

Toyota Ipsum (Picnic) 2G – fuse and relay

Toyota Ipsum 2nd generation was produced in 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009 in ACM21W, ACM26W bodies. During this time, the model has been restyled. In some countries it is known as **Toyota Avensis Verso** and **Toyota Picnic**. In this publication you will find a description of the locations of electronic control units, a description of fuses and relays Toyota Ipsum (Picnic) 2 with box diagrams and photo examples of their execution. Highlight the cigarette lighter fuse.



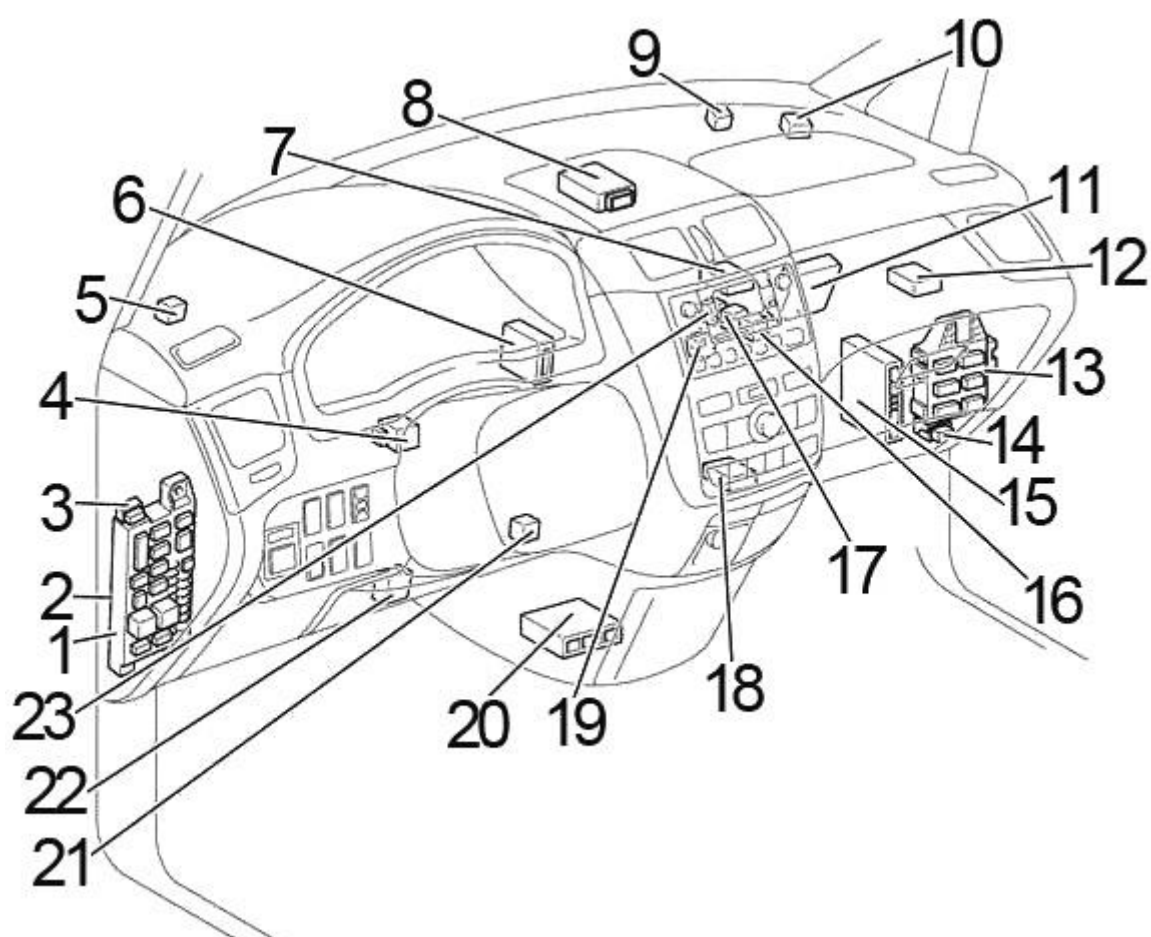
Check the purpose of the elements with your diagrams on the box cover. There may be a difference in the presented material and your performance.

