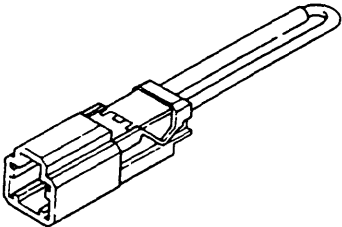
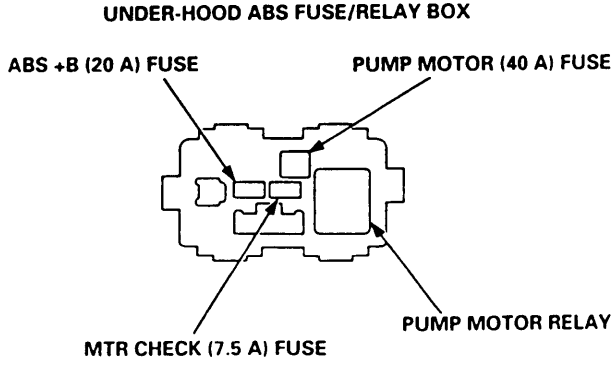
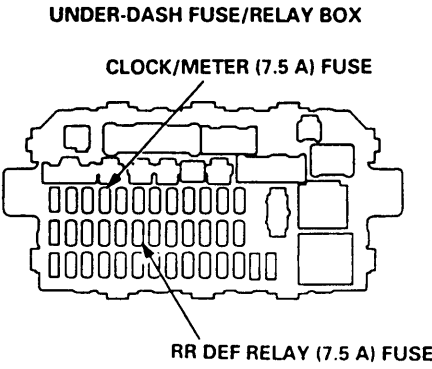
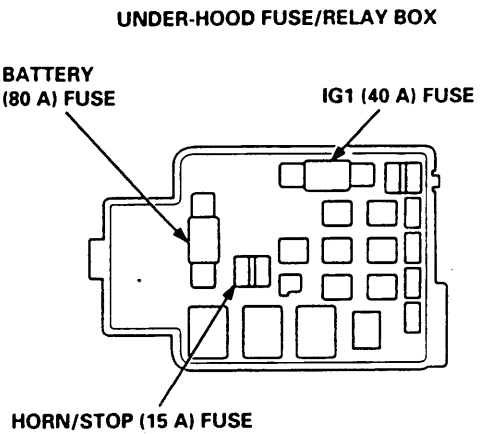
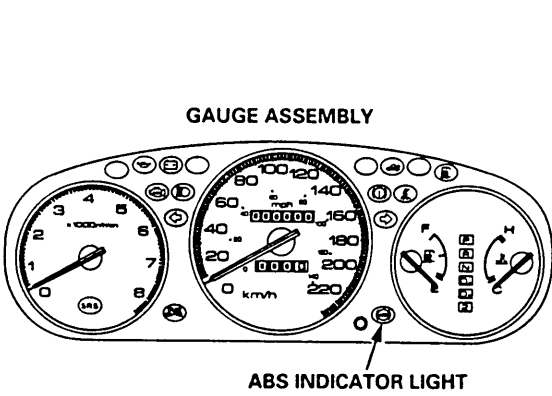
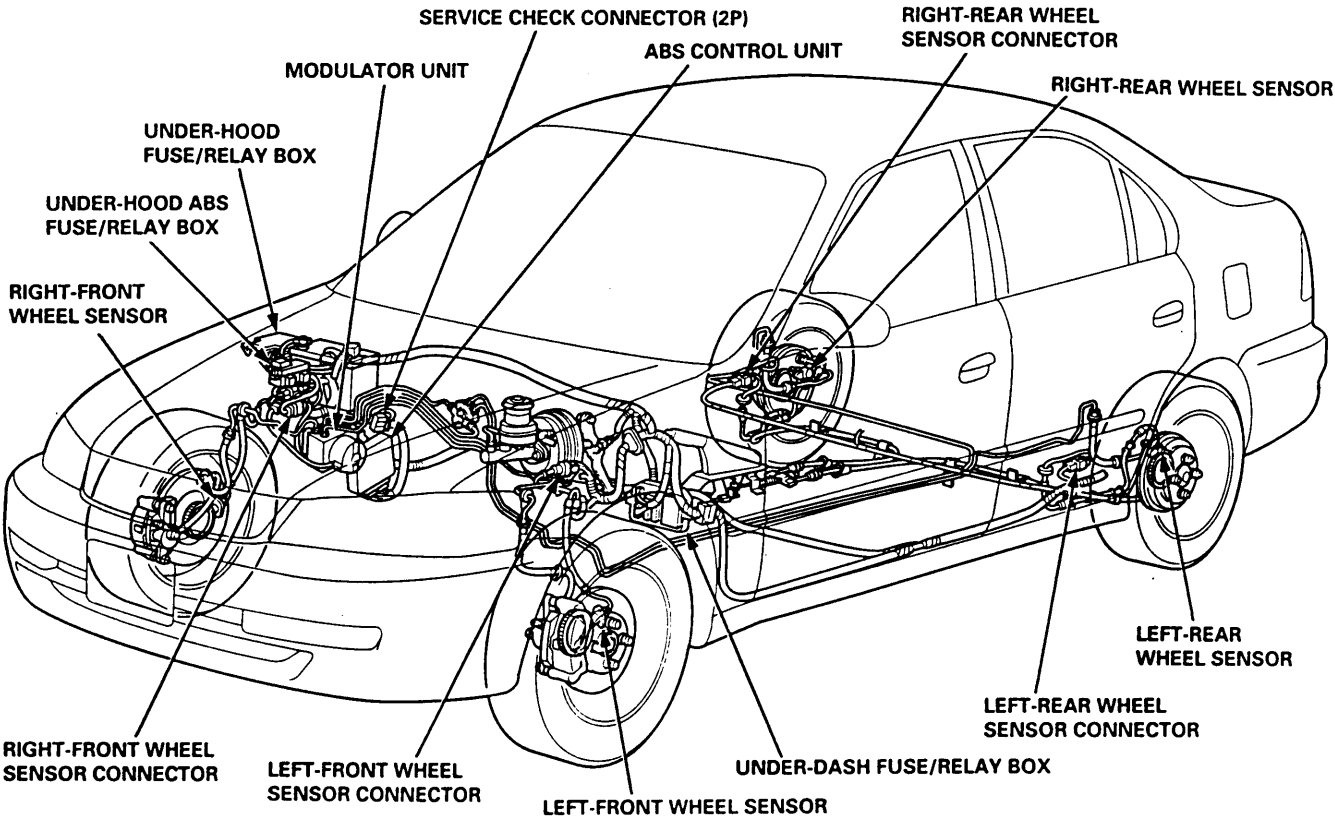


Special Tools

Ref. No.	Tool Number	Description	Qty	Page Reference
①	07PAZ – 0010100	SCS Service Connector	1	19-38
 ①				



Component Locations

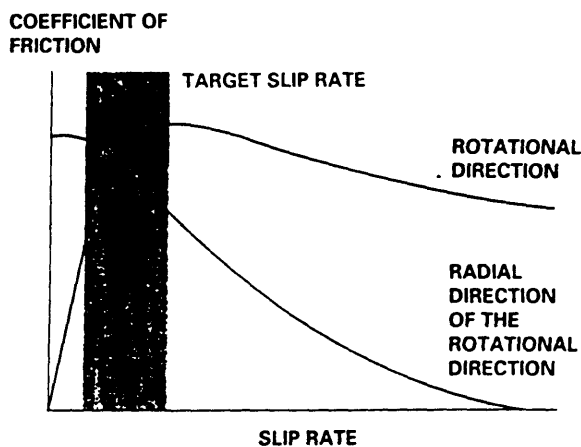


Anti-lock Brake System (ABS)

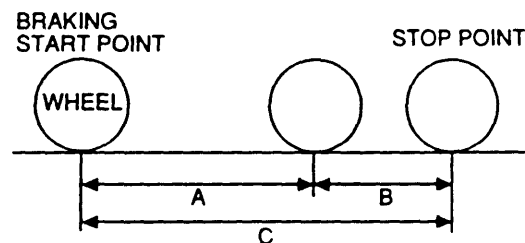
Features/Construction

When the brake pedal is depressed during driving, the wheels can lock before the vehicle comes to a stop. In such a case, the maneuverability of the vehicle is reduced if the front wheels are locked, and the stability of the vehicle is reduced if the rear wheels are locked, creating an extremely unstable condition. The ABS precisely controls the slip rate of the wheels to ensure the grip force of the tires, and it thereby ensures the maneuverability and stability of the vehicle. Judging the vehicle speed, the ABS calculates the slip rate of the wheels based on the vehicle speed and the wheel speed, then it controls the brake fluid pressure to attain the target slip rate.

Grip Force of Tire and Road Surface

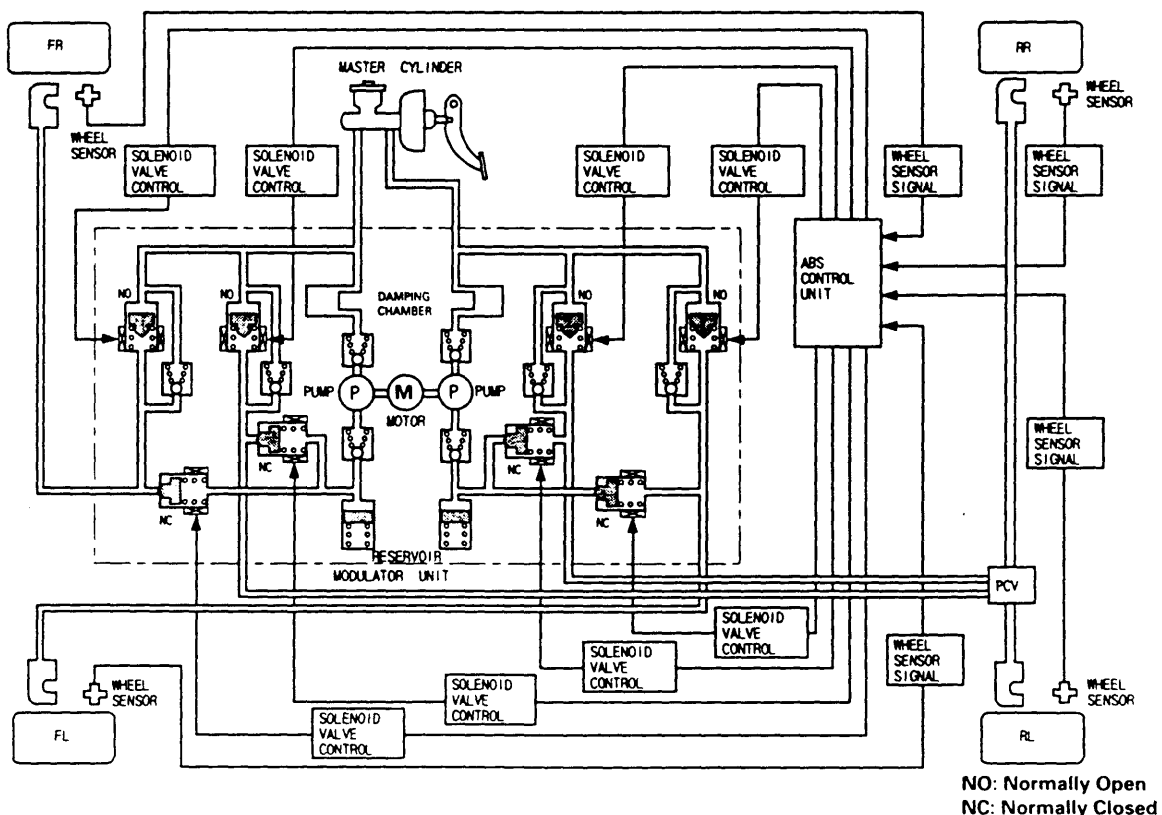


Slip Rate



A: Distance without slip
B: Slipped distance
C: Actual distance to stop

$$\text{SLIP RATE} = \frac{B}{C} = \frac{\text{VEHICLE SPEED} - \text{WHEEL SPEED}}{\text{VEHICLE SPEED}}$$



NO: Normally Open
NC: Normally Closed



Operation

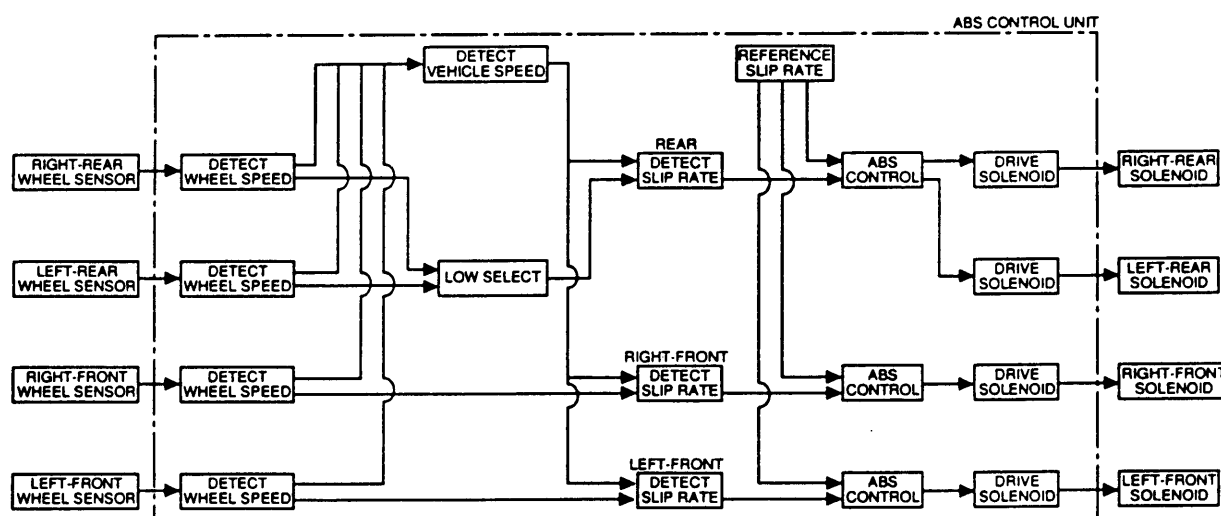
ABS Control Unit

Main Control

The ABS control unit detects the wheel speed based on the wheel sensor signal it received, then it calculates the vehicle speed based on the detected wheel speed. The control unit detects the vehicle speed during deceleration based on the rate of deceleration.

The ABS control unit calculates the slip rate of each wheel, and it transmits the control signal to the modulator unit solenoid valve when the slip rate is high.

The pressure reduction control is a three-mode system, that is pressure reduction, pressure retaining and pressure intensifying modes.



Self-diagnosis Function

The ABS control unit is equipped with a main CPU and a sub CPU, and the CPUs check each other.

The CPUs check the circuit of the system.

When the CPUs detect failure, they shift to the "system down mode" or the "control inhibition mode".

MODE	ABS INDICATOR LIGHT	MAIN RELAY	SOLENOID VALVE	CPU	Restart condition		DTC
SYSTEM DOWN	ON	No operation	Drive inhibition	Operation*1	Ignition switch	OFF → ON (II)	Memory
CONTROL INHIBITION	ON	No operation	Drive inhibition	Operation	Automatic		Memory

*1: Except CPU failure

The self-diagnosis can be classified into these four categories.

- ①: Initial diagnosis
- ②: Except ABS control
- ③: During ABS control
- ④: During warning

On-board Diagnosis Function

The ABS control unit is connected to the data link connector (16P).

The ABS system can be diagnosed with the Honda PGM Tester.

(cont'd)

Anti-lock Brake System (ABS)

Operation (cont'd)

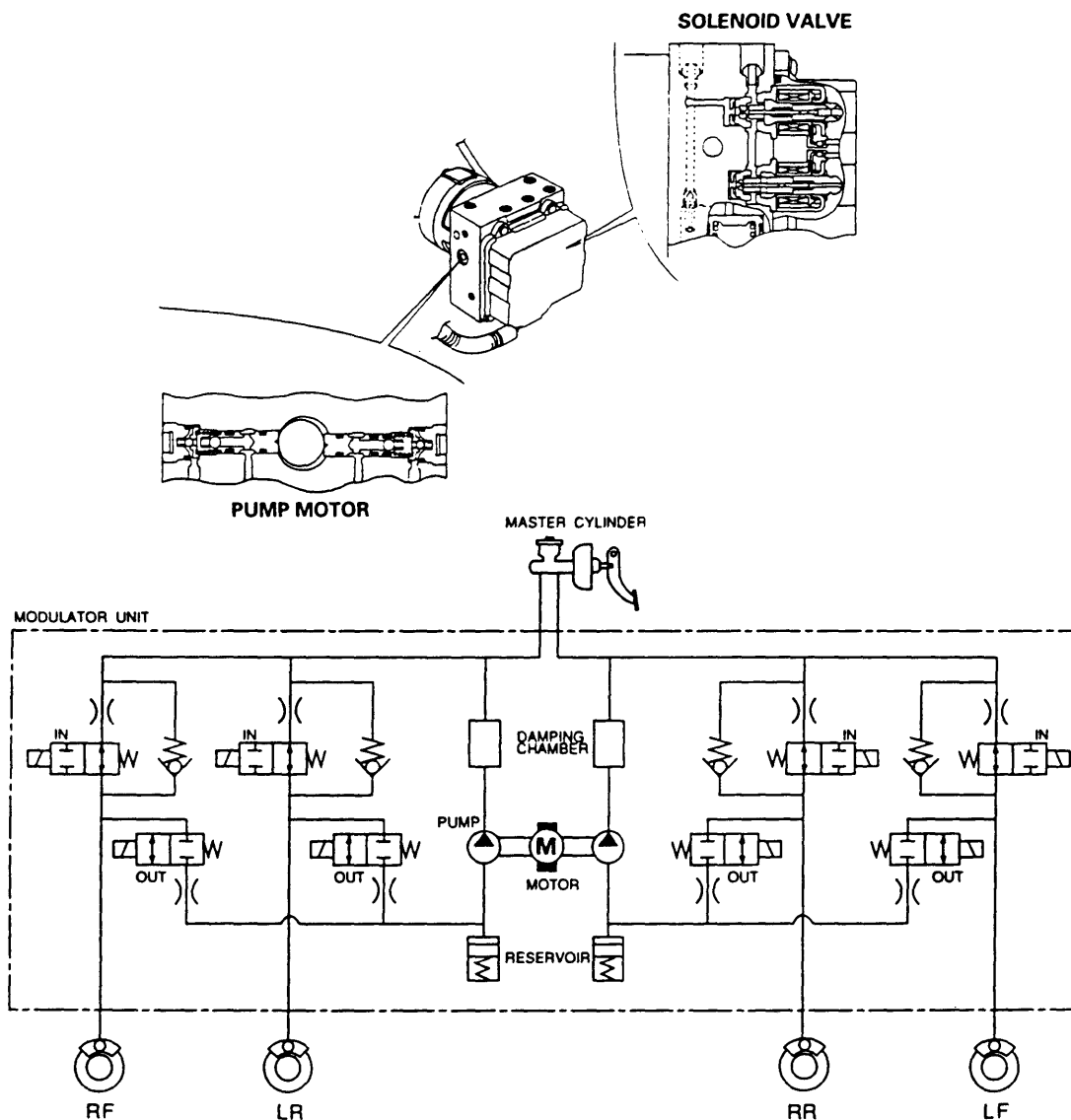
ABS Modulator

The ABS modulator consists of the inlet solenoid valve, outlet solenoid valve, reservoir, pump, pump motor and the damping chamber.

The modulator reduces the caliper fluid pressure directly. It is a circulating-type modulator because the brake fluid circulates through the caliper, reservoir and the master cylinder.

The hydraulic control has three modes: pressure reduction, pressure retaining and pressure intensifying.

The hydraulic circuit is the independent four channel-type, one channel for each wheel.



Pressure intensifying mode: Inlet valve open, outlet valve closed

Master cylinder fluid is pumped out to the caliper.

Pressure retaining mode: Inlet valve closed, outlet valve closed

Caliper fluid is retained by the inlet valve and outlet valve.

Pressure reduction mode: Inlet valve closed, outlet valve open

Caliper fluid flows through the outlet valve to the reservoir.

Motor operation mode:

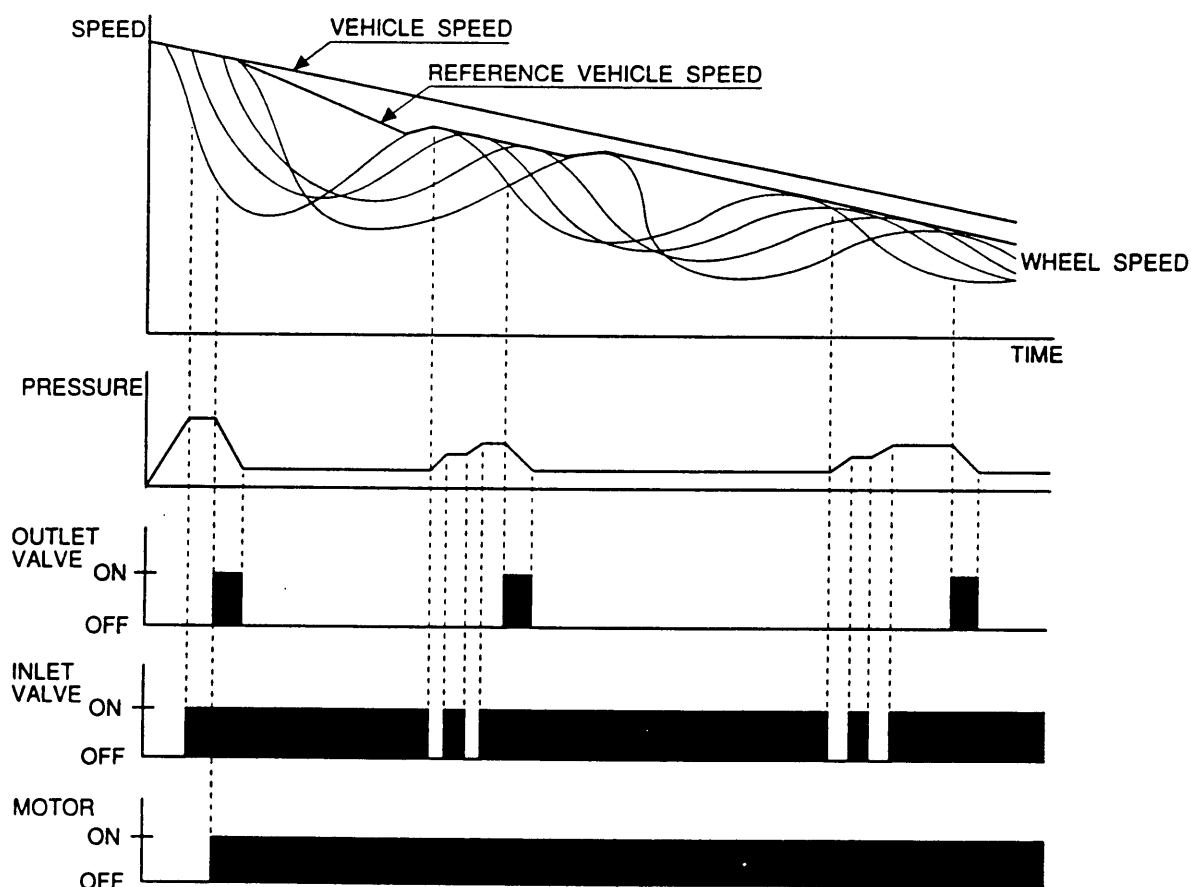
When starting the pressure reduction mode, the pump motor is ON.

When stopping ABS operation, the pump motor is OFF.

The reservoir fluid is pumped out by the pump, through the damping chamber, to the master cylinder.

IN: INLET VALVE (NORMALLY OPEN)
OUT: OUTLET VALVE (NORMALLY CLOSED)

Wheel Speed and Modulator Control



When the wheel speed drops sharply below the vehicle speed, the inlet valve closes to retain the caliper fluid pressure. When the wheel speed drops further, the outlet valve opens momentarily to reduce the caliper fluid pressure. The pump motor starts at this time. As the wheel speed is restored, the inlet valve opens momentarily to increase the caliper fluid pressure.

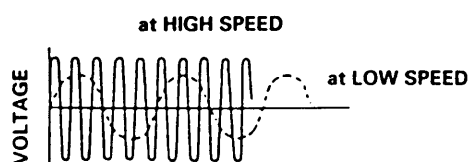
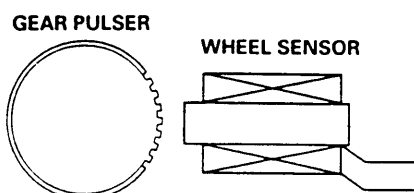
Wheel Sensor

The wheel sensors are the magnetic contactless type.

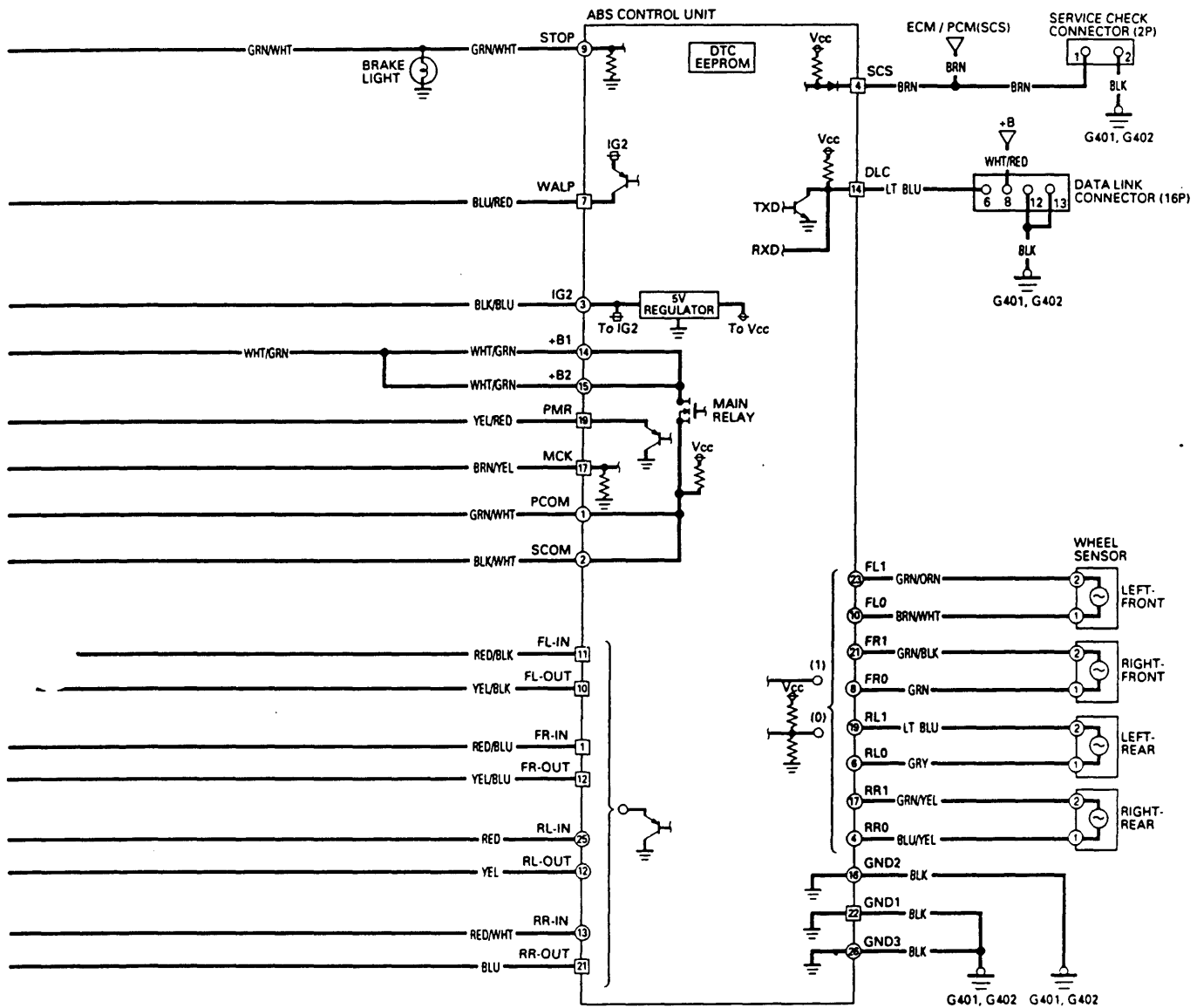
As the gear pulser teeth rotate past the wheel sensor's magnetic coil, AC current is generated. The AC frequency changes in accordance with the wheel speed. The ABS control unit detects the wheel sensor signal frequency and thereby detects the wheel speed.

There are four wheel sensors, one for each wheel.

The gear pulser has 50 teeth.



.....



ABS CONTROL UNIT 26P CONNECTOR
(○ number)

1	2	3	4	6	8	9	10	12	13
14	15	16	17	19	21	23	25	26	

ABS CONTROL UNIT 22P CONNECTOR
(□ number)

1	4	7	10	11
12	14	17	19	21
22				

Wire side of female terminals

SERVICE CHECK CONNECTOR (2P)



DATA LINK CONNECTOR (16P)



WHEEL SENSOR 2P CONNECTOR



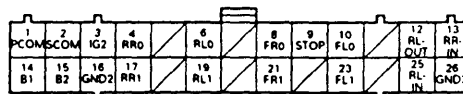
REAR



Terminal side of male terminals

ABS Control Unit Terminal Arrangement

ABS CONTROL UNIT 26P CONNECTOR



Wire side of female terminals

VB: Battery Voltage

Terminal number	Wire color	Terminal sign (Terminal name)	Description	Measurement terminals	Voltage		
					Conditions (Ignition Switch ON (III))		Output voltage
1	GRN/WHT	PCOM (Primary common)	Power source for the solenoid valve and pump motor.	1-GND	Engine	ON	0 V
2	BLK/WHT	SCOM (Secondary common)	Power source for the solenoid valve.	2-GND		OFF (Connect the SCS service connector)	AC: 3~6 V
3	BLK/BLU	IG2 (Ignition 2)	Detects ignition switch 2 signal. (System activate signal)	3-GND			VB
4	BLU/YEL	RR0 (Rear-right 0)	Detects right-rear wheel sensor signal.	4-17	When the wheel is turned at 1 turn/second.		53 mV or above on digital tester (AC range) (Reference) 150 mVp-p or above on oscilloscope
6	GRY	RL0 (Rear-left 0)	Detects left-rear wheel sensor signal.	6-19			
8	GRN	FR0 (Front-right 0)	Detects right-front wheel sensor signal.	8-21			
9	GRN/WHT	STOP (Stop)	Detects brake switch signal. (Prevents unnecessary ABS operation)	9-GND	Stops		Approx. 2.5 V
10	BRN/WHT	FLO (Front-left 0)	Detects left-front wheel sensor signal.	10-23	Brake pedal depressed.		VB
					Brake pedal released.		0 V
12	YEL	RL-OUT (Rear-left outlet)	Drives left-rear outlet solenoid valve.	12-GND	Engine	ON	0 V
						OFF (Connect the SCS service connector)	AC: 3~6 V
13	RED/WHT	RR-IN (Rear-right inlet)	Drives right-rear inlet solenoid valve.	13-GND			Approx. 3 V
14	WHT/GRN	B1 (Battery 1)	Power source for the solenoid valve and pump motor.	14-GND			VB
15	WHT/GRN	B2 (Battery 2)	Power source for the solenoid valve and pump motor.	15-GND			
16	BLK	GND2 (Ground 2)	Ground for the ABS control unit.	16-GND			
17	GRN/YEL	RR1 (Rear-right 1)	Detects right-rear wheel sensor signal.	17-4	When the wheel is turned at 1 turn/second.		53 mV or above on digital tester (AC range) (Reference) 150 mVp-p or above on oscilloscope
19	LT BLU	RL1 (Rear-left 1)	Detects left-rear wheel sensor signal.	19-6			
21	GRN/BLK	FR1 (Front-right 1)	Detects right-front wheel sensor signal.	21-8			
23	GRN/ORN	FL1 (Front-left 1)	Detects left-front wheel sensor signal.	23-10	Stops		Approx. 2.5 V
25	RED	RL-IN (Rear-left inlet)	Drives left-rear inlet solenoid valve.	25-GND	Engine	ON	0 V
						OFF (Connect the SCS service connector)	AC: 3~6 V
26	BLK	GND3 (Ground 3)	Ground for the ABS control unit.	26-GND			Approx. 3 V
							Below 0.3 V



ABS CONTROL UNIT 22P CONNECTOR



Wire side of female terminals

VB: Battery Voltage

Terminal number	Wire color	Terminal sign (Terminal name)	Description	Voltage			
				Measurement terminals	Conditions (Ignition Switch ON (II))		Output voltage
1	RED/BLU	FR-IN (Front-right inlet)	Drives right-front inlet solenoid valve.	1-GND	Engine	ON	0 V
						OFF (Connect the SCS service connector)	AC: 3~6 V
						ON	Approx. 3 V
4	BRN	SCS (Service check signal)	Detects service check signal (Diagnostic trouble code indication)	4-GND	SCS service connector connected.		0 V
					SCS service connector disconnected.		Approx. 5 V
7	BLU/RED	WALP (Warning lamp)	Drives ABS indicator light (The indicator light goes off when ABS control unit outputs battery voltage).	7-GND	Indicator light ON		Approx. 2 V
					Indicator light OFF		VB
10	YEL/BLK	FL-OUT (Front-left outlet)	Drives left-front outlet solenoid valve.	10-GND	Engine	ON	0 V
11	RED/BLK	FL-IN (Front-left inlet)	Drives left-front inlet solenoid valve.	11-GND		OFF (Connect the SCS service connector)	AC: 3~6 V
12	YEL/BLU	FR-OUT (Front-right outlet)	Drives right-front outlet solenoid valve.	12-GND		ON	Approx. 3 V
14	LT BLU	DLC (Data link connector)	Communicates with Honda PGM Tester.	14-GND	—		Approx. 5 V
17	BRN/YEL	MCK (Motor check)	Detects pump motor drive signal.	17-GND	Pump motor relay	ON	VB
						OFF	0 V
19	YEL/RED	PMR (Pump motor relay)	Drives pump motor relay.	19-GND	Engine	ON	0 V
						OFF (Connect the SCS service connector)	AC: 3~6 V
						ON	Approx. 3 V
21	BLU	RR-OUT (Rear-right outlet)	Drives right-rear outlet solenoid valve.	21-GND	Engine	ON	0 V
						OFF (Connect the SCS service connector)	AC: 3~6 V
						ON	Approx. 3 V
22	BLK	GND2 (Ground 2)	Ground for the ABS control unit.	22-GND			Below 0.3 V

Troubleshooting Precautions

ABS Indicator Light

1. If the system is OK, the ABS indicator light goes off two seconds after turning the ignition switch ON (II) without starting the engine. After starting the engine, the ABS indicator light comes on again and goes off after two seconds. This occurs because the ABS control unit is activated by the IG2 power source.
2. The ABS indicator light comes on when the ABS control unit detects a problem in the system. However, even though the system is normal, the ABS indicator light can come on, too, under the following conditions. To determine the actual cause of problem, question the customer about the problem, taking the following conditions into consideration.
 - Signal disturbance
 - Wheel spin
 - Only drive wheels rotate
 - Battery voltage fluctuates
3. When a problem is detected and the ABS indicator light comes on, the indicator light can stay on until the ignition switch is turned off, or it can automatically go off, depending on the mode.
 - Light stays on until the ignition switch is turned off: When the system is in the system down mode.
 - Light automatically goes off: When the system is in the control inhibition mode.
(refer to symptom-to-system chart)
4. The ABS indicator light stays on when the system is reactivated without erasing the DTC, but it goes off after starting the vehicle.
When the wheel sensor system is faulty and the ABS indicator light comes on, the algorithm of the system automatically turns off the ABS indicator light after the wheel speed signal returns to the normal speed. While, when the DTC is erased, the CPU is reset and the ABS indicator light goes off when the system checked out normal by the initial diagnosis.
Therefore, test-drive the vehicle after servicing the wheel sensor system, and be sure that the ABS indicator light does not come on.
5. When the ABS control unit outputs battery voltage to gauge assembly, the ABS indicator light goes off.

Diagnostic Trouble Code (DTC)

1. The diagnostic trouble code (DTC) is memorized when a problem is detected and the ABS indicator light does not go off, or when the ABS indicator light comes on.
The DTC is not memorized when the ABS indicator light comes on unless the CPU is activated.
2. The memory can hold any number of DTCs. However, when the same DTC is detected twice or more, the later one is written over the old one.
Therefore, when the same problem is detected repeatedly, it is recorded as one DTC.
3. The DTCs are indicated in the order of ascending number, not in the order they occur.
4. The DTCs are memorized in the EEPROM (non-volatile memory).
Therefore, the memorized DTCs cannot be canceled by disconnecting the battery. Perform the specified procedures to erase.

Self-diagnosis

1. The self-diagnosis can be classified into these four categories.
 - Initial diagnosis: Performed right after the engine starts and until the ABS indicator light goes off.
 - Except ABS control: Performed when the ABS is not functioning.
 - During ABS control: Performed when the ABS is functioning.
 - During warning: Performed when the ABS indicator light is ON.
2. The system performs the following controls when a problem is detected by the self-diagnosis.
 - ABS indicator light ON
 - Memory of DTC
 - Mode change to the "system down mode" or the "control inhibition mode".

MODE	ABS INDICATOR LIGHT	MAIN RELAY	SOLENOID VALVE	CPU	Restart condition		DTC
SYSTEM DOWN	ON	No operation	Drive inhibition	Operation*1	Ignition switch	OFF → ON (II)	Memory
CONTROL INHIBITION	ON	No operation	Drive inhibition	Operation	Automatic		Memory

*1: Except CPU failure



Kickback

1. The motor operates when the ABS is functioning, and the fluid in the reservoir is forced out to the master cylinder causing kickback at the brake pedal.
2. The ABS control unit operates the solenoid valve when the brake pedal is released after the initial diagnosis. You may hear the faint solenoid valve operation sound at this time, but it is normal.

Pump Motor

1. The pump motor operates when the ABS is functioning.
2. The ABS control unit checks the pump motor operation during acceleration. You may hear the faint operation sound at this time, but it is normal.

Brake Fluid Replacement/Air Bleeding

1. Brake fluid replacement and air bleeding procedures are the same as vehicles without ABS. To ease bleeding, start with the front wheels.

Troubleshooting

1. The troubleshooting flowcharts procedures assume that the cause of the problem is still present and the ABS indicator light is still on. Following the flowchart when the ABS indicator light does not come on can result in incorrect judgement.
2. Question the customer about the conditions when the problem occurred, and try to reproduce the same conditions for troubleshooting.
Self-diagnosis is made at various times such as the initial diagnosis, except ABS control, during ABS control, during acceleration, during the specified vehicle speed, etc. Therefore, the symptom cannot be checked unless the check conditions match with the problem conditions.
3. When the ABS indicator light does not come on during the test-drive, but the troubleshooting is performed based on the DTC, check for the loose connectors, poor contact of the terminals, etc, before troubleshooting.
4. After troubleshooting, erase the DTC and test-drive the vehicle. Be sure that the ABS indicator light does not come on.
5. The connector illustrations show the female connectors with a single outline and the male connector with a double outline.

ABS Function Test

To simulate ABS operation and activate the solenoid valves and pump, use the Honda PGM Tester.

Connect the PGM Tester to the 16P Data Link Connector (DLC). When the System Select menu is displayed, select the ABS Test Mode menu and follow the tester's prompts.

Diagnostic Trouble Code (DTC)

Diagnostic Trouble Code (DTC) Indication (SCS Mode)

NOTE: This operation can also be done with the Honda PGM Tester.

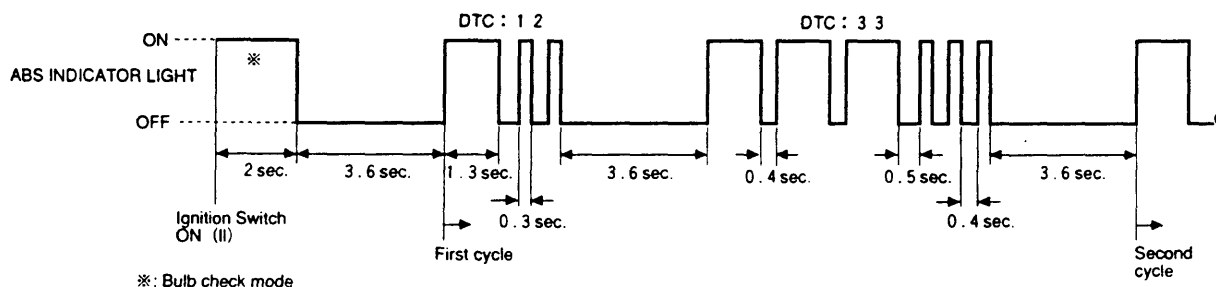
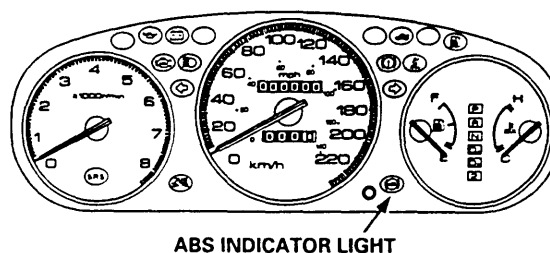
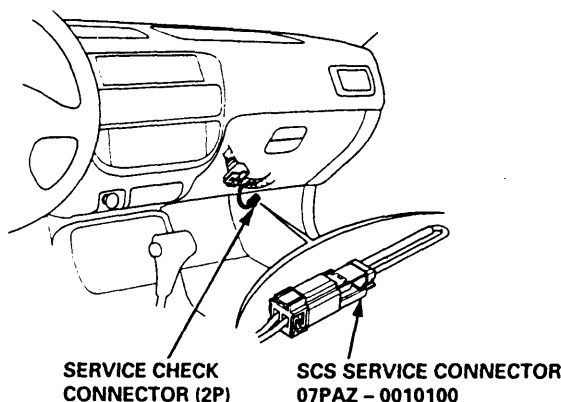
1. Connect the SCS service connector to the service check connector inside the passenger's side kick panel.
2. Turn the ignition switch ON (II).
NOTE: Do not depress the brake pedal when turning the ignition switch.
3. Record the blinking frequency of the ABS indicator light. The blinking frequency indicates the DTC.
4. Turn the ignition switch OFF, and remove the SCS service connector.
NOTE: The Malfunction Indicator Lamp (MIL) will stay on after the engine is started if the SCS service connector is connected.
5. Erase the DTC.

Conditions for DTC indication

- The car is stopped.
- The SCS service connector is connected before the ignition switch is turned ON (II).
- The brake pedal is released.
- The SCS service connector remains connected during this procedure.

The DTC indication stops and the ABS control unit executes the software function if at least one of the following conditions is satisfied.

- The car is not stopped.
- The ABS control unit receives the normal signal (which is for the ABS control unit) from a Honda PGM Tester.
- The SCS service connector is disconnected during this procedure.



- When ignition switch is turned ON (II), the ABS indicator light comes on to check the bulb. Do not count it as a DTC.
- The ABS control unit can memorize any number of DTCs.
- The new DTC is not memorized when the ABS control unit has already memorized the same DTC.
- If the DTC is not memorized, the ABS indicator light stays ON after it goes off for 3.6 seconds.



DTC Erasure (MES Mode)

NOTE: This operation can also be done with the Honda PGM Tester.

1. Connect the SCS service connector to the service check connector inside the passenger's side kick panel.
2. Depress the brake pedal.
3. Turn the ignition switch ON (II) while keeping the brake pedal depressed. The ABS indicator light goes off after two seconds.
4. After the indicator light goes off, release the brake pedal. The indicator light comes on after four seconds.
5. After the indicator light comes on, depress the brake pedal again. The indicator light goes off again after four seconds. (the brake pedal is still depressed.)
6. After the indicator light goes off, release the brake pedal again.
7. After four seconds, the indicator light blinks twice for 0.3 second and the DTC is erased.
8. Confirm the DTC indication, and check that the DTC was erased.

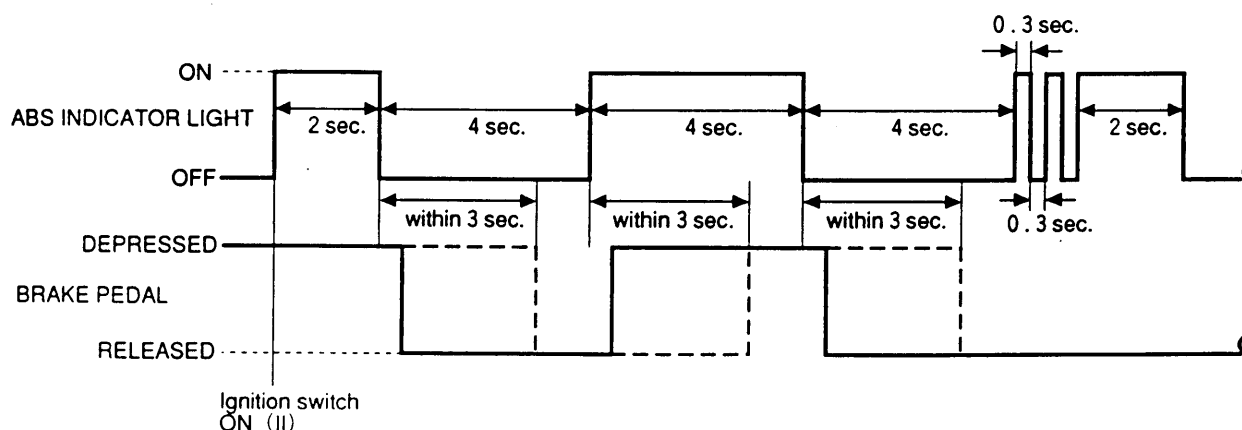
NOTE: Always maintain these steps. If you disconnect the SCS service connector and/or fail to operate the brake pedal according to the indicator light indication, the DTC will not be erased.

Conditions for DTC erasure

- The car is stopped.
- The SCS service connector is connected before the ignition switch is turned ON (II).
- The brake pedal is depressed before the ignition switch is turned ON (II).
- The SCS service connector remains connected during this procedure.

The DTC erasure stops and ABS control unit executes the software function if at least one of the following conditions is satisfied.

- The car is not stopped.
- The SCS service connector is disconnected during this service.
- The ABS control unit receives the normal signal (which is for the ABS control unit) from a Honda PGM Tester.
- The brake pedal is not operated according to the indicator light indication.
- The DTC erasure is finished.



Diagnostic Trouble Code (DTC)

Troubleshooting Index

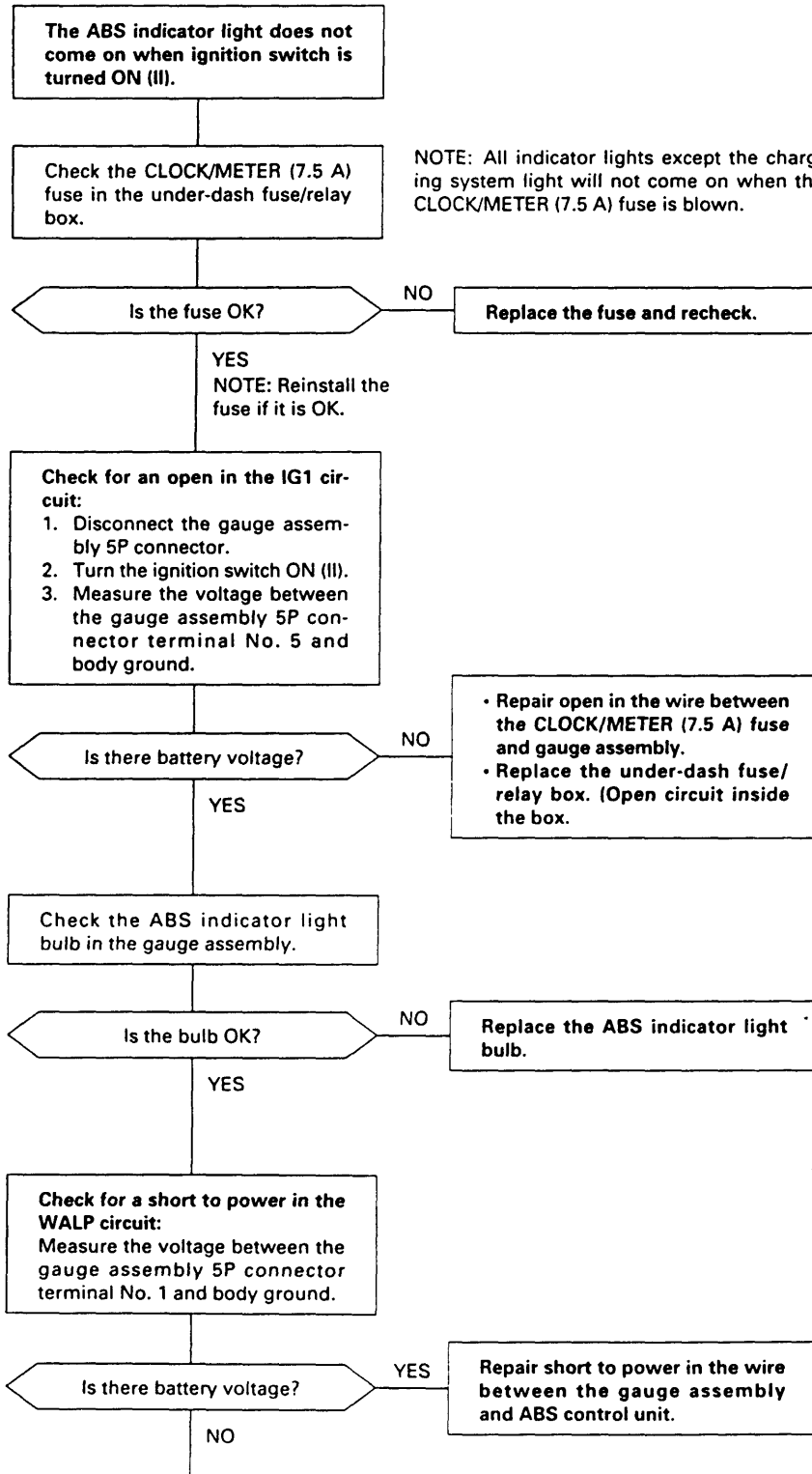
NOTE: This operation can also be done with the Honda PGM Tester.

