

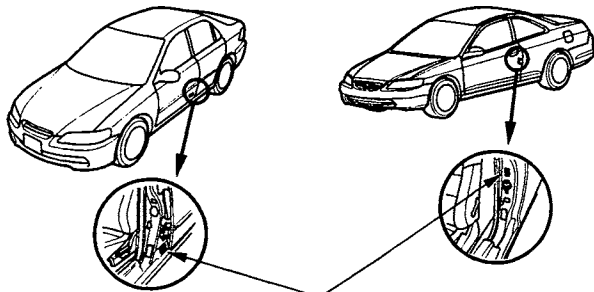
# General Information

## Chassis and Paint Codes - 1998 Model

### Vehicle Identification Number

1HG CG5 5 4 \* W A 000001  
 a b c d e f g h

- a. Manufacturer, Make and Type of Vehicle**  
 1HG: HONDA OF AMERICA MFG., INC., U.S.A.  
 HONDA Passenger vehicle
- b. Line, Body and Engine Type**  
 CF8: ACCORD/F23A5  
 CG3: ACCORD COUPE/F23A1, F23A4  
 CG5: ACCORD/F23A1  
 CG6: ACCORD/F23A4
- c. Body Type and Transmission Type**  
 1: 2-door Coupe/5-speed Manual  
 2: 2-door Coupe/4-speed Automatic  
 5: 4-door Sedan/5-speed Manual  
 6: 4-door Sedan/4-speed Automatic
- d. Vehicle Grade (Series)**  
 US model                      Canada model  
 4: DX, LX                      4: DX, LX  
 5: EX                              5: EX  
 7: EX-ULEV
- e. Check Digit**
- f. Model Year**  
 W: 1998
- g. Factory Code**  
 A: Marysville, Ohio Factory in U.S.A.
- h. Serial Number**  
 000001 - : US model  
 800001 - : Canada model



Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.  
 Vehicle Identification Number and Canadian Motor Vehicle Safety Standard Certification.

### Engine Number

F23A1 - 1000001  
 a b

- a. Engine Type**  
 F23A1: 2.3 l SOHC VTEC Sequential Multiport Fuel-injected engine  
 F23A4: 2.3 l SOHC VTEC Sequential Multiport Fuel-injected engine  
 F23A5: 2.3 l SOHC Sequential Multiport Fuel-injected engine
- b. Serial Number**

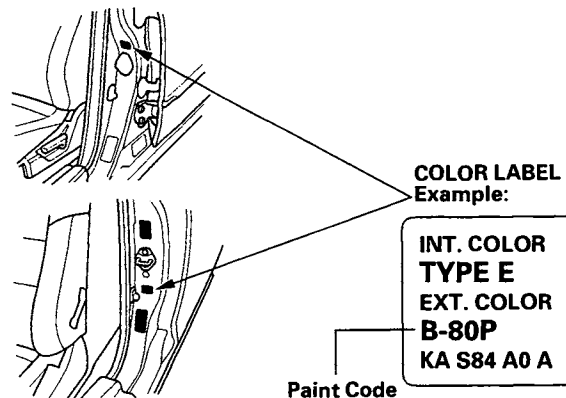
### Transmission Number

BAXA - 5000001  
 a b

- a. Transmission Type**  
 BAXA: 4-speed Automatic  
 P2A8: 5-speed Manual
- b. Serial Number**

### Paint Code

Code	Color
B-80P	Mystic Blue Pearl
G-87P	Dark Emerald Pearl
NH-578	Taffeta White
NH-592P	Flamenco Black Pearl
NH-612M	Regent Silver Metallic
RP-25P	Black Currant Pearl
RP-29P	Raisin Pearl
R-94	San Marino Red
YR-508P	Heather Mist Metallic



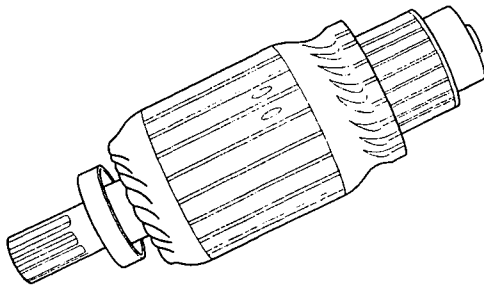
Paint Code

# Starting System

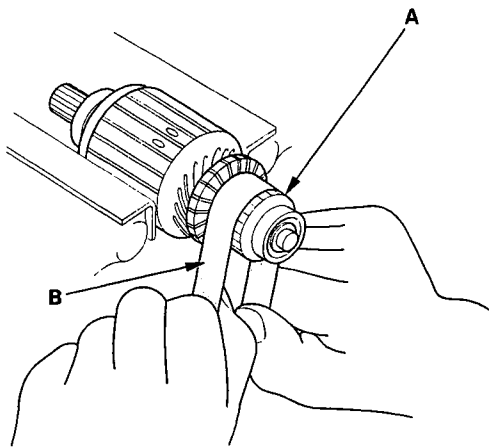
## Starter Overhaul (cont'd)

### Armature Inspection and Test

1. Remove the starter (see page 4-9).
2. Disassemble the starter as shown at the beginning of this procedure.
3. Inspect the armature for wear or damage from contact with the permanent magnet. If there is wear or damage, replace the armature.



4. Check the commutator (A) surface. If the surface is dirty or burnt, resurface with emery cloth or a lathe within the following specifications, or recondition with # 500 or # 600 sandpaper (B).



5. Check the commutator diameter. If the diameter is below the service limit, replace the armature.

### Commutator Diameter

#### Standard (New):

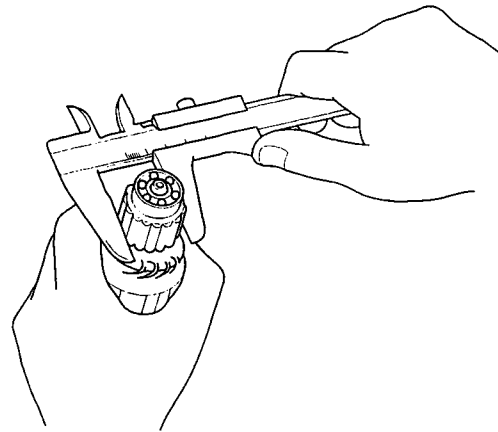
M/T: 29.9–30.0 mm (1.177–1.181 in.)

A/T: 28.0 mm–28.1 mm (1.102–1.106 in.)

#### Service Limit:

M/T: 29.0 mm (1.142 in.)

A/T: 27.5 mm (1.083 in.)



