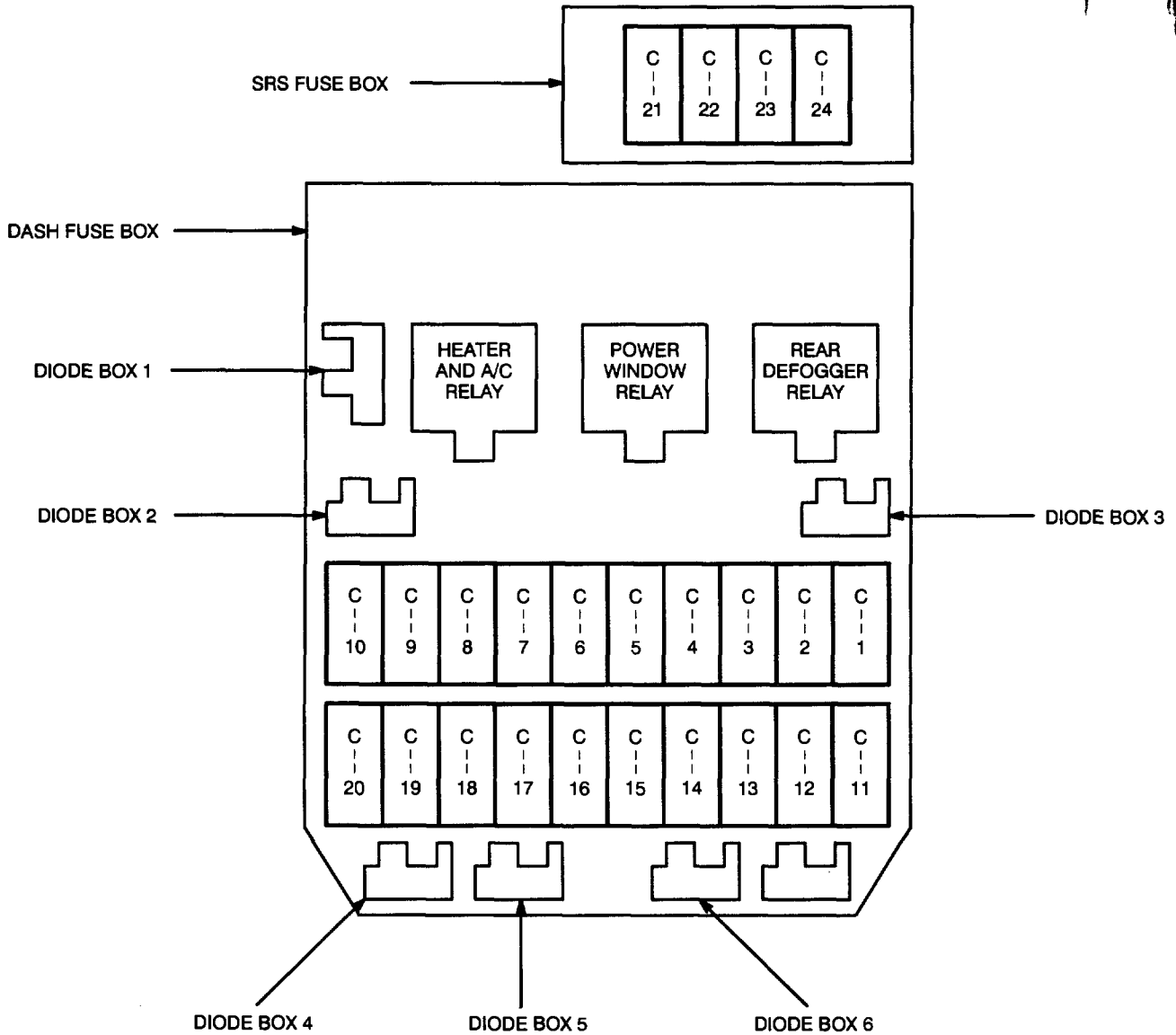


FUSE/RELAY INFORMATION

Dash and SRS Fuse Boxes



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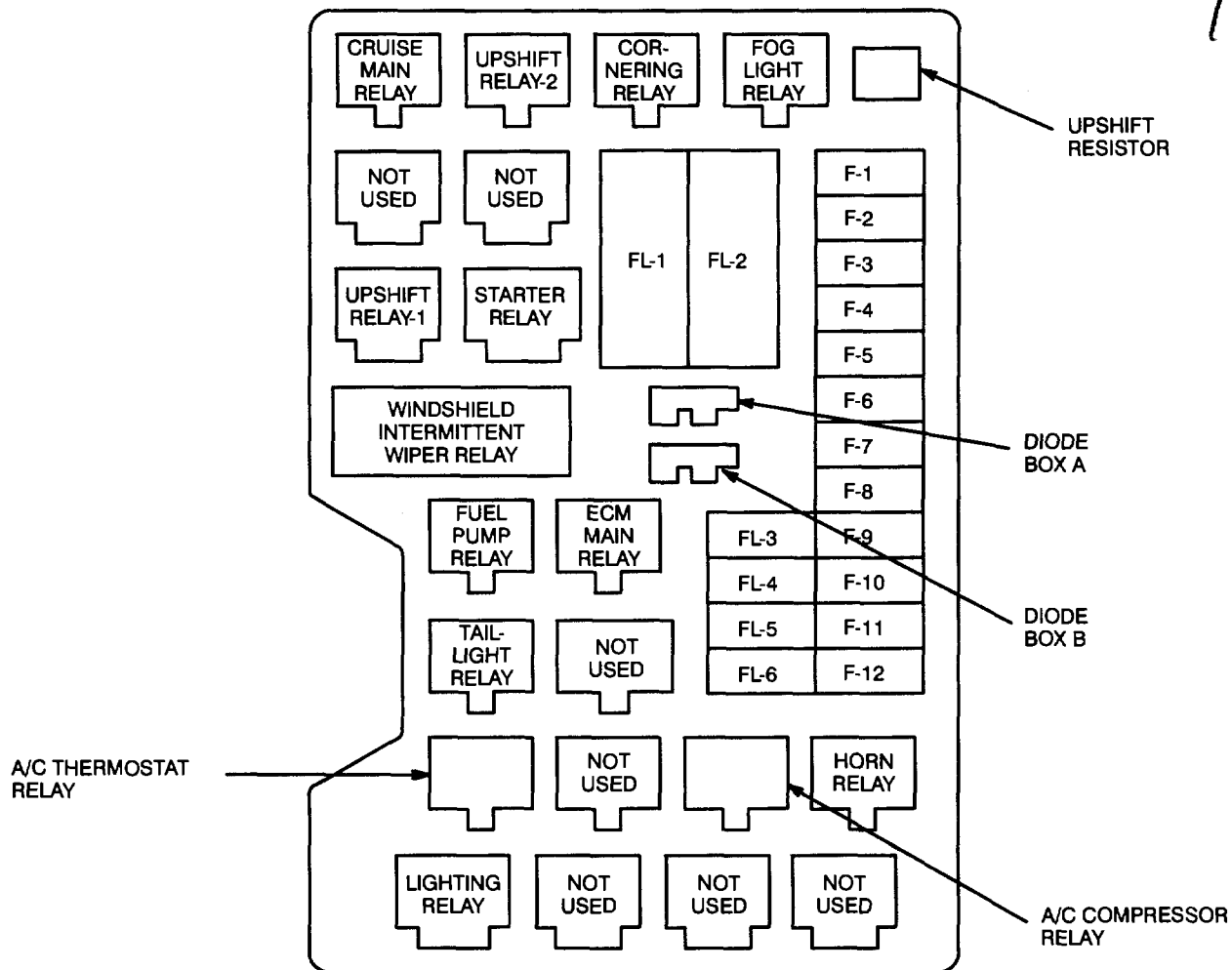
Fuse Number	Fuse Name	Amps	Circuit Protected
C-1	STARTER RELAY	10	Starting system; blower controls; A/C: compressor controls; supplemental restraint system (SRS)
C-2	(SEAT HEATER)	15	Seat heater
C-3	TURN BACK	15	Back up lights; turn lights; hazard lights; cornering lights; A/T shift indicator
C-4	ELEC. IGN.	10	Rear defogger; cruise control; power windows; engine control; door mirror defoggers; shift interlock system; power sunroof; 4-wheel anti-lock brake system (ABS)
C-5	FRT WIPER & WASHER	15	Windshield wiper/washer
C-6	RR WIPER & WASHER	10	Rear wiper/washer
C-7	(H/LAMP WIPER)	10	Headlight wiper/washer
C-8	ENGINE	15	Engine control; charging system
C-9	IGN. COIL	15	Ignition system
C-10	METER GAUGE	10	Gauges; indicators
C-11	(AUDIO [ACC]) MIRROR	10	Sound system; power mirrors; clock
C-12	CIGARETTE	20	Cigarette lighter
C-13	(ANTI THEFT)	10	Anti-theft system
C-14	STOP A/T CONT	15	Brake lights; automatic transmission control; shift interlock system; rear wheel anti-lock (RWAL) brake system
C-15	(AUDIO [B])	20	Sound system
C-16	CLOCK [B] ROOM	10	Sound system; interior lights; key-in ignition warning system; anti-theft system; auto antenna; clock
C-17	RR DEFOG	25	Rear defogger
C-18	(DOOR LOCK)	20	Power door locks; anti-theft system; power windows
C-19	BLOWER	25	Blower controls
C-20	(AIR CON)	10	A/C: compressor controls
C-21	SRS-1	10	Supplemental restraint system (SRS)
C-22	SRS-2	10	Supplemental restraint system (SRS)
C-23	SRS-3	10	Supplemental restraint system (SRS)
C-24	SRS-4	10	Supplemental restraint system (SRS)

Circuit Breaker Number	Circuit Breaker Name	Amps	Circuit Protected
C/B-1	—	—	Not used
C/B-2	(P/W, P/S, S/R)	30	Power windows; power sunroof; power seats; power door locks

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FUSE/RELAY INFORMATION

Fuse/Relay Box

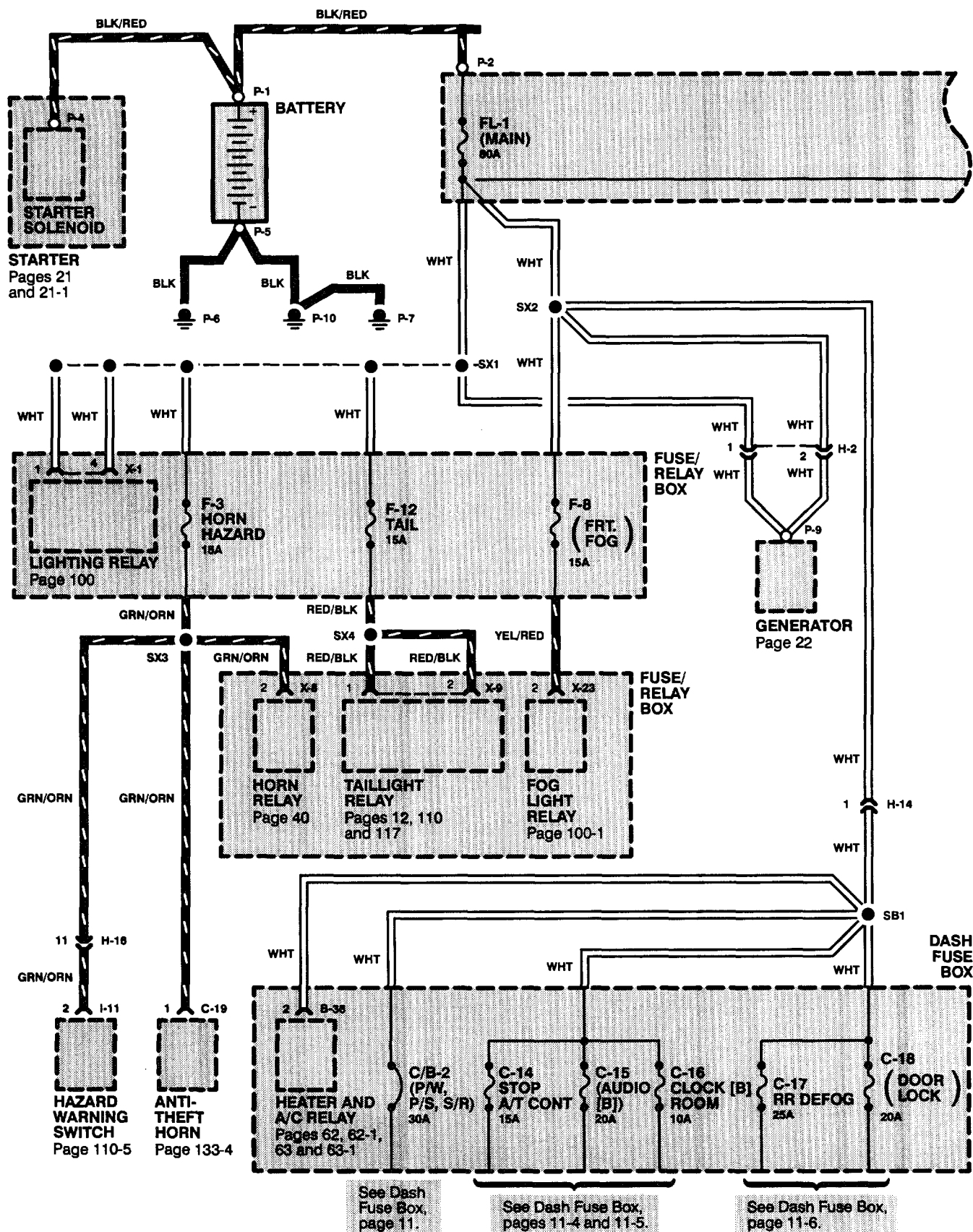


Fuse Number	Fuse Name	Amps	Circuit Protected
F-1	—	—	Not used
F-2	O ₂ SENSOR HEATER	10	Engine control
F-3	HORN HAZARD	15	Horns; Hazard light
F-4	H/LAMP—LH	15	Headlights and fog lights
F-5	H/LAMP—RH	15	Headlights
F-6	—	—	Not used
F-7	—	—	Not used
F-8	(FRT. FOG)	15	Fog lights
F-9	ABS	20	Rear wheel anti-lock (RWAL) brake system or anti-lock brake system (ABS)
F-10	FUEL PUMP	15	Engine control
F-11	—	—	Not used
F-12	TAIL	15	Taillights

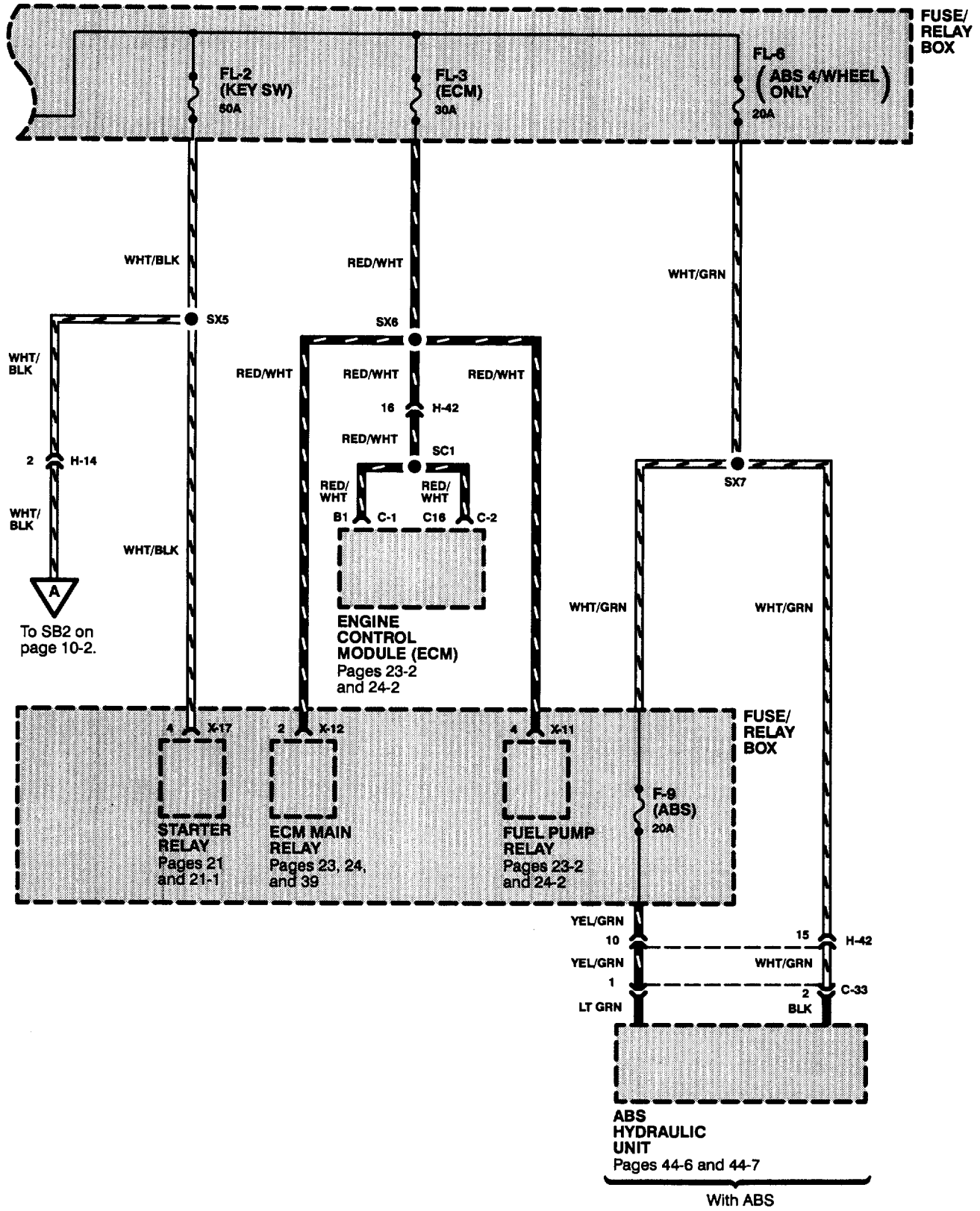
Fusible Link Number	Fusible Link Name	Amps	Circuit Protected
FL-1	MAIN	80	See Power Distribution
FL-2	KEY SW	50	See Power Distribution
FL-3	ECM	30	Engine control
FL-4	—	—	Not used
FL-5	—	—	Not used
FL-6	(ABS 4/WHEEL ONLY)	40	Anti-lock brake system (ABS)

POWER DISTRIBUTION

Circuit Schematic



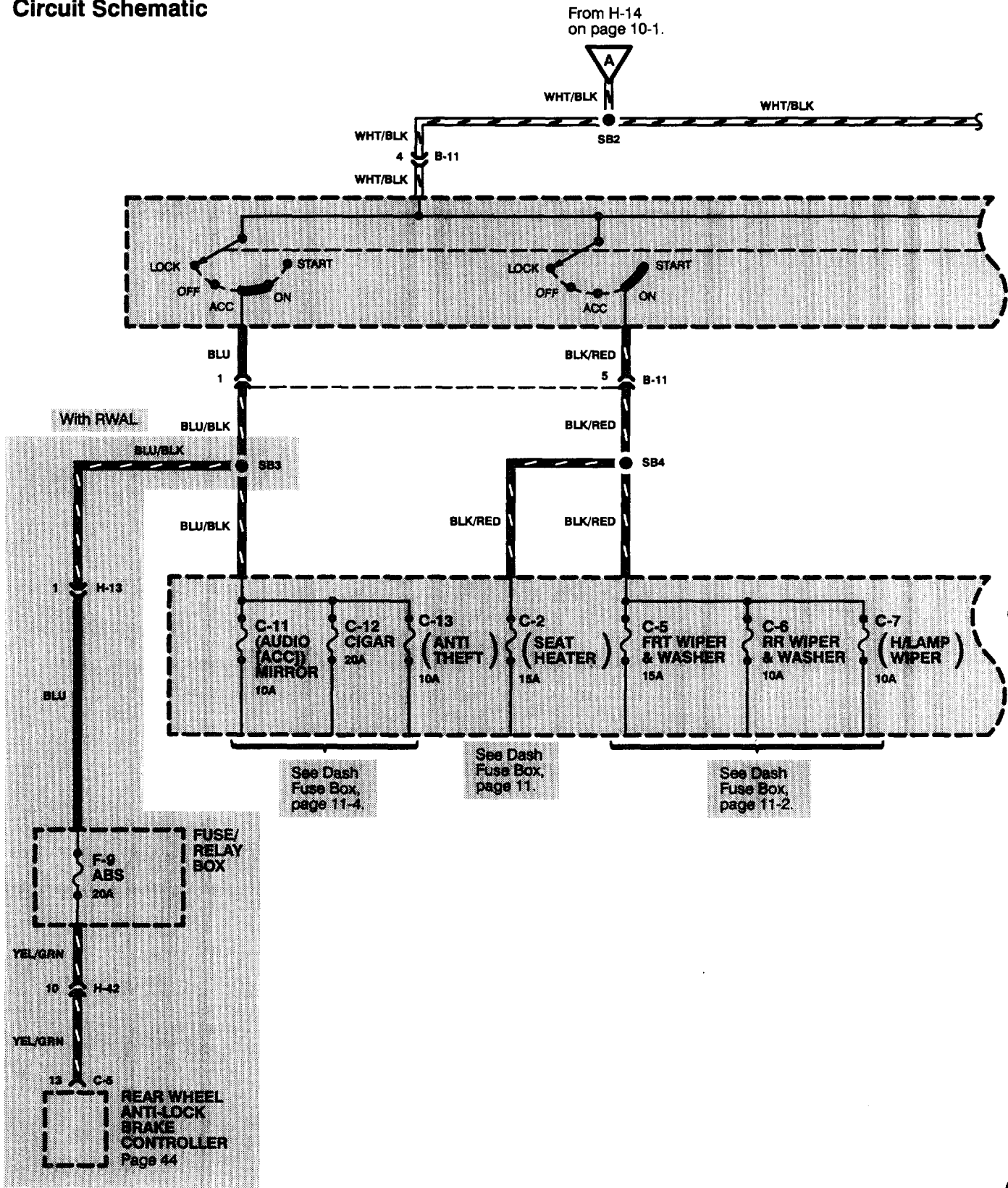
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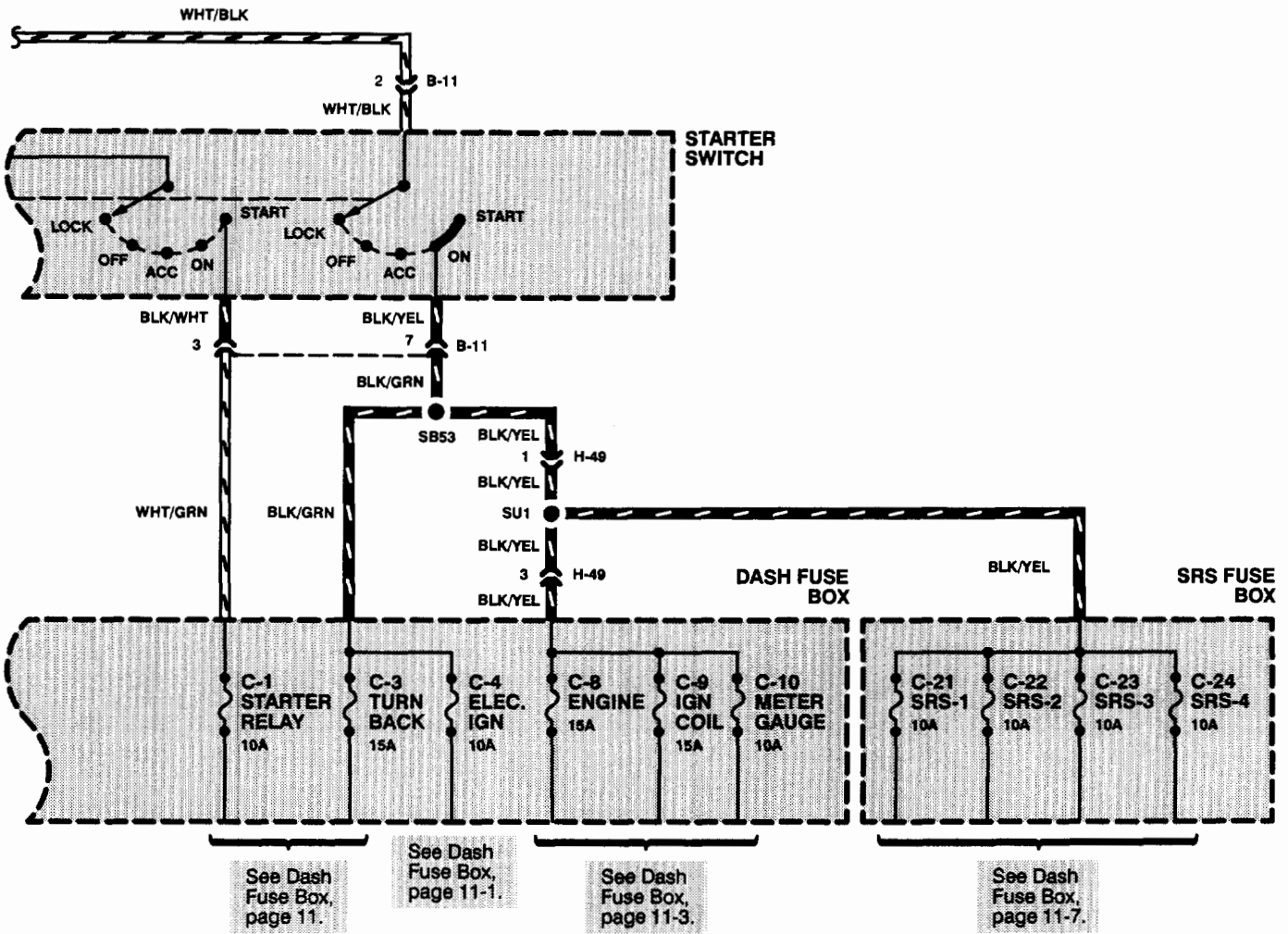


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POWER DISTRIBUTION

Circuit Schematic





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POWER DISTRIBUTION

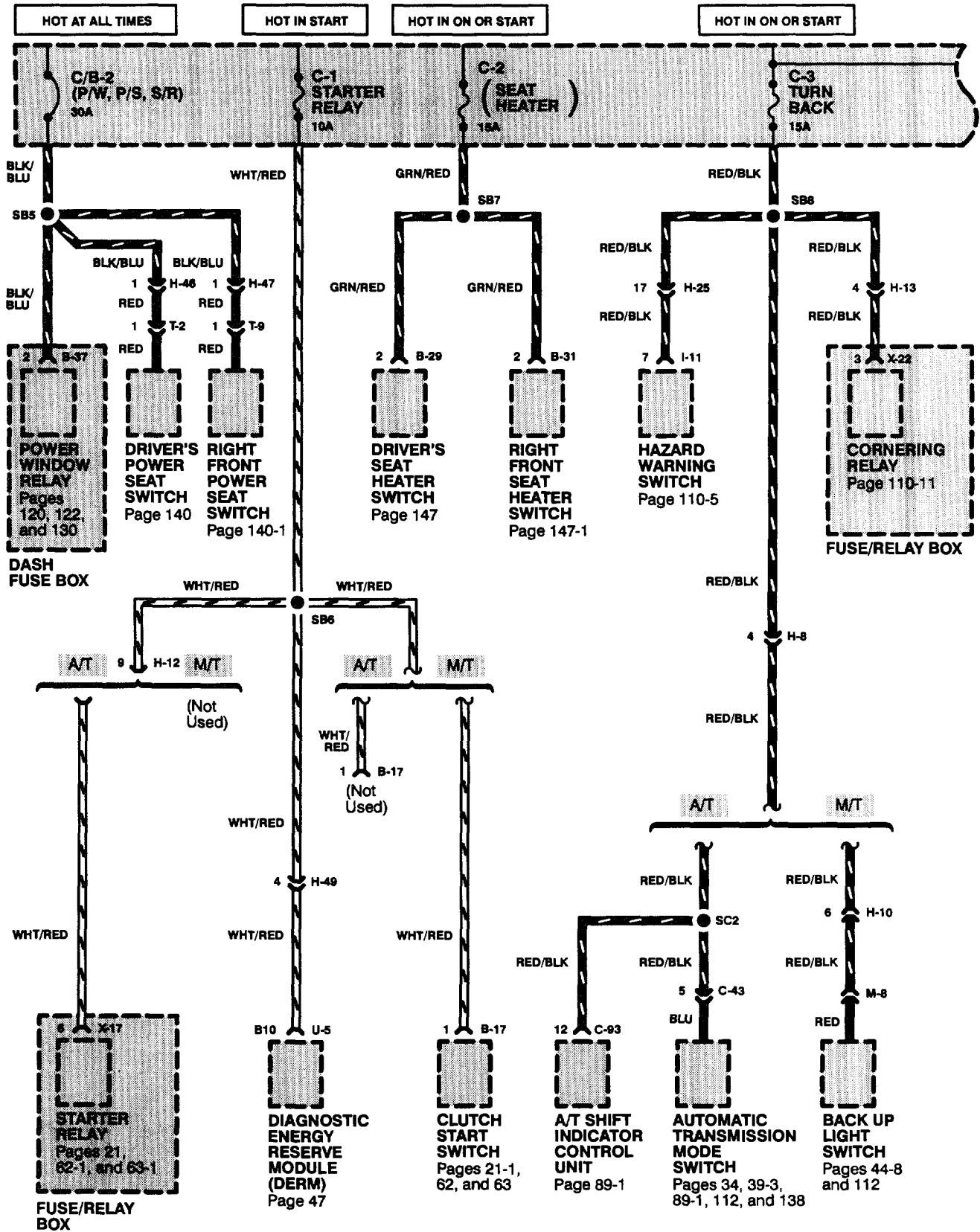
Component Location Index

(Refer to Section 201 for photographs.)

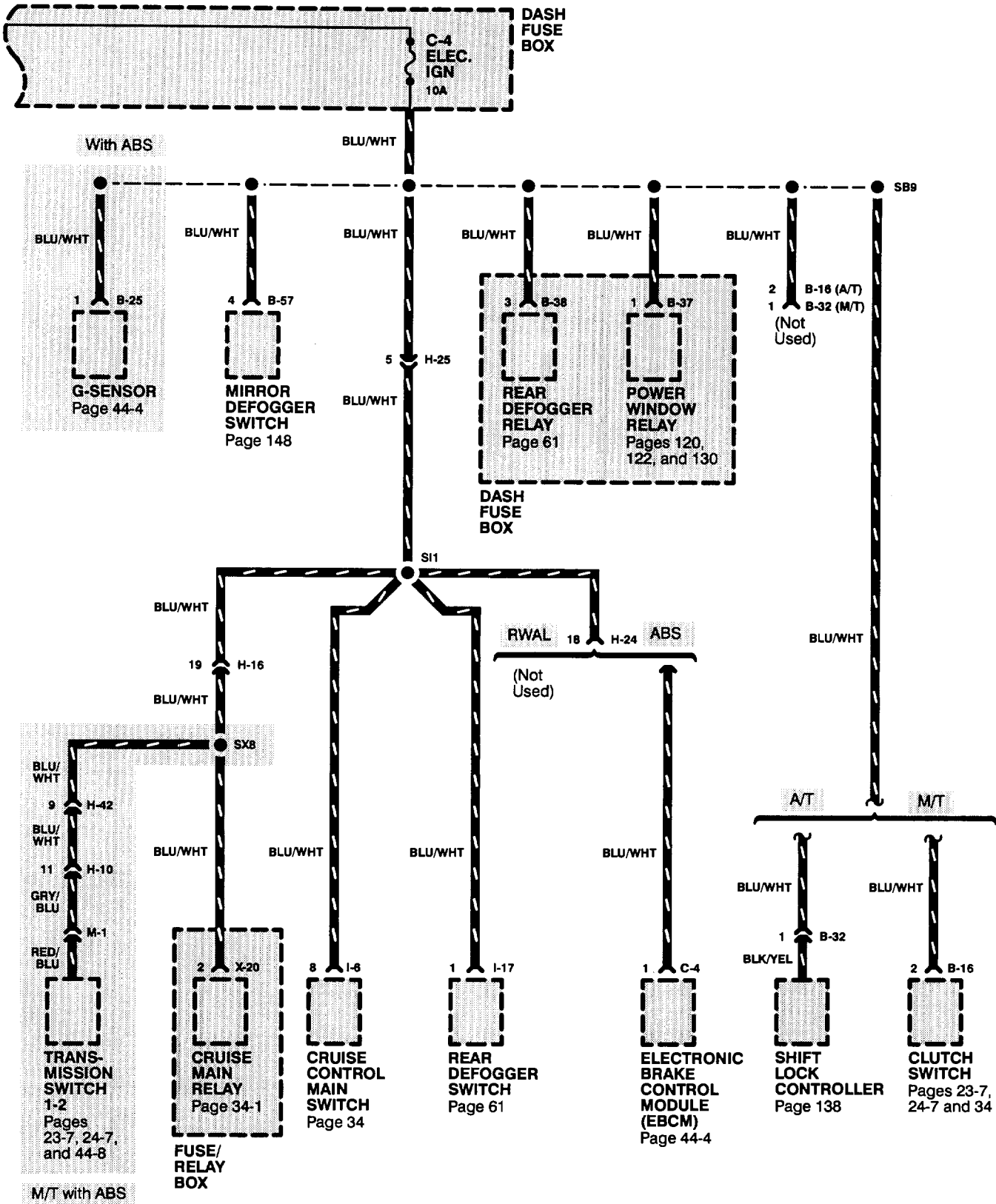
Component	Photo No.
ABS Hydraulic Unit	Right side of engine compartment 33
Anti-theft Horn	Right rear corner of engine compartment 41
Dash Fuse Box	Behind left dash side trim panel 58
ECM Main Relay	In fuse/relay box 37
Engine Control Module (ECM)	Behind front of front console 73
Fog Light Relay	In fuse/relay box 39
Fuel Pump Relay	In fuse/relay box 37
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Generator	Lower right front of engine
Heater and A/C Relay	In dash fuse box 59
Horn Relay	In fuse/relay box 38
Lighting Relay	In fuse/relay box 34
Rear Wheel Anti-lock Brake Controller	Behind lower cluster assembly 75
SRS Fuse Box	On top of dash fuse box 58
Starter	Lower left rear of engine 24
Starter Relay	In fuse/relay box 36
Starter Switch	Underside of steering column 54
Taillight Relay	In fuse/relay box 36
Connector	
B-11 (8-WHT)	Below I/P, right of steering column 69
C-1 (24-BRN)	On engine module (ECM) 73
C-2 (32-BRN)	On engine module (ECM) 73
C-33 (3-GRY)	Right front corner of engine compartment 49
H-2 (2-GRY)	Right side of engine compartment 40
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket 82
H-14 (2-RED)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-42 (16-BLK)	Right front of engine compartment 31
H-49 (4-WHT)	In dash fuse box 58
Ground	
P-6	Right side of engine compartment, on rear of battery tray
P-7	Lower right front of engine compartment 25
P-10	Lower right side of engine compartment
Terminal	
P-2	In fuse/relay box 38

DASH FUSE BOX

Circuit Schematic

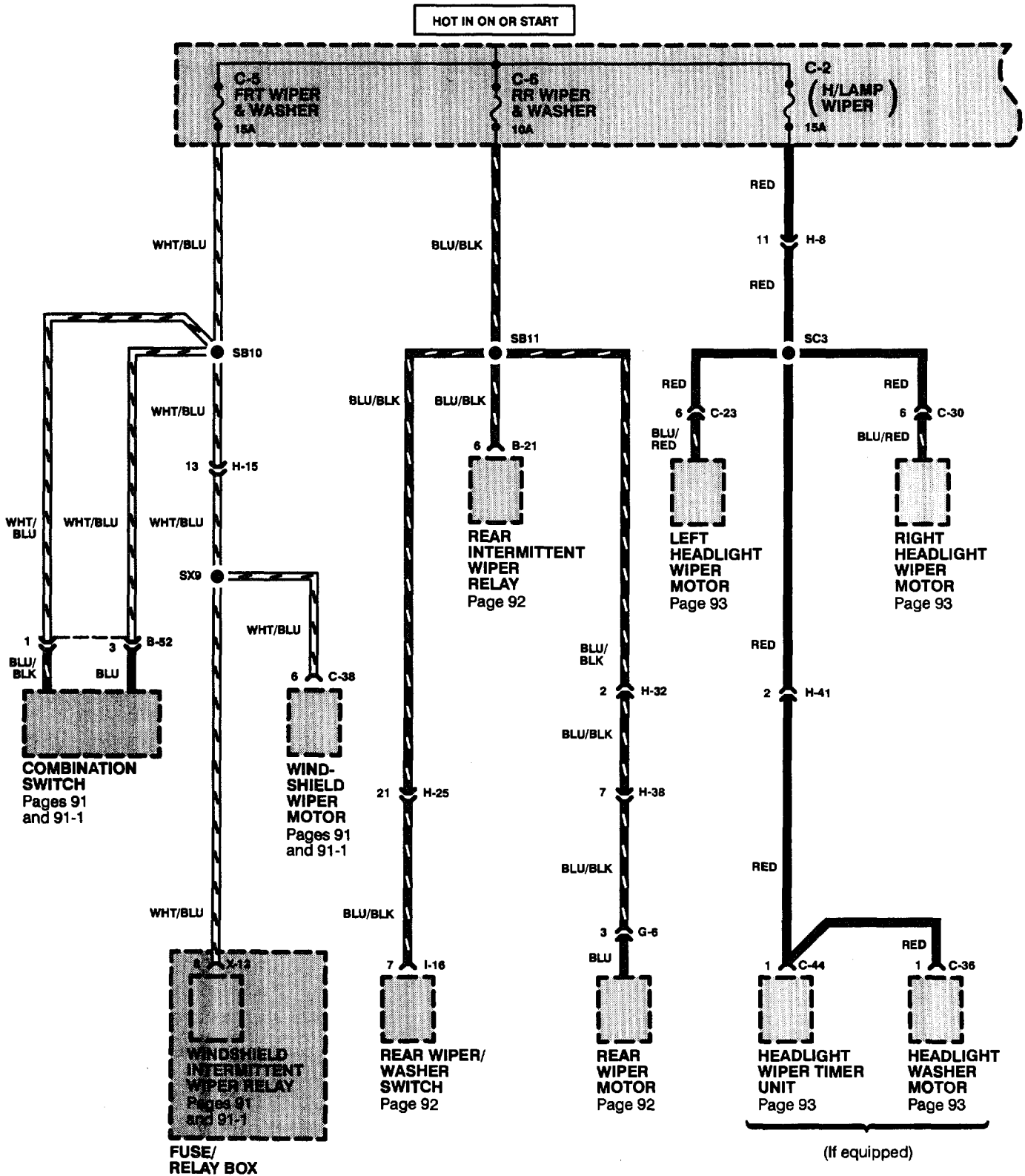


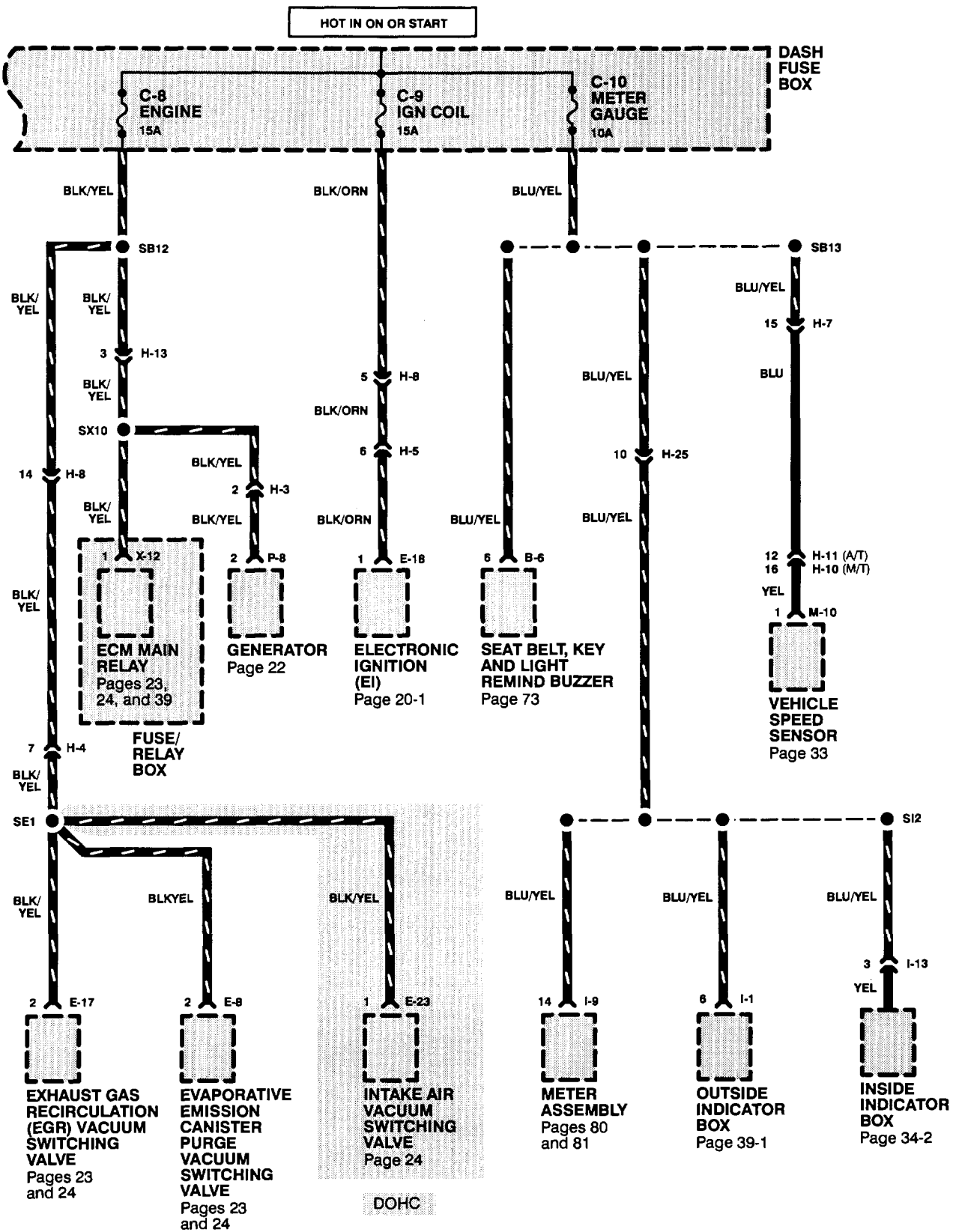
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DASH FUSE BOX

Circuit Schematic

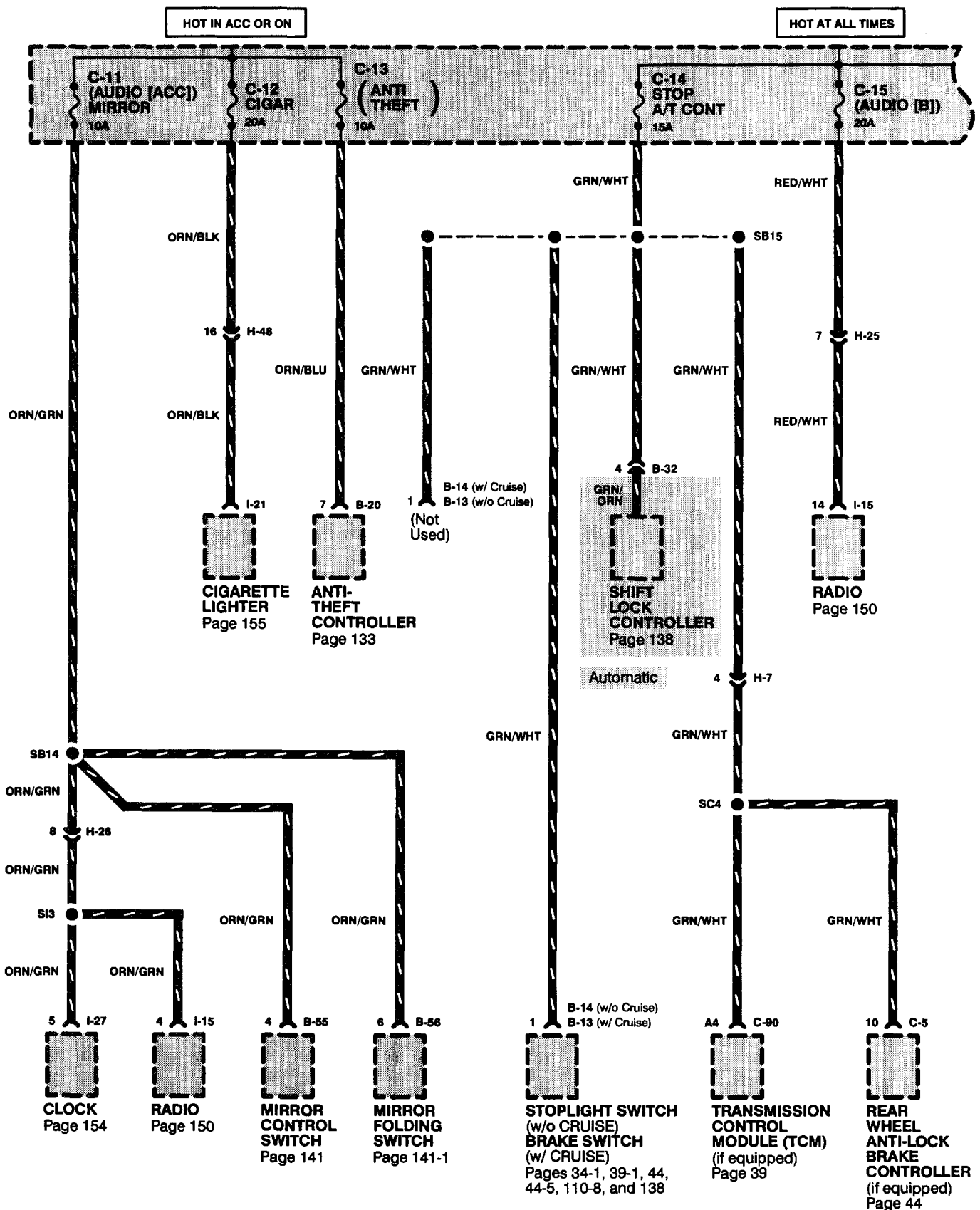




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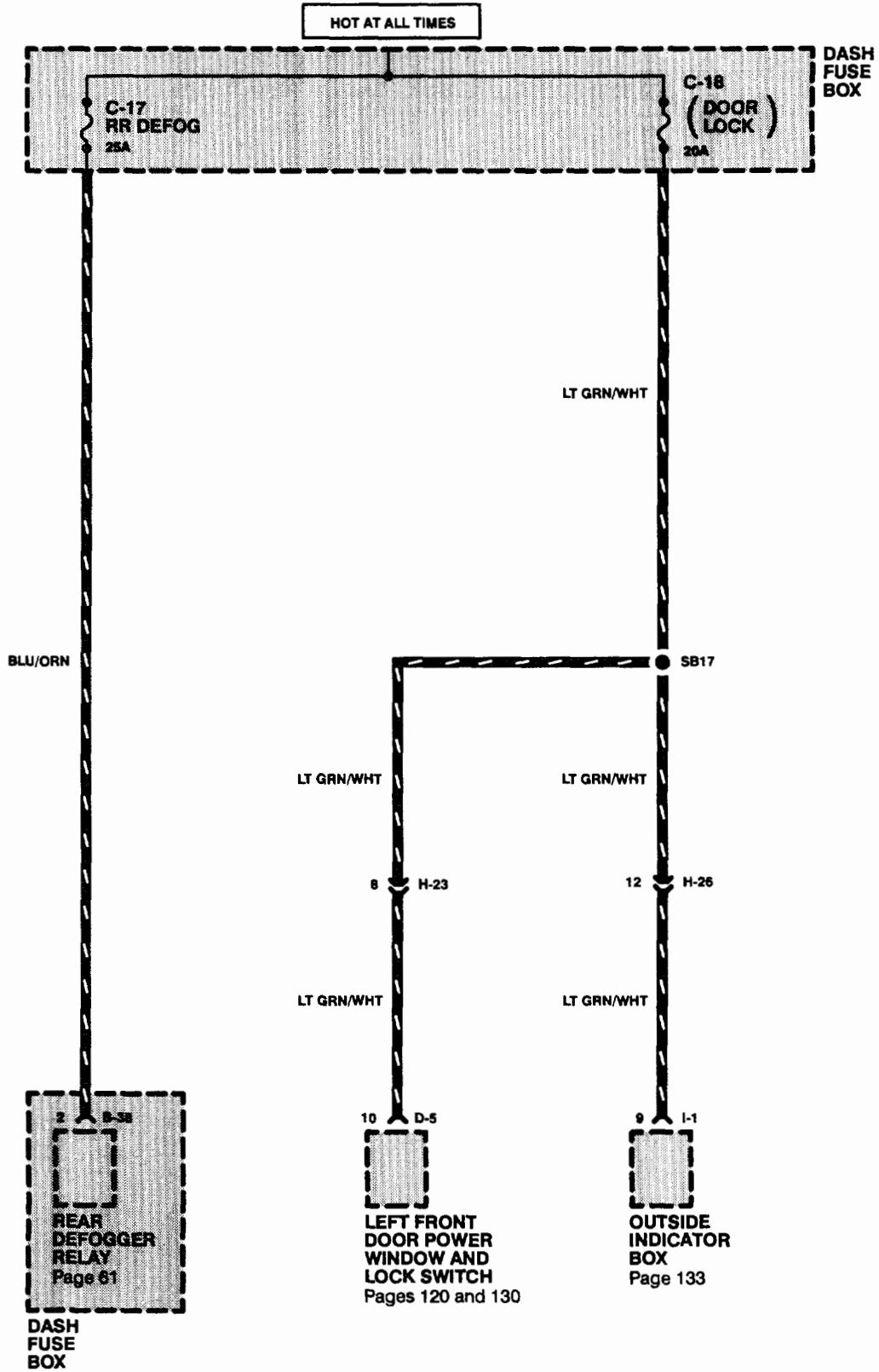
DASH FUSE BOX

Circuit Schematic

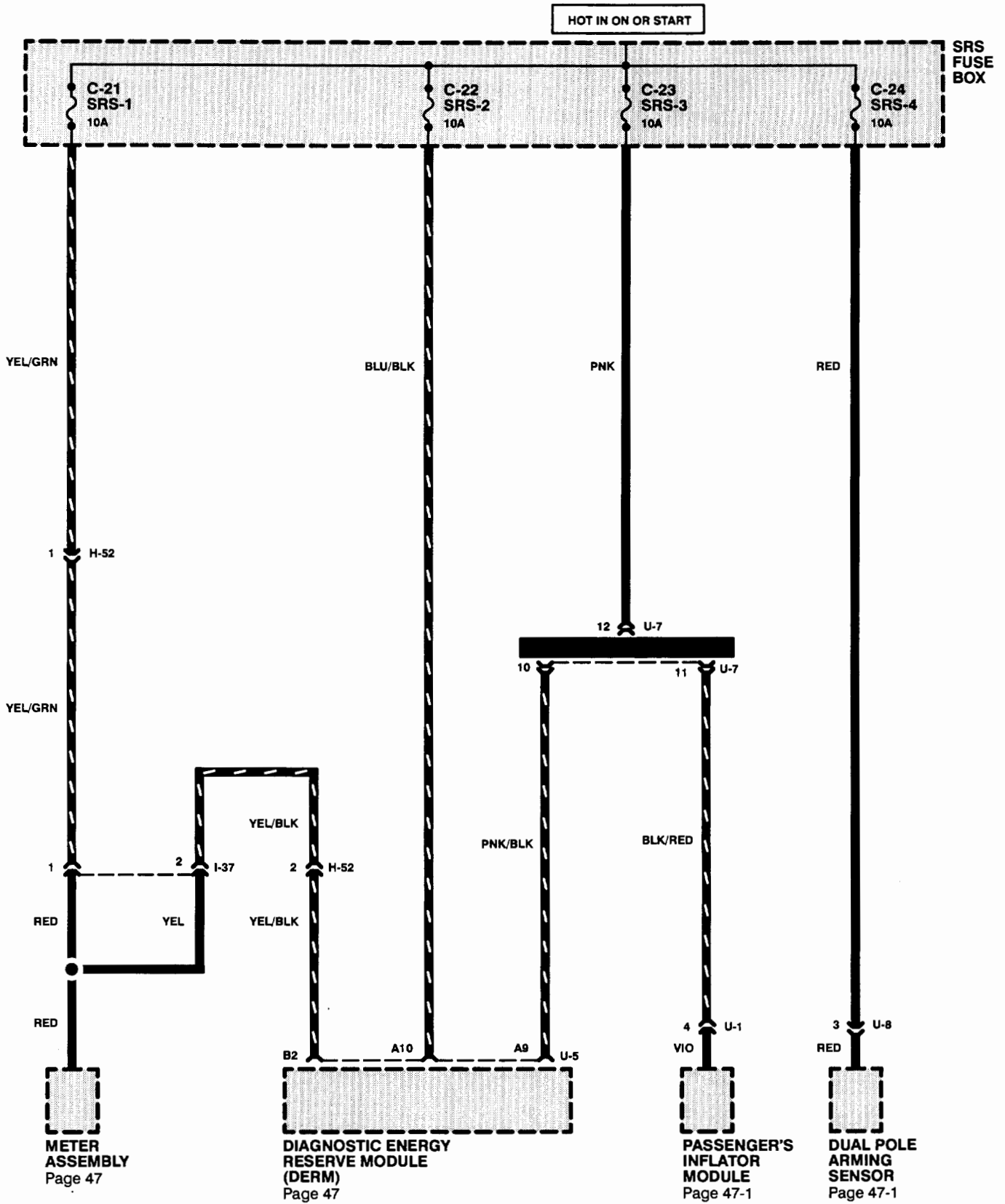


DASH FUSE BOX

Circuit Schematic



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DASH FUSE BOX

Component Location Index

(Refer to Section 201 for photographs.)

<u>Component</u>	<u>Photo No.</u>
A/T Shift Indicator Control	
Unit	Below I/P, left of steering column 67
Anti-theft Controller	Below left side of I/P 68
Auto Antenna	Inside right front fender 6
Automatic Transmission	
Mode Switch	Beneath vehicle, on left side of transmission 47
Back Up Light Switch	Beneath vehicle, on left side of transmission 44
Brake Switch	Below I/P, on brake pedal support 68
Clutch Start Switch	Below I/P, top of clutch pedal support 66
Clutch Switch	Below I/P, top of clutch pedal support 66
Cornering Relay	In fuse/relay box 37
Cruise Main Relay	In fuse/relay box 35
Dash Fuse Box	Behind left dash side trim panel 58
Diagnostic Energy Reserve	
Module (DERM)	Behind front of front console 72
Dual Pole Arming Sensor	Behind center of I/P, see Workshop Manual page 9J-122
ECM Main Relay	In fuse/relay box 37
Electronic Brake Control	
Module (EBCM)	Behind lower cluster assembly 74
Electronic Ignition (EI)	
(DOHC)	Top center rear of engine 15
Electronic Ignition (EI)	
(SOHC)	Center front of engine 9
Evaporative Emission	
Canister Purge Vacuum	
Switching Valve (DOHC)	Top left front of engine 13
Evaporative Emission	
Canister Purge Vacuum	
Switching Valve (SOHC)	Top left rear of engine 12
Exhaust Gas Recirculation	
(EGR) Vacuum Switching	
Valve (DOHC)	Top left rear of engine 15
Exhaust Gas Recirculation	
(EGR) Vacuum Switching	
Valve (SOHC)	Top left rear of engine 12
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
G-Sensor	Below rear of center console 79
Generator	Lower right front of engine
Headlight Washer Motor	Right side of engine compartment, in washer fluid reservoir 32
Headlight Wiper Timer Unit	Below right side of I/P 80
Intake Air Vacuum Switching	
Valve	Top right rear of engine 16
Left Headlight Wiper Motor	Behind left headlight assembly 5
Passenger's Inflator Module	Behind right side of I/P 81
Power Window Relay	In dash fuse box 59
Rear Defogger Relay	In dash fuse box 59
Rear Intermittent Wiper	
Relay	Behind left dash side trim panel, in access hole 57

Component Location Index

(Refer to Section 201 for photographs.)

