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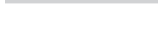




## AUDI A8 '03 - Distributed Functions

### Self Study Programme 288

This Self Study Programme contains information on data bus networking (topology) and distributed functions in the Audi A8 '03.

An understanding of the interaction of the components and distributed functions forms the necessary basis for successful fault-finding.

### Wiring

-  Convenience CAN
-  Drive system CAN
-  Adaptive cruise control CAN
-  Dash panel insert CAN
-  MOST bus
-  LIN bus
-  Diagnosis CAN
-  Bidirectional wire
-  Reception wire
-  Transmission wire
-  Discrete wire
-  Wireless transmission – transmission signal
-  Wireless transmission – reception signal
-  Follow-up function
-  Prerequisite

This introduction contains explanatory notes to clarify the meanings of certain terms, designations and symbols used in this Self Study Programme.

More detailed information can be found in the following Self Study Programmes:

- SSP 282 – Audi A8 '03 Technical Features
- SSP 286 – New Data Bus Systems – LIN, MOST, Bluetooth™
- SSP 287 – Audi A8 '03 Electrical Components
- SSP 289 – Adaptive cruise control in the Audi A8 '03
- SSP 293 – Audi A8 '03 Infotainment

### Components and symbols

①

A number is used to designate the information sequence described in the corresponding text. The green circle symbolises the start of an information sequence.



The green arrow indicates input information.



The blue arrow indicates output information.



The layout of the individual components such as control units, switches or control elements as illustrated corresponds to the actual arrangement in the vehicle. Component designations are explained on the basis of their identifiers in the relevant text.



Components marked in red indicate the function master within a sequence of operations.



Components marked in yellow indicate the substitute master(s).

### Definition of terms

#### Data bus network (topology)

The topology provides a general outline of the way in which control units fitted in the vehicle are interlinked by way of data bus systems.

It thus becomes clear which bus systems are used by the control units to exchange data.

#### Distributed functions

This term indicates that several control units are required to exchange information in order to implement a function.

#### Function master

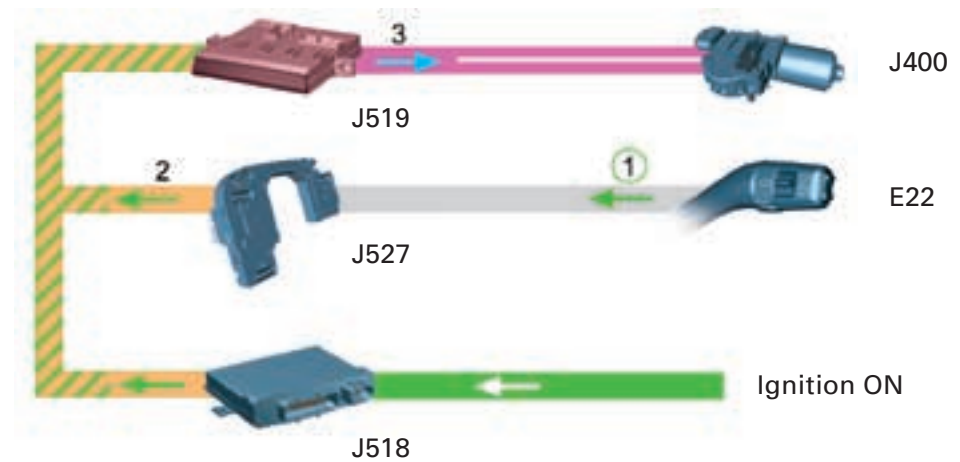
With distributed functions, one control unit is always responsible for the entire sequence of operations. The function master control unit gathers all input information. The requests resulting from this are then transmitted in the form of a message on the data bus system and read into the control units concerned for corresponding actuation of the appropriate connected components.

#### Substitute master

In the event of function master failure affecting major functions, the task of the function master is assumed by a control unit provided for this purpose and designed to maintain the sequence of operations (possibly with certain restrictions).

#### Example: Wiper speed 1 function

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SSP288\_013

#### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 transmits terminal 15 and 75x – information – to convenience CAN.

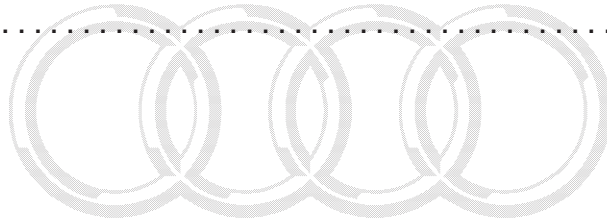
1 The intermittent wiper switch E22 transmits the information "Wiper speed 1" to the steering column electronics control unit J527.

2 The steering column electronics transmits the information "Wiper speed 1" to the onboard power supply control unit J519.

3 The onboard power supply control unit transmits the information "Wiper speed 1" via the LIN to the wiper motor control unit J400. The wiper motor control unit actuates the integrated motor.



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# Audi

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The Self Study Programme contains information on design features and functions.

**The Self Study Programme is not intended as a Workshop Manual. Values given are only intended to help explain the subject matter and relate to the software version applicable at the time of SSP compilation.**

Use should always be made of the latest technical publications when performing maintenance and repair work.

