SERVICE MANUAL

Speedrower® 200 / Speedrower® 240
Tier 3
Self-Propelled Windrower

PIN YEG675001 and above

Part number 47904526
1st edition English
August 2015

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(*) See content for specific models

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Air conditioning - General specification

COMPRESSOR

Type	TCCI QP7H15 Axial Piston

REFRIGERANT

Capacity	**1.9 kg (4.2 lb) R134A**

REFRIGERANT OIL

Capacity	**270 ml (9.13 US fl oz)** SP-46 PAG Oil

Air conditioning - Special tools

Item No.	Description
FHN02343A-3*	Seal Seat Remover
FHN02343A-4*	Pulley Bearing Installer
FHN02343A-5*	Pulley Bearing Installer Adapter
FHN02343A-6*	Universal Pulling Arbor
FHN02343A-7*	Universal Pulling Body
FHN02343A-8*	Clutch Holder
FHN02343A-9*	Armature Puller Assembly
FHN02343A-10*	External Retaining Ring Pliers
FHN02343A-12*	Seal Remover and Installer
FHN02343A-13*	Seal Protector
FHN02343A-14*	Clutch Face Plate Installer
FHN02343A-15*	Air Gap Feeler Gauges
FHN02343A-19*	Oil Level Checker
FHN02343A-20*	Oil Level Angle Gauge
FHN02343A-22*	Internal Retaining Ring Pliers
FHN02343A-25*	Pulley and Clutch Removal Jaws and Thumbscrews
FHN2RT95*	Protector, Shaft, Jaw Separator

*Included in compressor tool kit No. FNH02343B.

Air conditioning - General specification Temperature/pressure chart

Ambient Tempera-ture °C (°F)	Relative Humidity - %		Louver Temps* - °C (°F)		Normal Low Side Pressure - kPa (psi)		Normal High Side p Pressure - kPa (psi)	
	Low RH	High RH	Low RH	High RH	Low RH	High RH	Low RH	High RH
21 °C (70 °F)	19 - 21 %	81 - 89 %	4 °C (40 °F)	11 °C (51 °F)	62 - 62 kPa (9 - 9 psi)	83 - 97 kPa (12 - 14 psi)	779 - 862 kPa (113 - 125 psi)	807 - 889 kPa (117 - 129 psi)
27 °C (80 °F)	18 - 20 %	69 - 77 %	8 °C (46 °F)	14 °C (57 °F)	69 - 83 kPa (10 - 12 psi)	103 - 117 kPa (15 - 17 psi)	917 - 1014 kPa (133 - 147 psi)	993 - 1103 kPa (144 - 160 psi)
32 °C (90 °F)	16 - 18 %	58 - 64 %	12 °C (53 °F)	18 °C (64 °F)	90 - 103 kPa (13 - 15 psi)	131 - 145 kPa (19 - 21 psi)	1089 - 1200 kPa (158 - 174 psi)	1207 - 1331 kPa (175 - 193 psi)
38 °C (100 °F)	14 - 16 %	48 - 53 %	16 °C (60 °F)	21 °C (70 °F)	117 - 131 kPa (17 - 19 psi)	165 - 179 kPa (24 - 26 psi)	1276 - 1413 kPa (185 - 205 psi)	1427 - 1579 kPa (207 - 229 psi)

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E0160-11-Merger speed solenoid low side - Unidentified failure code

Speedrower® 200	ANZ Non draper ready - Not fitted for draper header --- APAC Non draper ready - Not fitted for draper header --- LA Non draper ready - Not fitted for draper header --- MEA Non draper ready - Not fitted for draper header
Speedrower® 240	ANZ Non draper ready - Not fitted for draper header --- APAC Non draper ready - Not fitted for draper header --- LA Non draper ready - Not fitted for draper header --- MEA Non draper ready - Not fitted for draper header

Control Module : UCM

Context:
The Universal Control Module (UCM) A-001 supplies the ground source to the merger speed solenoid Y-022. The UCM monitors the signal line for various faults. Fault Mode Indicator (FMI) -11 is active if the output circuit is shorted or open.

