

# John Deere 524L 4WD Loader Repair Technical Manual - TM14344X19

## 524L 4WD Loader Repair

PIN: 1DW524L\_\_\_F693054—



JOHN HARE



COLLECTION

### REPAIR TECHNICAL MANUAL

524L 4WD Loader (PIN: 1DW524L\_\_\_F693054—)

TM14344X19 30NOV19 (ENGLISH)

For complete service information also see:

524L 4WD Loader Diagnostic .....	TM14341X19
TeamMate™ IV 1200 Series Inboard Planetary Axles .....	ctm140119
PowerTech 6068 OEM Diesel Engines (Final Tier 4/Stage IV platform) Level 33 ECU .....	ctm120019
Hydraulic Cylinders .....	TM14344X19



Worldwide Construction and Forestry Division

Covers: 524L,1DW524L\_\_\_F693054(???)

**Type:** Service Manual

**Language:** English

**Pages:** 349

**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 524L 4WD Loader Repair Technical Manual - TM14344X19**

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
- Hydraulic System
- Electrical System
- Electrical Tests and Diagnostics
- 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.

## Front Axle and Differential Remove and Install

### SPECIFICATIONS

Front Axle and Differential Weight (approximate)	754 kg 1662 lb
Axle Mounting Nut (9) Torque	675 N·m 498 lb·ft

### SERVICE EQUIPMENT AND TOOLS

D01182AA 20-Ton Floor Stand (2 used)
JT01642A Low-Lift Transmission Jack

## REMOVAL

1. Park and prepare machine for service safely. See Park and Prepare for Service Safely - document TM14341X19 - (Group 0001.)
2. Install frame locking bar. See Frame Locking Bar - document OMT406387X19 - (Operator's Manual.)
3. Raise boom and install boom lock. See Locking Loader Boom - document OMT406387X19 - (Operator's Manual.)



4. **CAUTION:**  
Escaping fluid under pressure can penetrate the skin, causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

Relieve hydraulic system pressure. See Hydraulic System Pressure and Accumulators Discharge - document TM14341X19 - (Group 9025-25.)

5. Drain front axle oil. See Drain and Refill Front and Rear Axle Oil - document OMT406387X19 - (Operator's Manual.)



6. **CAUTION:**  
Prevent possible crushing injury from heavy component. Use appropriate lifting device.

Raise front of machine. Support loader frame with D01182AA 20-Ton Floor Stands. For machine weights, see:

Standard Z-Bar Specifications - document OMT406387X19 - (Operator's Manual.)  
 High Lift Z-Bar Specifications - document OMT406387X19 - (Operator's Manual.)  
 High Lift Plus Z-Bar Specifications - document OMT406387X19 - (Operator's Manual.)  
 Tool Carrier Specifications - document OMT406387X19 - (Operator's Manual.)

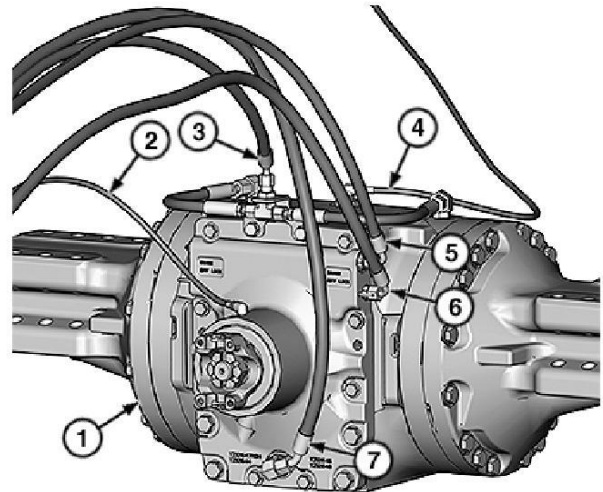
7. Remove wheels. [See Wheel Remove and Install](#). (Group 0110.)
8. Remove front axle guard (if equipped). [See Front Axle Guard Remove and Install](#). (Group 1746.)

