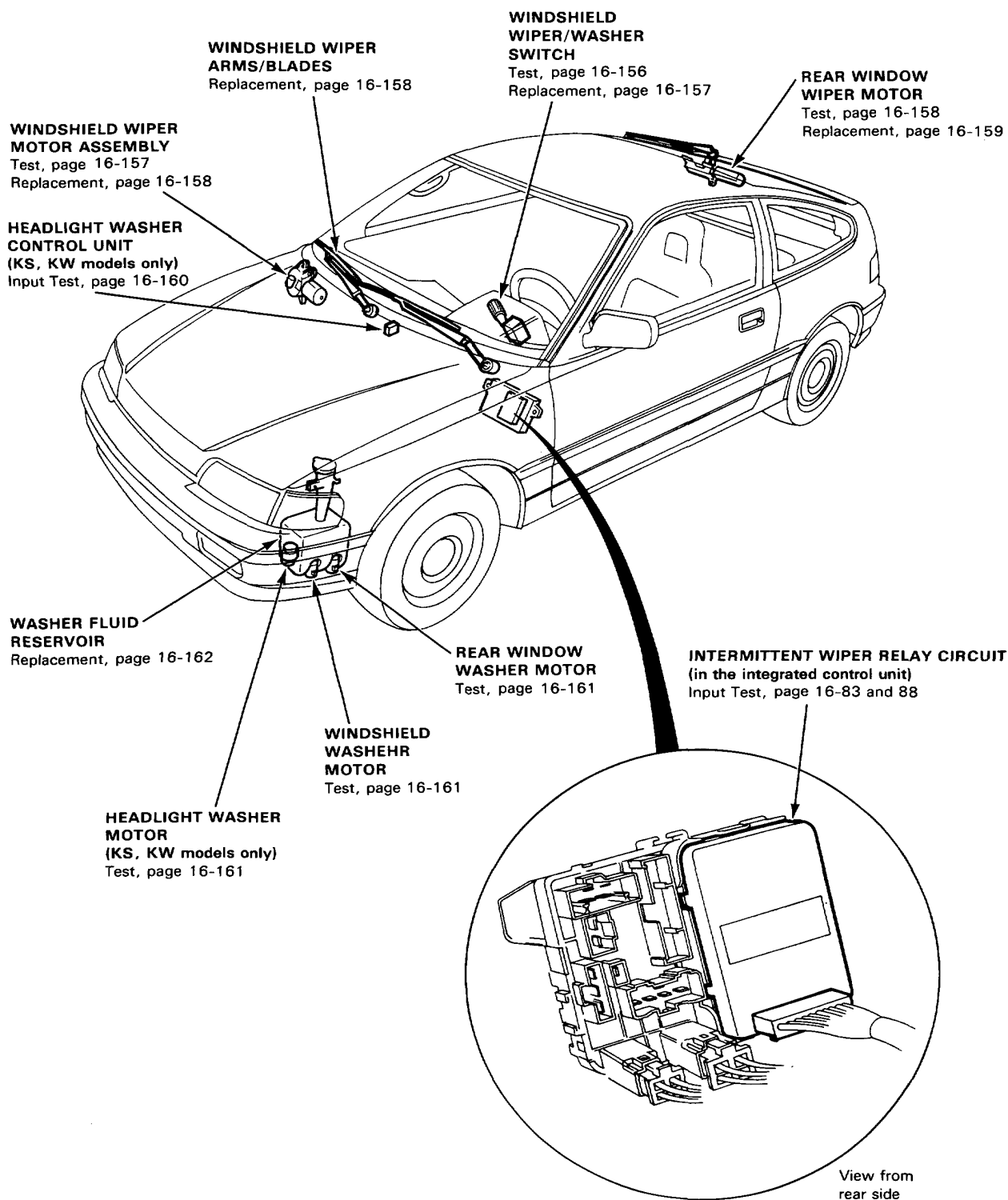


# Wipers/Washers

## Component Location Index

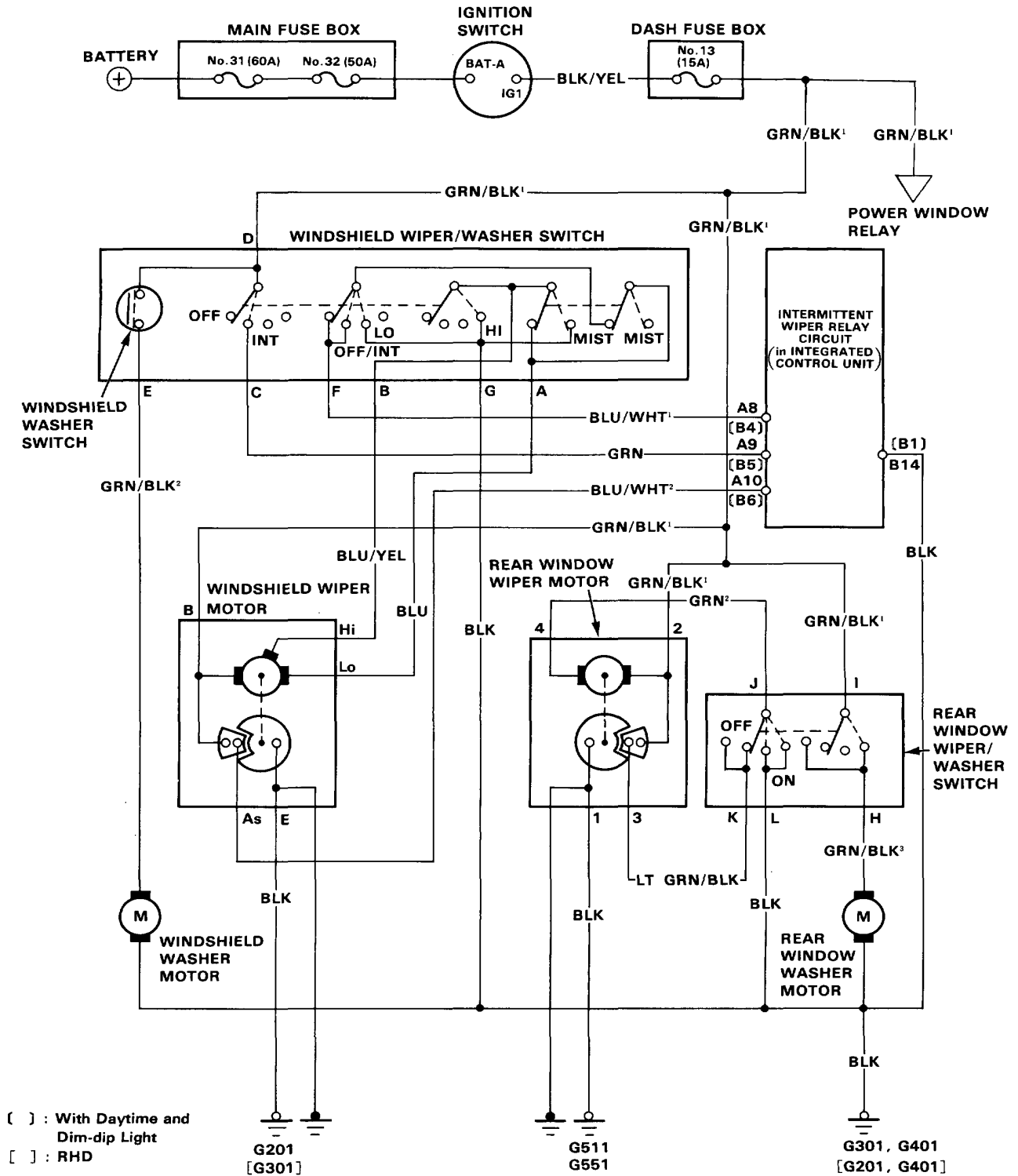


