Chapter 1: Engine Identification Casting Numbers Serial Numbers **Head Casting Numbers** Visual Differences **Engine Condition** Is It a Rebuild Candidate? Organization Is Key **Chapter 2: Tools and Engine Cleaning Tools List General Cleaning Procedures Chapter 3: The Head and Associated Parts** Lifters **Pushrods** Rocker Assembly **Head Machining Prep Chapter 4: Engine and Sheet Metal Parts Preparation Bellhousing Disassembly** Oil Pan Valve Cover Side Cover

Chapter 5: Engine Teardown

Table Of Contents Dedication

Acknowledgments

Introduction

Preface

Harmonic Balancer and Oil Pump Removal

Dipstick Tube

Timing Gear Cover

Camshaft

Crankshaft and Pistons

Water Jacket

Chapter 6: Choosing a Machine Shop

Preparing for Machine Shop Work

Standard Shop Procedures

Chapter 7: While the Engine Is at the Shop

Chapter 8: Distributor

Distributor Rebuild

Vacuum Advance

Ignition System

Reluctor

Wiring and Details

High-Energy Ignition System

Chapter 9: Carburetor

New-Style Carb to Old-Style Filter

Rochester B Carb Disassembly

Rochester B Carb Reassembly

Fuel Delivery System

Chapter 10: Miscellaneous Important Details

Intake/Exhaust Manifold Assembly

Engine Sheet Metal Prep and Painting

Flywheel Tips

Starter Engagement

Clutch Choices Water Pump Adapter Positive Crankcase Ventilation System Spin-On Oil Filter Adapter **High-Energy Ignition** Thermostat and Housing **Chapter 11: Post–Engine Shop Preparation** Building an Inline-6 Engine Stand Adapter Cleaning and Prepping for Paint Final Machining Prior to Assembly **Chapter 12: Engine Assembly** Crankshaft Timing Plate Camshaft Oil Seal Timing Cover and Harmonic Balancer Oil Pump and Pickup Pistons and Piston Rods Rings **Pistons** Oil Pan Head Intake and Exhaust Assembly Water Pump Carburetor Miscellaneous Attention to Detail Fuel Pump **Valves**

Hard Lines

Spark Plugs and Plug Wires

Water and Oil 1
Engine Break-In

Appendix

Resources