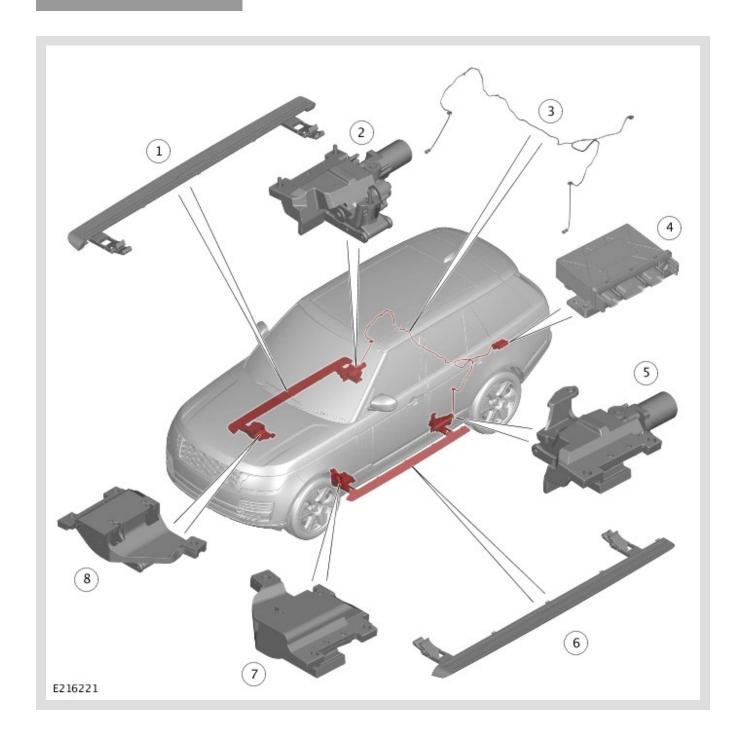
PUBLISHED: 10-NOV-2017 2018.0 RANGE ROVER (LG), 501-08

## **EXTERIOR TRIM AND ORNAMENTATION**

# DEPLOYABLE SIDE STEPS (G2187997)

## COMPONENT LOCATION



ITEM	DESCRIPTION
1	Right deployable side step board
2	Rear right bracket and motor assembly
3	Deployable side step Control Module (DSCM)

ITEM	DESCRIPTION
4	Deployable side step wiring harness
5	Rear left bracket and motor assembly
6	Left deployable side step board
7	Front left bracket
8	Front right bracket

### OVERVIEW



### NOTE:

The deployable side step is available as a dealer fit accessory only.

The deployable side step provides easy access to the vehicle for the passengers. Besides this it can provide a raised platform for the easier roof access. Operation of the deployable side step is controlled by the Deployable side step Control Module (DSCM).

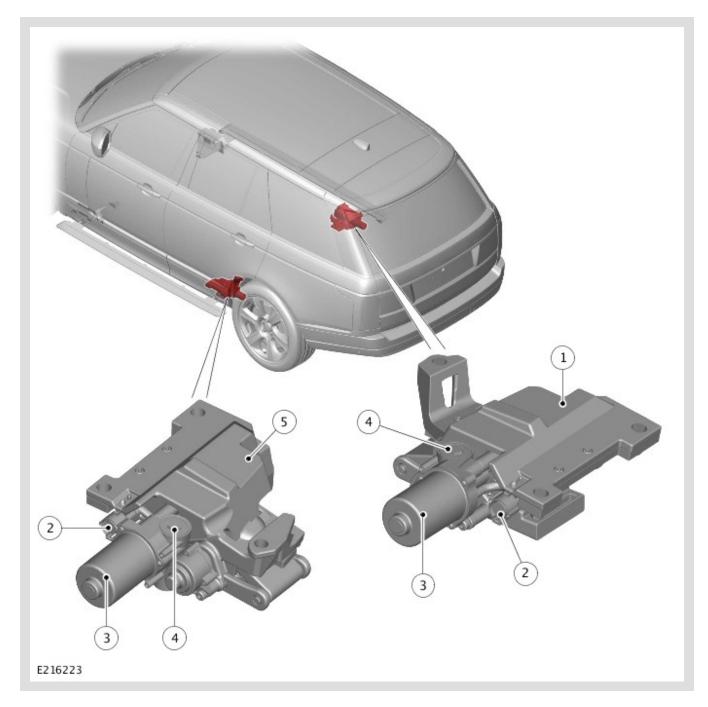
If the vehicles is equipped with a deployable towbar, operation of the deployable side step is controlled by the Deployable Towbar Control Module (DTCM).

