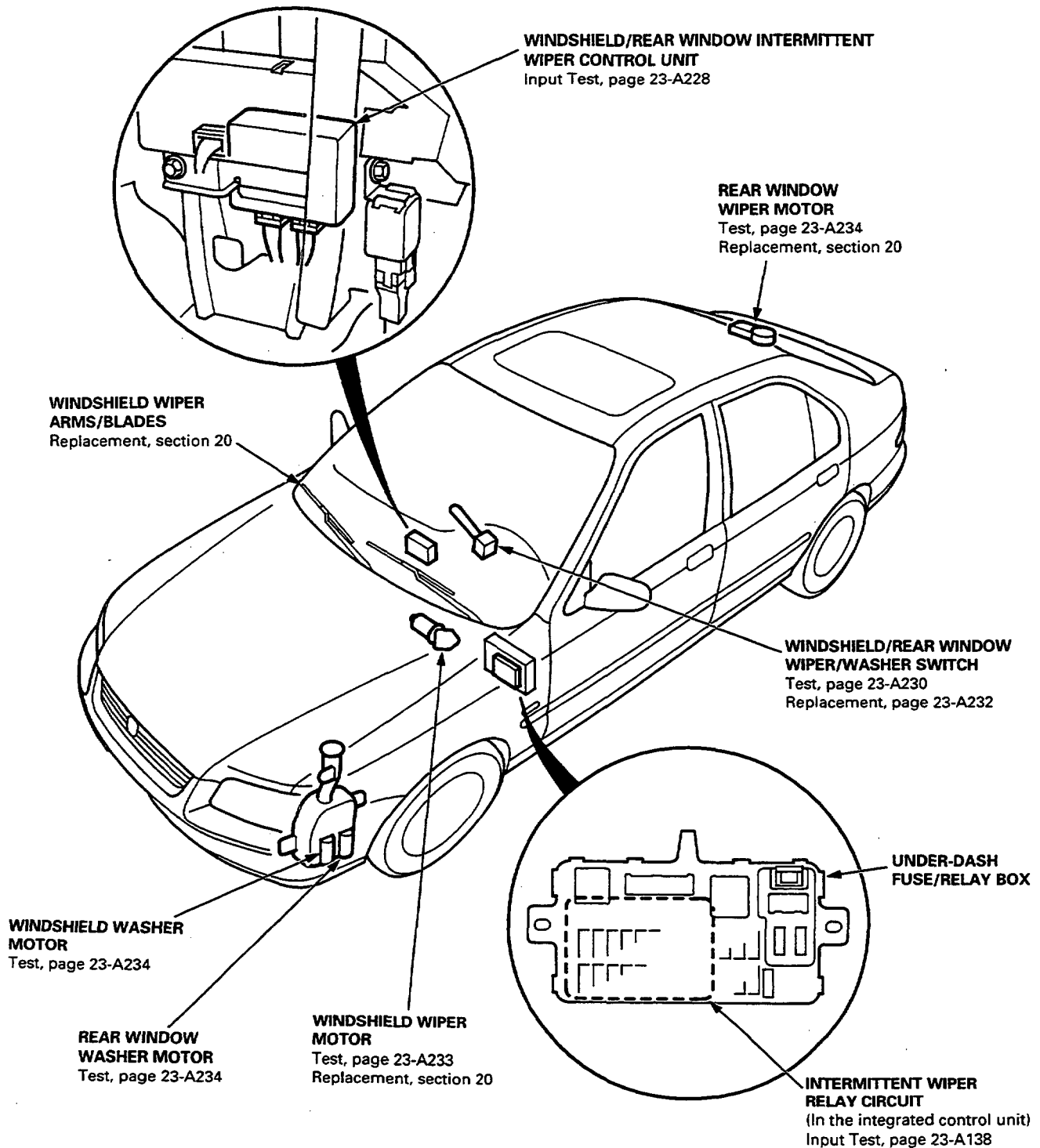


Wipers/Washers

Component Location Index



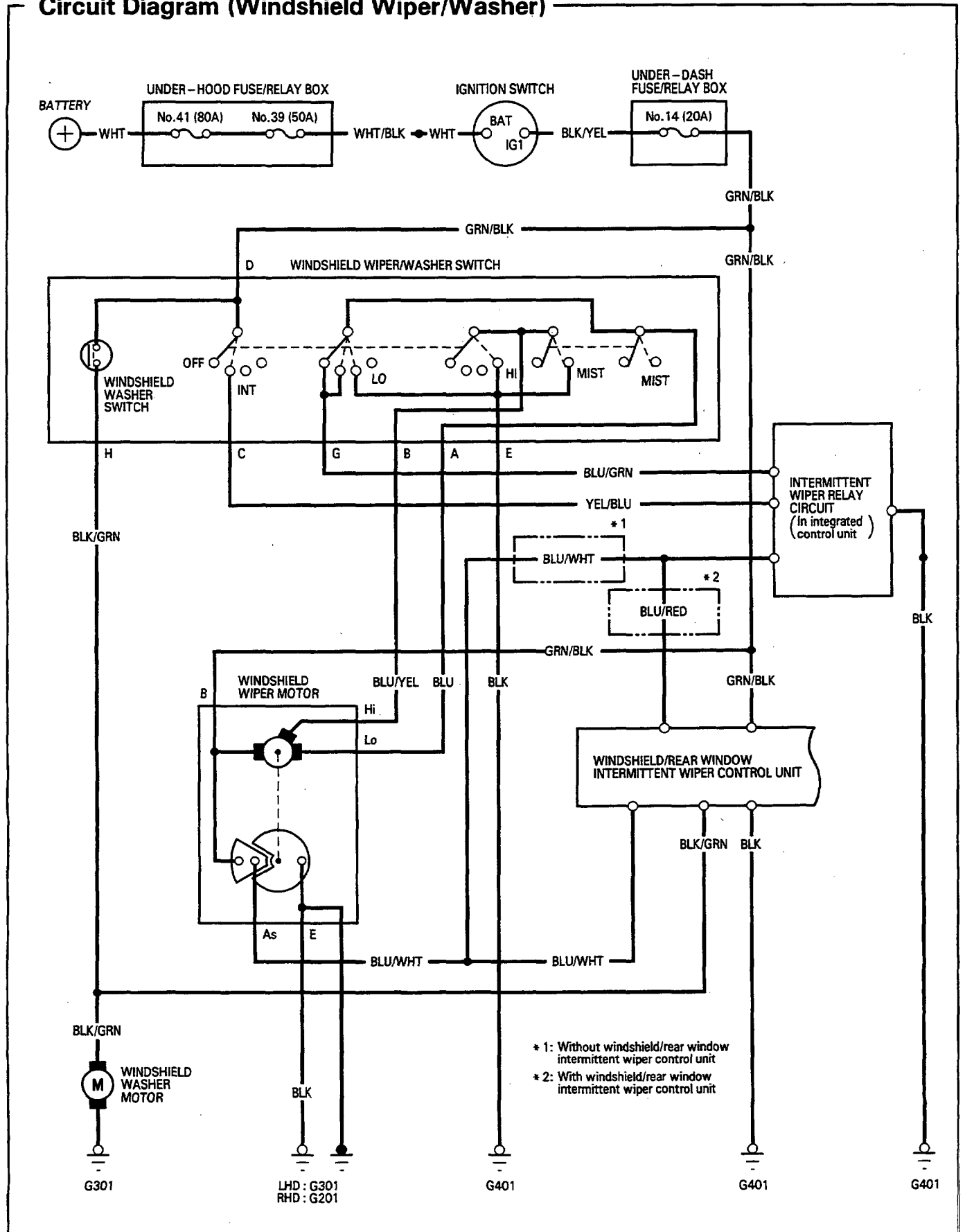
Description

- **Rear Window Wiper Intermittent Operation:**
After the rear window wiper switch has been turned ON, the rear wiper will work continuously for about three to five times, then it will work intermittently.
- **Combined Washer/Wiper Operation:**
When the washer switch is turned ON, the wipers too will work.



