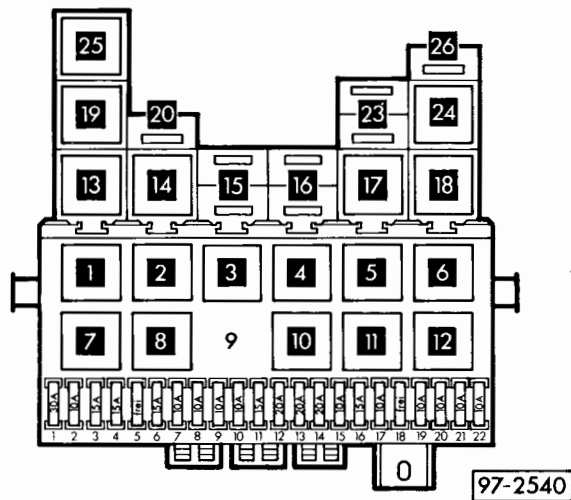


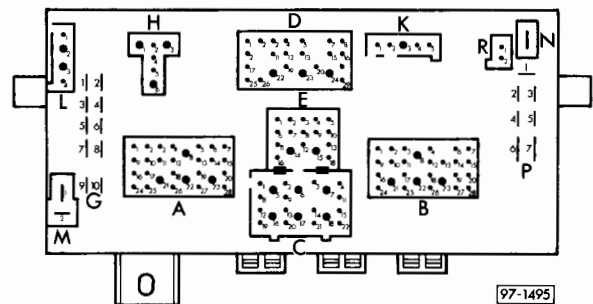
**Transporter / Caravelle Carat
(2.1 litre / 82 kW – Fuel injection engine – Digijet),
Engine code letters DJ,**

from August 1989

Relay locations



Connections



- 3** – Coolant shortage control unit (43)
- 5** – Radiator fan 2nd stage relay (53)
- 6** – Dual tone horn relay (53)
- 7** – Foglight relay (53)
- 8** – X-contact relief relay (18)
- 10** – Intermittent wash/wipe relay (19)
- 11** – Rear window wipe/wash relay (72)
- 12** – Emergency flasher relay (21) or emergency flasher relay for trailer operation (22)
- 15** – Rear foglight fuse

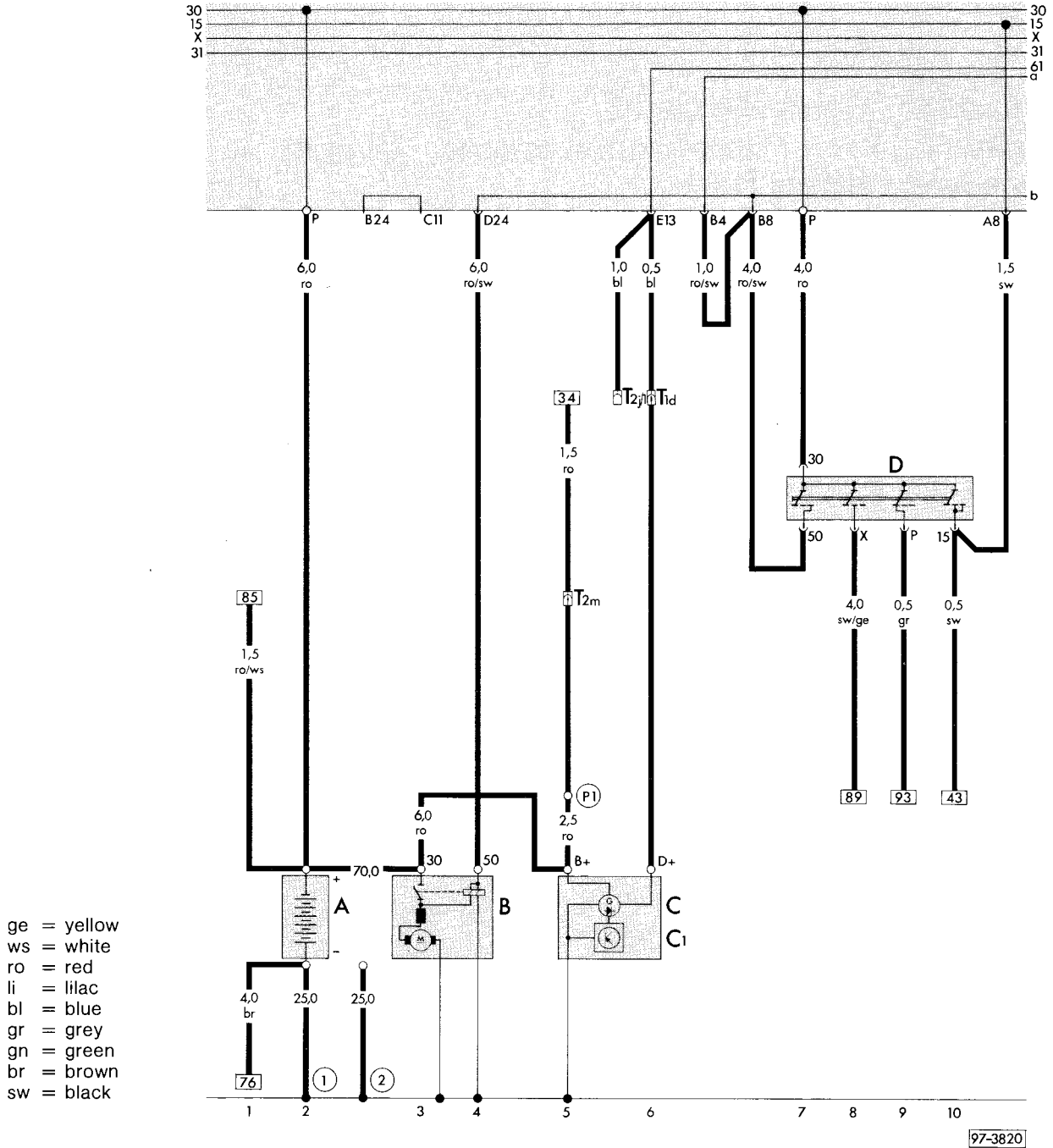
- A – Multi-pin connector (blue) for dash panel wiring loom
- B – Multi-pin connector (red) for dash panel wiring loom
- C – Multi-pin connector (yellow) for front wiring loom
- D – Multi-pin connector (white) for wiring loom, windscreen wipers and main wiring loom
- E – Multi-pin connector (black) for main wiring loom
- G – Single connector
- H – Multi-pin connector (brown), connections – 2nd stage relay for radiator fan
- K – Multi-pin connector (transparent), connections – control unit for coolant shortage indicator
- L – Multi-pin connector (grey), connections – dual horn system
- M – Not in use
- N – Single connector
- P – Single connector – terminal 30
- R – Not in use

Fuse colours:

- 30 A – green
- 25 A – white
- 20 A – yellow
- 15 A – blue
- 10 A – red

The numbers in brackets behind the part designation refer to production control numbers stamped on the housing.

Battery, starter, alternator, ignition/starter switch



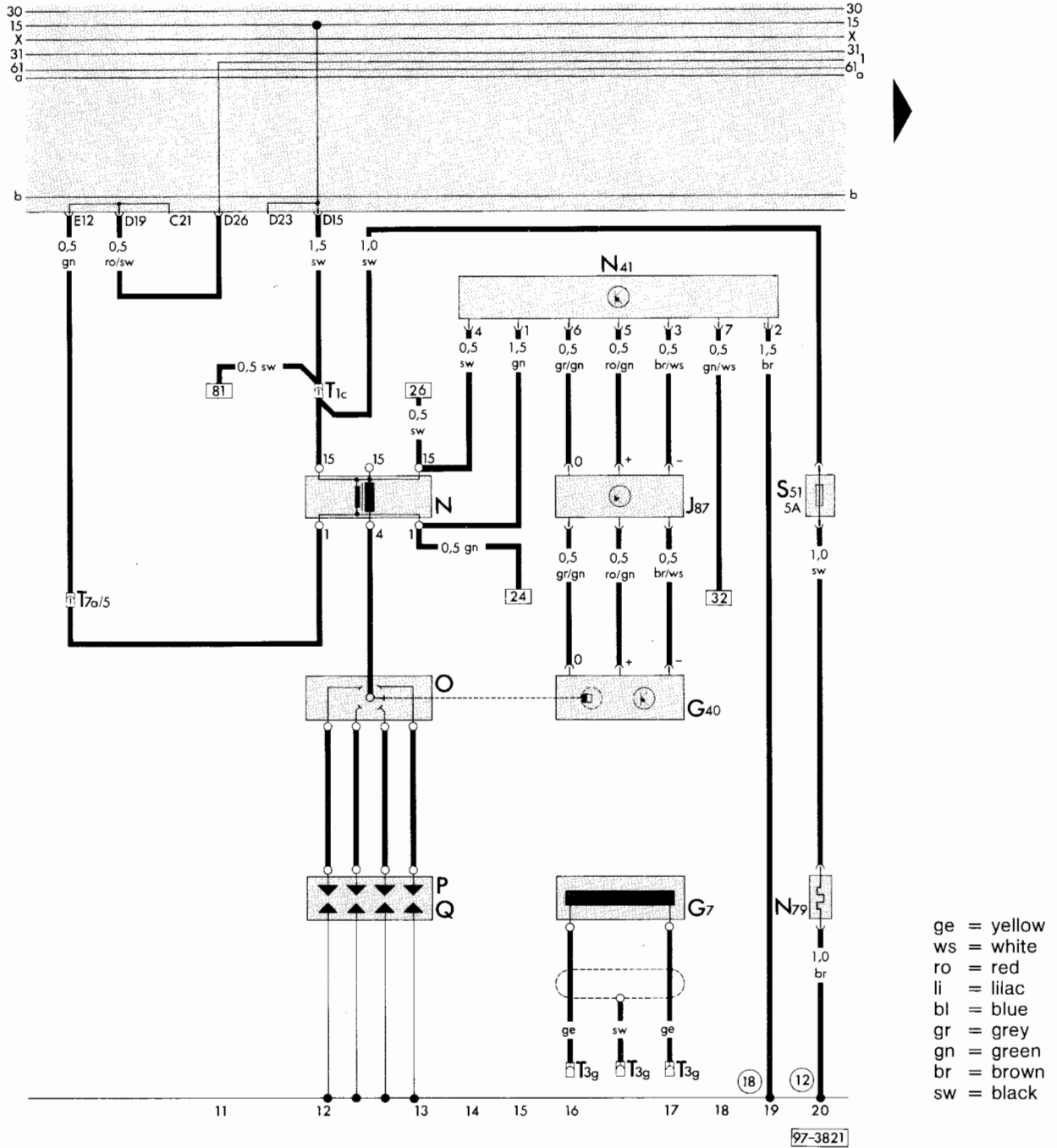
ge = yellow
 ws = white
 ro = red
 li = lilac
 bl = blue
 gr = grey
 gn = green
 br = brown
 sw = black

