

2007-08 ACCESSORIES AND BODY, CAB

Wipers/Washers - TL

COMPONENT LOCATION INDEX

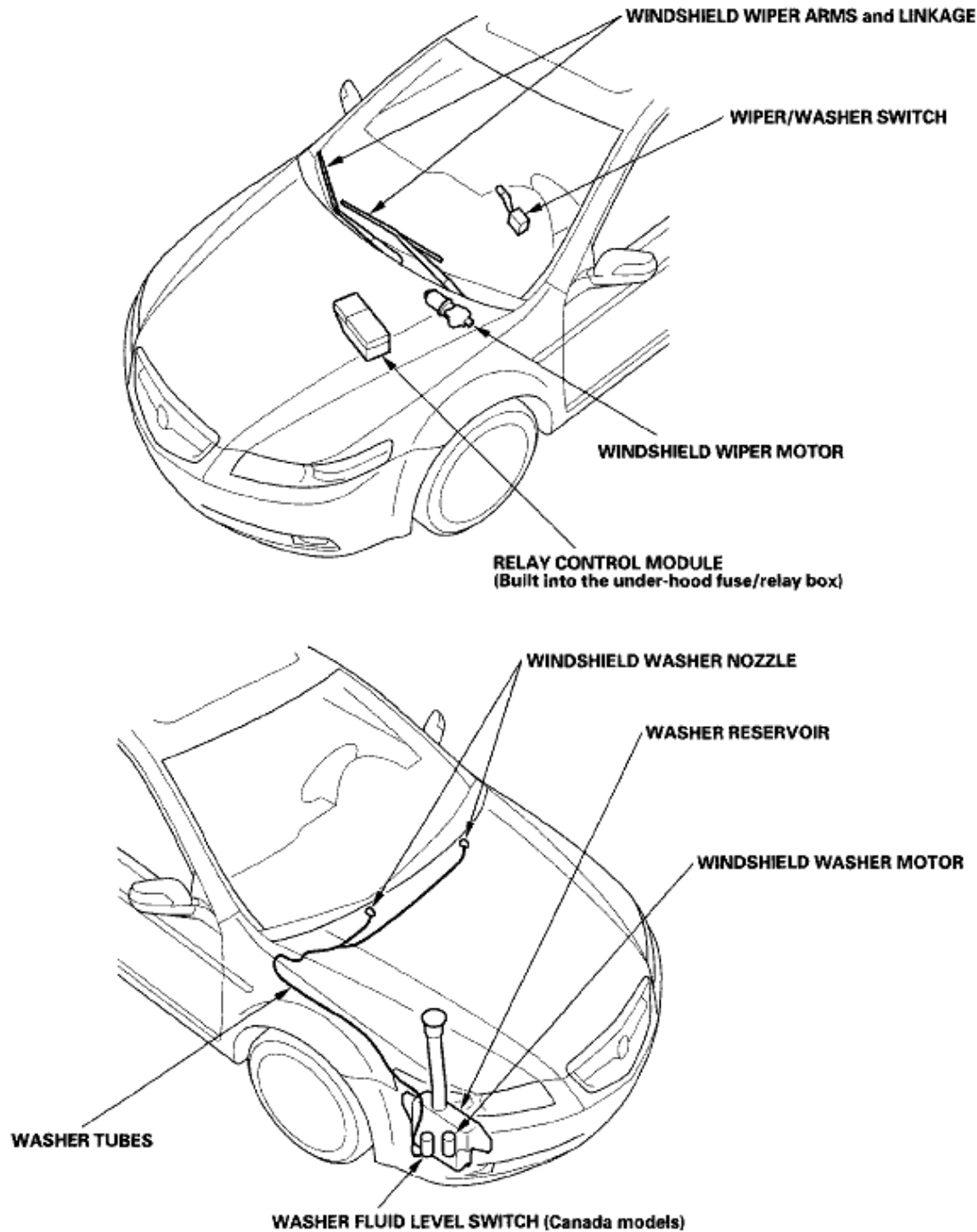


Fig. 1: Identifying Wipers/Washers Component Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