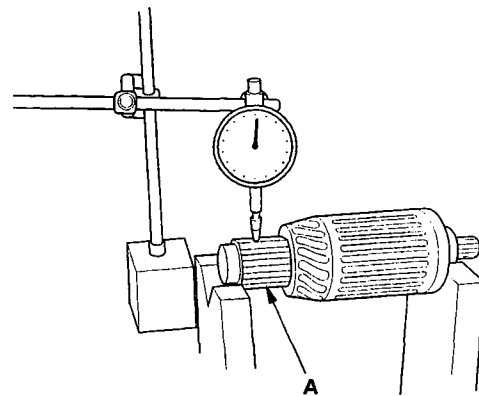
6. Measure the commutator (A) runout.

- If the commutator runout is within the service limit, check the commutator for carbon dust or brass chips between the segments.
- If the commutator runout is not within the service limit, replace the armature.

### Commutator Runout

Standard (New): 0.02 mm (0.001 in.) max.

Service Limit: 0.05 mm (0.002 in.)

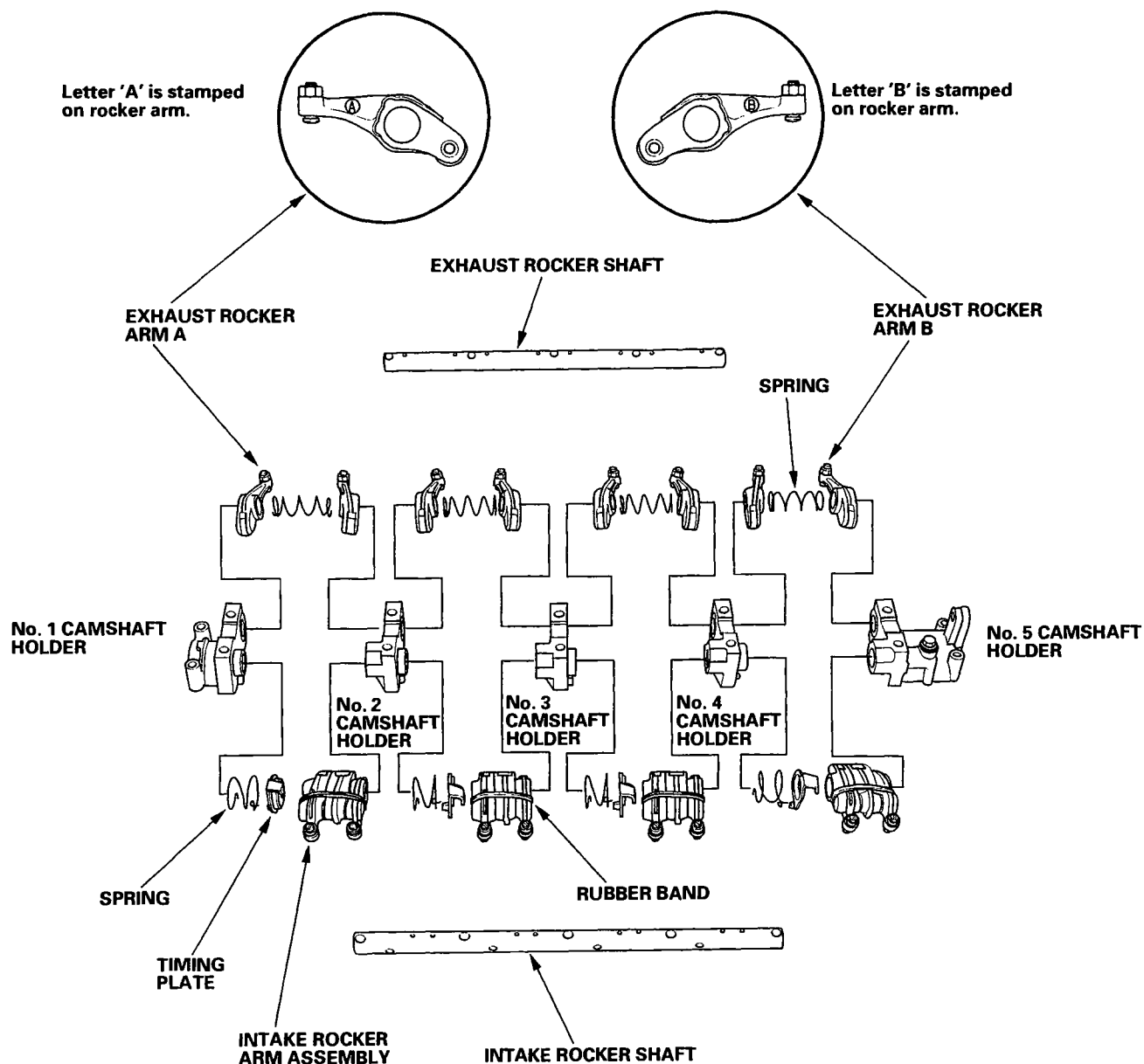


# Cylinder Head

## Rocker Arms and Shafts Disassembly/Reassembly - F23A1, F23A4 Engines

**NOTE:**

- Identify parts as they are removed to ensure reinstallation in original locations.
- Inspect the rocker shafts and rocker arms (see page 6-38).
- The rocker arms must be installed in the same positions if reused.
- When removing or installing the rocker arm assembly, do not remove the camshaft holder bolts. The bolts will keep the holders, springs and rocker arms on the shaft.
- Prior to reassembling, clean all the parts in solvent, dry them, and apply lubricant to any contact points.
- Bundle the rocker arms with rubber bands to keep them together as a set.



# Conventional Brake Components

## Parking Brake Check and Adjustment

### Check

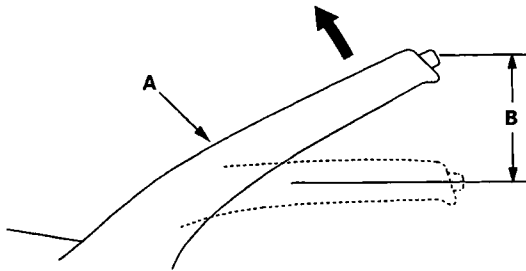
1. Pull the parking brake lever (A) with 196 N (20 kgf, 44 lbf) force to fully apply the parking brake. The parking brake lever should be locked within the specified number of clicks (B).