Passenger compartment

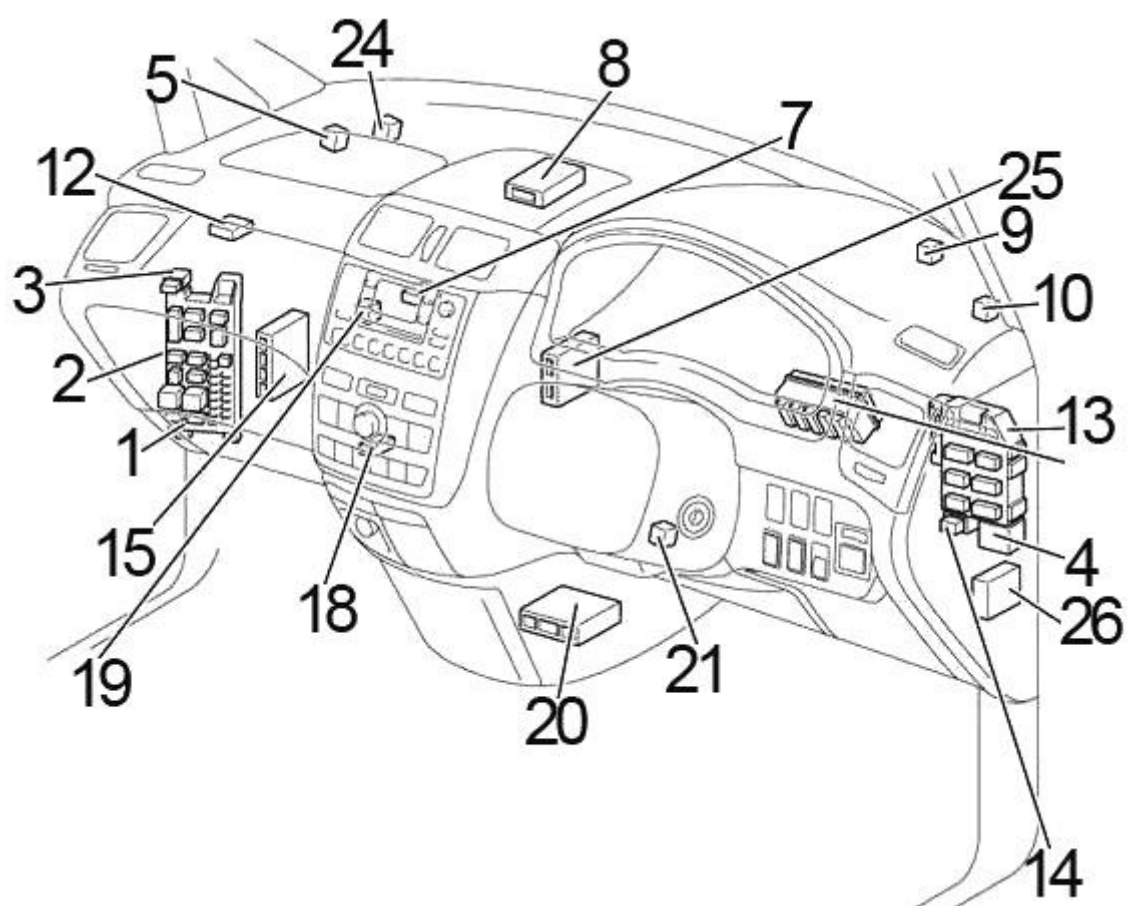
Location

General layout of boxes in the cabin

LHD



RHD



Assignment

1. Fuse box
2. Body ECU
3. Power-Point Relay
4. Turn signal relay
5. Open circuit relay (fuel pump)
6. LHD: TVSS ECU
7. Radio and player with display
8. Computer with transponder key
9. Rear heater relay (HI)
10. Rear heater relay
11. LHD: A / C amplifier (manual air conditioner)
12. TV camera ECU (with navigation system)
13. Connecting block
14. Front fog lamp relay
15. Engine ECU and ECT (A / T) / Engine ECU (M / T)
16. LHD: Fan relay (M2)
17. LHD: Fan relay (M1)
18. Air conditioning control unit (automatic air conditioning)
19. Antenna amplifier
or
RHD (up to 10.2003): fan relay (M2) / fan relay (M1) / fan relay (HI)
20. Airbag sensor unit
21. Transponder Key Amplifier
22. LHD: PTC heater booster (1AZ-FE)
23. LHD: fan relay (HI)
24. RHD: Relay for reversing lights
25. RHD: Anti-theft ECU
26. RHD: ECU for double door lock

Fuse box

It is located under the panel, behind a protective cover.

