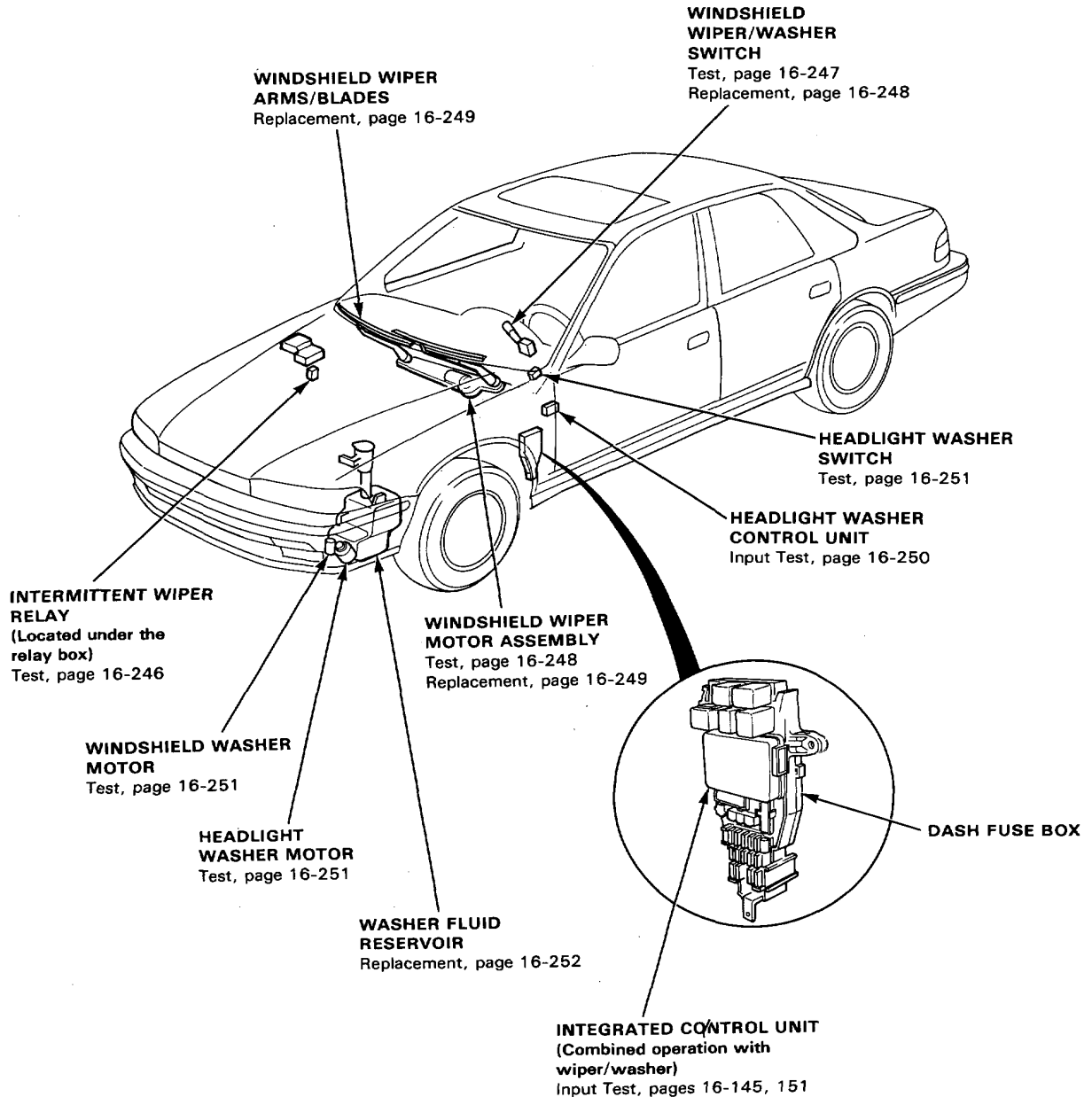


Wipers/Washers



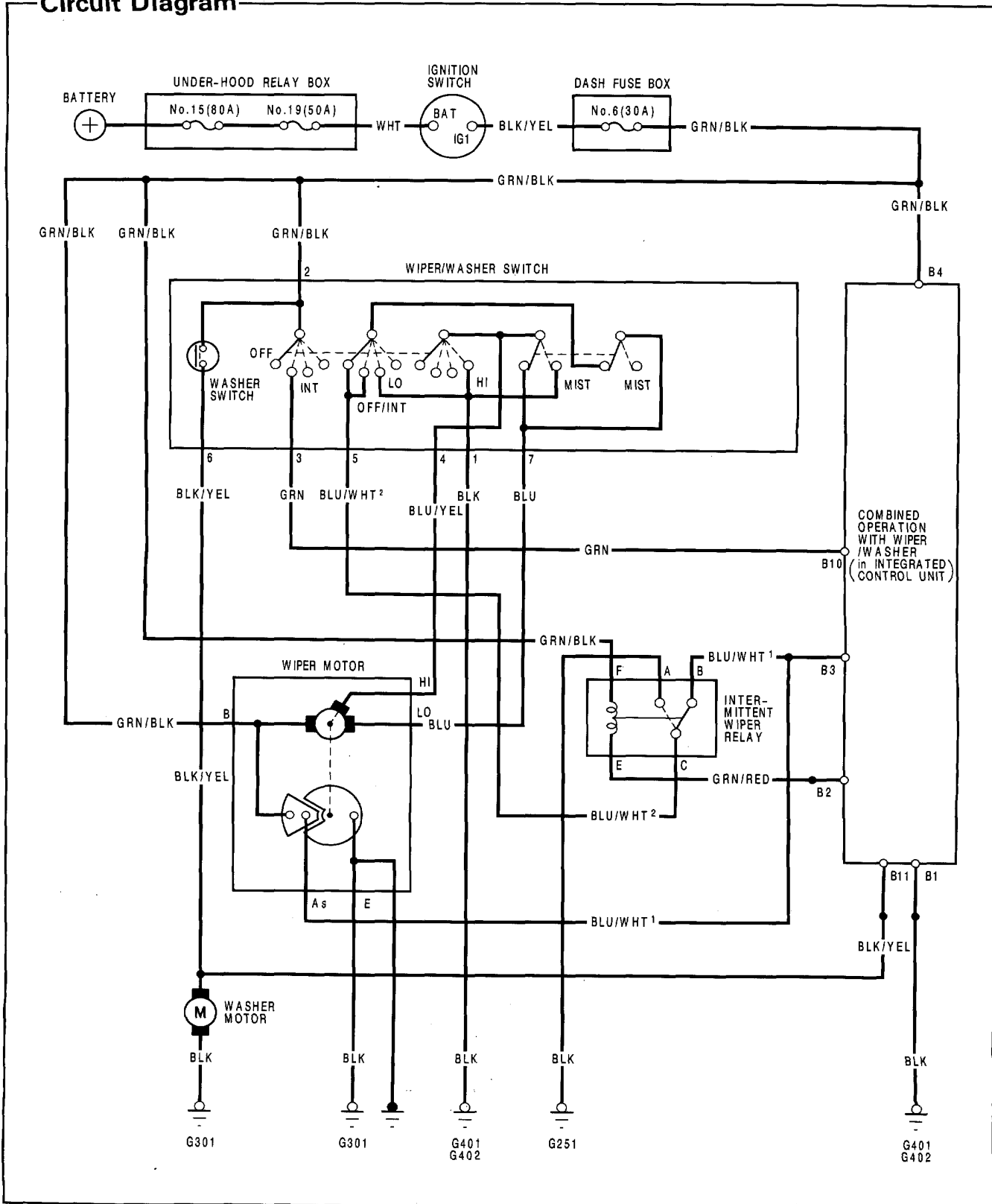
