# Spark Plug Replacement

This playbook provides a detailed series of steps for locating, inspecting, and replacing spark plugs in a vehicle to ensure optimal engine performance and efficiency.

### Step 1: Safety First

Ensure the engine is completely cool before beginning to prevent burns. Disconnect the vehicle's battery to avoid any electrical hazards.

### Step 2: Locate Plugs

Consult the vehicle's manual to find the exact location of the spark plugs, which are typically attached to thick rubbery wires.

### Step 3: Remove Wires

Carefully remove the spark plug wires or ignition coil by pulling on the boot, not the wire, to avoid damage.

### Step 4: Inspect Plugs

Use a spark plug socket and ratchet to remove the spark plugs. Inspect the old spark plugs for signs of wear or damage.

### Step 5: Adjust New Plugs

Check and adjust the gap on the new spark plugs using a gap gauge tool to ensure they meet the manufacturer's specifications.

### Step 6: Install New Plugs

Thread the new spark plugs by hand to avoid cross-threading, then tighten them with the spark plug socket and ratchet to the manufacturer's recommended torque.

### Step 7: Reconnect Wires

Reattach the spark plug wires or ignition coils, ensuring a firm connection without over-tightening.

### Step 8: Test Engine

Reconnect the battery and start the engine to ensure it runs smoothly and to check for proper installation of the spark plugs.

## General Notes

### Check Specifications

Always refer to the vehicle's service manual for the correct type of spark plugs, gap settings, and torque specifications specific to the make and model.

### Use Proper Tools

Ensure that you have all necessary tools on hand, including a spark plug socket, ratchet, and gap gauge, before starting work.