SERVICE MANUAL

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

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NEW HOLLAND AGRICULTURE

MidWestTech | New Holland Speedrower 220, 260 Tier 4B Self Propelled Windrower Service Manual | Publication 47824875

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Air conditioning - General specification

Speedrower® 220	NA
Speedrower® 260	NA

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

Speedrower® 220	NA
Speedrower® 260	NA

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

Speedrower® 220	NA
Speedrower® 260	NA

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)

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Wiring harnesses - Electrical schematic sheet 04 – Power distribution

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

Type	Component	Connector / Link	Description
Fuse	F-001	**X-361**	F-001
Fuse	F-002	**X-361**	F-002
Fuse	F-006	**X-361**	F-006
Fuse	F-007	**X-361**	F-007
Fuse	F-008	**X-361**	F-008
Fuse	F-009	**X-361**	F-009
Fuse	F-010	**X-361**	F-010
Relay	K-001	**X-361**	K-001

Wire Break

Component	Connector / Link	Description
FB-163B	**Wiring harnesses - Electrical schematic sheet 46 – Radio (55.100)**	FB-163B
FB-163C	**Wiring harnesses - Electrical schematic sheet 48 – Miscellaneous (55.100)**	FB-163C
FB-163H	**Wiring harnesses - Electrical schematic sheet 46 – Radio (55.100)**	FB-163H
FB-163J	**Wiring harnesses - Electrical schematic sheet 46 – Radio (55.100)**	FB-163J
FB-186	**Wiring harnesses - Electrical schematic sheet 19 – Engine monitoring and screen cleaner motor (55.100)**	WB-186
FB-187	**Wiring harnesses - Electrical schematic sheet 48 – Miscellaneous (55.100)**	FB-187
FB-756	**Wiring harnesses - Electrical schematic sheet 25 – Multi-function Handle (MFH) (55.100)**	Wire Break
FB-828	**Wiring harnesses - Electrical schematic sheet 29 – Universal Control Module (UCM) (55.100)**	FB-828
FB-860	**Wiring harnesses - Electrical schematic sheet 29 – Universal Control Module (UCM) (55.100)**	Wire Break
FB-862	**Wiring harnesses - Electrical schematic sheet 29 – Universal Control Module (UCM) (55.100)**	Wire Break
GB-141C	**Wiring harnesses - Electrical schematic sheet 13 – Grounds (55.100)**	GB-141C
WB-1084	**Wiring harnesses - Electrical schematic sheet 01 – Power distribution (55.100)**	WB-1084
WB-210C	**Wiring harnesses - Electrical schematic sheet 24 – Boot-up (55.100)**	WB-210C

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E0117-11- Draper reel height solenoid - Unidentified failure code

Control Module : UCM

Context:
The Universal Control Module (UCM) A-001 supplies the voltage source to the draper reel height Y-033 solenoid. The UCM monitors the signal line for various faults. Fault Mode Indicator (FMI) -11 is active if the circuit is open.

Cause:
Y-033 circuit is open.

Possible failure modes:

1. Faulty Y-033.
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-033 functions properly.

   Place the key switch OFF.

   Disconnect the wiring harness from the solenoid.

   Use a multimeter to measure the resistance of the 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-114 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 frame wiring harness from the cab wiring harness at connector **X-044**.

