SERVICE MANUAL

L218 / L220
Tier 4B (final)
200 Series Skid Steer Loader

L218 PIN NDM449275 and above; L220 PIN NDM456673 and above

Part number 47851949
English
May 2015
Replaces part number 47712047

NEW HOLLAND CONSTRUCTION

MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | Public... Order the manual at mid-west-tech.com >

L218 / L220
TIER 4B (FINAL)
200 SERIES SKID STEER LOADER

L218 PIN NDM449275 and above; L220 PIN NDM456673 and above

SERVICE MANUAL
COMPLETE CONTENTS

COMPLETE SERVICE MANUAL **47851949**

BOOK 1 ..... **47888410**

Engine – 10
Power coupling – 19
Front axle system – 25
Rear axle system – 27
Hydrostatic drive – 29
Brakes and controls – 33

BOOK 2 ..... **47888411**

Hydraulic systems – 35
Frames and ballasting – 39
Wheels – 44
Cab climate control – 50
Electrical systems – 55

BOOK 3 ..... **47888412**

Electrical systems – 55

BOOK 4 ..... **47888413**

Electrical systems – 55

BOOK 5 ..... **47888414**

Electrical systems – 55

BOOK 6 ..... **47888415**

Electrical systems – 55

BOOK 7 ..... **47888416**

Electrical systems – 55
Front loader and bucket – 82
Platform, cab, bodywork, and decals – 90

© 2015 CNH Industrial America LLC. All Rights Reserved.
New Holland is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates.

47888417 May 2015
Replaces 47720765

MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | Public... Order the manual at mid-west-tech.com >

COMPLETE CONTENTS 47888417

BINDER SPINE 47888418

ELECTRICAL SCHEMATIC POSTERS 47547375
47547376

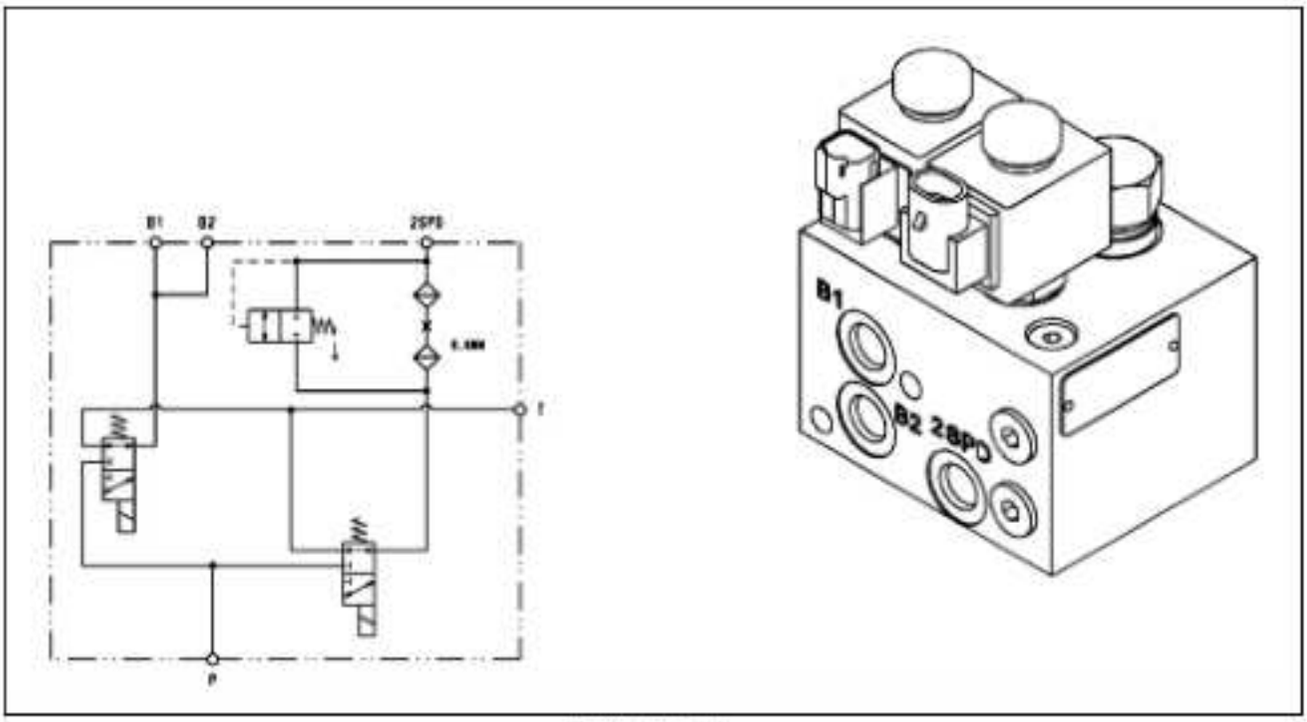
HYDRAULIC SCHEMATIC POSTER 47886242

ENGINE SERVICE MANUAL (sold separately) 47632284

MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | Public... Order the manual at mid-west-tech.com >

