SERVICE MANUAL

Speedrower® 220
Speedrower® 260
Tier 4B (final)
Self-Propelled Windrower

PIN YGG677501 and above

Part number 48126544
1st edition English
April 2017

MidWestTech | New Holland Speedrower 220, 260 Tier 4B Self Propelled Windrower Service Manual | Publication 48126544

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Hydraulic systems - Overview - Setting header flotation - Draper header only

Speedrower® 220	NA Draper ready - Factory-fitted to accept draper
Speedrower® 260	NA Draper ready - Factory-fitted to accept draper

NOTE: *All the steps described must be done with the engine running at high idle (> **2000 RPM**) PARK BRAKE ENGAGED, and the header PTO switch off unless described otherwise.*

STEP 1. Before beginning, make the following checks:

- Be sure unit is at normal operating temperature
- Set header tilt cylinder in the mid position
- If equipped, with the engine off, set the rear axle suspension air springs to the proper pressure
- If equipped, set castering gauge wheels to operating position
- Set cut height cylinders to operating position

STEP 2. Set "Header Drop Rate" to "5" as a starting point. Header drop rate range - "0 (slower) to 10 (faster)"

4-Line Display:

- Configure → Header Config → Drop Rate

Color Touchscreen Display (if equipped) :

- Toolbox →Header → Header Drop Rate

STEP 3. Set initial float pressure to 1500 using flotation switch(es) in cab. Lower the header.

Header reaches the ground with one push of the button?

YES

NO

Reduce float setting by 50, try to lower header. Continue lowering the float setting by 50 until header reaches ground with one push of the lower button.

STEP 4. With header in operating position, make flotation adjustments by checking the weight at each end of the header. The maximum weight at each end of the header should not exceed **68 kg** (**150 lb**) for sickle headers and for draper headers. Adjust by using flotation switch(es) in cab. If adjusted properly, header should float evenly on both sides in operating position. If weight is not even at each end of the header, proceed to next flow chart box. After header is lifted manually, header must fall to ground unaided when released.

NOTE: *Unit must stay running for **30 s** after changing the setting to allow the system to lock the value into memory.*

Is the weight the same at each end of header?

NO

Adjust independent flotation switches as needed.

Repeat STEP 4

YES

4-Line Display:

- Enter the configuration mode and adjust drop rate

Color touchscreen display:

- Enter the "toolbox" and adjust drop rate

STEP 5. Is the header drop rate satisfactory?

NO

Step 6. Before going to the field:

- If unit is equipped with deck shift, repeat steps 3 and 4 for every position of the decks. Unit will remember individual settings for each position as operator moves decks
- If equipped, with the engine off, recheck the rear axle suspension air springs for proper pressure

YES

STEP 7. Make final adjustments to the float pressure during operation. The header must stay at operating position with minimum weight.

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Wiring harnesses - Electrical schematic sheet 05 - Engine inputs/outputs (engine schematics)

Speedrower® 220	NA
Speedrower® 260	NA

Component ID	Description
A-9000	Engine Control Unit (ECU)
B-9000	Oil pressure sensor with oil temperature sensor
B-9001	Boost pressure sensor with air temperature sensor
B-9002	Fuel temperature sensor
B-9003	Coolant temperature sensor
B-9005	Exhaust gas absolute pressure sensor
B-9006	Fuel pre-filter clogging pressure sensor
B-9007	Crankshaft speed sensor
B-9008	Camshaft speed sensor
B-9009	Crankcase pressure sensor
B-9011	Water pump inlet pressure sensor
B-9012	High Pressure Intercooler (HPI) outlet temperature and pressure sensor
B-9015	Electronic Variable Geometry Turbocharger (EVGT) turbine speed sensor (Cursor 9 w/ EVGT only)
S-9000	Fuel filter clogging switch
Y-9000	Fuel metering unit

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E0297-03 - Park brake latching relay - Shorted to high source

Speedrower® 220	NA
Speedrower® 260	NA

Control Module: UCM

Context:
The Universal Control Module (UCM) A-001 supplies the voltage source to the park brake latch relay K-020. The UCM monitors the signal line for various faults. Fault Mode Indicator (FMI) 03 is active if the signal wire is shorted to a high source, when the K-020 circuit is active.

Cause:
The UCM has detected the output signal to K-020 is shorted to a high source.

