
WIPER & WASHER

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WIPER & WASHER SYSTEM

BASIC CHECK

1. Wiper & washer check

(1) Wiper and washer operation check

(a) Check the activation of the wiper when the wiper switch is operated with the IG turned on.

Reference

INT position: Activates intermittently.

LO position: Activates at low speed.

HI position: Activates at high speed.

MIST position: Activates at low speed.

(b) Operate the wiper and check the state of wiping.

Reference: Good

(c) Spray the washer fluid and check its direction and height.

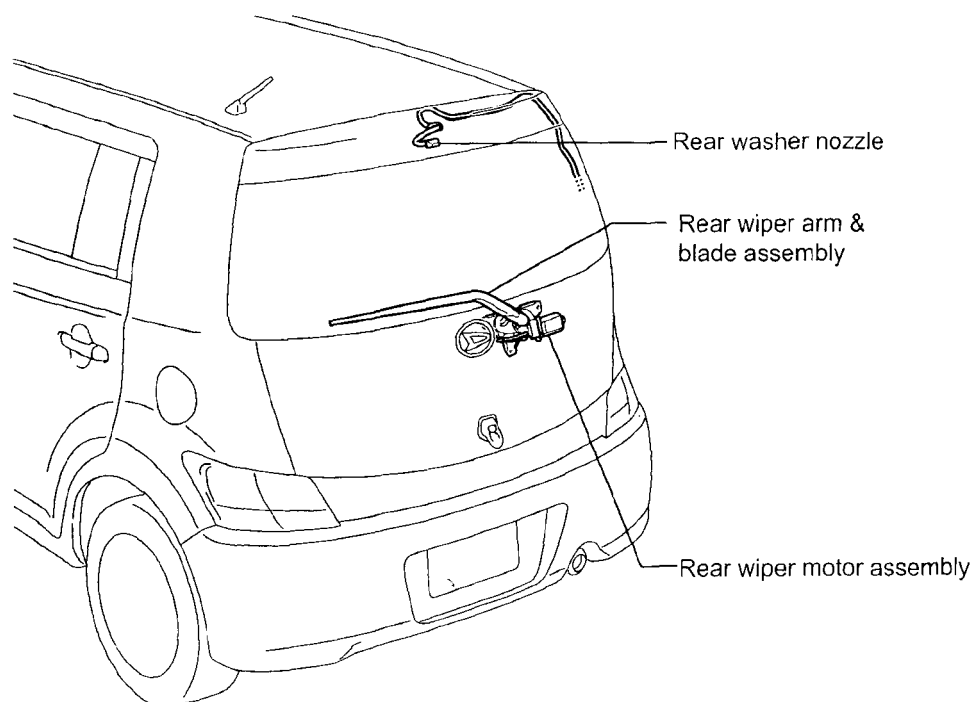
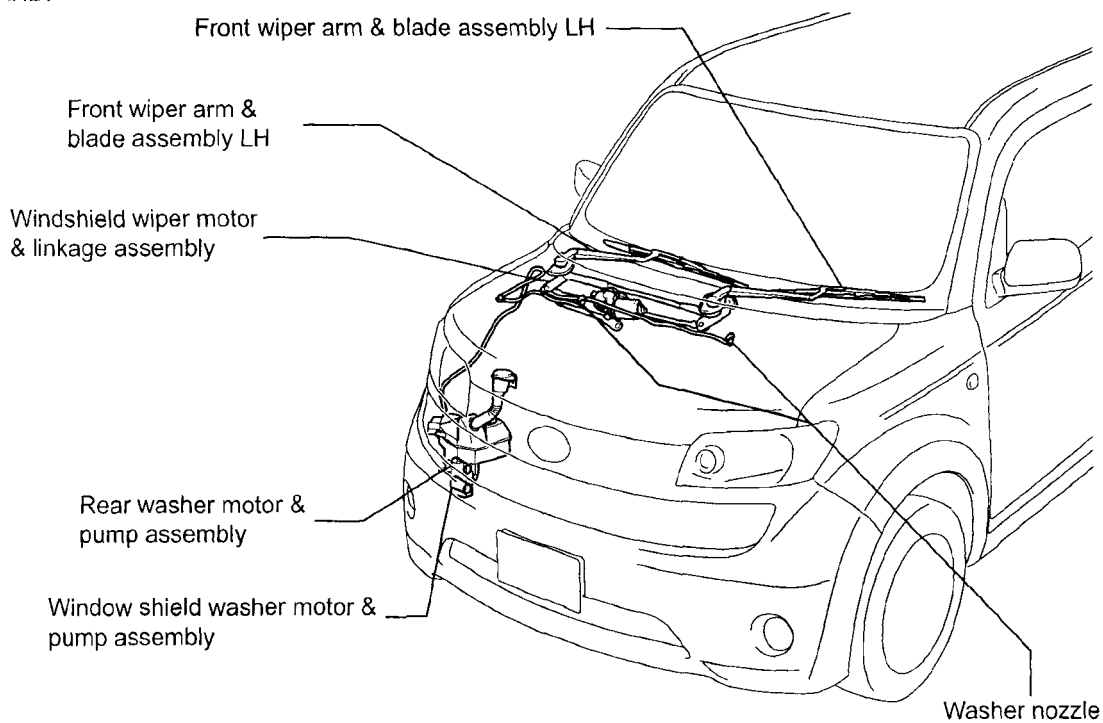
Reference: Good

(d) Check the washer fluid level in the tank visually or with other means.

Reference: The level is enough.

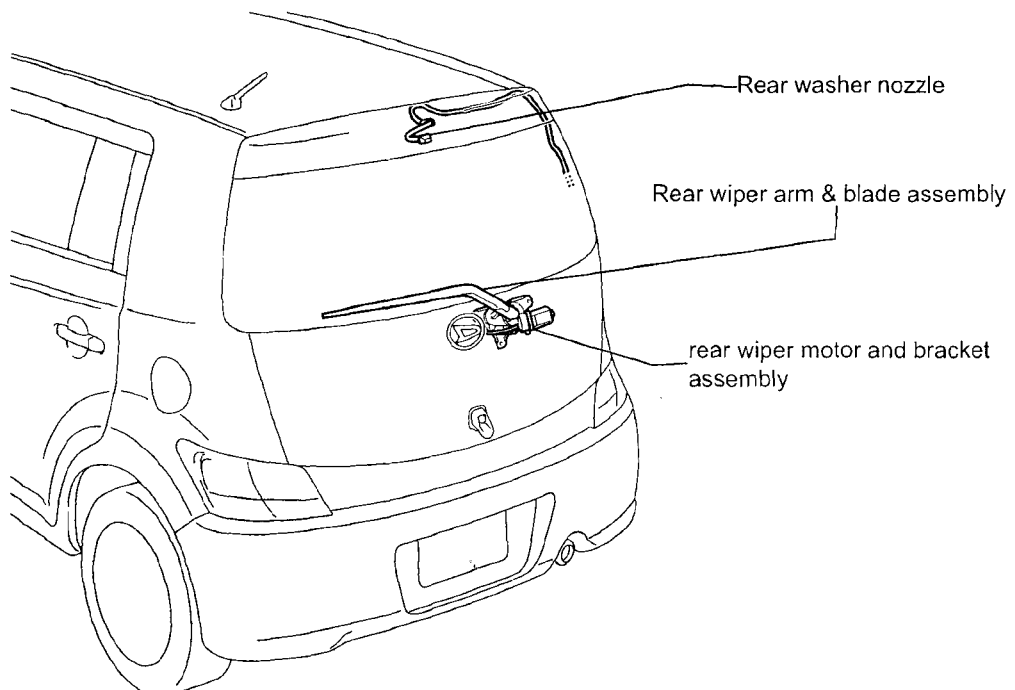
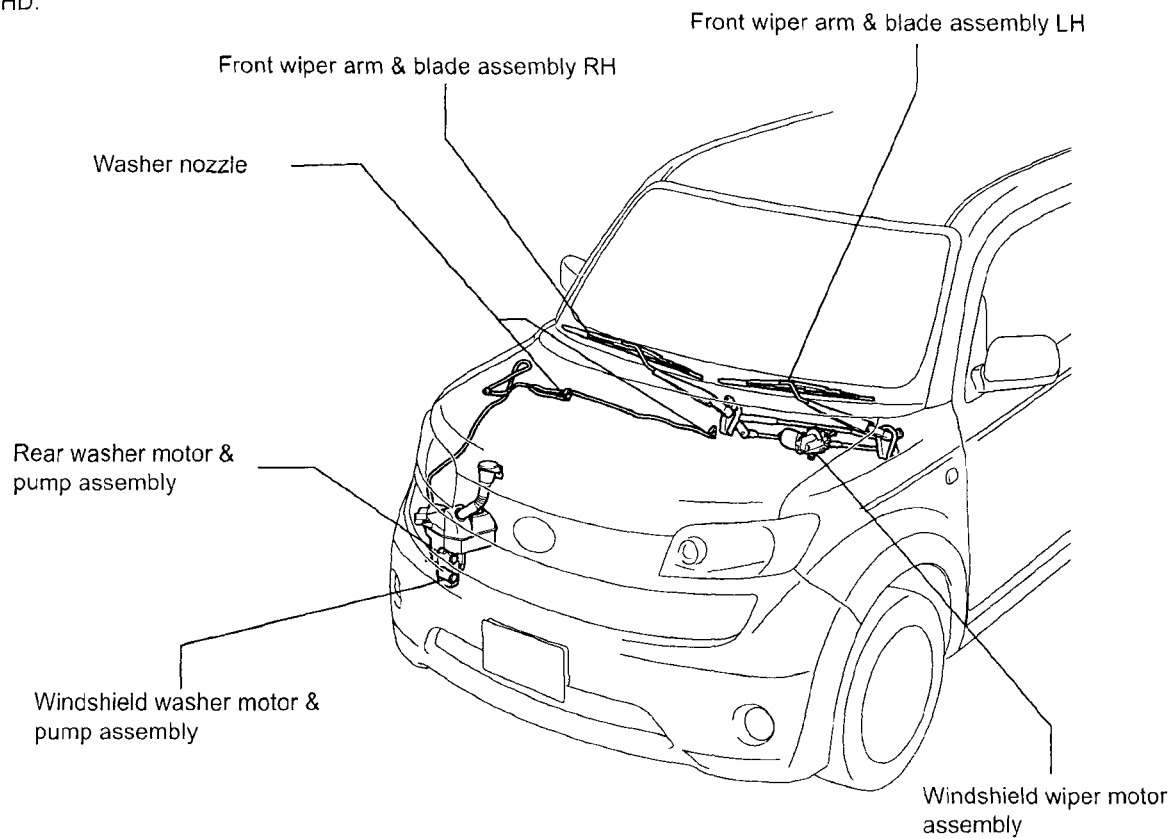
PART LAYOUT

RHD:



61

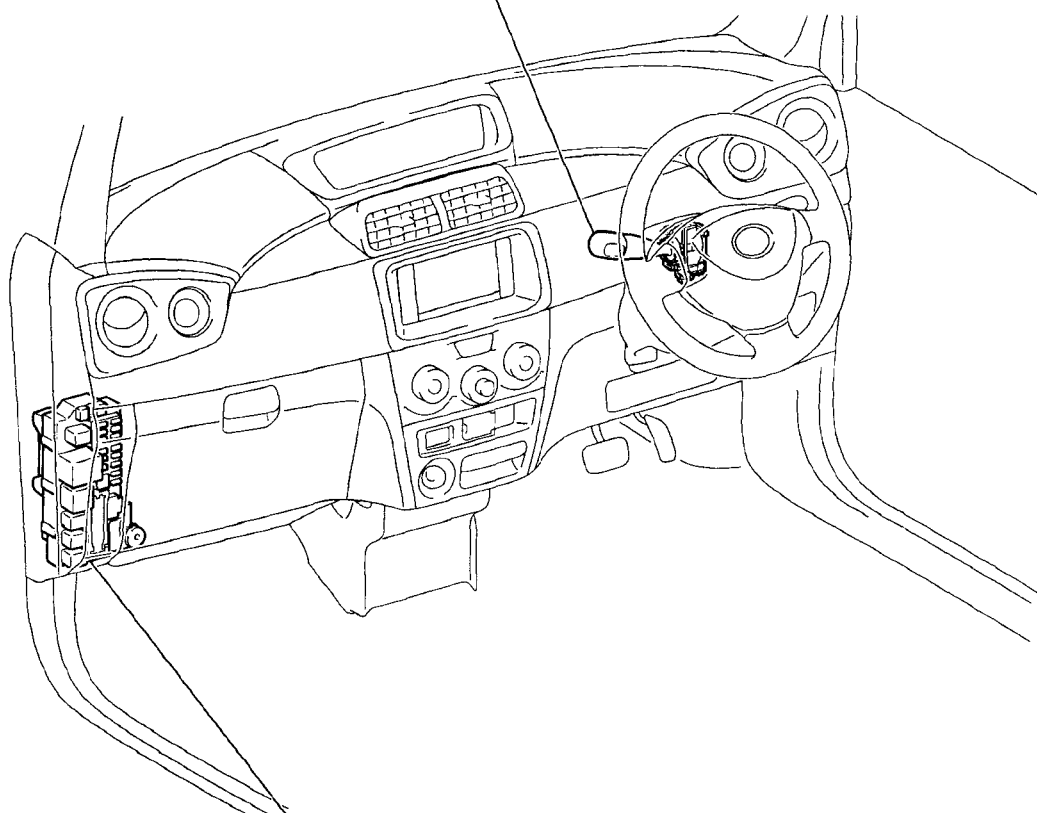
LHD:



E147129J03

RHD / except Europe:

Windshield wiper switch assembly



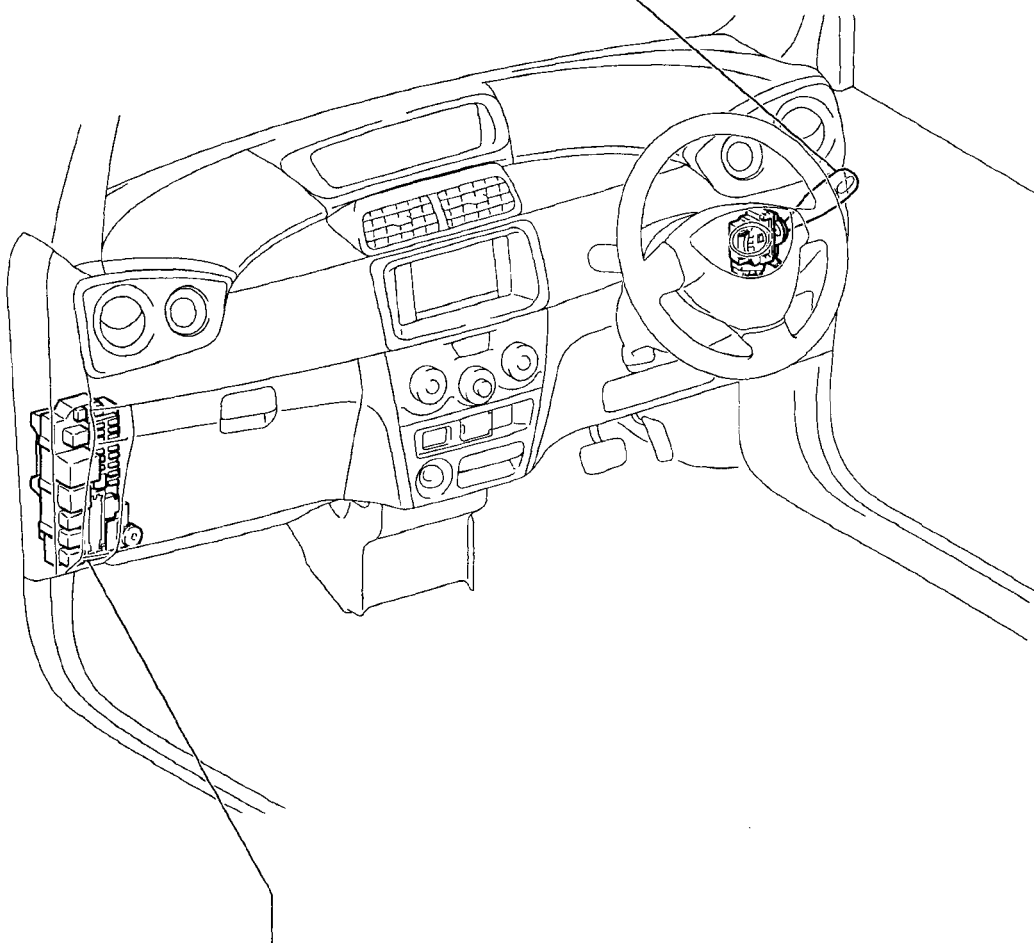
Fuse block assembly - WIPER fuse

61

RHD / for Europe:

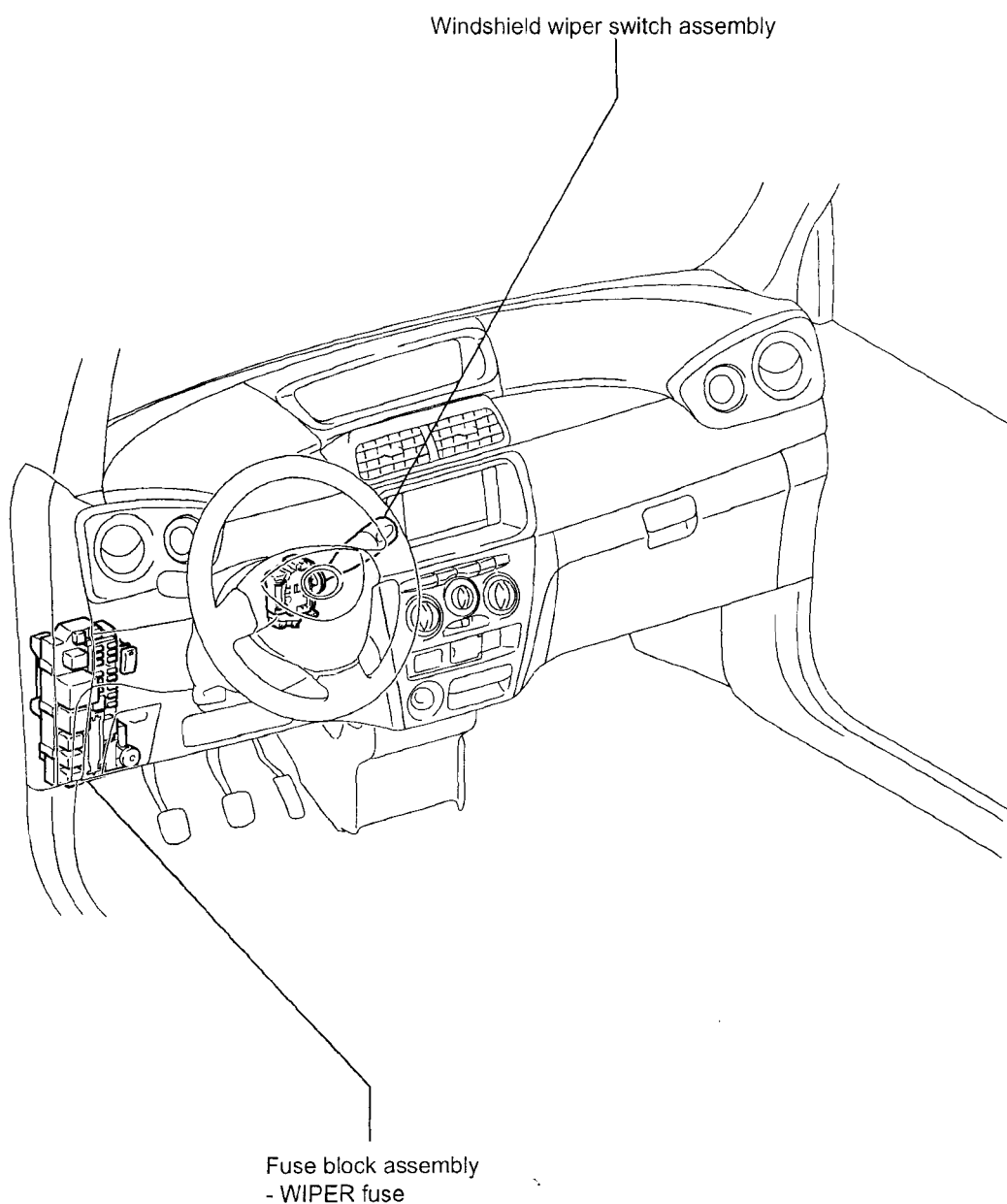
Windshield wiper switch assembly

61



Fuse block assembly - WIPER fuse

LHD:



61

LIST BY SYMPTOM

Front wiper and washer

Symptom	Part to be checked	Refer to page
Wiper and washer do not operate	WIPER fuse	-
	Windshield wiper switch assembly	61-29
	Wire harness and connector	-
Wiper is not operated at LO or HI position.	WIPER fuse	-
	Windshield wiper switch assembly	61-29
	Windshield wiper motor assembly	61-18
	Wire harness and connector	-
Wiper does not operate at INT position.	WIPER fuse	-
	Windshield wiper switch assembly	61-29
	Windshield wiper motor assembly	61-18
	Wire harness and connector	-
Washer motor does not operate.	WIPER fuse	-
	Windshield wiper switch assembly (Washer switch)	61-29
	Windshield washer motor & pump assembly	61-18
	Wire harness and connector	-
Wiper is not activated when the washer switch is turned on and the washer fluid is sprayed.	WIPER fuse	-
	Windshield wiper switch assembly (Washer switch)	61-29
	Windshield wiper motor assembly	61-18
	Wire harness and connector	-
Washer fluid is not sprayed.	Washer hose	-
	Washer nozzle	-
When the wiper switch is turned off, the wiper blades do not return to the stop positions or do not stop at correct positions.	Windshield wiper motor assembly	61-18
	Wire harness and connector	-

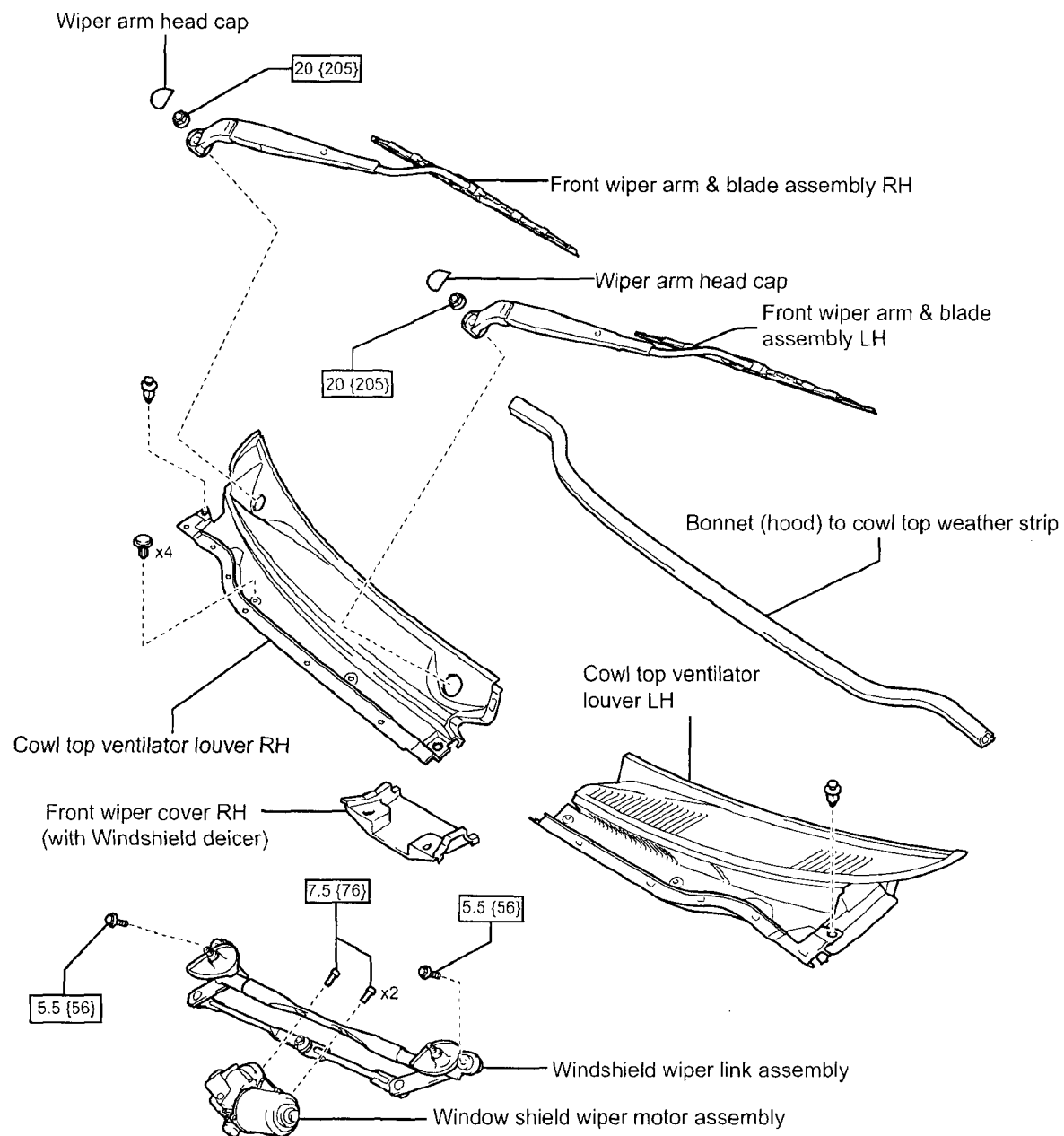
Rear wiper & washer

Symptom	Part to be checked	Refer to page
Rear wiper and rear washer do not operate.	WIPER fuse	-
	Windshield wiper switch assembly	61-29
	Wire harness and connector	-
Rear wiper does not operate at ON position.	WIPER fuse	-
	Windshield wiper switch assembly	61-29
	Rear wiper motor and bracket assembly	61-29
	Wire harness and connector	-
Rear wiper does not operate at INT position.	WIPER fuse	-
	Windshield wiper switch assembly	61-29
	Rear wiper motor and bracket assembly	61-37
	Wire harness and connector	-
Rear washer motor does not operate.	WIPER fuse	-
	Windshield wiper switch assembly (Rear washer switch)	61-29
	Rear washer motor & pump assembly	-
	Wire harness and connector	-
Rear washer fluid is not sprayed.	Washer hose	-
	Washer nozzle	-
When the rear wiper switch is turned off, the wiper blade does not return to the stop position or does not stop at correct position.	Rear wiper motor and bracket assembly	61-37
	Wire harness and connector	-

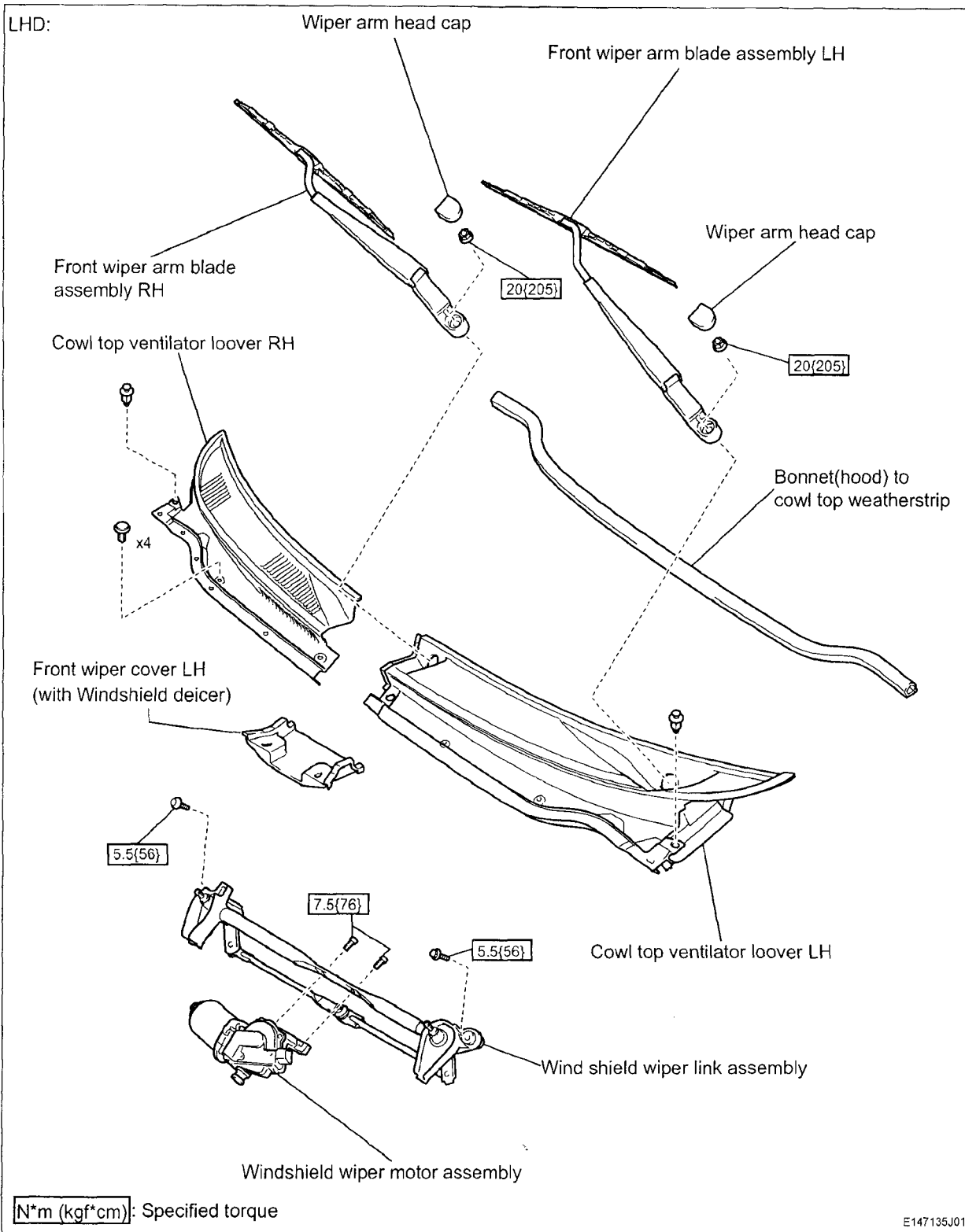
WINDSHIELD WIPER MOTOR ASSEMBLY

COMPONENTS

RHD:



61

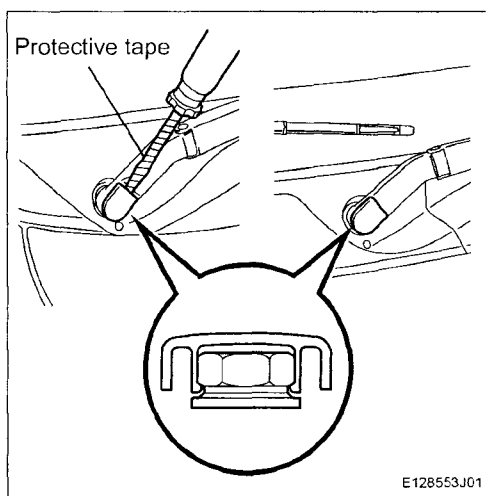


REMOVAL

<HINT>

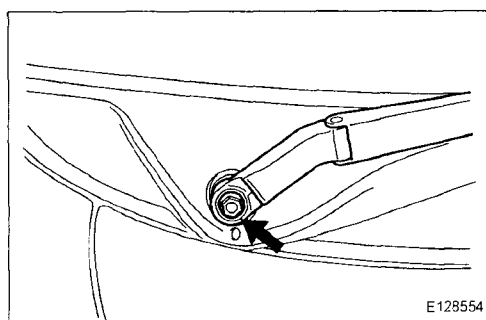
This procedure is for RHD vehicles. The same procedure is to be used also for LHD vehicles except specifically noted otherwise.

