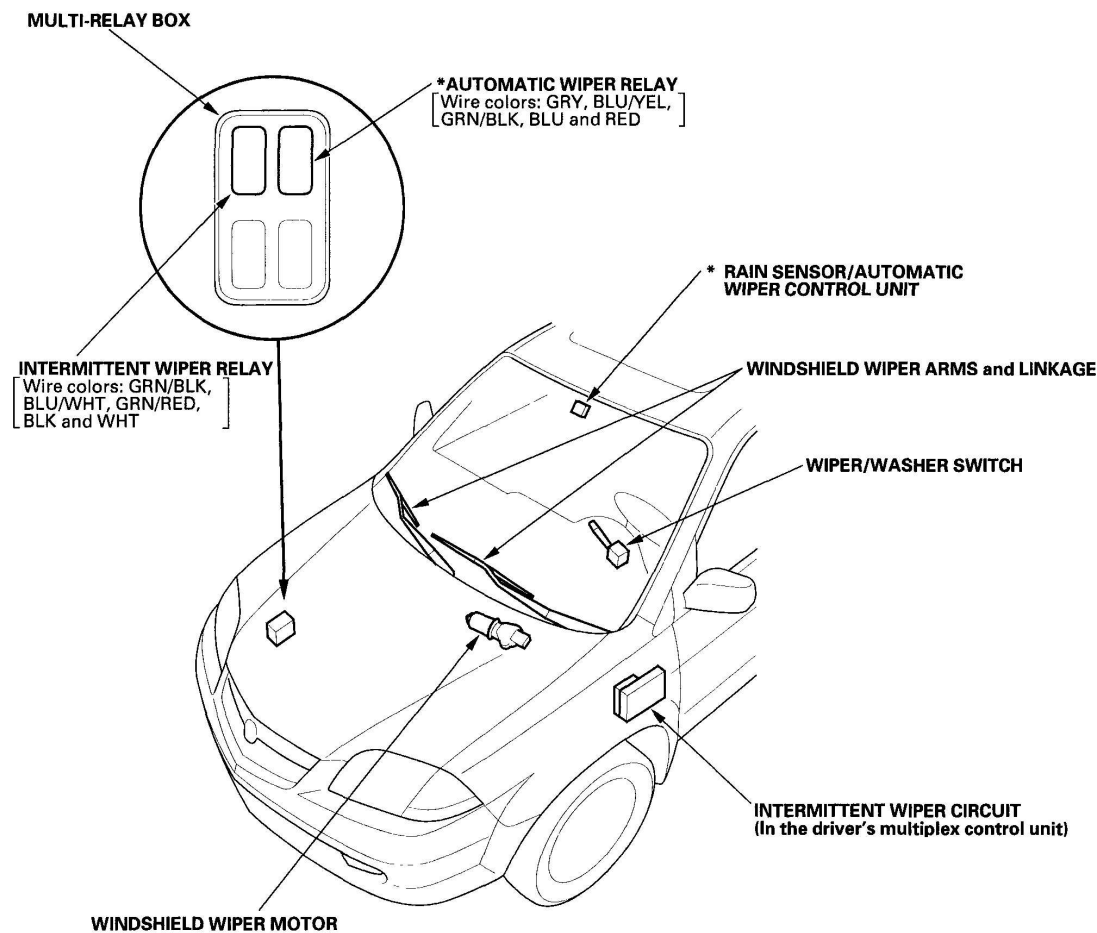


2003-06 ACCESSORIES & EQUIPMENT

Wipers/Washers - MDX

COMPONENT LOCATION INDEX



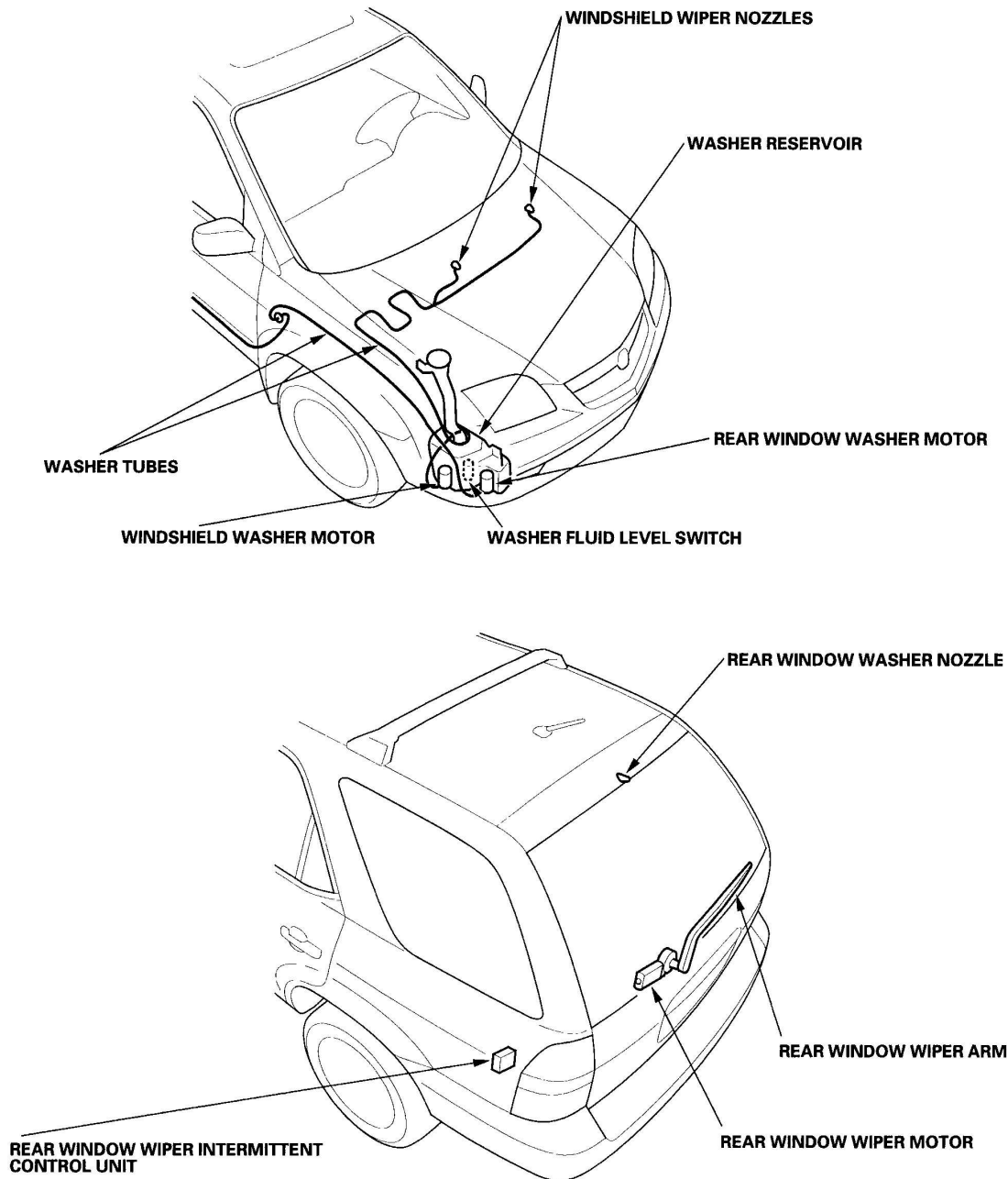
*: With automatic wiper

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Fig. 1: Identifying Wipers/Washers Components Location (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX



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Fig. 2: Identifying Wipers/Washers Components Location (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM - WINDSHIELD

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX

With automatic wiper

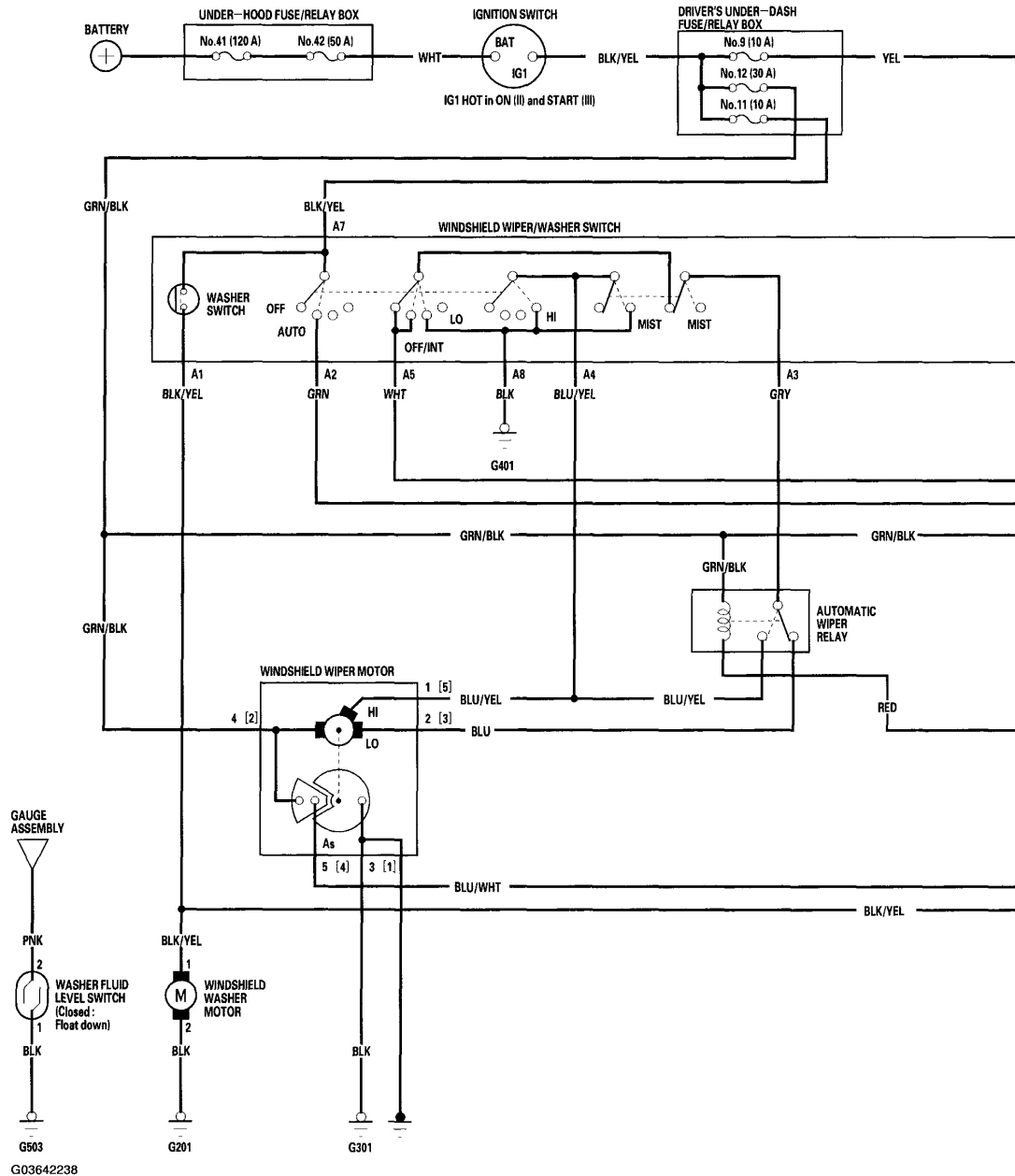
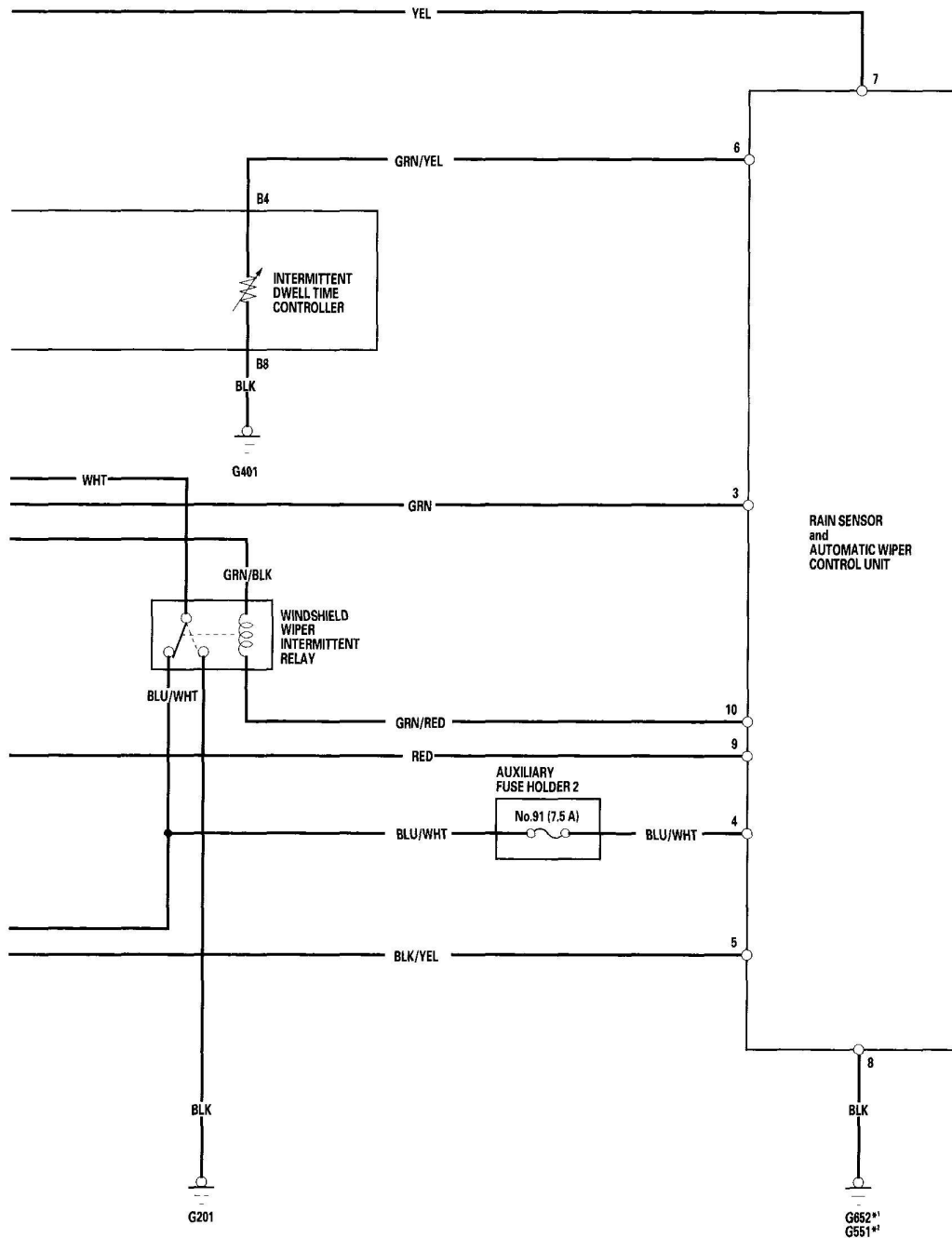


