

Comfort system, with alarm system

from June 2003

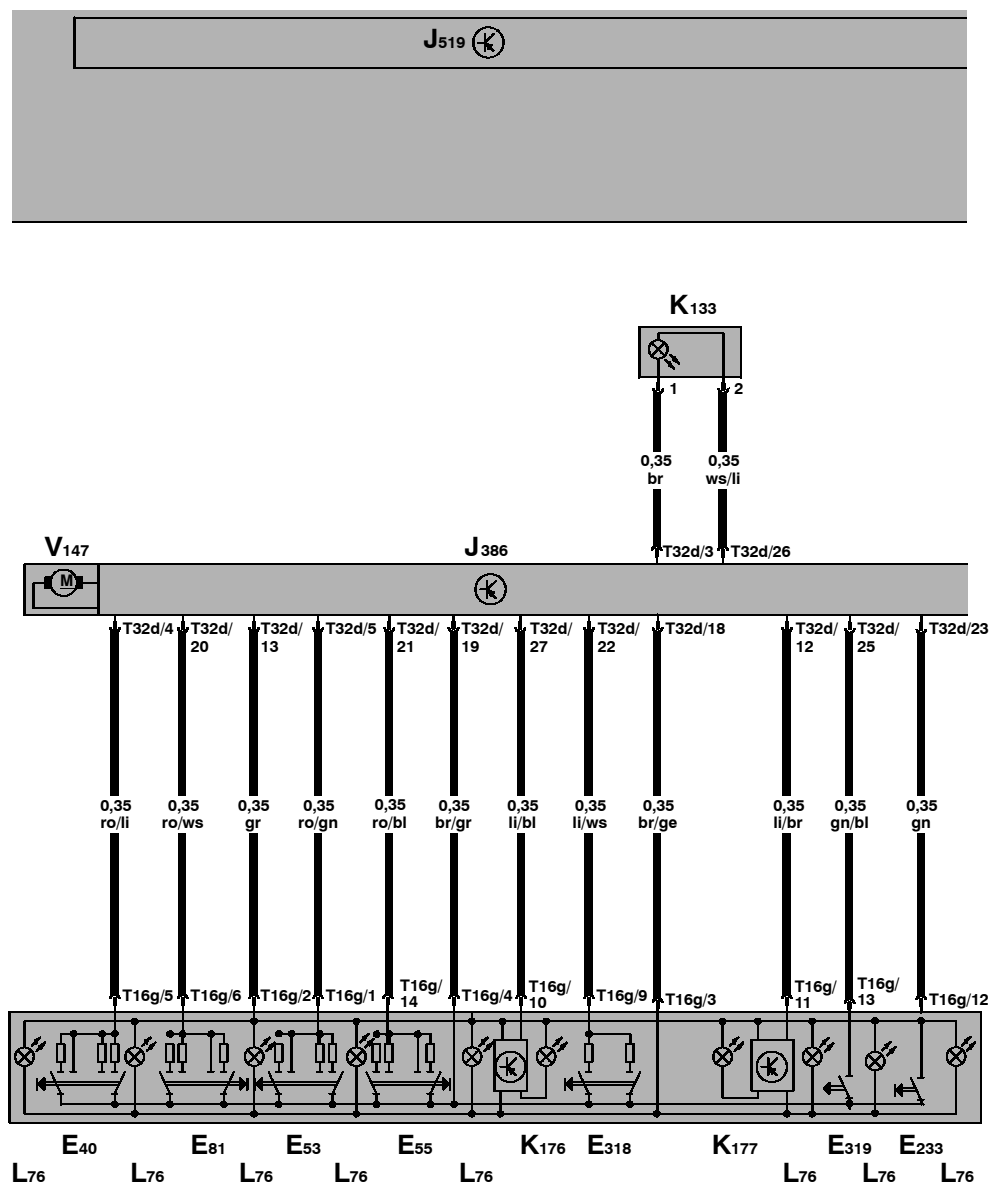
Notes:

Information for

- ◆ *Relay and fuse arrangements*
- ◆ *Connector arrangements*
- ◆ *Control Modules and Relays*
- ◆ *Ground connections*
- ⇒ *Component Locations!*

Information for

- ◆ *Troubleshooting Procedures*
- ⇒ *Guided Fault Finding using VAS 5051/5052*



Vehicle Electrical System Control Module, Door Control Module, driver side, Switch for window regulator, Switch for rear lid remote control lock

- E40 - Switch for window regulator front left
- E53 - Switch for window regulator rear left, driver
- E55 - Switch for window regulator rear right, driver
- E81 - Switch for window regulator front right, driver
- E233 - Switch for rear lid remote control lock
- E318 - Child Safety Button
- E319 - Fuel Tank Lid Unlock Button
- J386 - Door control module, driver side
- J519 - Vehicle Electrical System Control Module
- K133 - Warning light for central locking -SAFE-
- K176 - Left Rear Interior Locking Indicator Lamp
- K177 - Right Rear Interior Locking Indicator Lamp
- L76 - Push Button Light
- T16g - 16-Pin connector
- T32d - 32-Pin connector
- V147 - Motor for window regulator, driver side

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

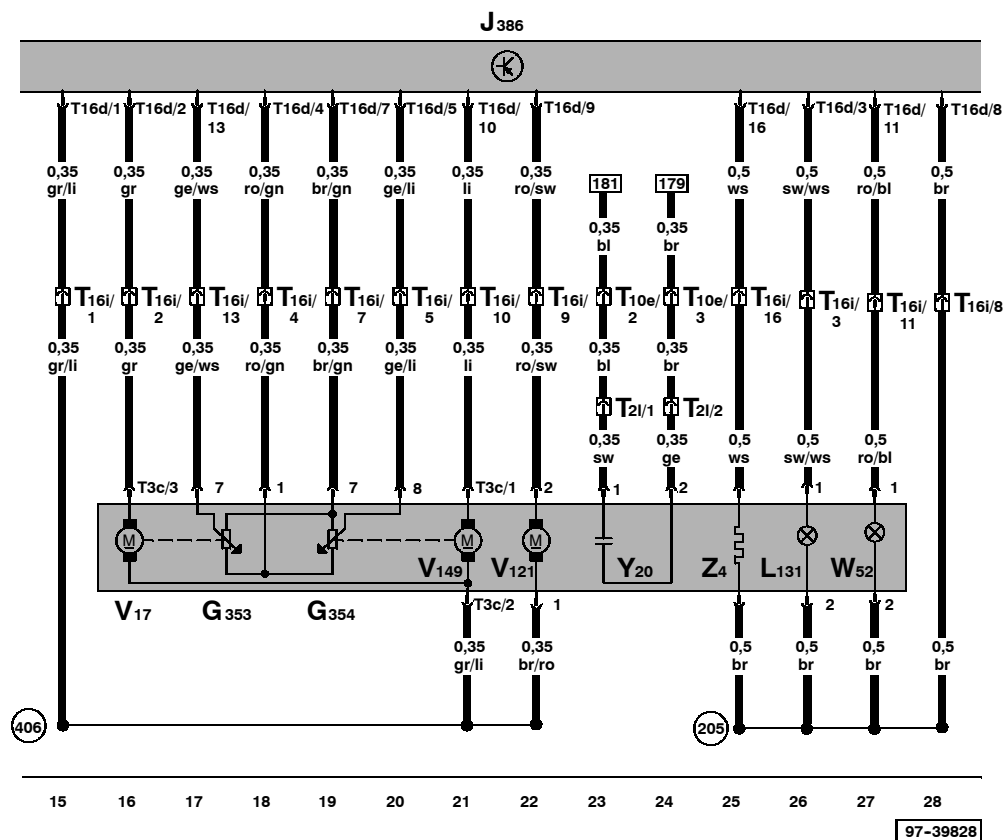
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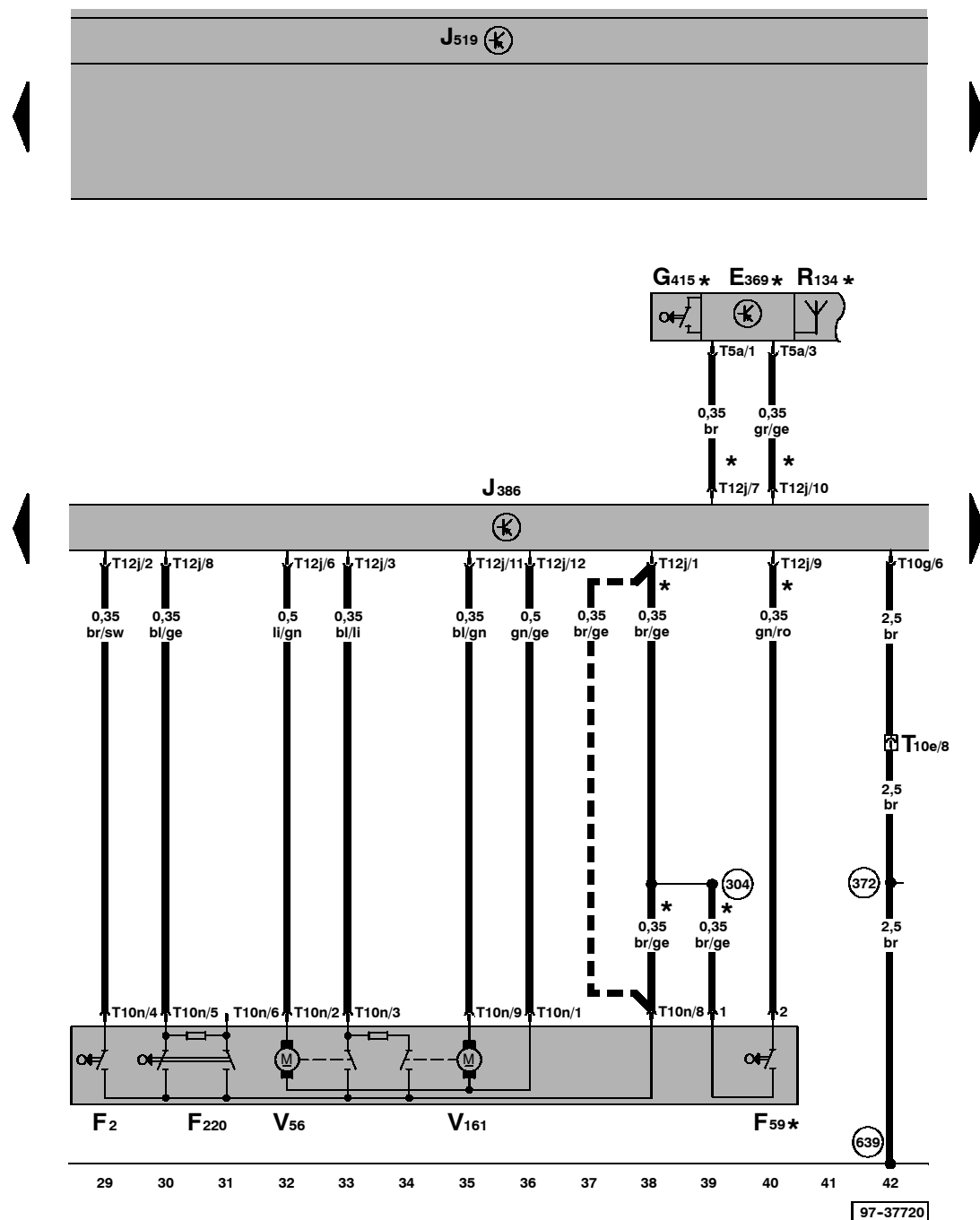
97-37719