DTC	ABS INDICATOR LIGHT	DIAGNOSIS/SYMPTOM	DETECTION TIMING				PROBLEM LOCATION	REFER TO PAGE
			INITIAL DIAGNOSIS	EXCEPT ABS CONTROL	DURING ABS CONTROL	DURING WARNING		
No DTC	OFF	ABS indicator light does not come on when ignition switch is turned ON (II).						19-41
	ON	ABS indicator light does not go off after engine is started. (No DTC)						19-43
11	ON*	Wheel sensor (open/short to body ground/short to power)	○	○	○	○	FR	19-45
13							FL	
15							RR	
17							RL	
12	ON*	Wheel sensor/Pulser (chipped pulser gear/electrical noise)		○	○	○	FR	19-45
14							FL	
16							RR	
18							RL	
31	ON	Solenoid (open/short to body ground/short to power/stuck)	○	○	○		FR-IN	19-47
32							FR-OUT	
33							FL-IN	
34							FL-OUT	
35							RR-IN	
36							RR-OUT	
37							RL-IN	
38							RL-OUT	
51	ON	Motor lock		○	○			19-49
52	ON	Motor stuck OFF		○	○			19-49
53	ON	Motor stuck ON		○				19-49
54	ON	Main relay stuck OFF	○	○	○			19-52
61	ON	Ignition voltage (low voltage/high voltage)	○	○	○	○		19-54
81	ON	CPU	○	○	○	○		19-55

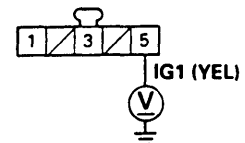
*: If DTCs 11-18 (wheel sensor codes) were detected the last the vehicle was driven, the ABS indicator light will stay on until the ignition switch is turned ON (II), and the control unit confirms that the wheel sensors are OK.

ABS Indicator Light Does Not Come On

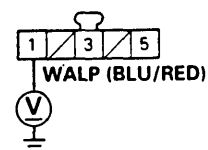
The ABS indicator light does not come on when ignition switch is turned ON (II).



GAUGE ASSEMBLY 5P CONNECTOR



Wire side of female terminals



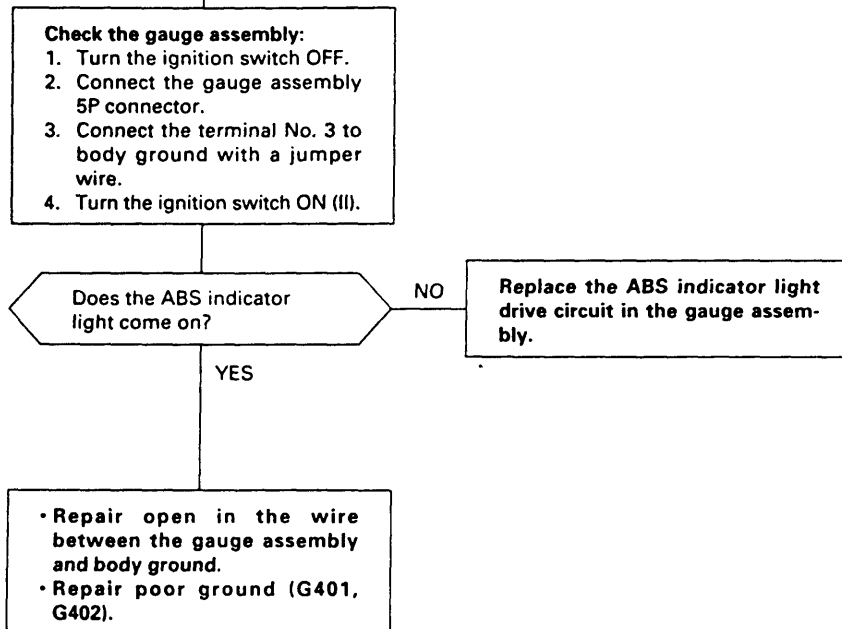
(To page 19-42)

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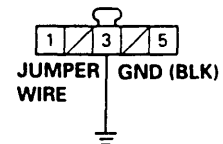
Troubleshooting

ABS Indicator Light Does Not Come On (cont'd)

(From page 19-41)



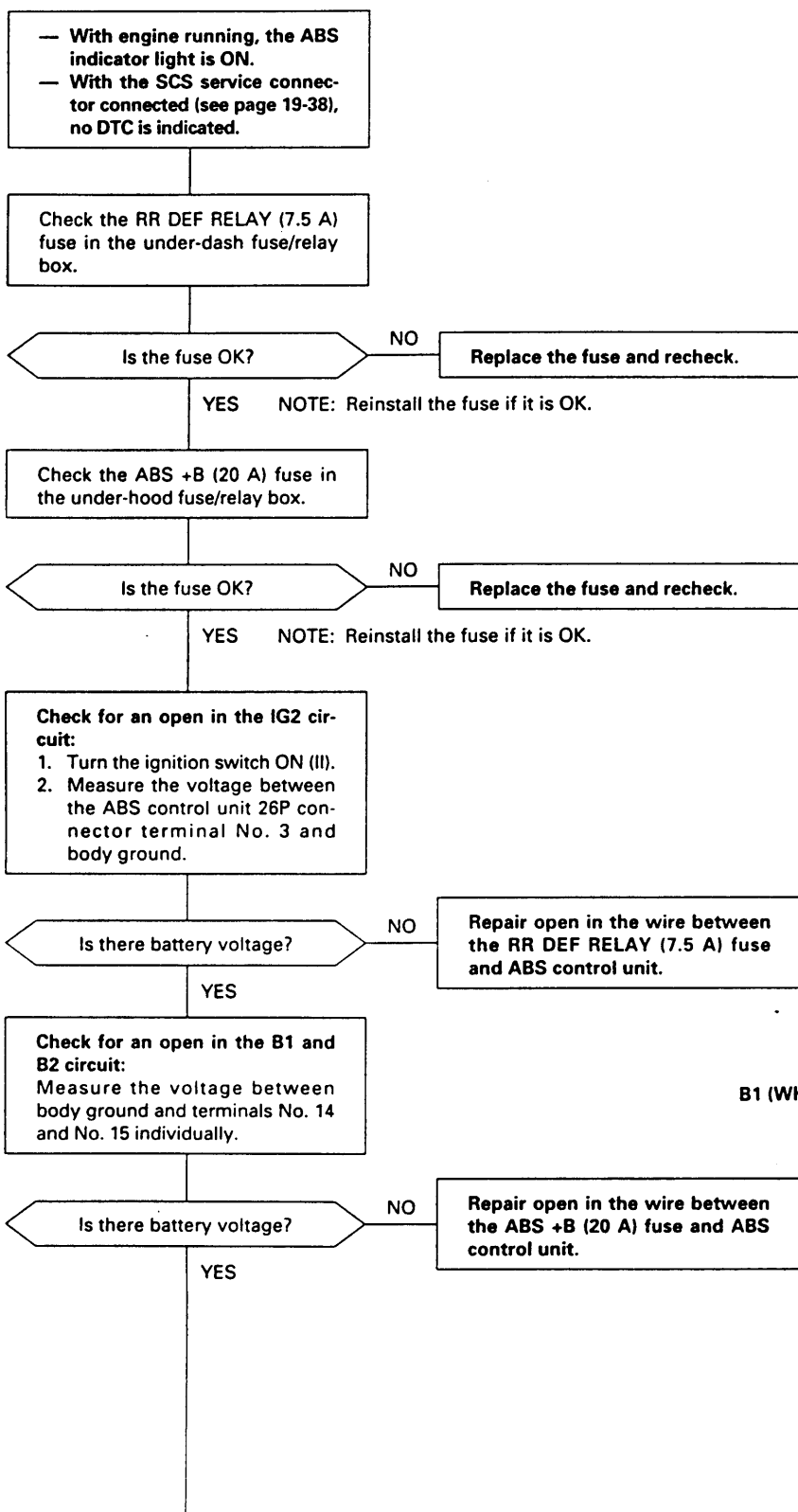
GAUGE ASSEMBLY 5P CONNECTOR



Wire side of female terminals

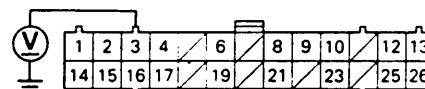
ABS Indicator Light Does Not Go Off (No DTC)

The ABS indicator light does not go off after the engine is started.



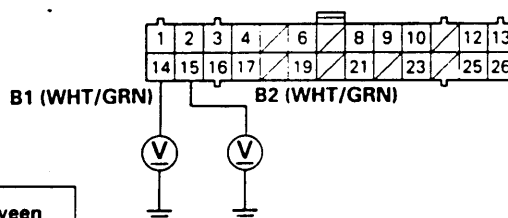
ABS CONTROL UNIT 26P CONNECTOR

IG2 (BLK/BLU)



Wire side of female terminals

ABS CONTROL UNIT 26P CONNECTOR



Wire side of female terminals

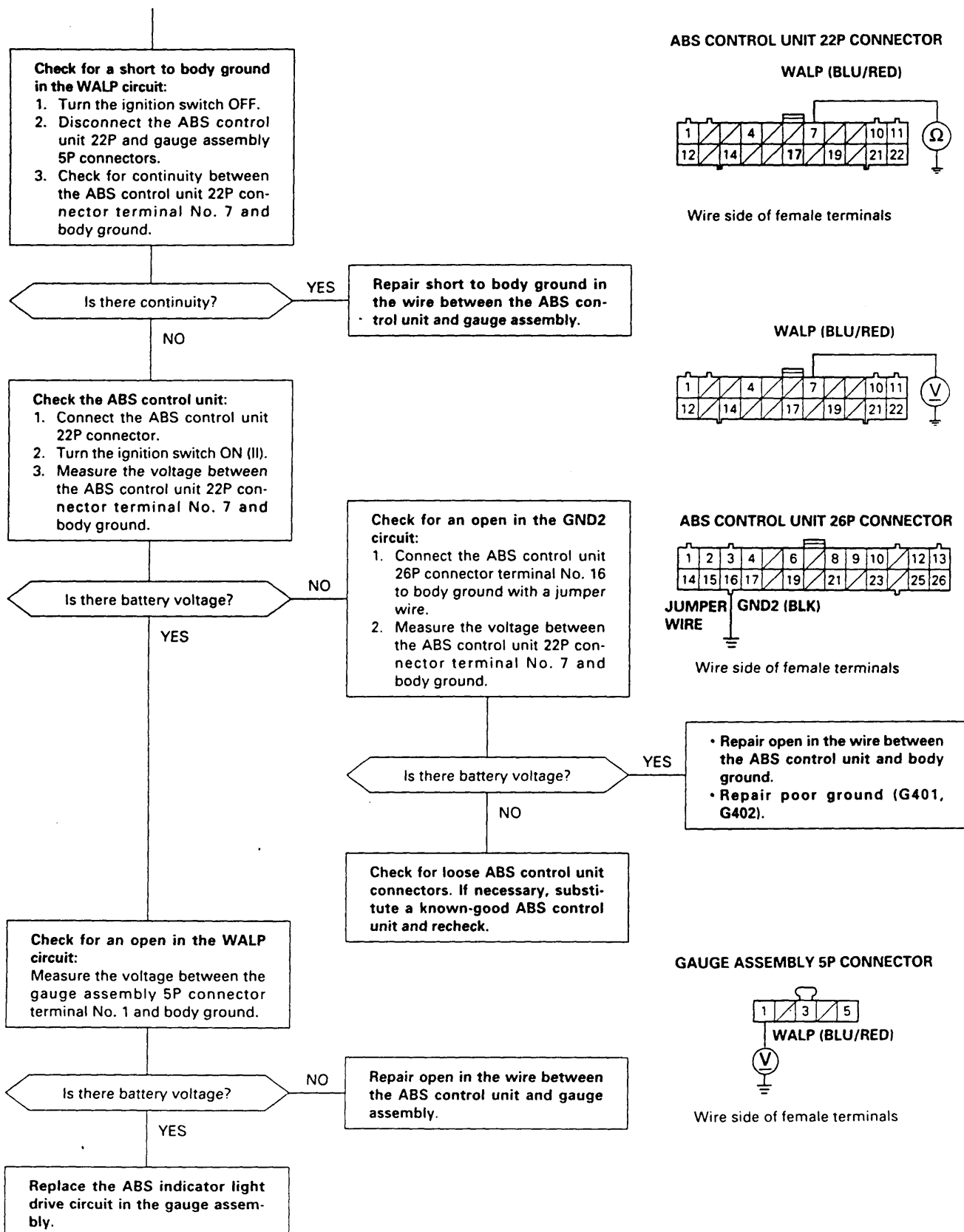
(To page 19-44)

(cont'd)

Troubleshooting

ABS Indicator Light Does Not Go Off (No DTC) (cont'd)

(From page 19-43)



DTC 11 – 18: Wheel Sensor

NOTE: The ABS indicator light comes on when only the drive wheels are turning, signal disturbance is detected, etc. Therefore, test-drive the car at a speed of 12 mph (20 km/h) or more after turning the ignition switch from OFF to ON (II), and if the ABS indicator light does not come on, the system is OK.

- With the ignition switch ON (II), the ABS indicator light does not go off.
- After driving, the ABS indicator light comes on.
- With the SCS service connector connected (see page 19-38), DTCs 11 – 18 are indicated.

Check the wheel sensor circuit:

1. Disconnect the ABS control unit 26P connector.
2. Measure the resistance between the appropriate wheel sensor (0) and (1) circuit terminals (see table).

DTC	Appropriate Terminal	
	(0) SIDE	(1) SIDE
11, 12 (Right-front)	No. 8: FR0	No. 21: FR1
13, 14 (Left-front)	No. 10: FL0	No. 23: FL1
15, 16 (Right-rear)	No. 4: RR0	No. 17: RR1
17, 18 (Left-rear)	No. 6: RL0	No. 19: RL1

- Repair open in the (0) or (1) circuit wire, or short to the (0) circuit wire in the (1) circuit wire between the ABS control unit and appropriate wheel sensor.
- Replace the appropriate wheel sensor.

Is the resistance OK?
(Front: 750 – 1050 Ω /20°C
Rear: 850 – 1150 Ω /20°C (Drum))

NO

YES

Check for a short to power in the wheel sensor circuit:

1. Reconnect the ABS control unit 26P connector.
2. Start the engine.
3. Measure the voltage between the ABS control unit 26P connector appropriate wheel sensor (0) circuit terminal and body ground (see table).

NOTE: Judgement value for short to power is 4 V.

Is there 4 V or more?

YES

- Repair short to power in the (0) or (1) circuit wire between the ABS control unit and appropriate wheel sensor.

NO

NOTE:

- Normal voltage: Approx. 2 V
- 0 V: Replace the ABS control unit.
- 4 V or more indicates a short to power.

Check for a short to body ground in the wheel sensor circuit:

1. Disconnect the ABS control unit 26P connector.
2. Check for continuity between the ABS control unit 26P connector appropriate wheel sensor (0) circuit terminal and body ground (see table).

Is there continuity?

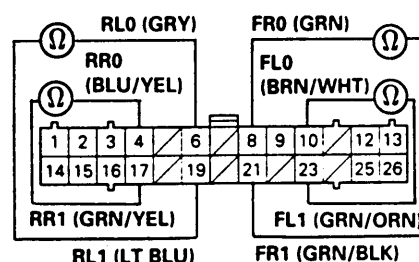
YES

- Repair short to body ground in the (0) or (1) circuit wire between the ABS control unit and appropriate wheel sensor.
- Replace the appropriate wheel sensor.

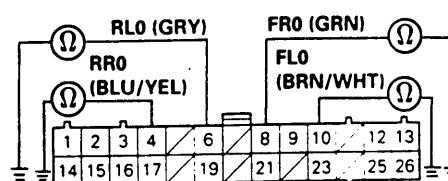
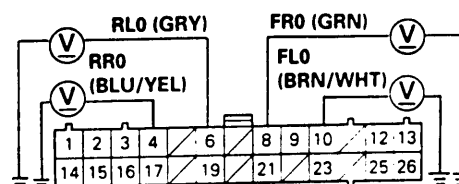
NO

(To page 19-46)

ABS CONTROL UNIT 26P CONNECTOR



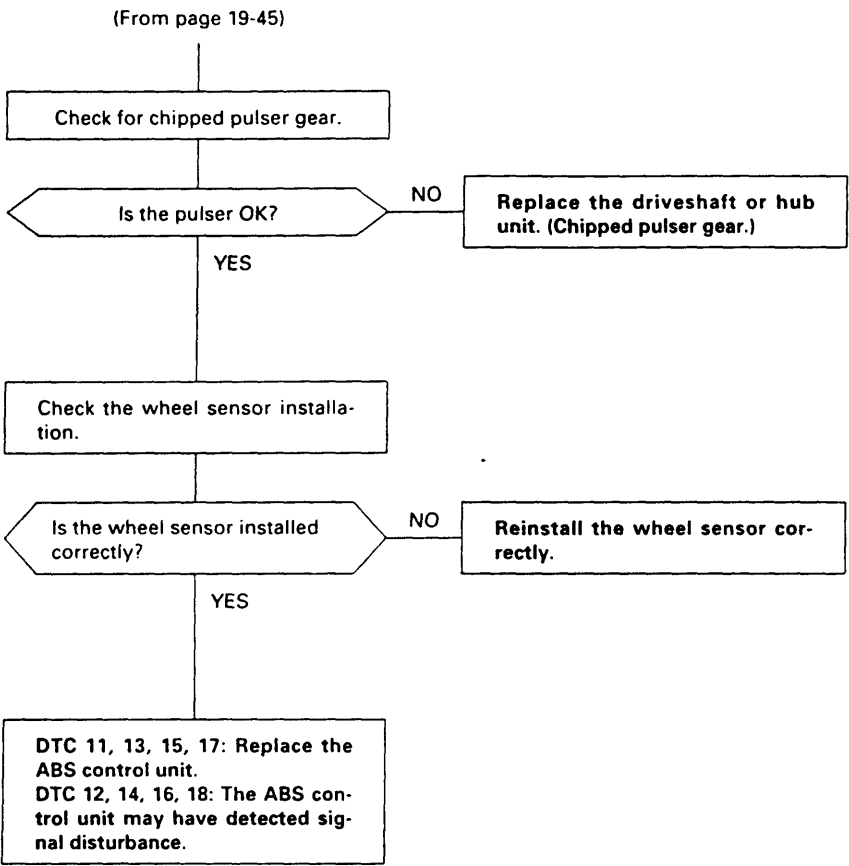
Wire side of female terminals



(cont'd)

Troubleshooting

DTC 11 – 18: Wheel Sensor (cont'd)



DTC 31 – 38: Solenoid

- With the ignition switch ON (II), the ABS indicator light does not go off, or the ABS indicator light comes on while ABS is functioning.
- With the SCS service connector connected (see page 19-38), DTCs 31 – 38 are indicated.

Check for a short to power in the solenoid circuit:

1. Disconnect the ABS control unit 22P and 26P connectors.
2. Start the engine.
3. Measure the voltage between the appropriate ABS control unit connector solenoid circuit terminal and body ground (see table).

DTC	Appropriate Connector	Appropriate Terminal
31: FR-IN	22P	No. 1
32: FR-OUT	22P	No. 12
33: FL-IN	22P	No. 11
34: FL-OUT	22P	No. 10
35: RR-IN	26P	No. 13
36: RR-OUT	22P	No. 21
37: RL-IN	26P	No. 25
38: RL-OUT	26P	No. 12

Is there battery voltage?

YES

Repair short to power in the appropriate solenoid circuit wire between the ABS control unit and modulator unit.

NO

Check for a short to body ground in the solenoid circuit:

Check for continuity between the appropriate solenoid circuit terminal and body ground (see table).

Is there continuity?

YES

- Repair short to body ground in the appropriate solenoid circuit wire between the ABS control unit and modulator unit.
- Replace the modulator unit.

NO

Check the ABS control unit:

1. Turn the ignition switch OFF.
2. Connect the ABS control unit 22P and 26P connectors.
3. Connect the SCS service connector.
4. Turn the ignition switch ON (II).
5. Measure the voltage between the appropriate ABS control unit 26P connector COM circuit terminal and body ground (see table).

DTC	Appropriate Terminal
31: FR-IN	No. 2: SCOM
32: FR-OUT	No. 2: SCOM
33: FL-IN	No. 1: PCOM
34: FL-OUT	No. 1: PCOM
35: RR-IN	No. 1: PCOM
36: RR-OUT	No. 1: PCOM
37: RL-IN	No. 2: SCOM
38: RL-OUT	No. 2: SCOM

Is there approx. 3 V?

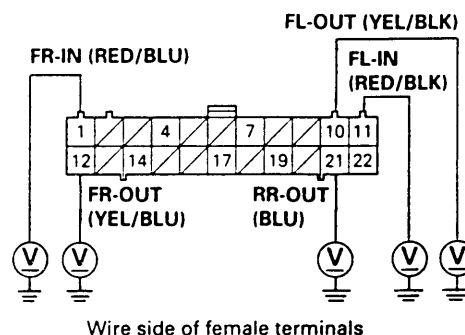
NO

Check for loose ABS control unit connectors. If necessary, substitute a known-good ABS control unit and recheck.

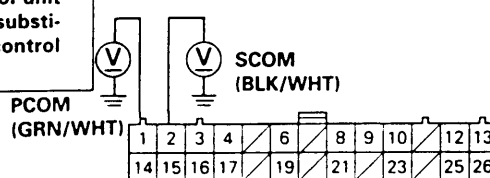
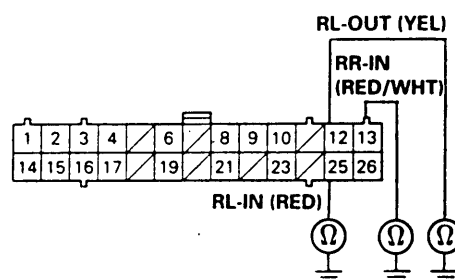
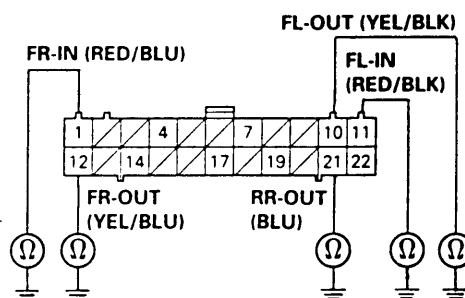
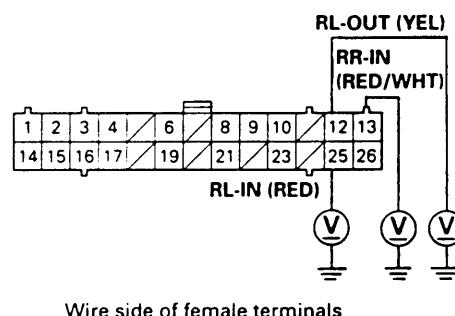
YES

(To page 19-48)

ABS CONTROL UNIT 22P CONNECTOR



ABS CONTROL UNIT 26P CONNECTOR

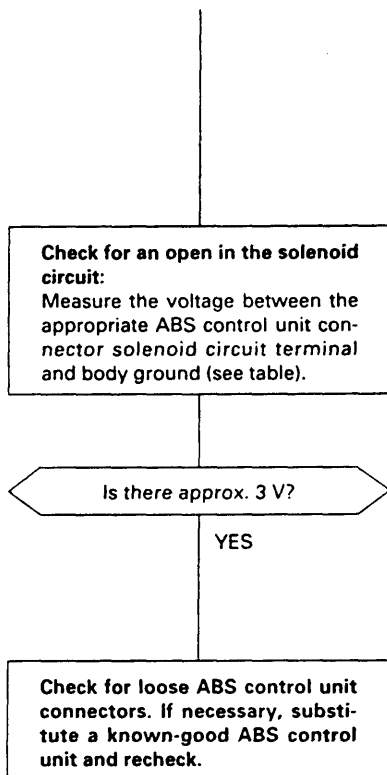


(cont'd)

Troubleshooting

DTC 31 – 38: Solenoid (cont'd)

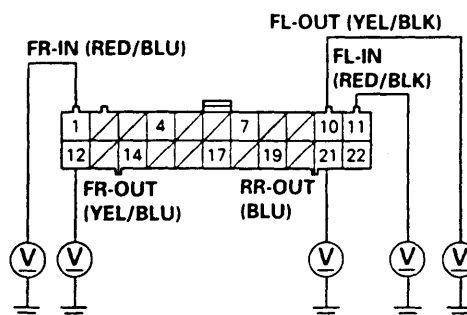
(From page 19-47)



DTC	Appropriate Connector	Appropriate Terminal
31: FR-IN	22P	No. 1
32: FR-OUT	22P	No. 12
33: FL-IN	22P	No. 11
34: FL-OUT	22P	No. 10
35: RR-IN	26P	No. 13
36: RR-OUT	22P	No. 21
37: RL-IN	26P	No. 25
38: RL-OUT	26P	No. 12

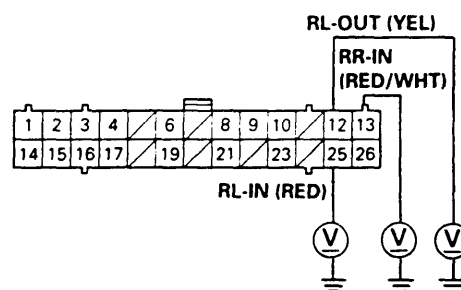
- Repair open in the appropriate COM circuit wire between the ABS control unit and modulator unit.
- Repair open in the appropriate solenoid circuit wire between the ABS control unit and modulator unit.
- Replace the modulator unit.

ABS CONTROL UNIT 22P CONNECTOR



Wire side of female terminals

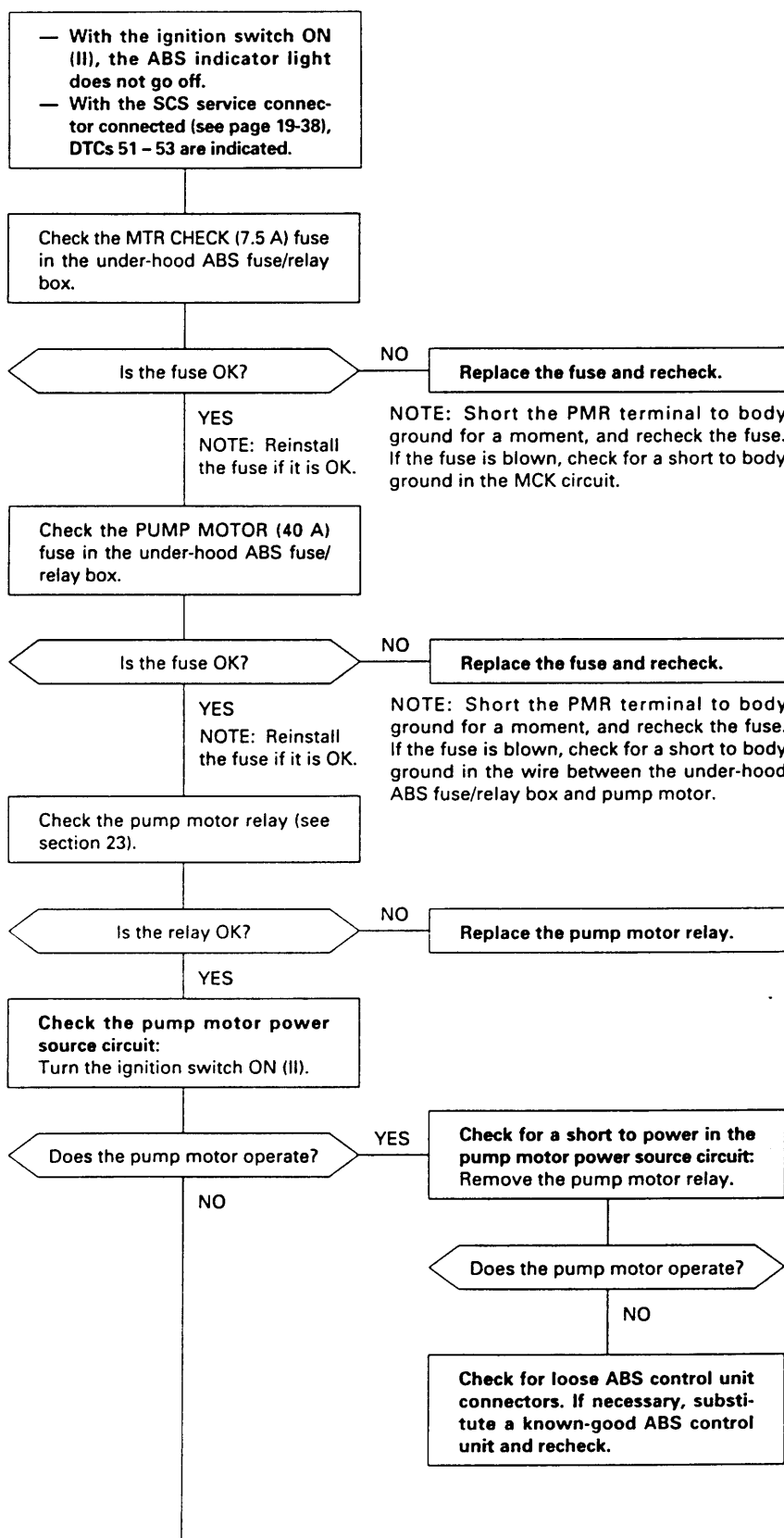
ABS CONTROL UNIT 26P CONNECTOR



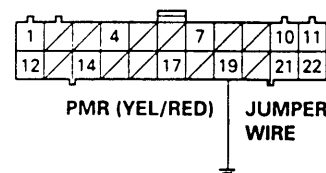
Wire side of female terminals



DTC 51 – 53: ABS Pump Motor



ABS CONTROL UNIT 22P CONNECTOR



Wire side of female terminals

(cont'd)

(To page 19-50)

Troubleshooting

DTC 51 – 53: ABS Pump Motor (cont'd)

(From page 19-49)

Check the pump motor circuit:
1. Remove the pump motor relay.
2. Turn the ignition switch ON (II).
3. Connect the pump motor relay connector +B and MOTOR terminals with a jumper wire for a moment.

Does the pump motor operate?

YES

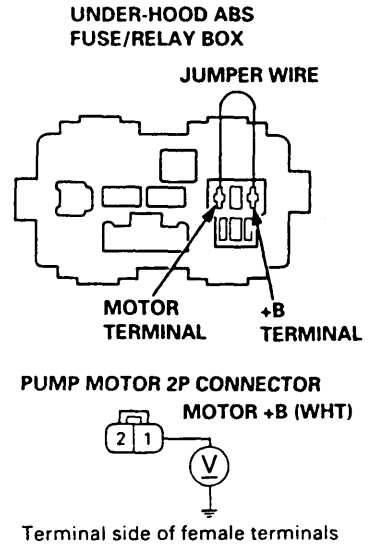
NO

Check for an open in the pump motor +B circuit:
1. Turn the ignition switch OFF.
2. Disconnect the pump motor 2P connector.
3. Turn the ignition switch ON (II).
4. Connect the pump motor relay connector +B and MOTOR terminals with a jumper wire.
5. Measure the voltage between the pump motor 2P connector terminal No. 1 and body ground.

Is there battery voltage?

YES

NO



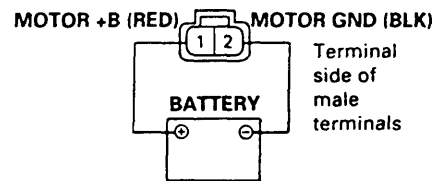
Repair open in the wire between the under-hood ABS fuse/relay box and pump motor.

Check the pump motor operation:
Connect the battery (+) terminal to the pump motor 2P connector terminal No. 1, and the (-) terminal to the terminal No. 2 for a moment.

Does the pump motor operate?

YES

NO



Replace the modulator unit. (Faulty pump motor)

Repair open in the wire between the pump motor and body ground, or poor ground (G301).

Check for a short to body ground in the PMR circuit:
1. Turn the ignition switch OFF.
2. Disconnect the ABS control unit 22P connector.
3. Check for continuity between terminal No. 19 and body ground.

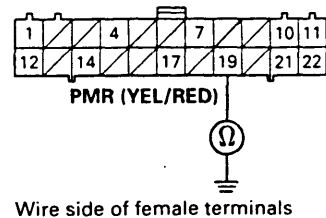
Is there continuity?

YES

Repair short to body ground in the wire between the under-hood ABS fuse/relay box and ABS control unit.

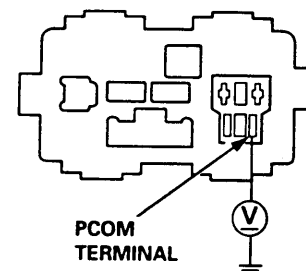
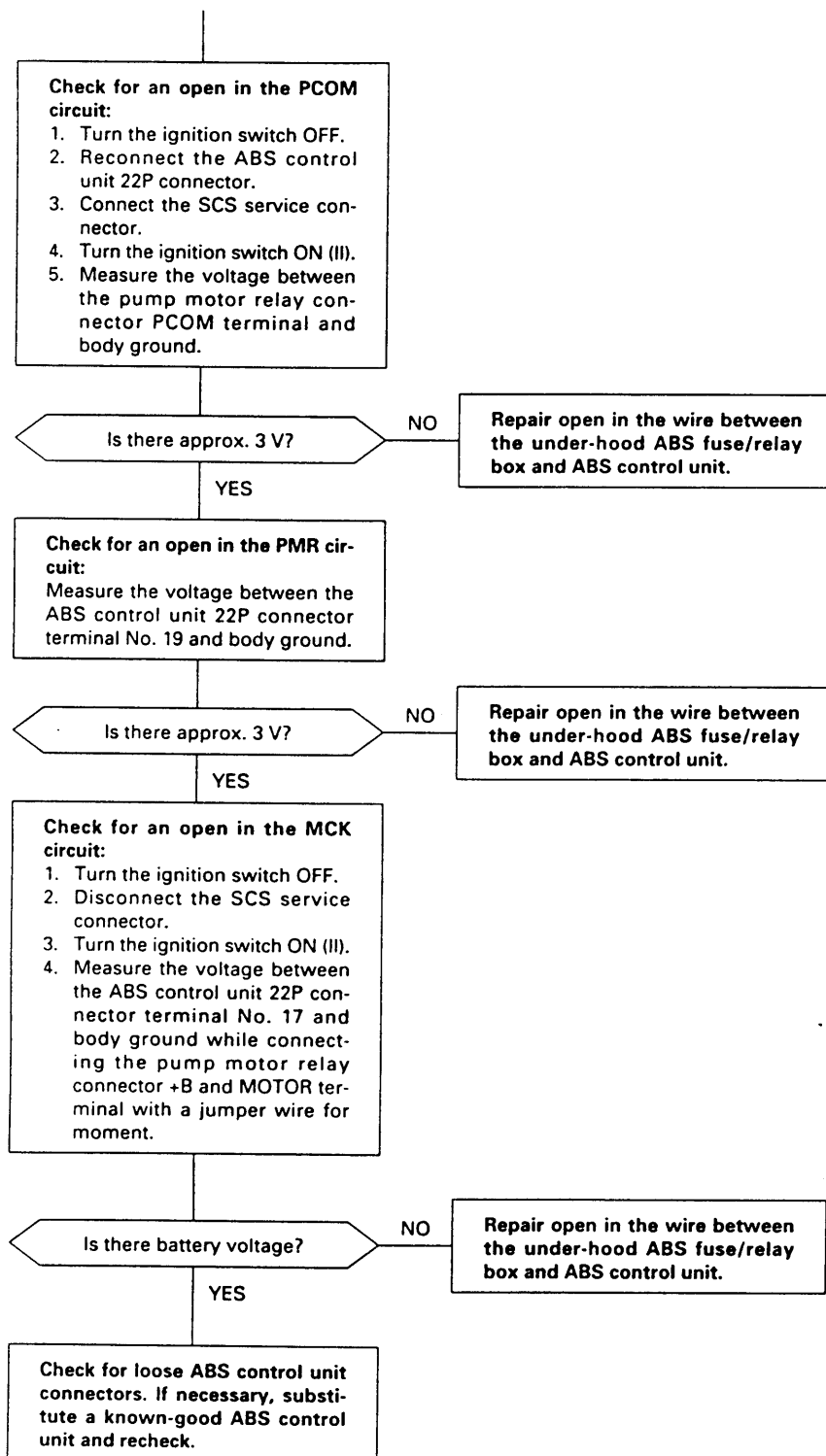
NO

ABS CONTROL UNIT 22P CONNECTOR

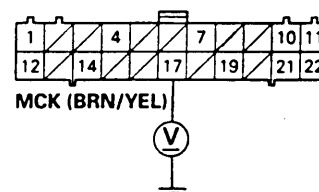
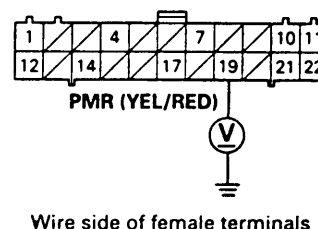


(To page 19-51)

(From page 19-50)



ABS CONTROL UNIT 22P CONNECTOR



Troubleshooting

DTC 54: Main Relay

- With the ignition switch ON (II), the ABS indicator light does not go off.
- With the SCS service connector connected (see page 19-38), DTC 54 is indicated.

Check the ABS +B (20 A) fuse in the under-hood ABS fuse/relay box.

Is the fuse OK?

NO

Replace the fuse and recheck.

YES

NOTE: Reinstall the fuse if it is OK.

Check for an open in the B1, B2 circuit:
Measure the voltage between body ground and the ABS control unit 26P connector terminal No. 14 and No. 15 individually.

Is there battery voltage?

NO

Repair open in the wire between the ABS control unit and under-hood ABS fuse/relay box.

YES

Check for a short to body ground in the PMR circuit:
1. Turn the ignition switch OFF.
2. Disconnect the ABS control unit 22P connector.
3. Check for continuity between terminal No. 19 and body ground.

Is there continuity?

YES

Repair short to body ground in the wire between the under-hood ABS fuse/relay box and ABS control unit.

NO

Check for a short to body ground in the PCOM, SCOM circuit:
1. Remove the pump motor relay.
2. Disconnect the ABS control unit 26P connector.
3. Check for continuity between body ground and the ABS control unit 26P terminals No. 1 and No. 2 individually.

Is there continuity?

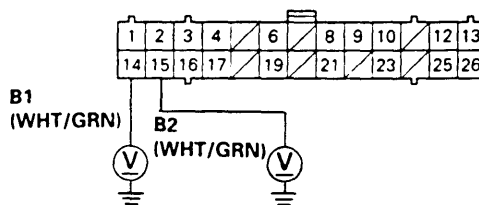
YES

- Repair short to body ground in the PCOM circuit wire between the ABS control unit and under-hood ABS fuse/relay box.
- Repair short to body ground in the PCOM or SCOM circuit wire between the ABS control unit and modulator unit.
- Replace the modulator unit. (Short circuit inside the unit)

NO

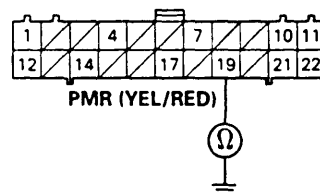
(To page 19-53)

ABS CONTROL UNIT 26P CONNECTOR



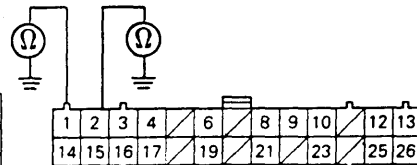
Wire side of female terminals

ABS CONTROL UNIT 22P CONNECTOR



Wire side of female terminals

PCOM (GRN/WHT) SCOM (BLK/WHT)



(From page 19-52)

Check for a short to power in the PCOM, SCOM circuit:

1. Start the engine.
2. Measure the voltage between body ground and ABS control unit 26P connector terminals No. 1 and No. 2 individually.

Is there 8 V or more?

YES

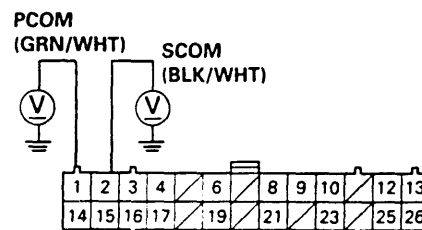
NO

Turn the ignition switch OFF and connect the SCS service connector. Then turn the ignition switch ON (II) and measure the voltage between the PCOM and SCOM terminals and body ground. If there is 0 V, replace the ABS control unit.

- Repair short to power in the PCOM circuit wire between the ABS control unit and underhood ABS fuse/relay box.
- Repair short to power in the PCOM or SCOM circuit wire between the ABS control unit and modulator unit.
- Replace the modulator unit. (Short to power inside the unit)

NOTE: 8 V or more indicates a short to power.

ABS CONTROL UNIT 26P CONNECTOR



Wire side of female terminals

Troubleshooting

DTC 61: Ignition Voltage

- With the engine running, the ABS indicator light is ON.
- With the SCS service connector connected (see page 19-50), DTC 61 is indicated.

Problem verification:

1. Erase the DTC.
2. Start the engine.

Does the ABS indicator light come on and is DTC 61 indicated?

NO

The system is OK at this time.

YES

Check the IG2 circuit:

Measure the voltage between the ABS control unit 26P connector terminal No. 3 and body ground.

Is there 18 V or above?

YES

Check the charging system.

NO

If the voltage is 0 V, check for an open in the IG2 circuit.
If there is 12 – 17 V, substitute a known-good ABS control unit and recheck.

ABS CONTROL UNIT 26P CONNECTOR

IG2 (BLK/BLU)

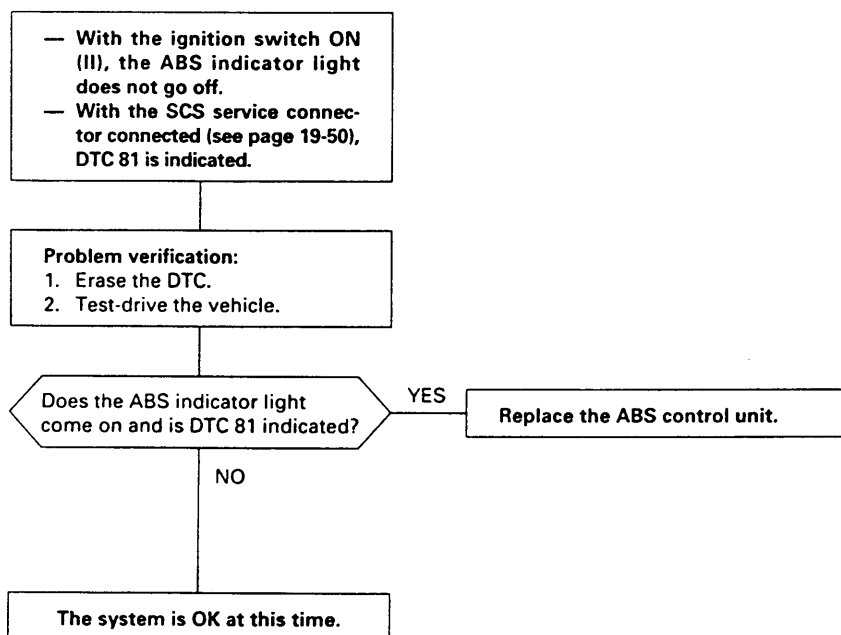


1	2	3	4	5	6	7	8	9	10	11	12	13
14	15	16	17	18	19	20	21	22	23	24	25	26

Wire side of female terminals



DTC 81: Central Processing Unit (CPU)



Modulator Unit

Removal/Installation

CAUTION:

- Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.
- Take care not to damage or deform the brake lines during removal and installation.
- To prevent the brake fluid from flowing, plug and cover the hose ends and joints with a shop towel or equivalent material.

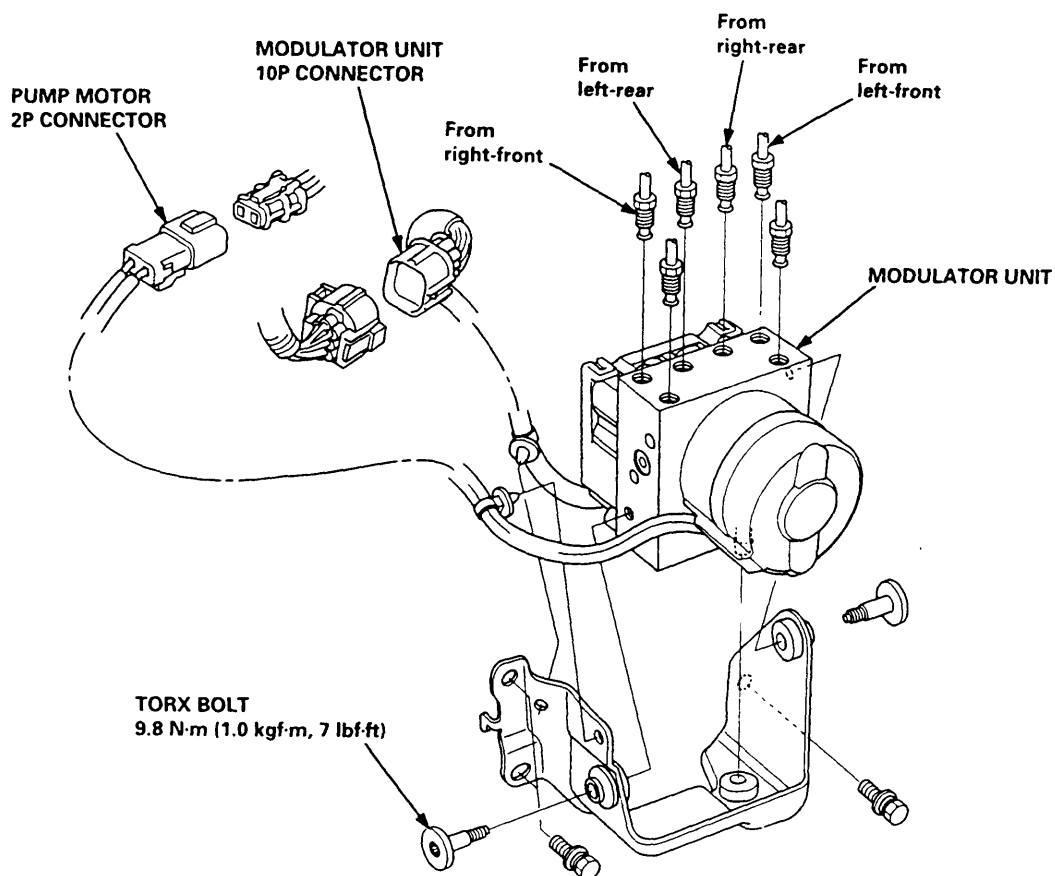
NOTE: Tighten the flare nuts to 15 N·m (1.5 kgf·m, 11 lbf·ft).

Removal

1. Disconnect the modulator unit 10P and pump motor 2P connectors.
2. Disconnect the brake lines, then remove the modulator unit.

Installation

1. Install the modulator unit, then connect the brake lines.
2. Connect the modulator unit 10P and pump motor 2P connectors.
3. Bleed the brake system, starting with the front wheels.
4. Start the engine, and check that the ABS indicator light goes off.
5. Test-drive the vehicle, and check that the ABS indicator light does not come on.



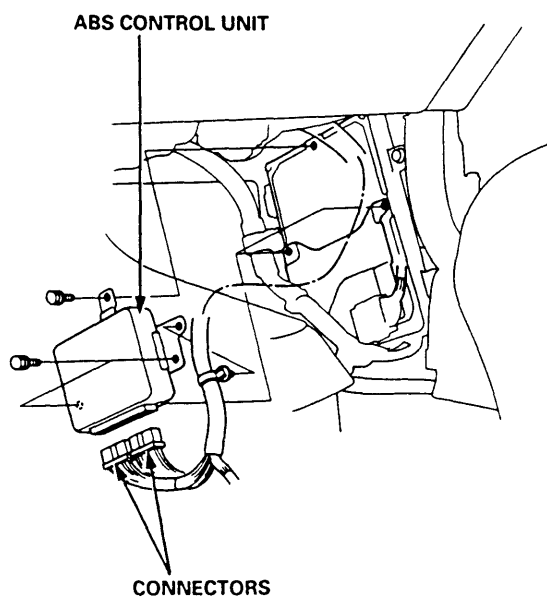
ABS Control Unit

Pulsers/Wheel Sensors



Replacement

1. Remove the right side kick panel.
2. Disconnect the ABS control unit connectors.
3. Remove the ABS control unit.
4. Install the ABS control unit in the reverse order of removal.

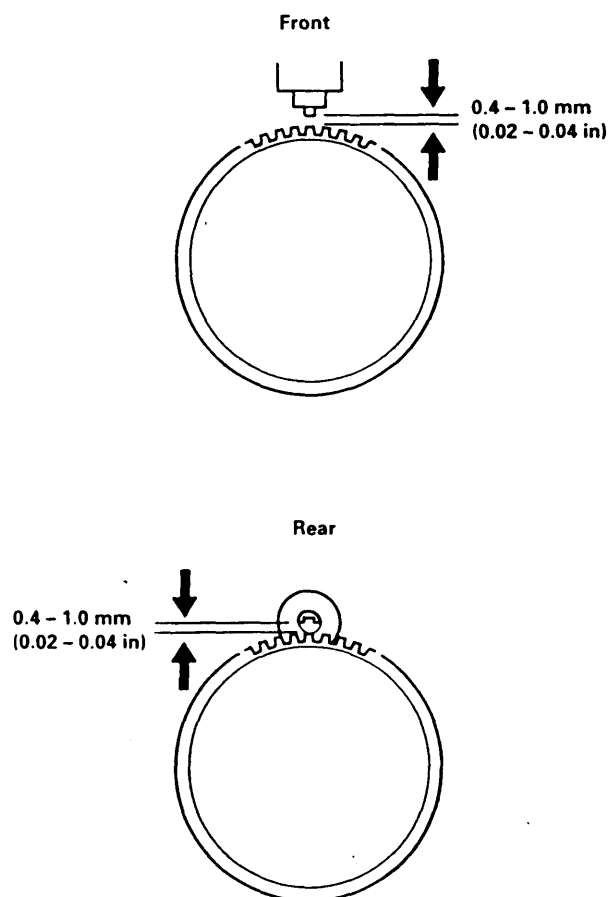


Inspection

1. Check the front and rear pulser for chipped or damaged teeth.
2. Measure the air gap between the wheel sensor and pulser all the way around while rotating the pulser.

