SERVICE MANUAL

Speedrower® 130
Tier 3
Self-Propelled Windrower

PIN YGG677501 and above

Part number 48126536
1st edition English
April 2017

NEW HOLLAND AGRICULTURE

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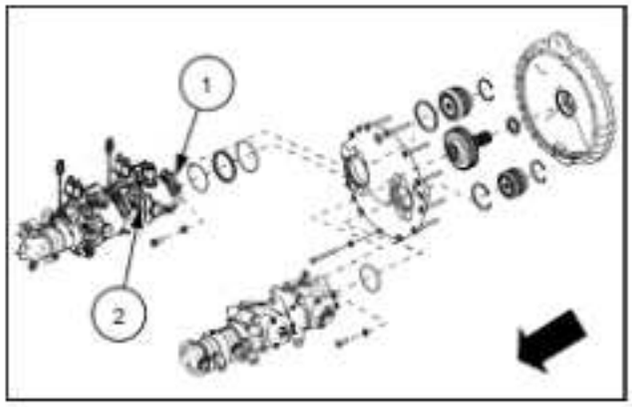
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5. Apply a **3 mm** (**0.118 in**) bead of **LOCTITE® SI 598™ BLACK** onto mount flange **(1)** of the header drive pump **(2)**.



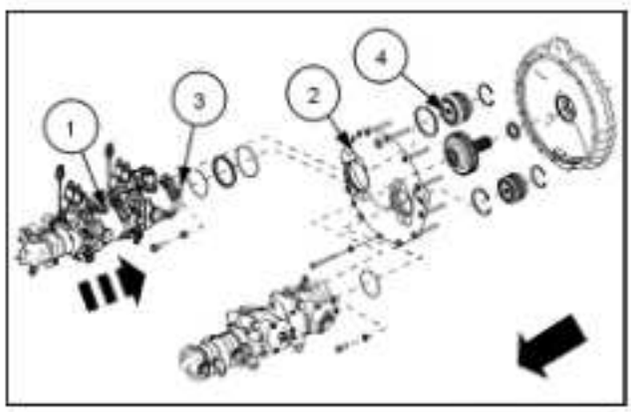
NHEL17WR00035FA 4

6. **⚠ WARNING**

Heavy objects!
Lift and handle all heavy components using lifting equipment with adequate capacity. Always support units or parts with suitable slings or hooks. Make sure the work area is clear of all bystanders. Failure to comply could result in death or serious injury.

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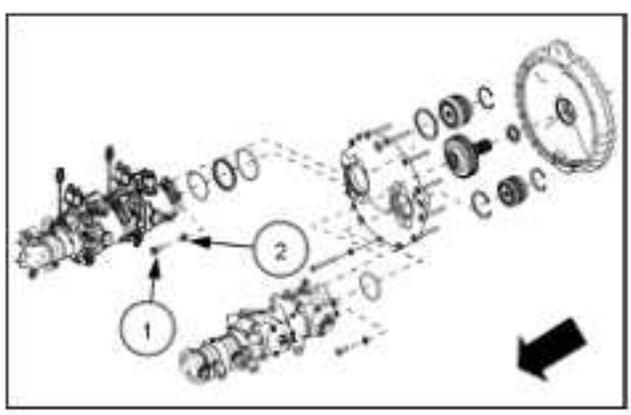
Raise the header drive pump **(1)** and move the header drive pump rearward into the splitter gearbox cover **(2)**. Align the splines of the header drive pump shaft **(3)** with the splines of the driven gear **(4)** located inside the splitter gearbox.



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NOTE: *Use a drift punch to line-up the header drive pump flange slots with the splitter gearbox mounting holes.*

7. Apply **LOCTITE® 545™** to the **1/2 in** x **1-1/4 in** grade 5 flange head bolts **(1)** and insert the hardened washers **(2)** onto the flange head bolts **(1)**.

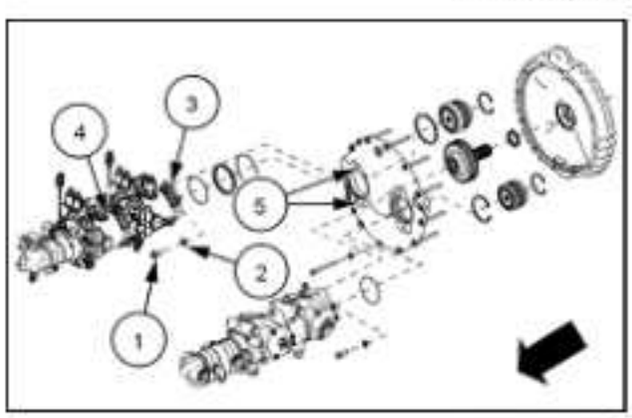


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8. Insert the flange head bolts **(1)** and washers **(2)** through the mounting flange **(3)** of the header drive pump **(4)** and thread them into the splitter gearbox cover **(5)**.

