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Cruise Control

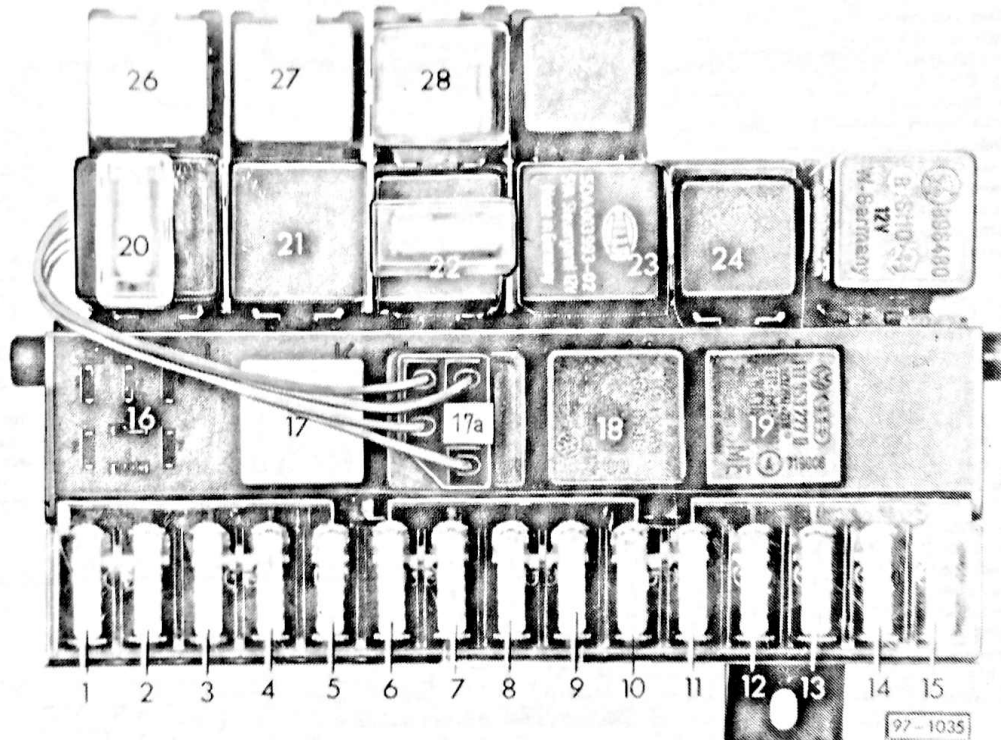
1982	197
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1982 Quantum CIS

CAUTION —

Before starting to work on any part of electrical system, disconnect battery ground cable.

Fuse/Relay Panel, Front Side



Fuses:

1	— Low-beam (left)	8A
2	— Low-beam (right)	8A
3	— High-beam (left)	8A
4	— High-beam (right)	8A
5	— Rear-window defogger, outside mirror (heated)	16A
6	— Stop lights, turn signal light	8A
7	— Cigarette lighter, radio, glove-comp. light, power door lock	8A
8	— Turn-signal light	8A
9	— Backup lights, horn	8A
10	— Fresh-air blower	16A
11	— Wiper motor, Upshift indicator horn, outside mirror (electronically operated)	8A
12	— License-plate light	8A
13	— Parking light (right), side-marker light (right)	8A
14	— Parking light (left), side-marker light (left)	8A
15	— Rear window-wiper motor	8A

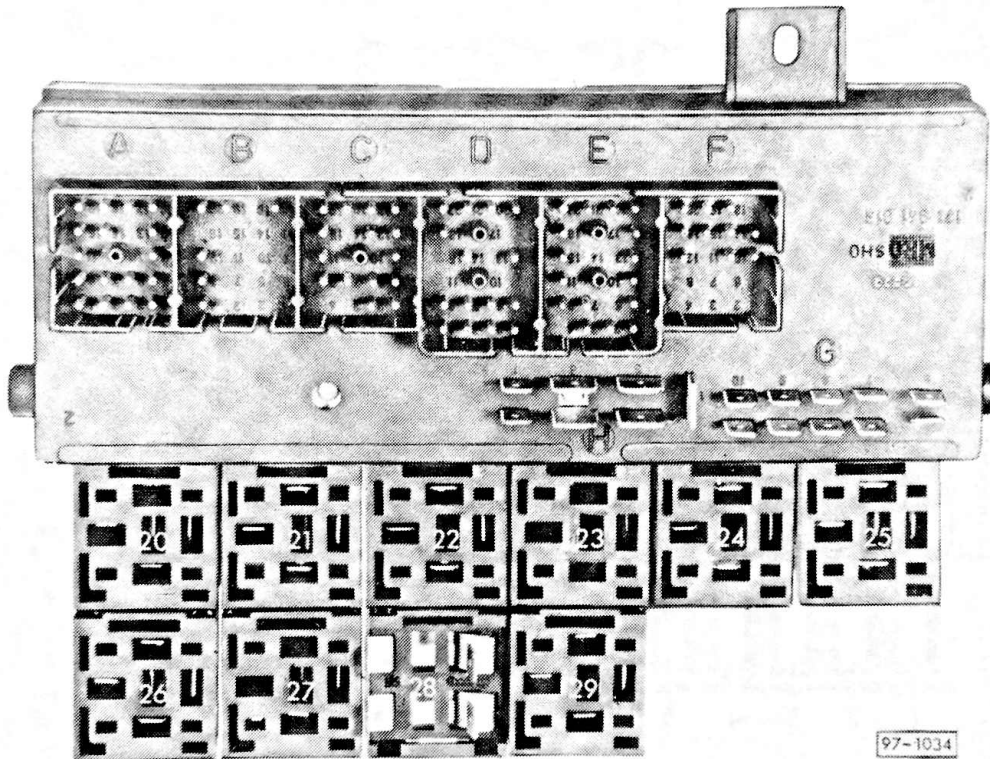
Relays and control units:

16	— Vacant
17	— Load-reduction relay (X-contact)
17a	— Adapter for fuel-pump relay
18	— Intermittent wiper/washer relay
19	— Emergency-flasher relay
20	— Fuel-pump relay
21	— Rear-window wiper/washer relay
22	— Air-conditioner relay
23	— Upshift-indicator control-unit relay
24	— Dual-horn relay
25	— Seat-belt buzzer relay
26	— Current-supply relay
27	— Cold-start-valve relay
28	— Fuse panel
29	— Power-window relay

CAUTION —

Before starting to work on any part of electrical system, disconnect battery ground cable.

Fuse/Relay Panel, Rear Side



Connections at Fuse/Relay Panel, rear side

- | | | | |
|---|--|----|----------------------------------|
| A | — Connection for left-front wiring harness (white) | 20 | — Fuel-pump relay |
| B | — Vacant | 21 | — Rear-window wiper/washer relay |
| C | — Connection for right-front wiring harness (colorless) | 22 | — Air-conditioner relay |
| D | — Connection for instrument-cluster wiring harness (blue) | 23 | — Upshift-indicator control unit |
| E | — Connection for instrument-cluster wiring harness (black) | 24 | — Dual-horn relay |
| F | — Connection for rear wiring harness (yellow) | 25 | — Seat-belt buzzer relay |
| G | — Single connectors | 26 | — Current-supply relay |
| H | — Single connector (terminal 30) | 27 | — Cold-start valve relay |
| | | 28 | — Fuse panel |
| | | 29 | — Power-window relay |

1982 Quantum

4 Cyl. Gas

All wire sizes American Wire Gauge

Description	Current Track
Alternator	3
Alternator warning light	104
Auxiliary-air regulator	15
Back-up light, left	90
Back-up light, right	89
Back-up light switch	89
Battery	4
Brake light, left	82
Brake light, right	83
Brake light switch	83
Brake warning light switch	39
Central door-locking motor	40, 41
Central door-locking switch	40
Cigarette lighter	42
Cigarette lighter light	43
Clock, digital	26
Clock light	45
Cold start valve	9
Control-pressure regulator	14
Coolant over-temperature warning light	109
Coolant-temperature-gauge	108
Coolant-temperature-gauge sending unit	112
Cruise-control	84-88
Cruise-control-regulator motor	84
Cruise-control brake-pedal switch	84
Cruise-control clutch-pedal switch	84
Cruise-control sender	86
Cruise-control switch	88, 87
Door contact switch, front left (interior light/buzzer)	32, 33
Door contact switch, front right	29
Door contact switch, left rear	31
Door contact switch, right rear	30
Dual-circuit brake warning/parking-brake warning light	37
Emergency-flasher relay	72, 73
Emergency-flasher switch	71-77
Emergency-flasher warning light	77
Fresh-air fan	131
Fresh-air fan resistor	67
Fresh-air fan switch	131-132
Fuel gauge	101
Fuel gauge sending unit	12
Fuel injection control unit	18-20
Fuel pump	13
Fuel pump relay	15, 16
Fuse, fuel pump	15
Fuse, power window	134
Fuses on fuse/relay panel (S-1 to S-15)	—
Glove compartment light	49
Hall generator	21, 22
Hall ignition control unit	20-24
Headlight dimmer/flasher switch	62, 64
Headlight high-beam indicator light	103
Headlight high-beam, left	70
Headlight high-beam, right	69
Headlight low-beam, left	65-67
Headlight low-beam, right	66, 68
Heater-lever illumination	76
Horn button	94
Horn, dual	91, 92
Horn-dual relay	93, 94
Hot-start pulse relay	10, 11
Idle-stabilizer control unit	21, 22
Ignition coil	23, 24
Ignition distributor	24, 25
Ignition/starter switch	32-34
Instrument panel light	46, 47
Instrument panel lighting control switch	48
Interior light, front	29, 30

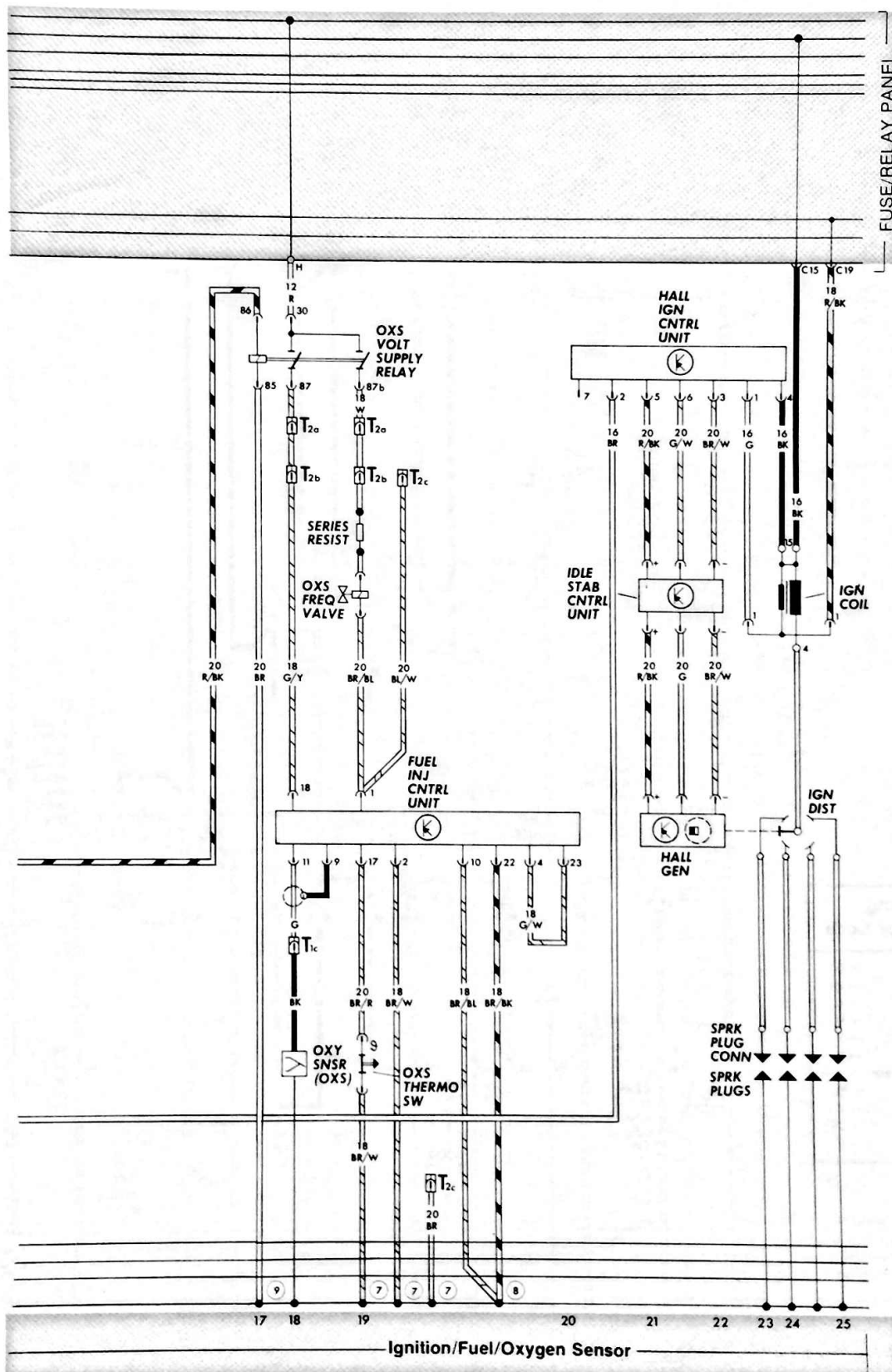
Description	Current Track
License plate light	55, 56
Light switch	46-48
Light switch light	44
Load reduction relay (X-contact)	44, 45
Luggage compartment light	27
Mirror adjusting selector switch	124
Oil-pressure control switch	100-102
Oil pressure switch	113
Oil pressure warning light	102
Outside-mirror adjuster, right side	124
Outside-mirror adjuster, left side	124-127
Outside-mirror adjusting switch	124
Outside-mirror heater, left side	129
Outside-mirror heater, right side	128
Outside-mirror magnetic clutch for adjusting, drivers side	126
Outside-mirror magnetic clutch for adjusting, right side	127
OXS elapsed-mileage switch	111
OXS frequency valve	17
OXS thermostatic switch	19
OXS voltage-supply relay	18, 19
OXS warning light	110
Oxygen sensor (OXS)	18
Parking brake warning light switch	37
Parking light, left	61
Parking light, right	58
Power-window motor, left front	135
Power-window motor, left rear	137
Power-window motor, right front	136
Power-window motor, right rear	138
Power-window regulator relay	133-134
Power-window regulator safety switch, rear	137
Power-window regulator switch left front	135
Power-window regulator switch right front	136
Power-window switch, left rear	137
Power-window switch, right rear	138
Radiator fan	130
Radiator-fan thermostatic switch	130
Radio connection	41, 42
Rear luggage compartment light switch	51, 52
Rear-window defogger	53
Rear-window defogger light	51
Rear-window defogger switch	51, 52
Rear-window defogger switch light	50
Rear-window-washer pump	120
Rear-window-wiper motor	122, 123
Rear-window-wiper/washer motor	121, 122
Rear-window wiper/washer relay	121-122
Safety-belt switch, left	34
Safety-belt warning light	36
Safety-belt warning relay	33-35
Series resistance	17
Side-marker lights, front	57, 62
Spark plugs	23-25
Spark-plug connectors	23, 25
Starter	5, 7
Tachometer	100
Tail light, left	60
Tail light, right	59
Thermo time switch	8, 9
Turn signal indicator light	105
Turn signal, left front	81
Turn signal, left rear	80
Turn signal, right front	79
Turn signal, right rear	78
Turn signal switch	73, 74
Upshift-indicator control unit	95-97
Upshift-indicator light	99
Upshift-indicator selector switch	98
Upshift-indicator vacuum switch	95
Vanity mirror light	28

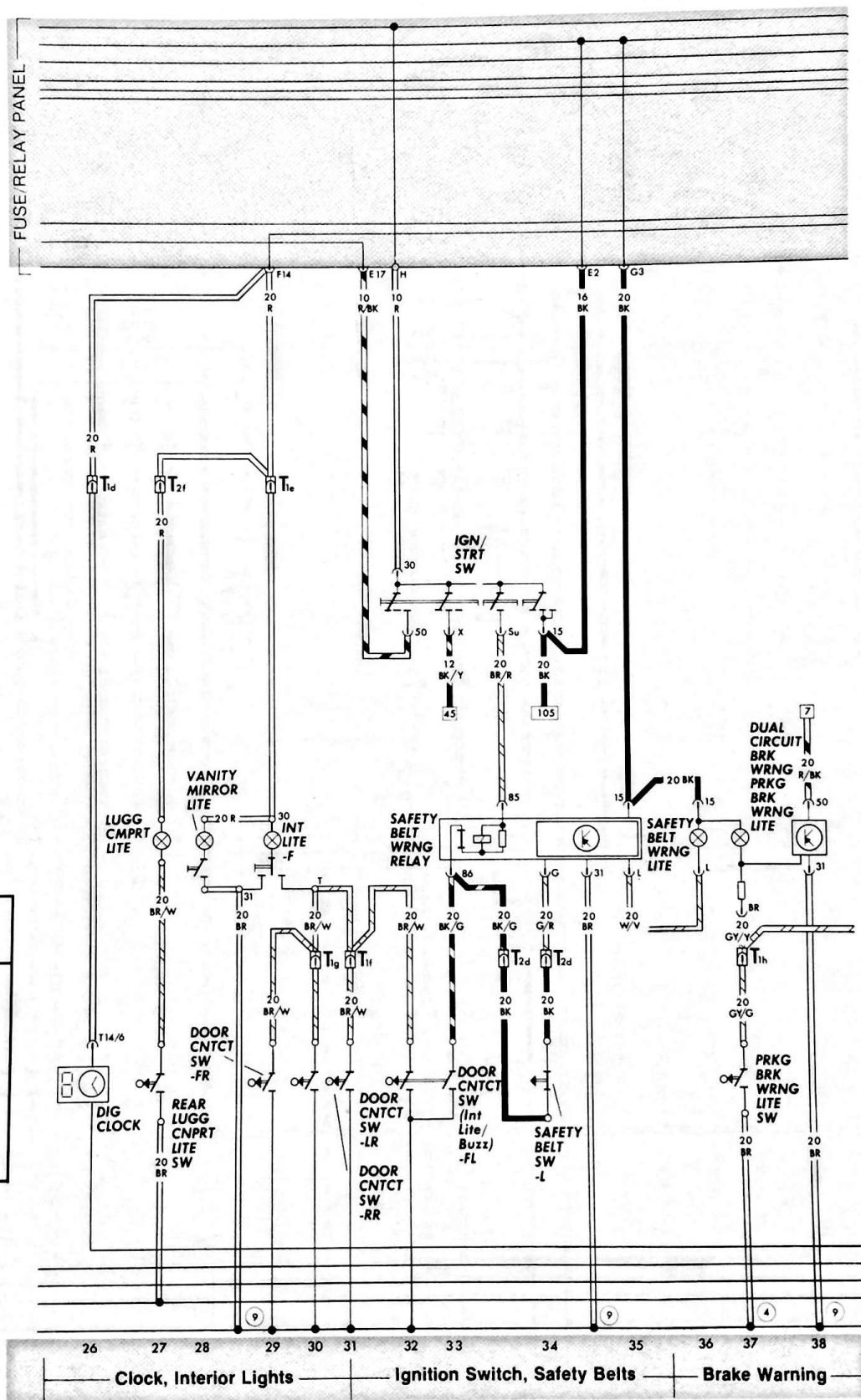
Wire Connectors

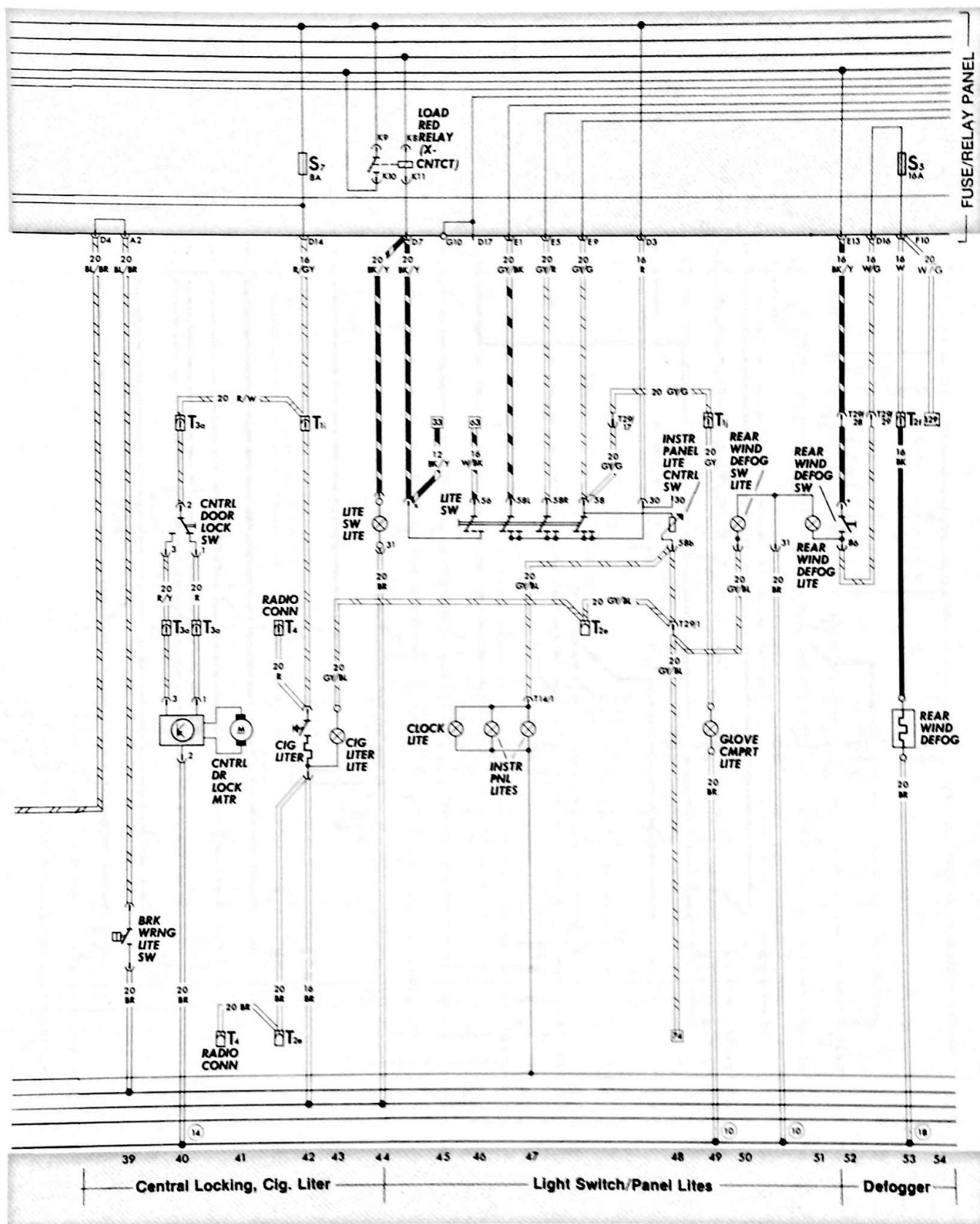
T1o	— single, behind dash near fuse panel
T1p	— single, behind dash near fuse panel
T1r	— single, behind dash near fuse panel
T1s	— single, behind dash near fuse panel
T1t	— single, behind dash near fuse panel
T1v	— single, behind dash near fuse panel
T1u	— single, behind dash
T2	— double, behind dash near fuse panel
T2a	— double, behind dash near fuse panel
T2b	— double, engine compartment, left side
T2c	— double, engine compartment, left side
T2d	— double, under driver seat
T2e	— double, behind dash
T2f	— double, luggage compartment, left side
T2g	— double, in engine compartment, left
T2h	— double, behind dash near fuse panel
T2i	— double, near dual horn
T2j	— double, behind dash near fuse panel
T2k	— double, in luggage compartment, left
T2l	— double, on luggage compartment lid
T2m	— double, behind dash
T2n	— double, behind dash near fuse panel
T2o	— double, behind dash near fuse panel
T2p	— double, near left side panel
T2r	— double, near right side panel
T2s	— double, behind dash near fuse panel
T2t	— double, behind dash near fuse panel
T3	— three-point, behind dash near fuse panel
T3a	— three-point, behind dash near fuse panel
T3c	— three-point, in engine compartment, right
T3d	— three-point, in engine compartment, left
T3e	— three-point, in engine compartment
T3i	— three-point, behind dash near fuse panel
T3g	— three-point, in front door, right
T3h	— three-point, in front door, right
T3i	— three-point, in driver's door
T3j	— three-point, in driver's door
T4	— four-point, behind dash
T4a	— four-point, behind dash near fuse panel
T4b	— four-point, behind dash
T4c	— four-point, near cruise control
T6	— six-point, behind dash near fuse panel
T6a	— six-point, behind dash near fuse panel
T6/	— six-point, on instrument cluster
T14	— fourteen-point, on instrument panel
T14/	— fourteen-point, on instrument cluster
T29	— twenty-nine point, behind dash
T29/	— twenty-nine point, behind dash

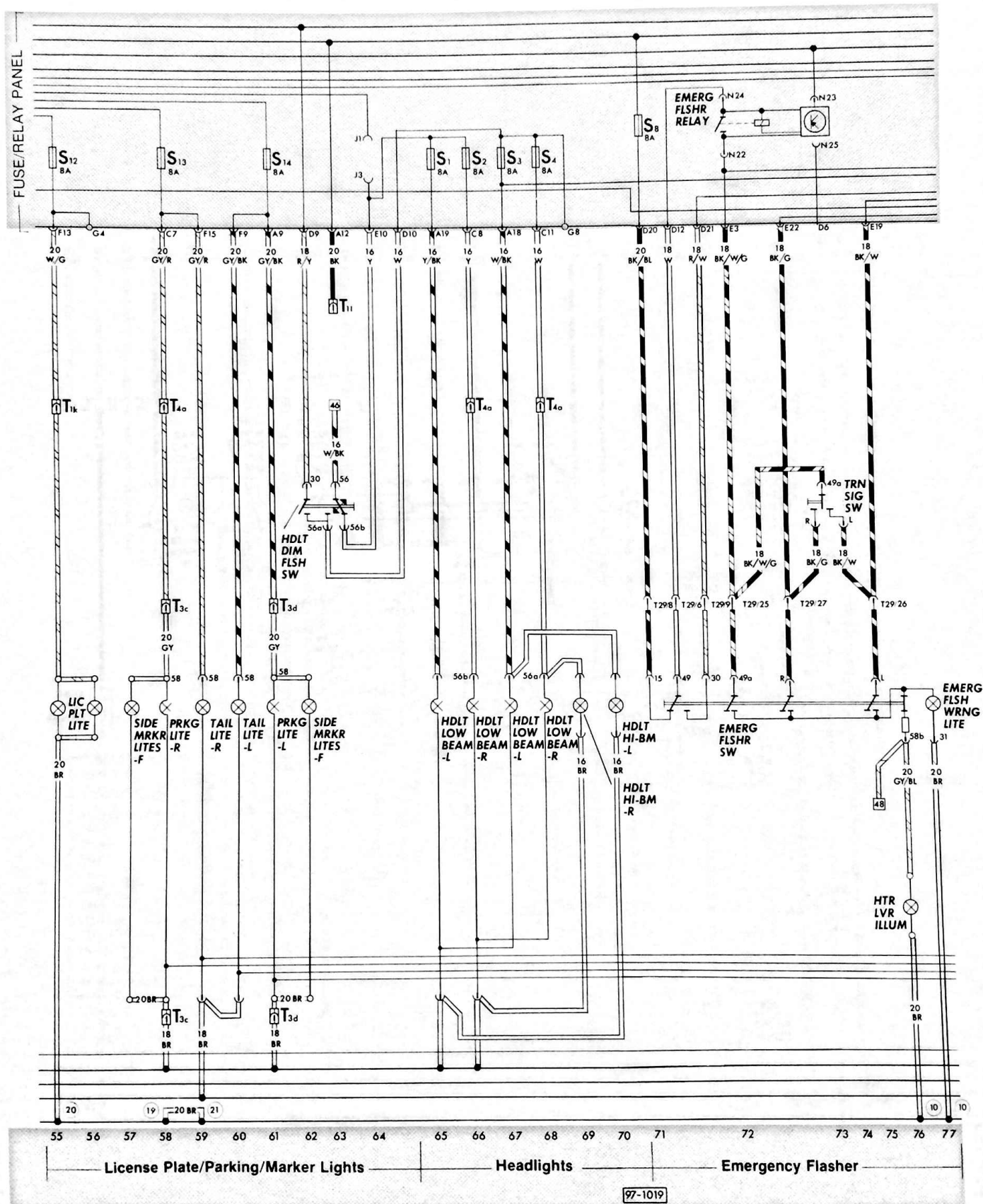
Ground Connectors

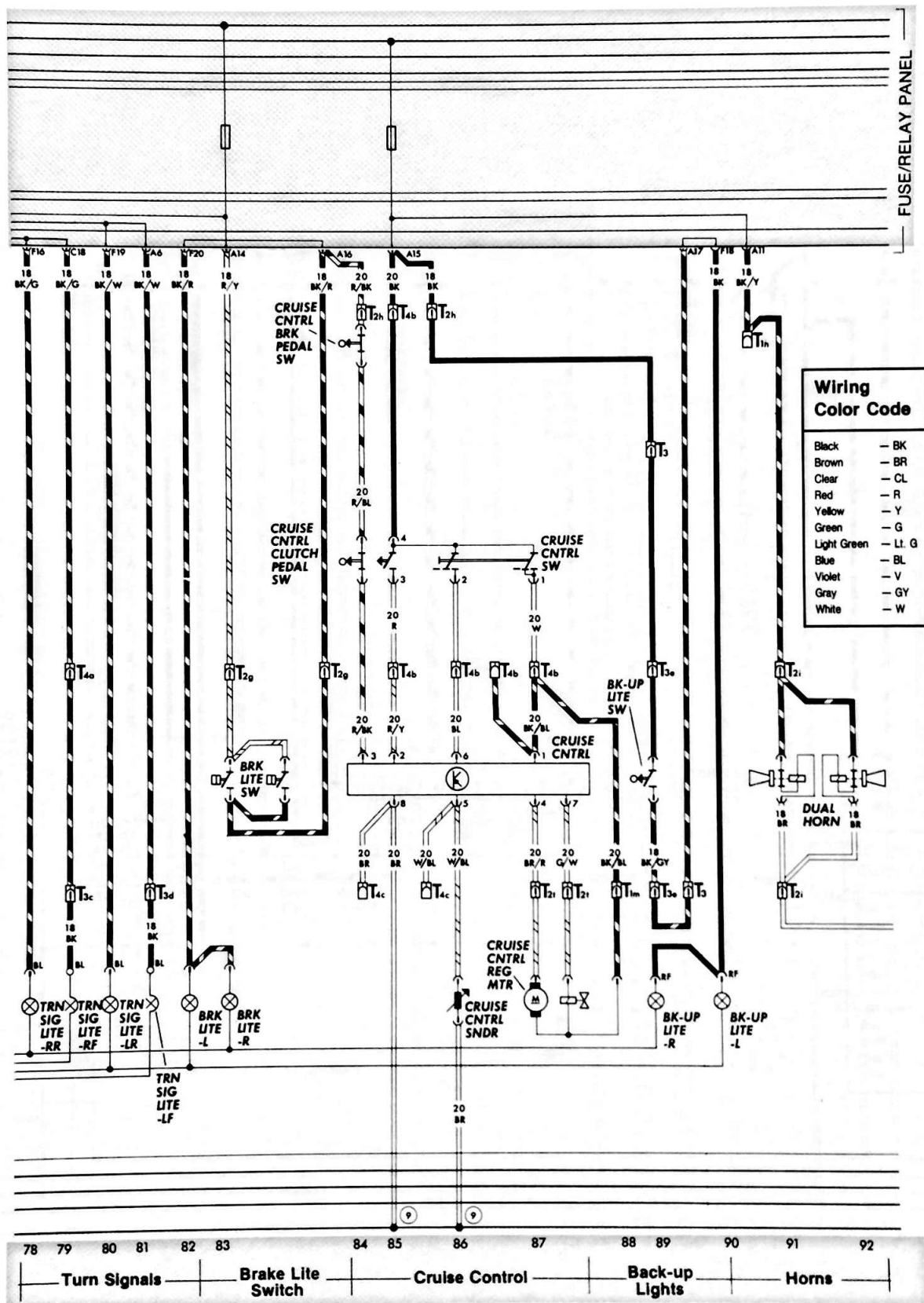
①	— strap, battery/body/transmission
②	— strap, alternator/engine block
③	— beneath driver seat
⑦	— near battery
⑧	— engine block
⑨	— on fuse relay panel bracket
⑩	— behind dash, left
⑭	— near dual vacuum pump
⑮	— in isolating strip of wire harness front
⑯	— bound in dash wire harness
⑰	— in wire harness, rear
⑱	— in luggage lid, right
⑲	— in luggage lid, left
⑳	— in luggage lid, center
㉑	— on left rear panel

