

Engine Tune-up

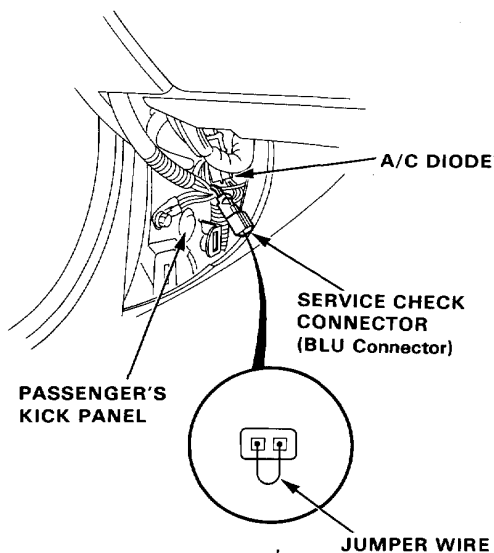
Ignition Timing Inspection and Setting

Fuel-Injected Engine:

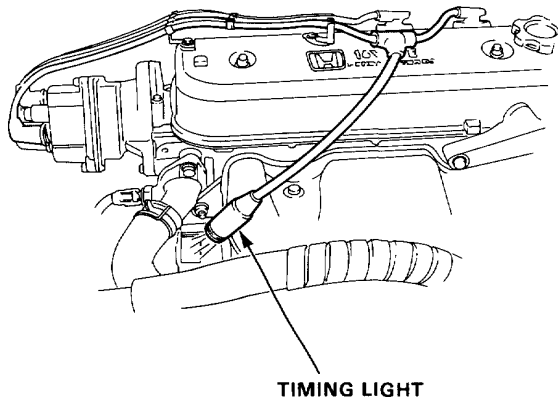
<KG, KS, KX and KQ models>

NOTE: To be made at idle with the service check connector shorted, the blue service check connector is located in the far passenger corner under the dashboard.

1. Start the engine and allow it to warm up (cooling fan comes on).
2. Connect the ORN/RED and GRN/WHT terminals of the service check connector (BLU) with a jumper wire.



3. Connect a timing light to the engine; while the engine idles, point the light toward the pointer on the flywheel (for M/T), or on the drive plate (for A/T).

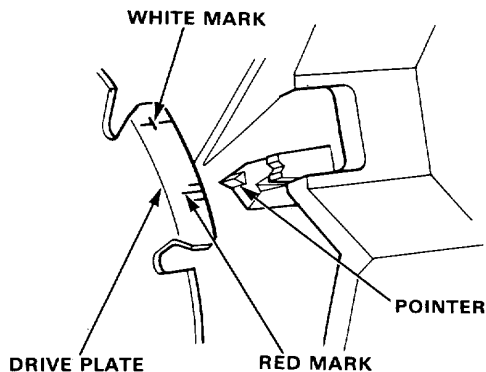


4. Adjust ignition timing, if necessary, to the following specifications:

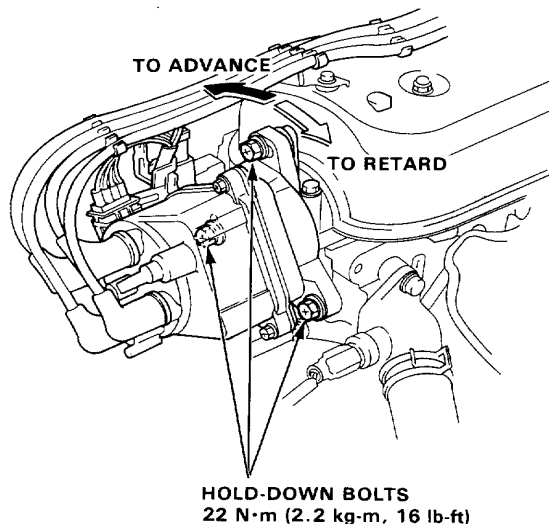
Ignition Timing

- All models: $15 \pm 2^\circ$ BTDC (RED)
at $800 \pm 50 \text{ min}^{-1}$ (rpm) in neutral

NOTE: The illustration shows A/T.