NOTE: *Use a drift punch to line-up the header drive pump flange slots with the splitter gearbox mounting holes.*

9. Torque the **1/2 in** x **1-1/4 in** grade 5 flange head bolts to **127 N·m** (**94 lb ft**)



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From	To	Value
Relay connector **X-366 pin R6_86**	Harness connector **X-502 pin C**	There should be continuity.

A. If the reading is correct, continue with Step **5**.

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

5. Locate the open circuit.

Place the key switch OFF.

Disconnect the wiring harness from A-001 at connector **X-008**.

Use a multimeter to check for continuity.

From	To	Value
Harness connector **X-008 pin 12**	Harness connector **X-502 pin D**	There should be continuity.

A. If there is no continuity, locate and repair the faulty wiring harness.

B. If there is continuity, the fault may be internal to the UCM. Load the appropriate module software.

Wiring harnesses - Electrical schematic sheet 24 - Boot up (55.100.DP-C.20.E.24)

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E0405-11 - Lift arm power down solenoid - Unidentified failure code

Control Module: UCM

Context:
The Universal Control Module (UCM) A-001 supplies the voltage source to the lift arm power down solenoid Y-065. The UCM monitors the signal line for various faults. Fault Mode Indicator (FMI) -11 is active if the circuit is open.

Cause:
Y-065 circuit is open.

Possible failure modes:

1. Faulty Y-065.
2. Faulty electrical wiring, open condition.
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, return the machine to service.
2. Verify Y-065 functions properly.

   Place the key switch OFF.

   Disconnect the wiring harness from the solenoid.

   Use a multimeter to measure the resistance of the solenoid coil.

From	To	Result
Solenoid pin 1	Solenoid pin 2	There should be **4 – 8 Ω**.

   A. If there is a nominal resistance value, leave the wiring harness disconnected. Continue to step **3**.

   B. If there is infinite resistance or **0 Ω**, the solenoid has failed. Replace the solenoid.
3. Check the ground circuit.

   Place the key switch OFF.

   Use a multimeter to check for continuity.

From	To	Result
Harness connector **X-146** pin 2	Chassis ground	There should be continuity.

   A. If there is continuity, leave the wiring harness disconnected. Continue with step **4**.

   B. If there is no continuity, locate and repair faulty wiring.
4. Check the signal circuit for an open condition.

   Place the key switch OFF.

   Disconnect the cab wiring harness from the frame harness at connector **X-044**.