Vehicle Electrical System Control Module, Door control Module, driver side, Driver's Side Mirror Adjustment Motor, Driver's Automatic Day/Night and Heated outside mirror

- G353 - Interior Mirror Horizontal-Adjustment Position Sensor
- G354 - Interior Mirror Vertical-Adjustment Position Sensor
- J386 - Door control module, driver side
- J519 - Vehicle Electrical System Control Module
- L131 - Left Mirror Turn Signal Lamp
- T2l - 2-Pin Connector, in driver's door
- T3c - 3-Pin Connector
- T10e - 10-Pin Connector, black, Connector station A-pillar, left
- T16d - 16-Pin Connector
- T16i - 16-Pin Connector, in driver's door
- V17 - Driver's Side Mirror Adjustment Motor
- V121 - Motor for fold-in mirror, driver side
- V149 - Motor for mirror adjustment, driver side
- W52 - Driver's Entry Lamp (in outside mirror)
- Y20 - Driver's Automatic Day/Night Outside Mirror
- Z4 - Heated outside mirror, driver side

- (205) - Ground connection, in driver's door wiring harness
- (406) - Ground Connection 3 (in driver's door wiring harness)





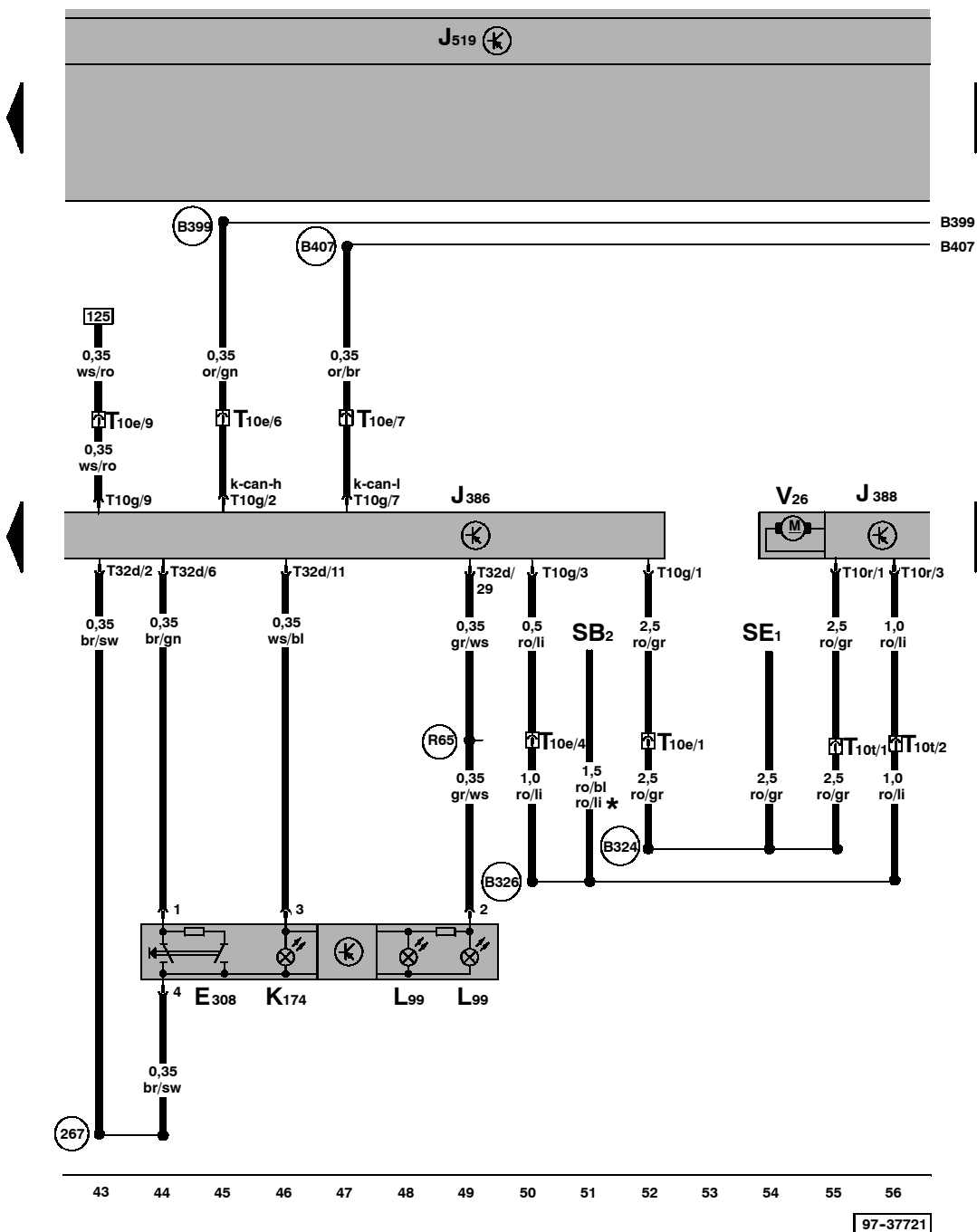
Vehicle Electrical System Control Module, Door Control Module, Door Contact Switch-Driver's side, Lock unit for central locking, Driver's Outside Door Handle Touch Sensor

- E369 - Driver's Outside Door Handle Central Locking Button
- F2 - Door contact Switch - Driver's side
- F59 - Driver's Door Central Locking System Switch *
- F220 - Lock unit for central locking, driver side
- G415 - Driver's Outside Door Handle Touch Sensor *
- J386 - Door control module, driver side
- J519 - Vehicle Electrical System Control Module
- R134 - Left Access/Start Authorization Antenna *
- T5a - 5-Pin connector
- T10e - 10-Pin connector, black, connector station A-pillar, left
- T10g - 10-Pin connector
- T10n - 10-Pin connector
- T12j - 12-Pin connector
- V56 - Driver's Door Central Locking System Motor
- V161 - Driver's Door Central Locking (Safe) Motor

- 304 - Ground Connection -3- (driver's door wiring harness)
- 372 - Ground Connection 7 (in main wiring harness)
- 639 - Ground Connection (on left A-pillar)

- * - vehicles with access/Start control
- - - - vehicles without access/Start control

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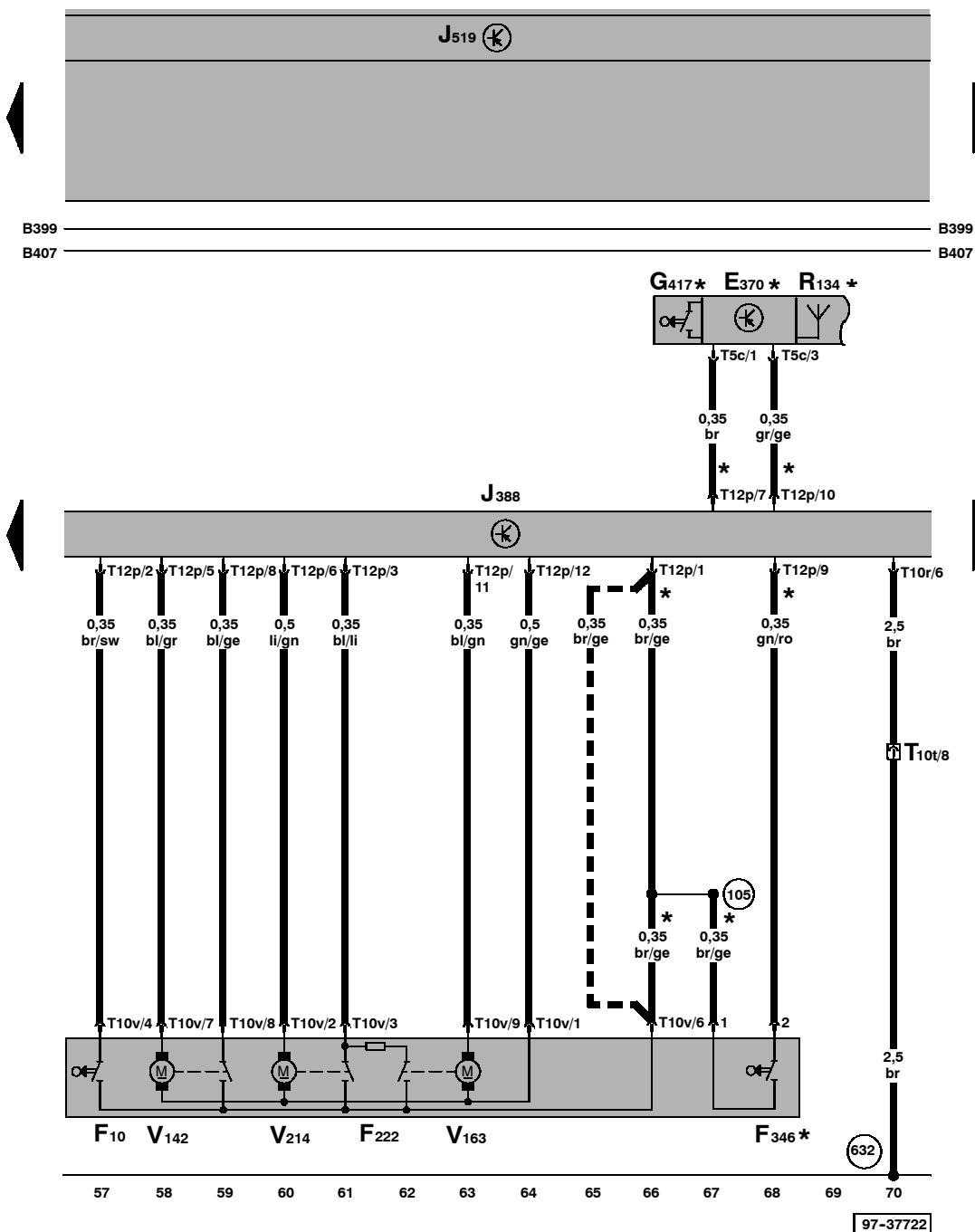
Vehicle Electrical System Control Module, Door Control Module, Driver's Interior Locking Button, Motor for window regulator


