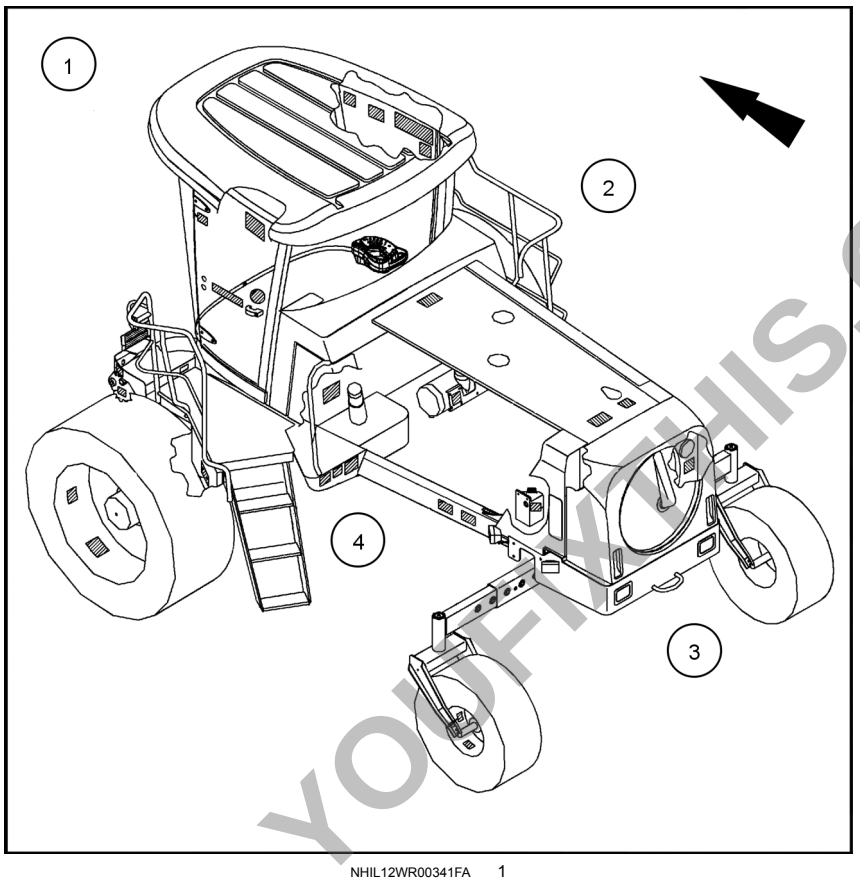
Product overview - Machine orientation

[YCG667001-]

To determine "left-hand" (LH) and "right-hand" (RH) stand at the rear of the machine and face the normal direction of travel as indicated by arrow in figure.



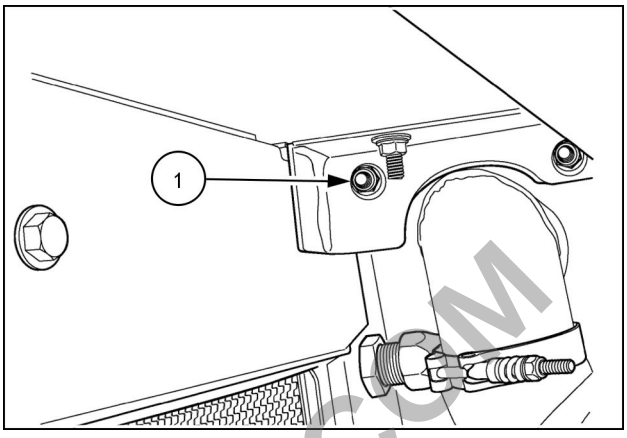
NHIL12WR00341FA 1

1. Front of the machine
2. Right-hand side of the machine
3. Rear of the machine
4. Left-hand side of the machine

PREVIEW - YOUFIXTHIS.COM

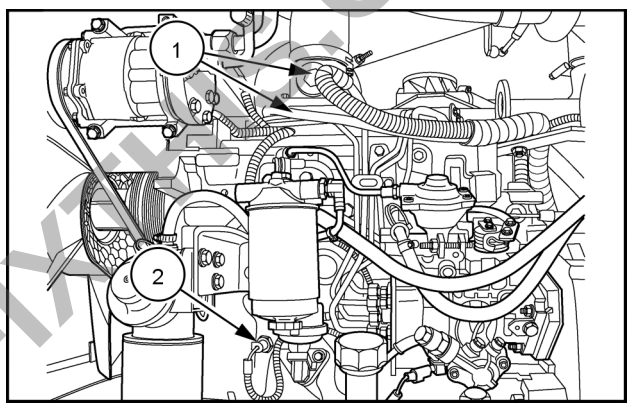
Download full manual at youfixthis.com

20. Remove four flange bolts, lock washers and flange nuts **(1)**, to detach hood support frame from radiator side supports. Frame can now be removed with roof panel attached.



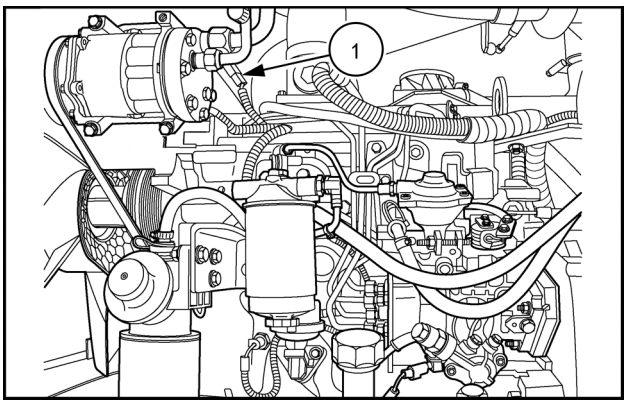
50041834 8

21. Disconnect wire harness at both sides of intake air heater **(1)** if so equipped, and at oil pressure switch **(2)**.



