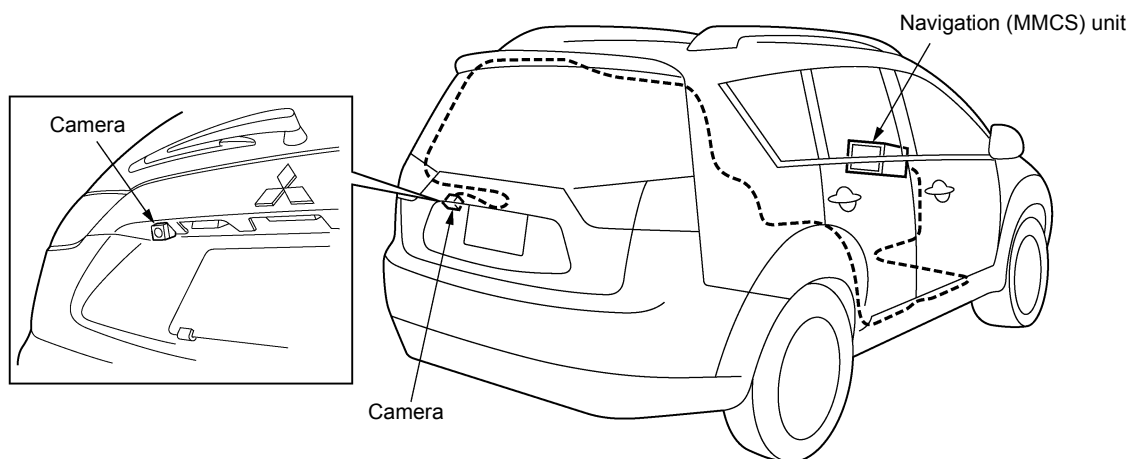


OUTLANDER REAR VIEW CAMERA MZ380461EX INSTALLATION AND HANDLING INSTRUCTIONS



Thank you for purchasing the Mitsubishi Genuine Accessory.
To install and use the product correctly with proper knowledge of it, read this publication carefully.
Keep this publication for reference when maintenance is required.

Attention

- This publication gives precautionary instructions in the boxes titled as follows.
Read through these instructions thoroughly.



Caution

Describes precautions that should be observed in order to prevent injury or damage to the vehicle or its components, which may occur if sufficient care is not taken.



Note

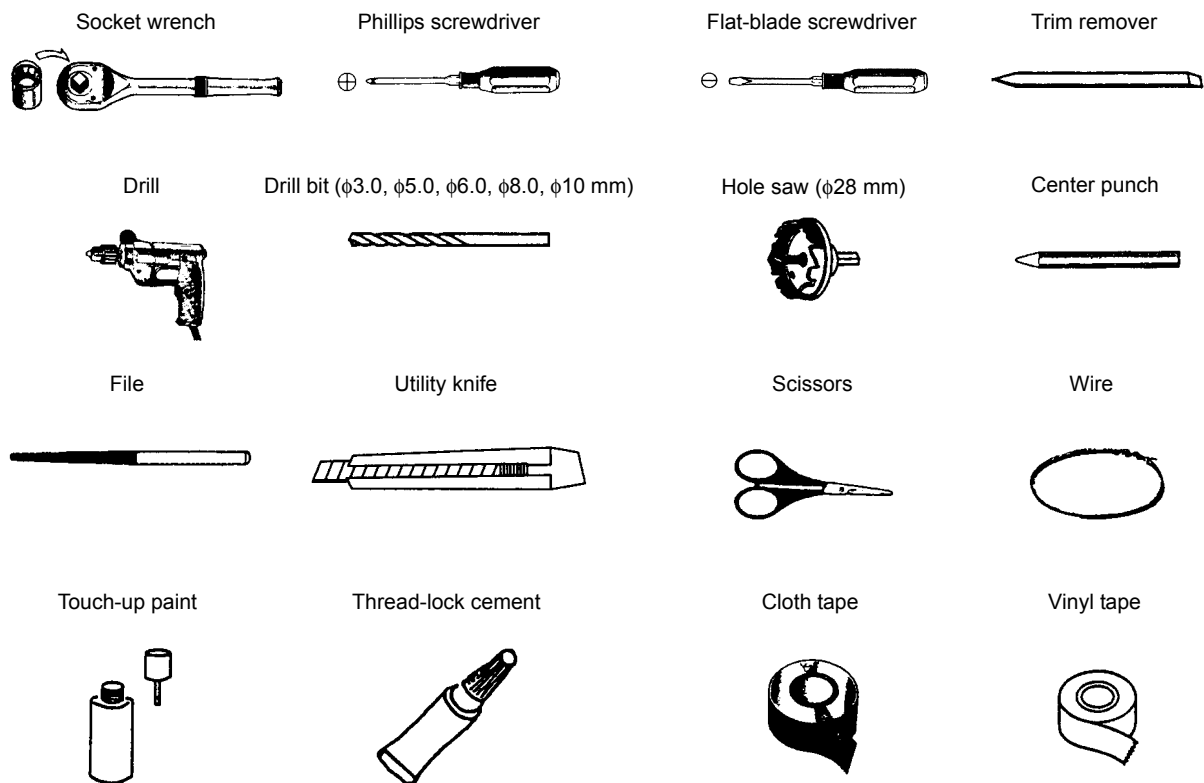
Provides additional information that facilitates installation work.

- Failure to follow these instructions not only prevents the product from working properly but may lead to trouble with the vehicle. Be sure to follow all instructions carefully.
- If there is anything unclear about the installation, handling and/or usage of the product, contact your Mitsubishi Motors dealer for clarification.
- Mitsubishi Motors Corporation is not responsible for any defects or difficulties caused by or resulting from the failure to follow given instructions.
- We recommend you to have the installation performed at an authorized Mitsubishi Motors dealer.

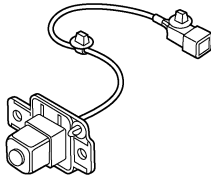

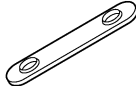



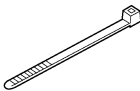
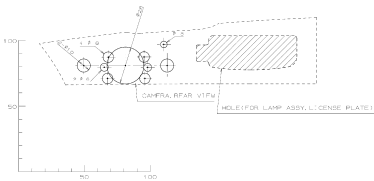
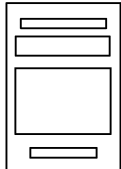
To the dealer:

Be sure that the customer receives this publication.

■ TOOLS (Make the following tools ready for use.)

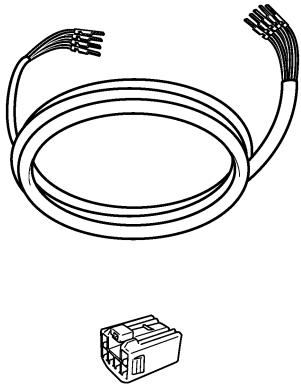


■ COMPONENTS (Make sure that all of the following components were included in the kit.)

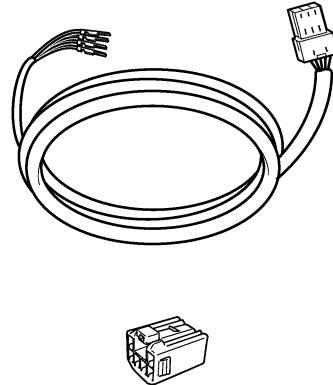
① Camera (CC-1133M-A): 1 	② Bolt with washer (M5 × 14): 2 	③ Supporter: 1 
④ Jack nut: 2 	⑤ Bolt (M5 × 25): 2 	⑥ Urethane sheet: 10 
⑦ Tie wrap (150 mm): 20 	⑧ Template 	⑨ Installation and Handling Instructions : 1 (this document) 

■ REQUIRED COMPONENTS (sold separately)

Camera harness (MZ380277EX) (for Australia)



Camera harness (MZ607384EX) (for EU and U.S.)

