Last modified: 23/10/2023 01:27:49

# Camera - Triple - Forward Facing (Remove and Replace)

Correction Code 17231002

Revision History:

 2023-10-09: Added a note to remind of checking if the bracket is firmly adhered on the windshield before disassembly to avoid damage.

2nd Generation Autopilot only:

Part Number	Description
1080559- 20-A	Adjustable Torque Vario Screwdriver (0.8 - 2.0 Nm)
1071339- 00-A	Adapter, Bit Holer, 1/4 in

## 1st Generation Autopilot



#### Warning

Whenever a camera has been moved out of its original position (for example, a camera or windshield replacement), camera calibration data must be cleared using the vehicle touchscreen: Controls > Service > Camera Calibration > Clear Calibration.

- 1. Remove the rear view mirror. Rear View Mirror (Remove and Replace)
- 2. Use a trim tool to release the upper camera cover from the windshield bracket.

#### **CAUTION**



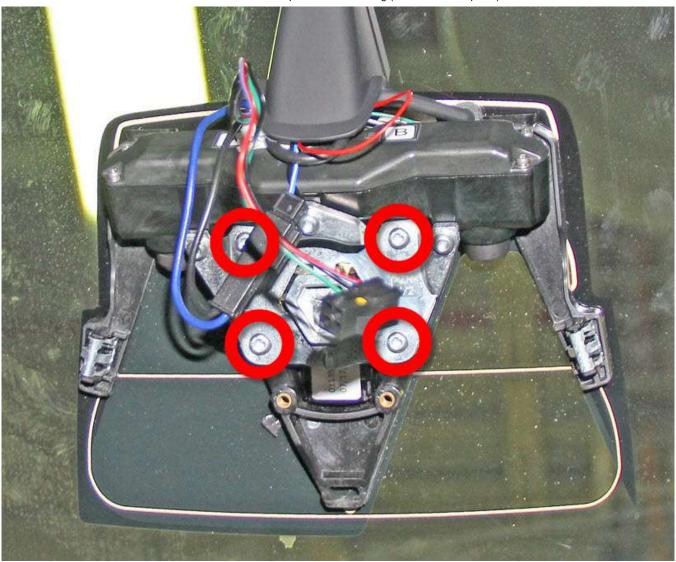
 $\Lambda$  Take care not to damage component(s). Before disassembling, verify the bracket is firmly adhered on the windshield. If the urethane bead is separated from the glass, the bracket is not properly adhered. Report any abnormality. Urethane can be added under the bracket to re-adhere it to the glass. See https://toolbox.tesla.cn/articles/47250.



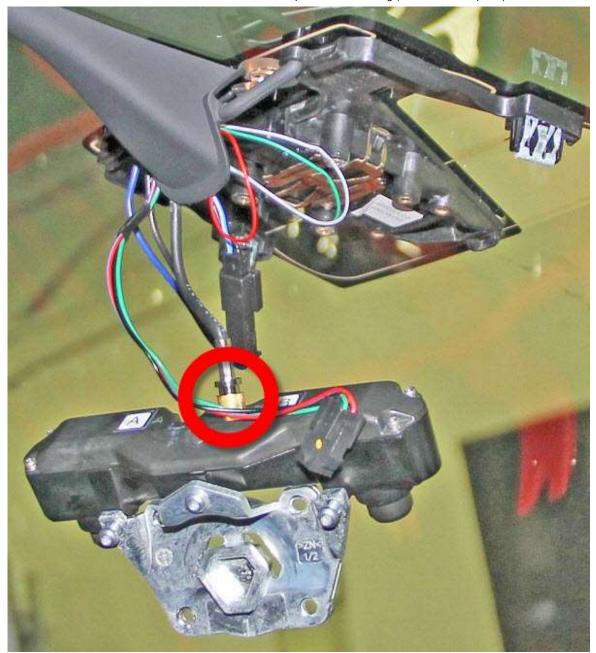
The following image shows the rear view mirror still installed.



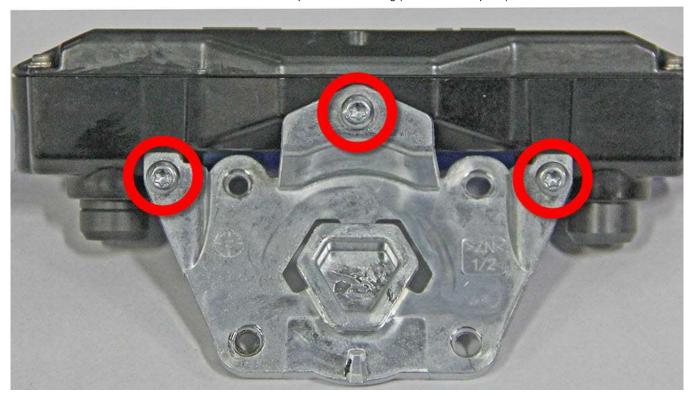
3. Remove the screws (x4) that secure the camera mounting plate to the windshield bracket (torque 3 Nm).