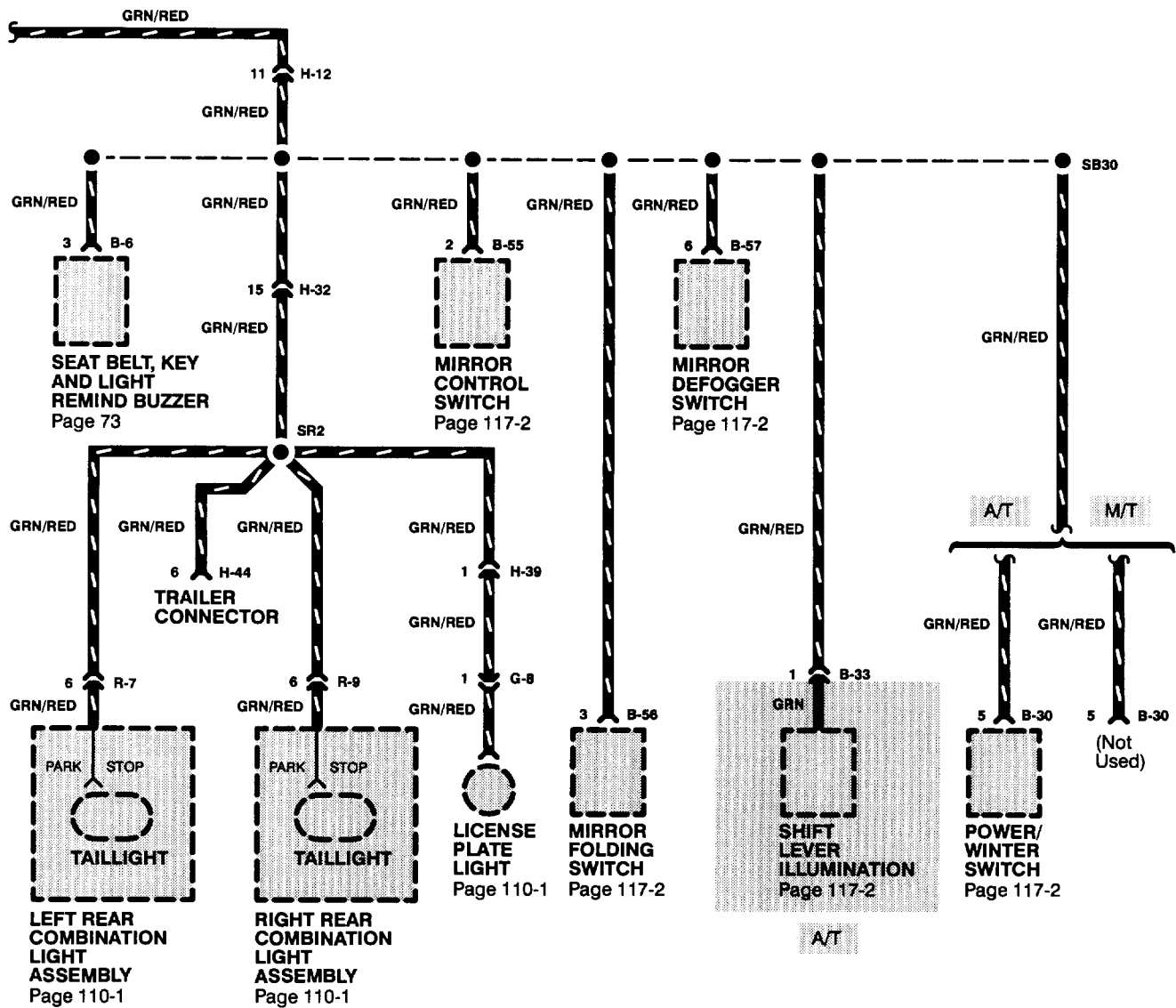
Component (cont'd)	Photo No.
Rear Wheel Anti-lock Brake	
Controller	Behind lower cluster assembly 75
Rear Wiper Motor	Inside left tailgate door, behind trim pad 104
Right Headlight Wiper Motor	Behind right headlight assembly 5
Seat Belt, Key and Light	
Remind Buzzer	Behind right dash side trim panel 86
Shift Lock Controller	Below front console 77
Starter Relay	In fuse/relay box 36
Starter Switch	Underside of steering column 54
Stop Light Switch	Below I/P, on brake pedal support 68
SRS Fuse Box	On top of dash fuse box 58
Transmission Control Module (TCM)	Below left side of I/P 65
Transmission Switch 1-2	Beneath vehicle, on left side of transmission 43
Vehicle Speed Sensor	Beneath center of vehicle, on rear of transmission 45
Windshield Intermittent	
Wiper Relay	In fuse/relay box 38
Windshield Wiper Motor	Right rear corner of engine compartment 41
Connector	
B-8 (2-WHT)	Below right side of I/P, behind cruise control unit 85
B-11 (8-WHT)	Below I/P, right of steering column 69
B-13 (4-WHT) (w/o cruise)	Below left side of I/P, above brake pedal 68
B-14 (2-BLK) (w/cruise)	Below left side of I/P, above brake pedal 68
B-16 (2-WHT) (A/T)	Below I/P, left of steering column 67
B-17 (2-BLK) (A/T)	Below I/P, left of steering column 67
B-32 (6-WHT)	Below rear of front console 78
B-52 (14-BLK)	Below I/P, right of steering column 69
C-23 (6-GRY)	Below left side of front bumper 5
C-30 (6-GRY)	Behind right side of front bumper 5
C-43 (8-BLK)	Left front of engine compartment 27
C-90 (24-BLU)	On transmission control module (TCM) 65
D-5 (10-BLK)	On left front door power window and lock switch
D-7 (2-BLK)	Inside left front door, behind trim panel 90
D-18 (2-BLK)	Inside right front door, behind trim panel 90
D-24 (2-BLK)	Inside rear of left rear door, behind door courtesy light 96
D-29 (2-BLK)	Inside rear of right rear door, behind door courtesy light 96
E-18 (2-BLK) (DOHC)	On left side of electronic ignition (EI) 15
E-18 (2-BLK) (SOHC)	On right side of electronic ignition (EI) 9
G-6 (4-WHT)	Inside left tailgate door, behind trim pad 104
H-3 (2-BLK)	Right side of engine compartment 40
H-4 (12-BLU)	Left side of engine compartment 30
H-5 (16-GRN)	Left side of engine compartment 30
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-11 (12-BLK)	Left front of engine compartment 27
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 82
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket 82

DASH FUSE BOX

Component Location Index

(Refer to Section 201 for photographs.)

<u>Connector (cont'd)</u>	<u>Photo No.</u>
H-15 (14-WHT)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-18 (18-WHT)	Behind right dash side trim panel, in access hole 87
H-21 (4-WHT)	Below I/P, above right dash side trim panel, on bracket 82
H-22 (18-WHT)	Behind left dash side trim panel, in access hole 87
H-23 (8-BLK)	Behind left dash side trim panel, in access hole 87
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-26 (20-WHT)	Below I/P, above left dash side trim panel, on bracket 62
H-28 (6-WHT)	In left center pillar 94
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat 120
H-34 (6-WHT)	In right center pillar 94
H-38 (10-WHT)	Left rear of luggage room 102
H-41 (12-BLU) (RWAL)	Right front of engine compartment 31
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
H-42 (16-BLK)	Right front of engine compartment 31
H-45 (6-BLK)	Center of roof, above map lights 98
H-46 (6-WHT)	Below left side of left front seat 120
H-47 (6-WHT)	Below right side of right front seat 125
H-48 (16-BLK)	Behind right dash side trim panel 86
H-49 (4-WHT)	In dash fuse box 58
H-52 (3-YEL)	Below I/P, above left dash side trim panel, on bracket 64
I-9 (16-BLK)	On left rear of meter assembly 53
I-13 (6-WHT)	Behind left side of I/P 52
I-37 (3-YEL)	Behind left side of meter assembly 53
L-2 (1-WHT)	Center front of roof, above map lights 98
L-3 (2-WHT)	Center of roof, above dome light 99
M-1 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-8 (1-CLR)	Beneath center of vehicle, top left side of transmission 44
R-6 (3-WHT)	Center rear of roof 100
T-2 (2-WHT)	Underside of driver's seat 123
T-9 (2-WHT)	Underside of right front seat 127
U-1 (4-YEL)	Below right side of I/P 81
U-7 (12-YEL)	Below I/P, above left dash side trim panel, inside bracket 64
U-8 (7-YEL)	Below I/P, above left dash side trim panel, on bracket 64



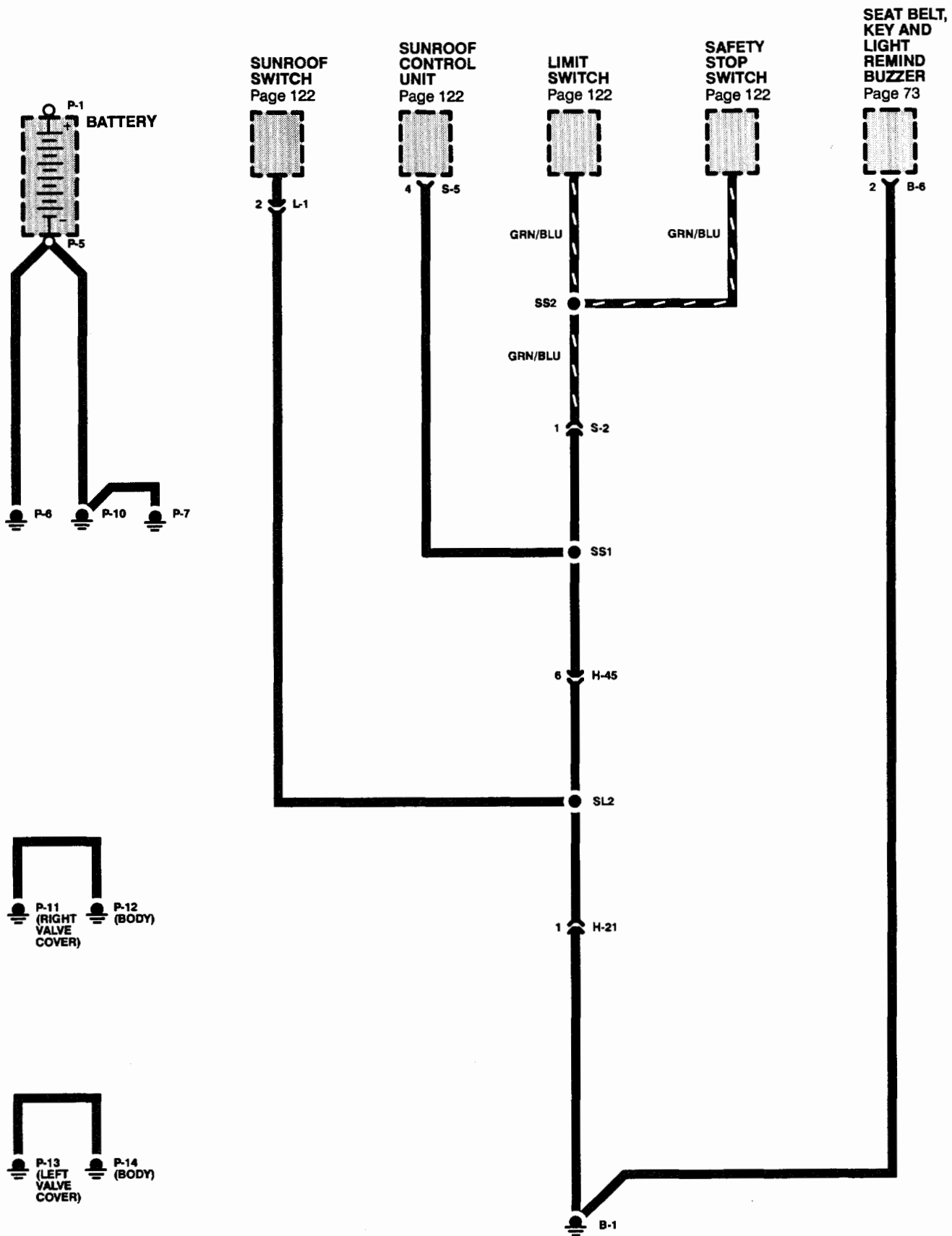
Component Location Index

(Refer to Section 201 for photographs.)

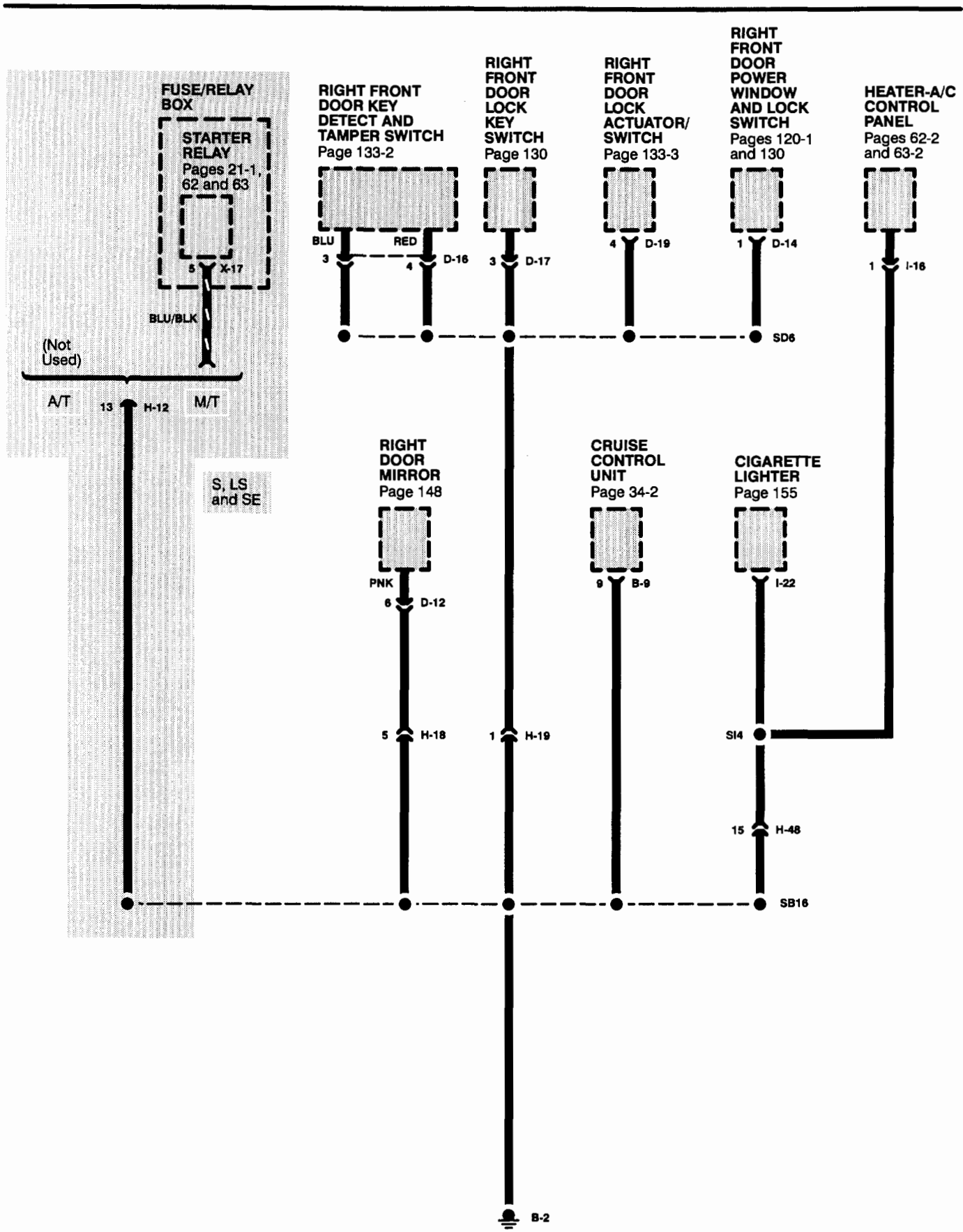
Component	Photo No.
A/T Shift Indicator	
Control Unit	Below I/P, left of steering column 67
Cornering Relay	In fuse/relay box 37
Diode Box B	In fuse/relay box 35
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Lighting Relay	In fuse/relay box 34
Seat Belt, Key and Light	
Remind Buzzer	Behind right dash side trim panel 86
Taillight Relay	In fuse/relay box 36
Trailer Connector	
H-44 (6-WHT)	Below left rear of vehicle, behind grommet 117
Upshift Relay-1	In fuse/relay box 34
Connector	
B-12 (16-BLK/WHT)	Below I/P, right of steering column 69
B-30 (6-WHT) (M/T)	Below rear of front console 78
B-33 (2-WHT/BLK)	Below rear of front console 3
C-22 (4-GRY)	Behind left front combination light assembly 3
C-31 (4-GRY)	Behind right front combination light assembly 108
G-8 (2-WHT)	Inside right tailgate door, behind trim pad 82
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 86
H-16 (22-WHT)	Behind right dash side trim panel 120
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (16-BLK) (with Power Door Locks)	Below left front seat 109
H-39 (2-WHT)	Right rear of luggage room 31
H-41 (12-BLU) (RWAL)	Right front of engine compartment 53
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 71
I-19 (2-WHT)	Behind cigarette lighter 71
I-20 (2-BLU/WHT)	Behind cigarette lighter 76
I-23 (6-WHT)	On rear of heater-A/C control panel 83
I-24 (2-WHT)	Below right side of I/P, above glove box 118
R-7 (6-WHT/BLK)	Behind left taillight assembly 118
R-9 (6-WHT/BLK)	Behind right taillight assembly 62
Ground	
B-19	Behind top of left dash side trim panel

GROUND DISTRIBUTION: B-1, B-2, P-6, P-7, P-10, P-11, P-12, P-13, AND P-14

Circuit Schematic



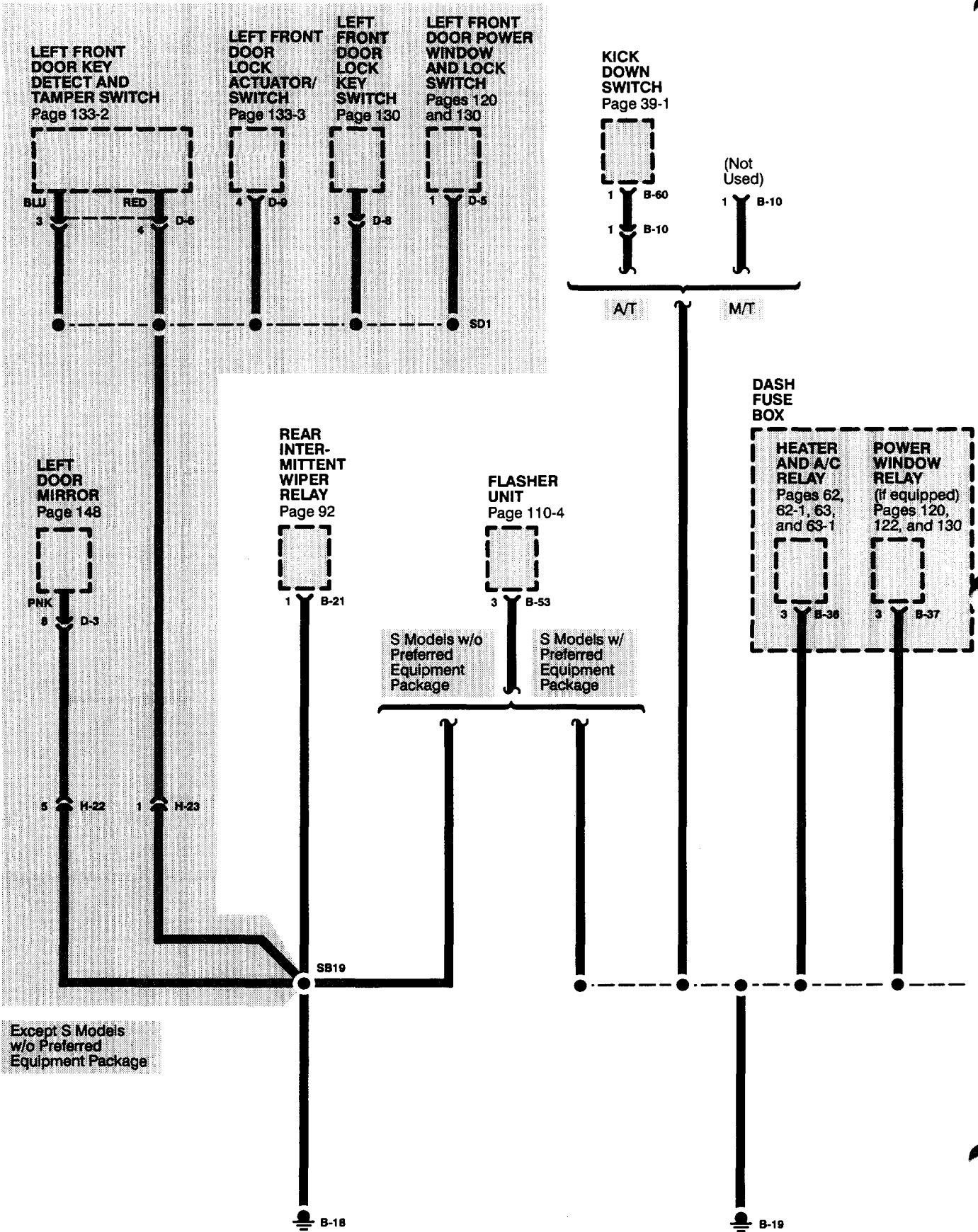
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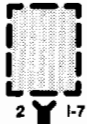
GROUND DISTRIBUTION: B-18 AND B-19

Circuit Schematic



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ILLUMINATION CONTROLLER
Page 117-1



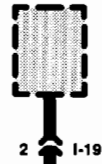
REAR DEFOGGER SWITCH
Page 61



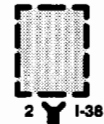
METER ASSEMBLY
Page 110-5



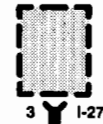
ASHTRAY ILLUMINATION
Page 117



GLOVE BOX SWITCH
Page 117



CLOCK
Page 154



HEADLIGHT WIPER SWITCH
(if equipped)
Page 93

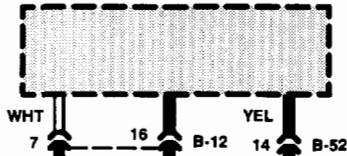


INSIDE INDICATOR BOX
Page 34-2

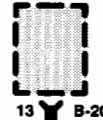


16 H-25

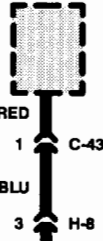
COMBINATION SWITCH
Pages 12, 91-1 and 100



ANTI-THEFT CONTROLLER
Page 133



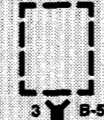
AUTOMATIC TRANSMISSION MODE SWITCH
Pages 21, 62-1 and 63-1



LIMITED and RS

S, LS and SE

MIRROR DEFOGGER SWITCH
Page 148



MIRROR FOLDING SWITCH
Page 141-1



MIRROR CONTROL SWITCH
Page 141



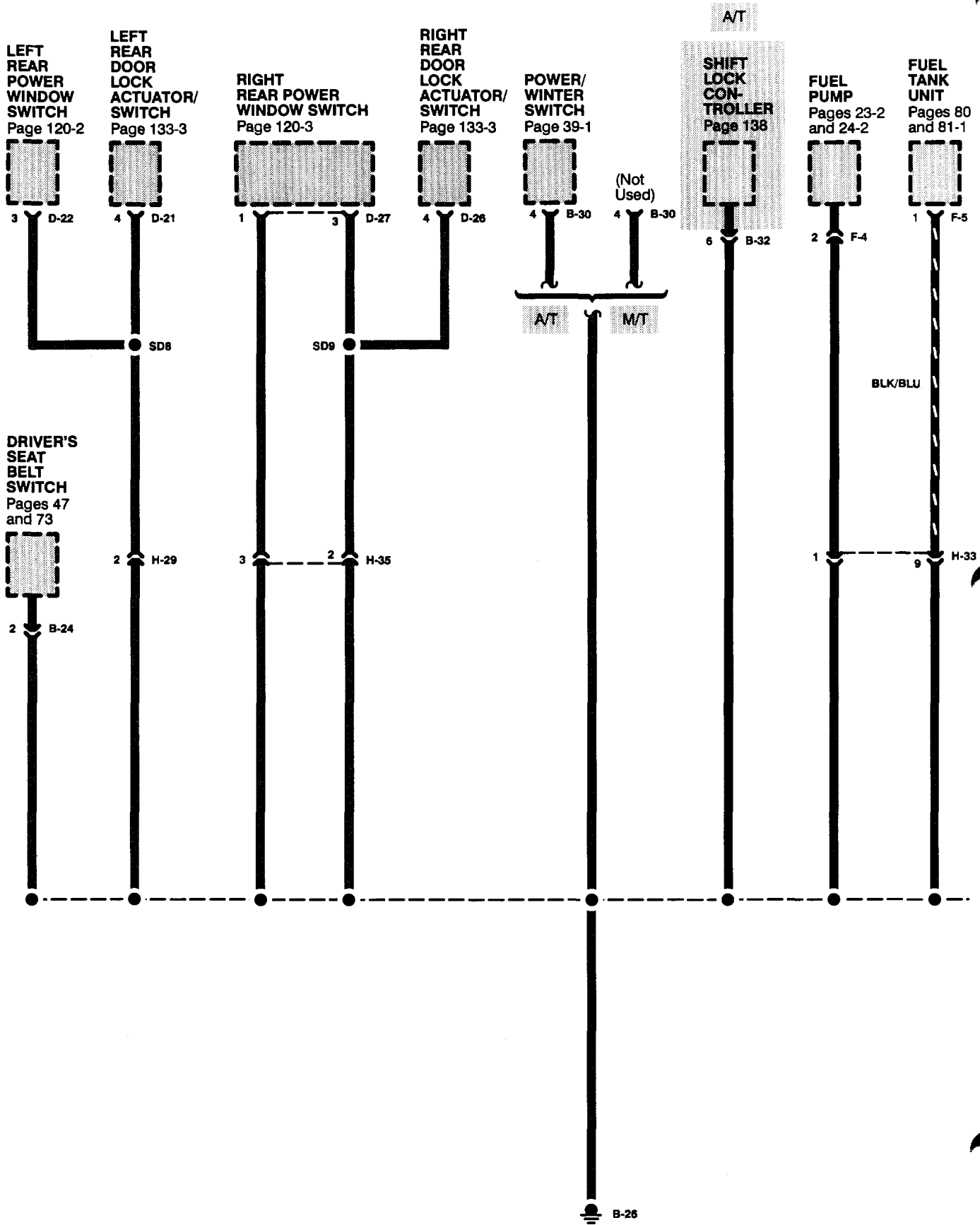
SB20

Except S Models
w/o Preferred
Equipment Package

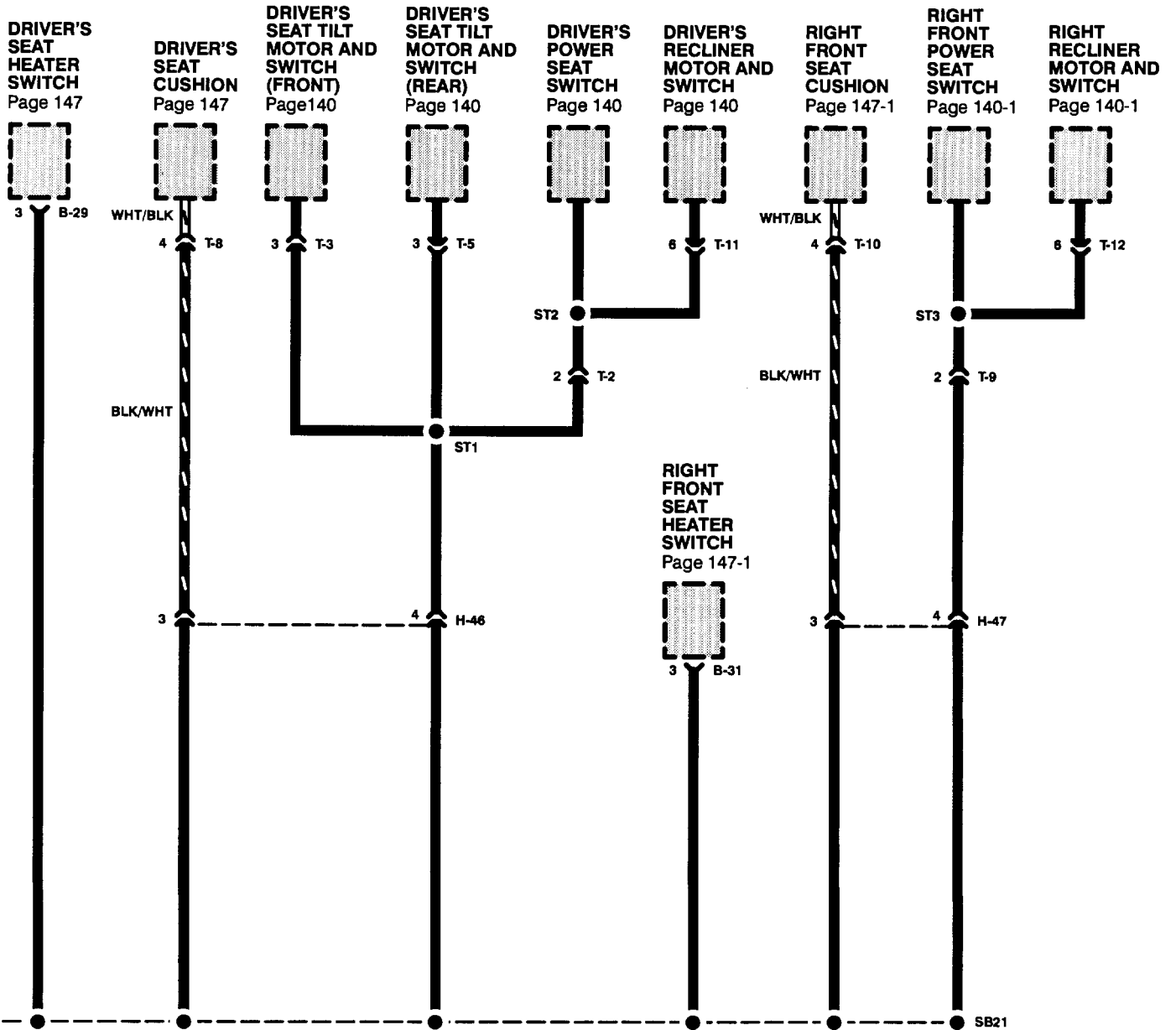
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GROUND DISTRIBUTION: B-26

Circuit Schematic



SE and LIMITED Models



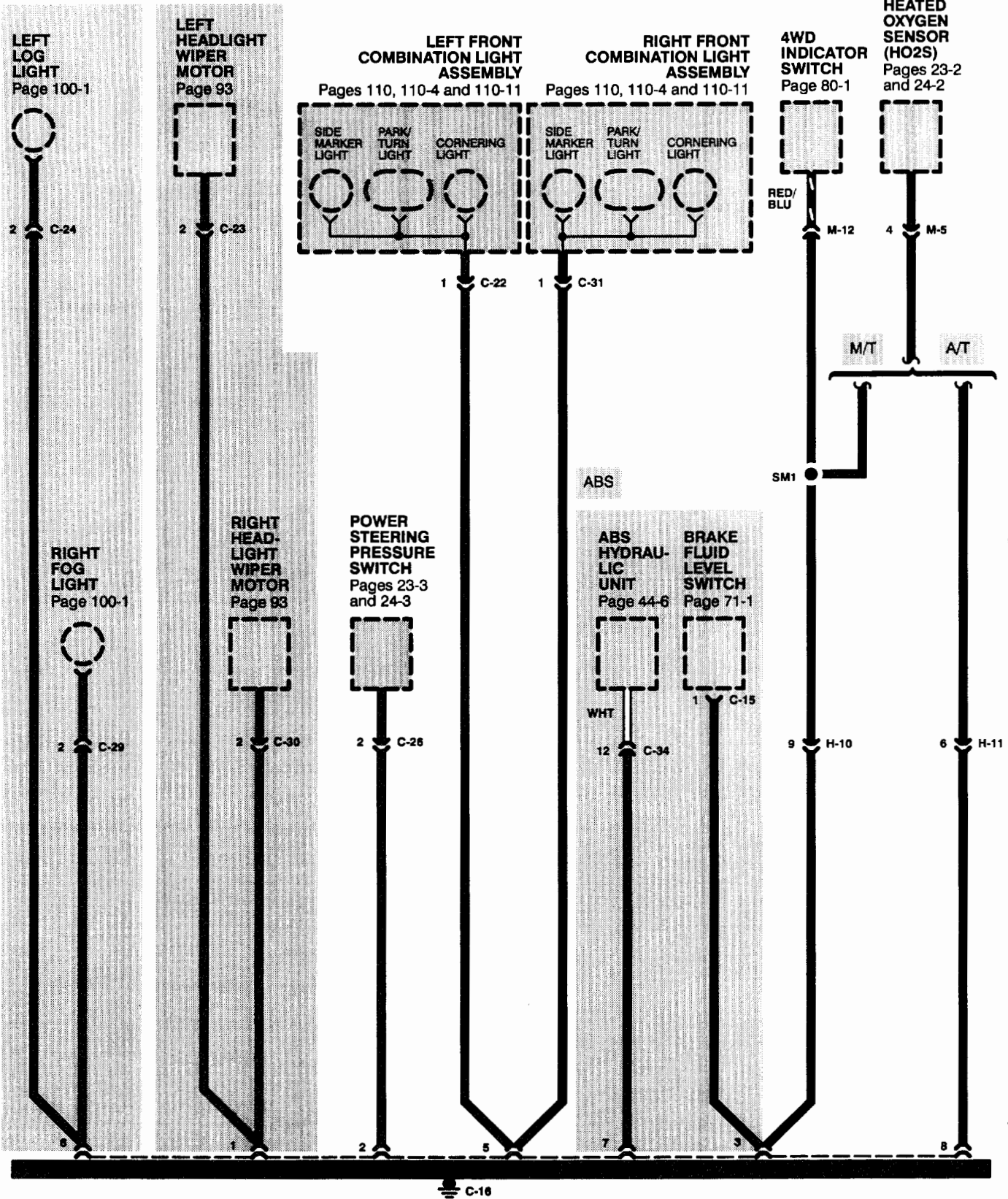
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GROUND DISTRIBUTION: C-16 AND C-39

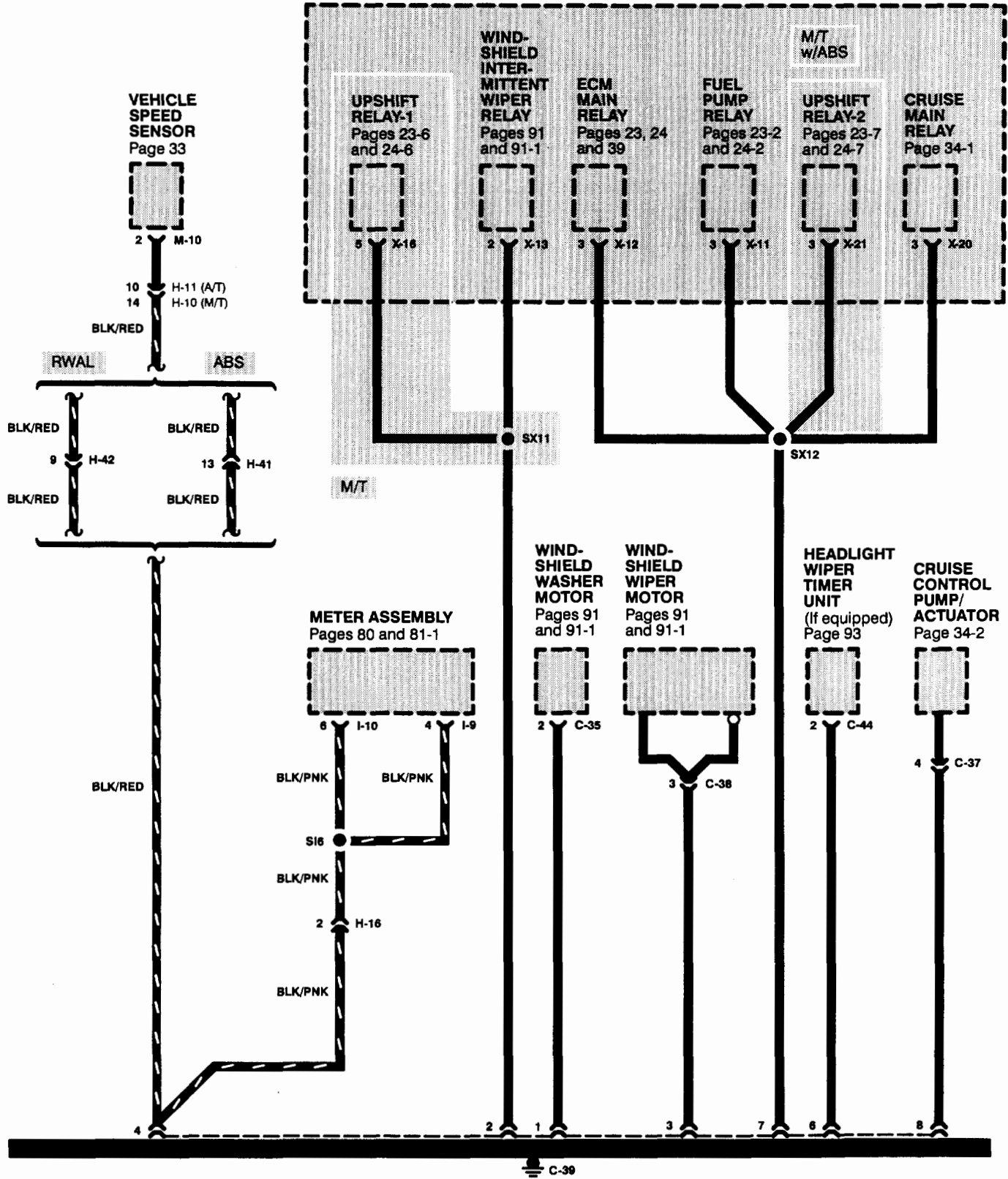
Circuit Schematic

SE, LIMITED
and RS Models

LIMITED and
RS Models



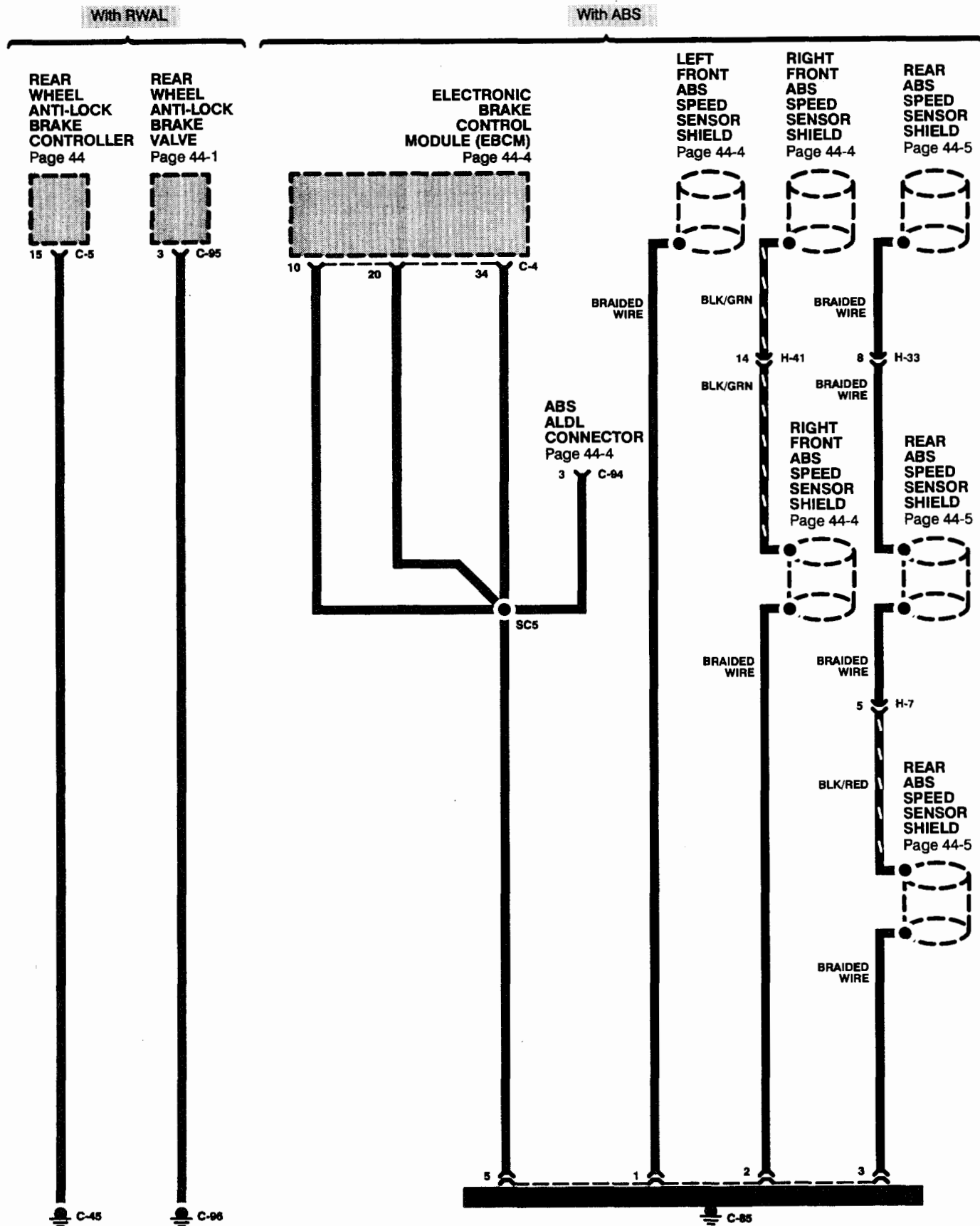
FUSE/RELAY BOX

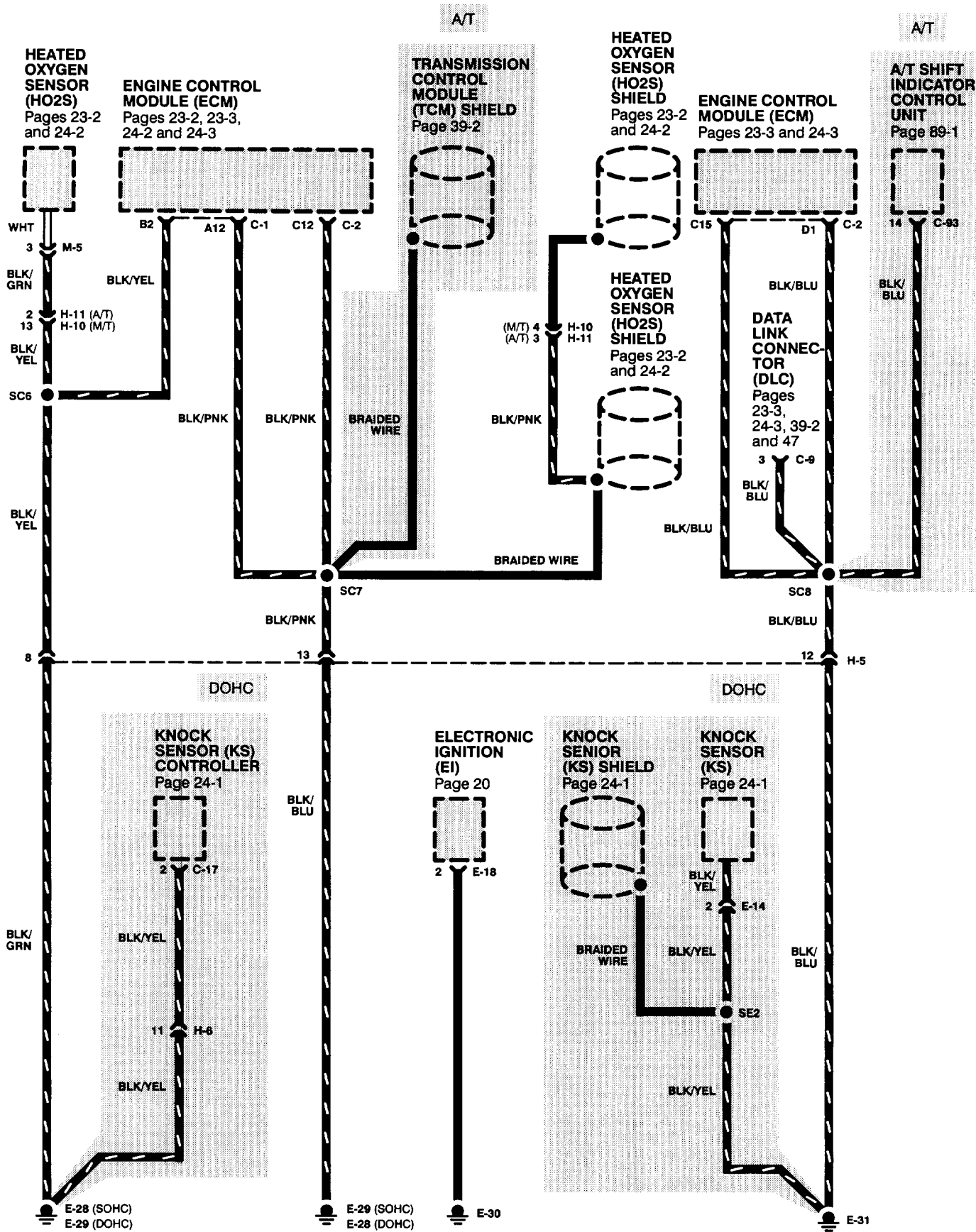


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GROUND DISTRIBUTION: C-45, C-85, C-96, E-28, E-29, E-30, AND E-31

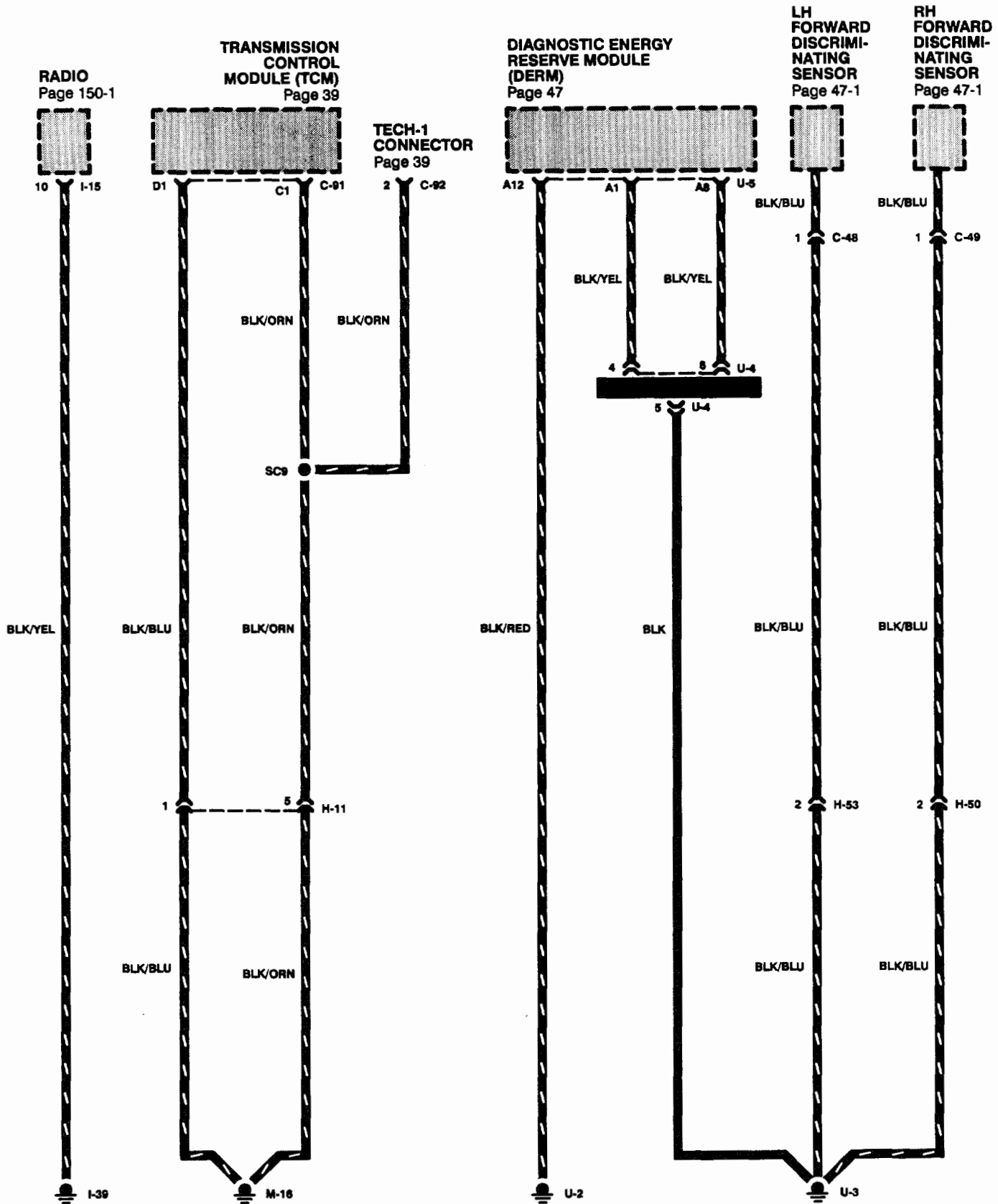
Circuit Schematic



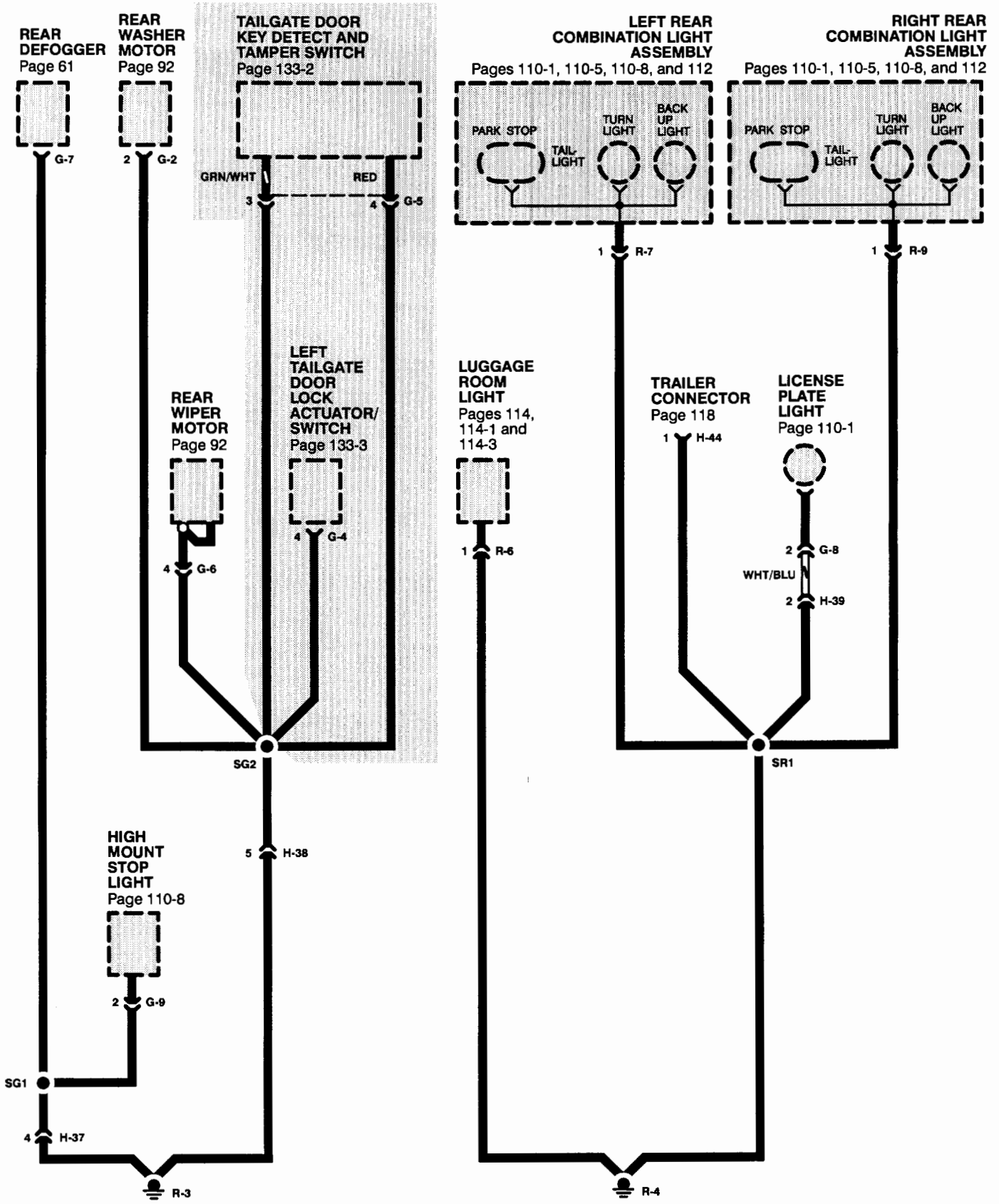


GROUND DISTRIBUTION: I-39, M-16, R-3, R-4, U-2 AND U-3

Circuit Schematic



LIMITED and RS Models



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GROUND DISTRIBUTION

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
4WD Indicator Switch	46
A/T Shift Indicator	
Control Unit	67
ABS ALDL Connector	
C-94 (3-ORN)	55
ABS Hydraulic Unit	33
Anti-theft Controller	68
Automatic Transmission	
Mode Switch	47
Brake Fluid Level Switch	28
Cruise Control	
Pump/Actuator	40
Cruise Control Unit	84
Cruise Main Relay	35
Dash Fuse Box	58
Data Link Connector	
(DLC) C-9 (3-WHT)	55
Diagnostic Energy Reserve	
Module (DERM)	72
Driver's Recliner Motor	
and switch	
Driver's Seat Belt Switch	
Driver's Seat Tilt Motor	
and Switch (Front)	121
Driver's Seat Tilt Motor	
and Switch (Rear)	121
ECM Main Relay	37
Electronic Brake Control	
Module (EBCM)	74
Electronic Ignition (EI)	
(DOHC)	15
Electronic Ignition (EI)	
(SOHC)	9
Engine Control Module	
(ECM)	73
Flasher Unit	60
Fuel Pump	
Fuel Pump Relay	37
Fuel Tank Unit	115
Fuse/Relay Box	33
Glove Box Switch	
Headlight Wiper Timer Unit	80
Heated Oxygen Sensor	
(HO2S)	47
Heater and A/C Relay	59
Kick Down Switch	70
Knock Sensor (KS)	
Knock Sensor (KS)	
Controller	30

Component Location Index

(Refer to Section 201 for photographs.)

Component (cont'd)	Photo No.
Left Front Door Key Detect	
And Tamper Switch	Inside left front door, part of outside handle assembly 92
Left Front Door Lock	
Actuator/Switch	Inside rear of left front door, behind trim pad 93
Left Front Door Lock	
Key Switch	Inside left front door, part of door lock assembly 93
Left Headlight Wiper Motor . . .	Behind left headlight assembly 5
Left Rear Door Lock	
Actuator/Switch	Inside of left rear door, behind trim pad 97
Left Tailgate Door Lock	
Actuator/Switch	Inside left tailgate door, behind trim pad 104
LH Forward Discriminating	
Sensor	Mounted to left side of radiator support 51
Limit Switch	Right rear underside of roof
Power Steering Pressure	
Switch	Lower right front of engine compartment 22
Power Window Relay	In dash fuse box 59
Rear Intermittent Wiper	
Relay	Behind left dash side trim panel, in access hole 57
Rear Washer Motor	Inside left tailgate door, behind trim pad 106
Rear Wheel Anti-lock Brake	
Controller	Behind lower cluster assembly 75
Rear Wheel Anti-lock Brake	
Valve	Right front of engine compartment 21
Rear Wiper Motor	Inside left tailgate door, behind trim pad 104
RH Forward Discriminating	
Sensor	Mounted to right side of radiator support 50
Right Front Door Key Detect	
And Tamper Switch	Inside right front door, part of outside handle assembly 92
Right Front Door Lock	
Actuator/Switch	Inside rear of right front door, behind trim pad 93
Right Front Door Lock	
Key Switch	Inside rear of right front door, part of door lock assembly 93
Right Headlight Wiper Motor . .	Behind right headlight assembly 5
Right Rear Door Lock	
Actuator/Switch	Inside of right rear door, behind trim pad 97
Right Recliner Motor	
and Switch	In right front seatback
Safety Stop Switch	Rear underside of roof 101
Seat Belt, Key And Light	
Remind Buzzer	Behind right dash side trim panel 86
Shift Lock Controller	Below front console 77
Starter Relay	In fuse/relay box 36
Sunroof Control Unit	Rear underside of roof 101
Tailgate Door Key Detect	
And Tamper Switch	Inside left tailgate door, behind trim pad 105
Tech-1 Connector C-92	
(2-WHT)	Behind left I/P lower cover 55

GROUND DISTRIBUTION

Component Location Index

(Refer to Section 201 for photographs.)