Control valve - General specification

L218 L220	



Brake, two speed valve

Hydraulic requirements:	Charge pressure = **24 - 25.5 bar** (**350 - 370 psi**)
	Brake release pressure = **15 bar** (**218 psi**)
Sequence valve setting	**12 bar** (**174 psi**)
Filter rating	40 – 50 microns
Port identification	P - Supply inlet
	T - Tank return
	2SPD - Two speed shift
	B1 - Brake motor 1
	B2 - Brake motor 2
	PS2 - Brake pressure switch

Control valve - General specification

L218 L220	

MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | P... Order the manual at mid-west-tech.com >

Wiring harnesses - Electrical schematic sheet 20 Unit Control Module - EH Units (55.100.DP-C.20.E.20)
Wiring harnesses - Electrical schematic sheet 01 Main Power Distribution - EH Units (55.100.DP-C.20.E.01)
Wiring harnesses - Electrical schematic sheet 02 Accessory Power Distribution - EH Units (55.100.DP-C.20.E.02)
Wiring harnesses - Electrical schematic sheet 03 Ignition/ Charging System - EH Units (55.100.DP-C.20.E.03)
Medium EH machines ISM engine
Wiring harnesses - Electrical schematic sheet 19 Unit Control Module - EH Units (55.100.DP-C.20.E.19)
Wiring harnesses - Electrical schematic sheet 20 Unit Control Module - EH Units (55.100.DP-C.20.E.20)
Wiring harnesses - Electrical schematic sheet 01 Main Power Distribution - EH Units (55.100.DP-C.20.E.01)
Wiring harnesses - Electrical schematic sheet 02 Accessory Power Distribution - EH Units (55.100.DP-C.20.E.02)
Wiring harnesses - Electrical schematic sheet 03 Ignition/ Charging System - EH Units (55.100.DP-C.20.E.03)

MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | P... Order the manual at mid-west-tech.com >

4951-Hydraulic Enable (Mechanical Machines) - Hydraulic Interlock Solenoid, Short to Power

L218 TIER 4B Final [NDM449275 -]	NA Mechanical hydraulic controls
L220 TIER 4B Final [NDM456673 -]	NA Mechanical hydraulic controls

Context:
Diagnostic Trouble Code 4951 has an error priority of Red.
The vehicle is disabled with Diagnostic Trouble Code 4951.

Cause:
Instrument Cluster has sensed a short to another voltage source in the Hydraulic Interlock circuit. The fault is active when Ignition is On and Hydraulic Enable Commanded state is low and Hydraulic Enable solenoid is energized.

Possible failure modes:

1. Faulty wiring or connectors.
2. Faulty Instrument Cluster.

Solution:

1. Verify that the fault code is still active.
   Prior to clearing fault codes, record all fault codes, number of occurrences, and engine hours at last occurrence.

   (1) Use the Electronic Service Tool to clear all fault codes.

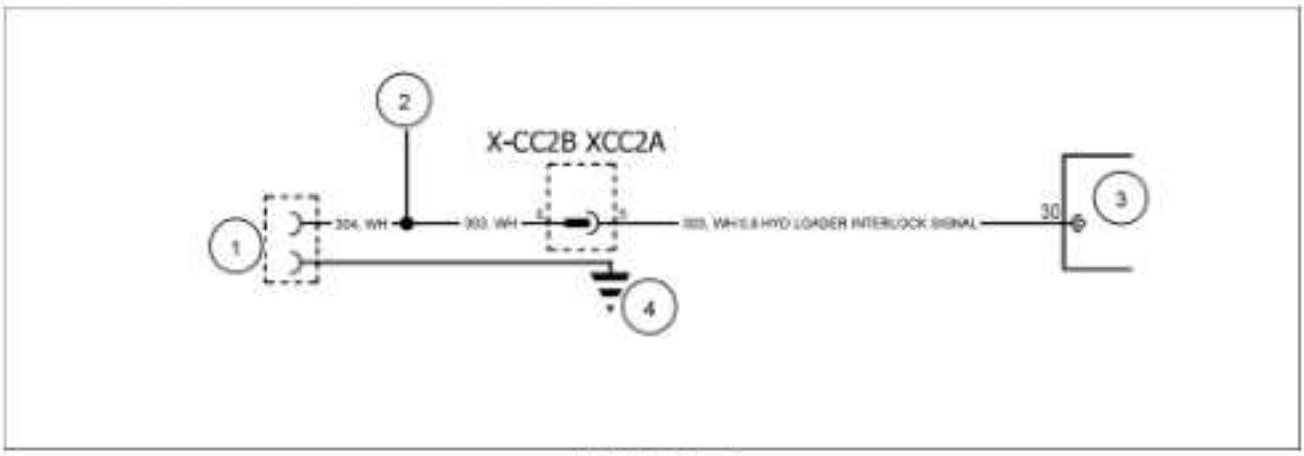
   (2) To check for fault code: Start and operate machine.

