

# John Deere 316GR and 318G Skid Steer Loader Operation & Test Technical Service Manual (TM13857X19)

**John Deere  
820  
Tractor**



**TECHNICAL MANUAL**

John Deere 820  
Tractor

TM4212 (01Jun72) English

JOHN HARE



John Deere Werke Mannheim  
TM4212 (01Jun72)

LITHO IN U.S.A.  
ENGLISH



**Covers: 316GR,318G**

**Type:** Service Manual

**Language:** English

**Pages:** 558

**Format:** PDF

**Features:** Bookmarked, searchable, printable

**Compatibility:** Windows/Mac/Tablet/Mobile

This service manual contains important information for the maintenance, troubleshooting and servicing of the **John Deere 316GR and 318G Skid Steer Loader Operation & Test Technical Service Manual (TM13857X19)**

In this manual you will find detailed specifications, illustrations, schematics, diagrams and step-by-step procedures to properly service and diagnose the machine to the manufacturer's standards.

**Contents:**

- General Information
- Specifications
- Serial Number Location
- Engine Specifications
- Engine Diagnostics
- Engine Tests and Adjustments
- Engine Repair
- Power Train
- Transmission
- Axles
- Differential
- PTO
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- Wiring Diagram / Schematic
- Ignition and Charging
- Steering
- Brakes
- Wheels
- Operator's Platform
- Body Panels
- Disassembly and Assembly
- Diagnostics, Tests and Adjustments
- Troubleshooting
- and much more...

Please note this manual is in **downloadable PDF format only**. If you have any questions about this product or would like to request sample pages, please contact us and reference the product name or SKU.

## REMOVAL AND INSTALLATION OF FINAL DRIVES

### REMOVAL

*NOTE: The removal of both final drives is explained below. If only one final drive is to be removed, remove only one wheel, wiring harness etc.*

For safety disconnect ground cable at batteries.

Lift up rear of tractor by means of a car jack or hoist and remove rear wheels.

**CAUTION:** Support transmission safely to prevent tipping of tractor.

Disconnect both rear wiring harnesses at connectors.

Remove rear fender.

Disconnect cables at brake warning switch located in left-hand rear axle housing.

Disconnect brake lines on both rear axle housings.

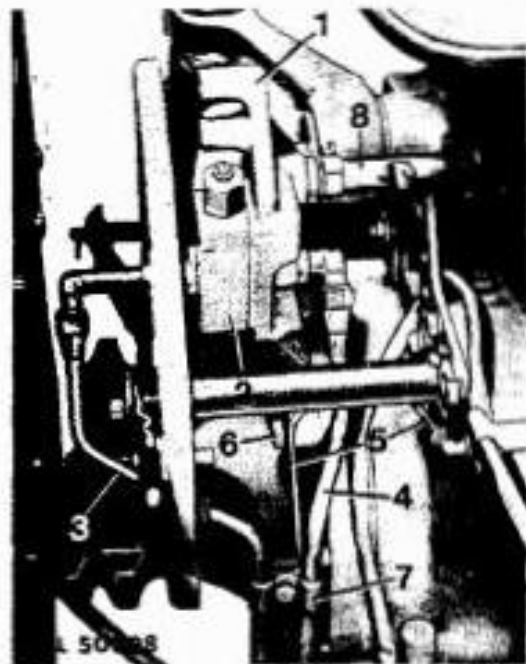


Fig. 6 — Oil Manifold and Pressure Control Valve Installed

- |                          |                                |
|--------------------------|--------------------------------|
| 1 Oil manifold           | 5 Pilot line                   |
| 2 Pressure control valve | 6 Final drive attaching screws |
| 3 Pressure line          | 7 Pipe clamp                   |
| 4 Pressure line          | 8 Return line                  |

Disconnect pilot line 5 (fig. 6) at dump valve and rockshaft and remove. Remove clamp 7. Disconnect both pressure lines 3 and 4 at elbows and return line 8 oil manifold 1. On tractors with selective control valve disconnect line to quick coupler at control valve. Remove two cap screws 6 attaching oil manifold 1 to right final drive housing. Lift off oil manifold with pressure control valve and selective control valve (if equipped).

Cover connections and exposed openings with plastic plugs or caps to keep out foreign particles.

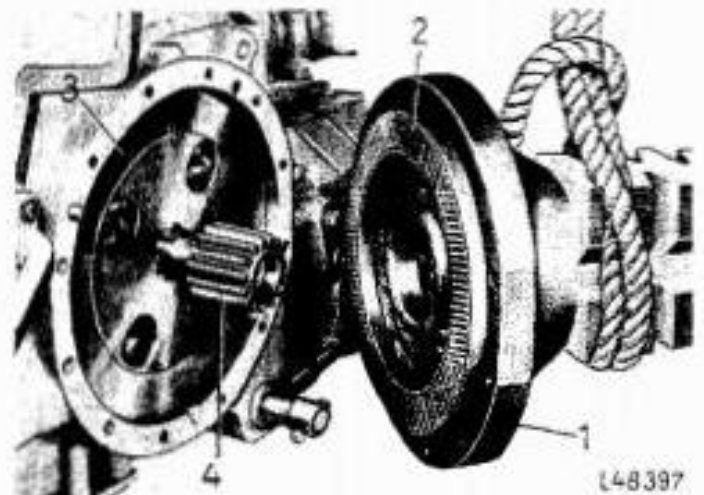


Fig. 7 — Removing Final Drive

- |                       |                     |
|-----------------------|---------------------|
| 1 Final drive housing | 3 Brake disk        |
| 2 Pressure ring       | 4 Final drive shaft |

Attach final drive to hoist. Remove final drive attaching screws and pull final drive housing from transmission case. Withdraw housing evenly until final drive shaft gear is no longer in mesh with planetary gears of final drive.

### INSTALLATION

*NOTE: If the brake disk and the "floating" facing were removed, install bonded two-layer facing so that the brass-interwoven upper layer faces the brake surface of the transmission case.*

Position new gasket between final drive housing and transmission case.

Attach final drives to transmission case by means of a suitable hoist. Make sure final drive shaft gear indexes with planetary gears and that the dowels are properly aligned.

Tighten final drive attaching screws to the specified torque.



Thank you very much  
for your reading.  
Please click here  
to get more information.