**4.** While supporting the camera and mounting plate, disconnect the electrical connector from the rear of the camera by pulling the gold-colored tab away from the camera.



- 5. Release the camera and mounting plate from the vehicle.
- **6.** Remove the screws (x3) that secure the camera to the mounting plate.



7. Release the camera from the mounting plate.

## 2nd Generation Autopilot

- 1. Whenever a camera has been moved out of its original position (for example, a camera or windshield replacement), camera calibration data must be cleared using the vehicle touchscree Controls > Service > Camera Calibration > Clear Calibration.
- **2.** Remove the rear view mirror. See Rear View Mirror (Remove and Replace)  $^{\mathsf{O}}$  .
- 3. Use a trim tool to release the upper camera cover from the windshield bracket.



#### CAUTION

Take care not to damage component(s). Before disassembling, verify the bracket is firmly adhered on the windshield. If the urethane bead is separated from the glass, the bracket is not properly adhered. Report any abnormality. Urethane can be added under the bracket to re-adhere it to the glass. See https://toolbox.tesla.cn/articles/47250.

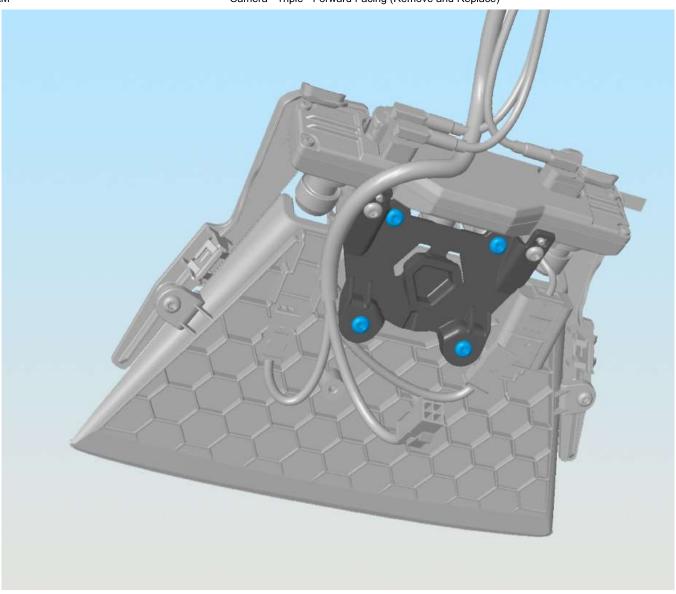


#### Note

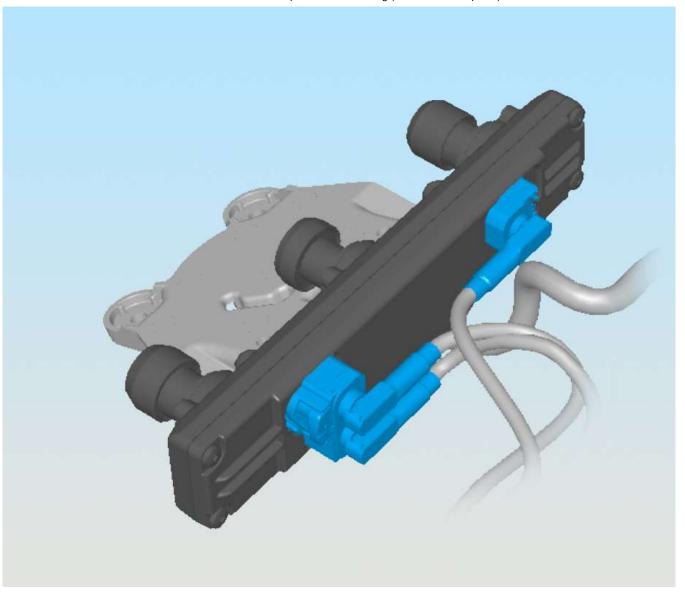
The following image shows the rear view mirror still installed.