- A - Battery
- B - Starter
- C - Alternator
- C 1 - Voltage regulator
- D - Ignition/starter switch
- T 1d - Connector single, in junction box - engine compartment
- T 2j - Connector 2 pin, behind relay plate (second battery)
- T 2m - Connector 2 pin, in the relay plate - engine compartment

- ① - Earthing strap, battery - body
- ② - Erthing strap, battery - body
- Ⓟ - Positive (+) connection (30) in junction box - engine compartment

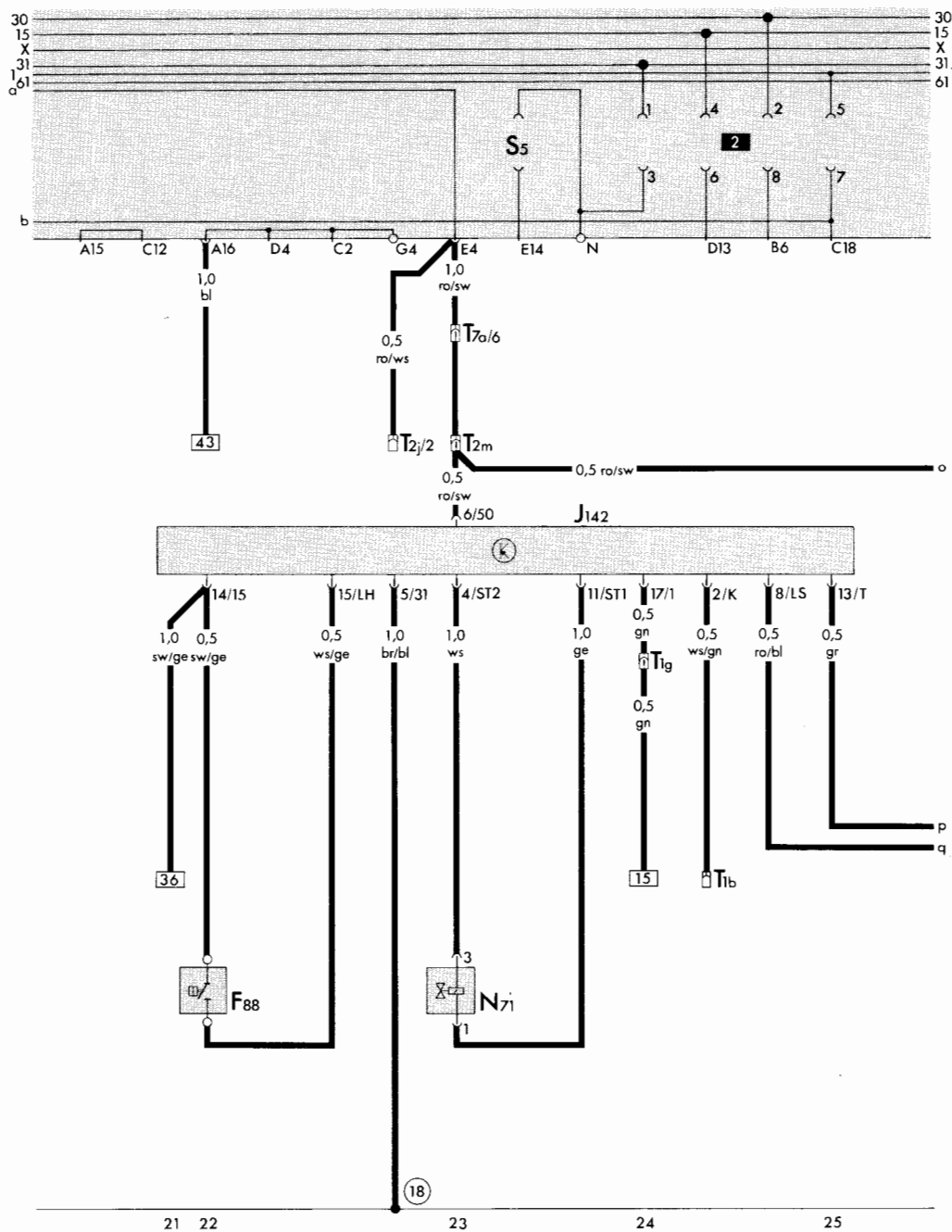
97-3820

Ignition system, electric heating for crankcase breather



- G 7 – TDC sender
- G 40 – Hall sender
- J 87 – DIS (Idling stabilization) switch unit, engine compartment left
- N – Ignition coil
- N 41 – TCI switch unit, engine compartment left
- N 79 – Heater element (crankcase breather)
- O – Ignition distributor
- P – Spark plug connector
- Q – Spark plugs
- S 51 – Fuse, in junction box – engine compartment
- T 1c – Connector single, in junction box – engine compartment
- T 3g – Connector 3 pin, near alternator
- T 7a/ – Connector 7 pin, in junction box – engine compartment
- (12) – Earth point, in engine compartment, left
- (18) – Earth point, on cylinder block

Idling speed stabilization

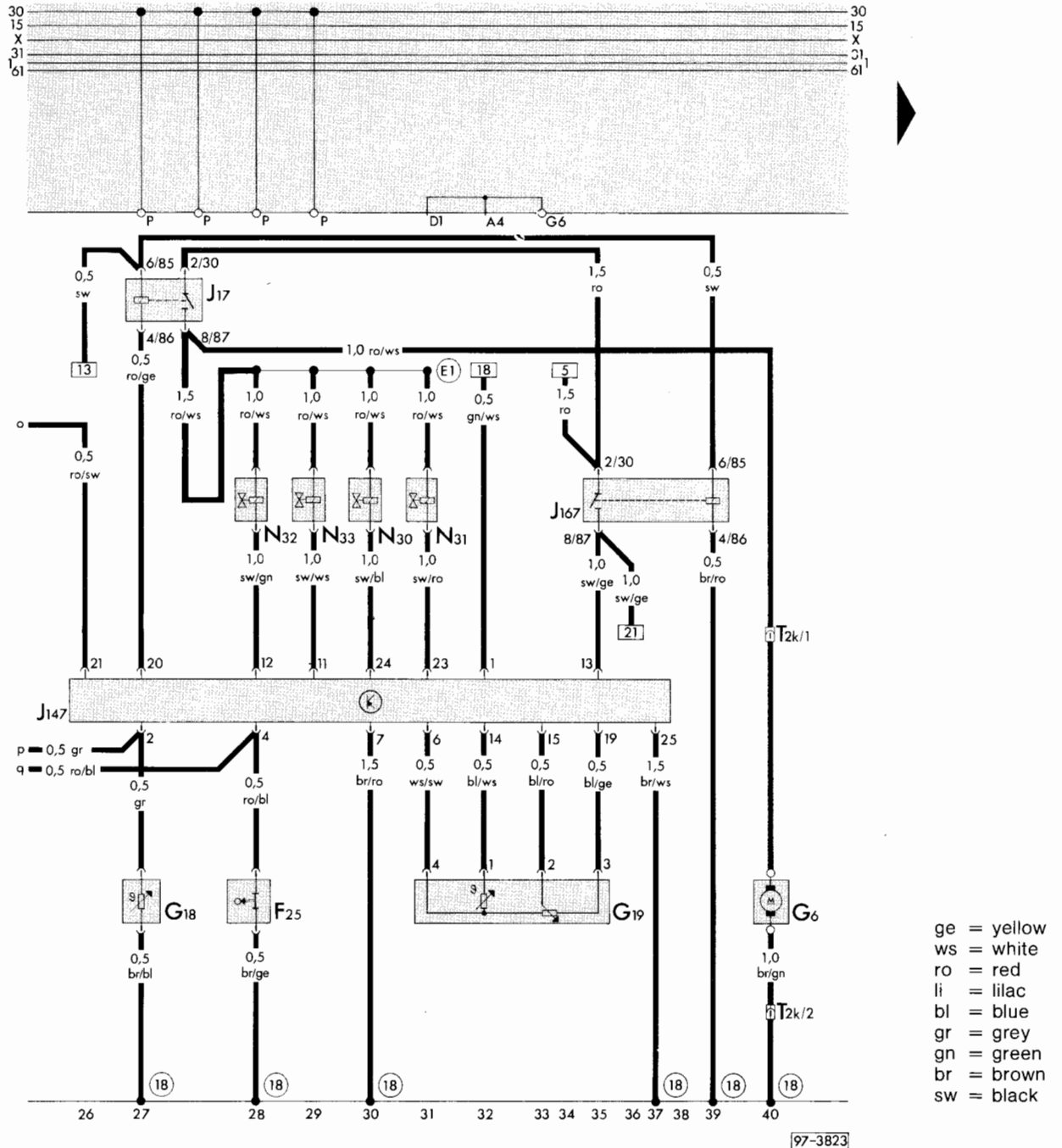


- ge = yellow
- ws = white
- ro = red
- li = lilac
- bl = blue
- gr = grey
- gn = green
- br = brown
- sw = black