#### Lever Locked Clicks:

Vehicle With Rear Disc Brakes: 9–11

Vehicle With Rear Drum Brakes: 9–11

Pulled up with 196 N (20 kgf, 44 lbf)

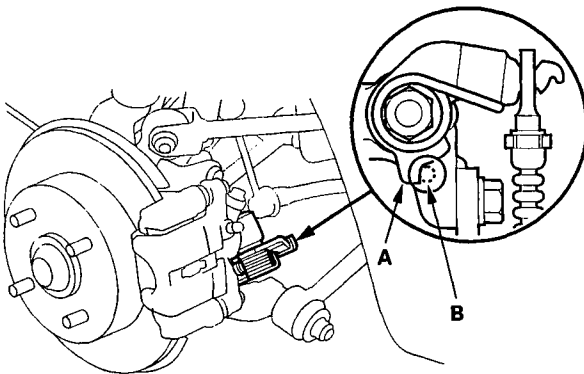


2. Adjust the parking brake if the lever clicks are out of specification.

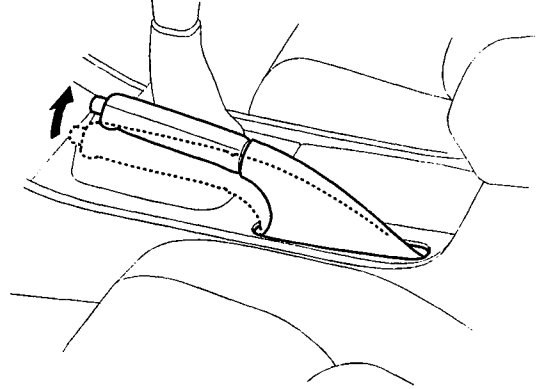
### Adjustment

NOTE: After rear brake caliper servicing, loosen the parking brake adjusting nut, start the engine, and press the brake pedal several times to set the self-adjusting brake before adjusting the parking brake.

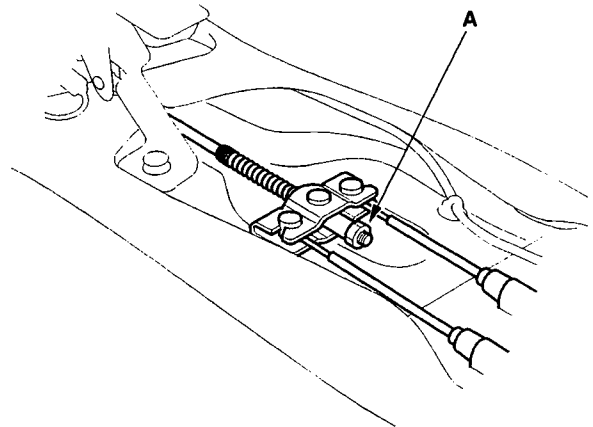
1. Block the front wheels, then raise the rear of the vehicle, and make sure it is securely supported.
2. Make sure the parking brake arm (A) on the rear brake caliper contacts the brake caliper pin (B).



3. Pull the parking brake lever up one click.



4. Remove the rear console lid (see page 20-83).
5. Tighten the adjusting nut (A) until the parking brakes drag slightly when the rear wheels are turned.



6. Release the parking brake lever fully, and check that the parking brakes do not drag when the rear wheels are turned. Readjust if necessary.
7. Make sure the parking brakes are fully applied when the parking brake lever is pulled up fully.
8. Reinstall the rear console lid.



## Glove Box Removal/Installation

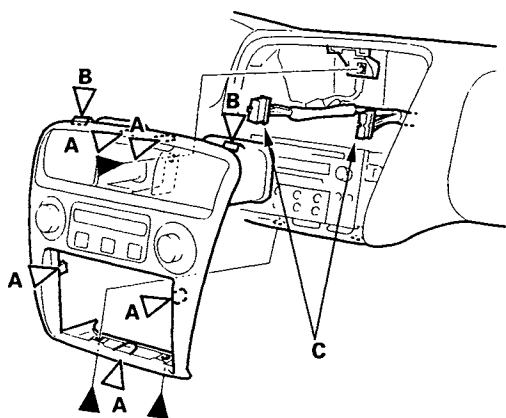
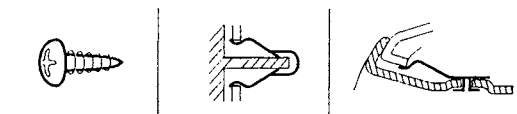
2. Remove the screws, and detach the clips (A), then detach the upper clips (A and B) to remove the center panel by disconnecting the heater control unit connectors (C).

### Fastener Locations

▶ : Screw, 3

A ▶ : Clip, 5

B ▶ : Clip, 2



3. Install the panel in the reverse order of removal, and make sure the connectors are plugged in properly.

SRS components are located in this area. Review the SRS component locations (see page 23-23), and precautions and procedures (see page 23-28) in the SRS section before performing repairs or service.

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

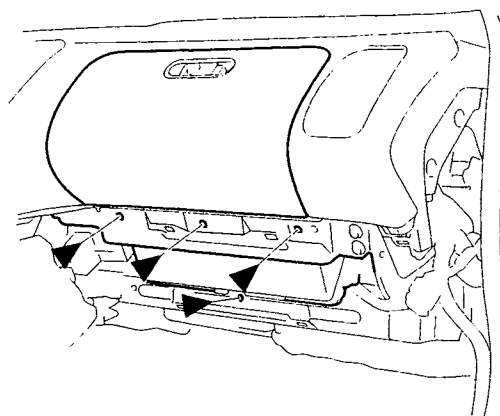
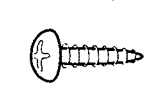
1. Remove these items:

- Dashboard center lower cover (see step 1 on page 20-84)
- Passenger's dashboard lower cover (see page 20-85)

2. Remove the screws from bottom of the glove box.

### Fastener Locations

▶ : Screw, 4



(cont'd)

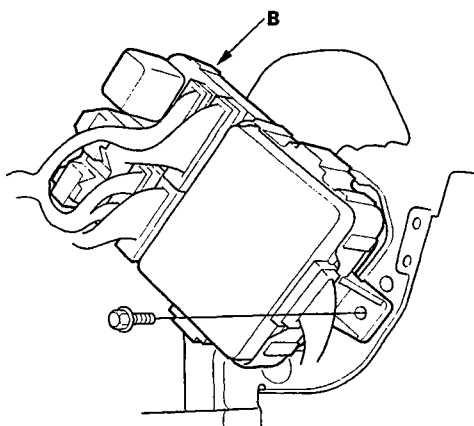
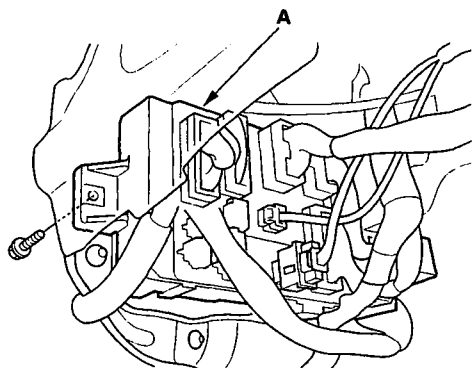
# Under-dash Fuse/Relay Box

## Removal and Installation

SRS components are located in this area. Review the SRS component locations, precautions, and procedures in the SRS section before performing repairs or service (see page 23-28).

