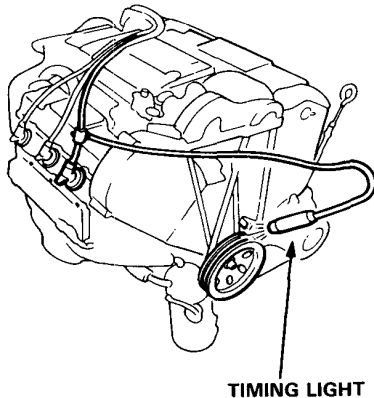


Ignition System

Ignition Timing Inspection and Setting

1. Start the engine and allow it to warm up (cooling fan comes on).
2. Connect a timing light to the engine; while the engine idles, point the light toward the pointer on the timing belt cover.



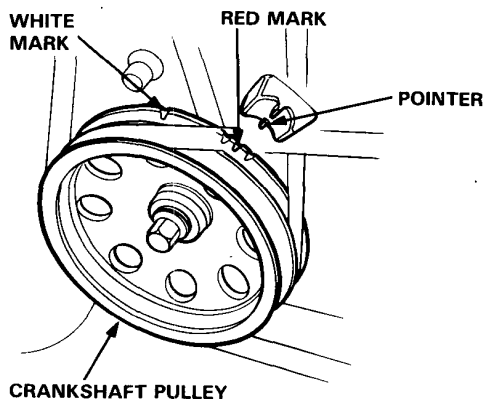
3. Inspection ignition timing at idle.

Ignition Timing:

$15 \pm 2^\circ$ BTDC (RED)

KF, KB, KE, KQ: at $720 \pm 50 \text{ min}^{-1}$ (rpm)
in neutral

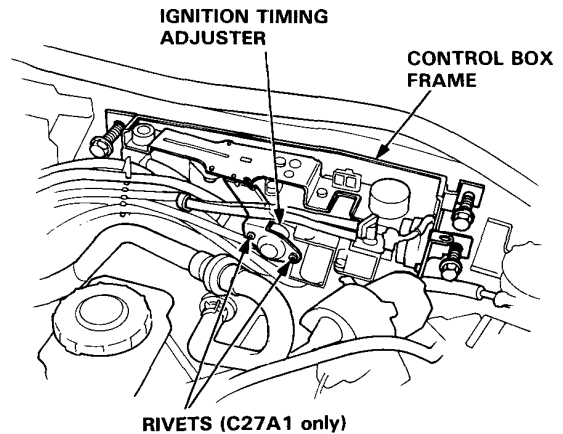
KG, KX: at $680 \pm 50 \text{ min}^{-1}$ (rpm)
in neutral



4. Adjust ignition timing, if necessary, by turning the adjusting screw on the ignition timing adjuster in the control box.

5. Remove the control box upper and lower covers.

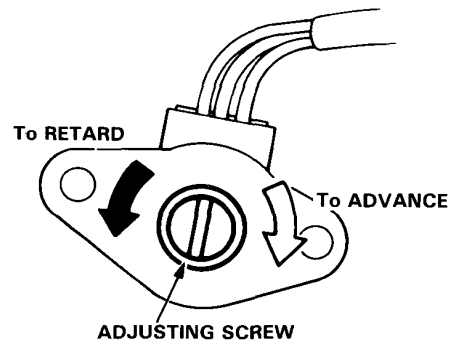
NOTE: LHD shown, RHD similar.



6. For C27A1 engine only, drill the 2 rivets off with a 3/16 in. drill bit, then separate the stay cover from the adjuster.

CAUTION: Do not damage the adjuster when removing the rivets.

7. Adjust as necessary by turning the adjusting screw on the adjuster; turn the adjusting screw counterclockwise to retard the timing, or clockwise to advance the timing.



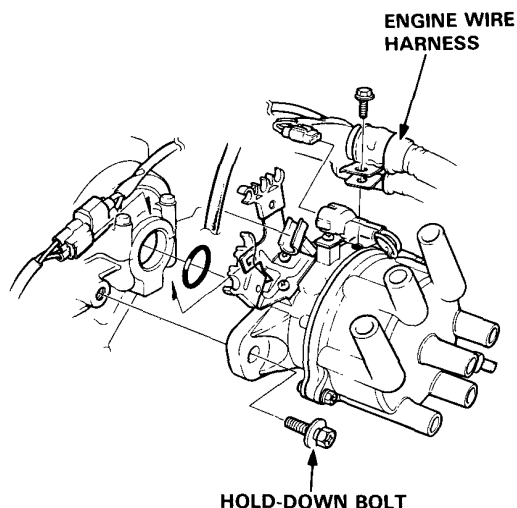
8. After adjusting, reinstall the stay cover to the ignition timing adjuster with new rivets, then reinstall the adjuster to the control box.



