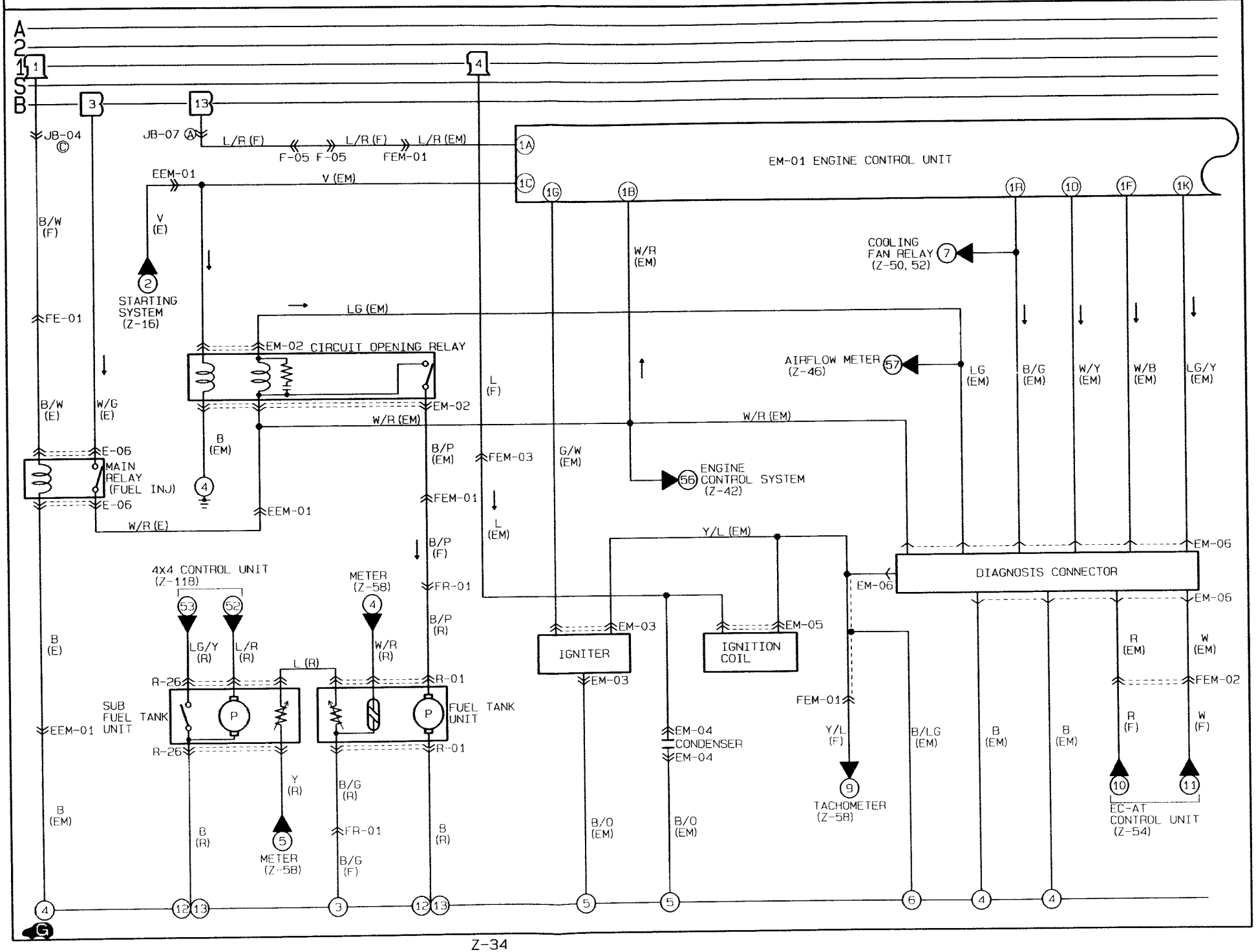
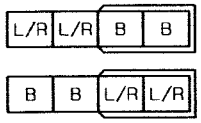
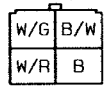
4WD ■ENGINE CONTROL SYSTEM (1/4)



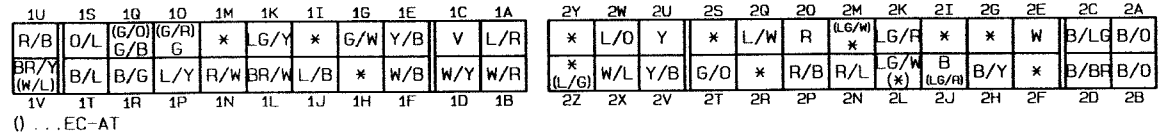
F-05 JOINT CONNECTOR (F)



E-06 MAIN RELAY (E)
(FUEL INJ)

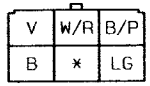


EM-01 ENGINE CONTROL UNIT (EM)

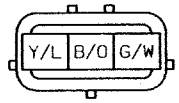


() . . . EC-AT

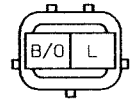
EM-02 CIRCUIT
OPENING RELAY (EM)



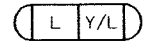
EM-03 IGNITER (EM)



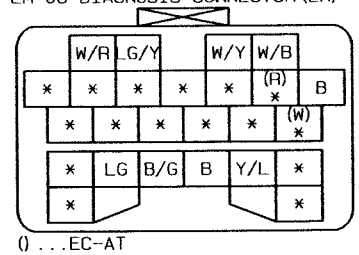
EM-04 CONDENSER (EM)



EM-05 IGNITION COIL (EM)

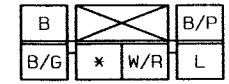


EM-06 DIAGNOSIS CONNECTOR (EM)

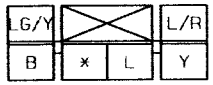


() . . . EC-AT

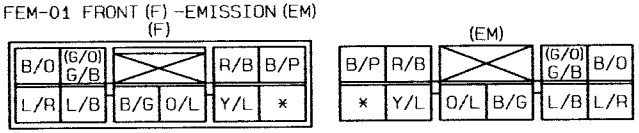
R-01 FUEL TANK UNIT (R)



R-26 SUB FUEL TANK UNIT (R)

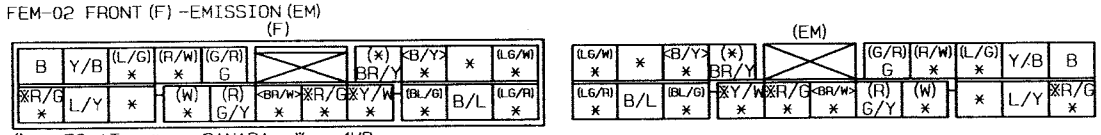


FEM-01 FRONT (F) -EMISSION (EM)



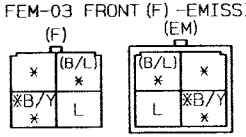
() . . . EC-AT

FEM-02 FRONT (F) -EMISSION (EM)



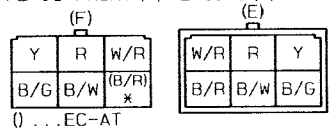
() . . . EC-AT <> . . . CANADA ※ . . . 4WD

FEM-03 FRONT (F) -EMISSION (EM)



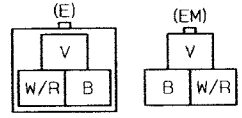
() . . . EC-AT ※ . . . 4WD

FE-01 FRONT (F) -ENGINE (E)

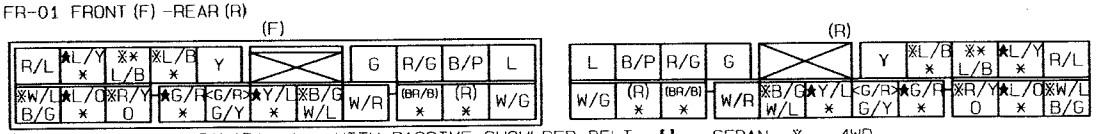


() . . . EC-AT

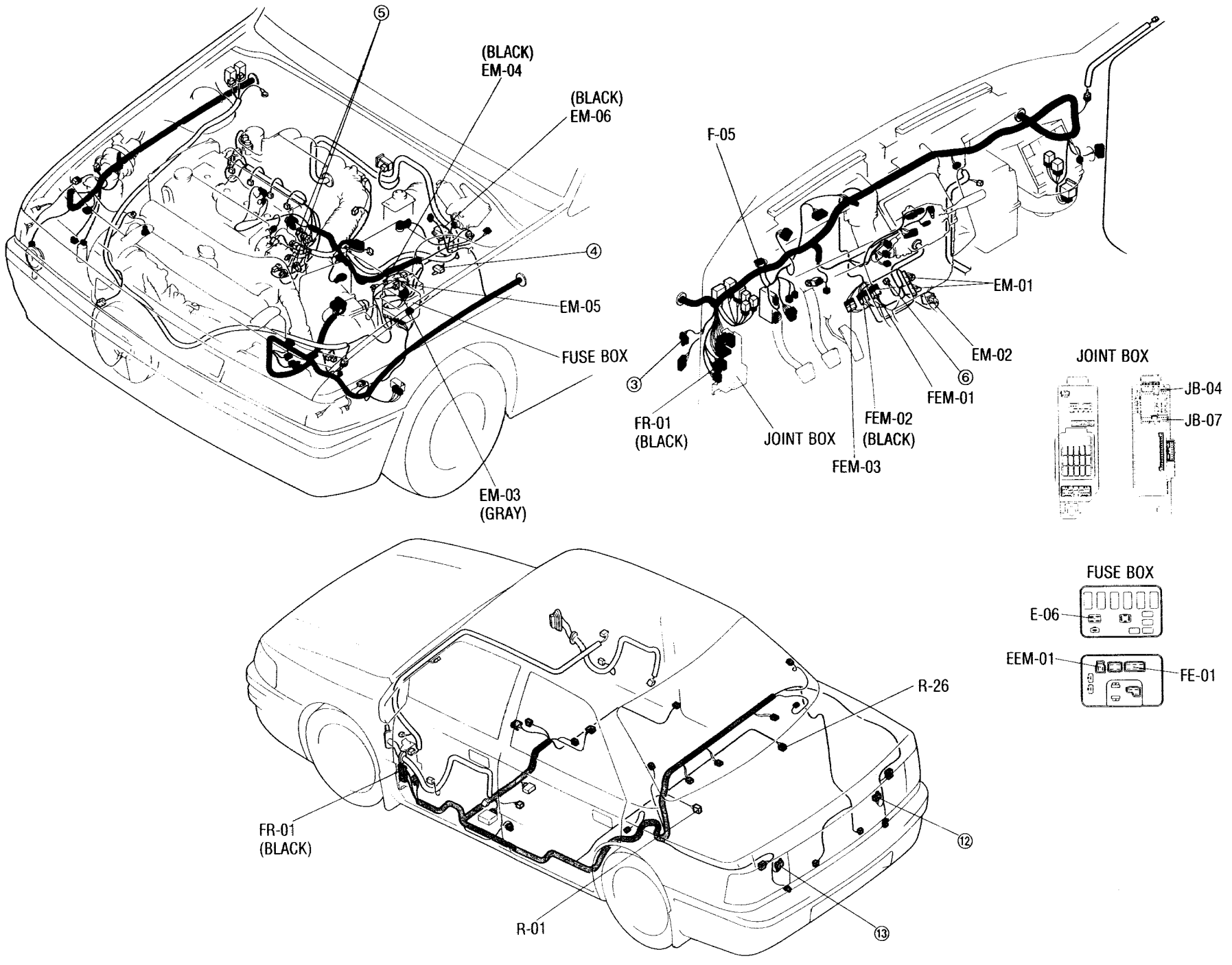
EEM-01 ENGINE (E) -EMISSION (EM)



