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› AgPubs Case 1816 Uni Loader Skid Steer Service and Repair Manual

AgPubs 1816

AgPubs Case 1816 Uni Loader Skid Steer Service and Repair Manual

Comprehensive Technical Guide for Repair, Overhaul, and Troubleshooting

INTRODUCTION TO YOUR SERVICE MANUAL

This manual is an essential resource for owners and technicians performing service, repair, overhaul, and troubleshooting on the Case 1816 Uni Loader Skid Steer. It provides detailed, step-by-step instructions and diagrams to guide you through complex procedures, ensuring accurate and effective maintenance of your equipment.

Utilizing a factory-authored manual helps prevent frustration and wasted time, offering reliable information superior to aftermarket alternatives. This quality reproduction is designed for durability, often surpassing the original print in longevity.

MANUAL CONTENT OVERVIEW

This service manual focuses on the repair, overhaul, and troubleshooting aspects of the Case 1816 Uni Loader Skid Steer. It is distinct from an operator's manual (which covers basic maintenance and operation) and a parts catalog (which provides exploded views and part numbers).

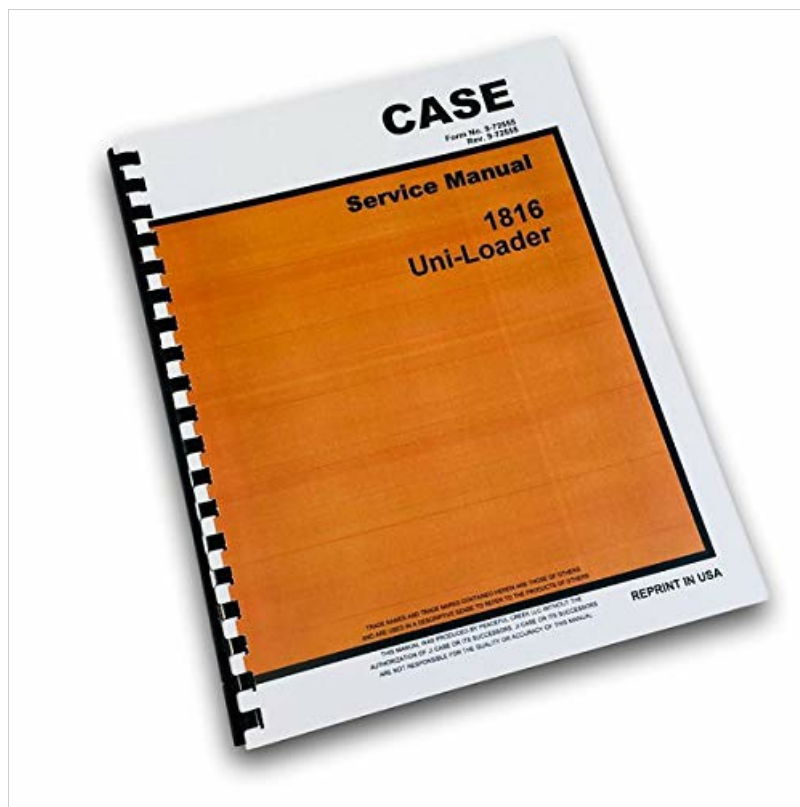


Figure 1: Front cover of the AgPubs Service Repair Manual for Case 1816 Uni Loader Skid Steer. This manual provides comprehensive technical information for maintenance and repair.

TABLE OF CONTENTS	
SERIES/SECTION	SECTION NO.
10 SERIES - GENERAL	
Maintenance and Lubrication	1050
Torque Chart	1051
20 SERIES - ENGINE	
Engine Removal Installation	2050
Drive belts	2052
4 Cycle Valve-in-Head Engine	2052
40 SERIES - EQUIPMENT HYDRAULICS	
Hydraulic Diagram, Maintenance, Trouble Shooting, Testing and Adjustments	4011
Equipment Pump	4012
Loader Control Valve	4020
Lift and Tilt Cylinders	4050
60 SERIES - POWER TRAIN	
Centrifugal Clutch	6021
Drive Chains and Axles	6023
Wheels and Tires	6024
Hydrostatic System Diagrams and Operation	6030
Trouble Shooting, Testing and Adjustments	6031
Hydrostatic Pump	6032
Hydrostatic Motor	6033
Hydrostatic Controls	6034
70 SERIES - BRAKES	
Parking Brake	7017
80 SERIES - ELECTRICAL SYSTEM	
Wiring Diagram	8011
System Components	See Section 2052, 4 Cycle Valve-in-Head
90 SERIES - MOUNTED EQUIPMENT	
Loader	9011
Rollover Protection Structure	9019