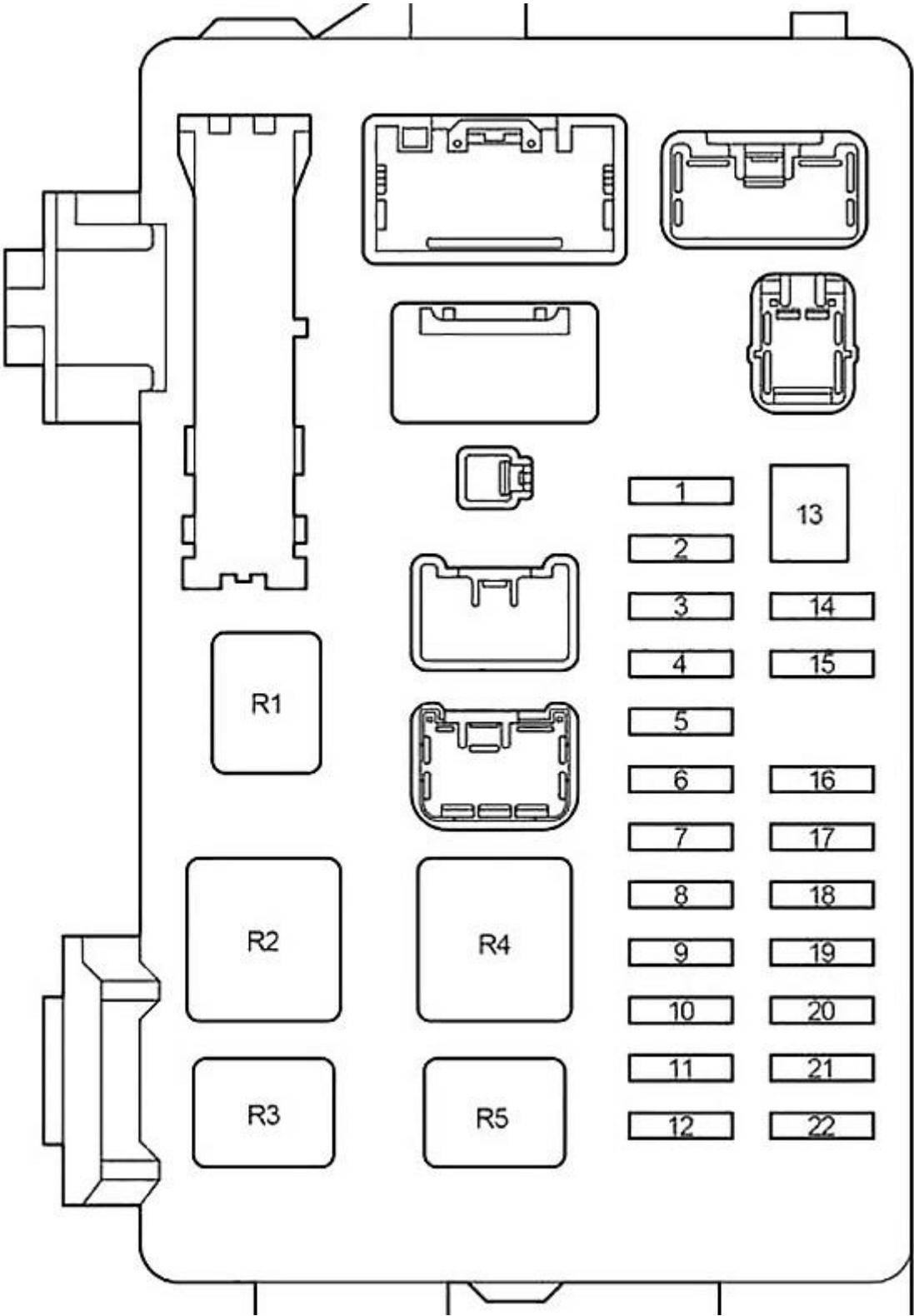


Example of a diagram from the box cover

IGN イグニッション 10A	PWR パワー 30A
PWR SEAT パワーシート 30A	
RR HTR リヤヒーター 10A	TAIL テールランプ 10A
FR FOG フロントフォグ 15A	ACC SOCKET アクセサリソケット 15A
AM1 25A	
PANEL パネル 7.5A	FR P/W フロントパワーウィンドウ 30A
SRS-IG エアバッグ-IG 10A	DOOR ドア 25A
TEMS 10A	WIPER ワイパ 25A
C/LTR コレットライタ 15A	ECU-IG エレクトロニクス-IG 7.5A
HTR ヒーター 10A	RR DEF リヤデフォッガ 20A
FR HTR フロントヒーター 10A	GAUGE メータ 7.5A
ACC 7.5A	STOP ストップ 15A

(A)

Diagram



Protected components

1	10A IGN – SRS airbag system, sensor and meters, starting system, multiport fuel injection system / sequential multiport fuel injection system, electric cooling fan, air conditioning system, ABS, VSC, “FUEL HTR” relay, “IG2” relay
2	25A DOOR NO.2 – Avensis Verso, Picnic: Power Door Lock System

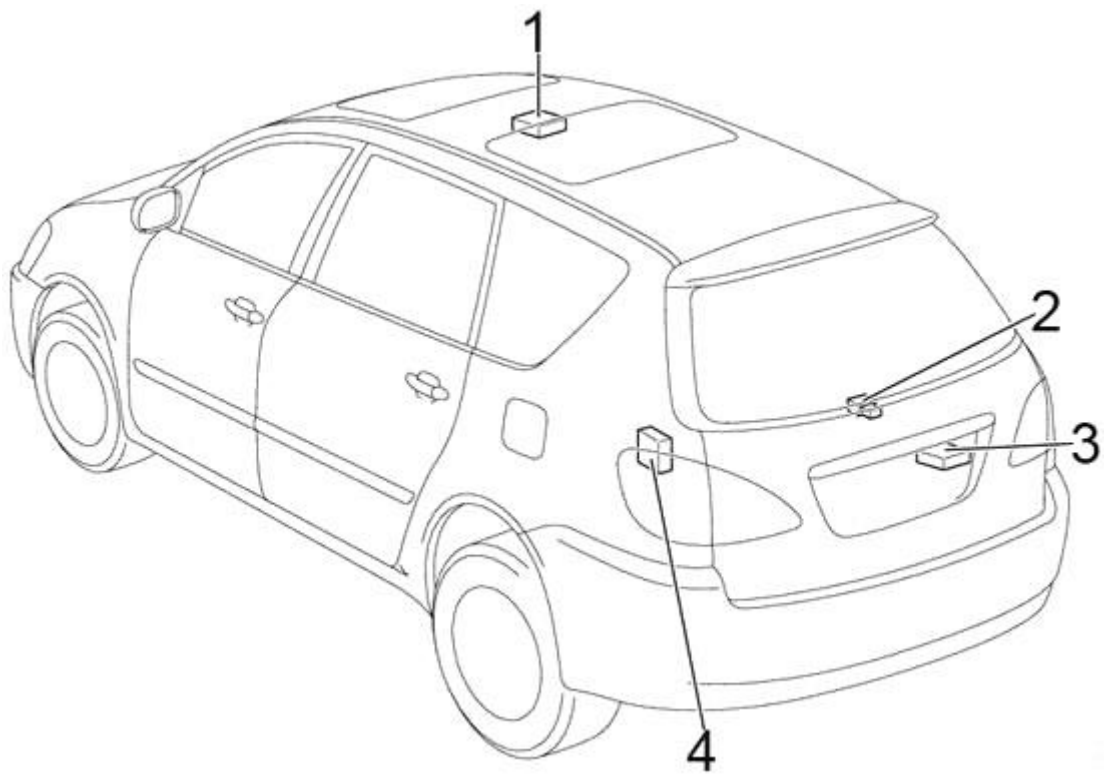
	30A PWR SEAT – Ipsum: Power Seat
3	10A RR HTR – Rear heater
4	15A FR FOG – Front fog lamp
5	25A AM1 – Starting system
6	7,5A PANEL – Instrument Cluster Lights, Instrument Panel Lights, Electronic Transmission, Audio System, Headlight Washer, Front Fog Lamp, TOYOTA Parking Assist System, Clock, Air Conditioning System, Key Reminder and Light Reminder
7	10A SRS-IG / AIRBAG-IG – SRS airbag system