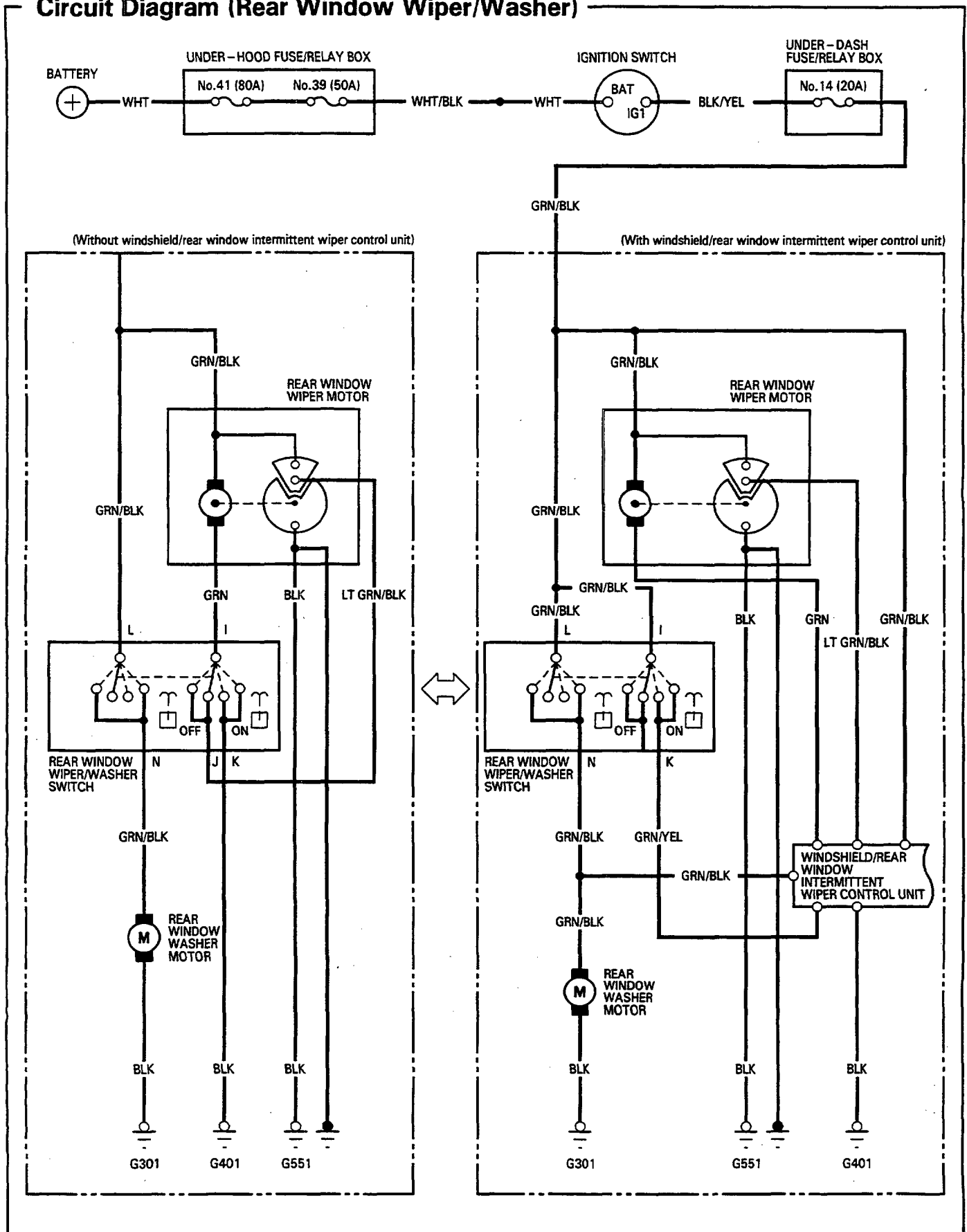
Wiper/Washers

Circuit Diagram (Windshield Wiper/Washer)



Wipers/Washers

Circuit Diagram (Rear Window Wiper/Washer)





Troubleshooting

NOTE: The numbers in the table show the troubleshooting sequence.

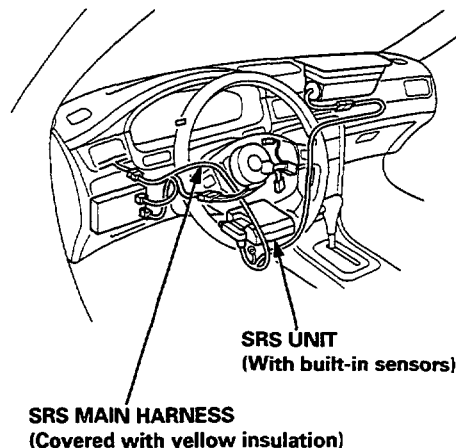
Item to be inspected		Blown No. 14 (20 A) fuse (In the under-dash fuse/relay box)	Wiper switch	Wiper motor	Washer switch	Washer motor	Intermittent wiper relay circuit (In the integrated control unit)	Windshield/rear window intermittent wiper control unit	Not enough washer fluid in reservoir	Disconnected, blocked washer hose or clogged outlet	Disconnected wiper linkages	Poor ground	Open circuit, loose or disconnected terminals
Symptom													
Wipers do not work.	In all positions	1	4	2							3	G201, G301, G401	GRN/BLK
	In INT		1	3			2						YEL/BLU, BLU/GRN
	In LO or HI		1	2									BLU, BLU/YEL
	In MIST		1	2									BLU/YEL
Rear window wiper does not work.		1	3	2								G301, G401 G504, G551	GRN/BLK, GRN LT GRN/BLK
Blades do not return to park position when the switch is turned OFF.			2	1									BLU/WHT, LT GRN/BLK
Intermittent cycle is erratic or wipers do not work intermittently.			1				2						YEL/BLU, BLU/GRN
Little or no washer fluid is pumped.					4	3			1	2		G301, G401	BLK/GRN, BLU/BLK
Wiper and washer do not work at the same time.				2		3		1					