- E308 - Driver's Interior Locking Button
- J386 - Door control module, driver side
- J388 - Door control module, rear, left
- J519 - Vehicle Electrical System Control Module
- K174 - Driver's Interior Locking Indicator Lamp
- L99 - Lighting for switch interior lock
- SB2 - Fuse 2 (in fuse holder)
- SE1 - Thermofuse 1 (on fuse holder)
- T10e - 10-Pin connector, black, connector station A-pillar, left
- T10g - 10-Pin connector
- T10r - 10-Pin connector
- T10t - 10-Pin connector, connector station B-pillar, left
- T32d - 32-Pin connector
- V26 - Motor for window regulator, rear, left

- (267) - Ground connector -2-, in wiring harness door cable - driver side
- (B324) - Plus Connection 10 (30a) (in main wiring harness)
- (B326) - Plus Connection 12 (30a) (in main wiring harness)
- (B399) - Comfort System CAN-Bus High Connection 3 (in main wiring harness)
- (B407) - Comfort System CAN-Bus Low Connection 2 (in main wiring harness)
- (R65) - Plus Connection (58) (in driver's door wiring harness)

* - from November 2003

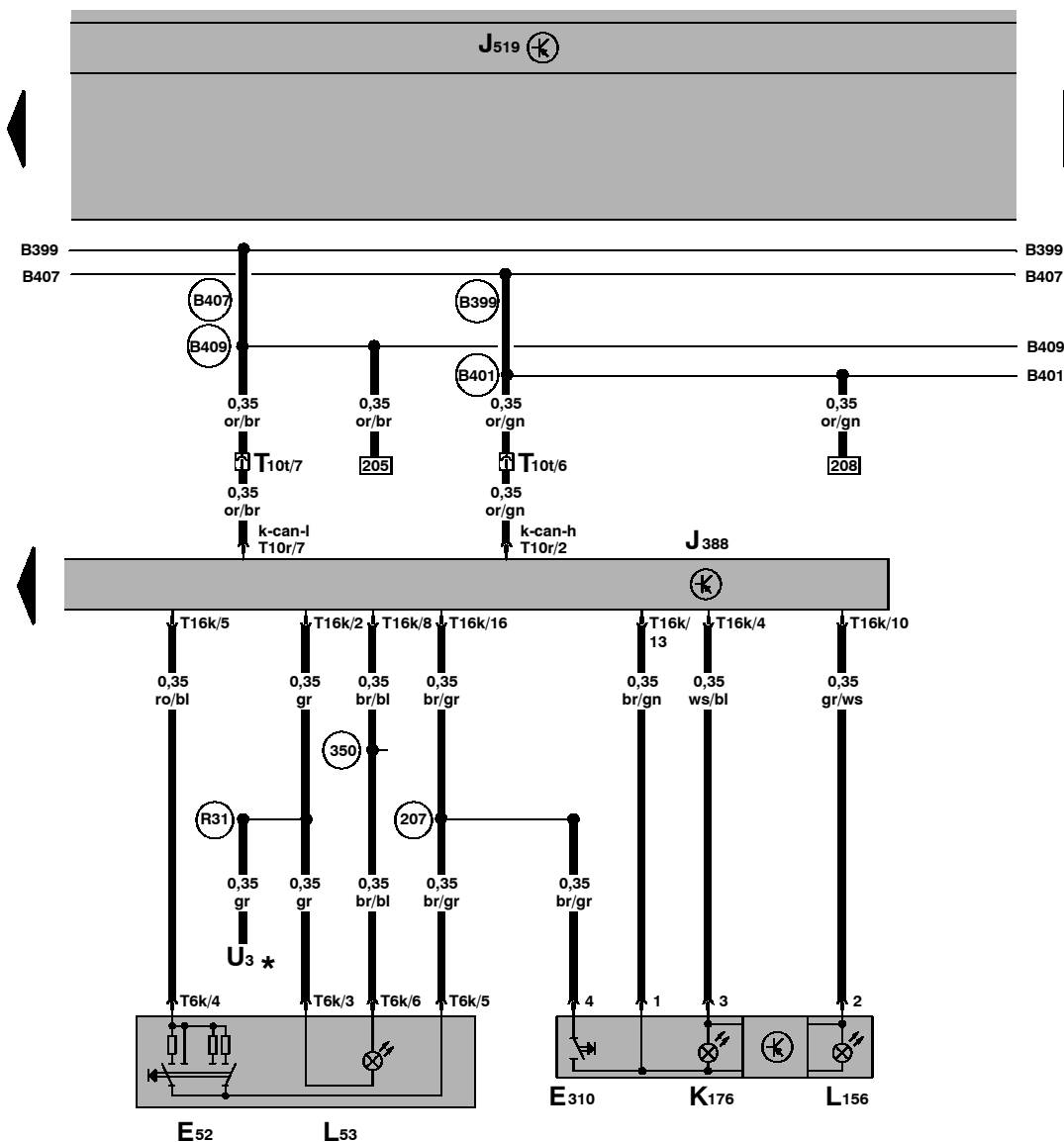
Vehicle Electrical System Control Module, Door Control Module, rear left, Left Rear Door Contact Switch, Left Rear Child Safety Motor



- E370 - Front Passenger's Outside Door Handle Central Locking Button
- F10 - Left Rear Door Contact Switch
- F222 - Lock unit for central locking, rear, left
- F346 - Left Rear Central Locking Switch *
- G417 - Left Rear Outside Door Handle Touch Sensor *
- J388 - Door control module, rear, left
- J519 - Vehicle Electrical System Control Module
- R134 - Left Access/Start Authorization Antenna *
- T5c - 5-Pin connector
- T10r - 10-Pin connector
- T10t - 10-Pin connector, connector station B-pillar, left
- T10v - 10-Pin connector
- T12p - 12-Pin connector
- V142 - Left Rear Child Safety Motor
- V163 - Left Rear Central Locking (Safe) Motor
- V214 - Left Rear Central Locking (Lock) Motor

- (105) - Ground connection -1-, in central locking system wiring harness
- (632) - Ground Connection (left rear door)

- * - vehicles with access/Start control
- - vehicles without access/Start control

Vehicle Electrical System Control Module, Door Control Module, rear left, Left Rear Window Switch, Left Rear Interior Locking Button


- E52 - Left Rear Window Switch, (In LR Door)
- E310 - Left Rear Interior Locking Button
- J388 - Door control module, rear, left
- J519 - Vehicle Electrical System Control Module
- K176 - Left Rear Interior Locking Indicator Lamp
- L53 - Power Window Switch Light
- L156 - Switch Illumination Lamp
- T6k - 6-Pin Connector
- T10r - 10-Pin Connector
- T10t - 10-Pin Connector, Connector station B-pillar, left
- T16k - 16-Pin Connector
- U3 - Left Rear Cigarette Lighter*

- (207) - Ground connection, in left rear door wiring harness
- (350) - Ground Connection 2 (in left rear door wiring harness)
- (B399) - Comfort System CAN-Bus High Connection 3 (in main wiring harness)
- (B401) - Comfort System CAN-Bus High Connection 5 (in main wiring harness)
- (B407) - Comfort System CAN-Bus Low Connection 2 (in main wiring harness)
- (B409) - Comfort System CAN-Bus Low Connection 4 (in main wiring harness)
- (R31) - Connection 1, in left rear door wiring harness

