

Subject: Power distribution, connector, and wiring diagrams for 1999–2005 Grand Cherokee with 42RE, 45RFE or NAG1 transmission

Source: Chrysler Service Manuals

This reference contains the following diagrams:

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- [Figure C1048-2](#) 1999–2004 Grand Cherokee connector diagram
- [Figure C1048-3](#) 1999–2004 Grand Cherokee power distribution diagram
- [Figure C1048-4](#) 2001–2004 Grand Cherokee 4.7L wiring diagram
- [Figure C1048-5](#) 2001–2004 Grand Cherokee wiring diagrams (all engines)
- [Figure C1048-6](#) 2005 Grand Cherokee wiring diagram
- [Figure C1048-7](#) 2005 Grand Cherokee connector pinouts

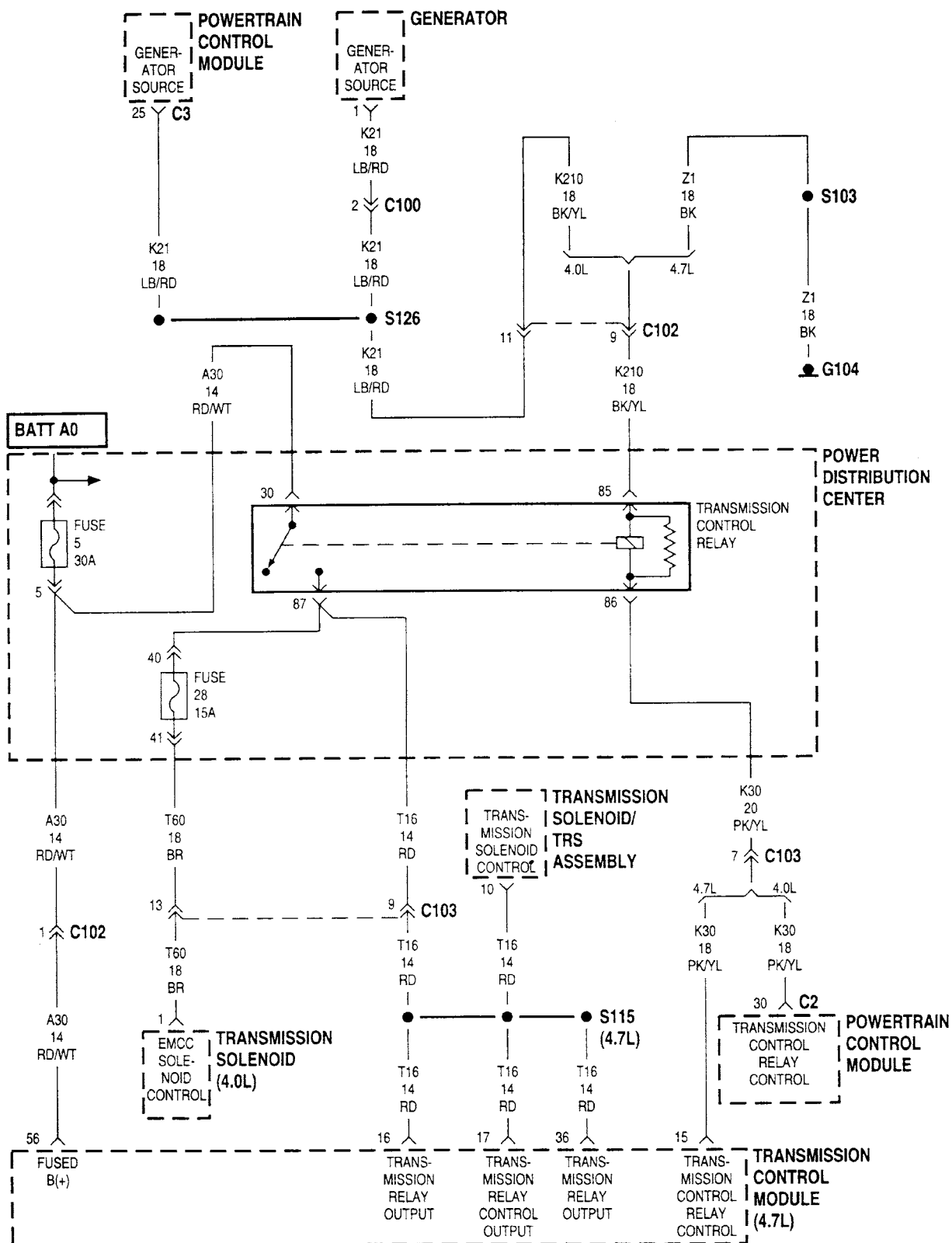
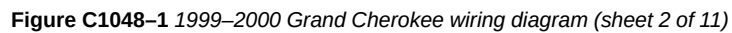


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 1 of 11)



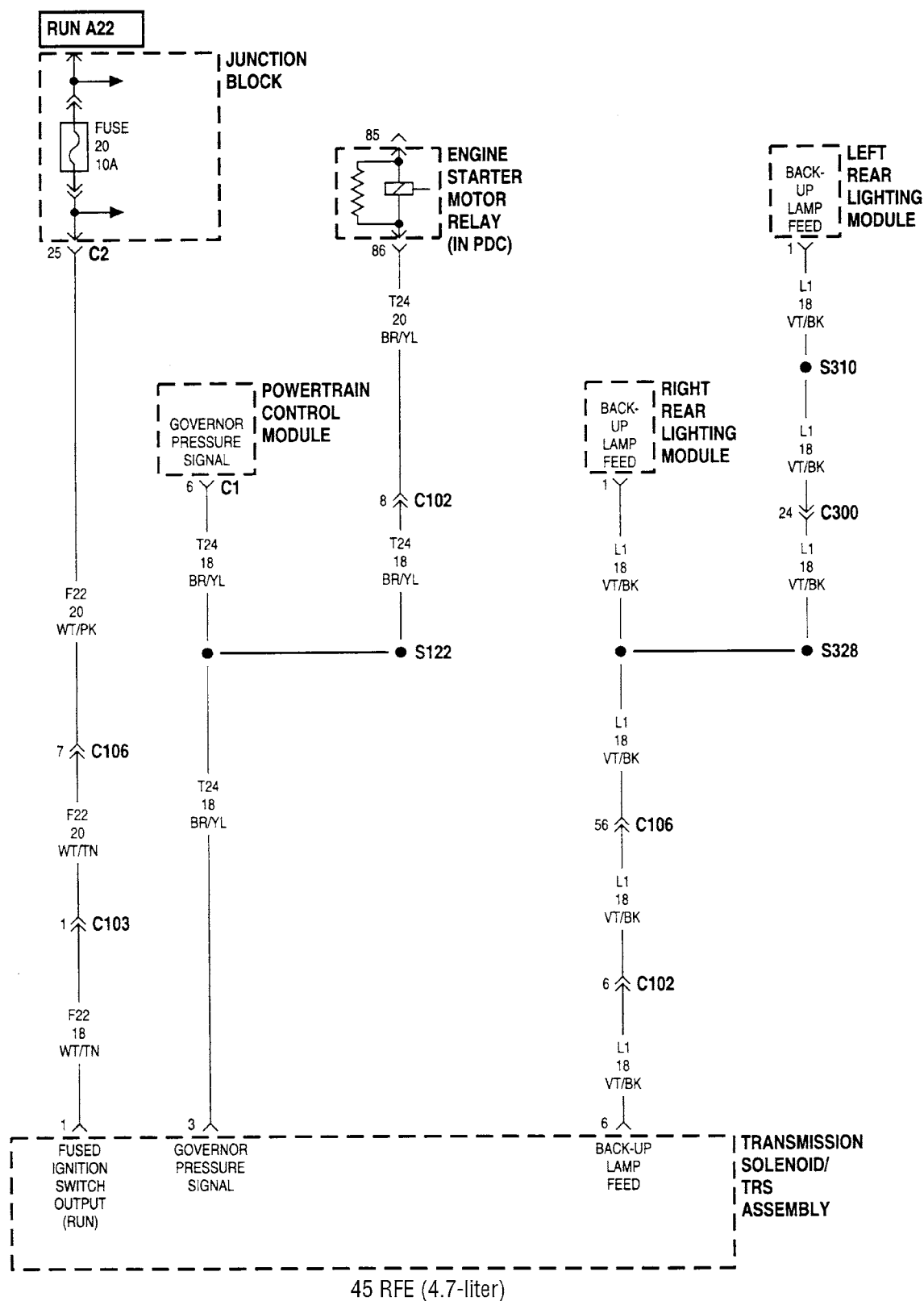
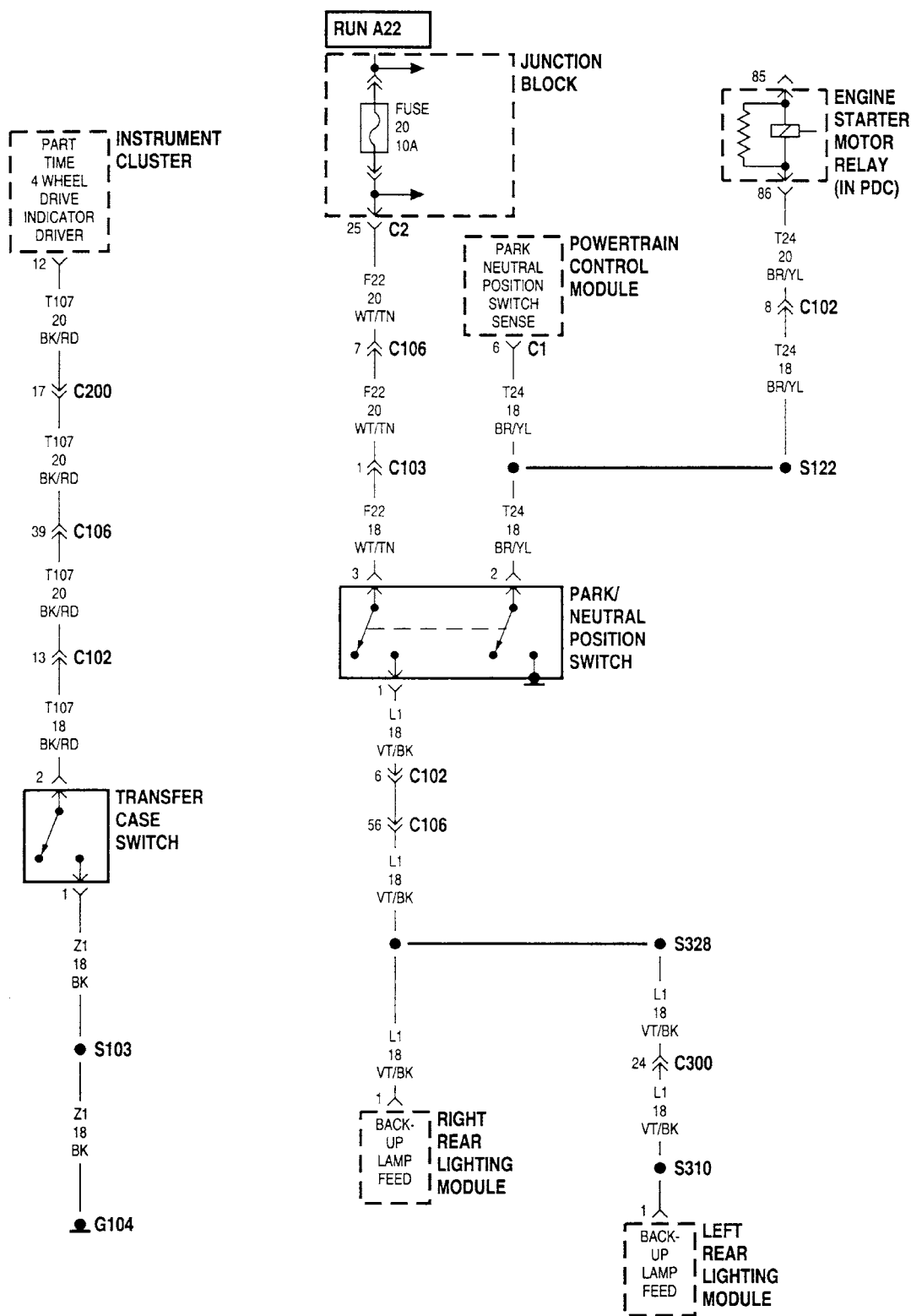


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 3 of 11)



42 RE (4.0-liter)

Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (Sheet 4 of 11)