Fig. 3: Circuit Diagram - Windshield With Automatic Wiper (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX

*1: '03 model
*2: '04-'06 models



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Fig. 4: Circuit Diagram - Windshield With Automatic Wiper (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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Without automatic wiper

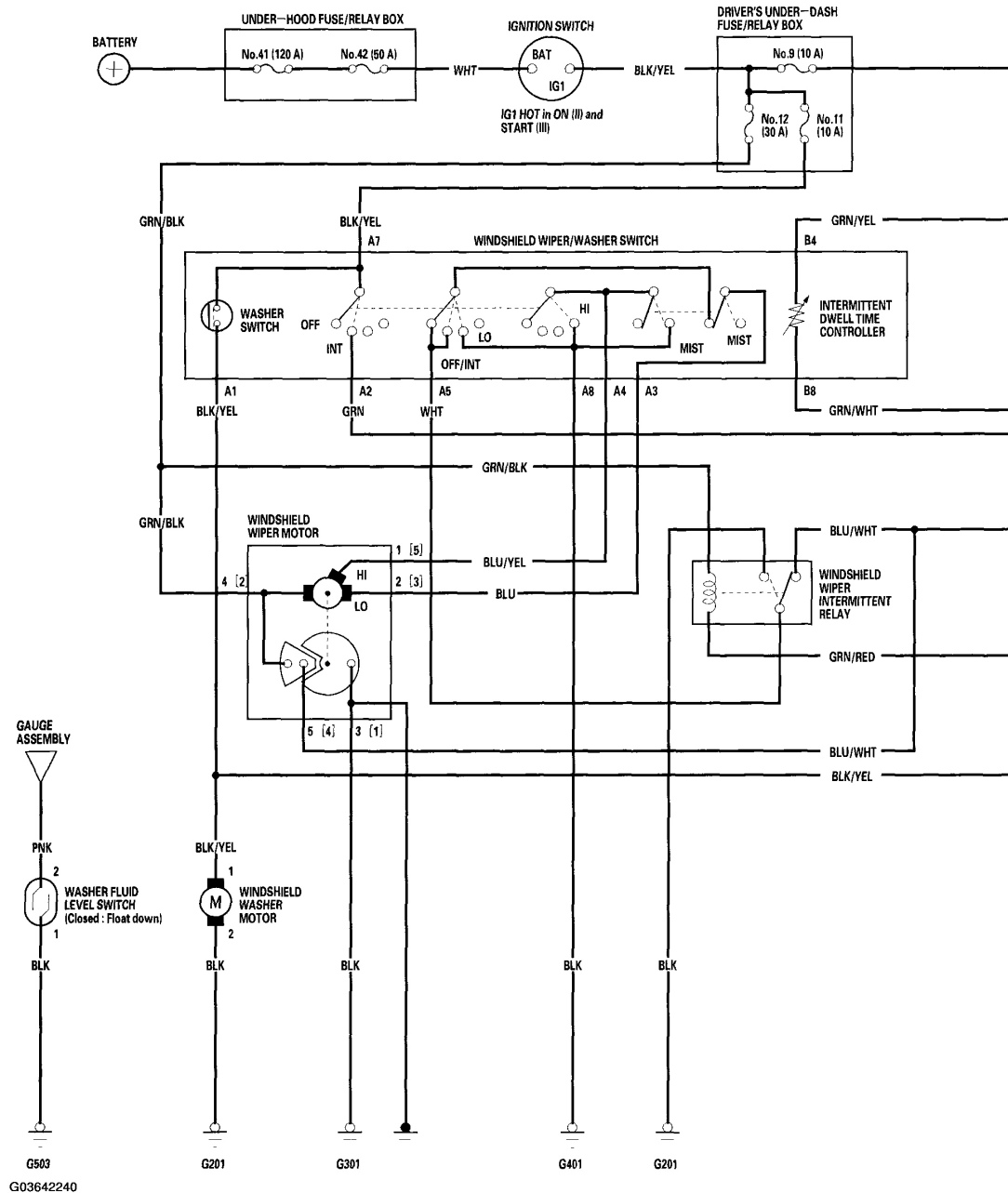
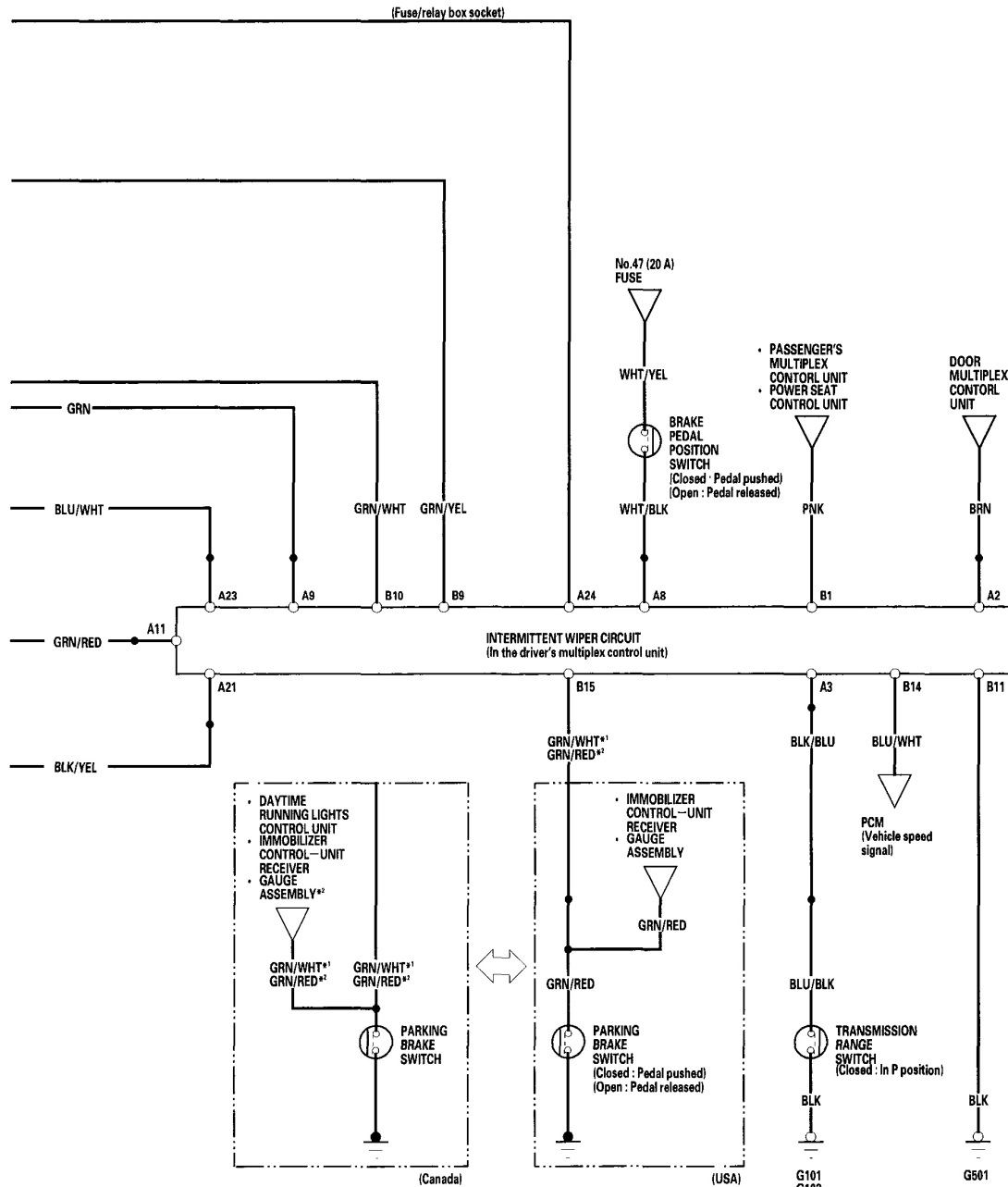


Fig. 5: Circuit Diagram - Windshield Without Automatic Wiper (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX

*1: '03 model
*2: '04-'06 models



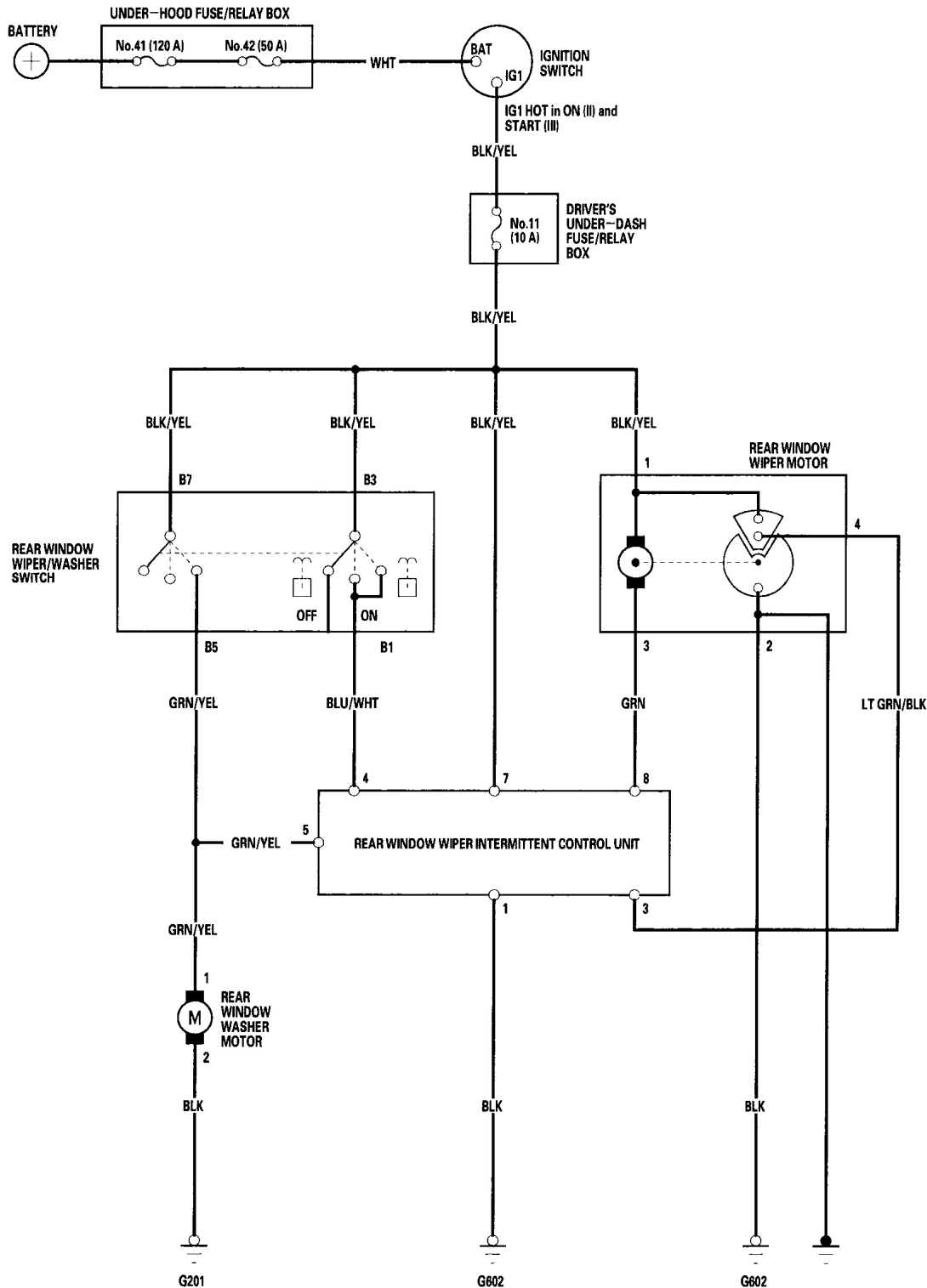
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Fig. 6: Circuit Diagram - Windshield Without Automatic Wiper (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM - REAR WINDOW

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX



G03642242

Fig. 7: Circuit Diagram - Rear Window

Courtesy of AMERICAN HONDA MOTOR CO., INC.

WIPER/WASHER SWITCH TEST/REPLACEMENT

1. Remove the dashboard lower cover (see **DRIVER'S DASHBOARD UNDER COVER REMOVAL/INSTALLATION**).
2. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
3. Disconnect the 8P connectors (A) from the wiper/washer switch (B), then remove the two screws and the switch.

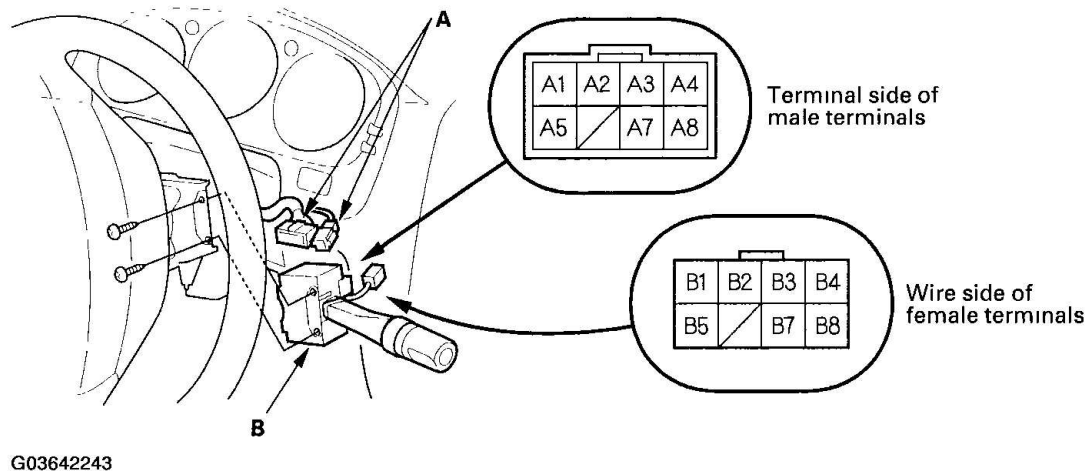


Fig. 8: Disconnecting 8P Connectors From Wiper/Washer Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check for continuity between the terminals in each switch position according to the table.

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX

Terminal Position	A1	A2	A3	A4	A5	A7	A8	B4		B8
OFF			○	—	○					
INT or AUTO		○	—	—	—	○				
LO			○	—	—	—	○			
HI				○	—	—	○			
Mist switch ON				○	—	—	○			
Washer switch ON	○	—				○				
Intermittent dwell time controller turned								○	0—30 k Ω	○

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Fig. 9: Checking Continuity Between Terminals In Each Switch Position (Windshield)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal Position	B1	B2	B3	B5	B7
OFF		○	○		
ON	○	—	○		
Wiper and Washer switch ON	○	—	○	○	○

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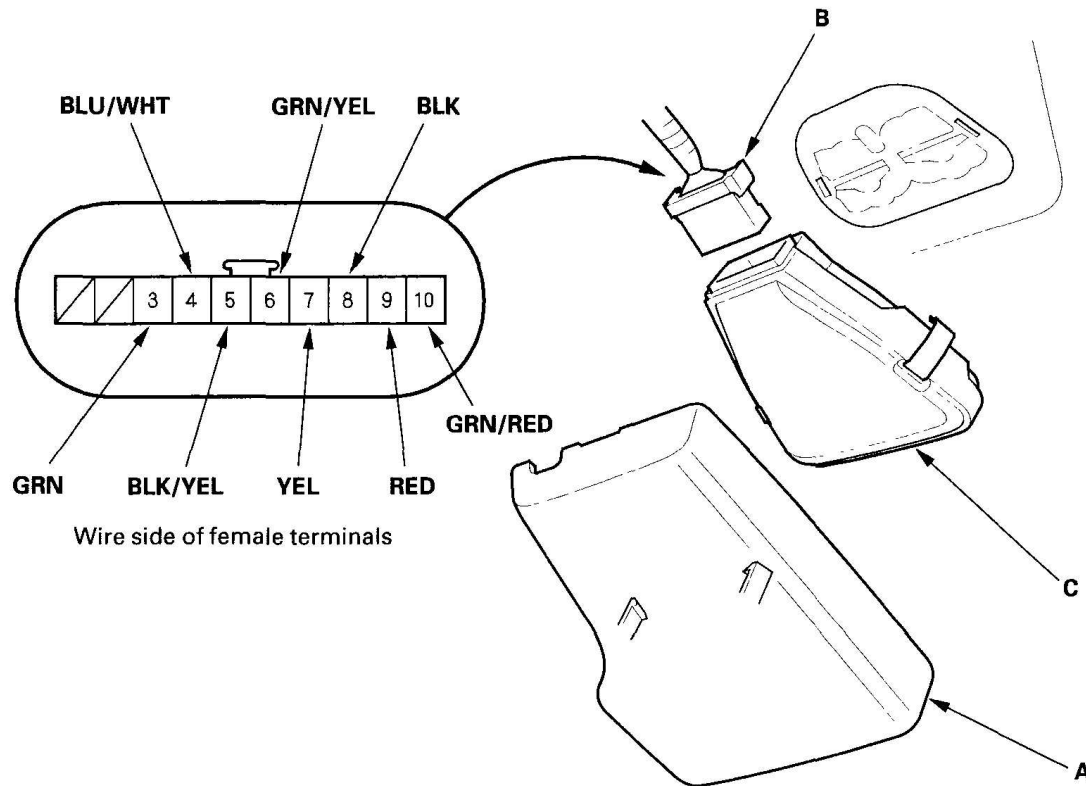
Fig. 10: Checking Continuity Between Terminals In Each Switch Position (Rear Window)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

CONTROL UNIT INPUT TEST

WITH AUTOMATIC WIPER

- Remove the rain sensor cover (A).



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Fig. 11: Removing Rain Sensor Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the 10P connector (B) from the rain sensor/automatic wiper control unit (C).
3. 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, go to step 4.
4. Reconnect the connector, and make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 5.

CONTROL UNIT INPUT TEST (WITH AUTOMATIC WIPER - CONNECTOR RECONNECTED)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
8	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	<ul style="list-style-type: none"> • Poor ground (G652⁽¹⁾, G551⁽²⁾) • An open in the wire

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2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX

7	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 9 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
9	RED	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 12 (30 A) fuse in the driver's under-dash fuse/relay box • Faulty automatic wiper relay • An open in the wire
3	GRN	Ignition switch ON (II), and windshield wiper switch in INT	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box • Faulty windshield wiper switch • An open in the wire
4	BLU/WHT	Ignition switch ON (II), and windshield wiper switch ON (LO)	Check for voltage to ground: There should be about 0- 12 V, -0- 12 V alternately. NOTE: Use an analog ohmmeter.	<ul style="list-style-type: none"> • Blown No. 91 (7.5 A) fuse in the auxiliary fuse holder 2 • Faulty windshield wiper motor • An open in the wire
5	BLK/YEL	Ignition switch ON (II), and windshield washer switch ON	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box • Faulty windshield washer switch • Faulty windshield washer motor • An open in the wire
(1) '03 model (2) '04-'06 models				

5. Disconnect the connector, and make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.

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- If all the input tests prove OK, the control unit must be faulty; replace it.

CONTROL UNIT INPUT TEST (WITH AUTOMATIC WIPER - CONNECTOR DISCONNECTED)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
10	GRN/RED	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 12 (30 A) fuse in the driver's under-dash fuse/relay box• Faulty wiper intermittent relay• An open in the wire
			Attach to ground: The windshield wiper should run at low speed.	<ul style="list-style-type: none">• Faulty automatic wiper relay• Faulty wiper intermittent relay• Faulty wiper/washer switch• Faulty windshield wiper motor• Poor ground (G201, G301)• An open in the wire
6	GRN/YEL	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none">• Poor ground (G401)• Faulty wiper/washer switch• An open in the wire

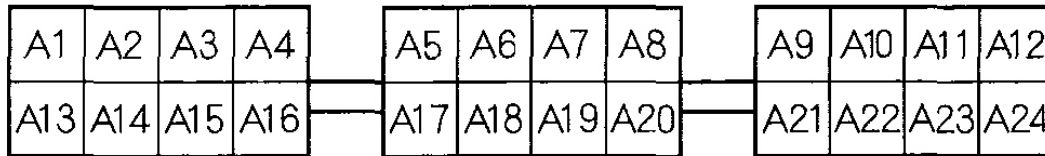
WITHOUT AUTOMATIC WIPER

Before testing the wiper/washer control functions, troubleshoot the multiplex control system (see **TROUBLESHOOTING**).

Driver's Multiplex Control Unit

1. Remove the driver's multiplex control unit from the driver's under-dash fuse/relay box, and disconnect its connector.
2. Inspect all 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, go to step 4.