**New**



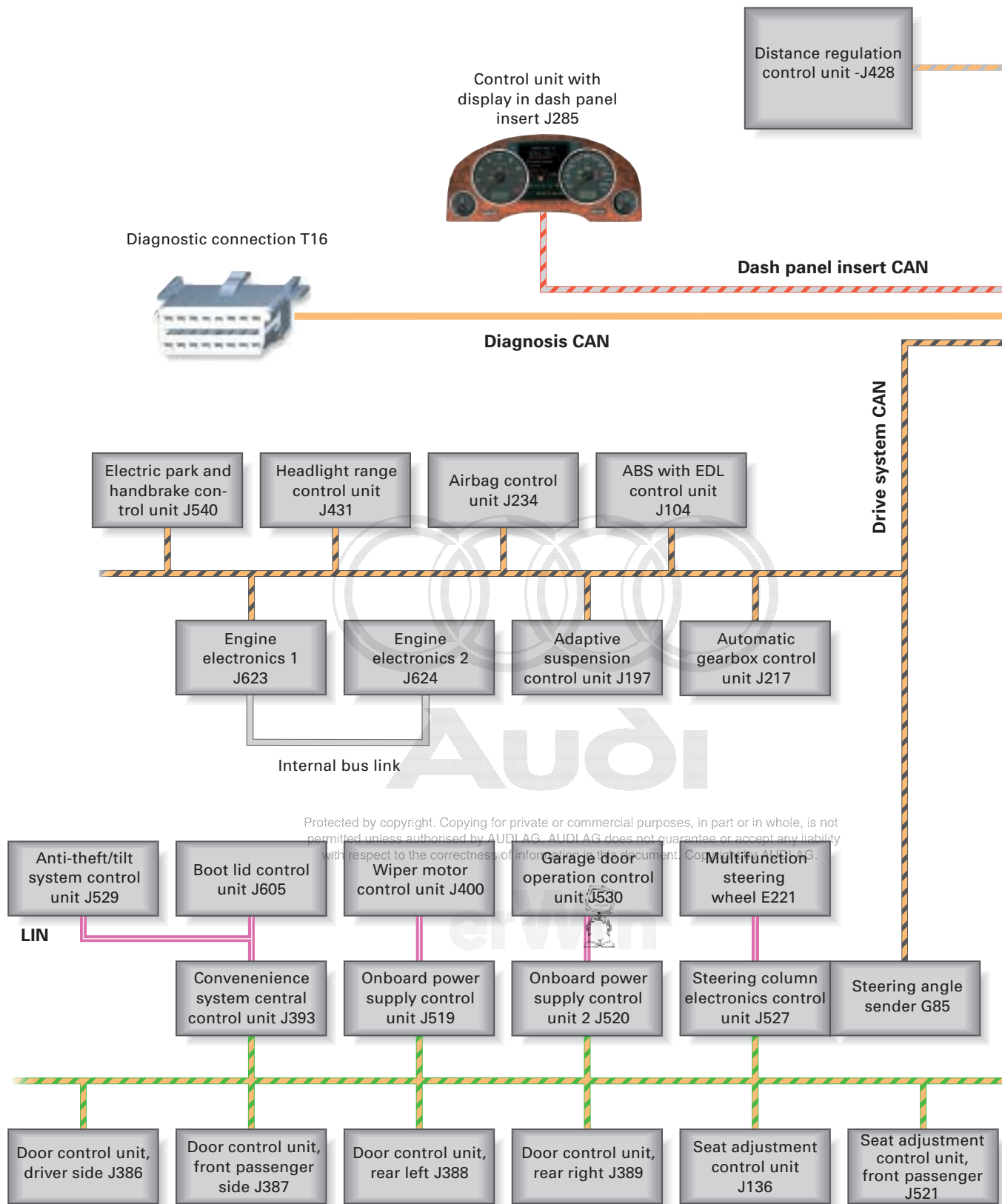
**Attention Note**

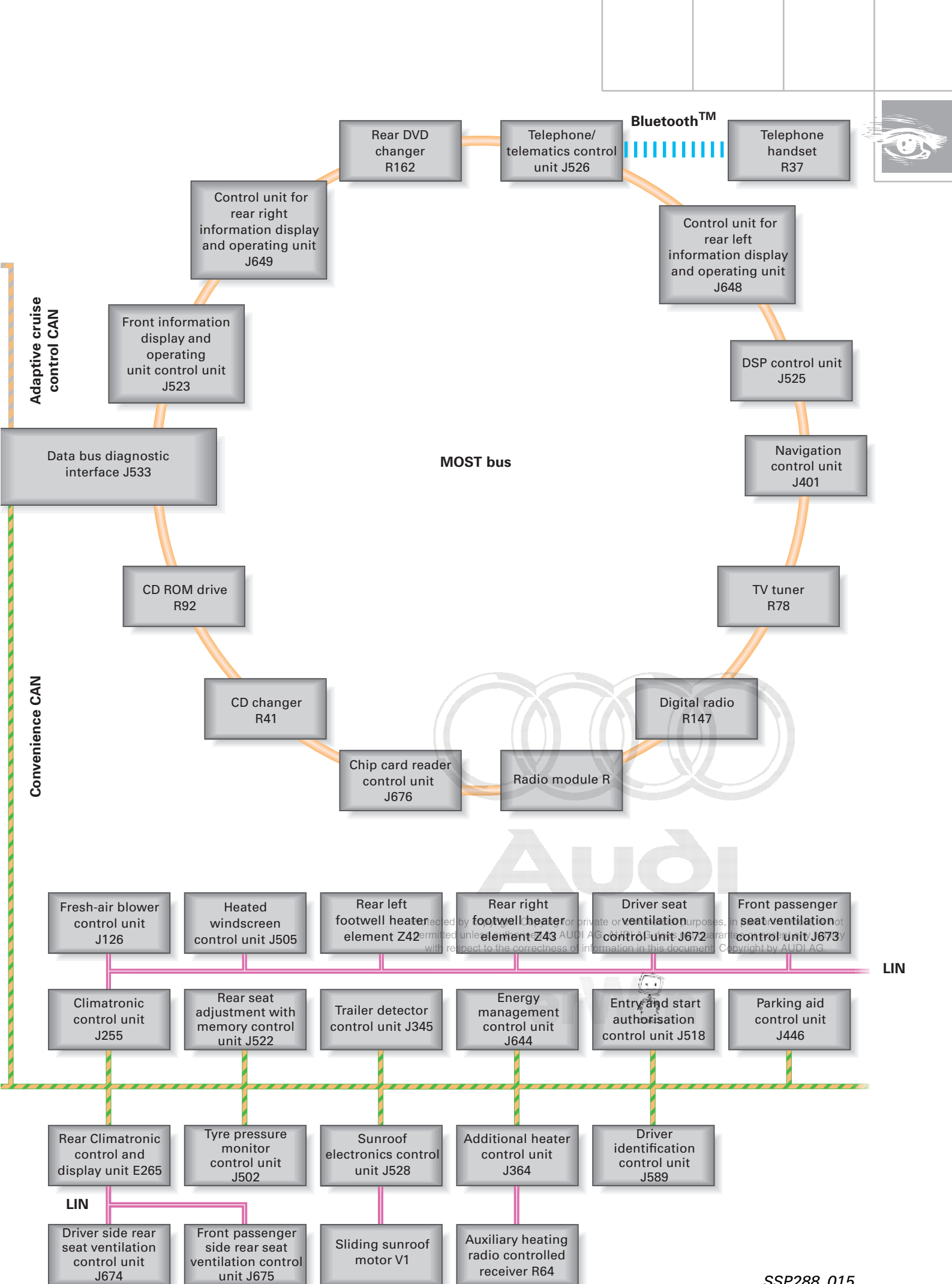


# Introduction



## Bus topology

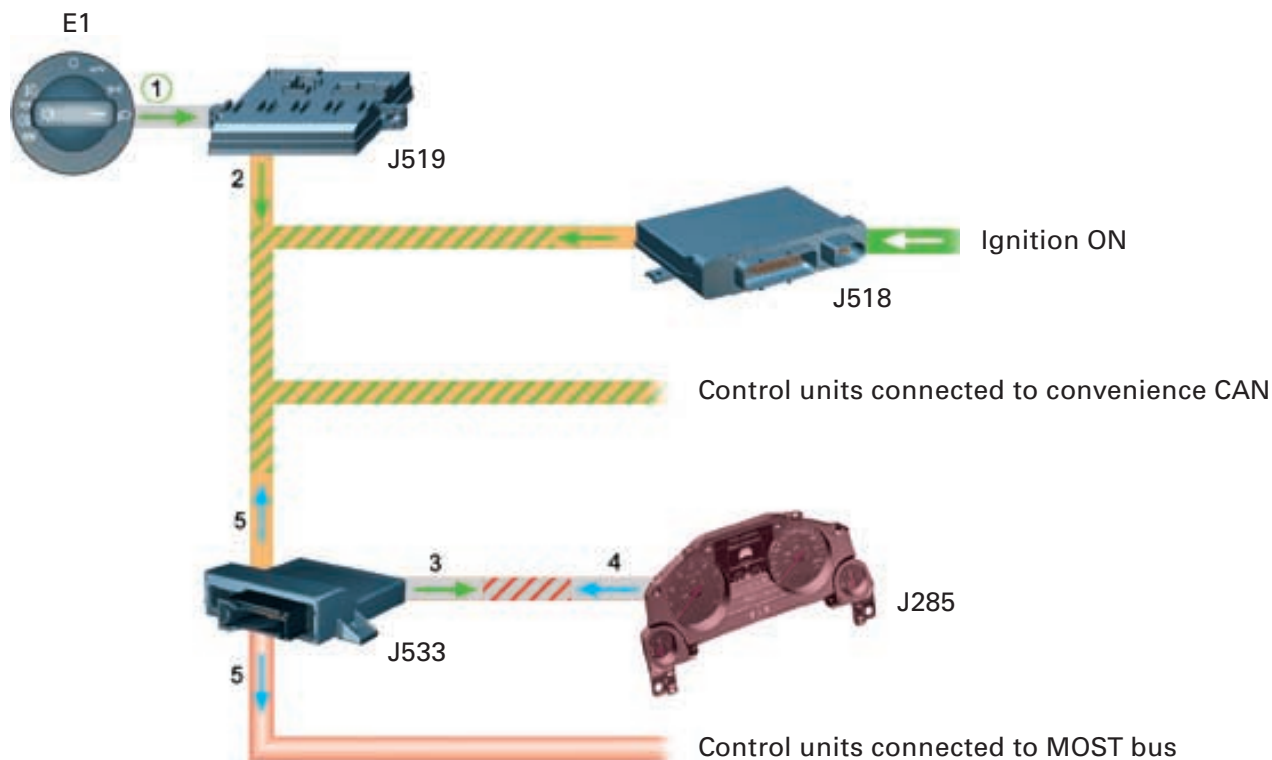




# Distributed Functions



## Switch/display illumination dimming



SSP288\_018

### Prerequisite

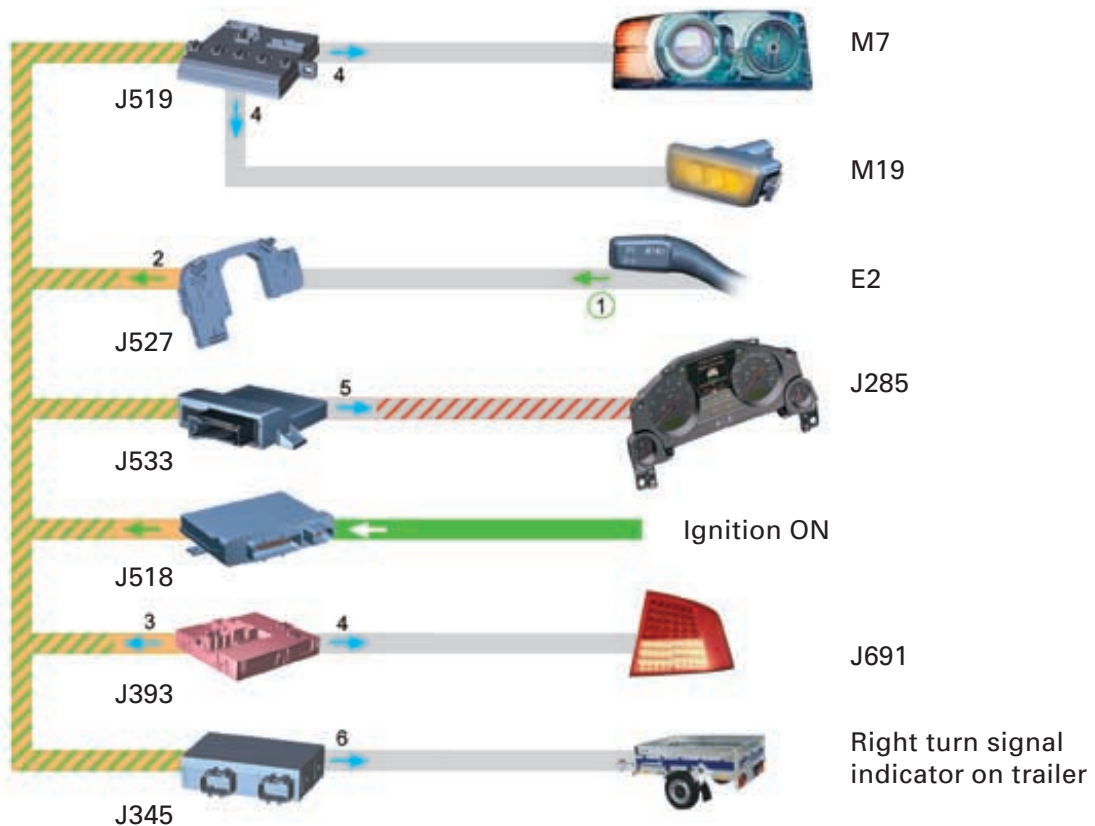
Ignition switched on by way of electric ignition/ starter switch or Advanced Key, so that entry and start authorisation control unit J518 connects terminals 15 and 75 to convenience CAN.

- 1 The driver sets the light switch E1 to "Dipped beam ON" position. The light switch transmits a voltage-encoded signal to the onboard power supply control unit J519.
- 2 The onboard power supply control unit transmits the information "Dipped beam ON" to the convenience CAN.
- 3 The data bus diagnostic interface J533 transmits the information via the dash panel insert CAN to the control unit with display in dash panel insert J285, where the CAN information "Term. 58s" is generated.

4 The dash panel insert transmits the information "Term. 58s" via the dash panel insert CAN to the data bus diagnostic interface.

5 The data bus diagnostic interface transmits this signal to the convenience CAN and the MOST bus. Each connected control unit uses this message to generate a PWM signal for actuation of the connected illumination systems with the set level of dimming.

## Right turn signal



SSP288\_001

### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 connects terminal 15 to convenience CAN.

- 1 The driver sets the turn signal switch E2 to the right. The switch transmits a resistance-encoded signal to the steering column electronics control unit J527.
- 2 The steering column electronics control unit relays the information "Right turn signal" via the convenience CAN to the convenience system central control unit J393.
- 3 The convenience system central control unit establishes priorities and type of indication on the basis of the information received. The convenience system central control unit then transmits the information "Right turn signal" to the convenience CAN.

- 4 The convenience system central control unit actuates the rear right turn signal indicator by way of the right tail light control unit J691 and the onboard power supply control unit J519 actuates both the front right turn signal bulb M7 and the right side turn signal bulb M19.

- 5 The data bus diagnostic interface J533 passes the CAN information "Right turn signal" to the dash panel insert CAN. The lamp in the dash panel insert then flashes.

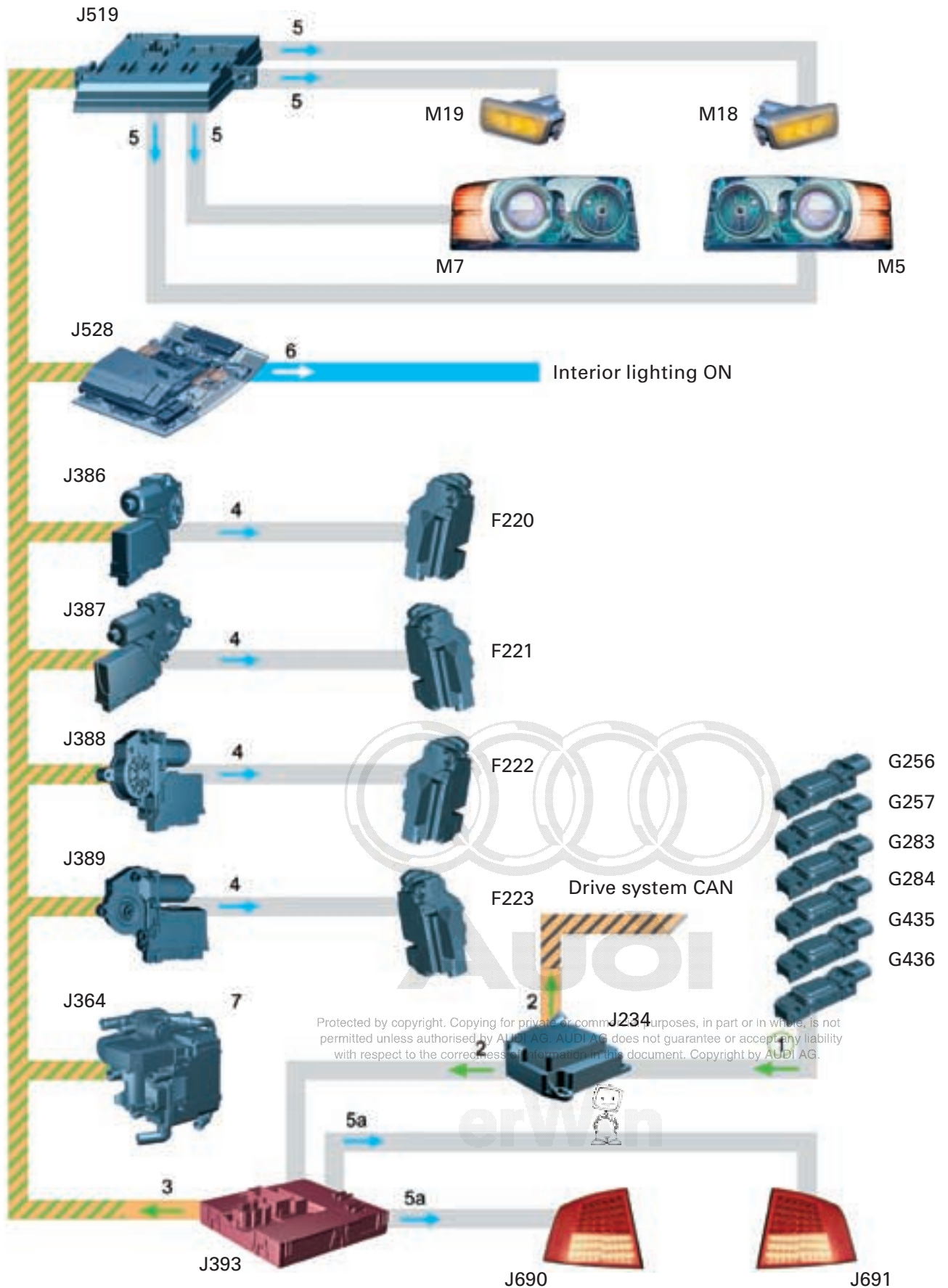
- 6 The trailer turn signal indicator is actuated by the trailer detector control unit J345 which received the message "Right turn signal".