Component Location Index

- Troubleshooting 16-246



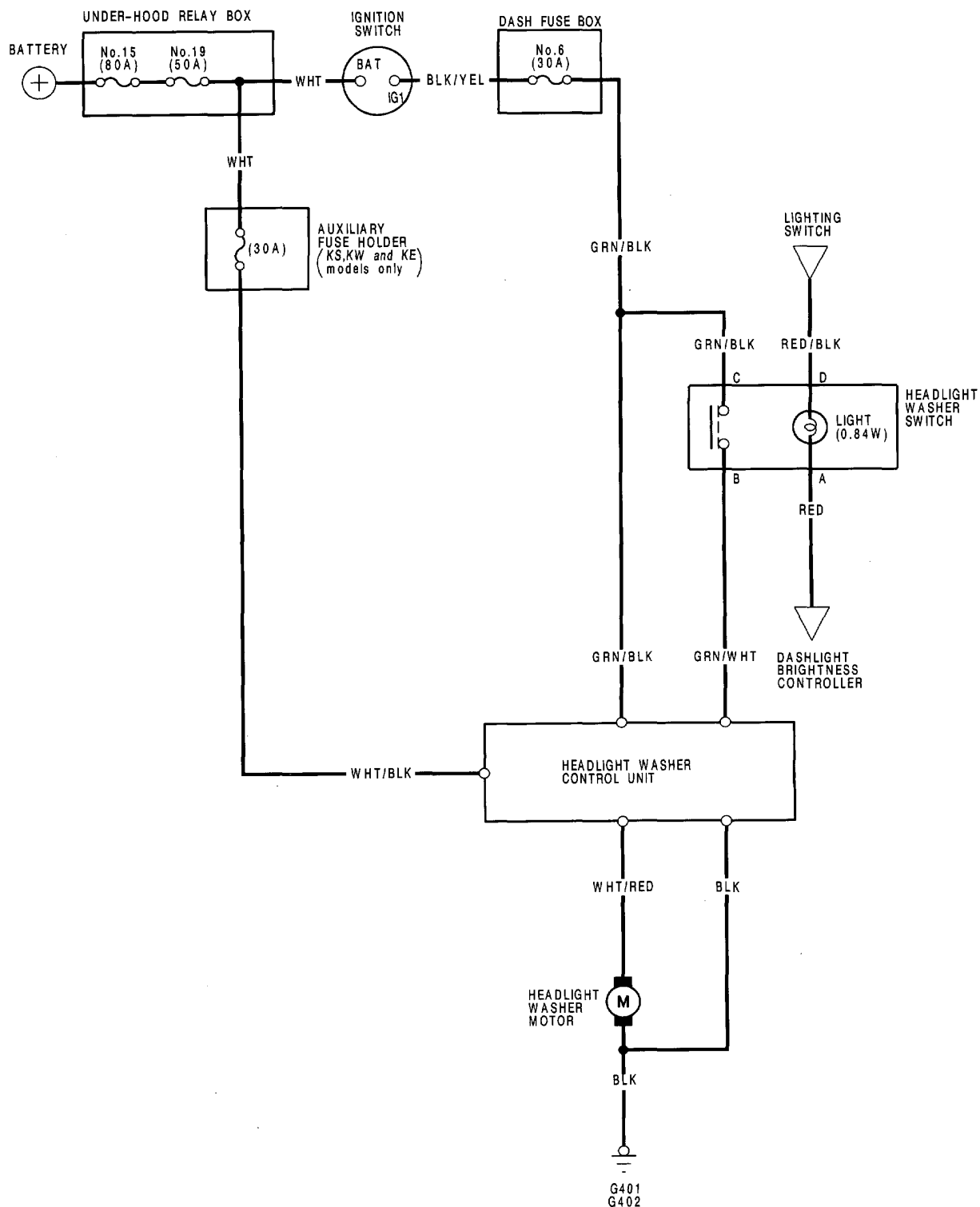
Wipers/Washers

Circuit Diagram





Circuit Diagram (Headlight Washer)



