

2002 ELECTRICAL

Fuses & Circuit Breakers - Rav4

IDENTIFICATION

WARNING: Vehicle is equipped with air bag supplemental restraint system. Before attempting ANY repairs involving steering column, instrument panel or related components, see SERVICE PRECAUTIONS and DISABLING & ACTIVATING AIR BAG SYSTEM in TOYOTA - AIR BAG RESTRAINT SYSTEMS article.

CAUTION: When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See appropriate COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION before disconnecting battery.

ENGINE ROOM JUNCTION & RELAY BLOCKS

NOTE: Numerous junction, relay and fusible link blocks are located in the engine room. See [Fig. 1](#) For identification of current flow, see [Fig. 2](#) .

Component Locations

- Engine room fusible link block is located at left side of engine room. See [Fig. 1](#) . For identification of engine room fusible link block components, see [Fig. 3](#) . Engine room fusible link block contains fuses. The engine room fusible link block is the connection point for various wiring harnesses. For wiring diagrams of engine room fusible link block components, see appropriate SYSTEM WIRING DIAGRAMS article in ELECTRICAL.
- Engine room junction block is located at left side of engine room. See [Fig. 1](#) . For identification of engine room junction block components, see [Fig. 4](#) . Engine room junction block contains relays and fuses. For identification of engine room junction block fuse components, see [Fig. 5](#) . The engine room junction block is the connection point for various wiring harnesses. For wiring diagrams of engine room junction block components, see appropriate SYSTEM WIRING DIAGRAMS article in ELECTRICAL.
- Engine room relay block is located at left side of engine room. See [Fig. 1](#) . For identification of relay block components, see [Fig. 6](#) . Engine room relay block contains fuses and relays. For identification of engine room relay block fuse components, see [Fig. 7](#) . The engine room relay block is the connection point for various wiring harnesses. For wiring diagrams of components, see appropriate SYSTEM WIRING DIAGRAMS article in ELECTRICAL.

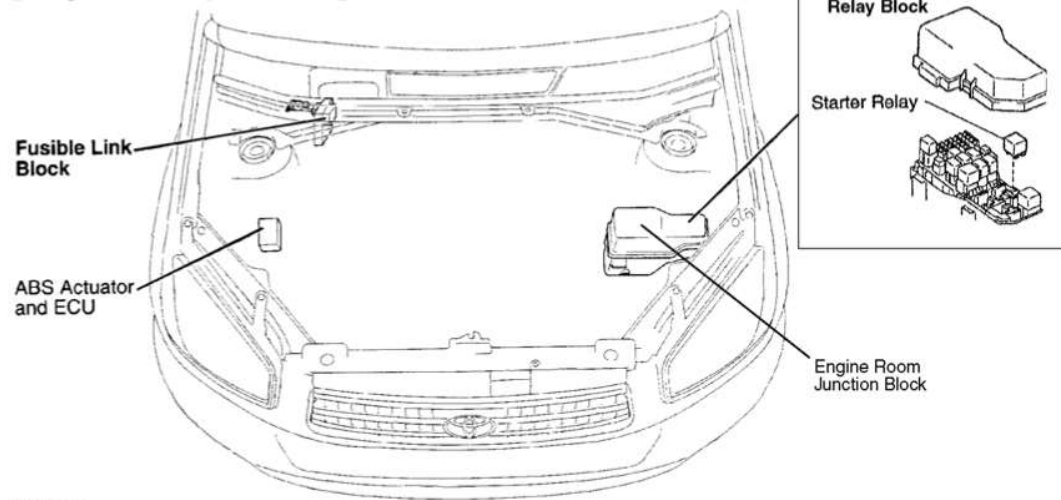
[Engine Compartment]

Fig. 1: Locating Engine Room Relay Blocks
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Current Flow Chart

The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other Parts.