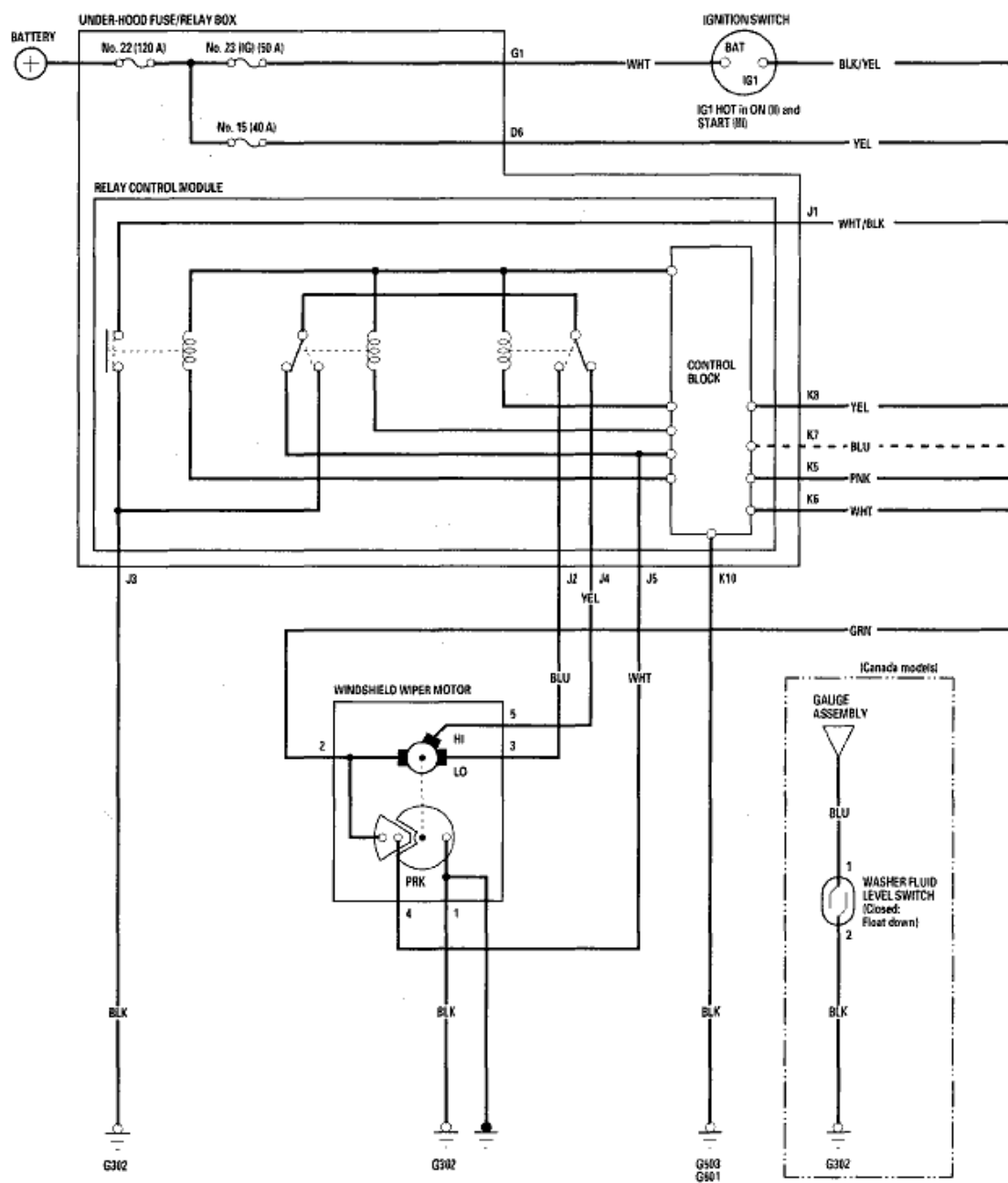


Fig. 2: Wipers/Washers - Circuit Diagram (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

