

Case 3394, 3594

Case 3394 and 3594 Tractor Service Manual

Comprehensive Service and Repair Instructions

INTRODUCTION

This service manual provides detailed technical information and procedures for the maintenance, repair, and overhaul of Case 3394 and 3594 series tractors. It is designed for qualified service technicians and individuals with a thorough understanding of tractor systems. The manual includes comprehensive instructions, diagrams, and specifications to ensure proper servicing and optimal performance of your equipment.

GENERAL INFORMATION

This section provides an overview of the manual's structure and general specifications pertinent to the Case 3394 and 3594 tractors. It covers general specifications, lubrication requirements, and an introduction to the various systems.

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Figure 1: Overview of Manual Sections. This image displays a page from the service manual showing the main sections and their corresponding page numbers, including General Specifications, Lubrication, Engine Systems, Fuel Systems, and Electrical Systems.

ENGINE SYSTEMS

This section details the engine components, including the 504BDT engine specifications, troubleshooting procedures, engine tune-up, cylinder head, valve train, camshaft, cylinder block, sleeves, pistons, rods, crankshaft, main bearings, flywheel, oil seals, lubrication system (oil pump, oil pan, heat exchanger), cooling system, turbocharger (T04B), and air induction system. Procedures for reconditioning the engine cylinder block are also included.

FUEL SYSTEM

Instructions for servicing the fuel system, including fuel system and filters, Robert Bosch fuel injection pumps, and American Bosch fuel injectors, are provided here. Proper maintenance of these components is crucial for engine performance.

ELECTRICAL SYSTEM

This section covers electrical system troubleshooting, instrument cluster troubleshooting, tractor electrical wiring diagrams, power shift electrical wiring diagrams, cab electrical wiring diagrams, starting motors, battery servicing and testing, Delco-Remy alternator system, and neutral start switch adjustment. Procedures for using booster batteries are also included.