Distributor Removal/Installation

Removal

1. Remove the engine wire harness and connectors from the distributor.
2. Disconnect the spark plug wires and coil wire from the distributor cap.

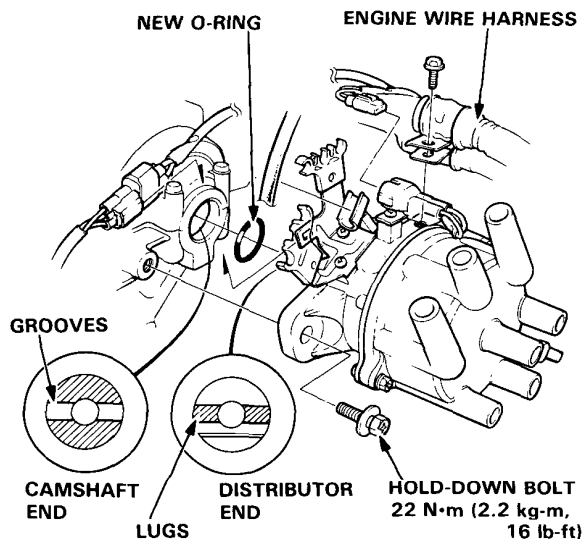


3. Remove the distributor hold-down bolt, then remove the distributor from the cylinder head.

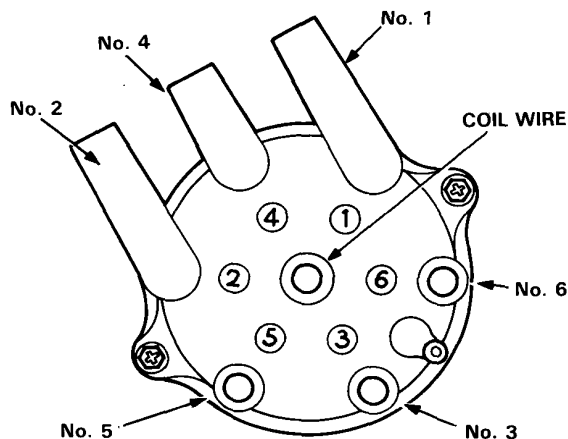
Installation

1. Coat a new O-ring with engine oil then install it.
2. Slip the distributor into position.

NOTE: The lugs on the end of the distributor and its mating grooves in the camshaft end are both offset to eliminate the possibility of installing the distributor 180° out of time.

