## **GENUINE REAR SPOILER**

### **INSTALLATION AND USER'S INSTRUCTIONS**

Thank you for purchasing a genuine Mazda accessory.

Before removal and installation, be sure to thoroughly read these instructions.

Please read the contents of this booklet in order to properly install and use the rear spoiler.

Your safety depends on it. Keep these instructions with your vehicle records for future reference.

- The rear spoiler must always be installed as a set together with the deflector (B0L6 V4 990) and the front under spoiler (BCKN V4 900).
- So as not to omit installing any of them, install in the order of the rear spoiler (BCKN V4 920), deflector (B0L6 V4 990) and front under spoiler (BCKN V4 900).

## **NWARNING**

• There are several **AWARNING** and **ACAUTION** sections in this booklet concerning safety when installing or removing the rear spoiler. Always read and follow them in order to prevent injuries, accidents, and possible damage to the vehicle.

**WARNING**: Indicates a situation in which serious injury or death could result if the warning is

ignored.

**CAUTION**: Indicates a situation in which bodily injury or damage to the vehicle could result if the caution is ignored.

- For areas indicating the tightening torque in this instruction manual, tighten to the specified torque using a torque wrench. For areas in which the tightening torque is indicated inside parentheses (), the tightening torque is indicated as a reference value, however tightening using a torque wrench is not necessary.
- Do not modify the rear spoiler.
- Do not install the rear spoiler in any way other than described in the following instructions.
- If in any doubt, please ask your Mazda dealer to install the accessory in order to prevent errors in installation.
- If you have any questions about the use of the accessory, ask your Mazda dealer for proper advice before using it.
- Mazda and its suppliers are not responsible for injuries, accidents, and damage to persons and property that arise from the failure of the dealer or installer to follow these instructions.
- To ensure safety and reliability of the work, installation, removal and disposal work must be carried out by an Authorized Mazda Dealership.
- Be careful not to lose removed parts and be sure that they are kept free from scratches, grease or other dirt.

PART NAME: REAR SPOILER
PART NUMBER: BCKN V4 920 (HB)

VEHICLE: MAZDA3

#### NOTE -

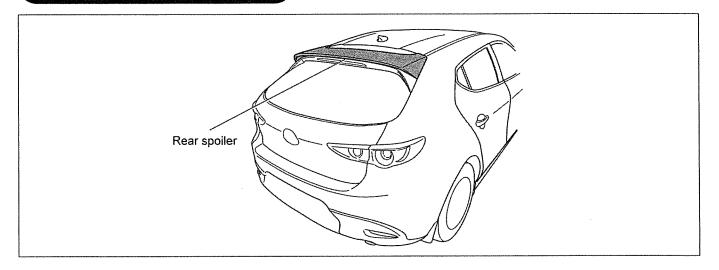
#### To the dealer

Please turn over these instructions to the customer after installation.

#### To the customer

- Keep these instructions after installation. The instructions may be necessary for installing other optional parts or removal of this accessory.
- Should the vehicle or this accessory be resold, always leave these instructions with it for the next owner.

# 1. INSTALLATION VIEW



# 2. PARTS

• Before installation, verify that the kit includes all the following parts and that they are free of dirt, scratches, or damage.

Part	Part name	Qty	Part	Part name	Qty
	Rear spoiler	1	A	Bolt (M5×12) For use with Allen key	1
®	Bolt (M5×12) For use with socket wrench	2	(A)	Washer	1
	Clip	2		Clip	2
	Template	1		Installation inspection sheet	1