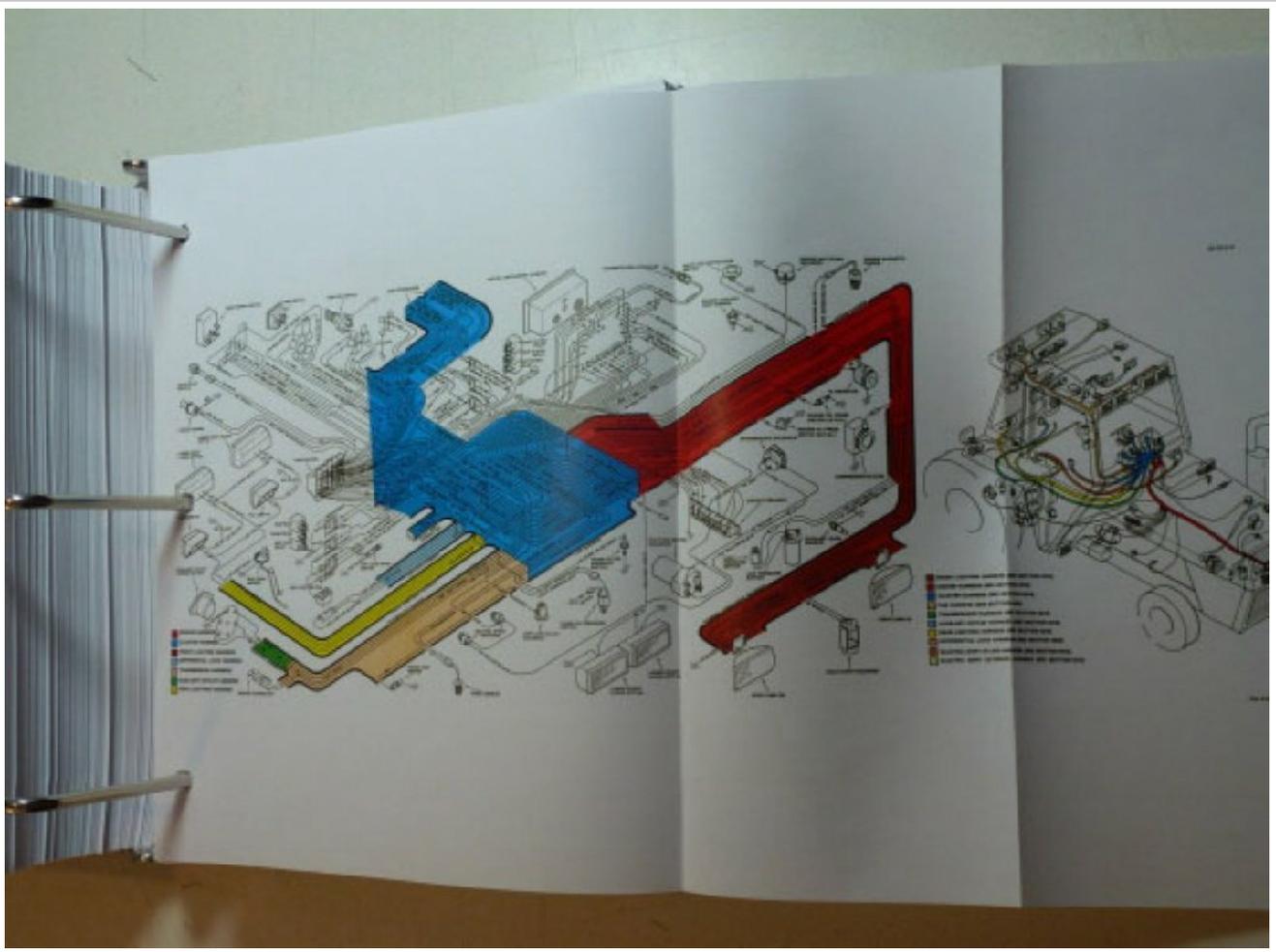


Figure 2: System Diagram. This image shows a detailed foldout diagram, likely illustrating the complex routing of electrical wiring or hydraulic lines within the tractor, with various components highlighted in different colors.

HYDRAULIC SYSTEM

This section outlines the specifications and operational principles of the hydraulic system. It includes details on pump flow, pressure compensator spool operation, and control piston functions, essential for understanding and maintaining hydraulic performance.