   A. Fault is not recorded again. OK to return the machine to service.

   B. Fault code is recorded again. Go to Step **2**.
2. Verify that the wiring and connectors are free of damage.

   (1) Inspect Instrument Cluster connector X-C23 and the Hydraulic Interlock Solenoid connections. All connections should be secure, tight, free of corrosion, abrasion and/or damage.

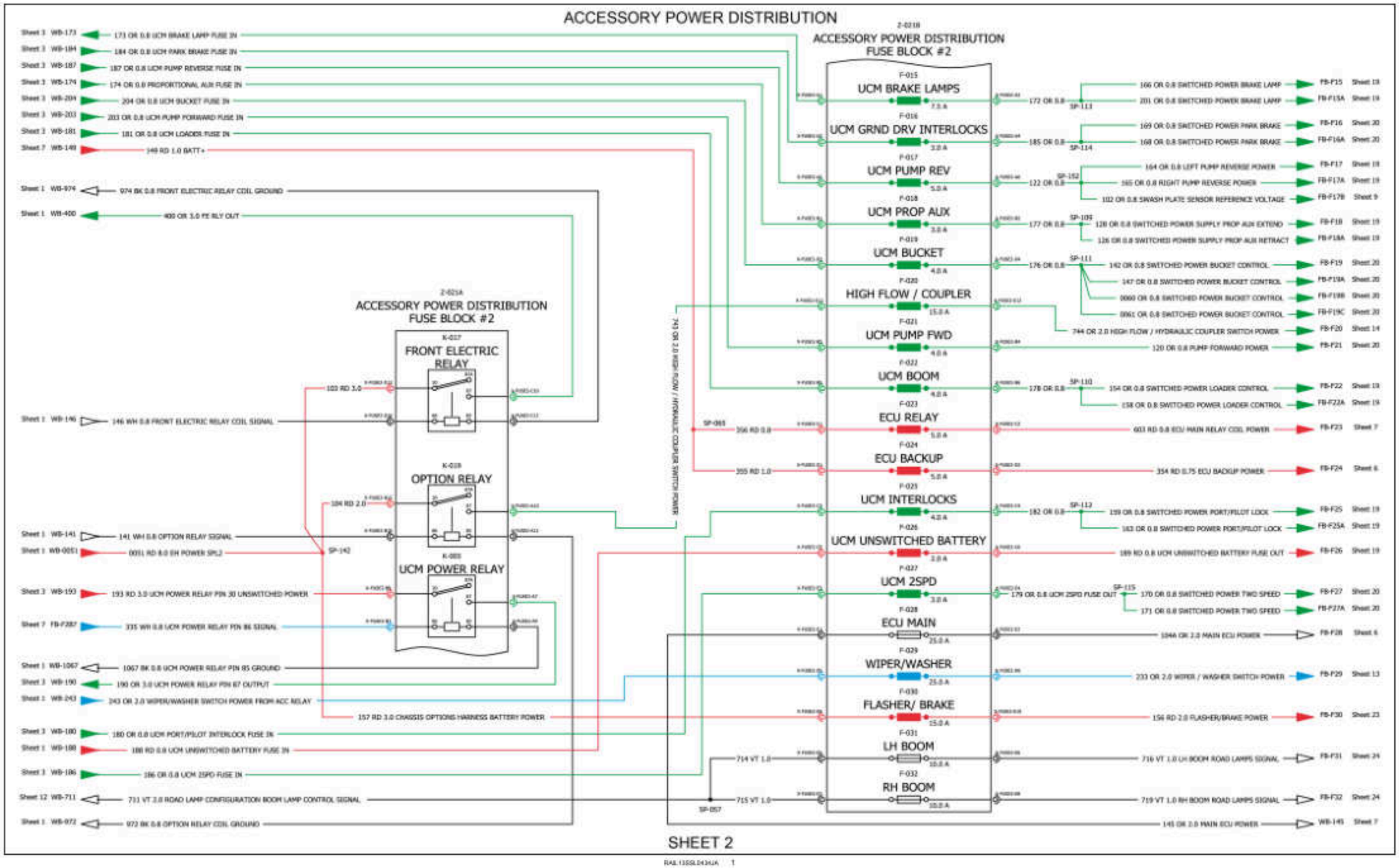
   (2) Inspect the harness from the Instrument Cluster to the Hydraulic Interlock Solenoid. Verify that the harness is free of damage, corrosion, abrasion and incorrect attachment.