Component (cont'd)	Photo No.
Trailer Connector H-44 (6-WHT)	Below left rear of vehicle, behind grommet 117
Transmission Control Module (TCM)	Below left side of I/P 65
Upshift Relay-1	In fuse/relay box 34
Upshift Relay-2	In fuse/relay box 34
Vehicle Speed Sensor	Beneath center of vehicle, on rear of transmission 45
Windshield Intermittent Wiper Relay	In fuse/relay box 38
Windshield Washer Motor	Right side of engine compartment, in washer fluid reservoir 32
Windshield Wiper Motor	Right rear corner of engine compartment 41
Connector	
B-10 (2-WHT)	Below I/P, right of steering column 70
B-12 (16-BLK/WHT)	Below I/P, right of steering column 69
B-24 (3-BLK)	Below left front seat 119
B-32 (6-WHT)	Below rear of front console 78
B-52 (14-BLK)	Below I/P, right of steering column 69
C-1 (24-BRN)	On engine control module (ECM) 73
C-2 (32-BRN)	On engine control module (ECM) 73
C-22 (4-GRY)	Behind left front combination light assembly 3
C-23 (6-GRY)	Behind left side of front bumper 5
C-24 (2-GRY)	Behind left fog light 4
C-26 (2-BLK)	Lower right front of engine compartment, below battery tray
C-29 (2-GRY)	Behind right fog light 4
C-30 (6-GRY)	Behind right side of front bumper 5
C-31 (4-GRY)	Behind right front combination light assembly 3
C-34 (12-GRY)	Right front corner of engine compartment 49
C-37 (4-GRY)	Right rear corner of engine compartment 40
C-38 (6-WHT)	Right rear of engine compartment 41
C-43 (8-BLK)	Left front of engine compartment 27
C-48 (2-YEL)	Behind left headlight 51
C-49 (2-YEL)	Below right side of radiator support 50
C-91 (32-BLU)	On transmission control module (TCM) 65
D-3 (8-WHT)	In top of left front door 91
D-5 (10-BLK)	On left front door power window and lock switch
D-6 (4-GRY)	Inside left front door, behind trim pad 92
D-8 (3-WHT)	Inside left front door, behind trim pad 93
D-12 (8-WHT)	In top of right front door 91
D-16 (4-GRY)	Inside right front door, behind trim pad 92
D-17 (3-WHT)	Inside right front door, behind trim pad 93
E-14 (2-BLK)	Right rear of engine 17
E-18 (2-BLK) (DOHC)	On left side of electronic ignition (EI) 15
E-18 (2-BLK) (SOHC)	On right side of electronic ignition (EI) 9
F-4 (2-BLK)	Beneath rear of vehicle, right of fuel tank 114
G-5 (4-GRY)	Inside left tailgate door, behind trim pad 105
G-6 (4-WHT)	Inside left tailgate door, behind trim pad 104
G-7 (1-BLK)	On right side of glass, in left tailgate door 106
G-8 (2-WHT)	Inside right tailgate door, behind trim pad 108
G-9 (2-WHT/BLK)	Inside top center of left tailgate door 110

Component Location Index

(Refer to Section 201 for photographs.)

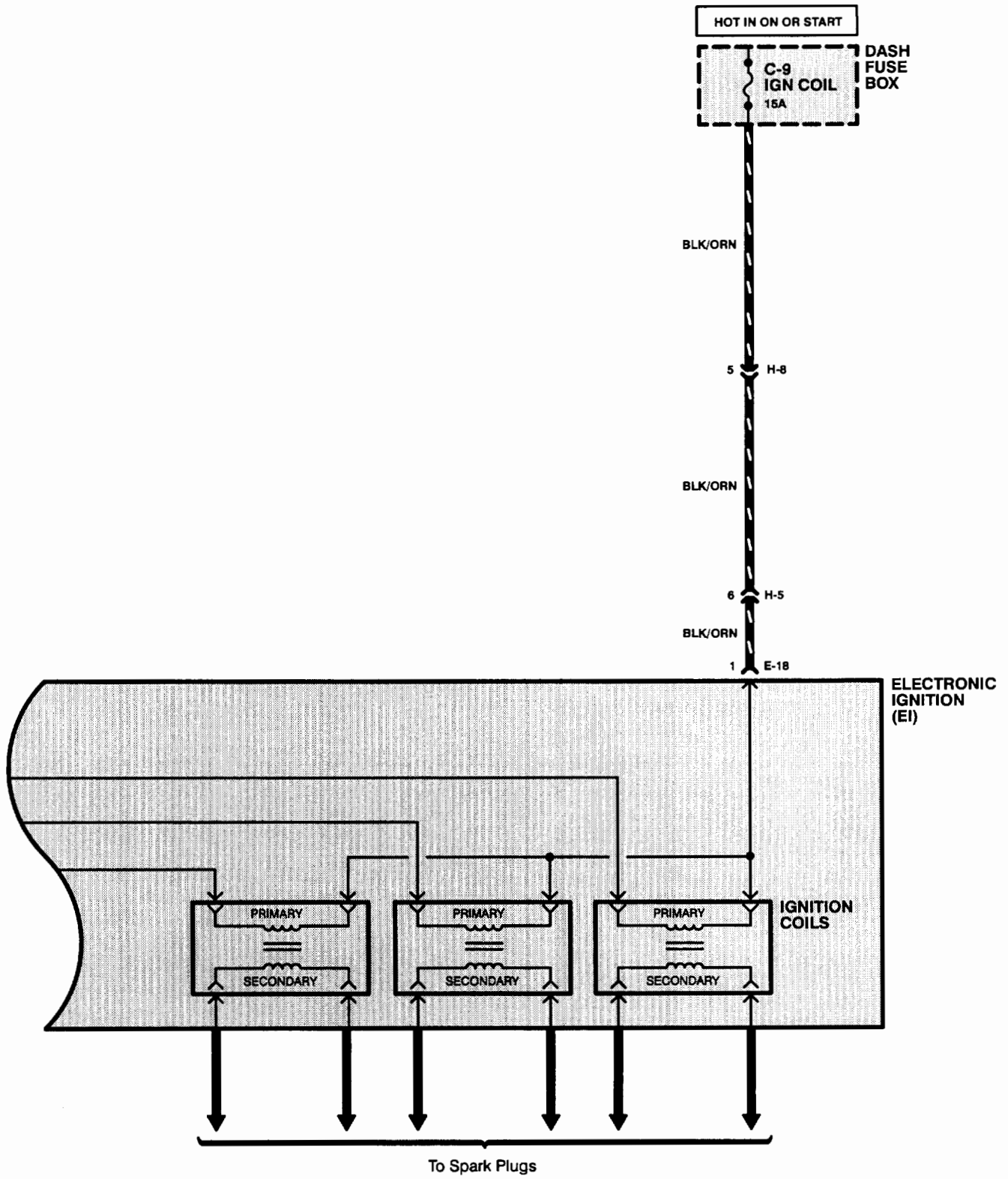
Connector (cont'd)	Photo No.
H-5 (16-GRN)	Left side of engine compartment 30
H-6 (12-BLK)	Left side of engine compartment 30
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-11 (12-BLK)	Left front of engine compartment 27
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-18 (18-WHT)	Behind right dash side trim panel, in access hole 87
H-19 (8-BLK)	Behind right dash side trim panel, in access hole 87
H-21 (4-WHT)	Below I/P, above right dash side trim panel, on bracket 82
H-22 (18-WHT)	Behind left dash side trim panel, in access hole 87
H-23 (8-BLK)	Behind left dash side trim panel, in access hole 87
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-29 (3-BLU)	In left center pillar 94
H-33 (14-WHT)	In floor, below right front seat 125
H-35 (3-BLU)	In right center pillar 94
H-37 (4-GRY)	Left rear of luggage room 102
H-38 (10-WHT)	Left rear of luggage room 102
H-39 (2-WHT)	Right rear of luggage room 109
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
H-42 (16-BLK)	Right front of engine compartment 31
H-45 (6-BLK)	Center of roof, above map lights 98
H-46 (6-WHT)	Below left side of left front seat 120
H-47 (6-WHT)	Below right side of right front seat 125
H-48 (16-BLK)	Behind right dash side trim panel 86
H-50 (2-YEL)	Below right side of I/P 80
H-53 (2-YEL)	Below I/P, above left dash side trim panel, on bracket 64
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 53
I-13 (6-WHT)	Behind left side of I/P 52
I-18 (6-WHT)	On rear of heater-A/C control panel 76
I-19 (2-WHT)	Behind cigarette lighter 71
L-1 (3-WHT)	Center of roof, above map lights 98
M-5 (4-BLK)	Beneath center of vehicle, top left side of transmission 47
M-12 (1-WHT)	Beneath center of vehicle, top right side of transmission 46
R-6 (3-WHT)	Center rear of roof 100
R-7 (6-WHT/BLK)	Behind left taillight assembly 118
R-9 (6-WHT/BLK)	Behind right taillight assembly 118
S-2 (3-WHT)	Center of roof 101
S-5 (6-WHT)	On sunroof control unit 101
T-2 (2-WHT)	Underside of driver's seat 123
T-3 (3-WHT)	Underside of driver's seat 123
T-5 (3-GRY)	Underside of driver's seat 124
T-8 (4-WHT)	Underside of driver's seat 122
T-9 (2-WHT)	Underside of right front seat 127
T-10 (4-WHT)	Underside of right front seat 126
T-11 (6-BLU)	Underside of driver's seat 123
T-12 (6-BLU)	Underside of right front seat 127

GROUND DISTRIBUTION

Component Location Index

(Refer to Section 201 for photographs.)

Connector (cont'd)		Photo No.
U-4 (12-YEL)	Behind front of front console	72
Ground		
B-1	Above right dash side trim panel	84
B-2	Above right dash side trim panel	84
B-18	Behind top of left dash side trim panel	62
B-19	Behind top of left dash side trim panel	62
B-26	Below rear of center console	79
C-16	Left rear corner of engine compartment, on inner fender panel	28
C-39	Right rear corner of engine compartment, on inner fender panel	42
C-45	Below right side of front console	75
C-85	Below right side of front console	73
C-96	Right front of engine compartment	21
E-28 (DOHC)	Top center of engine	14
E-28 (SOHC)	Top center front of engine	9
E-29 (DOHC)	Top center of engine	14
E-29 (SOHC)	Top center front of engine	9
E-30 (DOHC)	Top left rear of engine	17
E-30 (SOHC)	Top center front of engine	9
E-31 (DOHC)	Top left rear of engine	17
E-31 (SOHC)	Top center front of engine	9
I-39	Behind right side of lower cluster assembly	74
M-16	Left underside of engine, top of oil pan	26
P-6	Right side of engine compartment, on rear of battery tray	
P-7	Lower right front of engine compartment	25
P-10	Lower right side of engine compartment	
P-11	On rear of right valve cover	19
P-12	Lower right rear of engine compartment	19
P-13	On rear of left valve cover	20
P-14	Left rear of engine compartment, on bulkhead	20
R-3	Left side of luggage room	103
R-4	Left side of luggage room	103
U-2	Below right side of front console	72
U-3	Below right side of front console	72



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IGNITION SYSTEM

Component Location Index

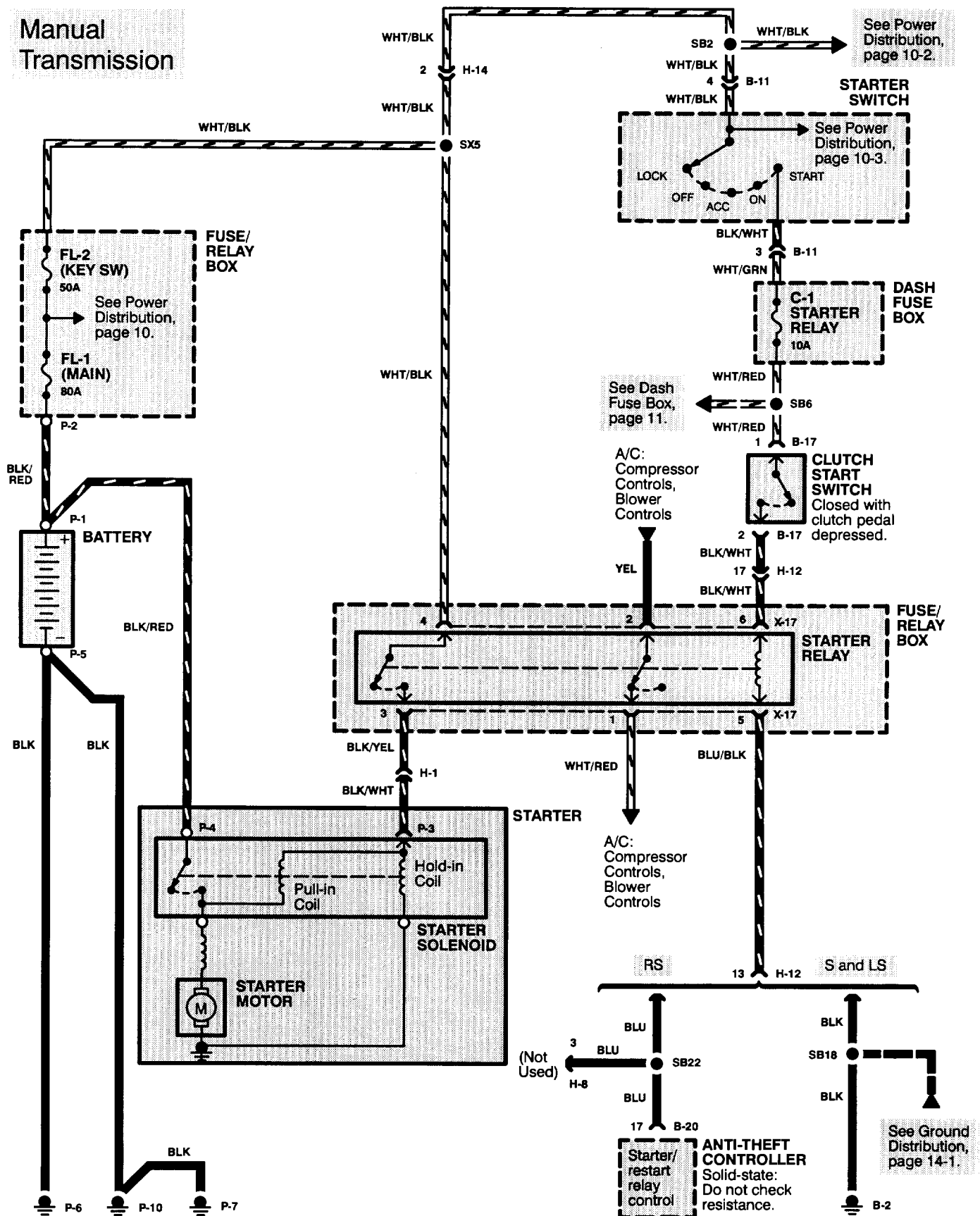
(Refer to Section 201 for photographs.)

Component	Photo No.
Crankshaft Position Sensor . . . Lower right side of engine, above oil pan	18
Dash Fuse Box Behind left dash side trim panel	58
Electronic Ignition (EI) (DOHC) Top center rear of engine	15
Electronic Ignition (EI) (SOHC) Center front of engine	9
Engine Control Module (ECM) Behind front of front console	73
Connector	
C-1 (24-BRN) On engine control module (ECM)	73
C-2 (32-BRN) On engine control module (ECM)	73
E-18 (2-BLK) (DOHC) On left side of electronic ignition (EI)	15
E-18 (2-BLK) (SOHC) On right side of electronic ignition (EI)	9
E-21 (6-BLK) (DOHC) On right side of electronic ignition (EI)	16
E-21 (6-BLK) (SOHC) On left side of electronic ignition (EI)	9
E-22 (3-BLK) (DOHC) On right side of electronic ignition (EI)	16
E-22 (3-BLK) (SOHC) On left side of electronic ignition (EI)	9
H-5 (16-GRN) Left side of engine compartment	30
H-8 (16-BLK) Below I/P, above left dash side trim panel, on bracket	62
H-16 (22-WHT) Behind right dash side trim panel	86
H-24 (18-YEL) Below I/P, above left dash side trim panel, on bracket	63
I-9 (16-BLK) On left rear of meter assembly	53
Ground	
C-39 Right rear corner of engine compartment, on inner fender panel	42
E-30 (DOHC) Top left rear of engine	17
E-30 (SOHC) Top center front of engine	9

Circuit Operation

With the starter switch in ON or START, battery voltage is applied to the electronic ignition (EI). When the engine is being cranked to start, the crankshaft position sensor sends timing information directly to the electronic ignition (EI). The ignition control module fires the ignition coils and the engine starts. After the engine reaches a certain idle speed, timing is switched to the engine control module (ECM). The engine control module (ECM) receives information such as firing order and starting timing at each ignition coil from the crankshaft position sensor. The engine control module (ECM) relies on information from various engine sensors to determine correct ignition timing.

Manual Transmission



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STARTING SYSTEM

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Anti-theft Controller	68
Automatic Transmission	
Mode Switch	47
Clutch Start Switch	66
Dash Fuse Box	58
Diode Box 4	61
Diode Box A	36
Engine Control Module (ECM)	73
Fuse/Relay Box	33
Starter	24
Starter Relay	36
Starter Switch	54
Connector	
B-11 (8-WHT)	69
C-2 (32-BRN)	73
C-43 (8-BLK)	27
H-1 (1-BLK)	31
H-8 (16-BLK)	62
H-12 (20-BRN)	82
H-14 (2-RED)	82
H-41 (12-BLU) (RWAL)	31
H-41 (16-BLU) (ABS)	31
Ground	
B-2	84
B-19	62
P-6	
P-7	25
P-10	
Terminal	
P-2	38

Circuit Operation

Manual Transmission

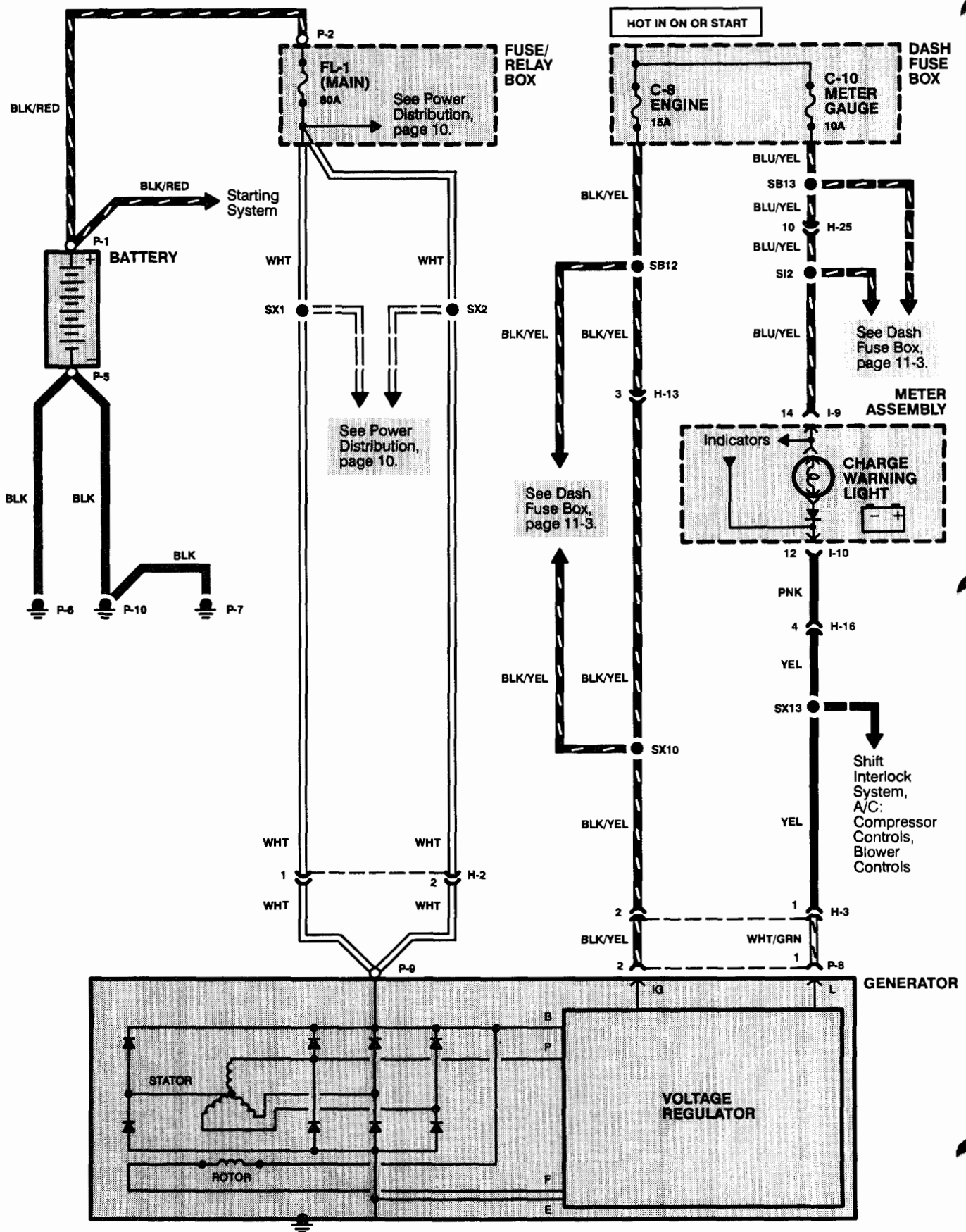
Battery voltage is applied at all times from the positive battery terminal to the starter switch and the normally open starter solenoid contacts. When the starter switch is turned to START and the clutch start switch is closed, battery voltage is applied to the starter relay. The starter relay energizes and applies battery voltage to the starter solenoid coils. The starter solenoid coils energize, the starter solenoid contact closes, and battery voltage is applied to the starter motor. The starter motor engages to start the engine.

Automatic Transmission

Battery voltage is applied at all times from the positive battery terminal to the starter switch and the normally open starter solenoid contacts. When the starter switch is turned to START and the automatic transmission mode switch is in park or neutral, battery voltage is applied to the starter relay. The starter relay energizes and applies battery voltage to the starter solenoid coils. The starter solenoid coils energize, the starter solenoid contact closes, and battery voltage is applied to the starter motor. The starter motor engages to start the engine.

CHARGING SYSTEM

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Generator	Lower right front of engine
Connector	
H-2 (2-GRY)	Right side of engine compartment 40
H-3 (2-BLK)	Right side of engine compartment 40
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 53
Ground	
P-6	Right side of engine compartment, on rear of battery tray
P-7	Lower right front of engine compartment 25
P-10	Lower right side of engine compartment
Terminal	
P-2	In fuse/relay box 38

Circuit Operation

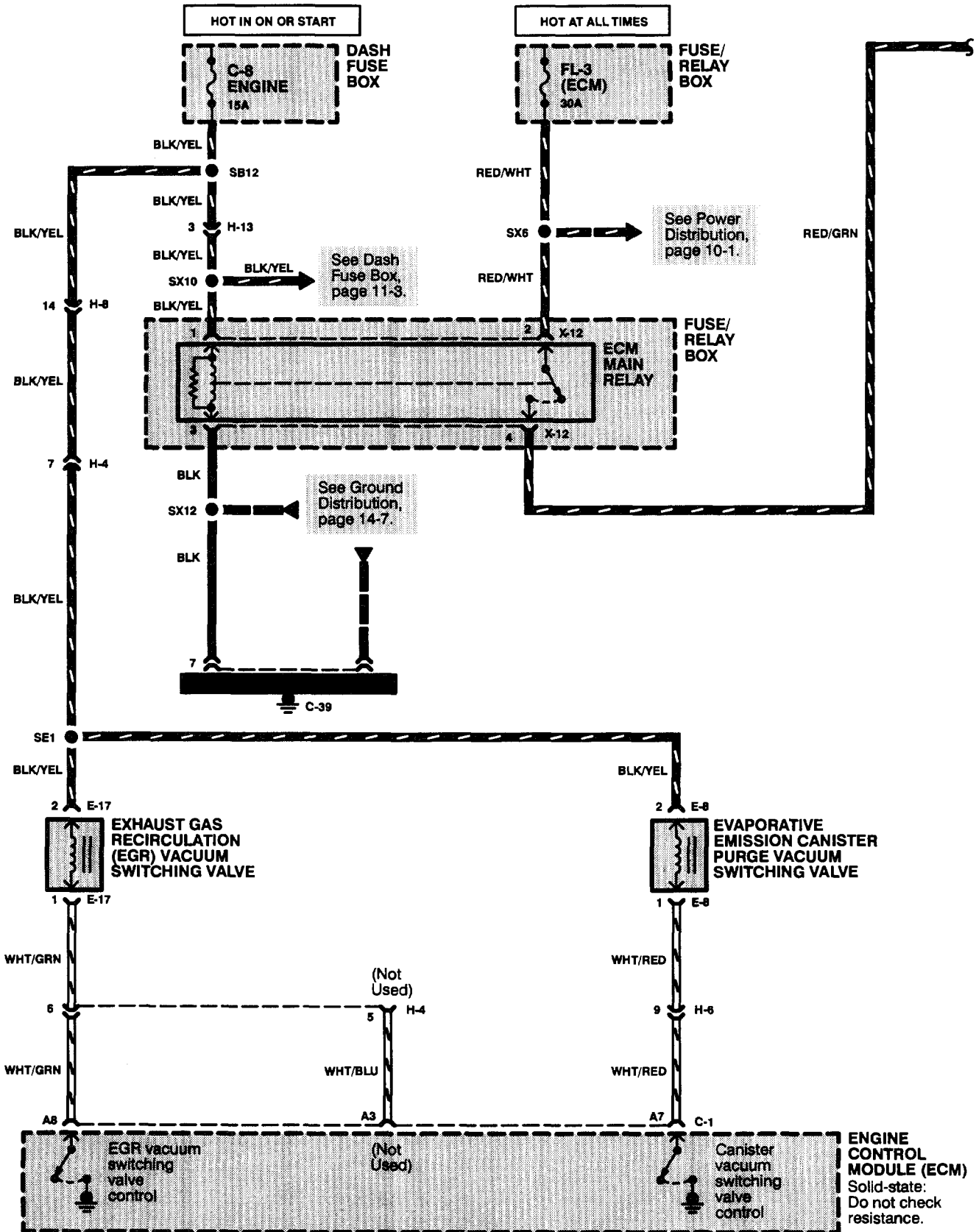
The generator generates an AC voltage in its windings as it is belt-driven by the engine. The rectifier converts this AC voltage to DC.

The voltage regulator, a component which is included in the generator frame, has a primary function of controlling the generator's output to meet electrical system requirements. This regulator controls the charge warning light.

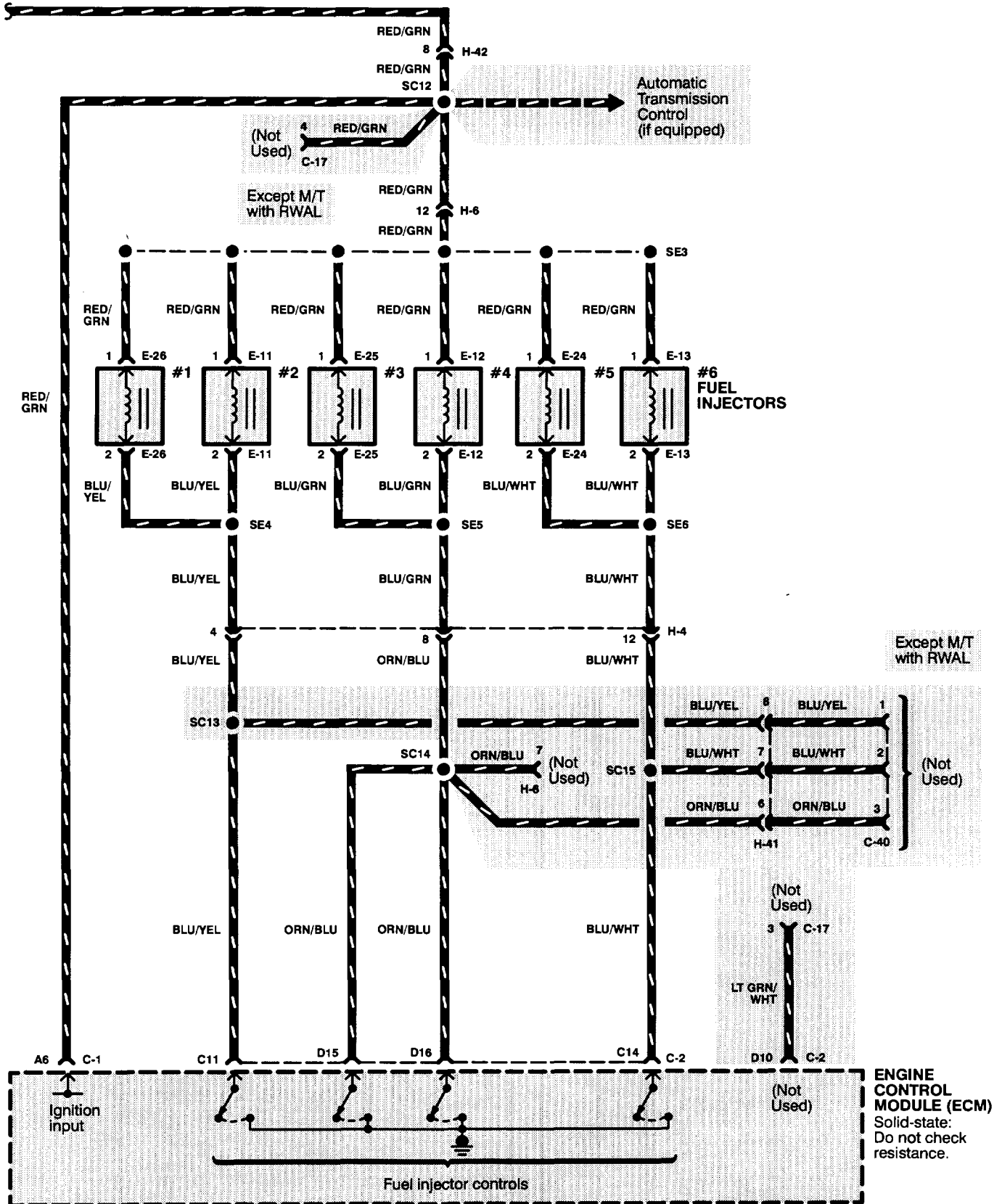
Fuse C-10 supplies battery voltage to the charge warning light. With the engine not running and the starter switch in ON, terminal L of the regulator is grounded internally, providing ground for the charge warning light, and the indicator lights up. With the engine running and the generator charging, terminal L voltage rises and the indicator goes out. If the generator fails to charge, terminal L grounds internally, which then provides ground for the charge warning light, and the indicator lights up.

ENGINE CONTROL: SOHC

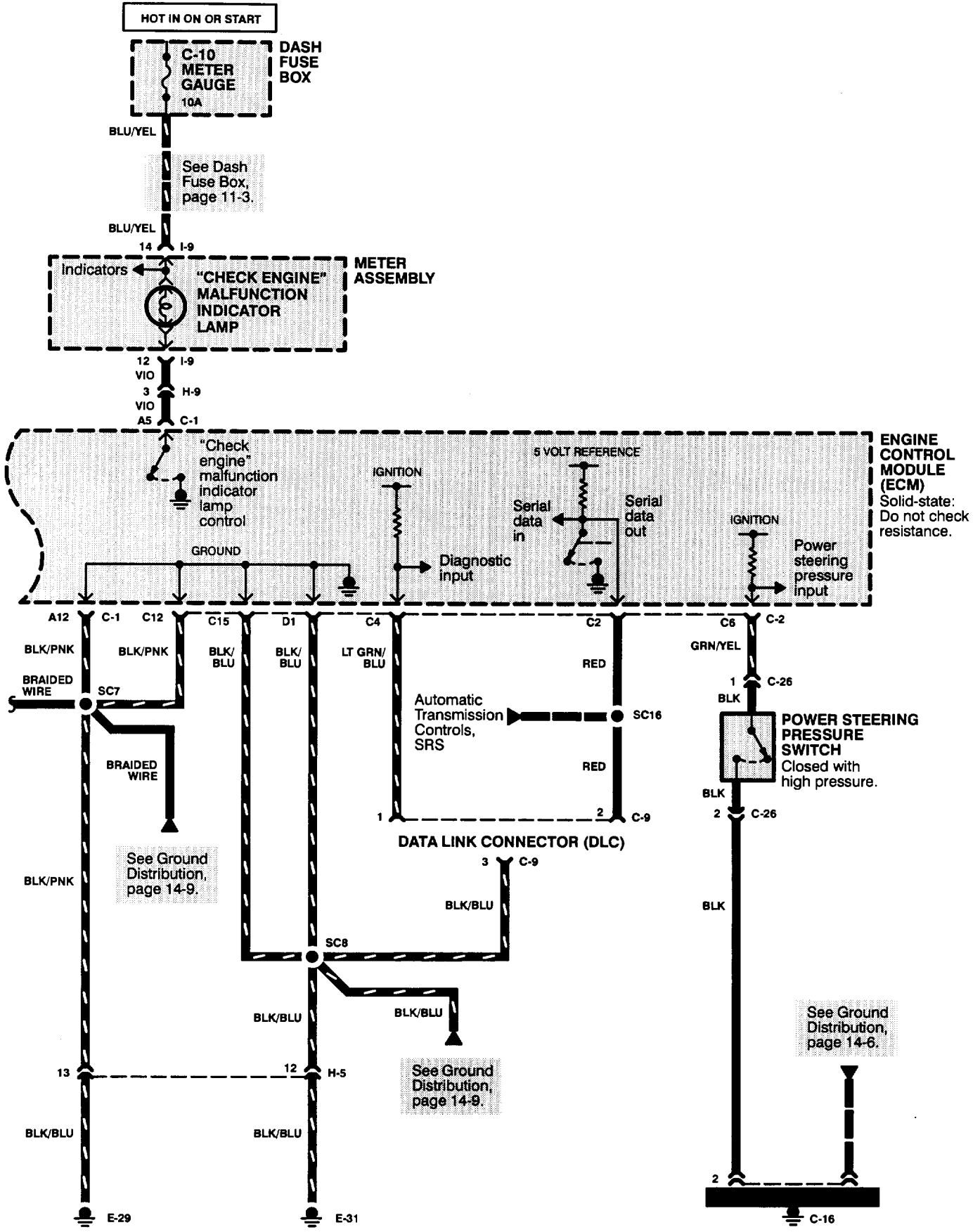
Circuit Schematic



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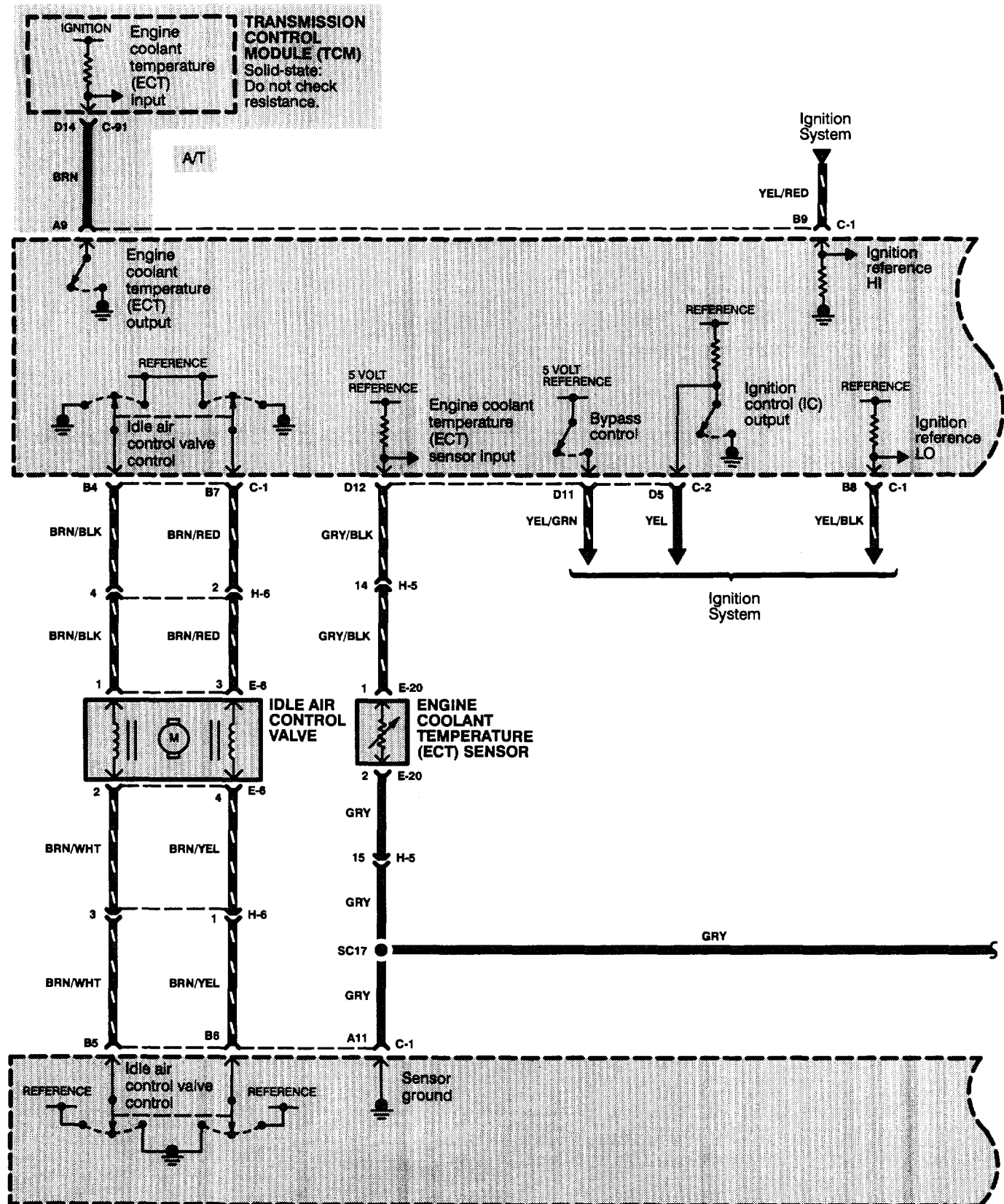
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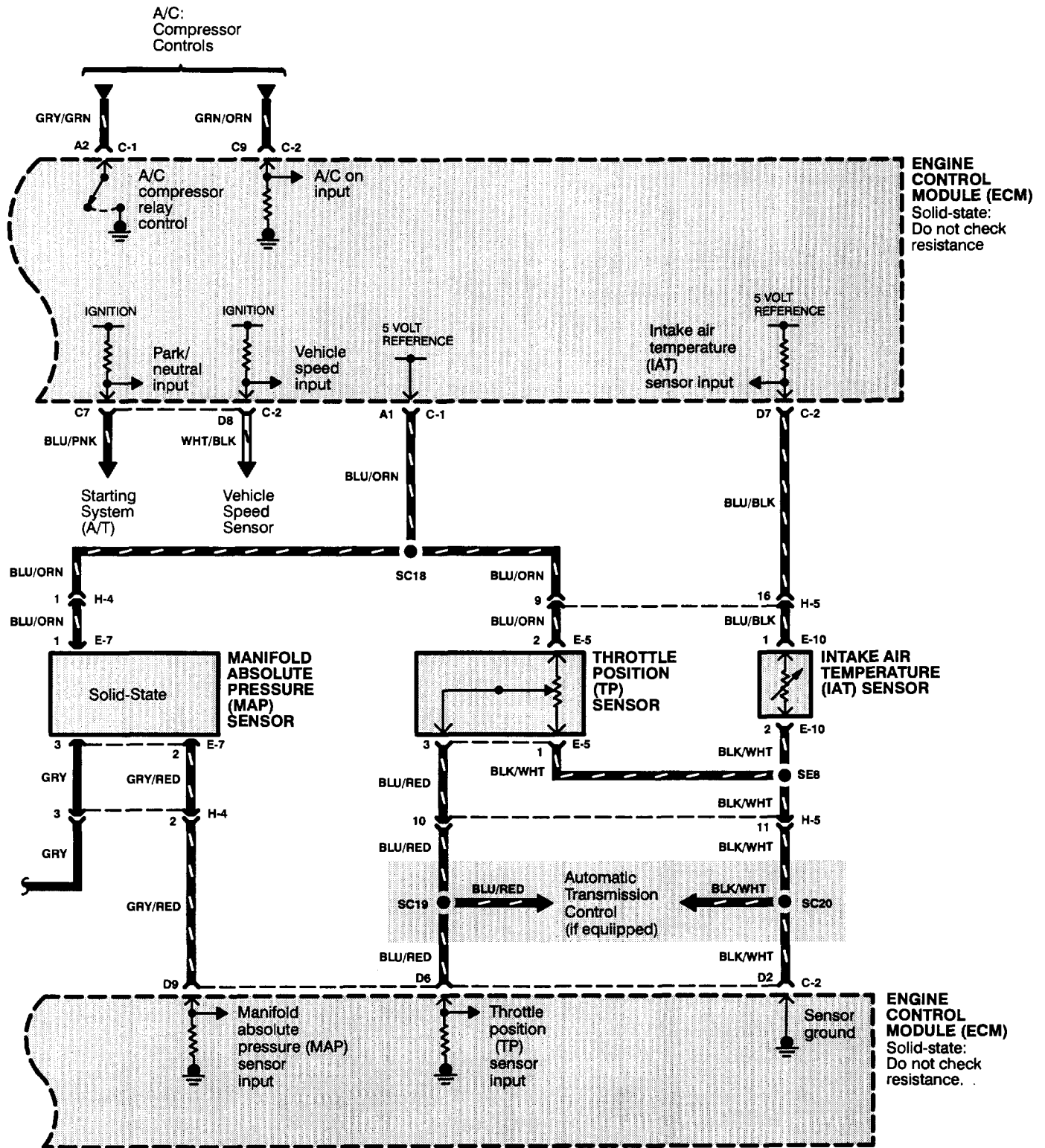
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ENGINE CONTROL: SOHC

Circuit Schematic



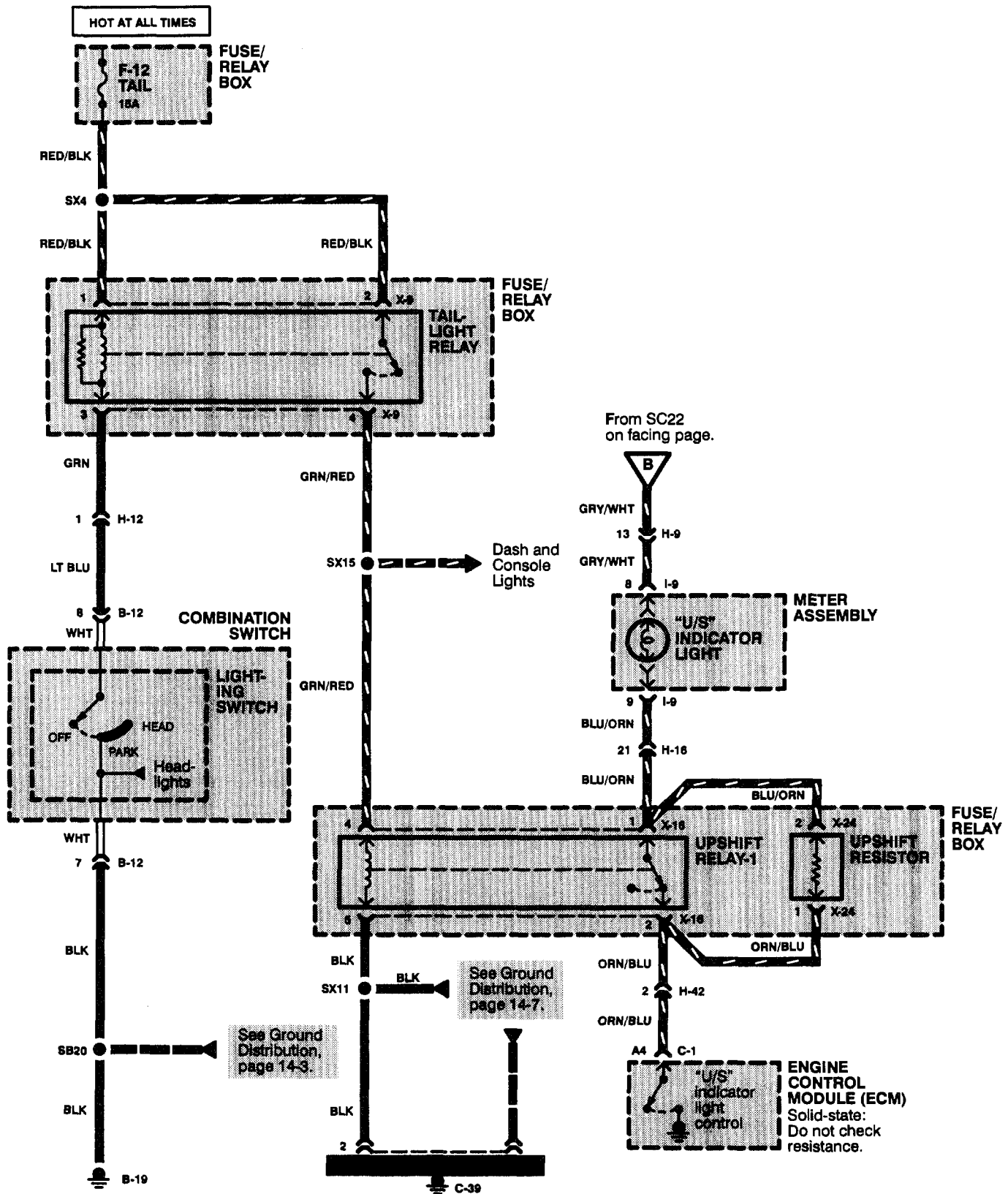
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ENGINE CONTROL: SOHC

Circuit Schematic

Manual Transmission



ENGINE CONTROL: SOHC

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Clutch Switch	66
Dash Fuse Box	58
Data Link Connector (DLC)	
C-9 (3-WHT)	55
ECM Main Relay	37
Engine Control Module (ECM)	73
Engine Coolant Temperature (ECT) Sensor	17
Evaporative Emission	
Canister Purge Vacuum Switching Valve (SOHC)	12
Exhaust Gas Recirculation (EGR) Vacuum Switching Valve (SOHC)	12
Fuel Injectors	
Fuel Pump	
Fuel Pump Relay	37
Fuse/Relay Box	33
Heated Oxygen Sensor (HO2S)	47
Idle Air Control Valve (SOHC)	10
Intake Air Temperature (IAT) Sensor (SOHC)	11
Manifold Absolute Pressure (MAP) Sensor (SOHC)	11
Power Steering Pressure Switch	22
Taillight Relay	36
Throttle Position (TP) Sensor (SOHC)	10
Transmission Control Module (TCM)	65
Transmission Switch 1-2	43
Transmission Switch 3-4	
Upshift Relay-1	34
Upshift Relay-2	34
Upshift Resistor	39
Connector	
B-12 (16-BLK/WHT)	69
C-1 (24-BRN)	73
C-2 (32-BRN)	73
C-17 (5-BLK) (SOHC)	
C-26 (2-BLK)	
C-40 (3-GRN)	42
C-91 (32-BLU)	65
F-4 (2-BLK)	114
H-4 (12-BLU)	30

Component Location Index

(Refer to Section 201 for photographs.)

Connector (cont'd)		Photo No.
H-5 (16-GRN)	Left side of engine compartment	30
H-6 (12-BLK)	Left side of engine compartment	30
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket	62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket	62
H-10 (16-BLU)	Left front of engine compartment	27
H-11 (12-BLK)	Left front of engine compartment	27
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket	82
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket	82
H-16 (22-WHT)	Behind right dash side trim panel	86
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket	63
H-33 (14-WHT)	In floor, below right front seat	125
H-41 (12-BLU) (RWAL)	Right front of engine compartment	31
H-41 (16-BLU) (ABS)	Right front of engine compartment	31
H-42 (16-BLK)	Right front of engine compartment	31
I-9 (16-BLK)	On left rear of meter assembly	53
M-1 (1-CLR)	Beneath center of vehicle, top left side of transmission	43
M-2 (1-CLR)	Beneath center of vehicle, top left side of transmission	43
M-3 (1-CLR)	Beneath center of vehicle, top left side of transmission	43
M-4 (1-CLR)	Beneath center of vehicle, top left side of transmission	43
M-5 (4-BLK)	Beneath center of vehicle, top left side of transmission	47
Ground		
B-19	Behind top of left dash side trim panel	62
B-26	Below rear of center console	79
C-16	Left rear corner of engine compartment, on inner fender panel	28
C-39	Right rear corner of engine compartment, on inner fender panel	42
E-28 (SOHC)	Top center front of engine	9
E-29 (SOHC)	Top center front of engine	9
E-31 (SOHC)	Top center front of engine	9

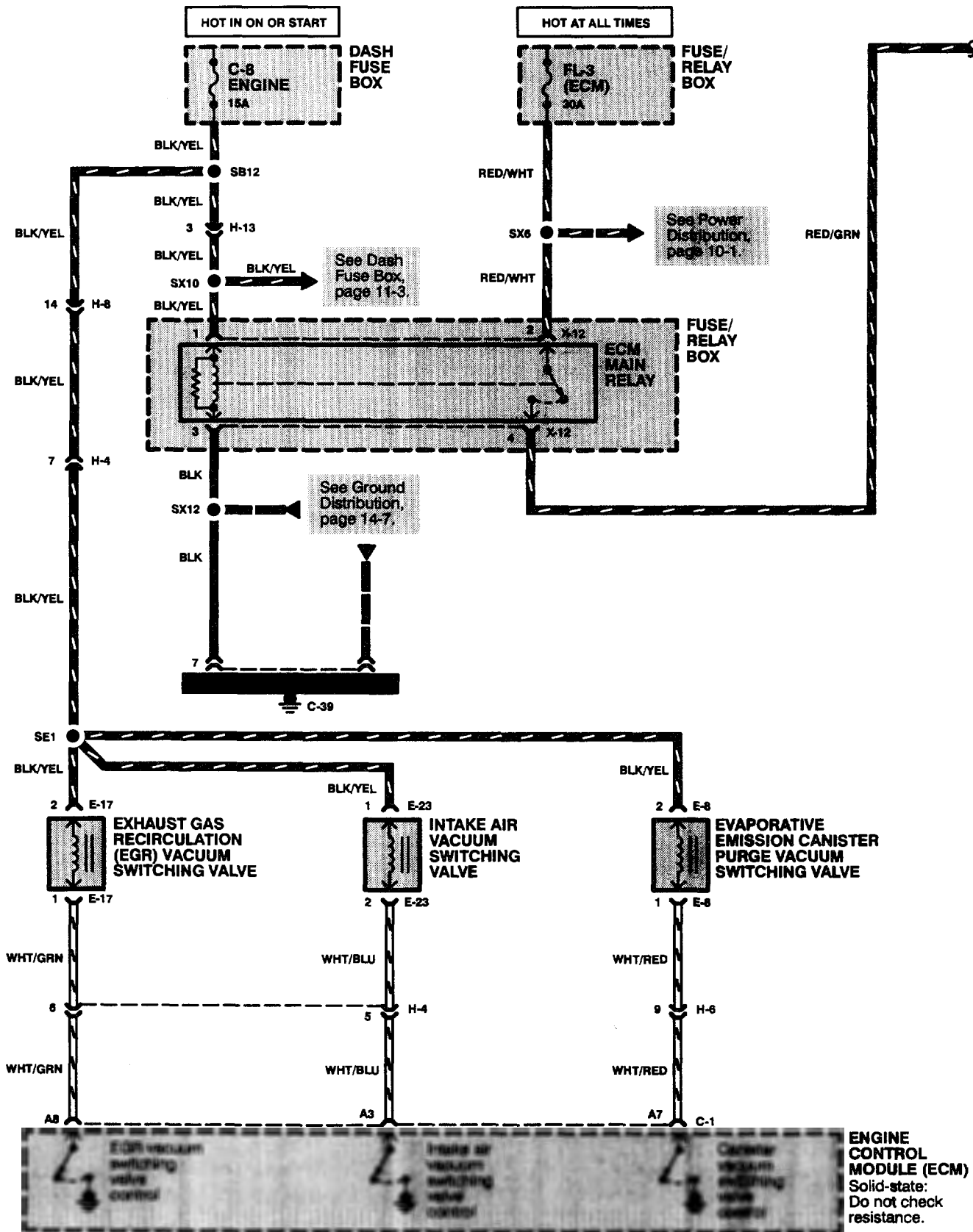
Circuit Operation

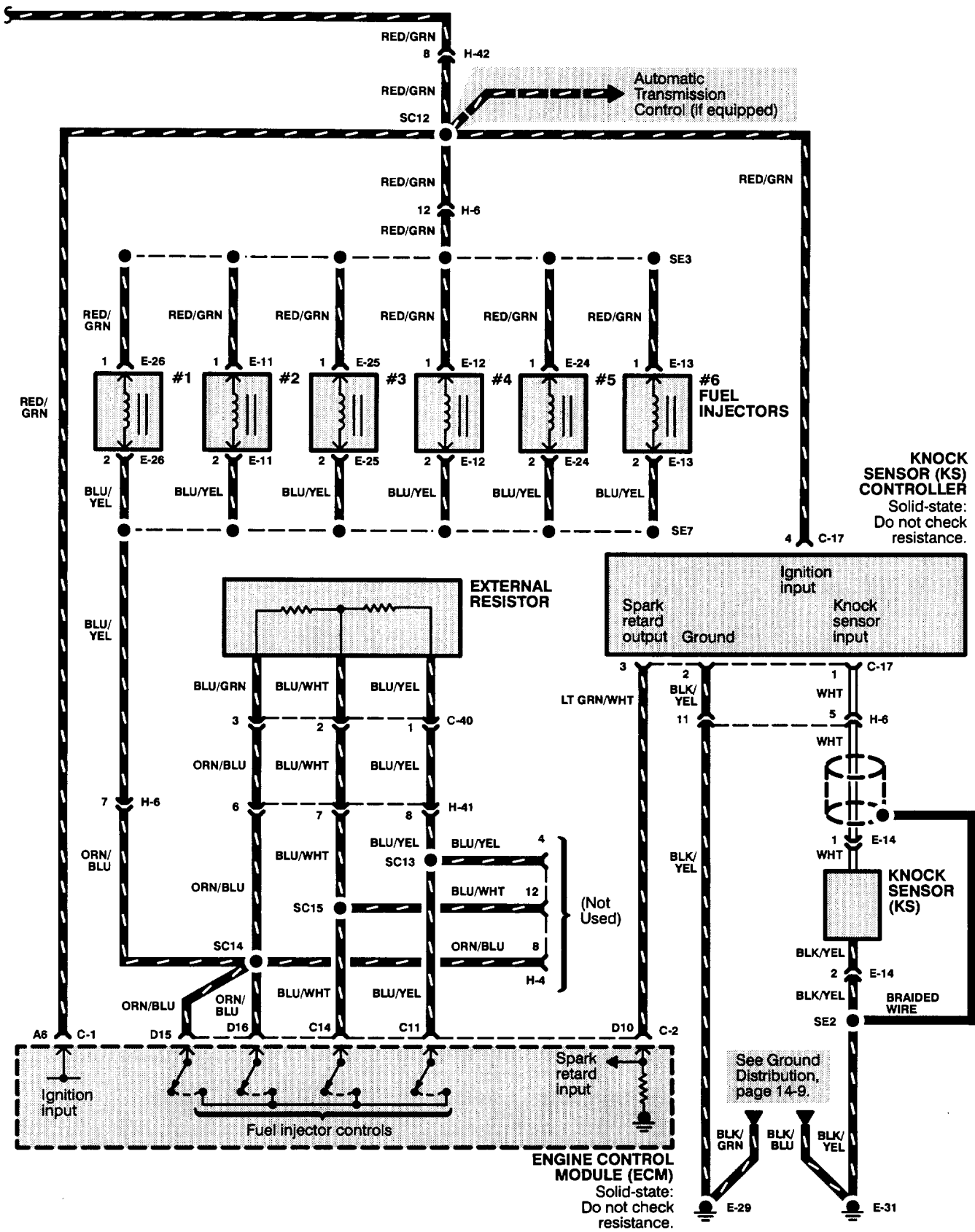
The engine control module (ECM) receives inputs from the engine sensors and switches, controlling the functions of the engine. The engine control module (ECM) also turns on the "CHECK ENGINE" malfunction indicator lamp whenever a malfunction or abnormal engine performance is detected, and allows for diagnostic testing through the data link connector (DLC).

Refer to Section 6 of Workshop Manual for further engine diagnosis.