# Wipers/Washers



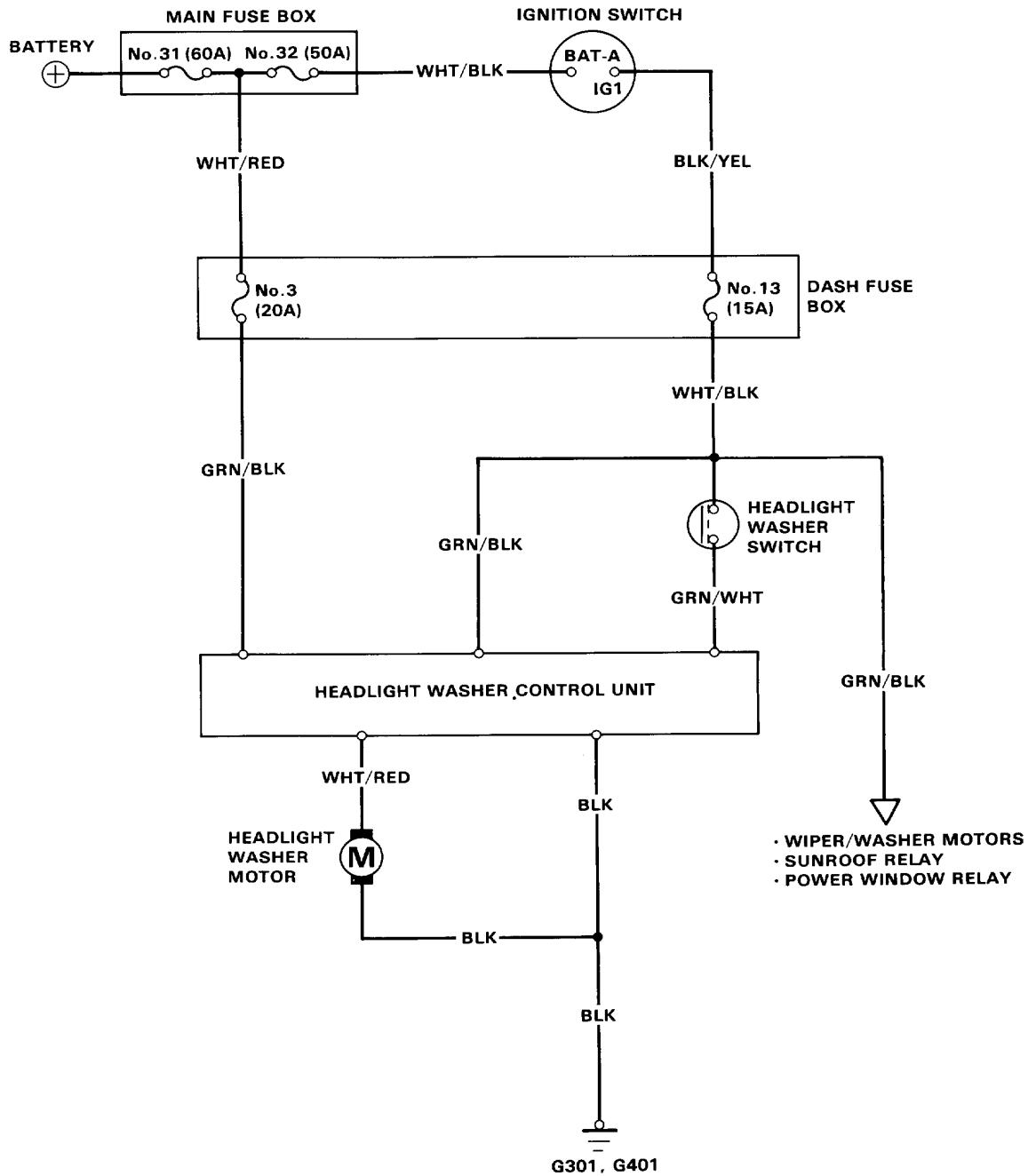
## Circuit Diagram

NOTE: Several different wires have the same color. They have been given a number suffix to distinguish them (for example GRN/BLK<sup>1</sup> and GRN/BLK<sup>2</sup> are not the same).



