# John Deere 710J Backhoe Loader (S.N.159770-) Diagnostic, Operation and Test Service Manual (TM10874)



**Covers:** 710J,159770-161143,172185-)

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

**Pages:** 796 **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 710J Backhoe Loader (S.N.159770-) Diagnostic, Operation and Test Service Manual (TM10874)

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.

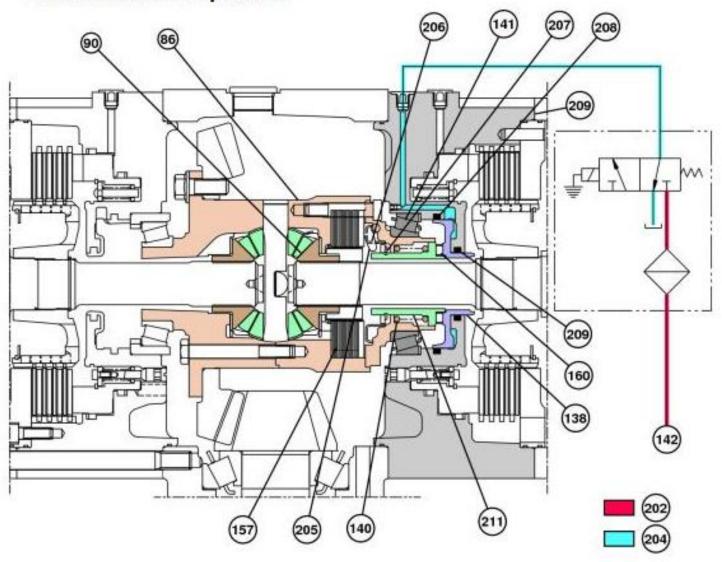
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Please note this manual is in <b>downloadable PDF format only.</b> If you have any questions about this product or would like to request sample pages, please contact us and reference the product name or SKU.	

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

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Thank you very much for your reading.

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