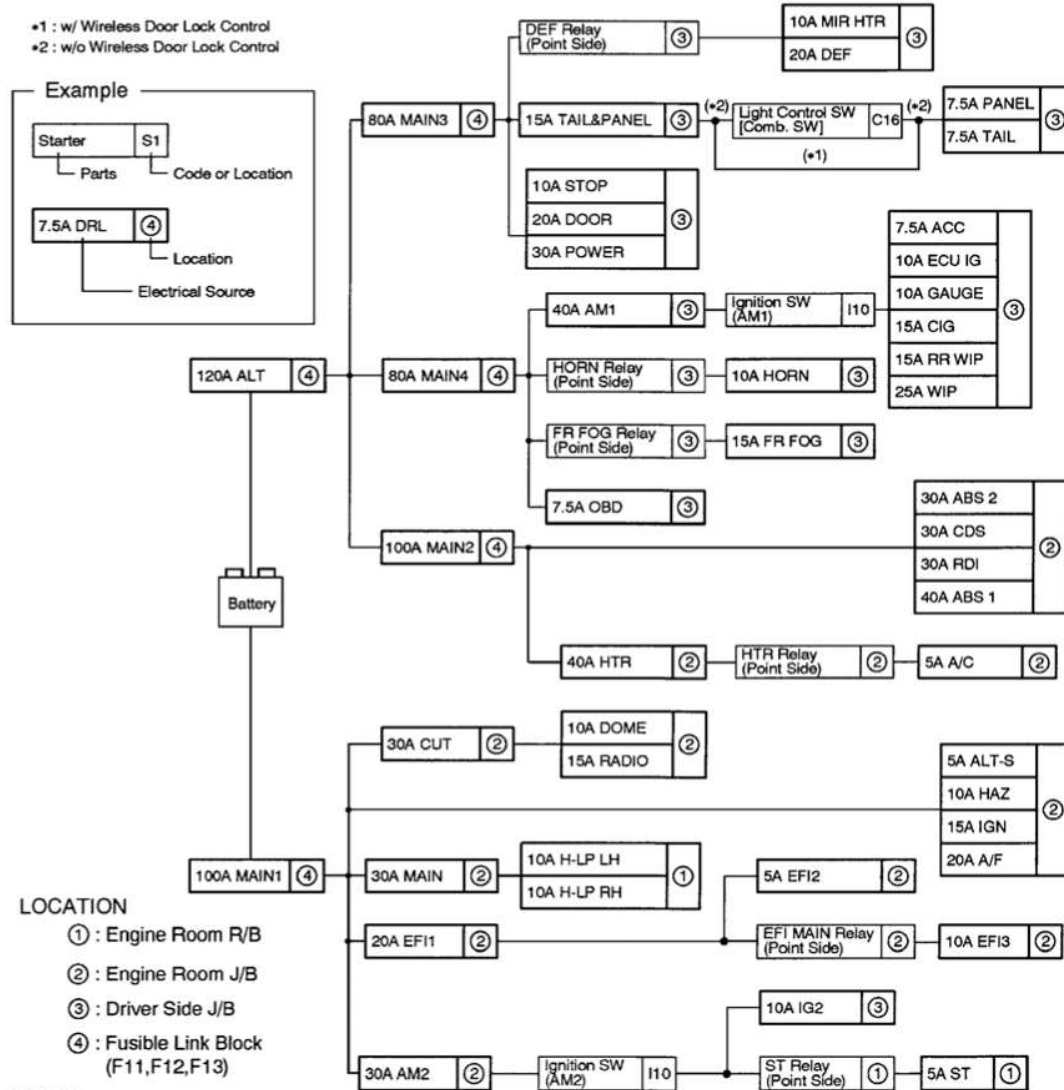


Fig. 2: Current Flow Chart

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Fusible Link Block (F11, F12, F13)