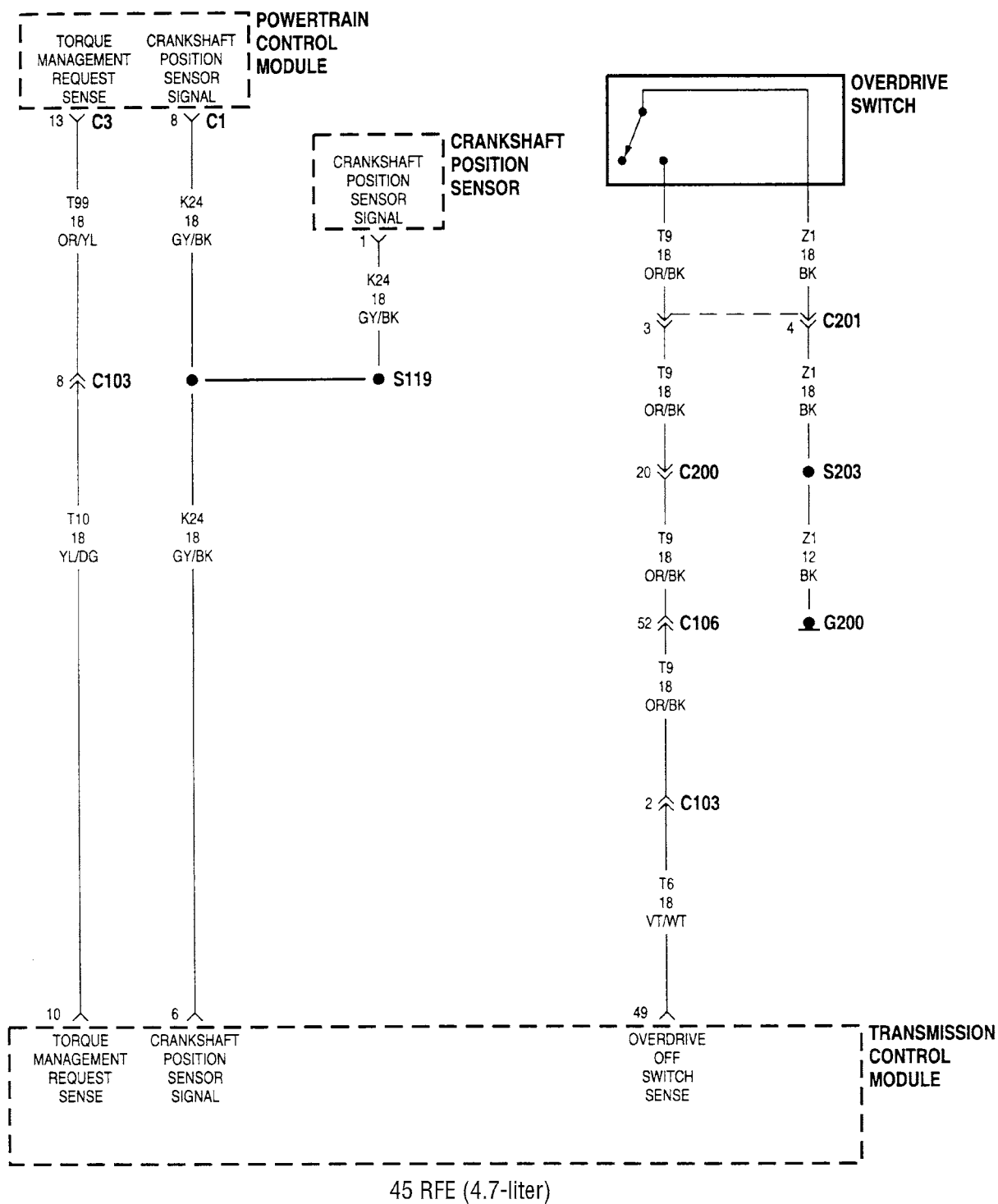


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 5 of 11)

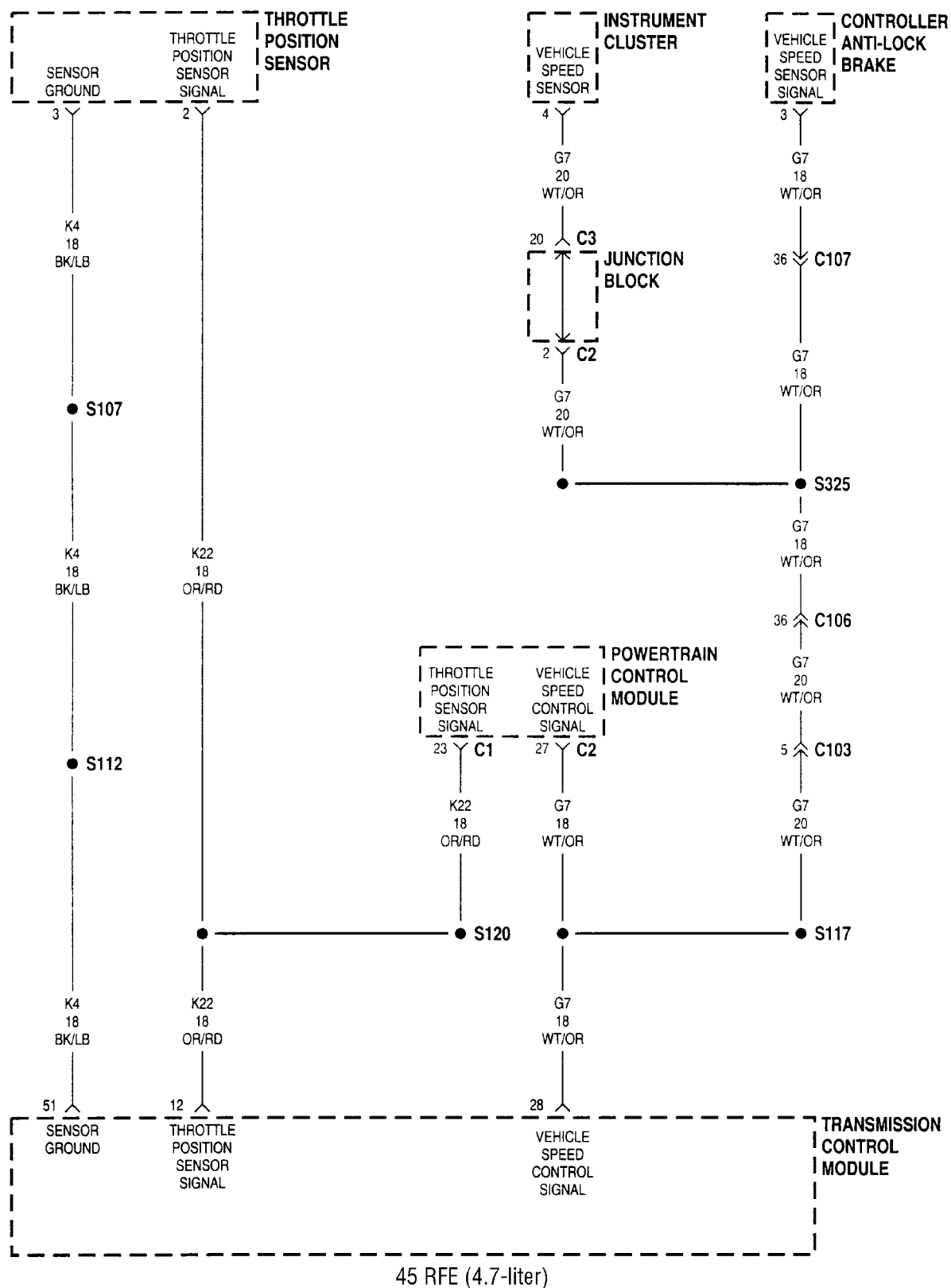


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (Sheet 6 of 11)

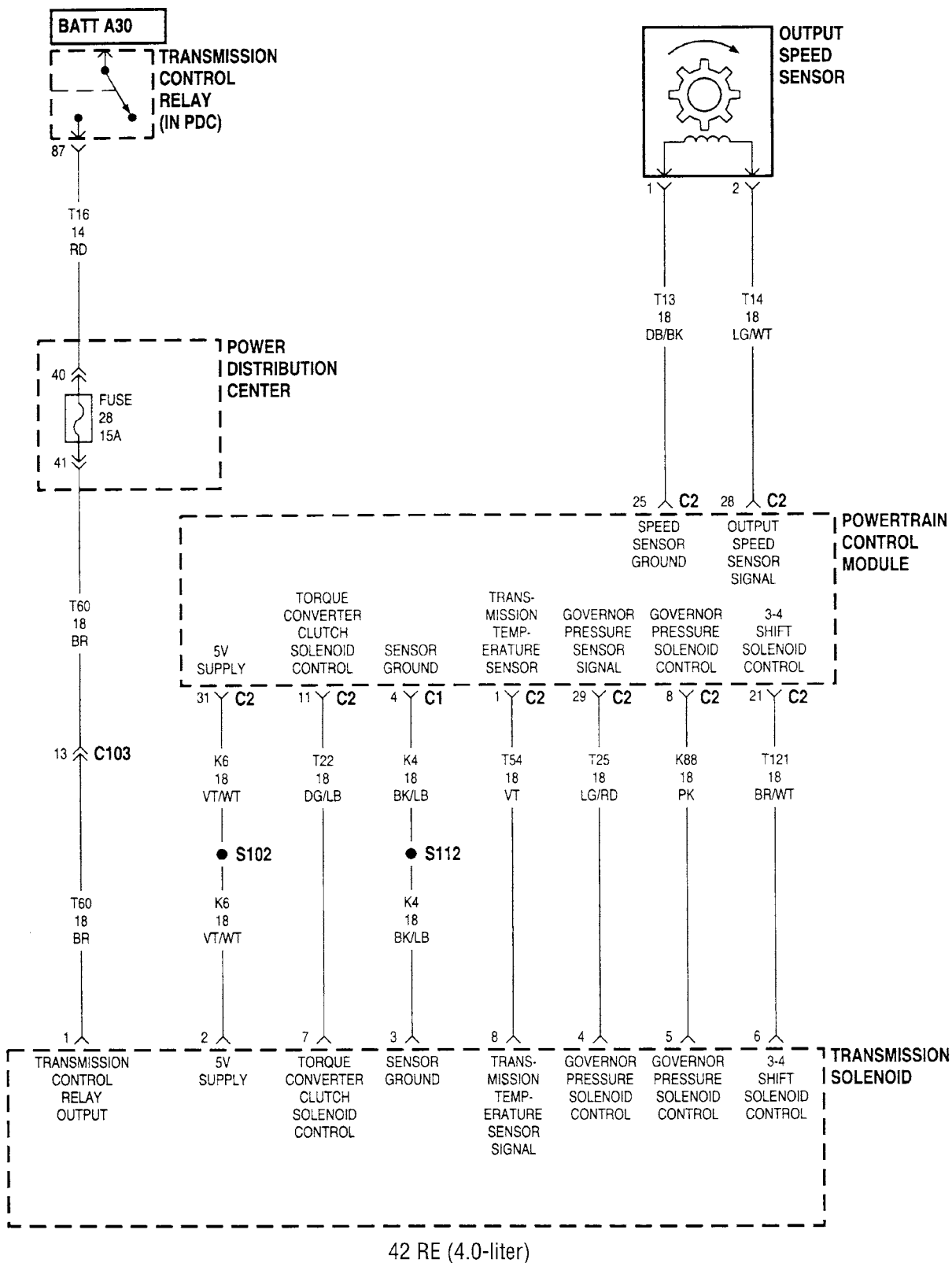


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 7 of 11)

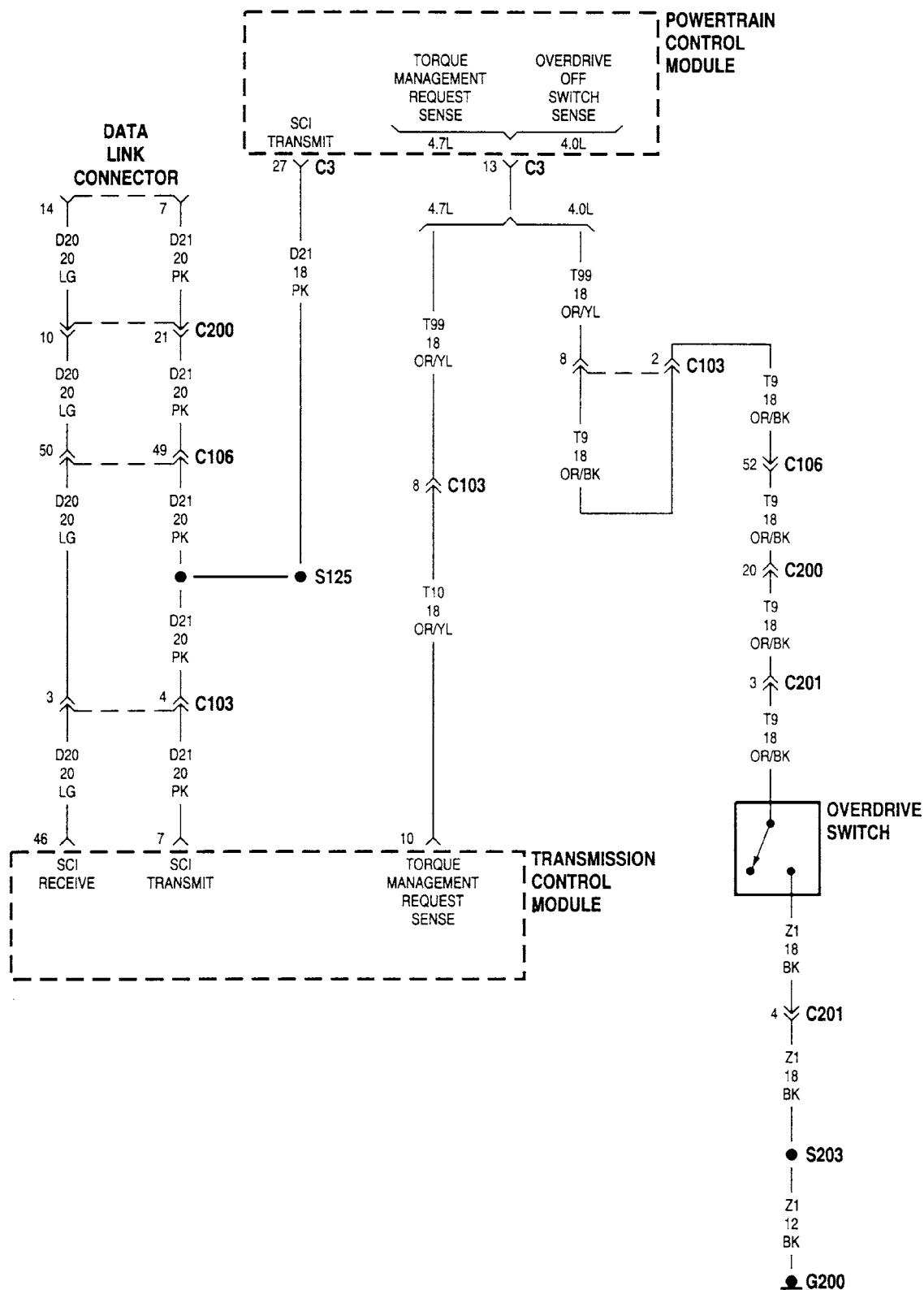


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 8 of 11)