## Wipers/Washers

### Circuit Diagram (Headlight Washer) (KS, KW models only)





## Troubleshooting

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

Item to be inspected		Blown No. 13 (15A) fuse (in the dash fuse box)	Wiper switch	Wiper motor assembly	Washer switch	Washer motor	Intermittent wiper relay circuit (in the integrated control unit)	Insufficient washer fluid in reservoir	Disconnected, blocked washer hose or clogged outlet	Disconnected wiper linkages	Poor ground	Open circuit in wires or loose or disconnected terminals
Wipers do not operate.	In all positions	1	4	2						3	G301, G401 [G201, G401]	GRN/BLK <sup>1</sup>
	In INT		1				2					GRN, BLU/WHT <sup>1</sup>
	In LO or HI		1	2								
	In Mist		1									
Rear window wiper does not operate.		1	3	2							G301, G401 [G201, G401]	GRN/BLK <sup>1</sup> or GRN <sup>2</sup>
Blades do not return to park position when wipers are turned OFF.			2	1								BLU/WHT <sup>2</sup>
Erratic intermittent cycle or wipers do not operate intermittently.			1				2					GRN/BLK <sup>2</sup> or GRN/BLK <sup>3</sup>
Little or no washer fluid is pumped.					4	3		1	2		G301, G401 [G201, G401]	BLK/YEL

[ ] : RHD

# Wipers/Washers

## Wiper/Washer Switch Test

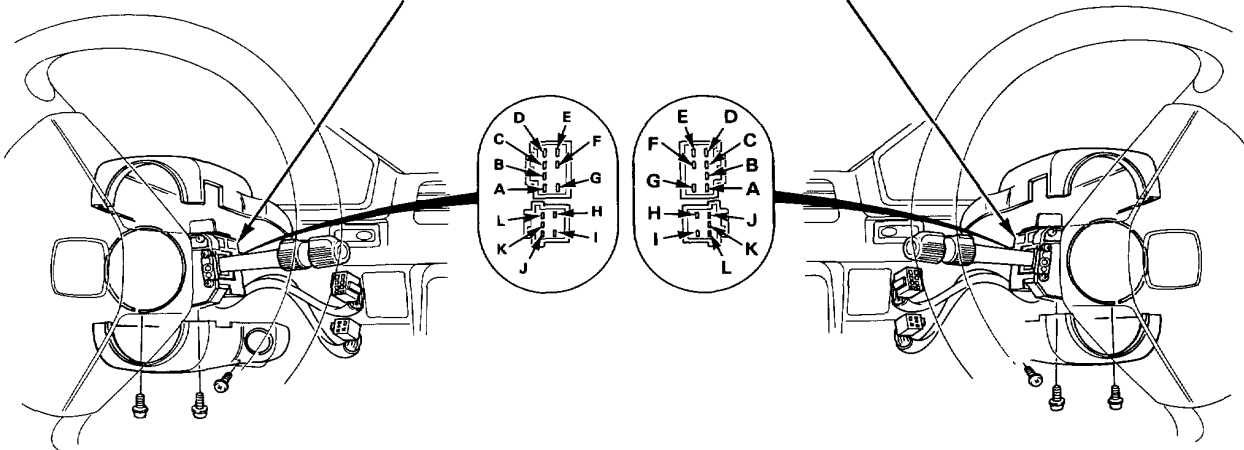
1. Remove the steering column covers.
2. Disconnect 8-P and 6-P connectors from the switch.
3. Check for continuity between the terminal in each switch position according to the table.

LHD:

WIPER/WASHER  
SWITCH

RHD:

WIPER/WASHER  
SWITCH



### Windshield

Terminal Position	A	B	C	D	E	F	G
OFF	<input type="radio"/>					<input type="radio"/>	
INT	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	
LO	<input type="radio"/>						<input type="radio"/>
HI		<input type="radio"/>					<input type="radio"/>
Mist Switch "ON"		<input type="radio"/>					<input type="radio"/>
Washer Switch "ON"				<input type="radio"/>	<input type="radio"/>		