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# Distributed Functions

## Crash signalling (without airbag triggering)

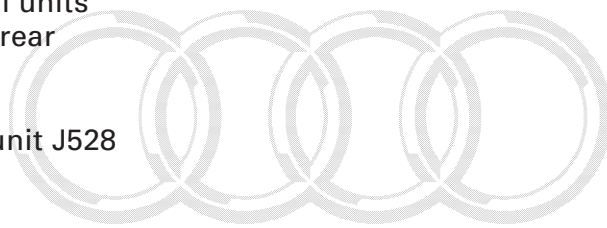


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- 1 One or more crash sensors (G256, G257, G283, G284, G435 or G436) transmit(s) the information "Vehicle crash" to the airbag control unit J234.
- 2 The information "Crash" is relayed by the airbag control unit via a discrete wire to the convenience system central control unit J393 and the drive system CAN.
- 3 The information is processed by the convenience system central control unit and the message "Crash detected" passed to the convenience CAN.  
The convenience system central control unit blocks remote controlled locking.
- 4 The door control units J386 to J389 then actuate the central locking lock units F220 to F223. All doors are unlocked.  
The door control units block door locking by the interior locking switches.
- 5 The onboard power supply control unit J519 actuates the front turn signal bulbs M5, M7 and the side turn signal bulbs M18, M19.
- 5a The convenience system central control unit actuates the tail light control units J690 and J691 to implement the rear signalling function.
- 6 The sunroof electronics control unit J528 switches on the interior lighting.
- 7 The additional heater control unit J364 switches the auxiliary heater to run-on mode.



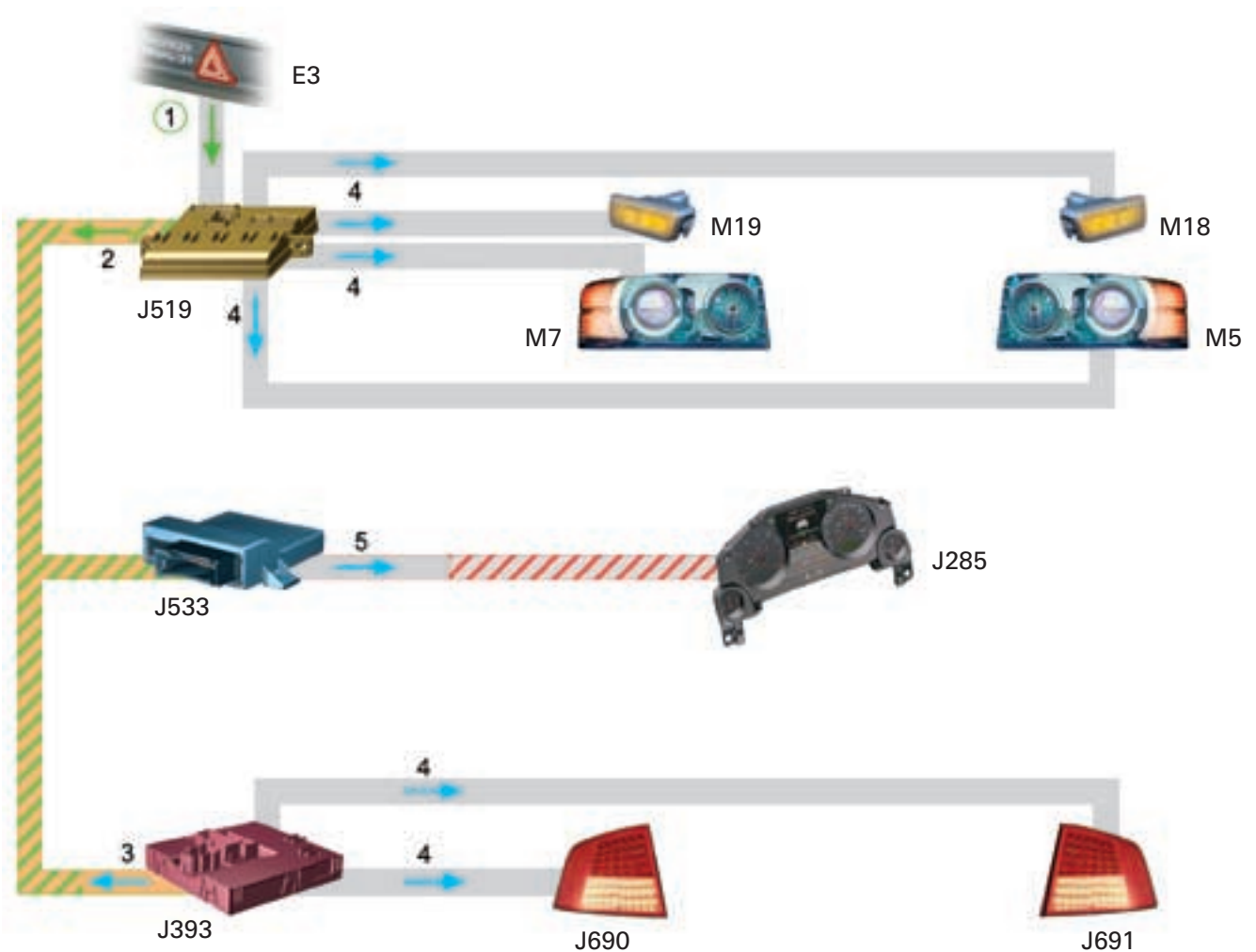
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# Distributed Functions

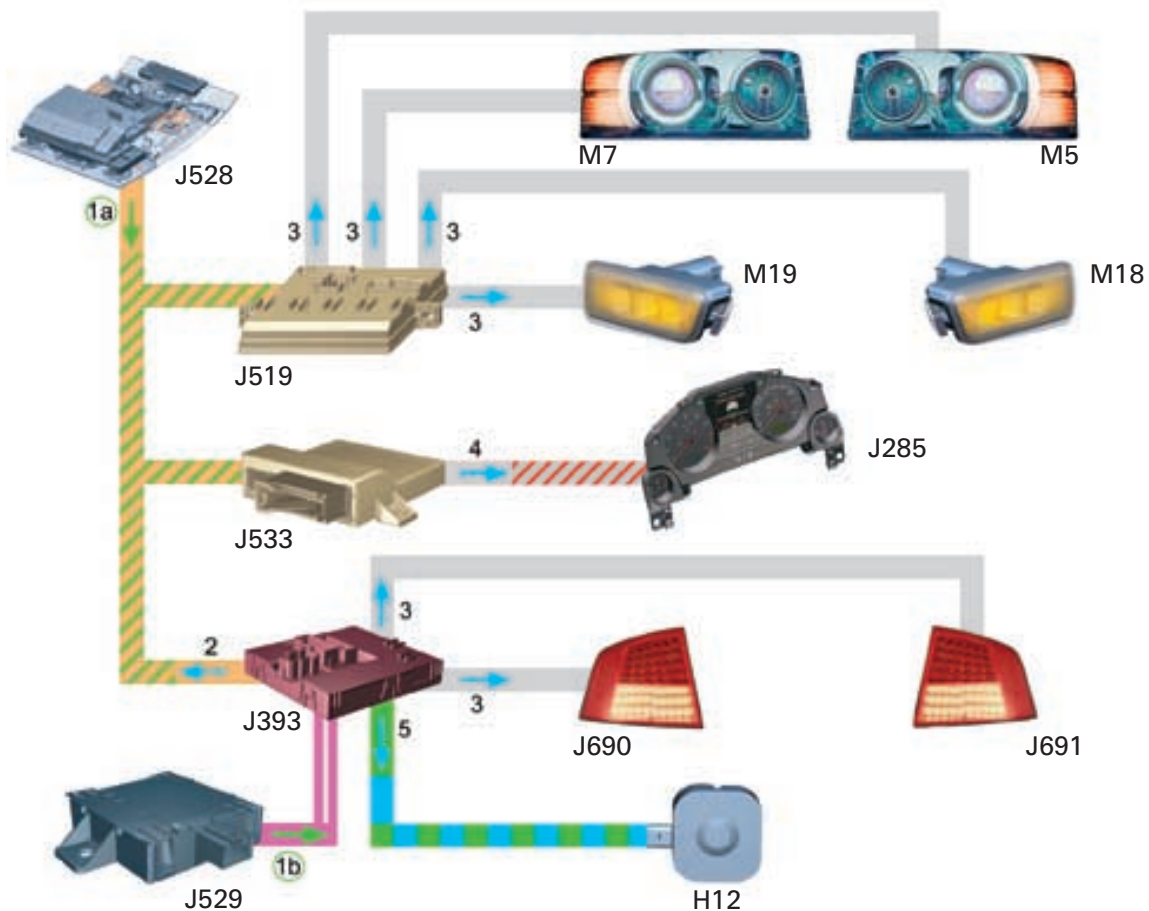
## Hazard warning



SSP288\_012

- 1 The driver actuates the hazard warning light switch E3, which transmits the discrete information "Hazard warning" to the onboard power supply control unit J519.
- 2 The onboard power supply control unit transmits the information "Hazard warning" via the convenience CAN to the convenience system central control unit J393.
- 3 The convenience system central control unit specifies the type of indication and transmits the information "Hazard warning mode" to the convenience CAN.
- 4 The onboard power supply control unit J519 actuates the front turn signal bulbs M5 and M7 as well as the side turn signal bulbs M18 and M19. The convenience system central control unit actuates the rear turn signal bulbs (M6 and M8) via the tail light control units J690 and J691.
- 5 The data bus diagnostic interface J533 actuates the hazard warning indicator lamps in the dash panel insert display via the dash panel insert CAN.

## Anti-theft alarm flashing function



SSP288\_002

### Prerequisite

Anti-theft alarm activated by "Central locking system locking".  
Interior monitoring/anti-towaway system not deactivated by buttons in driver's door.

1a The interior monitor transmission and reception module integrated into the sunroof electronics control unit J528 detects movement in the passenger compartment. This information is transmitted by the sunroof electronics control unit to the convenience CAN.

or

1b The anti-theft/tilt system control unit J529 transmits the information "Tilt alarm" via the LIN to the convenience system central control unit J393.

2 The convenience system central control unit specifies the type of indication and transmits the information "Alarm flashing mode" to the convenience CAN.