### Separate Purchase [Front under spoiler (BCKN V4 900)]

 Part	Part name	Qty	
	Front under spoiler	1	

### Separate Purchase [Deflector (B0L6 V4 990)]

Part	Part name	Qty
100000	Deflector	1

# 3. BEFORE INSTALLATION

# ■ REQUIRED TOOLS (Make sure they are at hand before starting work)

☆Flathead screwdriver

☆Phillips screwdriver

☆Punch

☆Ultrasonic cutter

☆Round file

☆Scissors

☆Socket wrench

☆Scales

☆Fastener remover

☆Allen key

#### Other items to prepare

☆Masking tape

☆Pencil

☆Red marker pen

☆Push pin

☆Protective sheet

☆IPA (isopropyl alcohol) or white gasoline

☆Dryer

☆Mending tape

☆Adhesion promoter

☆Instant adhesive (ThreeBond TB1782 or TB1757)

## WARNING

Disconnect the negative battery terminal while being careful not to touch the terminals. If this is not observed, damage to components, electric shocks or injury may occur as a result of electrical short-circuits.

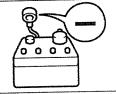
When disconnecting and connecting connectors, hold the connector firmly by the main body part of the connector.

If this is not observed, open circuits or short-circuits may occur, and accidents or fire may result.

Do not pull the harness too

If this is not observed, open circuits or short circuits may occur, and accidents, electric shocks or fire may result.

Before performing any work, park the vehicle on level ground, apply the parking brake securely, and then block the wheels. If the vehicle moves while performing work, it may cause injury.



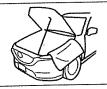


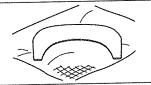




## **ACAUTION**

Be sure to cover the vehicle body with protectors or mats when removing/installing parts. Otherwise, the vehicle may be scratched or become dirty. Place the removed parts and kit accessories on a protective sheet to prevent scratches.





### Advice

Refer to the Workshop Manual for removal and installation of applicable vehicle parts.



## 4. DOUBLE-SIDED TAPE ATTACHMENT

\* "Attachment surface" refers to the vehicle's rear spoiler, and "part" refers to supplementary parts

# 1. Avoid working in ambient temperatures of less than 15 °C.

The stickiness of the adhesive depends on the softness of the resin, and so the adhesive loses its stickiness and the adhesive strength drops at low temperatures (15 °C or less).

Accordingly, avoid carrying out work in places where the ambient temperature is less than 15 °C.

If working in places where the ambient temperature is less than 15 °C, you should heat the attachment surface and the part until they are warm enough.

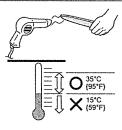
#### 2. Attach evenly.

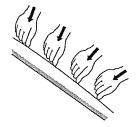
In order to ensure that the adhesive surface of the double-sided tape attaches correctly, it is necessary to press the adhesive surface of the tape against the attachment surface with a uniform force (50N) overall. In particular, press down sufficiently on the double-sided tape when the ends of the tape and the attachment surface are curved.

#### 3. Clean the attachment surface.

If there is any dirt, grease or other contamination on the attachment surface, they may become attached to the double-sided tape, causing a drop in the adhesive strength of the double-sided tape.

You should clean the attachment surface before attaching the double-sided tape. As a general rule, use mild detergent for interior surfaces, and use IPA (isopropyl alcohol) or white gas for exterior surfaces. After cleaning, let the area dry sufficiently.







#### 4. Avoid getting the tape dirty.

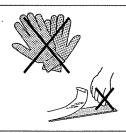
If you touch the adhesive surface while working, oil from your hands can get onto the adhesive and cause a drop in the adhesive strength of the double-sided tape.

In addition, when working while wearing gloves, fibers and dirt from the gloves may become attached to the adhesive. Take care to avoid contaminating the adhesive surface of the double-sided tape.

# 5. Handling after attaching the tape

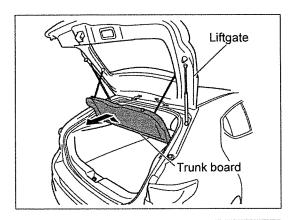
After the tape has been attached, the adhesive strength will not stabilize until 24 hours have passed, so do not drive or wash the vehicle or leave it exposed to rain for 24 hours.