Standard: 0.4 – 1.0 mm (0.02 – 0.04 in)

NOTE: If the gap exceeds 1.0 mm (0.04 in), the probability is a distorted suspension arm which should be replaced.



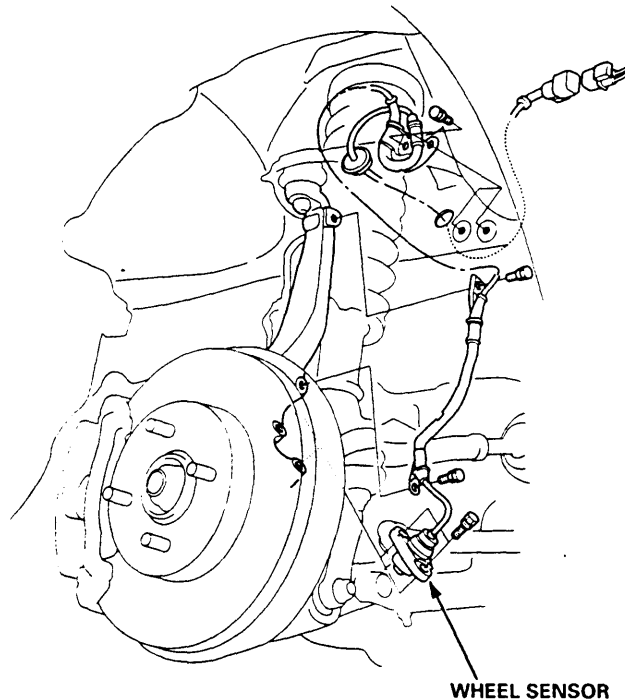
Pulsers/Wheel Sensors

Wheel Sensor Replacement

NOTE:

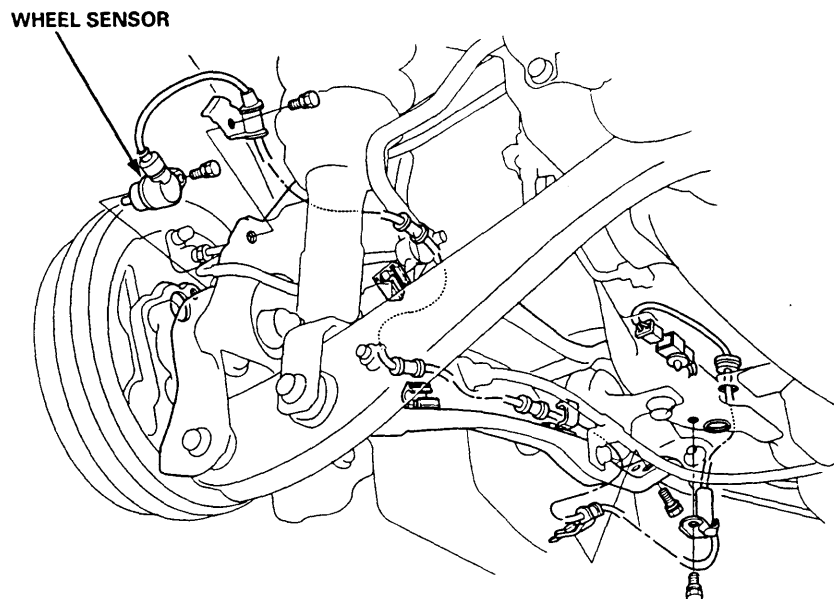
- Be careful when installing the sensors to avoid twisting the wires.
- The torque value of the bolts is at 9.8 N·m (1.0 kgf·m, 7 lbf·ft).

Front



Rear

1. Remove the hub bearing unit (see section 18).
2. Remove the four backing plate bolts.
3. Pull the backing plate away from the trailing arm, then remove the wheel sensor. It is not necessary to disconnect the brake line.



SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (if body maintenance is required)

The Acura 1.6EL SRS includes a driver's airbag located in the steering wheel hub, and a passenger's airbag located in the dashboard above the glove box. Information necessary to safely service the SRS is included in this Service Manual. Items marked with an asterisk (*) on the contents page include, or are located near, SRS components. Servicing, disassembling or replacing these items will require special precautions and tools, and should therefore be done by an authorized Acura dealer.

⚠ WARNING

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of severe frontal collision, all SRS service work must be performed by an authorized Acura dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional activation of the airbags.
- Do not bump the SRS unit. Otherwise, the system may fail in case of a collision, or the airbags may deploy when the ignition switch is ON (II).
- All SRS electrical wiring harnesses are covered with yellow insulation. Related components are located in the steering column, front console, dashboard, dashboard lower panel, and in the dashboard above the glove box. Do not use electrical test equipment on these circuits.

NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

Body

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***Interior**

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Mirror Holder Removal/

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Moonroof

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Opener Cable/Opener and Latch/

Wiper and Washer

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Seats

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Sub-frame 20-77

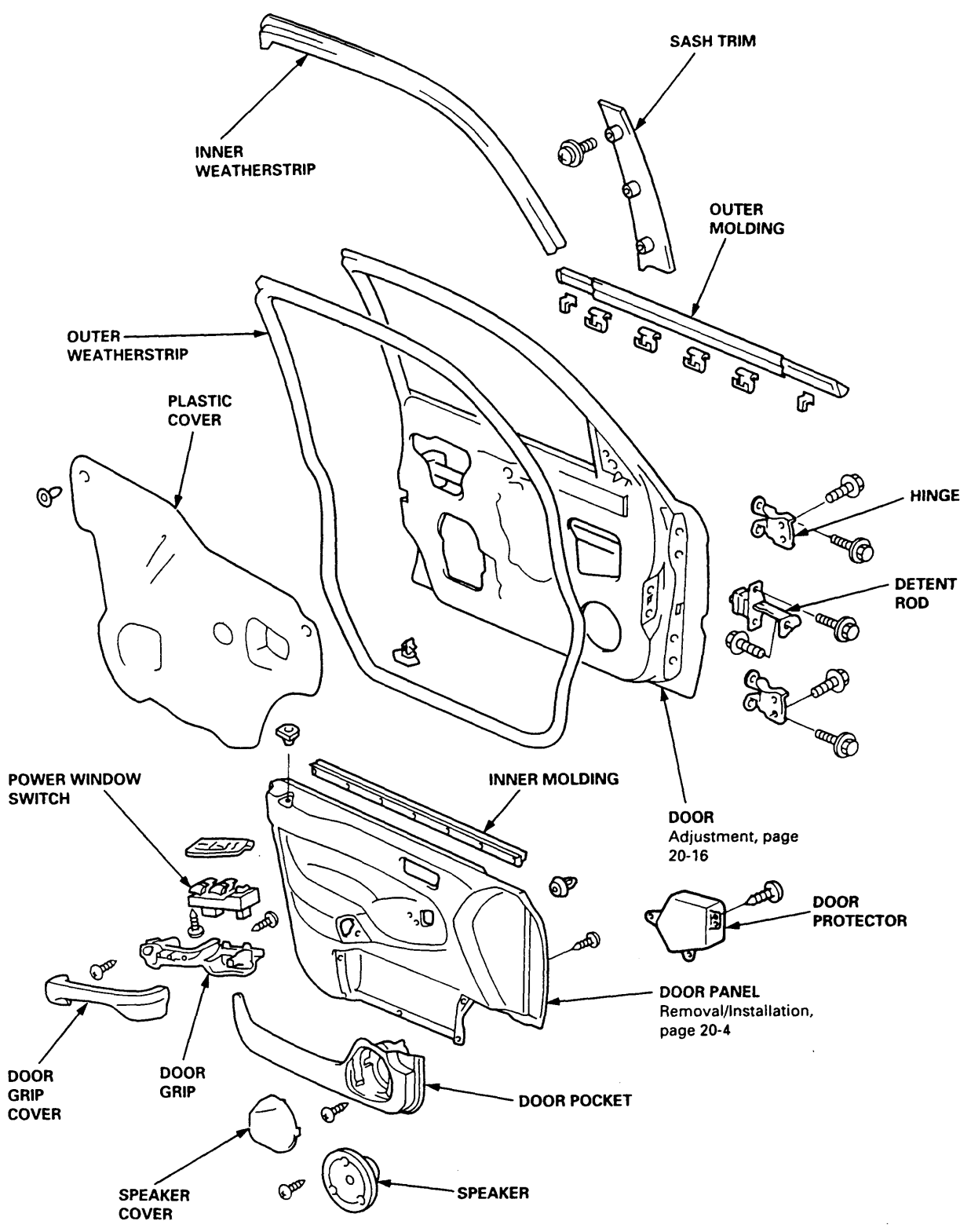
Windshield/Rear Window

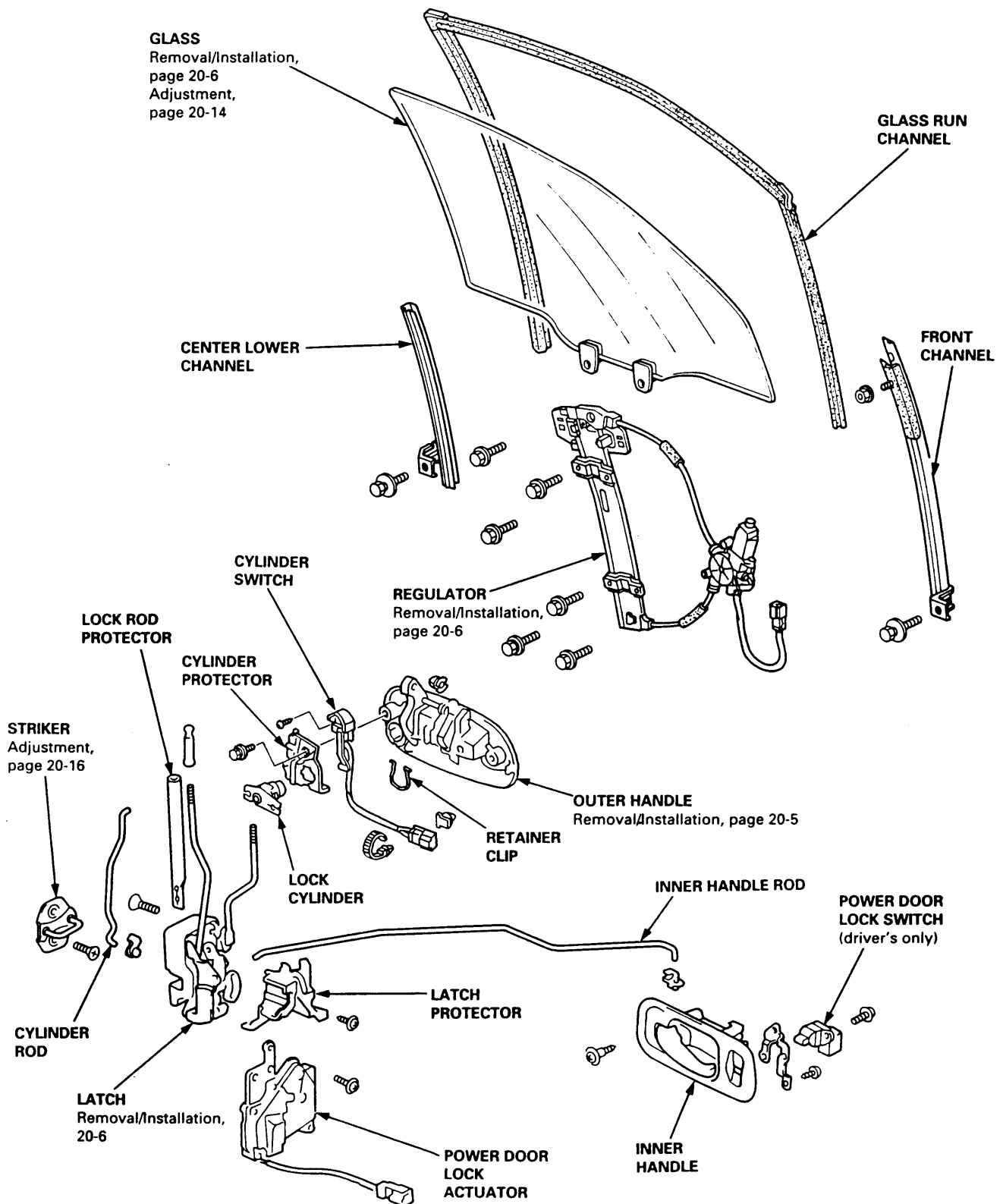
Index 20-20



Doors

Front Door Index





Doors

Door Panel Removal/Installation

NOTE: Take care not to scratch the door panel and other parts.

1. Remove:
 - Inner handle (see page 20-3)
 - Mirror mount cover panel (see page 20-18)
2. Remove the door grip cover and speaker cover, then remove the screws.

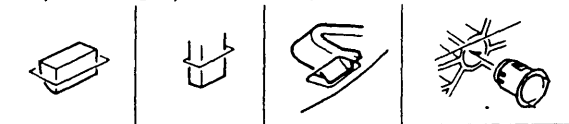
▷: Hook locations

A ▷, 5

B ▷, 2

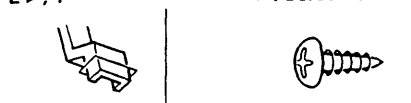
C ▷, 3

D ▷, 1

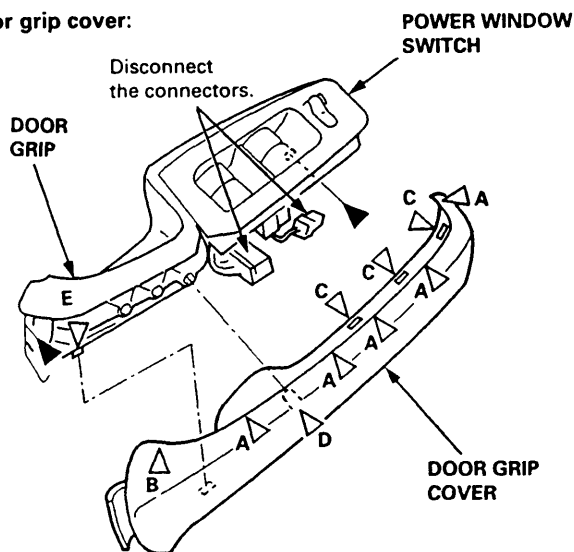


E ▷, 1

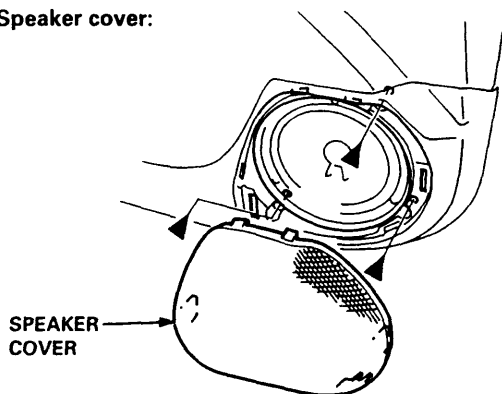
▷: Screw location, 5



Door grip cover:



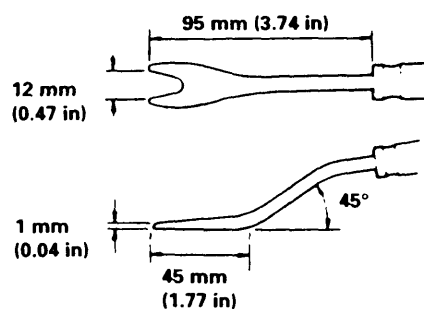
Speaker cover:



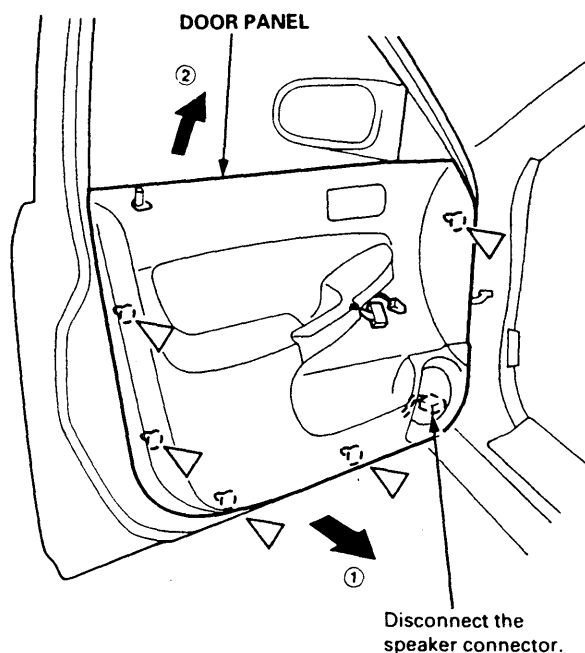
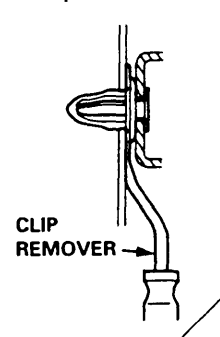
3. Release the clips that hold the door panel. Remove the door panel by pulling it upward.

NOTE: Remove the door panel with as little bending as possible to avoid creasing or breaking it.

TRIM PAD
REMOVER
(Commercially
available)
Snap-on
#A177A, or
equivalent



▷: Clip locations, 5



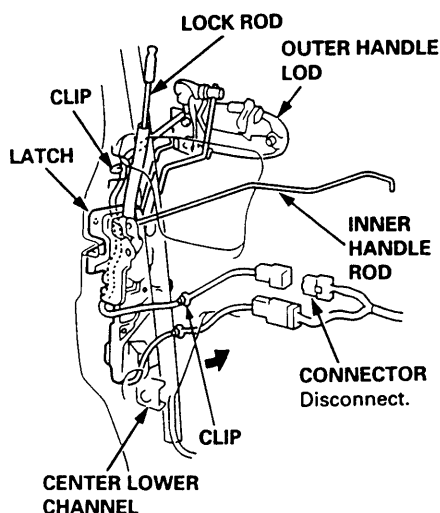
4. Installation is the reverse of the removal procedure.



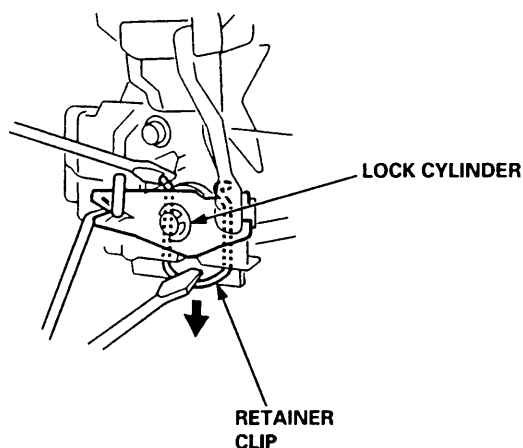
Outer Handle Removal/Installation

NOTE: Raise the glass fully.

1. Remove:
 - Door panel (see page 20-2)
 - Plastic cover (see page 20-2)
2. Disconnect the connector, and detach the harness clip from the door.



3. Pull out the retainer clip.



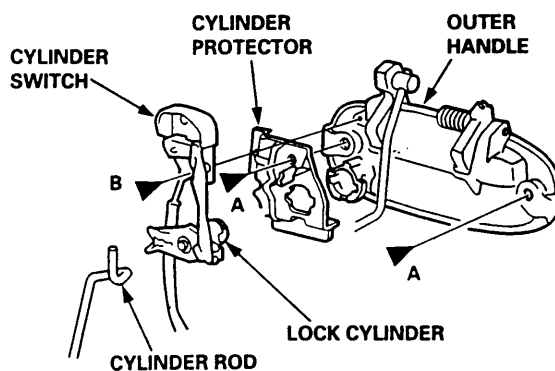
4. Remove the bolts and screw, then remove the cylinder protector, lock cylinder, cylinder switch and outer handle.

►: Bolt, screw locations

A ►, 2

B ►, 1

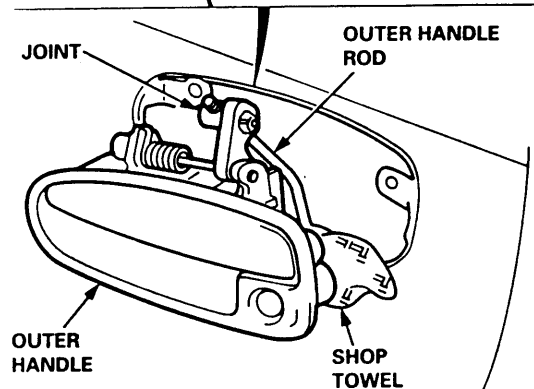
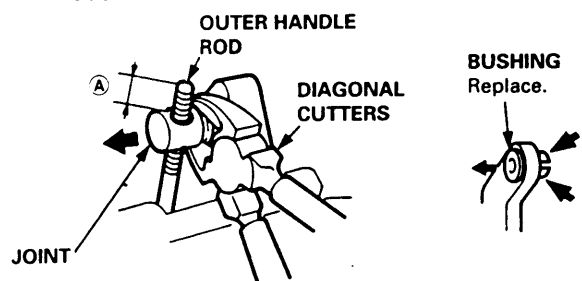
6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)



5. Pull out the outer handle. Pry the outer handle rod out of its joint using diagonal cutters.

NOTE:

- To ease reassembly, note distance location ① of the outer handle rod on the joint before disconnecting it.
- Take care not to bend the outer handle rod.
- Use a shop towel to protect the opening in the door.



6. Installation is the reverse of the removal procedure.
NOTE: Make sure the door locks and opens properly.

Doors

Latch Removal/Installation

NOTE: Raise the glass fully up.

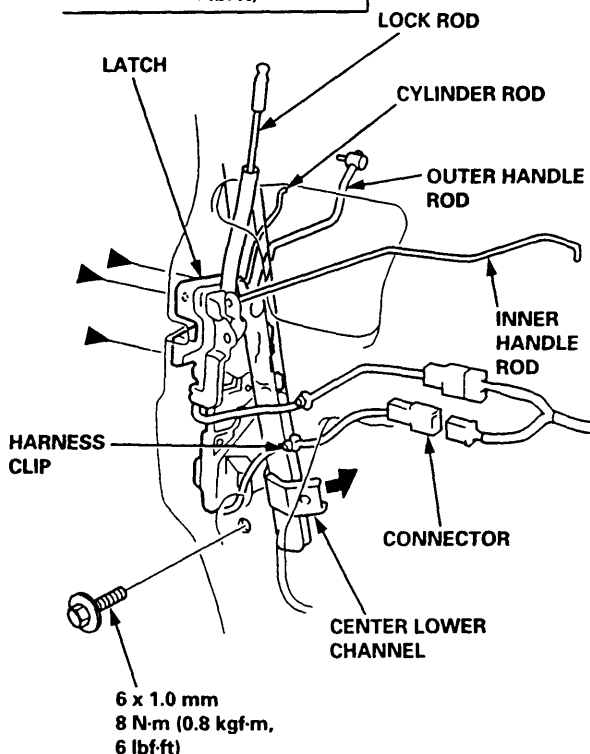
1. Remove:
 - Door panel (see page 20-4)
 - Plastic cover (see page 20-2)
 - Outer handle (see page 20-5)
2. Remove the bolt, then move the center lower channel forward.
3. Disconnect the connector, and detach the harness clip from the door. Remove the latch through the hole in the door.

NOTE: Take care not to bend any of the rods.

►: Screw locations, 3



6 x 1.0 mm
6 N·m (0.6 kgf-m,
4 lbf-ft)



4. Installation is the reverse of the removal procedure.

NOTE:

- Make sure the inner handle rod and connector are connected properly.
- Make sure the door locks and opens properly.

Glass and Regulator Removal/Installation

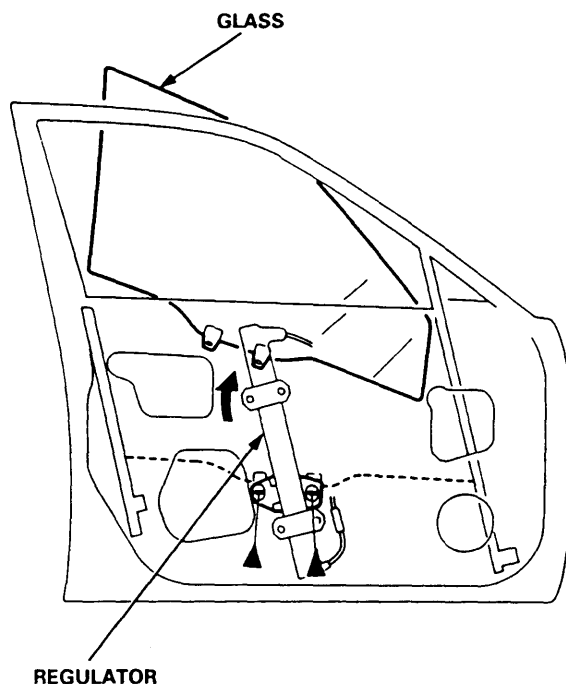
1. Remove:
 - Door panel (see page 20-4)
 - Plastic cover (see page 20-2)
2. Carefully move the glass until you can see the bolts, then remove them. Carefully pull the glass out through the window slot.

NOTE: Take care not to drop the glass inside the door.

►: Bolt locations, 2



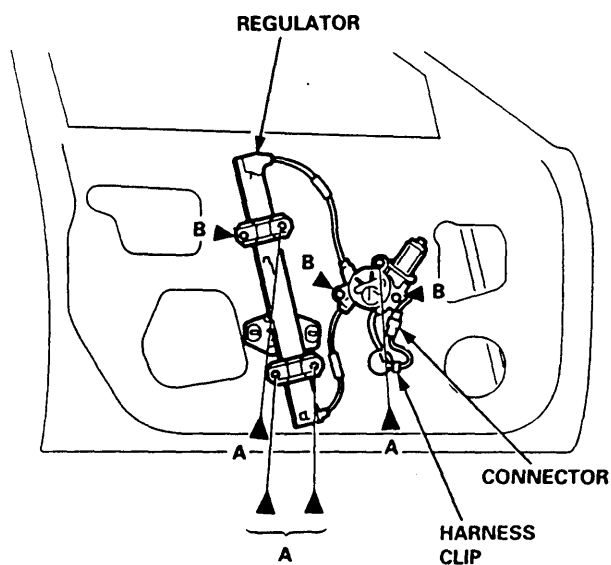
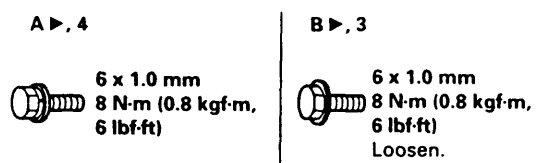
6 x 1.0 mm
9.8 N·m (1.0 kgf-m,
7.2 lbf-ft)



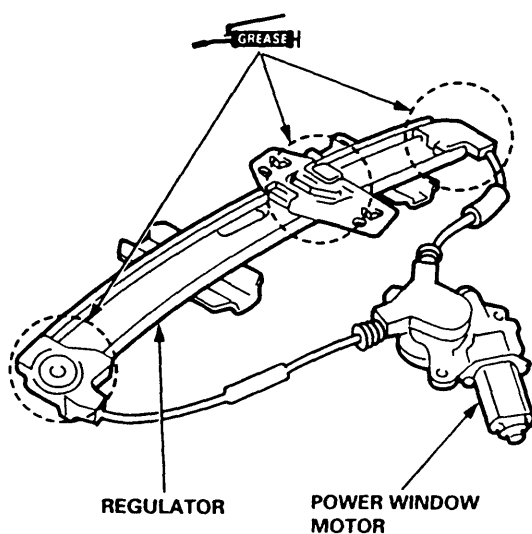


3. Disconnect the connector, and detach the harness clip, then remove the regulator through the hole in the door.

►: Bolt locations



4. Grease all the sliding surfaces of the regulator where shown.

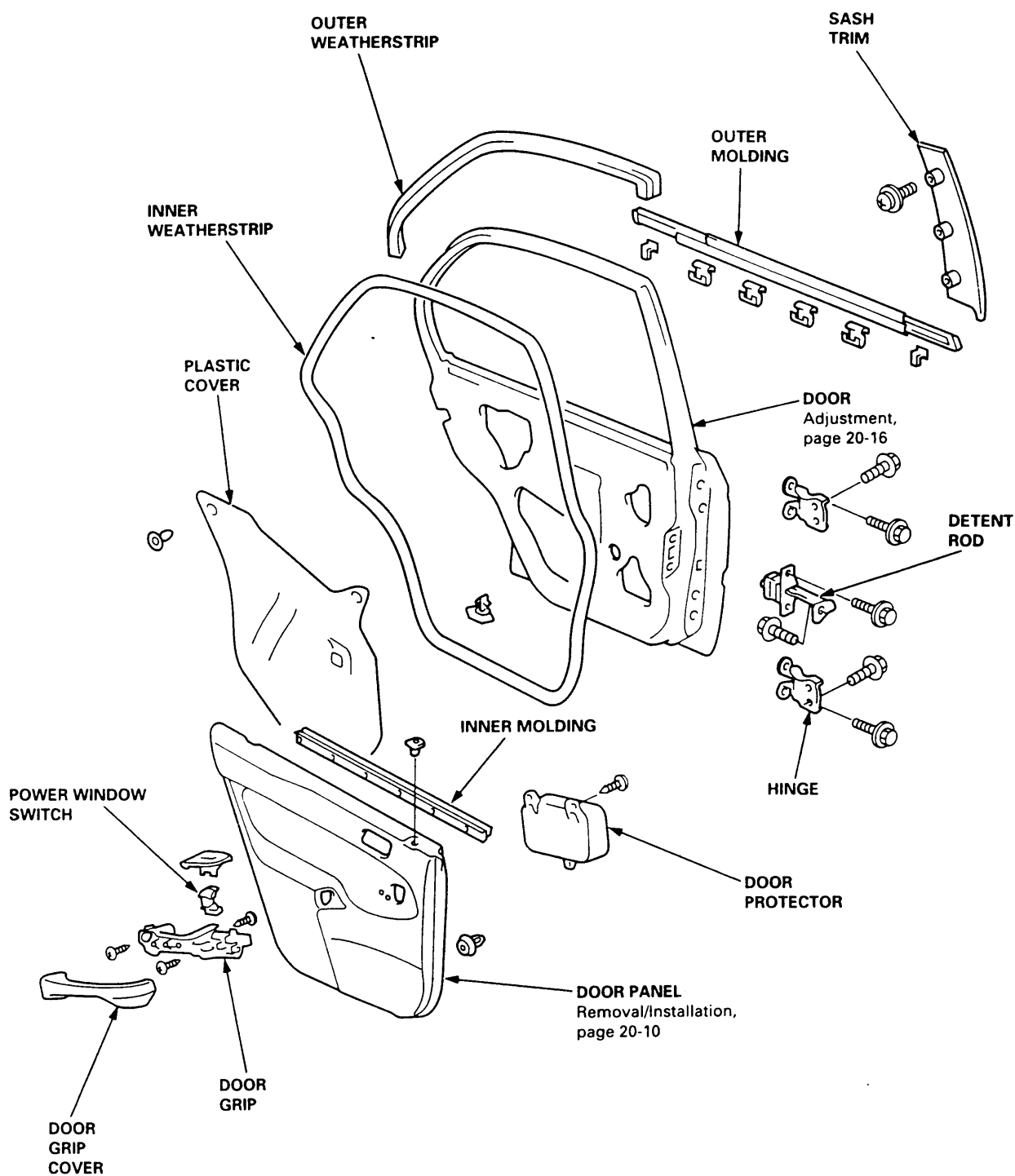


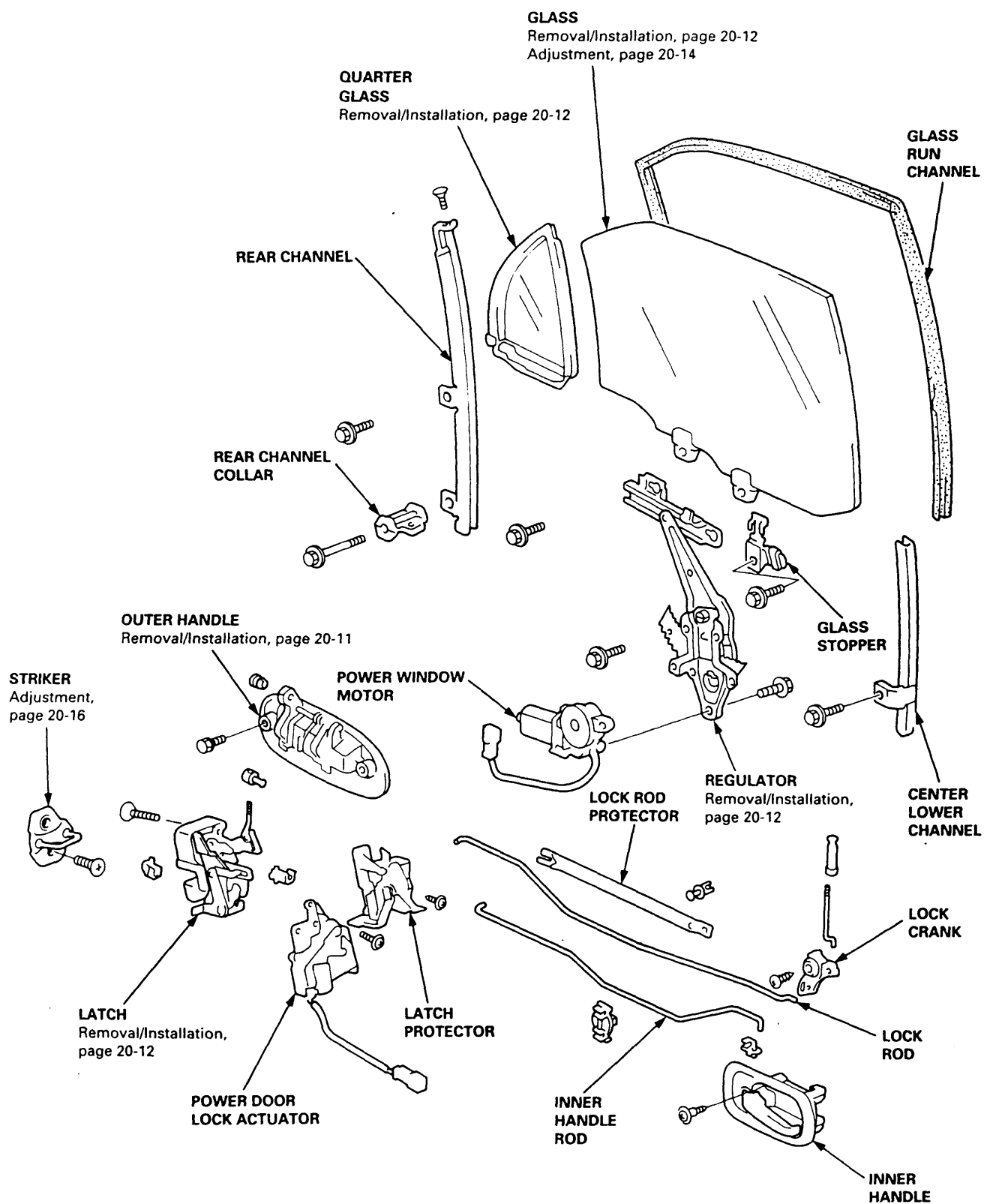
5. Installation is the reverse of the removal procedure.

NOTE: Roll the glass up and down to see if it moves freely without binding. Also make sure that there is no clearance between the glass and glass run channel when the glass is closed. Adjust the position of the glass as necessary (see page 20-14).

Doors

Rear Door Index



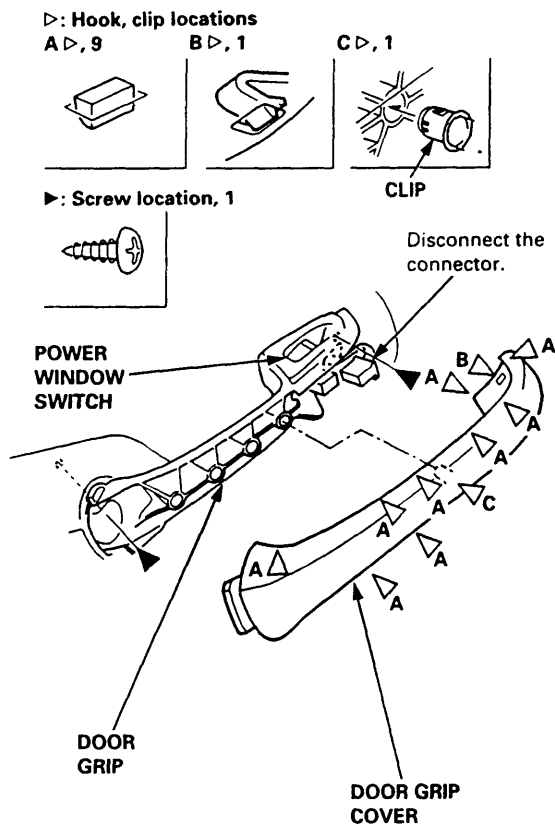


Doors

Door Panel Removal/Installation

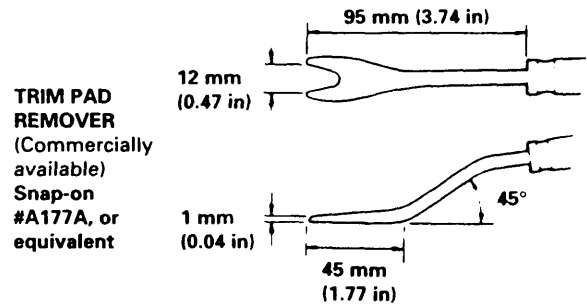
NOTE: Take care not to scratch the door panel and other parts.

1. Remove:
 - Inner handle (see page 20-9)
 - Regulator handle (see page 20-4)
2. Remove the door grip cover, then remove the screws.

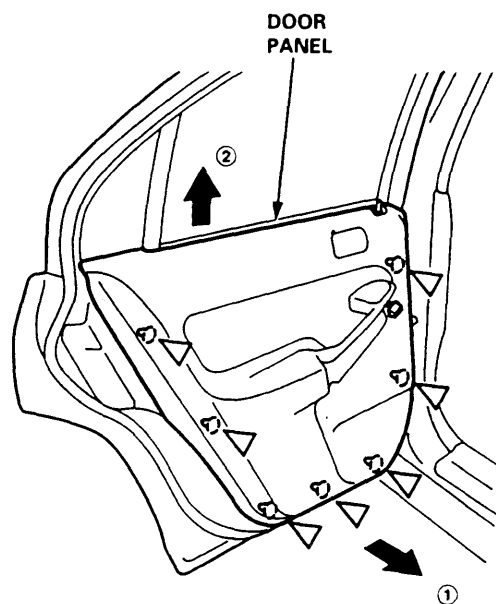
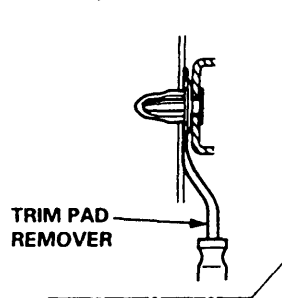


3. Release the clips that hold the door panel. Remove the door panel by pulling it upward.

NOTE: Remove the door panel with as little bending as possible to avoid creasing or breaking it.



▷: Clip locations, 7



4. Installation is the reverse of the removal procedure.

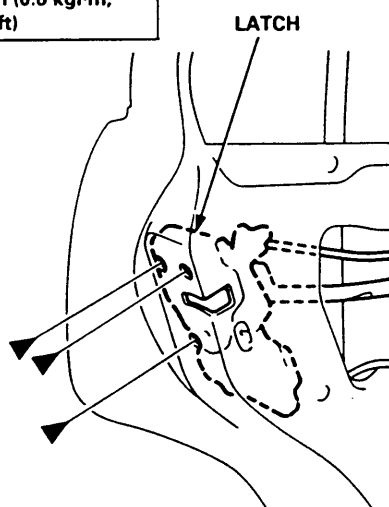
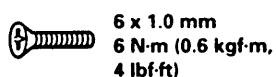


Outer Handle Removal/Installation

NOTE: Raise the glass fully.

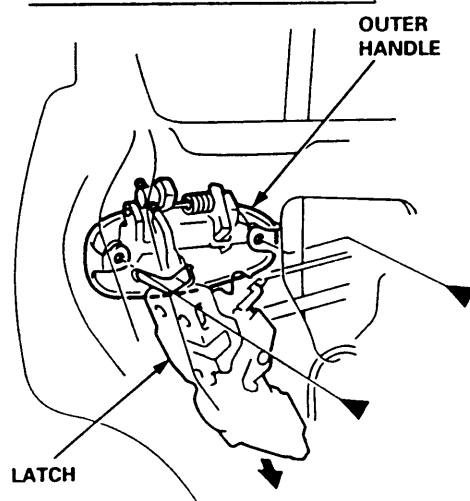
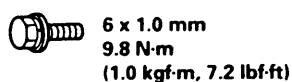
1. Remove:
 - Door panel
 - Plastic cover (see page 20-8)
2. Remove the screws.

►: Screw locations, 3



3. Move the latch down, and remove the bolts.

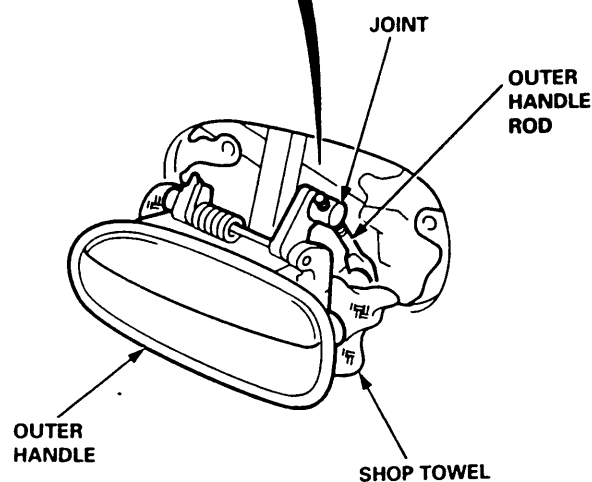
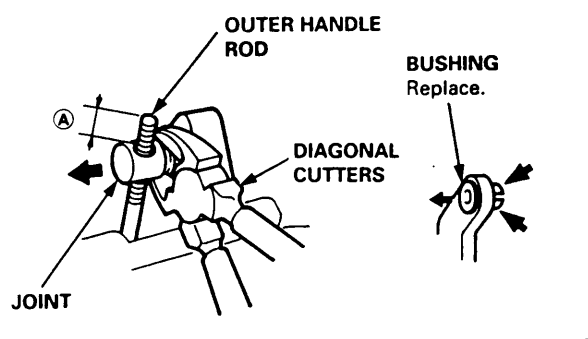
►: Bolt locations, 2



4. Pull out the outer handle. Pry the outer handle rod out of its joint using diagonal cutters.

NOTE:

- To ease reassembly, note location Ⓐ of the outer handle rod on the joint before disconnecting it.
- Take care not to bend the outer handle rod.
- Use a shop towel to protect the opening in the door.



5. Installation is the reverse of the removal procedure.

NOTE: Make sure the door locks and opens properly.

Doors

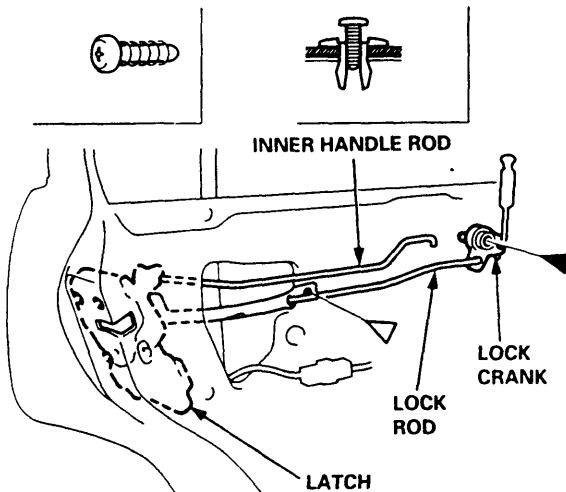
Latch Removal/Installation

NOTE: Raise the glass fully.

1. Remove:
 - Door panel (see page 20-10)
 - Plastic cover (see page 20-8)
 - Outer handle (see page 20-11)
2. Remove the lock crank and clip.

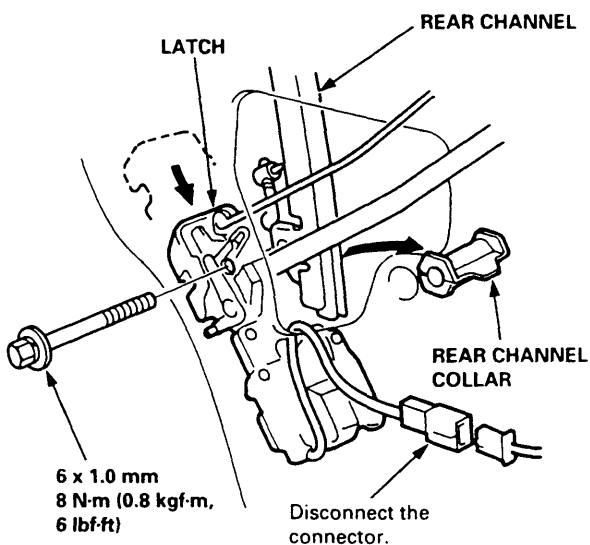
►: Screw location, 1

▷: Clip location, 1



3. Remove the rear channel collar.

NOTE: Take care not to bend the lock rod and inner handle rod.



4. Remove the latch through the hole in the door.
5. Installation is the reverse of the removal procedure.

NOTE: Make sure the door locks and opens properly.

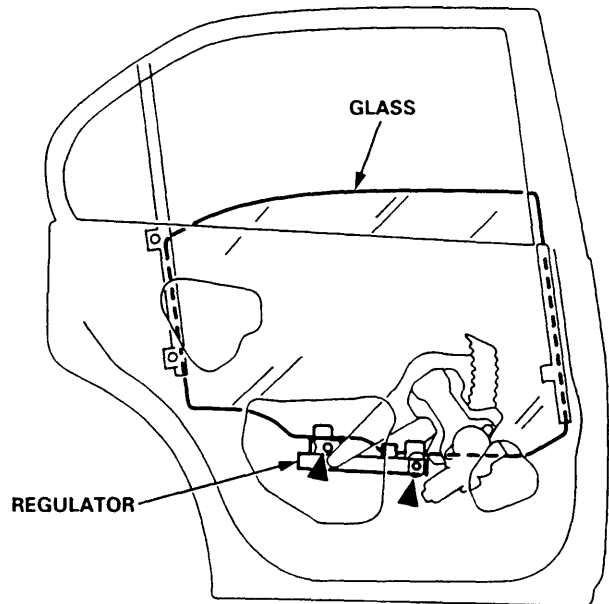
Glass and Regulator Removal/Installation

1. Remove:
 - Door panel (see page 20-10)
 - Plastic cover (see page 20-8)
2. Carefully move the glass until you can see the bolts, then remove them.

NOTE: Take care not to drop the glass inside the door.

►: Bolt locations, 2

6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)



3. Carefully lower the glass. Remove the bolts and screw from the rear channel, then remove the glass from the rear channel.

NOTE: Take care not to drop the glass inside the door.

►: Bolt, screw locations

A, 1

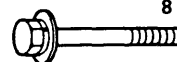
6 x 1.0 mm
8 N·m (0.8 kgf·m,
6 lbf·ft)

C, 1



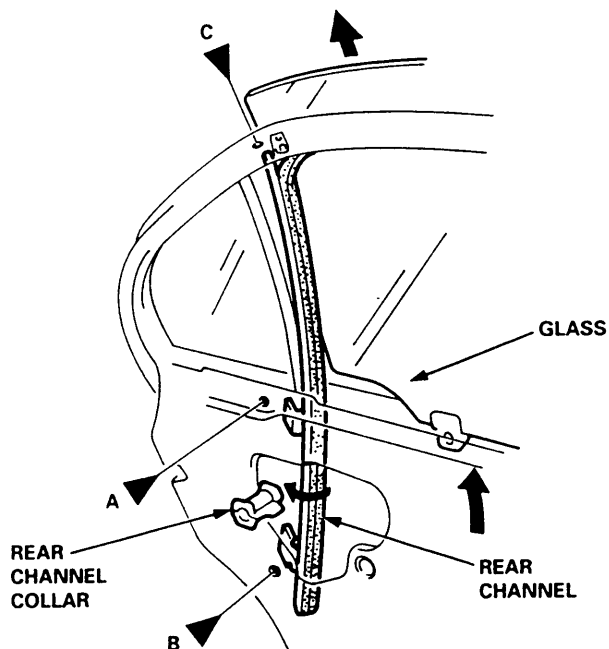
B, 1

6 x 1.0 mm
8 N·m (0.8 kgf·m, 6 lbf·ft)

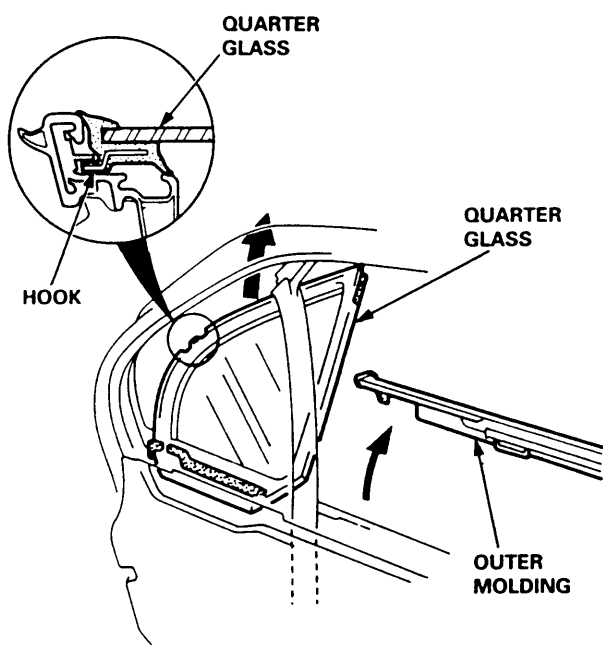




4. Carefully remove the glass from the window slot.



5. Remove the outer molding, then remove the quarter glass.



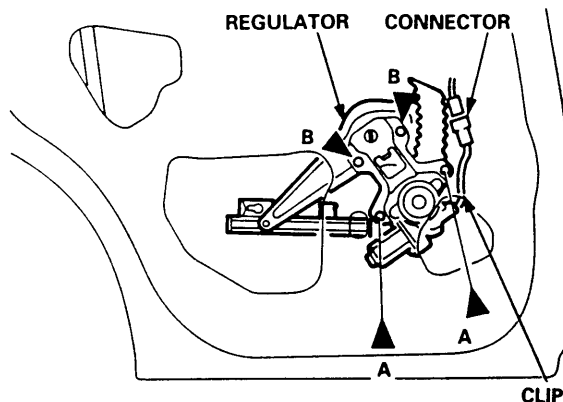
6. Disconnect the connector, and detach the harness clip, then remove the regulator through the hole in the door.

