2003 ELECTRICAL

Fuses & Circuit Breakers - F150 Pickup

IDENTIFICATION

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 <u>COMPUTER RELEARN</u> <u>PROCEDURES</u> article in GENERAL INFORMATION before disconnecting battery.

BATTERY JUNCTION BOX

- **NOTE:** Battery junction box may also be referred to as power distribution box.
- NOTE: Battery junction box is located on driver's side of engine compartment. See Fig. 1.

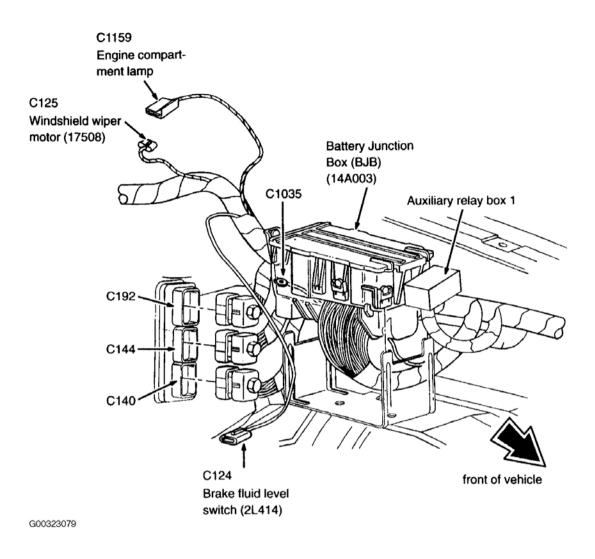


Fig. 1: Locating Battery Junction Box & Auxiliary Relay Box 1 Courtesy of FORD MOTOR CO.

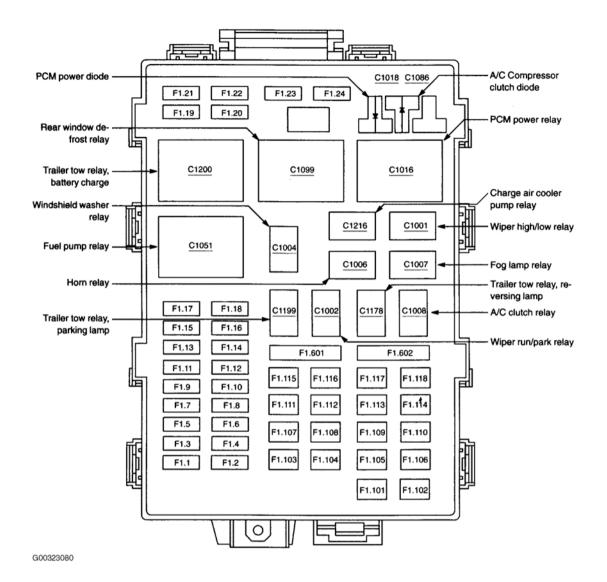


Fig. 2: Identifying Battery Junction Box Components Courtesy of FORD MOTOR CO.

