SERVICE MANUAL

9040L / 9040M / 9060L H / 9060L / 9080L H
9080L / 9090L GE / 9090L H / 9090L

Grape Harvester

Part number 84490331C
English
April 2014

Copyright © 2014 CNH Industrial France S.A.S. All Rights Reserved.

Order the manual at mid-west-tech.com >

Contents

INTRODUCTION

Rear axle system 27

[27.100] Powered rear axle 27.1

Hydrostatic drive 29

[29.218] Pump and motor components 29.1

[29.202] Hydrostatic transmission 29.2

Brakes and controls 33

[33.202] Hydraulic service brakes 33.1

Hydraulic systems 35

[35.000] Hydraulic systems 35.1

[35.300] Reservoir, cooler, and filters 35.2

[35.610] Machine leveling control system 35.3

[35.946] Frame positioning lifting 35.4

[35.903] Shaking hydraulic system 35.5

[35.904] Cleaning hydraulic system 35.6

[35.952] Destemmer system 35.7

[35.930] Conveyor receiver system 35.8

[35.736] Boom hydraulic system 35.9

Frames and ballasting 39

[39.100] Frame 39.1

Steering 41

[41.101] Steering control 41.1

Electrical systems 55

[55.000] Electrical system 55.1

[55.100] Harnesses and connectors 55.2

[55.425] Boom, dipper, and bucket control system 55.3

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >

[55.924] Cab grape harvesting controls 55.4
[55.408] Warning indicators, alarms, and instruments 55.5
[55.DTC] FAULT CODES 55.6
Grape harvester shaking 56
[56.301] Shaking control 56.1
[56.304] Connecting rods, front plates, and shakers 56.2
[56.305] Adjustable width system 56.3
Cleaning 74
[74.200] Upper extractors 74.1
[74.204] Lower extractors 74.2

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >

Contents

INTRODUCTION

Foreword (*) 3
Foreword 4
Basic instructions (*) 8
Torque Hydraulic connectors (*) 11
Special tools 13
Conversion factors (*) 19
Product identification (*) 20

(*) See content for specific models

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >

Oil filters - Hydraulic schema

9000 L	INT — WE
9040M	INT — WE

Diagram of the supply and return system

Components		Descriptif des repères	
S018	Pressure switch to illuminate the main return filter blockage indicator light	4	Cooler return
S019	Pressure switch to illuminate the wheel motor drain return blockage filter indicator light	6	Cooler bypass return valve
S020	Minimum level switch in hydraulic oil reservoir		
100	Hydraulic reservoir Visual level indicator Electric minimum level indicator Ambra Hydrosystem 68 (NH 668) oil Capacity: **65 l** for 9000L and M Capacity: **96 l** for 9090X	7	Cleaning system suction
152	Return and suction filter fitted with an electric blockage indicator	8	Boost pump intake
153	Return manifold	9	Tank fill half-coupling
155	Wheel motor drain filter	10	Harvesting equipment hydraulic unit return
156	Cooler bypass valve	12	Shaker hydraulic unit return
157	Hydraulic reservoir breather	13	Forward travel pump drain return on L2
158	Oil cooler	14	Steering valve return and hydraulic lifting unit on K
		15	Tank breather filter
		17a	Shaker motor return drain
L3	Forward travel pump drain return	17b	Noria motor drain return
		18	Cooler motor return
		19	Brake control hydraulic unit and gearshift return
		20	Cleaning pump drain return
		22	Free
		24	Free
		25	Wheel motor drain filter return
		26	Steering/lifting system double pump intake and cooling fan
		27	High-pressure hydraulic unit return on M
		28	Shaker pump intake
		29	Cleaning pump hydraulic control unit return
		30	Steering valve return
		31	Cooling fan motor drain return
		33	Left front and rear wheel motor drain return
		34	Right rear wheel motor drain return
		35	Right front wheel motor drain return