Wipers/Washers

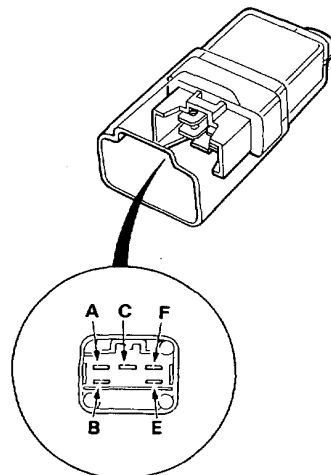
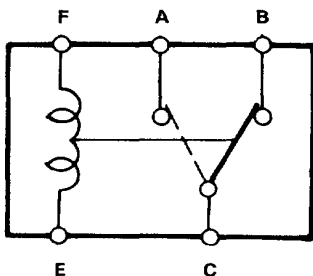
Troubleshooting

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

Item to be inspected		Blown No. 6 (30 A) fuse (in the dash fuse box)	Wiper switch	Mist switch	Wiper motor assembly	Washer switch	Washer motor	Intermittent wiper relay	Combined operation with washer (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	GRN/BLK
	In INT		1					2						ORN, BLU/WHT ¹
	In LO or HI		1		2									BLU/YEL, BLU
	In MIST			1										
Blades do not return to park position when wipers are turned OFF.			2		1									BLU/WHT ¹
Erratic intermittent cycle or wipers do not operate intermittently.								1						GRN/BLK, GRN BLU/WHT ¹ , GRN/RED
Little or no washer fluid is pumped.						4	3			1	2		G301	BLK/YEL
Wipers do not operate simultaneous- ly with washer.														BLK/YEL

Intermittent Wiper Relay Test

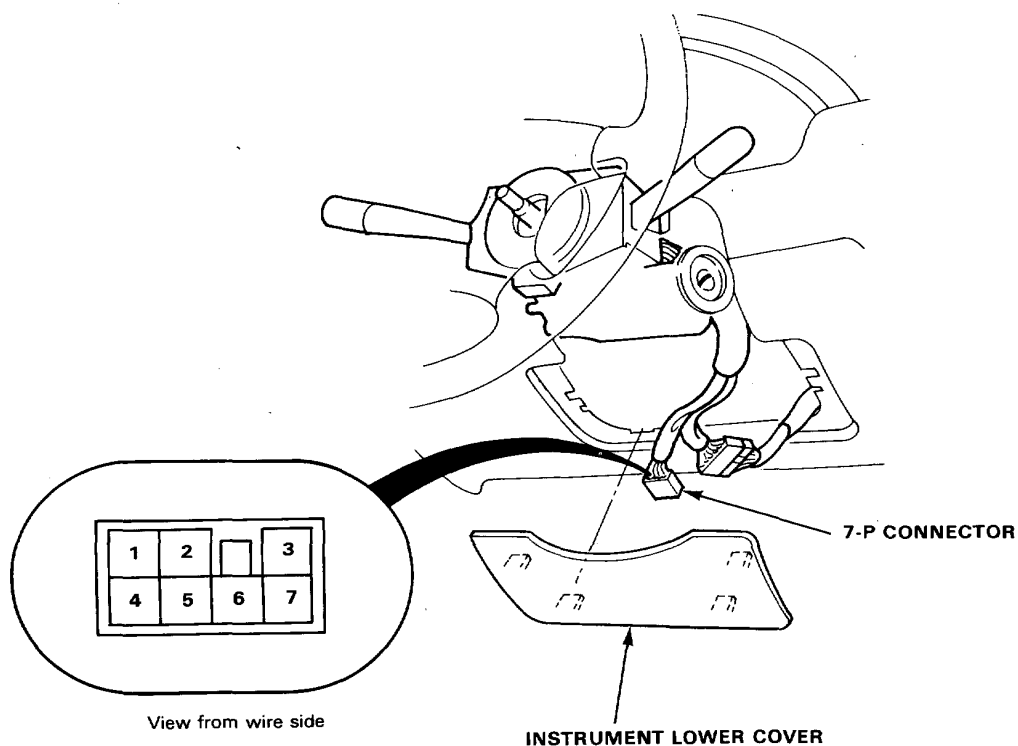
1. Remove the intermittent wiper relay.
2. There should be continuity between the A and C terminals when the battery is connected to the E and F terminals.
There should be continuity between the B and C terminals when the battery is disconnected.