### Removal

1. Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.
2. Disconnect the battery negative cable, then disconnect the positive cable, and wait at least three minutes.
3. Remove the driver's dashboard lower cover (see page 20-84) or the passenger's dashboard lower cover (see page 20-85).
4. Remove the door sill molding, left or right kick panel (see page 20-74) and fuse box cover (see page 20-84).
5. Remove the mounting bolt, and pull the driver's under-dash fuse/relay box (A) or passenger's under-dash fuse/relay box (B) away from the body.



6. Disconnect the driver's or passenger's under-dash fuse/relay box connectors, and remove the driver's or passenger's under-dash fuse/relay box.

NOTE: The SRS main harness connector is a springloaded lock type (see page 23-28).

### Installation

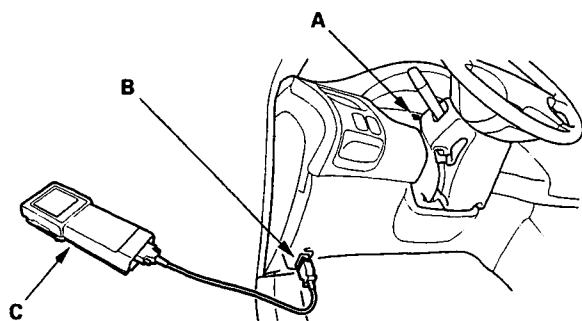
1. Connect the connectors to the driver's or passenger's under-dash fuse/relay box, then install the driver's or passenger's under-dash fuse/relay box in the reverse order of removal.
2. Install the left or right kick panel and access panel, and the door sill molding.
3. Install the dashboard lower cover.
4. Connect both the negative cable and positive cable to the battery, enter the anti-theft code for the radio, then enter the customer's radio station presets.
5. Confirm that all systems work properly.



### Honda PGM Tester "SCS" Menu Method (retrieving the flash codes) - '00-02 Models

The SRS indicator light (A) indicates the DTC by the number of blinks when the Honda PGM Tester (C) is connected to the DLC (16P) (B).

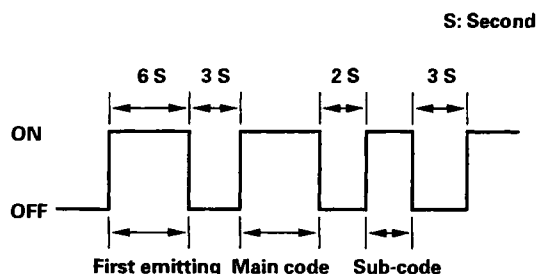
1. Make sure the ignition switch is OFF.
2. Connect the Honda PGM Tester (C) to the DLC (16P) (B), and follow the Tester's prompts in the "SCS" menu (see the Honda PGM Tester Operator's Manual).



3. Turn the ignition switch ON (II). The SRS indicator light (A) comes on for about 6 seconds, and then goes off. Then it will blink to indicate the DTCs (see the table below).
4. Read the DTC (proceed with the troubleshooting procedure for this DTC).
5. Turn the ignition switch OFF, and wait for 10 seconds.
6. Disconnect the Honda PGM Tester (C) from the DLC (16P) (B).

### Patterns of DTC Indications:

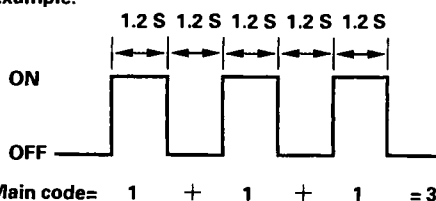
The DTC consists of a main code and sub-code.



### Reading the main code:

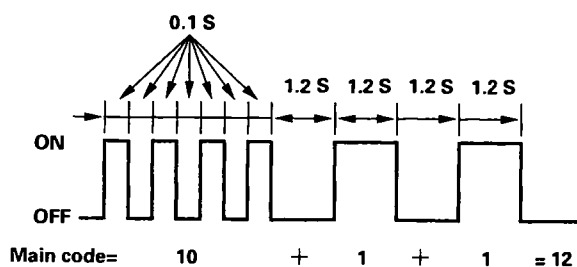
In case of 1 ~ 10  
Count the number of the blinks.

Example:



In case of 11 ~ 15  
Four continuous blinks count as ten.  
Add any further blink together as shown.

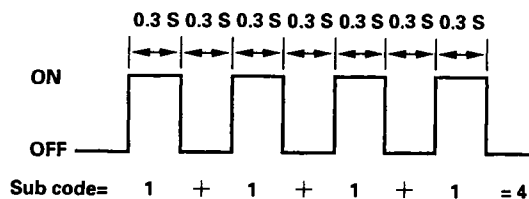
Example:



### Reading the sub code:

Count the number of the blinks.

Example:

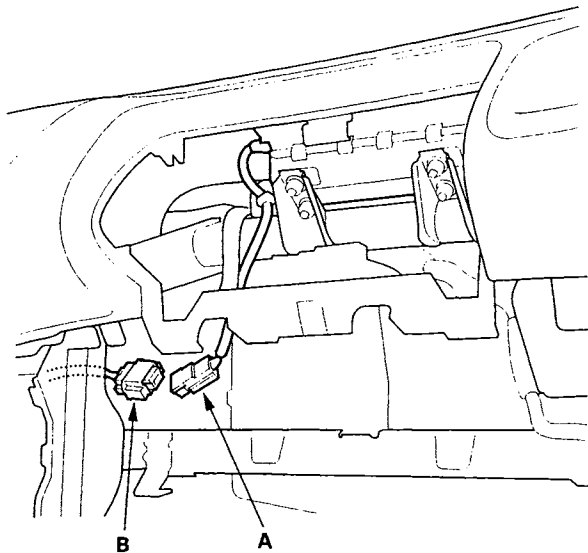


In case of main code is '3', sub code is '4', record a DTC 3-4.

