

Dodge M37, M42, M43, B1

Dodge M37 Restoration Guide

Covers All 1951-1968 Military M37, M42, M43, & B1 Models

INTRODUCTION

This guide provides comprehensive instructions for the buying, restoration, repair, and operation of Dodge M37, M42, M43, and B1 military pickup trucks produced between 1951 and 1968. It serves as a practical resource for enthusiasts and owners, offering detailed insights into various aspects of vehicle care and refurbishment.

GETTING STARTED WITH RESTORATION

Before commencing any restoration work, a thorough assessment of the vehicle's condition is crucial. This section outlines initial steps for evaluating your M37, M42, M43, or B1 model, including identifying areas requiring attention and planning your restoration project.

- **Vehicle Acquisition:** Guidance on what to look for when purchasing an M37 series truck.
- **Initial Inspection:** Steps for a comprehensive visual and mechanical inspection.
- **Project Planning:** Developing a restoration strategy and timeline.

MECHANICS AND ENGINE SYSTEMS

This section details the mechanical aspects of the M37 series trucks, focusing on engine, transmission, and drivetrain components. It provides practical tips for disassembly, inspection, repair, and reassembly.

- **Engine Overhaul:** Procedures for rebuilding the engine, including cylinder head, block, and rotating assembly.
- **Transmission and Transfer Case:** Maintenance and repair of manual transmissions and two-speed transfer cases.
- **Axles and Suspension:** Servicing front and rear axles, leaf springs, and shock absorbers.
- **Brake System:** Inspection, repair, and bleeding procedures for hydraulic drum brakes.

BODYWORK AND PAINTING

Restoring the exterior of your M37 involves addressing rust, repairing body panels, and applying a durable finish. This section covers techniques for achieving a high-quality body restoration.

- **Rust Repair:** Methods for identifying, treating, and preventing corrosion.
- **Panel Fabrication and Replacement:** Techniques for repairing or replacing damaged body panels.
- **Surface Preparation:** Steps for sanding, priming, and preparing surfaces for paint.
- **Painting:** Application methods for military-spec paint finishes.

ELECTRICAL SYSTEMS

Understanding and maintaining the electrical system is vital for the reliable operation of your M37. This section provides guidance on wiring, components, and common electrical issues.

- **Wiring Diagrams:** Interpretation and use of original wiring schematics.
- **Component Testing:** Procedures for checking generators, regulators, starters, and lighting.
- **Battery Maintenance:** Best practices for battery care and charging.

OPERATING YOUR RESTORED M37

Once restoration is complete, proper operation ensures longevity and performance. This section covers essential procedures for starting, driving, and shutting down your M37 series truck.

- **Pre-Operation Checks:** Daily and weekly checks before driving.
- **Starting Procedures:** Correct sequence for engine ignition.
- **Driving Techniques:** Tips for safe and effective operation in various conditions.
- **Shut-down Procedures:** Proper steps for parking and securing the vehicle.

PREVENTIVE MAINTENANCE GUIDE

Regular preventive maintenance is key to keeping your M37 running smoothly and preventing major issues. This guide includes a comprehensive 13-page section dedicated to routine service tasks.

- **Fluid Checks and Changes:** Engine oil, transmission fluid, differential fluid, coolant, and brake fluid.
- **Lubrication Schedule:** Greasing points and recommended lubricants.
- **Filter Replacement:** Air, fuel, and oil filter service intervals.
- **Tire Care:** Inflation, rotation, and inspection.

PARTS IDENTIFICATION AND SOURCING

Locating correct and often hard-to-find parts is a critical aspect of M37 restoration. This guide includes a completely illustrated 40-page parts catalog to assist in identifying necessary components.

- **Using the Parts Catalog:** How to navigate and interpret the detailed illustrations.
- **Part Numbers:** Cross-referencing and identifying original part numbers.
- **Sourcing Strategies:** Tips for finding new old stock (NOS), reproduction, and used parts.

TROUBLESHOOTING COMMON ISSUES

This section provides a systematic approach to diagnosing and resolving common operational and mechanical problems that may arise with your Dodge M37 series truck.

- **Engine Starting Problems:** Diagnosis for no-start, hard-start, or rough-running conditions.

- **Brake System Malfunctions:** Addressing issues like spongy pedal, pulling, or poor braking performance.
- **Electrical Faults:** Troubleshooting non-functional lights, gauges, or accessories.
- **Drivetrain Noises:** Identifying and resolving unusual sounds from the transmission, transfer case, or axles.

SPECIFICATIONS

The guide includes detailed specifications for the Dodge M37, M42, M43, and B1 models, covering key dimensions, engine characteristics, and other technical data essential for restoration and maintenance.

- **Vehicle Dimensions:** Length, width, height, and wheelbase.
- **Engine Data:** Type, displacement, horsepower, and torque.
- **Weight Capacities:** Gross vehicle weight rating (GVWR) and payload capacity.
- **Fluid Capacities:** Recommended volumes for engine oil, coolant, and other fluids.