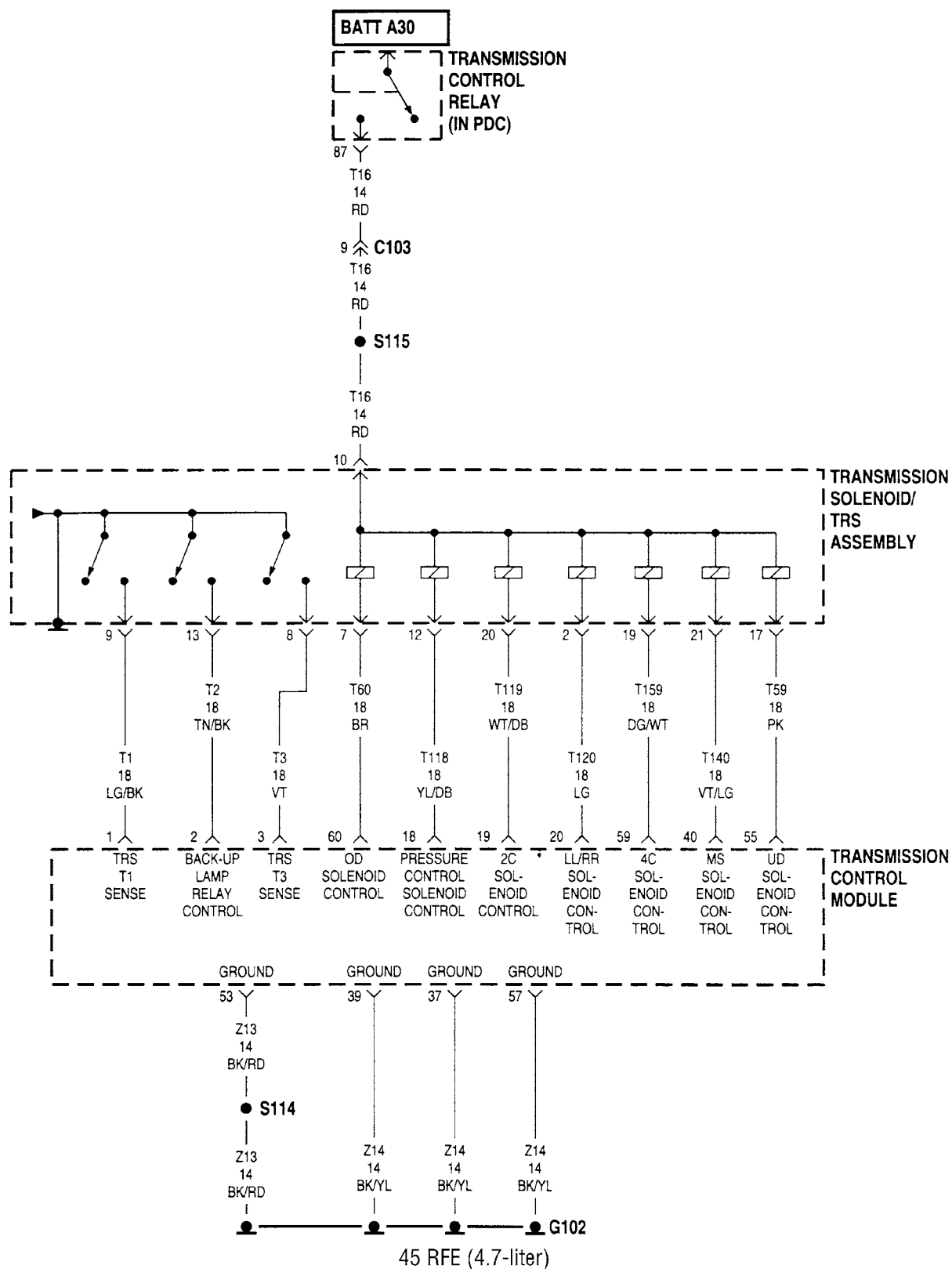


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 9 of 11)

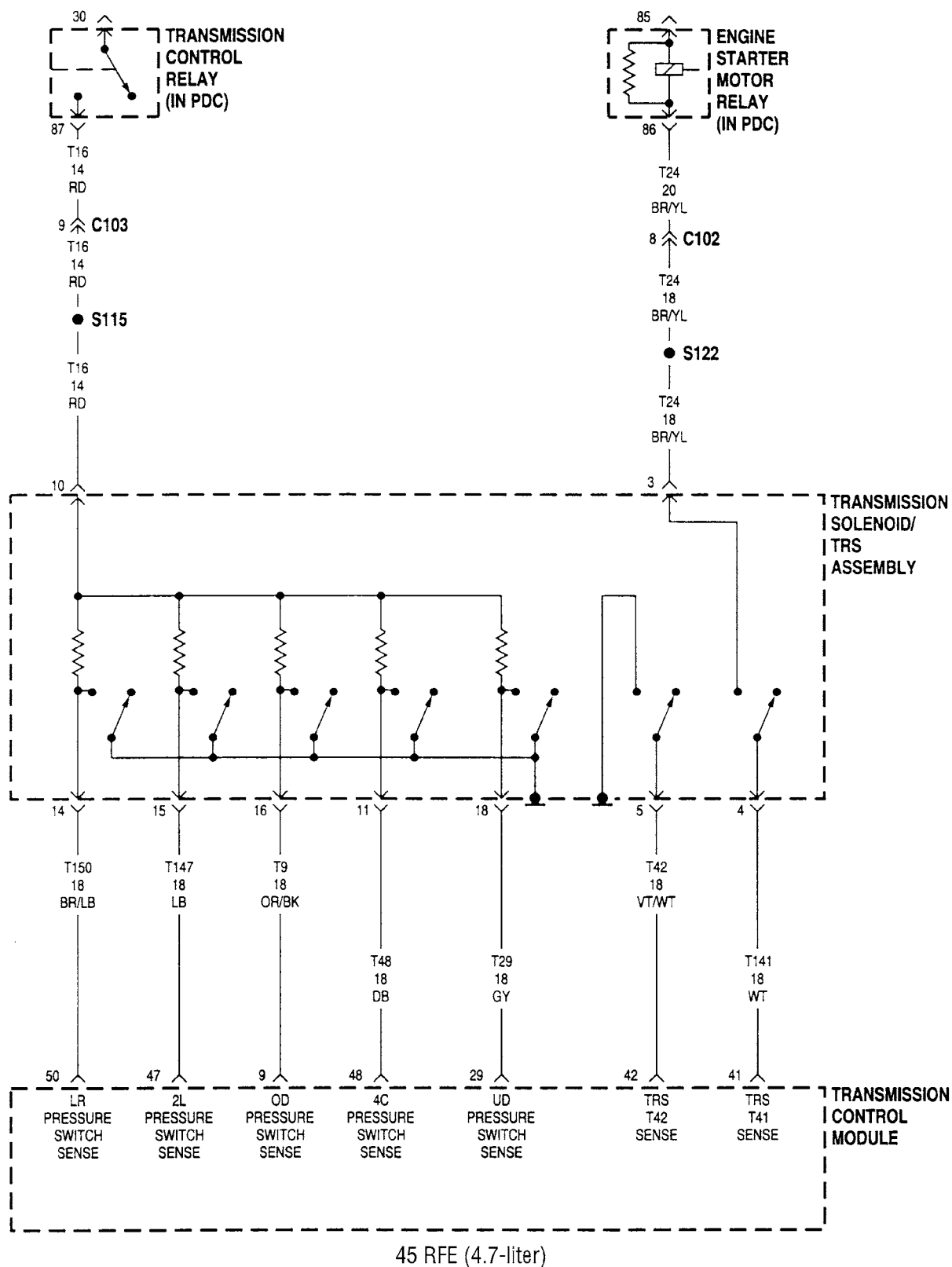


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 10 of 11)

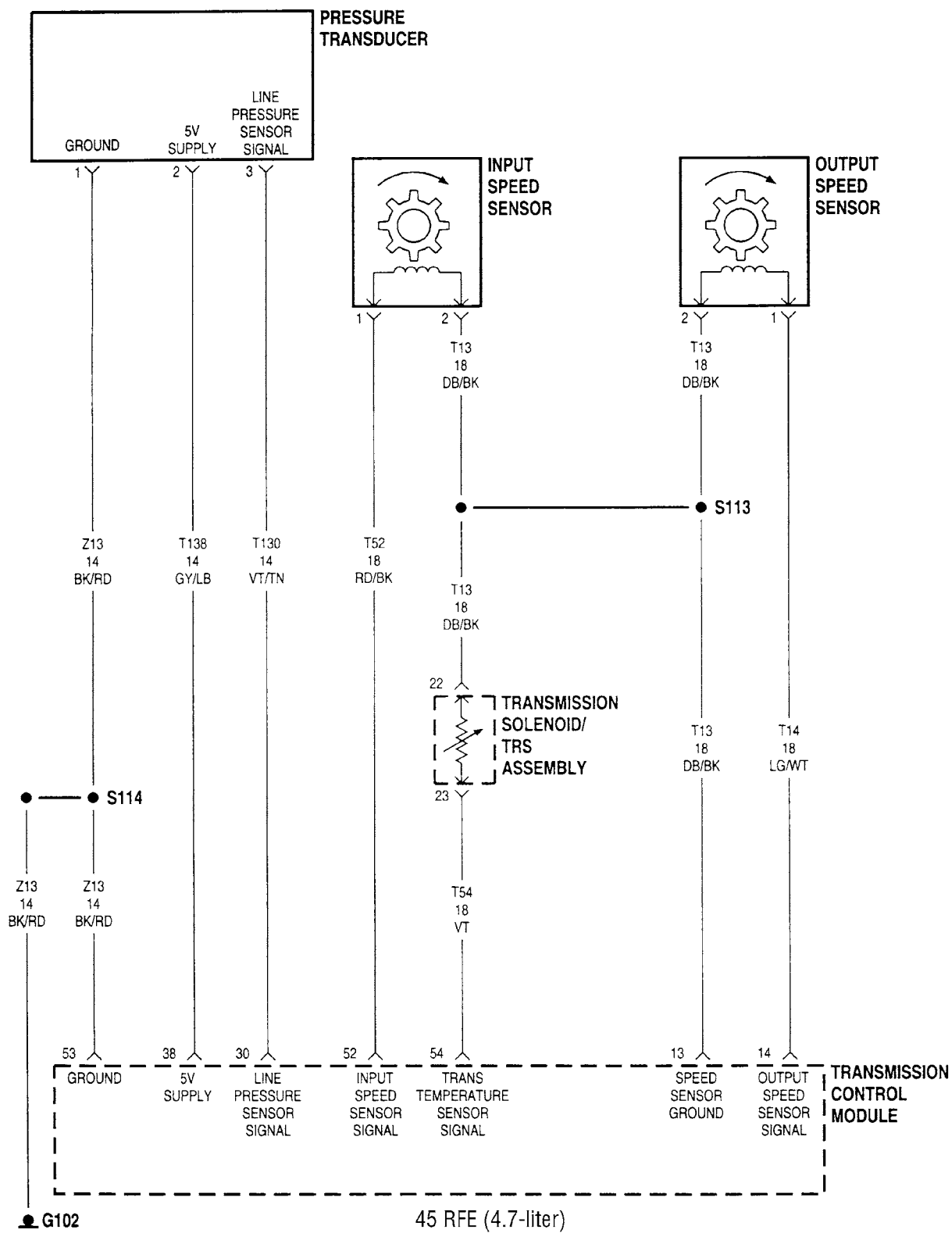


Figure C1048-1 1999-2000 Grand Cherokee wiring diagram (sheet 11 of 11)

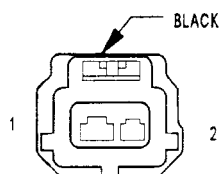
TRANSMISSION CONTROL RELAY, 1999–2001

CAV	CIRCUIT	FUNCTION
30	A30 14RD/WT	FUSED B(+)
85	K210 18BK/YL	GENERATOR SOURCE (4.0L)
85	K210 18BK/YL	GROUND (4.7L)
86	K30 20PK/YL	TRANSMISSION RELAY CONTROL
87	T16 14RD	TRANSMISSION CONTROL RELAY OUTPUT
87A	-	-

0

TRANSMISSION CONTROL RELAY, 2002–2004

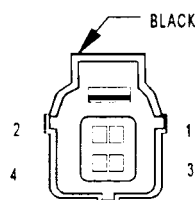
CAV	CIRCUIT	FUNCTION
30	A30 14RD/WT	FUSED B(+)
85	K125 18WT/DB	GENERATOR SOURCE (4.0L)
85	K307 18BK	GROUND (4.7L)
86	K30 20PK/YL	TRANSMISSION RELAY CONTROL
87	T16 14RD	TRANSMISSION CONTROL RELAY OUTPUT
87A	-	-



