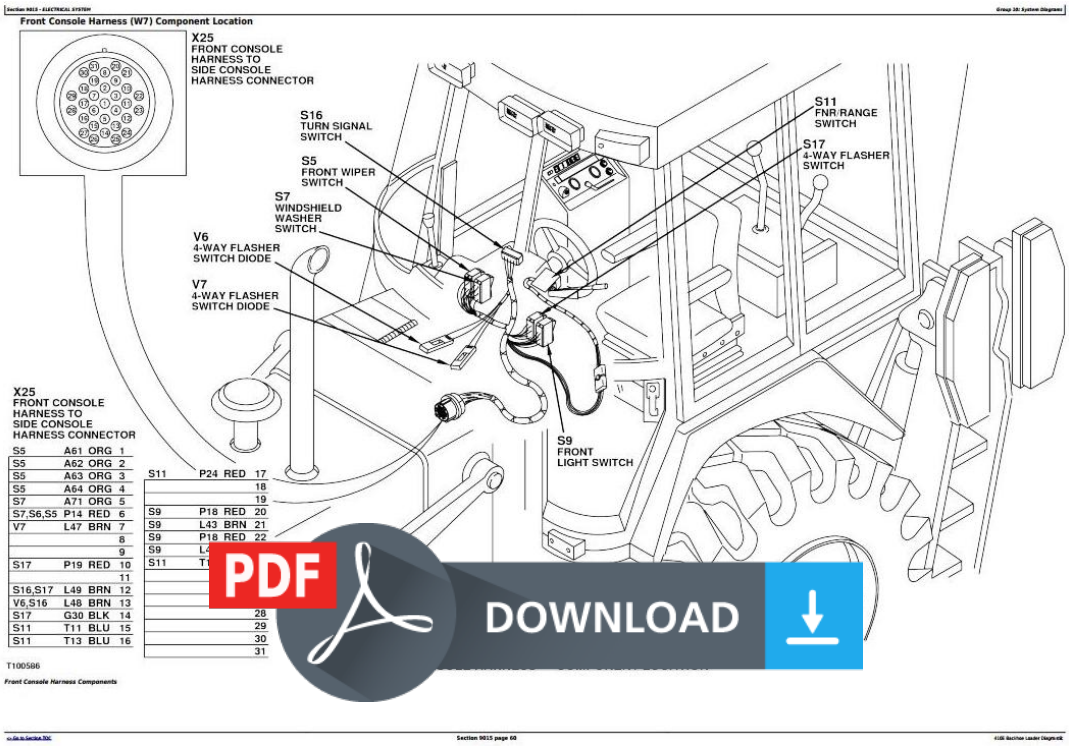
John Deere 410E Backhoe Loader Diagnostic, Operation and Test Service Manual (tm1610)



Covers: 410E

Type: Service Manual
Language: English
Pages: 620
Format: PDF
Features: Bookmarked, searchable, printable
Compatibility: Windows/Mac/Tablet/Mobile
This service manual contains important information for the maintenance, troubleshooting and servicing of the **John Deere 410E Backhoe Loader Diagnostic, Operation and Test Service Manual (tm1610)**

In this manual you will find detailed specifications, illustrations, schematics, diagrams and step-by-step procedures to properly service and diagnose the machine to the manufacturer's standards.

Contents:

- General Information
- Specifications
- Serial Number Location
- Engine Specifications
- Engine Diagnostics
- Engine Tests and Adjustments
- Engine Repair
- Power Train
- Transmission
- Axles
- Differential
- PTO
- Hydraulic System
- Electrical System
- Electrical Tests and Diagnostics
- Wiring Diagram / Schematic
- Ignition and Charging
- Steering
- Brakes
- Wheels
- Operator's Platform
- Body Panels
- Disassembly and Assembly
- Diagnostics, Tests and Adjustments
- Troubleshooting
- and much more...

