JDM B16 & OBD0 HONDA DISTRIBUTOR REPAIR

There are two things you should be checking before you begin. First, check the condition of the wiring harness. Pay close attention to the harness that comes out at the bottom of the distributor as this area tends to be in rough shape. Second, if your distributor heated up a LOT before you noticed the problem, you may not want to overhaul it as heat kills the strength of the magnets inside.
Distributor Overhaul

- **CAP SEAL**: Check for damage.

- **ROTOR RETAINING SCREW**: Replace 2 N-m (0.2 kg-m, 1.4 lb-ft).

- **CARBON POINT**: Check for cracks, wear, damage, or fouling. Clean or replace.

- **IGNITION COIL**: Test, page 23-64 Replacement, page 23-65

- **TDC/CRANK ANGLE SENSORS**: Troubleshooting, section 11

- **DISTRIBUTOR HOUSING**: Check for cracks or damage.

- **IGNITER UNIT**: Test, Section 11, Input test, page 23-63

- **HARNESS CLIPS**

- **PIN RETAINER**

- **COUPLING**

- **THRUST WASHERS**

- **O-RING**: Replace.
DISASSEMBLY

1. Disconnect the battery.
2. Unclip the air intake hosing and bend it out of the way of the distributor (for socket access).
3. Remove the spark plug wires from the distributor cap only.
4. Mark the alignment of the distributor on the cylinder head with a sharp object (for reference, timing should be readjusted).
5. Remove the three **12mm** bolts that fasten the distributor to the cylinder head.
6. Release the two electrical harness clips.
7. With the distributor in a vice, remove the 3 bolts on the distributor cap.
8. Pull off the cap, remove and DO NOT LOSE the seal - may be broken, but it can be reused with liquid gasket. Remove the leak cover (held in loosely by its clips).
9. Remove electrical connections to the igniter unit. Remove the 2 Phillips screws on the housing of the distributor that hold it in place and remove 1 screw holding the harness clip. Now you can remove the igniter.
10. Remove the four screws that hold the ignition coil in place, and place it out of the way. You'll have to move the harness some out to get to one of them.
11. Remove the ignition rotor - one retaining screw.
12. Heat the three T-15 tamper proof torx head screws that fasten the separator plate to the aluminum housing. Your best bet is to use heat gun with small focused beam of air flow. Don't overheat it! Aluminum conducts heat well.
13. After SOME cooling, remove the three torx screws.
14. Using the two (2) flat head screwdrivers, remove the C-clip on the coupling. Remove the pin (slides out).
15. Remove the O-ring (will be replaced).
16. Slide the coupling off.
17. The 3-tamper proof T-15 screws love to break off. It is ok if they break off, because you can use the vice grips to remove the studs later if necessary. Apply more heat and the studs should come out. The replacement is M4x0.7. If you wreck the screws inside the housing, just tap in an M5. No big deal!
18. After that extensive effort, remove the 2 screws that hold the magnetic sensor on the separator plate. Remove the shaft from the distributor. It slides out.
19. Remove the reluctor (star-shaped part on the top of the shaft) preferably with some puller or by gently knocking the reluctor off with a hammer. Place a piece of wood or something soft on the top of the shaft to avoid mushroom-ing it. Now the shaft is out of the separator plate.
20. Remove the three small screws that hold the bearing housing (underneath aluminum separator plate).
21. If the bearing does not just fall off, use the puller to remove the old bearing.
22. Have a machine shop press on the new bearing or if you're good at it, tap it in with a socket. The replacement bearing part for Civics (88-91 JDM Civic SiR, USDM 88 and up), USMD Accords (90 and up), and USDM Legends (88-90) is a Nachi Bearing. The part number is 6001NSL. Some of you reported that some JDM civics have a different bearing, Koyo 6001RS (replacement in Canada is 6001ZZ) which is the same as nachi in all respects but the ID which is 12mm vs. 12.4 ish mm for nachi. But you probably got Integra unit! From the reports of others, 90-93 Acura distributor bearing is Koyo # 6001Z or Lordco # 0782401.
23. While you have the distributor apart, clean the cap, and make sure the gasket in the aluminum housing is in good condition. This piece is very important, because it has a tiny spring inside it, and is hard to replace. DO NOT WRECK THIS GASKET.
ASSEMBLY

1. Re-attach the bearing housing to the aluminum separator plate, securing the shaft to the plate.
2. Ensuring that all the igniter unit wires (4) pass through the space in the separator plate, use three the (3) new screws, not torx heads, to fasten the plate to the housing. I'd use LOCTITE.
3. Re-attach the sensor to the top of the plate, these torx screws don't stick, so no need to replace them.
4. Gently tap the reluctor back into place on the shaft (only fits one way). Make sure it does not touch the sensor (little coil) when it spins.
5. Install the ignition coil, fastening the four screws that hold it in place.
6. Install the new ignition rotor on the marked side of the shaft. (some shafts are threaded right through, if it is not, it is a rebuilt unit). The new rotor is circular, different from the hammer-shaped stock rotor.
7. Install the igniter unit, fastening the two screws on the outside of the aluminum housing. Also re-attach the four electrical connections, and slide the plastic covers over them.
8. Install the leak cover.
9. Install the coupling on the shaft according to the markings. Slide the pin in, and re-install the metal C-clip.
10. Install the new O-ring.
11. Either (a) re-install the old cap seal, and use some liquid gasket, or (b) fill the gap with liquid gasket.
12. Ensuring all seals are in place, and the shaft spins freely, install the distributor cap, tightening the three (3) bolts.
13. Apply a small amount of liquid gasket to the aluminum housing surface around the coupling.
14. Slide the coupling into the groove on the intake camshaft - if it doesn't fit in, the coupling is on backwards.
15. Loosely install the three (3) 12mm bolts which fasten the distributor to the cylinder head - only so the distributor can be adjusted for timing purposes.
16. Re-attach the two (2) electrical harnesses.
17. Re-attach the spark plugs. Cylinder one is the driver's side on the cylinder head.

18. With the distributor aligned closely to the marking made previously, start the car, and adjust the timing by tapping the distributor gently forward (advance) or backward (retard). When it idles nicely at about 750 rpm (it must warm for a while), tighten the 12mm bolts. If there is a backfire, the plug wires are installed in the wrong order. Shut down the engine immediately.

19. Re-connect the battery.

20. Re-attach the intake tube.