A ▶, 2

6 x 1.0 mm
8 N·m (0.8 kgf·m,
6 lbf·ft)

B ▶, 2

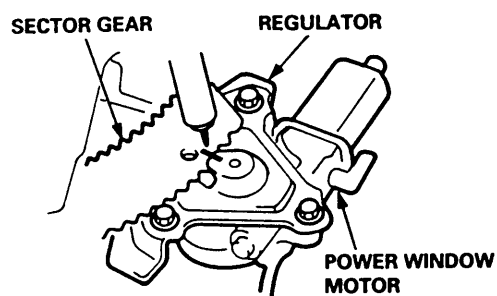
6 x 1.0 mm
8 N·m (0.8 kgf·m,
6 lbf·ft)
Loosen.



7. Grease all the sliding surfaces of the regulator where shown.

NOTE:

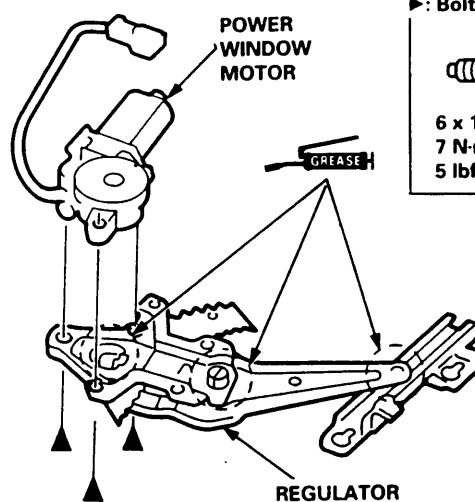
- If necessary, remove the power window motor from the regulator.
- Before removing the power window motor, scribe a line across the sector gear and regulator.



▶: Bolt locations, 3



6 x 1.0 mm
7 N·m (0.7 kgf·m,
5 lbf·ft)



8. Installation is the reverse of the removal procedure.

NOTE: Roll the glass up and down to see if it moves freely without binding. Also make sure that there is no clearance between the glass and glass run channel when the glass is closed. Adjust the position of the glass as necessary (see page 20-14).

Doors

Glass Adjustment

NOTE:

- Place the vehicle on a firm, level surface when adjusting the glass.
- Check the weatherstrips and glass run channel for damage or deterioration, and replace them if necessary.

1. Remove:

- Door panel (see page 20-4, 10)
- Plastic cover (see page 20-2, 8)

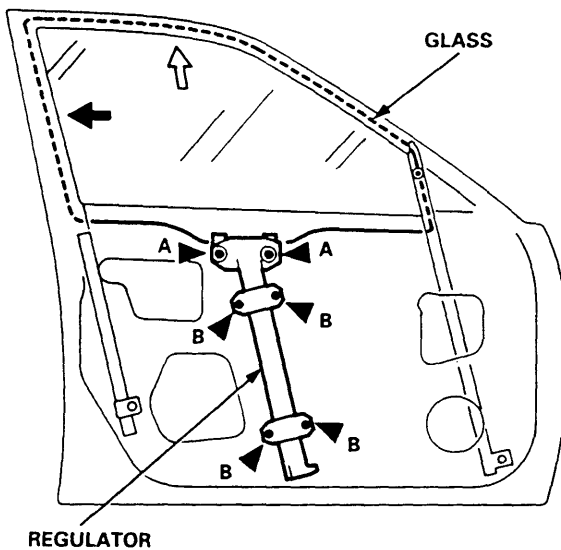
2. Adjust the glass.

- a. Raise the glass fully.
- b. Loosen the glass mounting bolts (front door) and regulator mounting bolts.
- c. Push the glass rearward (front door glass) or forward (rear door glass).
- d. Tighten the glass mounting bolts (front door) and regulator mounting bolts.

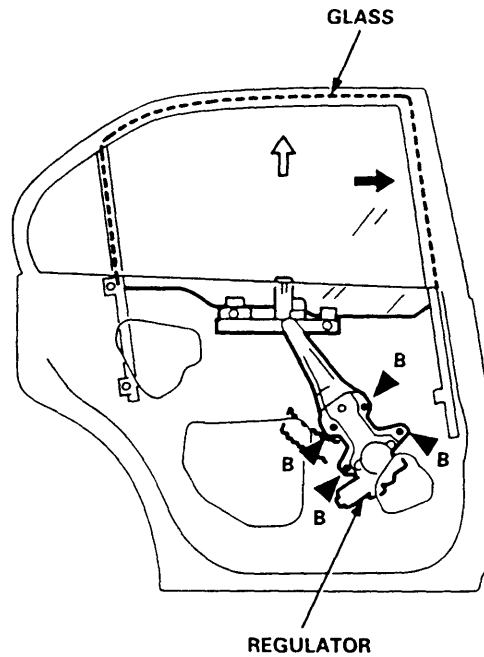
A►: Glass mounting bolt locations.

B►: Regulator mounting bolt locations.

Front:



Rear:



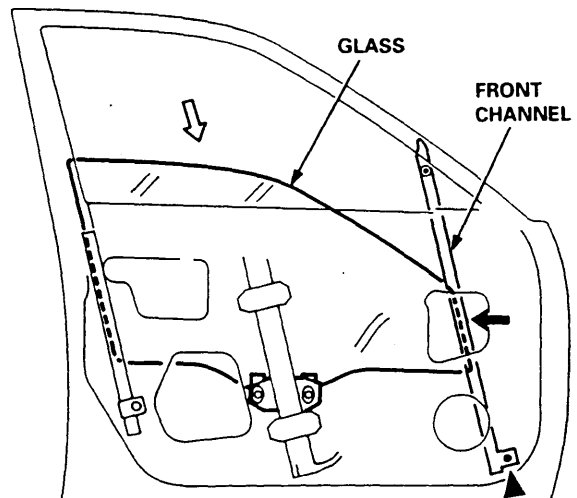
- e. Loosen the front channel mounting bolts (front door or rear channel mounting bolt (rear door)).

- f. Lower the glass.

- g. Push the front or rear channels against the glass while you tighten the mounting bolts.

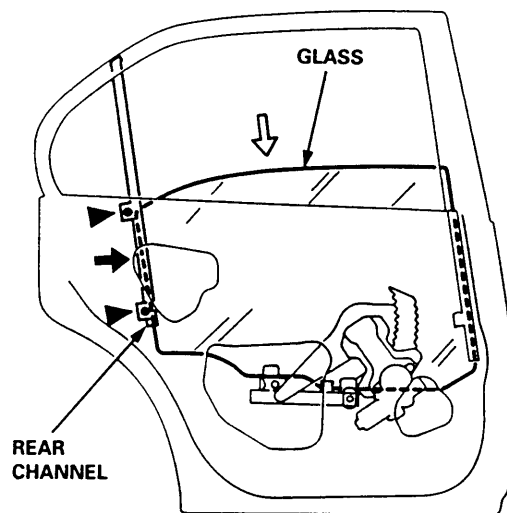
►: Front and rear channel mounting bolt locations

Front:



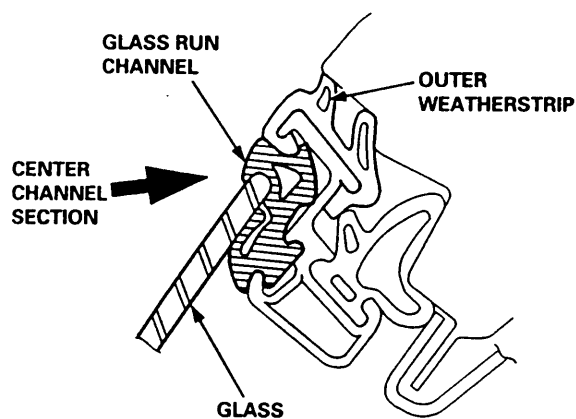


Rear:



3. Check that the glass moves smoothly.
4. Raise the glass fully and check for gaps.
5. Check the glass operation.

NOTE: Check that the glass contacts the glass run channel evenly.

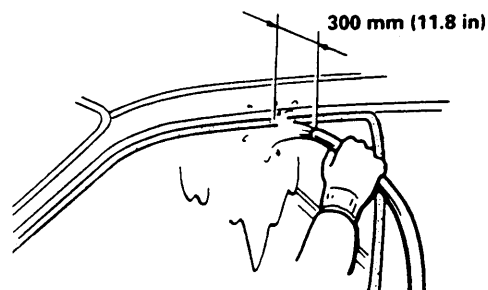
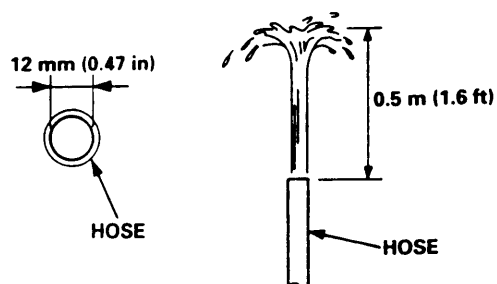


6. Check for water leaks.

Spray water over the roof and on the sealing area as shown.

NOTE:

- Adjust the water pressure as shown.
- Do not squeeze the tip of the hose.



7. Reattach the plastic cover, then reinstall the door panel (see pages 20-4, 10).

Doors

Position Adjustment

NOTE: Place the vehicle on a firm, level surface when adjusting the doors.

After installing the door, check for a flush fit with the body, then check for equal gaps between the front, rear, and bottom door edges and the body. The door and body edges should also be parallel. Adjust at the hinges as shown.

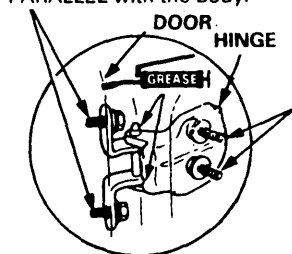
CAUTION: Place a shop towel on the jack to prevent damage to the door when loosening the door and hinge mounting bolts for adjustment.

DOOR MOUNTING BOLTS

8 x 1.25 mm

28 N·m (2.9 kgf·m, 21 lbf·ft)

Loosen the door mounting bolts slightly to move the door IN or OUT until it's flush with the body. If necessary, you can install a shim behind one hinge to make the door edges PARALLEL with the body.

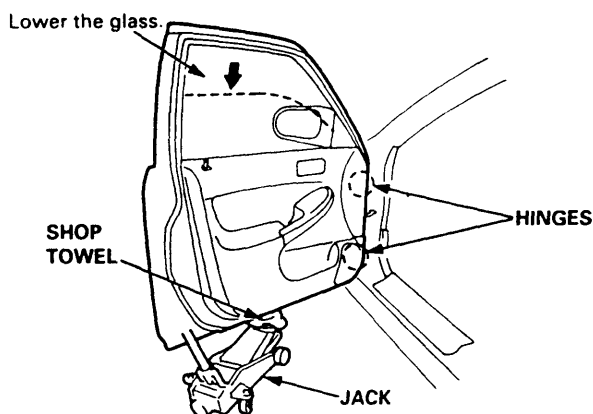


HINGE MOUNTING BOLTS

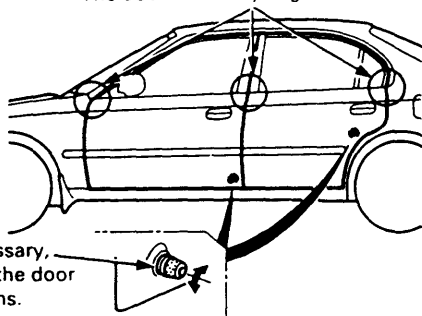
8 x 1.25 mm

28 N·m (2.9 kgf·m, 21 lbf·ft)

Remove the inner fender, loosen the hinge mounting bolts, and move the door BACKWARD or FORWARD, UP or DOWN as necessary to equalize the gaps. Lower the glass.



The door and body edges should be parallel.



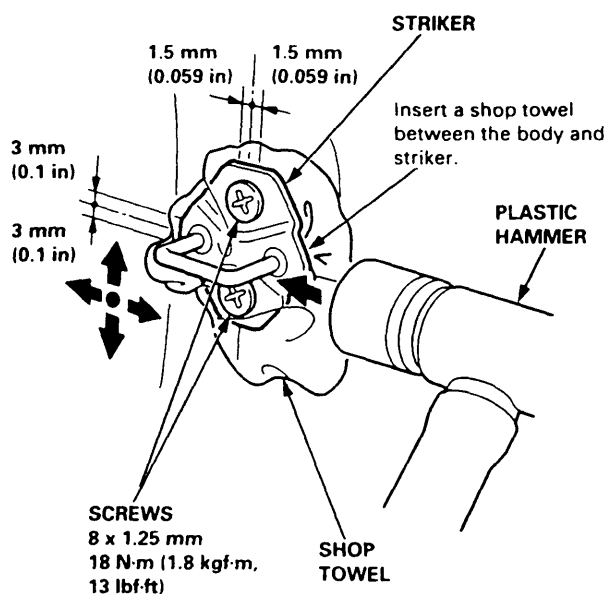
NOTE: Check for water leaks.

Striker Adjustment

Make sure the door latches securely without slamming. If it needs adjustment:

NOTE: The striker nuts are fixed. The striker can be adjusted 1.5 mm (0.059 in) up or down, and 3 mm (0.1 in) in or out.

1. Loosen the screws, then insert a shop towel between the body and striker.



2. Lightly tighten the screws.
3. Wrap the striker with a shop towel, then adjust the striker by tapping it with a plastic hammer.

CAUTION: Do not tap the striker too hard.

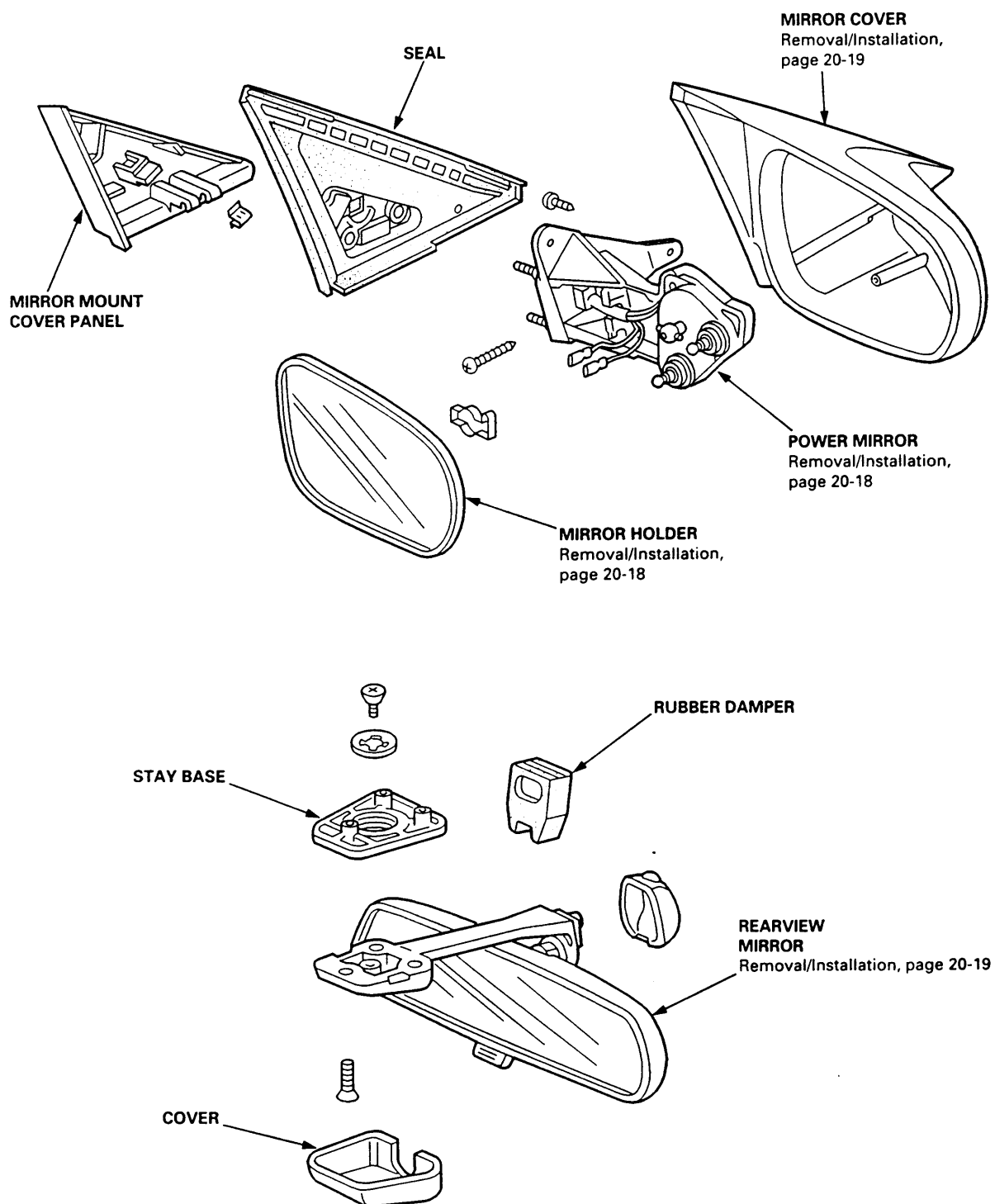
NOTE: Hold the outer handle out, and push the door against the body to be sure the striker allows a flush fit.

4. If the door latches properly, loosen the screws, then remove the shop towel. Tighten the screws and recheck.

Mirrors



Index

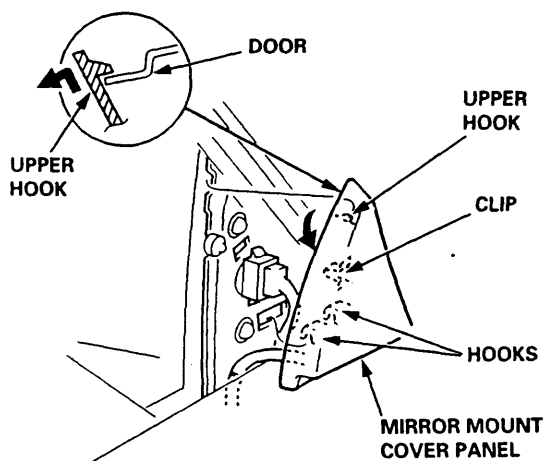


Mirrors

Power Mirror Removal/Installation

NOTE: Take care not to scratch the mirror, or the door.

1. Lower the door glass.
2. Carefully pry out the mirror mount cover panel by hand.

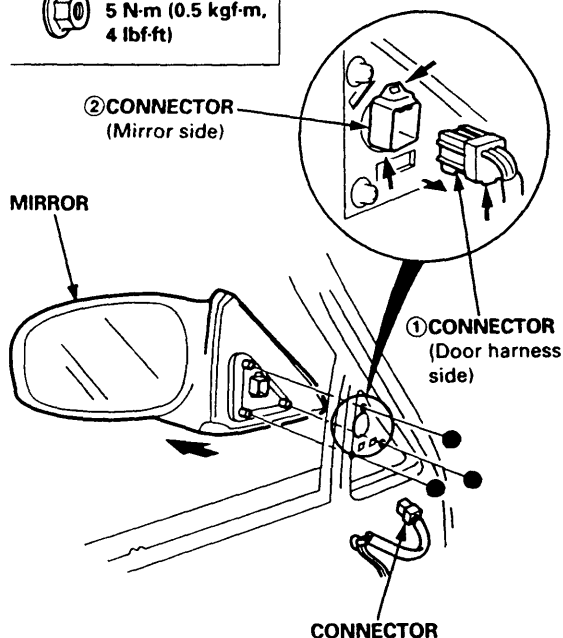


3. Disconnect the mirror connector. While holding the mirror, remove the nuts and remove the mirror.

●: Nut locations, 3



5 x 0.8 mm
5 N·m (0.5 kgf·m,
4 lbf·ft)



4. Installation is the reverse of the removal procedure.

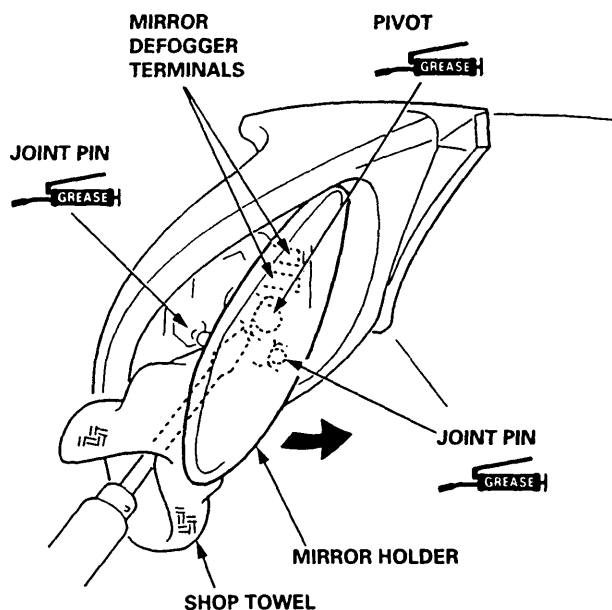
NOTE: Make sure the connector is connected properly.

Mirror Holder Removal/Installation

CAUTION:

- When prying with a flat tip screwdriver, wrap it with a shop towel to prevent damage.
- Wear gloves to remove and install the mirror holder.

1. Carefully pry out the mirror holder with a flat tip screwdriver as shown. Disconnect the mirror defogger terminals.



2. Installation is the reverse of the removal procedure.

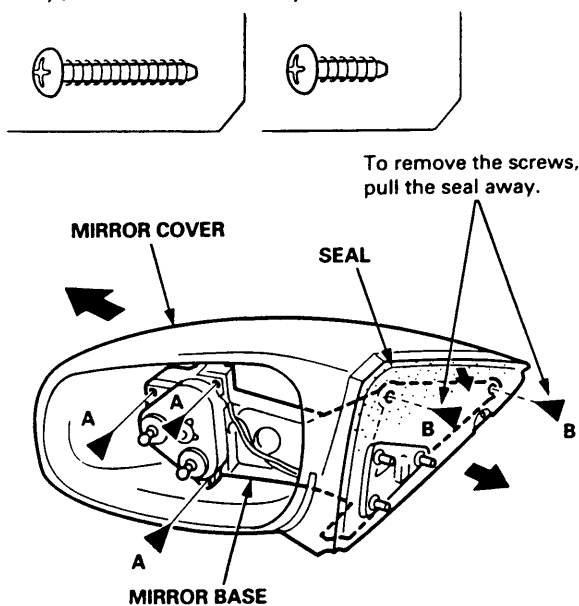
NOTE: Apply grease to the locations indicated by the arrows.



Mirror Cover Removal/Installation

►: Screw locations
A ►, 3

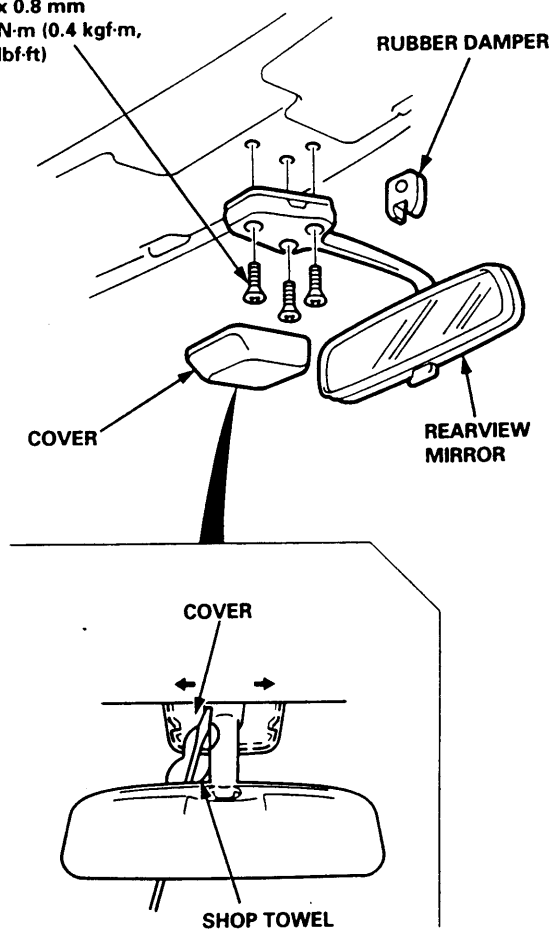
B ►, 2



Rearview Mirror Removal/Installation

1. Remove the rubber damper.
 2. Pry the cover off using the end of a flat tip screwdriver.
- CAUTION:** When prying with a flat tip screwdriver, wrap it with a shop towel to prevent damage.
3. Remove the screws, then remove the rearview mirror.

SCREW
5 x 0.8 mm
4 N·m (0.4 kgf·m,
3 lbf·ft)



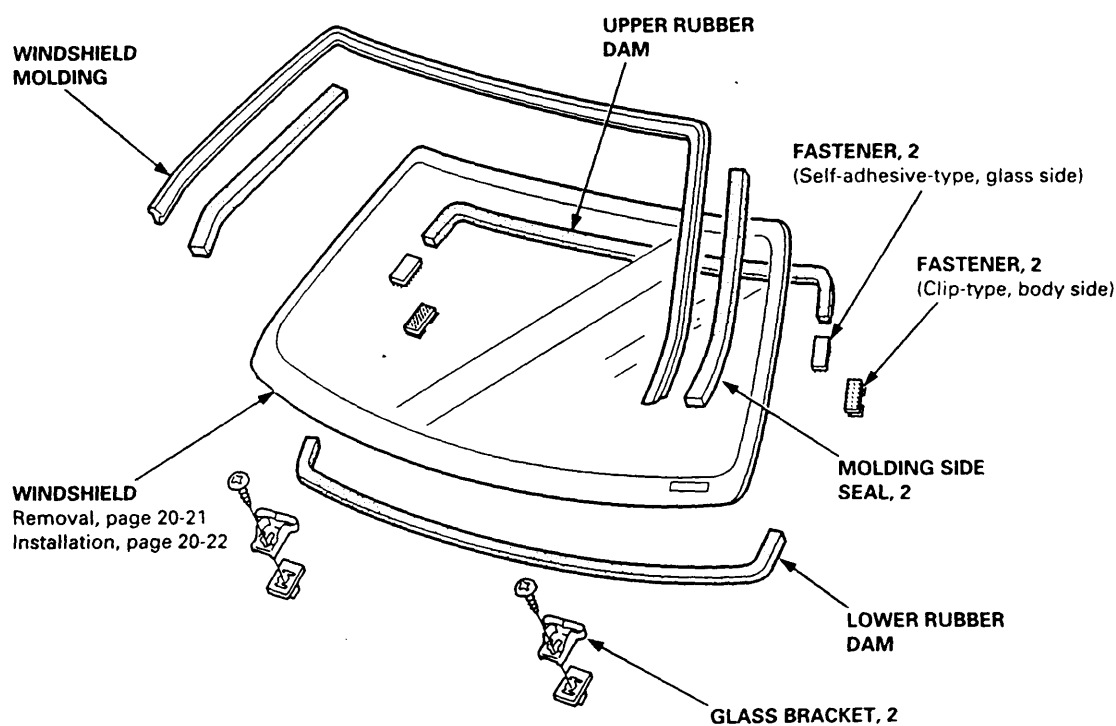
4. Installation is the reverse of the removal procedure.

Windshield/Rear Window

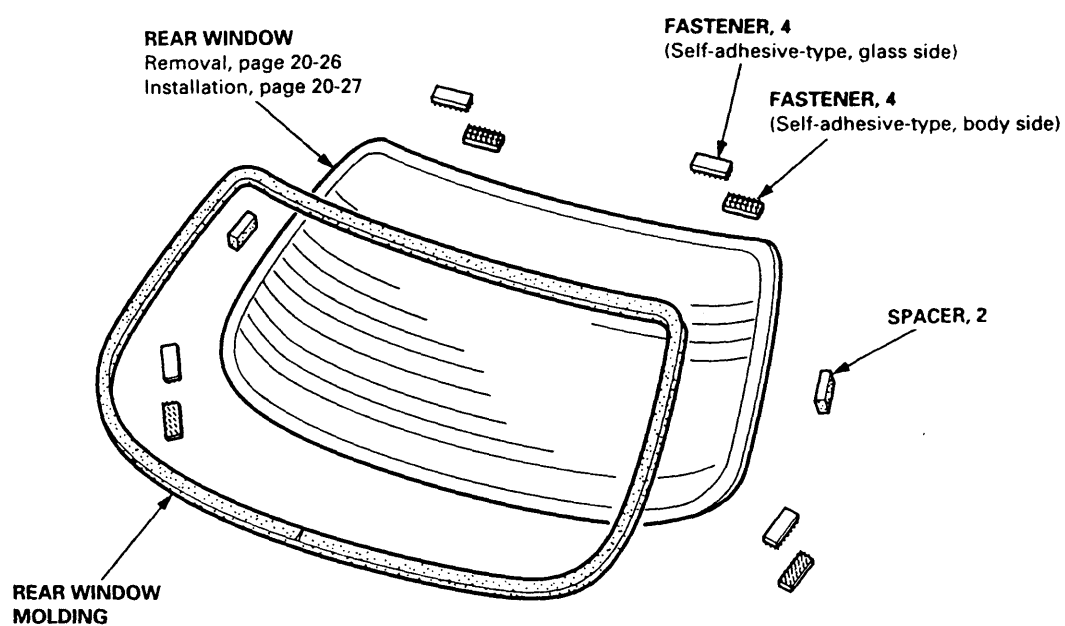
Index

NOTE: The numbers after the part names show the quantities of the parts used.

Windshield:



Rear Window:





Windshield Removal

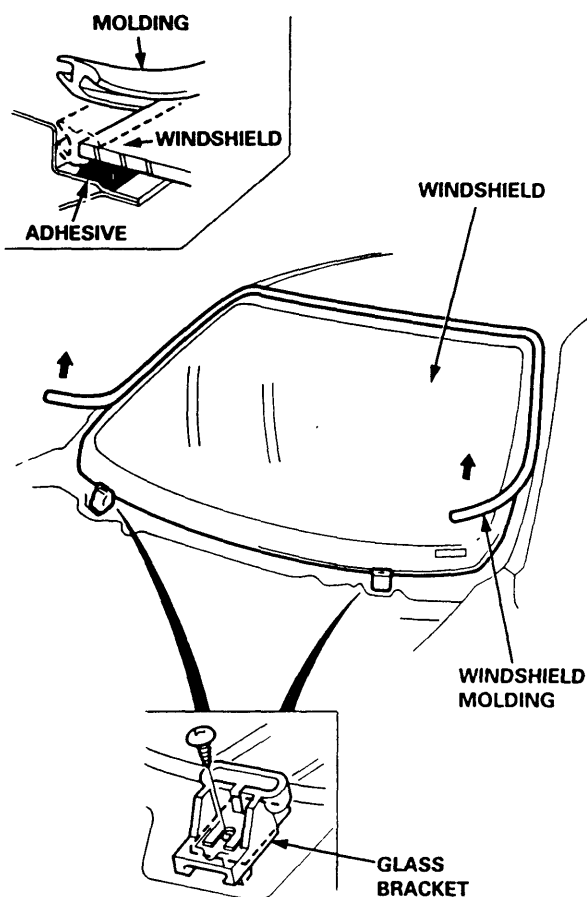
CAUTION:

- Wear gloves to remove and install the windshield.
- Use seat covers to avoid damaging any surfaces.

1. To remove the windshield, first remove the:
 - Rearview mirror (see page 20-19)
 - Sunvisors and holders (see page 20-41)
 - Front pillar trim (see page 20-39)
 - Windshield wiper arms and cowl cover (see page 20-73)

2. Remove off the windshield molding, and remove the glass brackets.

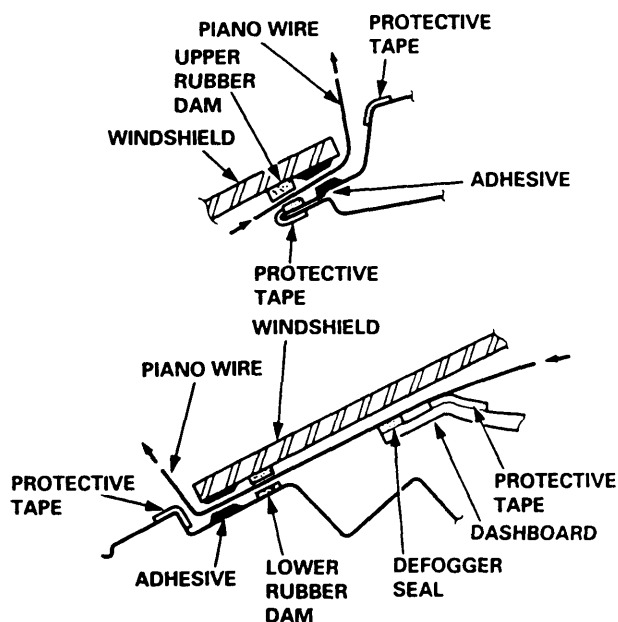
NOTE: If removing the windshield molding is difficult, cut the molding with a utility knife.



3. Pull down the front portion of the headliner (see page 20-41).

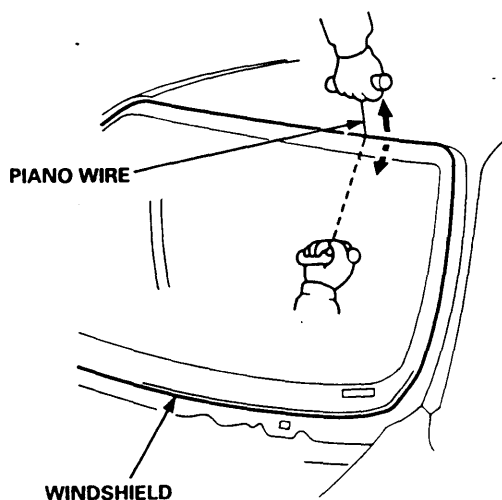
CAUTION: Take care not to bend the headliner excessively or you may break it.

4. Apply protective tape along the edge of the dashboard and body as shown. Using an awl, make a hole through the rubber dam and adhesive from inside the vehicle. Push a piece of piano wire through the hole, and wrap each end around a piece of wood.



CAUTION: Hold the piano wire as close to the windshield as possible to prevent damage to the body and dashboard.

5. With a helper on the outside, pull the piano wire back and forth in a sawing motion, and carefully cut through the rubber dam and adhesive around the entire windshield.



6. Carefully remove the windshield.

Windshield/Rear Window

Windshield Installation

1. Using a putty knife, scrape the old adhesive smooth to a thickness of about 2 mm (0.08 in) on the bonding surface around the entire windshield opening flange.

NOTE:

- Do not scrape down to the painted surface of the body; damaged paint will interfere with proper bonding.
- Remove the rubber dams and fasteners from the body.
- Mask off surrounding surfaces before painting.

2. Clean the body bonding surface with a sponge dampened in alcohol.

NOTE: After cleaning, keep oil, grease and water from getting on the surface.

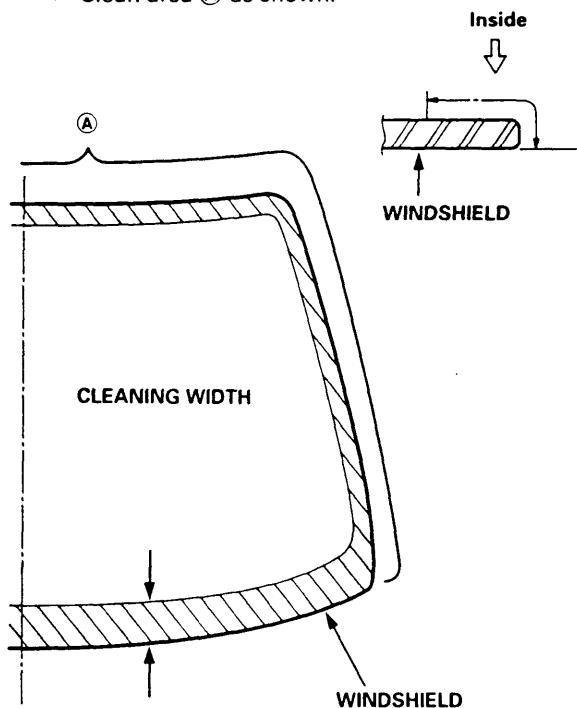
3. If the old windshield is to be reinstalled, use a putty knife to scrape off all traces of old adhesive and the rubber dam, then clean the windshield surface with alcohol where new adhesive is to be applied.

NOTE: Make sure the bonding surface is kept free of water, oil and grease.

CAUTION: Avoid setting the windshield on its edges; small chips may later develop into cracks.

NOTE:

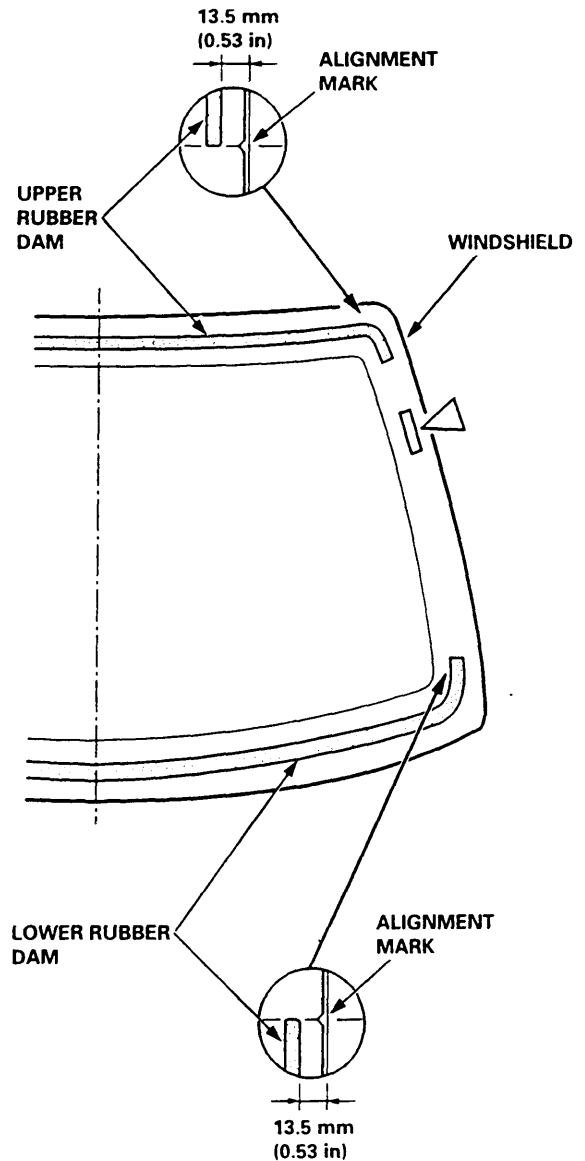
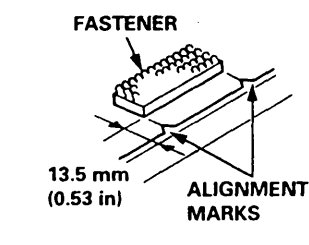
- Clean the shadowed area.
- Clean area (A) as shown.



4. Glue the rubber dam and fasteners to the inside face of the windshield as shown.

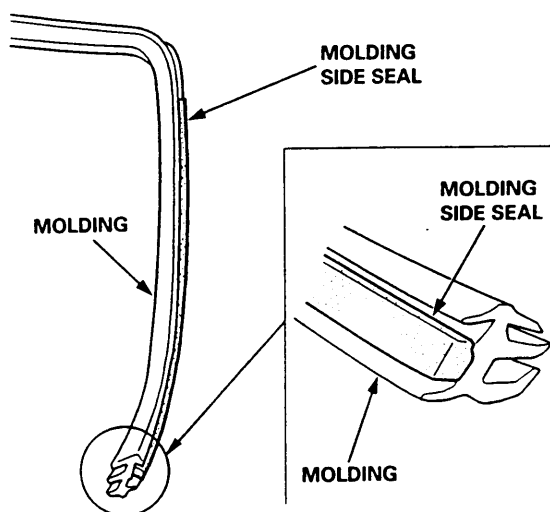
NOTE: Be careful not to touch the windshield where adhesive will be applied.

▷: Fastener locations, 2



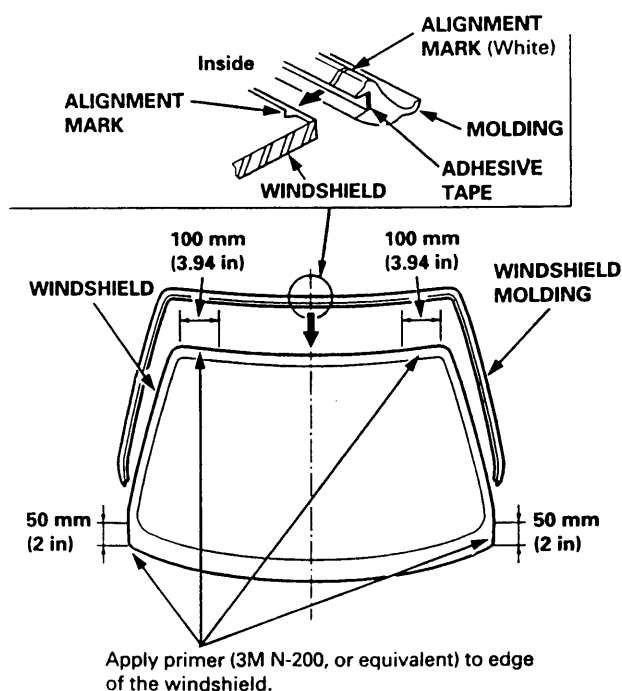


5. Glue the molding side seal to the windshield molding on each side.



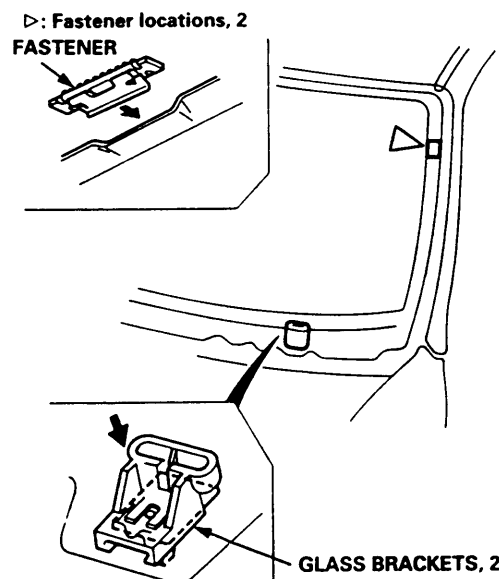
6. Align and glue the molding to the edge of the windshield.

NOTE: Be careful not to touch the windshield where adhesive will be applied.



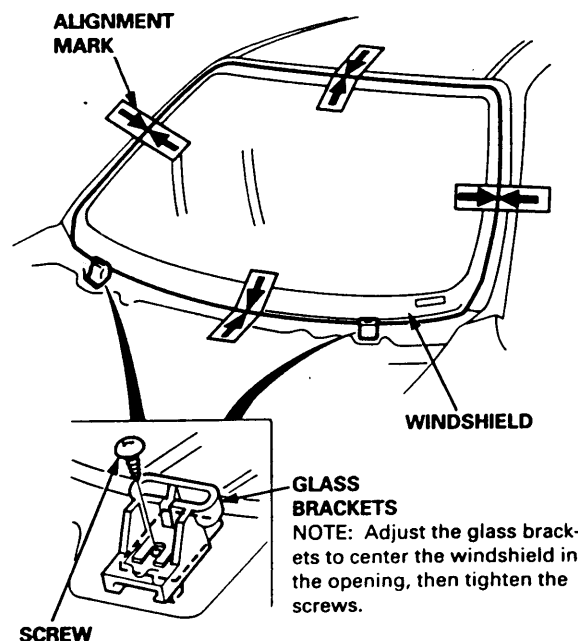
7. Install the glass brackets and fasteners as shown.

NOTE: The numbers after the part names show the quantities of the parts used.



8. Set the windshield on the glass brackets, then center it in the opening. Make alignment marks across the windshield and body with a grease pencil at the four points shown.

NOTE: Be careful not to touch the windshield where adhesive will be applied.



9. Remove the windshield.

(cont'd)

Windshield/Rear Window

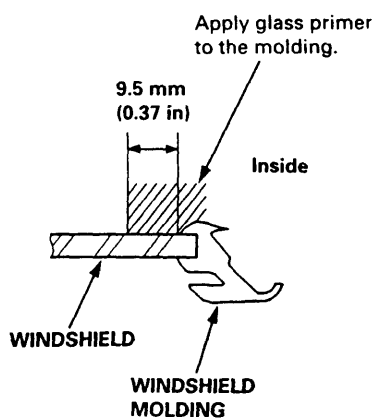
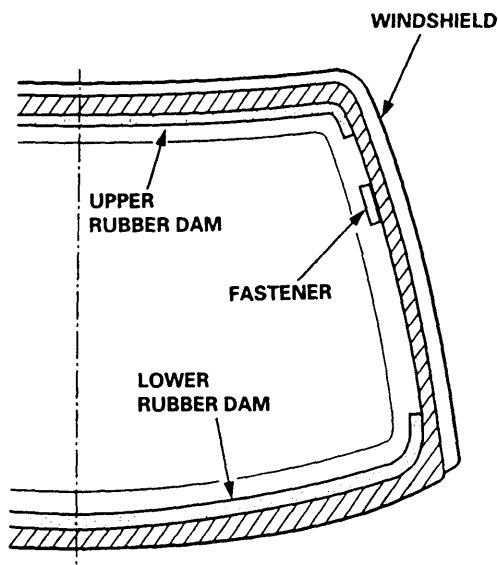
Windshield Installation (cont'd)

10. With a sponge, apply a light coat of glass primer around the edge of the windshield as shown, then lightly wipe it off with gauze or cheesecloth.

NOTE:

- Do not apply body primer to the windshield, and do not get body and glass primer sponges mixed up.
- Never touch the primed surfaces with your hands. If you do, the adhesive may not bond to the windshield properly, causing a leak after the windshield is installed.
- Keep water, dust, and abrasive materials away from the primed surface.

 : Apply glass primer here.

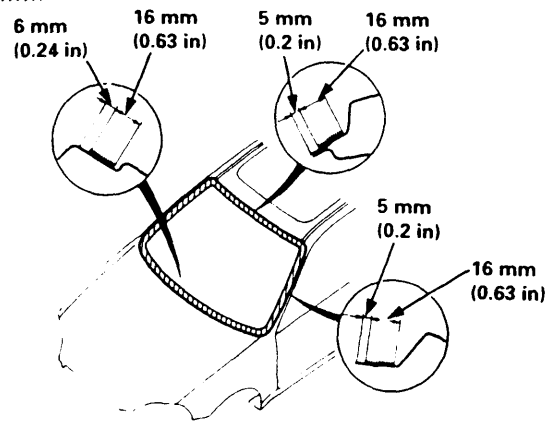


11. With a sponge, apply a light coat of body primer to the original adhesive remaining around the windshield opening flange. Let the body primer dry for at least 10 minutes.

NOTE:

- Do not apply glass primer to the body, and be careful not to mix up glass and body primer sponges.
- Never touch the primed surfaces with your hands.
- Mask off the dashboard before painting the flange.

 : Apply body primer here.



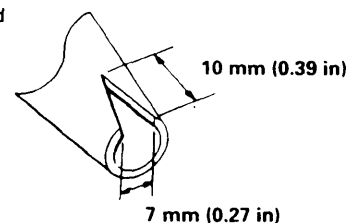
12. Thoroughly mix the adhesive and hardener together on a glass or metal plate with a putty knife.

NOTE:

- Clean the plate with a sponge and alcohol before mixing.
- Follow the instructions that come with the adhesive.

13. Before filling a cartridge, cut the end of the nozzle as shown.

Cut nozzle end as shown.





14. Pack adhesive into the cartridge without air pockets to ensure continuous delivery. Put the cartridge in a caulking gun, and run a bead of adhesive around the edge of the windshield as shown.

NOTE: Apply the adhesive within 30 minutes after applying the glass primer.

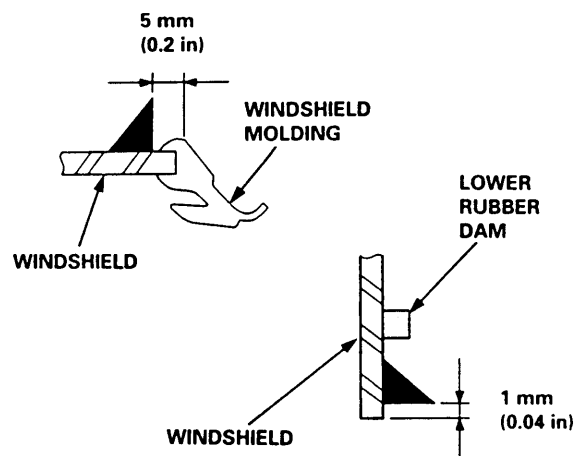
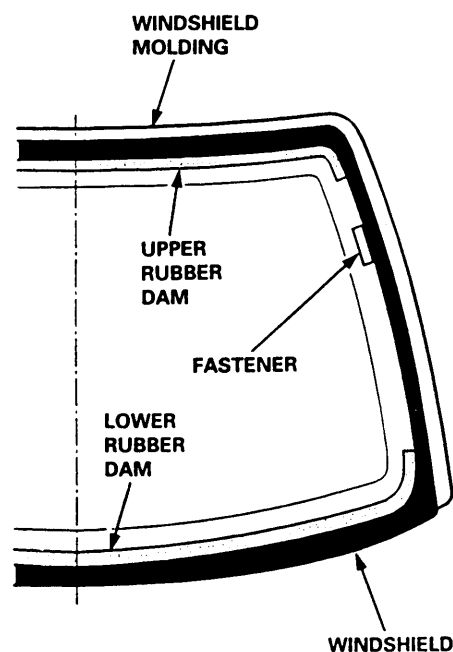
12 mm (0.47 in)



ADHESIVE

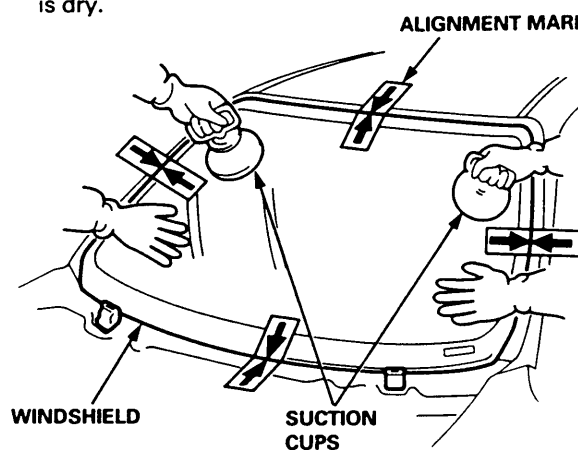
Make a slightly thicker bead at each corner.