97-3822

- F 88 – Pressure switch for PAS
- J 142 – Control unit for idling speed stabilization, in engine compartment, right
- N 71 – Control valve for idling speed stabilization
- T 1b – Connector single, in engine compartment, left (air conditioner)
- T 1g – Connector single, in engine compartment, left
- T 2j – Connector 2 pin, behind relay plate (second battery)
- T 2m – Connector 2 pin, in the relay plate – engine compartment
- T 7a/ – Connector 7 pin, in junction box – engine compartment
- 18 – Earth point, on cylinder block

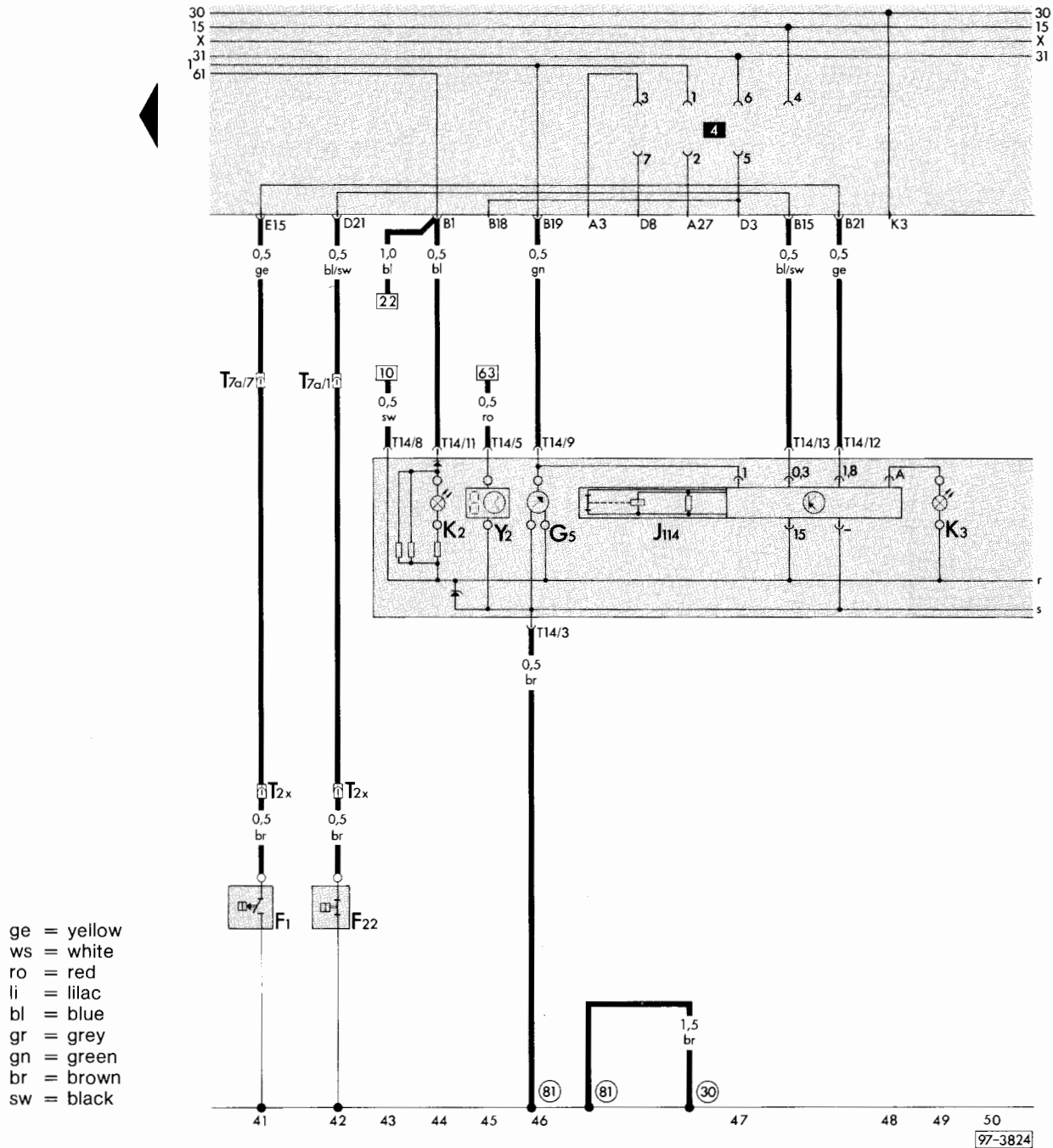
Digital fuel injection system (Digijet)



- F 25 – Throttle valve switch
- G 6 – Electric fuel pump
- G 18 – Temperature sensor
- G 19 – Air flow meter
- J 17 – Fuel pump relay, in the relay plate – engine compartment
- J 147 – Control unit for Digijet in engine compartment left
- J 167 – Current supply relay for Digijet and idling speed stabilization control units in the relay plate – engine compartment
- N 30 – Injector, cylinder 1
- N 31 – Injector, cylinder 2
- N 32 – Injector, cylinder 3
- N 33 – Injector, cylinder 4
- T 2k – Connector 2 pin, in engine compartment, left

- (18) – Earth point, on cylinder block
- (E1) – Positive (+) connection in Digijet wiring loom

Dash panel insert, optical and acoustic oil pressure warning



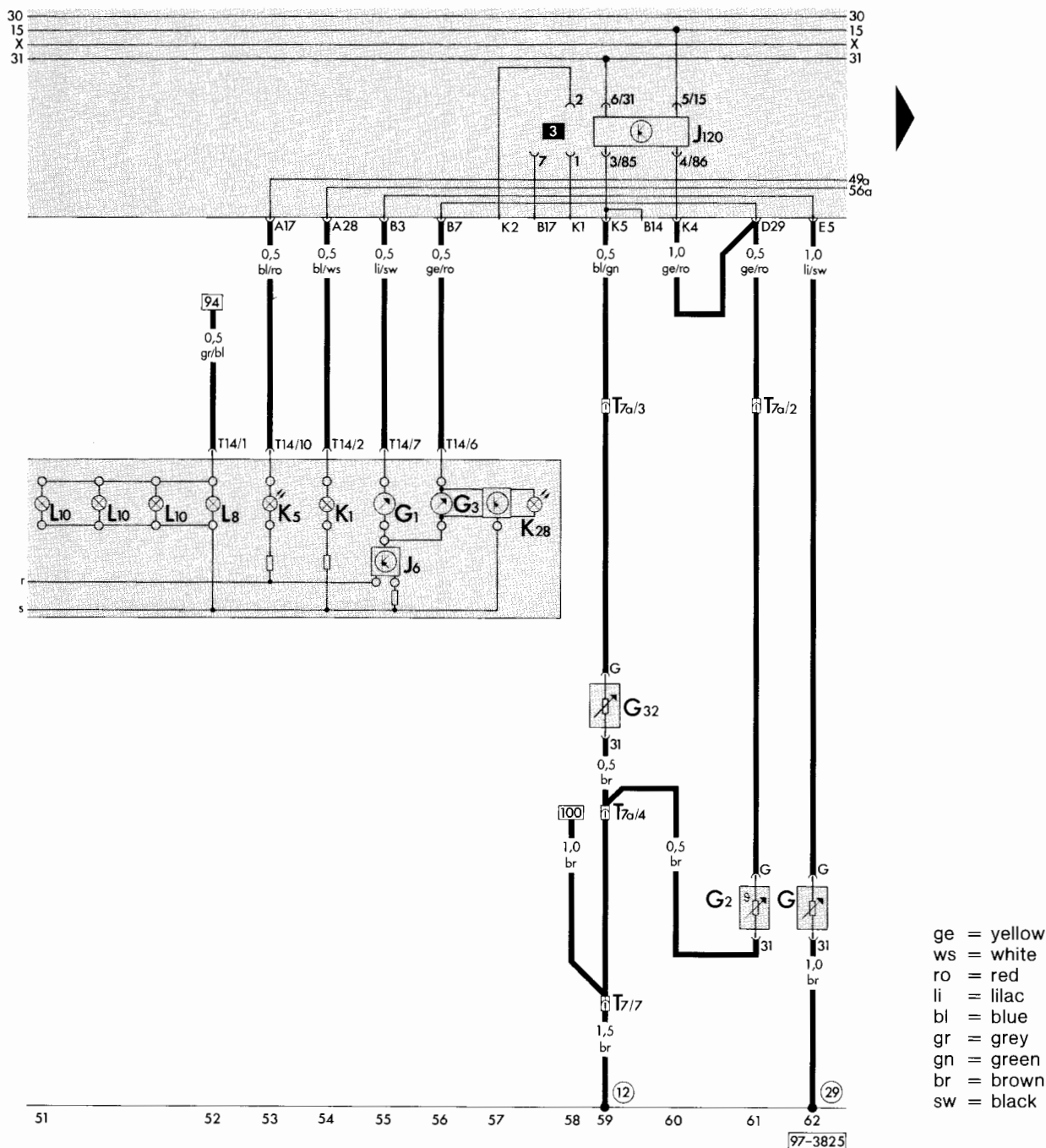
- ge = yellow
- ws = white
- ro = red
- li = lilac
- bl = blue
- gr = grey
- gn = green
- br = brown
- sw = black

- F 1 – Oil pressure switch (0.9 bar)
- F 22 – Oil pressure switch (0.3 bar)
- G 5 – Rev. counter
- J 114 – Oil pressure warning control unit
- K 2 – Generator warning lamp
- K 3 – Oil pressure warning lamp
- T 2x – Connector 2 pin in engine compartment centre
- T 7a/ – Connector 7 pin, in junction box – engine compartment
- T 14/ – Connector 14 pin, on dash panel insert
- Y 2 – Digital clock