In addition, never remove and reattach the double-sided tape once the product has been installed, as this will result in a dramatic drop in adhesive strength.



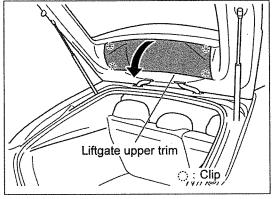


## 5. VEHICLE PART REMOVAL

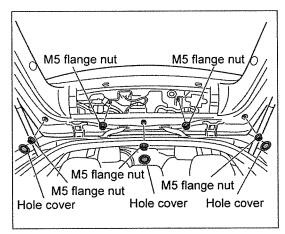


#### Rear spoiler removal

- 1. Open the liftgate.
- 2. Disconnect the negative battery cable while referring to "Disconnecting/connecting negative battery cable" in the vehicle workshop manual.
- 3. Remove the trunk board.

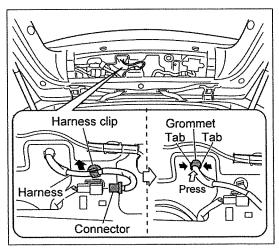


4. Remove the liftgate upper trim.



5. Remove the hole covers (3 places), and then remove the M5 flange nuts (5 places).

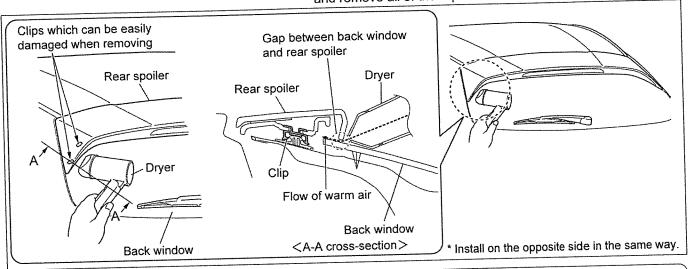
M5 flange nut tightening torque: (3.93−5.88 N·m)



- 6. Disengage the harness from the harness clip.
- 7. Disconnect the connector at the position in the illustration at left.
- 8. Press the tabs of the grommets shown in the illustration (1 place each at left and right) to disengage the grommets from the lift gate, and push the grommets into the holes in the vehicle.

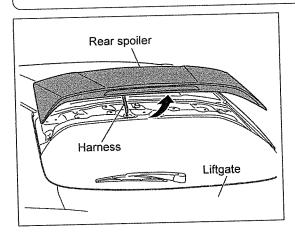
Because the clips can be easily damaged when removing the rear spoiler, use the hot air from a household dryer (1000 to 1200 W) to blow warm air through the gap between the back window and the rear spoiler to warm up one side of the rear spoiler for approximately 30 seconds as shown in the illustration below. After this, remove the clips starting from the area which was warmed and working backward.

Lastly, use the household dryer to warm the RH side in the area where the clips are installed in the same way as for the LH side, and remove all of the clips.



## /CAUTION

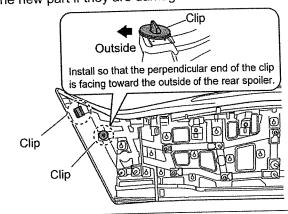
- If you forcibly remove the rear spoiler without warming around the places where the clips of the rear spoiler are installed (marked with () in the illustration above), the clips (2 places on each side) may break and the broken pieces may fall into the liftgate.
- If these places are warmed using the warm air from a household dryer (1000 to 1200 W) for approximately 30 seconds, the ambient temperature of these areas will reach normal temperature (23°C). If the ambient temperature is too low, be sure to warm the areas for a bit longer.



- 10. Remove the existing rear spoiler from the liftgate.
  - Cover the locking part of the liftgate with a cloth so that the liftgate cannot fully close.



- Be careful not to damage the rear spoiler harness when removing the rear spoiler.
- When removing the rear spoiler, replace the fasteners (clips) at the ends of the rear spoiler with the clips of the new part if they are damaged.

