

POWER WINDOW CONTROL SYSTEM

ON-VEHICLE INSPECTION

700HB-02

1. CHECK POWER WINDOW (MANUAL OPERATION FUNCTION)

- Turn the ignition switch ON.
- Check that the door glass moves up when the power window regulator master switch is pulled UP halfway, and the door glass moves down when the switch is pushed DOWN halfway.
- Check that the door glass moves up when the power window regulator switch is pulled UP, and the door glass moves down when the switch is pushed DOWN.
- Check that the door glasses other than the driver side door glass do not operate when the window lock switch is turned to LOCK.

2. CHECK AUTOMATIC OPERATION FUNCTION

HINT:

Only steps (a), (b), and (d) are applicable to the models without the jam protection function.

- Turn the ignition switch ON.
- Check that the AUTO UP function operates to fully close the door glass when each window switch of the regulator master switch is pulled UP fully.
- Check that the AUTO DOWN function operates to fully open the door glass when each window switch of the regulator master switch is pushed DOWN fully.
- Check that the door glass stops when the applicable switch is pulled UP during AUTO DOWN operation. (However, if the switch is held in the UP position, it will change to manual operation.)
- Check that the door glass stops when the applicable switch is pushed DOWN during AUTO UP operation. (However, if the switch is held in the DOWN position, it will change to manual operation.)

3. CHECK JAM PROTECTION FUNCTION (FOR DRIVER SIDE DOOR GLASS OF MODELS W/ JAM PROTECTION FUNCTION)

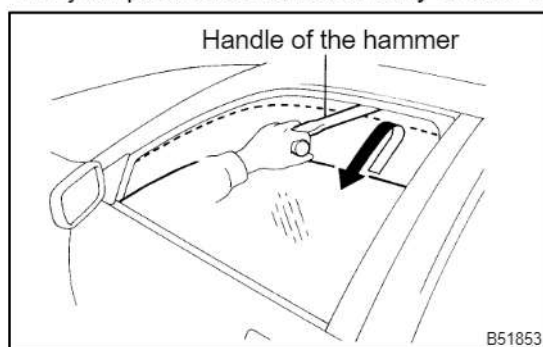
- Check the basic function.

NOTICE:

- Do not check this function using a part of your body such as a hand. Also, pay thorough attention that nothing gets caught by accident in this process.
- If the power window regulator motor assembly has just been reset, raise and lower the door glass several times using AUTO and MANUAL operation before performing check.

HINT:

The jam protection function only works during UP operation.



- Fully open the door glass.
- Insert the handle of the hammer when the door glass is almost in the fully closed position.
- Try to close the door glass with AUTO UP and MANUAL UP operation, check that the door glass moves down about 200 mm (7.87 in.) and stops there, so that the hammer handle is not caught.

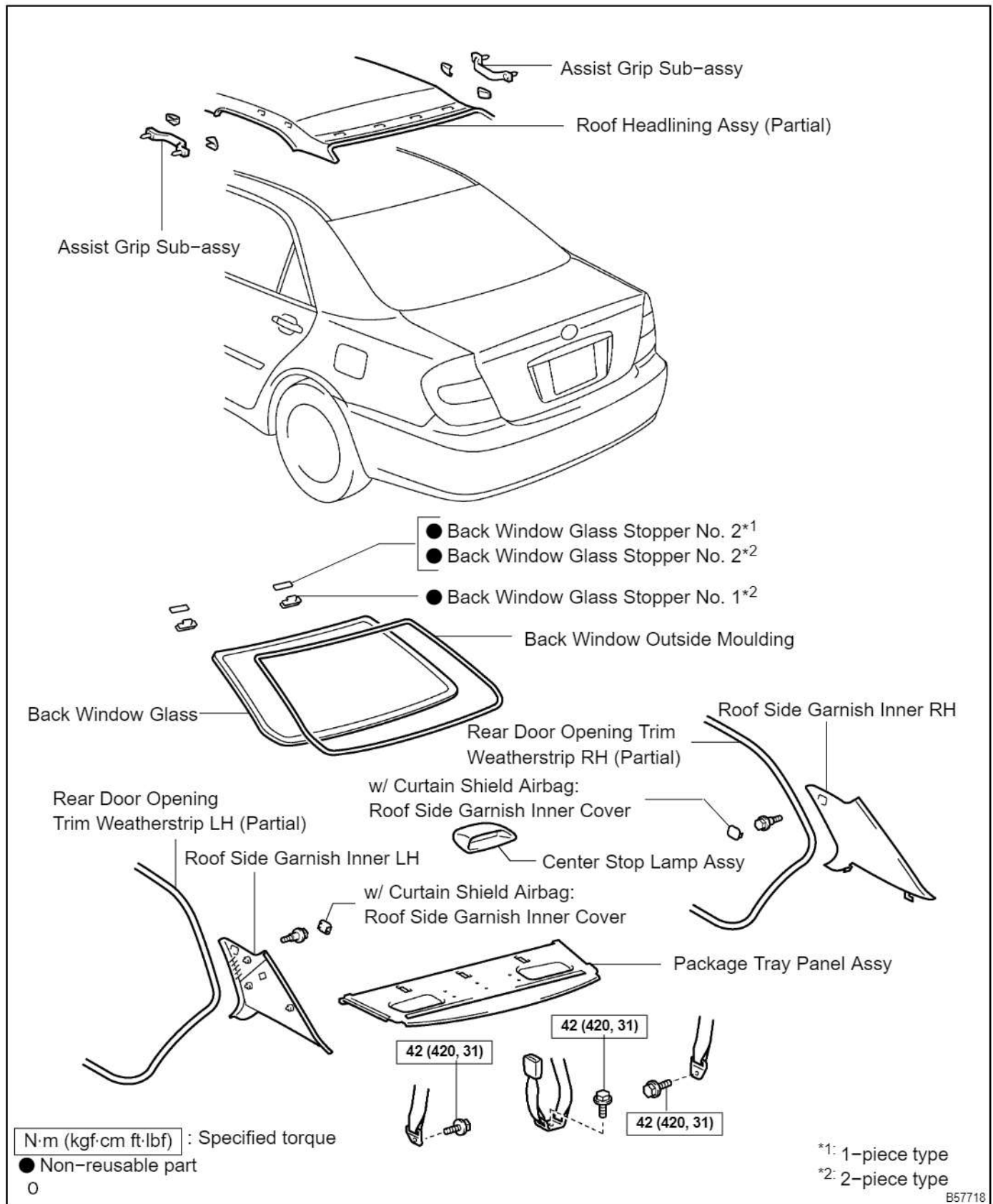
HINT:

The door glass goes down by about 50 mm. However, when the opening between the glass and body is less than 200 mm, the door glass goes down by 200 mm or keeps going down for 5 seconds, and then stops.

- During DOWN operation, check that the door glass does not move up even when the window regulator master switch is pulled UP.

BACK WINDOW GLASS COMPONENTS

700B1-03



REPLACEMENT

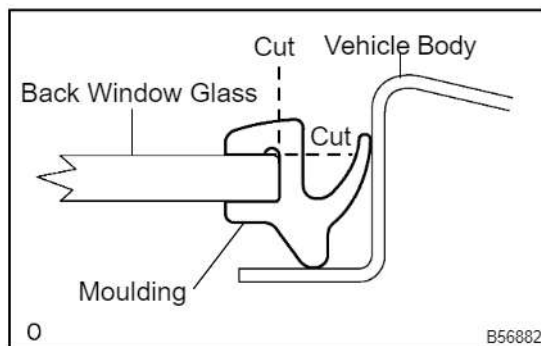
HINT:

- The installation procedures are the removal procedures in reverse order. However, only installation procedures requiring additional information are included.
 - A bolt without torque specification is a standard bolt (see page 03-2).
1. **REMOVE REAR SEAT CUSHION ASSY** (See page 72-32)
 2. **REMOVE REAR SEATBACK ASSY** (See page 72-32)
 3. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP RH**
 4. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH**
 5. **REMOVE ROOF SIDE GARNISH INNER RH (w/o CURTAIN SHIELD AIR BAG)**
(See page 76-22)
 6. **REMOVE ROOF SIDE GARNISH INNER LH (w/o CURTAIN SHIELD AIR BAG)**
(See page 76-22)
 7. **REMOVE ROOF SIDE GARNISH INNER RH (w/ CURTAIN SHIELD AIR BAG)**
(See page 76-22)
 8. **REMOVE ROOF SIDE GARNISH INNER LH (w/ CURTAIN SHIELD AIR BAG)**
(See page 76-22)
 9. **REMOVE ROOF HEADLINING ASSY** (See page 76-22)

HINT:

It is not necessary to completely remove the roof headlining. Slightly lower the rear section of the roof headlining so that the back window glass can be removed later in step 13.

10. **REMOVE CENTER STOP LAMP ASSY** (See page 65-22)
11. **REMOVE PACKAGE TRAY TRIM PANEL ASSY** (See pages 61-13 and 61-16)



12. REMOVE BACK WINDOW MOULDING OUTSIDE

- (a) Using a knife, cut off the moulding, as shown in the illustration.

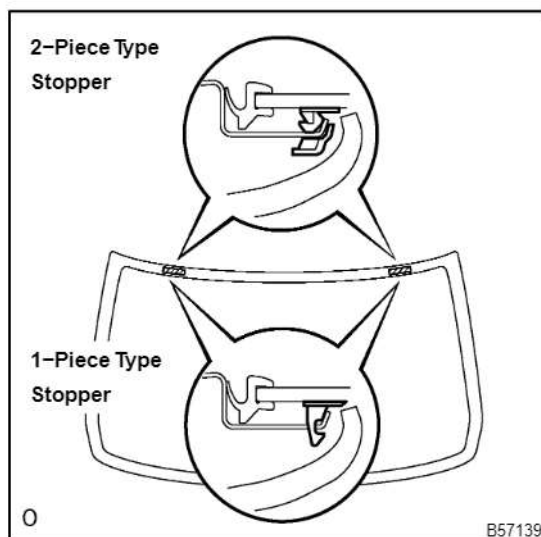
NOTICE:

Be careful not to damage the vehicle body with the knife.

- (b) Remove the remaining moulding.

HINT:

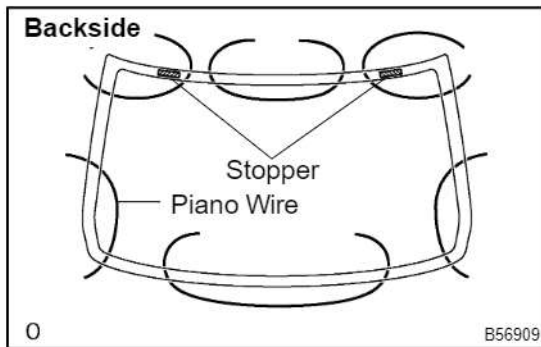
Make a partial cut in the moulding. Then pull and remove it by hand.



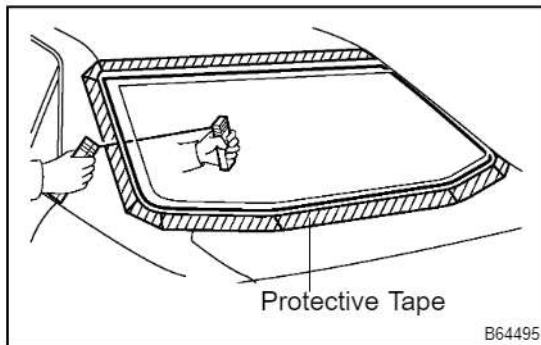
13. REMOVE BACK WINDOW GLASS

HINT:

In some cases, 1-piece type and 2-piece type stoppers are installed in the same vehicle.



- (a) From the interior, insert piano wires between the vehicle body and glass, as shown in the illustration.
- (b) Tie objects that can serve as handles (for example, wooden blocks) to all wire ends.

**HINT:**

Apply protective tape to the outer surface of the vehicle body to prevent its surface from being scratched.

