

[Table Of Contents](#)

About the Author

Acknowledgments

Chapter 1: Jeep Wrangler YJ

Jeep Wrangler YJ History

Suspension and Axles

Trim Levels

YJ Purchasing Considerations

Chapter 2: Tires and Wheels

Stock Replacement Tires

Off-Road Tires

Tire Size, Diameters, and Ground Clearance

Tire Cutting, Slashing, and Ply Ratings

Wheels

Wheel Size

Wheel and Tire Balancing

Tire Rotation

Choosing the Right Tires and Wheels

Wheel Spacers and Adapters

Wheel and Tire Care and Maintenance

Chapter 3: Lifts, Suspension, and Steering

Lifting a Jeep Wrangler YJ

Coil Springs Versus Leaf Springs

Articulation

Suspension Control

Control Arm Mounting Brackets

Spring and Control Arm Joints

Track Bars

Shock Absorbers

Types of Shocks

Hydraulic Bump Stops

Steering System

Steering Knuckles, Unit Bearings, and Ball Joints

Steering Hydraulics

Suspension and Steering Alignment

Chapter 4: Brake Upgrades

Brake System Basics

The Need for More Braking Performance

Brake Rotors

Brake Calipers

Disc Brake Conversion Kits for Rear Drum Brakes

Brake Master Cylinders and Power Brake Boosters

Brake Drums and Shoes

Brake Pads

Brake Flex Lines

Brake Fluid

Chapter 5: Bumpers, Armor, and Protection

Skid Plates

Aftermarket Skid Plate Armor

Skid Plate Protection

Rock Sliders

Body Armor

Half Doors and Tube Trail Doors

Fenders

Front Bumpers

Rear Bumpers

Roll Cage

Chapter 6: Transmissions, Drivelines, Axles, Housings, Driveshafts, and Lockers

Stock Jeep Wrangler YJ Axle Assemblies

Axle Gearing

Stock Wrangler YJ Transmissions

Stock Wrangler YJ Transfer Cases

Slip Yoke Eliminator

Gear Ratios and Crawl Ratios

Axle Swaps

Ring and Pinion Gear Upgrades

Central Axle Disconnect Front Axle

Axle Upgrades

Front Axle Shafts

Rear Axle Shafts

Splines

Axle Housing Reinforcements

Aftermarket Complete Axle Assemblies

Axle Lockers

U-joints, Yokes, and CV Joints

Pinion Angle

Ring and Pinion Break-in Procedure

Chapter 7: Styling and Storage Upgrades

Aftermarket Tops

Sun Shades

Tube Doors

Seat Upgrades

Steering Wheel

Mirrors

Fluid Storage

Metal Storage Boxes

Interior Storage

Roof Racks

Chapter 8: Electrical Upgrades and Lights

Battery Upgrades

Dual Battery Systems

Alternators

Auxiliary Lighting

Chapter 9: Engine Upgrades and Cooling System

Cold Air Intakes

Exhaust Systems

Ignition Upgrades

Heavy-Duty Clutch Kits

Forced Induction

Cooling System

Chapter 10: Popular Engine Swaps

Engine Weights

GM LS

Small-Block Ford

Cummins 2.8 Turbodiesel Crate Engine

Chapter 11: Winches, Vehicle Recovery Gear, and Trail Tools

Winches

Steel Versus Synthetic Winch Line

Winch Controllers

Roller Fairlead Versus Hawse Fairlead

Winch Accessories

Hi-Lift Jack

Straps

D-Ring Shackles

Ground Anchor for Winching

Extraction Boards, Sand Ladders, and Bridging Ladders

Trail Tools and Spare Parts

Tire Repair Kit

Simple Tools and Spare Parts

Chapter 12: All J Products/Jeep 4x4 School Street-Legal YJ Rock Crawler

Source Guide