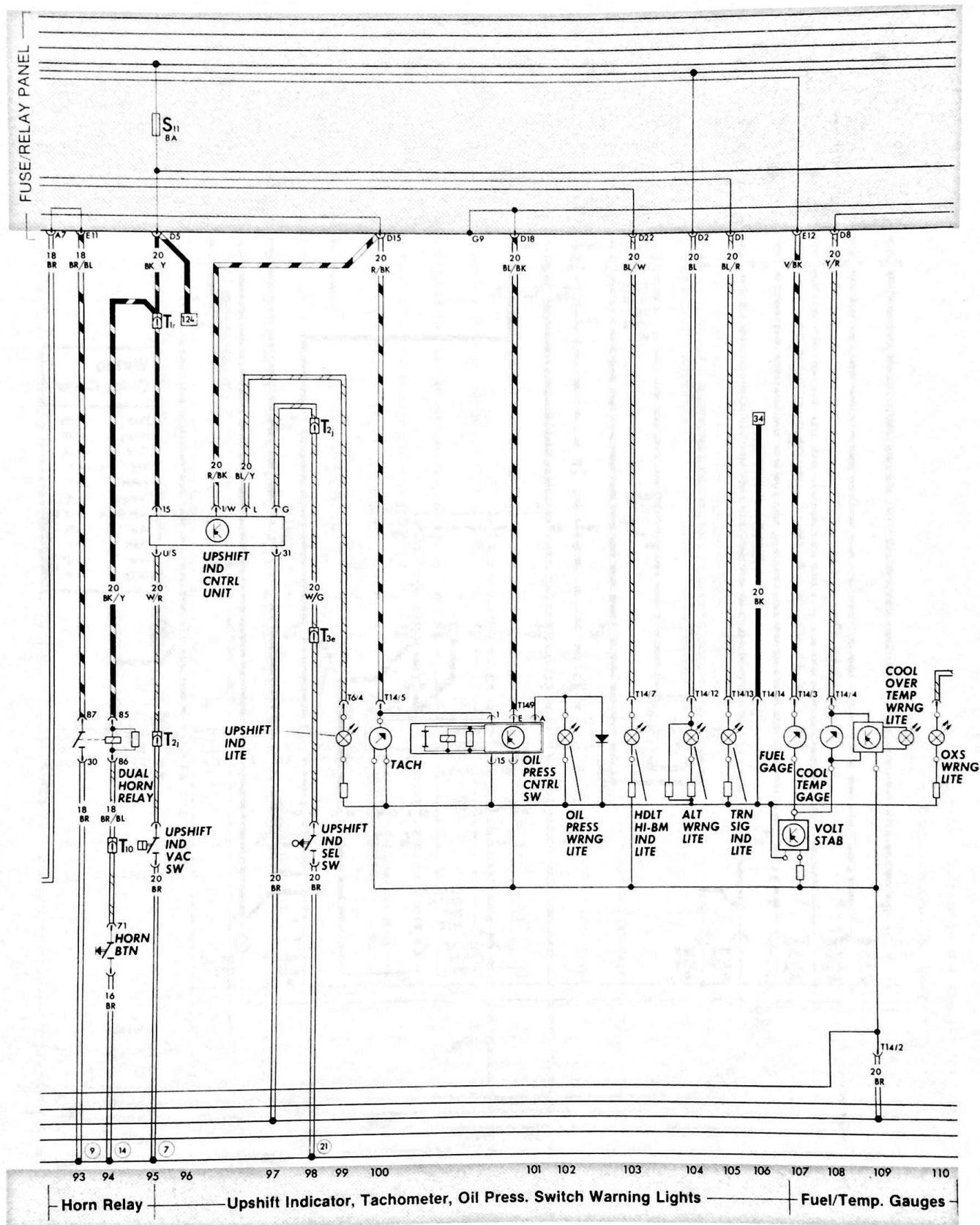


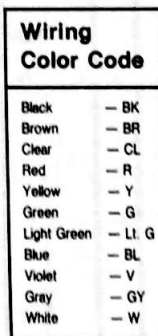


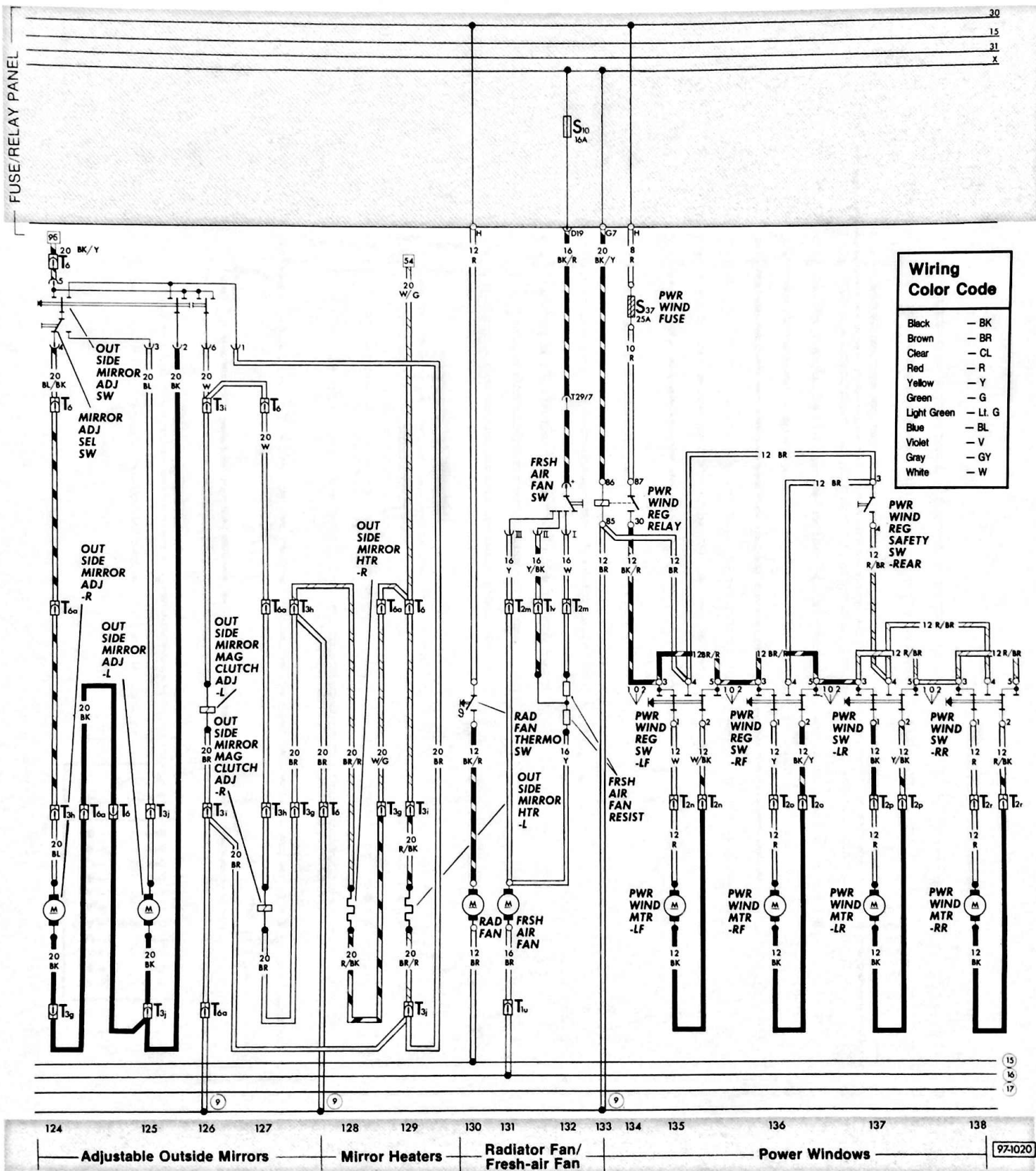










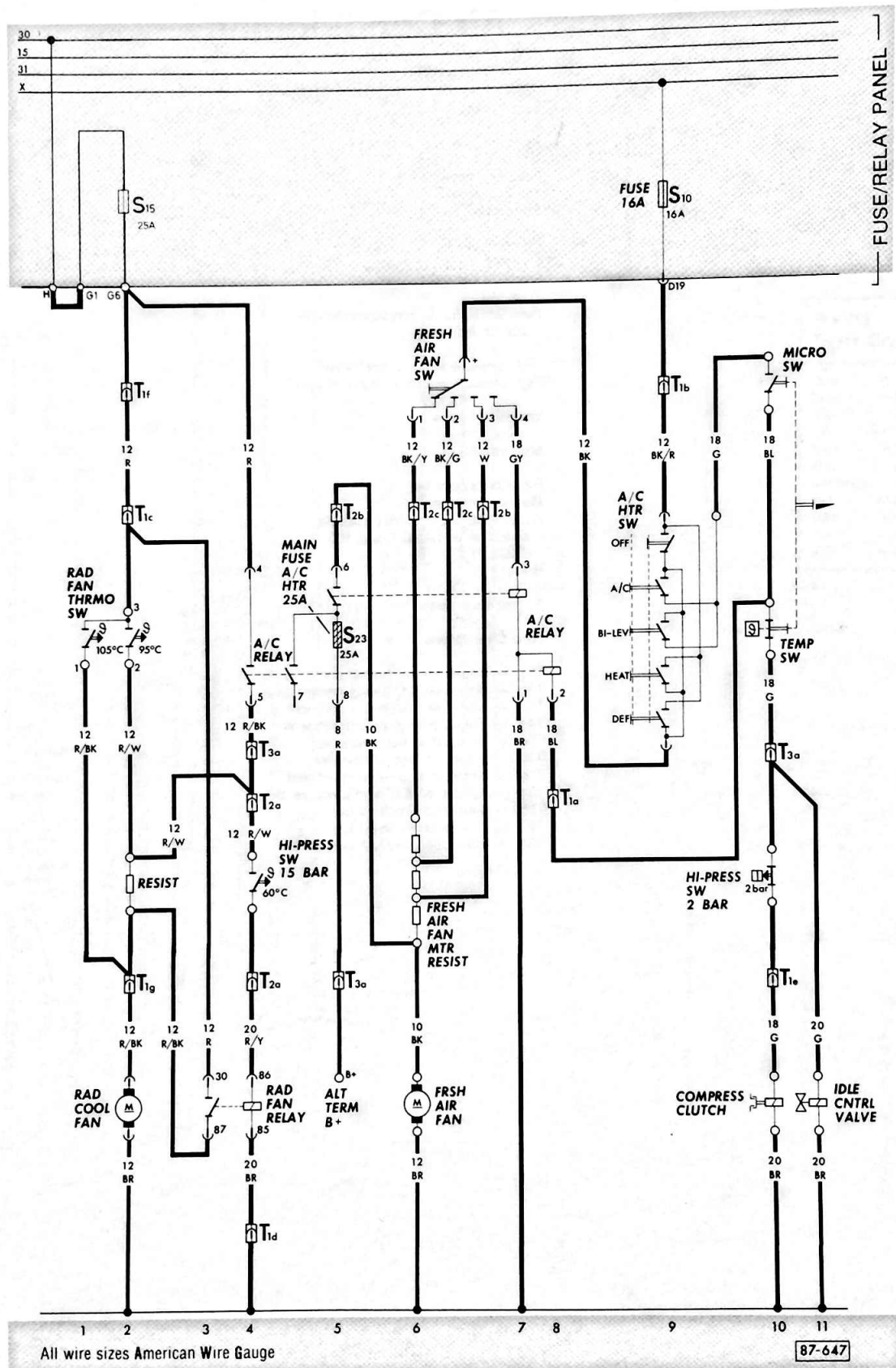


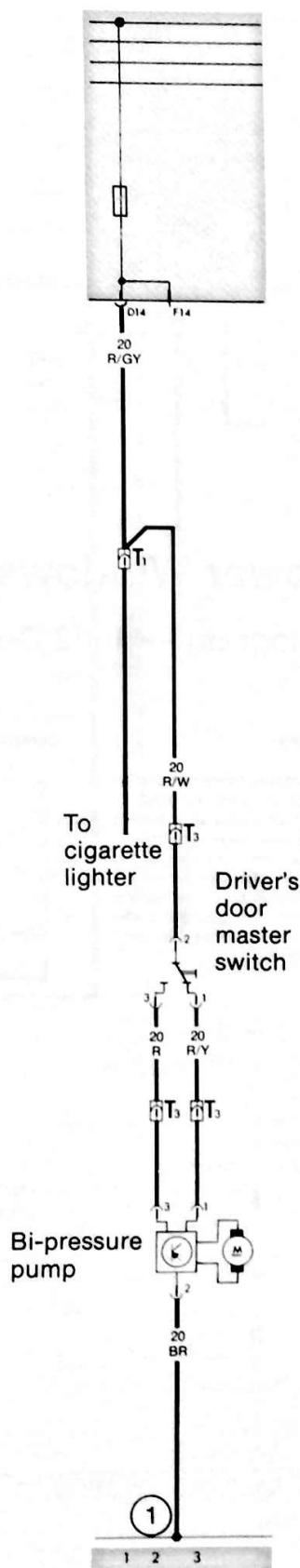
Air Conditioning

Description	Current Track
Air conditioner/heater switch	9
Air conditioner relay	4-8
Alternator terminal B +	5
Compressor clutch	10
Fresh air fan	6
Fresh air fan motor resistor	6
Fresh air fan switch	6-8
Fuse 16A	9
Fuse (Main) for air conditioner/heater 25A on A/C relay	5
High pressure switch 2 bar/29 psi	10
High pressure switch 15 bar/218 psi	4
Idle control valve	11
Microswitch	10
Radiator coolant fan	2
Radiator fan relay	3, 4
Radiator fan thermoswitch (double switch for 95 C/203 F and 105 C/221 F)	1, 2
Resistor	2
Temperature switch	10

Wire Connectors

- T1a — single, on A/C heater control lever
- T1b — single, on A/C heater control lever
- T1c — single, in engine compartment
- T1d — single, in engine compartment
- T1e — single, next to compressor
- T1f — single, on fuse/relay panel
- T1g — single, in engine compartment
- T2a — double, on A/C high pressure switch
- T2b — double, on fresh air fan
- T2c — double, on fresh air fan
- T3a — three-point, behind dash





Central Locking System

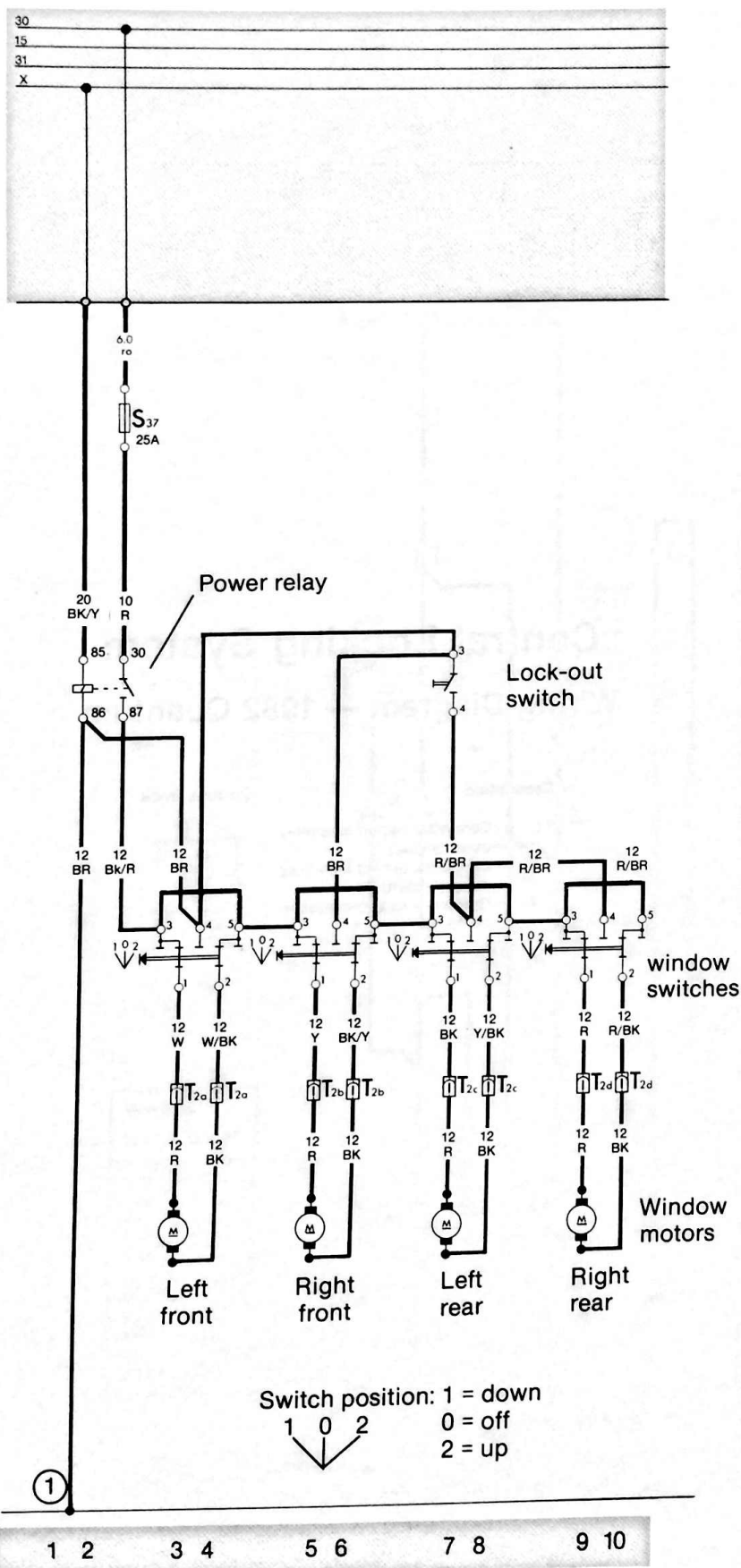
Wiring Diagram — 1982 Quantum

Description

- T1 — Connector behind fuse/relay panel (single)
- T3 — Connector behind fuse/relay panel (3-point)
- 1 — Ground — near bi-pressure pump

Current Track

1
3
3



Power Windows

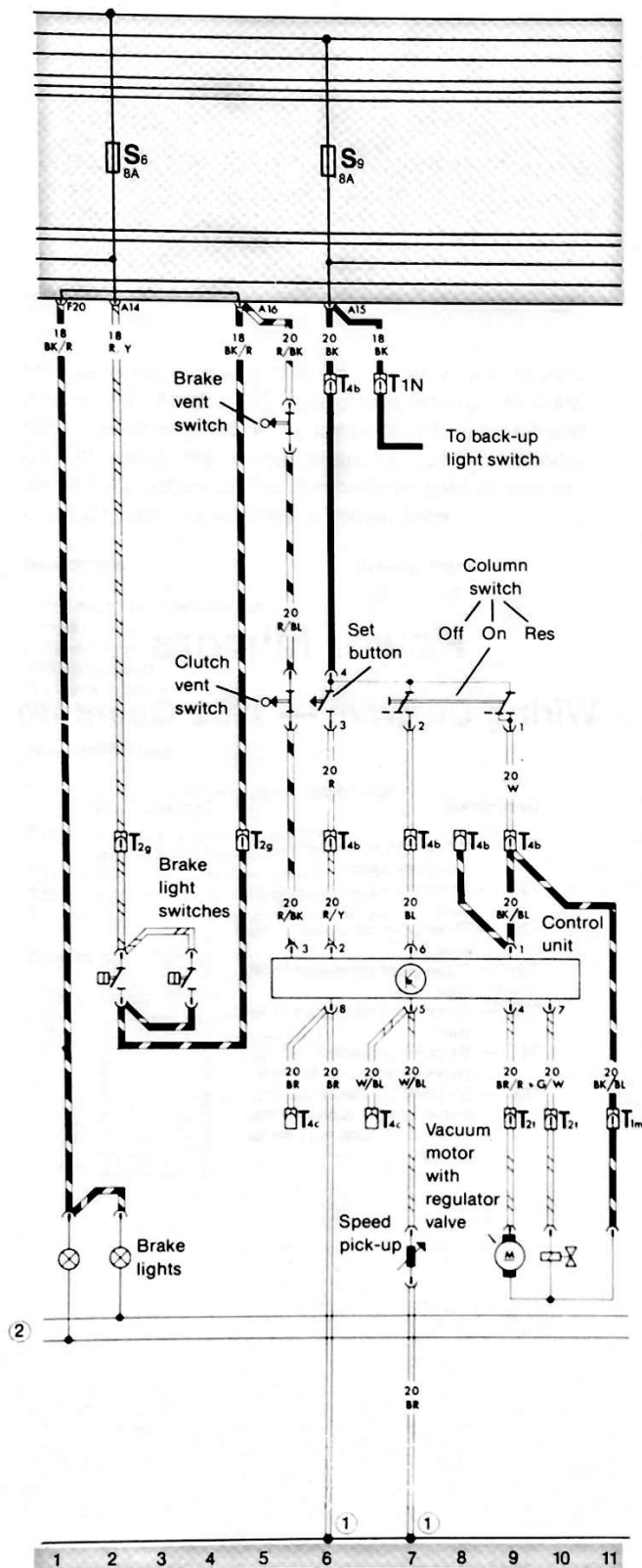
Wiring Diagram — 1982 Quantum

Description

- T2a — Double connector behind carpet lower left front
- T2b — Double connector behind carpet lower right front
- T2c — Double connector behind left door post trim panel
- T2d — Double connector behind right door post trim panel
- 1 — Ground, above fuse relay panel

Current Track

3, 4
5, 6
7, 8
9, 10



Cruise Control

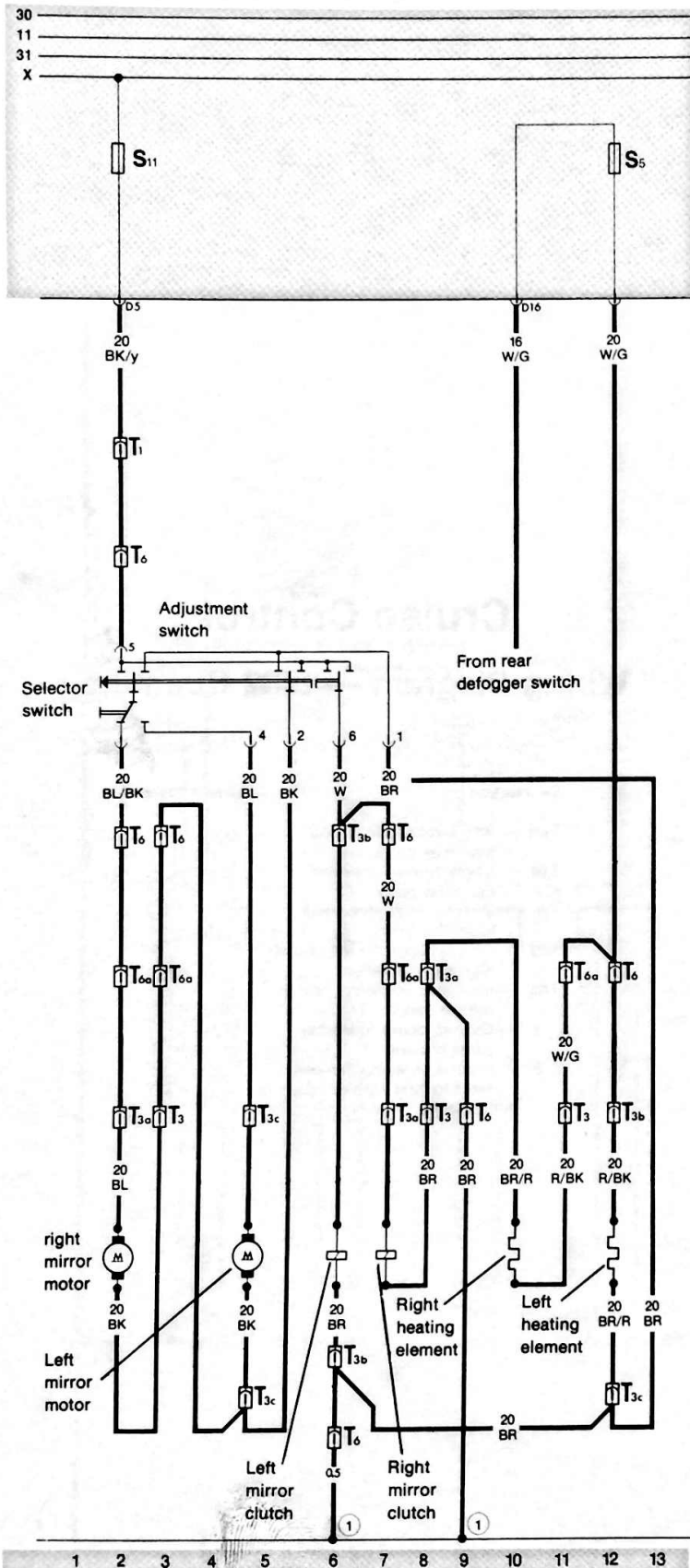
Wiring Diagram — 1982 Quantum

Description

- T1m — Single connector behind fuse/relay panel
- T1n — Single connector behind fuse/relay panel
- T2f — Double connector behind fuse/relay panel
- T2g — Double connector left side of engine compartment
- T4b — Four-point connector next to column switch
- 1 — Ground, above fuse/relay panel bracket
- 2 — Ground, in wiring harness leads to front harness, then to battery

Current Track

11
7
9, 10
2, 4
6, 7, 8, 9
6, 7
1, 2



Power Mirrors

Wiring Diagram — 1982 Quantum

Description

- T1 — Single connector behind fuse/relay panel
- T3 — Three-point connector in right door
- T3a — Three-point connector in right door
- T3b — Three-point connector in left door
- T3c — Three-point connector in left door
- T6 — Six-point connector behind carpet in left outer footwell
- T6a — Six-point connector behind carpet in right outer footwell
- 1 — Ground, on fuse/relay panel bracket

Current Track

1
2, 8, 11
1, 7, 8
6, 12
4, 12
1, 2, 6, 7, 12
1, 2, 7, 9, 11
6, 9

On California vehicles, a white jumper wire connects pins 16 and 23 on the CIS Control Unit, while on 49-state cars a green wire with white tracer connects pins 4 and 23. Otherwise, the oxygen sensor circuitry is identical on all 1982 vehicles. The complete oxygen sensor circuit for California vehicles is shown here.

Description

Oxygen-sensor thermostwitch
Oxygen sensor
OXS voltage-supply relay
CIS control unit
Series resistance
OXS frequency valve

Current Track

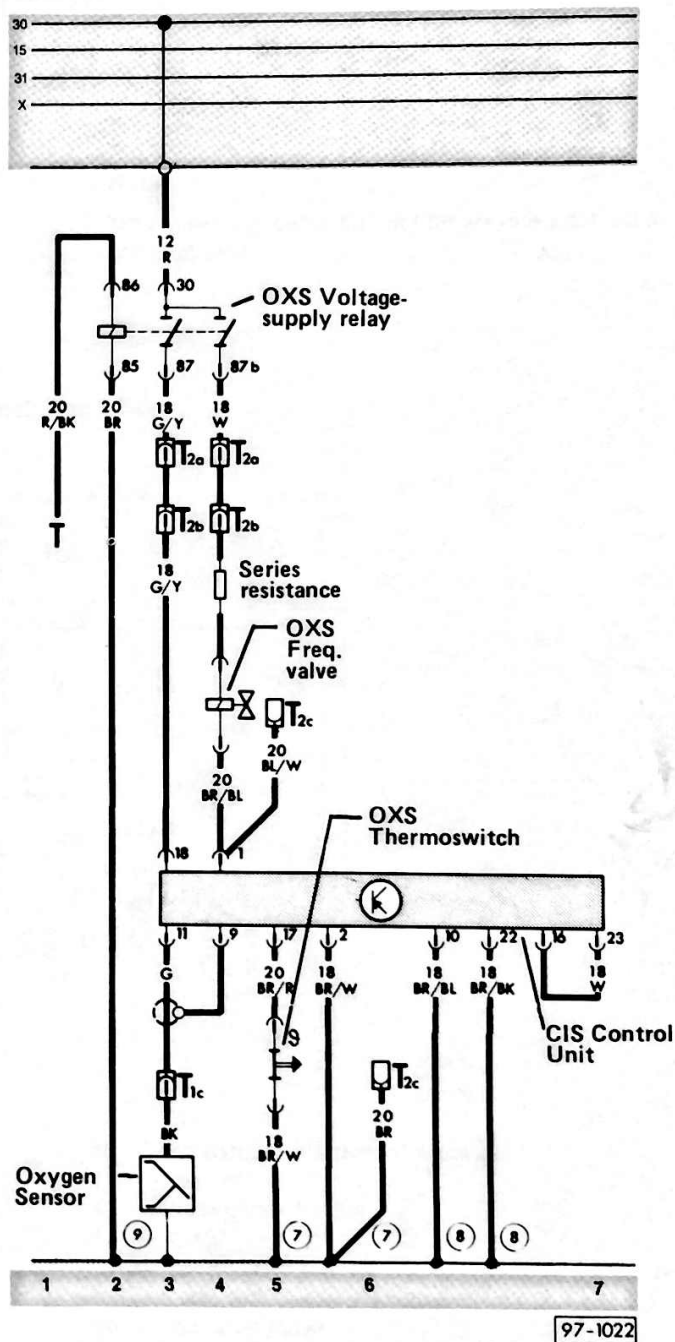
5
3
2-4
3-6
4
4

Wire connectors

T — to three-point wire connector behind fuse/relay panel
T1c — single, in engine compartment, near oxygen sensor
T2a — double, behind dash near fuse/relay panel
T2b — double, in engine compartment, left
T2c — double, in engine compartment, left

Ground connections

⑦ — next to battery
⑧ — on engine block
⑨ — on fuse/relay panel bracket



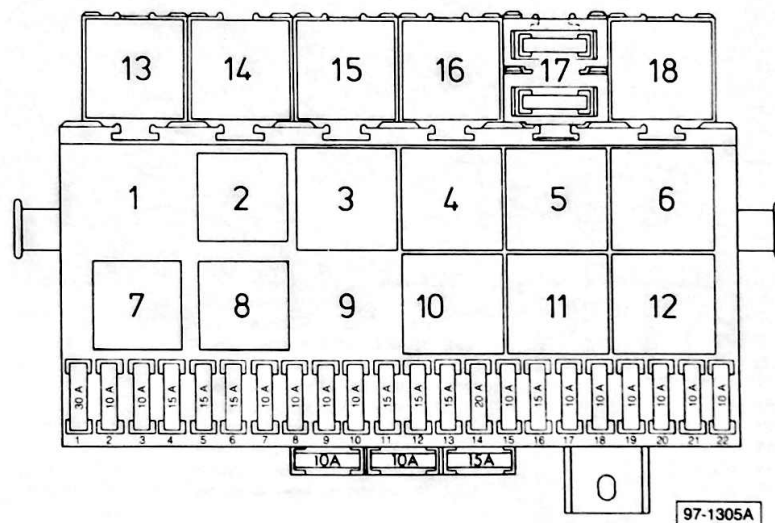
1983 Quantum 4 and 5 Cyl. CIS

- Fuse/Relay panel now has 22 fuse locations
- relay panel has 11 positions for relays plus an additional 6 adapter locations on top
- relays have stamped-in spare part numbers

Note

New fuse/relay panel can not be service installed in previous cars

Fuse/Relay Panel, Front Side

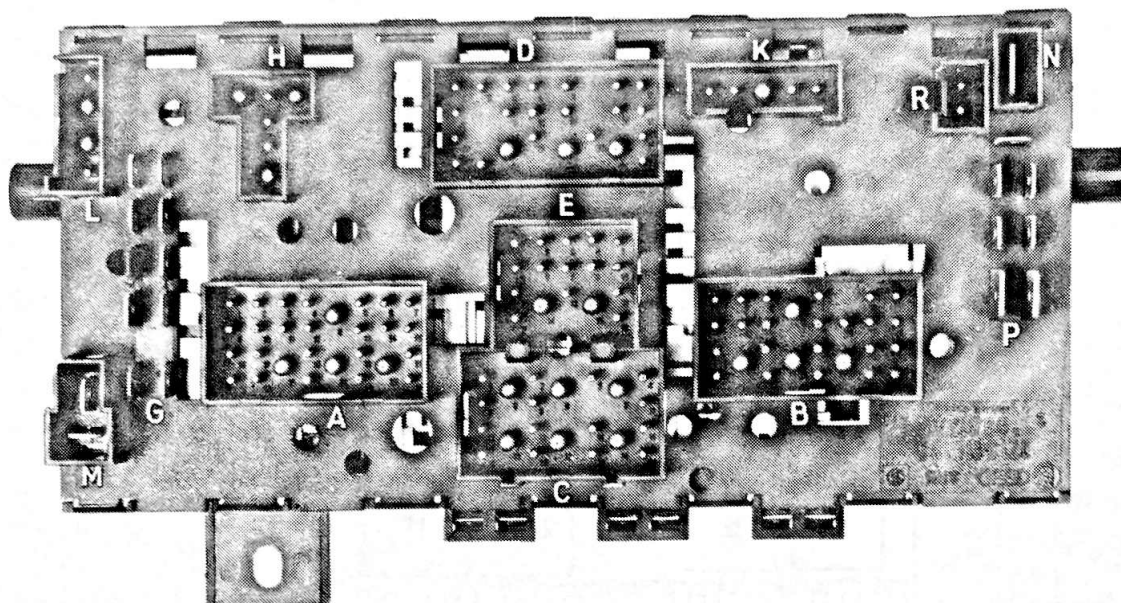


Relays

- | | |
|-----------------------------|--|
| 1 — not used | 10 — windshield intermittent wiper |
| 2 — fuel pump or glow plugs | 11 — rear wiper |
| 3 — seat-belt warning | 12 — emergency flasher |
| 4 — up-shift indicator | 13 — OXS |
| 5 — air conditioner | 14 — power windows |
| 6 — dual horn | 15 — not used |
| 7 — not used | 16 — hot-start pulse |
| 8 — load reduction | 17 — for fuse adapter |
| 9 — not used | 18 — catalytic converter and coolant-level control |

1983 Quantum

Fuse/Relay Panel, Rear Side



97-1100

Connections

- | | |
|--|---|
| A — for dashboard wiring harness (blue) | H — for air conditioner (brown) |
| B — for dashboard wiring harness (red) | K — for seat-belt warning (colorless) |
| C — for wiring harness in engine compartment left (yellow) | L — for dual horn (grey) |
| D — for wiring harness in engine compartment right (white) | M — for terminal 56 and 56a on headlight switch (black) |
| E — for wiring harness rear (black) | N — single connector |
| G — single connector | P — single connector (terminal 30) |
| | R — not used |