- (30) – Earth point, next to relay plate
- (81) – Earth connection, in dash panel wiring loom

97-3824

Dash panel insert, coolant temperature and coolant shortage indicator (V.A.G 1466), senders

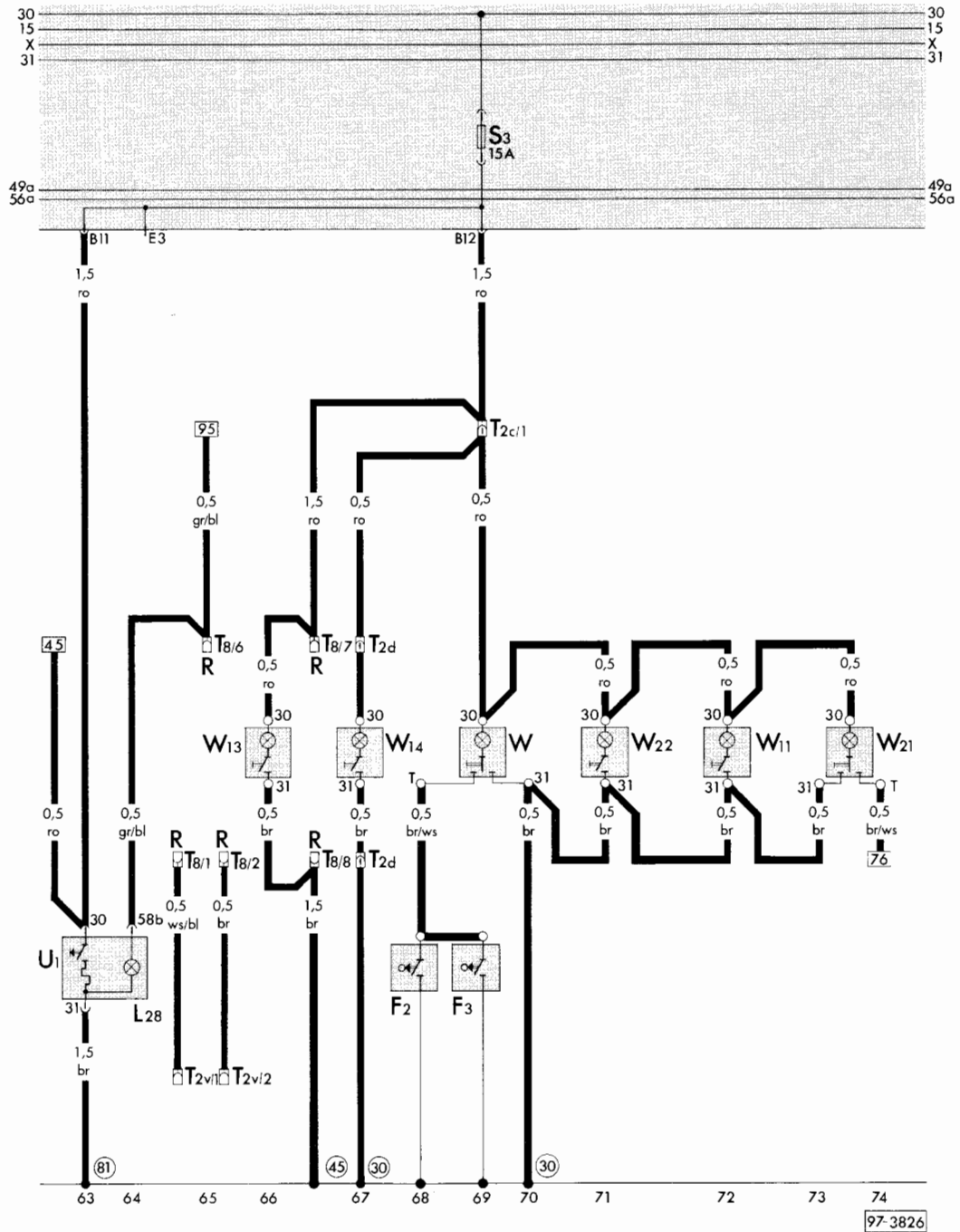


ge = yellow
 ws = white
 ro = red
 li = lilac
 bl = blue
 gr = grey
 gn = green
 br = brown
 sw = black

- G — Fuel gauge sender
- G 1 — Fuel gauge
- G 2 — Coolant temperature gauge sender
- G 3 — Coolant temperature gauge
- G 32 — Coolant shortage indicator sender
- J 6 — Voltage stabilizer
- J 120 — Control unit for coolant shortage indicator
- K 1 — Main beam warning lamp
- K 5 — Turn signal warning lamp
- K 28 — Warning lamp for coolant temperature/coolant shortage
- L 8 — Clock light bulb
- L 10 — Dash panel insert light bulb
- T 7/ — Connector 7 pin, in junction box — engine compartment
- T 7a/ — Connector 7 pin, in junction box — engine compartment
- T 14 — Connector 14 pin, on dash panel insert

- (12) — Earth point, in engine compartment, left
- (29) — Earth point, near fuel gauge sender

Cigarette lighter, radio, interior light, reading lamp



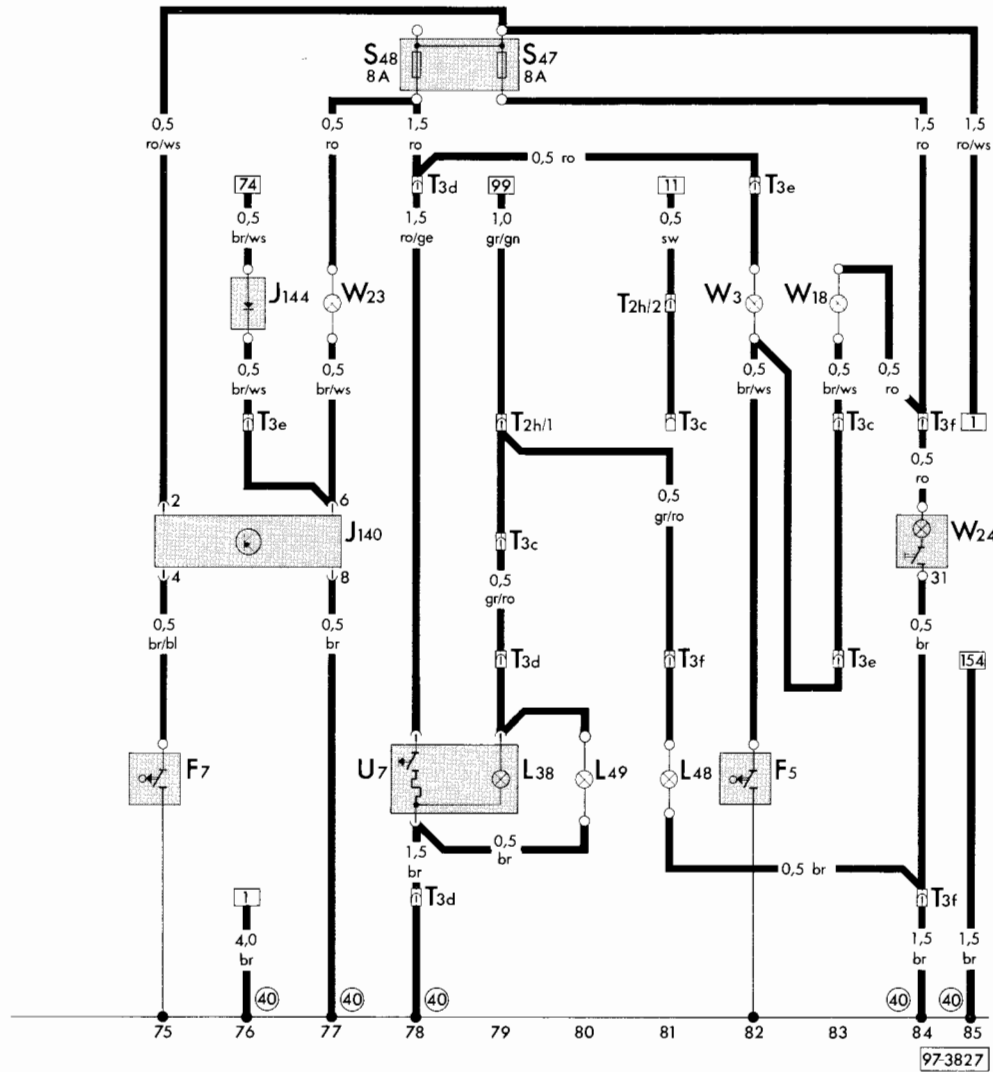
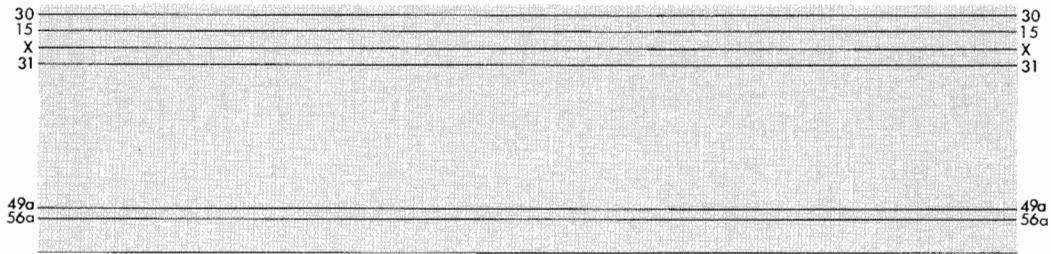
- ge = yellow
- ws = white
- ro = red
- li = lilac
- bl = blue
- gr = grey
- gn = green
- br = brown
- sw = black