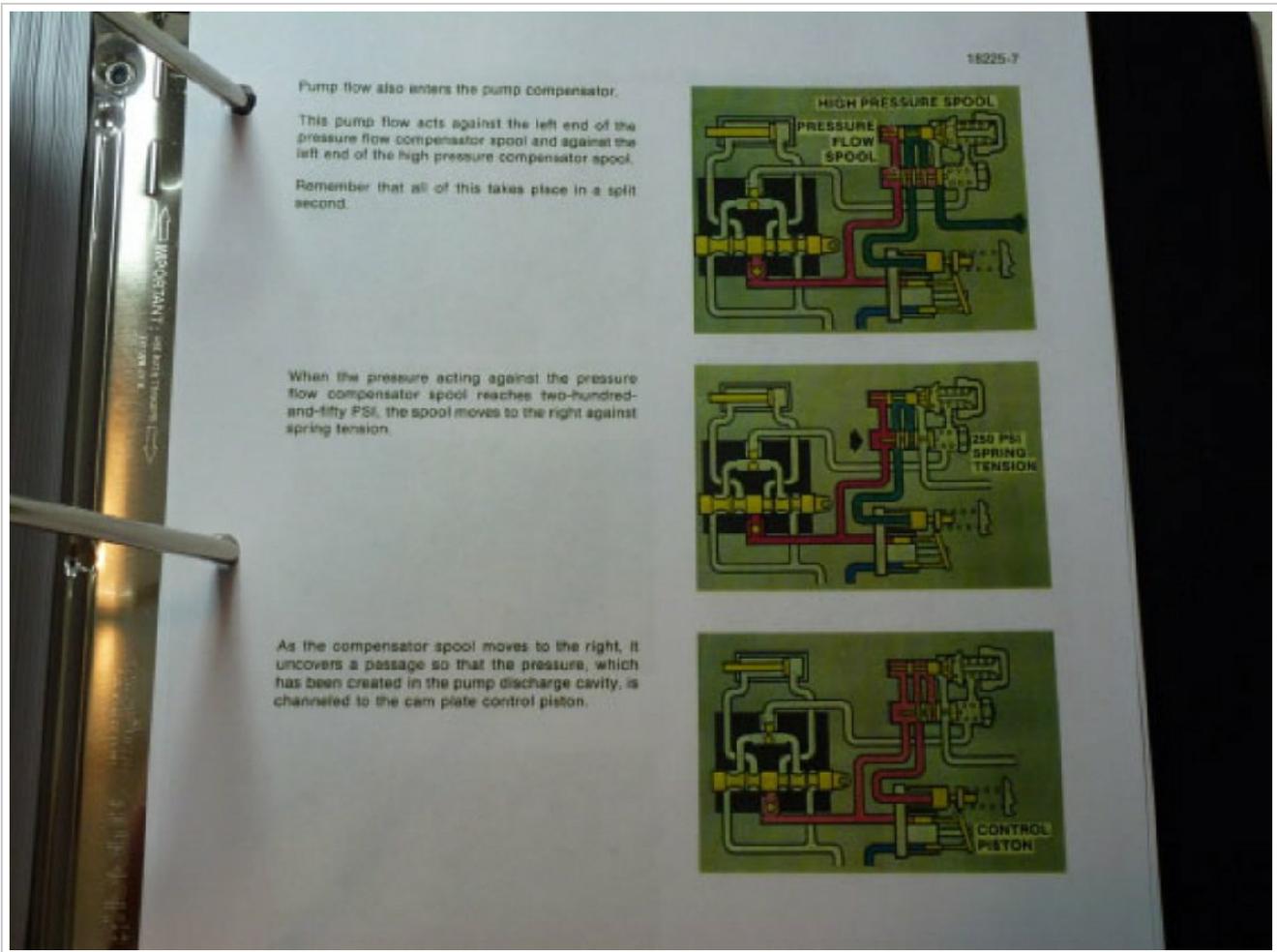


Figure 3: Hydraulic System Operation. This image displays a diagram with accompanying text explaining the principles of hydraulic pump flow and the function of the pressure compensator spool and control piston within the system.

MAINTENANCE PROCEDURES

Detailed step-by-step instructions for various maintenance tasks are provided to ensure the longevity and reliability of your tractor. This includes specific procedures for component servicing and replacement.

Servicing the Torque Limiter Clutch

1. **Step 1:** Separate the tractor between the engine and torque tube. Refer to Section 2210 for detailed separation instructions.
2. **Step 2:** Remove the torque limiter clutch from the engine flywheel.
3. **Step 3:** Clean the contact surface on the flywheel thoroughly.
4. **Step 4:** Fill the cavity in the flywheel 2/3 full of Molykote Number 2.
5. **Step 5:** Apply Loctite 271 to the threaded holes (not the bolts) in the flywheel. Start the two lower bolts and retainers into the flywheel.
6. **Step 6:** Install the first clutch plate, spring side towards the flywheel.