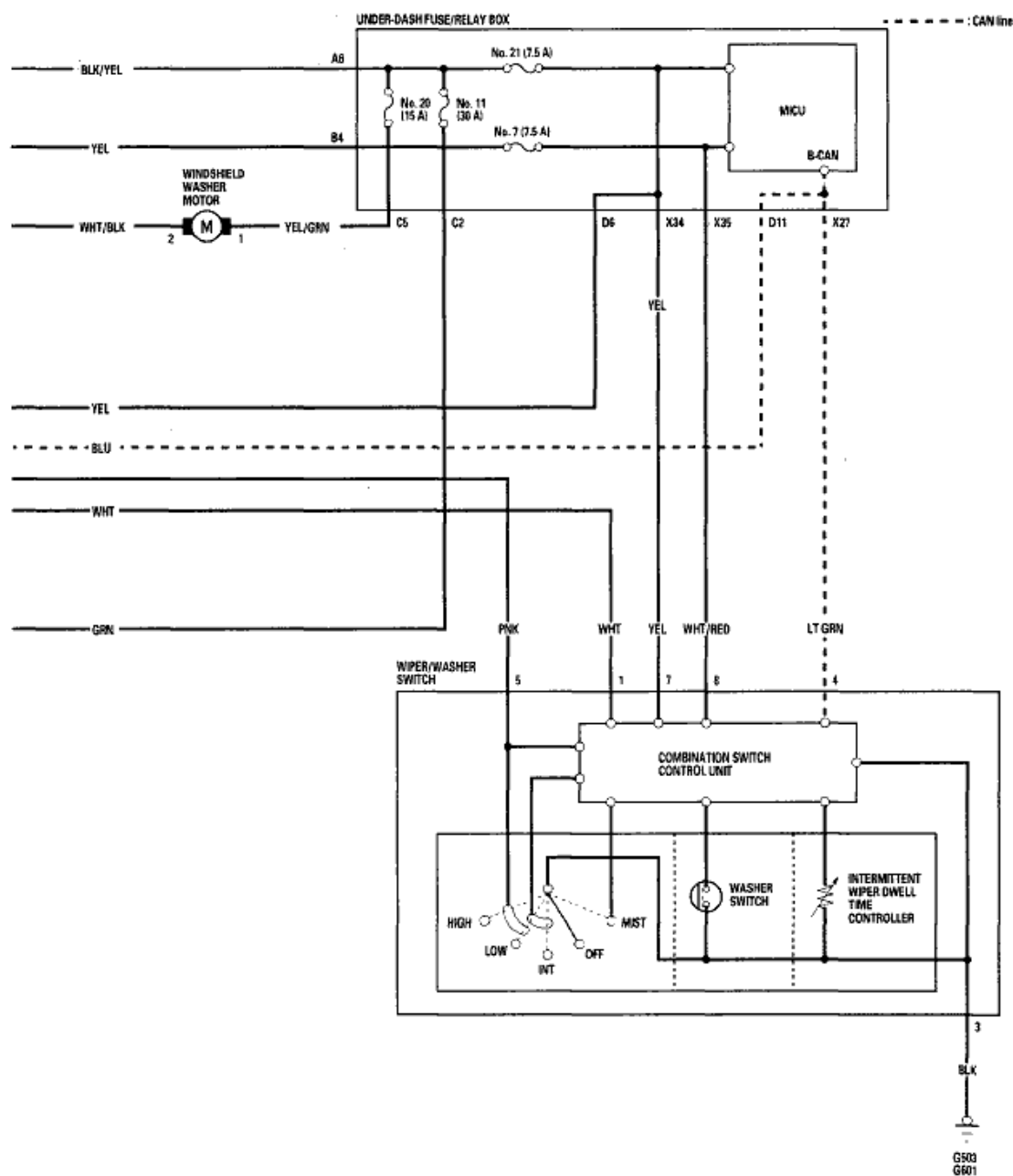


Fig. 3: Wipers/Washers - Circuit Diagram (2 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1076: WINDSHIELD WIPER SIGNAL ERROR

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see TRoubleshooting - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).

3. Turn the wiper switch to INT, LOW, then HIGH for at least 2 seconds each.
4. Check for DTCs with the HDS.

Is DTC B1076 indicated?

YES -Go to step 5.

NO -Intermittent failure. The windshield wiper system is OK at this time. Check pinfits and connections.

5. With the wiper/washer switch OFF, select Windshield Wipers from the BODY ELECTRICAL SYSTEM SELECT MENU, and enter the DATA LIST.
6. Check the ON/OFF information of the Windshield Wiper Switch (BACK-UP) in the DATA LIST.

Is the information indicator OFF?

YES -Go to step 7.

NO -Go to step 11.

7. Turn the wiper switch ON (low or high).
8. Check the ON/OFF information of the Windshield Wiper Switch (BACK-UP) in the DATA LIST.

Is the information indicator ON?

YES -Faulty relay control module; replace the under-hood fuse/relay box.

NO -Go to step 9.

9. Disconnect under-hood fuse/relay box connector K (10P) and the wiper/washer switch 8P connector.
10. Check for continuity between under-hood fuse/ relay box connector K(10P) No. 5 terminal and the wiper/washer switch 8P connector No. 5 terminal.

UNDER-HOOD FUSE/RELAY BOX CONNECTOR K (10P)

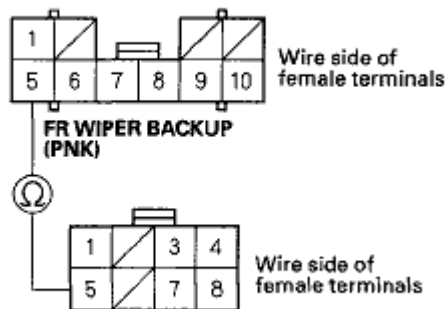


Fig. 4: Checking Continuity Between Under-Hood Fuse/ Relay Box No. 5 Terminal And Wiper/Washer Switch No. 5 Terminal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Faulty combination switch control unit; replace the wiper/washer switch.

NO -Repair an open in the PNK wire.

11. Disconnect under-hood fuse/relay box connector K (10P) connector.
12. Check for continuity between under-hood fuse/ relay box connector K (10P) No. 5 terminal and body ground.

UNDER-HOOD FUSE/RELAY BOX CONNECTOR K (10P)

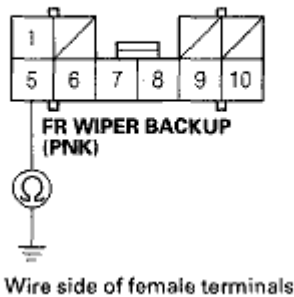


Fig. 5: Checking Continuity Between Under-Hood Fuse/ Relay Box Connector K (10P) No. 5 Terminal And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 13.

NO -Faulty relay control module; replace the under-hood fuse/relay box.

13. Disconnect the wiper/washer switch 8P connector.
14. Check for continuity between under-hood fuse/ relay box connector K (10P) No. 5 terminal and body ground.

UNDER-HOOD FUSE/RELAY BOX CONNECTOR K (10P)

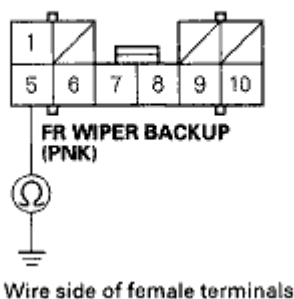


Fig. 6: Checking Continuity Between Under-Hood Fuse/ Relay Box Connector K (10P) No. 5 Terminal And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair a short in the PNK wire.

NO -Faulty wiper/washer switch; replace it.

DTC B1077: WINDSHIELD WIPER (PARK) SIGNAL ERROR

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Turn the wiper switch to LOW, then HIGH for at least 15 seconds in each position.
4. Check for DTCs with the HDS.

Is DTC B1077 indicated?

YES -Go to step 5.

NO -Intermittent failure. The windshield wiper system is OK at this time. Check pinfits and connections.

5. Turn the ignition switch OFF.
6. Perform the wiper motor test (see WIPER MOTOR TEST).

Does the wiper motor operate correctly?

YES -Go to step 7.

NO -Replace the windshield wiper motor and recheck.

7. Turn the ignition switch ON (II).
8. Turn the wiper switch to LOW, then HIGH and check wiper operation.

Do the wipers operate normally?

YES -Go to step 9.

NO -Go to step 12.

9. Disconnect under-hood fuse/relay box connector J (5P) and windshield wiper motor 5P connector.
10. Check for continuity between under-hood fuse/ relay box connector J (5P) No. 5 terminal and the windshield wiper motor 5P connector No. 4 terminal.