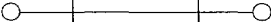




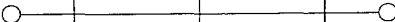





Wiper/Washer Switch Test

1. Remove the instrument lower panel.
2. Disconnect the 7-P connector of wiper washer switch from the main wire harness.
3. Check for continuity between the terminal in each switch position according to the table.



Terminal	1	2	3	4	5	6	7
Position							
OFF							
INT							
Lo							
Hi							
Mist switch "ON"							
Washer switch "ON"							

Wipers/Washers

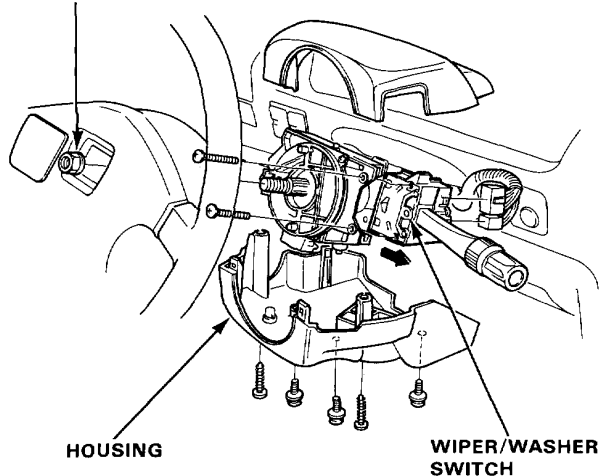
Wiper/Washer Switch Replacement

1. Remove the steering wheel.
2. Remove the lower and upper covers from the steering column.
3. Disconnect the 8-P and 2-P connectors from the wiper/washer switch.
4. Remove the 2 screws and slide the wiper/washer switch out of the housing as shown.

NOTE:

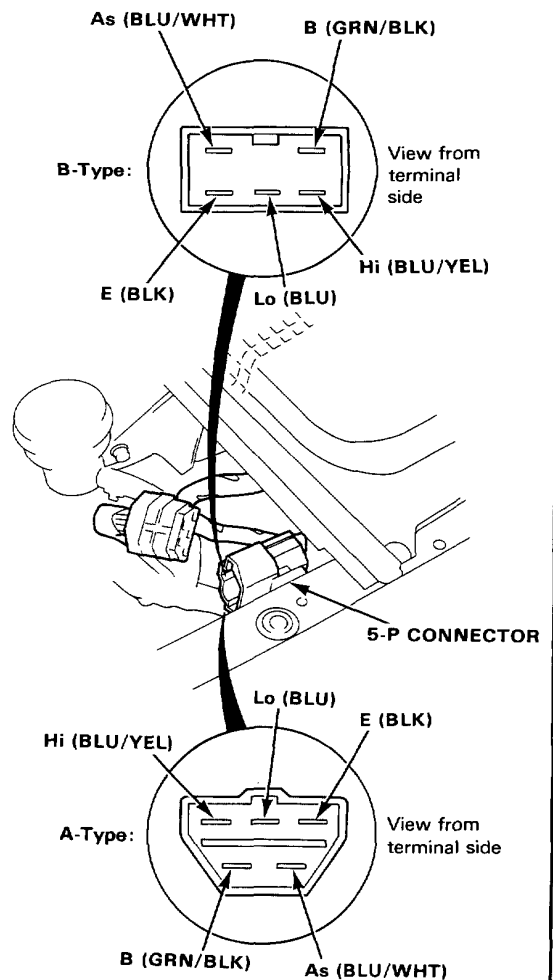
- Be careful not to damage the steering wheel cover.
- If equipped with cruise control, remove the wiper/washer switch after removing the slip ring (see page 16-262).

SELF-LOCKING NUT
50 N·m (5.0 kg-m, 36.2 lb-ft)
Replace.



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.