Figure 2: An open view of the manual, showcasing its spiral-bound format for ease of use during repair procedures.

ENGINE MAINTENANCE AND REPAIR

This section details procedures for engine removal, installation, and specific component servicing. Proper engine maintenance is crucial for the longevity and performance of your skid steer.

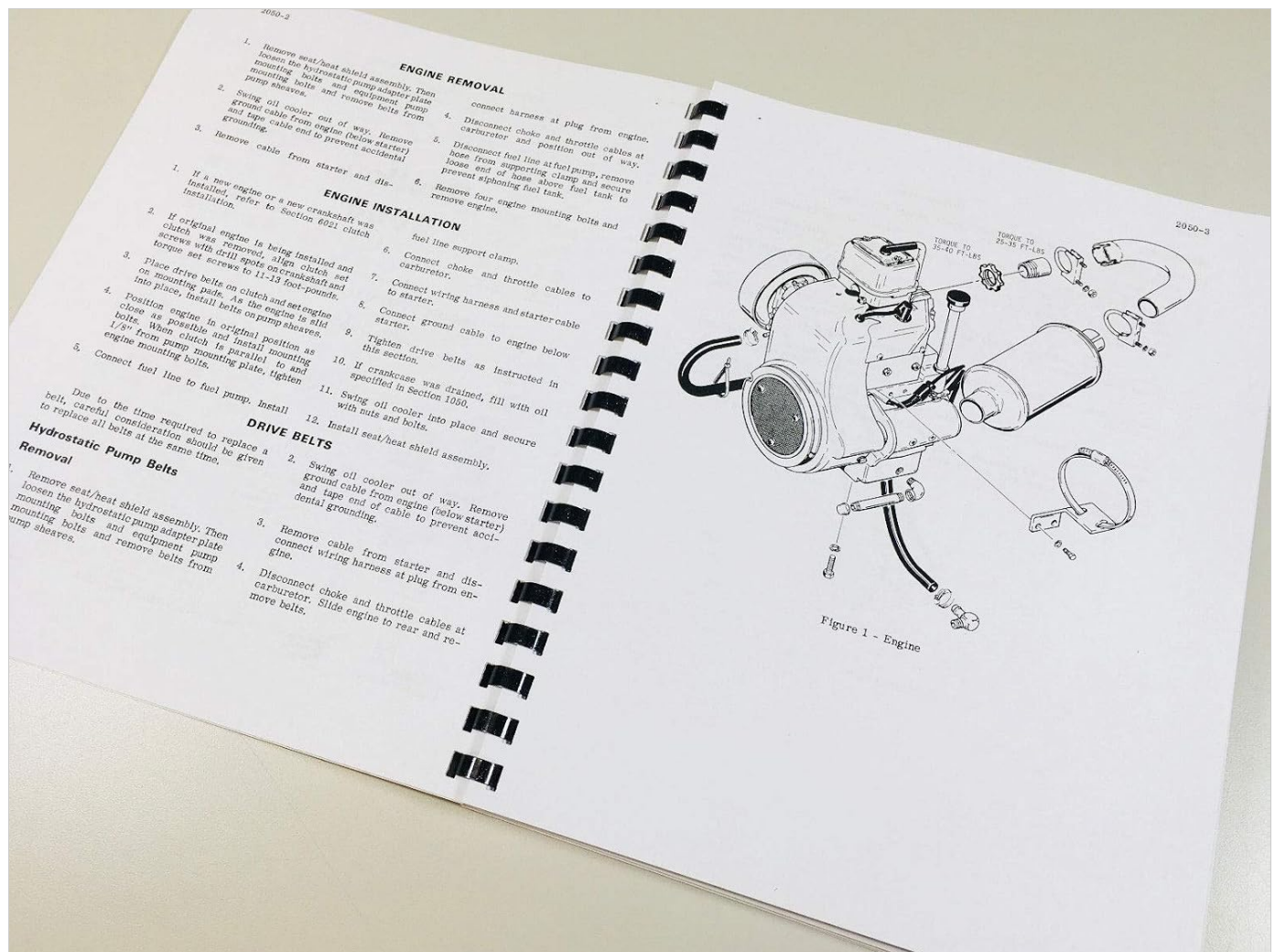


Figure 3: Detailed instructions for engine removal and installation, accompanied by an exploded view diagram of the engine components. This page is from the "ENGINE REMOVAL" section of the manual.



MECHANICS HANDBOOK

4-CYCLE VALVE-IN-HEAD ENGINES

PRICE: FIFTY CENTS

TECUMSEH PRODUCTS COMPANY

PARTS DEPOT DIVISION

GRAFTON, WISCONSIN 53024

GENERAL INFORMATION	1
AIR CLEANER, CARBURETOR, GOVERNOR AND PULSE PUMP	2
BREATHER, VALVES, VALVE SPRINGS, CYLINDER HEAD, PISTON, RINGS AND CONNECTING ROD	3
CAMSHAFT	4
BEARINGS	5
DYNA-STATIC®	6
IGNITION	7
STARTERS	8
SPECIFICATIONS	9

Figure 4: An example of a supplementary reference, the Tecumseh Mechanics Handbook for 4-Cycle Valve-in-Head Engines. This may be referenced for detailed component-level information relevant to the skid steer's engine.