Wipers/Washers

Windshield/Rear Intermittent Wiper Control Unit Input Test

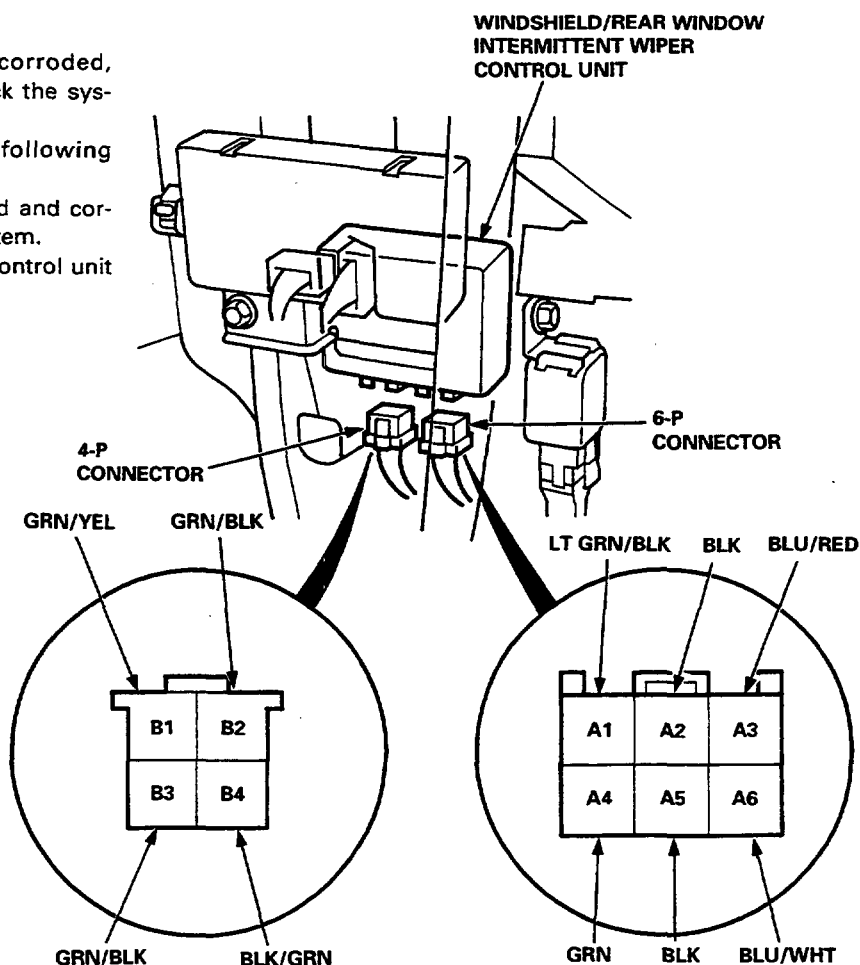
CAUTION:

- All SRS wire harnesses are covered with yellow insulation.
- Replace the entire affected SRS harness assembly if it has an open circuit or damaged wiring.
- Before disconnecting the SRS wire harness, turn the ignition switch OFF, disconnect the battery negative cable, then disconnect the positive cable, and wait at least three minutes.
- Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.
- Before you disconnect any part of an SRS wire harness, connect the short connectors (RED) to the airbags.
- For additional precautions, refer to page 23-B6 in the SRS sub-section.



1. Disconnect the 6-P and 4-P connectors from the control unit.
2. Inspect the connector and socket terminals to be sure they are all making good contact.

- If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
- If the terminals look OK, make the following input tests at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the control unit must be faulty; replace it.





Windshield Wiper:

Terminal No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B2	GRN/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • An open in the wire
A5	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Poor ground (G401) • An open in the wire
A2	BLK			
B4	BLK/GRN	Ignition switch ON (II), windshield washer switch ON	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • Faulty windshield wiper/washer switch • An open in the wire
A3	BLU/RED	Under all conditions	Check for continuity in the wire between the windshield/rear window intermittent wiper control unit and integrated control unit.	<ul style="list-style-type: none"> • An open in the wire
A6	BLU/WHT	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • Faulty windshield wiper motor • An open in the wire

Rear Window Wiper:

Terminal No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B2	GRN/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • An open in the wire
A5	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Poor ground (G401) • An open in the wire
A4	GRN	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • Faulty rear wiper motor • An open in the wire
B3	GRN/BLK	Ignition switch ON (II), rear window washer switch ON	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • Faulty rear window washer switch • An open in the wire
A1	LT GRN/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • Faulty rear window wiper • An open in the wire
B1	GRN/YEL	Ignition switch ON (II), rear window wiper switch ON	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 14 (20 A) fuse in the under-dash fuse/relay box • Faulty rear window wiper switch • An open in the wire

