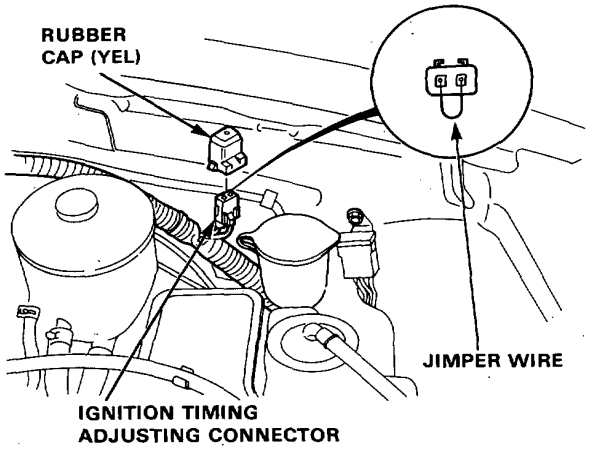
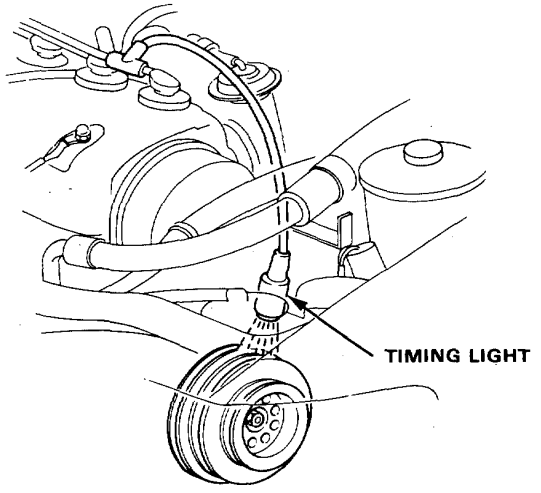
Ignition Timing Inspection and Setting (Fuel-Injected Engine)

1. Start the engine and allow it to warm up (cooling fan comes on.)

2. Remove the rubber cap (YEL) from the ignition timing adjusting connector located left front engine compartment and connect the BRN and GRN/WHT terminals with a jumper wire.



3. Connect a timing light to the engine; while the engine idles, point the light toward the pointer on the timing belt cover.



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

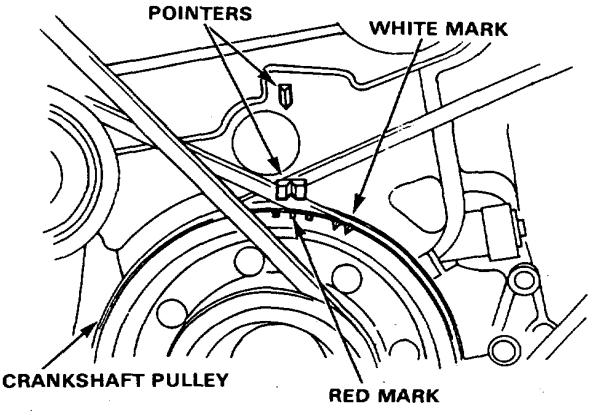
Ignition Timing

1.5 ℓ SOHC (MT, AT)
18°±2°BTDC (RED) at 800±50 min^{-1} (rpm) in neutral

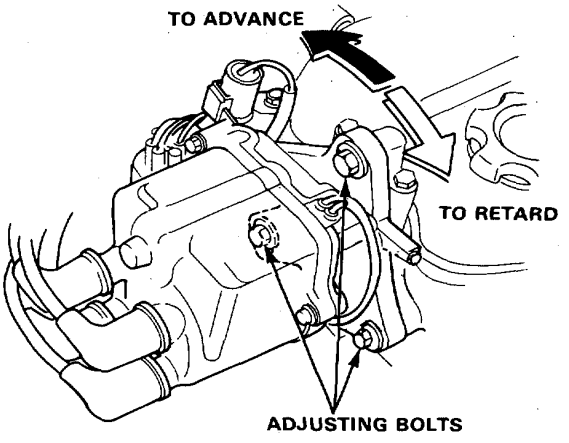
1.6 ℓ SOHC (MT, AT)
18°±2°BTDC (RED) at 780±50 min^{-1} (rpm) in neutral