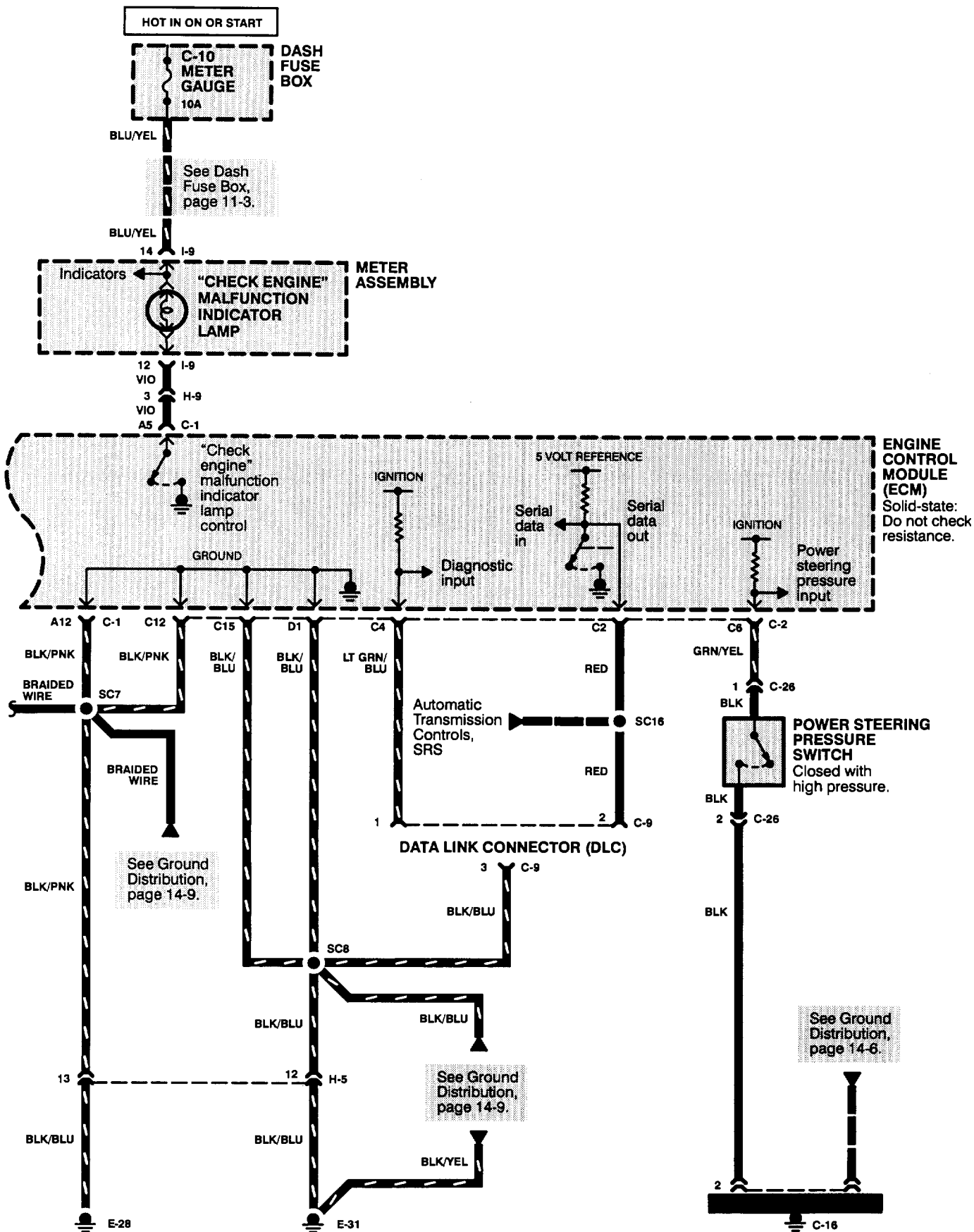
ENGINE CONTROL: DOHC

Circuit Schematic

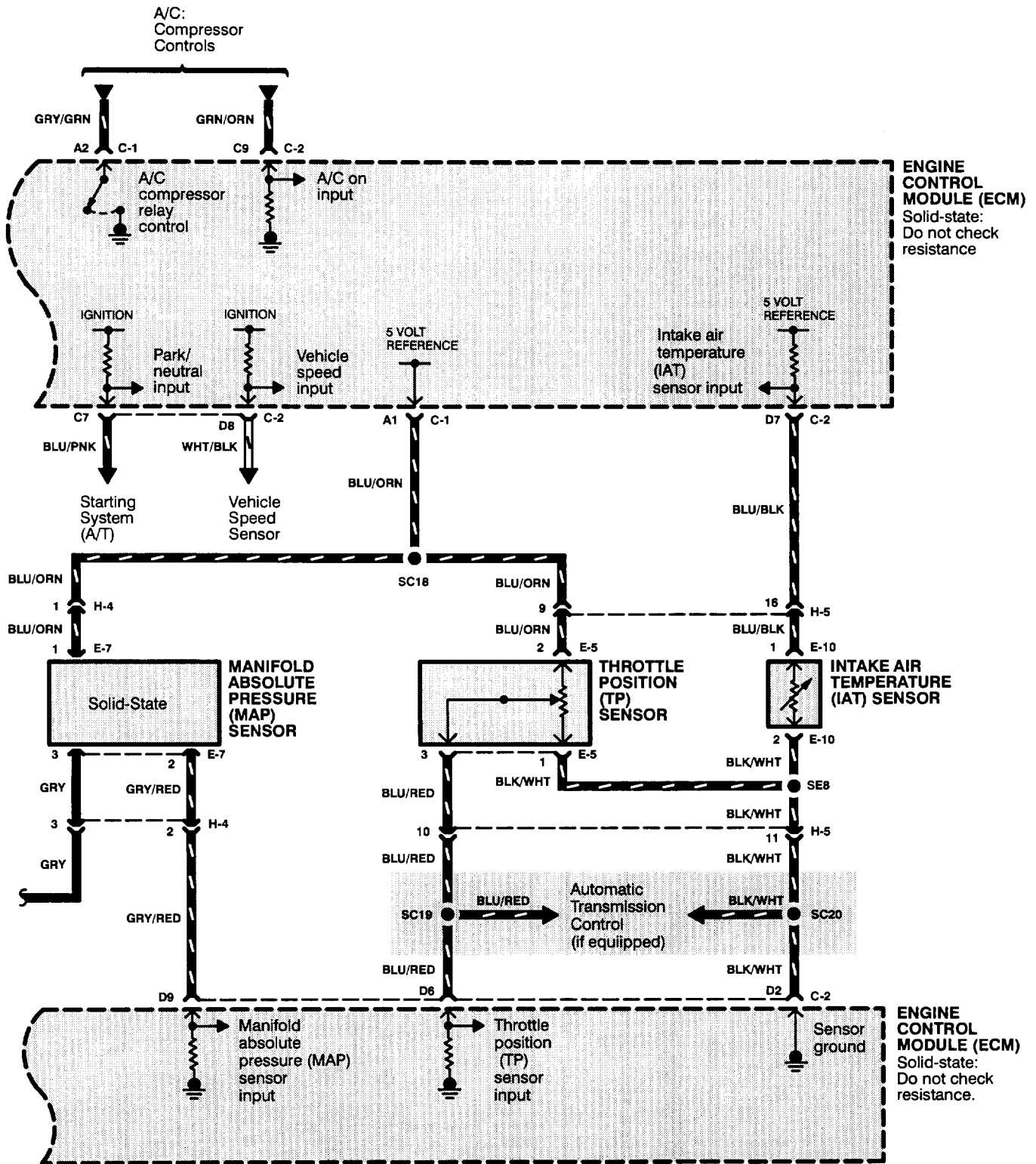




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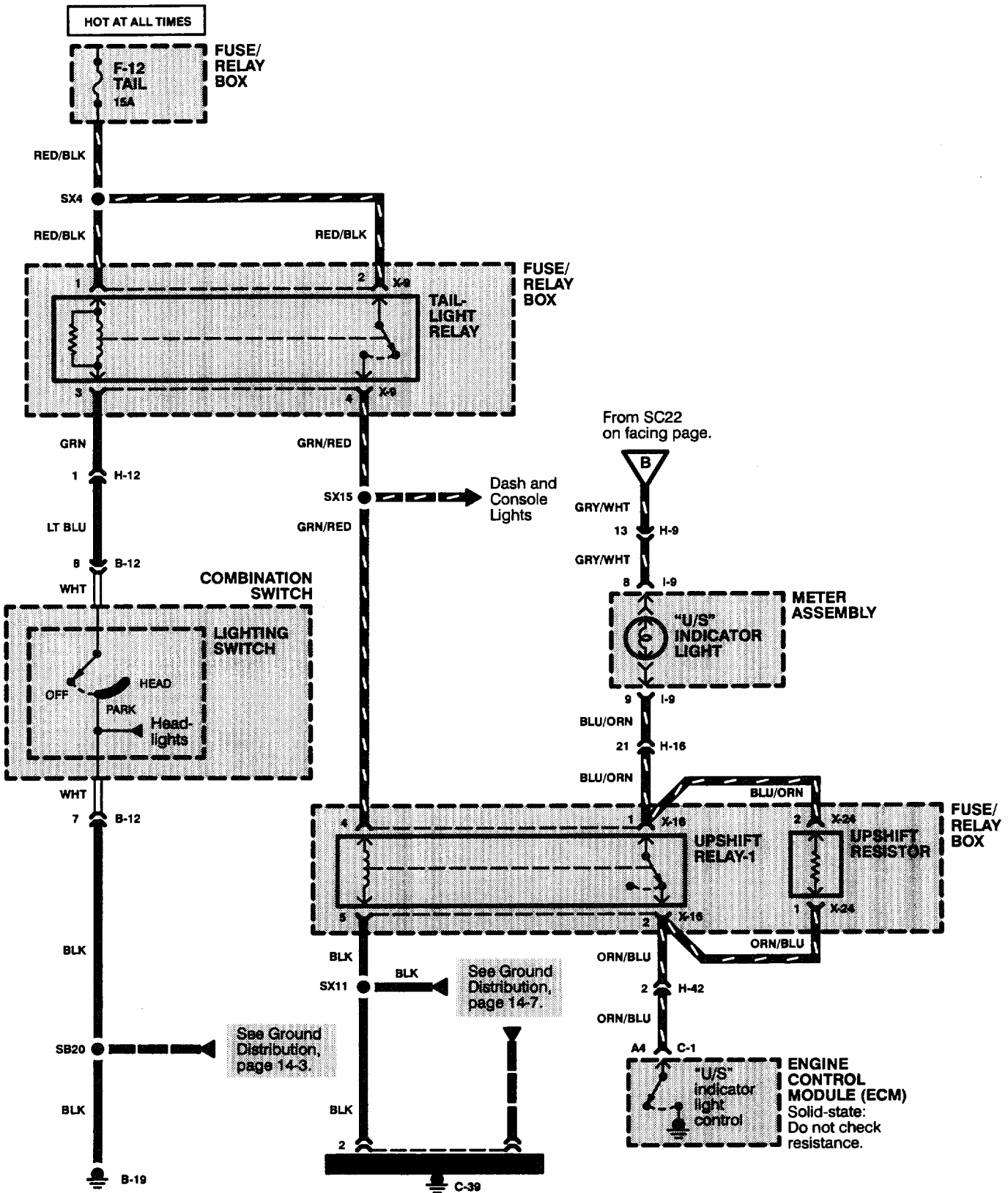
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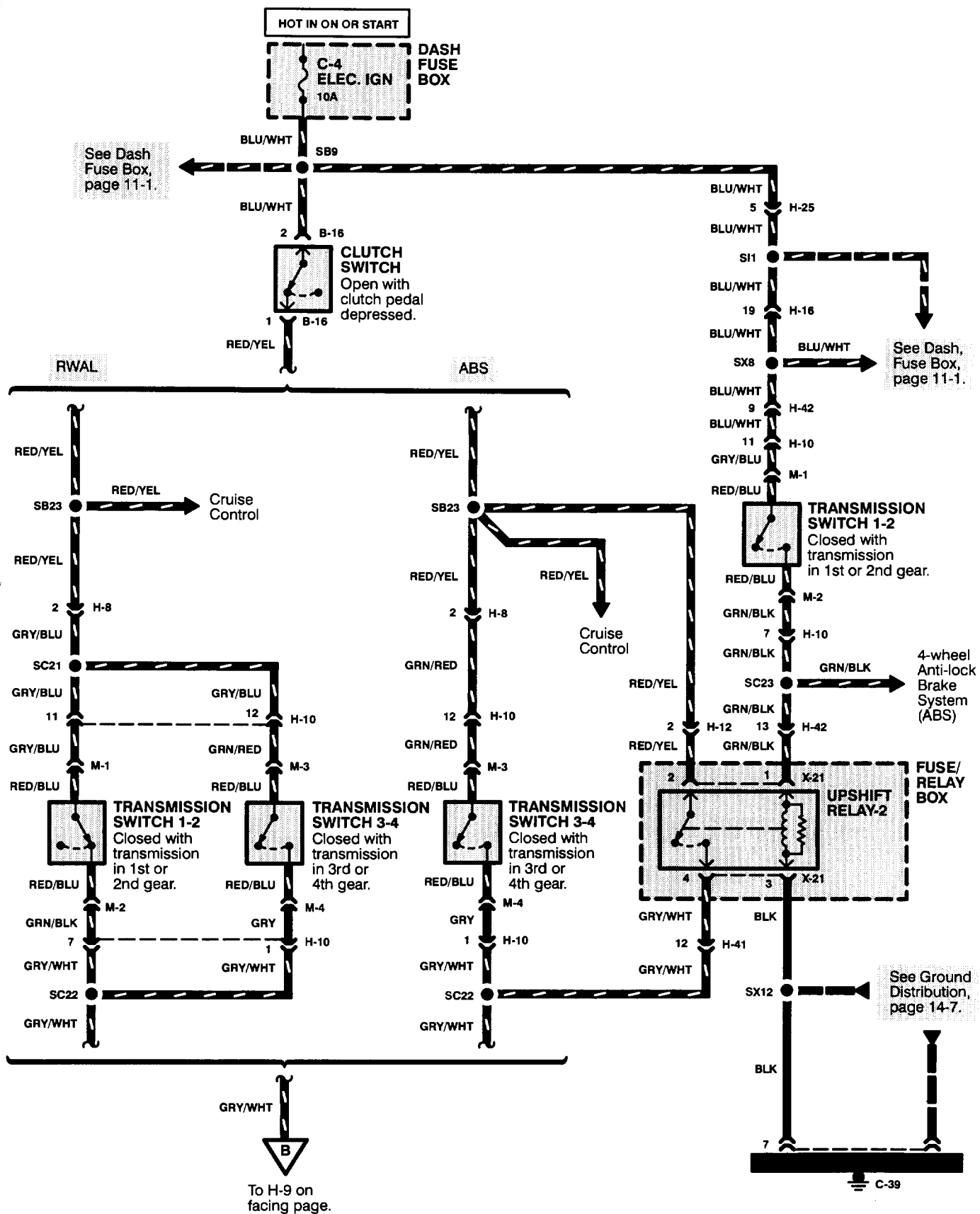


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ENGINE CONTROL: DOHC

Manual Transmission





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ENGINE CONTROL: DOHC

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Clutch Switch	66
Dash Fuse Box	58
Data Link Connector (DLC) C-9 (3-WHT)	55
ECM Main Relay	37
Engine Control Module (ECM)	73
Engine Coolant Temperature (ECT) Sensor	17
Evaporative Emission Canister Purge Vacuum Switching Valve (DOHC)	13
Exhaust Gas Recirculation (EGR) Vacuum Switching Valve (DOHC)	15
External Resistor	42
Fuel Injectors	
Fuel Pump	
Fuel Pump Relay	37
Fuse/Relay Box	33
Heated Oxygen Sensor (HO2S)	47
Idle Air Control Valve (DOHC)	14
Intake Air Temperature (IAT) Sensor (DOHC)	14
Intake Air Vacuum Switching Valve	16
Knock Sensor (KS)	
Knock Sensor (KS) Controller	30
Manifold Absolute Pressure (MAP) Sensor (DOHC)	13
Power Steering Pressure Switch	22
Taillight Relay	36
Throttle Position (TP) Sensor (DOHC)	13
Transmission Control Module (TCM)	65
Transmission Switch 1-2	43
Transmission Switch 3-4	
Upshift Relay-1	34
Upshift Relay-2	34
Upshift Resistor	39

Component Location Index

(Refer to Section 201 for photographs.)

Connector	Photo No.
B-12 (16-BLK/WHT)	Below I/P, right of steering column 69
C-1 (24-BRN)	On engine control module (ECM) 73
C-2 (32-BRN)	On engine control module (ECM) 73
C-26 (2-BLK)	Lower right front of engine compartment, below battery tray
C-40 (3-GRN/GRY)	Right rear of engine compartment 42
C-91 (32-BLU)	On transmission control module (TCM) 65
E-14 (2-BLK)	Right rear of engine 17
F-4 (2-BLK)	Beneath rear of vehicle, right of fuel tank 114
H-4 (12-BLU)	Left side of engine compartment 30
H-5 (16-GRN)	Left side of engine compartment 30
H-6 (12-BLK)	Left side of engine compartment 30
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-11 (12-BLK)	Left front of engine compartment 27
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 82
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-33 (14-WHT)	In floor, below right front seat 125
H-41 (12-BLU) (RWAL)	Right front of engine compartment 31
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
H-42 (16-BLK)	Right front of engine compartment 31
I-9 (16-BLK)	On left rear of meter assembly 53
M-1 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-2 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-3 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-4 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-5 (4-BLK)	Beneath center of vehicle, top left side of transmission 47
Ground	
B-19	Behind top of left dash side trim panel 62
B-26	Below rear of center console 79
C-16	Left rear corner of engine compartment, on inner fender panel 28
C-39	Right rear corner of engine compartment, on inner fender panel 42
E-28 (DOHC)	Top center of engine 14
E-29 (DOHC)	Top center of engine 14
E-31 (DOHC)	Top left rear of engine 17

Circuit Operation

The engine control module (ECM) receives inputs from the engine sensors and switches, controlling the functions of the engine. The engine control module (ECM) also turns on the "CHECK ENGINE" malfunction indicator lamp whenever a malfunction or abnormal engine performance is detected, and allows for diagnostic testing through the data link connector (DLC).

Refer to Section 6 of Workshop Manual for further engine diagnosis.

Component Location Index

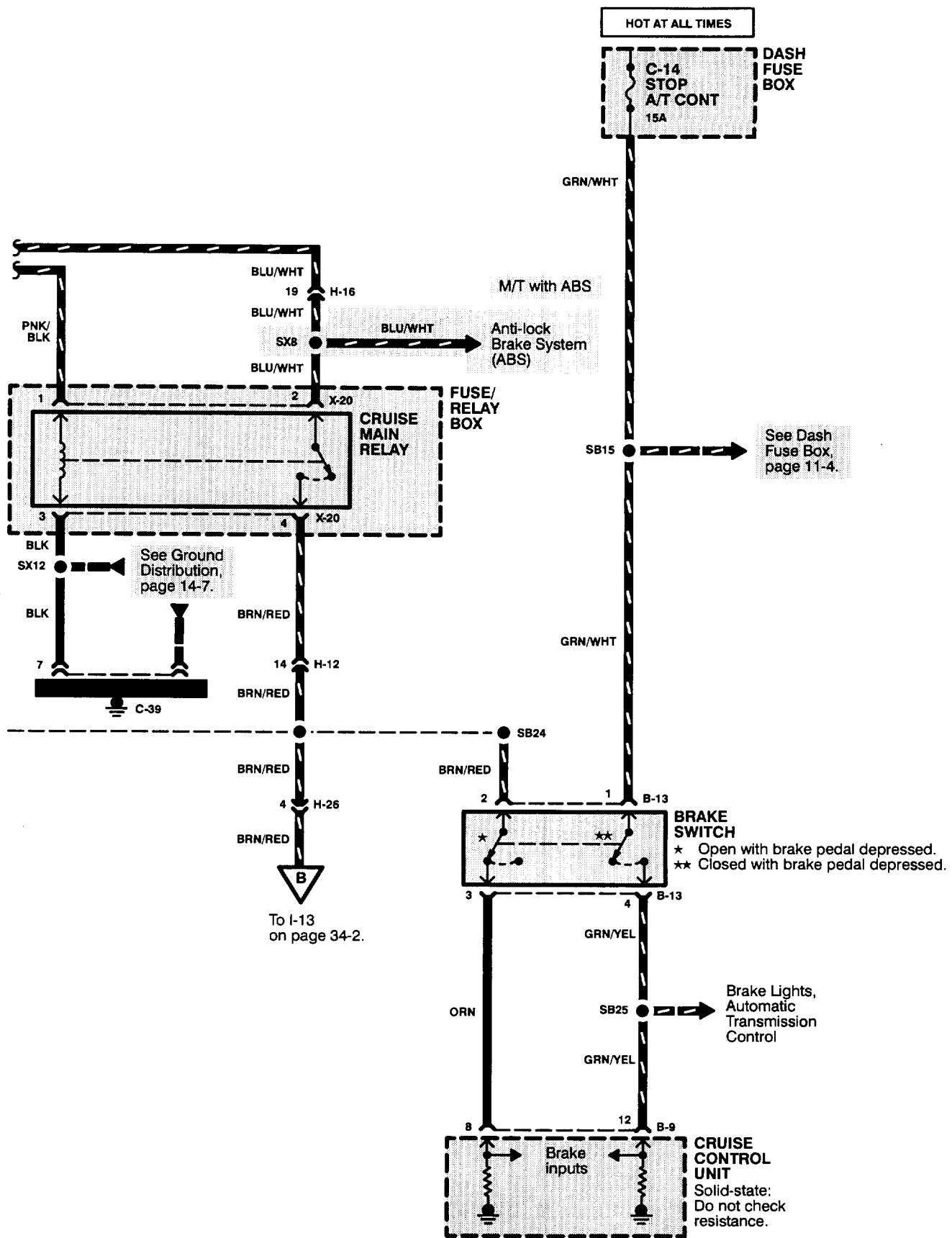
(Refer to Section 201 for photographs.)

Component	Photo No.
Cruise Control Unit	Below right side of I/P, above dash side trim panel 84
Dash Fuse Box	Behind left dash side trim panel 58
Engine Control Module (ECM)	Behind front of front console 73
Vehicle Speed Sensor	Beneath center of vehicle, on rear of transmission 45
Connector	
C-2 (32-BRN)	On engine control module (ECM) 73
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-11 (12-BLK)	Left front of engine compartment 27
H-16 (22-WHT)	Behind right dash side trim panel 86
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
H-42 (16-BLK)	Right front of engine compartment 31
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 53
Ground	
C-39	Right rear corner of engine compartment, on inner fender panel 42

Circuit Operation

The vehicle speed sensor generates a signal which indicates the vehicle speed to the speedometer. The speedometer consists of a vehicle speed sensor, an ammeter (needle movement), stepper motor (odometer), and a driving circuit (printed circuit board).

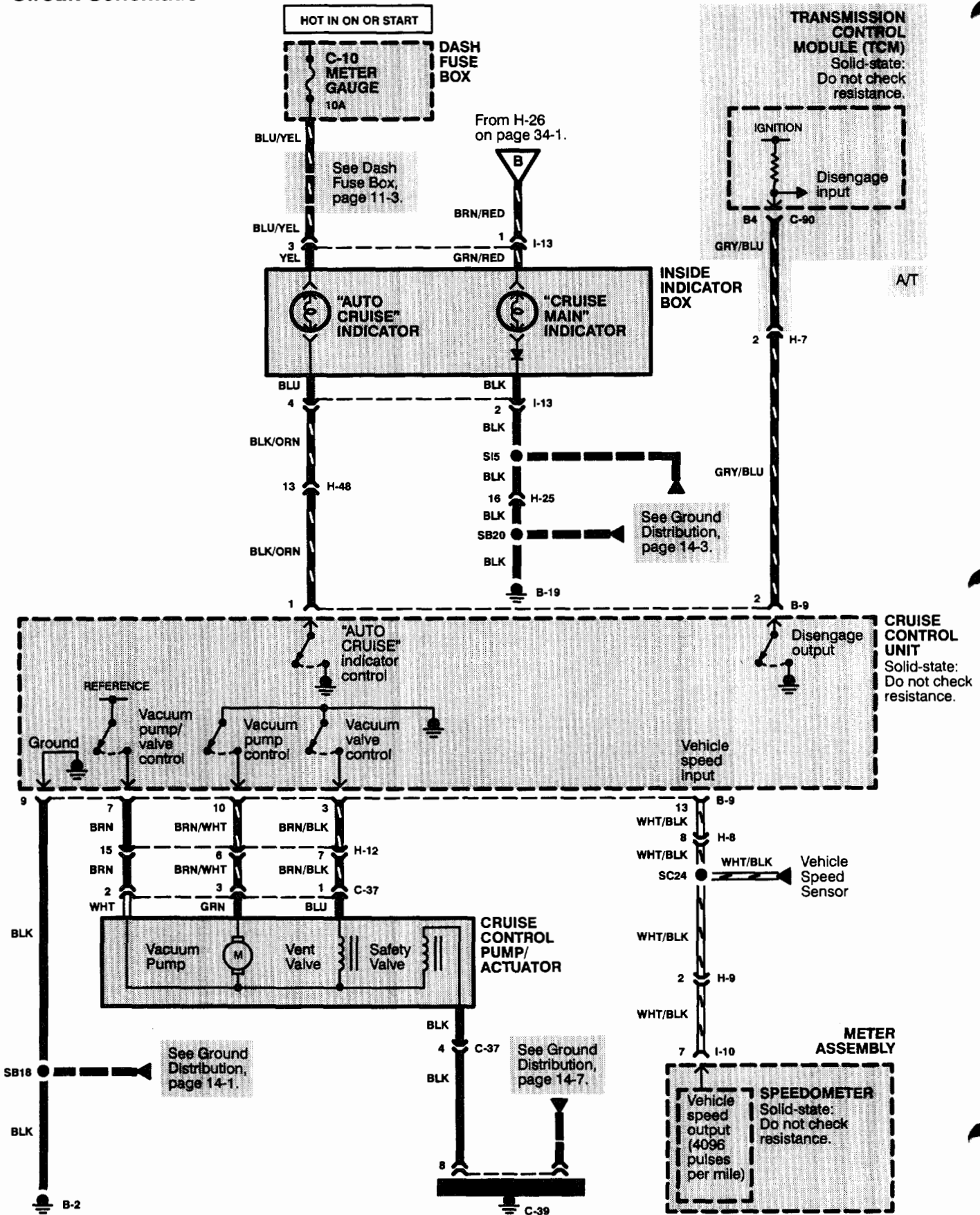
The vehicle speed sensor is mounted to the transmission. The transmission pinion shaft rotates and generates four pulses per one rotation. The rate at which the pulses are generated indicates the vehicle speed. The vehicle speed sensor (incorporated in the speedometer) uses the pulses to control needle movement and sends vehicle speed information to the engine control module (ECM) and the cruise control unit. The speedometer sends 4096 pulses per mile and the frequency indicates the vehicle speed.



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CRUISE CONTROL

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Automatic Transmission Mode	
Switch	Beneath vehicle, on left side of transmission 47
Brake Switch	Below I/P, on brake pedal support 68
Clutch Switch	Below I/P, top of clutch pedal support 66
Cruise Control	
Pump/Actuator	Right rear corner of engine compartment 40
Cruise Control Unit	Below right side of I/P, above dash side trim panel 84
Cruise Main Relay	In fuse/relay box 35
Dash Fuse Box	Behind left dash side trim panel 58
Diode Box 5	In dash fuse box 61
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Transmission Control Module (TCM)	Below left side of I/P 65
Connector	
B-16 (2-WHT) (A/T)	Below I/P, left of steering column 67
B-52 (14-BLK)	Below I/P, right of steering column 69
C-37 (4-GRY)	Right rear corner of engine compartment 40
C-43 (8-BLK)	Left front of engine compartment 27
C-90 (24-BLU)	On transmission control module (TCM) 65
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-26 (20-WHT)	Below I/P, above left dash side trim panel, on bracket 62
H-48 (16-BLK)	Behind right dash side trim panel 86
I-10 (16-WHT)	On right rear of meter assembly 53
I-13 (6-WHT)	Behind left side of I/P 52
Ground	
B-19	Behind top of left dash side trim panel 62
C-39	Right rear corner of engine compartment, on inner fender panel 42

CRUISE CONTROL

Circuit Operation

The cruise control system uses mechanical, electrical, and vacuum operated devices to maintain vehicle speed at a setting selected by the driver.

System Description

The cruise control unit receives command signals from the cruise control switch. It receives information about operating conditions from the brake switch, the speedometer, the clutch switch (manual transmission), and the automatic transmission mode switch and transmission control module (TCM)(automatic transmission).

The cruise control unit sends operational signals to the devices that regulate the throttle position. The throttle position maintains the selected vehicle speed. The control unit compares the actual speed of the vehicle to the selected speed. The control unit then uses the result of that comparison to open or close the throttle.

The brake switch releases the system's control of the throttle at the instant the driver depresses the brake pedal. The switch sends a signal to the cruise control unit when the brake pedal is depressed; the cruise control unit responds by allowing the throttle to close. The clutch switch or the automatic transmission mode switch sends a disengage signal input to the cruise control unit that also allows the throttle to close.

System Operation

The cruise control system will set and automatically maintain any speed above 25 mph (40 km/h). To set, press the cruise control main switch so that the "CRUISE MAIN" indicator is on. After reaching the desired speed, press the set switch. The cruise control unit will receive a set signal input and will activate the cruise control actuator.

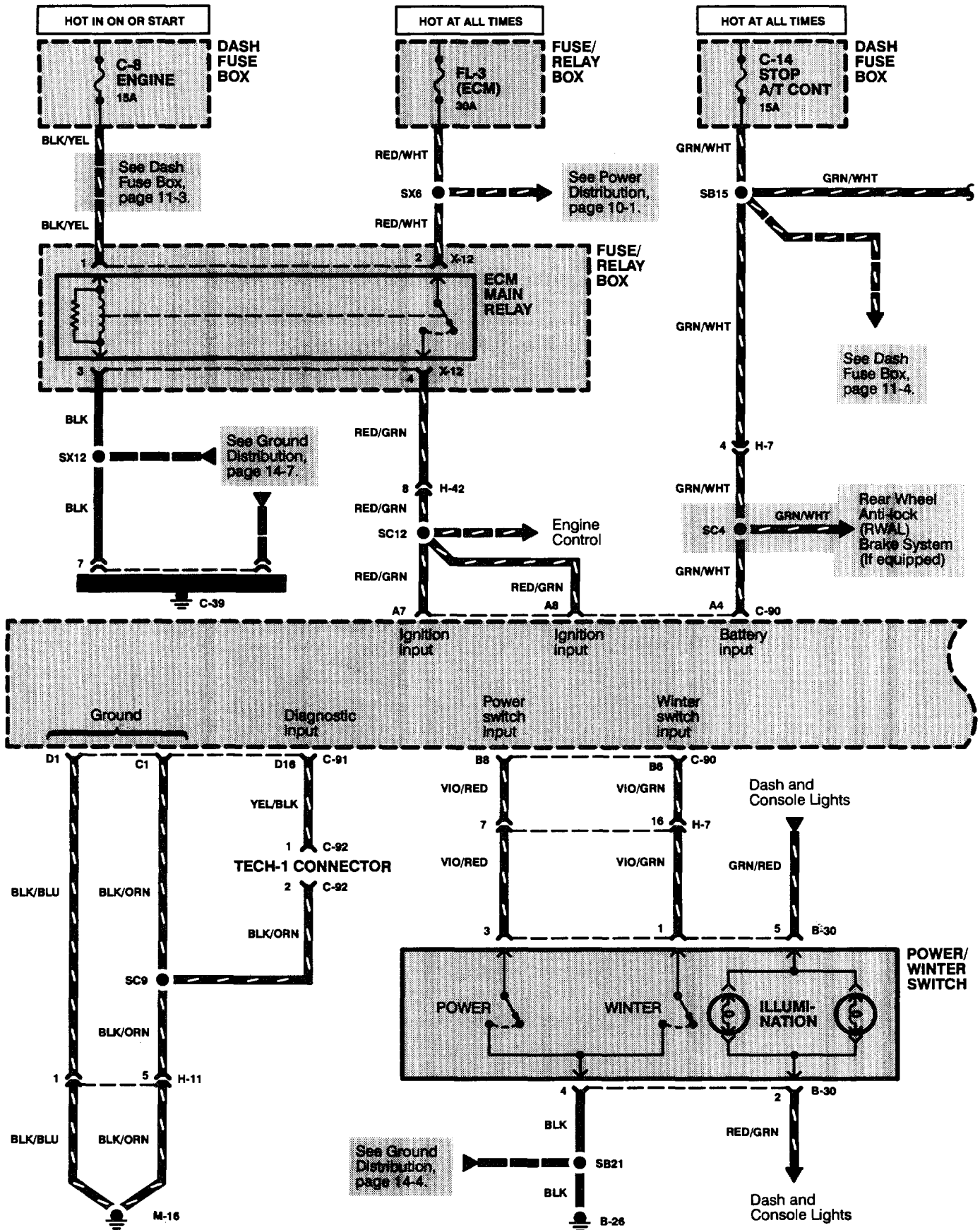
Pushing the cruise control main switch cancels the cruise control system. This removes power to the cruise control unit and erases the set speed from memory. The cruise control system also disengages when cruising speed is lower than the preset speed by 12 mph (19 km/h) or more. If the system is disengaged temporarily by the brake switch, clutch switch, or the automatic transmission mode switch and vehicle speed is still above 25 mph (40 km/h), turn and release the resume/accel switch. With the resume/accel switch turned and released, the set memory is retained, the vehicle automatically returns to the previous set speed.

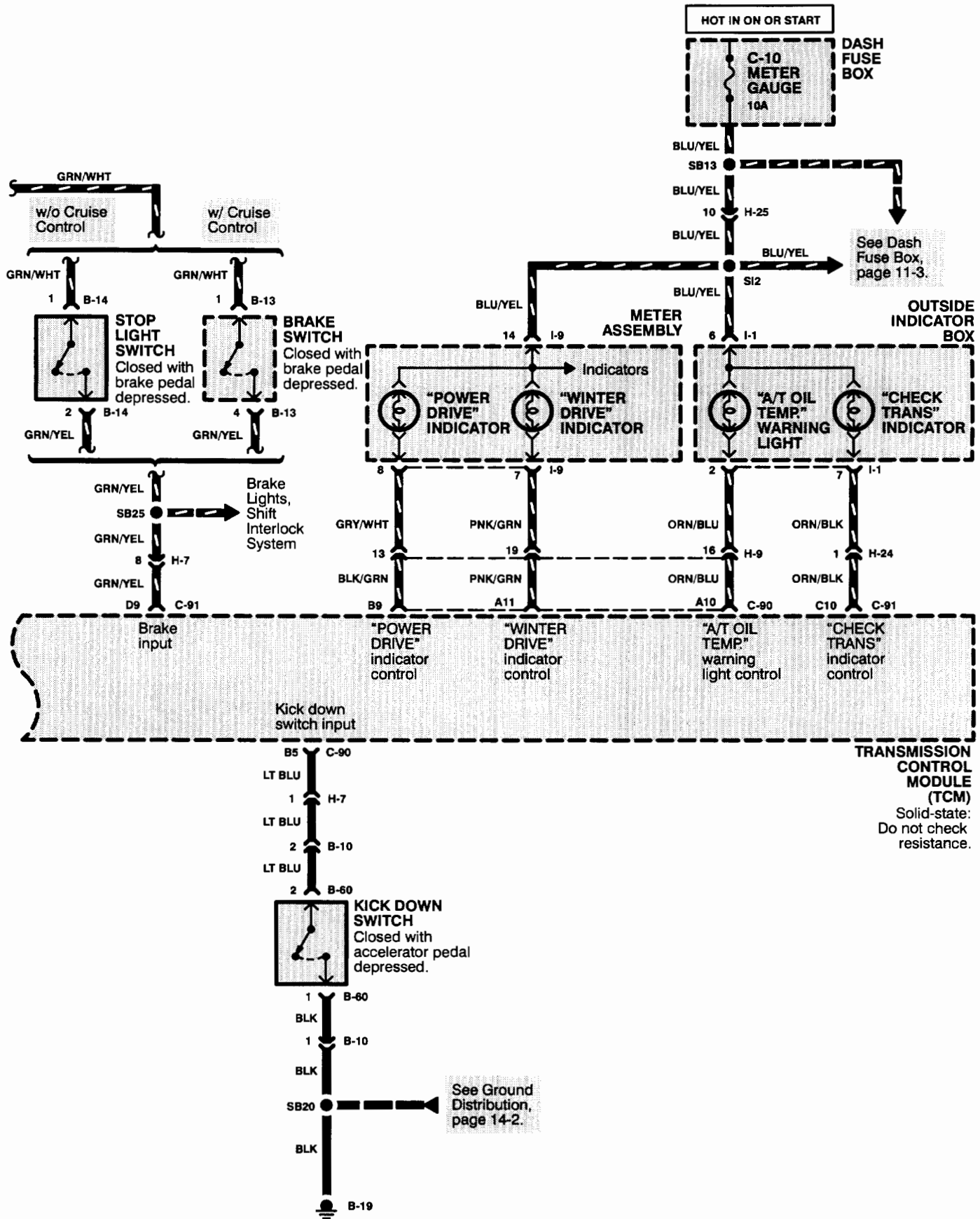
For gradual acceleration without depressing the accelerator pedal, turn the resume/accel switch and hold it there until the desired speed is reached. This will send an acceleration signal input to the cruise control unit. When the switch is released, the system will be reprogrammed for the new speed. Quickly turning and releasing the resume/accel switch allows you to tap up the preset cruising speed. Each turn increases the preset speed by 1 mph (1.6 km/h). The preset speed can be increased by up to 10 mph (16 km/h) in this manner.

To slow the vehicle down, depress and hold the set/coast switch. This will send a deceleration signal input to the cruise control unit, causing the vehicle to coast until the desired speed is reached. When the desired speed is reached, release the set/coast switch. This will reprogram the system for the new speed. Quickly depressing and releasing the set/coast switch allows you to tap down the preset cruising speed. Each depress decreases the preset speed by 1 mph (1.6 km/h). The preset speed can be decreased to a minimum of 25 mph (40 km/h) in this manner.

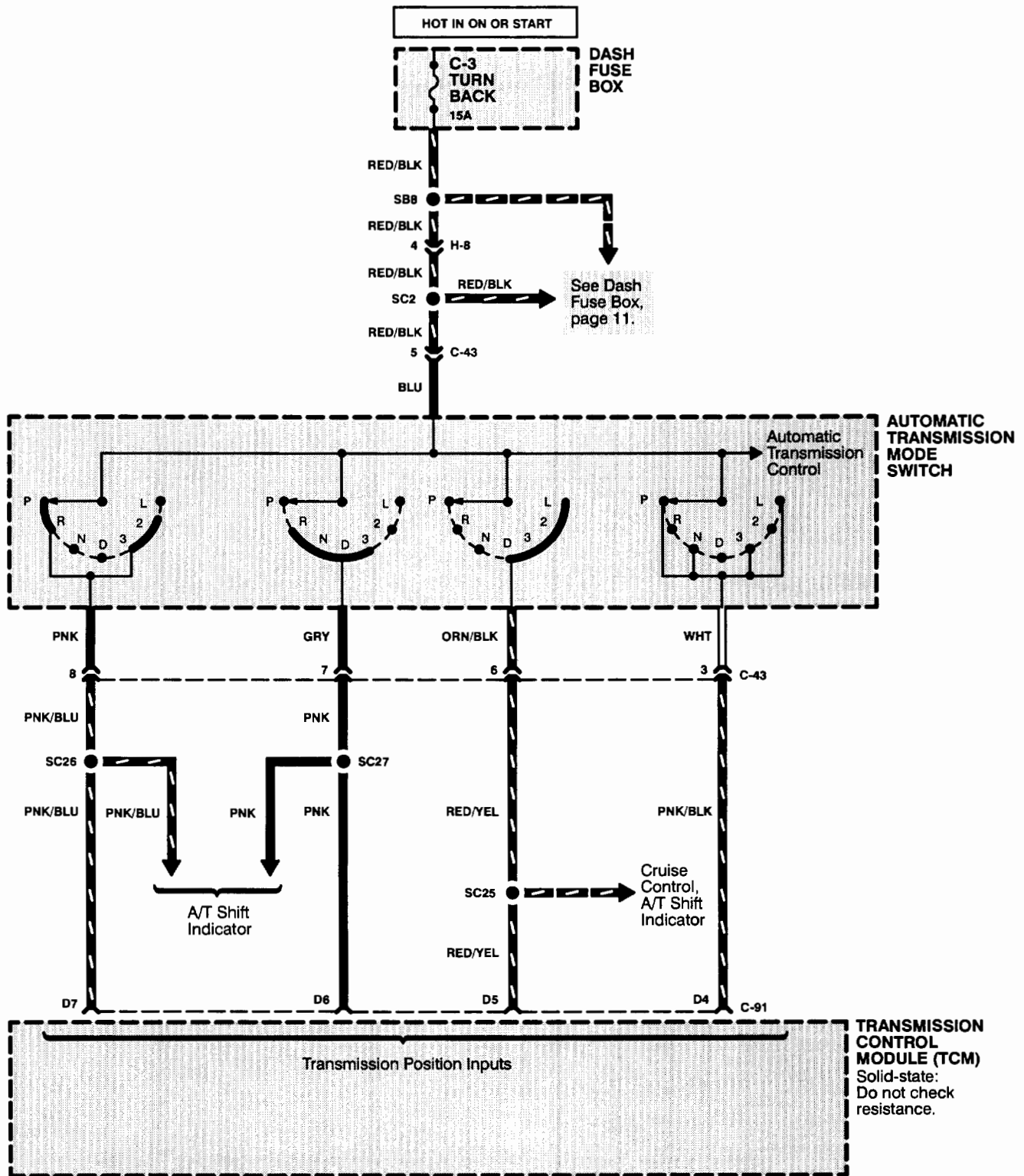
AUTOMATIC TRANSMISSION CONTROL

Circuit Schematic





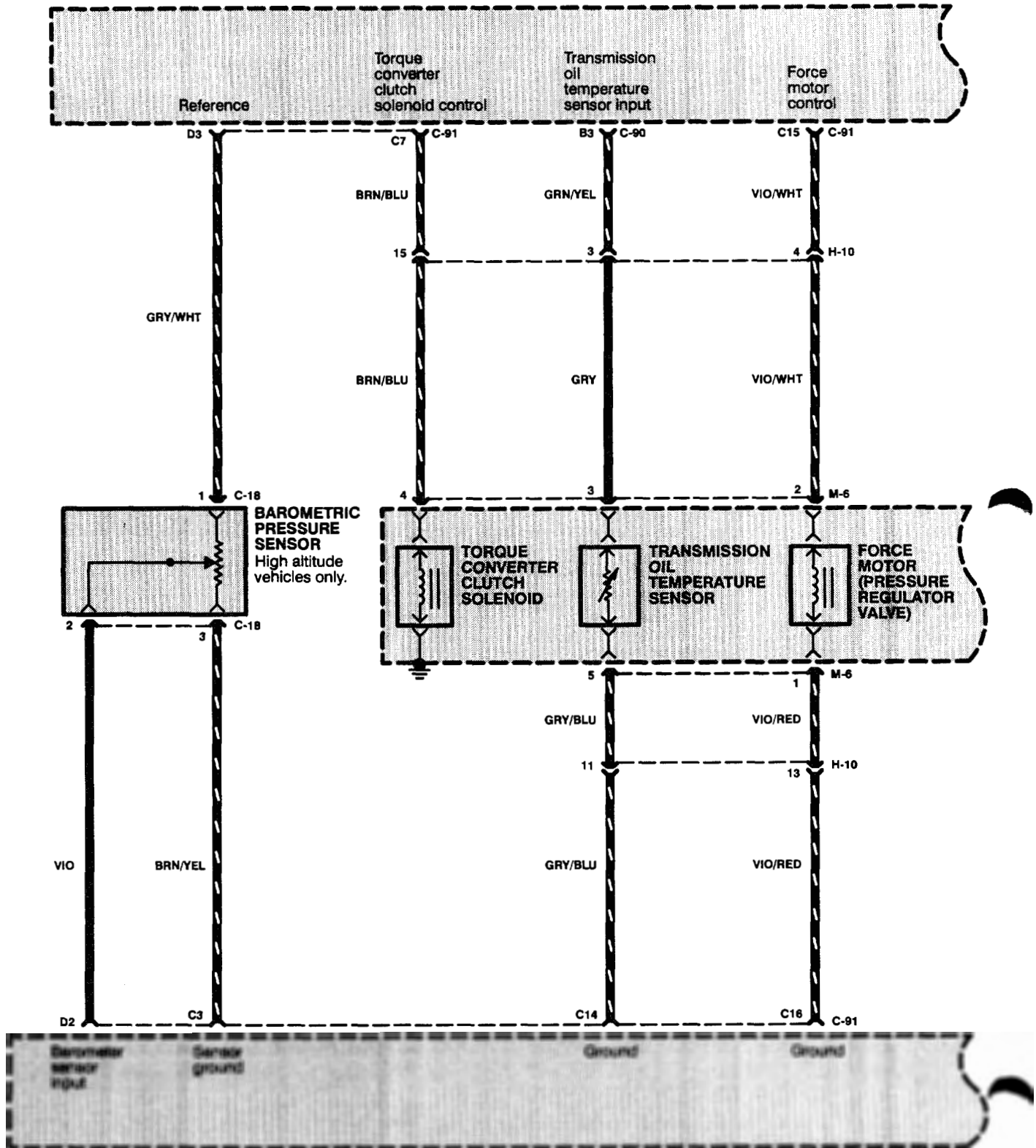
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AUTOMATIC TRANSMISSION CONTROL

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

<u>Ground</u>		<u>Photo No.</u>
B-19	Behind top of left dash side trim panel	62
B-26	Below rear of center console	79
C-39	Right rear corner of engine compartment, on inner fender panel	42
E-28 (DOHC)	Top center of engine	14
E-29 (SOHC)	Top center front of engine	9
E-31 (DOHC)	Top left rear of engine	17
E-31 (SOHC)	Top center front of engine	9
M-16	Left underside of engine, top of oil pan	26

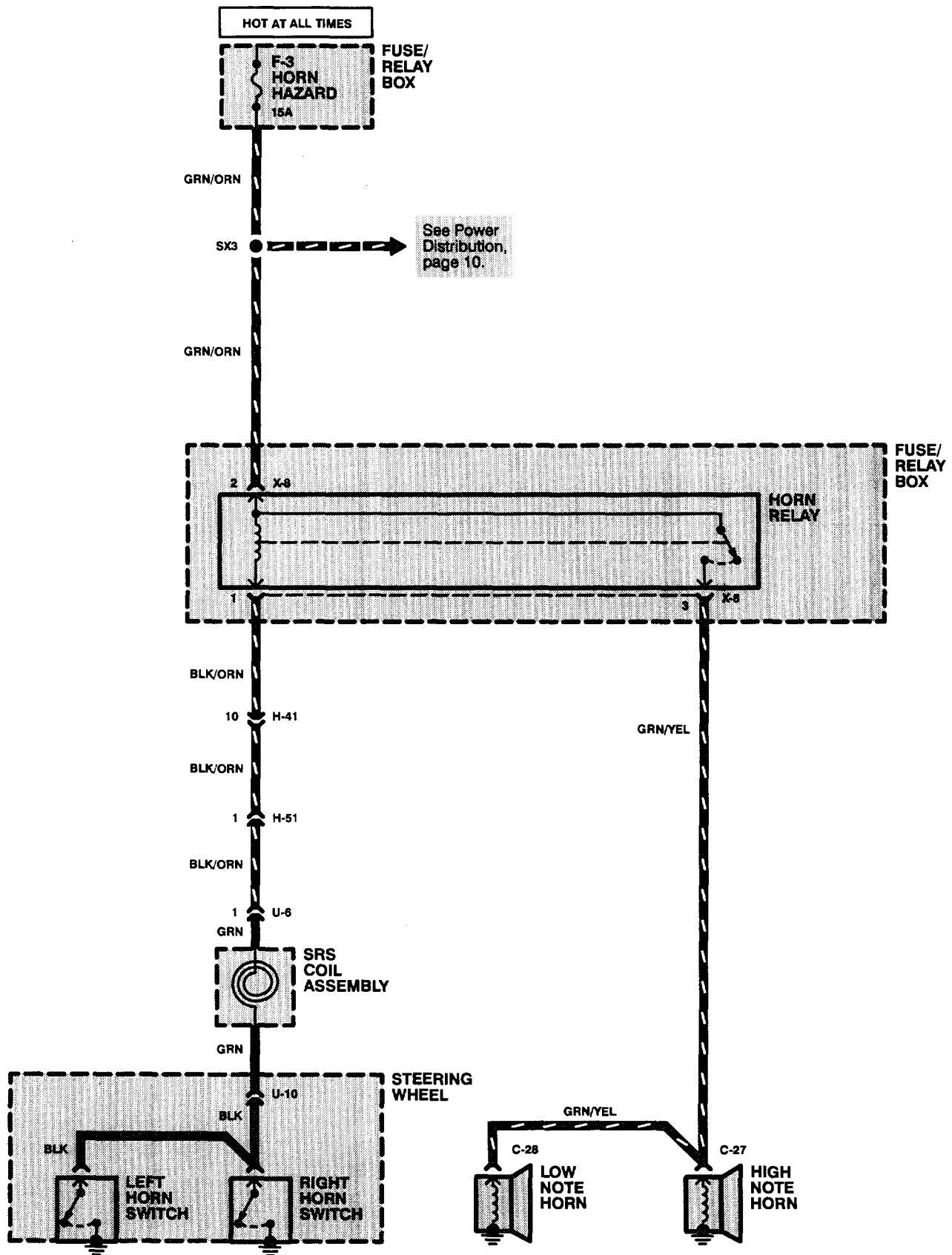
Circuit Operation

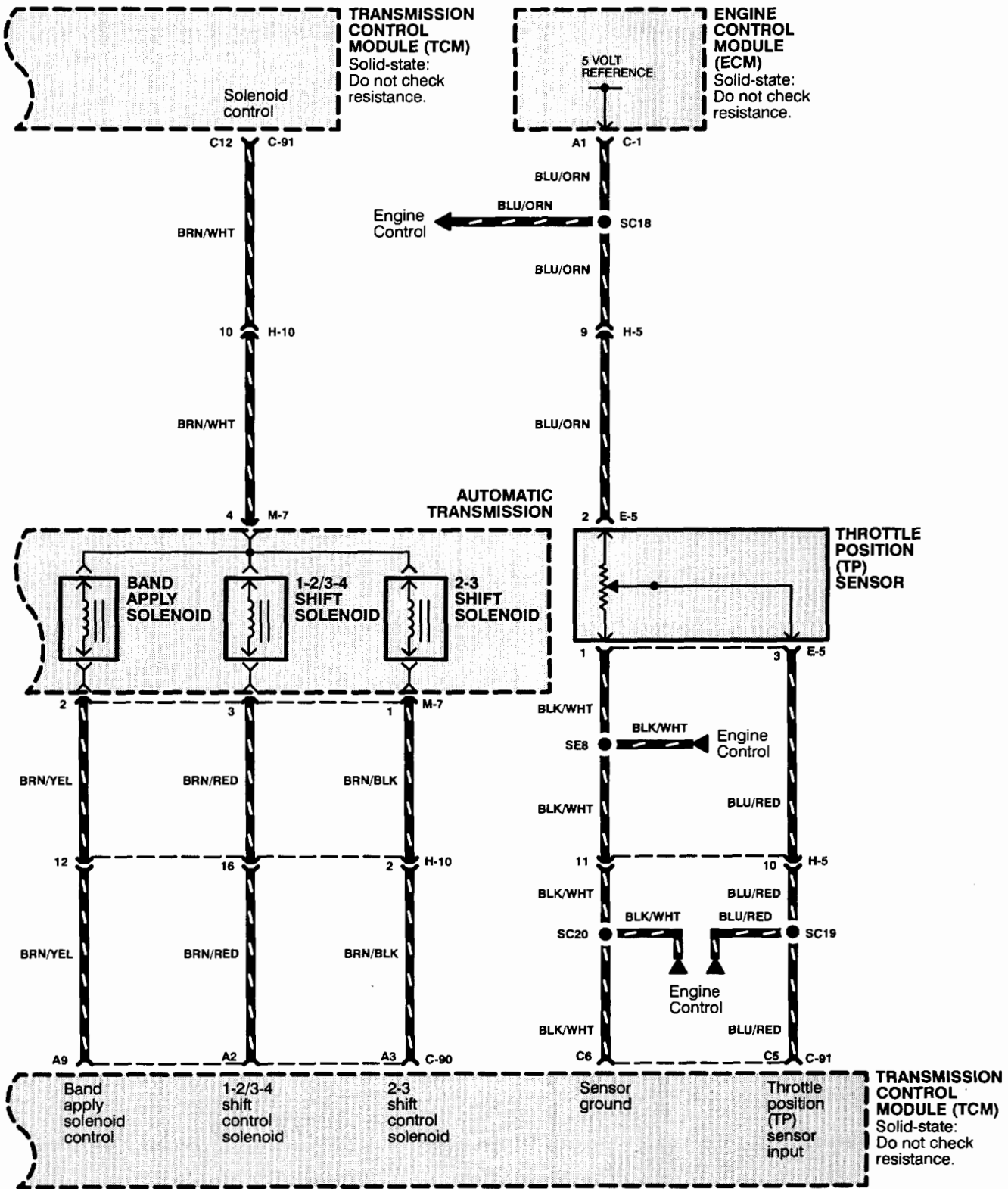
The transmission control module (TCM) receives inputs from switches, sensors, and the engine control module (ECM) and controls the functions of mode to the transmission. The transmission control module (TCM) also controls the "POWER DRIVE", "WINTER DRIVE", and "CHECK TRANS" indicator lights and allows for diagnostic testing through the tech-1 connector.

Refer to Section 7 of the Workshop Manual for further transmission diagnosis.