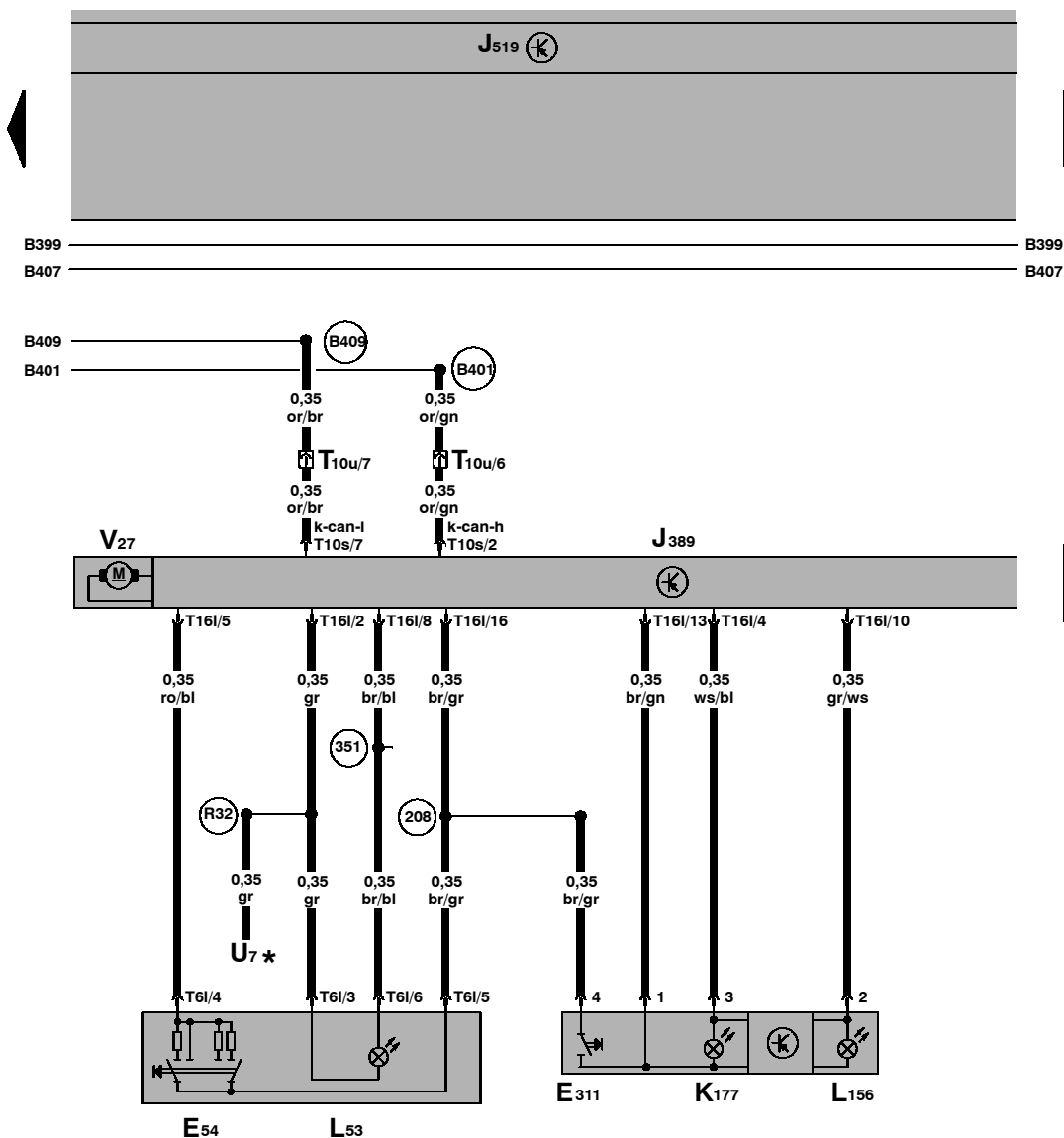
* - where applicable

ws = white
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97-39829

Vehicle Electrical System Control Module, Door Control Module, rear right, Right Rear Window Switch



- E54 - Right Rear Window Switch, (In RR Door)
- E311 - Right Rear Interior Locking Button
- J389 - Door control module, rear, right
- J519 - Vehicle Electrical System Control Module
- K177 - Right Rear Interior Locking Indicator Lamp
- L53 - Power Window Switch Light
- L156 - Switch Illumination Lamp
- T6l - 6-Pin Connector
- T10s - 10-Pin Connector
- T10u - 10-Pin Connector, Connector station B-pillar, right
- T16l - 16-Pin Connector
- U7 - Right Rear Cigarette Lighter*
- V27 - Motor for window regulator, rear, right

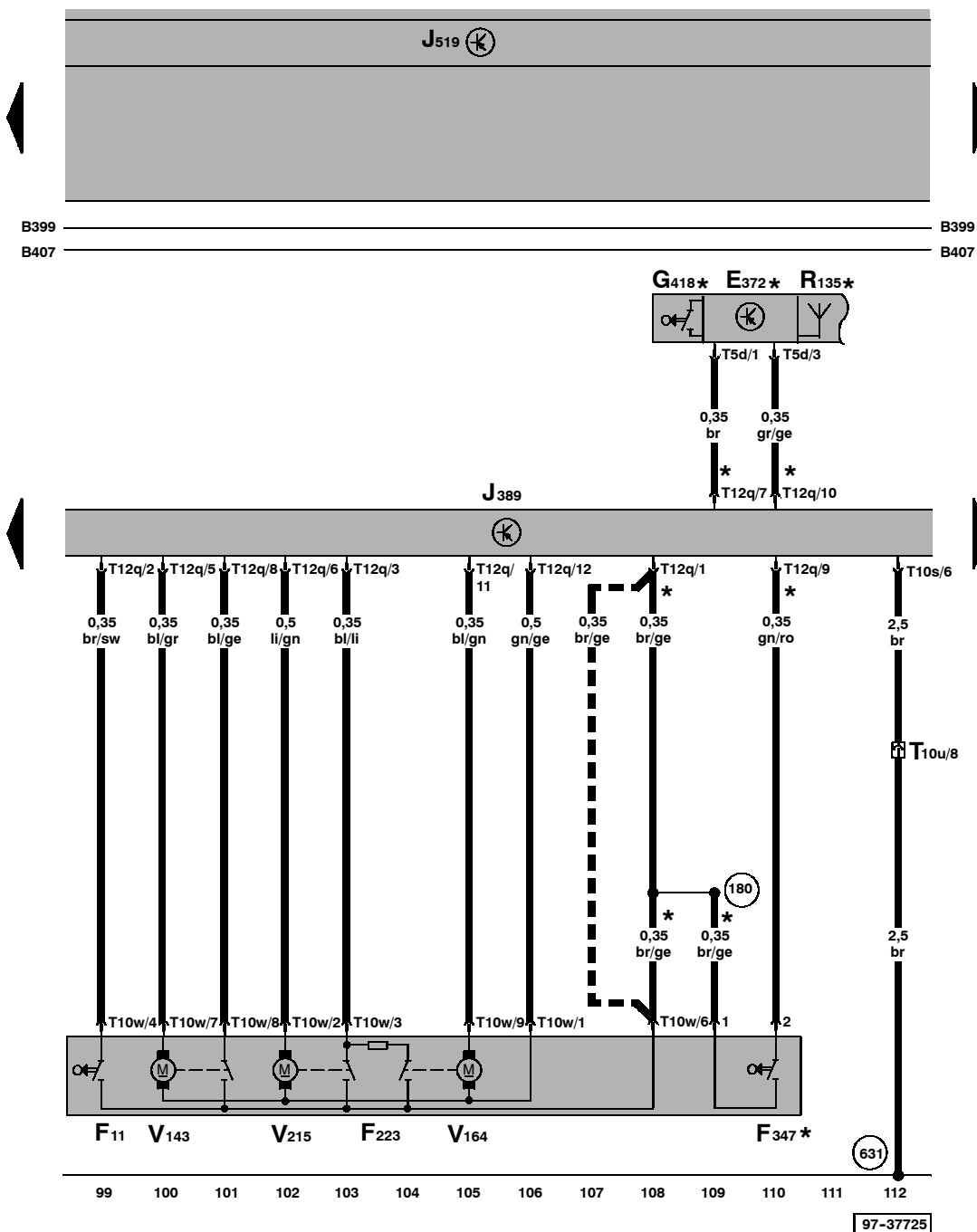
- (208) - Ground connection, in right rear door wiring harness
- (351) - Ground Connection 2 (in right rear door wiring harness)
- (B401) - Comfort System CAN-Bus High Connection 5 (in main wiring harness)
- (B409) - Comfort System CAN-Bus Low Connection 4 (in main wiring harness)
- (R32) - Connection 2, in right rear door wiring harness

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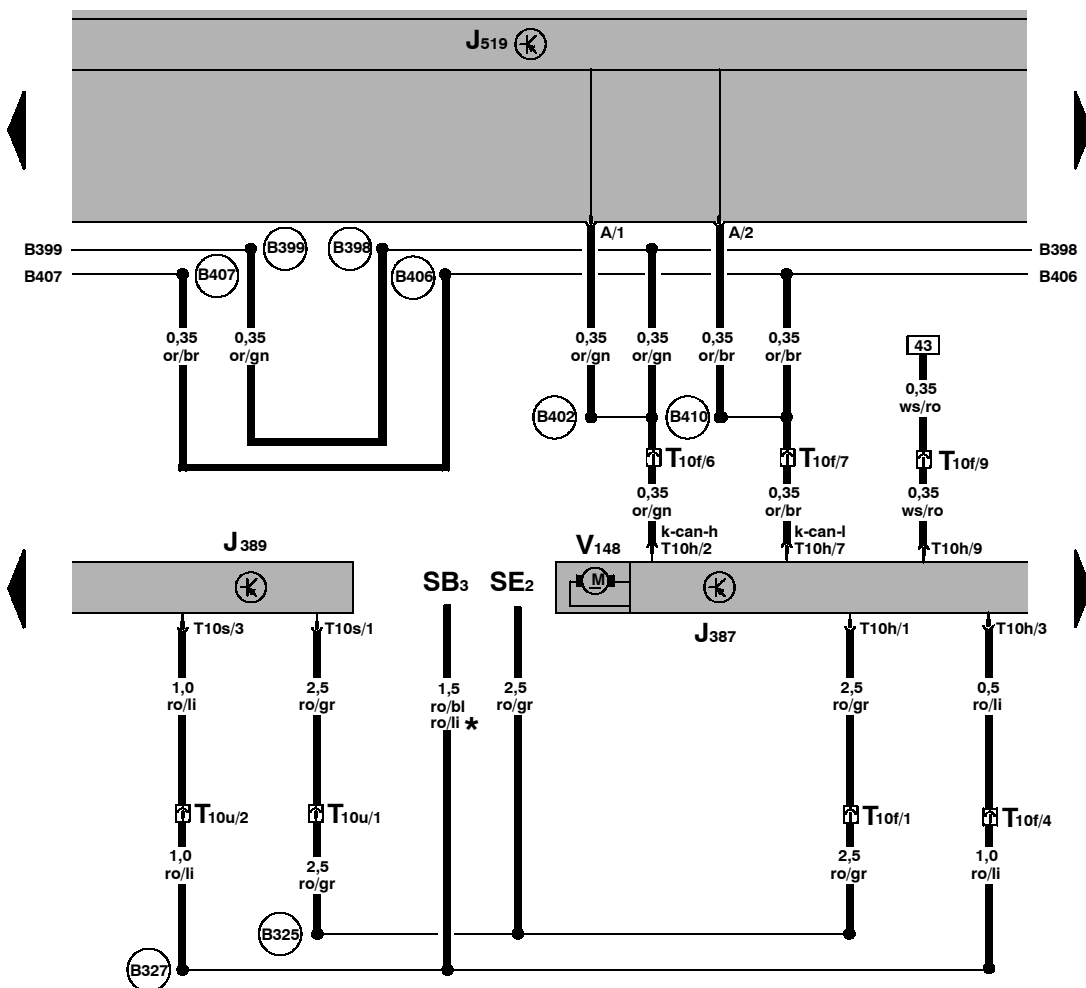
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97-39830

