

AgPubs 1840

AgPubs Case 1840 Uni-Loader Skid Steer Service Repair Manual

Technical Workshop Overhaul and Repair Instructions

1. INTRODUCTION

This document serves as a comprehensive service and repair manual for the Case 1840 Uni-Loader Skid Steer. It provides detailed technical information, procedures, and specifications necessary for the proper maintenance, troubleshooting, overhaul, and repair of the equipment. This manual is intended for qualified service personnel and individuals with a thorough understanding of mechanical and electrical systems.

The manual is organized into various sections, each covering specific components or systems of the Case 1840 Uni-Loader. Adherence to the instructions and safety precautions outlined in this manual is crucial for ensuring safe and effective service operations.

2. UNDERSTANDING MANUAL TYPES

For effective use of this and other related documentation, it is important to distinguish between different types of manuals:

- **Service Manual (Repair / Overhaul / Troubleshooting):** This type of manual, which you are currently viewing, provides in-depth instructions for diagnosing issues, performing repairs, and overhauling components. It includes detailed procedures, specifications, and diagrams for complex tasks.
- **Operators Manual (Basic Maintenance / Operation / Fluid Types / Quantities and Adjustments):** This manual focuses on the daily operation of the equipment, routine maintenance schedules, fluid specifications, and basic adjustments. It is essential for safe and efficient operation.
- **Parts Catalog (Exploded Views / Parts Names / Factory (OEM) Parts Numbers):** This manual contains exploded diagrams of assemblies, lists of individual parts, their names, and original equipment manufacturer (OEM) part numbers. It is vital for identifying and ordering correct replacement parts.

This specific manual is a **Service Manual**, designed to guide you through complex repair and overhaul processes.

3. GENERAL INFORMATION AND SPECIFICATIONS

This section provides foundational information applicable across various systems of the Case 1840 Uni-Loader. It includes critical data such as torque specifications, recommended fluids and lubricants, and detailed engine specifications.



Image: Front cover of the AgPubs Service Manual for the Case 1840 Uni-Loader. The cover displays the model number "1840 Uni-Loader" and "SERVICE MANUAL" prominently, indicating its purpose for technical workshop, troubleshooting, overhaul, and repair.

3.1. Manual Contents Overview

The manual is structured into several divisions and sections to facilitate easy navigation and access to specific repair information. Key sections include:

- General (Section Index, Torque Specifications, Fluids and Lubricants, Detailed Engine Specifications)
- Engines (Section Index, Engine Removal and Installation, Cylinder Head, Lubrication, Cooling System)
- Fuel System (Section Index, Fuel System and Filters, Fuel Injection Pump, Fuel Injectors)
- Electrical (Section Index, Component Removal/Installation, Specifications, Troubleshooting, Schematics, Battery, Starter, Alternator)
- Power Train (Section Index, Component Removal/Installation, Hydrostatic System Troubleshooting, Piston Pump, Motor, Sprockets, Chains, Axles, Pump Drive Coupling, Wheels and Tires)

- Brakes
- Hydraulics (Section Index, Component Removal/Installation, Schematics, Specifications, Troubleshooting, Cleaning, Pump, Control Valves, Cylinders)
- Mounted Equipment (Section Index, Pedals and Levers, Loader, ROPS Canopy, Seat, Backhoe)

