

Passat

Current Flow Diagram

No. 195 / 1

Edition 09.2005

CAN and LIN bus network

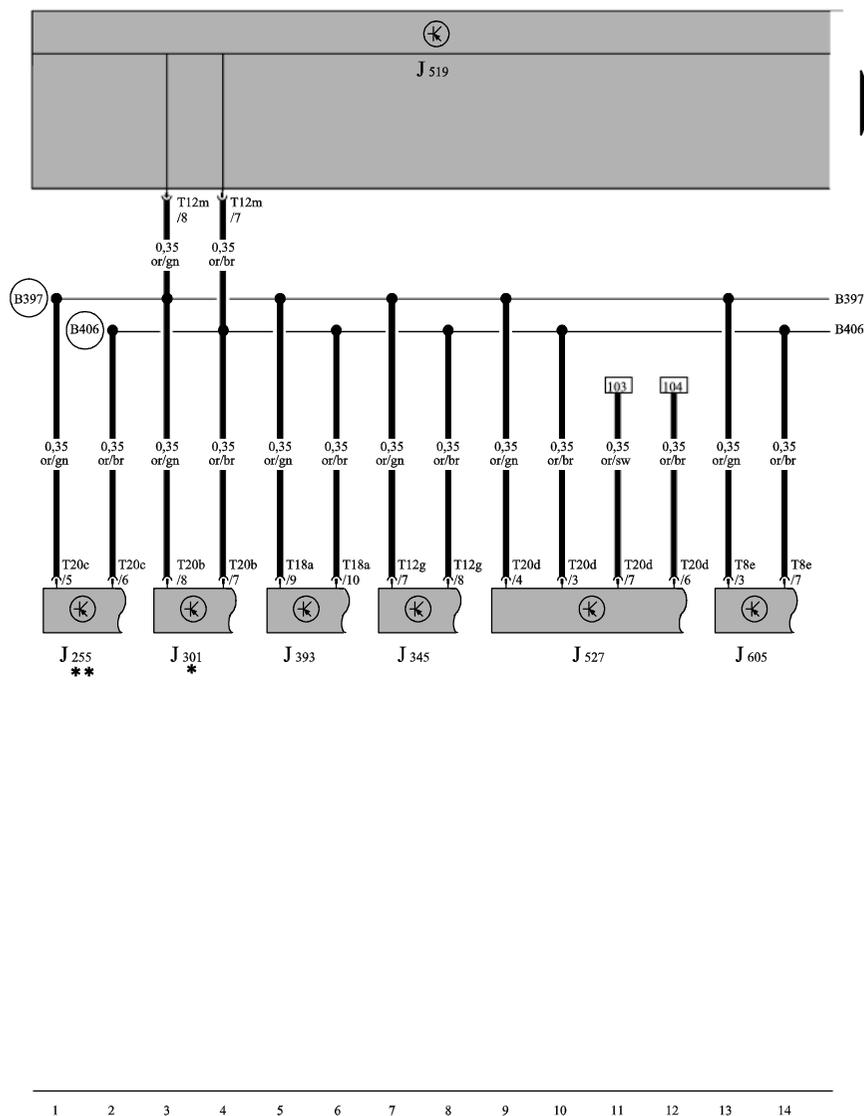
- **Powertrain, convenience, infotainment and diagnosis**

From November 2007

Passat

Current Flow Diagram

No. 195 / 2



Climatronic control unit, air conditioning system control unit, trailer detector control unit, convenience system central control unit, steering column electronics control unit

- J255 - Climatronic control unit
- J301 - Air conditioning system control unit
- J345 - Trailer detector control unit
- J393 - Convenience system central control unit
- J519 - Onboard supply control unit
- J527 - Steering column electronics control unit
- J605 - Rear lid control unit
- T8e - 8-pin connector
- T12g - 12-pin connector, coupling point for trailer connection
- T12m - 12-pin connector, black
- T18a - 18-pin connector
- T20b - 20-pin connector
- T20c - 20-pin connector
- T20d - 20-pin connector
- B397 - Connection 1 (convenience CAN bus, high), in main wiring harness
- B406 - Connection 1 (convenience CAN bus, low), in main wiring harness
- * - Only models with air conditioning system
- ** - Only models with Climatronic

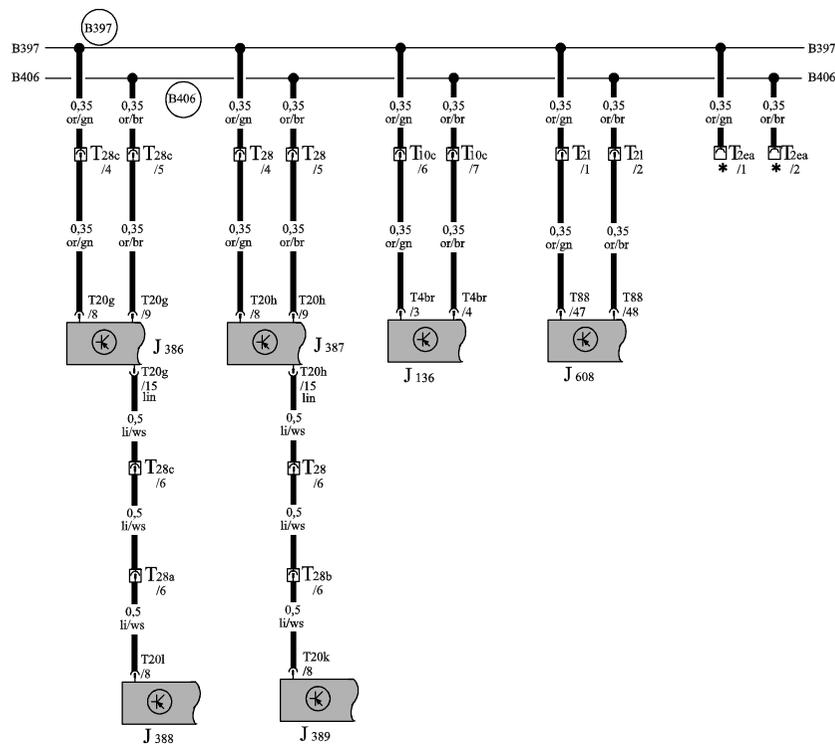
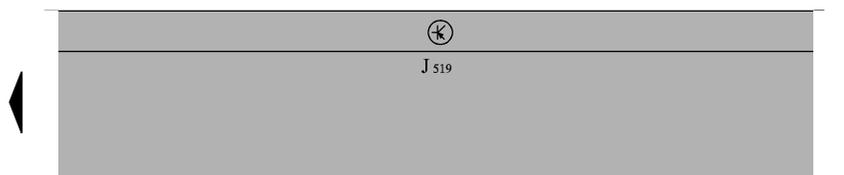
ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Passat

Current Flow Diagram

No. 195 / 3



15 16 17 18 19 20 21 22 23 24 25 26 27 28

Door control unit, special vehicle control unit, seat and steering column adjustment control unit with memory

- J136 - Seat and steering column adjustment control unit with memory
- J386 - Driver door control unit
- J387 - Front passenger side door control unit
- J388 - Rear left door control unit
- J389 - Rear right door control unit
- J519 - Onboard supply control unit
- J608 - Special vehicle control unit

- T2I - 2-pin connector
- T2ea - 2-pin connector
- T4br - 4-pin connector, black
- T10c - 10-pin connector, coupling point driver side, under seat
- T20g - 20-pin connector
- T20h - 20-pin connector
- T20k - 20-pin connector
- T20l - 20-pin connector
- T28 - 28-pin connector, coupling point, right A-pillar
- T28a - 28-pin connector, coupling point, left B-pillar
- T28b - 28-pin connector, coupling point, right B-pillar
- T28c - 28-pin connector, coupling point, left A-pillar
- T88 - 88-pin connector