5. Adjust as necessary by loosening the distributor adjusting bolts, and turn the distributor housing counter-clockwise to advance the timing, or clockwise to retard the timing.

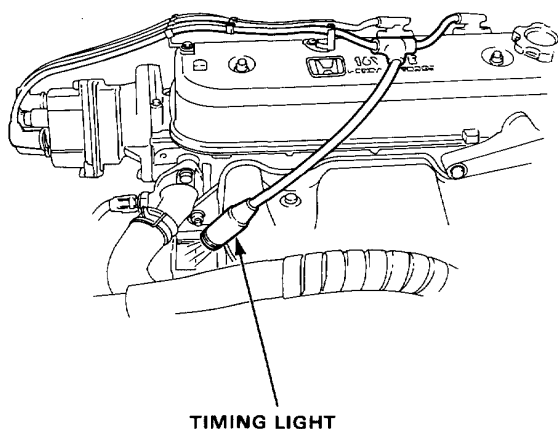


6. Tighten the adjusting bolts and recheck the timing.
7. Remove the jumper wire and install the rubber caps to the inspection window.



<Except KG, KS, KX and KQ models>

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 flywheel (for M/T), or on the drive plate (for A/T).

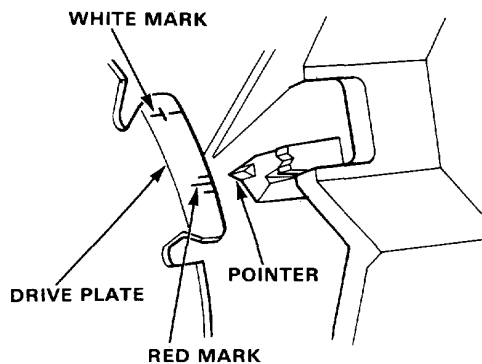


3. Inspection ignition timing at idle.

Ignition Timing:

$15 \pm 2^\circ$ BTDC (RED) at $800 \pm 50 \text{ min}^{-1}$ (rpm) in neutral

NOTE: The illustration shows A/T.



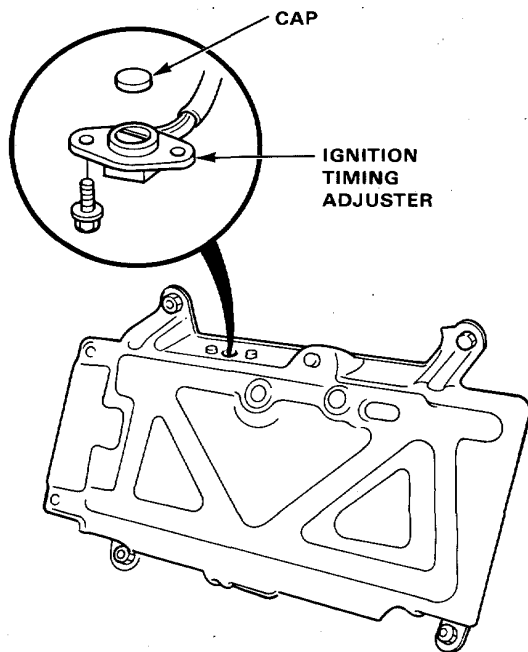
4. Adjust ignition timing, if necessary, by turning the adjusting screw on the ignition timing adjuster in the control box.

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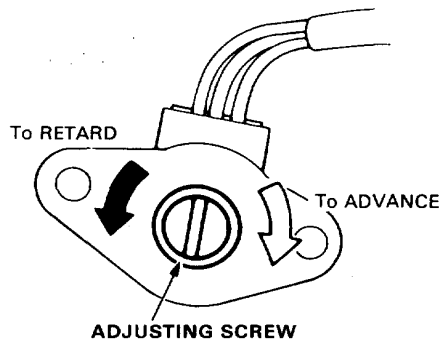
Engine Tune-up

Ignition Timing Inspection and Setting (cont'd)

5. Remove the cap from the ignition timing adjuster.



6. 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.



