

HONDA

Honda Civic (1973)

► CHANGES, CAUTIONS, CORRECTIONS

► **BATTERY INSTALLATION & OTHER ELECTRICAL SYSTEM REPAIR CAUTIONS** — Reversed polarity or excessive voltage will result in extensive damage to alternator system. Note the following to prevent damage.

Battery Installation — Negative battery terminal must be connected to ground (negative ground systems) and positive terminal must be connected to starter. DO NOT reverse battery leads.

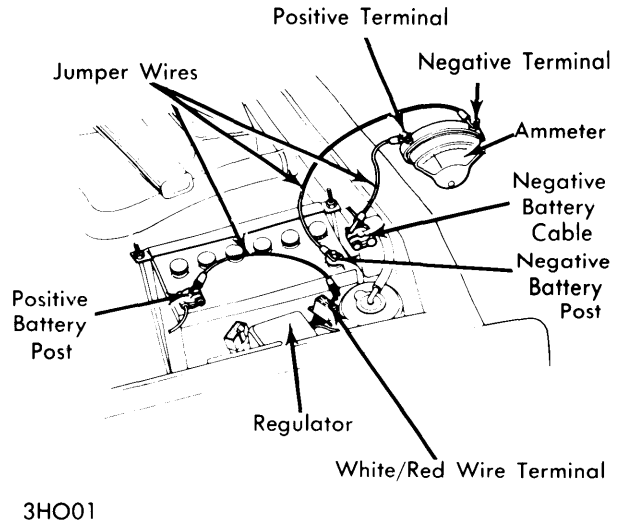
Battery Charging — If a Quick Charger is used, both battery cables must be disconnected from battery. DO NOT use a Quick Charger to provide starting voltage.

Alternator Removal — Always disconnect battery ground before replacement of alternator.

High Voltage — DO NOT use a high voltage source to test diodes.

Booster Battery (For Engine Start) — Booster battery must be connected with negative lead to negative terminal of battery and positive lead to positive battery terminal. DO NOT reverse battery leads.

4) Read ammeter and increase engine speed until ammeter reads maximum value. If value is below specifications, alternator must be repaired or replaced.



ON CAR TEST CONNECTIONS

DESCRIPTION

Honda alternators are conventional three-phase, self rectifying type alternators. Six diodes (three positive and three negative) are used to rectify current.

APPLICATION & SPECIFICATIONS

Application	Amps. (RPM)	Volts
Prior to Frame		
#1011758.....	35(2000).....	12
From Frame		
#1011759.....	40(2000).....	12

Minimum Brush Length — .2165" (5.5 mm).

TESTING

ON CAR TEST

1) Remove coolant reserve tank, start engine and allow to idle. Remove negative battery cable at battery. **NOTE** — If engine stops during test, reconnect negative cable before restarting engine.

2) Connect a jumper wire from negative cable to positive side of ammeter. Connect a second jumper from minus side of ammeter to negative battery post.

3) Attach one end of a third jumper wire to positive battery post. Disconnect voltage regulator plug and touch other end of jumper to white/red wire terminal on male side of regulator plug. **CAUTION** — Do not leave this wire connected for more than 15 seconds.

OVERHAUL

DISASSEMBLY

1) Remove alternator pulley by using an allen wrench and box wrench. Mark alternator housing and stator frame for correct reassembly. Remove three alternator case screws and remove front housing, tapping lightly with a rubber mallet if necessary.

2) Remove rear housing with stator by holding rotor shaft and tapping screw bosses with rubber mallet. Remove nuts and washers from rear housing, noting location of all spacers, washers, insulators and nuts for reassembly. Separate stator and rectifiers from housing.

3) Unsolder brush holder lead and remove holder from stator. Unsolder stator coil leads from rectifier terminals using care not to overheat diodes.

TESTING

Rotor & Stator — Check rotor and stator for open, shorted, or grounded circuits using an ohmmeter.

Diode Test — With diodes disconnected from stator, connect one ohmmeter lead to a diode and the other lead to diode plate. Note reading with ohmmeter on X1 scale. Reverse leads and again observe ohmmeter. If diode indicates either a high or low resistance in both directions, diode is defective. Repeat test on remaining diodes. If a diode is defective, entire diode plate must be replaced as diodes are not replacable individually.

HONDA (Cont.)

Brushes — Measure length of each brush. If length is shorter than specifications, brush must be replaced.

REASSEMBLY

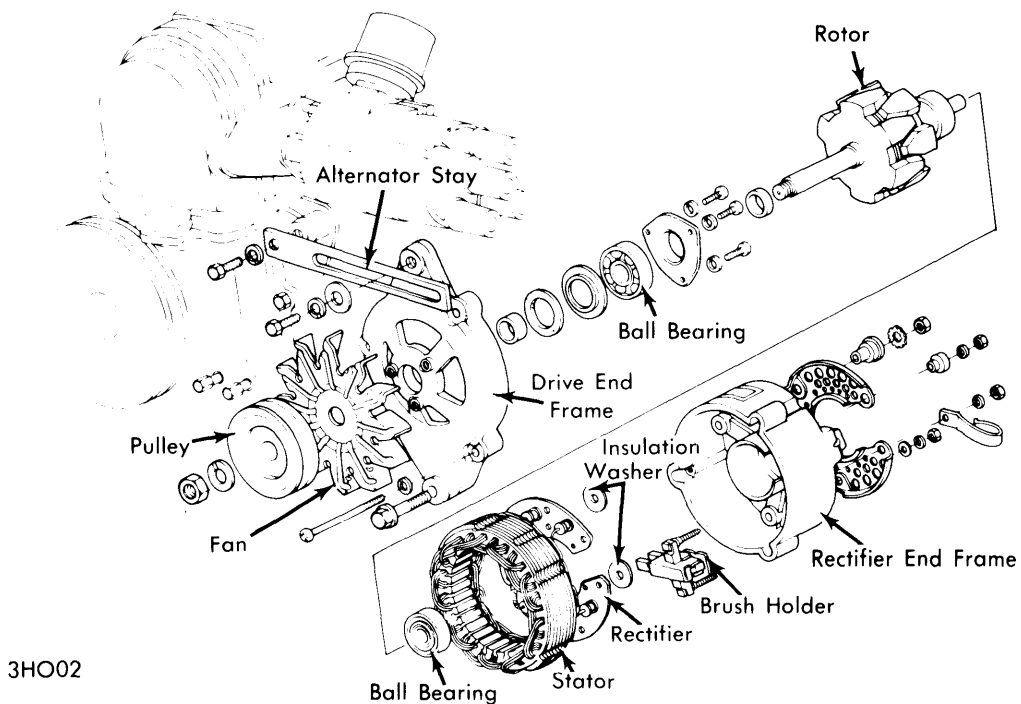
Reassemble alternator by reversing disassembly procedure, noting the following points:

1) When soldering diode terminals use care not to overheat diodes.

2) When installing rotor to rear housing, push up each of the brushes into the holder and insert a pin in brush lifting hole in rear housing. After installing rotor, pull out pin to permit brushes to seat on slip rings.

3) Tighten pulley locknut to 36-51 ft. lbs. (5-6.5 mkg) torque.

4) After assembly, rotate pulley and check that rotor is free of any interference.



HONDA ALTERNATOR