⚡ ECCPP Ignition Coils Installation Guide

⚠️ 1. Safety Precautions

- Perform all repair operations only after the engine has fully cooled down to avoid high-temperature burns.
- **Disconnect the battery negative terminal** before removing any ignition system parts to prevent electric shock, accidental engine start, and ignition failure.
- Wear safety gloves and protective goggles throughout the entire process.
- Do not touch ignition coils or wiring harnesses while the engine is running or the ignition is turned ON.
- Keep the spark plug tube clean – free of dirt, debris, or foreign particles to avoid contaminants entering the combustion chamber.

🔍 2. Pre-Installation Inspection

Confirm that the new ECCPP single ignition coil matches OEM specifications, including: **pin layout, mounting hole position, coil resistance, and boot size**.

Check the coil housing and rubber boot for cracks, damage, or defects.

Prepare necessary tools: socket set, 10mm socket, ratchet, extension bar, torque wrench, and dielectric grease (optional).

📌 Figure 1: Parts & Tools Inspection

Verify that the ECCPP ignition coil is complete with all accessories and free from surface damage; confirm compatibility with your vehicle model.

🔧 3. Old Ignition Coil Removal Procedure

1. **1.** Completely disconnect the vehicle battery negative cable.
2. **2.** Locate the faulty ignition coil mounted on the valve cover or cylinder head above the target cylinder.
3. **3.** Press the locking tab and gently pull off the electrical connector – avoid breaking the plastic lock.
4. **4.** Remove the **single mounting bolt (standard 10mm size)** that secures the ignition coil.
5. **5.** Pull the ignition coil straight upward out of the spark plug tube – **do not twist or squeeze the rubber boot violently**.
6. **6.** Inspect the coil boot for carbon tracking, oil contamination, or aging cracks for failure analysis reference.

📌 Figure 2: Ignition Coil Removal

Vertically lift the coil assembly out of the spark plug well; avoid prying sideways to prevent boot damage.

⚙️ 4. New ECCPP Ignition Coil Installation Procedure

1. **1.** Align the new ignition coil with the spark plug insulator and push it straight down into the spark plug tube until the boot fully seats on the spark plug.
2. **2.** Hand-tighten the mounting bolt to avoid cross-threading, then torque it to **8–12 N·m (7–10 ft-lbs)** using a torque wrench.
3. **3.** Reconnect the electrical connector until a distinct **"click"** is heard, confirming full locking.
4. **4.** If multiple coils are faulty, repeat the above steps for each cylinder separately.

📌 Figure 3: Ignition Coil Installation & Torque

Use a torque wrench to tighten the fixing bolt to the specified value, preventing loose coils or thread damage.

> 💡 **Important Note:** All new ECCPP coils are fully pre-processed before shipment. The inner rubber boot is pre-coated with insulation protection – no extra grease application or on-site adjustment is needed.

✅ 5. Post-Installation Inspection & Verification

1. Double-check that the coil connector is fully locked and the mounting bolt is properly torqued without looseness.
2. Clear the engine bay and confirm no tools or waste are left inside.
3. Reconnect the battery negative cable.
4. Start the engine and let it idle for **3–5 minutes**.
5. Observe engine running status: no rough idle, single-cylinder misfire, arcing, or abnormal ticking noise.
6. Carry out a short road test to check smooth acceleration and stable power output.

🛠️ 6. Troubleshooting Common Issues

Symptom	Possible Cause	Solution
Rough idle & noticeable cylinder vibration	Loose ignition coil or incomplete connector lock	Re-seat the coil and re-lock the electrical plug
Misfire during acceleration	Defective coil or poor contact between boot and spark plug	Replace the coil; reinsert tightly to ensure full boot contact
Continuous clicking / arcing sound near the coil	Insufficient insulation between boot and spark plug	Reinstall the coil to ensure full sealing contact
Hard starting or intermittent no-start	Disconnected coil wiring or loose mounting bolt	Recheck and retighten all connections and fasteners
Oil leakage inside spark plug tube after	Damaged valve cover gasket	Replace the valve cover gasket and clean the tube

Symptom	Possible Cause	Solution
installation		thoroughly

📌 7. Important Installation Notes

- All new ECCPP ignition coils are fully pre-processed before shipment. The inner rubber boot is pre-coated with insulation protection – **no extra grease or adjustment is needed**.
- Do not reuse aged, cracked, or deformed coil boots.
- Replace faulty ignition coils promptly to avoid uneven engine combustion.
- Never over-tighten the mounting bolt to prevent thread stripping on aluminum valve covers.
- Keep spark plug tubes clean at all times to eliminate misfire faults.
- After installation, clear all stored cylinder misfire trouble codes to restore normal vehicle operation.

📢 Final Reminder

This ECCPP ignition coil is fully pre-processed for direct installation. Strictly follow the torque standards and installation sequence to avoid ignition system failure and component damage.