1983 Quantum

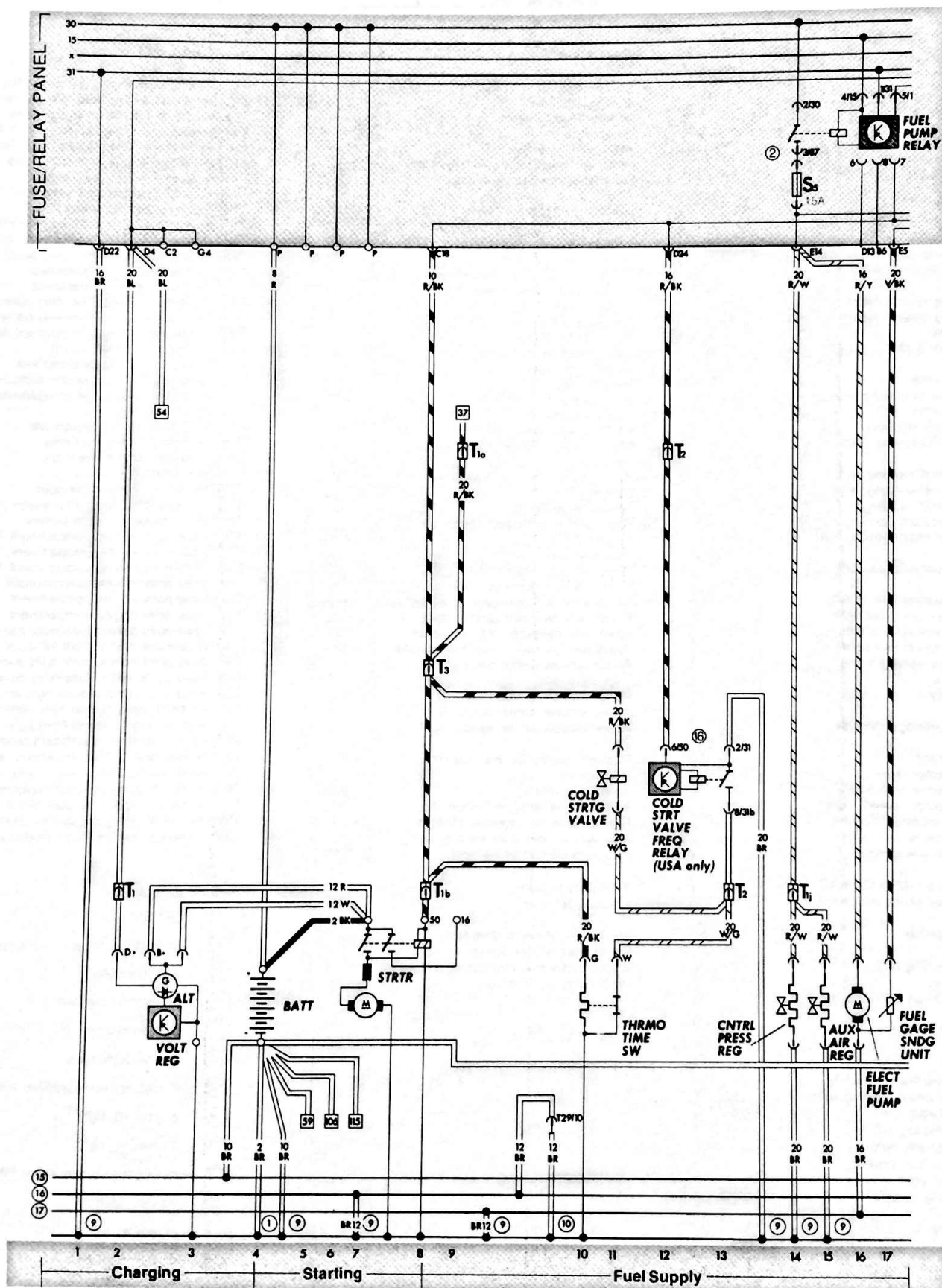
Description	Current Track
Alternator	2, 3
Alternator warning light	47
Auxiliary-air regulator	15
Back-up light, left	102
Back-up light, right	101
Back-up light switch	101
Battery	4
Brake light, left	99
Brake light, right	100
Brake light switch	100
Brake system warning switch	38
Central locking system motor	60
Central locking system switch	60
Cigarette lighter	62
Cigarette lighter light	63
Clock light	64
Cold starting valve	11
Cold start valve frequency relay (USA vinyl only)	12, 13
Control pressure regulator	14
Control unit/AFC-system/OXS (USA only)	19, 22
Coolant low level warning switch	115
Coolant low level warning relay	114, 115
Coolant temperature gauge	50
Coolant temperature sending unit	56
Coolant temperature warning light	51
Defogger cut-out relay (X-contact)	64, 95
Digital clock	26
Door contact/buzzer switch, left	32, 33
Door contact switch, front right	29
Door contact switch, rear left	31
Door contact switch rear right	30
Dual brake and parking brake warning light	36, 37
Dual horn relay	130
Elapsed OXS mileage mileage odometer	53, 54
Electric fuel pump	16
Emergency flasher relay	90, 91
Emergency flasher switch	90, 94
Emergency flasher warning light	94
Engine oil pressure control unit	44, 45
Engine oil pressure switch	57
Engine oil pressure switch	
Frequency valve OXS (USA only)	19, 20
Fresh air blower series resistance	105
Fresh air fan	110
Fresh air fan switch	104, 105
Fuel gauge	49
Fuel gauge sending unit	17
Fuel pump relay	14-17
Fuses, (S1-S22) on fuse relay panel	
Glove compartment light	74
Hall generator	23
Headlight dimmer/flasher switch	82, 83
Headlight, high beam warning light	46
Headlight low-beam left	85, 87
Headlight high-beam, left	89
Headlight low-beam, right	86, 88
Headlight high-beam, right	89
Headlight switch light	129
Heating control lever light	93
Horn button	130
Horn (dual horn)	131, 132

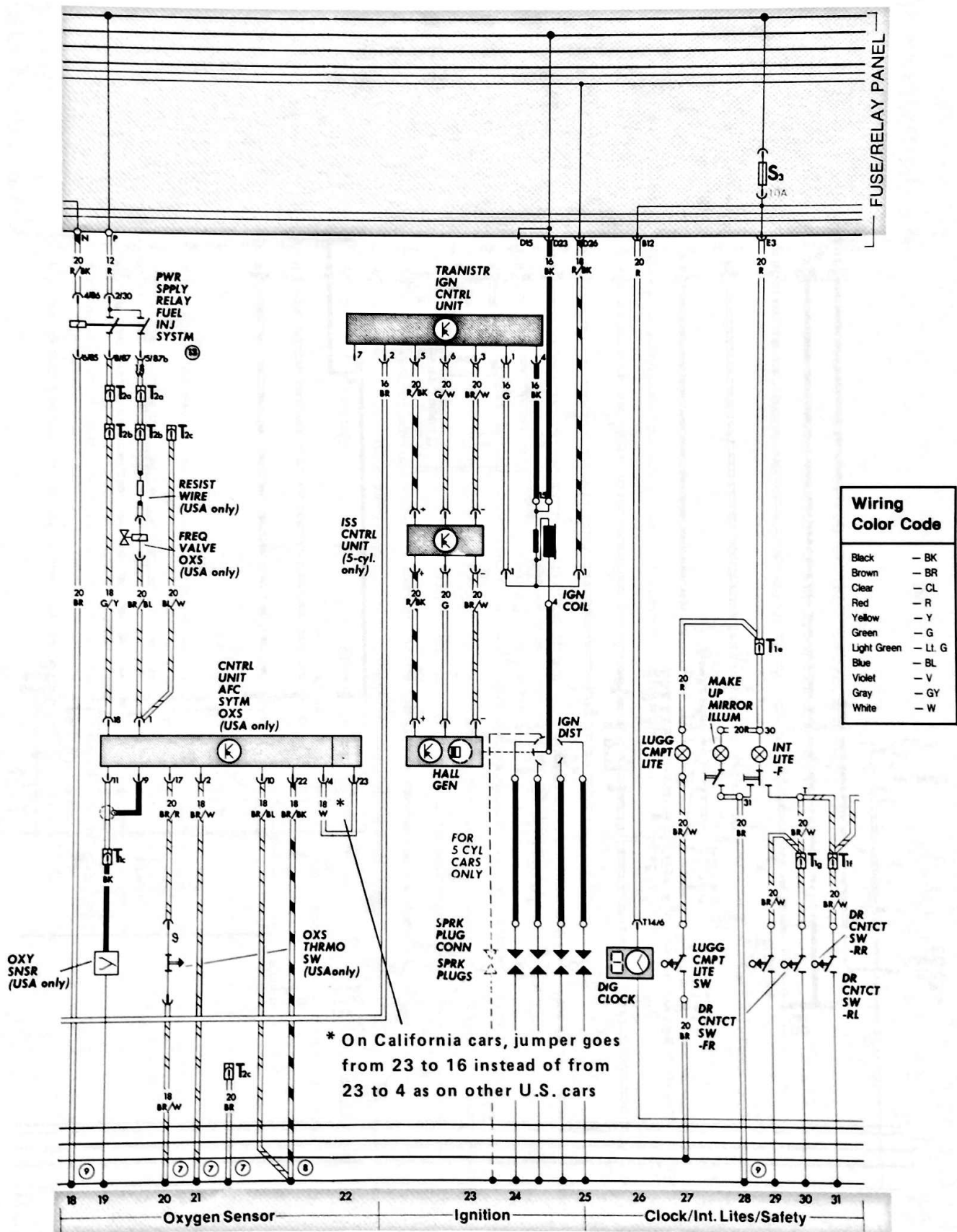
Description	Current Track
Ignition coil	24, 25
Ignition distributor	24, 25
Ignition/starter switch	39-41
Interior light front	28
Instrument panel light	65, 66
Instrument panel light switch/dimmer	67
ISS control unit 5 (engine only)	23
Luggage compartment, light	27
Luggage compartment light switch	27
Light switch	65-67
Make-up mirror button	28
Mirror adjusting clutch, outside left	124
Mirror heated, outside left	127
Mirror heated, outside right	128
Mirror magnetic clutch, outside right	125
Mirror motor remote control, left	123
Mirror motor remote control, right	122
Number plate light	75, 75
Oil pressure warning light	45
OXS thermostats (USA only)	20
OXS warning light	
Oxygen sensor (USA only)	19
Parking brake warning light switch	36
Parking light, left	81
Parking light, right	80
Power supply relay fuel-injection system	18, 19
Power window fuse S37	117
Power window main switch	128
Power window motor front-left door	118
Power window motor front-right door	119
Power window motor rear-left door	120
Power window motor rear-right door	121
Power window switch rear-left console	120
Power window switch rear-right (in console)	121
Power window winder relay	116, 117
Power window winder switch, left	118
Power window winder switch, right	119
Radiator cooling fan thermostats	103
Radiator fan	103
Radio connection	61
Rear window defogger switch	71
Rear window defogger switch light	63
Rear window defogger warning light	70
Rear window heater element	72
Voltage regulator	2, 3
Voltage stabilizer	40
Washer/wiper intermittent relay	108, 108
Windshield washer pump	116
Windshield wiper intermittent switch	106, 106
Windshield wiper motor	106, 107

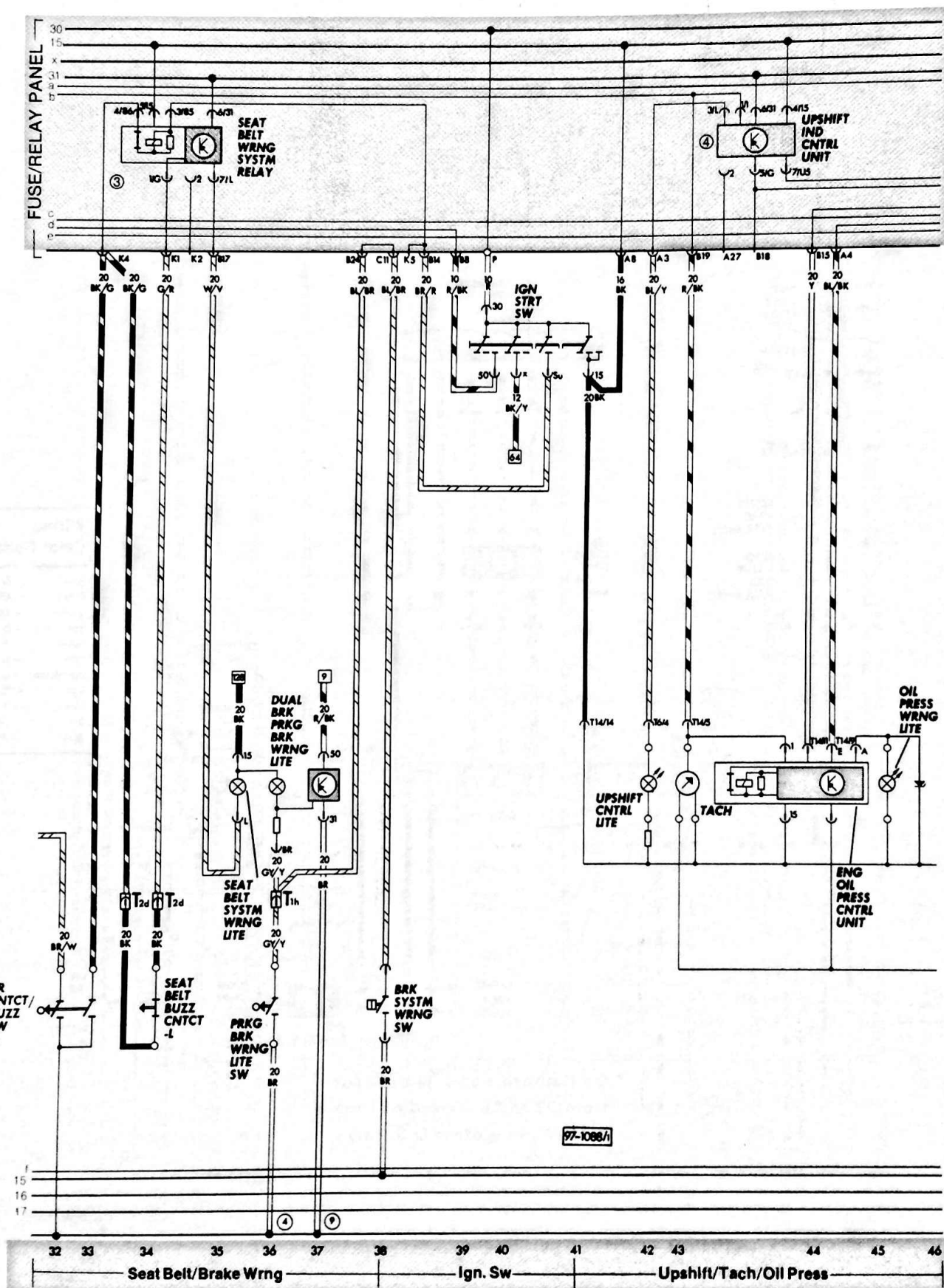
Wire Connectors
T1 — single, in engine compartment, left
T1 — single, next to fuse/relay panel
T1a — single, next to fuse/relay plate
T1b — single, engine compartment left
T1c — single, engine compartment, left
T1e — single, next to fuse/relay plate
T1f — single, next to left front door
T1g — single, next to right front door
T1h — single, behind dashboard
T1j — single, engine compartment left
T1k — single, engine compartment, left
T1p — single, next to fuse/relay panel
T2 — double, behind dashboard
T2 — double, next to dual horns
T2 — double, next to fuse/relay panel
T2a — double, next to fuse/relay panel
T2b — double, engine compartment, left
T2c — double, next to battery
T2d — double, next to seat belt lock
T2e — double, in luggage compartment, left
T2k — double, in luggage compartment, left
T2l — double, in rear lid
T2m — double, behind dashboard
T2n — double, in left front door
T2o — double, in right front door
T2p — double, in left door
T2r — double, in right rear door
T3 — three-point, behind fuse/relay panel
T3 — three-point, next to battery
T3c three-point engine compartment, left
T3c three-point engine compartment, right
T3d three-point engine compartment, left
T3d three-point engine compartment, left
T3e three-point engine compartment, front
T3e three-point engine compartment, left
T3f three-point behind fuse/relay panel
T3g three-point next to front left door
T3h three-point next to front right door
T3h three-point next to fuse/relay panel
T3 — three-point, next to front right door
T3i — three-point, next to front right door
T3j — three-point, next to front right door
T4 — four-point, on dashboard cluster
T6 — six-point, behind dashboard, left
T6 — six-point, behind dashboard, right
T6 — six-point, on dashboard cluster
T14 — fourteen-point, on dashboard cluster
T29 — twenty-one-point, behind dashboard
T29 — twenty-nine-point, on dashboard cluster

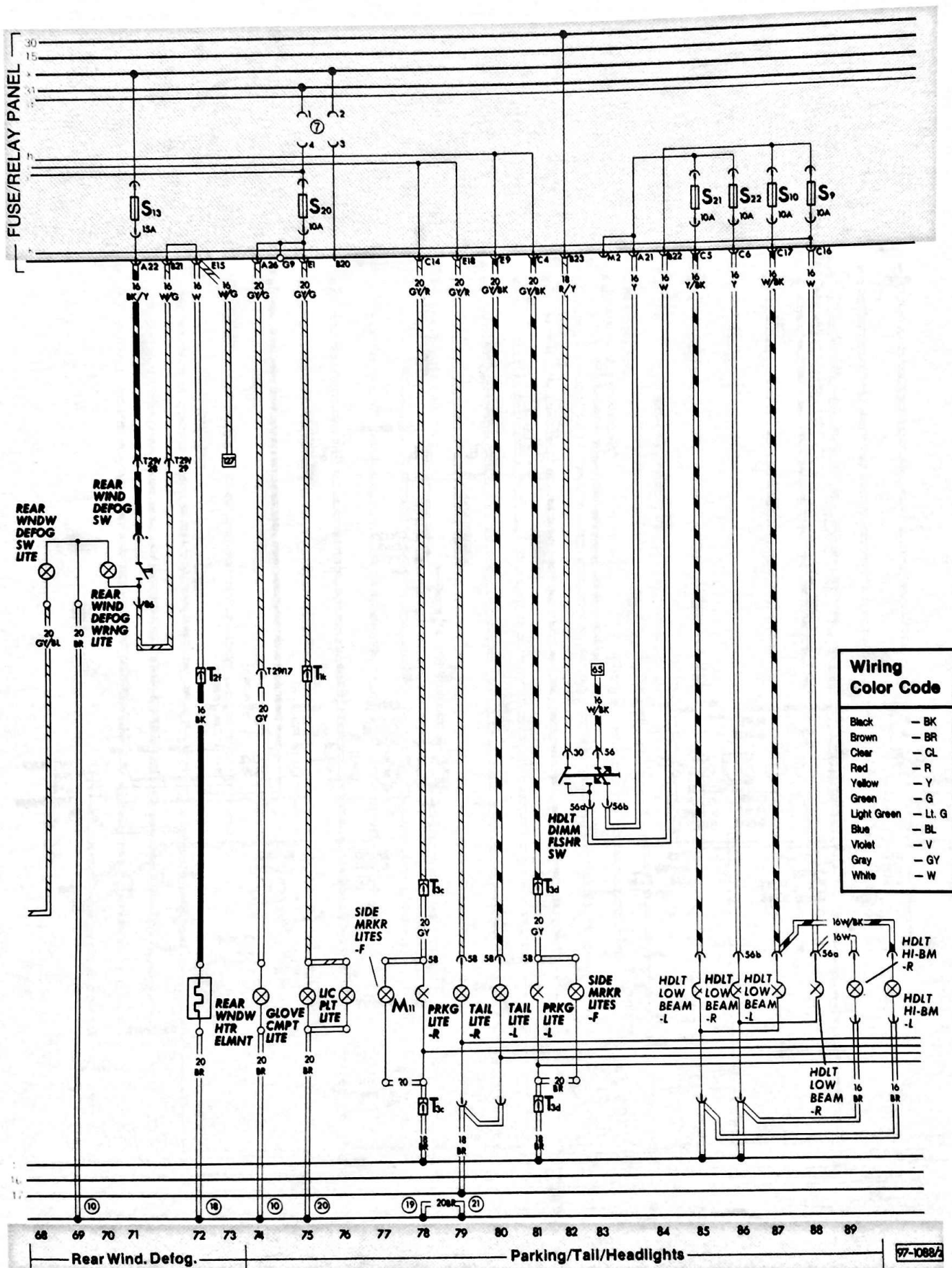
Ground Connectors

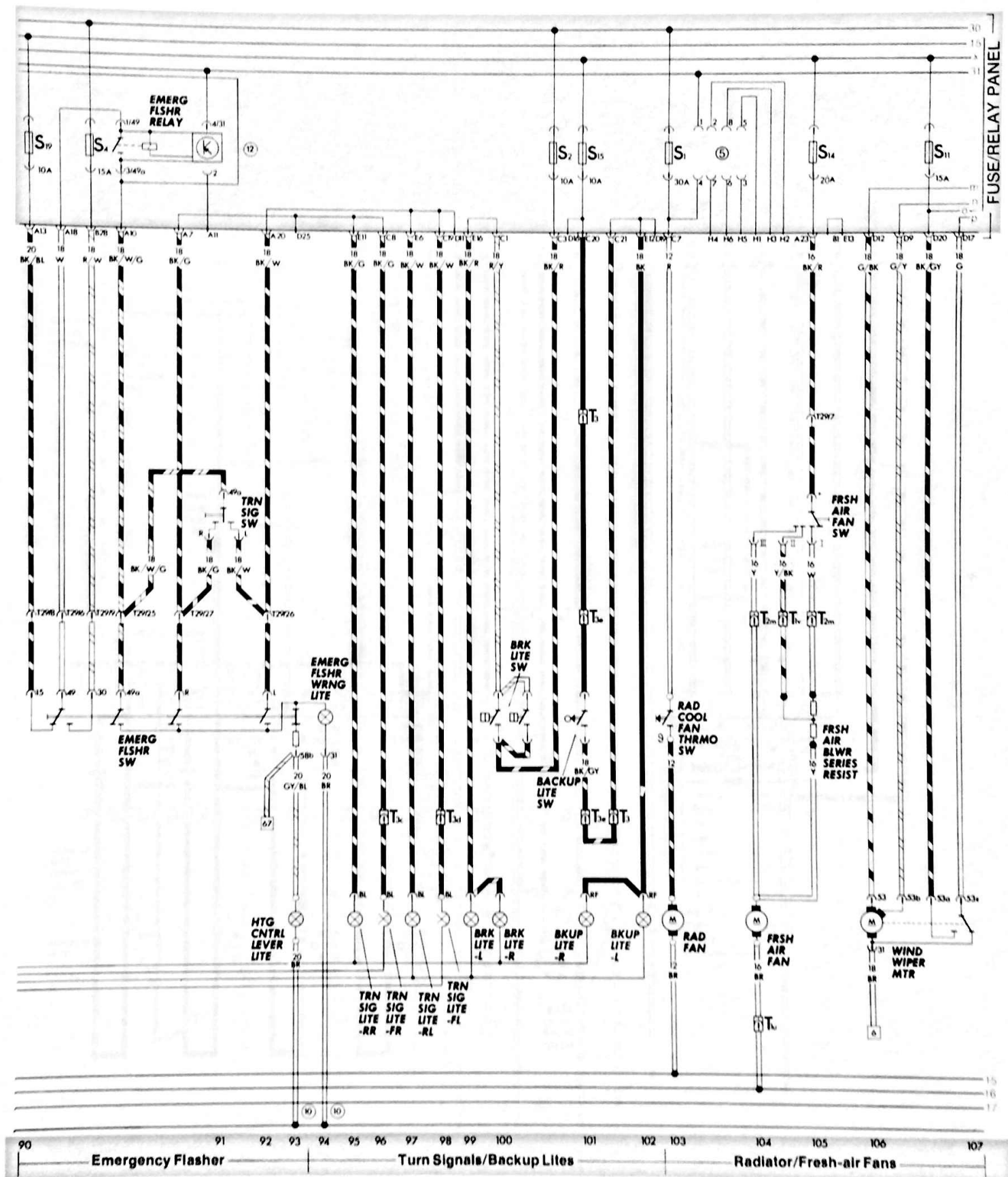
- ① — on body
- ④ — on seat mounting, driver's side
- ⑦ — next to battery
- ⑧ — on engine block left
- ⑨ — on fuse/relay panel
- ⑩ — behind dashboard
- ⑭ — in luggage compartment, left
- ⑱ — on rear lid, right
- ⑱ — on rear lid, right
- ⑲ — in luggage compartment, left
- ⑳ — on rear lid, right
- ㉑ — in rear lid, left
- ㉑ — on transmission

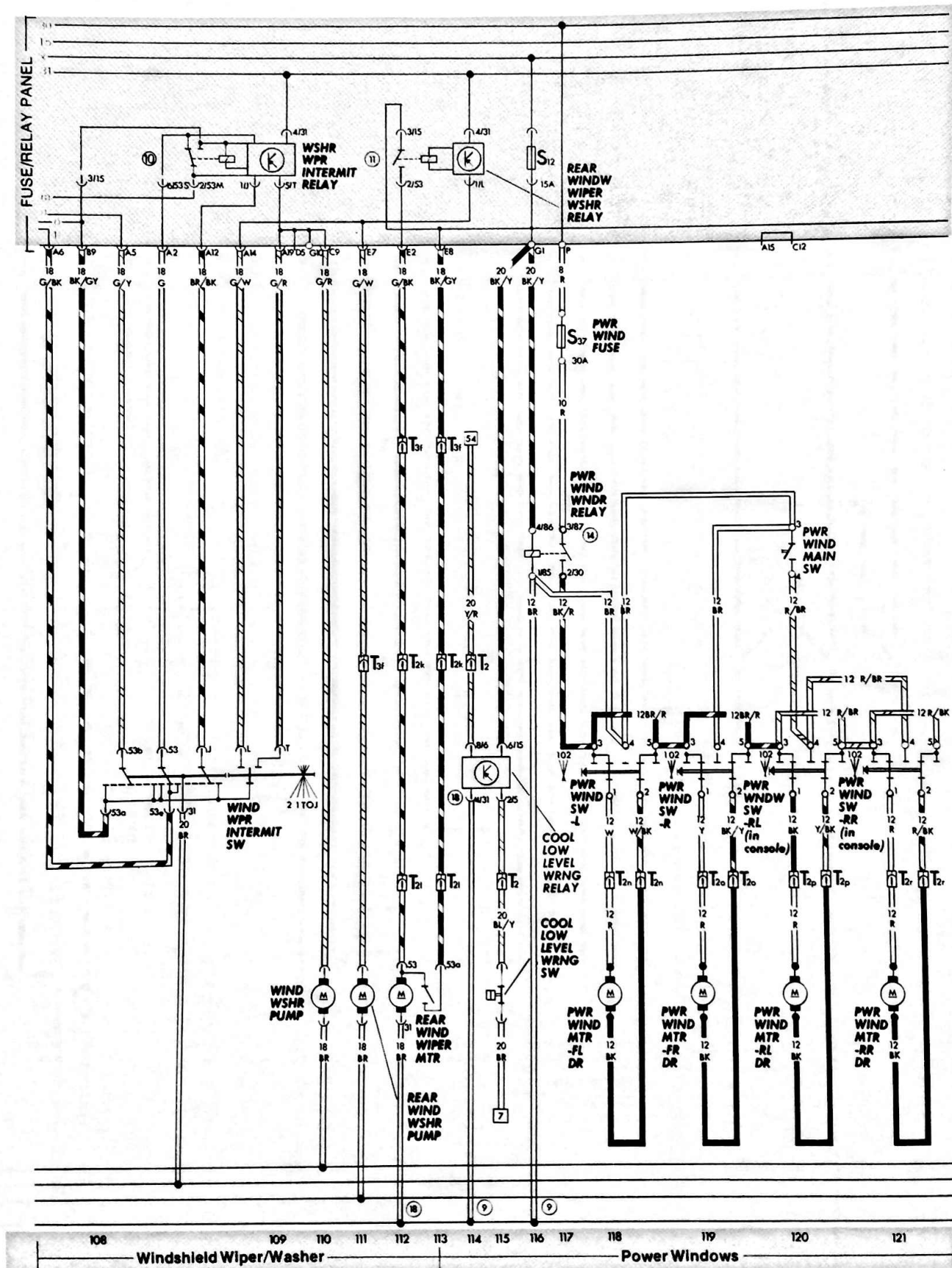


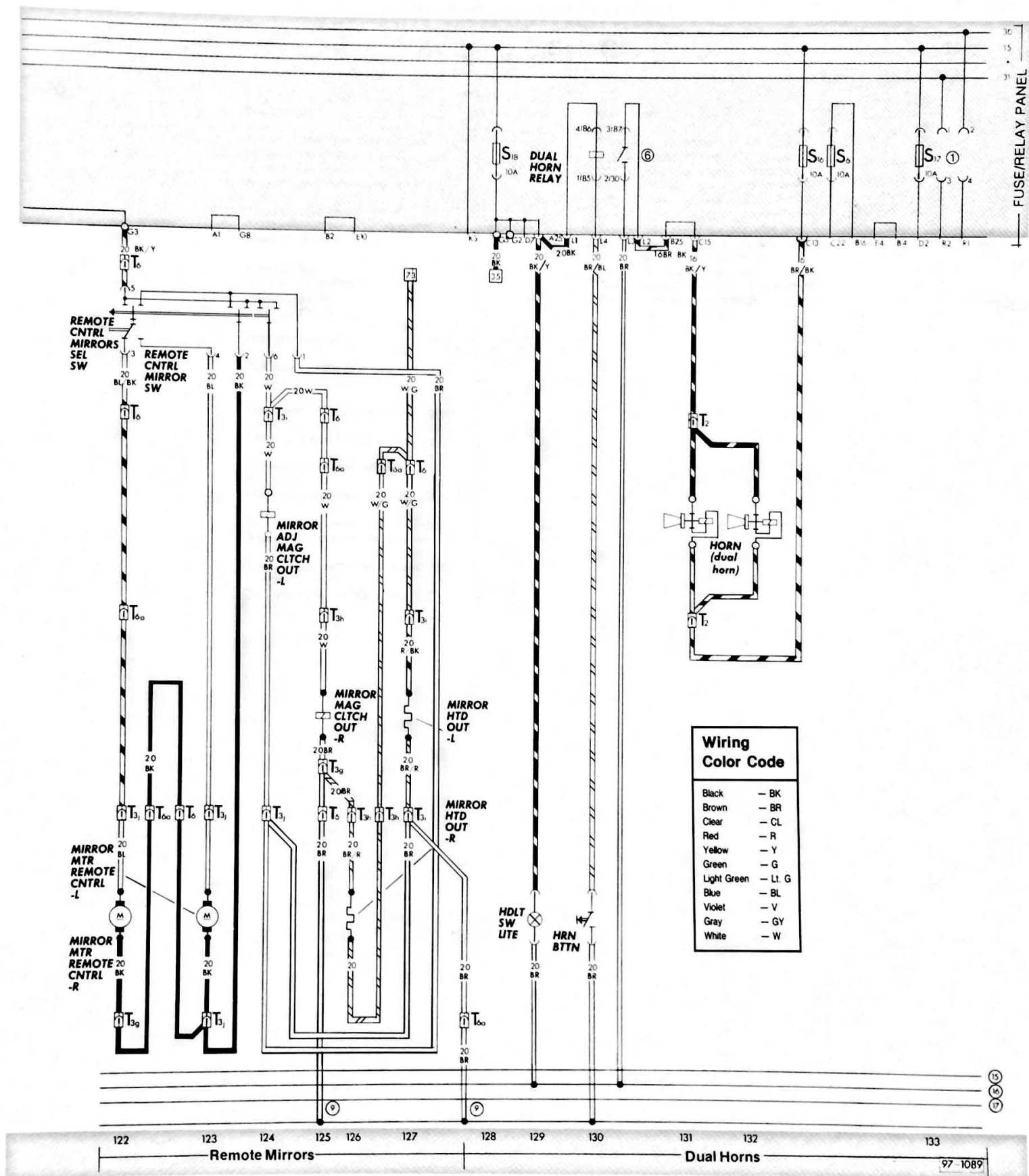








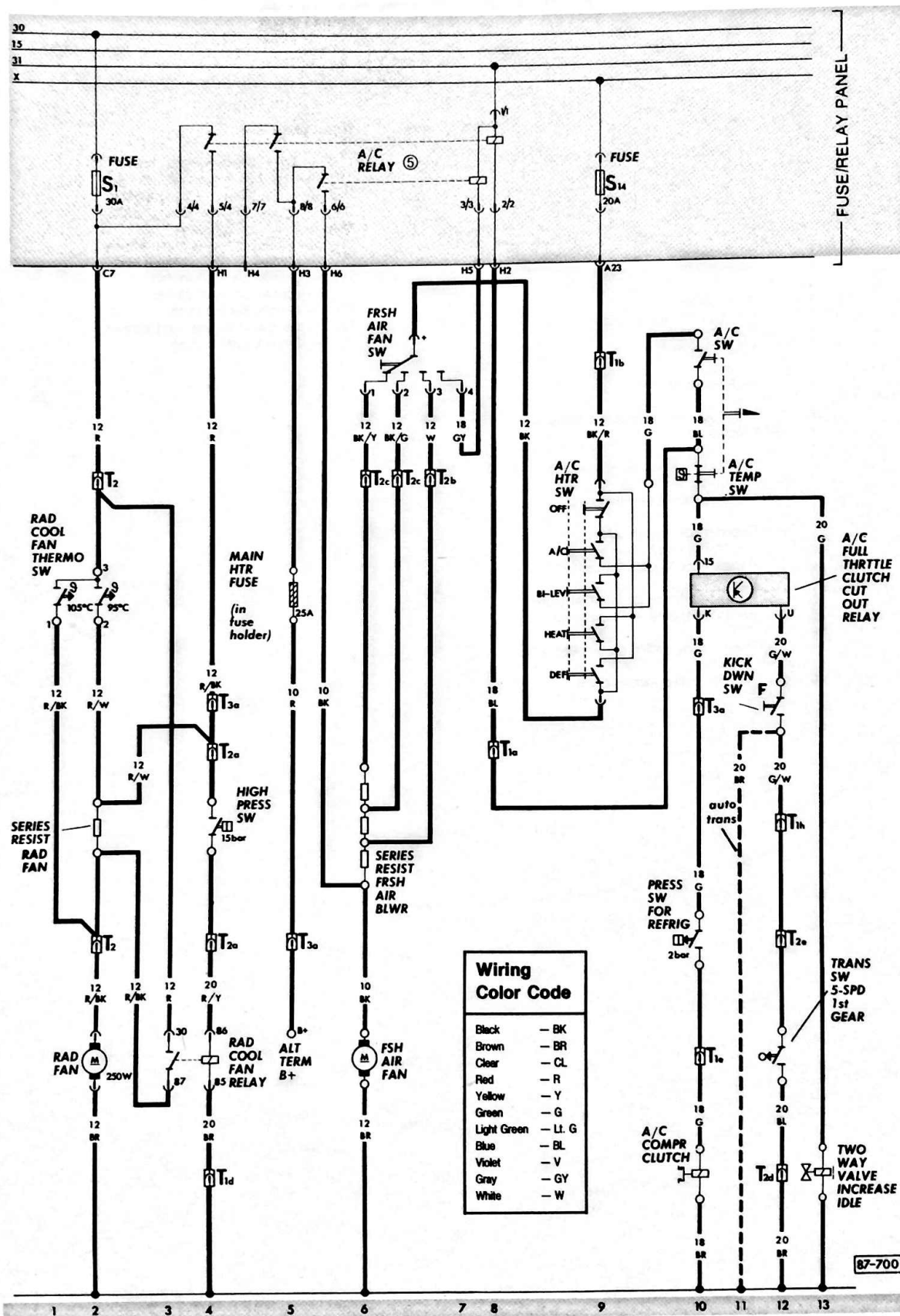




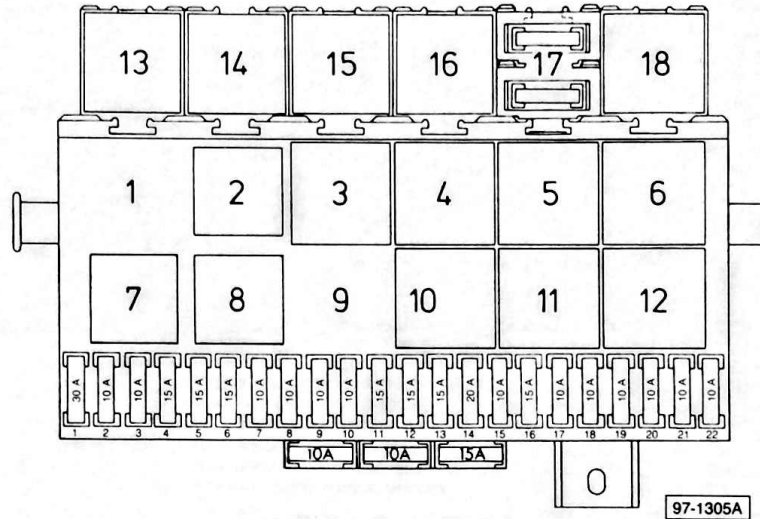
AIR CONDITIONING

1983 4 & 5 Cyl. CIS

Description	Current Track	Wire Connectors
Air conditioner compressor clutch	10	T1a — single, on heater/ A/C control
Air conditioner/heater switch	9	T1b — single, on heater/ A/C controls
Air conditioner relay	4-8	T1d — single, in engine compartment
Air conditioner full-throttle clutch cut-out relay		T1e — single, near compressor clutch
Air conditioner switch	10	T1h — single, behind dash
Air conditioner temperature switch	10	T2 — double, in engine compartment
Alternator to terminal B +	5	T2a — double, on A/C pressure switch
		T2b — double, on fresh air fan
Fresh air fan	6	T2c — double, on fresh air fan
Fresh air fan switch	6, 7	T2d — double, behind dash
Fuse S ₁ (30 A)	2	T2e — double, in engine compartment
Fuse S ₁₄ (20 A)	9	T3a — 3-point, behind dash
High pressure switch	4	
Kick-down switch (5 speed trans. and automatic trans.)	12	
Main heater fuse (25 A) in fuse holder	5	
Pressure switch for refrigerant	10	
Radiator cooling fan relay	3, 4	
Radiator fan	2	
Radiator cooling fan thermoswitch	1, 2	
Series resistance for fresh air blower	6	
Series resistance — Radiator fan	2	
Transmission switch for 5-speed 1st gear	12	
Two-way valve, increase idle	13	