HORNS

Circuit Schematic





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AUTOMATIC TRANSMISSION CONTROL

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Automatic Transmission	
Mode Switch	Beneath vehicle, on left side of transmission 47
Barometric Pressure Sensor ..	Left front corner of engine compartment 27
Brake Switch	Below I/P, on brake pedal support 68
Cruise Control Unit	Below right side of I/P, above dash side trim panel 84
Dash Fuse Box	Behind left dash side trim panel 58
Data Link Connector	
(DLC) C-9 (3-WHT)	Behind left I/P lower cover 55
ECM Main Relay	In fuse/relay box 37
Electronic Brake Control	
Module (EBCM)	Behind lower cluster assembly 74
Electronic Ignition (EI)	
(DOHC)	Top center rear of engine 15
Electronic Ignition (EI)	
(SOHC)	Center front of engine 9
Engine Control Module	
(ECM)	Behind front of front console 73
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Kick Down Switch	Below I/P, on accelerator pedal bracket 70
Stop Light Switch	Below I/P, on brake pedal support 68
Tech-1 Connector C-92	
(2-WHT)	Behind left I/P lower cover 55
Throttle Position (TP)	
Sensor (DOHC)	Top center front of engine, on air intake assembly 13
Throttle Position (TP)	
Sensor (SOHC)	Top center of engine, on air intake assembly 10
Transmission Control Module	
(TCM)	Below left side of I/P 65
Transmission Speed Sensor ..	Beneath vehicle, on top of transmission
Connector	
B-10 (2-WHT)	Below I/P, right of steering column 70
C-1 (24-BRN)	On engine control module (ECM) 73
C-43 (8-BLK)	Left front of engine compartment 27
C-90 (24-BLU)	On transmission control module (TCM) 65
C-91 (32-BLU)	On transmission control module (TCM) 65
E-21 (6-BLK) (DOHC)	On right side of electronic ignition (EI) 16
E-21 (6-BLK) (SOHC)	On left side of electronic ignition (EI) 9
H-5 (16-GRN)	Left side of engine compartment 30
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-11 (12-BLK)	Left front of engine compartment 27
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-42 (16-BLK)	Right front of engine compartment 31
I-9 (16-BLK)	On left rear of meter assembly 53
M-6 (5-BLK)	Beneath center of vehicle, left side of transmission 47
M-7 (4-BLK)	Beneath center of vehicle, left side of transmission 47

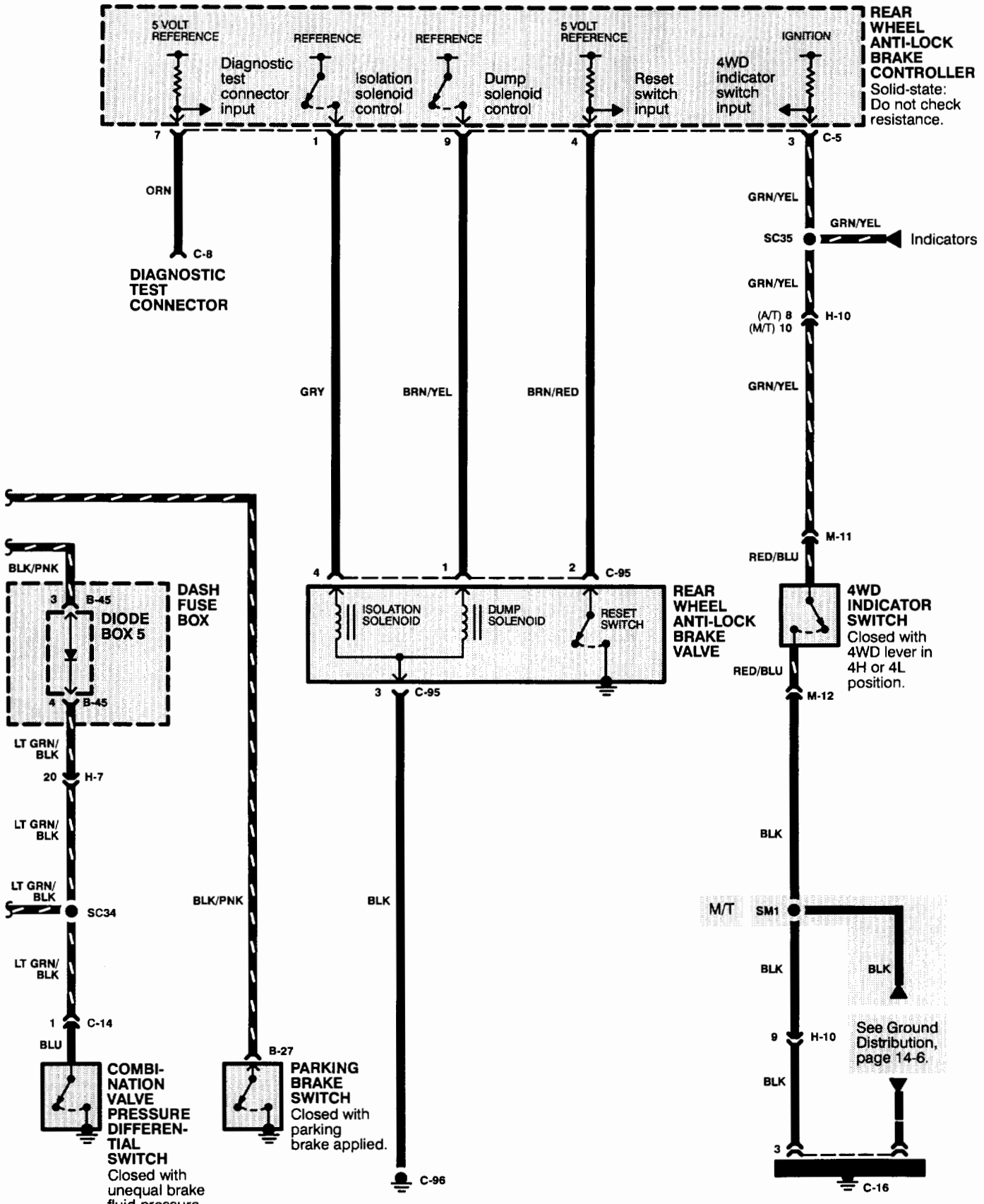
Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
High Note Horn	Behind right headlight 1
Horn Relay	In fuse/relay box 38
Low Note Horn	Behind right side of radiator grille 1
SRS Coil Assembly	Top of steering column 54
Connector	
H-41 (12-BLU) (RWAL)	Right front of engine compartment 31
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
H-51 (2-WHT)	Below I/P, above left dash side trim panel, on bracket 64
U-6 (3-YEL)	Below I/P, right of steering column 69

Circuit Operation

Voltage is applied at all times through fuse F-3 to the horn relay. The circuit continues from the horn relay to the SRS coil assembly and the horn switches. When a horn switch is closed, the circuit path is completed to ground and the horn relay energizes. The relay contact closes and battery voltage is applied to the horns. The horns sound.



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REAR WHEEL ANTI-LOCK (RWAL) BRAKE SYSTEM

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
4WD Indicator Switch	Beneath vehicle, on right side of transfer case 46
Brake Switch	Below I/P, on brake pedal support 68
Combination Valve Pressure	
Differential Switch	Left rear of engine compartment, in brake fluid valve 29
Dash Fuse Box	Behind left dash side trim panel 58
Diagnostic Test Connector	
C-8 (1-WHT)	Behind left I/P lower cover 56
Differential Speed Sensor	Beneath rear of vehicle, on top of differential 113
Diode Box 5	In dash fuse box 61
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Parking Brake Switch	Below rear of center console 79
Rear Wheel Anti-lock Brake	
Controller	Behind lower cluster assembly 75
Rear Wheel Anti-lock Brake	
Valve	Right front of engine compartment 21
Stop Light Switch	Below I/P, on brake pedal support 68
Test Connector C-7	
(2-WHT)	Behind left I/P lower cover 56
Connector	
A-1 (2-GRY)	Beneath rear of vehicle, above differential 113
C-14 (2-GRY)	Left rear of engine compartment 29
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-10 (16-BLU)	Left front of engine compartment 27
H-24 (18-YEL)	Below I/P, above left side dash trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left side dash trim panel, on bracket 63
H-33 (14-WHT)	In floor, below right front seat 125
H-40 (2-BRN)	Beneath rear of vehicle, above differential 112
H-42 (16-BLK)	Right front of engine compartment 31
I-9 (16-BLK)	On left of rear meter assembly 53
I-10 (16-WHT)	On right of rear meter assembly 53
M-11 (1-WHT)	Beneath center of vehicle, top right side of transmission 46
M-12 (1-WHT)	Beneath center of vehicle, top right side of transmission 46
Ground	
C-16	Left rear corner of engine compartment, on inner fender panel 28
C-45	Below right side of front console 75
C-96	Right front of engine compartment 21

Circuit Operation

The rear wheel anti-lock (RWAL) brake system is designed to prevent the rear wheels from locking up and to assist directional stability when the brakes are applied.

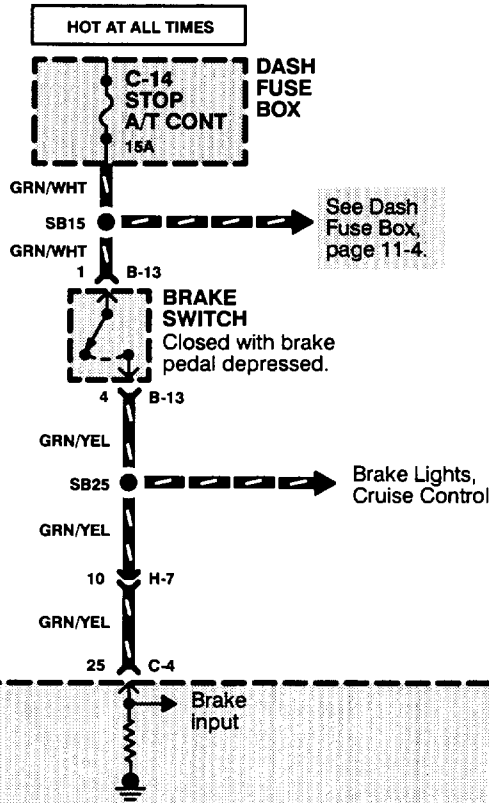
The rear wheel anti-lock brake controller determines if rear wheel anti-lock brake operation is required by monitoring the stop light switch (w/o cruise control) or brake switch (w/cruise control) state and the speed signal generated by the differential speed sensor. The differential speed sensor is a magnetic pickup coil which generates an AC voltage as a toothed exciter ring passes it. The frequency of the generated signal is proportional to vehicle speed.

When the controller detects an impending lockup, it will energize and deenergize the isolation solenoid and dump solenoid to prevent lockup. Energizing the isolation solenoid isolates the rear brake hydraulic circuits from the master cylinder. This allows brake pressure to be maintained but prevents brake pressure from increasing. Energizing the dump solenoid reduces the rear brake hydraulic pressure by opening a valve which allows brake fluid to flow into an accumulator. The controller energizes the solenoids by applying voltage.

The controller has the capability to detect a fault and set a code. When the controller detects a fault, it will turn on the "Rr. ABS" brake warning light and the "BRAKE" warning light by grounding the lamps at terminals 2 and 5. To read the codes, ground the diagnostic test connector. The "Rr. ABS" and "BRAKE" warning lamps will flash indicating the code number. The "BRAKE" warning light will stay on if the parking brake is on or unequal brake fluid pressure is detected.

When the 4WD is engaged, the RWAL brake system will be disabled. The controller is able to determine that the 4WD is engaged whenever the 4WD indicator switch closes and grounds terminal 3 of the rear wheel anti-lock brake controller.

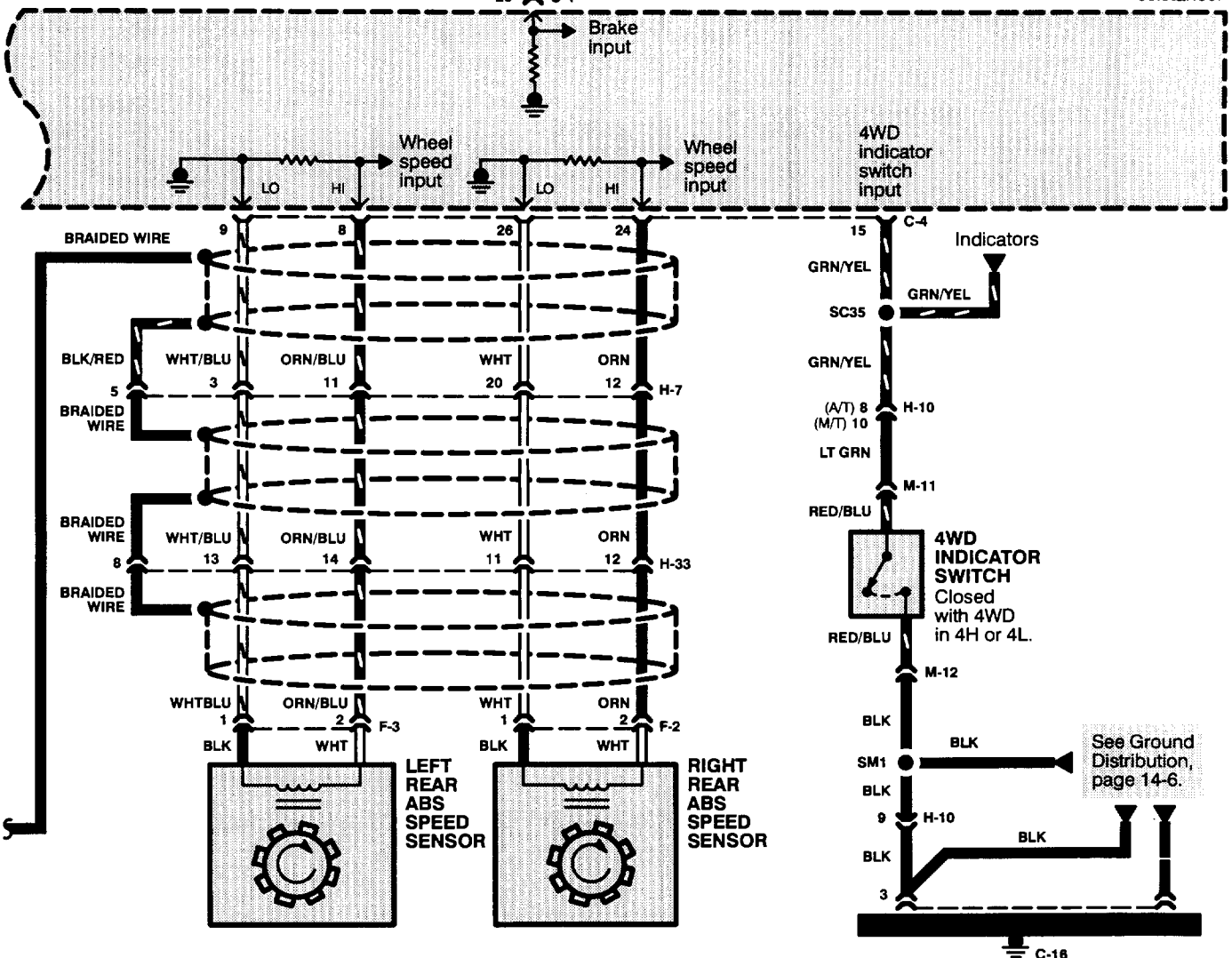
Refer to Section 5 of the Workshop Manual for further rear wheel anti-lock (RWAL) brake system diagnosis.



See Dash Fuse Box, page 11-4.

Brake Lights, Cruise Control

ELECTRONIC BRAKE CONTROL MODULE (EBCM)
Solid-state:
Do not check resistance.

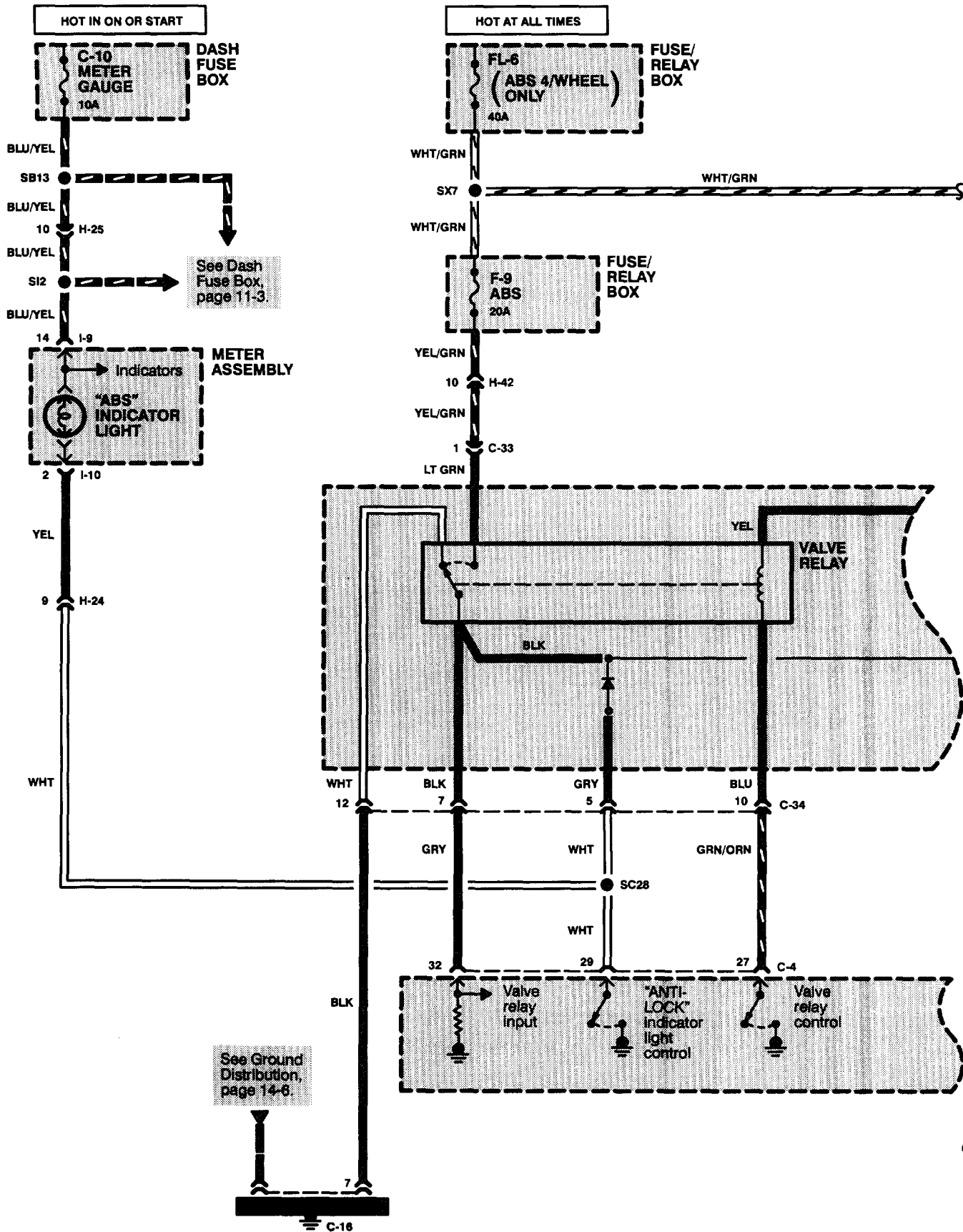


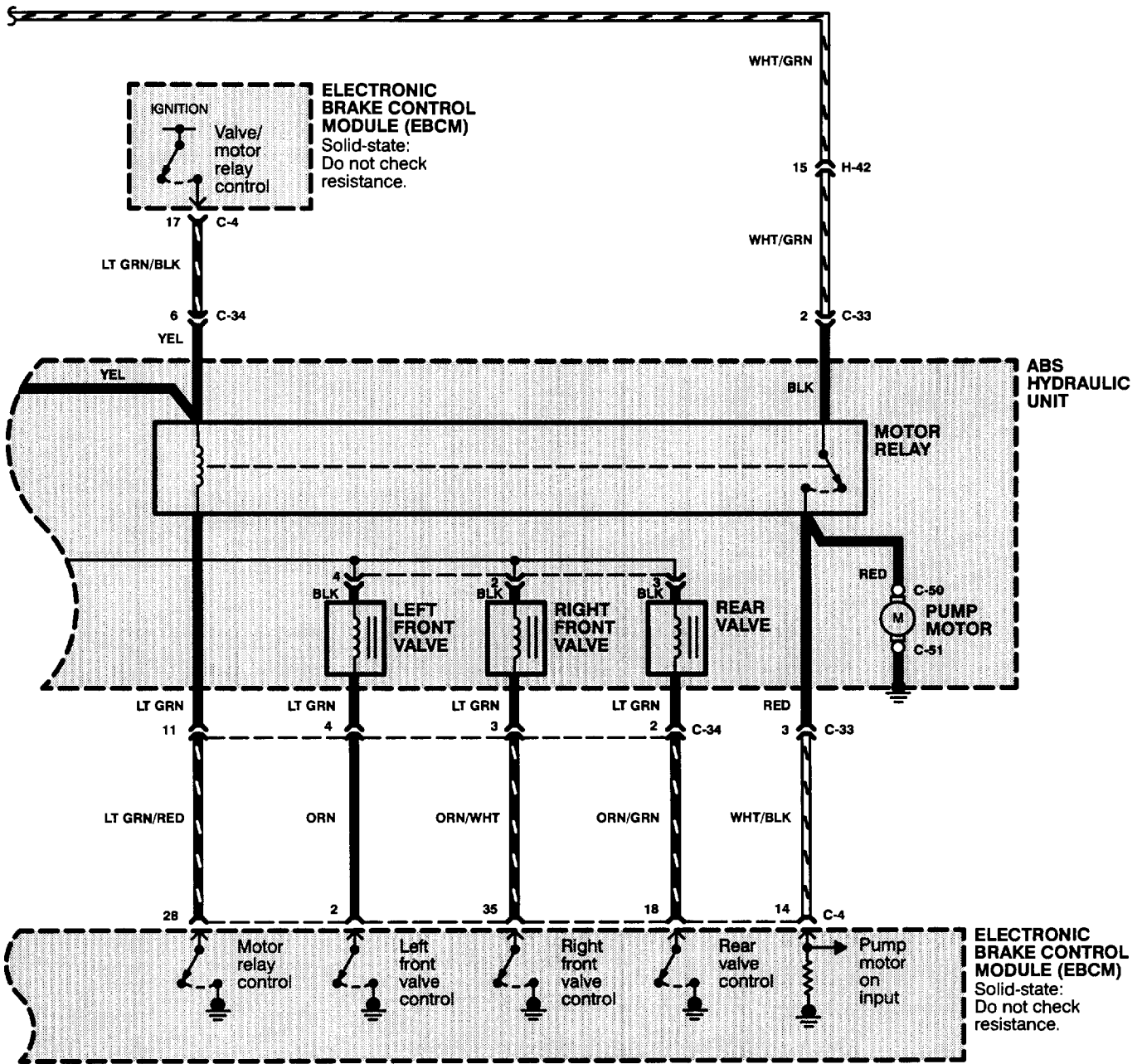
See Ground Distribution, page 14-6.

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4-WHEEL ANTI-LOCK BRAKE SYSTEM (ABS)

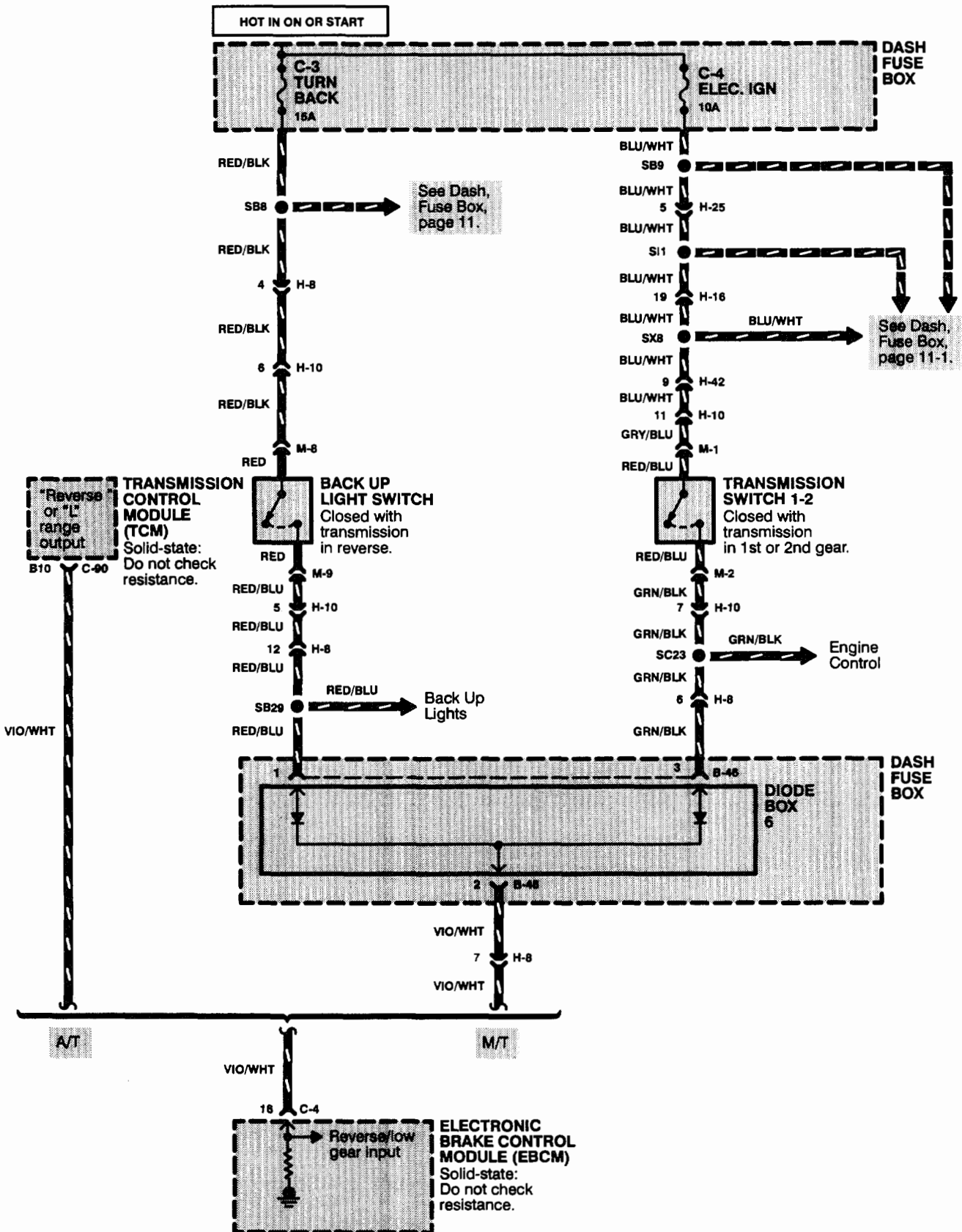
Circuit Schematic





4-WHEEL ANTI-LOCK BRAKE SYSTEM (ABS)

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
4WD Indicator Switch	Beneath vehicle, on right side of transfer case 46
ABS ALDL Connector	
C-94 (3-ORN)	Behind left I/P lower cover 55
ABS Hydraulic Unit	Right side of engine compartment 33
Back Up Light Switch	Beneath vehicle, on left side of transmission 44
Brake Switch	Below I/P, on brake pedal support 68
Dash Fuse Box	Behind left dash side trim panel 58
Diode Box 6	In dash fuse box 61
Electronic Brake Control	
Module (EBCM)	Behind lower cluster assembly 74
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
G-Sensor	Below rear of center console 79
Left Front ABS Speed	
Sensor	Inside of left front wheel 8
Left Rear ABS Speed	
Sensor	Inside of left rear wheel 116
Right Front ABS Speed	
Sensor	Inside of right front wheel 8
Right Rear ABS Speed	
Sensor	Inside of right rear wheel 116
Transmission Control	
Module (TCM)	Below left side of I/P 65
Transmission Switch 1-2	Beneath vehicle, on left side of transmission 43
Connector	
C-13 (2-BRN)	Lower left side of engine compartment 7
C-33 (3-GRY)	Right front corner of engine compartment 49
C-34 (12-GRY)	Right front corner of engine compartment 49
C-41 (2-BRN)	Lower right side of engine compartment 7
C-90 (24-BLU)	On transmission control module (TCM) 65
F-2 (2-BRN)	Beneath rear of vehicle, above right side of differential 111
F-3 (2-BLK)	Beneath rear of vehicle, above right side of differential 111
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket 63
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-16 (22-WHT)	Behind right dash side trim panel 86
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-33 (14-WHT)	In floor, below right front seat 125
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
H-42 (16-BLK)	Right front of engine compartment 31
I-9 (16-BLK)	On left of rear meter assembly 53
I-10 (16-WHT)	On right rear meter assembly 53
M-1 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-2 (1-CLR)	Beneath center of vehicle, top left side of transmission 43
M-8 (1-CLR)	Beneath center of vehicle, top left side of transmission 44
M-9 (1-CLR)	Beneath center of vehicle, top left side of transmission 44
M-11 (1-WHT)	Beneath center of vehicle, top right side of transmission 46
M-12 (1-WHT)	Beneath center of vehicle, top right side of transmission 46

4-WHEEL ANTI-LOCK BRAKE SYSTEM (ABS)

Component Location Index

(Refer to Section 201 for photographs.)

<u>Ground</u>	<u>Photo No.</u>
C-16 Left rear corner of engine compartment, on inner fender panel	28
C-85 Below right side of front console	73

Circuit Operation

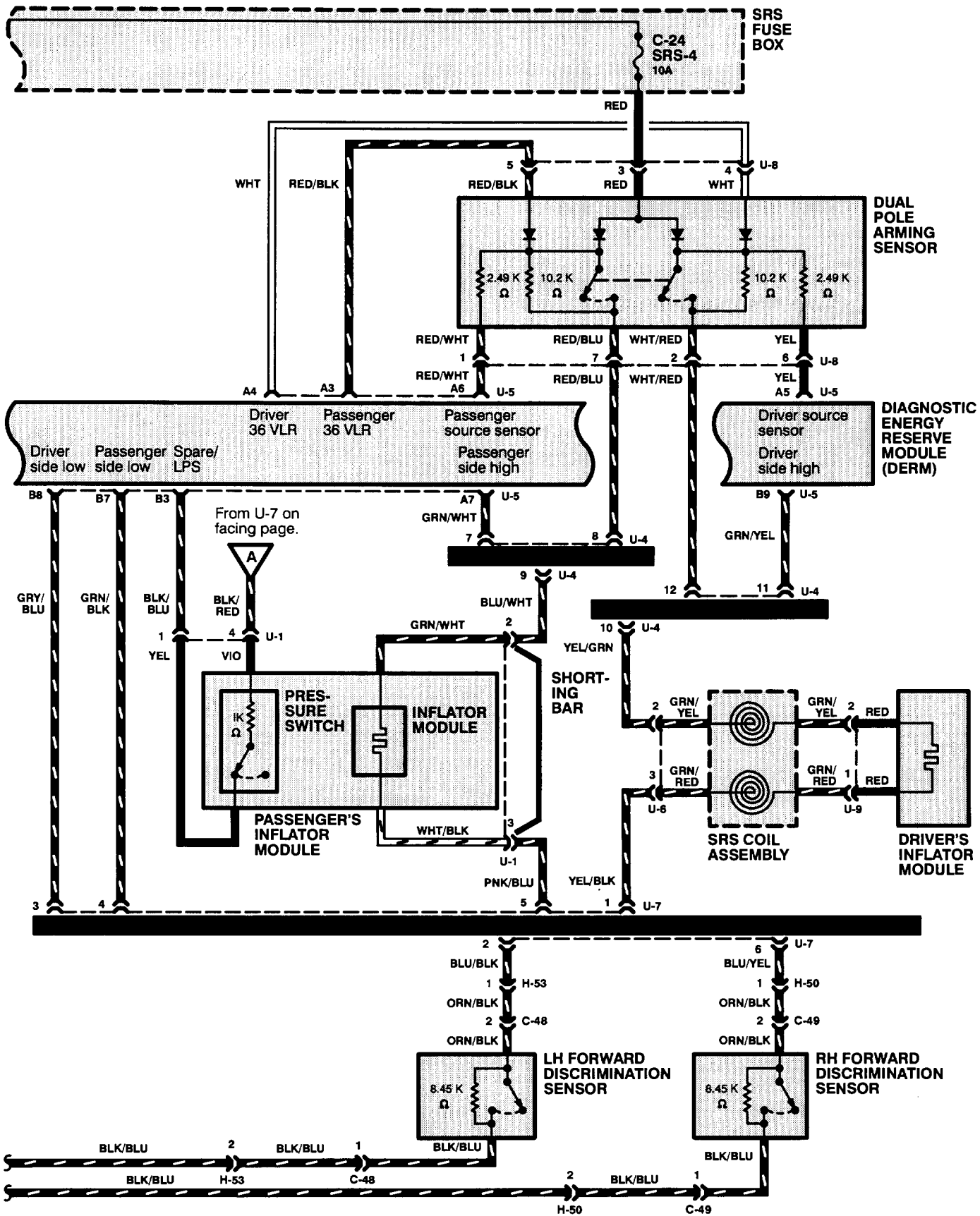
The anti-lock brake system adjusts the brake pressure whenever a wheel is about to lockup, allowing the driver to maintain greater control of the vehicle under heavy braking conditions. Under normal driving conditions, the anti-lock brake system (ABS) functions the same as a standard power assisted brake system.

The electronic brake control module (EBCM) receives inputs from individual ABS speed sensors and the G-sensor. The electronic brake control module (EBCM) uses the inputs to control the ABS hydraulic unit, which adjusts the hydraulic pressure applied to each caliper on the basis of the signals received from the electronic brake control module (EBCM).

The electronic brake control module (EBCM) has a self-diagnosis function which monitors the system's function. When a malfunction is detected, the "ABS" indicator light is turned on and the anti-lock braking function is disabled; but the standard power assisted brake system continues to operate normally.

Refer to Section 5 of the Workshop Manual for further anti-lock brake system (ABS) diagnosis.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	58
Data Link Connector (DLC) C-9 (3-WHT)	55
Diagnostic Energy Reserve Module (DERM)	72
Driver's Inflator Module	In steering wheel
Driver's Seat Belt Switch	In left front seat belt buckle
Dual Pole Arming Sensor	Behind center of I/P, see Workshop Manual page 9J-122
LH Forward Discriminating Sensor	Mounted to left side of radiator support
Passenger's Inflator Module	Behind right side of I/P
RH Forward Discriminating Sensor	Mounted to right side of radiator support
SRS Coil Assembly	Top of steering column
SRS Fuse Box	On top of dash fuse box
Connector	
B-24 (3-BLK)	Below left front seat
C-48 (2-YEL)	Behind left headlight
C-49 (2-YEL)	Below right side of radiator support
H-49 (4-WHT)	In dash fuse box
H-50 (2-YEL)	Below right side of I/P
H-51 (2-WHT)	Below I/P, above left dash side trim panel, on bracket
H-52 (3-YEL)	Below I/P, above left dash side trim panel, on bracket
H-53 (2-YEL)	Below I/P, above left dash side trim panel, on bracket
I-37 (3-YEL)	Behind left side of meter assembly
U-1 (4-YEL)	Below right side of I/P
U-4 (12-YEL)	Behind front of front console
U-6 (3-YEL)	Below I/P, right of steering column
U-7 (12-YEL)	Below I/P, above left dash side trim panel, inside bracket
U-8 (7-YEL)	Below I/P, above left dash side trim panel, on bracket
U-9 (2-YEL)	Inside steering wheel
Ground	
B-26	Below rear of center console
U-2	Below right side of front console
U-3	Below right side of front console

Circuit Operation

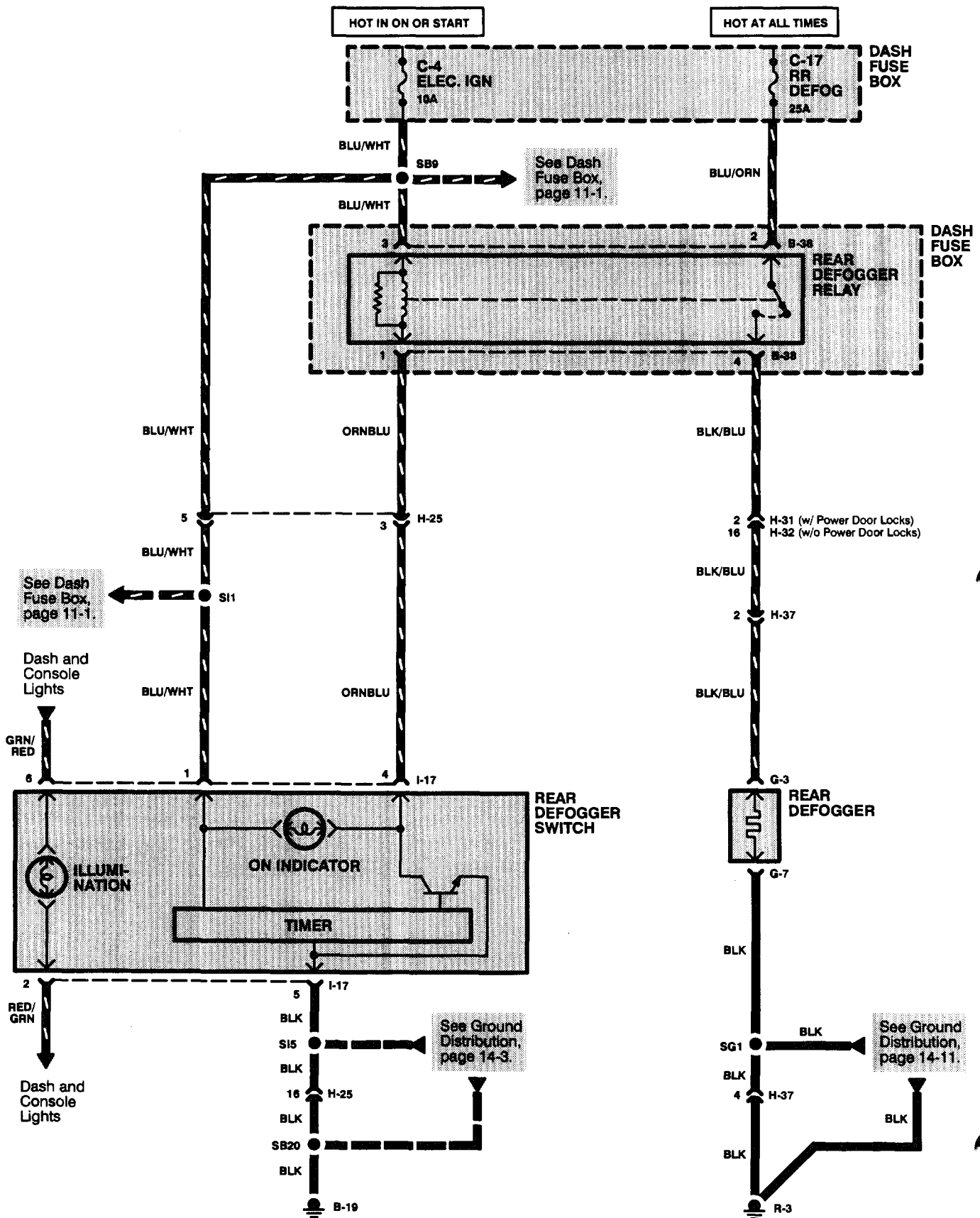
The main portions of the supplemental restraint system (SRS) are the deployment loops and the diagnostic energy reserve module (DERM). The main function of the deployment loops is to supply current through the inflator modules, which will cause deployment of the air bags in the event of a frontal crash of sufficient force, up to 30 degrees off the centerline of the vehicle. The dual pole arming sensor, SRS coil assembly (driver side only), inflator modules, LH forward discriminating sensor and RH forward discriminating sensor make up the deployment loops. The dual pole arming sensor switches power to the inflator modules on the high side (power side) of the deployment loops. Either of the discriminating sensors can supply ground to the inflator modules on the low side (ground side) of the loops. The inflator modules are only supplied sufficient current to deploy when the dual pole arming sensor and at least one of the discriminating sensors are closed simultaneously.

A function of the DERM is to supply the deployment loops with a 36-Volt Loop Reserve (36VLR) to ensure sufficient energy to deploy the air bags if the ignition feed to the dual pole arming sensor is lost during a frontal crash.

Another function of the DERM is electrical system diagnostics. The DERM monitors the deployment loops in conjunction with the resistors in the dual pole arming sensor, LH forward discriminating sensor and RH forward discriminating sensor. These resistors make it possible for the DERM to detect circuit and component malfunctions within the deployment loops. The DERM monitors the voltage drop across each component within the loops during normal non-deployment operation. If the monitored voltages fall outside of expected limits, the DERM will indicate a malfunction through the storage of a diagnostic trouble code and the illumination of the "AIR BAG" warning light.

Refer to Section 9J of the Workshop Manual for further diagnosis.

REAR DEFOGGER



Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Rear Defogger Relay	In dash fuse box 59
Connector	
G-3 (1-BLK)	On left side of glass, in left tailgate door 106
G-7 (1-BLK)	On right side of glass, in left tailgate door 106
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-31 (2-WHT)	Below left front seat 120
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (22-BLK) (with Power Door Locks) ...	Below left front seat 120
H-37 (4-GRY)	Left rear of luggage room 102
Ground	
B-19	Behind top of left dash side trim panel 62
R-3	Left side of luggage room 103

Circuit Operation

Voltage is applied at all times through fuse C-17 to the rear defogger relay contact. With the starter switch in ON or START, voltage is applied through fuse C-4 to the rear defogger switch and the rear defogger relay coil.

When the rear defogger switch is pushed, a ground signal is sent to the rear defogger timer. The timer provides ground for the rear defogger relay coil and the rear defogger "ON" indicator light. The rear defogger relay energizes and the relay contact closes. Battery voltage is applied to the rear defogger. The indicator lights up and the rear defogger heats the rear window to remove any fog from the glass. The rear defogger will turn off automatically after approximately 30 minutes. It will also turn off if the starter switch is turned to OFF or if the rear defogger switch is depressed again.

Component Location Index

(Refer to Section 201 for photographs.)

Component		Photo No.
Anti-theft Controller	Below left side of I/P	68
Automatic Transmission		
Mode Switch	Beneath vehicle, on left side of transmission	47
Blower Motor	Below right side of I/P	84
Blower Resistors	Right side of I/P, behind glove box	80
Clutch Start Switch	Below I/P, top of clutch pedal support	66
Dash Fuse Box	Behind left dash side trim panel	58
Diode Box 4	In dash fuse box	61
Fuse/Relay Box	Right side of engine compartment, on inner fender panel	33
Generator	Lower right front of engine	
Heater and A/C Relay	In dash fuse box	59
Starter Relay	In fuse/relay box	36
Connector		
C-43 (8-BLK)	Left front of engine compartment	27
H-3 (2-BLK)	Right side of engine compartment	40
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket	62
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket	82
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket	82
H-14 (2-RED)	Below I/P, above right dash side trim panel, on bracket	82
H-20 (6-WHT)	Behind right dash side trim panel	86
H-48 (16-BLK)	Behind right dash side trim panel	86
I-18 (6-WHT)	On rear of heater-A/C control panel	76
Ground		
B-2	Above right dash side trim panel	84
B-19	Behind top of left dash side trim panel	62

Circuit Operation

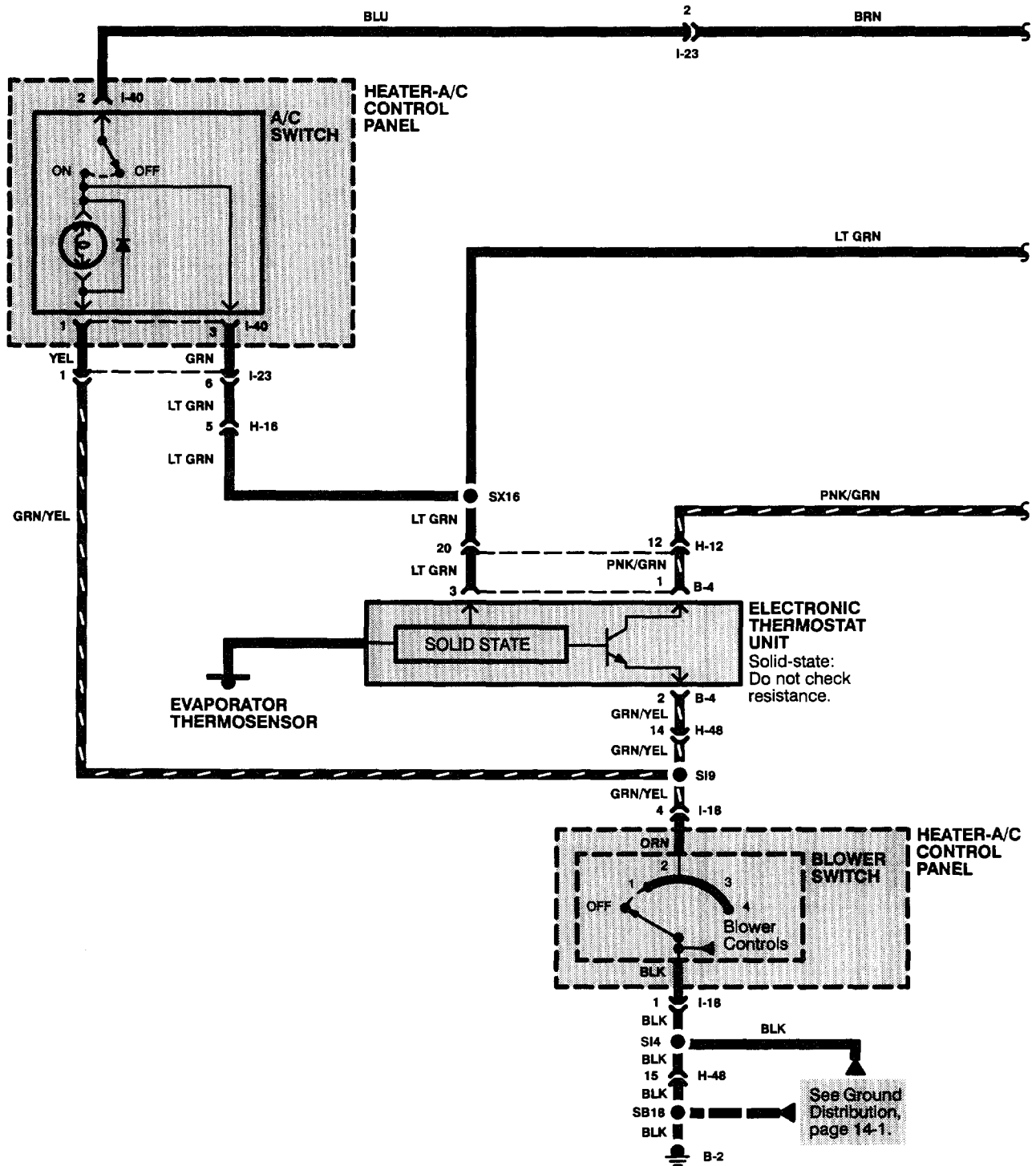
With the starter switch in START and the transmission control lever in park or neutral (automatic transmission), or with the clutch pedal depressed (manual transmission), voltage is applied to the starter relay and the relay energizes.

When the starter switch is turned to ON with the engine running, the relay deenergizes and voltage is applied from the generator to the heater and A/C relay through the normally closed contacts of the starter relay. The heater and A/C relay energizes allowing voltage to be applied from FL-1 (MAIN) fusible link to the blower motor through fuse C-19.

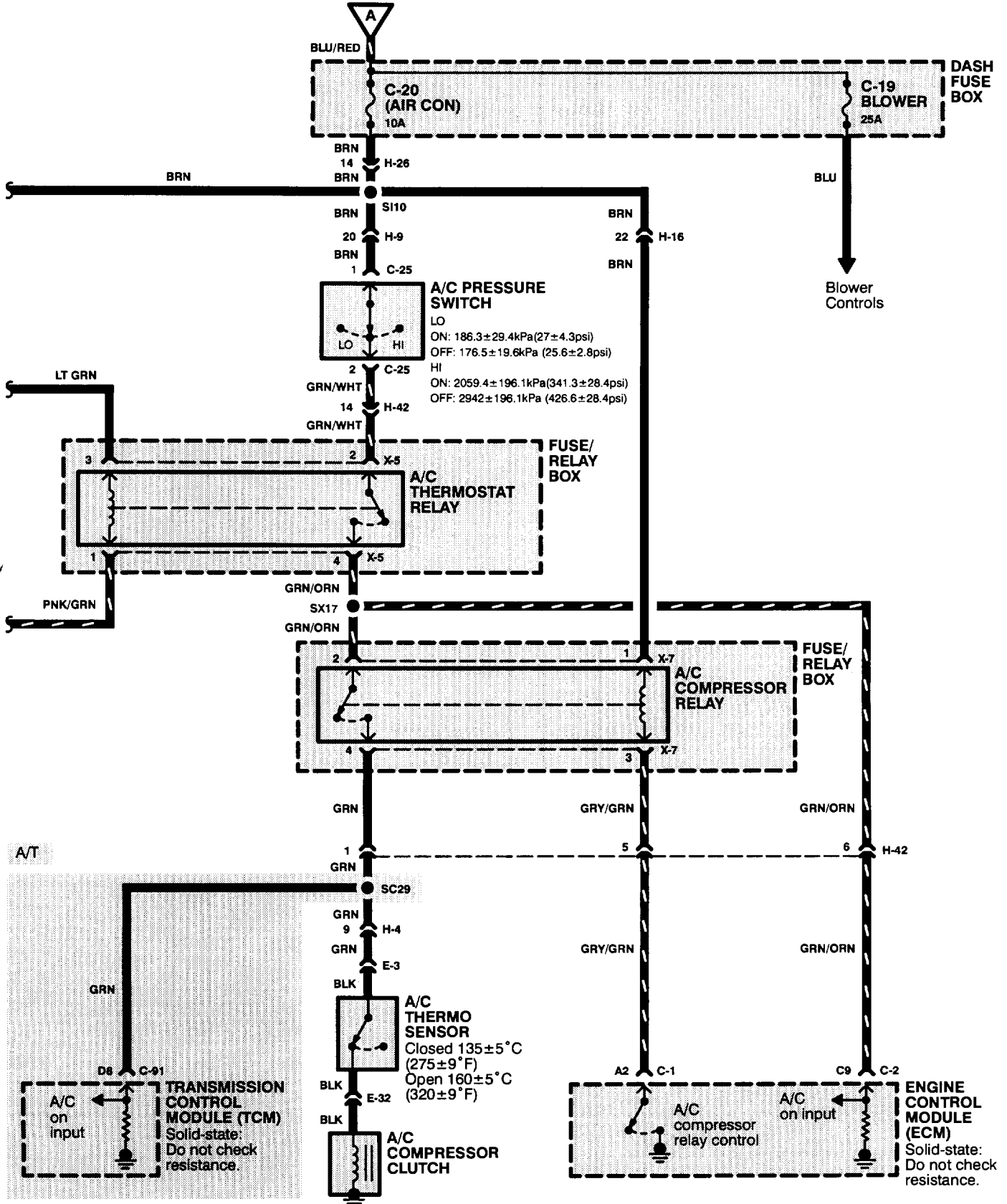
The blower switch then applies ground to the blower resistors for the desired blower motor speed. As the blower switch moves from OFF to position 4, resistors are bypassed. As the resistance to ground is decreased, blower speed increases. When the blower switch is in position 4, all of the resistors are bypassed and the blower motor runs at the highest speed.

AIR CONDITIONER: COMPRESSOR CONTROLS

Circuit Schematic



From Dash Fuse Box
on page 63 (M/T)
or 63-1 (A/T).



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AIR CONDITIONER: COMPRESSOR CONTROLS

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
A/C Compressor Clutch	48
A/C Compressor Relay	39
A/C Pressure Switch	2
A/C Thermo Sensor	48
A/C Thermostat Relay	35
Anti-theft Controller	68
Automatic Transmission	
Mode Switch	47
Clutch Start Switch	66
Dash Fuse Box	58
Diode Box 4	61
Electronic Thermostat Unit	80
Engine Control Module (ECM)	73
Fuse/Relay Box	33
Generator	
Heater And A/C Relay	59
Starter Relay	36
Transmission Control Module (TCM)	65
Connector	
C-1 (24-BRN)	73
C-2 (32-BRN)	73
C-43 (8-BLK)	27
C-91 (32-BLU)	65
E-3 (1-BLK)	48
E-32 (1-CLR)	48
H-3 (2-BLK)	40
H-4 (12-BLU)	30
H-8 (16-BLK)	62
H-9 (20-BLK)	62
H-12 (20-BRN)	82
H-13 (6-GRY)	82
H-14 (2-RED)	82
H-16 (22-WHT)	86
H-26 (20-WHT)	62
H-42 (16-BLK)	31
H-48 (16-BLK)	86
I-18 (6-WHT)	76
I-23 (6-WHT)	76
Ground	
B-2	84
B-19	62

Circuit Operation

A/C Compressor Clutch

With the starter switch in START and the transmission control lever in park or neutral (automatic transmission), or the clutch pedal depressed (manual transmission), voltage is applied to the starter relay and the relay energizes. When the starter switch is turned to ON with the engine running, the relay deenergizes and voltage is applied from the generator to the heater and A/C relay through the normally closed contacts of the starter relay. The heater and A/C relay energizes, allowing voltage to be applied from FL-1 (MAIN) fusible link to the A/C switch, the A/C pressure switch, and the A/C compressor relay through fuse C-20. When the A/C switch is switched on, voltage is applied to the coil of the A/C thermostat relay. Ground is provided to the coil of this relay through the electronic thermostat unit and the blower switch (provided the blower switch is not in the OFF position).

When ground is provided, the A/C thermostat relay energizes and voltage is applied through the A/C pressure switch to the A/C compressor relay. Ground is provided to the A/C compressor relay by the engine control module (ECM) and the relay energizes. Power is provided to the A/C compressor clutch and the clutch engages.

A/C Thermo Sensor

If the air conditioning compressor's temperature rises above $160 \pm 5^\circ \text{ C}$ ($320 \pm 9^\circ \text{ F}$), the A/C thermo sensor will open, disengaging the A/C compressor clutch. The A/C thermo sensor will close when the temperature falls below $135 \pm 5^\circ \text{ C}$ ($275 \pm 9^\circ \text{ F}$). Power is reapplied to the A/C compressor clutch and the clutch engages.

A/C Pressure Switch

Air conditioning system pressure below $176.5 \pm 19.6 \text{ kPa}$ ($25.6 \pm 2.8 \text{ psi}$) indicates a loss of refrigerant or refrigerant oil. The A/C pressure switch opens with low system pressure to prevent compressor damage. Also, with system pressure above $2942 \pm 196.1 \text{ kPa}$ ($426.6 \pm 28.4 \text{ psi}$), the A/C pressure switch opens to prevent compressor damage.

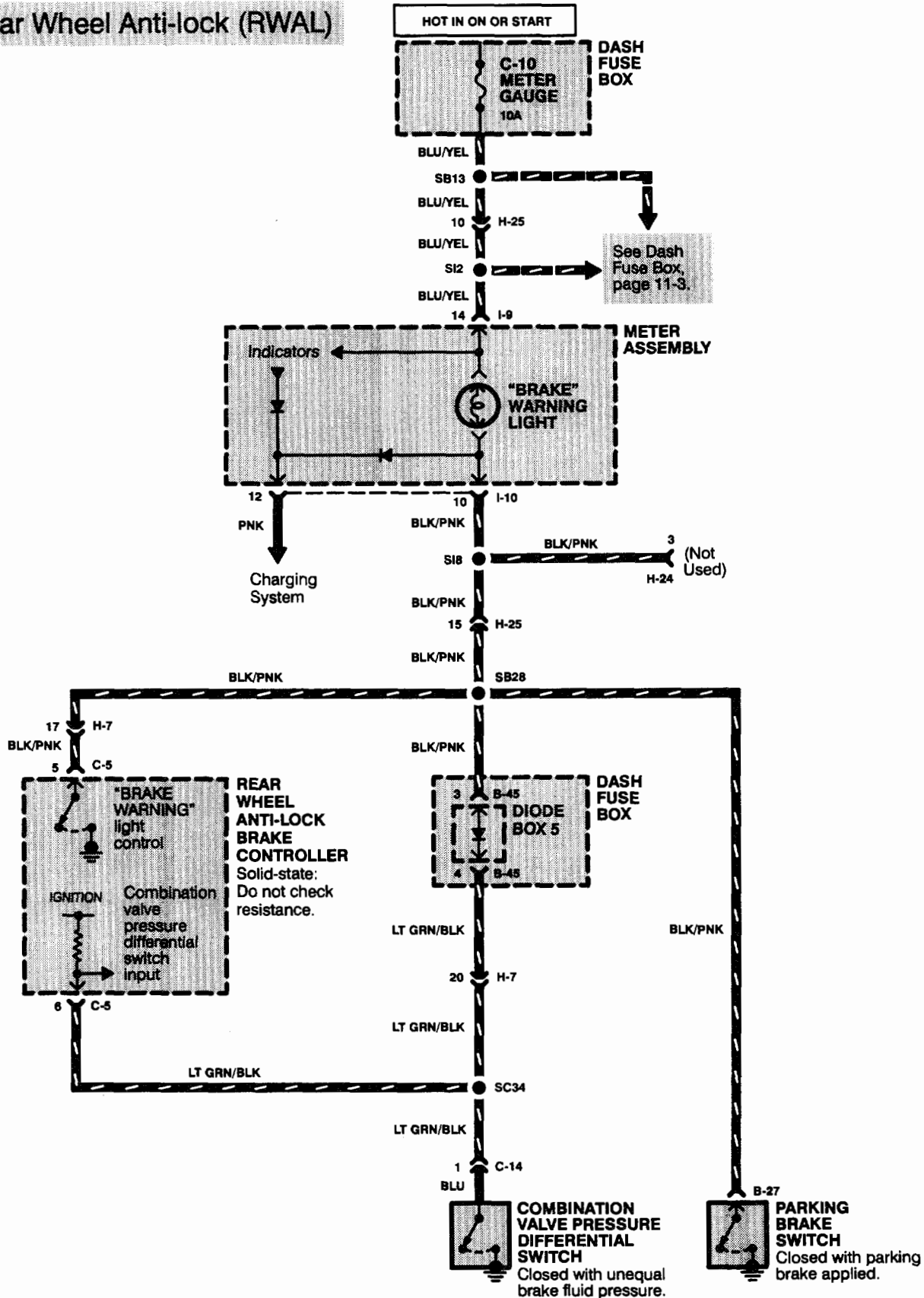
Electronic Thermostat Unit

The electronic thermostat unit senses the temperature of the cool air from the evaporator and the evaporator fins by means of the evaporator thermo sensor. This information is input by the electronic thermostat unit, which determines whether ground is to be provided to the A/C thermostat relay. When the temperature becomes too low, ground is not provided.