1.6 ℓ DOHC (MT):
16°±2°BTDC (RED) at 800±50 min^{-1} (rpm) in neutral

1.6 ℓ DOHC (AT):
16°±2°BTDC (RED) at 750±50 min^{-1} (rpm) in neutral



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

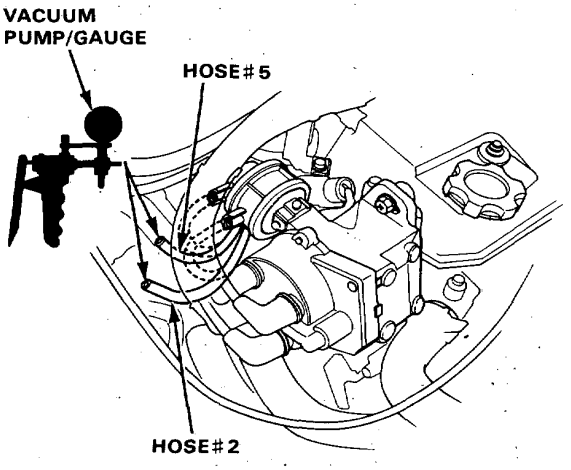


6. Tighten the adjusting bolts and recheck the timing.

7. Remove the jumper wire and install the rubber cap to the ighition timing adjusting connector.

Ignition Timing Inspection and Setting (2-Carbureted Engine)

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 [45°C (113°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 hose for proper connections, cracks, blockage or disconnected hoses, and the check valve is not clogged. If the #5 hose, and the check valve have no problem, replace the thermovalve and 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).

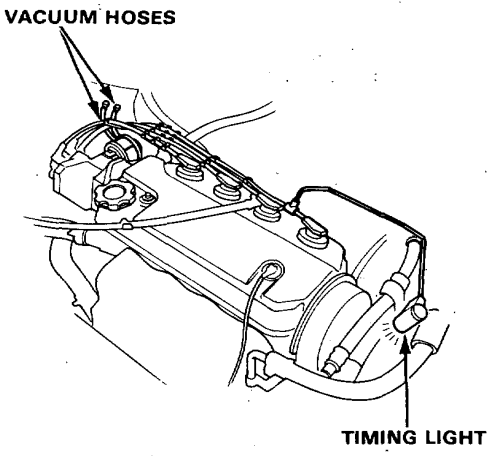
5. Disconnect the #5 hose from the vacuum advance diaphragm and connect the vacuum pump/gauge to the #5 hose.

6. Check the #5 hose for vacuum.
   The #5 hose should have no vacuum.

   - If the #5 hose has vacuum, replace the thermovalve and recheck the #5 hose for vacuum.

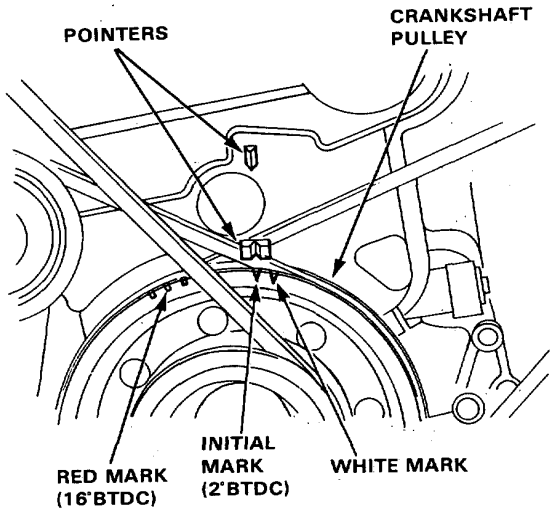
7. Disconnect the vacuum hoses from the vacuum advance diaphragm and plug them.