1. Battery minus terminal disconnection



2. Wiper arm head cap removal

- (1) Remove 2 wiper arm head caps using a thin-bladed flathead screwdriver wrapped with protective tape.

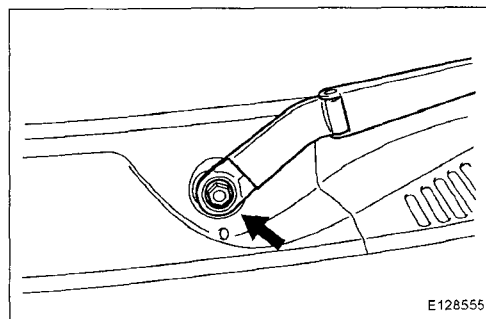


3. Front wiper arm & blade assembly RH removal

- (1) Remove the nut, and remove the front wiper arm & blade assembly RH.

<CAUTION>

- > Remove the nut with the bonnet (hood) open.
- > Remove the wiper arm with the bonnet (hood) closed.

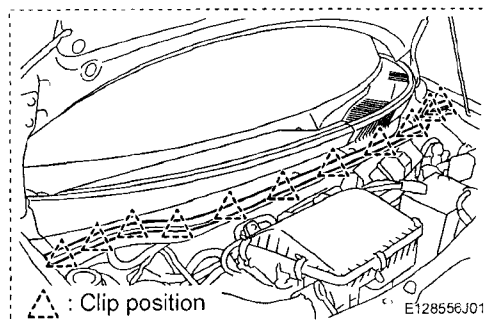


4. Front wiper arm & blade assembly LH removal

- (1) Remove the nut, and remove the front wiper arm & blade assembly LH.

<CAUTION>

- > Remove the nut with the bonnet (hood) open.
- > Remove the wiper arm with the bonnet (hood) closed.



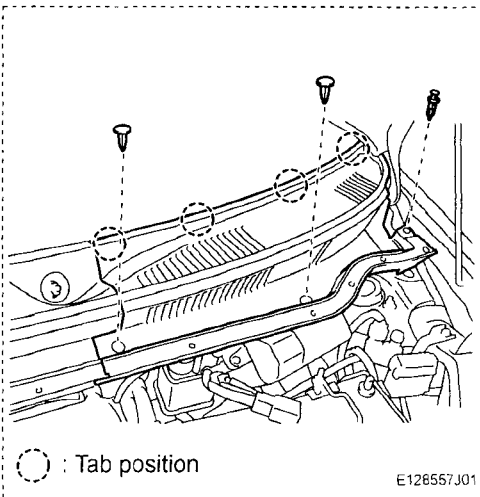
5. Bonnet (hood) to cowl top weather strip removal

- (1) Release 11 clips, and remove the bonnet (hood) to cowl top weather strip.

<CAUTION>

To remove each clip, use a pliers or a similar tool to push the clip out while pinching it from the rear side.

61

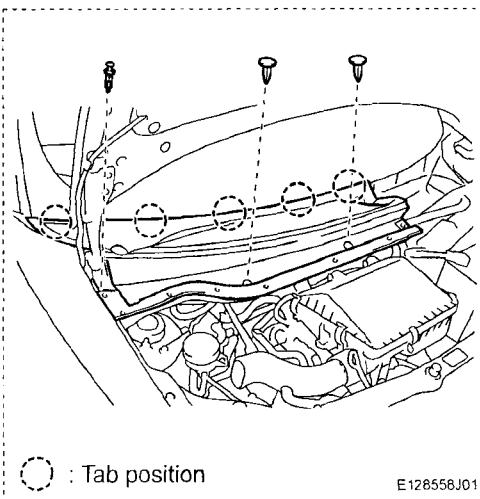


6. Cowl top ventilator louver LH removal

- (1) Remove the cowl top ventilator louver LH by releasing 3 clips and 4 tabs.

<HINT>

For LHD, remove the RH louver.

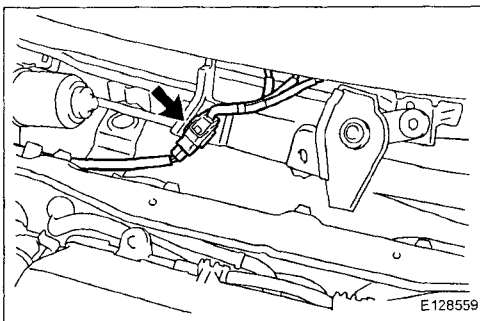


7. Cowl top ventilator louver RH removal

- (1) Remove the cowl top ventilator louver RH by releasing 3 clips and 5 tabs.

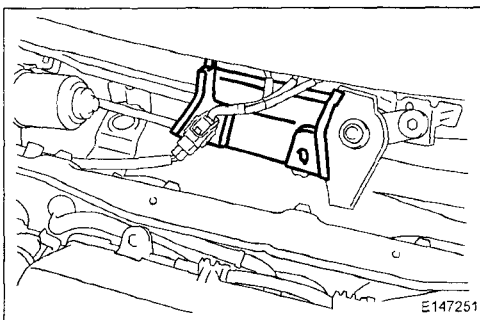
<HINT>

For LHD, remove the LH louver.

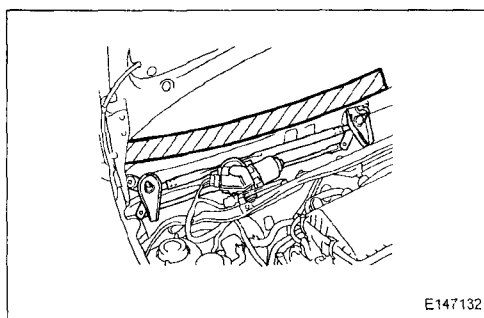


8. Windshield wiper motor & linkage assembly removal

- (1) Disconnect the connector and the clamp. (with Windshield wiper deicer)



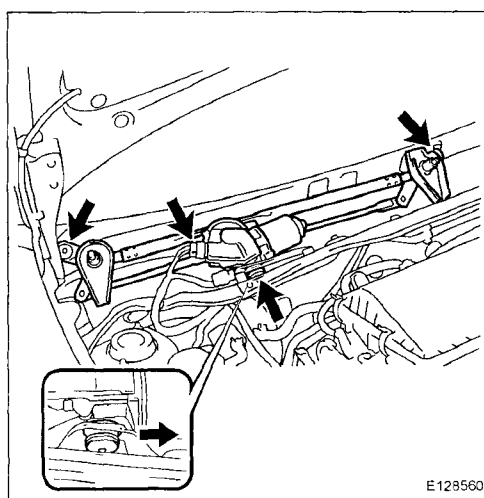
- (2) Remove the wiper cover. (with Windshield wiper deicer)



- (3) Affix a protective tape onto the bottom edge of the windshield glass.

<HINT>

For LHD, attach the tape at the LH side.



- (4) Disconnect the windshield wiper motor connector.

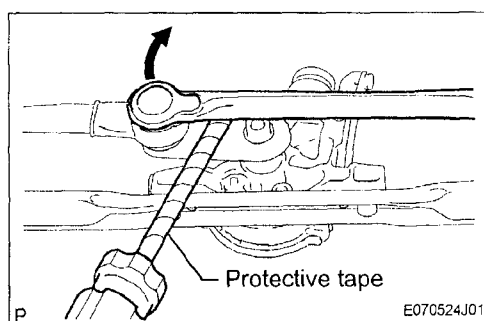
- (5) Remove the 2 bolts

- (6) Remove the windshield wiper motor & link assembly by sliding it to the right and releasing the rubber pin that is fitted.

<HINT>

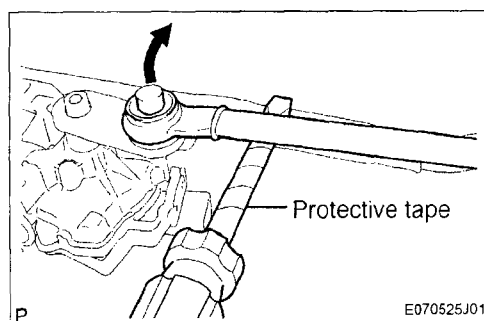
For LHD, slide the assembly to the left.

61

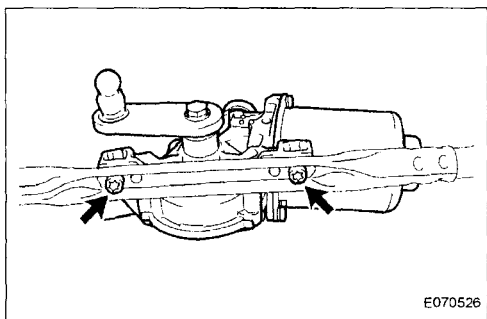


9. Windshield wiper motor assembly removal.

- (1) Using a flathead screwdriver wrapped with protective tape, disconnect the windshield wiper link arm from the crank arm pivot of the windshield wiper motor assembly.



- (2) Using a flathead screwdriver wrapped with protective tape, disconnect the windshield wiper link arm from the crank arm pivot of the windshield wiper motor assembly.



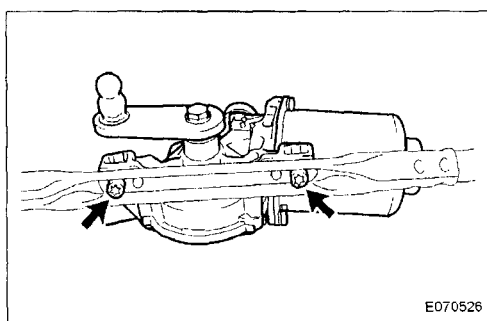
- (3) Remove 2 bolts with a TORX wrench (T30), and remove the windshield wiper motor assembly from the windshield wiper link assembly.

INSTALLATION

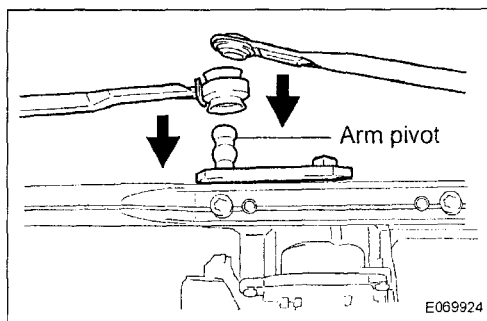
<HINT>

This procedure is for RHD vehicles. The same procedure is to be used also for LHD vehicles except specifically noted otherwise.

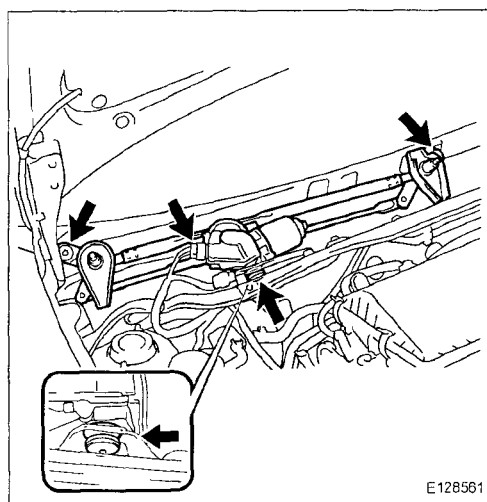
61



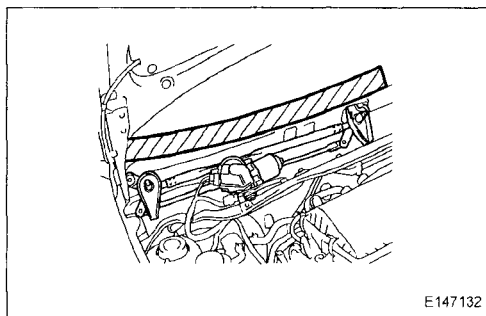
1. Windshield wiper motor assembly installation
 - (1) Fix the windshield wiper motor assembly to the windshield wiper link assembly with 2 bolts using a TORX wrench (T30).
Specified value: $T=7.5N*m$ {76kgf*cm}



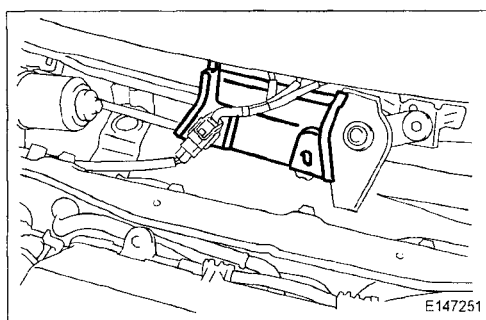
- (2) Apply grease to the crank arm pivot of the windshield wiper motor assembly, and attach the windshield wiper link arm.
Fat and oil: DENSO No. 50 grease or equivalent



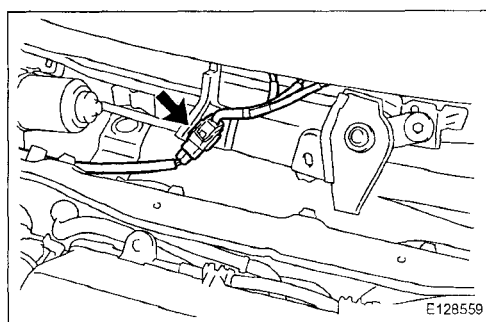
2. Windshield wiper motor & link assembly installation
 - (1) Attach the windshield wiper link assembly, with the windshield wiper motor assembly attached, by fitting the pin.
 - (2) Fix the windshield wiper link assembly with 2 bolts.
Specified value: $T=5.5N*m$ {56kgf*cm}
 - (3) Connect the windshield wiper motor connector.



(4) Remove the protective tape.

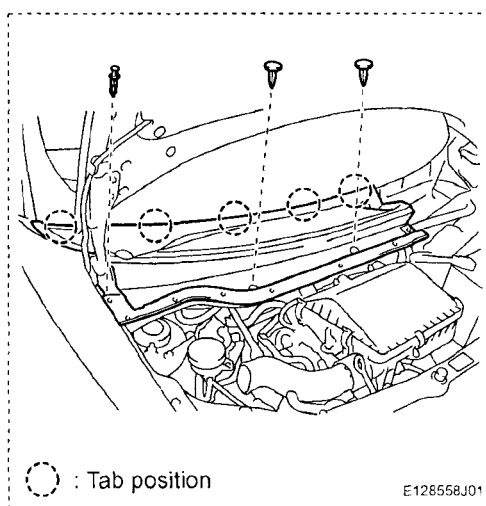


(5) Attach the wiper cover. (with Windshield wiper deicer)



(6) Connect the connector by fitting the clamp. (with Windshield wiper deicer)

61

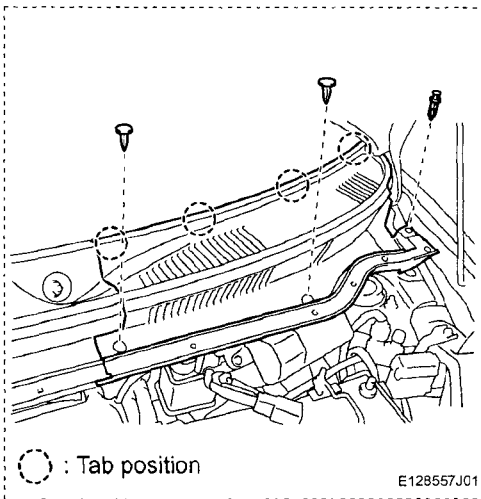


3. Cowl top ventilator louver RH installation

(1) Attach the cowl top ventilator louver RH by fitting 5 tabs and 3 clips.