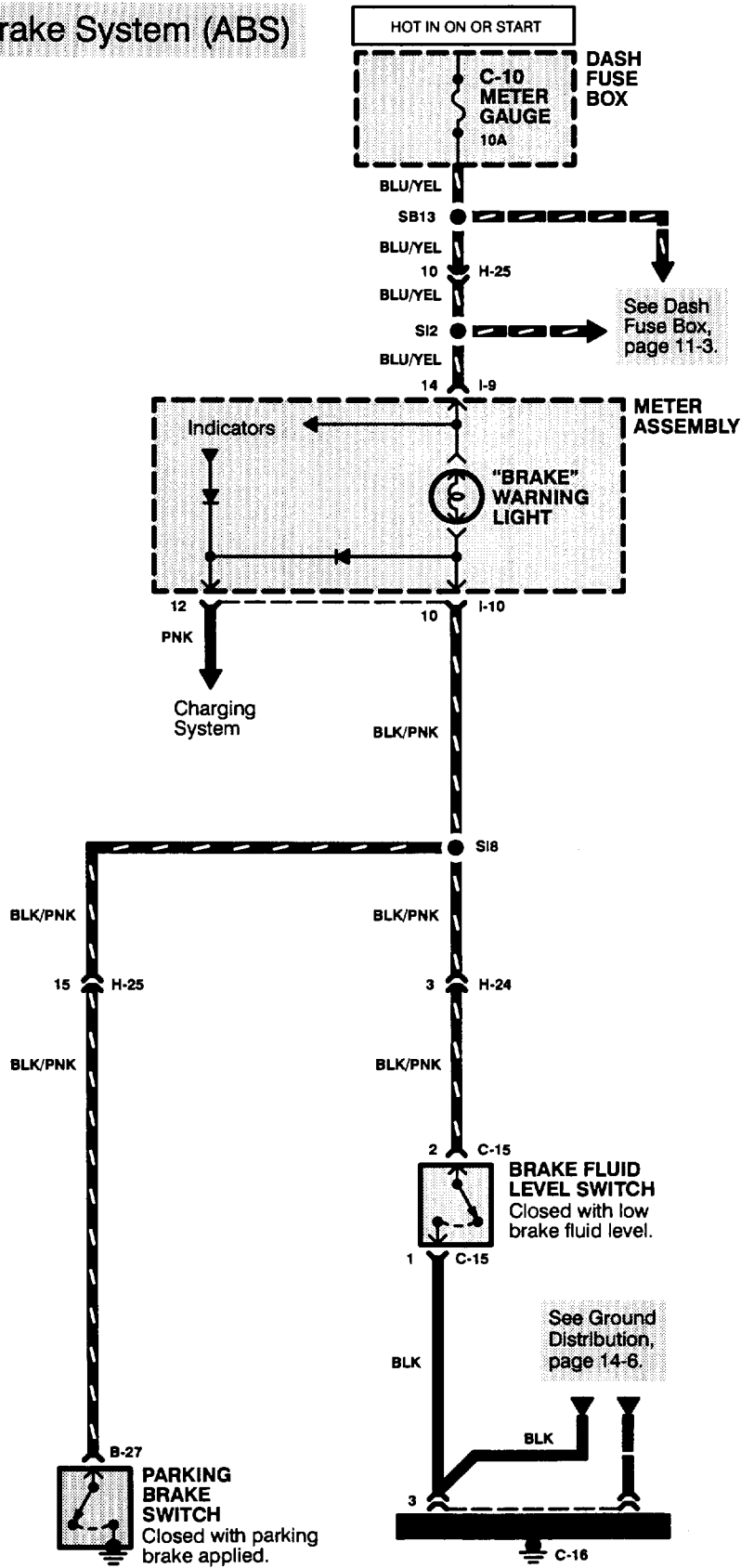
BRAKE WARNING SYSTEM

Circuit Schematic

Rear Wheel Anti-lock (RWAL)



Anti-lock Brake System (ABS)



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BRAKE WARNING SYSTEM

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Brake Fluid Level Switch Left rear of engine compartment	28
Combination Valve Pressure Differential Switch Left rear of engine compartment, in brake fluid valve	29
Dash Fuse Box Behind left dash side trim panel	58
Diode Box 5 In dash fuse box	61
Parking Brake Switch Below rear of center console	79
Rear Wheel Anti-lock Brake Controller Behind lower cluster assembly	75
Connector	
C-14 (2-GRY) Left rear of engine compartment	29
H-7 (20-BRN) Below I/P, above left dash side trim panel, on bracket	63
H-24 (18-YEL) Below I/P, above left dash side trim panel, on bracket	63
H-25 (22-BLU) Below I/P, above left dash side trim panel, on bracket	63
I-9 (16-BLK) On left rear of meter assembly	53
I-10 (16-WHT) On right rear of meter assembly	53
Ground	
C-16 Left rear corner of engine compartment, on inner fender panel	28

Circuit Operation

Circuit Operation

The "BRAKE" warning light goes on to alert the driver that the parking brake is applied or that the combination valve pressure differential switch (RWAL)/ brake fluid level switch (ABS) is closed. It also lights as a bulb test when the engine is cranked.

Parking Brake Switch

With the starter switch in ON or START, battery voltage is applied to fuse C-10 and to the "BRAKE" warning light. When the parking brake is applied, the parking brake switch closes and provides a ground for the light. The "BRAKE" warning light goes on to remind the driver that the parking brake is applied.

Combination Valve Pressure Differential Switch

With the starter switch in ON or START, battery voltage is applied to fuse C-10 and to the "BRAKE" warning light. The braking system is a split system designed so that one part will provide some braking action if there is a loss of brake fluid pressure in the other part of the system. If there is a loss of brake fluid pressure in either system, the combination valve pressure differential switch closes and provides a ground for the light.

The "BRAKE" warning light goes on to warn the driver that there is a loss of brake fluid pressure in the system. The switch also provides a ground for the rear wheel antilock brake controller. See Rear Wheel Anti-lock (RWAL) Brake System for further details.

(Note: check brake pad wear before adding fluid.)

Brake Fluid Level Switch

With the starter switch in ON or START, battery voltage is applied to fuse C-10 and to the "BRAKE" warning light. If the brake fluid is low, the brake fluid level switch closes and provides a ground for the light. The "BRAKE" warning light goes on to warn the driver of low brake fluid level in the brake master cylinder.

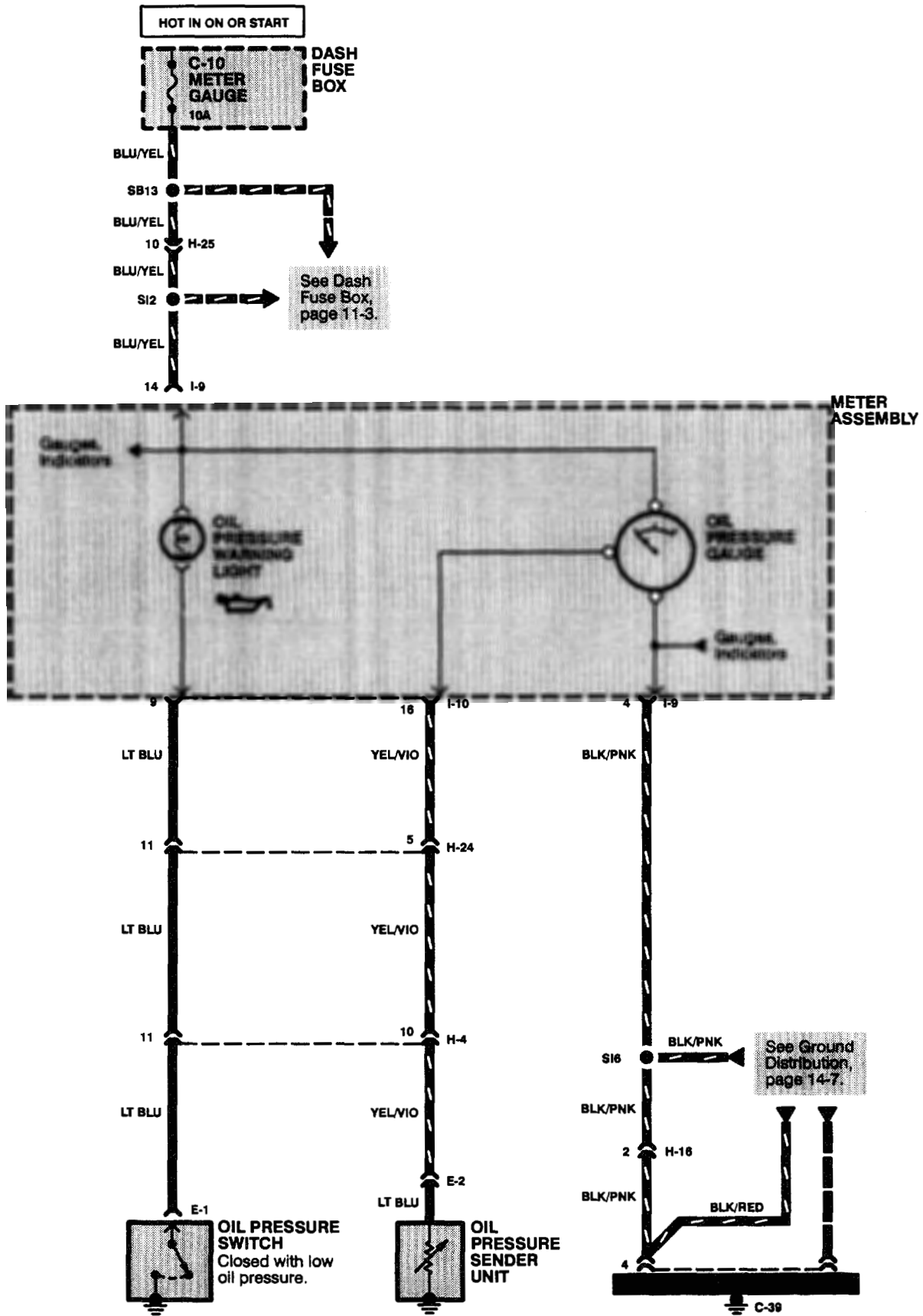
(Note: check brake pad wear before adding fluid.)

Bulb Check

With the starter switch in START, battery voltage is applied to the "BRAKE" warning light. The generator will provide ground until the engine is running. The "BRAKE" warning light goes on to test the brake warning light bulb and then goes off. See Charging System for further details.

OIL PRESSURE WARNING SYSTEM

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Oil Pressure Sender Unit	Lower front of engine 23
Oil Pressure Switch	Lower front of engine 23
Connector	
E-2 (1-GRY)	Lower left front of engine 23
H-4 (12-BLU)	Left side of engine compartment 30
H-16 (22-WHT)	Behind right dash side trim panel 86
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 53
Ground	
C-39	Right rear corner of engine compartment, on inner fender panel 42

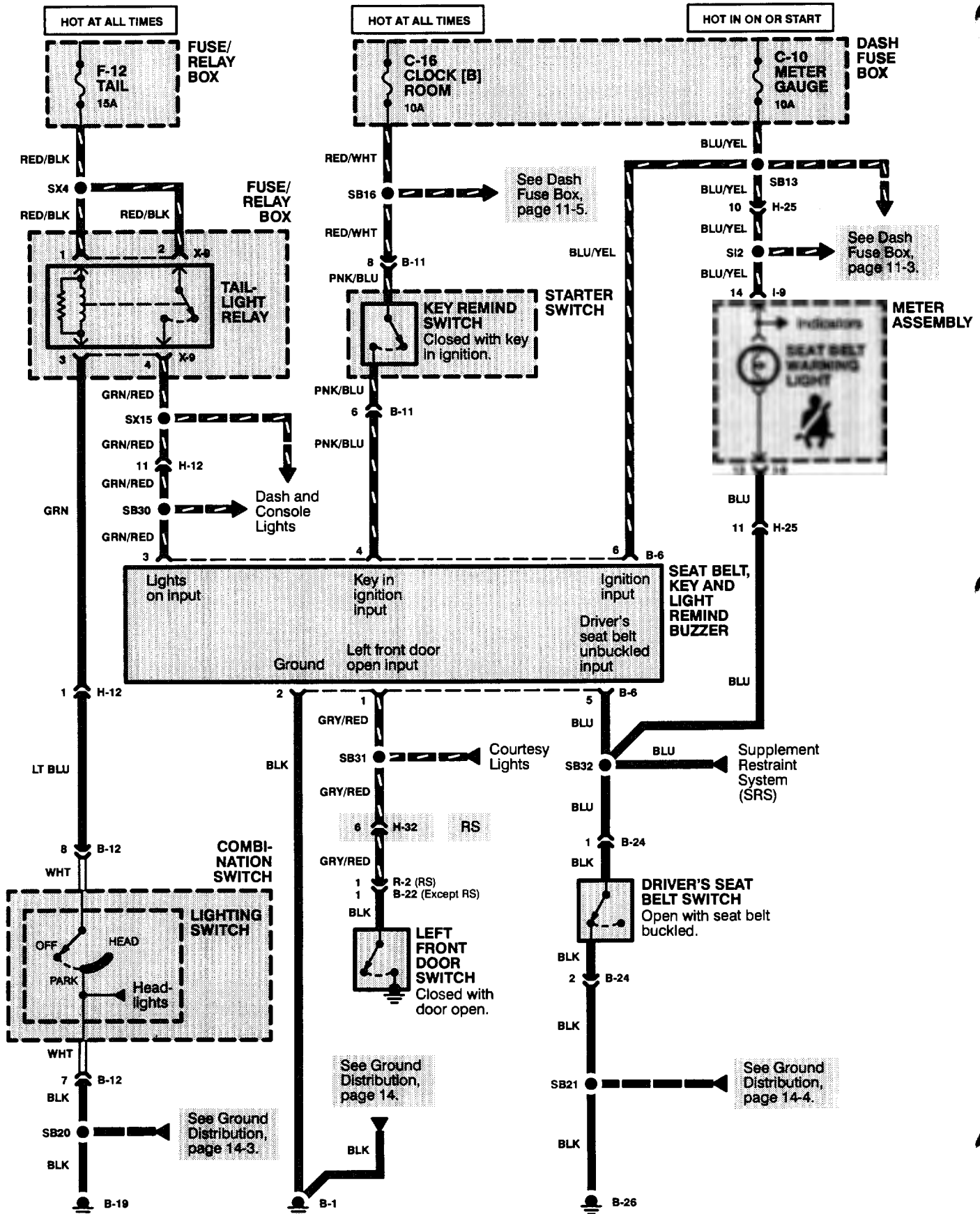
Circuit Operation

With the starter switch in ON or START, the oil pressure warning light will go on and the oil pressure gauge will show low oil pressure until the engine is started and normal oil pressure is obtained.

If the engine oil pressure falls below normal oil pressure and does not increase, the oil pressure switch will close and the oil pressure sending unit will decrease in resistance. The oil pressure warning light will go on and stay on and the oil pressure gauge will show low oil pressure.

SEAT BELT, LIGHTS-ON, AND KEY-IN IGNITION WARNING SYSTEM

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

<u>Component</u>	<u>Photo No.</u>
Dash Fuse Box	Behind left dash side trim panel 58
Driver's Seat Belt Switch	In left front seat belt buckle
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Left Front Door Switch	Near left front door striker 88
Seat Belt, Key and Light Remind Buzzer	Behind right dash side trim panel 86
Starter Switch	Underside of steering column 54
Taillight Relay	In fuse/relay box 36
Connector	
B-11 (8-WHT)	Below I/P, right of steering column 69
B-12 (16-BLK/WHT)	Below I/P, right of steering column 69
B-22 (2-WHT)	In left center pillar, behind door switch
B-24 (3-BLK)	Below left front seat 119
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 82
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-32 (22-BLK) (with Power Door Locks)	Below left front seat 120
I-9 (16-BLK)	On left rear of meter assembly 53
R-2 (2-WHT)	Front of left quarter panel area, behind door switch
Ground	
B-1	Above right dash side trim panel 84
B-19	Behind top of left dash side trim panel 62
B-26	Below rear of center console 79

Circuit Operation

Key-In Ignition Warning

When the key remind switch is closed, battery voltage is applied to the PNK/BLU wire of the seat belt, key and light remind buzzer. With the left front door open, ground is provided at the GRY/RED wire of the seat belt, key and light remind buzzer and the buzzer sounds.

Seat Belt Warning

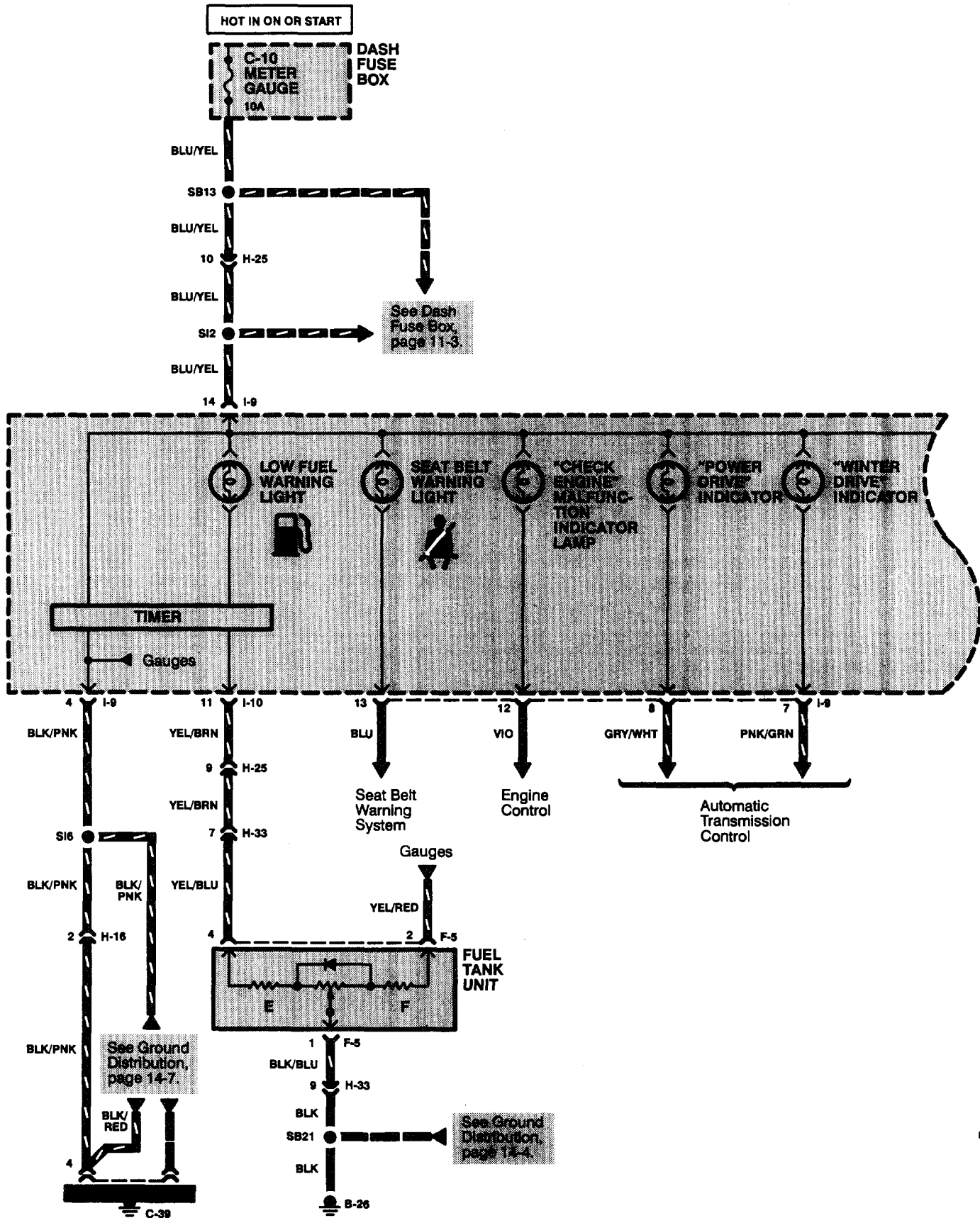
With the starter switch in ON or START, battery voltage is applied to the seat belt warning light from fuse C-10. With the driver's seat belt unbuckled, ground is provided at the BLU wire of the seat belt, key and light remind buzzer. With the starter switch in the ON position, the seat belt warning light turns on for four to eight seconds and the buzzer will sound for the same amount of time. With the driver's seat belt buckled, the seat belt warning light turns on for four to eight seconds, but the buzzer does not sound.

Lights-on Warning

When the starter switch is turned from the ON or START position to the OFF position, and the park lights are on, the taillight relay applies battery voltage to the seat belt, key and light remind buzzer at the GRN/RED wire. The buzzer will sound until the lights are turned off.

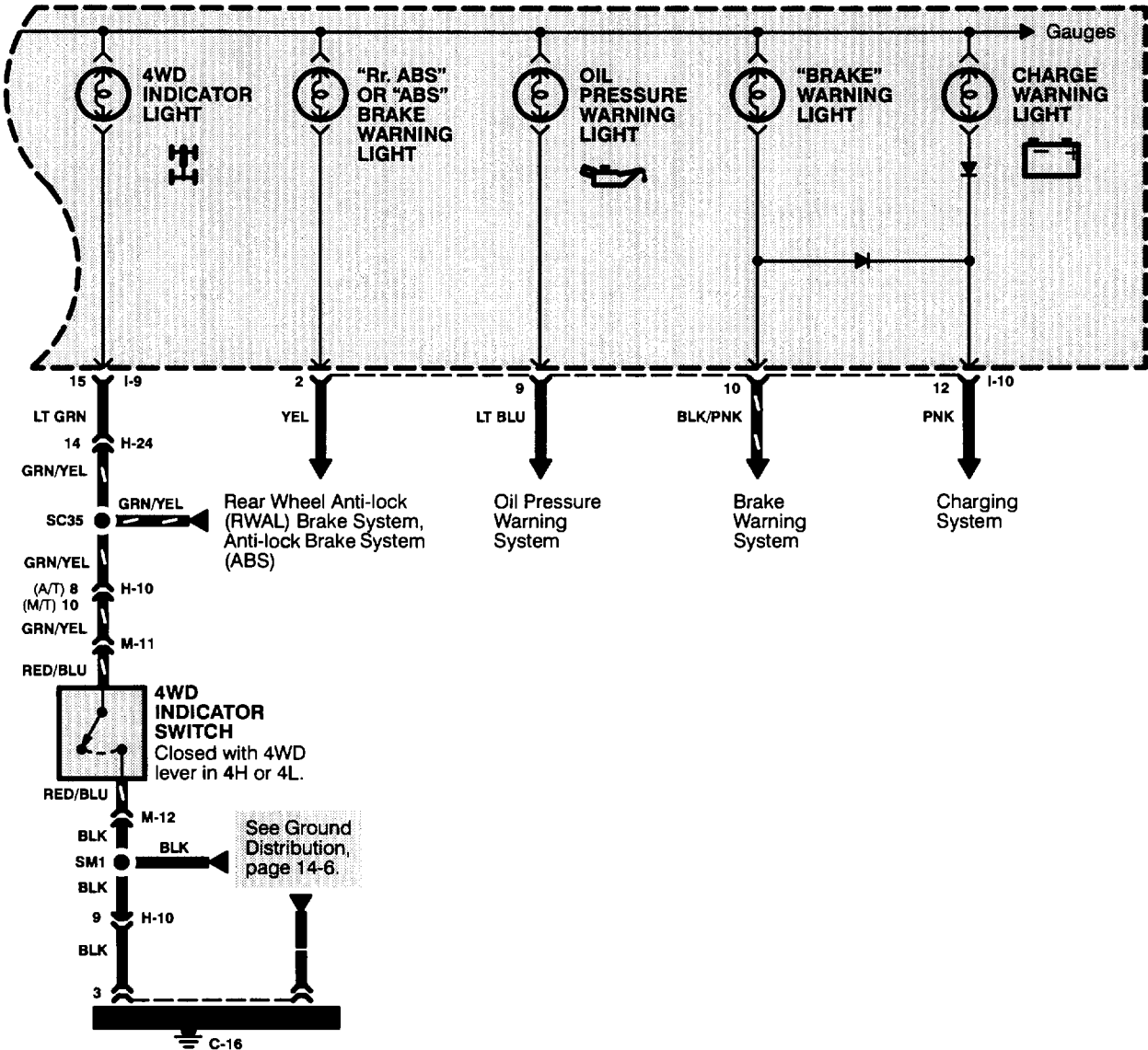
INDICATORS

Circuit Schematic



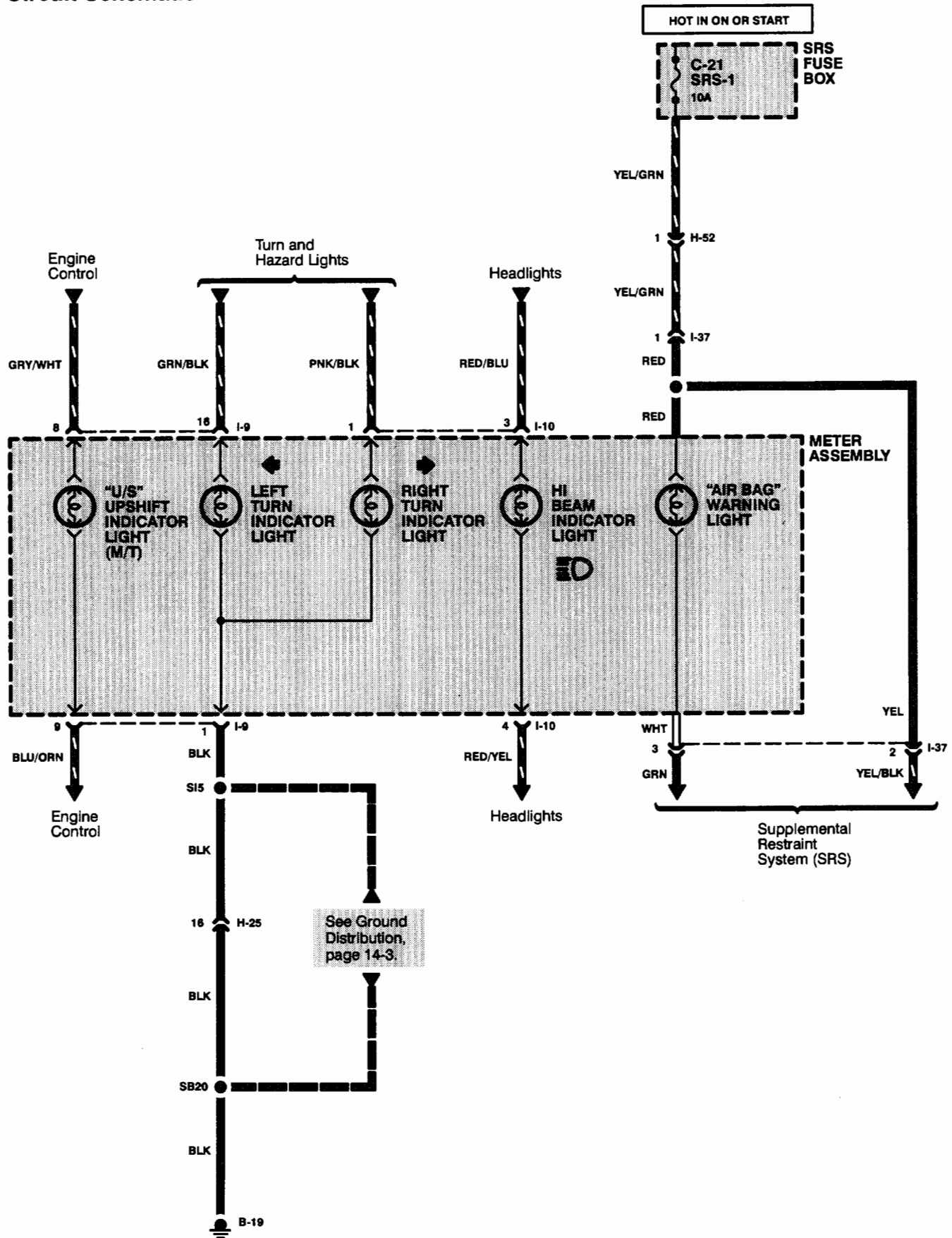
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METER ASSEMBLY



INDICATORS

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

Component		Photo No.
4WD Indicator Switch	Beneath vehicle, on right side of transfer case	46
Dash Fuse Box	Behind left dash side trim panel	58
Fuel Tank Unit	Beneath rear of vehicle, in right front of fuel tank	115
SRS Fuse Box	On top of dash fuse box	58
Connector		
H-10 (16-BLU)	Left front of engine compartment	27
H-16 (22-WHT)	Behind right dash side trim panel	86
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket	63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket	63
H-33 (14-WHT)	In floor, below right front seat	125
H-52 (3-YEL)	Below I/P, above left dash side trim panel, on bracket	64
I-9 (16-BLK)	On left rear of meter assembly	53
I-10 (16-WHT)	On right rear of meter assembly	53
I-37 (3-YEL)	Behind left side of meter assembly	53
M-11 (1-WHT)	Beneath center of vehicle, top right side of transmission	46
M-12 (1-WHT)	Beneath center of vehicle, top right side of transmission	46
Ground		
B-19	Behind top of left dash side trim panel	62
B-26	Below rear of center console	79
C-16	Left rear corner of engine compartment, on inner fender panel	28
C-39	Right rear corner of engine compartment, on inner fender panel	42

Circuit Operation

The indicator lights are controlled by different conditions in their associated systems. See the associated system for the indicator light circuit description.

Low Fuel Warning Light

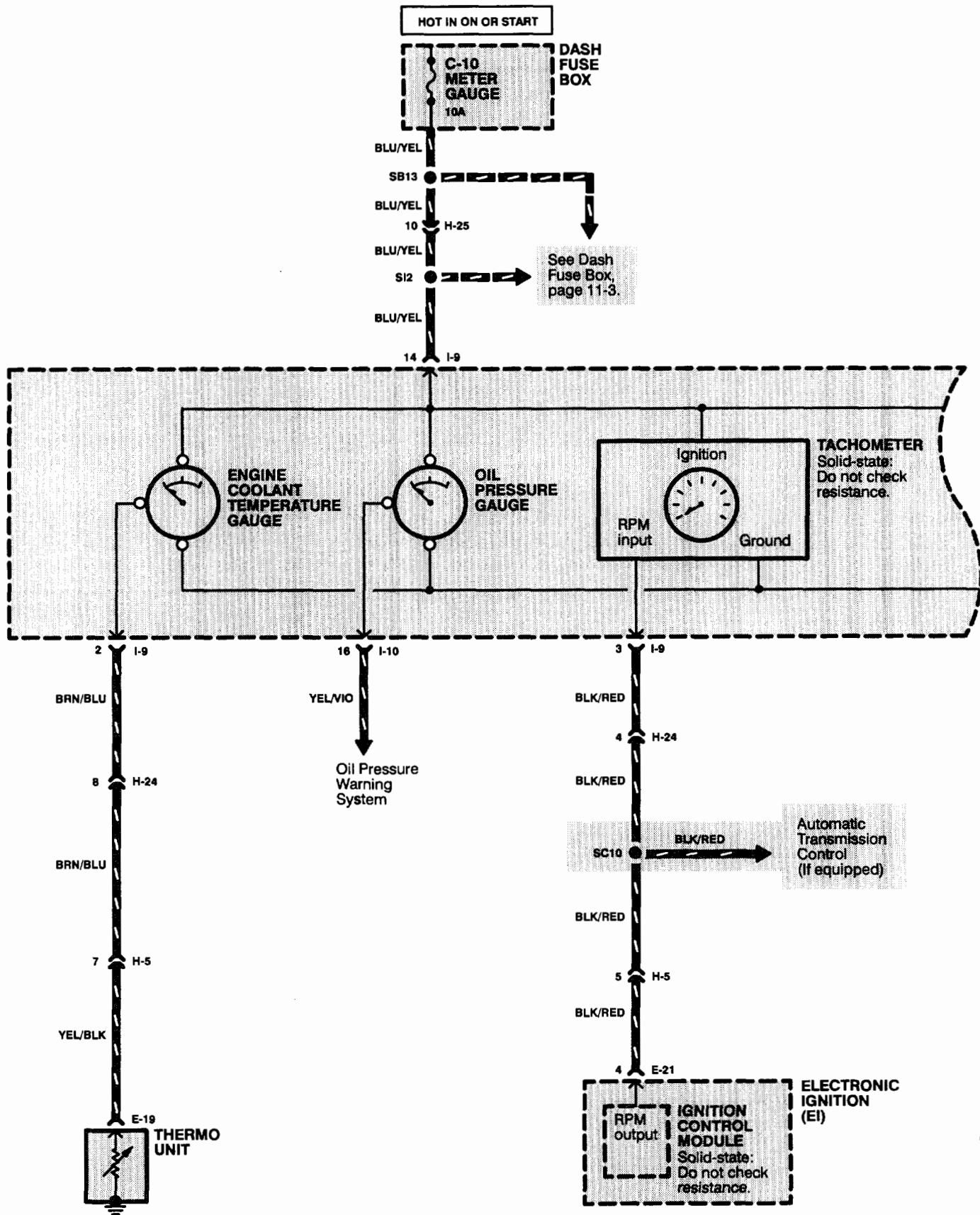
When there is an adequate amount of the fuel in the fuel tank, current flow is blocked in the fuel tank unit and the low fuel warning light will not go on. When the fuel level becomes low, current flow is allowed in the fuel tank unit and the low fuel warning light goes on to warn the driver.

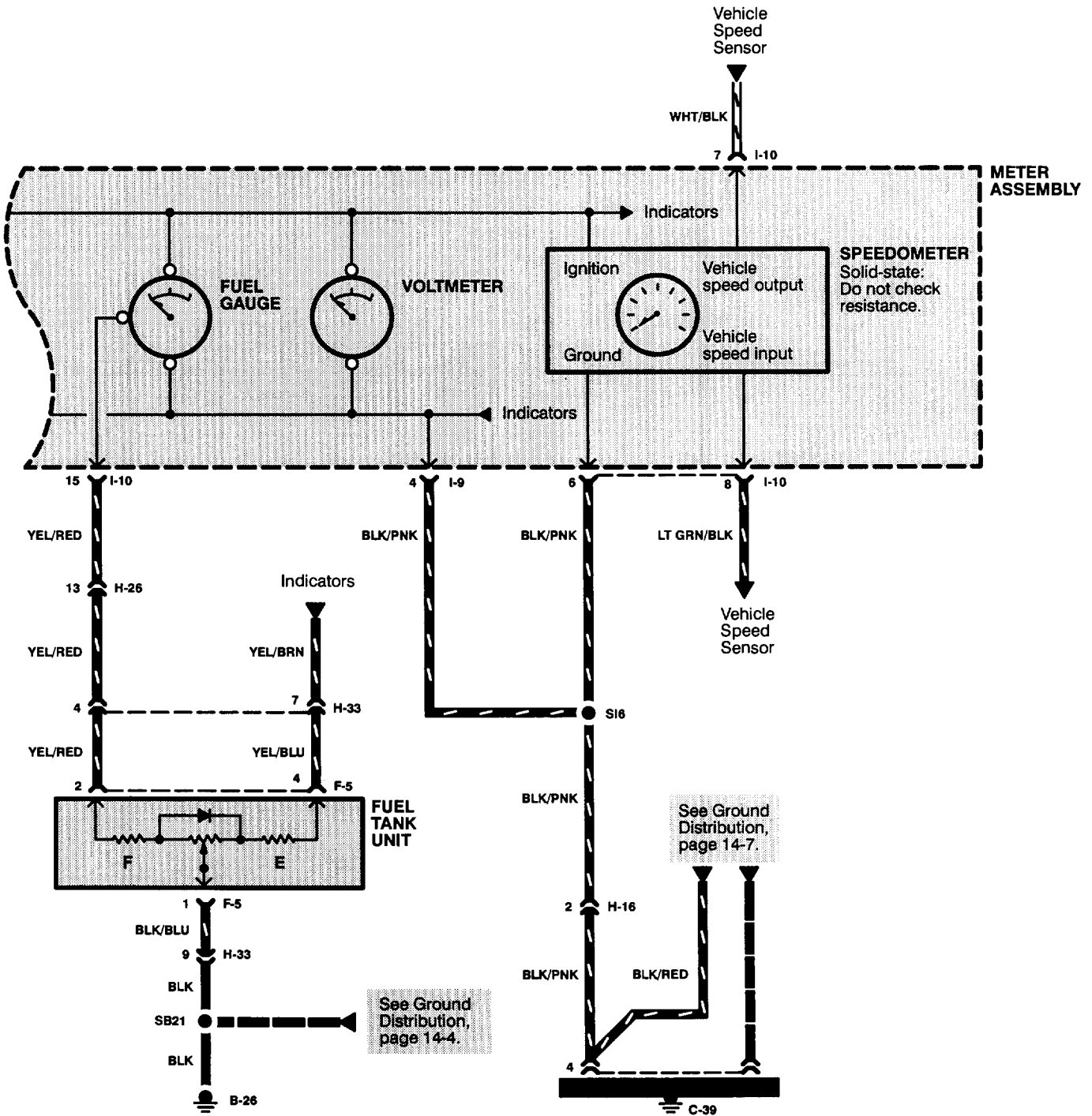
Bulb Check

With the starter switch in ON or START, battery voltage is applied to the "BRAKE" warning and charge warning lights. The generator will provide ground to the circuit until the engine is running. The lights go on to test the light bulbs and then go off after the engine is started.

GAUGES

Circuit Schematic





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GAUGES

Component Location Index

<u>Component</u>	<u>Photo No.</u>
Dash Fuse Box	Behind left dash side trim panel 58
Electronic Ignition (EI) (DOHC)	Top center rear of engine 15
Electronic Ignition (EI) (SOHC)	Center front of engine 9
Fuel Tank Unit	Beneath rear of vehicle, in right front of fuel tank 115
Thermo Unit	Right rear of engine 17
Connector	
E-21 (6-BLK) (DOHC)	On right side of electronic ignition (EI) 16
E-21 (6-BLK) (SOHC)	On left side of electronic ignition (EI) 9
H-5 (16-GRN)	Left side of engine compartment 30
H-16 (22-WHT)	Behind right dash side trim panel 86
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 63
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-26 (20-WHT)	Below I/P, above left dash side trim panel, on bracket 62
H-33 (14-WHT)	In floor, below right front seat 125
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 53
Ground	
B-26	Below rear of center console 79
C-39	Right rear corner of engine compartment, on inner fender panel 42

Circuit Operation

Engine Coolant Temperature Gauge

The engine coolant temperature gauge consists of two intersecting coils wound around a permanent magnet rotor. When voltage from fuse C-10 is applied to the coils, a magnetic field is generated. This causes the rotor to rotate and the gauge needle to move. The magnetic field is controlled by the thermo unit. As the resistance in the thermo unit varies, current through the gauge coils changes. The gauge needle moves according to the changing magnetic field.

Fuel Gauge

The fuel gauge consists of two intersecting coils wound around a permanent magnet rotor (see engine coolant temperature gauge, above, for operation). The fuel tank unit's resistance varies from approximately 17 ± 0.8 ohms with fuel tank full to 120 ± 5 ohms with the tank empty.

Tachometer

The tachometer displays engine speed in RPM. Voltage pulses are taken from the ignition system and sent to the tachometer. The tachometer responds to the frequency of the voltage pulses, which increases with engine speed. Solid-state circuits process these pulses into a signal that causes the gauge needle to move.

Oil Pressure Gauge

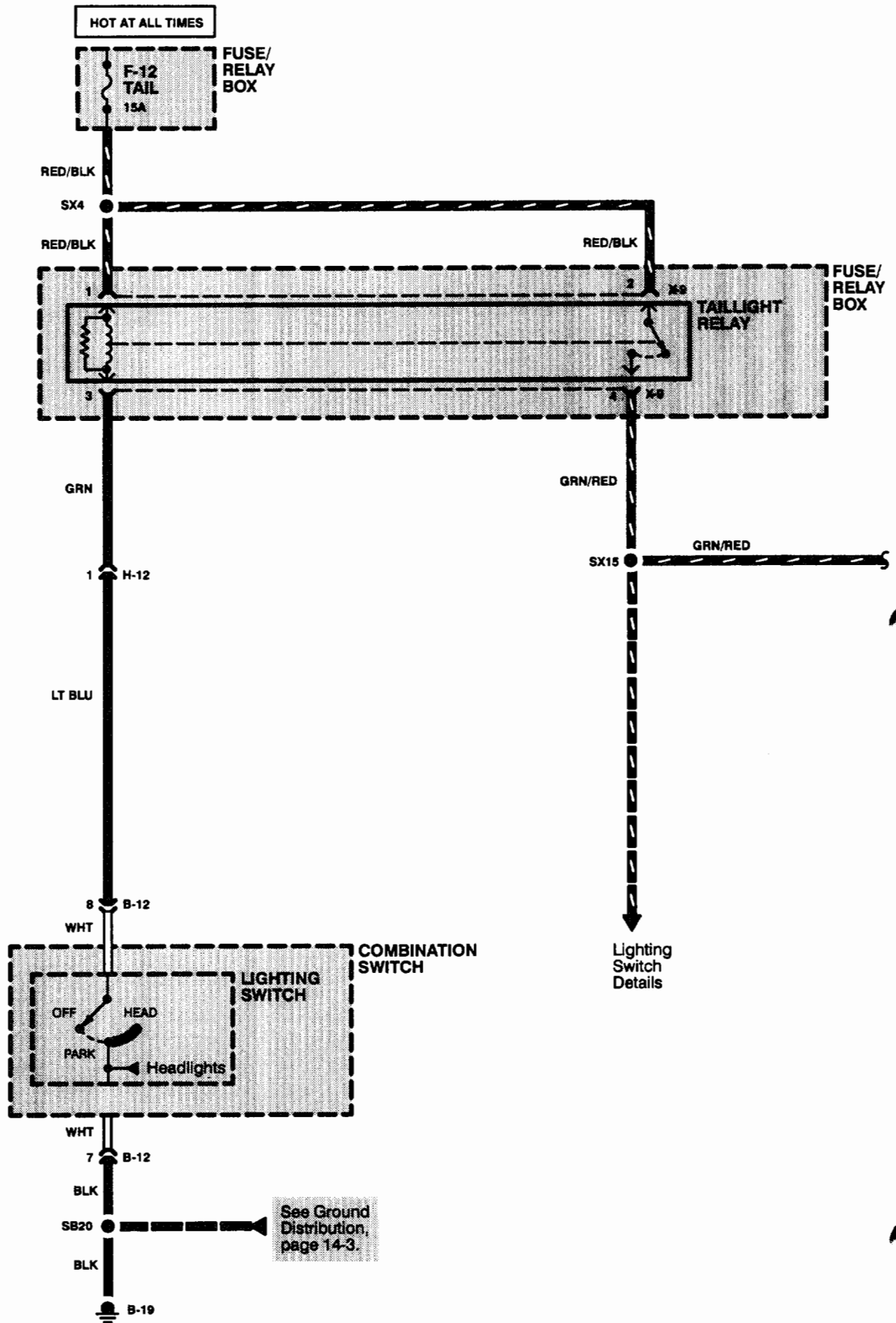
The oil pressure gauge consists of two intersecting coils wound around a permanent magnet rotor (see engine coolant temperature gauge for operation).

Voltmeter

The voltmeter measures the voltage through fuse C-10 when the starter switch is in ON or START.

A/T SHIFT INDICATOR

Circuit Schematic



A/T SHIFT INDICATOR

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
A/T Shift Indicator Control Unit . . . Below I/P, left of steering column	67
Automatic Transmission	
Mode Switch Beneath vehicle, on left side of transmission	47
Dash Fuse Box Behind left dash side trim panel	58
Fuse/Relay Box Right side of engine compartment, on inner fender panel	33
Taillight Relay In fuse/relay box	36
Connector	
B-12 (16-BLK/WHT) Below I/P, right of steering column	69
C-43 (8-BLK) Left front of engine compartment	27
H-5 (16-GRN) Left side of engine compartment	30
H-8 (16-BLK) Below I/P, above left dash side trim panel, on bracket	62
H-9 (20-BLK) Below I/P, above left dash side trim panel, on bracket	62
H-12 (20-BRN) Below I/P, above right dash side trim panel, on bracket	82
H-24 (18-YEL) Below I/P, above left dash side trim panel, on bracket	63
H-41 (12-BLU) (RWAL) Right front of engine compartment	31
H-41 (16-BLU) (ABS) Right front of engine compartment	31
I-36 (10-WHT) On rear of meter assembly	53
Ground	
B-19 Behind top of left dash side trim panel	62
E-31 (DOHC) Top left rear of engine	17
E-31 (SOHC) Top center front of engine	9

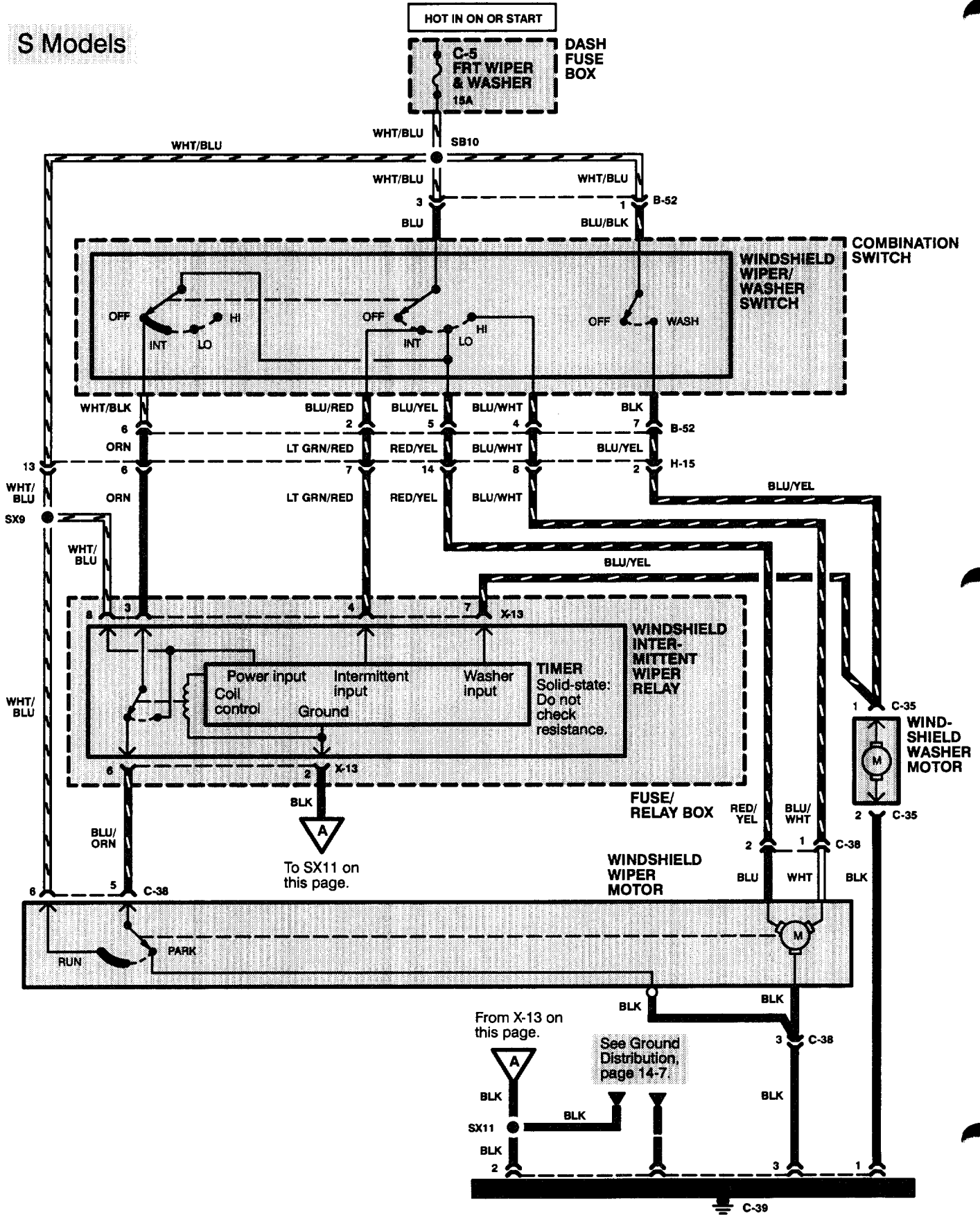
Circuit Operation

With the starter switch in ON or START, battery voltage is applied to the automatic transmission mode switch and the A/T shift indicator control unit from fuse C-3. The automatic transmission mode switch sends a signal to the A/T shift indicator control unit corresponding to the gear selected. The A/T shift indicator control unit applies voltage to the appropriate A/T shift indicator causing it to light up.

WINDSHIELD WIPER/WASHER

Circuit Schematic

S Models



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WINDSHIELD WIPER/WASHER

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Windshield Intermittent	
Wiper Relay	In fuse/relay box 38
Windshield Washer Motor	Right side of engine compartment, in washer fluid reservoir 32
Windshield Wiper Motor	Right rear corner of engine compartment 41
Connector	
B-52 (14-BLK)	Below I/P, right of steering column 69
C-38 (6-WHT)	Right rear of engine compartment 41
H-15 (14-WHT)	Below I/P, above right dash side trim panel, on bracket 82
Ground	
B-19	Behind top of left dash side trim panel 62
C-39	Right rear corner of engine compartment, on inner fender panel 42

Circuit Operation

With the starter switch in ON or START, battery voltage is applied to the windshield wiper/washer switch, windshield wiper motor, and windshield intermittent wiper relay from fuse C-5.

Low Speed

When the windshield wiper switch is moved to LO, battery voltage is applied to the LO winding of the windshield wiper motor and the windshield wipers run at low speed.

Park/Run

When the windshield wiper switch is turned to OFF, fuse C-5 provides battery voltage through the windshield wiper motor, windshield intermittent wiper relay, and the windshield wiper switch to the LO winding of the windshield wiper motor. When the switch on the motor reaches the PARK position, battery voltage from fuse C-5 is removed from the circuit and the windshield wipers stop in the PARK position.

High Speed

When the windshield wiper switch is in HI, battery voltage is applied to the HI winding of the windshield wiper motor and the windshield wipers run at high speed.

Intermittent

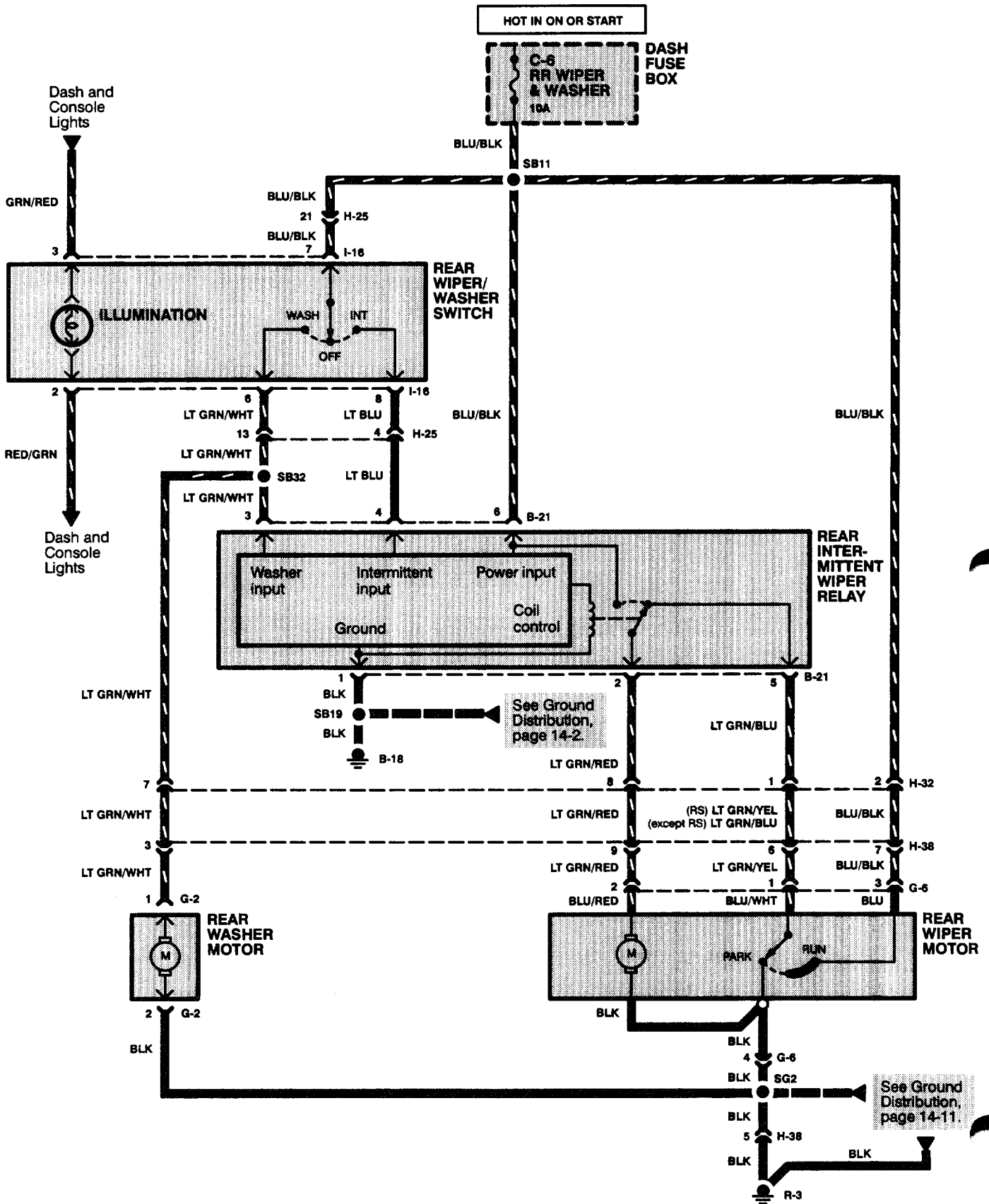
When the windshield wiper switch is moved to INT, the windshield wiper switch applies battery voltage to the windshield intermittent wiper relay. The windshield intermittent wiper relay momentarily energizes every 3 to 4 seconds (S models) or a variable time of 2 to 20 seconds (depending on intermittent ring position) and applies battery voltage to the LO winding of the windshield wiper motor to move the windshield wipers from the PARK position to the RUN position, then the PARK/RUN function takes over to return the windshield wipers to the PARK position. The windshield wipers make a single sweep approximately every 3 to 4 seconds (S models) or a variable time of 2 to 20 seconds (depending on intermittent ring position).

Washer

When the windshield washer switch is depressed, battery voltage is applied to the windshield washer motor and the windshield intermittent wiper relay. The windshield washer motor pumps fluid on the windshield and the windshield intermittent wiper relay energizes and applies battery voltage to the LO winding of the windshield wiper motor through the windshield wiper switch. The wipers run at LO speed until the switch is released.

REAR WIPER/WASHER

Circuit Schematic



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Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Rear Intermittent Wiper Relay	Behind left dash side trim panel, in access hole 57
Rear Washer Motor	Inside left tailgate door, behind trim pad 106
Rear Wiper Motor	Inside left tailgate door, behind trim pad 104
Connector	
G-6 (4-WHT)	Inside left tailgate door, behind trim pad 104
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat 120
H-38 (10-WHT)	Left rear of luggage room 102
Ground	
B-18	Behind top of left dash side trim panel 62
R-3	Left side of luggage room 103

Circuit Operation

With the starter switch in ON or START, battery voltage is applied to the rear wiper/washer switch, rear wiper motor, and rear intermittent wiper relay from fuse C-6.

Park/Run

When the rear wiper/washer switch is turned to OFF, fuse C-6 provides battery voltage through the rear wiper motor and rear intermittent wiper relay to the rear wiper motor. When the switch on the motor reaches the PARK position, battery voltage from fuse C-6 is removed from the circuit and the rear wiper stops in the PARK position.

Intermittent

When the rear wiper/washer switch is moved to INT, the rear wiper switch applies battery voltage to the rear intermittent wiper relay. The rear intermittent wiper relay momentarily energizes every 3 to 4 seconds and applies battery voltage to the rear wiper motor to move the rear wiper from the PARK position to the RUN position. The PARK/RUN function takes over to return the rear wiper to the PARK position. The rear wiper makes a single sweep approximately every 3 to 4 seconds.

Washer

When the rear wiper/washer switch is moved to WASH, battery voltage is applied to the rear washer motor and the rear intermittent wiper relay. The rear washer motor pumps fluid on the rear window and the rear intermittent wiper relay energizes and applies battery voltage to the rear wiper motor through the rear wiper switch. The wiper runs until the switch is released.