3 The onboard power supply control unit J519 actuates the front turn signal bulbs M5, M7 and the side turn signal bulbs M18, M19. The convenience system central control unit actuates the rear indicators via the corresponding tail light control units J690 and J691.

4 The data bus diagnostic interface J533 actuates the alarm indicator lamps in the dash panel insert display via the dash panel insert CAN.

5 The convenience system central control unit actuates the alarm horn H12 via a bidirectional wire.

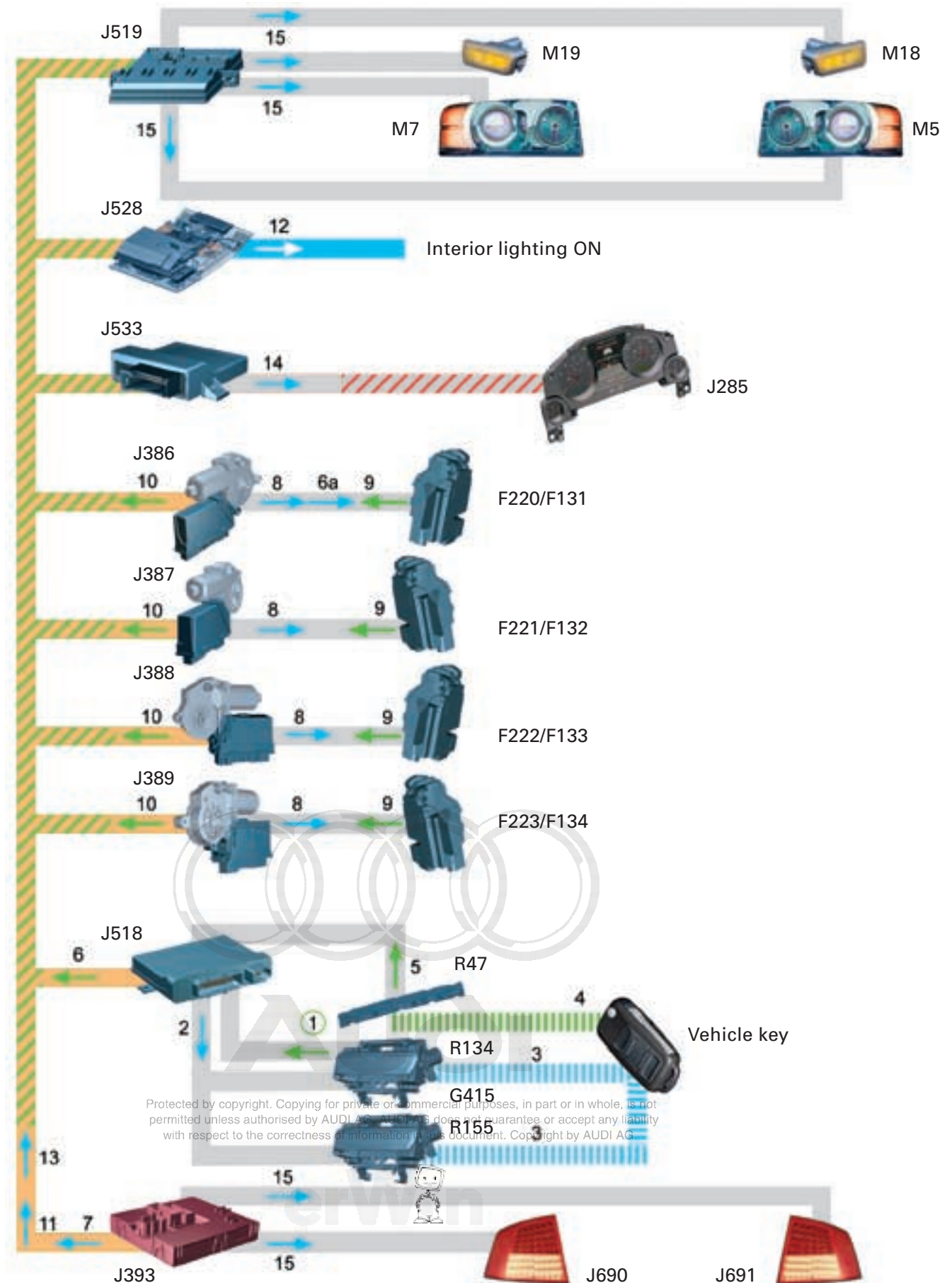
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# Distributed Functions



## Advanced Key unlocking

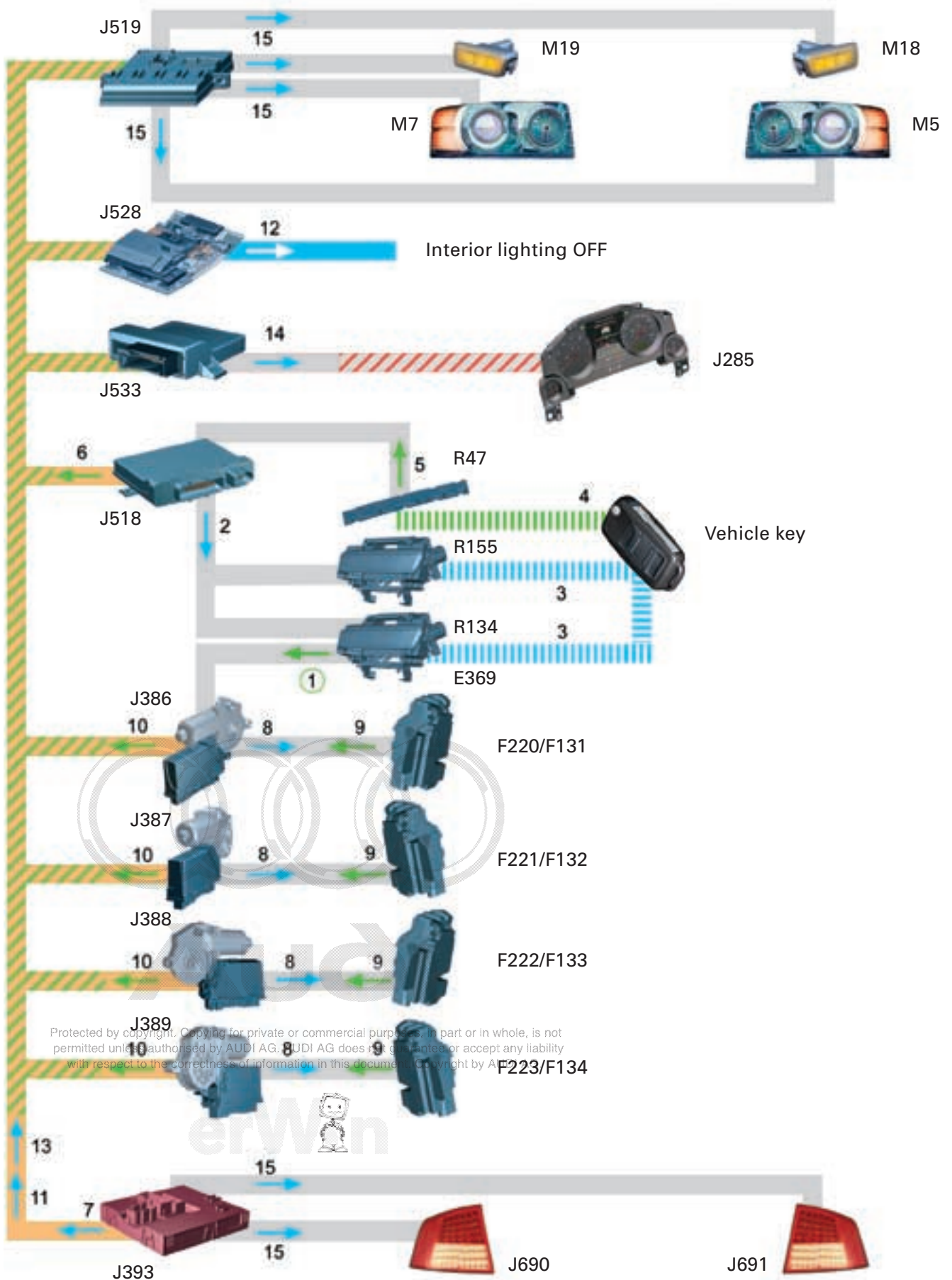


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- 1 The driver grasps hold of the recessed door handle moulding. The driver side exterior door handle touch sensor G415 transmits the information "Finger in handle moulding" to the entry and start authorisation control unit J518.
  - 2 The control unit transmits the information "Key interrogation" to the driver side and rear driver side entry and start authorisation aerials R134 and R155.
  - 3 The driver side entry and start authorisation aerials transmit this information to the vehicle key outside the vehicle.
  - 4 The vehicle key transmits the information "Key identification" to the central locking and anti-theft alarm system aerial R47.
  - 5 The central locking and anti-theft alarm system aerial transmits this information to the entry and start authorisation control unit.
  - 6 The entry and start authorisation control unit transmits the information "Convenience unlocking" to the convenience system central control unit J393 and to the door control unit for the door handle at which key interrogation was started.
  - 6a The door control unit receiving the command from the entry and start authorisation control unit, actuates the lock unit, which unlocks the door.
  - 7 The convenience system central control unit transmits the information "Vehicle unlocking – Advanced Key" to the convenience CAN.
  - 8 The door control units J386 to J389 evaluate the information "Advanced Key unlocking" and actuate the central locking lock units F220 to F223. The doors are unlocked.
  - 9 The central locking actuators F131 to F134 in the central locking lock units transmit the information "Doors unlocked" to the door control units.
  - 10 The door control units transmit the information "Doors unlocked" to the convenience system central control unit.
  - 11 The convenience system central control unit transmits the information "Vehicle not locked" to the convenience CAN.
  - 12 The sunroof electronics control unit J528 starts the function "Interior lighting ON".
  - 13 The convenience system central control unit transmits the information "Flashing after central locking unlocking" to the convenience CAN.
  - 14 The data bus diagnostic interface J533 actuates the flash indicator lamps in the dash panel insert display via the dash panel insert CAN.
  - 15 The convenience system central control unit actuates the rear indicators via the tail light control units J690 and J691 for two flashing cycles. The onboard power supply control unit J519 actuates the front turn signal bulbs M5, M7 and the side turn signal bulbs M18, M19 for two flashing cycles.