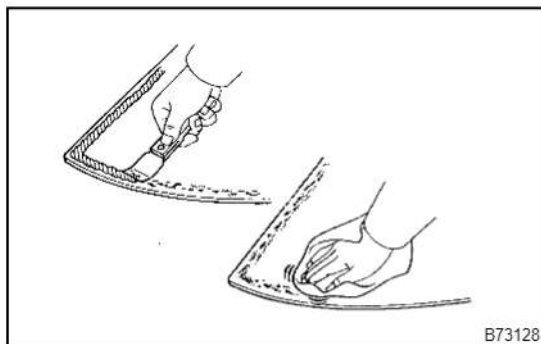
NOTICE:

When separating the glass from the vehicle, be careful not to damage the vehicle's paint or interior / exterior ornaments.

- (c) Cut through the adhesive by pulling the piano wire around the glass.
- (d) Disengage the stoppers.
- (e) Using a suction cup, remove the glass.

NOTICE:

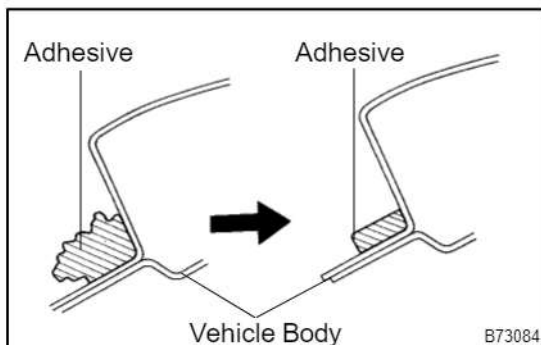
Leave as much adhesive on the vehicle body as possible when removing the glass.

**14. CLEAN BACK WINDOW GLASS**

- (a) Using a scraper, remove the damaged stoppers and adhesive sticking to the glass.
- (b) Clean the outer circumference of the glass with white gasoline.

NOTICE:

- **Do not touch the glass surface after cleaning it.**
- **Even if using new glass, clean the glass with white gasoline.**

**15. CLEAN VEHICLE BODY**

- (a) Clean and shape the contact surface of the vehicle body.
 - (1) Using a knife, cut away any rough adhesive on the contact surface of the vehicle body to ensure the appropriate surface shape.

NOTICE:

Be careful not to damage the vehicle body.

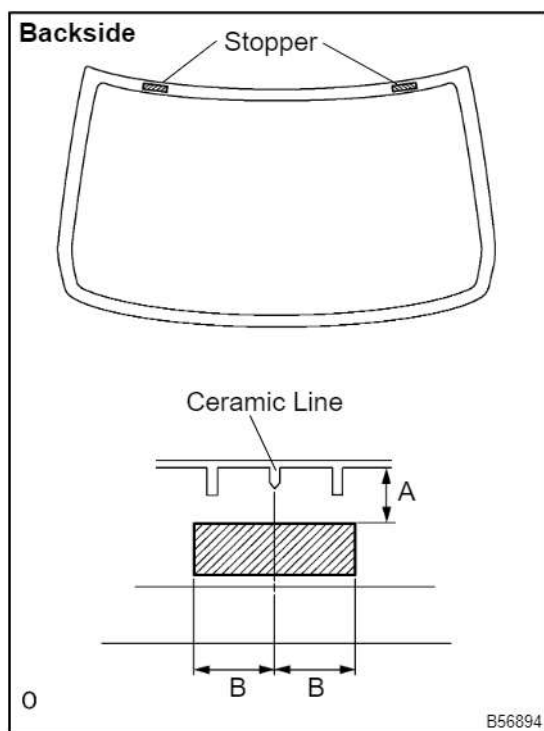
HINT:

Leave as much adhesive on the vehicle body as possible.

- (2) Clean the contact surface of the vehicle body with a piece of shop rag saturated with cleaner.

HINT:

Even if all the adhesive has been removed, clean the vehicle body.

**16. INSTALL BACK WINDOW GLASS STOPPER NO.2**

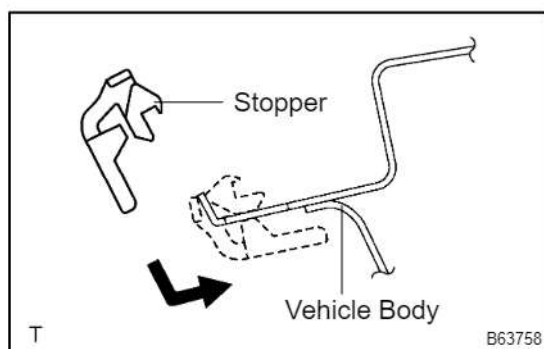
- (a) Coat the installation part of the stopper with Primer G.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
 - Throw away any leftover Primer G.
 - Do not apply too much Primer G.
- (b) Install 2 new stoppers onto the glass, as shown in the illustration.

Specification:

Area	Measurement
A	11.2 mm (0.441 in.)
B	40.0 mm (1.575 in.)

**17. INSTALL BACK WINDOW GLASS STOPPER NO.1**

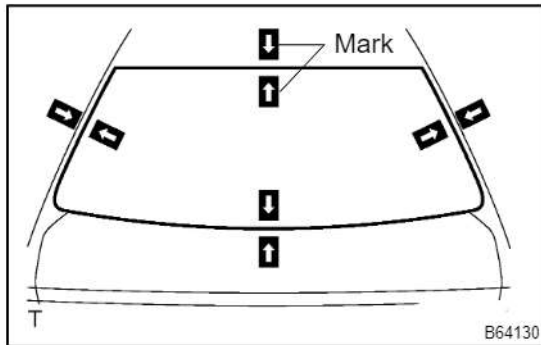
- (a) Install 2 new stoppers to the vehicle body, as shown in the illustration.

18. INSTALL BACK WINDOW MOULDING OUTSIDE

- (a) Using a brush or sponge, coat the edge of the glass and the contact surface with Primer G.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
 - Throw away any leftover Primer G.
 - Do not apply too much Primer G.
- (b) Install the moulding.



19. INSTALL BACK WINDOW GLASS

- (a) Position the glass.
- (1) Using a suction cup, place the glass in the correct position.
 - (2) Check that the whole contact surface of the glass rim is perfectly even.
 - (3) Place reference marks between the glass and vehicle body.

NOTICE:

Check that the stoppers are attached to the vehicle body correctly.

HINT:

When reusing the glass, check and correct the reference mark's positions.

- (4) Using a suction cup, remove the glass.
- (b) Using a brush, coat the exposed part of the vehicle body with Primer M.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
- Do not coat the adhesive with Primer M.
- Throw away any leftover Primer M.
- Do not apply too much Primer M.

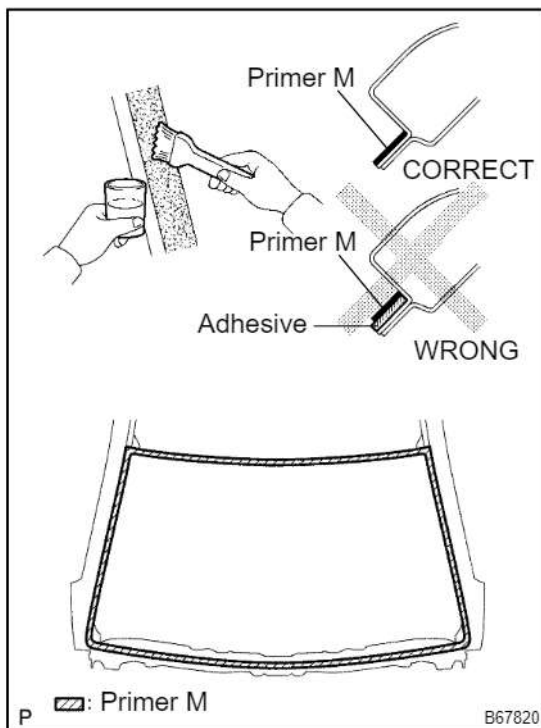
- (c) Using a brush or sponge, coat the edge of the glass and the contact surface with Primer G.

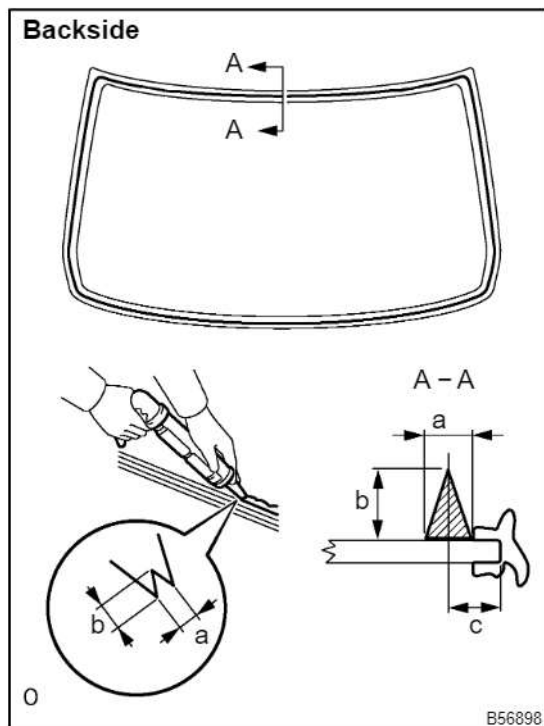
HINT:

If the area other than that specified is coated by accident, wipe off the primer with a clean shop rag before it dries.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
- Throw away any leftover Primer G.
- Do not apply too much Primer G.





(d) Apply adhesive.

Adhesive: Part No. 08850-00801 or equivalent

- (1) Cut off the tip of the cartridge nozzle, as shown in the illustration.

HINT:

After cutting off the tip, use all adhesive within the time described in the table below.

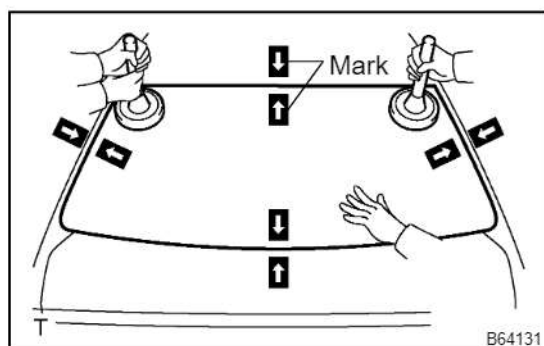
Usage timeframe:

Temperature	Usage Timeframe
35°C (95°F)	15 minutes
20°C (68°F)	1 hour 40 minutes
5°C (41°F)	8 hours

- (2) Load the sealer gun with the cartridge.
 (3) Coat the glass with adhesive, as shown in the illustration.

Specification:

Area	Measurement
a	8.0 mm (0.315 in.)
b	12.0 mm (0.472 in.)
c	6.5 mm (0.256 in.)

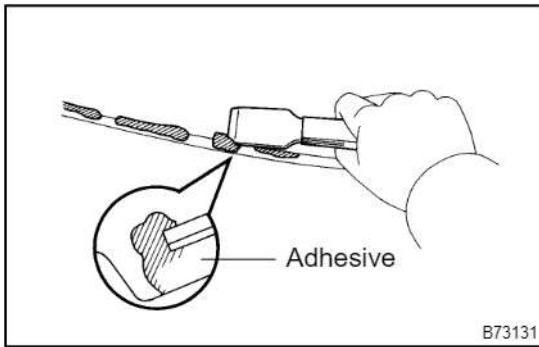


(e) Install the glass.

- (1) Using a suction cup, position the glass so that the reference marks are aligned. Press it in gently along the rim.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
 - Check that the stoppers are attached to the vehicle body correctly.
 - Check that the vehicle body and glass have a small gap between them.
- (2) Lightly press the front surface of the glass to ensure that the glass is securely fit to the vehicle body.



- (3) Using a scraper, remove any excess or protruding adhesive.

HINT:

Apply adhesive on the glass rim.

NOTICE:

Do not drive the vehicle for the amount of time described in the table below.