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Headlight Washer Motor	Right side of engine compartment, in washer fluid reservoir 32
Headlight Wiper Timer Unit	Below right side of I/P 80
Left Headlight Wiper Motor	Behind left headlight assembly 5
Right Headlight Wiper Motor	Behind right headlight assembly 5
Connector	
C-23 (6-GRY)	Behind left side of front bumper 5
C-30 (6-GRY)	Behind right side of front bumper 5
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-41 (12-BLU) (RWAL)	Right front of engine compartment 31
H-41 (16-BLU) (ABS)	Right front of engine compartment 31
Ground	
B-19	Behind top of left dash side trim panel 62
C-16	Left rear corner of engine compartment, on inner fender panel 28
C-39	Right rear corner of engine compartment, on inner fender panel 42

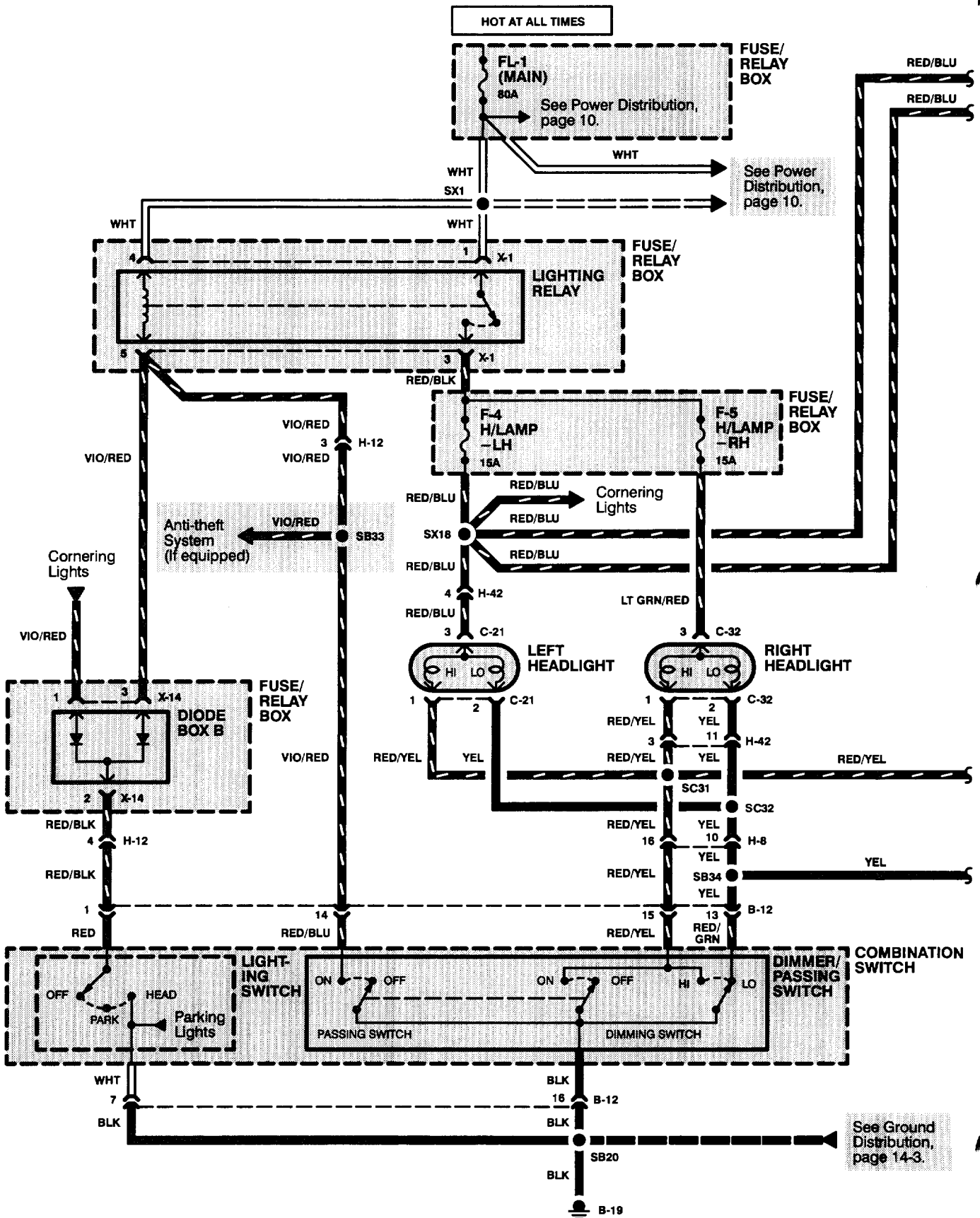
Circuit Operation

Circuit Operation

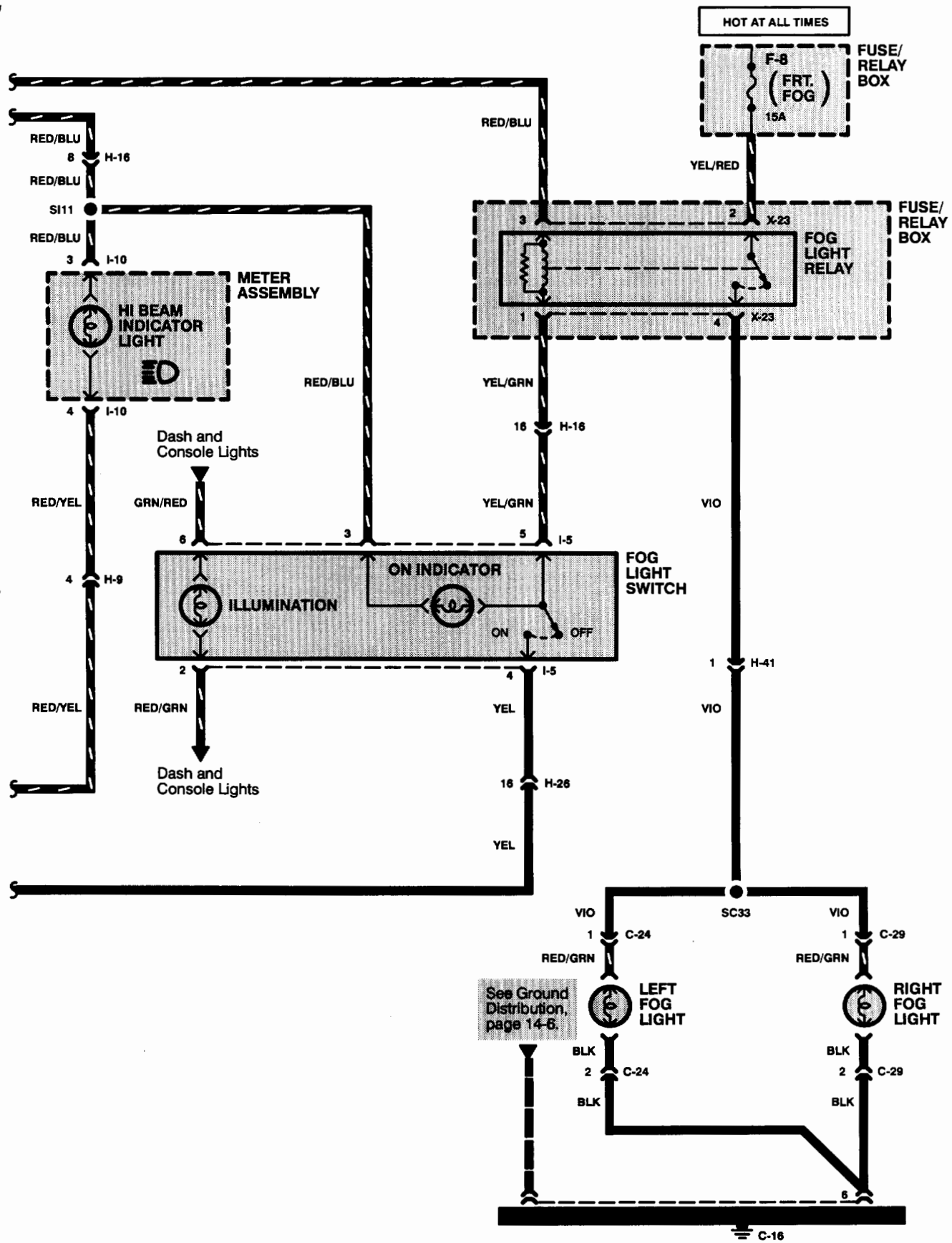
The headlight wiper motors wipe five times while the headlight washer motor applies fluid between the first four wipes. With the starter switch in ON or START, battery voltage is applied to the headlight wiper timer unit, the headlight washer motor, and the left and right headlight wiper motors. The headlight wiper switch is a momentary switch, and when it is pushed to the ON position, it provides ground to the left and right headlight wiper motors. The wipers begin to wipe and the contact disk is moved from the PARK position. When the headlight wiper switch is released, it is now in the OFF position. Ground is provided for the left and right headlight wiper motors through the contact disks and the OFF contacts of the headlight wiper switch. As the wipers continue to wipe, a ground signal is sent to the headlight wiper timer unit for the first four wipes. This signals the headlight wiper timer unit to control the headlight washer motor to pump fluid onto the headlights between the first four wipes of the headlight wipers. When the contact disk reaches the 5 position, the ground signal is removed from the headlight wiper timer unit. No fluid is pumped onto the headlights between the fourth and fifth wipes. When the contact disk reaches the PARK position, ground is removed from the circuit and the wipers stop.

HEADLIGHTS AND FOG LIGHTS

Circuit Schematic



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HEADLIGHTS AND FOG LIGHTS

Component Location Index

(Refer to Section 201 for photographs.)

<u>Component</u>		<u>Photo No.</u>
Diode Box B	In fuse/relay box	35
Fog Light Relay	In fuse/relay box	39
Fuse/Relay Box	Right side of engine compartment, on inner fender panel	33
Lighting Relay	In fuse/relay box	34
Connector		
B-12 (16-BLK/WHT)	Below I/P, right of steering column	69
C-24 (2-GRY)	Behind left fog light	4
C-29 (2-GRY)	Behind right fog light	4
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket	62
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket	62
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket	82
H-16 (22-WHT)	Behind right dash side trim panel	86
H-26 (20-WHT)	Below I/P, above left dash side trim panel, on bracket	62
H-41 (12-BLU) (RWAL)	Right front of engine compartment	31
H-41 (16-BLU) (ABS)	Right front of engine compartment	31
H-42 (16-BLK)	Right front of engine compartment	31
I-10 (16-WHT)	On right rear of meter assembly	53
Ground		
B-19	Behind top of left dash side trim panel	62
C-16	Left rear corner of engine compartment, on inner fender panel	28

Circuit Operation

Lo Beam Operation

With the lighting switch in HEAD and the dimmer/passing switch in LO, the lighting switch provides a ground path to the lighting relay, and the dimmer/passing switch provides a ground path for the lo beam filaments. The lighting relay energizes and provides battery voltage to the headlights and the lo beams light up.

Hi Beam Operation

With the lighting switch in HEAD and the dimmer/passing switch in HI, the lighting switch provides a ground to the lighting relay and the dimmer/passing switch provides a ground path for the high beam filaments. The lighting relay energizes and provides battery voltage to the headlights and the hi beams light up.

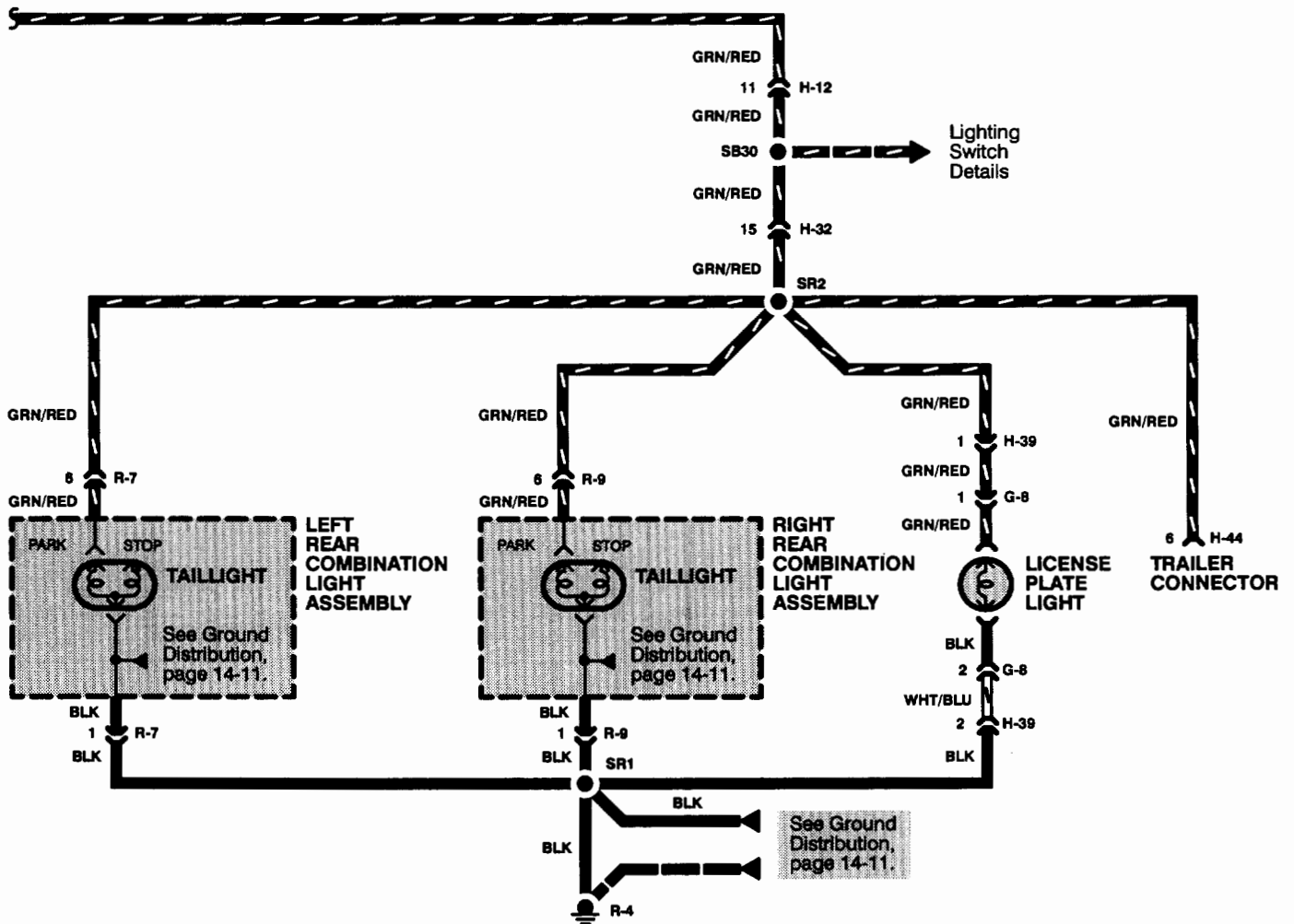
Battery voltage is also applied to the hi beam indicator and the hi beam indicator lights up to remind the driver that the hi beams are on.

Flash To Pass Operation

The flash to pass feature works with the lighting switch in OFF, PARK, or HEAD (lo beams). When the passing switch is turned on, it provides a ground path for both the hi and lo beam filaments and the lighting relay. The lighting relay energizes and applies battery voltage to the headlights and to the hi beam indicator light and the hi and lo beams light up. The hi beam indicator also flashes during the flash to pass operation. The flash to pass function has no effect if the hi beams are already on.

Fog Light Operation

With the lighting switch in HEAD and the dimmer/passing switch in LO, the lighting switch provides a ground path to the lighting relay which provides power through fuse F-8 to the fog light relay. A ground path is provided for the fog light relay through the fog light switch and the dimmer/passing switch. When the relay is energized, power is provided to both fog lights and the fog lights light. When the fog light switch is turned off or when the dimmer/passing switch is moved to HI, ground is removed from the fog light relay and the fog lights go out.



FRONT SIDE MARKER, FRONT PARK, REAR PARK, AND LICENSE PLATE LIGHTS

Component Location Index

(Refer to Section 201 for photographs.)

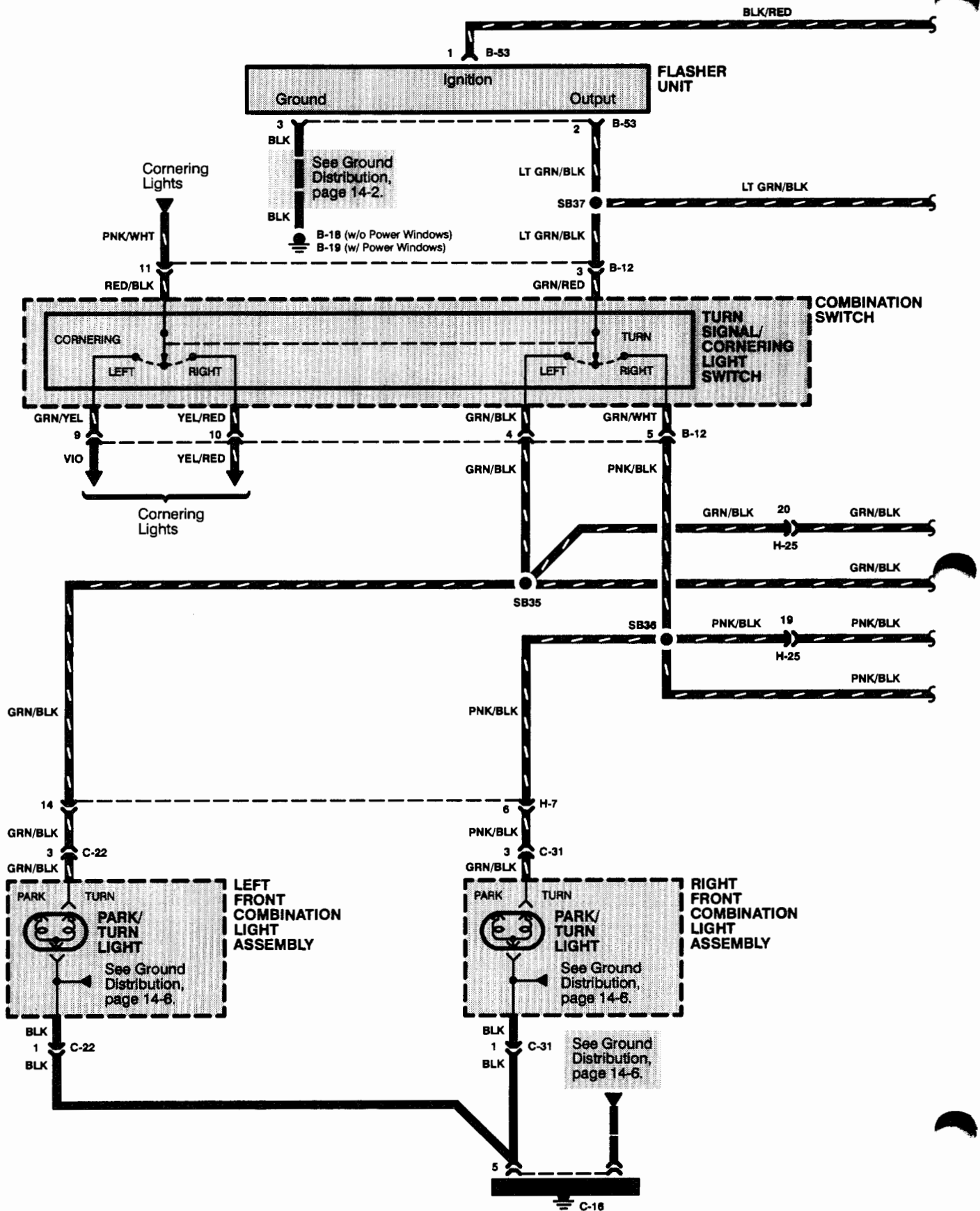
Component	Photo No.
Fuse/Relay Box	33
Taillight Relay	36
Trailer Connector H-44 (6-WHT)	117
Connector	
B-12 (16-BLK/WHT)	69
C-22 (4-GRY)	3
C-31 (4-GRY)	3
G-8 (2-WHT)	108
H-12 (20-BRN)	82
H-32 (16-BLK) (without Power Door Locks)	120
H-32 (22-BLK) (with Power Door Locks)	120
H-39 (2-WHT)	109
H-41 (12-BLU) (RWAL)	31
H-41 (6-BLU) (ABS)	31
R-7 (6-WHT/BLK)	118
R-9 (6-WHT/BLK)	118
Ground	
B-19	62
C-16	28
R-4	103

Circuit Operation

Battery voltage is applied to the taillight relay from fuse F-12. With the lighting switch in PARK or HEAD, ground is provided to the taillight relay. The taillight relay energizes and battery voltage is applied to the park, license, and side marker lights and the lights go on.

TURN AND HAZARD LIGHTS

Circuit Schematic



TURN AND HAZARD LIGHTS

Component Location Index

(Refer to Section 201 for photographs.)

Component		Photo No.
Dash Fuse Box	Behind left dash side trim panel	58
Flasher Unit	On top of dash fuse box	60
Fuse/Relay Box	Right side of engine compartment, on inner fender panel	33
Trailer Connector H-44 (6-WHT)	Below left rear of vehicle, behind grommet	117
Connector		
B-12 (16-BLK/WHT)	Below I/P, right of steering column	69
C-22 (4-GRY)	Behind left front combination light assembly	3
C-31 (4-GRY)	Behind right front combination light assembly	3
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket	63
H-16 (22-WHT)	Behind right dash side trim panel	86
H-20 (6-WHT)	Behind right dash side trim panel	86
H-32 (16-BLK) (without Power Door Locks)	Below left front seat	120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat	120
I-9 (16-BLK)	On left rear of meter assembly	53
I-10 (16-WHT)	On right rear of meter assembly	53
R-7 (6-WHT/BLK)	Behind left taillight assembly	118
R-9 (6-WHT/BLK)	Behind right taillight assembly	118
Ground		
B-18	Behind top of left dash side trim panel	62
B-19	Behind top of left dash side trim panel	62
C-16	Left rear corner of engine compartment, on inner fender panel	28
R-4	Left side of luggage room	103

Circuit Operation

Turn Operation

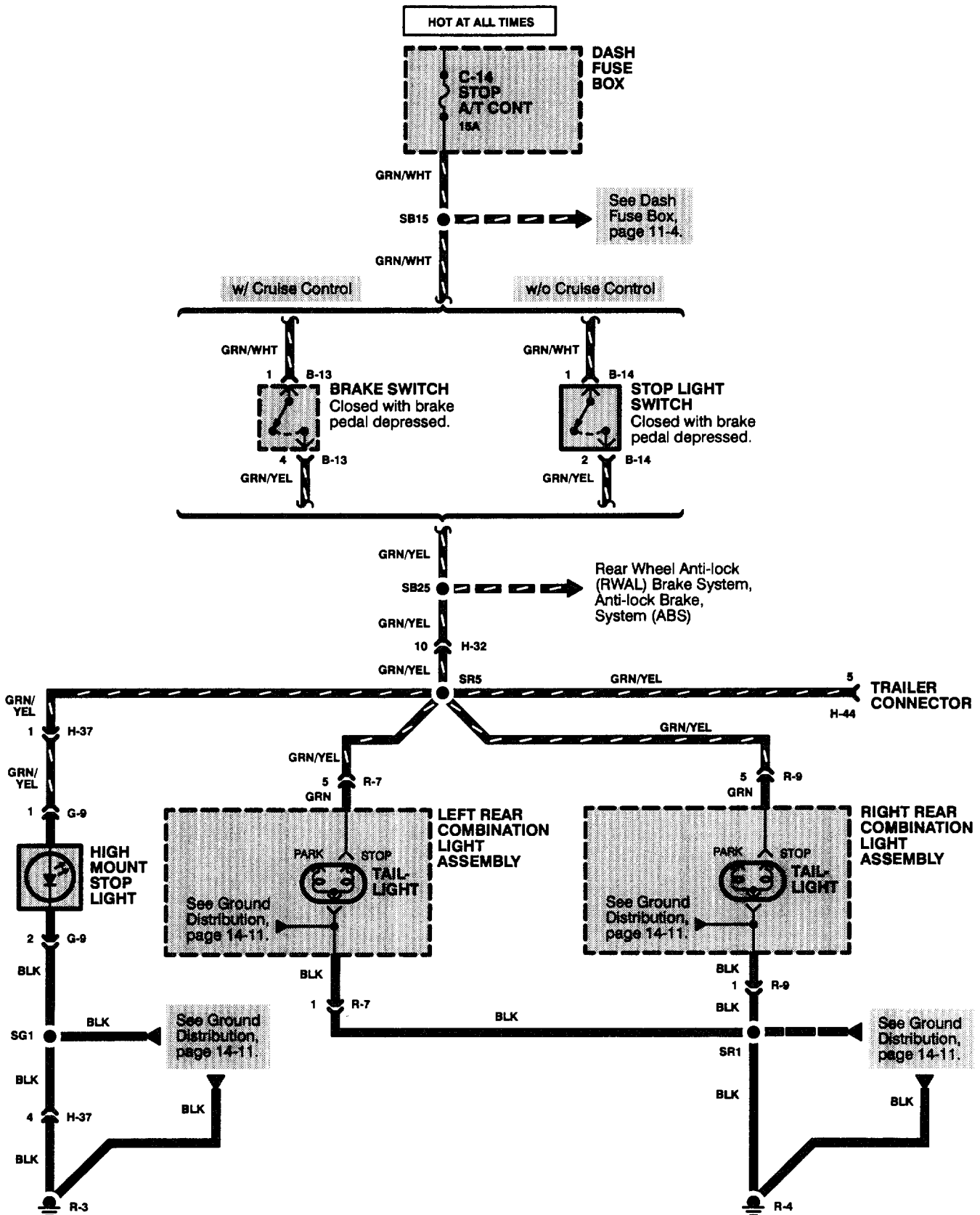
With the starter switch in ON or START, battery voltage is applied to the hazard warning switch from fuse C-3. When the hazard warning switch is in the OFF position, battery voltage is applied to the flasher unit. Its output is pulsing voltage which is directed to either the RIGHT or LEFT position on the turn signal switch and causes the turn lights and turn indicator lights to flash in either direction.

Hazard Operation

Battery voltage is applied to the hazard warning switch at all times from fuse F-3. When the hazard warning switch is in the HAZARD position, battery voltage is applied to the flasher unit. Its output is pulsing voltage which is directed to the hazard warning switch and causes the turn lights and turn indicator lights to flash in both directions.

BRAKE LIGHTS

Circuit Schematic



Component Location Index

(Refer to Section 201 for photographs.)

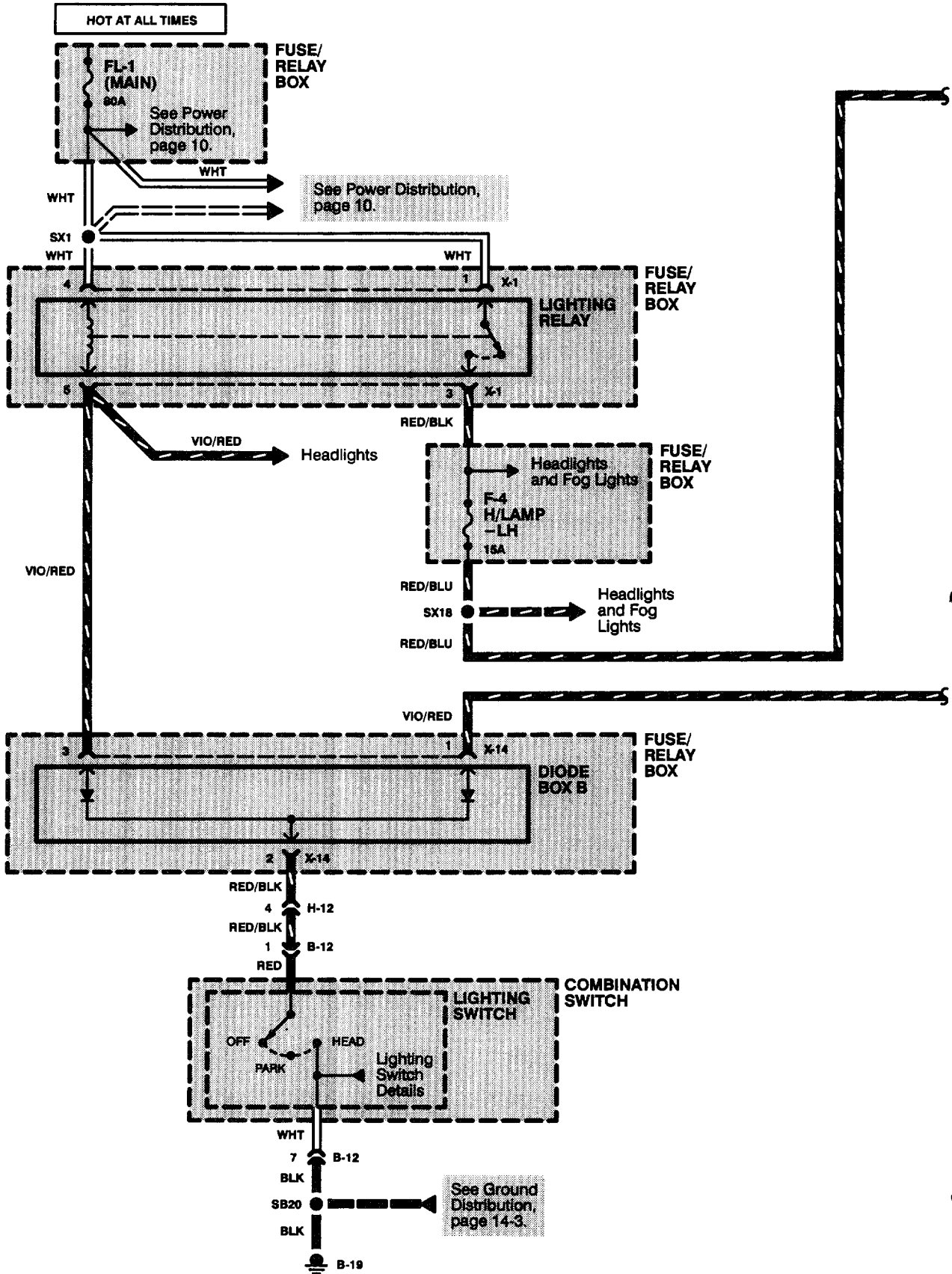
Component	Photo No.
Brake Switch	Below I/P, on brake pedal support 68
Dash Fuse Box	Behind left dash side trim panel 58
Stop Light Switch	Below I/P, on brake pedal support 68
Trailer Connector H-44 (6-WHT)	Below left rear of vehicle, behind grommet 117
Connector	
G-9 (2-WHT/BLK)	Inside top center of left tailgate door 110
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat 120
H-37 (4-GRY)	Left rear of luggage room 102
R-7 (6-WHT/BLK)	Behind left taillight assembly 118
R-9 (6-WHT/BLK)	Behind right taillight assembly 118
Ground	
R-3	Left side of luggage room 103
R-4	Left side of luggage room 103

Circuit Operation

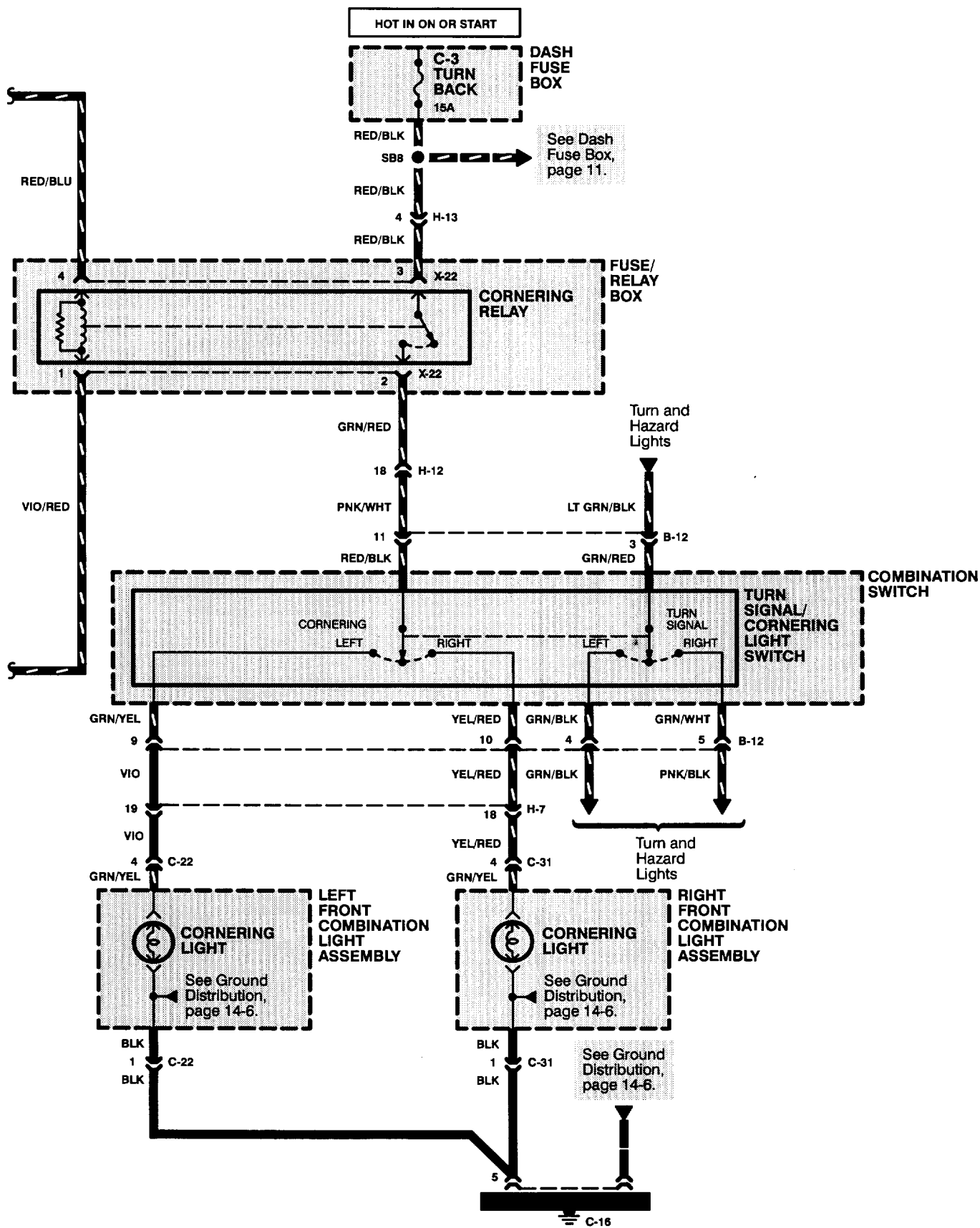
Battery voltage is applied to the stop light switch (without cruise control) or brake switch (with cruise control) at all times from fuse C-14. With the brake pedal depressed, the switch is closed and battery voltage is applied to the stop lights and the stop lights go on.

CORNERING LIGHTS

Circuit Schematic



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CORNERING LIGHTS

Component Location Index

(Refer to Section 201 for photographs.)

Component		Photo No.
Cornering Relay	In fuse/relay box	37
Dash Fuse Box	Behind left dash side trim panel	58
Diode Box B	In fuse/relay box	35
Fuse/Relay Box	Right side of engine compartment, on inner fender panel	33
Lighting Relay	In fuse/relay box	34
Connector		
B-12 (16-BLK/WHT)	Below I/P, right of steering column	69
C-22 (4-GRY)	Behind left front combination light assembly	3
C-31 (4-GRY)	Behind right front combination light assembly	3
H-7 (20-BRN)	Below I/P, above left dash side trim panel, on bracket	63
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket	82
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket	82
Ground		
B-19	Behind top of left dash side trim panel	62
C-16	Left rear corner of engine compartment, on inner fender panel	28

Circuit Operation

Battery voltage is applied to the lighting relay at all times from fuse FL-1 (MAIN). When the lighting switch is in the HEAD position, ground is provided to the lighting and cornering relay coils. The lighting relay energizes, allowing voltage to be applied to the cornering relay coil, causing it to energize and closing its contacts. With the starter switch in ON or START, battery voltage is applied to the turn signal/cornering light switch through the closed contacts of the cornering relay. When the turn signal/cornering light switch is in the LEFT or RIGHT position, voltage is directed to the appropriate cornering light and the light comes on until the turn signal/cornering light switch is cancelled.

Component Location Index

(Refer to Section 201 for photographs.)

<u>Component</u>	<u>Photo No.</u>
Automatic Transmission	
Mode Switch	Beneath vehicle, on left side of transmission 47
Back Up Light Switch	Beneath vehicle, on left side of transmission 44
Dash Fuse Box	Behind left dash side trim panel 58
Connector	
C-43 (8-BLK)	Left front of engine compartment 27
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket 62
H-10 (16-BLU)	Left front of engine compartment 27
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat 120
M-8 (1-CLR)	Beneath center of vehicle, top left side of transmission 44
M-9 (1-CLR)	Beneath center of vehicle, top left side of transmission 44
R-7 (6-WHT/BLK)	Behind left taillight assembly 118
R-9 (6-WHT/BLK)	Behind right taillight assembly 118
Ground	
R-4	Left side of luggage room 103

Circuit Operation

Automatic

With the starter switch in ON or START, battery voltage is applied to fuse C-3 and to the automatic transmission mode switch. With the transmission in reverse, the automatic transmission mode switch closes and battery voltage is applied to the back up lights and the back up lights go on.

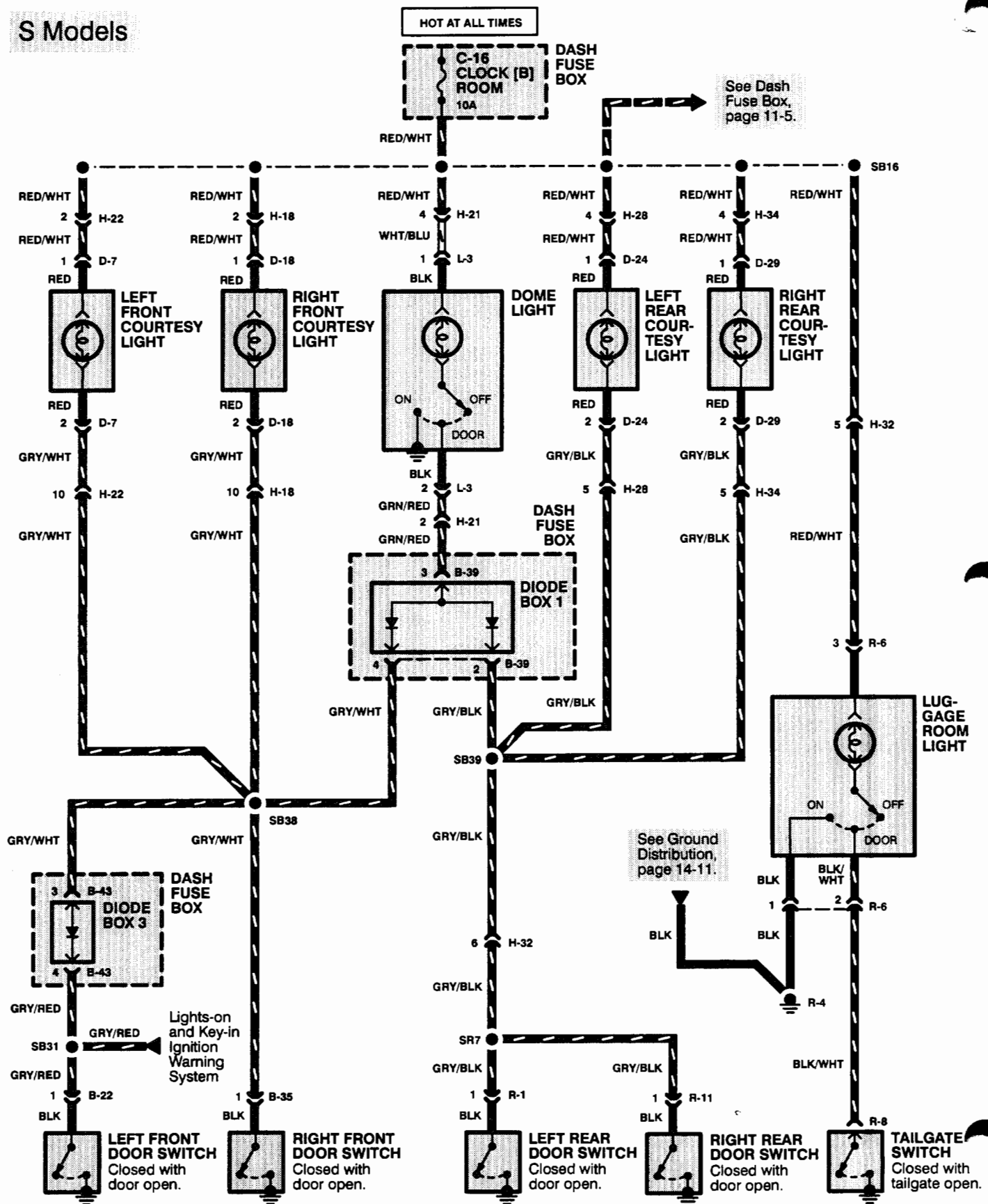
Manual

With the starter switch in ON or START, battery voltage is applied to fuse C-3 and to back up light switch. With the transmission in reverse, the back up light switch closes and battery voltage is applied to the back up lights and the back up lights go on.

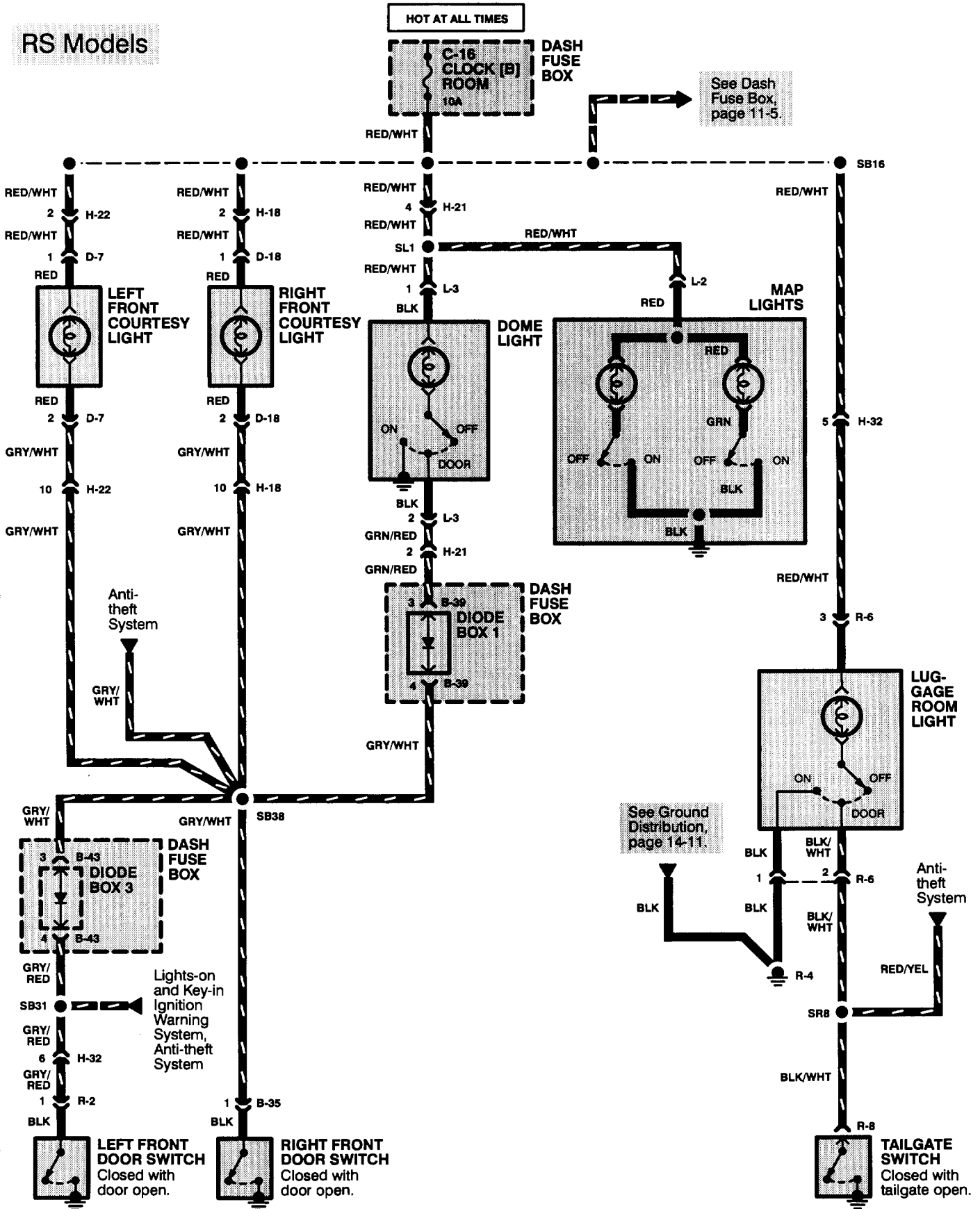
DOMES, LUGGAGE ROOM, COURTESY, AND MAP LIGHTS

Circuit Schematic

S Models



RS Models

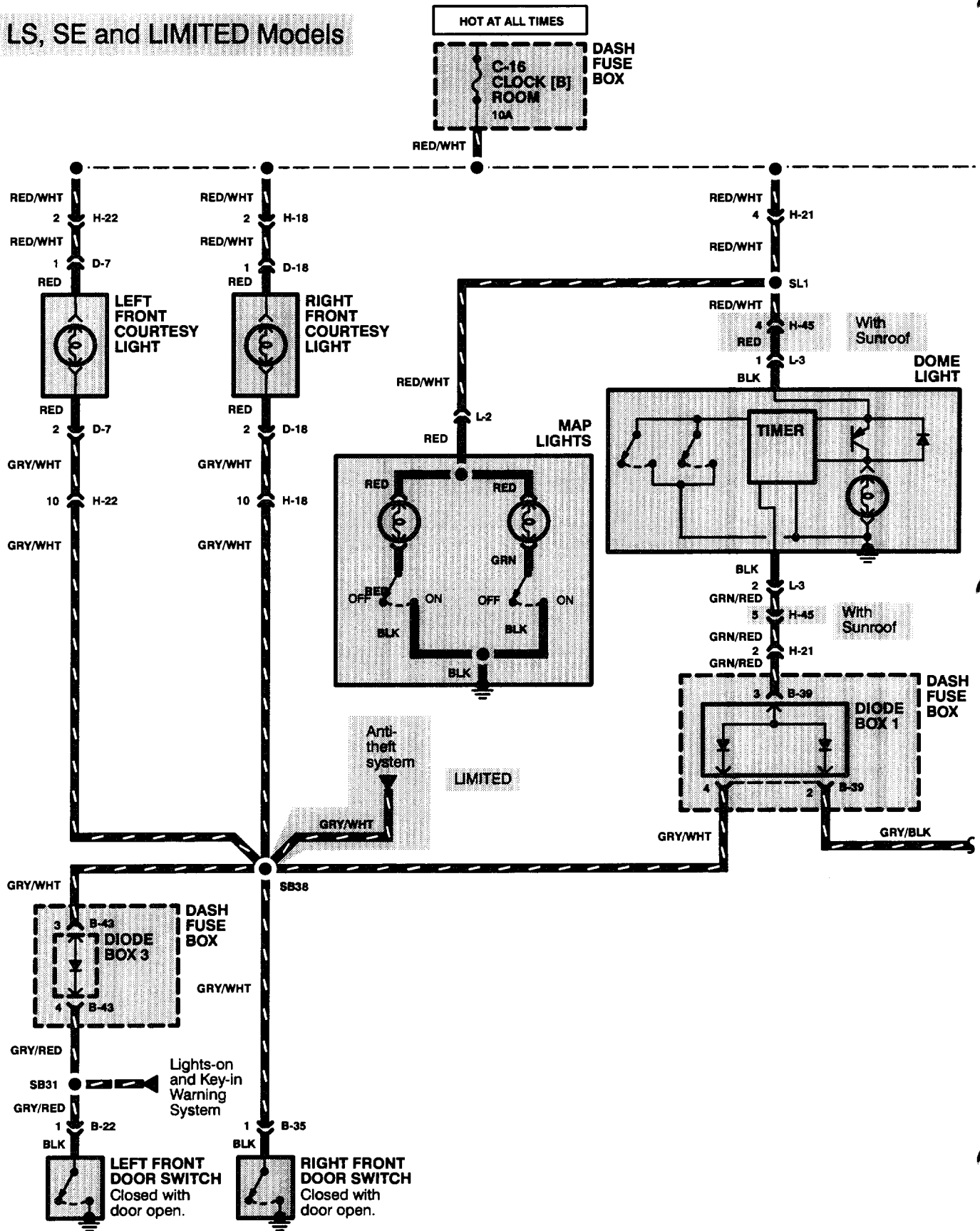


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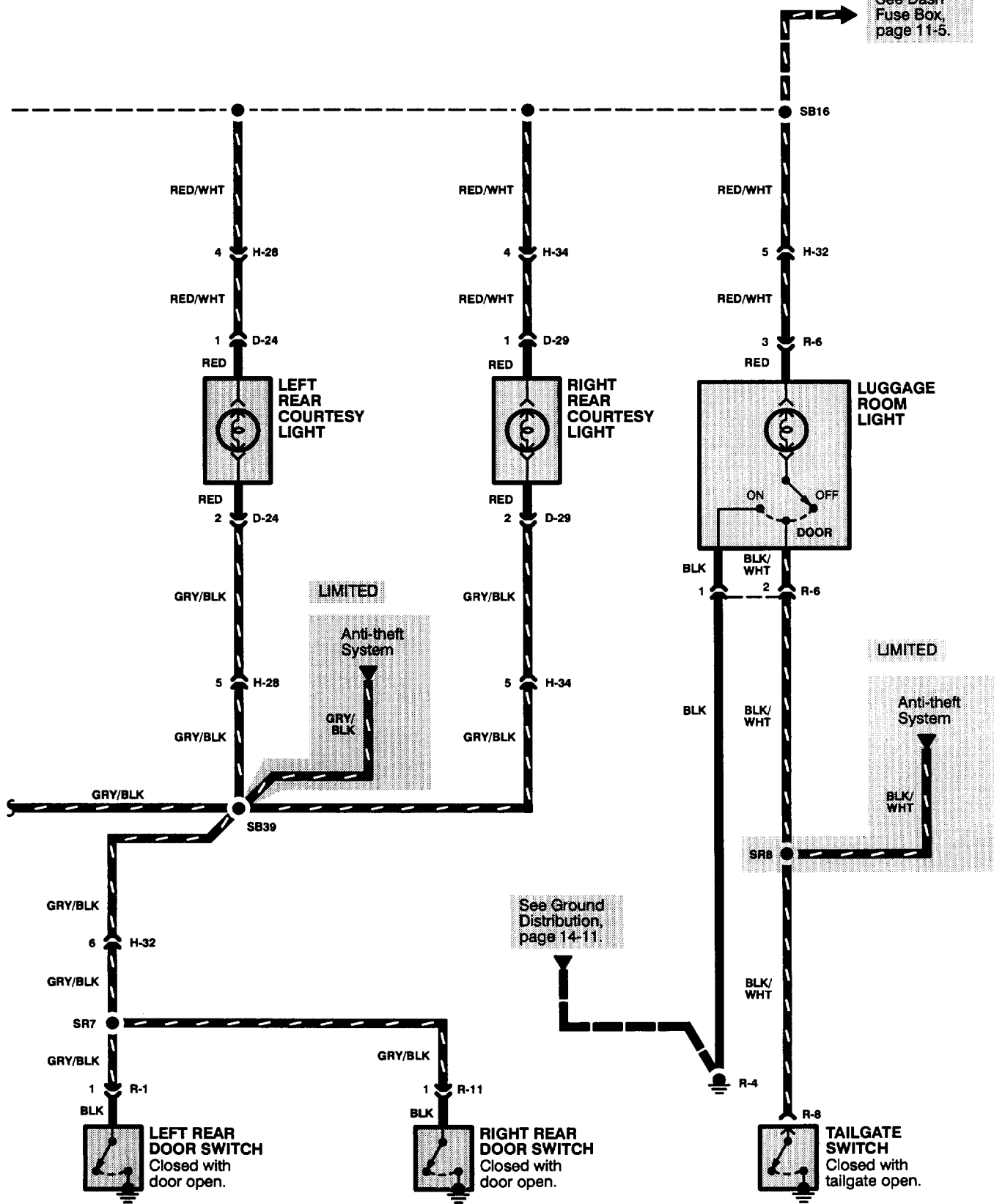
DOME, LUGGAGE ROOM, COURTESY, AND MAP LIGHTS

Circuit Schematic

LS, SE and LIMITED Models



See Dash Fuse Box, page 11-5.



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DOME, LUGGAGE ROOM, COURTESY, AND MAP LIGHTS

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Diode Box 1	In dash fuse box 60
Diode Box 3	In dash fuse box 60
Left Front Door Switch	Near left front door striker 88
Left Rear Door Switch	Near left rear door striker 95
Right Front Door Switch	Near right front door striker 88
Right Rear Door Switch	Near right rear door striker 95
Tailgate Switch	Center rear of luggage room floor 107
Connector	
B-22 (2-WHT)	In left center pillar, behind door switch
B-35 (2-WHT) (RS)	Front of right quarter panel area, behind door switch
B-35 (2-WHT) (S, LS, SE, LIMITED)	In right center pillar, behind door switch
D-7 (2-BLK)	Inside left front door, behind trim pad 90
D-18 (2-BLK)	Inside right front door, behind trim pad 90
D-24 (2-BLK)	Inside rear of left rear door, behind door courtesy light 96
D-29 (2-BLK)	Inside rear of right rear door, behind door courtesy light 96
H-18 (18-WHT)	Behind right dash side trim panel, in access hole 87
H-21 (4-WHT)	Below I/P, above right dash side trim panel, on bracket 82
H-22 (18-WHT)	Behind left dash side trim panel, in access hole 87
H-28 (6-WHT)	In left center pillar 94
H-32 (16-BLK) (without Power Door Locks)	Below left front seat 120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat 120
H-34 (6-WHT)	In right center pillar 94
H-45 (6-BLK)	Center of roof, above map lights 98
L-2 (1-WHT)	Center front of roof, above map lights 98
L-3 (2-WHT)	Center of roof, above dome light 99
R-1 (2-WHT)	Left front of luggage room, behind grommet 103
R-2 (2-WHT)	Front of left quarter panel area, behind door switch
R-6 (3-WHT)	Center rear of roof 100
R-11 (2-WHT)	Right front of luggage room, behind grommet 103
Ground	
R-4	Left side of luggage room 103

Circuit Operation

Battery voltage is applied at all times to fuse C-16 and to the dome, map, courtesy, and luggage room lights.

Dome Light (S and RS Models)

With a door open and the dome light switch in the DOOR position, a ground path is provided by the closed door switch and the dome light goes on. With the doors closed, the dome light can be turned on by turning the dome light switch to ON.

Dome Light (LS, SE and LIMITED Models)

With a door open, a ground path is provided by the closed door switch and the dome light goes on. When the open door is closed, the door switch opens to ground removing the ground signal to the timer. The dome light begins to dim approximately 3 seconds after closing the door. With the doors closed, the dome light can be turned on by pushing the indicated portion of the light lens. It goes off when pushed again, regardless of the door position.

Courtesy Lights

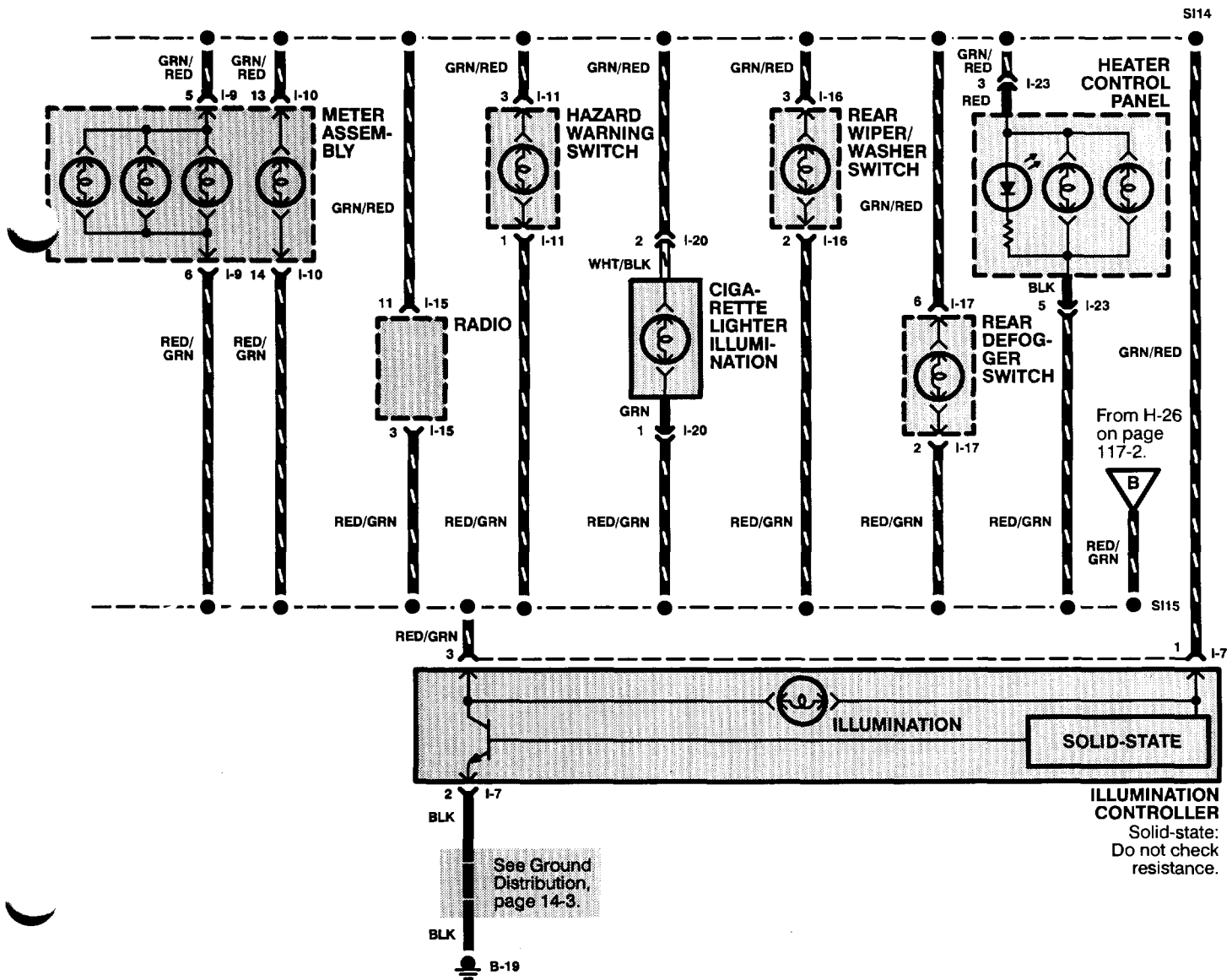
With a front door open, a ground path is provided by the closed front door switch and the front courtesy lights go on. With a rear door open, a ground path is provided by the closed rear door switch and the rear courtesy lights go on. Opening a front door does not turn on the rear courtesy lights and opening a rear door does not turn on the front courtesy lights.