### IMPORTANT:

9. Do not reuse drive shaft universal joint cap screws. Replace cap screws to avoid machine damage.

Disconnect drive shaft from front axle. Discard universal joint cap screws. [See Universal Joint and Drive Shaft Remove and Install](#). (Group 0225.)

10. Install identification tags and disconnect front axle oil temperature sensor. For location of sensor, see Loader Frame Harness (W2) Component Location - document TM14341X19 - (Group 9015-10.)



11. TX1194679A-UN: Front Axle and Differential

### LEGEND:

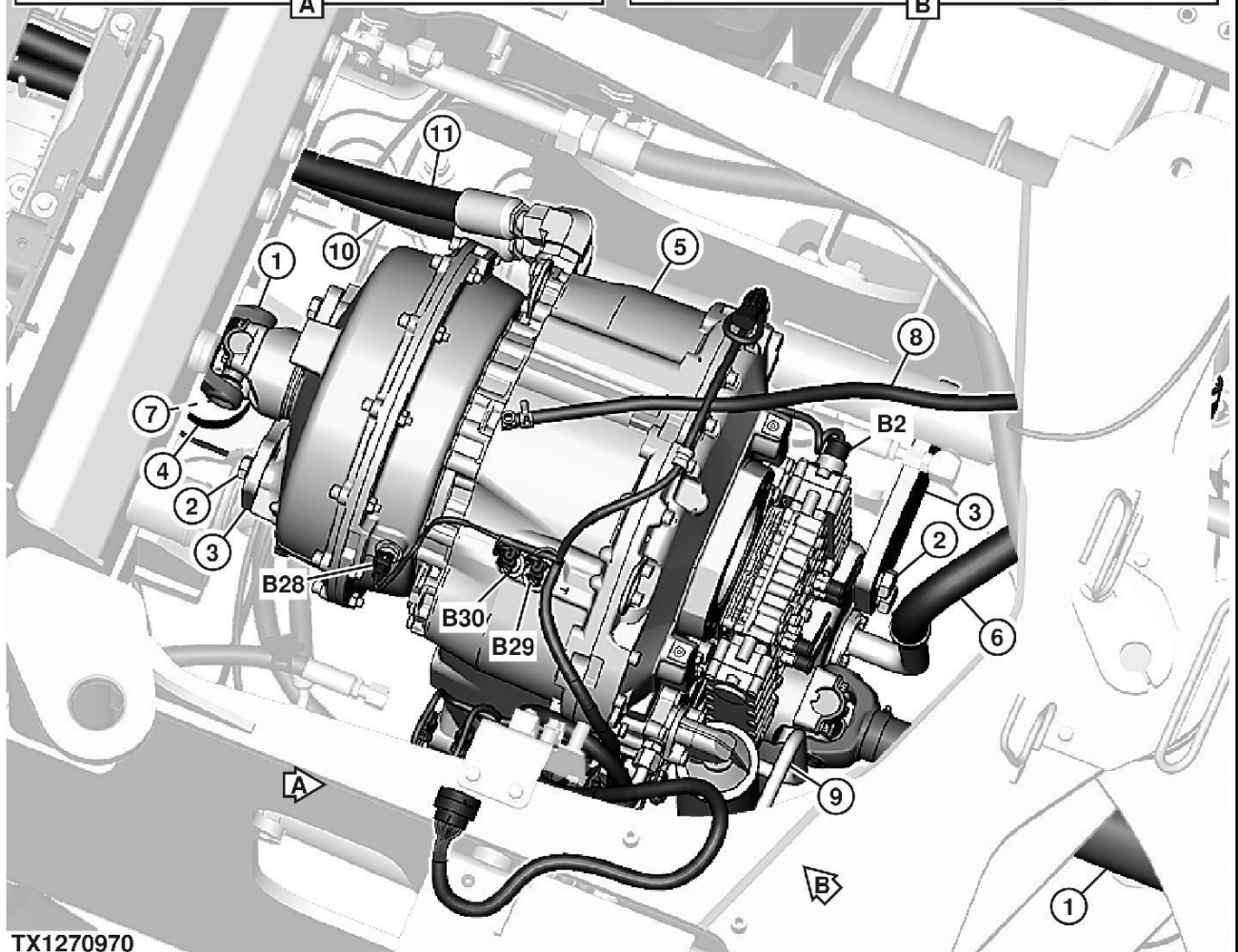
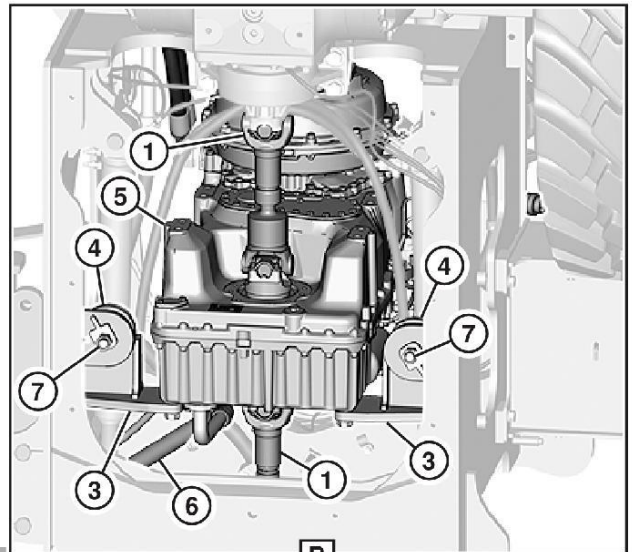
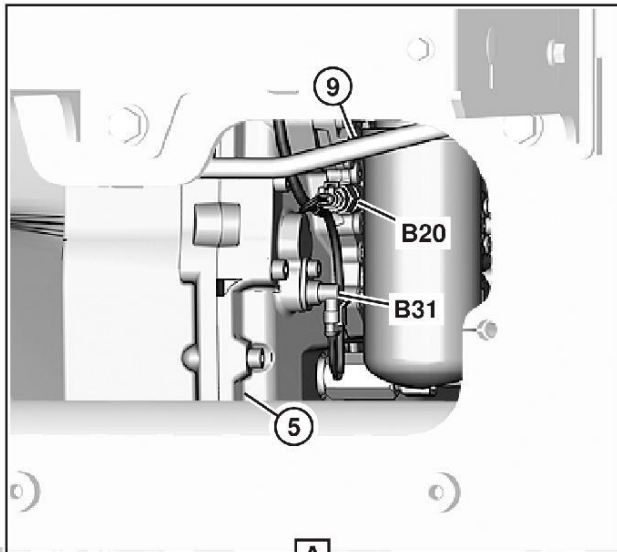
- 1-Front Axle and Differential
- 2-Grease Line
- 3-Axle Oil Cooler-to-Front Axle Line (if equipped)
- 4-Breather Line
- 5-Service Brake Line
- 6-Differential Lock Line
- 7-Front Axle-to-Front Axle Circulation Pump Line (if equipped)

Install identification tags and disconnect lines (2 and 4—6) and lines (if equipped) (3 and 7). Close all openings using caps and plugs.

**IMPORTANT:**

5. **Avoid machine damage. Do not reuse drive shaft universal joint cap screws.**

Disconnect drive shafts (1) from transmission (5). Discard universal joint cap screws. [See Universal Joint and Drive Shaft Remove and Install](#). (Group 0225.)



**TX1270970**

TX1270970-UN: Transmission

**LEGEND:**

- 1-Drive Shaft (3 used)
- 2-Transmission Mounting Bracket Cap Screw (8 used)
- 3-Transmission Mounting Bracket (3 used)
- 4-Transmission Isolator
- 5-Transmission

- 6-Transmission Oil Fill Tube
- 7-Transmission Isolator Nut (3 used)
- 8-Transmission Vent Line
- 9-Park Brake Manifold Return Line
- 10-Transmission Cooler Supply Line



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