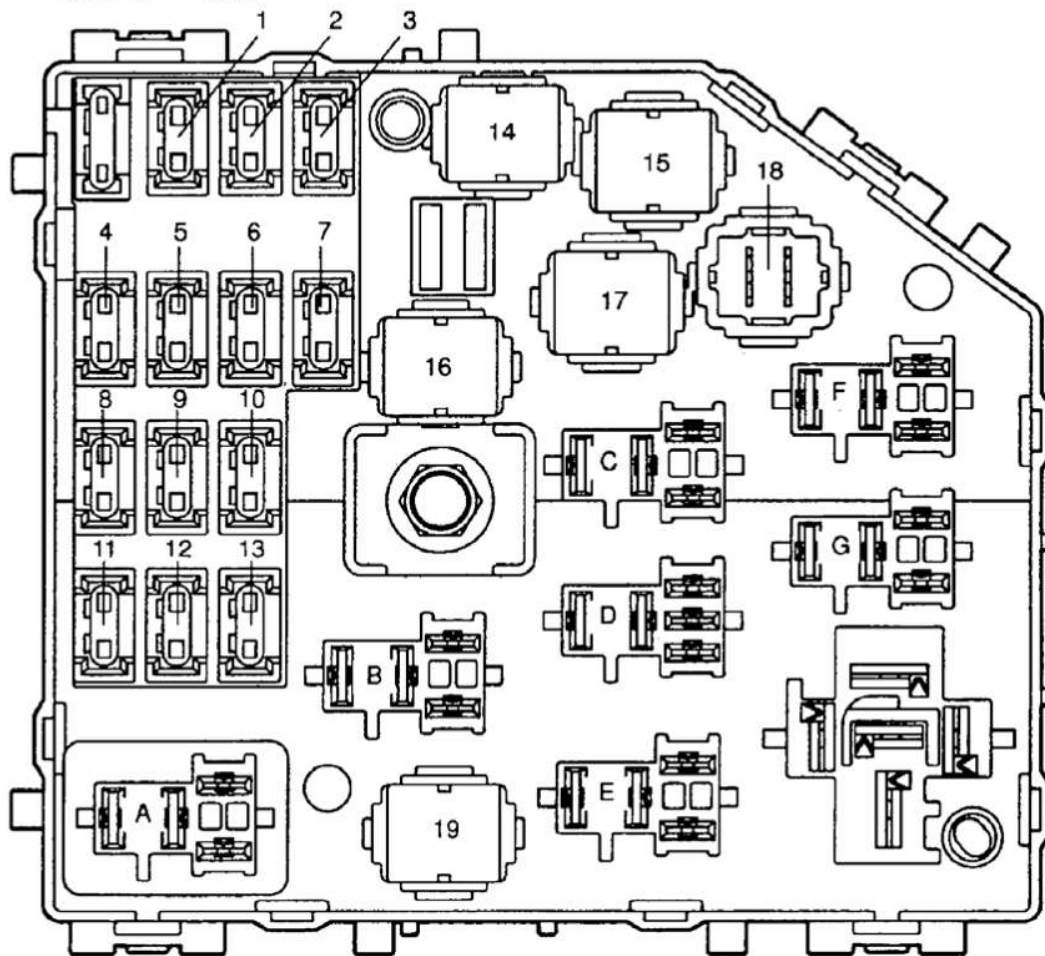
Fuse		System
80A	MAIN3	Front Fog Light Rear Window Defogger and Mirror Heater
80A	MAIN4	Front Fog Light Horn Rear Window Defogger and Mirror Heater Wireless Door Lock Control
100A	MAIN1	Electronically Controlled Transmission and A/T Indicator Engine Control Starting and Ignition
120A	ALT	Charging Front Fog Light Horn Rear Window Defogger and Mirror Heater Wireless Door Lock Control

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Fig. 3: Identifying Fusible Link Block Components
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Engine Room Junction Block**Fuses**

1. ALT-S	5 A	11. RADIO	15 A
2. A/F	20 A	12. A/C	5 A
3. EFI1	20 A	13. IGN	15 A
4. CUT	30 A	14. AM2 (Medium Current)	30 A
5. HAZ	10 A	15. HTR (Medium Current)	40 A
6. EFI2	5 A	16. CDS (Medium Current)	30 A
7. ABS2	30 A	17. ABS1 (Medium Current)	40 A
8. DOME	10 A	18. -	
9. MAIN	30 A	19. RDI (Medium Current)	30 A
10. EFI3	10 A		

**Relays**

- A. No. 1 Cooling Fan Relay (Marking: FAN NO.1)
- B. Ignition Relay (Marking: IG2)
- C. EFI Main Relay (Marking: EFI MAIN)
- D. No. 2 Cooling Fan Relay (Marking: FAN NO.2)
- E. Circuit Opening Relay (Marking: C/OPN)
- F. No. 3 Cooling Fan Relay (Marking: FAN NO.3)
- G. Air Fuel Ratio Relay (Marking: A/F)
- H. Heater Main Relay (Marking: HTR)