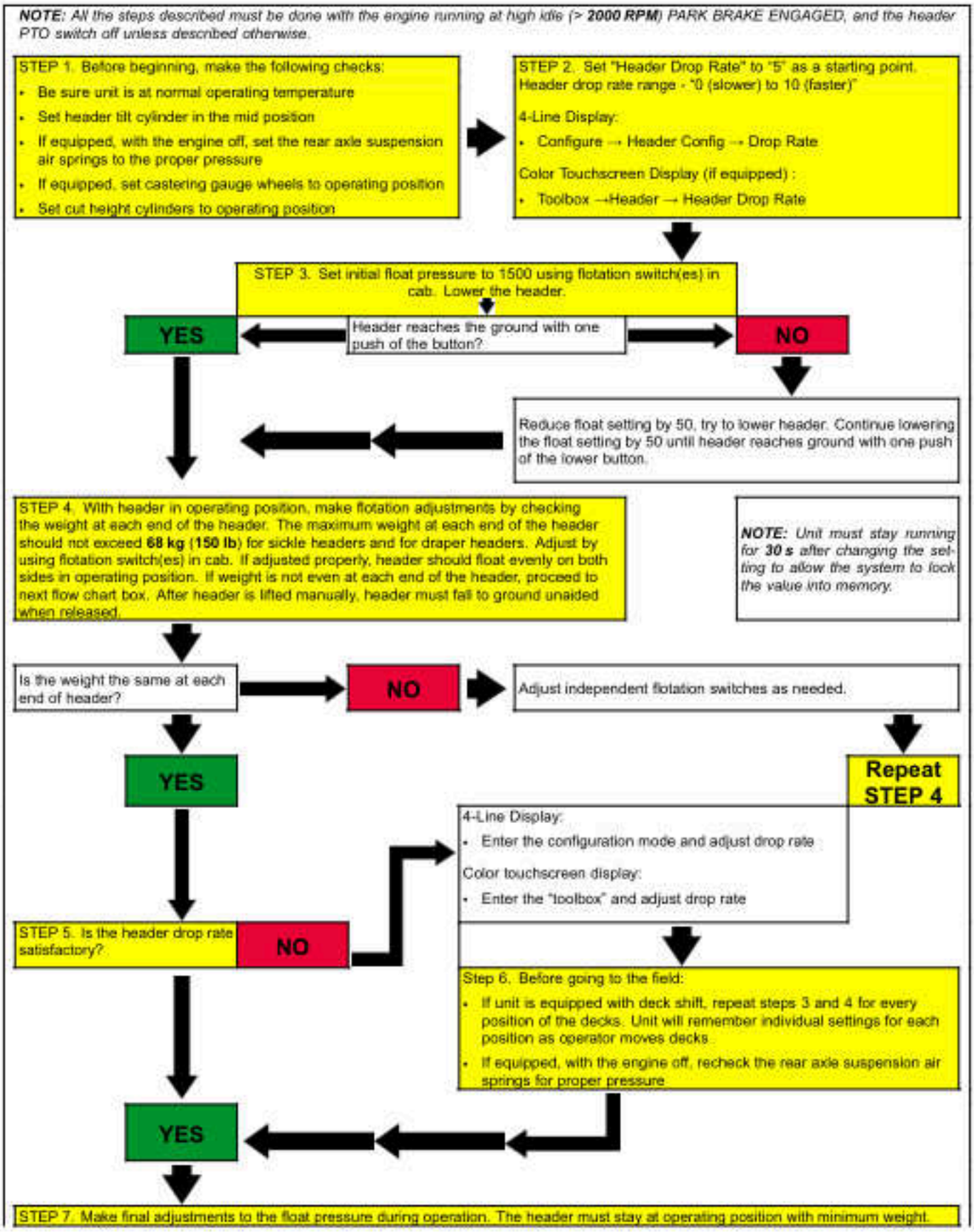
   Place a jumper wire between frame wiring harness connector **X-044 pin 105** to chassis ground.

   Use a multimeter to check for continuity.

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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



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STEER MOTOR
PN 47515826
DISP. 66 CC/REV

HYDRO TANDEM PUMP 49.2/49.2 15T
PN 84586637 [47364366]
MULTI GEAR PUMP 35.1/6.6/35.1/6.6 9T
PN 84586026 [47364395]