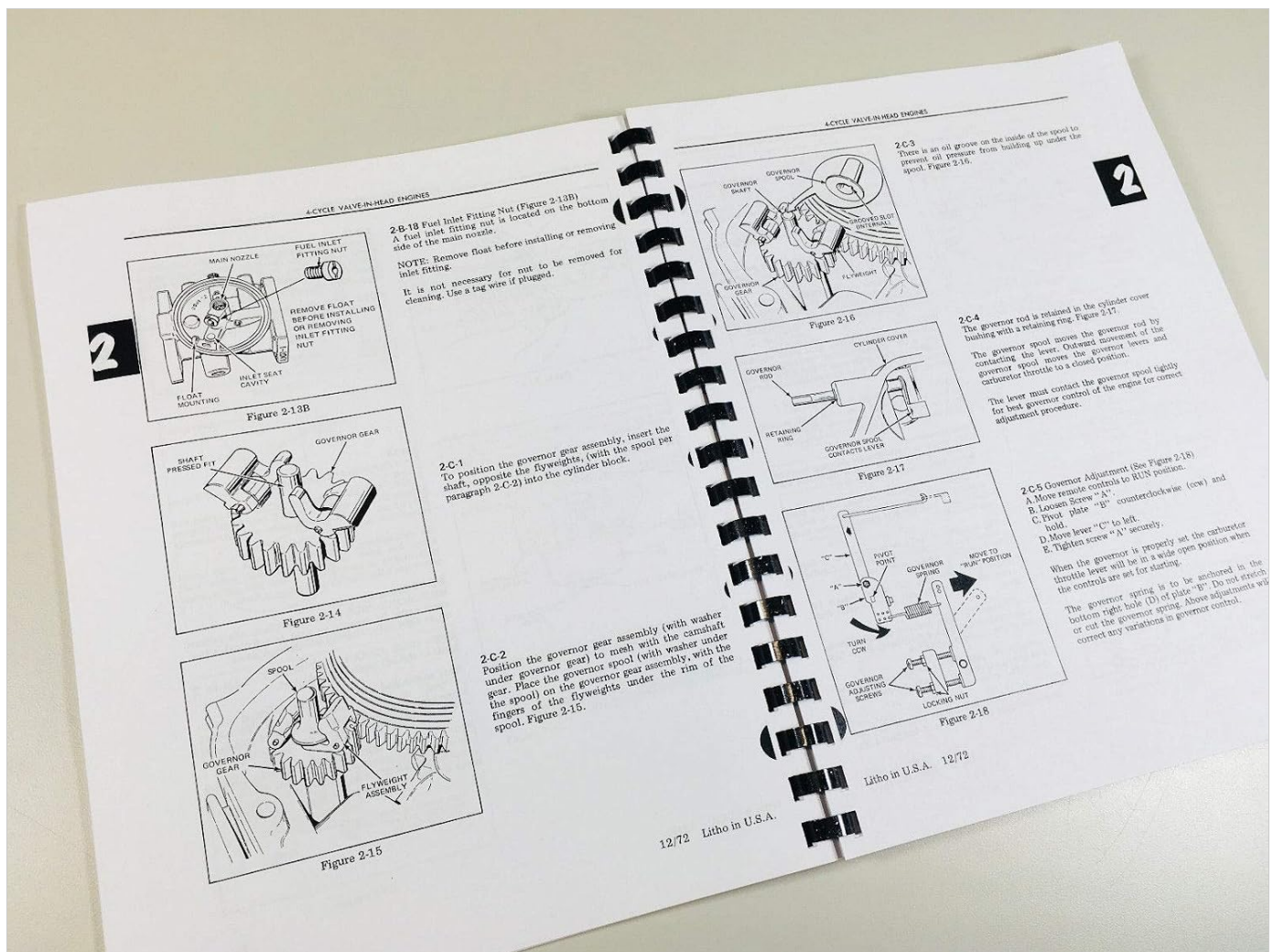


Figure 5: Close-up view of manual pages detailing the fuel inlet fitting and governor assembly for 4-cycle valve-in-head engines, providing visual aids for precise adjustments and repairs.

HYDRAULIC SYSTEM SERVICE AND TROUBLESHOOTING

The hydraulic system is critical for the operation of the Case 1816 Uni Loader. This section covers diagrams, maintenance procedures, and troubleshooting steps for hydraulic components.