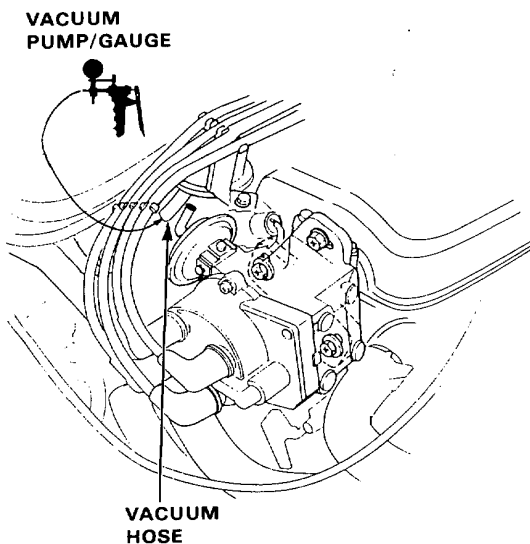
7. After adjusting, reinstall the cap to the ignition timing adjuster.



Carbureted Engine:

<KP, KT, KU and KY (A/T) models>

1. Disconnect the vacuum hose from the vacuum advance diaphragm, then connect the vacuum pump/gauge to the vacuum hose.



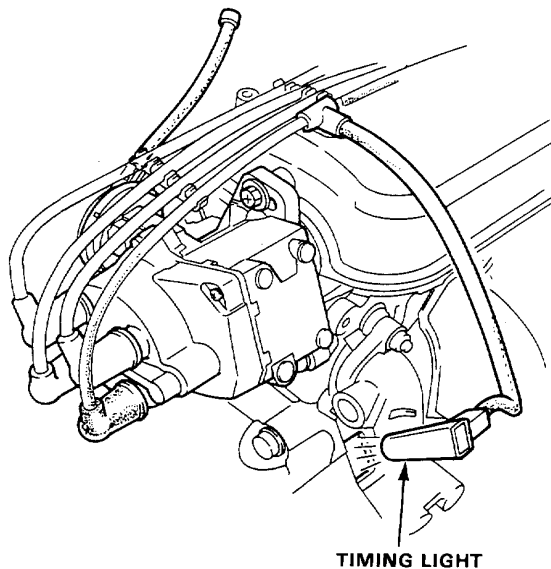
2. Start the engine.

KP and KT models: Let it idle.

KY (A/T) model: Hold the engine at 4,000 min^{-1} (rpm).

3. Check the vacuum hose for vacuum. The vacuum hose should have vacuum.
 - If the vacuum hose has no vacuum, check the vacuum hose of proper connection, cracks, blockage or disconnected hose.
4. Connect the vacuum hose to the vacuum advance diaphragm and allow the engine to warm up (cooling fan comes on).
5. Disconnect the vacuum hose from the vacuum advance diaphragm and plug them.

6. Connect a timing light to the engine; while the engine idles, point the light toward the pointer on the flywheel (for M/T), or on the drive plate (for A/T).

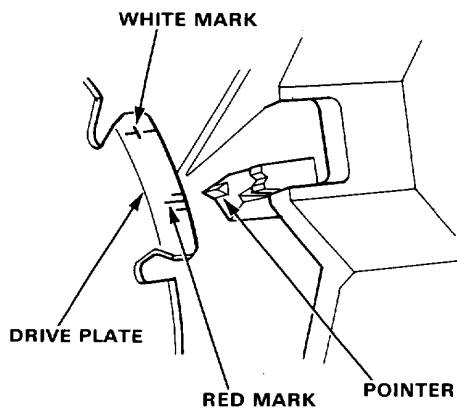


7. Read initial timing when timing mark (white) is aligned to the pointer.

Initial Timing: 0° TDC

- Manual Transmission [at $800 \pm 50 \text{ min}^{-1}$ (rpm) in neutral]
- Automatic Transmission [at $750 \pm 50 \text{ min}^{-1}$ (rpm) in gear]

NOTE: The illustration shows A/T.