REAR (SHAFT END)
PUMP RH DRIVE

LH DRIVE

REAR PUMP
CASE FLUSH

LH LIFT PUMP
6.6 CC/REV

OIL COOLER
PUMP
35.1 CC/REV

RH LIFT PUMP
6.6 CC/REV

TRIPLE CHARGE LIFT GEAR PUMP

PUMP RH DRIVE

REAR PUMP
CHARGE

LH DRIVE

FRONT PUMP
CHARGE

LEFT WHEEL MOTOR
STD SPEED PN 47570419
DISP. 46 CC/REV
HIGH SPEED PN 84171196
DISP. 36/50/68 CC/REV

MULTI-DISC PARKING BRAKE
PN 87631994

LEFT LIFT CYLINDER
PN 84357187
DOUBLE ACTING
2.75 inch BORE
10.5 inch STROKE

TILT CYLINDER
PN 84274521
DOUBLE ACTING
2 inch BORE
4 inch STROKE

0.032"
ORIFICE

0.055" ORIFICE

CHARGE
PRESSURE

A
3SP
B
T

STEER VALVE
STD SPEED PN 47515829
DISP. 250 CC/REV
HIGH SPEED PN 47515830
DISP. 350/200 CC/REV

LEFT DRAPER HEIGHT CYLINDER
PN 47537384
DOUBLE ACTING
3.00 inch BORE
5.25 inch STROKE

REEL

REEL LIFT

PRESSURE
RETURN
DRAIN

DRAPER KNIFE DRIVE

PRESSURE
RETURN
DRAIN

DRAPER / REEL DRIVE

RIGHT DRAPER HEIGHT CYLINDER
PN 47537384
DOUBLE ACTING
3.00 inch BORE
5.25 inch STROKE

RIGHT LIFT CYLINDER
PN 84357187
DOUBLE ACTING
2.75 inch BORE
10.5 inch STROKE

HYDRAULIC RELIEF CHARGE MANIFOLD
PN 47404488 [47457378]

CRG2
B
A
C3
CF2
CF1
X2
X3
IN
X1
CRG3
DIAG1
CRG1
CRG PSI

AUTOGUIDANCE VALVE (OPTION)
PN 47405063

15 PSI CRACK

PUMP SHAFT END
LH DRIVE

DRAPER/REEL DRIVE

CASE DRAIN

HEADER PUMP
RH DRIVE

FOR 4 CYLINDER
TANDEM PISTON PUMP
49 CC/REV 14T
FOR 6 CYLINDER
TANDEM PISTON PUMP
49 CC/REV 14T

CHARGE PUMP
35.1 CC/REV

HEADER PUMP
LH DRIVE

RH DRIVE

SUCTION STAINERS

HYDRAULIC RESERVOIR
PN 84484106
CAPACITY 11 GAL
SUCTION STAINER 100 MESH
RESERVOIR LEVEL SENSOR

RIGHT ACCUMULATOR
1.0 GALLON DIAPHRAM TYPE
800 PSI PRE-CHARGE

LEFT ACCUMULATOR
1.0 GALLON DIAPHRAM TYPE
800 PSI PRE-CHARGE

DIRECTION CONTROL VALVE
PN 87043394

SYSTEM CONTROL CYLINDER
PN 47429670
BORE 1.5 INCH
STROKE 3.28 INCH

OIL COOLER
PN 84160114

CHECK VALVE
PN 47481633
125 PSI

CHARGE FILTER
PN 84487527
OPERATING PRESSURE 500 PSI
MAX. HARD PARTICLE SIZE 500 MICRON

RIGHT ACCUMULATOR
LEFT ACCUMULATOR
LEFT HEADER LIFT
RIGHT HEADER LIFT
PARKING BRAKE
2 SPEED

LAC
LHL
RAC
RHL
TLT ROD
BRK
2SPD
CHRG

S3
Y09
S4
Y10
S5
Y07
Y05
S1
S6
Y08
Y06
S2
S11
Y13
Y28
S12
Y23
S13
LHD
RHD
Y02
S7
Y01
S8
S9
Y03
S10
Y04
REL-L
REL-R
T
T2
LP-1
LP-2
DRN-3
DRN-2
RP-3
RP-1
RP-2
DRN-1
TMP
DP
LIFT CAP
3SPD

TLT CAP
CRG PSI
LIFT CAP

LIFT MANIFOLD
PN 84590998 [47420179]

3 SPEED

MULTI-DISC PARKING BRAKE
PN 87631994

RIGHT WHEEL MOTOR
STD SPEED PN 47570419
DISP. 46 CC/REV
HIGH SPEED PN 84171196
DISP. 36/50/68 CC/REV

LP-3
T2
Y36
Y33
RHD
LHD
Y37
Y38
REEL

HEIGHT MANIFOLD
PN 47358541 [47480350]

LEGEND

PRIMARY CIRCUIT, SYSTEM PRESSURE
CHARGE PRESSURE
REDUCED PRESSURE VS. SYSTEM PRESSURE
RETURN TO TANK / SUMP
STEERING
PROPULSION SYSTEM

DRAPER READY
4-CYLINDER / 6-CYLINDER
SPEEDROWER® SERIES
SELF-PROPELLED WINDROWER
47885981
HYDRAULIC SCHEMATIC
NORTH AMERICA MODELS, MODEL YEAR 2015
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