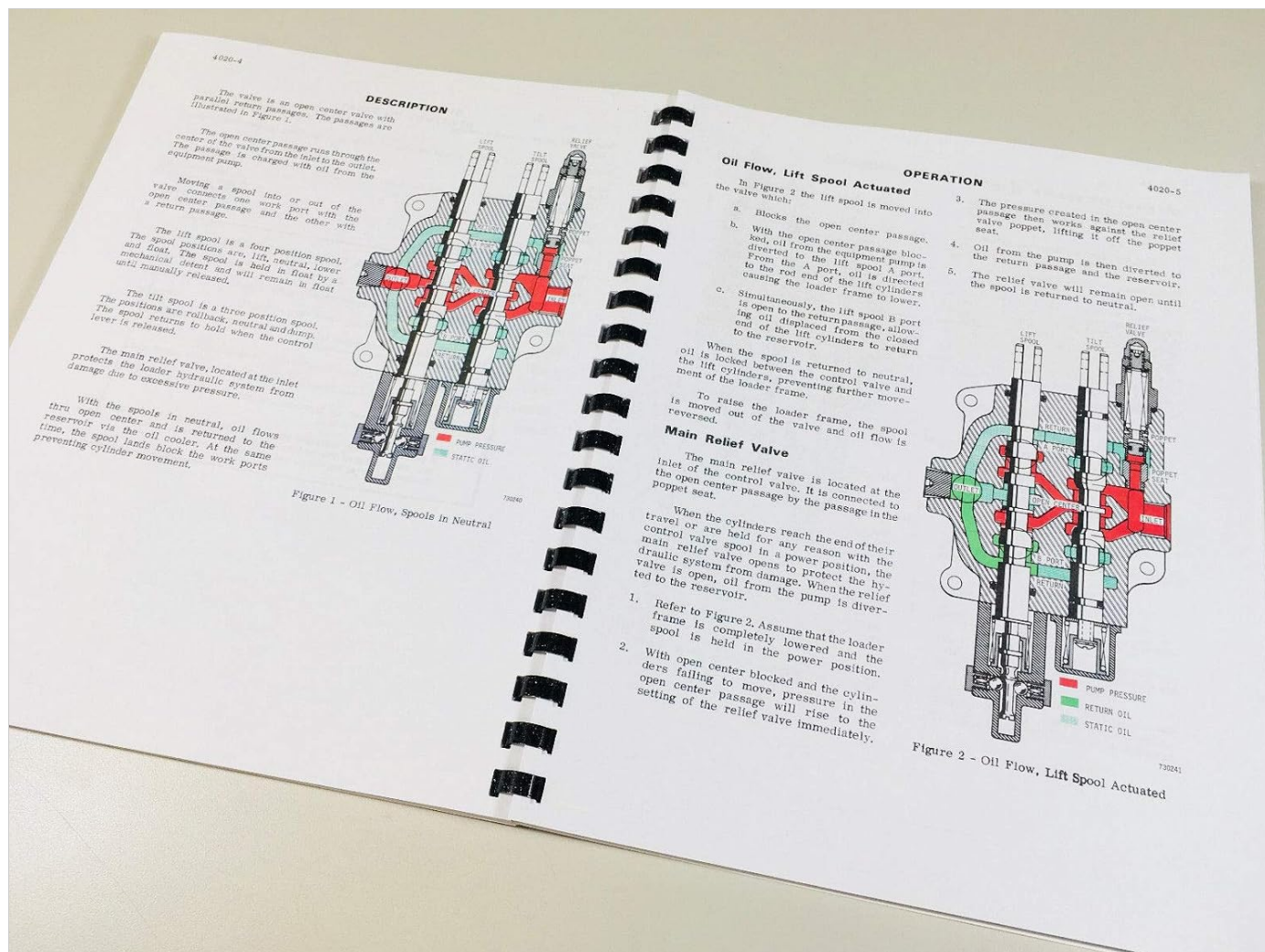


Figure 6: Diagram and description of oil flow and lift spool actuation within the hydraulic system, essential for understanding loader control valve operation.

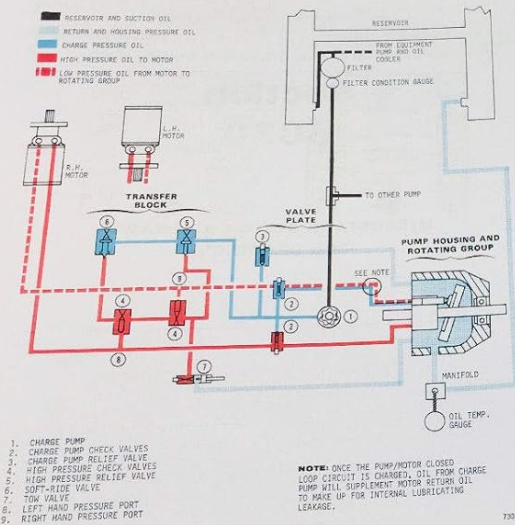


Figure 1 - Oil Flow, Right Side Forward or Left Side Reverse

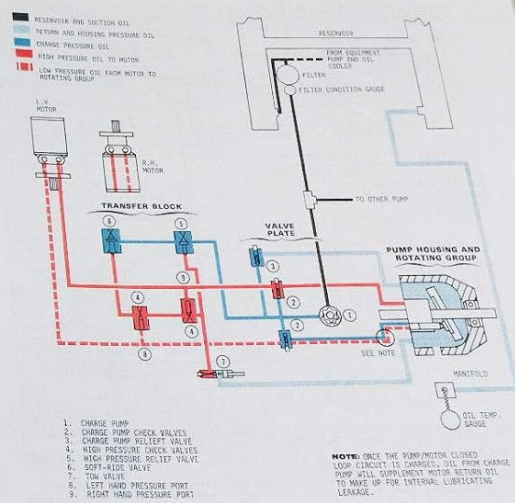


Figure 2 - Oil Flow, Left Side Forward or Right Side Reverse

Figure 7: Detailed oil flow diagrams for both right side forward and left side reverse operations, crucial for diagnosing issues related to hydrostatic drive and steering.