- F 2 – Front left door contact switch
- F 3 – Front right door contact switch
- L 28 – Cigarette lighter light bulb
- R – Connection for radio
- T 2c – Connector 2 pin, behind dash panel, left
- T 2d – Connector 2 pin, on A-pillar, upper left
- T 2v – Connector 2 pin, behind dash-panel, centre
- T 8 – Connector 8 pin, behind dash panel, centre
- U 1 – Cigarette lighter
- W – Interior light, front
- W 11 – Reading lamp, rear left
- W 13 – Front passenger reading lamp
- W 14 – Illuminated Make-up mirror (passenger's side)
- W 21 – Reading lamp with switch-off delay, rear right
- W 22 – Reading lamp, behind driver's seat

- (30) – Earth point, next to relay plate
- (45) – Earth point behind dash panel, centre
- (81) – Earth connection, in dash panel wiring loom

97-3826

Switch off delay for interior lights (V.A.G 1466), luggage boot light

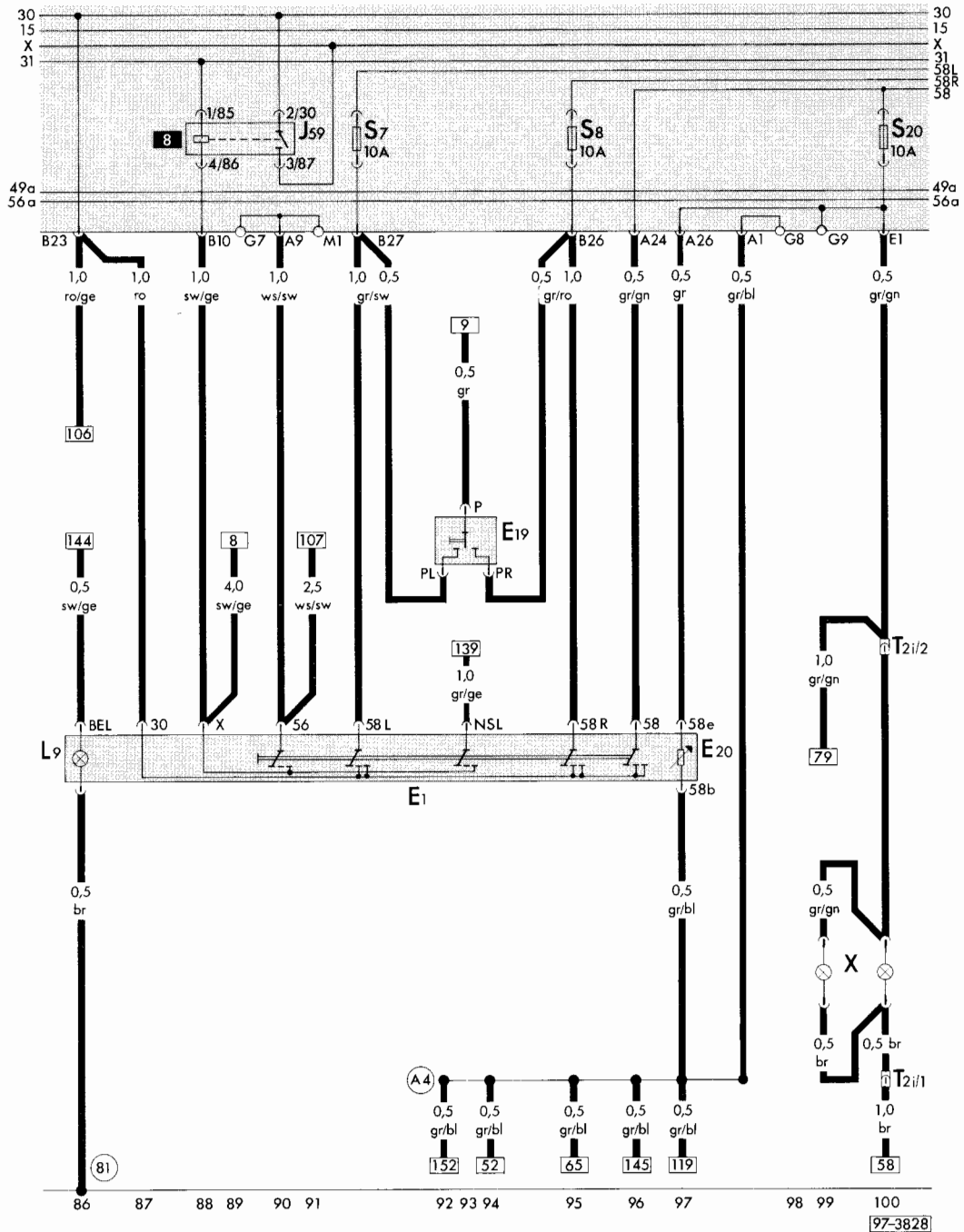


ge = yellow
 ws = white
 ro = red
 li = lilac
 bl = blue
 gr = grey
 gn = green
 br = brown
 sw = black

- F 5 – Luggage boot light switch (tailgate)
- F 7 – Door contact switch, rear (sliding door)
- J 140 – Control unit for interior light delay under rear seat right
- J 144 – Blocking diode for interior light delay circuit, under rear seat, right
- L 38 – Rear right cigarette lighter bulb
- L 48 – Ashtray lighting bulb rear left
- L 49 – Ashtray lighting bulb rear right
- S 47 – Fuse for reading lamps under rear seat right
- S 48 – Fuse for cigarette lighter under rear seat right
- T 2h – Connector 2 pin, under rear seat, centre
- T 3c – Connector 3 pin, under rear seat, right
- T 3d – Connector 3 pin, under rear seat, right
- T 3e – Connector 3 pin, under rear seat, right
- T 3f – Connector 3 pin, behind left hand side panel
- U 7 – Cigarette lighter, rear right
- W 3 – Luggage boot light, right
- W 18 – Boot light, left
- W 23 – Sill panel light with switch-off delay

- W 24 – Reading lamp – Pull out table
- (40) – Earth point, under rear seat, right

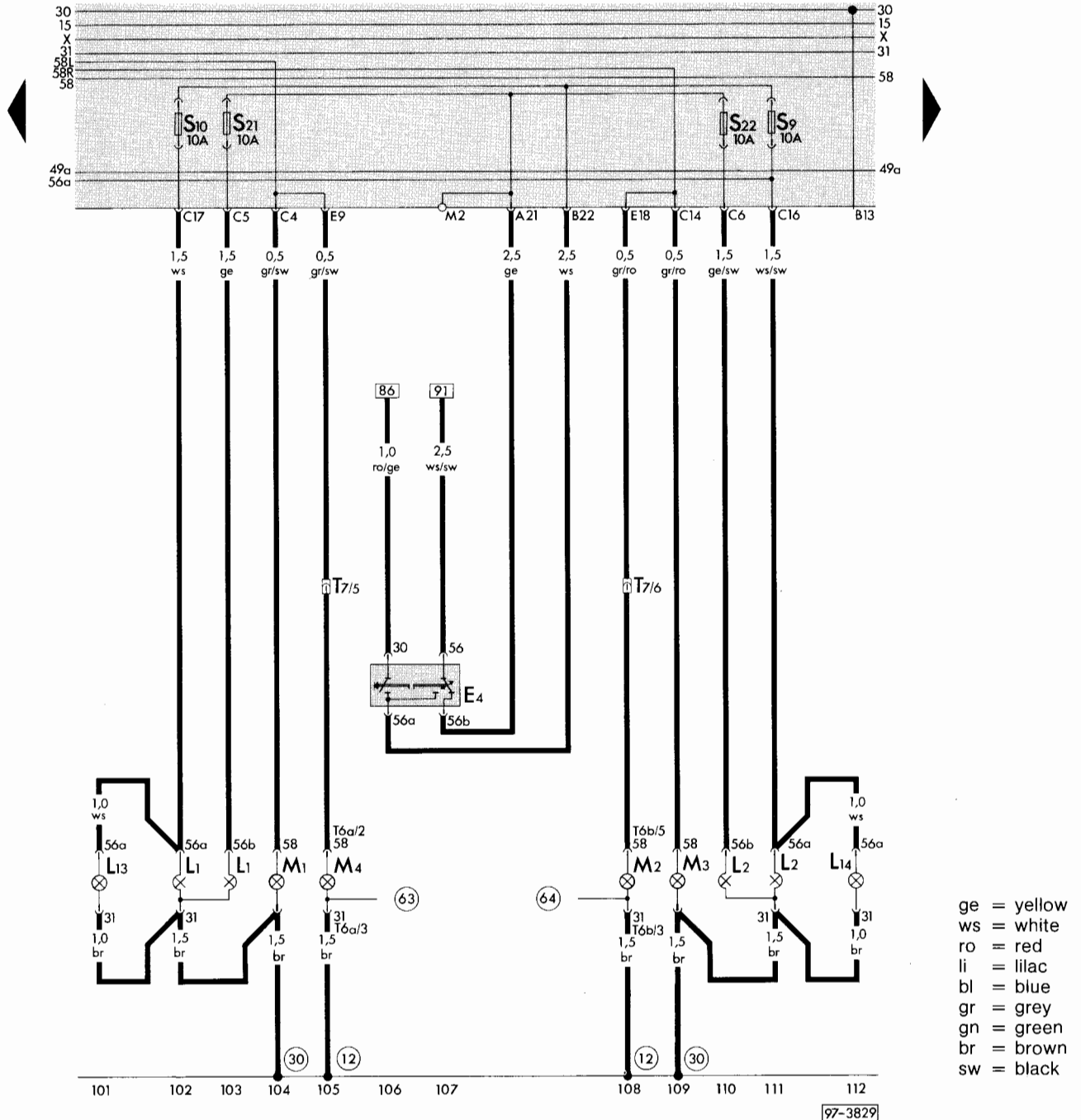
Lighting switch, instrument lighting, number plate light



ge = yellow
 ws = white
 ro = red
 li = lilac
 bl = blue
 gr = grey
 gn = green
 br = brown
 sw = black

