SERVICE MANUAL

Speedrower® 130
Tier 3
Self-Propelled Windrower

PIN YEG675001 and above

Part number 47904535
1st edition English
July 2015

NEW HOLLAND AGRICULTURE

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Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.202] Air cleaners and lines 10.2

[10.206] Fuel filters 10.3

[10.216] Fuel tanks 10.4

[10.218] Fuel injection system 10.5

[10.250] Turbocharger and lines 10.6

[10.254] Intake and exhaust manifolds and muffler 10.7

[10.400] Engine cooling system 10.8

[10.414] Fan and drive 10.9

Front axle system 25

[25.310] Final drives 25.1

Rear axle system 27

[27.550] Non-powered rear axle 27.1

Hydrostatic drive 29

[29.100] Transmission and steering hydrostatic control 29.1

[29.202] Hydrostatic transmission 29.2

[29.218] Pump and motor components 29.3

Brakes and controls 33

[33.110] Parking brake or parking lock 33.1

Hydraulic systems 35

[35.000] Hydraulic systems 35.1

[35.100] Main lift system 35.2

[35.105] Charge pump 35.3

[35.220] Auxiliary hydraulic pump and lines 35.4

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[35.300] Reservoir, cooler, and filters 35.5
[35.304] Combination pump units 35.6
[35.410] Header or attachment height system 35.7
[35.415] Header or attachment tilting system 35.8
[35.760] Header reverser drive 35.9
[35.910] Head and header hydraulic drive 35.10
Steering 41
[41.101] Steering control 41.1
Cab climate control 50
[50.200] Air conditioning 50.1
Electrical systems 55
[55.000] Electrical system 55.1
[55.019] Hydrostatic drive control system 55.2
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system 55.3
[55.100] Harnesses and connectors 55.4
[55.640] Electronic modules 55.5
[55.DTC] FAULT CODES 55.6
Platform, cab, bodywork, and decals 90
[90.124] Pneumatically-adjusted operator seat 90.1
[90.150] Cab 90.2
[90.151] Cab interior 90.3
[90.154] Cab doors and hatches 90.4

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Contents

INTRODUCTION

Foreword - Important notice regarding equipment servicing (*) 3
Foreword - Note to the dealer 4
Safety rules 5
Safety rules (*) 6
Personal safety - Emergency exit (*) 15
Personal safety - Hydraulic system safety 16
Personal safety - Maintenance safety (*) 17
Safety rules - Ecology and the environment (*) 18
Personal safety - Do not operate tag (*) 19
Torque - Minimum tightening torques for normal assembly (*) 20
Torque - Standard torque data for hydraulics (*) 24
Basic instructions - Shop and assembly (*) 26
Hydraulic contamination 28
Capacities 29
Maintenance chart - Recommended operating temperature range 30
General specification 31
Product identification - Product Identification Number (PIN) 35
Part identification - Engine serial number 36
Product identification - Machine orientation 37

(*) See content for specific models

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Wiring harnesses - Electrical schematic sheet 40 - Windrow shields

Speedrower® 130	NA

4 cylinder, non-draper equipped

Component Identifier	Description
A-001	MODULE, UCM
B-057	SENSOR, WINDROW SHIELD POSITION
K-027	RELAY, WINDROW SHIELDS ACTUATOR RETRACT
K-029	RELAY, WINDROW SHIELDS ACTUATOR EXTEND
M-018	MOTOR, WINDROW SHIELDS
S-054	SWITCH, WINDROW SHIELDS

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E0284-04-PTO pump low side - Shorted to low source

Speedrower® 130	NA Non draper ready - Not fitted for draper header

Control Module : UCM

Context:
The Universal Control Module (UCM) supplies the ground source for the PTO forward Y-030 and reverse Y-031 solenoids.

Cause:
The PTO pump left side low side supply is shorted to a low source.

Possible failure modes:

1. Faulty wiring harness, shorted to low source.
2. 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. Check the wiring harness for a short to low source.

   Disconnect the wiring harness from Y-030 and Y-031.

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

   Place the key switch OFF.

   Use a multimeter to check for continuity.

From	To	Result
Harness connector **X-044 pin 87**	Chassis ground	There should be no continuity.

   A. If there is no continuity, continue with Step **3**.

   B. If there is continuity, there is a short to low source in the wiring harness. Locate and repair faulty wiring.
3. Check for a short to low source.