DIVISION/SECTION	SECTION NO.	FORM NO.
1 GENERAL		
Section Index - General		8-11280
Torque Specifications	1001	8-71600
Fluids and Lubricants	1002	8-11290
Detailed Engine Specifications	1024	8-24161
2 ENGINES		
Section Index - Engine		8-11300
Engine Removal and Installation and Radiator Removal and Installation	2001	8-11310
Cylinder Head and Valve Train	2415	8-24171
Cylinder Block	2425	8-24181
Lubrication System	2445	8-24191
Cooling System	2455	8-24201
3 FUEL SYSTEM		
Section Index - Fuel System		8-11320
Fuel System and Filters	3410	8-24211
Fuel Injection Pump and Drive Gear	3412	8-27080
Fuel Injectors	3413	8-24231
4 ELECTRICAL		
Section Index - Electrical		8-11330
Removal and Installation of Electrical Components	4001	8-11340
Battery	4002	8-11350
Starter	4003	8-11360
Alternator	4004	8-11370
	4005	8-11380
6 POWER TRAIN		
Section Index - Power Train		8-11390
Removal and Installation of Power Train Components	6001	8-11400
Hydrostatic System Troubleshooting	6002	8-11410
Piston Pump	6003	8-11420
Motor	6004	8-11430
Sprockets, Chains, and Axles	6005	8-11440
Pump Drive Coupling	6006	8-11450
Wheels and Tires	6007	8-11460
7 BRAKES		
Brakes	7001	8-11480

Image: First page of the Table of Contents for the Case 1840 Uni-Loader Service Manual, showing sections for General, Engines, Fuel System, Electrical, and Power Train. Each section lists sub-topics and corresponding section numbers.

DIVISION/SECTION	SECTION NO.	FORM NO.
8 HYDRAULICS		
Section Index - Hydraulics		8-11490
Removal and Installation of Hydraulic Components	8001	8-11500
Hydraulic Schematics, Specifications, and Troubleshooting	8002	8-11510
Cleaning the Hydraulic System and Hydrostatic System	8003	8-11520
Pump	8004	8-11530
Loader Control Valve	8005	8-11540
Auxiliary Control Valve	8006	8-11550
Backhoe Control Valve - D100 Backhoe	8007	8-11560
Cylinders	8009	8-11580
9 MOUNTED EQUIPMENT		
Section Index - Mounted Equipment		8-11590
Pedals and Levers	9001	8-11600
Loader	9002	8-11610
ROPS Canopy, Seat, Seat Belts, and Operators Compartment	9003	8-11620
Auxiliary Hydraulic Installation	9004	8-11630
Backhoe - D100 Backhoe	9005	8-11640

Image: Second page of the Table of Contents for the Case 1840 Uni-Loader Service Manual, detailing sections for Hydraulics, Mounted Equipment, and Brakes. This page provides further breakdown of topics within these major systems.

4. ENGINE SYSTEM

This section covers all aspects related to the Case 1840 Uni-Loader engine. It includes detailed procedures for engine removal and installation, servicing of the cylinder head and valve train, maintenance of the cylinder block, lubrication system, and cooling system.

4.1. Engine Component Removal and Installation

Step-by-step instructions are provided for safely removing and installing engine components. This includes guidance on disconnecting various lines, wires, and mounting hardware. Proper torque specifications for reassembly are

critical and detailed within the manual.



Image: Open pages of the service manual illustrating detailed repair steps. Multiple small images depict specific actions like disconnecting wires or removing components, accompanied by numbered instructions. This section likely covers engine or electrical component servicing.

5. FUEL SYSTEM

This section details the fuel system components, including the fuel system and filters, fuel injection pump and drive gear, and fuel injectors. It provides guidance on inspection, maintenance, and repair procedures to ensure optimal fuel delivery and engine performance.

6. ELECTRICAL SYSTEM

The electrical system section covers the removal and installation of electrical components, detailed electrical specifications, troubleshooting guides, and schematics. It includes information on the battery, starter, and alternator, essential for maintaining the machine's electrical integrity.

7. POWER TRAIN

This section focuses on the power train components, including their removal and installation. It provides specific troubleshooting for the hydrostatic system, and detailed information on the piston pump, motor, sprockets, chains, axles, pump drive coupling, and wheels and tires.