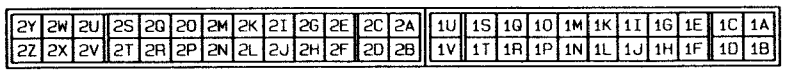
FR-01 FRONT (F) -REAR (R)



() . . . EC-AT <> . . . CANADA ★ . . . WITH PASSIVE SHOULDER BELT [] . . . SEDAN ※ . . . 4WD

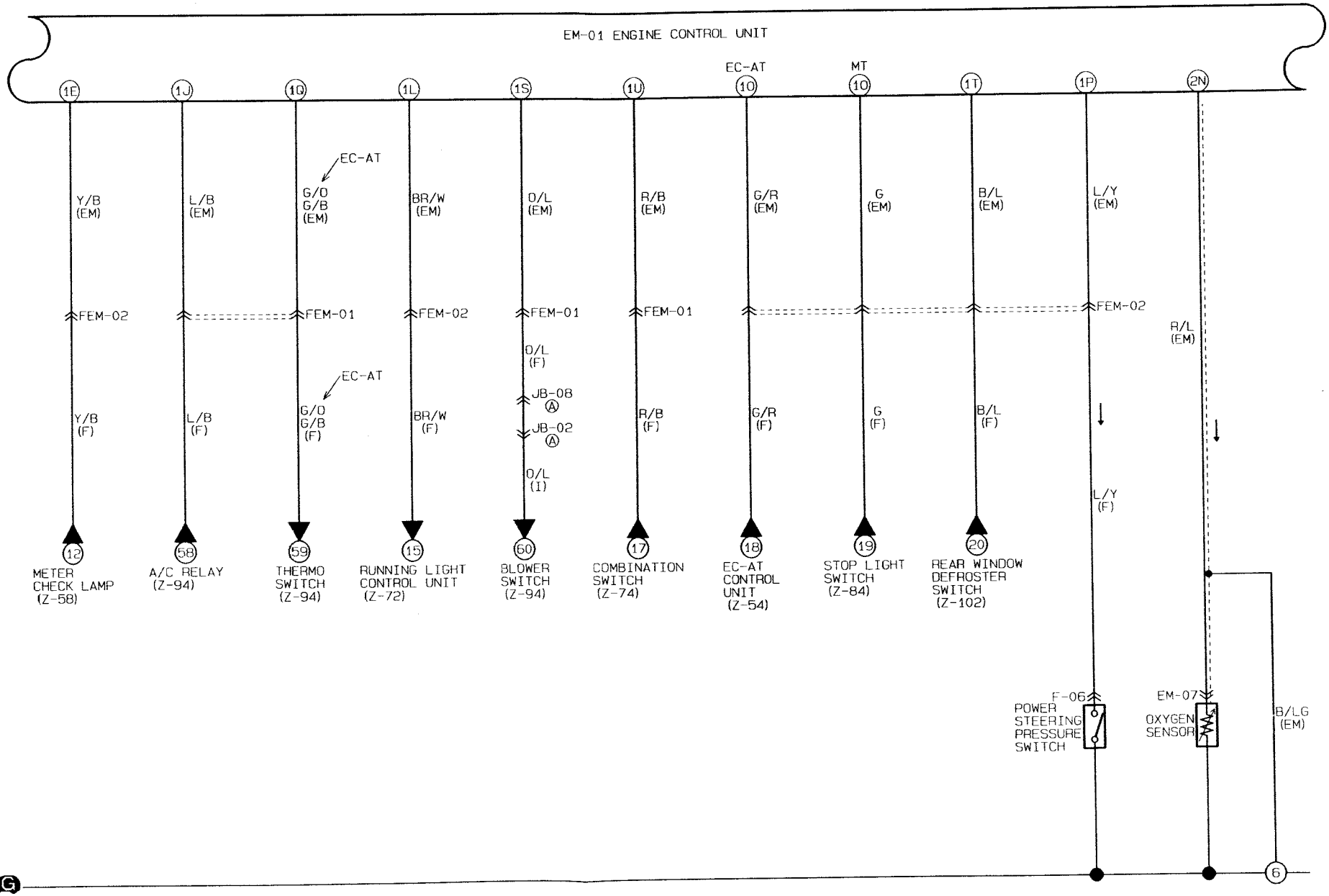

⑤
(BLACK)
EM-04
(BLACK)
EM-06
④
EM-05
FUSE BOX
EM-03
(GRAY)
F-05
EM-01
EM-02
⑥
FEM-01
③
FR-01
(BLACK)
JOINT BOX
FEM-02
(BLACK)
FEM-03
JOINT BOX
JB-04
JB-07
FUSE BOX
E-06
EEM-01
FE-01
R-26
⑫
FR-01
(BLACK)
R-01
⑬

Engine control unit terminal (unit side)



Terminal	Input	Output	Connection to	Test condition		Correct voltage	Remark
1A	—	—	Battery	Constant		Approx. 12V	For backup
1B	○		Main relay (FUEL INJ relay)	Ignition switch	OFF	Approx. 0V	—
					ON	Approx. 12V	
1C	○		Ignition switch (START)	While cranking		Approx. 10V	—
				Ignition switch ON		Approx. 0V	
1D		○	Self-Diagnosis Checker (Monitor lamp)	Test switch at "SELF-TEST" Lamp illuminated for 3 sec. after ignition switch OFF→ON		Approx. 5V	With Self-Diagnosis Checker and System Selector
				Lamp not illuminated after 3 sec.		Approx. 12V	
				Test switch at "O_2 MONITOR" at idle Monitor lamp illuminated		Approx. 5V	
				Test switch at "O_2 MONITOR" at idle Monitor lamp illuminated		Approx. 12V	
1F		○	Self-Diagnosis Checker (Code Number)	Buzzer sounded for 3 sec. after ignition switch OFF→ON		Below 2.5V	• With Self-Diagnosis Checker and System Selector • With System Selector test Selector at "SELF-TEST"
				Buzzer not sounded after 3 sec.		Approx. 12V	
				Buzzer sounded		Below 2.5V	
				Buzzer not sounded		Approx. 12V	
1G		○	Igniter	Ignition switch ON		Approx. 0V	
				Idle		Approx. 0.2V	
1K	○		Diagnosis connector (TEN terminal)	System selector test switch at "O_2 MONITOR"		Approx. 12V	—
				System selector test switch at "SELF-TEST"		Below 1.0V	
1R	○		Fan switch	Fan operating (Engine coolant temperature over 91°C (196°F)... CANADA. 97°C (207°F). USA or diagnosis connector terminal TFA grounded)		Below 1.0V	—
				Fan not operating (Idle)		Approx. 12V	

4WD ■ENGINE CONTROL SYSTEM (2/4)



F-06 POWER STEERING PRESSURE SWITCH (F)

EM-01 ENGINE CONTROL UNIT (EM)

1U	1S	1Q	1O	1M	1K	1I	1G	1E	1C	1A
R/B	O/L	(G/O) G/B	(G/R) G	*	LG/Y	*	G/W	Y/B	V	L/R
BR/Y (W/L)	B/L	B/G	L/Y	R/W	BR/W	L/B	*	W/B	W/Y	W/R
1V	1T	1R	1P	1N	1L	1J	1H	1F	1D	1B

2Y	2W	2U	2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
*	L/O	Y	*	L/W	R	(LG/W) *	LG/R	*	*	W	B/LG	B/O
* (L/G)	W/L	Y/B	G/O	*	R/B	R/L	LG/W (*)	B (LG/R)	B/Y	*	B/BR	B/O
2Z	2X	2V	2T	2R	2P	2N	2L	2J	2H	2F	2D	2B

() . . . EC-AT

EM-07 OXYGEN SENSOR (EM)

FEM-01 FRONT (F) -EMISSION (EM)

(F)

B/O	(G/O) G/B			R/B	B/P
L/R	L/B	B/G	O/L	Y/L	*

(EM)

B/P	R/B			(G/O) G/B	B/O
*	Y/L	O/L	B/G	L/B	L/R

() . . . EC-AT

FEM-02 FRONT (F) -EMISSION (EM)

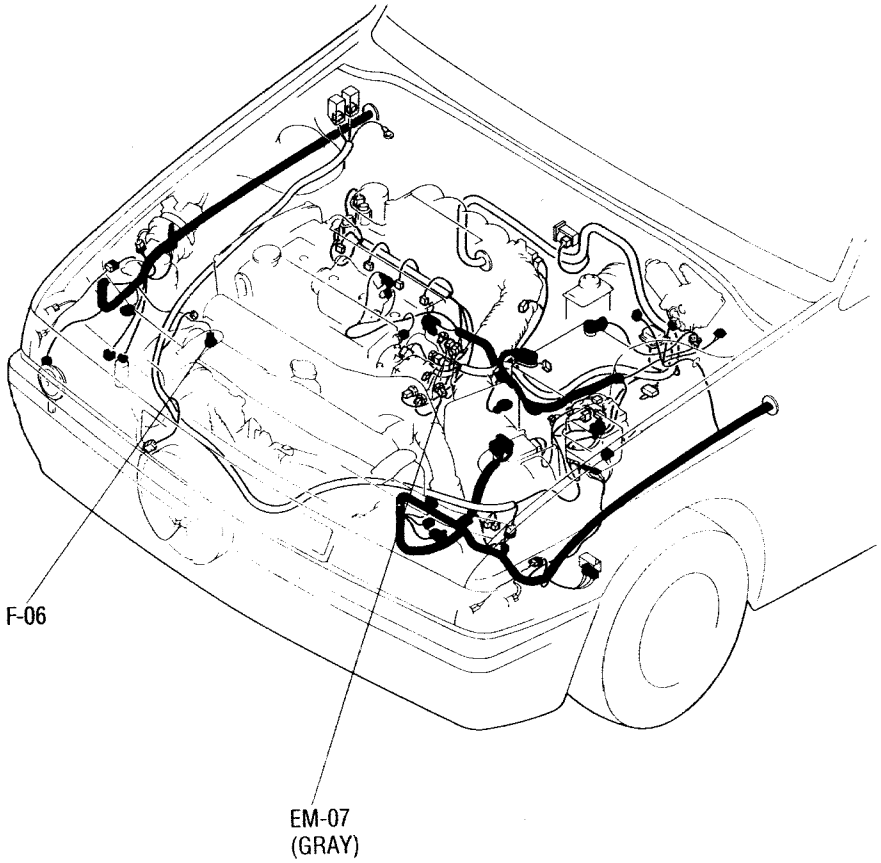
(F)

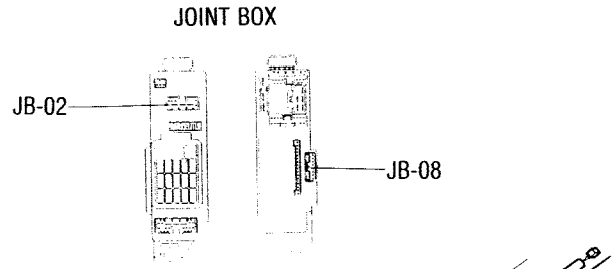
B	Y/B	(L/G) *	(R/W) *	(G/R) G		(*) BR/Y	<B/Y> *	*	(LG/W) *
※R/G *	L/Y	*	(W) *	(R) G/Y	<BR/W> ※R/G *	※Y/W *	(BL/G) *	B/L	(LG/R) *

