

# John Deere 624K (T2/S2) 4WD Loader (SN.000001-001000) Service Repair Technical Manual (TM13211X19)

## 225DLC Excavator

### REPAIR TECHNICAL MANUAL

225DLC

TM10085 30AUG15 (ENGLISH)

For complete service information also see:

225DLC Excavator Diagnostic	TM10082
Super Caddy Oil Cleanup Procedure	CTM310
JDLINK/ZXLINK Machine Monitoring System	CTM10006
JDG10274 Ultrasonic Undercarriage Measurement Gauge	CTM10001



John Deere Construction and Forestry

**Covers:** 624K,1BZ624K\*\*\*C000001-001000;;1BZ624K\*\*\*D000001-001000

**Type:** Service Manual

**Language:** English

**Pages:** 405

**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 624K (T2/S2) 4WD Loader (SN.000001-001000) Service Repair Technical Manual (TM13211X19)**

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
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- Brakes
- Wheels
- Operator's Platform
- Body Panels
- Disassembly and Assembly
- Diagnostics, Tests and Adjustments
- Troubleshooting
- and much more...

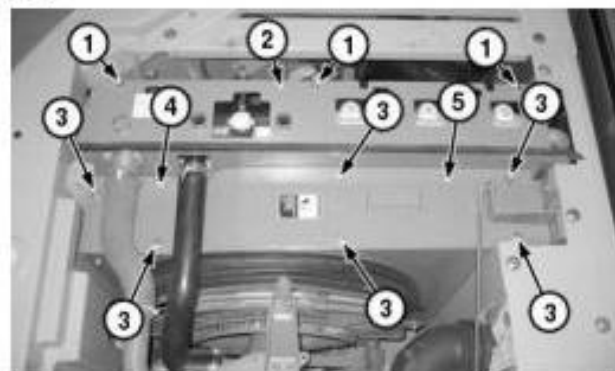
Please note this manual is in **downloadable PDF format only**. If you have any questions about this product or would like to request sample pages, please contact us and reference the product name or SKU.

[8] - Remove retaining pin and disconnect hood support rod (1).

[9] - Attach appropriate lifting device to hood.

[10] - Remove cap screws (2) and hood (3).

[11] -



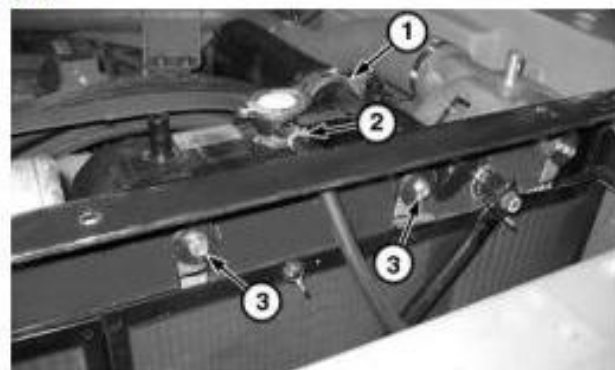
**LEGEND:**

- |   |            |
|---|------------|
| 1 | Cap Screws |
| 2 | Cover      |
| 3 | Cap Screws |
| 4 | Cover      |
| 5 | Cover      |

**Cooling Package Shields**

Remove cap screws (1 and 3) and cover (2, 4 and 5).

[12] -



**LEGEND:**

- |   |                              |
|---|------------------------------|
| 1 | Upper Radiator Hose          |
| 2 | Overflow Hose                |
| 3 | Mounting Cap Screws (2 used) |

**Upper Radiator**

Loosen clamp and disconnect upper radiator hose (1) from radiator.

[13] - Disconnect overflow hose (2).

[14] - Attach suitable lifting device to radiator.