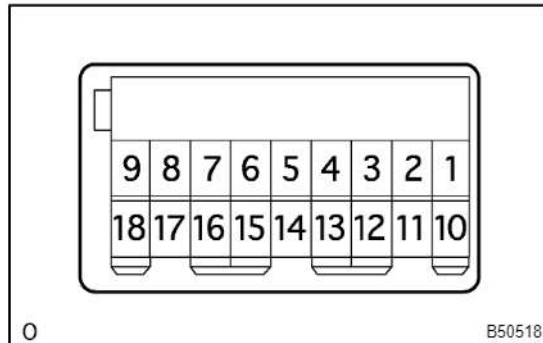
Minimum time:

Temperature	Minimum time prior to driving vehicle
35★C (95★F)	1 hour 30 minutes
20★C (68★F)	5 hours
5★C (41★F)	24 hours

20. CHECK FOR LEAKS AND REPAIR

- Conduct a leak test after the adhesive has completely hardened.
- Seal any leaks with auto glass sealer.

INSPECTION



1. INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY

- (a) Check the continuity between each terminal of the connector.

NOTICE:

Whether the operation is good or bad can be judged by the basic function check, because the continuity cannot be checked by UP/DOWN operation of the driver side switch.

Standard (Window unlock):

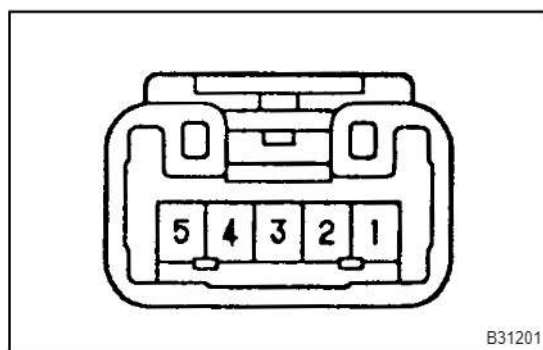
Switch position	Passenger Side Terminals No.	Rear RH Terminals No.	Rear LH Terminals No.
UP	6 - 13 * ¹ (6 - 18 * ²), 1 - 15	6 - 18 * ¹ (6 - 10 * ²), 1 - 16	6 - 12, 1 - 10 * ¹ (1 - 13 * ²)
OFF	1 - 13 * ¹ (1 - 18 * ²), 1 - 15	1 - 18 * ¹ (1 - 10 * ²), 1 - 16	6 - 12, 1 - 10 * ¹ (1 - 12 * ²)
DOWN	6 - 15, 1 - 13 * ¹ (1 - 18 * ²)	6 - 16, 1 - 18 * ¹ (1 - 10 * ²)	6 - 10 * ¹ (6 - 13 * ²), 1 - 12

Standard (Window lock):

Switch position	Passenger Side Terminals No.	Rear RH Terminals No.	Rear LH Terminals No.
UP	6 - 13 * ¹ (6 - 18 * ²)	6 - 18 * ¹ (6 - 10 * ²)	6 - 12
OFF	13 - 15 * ¹ (18 - 15 * ²)	16 - 18 * ¹ (1 - 10 * ²)	10 - 12
DOWN	6 - 15	6 - 16	6 - 10 * ¹ (6 - 13 * ²)

*¹: w/ Jam protection *²: w/o Jam protection

If the continuity is not as specified, replace the switch.



2. INSPECT POWER WINDOW REGULATOR SWITCH ASSY

- (a) Check the continuity between each terminal of the connector when operating the switch.

Standard:

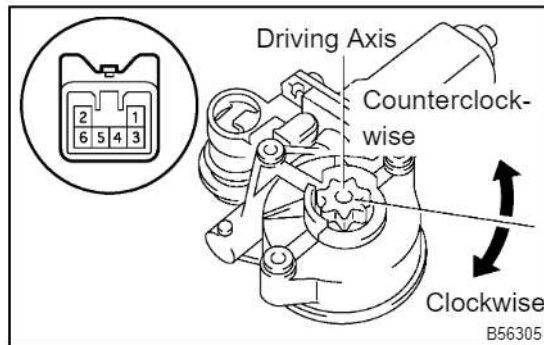
Switch position	Terminals No.	Condition
UP	1 - 2 3 - 4	Continuity
OFF	1 - 2 3 - 5	Continuity
DOWN	1 - 4 3 - 5	Continuity

If the continuity is not as specified, replace the switch.

3. INSPECT POWER WINDOW REGULATOR MOTOR ASSY LH

NOTICE:

- Be sure not to apply battery voltage to terminals 2, 3 and 6 of the power window regulator motor assy LH connector, because it might damage the pulse sensor and the limit switch.
- Be sure to reset the power window regulator motor assembly (initial position setting of the limit switch) when the power window regulator motor assy LH is installed to the regulator.



- (a) Inspect operation of the front LH power window regulator motor assembly.

- (1) When adding battery voltage to each connector terminal, check that the motor operates smoothly.

Standard:

Measurement condition	Operational direction
Battery positive – Terminal 5 Battery negative – Terminal 4	Clockwise
Battery positive – Terminal 4 Battery negative – Terminal 5	Counterclockwise

- (b) Check operation of the PTC inside the power window regulator motor.

NOTICE:

Work must be performed with the power window regulator and door glass installed to the vehicle.

- (1) Set the DC 400 A probe to terminal 4 or 5 of the wire harness.

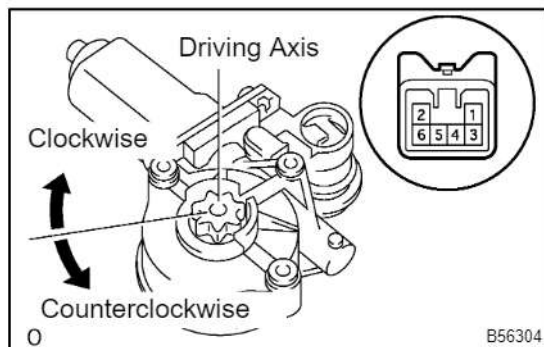
NOTICE:

Match the arrow mark of the probe with the current direction.

- (2) Set the door glass at the fully closed position.
- (3) When approximately 60 seconds have passed after fully closing the door glass, check how long the current takes to change from approximately 16 – 34 A to less than 1 A when pulling the power regulator switch UP furthermore (at initial time).

Standard: Approximately 4 – 90 seconds

- (4) When approximately 60 seconds have passed after the cut-off check, check that the door glass goes down when the power regulator switch is pressed DOWN.



4. INSPECT POWER WINDOW REGULATOR MOTOR ASSY RH

- (a) Inspect operation of the front RH power window regulator motor assembly.

- (1) When adding battery voltage to each connector terminal, check that the motor operates smoothly.

Standard:

Measurement condition	Operational direction
Battery positive – Terminal 5 Battery negative – Terminal 4	Clockwise
Battery positive – Terminal 4 Battery negative – Terminal 5	Counterclockwise

(b) Check operation of the PTC inside the power window regulator motor.

NOTICE:

Work must be performed with the power window regulator and door glass installed to the vehicle.

- (1) Set the DC 400 A probe to terminal 4 or 5 of the wire harness.

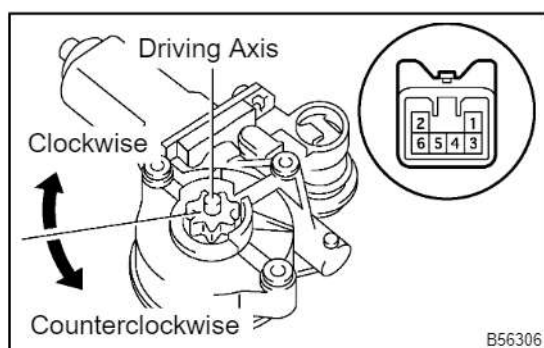
NOTICE:

Match the arrow mark of the probe with the current direction.

- (2) Set the door glass at the fully closed position.
 (3) When approximately 60 seconds have passed after fully closing the door glass, check how long the current takes to change from approximately 16 – 34 A to less than 1 A when pulling the power regulator switch UP furthermore (at initial time).

Standard: Approximately 4 – 90 seconds

- (4) When approximately 60 seconds have passed after the cut-off check, check that the door glass goes down when the power regulator switch is pressed DOWN.



5. INSPECT POWER WINDOW REGULATOR MOTOR ASSY LH

- (a) Inspect operation of the rear LH power window regulator motor assembly.

- (1) When adding battery voltage to each connector terminal, check that the motor operates smoothly.

Standard:

Measurement condition	Operational direction
Battery positive – Terminal 5 Battery negative – Terminal 4	Clockwise
Battery positive – Terminal 4 Battery negative – Terminal 5	Counterclockwise

(b) Check operation of the PTC inside the power window regulator motor.

NOTICE:

Work must be performed with the power window regulator and door glass installed to the vehicle.

- (1) Set the DC 400 A probe terminal 4 or 5 of the wire harness.

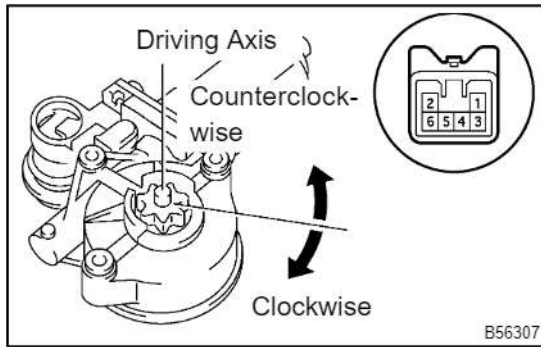
NOTICE:

Match the arrow mark of the probe with the current direction.

- (2) Set the door glass at the fully closed position.
 (3) When approximately 60 seconds have passed after fully closing the door glass, check how long the current takes to change from approximately 16 – 34 A to less than 1 A when pulling the power regulator switch UP furthermore (at initial time).

Standard: Approximately 4 – 90 seconds

- (4) When approximately 60 seconds have passed after the cut-off check, check that the door glass goes down when the power regulator switch is pressed DOWN.



6. INSPECT POWER WINDOW REGULATOR MOTOR ASSY RH

- (a) Inspect operation of the rear RH power window regulator motor assembly.

- (1) When adding battery voltage to each connector terminal, check that the motor operates smoothly.

Standard:

Measurement condition	Operational direction
Battery positive - Terminal 5 Battery negative - Terminal 4	Clockwise
Battery positive - Terminal 4 Battery negative - Terminal 5	Counterclockwise

- (b) Check operation of the PTC inside the power window regulator motor.

NOTICE:

Work must be performed with the power window regulator and door glass installed to the vehicle.

- (1) Set the DC 400 A probe to terminal 4 or 5 of the wire harness.

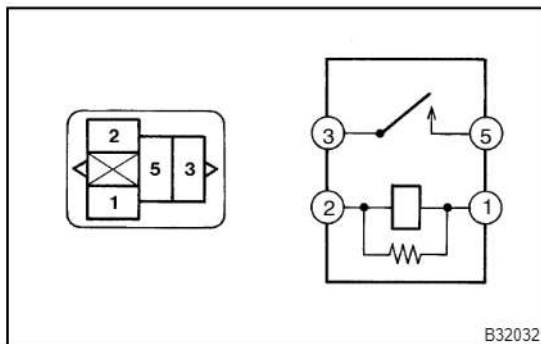
NOTICE:

Match the arrow mark of the probe with the current direction.

- (2) Set the door glass at the fully closed position.
 (3) When approximately 60 seconds have passed after fully closing the door glass, check how long the current takes to change from approximately 16 - 34 A to less than 1 A when pulling the power regulator switch UP furthermore (at initial time).

Standard: Approximately 4 - 90 seconds

- (4) When approximately 60 seconds have passed after the cut-off check, check that the door glass goes down when the power regulator switch is pressed DOWN.



7. INSPECT POWER WINDOW RELAY ASSY

- (a) Inspect the power window relay continuity.