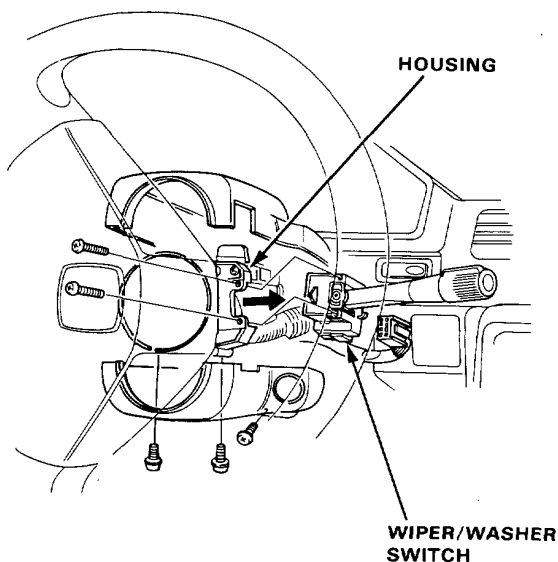
### Rear Window

Terminal Position	H	I	J	K	L
Washer Switch "ON"	<input type="radio"/>	<input type="radio"/>			
OFF			<input type="radio"/>	<input type="radio"/>	
ON			<input type="radio"/>		<input type="radio"/>
Washer Switch "ON"	<input type="radio"/>	<input type="radio"/>			



## Wiper/Washer Switch Replacement

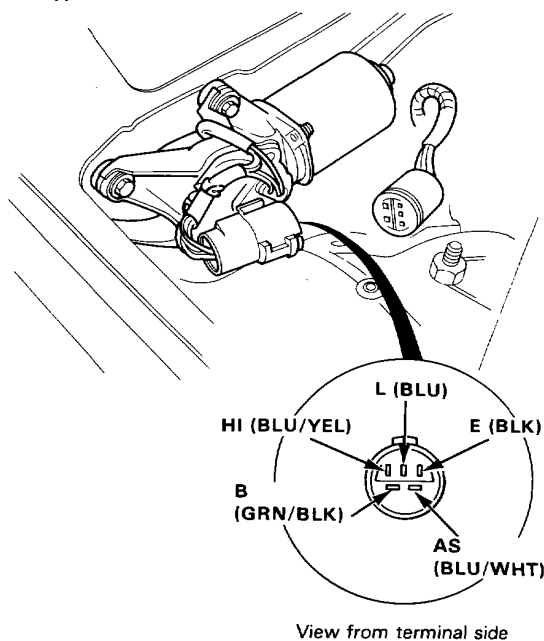
1. Remove the lower and upper covers from the steering column.
  2. Disconnect the 8-P and 6-P connectors from the wiper/washer switch.
  3. Remove the 2 screws and slide the wiper/washer switch out of the housing as shown.
- NOTE: Be carefull not to damage the steering wheel cover.



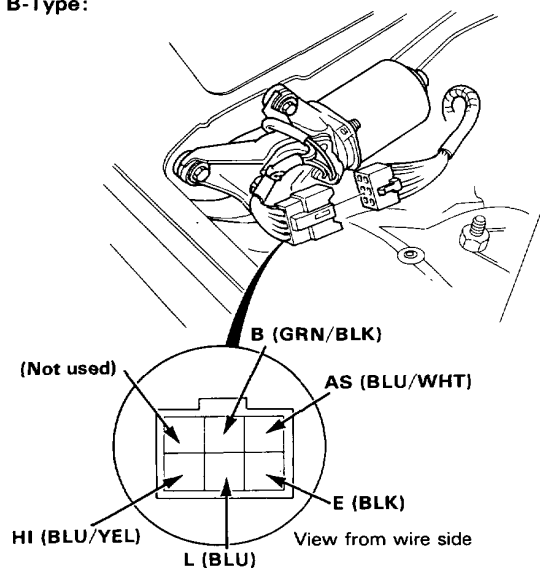
## Windshield Wiper Motor Test

1. Disconnect the 5-P connector of the wiper motor assembly.
2. Test motor operation:  
LOW SPEED: Connect battery positive to the B (GRN/BLK) terminal and negative to the Lo (BLU) terminal.  
HIGH SPEED: Connect battery positive to the B (GRN/BLK) terminal and negative to the Hi (BLU/YEL) terminal.
3. If the motor fails to run smoothly, replace it.