Vehicle Electrical System Control Module, Door Control Module, rear right, Lock unit for central locking, Right Rear Child Safety Motor










- E372 - Right Rear Outside Door Handle Central Locking Button *
- F11 - Right Rear Door Contact Switch
- F223 - Lock unit for central locking, rear, right
- F347 - Right Rear Central Locking Switch *
- G418 - Right Rear Outside Door handle Touch Sensor *
- J389 - Door control module, rear, right
- J519 - Vehicle Electrical System Control Module
- R135 - Right Access/Start Authorization Antenna *
- T5d - 5-Pin connector
- T10s - 10-Pin connector
- T10u - 10-Pin connector, connector station B-pillar, right
- T10w - 10-Pin connector
- T12q - 12-Pin connector
- V143 - Right Rear Child Safety Motor
- V164 - Right Rear Central Locking (Safe) Motor
- V215 - Right Rear Central Locking (Lock) Motor

- (180) - Ground connection -2-, in central locking system wiring harness
- (631) - Ground Connection (right rear door)
- * - vehicles with access/Start control
- - - vehicles without access/Start control



Vehicle Electrical System Control Module, Door Control Module, rear right and passenger side, Motor for window regulator, passenger side

- J387 - Door control module, passenger side
- J389 - Door control module, rear, right
- J519 - Vehicle Electrical System Control Module
- SB3 - Fuse 3 (in fuse holder)
- SE2 - Thermofuse 2 (on fuse holder)
- T10f - 10-Pin connector, connector station A-pillar, right
- T10h - 10-Pin connector
- T10s - 10-Pin connector
- T10u - 10-Pin connector, connector station B-pillar, right
- V148 - Motor for window regulator, passenger side

-  B325 - Plus Connection 11 (30a) (in main wiring harness)
-  B327 - Plus Connection 13 (30a) (in main wiring harness)
-  B398 - Comfort System CAN-Bus High Connection 2 (in main wiring harness)
-  B399 - Comfort System CAN-Bus High Connection 3 (in main wiring harness)
-  B402 - Comfort System CAN-Bus High Connection 6 (in main wiring harness)
-  B406 - Comfort System CAN-Bus Low Connection 1 (in main wiring harness)
-  B407 - Comfort System CAN-Bus Low Connection 2 (in main wiring harness)
-  B410 - Comfort System CAN-Bus Low Connection 5 (in main wiring harness)

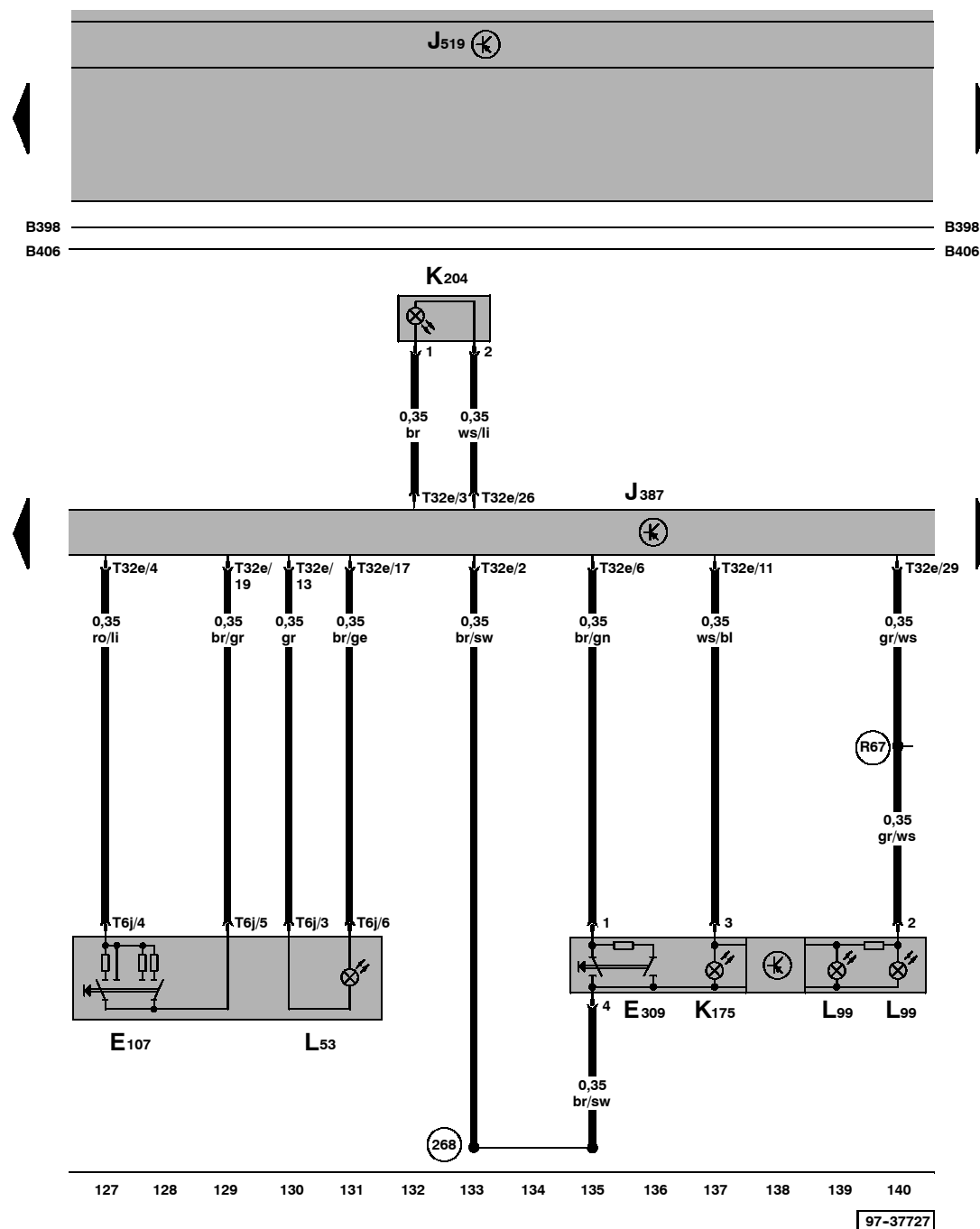
* - from November 2003

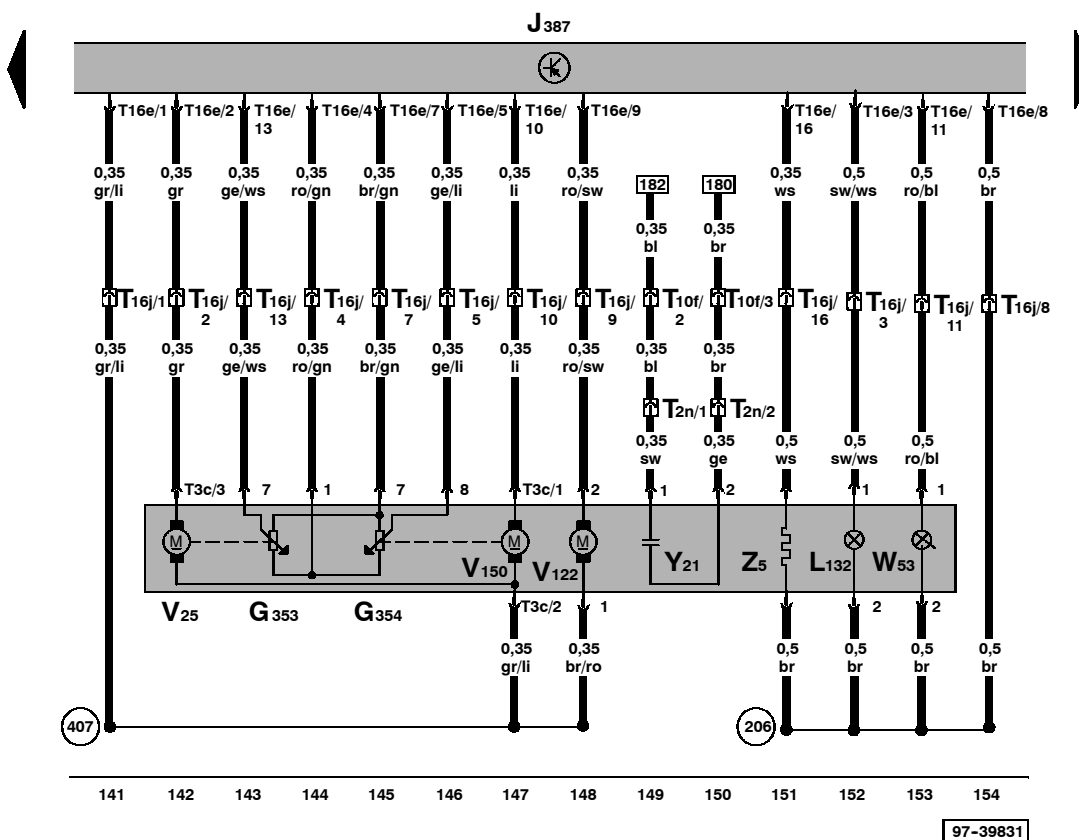
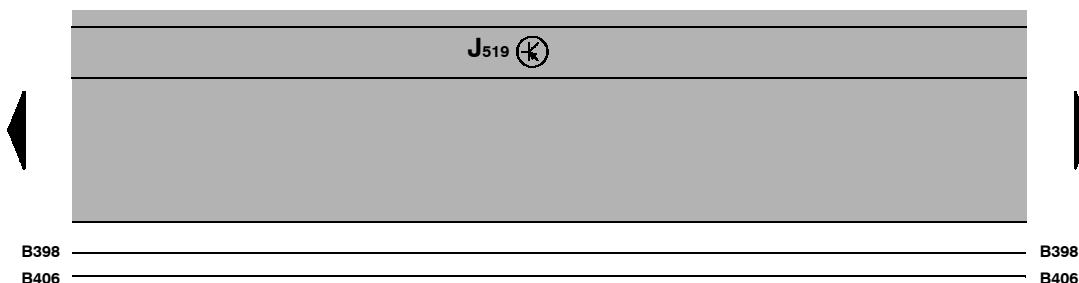
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Vehicle Electrical System Control Module, Door Control Module, passenger side, Switch for window regulator, Front Passenger's Interior Locking Button