Wipers/Washers

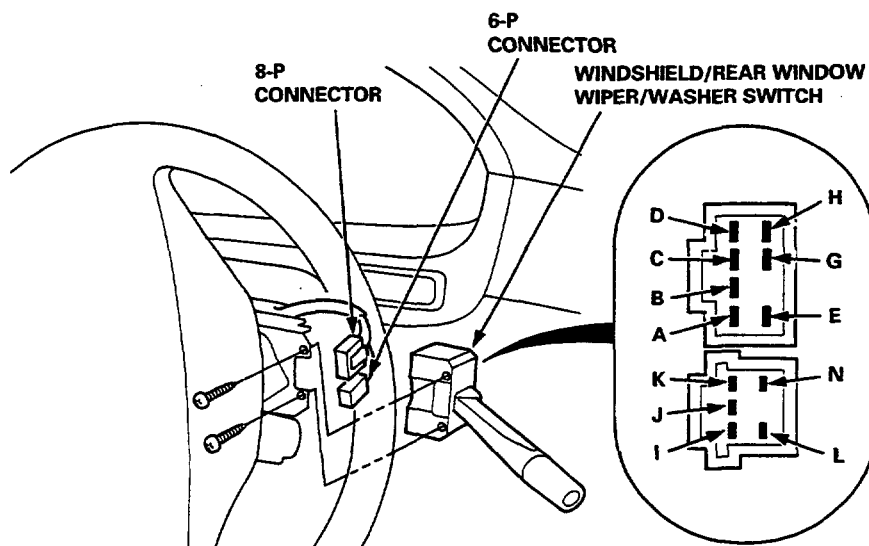
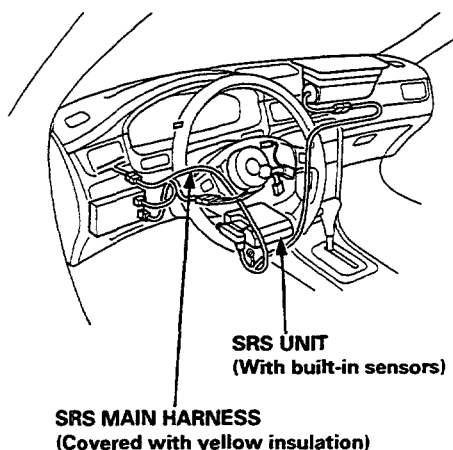
Wipers/Washers Switch Test

CAUTION:

- All SRS wire harnesses are covered with yellow insulation.
- Replace the entire affected SRS harness assembly if it has an open circuit or damaged wiring.
- Before disconnecting the SRS wire harness, turn the ignition switch OFF, disconnect the battery negative cable, then disconnect the positive cable, and wait at least three minutes.
- Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.
- Before you disconnect any part of an SRS wire harness, connect the short connectors (RED) to the airbags.
- For additional precautions, refer to page 23-B6 in the SRS sub-section.

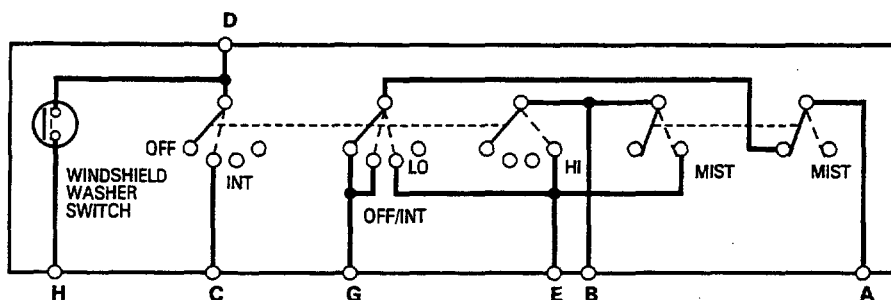
NOTE: LHD type is shown; RHD type is similar.

1. Remove the dashboard lower cover.
2. Remove the steering column covers.
3. Disconnect the 8-P and 6-P connectors from the switch, remove the two screws, and pull out the switch.
4. Check for continuity between the terminals in each switch position according to the table.





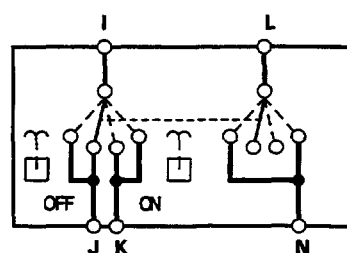
Windshield Wiper/Washer Switch



Terminal	A	B	C	D	H	G	E
Position							
OFF							
INT							
LO							
HI							
Mist switch "ON"							
Washer switch "ON"							

Rear Window Wiper/Washer Switch

Terminal	N	L	I	J	K
Position					
OFF					
Washer switch "ON"					
ON					
Washer switch "ON"					