Possible failure modes:

1. Faulty relay K-020.
2. Faulty electrical wiring, shorted to a high source.
3. Faulty controller.

Solution:

1. Verify this fault is still present and in an active state.

   A. If the fault is still present and active, continue to Step **2**.

   B. If the fault is no longer present or inactive, check for an intermittent fault. If no fault is found, return machine to proper operation.

2. Check the circuit functionality.

   Remove relay K-020.

   Place the key switch ON.

   Monitor the diagnostic screen for fault code **E0297-11 – Park brake latching relay - Unidentified failure code**.

   A. If fault code **E0297-11 – Park brake latching relay - Unidentified failure code** is not present, leave the relay removed. Continue with Step **3**.

   B. If fault code **E0297-11 – Park brake latching relay - Unidentified failure code** is present, the circuit is functioning properly. The relay has failed, replace the relay.

3. Check the ground circuit.

   Place the key switch OFF.

   Use a multimeter to check for continuity.

From	To	Result
Relay connector cavity **X-366 pin R3_85**	Chassis ground	There should be continuity.

   A. If the reading is correct, continue with step **4**.

   B. If the reading is incorrect, locate and repair the faulty wiring.

4. Check the signal line for a short to high source.

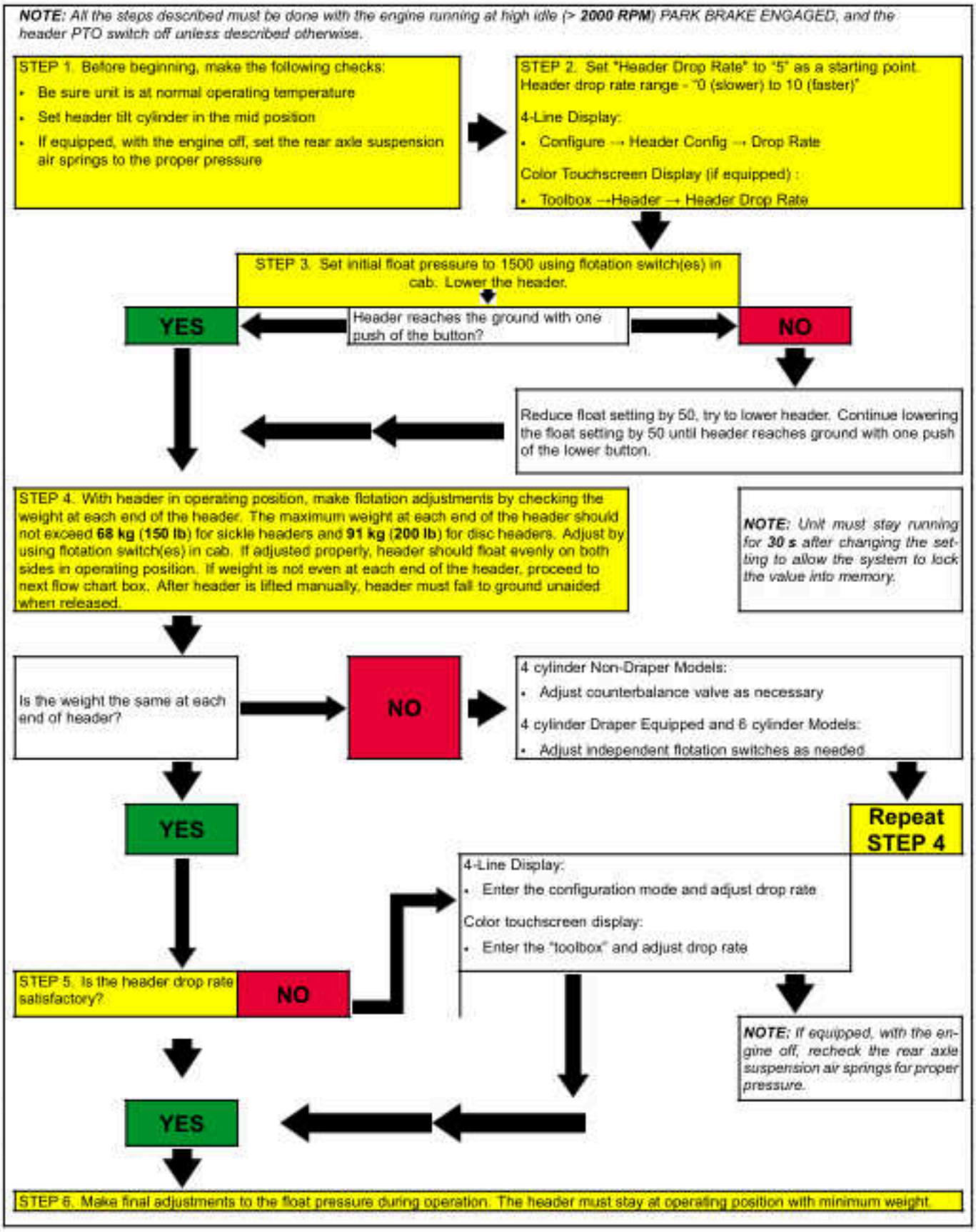
   Place the key switch ON.