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Fig. 4: Identifying Engine Room Junction Block Components
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Engine Room Junction Block Fuse Components

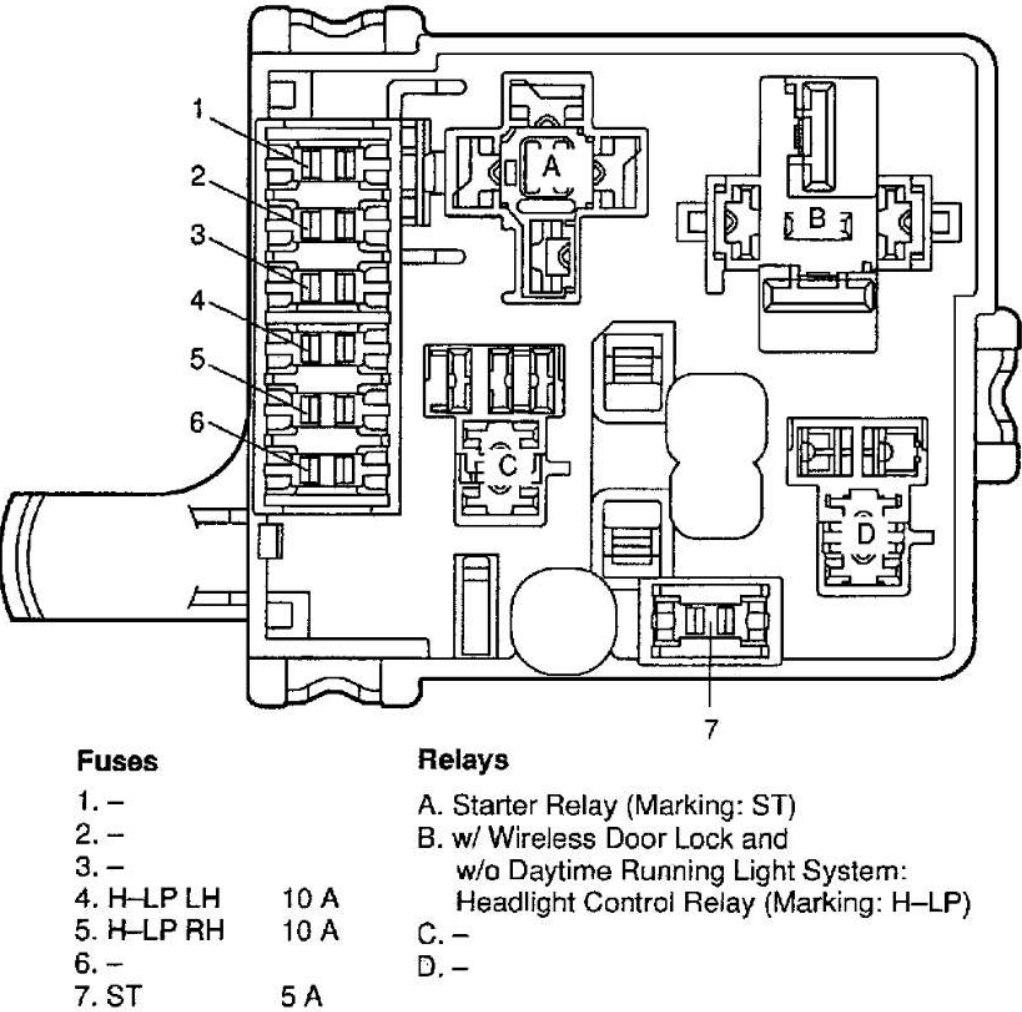
Fuse		System
5A	A/C	Air Conditioning
5A	ALT-S	Charging
5A	EFI2	Electronically Controlled Transmission and A/T Indicator Engine Control
10A	DOME	Clock Combination Meter Door Lock Control Headlight Illumination Interior Light Key Reminder and Light Reminder Buzzer Moon Roof Power Window Seat Belt Warning Taillight Wireless Door Lock Control
10A	EFI3	Engine Control Engine Immobiliser System
10A	HAZ	Turn Signal and Hazard Warning Light
15A	IGN	Engine Control Starting and Ignition
15A	RADIO	Radio and Player
20A	A/F	Engine Control
20A	EFI1	Electronically Controlled Transmission and A/T Indicator Engine Control
30A	ABS 2	ABS
30A	AM2	Electronically Controlled Transmission and A/T Indicator Engine Control Starting and Ignition
30A	CDS	Radiator Fan and Condenser Fan
30A	RDI	Radiator Fan and Condenser Fan
40A	ABS 1	ABS
40A	HTR	Air Conditioning

