SERVICE MANUAL

W110C
Wheel Loader
Tier II

Print No. 47476332

NEW HOLLAND CONSTRUCTION

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W110C Wheel Loader
Repair Manual
84581910A

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NOTE: *Automatic climate control only.*		

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NOTE: *Automatic climate control only.*		

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NOTE: *Automatic climate control only.*		

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CODE	DEFINITION	DESCRIPTION AND POSSIBLE STEPS FOR REPAIR
3083	Cylinder 4 injector cable short-circuit high side to low side	Defective coil of injector. Check the wiring and replace injector
3088	Crankshaft sensor lost synchronization	Signal interrupted do to wiring problem, defective or incorrectly installed crankshaft speed sensor. Check wiring, sensor installation and proper functioning of crankshaft sensor (evaluate raw signals)
3089	Crankshaft sensor defective	Check wiring, sensor installation and proper functioning of crankshaft sensor (evaluate raw signals).
3090	Camshaft sensor lost phase	Signal interrupted do to wiring problem, defective or incorrectly installed camshaft phase sensor. Check wiring, sensor installation and proper functioning of camshaft phase sensor (evaluate raw signals)
3091	Camshaft sensor phase synchronization failure	Check wiring, sensor installation and proper functioning of camshaft phase sensor (evaluate raw signals).
3092	Offset between camshaft and crankshaft - Not plausible.	See engine manual for details.
3093	Offset between camshaft and crankshaft outside boundaries	Signal interrupted do to wiring problem, defective or incorrectly installed camshaft or crankshaft sensor. Check wiring, sensor installations and proper functioning of camshaft and crankshaft sensors (evaluate raw signals)
3095	Operating with camshaft sensor only	Check wiring, sensor installation and proper functioning of crankshaft sensor (evaluated raw signals).
3096	ECM Busoff on vehicle CAN	See engine manual for details.
3097	ECM Busoff on Engine private CAN	See engine manual for details.
3098	Timeout of CAN Message TSC1-TE (when active).	See engine manual for details.
3099	Timeout of CAN Message TSC1-TE (when inactive).	See engine manual for details.
3100	Timeout of CAN Message TSC1 -AE (when active).	See engine manual for details.
3101	Timeout of CAN Message TSC1-AE (when inactive).	See engine manual for details.
3102	Rail pressure sensor CP3 signal below range min.	Short circuit of wiring to ground or defective pressure sensor. Check wiring and proper functioning of rail pressure sensor

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STEP 5

Install and torque regeneration check valve (14) to 100 Nm (73.7 pound-feet).

STEP 6

Install new O-rings on housing (1). Install plate (2), bolts (3) and washers (4), onto housing (1). Torque bolts to 20 to 25 Nm (177 to 221 pound-inches).

NOTE: *For 4 spool configuration install new O-rings between housings (30) and housing (1), install nuts (32) on studs (33).* Torque nuts to 70 Nm (51.5 pound-feet).

STEP 7

Install and torque pilot pressure reducing valve (6) to 90 Nm (66 pound-feet).

STEP 8

Install and torque anticavitation valves (7) to 90 Nm (66 pound-feet).

NOTE: *Repeat step for 3 and 4 spool anticavitation valves (31).*

STEP 9

Install anticavitation valves (27), spring (17), and cap (24) and torque cap to 60 Nm (44 pound-feet).

STEP 10

Install and torque flow limit valve (9 and 11) to 20 to 25 Nm (177 to 221 pound-inches).

STEP 11

Install and torque pressure relief valves (8 and 12) to 20 to 25 Nm (177 to 221 pound-inches).

STEP 12

Install and torque check valves (5) to 40 Nm (29.5 pound-feet).

STEP 13

Install and torque cone and plug (13) to 10 Nm (88.5 pound-inches).

STEP 14

Install and torque plug (28) to 60 Nm (44 pound-feet).

STEP 15

Lubricate spools with hydraulic oil and push spools (20 and 26) into housing (1).

IMPORTANT: *Do not force spools into housing.*

STEP 16

Install spring retainers (18), springs (17), covers (16), and bolts (14). Torque bolts to 6 Nm (53 pound-inches).