Standard:

Terminals No.	Condition	Specified Condition
1 - 2	Constant	Continuity
3 - 5	Constant	No continuity
3 - 5	Apply B + to terminals 1 and 2	Continuity

If the continuity is not as specified, replace the relay.

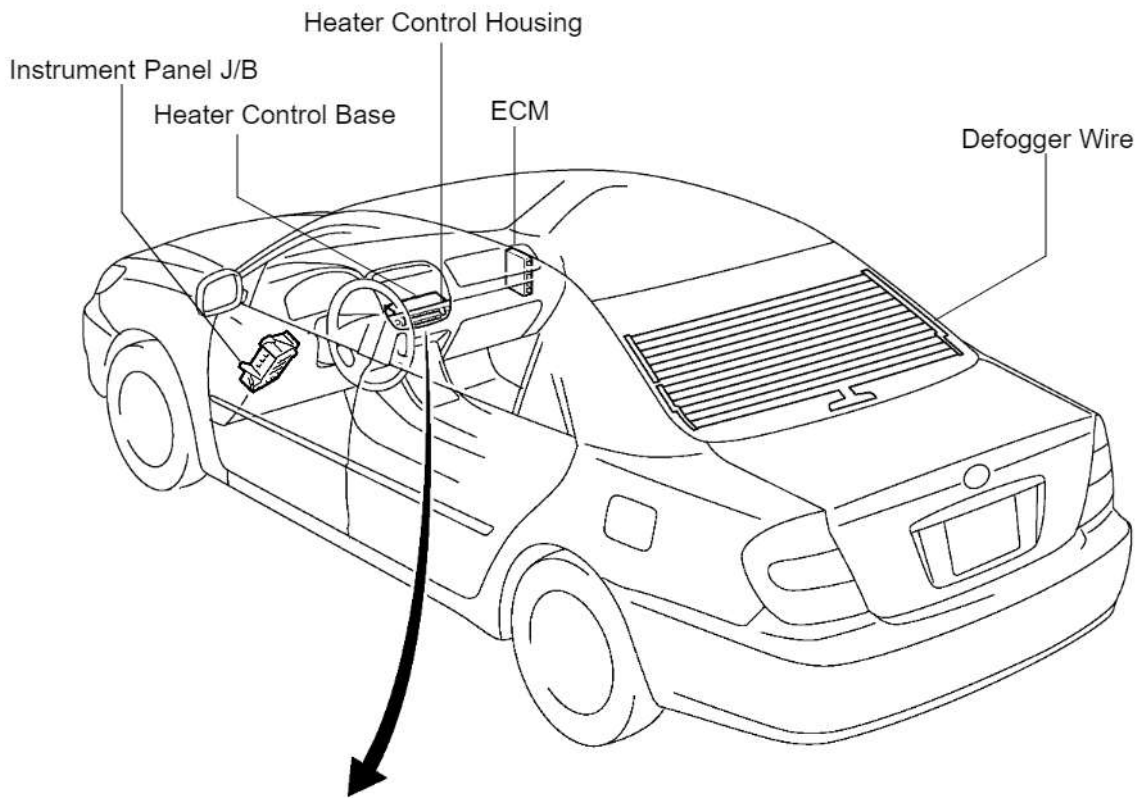
WINDOW DEFOGGER SYSTEM

PROBLEM SYMPTOMS TABLE

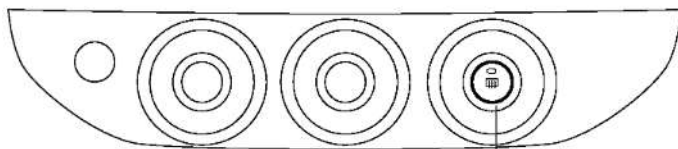
7008B-03

Symptom	Suspected Area	See page
Rear window defogger does not operate (Indicator lamp on)	1. DEF fuse (Instrument panel J/B)	68-1
	2. GAUGE 2 fuse (Instrument panel J/B)	68-1
	3. DEF relay (Instrument panel J/B)	70-22
	4. Rear window defogger wire	-
	5. Wire harness	-
	6. Body ECU (2AZ-FE)	-
	7. Body ECU (1MZ-FE)	-
Rear window defogger does not operate (Indicator lamp off)	1. HTR fuse (Instrument panel J/B)	68-1
	2. Defogger switch (Heater control housing)	05-1370
	3. Wire harness	-
	4. Heater control base	05-1370

LOCATION

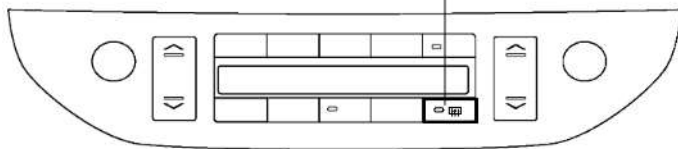


Manual A/C



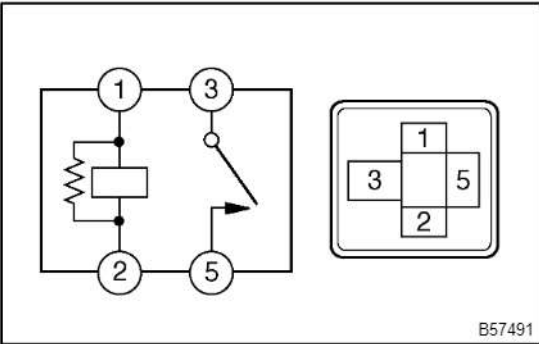
Rear Window Defogger Switch

Auto A/C



Rear Window Defogger Switch

INSPECTION



1. INSPECT DEFOGGER RELAY

(a) Inspect the defogger relay (marking: DEF) continuity.

Standard:

Terminals No.	Condition	Specified condition
1 ⇔ 2	Constant	Continuity
3 ⇔ 5	Constant	No continuity
3 ⇔ 5	Apply B+ between terminals 1 and 2	Continuity

If the continuity is not as specified, replace the relay.

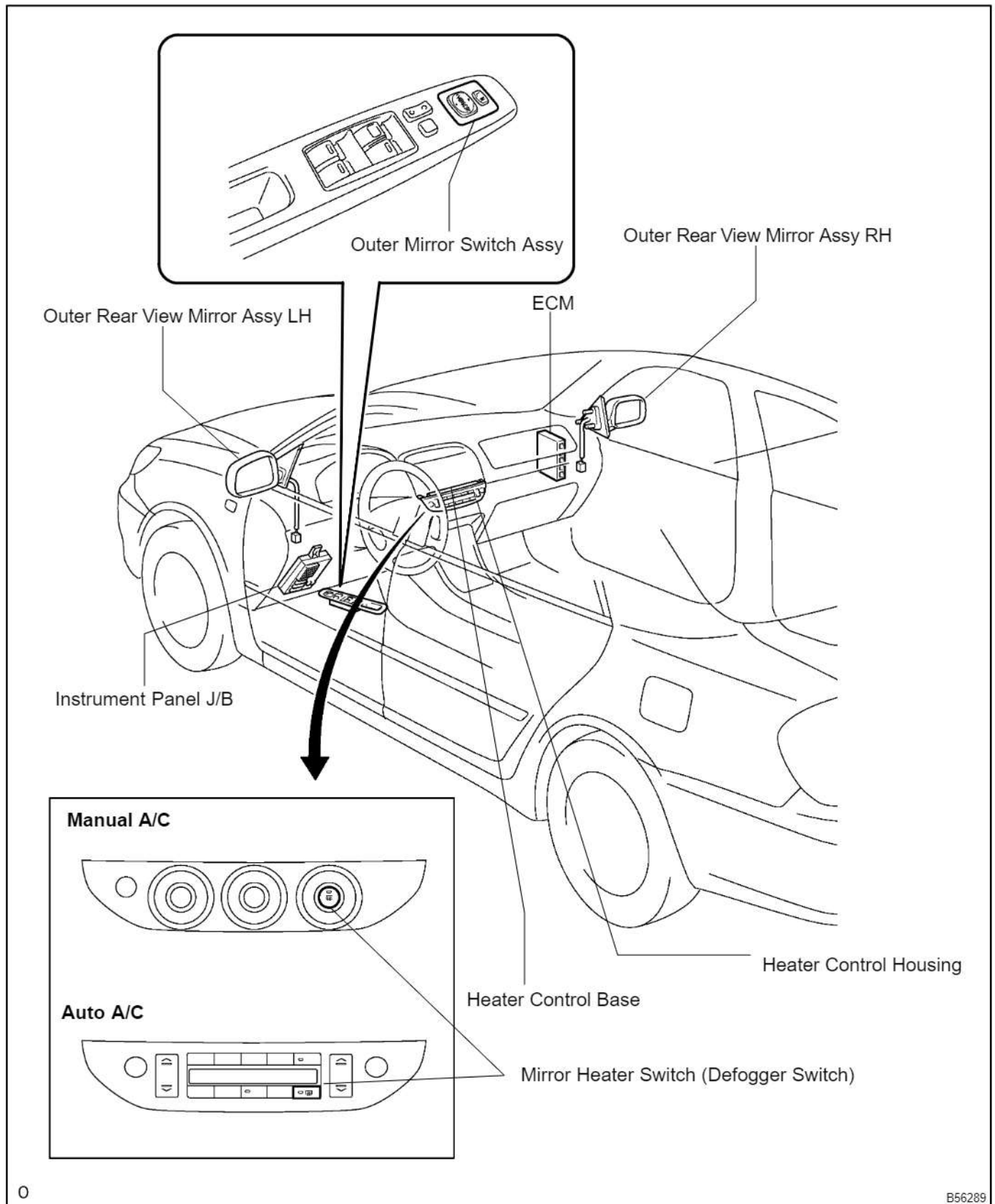
POWER MIRROR CONTROL SYSTEM

PROBLEM SYMPTOMS TABLE

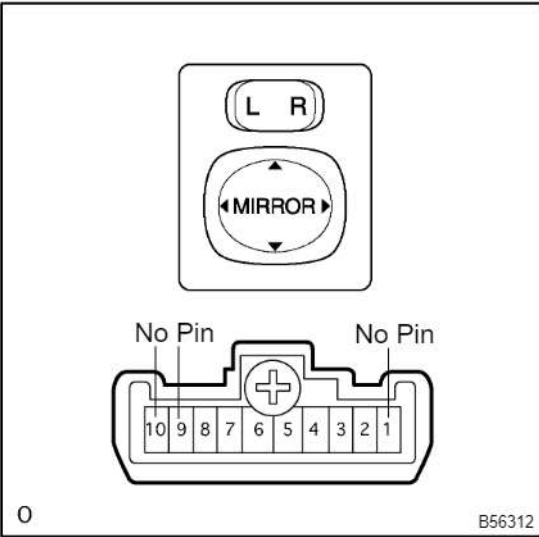
700H5-02

Symptom	Suspected Area	See page
Mirror does not operate	1. ECU-ACC fuse (Instrument panel J/B)	68-1
	2. Mirror switch	70-25
	3. Mirror motor	70-25
	4. Wire harness	-
Mirror operates abnormally	1. Mirror switch	70-25
	2. Mirror motor	70-25
	3. Wire harness	-

LOCATION



INSPECTION



1. INSPECT OUTER MIRROR SWITCH ASSY

- (a) Inspect the mirror switch continuity.
- (1) Left side for left/right adjustment switch:
Inspect the left side mirror switch continuity.

Standard:

Terminal No.	Switch position	Specified condition
-	OFF	No continuity
4 - 8 6 - 7	UP	Continuity
4 - 7 6 - 8	DOWN	Continuity
5 - 8 6 - 7	LEFT	Continuity
5 - 7 6 - 8	RIGHT	Continuity

If the continuity is not as specified, replace the switch.

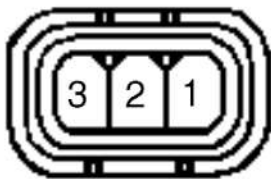
- (2) Right side for left/right adjustment switch:
Inspect the right side mirror switch continuity.