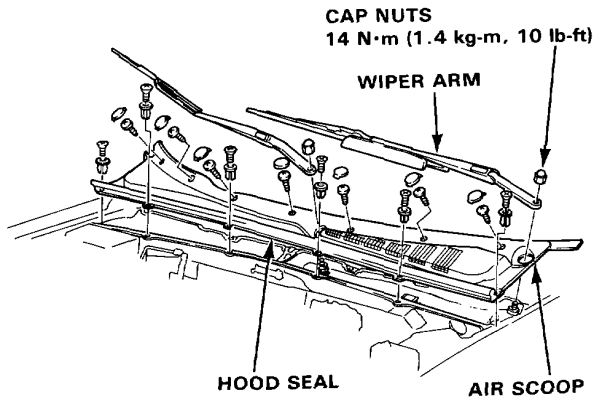


Windshield Wiper Motor Replacement

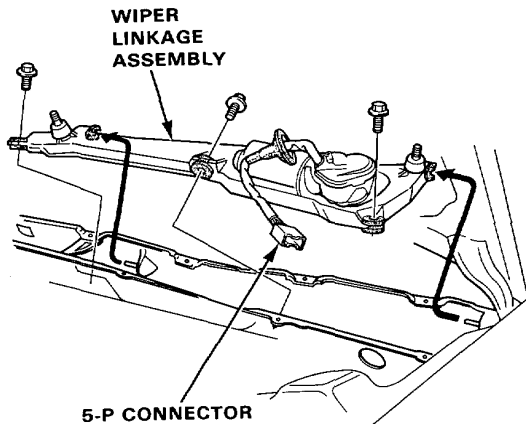
1. Open the hood and remove the cap nuts and the wiper arms

NOTE: Carefully remove the wiper arms so that the wiper arms do not touch the hood.

2. Remove the hood seal and air scoop by prying off the trim clips and removing the screws.



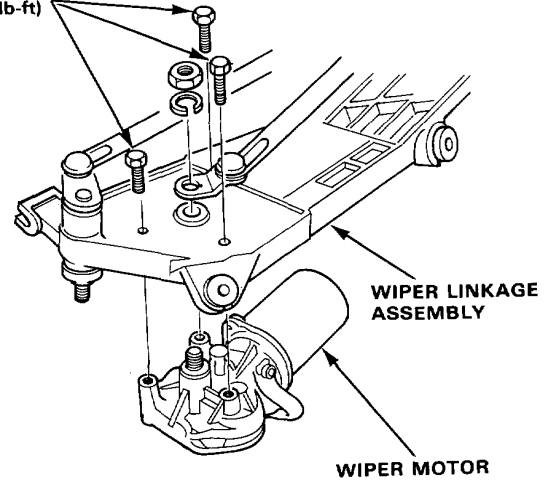
3. Disconnect the 5-P connector from the wiper motor assembly, then remove the 3 mounting bolts and the wiper linkage assembly.



4. Remove the 3 mounting bolts and 1 nut from the wiper linkage assembly to remove the wiper motor assembly.

MOUNTING BOLTS

10 N·m (1.0 kg-m,
7.2 lb-ft)



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

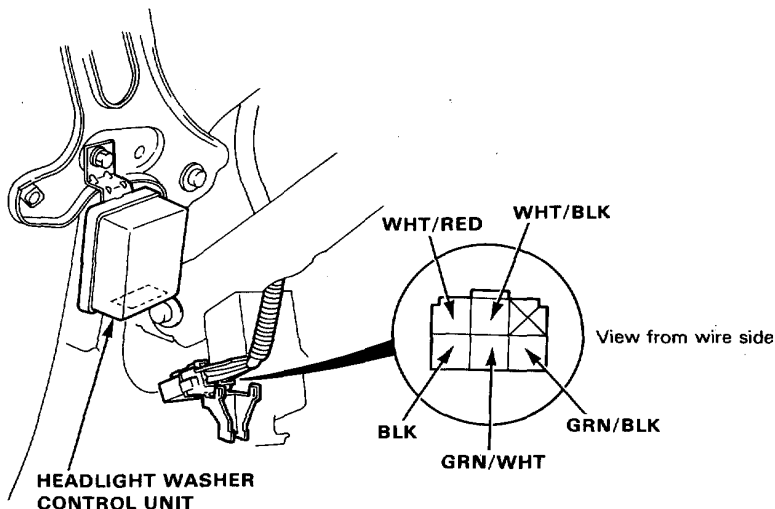
Wipers/Washers

Headlight Washer Control Unit Input Test

Disconnect the 6-P connector from the control unit, located at left kick panel.