- E107 - Switch for window regulator, in passenger door
- E309 - Front Passenger's Interior Locking Button
- J387 - Door control module, passenger side
- J519 - Vehicle Electrical System Control Module
- K175 - Front Passenger's Interior Locking Indicator Lamp
- K204 - Front Passenger's Central Locking -SAFE- Indicator Lamp
- L53 - Power Window Switch Light
- L99 - Lighting for switch interior lock
- T6j - 6-Pin connector
- T32e - 32-Pin connector

- (268) - Ground connector -2-, in wiring harness door cable - passenger side
- (R67) - Plus Connection (58) (in door wiring assembly harness, right)

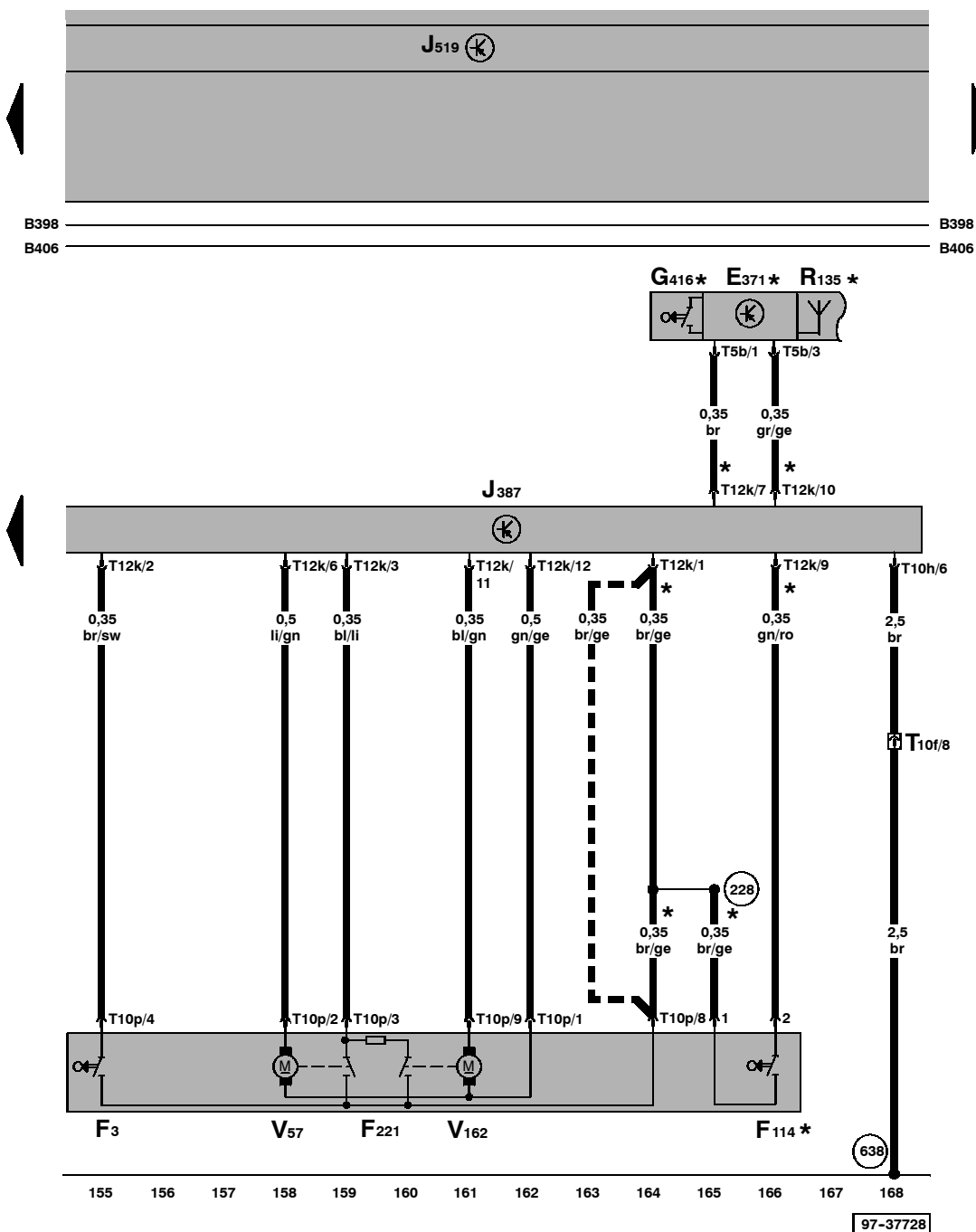


Vehicle Electrical System Control Module, Door Control Module, passenger side, Motor for fold-in mirror, passenger side, Motor for mirror adjustment passenger side


- G353 - Interior Mirror Horizontal-Adjustment Position Sensor
- G354 - Interior Mirror Vertical-Adjustment Position Sensor
- J387 - Door control module, passenger side
- J519 - Vehicle Electrical System Control Module
- L132 - Right Mirror Turn Signal Lamp
- T2n - 2-Pin Connector
- T3c - 3-Pin Connector
- T10f - 10-Pin Connector, black, Connector station A-pillar, right
- T16e - 16-Pin Connector
- T16j - 16-Pin Connector, in passenger's door
- V25 - Passenger's Side Mirror Adjustment Motor
- V122 - Motor for fold-in mirror, passenger side
- V150 - Motor for mirror adjustment, passenger side
- W53 - Front Passenger's Entry Lamp (in outside mirror)
- Y21 - Front Passenger's Automatic Day/Night Outside Mirror
- Z5 - Heated outside mirror, passenger side

- (206) - Ground connection, in passenger's door wiring harness
- (407) - Ground Connection 3 (in passenger's door wiring harness)

Vehicle Electrical System Control Module, Door Control Module, passenger side, Lock unit for central locking, passenger's side