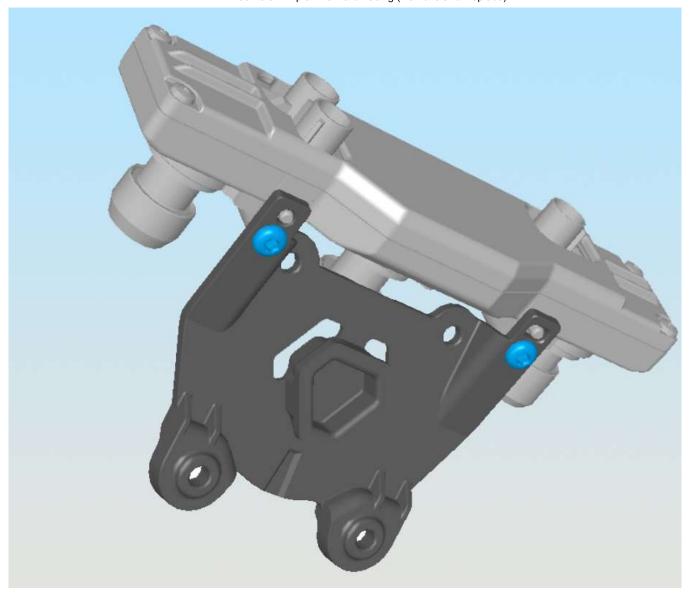
4. Release the screws that secure the mirror bracket carrier to the glare shield (torque 0.8 Nm).



5. Disconnect the camera harness connectors.



- 6. Remove the camera and mirror bracket carrier as an assembly.
- 7. Remove the screws that secure the camera to the mirror bracket carrier (torque 0.8 Nm).



### Installation

Installation procedure is the reverse of removal, except for the following:



### **△** CAUTION

Do not touch the camera lens at any point during this procedure.

1. Clean the inside surface of the windshield: Apply windshield cleaner to a microfiber cloth, and then wipe the windshield in circular motion. Allow time for the windshield to fully dry before continuing.



**CAUTION** 

Verify that the windshield has no stains or leftover residue. Otherwise, Autopilot features may be hindered.

#### 2. Vehicles with 1st generation Autopilot:

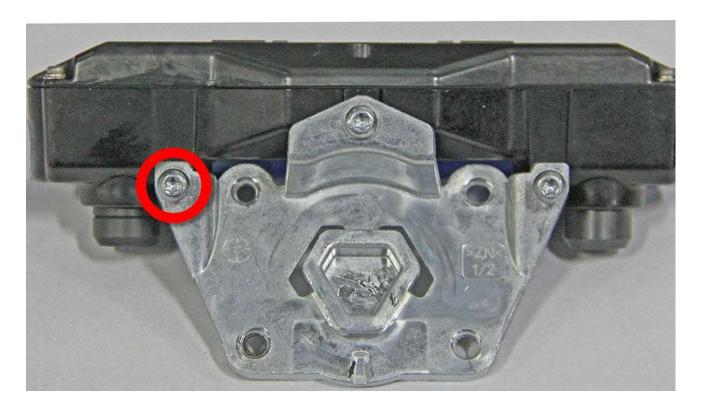
1. Loosely install the center screw that secures the mounting plate to the camera. Do not torq the screw at this time.



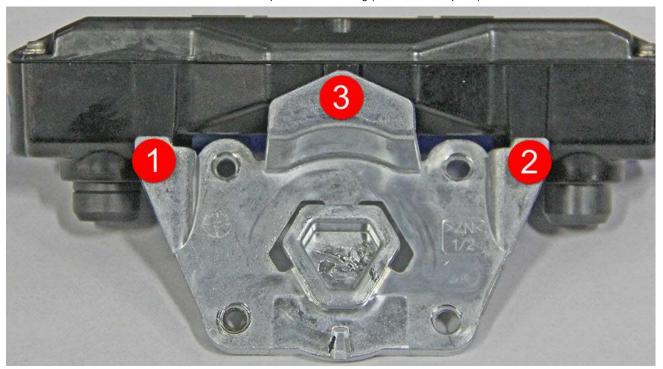
2. Loosely install the RH screw that secures the mounting plate to the camera. Do not torque screw at this time.



3. Loosely install the LH screw that secures the mounting plate to the camera. Do not torque to screw at this time.



4. Torque the screws (x3) in the order shown (torque 3 Nm).



- 3. Adjust the forward facing camera:
  - 1st generation Autopilot: Perform a target calibration. See <u>Target Calibration Forward</u> Facing Camera.
  - 2nd generation Autopilot: Perform a camera pitch adjustment. See <u>Camera Forward Facile</u> (Pitch Verification).