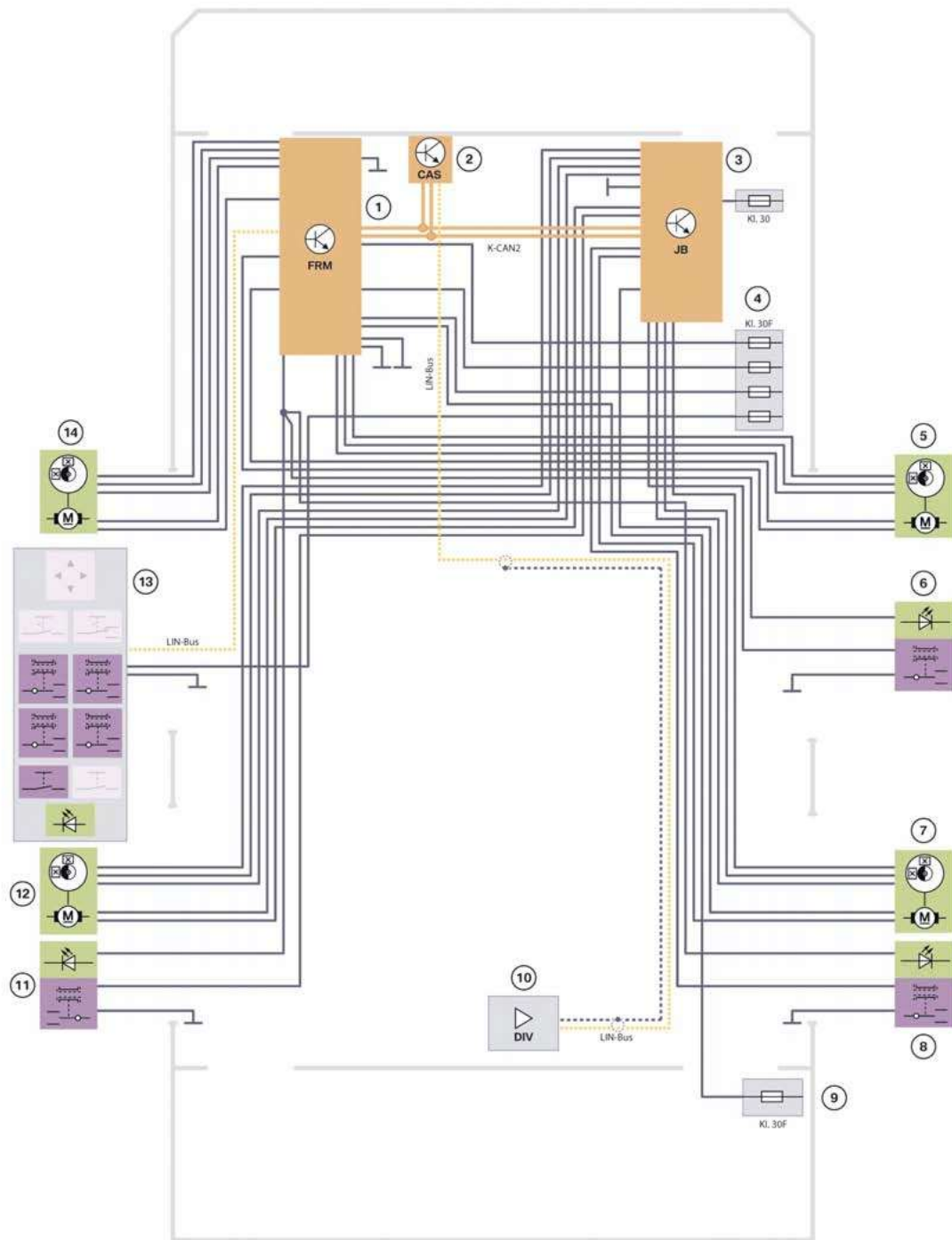


F10 General Vehicle Electronics

7. Power Windows

7.1. System wiring diagram



F10 System wiring diagram for power windows

TE09-2341

F10 General Vehicle Electronics

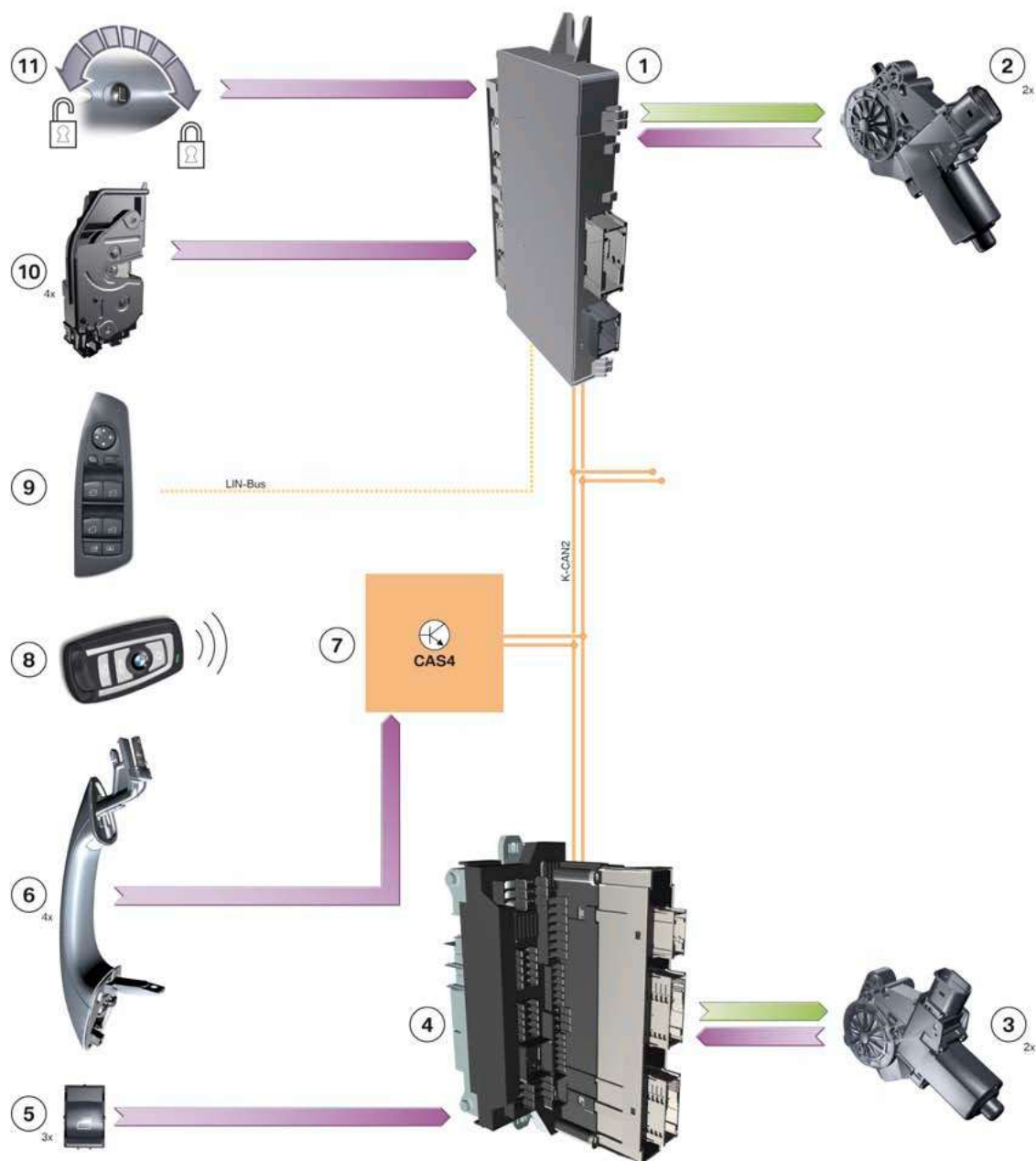
7. Power Windows

Index	Explanation
1	Footwell module (FRM)
2	Car Access System (CAS)
3	Junction Box (JB)
4	Front distribution box
5	Power window motor with front right indirect anti-trap mechanism
6	Power window switch, passenger side front
7	Power window motor with indirect anti-trap mechanism, rear right
8	Power window switch, passenger side rear
9	Luggage compartment junction box
10	Aerial diversity module with antenna amplifier
11	Power window switch, driver's side rear
12	Power window motor with indirect anti-trap mechanism, rear left
13	Switch block in the driver's door
14	Power window regulator with front left indirect anti-trap mechanism
K-CAN2	Body controller area network 2
LIN-Bus	Local Interconnect Network bus
Kl. 30	Terminal 30
Term. 30F	Terminal 30 incorrectly switched

F10 General Vehicle Electronics

7. Power Windows

7.2. Input/output Signals



F10 Power window input/output

Index	Explanation
1	Footwell module (FRM)
2	Power window motor, front doors
3	Power window motor, rear doors
4	Junction box electronics (JBE)

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7. Power Windows

Index	Explanation
5	Power window switch, driver's side rear/passenger side front and rear
6	Outer door handle with Comfort Access (CA)
7	Car Access System (CAS)
8	ID transmitter
9	Switch block in the driver's door
10	Lock with door contact
11	Driver's-door lock barrel
K-CAN.	Body controller area network
LIN-Bus	Local Interconnect Network bus

7.3. Examples of signal paths