<HINT>

For LHD, attach the louver LH.

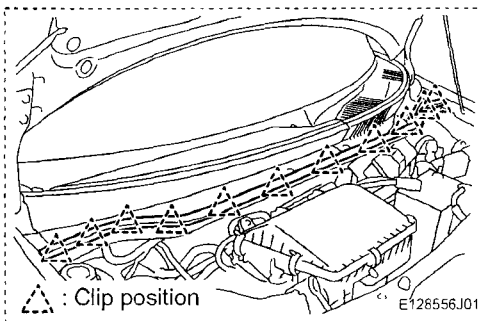


4. Cowl top ventilator louver LH installation

- (1) Fitting 4 tabs, attach the cowl top ventilator louver LH with 3 clips.

<HINT>

For LHD, attach the louver RH.



5. Bonnet (hood) to cowl top weather strip installation

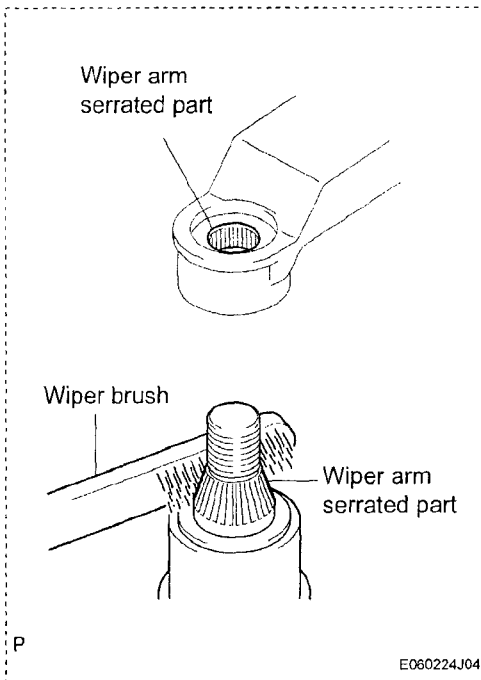
- (1) Attach the bonnet (hood) to cowl top weather strip by fitting 11 clips.

6. Front wiper arm & blade assembly RH installation

- (1) Temporarily connect the battery negative terminal.

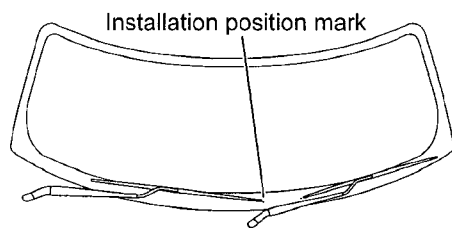
- (2) Activating the front wiper, stop the windshield wiper motor assembly at the automatic stop position.

- (3) Clean the wiper pivot serration with a wire brush.

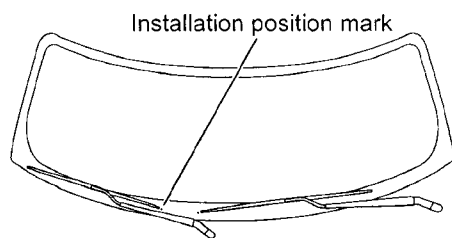


- (4) Clean the wiper arm serration with round file or something. (For reassembling)

RHD:



LHD:



E147622J01

- (5) Fix the front wiper arm & blade assembly RH with a nut so that the front wiper blade comes to the position as shown in the figure.

<CAUTION>

- > Fix the front wiper arm with the bonnet (hood) closed.
- > Attach the nut with the bonnet (hood) open.

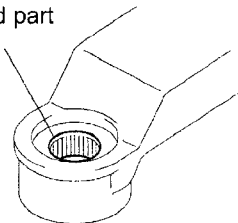
Specified value: $T=20N \cdot m$ {205kgf $\cdot$ cm}

<HINT>

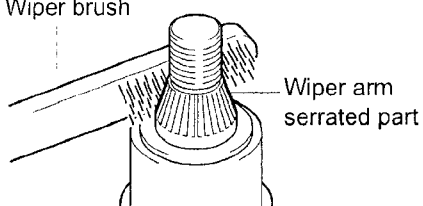
Tighten the nut while pressing the arm hinge with a hand.

61

Wiper arm
serrated part



Wiper brush



Wiper arm
serrated part

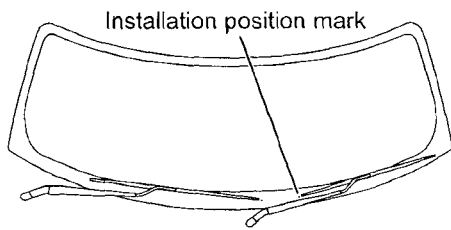
P

E060224J04

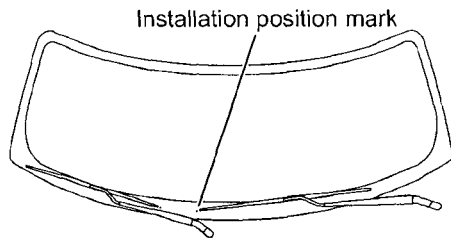
7. Front wiper arm & blade assembly LH.

- (1) Clean the wiper pivot serration with a wire brush.
- (2) Clean the wiper arm serration with round file or something. (For reassembling)

RHD:



LHD:



E147622J02

- (3) Fix the front wiper arm & blade assembly LH with a nut so that the front wiper blade comes to the position as shown in the figure.

<CAUTION>

- > Fix the front wiper arm with the bonnet (hood) closed.
- > Attach the nut with the bonnet (hood) open.

Specified value: $T=20N*m$ {205kgf*cm}

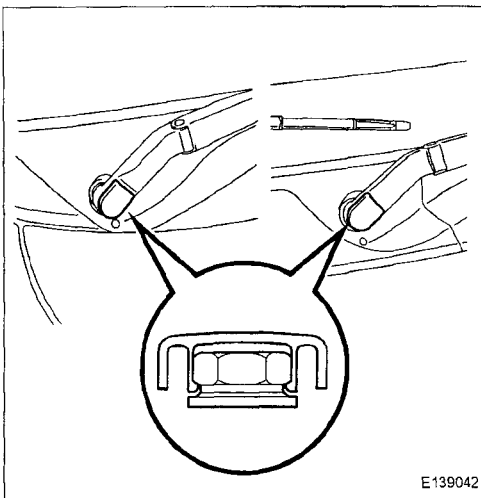
<HINT>

Tighten the nut while pressing the arm hinge with a hand.

- (4) While spraying water or washer fluid on the windshield surface, operate the front wiper to check the wiping state of the blade and to verify that the blade does not interfere with the body.
- (5) Disconnect the battery minus terminal.

8. Wiper arm head cap installation

- (1) Attach the wiper arm head cap.



E139042

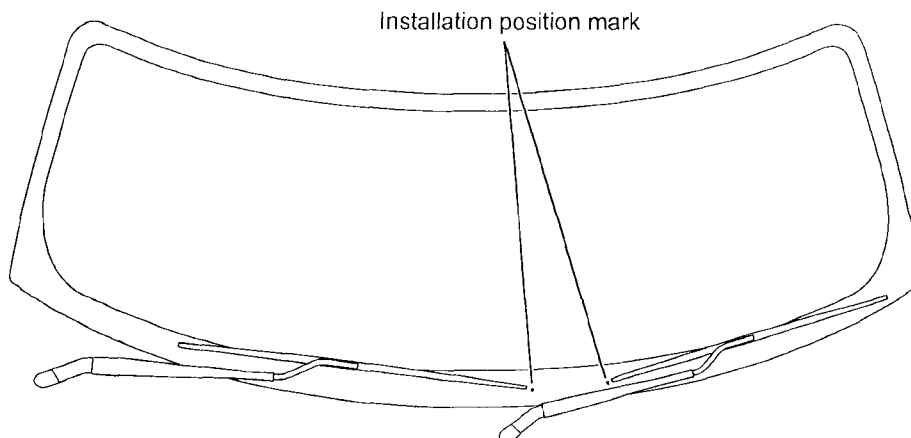
9. Battery minus terminal connection

Specified value: $T=6.4N*m$ {65kgf*cm}

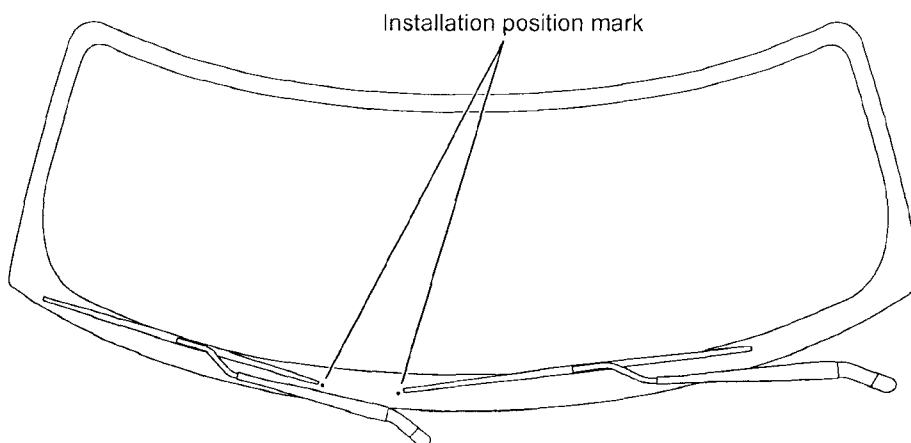
ON-VEHICLE INSPECTION

1. Windshield wiper motor assembly check
- (1) Automatic stop position check

RHD:



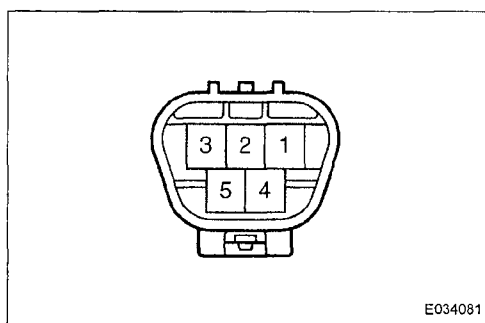
LHD:



E147623J01

(a) Activate and then stop the windshield wiper motor assembly. Check the automatic stop position of the wiper arm.
Reference: The wiper arm stops at the position shown in the figure.

INSPECTION



E034081

1. Windshield wiper motor assembly check (RHD)

(1) Lo operation check

(a) Check that the windshield wiper motor assembly operates at low speed (Lo) when the connector No. 5 (Lo) and No. 4 (E) terminals are connected to the battery positive and negative terminals respectively.

(2) Hi operation check

(a) Check that the windshield wiper motor assembly operates at high speed (Hi) when the connector No. 3 (Hi) and No. 4 (E) terminals are connected to the battery positive and negative terminals respectively.

2. Windshield wiper motor assembly check (LHD)

(1) Lo operation check

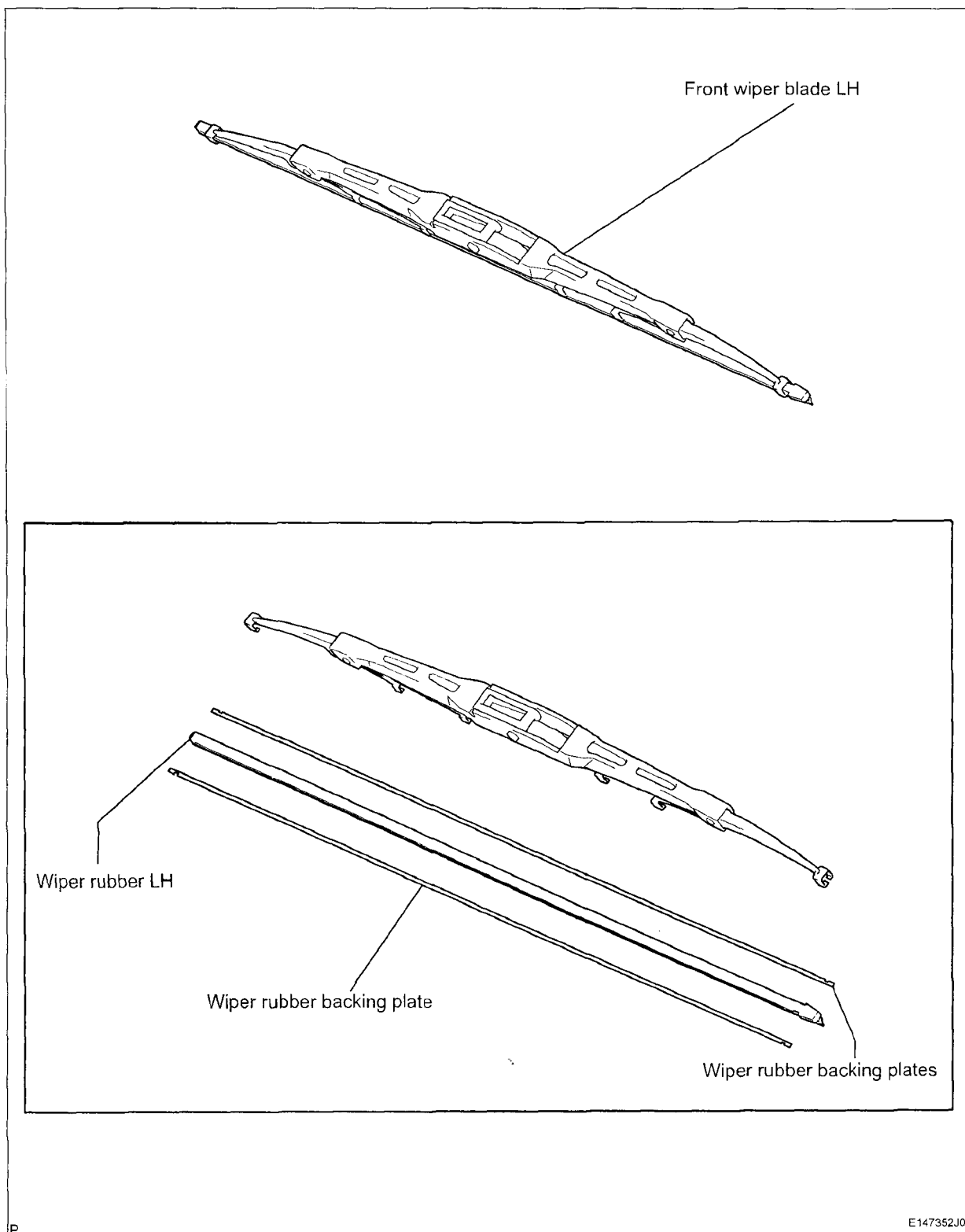
(a) Check that the windshield wiper motor assembly operates at low speed (Lo) when the connector No. 1 (Lo) and No. 5 (E) terminals are connected to the battery positive and negative terminals respectively.

(2) Hi operation check

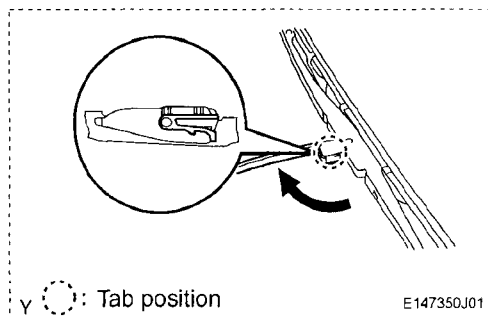
(a) Check that the windshield wiper motor assembly operates at high speed (Hi) when the connector No. 4 (Hi) and No. 5 (E) terminals are connected to the battery positive and negative terminals respectively.