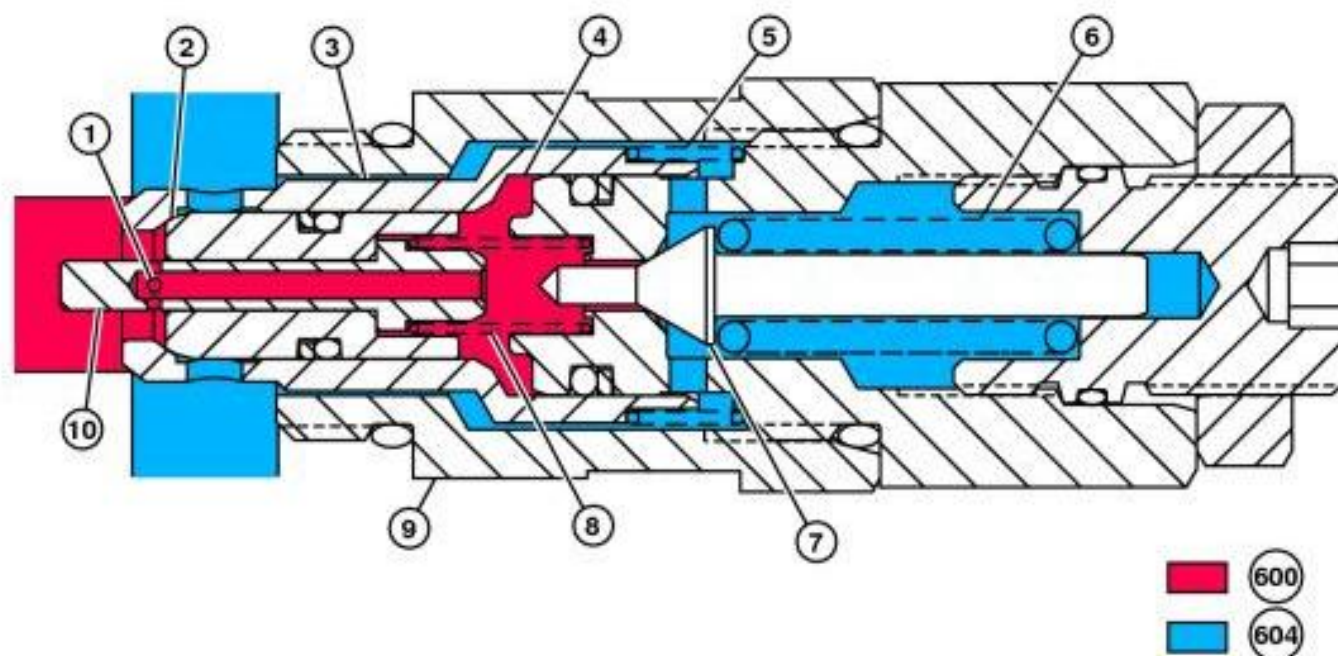
[15] -

**IMPORTANT:**

**Avoid damage to radiator drain when removing. Lift radiator upward and then toward engine until radiator is clear of cooling package mounting frame. Screen may be removed or set aside to provide additional clearance if needed by removing wing nuts at top of screen.**

Remove upper mounting cap screws (3) and radiator.

## Circuit Relief Valve with Anticavitation—Backhoe Bucket Curl and Loader Bucket Dump



TX1101099

### Circuit Relief Valve with Anticavitation—Backhoe Bucket Curl and Loader Bucket Dump

#### LEGEND:

1	Orifice
2	Main Poppet
3	Anticavitation Poppet
4	Oil Cavity
5	Anticavitation Spring
6	Pilot Spring
7	Pilot Poppet
8	Main Spring
9	Relief Body
10	Piston
600	High Pressure Oil
604	Return Oil

This pilot operated and screw adjustable relief valve has anticavitation operation.

The relief valve setting is controlled by the pilot spring (6) load holding the pilot poppet (7) on its seat. This setting is adjustable by turning the adjustment cap at the relief valve.

During normal operation, pressure oil less than relief valve setting, flows through orifice (1) into oil cavity (4). At this time, oil pressure is equal at both sides of main poppet (2) and anticavitation poppet (3). Because the surface area of the poppets is greater at the oil cavity side than the work port side, the effective area and spring tension will hold both poppets in the closed position.

During relief operation, pressure oil pushes pilot poppet off its seat allowing oil to flow from the pressurized port through orifice, into oil cavity, past the pilot poppet, and then to tank through a path between relief body (9) and anticavitation poppet. When the pilot poppet is unseated, a pressure drop is produced in the oil cavity. The pressure drop creates a pressure differential across the piston (10), causing the piston to move against the main spring (8) until the piston seats against the pilot poppet. When this happens, orifice (1) is closed off which further reduces the pressure in the oil cavity. When the pressure differential is large enough to overcome the surface area effect and spring tension, the main poppet will move off its seat and allow oil from the work port to flow to the return port.

During anticavitation operation, the pressure in the work port and the oil cavity is less than pressure in the return port. The pressure difference pushes the anticavitation poppet off its seat, allowing oil to flow from return port to work port to prevent cavitation.



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