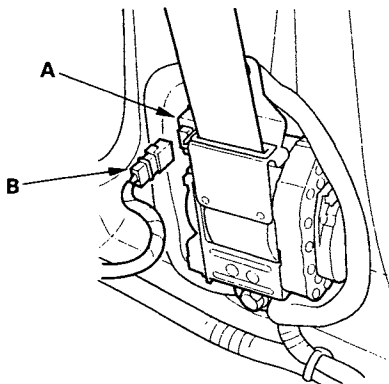
(cont'd)



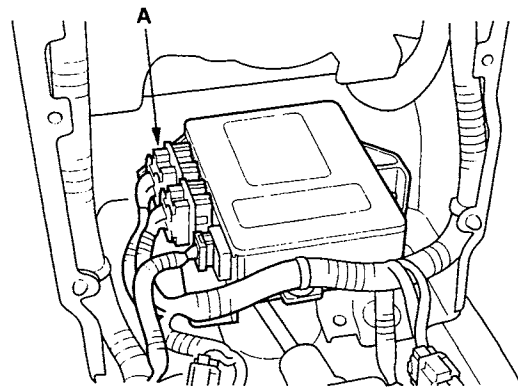
10. Disconnect the front passenger's airbag 4P connector (A) from the SRS main harness 4P connector (B).



11. Disconnect both seat belt tensioner 2P connectors (A) from the side wire harness 2P connectors (B).

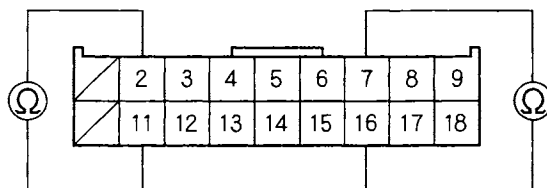


12. Disconnect SRS unit connector A (18P) from the SRS unit.



13. Check resistance between the No. 7 and the No. 16 terminals and between the No. 2 and the No. 11 terminals of SRS connector A (18P). There should be 2.0–3.0  $\Omega$ .

#### SRS UNIT CONNECTOR A (18P)



Wire side of female terminals

*Is the resistance as specified?*

**YES** – Faulty SRS unit or poor contact at SRS unit connector A (18P) and the SRS unit. Check the connection. If the connection is OK, replace the SRS unit (see page 23-296). ■

**NO** – Open or increased resistance in the SRS main harness or cable reel; replace the SRS main harness or cable reel (see page 23-292). ■



## Engine Lubrication

Item	Measurement	Qualification	Standard or New	Service Limit
Engine oil	Capacity		5.0 ℓ (5.3 US qt, 4.4 Imp qt) for engine overhaul 4.4 ℓ (4.6 US qt, 3.9 Imp qt) for oil change, including filter 4.0 ℓ (4.2 US qt, 3.5 Imp qt) for oil change, without filter	
Oil pump	Inner-to-outer rotor clearance		0.04–0.16 mm (0.002–0.006 in.)	0.20 mm (0.008 in.)
	Pump housing-to-outer rotor clearance		0.14–0.19 mm (0.006–0.007 in.)	0.20 mm (0.008 in.)
	Pump housing-to-outer rotor axial clearance		0.02–0.07 mm (0.001–0.003 in.)	0.12 mm (0.005 in.)
	Oil pressure with oil temperature at 176°F (80°C)	at idle at 3,000 rpm	70 kPa (0.7 kgf/cm <sup>2</sup> , 10 psi) 490 kPa (5.0 kgf/cm <sup>2</sup> , 71 psi)	

## Cooling

Item	Measurement	Qualification	Standard or New	Service Limit
Radiator	Coolant capacity (includes engine, heater, hoses and reservoir)	Engine overhaul	7.5 ℓ (7.9 US qt, 6.6 Imp qt)	
		Coolant change	5.6 ℓ (5.9 US qt, 4.9 Imp qt)	
Reservoir	Coolant capacity		0.6 ℓ (0.6 US qt, 0.5 Imp qt)	
Radiator cap	Opening pressure		93–123 kPa (0.95–1.25 kgf/cm <sup>2</sup> , 14–18 psi)	
Thermostat '98-00 models	Opening temperature	Begins to open	169–176°F (76–80°C)	
		Fully open	194°F (90°C)	
	Valve lift at fully open		10.0 mm (0.39 in.) min.	
Thermostat '01-02 models	Opening temperature	Begins to open	163–171°F (73–77°C)	
		Fully open	190°F (88°C)	
	Valve lift at fully open		10.0 mm (0.39 in.) min.	
Radiator fan switch	Thermoswitch "ON" temperature		196–203°F (91–95°C)	
	Thermoswitch "OFF" temperature		Subtract 5–15°F (3–8°C) from actual "ON" temperature	
	Fan timer "ON" temperature		217–232°F (103–111°C)	
	Fan timer "OFF" temperature		Subtract 5–23°F (3–13°C) from actual "ON" temperature	

## Fuel and Emissions

Item	Measurement	Qualification	Standard or New	Service Limit
Fuel pressure regulator	Pressure with regulator vacuum hose disconnected		280–330 kPa (2.9–3.4 kgf/cm <sup>2</sup> , 41–48 psi)	
Fuel tank	Capacity		64.8 ℓ (17.1 US gal, 14.3 Imp gal)	
Engine idle	Idle speed with headlights and radiator fan off	In <b>N</b> or <b>P</b>	680 ± 50 rpm	
	Idle CO %		0.1 max.	

# Cylinder Head

## Camshaft Inspection (cont'd)

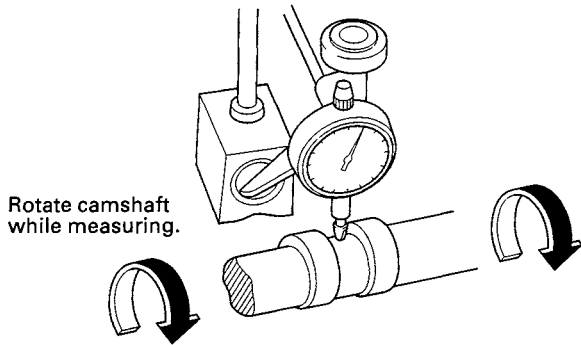
10. Check total runout with the camshaft supported on V-blocks.

- If the total runout of the camshaft is within the service limit, replace the cylinder head.
- If the total runout is beyond the service limit, replace the camshaft and recheck the oil clearance. If the clearance is still out of tolerance, replace the cylinder head.