WIPER RUBBER LH

COMPONENTS



REMOVAL

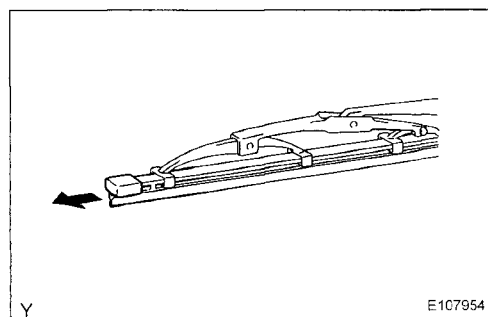


1. Front wiper blade LH removal

- (1) Remove the front wiper blade LH from the front wiper arm LH.

<CAUTION>

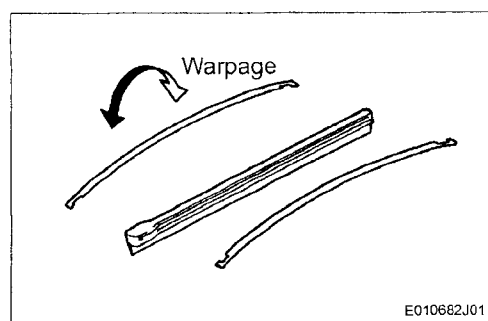
Do not fall down the front wiper arm with the front wiper blade removed.



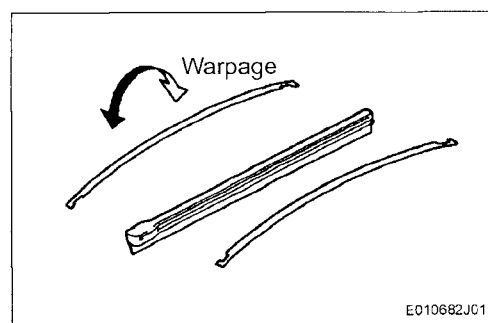
2. Wiper rubber LH removal

- (1) Remove the wiper rubber LH from the front wiper blade LH.

- (2) Remove 2 wiper rubber backing plates from the wiper rubber LH.



INSTALLATION

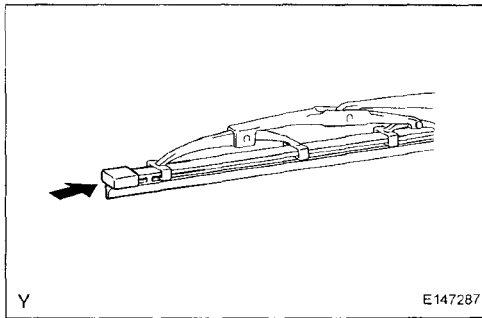


1. Wiper rubber LH installation

- (1) Attach 2 wiper rubber backing plates to the wiper rubber LH.

<CAUTION>

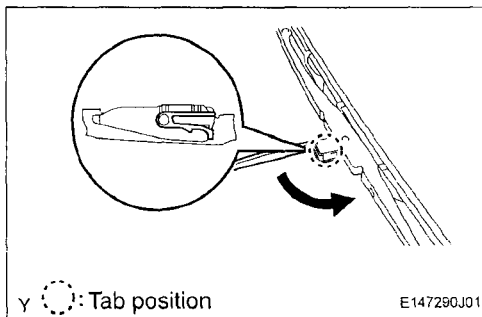
Do not confuse between the front and back sides of the backing plate.



- (2) Attach the wiper rubber so that its head (thicker side) faces the arm shaft.

<CAUTION>

Push in the rubber strongly until the concavity of its end is fully fit to the blade.



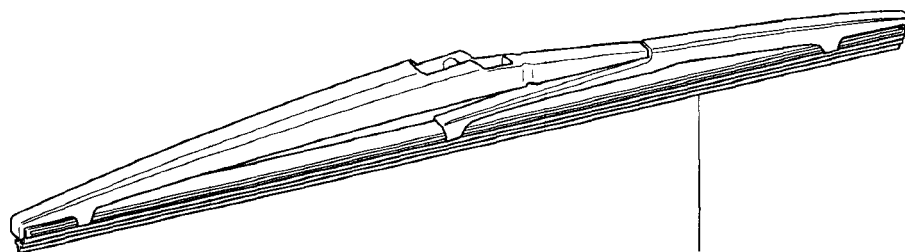
2. Front wiper blade LH installation

- (1) Fix the front wiper blade LH by engaging the claw.

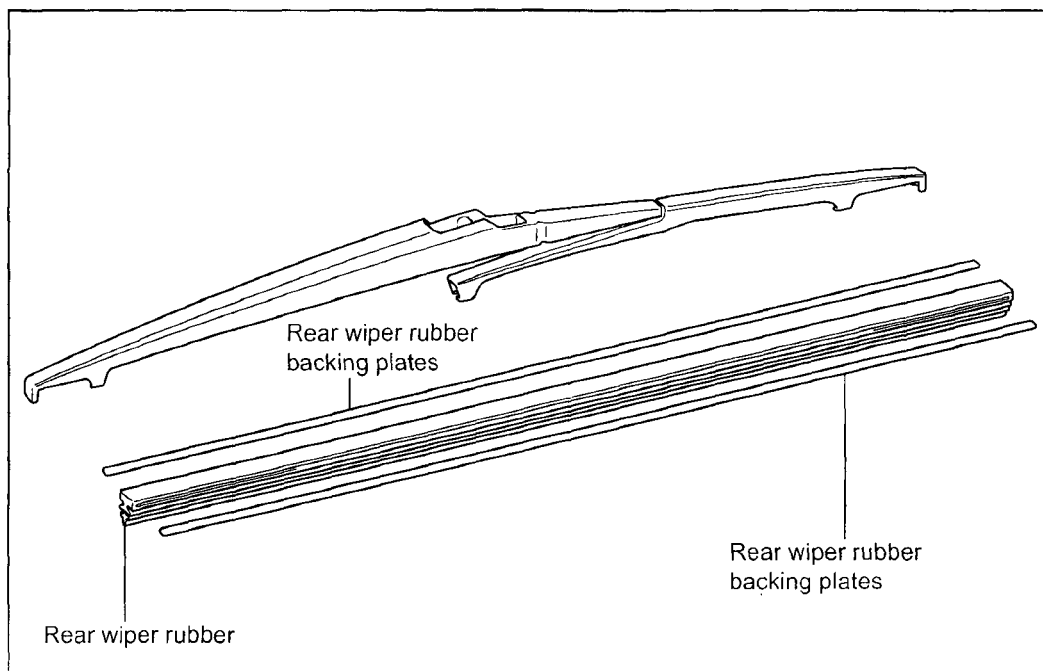
REAR WIPER RUBBER

COMPONENTS

61



Rear wiper blade

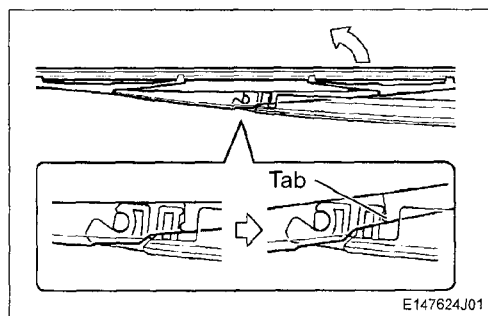


Rear wiper rubber
backing plates

Rear wiper rubber

Rear wiper rubber
backing plates

REMOVAL

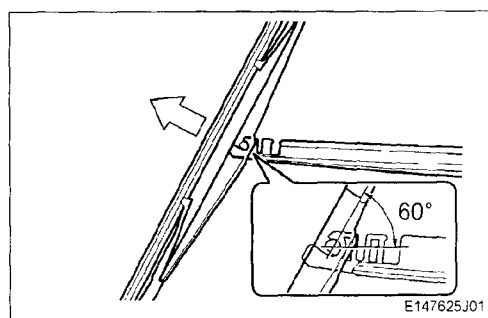


1. Rear wiper blade removal

- (1) Raise the rear wiper blade.
- (2) Raise the rear wiper blade to the position shown in the figure until it "clicks" and the claw is disengaged.

<CAUTION>

Take care not to damage the claw.

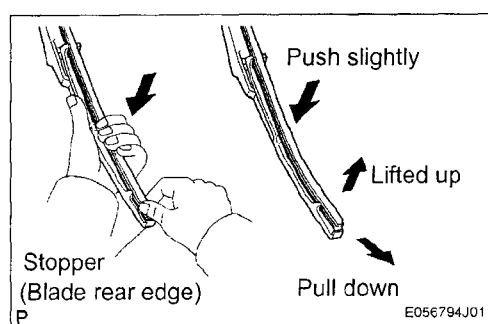


- (3) Pull out the blade straight ahead toward the left side of the vehicle, and remove the rear wiper blade from the rear wiper arm.

<CAUTION>

Do not fall down the rear wiper arm with the rear wiper blade removed.

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2. Rear wiper rubber removal

- (1) As shown in the figure, pull the rear wiper rubber out of the stopper at the rear end of the blade, and then pull out the rubber.

<CAUTION>

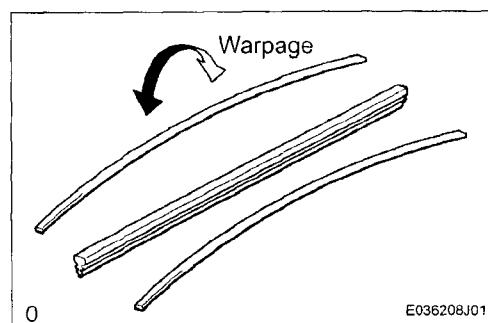
Do not deform the backing plates or break the claws of the blade by pulling out the wiper rubber forcefully.

<HINT>

The rubber is raised and becomes easy to be pulled out if you push the wiper blade gently at a portion around the center between the claws.

- (2) Remove the backing plate from the rear wiper rubber.

INSTALLATION

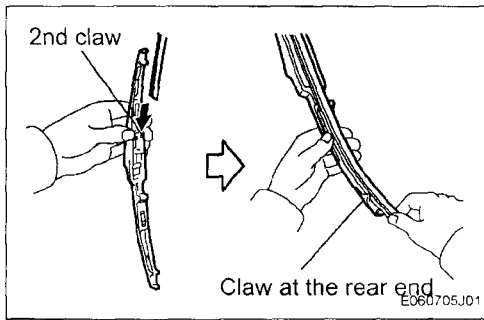


1. Rear wiper rubber installation

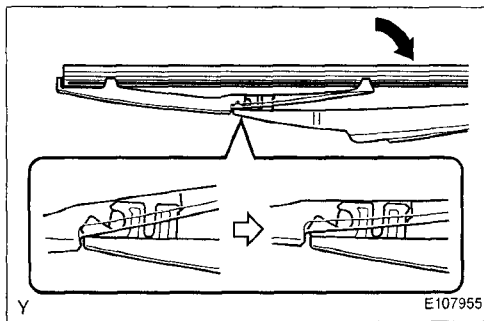
- (1) As shown in the figure, attach the rear wiper rubber backing plates.

<CAUTION>

Do not confuse the direction in which the backing plates warp.



- (2) Start at the front of the rear wiper blade, insert the rubber from the 2nd claw to the rear end of the wiper.
- (3) After inserting the rubber through the claw at the rear end, stick out the rubber end from the rear end stopper.
- (4) Insert the rubber through the rear end claw to fix the rear wiper rubber.



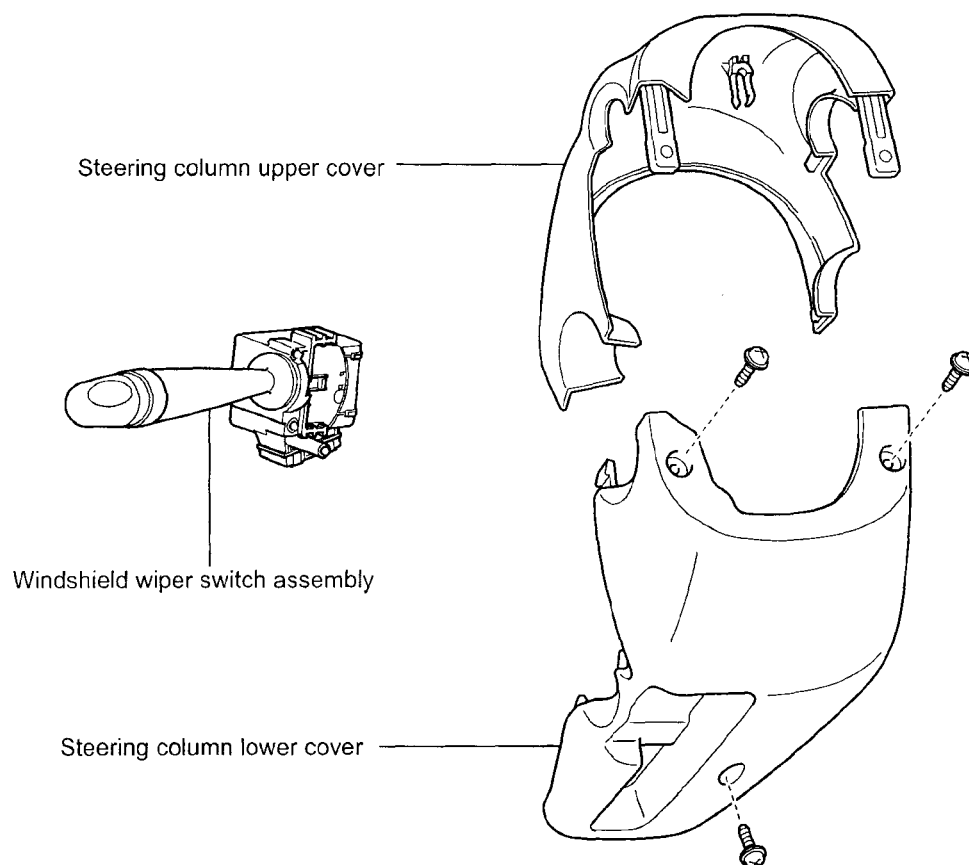
2. Rear wiper blade installation

- (1) Fix the rear wiper blade to the rear wiper arm by engaging the claw.
- (2) Verify that the claw is caught securely, and return the rear wiper arm.

