SERVICE MANUAL

P1030 / P1040 / P1050 / P1060

Air Cart

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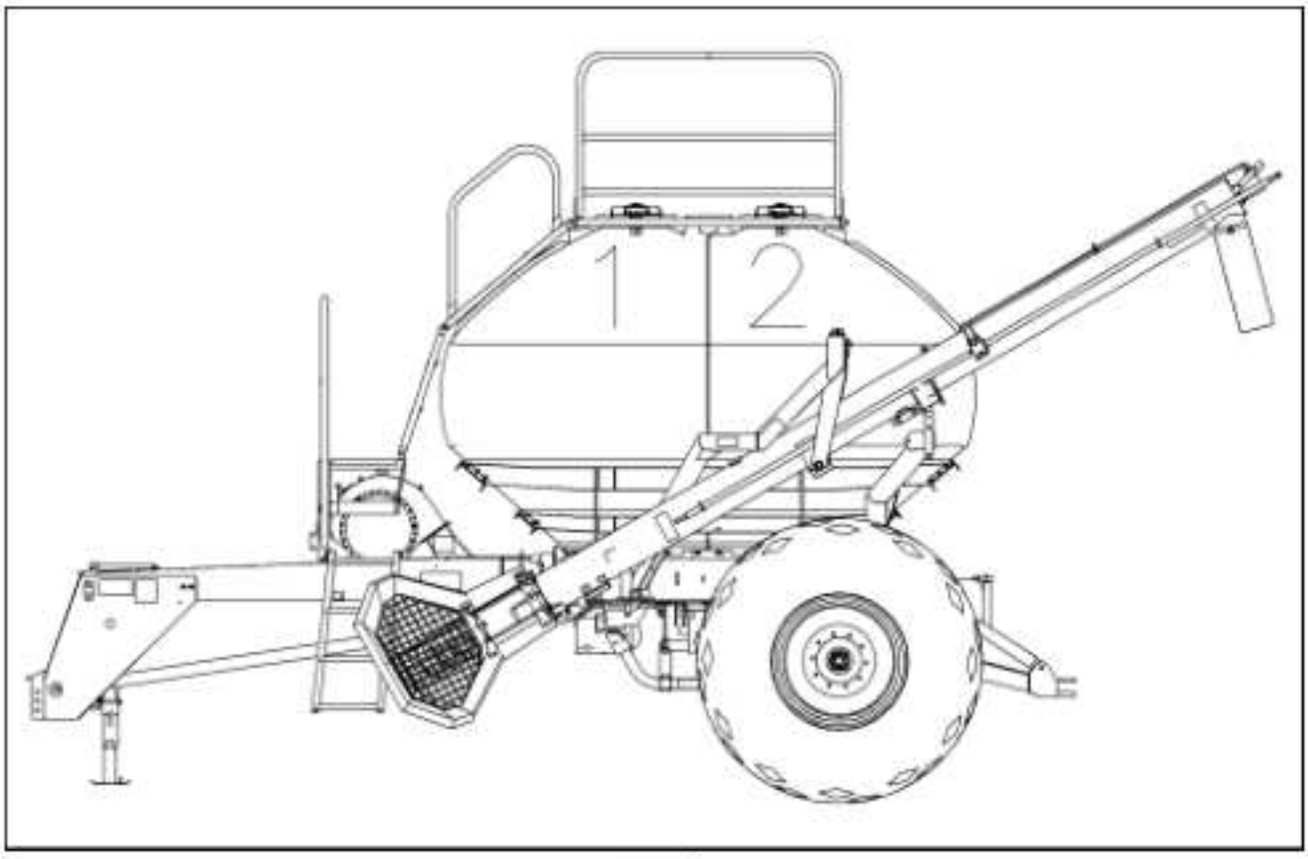
SERVICE

Non-powered rear axle
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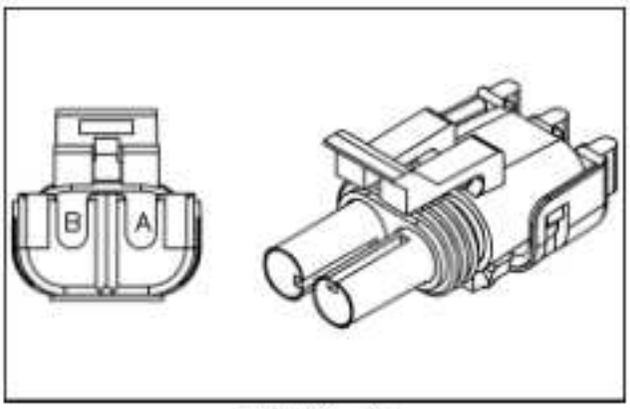
Tow Between P1030 and P1040 Air Cart Dimensions