	10A SEAT HTR – Avensis Verso, Picnic: Heated seats
8	10A TEMS – Ipsum: TOYOTA suspension with electronic modulation
9	15A C / LTR / CIG – Cigarette lighter
10	10A HTR / HEATER – Air Conditioning, Charging System, Multiport Fuel Injection System / Sequential Multiport Fuel Injection System, ABS, VSC, Key Reminder and Light Reminder, Seat Belt Warning, TOYOTA Parking Assist System, Instrument Cluster, Heater rear windshield
11	Heated outside rearview mirrors
12	7.5A ECU-ACC – Power Door Lock System, Electric Cooling Fans, Power Windows, Audio System, Fog Lights, Interior Lights, Tail Lights, Parking Lights, Headlights
13	30A PWR – Electric windows, sliding roof
14	10A TAIL – Tail lights, side lights, license plate light, trunk light, front fog light, rear fog light, instrument cluster
15	15A PWR OUTLET – Socket
16	30A FR P / W – Electric windows, sliding roof
17	25A DOOR – Electric door locking system
18	25A WIPER – Front wiper and washer, rear wiper and washer, headlight cleaner
19	7.5A ECU-IG – Electric Cooling Fans, Multiport Fuel Injection System / Sequential Multiport Fuel Injection System, ABS, VSC, Audio System, Electronic Modulated TOYOTA Suspension, Power Mirrors, Auto Lighting Control