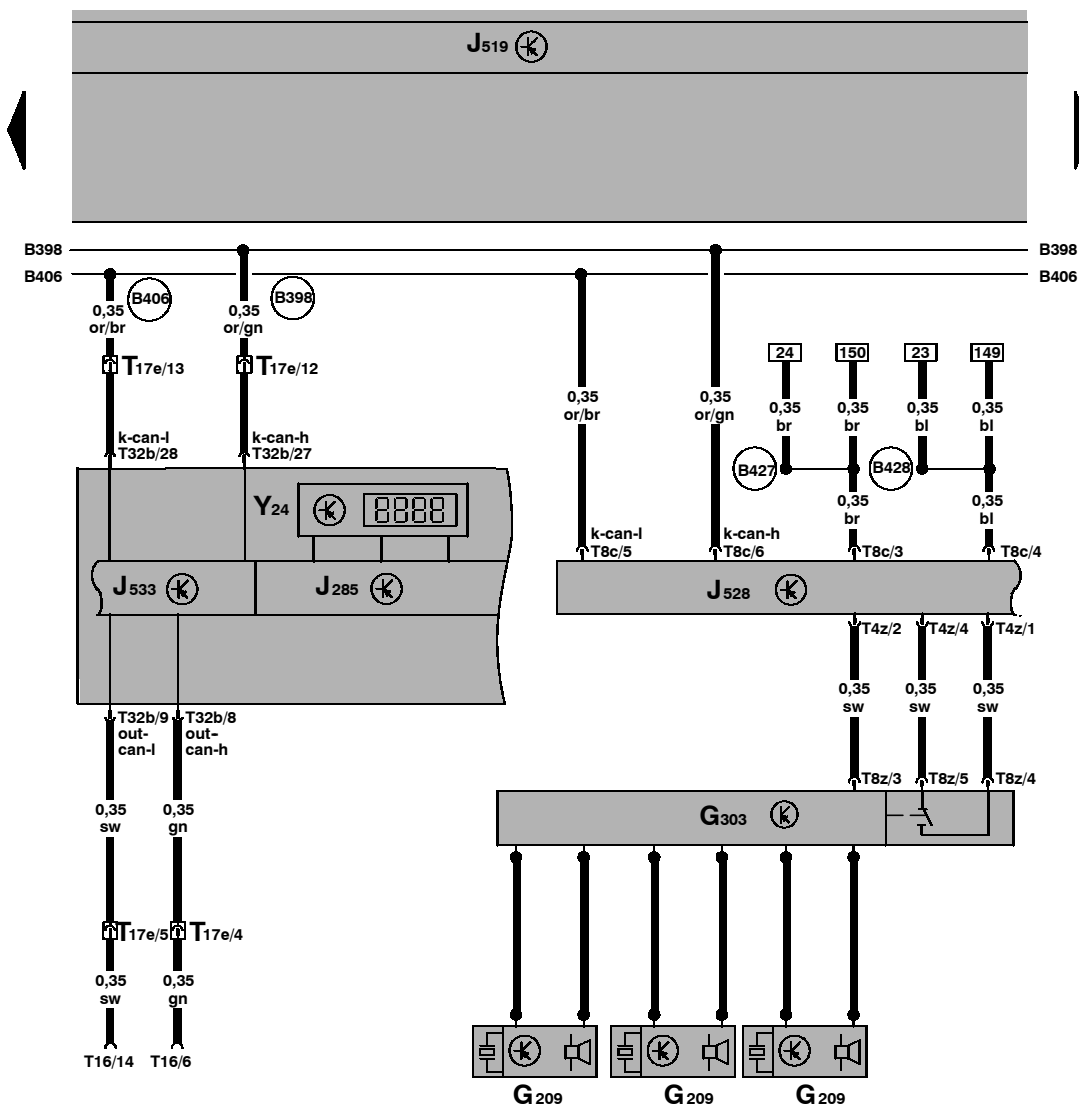
- E371 - Left Rear Outside Door Handle Central Locking Button
- F3 - Door contact switch-Passenger side
- F114 - Passenger's Door Central Locking System Switch
- F221 - Lock unit for central locking, passenger side
- G416 - Passenger's Outside Door Handle Touch Sensor
- J387 - Door control module, passenger side
- J519 - Vehicle Electrical System Control Module
- R135 - Right Access/Start Authorization Antenna *
- T5b - 5-Pin connector
- T10f - 10-Pin connector, connector station A-pillar, right
- T10h - 10-Pin connector
- T10p - 10-Pin connector
- T12k - 12-Pin connector
- V57 - Passenger's Door Central Locking System Motor
- V162 - Front Passenger's Central Locking (Safe) Motor

- (228) - Wire Connection, in Door Ground wiring harness
- (638) - Ground Connection (on right A-pillar)

- * - vehicles with access/Start control
- - - vehicles without access/Start control

ws = white
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Vehicle Electrical System Control Module, Control module with indicator unit in instrument panel insert, Roof Electronics Control Module, Data Link Connector (DLC)



- G209 - Ultra-sound sensor for anti-theft warning
- G303 - Radar Interior Monitoring Control Module 1
- J285 - Control module with indicator unit in instrument panel insert
- J519 - Vehicle Electrical System Control Module
- J528 - Roof Electronics Control Module
- J533 - Data Bus On Board Diagnostic Interface
- T4z - 4-Pin Connector, black
- T8c - 8-Pin Connector
- T8z - 8-Pin Connector, black
- T16 - 16-Pin Connector, black, Data Link Connector (DLC), under instrument panel, left
- T17e - 17-Pin Connector, blue, behind instrument panel, left
- T32b - 32-Pin Connector, green, on instrument cluster
- Y24 - Display Unit in Instrument Cluster

- (B398) - Comfort System CAN-Bus High Connection 2 (in main wiring harness)
- (B406) - Comfort System CAN-Bus Low Connection 1 (in main wiring harness)
- (B427) - Mirror Auto-dimming Signal Connection 1 (in main wiring harness)
- (B428) - Mirror Auto-dimming Signal Connection 2 (in main wiring harness)

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169 170 171 172 173 174 175 176 177 178 179 180 181 182

97-39832



- E43 - Mirror Adjustment Switch
- E48 - Mirror Selector Switch
- E231 - Switch for outside mirror heating
- E263 - Mirror Folding Switch
- J519 - Vehicle Electrical System Control Module
- J523 - Front Information Display Control Head Control Module
- L78 - Mirror Adjusting Switch Light
- T4k - 4-Pin connector
- T10q - 10-Pin connector
- T32c - 32-Pin connector, green

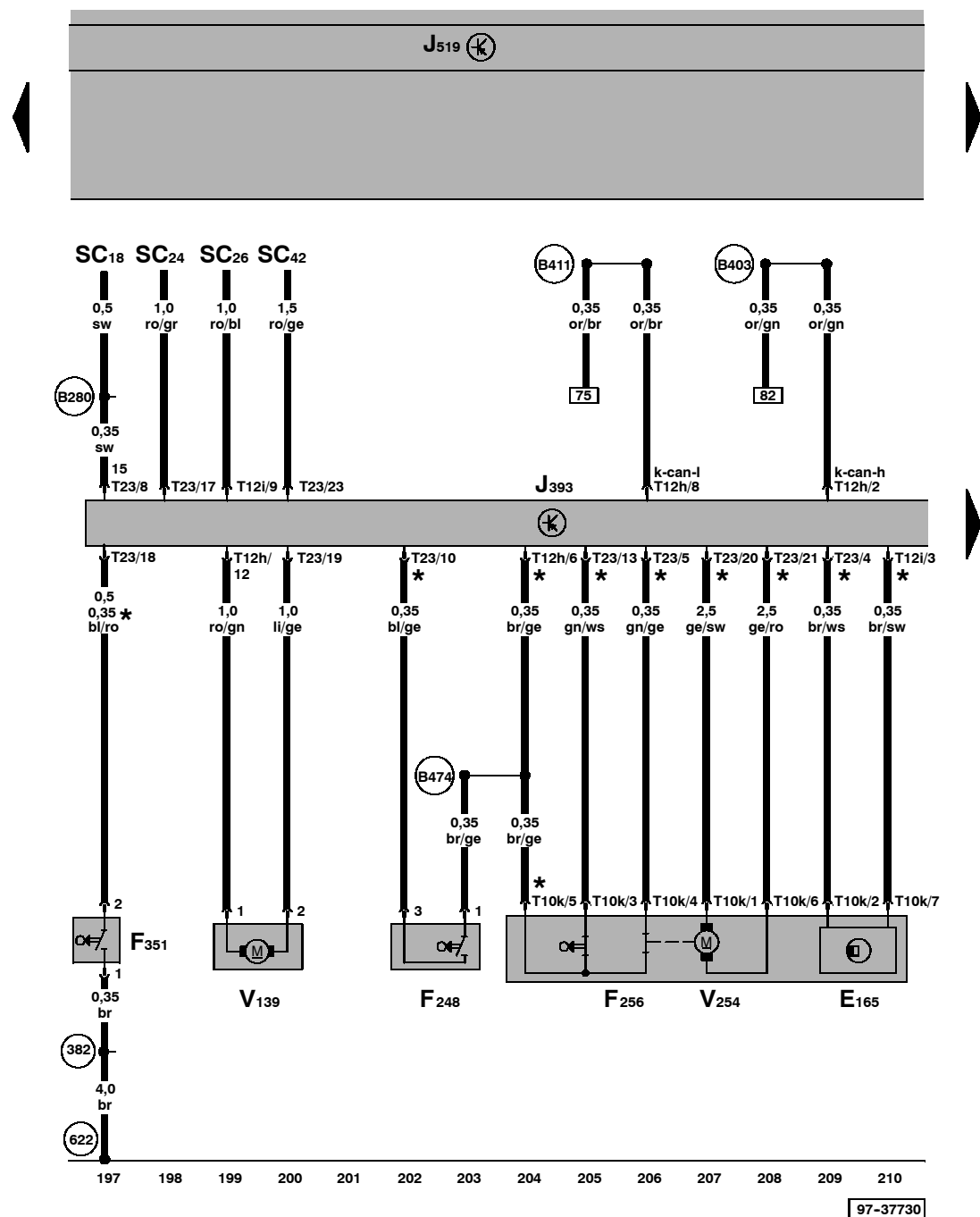
- 367 - Ground Connection 2 (in main wiring harness)
- 397 - Ground Connection 32 (in main wiring harness)
- 629 - Ground Connection (Radio, TV, Central Display Unit)
- 634 - Ground Connection (driver's seat control module)
- B340 - Connection 1 (58d) (in main wiring harness)
- B341 - Connection 2 (58d) (in main wiring harness)
- B342 - Connection 3 (58d) (in main wiring harness)
- B398 - Comfort System CAN-Bus High Connection 2 (in main wiring harness)
- B400 - Comfort System CAN-Bus High Connection 4 (in main wiring harness)
- B406 - Comfort System CAN-Bus Low Connection 1 (in main wiring harness)
- B408 - Comfort System CAN-Bus Low Connection 3 (in main wiring harness)

Vehicle Electrical System Control Module, Central control module for comfort system, Rear Lid Lock Unit, Motor to unlock rear lid

- E165 - Trunk Lid Release Switch
- F248 - Switch for unlocking, rear lid lock cylinder
- F256 - Rear Lid Lock Unit
- F351 - Emergency switch for door
- J393 - Central control module for comfort system
- J519 - Vehicle Electrical System Control Module
- SC18 - Fuse 18 (in fuse holder)
- SC24 - Fuse 24 (in fuse holder)
- SC26 - Fuse 26 (in fuse holder)
- SC42 - Fuse 42 (in fuse holder)
- T10k - 10-Pin connector
- T12h - 12-Pin connector
- T12i - 12-Pin connector
- T23 - 23-Pin connector
- V139 - Motor to unlock rear lid
- V254 - Rear Lid Opening Motor