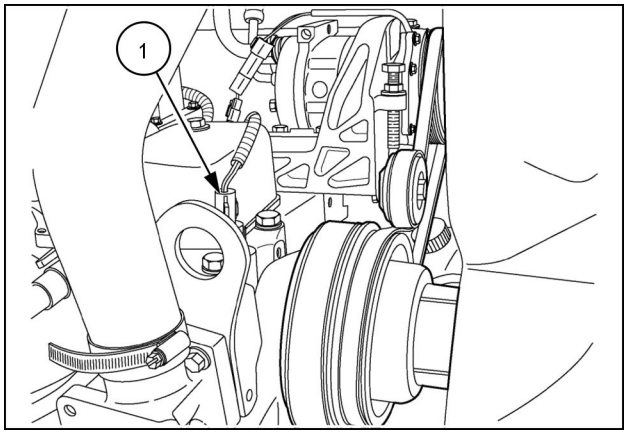
NHIL12WR00653AA 9

22. Disconnect wire connector **(1)**.



NHIL12WR00653AA 10

23. Disconnect temperature sensor **(1)**.

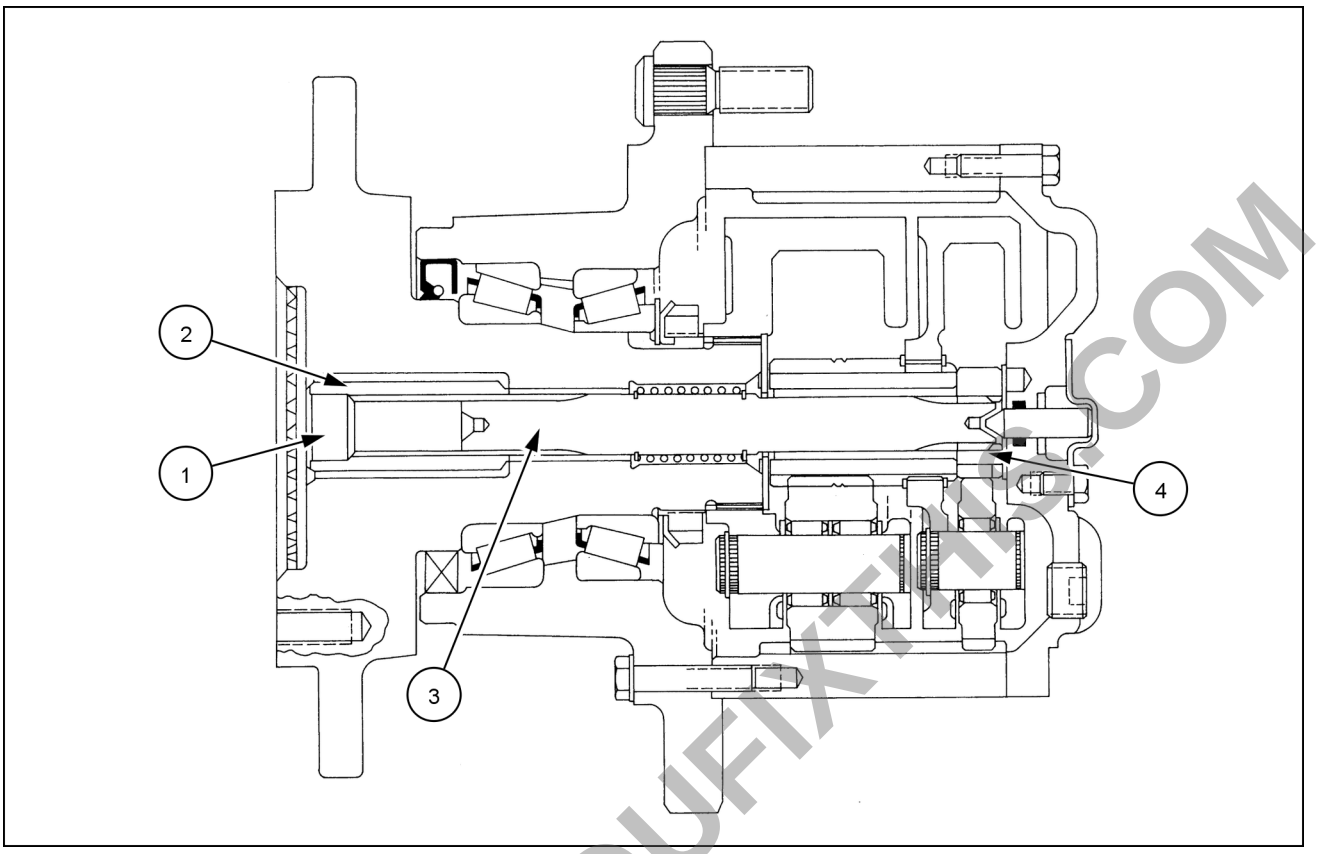


86075189 11

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Final drives - Dynamic description Of Operation



20105249N 1

Self-Propelled Windrowers come equipped with an Auburn Model 8, double reduction final drive hubs.
The hydraulic motor shaft, **(1)**, rotates as flow is applied from the pumps. A coupling, **(2)**, has internal splines and makes the connection from the motor shaft to the hub shaft, **(3)**. The primary sun gear, **(4)**, is splined onto the end of the hub shaft.
The model 8 drive hub will have eight lug nuts.

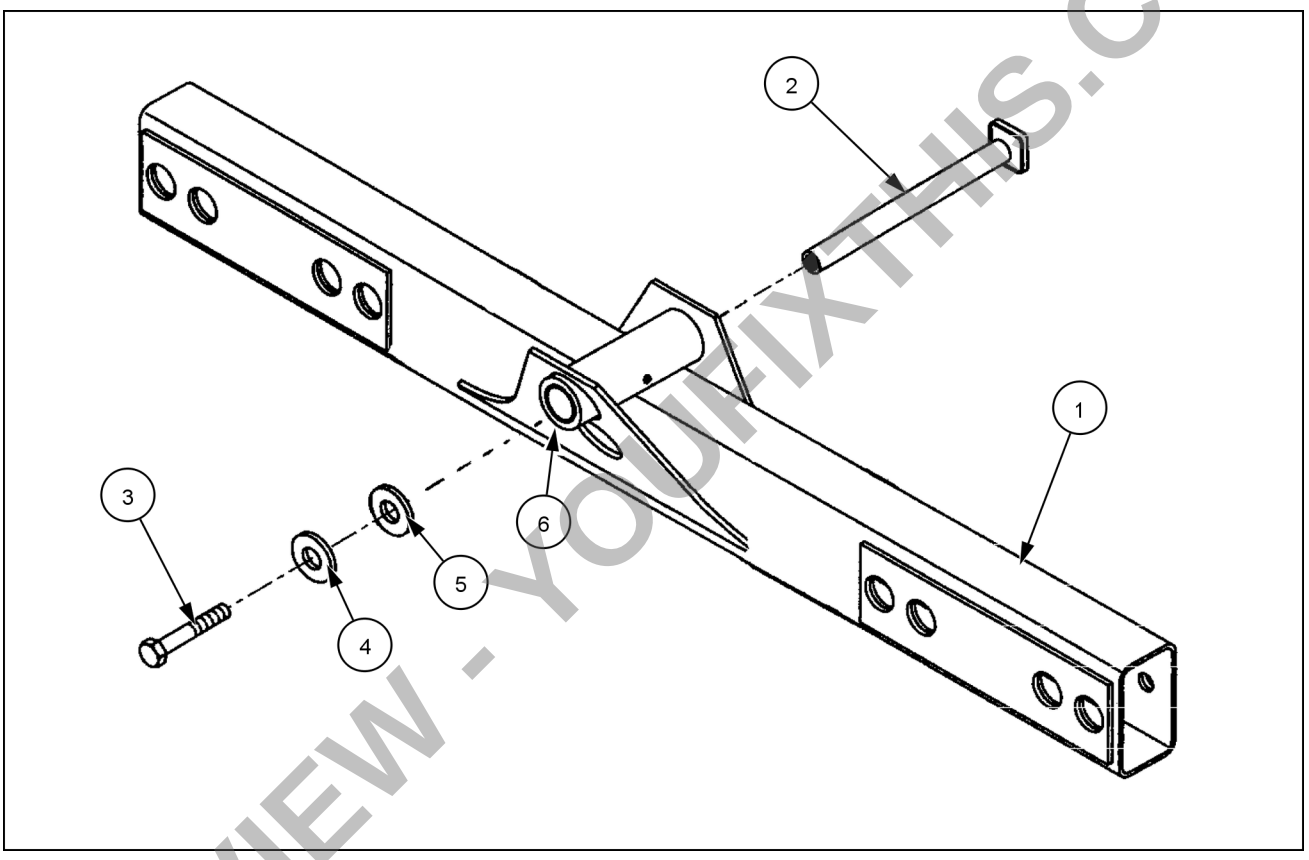
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Non-powered rear axle - Dynamic description Non-Suspended Rear Axle

EXTENSIONS AND AXLE TUBE

The axle tube, **(1)**, is held in the frame by a center pivot pin, **(2)**, which allows the axle tube to oscillate over uneven ground. The pivot pin is held in place with a bolt, **(3)**, washer, **(5)**, and lock washer, **(4)**.
The extension has two greased bushings, **(6)**, that allow the extension to pivot.
The wheel width is adjustable by removing the extension bolts and sliding both extensions out or in.



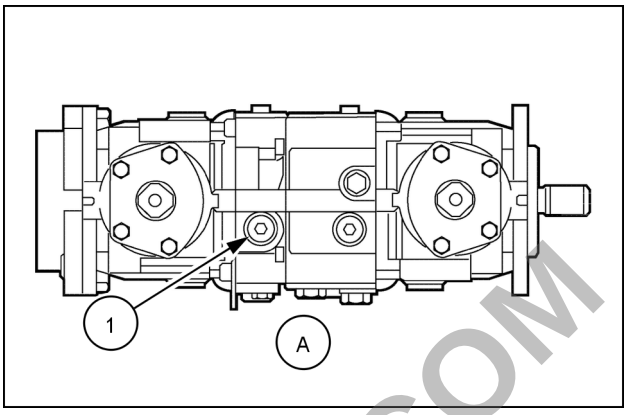
20045336N 1

(1) Axle tube carrier
(2). Pivot pin
(3) Bolt
(4) Lock washer
(5) Flat washer
(6) Bushing

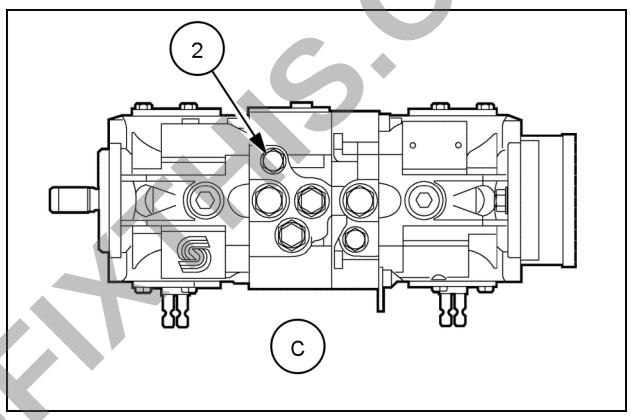
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

To test the “Right Hand Reverse” high pressure relief valve, **(1)**, connect a **689.7 bar** (**10000 psi**) pressure gage to gage port, **(2)**.
(A) Right Side View
(C) Top View