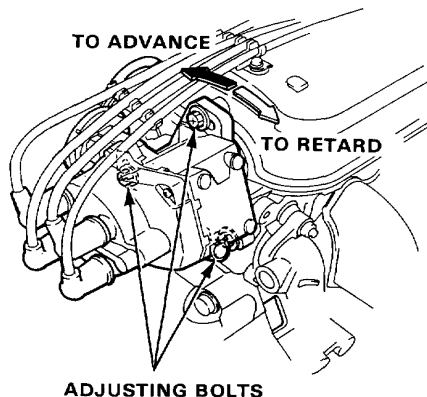


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Engine Tune-up

Ignition Timing Inspection and Setting (cont'd)

8. Adjust as necessary by loosening the distributor adjusting bolts, and turn the distributor housing clockwise to retard the timing, or counterclockwise to advance the timing.



9. Tighten the distributor adjusting bolts, then recheck the timing.

10. Connect the vacuum hose to the vacuum advance diaphragm and inspect ignition timing at idle.

Ignition Timing

M/T: $15^{\circ} \pm 2^{\circ}$ BTDC (Red)

A/T: $10^{\circ} \pm 2^{\circ}$ BTDC (Red)

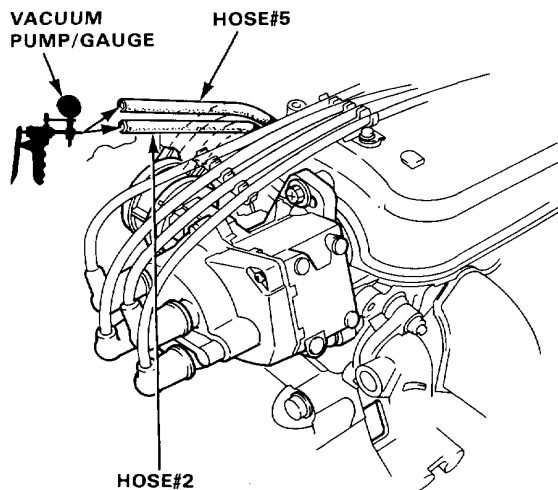
- Manual Transmission [at $800 \pm 50 \text{ min}^{-1}$ (rpm) in neutral]
- Automatic Transmission [at $750 \pm 50 \text{ min}^{-1}$ (rpm) in gear]

If advance is not as specified, check the vacuum advance diaphragm and distributor advance mechanism.



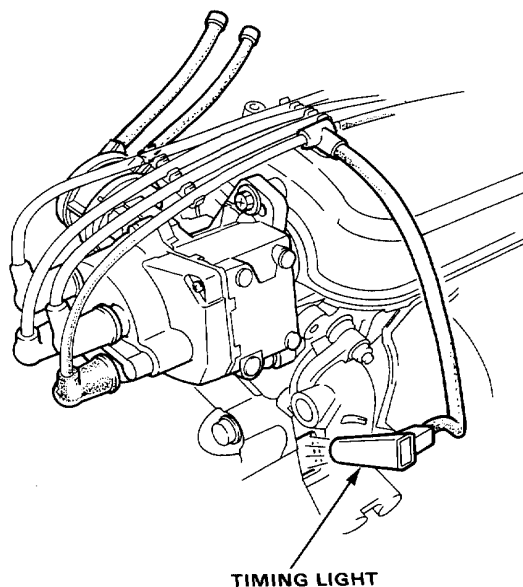
<KP, KT and KY (A/T) models>

1. Disconnect the vacuum hoses from the vacuum advance diaphragm, then connect the vacuum pump/gauges to the vacuum hoses.