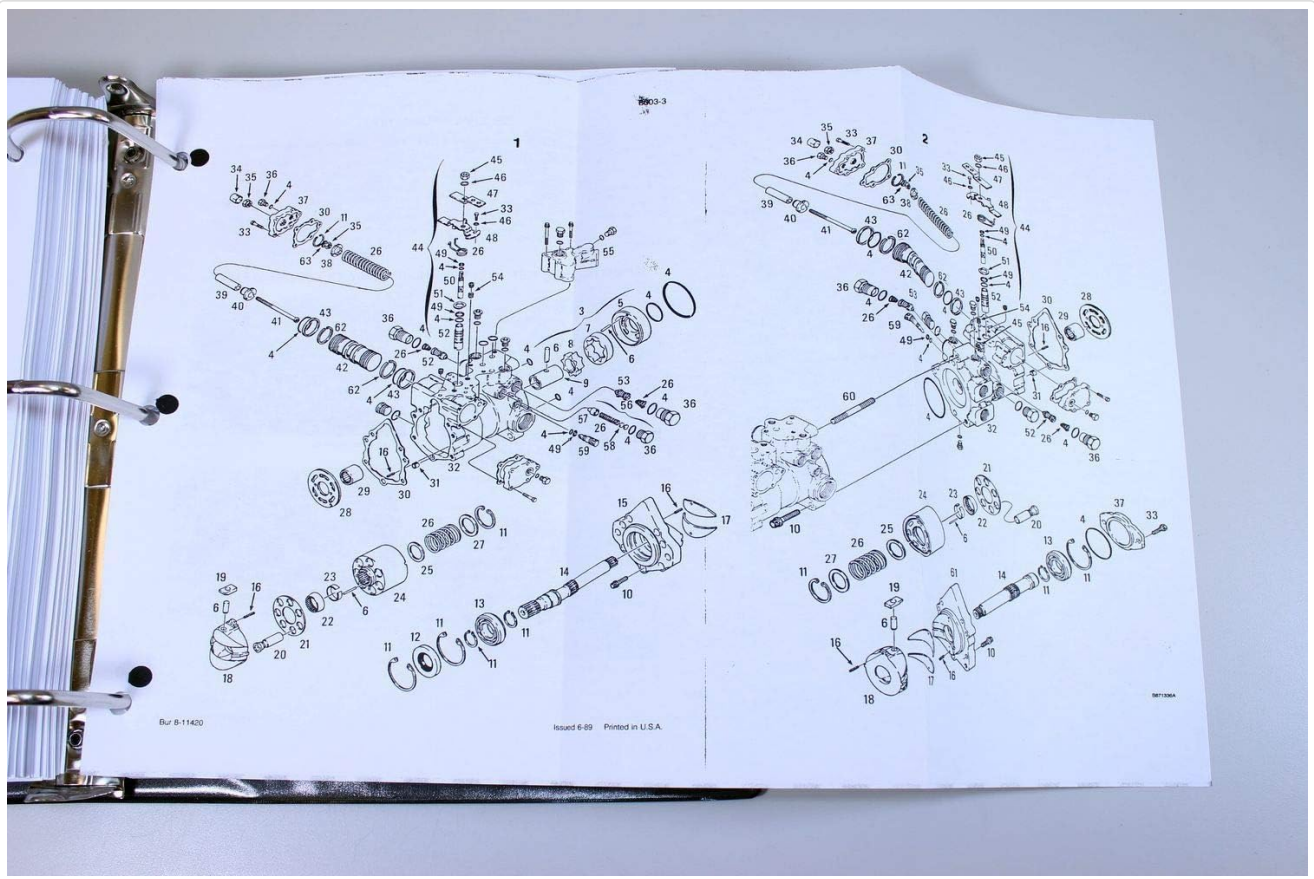


Image: An exploded view diagram from the service manual, showing numerous numbered parts of a complex assembly, likely related to the power train or a major mechanical system. This type of diagram is crucial for identifying individual components during assembly or disassembly.

8. BRAKES

This section provides detailed instructions for the inspection, maintenance, and repair of the braking system on the Case 1840 Uni-Loader. Proper functioning of the brakes is critical for operational safety.

9. HYDRAULICS SYSTEM

The hydraulics section covers the removal and installation of hydraulic components, detailed hydraulic schematics, specifications, and troubleshooting procedures. It also includes guidance on cleaning the hydraulic and hydrostatic systems, and servicing the pump, loader control valve, auxiliary control valve, backhoe control valve, and cylinders.