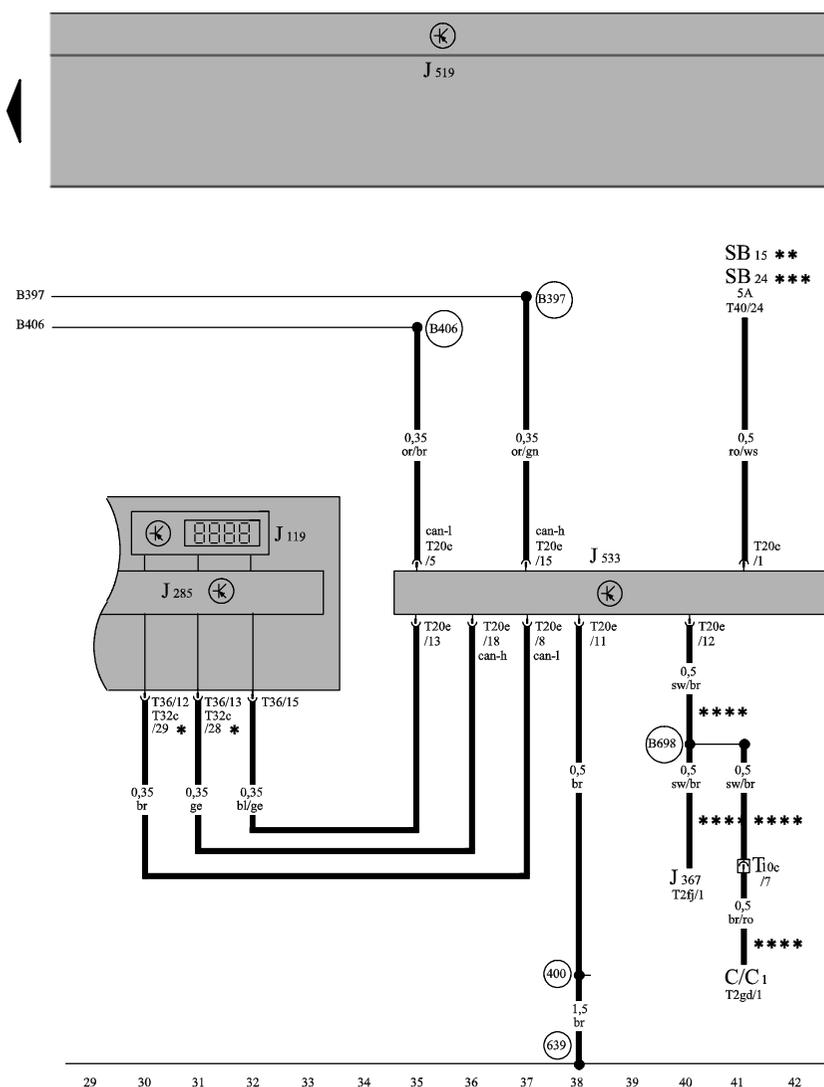
- B397 - Connection 1 (convenience CAN bus, high), in main wiring harness
- B406 - Connection 1 (convenience CAN bus, low), in main wiring harness
- * - wire for special installation

- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 195 / 4



Dash panel insert, multifunction display, data bus diagnosis interface

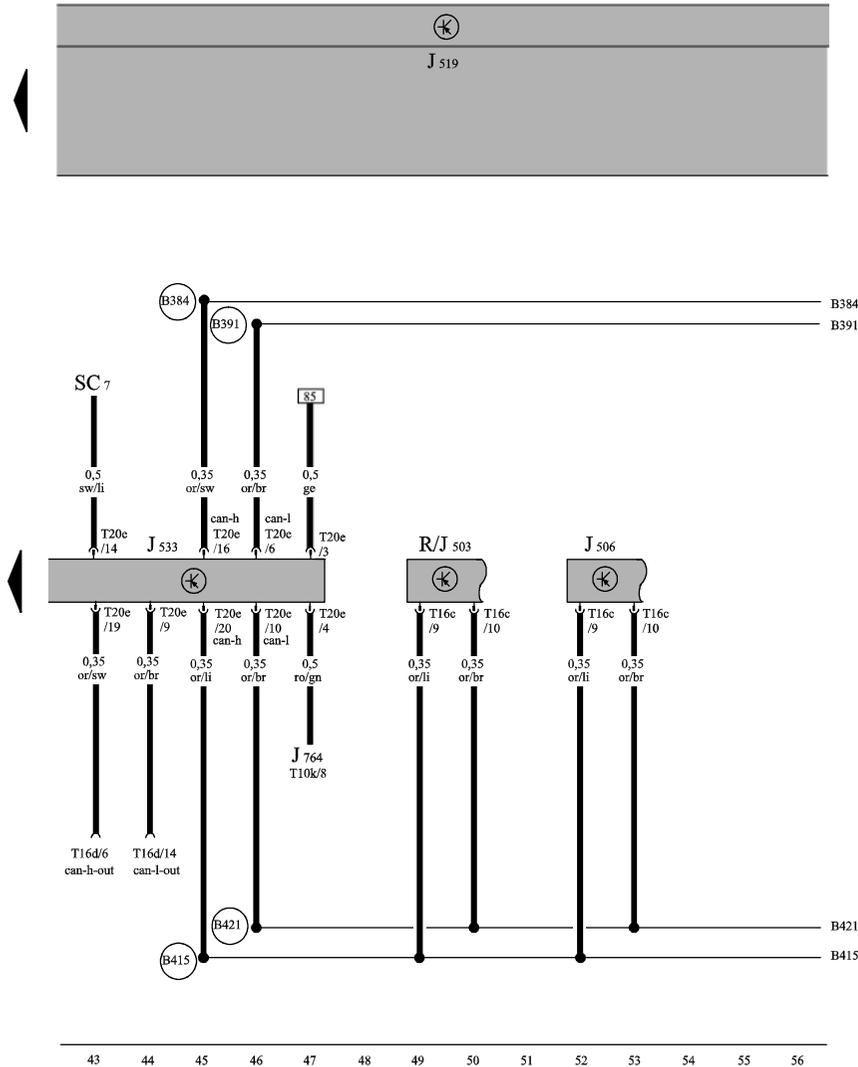
- C - Alternator
 - C1 - Voltage regulator
 - J119 - Multifunction display
 - J285 - Control unit in dash panel insert 📷
 - J367 - Battery monitor control unit
 - J519 - Onboard supply control unit 📷
 - J533 - Data bus diagnosis interface 📷
 - SB15 - Fuse 15 on fuse holder B 📷
 - SB24 - Fuse 24 on fuse holder B 📷
 - T2fj - 2-pin connector
 - T2gd - 2-pin connector
 - T4a - 4-pin connector
 - T20e - 20-pin connector
 - T32c - 32-pin connector
 - T36 - 36-pin connector
 - T40 - 40-pin connector
 - 400 - Earth connection 35, in main wiring harness
 - 639 - Earth point, left A-pillar 📷
 - B397 - Connection 1 (convenience CAN bus, high), in main wiring harness
 - B406 - Connection 1 (convenience CAN bus, low), in main wiring harness
 - B698 - Connection 3 (LIN bus), in main wiring harness
- * - Applicable from November 2008
 ** - Only models with E-box low
 *** - Only models with E-box high
 **** - Only models with stop/start system

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 195 / 5



Data bus diagnostic interface, control unit with display for radio and navigation, electronic steering column lock control unit, self-diagnosis connection

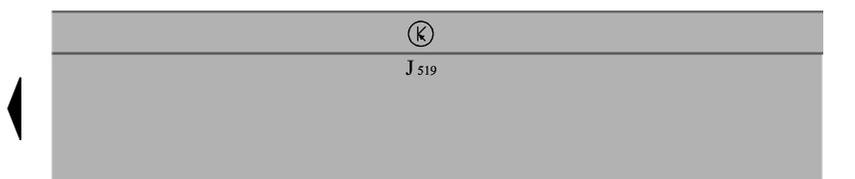
- J503 - Control unit with display for radio and navigation
- J506 - Control unit with display for TV, radio, navigation system
- J519 - Onboard supply control unit
- J533 - Data bus diagnosis interface
- J764 - Electronic steering column lock control unit
- R - Radio
- SC7 - Fuse 7 on fuse holder C
- T10k - 10-pin connector
- T16c - 16-pin connector
- T16d - 16-pin connector, self-diagnosis connection
- T20e - 20-pin connector
- B384 - Connection 2 (powertrain CAN bus, high), in main wiring harness
- B391 - Connection 2 (powertrain CAN bus, low), in main wiring harness
- B415 - Connection 1 (infotainment CAN bus, high), in main wiring harness
- B421 - Connection 1 (infotainment CAN bus, low), in main wiring harness