   Place the key switch OFF.

   Disconnect the cab harness from the UCM at connector **X-004**.

   Use a multimeter to check for continuity.

From	To	Result
Cab harness connector **X-004 pin 25**	Chassis ground	There should be no continuity.

   A. If there is no continuity, the fault may be internal to the UCM. Load the appropriate module software.

   B. If there is continuity, there is a short to low source in the wiring harness. Locate and repair faulty wiring.

Wiring harnesses - Electrical schematic sheet 42 - Power Take-Off (PTO) (55.100.DP-C.20.E.42)

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E0302-00-Hydraulic oil temperature resistor - Value above normal

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

Control Module : UCM

Context:
The Universal Control Module (UCM) A-001 monitors the hydraulics oil temperature resistor circuit.

Cause:
Hydraulics-hydraulic oil temp overheat.

Possible failure modes:

1. Faulty hydraulic oil temperature resistor.
2. Faulty controller.
3. Faulty electrical wiring, shorted to high source condition.

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 the hydraulics oil temperature resistor R-007 functions properly.

   Disconnect the wiring harness from the resistor.

   Use a multimeter to measure the resistance.

From	To	Result
Resistor pin A	Resistor pin B	The resistance should be approximately: • **30,000 - 9000 Ω** at **-20.0 - 0.0 °C (-4.0 - 32.0 °F)** • **7263 - 3511 Ω** at **5.0 - 20.0 °C (41.0 - 68.0 °F)** • **2795 - 980 Ω** at **25.0 - 50.0 °C (77.0 - 122.0 °F)**

   A. If the resistance value is **0 Ω** or infinite, the resistor has failed internally. Replace the resistor.

   B. If there is a nominal resistance value, continue to Step. **3**.
3. Check the ground circuit.

   Place the key switch OFF.

   Use a multimeter to check for continuity.

From	To	Result
Harness connector **X-140 pin A**	Chassis ground	There should be continuity.

   A. If there is continuity, continue to Step **3**.

   B. If there is no continuity, locate and repair faulty wiring.
4. Check the wiring harness for a short to high source.

   Disconnect the cab harness from the frame harness at connector **X-004**.

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

Speedrower® 130 [YEG675001 -]	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

STEP 5. Is the header drop rate satisfactory?

NO

4-Line Display:

- Enter the configuration mode and adjust drop rate

Color touchscreen display:

- Enter the "toolbox" and adjust drop rate

Step 6. Before going to the field:

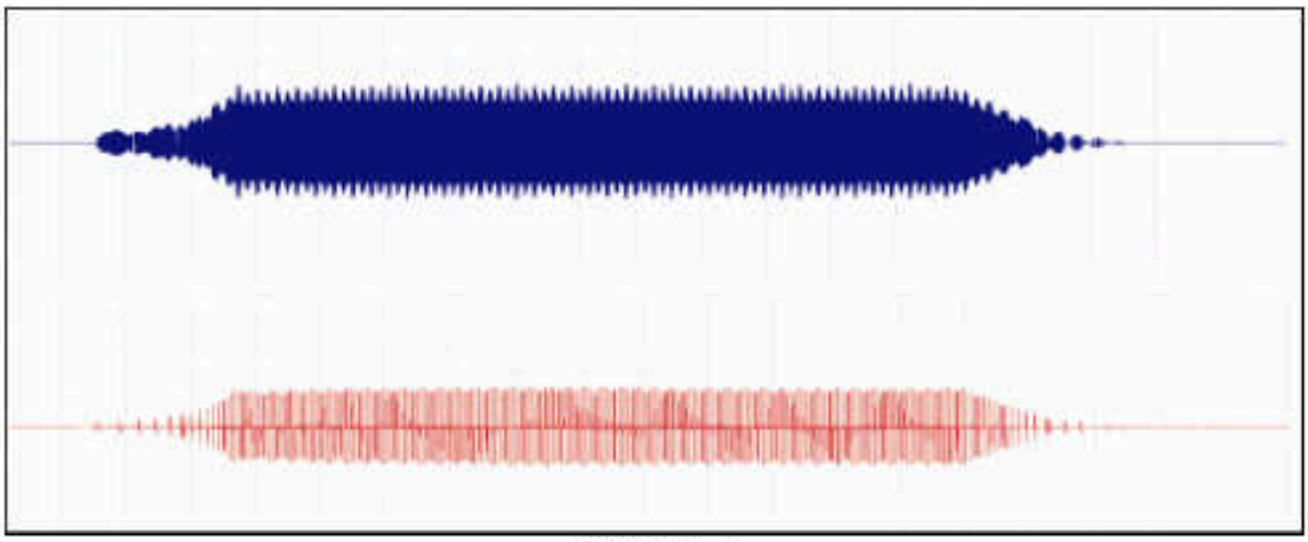
- If unit is equipped with deck shift, repeat steps 3 and 4 for every position of the decks. Unit will remember individual settings for each position as operator moves decks
- If equipped, with the engine off, recheck the rear axle suspension air springs for proper pressure

