# Performance Brake Upgrade

This guide provides a detailed procedure for upgrading a vehicle's braking system, including the installation of new brake pads, rotors, and calipers for enhanced performance.

### Step 1: Safety Precautions

Ensure the vehicle is parked on a level surface, the parking brake is engaged, and wheel chocks are placed behind the wheels for safety. Wear safety glasses and gloves.

### Step 2: Wheel Removal

Loosen the lug nuts, lift the vehicle using a jack, support it with jack stands, and then fully remove the wheels.

### Step 3: Caliper Detachment

Remove the caliper bolts, slide the caliper off the brake disc, and suspend it with a piece of wire to avoid strain on the brake hose.

### Step 4: Old Pads Removal

Take out the old brake pads from the caliper bracket and dispose of them properly.

### Step 5: Rotor Replacement

Remove the rotor retaining screws, if present, take off the old rotor, clean the hub surface, and install the new performance rotor.

### Step 6: Caliper Prep

Compress the caliper pistons using a caliper compression tool, make sure they are retracted, and clean the caliper bracket.

### Step 7: New Pads Installation

Install the new performance brake pads into the caliper bracket, ensuring they are correctly seated and the clips are secure.

### Step 8: Caliper Installation

Reposition the caliper over the new rotor and brake pads, and then secure it using the caliper bolts to the manufacturers' recommended torque specification.

### Step 9: Brake Lines and Bleeding

If brake lines were detached or new calipers were installed, bleed the brake system to remove any air that may have entered the lines.

### Step 10: Wheel Refit

Mount the wheel back onto the hub, tighten the lug nuts in a star pattern, lower the vehicle from the jack stands, and then torque the lug nuts to the correct specification when the vehicle is on the ground.

### Step 11: Brake Bed-In

Follow the bed-in procedure recommended by the brake component manufacturer to properly mate the brake pads and rotors for optimal performance.

## General Notes

### Component Compatibility

Verify that the performance brake pads, rotors, and calipers are compatible with your vehicle model and year before purchase and installation.

### Torque Specs

Always use a torque wrench and follow the manufacturer's torque specifications for all bolts and nuts to ensure proper tightness without over-tightening.

### Test Drive

After the installation is complete, conduct a careful test drive to ensure that the brake system is operating correctly and there are no unusual noises or vibrations.