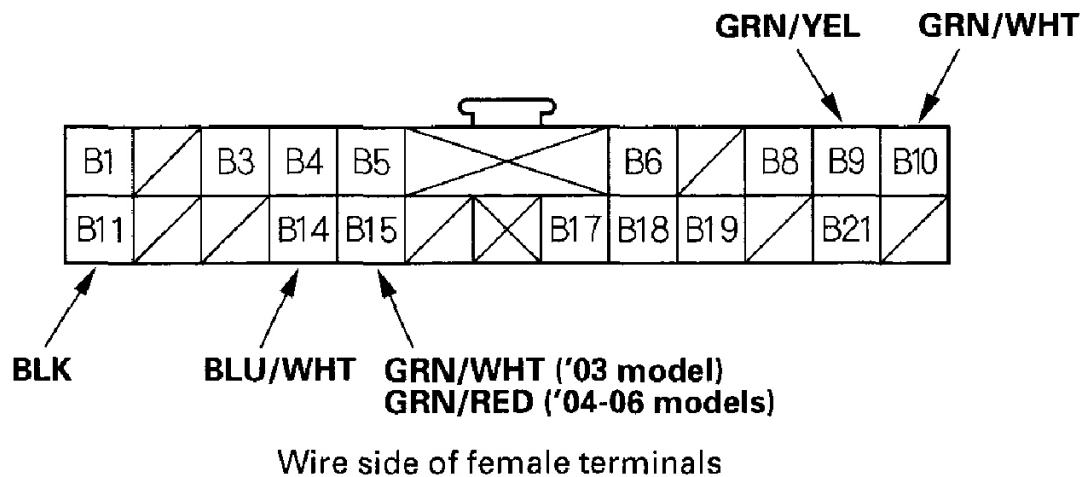
DRIVER'S UNDER-DASH FUSE/RELAY BOX SOCKET (Driver's multiplex control unit connector A)



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Fig. 12: Identifying Under-Dash Fuse/Relay Box Socket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVER'S MULTIPLEX CONTROL UNIT CONNECTOR B



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Fig. 13: Identifying Driver's Multiplex Control Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. With the driver's multiplex control unit still disconnected, make these input tests at the connector and driver's under-dash fuse/relay box sockets.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, driver's multiplex control unit must be faulty; replace it.

CONTROL UNIT INPUT TEST (WITHOUT AUTOMATIC WIPER)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is
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				not obtained
B11 ⁽¹⁾	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Poor ground (G501) • An open in the wire
A24	Fuse/relay box socket	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 9 (10 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box
A3		Shift lever in P	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Faulty transmission range switch • An open in the wire
A8		Brake pedal pressed	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 47 (20 A) fuse in the under-hood fuse/relay box • Faulty brake pedal position switch • An open in the wire
B14 ⁽¹⁾	BLU/WHT	Under all conditions	Check for continuity between the B14 terminal and No. 26 terminal of the PCM 32P connector B: There should be continuity.	An open in the wire
B15 ⁽¹⁾	GRN/WHT ⁽²⁾ GRN/RED ⁽³⁾	Parking brake pedal pressed	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Faulty parking brake switch • An open in the wire
B9 ⁽¹⁾	GRN/YEL	Intermittent dwell time control ring turned	Check resistance between the terminals: It should vary from 0 to about 30 k ohm as the ring is turned.	<ul style="list-style-type: none"> • Faulty intermittent dwell time controller • An open in the wire
B10 ⁽¹⁾	GRN/WHT			
A9		Ignition switch ON (II) and wiper switch in INT	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box • Faulty wiper switch • Faulty driver's under-dash fuse/relay box • An open in the wire
				<ul style="list-style-type: none"> • Blown No. 12 (30 A) fuse in the driver's

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A11	Fuse/relay box socket	Ignition switch ON (II) and INT switch OFF	Check for voltage to ground: There should be battery voltage.	under-dash fuse/relay box <ul style="list-style-type: none">• Faulty intermittent wiper relay• Faulty driver's under-dash fuse/relay box• An open in the wire
A21		Ignition switch ON (II) and washer switch ON	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box• Faulty washer switch• Faulty driver's under-dash fuse/relay box• An open in the wire
A23		Ignition switch ON (II) and wiper in PARK position	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 12 (30 A) fuse in the driver's under-dash fuse/relay box• Faulty wiper motor• Faulty driver's under-dash fuse/relay box• An open in the wire
(1) Driver's multiplex control unit connector B				
(2) '03 model				
(3) '04-'06 models				

REAR WINDOW WIPER INTERMITTENT CONTROL UNIT INPUT TEST

1. Remove the left rear side trim panel (see **TRIM REMOVAL/INSTALLATION - REAR SIDE LOWER AREA**).
2. Disconnect the 8P connector (A) from the rear window wiper intermittent control unit (B).

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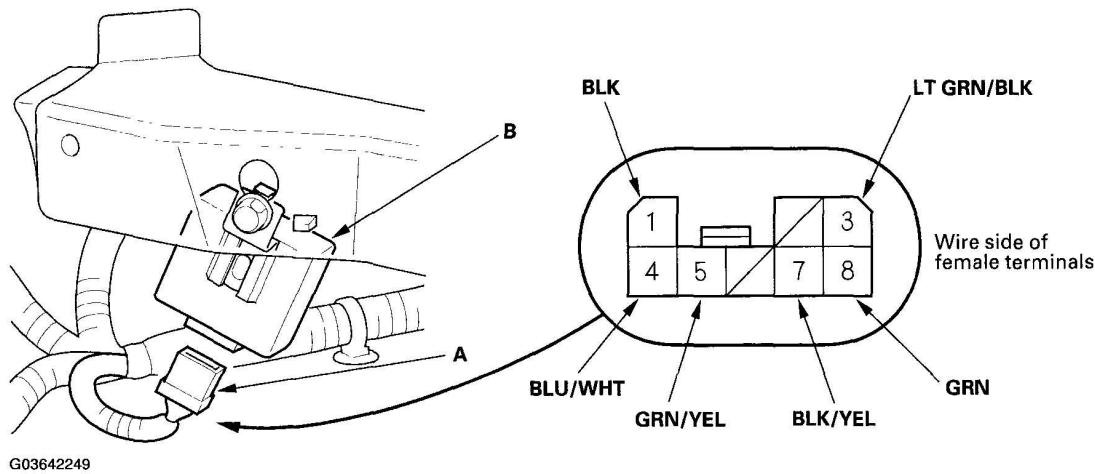


Fig. 14: Disconnecting 8P Connector From Rear Window Wiper Intermittent Control Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. 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, go to step 4.
4. Reconnect the connector and make these 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, go to step 5.

REAR WINDOW WIPER INTERMITTENT CONTROL UNIT INPUT TEST (1 OF 2)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	<ul style="list-style-type: none">• Poor ground (G602)• An open in the wire
3	LT GRN/BLK	Ignition switch ON (II) and rear window wiper in parked position	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box• Faulty rear window wiper motor• An open in the wire
4	BLU/WHT	Ignition switch ON (II) and rear window wiper	Check for voltage to ground: There should	

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		switch ON	be battery voltage.	<ul style="list-style-type: none">• Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box• Faulty wiper/washer switch• An open in the wire
5	GRN/YEL	Ignition switch ON (II) and rear window washer switch ON	Check for voltage to ground: There should be battery voltage.	
7	BLK/YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none">• Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box• An open in the wire

5. Disconnect the 8P connector, and make this test at the connector.

- If the test indicates a problem, find and correct the cause, then recheck the system.
- If the input test proves OK, the control unit must be faulty; replace it.

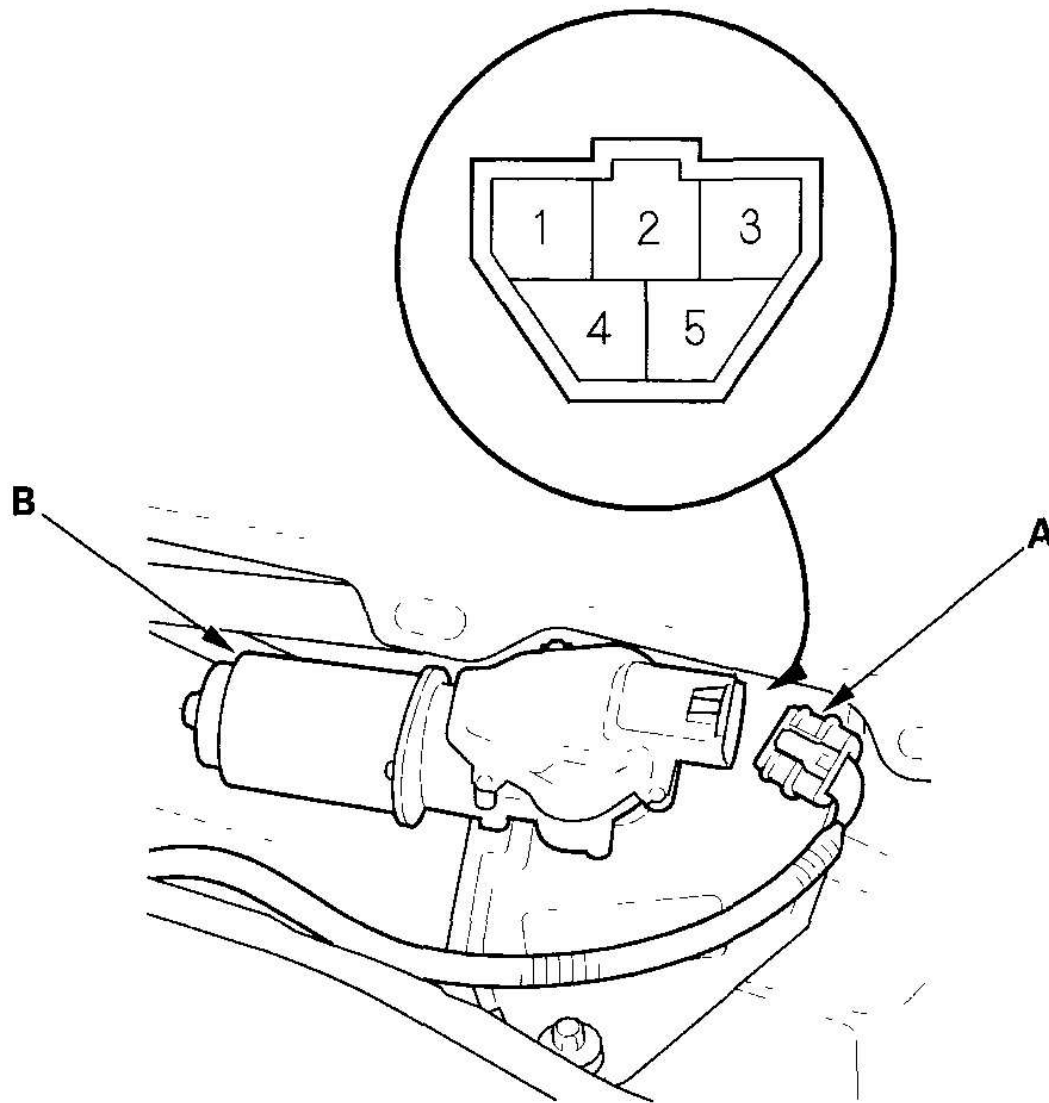
REAR WINDOW WIPER INTERMITTENT CONTROL UNIT INPUT TEST (2 OF 2)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
8	GRN	Ignition switch ON (II)	Attach to ground: The rear window wiper motor should run.	<ul style="list-style-type: none">• Blown No. 11 (10 A) fuse in the driver's under-dash fuse/relay box• Faulty rear window wiper motor• An open in the wire

WIPER MOTOR TEST

WINDSHIELD

1. Remove the cowl cover (see **WIPER MOTOR REPLACEMENT**).
2. Disconnect the wiper motor connector (A) from the wiper motor (B).



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Fig. 15: Disconnecting Wiper Motor Connector From Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor by connecting battery power and ground according to **Fig. 16** .