The following signal path examples show the paths the signal takes before the power window motors open or close the windows. A requirement is that the Car Access System has issued the enable to operate the power windows.

7.3.1. Driver's door switch cluster

When the power window switch for the driver's window or front passenger's window is operated, the signal is routed via the LIN-Bus to the footwell module. The footwell module activates the corresponding power window motor.

The signal is routed from the driver's door switch cluster via the LIN-Bus to the footwell module when the power window switches for the windows in the rear doors are operated. The footwell module sends the signal via the K-CAN2 to the junction box electronics. The junction box electronics receive the signal and activate the corresponding power window motor.

F10 General Vehicle Electronics

7. Power Windows



F10 Driver's door switch cluster

Index	Explanation
1	Button for exterior mirror adjustment
2	Mirror folding button
3	Mirror changeover switch
4	Power window regulator switch, front left
5	Power window regulator switch, front right
6	Power window regulator switch, rear left
7	Power window regulator switch, rear right
8	Safety switch

7.3.2. Power window switch, front passenger's door

The signal is routed to the junction box electronics when the power window switch in the front passenger's door is operated.

The junction box electronics sends the signal to the footwell module on the K-CAN2. The footwell module activates the power window motor.

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7. Power Windows

7.3.3. Power window switch, rear doors

When the power window switches in the rear doors are operated, the signal is routed to the junction box electronics. The junction box electronics drives the power window motor.