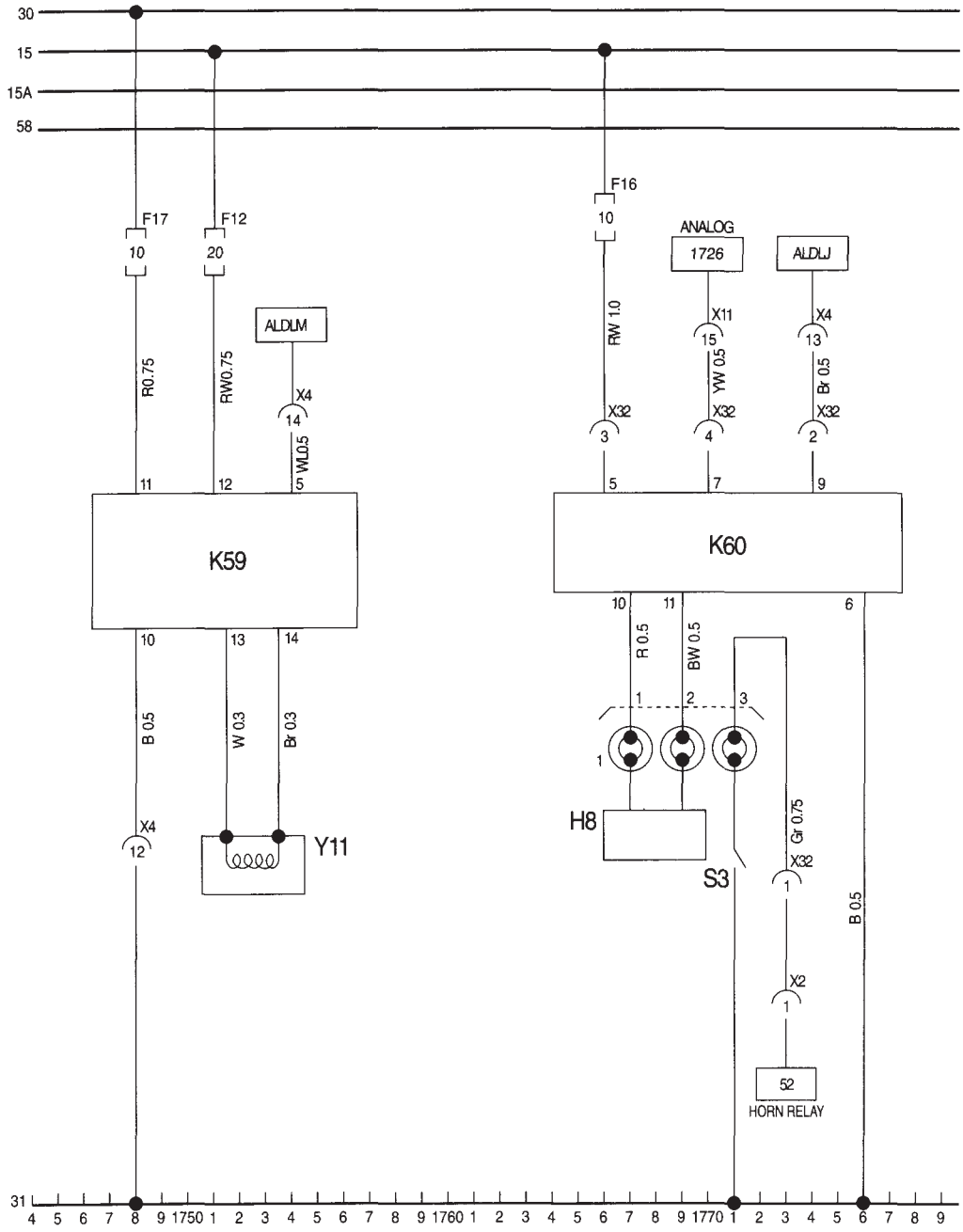
46) ANALOG I·P WIRNING(1.5 DOHC/1.8, 2.0 MPFI)

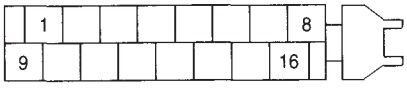
S35 BRAKE FLUID SWITCH
S36 PARKING BRAKE SWITCH
S37 WASTE FLUID LEVEL SWITCH
Y8 FUEL UNIT
Y9 COOLANT UNIT
Y10 FUEL LEVEL WARNING SENSOR



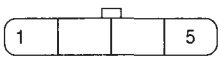
47) IMMOBILIZER, AIR BAG WIRING

H8 CONTACT COIL & HORN SWITCH
K59 IMMOBILIZER CONTROL UNIT
K60 AIR BAG CONTROL UNIT
Y11 TRANSPONDER DETECTION COIL
S3 HORN SWITCH

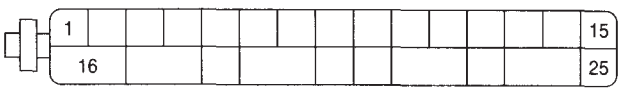




IMMOBILIZER



X32 CONNECTOR



ELECTRONIC CONTROL UNIT