1983 Quantum Turbo-Diesel



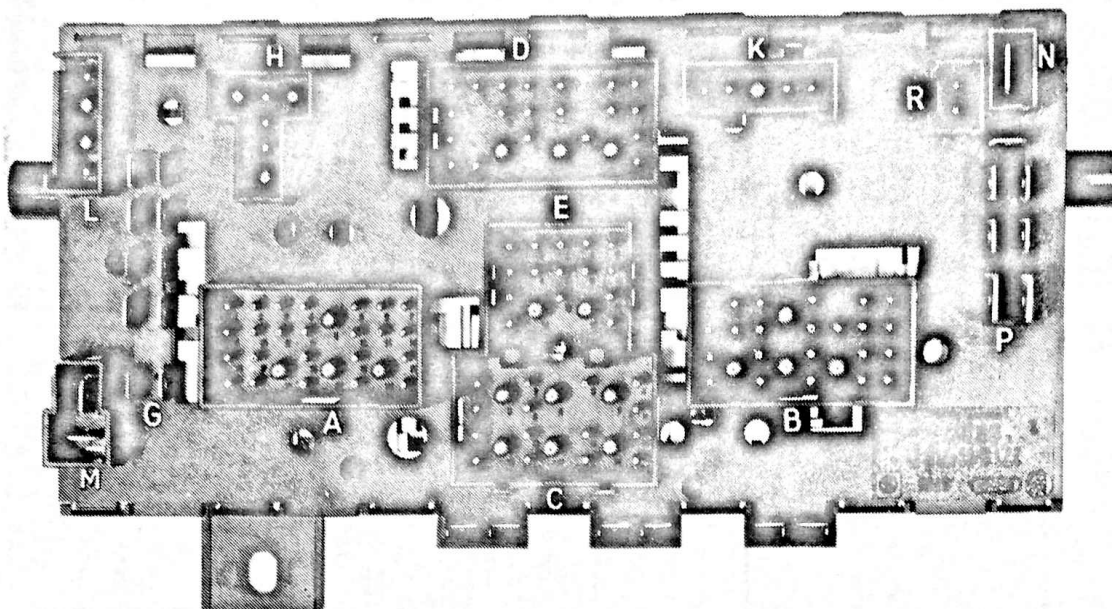
Fuse/Relay Panel

Relay locations on Fuse/Relay Panel

- 1 — open position
- 2 — glow plug relay
- 3 — seat belt warning
- 4 — upshift indicator
- 5 — open position
- 6 — dual horn
- 7 — open position
- 8 — load reduction
- 9 — open position
- 10 — intermittent wiper
- 11 — rear wiper/washer
- 12 — emergency flasher
- 13 — OXS voltage-supply (except diesel)
- 14 — power windows
- 15 — open position
- 16 — cold-start valve (except diesel)
- 17 — open position
- 18 — conduct-level indicator

Fuses

	Rating	Color
S ₁	— 30A	green
S ₂ , S ₃	— 10A	red
S ₄ -S ₆	— 15A	blue
S ₇ -S ₁₀	— 10A	red
S ₁₁ -S ₁₃	— 15A	blue
S ₁₄	— 20A	yellow
S ₁₅	— 10A	red
S ₁₆	— 15A	blue
S ₁₇ -S ₂₂	— 10A	red



97-1100

Fuse/Relay Panel, Rear

Connections

- | | |
|--|---|
| A — for dashboard wiring harness (blue) | H — for air conditioner (brown) |
| B — for dashboard wiring harness (red) | K — for seat-belt warning (colorless) |
| C — for wiring harness in engine compartment left (yellow) | L — for dual horn (grey) |
| D — for wiring harness in engine compartment right (white) | M — for terminal 56 and 56a on headlight switch (black) |
| E — for wiring harness rear (black) | N — single connector |
| G — single connector | P — single connector (terminal 30) |
| | R — not used |

1983 Quantum

4 Cyl./Turbo Diesel

Description	Current Track
Alternator	3
Alternator warning light	47
Battery	4
Coolant temperature gauge	50
Coolant-temperature sending unit	55
Coolant temperature warning light	51
Defogger cut-out relay (X-contact)	64, 65
Digital clock	26
Door contact/buzzer switch, left	32, 33
Door contact switch, front right	29
Door contact switch, rear left	31
Door contact switch, rear right	30
Dual brake and parking brake warning light	36, 37
Dual horn relay	130
Emergency flasher relay	90, 91
Emergency flasher switch	90, 94
Emergency flasher warning light	94
Engine oil pressure control unit	43-46
Engine oil pressure switch (1.8 bar)	56
Engine temperature sender (pre-glow system)	10
Fresh air blower series resistance	105
Fresh-air fan	110
Fresh-air fan switch	104, 105
Fuel gauge	50
Fuel gauge sending unit	13
Fuses (S1-S22) on fuse/relay panel	—
Fuse for glow plugs (S20)	8
Glove compartment light	74
Glow plugs	8-9
Glow plug pre-heat light	41
Glow plug relay	8-11
Headlight dimmer/flasher switch	82, 83
Headlight high-beam warning light	46
Headlight low-beam, left	85-87
Headlight high-beam, left	89
Headlight low-beam, right	86, 88
Headlight high-beam, right	89
Headlight switch light	129
Heating control lever light	93
Horn button	130
Horn (dual horn)	131, 132
Interior light, front	28
Instrument panel light	65, 66
Instrument panel light switch/dimmer	67
Luggage compartment light	27
Luggage compartment light switch	27
Light switch	65-67
Make-up mirror illumination	28
Mirror adjusting magnetic clutch outside left	124
Mirror, heated, outside left	127
Mirror, heated, outside right	126
Mirror magnetic clutch, outside right	125
Mirror motor remote control, left	123
Mirror motor remote control, right	122
Number plate light	75, 76
Oil pressure switch (0.3 bar)	57
Oil pressure warning light	45

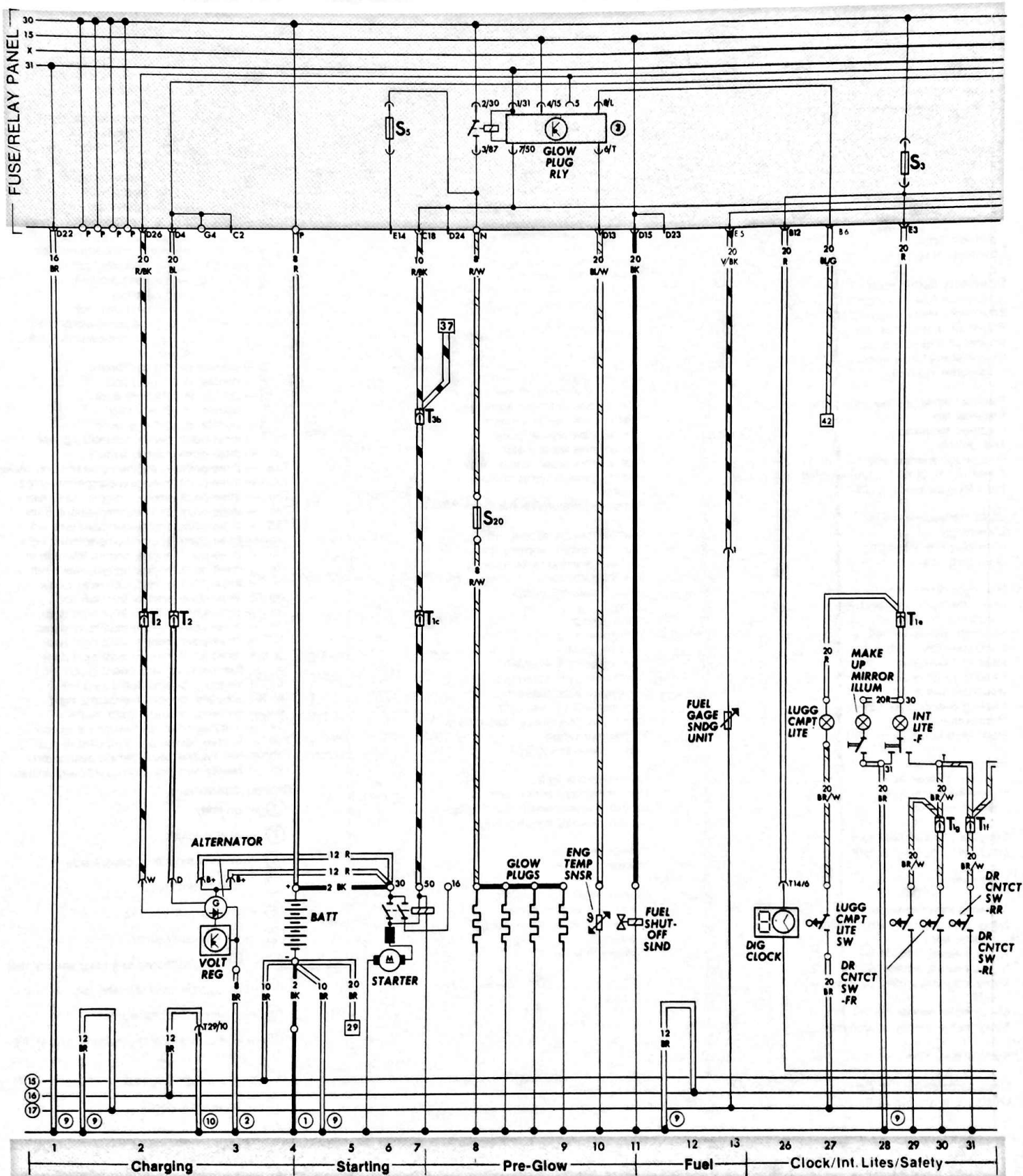
Description	Current Track
Parking brake warning light switch	36
Parking light, left	81
Parking light, right	80
Power window fuse S37	117
Power window main switch	120
Power window motor, front left door	118
Power window motor, front-right door	119
Power window motor, rear left door	120
Power window motor, rear-right door	121
Power window switch, rear left (in console)	120
Power window switch, rear right (in console)	121
Power window winder relay	116, 117
Power window winder switch, left	118
Power window winder switch, right	119
Radiator cooling fan thermostatic switch	103
Radiator fan	103
Radio connection	61
Rear window defogger switch	71
Rear window defogger switch light	63
Rear window defogger warning light	70
Rear window heater element	72
Rear window washer pump	111
Rear window wiper motor	112, 113
Rear window wiper/washer relay	112, 114
Remote control mirrors selector switch	122
Remote control mirror switch	122, 124
Seat belt buzzer control, left	34
Seat belt system warning light	35
Seat belt warning system relay	33, 35
Shift indicator switch	58
Shut-off solenoid switch	11
Starter	6
Starter switch	38-41
Tail light, left	80
Tail light, right	79
Turn signal light, front-left	98
Turn signal light, front-right	96
Turn signal light, rear-left	97
Turn signal light, rear-right	95
Turn signal/emergency flasher relay	90, 91
Turn signal switch	91
Turn signal warning light	48
Upshift control light	42
Upshift indicator control unit	43, 44
Upshift indicator switch (full throttle)	60
Upshift indicator switch (idling)	60
Voltage regulator	3
Voltage stabilizer	50
Washer/wiper intermittent relay	108, 109
Windshield washer pump	110
Windshield wiper intermittent switch	108, 109
Windshield wiper motor	106, 107

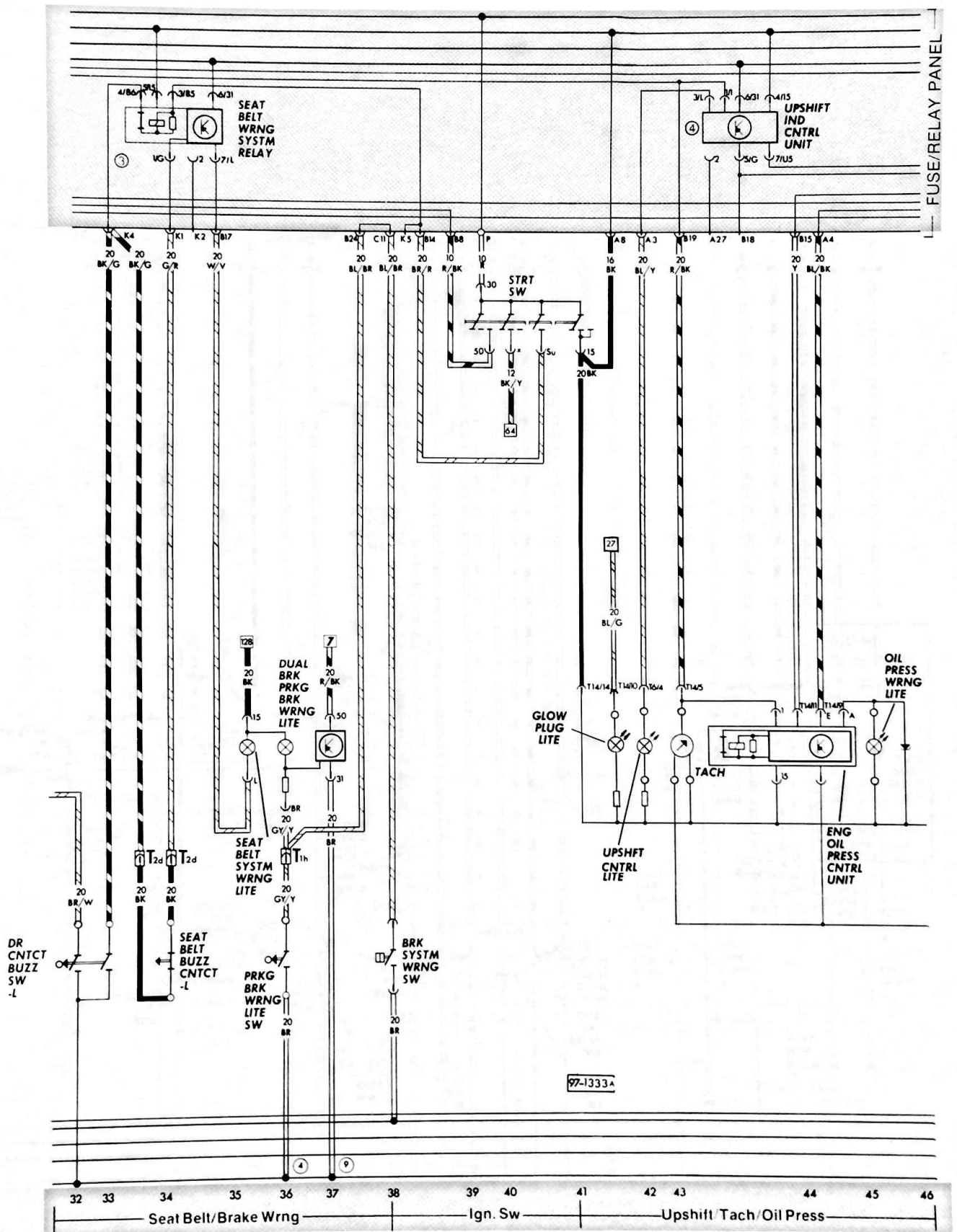
Wire Connectors

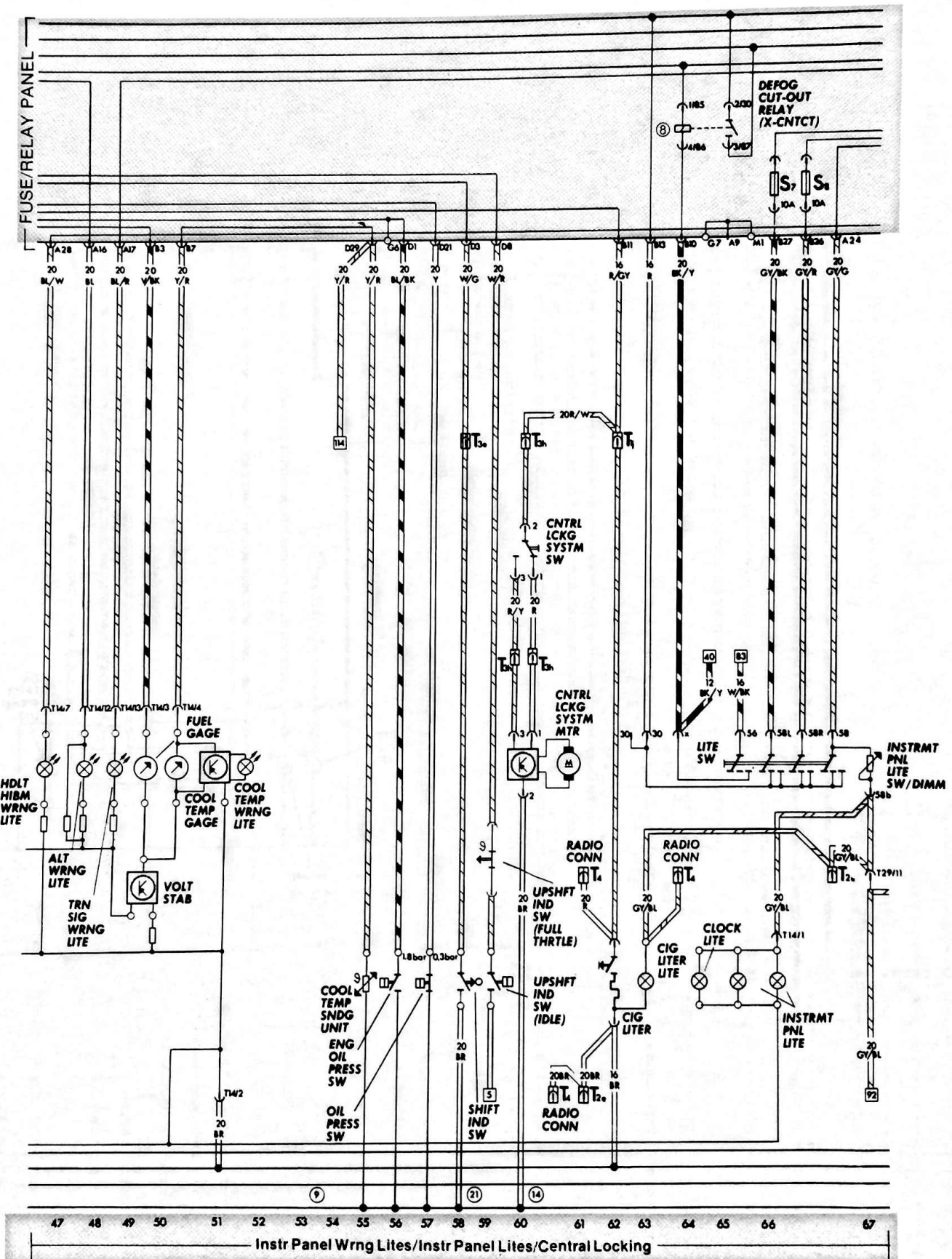
T1	— single, in engine compartment, left
T1	— single, next to fuse/relay panel
T1a	— single, next to fuse/relay plate
T1b	— single, engine compartment, left
T1c	— single, engine compartment, left
T1e	— single, next to fuse/relay plate
T1f	— single, next to left front door
T1g	— single, next to right front door
T1h	— single, behind dashboard
T1j	— single, engine compartment, left
T1k	— single, engine compartment, left
T1p	— single, next to fuse/relay panel
T1u	— single, behind dashboard
T2	— double, behind dashboard
T2	— double, next to dual horns
T2	— double, next to fuse/relay panel
T2	— double, in engine compartment, left
T2a	— double, next to fuse/relay panel
T2b	— double, engine compartment, left
T2c	— double, next to battery
T2d	— double, next to seat belt lock
T2e	— double, in luggage compartment, left
T2k	— double, in luggage compartment, left
T2l	— double, in rear lid
T2m	— double, behind dashboard
T2n	— double, in left front door
T2o	— double, in right front door
T2p	— double, in left rear door
T2r	— double, in right rear door
T3	— three-point, behind fuse/relay panel
T3	— three-point, next to battery
T3a	— three-point, in engine compartment, center
T3b	— three-point, in engine compartment left
T3c	— three-point, engine compartment, left
T3c	— three-point, engine compartment, right
T3d	— three-point, engine compartment, left
T3d	— three-point, engine compartment, right
T3e	— three-point, engine compartment front
T3e	— three-point, engine compartment, left
T3f	— three-point, behind fuse/relay panel
T3g	— three-point, next to front left door
T3h	— three-point, next to front right door
T3h	— three-point, next to fuse/relay panel
T3i	— three-point, next to front right door
T3j	— three-point, next to front right door
T4	— four-point, on dashboard clutch
T6	— six-point, behind dashboard left
T6	— six-point, behind dashboard, right
T6	— six-point, on dashboard cluster
T14	— fourteen-point, on dashboard cluster
T14	— fourteen-point, on dashboard cluster
T29	— twenty-nine point, behind dashboard
T29	— twenty-nine point, on dashboard cluster

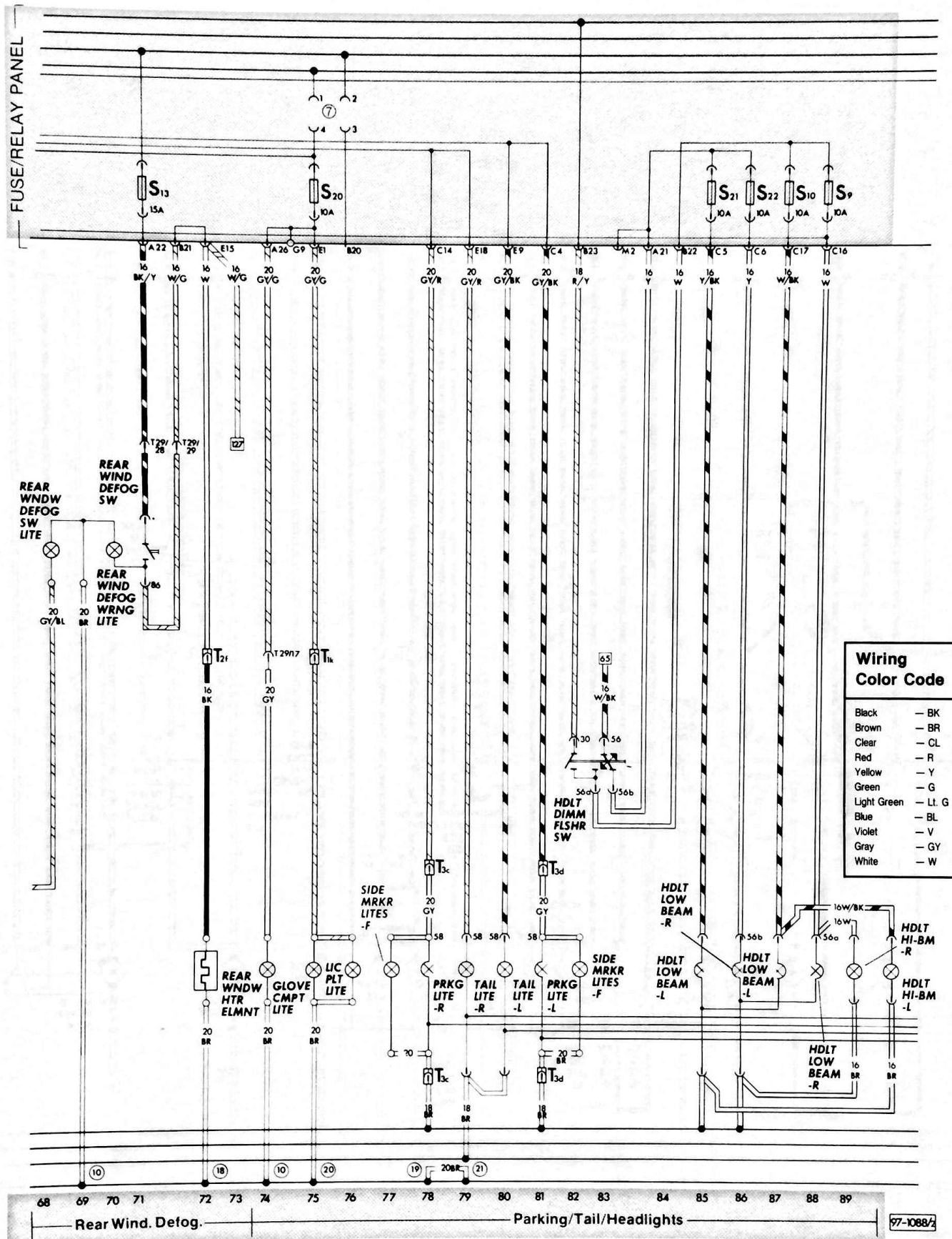
Ground Connectors

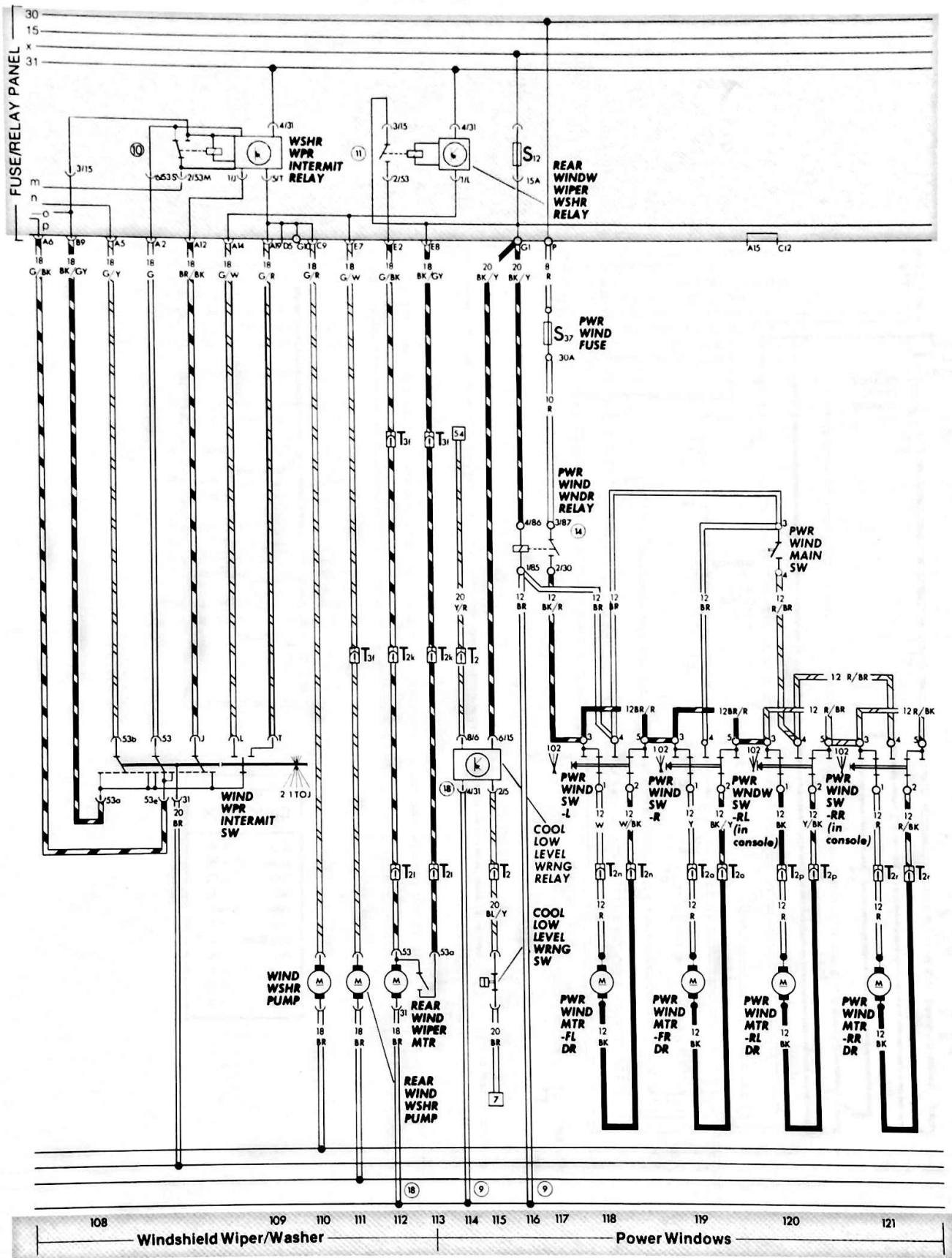
- ① — on body
- ② — at alternator
- ④ — on seat mounting, driver's side
- ⑦ — next to battery
- ⑧ — on engine block, left
- ⑨ — on fuse/relay panel
- ⑩ — behind dashboard to ground plate at dash
- ⑭ — in luggage compartment, left
- ⑮ — in wiring harness, front
- ⑯ — in dashboard wiring harness (bound with isolating tape)
- ⑰ — in wire harness, rear
- ⑱ — on rear lid, right
- ⑲ — in luggage compartment, left
- ⑳ — on rear lid, right
- ㉑ — in rear lid, left
- ㉒ — on transmission