WINDSHIELD WIPER SWITCH ASSEMBLY

COMPONENTS

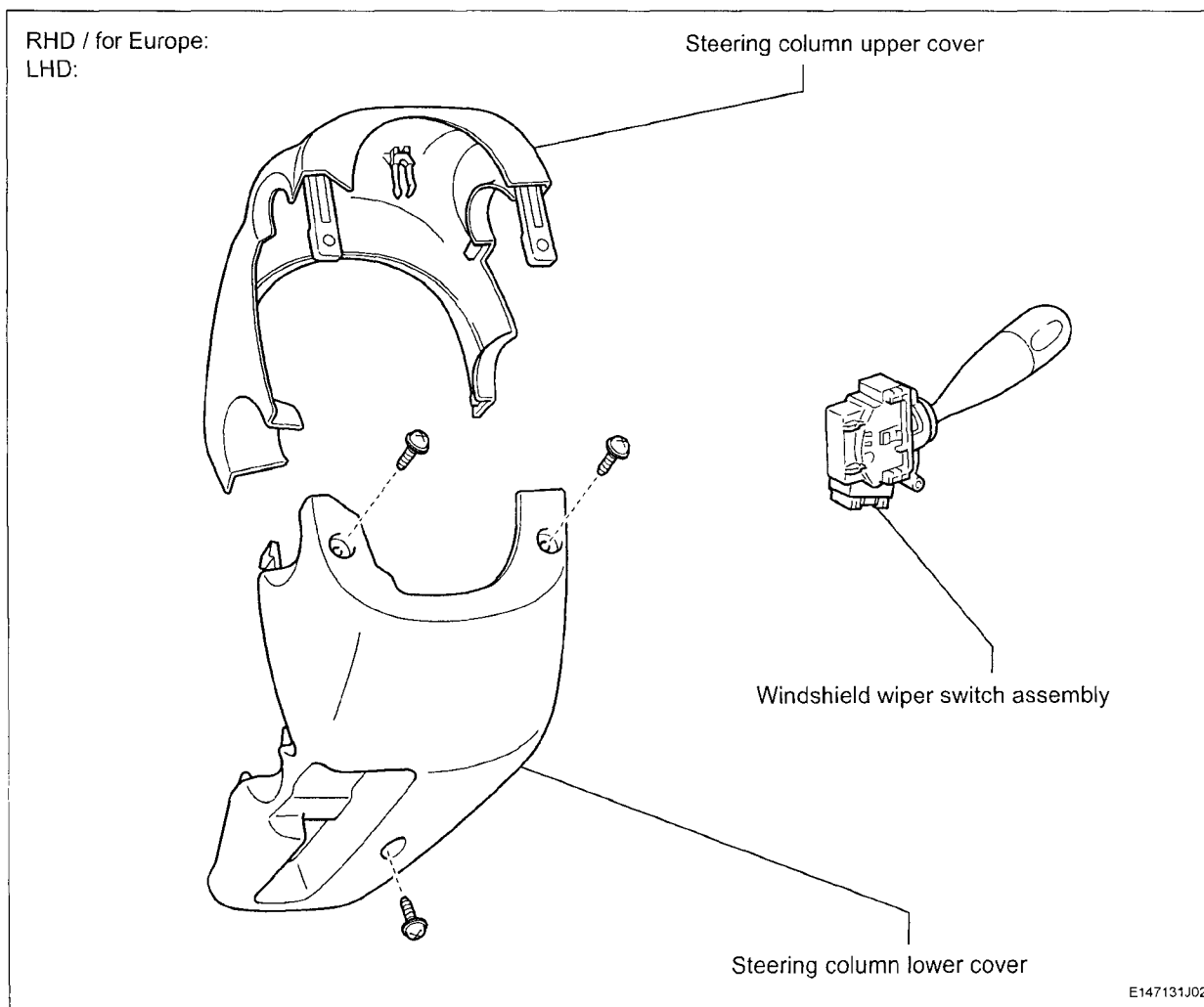
RHD / for Europe:



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E147268J03

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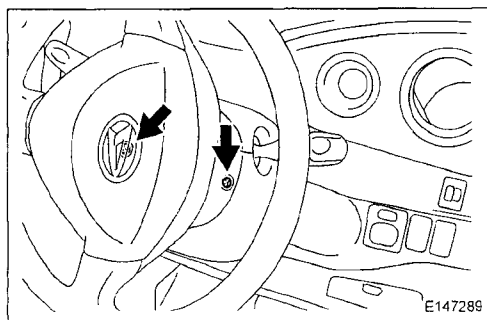


REMOVAL

<HINT>

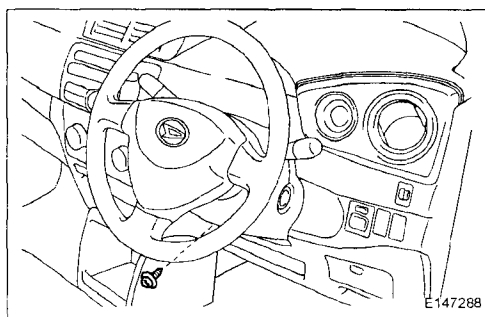
This procedure is for RHD vehicles for regions other than Europe. The same procedure is applied to LHD vehicles and RHD vehicles for Europe except specifically noted otherwise.

1. Battery minus terminal disconnection

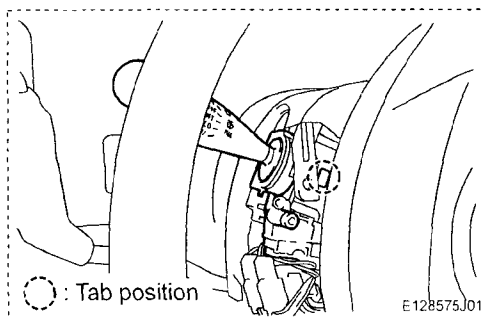


2. Steering column upper cover removal

(1) Turn the steering wheel 90 degrees right and left, and remove 2 screws to remove the steering column upper cover.



3. Steering gear column lower cover removal
 - (1) Remove the screw at the lower portion, and remove the steering column lower cover.



4. Remove the windshield wiper switch assembly.
 - (1) Disconnect the connector.

<HINT>

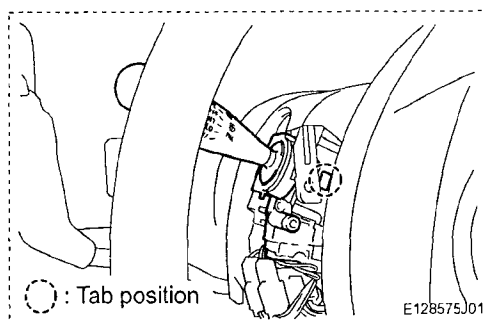
For LHD vehicles and RHD vehicles for Europe, remove the one at the right side.
 - (2) As shown in the figure, push the tab to release the fit. Remove the windshield wiper switch assembly.

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INSTALLATION

<HINT>

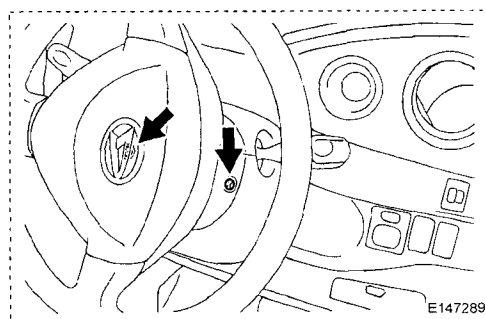
This procedure is for RHD vehicles for regions other than Europe. The same procedure is applied to LHD vehicles and RHD vehicles for Europe except specifically noted otherwise.



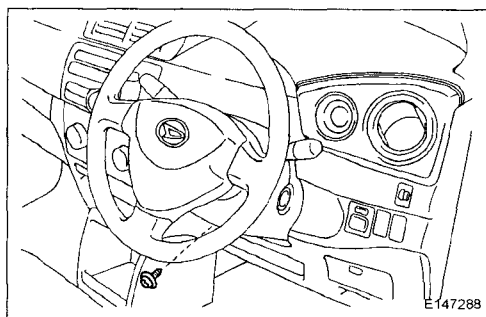
1. Windshield wiper switch assembly installation
 - (1) Insert the windshield wiper switch assembly until the tab fits.

<HINT>

For LHD vehicles and RHD vehicles for Europe, attach the one at the left side.
 - (2) Connect the connector.



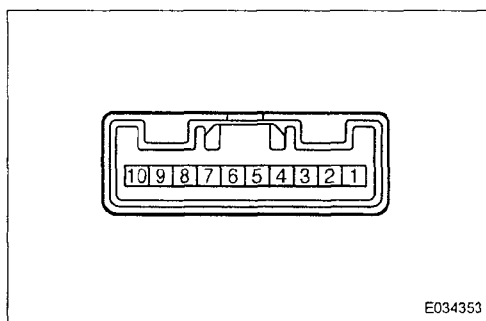
2. Steering column lower cover installation
 - (1) Attach the steering column lower cover with a screw.



4. Battery minus terminal connection
Specified value: $T=6.4N \cdot m$ {65kgf*cm}

INSPECTION

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3. Steering column upper cover installation
(1) Turn the steering wheel 90 degrees right and left, and attach the steering column upper cover with 2 screws.

1. Windshield wiper switch assembly inspection (RHD / For Europe)

- (1) Conductivity check

(a) Using a tester, check continuity between the terminals of the connector.

Reference

Front wiper switch

Switch	Terminal number (terminal symbol)	Electrical continuity
MIST	8(WB) ↔ (+1)	With electrical continuity
OFF	6(+S) ↔ (+1)	With electrical continuity
INT	6(+S) ↔ (+1)	With electrical continuity
Lo	8(WB) ↔ (+1)	With electrical continuity
Hi	8(WB) ↔ (+2)	With electrical continuity

Front washer switch

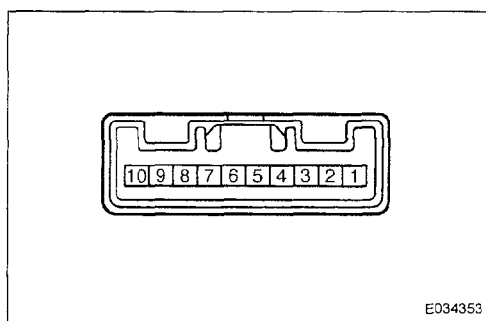
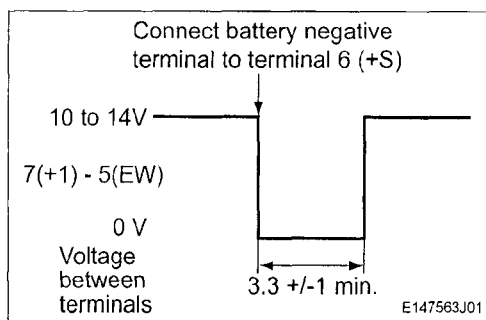
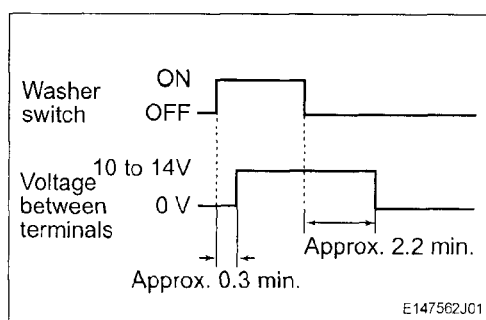
Switch	Terminal number (terminal symbol)	Electrical continuity
OFF	-	No continuity between all terminals
ON	4(W) ↔ 5(EW)	With electrical continuity

Rear wiper switch

Switch	Terminal number (terminal symbol)	Electrical continuity
WASH	3(WR) ↔ 5(EW)	With electrical continuity
OFF	-	No continuity between all terminals
INT	1(C1R) ↔ 5(EW)	With electrical continuity
ON	2(+1R) ↔ 5(EW)	With electrical continuity
ON+WASH	2(+1R) ↔ 3(WR) ↔ 5(EW)	With electrical continuity

- (2) Intermittent operation check (Front wiper)

- (a) Using a tester, connect the connector No. 7 (+1) and No. 5 (EW) terminals to the positive and negative terminals of the tester respectively.
(b) Connect the connector No. 8 (WB) terminal to the battery positive terminal, and connect the connector No. 5 (EW) and No. 6 terminals to the battery negative terminal.
(c) Turn the wiper switch to INT.
(d) Connect the connector No. 6 (+S) terminal to the battery positive terminal for 5 seconds.



(e) Check the voltage between the No. 7 (+1) and No. 5 (EW) terminals when the connector No. 6 (+S) terminal is connected to the battery negative terminal to activate the intermittent wiper relay.

Reference: As shown in the figure.

(3) Operation check (Front washer)

(a) Turn off the front wiper switch.

(b) Connect the connector No. 8 (WB) terminal to the battery positive terminal, and connect the connector No. 6 (+S) and No. 5 (EW) terminals to the battery negative terminal.

(c) Using a tester, connect the connector No. 7 (+1) and No. 5 (EW) terminals to the positive and negative terminals of the tester respectively. Check the voltage between the No. 8 (WB) and No. 5 (EW) terminals when the washer switch is turned on and off.

Reference: As shown in the figure.

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2. Windshield wiper switch assembly inspection (RHD / for Europe)

(1) Conductivity check

(a) Using a tester, check continuity between the terminals of the connector.

Reference

Front wiper switch

Switch	Terminal number (terminal symbol)	Electrical continuity
MIST	3(WB) ↔ 4(+1)	With electrical continuity
OFF	4(+1) ↔ 5(+S)	With electrical continuity
INT	4(+1) ↔ 5(+S)	With electrical continuity
LO	3(WB) ↔ 4(+1)	With electrical continuity
HI	3(WB) ↔ 2(+2)	With electrical continuity

Front washer switch

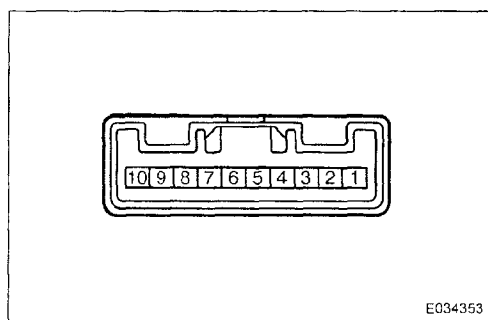
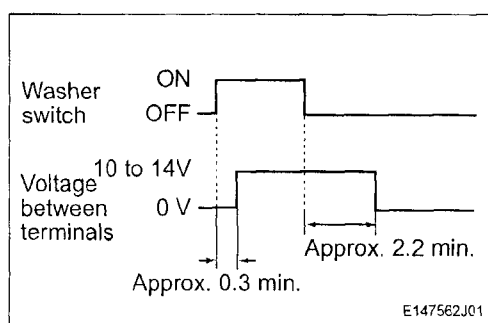
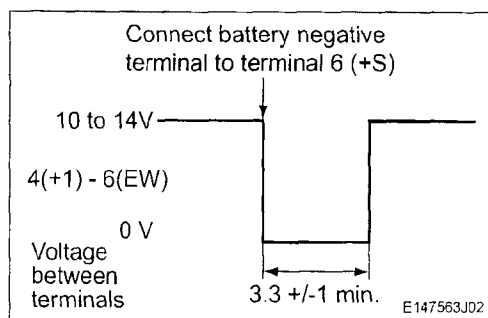
Switch	Terminal number (terminal symbol)	Electrical continuity
OFF	-	No continuity between all terminals
ON	7(W) ↔ 6(EW)	With electrical continuity

Rear wiper switch

Switch	Terminal number (terminal symbol)	Electrical continuity
WASH	8(WR) ↔ 6(EW)	With electrical continuity
OFF	-	No continuity between all terminals
ON	9(+1R) ↔ 6(EW)	With electrical continuity
ON+WASH	8(WR) ↔ 9(+1R) ↔ 6(EW)	With electrical continuity

(2) Intermittent operation check (Front wiper)

(a) Using a tester, connect the connector No. 4 (+1) and 6 (EW) terminals to the positive and negative terminals of the tester respectively.



(b) Connect the connector No. 3 (WB) terminal to the battery positive terminal, and connect the connector No. 6 (EW) and No. 5 (+S) terminals to the battery negative terminal.

(c) Turn the wiper switch to INT.

(d) Connect the connector No. 5 (+S) terminal to the battery positive terminal for 5 seconds.

(e) Check the voltage between the connector No. 4 (+1) and No. 6 (EW) terminals when the connector No. 5 (+S) terminal is connected to the battery negative terminal to activate the intermittent wiper relay.

Reference: As shown in the figure.

(3) Operation check (Front washer)

(a) Turn OFF the front wiper switch.

(b) Connect the connector No. 3 (WB) terminal to the battery positive terminal, and connect the No. 5 (+S) and No. 6 (EW) terminals to the battery negative terminal.

