

I.H.C. - HOLLEY BREAKERLESS IGNITION

DESCRIPTION

Electronic Breakerless Ignition System consists of three major components; distributor, coil and electronic control unit. Distributor is conventional type except a sensor and trigger wheel replace usual contact points, condenser and breaker cam. Ignition coil is standard type. Electronic control unit is solid state, permanently sealed unit which makes and breaks the ignition primary circuit.

SPECIFICATIONS

AIR GAP & CAM ANGLE

See appropriate article in *TUNE-UP* Section.

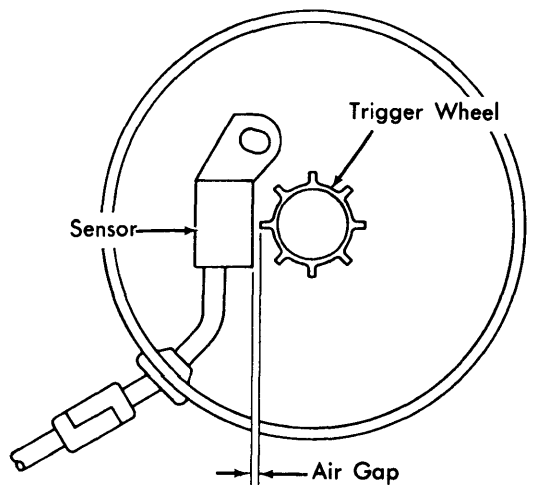
CENTRIFUGAL & VACUUM ADVANCE

See *DISTRIBUTOR ADVANCE SPECIFICATIONS* in this Section.

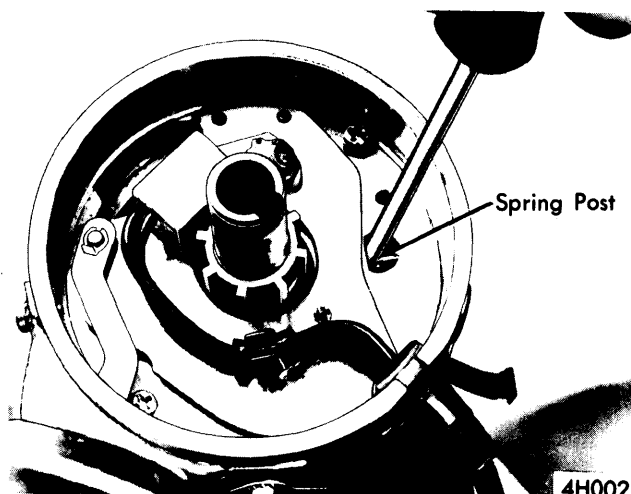
ADJUSTMENT

AIR GAP

With one tooth of trigger wheel aligned with centerline of sensor, measure air gap between sensor and end of tooth. Move sensor as necessary to obtain specified air gap.



CHECKING AIR GAP



ADJUSTING ADVANCE SPRING TENSION

CENTRIFUGAL ADVANCE

Centrifugal advance is adjusted by bending advance spring posts. Bending posts toward mainshaft increases advance, bending posts away from mainshaft decreases advance.

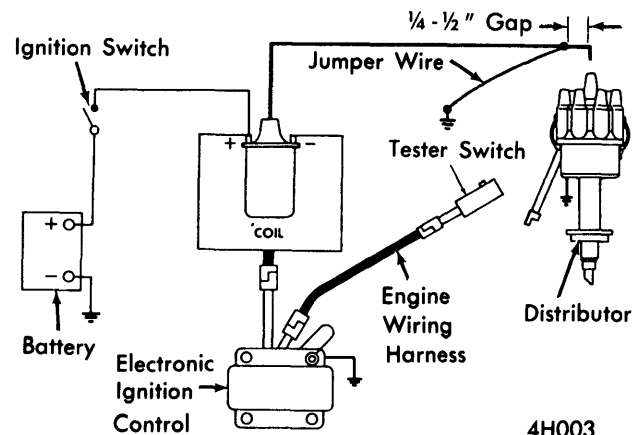
VACUUM ADVANCE

Diaphragm assembly is preset and no adjustment is provided. If not within specifications, replace vacuum unit.

TESTING & TROUBLE SHOOTING

DISTRIBUTOR

Disconnect high tension lead from center terminal of distributor cap. Attach one end of a jumper wire to distributor end of cable, $\frac{1}{4}$ " to $\frac{1}{2}$ " back from terminal. Ground other end of jumper wire. Crank engine and watch for spark between jumper wire clip and high tension cable terminal. If spark occurs, distributor cap or rotor is faulty. Disconnect distributor primary wiring connector at distributor and install suitable switch (SE-2503) into harness. Turn ignition switch "ON". Press tab on switch and watch for spark between jumper wire clip and high tension cable terminal. If spark occurs, distributor sensor is faulty.



TESTING IGNITION CIRCUIT

IGNITION COIL

With tester switch installed, connect voltmeter between positive terminal of coil and ground. Voltage should be same as battery voltage reading. If voltage noticeably lower, coil should be replaced.

ELECTRONIC IGNITION CONTROL

With tester switch installed, connect voltmeter between negative terminal of coil and ground. A reading of under five volts or over eight volts indicates a bad coil. Press tab on tester switch and observe voltmeter. Voltage reading should increase to battery voltage reading. Release tab on switch. Voltage should drop to five to eight volts. If voltage does not rise or drop as specified, Electronic Ignition Control is faulty.

Ignition Systems

I.H.C. – HOLLEY BREAKERLESS IGNITION (Cont.)

OVERHAUL

DISASSEMBLY

Remove rotor, dust cover and vacuum advance unit. Carefully pull sensor wire seal/retainer from slot in distributor housing. Remove sensor plate mounting screws and lift sensor plate assembly from housing. Disassemble sensor mounting plate. Remove lubrication wick, trigger wheel assembly retainer and trigger wheel assembly from distributor. Remove advance weight springs, advance weights, bushings and washers. **NOTE** – Before removing distributor drive gear, measure and record distributor shaft end play. Support drive gear in vise and drive roll pin from gear and shaft. Press drive gear from shaft and withdraw mainshaft from housing.

INSPECTION

Wash and clean all parts. Check for wear, burrs, and roughness and replace parts as necessary. Mount distributor mainshaft in "V" blocks and check shaft alignment with suitable tool. Runout should not exceed .002".

BUSHING REPLACEMENT

Removal – Using suitable tool (SE-1955-5), place distributor housing in press bed and insert knock-out bar ($\frac{1}{16}$ "x-11"). Press bushing out of housing.

Installation – Place housing in press bed and install suitable tool (SE-1955-8) into bushing. Press new bushing into housing until distance from top of housing to top of bushing is $1\frac{5}{64}$ " (on upper bushing) or until bushing is flush with bottom of housing (on lower bushing). Size new bushings using suitable burnishing tool (SE-1955-2).

REASSEMBLY

Assemble distributor in reverse order of disassembly, using new roll pins, bushings and seals.