8 mm (0.31 in)



15. Use suction cups to hold the windshield over the opening, align it with the alignment marks made in step 8, and set it down on the adhesive. Lightly push on the windshield until its edge is fully seated on the adhesive all the way around.

NOTE: Do not open or close the doors until adhesive is dry.



16. Scrape or wipe the excess adhesive off with a putty knife or towel.

NOTE: To remove adhesive from a painted surface or the windshield, wipe with a soft shop towel dampened with alcohol.

17. Let the adhesive dry for at least one hour, then spray water over the windshield and check for leaks. Mark the leaking areas, let the windshield dry, then seal with sealant.

NOTE:

- Let the adhesive dry stand for at least four hours after windshield installation. If the vehicle has to be used within the first four hours, it must be driven slowly.
- Keep the windshield dry for the first hour after installation.
- Check that the ends of the side molding are set under the air scoop.

18. Reinstall all remaining removed parts.

NOTE:

- Install the rearview mirror rubber damper after the adhesive has dried thoroughly.
- Advise the customer not to do the following things for two to three days:
 - Slam the doors with all the windows rolled up.
 - Twist the body excessively (such as when going in and out of driveways at an angle or driving over rough, uneven roads).

Windshield/Rear Window

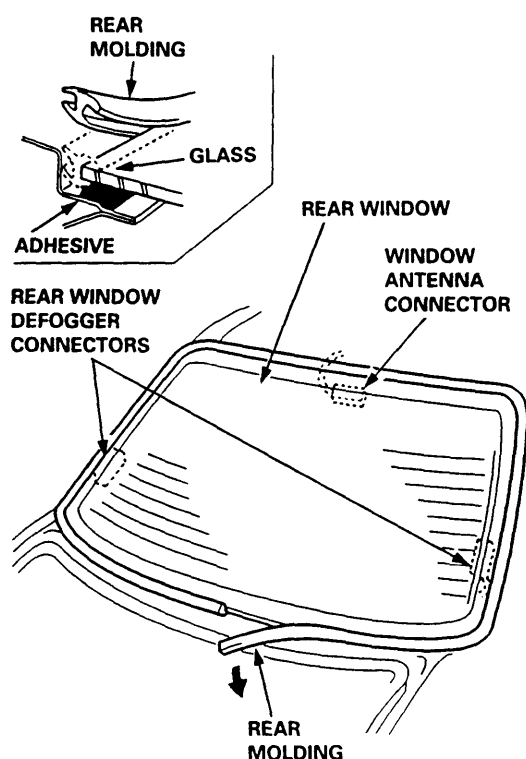
Rear Window Removal

CAUTION:

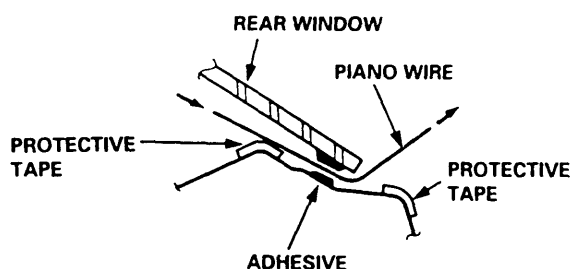
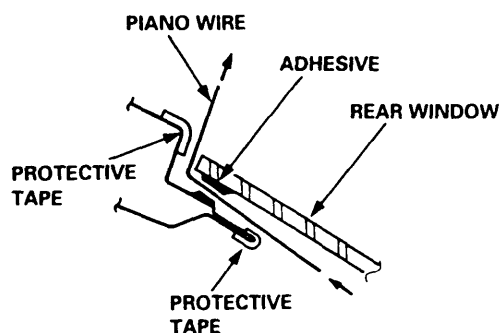
- Wear gloves to remove and install the rear window.
- Use seat covers to avoid damaging any surfaces.
- Do not damage the rear window defogger grid lines, window antenna grid lines, and terminals.

1. To remove the rear window, first remove the:
 - Trunk lid (see body repair manual)
 - Rear seat cushion (see page 20-55)
 - Rear seat side bolsters (see page 20-55)
 - Rear shelf (see page 20-39)
 - Rear pillar trim (see page 20-39)
 - Rear roof trim (see page 20-41)
2. Disconnect the rear window defogger connectors from each side and window antenna connector.
3. Remove off the rear molding.

NOTE: If removing the rear molding is difficult, cut the molding with a utility knife.

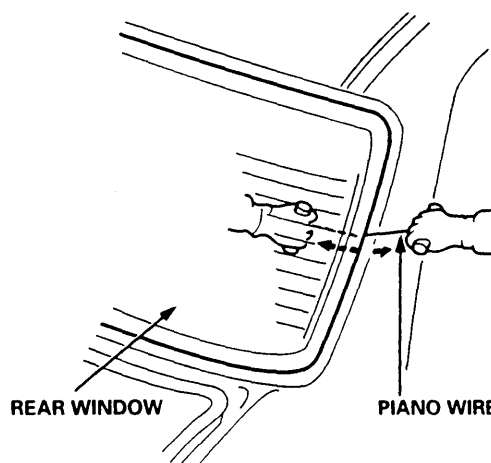


4. Apply protective tape along the edge of the body as shown. Using an awl, make a hole through the adhesive from inside the vehicle. Push a piece of piano wire through the hole, and wrap each end around a piece of wood.



CAUTION: Hold the piano wire as close to the rear window as possible to prevent damage to the body.

5. With a helper on the outside, pull the piano wire back and forth in a sawing motion, and carefully cut through the adhesive around the entire rear window.



6. Carefully remove the rear window.



Rear Window Installation

- Using a putty knife, scrape the old adhesive smooth to a thickness of about 2 mm (0.08 in) on the bonding surface around the entire rear window opening flange.

NOTE:

- Do not scrape down to the painted surface of the body; damaged paint will interfere with proper bonding
- Mask off surrounding surfaces before painting.
- Remove the fasteners and spacers from the body.

- Clean the body bonding surface with a sponge dampened in alcohol.

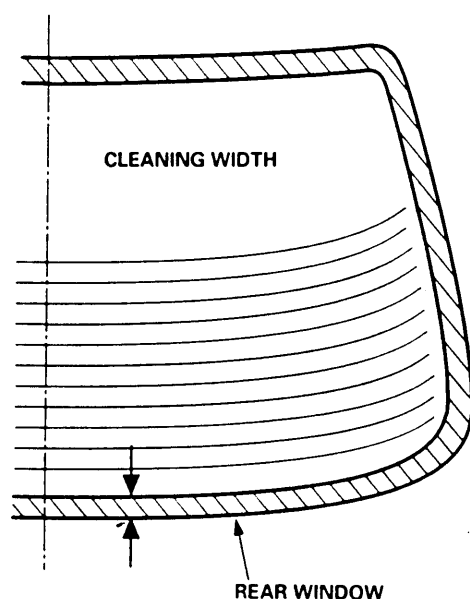
NOTE: After cleaning, keep oil, grease and water from getting on the surface.

- If the old rear window is to be reinstalled, use a putty knife to scrape off all traces of old adhesive and the rubber dam, then clean the rear window surface with alcohol where new adhesive is to be applied.

NOTE: Make sure the bonding surface is kept free of water, oil and grease.

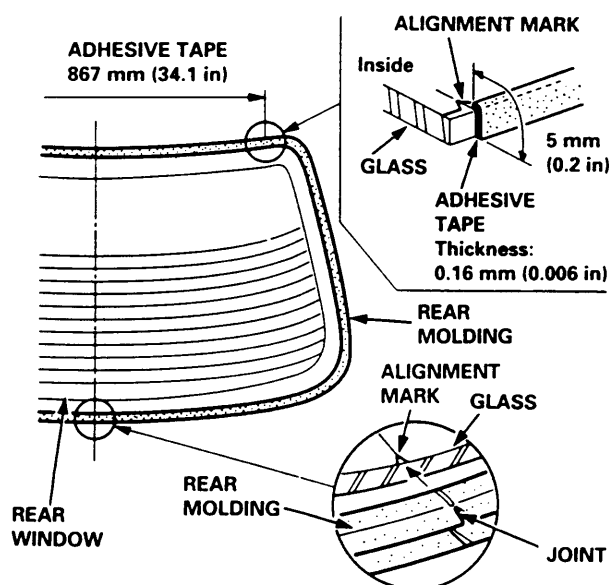
CAUTION: Avoid setting the rear window on its edges; small chips may later develop into cracks.

NOTE: Clean the shadowed area.



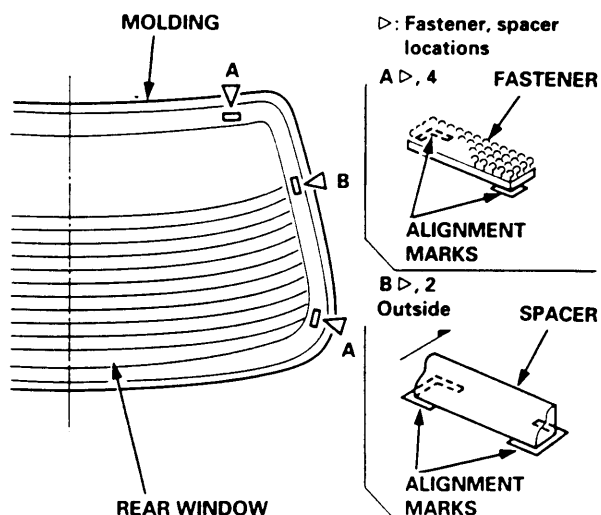
- Apply the double-faced adhesive tape to the edge of the rear window, then install the molding around the edge of the rear window as shown.

NOTE: Be careful not to touch the rear window where adhesive will be applied.



- Glue the fasteners and spacers to the inside face of the rear window as shown.

NOTE: Be careful not to touch the rear window where adhesive will be applied.



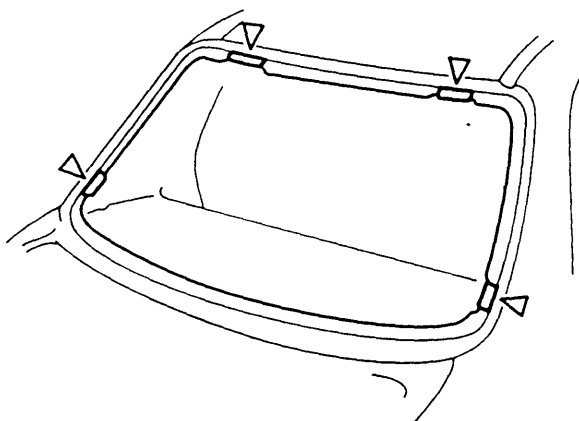
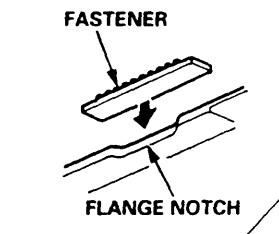
(cont'd)

Windshield/Rear Window

Rear Window Installation (cont'd)

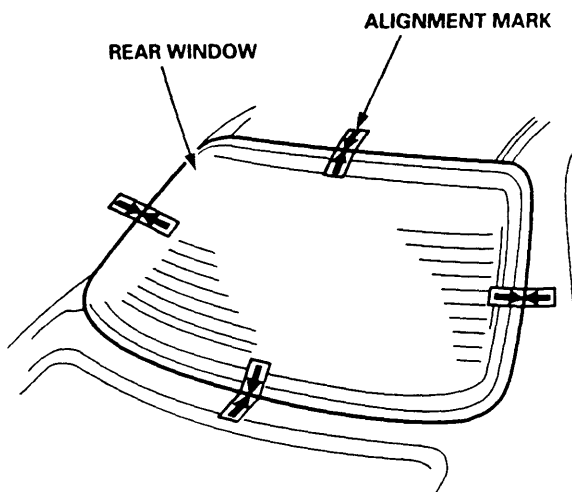
6. Glue the fasteners to the body as shown.

▷: Fastener locations, 4



7. Set the rear window in the window opening, and then center it. Make alignment marks across the rear window and body with a grease pencil at the four points shown.

NOTE: Be careful not to touch the rear window where adhesive will be applied.



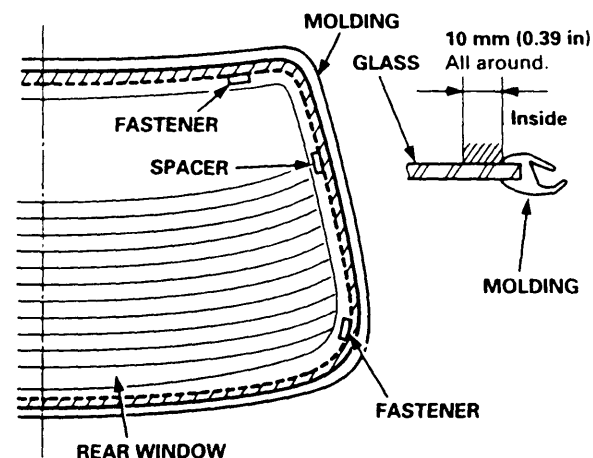
8. Remove the rear window.

9. With a sponge, apply a light coat of glass primer around the edge of the rear window as shown, then lightly wipe it off with gauze or cheesecloth.

NOTE:

- Do not apply body primer to the rear window, and do not get body and glass primer sponges mixed up.
- Never touch the primed surfaces with your hands. If you do, the adhesive may not bond to the rear window properly, causing a leak after the rear window is installed.
- Keep water, dust, and abrasive materials away from the primed surface.

▨ : Apply glass primer here.

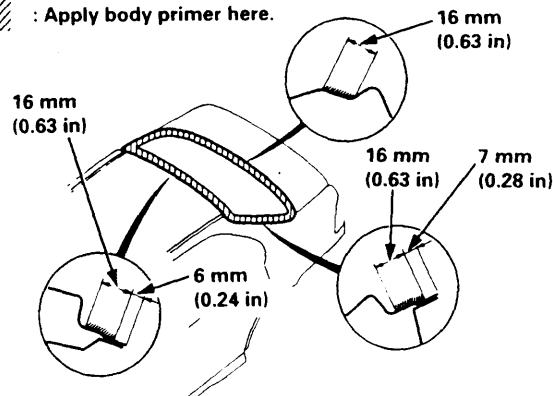


10. With a sponge, apply a light coat of body primer to the original adhesive remaining around the rear window opening flange. Let the body primer dry for at least 10 minutes.

NOTE:

- Do not apply glass primer to the body, and be careful not to mix up glass and body primer sponges.
- Never touch the primed surfaces with your hands.

▨ : Apply body primer here.



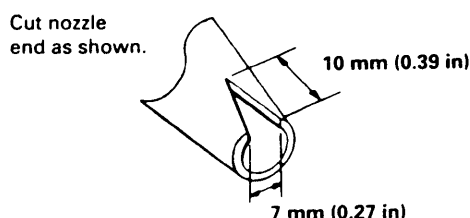


11. Thoroughly mix the adhesive and hardener together on a glass or metal plate with a putty knife.

NOTE:

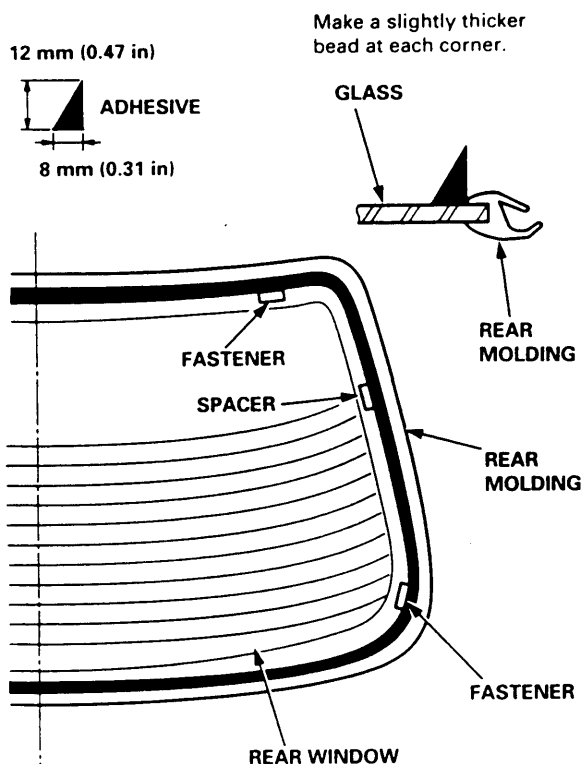
- Clean the plate with a sponge and alcohol before mixing.
- Follow the instructions that came with the adhesive.

12. Before filling a cartridge, cut the end of the nozzle as shown.



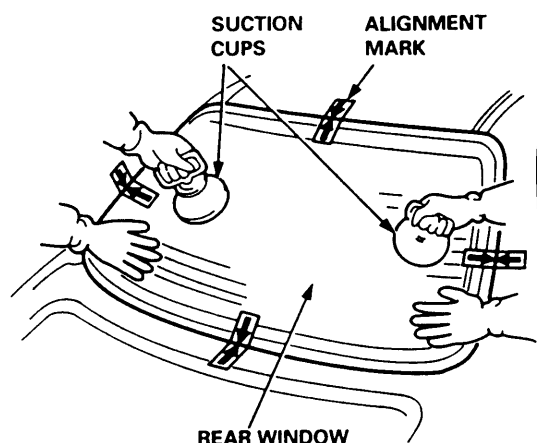
13. Pack adhesive into the cartridge without air pockets to ensure continuous delivery. Put the cartridge in a caulking gun, and run a bead of adhesive around the edge of the rear window as shown.

NOTE: Apply the adhesive within 30 minutes after applying the glass primer.



14. Use suction cups to hold the rear window over the opening, align it with the alignment marks you made in step 7, and set it down on the adhesive. Lightly push on the rear window until its edges are fully seated on the adhesive all the way around.

NOTE: Do not open or close the doors until the adhesive is dry.



15. Scrape or wipe the excess adhesive off with a putty knife or towel.

NOTE: To remove adhesive from a painted surface or the rear window, use a soft shop towel dampened with alcohol.

16. Let the adhesive dry for at least one hour, then spray water over the rear window and check for leaks. Mark the leaking areas, let the rear window dry, then seal with sealant.

NOTE: Let the adhesive stand for at least four hours after rear window installation. If the vehicle has to be used within the first four hours, it must be driven slowly.

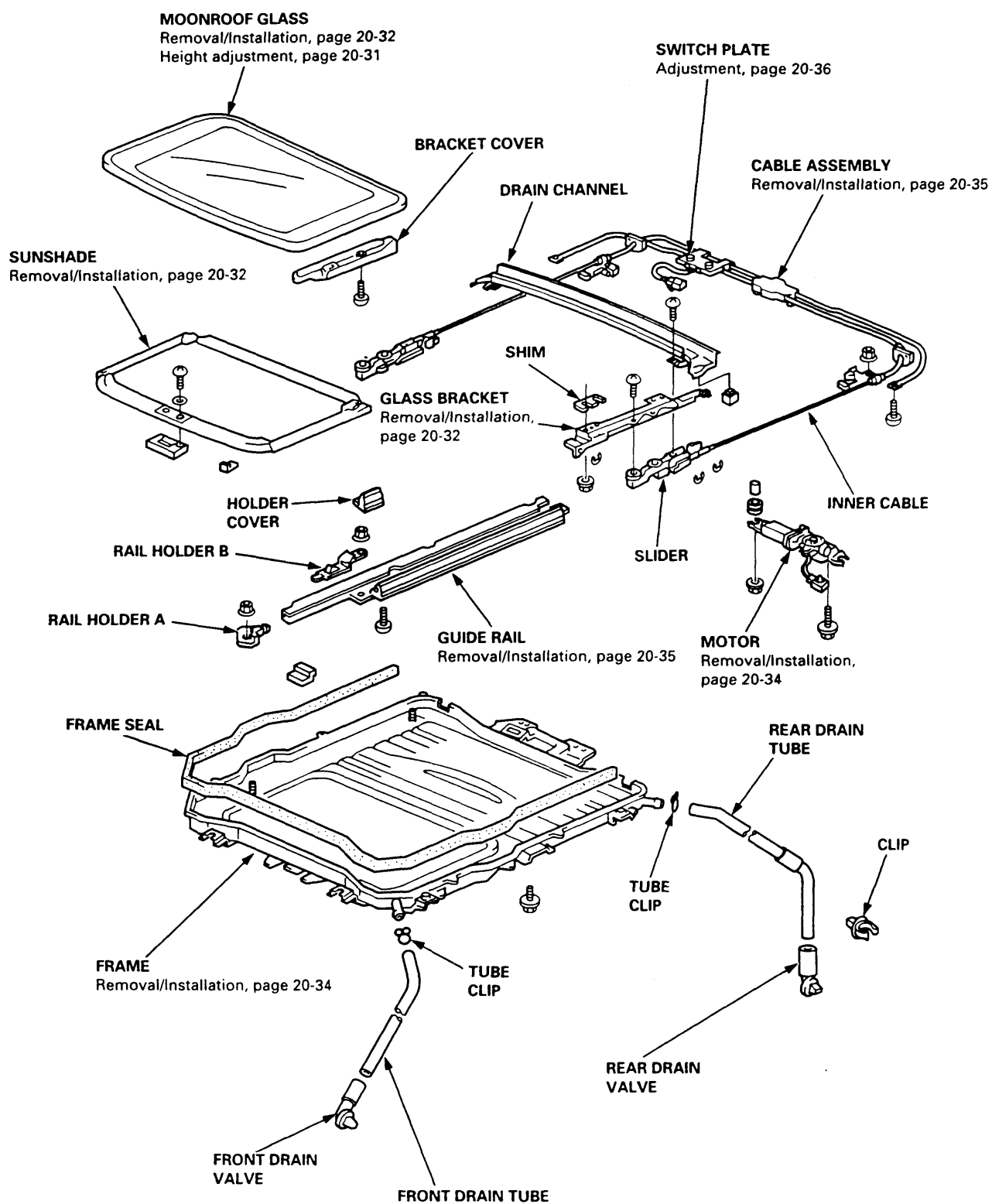
17. Reinstall all remaining removed parts.

NOTE: Advise the customer not to do the following things for two to three days:

- Slam the doors with all the windows rolled up.
- Twist the body excessively (such as when going in and out of driveways at an angle or driving over rough, uneven roads).

Moonroof

Index



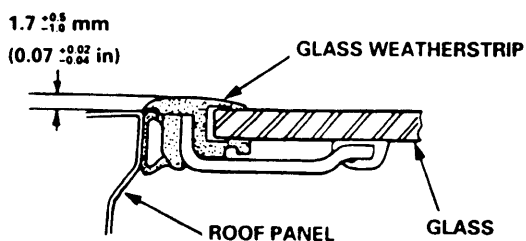


Troubleshooting

Symptom	Probable Cause
Water leaks	1. Clogged drain tube. 2. Gap between glass weatherstrip and roof panel. 3. Defective or improperly installed glass weatherstrip. 4. Gap between drain seal and roof panel.
Wind noise	1. Excessive clearance between glass weatherstrip and roof panel.
Motor noise	1. Loose motor. 2. Worn gear or bearing. 3. Cable assembly deformed.
Glass does not move, but motor turns	1. Clutch out of adjustment. 2. Foreign matter stuck between guide rail and slider. 3. Inner cable loose. 4. Cable assembly not attached properly.
Glass does not move and motor does not turn (glass can be moved with moonroof wrench)	1. Blown fuse. 2. Faulty switch. 3. Battery run down. 4. Defective motor. 5. Faulty relay.

Glass Height Adjustment

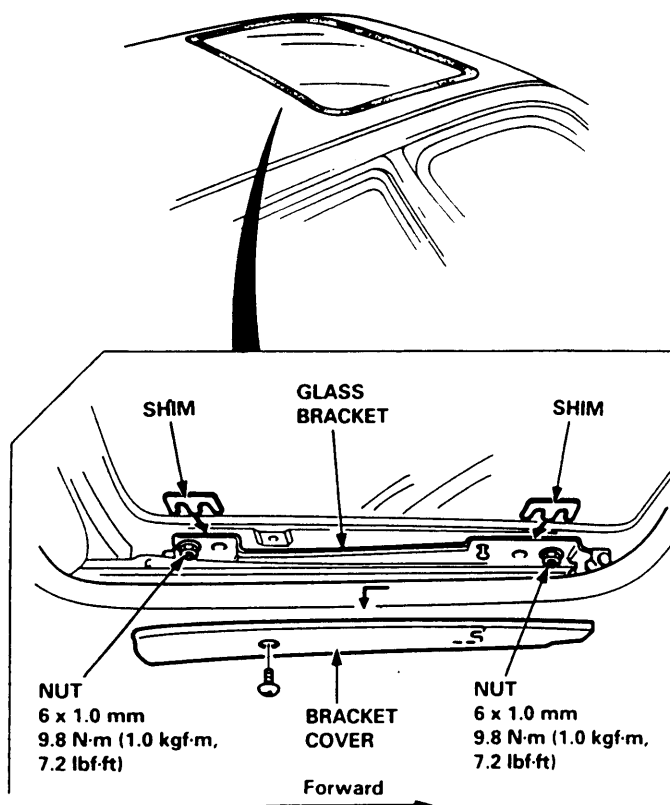
The roof panel should be even with the glass weatherstrip, to within $1.7 \pm_{-1.0}^{+0.5}$ mm ($0.07 \pm_{-0.04}^{+0.02}$ in) all the way around. If not, open the glass fully, and:



1. Remove the bracket cover.
2. Loosen the nuts, and install the shims between the glass frame and glass bracket as shown.

Shim thickness: Front max. 3 mm (0.12 in)
Rear max. 2 mm (0.08 in)

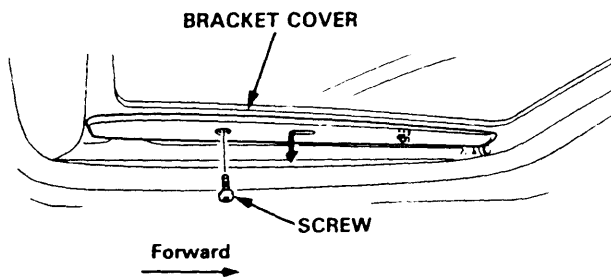
3. Repeat on opposite side if necessary.



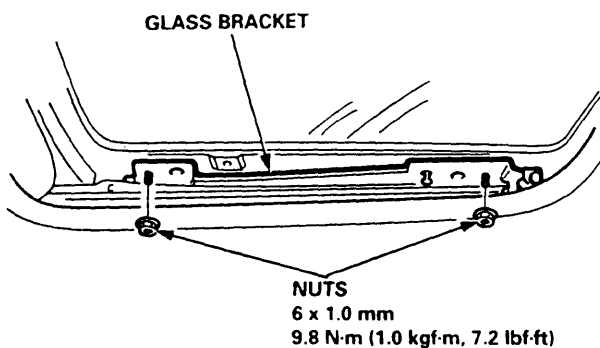
Moonroof

Glass, Glass Bracket and Sunshade Removal/Installation

1. Close the glass fully.
2. Slide the sunshade all the way back.
3. Remove both bracket covers.

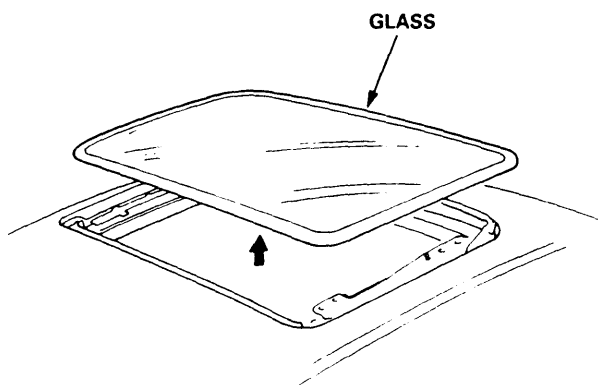


4. Remove the nuts from both glass brackets.

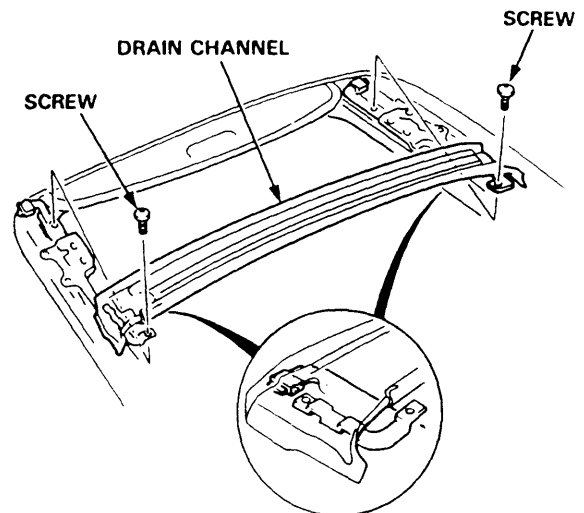


5. Remove the glass by lifting up and pulling forward as shown.

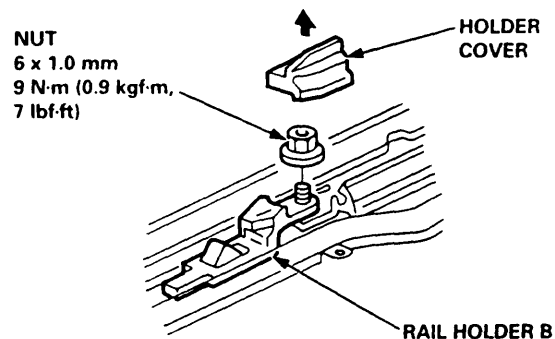
NOTE: Do not damage the roof panel.



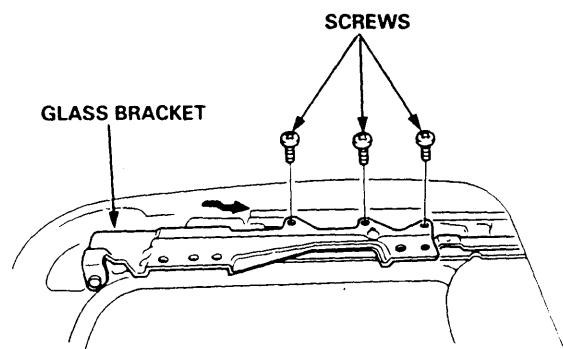
6. Remove the drain channel.



7. Remove the holder cover, then remove the rail holder B.

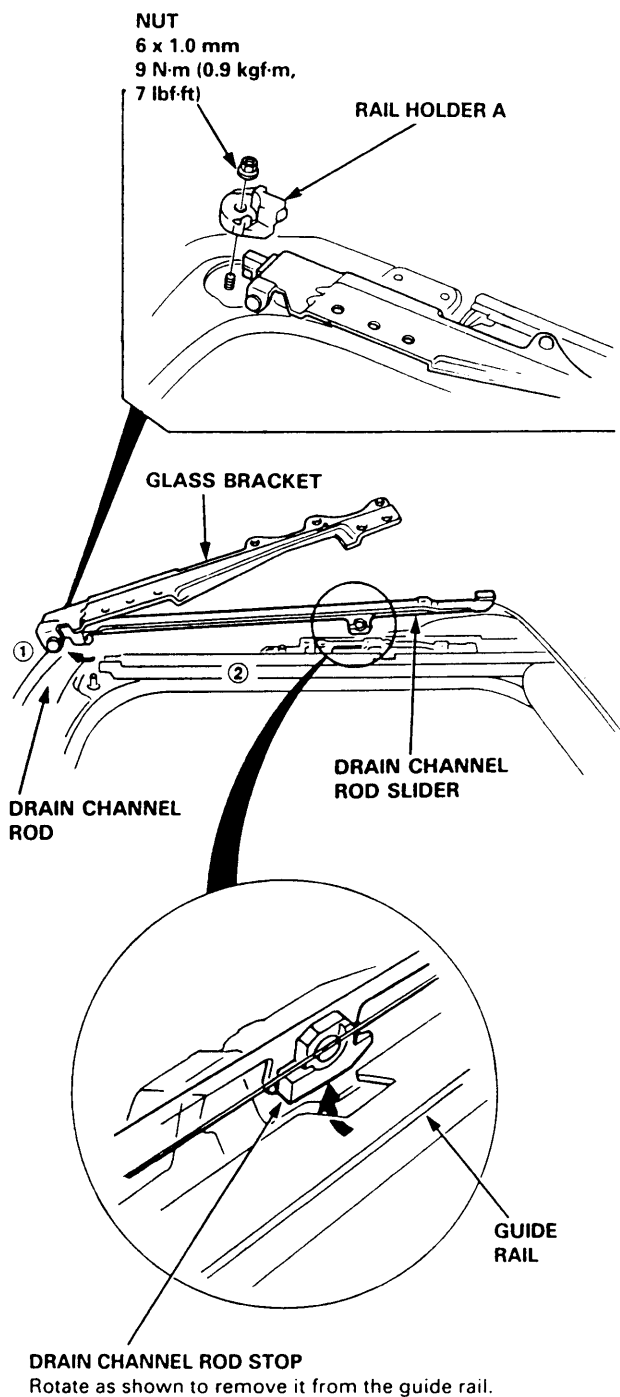


8. Using the moonroof wrench, move the glass bracket to the position where the moonroof normally pivots down, and remove the screws.



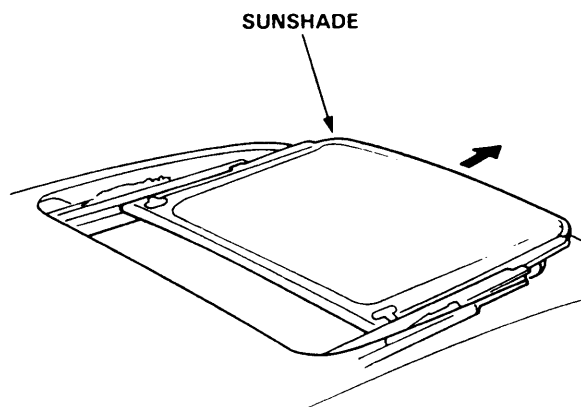


9. Remove the rail holder A.



10. Remove the drain channel rod slider by moving the cable slider forward using the moonroof wrench.
11. Detach the drain channel rod stop from the cutout of the guide rail as shown.

12. Slide the sunshade forward, then remove it.



13. Installation is the reverse of the removal procedure.

NOTE: Check the glass height (see page 20-31).

14. Check for water leaks.

NOTE: Do not use high-pressure water.

Moonroof

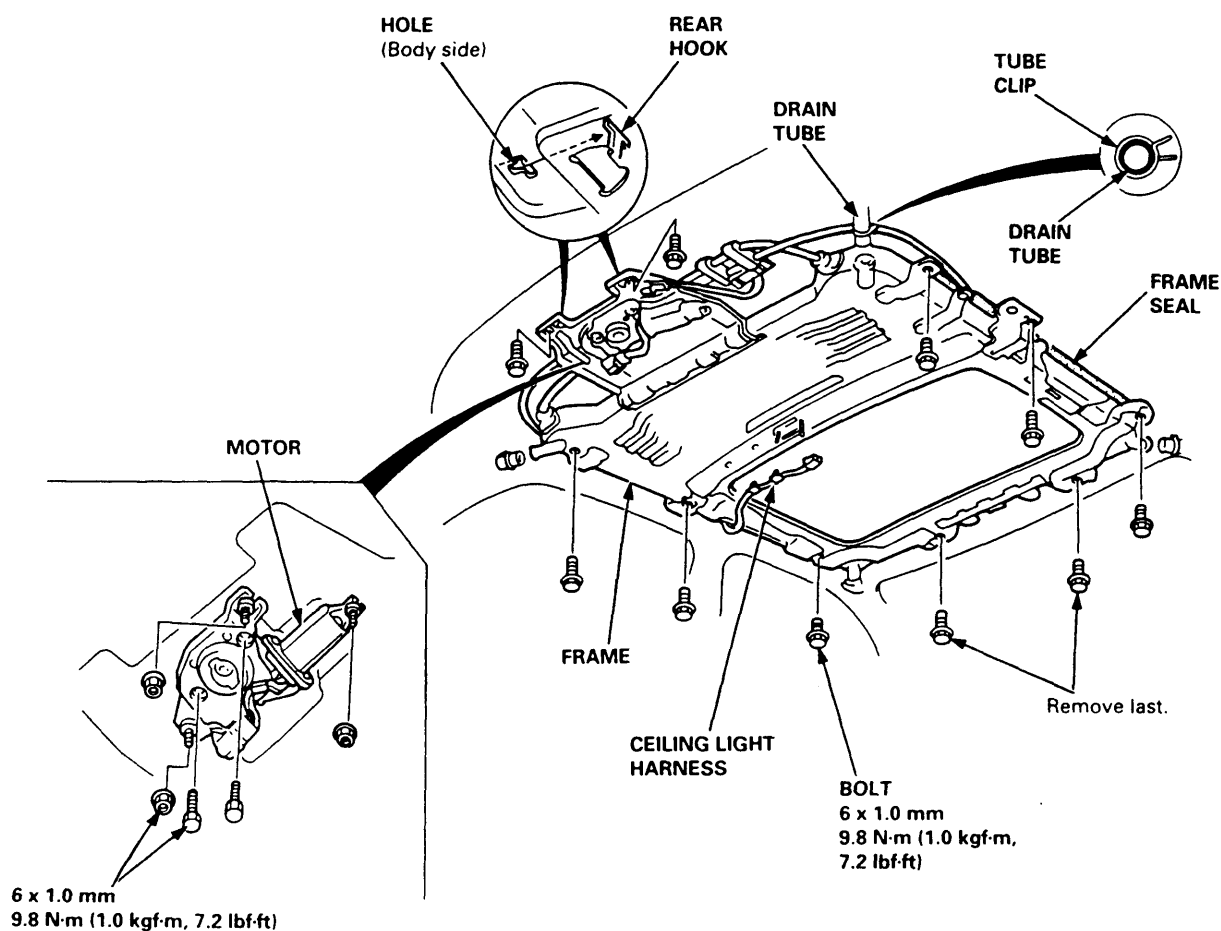
Motor, Drain Tube and Frame Removal/Installation

CAUTION:

- **Wear gloves to remove and install the frame.**
- **Be careful not to damage the seats, the dashboard or any other interior panels.**

1. Remove the headliner (see page 20-41).
2. Disconnect the motor connector and glass position switch connector, then remove the bolts and nuts, and remove the motor.
3. Remove the moonroof glass (see page 20-32).
4. Disconnect the drain tubes, and detach the ceiling light harness.
5. The moonroof frame with an assistant holding, remove the frame mounting bolts. Detach the rear hooks by moving the frame forward, and remove the frame.

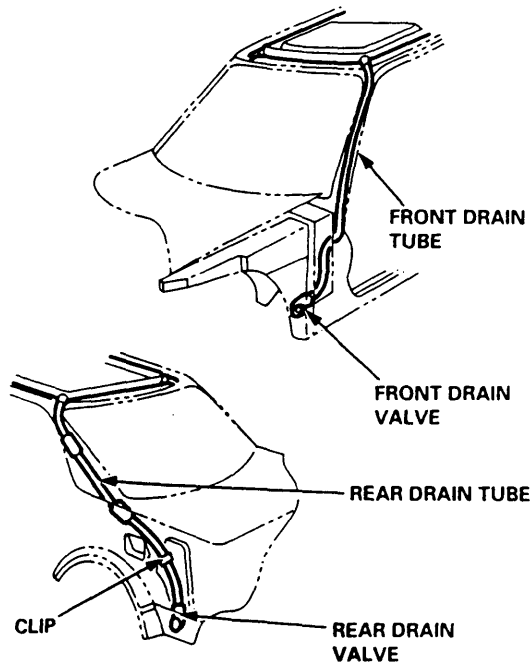
NOTE: Remove the front bolts last.





6. Pull the drain tubes out the front and rear pillars.

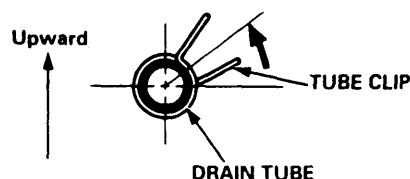
NOTE: Before removing the drain tube, tie a string to the end of it so it can be reinstalled.



7. Installation is the reverse of the removal procedure.

NOTE:

- Before installing the frame, clear the drain tubes and drain valves using compressed air.
- Check the frame seal.
- Clean the surface of the frame.
- When installing the frame, first attach the rear hooks into the body holes.
- When connecting the drain tube, slide it over the frame nozzle at least 10 mm (0.39 in).
- Install the tube clip as shown.



8. Check for water leaks.

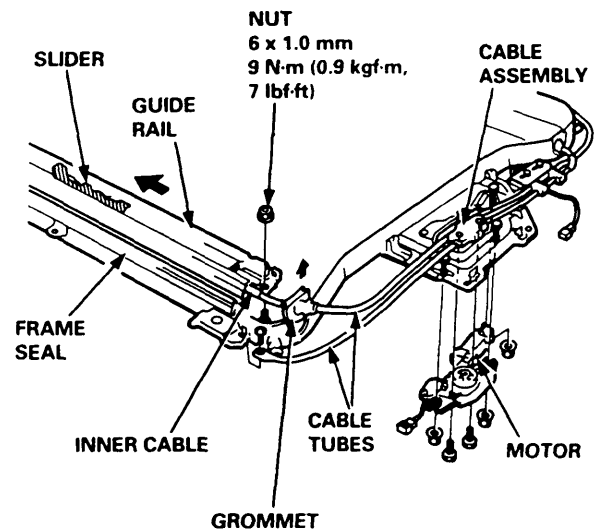
NOTE: Do not use high-pressure water.

Guide Rails and Cable Assembly Removal/Installation

CAUTION: Wear gloves to remove and install the guide rails and cable assembly.

1. Remove the frame.
2. Remove the motor and glass bracket (see page 20-32).
3. Remove the nuts, and lift off each guide rail, then remove the cable assembly with the sliders attached.

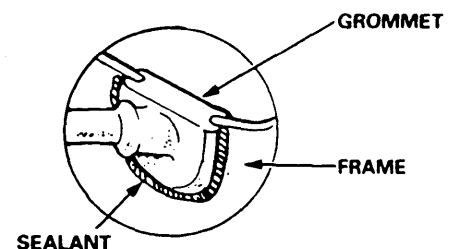
NOTE: Take care not to bend the cable tubes and the guide rails.



4. Installation is the reverse of the removal procedure.

NOTE:

- Damaged parts should be replaced.
- Grease the sliding portion with Super High Temp Urea Grease, P/N 08798 - 9002.
- Fill the groove in each grommet with sealant.



- Install the frame seal securely.
- Before installing the motor, make sure both sliders are parallel.
- Before installing the motor, install the frame and glass, then check the opening drag (see page 20-37).

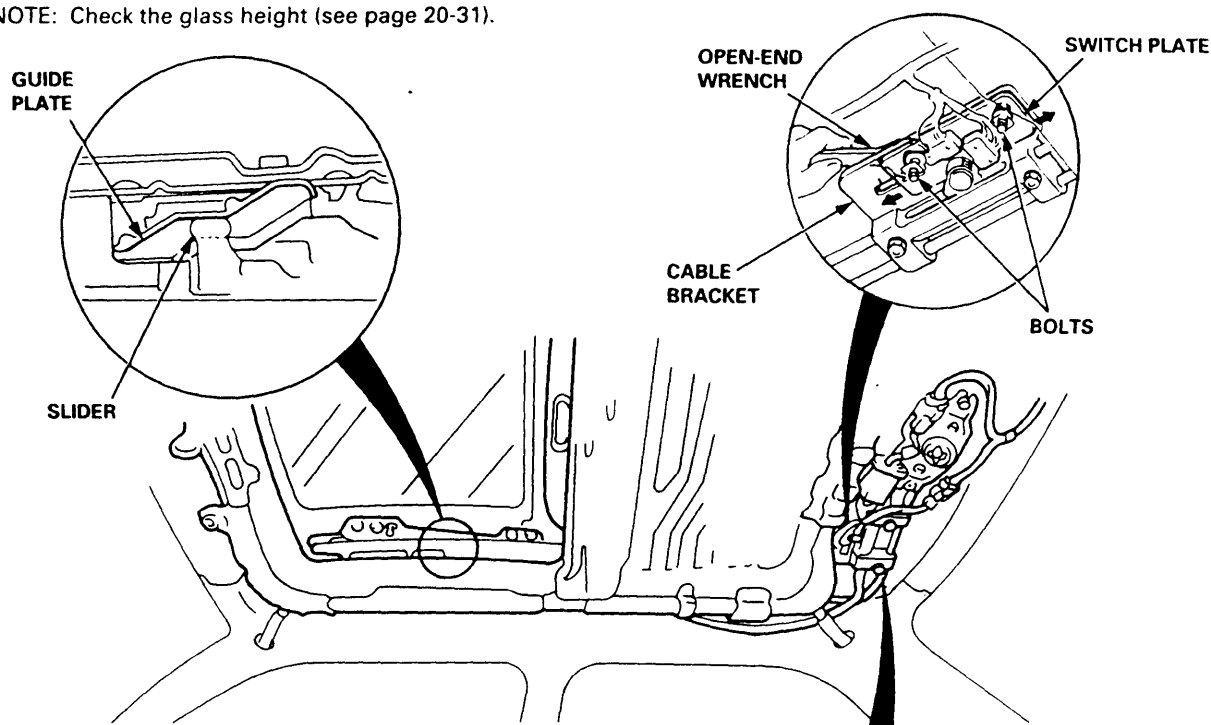
Moonroof

Switch Plate Adjustment (Fully Closed Position)

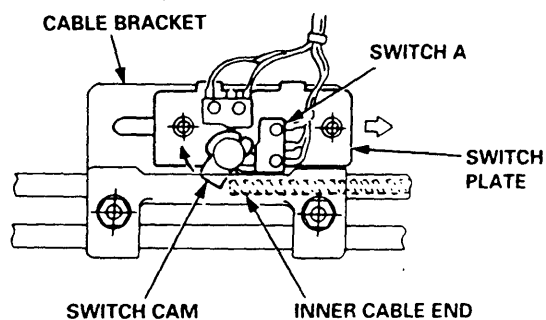
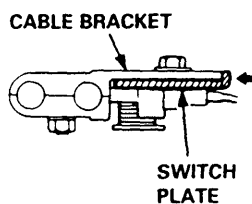
1. Remove the headliner (see page 20-41).
2. Using the moonroof wrench, close the glass fully.

NOTE: Check the glass fit to the roof panel.
3. Using an open-end wrench, loosen the switch plate mounting bolts.
4. Adjust position of the switch plate (switch cam) as shown.
5. Check the operation of the glass (from tilt-up position to fully closed position, from the fully open position to the fully closed position) by operating the moonroof switch.

NOTE: Check the glass height (see page 20-31).



Check the switch plate contacts the cable bracket.



While moving the switch plate little by little, secure the switch plate at the position where the switch cam contacts the switch A (a faint click is heard).

6. Close the glass fully, and check for water leaks.

NOTE: Do not use high-pressure water.

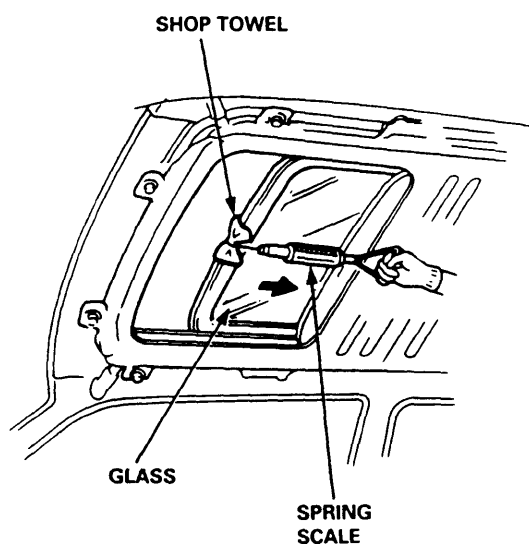


Opening Drag Check (Motor Removed)

Before installing the motor, measure the effort required to open the glass using a spring scale as shown.

CAUTION: When using a spring scale, protect the leading edge of the glass with a shop towel.

If load is over 40 N (4 kgf, 9 lbf), check the side clearance and glass height (see page 20-31).