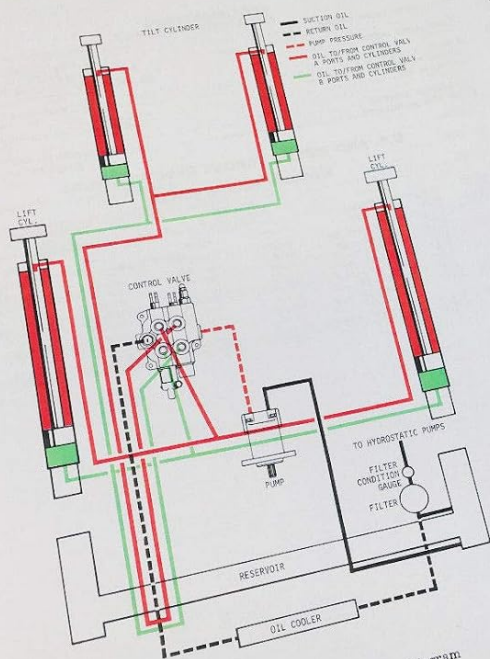


Figure 1 - Loader Hydraulic Diagram

HYDRAULIC RESERVOIR AND FILTER SERVICE

Oil Level Check

A dipstick is attached to the fill cap on the right hand reservoir. Maintain the oil level to mark on dipstick. Do not overfill reservoir as oil may be discharged through the breather when the oil is cold. Use oil specified in Section 1059 or on page 4011-3. DO NOT substitute. Check oil at operating temperature whenever possible.

Oil Drain

Reservoir oil must be drained and replaced once a year.

The preferred method of emptying the reservoir is to use a portable suction pump. The hose should be long enough to reach the bottom of each reservoir. A small diameter hose or tube is required for the left hand reservoir. This method is preferred as it is the least time consuming.

If a suction pump is not available:

1. Have on hand a five gallon container. Container should be clean if oil is to be used again.
2. Remove seat/heat shield assembly and used again.
3. Loosen inlet hose clamp at equipment pump. Remove hose from pump and quickly place thumb over hose. Hold hose over side of machine and drain oil into container.
4. Loosen lower hose clamp on hose to left hand reservoir. Remove hose from bike and quickly place thumb over hose. Hold hose over side of machine and drain oil into container.
5. Remove disconnected hoses from elbows and remove elbows from reservoir. Using a hand suction gun, remove remaining oil from reservoirs.
6. After reservoirs are completely drained, reinstall elbows and hoses, then install seat/heat shield assembly and side screens.

7. Fill reservoir with 6.5 gallons of oil specified in Section 1059 or on page 4011-3.

8. Check oil level when oil is at operating temperature and add as required.

Oil Filter

The oil filter must be changed whenever the needle on the filter condition gauge enters the red zone.

To check filter condition, warm oil to operating temperature and run engine at full throttle and observe gauge. The needle may enter the red zone when the oil is cold; this is normal.

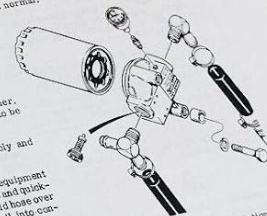


Figure 2 - Oil Filter Installation

1. Drain right hand reservoir as instructed under Oil Drain. Use suction pump or steps 2 and 3.
2. Place a drip pan under filter and unscrew filter.
3. Coat filter seal with oil and install filter. Filter must be tight enough to prevent sucking air. Do not tighten a excessive 15 foot-pounds.

Figure 8: Instructions and diagrams for hydraulic reservoir and filter service, including oil level checks, oil drain procedures, and filter installation.

