



Installing the 3DUC4U1 Electronic Ignition Conversion Kit in Ducellier 4-Cylinder Distributors



**HSDUC4 4-Cylinder Distributor
with 3DUC4U1 Electronic Ignition:
Replacement Ducellier-type Distributor**

(for 12-volt, negative ground electrical systems only)

Uses these standard Ducellier replacement parts:

- Rotor: Ducellier 5937.05
- Distributor Cap: Ducellier 5941.31, 5941.15

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Rotate the engine until the rotor is pointing at No. 1 Cylinder's spark plug wire. Remove each spark plug wire from the old distributor cap, one-at-a-time, and insert it into the new distributor cap in the same location and order (cylinders 1-3-4-2, clockwise).

Remove the old distributor and remove its clamp. Coat the new distributor's shaft and O-Ring with motor oil before sliding it into its hole. Look down into the engine's distributor hole to see how the distributor drive slot is oriented and turn the distributor shaft to match it. You might need to tap the distributor's rim gently to get the O-Ring started into the hole. Work the shaft down all the way, turning the rotor gently, as needed, until the distributor shaft gear settles into its slot and the rotor will no longer turn.

Turn the distributor body until the rotor points to the spark plug wire of No.1 Cylinder. Place the cap on the new distributor. Tighten the distributor clamp enough so that the distributor can't turn on its own, but you can still turn it by hand.

Timing the 3DUC4U1 Ignition Kit:

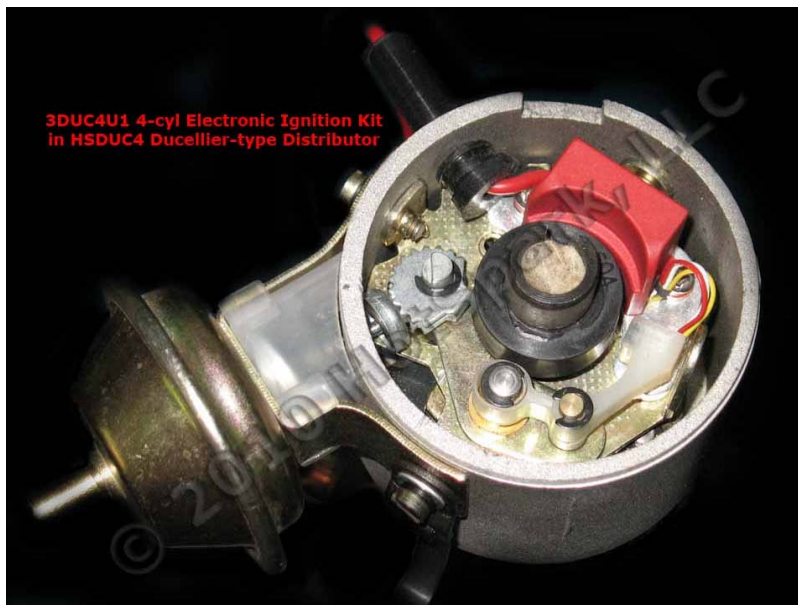
Use a stroboscopic timing light. Timing should be set initially at about 30° BTDC at 3,500+ RPM, vacuum hose disconnected and plugged. The distributor shaft rotates clockwise. The ignition timing should be checked with the engine running, using a stroboscopic timing light, ensuring optimum engine performance and economy. Paint a small line of white paint on both the reference pointer and the appropriate mark on the timing scale to make them more easily seen. With the engine running at the specified speed, the appropriate timing mark should be in line with the reference pointer. Rotate the distributor body counter-clockwise to advance the timing, or clockwise to retard it.

This distributor requires a 12-volt, negative ground electrical system.

Coil: A coil with 3 Ohms or more primary resistance should be used. Stock 3+ Ohm points coil or [HS34HEC](#) high-energy coil required.

To measure primary resistance: Label and remove all wires to coil (+ or -). Using a common digital multimeter in the 200 O mode, cross the red and black leads of the Ohmmeter. Allow 10 seconds or more for the reading to settle and write down the reading. Still in the 200 Ohm mode, measure between coil's + and - terminals. Allow a few seconds for the reading to settle, until it stabilizes. Subtract the previous reading, taken with the leads crossed, to compensate for multimeter's inherent resistance. Do not use a low-resistance coil, such as the MSD or Accel coil; they don't have enough primary resistance for this application.

Test the charging system's maximum voltage: If the charging system voltage, measured at the coil's positive terminal, is more than 14.2 volts at 2,500+ RPM, the voltage regulator likely needs replacing. Too much voltage can damage the ignition module and other electronic components.



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