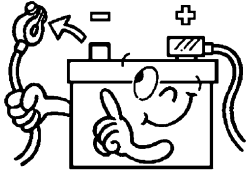


■ PRECAUTIONS

- Be sure to apply the parking brake securely. Remove the ignition key from the key cylinder.
- When removing and reinstalling the vehicle parts, perform the work including the tightening torques in accordance with the workshop manual.
- Disconnecting the (–) cable from the battery causes the radio and audio presets, the clock, etc. to lose their memory. Record the contents of the memory before disconnecting the battery (–) cable to allow you to reprogram the radio presets after the installation is completed.

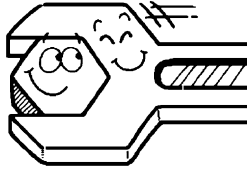
Before installation

- Be sure to disconnect the negative terminal cable from the battery.



When installing or removing parts

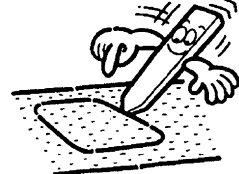
- Loosen or tighten bolts and nuts using tools that match their sizes.



- Use a Phillips screwdriver that fits the recess in the head of the screw being loosened or tightened.

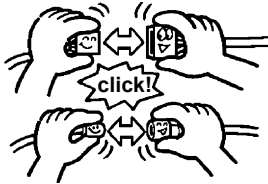


- To remove plastic parts, use a trim remover.

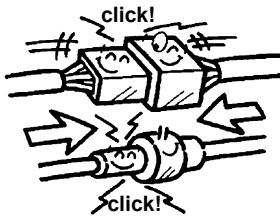


Wiring

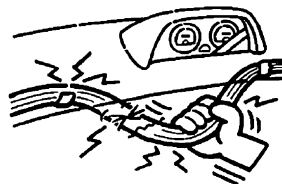
- When disconnecting connectors, first unlock them, then separate the connectors by pulling on themselves, not on cables.



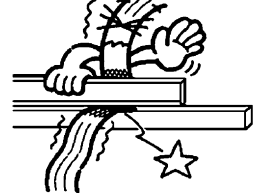
- When connecting connectors, push them against each other until the lock clicks.



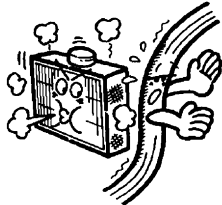
- Do not pull on wiring harnesses strongly.



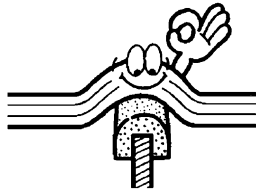
- Do not let harnesses be pinched between parts.



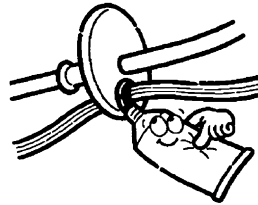
- Route the harness away from hot components such as the engine and radiator.



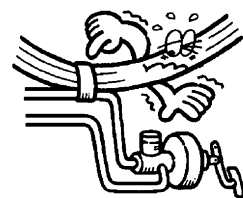
- Protect the harness from sharp edges by covering the edges with tape or other suitable materials.



- Apply sealant to grommets at portions where the harness run through.

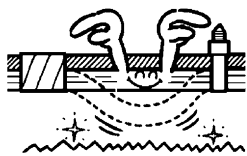


- Do not fasten the harness to brake pipes or high pressure air conditioner pipes.



Clamping harness

- Fasten the additional harness to an existing vehicle harness using tape or tie wraps.



- Bind up extra length of the harness using a tie wrap.

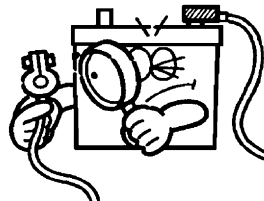


- If one tie wrap is too short, use two connected together.

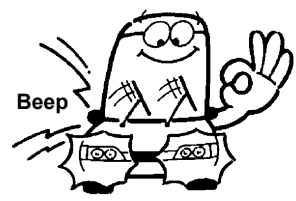


After installation

- Check the product and wiring for installed condition before connecting the cable to the battery.

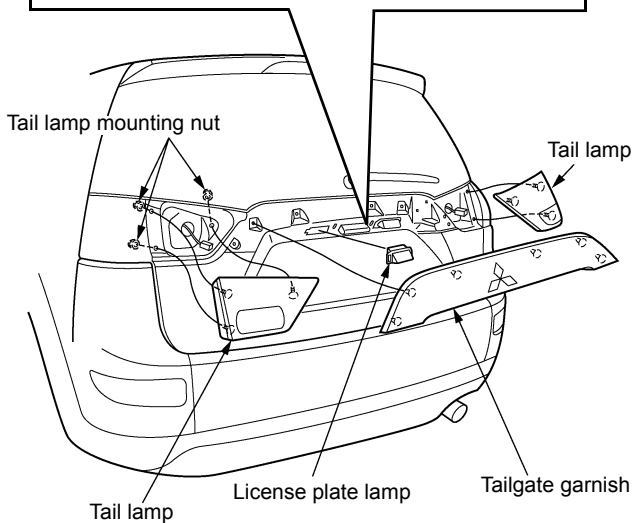
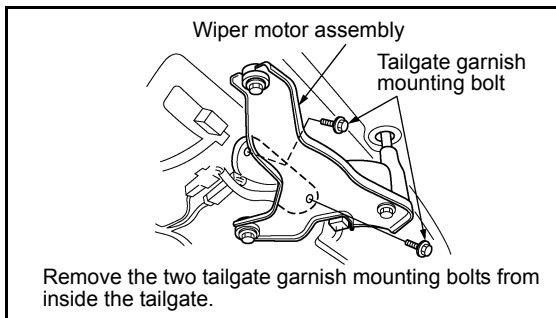
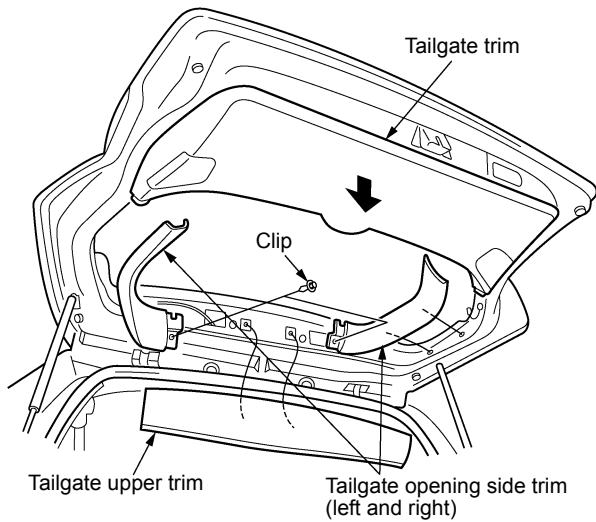


- Check the installed product for function. Also check lamps, horn, wipers, etc. for proper operation.