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Terminal Position	1 [5]	2 [3]	4 [2]
LOW SPEED		⊖	⊕
HIGH SPEED	⊖		⊕

[] : '05-06 models

G03642251

Fig. 16: Connecting Battery Power And Ground Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

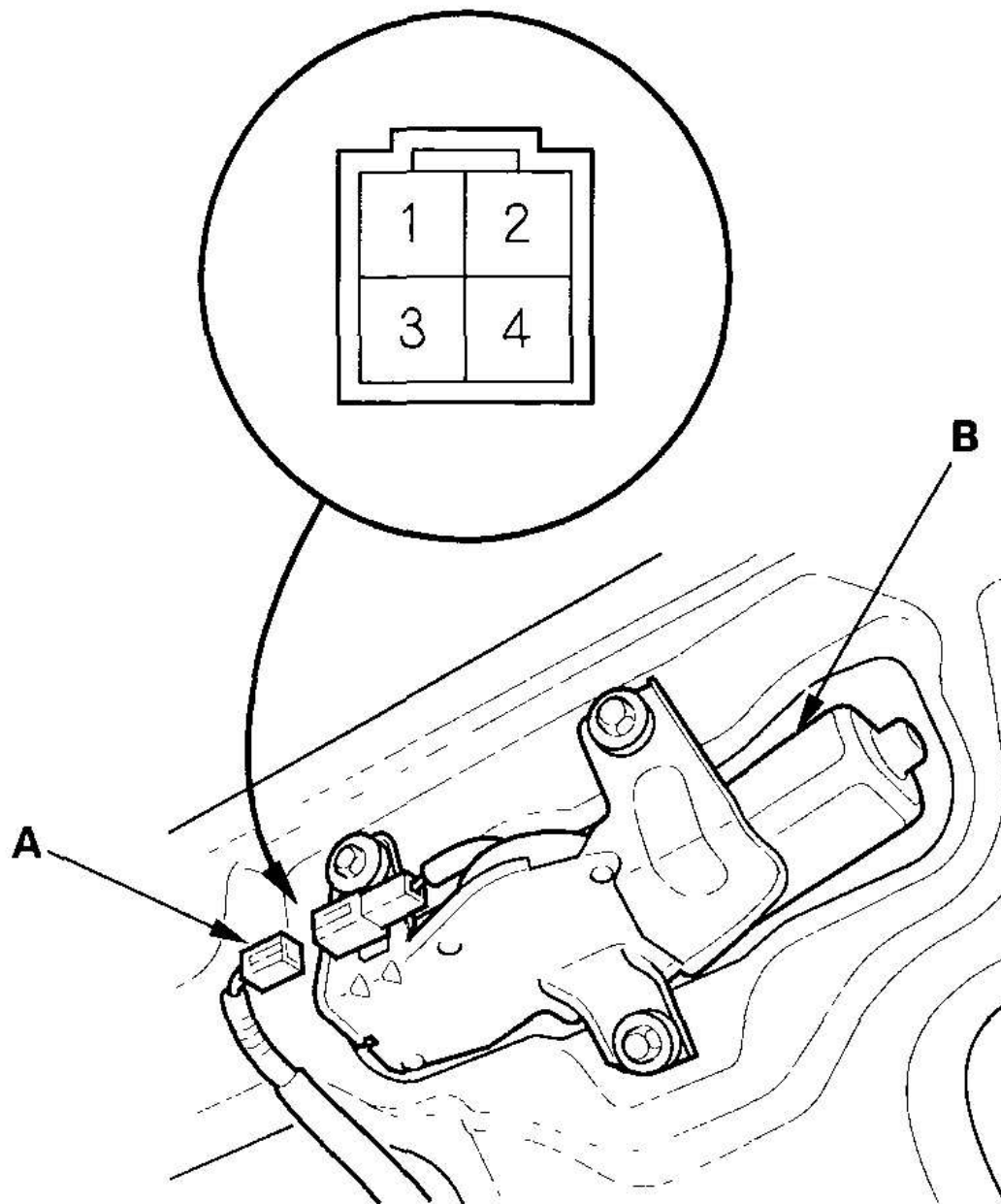
4. Connect an analog voltmeter between the No. 5 [No. 4] (+) and No.3 [No. 1] (-) terminals, and run the motor at low or high speed. The voltmeter should indicate 0 V and 4 V or more alternately.

[] : '05-'06 models

5. If the voltmeter does not indicate as specified, replace the windshield wiper motor.

REAR WINDOW

1. Remove the tailgate trim panel (see **TRIM REMOVAL/INSTALLATION - TAILGATE AREA**).
2. Disconnect the 4P connector (A) from the rear window wiper motor (B).



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Fig. 17: Disconnecting 4P Connector From Rear Window Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor by connecting battery power to the wiper motor 4P connector No. 1 terminal and grounding the No. 3 terminal. The motor should run.

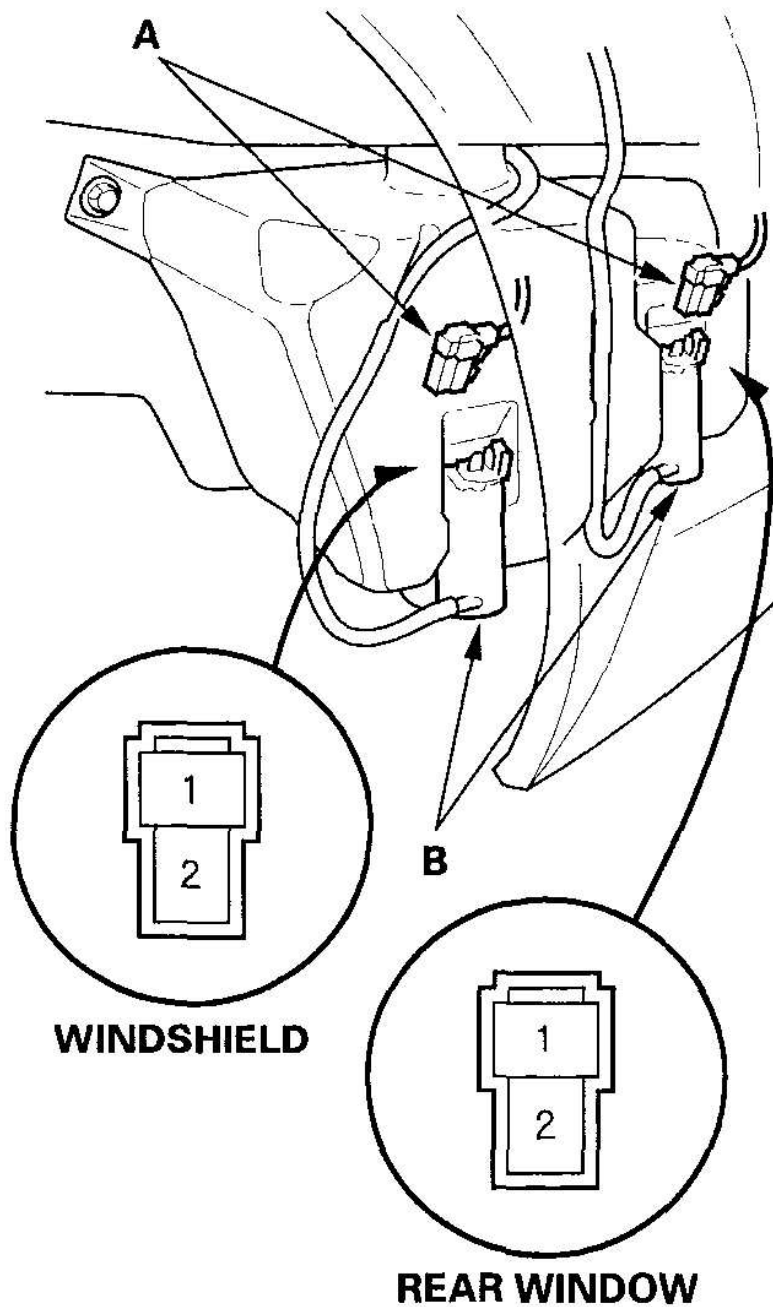
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4. Connect an analog voltmeter between the No. 4 (+) and No. 2 (-) terminals, and run the motor. The voltmeter should indicate 0 V and 4 V or more alternately.
5. If the voltmeter does not indicate as specified, replace the rear window wiper motor.

WASHER MOTOR TEST

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the 2P connectors (A) from the washer motors (B).



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Fig. 18: Disconnecting 2P Connectors From Washer Motors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the washer motor by connecting battery power to the No. 1 terminal and ground to the No. 2

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terminal. The motor should run.

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

NOTE: **If the motor runs smoothly, but little or no washer fluid is pumped, check for a disconnected or blocked washer hose, or a clogged washer motor outlet.**

WASHER FLUID LEVEL SWITCH TEST/REPLACEMENT

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the 2P connector (A) from the washer fluid level switch (B).

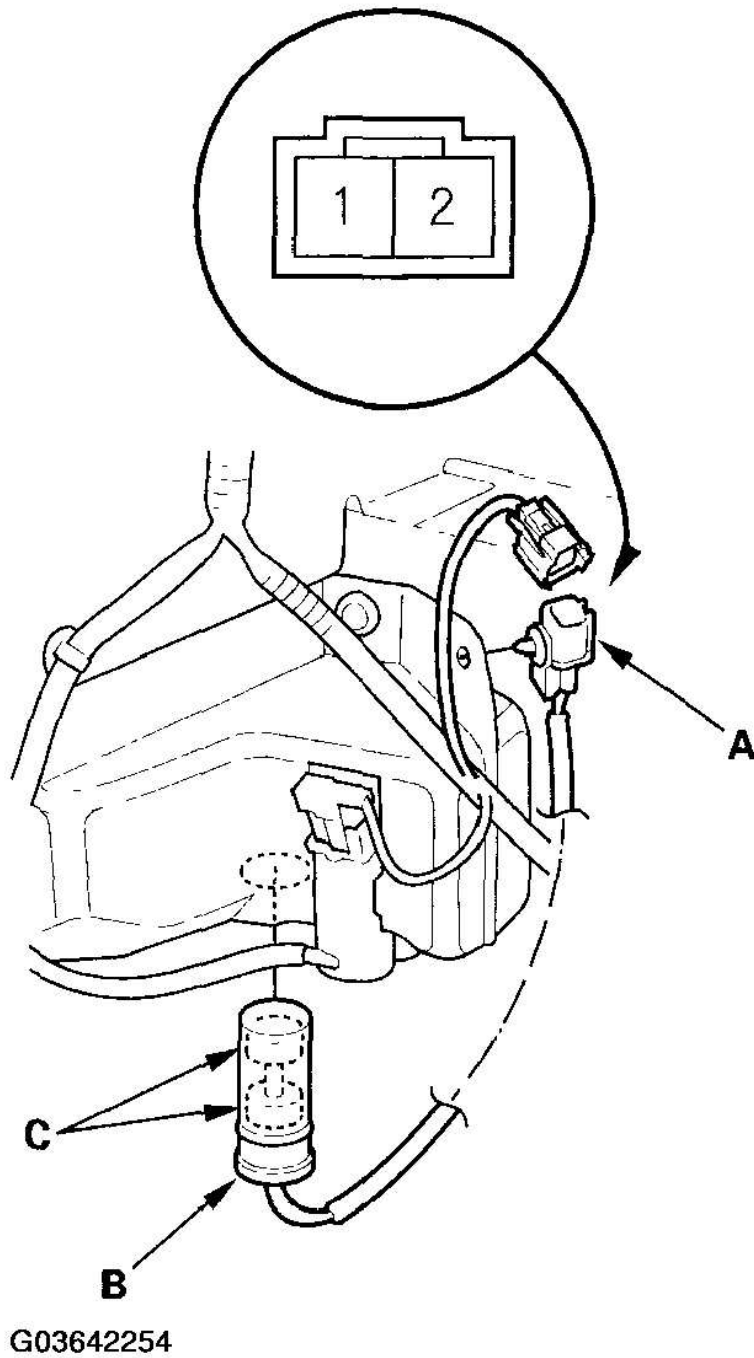


Fig. 19: Disconnecting 2P Connector From Washer Fluid Level Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull the switch out of the reservoir.

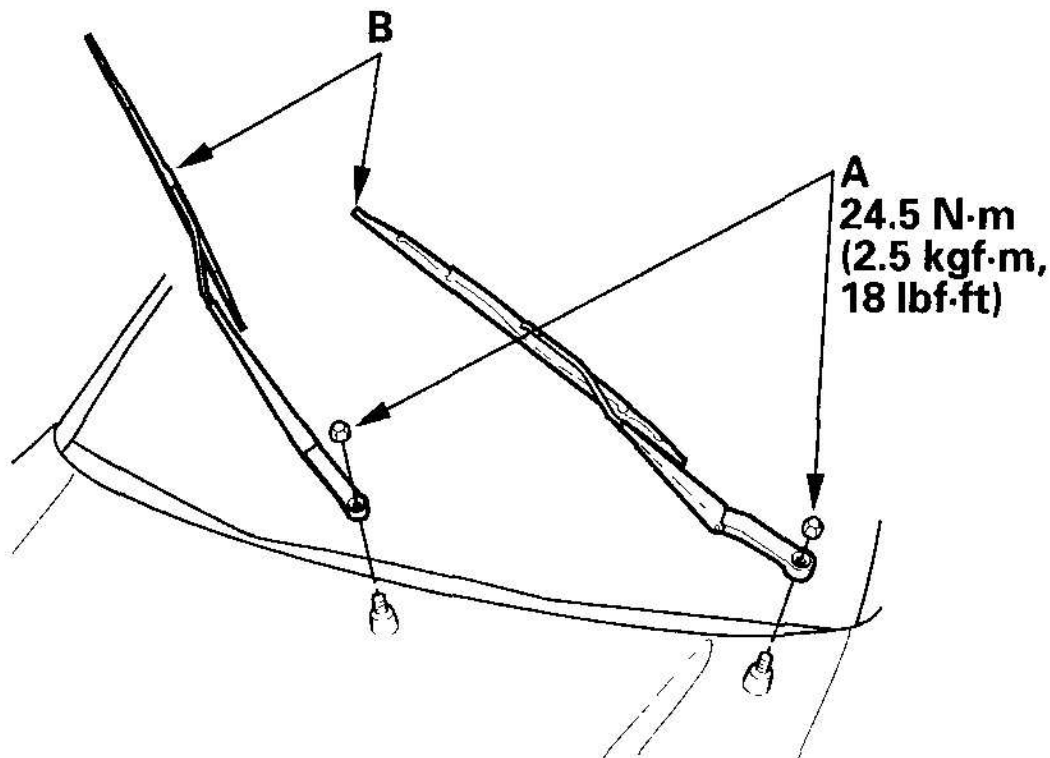
NOTE: Fluid may flow out of the opening.