**Camshaft Total Runout:**

**Standard (New):** 0.03 mm (0.001 in.) max.

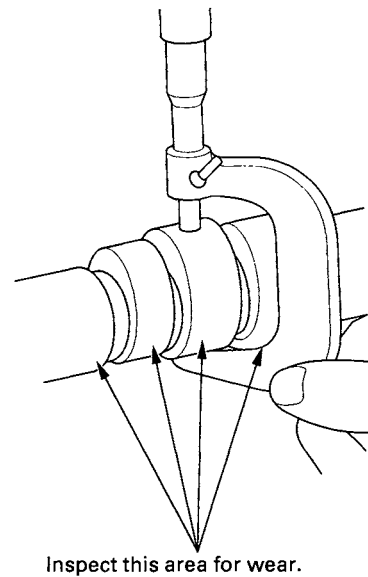
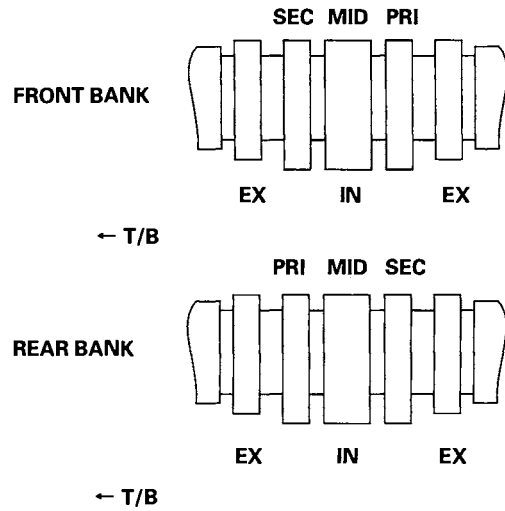
**Service Limit:** 0.04 mm (0.002 in.)



11. Measure cam lobe height.

**Cam Lobe Height Standard (New):**

	INTAKE	EXHAUST
PRI	34.615 mm (1.3628 in.)	36.076 mm (1.4203 in.)
MID	36.210 mm (1.4256 in.)	
SEC	31.188 mm (1.2279 in.)	





### DTC P0137: Secondary HO2S (Sensor 2) Circuit Low Voltage

1. Reset the PCM.
2. Start the engine. Hold the engine at 3,000 rpm with no load (in Park or neutral) until the radiator fan comes on.
3. Check the secondary HO2S (Sensor 2) output voltage at 3,000 rpm with the scan tool.

*Does the voltage stay at 0.3 V or less?*

**YES** – Go to step 4.

**NO** – Intermittent failure, system is OK at this time. Check for poor connections or loose wires at C204 (located under the right side of the dash), C104 (located at the right side of the engine compartment), the secondary HO2S (Sensor 2) and the PCM. ■

4. Turn the ignition switch OFF.
5. Disconnect the secondary HO2S (Sensor 2) 4P connector.
6. Start the engine.
7. Check the secondary HO2S (Sensor 2) output voltage with the scan tool.

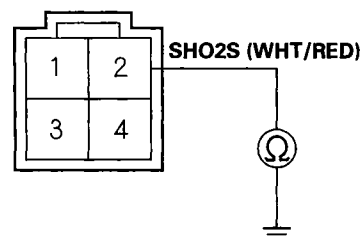
*Does the voltage stay at 0.3 V or less?*

**YES** – Go to step 8.

**NO** – Replace the secondary HO2S (Sensor 2). ■
8. Turn the ignition switch OFF.
9. Disconnect PCM connector A (32P).

10. Check for continuity between the secondary HO2S (Sensor 2) 4P connector terminal No. 2 and body ground.

#### SECONDARY HO2S (SENSOR 2) 4P CONNECTOR



Terminal side of male terminals

*Is there continuity?*

**YES** – Repair short in the wire between the PCM (A23) and the secondary HO2S (Sensor 2). ■

**NO** – Substitute a known-good PCM and recheck. Refer to the '98-02 Accord Service Manual (see page 11-5). If the symptom/indication goes away, replace the original PCM.

# Automatic Transmission

## DTC Troubleshooting (cont'd)

### DTC P1705: Short in Transmission Range Switch Circuit

NOTE: Record all freeze data before you troubleshoot.

1. Turn the ignition switch ON (II).
2. Observe the A/T gear position indicator, and shift each position separately.

*Do any indicators stay on when the shift lever is not in that position?*

**YES**— Go to step 3.

**NO**— The system is OK at this time. Check the wire harness for damage. ■

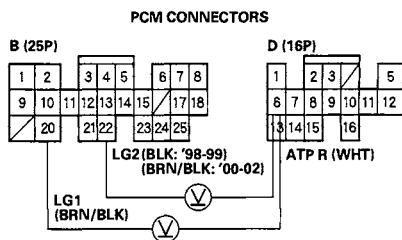
3. Disconnect the transmission range switch connector.

*Do all gear position indicators go out?*

**YES**— Replace the transmission range switch. ■

**NO**— Go to step 4.

4. Turn the ignition switch OFF, and connect the transmission range switch connector.
5. Turn the ignition switch ON (II).
6. Shift to all positions other than **R**.
7. Measure the voltage between the D6 and B20 or B22 terminals.



Wire side of female terminals

*Is there battery voltage?*

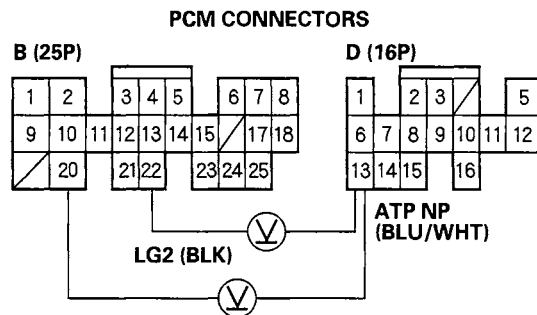
**YES**— Go to step 8.

**NO**— Check for short in the wire between the D6 terminal and the transmission range switch or A/T gear position indicator, and check for an open in the wires between the B20 and B22 terminals and body ground (G101). If wires are OK, check for loose terminal fit in the PCM connectors. If necessary, substitute a known-good PCM and recheck. ■

8. Shift to all positions other than **P** or **N**.
9. Measure ATP NP voltage between these terminals:

- '98-'99 models: Between terminals D13 and B20 or B22.
- '00-'02 models: Between terminals B14 and B20 or B22.