Cause:
The UCM has detected the output signal to Y-022 is shorted or open.

Possible failure modes:

1. Faulty solenoid Y-022.
2. Faulty electrical wiring, shorted or open.
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 Y-022 functionality.

   Place the key switch OFF.

   Disconnect the wiring harness from the solenoid.

   Use a multimeter to measure the solenoid coil.

From	To	Result
Coil pin 1	Coil 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 for a short circuit condition.

   Place the key switch OFF.

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

   Use a multimeter to check for continuity.

From	To	Value
Harness connector **X-001 pin 19**	Chassis ground	There should be no continuity.
Harness connector **X-001 pin 19**	All other pins on connector **X-001**	There should be no continuity.

   A. If there is no continuity, continue with Step **4**.

   B. If there is continuity, locate and repair the faulty wiring harness.

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From	To	Result
Harness connector **X-213** pin A	Chassis ground	There should be continuity.

A. If there is continuity, leave the wiring harness disconnected. Continue with step **5**.

B. If there is no continuity, locate and repair faulty wiring.

5. Check the signal circuit for an open condition.

Place the key switch OFF.

Disconnect the wiring harness from A-001 at connector **X-006**.

Place the jumper wire on the cab harness side of connector **X-044 pin 21** to chassis ground.

Use a multimeter to check for continuity.

From	To	Result
Cab harness connector **X-006 pin 10**	Chassis ground	There should be continuity.

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

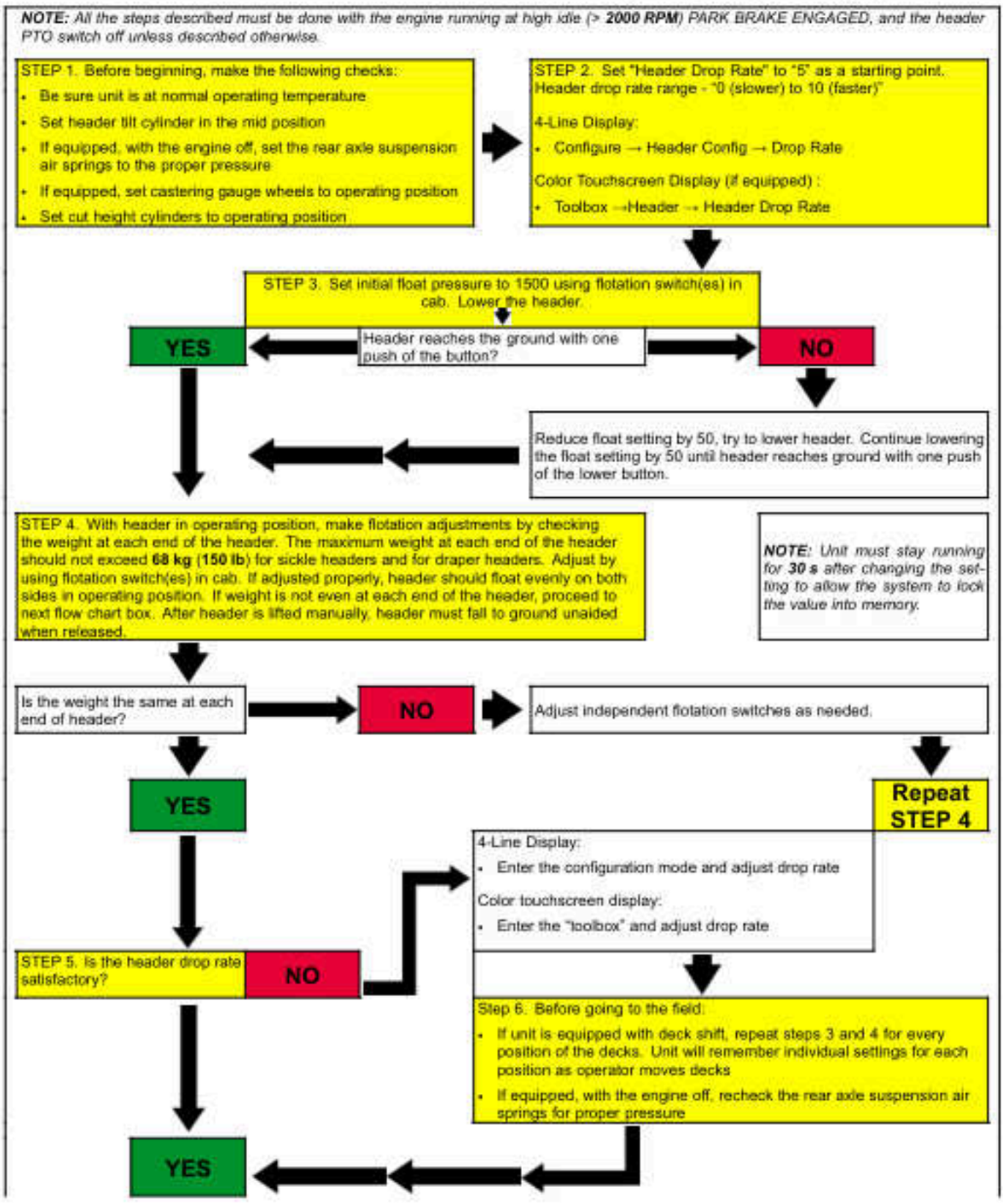
B. If there is continuity, the fault may be internal to the A-001. Load the appropriate module software.