(c) Using a tester, connect the connector No. 4 (+1) and No. 6 (EW) terminals to the tester positive and negative terminals respectively. Check the voltage between the No. 4 (+1) and No. 6 (EW) when the washer switch is turned on and off.

Reference: As shown in the figure.

3. Windshield wiper switch assembly inspection (LHD)

(1) Conductivity check

(a) Using a tester, check continuity between the terminals of the connector.

Reference

Front wiper switch

Switch	Terminal number (terminal symbol)	Electrical continuity
MIST	8(WB) ↔ 7(+1)	With electrical continuity
OFF	6(+S) ↔ 7(+1)	With electrical continuity
INT	6(+S) ↔ 7(+1)	With electrical continuity
LO	8(WB) ↔ 7(+1)	With electrical continuity
HI	8(WB) ↔ 9(+2)	With electrical continuity

Front washer switch

Switch	Terminal number (terminal symbol)	Electrical continuity
OFF	-	No continuity between all terminals
ON	4(W) ↔ 5(EW)	With electrical continuity

Rear wiper switch

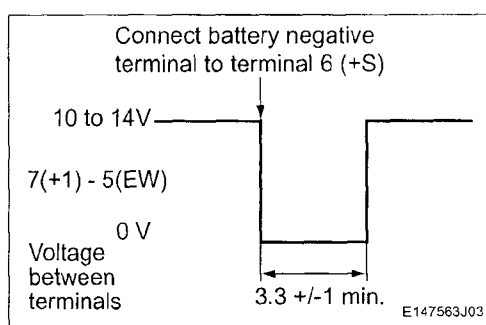
Switch	Terminal number (terminal symbol)	Electrical continuity
WASH	3(WR) ↔ 5(EW)	With electrical continuity
OFF	-	No continuity between all terminals
INT	1(C1R) ↔ 5(EW)	With electrical continuity
ON	2(+1R) ↔ 5(EW)	With electrical continuity

Switch	Terminal number (terminal symbol)	Electrical continuity
ON+WASH	2(+1R) ↔ 3(WR) ↔ 5(EW)	With electrical continuity

(2) Intermittent operation check (Front wiper)

- (a) Using a tester, connect the connector No. 7 (+1) and No. 5 (EW) terminals to the positive and negative terminals of the tester respectively.
- (b) Connect the connector No. 8 (WB) terminal to the battery positive terminal, and connect the connector No. 5 (EW) and No. 6 terminals to the battery negative terminal.
- (c) Turn the wiper switch to INT.
- (d) Connect the connector No. 6 (+S) terminal to the battery positive terminal for 5 seconds.
- (e) Check the voltage between the No. 7 (+1) and No. 5 (EW) terminals when the connector No. 6 (+S) terminal is connected to the battery negative terminal to activate the intermittent wiper relay.

Reference: As shown in the figure.



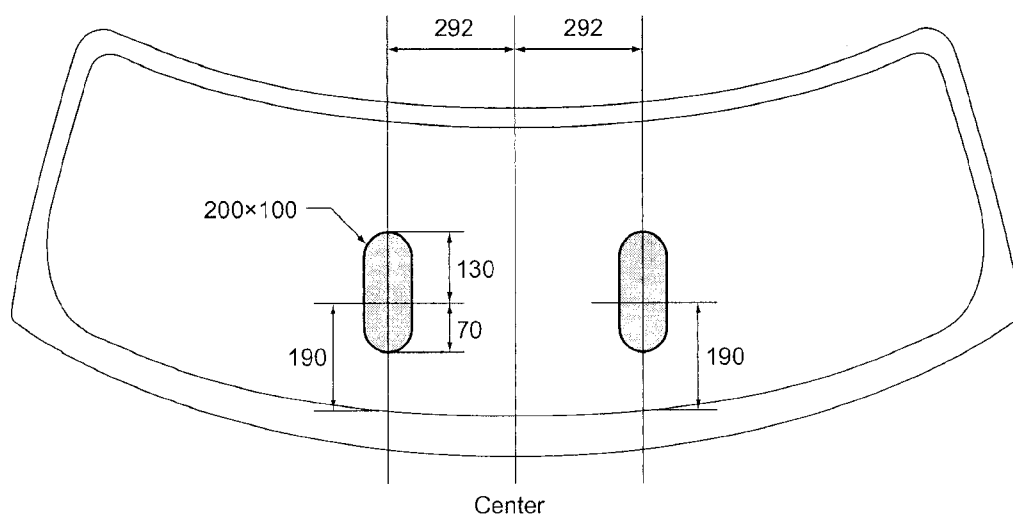
WASHER NOZZLE

ADJUSTMENT

1. Washer nozzle adjustment

(1) Washer nozzle adjustment

(a) With the engine operated, adjust the washer nozzle so that the washer fluid splash areas on the windshield are within reference areas.

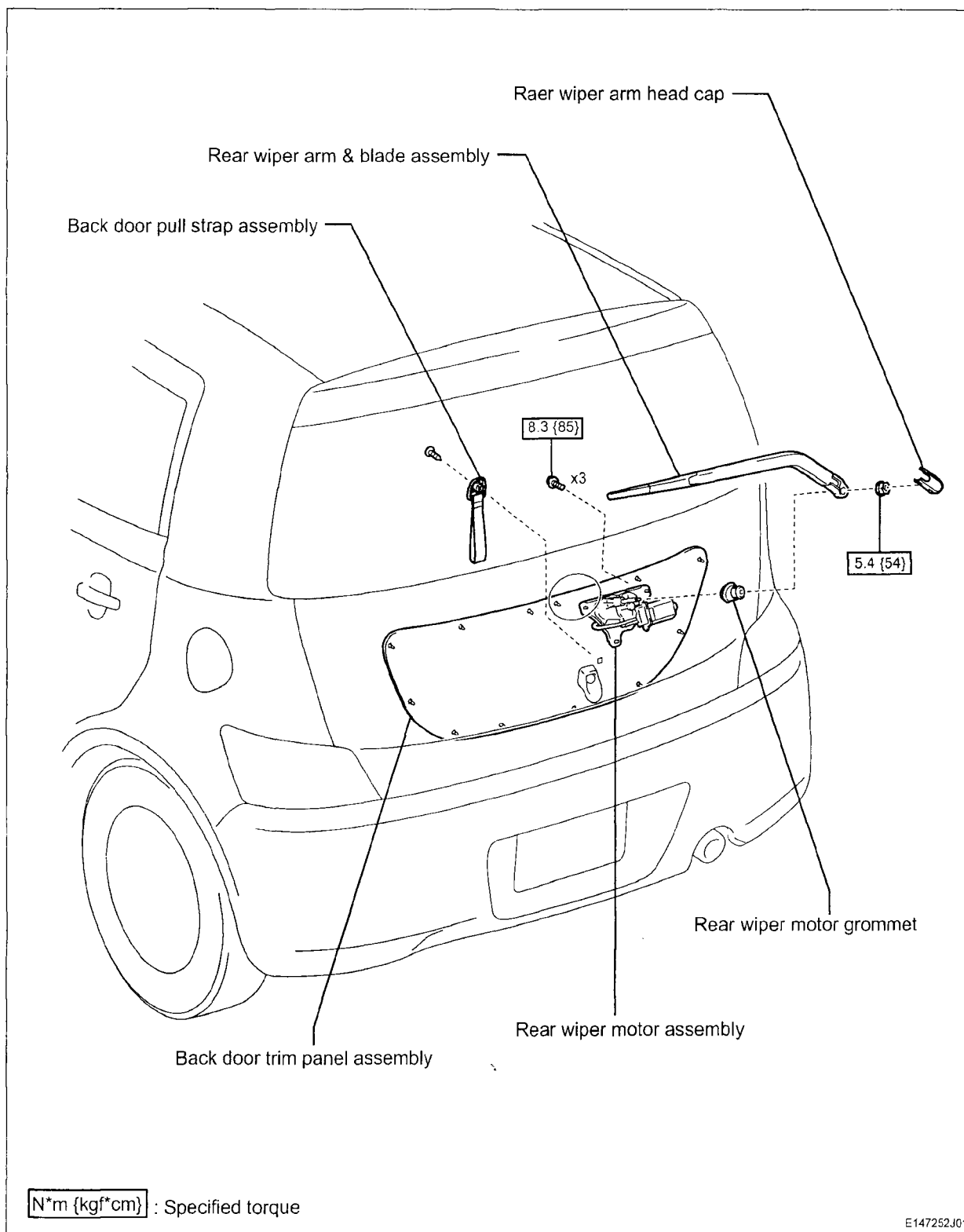


E128576J02

Reference: The areas should be as shown in the figure.

REAR WIPER MOTOR & BRACKET ASSEMBLY

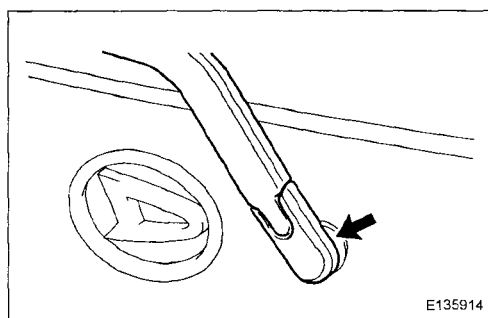
COMPONENTS



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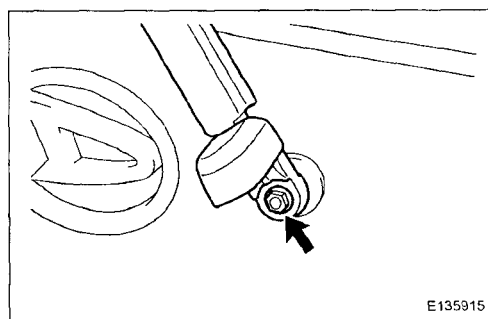
REMOVAL

1. Battery minus terminal disconnection

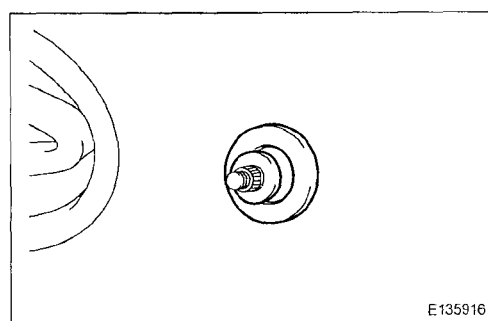


2. Rear wiper arm & blade assembly removal

(1) Open the rear wiper head cap.



(2) Remove the nut, and remove the rear wiper.

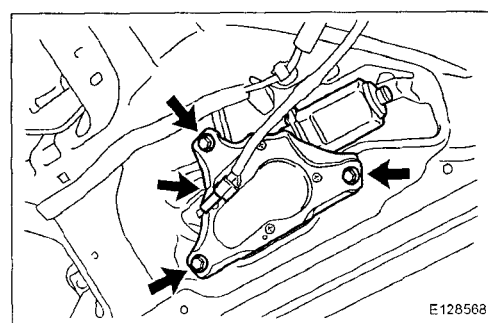


3. Rear wiper motor grommet removal

(1) Remove the rear wiper motor grommet.

4. Back door pull strap removal (See page 80-47)

5. Back door trim panel assembly removal (See page 80-47)

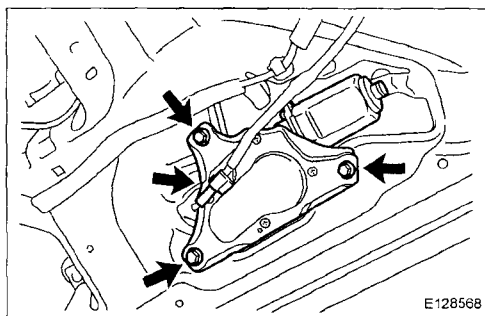


6. Rear wiper motor assembly removal

(1) Disconnect the connector.

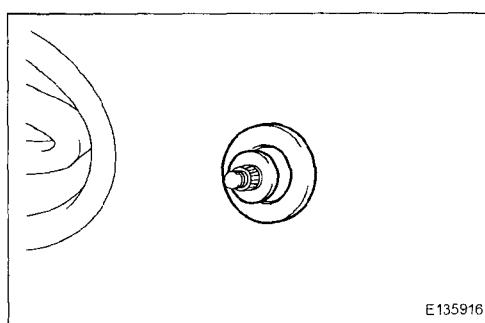
(2) Removing 3 bolts, remove the rear wiper motor and bracket assembly.

INSTALLATION



1. Rear wiper motor assembly installation
 - (1) Fix the rear wiper motor and bracket assembly.
Specified value: $T=8.3N \cdot m$ {85kgf*cm}
 - (2) Connect the connector.

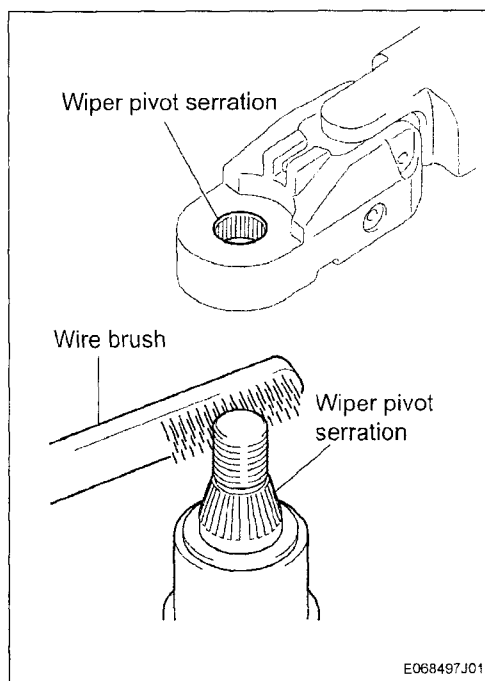
2. Back door trim panel assembly installation (See page 80-50)
3. Back door pull strap assembly installation (See page 80-51)



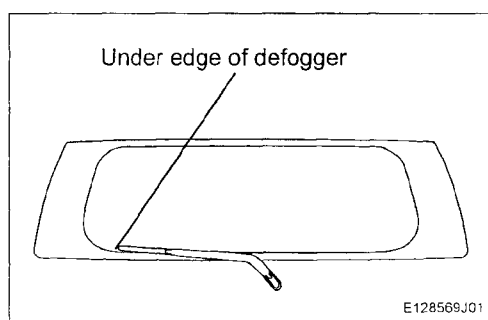
4. Rear wiper motor grommet installation
 - (1) Fix the rear wiper motor grommet.

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5. Rear wiper arm & blade assembly installation
 - (1) Temporarily connect the battery negative terminal.
 - (2) Activate the rear wiper, and set the rear wiper motor assembly at an automatic stop position.
 - (3) Clean the rear wiper pivot serration with a wire brush.



- (4) Clean the rear wiper pivot serration with a round file or something. (For reassembling)



- (5) As shown in the figure, fix the rear wiper arm & blade assembly with a nut.

Specified value: $T=5.4\text{N}\cdot\text{m}$ {54kgf*cm}

<HINT>

Tighten the nut while pressing the arm hinge with a hand.

- (6) While splash water or washer fluid on the glass surface, operate the rear wiper. Check the wiping state of the blade and also check that the blade does not interfere with the body.

- (7) Disconnect the battery minus terminal.

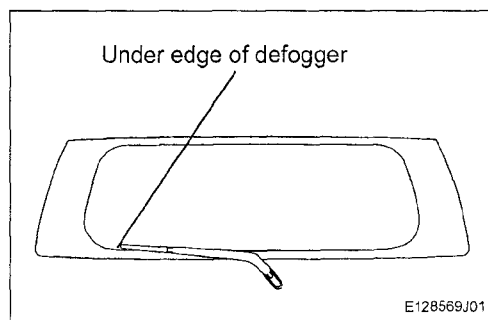
- (8) Close the rear wiper arm head cap.