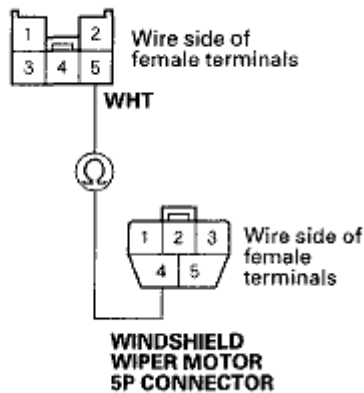
UNDER-HOOD FUSE/RELAY BOX CONNECTOR J (5P)

Fig. 7: Checking Continuity Between Under-Hood Fuse/ Relay Box No. 5 Terminal And Windshield Wiper Motor No. 4 Terminal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 11.

NO -Repair an open in the WHT wire.

11. Check for continuity between under-hood fuse/ relay box connector J (5P) No. 5 terminal and body ground.

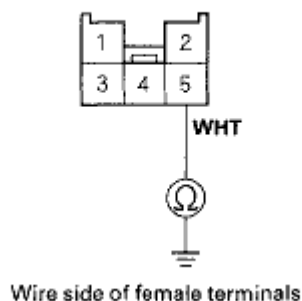
UNDER-HOOD FUSE/RELAY BOX CONNECTOR J (5P)

Fig. 8: Checking Continuity Between Under-Hood Fuse/ Relay Box Connector J (5P) No. 5 Terminal And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair a short in the WHT wire.

NO -Faulty relay control module; replace the under-hood fuse/relay box.

12. Turn the ignition switch OFF, and check the No. 11 (30 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES -Go to step 13.

NO -Replace the blown fuse and recheck the system. If the fuse blown again, check for a short on the GRN wire between the under-dash fuse/ relay box and the windshield wiper motor.

13. Turn the ignition switch ON (II).
14. Measure the voltage between the windshield wiper motor 5P connector No. 2 terminal and body ground.

WINDSHIELD WIPER MOTOR 5P CONNECTOR

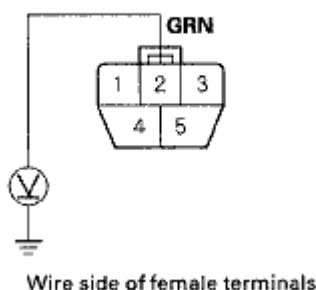


Fig. 9: Measuring Voltage Between Windshield Wiper Motor 5P Connector No. 2 Terminal And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 15.

NO -Repair an open in the GRN wire.

15. Check for continuity between under-hood fuse/ relay box connector J (5P) No. 2 and No. 4 terminals and the windshield wiper motor 5P connector the No. 3 and No. 5 terminals individually.

UNDER-HOOD FUSE/RELAY BOX CONNECTOR J (5P)

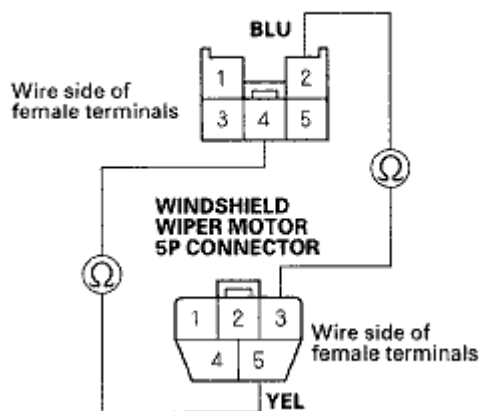


Fig. 10: Checking Continuity Between Under-Hood Fuse/ Relay Box Connector J (5P) No. 2 And No. 4

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Faulty relay control module; replace the under-hood fuse/relay box.

NO -Repair an open in the BLU or YEL wire.

DTC B1281: WINDSHIELD WIPER SWITCH MIST POSITION CIRCUIT MALFUNCTION; DTC B1282: WINDSHIELD WIPER SWITCH INT (AUTO) POSITION CIRCUIT MALFUNCTION; DTC B1283: WINDSHIELD WIPER SWITCH LOW POSITION CIRCUIT MALFUNCTION; DTC B1284: WINDSHIELD WIPER SWITCH HIGH POSITION CIRCUIT MALFUNCTION

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in **B-CAN system diagnosis test mode A** (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Turn the windshield wiper switch in MIST and wait for 2 seconds.
4. Turn the windshield wiper switch OFF and wait for 2 seconds.
5. Turn the windshield wiper switch in INT (AUTO) and wait for 2 seconds.
6. Turn the windshield wiper switch in LOW and wait for 2 seconds.
7. Turn the windshield wiper switch in HIGH and wait for 2 seconds.
8. Check for DTCs with the HDS.

Are DTCs B1281, B1282, B1283, or B1284 indicated?

YES -Replace the windshield wiper/washer switch.

NO -Intermittent failure, the windshield wiper/washer switch and the combination switch control unit are OK at this time. Check pinfits and connections.

WIPER/WASHER SWITCH TEST/ REPLACEMENT

NOTE: The wiper/washer switch is built into the combination switch control unit. For the wiper/washer test, refer to the combination switch control unit input test (see **WIPER/WASHER SWITCH (COMBINATION SWITCH CONTROL UNIT) INPUT TEST**).

1. Remove the dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
3. Disconnect the dashboard wire harness 8P connector (A) from the wiper/washer switch (B), and the combination light switch 12P connector (C).