- E 1 - Lighting switch
- E 19 - Parking light switch
- E 20 - Instrument/dash panel lighting control
- J 59 - Relief relay for x contact
- L 9 - Lighting switch light bulb
- T 2i - Connector 2 pin, in junction box – engine compartment
- X - Number plate light
- (81) - Earth connection, in dash panel wiring loom
- (A4) - Positive (+) connection (58b), in dash panel wiring loom

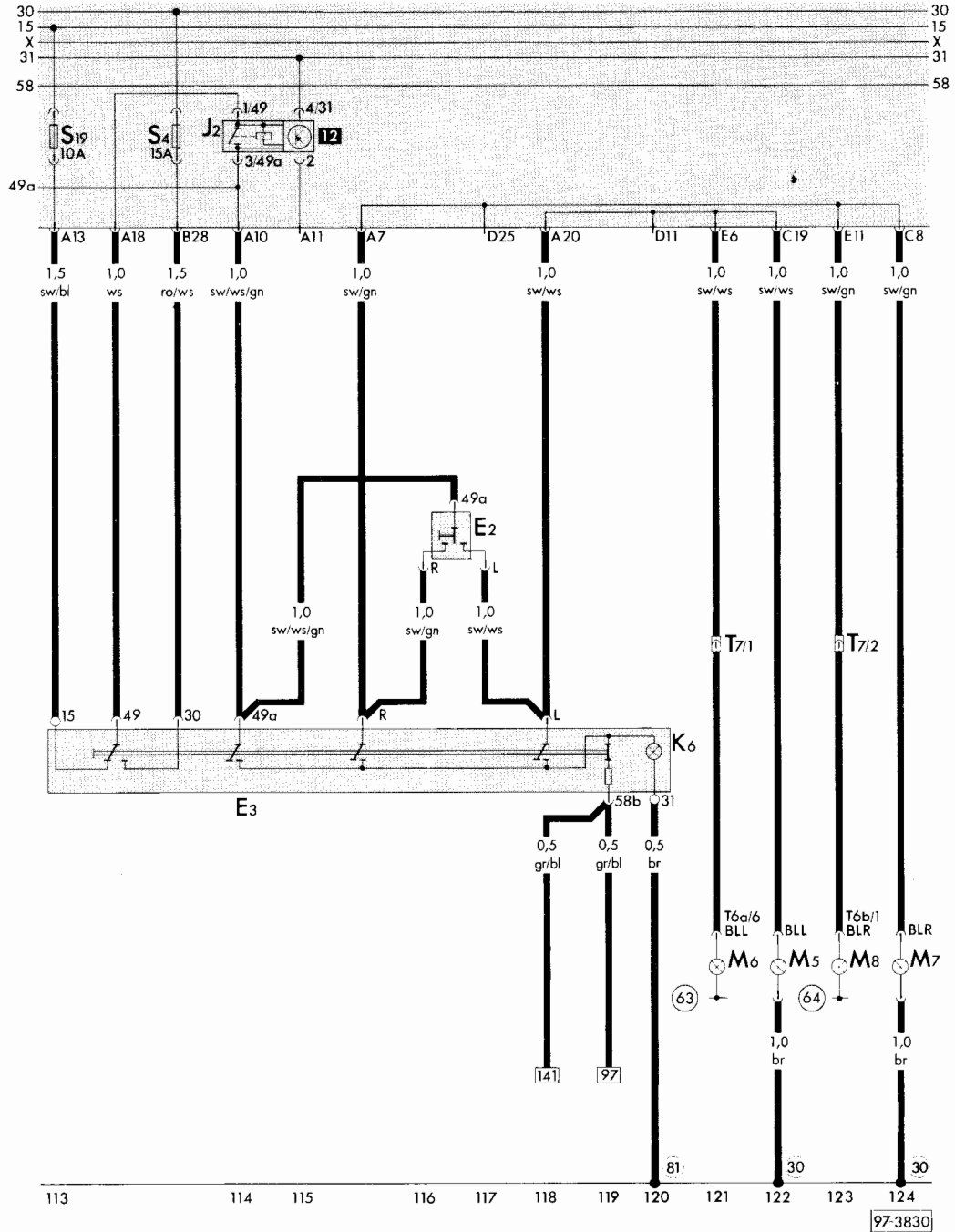
Headlights, tail lights, headlight dipper / flasher switch



- E 4 – Headlight dipper/flasher switch
- L 1 – Twin filament bulb, left headlight
- L 2 – Twin filament bulb, right headlight
- L 13 – Main beam headlight bulb, left
- L 14 – Main beam headlight bulb, right
- M 1 – Side light bulb, left
- M 2 – Tail light bulb, right
- M 3 – Side light bulb, right
- M 4 – Tail light bulb, left
- T 7/ – Connection 7 pin, in junction box – engine compartment

- (12) – Earth point, in engine compartment, left
- (30) – Earth point, next to relay plate
- (63) – Earth point, left tail light bulb holder
- (64) – Earth point, right tail light bulb holder

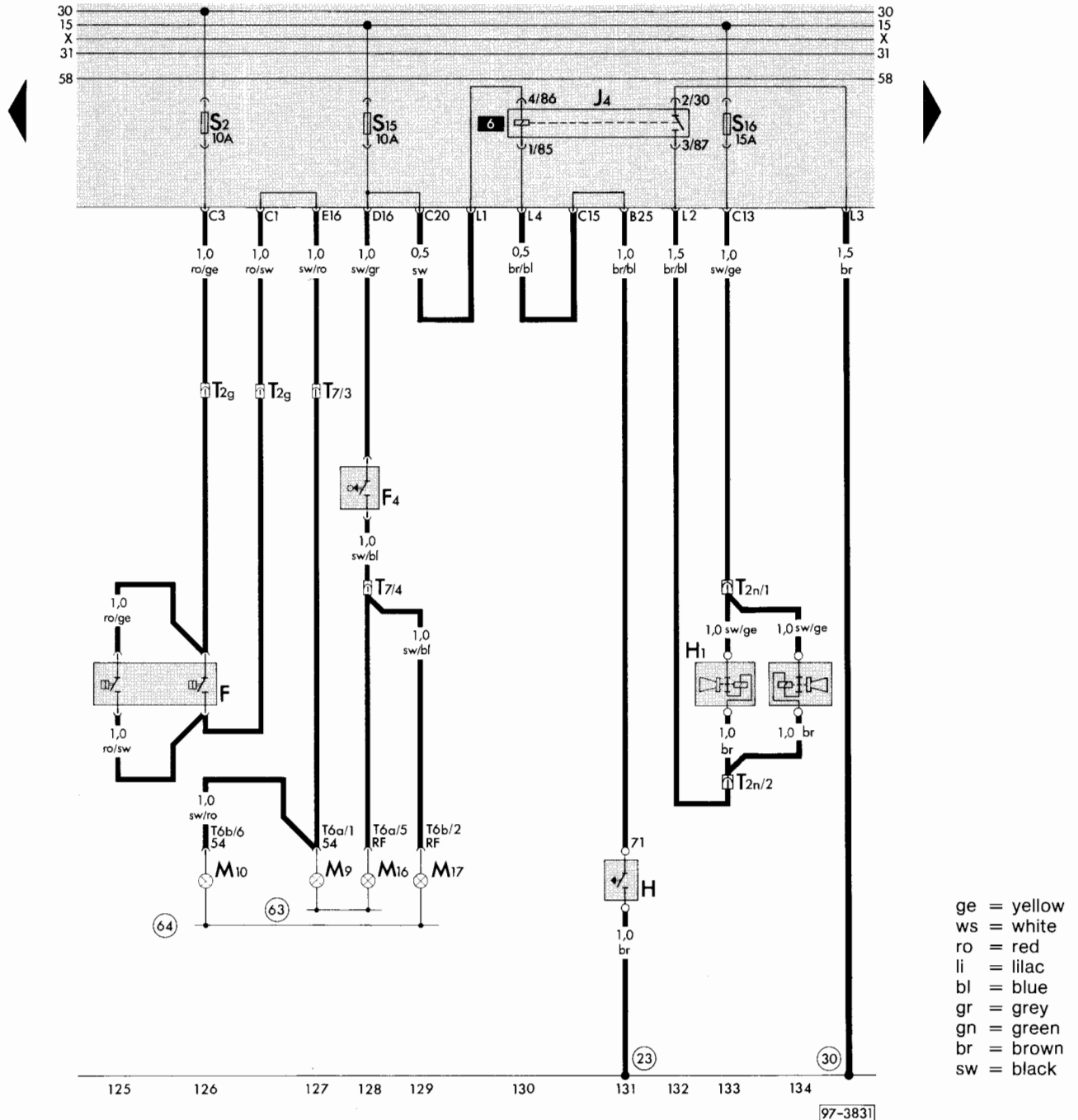
Turn signals and emergency light systems



- ge = yellow
- ws = white
- ro = red
- li = lilac
- bl = blue
- gr = grey
- gn = green
- br = brown
- sw = black

- E 2 – Turn signal switch
 - E 3 – Emergency light switch
 - J 2 – Emergency light relay
 - K 6 – Emergency light system warning lamp
 - M 5 – Front left turn signal bulb
 - M 6 – Rear left turn signal bulb
 - M 7 – Front right turn signal bulb
 - M 8 – Rear right turn signal bulb
 - T 7/ – Connector 7 pin, in junction box – engine compartment
- (30) – Earth point, next to relay plate
 - (81) – Earth connection, in dash panel wiring loom
 - (63) – Earth point, left tail light bulb holder
 - (64) – Earth point, right tail light bulb holder