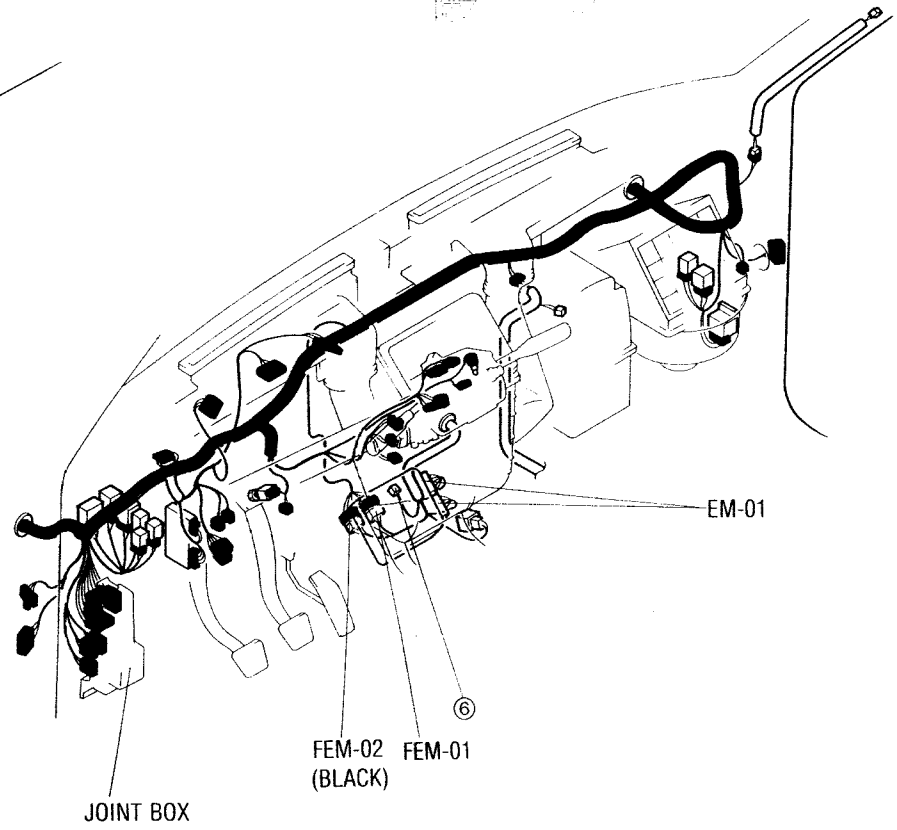
(EM)

(LG/W) *	*	<B/Y> *	(*) BR/Y		(G/R) G	(R/W) *	(L/G) *	Y/B	B
(LG/R) *	B/L	(BL/G) *	※Y/W *	※R/G *	<BR/W> *	(R) G/Y	(W) *	*	L/Y	※R/G *

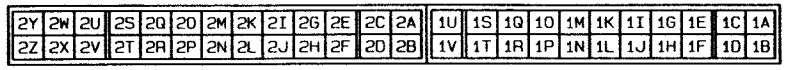
() . . . EC-AT <> . . . CANADA ※ . . . 4WD


F-06
EM-07
(GRAY)


JOINT BOX
JB-02
JB-08

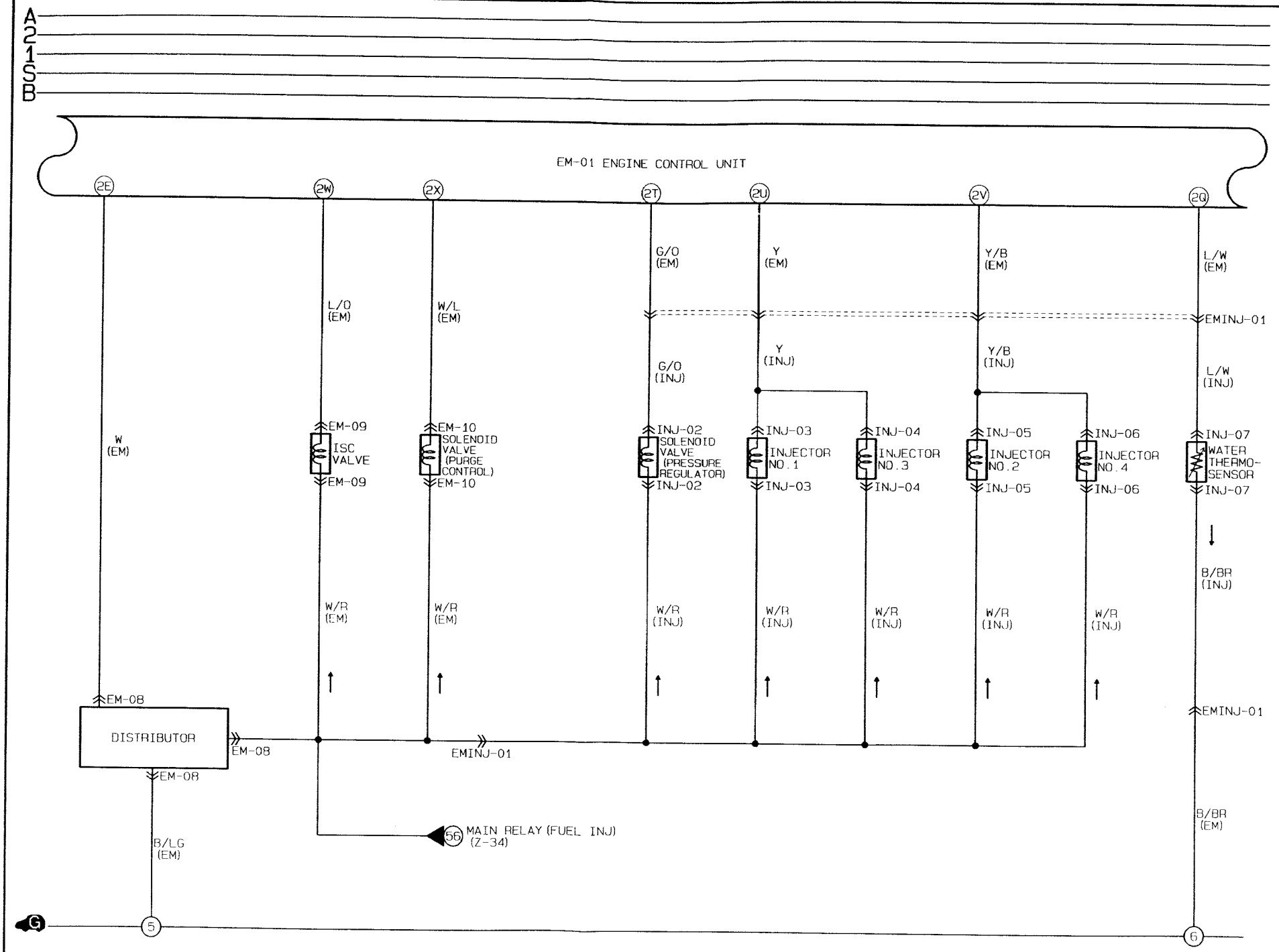

EM-01
⑥
FEM-02
(BLACK)
FEM-01
JOINT BOX

Engine control unit terminal (unit side)



Terminal	Input	Output	Connection to	Test condition	Correct voltage	Remark
1E		○	Malfunction indicator lamp (MIL)	Lamp illuminated for 3 sec. after ignition switch OFF→ON	Below 2.5V	With System Selector test switch at "SELF-TEST"
				Lamp not illuminated after 3 sec.	Approx. 12V	
				Lamp illuminated	Below 2.5V	
				Lamp not illuminated	Approx. 12V	
1J		○	A/C relay	Ignition switch ON	Approx. 12V	—
				A/C switch ON at idle	Below 2.5V	
				A/C switch OFF at idle	Approx. 12V	
1L	○		DRL relay (Canada)	Parking brake pulled with ignition switch ON (DRL OFF)	Approx. 12V	•DRL: Daytime Running Light
				Idle (DRL ON)	Below 2.5V	
1O	○		Stoplight switch/ EC-AT control unit (ATX)	Brake pedal released	Below 1.0V	—
				Brake pedal depressed	Approx. 12V	
1P	○		P/S pressure switch	Ignition switch ON	Approx. 12V	—
				P/S ON at idle	Below 1.0V	
				P/S OFF at idle	Approx. 12V	
1Q	○		A/C switch	A/C switch ON	Below 2.5V	Ignition switch ON and blower motor ON
				A/C switch OFF	Approx. 12V	
1S	○		Blower control switch	Blower control switch OFF or 1st position	Approx. 12V	Ignition switch ON
				Blower control switch 2nd or more position	Below 1.0V	
1T	○		Rear window defroster switch	Rear window defroster switch OFF	Below 1.0V	Ignition switch ON
				Rear window defroster switch ON	Approx. 12V	
1U	○		Headlight switch	Headlights ON	Approx. 12V	
				Headlights OFF	Below 1.0V	
2N	○		Oxygen sensor	Ignition switch ON	0V	
				Idle (Cold engine)	0V	
				Idle (After warm-up)	0–1.0V	
				Increase engine speed (After warm-up)	0.5–1.0V	
				Deceleration	0–0.4V	

4WD ■ ENGINE CONTROL SYSTEM (3/4)



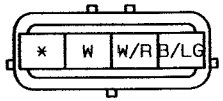
EM-01 ENGINE CONTROL UNIT (EM)

1U	1S	1Q	1O	1M	1K	1I	1G	1E	1C	1A
R/B	O/L	(G/O) G/B	(G/R) G	*	LG/Y	*	G/W	Y/B	V	L/R
BR/Y (W/L)	B/L	B/G	L/Y	R/W	BR/W	L/B	*	W/B	W/Y	W/R
1V	1T	1R	1P	1N	1L	1J	1H	1F	1D	1B

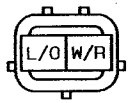
2Y	2W	2U	2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
*	L/O	Y	*	L/W	R	(LG/W) *	LG/R	*	*	W	B/LG	B/O
* (L/G)	W/L	Y/B	G/O	*	R/B	R/L	LG/W (*)	B (LG/R)	B/Y	*	B/BR	B/O
2Z	2X	2V	2T	2R	2P	2N	2L	2J	2H	2F	2D	2B

() . . . EC-AT

EM-08 DISTRIBUTOR (EM)

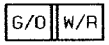


EM-09 ISC VALVE (EM)

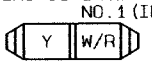


EM-10 SOLENOID VALVE (PURGE CONTROL) (EM)

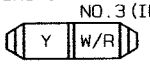
INJ-02 SOLENOID VALVE (PRESSURE REGULATOR) (INJ)



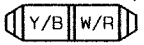
INJ-03 INJECTOR NO.1 (INJ)



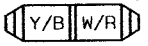
INJ-04 INJECTOR NO.3 (INJ)



INJ-05 INJECTOR NO.2 (INJ)



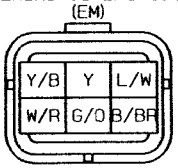
INJ-06 INJECTOR NO.4 (INJ)



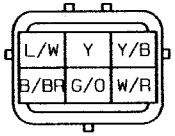
INJ-07 WATER THERMOSENSOR (INJ)