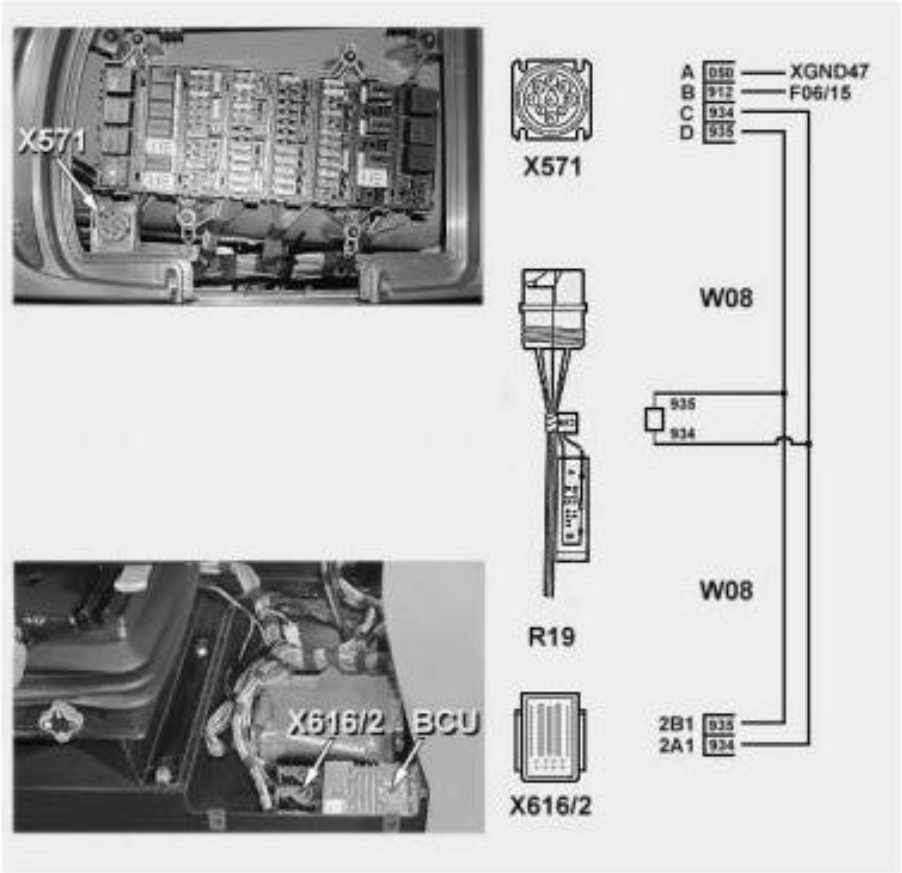
29-bit CAN BUS - Check (tractors with PowrQuad transmission)

General information:

Data transfer at the 29-bit CAN BUS takes place via the communication lines CAN+ (lead 934) and CAN- (lead 935). These lines are twisted together to reduce electro-magnetic interference.

Power supply to communication leads 934 and 935 is via the basic control unit BCU (fuse F04/8).

At the end of the CAN BUS communication lines (close to the 9-pin service plug X571) is an 120-ohm terminating resistor (R19). This terminating resistor is required to reduce faults in the communication lines.



Layout of leads for 29-bit CAN BUS on tractors with PowrQuad transmission

LEGEND:

X571	9-pin service plug (CAN BUS)
X616/2	48-pin plug for basic control unit (BCU)
R19	120-ohm terminating resistor
W08	Cab wiring harness
F06/15	Fuse
XGND47	Ground point on cab wiring harness

Checking the circuit

(1) Check the 29-bit CAN BUS voltage

Action:

1. Ignition ON.
2. Use multimeter JT05791A to check the voltage at service plug X571:

Item	Measurement	Specification
29-bit CAN BUS voltage (service plug X571)		
CAN+, between pin C (lead 934) and pin A (lead 050):	Voltage	2.5 - 3.1 volts
CAN-, between pin D (lead 935) and pin A (lead 050):	Voltage	1.9 - 2.5 volts