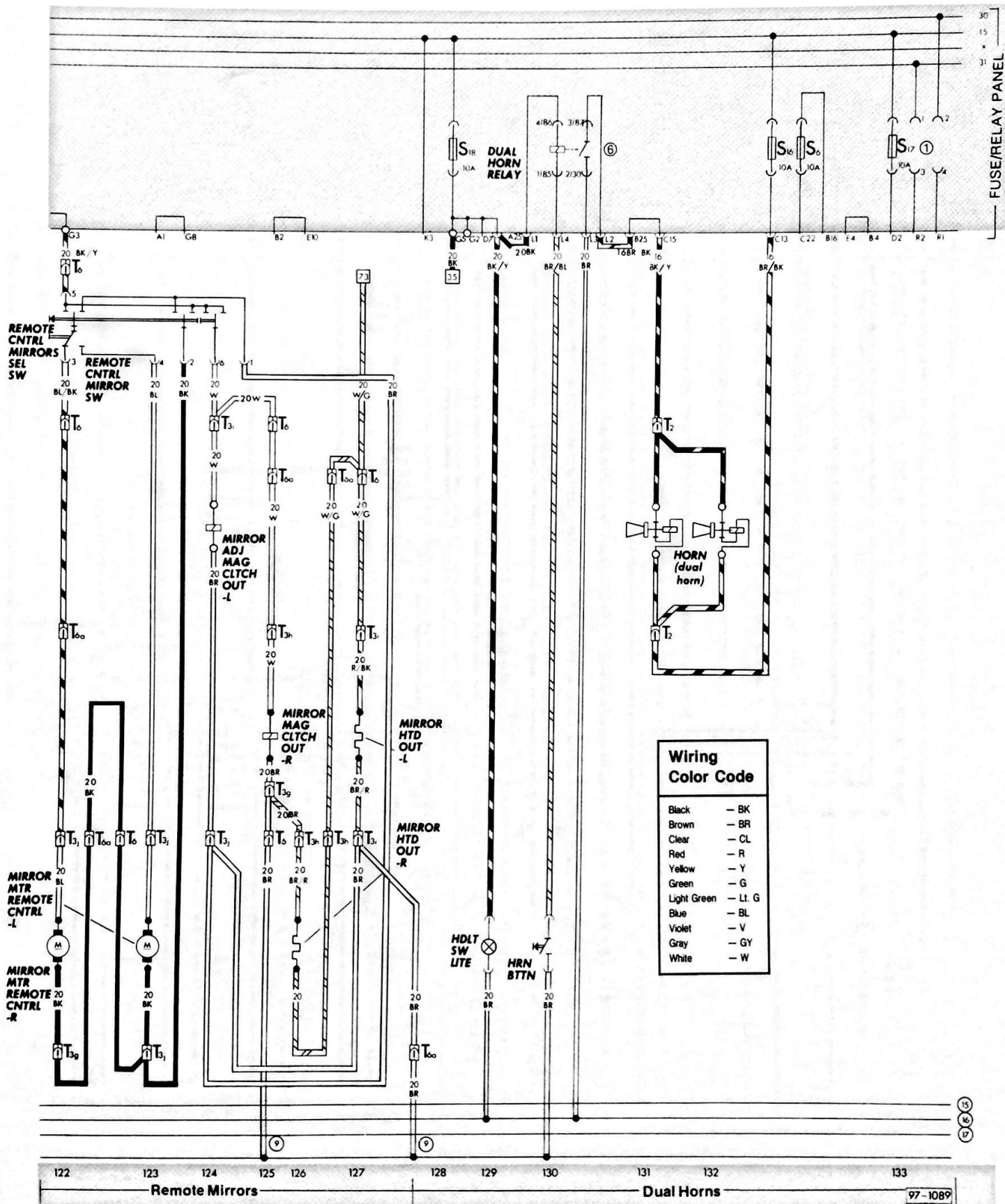












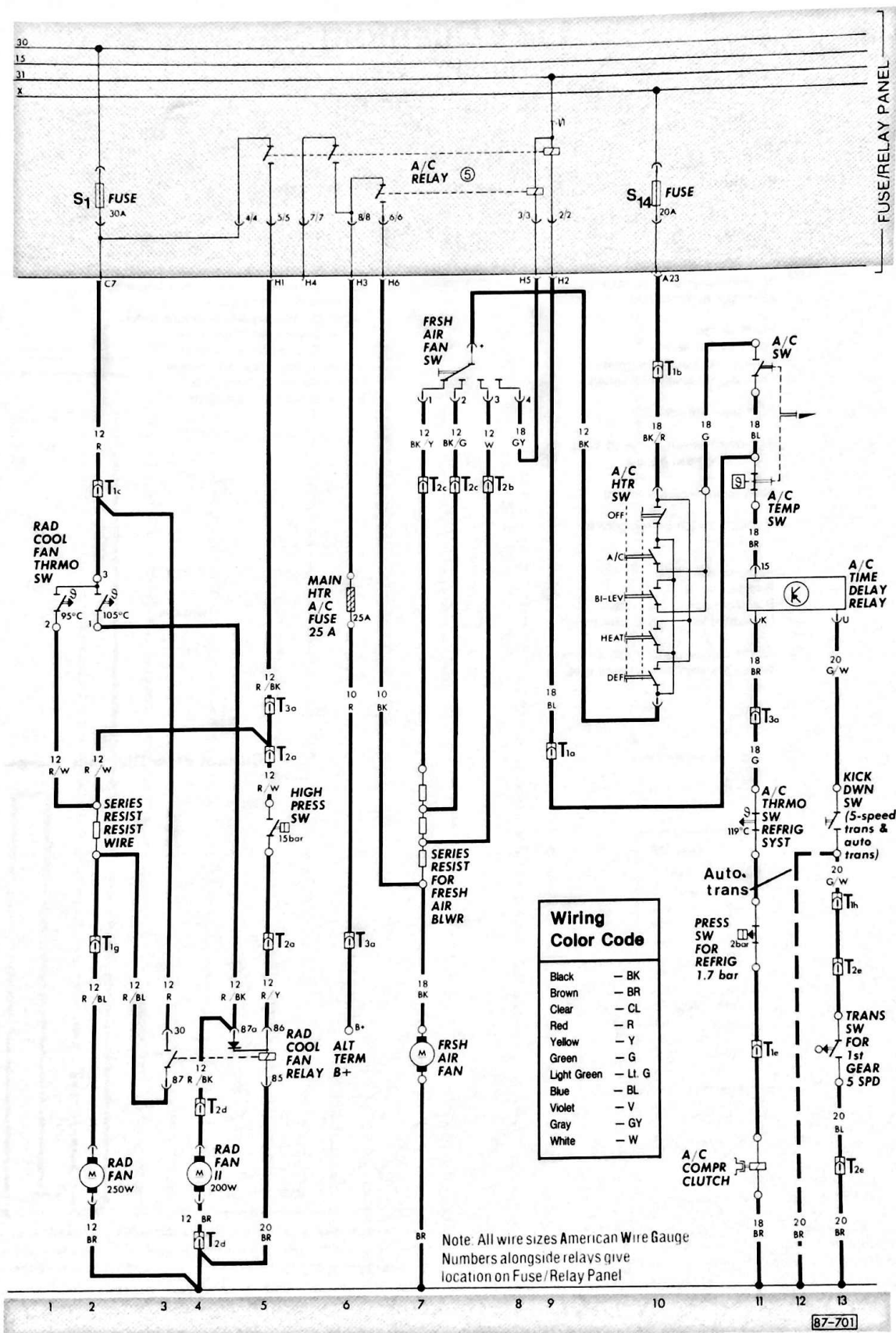
1983 Quantum

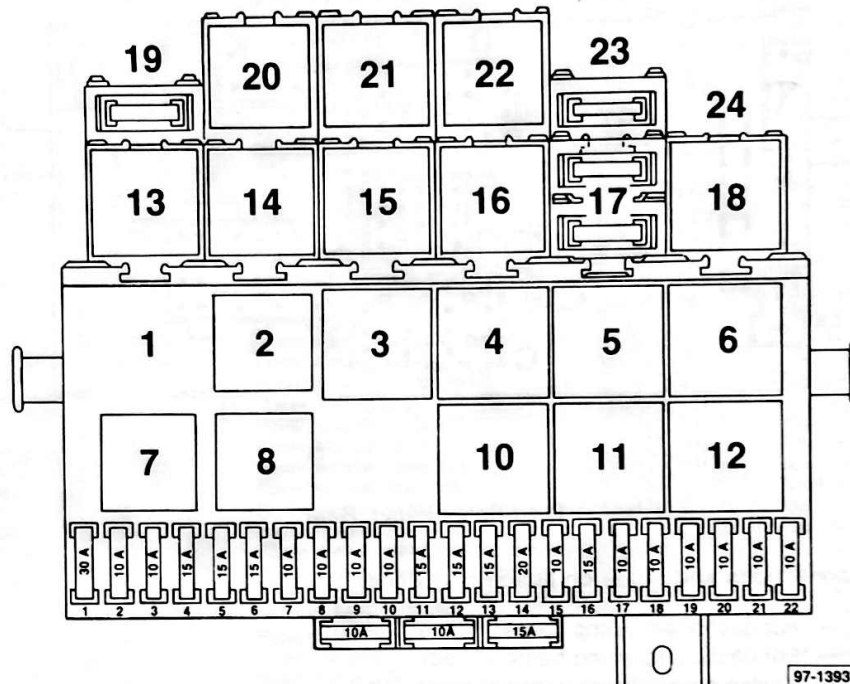
Turbo Diesel

Air Conditioning

Description	Current Track	Wire Connectors
Air conditioner compressor clutch	8	T1a — single, on heater/ A/C controls
Air conditioner temperature switch	11	T1b — single, on heater/A/C controls
Air conditioner thermostatic switch (in refrigerant system)	11	T1c — single, in engine compartment
Air conditioner time delay relay	11-13	T1a — single, near compressor clutch
Alternator to terminal B +	6	T1g — single, in engine compartment
		T1h — single, behind dash
Fresh air fan	7	T2a — double, on A/C pressure switch
Fresh air fan switch	7-8	T2b — double, on fresh air fan
Fuse S ₁ (in fuse/relay panel)	2	T2c — double, on fresh air fan
Fuse S ₁₄ (in fuse/relay panel)	10	T2d — double, near A/C blower
		T2e — double, behind dash
High pressure switch	5	T3 — 3-point, behind dash
Kick-down switch (5-speed trans. and automatic trans.)	13	
Main heater/A/C (25 amps)	6	
Pressure switch for refrigerant (1.7 bar)	11	
Radiator fan	2	
Radiator fan II	4	
Radiator cooling fan relay	3-5	
Radiator cooling fan thermostatic switch	1, 2	
Series resistance for fresh air blower	7	
Series resistance/resistance wire	2	

Current Flow Diagram →





Fuse/Relay Panel, Front

Fuse arrangement

according to numbers on fuse panel as seen from left to right:

	Amp.
1 Radiator fan, air conditioner	30
2 Stop lights	10
3 Cigarette lighter, radio, clock, interior lights, central locking system	10
4 Emergency flasher system	15
5 Electric fuel pump*	15
6 Vacant	
7 Tail, parking and side marker lights, left	10
8 Tail, parking and side marker lights, right	10
9 High beam right, high beam indicator light	10
10 High beam left	10
11 Windshield wipers and washer	15
12 Rear window wiper and washer*, coolant level checking device*, outside rear view mirror adjustment	15
13 Rear window defogger, heated rear view mirror	15
14 Fresh air fan	20
15 Back-up lights, shift console light (Automatic Transmission)	10
16 Horn	15
17 Vacant	
18 Throttle switch*	10
19 Turn signals	10

20 License plate lights, glove compartment light	10
21 Low beam left	10
22 Low beam right	10

Separate fuses above fuse panel

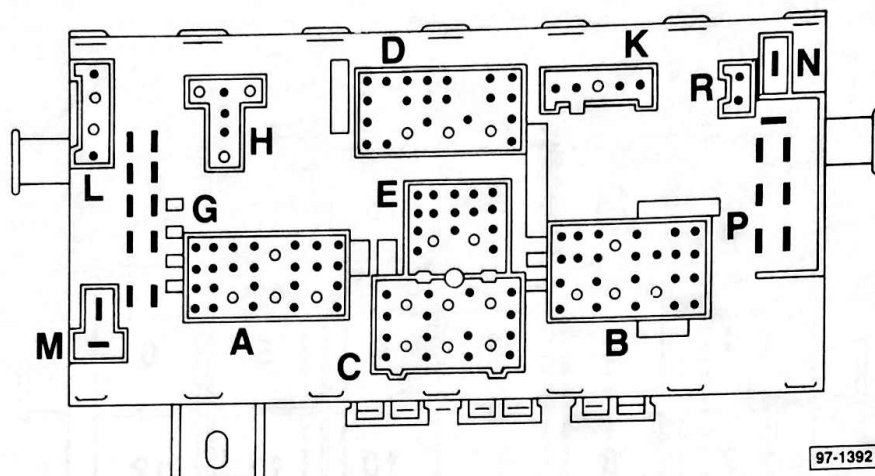
Power windows	30
Add. radiator fan*	
(Diesel Engine with A/C)	15

Color codes

10 Amp. fuses	— red
15 Amp. fuses	— blue
20 Amp. fuses	— yellow
30 Amp. fuses	— green

Relay locations on Fuse/relay panel

1	— Open position
2	— Fuel pump
3	— Seat belt warning system
4	— Upshift indicator
5	— Open position
6	— Dual horn
7	— Open position
8	— Load reduction
9	— Open position
10	— Intermittent wiper
11	— Rear wiper/washer
12	— Emergency flasher
13	— Fuel enrichment system
14	— Power supply for J 21
15	— Open position
16	— Power windows
17	— Open position
18	— Coolant level indicator
19	— Open position
20	— Open position
21	— Open position
22	— Fuse for power windows
23	— Open position
24	— Open position



Fuse/Relay Panel, Rear

Connections and Plugs on Fuse/Relay Panel

- A — For dashboard wiring harness (blue)
- B — For dashboard wiring harness (red)
- C — Engine compartment wiring harness, left (yellow)
- D — Engine compartment wiring harness, right (white)
- E — Rear wiring harness (black)
- G — Single connector
- H — Air conditioner (brown)
- K — Seat belt warning system (colorless)
- L — Headlight/terminal 56, dimmer switch/terminal 56b (black)
- N — Open position
- P — Single connector/terminal 30
- R — Open position

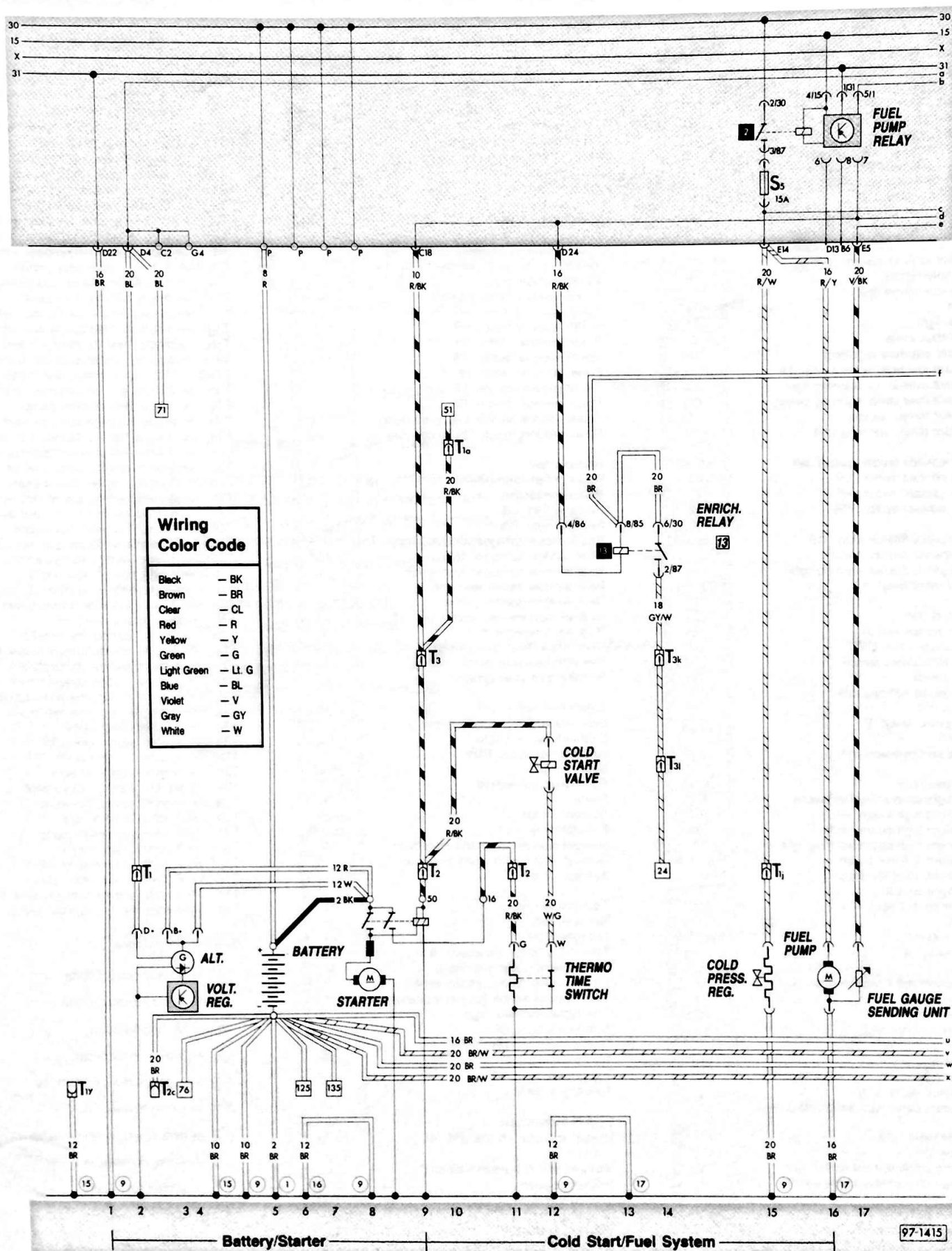
Description	Current Track
Acceleration enrichment valve	3, 4
Alternator	23
Alternator warning light	64
Backup light, right	119
Backup light, left	120
Backup light switch	119
Battery	5
Brake light, left	116
Brake light, right	117
Brake, parking brake indicator light	50
Brake light switch	117, 118
Brake system warning switch	52
Cat. elapsed mileage indicator	69
Cat. elapsed mileage odometer	70
Central locking system motor	77
Central locking system switch	77
Cigarette lighter	78
Cigarette lighter light	79
Clock	35
Clock light	81
Cold start valve	12
Control pressure regulator	15
Coolant low level control unit	134, 135
Coolant over-temp. warning light	68
Coolant over-temp. warning switch	135
Coolant temp., gauge	67
Coolant temp., sending unit	72
Door contact/buzzer switch, left	44, 45
Door contact switch, LR	43
Door contact switch, RF	41
Door contact switch, RR	42
Emergency flasher relay	108, 109
Emergency flasher switch	106, 111
Emergency flasher warning light	111
Enrichment relay	13, 14
Fresh air fan	123
Fresh air fan switch	124
Frequency valve OXS	20
Fuel enrichment switch	22
Fuel gauge	66
Fuel gauge sending unit	17
Fuel pump	16
Fuel pump relay	2, 16, 17
Glove compartment light	91
Hall generator	26, 27
Headlight dimmer/flasher switch	100
Headlight high beam, left	107
Headlight high beam, right	106
Headlight high beam warning light	63
Headlight, left low beam	102, 104
Headlight, right low beam	103, 105
Headlight switch	150
Heater control light	110
Horns	151
Horn button	153, 154
Horn relay	6, 156, 160
Idle speed stabilization valve	33
Idle stabilizer	29
Ignition coil	29
Ignition control unit	24-27
Ignition distributor	29, 30
Ignition starter/switch	53, 55
Interior light, front	40
Instrument panel light	82
Instrument panel light switch/dimmer	55
License plate light	92, 93
Light switch	79, 85
Luggage compartment light	36
Luggage compartment light switch	36
Make-up mirror light	39
Mirror, adjusting switch	142
Mirror, heat element, RF	146
Mirror, heat element, LF	147

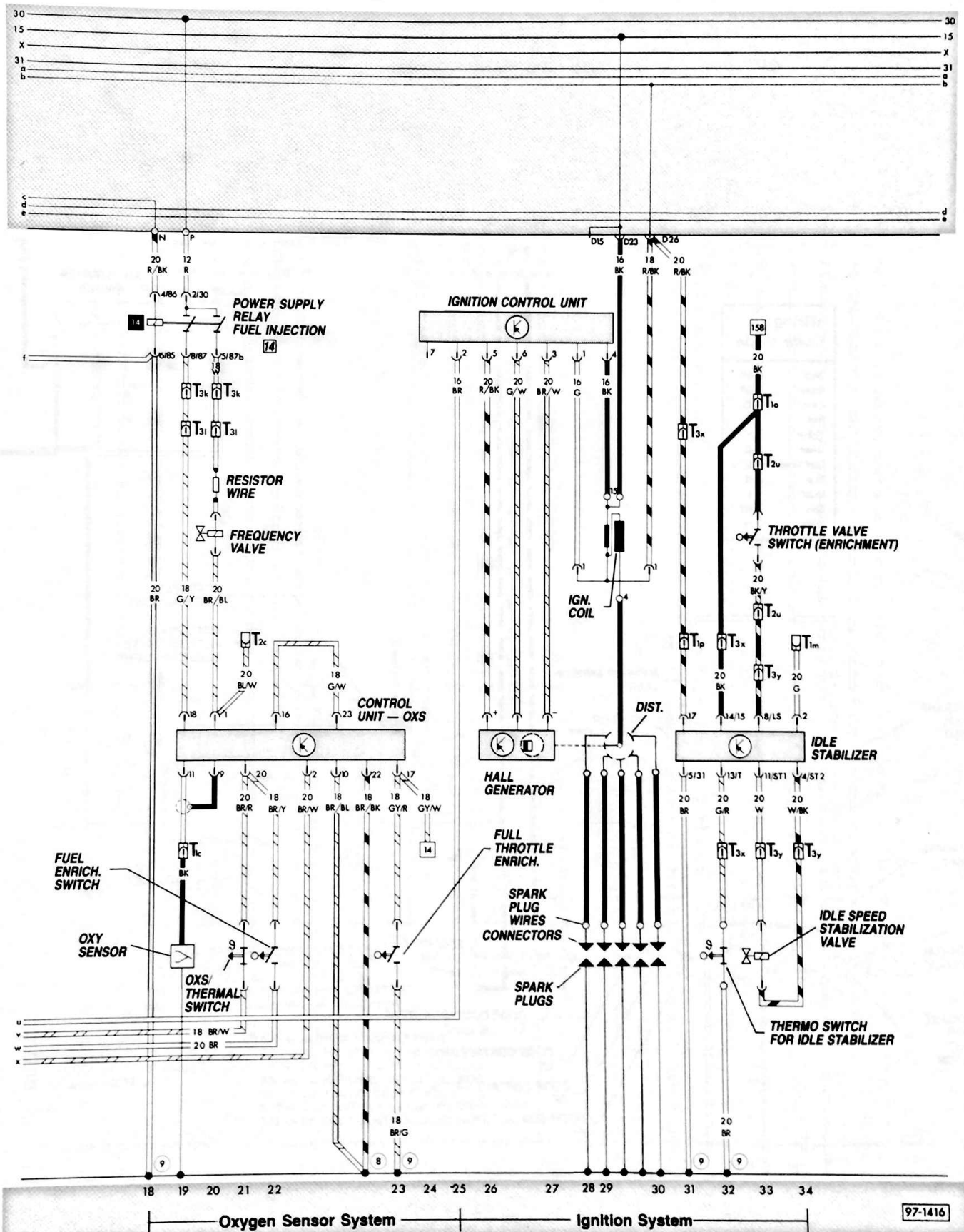
Description	Current Track
Mirror, magnetic clutch, LF	144
Mirror, magnetic clutch, RF	145
Mirror motor, LF	143
Mirror motor, RF	142
Mirror, selecting switch	142-147
Oil pressure control unit	59-61
Oil pressure switch (0.3 bar)	73
Oil pressure switch (1.8 bar)	74
Oil pressure warning light	62
OXS control unit	19-23
OXS thermostwitch	21
Oxygen sensor	19
Parking brake warning light switch	50
Parking light, left	98
Parking light, right	95
Power supply relay (fuel-injection)	14, 18, 19
Power window fuse	137
Power window lockout switch	140
Power window motor, LF	139
Power window motor, LR	140
Power window motor, RF	139
Power window motor, RR	141
Power window relay	16, 136
Power window switch, LF	138
Power window switch, RF	139
Power window switch, LR (in console)	140
Power window switch, RR (in console)	141
Radiator fan	121
Radiator fan thermostwitch	121, 122
Radio connection	78
Reading light, LR	38
Reading light, RR	37
Rear window defogger indicator light	87
Rear window defogger switch	88
Rear window defogger light switch	86
Rear window heater element	89
Rear window washer pump	131
Rear window washer/wiper relay	11, 131, 133
Rear window wiper motor	132
Resistance (fresh air blower)	124
Resistor (heater system)	122
Resistor wire (fuel system)	20
Safety belt switch, left	46, 47
Seat belt warning system relay	3, 46, 48
Seat belt warning light	49
Side marker lights, front	94
Spark plugs	28-30
Spark plug connectors	28-30
Starter	8
Sunroof motor	159
Sunroof relay	156-160
Sunroof stop switch (closed position)	156
Sunroof stop switch (open position)	158
Sunroof switch	156, 157
Tachometer	58
Tail light, left	97
Tail light, right	96
Time delay relay (x-contact)	8, 80-83
Thermostwitch (idle stabilizer)	32
Throttle valve switch (enrichment)	33
Transmission switch (upshift indicator)	75
Turn signal indicator light	65
Turn signal light, LF	115
Turn signal light, LR	114
Turn signal light, RF	113
Turn signal light, RR	112
Turn signal switch	109
Upshift control light	57
Upshift indicator control unit	4, 59, 60
Vacuum switch (upshift indicator)	76
Voltage regulator	3, 4
Voltage stabilizer	66
Washer/wiper intermittent relay	10, 128-129
Windshield washer pump	130
Windshield wiper intermittent switch	127, 130
Windshield wiper motor	125, 126

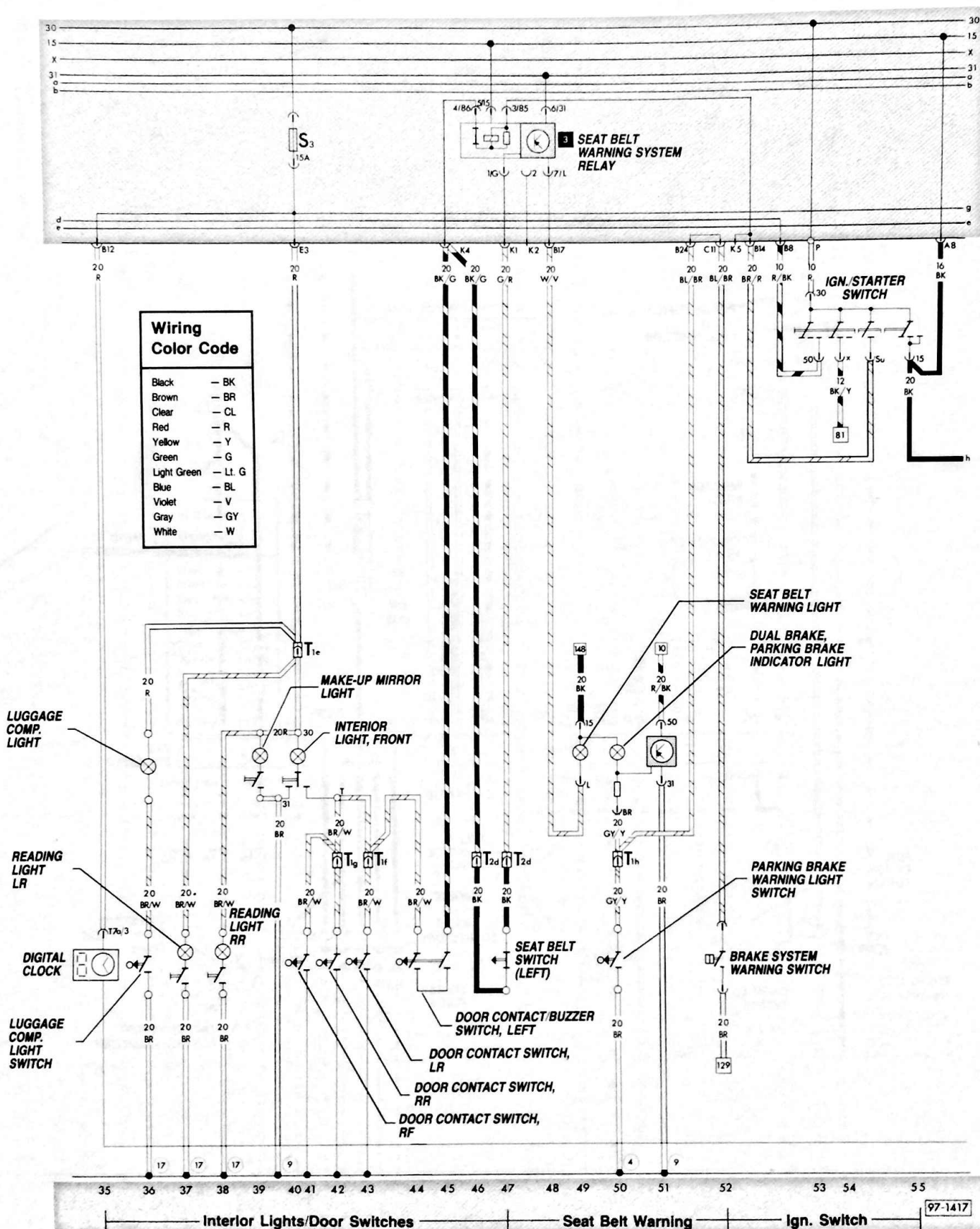
Wire Connectors
T1 — single, engine compartment, left
T1a — single, behind relay panel
T1j — single, behind relay panel
T1y — single, engine compartment, right
T2 — double, engine compartment, left
T2c — double, plenum chamber
T3 — 3 point, engine compartment, left
T3k — 3 point, behind relay panel
T3l — 3 point, engine compartment, left
T1c — single, engine compartment, left
T1m — single, behind relay panel
T1o — single, behind relay panel
T1p — double, behind relay panel
T2c — double, plenum chamber
T2n — double, engine compartment, front
T3k — 3 point, engine compartment, right
T3l — 3 point, engine compartment, right
T3x — 3 point, left of relay panel
T3y — 3 point, engine compartment, left
T1e — single, behind relay panel
T1f — single, behind dashboard, left
T1g — single, behind dashboard, right
T1h — single, next to parking brake
T2 — double, next to seat belt buckle
T7a/3 — 7 point, on instrument cluster
T3c — 3 point, engine compartment, right
T1g — single, behind relay panel
T1k — single, luggage compartment, left
T2e — double, behind dashboard, center
T2f — double, luggage compartment, left
T3c — 3 point, engine compartment, front
T3d — 3 point, engine compartment, front
T3h — 3 point, behind dashboard, left
T4 — 4 point, behind dashboard, center
T29 — 29 point, behind dashboard
T3c — 3 point, engine compartment, front
T3d — 3 point, engine compartment, front
T1u — single, behind dashboard
T1v — single, behind dashboard
T2k — double, luggage compartment, left
T2l — double, rear trunk lid
T2m — double, behind dashboard
T2x — double, engine compartment, front
T3 — 3 point, engine compartment, right
T3e — 3 point, engine compartment, center
T3f — 3 point, in luggage compartment
T1b — single, behind relay panel
T2n — double, driver's door
T2o — double, passenger door
T2p — double, left rear door
T2r — double, right rear door
T2s — double, behind relay panel
T3q — 3 point, passenger door
T3h — 3 point, driver's door
T3i — 3 point, passenger door
T3j — 3 point, driver's door
T6 — 6 point, next to relay panel
T6a — 6 point, next to relay panel
T2b — double, engine compartment, front
T2c — double, next to sunroof switch

