<u>Table Of Contents</u> Dedication and Foreword Preface, Acknowledgments, and Author's Bio Introduction

Chapter 1: The History of The Gen III LS1 V-8

Small Blocks: Gen I/II/III Thumbs-Up for the Gen III The Gen III LS1 V-8 Begins Building an Engine From Scratch The LS6 Story The LQ9 The Future

Chapter 2: The Gen III LS1 V-8 Engine Basics

Gen III LS1 V-8 Usages The Details to Make Horsepower **Engine Block** Cylinder Heads Crankshaft **Connecting Rods** Pistons Valvetrain **Oiling System** Intake Tract Electronic Fuel Injection Ignition Exhaust Front Accessory Drive The LQ4 and LQ9 6.0-Liter Gen IIIs Building a High-Performance 6.0-Liter Gen III V-8 **Quality Built Engines**



Vehicle and Gen III V-8 Factory Combos

Chapter 3: Production Parts for Performance

Engine Blocks Cranks Rods Pistons Valves Valvesprings Camshafts Cylinder Heads Fasteners Intake Manifold Coils Oil Pans Throttle Body Mass Airflow (MAF) Sensors

Chapter 4: Tips and Tricks to Remove and Reinstall the Gen III V-8 Removing a Gen III V-8 from an F-Car Removing a Gen III V-8 from a Corvette Removing a Gen III from a Full-Size Truck or SUV Running a Gen III V-8 in a Pre-Gen III V-8 Vehicle

Chapter 5: Bolt-On Power

Where Does Bolt-On Power Come From? Noise Canceling Hot Rod Development Airboxes Intake Manifold Performance Camshaft and Valvetrain Components Supercharger

Nitrous

Chapter 6: 100 Horsepower Anybody Can Install

SLP Power More Air A Lift Special Tools Tips for Success Why CNC Porting? Vehicles That Respond Dyno Results

Chapter 7: 500+ Horsepower NA Street-Racer Buildup

Power Parts External Pump Oiling System Simple Performance Controlling it All Every Last Detail **Block Prep Ring Fitting Bearing Clearance** Hanging the Pistons on the Rods Installing Rings on Pistons Installing the Crank in the Block Installing a Camshaft Installing the Connecting Rods/Pistons Piston Talk Oiling System and Water Pump **Building Cylinder Heads**

Installing and Torquing the Cylinder Heads Dyno Results

Chapter 8: Gen III Vortec Truck Engine Buildups

Simple Supercharger Install LS6 Parts for Power Turbo

Chapter 9: 1,200-Horsepower, 387-Cubic-Inch C5R Power

The Builders The Engine How to Build 1,200-Horsepower Engines Prepping a Race Block Cleaning Parts for Final Install Piston and Rod Assembly Installing the Cam Degreeing the Cam Building the Heads Finishing it Off So How Did It Do?

Chapter 10: How to Control That Gen III V-8

Slewing EFI Computer Contents Fuel Injectors Mass Air, Speed-Density, and Alpha-N Sequential, Bank Fire, and Batch Fire Tuning the Gen III V-8 EFI Aftermarket Controllers