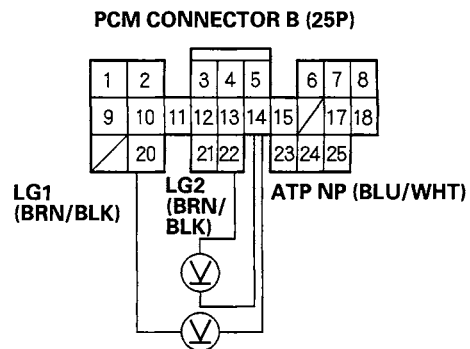
'98-'99 models:



LG1 (BRN/BLK)

Wire side of female terminals

'00-'02 models:



Wire side of female terminals

*Is there about 5 V?*

**YES**— Go to step 10.

**NO**— Check for short in the wire between the D13 terminal and the transmission range switch, and in the **P** and **N** position signal wires between the A/T gear position indicator and the transmission range switch. If wires are OK, check for loose terminal fit in the PCM connectors. If necessary, substitute a known-good PCM and recheck. ■

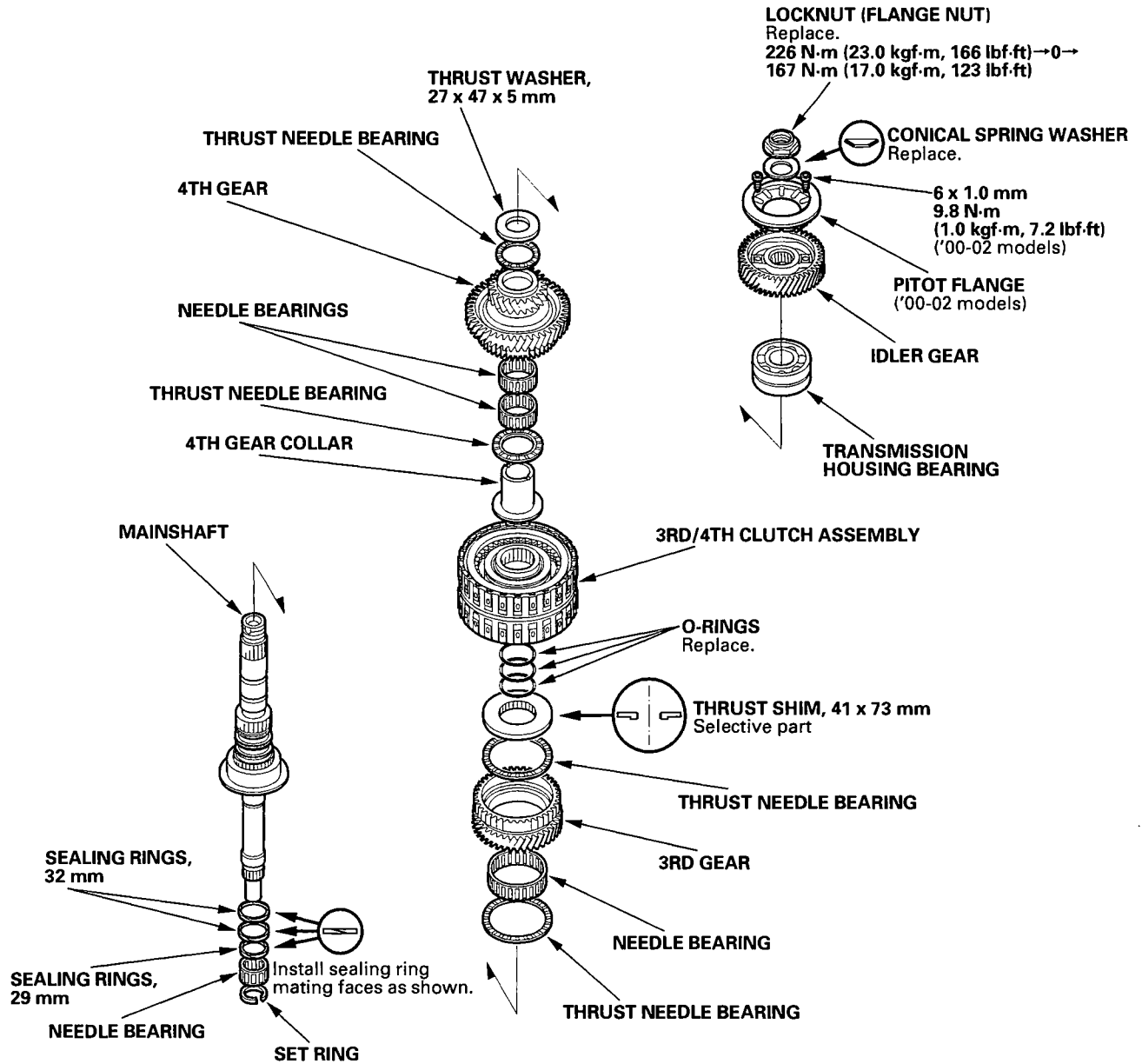
10. Shift to all positions other than **D**.

# Shafts and Clutches



## Mainshaft Disassembly, Inspection, and Reassembly

1. Lubricate all parts with ATF during reassembly.

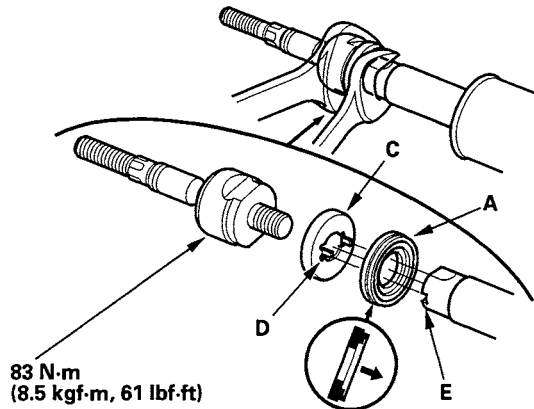


2. Check the clearance of the 3rd/4th clutch assembly (see page 14-170).
3. Inspect the thrust needle bearing and the needle bearing for galling and rough movement.
4. Inspect the splines for excessive wear and damage.
5. Check shaft bearing surfaces for scoring, scratches, and excessive wear.
6. Before installing the O-rings, wrap the shaft splines with tape to prevent damage to the O-rings.
7. Install the conical spring washer and 41 x 73 mm thrust shim in the direction shown.
8. Inspect condition of the sealing rings. If the sealing rings are worn, distorted, or damaged, replace them (see page 14-171).