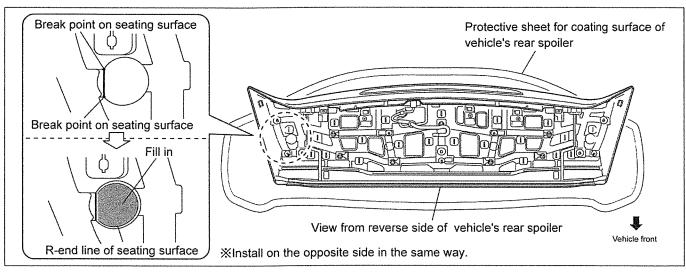


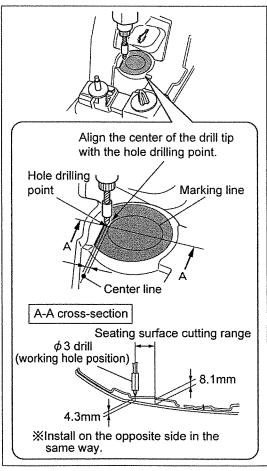
## 6. PREPARATION BEFORE REAR SPOILER INSTALLATION

 The diagrams showing the work procedure are for the left side of the vehicle; the same steps should be carried out for the right side as well.

#### Preparation for drilling vehicle rear spoiler mounting holes

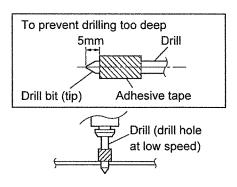
- 1. Use a pencil or similar to draw a line connecting the break points on the seating surface.
- Use a red marker pen or similar to fill in the area enclosed by the line which was drawn in step 1 and the R-end line on the seating surface as a guide to the area for cutting out the seating surface.





3. Place the tip of the drill at a point about in the center of the area between the line which was drawn in step 1 and the marking line, and drill  $\phi$ 6 mm working holes in steps (1 each at left and right) to be used for drilling holes using the ultrasonic cutter.

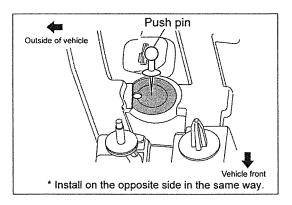
 $(\phi 6 \text{ mm hole: } \phi 3 \text{ mm } \rightarrow \phi 6 \text{ mm})$ 



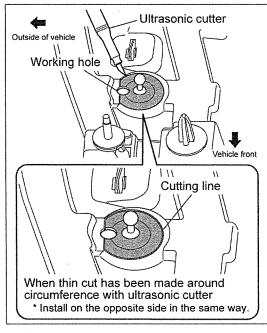
### **ACAUTION**

 Take care not to let the tip of the drill go too far into the seating surface. (5 mm as a guide)

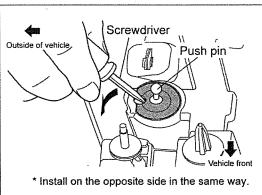
If the tip of the drill goes in too far, there is a danger that it may pierce the surface of the vehicle's rear spoiler.



Push a push pin as far as it will go into the area near the center of the area which has been filled in using the red marker pen to prevent it falling into the gap when cutting the seating surface.



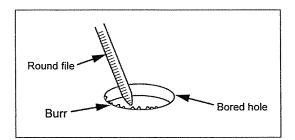
5. Starting from  $\phi$  6 mm working hole which was made in step: use the ultrasonic cutter to make a thin cut around the circumference of the area marked in red for using as cutting-away guide line as shown in the illustration.



