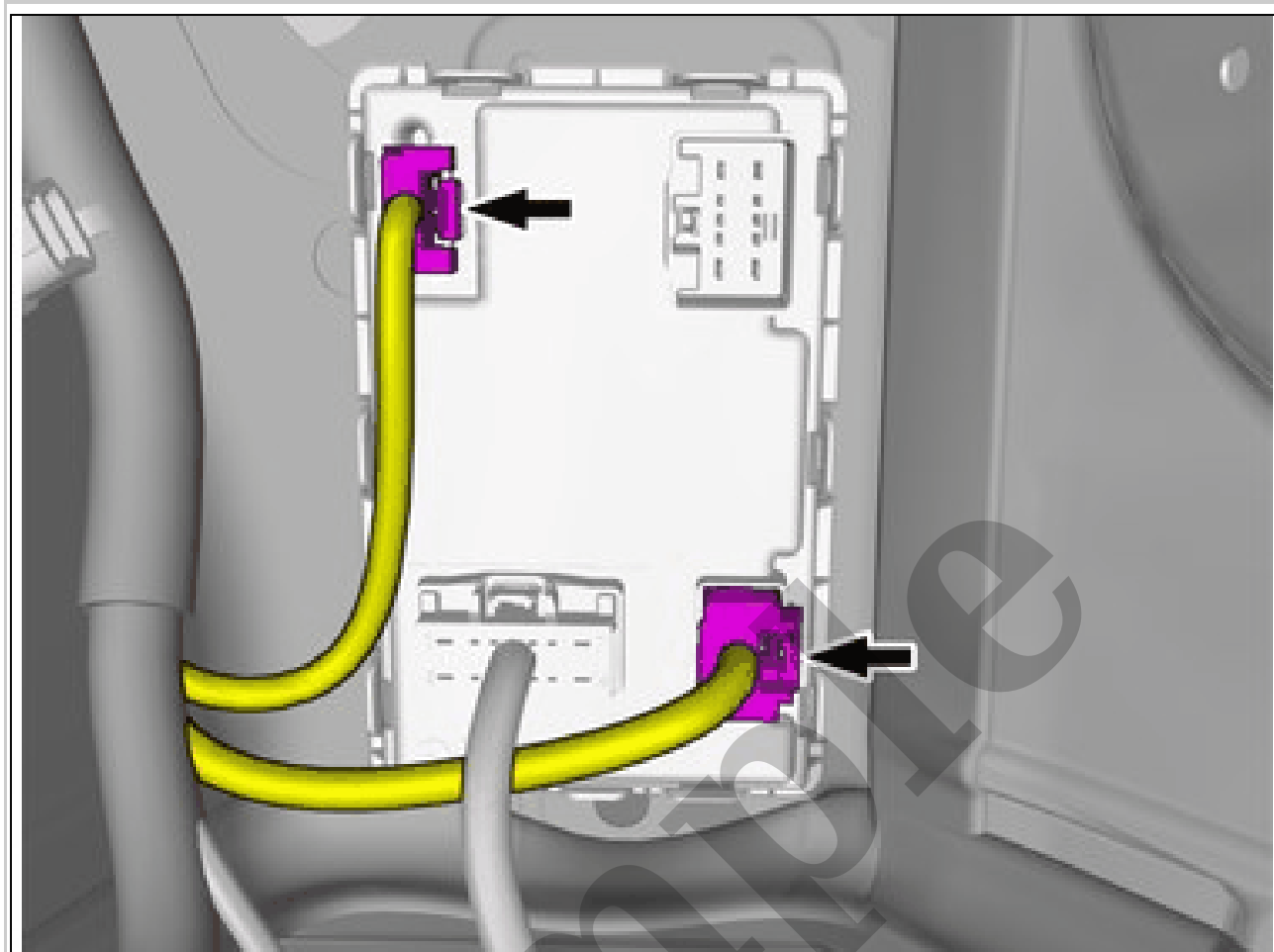


# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

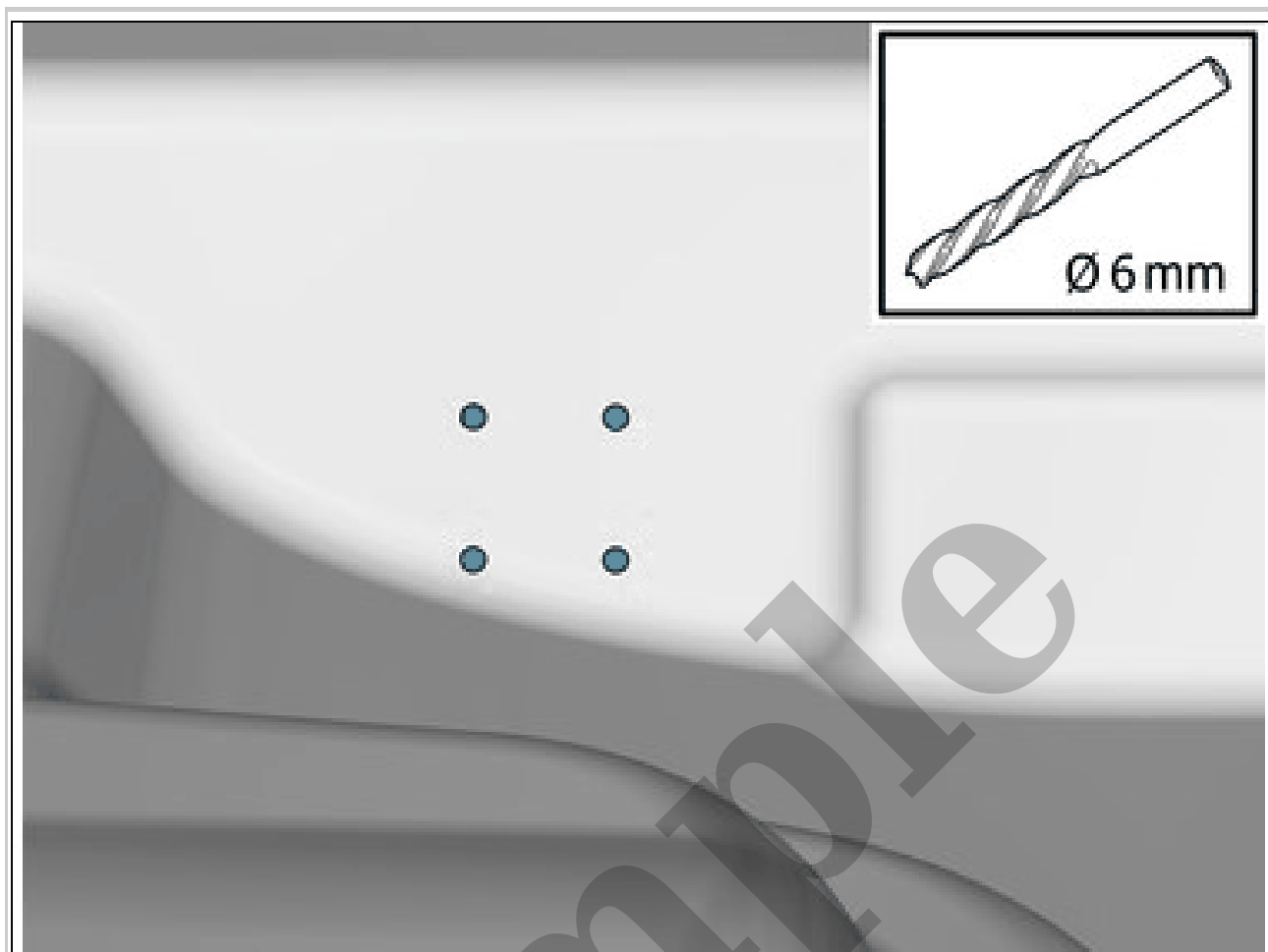
## 2005 VOLVO C70 Convertible OEM Service and Repair Workshop Manual

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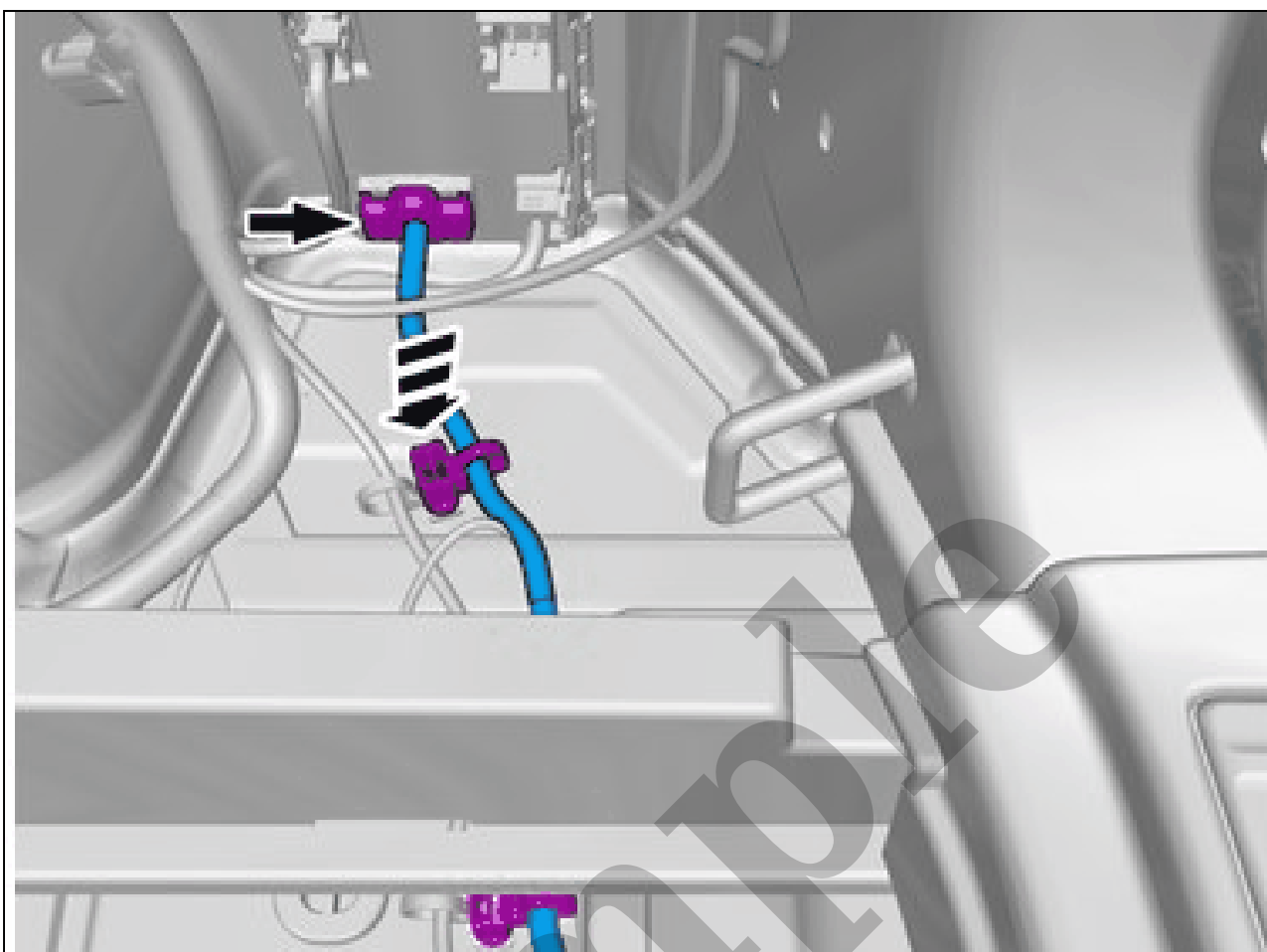
Courtesy of VOLVO CARS CORPORATION

Locate the pre-routed connectors.  
Connect the connectors.



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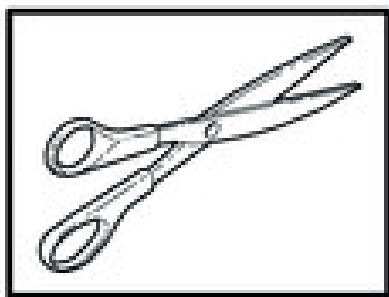
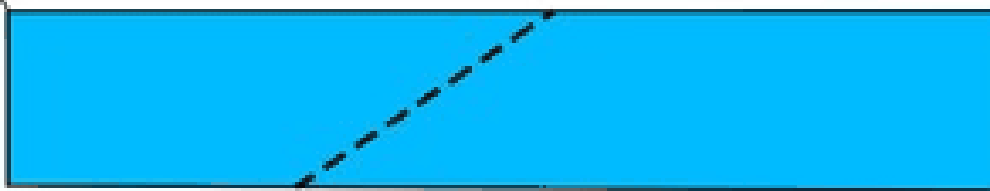
Make a hole, using the tool indicated.



Courtesy of VOLVO CARS CORPORATION

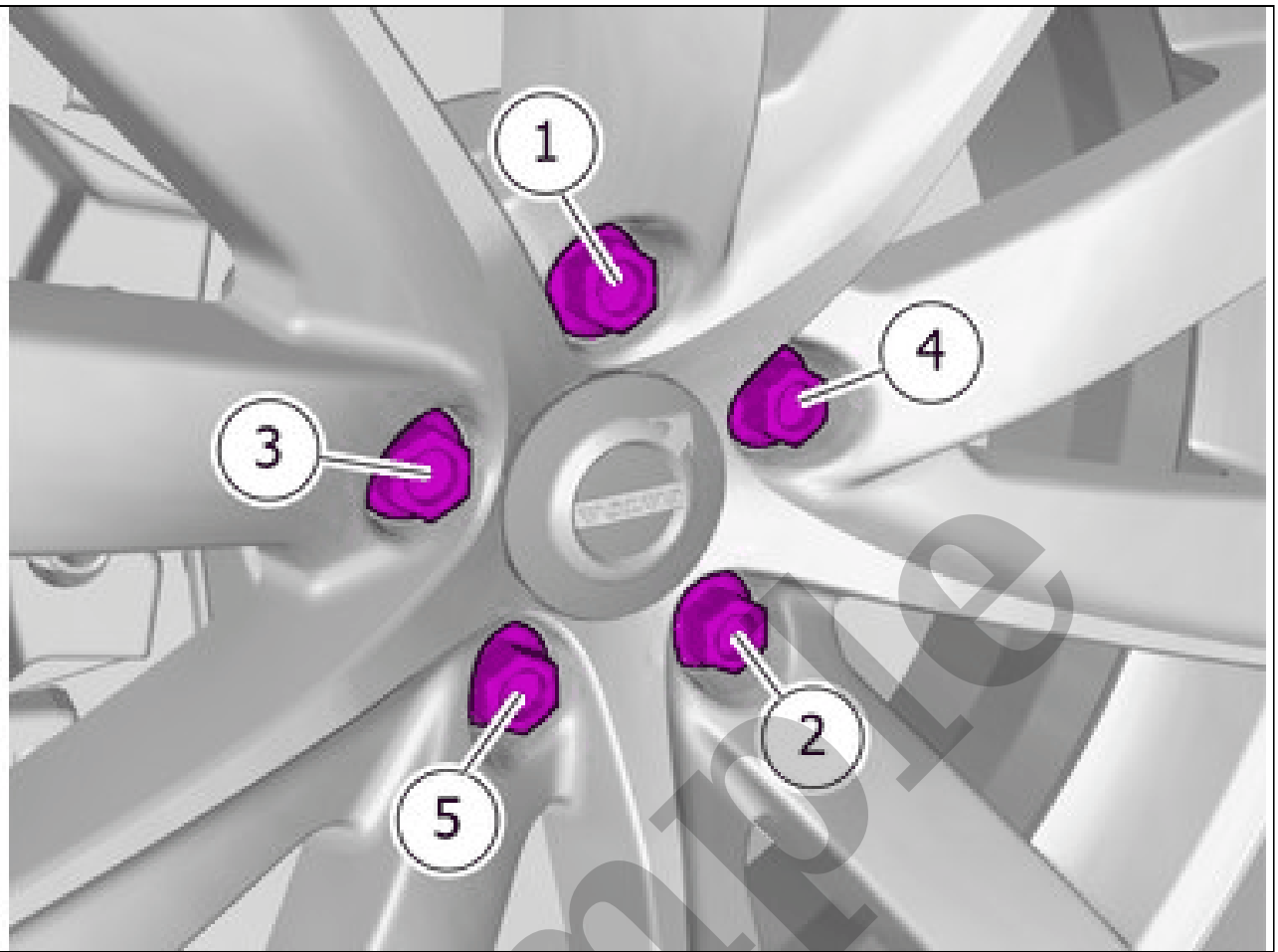
Fasten the wiring harness using the existing clips.  
Connect the connector.

R



Courtesy of VOLVO CARS CORPORATION

Cut following the dotted lines.



Courtesy of VOLVO CARS CORPORATION

**Torque:** Aluminum wheel rim to wheel hub

- Stage 1: 4Nm
- Stage 2: 50Nm
- Stage 3: 140Nm

**CONNECTING THE BATTERY**

## **ARMREST ILLUMINATION > ARMREST ILLUMINATION (10/270 - 10/271, 10/276 - 10/277) [2018-2022] > DESCRIPTION**

The armrest illumination illuminates the armrest.

## **ARMREST ILLUMINATION > ARMREST ILLUMINATION (10/270 - 10/271, 10/276 - 10/277) [2018-2022] > DIAGNOSTIC INFORMATION**

The armrest illumination does not have a built-in diagnostic system. The Central Electronic Module (CEM) monitors the LEDs and sets DTCs.

## **ARMREST ILLUMINATION > ARMREST ILLUMINATION (10/270 - 10/271, 10/276 - 10/277) [2018-2022] > CONNECTION AND COMMUNICATION**

The armrest illumination is directly connected to the Central Electronic Module (CEM).

## **DECOR ILLUMINATION, TRUNK > DECOR ILLUMINATION, TRUNK (10/352) [2018-2022] > DESCRIPTION**

The decor illumination, trunk, illuminates the rear decor.

## **DECOR ILLUMINATION, TRUNK > DECOR ILLUMINATION, TRUNK (10/352) [2018-2022] > DIAGNOSTIC INFORMATION**

The decor illumination, trunk, does not have a built-in-diagnostic system. The Central Electronic Module (CEM) monitors the relay and sets DTCs.

## **DECOR ILLUMINATION, TRUNK > DECOR ILLUMINATION, TRUNK (10/352) [2018-2022] > CONNECTION AND COMMUNICATION**

The decor illumination, trunk, is connected to a relay that is directly connected to the Central Electronic Module (CEM).

## **DOOR PANEL ILLUMINATION > DOOR PANEL ILLUMINATION (10/324 - 10/327) [2018-2022] > DESCRIPTION**

The door panel illumination is a light guide located under the door decor panel. It consists of one LED and a light guide. Light flows below the decor panel towards the door insert. For 90-models the door panel light guide also lights up inside the inner door opener cup.

## **DOOR PANEL ILLUMINATION > DOOR PANEL ILLUMINATION (10/324 - 10/327) [2018-2022] > DIAGNOSTIC INFORMATION**

The door panel illumination does not have a built-in diagnostic system. The Driver Door Module (DDM) or the Passenger Door Module (PDM) monitors the door panel illumination, sets DTCs and stores

Headlamp IR HIR	
Headlamp Control Module Left (HCML) Headlamp Control Module Right (HCMR)	90-models (2017w46 -) 60-models 40-models Polestar 2
Halogen light	Option
Pixel light	Polestar 2 (option)
Reflector LED light	Polestar 2

In the full LED option, all lights are LEDs. This headlight unit has the following replaceable components:

- 90-models (- 2017w46):
  - Adaptive headlamp module AHM, left and adaptive headlamp module AHM, right: LIN nodes that control the motors for automatic headlight levelling and active bending lights ABL.
  - Front full LED module FMM, left and front full LED headlight module FFM, right: LIN nodes that controls the low and high beams.
  - Headlamp IR HIR, left and headlamp IR HIR, right: LIN nodes that control the turn signal lights and hazard warning flashers, position lights, and daytime running lights DRL.
  - A LED matrix with a cooling flange for the turn signal lights and hazard warning flashers, position lights, and daytime running lights DRL.
- 90-models (2017w46 -), 60-models, 40-models and Polestar 2:
  - Headlamp Control Module Left (HCML)/Headlamp Control Module Right (HCMR)

**NOTE:** The left/right side definition for the Headlamp Control Module Left (HCML) / Headlamp Control Module Right (HCMR) is set after the software is programmed after replacement.

For the halogen option, the side-marker lights are LEDs and all other lights are replaceable bulbs.

## HEADLIGHT UNIT > HEADLIGHT UNIT (10/1 - 10/2) [2018-2022] > DIAGNOSTIC INFORMATION

### 90-models (- 2017w46)

The headlight unit has a simplified built-in diagnostic system, which can monitor a limited amount of errors. All diagnostic data is sent via LIN to the Central Electronic Module (CEM).

### 90-models (17w46 -), 60-models, 40-models and Polestar 2

The Headlamp Control Module Left (HCML)/Headlamp Control Module Right (HCMR) has a built-in diagnostic system, which can monitor itself for internal errors and diagnostic information.

## HEADLIGHT UNIT > HEADLIGHT UNIT (10/1 - 10/2) [2018-2022] > CONNECTION AND COMMUNICATION

### 90-models (- 2017w46)

The headlight unit is a LIN slave and communicates with the Central Electronic Module (CEM).

### 90-models (17w46 -), 60-models, 40-models, and Polestar 2



## OVERHEAD CONSOLE > OVERHEAD CONSOLE (OHC) (4/198) [2018-2022] > DESCRIPTION

The Overhead Console (OHC) controls the following:

- Front interior lights
- Panorama roof
- Volvo On Call

The Overhead Console (OHC) has a LED display that displays seat belt status and information about the front airbag, passenger side.

## OVERHEAD CONSOLE > OVERHEAD CONSOLE (OHC) (4/198) [2018-2022] > VARIANTS

Some parts of the function depend on factors such as market, customer option, vehicle model.

Component or function	Market, customer option, vehicle model
Telematics: <ul style="list-style-type: none"><li>• Telematics Module (TEM)</li></ul>	All vehicles -MY16 (option)
<ul style="list-style-type: none"><li>• Vehicles Connectivity Module (VCM) with built-in telematics functionality</li></ul>	All vehicles MY17 - MY21 (option) V60 / S60 MY22- (standard)
Telematics and Connectivity Antenna Module (TCAM)	S90 / S90L / V90 / V90CC / XC60 MY22- Pure electric vehicles Polestar 2
Panorama roof switch	Option

## OVERHEAD CONSOLE > OVERHEAD CONSOLE (OHC) (4/198) [2018-2022] > DIAGNOSTIC INFORMATION

**All vehicles except S90 / S90L / V90 / V90CC / XC60 MY22-, pure electric vehicles and Polestar 2**

The Overhead Console (OHC) has a simplified built-in diagnostic system, which can monitor a limited amount of errors. All diagnostic data is sent to the diagnostic tool via the Central Electronic Module (CEM). The Central Electronic Module (CEM) sets DTCs, stores readable parameters and has activations for the Overhead Console (OHC).

**S90 / S90L / V90 / V90CC / XC60 MY22-, pure electric vehicles and Polestar 2**

The Overhead Console (OHC) has a simplified built-in diagnostic system, which can monitor a limited amount of errors. The Central Electronic Module (CEM) sets DTCs but the Overhead Console (OHC) stores readable parameters and activations.

## **TUNNEL CONSOLE ILLUMINATION > TUNNEL CONSOLE ILLUMINATION (10/328) [2018-2022] > DIAGNOSTIC INFORMATION**

There is no diagnostics for the tunnel console illumination.

## **TUNNEL CONSOLE ILLUMINATION > TUNNEL CONSOLE ILLUMINATION (10/328) [2018-2022] > CONNECTION AND COMMUNICATION**

Tunnel console illumination is directly connected to the battery saver relay in the fuse box, central.

## **TUNNEL CONSOLE ILLUMINATION, CUP HOLDER > TUNNEL CONSOLE ILLUMINATION, CUP HOLDER (10/263) [2018-2022] > DESCRIPTION**

The Tunnel console illumination, cup holder consists of a light guide along the contour of the cup holder compartment. The light guide uses one LED and serves with lighting for the walls and bottom of the cup holder.

## **TUNNEL CONSOLE ILLUMINATION, CUP HOLDER > TUNNEL CONSOLE ILLUMINATION, CUP HOLDER (10/263) [2018-2022] > DIAGNOSTIC INFORMATION**

The Central Electronic Module (CEM) monitors the cup holder LEDs and sets DTCs.

## **TUNNEL CONSOLE ILLUMINATION, CUP HOLDER > TUNNEL CONSOLE ILLUMINATION, CUP HOLDER (10/263) [2018-2022] > CONNECTION AND COMMUNICATION**

The cup holder illumination is directly connected to the Central Electronic Module (CEM).

## **TURN INDICATOR, EXTERNAL MIRROR > TURN INDICATOR, EXTERNAL MIRROR [2018-2022] > DESCRIPTION**

The turn indicator, external mirror, has the following function:

- Side turn indication

## **TURN INDICATOR, EXTERNAL MIRROR > TURN INDICATOR, EXTERNAL MIRROR [2018-2022] > DIAGNOSTIC INFORMATION**

The turn indicator, external mirror, does not have a built-in diagnostic system. The Driver Door Module (DDM) monitors the turn indicator on the driver side and sets DTCs and readable parameters. Passenger Door Module (PDM) monitors the turn indicator on the passenger side and sets DTCs and readable parameters.