# Emission System Modification

This playbook provides a step-by-step guide on modifying a vehicle's emission system to improve performance without violating environmental regulations. It ensures that best practices are followed for legal compliance and optimal vehicle output.

### Step 1: Research

Investigate federal, state, and local environmental regulations regarding emission system modifications. Ensure you understand the legal requirements before making any changes to the vehicle.

### Step 2: Plan Modification

Design a modification plan that will enhance performance while remaining compliant with emission standards. Consider consulting with a professional or referencing certified parts that meet regulatory standards.

### Step 3: Source Parts

Acquire performance parts that are certified for compliance with emission standards. This should include a thorough vetting of part suppliers and manufacturers for credibility and legality.

### Step 4: Professional Installation

Have the modifications installed by a certified mechanic or a technician specialized in emission systems to ensure proper fit, function, and compliance with all regulations.

### Step 5: Testing

After installation, test the vehicle to ensure that it meets performance expectations and does not exceed regulated emission levels. This may involve on-road testing and measurements with diagnostic tools.

### Step 6: Certification

Obtain certification from an authorized entity if required by law, confirming that the modified emission system is within legal limits and the vehicle is compliant with all applicable regulations.

### Step 7: Documentation

Keep all records of the modifications made, parts purchased, installation process, and certification of compliance. This documentation will be crucial for any future inspections or sale of the vehicle.

## General Notes

### Warranty Implications

Be aware that modifications to the emission system may void the vehicle's warranty. It is important to consider the impact on the vehicle's warranty and possible future support when planning modifications.

### Insurance Impact

Notify your insurance company of any significant modifications to your vehicle, as these may affect your coverage or premium.

### Resale Value

Consider that modifications, even if legal, may affect the resale value of the vehicle. Modifications could limit the number of potential buyers or change the vehicle's market value.