Wiring harnesses - Electrical schematic sheet 34 (55.100)

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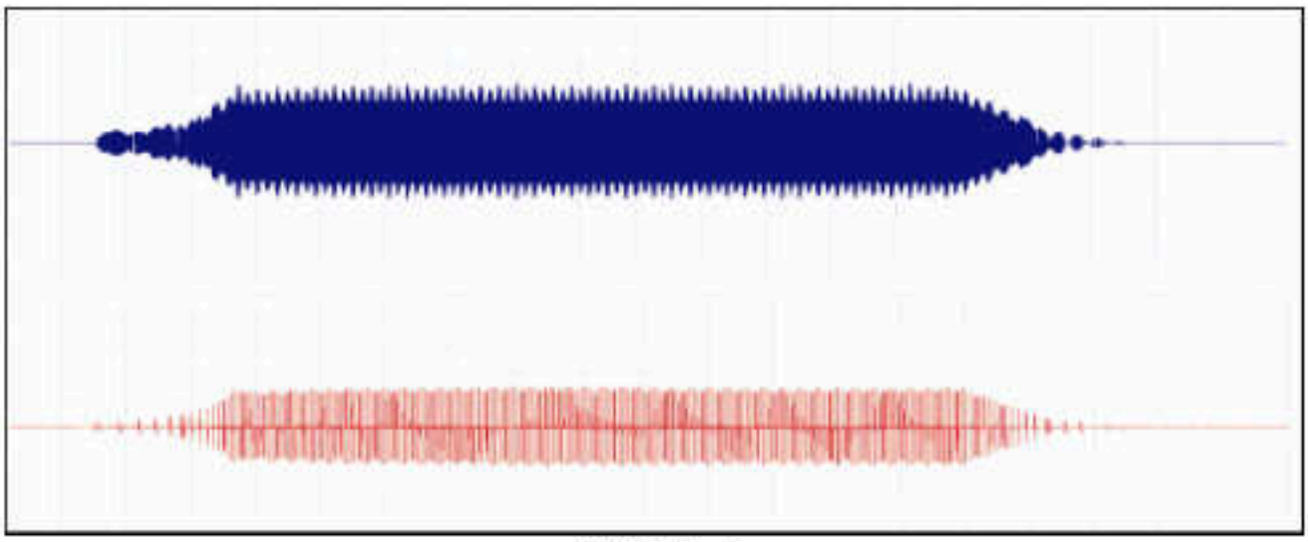
Hydraulic systems - Overview - Setting header flotation - Draper header only