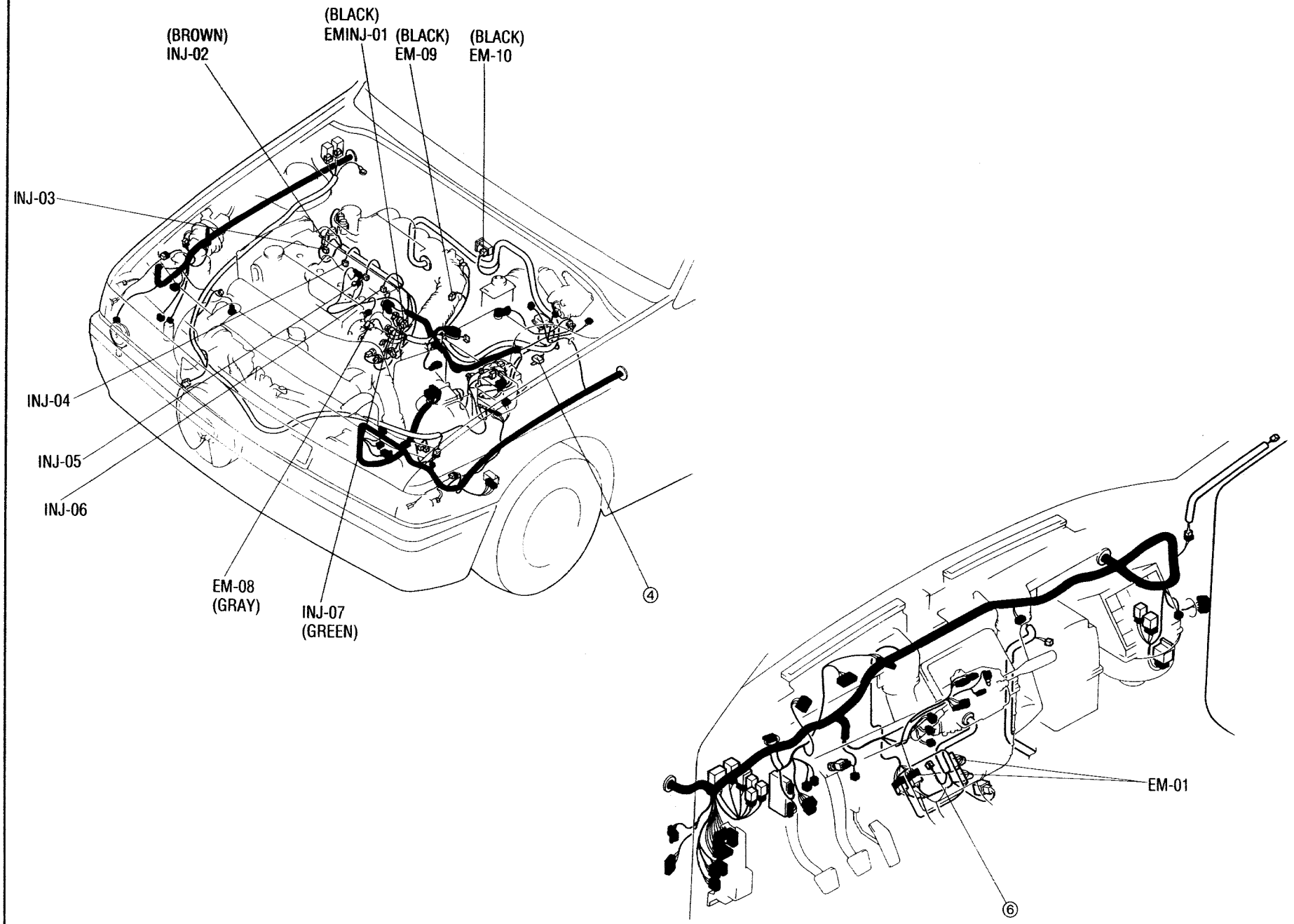
EMINJ-01 EMISSION (EM) - INJECTOR (INJ)

(EM)

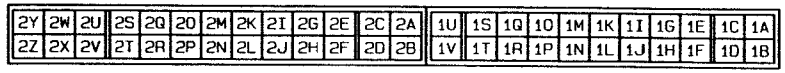


(INJ)



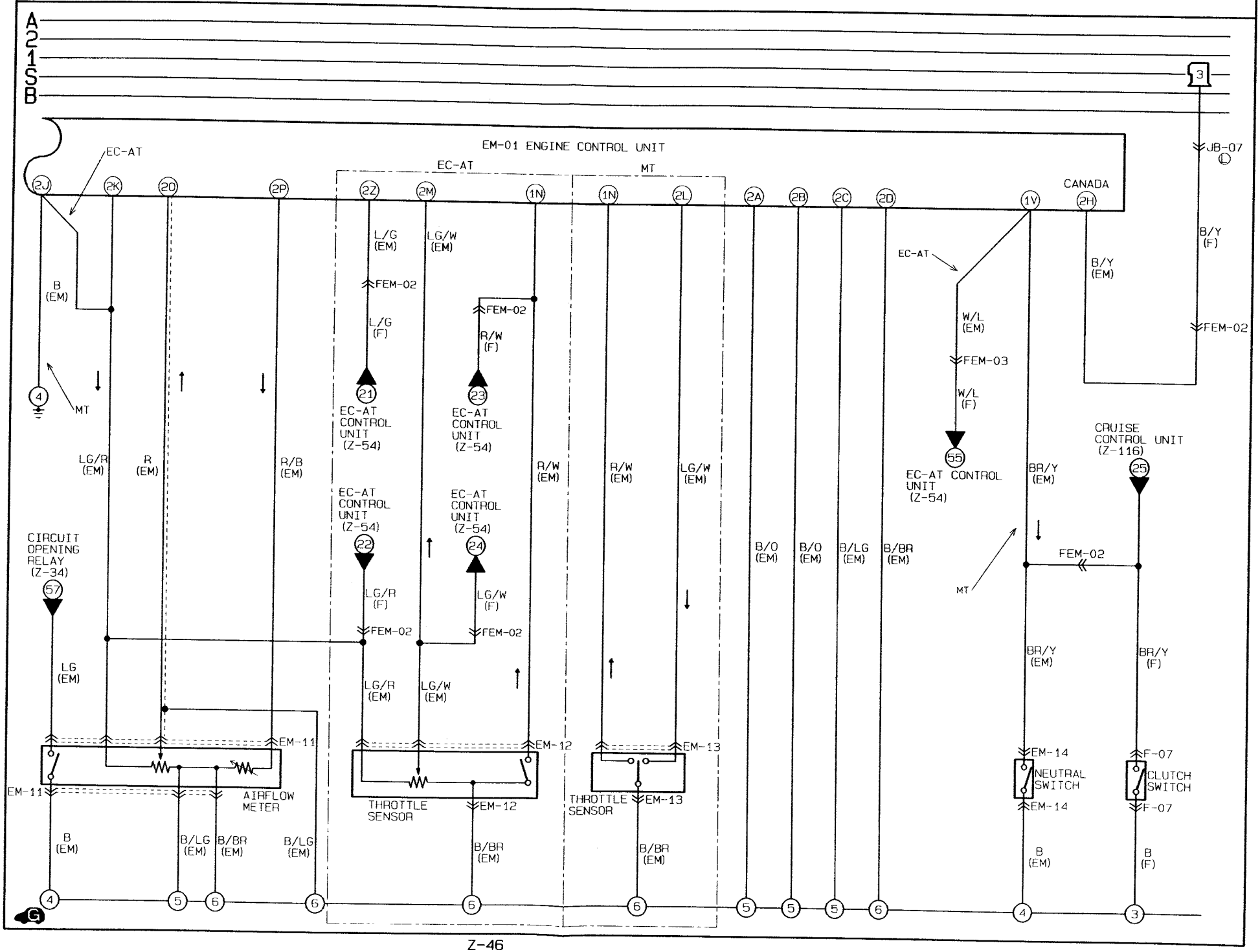

(BROWN)
INJ-02
(BLACK)
EMINJ-01
(BLACK)
EM-09
(BLACK)
EM-10
INJ-03
INJ-04
INJ-05
INJ-06
EM-08
(GRAY)
INJ-07
(GREEN)
④
EM-01
⑥

Engine control unit terminal (unit side)

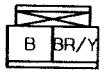


Terminal	Input	Output	Connection to	Test condition	Correct voltage	Remark
2E	○		Distributor (Ne-signal)	Ignition switch ON	Approx. 0V or 5V	—
				Idle	Approx. 2V	
2Q	○		Water thermo-sensor	Engine coolant temperature 20°C (68°F)	Approx. 2.5V	
				After warm-up	Below 0.5V	
2T		○	Solenoid valve (Pressure regulator) (BP)	60 seconds after engine started when engine coolant temperature above 90°C (194°F) and intake air temperature above 58°C (136°F)	Below 1.5V	
				Other condition at idle	Approx. 12V	
2U		○	Injector (Nos. 1, 3)	Ignition switch ON	Approx. 12V	*Engine Signal Monitor. Green and red lamps flash
				Idle	Approx. 12V*	
				Engine speed above 2,000 rpm on deceleration (After warm-up)	Approx. 12V	
2V		○	Injector (Nos. 2, 4)	Ignition switch at idle	Approx. 12V	
				Idle	Approx. 12V*	
				Engine speed above 2,000 rpm on deceleration (After warm-up)	Approx. 12V	
2W		○	ISC valve	Ignition switch ON	Approx. 12V	—
				Idle	Approx. 10V	
2X		○	Solenoid valve (Purge control)	Ignition switch ON	Approx. 12V	—
				Idle	Approx. 12V	

4WD ■ENGINE CONTROL SYSTEM (4/4)



F-07 CLUTCH SWITCH (F)



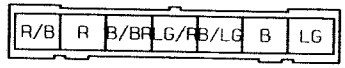
EM-01 ENGINE CONTROL UNIT (EM)

1U	1S	1Q	1O	1M	1K	1I	1G	1E	1C	1A
R/B	O/L	(G/O) G/B	(G/R) G	*	LG/Y	*	G/W	Y/B	V	L/R
BR/Y (W/L)	B/L	B/G	L/Y	R/W	BR/W	L/B	*	W/B	W/Y	W/R
1V	1T	1R	1P	1N	1L	1J	1H	1F	1D	1B

2Y	2W	2U	2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
*	L/O	Y	*	L/W	R	(LG/W) *	LG/R	*	*	W	B/LG	B/O
* (L/G)	W/L	Y/B	G/O	*	R/B	R/L	LG/W (*)	B (LG/R)	B/Y	*	B/BR	B/O
2Z	2X	2V	2T	2R	2P	2N	2L	2J	2H	2F	2D	2B

() . . . EC-AT

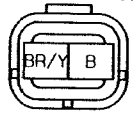
EM-11 AIRFLOW METER (EM)



EM-12 THROTTLE SENSOR (EM)

EM-13 THROTTLE SENSOR (EM)

EM-14 NEUTRAL SWITCH (EM)



FEM-02 FRONT (F) -EMISSION (EM)

(F)

B	Y/B	(L/G) *	(R/W) *	(G/R) G		(*) BR/Y	<B/Y> *	*	(LG/W) *
※R/G *	L/Y	*	(W) *	(R) G/Y	<BR/W> *	※R/G *	※Y/W *	(BL/G) *	B/L	(LG/R) *

(EM)

(LG/W) *	*	<B/Y> *	(*) BR/Y		(G/R) G	(R/W) *	(L/G) *	Y/B	B
(LG/R) *	B/L	(BL/G) *	※Y/W *	※R/G *	<BR/W> *	(R) G/Y	(W) *	*	L/Y	※R/G *

() . . . EC-AT <> . . . CANADA ※ . . . 4WD

FEM-03 FRONT (F) -EMISSION (EM)