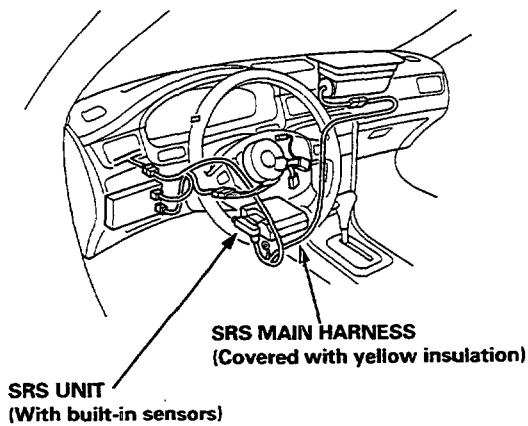


Wipers/Washers

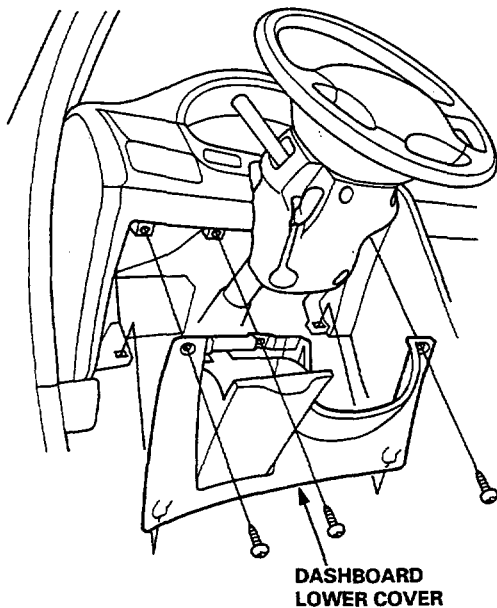
Windshield/Rear Window Wiper/Washer Switch Replacement

CAUTION:

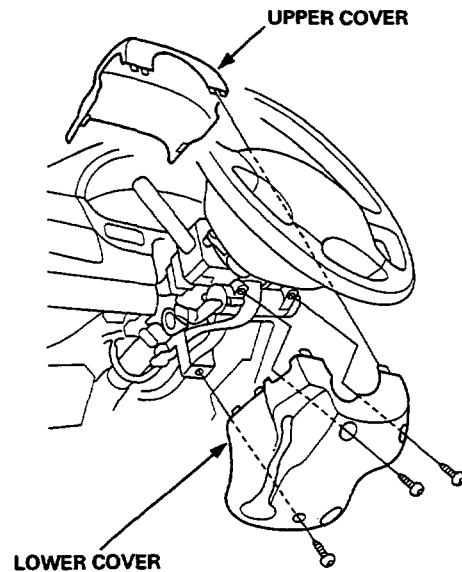
- All SRS wire harnesses are covered with yellow insulation.
- Replace the entire affected SRS harness assembly if it has an open circuit or damaged wiring.
- Before disconnecting the SRS wire harness, turn the ignition switch OFF, disconnect the battery negative cable, then disconnect the positive cable, and wait at least three minutes.
- Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.
- Before you disconnect any part of an SRS wire harness, connect the short connectors (RED) to the airbags.
- For additional precautions, refer to page 23-B6 in the SRS sub-section.



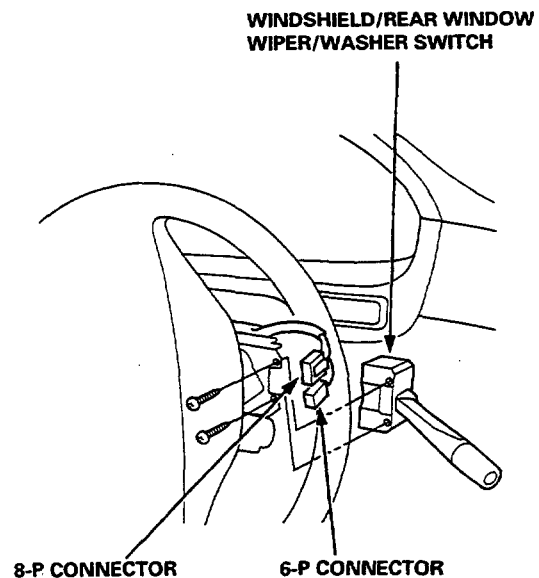
1. Remove the dashboard lower cover.