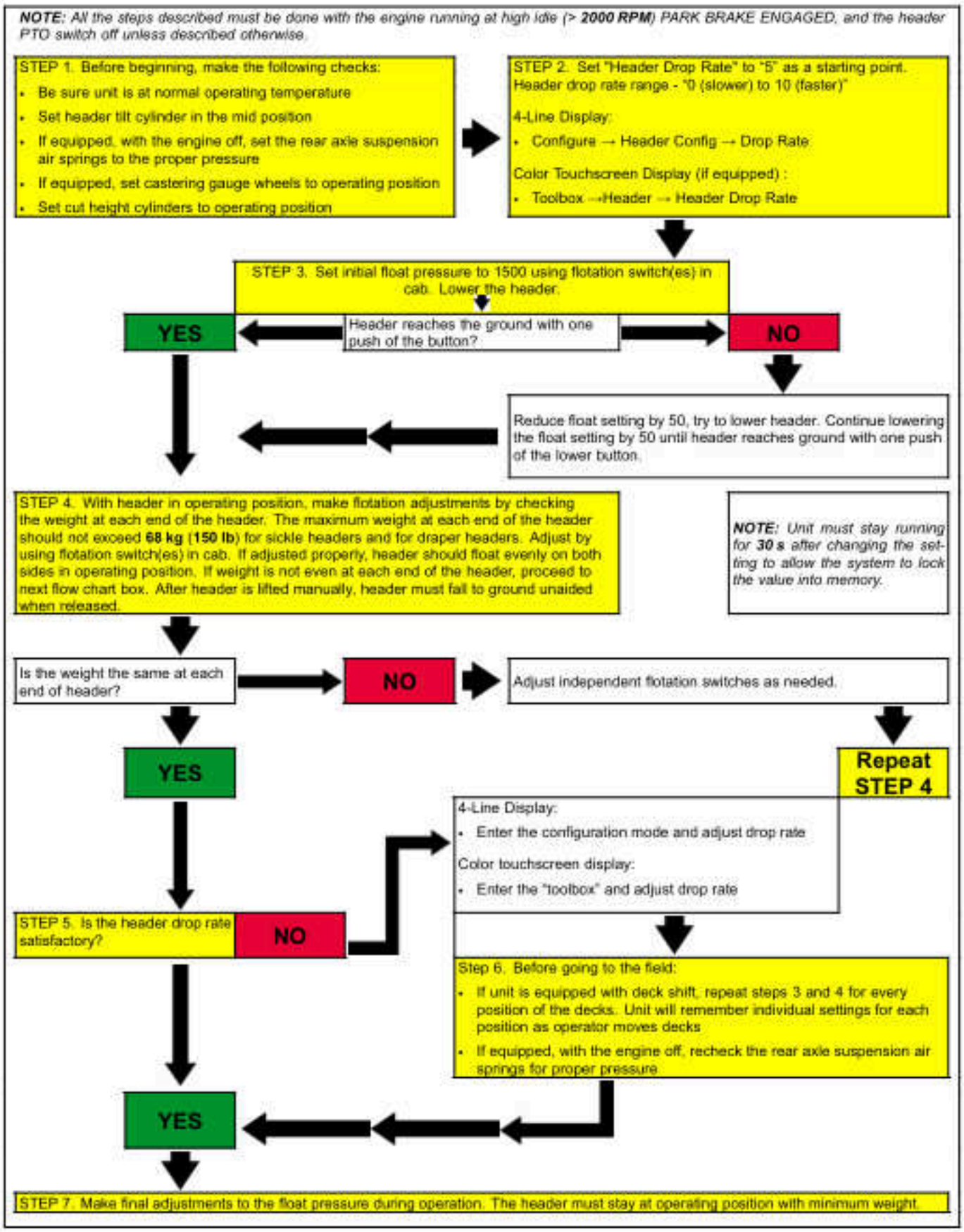
   Place a jumper wire on the frame harness side of connector **X-044** pin 37 to chassis ground.

   Use a multimeter to check for continuity.

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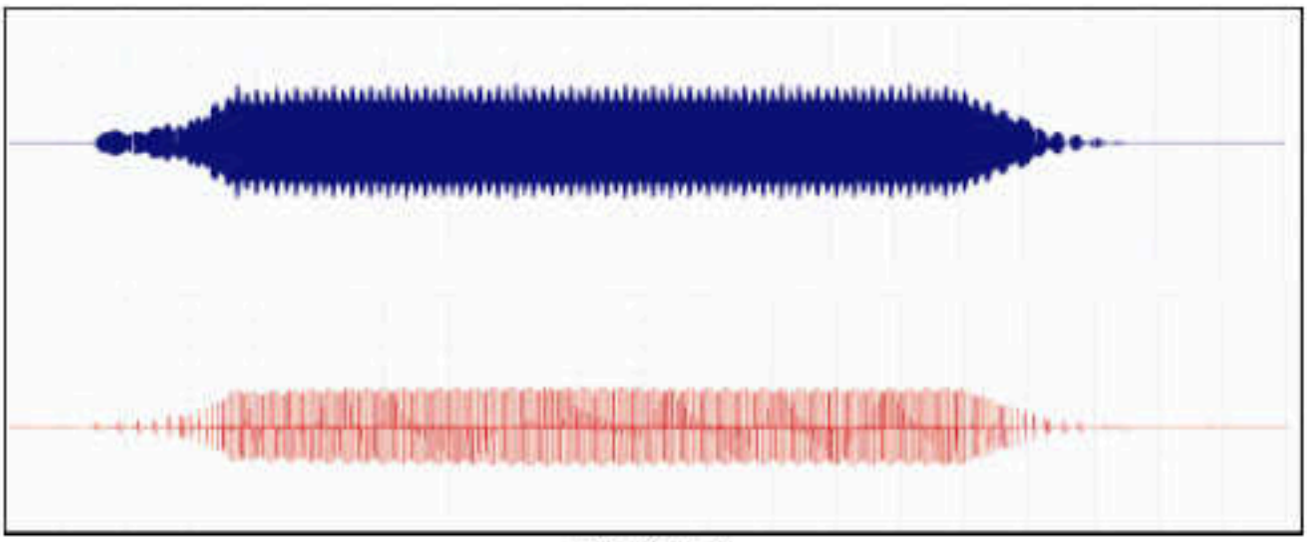
Hydraulic systems - Overview - Setting header flotation - Draper header only