**INPUT
SPEED
SENSOR
(4.7L)**

INPUT SPEED SENSOR (4.7L) - BLACK 2 WAY

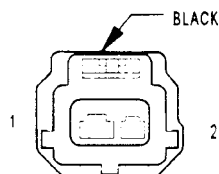
CAV	CIRCUIT	FUNCTION
1	T52 18RD/BK	INPUT SPEED SENSOR SIGNAL
2	T13 18DB/BK	SPEED SENSOR GROUND



**LINE
PRESSURE
SENSOR
(4.7L)**

LINE PRESSURE SENSOR (4.7L) - BLACK 4 WAY

CAV	CIRCUIT	FUNCTION
1	Z13 14BK/RD	GROUND (1999-2001)
1	Z114 14BK/LG	GROUND (2002-2003)
2	T138 14GY/LB	5V SUPPLY
3	T130 14VT/TN	LINE PRESSURE SENSOR SIGNAL
4	-	-



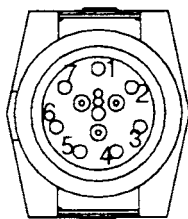
**OUTPUT
SPEED
SENSOR
(4.7L)**

OUTPUT SPEED SENSOR (4.7L) - BLACK 2 WAY

CAV	CIRCUIT	FUNCTION
1	T14 18LG/WT	OUTPUT SPEED SENSOR SIGNAL
2	T13 18DB/BK	SPEED SENSOR GROUND

Figure C1048-2 1999–2004 Grand Cherokee connector diagram (sheet 1 of 10)

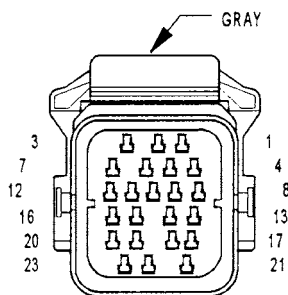
1999–2001 Models Only



TRANSMISSION
SOLENOID
(4.0L)

TRANSMISSION SOLENOID (4.0L) - 8 WAY

CAV	CIRCUIT	FUNCTION
1	T60 18BR	FUSED TRANSMISSION CONTROL RELAY OUTPUT
2	K6 18VT/WT	5V SUPPLY
3	K4 18BK/LB	SENSOR GROUND
4	T25 18LG/RD	GOVERNOR PRESSURE SENSOR SIGNAL
5	K88 18PK	GOVERNOR PRESSURE SOLENOID CONTROL
6	T121 18BR/WT	3-4 SHIFT SOLENOID CONTROL
7	T22 18DG/LB	TORQUE CONVERTER CLUTCH SOLENOID CONTROL
8	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL

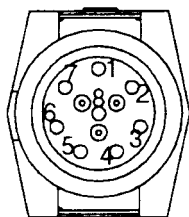


TRANSMISSION
SOLENOID/
TRS
ASSEMBLY
(4.7L)

TRANSMISSION SOLENOID/TRS ASSEMBLY (4.7L) - GRAY 23 WAY

CAV	CIRCUIT	FUNCTION
1	F22 18WT/TN	FUSED IGNITION SWITCH OUTPUT (RUN)
2	T120 18LG	LR SOLENOID CONTROL
3	T24 18BR/YL	ENGINE STARTER MOTOR RELAY CONTROL
4	T141 18VT/WT	TRS T41 SENSE
5	T42 18VT/WT	TRS T42 SENSE
6	L1 18VT/BK	BACK-UP LAMP FEED
7	T60 18BR	OVERDRIVE SOLENOID CONTROL
8	T3 18VT	TRS T3 SENSE
9	T1 18LG/BK	TRS T1 SENSE
10	T6 14RD	TRANSMISSION CONTROL RELAY OUTPUT
11	T48 18DB	4C PRESSURE SWITCH SENSE
12	T118 18YL/DB	PRESSURE CONTROL SOLENOID CONTROL
13	T2 18TN/BK	TRS T2 SENSE
14	T150 18BR/LB	LR PRESSURE SWITCH SENSE
15	T147 18LB	2C PRESSURE SWITCH SENSE
16	T9 18OR/BK	OVERDRIVE PRESSURE SWITCH SENSE
17	T59 18PK	UNDERDRIVE SOLENOID CONTROL
18	T29 18GY	UNDERDRIVE PRESSURE SWITCH SENSE
19	T159 18DG/WT	4C SOLENOID CONTROL
20	T119 18WT/DB	2C SOLENOID CONTROL
21	T140 18VT/LG	MS SOLENOID CONTROL
22	T13 18DB/BK	SPEED SENSOR GROUND
23	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL

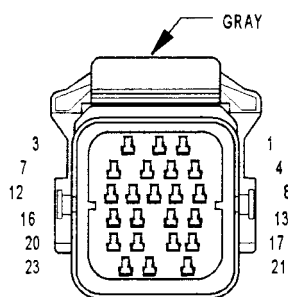
Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 2 of 10)

2002–04 Model Only

**TRANSMISSION
SOLENOID
(4.0L)**

TRANSMISSION SOLENOID (4.0L) - 8 WAY

CAV	CIRCUIT	FUNCTION
1	T15 18LG	FUSED TRANSMISSION CONTROL RELAY OUTPUT
2	K6 18VT/WT	5V SUPPLY
3	K4 18BK/LB	SENSOR GROUND
4	T25 18LG/RD	GOVERNOR PRESSURE SENSOR SIGNAL
5	K88 18PK	GOVERNOR PRESSURE SOLENOID CONTROL
6	T60 18BR	3-4 SHIFT SOLENOID CONTROL
7	T20 18LB	TORQUE CONVERTER CLUTCH SOLENOID CONTROL
8	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL

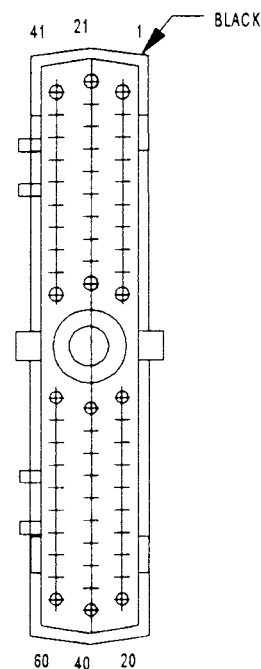


**TRANSMISSION
SOLENOID/
TRS
ASSEMBLY
(4.7L)**

TRANSMISSION SOLENOID/TRS ASSEMBLY (4.7L) - GRAY 23 WAY

CAV	CIRCUIT	FUNCTION
1	F22 18WT/PK	FUSED IGNITION SWITCH OUTPUT (RUN)
2	T120 18LG	LR SOLENOID CONTROL
3	T24 18BK/WT	PARK/NEUTRAL POSITION SWITCH SENSE (T41)
4	T141 18WT	TRS T41 SENSE
5	T42 18VT/WT	TRS T42 SENSE
6	L1 18VT/BK	BACK-UP LAMP FEED
7	T60 18BR	OVERDRIVE SOLENOID CONTROL
8	T3 18VT	TRS T3 SENSE
9	T1 18LG/BK	TRS T1 SENSE
10	T6 14RD	TRANSMISSION CONTROL RELAY OUTPUT
11	T48 18DB	4C PRESSURE SWITCH SENSE
12	T118 18YL/DB	PRESSURE CONTROL SOLENOID CONTROL
13	T2 18TN/BK	TRS T2 SENSE
14	T150 18BR/LB	LR PRESSURE SWITCH SENSE
15	T147 18LB	2C PRESSURE SWITCH SENSE
16	T9 18OR/BK	OVERDRIVE PRESSURE SWITCH SENSE
17	T59 18PK	UNDERDRIVE SOLENOID CONTROL
18	T29 18GY	UNDERDRIVE PRESSURE SWITCH SENSE
19	T159 18DG/WT	4C SOLENOID CONTROL
20	T119 18WT/DB	2C SOLENOID CONTROL
21	T140 18VT/LG	MS SOLENOID CONTROL
22	T13 18DB/BK	SPEED SENSOR GROUND
23	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL

Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 3 of 10)

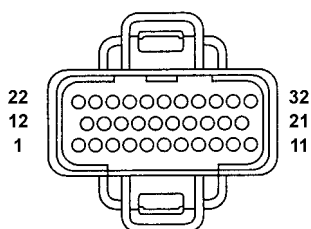


TRANSMISSION
CONTROL
MODULE
(4.7L)

TRANSMISSION CONTROL MODULE (4.7L) - BLACK 60

CAV	CIRCUIT	FUNCTION
1	T1 18LG/BK	TRS T1 SENSE
2	T2 18TN/BK	TRS T2 SENSE
3	T3 18VT	TRS T3 SENSE
4	-	-
5	-	-
6	K24 18GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL
7	D21 20PK	SCI TRANSMIT
8	F45 18YL/RD	FUSED IGNITION SWITCH OUTPUT (ST)
9	T9 18OR/BK	OVERDRIVE PRESSURE SWITCH SENSE
10	T10 18YL/DG	TORQUE MANAGEMENT REQUEST SENSE
11	F991 18OR/BK	FUSED IGNITION SWITCH OUTPUT (ST-RUN)
12	K22 18OR/RD	THROTTLE POSITION SENSOR SIGNAL
13	T13 18DB/BK	SPEED SENSOR GROUND
14	T14 18LG/WT	OUTPUT SPEED SENSOR SIGNAL
15	K30 18PK/YL	TRANSMISSION CONTROL RELAY CONTROL
16	T16 14RD	TRANSMISSION CONTROL RELAY OUTPUT
17	T16 14RD	TRANSMISSION CONTROL RELAY OUTPUT
18	T118 18YL/DB	PRESSURE CONTROL SOLENOID CONTROL
19	T119 18WT/DB	2C SOLENOID CONTROL
20	T120 18LG	LR SOLENOID CONTROL
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
29	T29 18GY	UNDERDRIVE PRESSURE SWITCH SENSE
30	T130 14VT/TN	LINE PRESSURE SENSOR SIGNAL
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	T16 14RD	TRANSMISSION CONTROL RELAY OUTPUT
37	Z14 14BK/YL	GROUND
38	T138 14GY/LB	5V SUPPLY
39	Z14 14BK/YL	GROUND
40	T140 18VT	MS SOLENOID CONTROL
41	T141 18WT	TRS T41 SENSE
42	T42 18VT/WT	TRS T41 SENSE
43	D25 18YL/VT	PCI BUS
44	-	-
45	-	-
46	D20 20LG	SCI RECEIVE
47	T147 18LB	2C PRESSURE SWITCH SENSE
48	T48 18DB	4C PRESSURE SWITCH SENSE
49	T6 18VT/WT	OVERDRIVE OFF SWITCH SENSE
50	T150 18BR/LB	LR PRESSURE SWITCH SENSE
51	K4 18BK/LB	SENSOR GROUND
52	T52 18RD/BK	INPUT SPEED SENSOR SIGNAL
53	Z13 14BK/RD	GROUND
54	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL
55	T59 18PK	UNDERDRIVE SOLENOID CONTROL
56	A30 14RD/WT	FUSED B(+)
57	Z14 14BK/YL	GROUND
58	-	-
59	T159 18DG/WT	4C SOLENOID CONTROL
60	T60 18BR	OVERDRIVE SOLENOID CONTROL

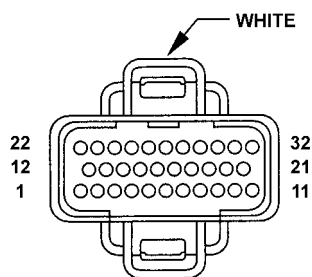
Figure C1048-2 1999-2004 Grand Cherokee connector diagram (sheet 4 of 10)



POWERTRAIN CONTROL MODULE – C1

1999–2001 PCM CONNECTOR C1					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	K93 16TN/OR•	Coil driver #3	17	K7 18OR	5 volt supply
	K93 16TN/OR†		18	K44 18TN/YL	CMP sensor signal
2	F991 18OR/DB	Fused ignition (START/RUN)	19	K39 18GY/RD•	IAC number 1 driver
3	K94 14TN/LG	Coil driver #4		K39 18GY/BK†	
4	K4 18BK/LB	Sensor ground	20	K59 18VT/BK	IAC number 4 driver
5	K96 14TN/LB	Coil driver #6	21	K95 14TN/DG	Coil driver #6
6	T24 18BR/YL	PNP switch sense	22	A7 14RD/BK	Fused B+
7	K91 16TN/RD•	Coil driver #1	23	K22 18OR/RD	TPS sensor signal
	K91 14TN/RD†		24	K241 18LG/RD	Oxygen sensor 1/1 signal
8	K24 18GY/BK	CKP sensor signal	25	K41 18BK/DG	Oxygen sensor 1/2 signal
9	K98 14LB/RD	Coil driver #8	26	K141 18TN/WT	Oxygen sensor 2/1 signal*
10	K60 18YL/BK	IAC number 2 driver	27	K1 18DG/OR	MAP sensor signal
11	K40 18BR/WT	IAC number 3 driver	28	—	—
12	—	—	29	K341 18PK/WT	Oxygen sensor 2/2 signal*
13	—	—	30	—	—
14	—	—	31	Z11 14BK/WT	Ground
15	K21 18BK/RD	IAT sensor signal	32	Z12 14BK/TN	
16	K2 18TN/BK	ECT sensor signal			
• 4.0L engine only † 4.7L engine only. * California models only					