NOTE: *Repeat steps 15 and 16 for 3 and 4 spool valve configuration.*

STEP 17

Install spring (17) and cap (24) and torque cap to 60 Nm (44 pound-feet).

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

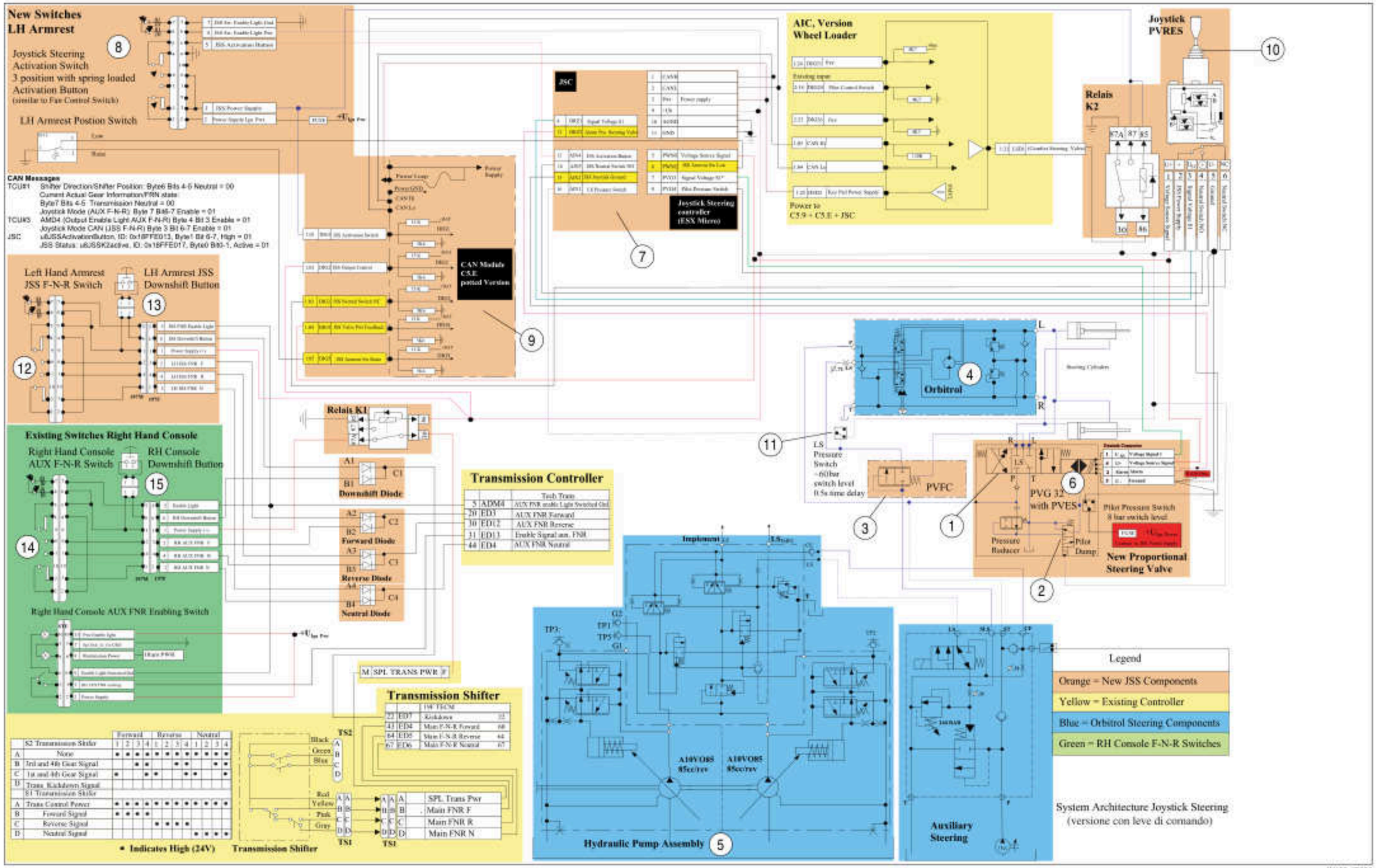
STEP 18

Install valve in machine, see section 8001.

STEP 19

Check loader limit pressure, see section 8002.

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