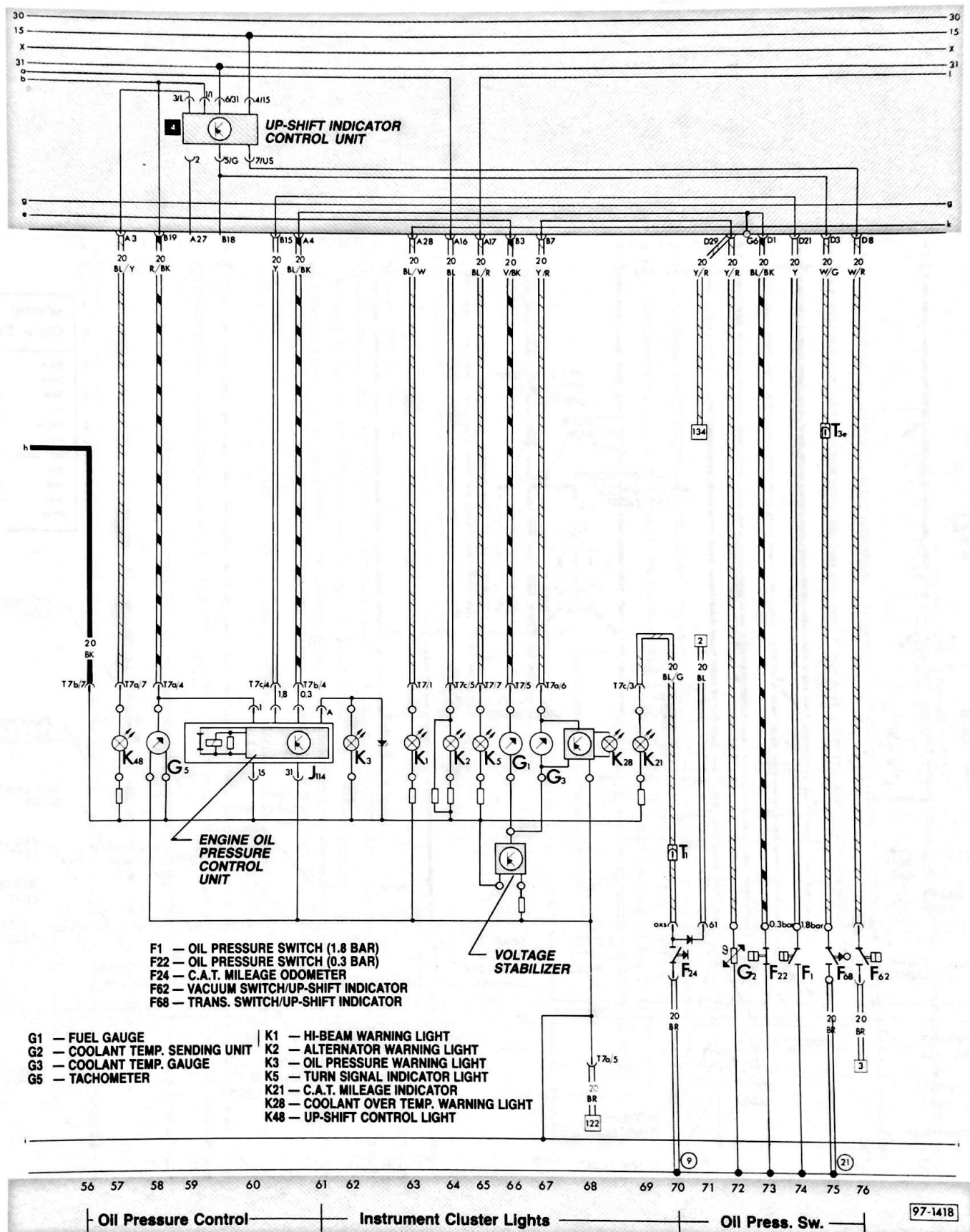
Ground Connectors

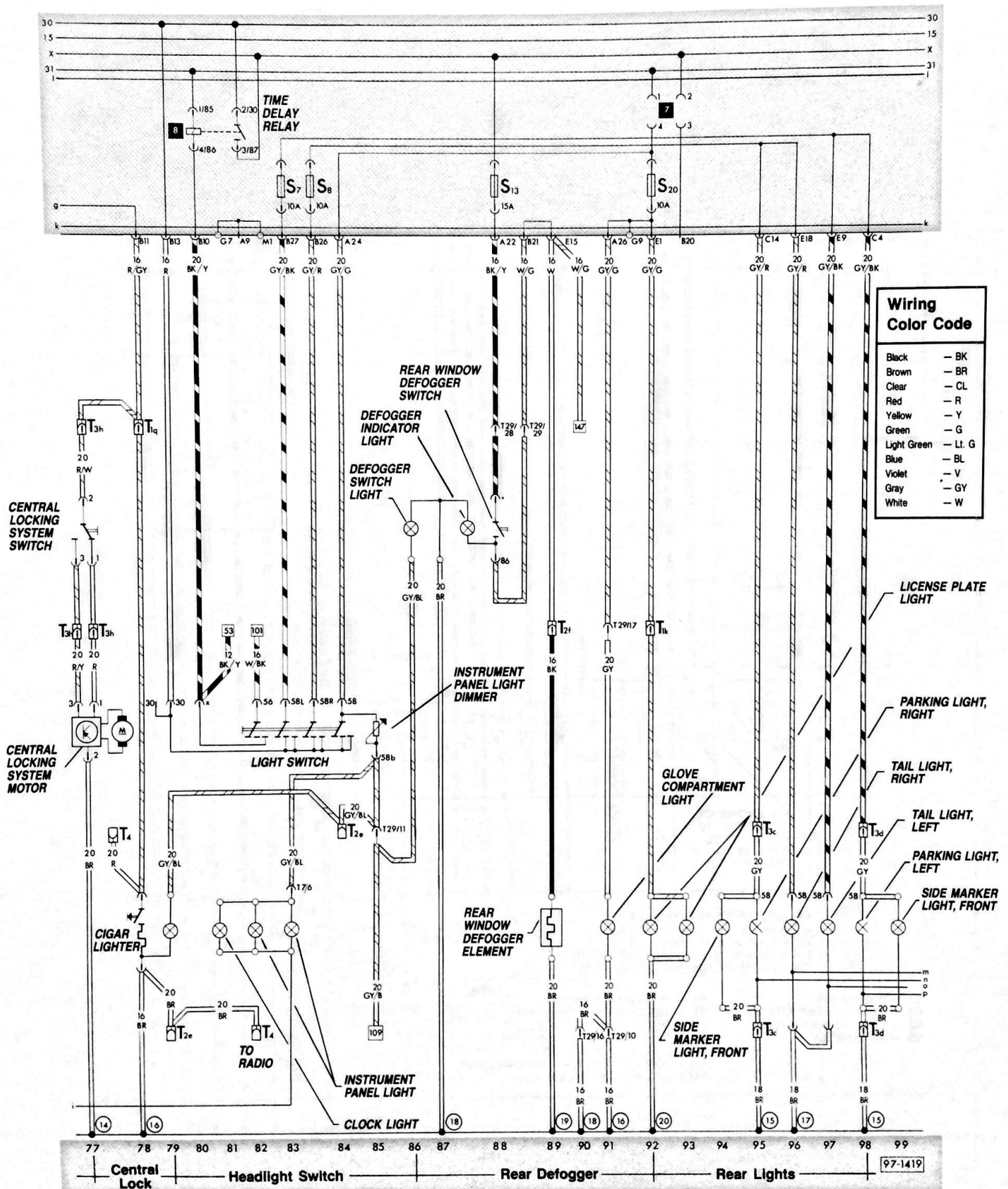
- ① — battery ground strap
- ④ — next to parking brake
- ⑧ — on engine block
- ⑨ — next to relay panel
- ⑭ — luggage compartment, left
- ⑮ — wiring harness, front
- ⑯ — dashboard wiring harness
- ⑰ — wiring harness, rear
- ⑱ — instrument cluster
- ⑲ — rear deck lid

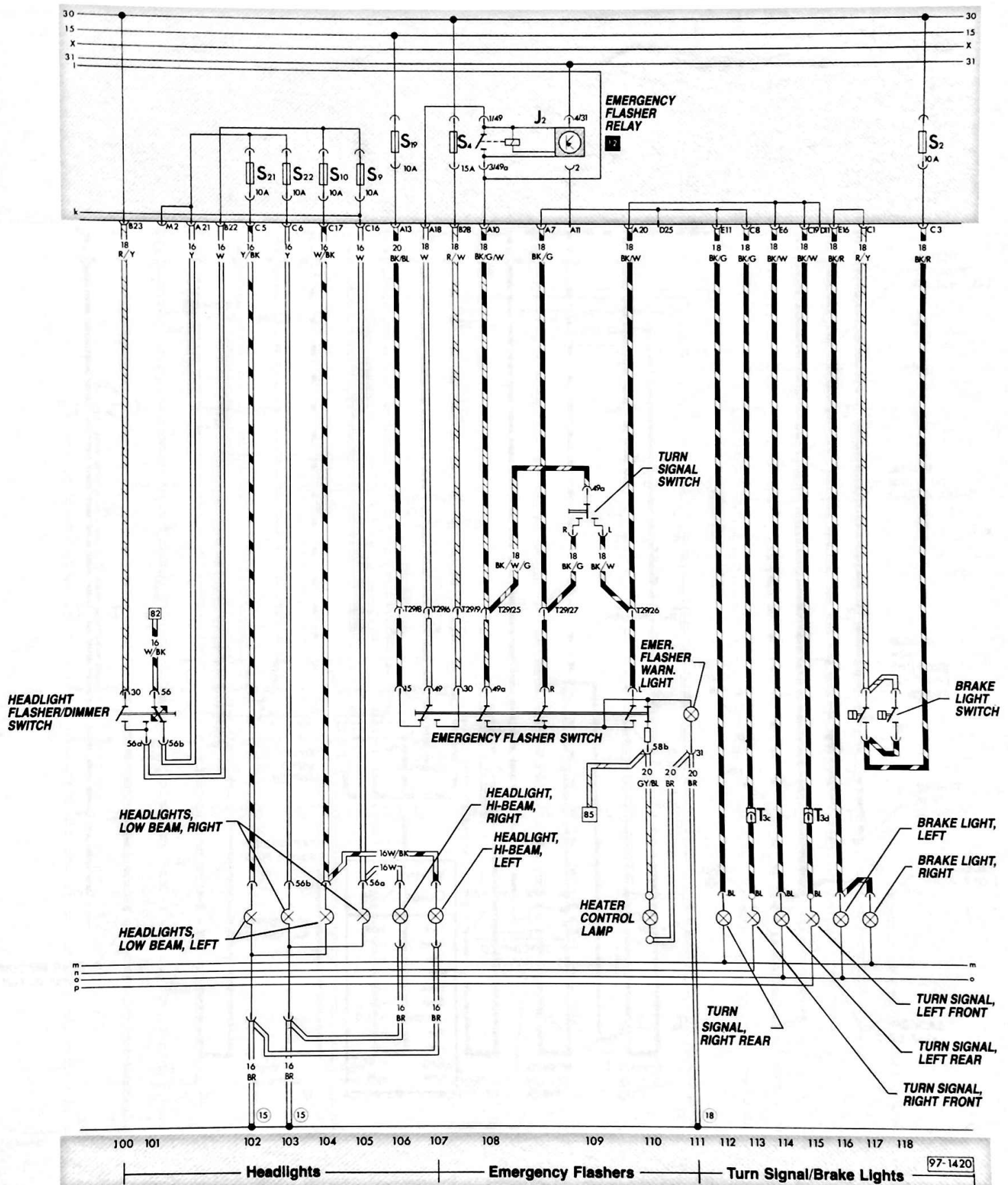


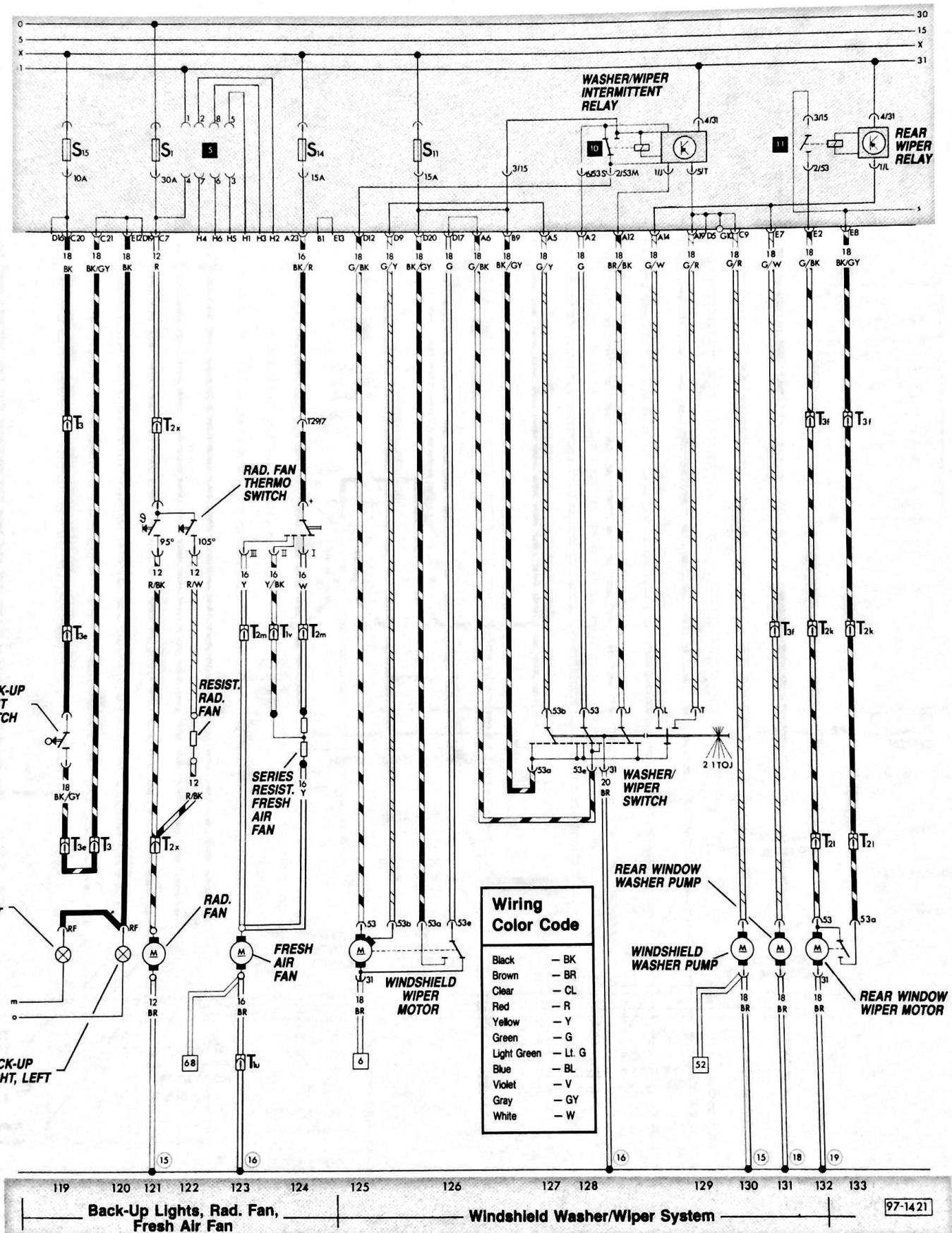


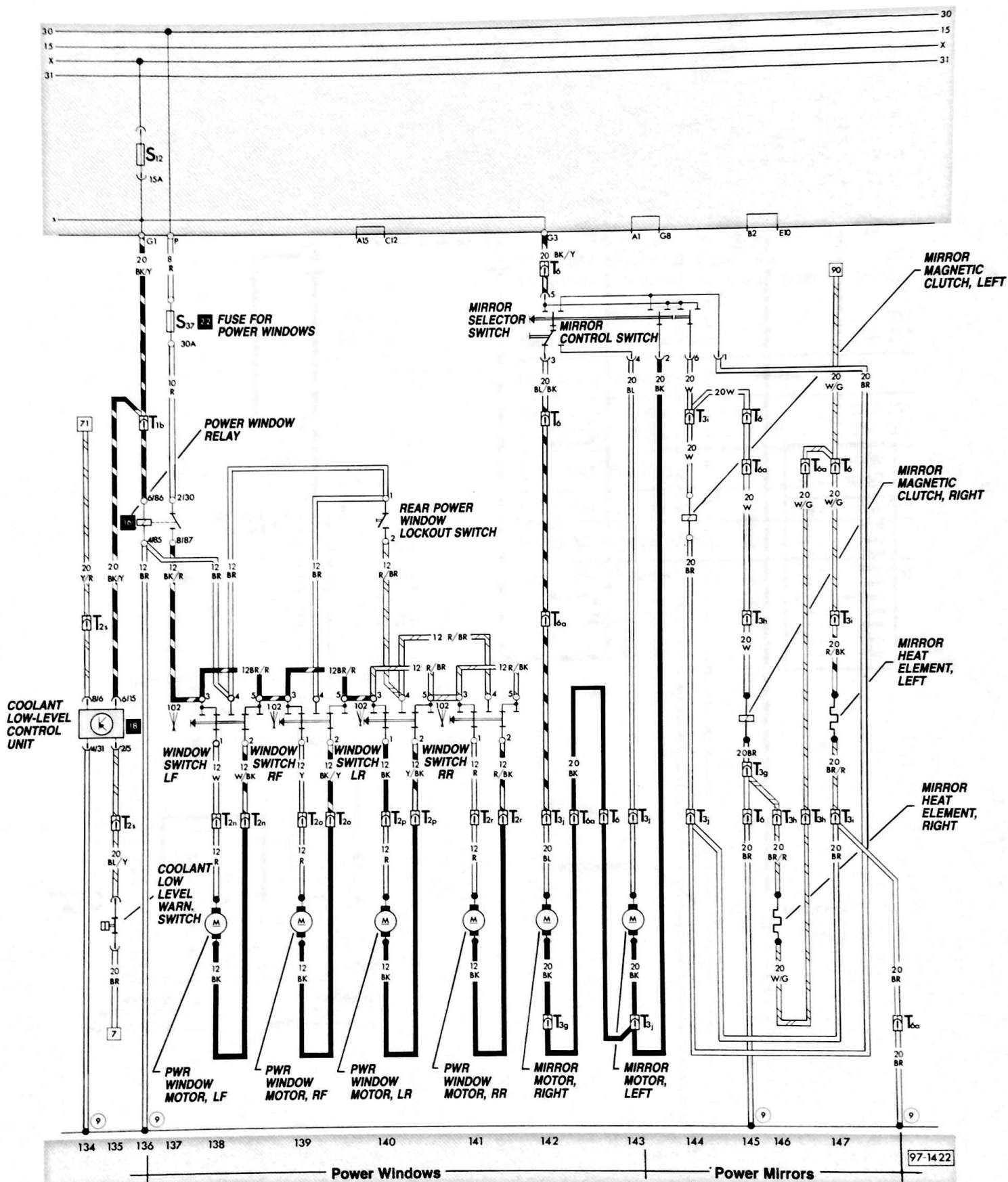


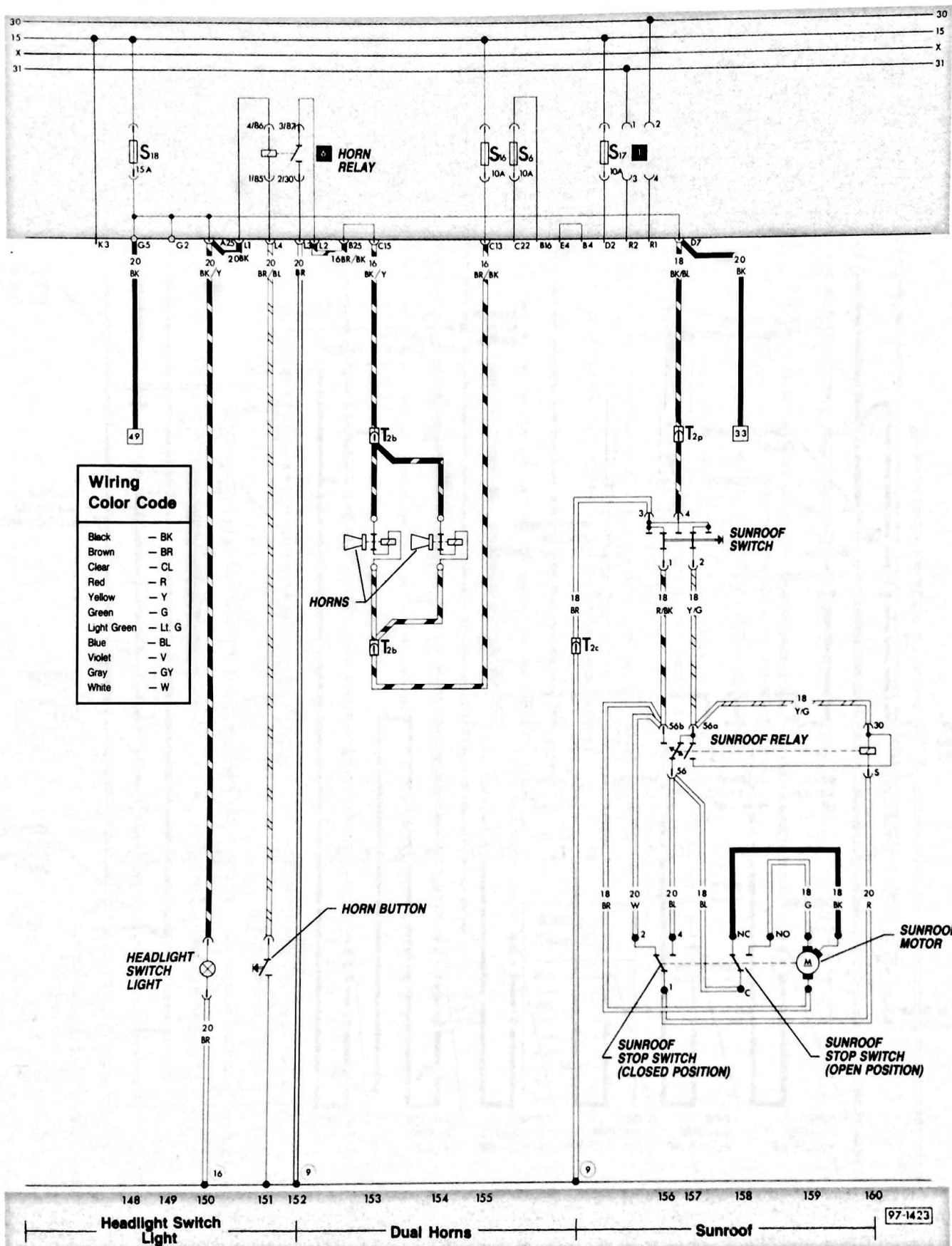












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Heater Booster

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1983-1984	270
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1982-83 Vanagon

Air-cooled

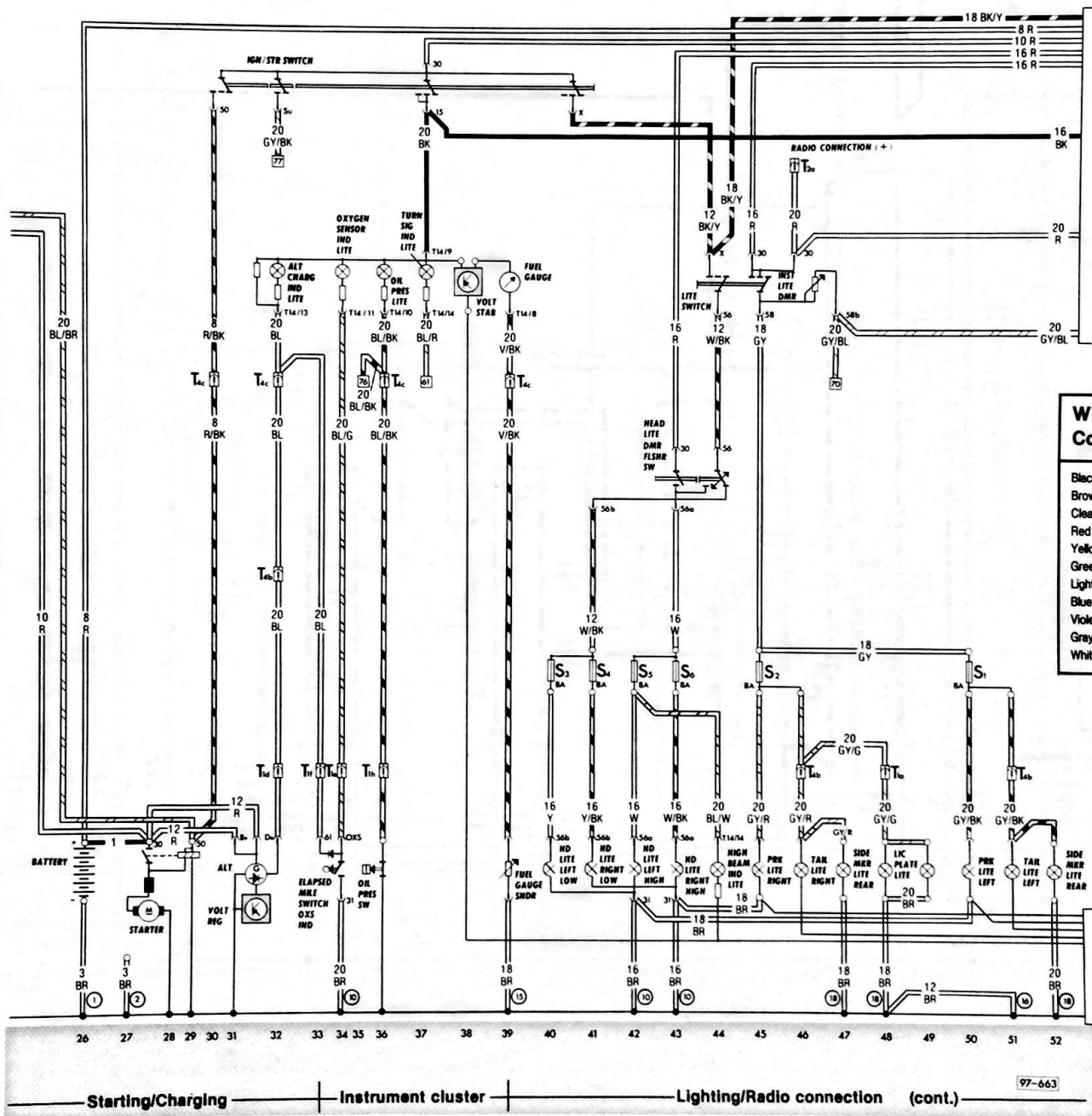
Description	Current Track	Description	Current Track
Alternator	31, 32	Side marker light, left	52
Alternator charging indicator light	32	Side marker light, right	47
Auxiliary air regular	22	Sliding door switch	83
Back-up light, left	58	Spark plug connector	5-8
Back-up light, right	59	Spark plugs	5-8
Back-up light switch	58	Starter	28, 29
Battery	26	Tail light, left	51
Brake light, left	76	Tail light, right	46
Brake light, right	75	TDC sender	11-13
Brake light switch	75, 76	Temperature sensor	21
Brake warning light	73-76	Thermo time switch	24, 25
Cigarette lighter	71	Throttle valve switch	11
Cigarette lighter light	70	Turn signal indicator light	37
Clock	56	Turn signal, left front	64
Cold start valve	24	Turn signal, left rear	63
Distributor	5-8	Turn signal, right front	65
Door switch, left front, with buzzer contact	78, 79	Turn signal, right rear	66
Door switch, right front	80	Turn signal switch	62
Elapsed mileage switch for OXS indicator	33, 34	Voltage regulator	31
Emergency flasher indicator light	67	Voltage stabilizer	38
Emergency flasher relay	59-61	Windshield washer pump	84
Emergency flasher switch	61-69	Windshield wiper motor	86-89
Fuel gauge	39	Windshield wiper switch	85-90
Fuel gauge sender	39	Windshield wiper/washer intermittent relay	85-87
Fuel pump	23		
Fuel pump relay	19-24		
Fuses S1-S12 on fuse/relay panel (under dash)			
Hall generator	2-4		
Headlight dimmer switch/flasher	43, 44		
Headlight, left, high	42		
Headlight, left, low	40		
Headlight, right, high	43		
Headlight, right, low	41		
Heater/fresh air controls light	69		
High beam indicator light	44		
Horn	57		
Horn button	57		
Idle stabilizer control unit	2-4		
Ignition coil	7		
Ignition control unit	1-6		
Ignition key warning buzzer	77, 78		
Ignition/starter switch	30-40		
Injector, cylinder 1	15		
Injector, cylinder 2	16		
Injector, cylinder 3	17		
Injector, cylinder 4	14		
Instrument light dimmer	46		
Instrument panel lights	53-55		
Intake air sensor	18-20		
Interior light, front	79-81		
Interior light, rear	82, 83		
License plate light	48, 49		
Light switch	44-47		
Load reduction relay	88-93		
Oil pressure light	36		
Oil pressure switch	36		
Oxygen sensor (OXS)	19		
Oxygen sensor (OXS) indicator light	34		
Oxygen sensor (OXS) relay	9-12		
Parking brake indicator light switch	73		
Parking light, left	50		
Parking light, right	45		
Radio connection (-)	72		
Radio connection (+)	46		
Rear window defogger	91		
Rear window defogger switch	91, 92		

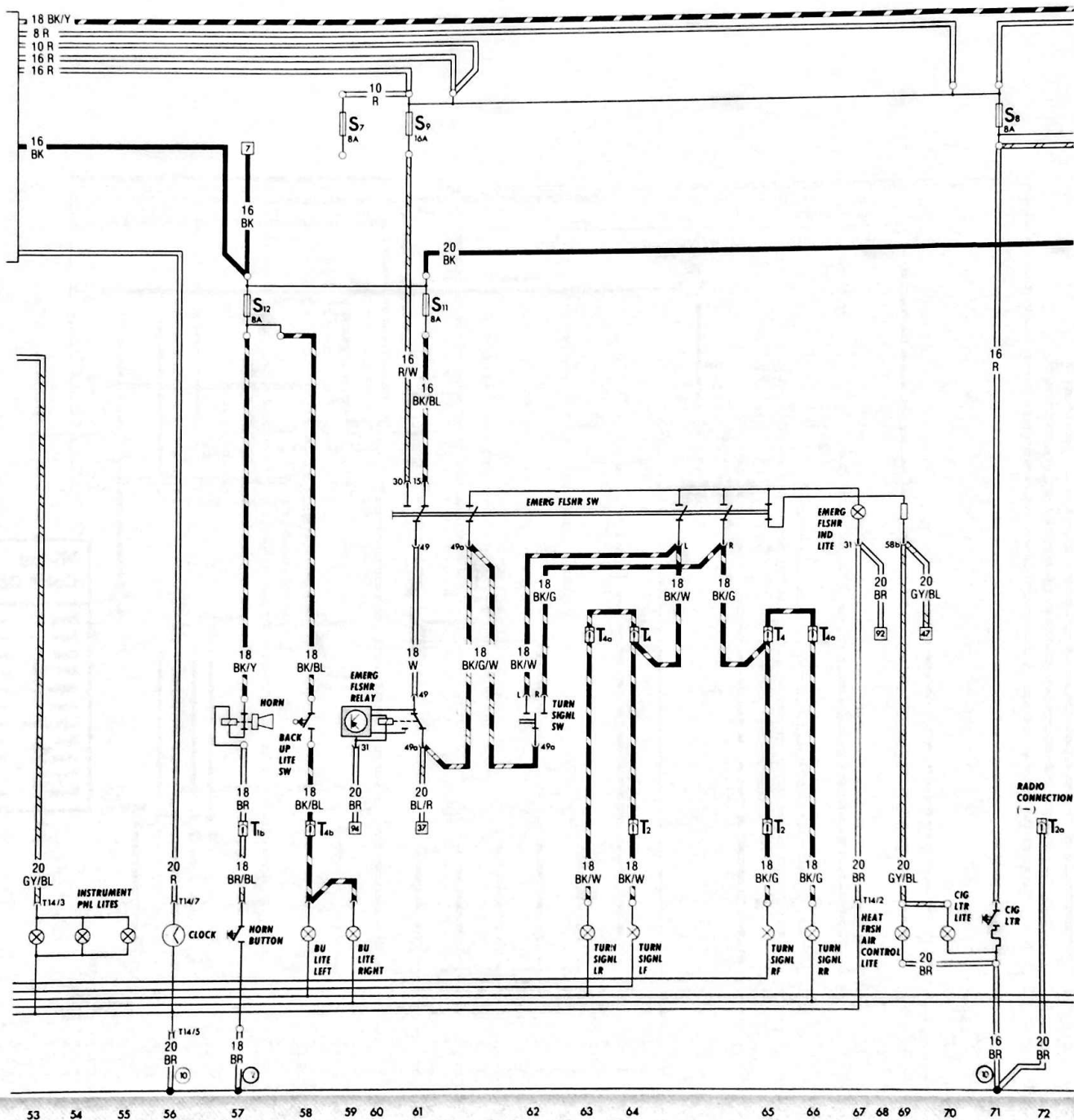
Wire Connectors

T1a	— at fuse/relay panel
T1b	— behind dash
T1c	— behind dash
T1d	— in engine compart, near alternator
T1e	— behind instr. panel
T1f	— behind instr. panel
T1g	— behind dash
T1h	— in engine compart.
T1i	— behind dash
T1j	— behind dash
T1j	— in engine compart.
T1k	— in engine compart.
T2	— behind dash
T2a	— behind dash
T3a	— in engine compart
T4	— behind dash
T4a	— at fuse/relay panel
T4b	— at fuse/relay panel
T4c	— behind instr. panel
T8	— at brake warning light
T14	— at instr. panel insert

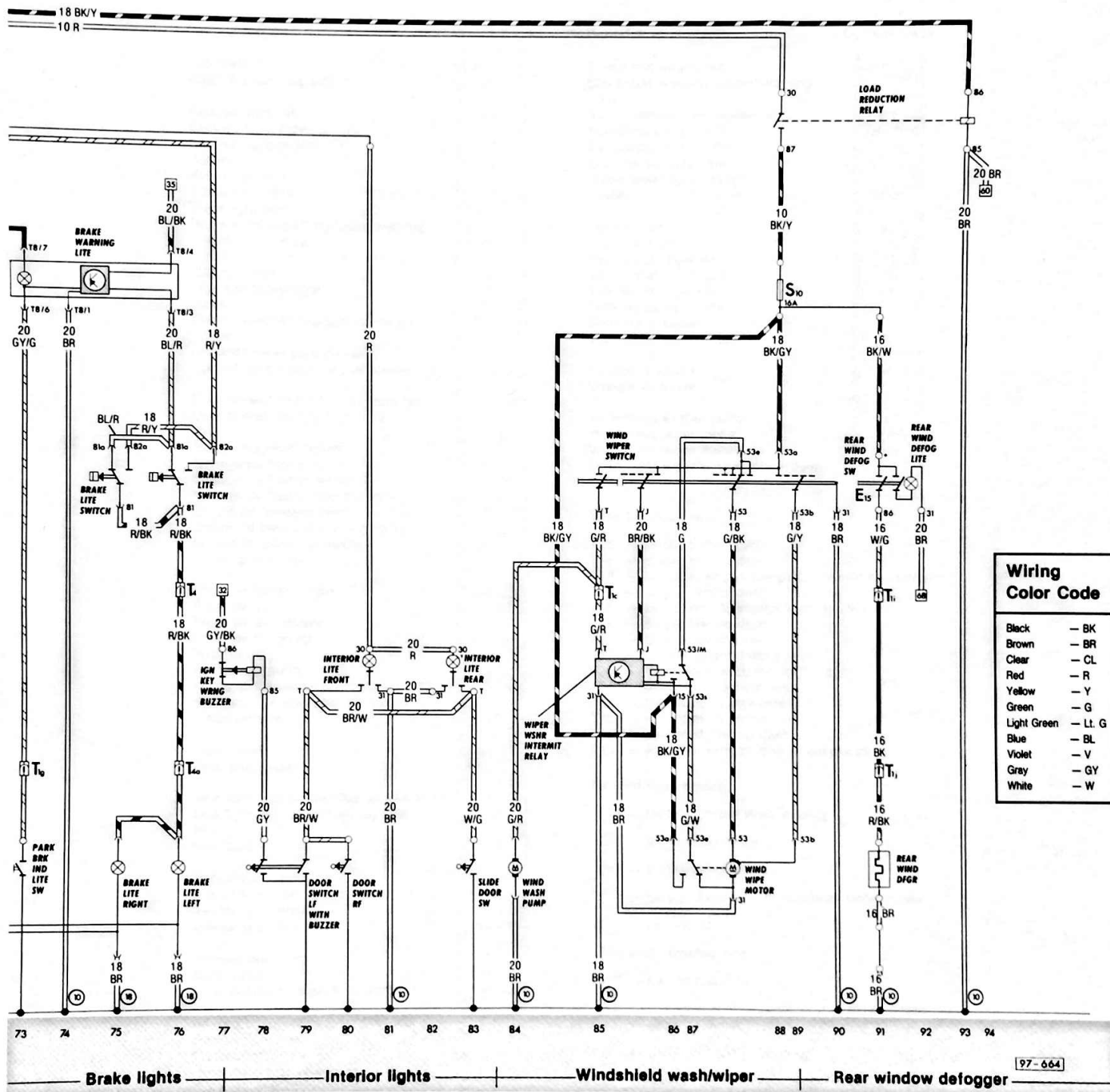
Ground Connectors

1	— from battery to body
2	— from transmission to body
10	— behind instr. panel to left of fuse/relay panel
11	— behind instr. panel to left of fuse/relay panel
12	— on steering gear
15	— at left front of crossmember
16	— near fuse/relay panel
17	— near ignition distributor
18	— at fuse/relay panel