6. Trace the ultrasonic cutter around the cut which was made step 5 to cut away the seating surface.

### **⚠**CAUTION-

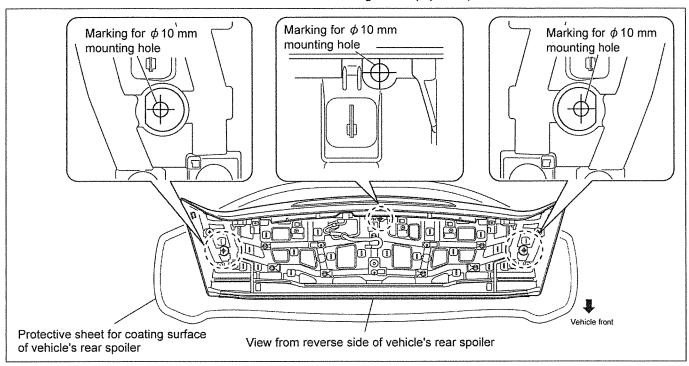
 Be careful not to let the blade of the ultrasonic cutter to go too far into the seating surface. (5 mm as a guide)
 If the tip of the drill goes in too far, there is a danger that it may pierce the surface of the vehicle's rear spoiler.



- 7. After cutting away the seating surface, insert a screwdriver in the working hole which was made in step 3, and while holdir the push pin, fully remove the seating surface which has bee cut away.
- 8. After cutting away the seating surface with the ultrasonic cutte use a file to fully remove any burrs from the resulting hole.

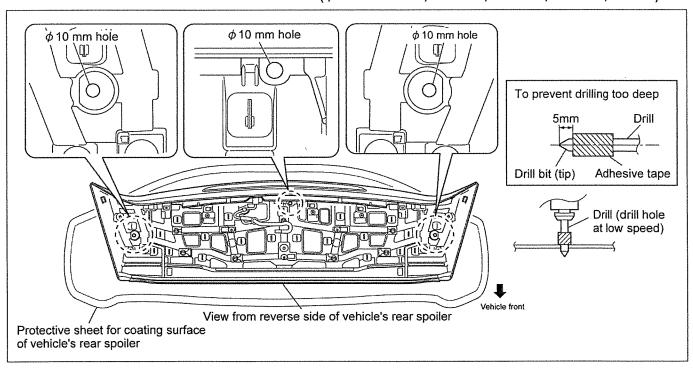
#### Rear spoiler mounting hole drilling

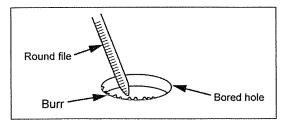
1. Use a punch to make marks at the centers of the  $\phi$ 10 mm mounting holes. (3 places)



2. Use the drill to drill  $\phi$  10 mm holes (in 3 places) in stages at the locations of the marks.

 $(\phi 10 \text{ mm hole: } \phi 3 \text{ mm} \rightarrow \phi 6 \text{ mm} \rightarrow \phi 8 \text{ mm} \rightarrow \phi 10 \text{ mm})$ 