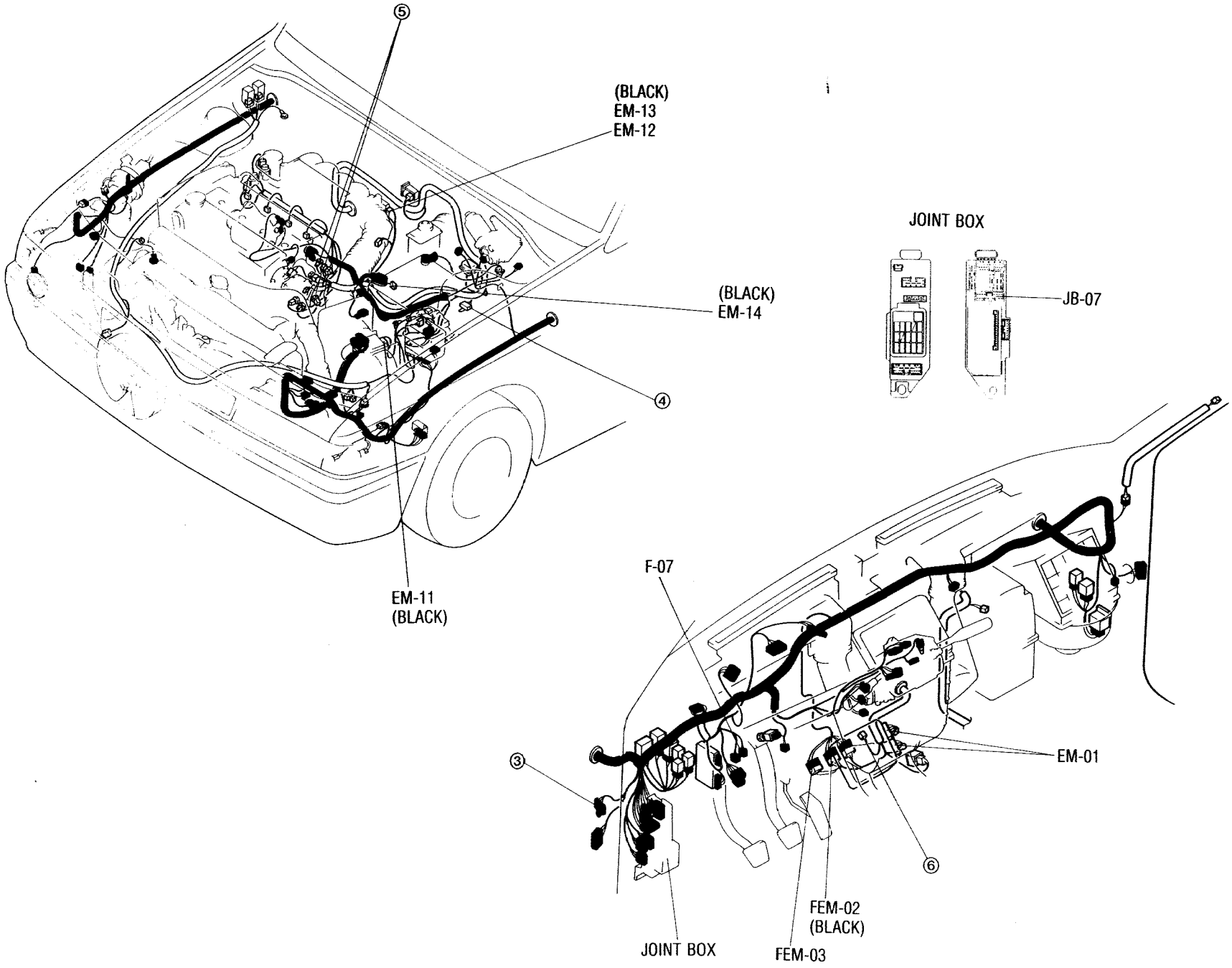
(F)

*	(B/L) *
※B/Y *	L

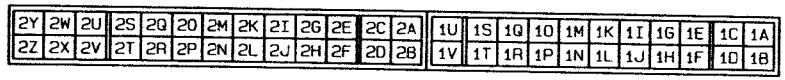
(EM)

(B/L) *	*
L	※B/Y *

() . . . EC-AT ※ . . . 4WD

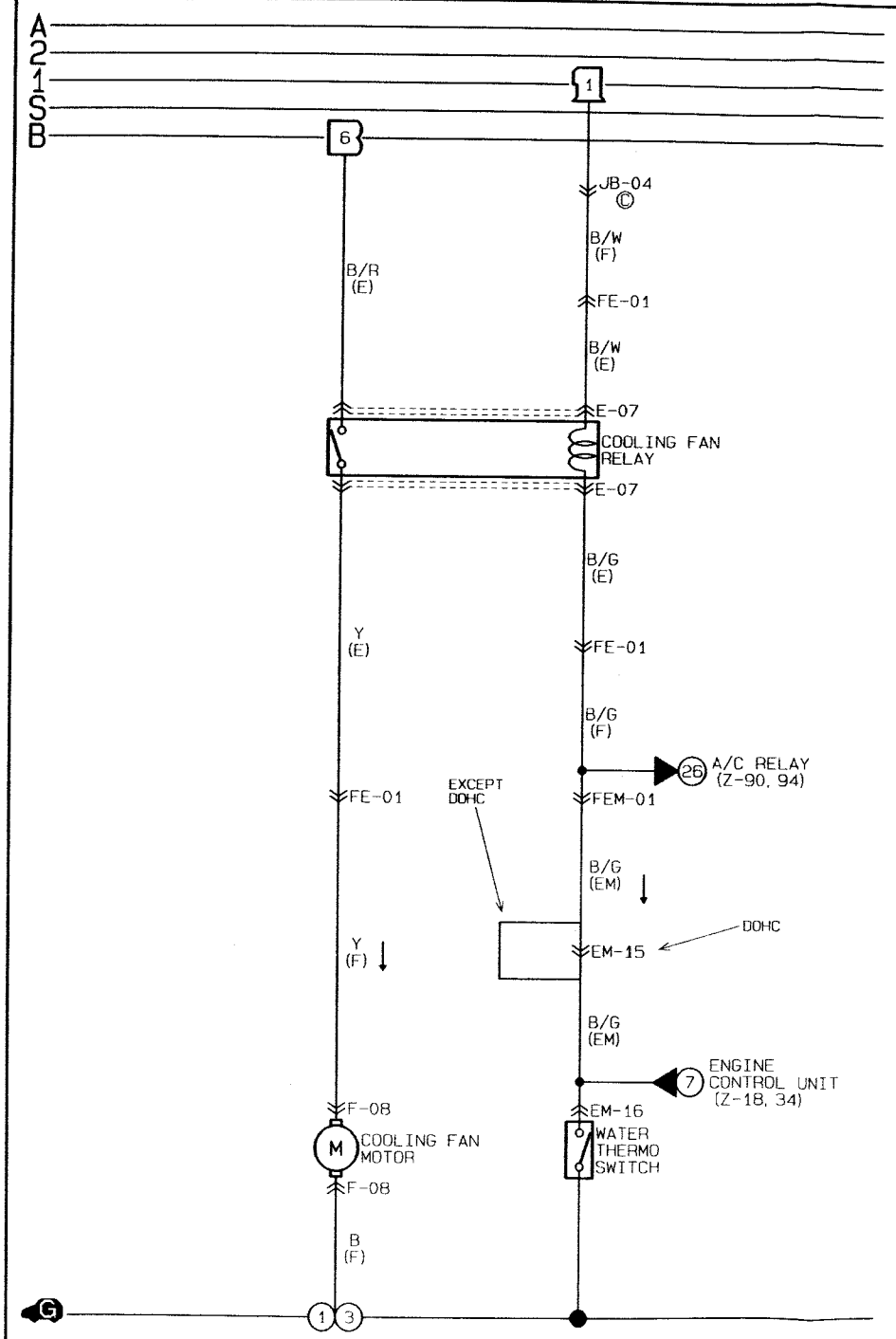

⑤
(BLACK)
EM-13
EM-12
(BLACK)
EM-14
④
EM-11
(BLACK)
JOINT BOX
JB-07
F-07
③
EM-01
⑥
FEM-02
(BLACK)
FEM-03
JOINT BOX

Engine control unit terminal (unit side)



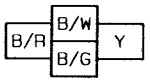
Terminal	Input	Output	Connection to	Test condition	Correct voltage	Remark
1N	○		Throttle sensor (Idle switch) (MTX/ATX) EC-AT control unit (ATX)	Accelerator pedal released	Below 1.0V	Ignition switch ON
				Accelerator pedal depressed	Approx. 12V	
1V	○		Neutral/Clutch switches (MTX)	Neutral position or clutch pedal depressed	Below 1.0V	
				Others	Approx. 12V	
			Inhibitor switch (ATX)	N or P range	Below 1.0V	
				Others	Approx. 12V	
2A	—	—	Ground (Injector)	Constant	0V	—
2B	—	—	Ground (Output)	Constant	0V	—
2C	—	—	Ground (CPU)	Constant	0V	—
2D		—	Ground (Input)	Constant	0V	—
2H	○		Ground (California)	Constant	0V	—
			Open (Federal)	Constant	Approx. 2V	—
			Main relay (Canada)	Ignition switch ON	Approx. 12V	—
2J	—	—	Ground (MTX)	Constant	0V	—
	○		Throttle sensor (ATX)/EC-AT control unit (ATX)/Airflow meter	Constant	4.5–5.5V	
2K	○		Throttle sensor (ATX)/EC-AT control unit (ATX)/Airflow meter	Constant	4.5–5.5V	
2L	○		Throttle sensor (Power switch) (MTX)	Accelerator pedal released	Approx. 5V	—
				Accelerator pedal fully opened	Below 1.0V	
2M	○		Throttle sensor (ATX)/EC-AT control unit (ATX)	Accelerator pedal released	Approx. 0.5V	—
				Accelerator pedal fully opened	Approx. 4.0V	
2O	○		Airflow meter	Ignition switch ON	Approx. 3.8V	—
				Idle	Approx. 3.3V	
2P	○		Intake air thermo-sensor	Ambient air temperature 20°C (68°F)	Approx. 2.5V	Built in airflow meter
2Z		○	EC-AT control unit (ATX)	Engine coolant temperature below 72°C (162°F) at idle	Below 2.5V	
				Engine coolant temperature above 72°C (162°F) at idle	Approx. 12V	

MT ■ COOLING FAN SYSTEM

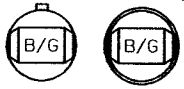


F-08 COOLING FAN MOTOR (F)

E-07 COOLING FAN RELAY (E)

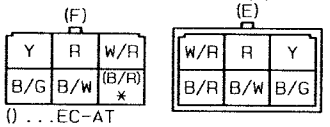


EM-15 SHORT CONNECTOR (EM)