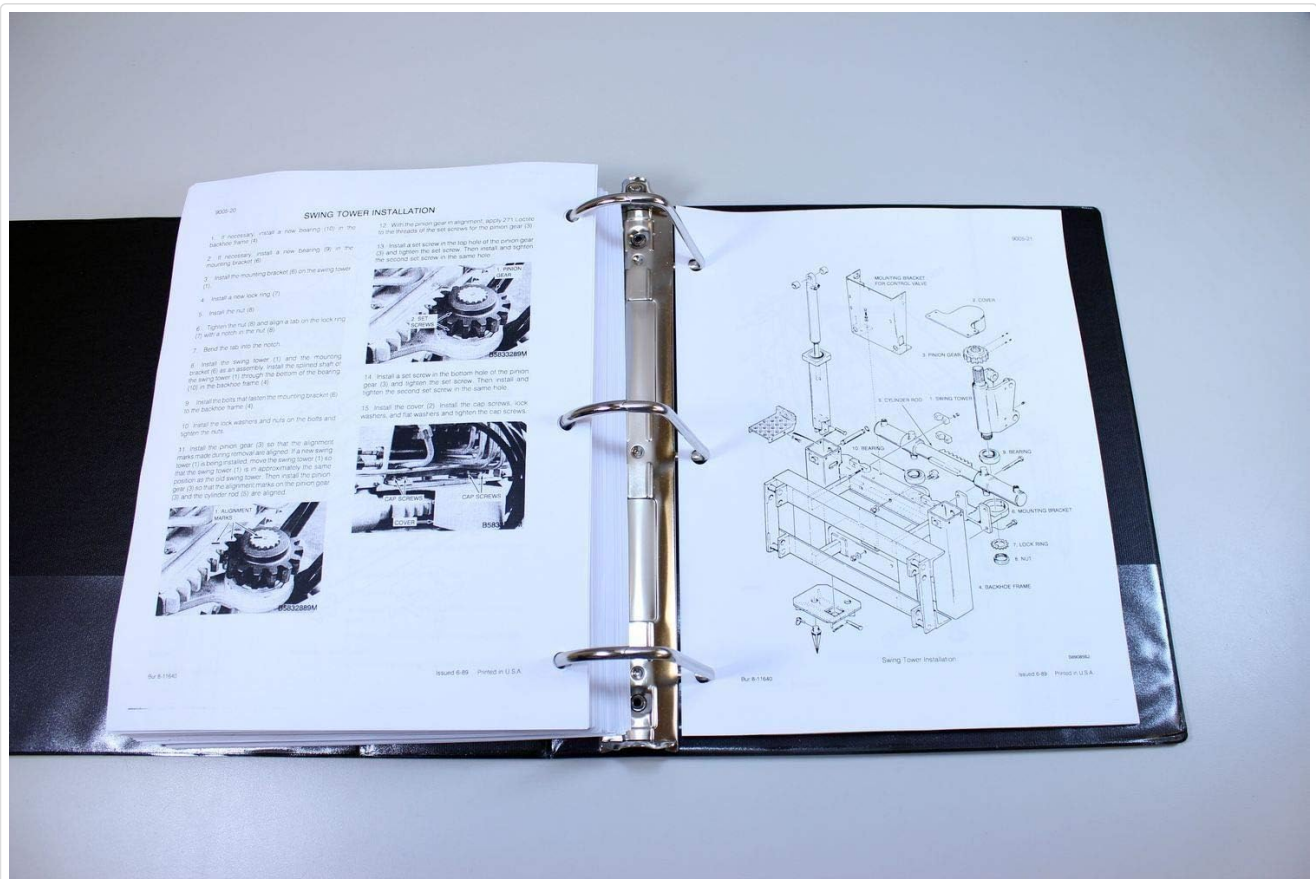


Image: Pages from the service manual displaying complex hydraulic schematics. These diagrams use symbols to represent hydraulic components and their connections, essential for diagnosing and repairing hydraulic system issues.