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# Distributed Functions

## Advanced Key locking

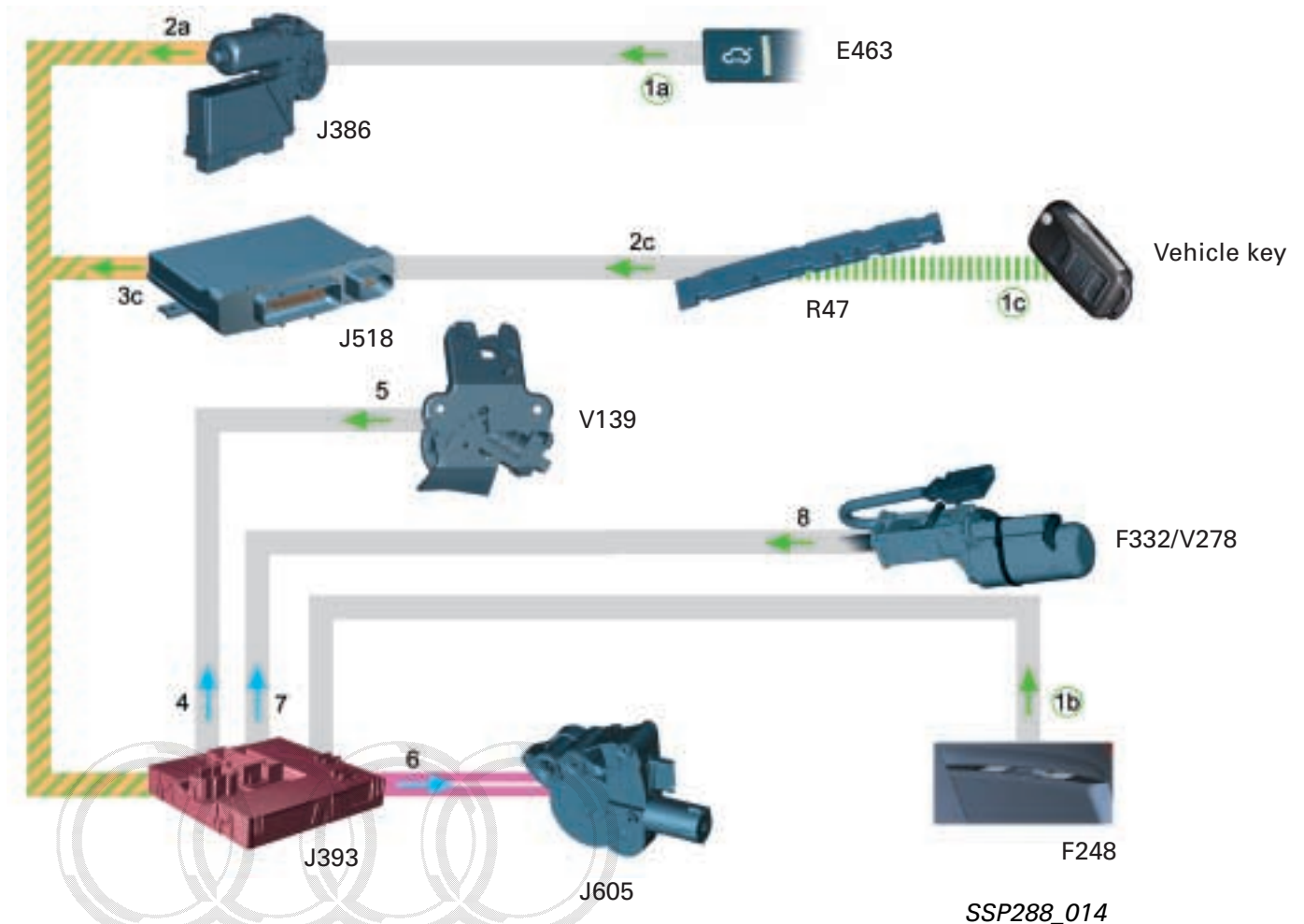


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- 1 The driver presses the driver side outer door handle central locking button E369. The button transmits the information "Lock vehicle" by way of a discrete wire to the driver side door control unit J386, which in turn transmits the signal via the convenience CAN to the entry and start authorisation control unit J518.
  - 2 The control unit transmits the information "Key interrogation" to the driver side and rear driver side entry and start authorisation aerials R134 and R155.
  - 3 The driver side entry and start authorisation aerials transmit this information to the vehicle key outside the vehicle.
  - 4 The vehicle key transmits the information "Key identification" to the central locking and anti-theft alarm system aerial R47.
  - 5 The central locking and anti-theft alarm system aerial transmits this information to the entry and start authorisation control unit.
  - 6 The entry and start authorisation control unit transmits the information "Lock" to the convenience system central control unit J393.
  - 7 The convenience system central control unit transmits the information "Lock vehicle – Advanced Key" to the convenience CAN.
  - 8 The door control units J386 to J389 evaluate the information "Lock" and actuate the central locking lock units F220 to F223. The doors are locked and the locks isolated.
  - 9 The central locking actuators F131 to F134 in the central locking lock units transmit the information "Doors locked and locks isolated" to the door control units.
  - 10 The door control units transmit the information "Doors locked and locks isolated" to the convenience system central control unit.
  - 11 The convenience system central control unit transmits the information "Vehicle locked" to the convenience CAN.
  - 12 The sunroof electronics control unit J528 starts the function "Interior lighting OFF".
  - 13 The convenience system central control unit transmits the information "Flashing after central locking system locking" to the convenience CAN.
  - 14 The data bus diagnostic interface J533 actuates the flash indicator lamps in the dash panel insert display via the dash panel insert CAN.
  - 15 The convenience system central control unit actuates the rear indicators via the tail light control units J690 and J691 for two flashing cycles. The onboard power supply control unit J519 actuates the front turn signal bulbs M5 and M7 as well as the side turn signal bulbs M18 and M19 for two flashing cycles.
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- !** For greater clarity, the handles of the passenger's and rear doors are not shown. Operation by way of these buttons is the same as for the driver's door.

# Distributed Functions

## Automatic boot lid release



a) Release via button in driver's door

b) Release via button in boot lid  
(handle cover strip)

1a The driver presses the boot lid remote release button E463, which transmits the discrete information "Release boot lid" to the driver side door control unit J386.

1b The driver presses the release button for boot lid lock cylinder F248, which transmits the discrete information "Release boot lid" to the convenience system central control unit.

2a The driver side door control unit transmits the information "Release boot lid" via the convenience CAN to the convenience system central control unit J393.

– Sequence continues with Item 4 –

– Sequence continues with Item 4 –





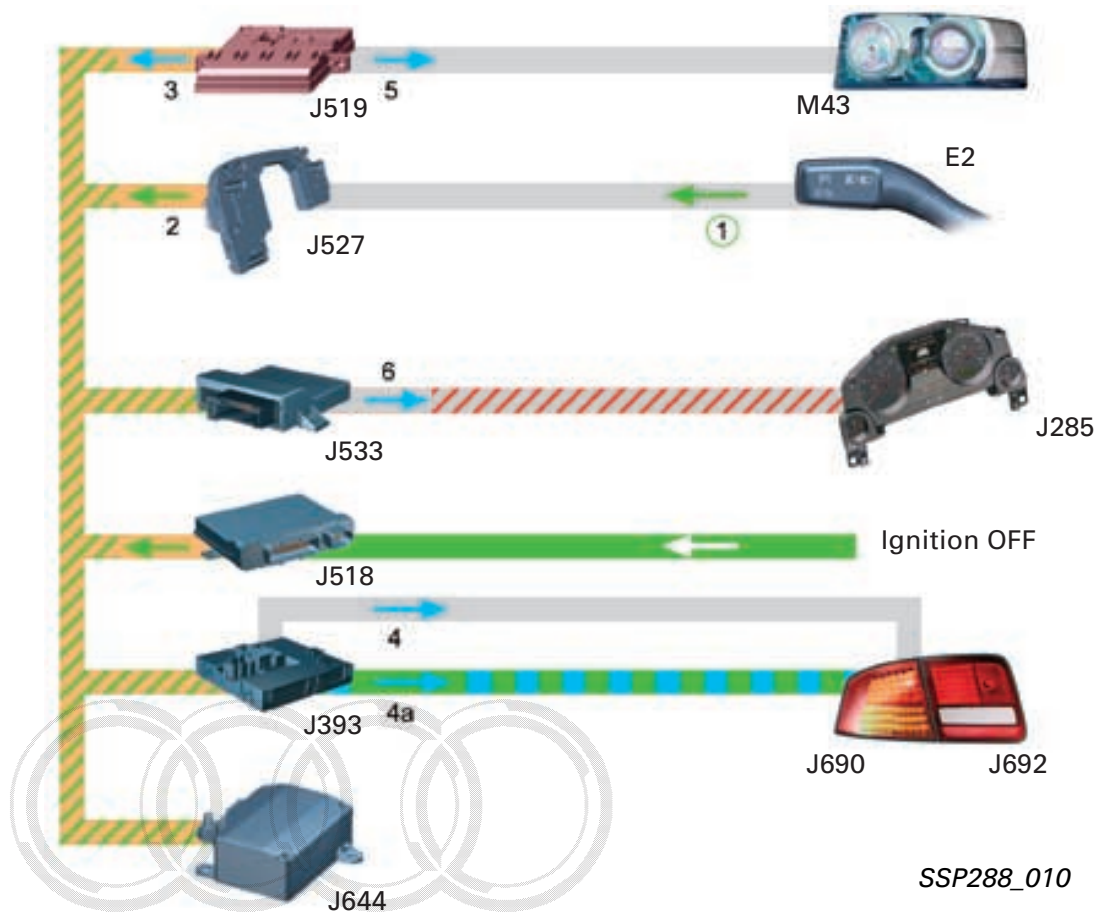
c) Release via button in vehicle key

- 1c The driver presses the "Boot lid" button in the vehicle key, which transmits a radio signal to the central locking and anti-theft alarm system aerial R47.
- 2c The "Release boot lid" signal is received by the central locking and anti-theft alarm system aerial and transmitted via a discrete wire to the entry and start authorisation control unit J518.
- 3c The entry and start authorisation control unit transmits the information "Release boot lid" via the convenience CAN to the convenience system central control unit.
- 4 The convenience system central control unit actuates the boot lid release motor V139.
- 5 The button in the boot lid release motor transmits the information "Boot lid released" to the convenience system central control unit.
- 6 The convenience system central control unit transmits the information "Release boot lid" via the LIN to the boot lid control unit J605.
- 7 The convenience system central control unit actuates the boot lid power latching system motor V278. The striker pin moves upwards.
- 8 The power latching system limit switch, luggage compartment unlocked F332 transmits "Striker pin up" to the convenience system central control unit, which stops the boot lid power latching system motor.

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# Distributed Functions

## Left parking light



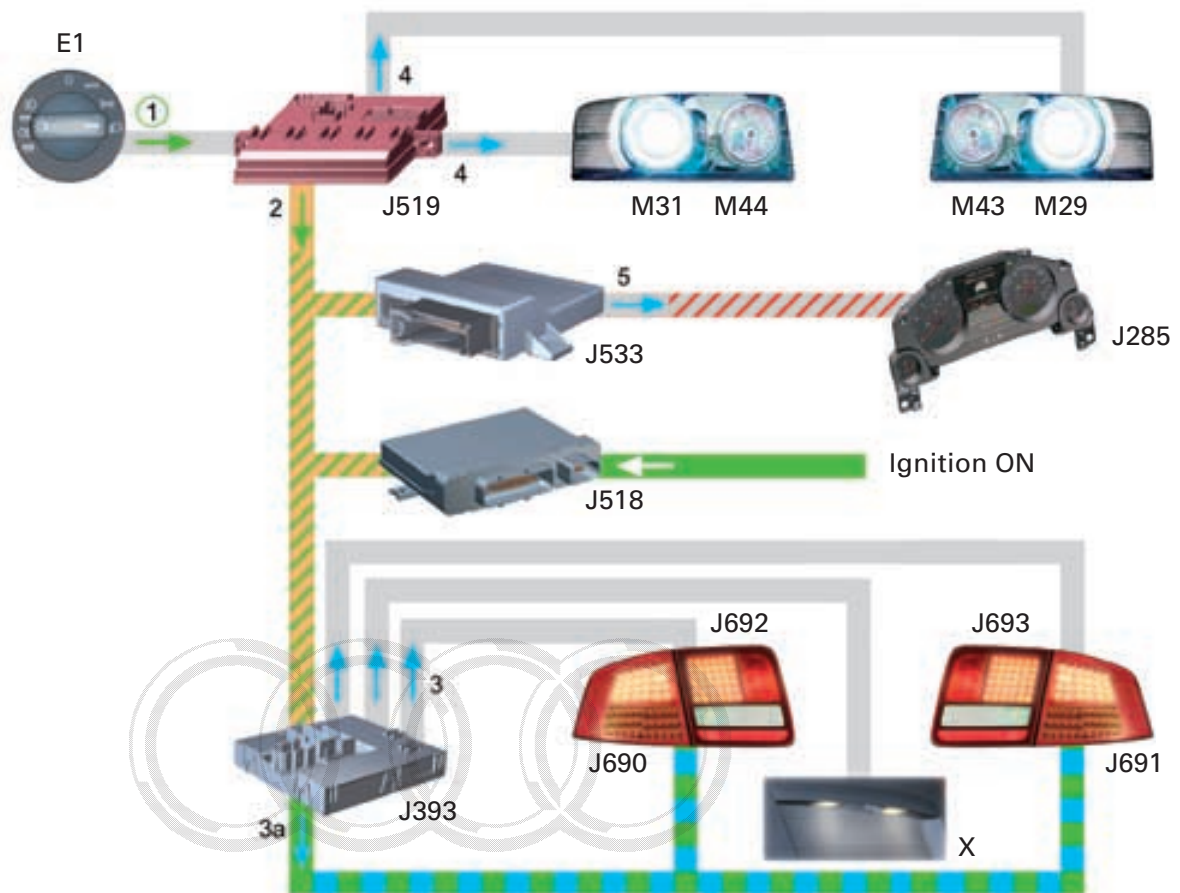
SSP288\_010

### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 connects terminal P to convenience CAN.  
Light switch E1 set to OFF position.