8. Connect a timing light.



9. While the engine idles, point the light toward the pointer on the timing belt cover.

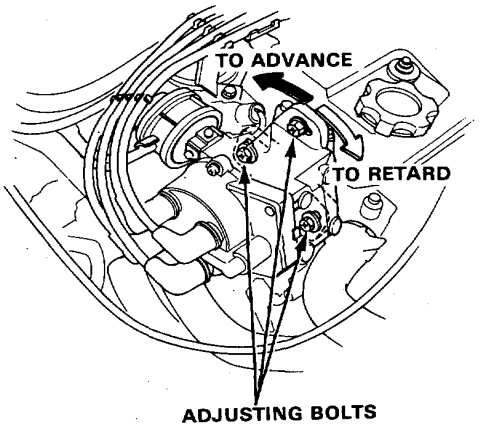
10. Align the timing initial mark on the crankshaft pulley to the pointer.



11. Timing when initial timing mark is aligned to the pointer.

Initial Timing
2° BTDC
- **Manual Transmission [at 750 ± 50 min^{-1} (rpm) in neutral]**
- **Automatic Transmission [at 700 ± 50 min^{-1} in gear]**

12. 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.



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

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

Ignition Timing
1.6ℓ : 16° ± 2° BTDC (Red)
1.4ℓ : 18° ± 2° BTDC (Red)

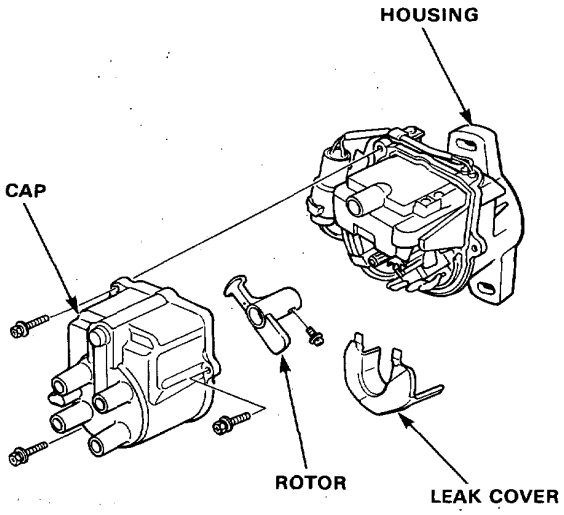
- **Manual Transmission [at 750 ± 50 min^{-1} (rpm) in neutral]**
- **Automatic Transmission [at 700 ± 50 min^{-1} in gear]**

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

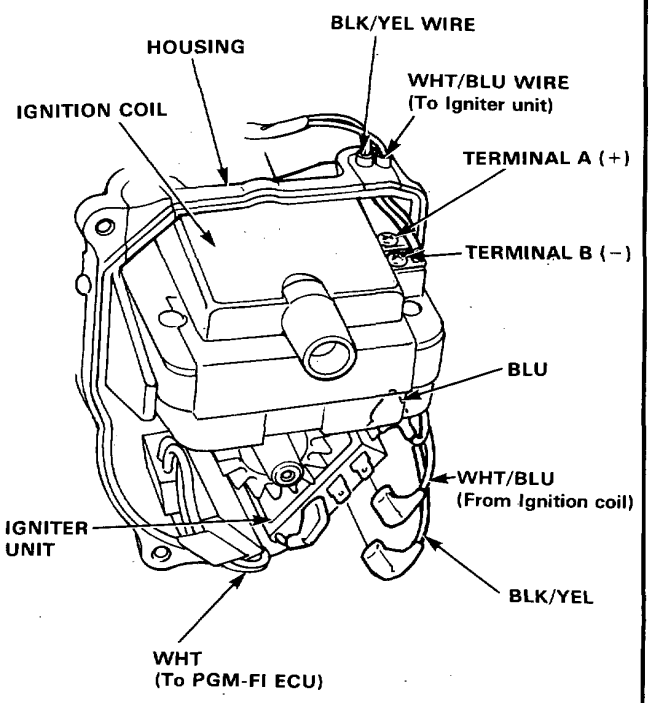
Igniter Unit Input Test (Fuel-injected engine)

NOTE: If the check engine warning light comes on, see section 6.