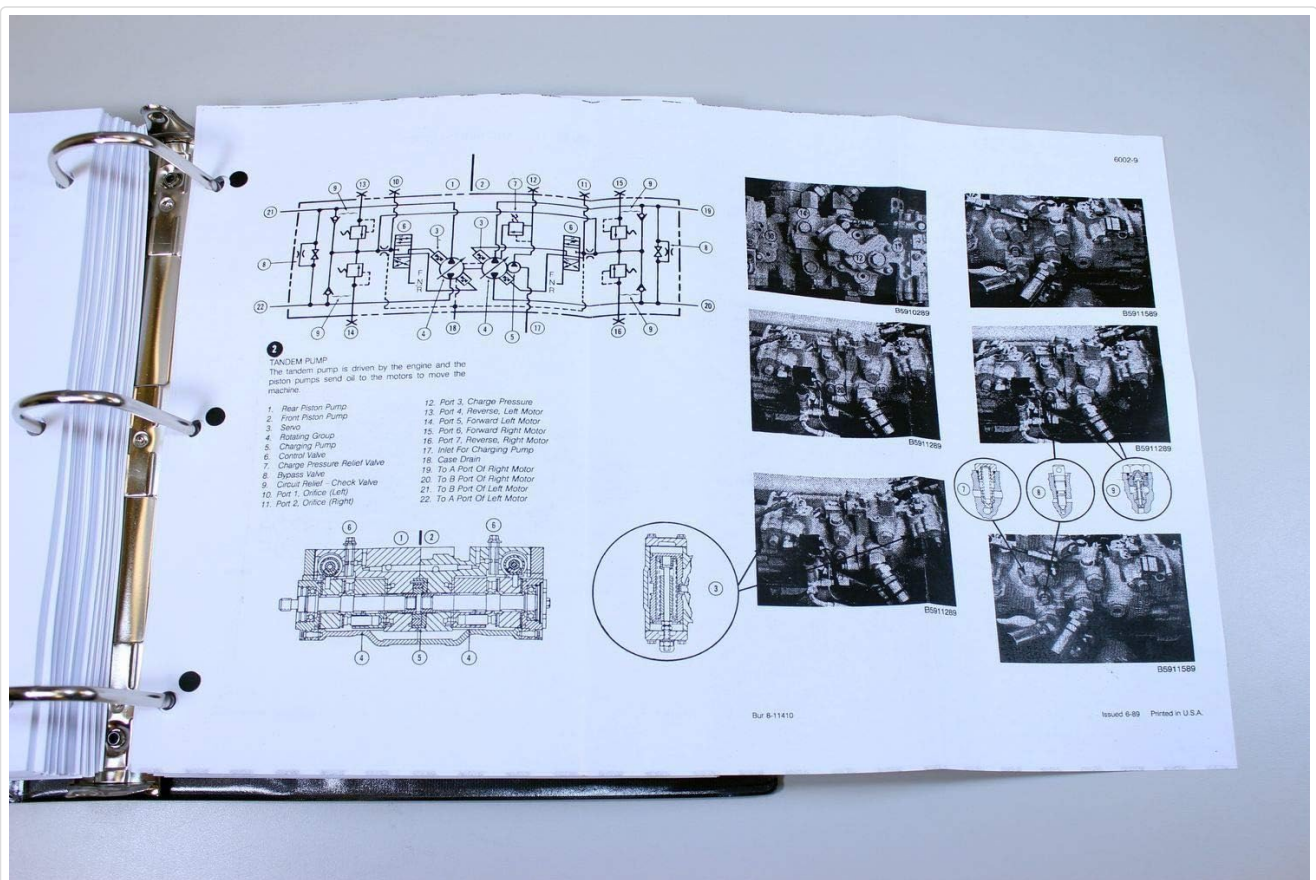


Image: A detailed diagram of a hydraulic pump assembly from the service manual, showing internal components and their arrangement. This visual aid is critical for understanding the pump's operation and for correct disassembly and reassembly.