20	20A RR DEF – Heated rear window
21	7,5A GAUGE – Charging system, instrument cluster, reversing light, turn signal and emergency light, multiport fuel injection system / sequential multiport fuel injection system, ABS, power door lock system, power windows, key reminder and light reminder, seat belt warning, sliding roof, audio system, clock, headlight, automatic lighting control system, fog lights, taillights, side lights, interior lighting, TOYOTA parking aid, air conditioning system, heated rear window
22	15A STOP – Brake Light, Shift Lock Control System, ABS, Brake Light High, Multiport Fuel Injection System / Sequential Multiport Fuel Injection System, Electronic Modulated TOYOTA Suspension
Relay	
R1	Short Pin (since 10.2003: Avensis Verso, Picnic)
R2	Heater (HTR)
R3	Rear windshield defogger (RR DEF)
R4	Ignition (IG1)
R5	Taillight (TAIL)

The fuses number 9 and 15 at 15A are responsible for the operation of the cigarette lighter.

Additional elements

Diagram

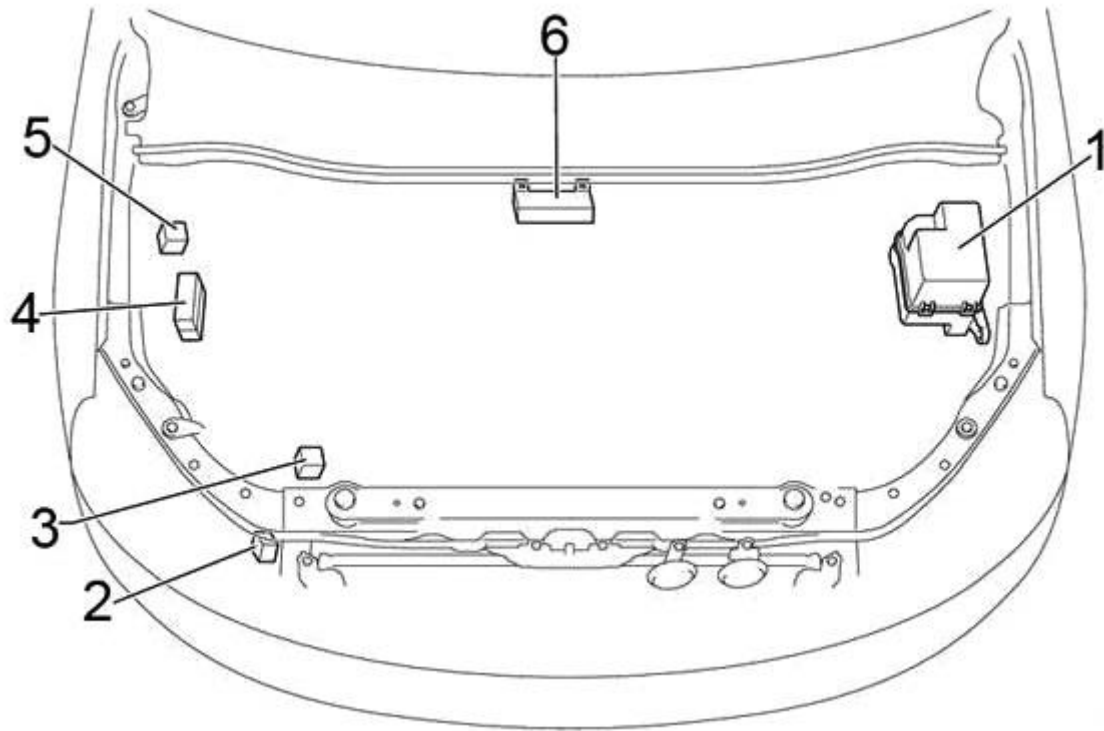


1. Moon Roof Control Relay
2. Rear Cooler Relay
3. Rear Wiper Relay (to 10.2003)
4. Wireless Door Lock Control Receiver

Engine Compartment

Location

General arrangement of boxes under the hood



Designation

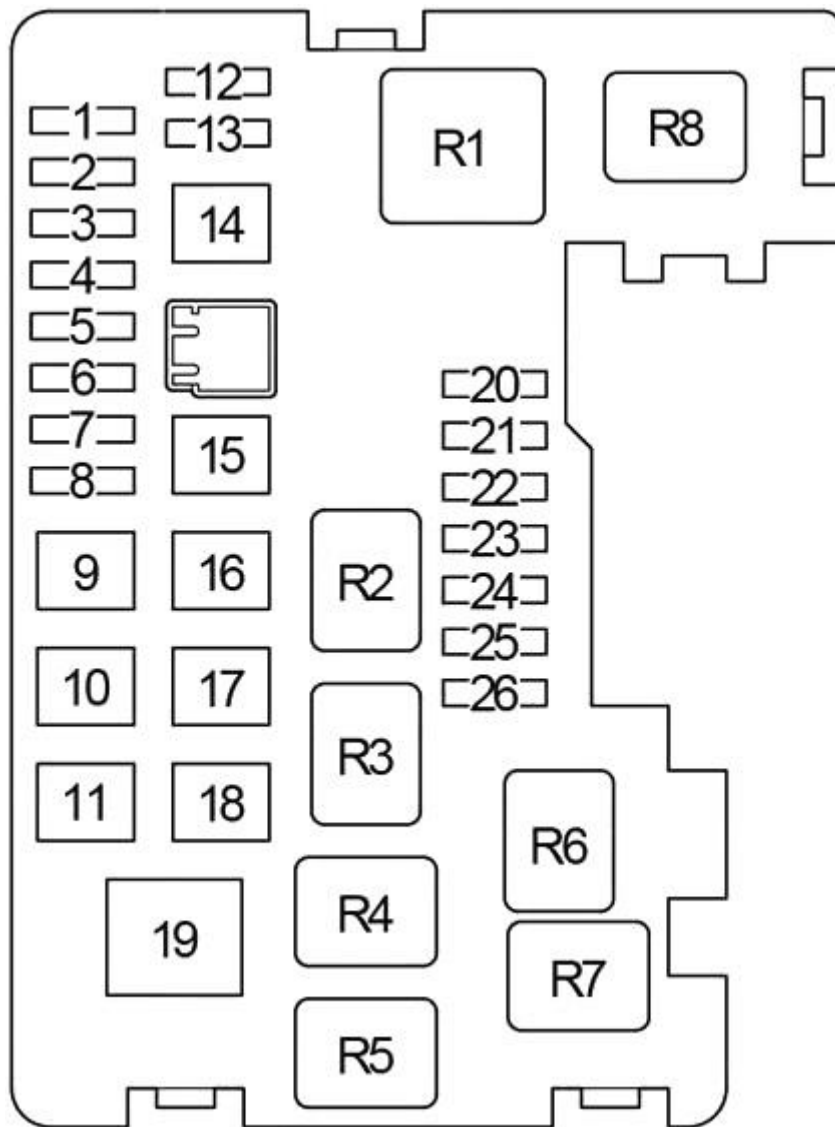
1. Fuse and Relay Box
2. Headlight Cleaner Control Relay
3. Skid Control ECU with Actuator
4. ABS Relay Box
5. **1CD-FTV**: Glow Plug Relay
6. Relay Box

Fuse and Relay Box

Located on the left side of the engine compartment, under the protective cover.