Standard:

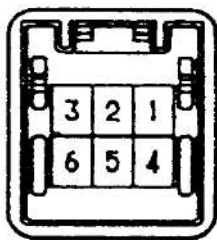
Terminal No.	Switch position	Specified condition
-	OFF	No continuity
3 - 8 6 - 7	UP	Continuity
3 - 7 6 - 8	DOWN	Continuity
2 - 8 6 - 7	LEFT	Continuity
2 - 7 6 - 8	RIGHT	Continuity

If the continuity is not as specified, replace the switch.

TMC Made



TMMK Made



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2. INSPECT OUTER REAR VIEW MIRROR ASSY LH (W/O OUTER MIRROR HEATER)

- (a) Inspect the mirror motor operation.

Standard (TMC Made):

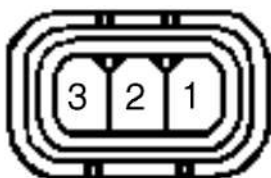
Battery connection	Mirror position
Positive (+) - 1 Negative (-) - 2	Turn upward
Positive (+) - 2 Negative (-) - 1	Turn downward
Positive (+) - 3 Negative (-) - 2	Turn left
Positive (+) - 2 Negative (-) - 3	Turn right

Standard (TMMK Made):

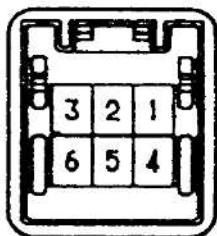
Battery connection	Mirror position
Positive (+) - 6 Negative (-) - 2	Turn upward
Positive (+) - 2 Negative (-) - 6	Turn downward
Positive (+) - 3 Negative (-) - 2	Turn left
Positive (+) - 2 Negative (-) - 3	Turn right

If the continuity is not as specified, replace the outer rear view mirror assy LH.

TMC Made



TMMK Made



B59988

3. INSPECT OUTER REAR VIEW MIRROR ASSY RH (W/O OUTER MIRROR HEATER)

- (a) Inspect the mirror motor operation.

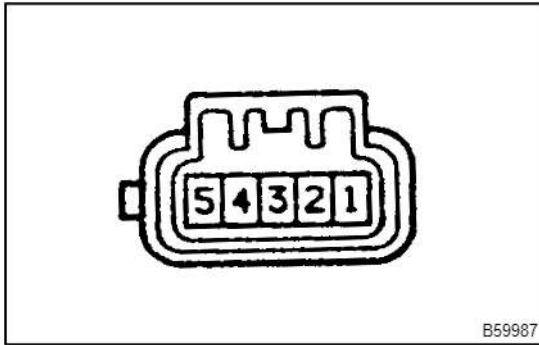
Standard (TMC Made):

Battery connection	Mirror position
Positive (+) - 1 Negative (-) - 2	Turn upward
Positive (+) - 2 Negative (-) - 1	Turn downward
Positive (+) - 3 Negative (-) - 2	Turn left
Positive (+) - 2 Negative (-) - 3	Turn right

Standard (TMMK Made):

Battery connection	Mirror position
Positive (+) - 6 Negative (-) - 2	Turn upward
Positive (+) - 2 Negative (-) - 6	Turn downward
Positive (+) - 3 Negative (-) - 2	Turn left
Positive (+) - 2 Negative (-) - 3	Turn right

If the continuity is not as specified, replace the outer rear view mirror assy RH.



4. INSPECT OUTER REAR VIEW MIRROR ASSY LH (W/ OUTER MIRROR HEATER, TMC MADE)

- (a) Inspect the mirror heater operation.

Standard:

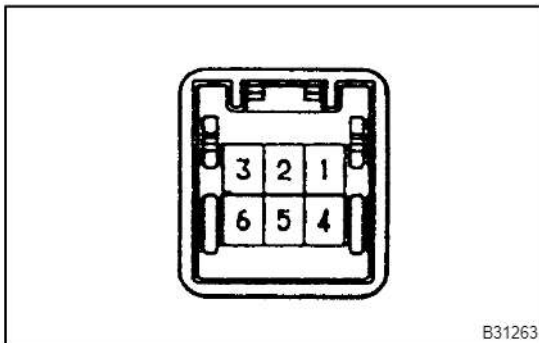
Battery connection	Mirror position
Positive (+) - 2 Negative (-) - 3	Turn upward
Positive (+) - 3 Negative (-) - 2	Turn downward
Positive (+) - 4 Negative (-) - 3	Turn left
Positive (+) - 3 Negative (-) - 4	Turn right

If the continuity is not as specified, replace the outer rear view mirror assy LH.

- (1) Check the resistance between terminals 1 and 5 of the connector.

Resistance: 4.0 - 5.4 Ω

- (2) Check that the mirror is heated up when connecting the battery positive (+) to terminal 4 and the battery negative (-) to terminal 5 of the connector.



5. INSPECT OUTER REAR VIEW MIRROR ASSY LH (W/ OUTER MIRROR HEATER, TMMK MADE)

- (a) Inspect the mirror motor operation.

Standard:

Battery connection	Mirror position
Positive (+) - 6 Negative (-) - 2	Turn upward
Positive (+) - 2 Negative (-) - 6	Turn downward
Positive (+) - 3 Negative (-) - 2	Turn left
Positive (+) - 2 Negative (-) - 3	Turn right

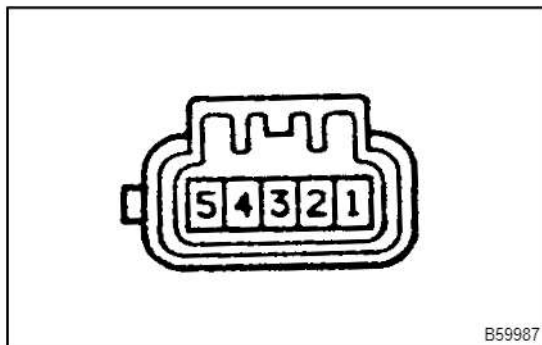
If the continuity is not as specified, replace the outer rear view mirror assy LH.

- (b) Inspect the mirror heater operation.

- (1) Check the resistance between terminals 1 and 4 of the connector.

Resistance: 4.0 - 5.4 Ω

- (2) Check that the mirror is heated up when connecting the battery positive (+) to terminal 4 and the battery negative (-) to terminal 5 of the connector.



B59987

6. INSPECT OUTER REAR VIEW MIRROR ASSY RH (W/ OUTER MIRROR HEATER, TMC MADE)

- (a) Inspect the mirror motor operation.

Standard:

Battery connection	Mirror position
Positive (+) – 2 Negative (–) – 3	Turn upward
Positive (+) – 3 Negative (–) – 2	Turn downward
Positive (+) – 4 Negative (–) – 3	Turn left
Positive (+) – 3 Negative (–) – 4	Turn right

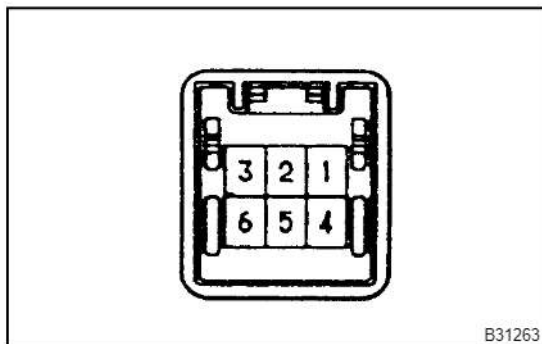
If the continuity is not as specified, replace the outer rear view mirror assy RH.

- (b) Check the mirror heater operation.

- (1) Check the resistance between terminals 1 and 5 of the connector.

Resistance: 4.0 – 5.4 Ω

- (2) Check that the mirror is heated up when connecting the battery positive (+) to terminal 4 and the battery negative (–) to terminal 5 of the connector.



B31263

7. INSPECT OUTER REAR VIEW MIRROR ASSY RH (W/ OUTER MIRROR HEATER, TMMK MADE)

- (a) Inspect the mirror motor operation.

Standard:

Battery connection	Mirror position
Positive (+) – 6 Negative (–) – 2	Turn upward
Positive (+) – 2 Negative (–) – 6	Turn downward
Positive (+) – 3 Negative (–) – 2	Turn left
Positive (+) – 2 Negative (–) – 3	Turn right

If the continuity is not as specified, replace the outer rear view mirror assy RH.

- (b) Check the mirror heater operation.

- (1) Check the resistance between terminals 1 and 4 of the connector.

Resistance: 4.0 – 5.4 Ω

- (2) Check that the mirror is heated up when connecting the battery positive (+) to terminal 4 and the battery negative (–) to terminal 5 of the connector.

INNER REAR VIEW MIRROR ASSY REPLACEMENT

700LA-01

HINT:

The installation is in the reverse order of the removal.

1. REMOVE INNER REAR VIEW MIRROR ASSY

- (a) Remove the screw.
- (b) w/ Erector chromic inner mirror:
Remove the inner rear view mirror cover.
- (c) w/ Erector chromic inner mirror:
Disconnect the connector.
- (d) Remove the rear view inner mirror assembly.

PRE-CHECK

1. SELECTING COMPASS DISPLAY MODE

- (a) The comp switch allows you to select a Display or Non-display mode of the compass.

2. SETTING ZONE

- (a) Deviation between the "magnetic north" and "actual north" differs depending on the location. Therefore, adjustment of the magnetism is required. Since the magnetic condition differs depending on the area where the vehicle is used, it is necessary for each user to set the zone. (Refer to "Compass Zone Map"). The zone setting can be changed using the comp switch of the inner mirror.

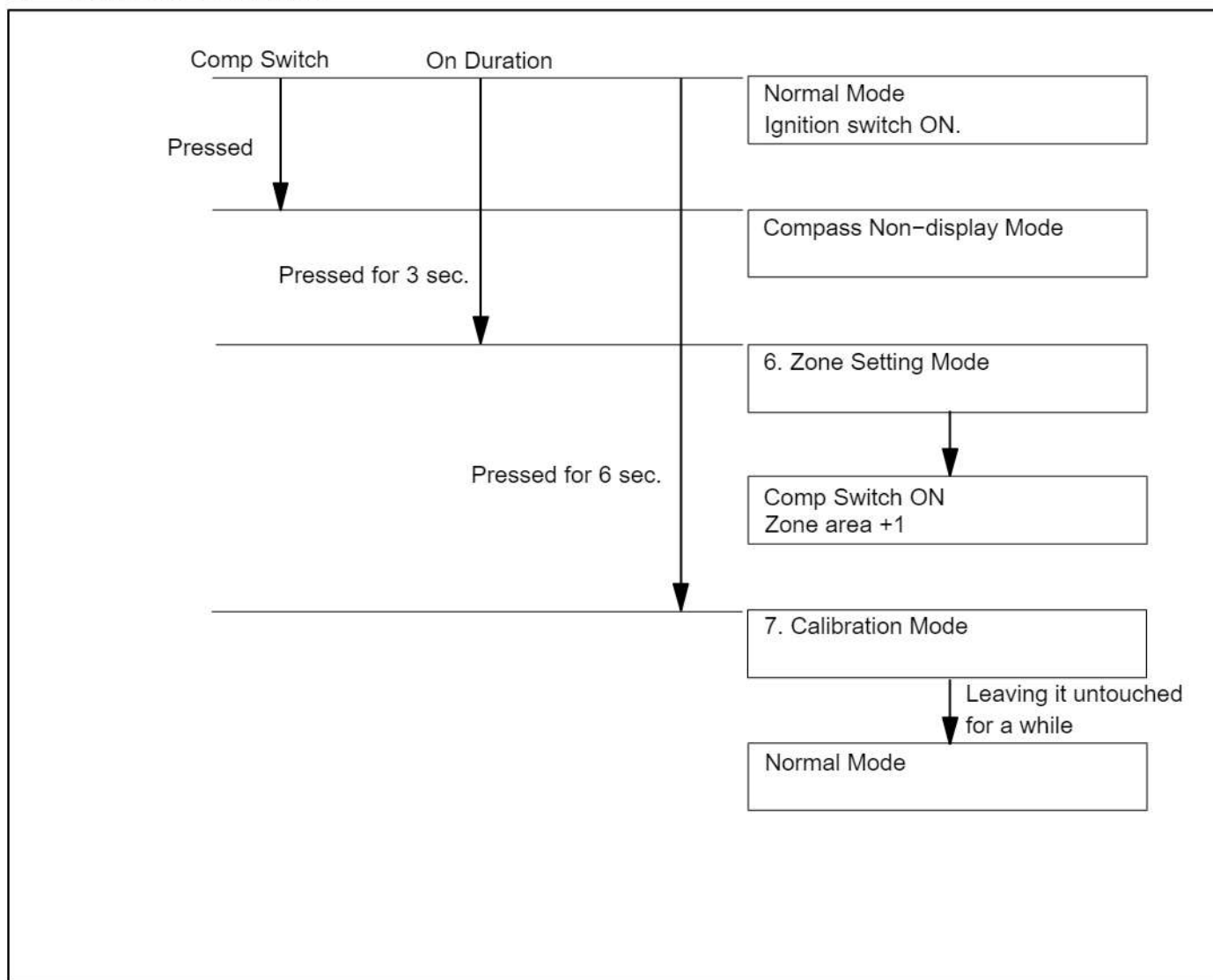
3. PERFORMING CALIBRATION

- (a) Since each vehicle has its own magnetic field, calibration should be performed for each vehicle. This compass function is used when storing the record of the magnetic field of the vehicle.