   Use a multimeter to check for voltage.

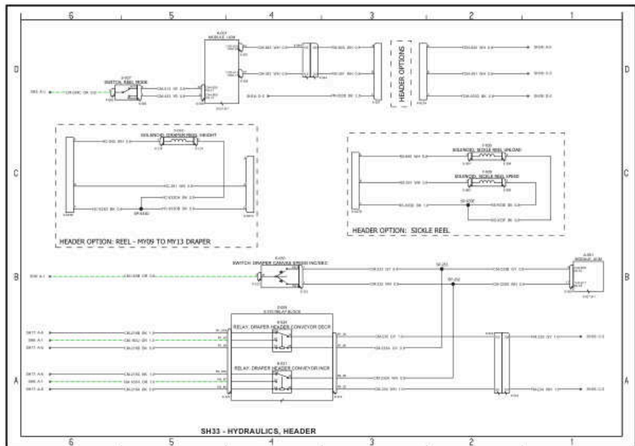
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Hydraulic systems - Overview - Setting header flotation - Disc or sickle header only

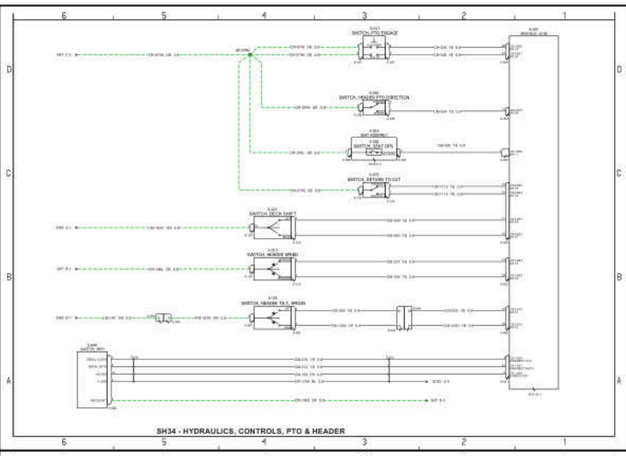
Speedrower® 220	NA Non draper ready - Not fitted for draper header
Speedrower® 260	NA Non draper ready - Not fitted for draper header



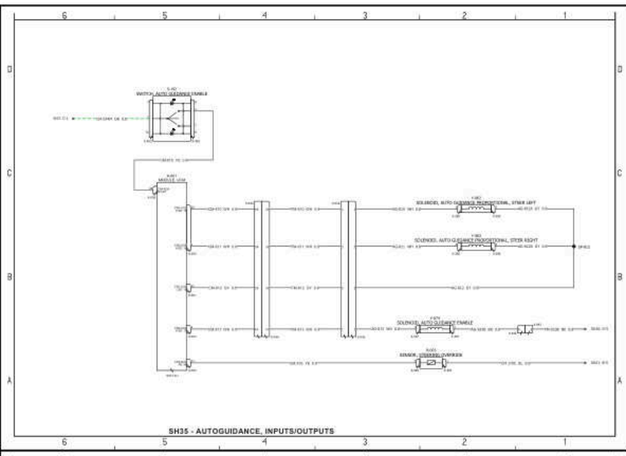
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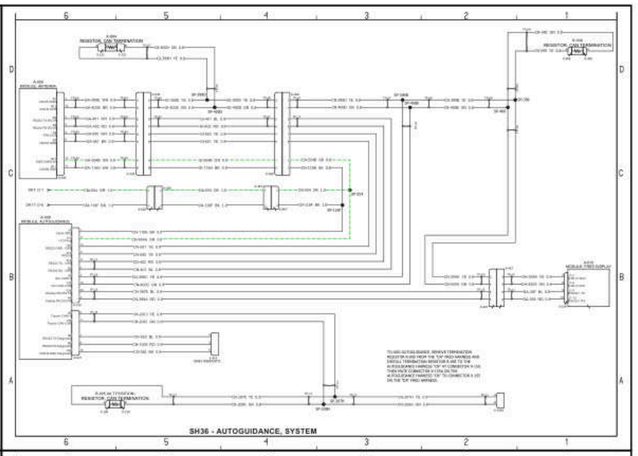
SH33 - HYDRAULICS, HEADER