Configuration	P1030	P1040
Length (with auger)	8.05 m (26 ft 5 in)	
Height	4.55 m (14 ft 1 in)	4.65 m (15 ft 3 in)
Volume **100 %**		
Front	5955 L (169 Bu)	6554 L (186 Bu)
Rear	4158 L (118 Bu)	5004 L (142 Bu)
Weight - Empty	45450 kg (10 020 lb)	4560 kg (10 050 lb)
Weight - Loaded	12 130 kg (26 740 lb)	13 500 kg (29 760 lb)
Rear Axle - Empty	3545 kg (7815 lb)	355 kg (7840 lb)
Rear Axle - Loaded (Estimate)	19430 kg (207900 lb)	13 370 kg (22 870 lb)
Front Hitch / Axle - Empty	1005 kg (2210 lb)	1015 kg (2235 lb)
Front Hitch / Axle - loaded (Estimate)	2700 kg (5900 lb)	3135 kg (6900 lb)

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CONNECTOR X-141

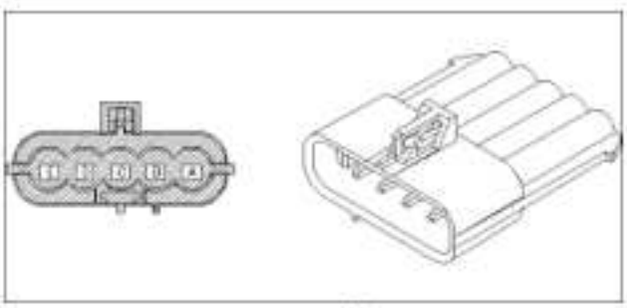
METER 3 CLUTCH			
POSITION	**WIRE NUMBER**	**CIRCUIT REFERENCE**	**ELECTRICAL SCHEMATIC FRAME**
A	39D BK-0.75	TANK 3 CLUTCH L	**Wire harnesses - Electrical schematic frame 11 Tank 3 (3 tank carts only) (55.100)**
B	38D RD-0.75	TANK 3 CLUTCH H	**Wire harnesses - Electrical schematic frame 11 Tank 3 (3 tank carts only) (55.100)**



BL07_87692853 19

CONNECTOR X-142

3rd tank A IN			
POSITION	**WIRE NUMBER**	**CIRCUIT REFERENCE**	**ELECTRICAL SCHEMATIC FRAME**
A	40C RD-0.75	MASTER CLUTCH	**Wire harnesses - Electrical schematic frame 11 Tank 3 (3 tank carts only) (55.100)**
B			
C			
D			
E			



87693751 20

CONNECTOR X-143

3rd tank B out			
POSITION	**WIRE NUMBER**	**CIRCUIT REFERENCE**	**ELECTRICAL SCHEMATIC FRAME**
A	38D RD-0.75	TANK 3 CLUTCH H	**Wire harnesses - Electrical schematic frame 11 Tank 3 (3 tank carts only) (55.100)**
B	39D BK-0.75	TANK 3 CLUTCH L	**Wire harnesses - Electrical schematic frame 11 Tank 3 (3 tank carts only) (55.100)**
C	10H BK 2.0	GND	**Wire harnesses - Electrical schematic frame 11 Tank 3 (3 tank carts only) (55.100)**

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520193-03-ECU_PWR, Voltage above normal, or shorted to high source

Control Module : Air Cart Rate ECU

NOTE: *This fault code can be generated by any ECU. Check the display for which ECU is indicated.*

The implement is indicated by the icon next to the stop sign  *when the fault is displayed.*
Fault codes from implement Rate ECU are explained in the implement service manual.

Context:
The rate ECU detected an abnormally high voltage on its ECU_PWR ("quiet power") supply.

Cause:
High battery voltage, short to high source, or defective component.

Possible failure modes:

1. High battery voltage, failed alternator.
2. ECU_PWR circuit is shorted to a voltage greater than **16 V**.
3. Faulty Rate ECU hardware or software.

Solution:

1. Determine if the fault code is still active:

   Cycle system power or reset the Air Cart Rate ECU.