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 195 / 6



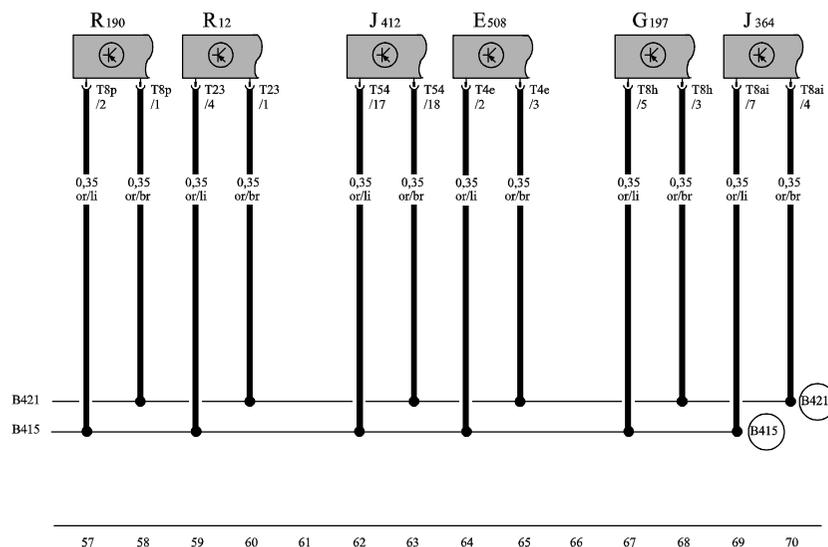
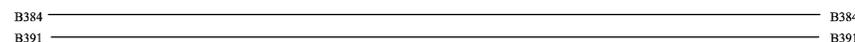
Magnetic field sender for compass, mobile telephone operating electronics control unit, satellite digital radio tuner, auxiliary heater control unit, operating unit for preparation for mobile telephone, amplifier

- E508 - Operating unit for preparation for mobile telephone
- G197 - Magnetic field sender for compass
- J364 - Auxiliary heater control unit
- J412 - Control unit for mobile telephone operating electronics

- J519 - Onboard supply control unit
- R12 - Amplifier
- R190 - Satellite digital radio tuner

- T4e - 4-pin connector
- T8h - 8-pin connector
- T8p - 8-pin connector
- T8ai - 8-pin connector
- T23 - 23-pin connector
- T54 - 54-pin connector

- B415 - Connection 1 (infotainment CAN bus, high), in main wiring harness
- B421 - Connection 1 (infotainment CAN bus, low), in main wiring harness

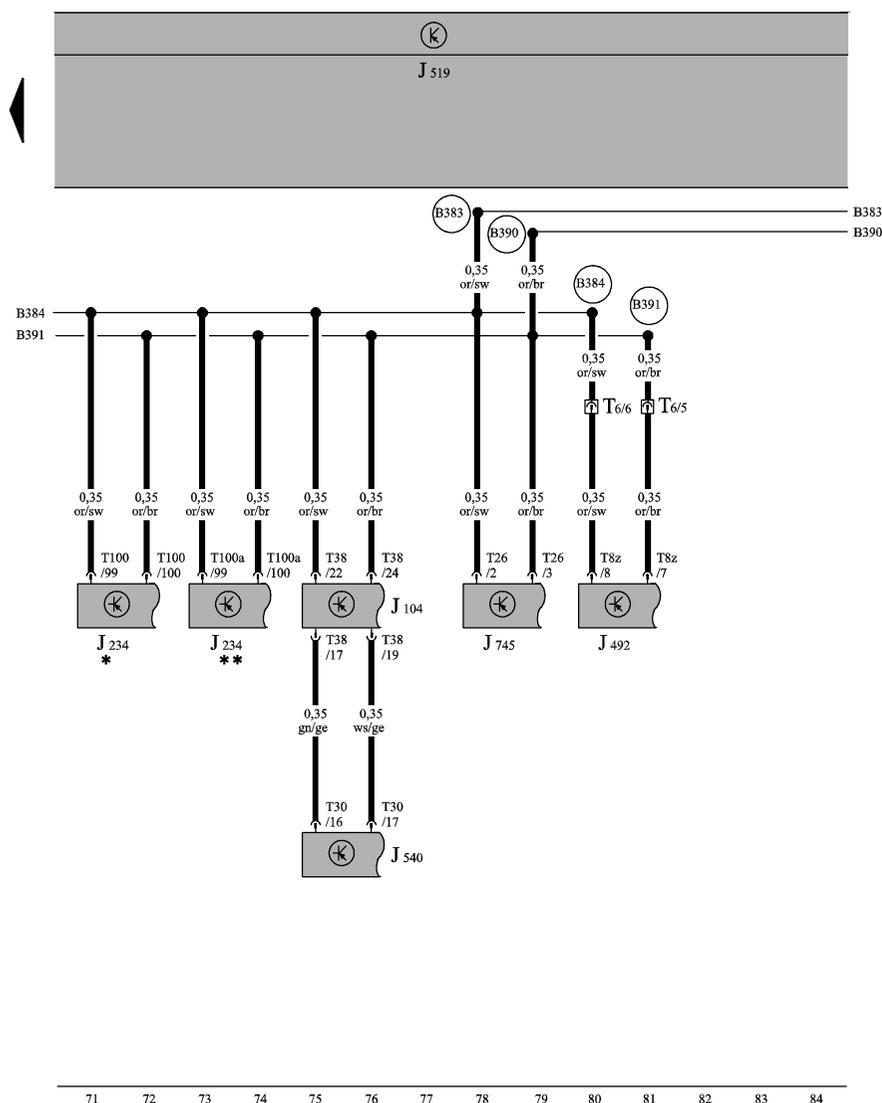


- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 195 / 7



ABS control unit, airbag control unit, cornering light and headlight range control unit, all-wheel drive control unit, control unit for electromechanical parking brake

- J104 - ABS control unit
- J234 - Airbag control unit
- J492 - All-wheel drive control unit
- J519 - Onboard supply control unit
- J540 - Control unit for electromechanical parking brake
- J745 - Control unit for cornering light and headlight range control, behind glove compartment

- T6 - 6-pin connector, black
- T8z - 8-pin connector
- T26 - 26-pin connector
- T30 - 30-pin connector
- T38 - 38-pin connector
- T100 - 100-pin connector
- T100a - 100-pin connector
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B384 - Connection 2 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
- B391 - Connection 2 (powertrain CAN bus, low), in main wiring harness

