SERVICE MANUAL

W130D
W170D
Tier 2
Wheel Loader

Part number 48083744
English
July 2018

NEW HOLLAND CONSTRUCTION

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Lift arm cylinder - General specification

W130 D ZBAR, NEW CAB - EH, TIER2	ANZ — APAC — LA — MEA
Lift cylinder weight	**90.4 kg (199.3 lb)**

Lift arm cylinder - General specification

W170 D ZBAR, NEW CAB - EH, TIER2	ANZ — APAC — LA — MEA
Lift cylinder weight	**120 kg (264.6 lb)**

Lift arm cylinder - Torque

Screw in gland for lift cylinders	**135 – 542 N·m (100 – 400 lb ft)**
Piston bolt for lift cylinder	**2830 – 3220 N·m (2087 – 2375 lb ft)**
Lock screw for lift cylinder	**2.3 N·m (1.7 lb ft)**

Lift arm cylinder - Special tools

Torque multiplier	CAS-1039

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A. If a problem is found, replace the damaged connector.

B. If there are no problems, replace the connector **X-UCM2B**.

Wiring harnesses - Electrical schematic sheet 22 (55.100)
Wiring harnesses - Electrical schematic sheet 24 (55.100)

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Disconnect **X-ENG** connector and visually check the integrity of the pin 7.

A. If the pin 7 is damaged, replace the **X-ENG** connector.

B. If the pin 7 is not damaged, continue with Step **6**.

6. Check the integrity of the **X-CAB_E** connector.

   The key must be in the OFF position.

   Disconnect **X-CAB_E** connector and visually check the integrity of the pin 7.

   A. If the pin 7 is damaged, replace the **X-CAB_E** connector.

   B. If the pin 7 is not damaged, continue with Step **7**.

7. Check the integrity of the Smart Fuse Box connector.

   The key must be in the OFF position.

   Disconnect **X-X4** connector and visually check the integrity of the pin 21.

   A. If the pin 21 is damaged, replace the **X-X7** connector.

   B. If the pin 21 is not damaged, continue with Step **8**.

8. Check the Backup Alarm signal circuit for an open circuit condition.

   Use a multimeter to perform the following voltage check:

From	To	Value
Connector **X-BU1**	Connector **X-BU2**	There should be an open circuit

   A. If there is continuity, replace the Backup Alarm.

   B. If there is an open circuit, continue to Step **9**.

9. Check the signal circuit for an open circuit condition on the harness between Backup Alarm and **X-ENG** connector.

   Use a multimeter to perform the following voltage check:

From	To	Value
Connector **X-ENG**	Connector **X-BU2**	There should be a short circuit

   A. If there is an open circuit, replace the harness.

   B. If there is not voltage, continue to Step **10**.

10. Check the signal circuit for an open circuit condition on the harness between Smart Fuse Box and **X-CAB_E** connector.

    Use a multimeter to perform the following voltage check:

From	To	Value
Connector **X-X4** pin 21	Connector **X-CAB_E**	There should be a short circuit

    A. If there is an open circuit, replace the harness.

    B. If there is not voltage, continue to Step **11**.

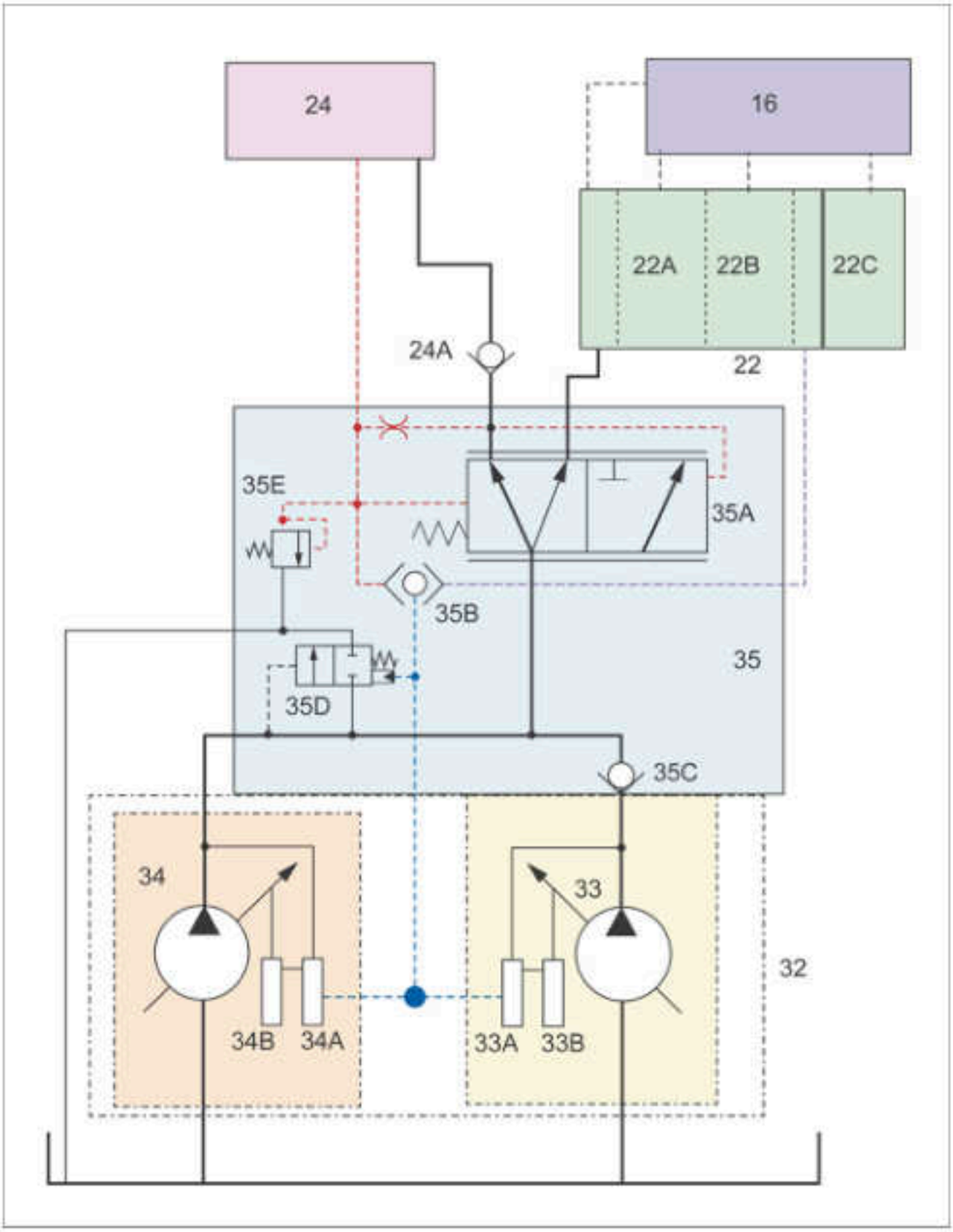
11. Check the Smart Fuse Box signal circuit for an open circuit.