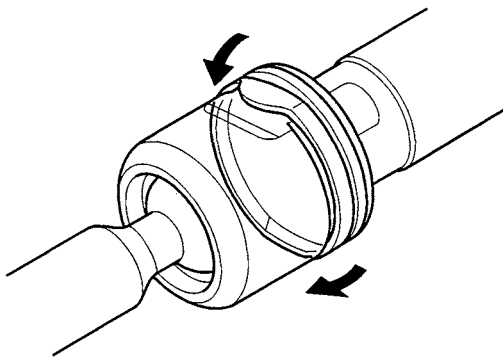
# Power Steering

## Steering Gearbox Overhaul (cont'd)

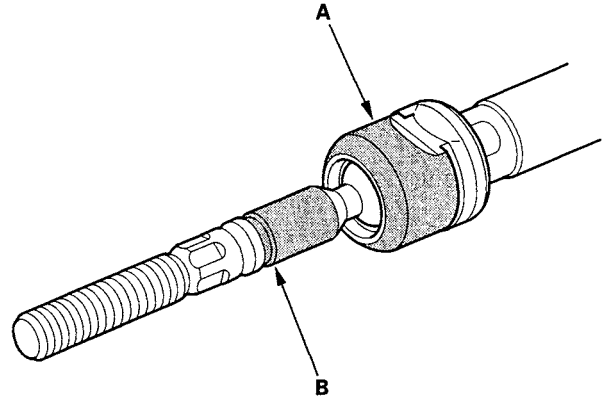
49. Install the stop washer (A) with the chamfered side facing out, and screw each rack end (B) into the rack while holding the lock washer (C) so its tabs (D) are in the slots (E) in the end of the rack.



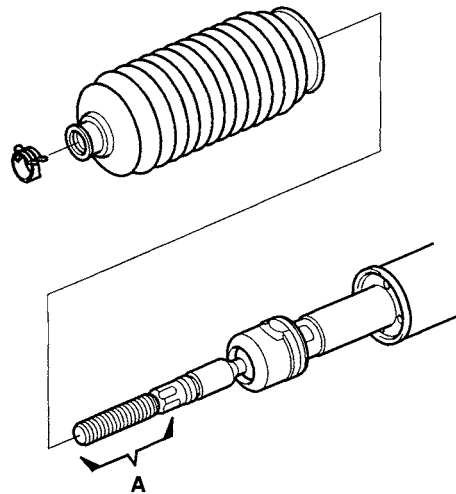
50. Hold the flat surface sections of the right side steering rack with a wrench, and tighten both rack ends. Be careful not to damage the rack surface with the wrench.
51. Bend the lock washer back against the flat spots on the rack end joint housing.

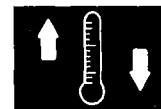


52. Apply multipurpose grease (A) to the circumference of the rack end joint housing.



53. Apply a light coat of silicone grease (B) to the boot grooves (B) on the rack ends.
54. Center the steering rack within its stroke. Install the boots on the rack ends with the tie-rod clips. After installing the boots, wipe the grease off the threaded section (A) of the rack end.



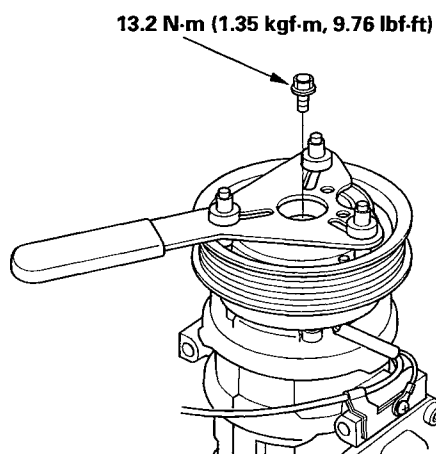


## Compressor Clutch Overhaul ('98-00 model)

### Special Tool Required

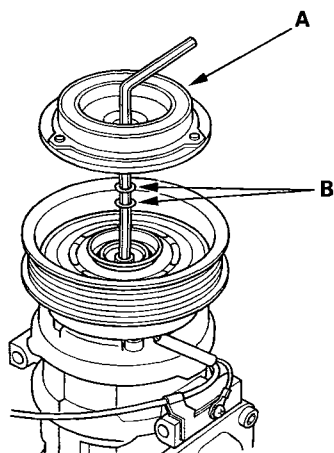
A/C clutch holder, Robinair 10204, Kent-Moore J37872, or Honda Tool and Equipment KMT-J33939, commercially available

1. Remove the center bolt while holding the pressure plate with a commercially available A/C clutch holder.

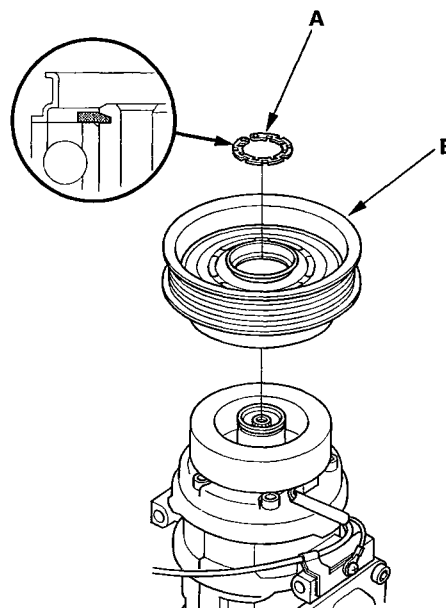


2. Remove the pressure plate (A) and shim(s) (B), taking care not to lose the shim(s). If the clutch needs adjustment, increase or decrease the number and thickness of shims as necessary, then reinstall the pressure plate, and recheck its clearance (see page 21-20).

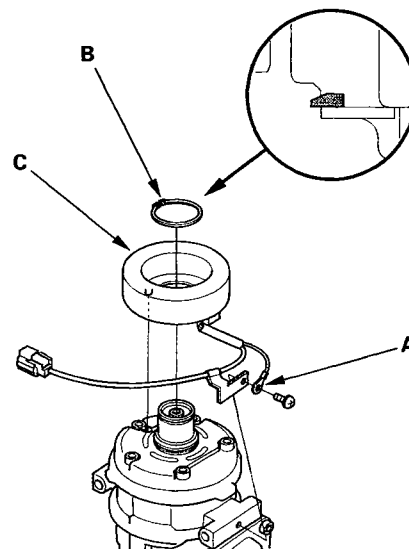
NOTE: The shims are available in four thicknesses: 0.1 mm, 0.3 mm, 0.5 mm, and 1.5 mm.



3. If you are replacing the field coil, remove the snap ring (A) with snap ring pliers, then remove the pulley (B). Be careful not to damage the pulley and compressor.



4. Remove the screw from the field coil ground terminal (A). Remove the snap ring (B) with snap ring pliers, then remove the field coil (C). Be careful not to damage the field coil and compressor.



(cont'd)