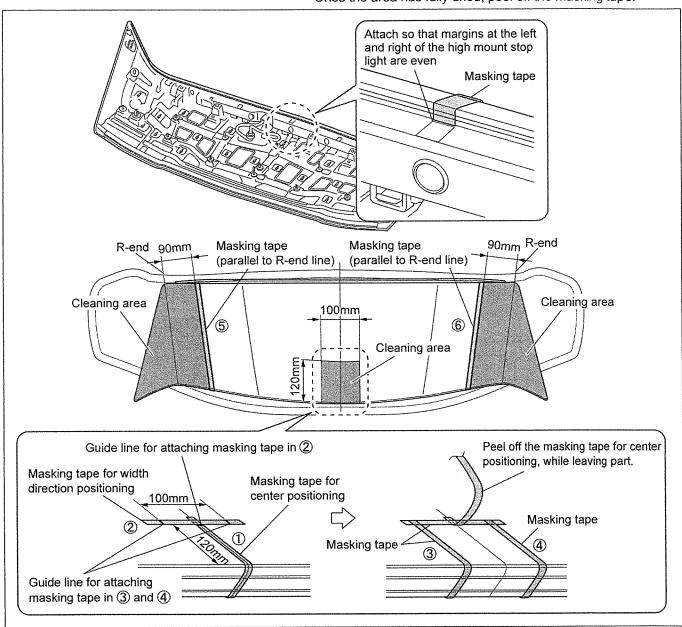


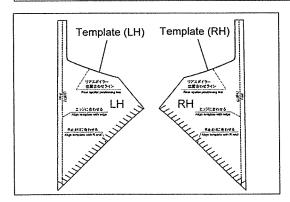
3. After drilling the holes, use a file to fully remove any burrs from the undersides of the holes.

## 7. REAR SPOILER INSTALLATION

### Rear spoiler installation

Attach masking tape in the order ① to ⑥ in the places where
the double-sided adhesive tape for the rear spoiler is to be
attached as shown in the illustration below, and then use IPA
(isopropyl alcohol) or white gasoline to clean the area.
Once the area has fully dried, peel off the masking tape.

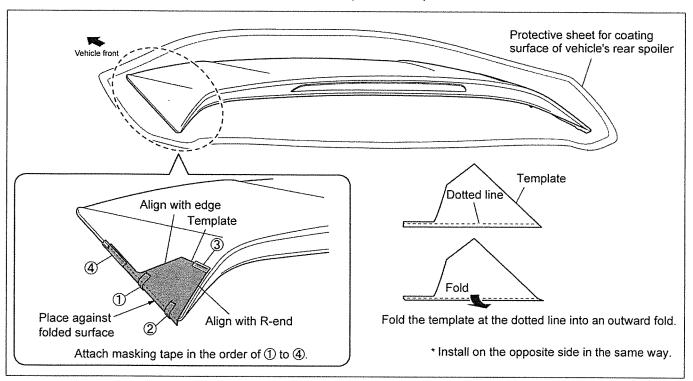


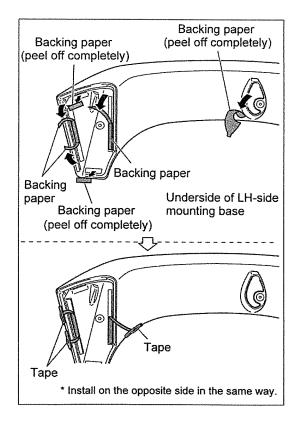


Cut the templates for using to position the rear spoiler for installation.

(1 each for RH and LH)

3. Use masking tape to attach the template (LH) to the vehicle's rear spoiler in the position shown in the illustration below.

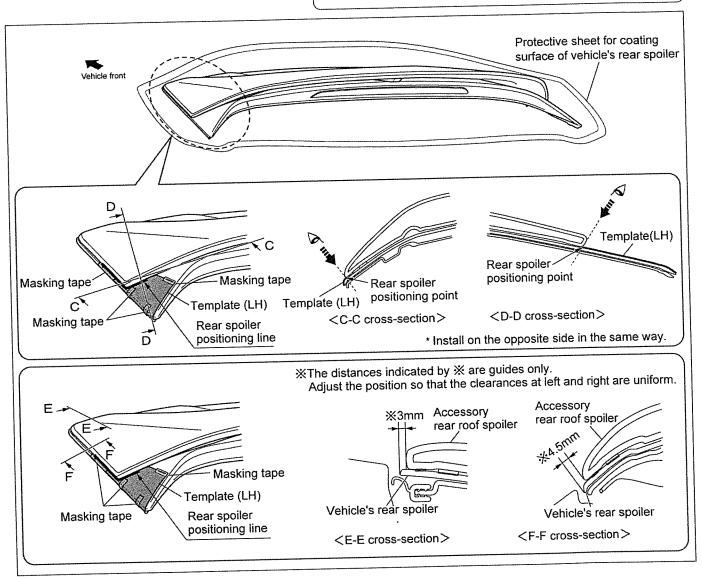




 Peel off the backing paper from the double-sided tape on the rear spoiler (on each of the center, RH-side and LH-side mounting bases) as shown in the illustration at left.