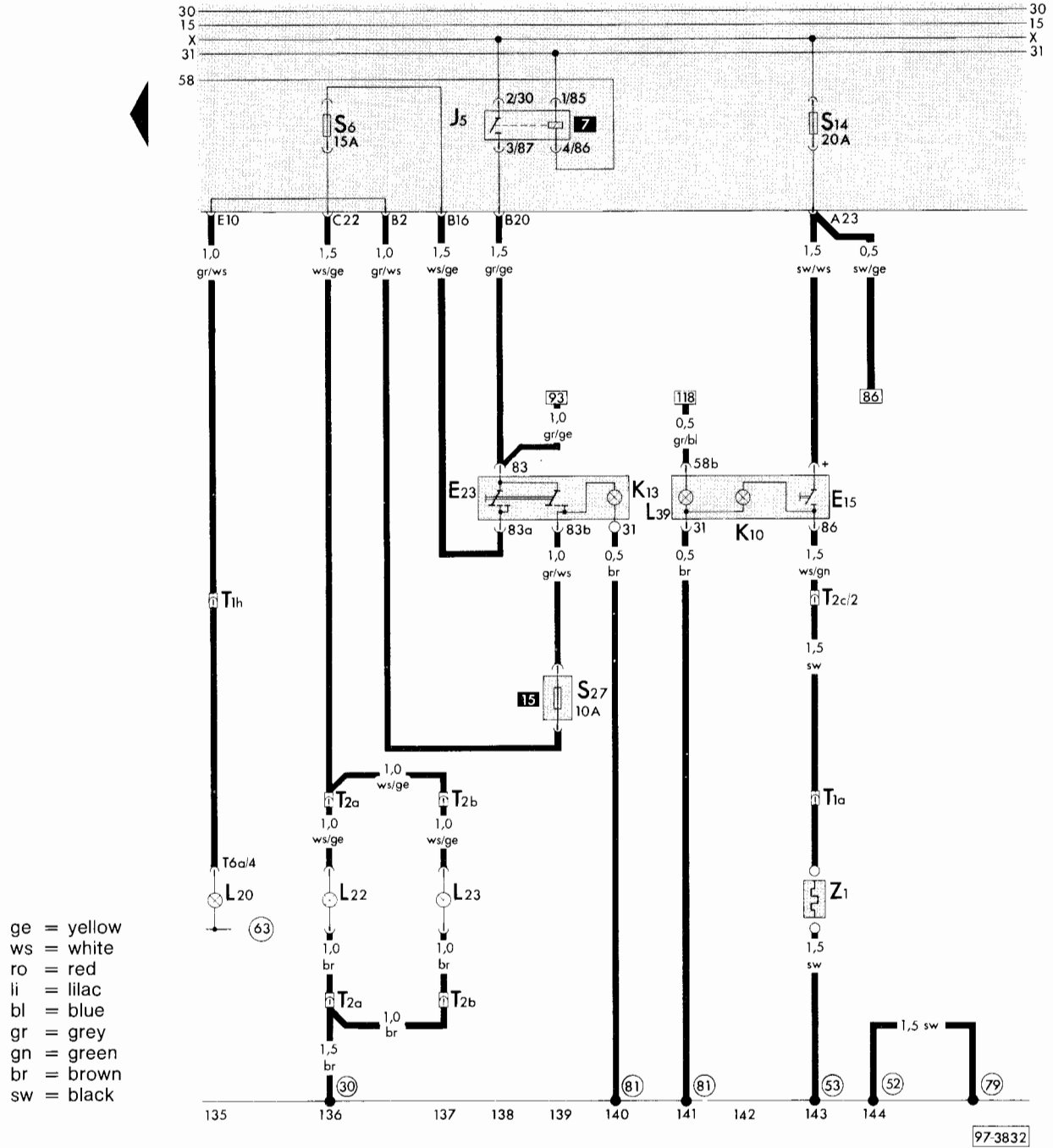
Brake lights, reversing light, dual tone horn system (V.A.G 1466)



- F – Brake light switch
- F 4 – Reversing light switch
- H – Horn plate
- H 1 – Dual tone horn
- J 4 – Dual tone horn relay
- M 9 – Brake light bulb, left
- M 10 – Brake light bulb, right
- M 16 – Reversing light bulb left
- M 17 – Reversing light bulb right
- T 2g – Connector 2 pin behind dash panel
- T 2n – Connector 2 pin, near dual tone horn
- T 7/ – Connector 7 pin in junction box – engine compartment

- (23) – Earth wire, above steering gear
- (30) – Earth point, next to relay plate
- (63) – Earth point, left tail light bulb holder
- (64) – Earth point, right tail light bulb holder

Front and rear foglights, heated rear window

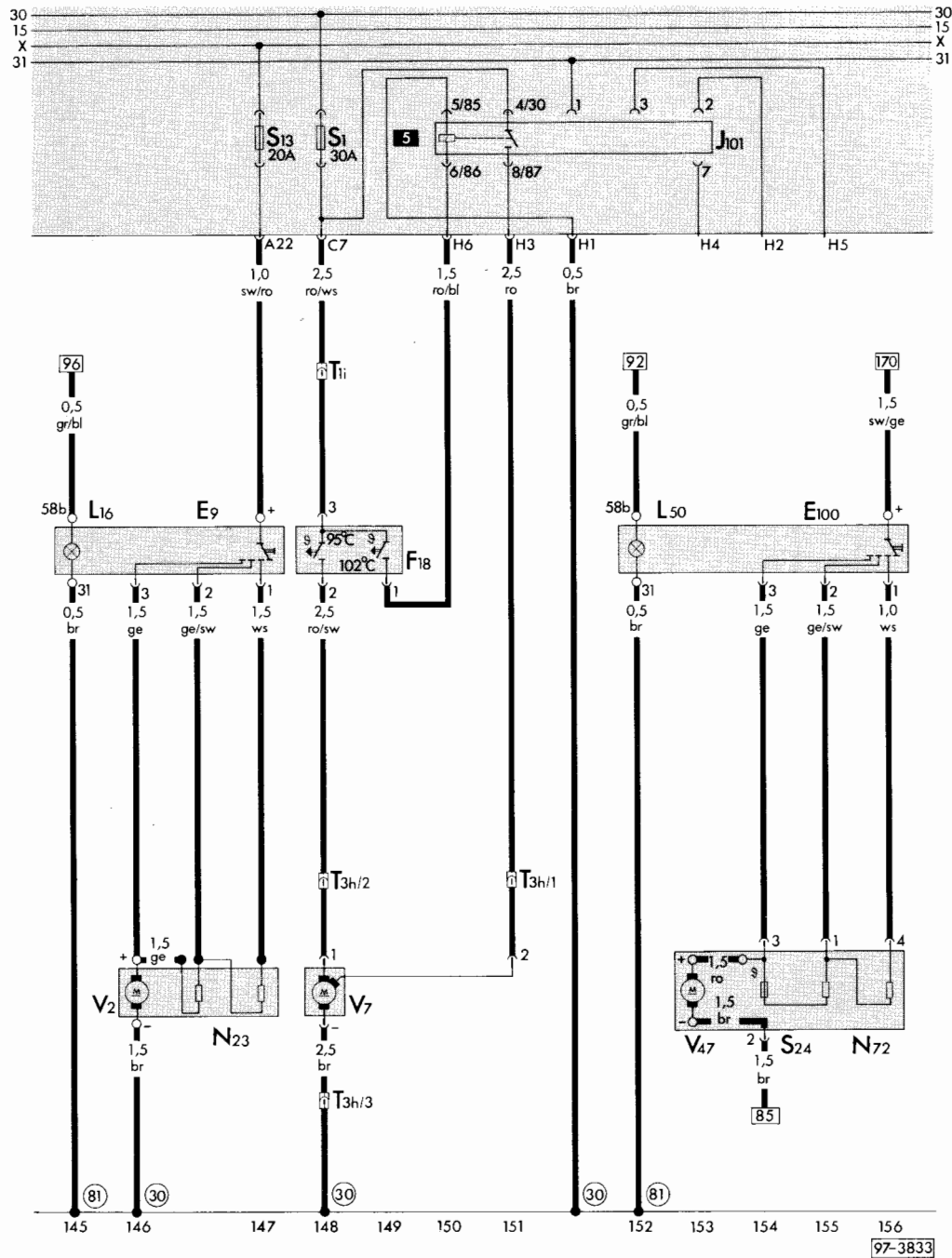


- ge = yellow
- ws = white
- ro = red
- li = lilac
- bl = blue
- gr = grey
- gn = green
- br = brown
- sw = black

- E 15 – Heated rear window switch
- E 23 – Fog light and rear fog light switch
- J 5 – Fog light relay
- K 10 – Heated rear window warning lamp
- K 13 – Rear fog light warning lamp
- L 20 – Rear fog light bulb
- L 22 – Fog light bulb, left
- L 23 – Fog light bulb, right
- L 39 – Heated rear window switch bulb
- S 27 – Single fuse for rear fog light
- T 1a – Connector single, above window rear left
- T 1h – Connector single, in engine compartment junction box
- T 2a – Connector 2 pin, behind upper air outlet trim, left
- T 2b – Connector 2 pin, behind upper air outlet trim, right
- T 2c – Connector 2 pin, behind dash panel, left
- Z 1 – Heated rear window

- (30) – Earth point, next to relay plate
- (52) – Earth point, in tailgate, left
- (53) – Earth point, in tailgate, right
- (63) – Earth point, left tail light bulb holder
- (64) – Earth point, right tail light bulb holder
- (79) – Earth point, rear left roof frame, near tailgate wiring loom hole
- (81) – Earth connection, in dash panel wiring loom