1. Remove the distributor cap.
2. Remove the roter and reak cover.



3. With the ignition switch on, there should be battery voltage between the terminal (+) and body ground.
   - If there is battery voltage, go to step4.
   - If there is no voltage, check for
     - An open in the WHT wire or BLK/YEL wire.
     - Disconnected terminals.
4. Disconnect the BLK/YEL wire from the igniter unit. There should be battery voltage between the BLK/YEL (+) wire and body ground.
   - If there is battery voltage, go to step 5.
   - If there is no voltage, check for an open in the BLK/YEL wire between the ignition coil and igniter unit.

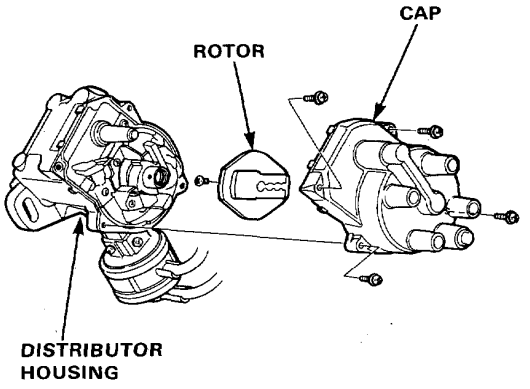


5. Disconnect the WHT/BLU wire from the Igniter unit. There should be battery voltage between the WHT/BLU (+) wire and body ground.
   - If there is battery voltage, go to step 6.
   - If there is no voltage, check for;
     - Ignition coil test.
     - An open in the WHT/BLU wire between the ignition coil and igniter unit.
     - Disconnected terminals.
6. Check for continuity between the igniter body and distributor housing.
7. If all tests ok, yet the system still fails to work, replace the igniter unit assembly.

Igniter Unit Input Test (Carbureted Engine)

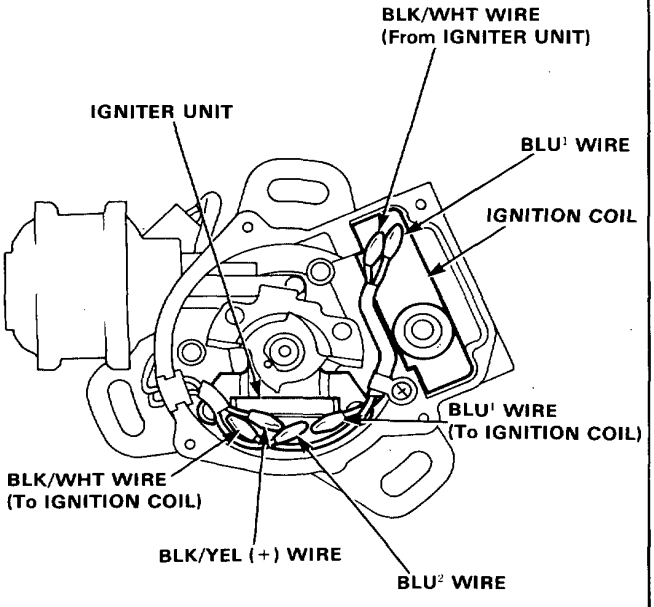
NOTE: Several different wires have the same color. They have been given a number suffix to distinguish them (for example BLU[1] and BLU[2] are not the same).

1. Remove the cap and rotor from the distributor. (Ensuehe caps contact point ~ see next page * isclear of distributor body befor lipting out cap).



2. With the ignition switch ON. Check the battery voltage between the BLK/YEL (+) wire and body ground.

   - If there is battery voltage, go to step 3.
   - If there is no voltage, check for an open in WHT or BLK/YEL wire.



3. With the ignition switch OFF. Check for continuity between the BLK/WHT wire and BLU[1] wire on the igniter unit.

   - If there is continuity, go to step 4.
   - If there is no continuity, check for:
     - An open in the BLK/WHT wire or BLU[1] wire between the igniter unit and ignition coil.
     - Ignition coil test (see page 16-55)

4. Check for continuity between the igniter unit and distributor housing.

5. If all tests OK, yet the system still fails to work, replace the igniter unit assembly.