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Fig. 5: Identifying Engine Room Junction Block Fuse Components

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Engine Room Relay Block



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Fig. 6: Identifying Engine Room Relay Block Components
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Engine Room Relay Block Fuse Components

Fuse		System
5A	ST	Electronically Controlled Transmission and A/T Indicator Engine Control Starting and Ignition
10A	H-LP LH	Headlight
10A	H-LP RH	Headlight

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Fig. 7: Identifying Engine Room Relay Block Fuse Components

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

INSTRUMENT PANEL JUNCTION & RELAY BLOCKS

NOTE: Numerous junction, relay and fusible link blocks are located in the instrument panel and passenger room area. See [Fig. 8](#) . For identification of current flow, see [Fig. 2](#) .

Component Locations

- The drivers side junction block is located behind left side of dash. See [Fig. 8](#) . For identification of drivers side junction block components, see [Fig. 9](#) , and [Fig. 10](#) . The drivers side junction block contains connectors, fuses, and relays. For drivers side junction block fuse components, see [Fig. 11](#) and [Fig. 12](#) . The drivers side junction block is the connection point for various wiring harnesses, see . For wiring diagrams of components, see appropriate SYSTEM WIRING DIAGRAMS article in ELECTRICAL.
- The moon roof control relay is located above headliner on top front center of roof. See [Fig. 8](#) . For wiring diagram of moon roof control relay circuit components, see [POWER TOP/SUNROOF](#) in SYSTEM WIRING DIAGRAMS article in ELECTRICAL.
- The rear wiper motor and relay is located on the tailgate. See [Fig. 8](#) . For wiring diagram of rear wiper motor and relay circuit components, see [WIPER/WASHER](#) in SYSTEM WIRING DIAGRAMS article in ELECTRICAL.
- The tail light relay is located behind left side of dash, right of steering column. See [Fig. 8](#) . For wiring diagram of tail light relay circuit components, see [EXTERIOR LIGHTS](#) in SYSTEM WIRING DIAGRAMS article in ELECTRICAL.
- The turn signal flasher relay is located behind left side of dash, right of steering column. See [Fig. 8](#) . For wiring diagram of turn signal flasher relay circuit components, see [EXTERIOR LIGHTS](#) in SYSTEM WIRING DIAGRAMS article in ELECTRICAL.