    The key must be in the OFF position.

    Use a multimeter to perform the following voltage check:

From	To	Value
Connector **A-SFB** pin OUT_45_H_CS_L	Chassis ground	There should be an open circuit

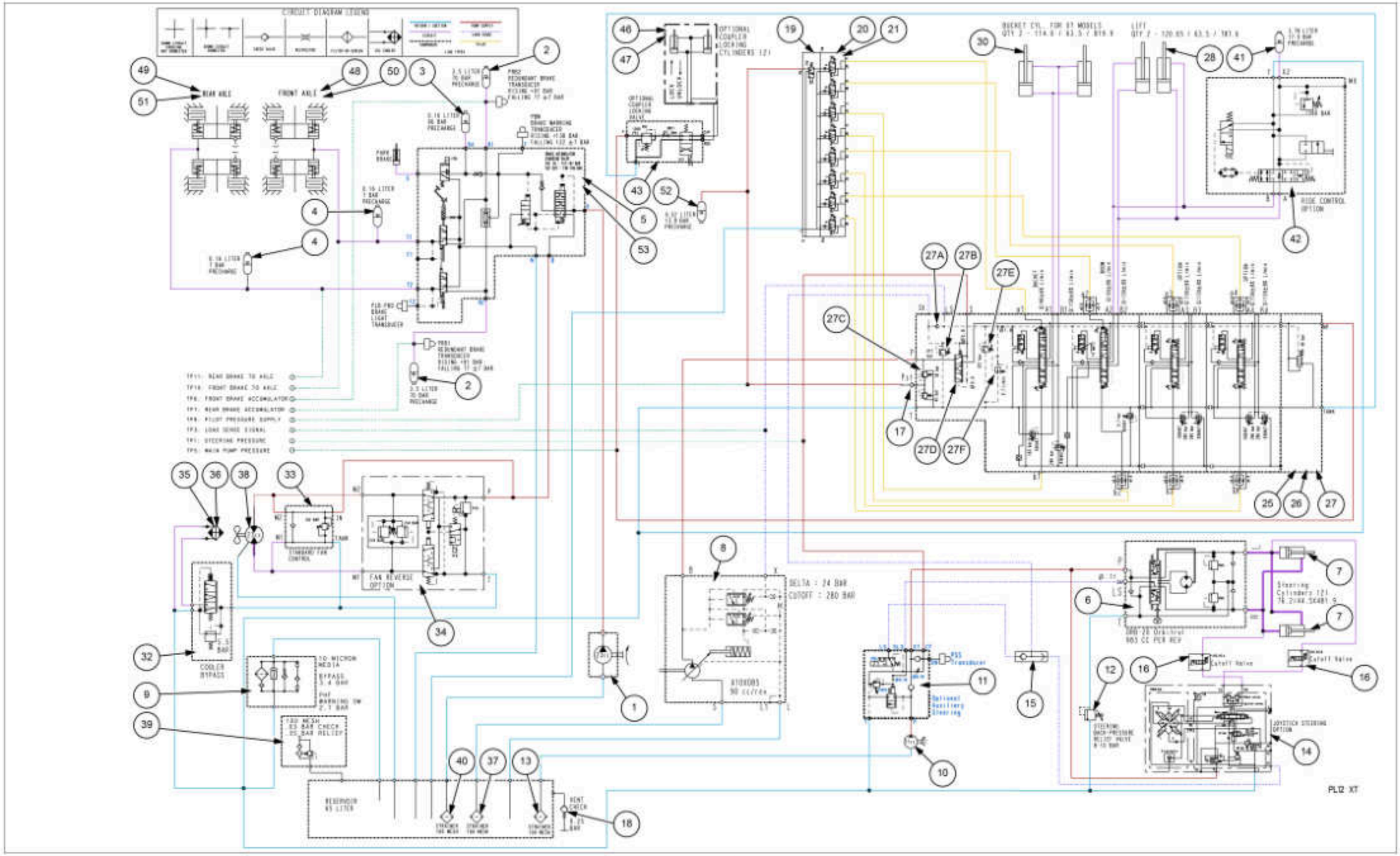
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Component Flow Chart

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