Fresh air blower, radiator fan (200/300 watt), warm air blower

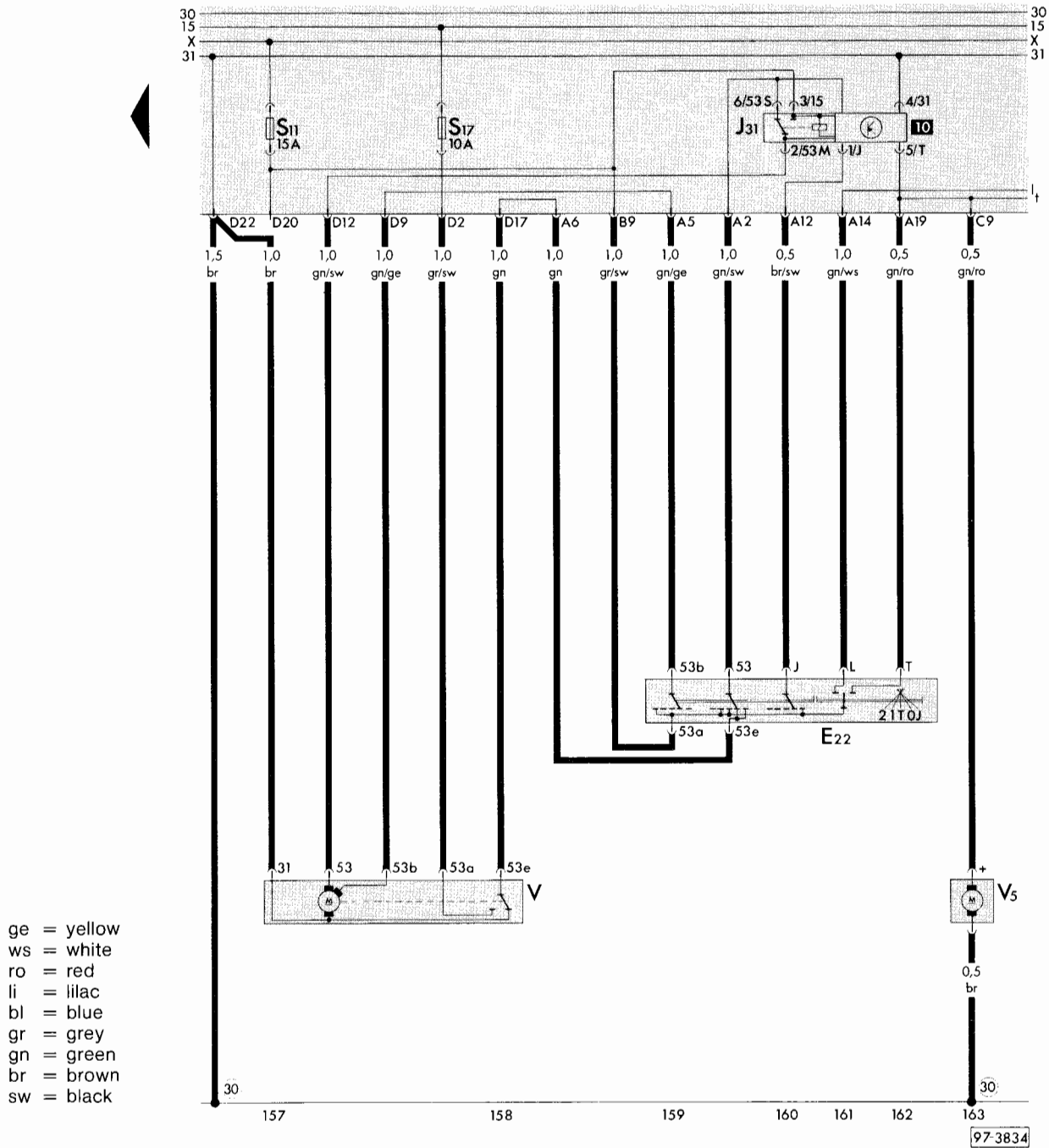


ge = yellow
 ws = white
 ro = red
 li = lilac
 bl = blue
 gr = grey
 gn = green
 br = brown
 sw = black

- E 9 – Fresh air blower switch
- E 100 – Switch for warm air blower
- F 18 – Radiator fan thermo switch
- J 101 – Radiator fan 2nd stage relay
- L 16 – Fresh air controls light bulb
- L 50 – Bulb for warm air blower switch light
- N 23 – Series resistance for fresh air blower
- N 72 – Series resistance for warm air blower
- S 24 – Overheating fuse
- T 1i – Connector single, behind dash panel, left
- T 3h – Connector 3 pin, behind upper air outlet trim
- V 2 – Fresh air blower
- V 7 – Radiator fan (200/300 Watt)
- V 47 – Warm air blower

- (30) – Earth point, next to relay plate
- (81) – Earth connection, in dash panel wiring loom

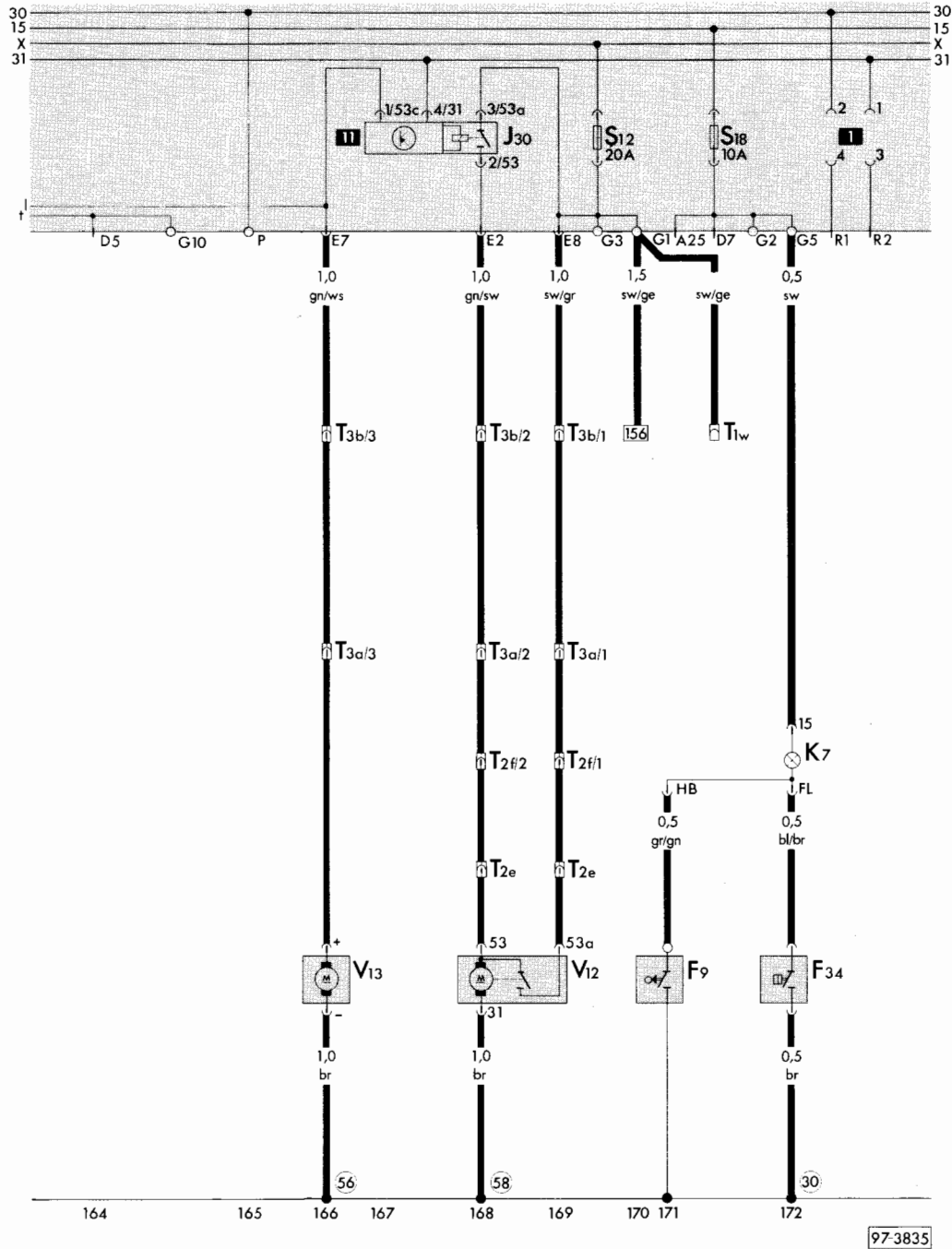
Windscreen wiper/washer system (V.A.G 1466)



- E 22 — Intermittent wiper switch
- J 31 — Intermittent wash/wipe relay
- V — Windscreen wiper motor
- V 5 — Windscreen washer pump

⓪ — Earth point, next to relay plate

Rear window wiper/washer system (V.A.G 1466), handbrake and brake fluid warning



- ge = yellow
- ws = white
- ro = red
- li = lilac
- bl = blue
- gr = grey
- gn = green
- br = brown
- sw = black

- F 9 – Handbrake warning system switch
- F 34 – Brake fluid level warning contact
- J 30 – Rear window wiper/washer relay
- K 7 – Dual circuit brake and handbrake warning lamp
- T 1w – Connector single, behind relay plate
- T 2e – Connector 2 pin, in tailgate near wiper motor
- T 2f – Connector 2 pin, behind right upper C-pillar trim
- T 3a – Connector 3 pin, behind dash panel, right
- T 3b – Connector 3 pin, behind dash panel, left
- V 12 – Rear wiper motor
- V 13 – Rear window washer pump

- (30) – Earth point, next to relay plate
- (56) – Earth point, next to water reservoir
- (58) – Earth point, near rear window wiper motor

97-3835