INSTALLATION PROCEDURES

A. REMOVING THE VEHICLE PARTS (1)

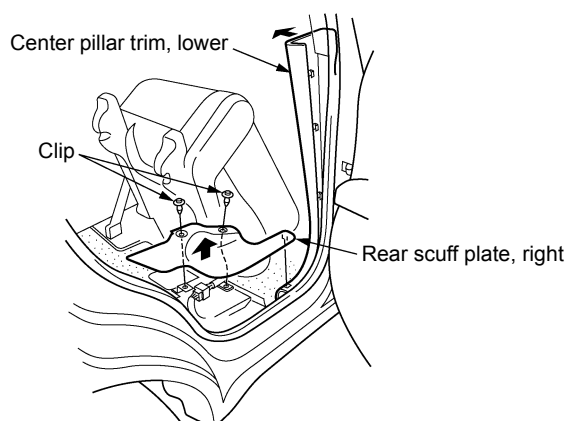
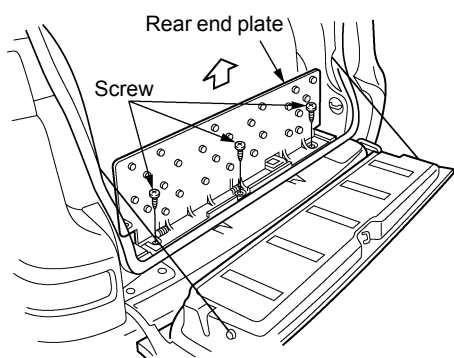
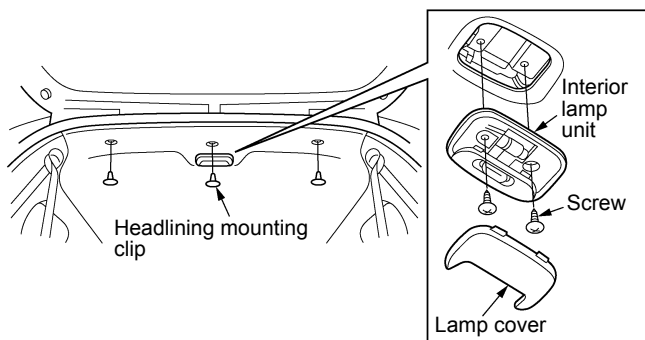


- 1) Disconnect the battery negative cable.

Caution

- For vehicles with side airbags, allow at least 60 seconds after disconnecting the battery negative cable before starting to remove the driver's or front passenger's seat.
- The SRS holds sufficient voltage to operate the side airbags for a while, so the side airbag could be deployed accidentally if you start working on the front seat soon after disconnecting the battery negative cable.

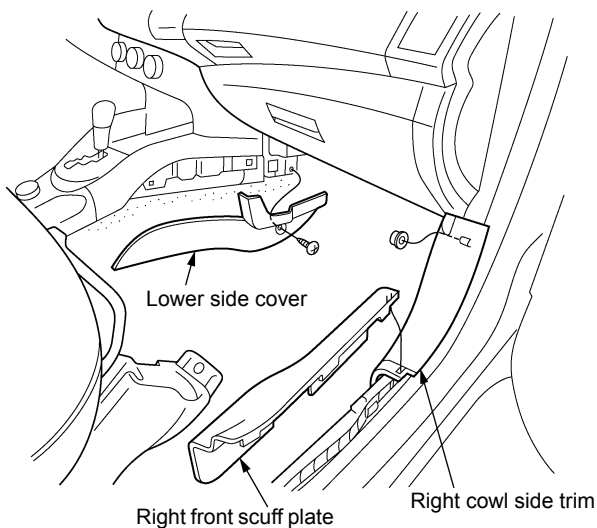
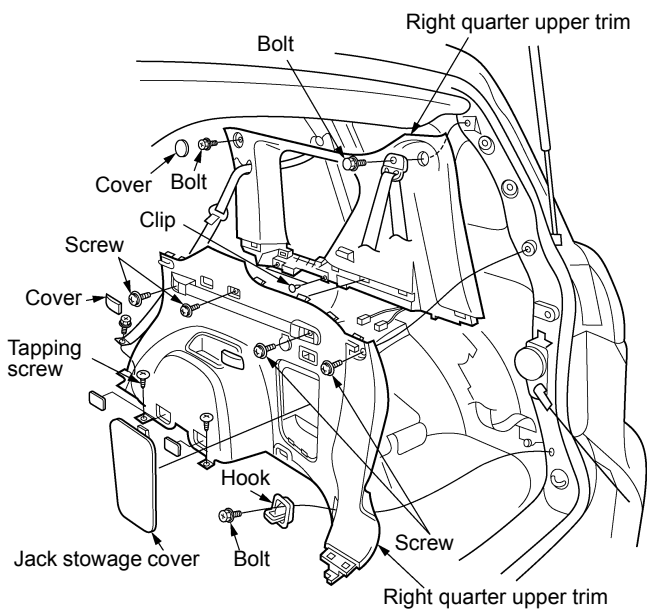
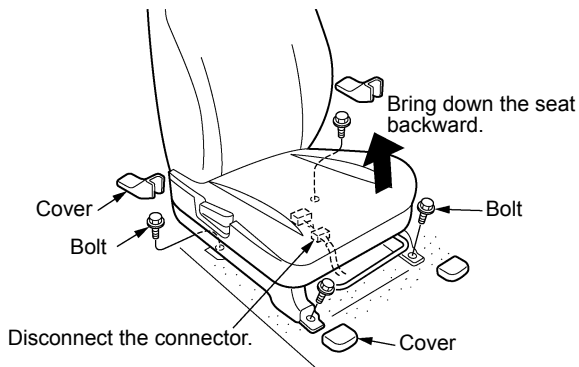
- 2) Remove the tailgate upper trim.
- 3) Remove the right and left tailgate opening side trims.
- 4) Remove the tailgate trim.
- 5) Remove the tail lamps by removing the three nuts for each.
- 6) Remove the right and left license plate lamps.
- 7) Remove the tailgate garnish.



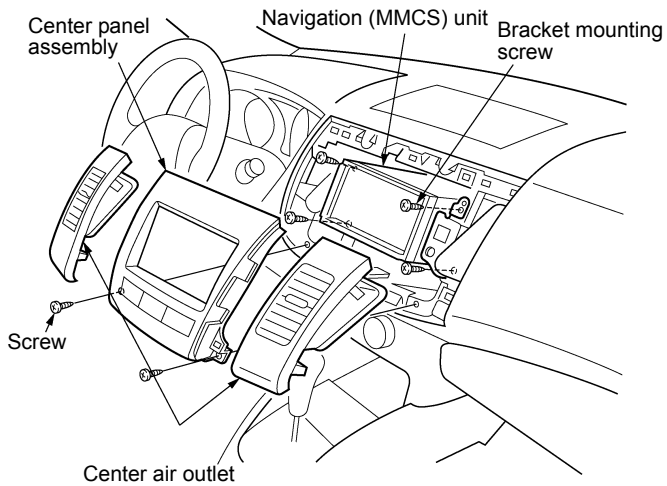
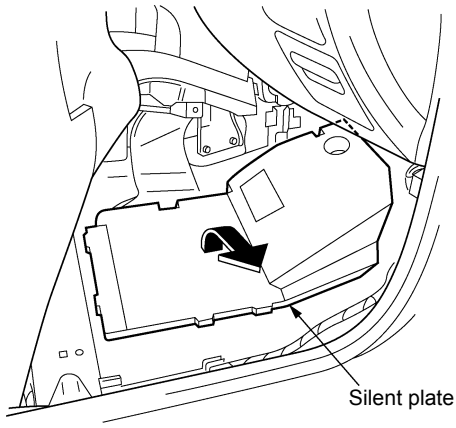
- 8) Remove the interior lamp cover.
- 9) Remove the interior lamp unit by removing the two screws.
- 10) Remove the three headlining mounting clips shown in the drawing.
- 11) Remove the rear end plate by removing the three screws.
- 12) Remove the right rear scuff plate by removing the two clips.
- 13) Remove the center pillar trim, lower.

