SERVICE MANUAL

Wheel Loader
W170C

Print No. 84488417

NEW HOLLAND
CONSTRUCTION

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120 –

121 – Power Converter 24 volts to 12 volts (Option)

Located in the cab access panel for fuses and relays.

Check Points	Correct Reading	Possible Cause of Bad Reading
Terminal for wire 0-EJ to ground	Continuity	Bad ground circuit.
NOTE: *Put master disconnect switch and ignition switch in ON position.*		
Terminal for wire 19L-B and 19L-A to ground	24 volts	Bad fuse F1 in power relay module A, also check circuit 19L.
Terminal for wire 12V-C to ground	12 volts	Bad power converter.

122 – Power Outlet (Option)

Located in the cab.

Check Points	Correct Reading	Possible Cause of Bad Reading
Terminal for wire 0-EK or 0-EL to ground	Continuity	Bad ground circuit.
Terminal for wire 12V or 12V-A to ground	12 volts	Bad power converter (121), check fuse ECB-F1 and F2, also check wire 12V-A.
NOTE: *If the readings are good replace the power outlet.*		

123 – 12 Volt Radio Ready (Option)

Located in the cab.

Check Points	Correct Reading	Possible Cause of Bad Reading
Terminal in radio connector for wire 0-EN to ground	Continuity	Bad ground circuit.
NOTE: *Put master disconnect switch and ignition switch in ON position.*		
Terminal in radio connector for wire 12V-HA to ground	12 volts	Check fuse ECB-F9, also check circuit 12V. Also check the remote radio power converter (121).

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CODE	DEFINITION	DESCRIPTION AND POSSIBLE STEPS FOR REPAIR
3145	Terminal 15 - No signal	**NOTICE:** Fault Code 3145 is stored historical information. For multiple occurrences of this fault proceed with the following tests. **NOTE:** See engine repair manual for electrical schematic information. When available use special tool 380040185 harness diagnostic/repair kit. Cause: 1. Faulty reading from component. 2. Connectors not mated fully, pins not pushed into connector fully, bent pin or broken wire at rear of connector. 3. Wiring or circuits open. 4. Wiring or circuits shorted. 5. Connector pins corroded or dirty.
3147	Oil temperature sensor signal above normal range	Check oil temperature sensor for accuracy and check oil system.
3148	Coolant temperature sensor dynamic test - Failure (Minimum temperature raise not reached).	See engine manual for details.
3154	Grid heater relay short-circuit to battery	Short circuit of wiring to external source or inside relay. Check wiring or replace relay
3155	Grid heater relay short-circuit to ground	Short circuit of wiring to ground or inside relay. Check wiring or replace relay
3156	Grid heater relay no load	Broken or disconnected wiring or defective relay. Check wiring or replace relay
3157	Engine dataset information was not available from EDC in required time	See engine manual for details.
3158	Engine dataset does not match dataset registered for this machine	See engine manual for details.
3160	Fan actuator - Short circuit to battery	See engine manual for details.
3161	Fan actuator signal low	See engine manual for details.
3162	Fan actuator - Open load	See engine manual for details.
3163	Fan actuator - Temperature too high	See engine manual for details.
3166	Fuel filter heater relay - Short circuit to battery	See engine manual for details.
3167	Fuel filter heater relay - Short circuit to ground.	See engine manual for details.
3168	Fuel filter heater relay - Open load.	See engine manual for details.
3169	Fuel filter heater relay - Signal not plausible.	See engine manual for details.

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INSTALLING A WHEEL

1. Make sure the mounting surfaces of the rim and axle flange are clean and free of dirt and grease.
2. Install the wheel, hardened washers and wheel bolts or nuts depending on axle configuration. The W170C Heavy Duty Axles axles have wheel studs on the axles and use wheel nuts.
3. Use a hand wrench (not an impact) to tighten the wheel bolts to pull the wheel against the planetary housing. DO NOT use an impact wrench to tighten the wheel bolts.
4. Tighten the wheel bolts to 278 Nm (205 lb ft.) in the sequence shown in Figure 1. Then tighten to final torque of 640 - 720 Nm (475 - 530 lb ft.).