10. MOUNTED EQUIPMENT

This section provides service information for various mounted equipment components, including pedals and levers, the loader assembly, ROPS canopy, seat, seat belts, operator's compartment, auxiliary hydraulic installation, and the backhoe (D100 Backhoe).

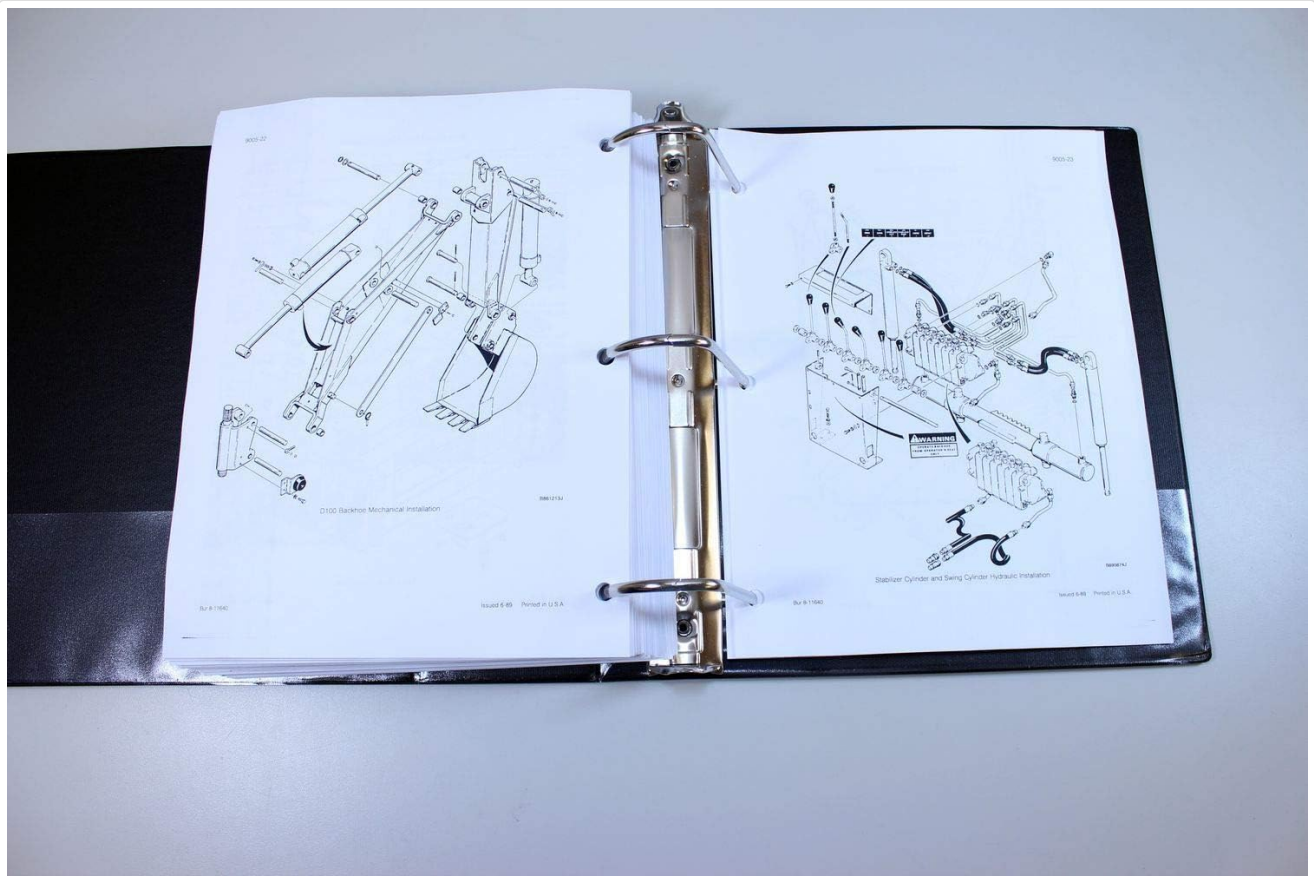


Image: An illustration from the service manual detailing the "Swing Tower Installation" process. The diagram shows various components and their assembly, accompanied by numbered steps, likely for a backhoe or similar mounted attachment.