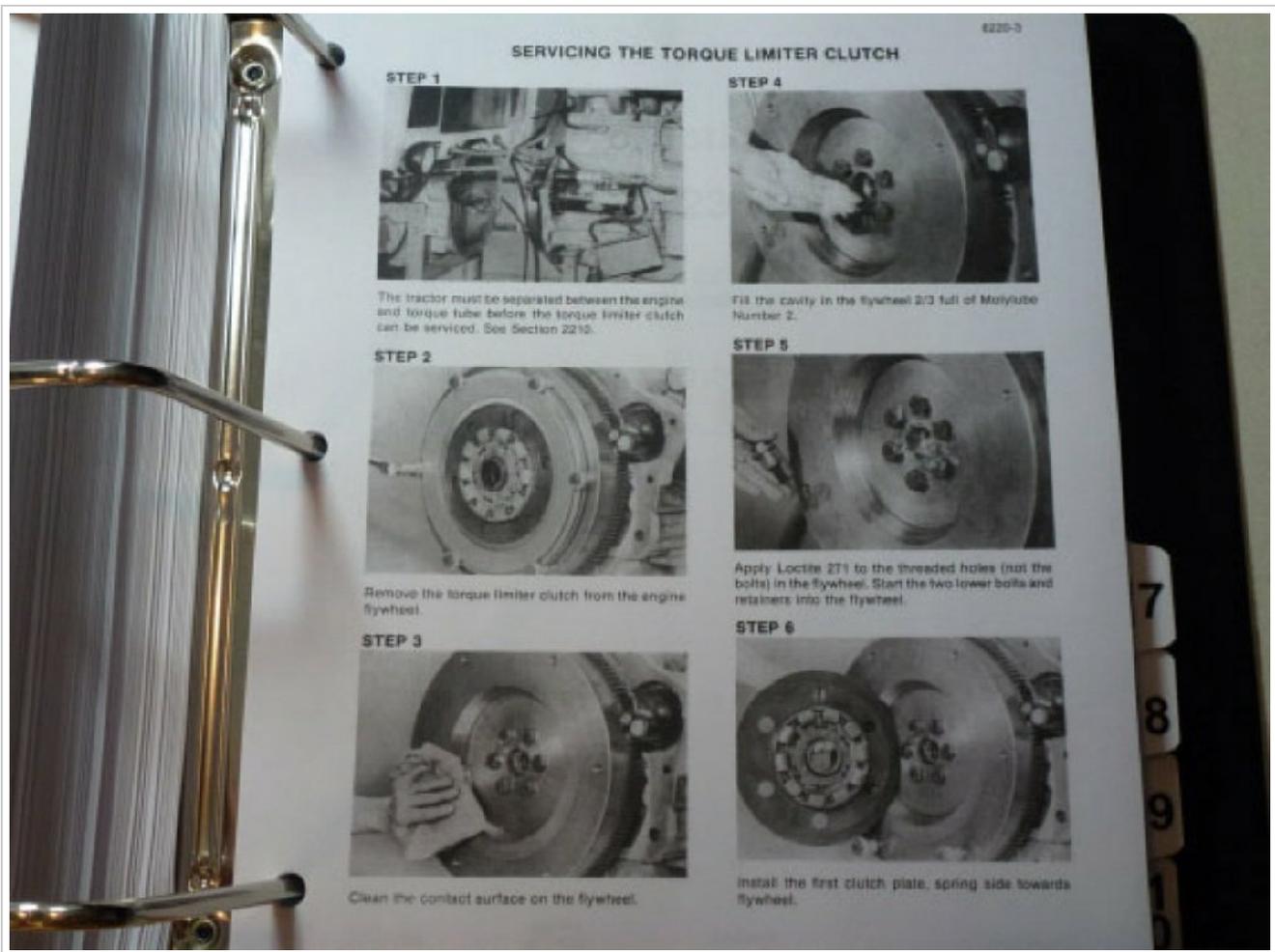


Figure 4: Torque Limiter Clutch Service Steps. This image illustrates a six-step process for servicing the torque limiter clutch, showing visual cues for each stage of disassembly, cleaning, lubrication, and reassembly.

TROUBLESHOOTING

This section provides guidance for diagnosing and resolving common issues that may arise with the Case 3394 and 3594 tractors. Refer to specific system sections for detailed troubleshooting charts and procedures.

SPECIFICATIONS

Specification	Detail
ASIN	B005N15L8M
Publisher	TechMedia
Publication Date	January 1, 1985
Language	English
Print Length	1964 pages
Item Weight	0.01 ounces