Speedrower® 200 [YEG675001 -]	ANZ Draper ready - Factory-fitted to accept draper — APAC Draper ready - Factory-fitted to accept draper — LA Draper ready - Factory-fitted to accept draper — MEA Draper ready - Factory-fitted to accept draper
Speedrower® 240 [YEG675001 -]	ANZ Draper ready - Factory-fitted to accept draper — APAC Draper ready - Factory-fitted to accept draper — LA Draper ready - Factory-fitted to accept draper — MEA Draper ready - Factory-fitted to accept draper

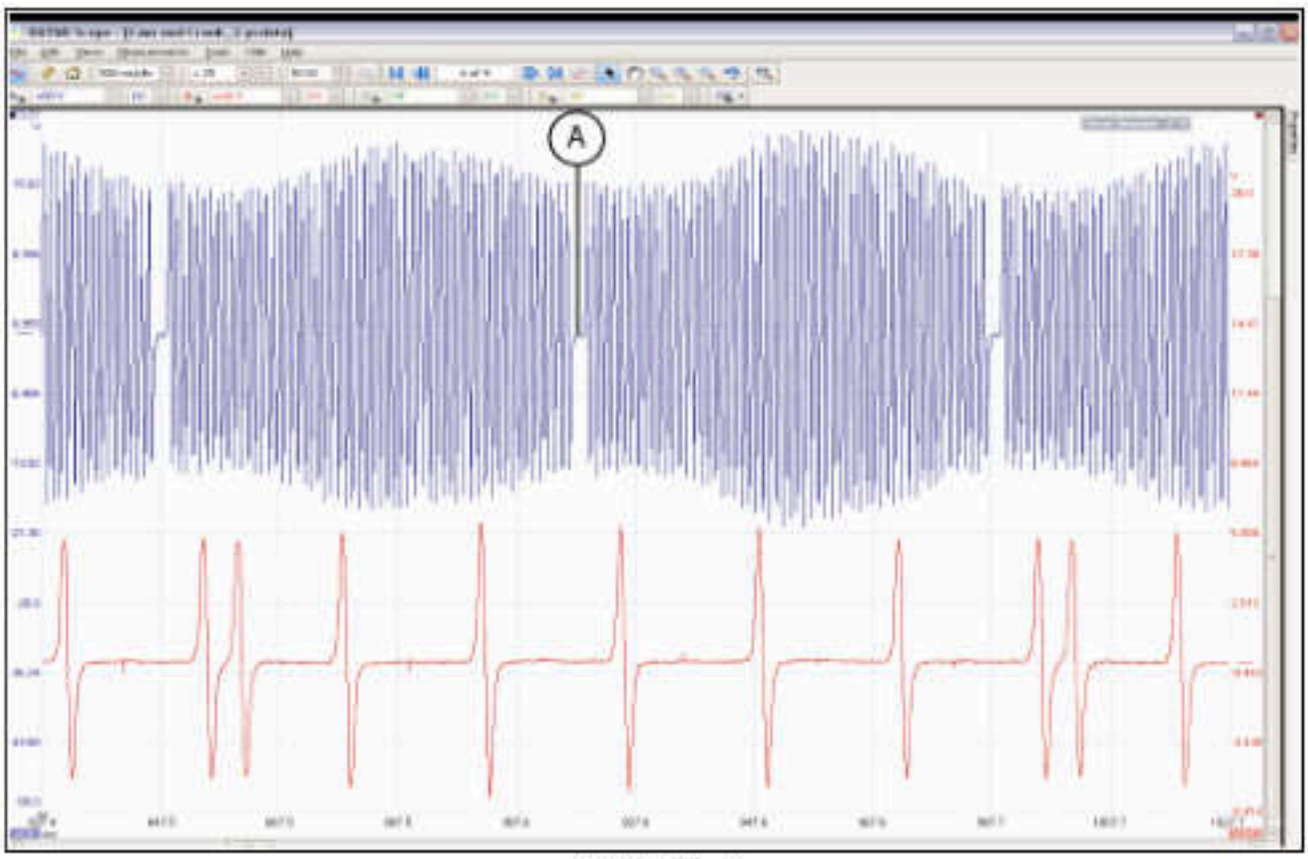


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Figure **5**
(A) = Ignition start up **(B)** = Engine begins to turn