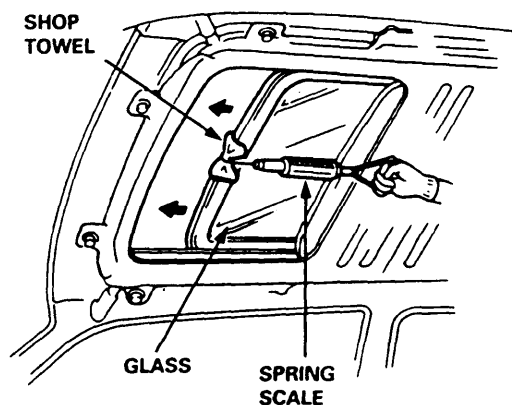


Closing Force Check (Motor Installed)

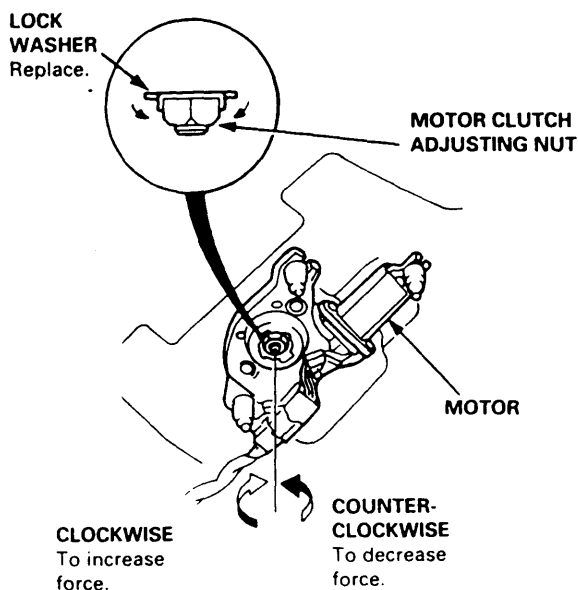
1. After installing all removed parts, have a helper hold the switch to close the glass while you measure the force required to stop it. Attach a spring scale as shown. Read the force as soon as the glass stops moving, then immediately release the switch and spring scale.

CAUTION: When using a spring scale, protect the leading edge of the glass with a shop towel.

Closing Force: 200 – 290 N
(20 – 30 kgf, 44 – 66 lbf)



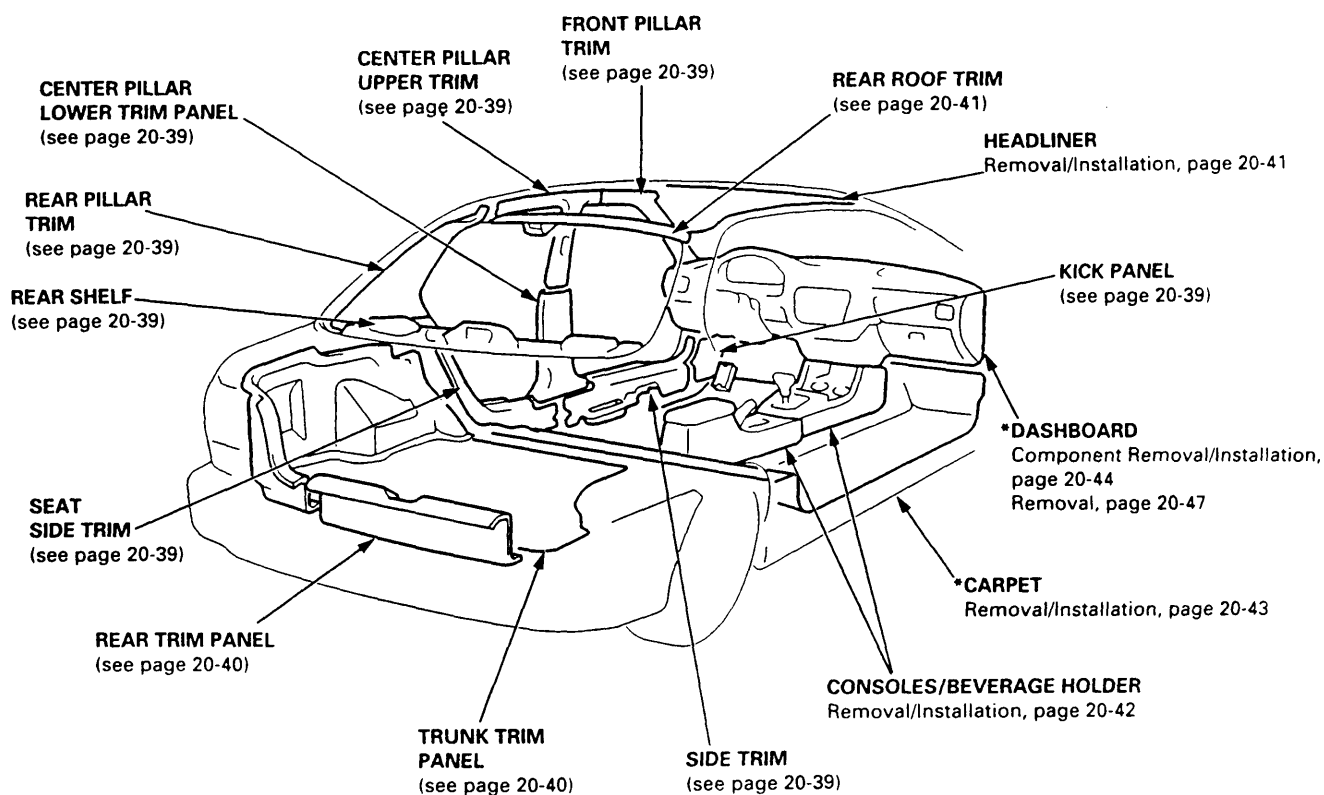
2. If the force is not within specification, install a new lock washer, adjust the tension by turning the motor clutch adjusting nut, and bend the lock washer against the motor clutch adjusting nut.



Interior

Component Location Index

SRS components are located in the parts areas marked with an asterisk (*). Review the SRS component locations, precautions, and procedures in the SRS section (24) before performing repairs or service.





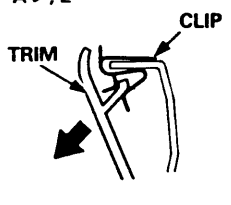
Interior Trim Removal/Installation

CAUTION:

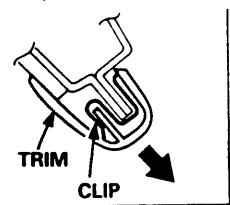
- Wear gloves to remove and install the trim and panels.
- When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage.

NOTE: Take care not to bend or scratch the trim and panels.

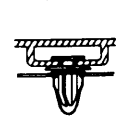
▷: Clip locations
A ▷, 2



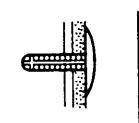
B ▷, 6



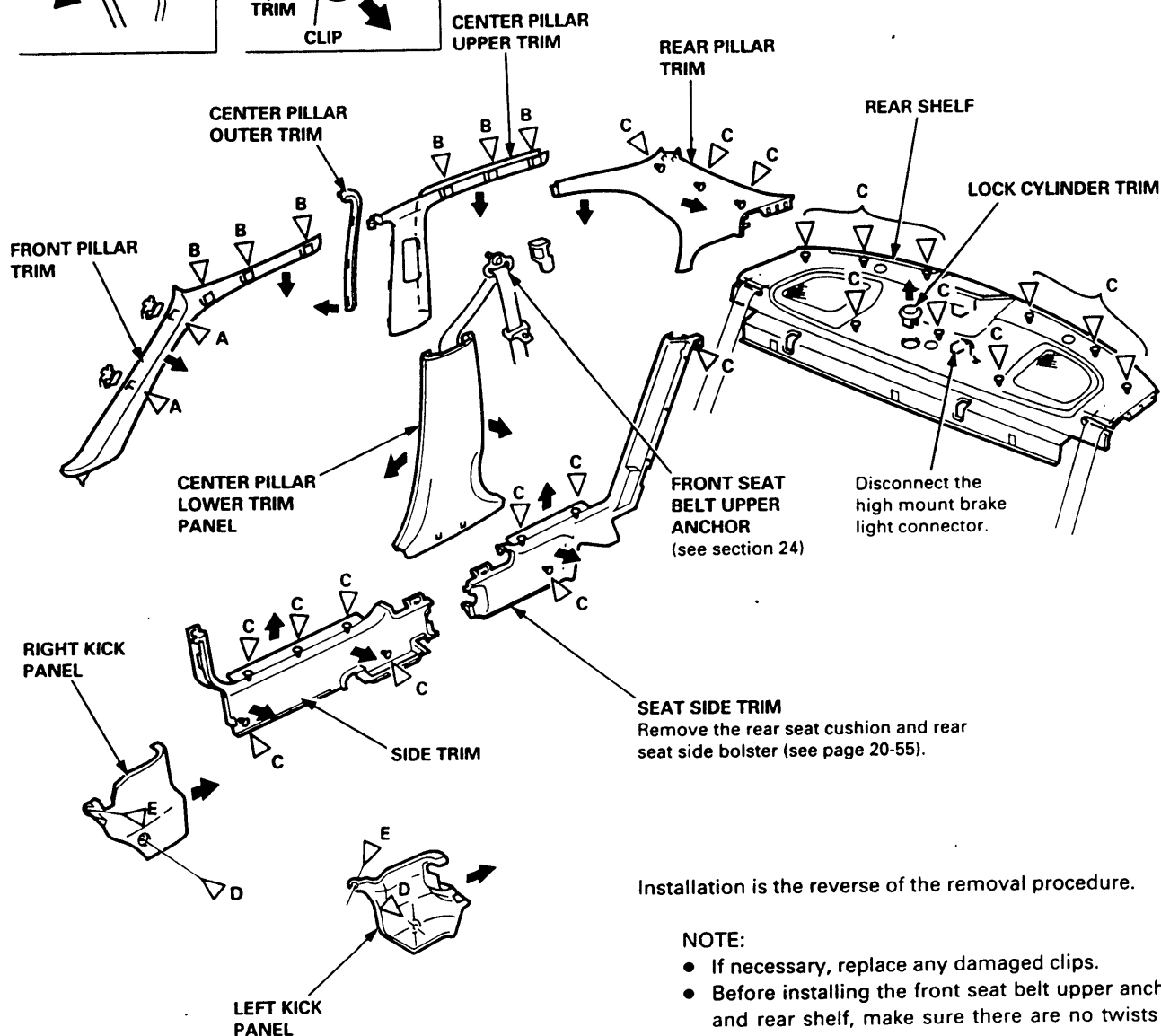
C ▷, 21



D ▷, 2



E ▷, 2



Installation is the reverse of the removal procedure.

NOTE:

- If necessary, replace any damaged clips.
- Before installing the front seat belt upper anchor and rear shelf, make sure there are no twists or kinks in the seat belts.

(cont'd)

Interior

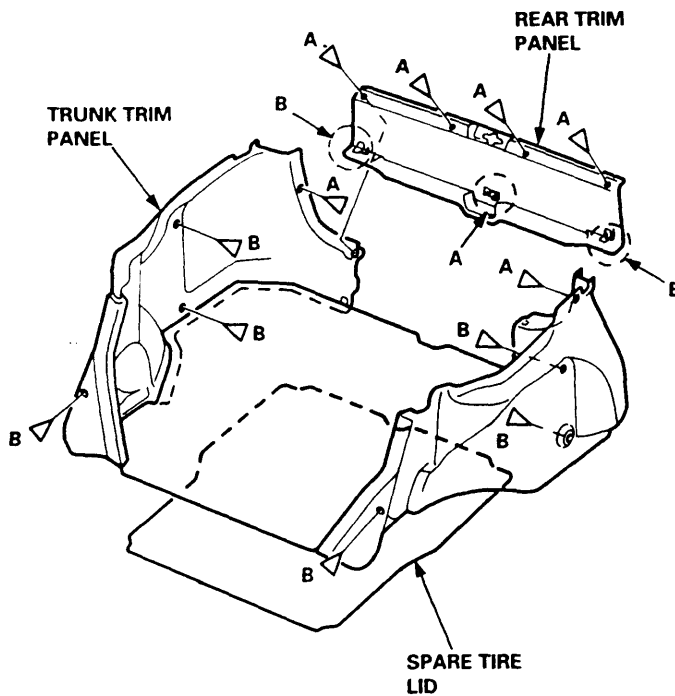
Trunk Trim Removal/Installation

CAUTION:

- Wear gloves to remove and install the trim and panels.
- When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage.

NOTE:

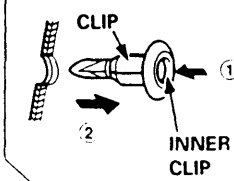
- Take care not to bend or scratch the trim and panels.
- When removing the trunk side trim or trunk trim panel, fold the seat-back forward.



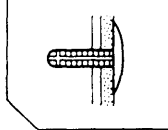
▷: Clip locations

A ▷, 6

NOTE: Do not push the inner clip in too far.

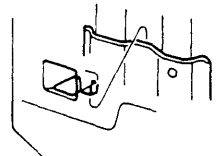


B ▷, 6



○: Hook locations

A ○, 1



B ○, 2



Installation is the reverse of the removal procedure.

NOTE:

- If necessary, replace any damaged clips.
- To install the A clips, pull the inner clip up, install the clip, then push the inner clip until it's flush.



Headliner Removal/Installation

CAUTION: When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage.

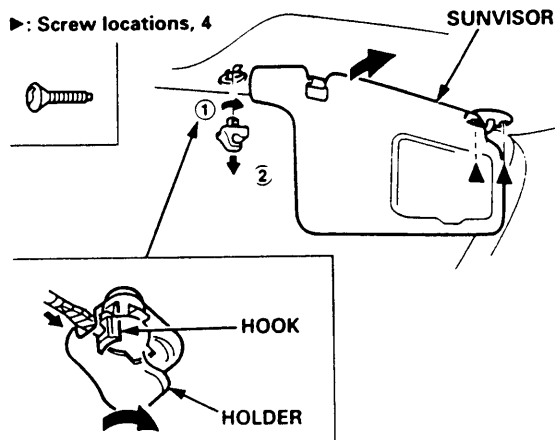
NOTE:

- Take care not to bend and scratch the headliner.
- Be careful not to damage the dashboard and other interior trim.

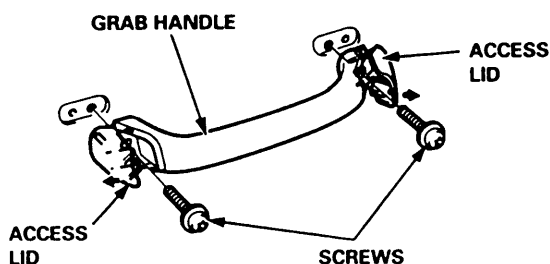
1. Remove:

- Front pillar trim (both sides, see page 20-39)
- Center pillar lower trim panel (both sides, see page 20-39)
- Upper anchor bolt from the front seat belt (both sides, see section 24)
- Center pillar outer trim and center pillar upper trim (both sides, see page 20-39)
- Ceiling light (see section 23)
- Rearview mirror (see page 20-19)

2. Remove the sunvisor and holder from each side.



3. Remove the grab handles and coat hanger.

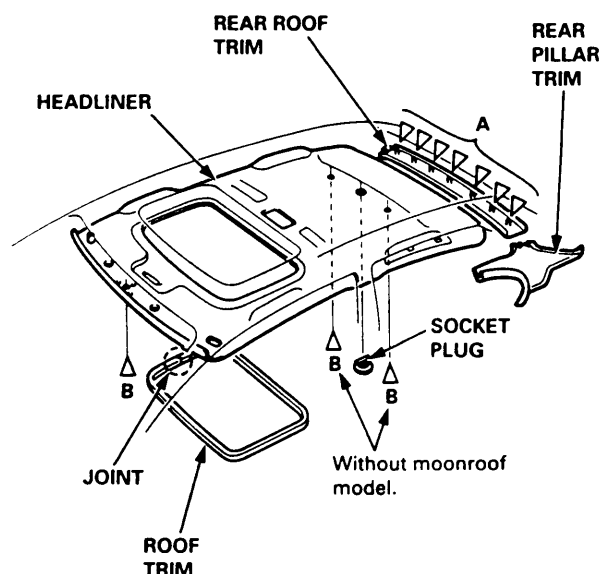
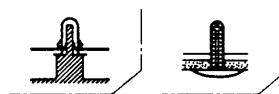


4. Remove the rear roof trim and clips, and remove the roof trim and socket plug (moonroof model).

►: Clip locations

A ► 7

B ► With moonroof, 1
Without moonroof, 3



5. Lower the rear pillar trim on both sides.

6. Lower the headliner.

7. Carefully remove the headliner through the passenger's door opening.

8. Installation is the reverse of the removal procedure.

NOTE:

- When inserting the headliner through the opening, be careful not to fold or bend it. Also, be careful not to scratch the body.
- Check that both sides of the headliner are securely attached to the trim.
- When installing the roof trim, install the joint toward the right side (with moonroof model).

Interior

Consoles and Beverage Holder Removal/Installation

NOTE: Take care not to scratch the front and rear consoles, front seat and related parts.

Disassemble in numbered sequence.

►: Screw locations

A ►, 6

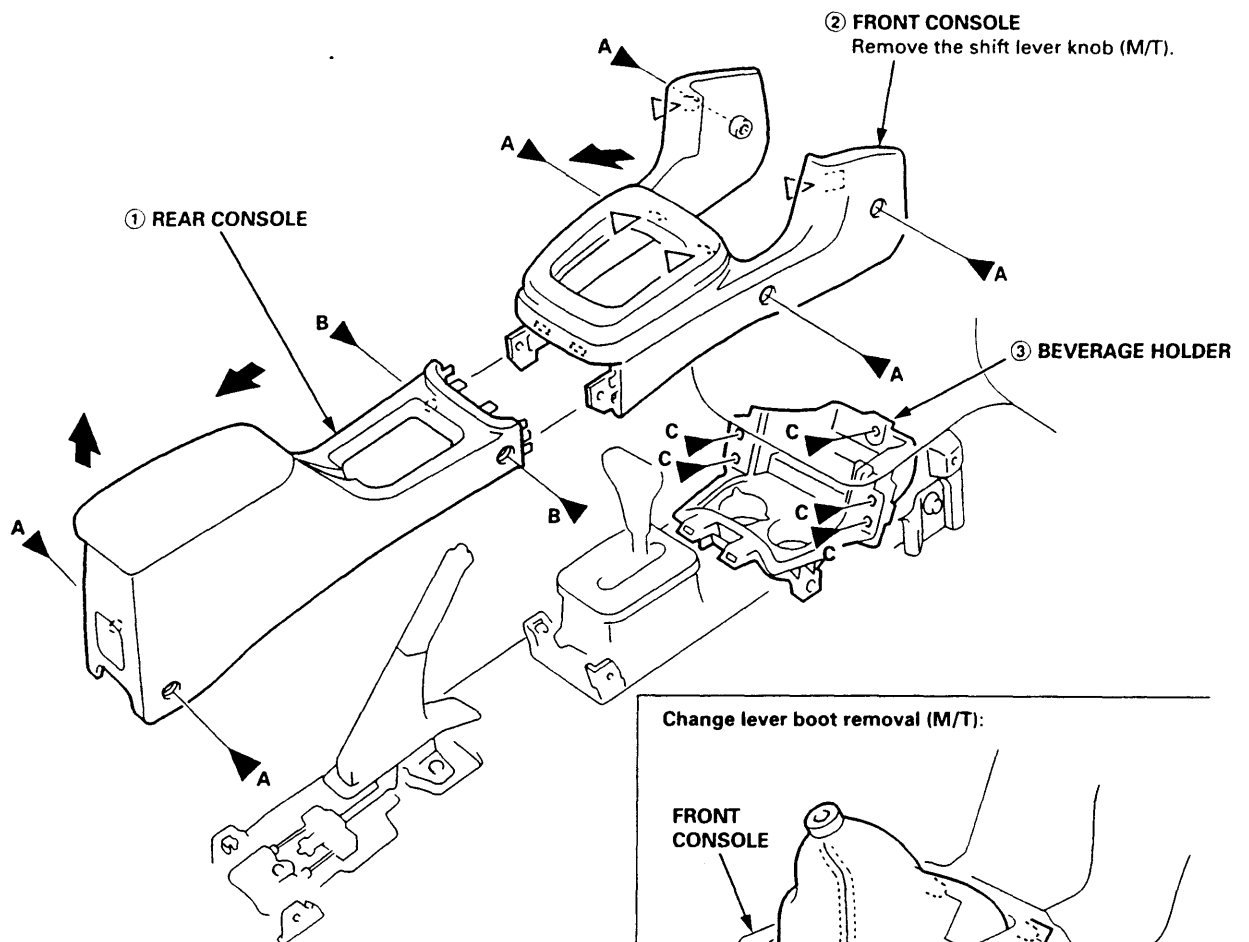
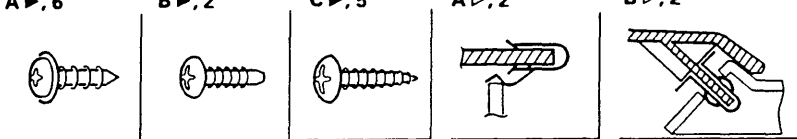
B ►, 2

C ►, 5

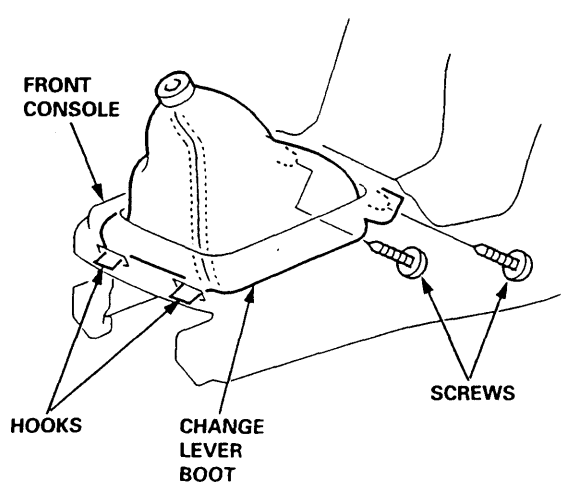
▷: Clip locations

A ▷, 2

B ▷, 2



Change lever boot removal (M/T):



Installation is the reverse of the removal procedure.

NOTE:

- If necessary, replace any damaged clips.
- Make sure the wire harnesses are not pinched.

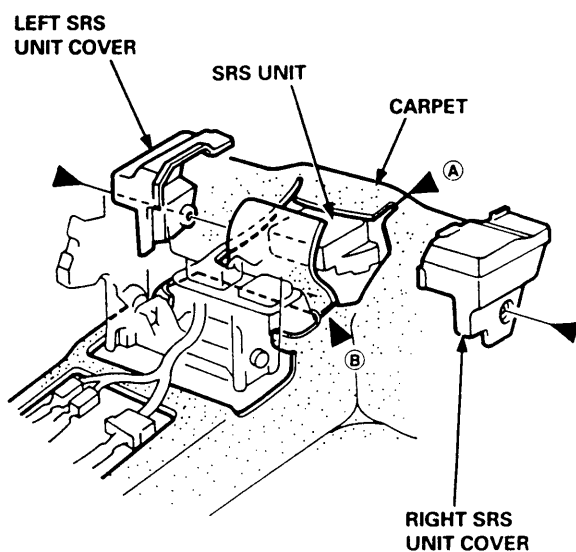
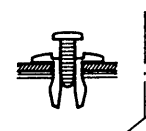


Carpet Removal/Installation

SRS components are located in this area. Review the SRS component locations, precautions, and procedures in the SRS section (24) before performing repairs or service.

1. Remove:
 - Front seat (see page 20-51)
 - Rear seat cushion (see page 20-55)
 - Kick panel (see page 20-39)
 - Center pillar lower trim panel (see page 20-39)
 - Side trim (see page 20-39)
 - Front and rear consoles
 - Beverage holder
2. Remove the SRS unit covers.
3. Cut areas (A) and (B) in the carpet, then pull it back as shown.

▷: Clip locations, 2

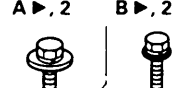


4. Remove the footrest and parking brake lever mounting bolts, and detach the clips, then remove the carpet.

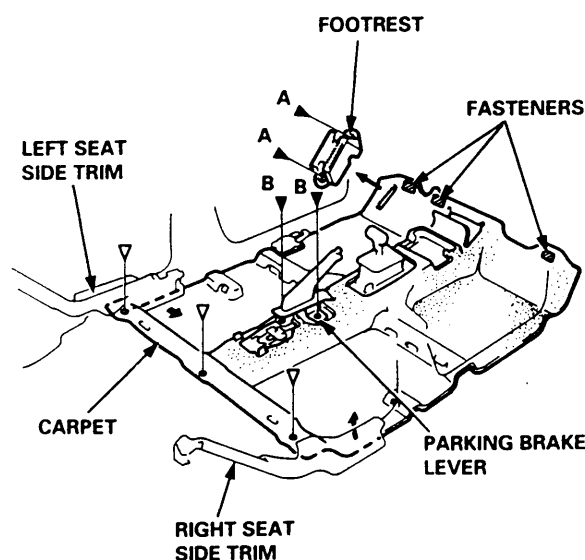
▷: Clip locations, 3



▷: Bolt locations



6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)



5. Installation is the reverse of the removal procedure.

NOTE:

- Take care not to damage, wrinkle or twist the carpet.
- Make sure the wire harnesses are routed correctly.
- If necessary, replace any damaged clips.
- Slip the carpet under the seat side trim on each side properly.
- Reattach the cut areas (A) and (B) in the carpet with wire ties.

Interior

Dashboard Component Removal/Installation

CAUTION:

- When prying with a flat tip screwdriver, wrap it with protective tape, and apply protective tape around the related parts, to prevent damage.
- Wear gloves to remove and install the dashboard component parts.

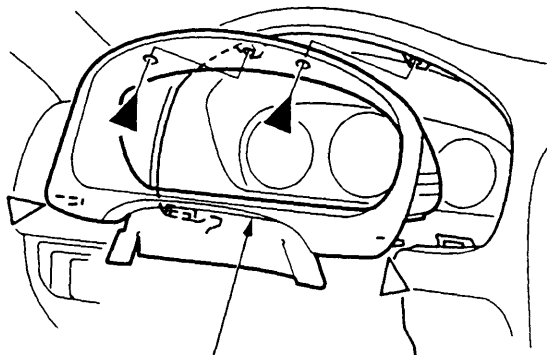
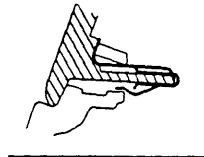
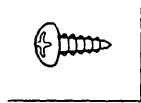
NOTE: Take care not to scratch the dashboard and related parts.

Instrument panel removal:

1. Tilt the steering column down.
2. Remove the screws, and detach the clips, then carefully remove the instrument panel.

►: Screw locations, 2

▷: Clip locations, 2



INSTRUMENT
PANEL

3. Installation is the reverse of the removal procedure.

Driver's dashboard lower cover and knee bolster removal:

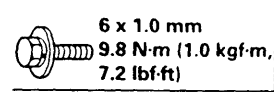
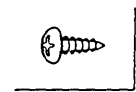
SRS components are located in this area. Review the SRS component locations, precautions, and procedures in the SRS section (24) before performing repairs or service.

1. Remove the screws, and detach the clips, then remove the driver's dashboard lower cover. Disconnect the power mirror switch and mirror defogger switch connector. If equipped with a moonroof, disconnect the connector.

►: Screw, bolt locations

A ►, 3

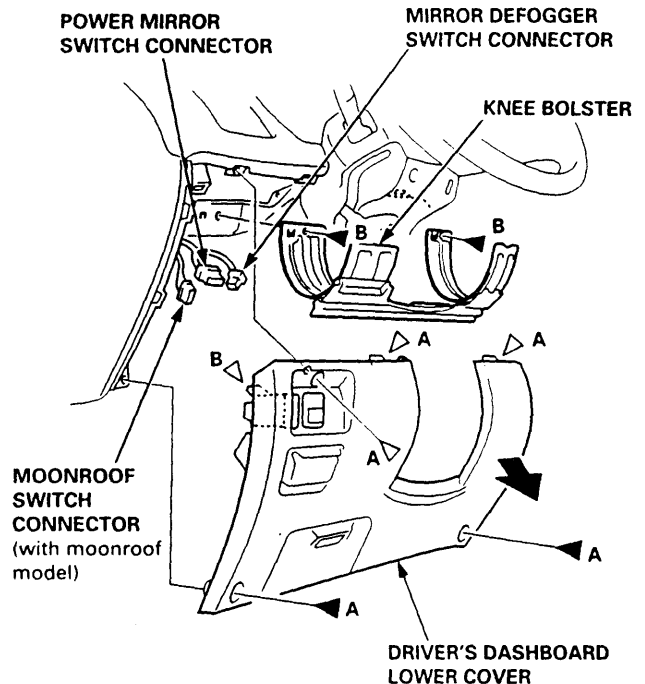
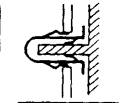
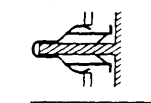
B ►, 2



▷: Clip locations

A ▷, 2

B ▷, 1



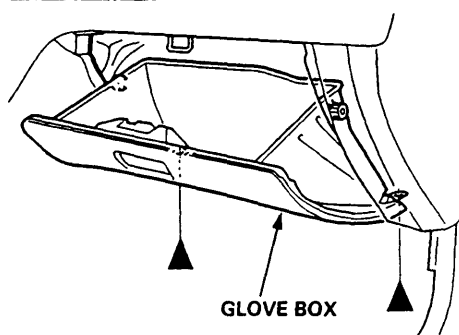
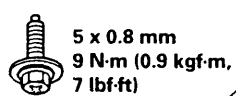
2. Remove the bolts, then remove the knee bolster.
3. Installation is the reverse of the removal procedure.



Glove box:

Lower the glove box, and remove the bolts, then remove the glove box.

►: Bolt locations, 2

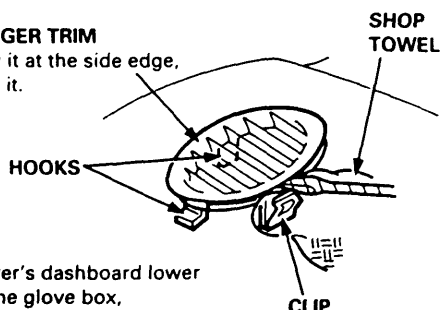


Installation is the reverse of the removal procedure.

Side air vent/Side defogger trim:

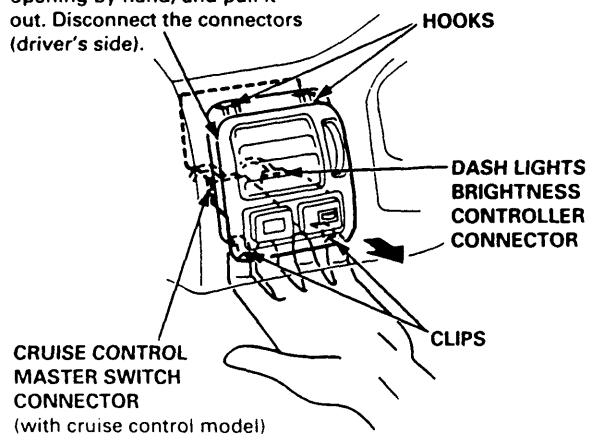
SIDE DEFOGGER TRIM

Carefully pry it at the side edge, then remove it.



SIDE AIR VENT

Remove the driver's dashboard lower cover, or open the glove box, then push the clips from each opening by hand, and pull it out. Disconnect the connectors (driver's side).



Center dashboard lower:

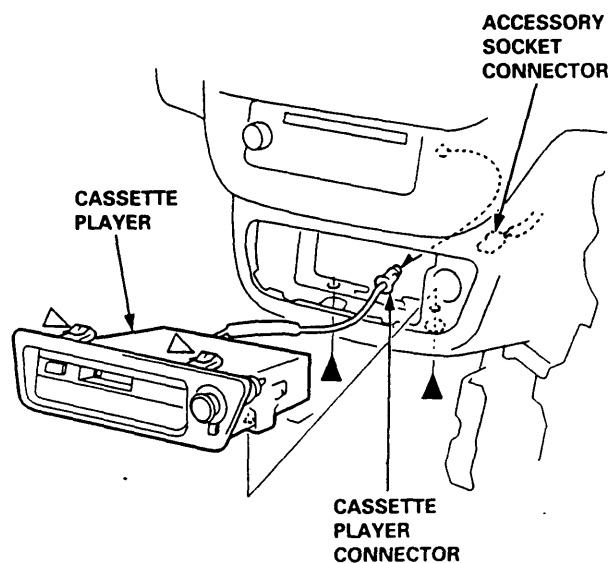
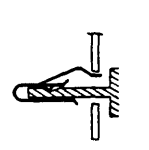
1. Remove:
 - Driver's dashboard lower cover
 - Glove box
 - Beverage holder
2. Remove the screws. Disconnect the cassette player connector from glove box opening, then remove the cassette player. Disconnect the accessory socket connector.

►: Bolt locations, 2



5 x 0.8 mm
9 N·m (0.9 kgf·m,
7 lbf·ft)

▷: Clip locations, 2

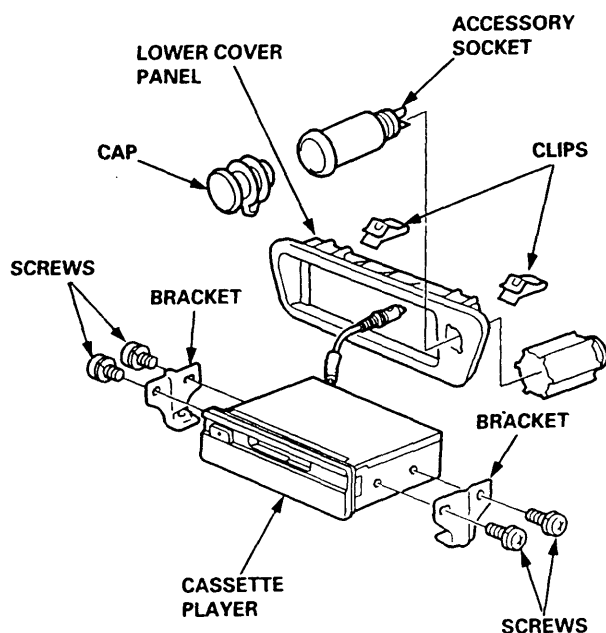


(cont'd)

Interior

Dashboard Component Removal/Installation (cont'd)

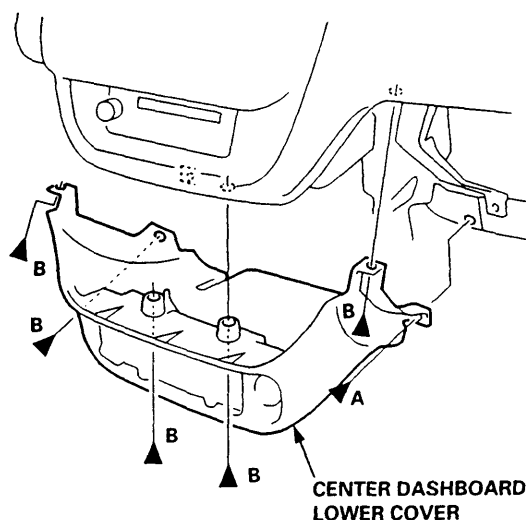
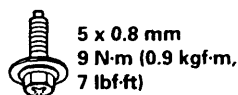
3. If necessary, remove the brackets from the cassette player unit.



4. Remove the screws and bolt, then remove the center dashboard lower cover.

►: Bolt, screw locations
A ►, 1

B ►, 5



5. Installation is the reverse of the removal procedure.

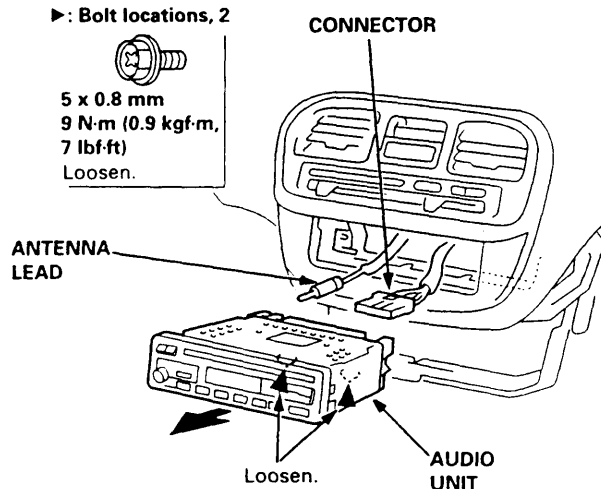
Center panel removal:

1. Remove the center dashboard lower cover.
 2. Loosen the screws, then remove the audio unit. Disconnect the antenna lead and connector.
- NOTE: Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.

►: Bolt locations, 2



5 x 0.8 mm
9 N-m (0.9 kgf-m,
7 lbf-ft)
Loosen.

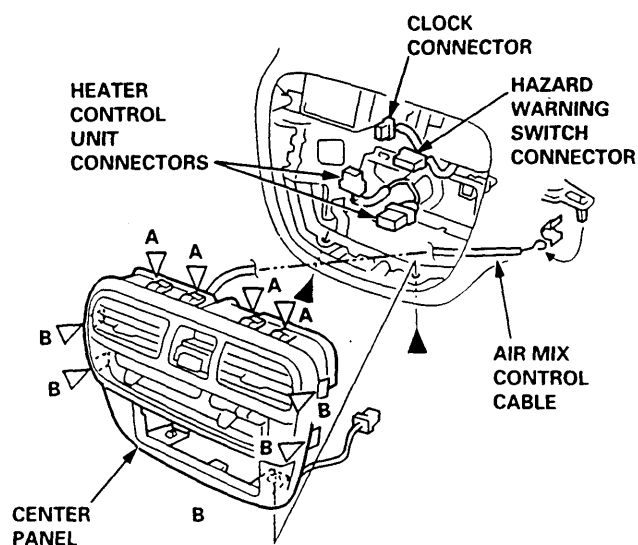
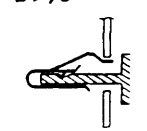
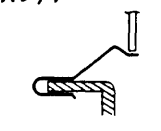


3. Disconnect the air mix control cable, and remove the screws, then pull out the center panel.
4. Disconnect the connectors.

►: Screw locations, 2

▷: Clip locations
A ►, 4

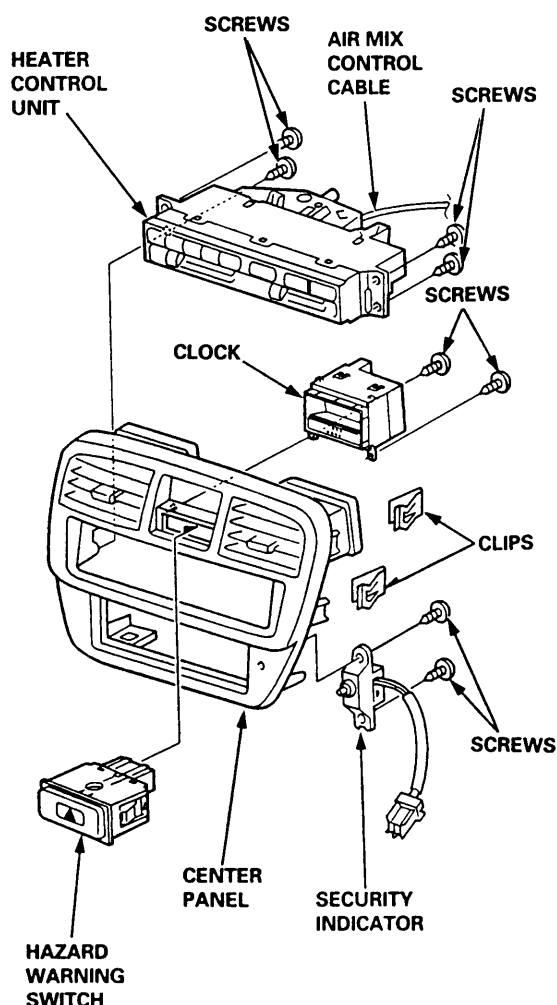
B ►, 5





Dashboard Removal/Installation

5. If necessary, disassemble the center panel.



6. Installation is the reverse of the removal procedure.

NOTE:

- Make sure the connectors are connected properly.
- Adjust the air mix control cable (see section 21).
- Enter the anti-theft code for the radio, then enter the customer's radio station presets.

SRS components are located in this area. Review the SRS component locations, precautions, and procedures in the SRS section (24) before performing repairs or service.

CAUTION: Wear gloves to remove and install the dashboard.

NOTE:

- An assistant is helpful when removing and installing the dashboard.
- Take care not to scratch the dashboard, body and other related parts.
- Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.

1. Remove:

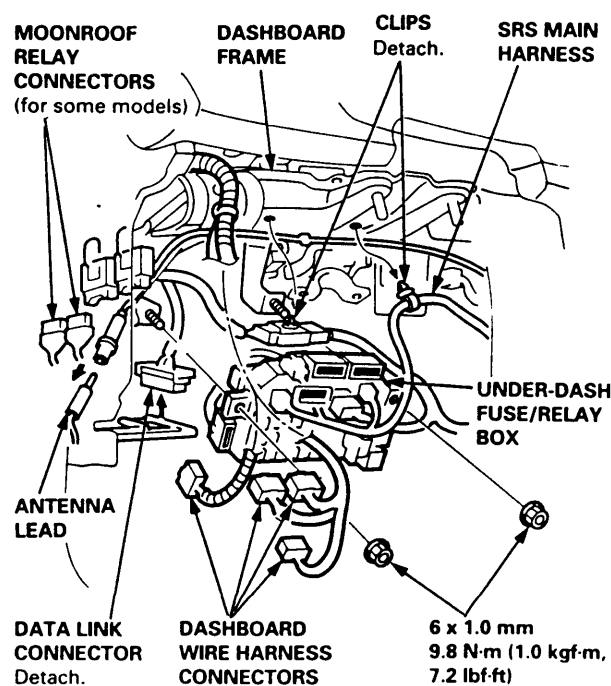
- Front and rear consoles (see page 20-42)
- Beverage holder (see page 20-42)
- Driver's dashboard lower cover and knee bolster (see page 20-44)
- Glove box (see page 20-45)
- Center dashboard lower cover (see page 20-46)

2. Lower the steering column (see section 17).

⚠ WARNING To avoid accidental deployment and possible injury, always disconnect the driver's airbag connector before lowering the steering column (see section 24).

NOTE: To prevent damage to the steering column, wrap it with a shop towel.

- ### 3. Disconnect the dashboard wire harness connectors, remove the nuts, then move the under-dash fuse/relay box. Disconnect the antenna lead and moon-roof relay connectors.



(cont'd)

Interior

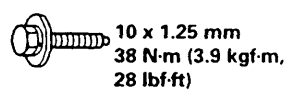
Dashboard Removal/Installation (cont'd)

4. Remove:
 - Driver's dashboard side cover
 - Passenger's dashboard lower cover
 - Dashboard center lid
5. Disconnect the connectors and air mix control cable.

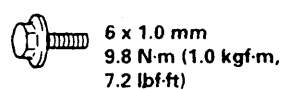
⚠ WARNING To avoid accidental deployment and possible injury, always disconnect the front passenger's airbag connector when the SRS main harness is disconnected (see section 24).

►: Bolt, screw locations

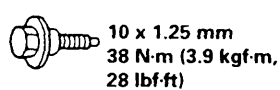
A ►, 7



B ►, 1



C ►, 1

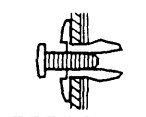


D ►, 1

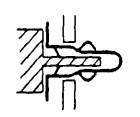


▷: Clip locations

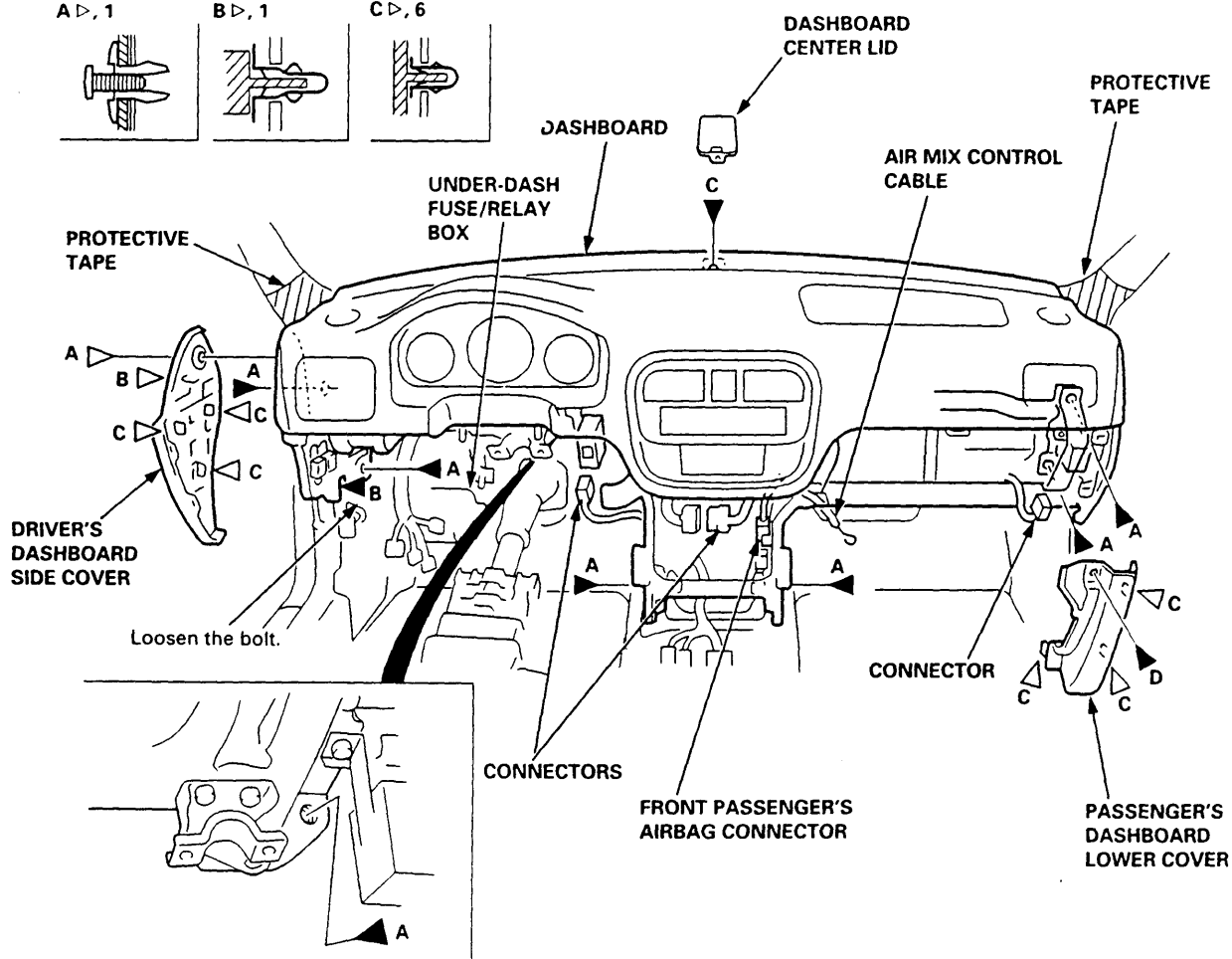
A ►, 1



B ►, 1



C ►, 6

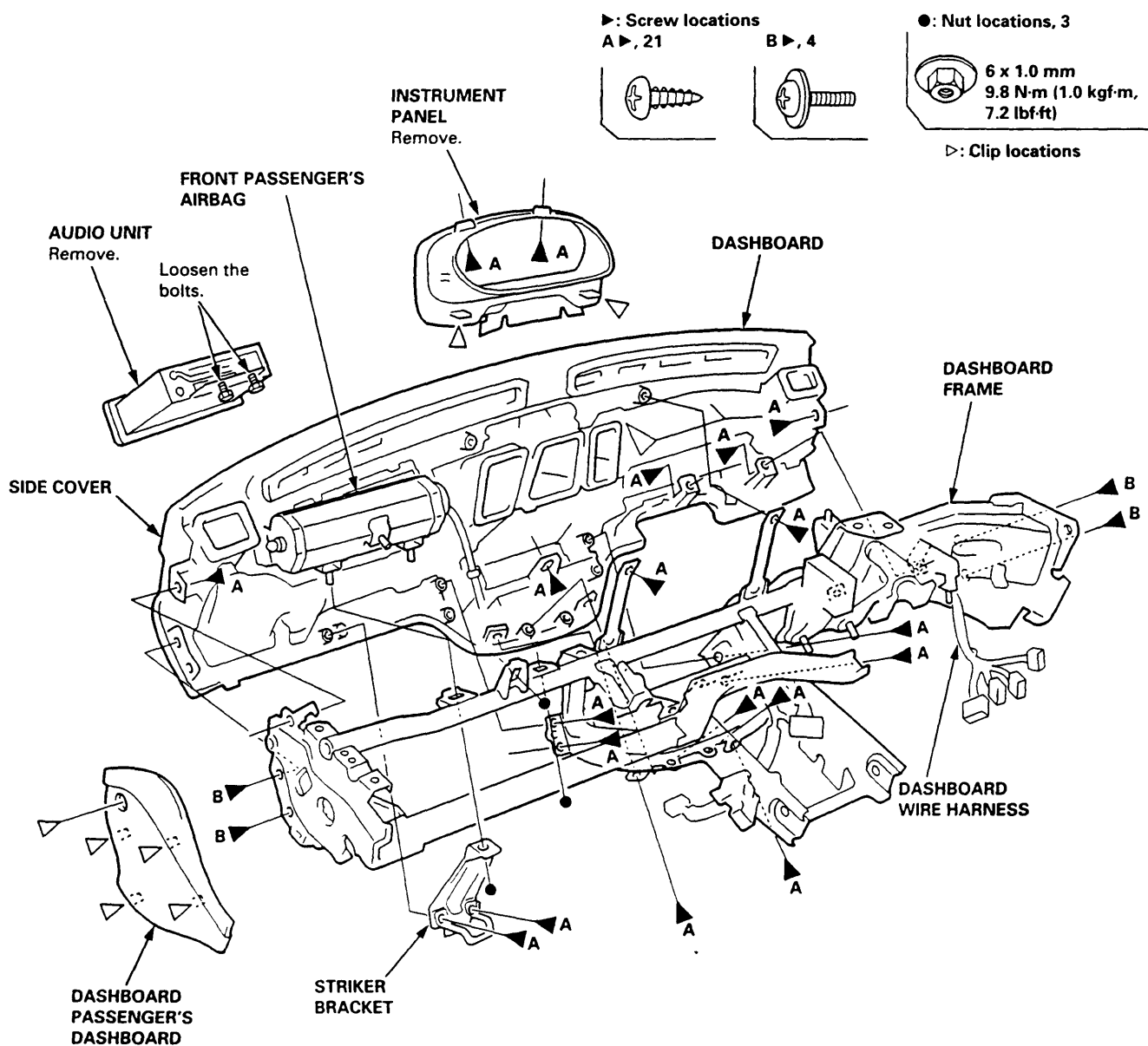


6. Remove the bolts, then lift and remove the dashboard.

CAUTION: Use protective tape on the bottom of the front pillar trim.