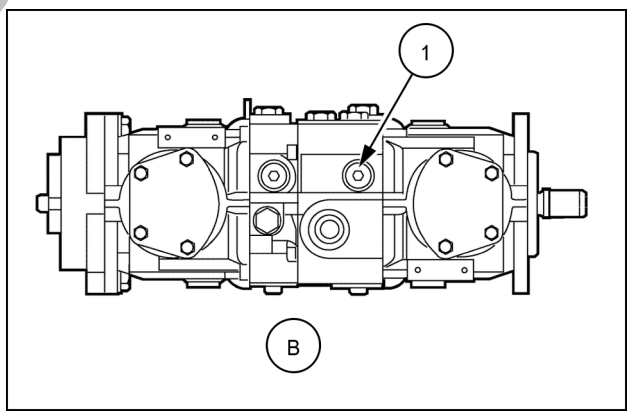


50046581N 4

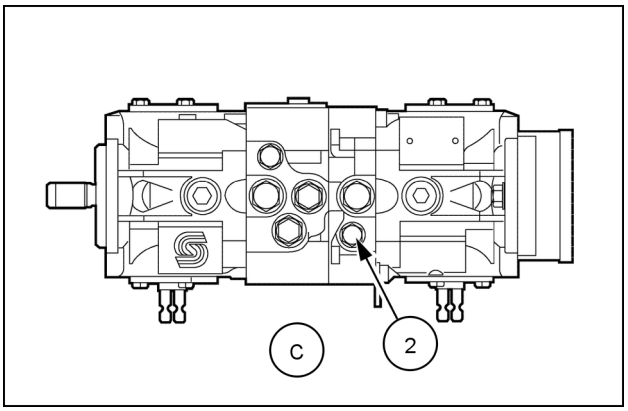


50046579N 5

To test the “Left Hand Reverse” high pressure relief valve, **(1)**, connect a **689.7 bar** (**10000 psi**) pressure gage to gage port, **(2)**.
(B) Left Side View
(C) Top View



50046580N 6



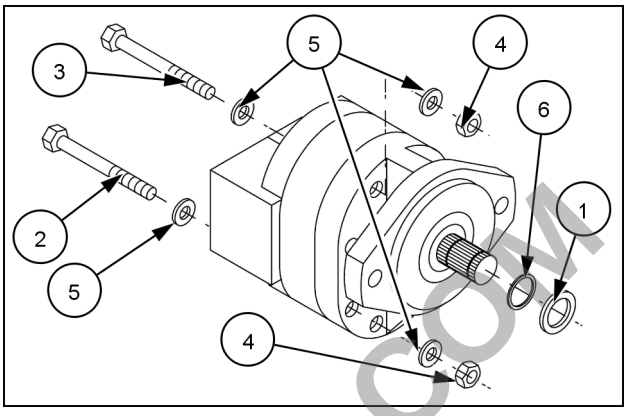
50046579N 7

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Hydraulic pump drive - Inspect - Header Drive Pump

1.

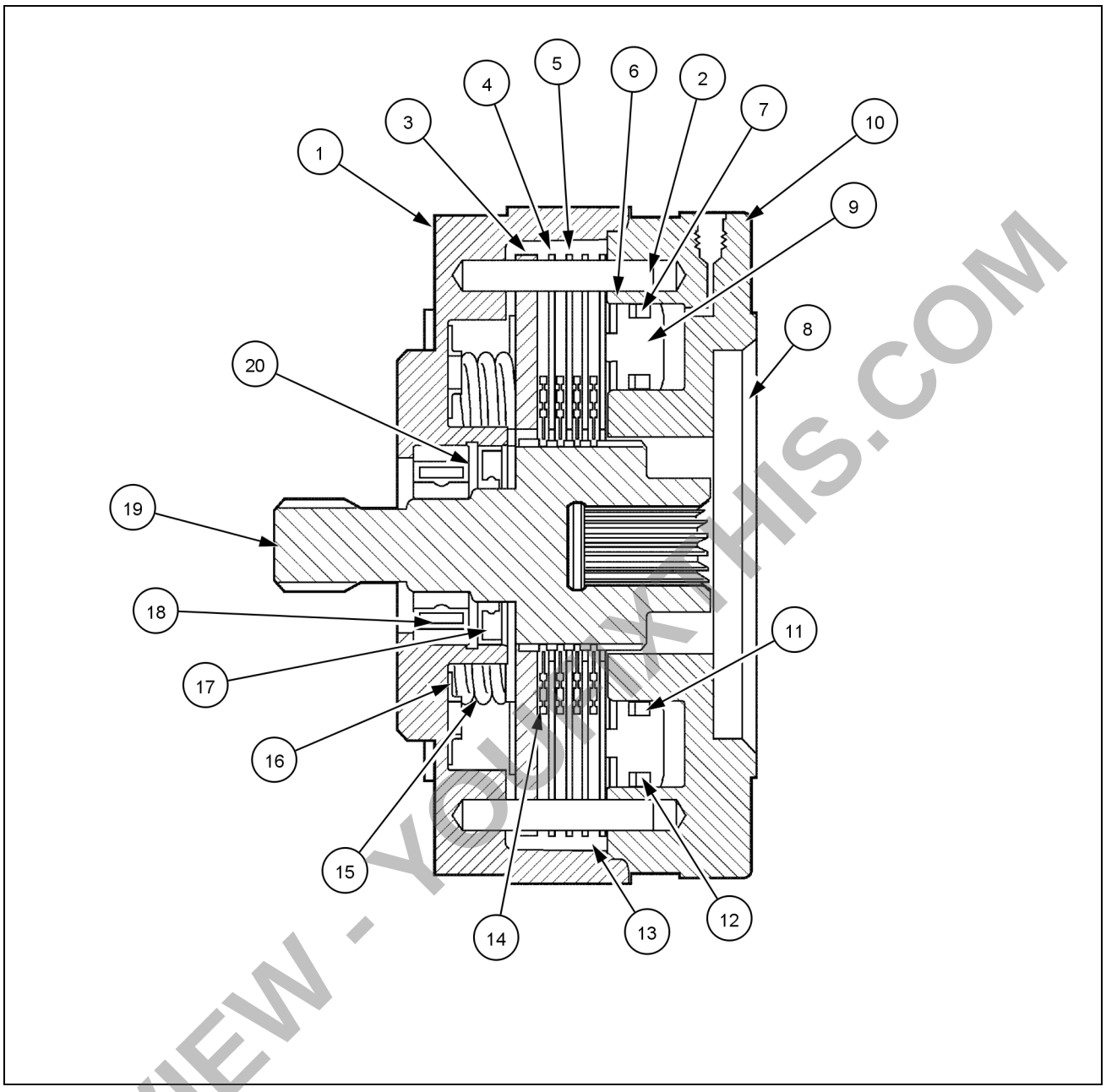


20052039N 1

Item	Qty	Description
1	1	Ring, Snap, Int, 1.500"
2	4	Screw, Cap, HH, G8, 7/16"-20 x 3-3/4"
3	4	Screw, Cap, HH, G8, 7/16"-20 x 3"
4	12	Nut, G8, 7/16"-20
5	12	Washer, Hardened, 7/16"
6	AR	Kit, Seals