## DESCRIPTION

#### **DEPLOYABLE SIDE STEP BOARD**

Each deployable side step board is a powder coated, aluminum extrusion. Each deployable side step board have a plastic lower cover and a rubber upper cover. Each deployable side step board is attached to the vehicle body with 2 brackets. The front brackets are secured to the vehicle body with 5 bolts. The rear brackets are secured to the vehicle body with 3 bolts. The bracket mechanism allows that the deployable side steps can be deployed from below the side sills when required. The rear bracket on each side comprises the deployable side step motor.

## DEPLOYABLE SIDE STEP MOTOR



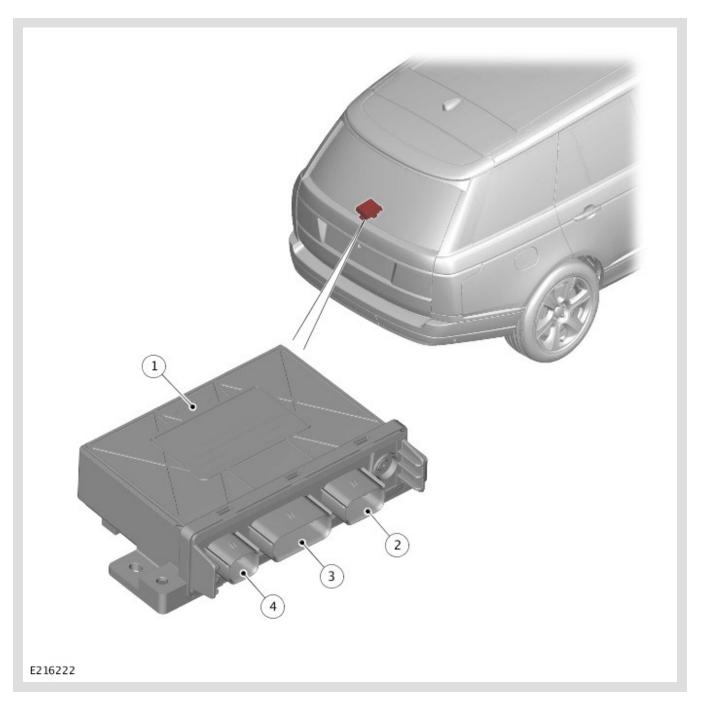
ITEM	DESCRIPTION
1	Right deployable side step motor and bracket
2	Electrical connector - Deployable side step wiring harness
3	Deployable side step motor
4	Reduction gear
5	Left deployable side step motor and bracket

The rear bracket comprises the deployable side step motor on each side of the vehicle. The deployable side step motor is attached to the rear bracket with 3 bolts. The motor is a Direct Current (DC) motor, which comprises a worm drive gear to convert the motor torque and speed to the appropriate level.

The Deployable side step Control Module (DSCM) provides the power supply to operate the motors. The DSCM reverses the polarity of the motor power and ground connections to deploy or stow the deployable side steps.

Each deployable side step motor incorporates a Hall effect sensor, which allows the DSCM to determine the position of the deployable side step.

#### **DEPLOYABLE SIDE STEP CONTROL MODULE**



ITEM	DESCRIPTION
1	Deployable side step Control Module (DSCM)

ITEM	DESCRIPTION
2	Electrical connector - Deployable side step motors
3	Electrical connector - Deployable towbar - If equipped
4	Electrical connector - Vehicle wiring harness

The Deployable side step Control Module (DSCM) is located on the left side of the luggage compartment behind the side trim panel. The DSCM is attached to a bracket with 2 nuts. The bracket is attached to the rear left side member with 2 nuts.

The DSCM has a fused power supply from the Rear Junction Box (RJB). Power supply for the motors are provided by the DSCM. The DSCM is connected to the High Speed (HS) Controller Area Network (CAN) body systems bus. This connection provides the communication with the Body Control Module/Gateway Module (BCM/GWM).

The DCSM has the following hardwired connections with both deployable side step motors:

- Power supply for motor operation.
- Power supply for sensor operation.
- Ground for the sensor.
- Signal feedback from sensor.

If the vehicles is equipped with a deployable towbar, operation of the deployable side step is controlled by the Deployable Towbar Control Module (DTCM).

## **OPERATION**

#### DEPLOYABLE SIDE STEP ACTIVATION/DEACTIVATION

To enable or disable the operation of the Deployable Side Steps, the feature must be activated or deactivated in the 'Extra Features' menu. The 'Extra Features' menu can be achieved using the Interactive Display Module (IDM).

When the operation is enabled, the side steps automatically deploys if any of the doors are opened on the appropriate side. If doors on both sides are opened, both side steps deploy. The IDM sends a message to the Body Control Module/Gateway Module (BCM/GWM) on the High Speed (HS) Controller Area Network (CAN) comfort systems bus. The BCM/GWM transmits the message to the Deployable side step Control Module (DSCM) via the HS CAN body systems bus to activate the feature.

#### **DEPLOYABLE SIDE STEP OPERATION**

When the deployable side step is activated it is automatically deploys if any of the doors are opened on the appropriate side. If doors on both sides are opened, both side steps deploy. When the door is opened the ajar switch in the door latch provides a ground signal to the Body Control Module/Gateway Module (BCM/GWM). The BCM/GWM

sends a message to the Deployable side step Control Module (DSCM) on the High Speed (HS) Controller Area Network (CAN) body systems bus. The DSCM then supplies power for the deployable side step motors to deploy the side step boards.

If the door is closed, a request message from the BCM/GWM is sent to the DSCM on the HS CAN body systems bus. The DSCM controls the operation of the deployable side step motors with a 5 second delay to stow the side step boards below the side sills.

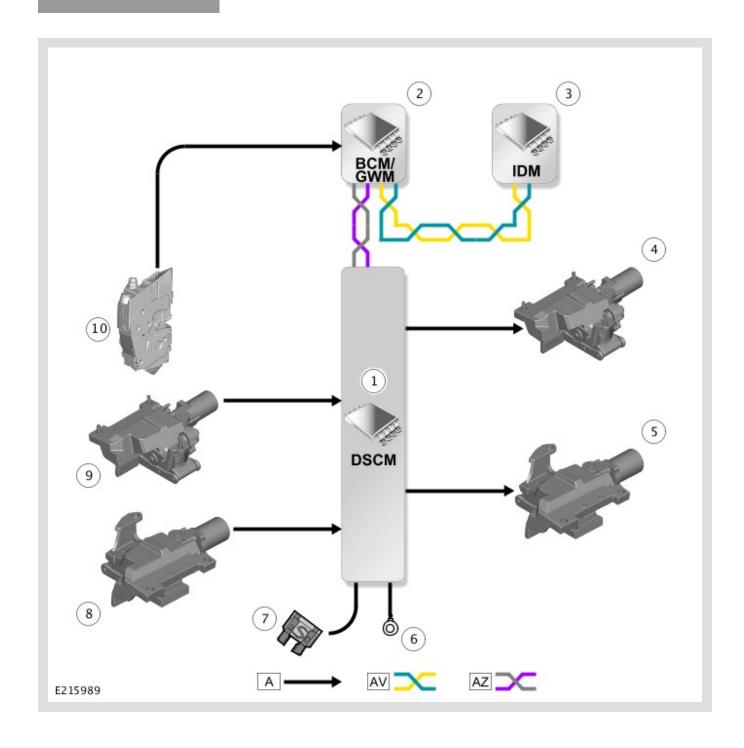
The deployable side steps are stowed immediately, when a transmission drive gear is selected.

#### **ROOF ACCESS**

To enable the roof access feature, the 'Roof access' must be selected in the 'Extra Features' menu on the Interactive Display Module (IDM). If the roof access feature is enabled the side steps are deploys immediately.

The side steps remain deployed until one of the following occurs:

- The feature is deactivated in the menu on the IDM.
- The vehicle speed exceeds 5 km/h (3 mph).
- The vehicle doors are locked.



 $A = \mathsf{HARDWIRED} \text{: AV} = \mathsf{HIGH} \text{ SPEED (HS) CONTROLLER AREA NETWORK (CAN) COMFORT SYSTEMS BUS: AZ = \mathsf{HIGH} \text{ SPEED (HS) CONTROLLER AREA NETWORK (CAN) BODY SYSTEMS BUS.}$ 

ITEM	DESCRIPTION
1	Deployable side step Control Module (DSCM)
2	Body Control Module/Gateway Module (BCM/GWM)
3	Interactive Display Module (IDM)
4	Right deployable side step motor

ITEM	DESCRIPTION
5	Left deployable side step motor
6	Ground
7	Power supply
8	Sensor input - Left deployable side step motor
9	Sensor input - Right deployable side step motor
10	Door ajar switch (4 off)