

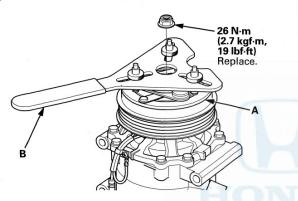
## A/C Compressor Clutch Overhaul

## **Special Tools Required**

A/C Compressor Kit 07AAF-000A150

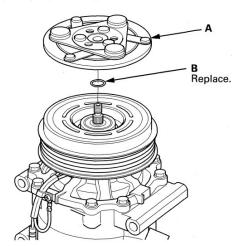
#### NOTE:

- Do not use a hammer to remove the snap rings. Using a hammer damages the A/C compressor.
- Do not hammer or pry on the pulley to remove it. If the pulley is difficult to remove, use a commercially available pulley removing tool. Make sure the jaws of the pulling tool engage the back face of the pulley, not the pulley grooves.
- 1. Remove the center nut while holding the armature plate (A) with the A/C clutch holder (B).

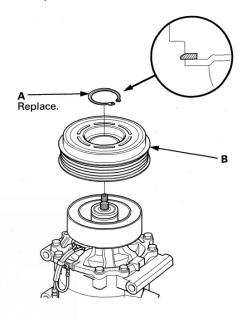


 Remove the armature plate (A) and the shim(s) (B), taking care not to lose the shim(s). If the clutch needs adjustment, increase or decrease the number and thickness of shims as necessary, then reinstall the armature plate, and recheck its clearance (see page 21-43).

NOTE: The shims are available in four thicknesses: 0.1 mm, 0.2 mm, 0.4 mm, and 0.5 mm.



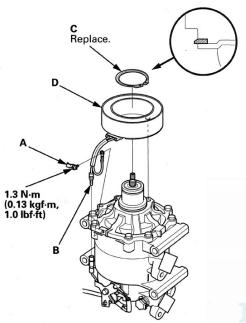
 If you are replacing the field coil, remove the snap ring (A) with snap ring pliers, then remove the rotor pulley (B). Be careful not to damage the rotor pulley or the A/C compressor.



# **Heating/Air Conditioning**

# A/C Compressor Clutch Overhaul (cont'd)

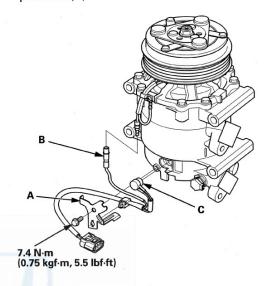
4. Remove the bolt and the holder (A), then disconnect the field coil connector (B). Remove the snap ring (C) with snap ring pliers, then remove the field coil (D). Be careful not to damage the field coil or the A/C compressor.



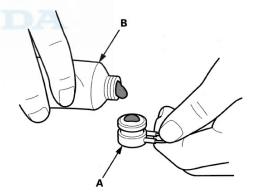
- 5. Reassemble the clutch in the reverse order of disassembly, and note these items:
  - When the replacing the field coil, check that the new coil has the correct resistance (see page 21-43).
  - Install the field coil with the wire side facing down, and align the boss on the field coil with the hole in the A/C compressor.
  - Clean the rotor pulley and the A/C compressor friction surfaces with contact cleaner or other non-petroleum solvent.
  - Install new snap rings, note the installation direction, and make sure they are fully seated in the grooves.
  - Make sure that the rotor pulley turns smoothly after it's reassembled.
  - Route and clamp the wires properly to prevent damage by the rotor pulley.
- 6. After reinstallation, cycle the A/C clutch approximately 20 times by running the engine at 1,500—2,000 RPM and setting the A/C switch to ON. This procedure seats the clutch friction surfaces and increases clutch torque capacity.

# A/C Compressor Thermal Protector Replacement

 Remove the bolt and the holder (A). Disconnect the field coil connector (B), then remove the thermal protector (C).



Replace the thermal protector (A) with a new one, and apply silicone sealant (B) to the bottom of the thermal protector.



Install the thermal protector in the reverse order of removal.

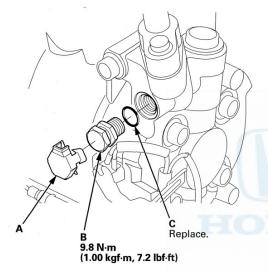


## A/C Compressor Relief Valve Replacement

NOTE: If the A/C compressor relief valve has opened, diagnose and correct the cause of the excessive A/C refrigerant pressure, then replace the relief valve.

#### '09-10 models

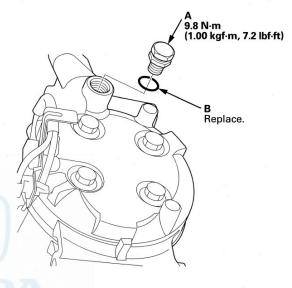
- Recover the refrigerant with a recovery/recycling/charging station (see page 21-69).
- Remove the relief valve cover (A), the relief valve (B), and the O-ring (C). Plug the opening to keep foreign matter from entering the system and the A/C compressor oil from running out.



- 3. Clean the mating surfaces.
- Replace the O-ring with a new one at the relief valve, and apply a thin coat of refrigerant oil before installing it
- 5. Remove the plug, and install and tighten the relief valve.
- 6. Charge the system (see page 21-71).

### '11-12 model

- Recover the refrigerant with a recovery/recycling/charging station (see page 21-69).
- Remove the relief valve (A) and the O-ring (B). Plug the opening to keep foreign matter from entering the system and the A/C compressor oil from running out.



- 3. Clean the mating surfaces.
- Replace the O-ring with a new one at the relief valve, and apply a thin coat of refrigerant oil before installing it.
- Remove the plug, and install and tighten the relief valve.
- 6. Charge the system (see page 21-71).

# **Heating/Air Conditioning**

## A/C Refrigerant Oil Replacement

### **Special Tools Required**

Oil Injector Tool Robinair ROB16256, commercially available

\*This tool is available through the Honda Tool and Equipment Program; call 888-424-6857

Recommended PAG oil: SP-10

• P/N 38897-P13-A01AH: 120 mL (4 fl·oz)

It is important to have the correct amount of refrigerant oil in the A/C system to ensure proper lubrication of the A/C compressor. Too little oil damages the A/C compressor; too much oil reduces the cooling capacity of the system, and can produce high vent temperatures.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if it gets on the paint, wash it off immediately.

Add the recommended refrigerant oil in the amount listed if you replace any of the following parts:

A/C condenser

A/C compressor....... Oil drainage is unnecessary at the time of compressor replacement.