Diagram



Appointment

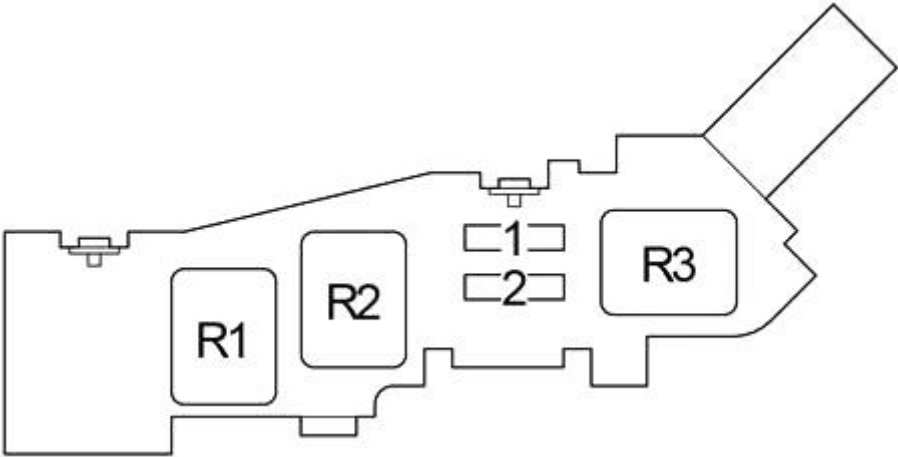
1	30A DCC – Fuses “ECU-B”, “DOME”, “RAD NO.1”
2	15A IG2 – Petrol: Electric Cooling Fans, Multiport Fuel Injection System / Sequential Multiport Fuel Injection System, Air Conditioning System
2	30A FUEL HTR – Diesel: Fuel heater
3	10A HORN – Signal
4	10A HAZ – Direction indicator and warning lamp
5	15A EFI – Multiport fuel injection system / sequential multiport fuel injection system, air conditioning system, electric cooling fans
6	10A ETCS – Avensis Verso, Picnic (up to 10.2003): Electronic throttle control system.

	10A ETCS – Ipsum (from 10.2003): Electronic throttle control system.
	15A A / F – Avensis Verso, Picnic (from 10.2003): Air-fuel ratio sensor.
7	7,5A OBD – On-board diagnostic system
8	7,5A ALT-S – Avensis Verso, Picnic: charging system
	15A FR DEF – Ipsum (from 10.2003): Wiper defroster.
9	50A MAIN – Relay “HEAD” (fuses “HEAD LH LWR”, “HEAD RH LWR”, “HEAD LH UPR”, “HEAD RH UPR”)
10	30A AM2 – Ignition switch
11	30A RR CLR – Rear air conditioning
12	30A HEAD LP CLN – Avensis Verso, Picnic: Headlight Cleaner
	15A Ipsum: socket
13	7,5A RR FOG – Rear fog lamp
14	40 / 50A ABS NO.1 -ABS, VSC
15	30/40 ABS NO.2 – ABS, VSC
16	30A CDS – Gasoline: Electric cooling fans
	40A CDS – Diesel: Electric cooling fans
17	30A RDI – Gasoline: Electric cooling fans
	40A RDI – Diesel: Electric cooling fans
18	50A HTR – Air conditioning / heater
19	140A ALT – Relay “RR DEF” (fuses “RR DEF”, “MIR HTR”) relay “TAIL” (fuses “TAIL”, “PANEL”), relay “IG1” (“ECU-IG”, “GAUGE”, “HTR”, Fuses “SEAT HTR”, “SRS-IG”, “WIPER”), “PWR”, “RR HTR”, “DOOR”, “DOOR NO.2”, “FR FOG”, “PWR OUTLET”, “STOP” “,” AM1 “fuses
20	15A HEAD RH UPR – Right headlight (high beam), instrument cluster
21	15A HEAD LH UPR – Left headlight (high beam)