YES

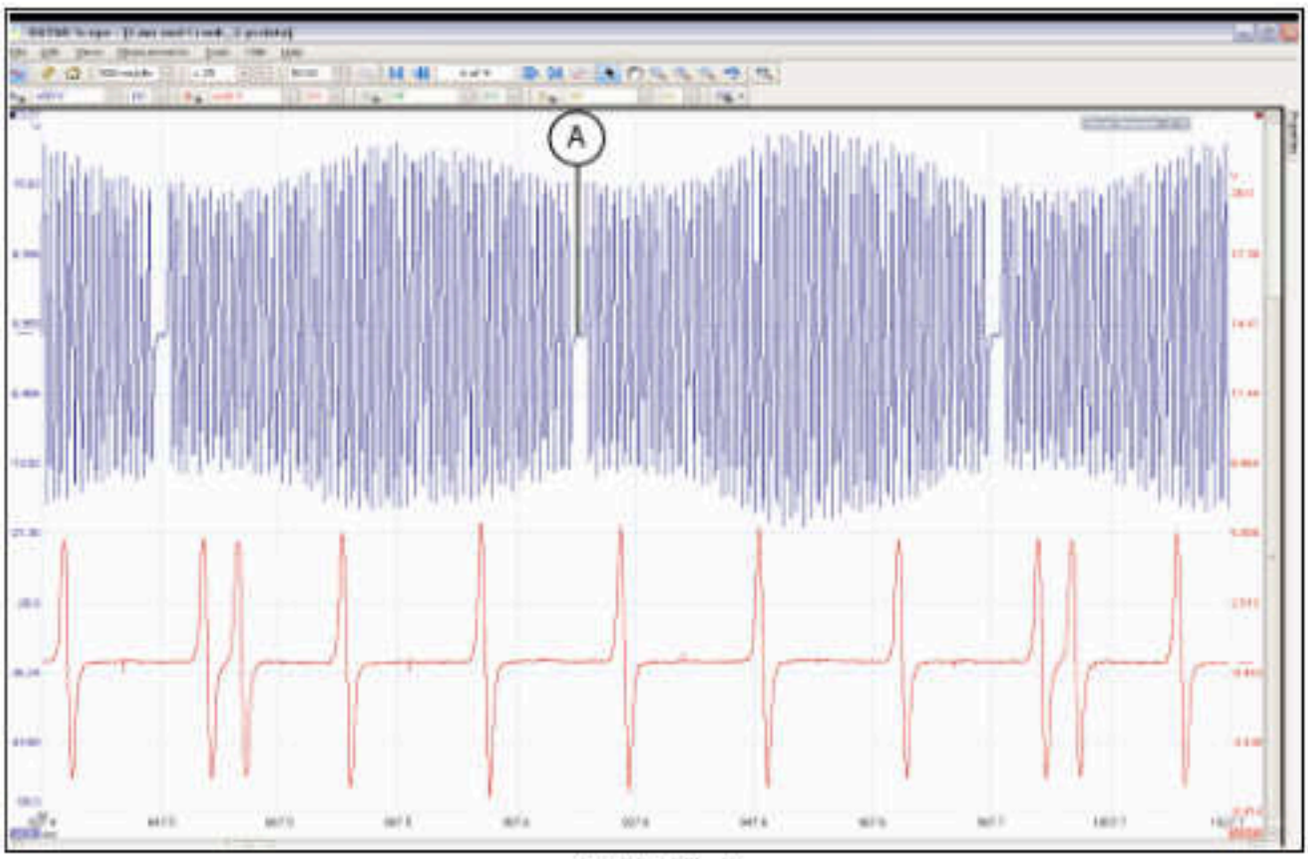
STEP 7. Make final adjustments to the float pressure during operation. The header must stay at operating position with minimum weight.