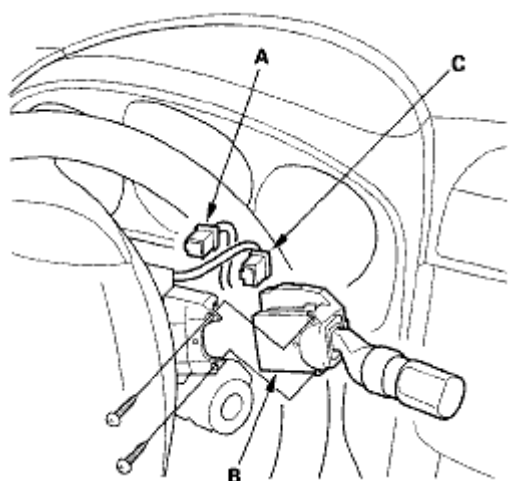


Fig. 11: Identifying Dashboard Wire Harness 8P Connector And Wiper/Washer Switch
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the two screws, then slide out the wiper/washer switch.

WIPER/WASHER SWITCH (COMBINATION SWITCH CONTROL UNIT) INPUT TEST

1. Before troubleshooting the wiper/washer system, troubleshoot the B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
2. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
3. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
4. Disconnect the 8P connector (A) from the wiper/washer switch (B).

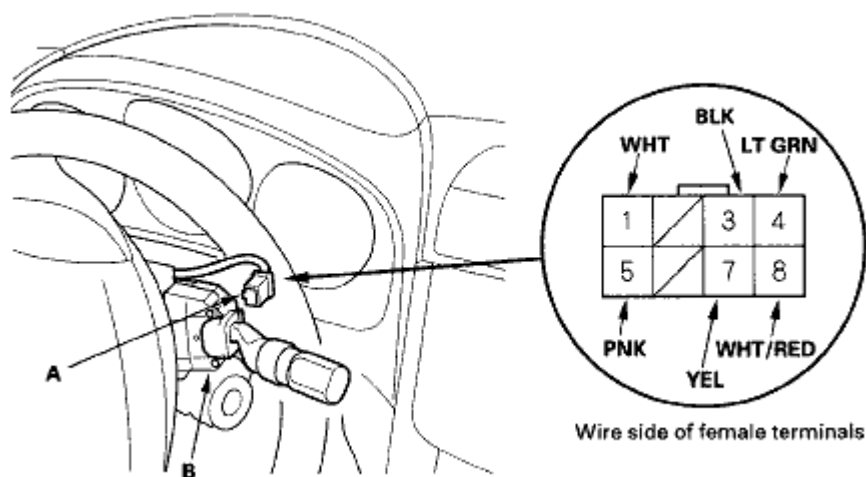


Fig. 12: Identifying Wiper/Washer Switch 8P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. 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 6.
6. 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 7.

WIRE TEST CONDITION REFERENCE

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
3	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G503,G601) • An open in the wire
8	WHT/RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (40 A) fuse in the under-hood fuse/relay box • Blown No. 7 (7.5 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire
7	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire

7. Disconnect the connector from the wiper/washer switch, 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, the combination switch control unit must be faulty, replace the wiper/washer switch.

WIRE TEST CONDITION REFERENCE

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
5	PNK	Disconnect the under-hood fuse/relay box connector K(1 OP)	Check for continuity between the No. 5 terminal and under-hood fuse/relay box connector K (10P) No. 5 terminal: There should be continuity.	An open in the wire
			Check for continuity between the No. 5 terminal and body ground: There should be no continuity.	A short to ground in the wire
4	LT GRN	Disconnect the under-dash fuse/relay box connector X (39P)	Check for continuity between the No. 4 terminal and under-dash fuse/relay box connector X (39P) No. 27 terminal: There should be continuity.	An open in the wire
			Check for continuity between the	

			No. 4 terminal and body ground: There should be no continuity.	A short to ground in the wire
1	WHT	Disconnect the under-hood fuse/relay box connector K(10P)	Check for continuity between the No. 1 terminal and under-hood fuse/relay box connector K (10P) No. 6 terminal: There should be continuity.	An open in the wire
			Check for continuity between the No. 1 terminal and body ground: There should be no continuity.	A short to ground in the wire

WIPER MOTOR TEST

1. Open the hood, and remove the wiper arms (see **WIPER MOTOR REPLACEMENT**).

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

2. Remove the hood seal and cowl cover.
3. Disconnect the 5P connector (A) from the wiper motor (B).

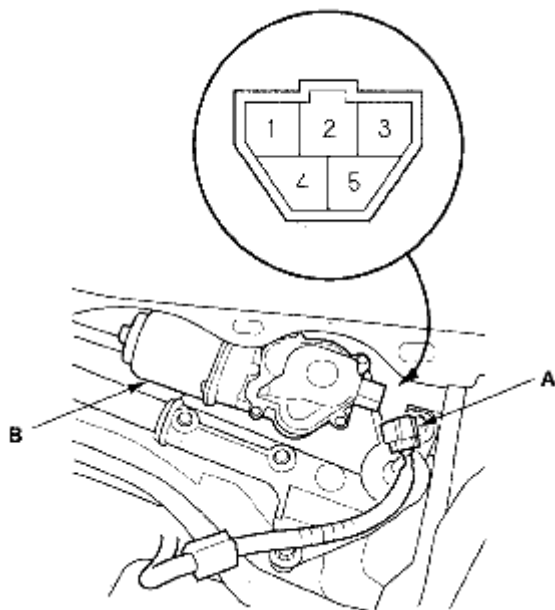


Fig. 13: Identifying Wiper Motor And 5P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Test the motor by connecting battery power to the No. 2 terminal and ground the No. 3 terminal of the wiper motor 5P connector. The motor should run at low speed. If the motor does not run or fails to run smoothly, replace the motor.
5. Test the motor by connecting battery power to the No. 2 terminal and ground the No. 5 terminal of the wiper motor 5P connector. The motor should run at high speed. If the motor does not run or fails to run smoothly, replace the motor.
6. Connect the battery power to the No. 2 terminal, and ground to the No. 3 and No. 1 terminals of the 5P connector. Then connect an analog voltmeter between the No. 2 (+) terminal and the No. 4

(ground) terminal. When the park switch contacts, the pointer should swing. If not, replace the motor.