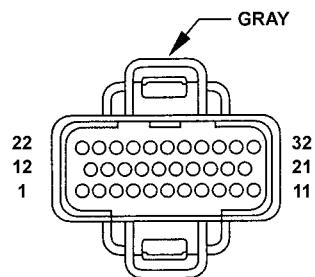
Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 5 of 10)



POWERTRAIN CONTROL MODULE – C2

1999–2001 PCM CONNECTOR C2					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	T54 18VT•	TFT sensor signal	17	C24 18DB/PK	Radiator fan relay control
2	K17 18 DB/TN	Fuel injector driver #7	18	—	—
3	—	—	19	—	—
4	K11 18WT/DB	Fuel injector driver #1	20	—	—
5	K13 18YL/WT	Fuel injector driver #3	21	T121 18BR/WT•	3–4 shift solenoid control
6	K38 18GY	Fuel injector driver #5	22	—	—
7	K97 14BR†	Coil driver #7	23	G60 18GY/YL	Engine oil pressure sensor
8	K88 18PK•	Governor pressure solenoid control	24	—	—
9	K92 16TN/PK•	Coil driver #2	25	T13 18DB/BK•	Speed sensor ground
	K92 14TN/PK†		26	—	—
10	K20 18DG	Generator field driver	27	G7 18WT/OR	Vehicle speed sensor signal
11	T22 18DG/LB	TCC solenoid control	28	T14 18LG/WT	Output speed sensor signal
12	K58 18BR/DB	Fuel injector driver #6	29	T25 18LG/RD	Governor pressure signal
13	K18 18DB/GY†	Fuel injector driver #8	30	K30 18PK/YL	Transmission relay control
14	—	—	31	K6 18VT/WT	5 volt supply
15	K12 18TN	Fuel injector driver #2	32	—	—
16	K14 18LB/BR	Fuel injector driver #4			
• 4.0L engine only † 4.7L engine only. * California models only					

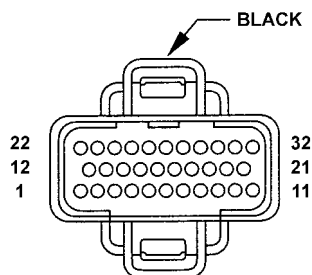
Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 6 of 10)



POWERTRAIN CONTROL MODULE – C3

1999–2001 PCM CONNECTOR C3					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	C13 18BR/OR	A/C clutch relay control	17	—	—
2	—	—	18	—	—
3	K51 18DB/YL	ASD relay control	19	K31 18BR	Fuel pump relay control
4	V36 18TN/RD	S/C vacuum solenoid control	20	K51 18PK/BK	EVAP solenoid control
5	V35 18LG/RD	S/C vent solenoid control	21	—	—
6	—	—	22	C18 18DB	A/C pressure signal
7	—	—	23	—	—
8	K151 18GY	O2S 1/2 2/2 heater signal	24	K29 18WT/PK	Brake switch sense
9	K251 18LB	O2S 1/1 2/1 heater signal	25	K21 18LB/RD	Generator source
10	K106 18WT/DG	Leak detection pump solenoid control	26	K226 118LB/YL	Fuel level sensor signal
11	V32 18OR/DG	S/C power supply	27	D21 18PK	SCI transmit
12	F42 18DG/LG	Fused ASD relay output	28	—	—
13	T99 18OR/YL	Torque management request	29	D31 18LG/DG	SCI receive
14	K107 18OR/PK	Leak detection pump switch	30	D25 18YL/VT	PCI bus
15	K25 18VT/LG	Battery temperature signal	31	—	—
16	—	—	32	V37 18RD/LG	S/C switch signal

Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 7 of 10)

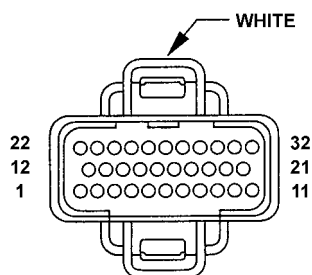


POWERTRAIN CONTROL MODULE – C1

2002–04 PCM CONNECTOR C1					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	K93 14TN/OR	Coil driver #3	17	K7 18OR	5 volt supply
2	F991 18OR/DB	Fused ignition (START/RUN)	18	K44 18TN/YL	CMP sensor signal
3	K94 14TN/LG†	Coil driver #4	19	K39 18GY/BK	IAC number 1driver
4	K4 18BK/LB	Sensor ground	20	K59 18VT/BK	IAC number 4driver
5	K96 14TN/LB†	Coil driver #6	21	K95 14TN/DG†	Coil driver #6
6	T41 18BK/WT	PNP switch sense	22	A7 14RD/BK	Fused B+
7	K91 16TN/RD	Coil driver #1	23	K22 18OR/RD	TPS sensor signal
8	K24 18GY/BK	CKP sensor signal	24	K41 18BK/DG	Oxygen sensor 1/1 signal
9	K98 14LB/RD†	Coil driver #8	25	K141 18TN/WT	Oxygen sensor 1/2 signal
10	K60 18YL/BK	IAC number 2 driver	26	K141 18LG/RD•	Oxygen sensor 2/1 signal
11	K40 18BR/WT	IAC number 3 driver	27	K1 18DG/RD	MAP sensor signal
12	—	—	28	—	—
13	—	—	29	K341 18TN/WT•	Oxygen sensor 2/2 signal
14	K77 18LG/BK	Transfer case position input	30	—	—
15	K21 18BK/RD	IAT sensor signal	31	Z82 14BK/WT	Ground
16	K2 18TN/BK	ECT sensor signal	32	Z81 14BK/TN	

• 4.0L engine only, except built-up-export.
† 4.7L engine only.

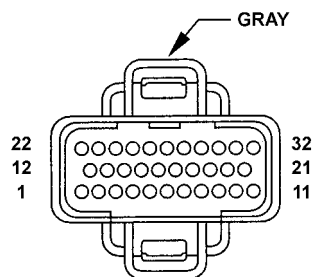
Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 8 of 10)



POWERTRAIN CONTROL MODULE – C2

2002–04 PCM CONNECTOR C2					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	T54 18VT•	TFT sensor signal	17	K173 18LG	Radiator fan relay control
2	K26 18VT†	Fuel injector driver #7	18	—	—
3	—	—	19	C18 18DB	A/C pressure signal
4	K11 18WT/DB	Fuel injector driver #1	20	—	—
5	K13 18YL/WT	Fuel injector driver #3	21	T60 18BR•	3–4 shift solenoid control
6	K38 18GY	Fuel injector driver #5	22	—	—
7	K97 14BR†	Coil driver #7	23	G60 18GY/YL	Engine oil pressure sensor
8	K88 18PK•	Governor pressure solenoid	24	—	—
9	K92 14TN/PK	Coil driver #2	25	T13 18DB/BK•	Speed sensor ground
10	K20 18DG	Generator field driver	26	—	—
11	T20 18LB•	TCC solenoid control	27	B22 18DG/YL	Vehicle speed sensor signal
12	K58 18BR/DB	Fuel injector driver #6	28	T14 18LG/WT•	Output speed sensor signal
13	K28 18GY/LB†	Fuel injector driver #8	29	T25 18LG/RD	Governor pressure signal
14	—	—	30	K30 18PK/YL•	Transmission relay control
15	K12 18TN	Fuel injector driver #2	31	K6 18VT/BK	5 volt supply
16	K14 18LB/BR	Fuel injector driver #4	32	—	—
• 4.0L engine only † 4.7L engine only.					

Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 9 of 10)



POWERTRAIN CONTROL MODULE – C3

2002–04 PCM CONNECTOR C3					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	C13 18BR/OR	A/C clutch relay control	17	—	—
2	—	—	18	K142 18GY/BK†	Knock sensor 2 signal
3	K51 18DB/YL	ASD relay control	19	K31 18BR	Fuel pump relay control
4	V36 18TN/RD	S/C vacuum solenoid control	20	K52 18PK/BK	EVAP solenoid control
5	V35 18LG/RD	S/C vent solenoid control	21	—	—
6	—	—	22	—	—
7	K42 18DB/LG†	Knock sensor 1 signal	23	—	—
8	K99 18BR/OR	O2S 1/1 heater control	24	K29 18WT/PK	Brake switch signal
9	K251 18RD/YL•	Downstream O2S control	25	K125 18WT/DB	Generator source
10	K106 18WT/DG	Leak detection pump solenoid control	26	K226 118LB/YL	Fuel level sensor signal
11	V32 18OR/DG	S/C power supply	27	D21 18PK	SCI transmit
12	F42 18DG/LG	Fused ASD relay output	28	—	—
13	T10 18YL/DG†¹	Torque management request	29	D32 18LG	SCI receive (LHD)
	T10 18DG/LG†²			D32 18 LG/DG	SCI receive (RHD)
	T6 18OR/WT•¹	Overdrive off switch sense	30	D25 18VT?YL	PCI bus
	T6 18OR/BK•²		31	—	—
14	K107 18OR/PK	Leak detection pump switch	32	V37 18RD/LG	S/C switch signal
15	K25 18VT/LG	Battery temperature signal			
16	K299 18BR/WT	O2S 1/2 heater control			
• 4.0L engine only, except built-up-export. •¹ 4.0L engine, left-hand drive (LHD). •² 4.0L engine, right-hand drive (RHD). † 4.7L high output engine only. †¹ 4.7L engine, RHD. †² 4.7L engine, LHD					

Figure C1048–2 1999–2004 Grand Cherokee connector diagram (sheet 10 of 10)