6. Battery minus terminal connection

Specified value: $T=6.4\text{N}\cdot\text{m}$ {65kgf*cm}

61

ON-VEHICLE INSPECTION



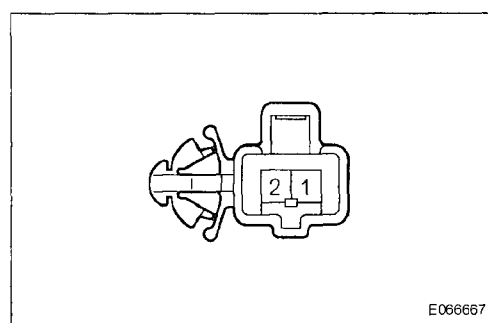
1. Rear wiper motor assembly check

- (1) Automatic stop position check

- (a) Activate and then stop the rear wiper. Check the automatic stop position of the wiper arm.

Reference: The wiper arm stops at the position shown in the figure.

INSPECTION



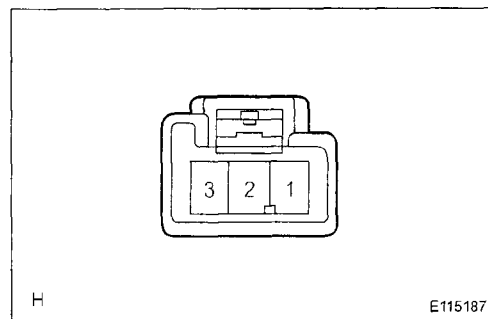
1. Rear wiper motor assembly check (without Intermittent wiper)

- (1) Operation check

- (a) Connect the connector No. 1 (+) and No. 2 (-) terminals to the battery positive and negative terminals respectively, and check that the rear wiper motor assembly operates.

<CAUTION>

Body ground is connected.



2. Rear wiper motor assembly check (with Intermittent wiper)

- (1) Operation check

- (a) Connect the connector No. 3 (+B) and No. 1 (+1R) terminals to the battery positive and negative terminals respectively. Check that the rear wiper motor assembly operates.

<CAUTION>

Body earth is connected.

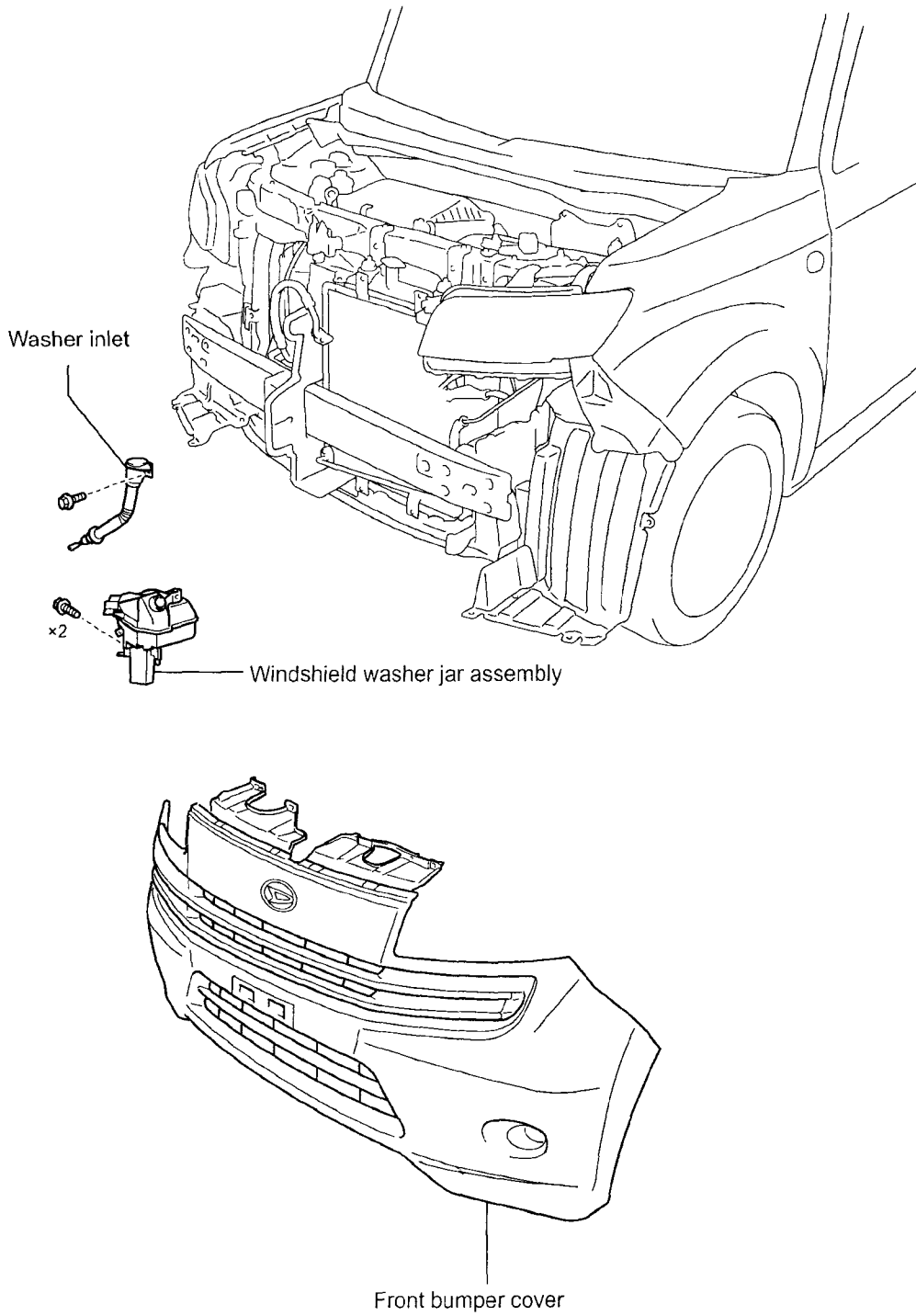
- (2) Intermittent operation check

- (a) Connect the connector No. 3 (+B) and No. 2 (C1) terminals to the battery positive and negative terminals respectively. Check that the rear wiper motor assembly operates.

<CAUTION>
Body ground is connected.

WINDSHIELD WASHER JAR ASSEMBLY COMPONENTS

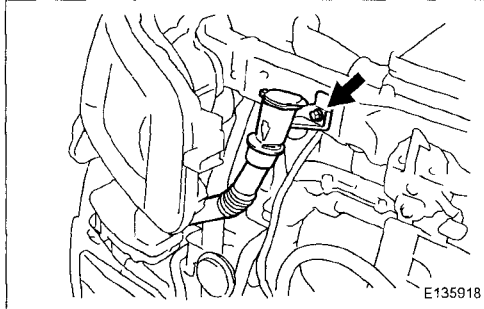
61



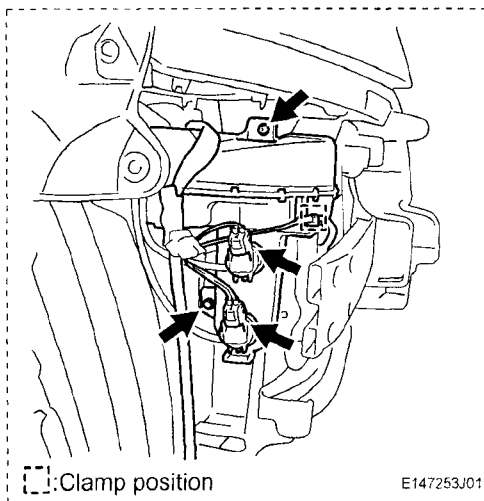
E135917J01

REMOVAL

1. Battery minus terminal disconnection
2. Front bumper cover removal (See page 82-5)



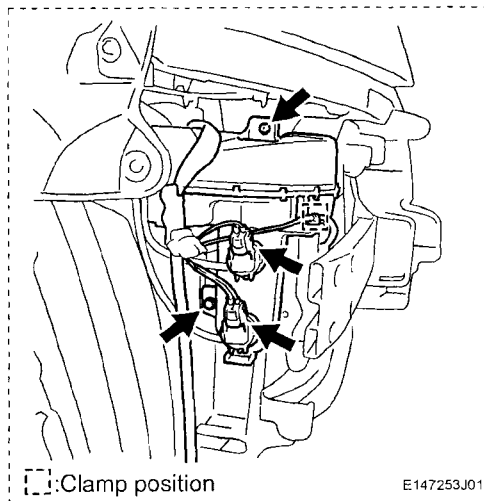
3. Washer inlet removal
 - (1) Remove the bolt, and remove the washer inlet.



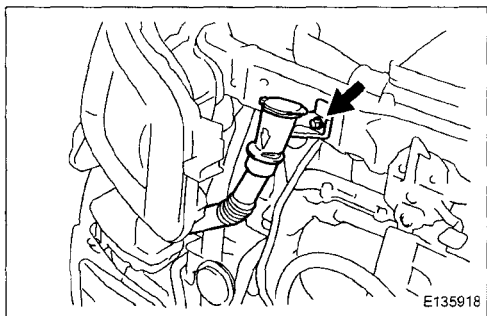
4. Remove the bolt, and remove the washer inlet.
 - (1) Disconnect 2 connectors.
 - (2) Disconnect the clamp.
 - (3) Remove 2 washer hoses.
 - (4) Remove 2 bolts, and remove the windshield washer jar assembly.

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INSTALLATION



1. Windshield washer jar installation
 - (1) Fix the windshield washer jar assembly with 2 bolts.
 - (2) Attach 2 hoses.
 - (3) Connect 2 connectors.
 - (4) Fix a clamp.



2. Washer inlet installation

- (1) Insert the tip of the washer inlet into the windshield washer jar assembly, and fix the washer inlet with a bolt.

3. Front bumper cover installation (See page 82-15)

4. Battery minus terminal connection
Specified value: $T=6.4\text{N}\cdot\text{m}$ {65kgf*cm}

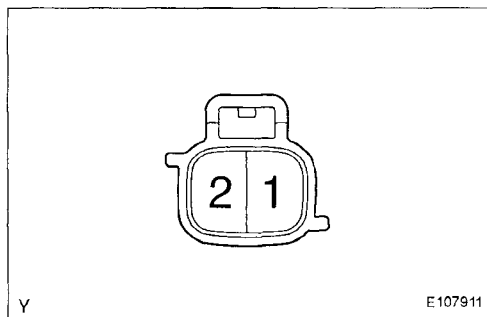
WINDSHIELD WASHER MOTOR & PUMP ASSEMBLY

ON-VEHICLE INSPECTION

1. Windshield washer motor & pump assembly check

(1) Operation check

(a) With the windshield washer motor & pump assembly attached to the washer jar assembly, pour washer fluid into the washer jar.



(b) Check that the washer fluid is sent under pressure from the front when the No. 1 (+) and No. 2 (-) terminals of the windshield washer motor & pump assembly are connected to the battery positive and negative terminals respectively.

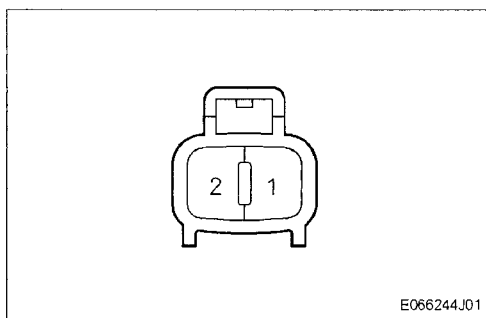
REAR WASHER MOTOR & PUMP ASSEMBLY

ON-VEHICLE INSPECTION

1. Rear washer motor & pump assembly check

(1) Operation check

(a) With the rear washer motor & pump assembly attached to the washer jar assembly, pour washer fluid into the washer jar.



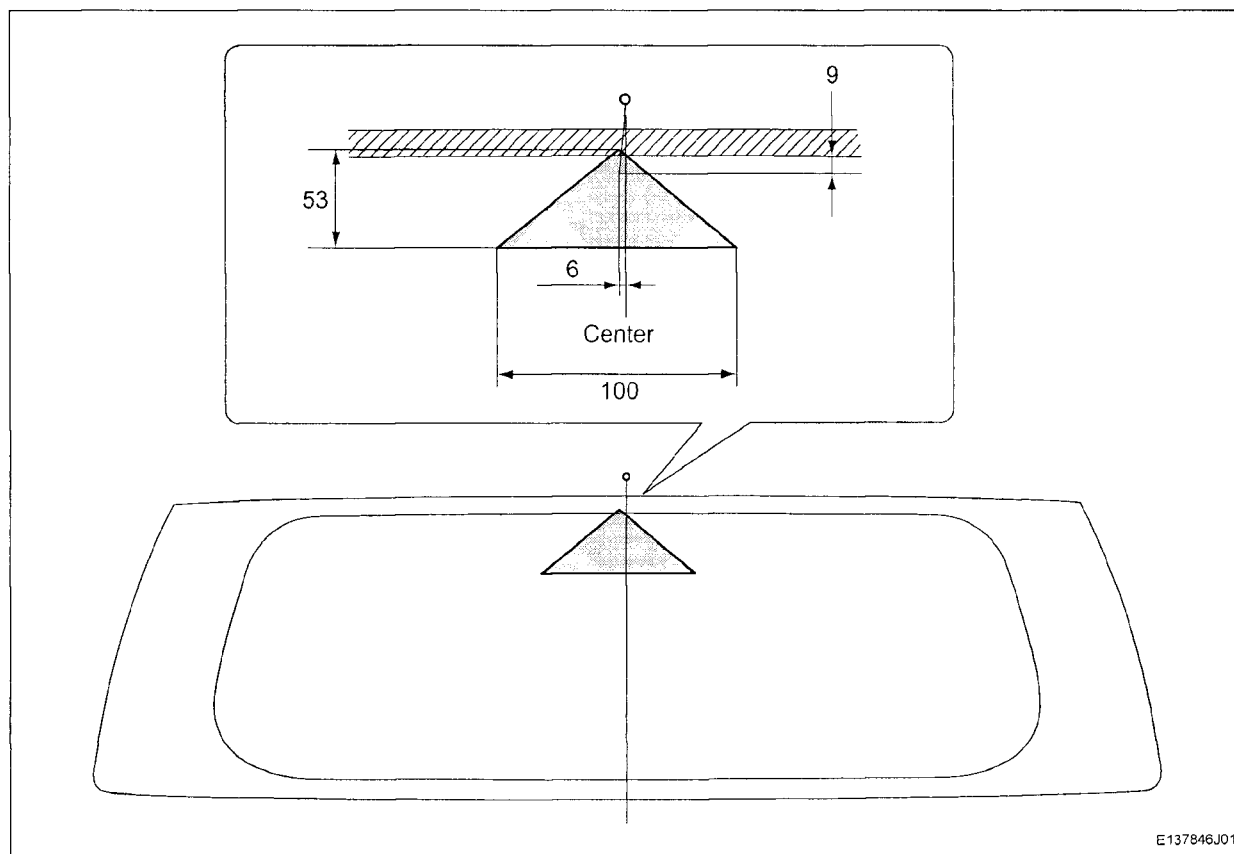
(b) Check that the washer fluid is sent under pressure from the rear when the No. 1 (+) and No. 2 (-) terminals of the rear washer motor & pump assembly are connected to the battery positive and negative terminals respectively.

REAR WASHER NOZZLE

ADJUSTMENT

1. Washer nozzle assembly adjustment

- (1) With the engine operated, adjust the rear washer nozzle so that the washer fluid splash areas on the glass are within reference areas.



Reference: The areas should be as shown in the figure.