### A-Type:



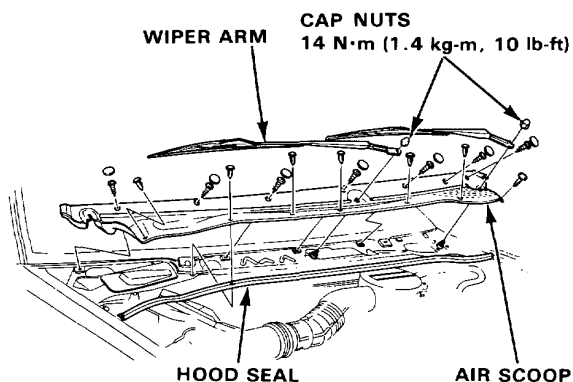
### B-Type:



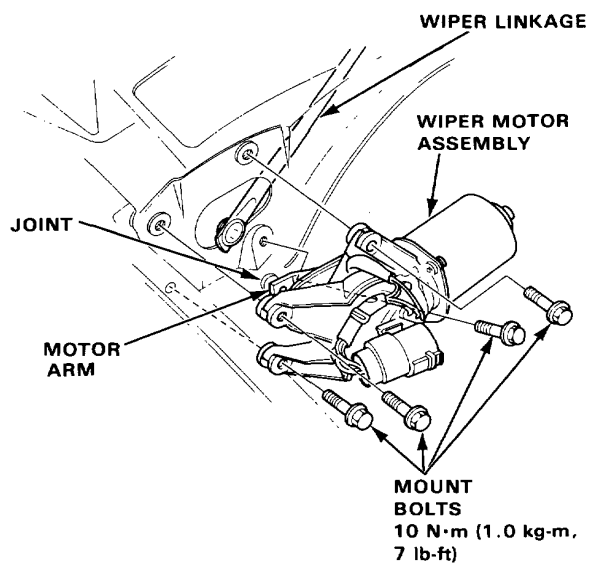
# Wipers/Washers

## Windshield Wiper Motor Replacement

1. Remove the cap nuts and the wiper arms.
2. Remove the hood seal and air scoop by prying off the trim clips and removing the screws.



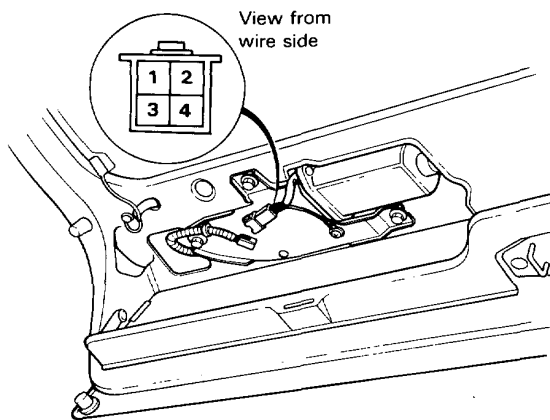
3. Pry the wiper linkage off the motor arm with a screw driver.
4. Disconnect the 5-P connector from the wiper motor assembly, then remove the 4 mount bolts and the wiper motor assembly.



5. Install the wiper motor assembly in the reverse order of removal.

## Rear Window Wiper Motor Test

1. Remove the hatch trim panel.
2. Disconnect the 4-P connector.
3. Test wiper motor operation by connecting battery positive wire to the No.2 terminal and negative to the No.4 terminal.
4. If the motor fails to run smoothly, replace it.



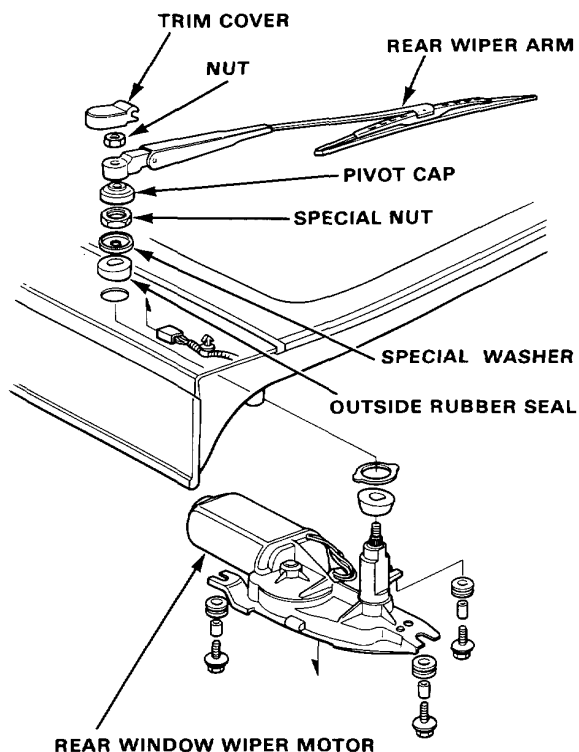
5. Check for continuity between the terminals according to the table.