Check	
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B-1. REMOVING THE VEHICLE PARTS (2) (for left-hand drive vehicles)



- 1) Remove the four front passenger's seat mounting bolts. Disconnect the connector under the seat.
- 2) Bring down the front passenger's seat backward.
- 3) Remove the jack stowage cover and remove the jack.
- 4) Remove the right quarter lower trim by removing the two bolts and six screws and disconnecting the three connectors.
- 5) Remove the right quarter upper trim by removing the two bolts and two clips.
- 6) Remove the lower side cover by removing the one screw and one clip.
- 7) Remove the right front scuff plate.
- 8) Remove the right cowl side trim.



9) Turn over the floor carpet and remove the silent plate.

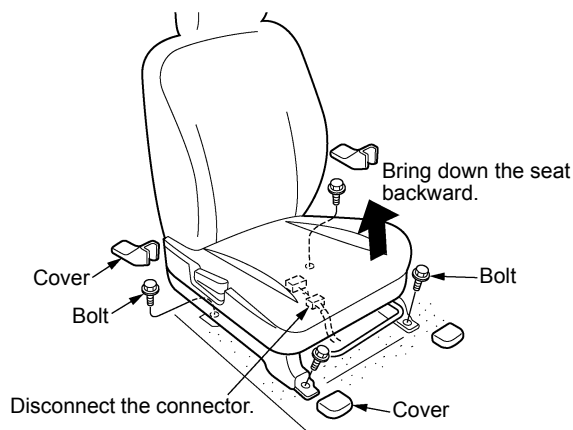
10) Remove the center air outlets.

11) Remove the center panel assembly by removing the two screws.

12) Remove the navigation (MMCS) unit by removing the four screws.

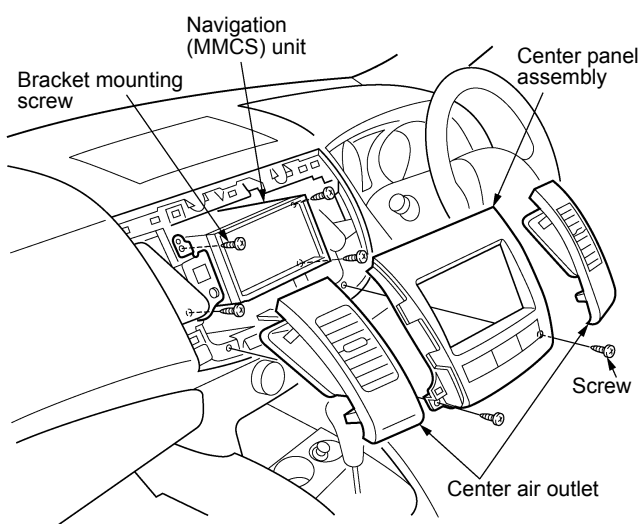
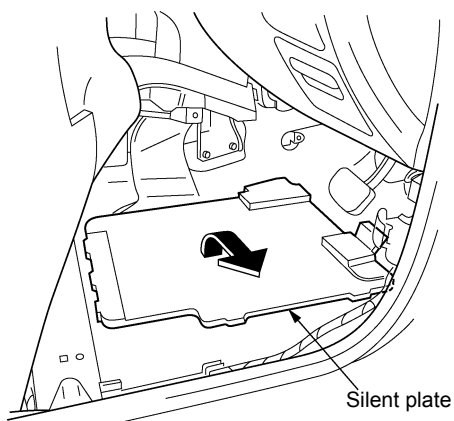
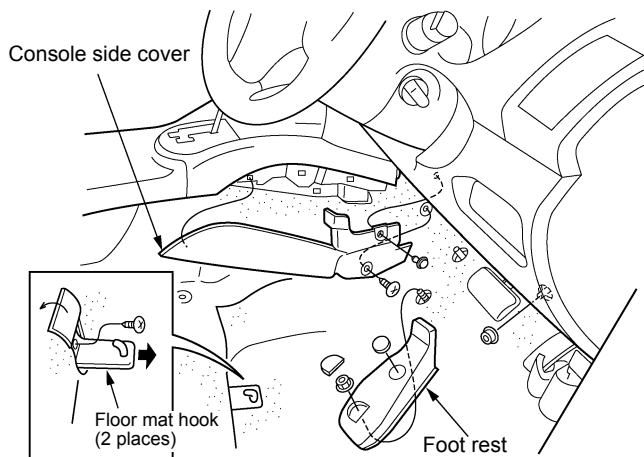
Check	
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B-2. REMOVING THE VEHICLE PARTS (2) (for right-hand drive vehicles)



1) Remove the four driver's seat mounting bolts. Disconnect the connector under the seat.

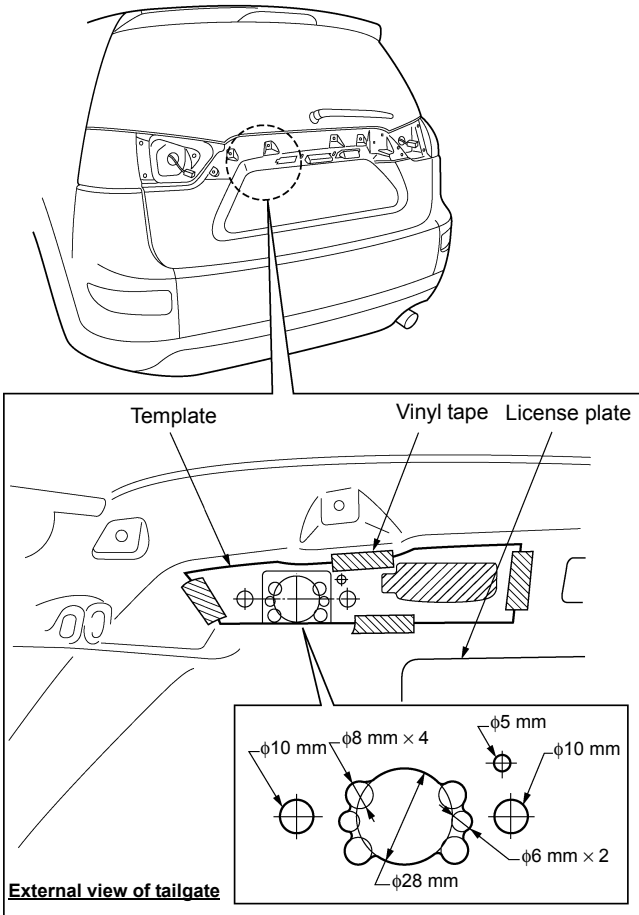
2) Bring down the driver's seat backward.