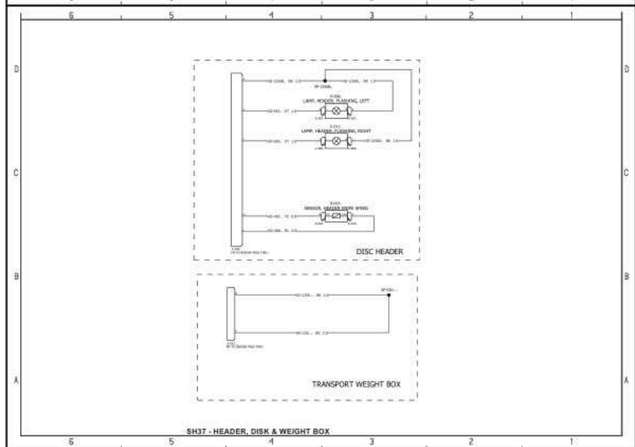
SH34 - HYDRAULICS, CONTROLS, PTO & HEADER



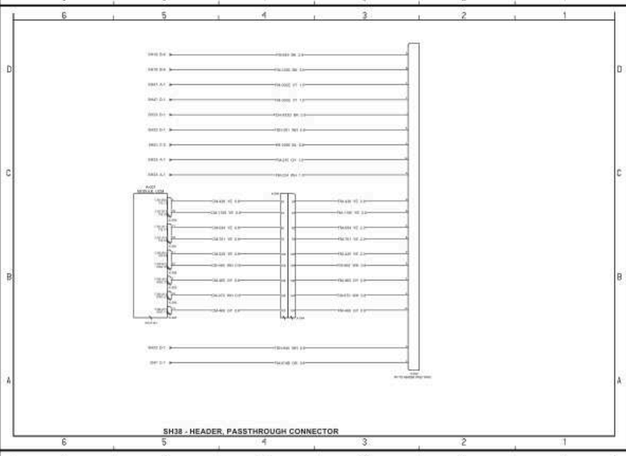
SH35 - AUTOGUIDANCE, INPUTS/OUTPUTS



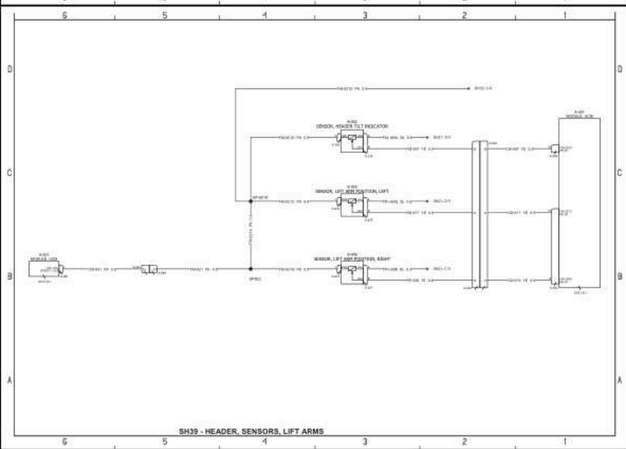
SH36 - AUTOGUIDANCE, SYSTEM



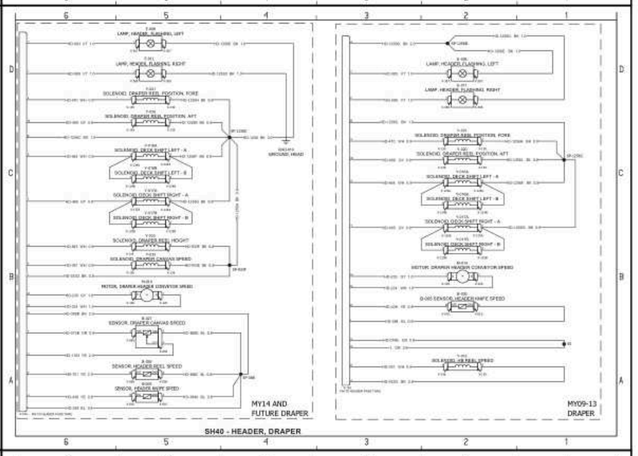
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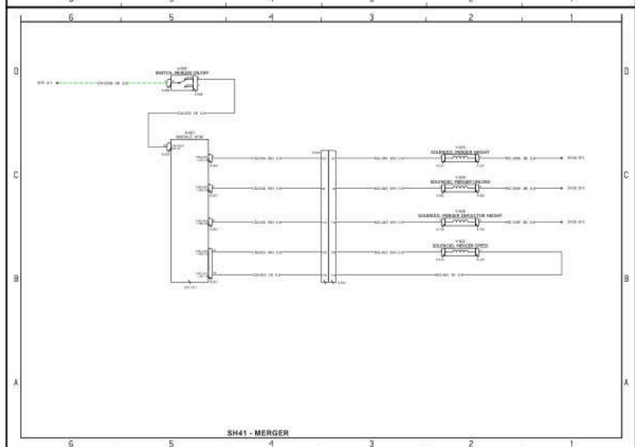
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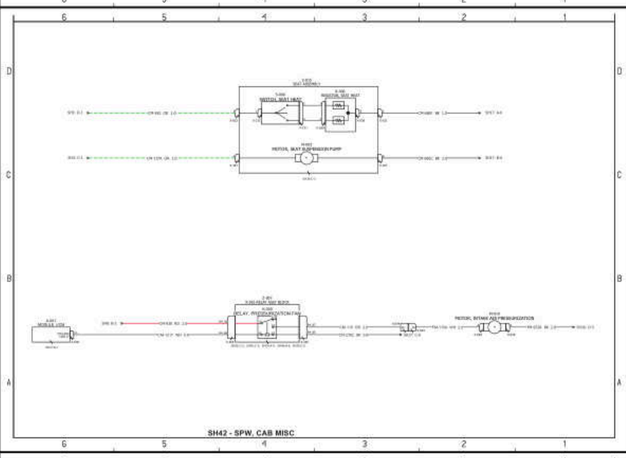
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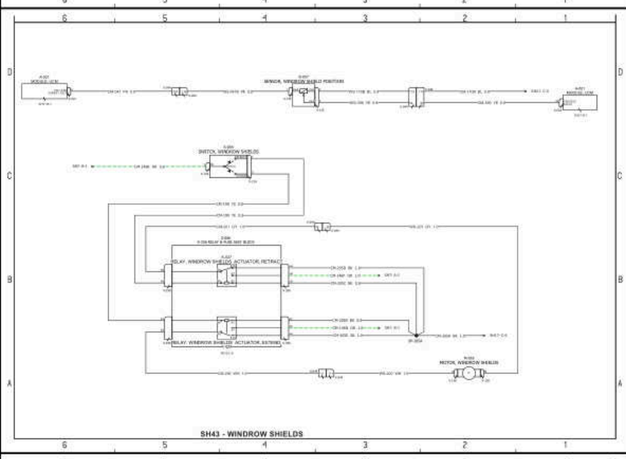
SH40 - HEADER, DRAPER



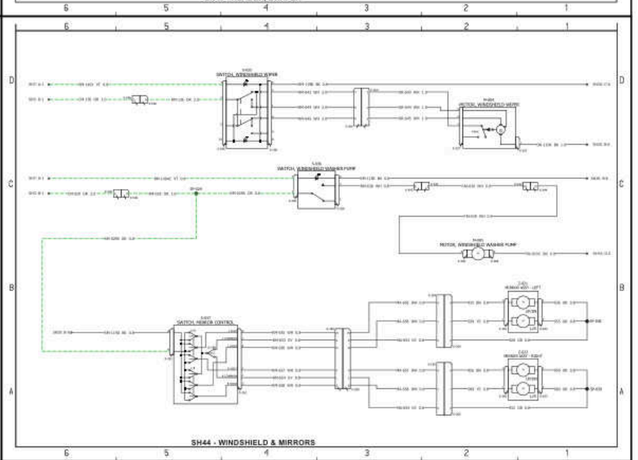
SH41 - MERGER



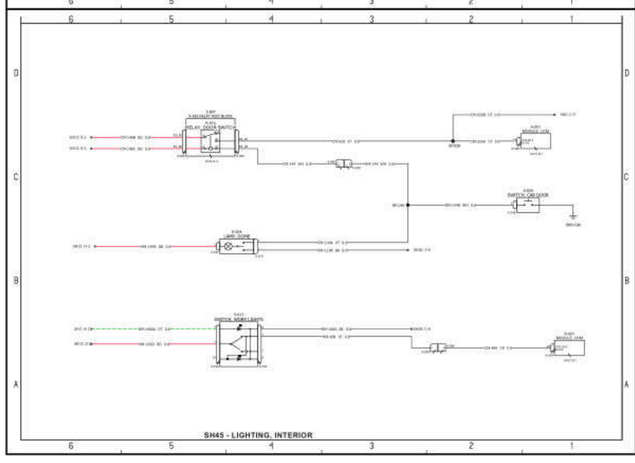
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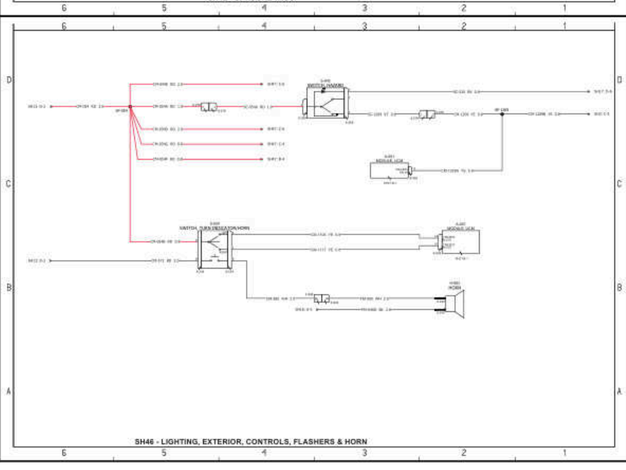
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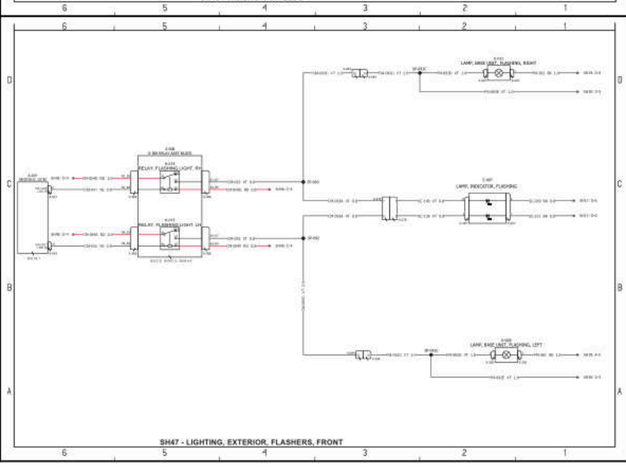
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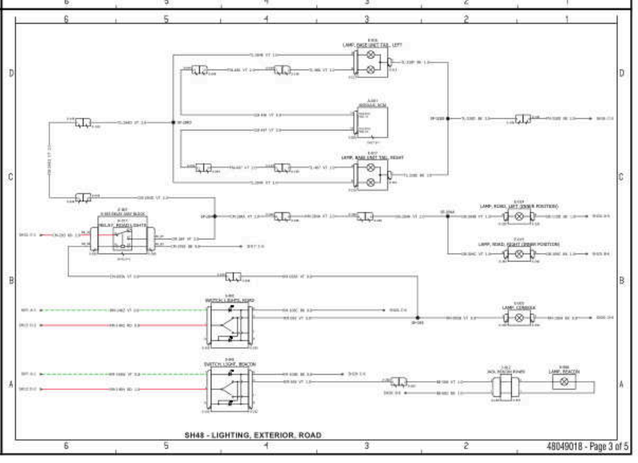
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SH48 - LIGHTING, EXTERIOR, ROAD

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