4. WHEN COMPASS MAGNETIZED:

- (a) A compass could be magnetized during shipping by vessels or freight cars. Before delivery, therefore, make sure to perform calibration and ensure that calibration is done properly. If it cannot be done (cannot be complete in spite of driving around several times), it may be caused by magnetization. Demagnetize the vehicle using a demagnetizer and perform calibration again.

5. SETTING COMPASS



6. ZONE SETTING MODE

- (a) Press the comp switch for 3 seconds. In the normal mode, the zone setting mode will activate. A number (1-15) is displayed on the compass display.

HINT:

In the initial status, "8" is displayed.

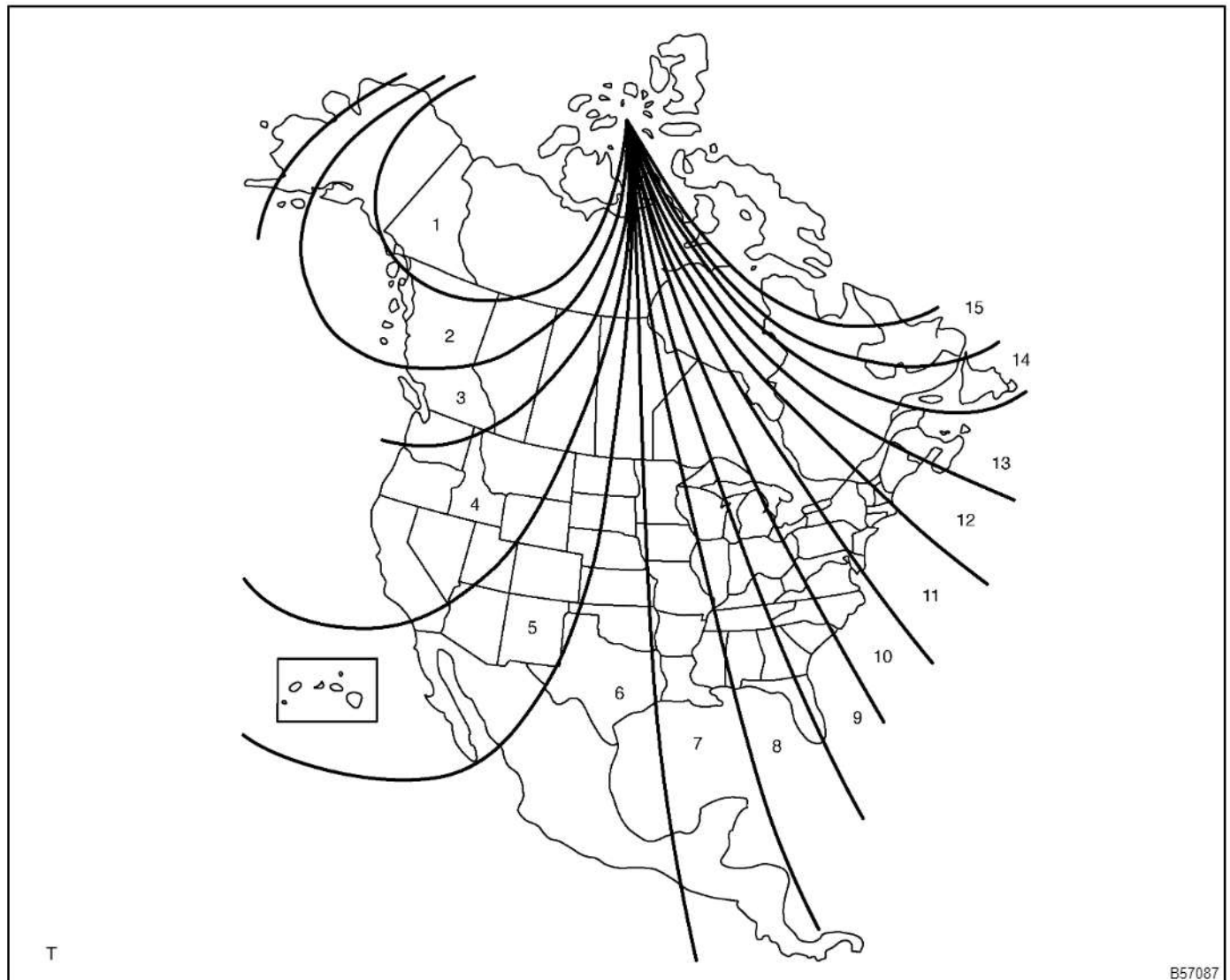
- (b) The displayed number increases +1 every time the comp switch is pressed. Referring to the map, check the number for the area where the vehicle will be used and set the zone number.
- (c) Leave it untouched for several seconds after setting and check that the compass display shows an azimuthal direction (N, NE, E, SE, S, SW, W or NW) or "C".

7. CALIBRATION SETTING MODE

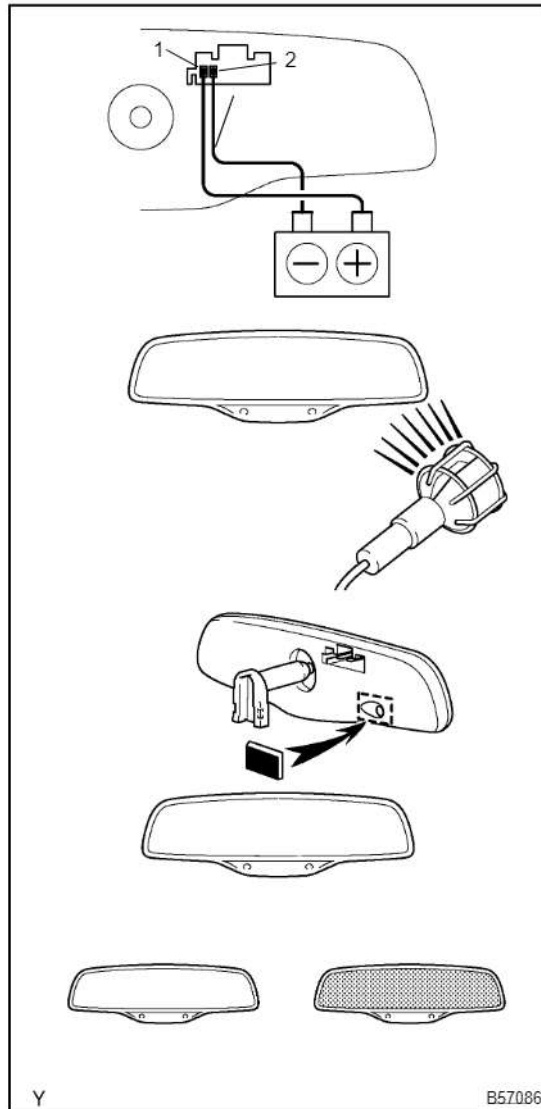
- (a) Press the comp switch for 6 seconds. In the normal mode, this mode will also activate.
- (b) Drive the vehicle at a slow speed of 8 km/h (5 MPH) or less in the circular direction.
- (c) Driving around the circle 1 to 3 times will display the azimuthal direction on the display, completing the calibration.

HINT:

Once calibration is completed, it is not necessary to perform the above procedures unless the magnetic field strength is drastically changed. If this happens, the azimuthal display will be changed to "C".



INSPECTION



1. INSPECT INNER REAR VIEW MIRROR ASSY

- (a) Inspect operation of the electrochromic inner mirror.
- (1) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2.
 - (2) Attach a black colored tape to the forward sensor to prevent it from sensing.
 - (3) Light up the mirror with an electric light, and check that the mirror surface changes from "bright" to "dark".

If operation is not as specified, replace the inner mirror.

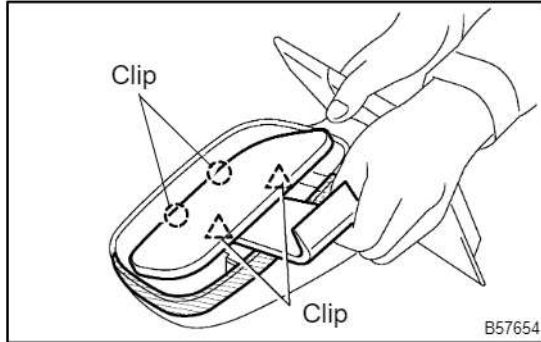
OUTER REAR VIEW MIRROR SUB-ASSY LH

REPLACEMENT

700BF-02

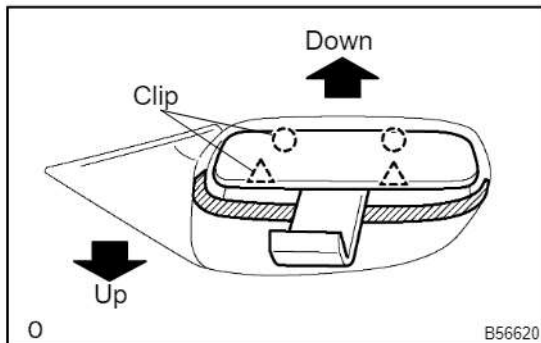
HINT:

On the RH side, use the same procedures as on the LH side.



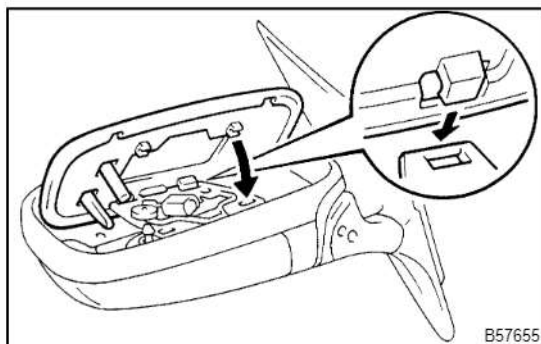
1. REMOVE OUTER REAR VIEW MIRROR SUB-ASSY LH(TMC made)

- Tape the lower part of outer mirror body with protection tape.
- Using a roof-moulding remover, disengage the clips placed in the lower part of the mirror.
- Pull out the outer rear view mirror.



2. REMOVE OUTER REAR VIEW MIRROR SUB-ASSY LH(TMMK made)

- Tape the upper part of outer mirror body with protection tape.
- Using a roof-moulding remover, disengage the clips placed in the upper part of the mirror.
- Pull out the outer rear view mirror.