WASHER MOTOR TEST

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

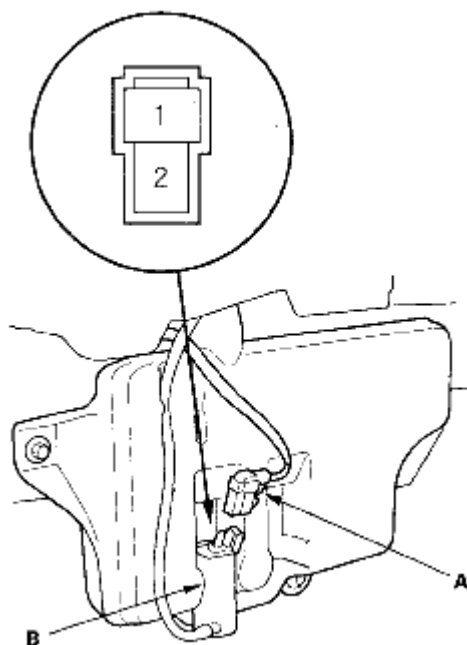


Fig. 14: Identifying Washer Motor And 2P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor by connecting battery power to the No. 1 terminal and ground to the No. 2 terminal of the washer motor. The motor should run.
 - 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 washer motor outlet.

WIPER MOTOR REPLACEMENT

1. Open the hood. Remove the left and right rear engine compartment covers (see **ENGINE REMOVAL**).
2. Remove the caps, nuts (A), and the windshield wiper arms (B).

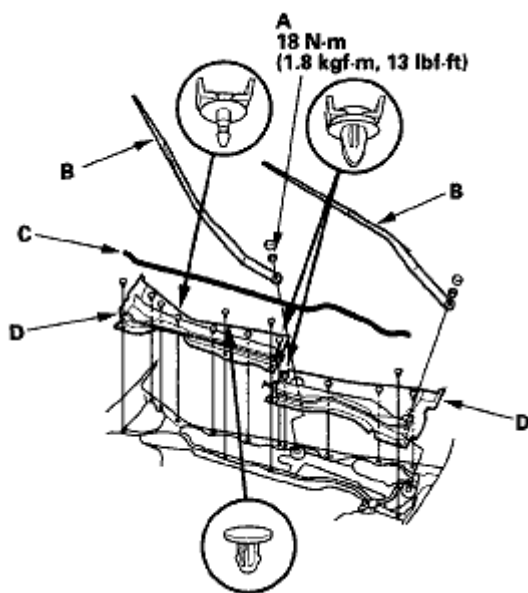


Fig. 15: Identifying Caps, Nuts And Windshield Wiper Arms With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the hood seals (C) and cowl covers (D).
4. Disconnect the 5P connector (A) from the wiper motor.

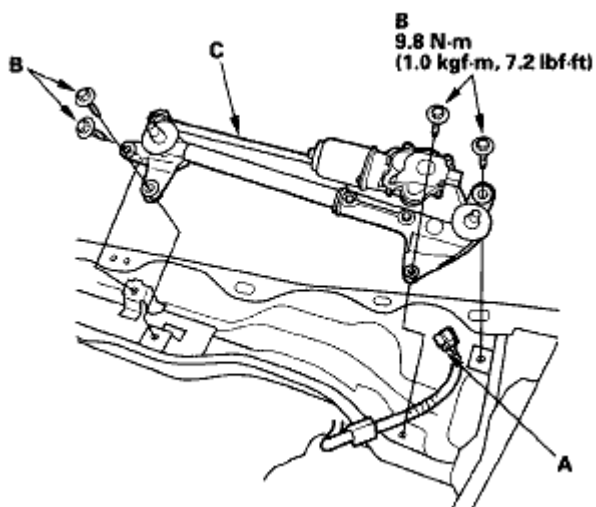


Fig. 16: Identifying Wiper Motor 5P Connector, Hood Seals And Cowl Covers With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the four bolts (B) and wiper linkage assembly (C).
6. 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).

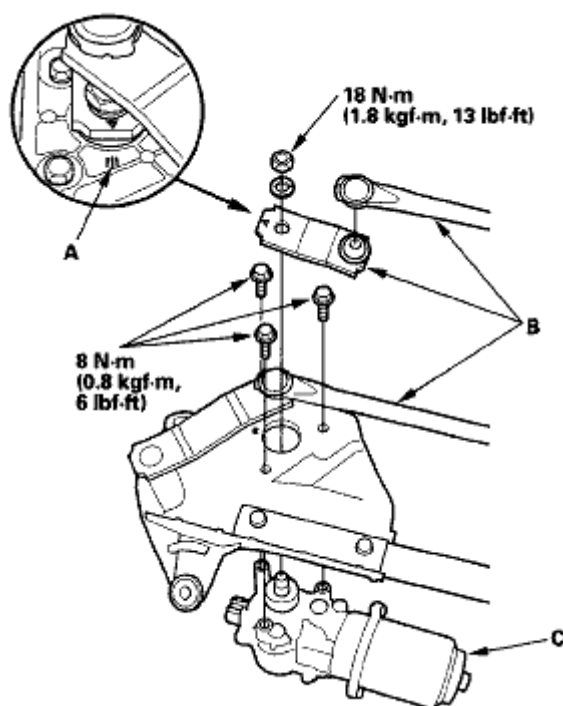


Fig. 17: Identifying Windshield Wiper Linkage And Wiper Motor With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install in the reverse order to 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.
 - Check the wiper motor operation.