- 1 The driver sets the turn signal switch E2 to the left. The switch transmits a resistance-encoded signal to the steering column electronics control unit J527.
- 2 The steering column electronics control unit transmits the information "Left parking light" via the convenience CAN to the onboard power supply control unit J519.
- 3 The onboard power supply control unit transmits the information "Left parking light active" to the convenience CAN.
- 4 The convenience system central control unit J393 actuates the left tail light control unit J690 and the tail light control unit for lights on left in boot lid J692 via a discrete wire.
- 4a The information "LED lighting 10 %" is transmitted via a bidirectional wire to the tail light.
- 5 The onboard power supply control unit actuates the left parking light bulb M43.
- 6 The data bus diagnostic interface J533 passes the CAN information "Parking light" to the dash panel insert CAN. The warning buzzer in the dash panel insert sounds as soon as the driver's door contact switch passes the information "Door OPEN" via the door control unit to the dash panel insert CAN.

## Dipped beam



### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 connects terminal 15 to convenience CAN.

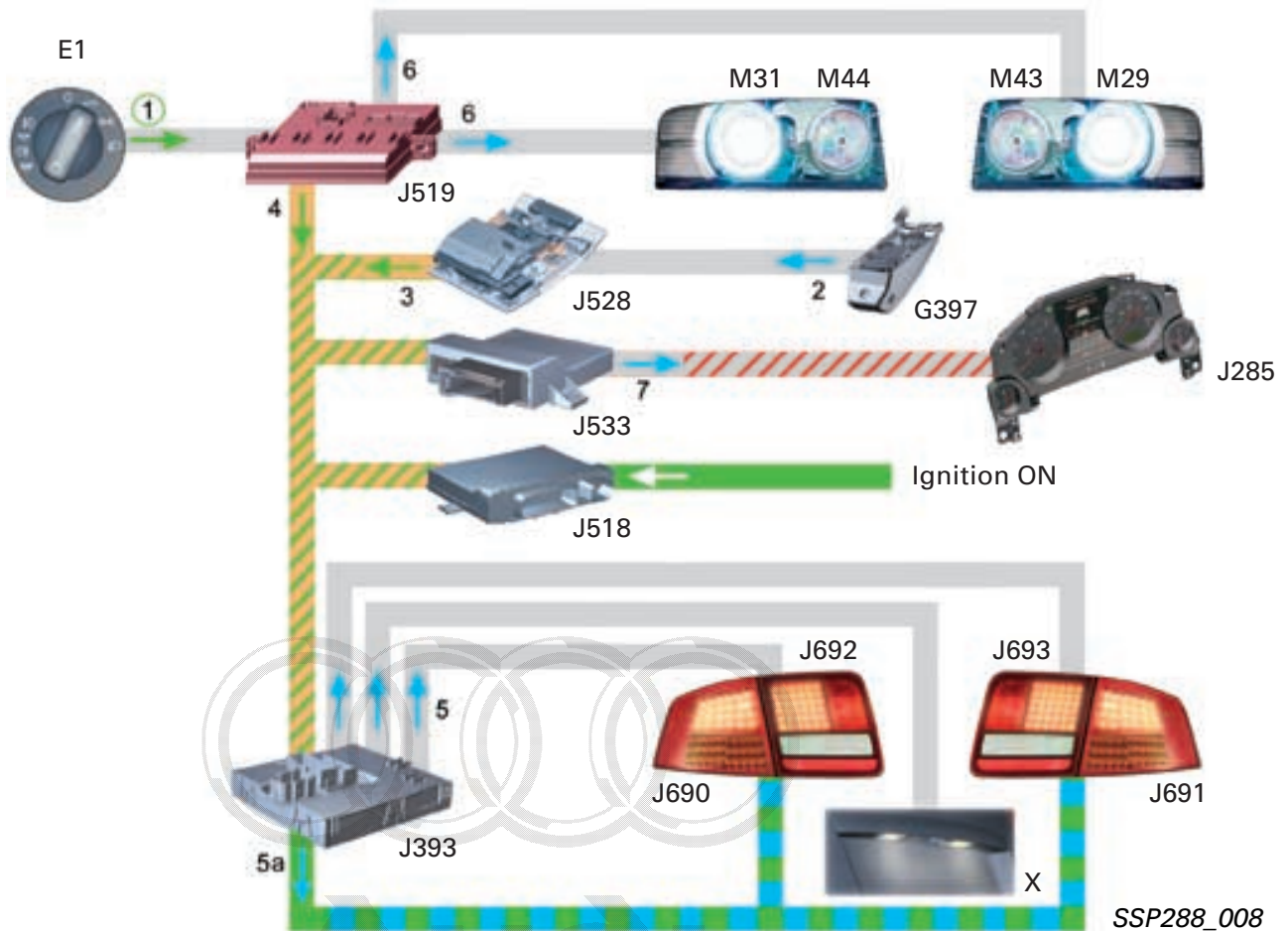
The convenience system central control unit J393 actuates the LEDs in the tail light control units J690, J691, J692 and J693 via discrete wires. The two number plate lights X are also actuated.

- 1 The driver sets the light switch E1 to "Dipped beam ON" position. The light switch transmits a voltage-encoded signal to the onboard power supply control unit J519.
- 2 The onboard power supply control unit transmits the information "Dipped beam ON" to the convenience CAN.
- 3a The information "LED lighting 10 %" is transmitted via a bidirectional wire to the tail lights.
- 4 The onboard power supply control unit actuates the left and right parking light bulbs M43, M44 and the left and right dipped beam bulbs M29, M31.
- 5 The data bus diagnostic interface J533 transmits the information via the dash panel insert CAN to the control unit with display in dash panel insert J285, where the CAN information "Term. 58s" and "Term. 58d" is generated. This information is required for switch and display illumination.



# Distributed Functions

## Dipped beam (automatic)



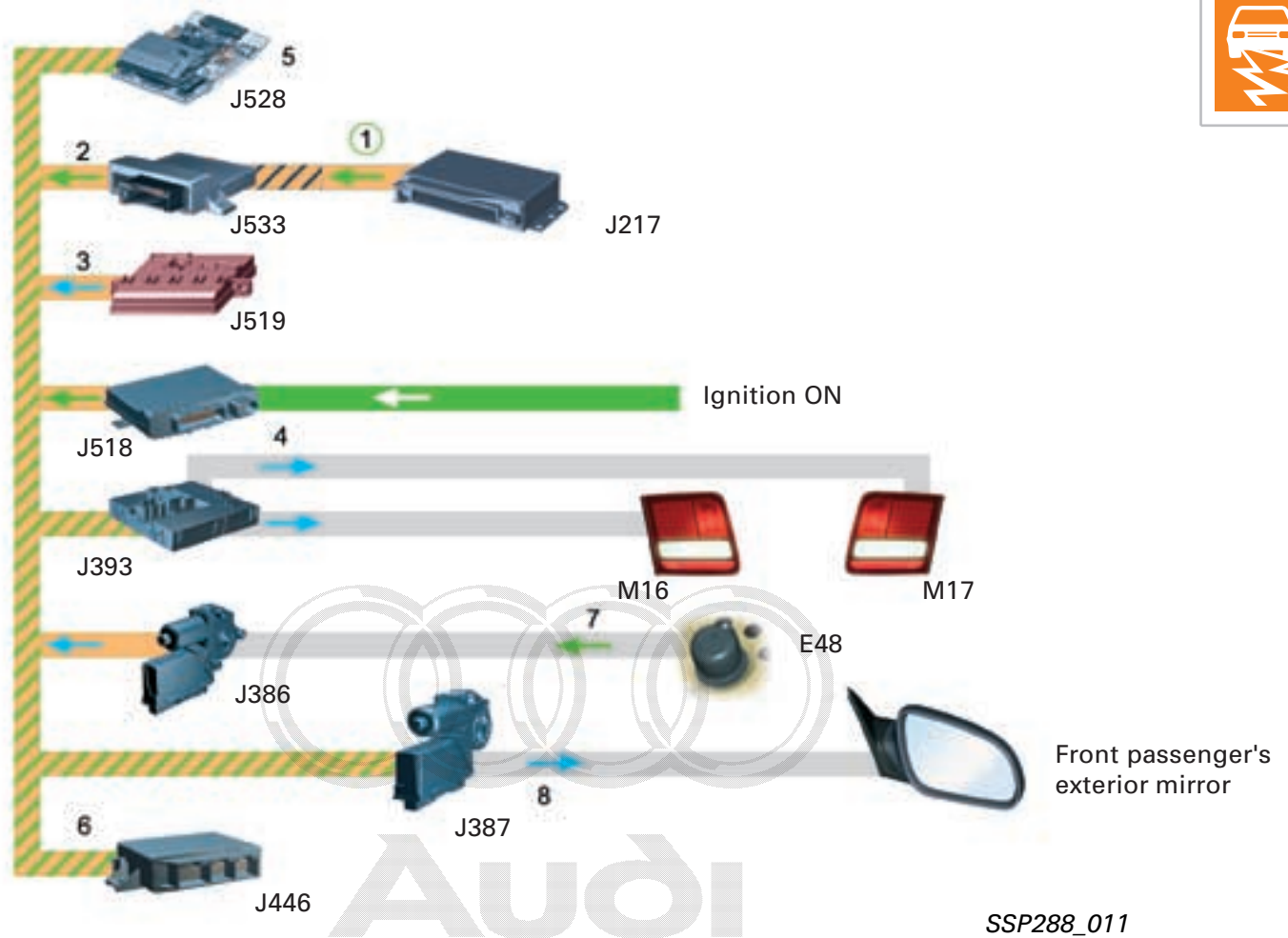
### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 connects terminals 15 and 75 to convenience CAN.

5 The convenience system central control unit J393 actuates the LEDs in the tail light control units J690, J691, J692 and J693. The two number plate lights X are also actuated.

- 1 The driver sets the light switch E1 to position AUTO – "Automatic dipped beam".
- 2 The rain and light detector sensor G397 connected to the sunroof electronics control unit J528 relays the signal "Light ON" detected to the sunroof electronics control unit.
- 3 The information "Light ON" is conveyed via the convenience CAN to the onboard power supply control unit J519.
- 4 The onboard power supply control unit transmits the information "Dipped beam ON" to the convenience CAN.
- 5a The information "LED lighting 10 %" is transmitted via a bidirectional wire.
- 6 The onboard power supply control unit actuates the left and right parking light bulbs M43, M44 and the left and right dipped beam bulbs M29, M31.
- 7 The data bus diagnostic interface J533 transmits the information via the dash panel insert CAN to the control unit with display in dash panel insert J285, where the CAN information "Term. 58s" and "Term. 58d" is generated. This information is required for switch and display illumination.