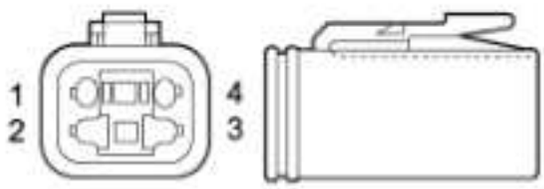
SERVICING: The tank must be drained and the filters changed every two years or 800 hours or as indicated by the blockage indicator

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >

CONNECTOR X442

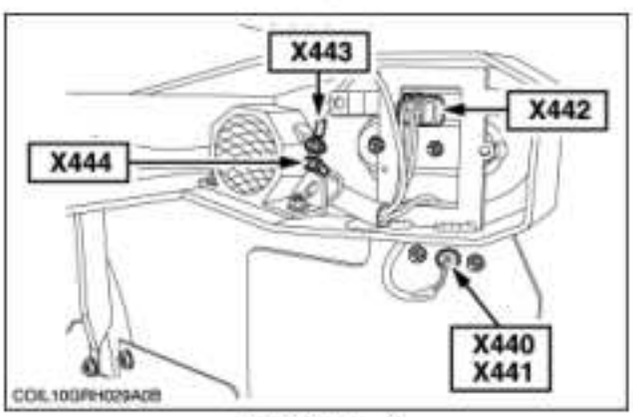
CONNECTOR X442 HARNESS OUTLET, LEFT LIGHTING			
POSITION	**WIRE NUMBER**	**CIRCUIT REFERENCE**	**WIRING DIAGRAM**
1	1002 (PU)	TO ELECTRICAL SCHEMATIC X114 FOR LEFT REAR INDICATOR LIGHT E016	**Wire harnesses - Electrical schematic sheet 34 (55.100)**
2	1085 (PU)	TO ELECTRICAL SCHEMATIC X114 FOR LEFT REAR MARKER LIGHT E005	**Wire harnesses - Electrical schematic sheet 32 (55.100)**
3	9163 (BK)	TO ELECTRICAL SCHEMATIC X115, GROUND	
4	1274 (PU)	TO ELECTRICAL SCHEMATIC X114 FOR LEFT STOP LIGHT E020	**Wire harnesses - Electrical schematic sheet 35 (55.100)**

NOTE: *For the wiring color code, refer to* ***Electrical system - Electrical standard (55.000).***



DEUTSCH_DT06-4S 5

X442
LEFT LIGHTING HARNESS, DEUTSCH CONNECTOR



COIL10GRH029ADB 8

CONNECTOR X442 - FROM LEFT LIGHTING HARNESS FOR STOP LIGHT AND LEFT REAR DIRECTION INDICATOR LIGHT

NOTE: *For connector service tools refer to* ***Wire harnesses - Special tools 4 (55.100).***

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >

E1049-03-Digital sensor power supply, short circuit to an elevated source, +12 V

9000 L	INT — WE
9040M	INT — WE

Control Module : ECM

NOTE: *The diagnostic function on the monitor can be used to facilitate troubleshooting the electrical circuit. For more information, refer to* ***Instrument cluster - Detailed view (55.408)****.*

NOTE: *When the cause of the error code has been rectified, clear the error code and test the system for normal operation.*

Cause:
The engine controller has detected that a voltage above **12 V** was being supplied to the sensors as a reference voltage.

Possible failure modes:

1. Faulty engine sensor
2. Faulty harness
3. Faulty engine controller

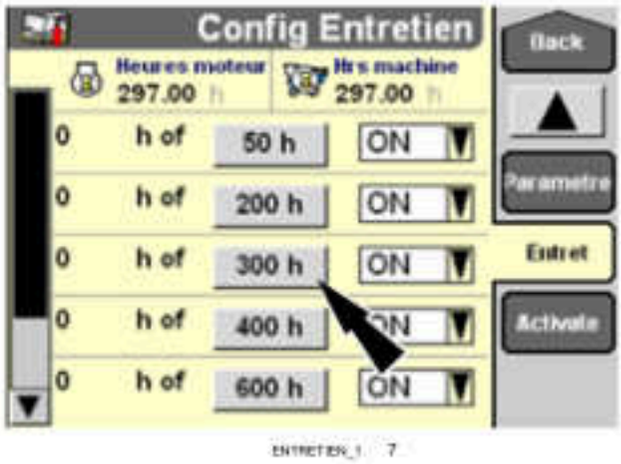
Solution:

1. Before continuing, delete the error code using the approved diagnostic equipment. Operate the machine under normal conditions and test again.
   A. If the error code is not shown, check that the system is working properly.
   B. If the fault is still present, proceed to step **2**
2. Check for other engine-sensor-related error codes.
   A. If other engine-sensor-related error codes are present, carry out the tests for the code(s).
   B. If no other engine-sensor-related error codes are displayed, download the correct version of the software. If the fault recurs, remove and replace the engine controller.

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >

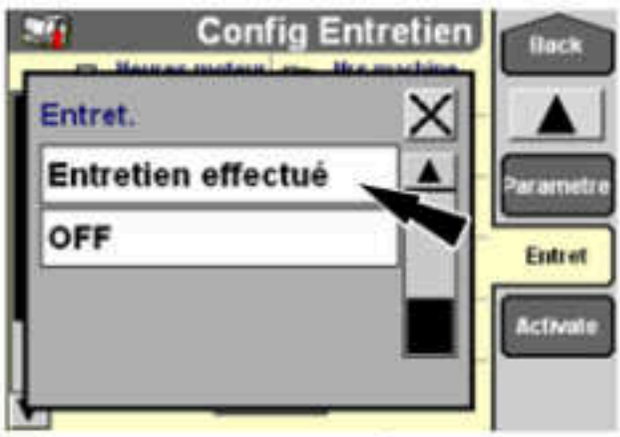
What you need to do

When the "heures moteur" (engine hours) meter displays that a maintenance operation is due, you should indicate on the monitor that the operation has been carried out.
In the example shown opposite, the meter displays **299.28 h**.
After having carried out the operations relating to the **300 h** servicing interval, indicate on the meter that the operation has been completed.
Select the corresponding checkbox on the meter.



ENTRETIEN_1 7

Using the scroll bar, select "Service done"



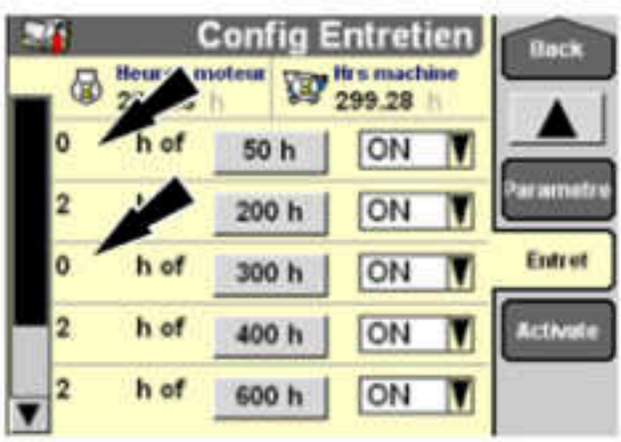
ENTRETIEN_4 8

Confirm the counter zero reset by pressing "YES"