Terminal	1	2	3
Wiper Blade			
At park position		○	○
At center position	○		○



## Rear Window Wiper Motor Replacement

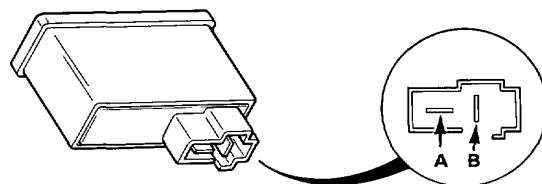
1. Remove the hatch trim panel.
2. Remove the trim cover, nut, wiper arm, special nut, special washer and the outside rubber seal.
3. Disconnect the 4-P connector from the wiper motor.
4. Remove the 3 mount bolts and the wiper motor.



## Headlight Washer Switch Test

1. Remove the dashboard lower panel. Push out the switch from behind the instrument panel, then disconnect the 2-P connector from the switch.
2. Check for continuity between the terminals according to the table.

Terminal	A	B
Position		
OFF		
ON		

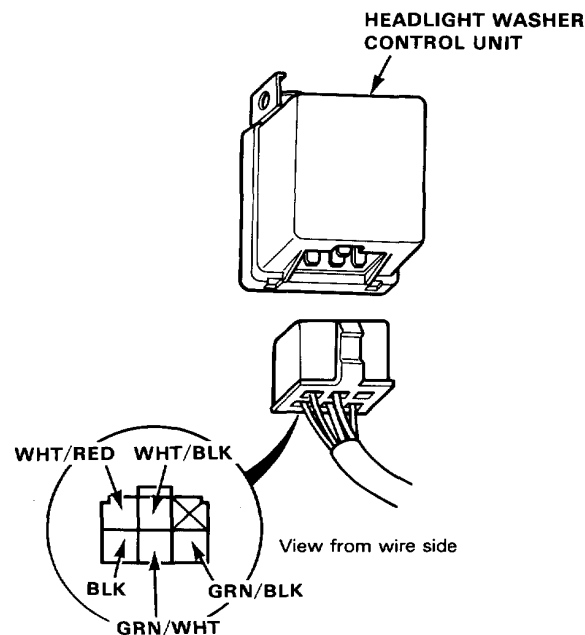




# Wipers/Washers

## Headlight Washer Control Unit Input Test

Remove the dashboard lower panel and disconnect the 6-P connector from the control unit.  
Make the following input tests at the harness pins.  
If all tests prove OK, yet the system still fails to work, replace the control unit.

