

John Deere 744L 4WD Loader Operation & Test Technical Manual - TM14364X19

744L 4WD Loader Operation and Test

PIN: 1DW744L__D697296



JOHN HARE



COLLECTION

OPERATION & TEST TECHNICAL MANUAL 744L 4WD Loader (PIN: 1DW744L__D697296—)

TM14364X19 30NOV19 (ENGLISH)

For complete service information also see:

6090 Diesel Engine - Level 25 ECU.....	ctm139119
744L 4WD Loader Repair.....	TM14370X19
Hydraulic Cylinders.....	ctm120519
JDLink™ (MTG) 4G LTE Technical Manual.....	tm143019
TEAMMATE V 1600 Axles.....	19



Worldwide Construction and
Forestry Division

Covers: 744L,1DW744L__,D697296 () () () () () () () ()

Type: Service Manual

Language: English

Pages: 1433

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 744L 4WD Loader Operation & Test Technical Manual - TM14364X19**

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.

Transmission Pump Flow Test

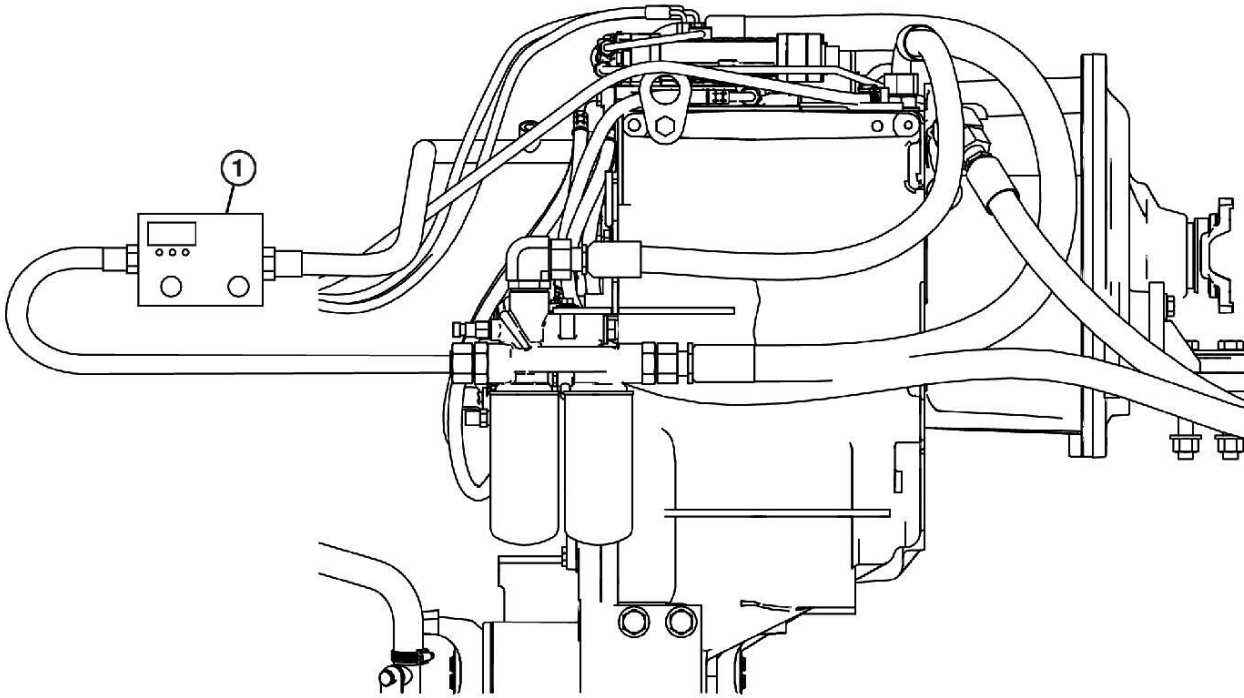
SPECIFICATIONS

Transmission Oil Temperature	74—86°C 165—187°F
Engine Speed	1500 rpm
Transmission Forward, Neutral, and Reverse (FNR) Position	Neutral
Transmission Pump Flow (new, minimum) Slow Idle	40 L/min 10.5 gal/min
Transmission Pump Flow (used, minimum) Fast Idle	120 L/min 31.5 gal/min

ESSENTIAL TOOLS

JT07148 Digital Hydraulic Flowmeter Tester

The purpose of this test is to determine transmission pump flow rate and performance.



XJ1218998

XJ1218998-UN: Transmission

LEGEND:

1-JT07148 Digital Hydraulic Flowmeter Tester



1. **CAUTION:**

Prevent possible injury from machine movement. Ensure that there is adequate room and clear area of bystanders.

Park the machine on a flat, level surface.