Luggage Room Lights

With the tailgate open and the luggage room light switch in the DOOR position, a ground path is provided by the closed tailgate switch and the luggage room light goes on. With the tailgate closed, the luggage room light can be turned on by turning the luggage room light switch to ON.

Map Lights

When either the left or right map light switch is depressed, battery voltage is applied to that particular light and the map light goes on.



SI14

From H-26 on page 117-2.



SI15

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Component Location Index

(Refer to Section 201 for photographs.)

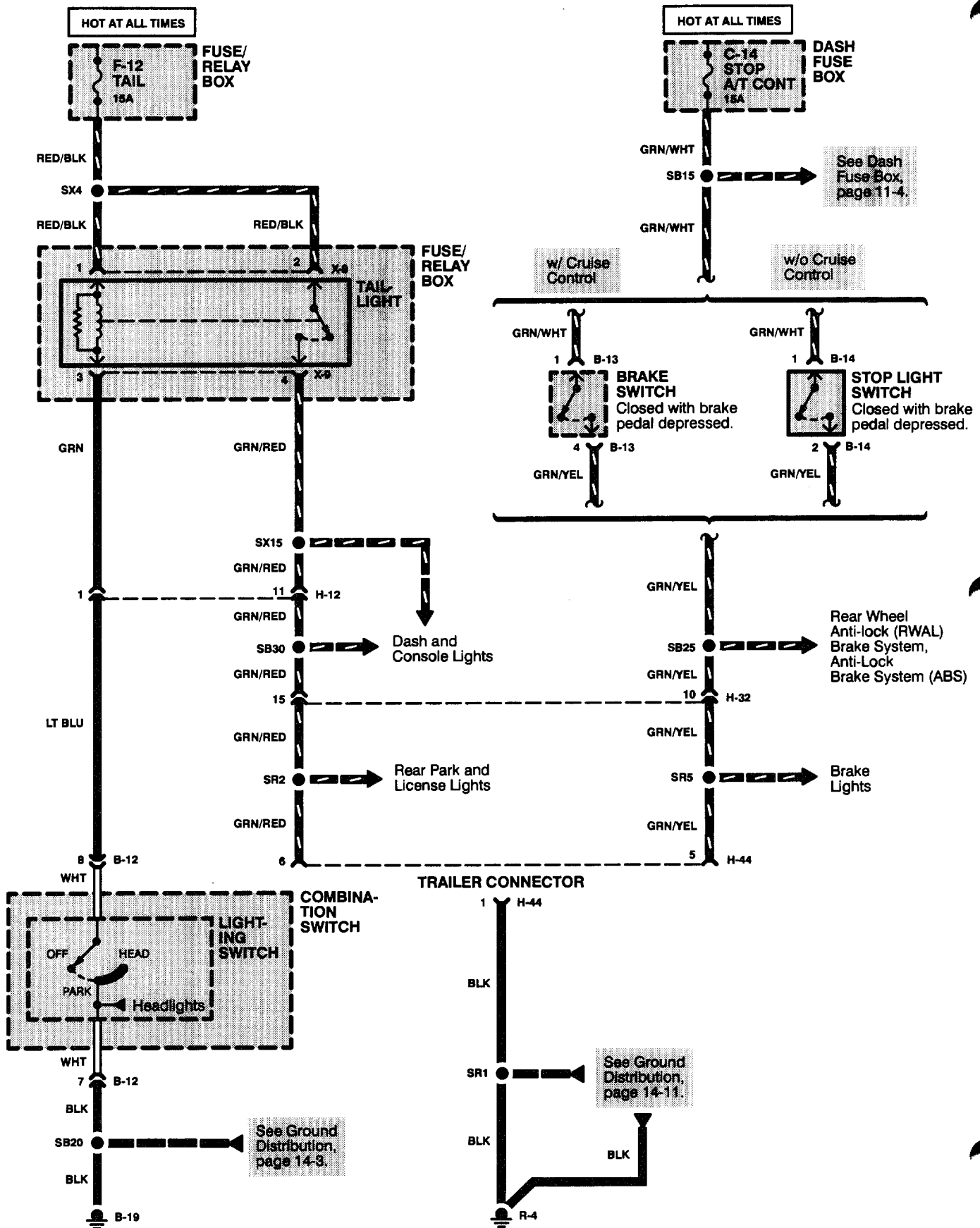
<u>Component</u>	<u>Photo No.</u>
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
Glove Box Switch	Top right side of glove box
Taillight Relay	In fuse/relay box 36
Connector	
B-12 (16-BLK/WHT)	Below I/P, right of steering column 69
B-30 (6-WHT) (M/T)	Below rear of front console
B-33 (2-WHT/BLK)	Below rear of front console 78
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket 82
H-16 (22-WHT)	Behind right dash side trim panel 86
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 63
H-26 (20-WHT)	Below I/P, above left dash side trim panel, on bracket 62
I-9 (16-BLK)	On left rear of meter assembly 53
I-10 (16-WHT)	On right rear of meter assembly 53
I-19 (2-WHT)	Behind cigarette lighter 71
I-20 (2-BLU/WHT)	Behind cigarette lighter 71
I-23 (6-WHT)	On rear of heater-A/C control panel 76
1-24 (2-WHT)	Below right side of I/P, above glove box 83
Ground	
B-19	Behind top of left dash side trim panel 62

Circuit Operation

Fuse F-12 applies battery voltage at all times to the tail-light relay. When the lighting switch is in the HEAD or PARK position, the lighting switch provides ground to the taillight relay. The taillight relay energizes providing battery voltage to the dash and console lights. The brightness of the lights is controlled by the illumination controller. The illumination controller is a solid-state device which controls the ground path provided to the lights.

TRAILER ADAPTER

Circuit Schematic



TRAILER ADAPTER

Component Location Index

(Refer to Section 201 for photographs.)

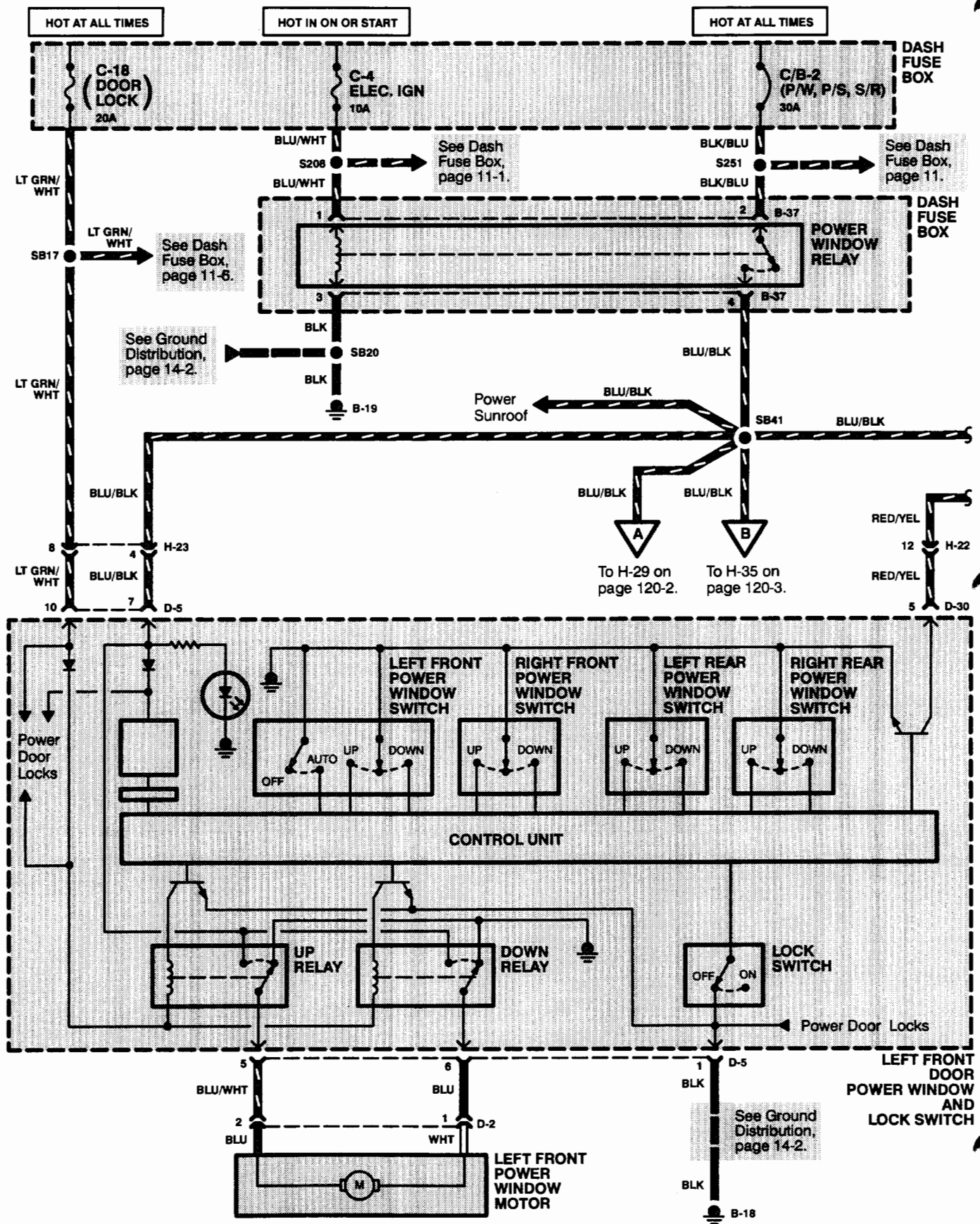
Component		Photo No.
Brake Switch	Below I/P, on brake pedal support	68
Dash Fuse Box	Behind left dash side trim panel	58
Flasher Unit	On top of dash fuse box	60
Fuse/Relay Box	Right side of engine compartment, on inner fender panel	33
Stop Light Switch	Below I/P, on brake pedal support	68
Taillight Relay	In fuse/relay box	36
Trailer Connector H-44 (6-WHT)	Below left rear of vehicle, behind grommet	117
Connector		
B-12 (16-BLK/WHT)	Below I/P, right of steering column	69
H-12 (20-BRN)	Below I/P, above right dash side trim panel, on bracket	82
H-16 (22-WHT)	Behind right dash side trim panel	86
H-20 (6-WHT)	Behind right dash side trim panel	86
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket	63
H-32 (16-BLK) (without Power Door Locks)	Below left front seat	120
H-32 (22-BLK) (with Power Door Locks)	Below left front seat	120
Ground		
B-18	Behind top of left dash side trim panel	62
B-19	Behind top of left dash side trim panel	62
R-4	Left side of luggage room	103

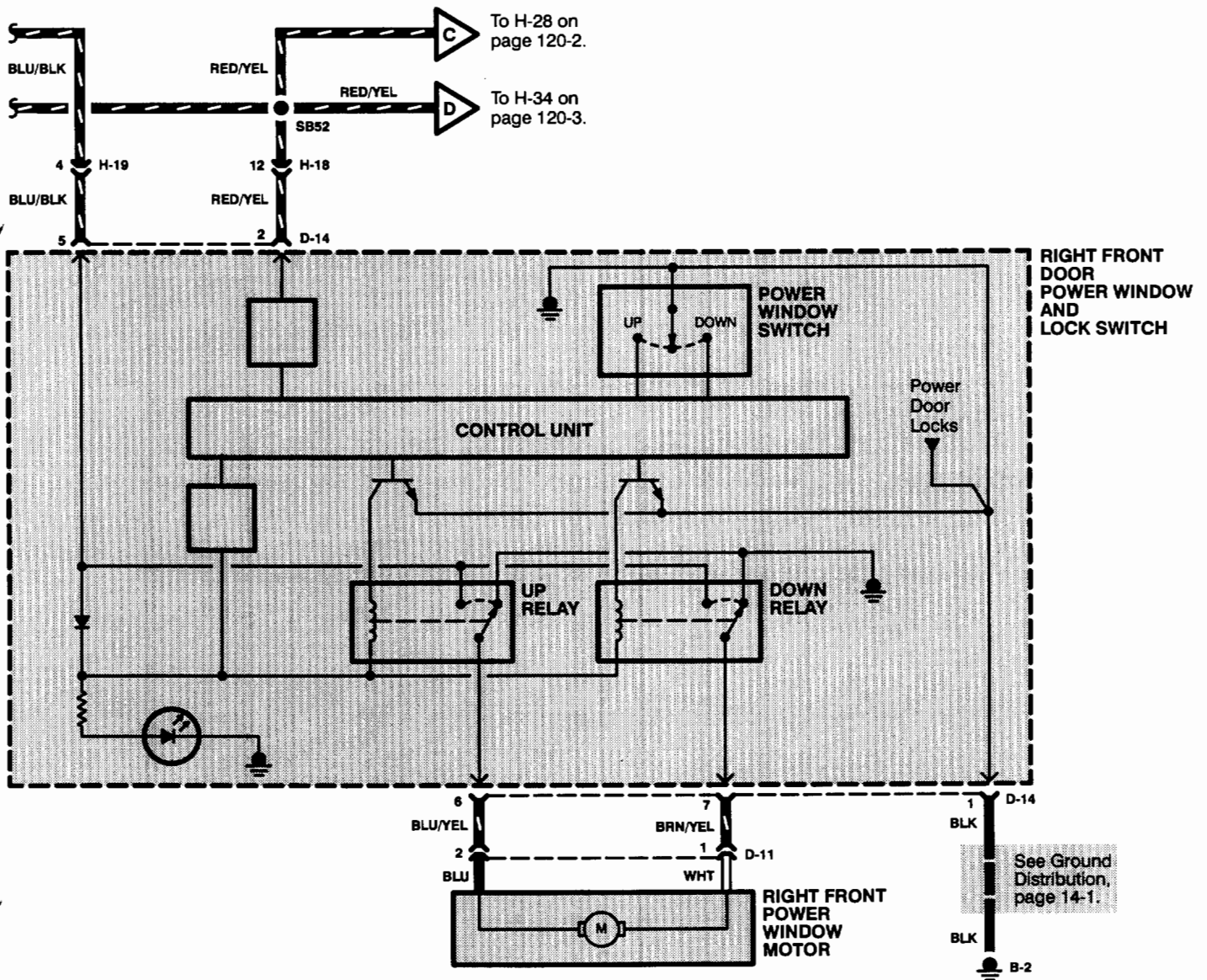
Circuit Operation

The trailer connector is an extension of the main wiring harness. See corresponding exterior lights cell for circuit operation.

POWER WINDOWS

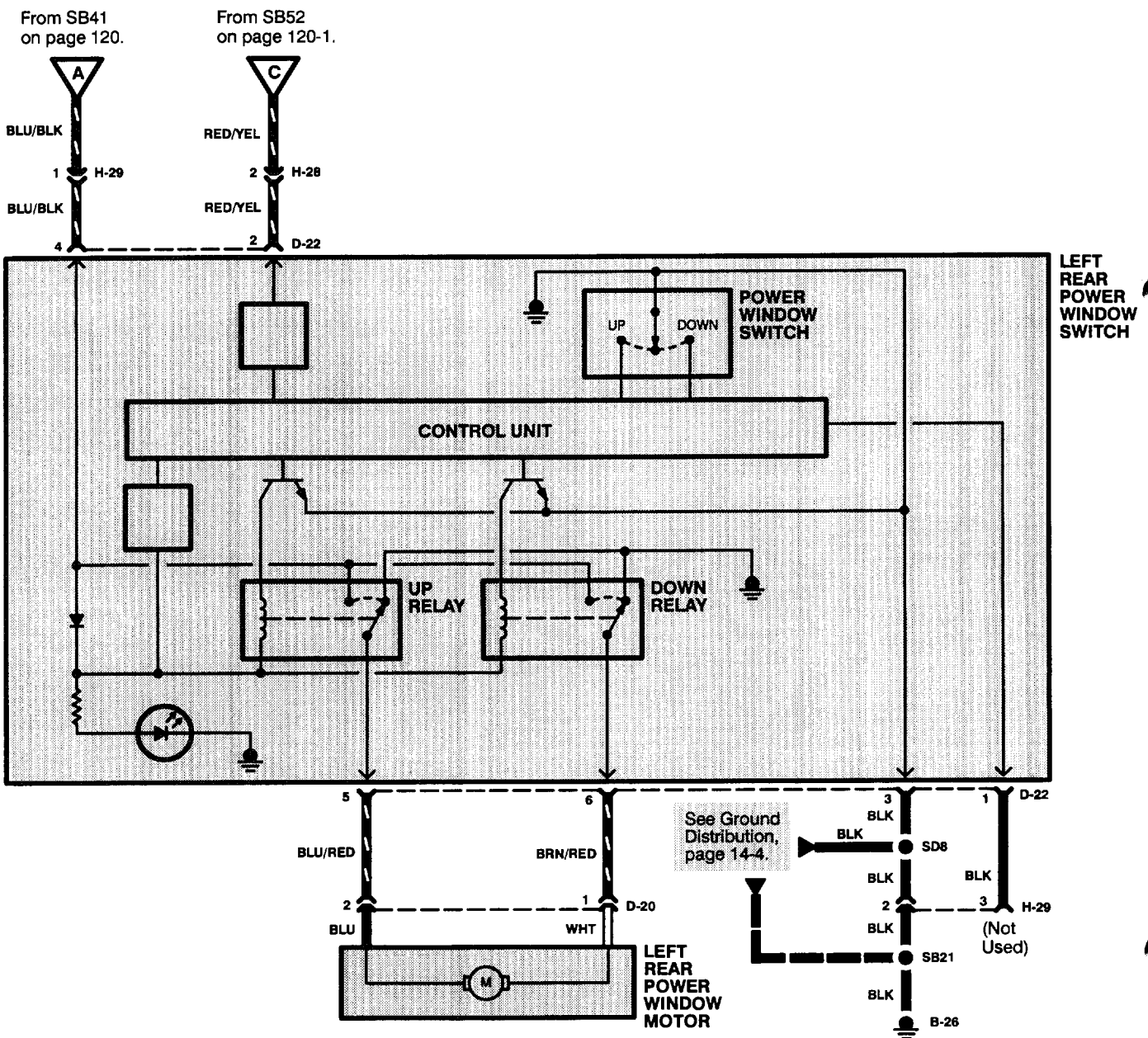
Circuit Schematic



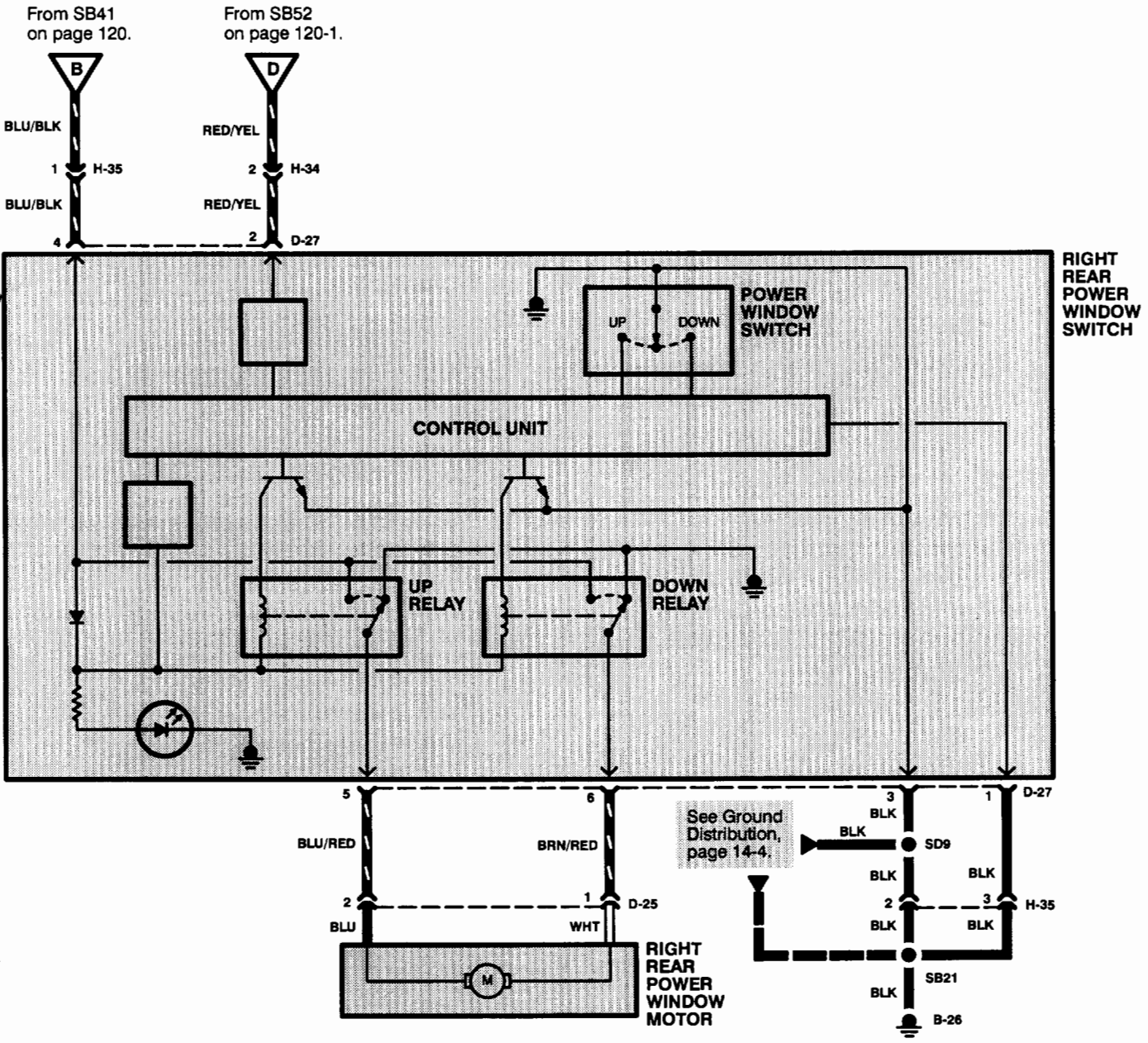


POWER WINDOWS

Circuit Schematic



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POWER WINDOWS

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Behind left dash side trim panel 58
Left Front Power Window	
Motor	Inside front of left front door, behind trim pad 92
Left Rear Power Window	
Motor	Inside front of left rear door, behind trim pad 97
Power Window Relay	In dash fuse box 59
Right Front Power Window	
Motor	Inside front of right front door, behind trim pad 92
Right Rear Power Window	
Motor	Inside front of right rear door, behind trim pad 97
Connector	
D-2 (2-BLK)	Inside front of left front door, behind trim pad 92
D-5 (10-BLK)	On left front door power window and lock switch
D-11 (2-BLK)	Inside front of right front door, behind trim pad 92
D-20 (2-BLK)	Inside front of left rear door, behind trim pad 97
D-25 (2-BLK)	Inside front of right rear door, behind trim pad 97
D-30 (10-WHT)	On left front door power window and lock switch
H-18 (18-WHT)	Behind right dash side trim panel, in access hole 87
H-19 (8-BLK)	Behind right dash side trim panel, in access hole 87
H-22 (18-WHT)	Behind left dash side trim panel, in access hole 87
H-23 (8-BLK)	Behind left dash side trim panel, in access hole 87
H-28 (6-WHT)	In left center pillar 94
H-29 (3-BLU)	In left center pillar 94
H-34 (6-WHT)	In right center pillar 94
H-35 (3-BLU)	In right center pillar 94
Ground	
B-2	Above right dash side trim panel 84
B-18	Behind top of left dash side trim panel 62
B-19	Behind top of left dash side trim panel 62
B-26	Below rear of center console 79

Circuit Operation

Fuse C-18 applies battery voltage at all times to the left front door power window switch. The circuit breaker C/B-2 applies battery voltage at all times to the power window relay. With the starter switch in ON or START, fuse C-4 applies battery voltage to the power window relay. The power window relay energizes and allows battery voltage from the circuit breaker to all the door power window switches.

Left Front Window

When the left front power window switch is moved to UP, a signal is sent to the control unit. The control unit grounds the coil of the up relay. The contacts of the relay close, and voltage is applied to the left front power window motor. The motor's ground path is through the open contacts of the down relay. The motor drives the window up as long as the switch is held. When the switch is moved to DOWN, a signal is sent to the control unit. The control unit grounds the coil of the down relay. The contacts of the relay close, and voltage is applied to the motor. The motor's ground path is through the open contacts of the up relay. The motor drives the window down as long as the switch is held.

Auto Down

When the left front power switch is moved to AUTO, a signal is sent to the control unit. The control unit grounds the coil of the down relay. The contacts of the relay close, and voltage is applied to the left front power window motor. The motor's ground path is through the open contacts of the down relay. The control unit keeps the relay energized until the motor drives the window to the fully open position.

Passenger's Window

The passenger windows can be operated from the left front door power window switch or the respective door power window switch. The passenger's door power window switches can only operate the windows when the lock switch in the left front power window switch is in the OFF position.

When a passenger's door power window switch is moved to UP, a signal is sent to the respective control unit. The control unit grounds the coil of the up relay. The contacts of the relay close, and voltage is applied to the respective power window motor. The motor's ground path is through the open contacts of the down relay. The motor drives the window up as long as the switch is held. When the switch is moved to DOWN, a signal is sent to the control unit. The control unit grounds the coil of the down relay. The contacts of the relay close, and voltage is applied to the motor. The motor's ground path is through the open contacts of the up relay. The motor drives the window down as long as the switch is held.

When a passenger's power window is being controlled by the switch in the left front door power window switch, the control unit in the left front door power window switch sends a multiplexed signal to the control units in the other power window switches. The signal tells the appropriate control unit to energize either the up or down relay depending on the function requested. Once the relay is energized, power is supplied to the respective power window motor (see above paragraph) and the motor drives the window in the proper direction as long as the switch is held. Since the signal is multiplexed, more than one passenger's window can be controlled by the left front door power window switch simultaneously.

Component Location Index

(Refer to section 201 for photographs.)

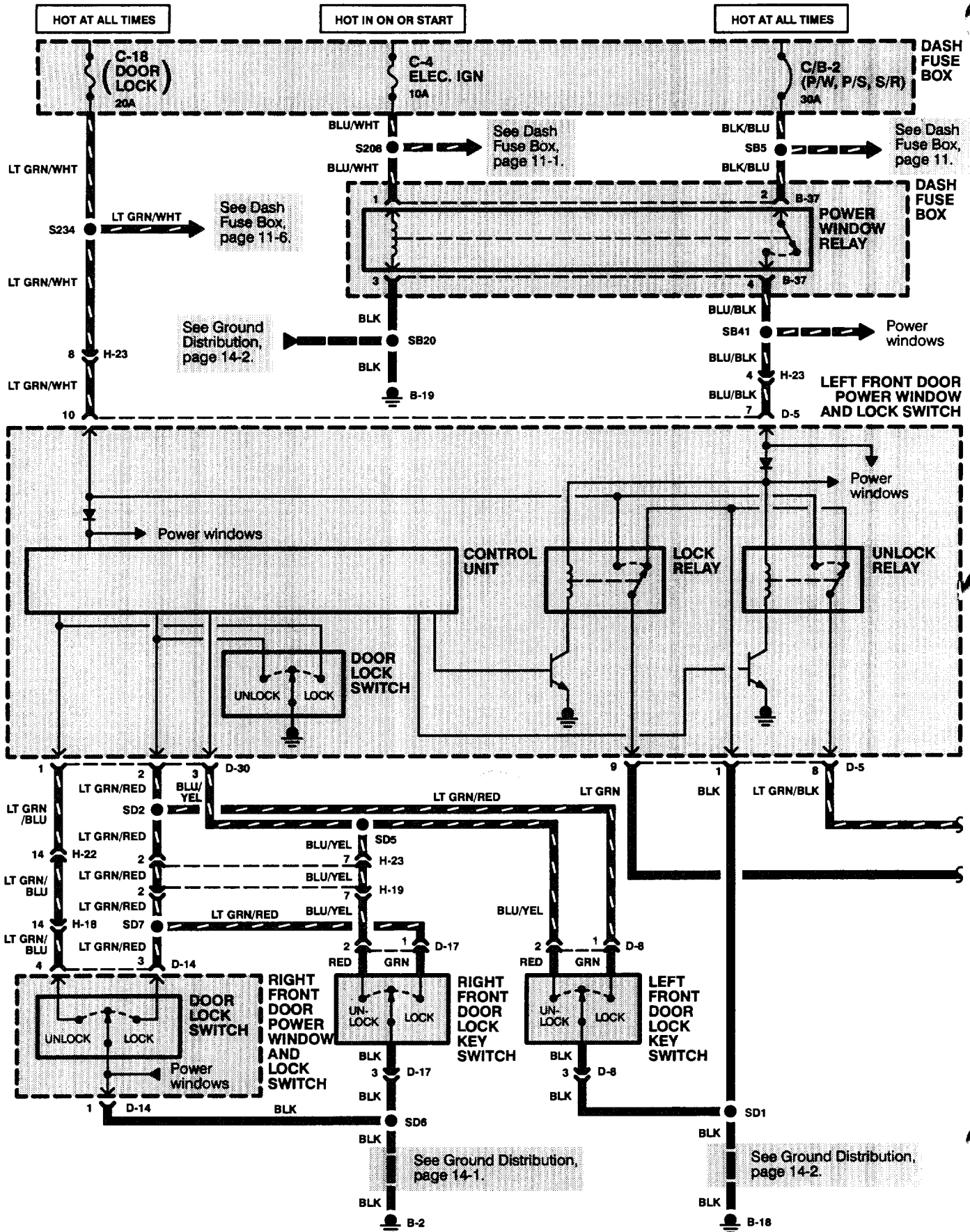
Component	Photo No.
Dash Fuse Box	58
Limit Switch	59
Power Window Relay	59
Safety Stop Switch	101
Sunroof Control Unit	101
Sunroof Motor	101
Connector	
H-21 (4-WHT)	82
H-45 (6-BLK)	98
L-1 (3-WHT)	98
S-2 (3-WHT)	101
S-3 (2-WHT)	101
S-4 (4-WHT)	101
S-5 (6-WHT)	101
Ground	
B-1	84
B-19	62

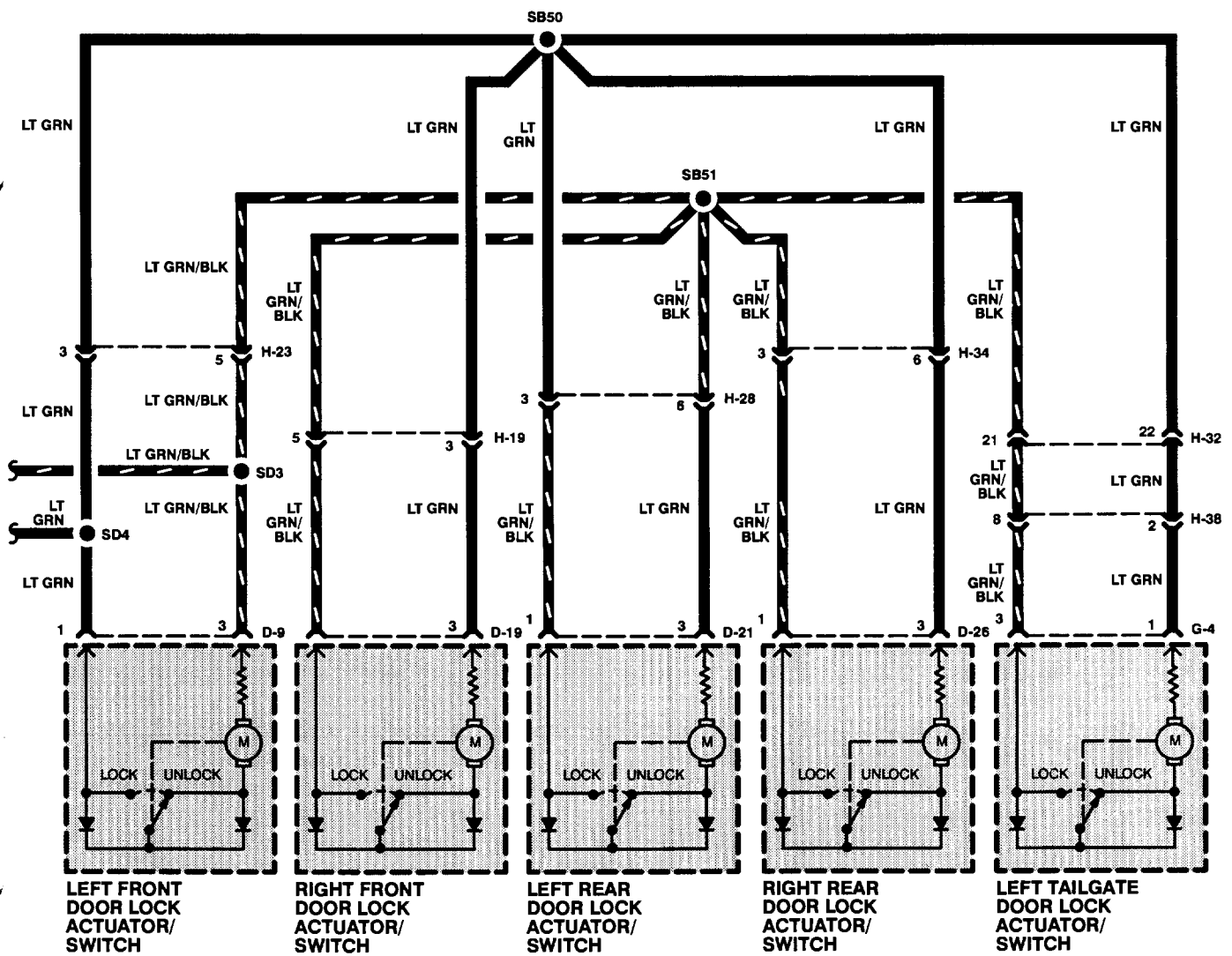
Circuit Operation

When the starter switch is in ON or START, the power window relay is energized and applies battery voltage to the sunroof control unit. When the sunroof switch is held in the OPEN position, the open relay energizes, supplying battery voltage to the sunroof motor and the sunroof opens to the limit stop position. At the moment the sunroof reaches the limit stop position, the limit switch closes and applies ground to the sunroof control unit. The sunroof control unit stops the sunroof in the limit stop position. After the sunroof switch is released and held in the OPEN position, the sunroof motor opens the sunroof until it reaches its mechanical limit. When the sunroof switch is held in the CLOSE position, the close relay energizes, supplying battery voltage to the sunroof motor and the sunroof opens to the safety stop position. At the moment the sunroof reaches the safety stop position, the safety stop switch closes and applies ground to the sunroof control unit. The sunroof control unit stops the sunroof in the safety stop position. After the sunroof switch is released and held in the CLOSE position, the sunroof motor closes the sunroof until it reaches its mechanical limit.

POWER DOOR LOCKS

Circuit Schematic





POWER DOOR LOCKS

Component Location Index

(Refer to Section 201 for photographs.)

<u>Component</u>	<u>Photo No.</u>
Dash Fuse Box Behind left dash side trim panel	58
Left Front Door Lock	
Actuator/Switch Inside rear of left front door, behind trim pad	93
Left Front Door Lock	
Key Switch Inside left front door, part of door lock assembly	93
Left Rear Door Lock	
Actuator/Switch Inside of left rear door, behind trim pad	97
Left Tailgate Door Lock	
Actuator/Switch Inside left tailgate door, behind trim pad	104
Power Window Relay In dash fuse box	59
Right Front Door Lock	
Actuator/Switch Inside rear of right front door, behind trim pad	93
Right Front Door Lock	
Key Switch Inside rear of right front door, part of door lock assembly	93
Right Rear Door Lock	
Actuator/Switch Inside of right rear door, behind trim pad	97
Connector	
D-5 (10-BLK) On left front door power window and lock switch	93
D-8 (3-WHT) Inside left front door, behind trim pad	93
D-17 (3-WHT) Inside right front door, behind trim pad	93
D-30 (10-WHT) On left front door power window and lock switch	87
H-18 (18-WHT) Behind right dash side trim panel, in access hole	87
H-19 (8-BLK) Behind right dash side trim panel, in access hole	87
H-22 (18-WHT) Behind left dash side trim panel, in access hole	87
H-23 (8-BLK) Behind left dash side trim panel, in access hole	87
H-28 (6-WHT) In left center pillar	94
H-32 (22-BLK) (with Power Door Locks) Below left front seat	120
H-34 (6-WHT) In right center pillar	94
H-38 (10-WHT) Left rear of luggage room	102
Ground	
B-2 Above right dash side trim panel	84
B-18 Behind top of left dash side trim panel	62
B-19 Behind top of left dash side trim panel	62

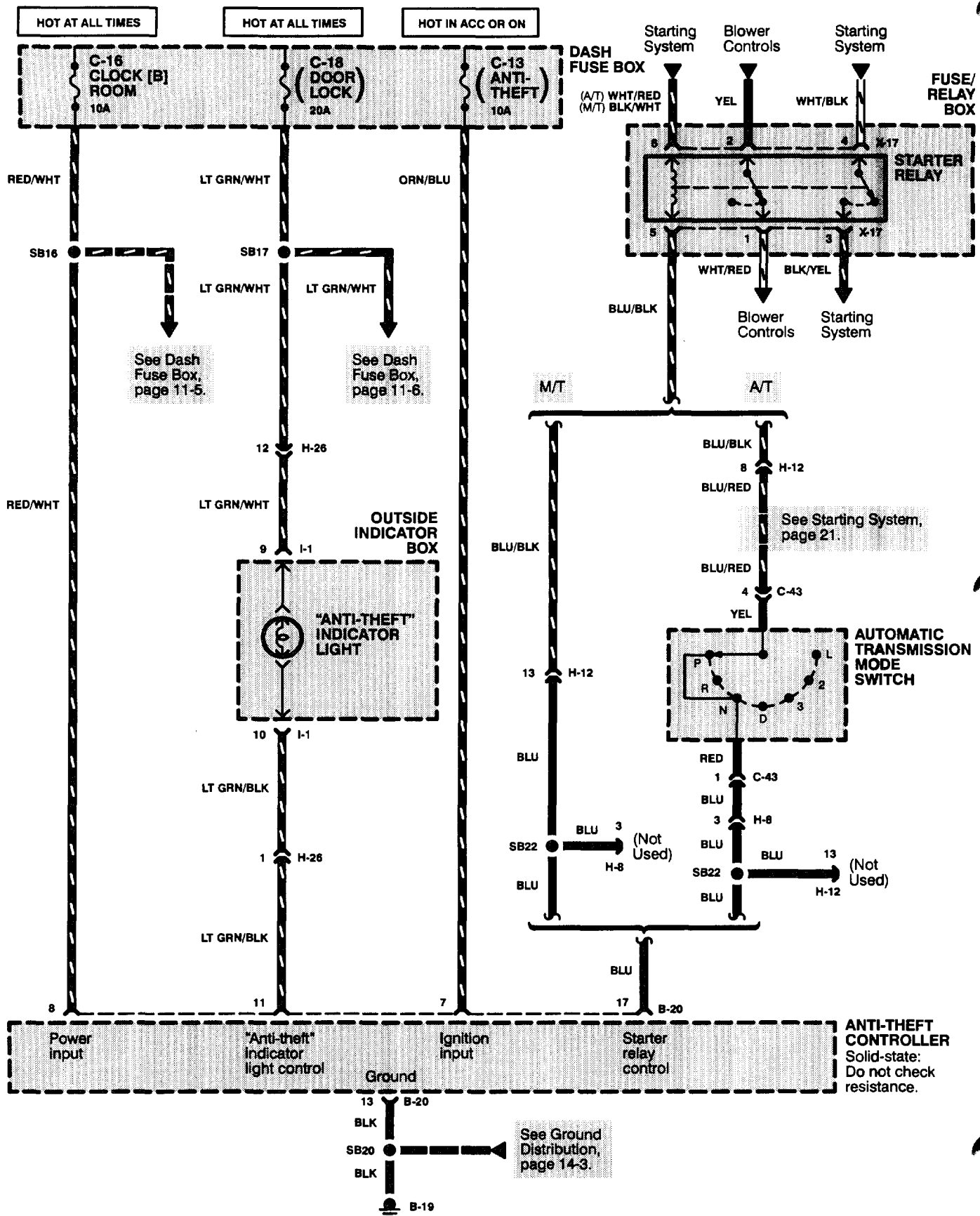
Circuit Operation

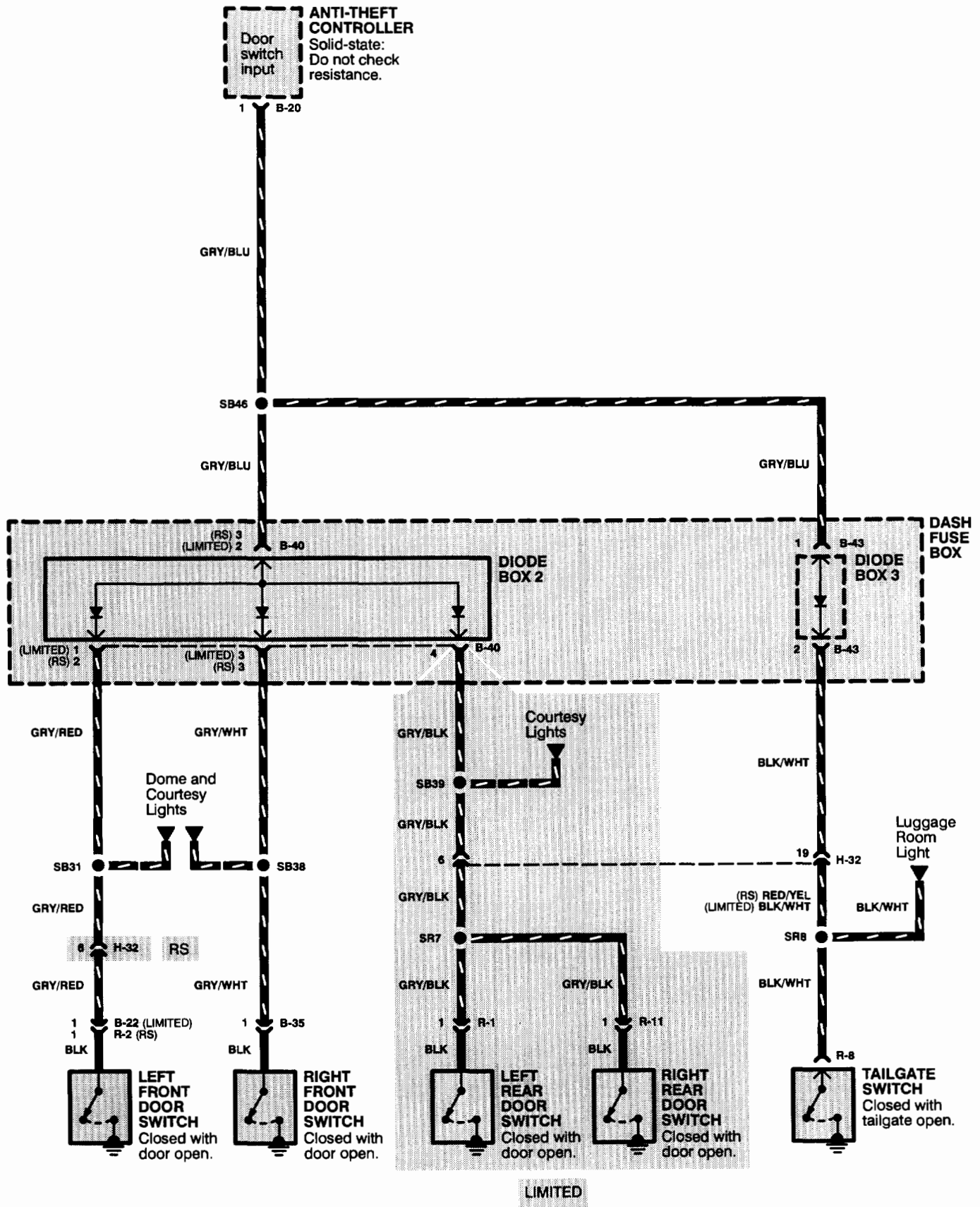
Fuse C-18 applies battery voltage at all times to the door lock control unit (in left front door lock switch). If either of the front door lock key switches is turned once, only that door will be unlocked. If either of the front door lock key switches is turned twice (within 3 seconds) it sends a signal to the control unit to unlock

all the doors. Locking or unlocking the doors with either door lock switch also locks or unlocks all the doors. The control unit locks or unlocks the doors by applying battery voltage and providing a ground to the door lock actuators in one direction to lock the doors and in the opposite direction to unlock the doors.

ANTI-THEFT SYSTEM

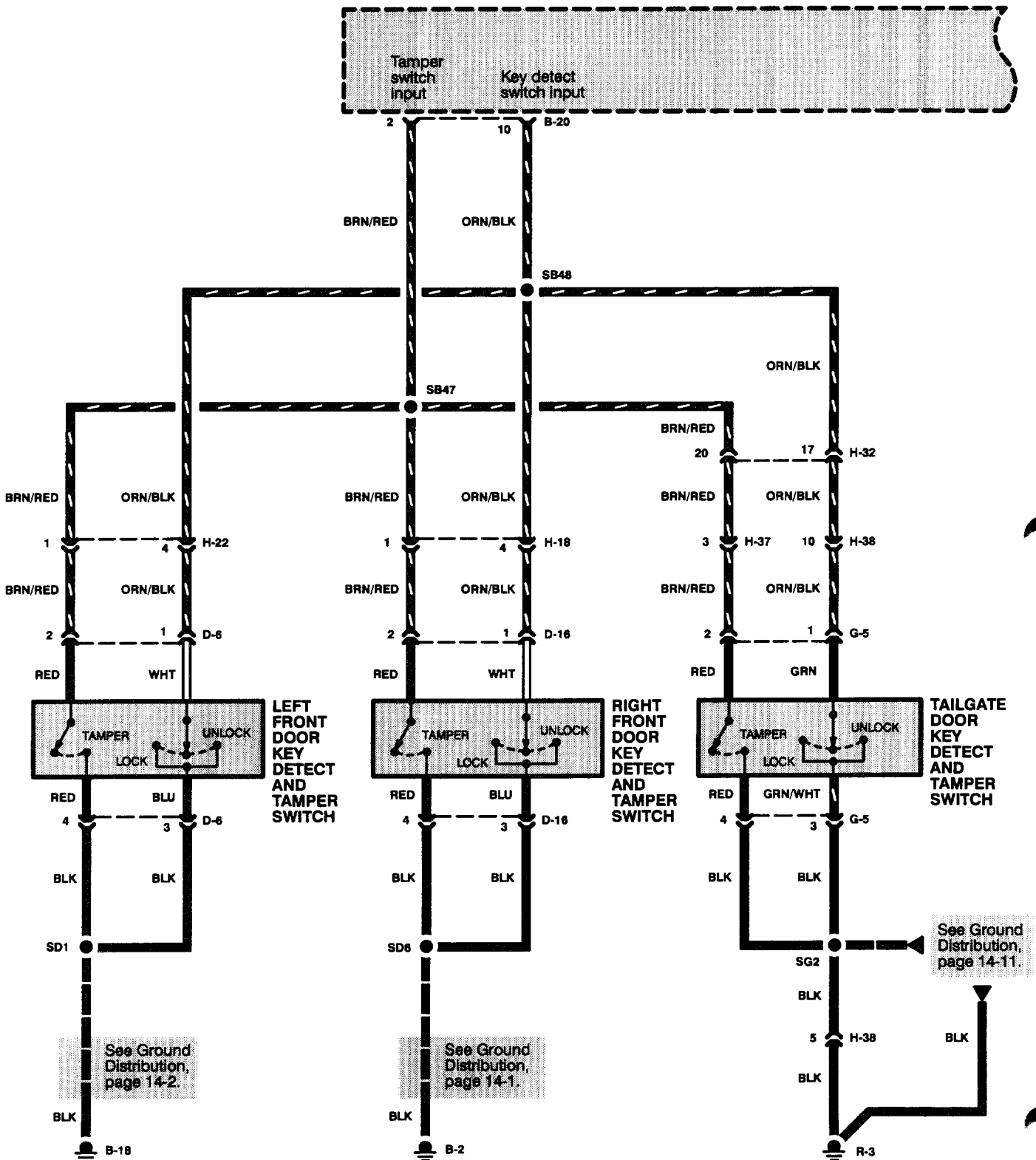
Circuit Schematic



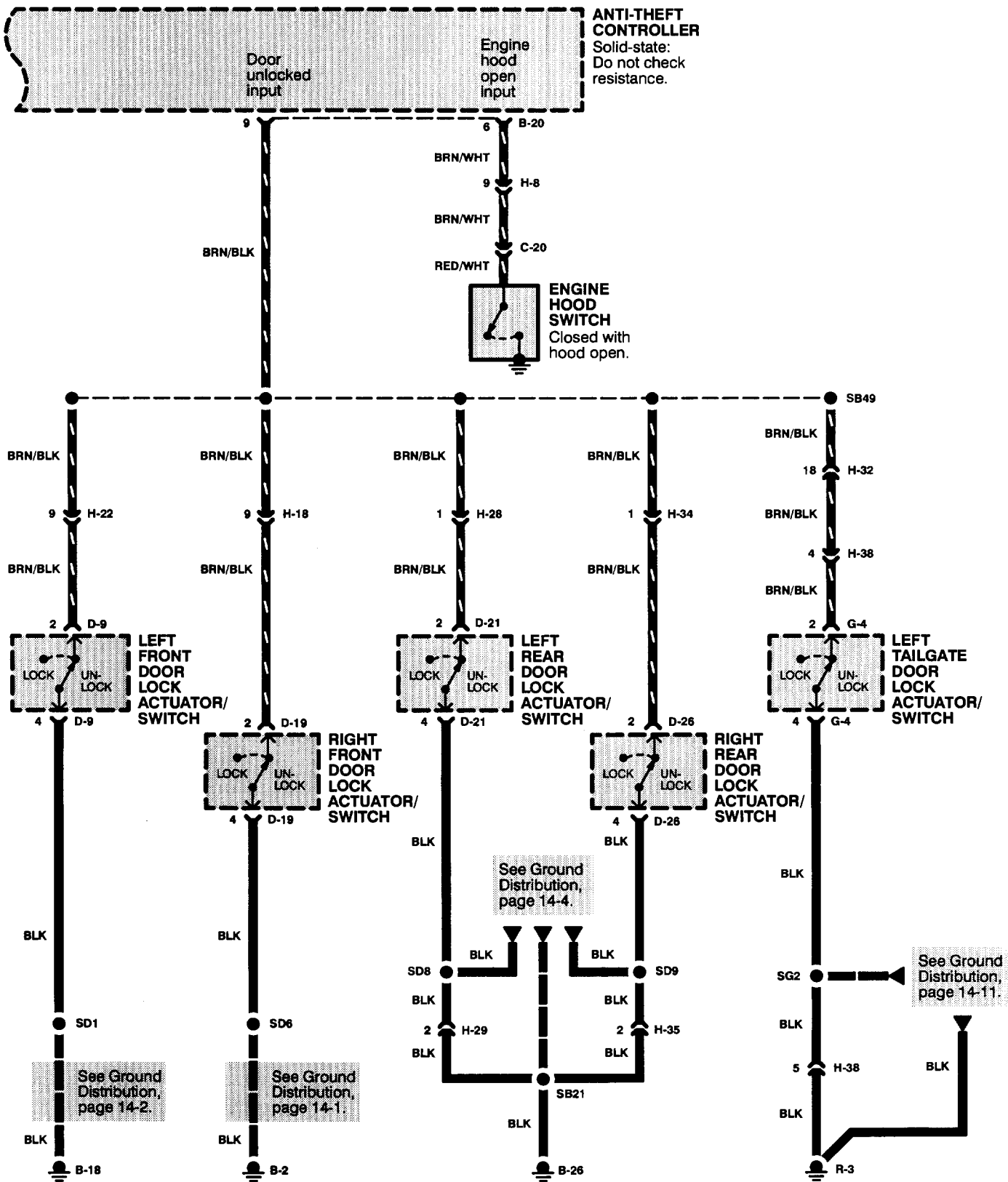


ANTI-THEFT SYSTEM

Circuit Schematic



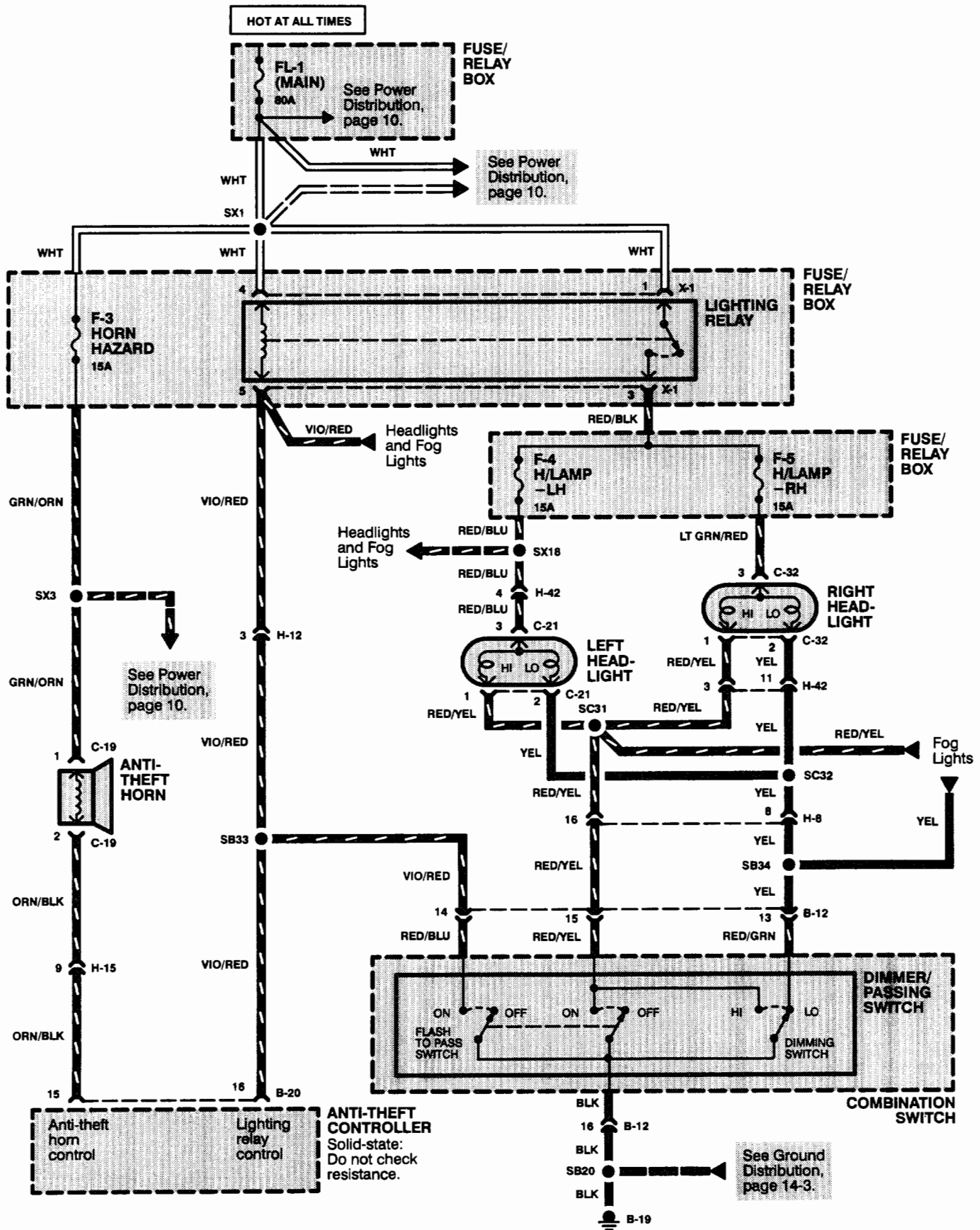
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ANTI-THEFT SYSTEM

Circuit Schematic



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