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

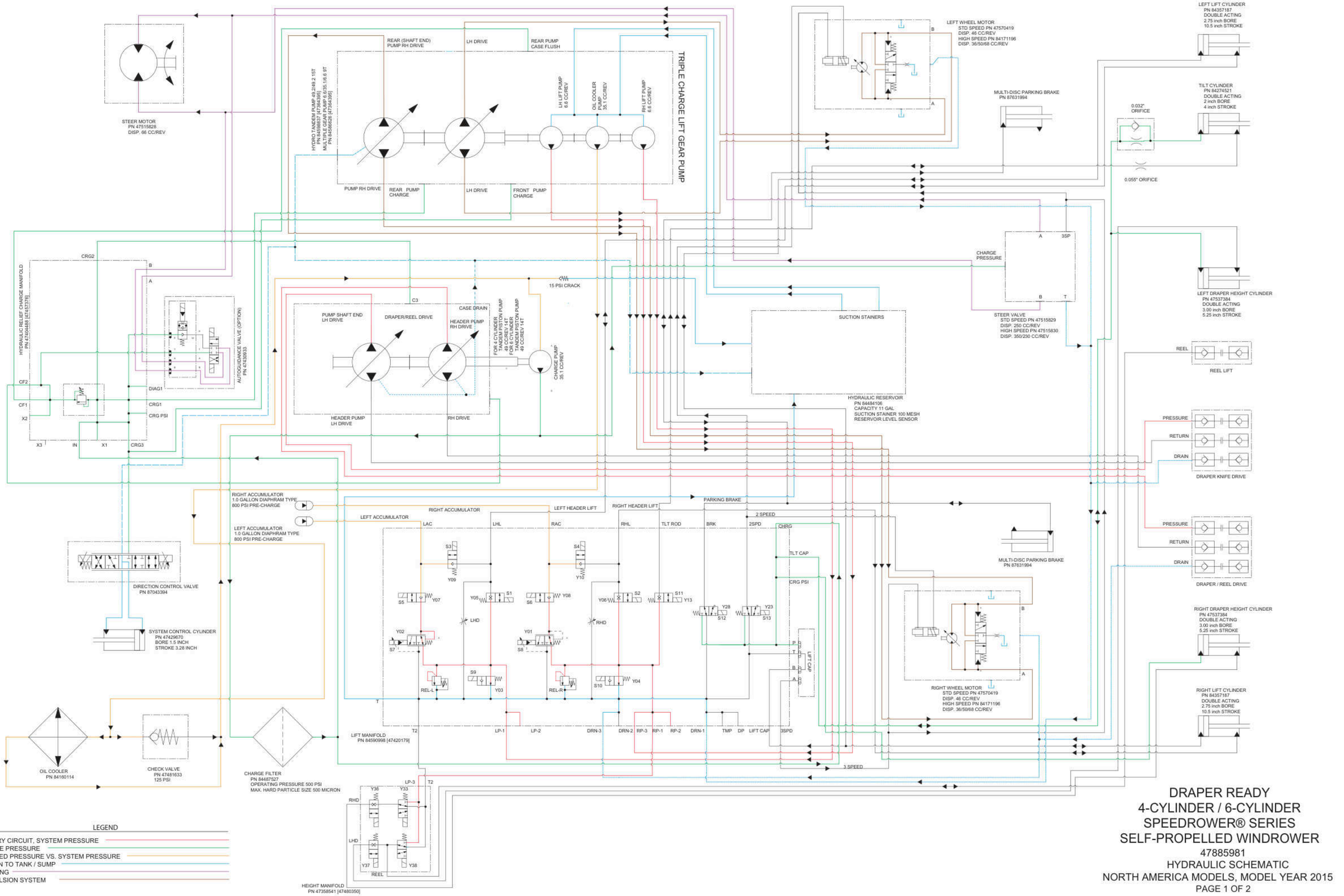


5. Figure **6** shows the ideal full signal of the crank and cam position from the point of when the engine is turned on , and until it is turned off.



(A) = Sync Trigger

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