Fuse	Amps	Circuits protected		
F1.1	20	Power point (19N236)		
F1.2	30	PCM power relay		
F1.3	30	Main light switch (11654), Headlamp relay, Multifunction switch		
F1.4	20	Power point, console (19N236)		
F1.5	20	Trailer tow relay, parking lamp, Trailer tow relay, reversing lamp		
F1.6	15	Main light switch (11654), Park lamp relay		
F1.7	20			
F1.8	15	Horn relay		
		Central security module		
F1.9	15	Daytime running lamps resistor, Fog lamp relay		
F1.10	20	Fuel pump relay		
F1.11	20	Generator		
F1.12	20	Power point, rear (19G247)		
F1.13	15	A/C clutch relay		
F1.14	-	not used		
F1.15	10	Running board lamp, left front, Running board lamp, left rear, Running board lamp, right front, Running board lamp, right rear		
F1.16	15	Alternative Fuel Control Module (AFCM), Alternative fuel indicator switch, Fuel injectors		
F1.17	2	Brake pressure switch (2B264)		
F1.18	15	Mass Air Flow (MAF) sensor (128579), Powertrain Control Module (PCM) (12A650), Fuel injector 1 (9F593), Fuel injector 2 (9F593), Fuel injector 3 (9F593), Fuel injector 4 (9F593), Fuel injector 5 (9F593), Fuel injector 6 (9F593), Fuel injector 7 (9F593), Fuel injector 8 (9F593), Ide Air Control (IAC) valve (9F715), Fuel pump relay, Fuel pump cutoff relay		
F1.19	10	Trailer tow connector (15A416)		
F1.20	10	Trailer tow connector (15A416)		
F1.21	-	not used		
F1.22	-	not used		
F1.23	15	Evaporative emission (EVAP) canister vent valve (9F945), EVAP canister purge valve, Heated Oxygen Sensor (HO2S) #21 (9F472), Heated Oxygen Sensor (HO2S) #11 (9F472), A/C clutch relay, Heated Oxygen Sensor (HO2S) #22 (9G444), Heate Oxygen Sensor (HO2S) #12 (9G444), Automatic transmission module (7G422), Camshaft position sensor (6B288), Intake Manifold Runner Control (IMRC) module, Bi–Fuel power relay		
F1.24	-	not used		
F1.101	30	Trailer tow relay, battery charge		
F1.102	50	ABS control module (2C219)		
F1.103	50	Central Junction Box (CJB) (14A068)		
F1.104	30	Transfer case relay module, Transfer case electric clutch relay, Mechanical Shift On the Fly (MSOF) relay		
F1.105	40	Blower motor relay		
F1.106	20	Charge air cooler pump relay		
F1.107	-	not used		
F1.108	30	Trailer tow connector (15A416)		
F1.109	-	not used		
F1.110	30	Accessory delay relay		
F1.111	40			
F1.112	30	Ignition switch (11572) Adjustable pedal switch, Power seat switch, left		
F1.113	40	Ignition switch (11572)		
F1.113	40	not used		
F1.114	20	Central security module		
	40			
F1.116		Rear window defrost relay		
F1.117	40	audio		
F1.118	30	Heated seat module, passenger side front, Heated seat module, driver side front (14C724)		
F1.601 C.B.	30	Accessory delay relay		
F1.602 C.B.	-	not used		

Fig. 3: Battery Junction Box Legend Courtesy of FORD MOTOR CO.

CENTRAL JUNCTION BOX

NOTE: Central junction box may also be referred to as passenger compartment fuse panel.

NOTE:

Central junction box is located under driver's side of instrument panel. See <u>Fig.</u> <u>4</u> .

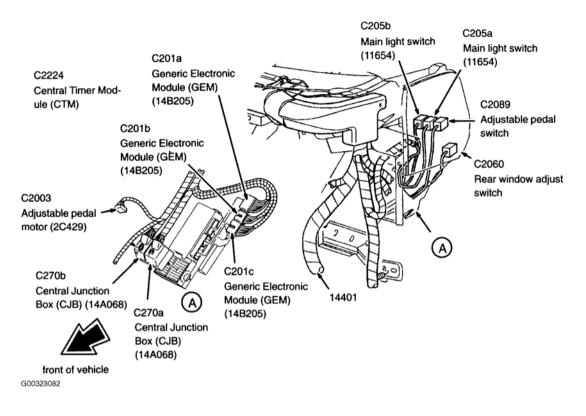


Fig. 4: Locating Central Junction Box Courtesy of FORD MOTOR CO.

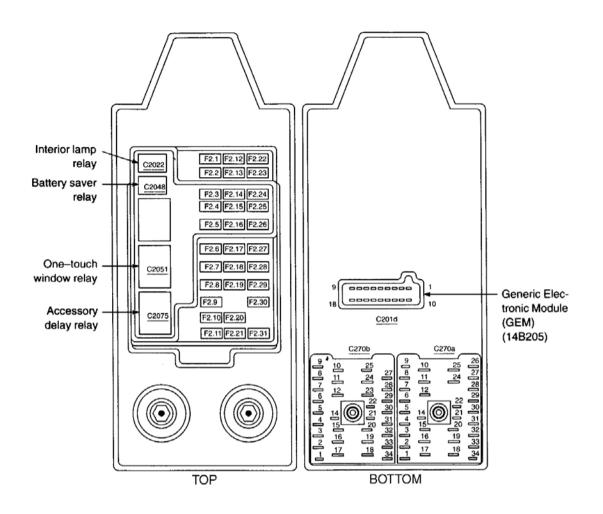


Fig. 5: Identifying Central Junction Box Components Courtesy of FORD MOTOR CO.