Note: All wire sizes American Wire Gauge



1982 Vanagon Diesel

Description	Current Track
Alternator	28, 29
Alternator warning light	29
Back-up light, left	14
Back-up light, right	15
Back-up light switch	14
Battery	22
Brake light, left	11
Brake light, right	8
Brake light switch	8-12
Brake warning/parking brake warning light, dual circuit	6-8
Cigarette lighter	84
Cigarette lighter light	83
Clock	56
Coolant over-temperature warning light	36
Coolant temperature gauge	34
Coolant temperature gauge sender	34
Door contact switch/buzzer, front left	3
Door contact switch, front right	
Electro-magnetic cut-off	16
Emergency flasher relay	69-71
Emergency flasher switch	70-79
Emergency flasher warning light	79
Engine oil pressure switch	31
Engine oil pressure warning light	31
Engine temperature sender (pre-glow system)	17
Fresh air controls light	82
Fresh air fan	58
Fresh air fan resistor	57
Fresh air fan switch	57, 58
Fuel gauge	33
Fuel gauge sender	33
Fuses, in fuse/relay panel (S-1 to S13)	
Fuse strip for glow plug, in engine compartment	20
Glow plugs	20, 21
Glow plugs relay	
Headlight dimmer and flasher switch	43-44
Headlight high-beam warning light	38
Horn	13
Horn button	13
Instrument panel light	53-55
Instrument panel light resistor	46
Interior light, front	86, 87
Interior light, rear	88-89
License plate light	48, 49
Light switch	44-47
Load reduction relay (X-contact)	65-68
Parking brake warning light switch	6
Parking light, left	50
Parking light, right	45
Pre-glow/starter switch	24-31
Pre-glow time indicator light	30
Radiator cooling fan	90
Radiator cooling fan relay for 2nd stage	91, 92
Radiator cooling fan thermoswitch (switch on at 95°C/203°F)	90
Radiator cooling fan thermoswitch (switched on at 110°C/230°F)	92
Radio connectors	46, 85
Rear-window defogger heating element	81
Rear-window defogger switch	81-83
Rear-window defogger switch light	82
Rear-window defogger warning light	81

Description	Current Track
Safety belt switch, left	4
Safety belt warning system warning light	5
Safety belt warning system relay	3-5
Sealed-beam unit, left	40-42
Sealed-beam unit, right	41, 43
Side-marker light, rear	47, 52
Side-marker lights, rear	88
Starter	24-26
Tail light, left	51
Tail light, right	46
Turn signal, front left	76
Turn signal, front right	77
Turn signal, rear left	75
Turn signal, rear right	78
Turn signal switch	73
Turn signal warning light	32
Voltage regulator	28
Voltage stabilizer	37
Windshield washer pump	59
Windshield wiper motor	64-66
Windshield wiper switch	59-66
Windshield wiper/washer intermittent relay	60-63

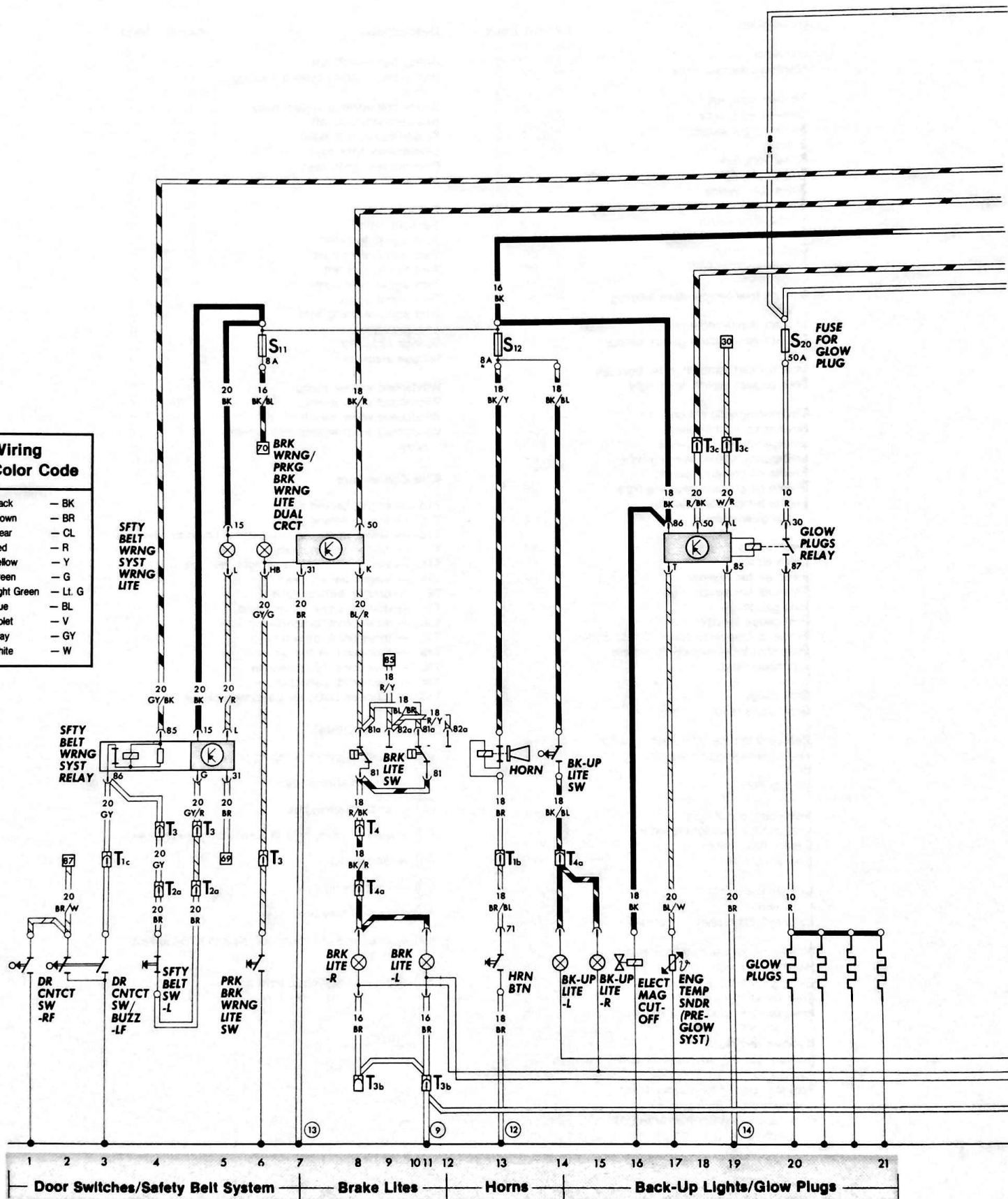
Wire Connectors

T1b	— single, behind dash
T1c	— single, behind dash
T1d	— single, in engine compartment next to alternator
T	— single, behind dash
T1f	— single, next to interior light rear, left
T1k	— single, behind dash
T2	— double, behind dash
T3	— double, under driver's seat
T3b	— three-point, in connector
T3c	— three-point, behind dash
T4a	— four-point, in connection
T4b	— four-point, in connection
T4c	— four-point, behind dash
T14/	— fourteen-point, on instrument cluster

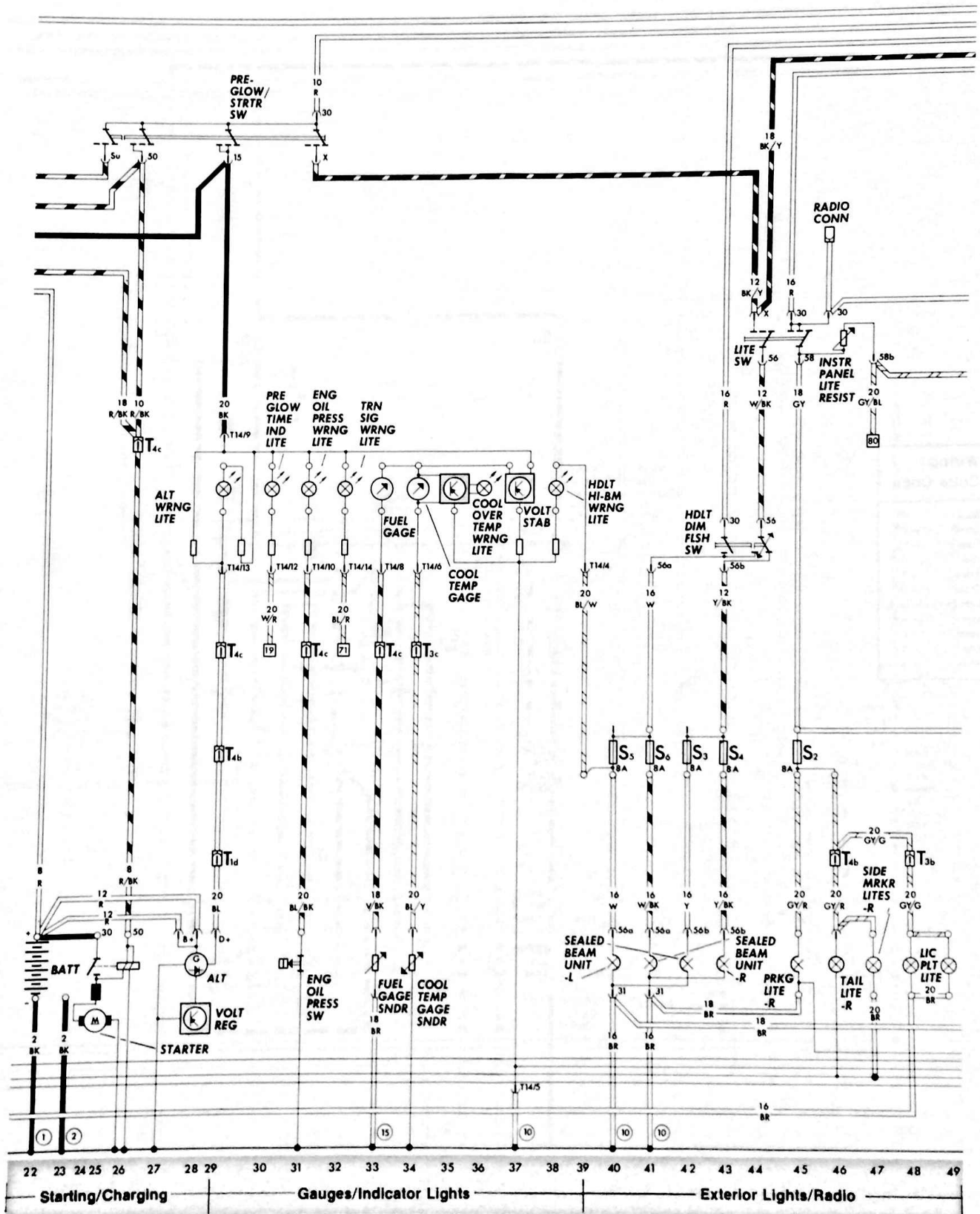
Ground Connectors

- ① — Battery ground strap, to body
- ② — transmission/body
- ⑨ — in connection box
- ⑩ — behind dash, next to fuse/relay panel holder
- ⑪ — on rear lid
- ⑫ — on steering box
- ⑬ — behind fuse box
- ⑭ — in engine compartment, next to glowing-time relay
- ⑮ — on crossmember, front left

Wiring Color Code	
Black	— BK
Brown	— BR
Clear	— CL
Red	— R
Yellow	— Y
Green	— G
Light Green	— Lt. G
Blue	— BL
Violet	— V
Gray	— GY
White	— W

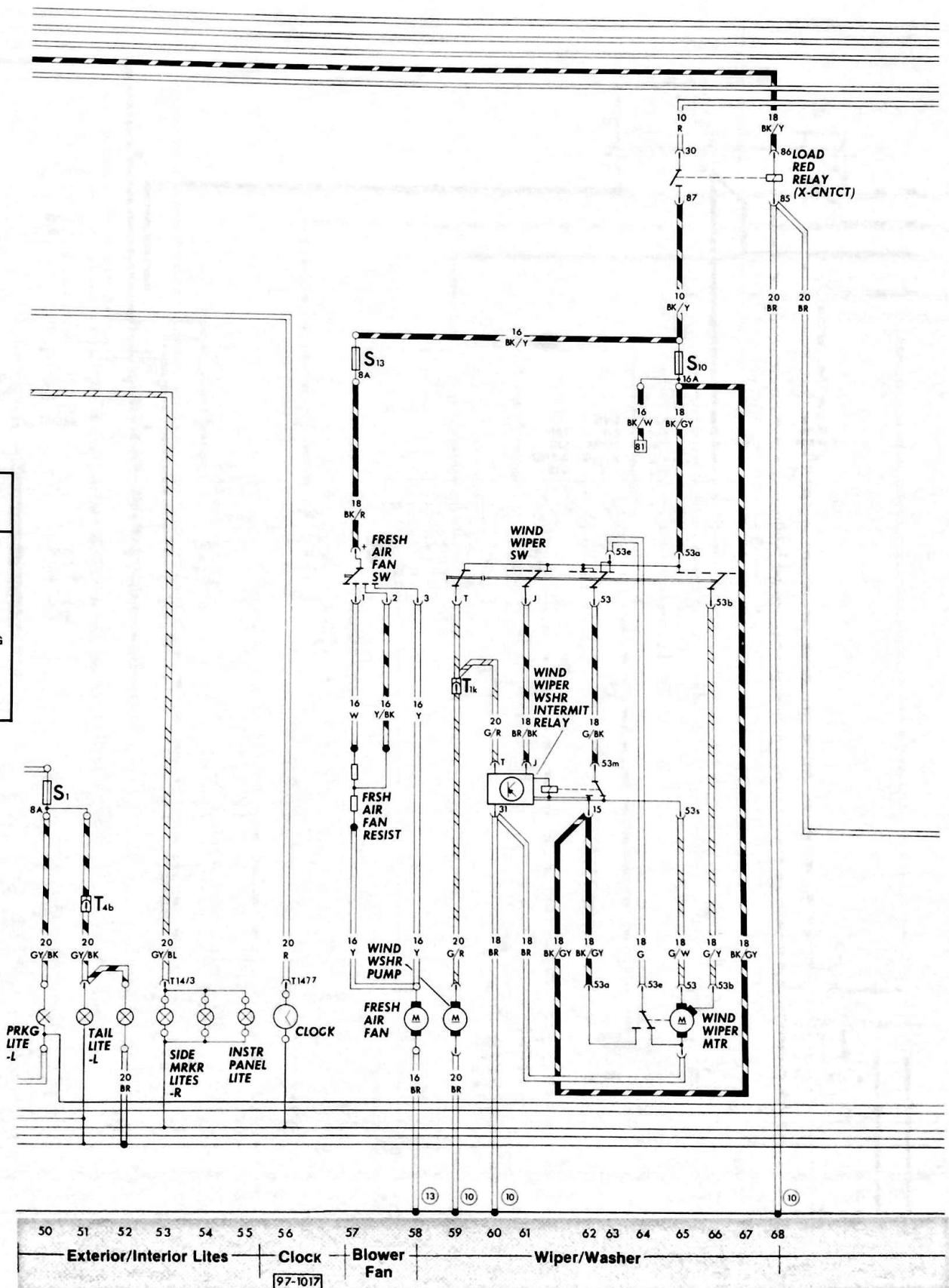


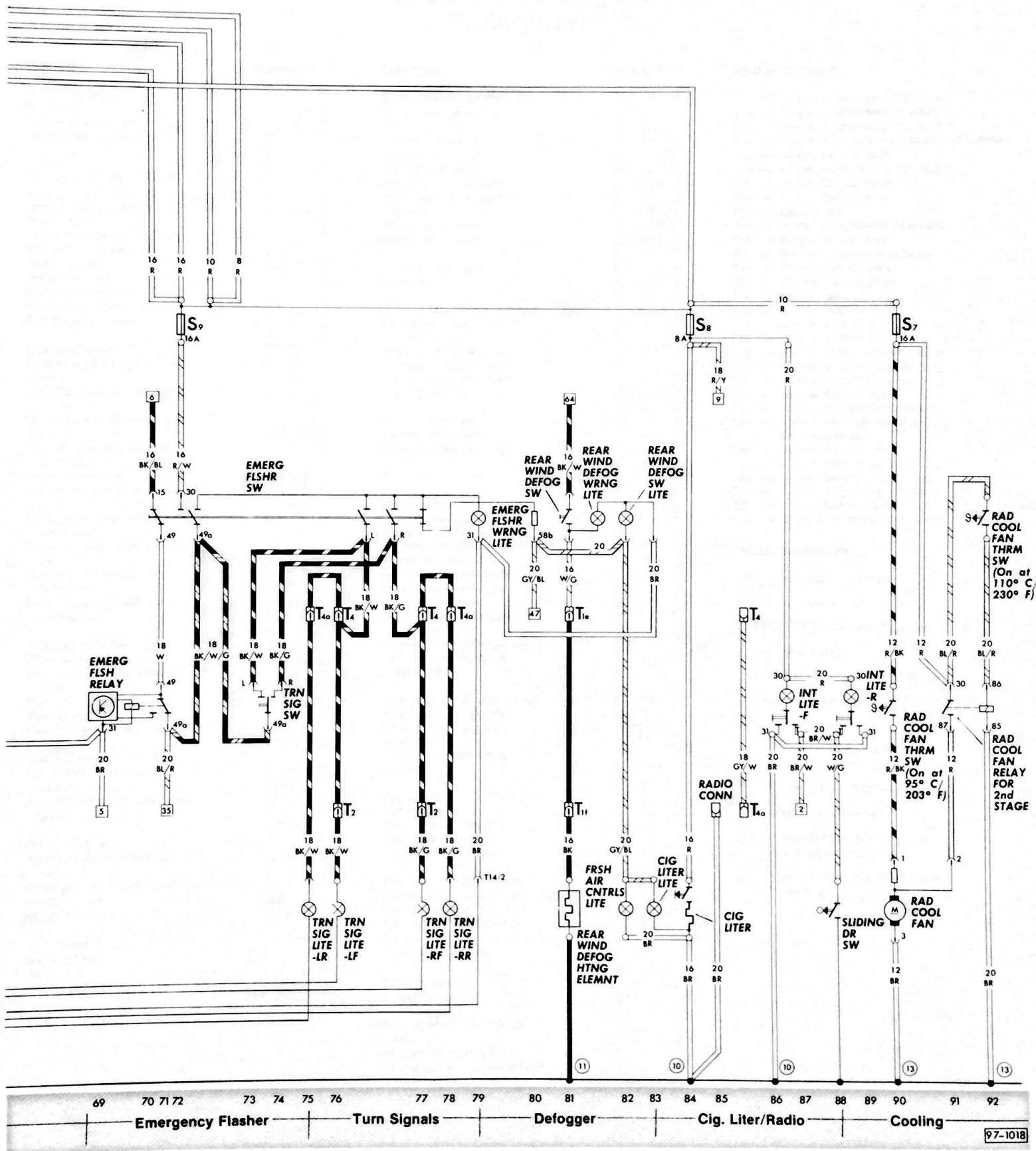
All wire sizes American Wire Gauge



Wiring Color Code

Black	— BK
Brown	— BR
Clear	— CL
Red	— R
Yellow	— Y
Green	— G
Light Green	— Lt. G
Blue	— BL
Violet	— V
Gray	— GY
White	— W





1983-84 Vanagon Waterboxer

Description	Current Track
Air flow sensor	8-9
Alternator	24-26
Alternator warning light	26
Auxiliary air regulator	13
Battery	20
Back-up light, left	55
Back-up light, right	56
Back-up light switch	55
Blower fan	105
Blower-fan control-lever light	67
Blower-fan resistance	104
Blower switch	104, 105
Brake light, left	80
Brake light, right	79
Brake-light switch	79, 80
Brake warning light	66
Cigarette lighter	70
Cigarette-lighter light	69
Clock	51
Coolant low-level-warning control unit	33, 34
Coolant low-level-warning switch	33
Coolant over-temperature warning light	34
Coolant-temperature gauge	32
Coolant-temperature sending unit	32
Defogger cut-out relay (X-contact)	91-97
Door contact/buzzer switch, left	72, 73
Door contact switch, front right	71
Door contact switch, right sliding door	84
Emergency flasher relay	56-58
Emergency-flasher switch	58-68
Emergency-flasher warning light	66
Fuel control unit	6-15
Fuel gauge	31
Fuel-gauge sending unit	31
Fuel pump	18
Fuel pump relay	18, 19
Full-throttle enrichment switch	11
Fuses (S1-S13) on fuse/relay panel	—
Hall generator	4, 5
Headlight dimmer/flasher switch	38-40
Headlight-high-beam light	36
Headlight, left	37, 39
Headlight, right	38, 40
Horn	53
Horn button	53
Idle stabilizer	4, 5
Idle switch	4, 5
Ignition coil	1-3

Description	Current Track
Ignition distributor	1-3
Ignition/starter switch	22-27
Injector cylinder 1	11
Injector cylinder 2	12
Injector cylinder 3	13
Injector cylinder 4	14
Instrument panel light	49, 50
Instrument-panel light dimmer	42
Interior light, front	81-83
Interior light, rear	84-86
License plate light	42, 43
Light switch	40-42
Oil-pressure switch (1.8 bar)	29
Oil pressure warning light	29
Oxygen sensor	7
Oxygen sensor elapsed-mileage indicator light	28
Oxygen-sensor elapsed-mileage switch	28
Parking light, left	48
Parking light, right	41
Parking-brake warning light switch	76
Power supply relay	16, 17
Radiator fan	87
Radiator-fan relay	88-90
Radiator-fan thermoswitch I	87
Radiator-fan thermoswitch II	90
Radio connection	60, 94
Rear side-marker lights	45, 46
Rear-window defogger heater element	92
Rear-window defogger indicator light	93
Rear-window defogger switch	92
Rear-window defogger switch light	94
Seat-belt buzzer contact, left	74
Seat-belt warning light	75
Seat-belt warning relay	73, 75
Spark plugs	1-3
Spark plug connectors	1-3
Starter	22, 23
Tail light, left	47
Tail light, right	44
Temperature sensor II	6
Timing RPM sensor	4, 5
Transistorized ignition control unit	3-6
Turn-signal indicator light	30
Turn-signal light, front-left	65
Turn-signal light, front-right	62
Turn-signal light, rear-left	64
Turn-signal light, rear-right	63
Turn-signal switch	61
Voltage regulator	24-26
Voltage stabilizer	35
Washer/wiper intermittent relay	98-100
Windshield-washer pump	96
Windshield-wiper intermittent switch	98-103
Windshield-wiper motor	100-103

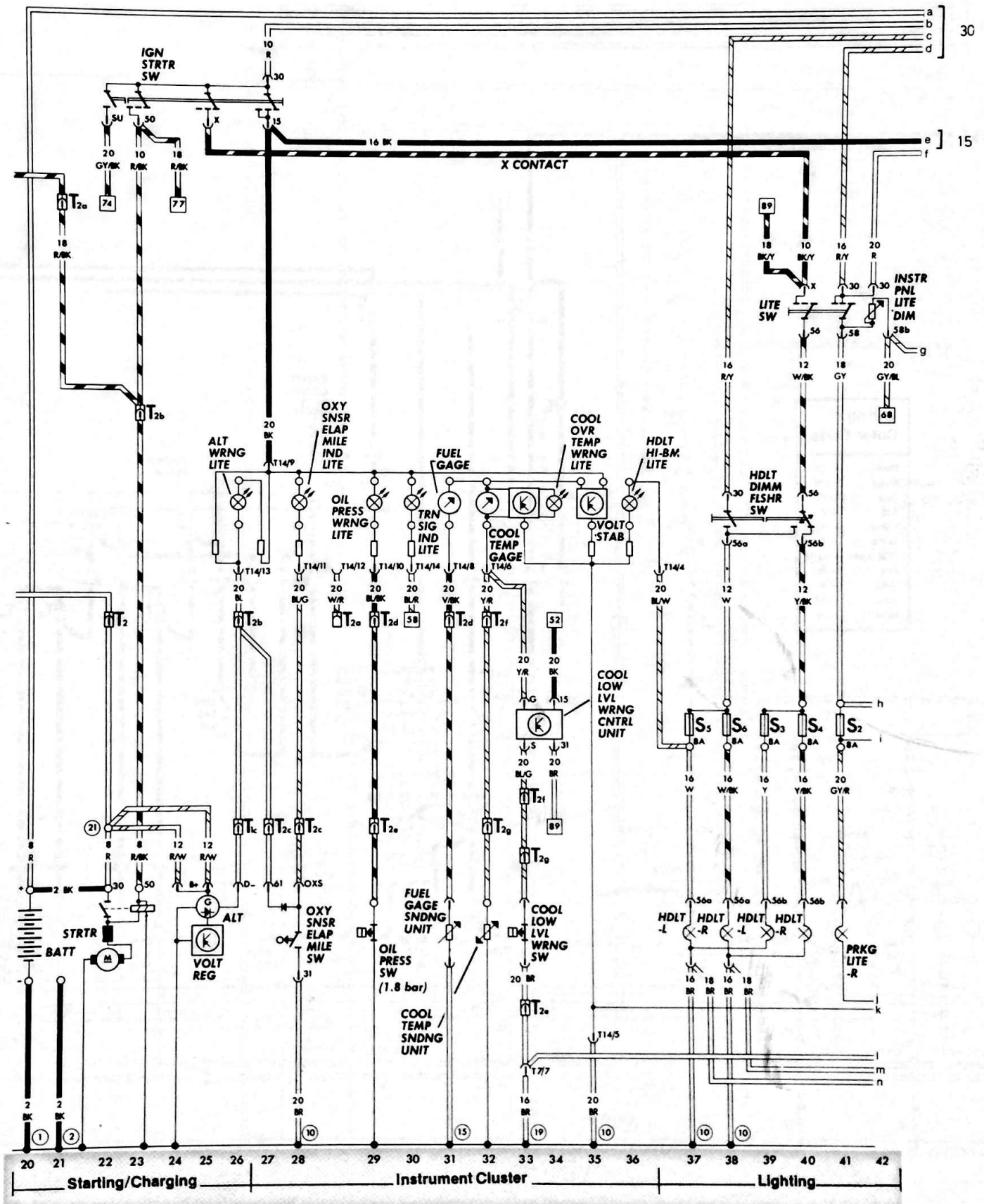
Wire Connectors

T1	— single, in engine compart, left
T1a	— single, in connector housing
T1b	— single, in connector housing
T1c	— single, near alternator in engine compart.
T1d	— single, behind dash
T1e	— single, in connector housing
T1f	— single, behind dash
T1g	— single, behind dash
T1h	— behind dash
T1i	— at roof cross-beam, rear right
T1k	— single, behind dash
T2	— double, on fuse/relay panel
T2a	— double, behind dash
T2b	— double, behind dash
T2c	— double, behind dash
T2d	— double, behind dash
T2e	— double, in connector housing
T2f	— double, behind dash
T2g	— double, in connector housing
T2h	— double, in connector housing
T2i	— double, in connector housing
T2k	— double, behind dash
T2l	— double, below driver's seat
T3	— 3-point, near alternator in engine compart.
T3a	— 3-point, behind dash
T4	— 4-point, behind dash
T4a	— 4-point, behind dash
T7	— 7-point, in connector housing
T8	— 8-point, behind dash
T14	— 14-point on instrument cluster

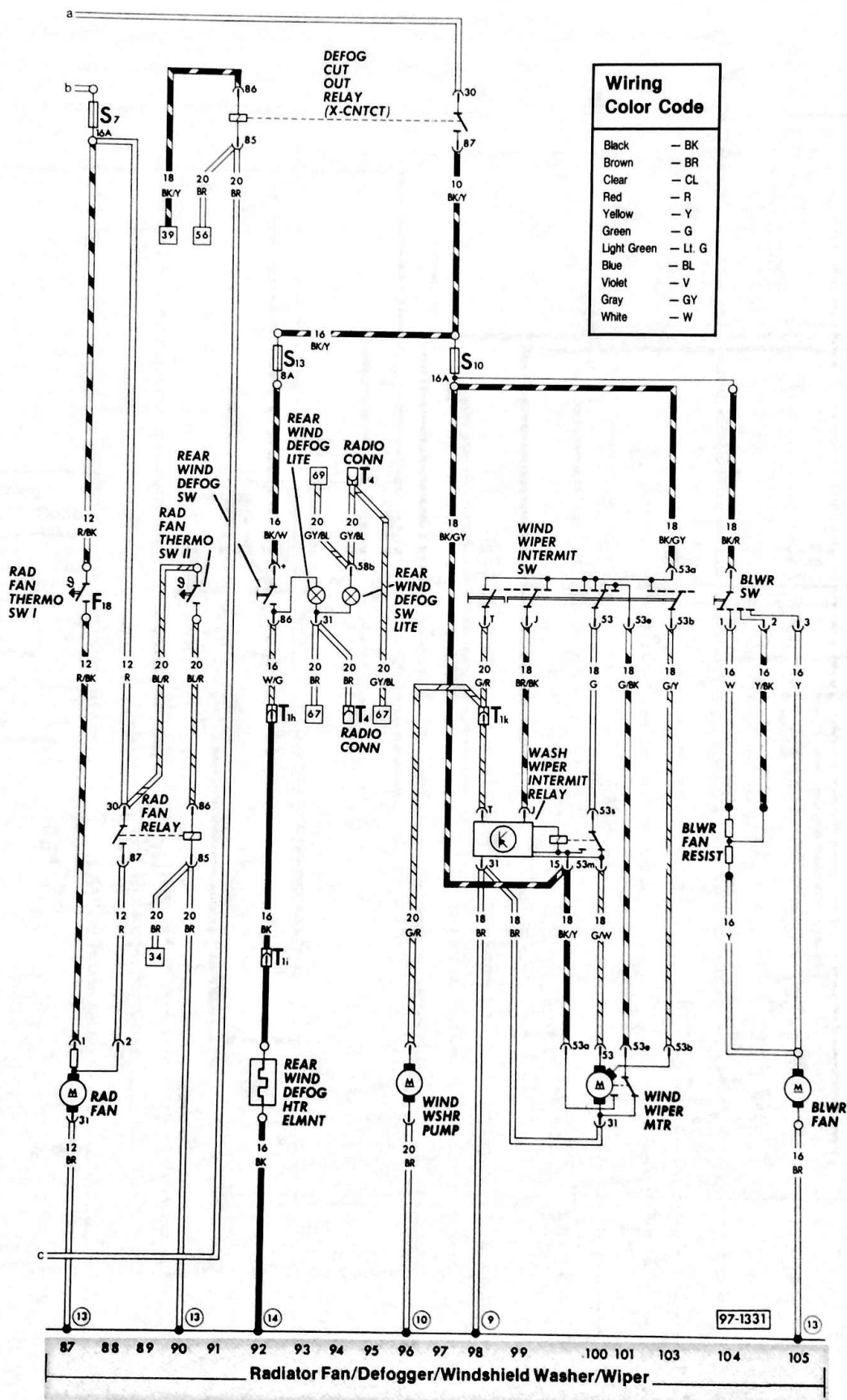
Ground Connectors

- ① — from battery to body
- ② — from transmission to body
- ⑨ — behind dash near fuse/relay panel
- ⑩ — behind dash
- ⑫ — at steering-gear housing
- ⑬ — behind air vent
- ⑭ — at rear deck
- ⑮ — near fuel pump at floor board/crossmember
- ⑰ — near ignition distributor
- ⑱ — left at cylinder head
- ⑲ — near ignition coil, in engine compart., left
- ⑳ — plus connection, in connector housing









Note: All wire sizes American Wire Gauge

Vanagon Diesel

Description	Current Track
Alternator	24-26
Alternator warning light	26
Battery	20
Back-up light, left	55
Back-up light, right	56
Back-up light switch	55
Blower fan	105
Blower-fan control-lever light	67
Blower-fan resistance	104
Blower switch	104, 105
Brake light, left	80
Brake light, right	79
Brake-light switch	79, 80
Brake warning light	66
Cigarette lighter	70
Cigarette lighter light	69
Clock	51
Coolant low-level-warning control unit	33, 34
Coolant low-level-warning switch	33
Coolant over-temperature warning light	34
Coolant-temperature gauge	32
Coolant-temperature sending unit	32
Defogger cut-out relay (X-contact)	91-97
Door contact/buzzer switch, left	72, 73
Door contact switch, front right	71
Door contact switch, right sliding door	84
Electromagnetic fuel cut-off	16
Emergency-flasher relay	56-58
Emergency-flasher switch	58-68
Emergency-flasher warning light	66
Engine temperature sender (pre-glow system)	17
Fuel gauge	31
Fuel-gauge sending unit	31
Fuse for glow plugs (S20)	20
Fuses (S1-S13) on fuse/relay panel	—
Glow plugs	20-21
Glow plugs relay	17-20
Headlight dimmer/flasher switch	38-40
Headlight-high-beam light	36
Headlight, left	37, 39
Headlight, right	38, 40
Horn	53
Horn button	53

Description	Current Track
Ignition/starter switch	22-27
Instrument panel light	49, 50
Instrument-panel light dimmer	42
Interior light, front	81-83
Interior light, rear	84-86
License plate light	42, 43
Light switch	40-42
Oil-pressure switch (1.8 bar)	29
Oil pressure warning light	29
Parking light, left	48
Parking light, right	41
Parking-brake warning light switch	76
Radiator fan	87
Radiator-fan relay	88-90
Radiator-fan thermost switch I	87
Radiator-fan thermost switch II	90
Radio connection	60, 94
Rear side-marker lights	45, 46
Rear-window defogger heater element	92
Rear-window defogger indicator light	93
Rear-window defogger switch	92
Rear-window defogger switch light	94
Seat-belt buzzer contact, left	74
Seat-belt warning light	75
Seat-belt warning relay	73, 75
Starter	22, 23
Tail light, left	47
Tail light, right	44
Temperature sensor II	6
Turn-signal indicator light	30
Turn-signal light, front-left	65
Turn-signal light, front-right	62
Turn-signal light, rear-left	64
Turn-signal light, rear-right	63
Turn-signal switch	61
Voltage regulator	24-26
Voltage stabilizer	35
Washer/wiper intermittent relay	98-100
Windshield-washer pump	96
Windshield-wiper intermittent switch	98-103
Windshield wiper motor	100-103