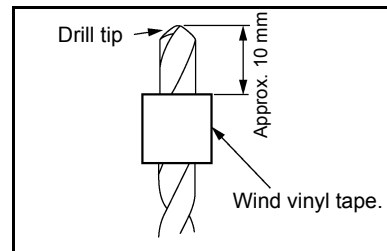
- 3) Remove the console side cover by removing the one screw and one clip.
- 4) Remove the foot rest by removing the one nut.
- 5) Remove the two mat hooks by removing the two screws.
- 6) Turn over the floor carpet and remove the silent plate.
- 7) Remove the center air outlets.
- 8) Remove the center panel assembly by removing the two screws.
- 9) Remove the navigation (MMCS) unit by removing the four screws.

Check	
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C. MODIFYING THE TAILGATE PANEL



- 1) Cut out the template ⑧.
- 2) Align the hatched section on the template ⑧ with the left license plate lamp mounting hole and secure the template ⑧ on the tailgate panel using vinyl tape.
- 3) Mark the centers of the ten drilling holes using a center punch.
- 4) Apply the cloth tape underneath the drilling portions to prevent the drilling chips from scattering around.
- 5) Wrap the drill bit with vinyl tape at the position 10 mm away from the drill tip to prevent it from penetrating unnecessary.



- 6) Remove the template. Using the punched marks as references, drill the following holes.
 - $\phi 10$ mm hole $\times 2$: $\phi 3$ mm base hole $\rightarrow \phi 6$ mm base hole $\rightarrow \phi 10$ mm hole
 - $\phi 8$ mm hole $\times 4$: $\phi 3$ mm base hole $\rightarrow \phi 6$ mm base hole $\rightarrow \phi 8$ mm hole
 - $\phi 6$ mm hole $\times 2$: $\phi 3$ mm base hole $\rightarrow \phi 6$ mm hole
 - $\phi 5$ mm hole $\times 1$: $\phi 3$ mm base hole $\rightarrow \phi 5$ mm hole
 - $\phi 28$ mm hole $\times 1$: $\phi 3$ mm base hole $\rightarrow \phi 28$ mm hole (using a hole saw)

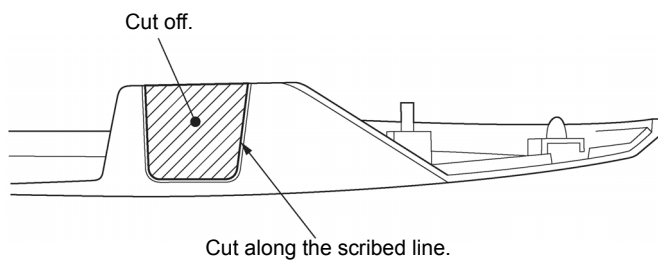
Caution

- During drilling work, always wear goggles to protect your eyes from drilling chips.
- Before drilling, make sure that there are no harnesses and pipes underneath the drilling position. If any harness or pipe is damaged, it could cause a fire or short-circuit.

- 7) After drilling, shape the camera mounting hole roughly to a square hole using a file.
- 8) Remove the burrs around the drilled holes using a file. Apply touch-up paint to prevent corrosion.

Check

D. MODIFYING THE TAILGATE GARNISH



- 1) Cut off the tailgate garnish (hatched section) along the scribed line.

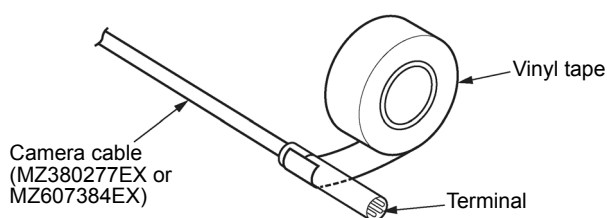


Note

If available, use an ultrasonic cutter or saw-blade type utility knife to shorten the work time.

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E. COVERING THE CAMERA CABLE TERMINALS



- 1) Before routing the camera cable, wrap its terminals to their ends with vinyl tape so as not to damage them during routing.



Caution

When winding the vinyl tape, be careful not to bend or break the terminals. Such damage may result in an open circuit or poor contact.

Check	
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F-1. CONNECTING THE CAMERA CABLE TO THE NAVIGATION UNIT (for EU and U.S.)

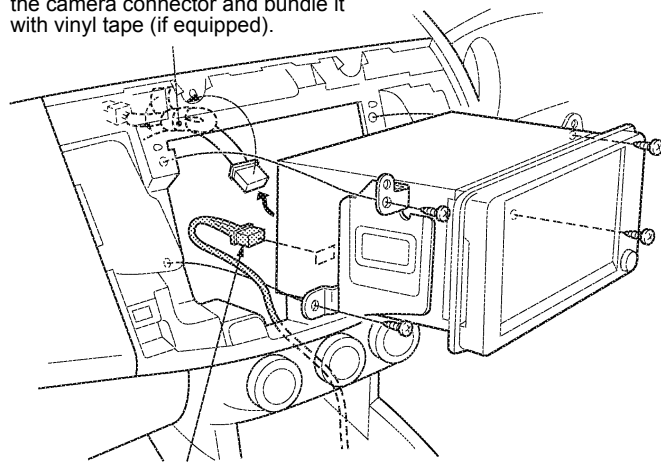
- 1) Use the camera cable MZ607384EX. Connect the connector of the camera cable to the camera connector at the backside of the navigation (MMCS) unit.



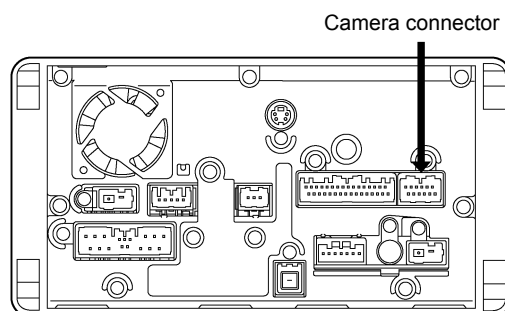
Note

If a vehicle harness is already connected to the camera connector, disconnect the harness and bundle it with vinyl tape within the dashboard. (This vehicle harness will not be used.)

Disconnect the vehicle harness from the camera connector and bundle it with vinyl tape (if equipped).



Camera cable
(MZ380277EX or MZ607384EX)

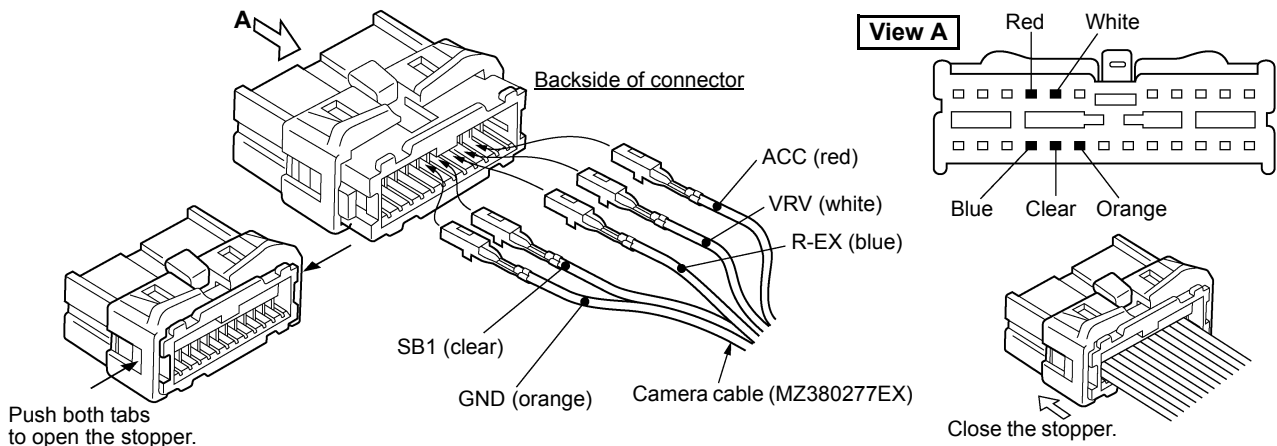


* A right-hand drive vehicle is shown.