7. If necessary, remove the dashboard frame from the dashboard.



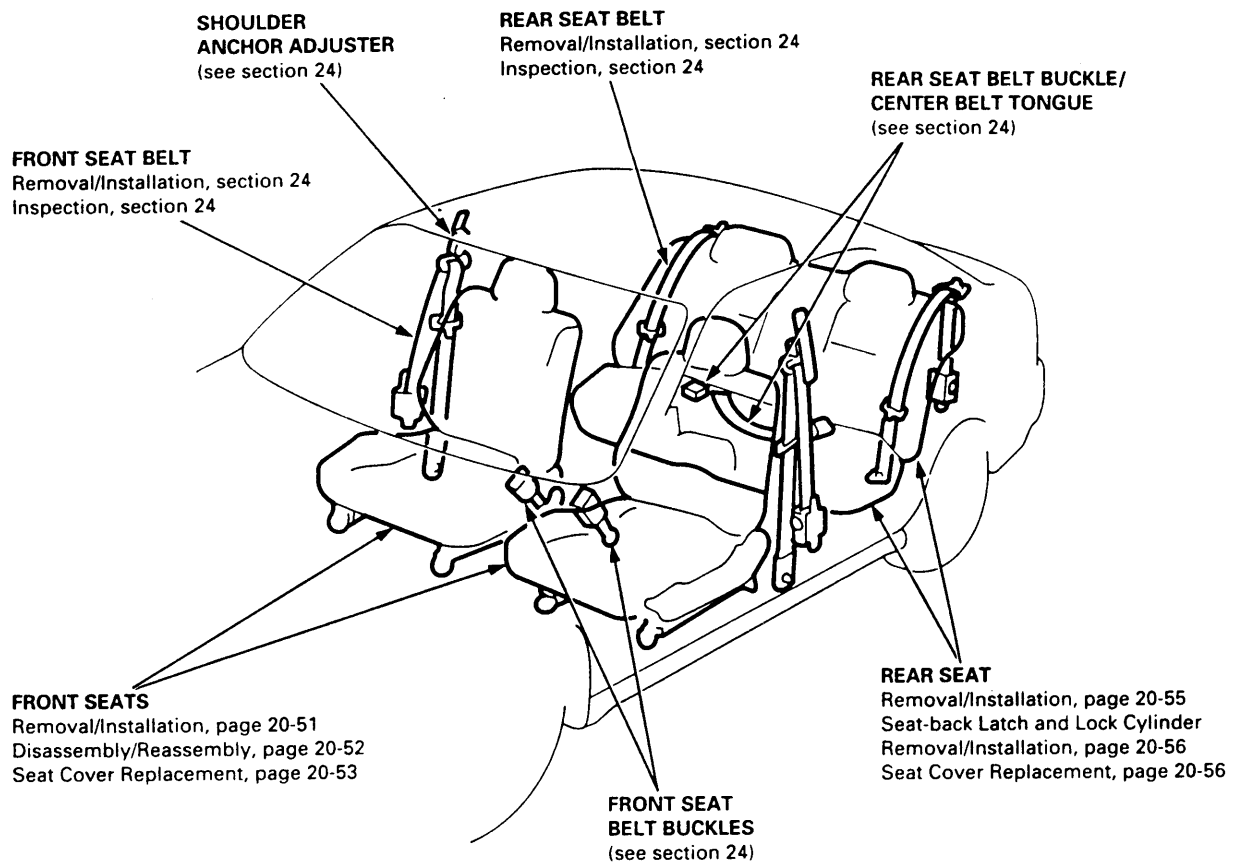
8. Installation is the reverse of the removal procedure.

NOTE:

- Before tightening the bolts, make sure the dashboard wire harnesses are not pinched.
- Make sure the connectors, antenna lead and air mix control cable are connected properly.
- Enter the anti-theft code for the radio, then enter the customer's radio station presets.

Seats

Component Location Index



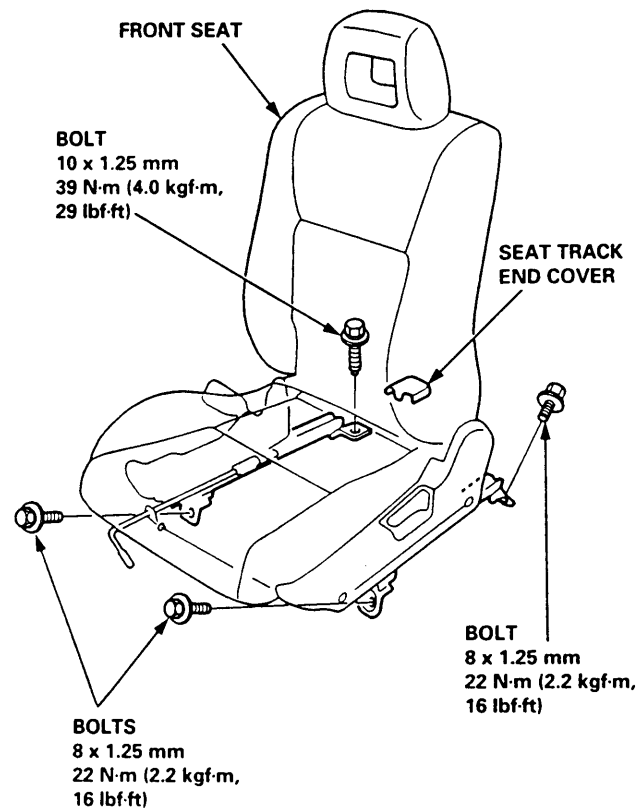
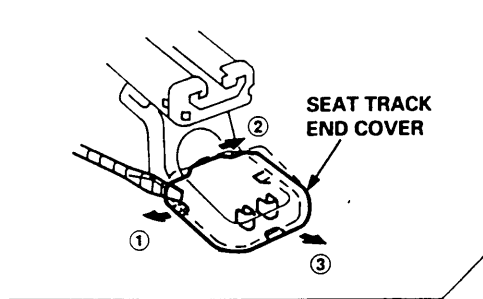


Front Seat Removal/Installation

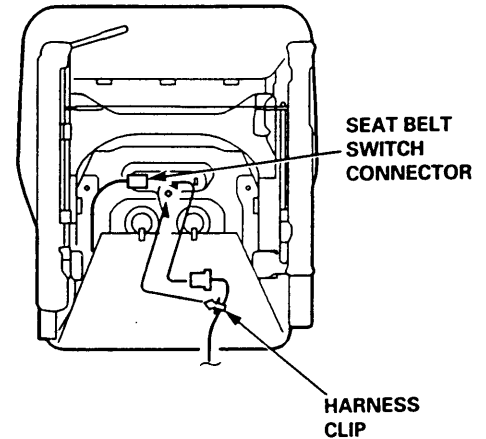
CAUTION: When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage.

NOTE: Take care not to scratch the seat covers and body.

1. Remove the seat track end cover, then remove the bolts.



2. Lift the driver's front seat, and disconnect the seat belt switch connector, and detach the harness clip.



3. Remove the headrest.
4. Carefully remove the front seat through the front door opening.
5. Installation is the reverse of the removal procedure.

NOTE: Make sure the connector is connected properly.

Seats

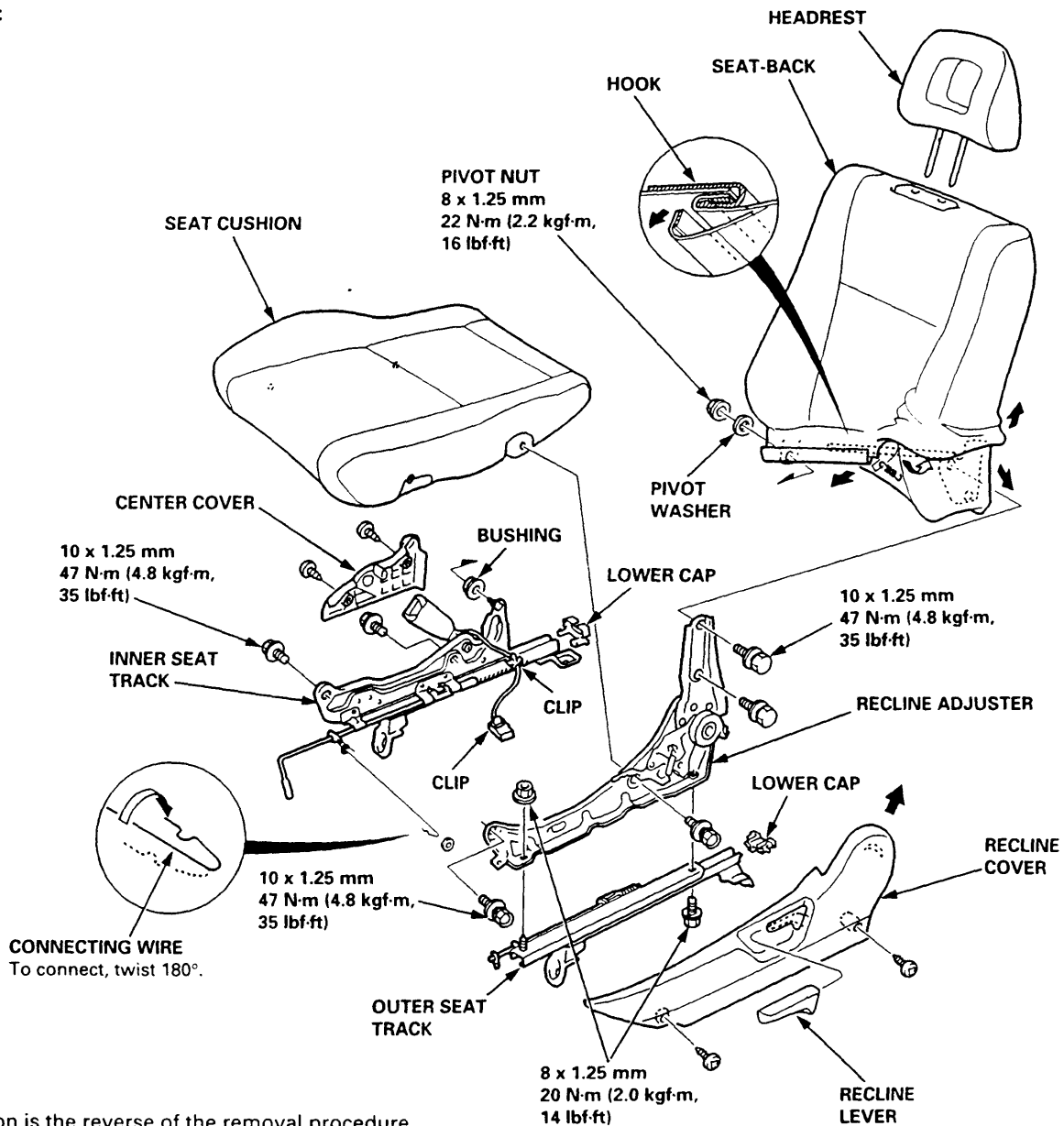
Front Seat Disassembly/Reassembly

CAUTION: When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage.

NOTE:

- Take care not to scratch the seat covers and body.
- Remove the front seat through the front door opening.

Driver's:



Installation is the reverse of the removal procedure.

NOTE:

- Make sure the bushing and pivot washer are installed properly.
- To prevent wrinkles when installing the seat-back cover, make sure the material is stretched evenly over the pad.
- Grease the sliding portion of the seat track.



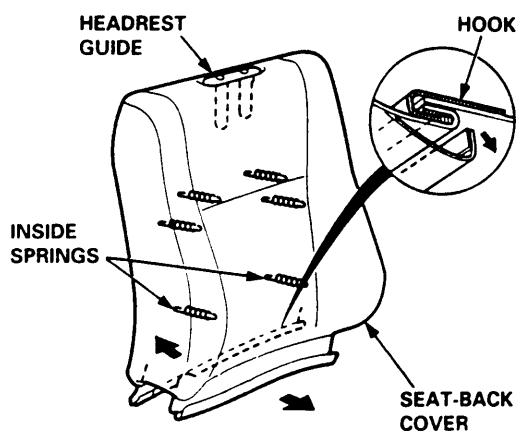
Front Seat Cover Replacement

CAUTION: Wear gloves to remove and install the seat covers.

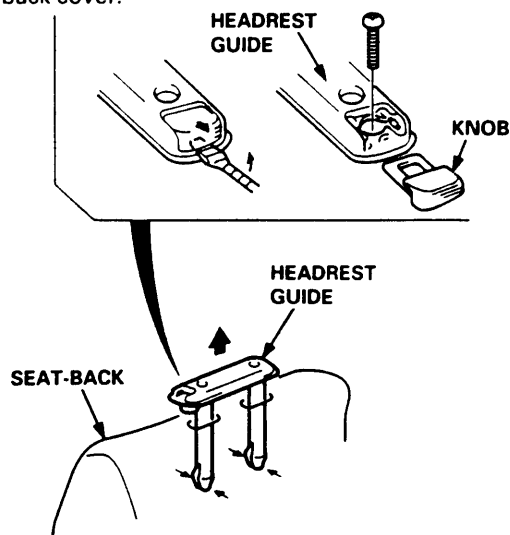
NOTE: Take care not to tear the seams or damage the seat covers.

Seat-back cover:

1. Release the hook, and fold back the seat-back cover.



2. Release all inside springs, then fold back the seat-back cover.
3. Remove the headrest.
4. Remove the headrest guide, then remove the seat-back cover.



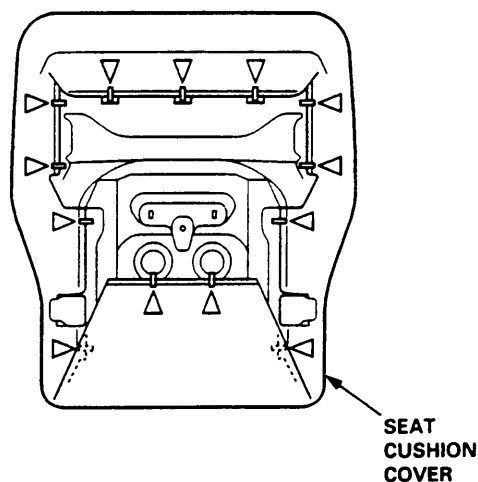
5. Installation is the reverse of the removal procedure.

NOTE: To prevent wrinkles when installing a seat-back cover, make sure the material is stretched evenly over the pad before securing the inside springs and hook.

Seat cushion cover:

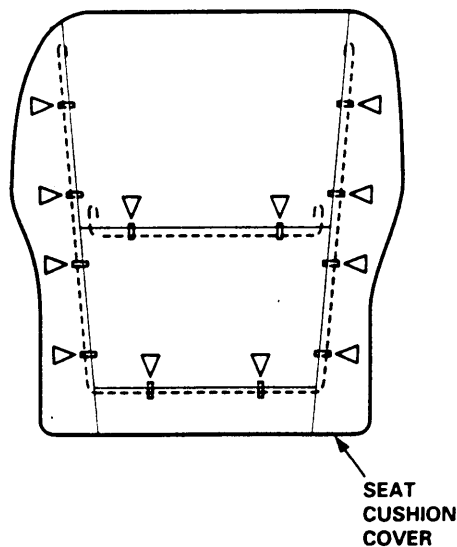
1. Remove the seat cushion (see page 20-52).
2. Remove the clips from under the seat cushion, then loosen the seat cushion cover.

▷: Clip locations



3. Pull back the edge of the seat cushion cover all the way around, then release the clips, and remove the seat cushion cover.

▷: Clip locations



(cont'd)

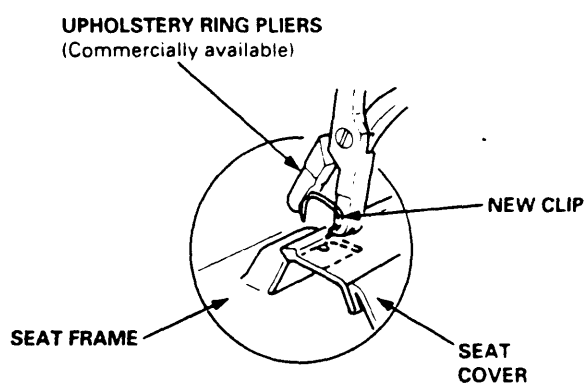
Seats

Front Seat Cover Replacement (cont'd)

4. Installation is the reverse of the removal procedure.

NOTE:

- To prevent wrinkles when installing a seat cushion cover, make sure the material is stretched evenly over the pad before securing the clips.
- Replace the clips with new ones.





Rear Seat Removal/Installation

NOTE: Take care not to scratch the seat covers and body.

► Bolt locations

A ►, 6



6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)

B ►, 2



6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)

C ►, 1



6 x 1.0 mm
22 N·m (2.2 kgf·m,
16 lbf·ft)

D ►, 1



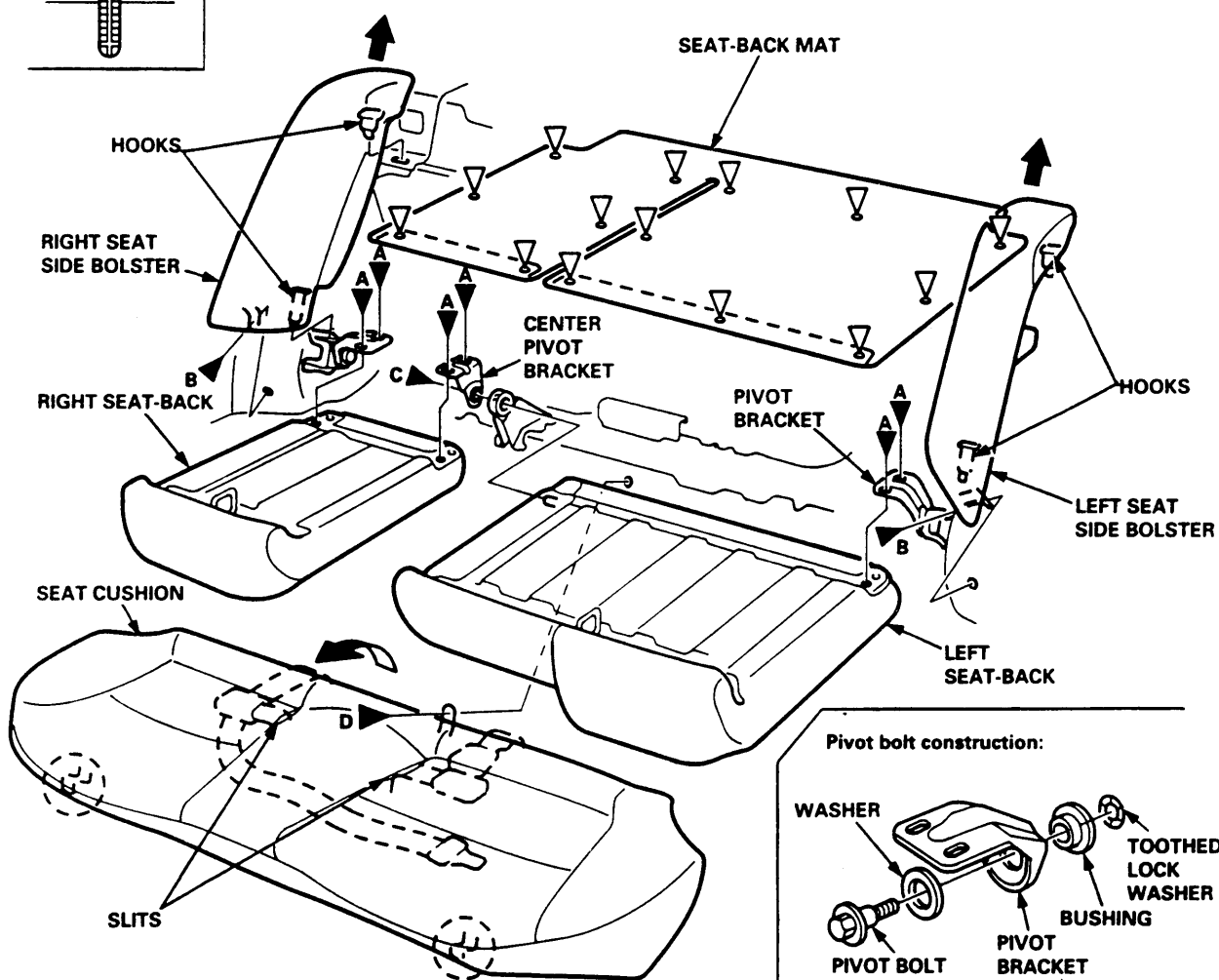
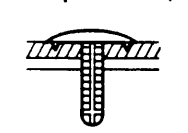
6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)

○ Hook locations, 2

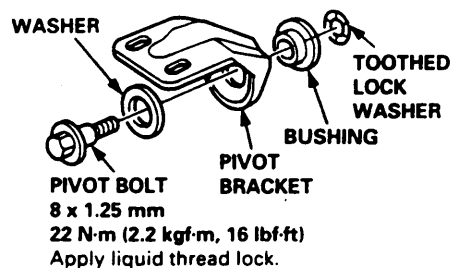


SEAT CUSHION HOOK

▷ Clip locations, 14



Pivot bolt construction:



Installation is the reverse of the removal procedure.

NOTE:

- Before attaching the rear seat-back and seat cushion, make sure there are no twists or kinks in the rear seat belts and center belt.
- When installing the seat cushion, slip the seat belt buckles through the slits in the seat cushion.
- Make sure the seat-back locks securely.
- If necessary, adjust the rear seat-back latch (see page 20-56) and rear seat-back.

(cont'd)

Seats

Rear Seat-back Latch and Lock Cylinder Removal/Installation

Remove the lock cylinder trim, then remove the rear shelf (see page 20-39).

NOTE: Take care not to bend each lock rod.

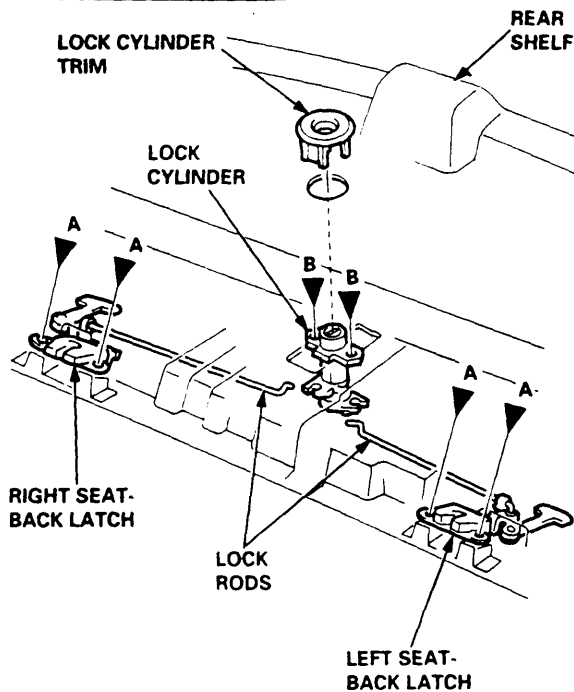
►: Bolt, screw locations

A ►, 4

B ►, 2



6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)



Installation is the reverse of the removal procedure.

NOTE:

- Make sure each lock rod is connected securely.
- Make sure each seat-back locks securely and opens properly.
- If necessary, adjust the seat-back latch.

Rear Seat Cover Replacement

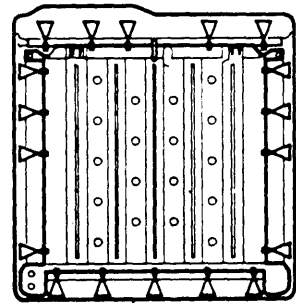
CAUTION: Wear gloves to remove and install the seat covers.

NOTE: Take care not to tear the seams or damage the seat covers.

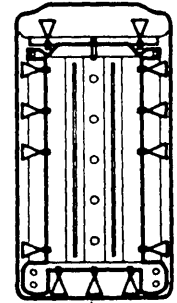
Seat-back cover:

1. Remove the seat-back (see page 20-55).
2. Release the hooks and clips, and loosen the seat-back cover.

►: Clip locations



LEFT SEAT-BACK COVER

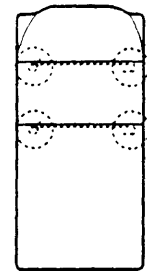


RIGHT SEAT-BACK COVER

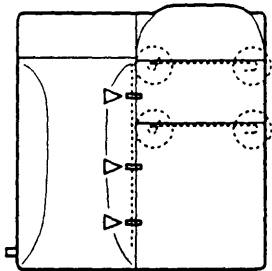
3. Pull back the edge of the seat-back cover all the way around, and release the hooks and clips. Remove the seat-back cover.

►: Clip locations

○: Hook locations



RIGHT SEAT-BACK COVER



LEFT SEAT-BACK COVER

4. Installation is the reverse of the removal procedure.

NOTE:

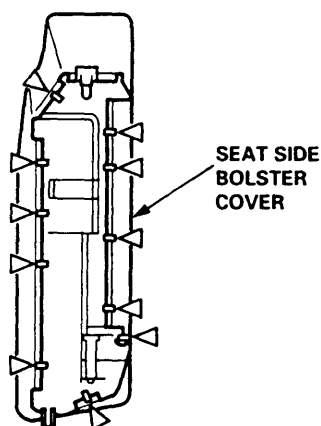
- To prevent wrinkles when installing a seat cushion cover, make sure the material is stretched evenly over the pad before securing the clips and hooks.
- Replace the clips with new ones.



Seat side bolster cover:

1. Remove the seat side bolster (see page 20-55).
2. Loosen the seat side bolster cover by releasing all the clips, then remove it.

▷: Clip locations



3. Installation is the reverse of the removal procedure.

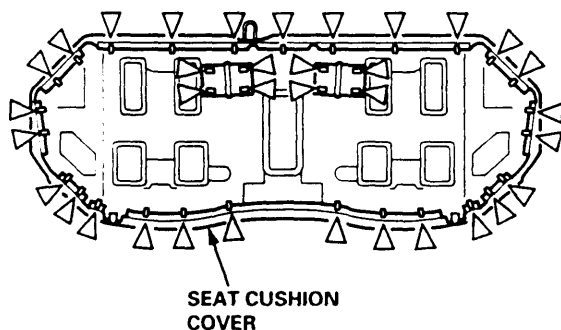
NOTE:

- To prevent wrinkles when installing a seat side bolster cover, make sure the material is stretched evenly over the pad before securing the clips.
- Replace the released clips with new ones.

Seat cushion cover:

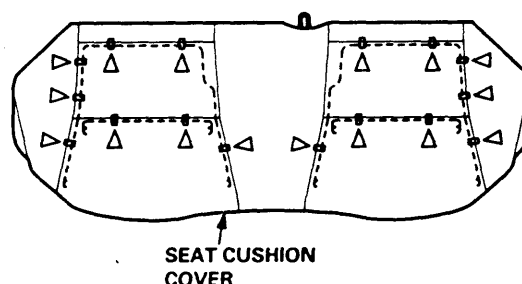
1. Remove the seat cushion (see page 20-55).
2. Loosen the seat cushion cover by releasing all the clips.

▷: Clip locations



3. Pull back the edge of the seat cushion cover all the way around, and release the clips, then remove the seat cushion cover.

▷: Clip locations

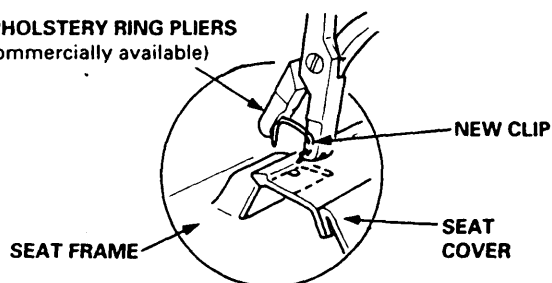


4. Installation is the reverse of the removal procedure.

NOTE:

- To prevent wrinkles when installing a seat cushion cover, make sure the material is stretched evenly over the pad before securing the clips.
- Replace the clips with new ones.

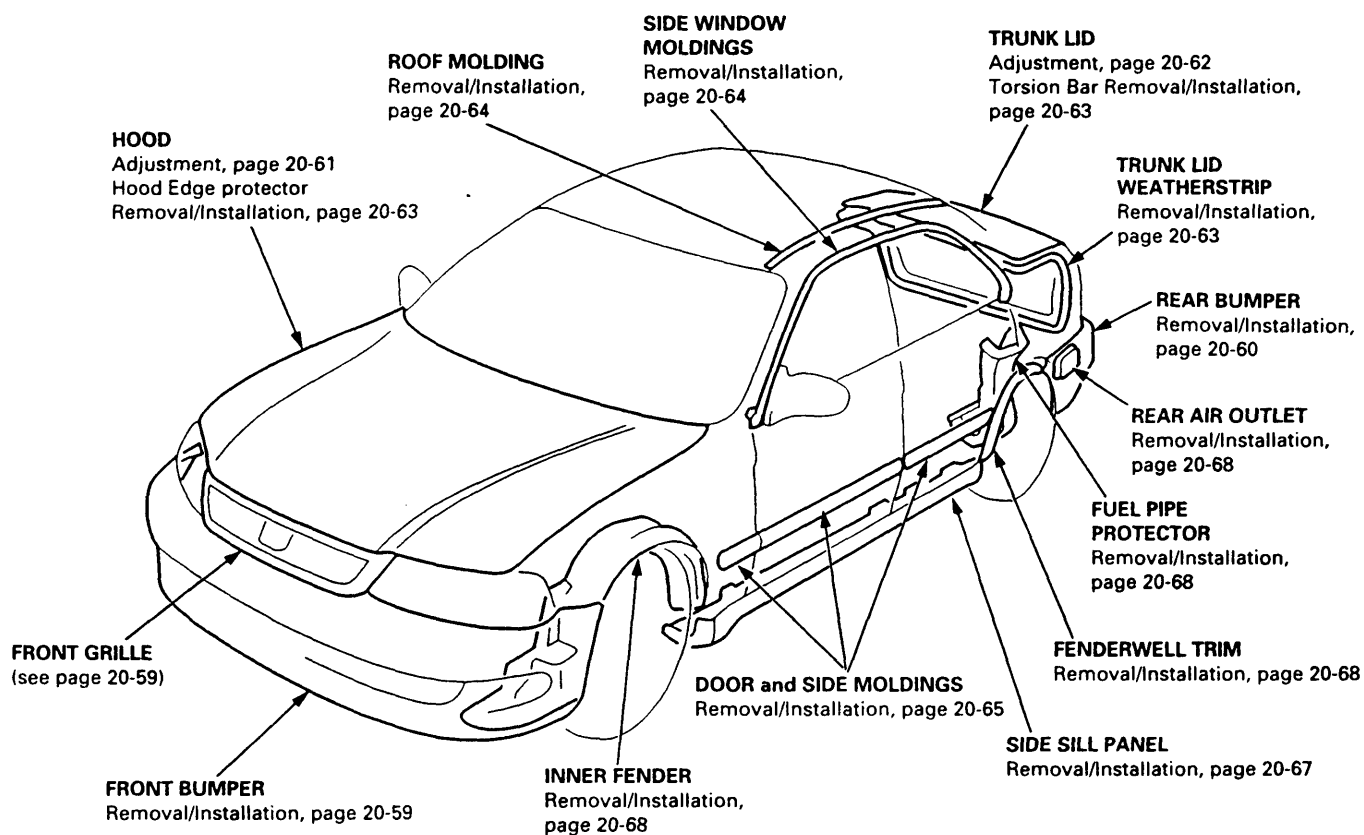
UPHOLSTERY RING PLIERS
(Commercially available)



Exterior

Component Location Index

NOTE: Refer to the Acura 1.6 EL Body Repair Manual, 1997 Model Series, P/N. 61S5230, for the hood and trunk lid removal.



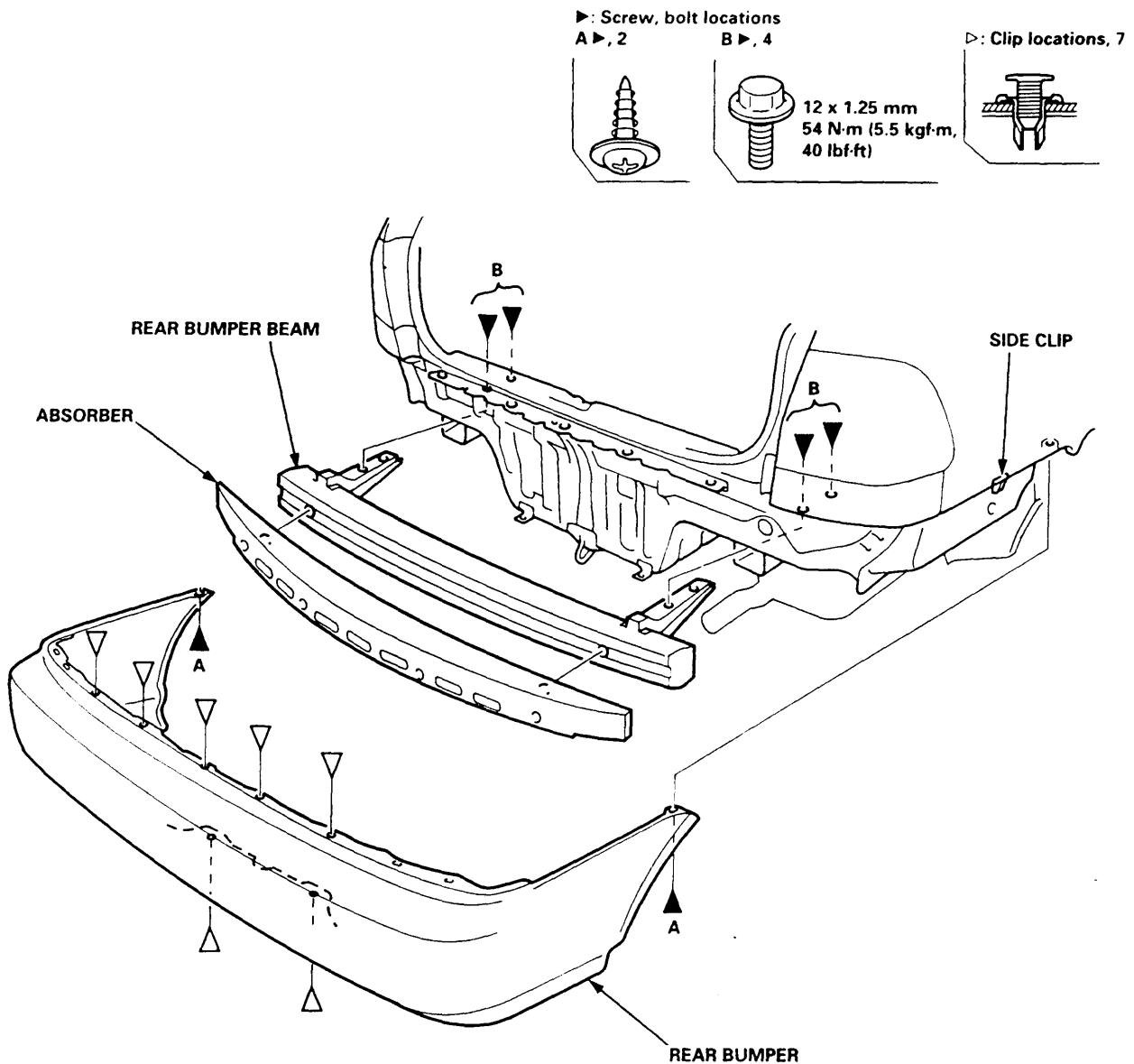
Exterior

Rear Bumper Removal/Installation

CAUTION: Wear gloves to remove and install the rear bumper.

NOTE:

- An assistant is helpful when removing the rear bumper.
- Take care not to scratch the rear bumper and body.



Installation is the reverse of the removal procedure.

NOTE:

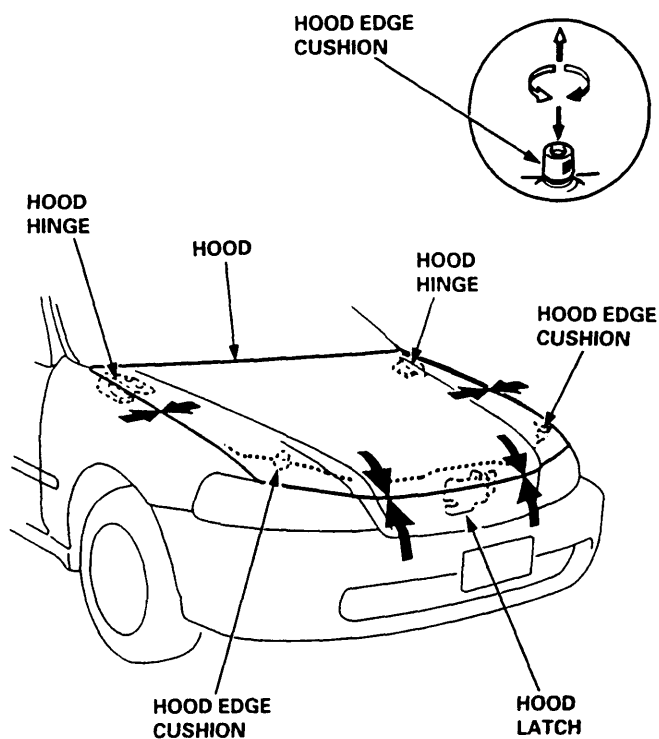
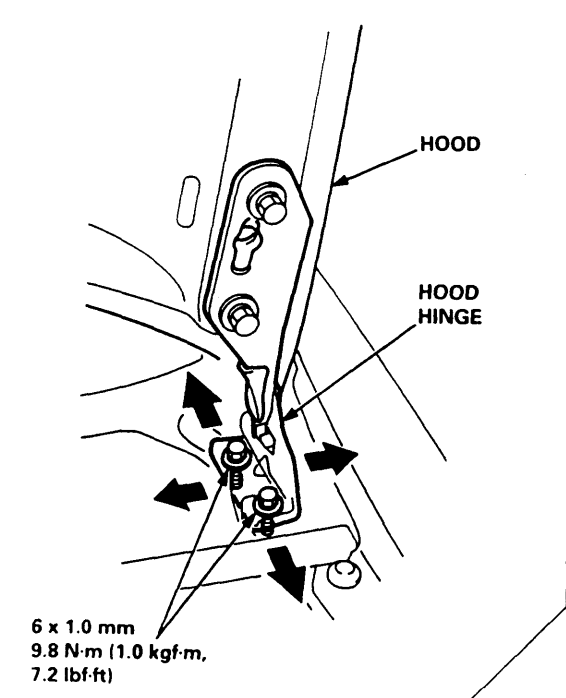
- If necessary, replace any damaged clips.
- Make sure the rear bumper engages the side clip on each side securely.



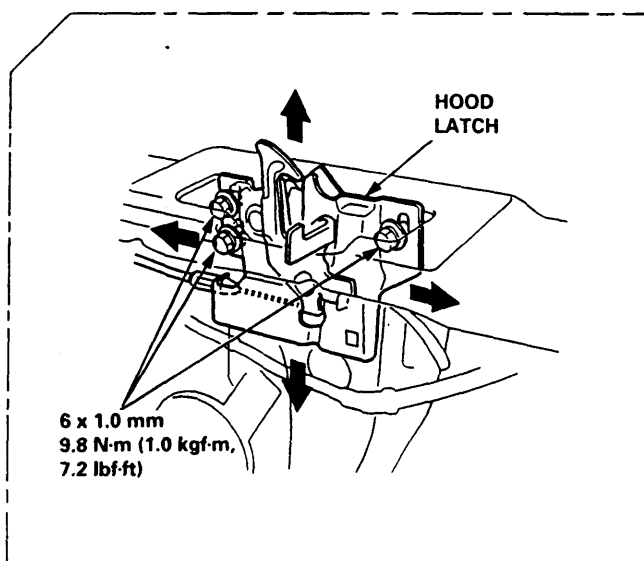
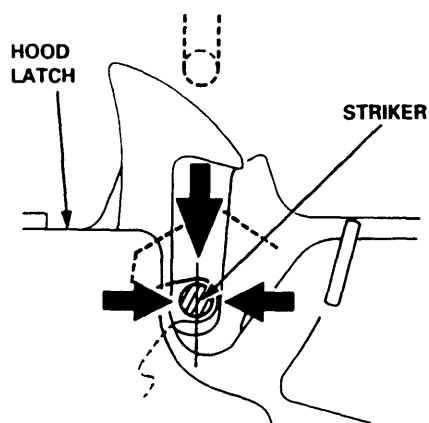
Hood Adjustment

NOTE: Before adjusting the hood, loosen each bolt slightly.

1. Adjust the hood hinges right and left, as well as fore and aft, by using the elongated holes.
2. Turn the hood edge cushions, as necessary, to make the hood fit flush with the body at front and side edges.
3. Adjust the hood latch to obtain the proper height at the forward edge.
4. After adjustment, tighten each bolt securely.



NOTE: Move the hood latch right or left until the striker is centered in the hood latch as shown.

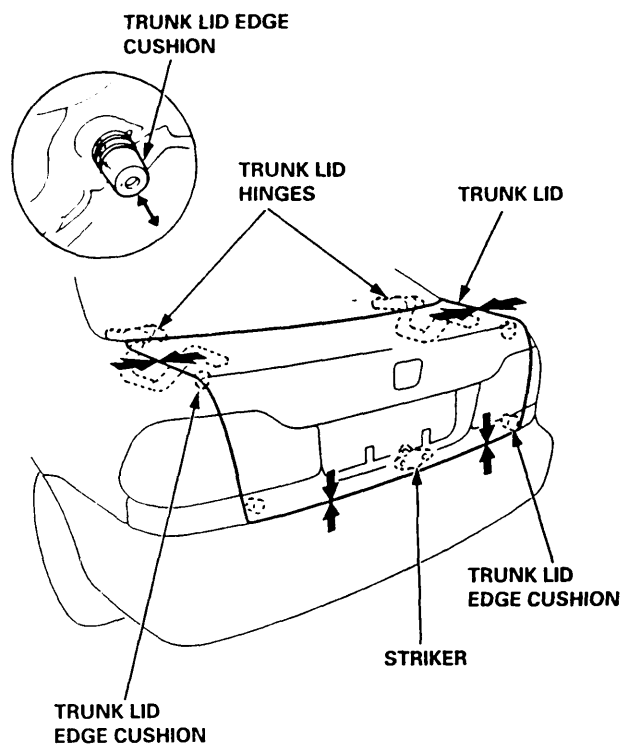
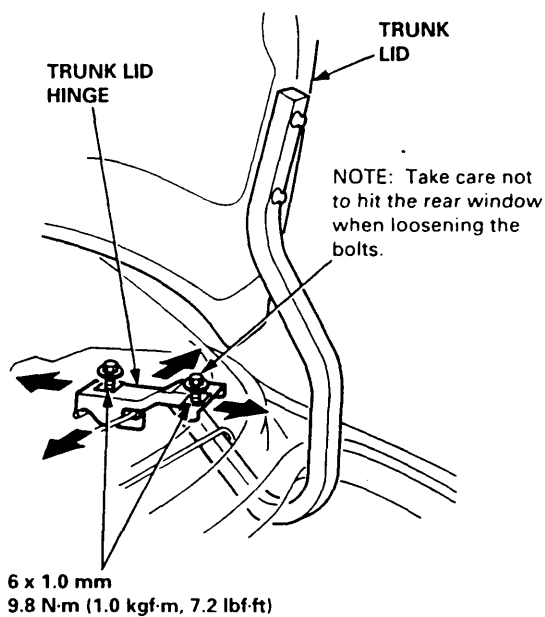


Exterior

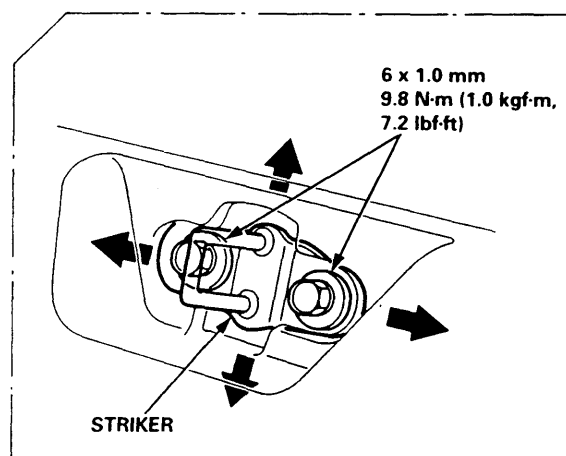
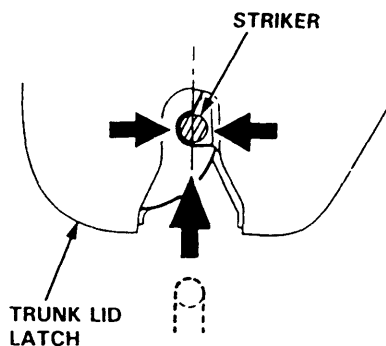
Trunk Lid Adjustment

NOTE: Before adjusting the trunk lid, loosen each bolt slightly.

1. Remove the rear shelf (see page 20-39), and adjust the trunk lid hinges right and left, as well as fore and aft, by using the elongated holes.
2. Turn the trunk lid edge cushions, as necessary, to make the trunk lid fit flush with the body at the rear and side edges.
3. Adjust the fit between the trunk lid and the trunk lid opening by moving the striker.
4. After adjustment, tighten each bolt securely.



NOTE: Move the striker right or left until it's centered in the trunk lid latch as shown.





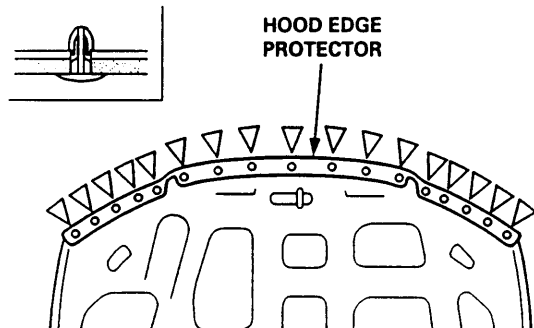
Hood Edge Protector and Trunk Lid Weatherstrip Removal/Installation

Hood edge protector:

NOTE:

- When removing the clips, use a clip remover.
- If necessary, replace any damaged clips.

▷: Clip locations, 17

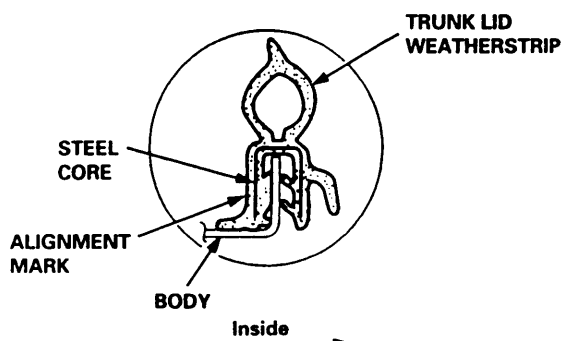
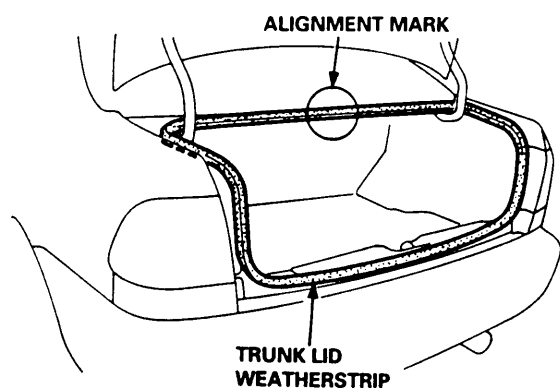


Trunk lid weatherstrip:

When installing the trunk lid weatherstrip, align it with the alignment mark on the trunk lid opening.

NOTE:

- Make sure there are no wrinkles in the weatherstrip.
- Check for water leaks.

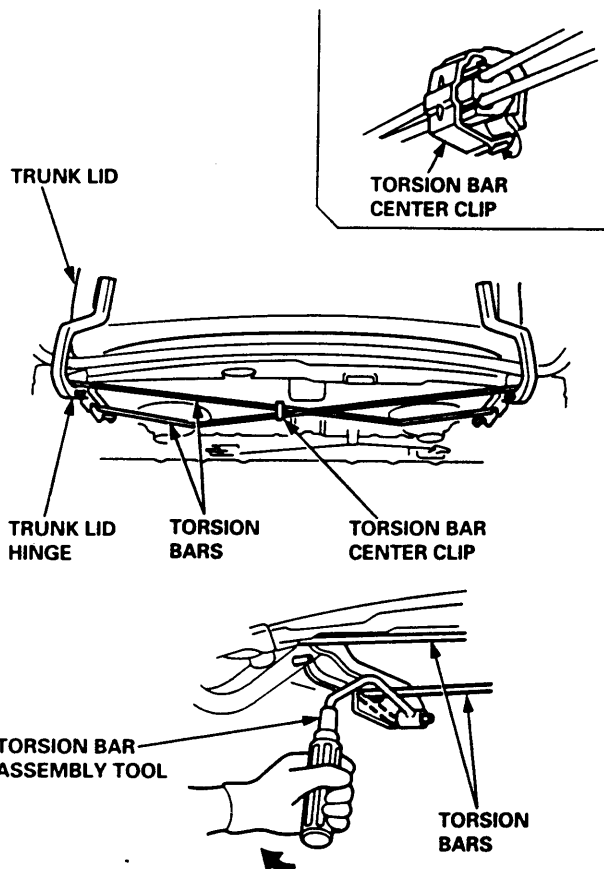


Trunk Lid Torsion Bars Removal/Installation

CAUTION: Wear gloves to remove and install the torsion bars.

NOTE: Take care not to damage the body.

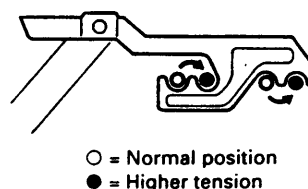
Remove the torsion bars with the torsion bar assembly tool while holding the trunk lid as shown.



Installation is the reverse of the removal procedure.

NOTE:

- Adjust the torsion bars fore or aft with the torsion bar assembly tool as shown.