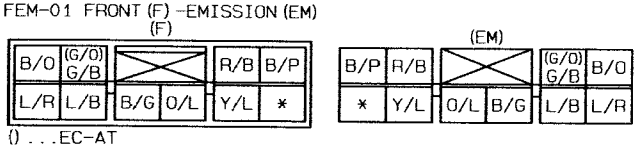


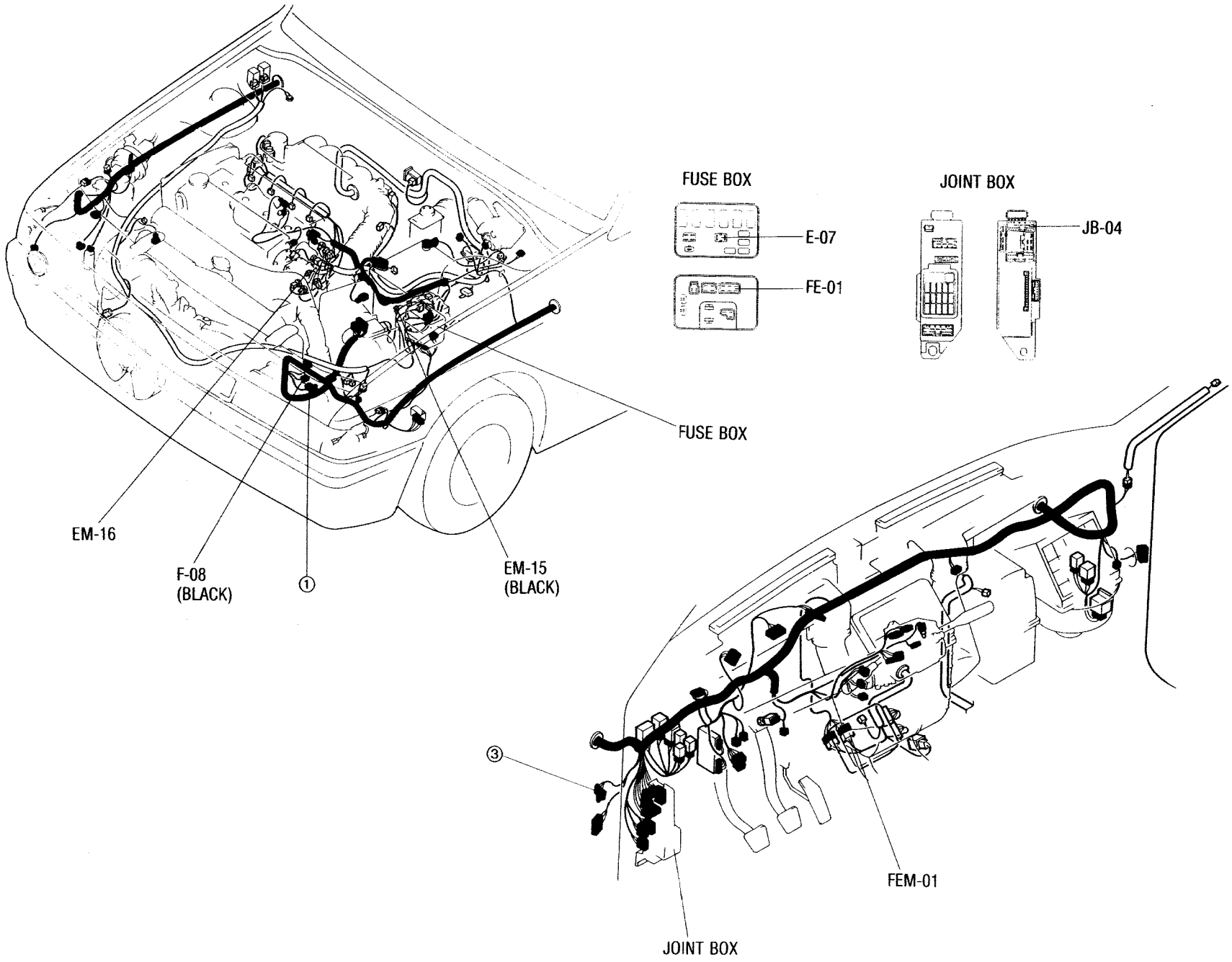
EM-16 WATER THERMO SWITCH (EM)

FE-01 FRONT (F) -ENGINE (E)

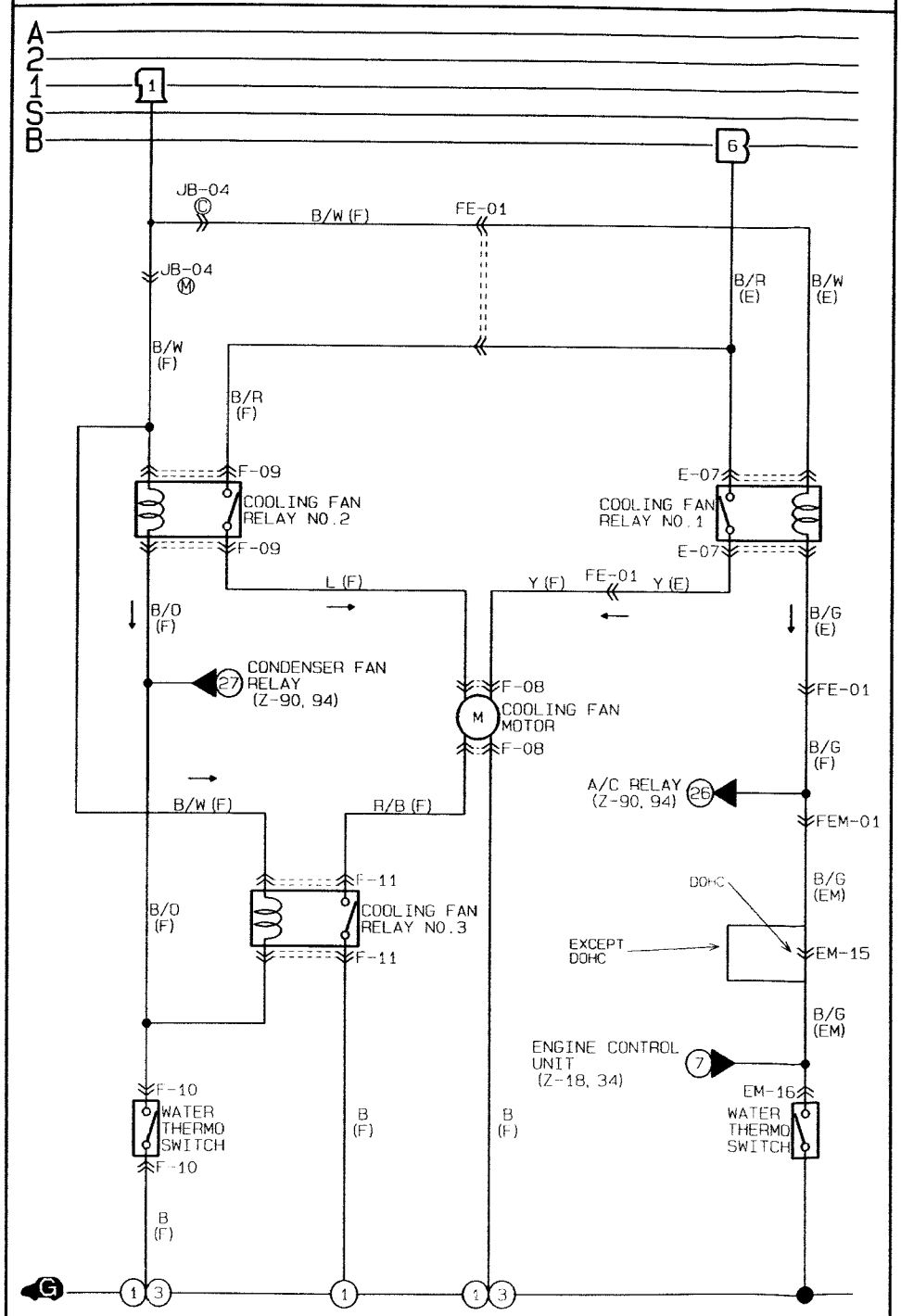


FEM-01 FRONT (F) -EMISSION (EM)

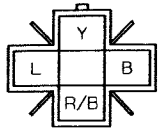



FUSE BOX
E-07
FE-01
JOINT BOX
JB-04
FUSE BOX
EM-16
F-08
(BLACK)
①
EM-15
(BLACK)
③
FEM-01
JOINT BOX

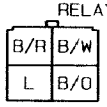
EC-AT■COOLING FAN SYSYTEM



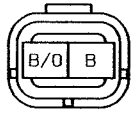
F-08 COOLING FAN MOTOR (F)



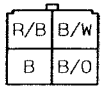
F-09 COOLING FAN RELAY NO.2 (F)



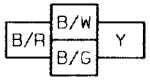
F-10 WATER THERMO SWITCH (F)



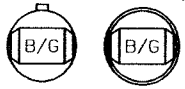
F-11 COOLING FAN RELAY NO.3 (F)



E-07 COOLING FAN RELAY NO.1 (E)

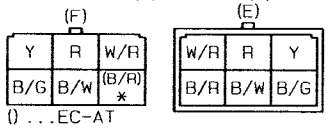


EM-15 SHORT CONNECTOR (EM)

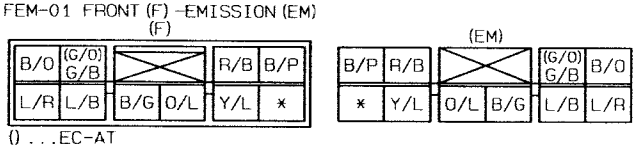


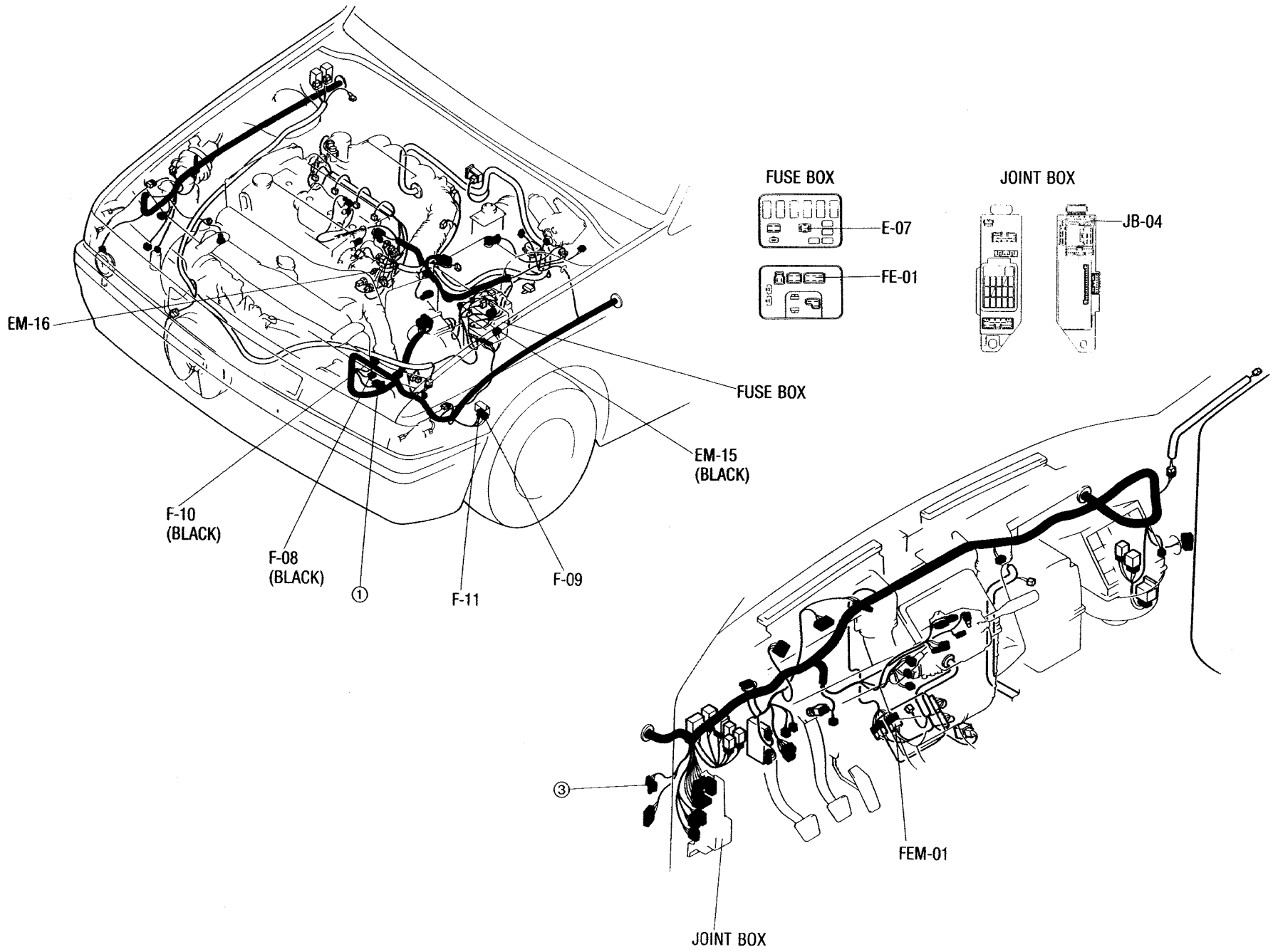
EM-16 WATER THERMO SWITCH (EM)