4. Check for continuity between the No. 1 and No. 2 terminals in each float switch position (C).
 - There should be continuity when the float is down.
 - There should be no continuity when the float is up.
5. If the continuity is not as specified, replace the switch.

WIPER MOTOR REPLACEMENT

WINDSHIELD

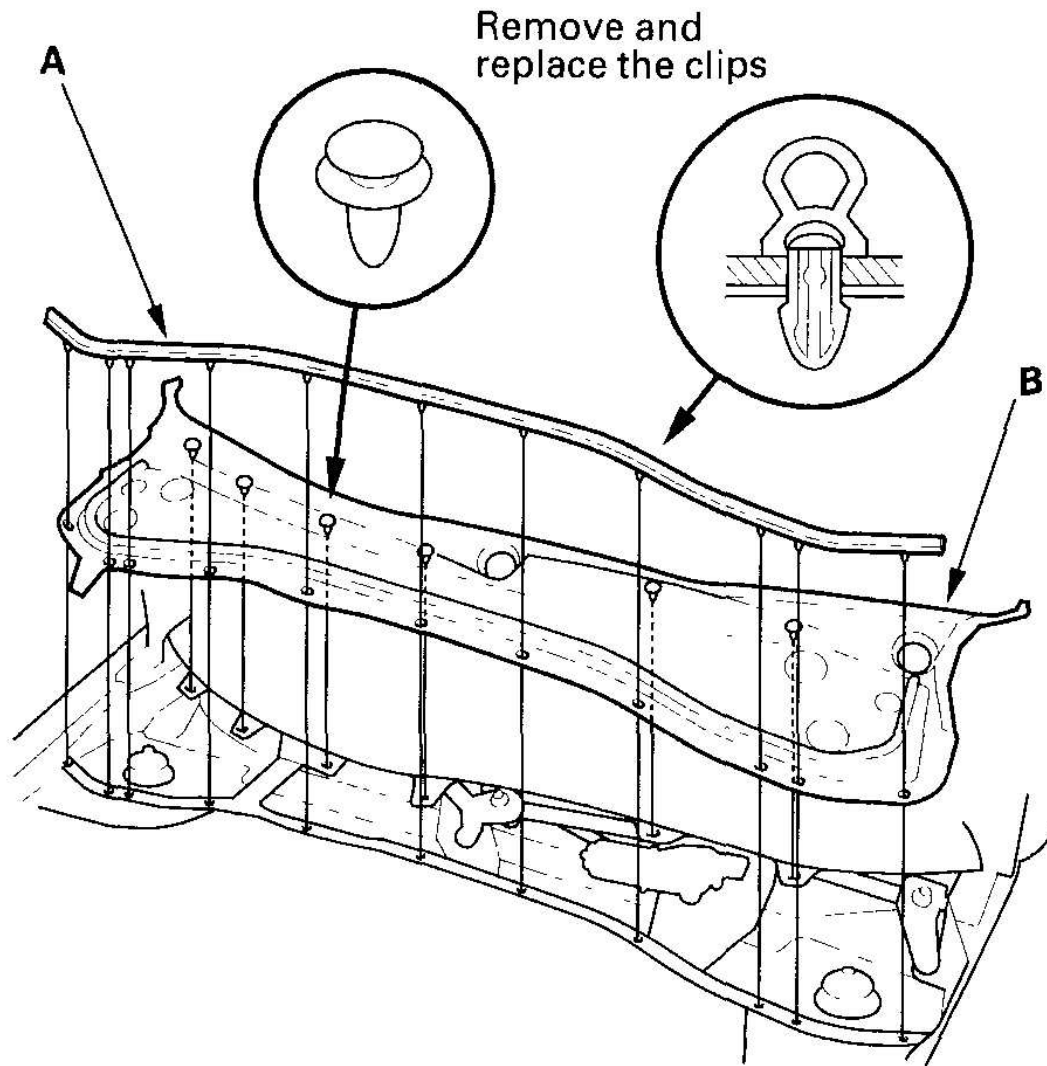
1. Remove the nuts (A) and the windshield wiper arms (B).



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Fig. 20: Removing Windshield Wiper Arms
Courtesy of AMERICAN HONDA MOTOR CO., INC.

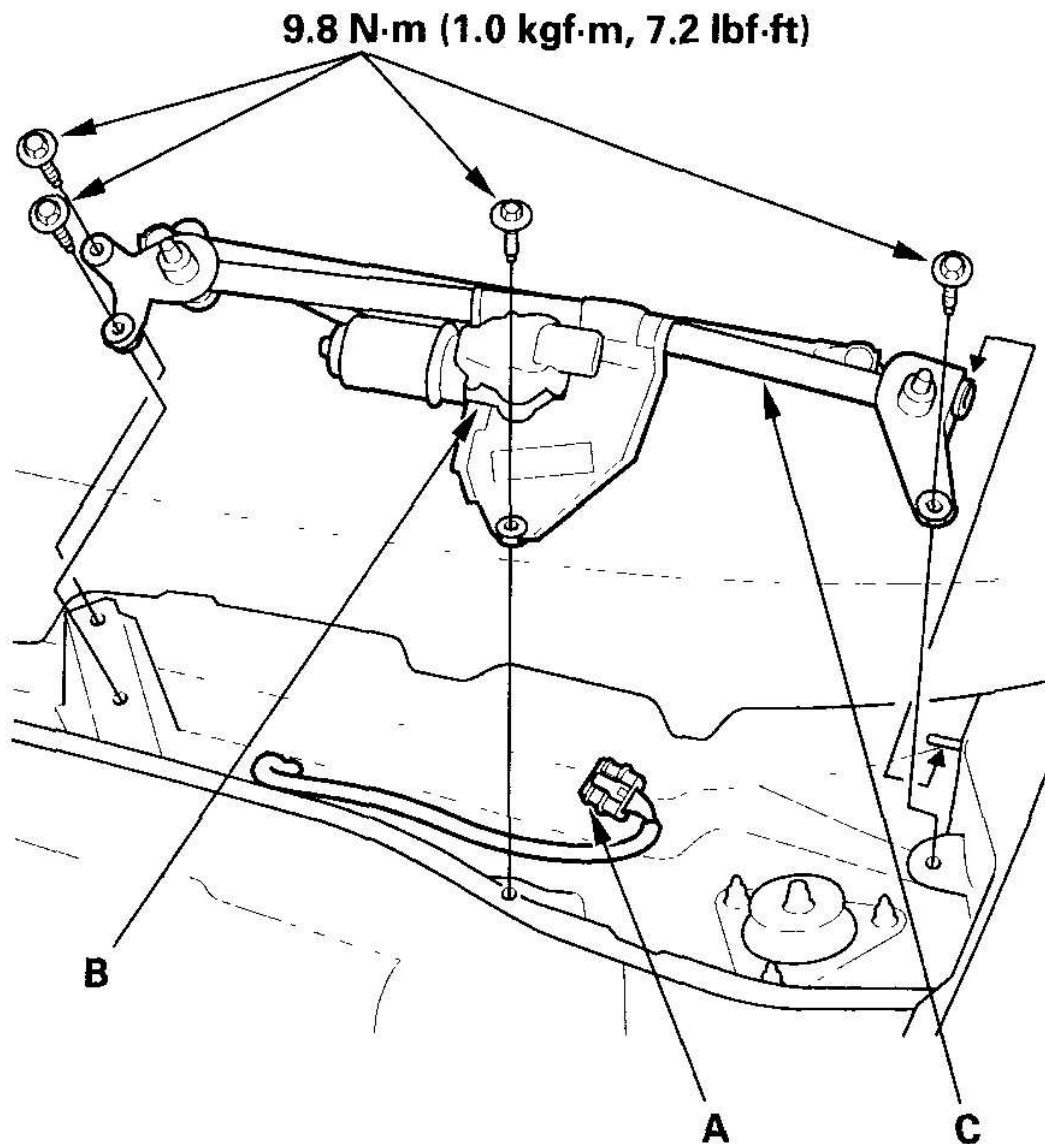
2. Remove the hood seal (A) and cowl cover (B).



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Fig. 21: Removing Hood Seal And Cowl Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 5P connector (A) from the windshield wiper motor (B).



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Fig. 22: Disconnecting 5P Connector From Windshield Wiper Motor
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the mounting bolts and the wiper linkage assembly (C).
5. Scribe a line (A) across the link and windshield wiper linkage to show the original adjustment. Separate the windshield wiper linkage (B) from the wiper motor (C).

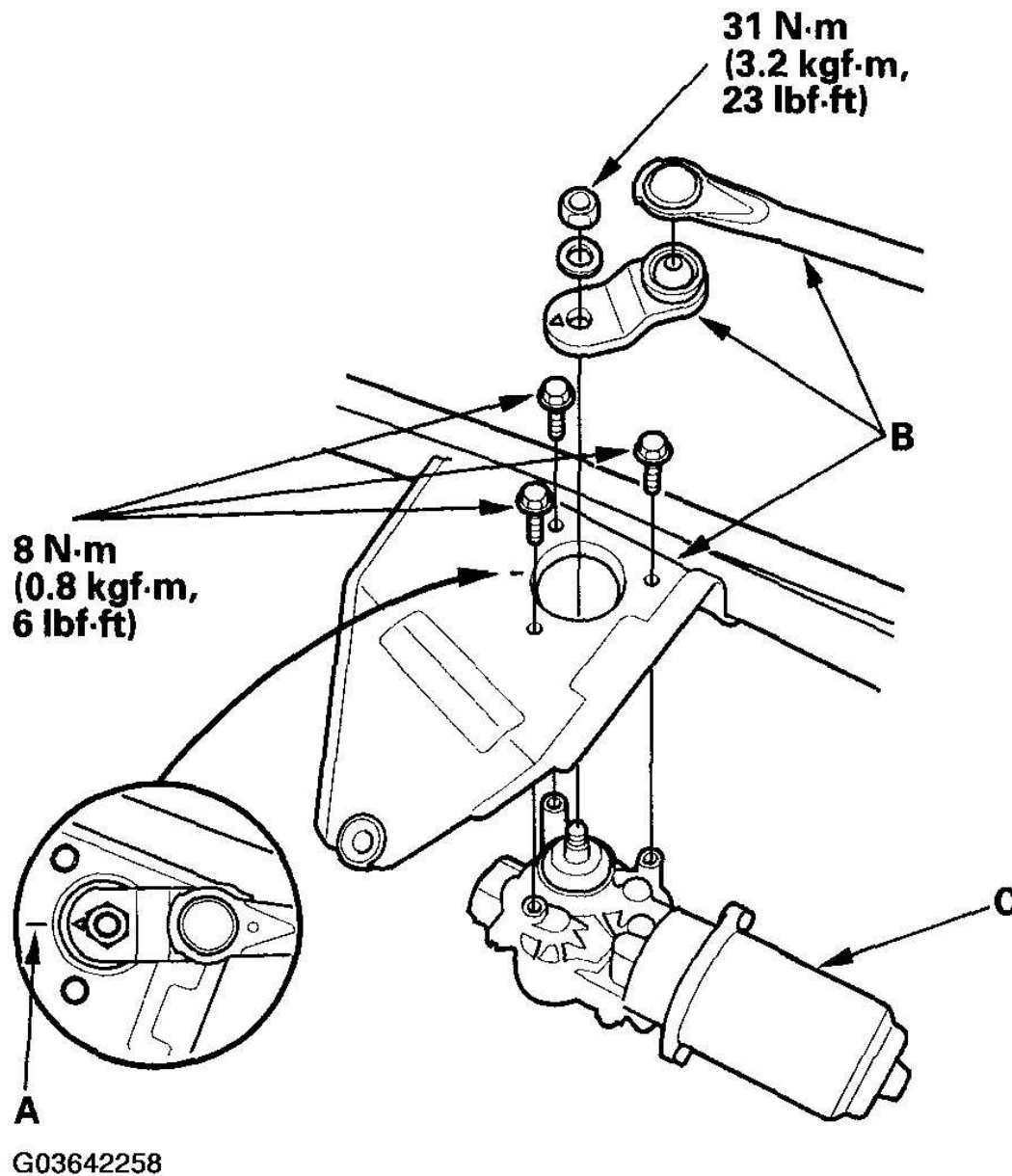


Fig. 23: Separating Windshield Wiper Linkage From Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