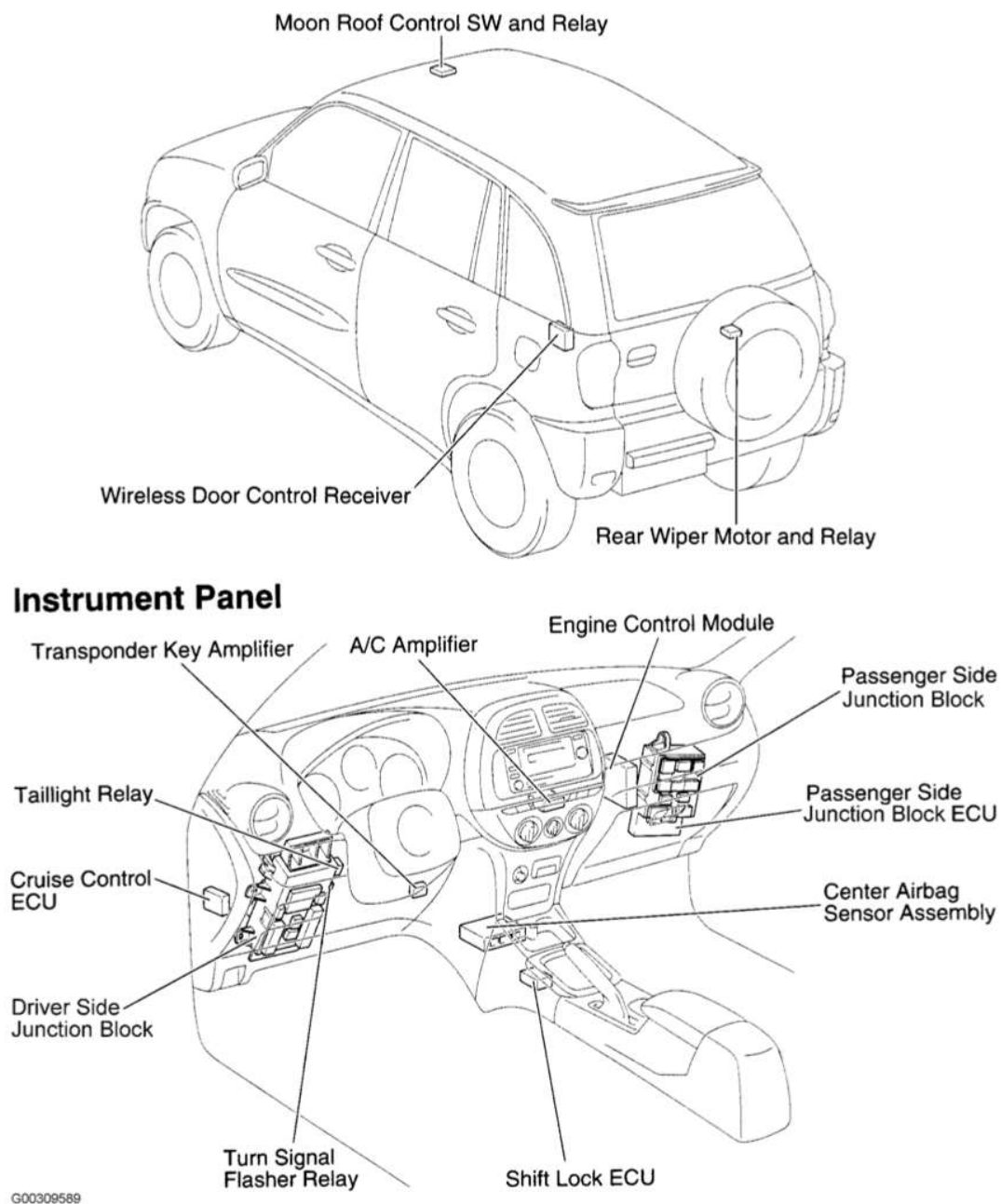


Fig. 8: Locating Passenger Room Fuse, Relay & Junction Blocks
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