FE-01 FRONT (F) -ENGINE (E)

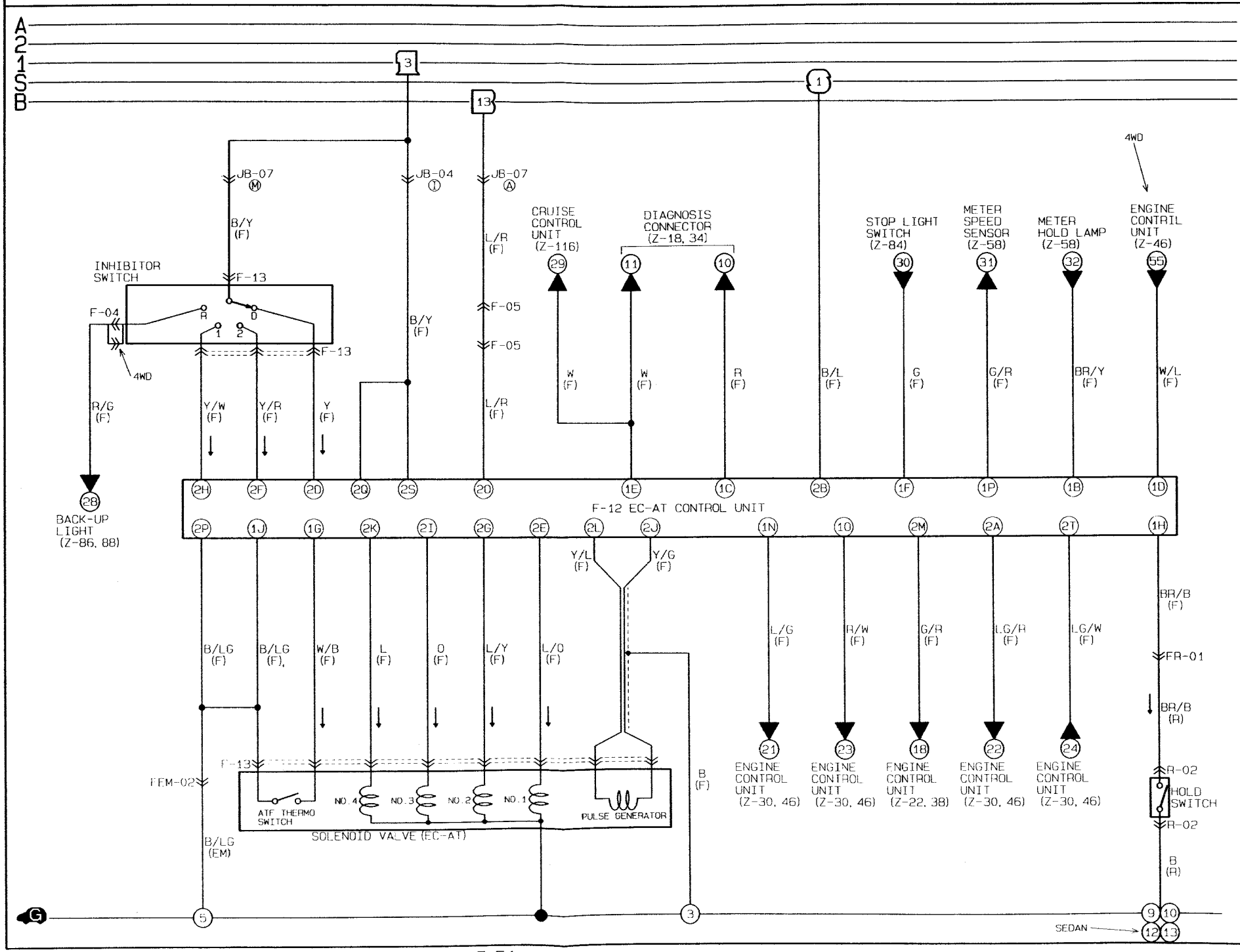


FEM-01 FRONT (F) -EMISSION (EM)

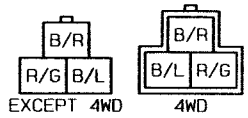



FUSE BOX
E-07
FE-01
JOINT BOX
JB-04
EM-16
FUSE BOX
EM-15
(BLACK)
F-10
(BLACK)
F-08
(BLACK)
①
F-11
F-09
③
FEM-01
JOINT BOX

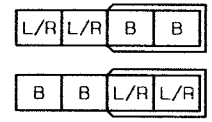
■ EC-AT CONTROL SYSTEM



F-04 INHIBITOR SWITCH (F)



F-05 JOINT CONNECTOR (F)



F-12 EC-AT CONTROL UNIT (F)

1O	1M	1K	1I	1G	1E	1C	1A
R/W	*	*	*	W/B	W	R	*
G/R	L/G	*	B/LG	BR/B	G	※W/L *	BR/Y
1P	1N	1L	1J	1H	1F	1D	1B

2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
B/Y	B/Y	L/R	G/R	L	O	L/Y	L/O	*	LG/R
LG/W	*	B/LG	*	Y/L	Y/G	Y/W	Y/R	Y	B/L
2T	2R	2P	2N	2L	2J	2H	2F	2D	2B

※...4WD

F-13 SOLENOID VALVE (EC-AT) & INHIBITOR SWITCH (F)

B/Y	W/B	Y/R	Y/G	L/O	O
B/LG	Y	Y/W	Y/L	L/Y	L

R-02 HOLD SWITCH (R)

BR/B	R/B	*
B	R	*

FEM-02 FRONT (F) -EMISSION (EM)

(F)

B	Y/B	(L/G) *	(R/W) *	(G/R) G		(*) BR/Y	<B/Y> *	*	(LG/W) *
※R/G *	L/Y	*	(W) *	(R) G/Y	<BR/W> ※R/G *	*	※Y/W *	(BL/G) *	B/L	(LG/R) *

(EM)

(LG/W) *	*	<B/Y> *	(*) BR/Y		(G/R) G	(R/W) *	(L/G) *	Y/B	B
(LG/R) *	B/L	(BL/G) *	※Y/W *	※R/G *	<BR/W> *	(R) G/Y	(W) *	*	L/Y	※R/G *

() ...EC-AT <>...CANADA ※...4WD

FR-01 FRONT (F) -REAR (R)

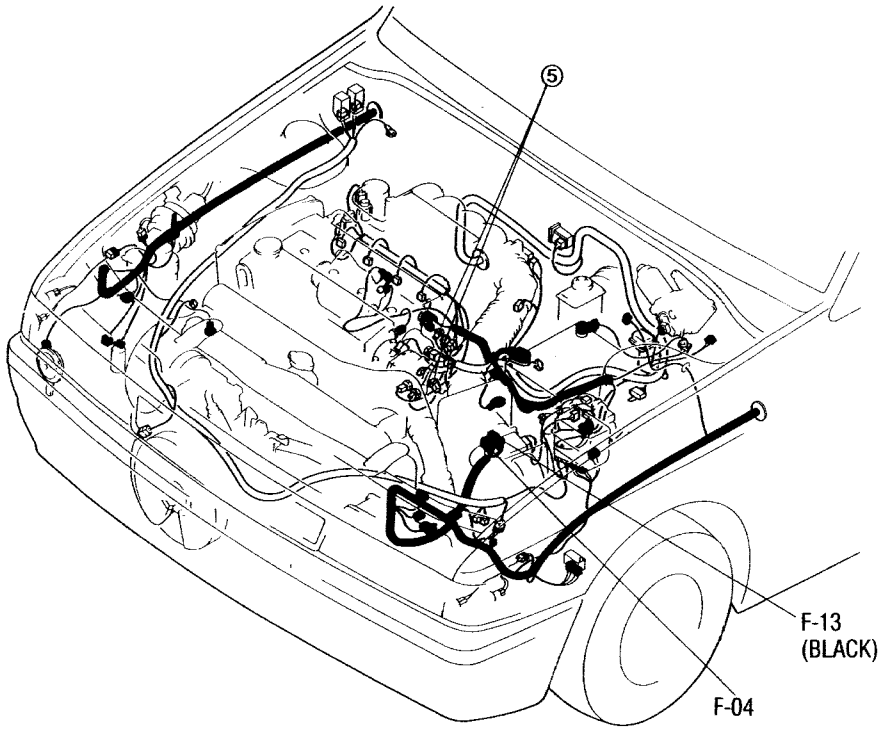
(F)

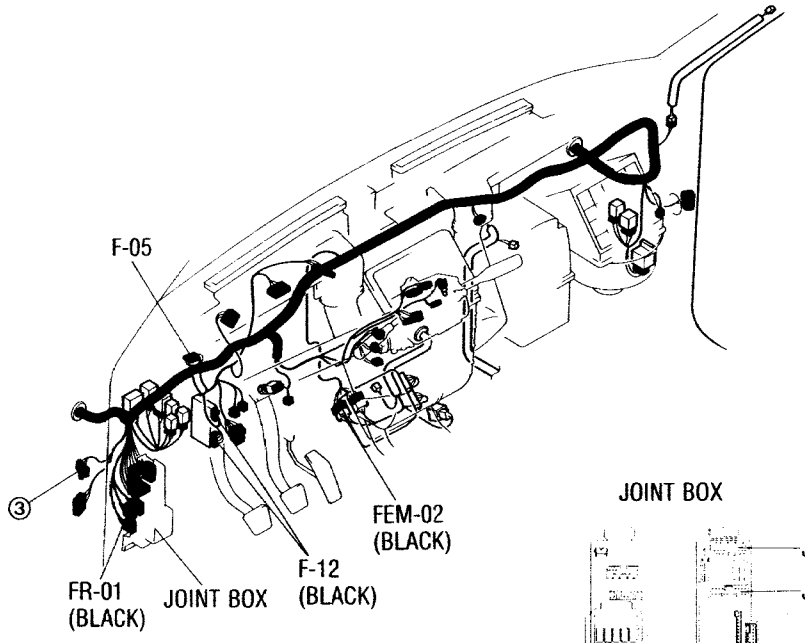
R/L	★L/Y *	※* L/B	※L/B *	Y		G	R/G	B/P	L
※W/L B/G	★L/O *	※R/Y O	★G/R *	<G/R> G/Y	★Y/L *	※B/G W/L	W/R	(BR/B) *	(R) *	W/G