Speedrower® 130	Draper ready - Factory-fitted to accept draper



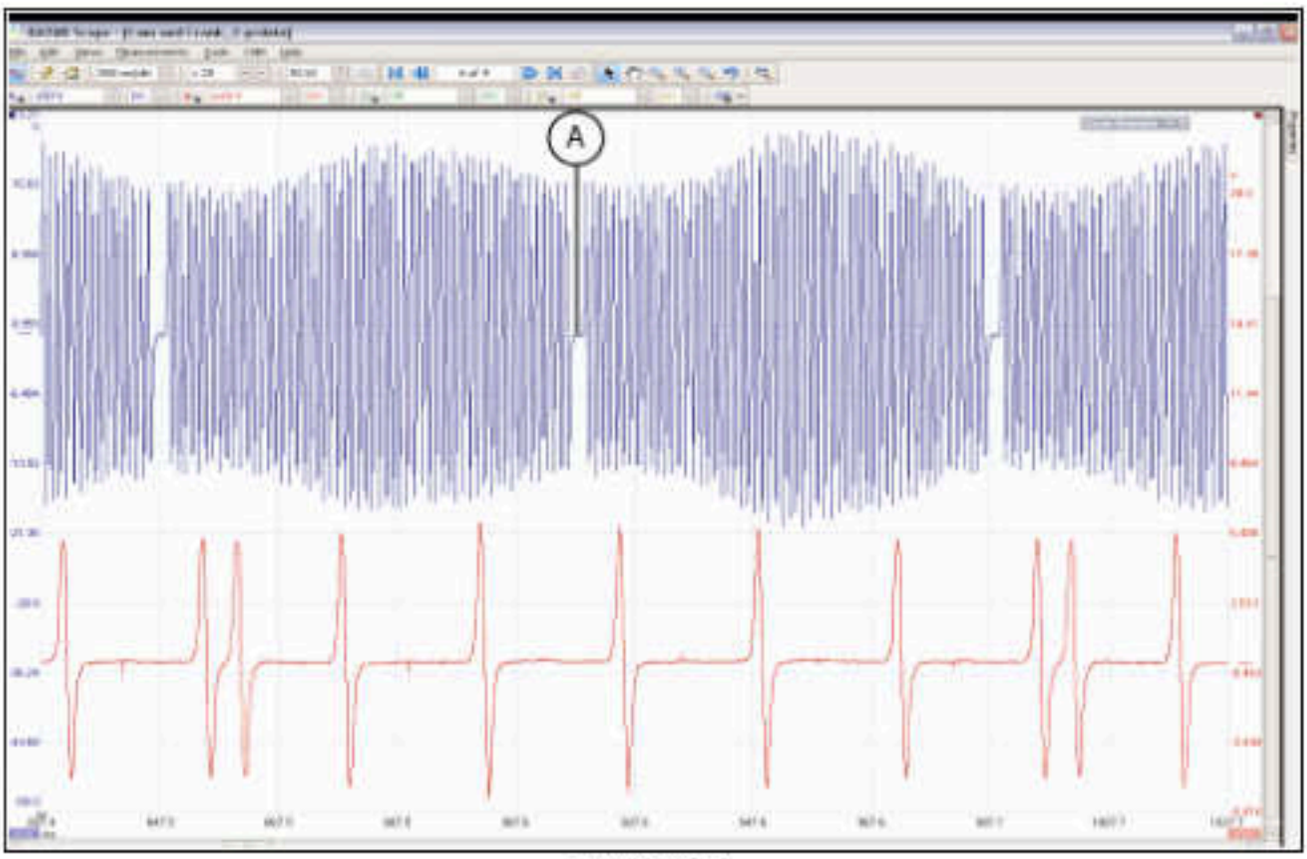
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Figure **5**
(A) = Ignition start up **(B)** = Engine begins to turn



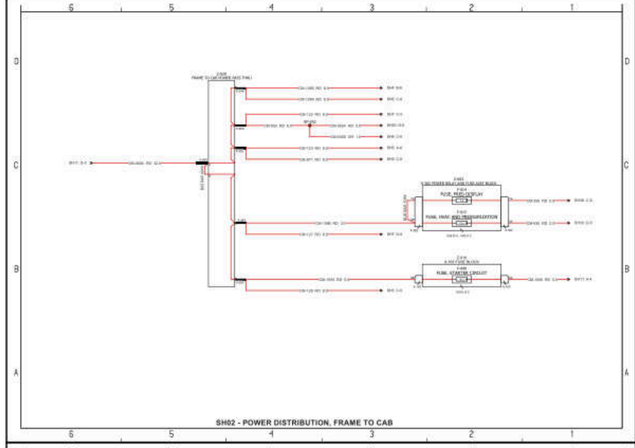
BAL10CVT354FMB 6

5. Figure **6** shows the ideal full signal of the crank and cam position from the point of when the engine is turned on , and until it is turned off.