- Make sure the trunk lid opens properly.

Exterior

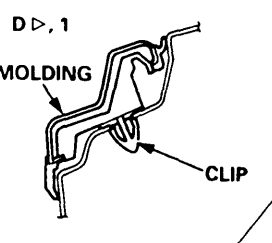
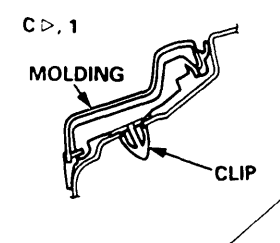
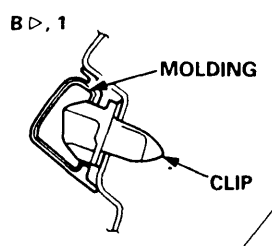
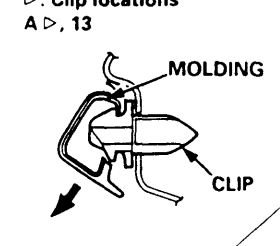
Side Window Moldings Removal/Installation

CAUTION: Wear gloves to remove and install the side window moldings.

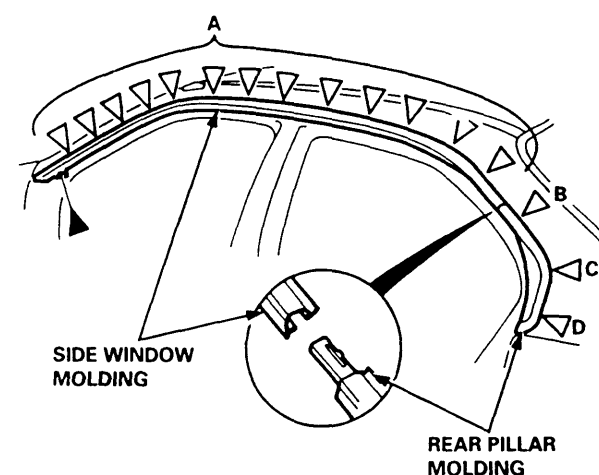
NOTE:

- Take care not to scratch the body.
- Remove the screw, and pull the side window molding by hand.

▷: Clip locations
A ▷, 13



▷: Screw locations, 1



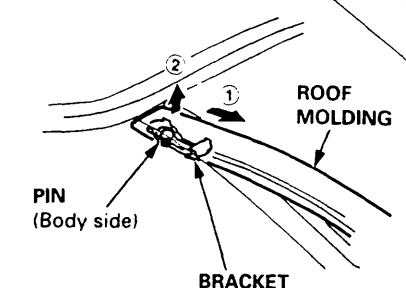
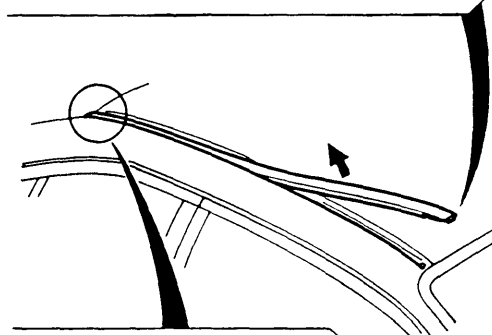
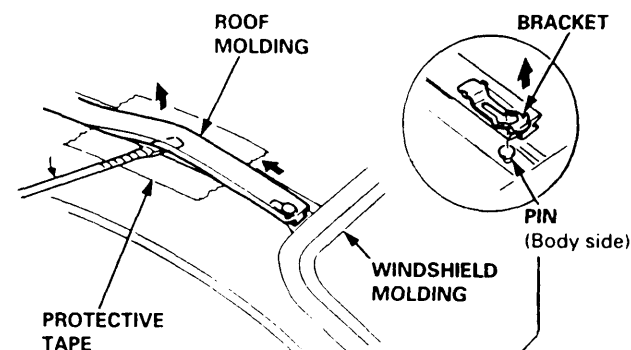
Installation is the reverse of the removal procedure.

NOTE: If necessary, replace any damaged clips.

Roof Molding Removal/Installation

CAUTION: When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage, and use protective tape on the body.

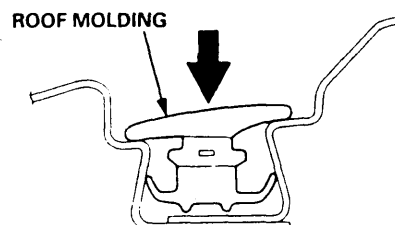
NOTE: Take care not to scratch the body.



Installation is the reverse of the removal procedure.

NOTE:

- Take care not to damage the windshield molding.
- Make sure the roof molding is installed securely.



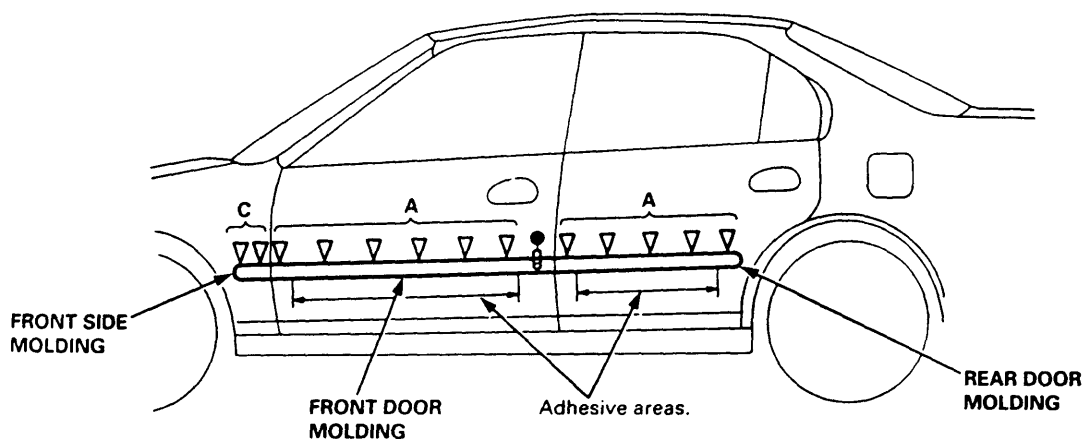


Door and Side Moldings Removal/Installation

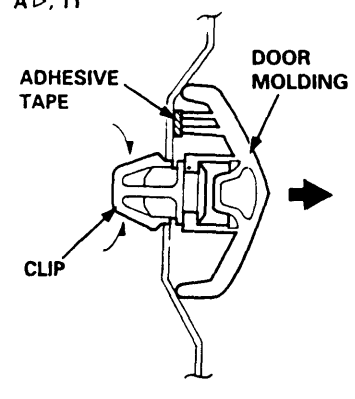
CAUTION: When prying with a flat tip screwdriver, wrap it with protective tape to prevent damage.

NOTE:

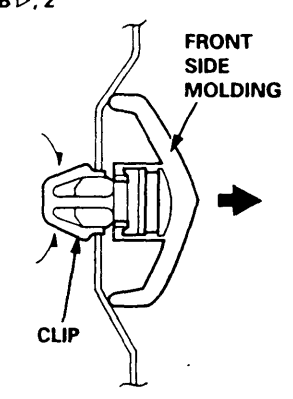
- To remove the front side molding, remove the inner fender (see page 20-68).
- To remove the door molding, remove the door panel (see pages 20-4, 10) and plastic cover.
- Take care not to bend the door moldings.
- Before reassembling, clean the door bonding surface with a sponge dampened in alcohol.
- After cleaning, keep oil, grease and water from getting on the surface.
- If necessary, replace any damaged clips.



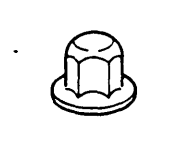
▷: Clip locations
A ▷, 11



B ▷, 2



●: Plastic nut location, 1



(cont'd)

Exterior

Door and Side Moldings Removal/Installation (cont'd)

Door molding removal:

The following materials and tools are required to repair the door moldings.

NOTE: Follow the manufacturer's instructions.

Materials: (Reference)

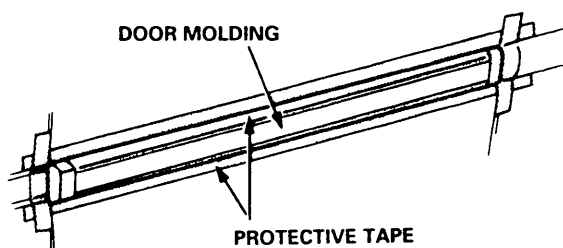
- Stripe remover
3M 08907
- Stripe adhesive remover
3M 08908
- Adhesive tape
3M Super Automotive Attachment Tape

Tools:

- Protective tape
- Knife or Cutter
- Sponge or Shop towel
- Infrared dryer
- Film
- Putty knife
- Alcohol

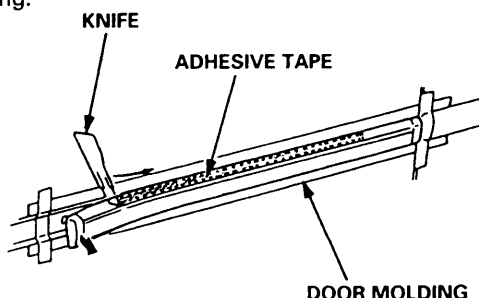
CAUTION: Wear gloves to remove and install the door moldings.

1. Remove the door panel, and pull back the plastic cover.
2. Apply protective tape on and around the molding.



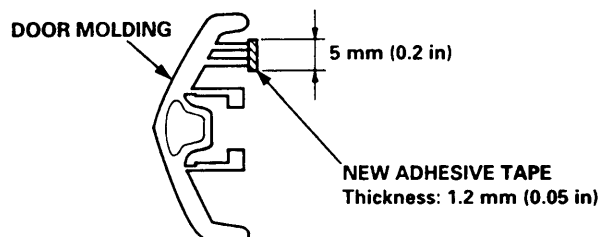
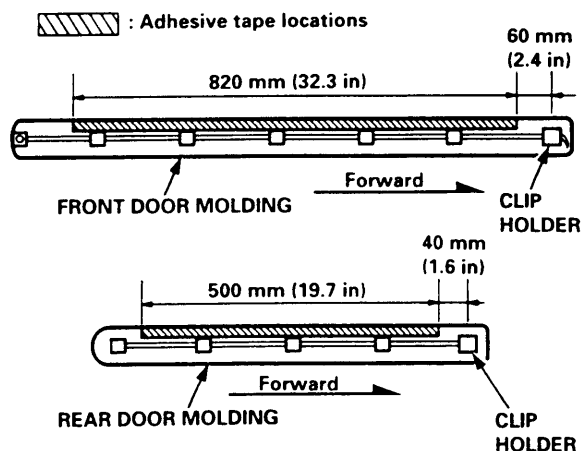
3. Release the clips from inside of the door. Carefully cut the adhesive tape with a knife or cutter while pulling the edge of the molding away from the door as shown.

NOTE: Take care not to scratch or bend the molding.



Door molding installation:

1. Glue the new adhesive tape to the moldings as shown.



2. Install the clips on the molding.
3. Heat the bonding surface of the door and door molding with an infrared dryer.
Door: 40 – 60°C (104 – 140°F)
Molding: 20 – 30°C (68 – 86°F)

NOTE: Use care when heating to prevent deformation of the molding.

4. Align the molding with the clip locations, and set the molding. Lightly push on the molding until its edge is fully seated on the adhesive tape.

NOTE: Do not spray water on the molding within the first 24 hours after installation.

5. Reassemble all removed parts.

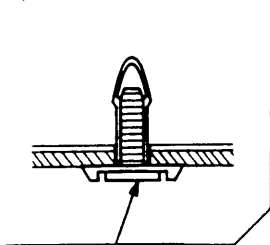


Side Sill Panel Removal/Installation

NOTE: Take care not to scratch the body.

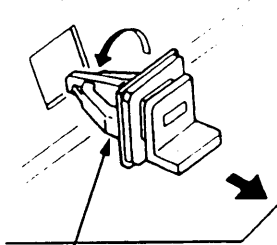
▷: Clip locations

A ▷, 3



NOTE: Loosen the screw, then remove the lower clip using a clip remover.

B ▷, 7

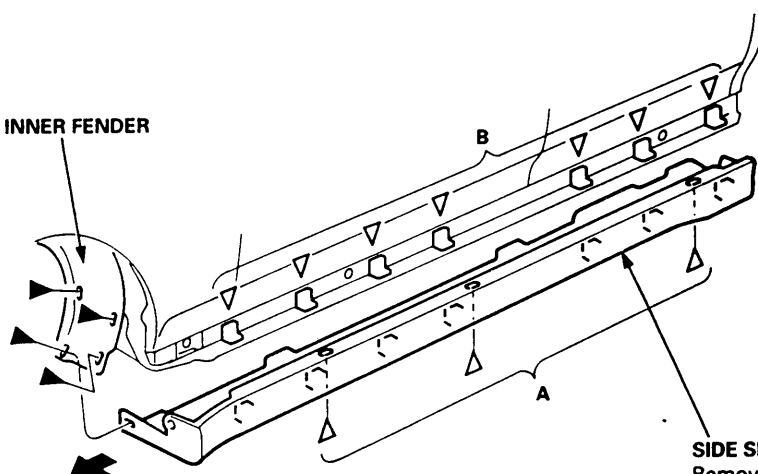


SIDE CLIP
Remove the side clips from the body by turning them 45°

▶: Screw locations, 4



INNER FENDER



SIDE SILL PANEL

Remove the lower clips, then remove the side sill panel by sliding it forward.

SIDE CLIP

LOWER CLIP

SIDE SILL PANEL

SIDE CLIP

Forward

NOTE: When removing the side sill panel, the side clips will stay in the body.

To install the side sill panel, remove the side clips from the body, install them on the side sill panel, then install the side sill panel on the vehicle.

NOTE:

- Take care not to twist the side sill panel.
- If necessary, replace any damaged side and lower clips.

Exterior

Inner Fender, Fenderwell Trim, Fuel Pipe Protector and Rear Air Outlet Removal/Installation

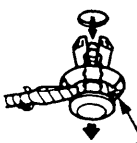
NOTE: If necessary, replace any damaged clips.

Inner fender:

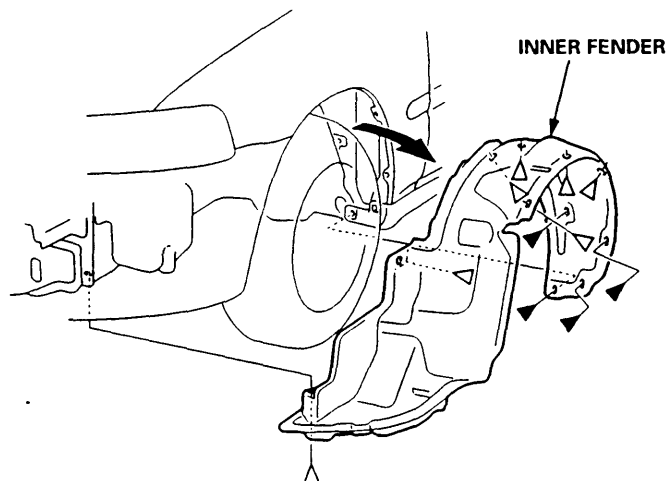
►: Screw locations, 4



►: Clip locations, 7



CLIP



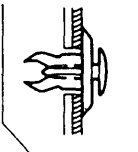
Fenderwell trim/Fuel pipe protector/Rear air outlet:

NOTE:

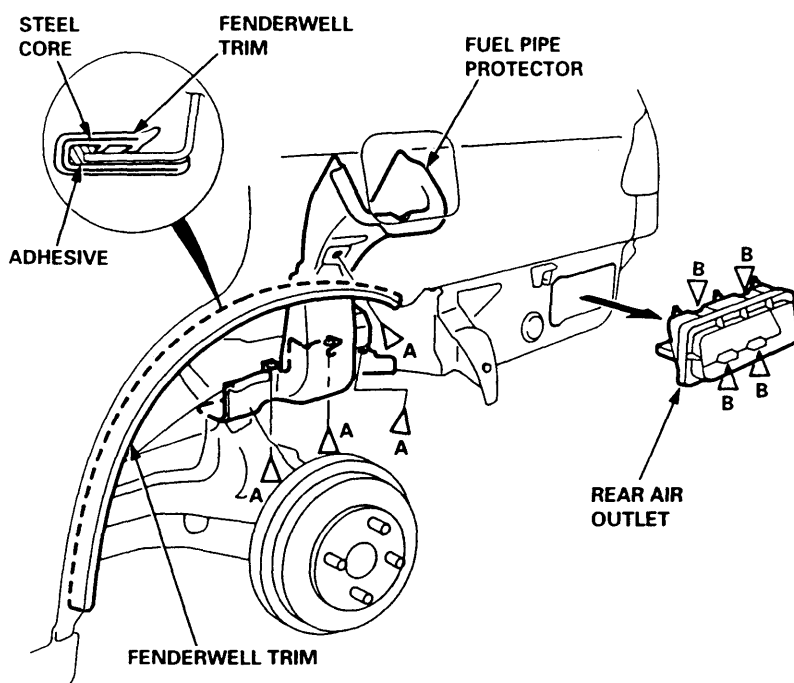
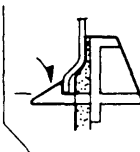
- Take care not to bend the fenderwell trim.
- Before installing the fenderwell trim, clean the body bonding surface with a sponge dampened in alcohol.
- After cleaning, keep oil, grease or water from getting on the surface.
- To remove the fuel pipe protector, first remove the rear wheel (see section 18).
- To remove the rear air outlet, first remove the rear bumper (see page 20-60).

►: Clip locations

A ►, 4



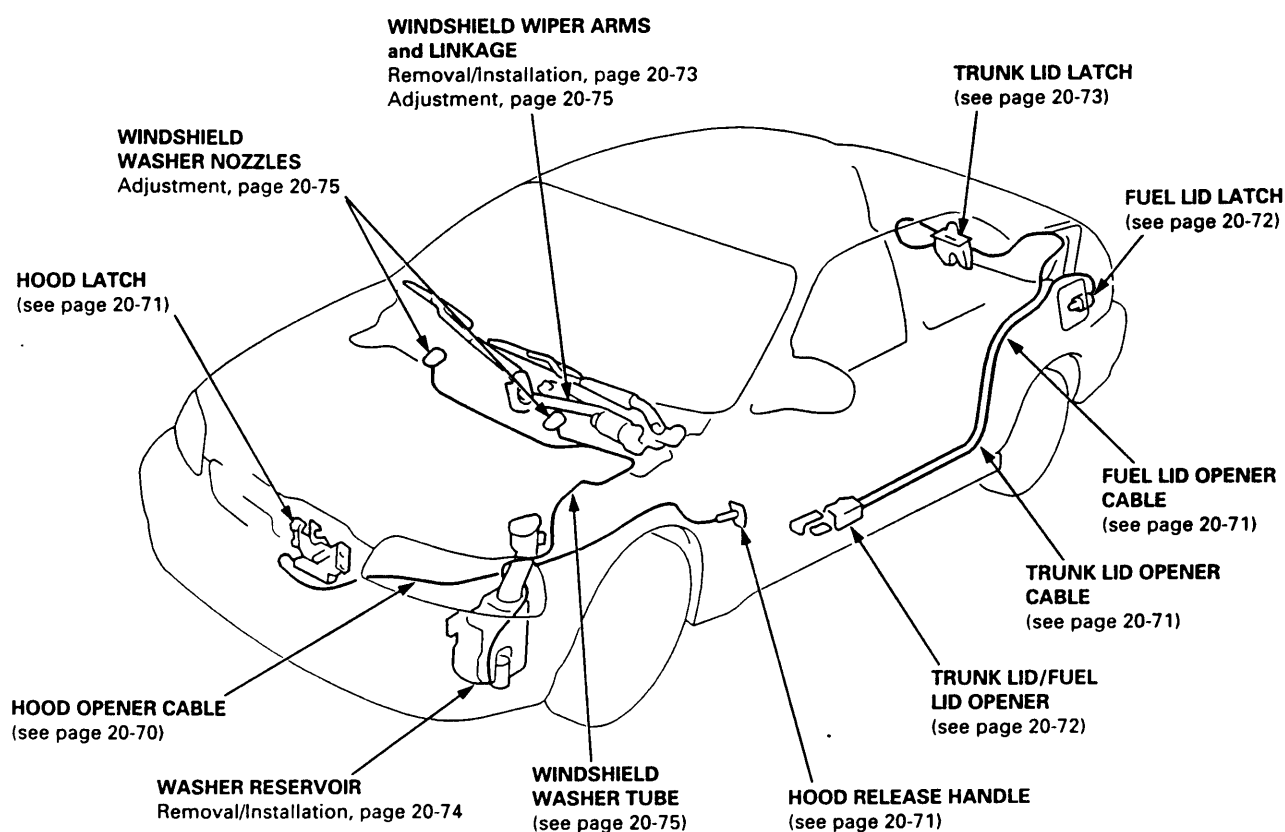
B ►, 4



Opener Cable/Opener and Latch/Wiper and Washer



Component Location Index



Opener Cable/Opener and Latch/Wiper and Washer

Opener Cables Removal/Installation

NOTE:

- Use a clip remover to remove the clips.
- Take care not to bend the opener cables.

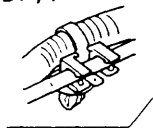
Hood opener cable:

NOTE: Remove the front bumper (see page 20-59) and inner fender (see page 20-68).

▷: Clip locations

A ▷, 5

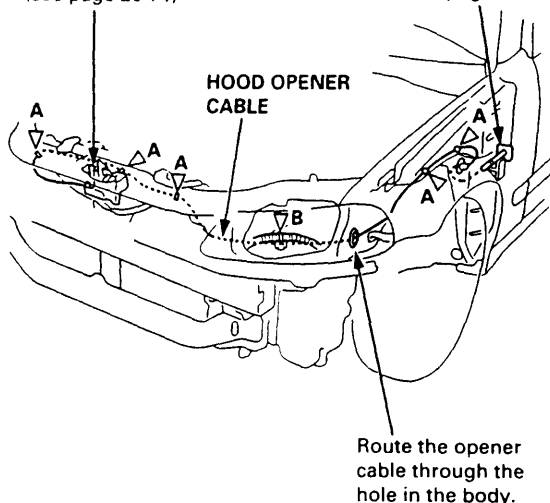
B ▷, 1



HOOD LATCH
(see page 20-71)

HOOD RELEASE
HANDLE
(see page 20-71)

HOOD OPENER
CABLE



Route the opener
cable through the
hole in the body.

Installation is the reverse of the removal procedure.

NOTE:

- Make sure the hood opener cable is routed and connected properly.
- Make sure the hood opens properly.

Trunk lid/Fuel lid opener cable:

NOTE: Remove the following parts from the left side of the vehicle, then pull the carpet back, as necessary (see page 20-43).

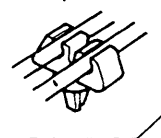
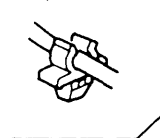
- Rear seat cushion (see page 20-55)
- Rear seat side bolster (see page 20-55)
- Center pillar lower trim panel (see page 20-39)
- Side trim (see page 20-39)
- Seat side trim (see page 20-39)
- Rear trim panel and spare tire lid (see page 20-40)
- Trunk trim panel (see page 20-40)

▷: Clip, cable cushion locations

A ▷, 4

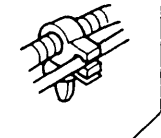
B ▷, 1

C ▷, 1



D ▷, 3

E ▷, 1





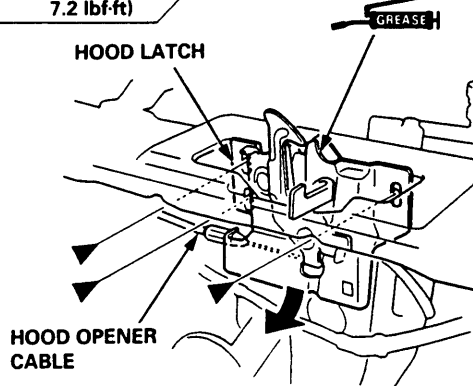
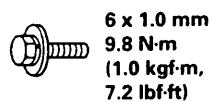
Opener and Latch Removal/Installation

NOTE: Take care not to bend the opener cables.

Hood release handle:

NOTE: Remove the kick panel (see page 20-39).

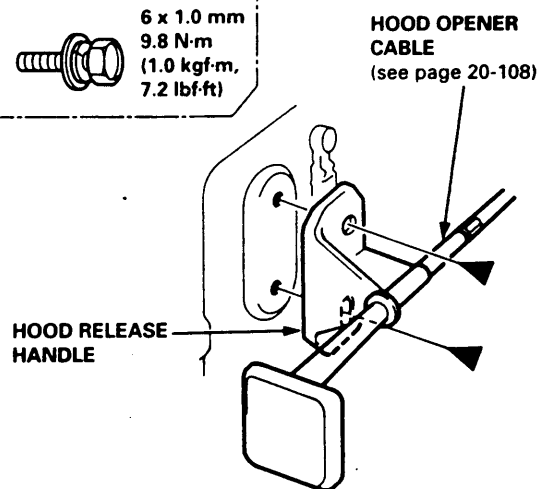
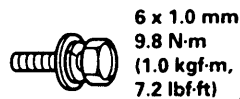
►: Bolt locations, 3



Hood latch:

NOTE: Remove the front grille (see page 20-59).

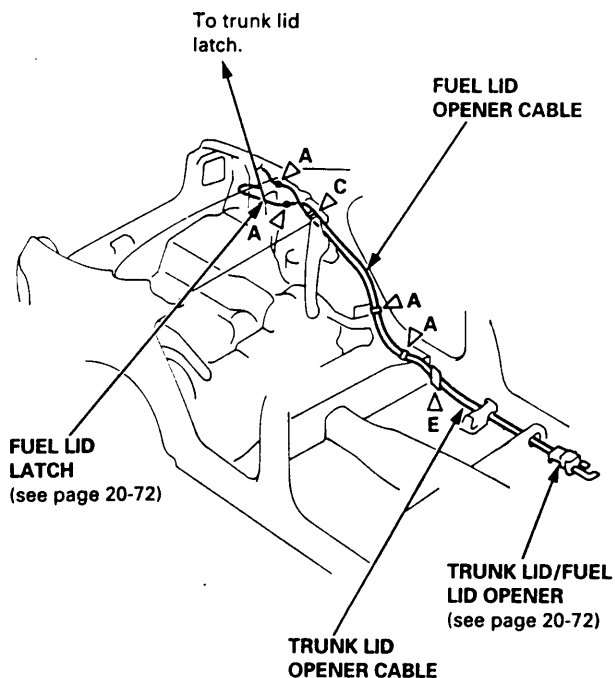
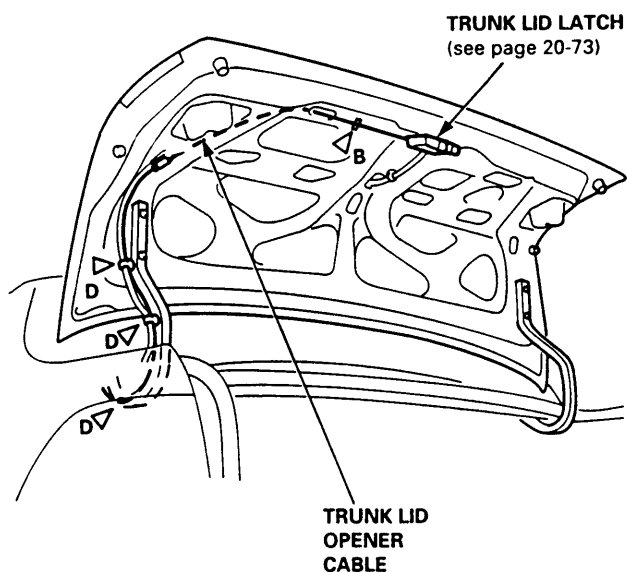
►: Bolt locations, 2



Installation is the reverse of the removal procedure.

NOTE:

- Make sure the opener cable is connected properly.
- Make sure the hood opens properly and locks securely.



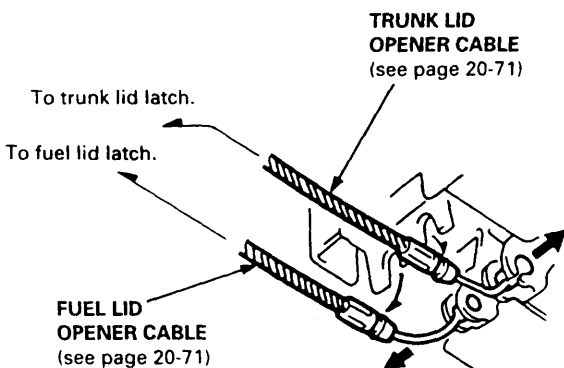
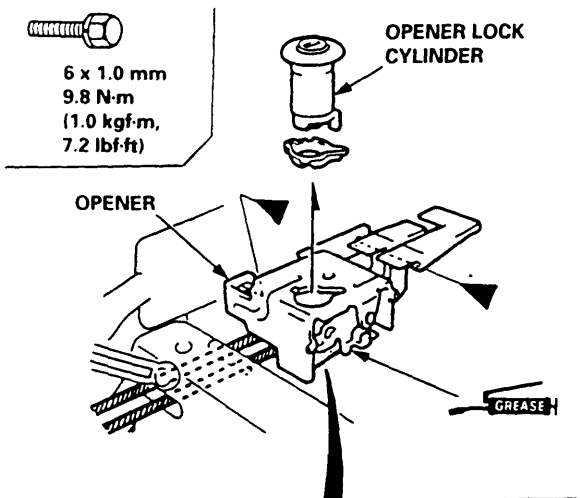
Opener Cable/Opener and Latch/Wiper and Washer

Opener and Latch Removal/Installation (cont'd)

Trunk lid/Fuel lid opener:

NOTE: Remove the side trim (see page 20-39).

► Bolt locations, 2



Installation is the reverse of the removal procedure.

NOTE:

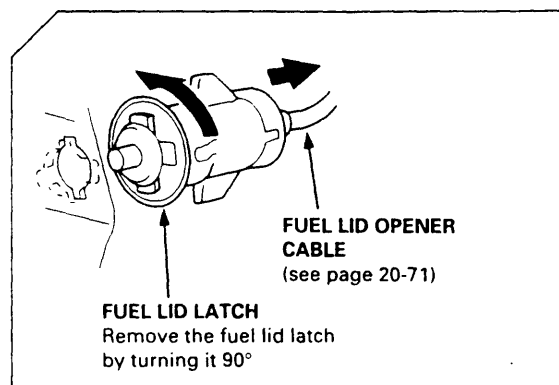
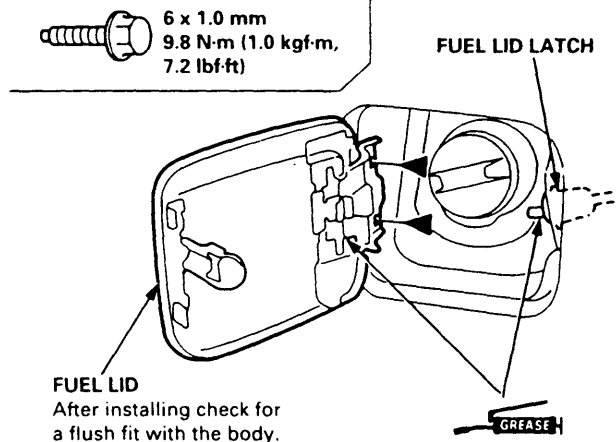
- Make sure the opener cable is connected properly.
- Make sure the trunk lid and fuel lid open properly.

Fuel lid latch:

NOTE: Remove the following parts.

- Rear trim panel (see page 20-40)
- Rear edge of the trunk trim panel (left side, see page 20-40)

► Bolt locations, 2



Installation is the reverse of the removal procedure.

NOTE:

- Make sure each opener cable is connected properly.
- Make sure the fuel lid opens properly and locks securely.

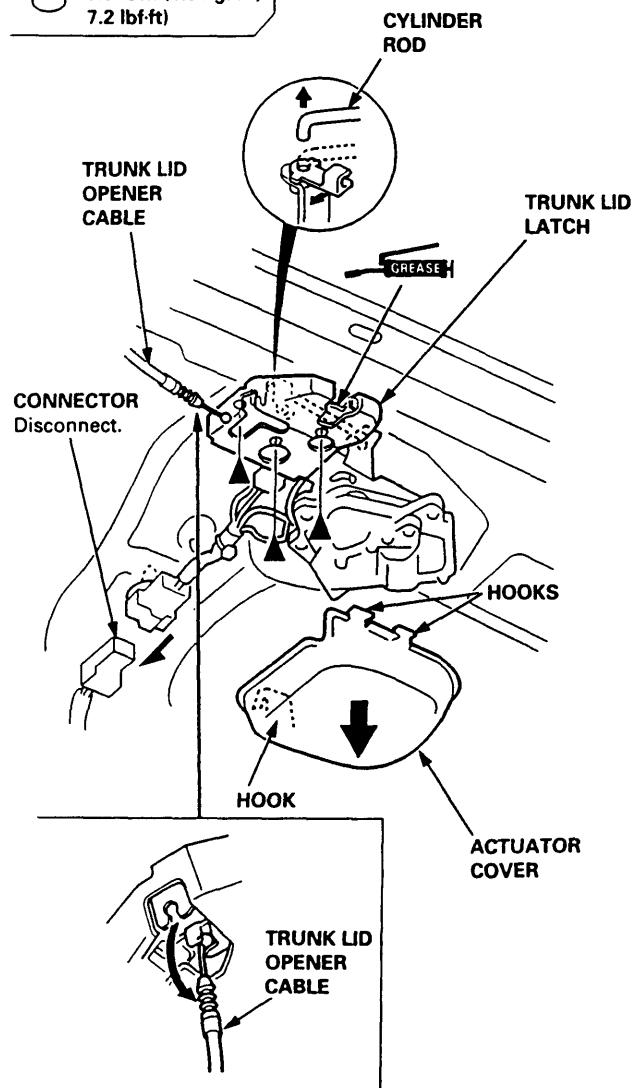


Trunk lid latch:

►: Bolt locations, 3



6 x 1.0 mm
9.8 N·m (1.0 kgf·m,
7.2 lbf·ft)



Installation is the reverse of the removal procedure.

NOTE:

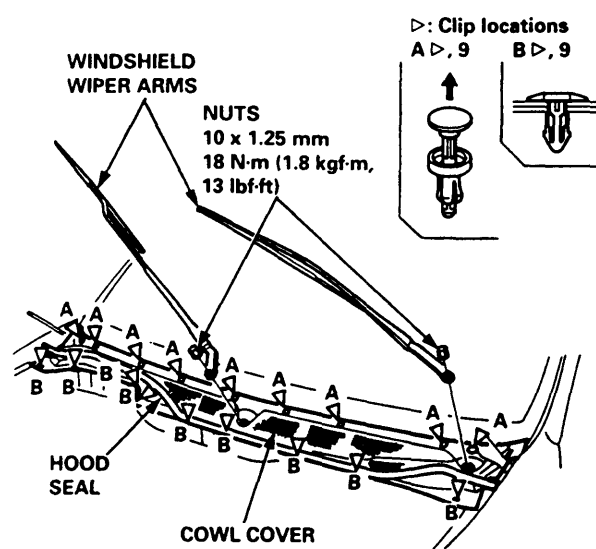
- Grease the trunk lid latch.
- Make sure the trunk lid opens properly and locks securely.
- Make sure the connector and cylinder rod are connected properly.

Windshield Wiper Arms and Linkage Removal/Installation

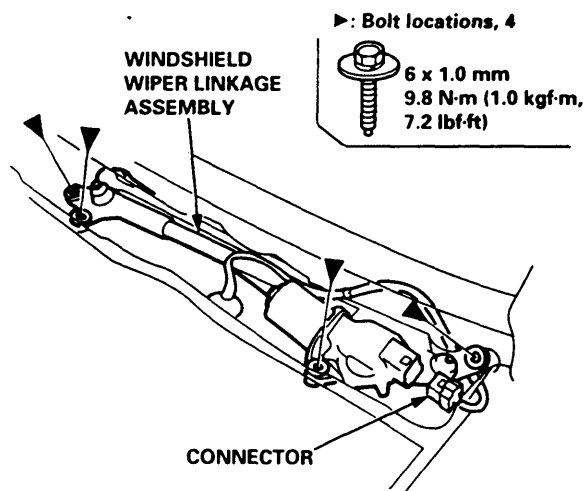
CAUTION: Wear gloves to remove and install the windshield wiper linkage.

NOTE: Take care not to scratch the hood and body.

1. Remove the windshield wiper arms, then remove the hood seal and cowl cover.



2. Disconnect the connector, then remove the windshield wiper linkage assembly.



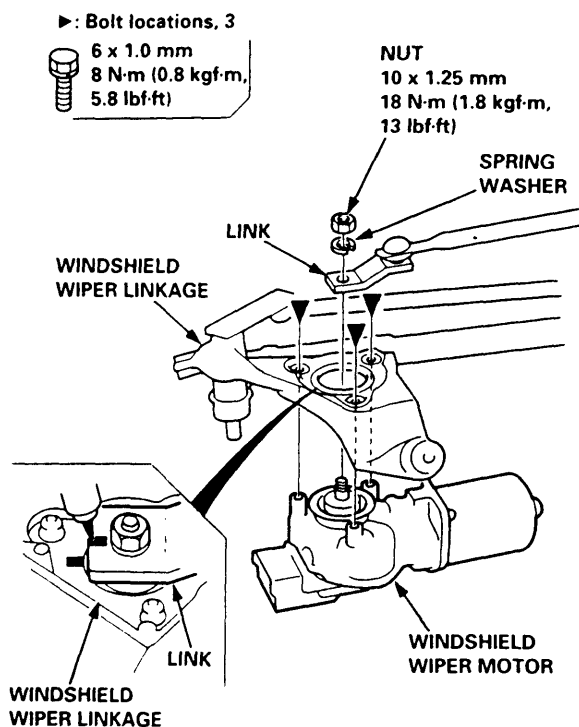
(cont'd)

Opener Cable/Opener and Latch/Wiper and Washer

Windshield Wiper Arms and Linkage Removal/Installation (cont'd)

3. Separate the windshield wiper linkage and windshield wiper motor.

NOTE: Scribe a line across the link and windshield wiper linkage to show the original adjustment.



4. Installation is the reverse of the removal procedure.

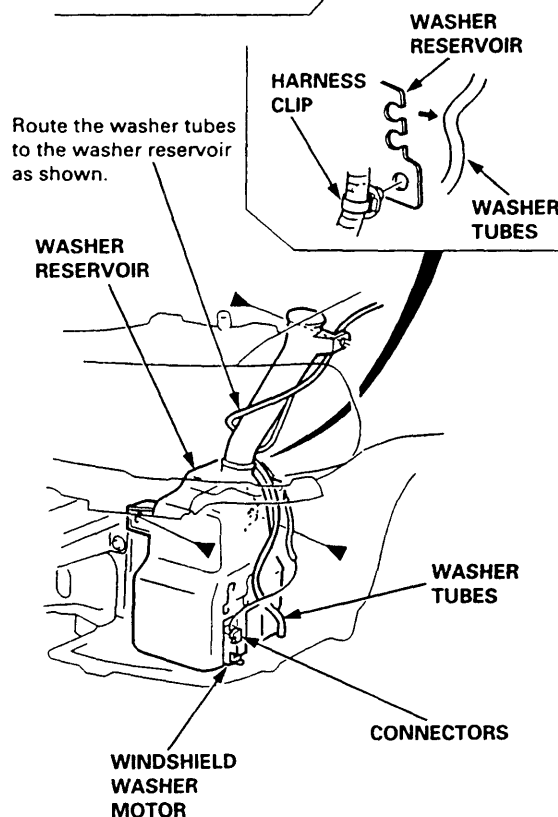
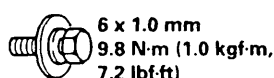
NOTE:

- Make sure the connector is connected properly.
- If necessary, replace any damaged clips.
- Adjust the windshield wiper arms as described on page 20-75.
- Check the windshield wiper motor operation.
- Grease the moving parts.

Washer Reservoir Removal/Installation

1. Remove the front bumper (see page 20-59).
2. Disconnect the connectors and washer tubes from the washer motors.

►: Bolt locations, 3



3. Remove the bolts, then remove the washer reservoir.
4. Installation is the reverse of the removal procedure.

NOTE:

- Make sure the washer motor connectors and washer tubes are connected properly.
- Check the washer motor operation.



Windshield Washer Tube Removal/Installation

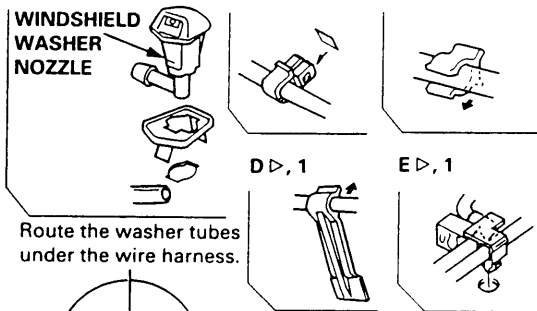
NOTE: To remove the windshield washer tube, remove the left inner fender (see page 20-68).

▷: Washer nozzle, clip and cushion locations

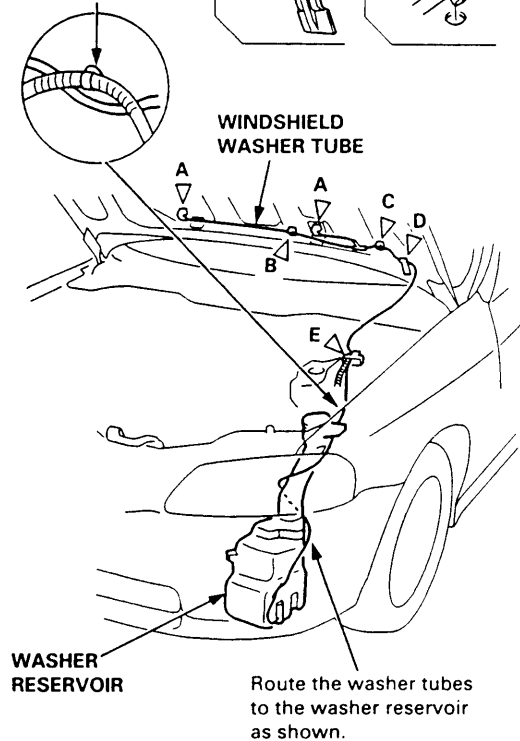
A ▷, 2

B ▷, 1

C ▷, 1



Route the washer tubes under the wire harness.



Route the washer tubes to the washer reservoir as shown.

Installation is the reverse of the removal procedure.

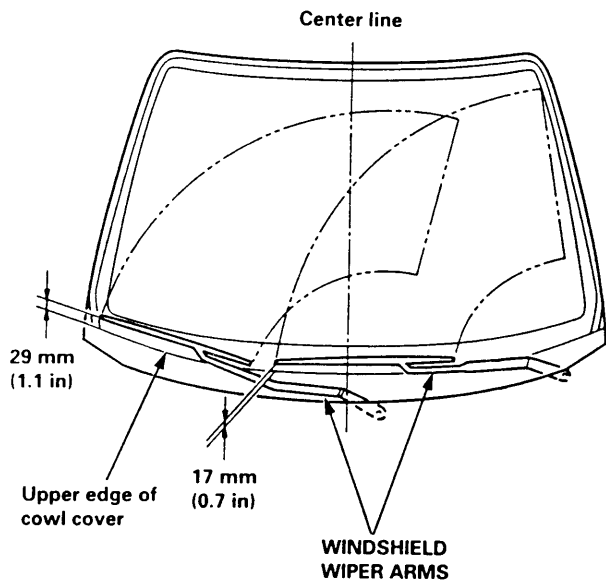
NOTE:

- Take care not to pinch the washer tubes.
- If necessary, replace any damaged clips.
- After installing, adjust the aim of the windshield washer nozzles.

Windshield Wiper Arms Adjustment

Adjust the windshield wiper arms so that their park positions match the illustration.

View from front to rear



Emblems

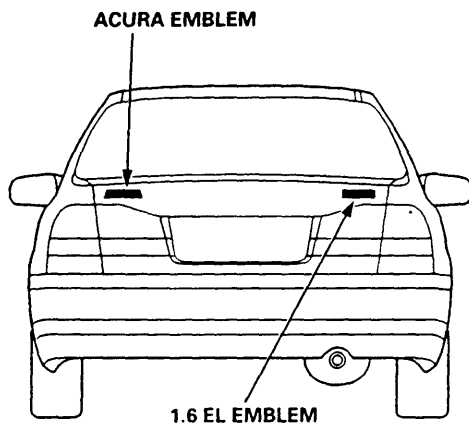
Installation

Apply the emblems where shown.

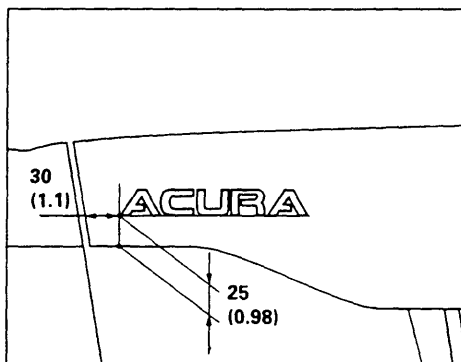
NOTE:

- Before applying, clean the body surface with a sponge dampened in alcohol.
- After cleaning, keep oil, grease and water from getting on the surface.

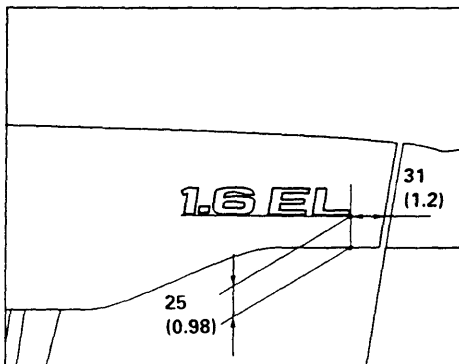
Attachment Points (Reference):



ACURA Emblem Unit: mm (in)



1.6 EL Emblem

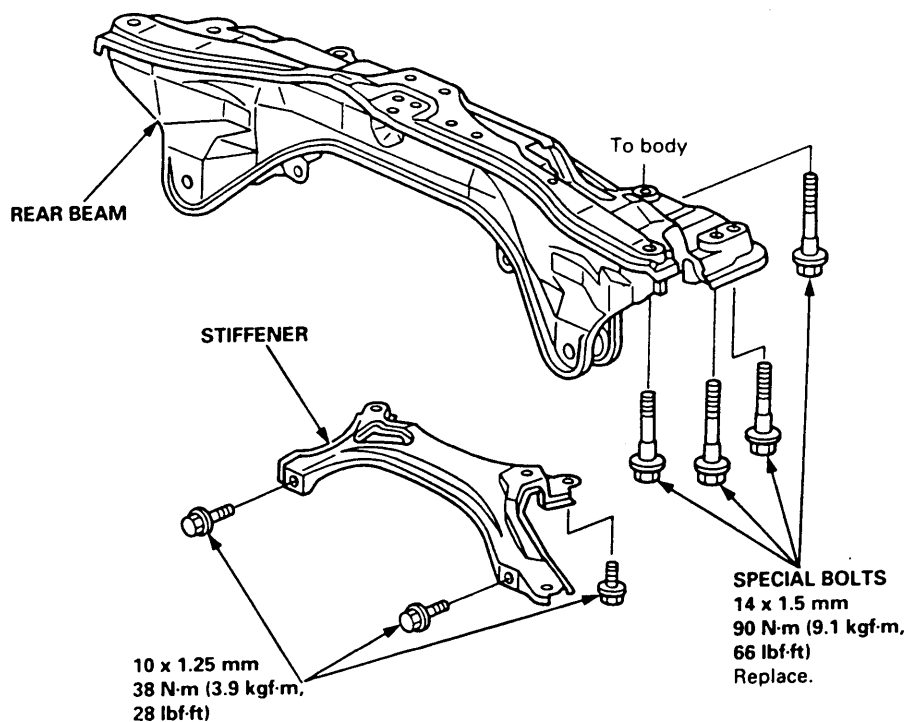
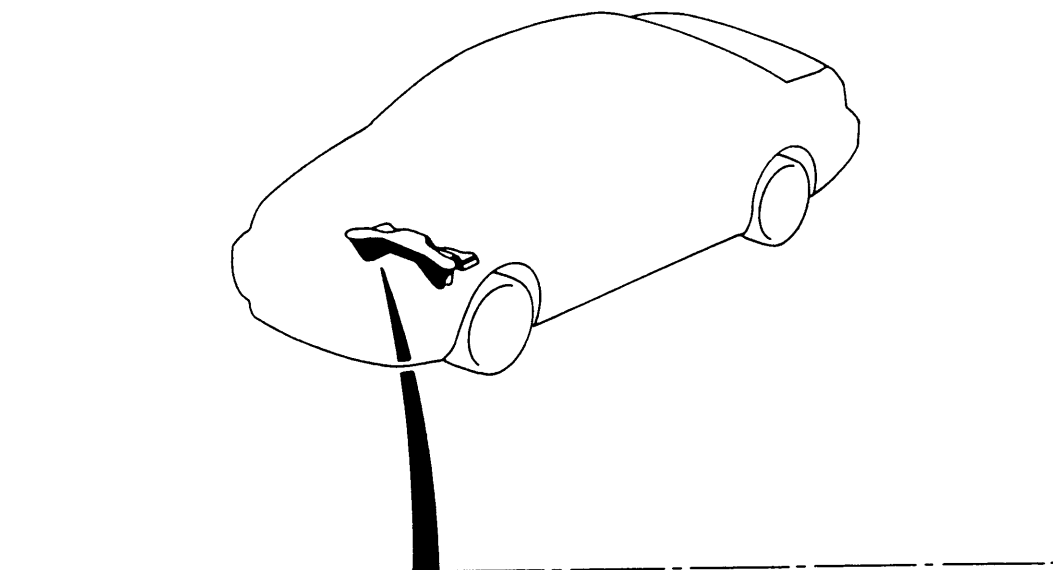


Sub-frame



Sub-frame Torque Sequence:

CAUTION: After loosening the sub-frame mounting bolts, be sure to replace them with new ones.



Unit: mm (in)
 Ø: Inner diameter

