SERVICE MANUAL

W230C
Wheel Loader

Print No. 84489509

NEW HOLLAND CONSTRUCTION

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158 – Ignition Power Latch

Located in the cab access panel for fuses and relays.

Check Points	Correct Reading	Possible Cause of Bad Reading
Terminal for wire 0-EW to ground	Continuity	Bad ground circuit.
NOTE: *Put master disconnect switch and ignition switch in ON position. Make sure transmission is in NEUTRAL.*		
Terminal for wire 13K to ground	24 volts	Check circuit 13K, check Ignition switch (10).
Terminal for wire 0-EA to 0-EU on Program relay module A (13)	Continuity	Bad wire or connector
Terminal for wire 0-ET to ground	Continuity	Bad ignition power latch relay or ignition power control relay (159).

159 – Ignition Power Control

Located in the cab access panel for fuses and relays.

Check Points	Correct Reading	Possible Cause of Bad Reading
Terminal for wire 0-KA to ground	Continuity	Bad ground circuit.
NOTE: *Put master disconnect switch and ignition switch in ON position. Make sure transmission is in NEUTRAL.*		
Terminal for wire 13K-A to ground	24 volts	Check circuit 13K, check ignition switch (10).
Terminal for wire 0-EY to ground	Continuity	Bad ignition power control relay.

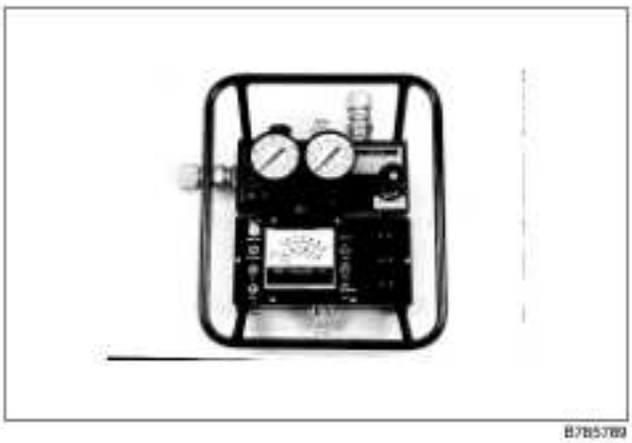
160 – Start Lockout

Located in the cab access panel for fuses and relays.

Check Points	Correct Reading	Possible Cause of Bad Reading
NOTE: *Used with Telematics on future models.*		

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SPECIAL TOOLS



B7853789

380001731 FLOWMETER



B0039638

380001739 PRESSURE TEST FITTING KIT



B797157

380001740 FLOWMETER FITTING KIT

TROUBLESHOOTING THE STEERING SYSTEM

NOTE: *The steering hydraulic schematic is included in the hydraulic schematic. Refer to the rear pocket of this manual.*

1. Make sure the oil level in the hydraulic reservoir is correct. Visually inspect the steering system for leakage and damage.
2. The loader/steering pump differential pressure must be properly adjusted. Refer to Section 8002 Testing and Adjusting the Loader/Steering Pump differential Pressure.
3. Do the steering limit valve pressure test. Refer to page 6. If the pressure is above or below specifications, adjust the steering limit valve.
4. Do the main hydraulic pump test. See Section 8002. If the main pump is bad, repair or replace the main hydraulic pump.
5. Test the steering cylinders for leakage, refer to instructions on page 8. If a steering cylinder is leaking, repair or replace the steering cylinder.
6. If the steering system is noisy test the back pressure relief valve, refer to instructions on page 9.

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STEP 16

Install and torque flow limit valve (19) to 20 to 25 Nm (177 to 221 pound inches).

STEP 17

Install cone (18), spring (17), locking screw (16). Torque locking screw to 100 Nm (73.7 pound feet).

STEP 18

Lubricate spools with hydraulic oil and push spools (35) into housing (11).

IMPORTANT: *Do not force spools into housing.*

STEP 19

Install spring retainers (23), springs (24), covers (33), and bolts (32). Torque bolts to 10.4 Nm (92 pound inches).

NOTE: *Repeat step 17 for a 3 spool valve configuration.*

STEP 20

Install spring retainers (23), spring (24 and 25), cover (26), and bolts (27). Torque bolts to 10.4 Nm (92 pound inches).

NOTE: *Prior to installation in the machine, circuit reliefs can be tested.*

STEP 21

Install valve in machine, see section 8001.

STEP 22

Check loader limit pressure, see section 8002.

Circuit Relief Pressure Test

STEP 1

Connect the hand pump to the port for anticavitation and circuit relief valves (21).

NOTE: *Repeat steps for machines that are configured with a 3 spool valve.*

STEP 2

Make sure that the hand pump is full of hydraulic oil and that the temperature of the oil is approximately 21°C (70°F).

STEP 3

Operate the handle of the hand pump and read the highest pressure. Repeat this step several times to be sure of the reading.

STEP 4

Compare the reading to the specifications on Page 3.

STEP 5

If the pressure is not correct, adjust the circuit relief valve.

Circuit Relief Adjustment

STEP 1

Loosen the lock nut. Turn the adjustment screw clockwise to increase the pressure or counterclockwise to decrease the pressure.

NOTE: *One turn of the adjusting screw will change the pressure approximately 138 bar (2000 psi).*

STEP 2

Check the pressure again. Repeat the adjustment as necessary.

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