# John Deere 110 Excavator Diagnostic Operation and Test Service Manual (tm1657)

204L and 304L Compact 4WD Loader Repair

(PIN: 1LU204LX\_ \_B040073—; PIN: 1LU304LX\_ \_B040073—)



JOHN HARE



### REPAIR MANUAL

204L and 304L Compact 4WD Loader (PIN: 1LU204LX\_\_B040073—; PIN: 1LU304LX\_\_B040073—)

TM14272X19 01DEC18 (ENGLISH)

#### For complette service information also see:



Worldwide Construction and Foresty Division

Covers: 110

**Type:** Service Manual **Language:** English

Pages: 630 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 110 Excavator Diagnostic Operation and Test Service Manual (tm1657)

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.

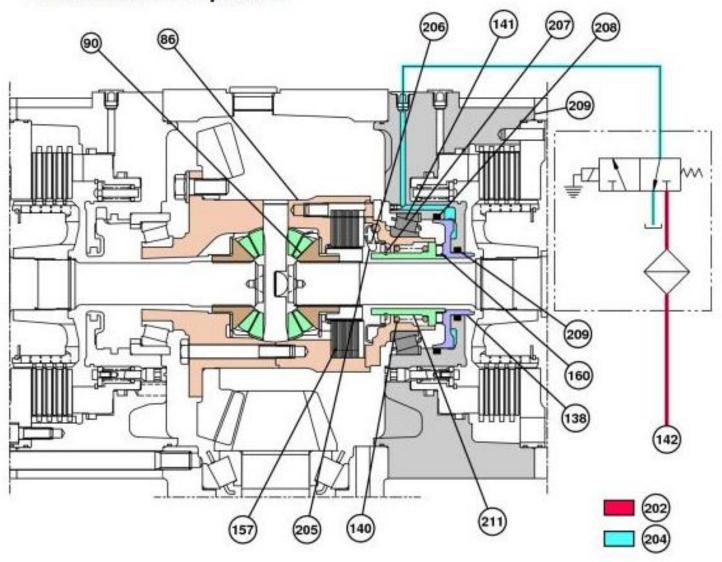
#### **Contents:**

- 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 <b>downloadable PDF format only.</b> 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.	

Section 9020 - POWER TRAIN Group 05: Theory of Operation

# **Differential Lock Operation**



# TX1016457

# Differential Lock Operation

LEGEND:	
86	Differential Housing
138	Piston
140	Spring
141	Bearing
142	From Transmission Pump
157	Clutch Pack
160	Needle Bearing
202	System Pressure
204	Return Pressure
205	Lever
206	Cage
207	Snap Ring
208	Seal
209	Brake Housing
210	Differential Lock Solenoid

When the operator has the differential lock foot control switch in the off position (unapplied), the spring force (140) moves the sliding sleeve (211), lever (205) and piston (138) back releasing the differential lock. The return oil returns through the same port as when the switch is in the "On" position.

When the operator pushes the differential lock foot control switch to the on position, the switch energizes the differential lock solenoid (210) on the transmission. When the differential lock solenoid is energized, pressure oil flows to the inlet and through the cross-drilled passages to the piston (138). The pressurized oil moves the piston against the sliding sleeve and lever to lock

Section 9020 page 13 710/ Backhoe Loader Diagnostic



Thank you very much for your reading.

Please click here to get more information.