2. Remove the steering column covers.



3. Disconnect the 8-P and 6-P connectors from the switch, remove the two screws, and pull out the switch.





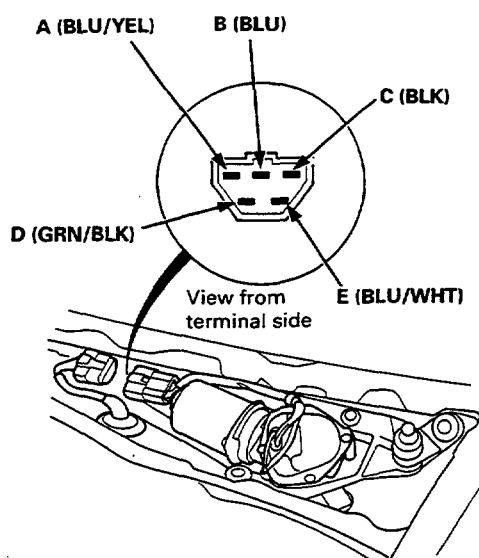
Windshield Wiper Motor Test

1. Open the hood, and remove the cap nuts and the wiper arms (see section 20).

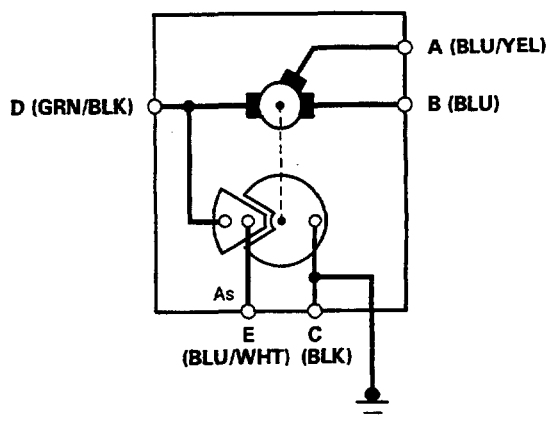
NOTE: Remove the wiper arms carefully without damaging the hood.

2. Remove the hood seal and air scoop by prying out their trim clips.
3. Disconnect the 5-P connector from the windshield wiper motor.
4. Test the motor by connecting battery power and ground according to the table.

Terminal Position	D (GRN/BLK)	B (BLU)	A (BLU/YEL)
LOW SPEED	⊕	⊖	
HIGH SPEED	⊕		⊖



5. If the motor does not run or fails to run smoothly, replace it.



6. Reconnect the 5-P connector to the wiper motor assembly.
7. Connect an analog voltmeter between the E (BLU/WHT) and the C (BLK) terminals. Run the motor by turning the wiper switch ON (LO or HI position). The voltmeter should alternately indicate 0 V and more than 4 V.

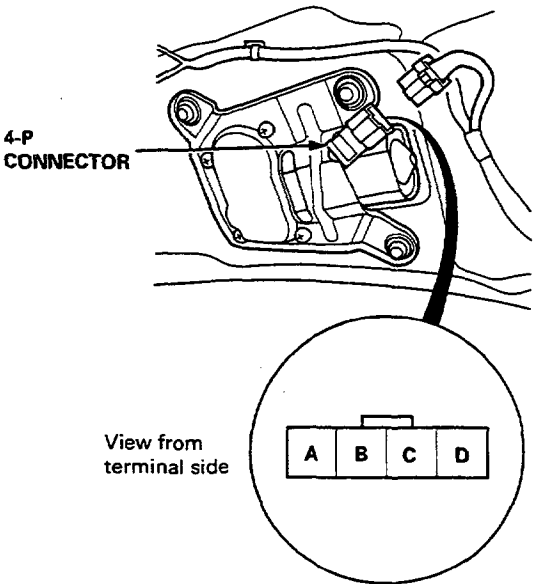
NOTE:

- Use an analog tester.
- Use the car battery.

Wipers/Washers

Rear Window Wiper Motor Test

1. Disconnect the 4-P connector from the rear window wiper motor.



2. Test the rear window motor by connecting battery power and ground according to the table.

Terminal	A	B
Battery		
Disconnected		
Connected	⊕	⊖

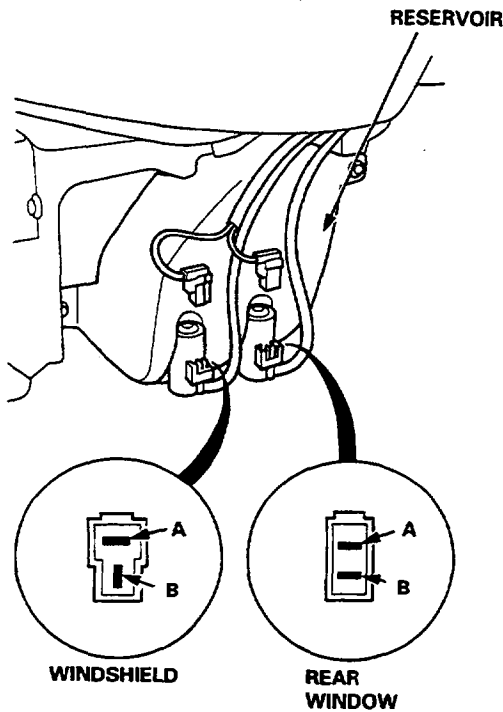
- If the motor does not run or fails to run smoothly, replace it.
 - If the motor runs smoothly, go to step 3.
3. Reconnect the 4-P connector to the wiper motor.
4. Connect an analog voltmeter between the C and D terminals. Run the motor by turning the wiper switch ON. The voltmeter should alternately indicate 0 V and more than 4 V.

NOTE:

- Use an analog tester.
- Use the car battery.

