2007-2017 Lexus LS - Spark Plug Replacement

2007-2017 Lexus LS | Advanced | 2-3 hours | $131 DIY

TOOLS

10mm socket and ratchet 5/8-inch spark plug socket with rubber insert Long socket extensions Feeler gauge Torque wrench (optional) Magnetic pick-up tool Safety glasses Shop towels

PARTS

8x iridium spark plugs (OEM-spec heat range) $123.00
8x ignition coils (replace if worn) $465.00
Dielectric grease $8.00
Anti-seize compound (optional) $5.00

STEPS

1. **Cool the engine and disconnect the battery - Park on level ground, set the parking brake,** and let the engine cool fully before touching anything. Pop the hood and disconnect the negative battery terminal with a 10mm wrench, setting the cable where it can't touch the post.
2. **Remove the engine cover and document the layout - Remove the plastic engine cover by** pulling it straight up off its rubber grommets. Take a photo of the coil and intake layout so you can route everything back exactly as it came.
3. **Unplug the ignition coil connectors - Working one bank at a time, press the locking tab** on each coil connector and unplug it. Move the harness aside gently without yanking the wires.
4. **Remove the coil hold-down bolts and pull the coils - Remove the 10mm bolt from each coil,** then twist the boot slightly to break it free from the plug. Pull each coil straight up - resistance is normal, since the rubber boot seals against the plug well.
5. **Remove the old spark plugs - Fit a 5/8-inch plug socket with an extension into each well;** loosen each plug and lift it out with the rubber insert or a pick-up tool. Inspect for oil fouling or worn electrodes - that confirms the replacement was due.
6. **Verify the new plugs and gap - Compare each new iridium plug to the old one to confirm** reach and heat range match. Check the factory gap with a feeler gauge - iridium plugs come pre-gapped, so adjust only if one is clearly out of spec.
7. **Install the new spark plugs - Thread each new plug in by hand on just the extension to** avoid cross-threading the aluminum heads. Once finger-tight, snug to firm hand-tight plus a quarter turn - don't over-torque. Every plug should seat smoothly at the same depth.
8. **Reinstall the ignition coils - Apply dielectric grease inside each coil boot and press** each coil firmly onto its plug until it seats. Reinstall the 10mm hold-down bolts, snug evenly. Replace any coil with cracks or carbon tracking - a weak coil misfires under load.
9. **Reconnect everything and refit the cover - Reconnect every coil connector until the** locking tab clicks. Reinstall the engine cover, pressing until each grommet seats. Reconnect the negative battery terminal and tighten the clamp.
10. **Start, idle-check, and test drive - Start the engine and idle a few minutes, listening** for a smooth idle with no stumble. Take a short test drive with light acceleration, then confirm no check-engine light and that the engine pulls cleanly through the rev range.

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