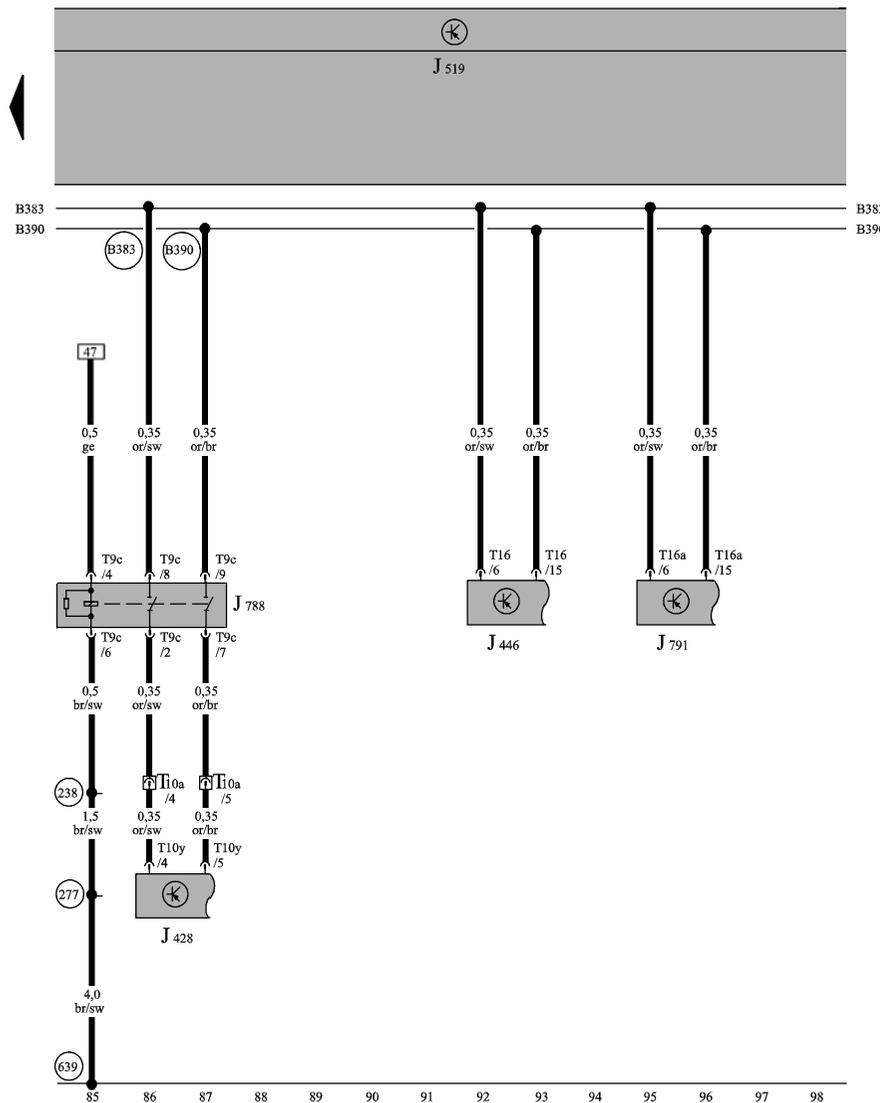
- * - Only models with 12 channel airbag control unit
- ** - Only models with 16 channel airbag control unit

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 195 / 8



- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

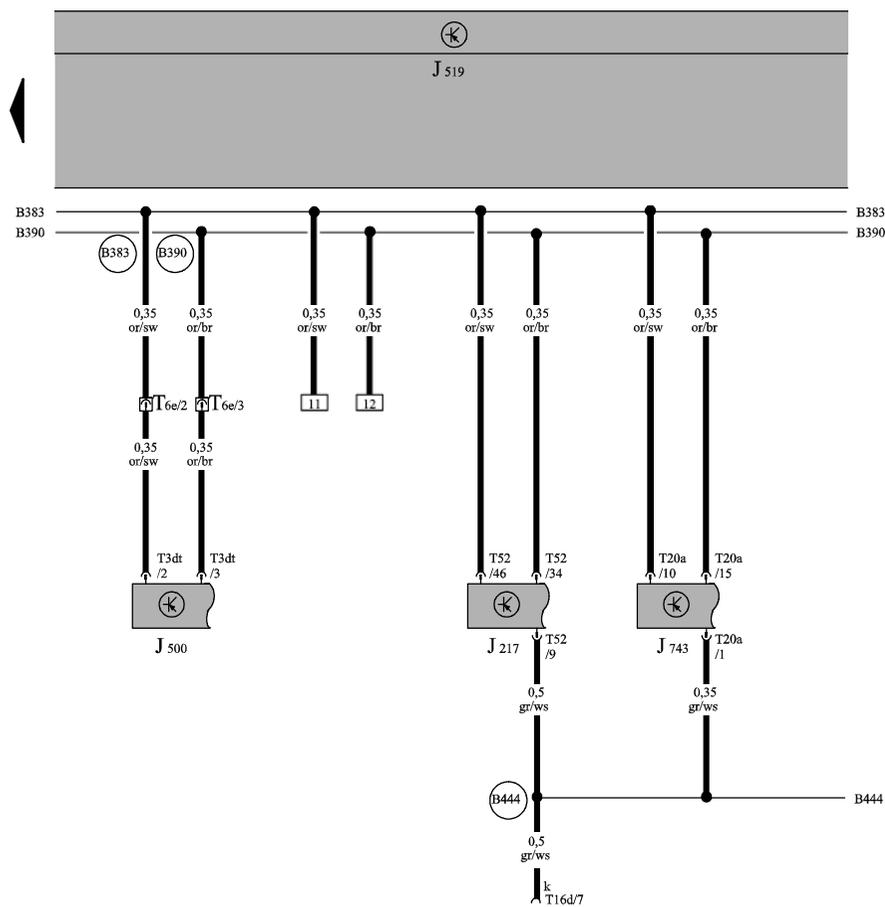
Adaptive cruise control unit, parking aid control unit, isolation relay for powertrain CAN bus, park assist steering control unit

- J428 - Adaptive cruise control unit 📷
- J446 - Parking aid control unit 📷
- J519 - Onboard supply control unit 📷
- J788 - Isolation relay for powertrain CAN bus 📷
- J791 - Control unit for park assist steering 📷
- T9c - 9-pin connector
- T10a - 10-pin connector, black
- T10y - 10-pin connector
- T16 - 16-pin connector
- T16a - 16-pin connector
- 238 - Earth connection 1, in interior wiring harness
- 277 - Earth connection 3, in interior wiring harness
- 639 - Earth point, left A-pillar 📷
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness

Passat

Current Flow Diagram

No. 195 / 9



Automatic gearbox control unit, power steering control unit, mechatronic unit for dual clutch gearbox, self-diagnosis connection

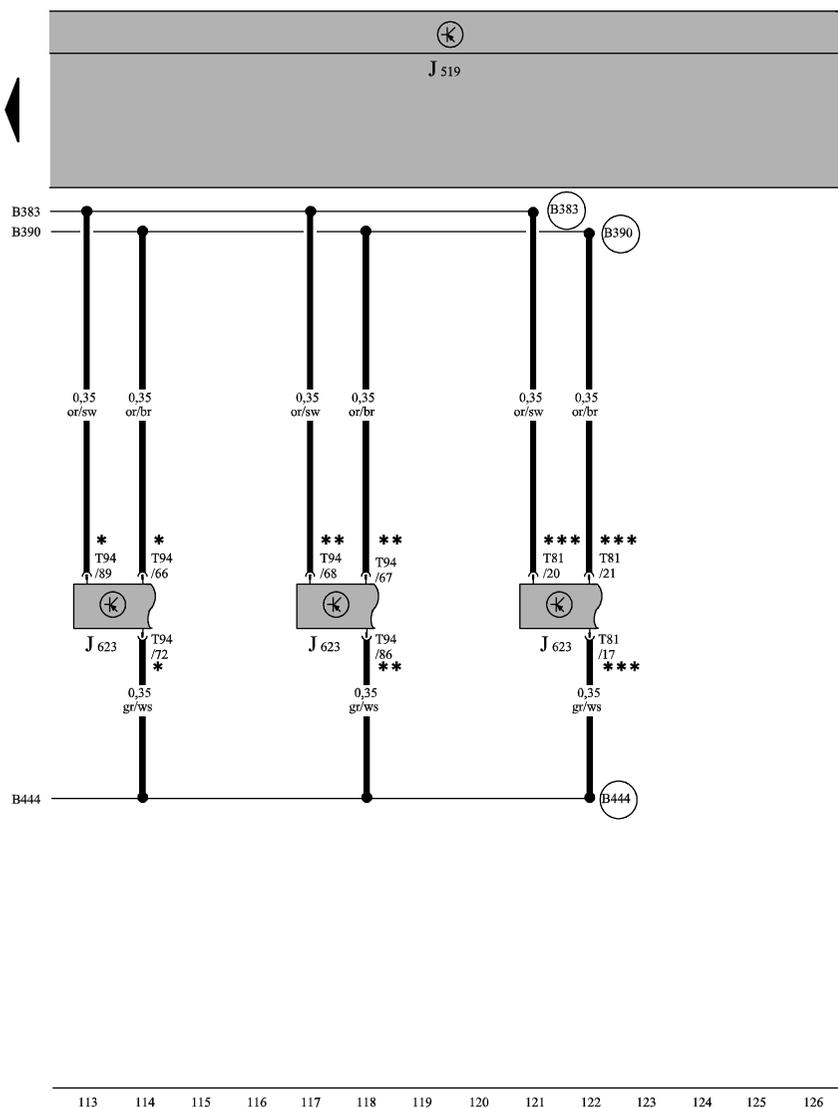
- J217 - Automatic gearbox control unit
- J500 - Power steering control unit
- J519 - Onboard supply control unit
- J743 - Mechatronics for dual clutch gearbox
- T3dt - 3-pin connector
- T6e - 6-pin connector
- T16d - 16-pin connector, self-diagnosis connection
- T20a - 20-pin connector
- T52 - 52-pin connector
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
- B444 - Connection 1 (diagnosis), in main wiring harness

- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 195 / 10



Engine control unit

- J519 - Onboard supply control unit
- J623 - Engine control unit
- T81 - 81-pin connector
- T94 - 94-pin connector
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
- B444 - Connection 1 (diagnosis), in main wiring harness
- * - Only models with a diesel engine
- ** - Only models with a petrol engine
- *** - Only models with engine codes BSE, BSF

- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 78 / 1

Edition 12.2006

CAN bus network

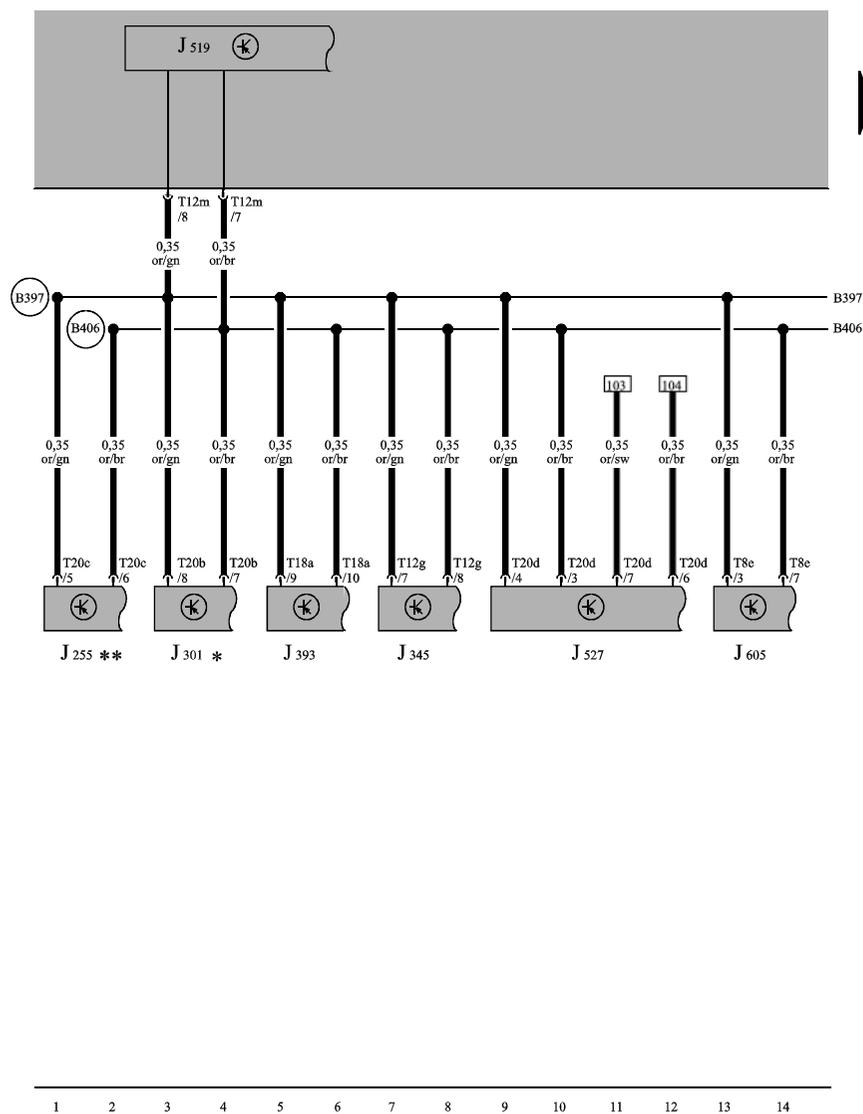
- Power train, convenience, infotainment and diagnosis

From May 2005

Passat

Current Flow Diagram

No. 78 / 2



Climatronic control unit, air conditioning system control unit, trailer detector control unit, convenience system central control unit, steering column electronics control unit

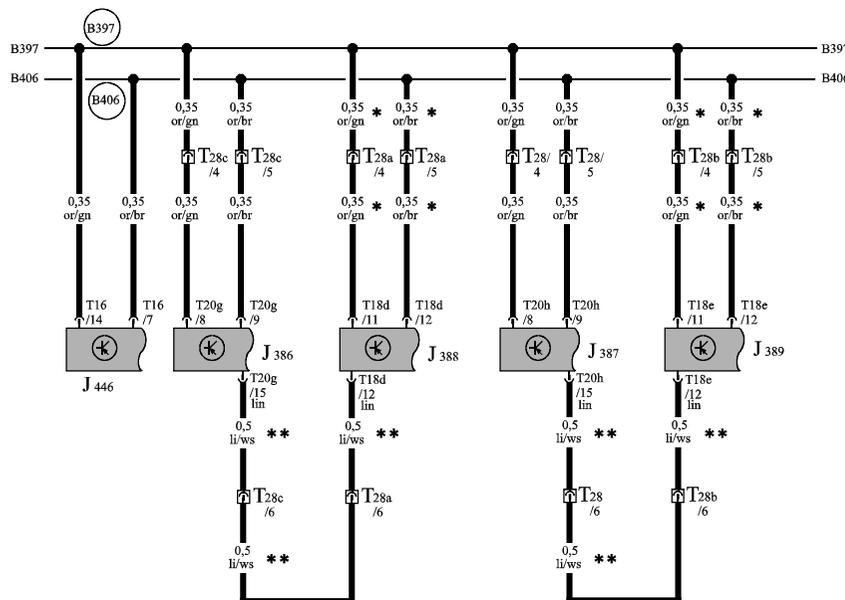
- J255 - Climatronic control unit
- J301 - Air conditioning system control unit
- J345 - Trailer detector control unit
- J393 - Convenience system central control unit
- J519 - Onboard supply control unit
- J527 - Steering column electronics control unit
- J605 - Rear lid control unit
- T8e - 8-pin connector
- T12g - 12-pin connector, coupling point trailer connection
- T12m - 12-pin connector, black
- T18a - 18-pin connector
- T20b - 20-pin connector
- T20c - 20-pin connector
- T20d - 20-pin connector
- B397 - Connection 1 (convenience CAN bus, high), in main wiring harness
- B406 - Connection 1 (convenience CAN bus, low), in main wiring harness
- * - only models with air conditioning system
- ** - only models with Climatronic

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 78 / 3



15 16 17 18 19 20 21 22 23 24 25 26 27 28

Convenience system central control unit, exterior handle touch sensor, driver side aerial for entry and start authorisation, central locking button

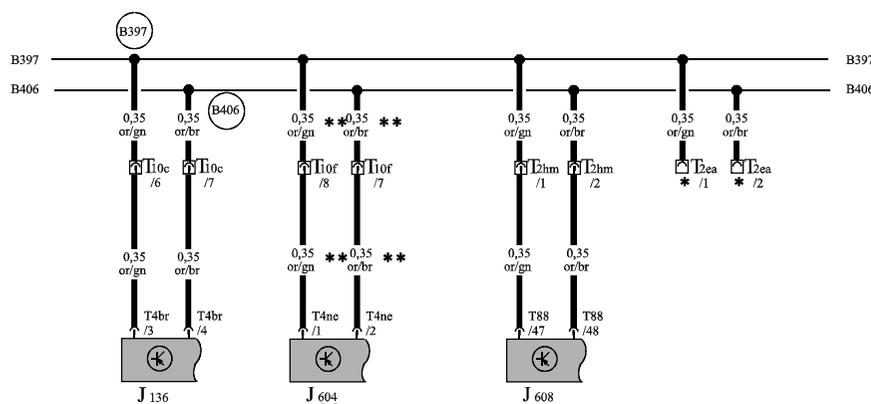
- J386 - Driver door control unit
- J387 - Front passenger door control unit
- J388 - Rear left door control unit
- J389 - Rear right door control unit
- J446 - Parking aid control unit
- T16 - 16-pin connector, brown
- T18e - 18-pin connector
- T18d - 18-pin connector
- T20g - 20-pin connector
- T20h - 20-pin connector
- T28 - 28-pin connector, coupling point, right A-pillar
- T28a - 28-pin connector, coupling point, left B-pillar
- T28b - 28-pin connector, coupling point, right B-pillar
- T28c - 28-pin connector, coupling point, left A-pillar
- B397 - Connection 1 (convenience CAN bus, high), in main wiring harness
- B406 - Connection 1 (convenience CAN bus, low), in main wiring harness
- * - applicable up to April 2006
- ** - applicable from May 2006