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



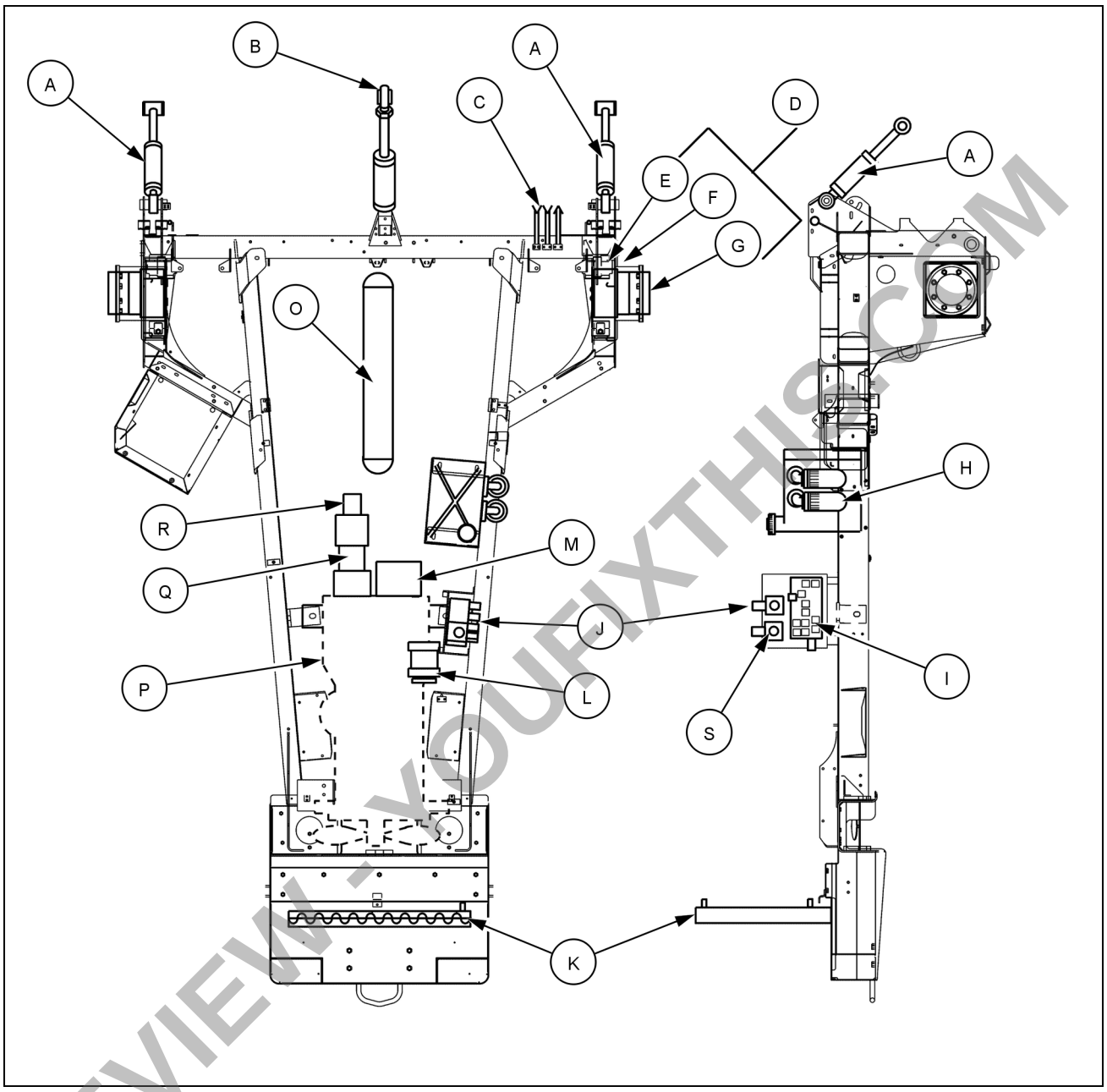
50045420N 13

(1) Housing
(2) Torque pin
(3) Primary disc
(4) Stationary disc
(5) Rotating disc with slots
(6) Backup ring
(7) O-ring
(8) Gasket
(9) Piston
(10) Power plate
(11) O-ring
(12) Backup ring
(13) Gasket
(14) Rotating disc
(15) Compression spring
(16) Compression spring
(17) Lip seal
(18) Ball bearing
(19) Shaft
(20) Snap ring

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Hydraulic systems - Component localisation



76086055 1

(A) Header Lift Cylinder
(B) Header Tilt Cylinder
(C) Header Drive
(D) Both Sides
(E) Ground Drive Motor
(F) Brake
(G) Ground Drive Gear Box
(H) Reservoir w/Filters
(I) Control Valve Manifold
(J) Auxiliary Control Manifold
(K) Oil Cooler
(L) Auxiliary Gear Pump (Engine Mounted)
(M) Hydraulic Header Drive Pump
(O) Accumulator
(P) Engine
(Q) Hydraulic Ground Drive Tandem Pump
(R) Hydraulic Header Lift Pump
(S) Draper Control Manifold

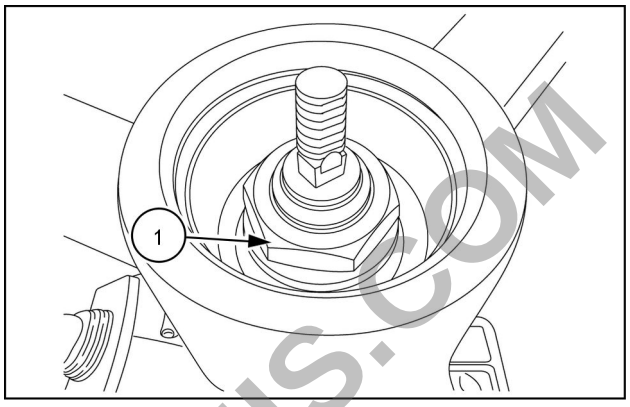
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Power steering wheel - Install - Steering wheel

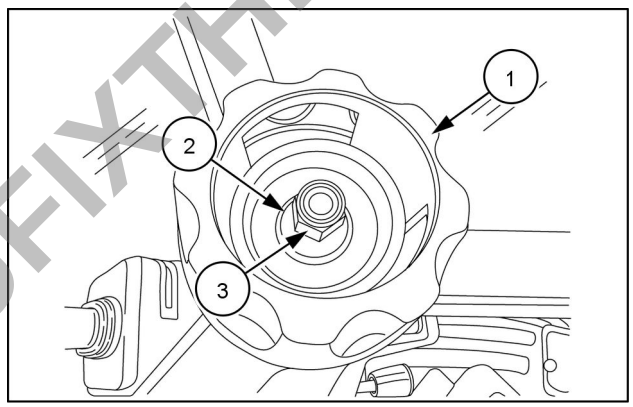
Prior operation:
When installing the steering wheel lubricate the steering column splines with a **LOCTITE® ANTI-SEIZE**.

1. Install steering wheel in the desired position and secure with large nut **(1)** from removal.



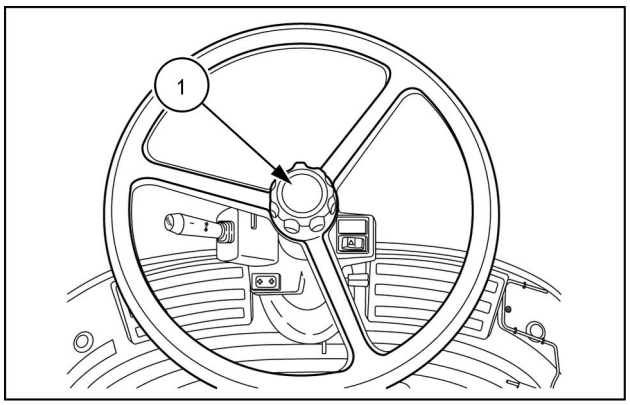
83112410 1

2. Install the telescoping lock knob **(1)** and secure with the two washers **(2)** and lock nut **(3)** from removal.



83112409 2

3. Install center cap **(1)** on steering wheel.



83112408 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

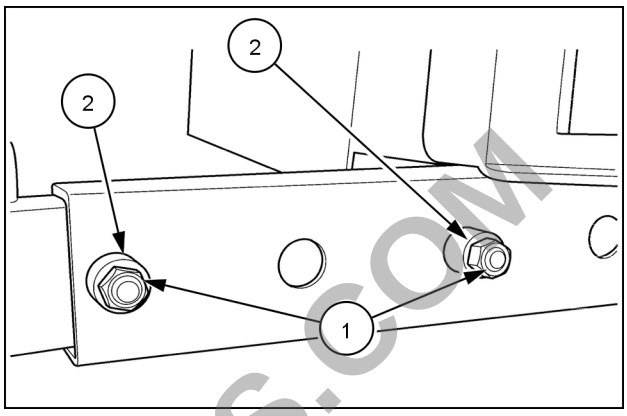
Rear wheels - Adjust Non-Suspended Rear Axle

WHEEL WIDTH

⚠ DANGER

Unexpected movement!
Make sure parking brake is applied. Secure machine with wheel chocks.
Failure to comply will result in death or serious injury.

D0013A



10041117N 1

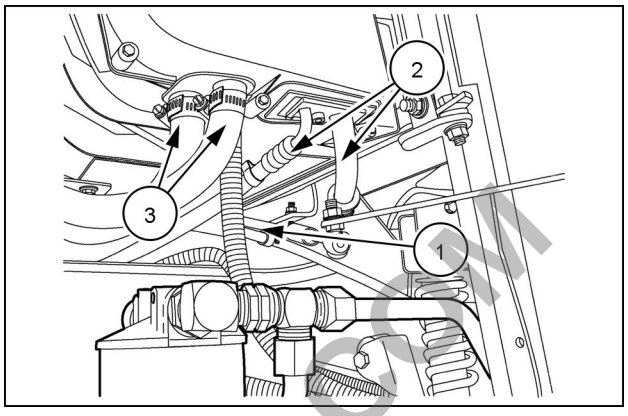
The rear axle is adjustable from **2250 - 3048 mm** (**89 - 120 in**) in **150 mm** (**6 in**) increments.
To change the setting, raise the rear of the windrower enough to remove the weight from the rear wheels. Remove the bolts, **(1)**, and position the axle as desired. Reinstall the bolts with flat washers under the bolt heads on the rear of the channel tube. Install a **9.5 mm** (**0.374 in**) thick washer, **(2)**, (or two 6.3 mm (1/4″) washers) under each locknut on the front side. Always use the same set of bolt holes on both sides.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

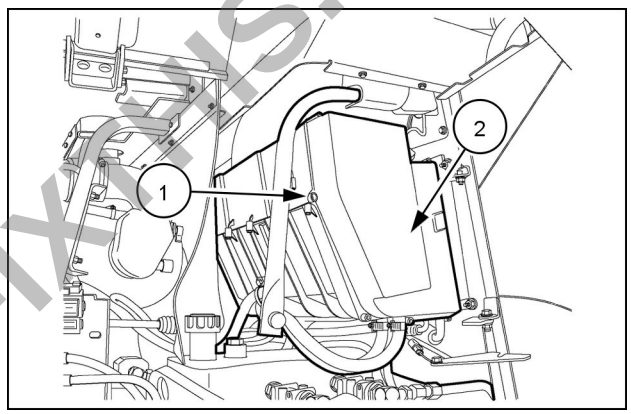
Cab heater - Remove

1. Remove the clamps **(1)** securing the evaporator lines.
2. Drain the engine coolant low enough to remove the heater core hoses, **(3)**.