2. Start the engine and let it idle.
3. When the engine is cool, coolant temperature is below 55°C (131°F). Check each hose for vacuum. The #2 and #5 hoses should have vacuum.
 - If the #2 hose has no vacuum, check the #2 hose of proper connection, cracks, blockage or disconnected hose.
 - If the #5 hose has no vacuum, check the #5 and connected hoses for proper connections, cracks, blockage or disconnected hoses, and the check valve is not clogged. If the #5 and connected hoses, and the check valve have no problem, recheck the #5 hose for vacuum.

4. Connect the vacuum hoses to the vacuum advance diaphragm and allow the engine to warm up. (cooling fan comes on).
5. Disconnect the #5 hose from the vacuum advance diaphragm and connect the vacuum pump/gauge to the #5 hose.
6. Check the #5 hose for vacuum. The #5 hose should have no vacuum.
7. Disconnect the vacuum hoses from the vacuum advance diaphragm and plug them.
8. Connect a timing light to the engine; while the engine idles, point the light toward the pointer on the flywheel (for M/T), or on the drive plate (for A/T).



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Engine Tune-up

Ignition Timing Inspection and Setting (cont'd)

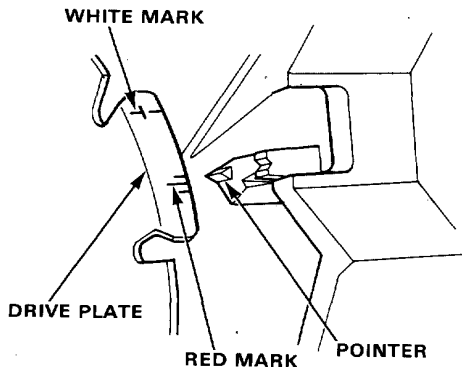
9. Read initial timing when timing mark (white) is aligned to the pointer.

Initial Timing

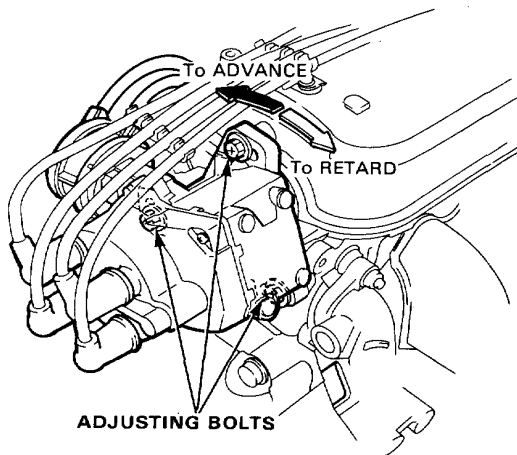
All models: 0° BTDC

- Manual Transmission [at $800 \pm 50 \text{ min}^{-1}$ (rpm) in neutral]
- Automatic Transmission [at $750 \pm 50 \text{ min}^{-1}$ (rpm) in gear]

NOTE: The illustration shows A/T.



10. Adjust as necessary by loosening the distributor adjusting bolts, and turn the distributor housing clockwise to retard the timing, or counterclockwise to advance the timing.



11. Tighten the distributor adjusting bolts, then recheck the timing.

Connect the vacuum hose to the vacuum advance diaphragm and inspect ignition timing at idle.

Ignition Timing

M/T: $15^\circ \pm 2^\circ$ BTDC

A/T: $10^\circ \pm 2^\circ$ BTDC (Except KQ, KX, KS and KG models)
 $15^\circ \pm 2^\circ$ BTDC (KQ, KX, KS and KG models)

- Manual Transmission [at $800 \pm 50 \text{ min}^{-1}$ (rpm) in neutral]
- Automatic Transmission [at $750 \pm 50 \text{ min}^{-1}$ (rpm) in gear]

If advance is not as specified, check the vacuum advance diaphragm and distributor advance mechanism.