Fuse	Amps	Circuits protected		
F2.1	15	Radio (18806), Video cassette player, Rear Seat Entertainment (RSE) module, Rear Integrated Control Panel (RICP) (19		
F2.2	5	Instrument cluster, Powertrain Control Module (PCM) (12A650), Electronic Automatic Temperature Control (EATC) module (19980), Natural Gas Vehicle (NGV) timer jumper		
F2.3	20	Data Link Connector (DLC) (14489), Cigar lighter, front (15055)		
F2.4	5	Mirror turn signal relay, left, Mirror turn signal relay, right, Exterior rear view mirror switch (17B676)		
F2.5	15	Digital Transmission Range (DTR) sensor (7F293), Reversing lamps switch, Speed control servo (9C735), Function select switch assembly (19B888), Temperature blend door actuator (19E616), Daytime Running Lamps (DRL) relay 1		
F2.6	5	Generic Electronic Module (GEM) (14B205), Brake shift interlock, Instrument cluster		
F2.7	-	not used		
F2.8	5	Generic Electronic Module (GEM) (14B205), Radio (18806), Video display, Video cassette player		
F2.9	-	not used		
F2.10	-	not used		
F2.11	30	Windshield washer relay, Wiper run/park relay, Wiper high/low relay, Windshield wiper motor (17508)		
F2.12	-	not used		
F2.13	20	Indicator flasher relay (13350), Brake pedal position switch (13480)		
F2.14	15	Battery saver relay, Interior lamp relay		
F2.15	5	Generic Electronic Module (GEM) (14B205), Brake pressure switch (2B264), Brake pedal position switch (13480)		
F2.16	20	Instrument cluster, Headlamp, left (13008), Headlamp, right (13008)		
F2.17	-	not used		
F2.18	5	Main light switch (11654)		
F2.19	-	not used		
F2.20	5	Powertrain Control Module (PCM) (12A650), Generic Electronic Module (GEM) (14B205), Radio (18806)		
F2.21	15	Clutch pedal position switch, Clutch triple function switch jumper, Central Junction Box (CJB) (14A068), Digital Transmission Range (DTR) sensor (7F293)		
F2.22	10	Restraints control module (14B321), Passenger Air bag Deactivation (PAD) switch		
F2.23	10	Trailer tow relay, battery charge, 4x2 center axle disconnect solenoid, 4x4 center axle disconnect solenoid, Indicator flasher relay (13350), Transfer case electric clutch relay, Mechanical Shift On the Fly (MSOF) relay, ABS control module (2C219), Heated seat module, driver side front (14C724), Seat heater switch, driver side. Heated seat module, passenger side front, Seat heater switch, passenger side, Overhead console, Electrochromatic inside mirror unit (17700)		
F2.24	10	Function selector switch assembly (19B888), Blower motor relay, Electronic Automatic Temperature Control (EATC) module (19980)		
F2.25	10	Heated mirrors		
F2.26	10	Headlamp, right (13008)		
F2.27	5	Main light switch (11654)		
F2.28	10	Headlamp, left (13008)		
F2.29	5	Transmission control switch, Autolamp sensor, Central security module, Belt minder module		
F2.30	30	PCM power diode, Ignition transformer capacitor 1 (18801), Ignition coil (12029), Natural Gas Vehicle (NGV) timer jumper, Instrument cluster, Passive anti-theft transceiver module (15607)		
F2.31	-	not used		

Fig. 6: Central Junction Box Legend Courtesy of FORD MOTOR CO.

FUSIBLE LINKS

Fusible links A, B & C are located in right rear of engine compartment.

AUXILIARY RELAY BOX 1

NOTE: Auxiliary relay box 1 is located on battery junction box. See Fig. 1.

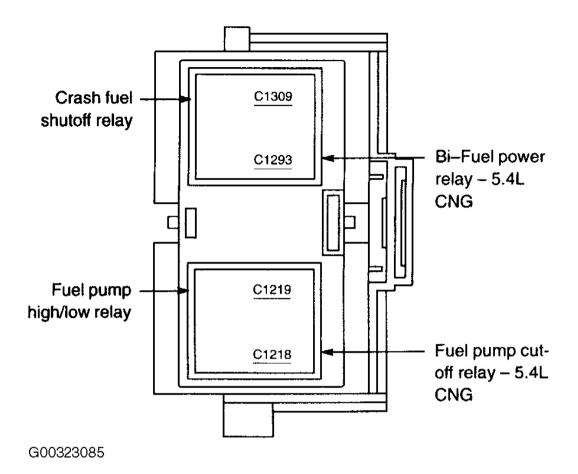


Fig. 7: Identifying Auxiliary Relay Box 1 Components Courtesy of FORD MOTOR CO.

AUXILIARY RELAY BOX 2

NOTE: Auxiliary relay box 2 is located behind right side of instrument panel. See Fig. 8.