Check	
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F-2. CONNECTING THE CAMERA CABLE TO THE NAVIGATION (MMCS) UNIT (for Australia)

- 1) Disconnect the 24-pin connector from the backside of the navigation (MMCS) unit.
- 2) Open the stopper of the 24-pin connector.



- 3) Use the camera cable MZ380277EX. Insert the five terminals of the camera cable into the cavities of the 24-pin connector as shown in the drawing.



Caution

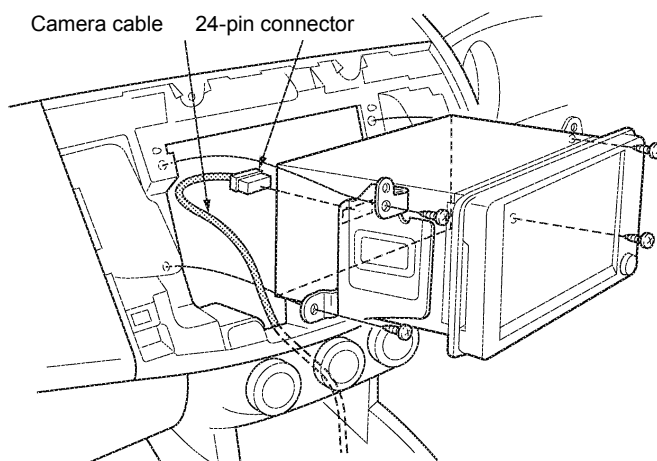
Be sure to insert the connector into the correct cavity. Incorrect installation may damage the navigation (MMCS) unit.



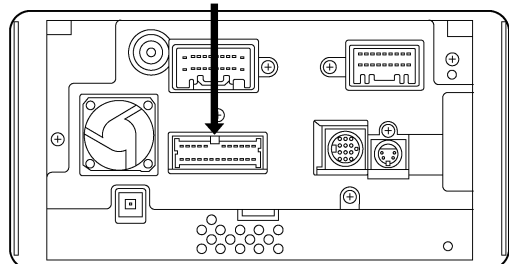
Note

The camera cable has a 5-terminal end and a 4-terminal end.

- 4) Close the stopper of the 24-pin connector.
- 5) Reconnect the 24-pin connector to the backside of the navigation (MMCS) unit.



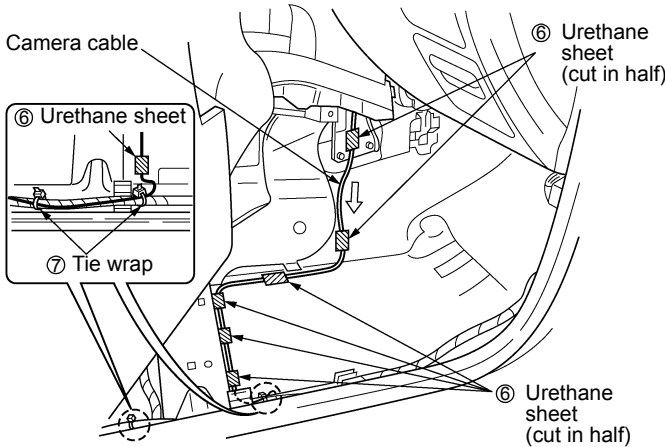
Reconnect the 24-pin connector here.



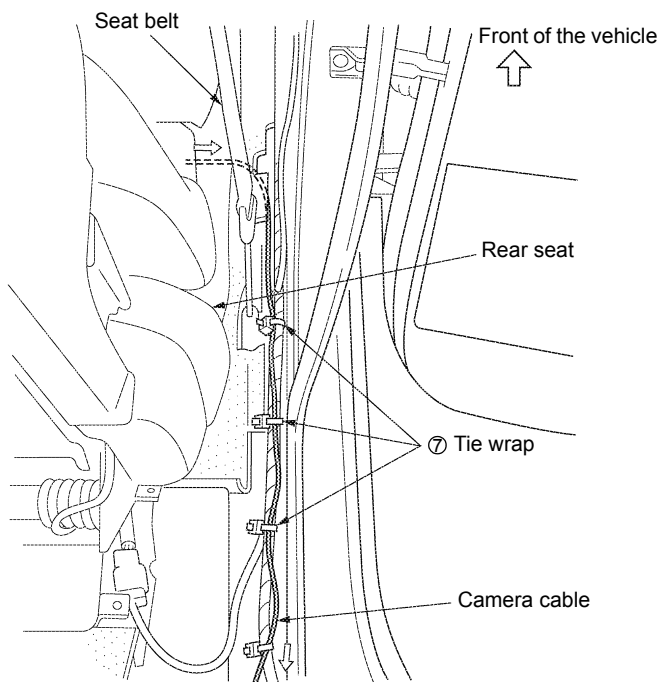
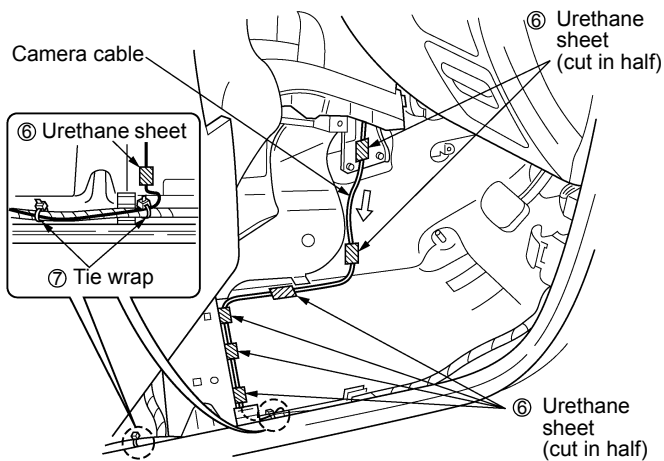
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G. ROUTING THE CAMERA CABLE IN THE CABIN

Left-hand drive vehicles



Right-hand drive vehicles



- 1) Route the camera cable toward the right side of the vehicle. The camera cable should be fixed to the floor using the urethane sheets (6) cut in half.

- 2) Route the camera cable toward the rear of the vehicle along the existing vehicle harness. Bundle the camera cable with the vehicle harness using the tie wraps (7).