WASHER RESERVOIR REPLACEMENT

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the washer tube (A) and washer motor 2P connector (B).

Washer reservoir capacity: 2.5 L (2.6 US qt) (USA models)

4.5 L (4.8 US qt) (Canada models)

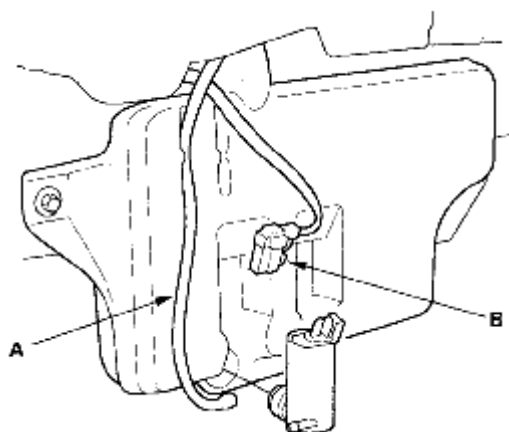


Fig. 18: Identifying Washer Tube And Washer Motor 2P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the clip and three bolts (A), then remove the washer reservoir (B).

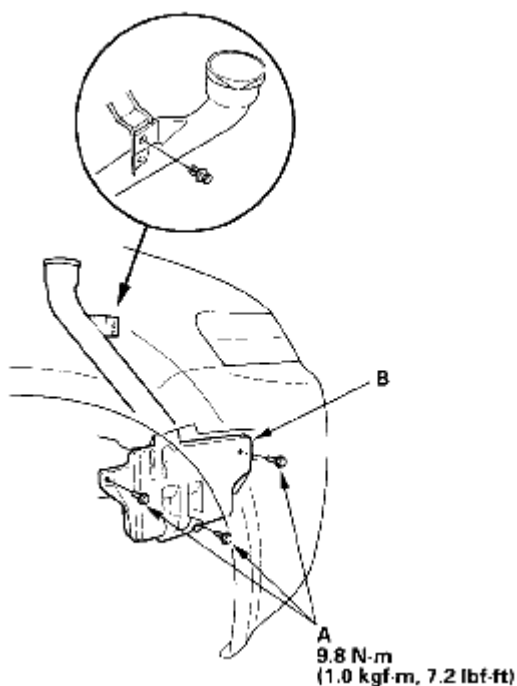


Fig. 19: Identifying Washer Reservoir Clip And Bolts With Torque Specifications
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the reservoir in the reverse order of removal.

WASHER FLUID LEVEL SWITCH TEST

CANADA MODELS

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

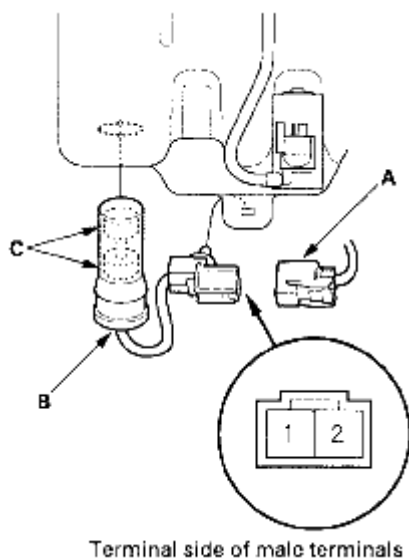


Fig. 20: Identifying Washer Fluid Level Switch And 2P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the washer fluid level switch from 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 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.