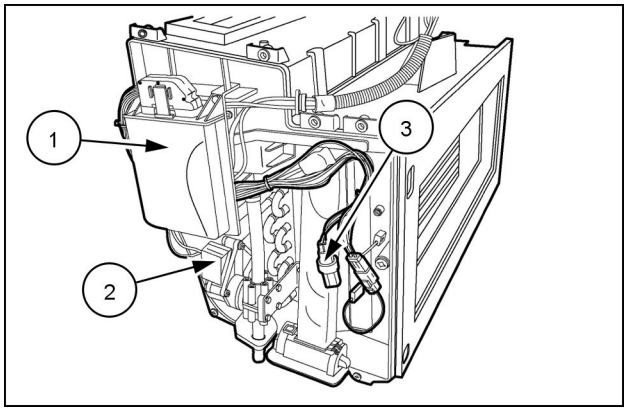
86085586N 1

3. Remove nine T30 Torx head screws **(1)** securing the cover **(2)** to the HVAC box.



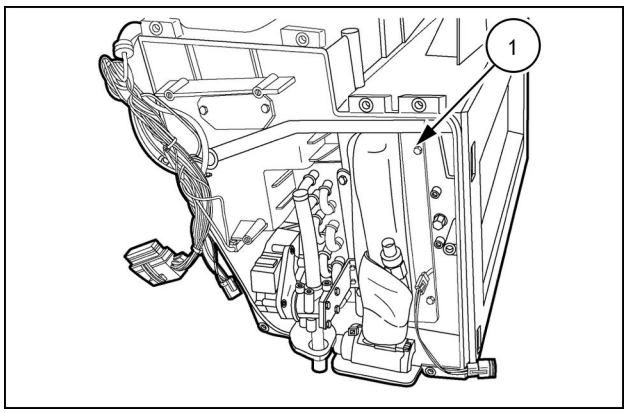
86085587N 2

4. Disconnect the harnesses from the following components:
   - HVAC controller **(1)** (If applicable).
   - Heater control valve **(2)**.
   - Low pressure switch **(3)**.
5. Remove the three screws securing the HVAC controller to the box.



86085588N 3

6. Remove the six screws **(1)** securing the heater and evaporator cores.

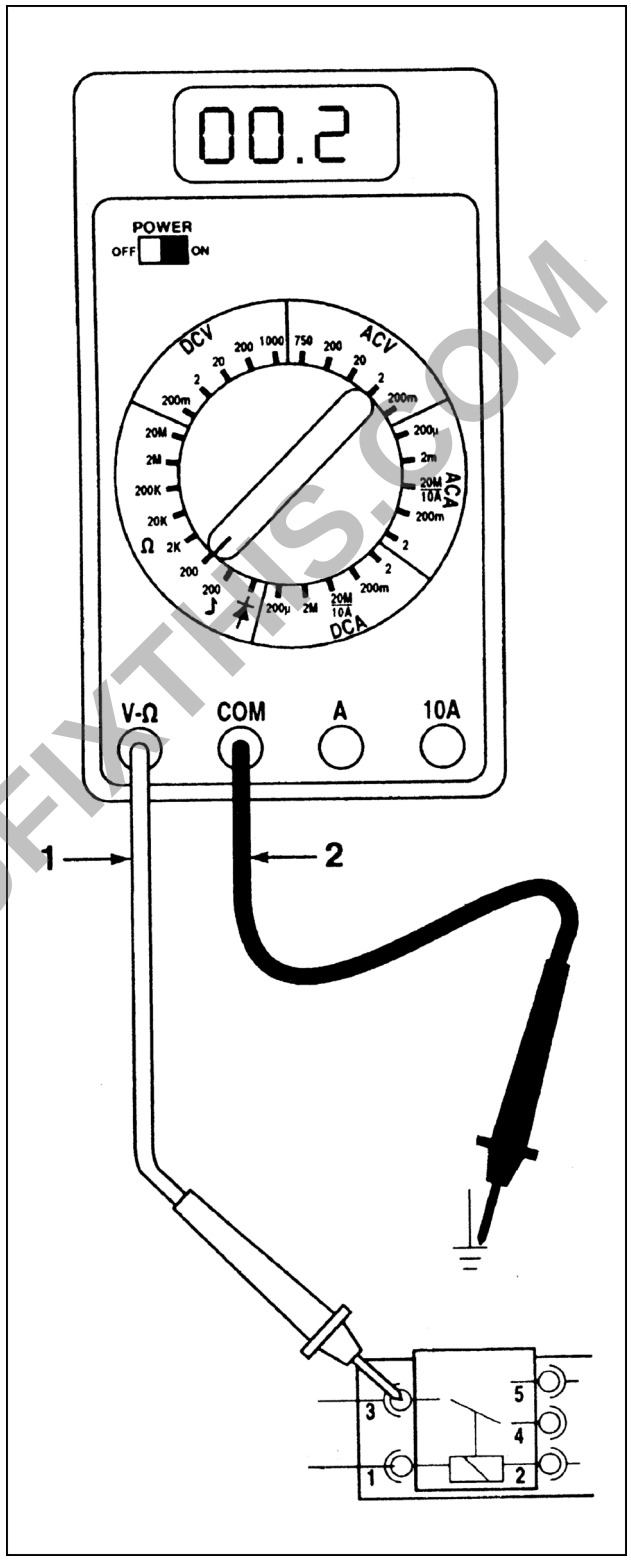


86085589N 4

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

3. Set meter to measure resistance or ohms, and measure circuit resistance. Use black lead **(2)** to make contact with a plated metal part on the chassis such as a jump start post if fitted. Make sure the surface of the part is not corroded. Use the red meter lead **(1)** to touch the connector pins, one pin at a time, and avoid contact with the case of metal connectors.



26093638 1

PREVIEW - YOUFIXTHIS.COM

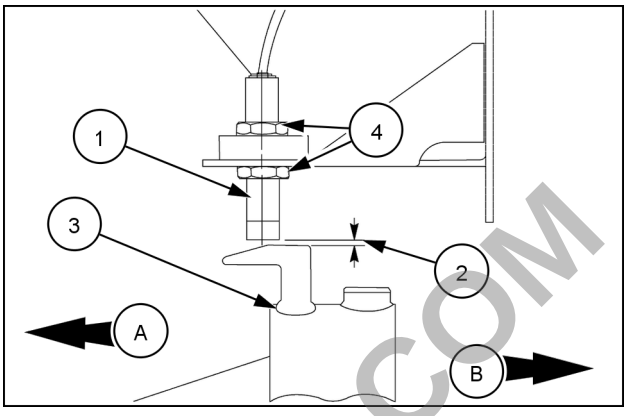
Download full manual at youfixthis.com

Hydrostatic drive control system - Adjust

1. The pintle arm sensor, **(1)**, is correctly set when the gap, **(2)**, is **2 mm** (**0.08 in**) away from the flat side of the steering nut, **(3)**.
   (A) Front side
   (B) Engine side

2. Adjust the sensor by loosing both jam nuts, **(4)**. Move the sensor to the correct position and retighten the jam nuts.