- (382) - Ground Connection 17 (in main wiring harness)
- (622) - Ground Connection 1 (ground plate)
- (B280) - Plus Connection 4 (15a) (in main wiring harness)
- (B403) - Comfort System CAN-Bus High Connection 7 (in main wiring harness)
- (B411) - Comfort System CAN-Bus Low Connection 6 (in main wiring harness)
- (B474) - Connection 10 (in main wiring harness)
- * - through October 2003

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Vehicle Electrical System Control Module, Central control module for comfort system, Rear Lid Lock Unit

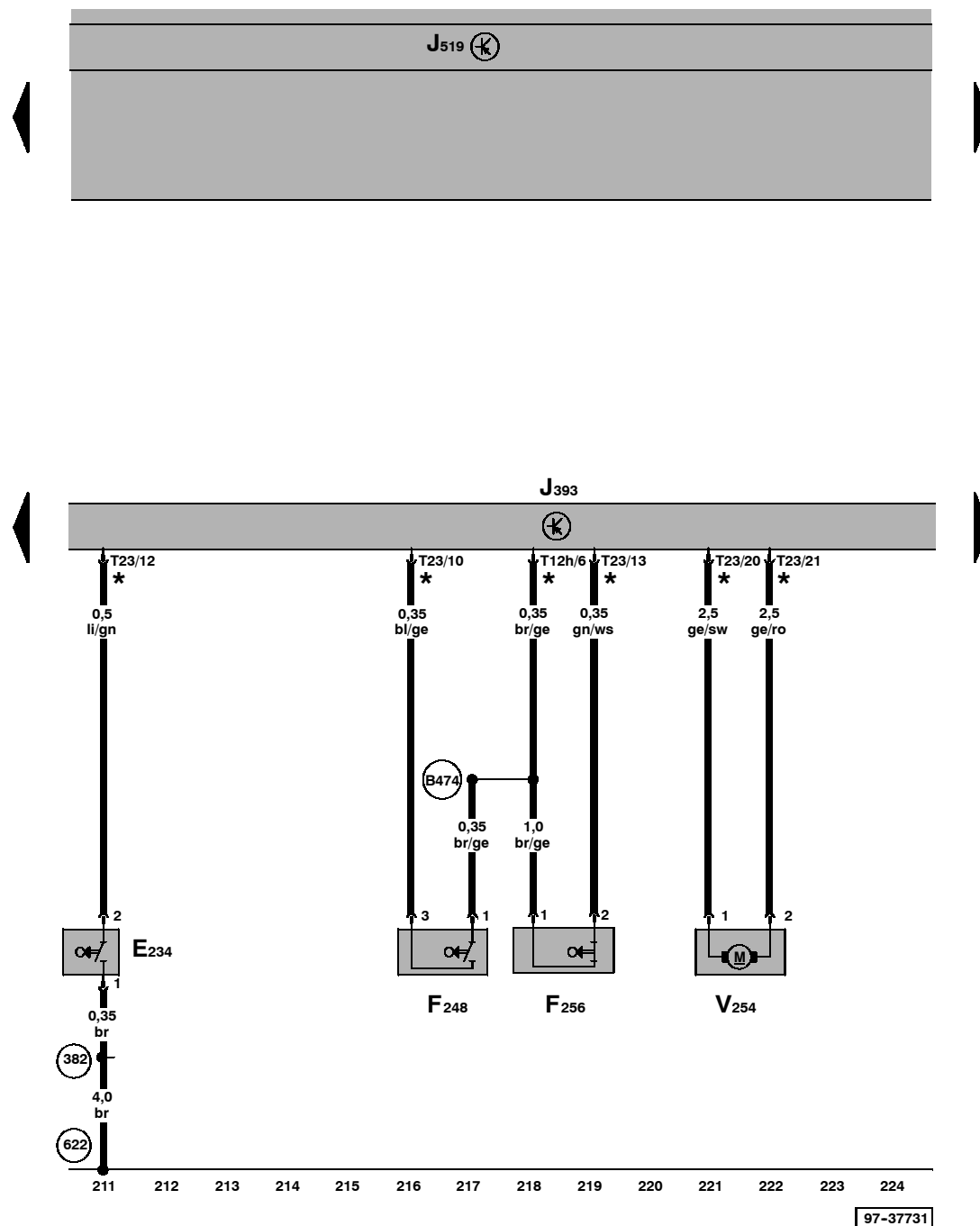
- E234 - Switch for unlocking, rear lid handle
- F248 - Switch for unlocking, rear lid lock cylinder
- F256 - Rear Lid Lock Unit
- J393 - Central control module for comfort system
- J519 - Vehicle Electrical System Control Module
- T12h - 12-Pin connector
- T23 - 23-Pin connector
- V254 - Rear Lid Opening Motor

(382) - Ground Connection 17 (in main wiring harness)

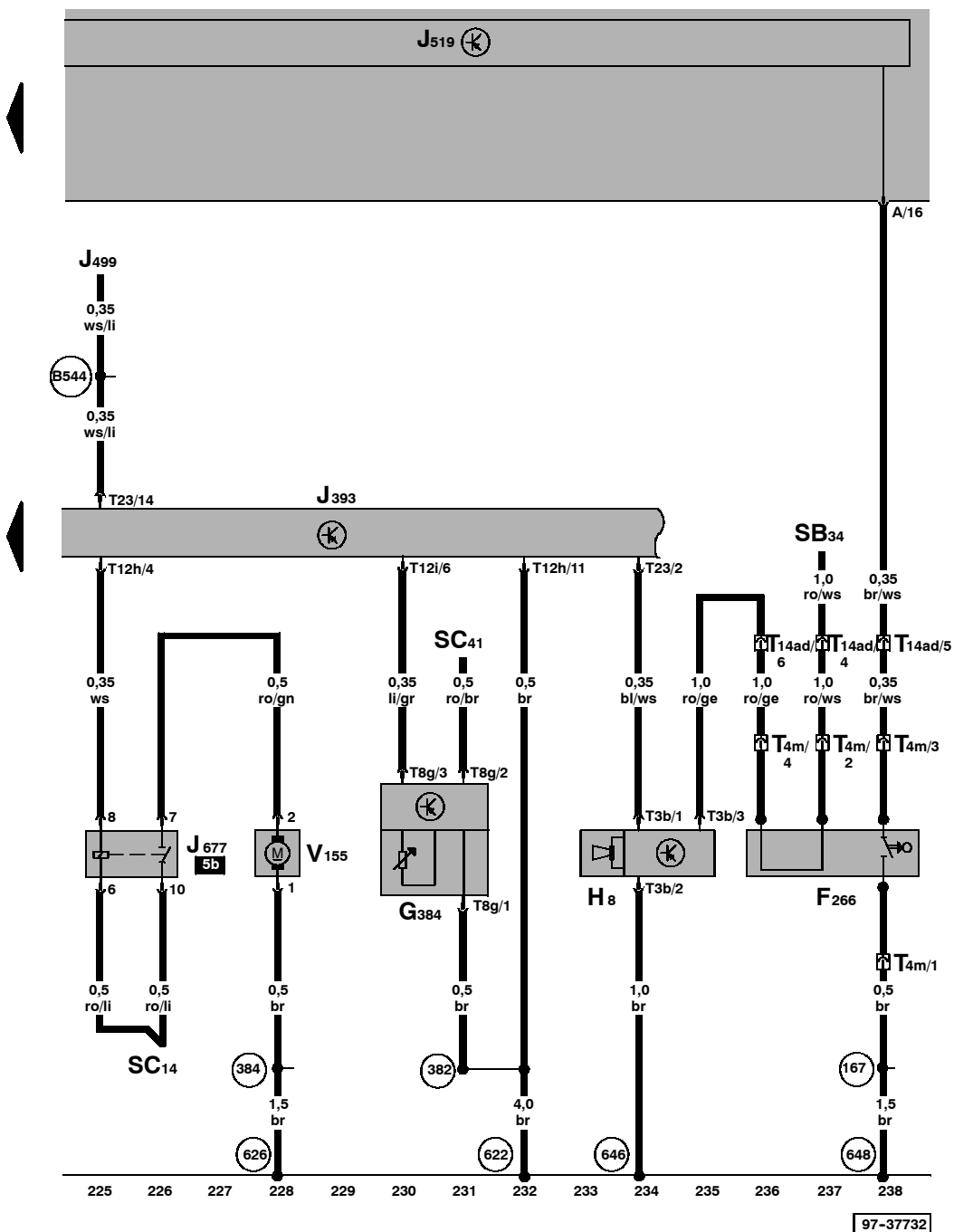
(622) - Ground Connection 1 (ground plate)

(B474) - Connection 10 (in main wiring harness)

* - from November 2003



Vehicle Electrical System Control Module, Central Control Module for comfort system, Front Hood Switch, Vehicle Inclination Sensor, Motor for fuel tank lid unlock



- F266 - Front Hood Switch
- G384 - Vehicle Inclination Sensor
- H8 - Alarm Horn
- J393 - Central control module for comfort system
- J499 - Telematic Control Module
- J519 - Vehicle Electrical System Control Module
- J677 - Fuel Filler Lid Unlock Relay
- SB34 - Fuse 34 (in fuse holder)
- SC14 - Fuse 14 (in fuse holder)
- SC41 - Fuse 41 (in fuse holder)
- T3b - 3-Pin connector
- T4m - 4-Pin connector
- T8g - 8-Pin connector
- T12h - 12-Pin connector
- T12i - 12-Pin connector
- T14ad - 14-Pin connector, connector station 2 / in basic engine harness
- T23 - 23-Pin connector
- V155 - Motor for fuel tank lid unlock

- 167 - Ground connection -4-, in engine compartment wiring harness
- 382 - Ground Connection 17 (in main wiring harness)
- 384 - Ground Connection 19 (in main wiring harness)
- 622 - Ground Connection 1 (ground plate)
- 626 - Ground Connection (right rear lights)
- 646 - Ground Connection 2 (on firewall)
- 648 - Ground Connection 4 (on firewall)
- B544 - Connection (lock/unlock) (in main wiring harness)