2. Install frame locking bar. See Frame Locking Bar - document OMT426213X19 - (Operator's Manual.)



3. **CAUTION:**

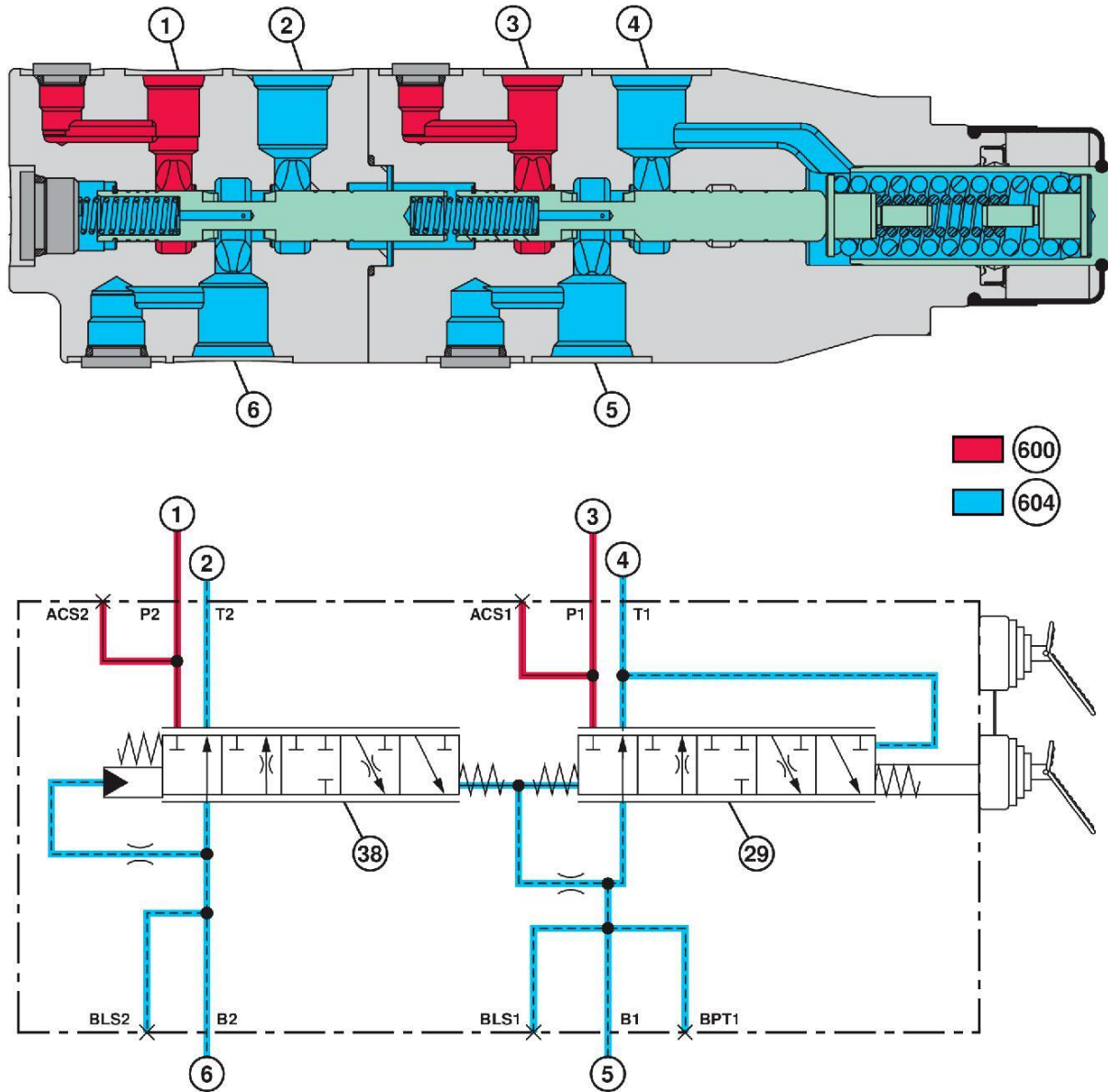
To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

4. Install JT07148 Digital Hydraulic Flowmeter Tester (1).

Service Brake Valve Operation

NOTE:

For service brake hydraulic line information, [see Service Brake System Line Identification](#). (Group 9020-10.)



TX1276660

TX1276660-UN: Service Brake Valve

LEGEND:

1-High-Pressure Oil From Front Brake Accumulator (port P2)
2-Return Oil to Hydraulic Reservoir (port T2)
3-High-Pressure Oil From Rear Brake Accumulator (port P1)
4-Return Oil to Hydraulic Reservoir (port T1)
5-Rear Brake Work Port (port B1)
6-Front Brake Work Port (port B2)
29-Rear Axle Brake Valve Spool
38-Front Axle Brake Valve Spool
600-High-Pressure Oil
604-Return Oil

The brake valve is a manually operated, dual section, closed-center, spool-type valve. The first valve section controls the rear brakes. The second valve section controls the front brakes. Each brake valve section has its own brake valve spool (29 and 38). Linking the two separate brake valve spools are a spring and a small oil passage that provides a reduced pressure from the brake system when activated.

For more information, [see Hydraulic System Schematic](#). (Group 9025-10.)

At the moment the service brake pedal is pressed, oil flows into the spring cavity. The spring begins to compress from the travel of the first spool. The combination of the oil and the spring moves the spool of the second brake valve section.



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