### **Table Of Contents**

### Acknowledgments

### **About the Author**

### Introduction

### **Chapter 1: Suspension Basics and Drag Racing Dynamics**

For Every Action There is a Reaction Shock Absorbers

## **Chapter 2: Rear Suspension: Leaf Springs**

Pinion Angle

Preload and Spring Wrap

Rise or Squat

The Neutral Line

Ladder Bars

**Subframe Connectors** 

**Calvert Leaves** 

### **Chapter 3: Rear Suspension: Coil Springs and Three-Link**

The Neutral Line

Preload

Pinion Angle

Bushings

Lower Control Arms

Scale Procedure

## **Chapter 4: Rear Suspension: Coil Springs and Four-Link**

Basic Design

**Bushing Replacement** 

Control Arm Upgrades

No-Hop Bars

**Track Locators** 

Control Arm Adjustments

**Setting Preload** 

Adjusting Preload

### **Chapter 5: Front Suspension: Straight Axles**

The Basics

Gasser Era

Steering Styles

**Bump Steer** 

Front Tires

# **Chapter 6: Front Suspension: Double A-Arm**

Alignment

Sway bars

Sway Bars versus Anti-Roll Bars

Shocks

**Spring Selection** 

# **Chapter 7: Front Suspension: Single A-Arm**

Alignment

**Sway Bars** 

Aftermarket Struts

Bracing

Coil-Overs, Struts, Springs, K-Members

## **Chapter 8: Front Suspension: Torsion Bars**

Basic Design

Performance Upgrades

**Drag Tuning** 

**Shock Absorbers** 

Weight Loss

**Subframe Connectors** 

Bars and Cages

**Bushings** 

**Tubular Arms** 

### **Chapter 9: Tires**

Offset Axle Housings

**Rubber Compounds** 

Wheel Screws

Tire Care

Mounting Advice

Street Tire Comparison

Drag Radial Advice

Tire Storage

Pressure and Wear

Sample Applications

# **Chapter 10: Fine-Tuning Suspension for Maximum Traction**

Shooting Video

Having the Right Torque Converter

Adjusting Pinion Angle
Adjusting Chassis Preload with Rear Coil Springs
Adjusting Chassis Preload with Rear Leaf Springs
Adjusting Rear Rise or Squat
Adjusting Anti-Roll Bars
Adjusting Front and Rear Tire Pressure and Diameter
Scaling a Car

# **Chapter 11: Making a Pass**

The Burnout

**Street Tires** 

Reaction Time

Mechanical Snafus

The First 60 Feet

Starting-Line Ratio

Dissecting The Run

Comparing Runs

# **Chapter 12: Suggestions for a More Consistent and Winning Car**

**Tall Tires** 

**Power Saving** 

Shifter Style

Transmission Brake

Weather Stations

2-Speed vs. 3-Speed

Data Records

Ignition System and RPM Limiters

### **Source Guide**