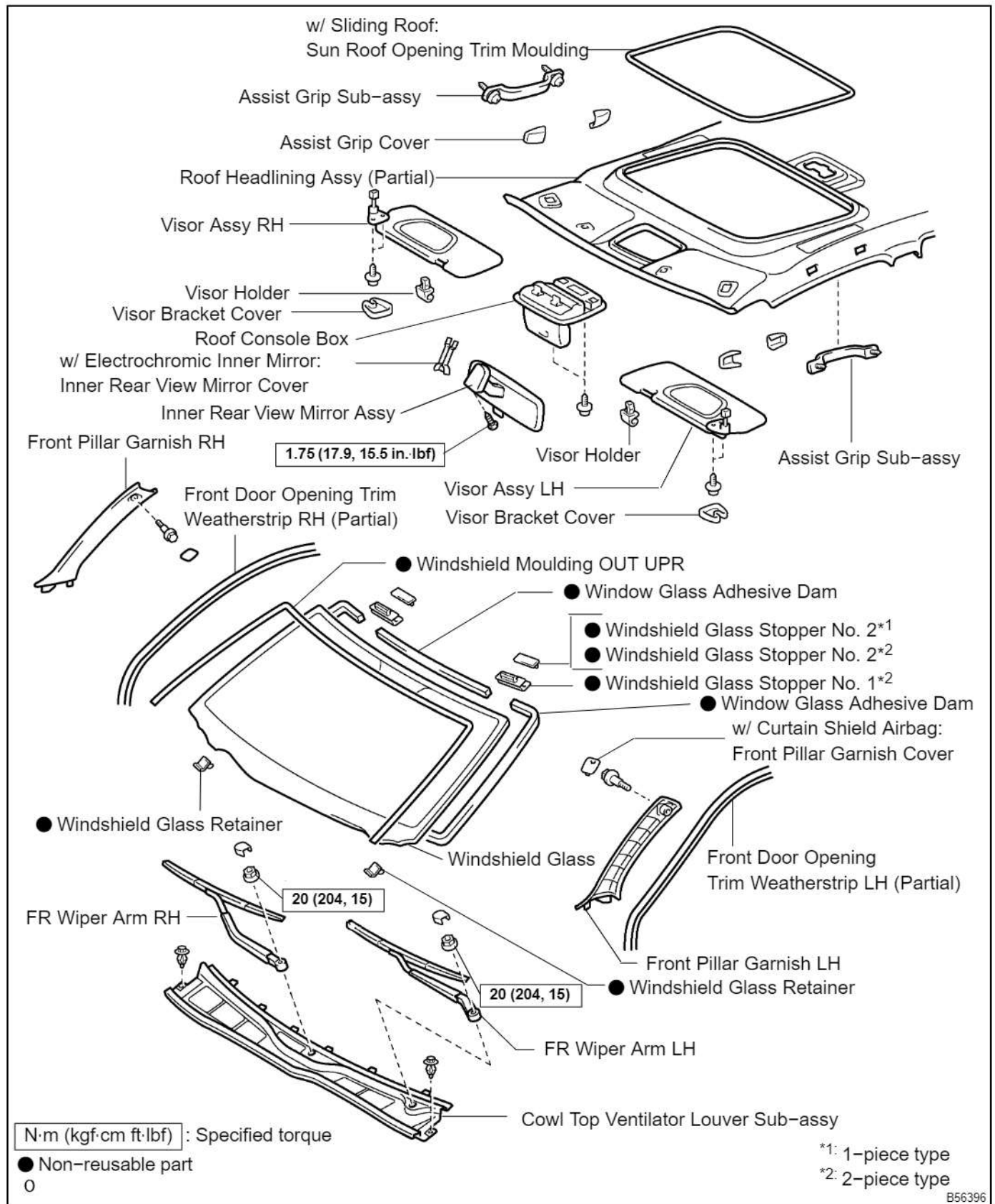
3. INSTALL OUTER REAR VIEW MIRROR SUB-ASSY LH(TMC made)

- Insert the claws placed in the upper part of backside of the mirror into the actuator hole.
- Set the mirror in the actuator.
- Insert the lower portion of the mirror to engage the 2 clips securely.

4. INSTALL OUTER REAR VIEW MIRROR SUB-ASSY LH(TMMK made)

- Insert the claws placed in the lower part of backside of the mirror into the actuator hole.
- Set the mirror in the actuator.
- Insert the upper portion of the mirror to engage the 2 clips securely.

WINDSHIELD GLASS COMPONENTS



REPLACEMENT

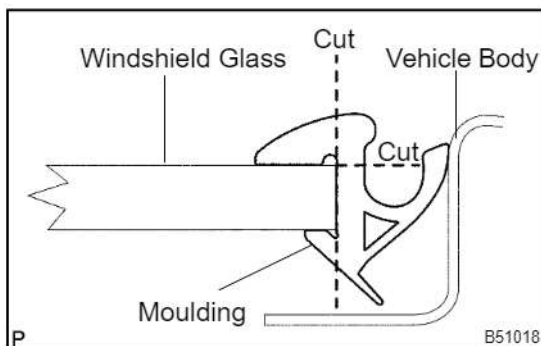
HINT:

- The installation procedures are the removal procedures in reverse order. However, only installation procedures requiring additional information are included.
 - A bolt without a torque specification is a standard bolt (See page 03-2).
1. REMOVE FR WIPER ARM RH (See page 66-6)
 2. REMOVE FR WIPER ARM LH (See page 66-6)
 3. REMOVE COWL TOP VENTILATOR LOUVER SUB-ASSY (See page 66-6)
 4. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP RH (See page 66-6)
 5. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP LH (See page 66-6)
 6. REMOVE FRONT PILLAR GARNISH RH (w/o CURTAIN SHIELD AIR BAG) (See page 76-22)
 7. REMOVE FRONT PILLAR GARNISH LH (w/o CURTAIN SHIELD AIR BAG) (See page 76-22)
 8. REMOVE FRONT PILLAR GARNISH RH (w/ CURTAIN SHIELD AIR BAG) (See page 76-22)
 9. REMOVE FRONT PILLAR GARNISH LH (w/ CURTAIN SHIELD AIR BAG) (See page 76-22)
 10. REMOVE ROOF CONSOLE BOX ASSY (See page 76-22)
 11. REMOVE RH VISOR ASSY (See page 76-22)
 12. REMOVE LH VISOR ASSY (See page 76-22)
 13. REMOVE VISOR HOLDER (See page 76-22)
 14. REMOVE ROOF HEADLINING ASSY (See page 76-22)

HINT:

It is not necessary to completely remove the roof headlining. Slightly lower the front section of the roof headlining so that the windshield glass can be removed later in step 17.

15. REMOVE INNER REAR VIEW MIRROR ASSY (See page 70-29)



16. REMOVE WINDSHIELD MOULDING OUTER UPPER
 - (a) Using a knife, cut off the moulding, as shown in the illustration.

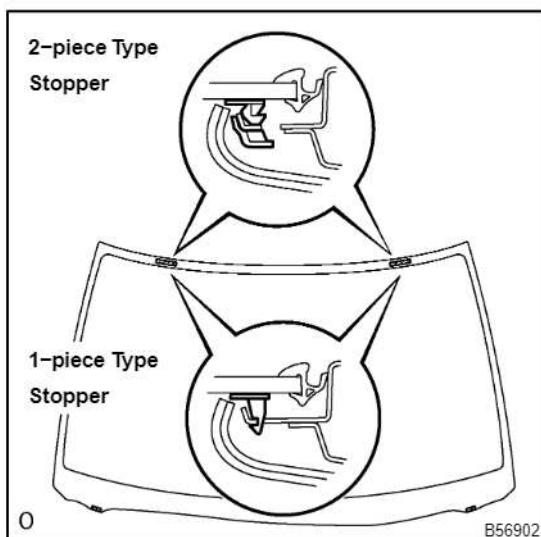
NOTICE:

Be careful not to damage the vehicle body with the knife.

- (b) Remove the remaining moulding.

HINT:

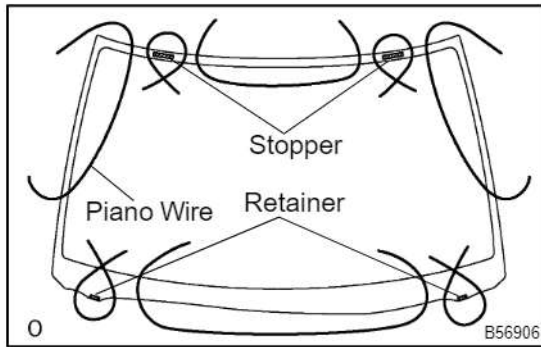
Make a partial cut in the moulding. Then pull and remove it by hand.



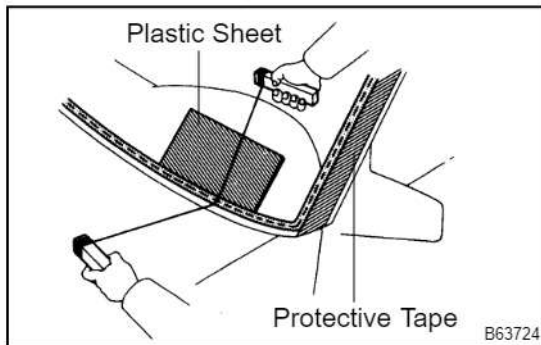
17. REMOVE WINDSHIELD GLASS

HINT:

In some cases, 1-piece type and 2-piece type stoppers are installed in the same vehicle.



- (a) From the interior, insert piano wires between the vehicle body and glass, as shown in the illustration.
- (b) Tie objects that can serve as handles (for example, wooden blocks) to all wire ends.

**HINT:**

Apply protective tape to the outer surface of the vehicle body to prevent its surface from being scratched.

NOTICE:

- **w/ Curtain shield airbag:**
When working around the curtain shield airbag, be careful not to damage the airbag.
 - When separating the glass from the vehicle, be careful not to damage the vehicle's paint or interior / exterior ornaments.
 - To prevent the safety pad from being scratched when removing the glass, place a plastic sheet between the piano wire and safety pad.
- (c) Cut through the adhesive by pulling the piano wire around the glass.
 - (d) Disengage the stoppers.
 - (e) Using a suction cup, remove the glass.

NOTICE:

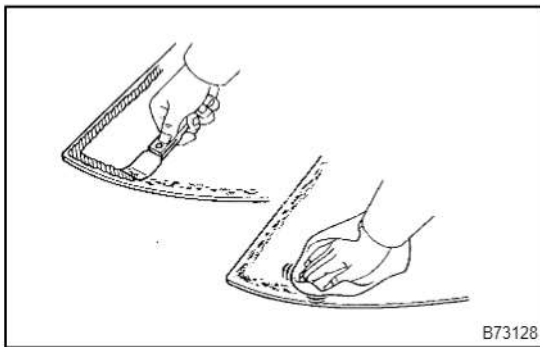
Leave as much adhesive on the vehicle body as possible when removing the glass.

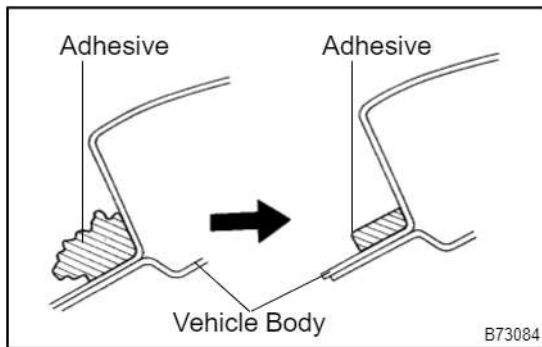
18. CLEAN WINDSHIELD GLASS

- (a) Using a scraper, remove the damaged stoppers, dam and adhesive sticking to the glass.
- (b) Clean the outer circumference of the glass with white gasoline.

NOTICE:

- Do not touch the glass after cleaning it.
- Even if using new glass, clean the glass with white gasoline.



**19. CLEAN VEHICLE BODY**

- (a) Clean and shape the contact surface of the vehicle body.
- (1) Using a knife, cut away any rough adhesive on the contact surface of the vehicle body to ensure the appropriate surface shape.