NOTICE: *The art shown may not be neutral for the machine. The sensor should not be lined up with the flat surface when in neutral. It should end up near the middle of the angled surface when the machine is in true neutral. Refer to "Neutral Adjustment" in this chapter to set neutral.*

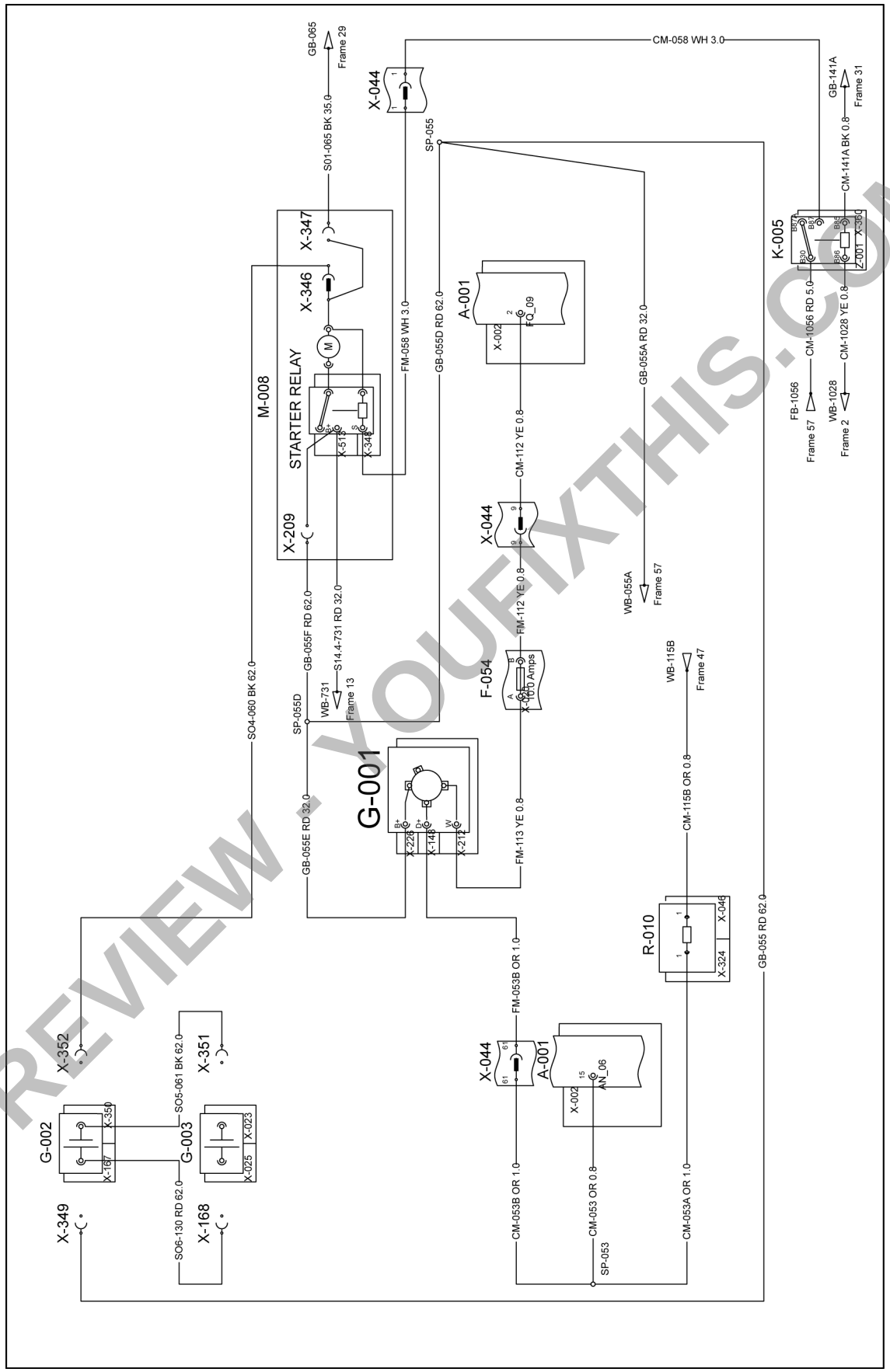


76070684N 1

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

4 cylinder standard



NHIL12WRO0867AA 1

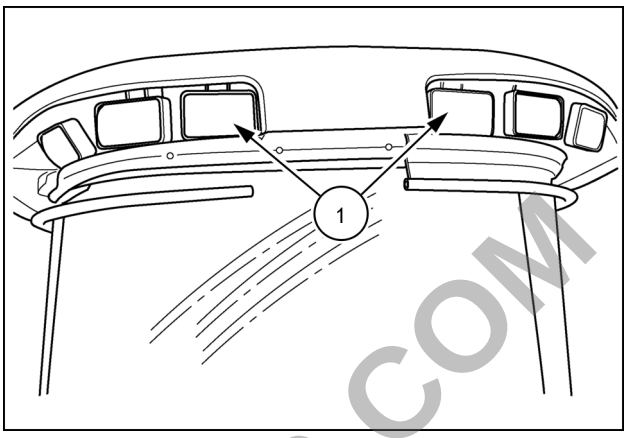
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

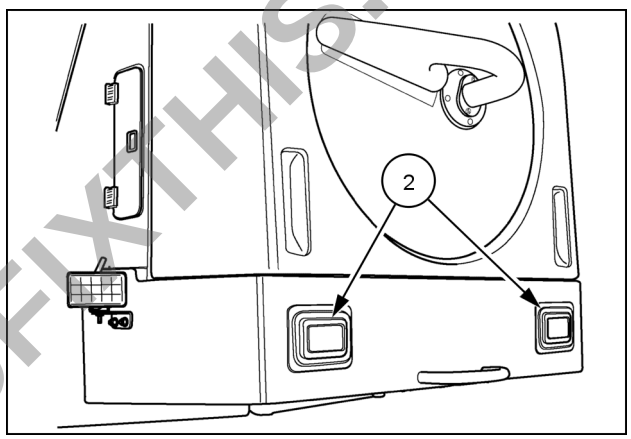
Road light - Overview

Operation

When the Road Lights switch is positioned "on", the two inboard lights **(1)** mounted on the front of the cab at the roof line, will illuminate. In addition, the two tail lights **(2)** and the console illumination lamp will also illuminate. The Key/Start switch does not have to be "on" for these circuits to work, since the battery buss supplies power for their operation.



10041235 1



76070788 2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Electrical systems - 55

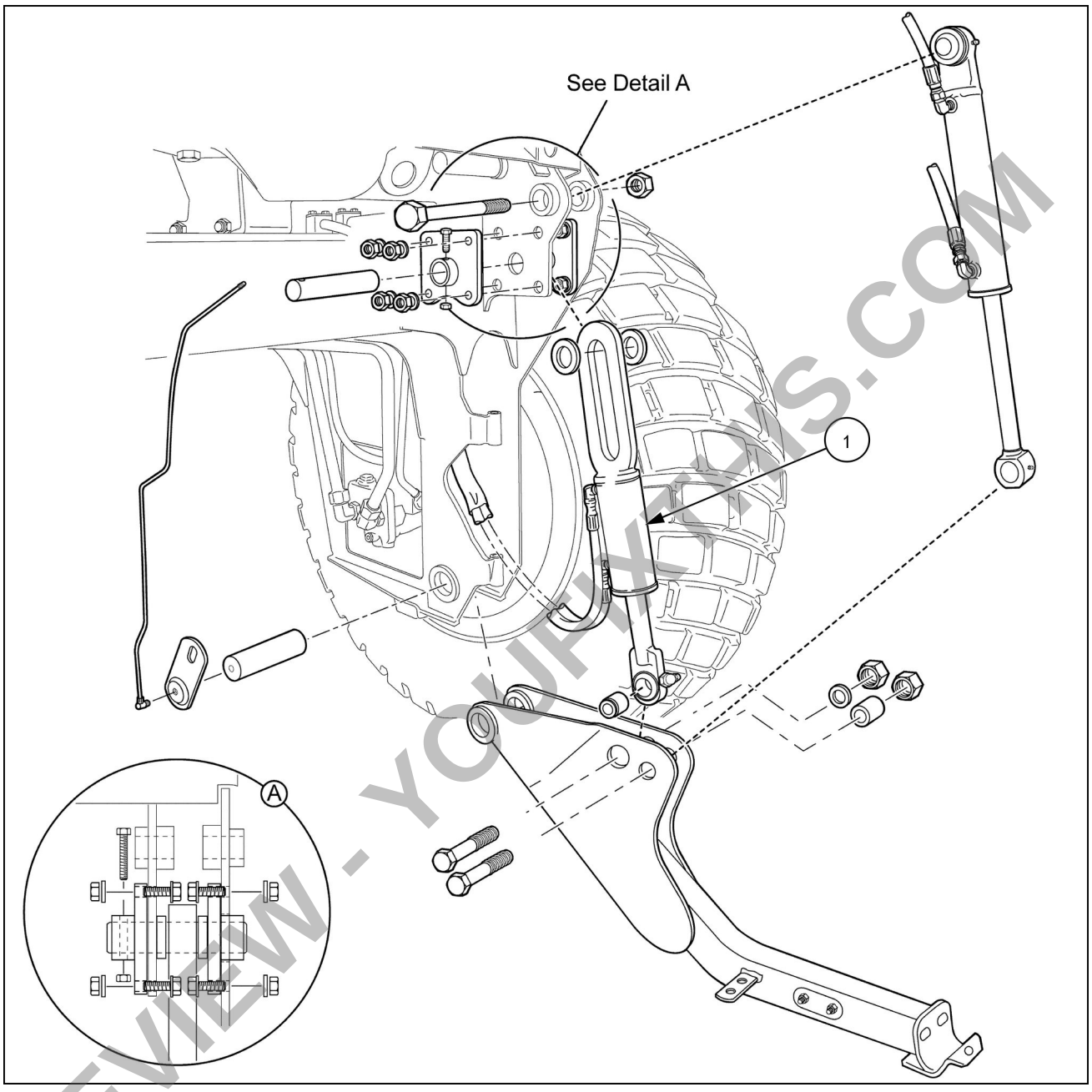
FAULT CODES - DTC

[YCG667001-]

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Attachment/Header cutting mechanism - Overview Draper Flotation



76070676N 1

Two cut height cylinders, **(1)**, keep the draper at desired cut height as set by the operator.