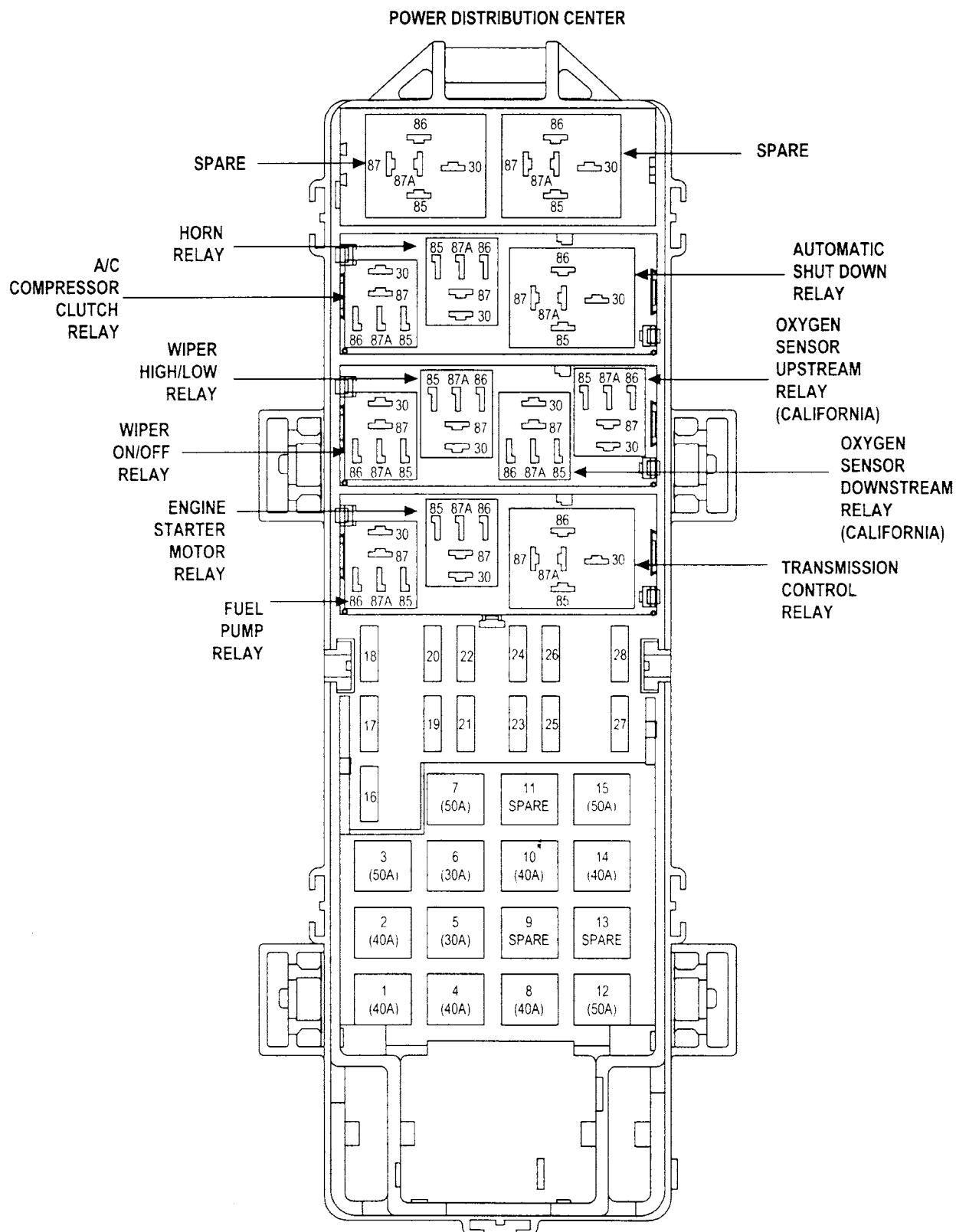


Figure C1048-3 1999–2004 Grand Cherokee power distribution diagram

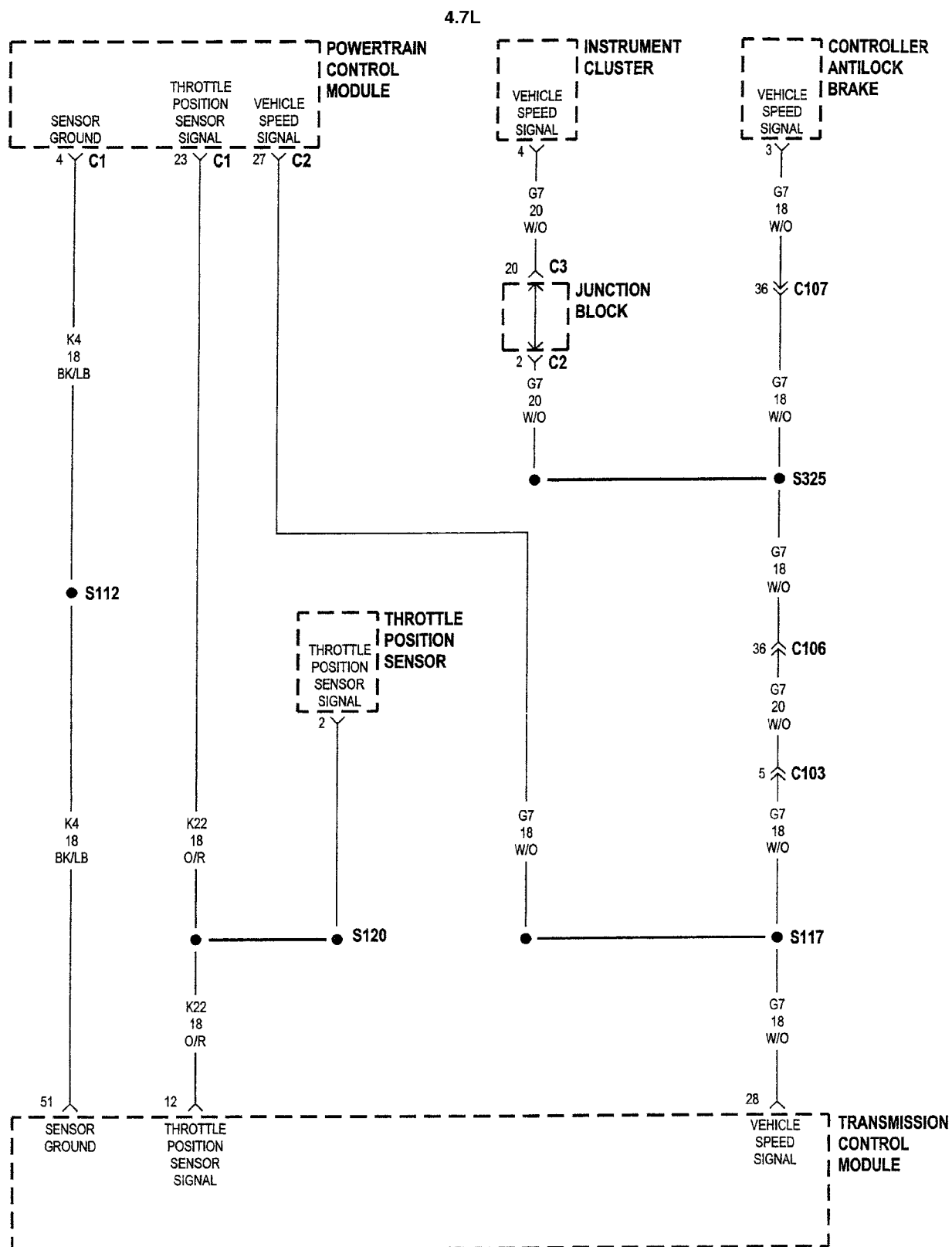


Figure C1048-4 2001–2004 Grand Cherokee 4.7L wiring diagram

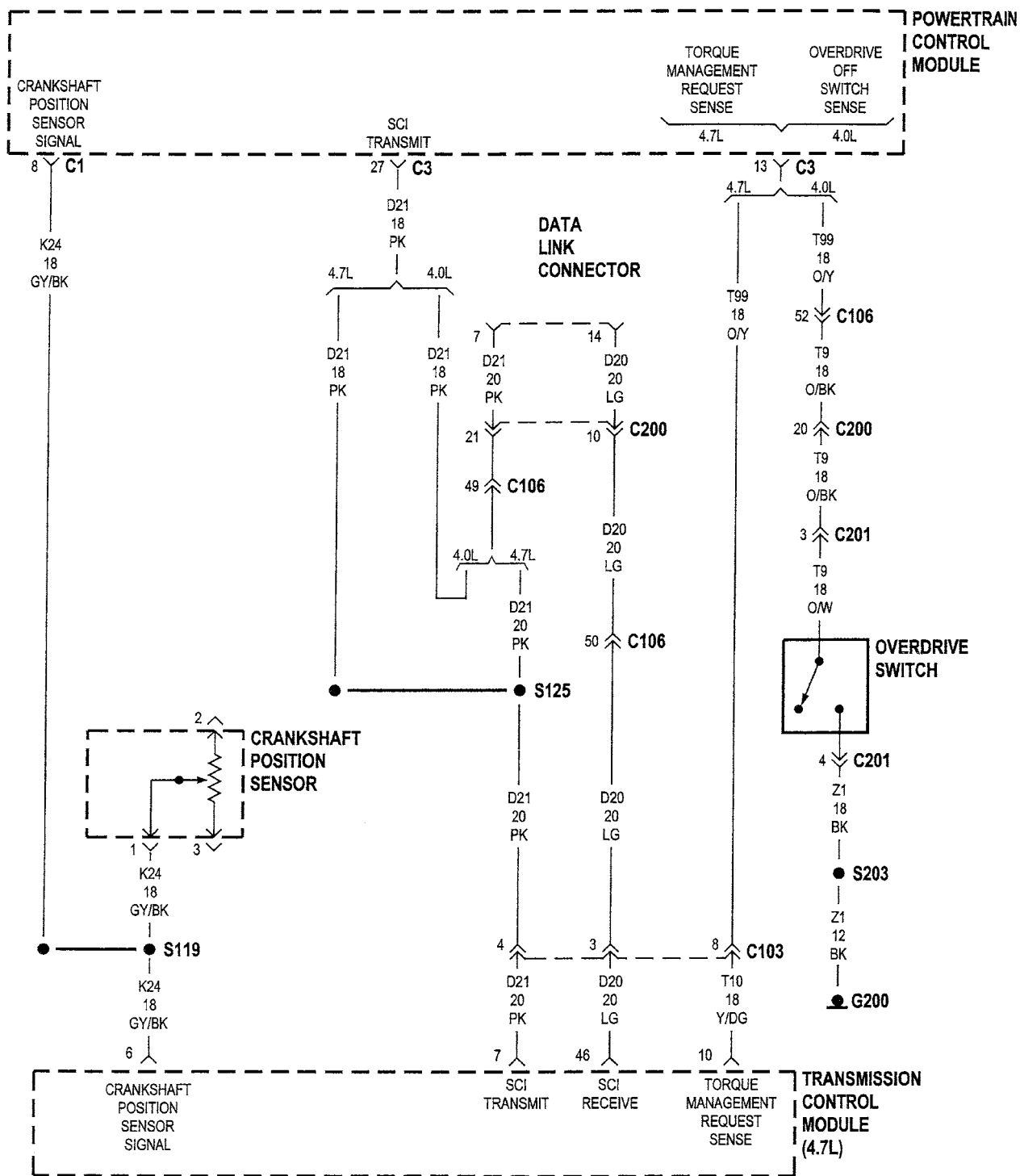


Figure C1048-5 2001-2004 Grand Cherokee wiring diagram (all engines)

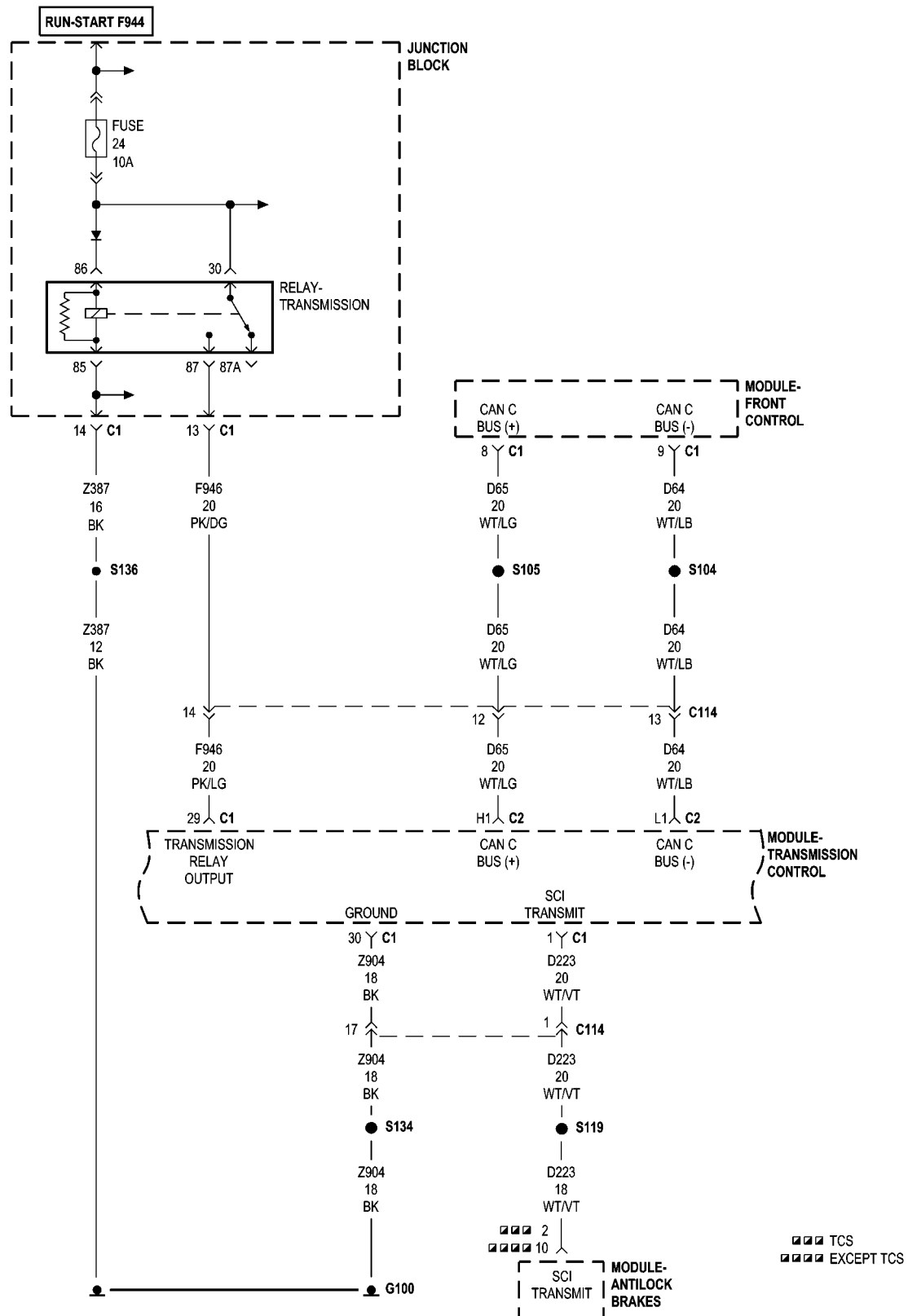


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 1 of 7)

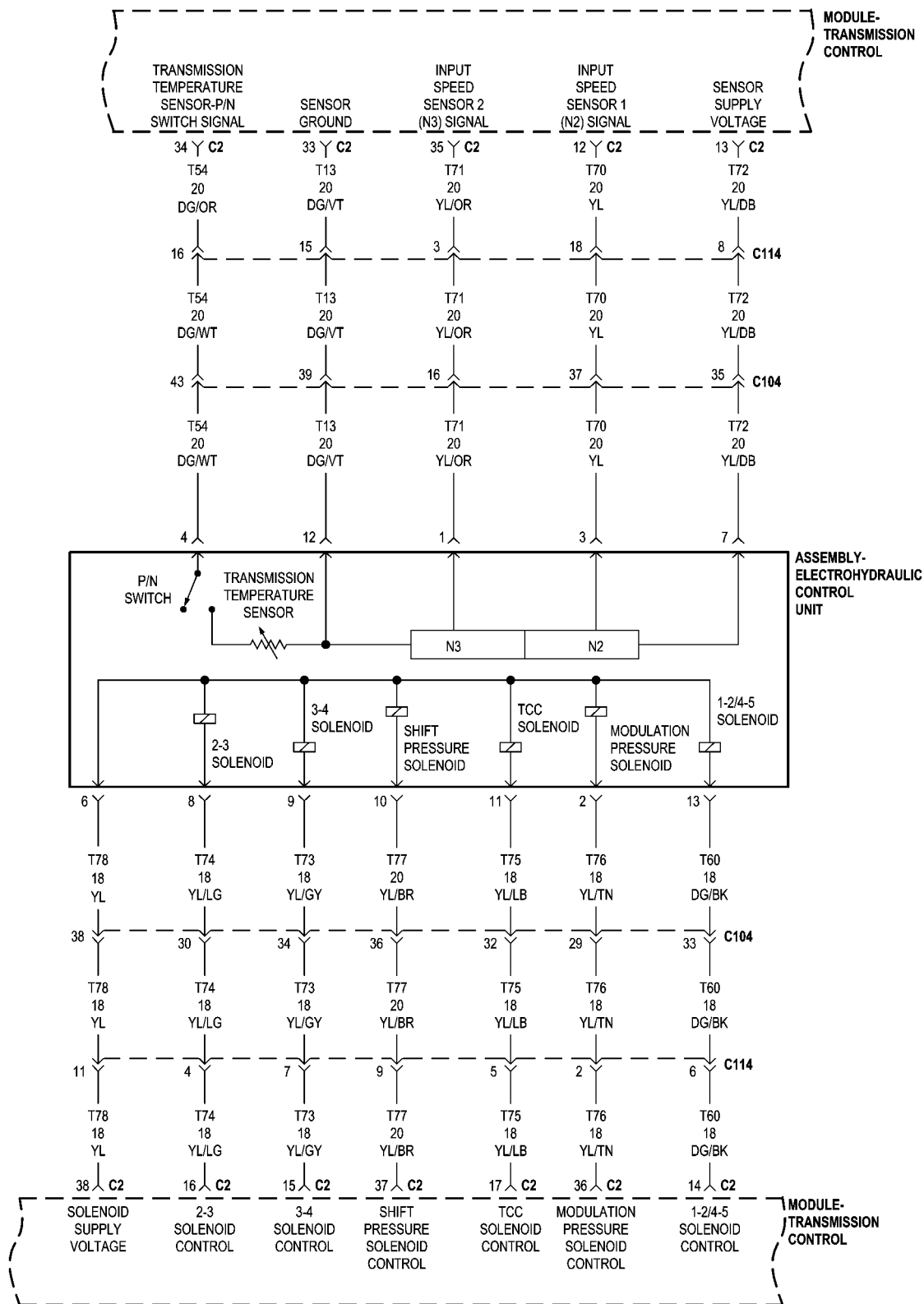


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 2 of 7)