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"> • Poor ground (G401, G402). • An open in the wire.
2	WHT/BLK *	Under all conditions.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"> • Blown 30 A fuse in auxiliary fuse holder. • An open in the wire.
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"> • Blown No.6 (30 A) fuse. • Faulty headlight washer switch • An open in the wire.
4	WHT/RED	Connect the WHT terminal to the WHT/RED terminal.	Check the headlight washer motor operation: should run.	<ul style="list-style-type: none"> • Faulty headlight washer motor. • Poor ground (G401, G402). • An open in the wire.
5	GRN/BLK	Ignition switch ON.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"> • Blown No.6 (30 A) fuse. • An open in the wire.

*: KS, KW and KE models only

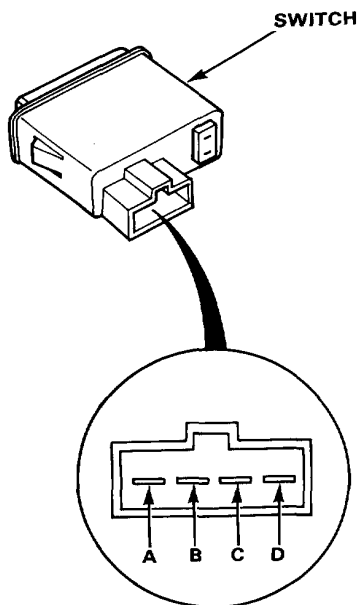


Headlight Washer Switch Test

1. Pry out the switch from the floor console, then disconnect the 4-P connector from the switch.
2. Check for continuity between the terminals according to the table.

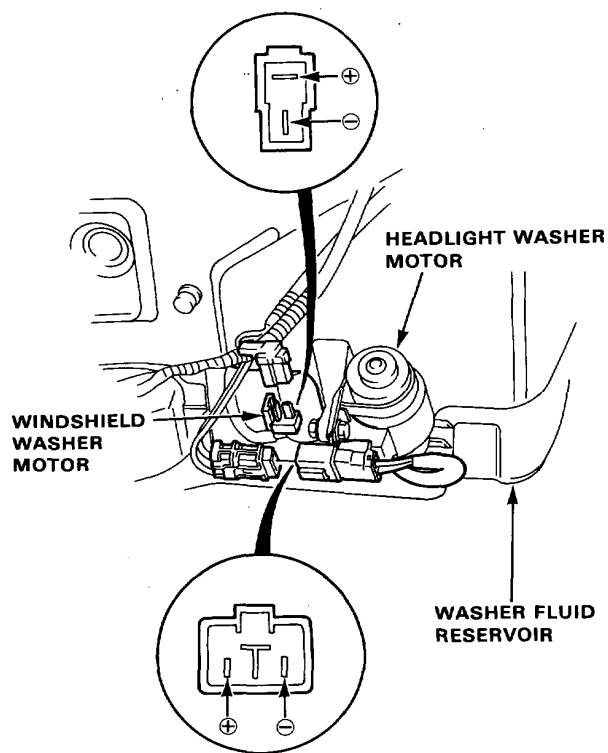
NOTE: Be careful not to damage the switch or the instrument panel when prying out the switch.

Terminal	B	C	A		D
Position					
OFF					
ON					



Washer Motor Test

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



Wipers/Washers

Washer Replacement

1. Remove the bumper, then remove the washer reservoir by removing the 3 mounting bolts.
2. Disconnect the hoses and the 2-P connectors from the windshield and the headlight washer motors.
3. Remove the washer nozzles.

NOTE:

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