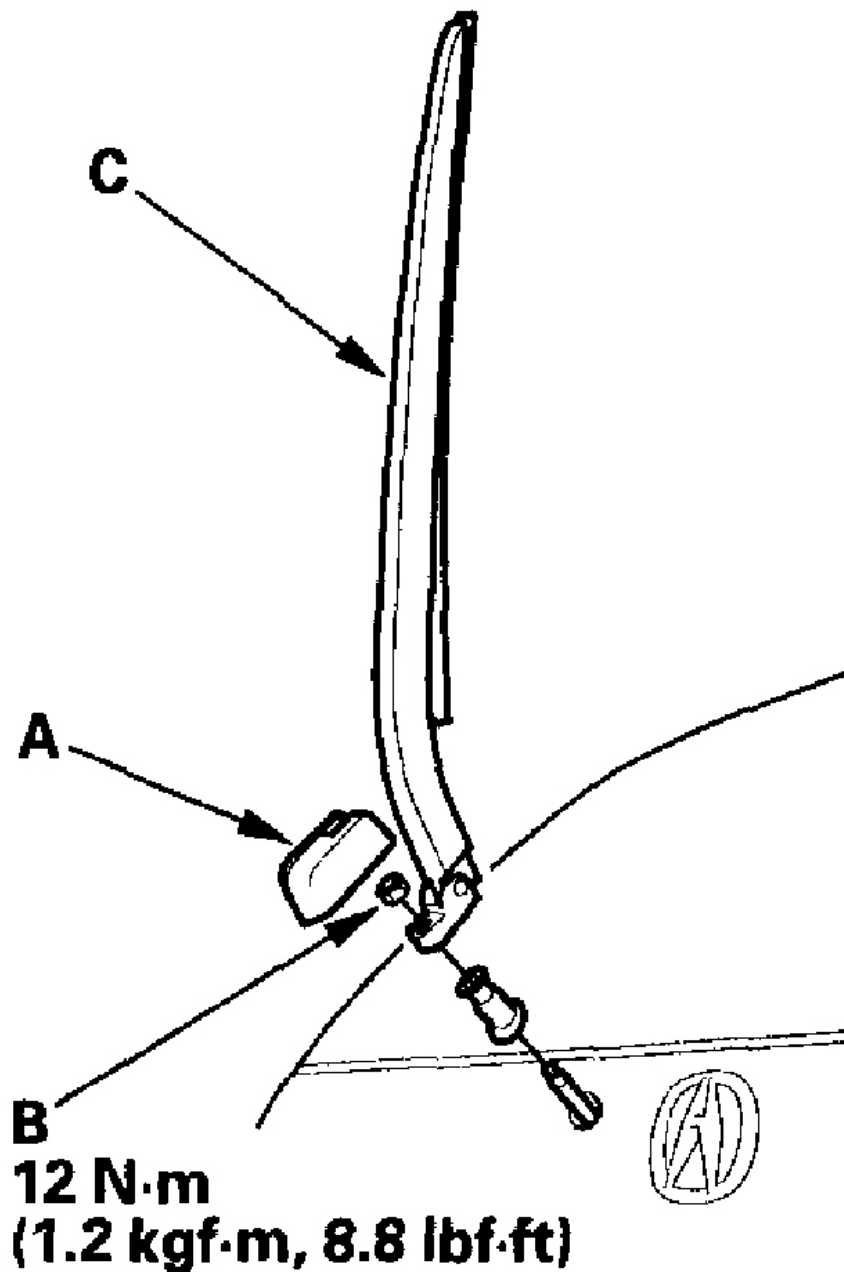
6. Install in the reverse order of removal, and note these items:
 - Apply multipurpose grease to the moving parts.
 - Before reinstalling the wiper arms, turn the wiper switch ON, then OFF to return the wiper shafts to the park position.
 - If necessary, replace any damaged clips.

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- Make sure the wiper motor operates properly.

REAR WINDOW

1. Remove the cap (A), mounting nut (B) and rear window wiper arm (C).



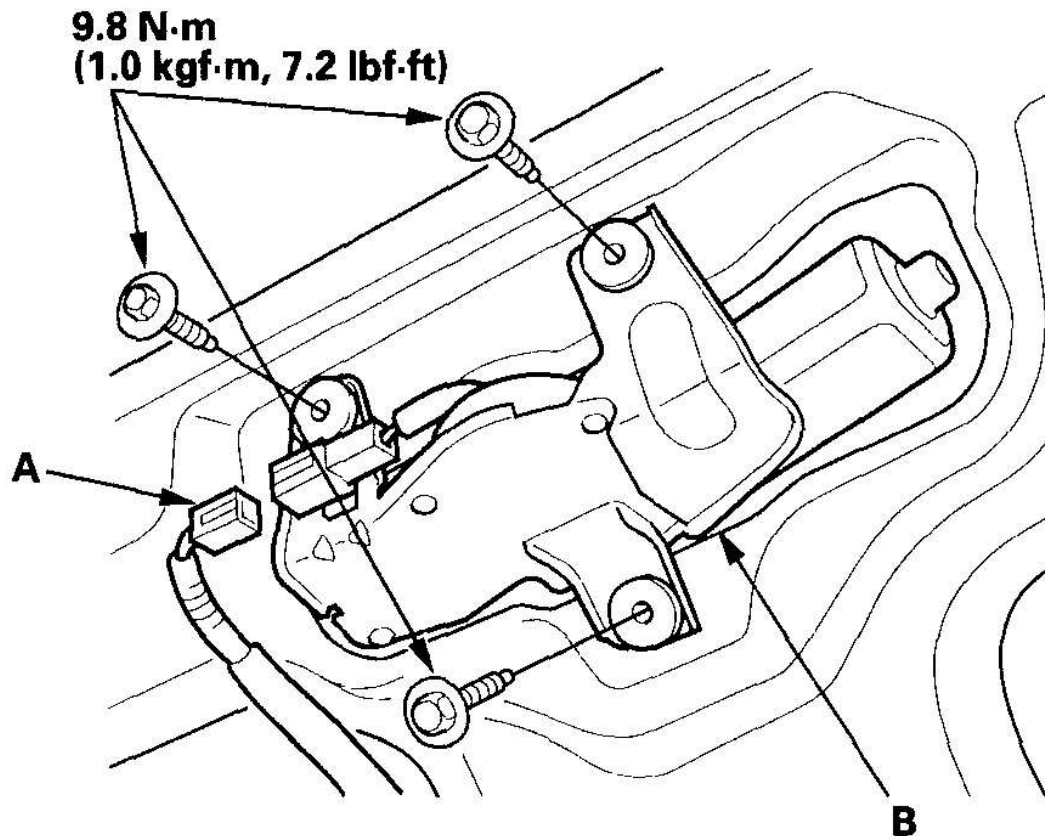
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Fig. 24: Removing Rear Window Wiper Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Open the tailgate and remove the tailgate lower trim panel (see **TRIM REMOVAL/INSTALLATION -**

TAILGATE AREA).

3. Disconnect the 4P connector (A) from the rear window wiper motor (B).



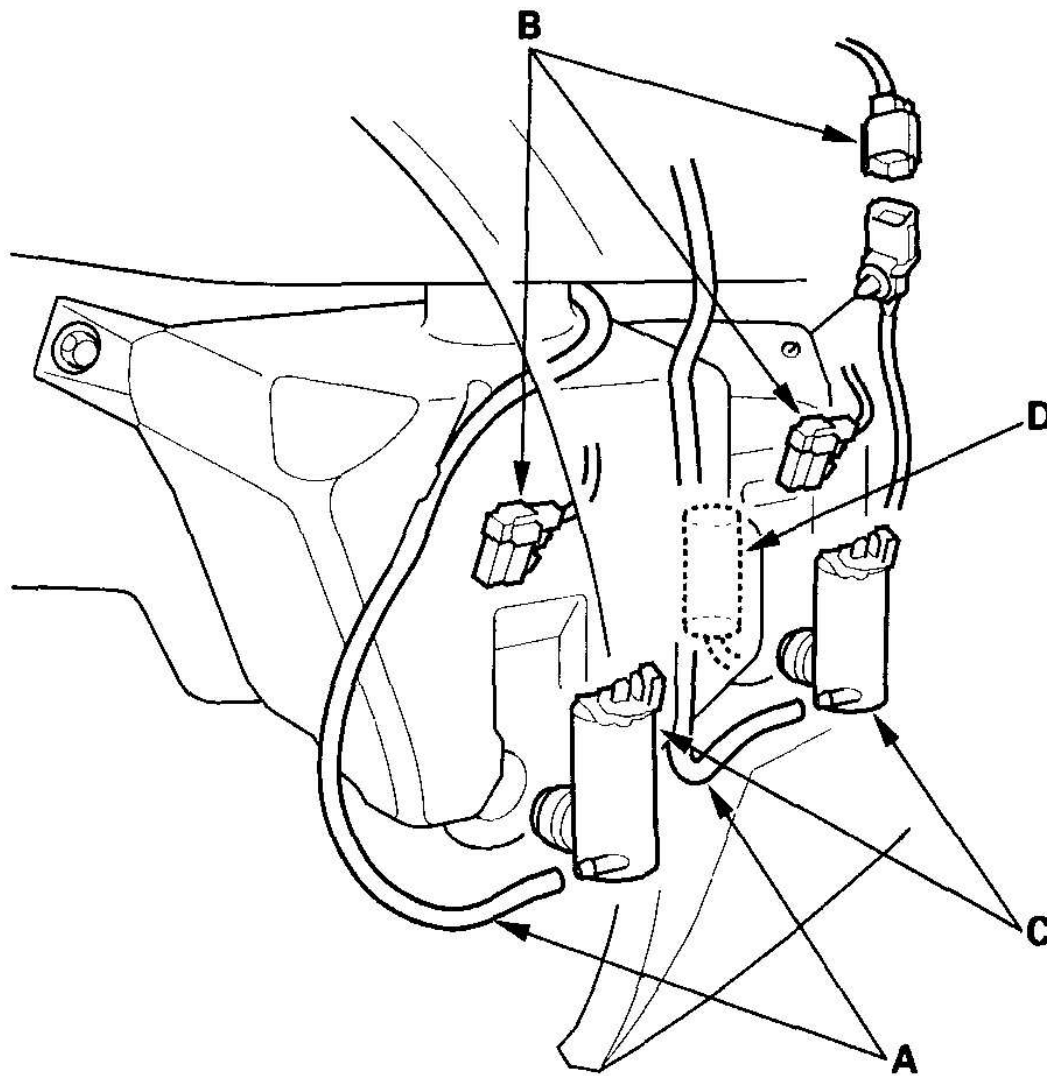
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Fig. 25: Disconnecting 4P Connector From Rear Window Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the mounting bolts and the wiper motor.
5. Install in the reverse order of removal.

WASHER RESERVOIR REPLACEMENT

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the washer tubes (A).