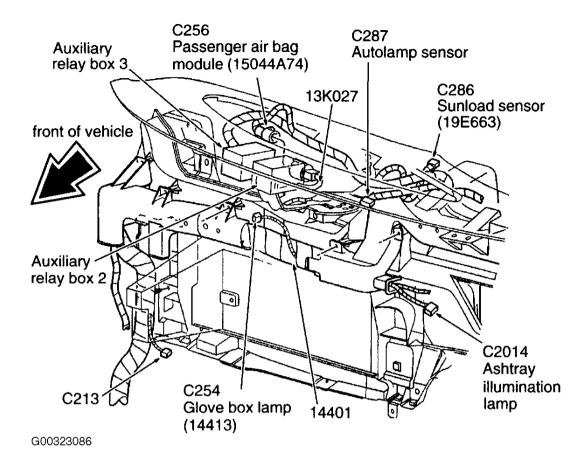
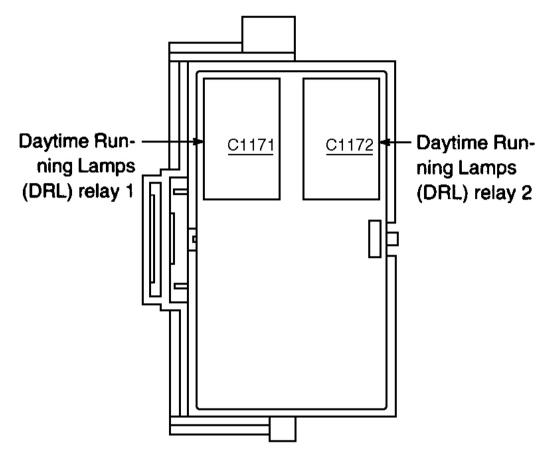


Fig. 8: Locating Auxiliary Relay Box 2 & 3 Courtesy of FORD MOTOR CO.



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Fig. 9: Identifying Auxiliary Relay Box 2 Components Courtesy of FORD MOTOR CO.

AUXILIARY RELAY BOX 3

NOTE: Auxiliary relay box 3 is located behind right side of instrument panel. See Fig. 8.

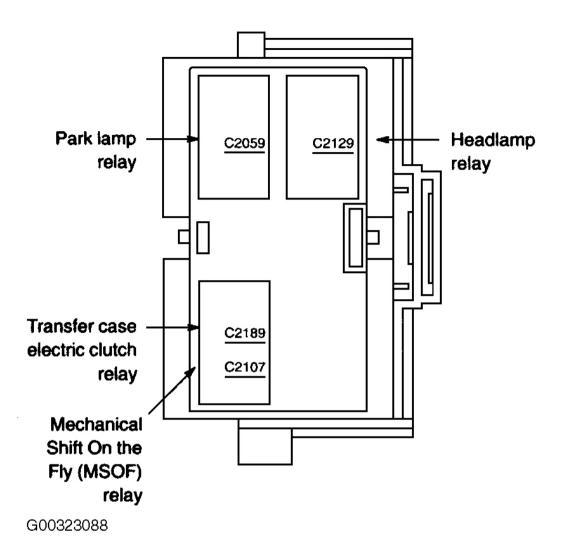


Fig. 10: Identifying Auxiliary Relay Box 3 Components Courtesy of FORD MOTOR CO.

AUXILIARY RELAY BOX 4

NOTE: Auxiliary relay box 4 is located behind left side of instrument panel. See <u>Fig. 11</u>.

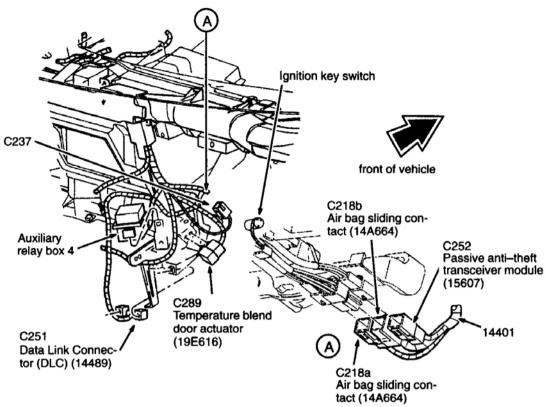


Fig. 11: Locating Auxiliary Relay Box 4 Courtesy of FORD MOTOR CO.