Caution

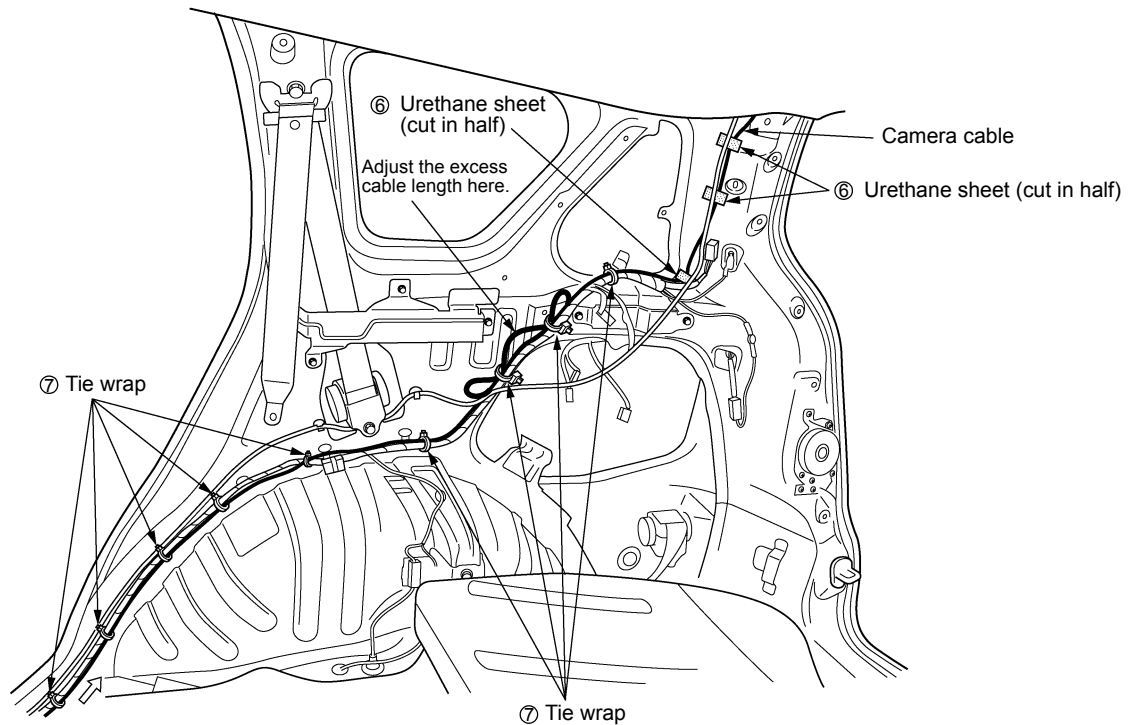
Never bundle the washer tube together. Doing so may cause the washer system to fail.

- 3) Route the camera cable along the vehicle harness as shown in the drawing. Fix the camera cable using the tie wraps ⑦ and urethane sheets ⑥ cut in half.



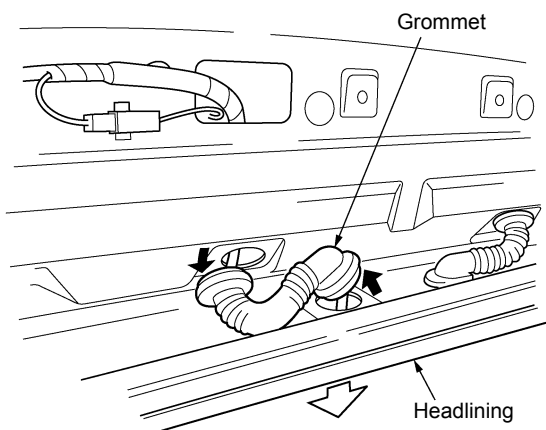
Caution

Never bundle the washer tube together. Doing so may cause the washer system to fail.

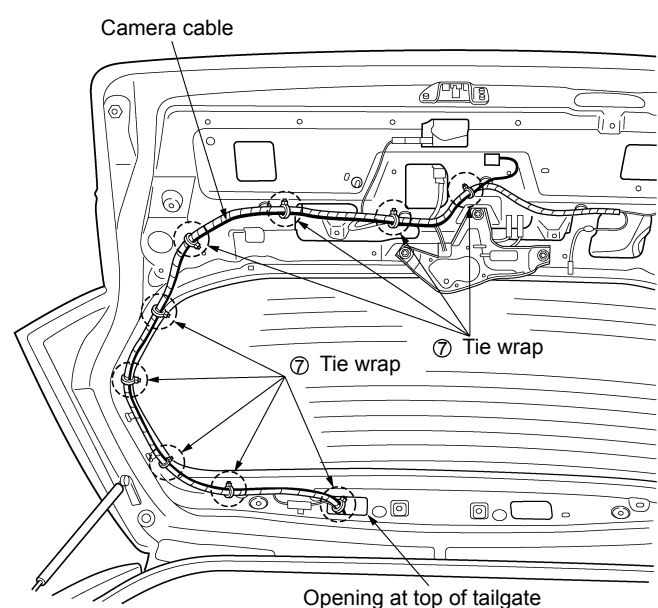
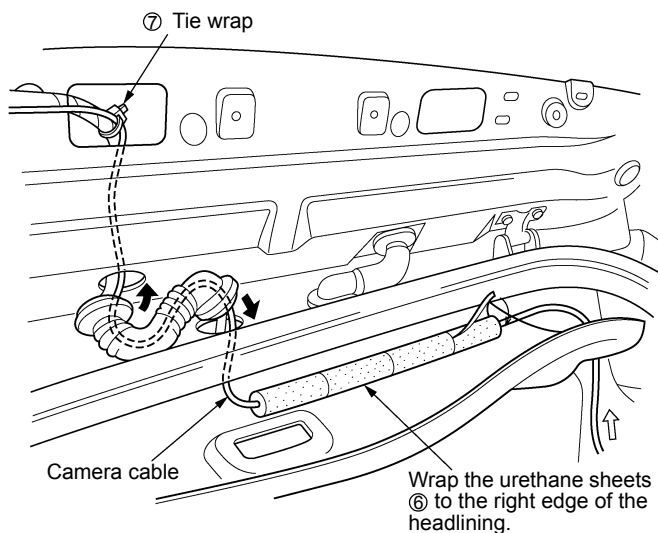


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H. ROUTING THE CAMERA CABLE IN THE TAILGATE



- 1) Release both ends of the grommet at the tailgate opening.



2) Route the camera cable inside the headlining. Wrap the urethane sheets ⑥ around the camera cable from near the grommet opening to the right edge of the headlining.

3) Using a wire, pass the camera cable through the grommet into the tailgate panel.

Caution

- When passing the camera cable through the grommet using a wire, be careful not to damage the grommet, vehicle harness, camera cable, and its terminals.
- Never pull the camera cable violently as it may break the cable.

Note

Applying a small amount of soapy water in the grommet will facilitate the work.

4) Route the camera cable along the vehicle harness. Bundle the camera cable with the vehicle harness using the tie wraps ⑦.

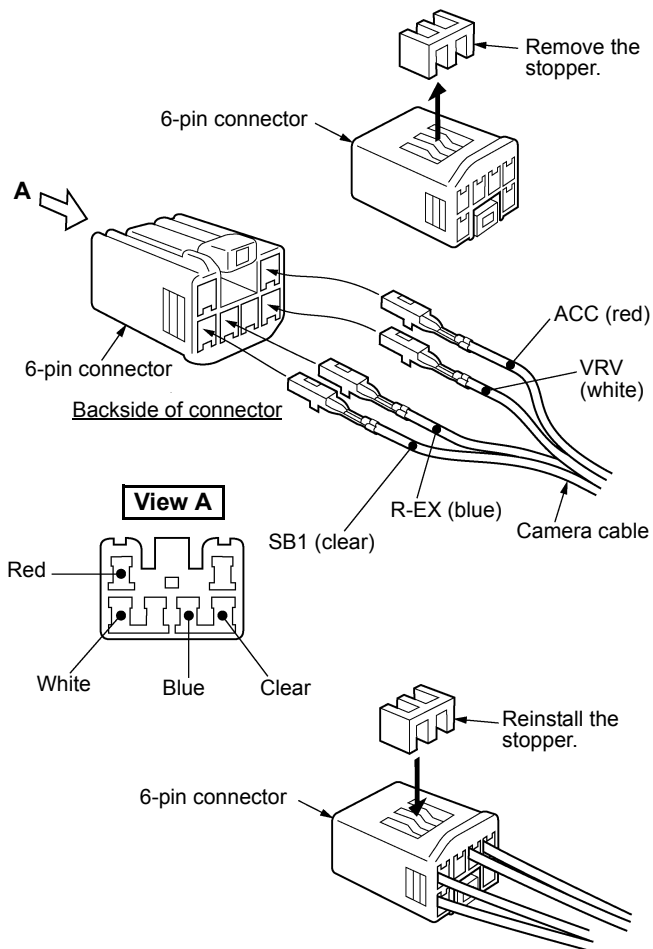
Caution

Never attach the tie wrap ⑦ or urethane sheet ⑥ to the washer tube. Doing so may cause the washer system to fail.