While running Draper without cylinders the head would continually drop off on one side due to that side of the head is considerably heavier.

The hydraulics' consists of valves, hoses, and (2) cylinders to properly run the draper.

The Draper is electrically operated with rocker switches and wiring harnesses.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Pneumatically-adjusted operator seat - Remove

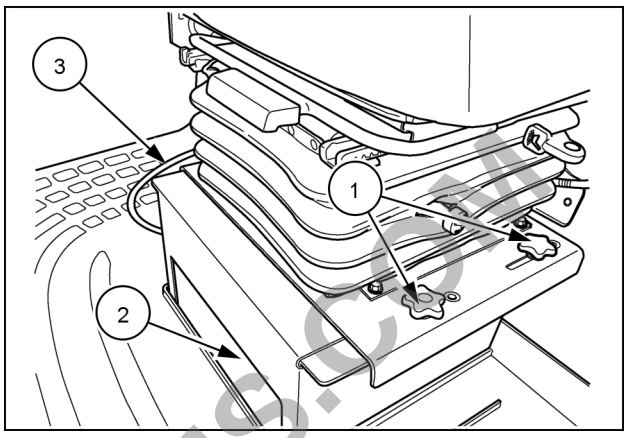
Removing the Seat from the Seat Base

1. **⚠ CAUTION**

   Avoid injury!
   The seat is heavy and will require two people or a lifting device to remove from the cab.
   Failure to comply could result in minor or moderate injury.

   C0089A

   Remove the four bolts **(1)**, from the seat base **(2)**.



10041214 1

2. Disconnect the seat wire harness **(3)**, at the rear of the seat.
3. Remove the seat assembly from the cab using a proper lifting device.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SCHEMAS INDEX

Reference	PAGE
Wire connectors - Component diagram 03 Connectors X-031 to X-040	55.10 / 199
Wire connectors - Component diagram 09 Connectors X-091 to X-100	55.10 / 212
Wire connectors - Component diagram 71 Connectors X-711 to X-720	55.10 / 222
Wire harnesses - Electrical schematic frame 01 - Starting System	55.10 / 5
Wire harnesses - Electrical schematic frame 02 - Starting System	55.10 / 8
Wire harnesses - Electrical schematic frame 03 - Power Distribution System	55.10 / 11
Wire harnesses - Electrical schematic frame 04 - Engine Monitoring System	55.10 / 14
Wire harnesses - Electrical schematic frame 05 - Engine Monitoring System	55.10 / 17
Wire harnesses - Electrical schematic frame 06 - Engine Monitoring System	55.10 / 20
Wire harnesses - Electrical schematic frame 07 - Driveline - Propulsion System	55.10 / 23
Wire harnesses - Electrical schematic frame 08 - Driveline - Propulsion System	55.10 / 26
Wire harnesses - Electrical schematic frame 09 - Driveline - Propulsion System	55.10 / 29
Wire harnesses - Electrical schematic frame 10 - Header PTO System	55.10 / 32
Wire harnesses - Electrical schematic frame 11 - Draper Header System	55.10 / 35
Wire harnesses - Electrical schematic frame 12 - Windrow Merger System	55.10 / 39
Wire harnesses - Electrical schematic frame 13 - Cold Start - Grid Heater	55.10 / 42
Wire harnesses - Electrical schematic frame 14 - Draper Header System	55.10 / 45
Wire harnesses - Electrical schematic frame 15 - Header Reel System	55.10 / 49
Wire harnesses - Electrical schematic frame 16 - Signal Distribution System	55.10 / 52
Wire harnesses - Electrical schematic frame 17 - Draper Reel System	55.10 / 55
Wire harnesses - Electrical schematic frame 18 - Draper Reel System	55.10 / 59
Wire harnesses - Electrical schematic frame 19 - Header Tilt System	55.10 / 62
Wire harnesses - Electrical schematic frame 20 - Communications Network System	55.10 / 66
Wire harnesses - Electrical schematic frame 21 - Windshield Washer & Mirrors System	55.10 / 69
Wire harnesses - Electrical schematic frame 22 - Windrow Shields System	55.10 / 72
Wire harnesses - Electrical schematic frame 23 - Screen Cleaner & Seat System	55.10 / 75
Wire harnesses - Electrical schematic frame 24 - Radio System	55.10 / 78
Wire harnesses - Electrical schematic frame 25 - Windshield Wiper, Power Jacks & Beacon System	55.10 / 81
Wire harnesses - Electrical schematic frame 26 - Power Jacks System	55.10 / 84
Wire harnesses - Electrical schematic frame 27 - Windshield Wiper System	55.10 / 87
Wire harnesses - Electrical schematic frame 28 - Signal Distribution System	55.10 / 90
Wire harnesses - Electrical schematic frame 29 - Grounds System	55.10 / 93
Wire harnesses - Electrical schematic frame 30 - Grounds System	55.10 / 96
Wire harnesses - Electrical schematic frame 31 - Grounds System	55.10 / 99
Wire harnesses - Electrical schematic frame 32 - Grounds System	55.10 / 102
Wire harnesses - Electrical schematic frame 33 - Grounds System	55.10 / 105
Wire harnesses - Electrical schematic frame 34	55.10 / 108
Wire harnesses - Electrical schematic frame 35 - Signal Distribution System	55.10 / 111
Wire harnesses - Electrical schematic frame 36 - Driveline - Propulsion System	55.10 / 114
Wire harnesses - Electrical schematic frame 37 - Lighting & Horn System	55.10 / 117
Wire harnesses - Electrical schematic frame 38 - Hydraulic Monitoring & MFH System	55.10 / 120
Wire harnesses - Electrical schematic frame 39 - Hydraulic Monitoring & MFH System	55.10 / 123
Wire harnesses - Electrical schematic frame 40 - Lighting System	55.10 / 126
Wire harnesses - Electrical schematic frame 41 - Lighting System	55.10 / 129
Wire harnesses - Electrical schematic frame 42 - Lighting System	55.10 / 132
Wire harnesses - Electrical schematic frame 43 - Lighting System	55.10 / 135
Wire harnesses - Electrical schematic frame 44 - Lighting & Cab Door System	55.10 / 138
Wire harnesses - Electrical schematic frame 45 - ATC Temperature Control System	55.10 / 141
Wire harnesses - Electrical schematic frame 46 - Manual Temperature Control System	55.10 / 144
Wire harnesses - Electrical schematic frame 47 - Intake Air Pressurization System	55.10 / 147
Wire harnesses - Electrical schematic frame 48 - HVAC System	55.10 / 150
Wire harnesses - Electrical schematic frame 49 - Draper Header System	55.10 / 153
Wire harnesses - Electrical schematic frame 50 - Signal Distribution System	55.10 / 156
Wire harnesses - Electrical schematic frame 51 - Header Flotation System	55.10 / 159
Wire harnesses - Electrical schematic frame 52 - Header Flotation System	55.10 / 162