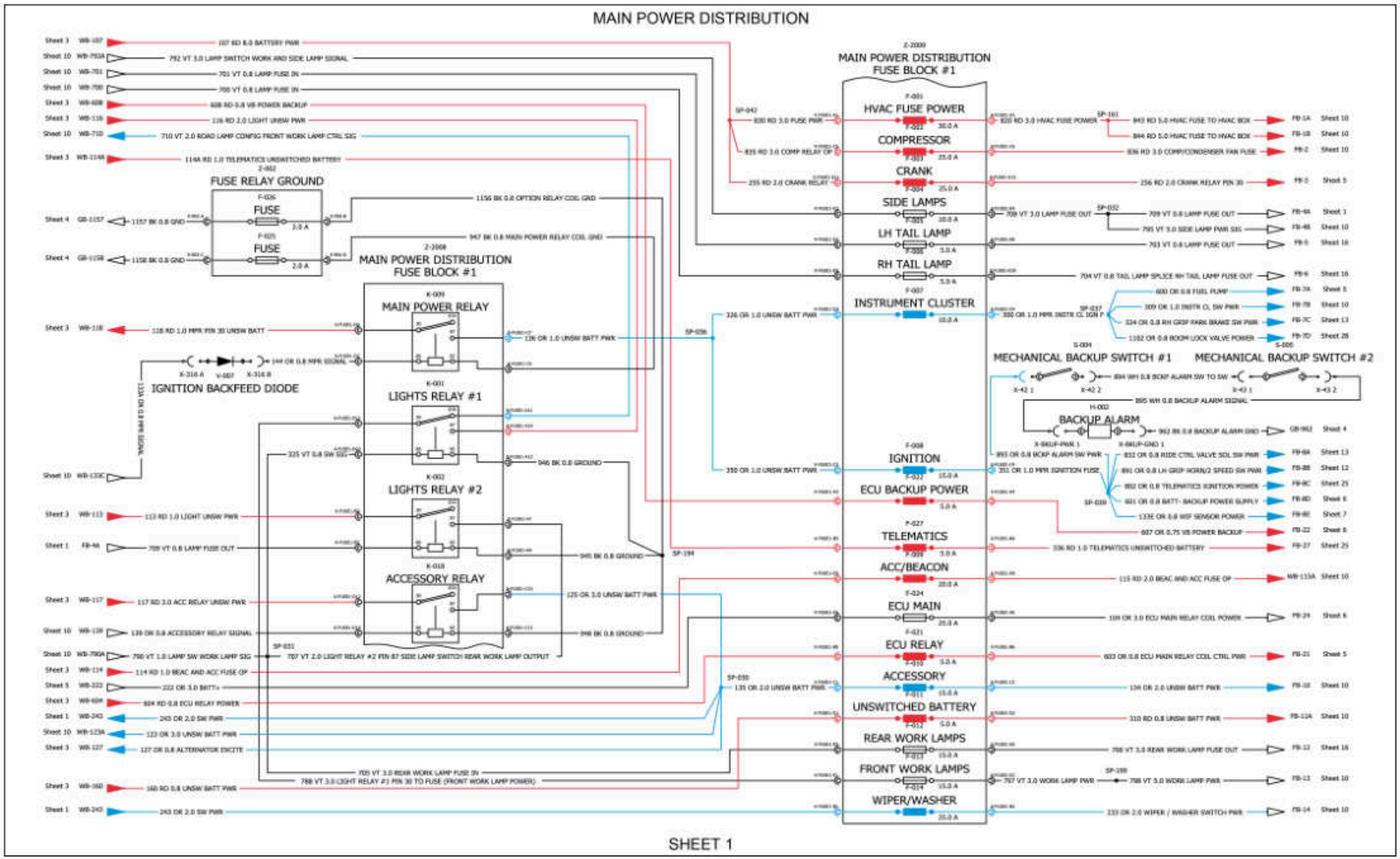
RAPH12SSL028TA 1

Schematic Legend			
(1)	Port Lock Connector X-PORT_LK PIN 1	**(3)**	Instrument Cluster Connector X-C23 pin 30
(2)	Vehicle Working Condition to Telematics Wire 308, YE	**(4)**	Chassis Ground X-CNH_GND_RR