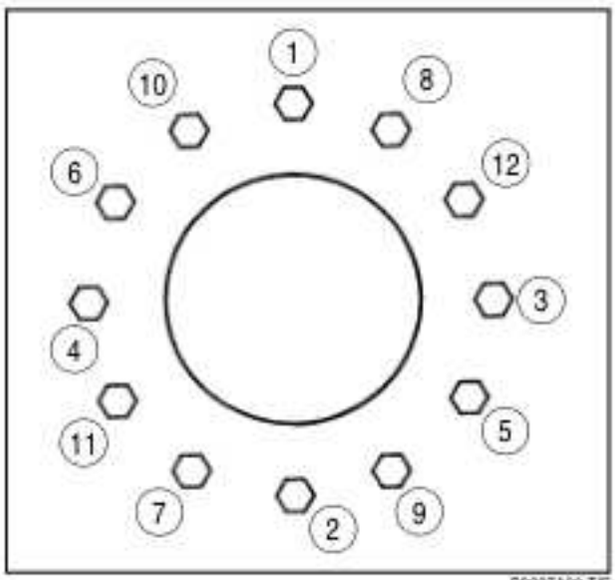


FIGURE 1. W170C WHEEL NUT/BOLT TORQUE SEQUENCE

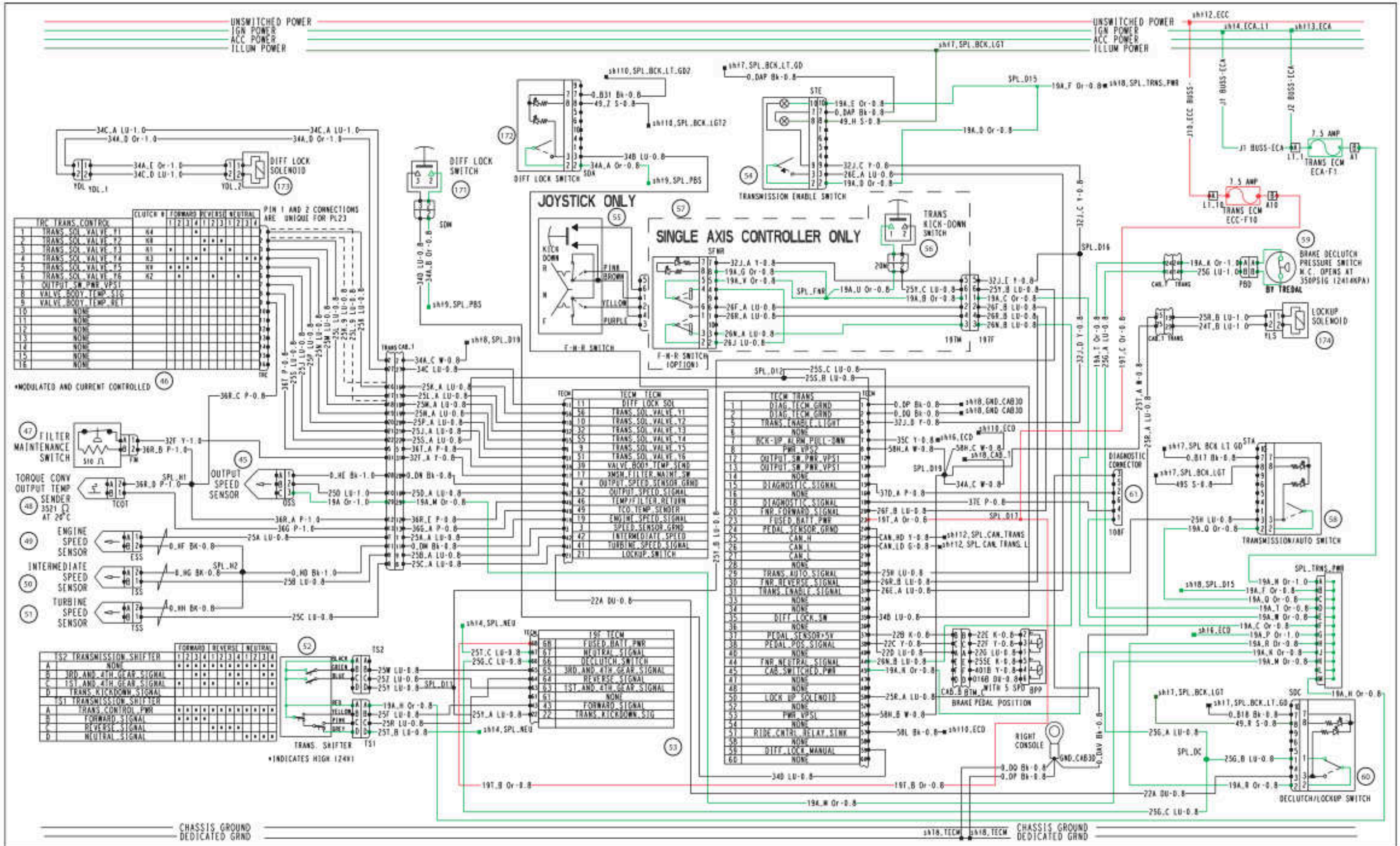
Stud Mounted Wheels (If equipped)

Machines equipped with optional heavy duty axles have a stud mounted wheel. The heavy duty axle incorporates a stud and nut assembly.

Torque Rates

First tighten nuts/bolts using correct sequence. Initially tighten to 278 Nm (205 lb ft.) Then tighten to final torque of 640 - 720 Nm (475 - 530 lb ft.).

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TRANSMISSION CONTROLS

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