5) Reinstall the grommet.

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I. INSTALLING THE 6-PIN CONNECTOR TO THE CAMERA CABLE



- 1) Prepare the 6-pin connector supplied together with the camera cable.
- 2) Remove the stopper from the connector.
- 3) Peel off the vinyl tape covering the terminals of the camera cable for protection.



Caution

Peel off carefully, otherwise an open-circuit or poor connection of the cable will result.

- 4) Insert the four terminals of the camera cable into the cavities of the connector as shown in the drawing.



Caution

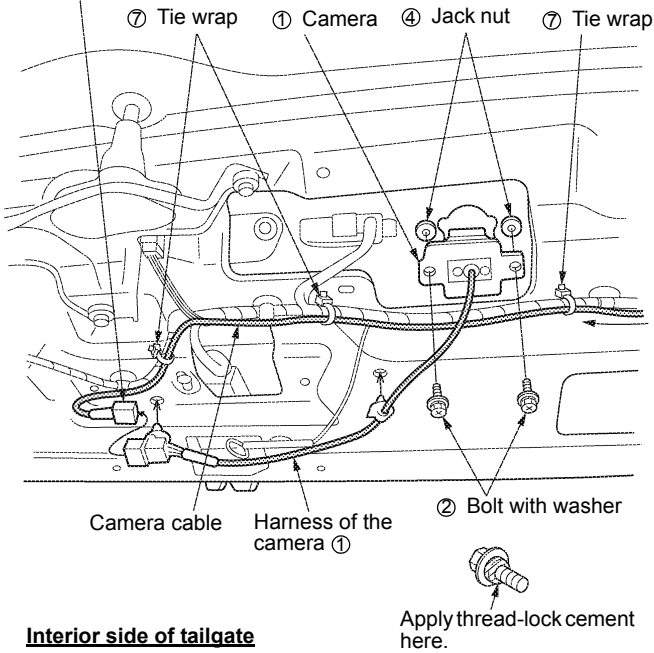
Be sure to insert the connector into the correct cavity. Incorrect installation may cause damage to the navigation (MMCS) unit.

- 5) Reinstall the stopper.

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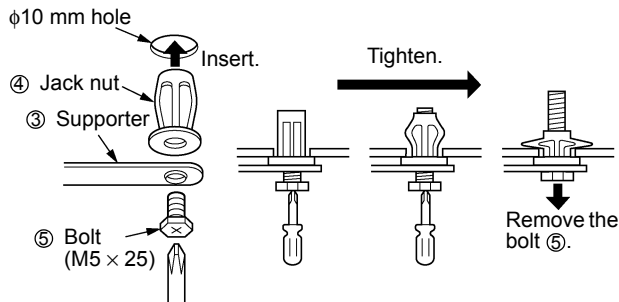
J. INSTALLING THE CAMERA

Connect the 6-pin connectors of the camera cable and camera.



Interior side of tailgate

Installing the jack nut



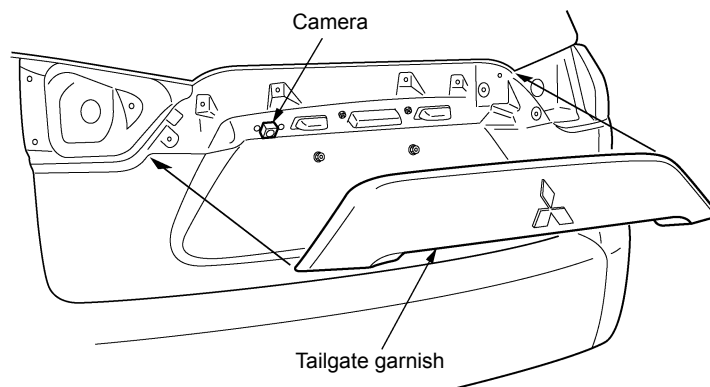
- 1) Install the two jack nuts to the $\phi 10$ -mm camera mounting screw holes. Refer to "Installation of jack nut" below.
- 2) Apply thread-lock cement to the two bolts with washers ② as shown in the drawing and install the camera ① using these bolts ②.
- 3) Fit the two clips of the harness on the camera ① into the mounting holes on the backside of the tailgate panel.
- 4) Connect the 6-pin connector of the camera cable to that of the camera ①.
- 5) Bundle the camera cable with the vehicle harness using the tie wraps ⑦.

- 1) Insert the jack nut ④ to its mounting hole.
- 2) Hold the jack nut ④ with the supporter ③ and screw in the bolt ⑤ into the jack nut ④ through the supporter ③.
- 3) When the jack nut ④ is fixed securely, remove the bolt ⑤.

Check	
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K. CHECKING AFTER INSTALLATION

- 1) Reinstall all the removed parts to the vehicle in accordance with the workshop manual.



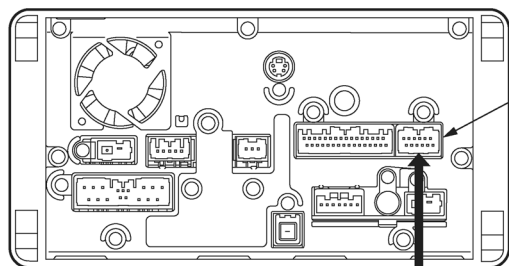
- 2) Reconnect the battery negative cable.
- 3) Check that the electrical systems operate properly.
- 4) Reprogram the radio and audio memories and adjust the clock. For the reprogramming procedure, refer to the owner's handbook.

Check	
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CABLE CONNECTION

For EU and U.S.

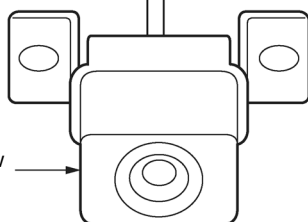
Navigation (MMCS) unit



Camera connector

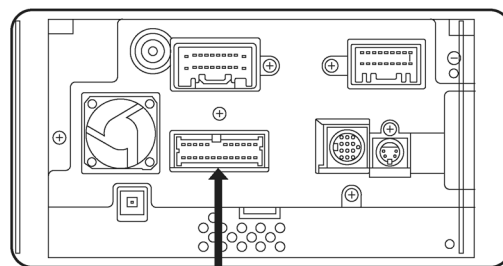
Camera cable
(MZ607384EX)

Rear view
camera



For Australia

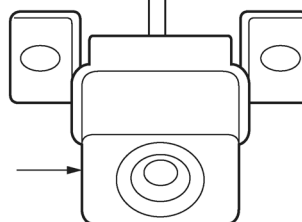
Navigation (MMCS) unit



24-pin connector

Camera cable
(MZ380277EX)

Rear view
camera



OUTLANDER

Template for rear view camera