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 78 / 4



Special vehicle control unit, auxiliary air heater control unit

J136 - Seat and steering column adjustment control unit with memory

J604 - Auxiliary air heater control unit

J608 - Special vehicle control unit

T2hm - 2-pin connector

T2ea - 2-pin connector

T4br - 4-pin connector, black

T4ne - 4-pin connector

T10c - 10-pin connector, coupling point driver side, under the seat

T10f - 10-pin connector, coupling point heater/air conditioner

T88 - 88-pin connector

B397 - Connection 1 (convenience CAN bus, high), in main wiring harness

B406 - Connection 1 (convenience CAN bus, low), in main wiring harness

* - wire for special installation

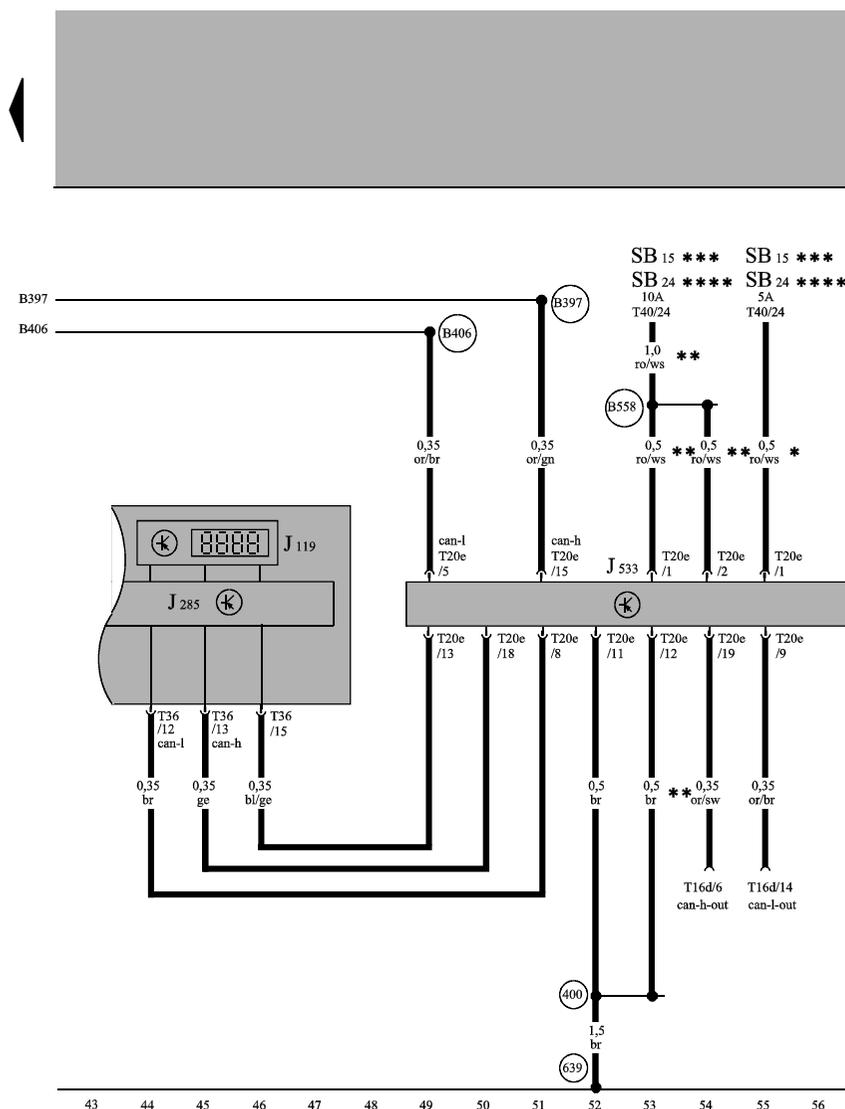
** - applicable up to October 2006

- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 78 / 5



Dash panel insert, multifunction display, data bus diagnostic interface, self-diagnosis connection

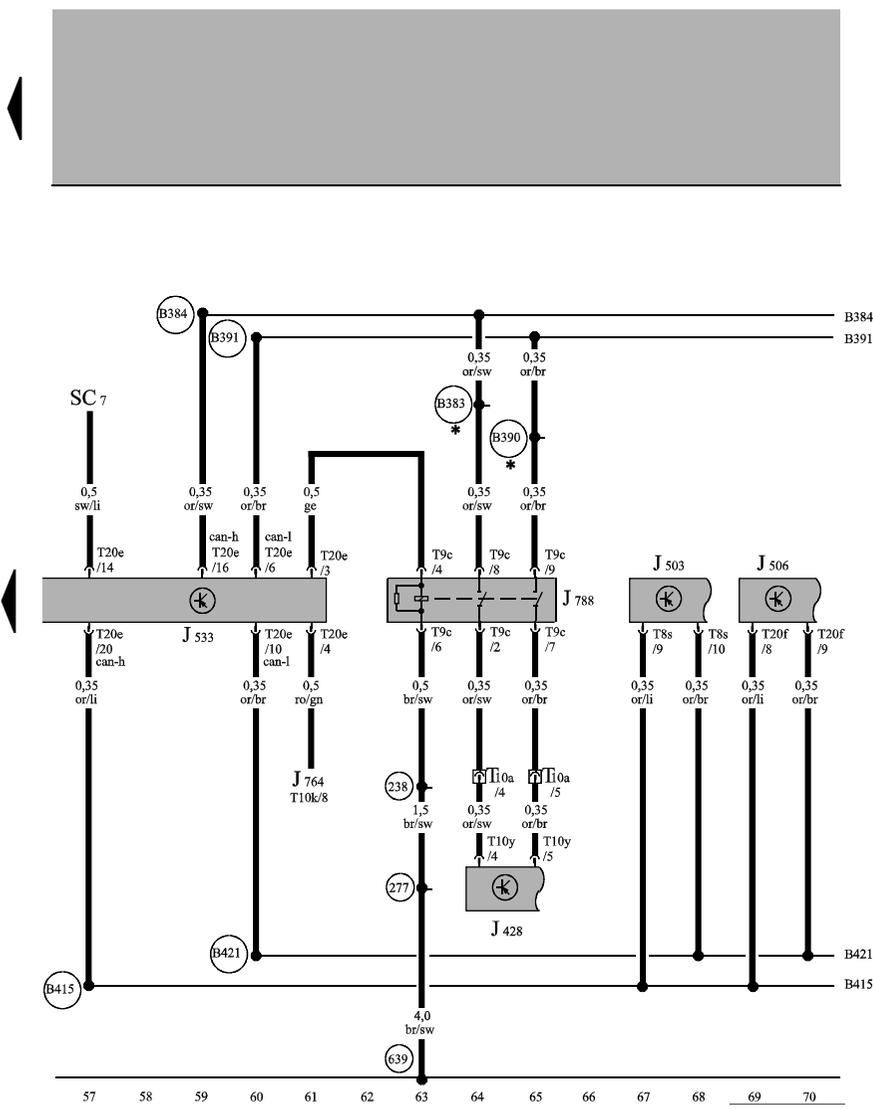
- J119 - Multifunction display
- J285 - Control unit in dash panel insert
- J533 - Data bus diagnostic interface
- SB15 - Fuse 15 on fuse holder B
- SB24 - Fuse 24 on fuse holder B
- T16d - 16-pin connector, self-diagnosis connection
- T20e - 20-pin connector
- T36 - 36-pin connector
- T40 - 40-pin connector
- 400 - Earth connection 35, in main wiring harness
- 639 - Earth point, left A-pillar
- B397 - Connection 1 (convenience CAN bus, high), in main wiring harness
- B406 - Connection 1 (convenience CAN bus, low), in main wiring harness
- B558 - Connection 22 (30a), in main wiring harness
- * - applicable from November 2006
- ** - applicable up to October 2006
- *** - Models with E-box low only
- **** - Models with E-box high only