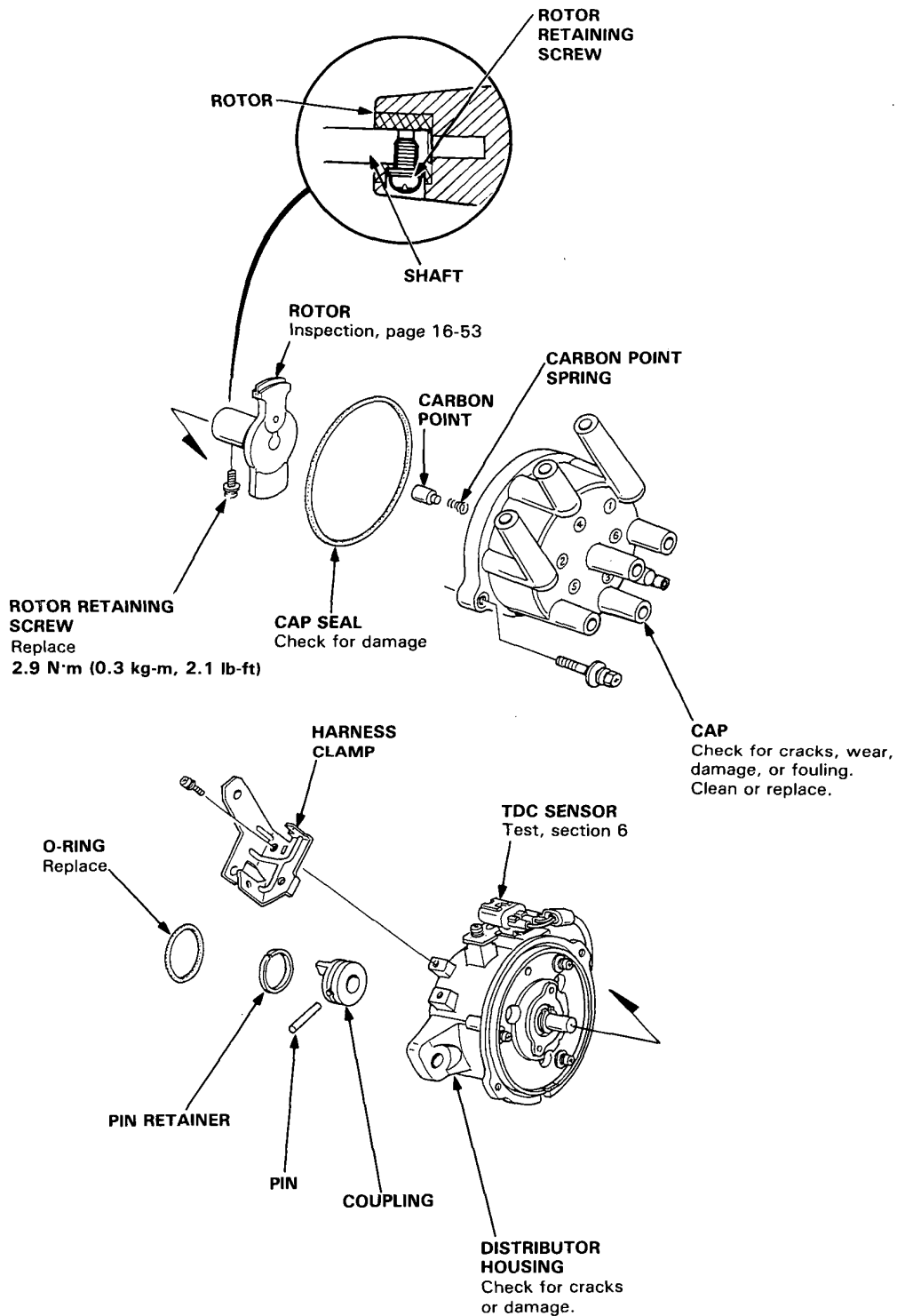


3. Install the hold-down bolt and tighten.
4. Connect the engine wire harness and connector to the distributor.
5. Connect the coil wire and the spark plug wires as shown.



Ignition System

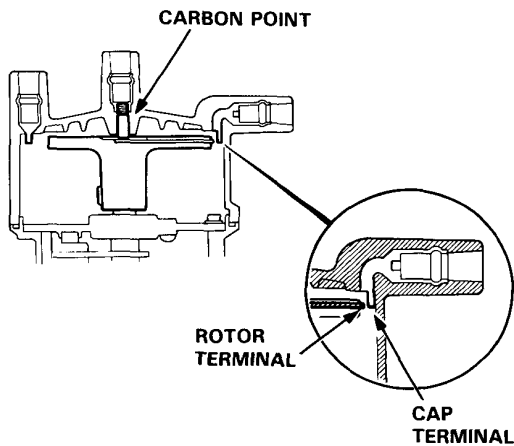
Distributor Overhaul





Distributor Top End Inspection

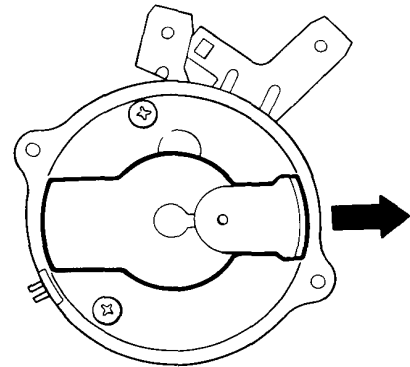
1. Check for rough or pitted rotor and cap terminals.
2. Scrape or file off the carbon deposits. Smooth the rotor terminal with an oil stone or #600 sandpaper if rough.
3. Check the distributor cap for cracks, wear and damages. If necessary, clean or replace it.



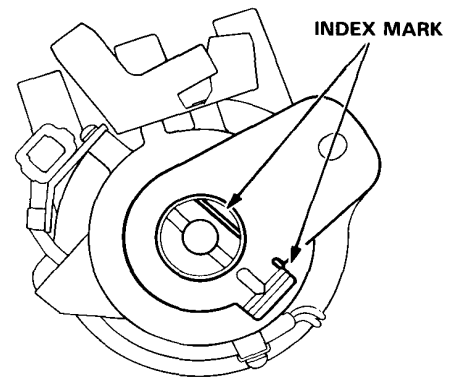
Distributor Reassembly

Reassembly the distributor in the reverse order of disassembly.

1. Install the rotor, then turn it so that it faces in the direction shown (toward the No.1 cylinder).



2. Set the thrust washer and coupling on the shaft.
3. Check that the rotor is still pointing toward the No.1 cylinder, then align the index mark on the housing with the index mark on the coupling.



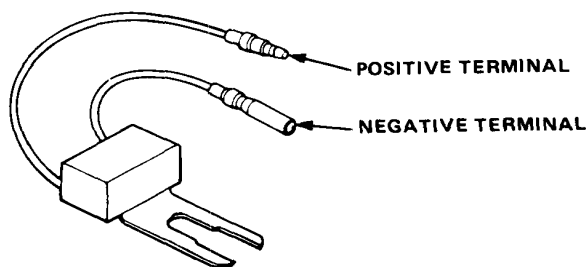
4. Drive in the pin and secure it with the pin retainer.