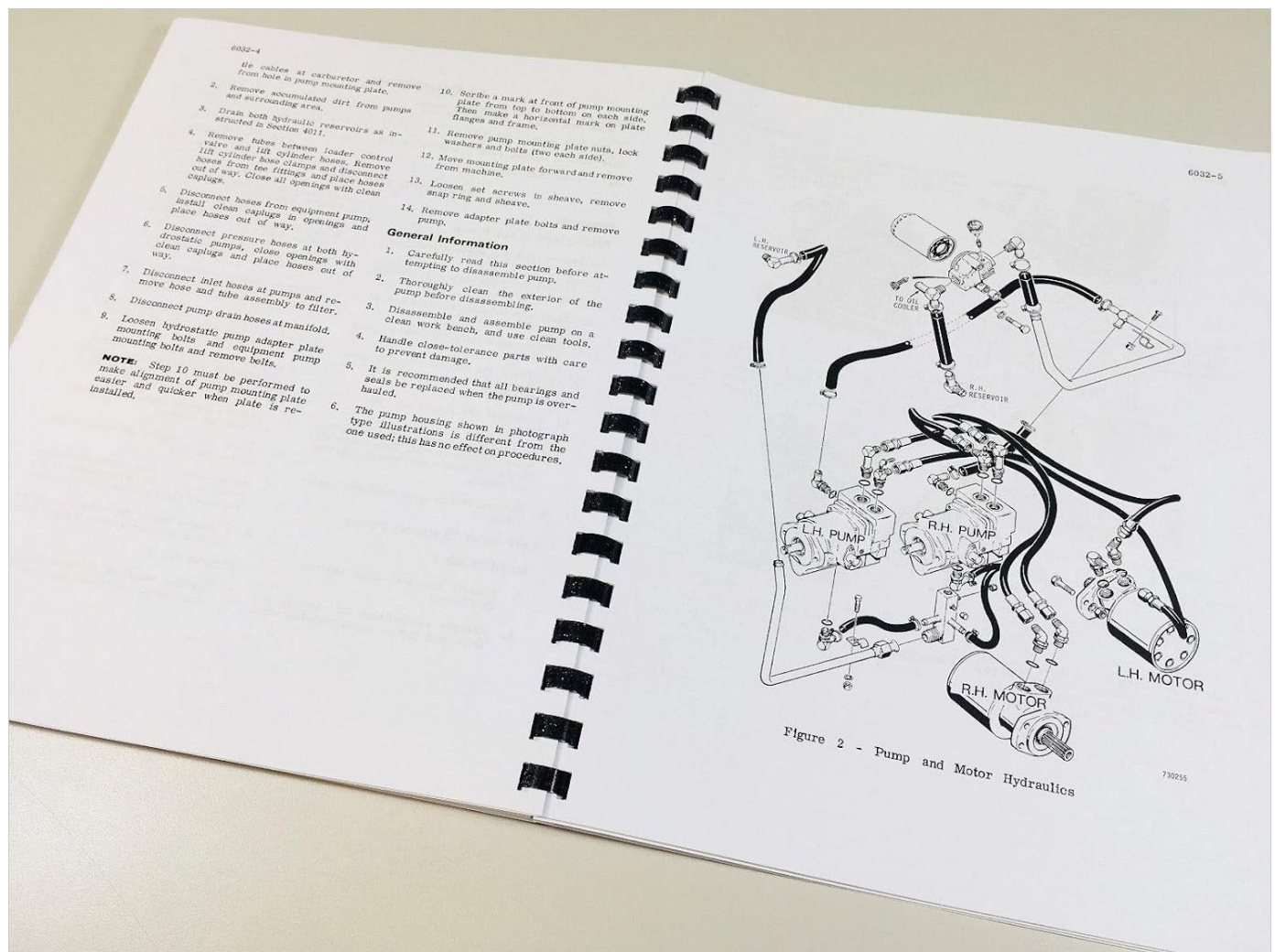


Figure 9: Diagram of the pump and motor hydraulics system, along with general information and steps for removal and disassembly of hydraulic components.

SPECIFICATIONS AND GENERAL INFORMATION

This manual includes various specifications and general information pertinent to the Case 1816 Uni Loader Skid Steer, aiding in correct part identification and operational parameters. While specific tables are not reproduced here, the manual contains detailed data for all major systems.

- **Engine Specifications:** Details on engine type, displacement, and performance characteristics.
- **Hydraulic System Data:** Information on pump capacities, pressure settings, and fluid types.
- **Torque Specifications:** Essential torque values for fasteners across various components.
- **Electrical System Diagrams:** Wiring schematics for troubleshooting electrical issues.

This manual is published by AgPubs and is intended for technical personnel and experienced mechanics. Always follow safety precautions when performing maintenance or repairs.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

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