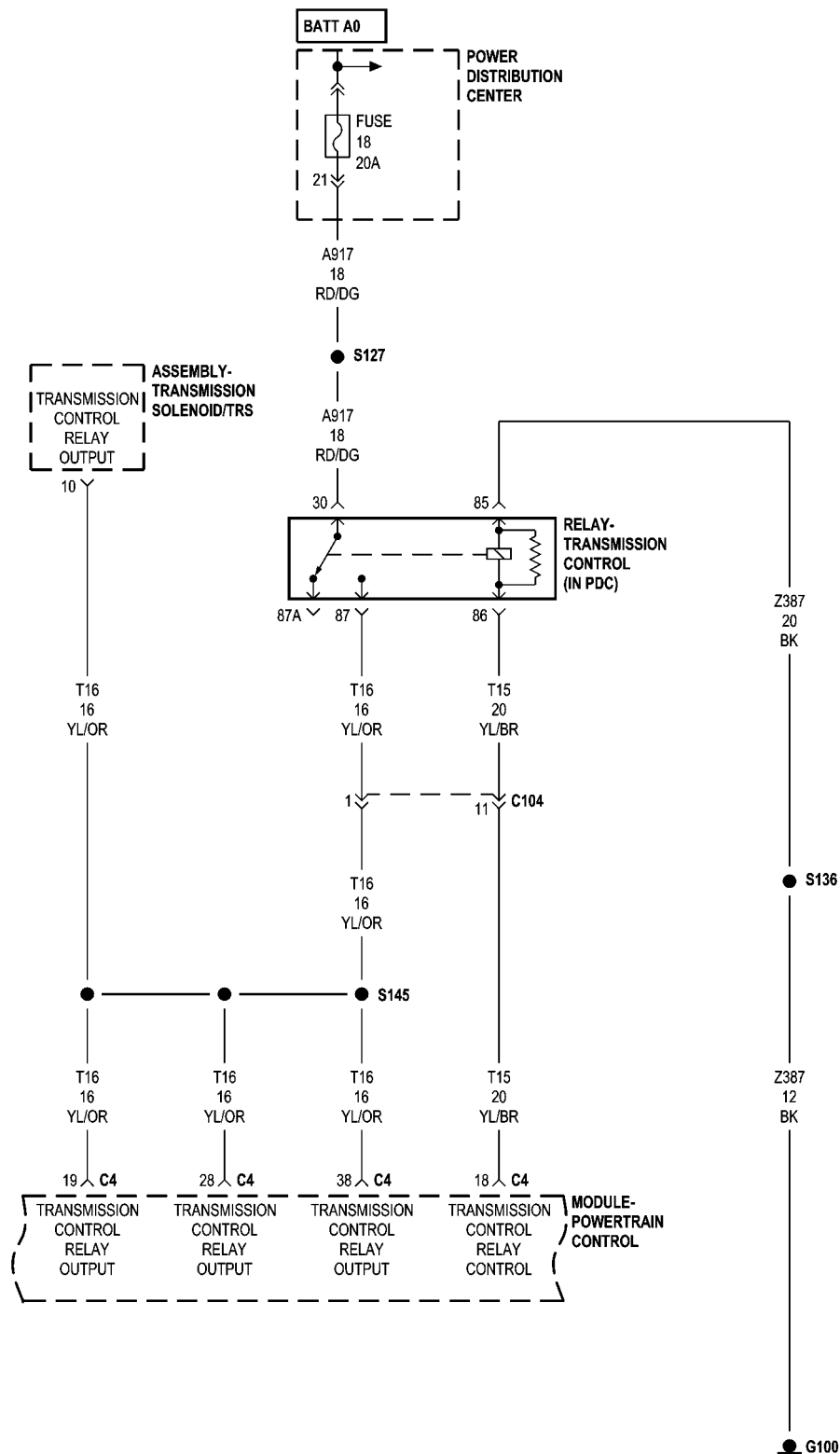


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 3 of 7)

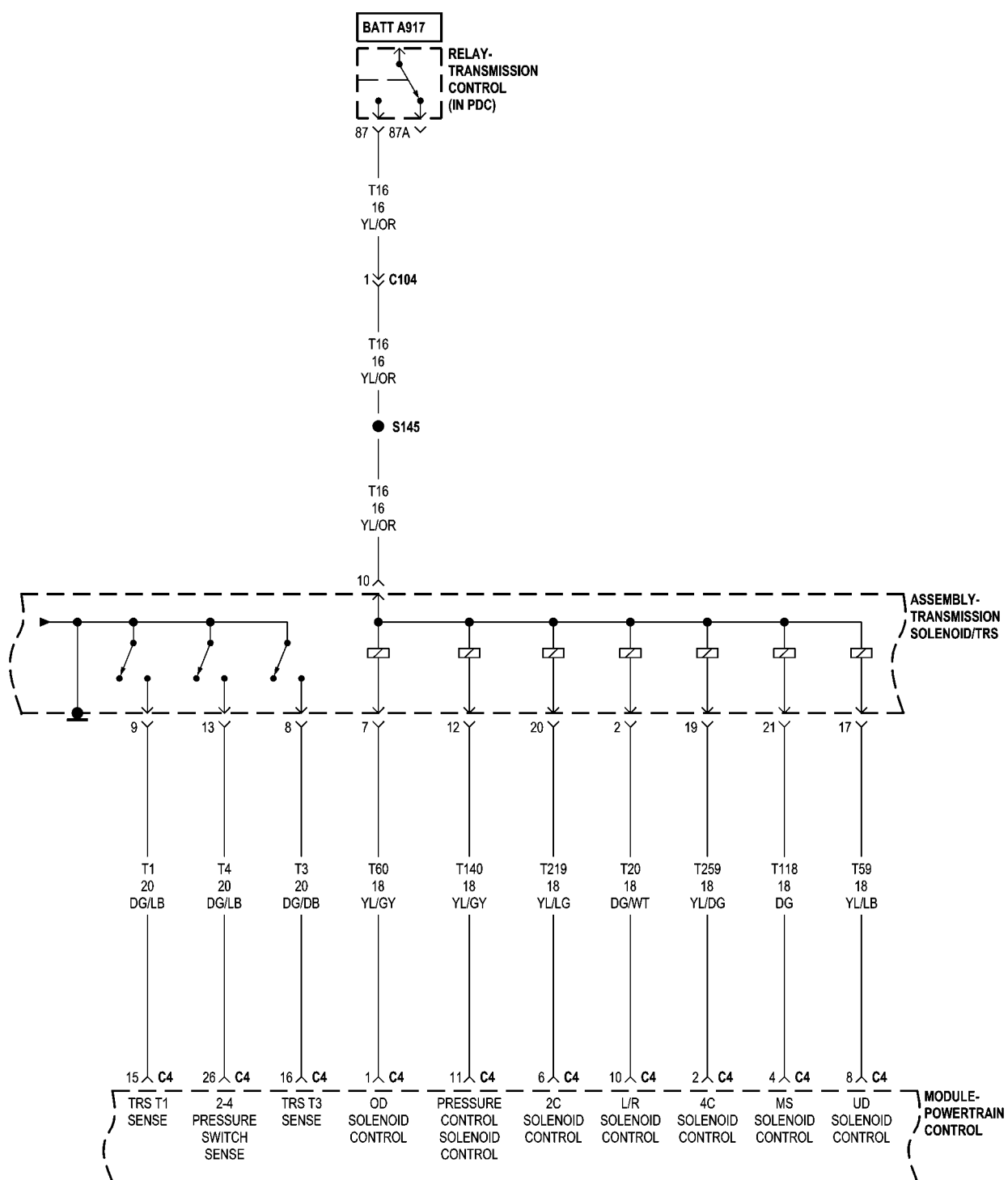


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 4 of 7)

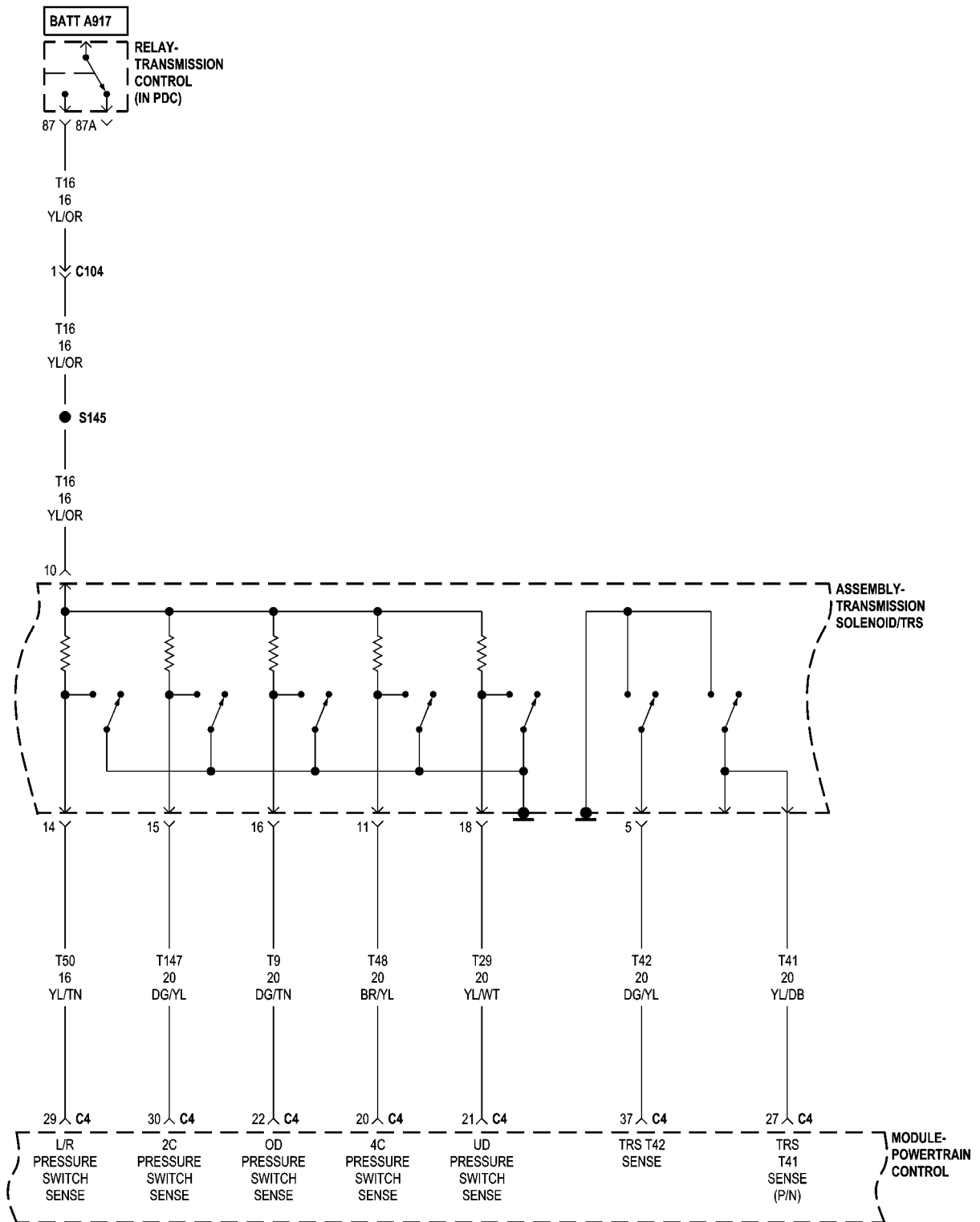


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 5 of 7)