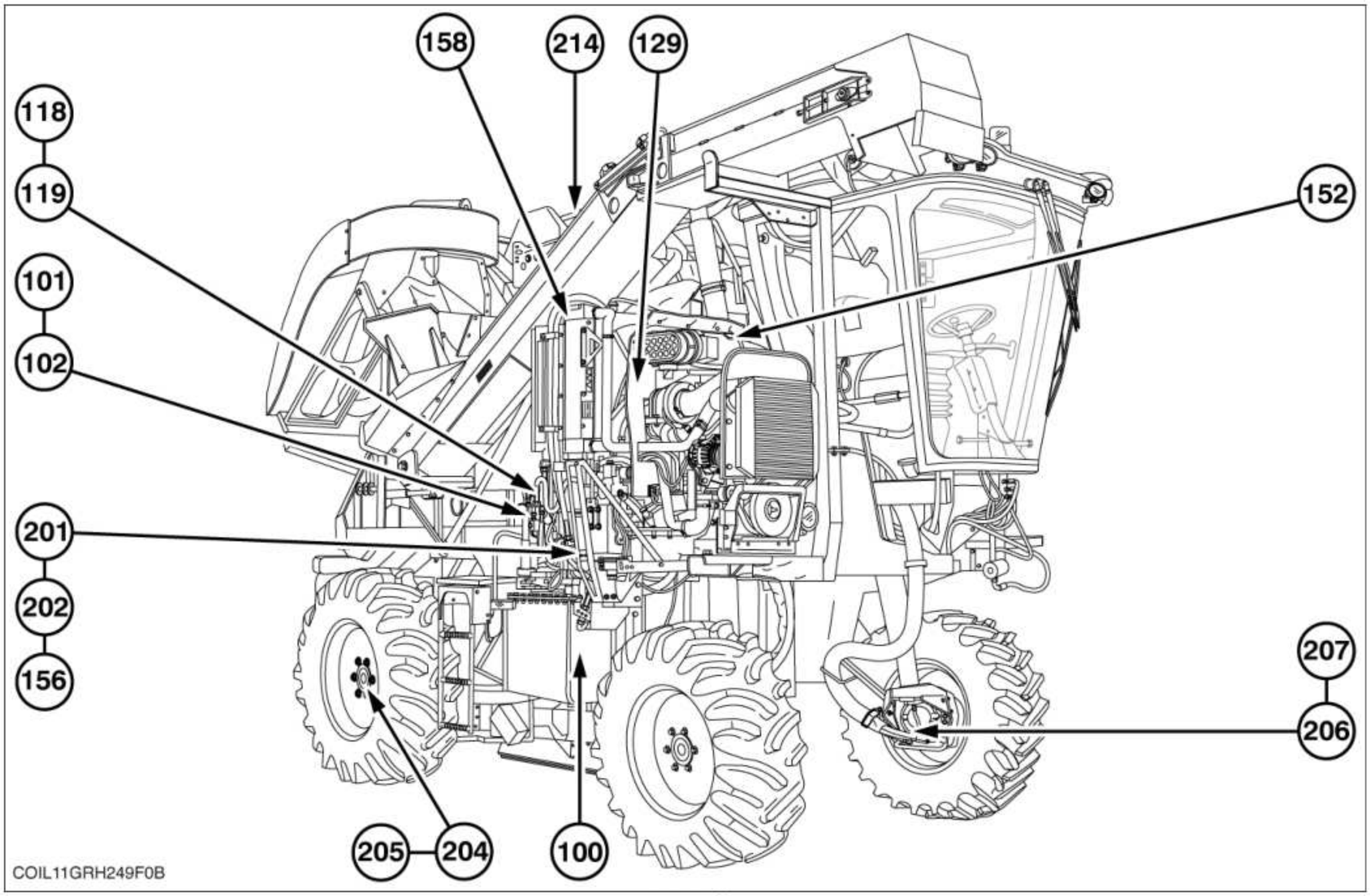
ENTRETIEN_3 9

Also confirm the **50 h** servicing interval meter.
The **50 h** and **300 h** meters are reset to 0. The automatic reminder will operate for these two meters.
Configure the other meters as quickly as possible to receive an automatic reminder for all servicing intervals on your machine.



ENTRETIEN_6 10

MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L... Order the manual at mid-west-tech.com >



MidWestTech | New Holland 9040L, 9040M, 9060L H, 9060L, 9080L H, 9080L, 9090L GE, 9090L H, 9090L Grape Harvester Service Manual | Publication 84490331C
Order the manual at mid-west-tech.com >