

John Deere 524L 4WD Loader Diagnostic Technical Manual - TM14341X19

524L 4WD Loader Diagnostic

PIN: 1DW524L___F693054—



JOHN HARE



COLLECTION

DIAGNOSTIC TECHNICAL MANUAL

524L 4WD Loader (PIN: 1DW524L___F693054—)

TM14341X19 30NOV19 (ENGLISH)



Worldwide Construction and
Forestry Division

Covers: 524L,1DW524L___F693054(???)

Type: Service Manual

Language: English

Pages: 1015

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Compatibility: Windows/Mac/Tablet/Mobile

This service manual contains important information for the maintenance, troubleshooting and servicing of the **John Deere 524L 4WD Loader Diagnostic Technical Manual - TM14341X19**

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
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- 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
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- 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.

Service Brake Bleeding Procedure

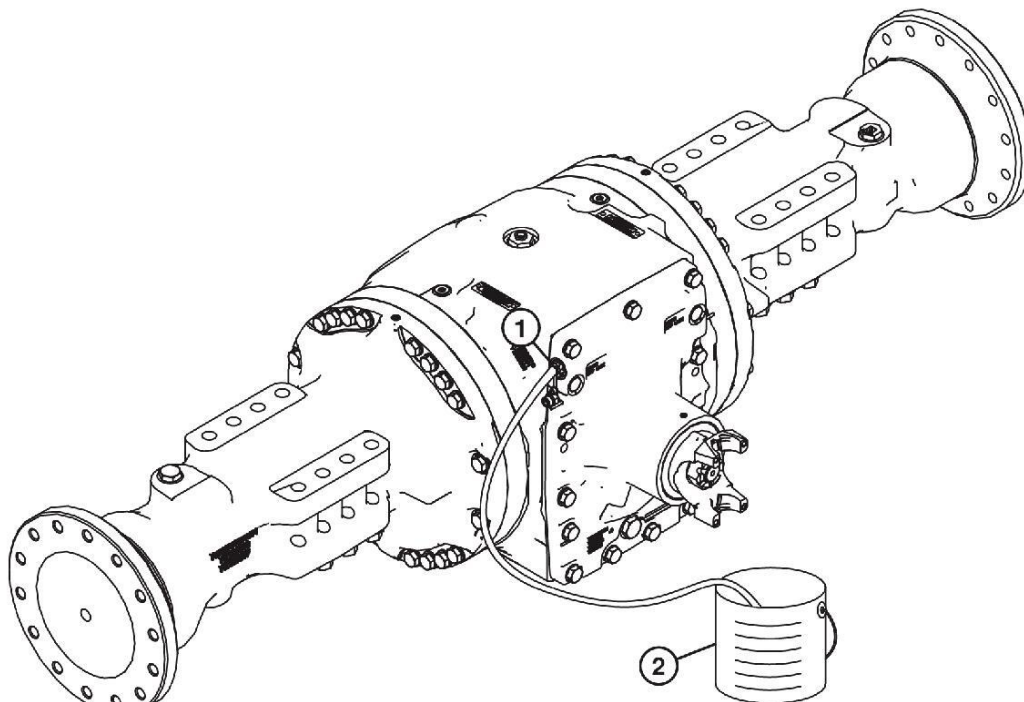
SPECIFICATIONS

| | |
|----------------------------------|-----------|
| Engine Speed | Slow Idle |
| Service Brake Pedal Applied Time | 15 s |

**CAUTION:**

To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

1. Park and prepare machine for service safely. [See Park and Prepare for Service Safely](#). (Group 0001.)



2. **TX1062035**

TX1062035-UN: Front Axle

LEGEND:

1-Bleed Screw

2-Container

Remove front and rear axle bottom guards (if equipped) to access brake bleed screw (1).

3. Install a clear plastic tube to bleed screw with hose clamp.
4. Secure other end of tube to a 20 L (5 gal) container (2).

**CAUTION:**

Avoid injury from escaping fluid under pressure. **DO NOT** loosen or tighten brake bleed screw while engine is running. **DO NOT** loosen plug more than 2 turns.

Loosen brake bleed screw 2 turns.

6. Start engine and run at slow idle with park brake engaged.

| Item | Measurement | Specification |
|--------|-------------|---------------|
| Engine | Speed | Slow Idle |

7. Apply slight pressure to service brake pedal for 15 seconds.

| Item | Measurement | Specification |
|-----------------------------|-------------|---------------|
| Service Brake Pedal Applied | Time | 15 s |

8. Release service brake pedal and stop engine.

Axle Circulation Pump Flow Test

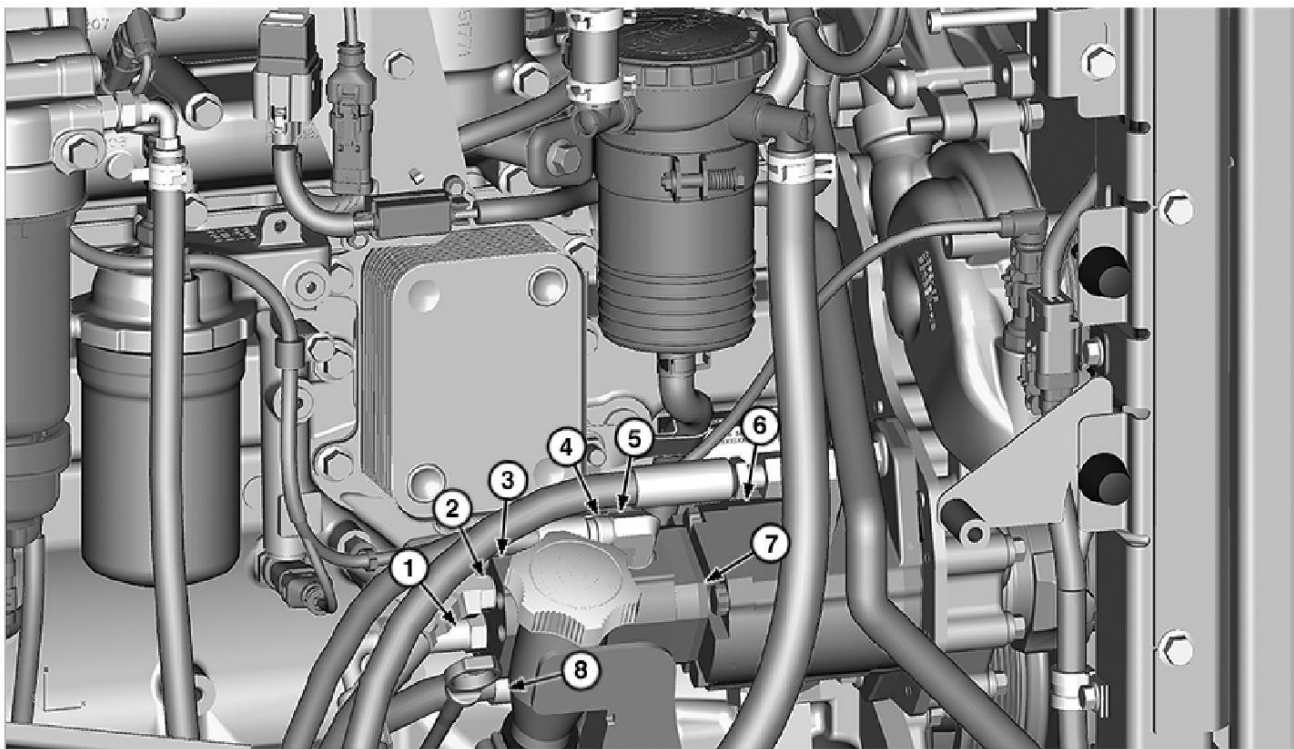
SPECIFICATIONS

| | |
|---|--------------------------|
| Engine Speed | Fast Idle |
| Axle Circulation Pump Flow Rate (minimum, one pump, new) | 4.9 L/min 1.3 gal/min |
| Axle Circulation Pump Flow Rate (minimum, one pump, used) | 3.7 L/min 1.0 gal/min |

SERVICE EQUIPMENT AND TOOLS

| |
|--|
| JDG11863 Flowmeter |
| Adapter (9/16-18 UNF M.ORB x -6 M. ORFS) |
| Test Hose (-6 F ORFS x -6 F ORFS) |
| Adapter (-6 M ORFS x 9/16-18 UNF F ORB) |

The purpose of this test is to verify that the axle circulation pump is functioning properly to keep axle oil temperatures within normal operating range.



TX1220314A-UN: Axle Circulation Pump

LEGEND:

| | | |
|--|---|--|
| 1-Front Axle Circulation Pump Inlet Line | 4-Rear Axle Circulation Pump Outlet Line | 7-Rear Axle Circulation Pump |
| 2-Front Axle Circulation Pump Outlet Line | 5-Elbow | 8-Rear Axle Circulation Pump Inlet Line |
| 3-Front Axle Circulation Pump | 6-Hydraulic Fan Pump | |

1. Park and prepare machine for service. [See Park and Prepare for Service Safely](#). (Group 0001.)

2. NOTE:

Before performing axle circulation pump flow test, check for seal damage. Repair or replace as needed. If oil is leaking from the axle circulation pump weep holes, replace both axle circulation pumps.

Disconnect front axle circulation pump outlet line (2) and connect to JDG11863 Flowmeter outlet port.

3. Connect -6 F ORFS x -6 F ORFS test hose to front axle circulation outlet fitting.
4. Connect opposite end of test hose to flowmeter inlet port.
5. Check axle oil level.



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