11. SETUP FOR SERVICE PROCEDURES

This manual is a service and repair guide. "Setup" in this context refers to the preparatory steps required before commencing any repair or overhaul procedure on the Case 1840 Uni-Loader. This typically includes:

- **Safety Precautions:** Always review and adhere to all safety warnings and guidelines provided in the manual and on the equipment.
- **Work Area Preparation:** Ensure a clean, well-lit, and safe working environment.
- **Tooling:** Gather all necessary specialized and general tools as specified for the particular repair.
- **Fluid Management:** Prepare for proper drainage and disposal of fluids (oil, coolant, hydraulic fluid) if required for the procedure.
- **Component Identification:** Familiarize yourself with the relevant diagrams and part numbers before disassembly.

12. OPERATING INSTRUCTIONS

This service manual does not contain operating instructions for the Case 1840 Uni-Loader Skid Steer. For information regarding the safe and proper operation of the equipment, including controls, starting procedures, and basic functions, please refer to the dedicated **Operators Manual** for the Case 1840 Uni-Loader.

13. MAINTENANCE PROCEDURES

While an Operators Manual covers routine maintenance, this Service Manual provides detailed, in-depth maintenance procedures for components requiring more extensive attention. This includes:

- Scheduled overhauls of major systems (engine, transmission, hydraulics).
- Detailed inspection criteria for wear and tear on critical parts.
- Adjustment procedures for complex systems (e.g., valve clearances, fuel injection timing).
- Cleaning and flushing procedures for hydraulic and cooling systems.
- Lubrication points and specifications for components not covered in basic operator maintenance.

Always consult the specific section pertaining to the component you are maintaining for precise instructions and specifications.

14. TROUBLESHOOTING GUIDE

This manual includes comprehensive troubleshooting guides for various systems to assist in diagnosing operational issues. Refer to the specific sections for detailed diagnostic charts and procedures:

- **Electrical System:** Includes troubleshooting for battery, starter, alternator, and general electrical faults.
- **Hydrostatic System:** Provides guidance for diagnosing issues related to the hydrostatic drive.
- **Hydraulics System:** Offers troubleshooting steps for pump, control valves, cylinders, and overall hydraulic performance problems.
- **Engine:** While not explicitly listed as "troubleshooting" in the TOC, the repair sections implicitly guide diagnosis through component inspection and testing.

Follow the diagnostic steps systematically to identify the root cause of any malfunction before attempting repairs.

15. TECHNICAL SPECIFICATIONS

Detailed technical specifications are provided throughout this manual, crucial for accurate repair and assembly. Key specifications include:

- **Torque Specifications:** Essential for tightening fasteners to the correct tension, preventing damage or loosening.
- **Fluid and Lubricant Specifications:** Types and quantities of oils, coolants, and hydraulic fluids required.
- **Detailed Engine Specifications:** Critical dimensions, clearances, and performance parameters for engine components.
- **Electrical Specifications:** Voltage, amperage, and resistance values for electrical components and circuits.
- **Hydraulic Specifications:** Pressure settings, flow rates, and component tolerances for the hydraulic system.

Always refer to the specific section for the most accurate and up-to-date specifications for the component being serviced.

16. WARRANTY AND SUPPORT

This service manual provides technical repair information for the Case 1840 Uni-Loader Skid Steer. Information regarding product warranty, manufacturer support, or contact details for the original equipment manufacturer (OEM) or the manual publisher (AgPubs) is not included within this technical document. For warranty claims or direct product support, please refer to your original purchase documentation or contact the equipment manufacturer.

directly.

ASK A QUESTION ABOUT THIS MANUAL

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question