Washer Motor Test

1. Remove the front bumper (see section 20).
2. Disconnect the 2-P connector from the washer motor.



3. Test the washer motor operation by connecting battery power and ground according to the table.

Terminal	A	B
Battery		
Disconnected		
Connected	⊕	⊖

- If the motor does not run or fails to run smoothly, replace it.
- If the motor runs smoothly, but little or no washer fluid is pumped, check for a disconnected or blocked washer hose, or a clogged pump outlet in the motor.

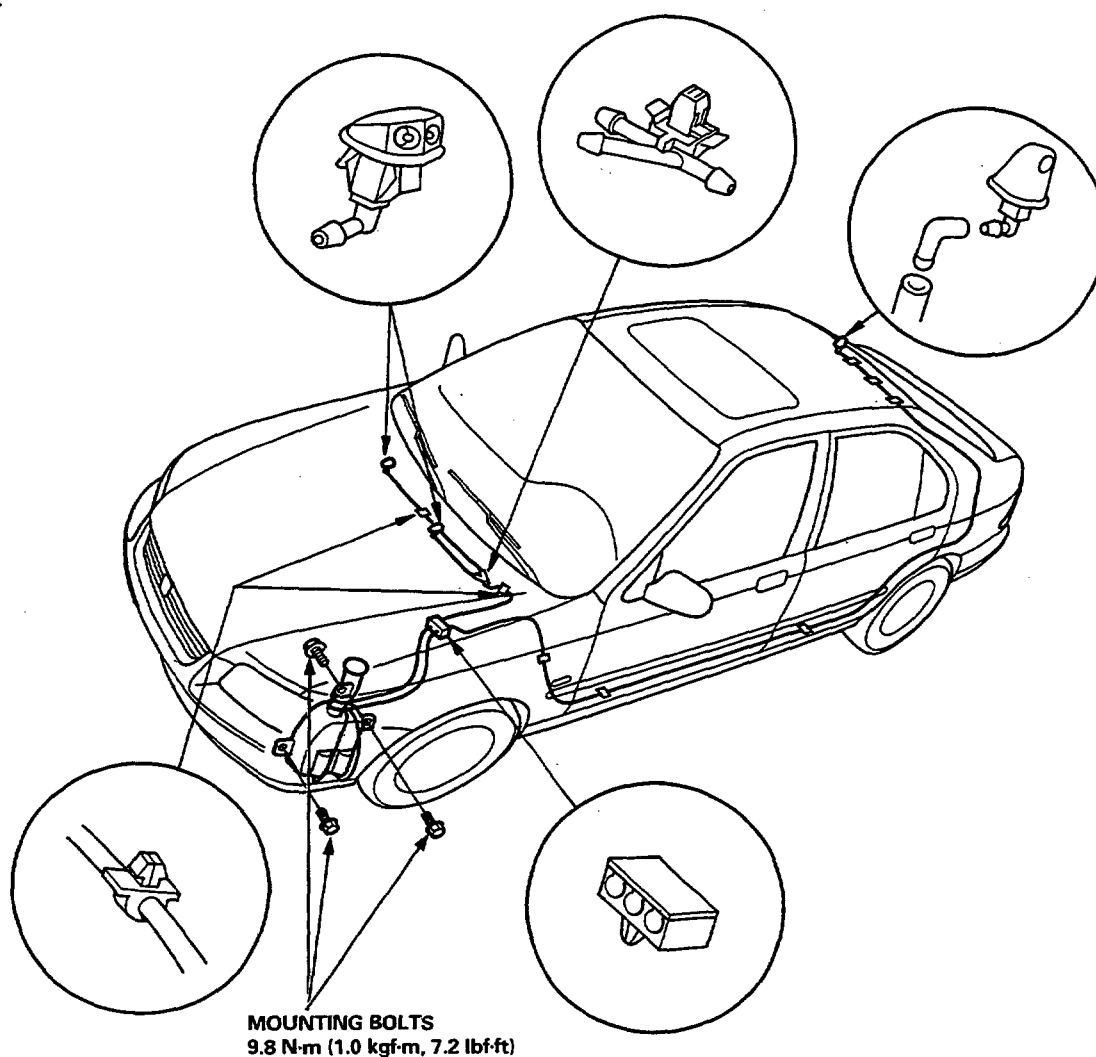


Washers Replacement

1. Remove the front bumper (see section 20).
2. Remove the left front inner fender.
3. Disconnect the 2-P connectors and washer hose from the washer motors.
4. Remove the three mounting bolts and the washer reservoir.
5. Remove the washer nozzles and washer hoses.
6. Install in the reverse order of removal.

NOTE:

- Take care not to pinch the hoses during installation.
- Install the clips firmly.
- After installing, adjust the aim of the washer nozzles.



MOUNTING BOLTS
9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)