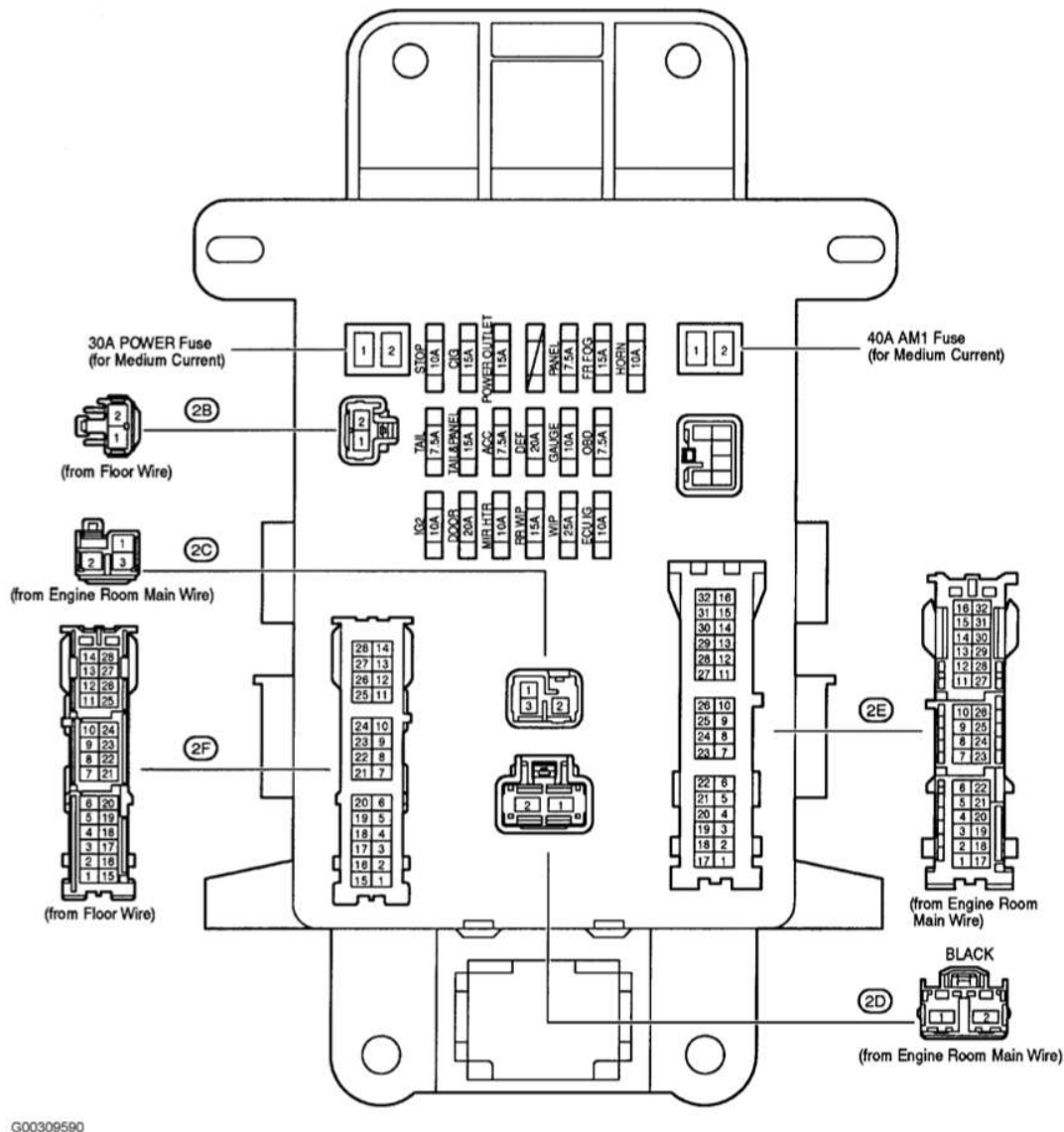
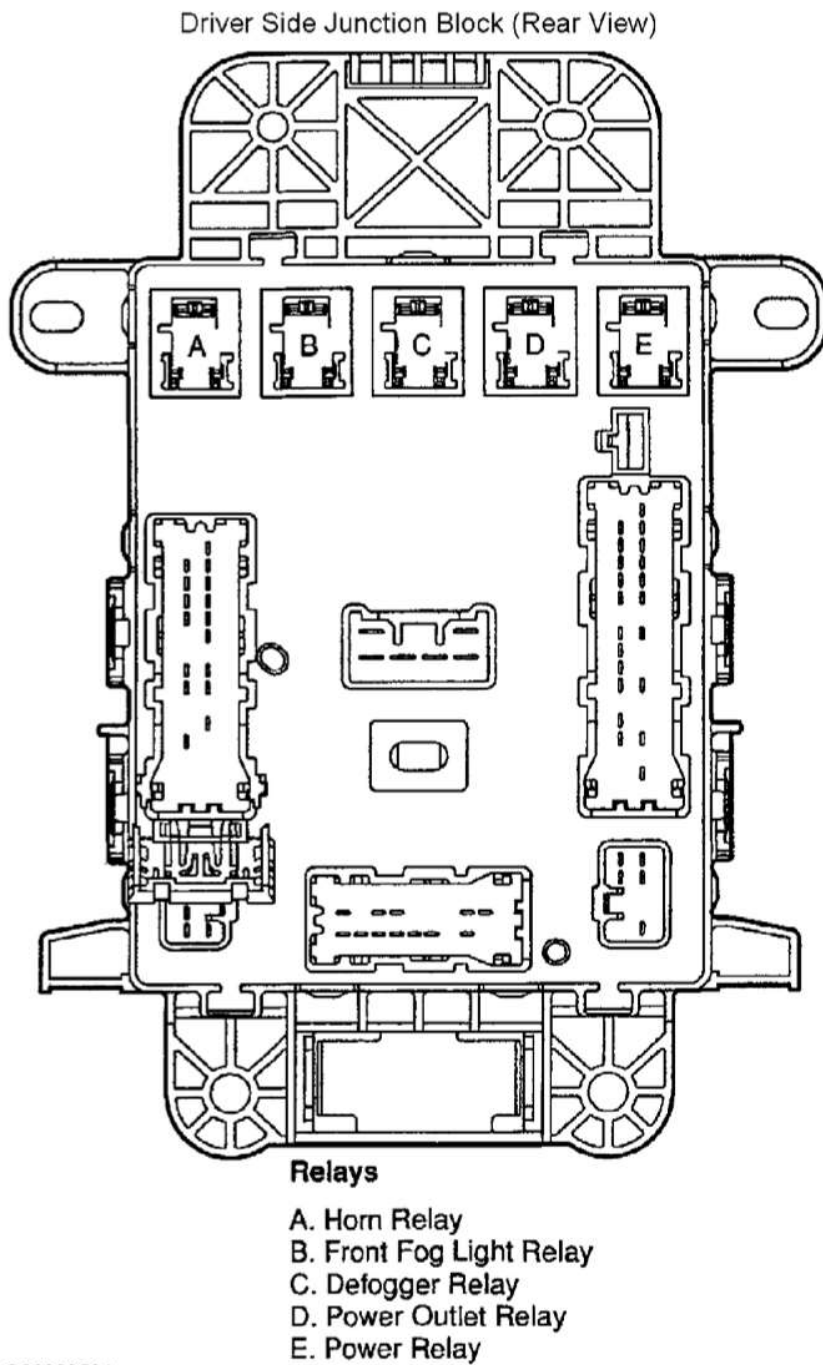