   Select UTIL > FAULT and check both ACTIVE and INACTIVE faults. Refer to **Cab seeding controls - Check Faults (55.517)**.
   Review: Fault Count, First Time, Last Time

   Also view the ECU_PWR voltage as measured by the Air Cart Rate ECU.
   Select DIAGN > MONTR and choose ECU_PWR. Refer to **Cab seeding controls - Check Diagnostics - Monitor (55.517)**.

   A. Fault 520193-3 is active. Go to Step **2**.

   B. Fault is inactive. Continue operation and monitor for recurring fault.

2. Disconnect the IBBC (Implement Bus Breakaway Connector) at the rear of the tractor or seed tool if tow behind air cart. Measure the following voltages on the tractor/air cart connector:

   P series Tow Behind **X-101**
   P series Tow Between **X-101**

Measure with Voltmeter		Measured Voltage	Interpretation and Action
Positive lead	**Negative lead**		
ECU_PWR (cavity 4)	ECU_GND (cavity 2)	**11 - 16 V**	Normal
		>16 V	Check for failed tractor alternator or high short on ECU_PWR to a voltage source greater than **16 V**.
		<11 V	Should not occur. Double-check measurement, double-check fault code

   A. Fault 520193-3 is active. Go to Step **3**.

   B. Fault is inactive. Continue operation.

3. Perform the Rate ECU troubleshooting procedure described in **Electronic module - Problem solving (55.640)**.

   A. Fault 520193-3 is active. Reinstall original Rate ECU and contact your service organization.

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Low Fan Speed!

This alarm informs the operator that the speed of the bulk fan is less than the operator specified threshold. Either adjust the hydraulics to speed the fan up, or adjust the Low Fan Alarm threshold lower.



SAIL13S830452AA 7

Master Clutch disabled due to hardware fault!

This alarm informs the operator that the master clutch has been disabled which disconnects the meter box assembly from the ground drive. This alarm is applicable only for mechanical carts, and indicates an excessive current fault has occurred at the master clutch. The clutch fault will need to be fixed, and power cycled to re-enable the clutch.



SAIL13S830453AA 8

Meter disabled due to hardware fault!

This alarm informs the operator that the indicated meter is no longer available for seeding. This alarm indicates an excessive current fault has occurred at the the meter motor (variable rate cart), or meter clutch (mechanical cart). The motor/clutch fault will need to be fixed, and power cycled to re-enable the motor/clutch. This alarm can occur at any meter.

NOTE: *The Meter 1 alarm is shown, but this alarm can occur for any meter.*

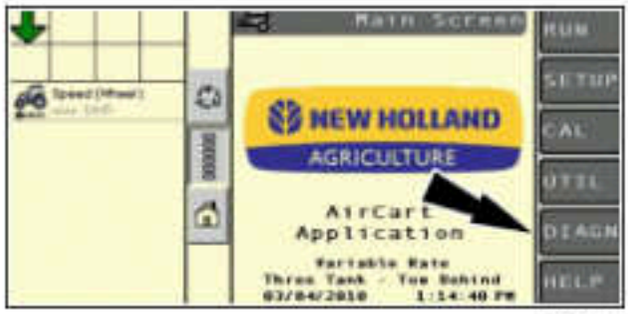


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Cab seeding controls - Check Diagnostics - Monitor

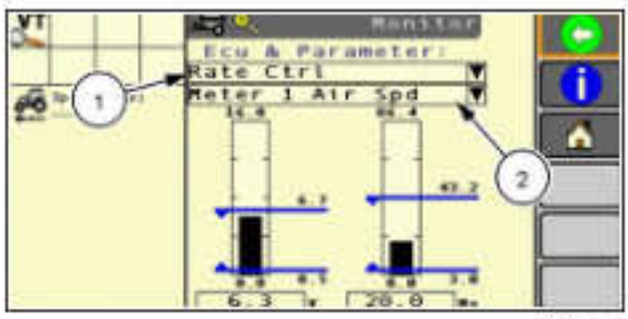
1. From the Main Screen select DIAGN for 'diagnostics'.



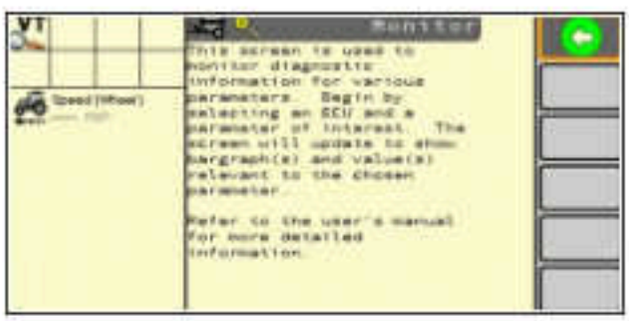
2. Select MONTR for 'monitor'.
The Monitor screen will be displayed



3. You can select the ECU. This will be Rate Controller **(1)**. Select the component you wish to view from the selection list **(2)**.