Ignition System

Radio Condenser Capacity Test

1. Use a commercially available condenser tester. Connect the tester probes and measure the condenser capacity.

Condenser Capacity: 0.47 ± 0.09 microfarads (μF)



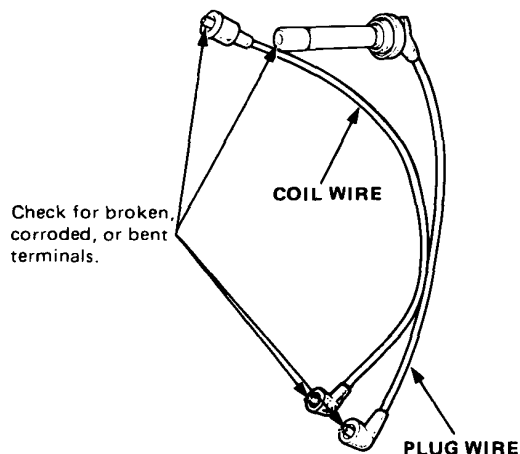
NOTE: The radio condenser is intended to reduce ignition noise; however, condenser failure may cause the engine to stop running.

2. If not within the specifications, replace the radio condenser.

Ignition Wire Inspection and Test

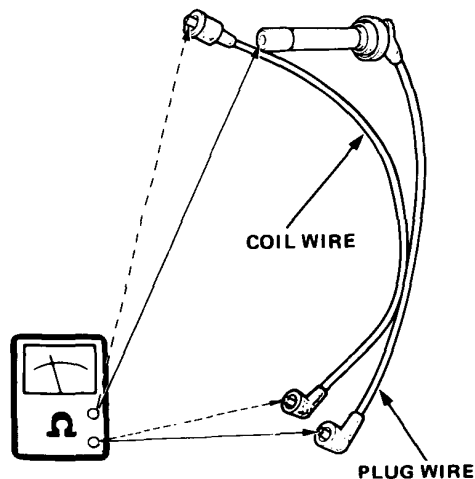
CAUTION: Carefully remove the ignition wires by pulling on the rubber boots. Do not bend the wire or the conductor may be broken.

1. Check the condition of the wire terminals. If any terminal is corroded, clean it, and if it is broken or distorted, replace the wire.



2. Connect ohmmeter probes and measure resistance.

Ignition Wire Resistance:
25,000 ohms max. at 20°C (70°F)



3. If resistance exceeds 25,000 ohms, replace the ignition wire.



Ignition Coil Test

1. With the ignition switch OFF, disconnect the primary connectors and the coil wire.
2. Using an ohmmeter, measure resistance between the terminals. Replace the coil if the resistance is not within specifications.

NOTE: Resistance will vary with the coil temperature; specifications are at 20°C (70°F).

Primary Winding Resistance

(between the A and D terminals):

0.3–0.4 ohms

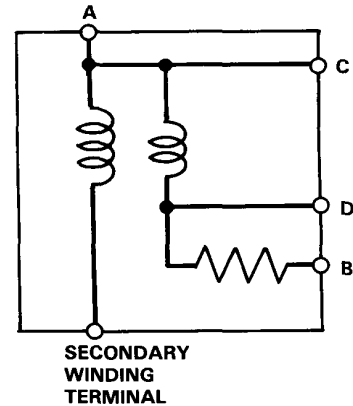
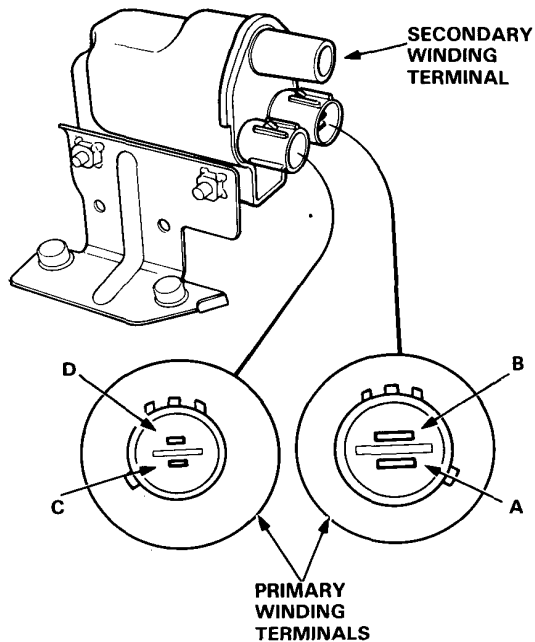
Secondary Winding Resistance

(between the A and secondary winding terminals):

9,040–13,560 ohms

Resistance between the B and D terminals:

2,090–2,310 ohms



3. Check for continuity between the A and C terminals.
Replace the coil if there is no continuity.