Fig. 9: Identifying Drivers Side Junction Block Components Front View
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



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Fig. 10: Identifying Drivers Side Junction Block Components Rear View
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Junction Block Fuse Components P.1.

Fuse		System
7.5A	ACC	Air Conditioning Clock Door Lock Control Interior Light Radio and Player Remote Control Mirror Shift Lock Wireless Door Lock Control
7.5A	OBD	Engine Control
7.5A	PANEL	Air Conditioning Clock Combination Meter Front Fog Light Illumination Key Reminder and Light Reminder Buzzer Rear Window Defogger and Mirror Heater Taillight
7.5A	TAIL	Engine Control Taillight
10A	ECU IG	ABS Air Conditioning Combination Meter Cruise Control Engine Control Key Reminder and Light Reminder Buzzer Power Window Rear Window Defogger and Mirror Heater Seat Belt Warning Shift Lock SRS Turn Signal and Hazard Warning Light
10A	GAUGE	ABS Air Conditioning Back-Up Light Charging Combination Meter Cruise Control Door Lock Control Electronically Controlled Transmission and A/T Indicator Engine Control Headlight Illumination
40A	AM1	Rear Window Defogger and Mirror Heater

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Fig. 11: Drivers Side Junction Block Fuse Components (1 Of 2)
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Drivers Side Junction Block Fuse Components P.2.

Fuse		System
10A	GAUGE	Interior Light Moon Roof Power Window Radiator Fan and Condenser Fan Taillight Wireless Door Lock Control
10A	HORN	Horn
10A	IG2	ABS Charging Combination Meter Cruise Control Electronically Controlled Transmission and A/T Indicator Engine Control SRS Starting and Ignition
10A	MIR HTR	Rear Window Defogger and Mirror Heater
10A	STOP	ABS Cruise Control Electronically Controlled Transmission and A/T Indicator Engine Control Shift Lock Stop Light
15A	CIG	Cigarette Lighter
15A	FR FOG	Front Fog Light
15A	POWER OUTLET	Power Outlet
15A	RR WIP	Rear Wiper and Washer
15A	TAIL&PANEL	Air Conditioning Clock Front Fog Light Illumination Key Reminder and Light Reminder Buzzer Rear Window Defogger and Mirror Heater Taillight
20A	DEF	Engine Control Rear Window Defogger and Mirror Heater
20A	DOOR	Door Lock Control Interior Light Moon Roof Power Window Wireless Door Lock Control
25A	WIP	Front Wiper and Washer
30A	POWER	Moon Roof Power Window

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Fig. 12: Drivers Side Junction Block Fuse Components (2 Of 2)
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