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

M1
M2
M3
M4
SAUER-DANFOSS M44 SERIES
MDC TANDEM PISTON PUMP
39:26 DRIVE RATIO
HYDRAULIC GROUND DRIVE
LH REV RELIEF VALVE 5580 PSI
LH FWD RELIEF VALVE 5580 PSI
CHARGE RELIEF VALVE 290 PSI
CHARGE PUMP 16.4 CC/REV
RH FWD RELIEF VALVE 5580 PSI
LH REV RELIEF VALVE 5580 PSI
CHARGE PRESSURE SWITCH
E
D
L1
S
FRONT FILTER
SUCTION
9.8 GPM
SAUER-DANFOSS SNP2 SERIES
10.8 CC/REV SINGLE GEAR PUMP
39:26 DRIVE RATIO
HYDRAULIC HEADER LIFT
SAUER-DANFOSS M46 SERIES
2 SPEED MOTOR W/ LOOP FLUSH
LH HYDRAULIC GROUND DRIVE
LEFT LIFT
DRAPER REEL LIFT CYLINDERS
PARKING BRAKE CYLINDER
0.032" ORIFICE
TILT
0.055" ORIFICE
OIL COOLER
80 PSI
HALDEX G-20 SERIES
38CC/REV GEAR PUMP
39:30 DRIVE RATIO
HYDRAULIC HEADER DRIVE
29 GPM
Y-031
40 PSI
P1
P2
Y-030
UNLOAD 4000 PSI
40 PSI
T1
T2
HEADER CONTROL VALVE (REVERSER INSTALLED)
PROPULSION CYLINDER
PROPORTIONAL VALVE
ELECTRONIC PROPULSION CONTROL
1 GPM
0.040" ORIFICE
SAUER-DANFOSS M44 SERIES
PISTON MOTOR W/O LOOP FLUSH
SICKLE HEADER HYDRAULIC DRIVE
DRAPER HEIGHT CONTROL CYLINDERS
0.040" ORIFICE
RIGHT LIFT
ACCUMULATOR
ACC
HL
TLT
RD
LD
BRK
2SP
RL
LH
RH
CW
L
R
Y-033
Y-036
Y-037
Y-038
Y-019
Y-018
V1
V2
DRAPER OPTION
SYS
T
HL
Y-010
Y-008
NEEDLE VALVE
PRESSURE REDUCING
Y-001
Y-006
3275 PSI
Y-003
MASTER
Y-013
Y-028
Y-023
P3
FNR CONTROL
P4
TILT EXTEND
P5
CHARGE PUMP
T3
T2
DELUXE CONTROL VALVE
P1
ML
P6
T1
ACCUMULATOR
2GAL PISTON TYPE
800 PSI NITROGEN CHARGE
29 GPM
S1
S2
S3
F3
RESERVIOR
F1
F2
REAR FILTER
FRONT FILTER
7 GPM
7 GPM
9.8 GPM
PARKING BRAKE CYLINDER
3 GPM
SAUER-DANFOSS M46 SERIES
2 SPEED MOTOR W/LOOP FLASH
RH HYDRAULIC GROUNG DRIVE

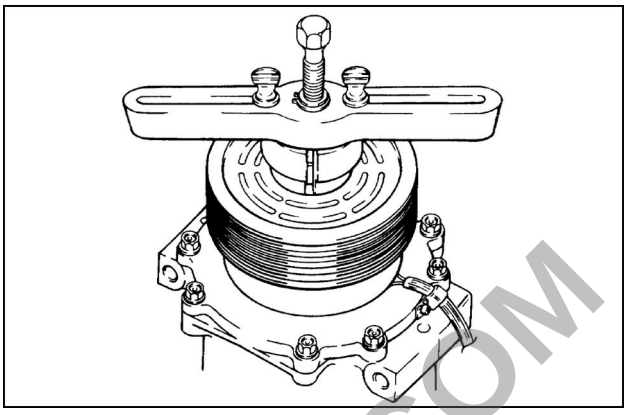
H8040 NON-DRAPER EQUIPPED SELF-PROPELLED WINDROWERS
47489334
HYDRAULIC SCHEMATIC
MODEL YEAR 2013 PRODUCTION

[55.662] Header height control 55.18
[55.830] Rotary screen drive and cleaning 55.19
[55.DTC] FAULT CODES 55.20
Attachments/Headers 58
[58.110] Attachment/Header cutting mechanism 58.1
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

PREVIEW - YOUFIXTHIS.COM

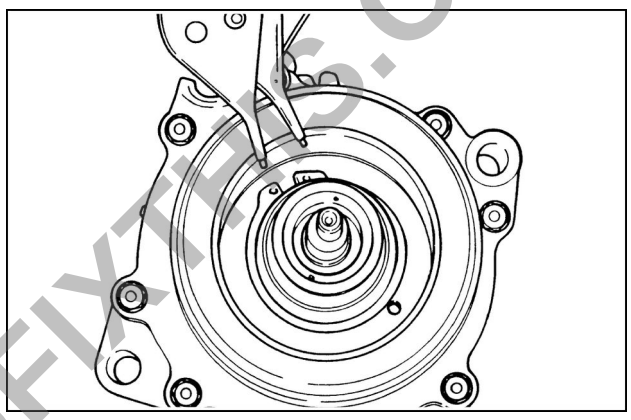
Download full manual at youfixthis.com

10. Use a puller to remove the rotor and pulley from the shaft by inserting the lip of the jaws into the snap ring groove.
11. Place in a protector over the rotor shaft, align the jaws, and remove the pulley using the puller center bolt.



20105967N 8

12. Loosen the clutch lead wire clamp screw and remove the wire from the clamp.

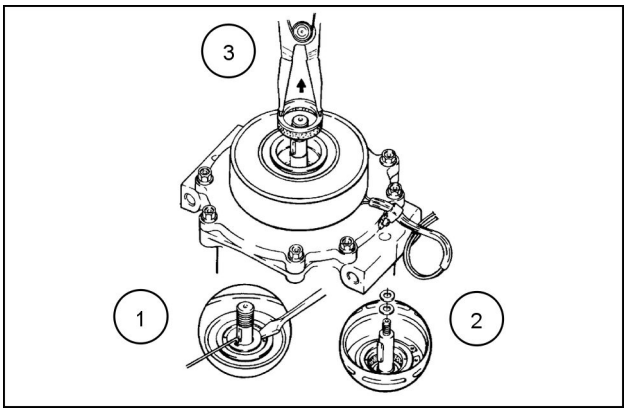


20105968N 9

13. Remove the field coil snap ring and field coil.

NOTE: *If replacing only the shaft seal, it is not necessary to remove the field coil.*

14. Relieve all pressure inside the compressor.
15. Pry the retainer and ring out to remove them from the compressor, **(1)**.
16. Remove shims, **(2)**, if applicable.
17. Place snap ring pliers in the holes in the felt ring and retainer, **(3)**, to remove from compressor.



20105969N 10

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Wire harnesses - Electrical schematic frame 23 - Screen Cleaner & Seat System

[YCG667001-] INT, [YCG667001-] NA

Component Identifier	Description
J-007	JACK, SERVICE LIGHT, LEFT
M-003	MOTOR, SEAT SUSPENSION PUMP
M-009	MOTOR, SCREEN CLEANER
R-006	RESISTOR, SEAT HEAT

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

E0114-05- Reel dump solenoid - Line disconnected

[YCG667001-] INT, [YCG667001-] NA

Control Module : UCM

Context:
The reel dump solenoid **Y-035** is used by the controller to provide hydraulic pressure to the Reel Speed Solenoid **Y-012** (draper) or **Y-029** (sickle).

Cause:
Reel dump solenoid current is less than **0.5 A**.

Possible failure modes:

1. Faulty reel dump solenoid.
2. Faulty controller.
3. Faulty electrical wiring, open 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 machine to proper operation.
2. Verify the reel dump solenoid **Y-035** function properly. Disconnect the reel dump solenoid **Y-035** from the reel speed harness at the connector **X-304**. Use a multi-meter to check the resistance at the reel dump solenoid **Y-035** connector **X-304** pin 1 and 2.
   A. If there is a nominal resistance value, continue to step **3**.
   B. If the resistance value is **0 Ω**, the solenoid has failed. Replace the solenoid.
3. Check the signal circuit for an open condition. Disconnect the connector **X-044** from the reel speed harness. Use a multi-meter to check for voltage at the connector **X-044** pin 57 and the chassis ground.
   A. If there is no voltage, continue to **4**.
   B. If there is voltage, there is an open condition between the connector **X-044** pin 57 and the reel dump solenoid **Y-035** connector **X-304** pin 1, at wire RS-714 WH. Locate and repair the open conductor.
4. Check the signal circuit for an open condition. Disconnect the UCM module **A-001** connector **X-003** from the reel speed harness. Use a multi-meter to check for voltage between the UCM module **A-001** connector **X-003** pin 19 and the chassis ground.
   A. If there is no voltage, the controller has failed. Replace the controller.
   B. If there is voltage, there is an open condition between the UCM module **A-001** connector **X-003** pin 19 and the connector **X-044** pin 57, at wire RS-714 WH (standard) or CM-714 WH (draper). Locate and repair the open conductor.

Wire harnesses - Electrical schematic frame 15 (55.100.DP-C.20.E.15)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 24 of 1633 pages

The full manual includes:

- All 1633 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

New Holland H8040 Service Manual



Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual