

### Image Processing Module A (IPMA)

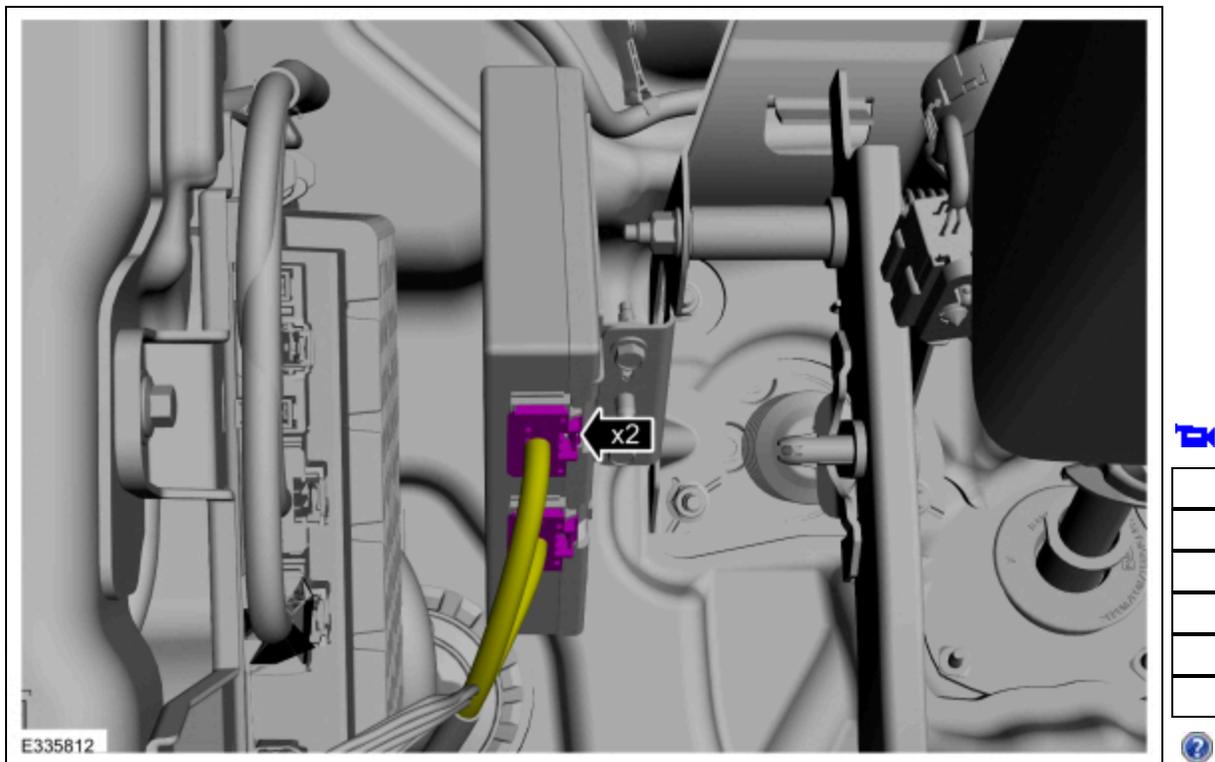


#### Removal

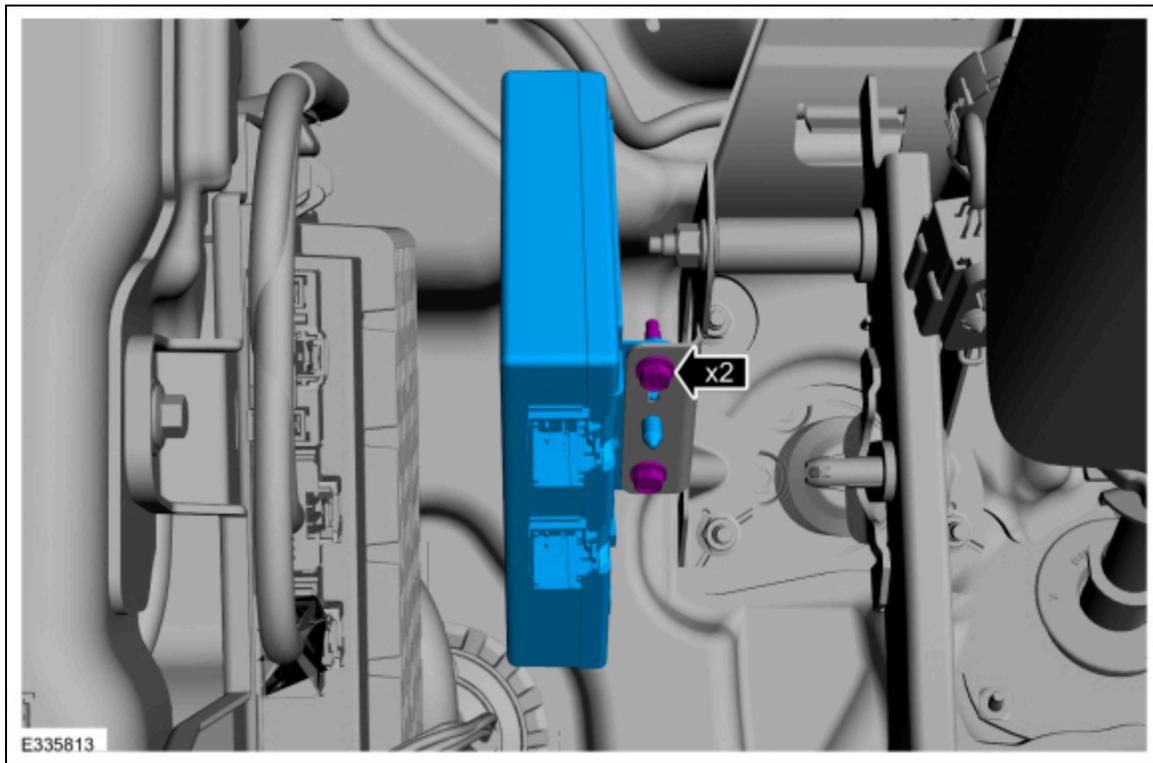
**NOTE:** Removal steps may contain installation details.

**NOTE:** If installing a new module, it is necessary to upload the module configuration information to the scan tool prior to removing the module. This information must be downloaded into the new module after installation.

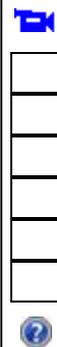
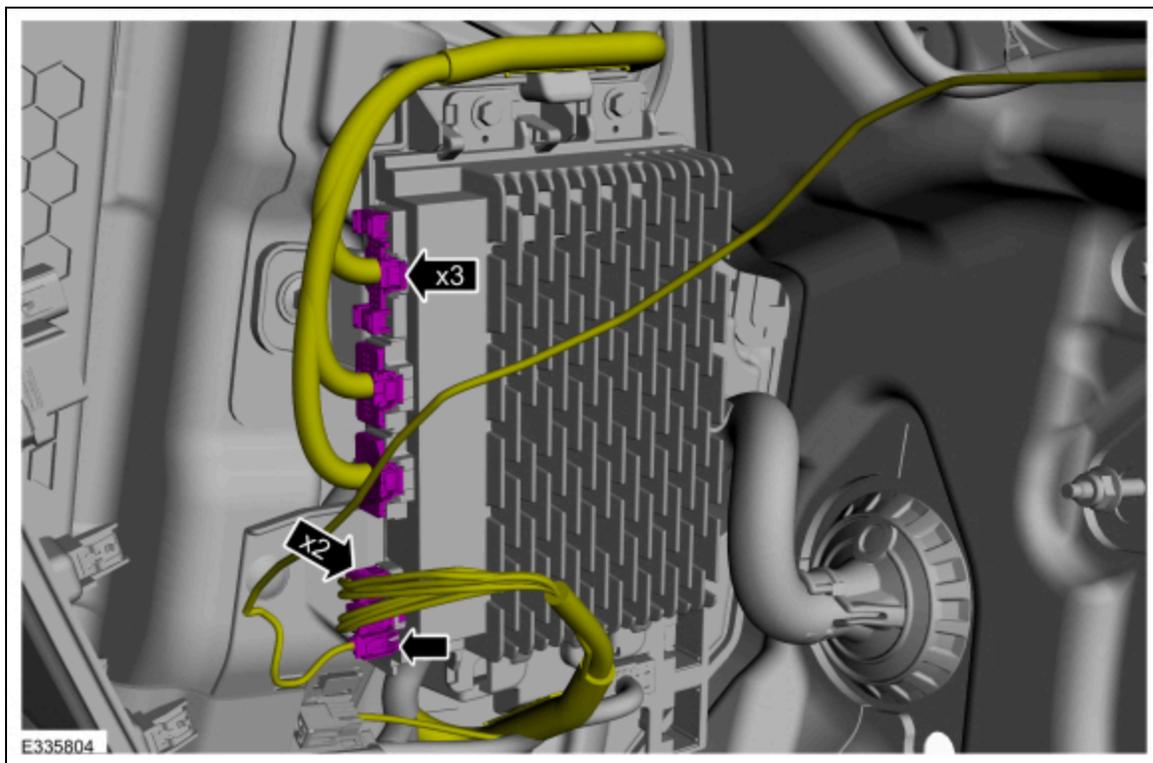
1. Disconnect the trailer tow lighting module electrical connectors.



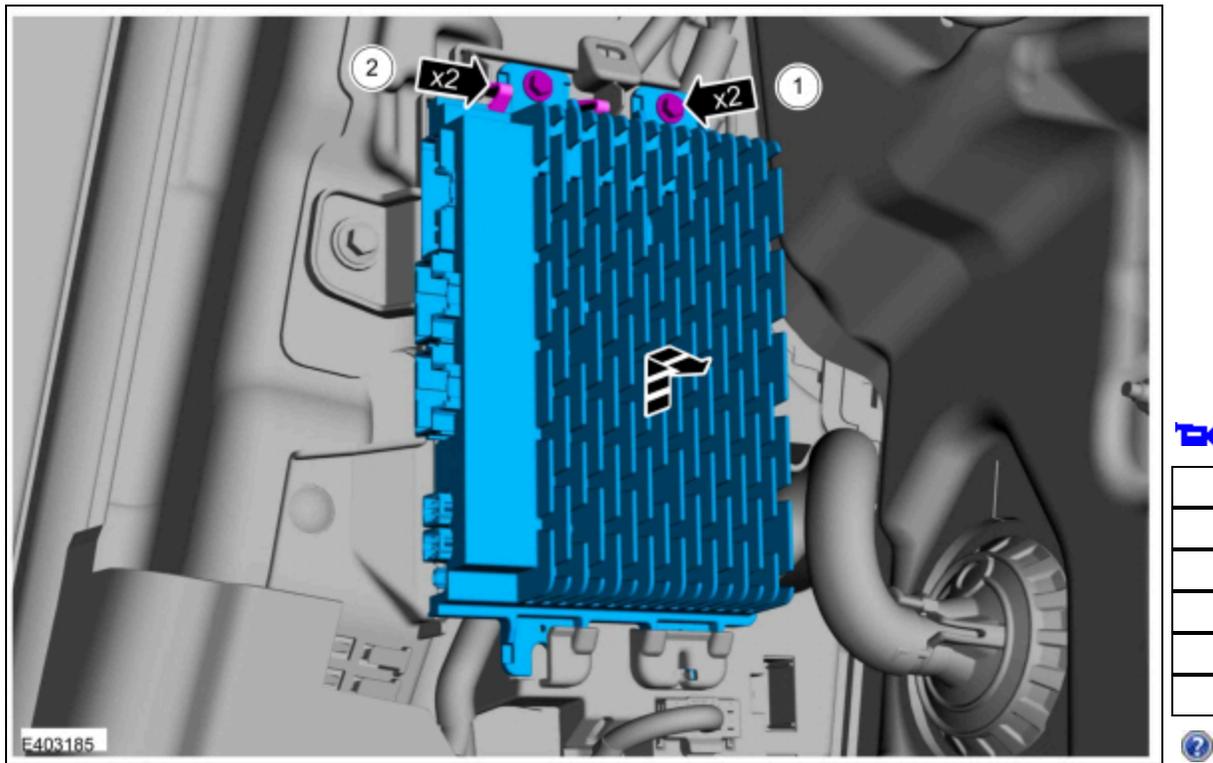
2. Remove the bolts and trailer tow lighting module.  
*Torque:* 106 lb.in (12 Nm)



3. Disconnect the IPMA electrical connectors.



4.
  1. Remove the bolts.  
*Torque: 53 lb.in (6 Nm)*
  2. Release the tabs, gently pull the IPMA out and up.



## Installation

1. To install, reverse the removal procedure.
2. If a new module has been installed, using a diagnostic scan tool, complete the [PMI](#) process for the [IPMA](#) following the on-screen instructions.
3. Using a diagnostic scan tool, reset the [IPMA](#) learned values.
4. Using a diagnostic scan tool, perform the IPMA - Local Interconnect Network (LIN) New Module Initialization.
5. Using a diagnostic scan tool, Complete the Image Processing Module A (IPMA) Alignment.
6. **NOTE:** When a new [IPMA](#) is installed, a camera alignment [DTC](#) is stored until the [IPMA](#) camera alignment is successfully completed.

IPMA camera alignment is required for the lane keeping alert and lane keeping aid to function correctly. The procedure is initiated using the diagnostic scan tool and requires about 10 minutes of driving above 64 km/h (40 mph) on a flat, straight road with highly visible lane markings to complete.

Refer to: [Lane Keeping System - System Operation and Component Description](#) (419-07 Lane Keeping System, Description and Operation).

## 360 degree camera alignment

7. **NOTE:** A 360 degree camera alignment [DTC](#) (diagnostic trouble code) set until the 360 Calibration is successfully completed.

Carry out the 360 degree camera alignment.

Refer to: [360 Degree View Camera Alignment](#) (413-13B Parking Aid - Vehicles With: Parking Aid Camera, General Procedures).

## All vehicles

8. Carry out the pro trailer backup assist alignment using the scan tool.