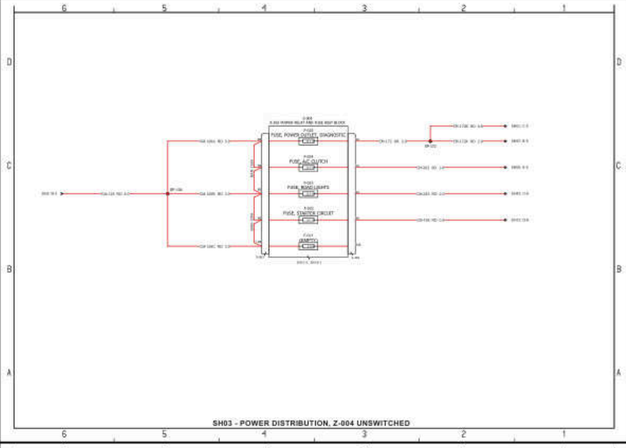


BAL11CVT057FMA 7
(A) = Sync Trigger

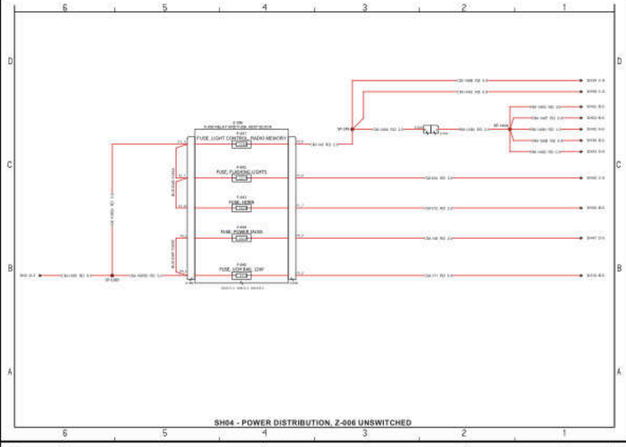
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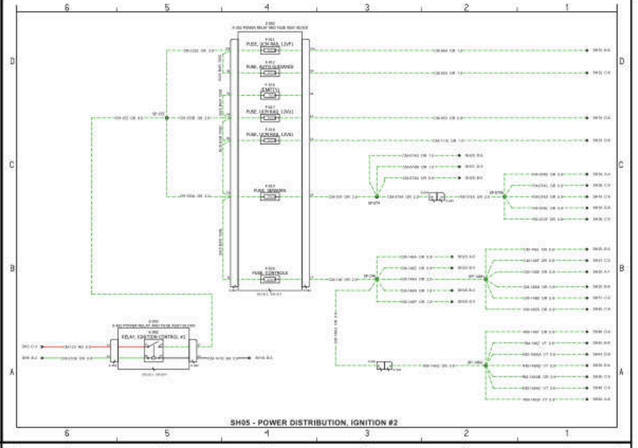
SH02 - POWER DISTRIBUTION, FRAME TO CAB



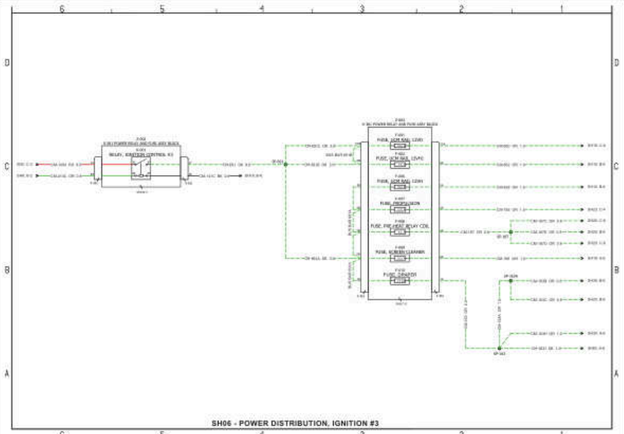
SH03 - POWER DISTRIBUTION, Z-004 UNSWITCHED



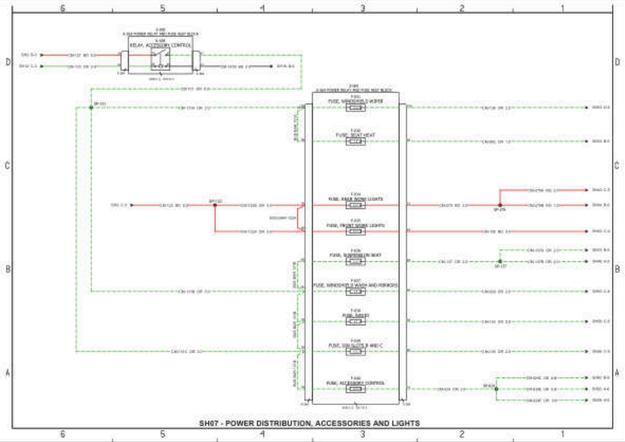
SH04 - POWER DISTRIBUTION, Z-006 UNSWITCHED



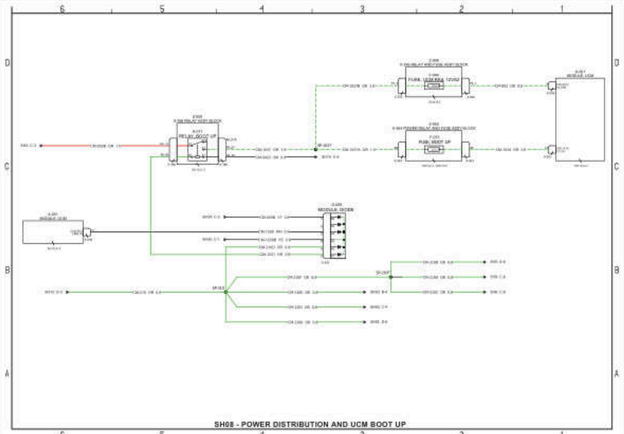
SH05 - POWER DISTRIBUTION, IGNITION #2



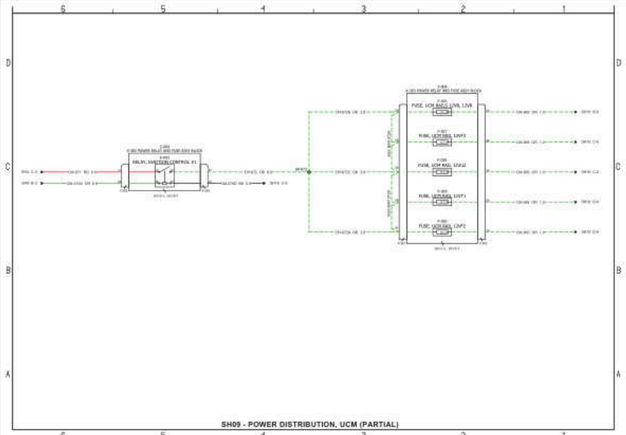
SH06 - POWER DISTRIBUTION, IGNITION #3



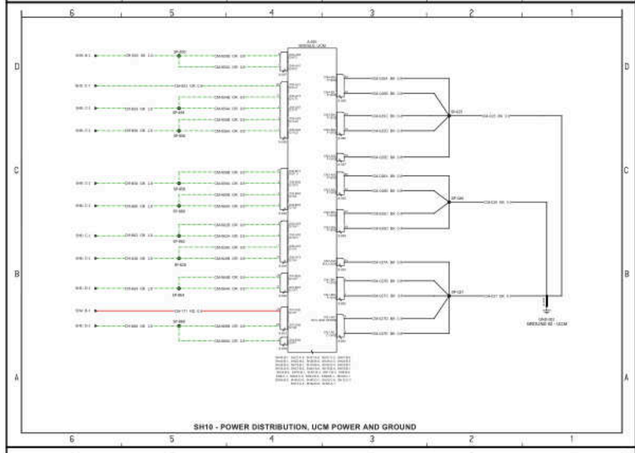
SH07 - POWER DISTRIBUTION, ACCESSORIES AND LIGHTS



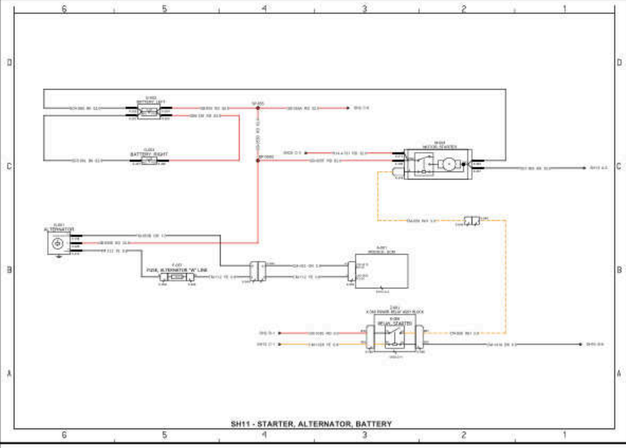
SH08 - POWER DISTRIBUTION AND UCM BOOT UP



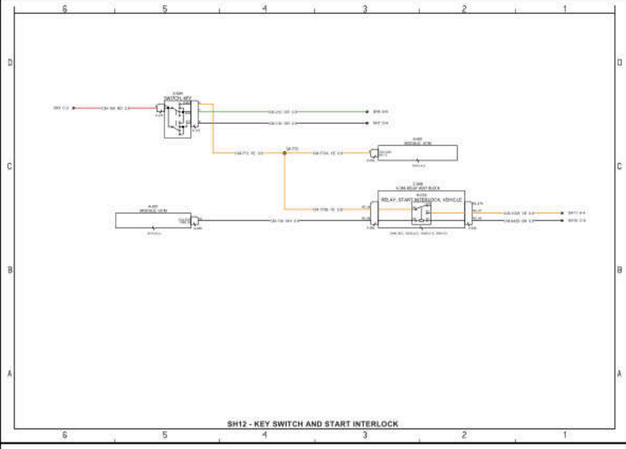
SH09 - POWER DISTRIBUTION, UCM (PARTIAL)



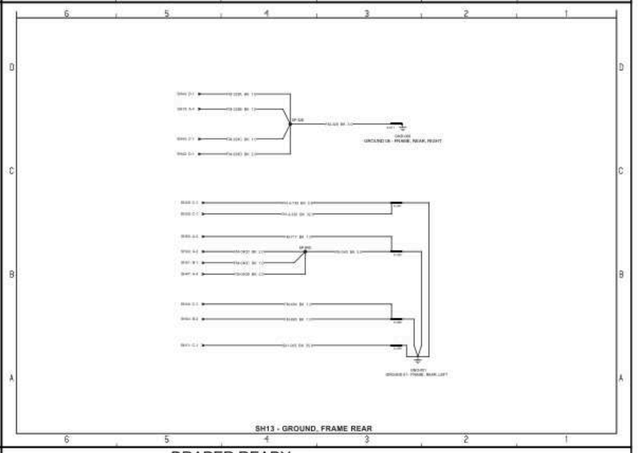
SH10 - POWER DISTRIBUTION, UCM POWER AND GROUND



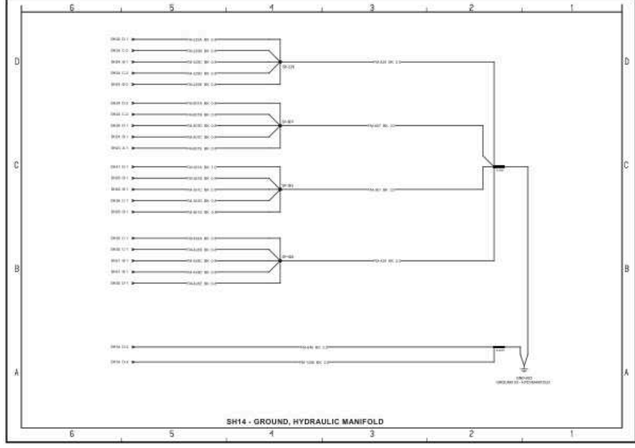
SH11 - STARTER, ALTERNATOR, BATTERY



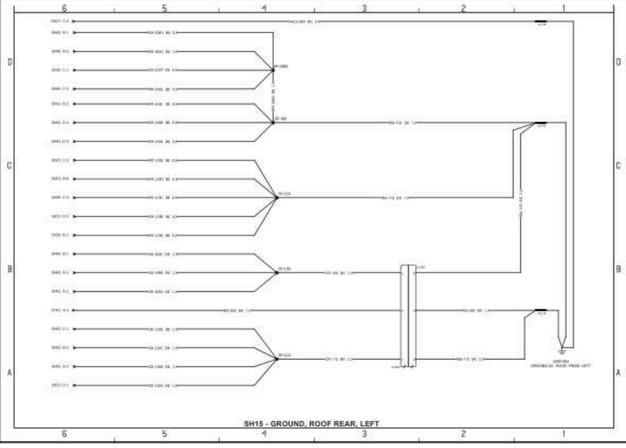
SH12 - KEY SWITCH AND START INTERLOCK



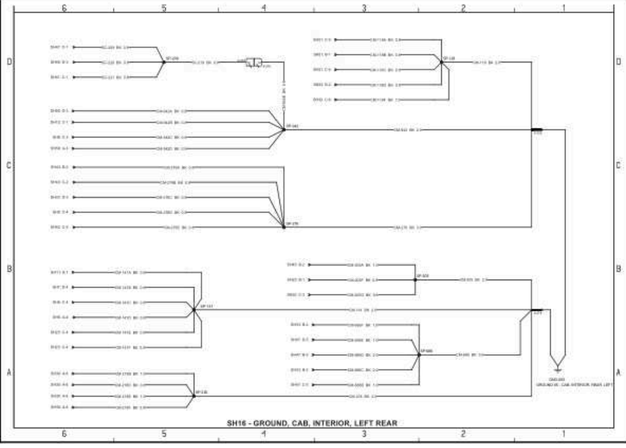
SH13 - GROUND, FRAME REAR



SH14 - GROUND, HYDRAULIC MANIFOLD



SH15 - GROUND, ROOF REAR, LEFT



SH16 - GROUND, CAB, INTERIOR, LEFT REAR

DRAPER READY SELF-PROPELLED WINDROWER SPEEDROWER® 130 TIER 3

48049022

ELECTRICAL SCHEMATIC, PIN YGG677501 AND ABOVE

SCHEMATIC SHEET INDEX

SHEET	DESCRIPTION	SHEET	DESCRIPTION
1	BLANK	33	SPW, CAB MISC
2	POWER DISTRIBUTION, FRAME TO CAB	34	HEADER, PASSTHROUGH CONNECTOR
3	POWER DISTRIBUTION, Z-004 UNSWITCHED	35	HEADER, SENSORS, POSITION AND ANGLE
4	POWER DISTRIBUTION, Z-006 UNSWITCHED	36	HEADER, DRAPER
5	POWER DISTRIBUTION, IGNITION #2	37	HEADER, SICKLE AND WEIGHT BOX
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16	GROUND, CAB, INTERIOR, LEFT REAR	48	HVAC, AUTOMATIC
17	GROUND, CAB, EXTERIOR	49	HVAC, MANUAL
18	GROUND, SIGNAL, UCM	50	HVAC, VEHICLE SIDE
19	ENGINE, MISC	51	CAN, VEHICLE
20	ENGINE, PRE-HEAT	52	STEREO
21	PROPULSION, SOLENOIDS, SPEED SENSORS	53	BLANK
22	PROPULSION, CONTROLS	54	BLANK
23	PROPULSION, INTERLOCK AND BRAKE	55	BLANK
24	HYDRAULICS, HEADER, FLOAT AND TILT	56	BLANK
25	HYDRAULICS, CONTROLS, PTO AND HEADER	57	BLANK
26	HYDRAULICS, LIFT ARMS	58	UNIMPLEMENTED FEATURES
27	HYDRAULICS, PTO		
28	HYDRAULICS, SENSORS		
29	HYDRAULICS, SENSORS, SWASH PLATE ANGLE		
30	HYDRAULICS, HEADER		
31	AUTOGUIDANCE, INPUTS/OUTPUTS		
32	AUTOGUIDANCE, SYSTEM		

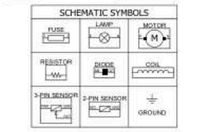
COMPONENT CODES

CODE	DESCRIPTION
A	CONTROL MODULE
B	SENSOR, HEADER CONTROLLED SWITCH
C	CAMPLIGHT
D	DIODE
G	POWER OUTLET (ie TERMINUS, BATTERY)
H	HOUSING LOCATION
I	ACCESS, DIGITAL
J	CONNECTOR (SOCKET) (MOUNT)
K	RELAY
M	POTENTIOMETER
N	RESISTOR
O	OPERATOR CONTROLLED SWITCH
P	SPLICE
Q	FUSE
R	CONNECTOR
S	SOLENOID

WIRE COLORS

ABBREVIATION	DESCRIPTION
BK	BLACK
BL	BLUE
BR	BROWN
GN	GREEN
GY	GRAY
LB	LIGHT BLUE
LG	LIGHT GREEN
OR	ORANGE
PK	PINK
RD	RED
TN	TAN
VT	VIOLET
WH	WHITE
YL	YELLOW

SCHEMATIC SYMBOLS



CIRCUIT COLOR INDEX

12V UNSWITCHED POWER
12V SWITCHED POWER - AFTER 12V BATTERY DISCONNECT
IGNITION KEY ON
IGNITION KEY ON - AFTER CAB POWER RELAY
GROUNDS
GROUNDS - AFTER START RELAY

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