4. Choose i for extra information on the current screen at any time.

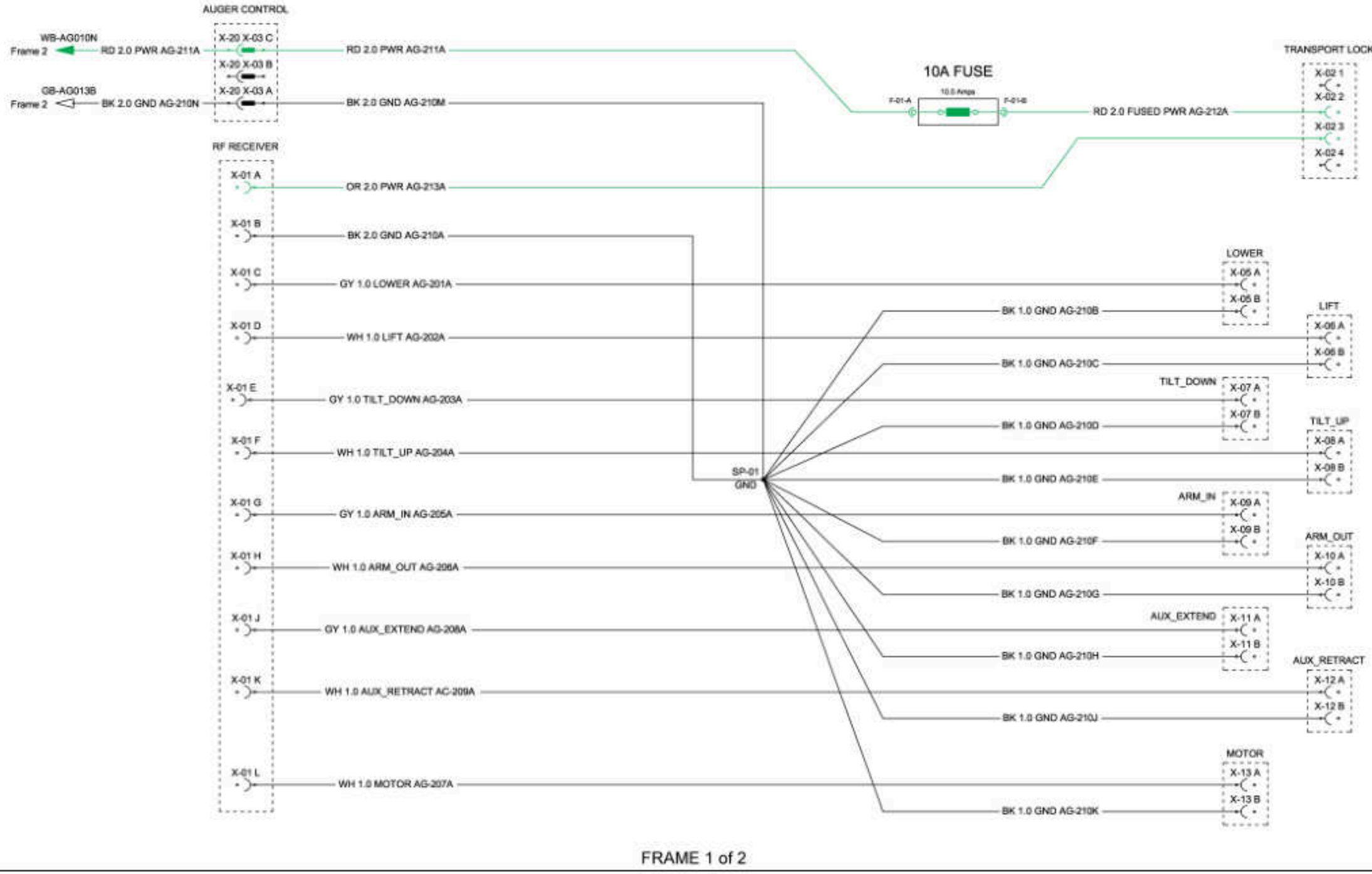


5. Pick the desired item from the scroll list.



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AUGER CONTROL



FRAME 1 of 2

SAvE13TIL030JA 1

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