Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.218] