SERVICE MANUAL

W190C
Wheel Loader

Print No. 47373613B

NEW HOLLAND CONSTRUCTION

MidWestTech | New Holland W190C Wheel Loader Service Manual | Publication 47373613B

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W190C Wheel Loader
Service Manual
47373613B

Table of Contents

Description	Section No.
General	**Tab 1**
Section Index - General	
Standard Torque Specifications	1001
Fluids and Lubricants	1002
Metric Conversion Chart	1003
Engines	**Tab 2**
Section Index - Engines	
Engine and Radiator Removal and Installation	2000
Stall Tests	2002
After Cooler	2003
For Engine Repair, See the Engine Service Manual - Sold Separately	604.13.689
Fuel System	**Tab 3**
Section Index - Fuel System	
For Engine Repair, See the Engine Service Manual - Sold Separately	604.13.689
Electrical	**Tab 4**
Section Index - Electrical	
Removal and Installation of Starter and Alternator	4001
Electrical Specifications and Troubleshooting	4002
Batteries	4003
Jump Post Option	4003a
Instrument Cluster	4005

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W190C Wheel Loader
Service Manual
47373613B

Table of Contents

Description	Section No.
Steering	**Tab 5**
Section Index - Steering	
Removal and Installation of Steering Components	5001
Steering Specifications, Pressure Checks, and Troubleshooting	5002
Steering Cylinders	5005
Center Pivot	5006
Auxiliary Steering Motor and Pump	5008
Joystick Steering System (JSS)	5009
Power Train	**Tab 6**
Section Index - Power Train	
Removal and Installation of Power Train Components	6001
Transmission Specifications, Pressure Checks, and Troubleshooting	6002
Transmission	6003
Multitrac MT-L 3075 II/3085 II/3095 II Axles	6004
Drive Shafts, Center Bearing, and Universal Joints	6005
Wheels and Tires	6006
Brakes	**Tab 7**
Section Index - Brakes	
Removal and Installation of Brake Components	7001
Hydraulic Brake Troubleshooting	7002
Brake Pump	7003
Brake Accumulators	7004
Parking Brake	7008

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W190C Wheel Loader
Service Manual
47373613B

Table of Contents

Description	Section No.
Hydraulics	**Tab 8**
Section Index - Hydraulics	
Removal and Installation of Hydraulic Components	8001
Hydraulic Specifications, Troubleshooting, and Pressure Checks	8002
Cleaning the Hydraulic System	8003
Hydraulic Pump	8004
Loader Control Valve	8005
Cylinders	8006
Coupler Solenoid Locking Valve	8007
Ride Control Accumulator	8013
Ride Control Valve	8014
Mounted Equipment	**Tab 9**
Section Index - Mounted Equipment	
Air Conditioning Troubleshooting and System Checks For Systems with HFC-134a Refrigerant	9002
Air Conditioner System Service	9003
Removal And Installation Of Air Conditioning And Heater Components	9004
Loader	9006
Roll Over Protective Structure (ROPS), Cab Structural Frame (CSF)	9007
Cab Glass Installation	9010
Rear View Camera Installation and Removal	9020
Electrical Schematic Foldouts and Hydraulic Schematic Foldout	**In Rear Pocket**

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150 – Air Conditioning Switch

Check Points	Correct Reading	Possible Cause of Bad Reading
NOTE: *Remove connector from AC switch.*		
Between terminal 1 and 2 on AC switch	Continuity with switch on.	Bad AC switch.

151 – Control Panel Lights

Check Points	Correct Reading	Possible Cause of Bad Reading
NOTE: *Remove connector from Control panel lights.*		
Between terminal 1 and 2 on light.	Continuity	Bad light(s).

152 – Water Valve Potentiometer

Check Points	Correct Reading	Possible Cause of Bad Reading
NOTE: *Remove connector from Water valve potentiometer.*		
Between terminals measure resistance change.	Resistance change	Bad potentiometer.

153 – Air Recirculating Switch

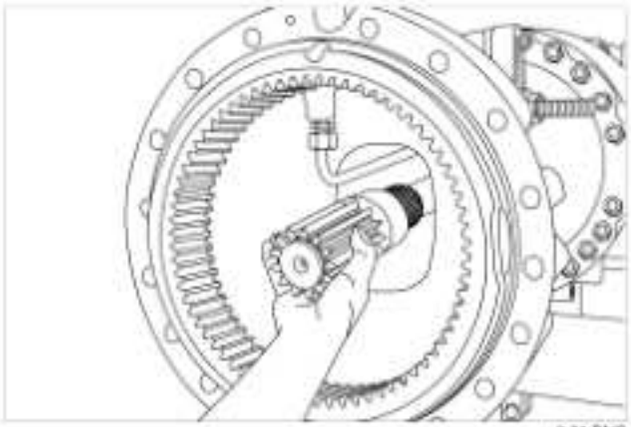
Check Points	Correct Reading	Possible Cause of Bad Reading
NOTE: *Remove connector on Air recirculating switch.*		
Between terminals 1 and 2.	Continuity with switch on.	Bad recirculating switch.

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CODE	DEFINITION	DESCRIPTION AND POSSIBLE STEPS FOR REPAIR
3114	Main Relay 1 (High Pressure Pump) short to GND.	Short circuit to ground of main relay or defective main relay. Check the wiring connecting the battery to the EDC or replace main relay
3118	ECM 12V sensor supply voltage high	Ambient pressure sensor inside ECU is defective. Replace ECU (not necessary if never running in high altitude and if turbocharger without VGT)
3119	ECM 12V sensor supply voltage low	
3131	Grid heater always switched on	Short circuit to ground of grid heater. Check grid heater switch and replace it
3133	Cold start lamp - No load	See engine manual for details.
3134	Cold start lamp - Short circuit to battery	See engine manual for details.
3135	Cold start lamp - Short circuit to ground.	See engine manual for details.
3136	Cold start lamp - Excessive temperature.	See engine manual for details.
3137	Metering unit open load	Broken or disconnected wiring or defective relay. Check of wiring or replace relay
3138	Metering unit signal not plausible	Defective wiring, ECU, power stage or metering unit. Check wiring, ECU, power stage and metering unit
3141	Set point of fuel volume flow through metering unit is lower than calculated limit	High pressure system: Rail pressure sensor inaccurate, high pressure pump defective. Low pressure system: Metering unit reflux too low. Check for defects according to failure list.
3142	High pressure test - Test active	The engine control unit (ECU) has acknowledged that the 'High Pressure Test' is running. The 'High Pressure Test' is a test procedure used to evaluate the performance of the fuel high pressure unit (pump, rail pressure control valve, etc.) and is executed via a diagnostic tester request. If this test is running the rail pressure monitoring has to be deactivated, which is done by setting this fault path. Therefore, this failure path is used more for information purposes and inhibit handling than as an actual error status.

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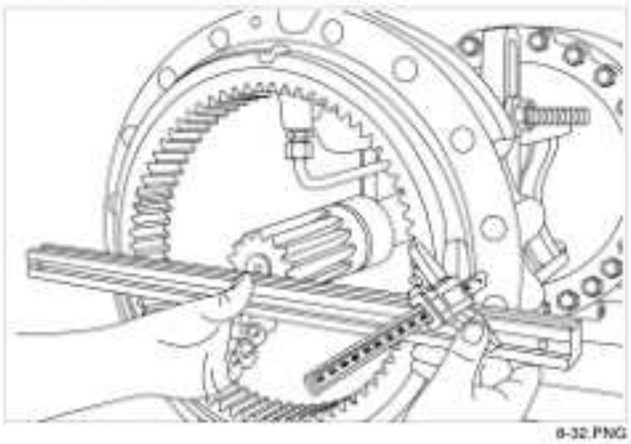
STEP 31



8-31.PNG

Insert sun gear shaft until contact is made.

STEP 32



8-32.PNG

Measure dimension II, from front face of sun gear shaft to mounting surface of axle housing.

Dimension II e.g. 17.15 mm (0.68 in)

CALCULATION EXAMPLE:

Dimension I: 19.75 mm (0.78 in)

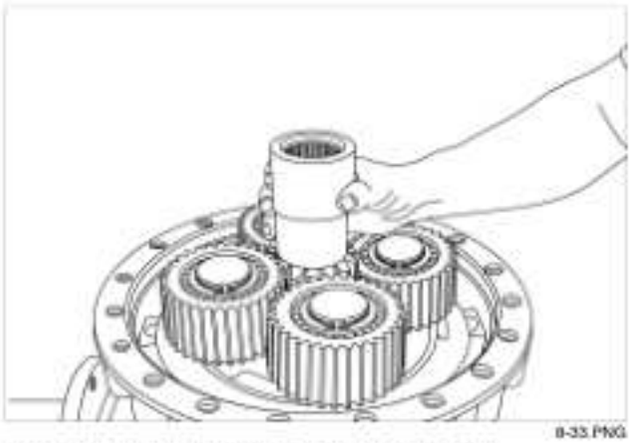
Dimension II: 17.15 mm (0.68 in)

Difference: 2.60 mm (0.10 in)

Required axial play e.g.: 1.00 mm (0.04 in)

Difference = shim e.g. s = 1.60 mm (0.06 in)

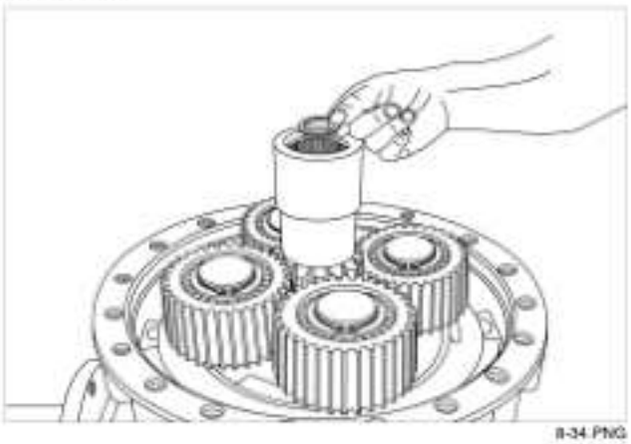
STEP 33



8-33.PNG

Insert sun gear shaft into planetary carrier.

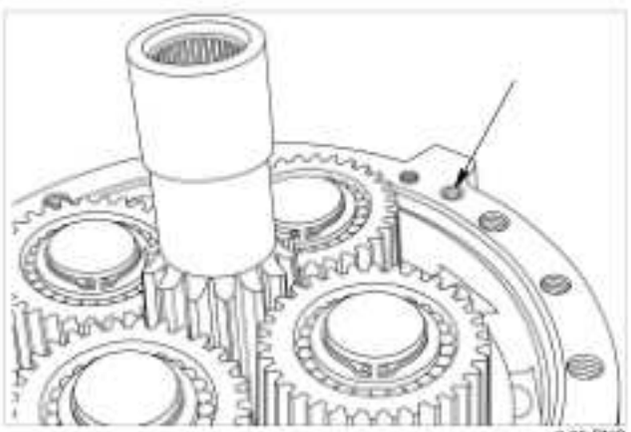
STEP 34



8-34.PNG

Insert shim(s) e.g. s = 1.60 mm (0.06 in) with grease into sun gear shaft.

STEP 35



8-35.PNG

Insert O-ring with grease into countersink of brake housing.

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