WASHER TUBE REPLACEMENT

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

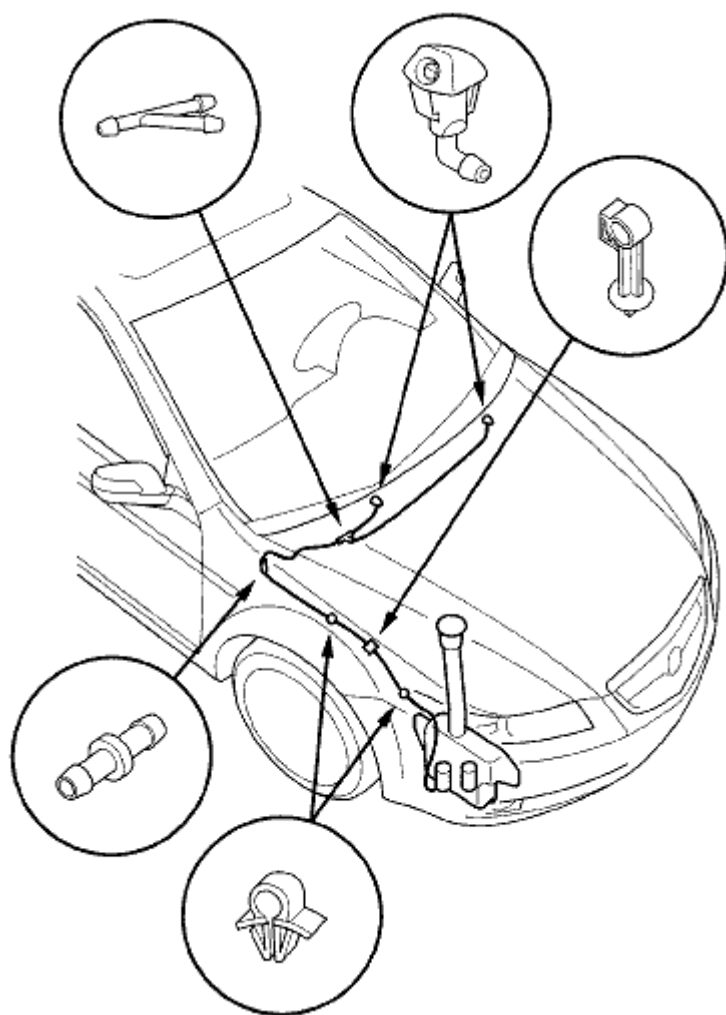


Fig. 21: Identifying Washer Tube

Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

WIPER BLADE REPLACEMENT

1. Lift the windshield wiper arm off the windshield, rising the driver's side first, then the passenger's side.
2. Press and hold the tab (A) and slide the wiper blade (B) toward the tab until it releases from the wiper arm (C).

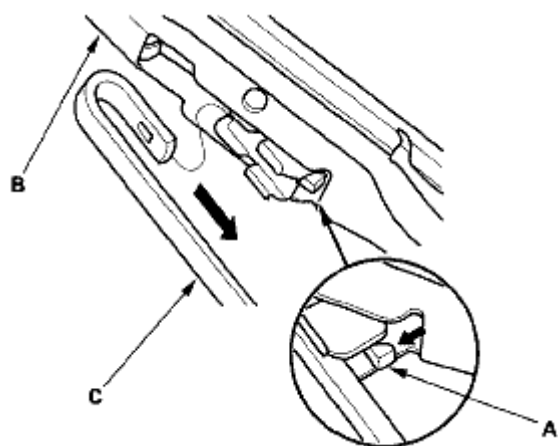


Fig. 22: Identifying Wiper Blade And Wiper Arm
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Slide out the old rubber (A).

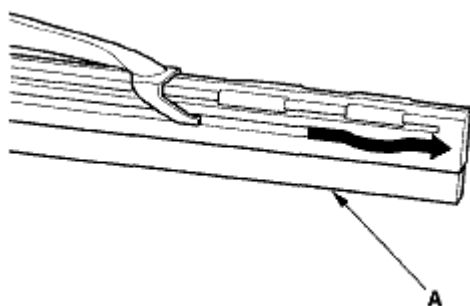


Fig. 23: Sliding Out Rubber
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install a new rubber in the reverse order of removal.
5. Install the wiper blades onto the windshield wiper arms in the reverse order of removal.
6. Test by turning on the wipers. If the blades slip, turn off the wipers and seat the attachments more firmly.

WIPER ARM/NOZZLE ADJUSTMENT

Wiper arms stop position

1. When the wiper arms stop at automatic stop position, confirm the wiper arms are at the standard position.
 - a. Position at about 1.5 in. (40 mm) from the top of cowl cover (A)
 - b. Position at about 1.2 in. (33 mm) from the top of cowl cover (A)

Washer nozzle position

2. When you jet the washer fluid, confirm 50% or more of the jet fluid splashes down within the slash area. If there are not standard positions, adjust the nozzles.

- c: Position at about 11.6 in. (295 mm) from the top of black ceramic (B) at lower windshield
 d: Position at about 11.6 in. (295 mm) from the top of black ceramic (B) at lower windshield
 e: Position at about 11.2 in. (285 mm) from the windshield center line (C)

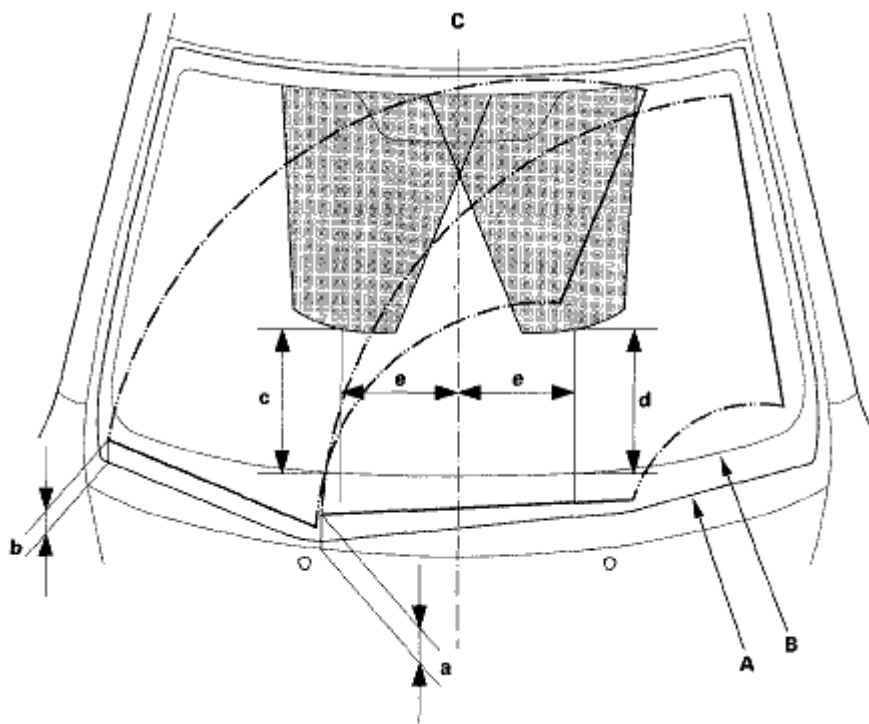


Fig. 24: Identifying Wiper Arm/Nozzle Spray Position
 Courtesy of AMERICAN HONDA MOTOR CO., INC.