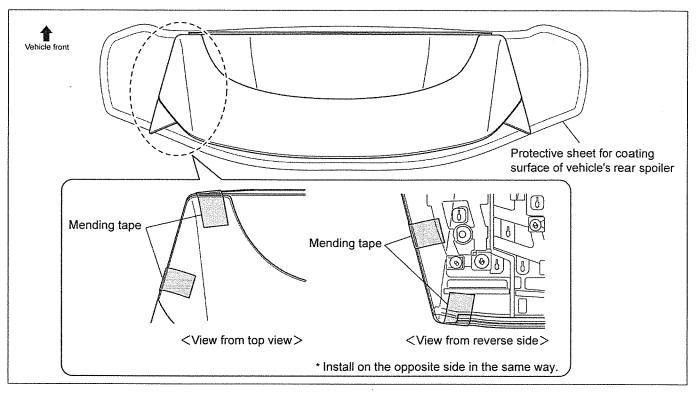
5. Secure the folded ends to the upper surface of the rear spoiler with tape.

- 6. Provisionally position the rear spoiler by aligning the reference lines on the templates with the rear edges of the left and right seating surfaces for installing the rear spoiler to the vehicle's rear spoiler as shown in the illustration below.
  - Be sure to have two people position the rear spoiler carefully, otherwise the double-sided tape which has the backing paper removed will become attached to the vehicle's rear spoiler.

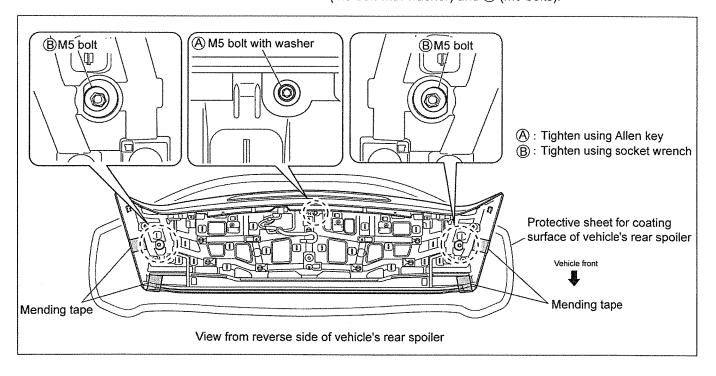


## **ACAUTION**

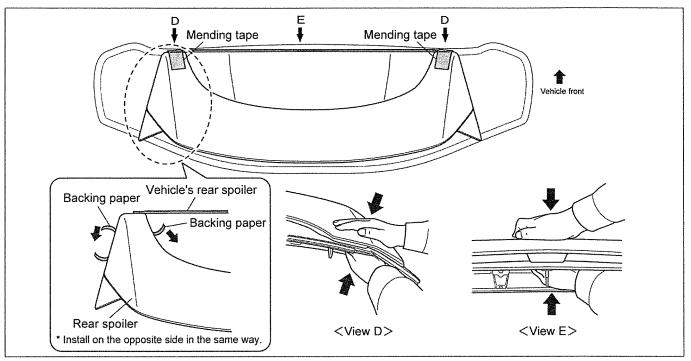
 If the distance at the front indicated by ※ (3 mm) is too narrow, the rear spoiler may cause an obstruction when opening and closing the liftgate, so check visually to maintain a clearance of about 3 mm at both left and right sides.  Securely attach mending tape to the rear spoiler so that it does not move from the provisional installation position for the rear spoiler to be secured to the vehicle's rear spoiler with the bolts.