## Reversing lights



SSP288\_011

### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 connects terminal 15 to convenience CAN.

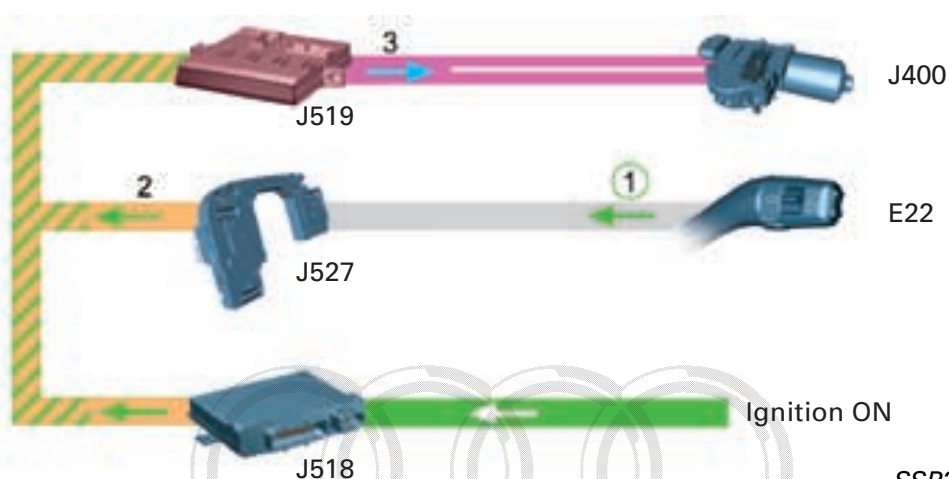
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- 1 The information "Reverse gear" is transmitted by way of a contact at the automatic gearbox control unit J217 via the drive system CAN to the data bus diagnostic interface J533.
- 2 The data bus diagnostic interface transmits the information "Reverse gear" to the convenience CAN.
- 3 The onboard power supply control unit J519 transmits the information "Reversing light switch ON" to the convenience CAN.
- 4 The convenience system central control unit J393 discretely actuates the left M16 and right M17 reversing light bulbs.
- 5 The sunroof electronics control unit J528 deactivates the automatic folding mechanism of the right interior mirror.
- 6 The parking aid control unit J446 activates the rear parking aid.
- 7 The driver side door control unit J386 transmits the information "Mirror selection right" from the mirror adjustment changeover switch E48 to the convenience CAN.
- 8 The front passenger side door control unit J387 moves the exterior mirror into low position.



# Distributed Functions

## Wiper speed 1



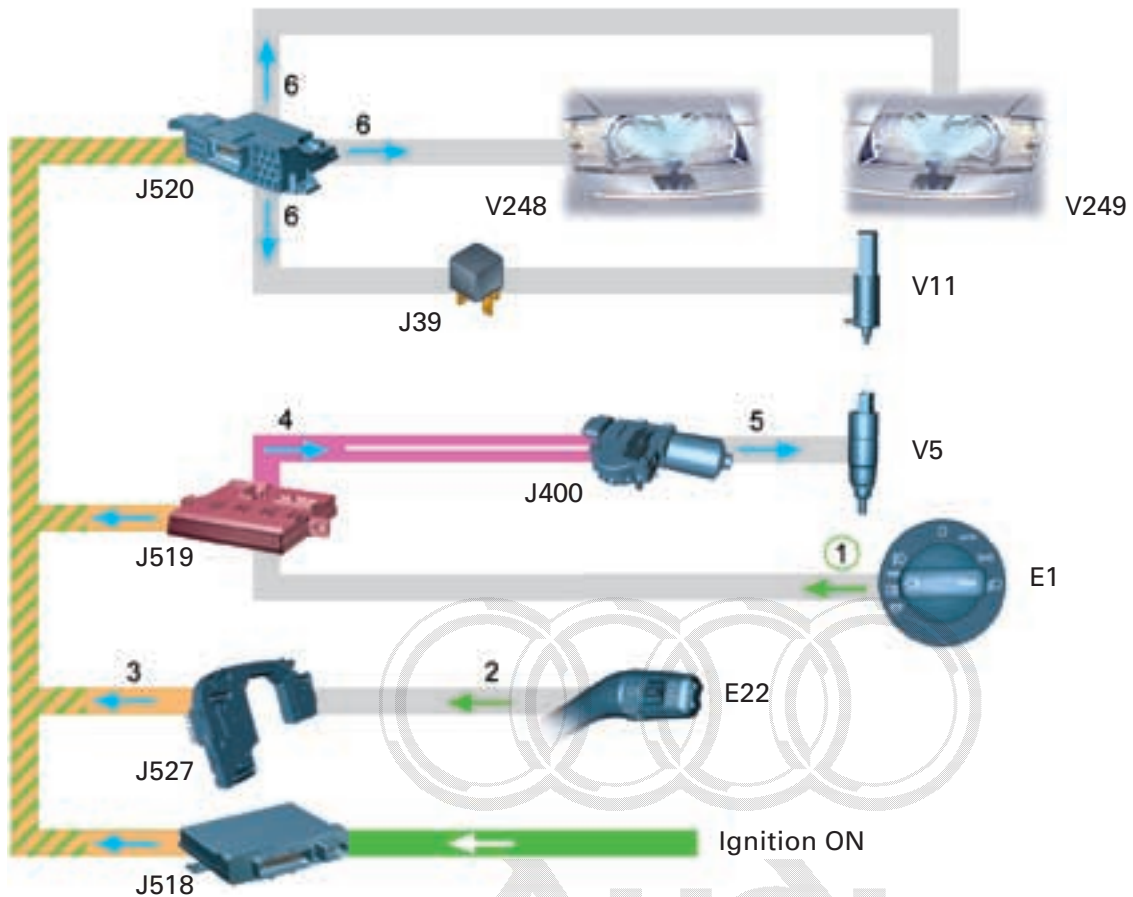
SSP288\_013

### Prerequisite

Ignition switched on by way of electric ignition/  
starter switch or Advanced Key, so that entry  
and start authorisation control unit J518  
transmits terminal 15 and 75x – information –  
to convenience CAN.

- 1 The intermittent wiper switch E22 transmits the information "Wiper speed 1" to the steering column electronics control unit J518.
- 2 The steering column electronics transmits the information "Wiper speed 1" to the onboard power supply control unit J519.
- 3 The onboard power supply control unit transmits the information "Wiper speed 1" via the LIN to the wiper motor control unit J400, which actuates the integrated motor.

## Flick wipe with headlight washing



SSP288\_009

### Prerequisite

Ignition switched on by way of electric ignition/starter switch or Advanced Key, so that entry and start authorisation control unit J518 transmits terminal 15 and 75x – information – to convenience CAN.

- 1 The driver sets the light switch E1 to dipped beam.  
The onboard power supply control unit J519 transmits the information "Dipped beam ON" via the convenience CAN to the onboard power supply control unit 2 J520.
- 2 The driver sets the intermittent wiper switch E22 to "Flick wash" position for more than one second.  
The switch outputs a voltage-encoded signal to the steering column electronics control unit J527.

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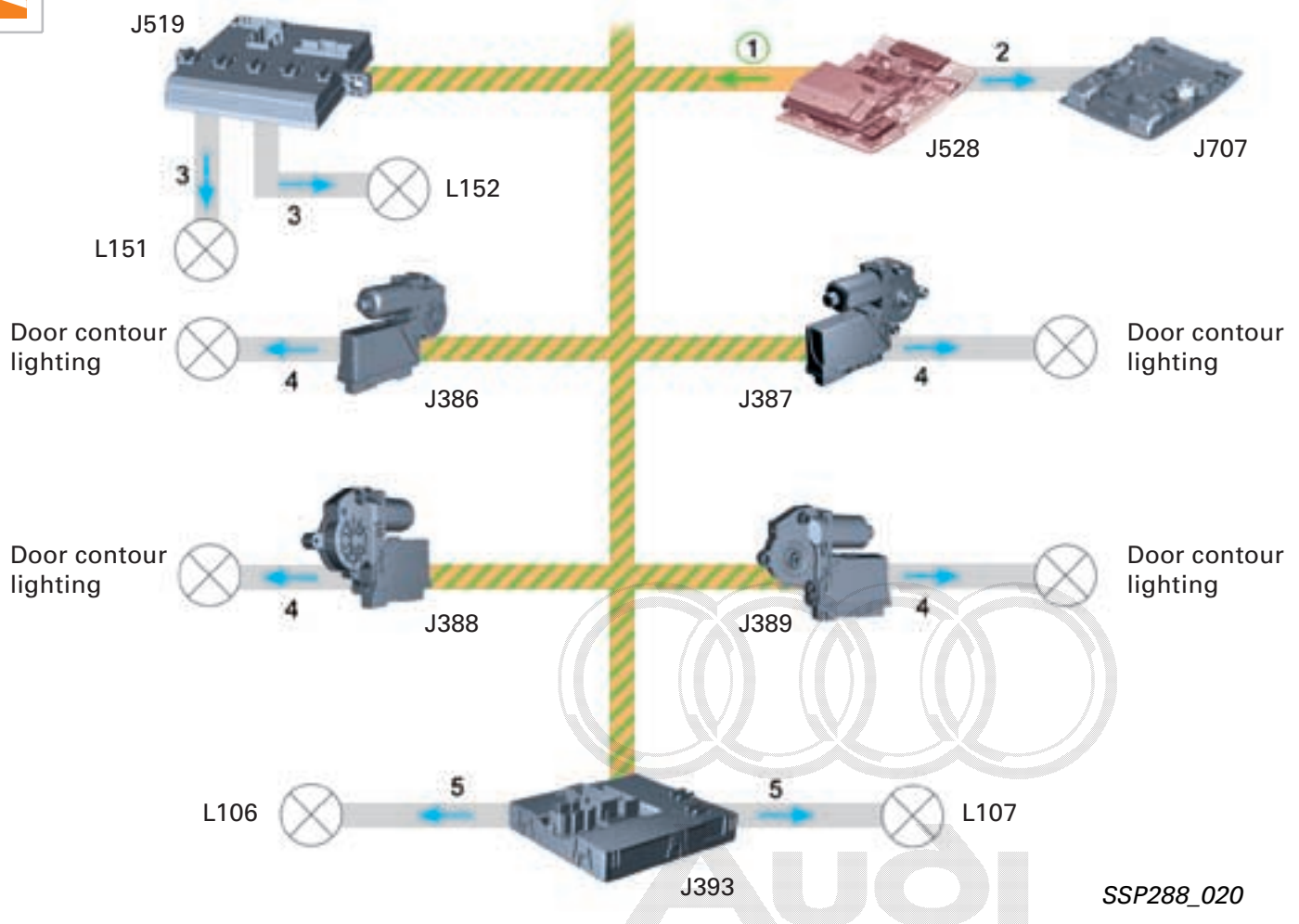
- 3 The steering column electronics control unit transmits the information "Wash windscreen" to the convenience CAN.

- 4 The onboard power supply control unit J519 transmits the information "Windscreen washer pump ON" via the LIN to the wiper motor control unit J400.
- 5 The wiper motor control unit actuates the windscreen washer pump V5.
- 6 On the basis of the information "Wash windscreen" and "Dipped beam ON", the onboard power supply control unit 2 J520 actuates the pop-up washer jet motors V248, V249 and the headlight washer system pump V11 via the headlight washer system relay J39 after a delay of one second.



