

# John Deere 643L-II Wheeled Feller Buncher Repair Technical Manual (TM14328X19)

## 643L-II Wheeled Feller Buncher Repair

PIN: 1DW643L\_\_\_F690815—



JOHN HARE



COLLECTION

### REPAIR TECHNICAL MANUAL 643L-II Wheeled Feller Buncher

(PIN: 1DW643L\_\_\_F690815—)

TM14328X19 30NOV19 (ENGLISH)

For complete service information also see:

TeamMate IV 1400 Series Inboard Planetary Axles ..... ctm14021E  
643L-II Wheeled Feller Buncher Diagnostic ..... TM14327X19  
1800C Series F-10D Transmission ..... ctm158  
PowerTech 6059 OEM Diesel Engines (First Tier  
platform) Level 23 ECU .....  
Hydraulic Cylinders .....



Worldwide Construction and  
Forestry Division

Covers: 643L-II, 1DW643L\_\_\_F690815 ( ) ( ) ( ) ( ) ( ) ( ) ( )

**Type:** Service Manual

**Language:** English

**Pages:** 298

**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 643L-II Wheeled Feller Buncher Repair Technical Manual (TM14328X19)**

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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- Operator's Platform
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- 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.

## Rear Differential Drive Shaft Remove and Install

### SPECIFICATIONS

Cap Screw (1 and 2) Torque:

57 N·m  
42 lb.-ft.

### REMOVAL

1. Park and prepare machine for service. [See Park and Prepare for Service Safely](#). (Group 0001.)
2. Turn battery disconnect switch to the OFF position. See Battery Disconnect Switch - document OMT412053X19 - (Operator's Manual.)

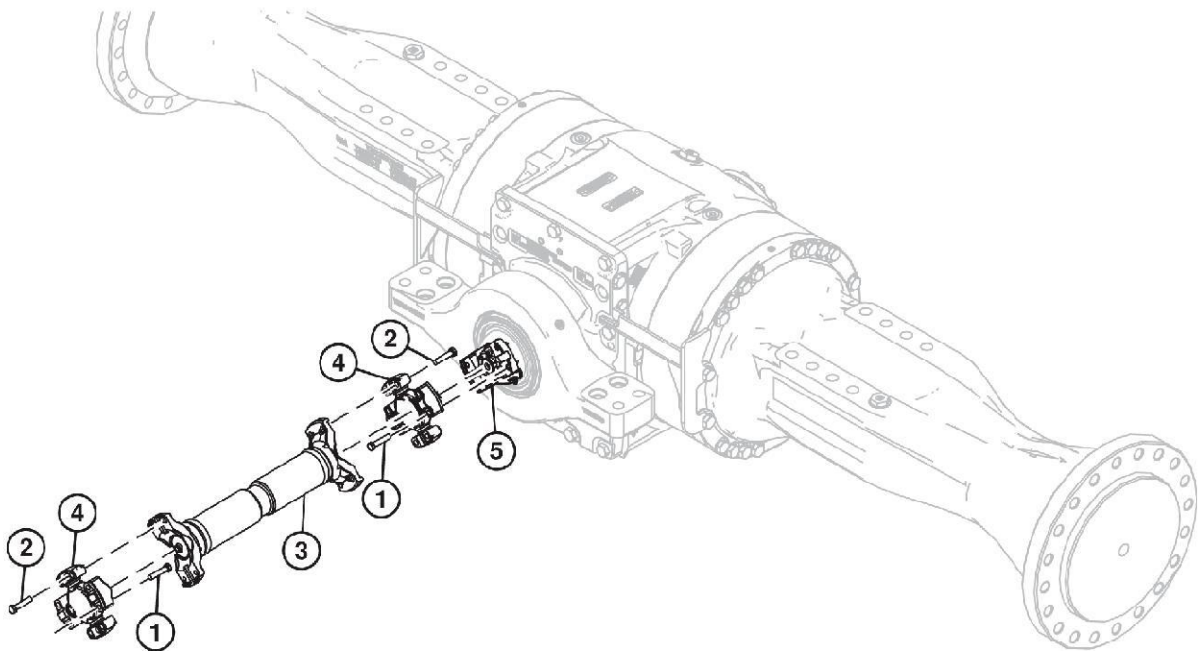


### CAUTION:

Avoid possible injury from unexpected machine movement. Install wheel chocks under wheels.

Install wheel chocks under wheels.

4. Remove center bottom guard. [See Bottom Guards Remove and Install](#). (Group 1746.)



### 5. TX1194980

TX1194980-UN: Rear Differential Drive Shaft (843\_ shown)

#### LEGEND:

1-Cap Screw (8 used)

2-Cap Screw (8 used)

3-Rear Differential Drive Shaft

4-Cross Joint (2 used)

5-Yoke

Remove caps screws (1) and rear differential drive shaft (3).

6. Remove caps screws (2) and cross joints (4).

### 7. NOTE:

Yoke faces, keyways, and bearing cap mounting face and key must be free of foreign material, burrs, and nicks which will prevent the proper position and alignment of yoke keyway and cross bearing cap key.

Clean and inspect parts. Repair or replace as necessary.

### INSTALLATION

## Hydraulic System (Hydrostatic Transmission)

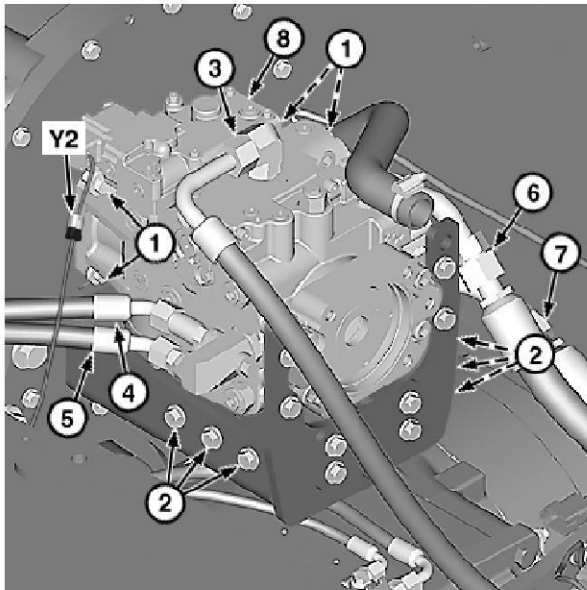
## Hydrostatic Pump Remove and Install

## SPECIFICATIONS

Hydrostatic Pump Weight (approximate)	68 kg 150 lb.
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## REMOVAL

1. Park and prepare machine for service. [See Park and Prepare for Service Safely.](#) (Group 0001.)
2. Tilt cab. [See Hydraulic Cab Tilt Procedure.](#) (Operator's Manual.)
3. Remove main hydraulic pump. [See Main Hydraulic Pump Remove and Install.](#) (Group 2160.)



4. TX1155868A-JN: Hydrostatic Pump (components removed for clarity)

## LEGEND:

1-Cap Screw (4 used)

2-Cap Screw (6 used)

3-Hydrostatic Line

4-Hydrostatic Line

5-Hydrostatic Line

6-Hydrostatic Line

7-Hydrostatic Line

8-Hydrostatic Pump

Y2-Hydrostatic Pump Solenoid

Disconnect hydrostatic pump solenoid (Y2).

5. Install identification tags and disconnect hydrostatic lines (3—7). Close all openings using caps and plugs.



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

Attach appropriate lifting device to hydrostatic pump (8) and remove cap screws (2).

Item	Measurement	Specification
Hydrostatic Pump	Weight (approximate)	68 kg 150 lb.

7. Remove cap screws (1) and slide hydrostatic pump away from engine to remove.

## INSTALLATION

Installation is reverse of removal procedure.

Perform hydrostatic transmission start-up procedure. See Hydrostatic Transmission Start-Up Procedure - document TM14327X19 - (Group 9020-20.)

Calibrate transmission. See Setup—Machine Configuration - document TM14327X19 - (Group 9015-16.)

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