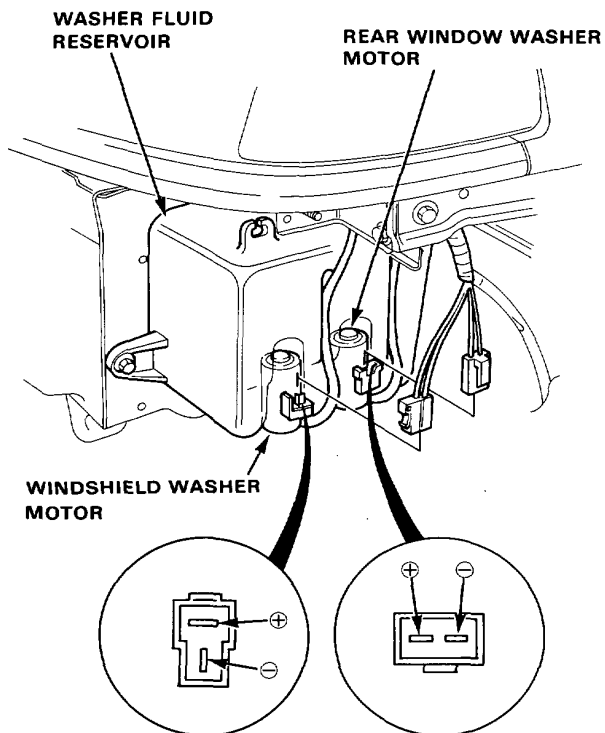


No.	Terminal	Test condition	Test: desired result	Possible cause (if result is not obtained)
1	BLK	Under all conditions.	Check for continuity to ground: should be continuity.	<ul style="list-style-type: none"><li>• Poor ground (G301, G401).</li><li>• An open in the wire.</li></ul>
2	WHT/BLK	Under all conditions.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"><li>• Blown No.3 (20A) fuse.</li><li>• An open in the wire.</li></ul>
3	GRN/WHT	Ignition switch ON and headlight washer switch ON.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"><li>• Blown No.13 (15A) fuse.</li><li>• Faulty headlight washer switch</li><li>• An open in the wire.</li></ul>
4	WHT/RED	Connect the WHT/BLK terminal to the WHT/RED terminal.	Check the headlight washer motor operation: should run.	<ul style="list-style-type: none"><li>• Faulty headlight washer motor.</li><li>• Poor ground (G301, G401).</li><li>• An open in the wire.</li></ul>
5	GRN/BLK	Ignition switch ON.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"><li>• Blown No.13 (15A) fuse.</li><li>• An open in the wire.</li></ul>

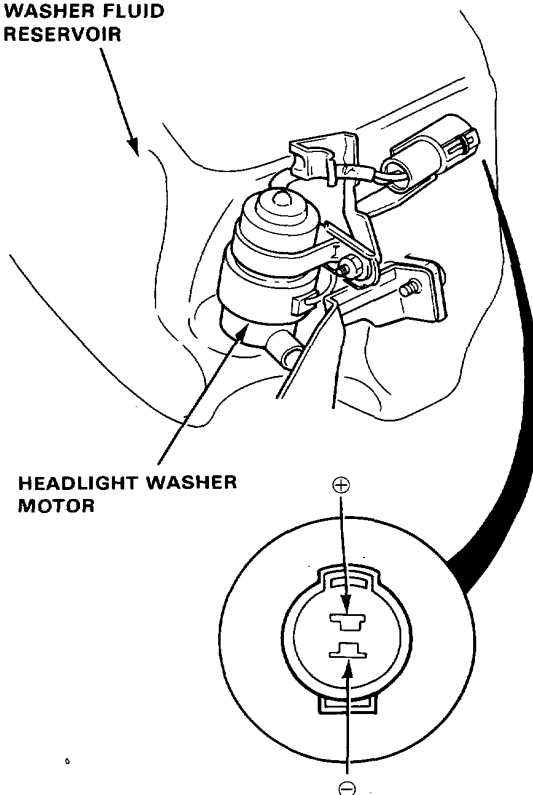


## Washer Motor Test

1. Remove the front bumper and disconnect the 2-P connector from the washer motor.
2. Test either washer motor operation by connecting battery positive to the  $\oplus$  terminal and negative to the  $\ominus$  terminal.



WASHER FLUID RESERVOIR



- If the motor fails to run smoothly, replace it.
- If the motor runs smoothly but little or no washer fluid is pumped, check for disconnected or blocked washer-hose, or clogged pump outlet in the motor.

# Wipers/Washers

## Washer Replacement

1. Remove the bumper, then remove the washer reservoir by removing the 4 mount bolts.
2. Disconnect the hoses and the 2-P connectors from the windshield, rear window and headlight washer motors.
3. Remove the washer nozzles;  
Windshield Washer Nozzles: Releasing the retaining pawls and pushing them out from the under side.  
Rear Window Washer Nozzle: Remove the rear spoiler and pull out the nozzle.  
Headlight Washer Nozzles: Releasing the retainer plate and pushing them out from the inside of bumper.

### NOTE:

- Clamp the hoses with the wire harness in the left front fender.
- Take care not to pinch hoses during reinstallation.
- Install the grommets firmly.
- After installation, adjust the washer nozzles.