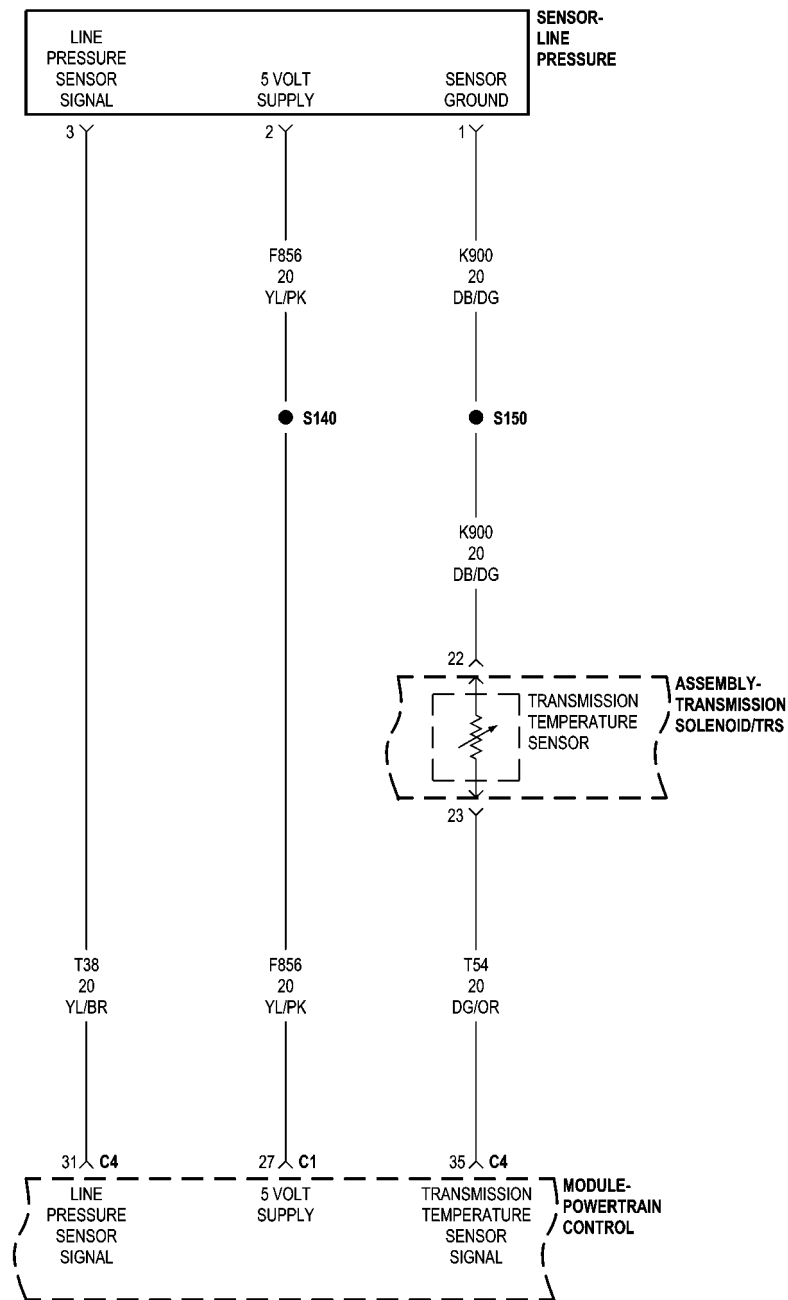


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 6 of 7)

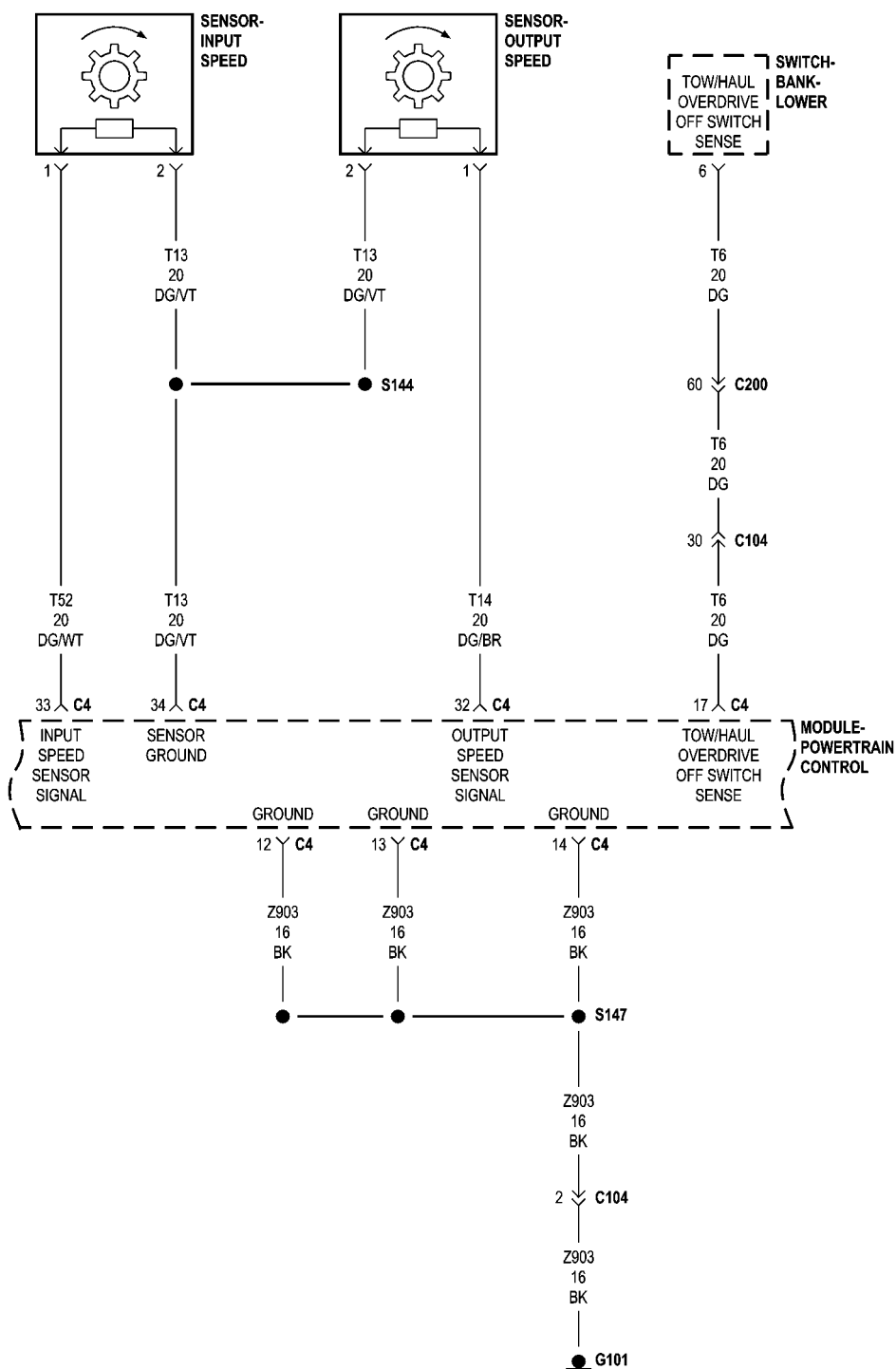
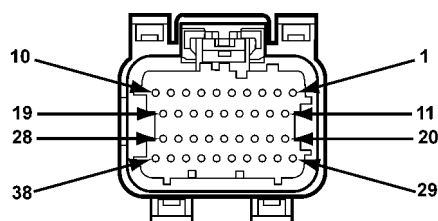
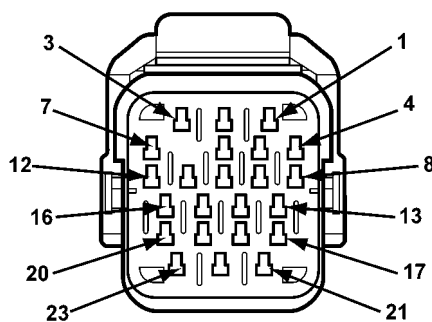


Figure C1048-6 2005 Grand Cherokee wiring diagram and connector pinouts (sheet 7 of 7)



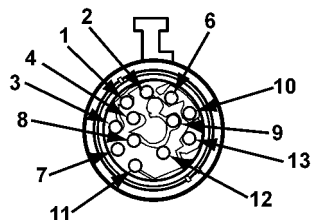
Powertrain Control Module C4—Black/Green 38-pin					
CAV	CIRCUIT	FUNCTION	CAV	CIRCUIT	FUNCTION
1	T60 18 YL/GY	OD solenoid control	20	T48 20 BR/YL	4C pressure switch
2	T259 18 YL/DG	4C solenoid control	21	T29 20 YL/WT	UD pressure switch
3	—	—	22	T9 20 DG/TN	OD pressure switch
4	T118 18 DG	MS solenoid control	23	—	—
5	—	—	24	—	—
6	T219 18 YL/LG	2–4 solenoid control	25	—	—
7	—	—	26	T4 20 DG/LB	TRS T2 sense
8	T59 18 YL/LB	UD solenoid control	27	T41 20 YL/DB	TRS T41 sense (P/N)
9	—	—	28	T16 18 YL/OR	Transmission control relay output
10	T20 18 DG/WT	Low-reverse solenoid control	29	T50 16 YL/TN	Low-reverse pressure switch
11	T140 18 YL/GY	PCS control	30	T47 20 DG/YL	2C pressure switch
12	Z903 16 BK	Ground	31	T38 20 YL/BR	Line pressure sensor signal
13			32	T14 20 DG/BR	Output speed sensor signal
14			33	T55 20 DG/WT	Input speed sensor signal
15	T1 20 DG/LB	TRS T1 sense	34	T13 20 DG/VT	Speed sensor ground
16	T3 20 DG/DB	TRS T3 sense	35	T54 20 DG/OR	TFT sensor signal
17	T6 20 DG	Tow/haul OD off switch sense	36	—	—
18	T15 20 YL/BR	Transmission relay control	37	T42 20 DG/YL	TRS T42 sense
19	T16 16 YL/OR	Transmission relay output	38	T16 18 YL/OR	Transmission relay output

Figure C1048-7 2005 Grand Cherokee connector pinouts (sheet 1 of 4)

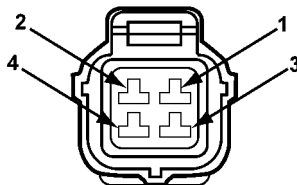


Transmission Solenoid Assembly—23-pin		
Pin	Circuit	Function
1	—	—
2	T20 18 DG/WT	Low/reverse solenoid control
3	—	—
4	T41 20 YL/DB	TRS T41 sense
5	T42 20 DG/YL	TRS T42 sense
6	—	—
7	T60 18 YL/GY	Overdrive solenoid control
8	T13 20 DG/DB	TRS T3 sense
9	T1 20 DG/LB	TRS T1 sense
10	T16 16 YL/OR	Transmission control relay output
11	T48 20 BR/YL	4C pressure switch sense
12	T140 18 YL/GY	Pressure control solenoid control
13	T4 20 DG/LB	2–4 pressure switch sense
14	T50 16 YL/TN	Low reverse pressure switch sense
15	T147 20DG/YL	2C pressure switch sense
16	T9 20 DG/TN	Overdrive pressure switch sense
17	T59 18 YL/LB	Underdrive solenoid control
18	T29 20YL/WT	Underdrive pressure switch sense
19	T259 18 YL/DG	4C solenoid control
20	T219 18 YL/LG	2C solenoid control
21	T118 18 DG	MS solenoid control
22	K900 20 DB/DG	Sensor ground
23	T54 20 DG/OR	Transmission temperature sensor signal

Figure C1048–7 2005 Grand Cherokee connector pinouts (sheet 2 of 4)

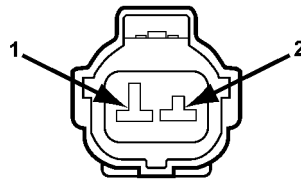


Transmission Throttle Valve Assembly—6-pin		
Pin	Circuit	Function
1	T71 20 YL/OR	Input speed sensor 2 signal (N3)
2	T76 20 YL/TN	Modulation pressure solenoid control
3	T70 20 YL	Input speed sensor 1 signal (N2)
4	T54 20 DG/WT	Transmission temperature sensor, P/N switch signal
5	—	—
6	T78 18 YL	Sensor supply voltage
7	T72 20 YL/DB	
8	T74 18 YL/LG	2–3 solenoid control
9	T73 18 YL/GY	3–4 solenoid control
10	T77 20 YL/BR	Shift pressure solenoid control
11	T75 18 YL/LB	TCC solenoid control
12	T13 20 DG/VT	Sensor ground
13	T60 18 DG/BK	1–2/4–5 solenoid control

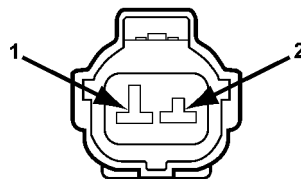


Line Pressure Sensor—4-pin		
Pin	Circuit	Function
1	K900 20 DB/DG	Sensor ground
2	F856 20 YL/PK	5-volt supply
3	T38 20 YL/BR	Line pressure sensor signal
4	—	—

Figure C1048–7 2005 Grand Cherokee connector pinouts (sheet 3 of 4)



Input Speed Sensor Connector—Black 2-pin		
Pin	Circuit	Function
1	T52 20 DG/OR	Input speed sensor signal
2	T13 20 DG/VT	Speed sensor ground



Output Speed Sensor Connector—Dark Blue 2-pin		
Pin	Circuit	Function
1	T14 20 DG/BR	Output speed sensor signal
2	T13 20 DG/VT	Speed sensor ground

Figure C1048–7 2005 Grand Cherokee connector pinouts (sheet 4 of 4)