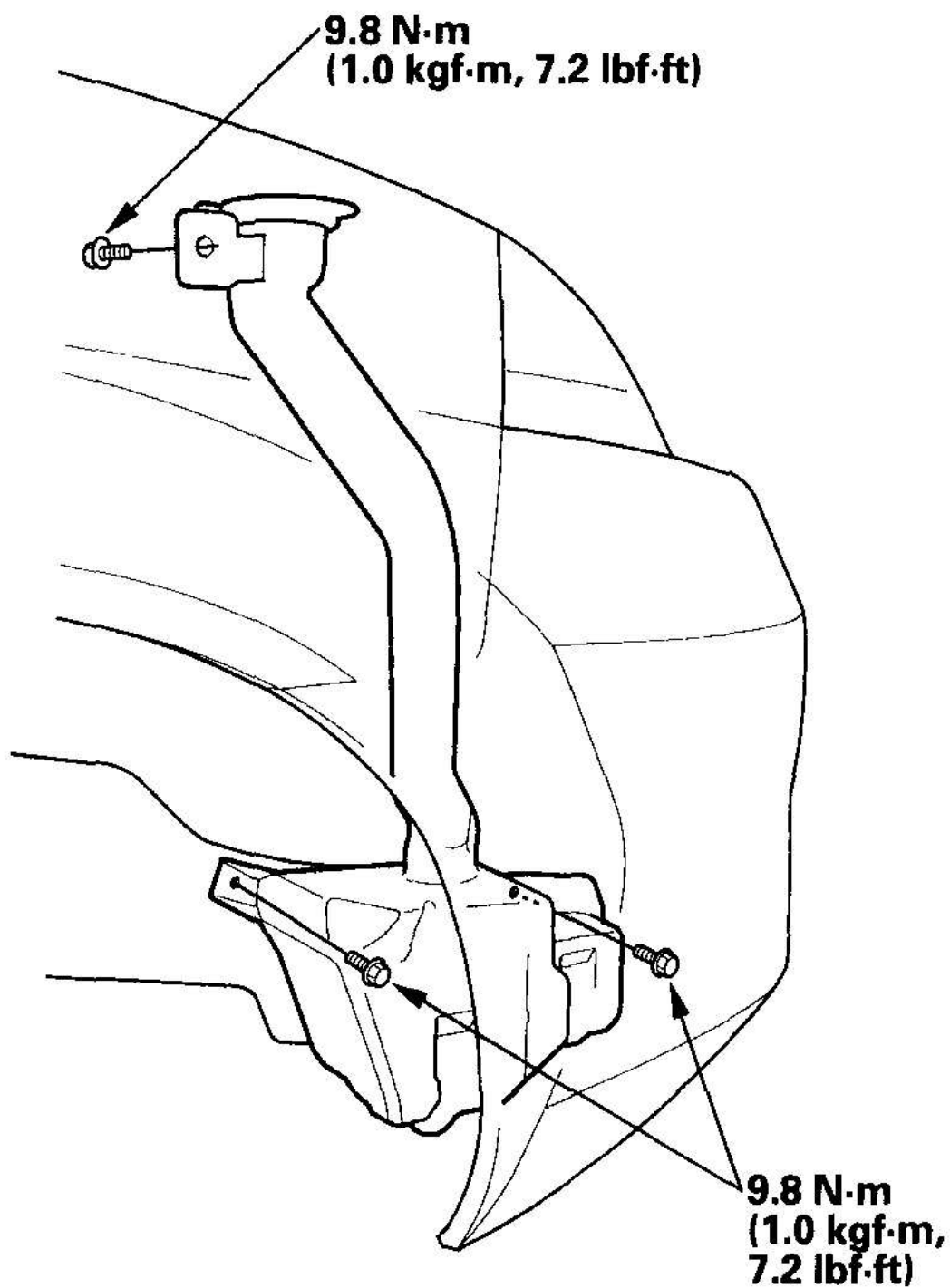


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Fig. 26: Disconnecting Washer Tubes

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 2P connectors (B) from the washer motors (C) and the washer fluid level switch (D).
4. Remove the three mounting bolts and washer reservoir.



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Fig. 27: Removing Washer Reservoir

2006 Acura MDX
2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX

Courtesy of AMERICAN HONDA MOTOR CO., INC.

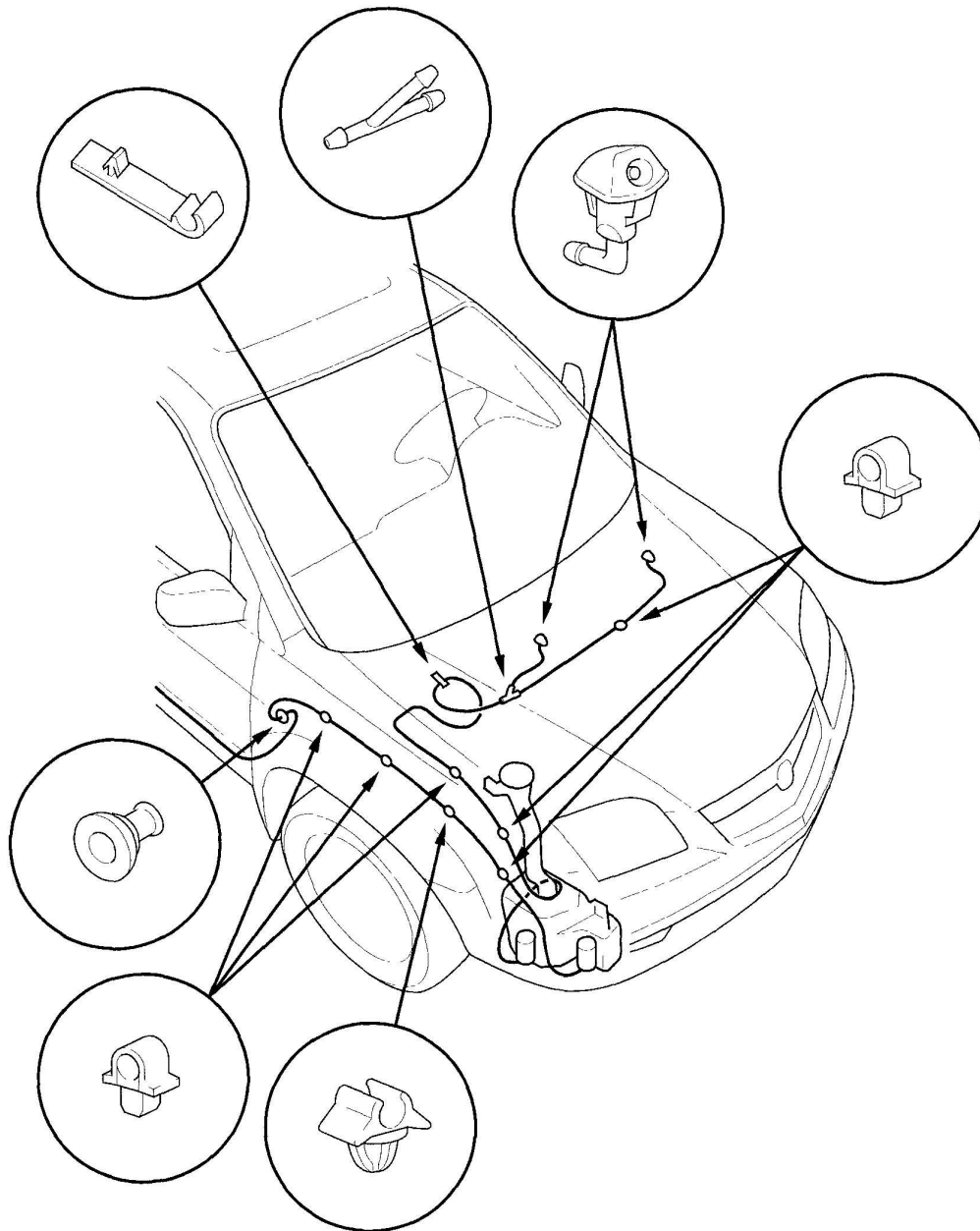
5. Install in the reverse order of removal. Make sure the washer motors operate properly.

WASHER TUBE REPLACEMENT

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Remove the washer nozzles and clips, then remove the tubes.

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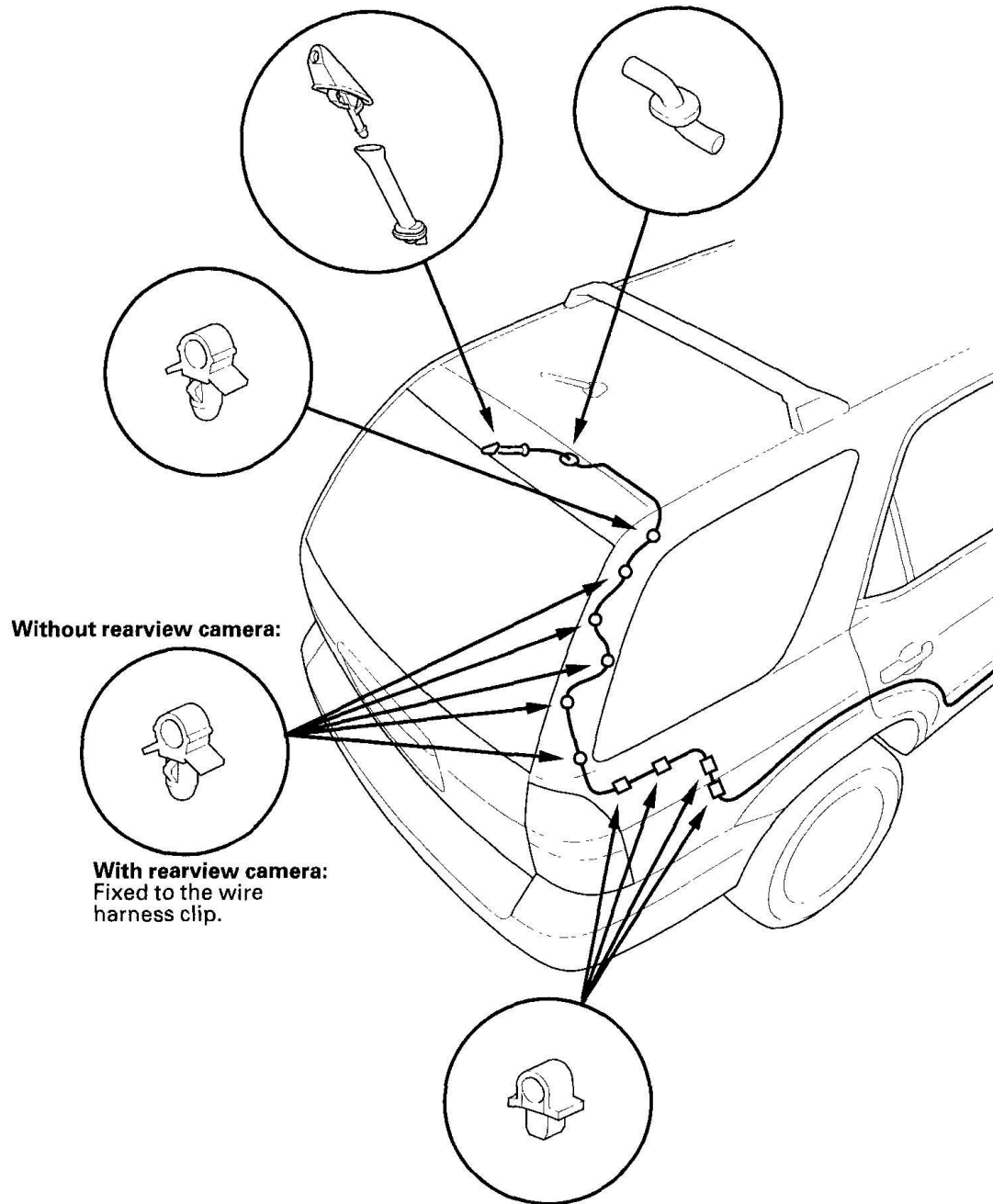
2003-06 ACCESSORIES & EQUIPMENT Wipers/Washers - MDX



NOTE: The illustration shows '03 model.
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Fig. 28: Removing Washer Nozzles, Clips And Tubes (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: The illustration shows '03 model.



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Fig. 29: Removing Washer Nozzles, Clips And Tubes (2 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install in the reverse order of removal. Take care not to pinch the washer tubes. Check the washers operation.