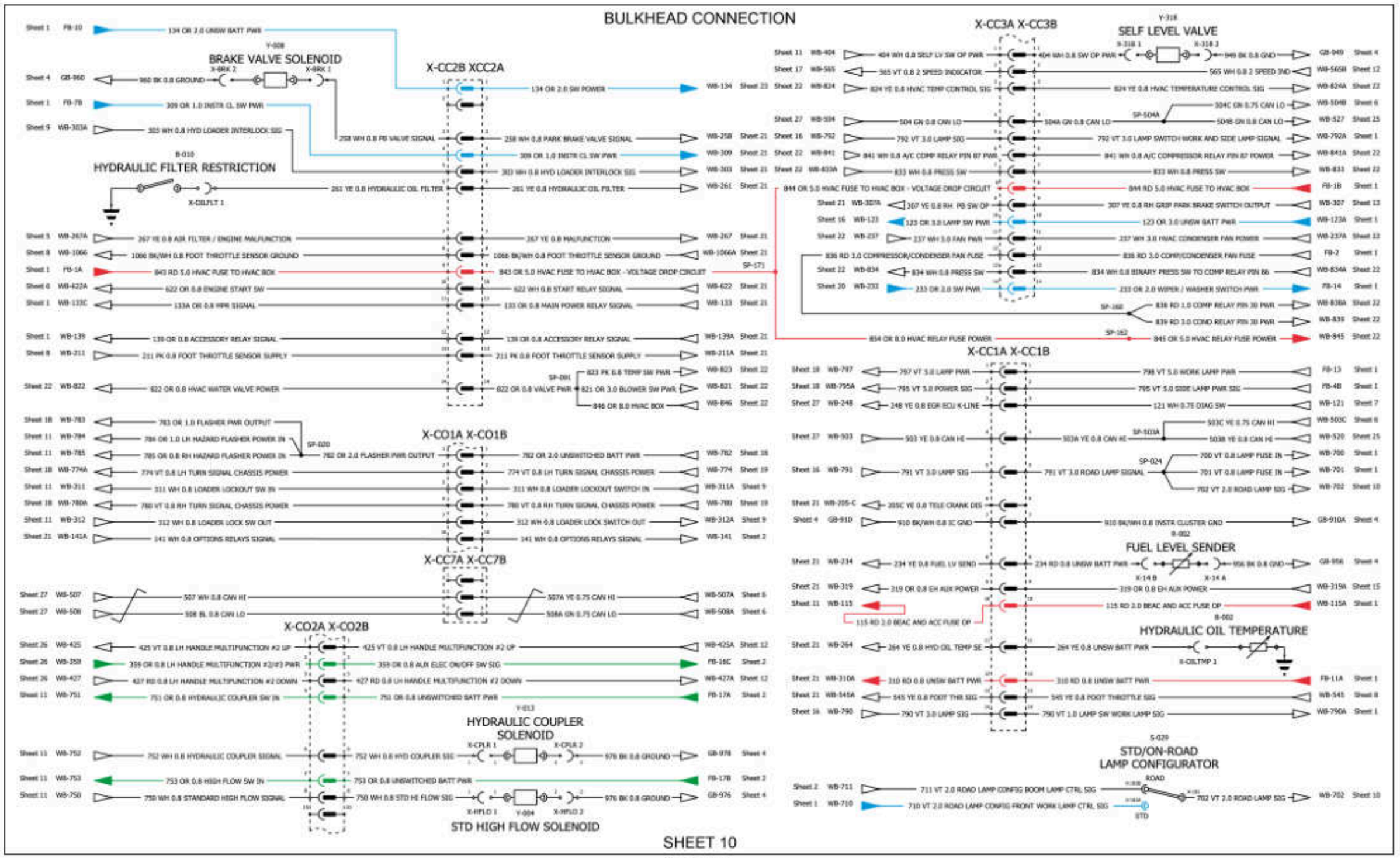
MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | P... Order the manual at mid-west-tech.com >



MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | Publication 47851949
Order the manual at mid-west-tech.com >



MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | Publication 47851949
Order the manual at mid-west-tech.com >



MidWestTech | New Holland L218, L220 Tier 4B Skid Steer Loader Service Manual | Publication 47851949
Order the manual at mid-west-tech.com >