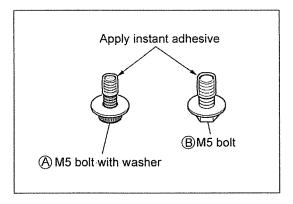


8. Provisionally tighten the bolts on the underside in 3 places (M5 bolt with washer) and (M5 bolts).



 After checking that the the rear spoiler is aligned with the vehicle, remove the mending tape and templates from both sides.
 Next, peel off the backing paper from the double-sided adhesive tape, and securely press down from above and below as shown in the illustration below to attach.



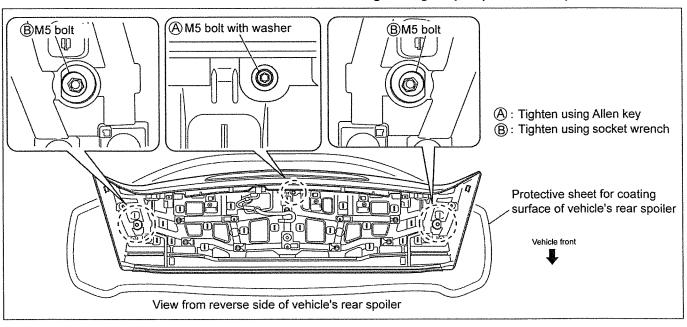


10. Remove the bolts (M5 bolt with washer: 1 place) and (B) (M5 bolts: 2 places) which were provisionally installed in step 8 from the underside, and then apply instant adhesive to the threads.

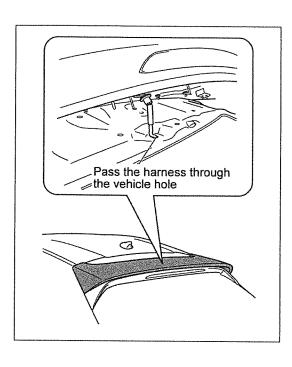
### ACAUTION-

- Do not use anything other than the specified instant adhesive. (The spoiler is made from ABS, so do not use any other screw lock adhesive, as it may result in damage (such as solvent cracking).)
- 11. Fully tighten the bolts (M5 bolt with washer: 1 place) and (B) (M5 bolts: 2 places) which have instant adhesive applied to their threads.

M5 bolt tightening torque: (5.0−7.8 N·m)



1 1

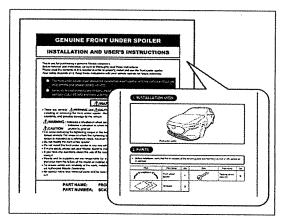


- 12. Install the rear spoiler assembly to the vehicle while being careful of the harness.
  - Two people should carry out this work.
- 13. Gently open the liftgate.
- 14. Re-install the rear spoiler by following the procedure in "Rear spoiler removal" (page 5) in reverse.

## 8. REASSEMBLY AND INSPECTION

- 1. Check that all vehicle functions are restored, while referring to "Required servicing after disconnecting/connecting negative battery cable" in "Disconnecting/connecting negative battery cable" in the vehicle workshop manual.
- 2. Carry out a reassembly and operation inspection for the vehicle parts and check that all items are installed.

# 9. DEFLECTOR AND FRONT UNDER SPOILER (SEPARATE PURCHASE) INSTALLATION



 Install the deflector and front under spoiler while referring to the Installation and User's Instructions for the front under spoiler (BCKN V4 900).

## 10. TO THE CUSTOMER

Heed the following cautions when handling (maintenance) the rear spoiler.

- If gasoline, oil, engine coolant, or battery fluid adheres to the hard plastic parts, it will cause discoloration, stains, or damage. Wipe off immediately with a soft cloth.
- Depending on the type of high pressure car washer used, the water for washing may be high temperature and/or under high pressure. Be careful when using pressurized water from a car washer nozzle. If the nozzle is too close or water pressure is applied for long periods, it may cause deformation or damage to the hard plastic parts.
- Do not use electric or air tools to apply wax or compound (polishing powder). Otherwise, friction heat will be generated causing deformation or damage to the hard plastic parts.