NOTICE:

Be careful not to damage the vehicle body.

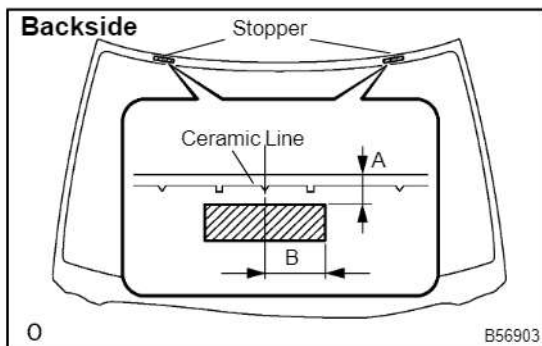
HINT:

Leave as much adhesive on the vehicle body as possible.

- (2) Clean the contact surface of the vehicle body with a piece of shop rag saturated with cleaner.

HINT:

Even if all the adhesive has been removed, clean the vehicle body.

**20. INSTALL WINDSHIELD GLASS STOPPER NO.2**

- (a) Coat the installation part of the stopper with Primer G.

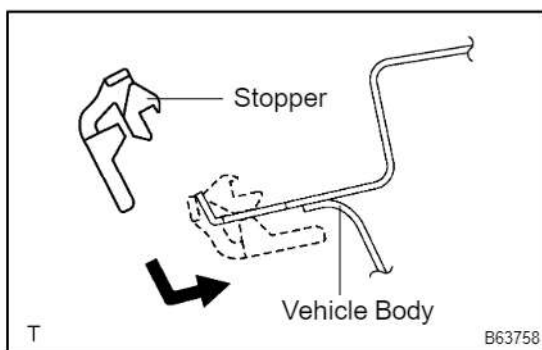
NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
- Throw away any leftover Primer G.
- Do not apply too much Primer G.

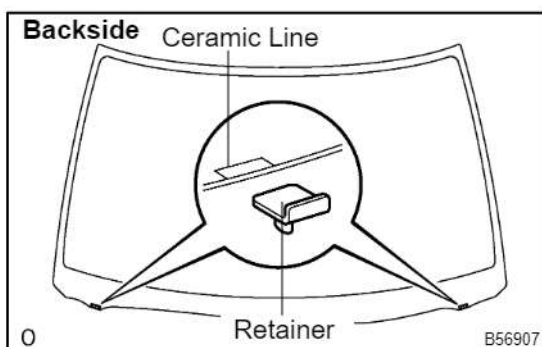
- (b) Install 2 new stoppers onto the glass, as shown in the illustration.

Specification:

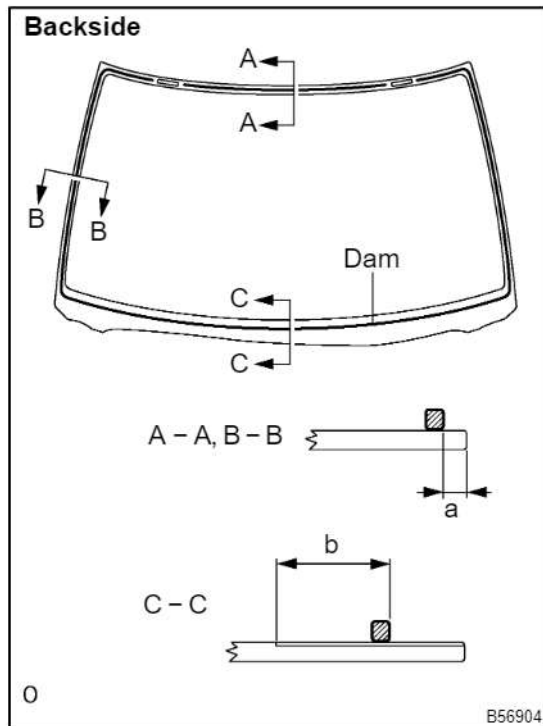
Area	Measurement
A	7.7 mm (0.303 in.)
B	40.0 mm (1.575 in.)

**21. INSTALL WINDSHIELD GLASS STOPPER NO.1**

- (a) Install 2 new stoppers to the vehicle body, as shown in the illustration.

**22. INSTALL WINDSHIELD GLASS RETAINER**

- (a) Install 2 new retainers onto the glass, as shown in the illustration.



23. INSTALL WINDOW GLASS ADHESIVE DAM

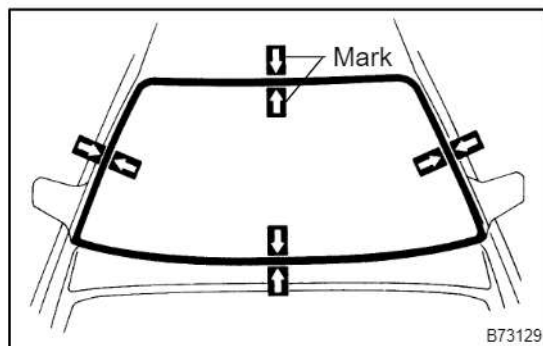
- (a) Coat the installation part of the windshield glass adhesive dam with Primer G.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
 - Throw away any leftover Primer G.
 - Do not apply too much primer.
- (b) Install a new dam, as shown in the illustration.

Specification:

Area	Measurement
a	7.0 mm (0.276 in.)
b	35.0 mm (1.378 in.)



24. INSTALL WINDSHIELD GLASS

- (a) Position the glass.
- (1) Using a suction cup, place the glass in the correct position.
 - (2) Check that the whole contact surface of the glass rim is perfectly even.
 - (3) Place reference marks between the glass and vehicle body.

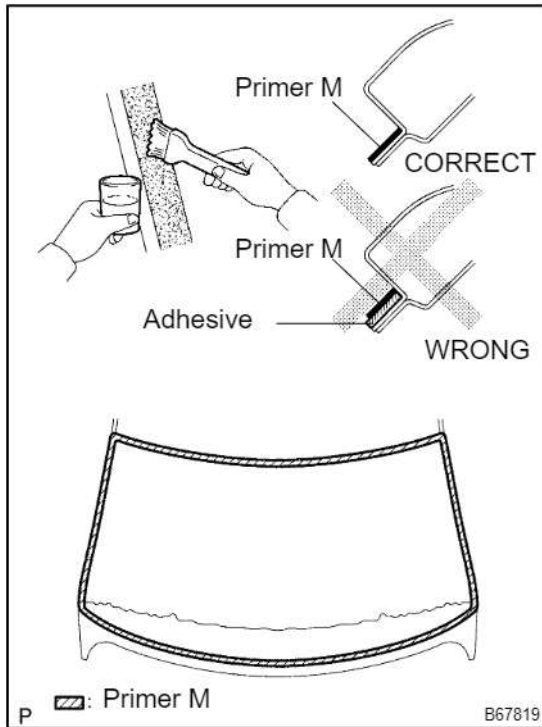
NOTICE:

Check that the stoppers are attached to the vehicle body correctly.

HINT:

When reusing the glass, check and correct the reference mark's positions.

- (4) Using a suction cup, remove the glass.



- (b) Using a brush, coat the exposed part of the vehicle body on the vehicle side with Primer M.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
- Do not coat the adhesive with Primer M.
- Throw away any leftover Primer M.
- Do not apply too much Primer M.

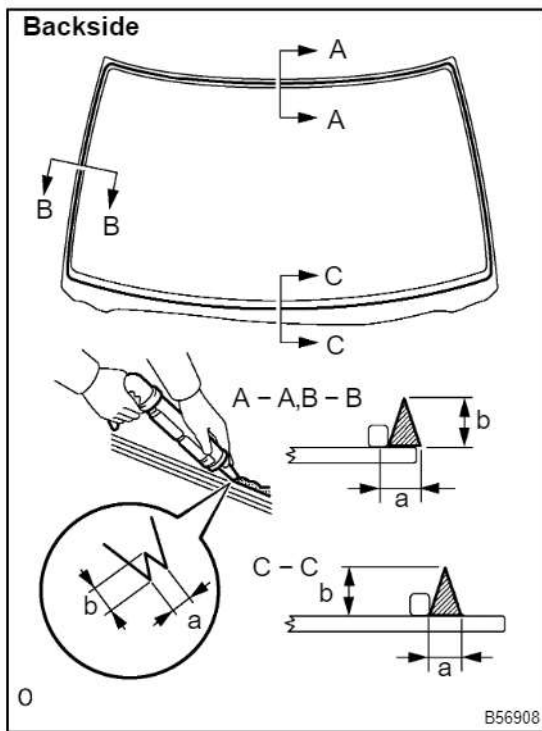
- (c) Using a brush or sponge, coat the edge of the glass and the contact surface with Primer G.

HINT:

If the area other than that specified is coated by accident, wipe off the primer with a clean shop rag before it dries.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
- Throw away any leftover Primer G.
- Do not apply too much Primer G.



- (d) Apply adhesive.

Adhesive: Part No. 08850-00801 or equivalent

- (1) Cut off the tip of the cartridge nozzle, as shown in the illustration.

HINT:

After cutting off the tip, use all adhesive within the time described in the table below.

Usage timeframe:

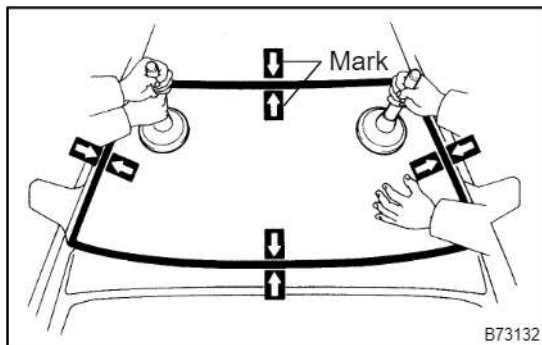
Temperature	Usage Timeframe
35°C (95°F)	15 minutes
20°C (68°F)	1 hour 40 minutes
5°C (41°F)	8 hours

- (2) Load the sealer gun with the cartridge.

- (3) Coat the glass with adhesive, as shown in the illustration.

Specification:

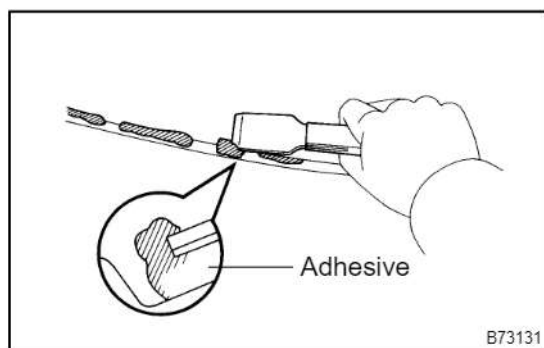
Area	Measurement
a	8.0 mm (0.315 in.)
b	12.0 mm (0.472 in.)



- (e) Install the glass.
- (1) Using a suction cup, position the glass so that the reference marks are aligned. Press it in gently along the rim.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
 - Check that the stoppers are attached to the vehicle body correctly.
 - Check that the vehicle body and glass have a small gap between them.
- (2) Lightly press the front surface of the glass to ensure that the glass is securely fit to the vehicle body.



- (3) Using a scraper, remove any excess or protruding adhesive.

HINT:

Apply adhesive on the glass rim.

NOTICE:

Do not drive the vehicle for the amount of time described in the table below.

Minimum time:

Temperature	Minimum time prior to driving vehicle
35★C (95★F)	1 hour 30 minutes
20★C (68★F)	5 hours
5★C (41★F)	24 hours

25. INSTALL WINDSHIELD MOULDING OUTER UPPER

- (a) Using a brush or sponge, coat the edge of the glass and the contact surface with Primer G.

NOTICE:

- Allow the primer coating to dry for 3 minutes or more.
- Throw away any leftover Primer G.
- Do not apply too much Primer G.

- (b) Install the moulding.

26. CHECK FOR LEAKS AND REPAIR

- (a) Conduct a leak test after the adhesive has completely hardened.
- (b) Seal any leaks with auto glass sealer.