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 78 / 6



- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

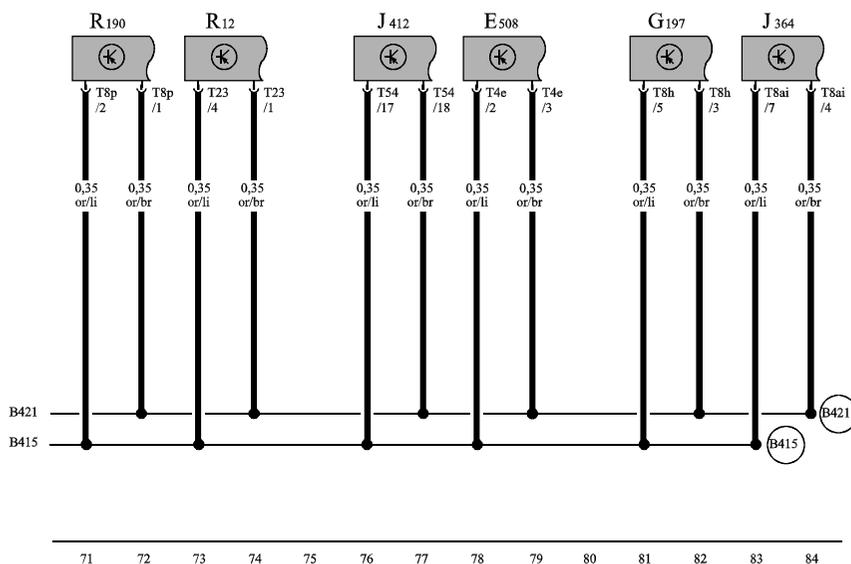
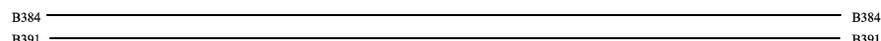
Data bus diagnostic interface, control unit with display for radio and navigation, adaptive cruise control unit, electronic steering column lock control unit

- J428 - Adaptive cruise control unit 📷
- J503 - Control unit with display for radio and navigation
- J506 - Control unit with display for TV, radio navigation
- J533 - Data bus diagnostic interface 📷
- J764 - Electronic steering column lock control unit 📷
- J788 - Isolation relay for powertrain CAN bus 📷
- SC7 - Fuse 7 on fuse holder C 📷
- T8s - 8-pin connector, black
- T9c - 9-pin connector
- T10a - 10-pin connector, black
- T10k - 10-pin connector
- T10y - 10-pin connector
- T20e - 20-pin connector
- T20f - 20-pin connector
- 238 - Earth connection 1, in interior wiring harness
- 277 - Earth connection 3, in interior wiring harness
- 639 - Earth point, left A-pillar 📷
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B384 - Connection 2 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
- B391 - Connection 2 (powertrain CAN bus, low), in main wiring harness
- B415 - Connection 1 (infotainment CAN bus, high), in main wiring harness
- B421 - Connection 1 (infotainment CAN bus, low), in main wiring harness
- * - applicable from November 2006

Passat

Current Flow Diagram

No. 78 / 7



Magnetic field sender for compass, mobile telephone operating electronics control unit, digital radio satellite receiver, amplifier, auxiliary heater control unit, operating unit for preparation for mobile telephone

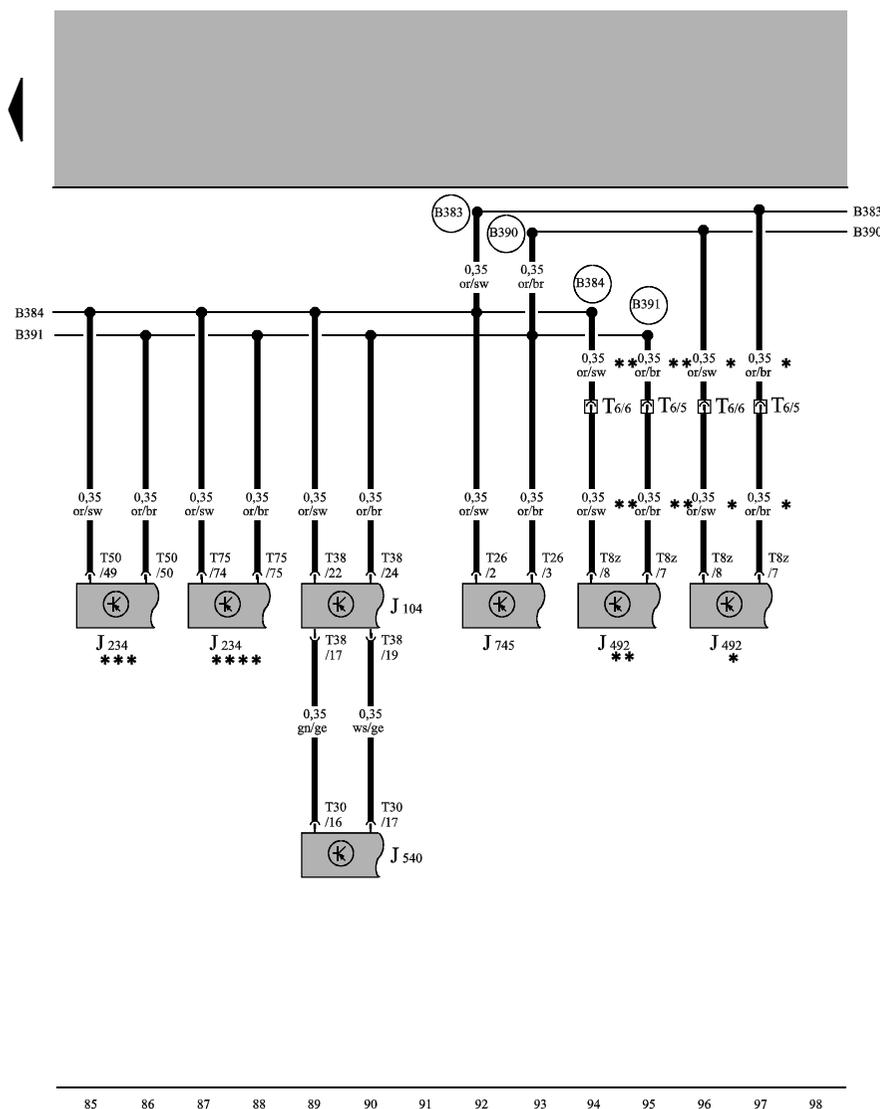
- E508 - Operating unit for preparation for mobile telephone
- G197 - Magnetic field sender for compass
- J364 - Auxiliary heater control unit
- J412 - Mobile telephone operating electronics control unit
- R12 - Amplifier
- R190 - Digital radio satellite receiver
- T4e - 4-pin connector
- T8ai - 8-pin connector
- T8h - 8-pin connector
- T8p - 8-pin connector
- T23 - 23-pin connector
- T54 - 54-pin connector
- B415 - Connection 1 (infotainment CAN bus, high), in main wiring harness
- B421 - Connection 1 (infotainment CAN bus, low), in main wiring harness

- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 78 / 8



ABS control unit, airbag control unit, cornering light and headlight range control unit, four-wheel drive control unit, control unit for electromechanical parking brake