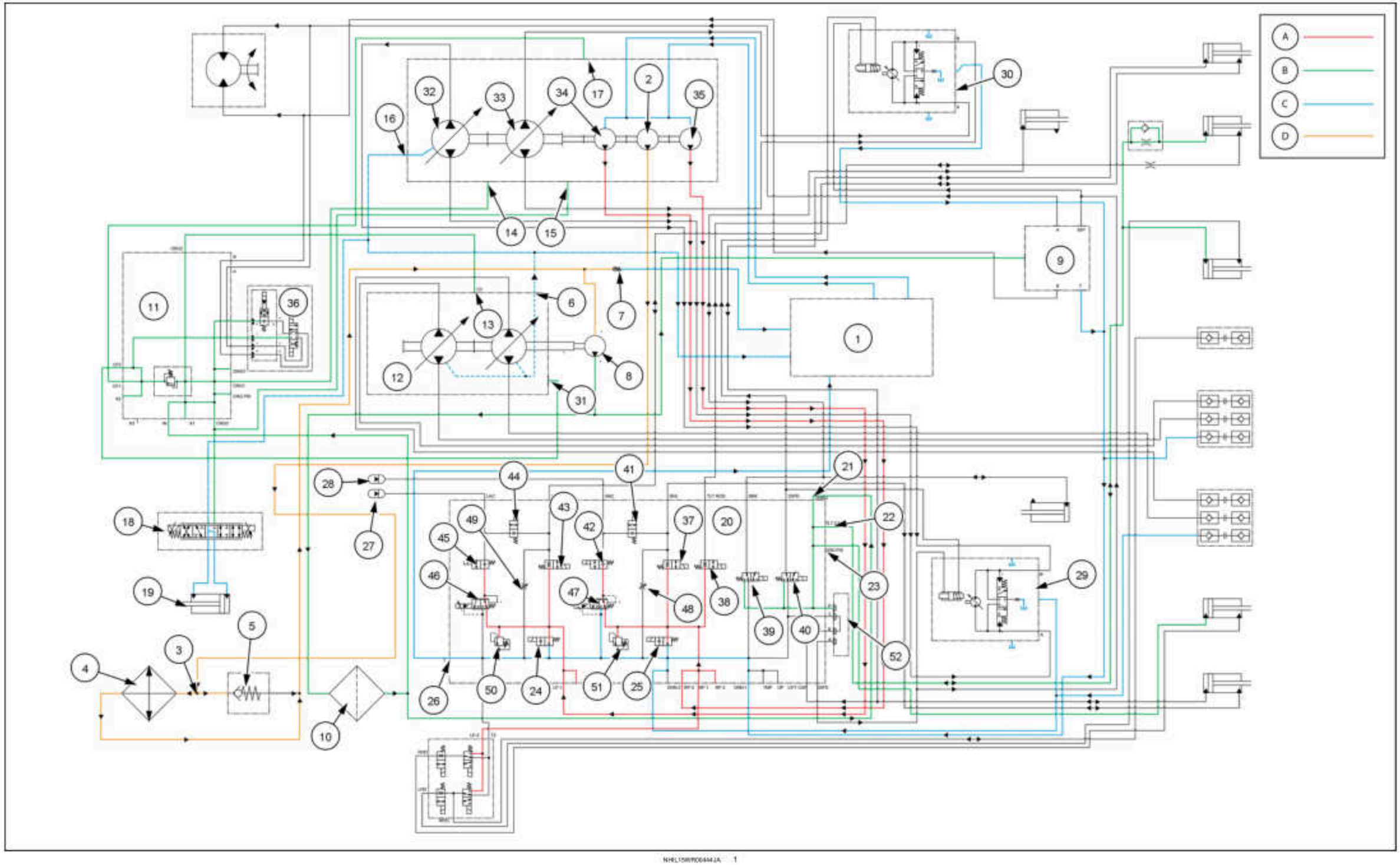


5. Figure **6** shows the ideal full signal of the crank and cam position from the point of when the engine is turned on , and until it is turned off.



(A) = Sync Trigger

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