# Distributed Functions

## Interior light actuation



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The distributed functions relating to interior light actuation are highly complex.

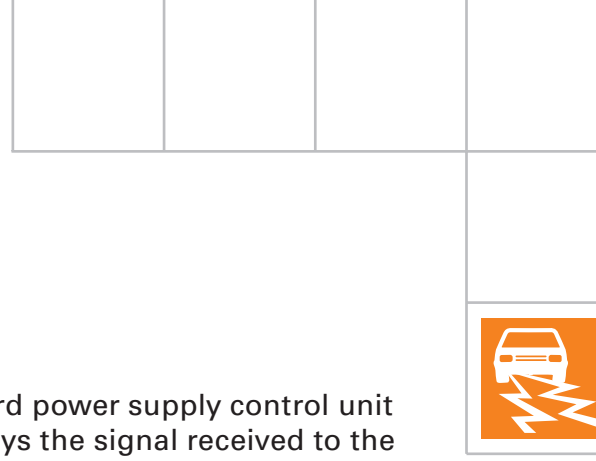
The functions are therefore split up here into three categories.

Basic functions:

- Manual interior light control (at corresponding light)
- Central brightening/dimming on opening/closing doors
- Lighting profiles by way of "ambiente" lighting

Each basic function also contains certain special functions.





- 1 The driver presses the lighting profile button on the sunroof electronics control unit J528.  
The signal is transmitted on the convenience CAN in line with the lighting profile preset in the MMI and the activated key.  
After selection, the lighting profile is stored for each key recognised in the sunroof electronics control unit J528.
- 2 If necessary (depending on lighting profile), the sunroof electronics control unit relays the signal to the rear roof console, thus switching the rear roof console to standby mode.  
The rear interior light is not switched in until the rear door contact switches are actuated.  
All interior lights activated remain on until all door contacts signal "Doors closed" again.
- 3 The onboard power supply control unit J519 conveys the signal received to the front left L151 and front right L152 footwell illumination, which is then switched on.
- 4 The door control units J386 to J389 actuate the appropriate door contour lights in the selected lighting profile.
- 5 The convenience system central control unit J393 actuates the rear left L106 and rear right L107 footwell illumination.

### a) Manual interior light control

Interior light control is always performed in the sunroof electronics control unit.

The operating elements are located at the front in the sunroof electronics control unit J528 and at the rear in the roof console.

The functions of the two operating units are separate.

If the interior lighting is switched on manually with terminal 15 OFF, all interior lights and the make-up lights are switched off following last button actuation.



Special function: Brightness adjustment

Keeping the ON button at the interior light pressed for a lengthy period causes the corresponding interior light to be dimmed and brightened again until the button is released.

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Briefly releasing the button only interrupts adjustment. After releasing the button, the corresponding brightness value is stored.

Special function: Control of rear lighting from front

The rear lighting is controlled by touching a front button twice.

In other words:

Front 1 x ON = Front lighting on

Front 2 x ON = Front and rear lighting on

# Distributed Functions

Special function: Transfer of brightness value to rear

Once the front brightness value has been set by keeping the button pressed once, the same brightness value can be transferred to the rear by pressing the button again.

If this value is not acceptable to the rear passenger, the value stored in the sunroof electronics control unit at the front can be restored by renewed pressing of the ON button at the rear roof console.



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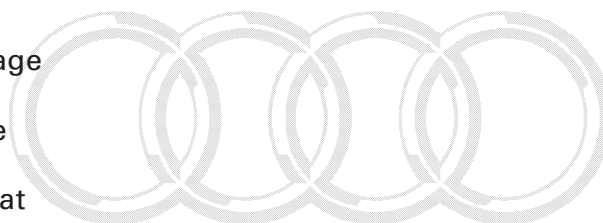
Special function: Childproof lock

If the childproof lock has been activated for both rear doors via the buttons in the driver's door, neither the interior lighting nor the rear and side roller blinds can be operated from the roof console.

The rear roller blind can be operated from the front. It is however possible to activate the rear reading lights.

Sequence of operations:

The door control unit passes the message "Activate childproof lock" to the convenience CAN. This is read in by the sunroof electronics control unit J528. The control unit then blocks operation at the rear.



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**b) Central brightness adjustment:  
Brightening and dimming on opening/  
closing doors**

On setting central locking to OPEN  
(remote control key or keyless entry)

The entire interior lighting

- Interior light
- Door contour lighting (optional)
- Footwell lighting

is brightened within 1.5 seconds to 100 %.

Special function:

If the vehicle automatically re-locks,  
dimming takes place at the same time.  
If a door is opened, dimming takes place  
after 10 minutes. After closing the door,  
dimming is implemented after 2 minutes if  
the ignition is not switched on.

On activating terminal 15, the interior lights  
are dimmed immediately. If a rear door is  
opened with terminal 15 active, the rear  
interior light only is in operation when the  
LED in the rear door contact button lights.

If a front door is opened with terminal 15  
active, the front interior light only is in  
operation when the LED in the front door  
contact button lights.

If both a front and a rear door are opened  
with terminal 15 active, the front and rear  
interior lights come on when the LED in the  
corresponding door contact button lights.

**Dimming however only takes place again  
when all doors have been locked.**

Special function: Dimming

If a brightness value has been set for the  
corresponding light, it will be dimmed to  
this value after closing the doors.

If no door is opened, the interior lights are  
dimmed again and switched off after  
2 minutes.



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# Distributed Functions



## c) Lighting profiles by way of "ambiente" lighting

The lighting profile functions are stored in the sunroof electronics control unit. The lighting profiles are selected via the MMI in the CAR menu under "Ambiente" lighting.

Following selection and confirmation via the rotary/pushbutton control, the lighting profile is displayed and the brightness value can be adjusted.

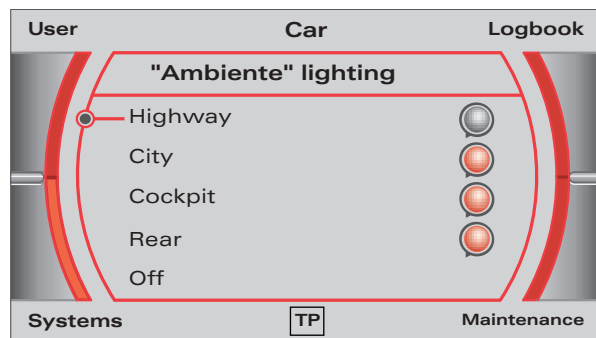
This value is stored in the sunroof electronics control unit on exit from the menu.

Special function: Lighting profile button

Whilst driving, the selected lighting profile can only be activated and deactivated by the driver via the lighting profile button.

As a general rule, the lighting profiles are only active with terminal 15 ON. Switching off the ignition causes the interior lights to be dimmed and switched off. If the lighting profile has been deliberately activated via the light button with terminal 15 ON, it remains active even with terminal 15 OFF and is only deactivated 30 minutes after leaving the vehicle.

Locking the vehicle results in immediate deactivation.



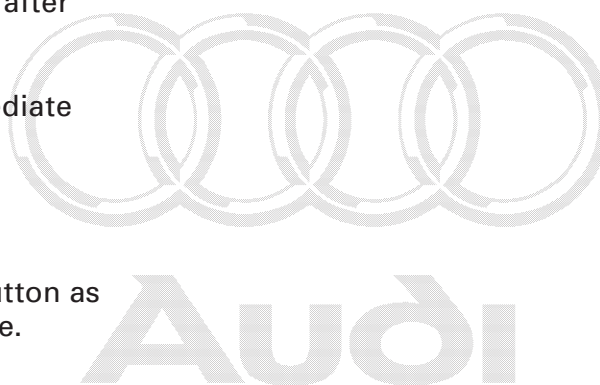
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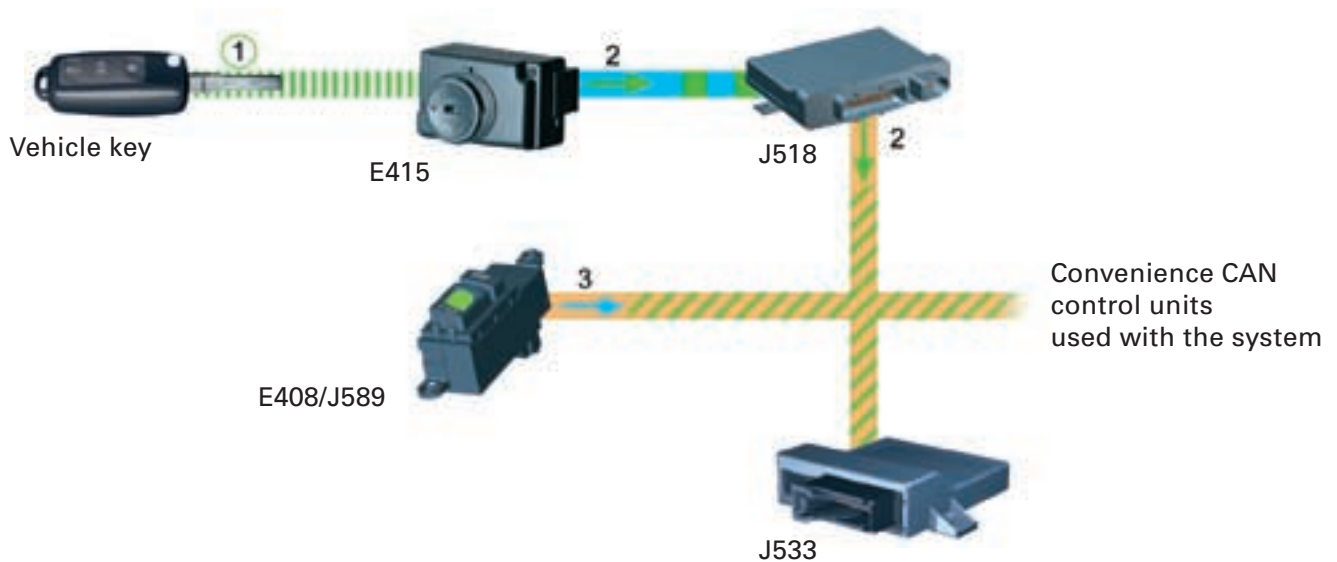
Operation via the interior light button as described under a) is still possible.



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## Driver identification



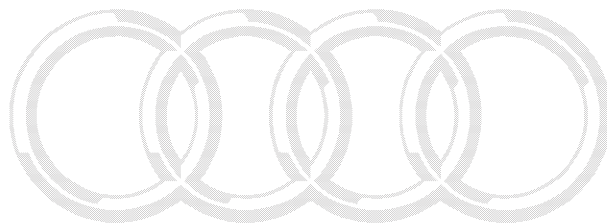
- 1 The vehicle key is to be inserted in the ignition/starter switch. The entry and start authorisation switch E415 is actuated.
- 2 The S-contact terminal signal is then transmitted to the entry and start authorisation control unit J518, which passes this information to the convenience CAN.

- 3 The "S-contact terminal" signal is applied to the driver identification control unit J589.

If a stored finger is then placed on the entry and start authorisation button E408, the driver identification control unit transmits the user ID to the convenience CAN. The control units involved with the memory system recognise the user ID and set the stored values.

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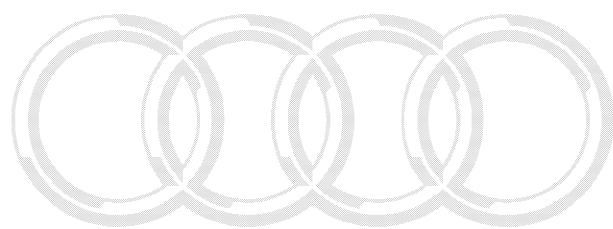




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