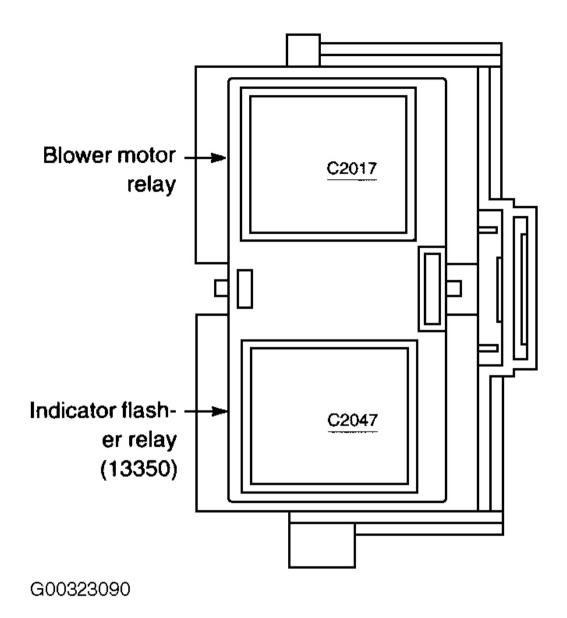


Fig. 12: Identifying Auxiliary Relay Box 4 Components Courtesy of FORD MOTOR CO.

AUXILIARY RELAY BOX 5

NOTE: Auxiliary relay box 5 is located behind right side of instrument panel. See <u>Fig.</u> <u>13</u>.

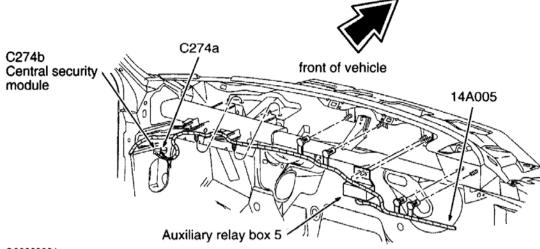


Fig. 13: Locating Auxiliary Relay Box 5 Courtesy of FORD MOTOR CO.

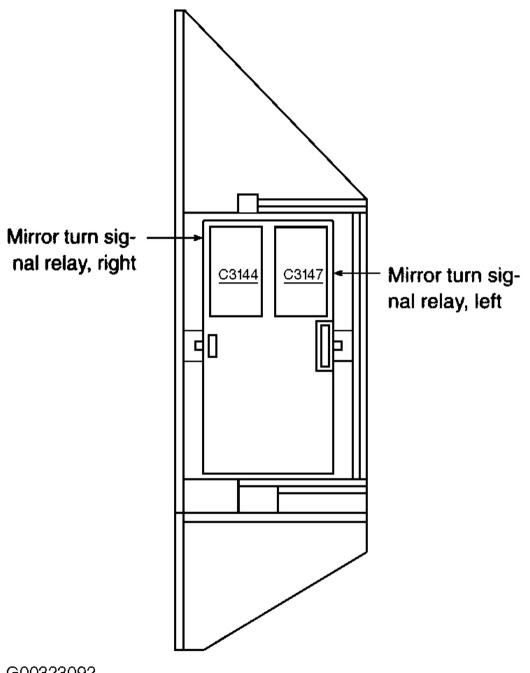
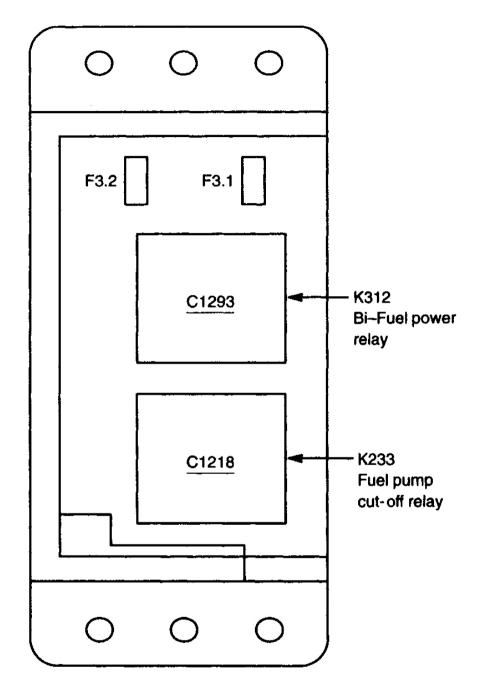


Fig. 14: Identifying Auxiliary Relay Box 5 Components Courtesy of FORD MOTOR CO.

BI-FUEL RELAY MODULE

NOTE: Bi-fuel relay module is located in left rear of engine compartment.



Fuse	Amps	Circuits protected
F3.1	3	Compuvalve module
F3.2	10	Bi–Fuel power relay, Low flow injector assembly, High flow injector as sembly

Fig. 15: Identifying Bi-Fuel Relay Module Components Courtesy of FORD MOTOR CO.