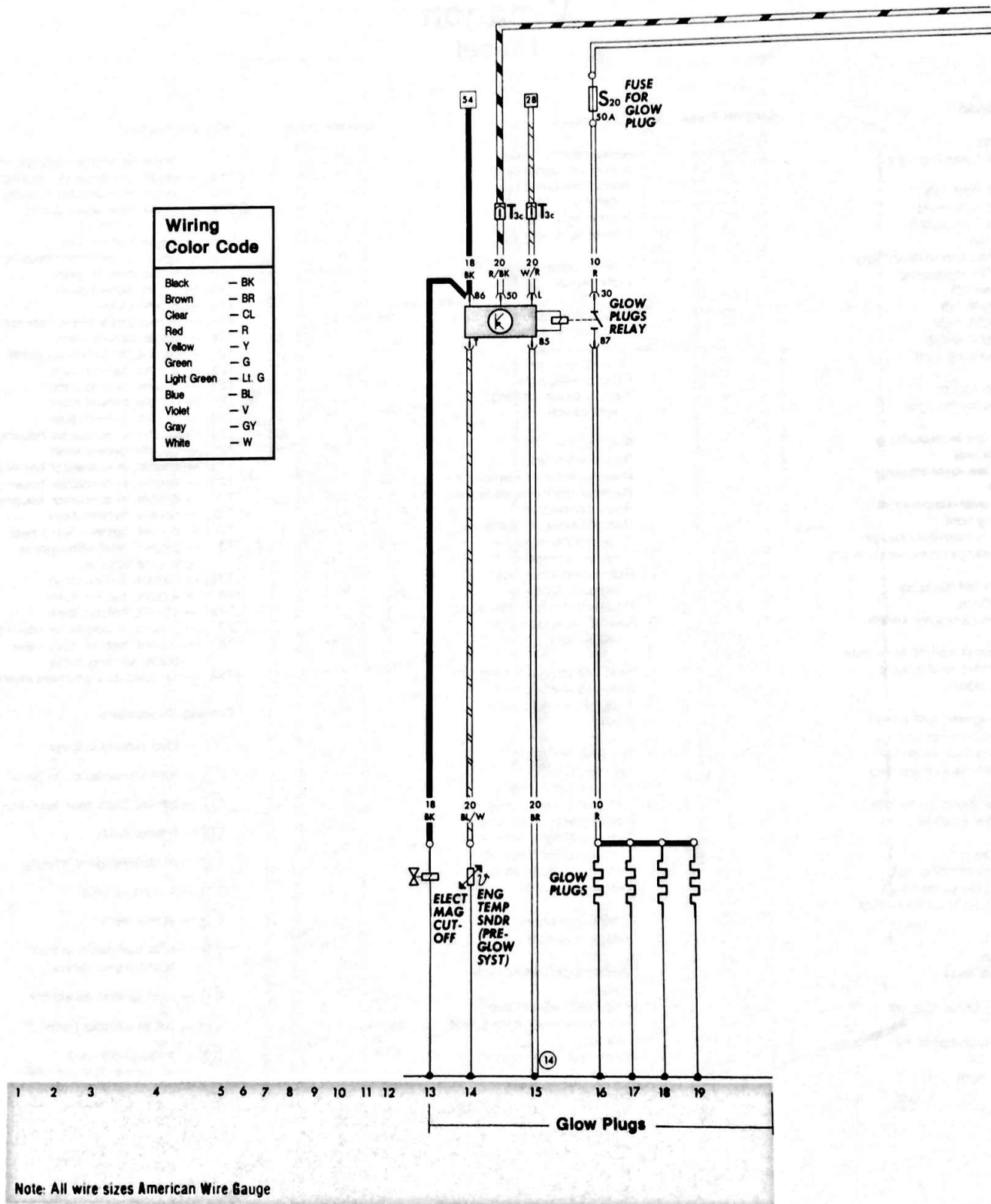
Wire Connectors

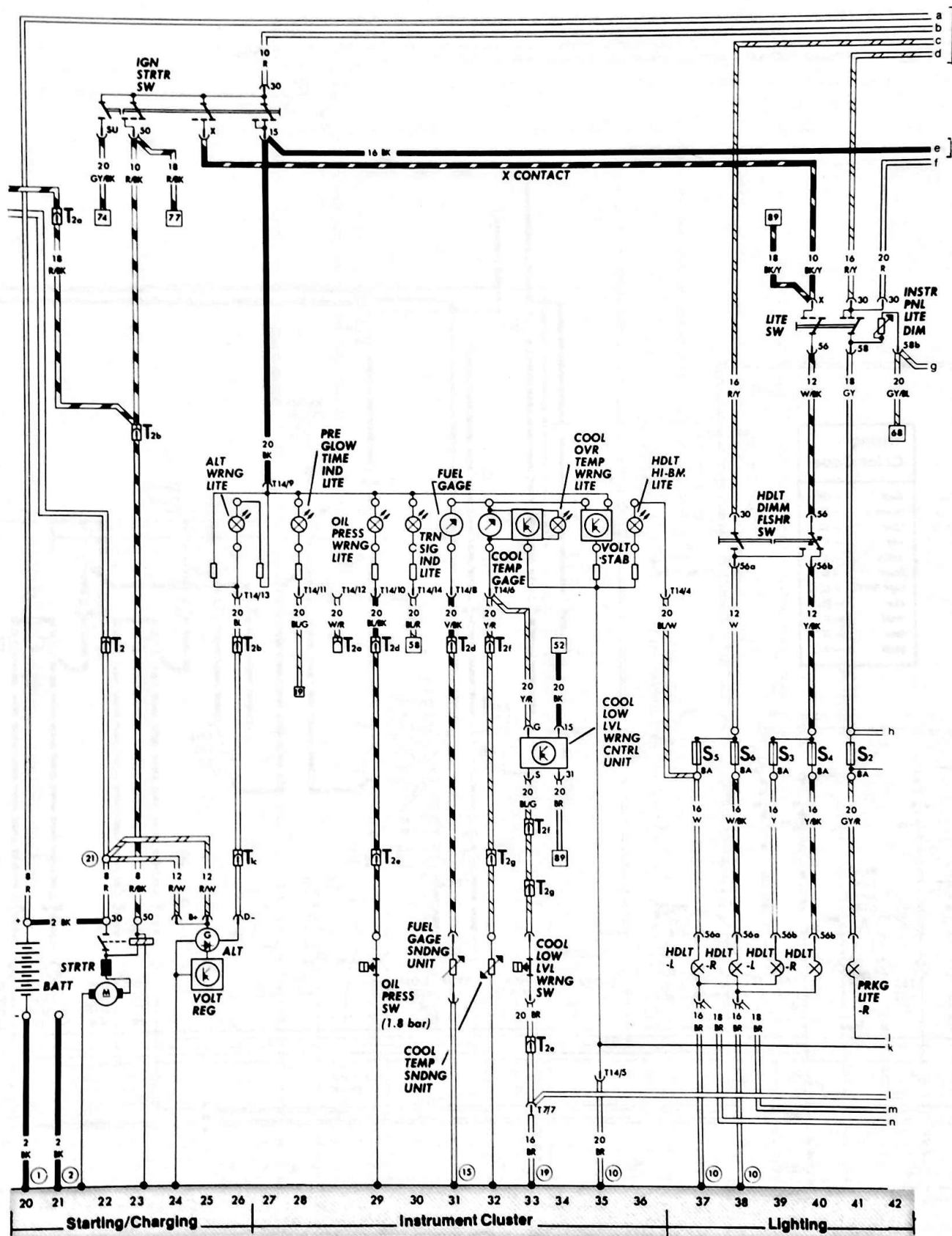
T1	— single, in engine compart. left
T1a	— single, in connector housing
T1b	— single, in connector housing
T1c	— single, near alternator in engine compart.
T1d	— single, behind dash
T1e	— single, in connector housing
T1f	— single, behind dash
T1g	— single, behind dash
T1h	— behind dash
T1i	— at roof cross-beam, rear right
T1k	— single, behind dash
T2	— double, on fuse/relay panel
T2a	— double, behind dash
T2b	— double, behind dash
T2c	— double, behind dash
T2d	— double, behind dash
T2e	— double, in connector housing
T2f	— double, behind dash
T2g	— double, in connector housing
T2h	— double, in connector housing
T2i	— double, in connector housing
T2k	— double, behind dash
T2l	— double, below driver's seat
T3	— 3-point, near alternator in engine compart.
T3a	— 3-point, behind dash
T4	— 4-point, behind dash
T4a	— 4-point, behind dash
T7	— 7-point, in connector housing
T8	— 8-point, behind dash, near brake warning lights
T14	— 14-point on instrument cluster

Ground Connectors

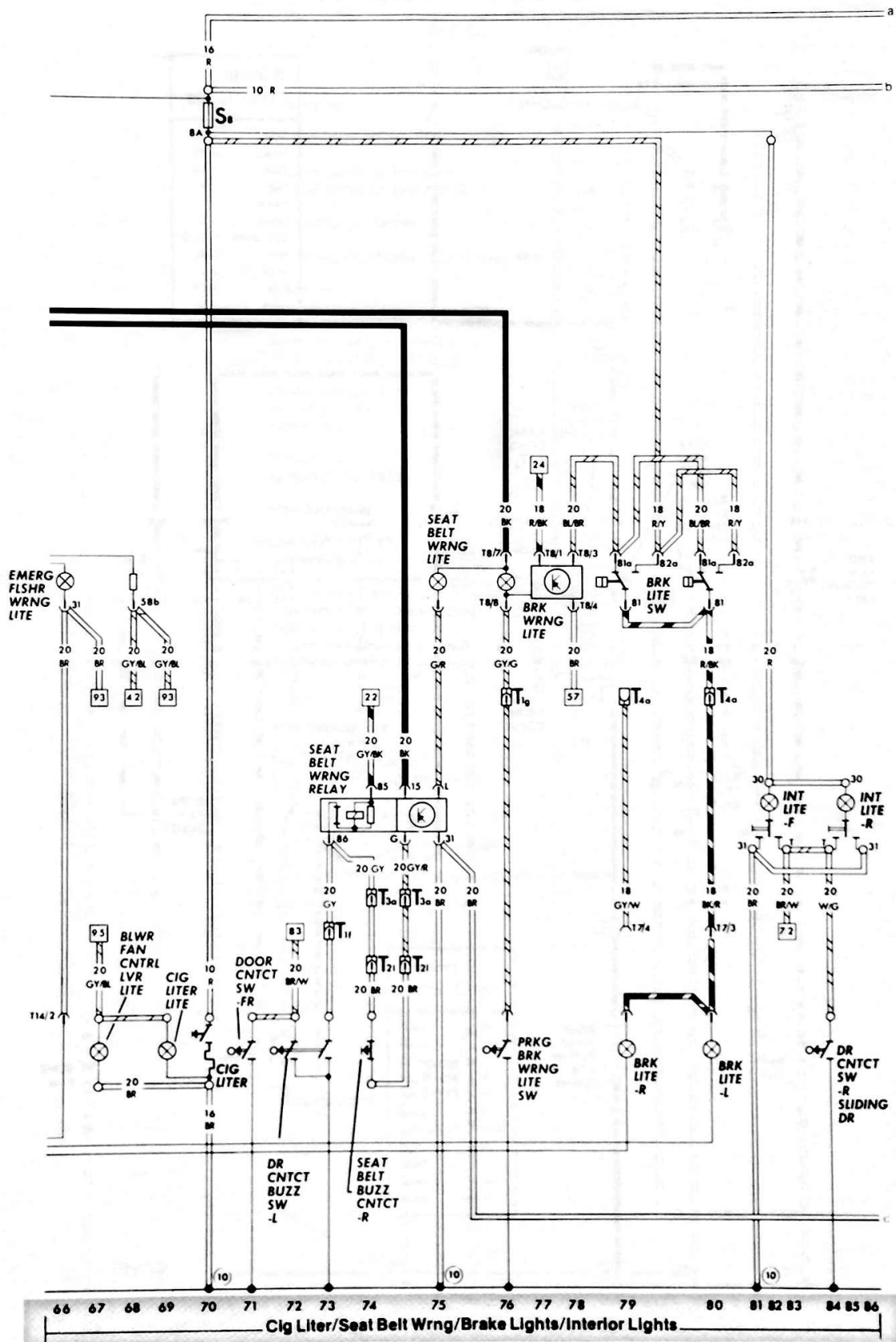
①	— from battery to body
②	— from transmission to body
⑨	— behind dash near fuse/relay panel
⑩	— behind dash
⑫	— at steering-gear housing
⑬	— behind air vent
⑭	— at rear deck
⑮	— near fuel pump at floor board/crossmember
⑰	— near ignition distributor
⑱	— left at cylinder head
⑲	— near ignition coil in engine compart., left
⑳	— plus connection, in connector housing

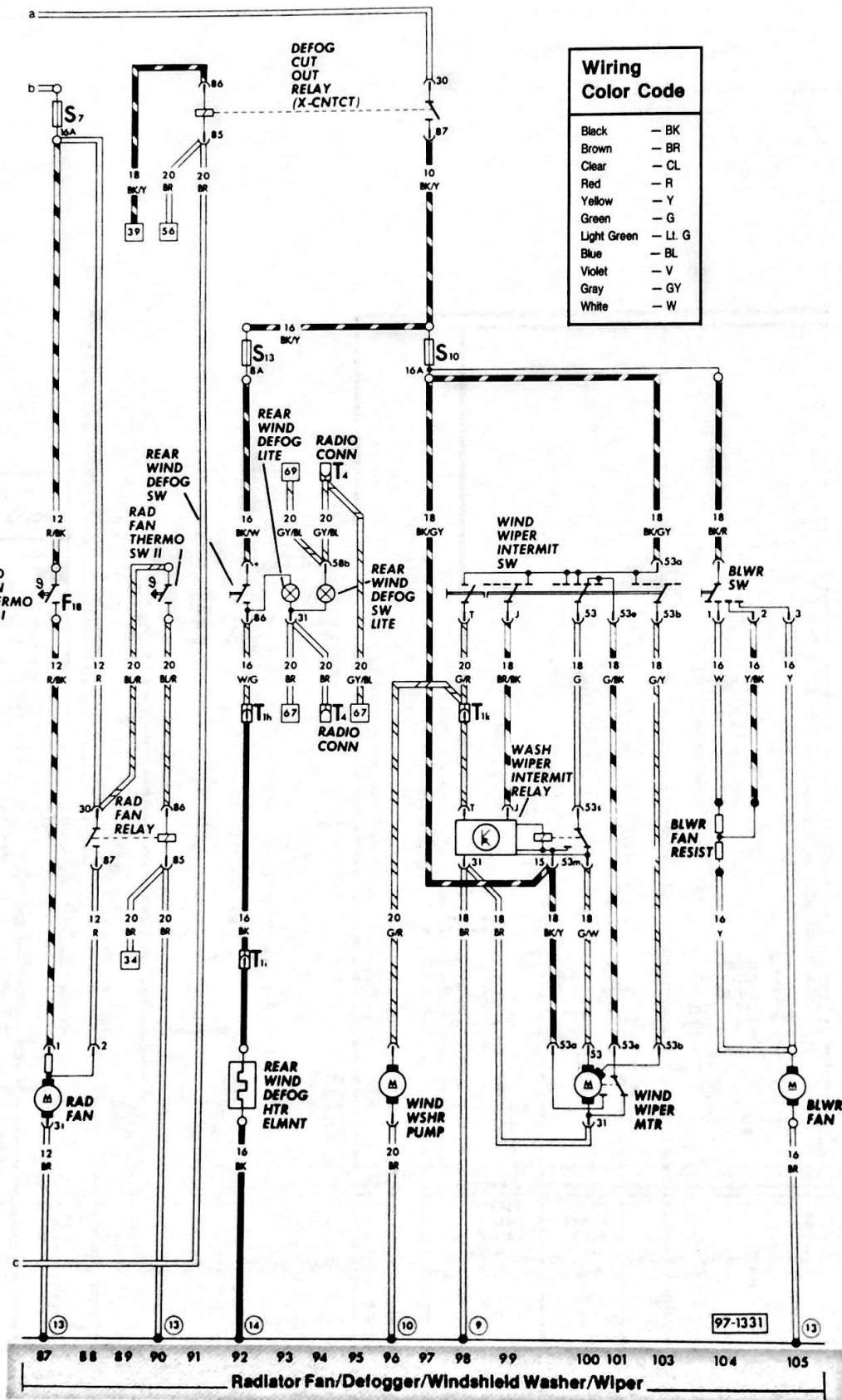
Wiring Color Code	
Black	— BK
Brown	— BR
Clear	— CL
Red	— R
Yellow	— Y
Green	— G
Light Green	— Lt. G
Blue	— BL
Violet	— V
Gray	— GY
White	— W











Heater Booster AFC

Description	Current Track
Air circulation blower	10
Breaker points for fuel pump	12
Breaker points for ignition coil	14
Combustion air blower	13
(to) Emergency flasher switch, term. 58b	7
Flame switch	14
Fuel pump	1, 3
Glow/spark plug — element	16
Glow/spark plug — electrode	15
Heater indicator light	6
Heater lever switch	7
Heater relay	9-14
Ignition coil	14
Ignition/starter switch	9
Main fuse S23	3
Overheat fuse S17	12
Overheat switch	11
Suppressor for air circulation blower	10
Suppressor for glow/spark plug	16
Suppressor for ignition coil	14, 15
Temperature regulating switch	1-8
Temperature sensor	9

Wire Connectors

- T1a — at fuse holder
 T2 — at air circulation blower
 T4a — at heater
 T4b — at heater
 (8) — ground connector, at heater
 (18) — ground connector, at combustion air blower

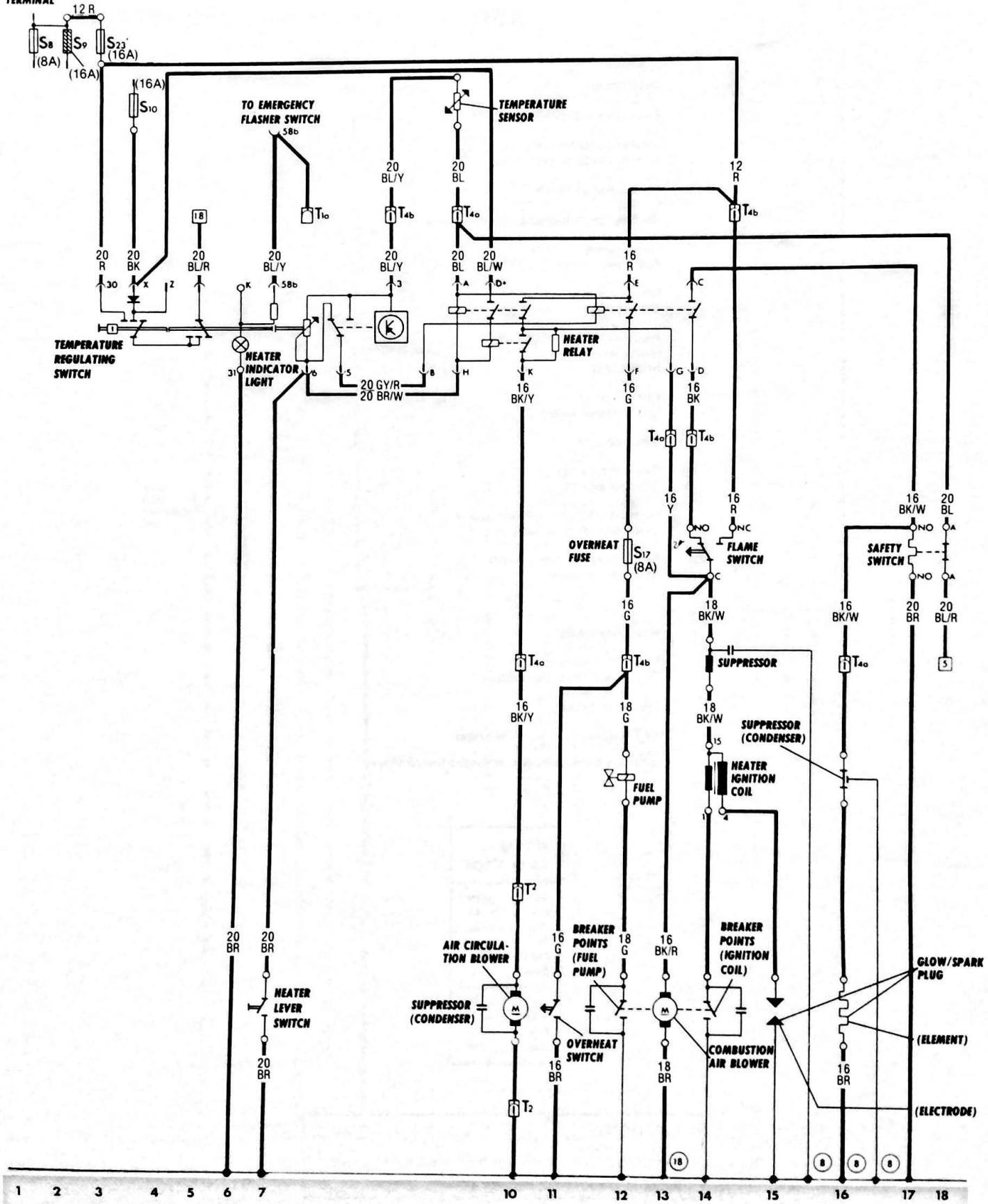
Wiring Color Code

Black	— BK
Brown	— BR
Clear	— CL
Red	— R
Yellow	— Y
Green	— G
Light Green	— Lt. G
Blue	— BL
Violet	— V
Gray	— GY
White	— W

CAUTION

Before working on any part of electrical system, disconnect battery ground strap.

TO BATTERY
POSITIVE
TERMINAL



Note: All wire sizes American Wire Gauge

82 172

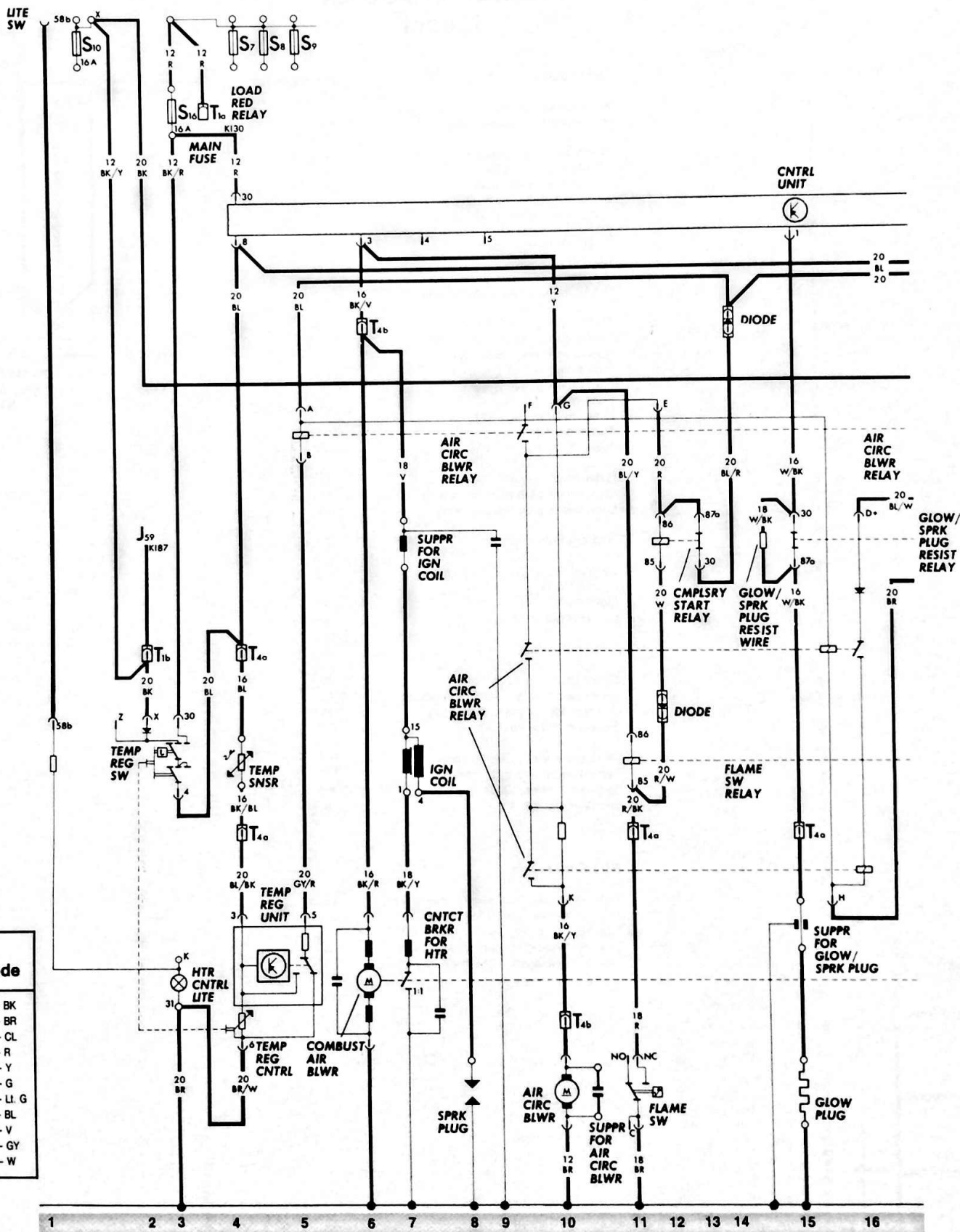
Heater Booster

Diesel

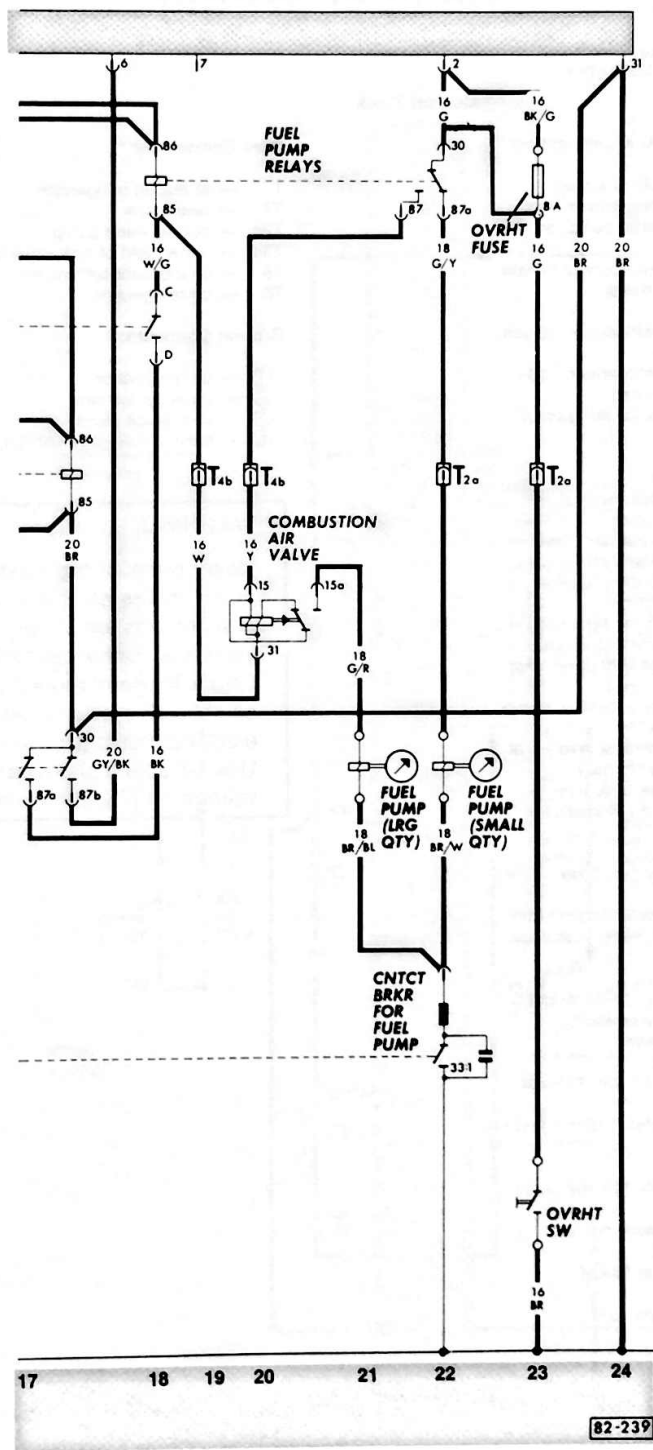
Description	Current Track
Air circulation blower	10
Air circulation blower relay	5-18
Combustion air blower	6-22
Combustion air valve	20
Compulsary start relay	12-13
Contact breaker for fuel pumps (in combustion air blower)	22
Contact breaker for heater (in combustion air blower)	7
Control unit	4-24
Diode (behind dash next to relay)	12, 14
Flame switch	11
Flame switch relay	11-17
Fuel pump (large quantity)	22
Fuel pump (small quantity)	22
Fuel pump relays	18-22
Fuse main (16A)	3
Fuse, overheating (8A)	23
Fuses on fuse/relay panel S7, 8, 9, 10	—
Glow plug	15
Glow/spark plug resistance wire	15
Glow/spark plug resistor relay	15-17
Heater control light	3
Ignition coil	7
Light switch	1
Load-reduction relay	4
Overheat switch	23
Spark plug	8
Suppressor for air circulation blower	10
Suppressor for glow/spark plug	15
Suppressor for ignition coil	7-8
Temperature regulator control	4-5
Temperature regulator switch	1-3
Temperature regulator unit	4-5
Temperature sensor	4

Wire Connectors

- T1a — single, fuse relay panel
- T1b — single, fuse relay panel
- T2a — two-point, behind dash, left
- T4a — four-point, behind dash, left
- T4b — four-point, behind dash, left



Note: All wire sizes American Wire Gauge



Camper Wiring

Description	Current Track
Circuit breaker (15A) in cabinet front	3
Fuse S4, main, (16A) in storage compartment under driver's seat	19
Fuse S5, (3A) for water pump, on water pump	13
Fuse S6, (10A) for refrigerator 12-volt system in switch panel	19
Heater resistor for refrigerator, 12-volt, 85-watt, 1.7-ohm	18
Heater resistor for refrigerator, 115-volt, 85-watt, 150-ohm	9
Heater resistor relay for refrigerator, 12-volt system	18-20
Indicator light panel	10-15
LED — green, for battery level — above 12.5 volts	11
LED — green, for water tank level — at least 40 liters (10½ gal.)	14
LED — yellow, for battery level — below 12.5 volts	11
LED — yellow, for water tank level — at least 10 liters (2½ gal.)	14
LED — red, indicator light panel pilot light	10
LED — red, for battery level — above 12 volts	11
LED — red, for water tank level — at least 2 liters (½ gal.)	14
LED — red, for water tank level — empty (pump automatically shut off)	12
Plug external, 115-volt, outside vehicle	2-4
Plug, interior 115-volt, in cabinet front	2-4
Plug, refrigerator, 115-volt, in storage cabinet	2-4
Refrigerator fan, behind refrigerator	16
Refrigerator fan thermoswitch, rear of refrigerator	16
Refrigerator housing	5-9, 16-20
Refrigerator switch, 12-volt, 115-volt, or gas	6, 7, 18, 19
Refrigerator thermostat, 115-volt and gas systems	7
Safety ground wire for 115-volt plugs	1-5
Water pump, underneath cover in cabinet below sink	13
Water pump switch, in faucet	10
Water tank	15
Water tank level sender unit	14

Wire Connectors

T1	— at rear of refrigerator
T2	— below sink
T2c	— next to water pump
T3a	— upper right of sink/stove cabinet
T6	— on indicator light panel
T8	— on refrigerator

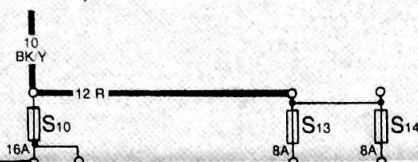
Ground Connectors

- ① — on refrigerator
- ② — on body, left side
- ③ — in 115 volt plugs
- ⑥ — behind sink/stove cabinet, left side

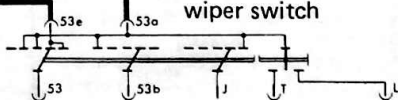
WARNING

Never remove/install external electrical outlet, inside electrical outlets, circuit breaker with switch, or refrigerator if vehicle is connected to 115 volts AC. Check for good ground connections on 115-volt system after installing electrical equipment or components. Use suitable test equipment to check voltage on 115-volt system.

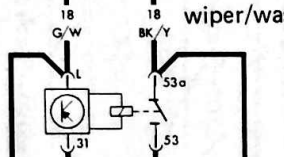
**LOAD
REDUCTION
RELAY
(X-CONTACT)**



**Intermittent
wiper switch**



**Rear-window
wiper/washer relay**



Wire Connectors

- T1 — single, behind dash
- T2 — double, behind dash, right
- T2a — double, on roof, rear, right
- T2b — double, on rear window-wiper motor

Ground Connectors

- 9 — behind dash, right
- 10 — near fuse panel
- 11 — near rear washer-fluid container, right
- 12 — on rear lid, near rear window-wiper motor

**Wiring
Color Code**

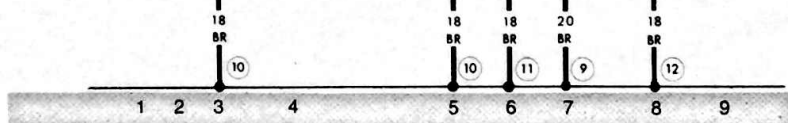
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Yellow	— Y
Green	— G
Light Green	— Lt. G
Blue	— BL
Violet	— V
Gray	— GY
White	— W

Windshield-wiper
motor

Windshield-
washer
pump

Rear-window
washer pump

Rear-window
wiper motor



97-1026

**We Encourage
Professionalism**



**Through Mechanic
Certification**