22	15A HEAD RH LWR – Left headlight (low beam), headlamp leveling
23	15A HEAD LH LWR – Right headlight (low beam)
24	15A RAD NO.1 – Audio system
25	7.5A ECU-B – Charging system, multiport fuel injection system / sequential multiport fuel injection system, ABS, TOYOTA electronic modulation suspension, power door lock system, power windows, key reminder and light reminder, seat belt warning , audio system, clock, instrument cluster, headlight, automatic lighting control system, fog lights, taillights, side lights, interior lighting, TOYOTA parking assistance system, air conditioning system, heated rear window
26	10A DOME – Interior lighting, personal lighting, lighting for feet, lighting for doors, lighting for the trunk, lighting for the dressing table
Relay	
R1	Headlights (HEAD)
R2	Avensis Verso, Picnic: (DIMMER)
	Ipsium (since 10.2003): FR DEF
R3	Gasoline: Ignition (IG2)
	Diesel: Fuel heater (FUEL HTR)
R4	Signal / Horn
R5	Cooling system fan (FAN №2)
R6	Cooling system fan (FAN №1)
R7	Cooling fan (FAN №3)
R8	Engine control unit (EFI)

Main relay box

Diagram

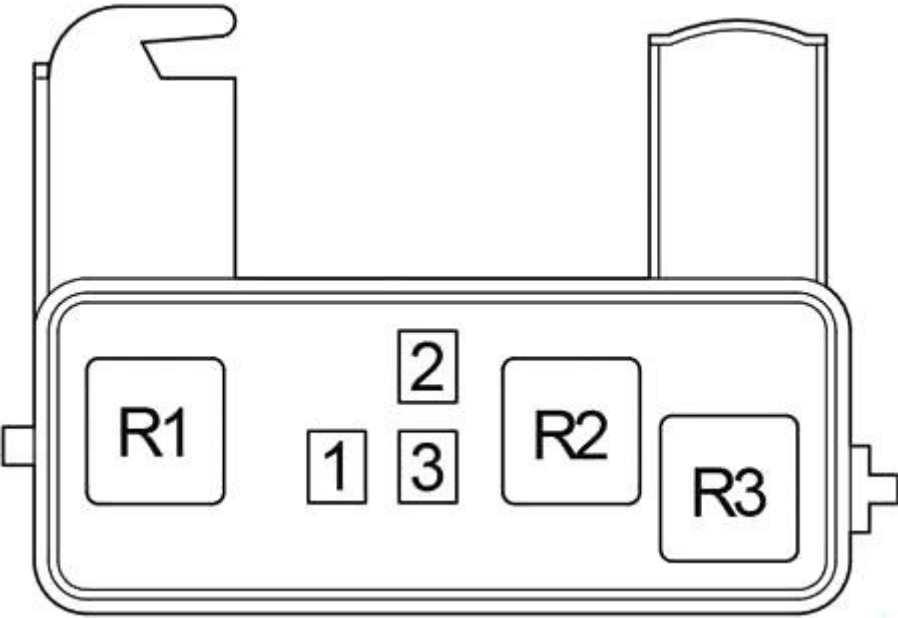


Assignment

- R1 – Starter (ST)
- R2 – 1CD-FTV: Engine control unit (EDU) / 1AZ-FE (from 10.2003): Air-fuel ratio (A / F) sensor
- R3 – Air conditioning compressor clutch (MG / C)
- 1 – 7.5A ST – Starting system, multiport fuel injection system / sequential multiport fuel injection system
- 2 – Reserve

Additional relay box

Diagram



Designation

1	50A HTR SUB 3 – Heater (Front A / C (Auto Air Conditioner), Rear Heater and Auxiliary Heater)
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2	50A HTR SUB 1 – Heater (Front A / C (Auto Air Conditioner), Rear Heater and Auxiliary Heater)
3	50A HTR SUB 2 – Heater (Front A / C (Auto Air Conditioner), Rear Heater and Auxiliary Heater)
Relay	
R1	Power heater (HTR SUB 1)
R2	Power heater (HTR SUB 2)
R3	Power heater (HTR SUB 3)

The ABS relay box contains elements responsible for the operation of the ABS system, such as: ABS CUT and ABS MTR.