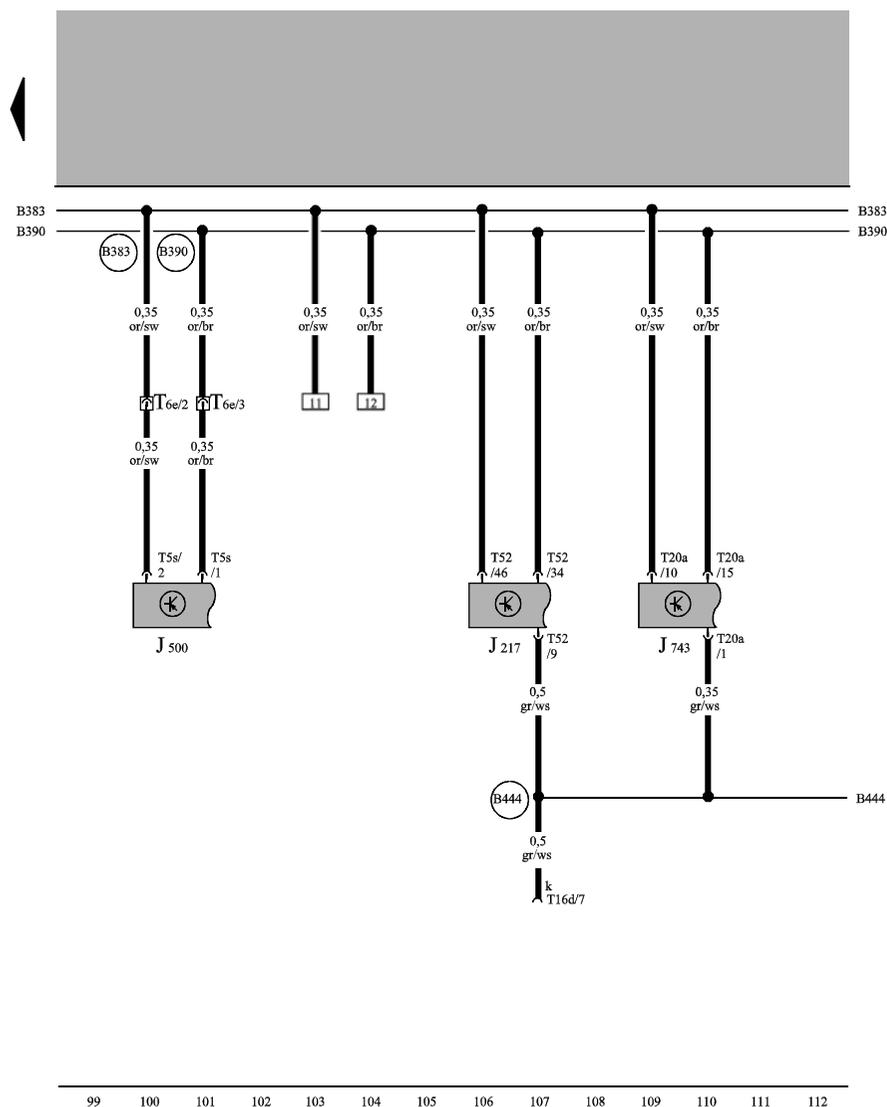
- J104 - ABS control unit
 - J234 - Airbag control unit
 - J492 - Four-wheel drive control unit
 - J540 - Control unit for electromechanical parking brake
 - J745 - Cornering light and headlight range control unit, behind the glove compartment
-
- T6 - 6-pin connector, black
 - T8z - 8-pin connector
 - T26 - 26-pin connector
 - T30 - 30-pin connector
 - T38 - 38-pin connector
 - T50 - 50-pin connector
 - T75 - 75-pin connector
-
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
 - B384 - Connection 2 (powertrain CAN bus, high), in main wiring harness
 - B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
 - B391 - Connection 2 (powertrain CAN bus, low), in main wiring harness
-
- * - applicable from November 2006
 - ** - applicable up to October 2006
 - *** - only models with airbag control unit 12 channel
 - **** - only models with airbag control unit 16 channel

ws = white
 sw = black
 ro = red
 rt = red
 br = brown
 gn = green
 bl = blue
 gr = grey
 li = purple
 vi = purple
 ge = yellow
 or = orange
 rs = pink

Passat

Current Flow Diagram

No. 78 / 9



Automatic gearbox control unit, power steering control unit, mechatronic unit for dual clutch gearbox, self-diagnosis connection

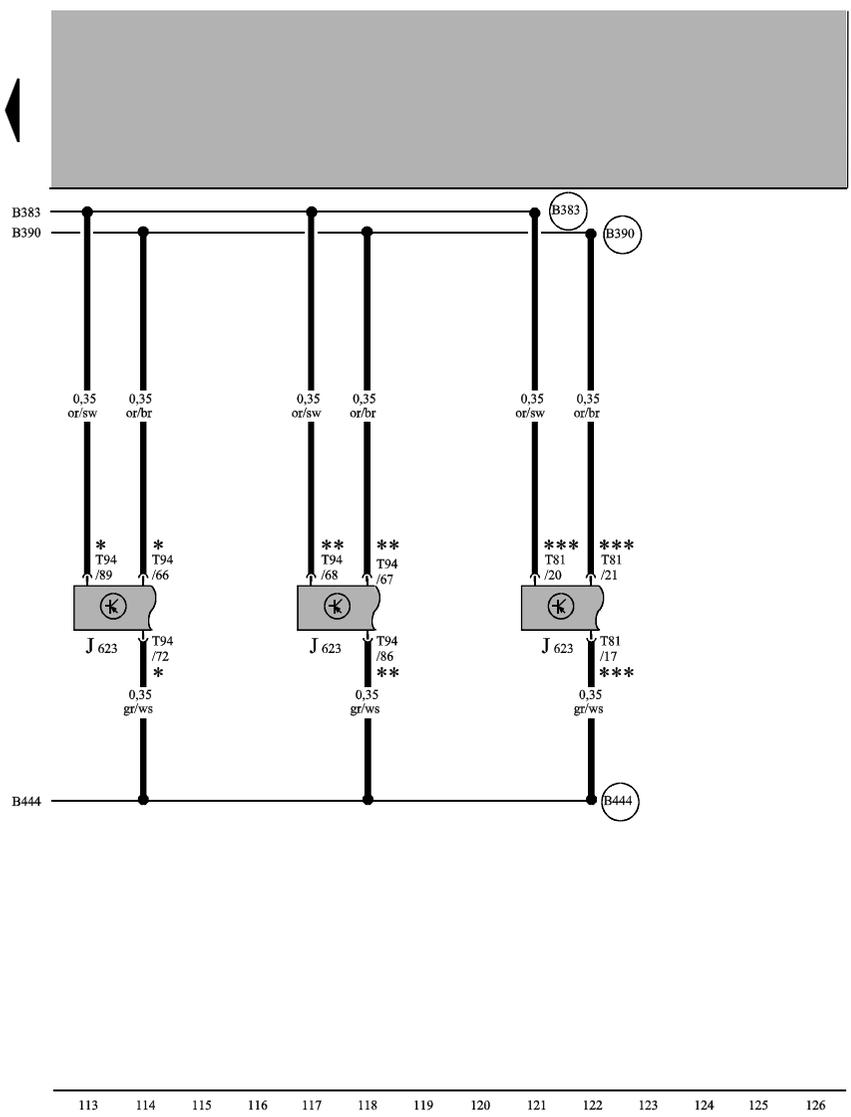
- J217 - Automatic gearbox control unit
- J500 - Power steering control unit
- J743 - Mechatronics for direct shift gearbox
- T5s - 5-pin connector
- T6e - 6-pin connector
- T16d - 16-pin connector, self-diagnosis connection
- T20a - 20-pin connector
- T52 - 52-pin connector
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
- B444 - Connection 1 (diagnosis), in main wiring harness

- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink

Passat

Current Flow Diagram

No. 78 / 10



Engine control unit

- J623 - Engine control unit 
- T81 - 81-pin connector
- T94 - 94-pin connector
- B383 - Connection 1 (powertrain CAN bus, high), in main wiring harness
- B390 - Connection 1 (powertrain CAN bus, low), in main wiring harness
- B444 - Connection 1 (diagnosis), in main wiring harness
- * - models with diesel engine only
- ** - models with petrol engine only
- *** - only models with engine codes BSE, BSF



- ws = white
- sw = black
- ro = red
- rt = red
- br = brown
- gn = green
- bl = blue
- gr = grey
- li = purple
- vi = purple
- ge = yellow
- or = orange
- rs = pink