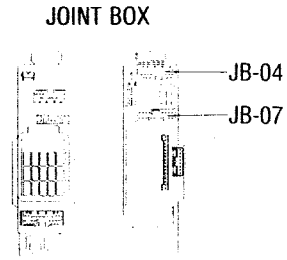
(R)

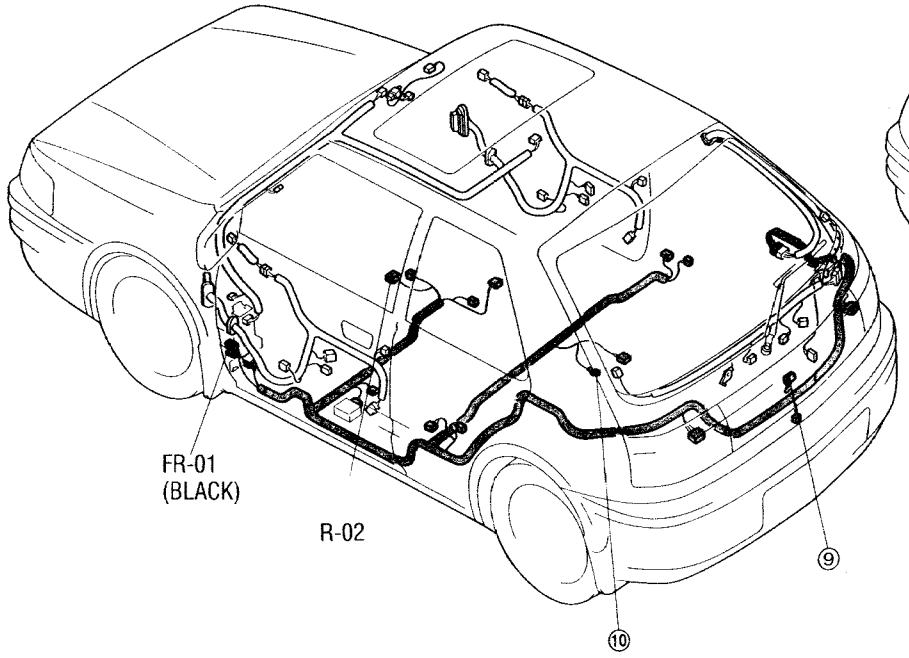
L	B/P	R/G	G			Y	※L/B *	※* L/B	★L/Y *	R/L
W/G	(R) *	(BR/B) *	W/R	※B/G W/L	★Y/L *	<G/R> G/Y	★G/R *	※R/Y O	★L/O *	※W/L B/G

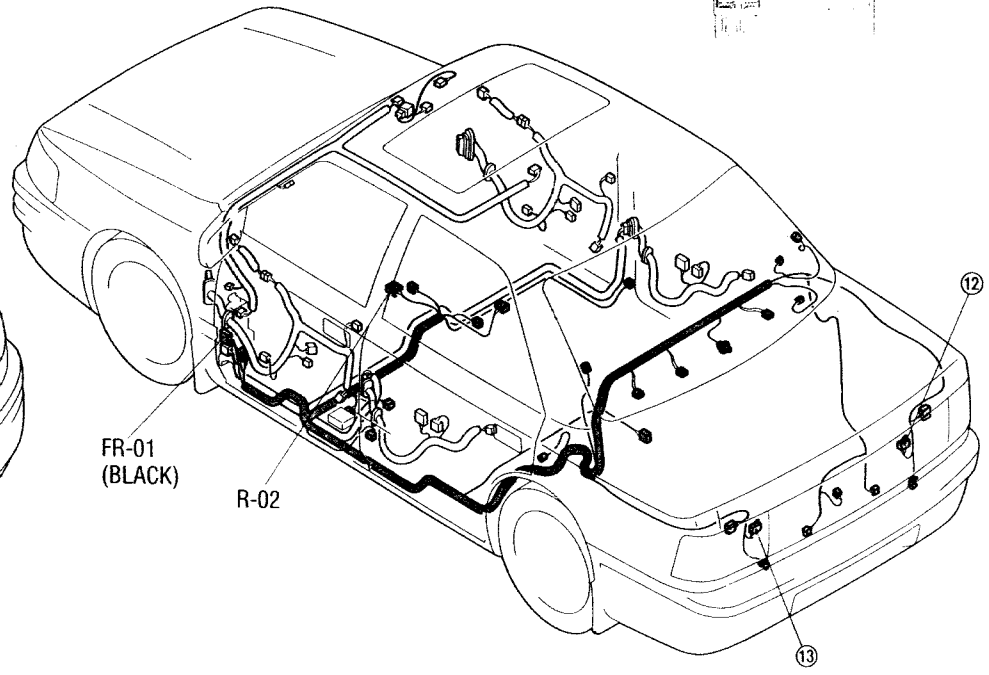
() ...EC-AT <>...CANADA ★...WITH PASSIVE SHOULDER BELT [] ...SEDAN ※...4WD


⑤
F-13
(BLACK)
F-04

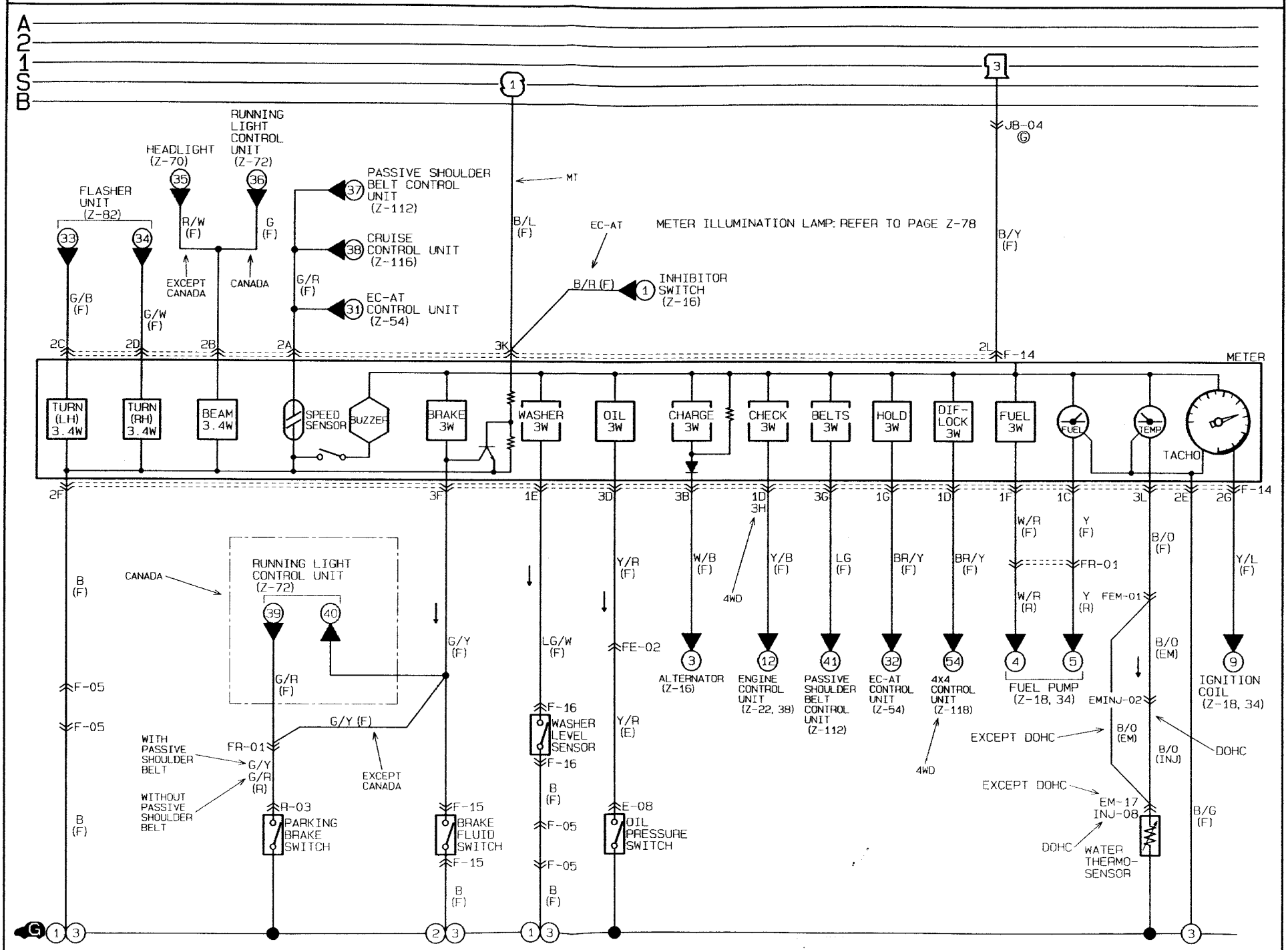

F-05
③
FEM-02
(BLACK)
F-12
(BLACK)
FR-01
(BLACK)
JOINT BOX


JOINT BOX
JB-04
JB-07

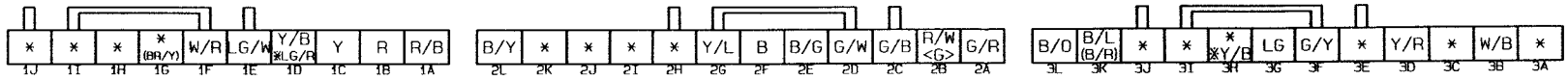

FR-01
(BLACK)
R-02
⑨
⑩


FR-01
(BLACK)
R-02
⑫
⑬

■ METER & WARNING LAMPS

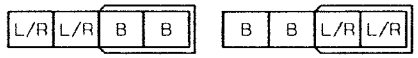


F-14 METER (F)



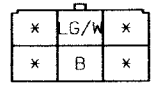
() . . . EC-AT <> . . . CANADA ※ . . . 4WD

F-05 JOINT CONNECTOR (F)



F-15 BRAKE FLUID SWITCH (F)

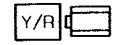
F-16 WASHER LEVEL SENSOR (F)



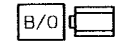
R-03 PARKING BRAKE SWITCH (R)

★ . . . WITH PASSIVE SHOULDER BELT

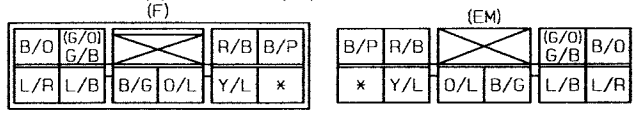
E-08 OIL PRESSURE SWITCH (E)



EM-17 WATER THERMO-SENSOR (EM)

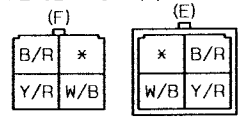


FEM-01 FRONT (F) -EMISSION (EM)

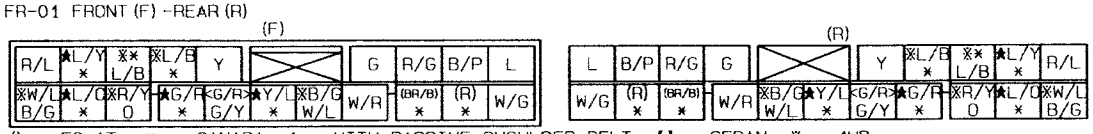


() . . . EC-AT

FE-02 FRONT (F) -ENGINE (E)



FR-01 FRONT (F) -REAR (R)



() . . . EC-AT <> . . . CANADA ★ . . . WITH PASSIVE SHOULDER BELT [] . . . SEDAN ※ . . . 4WD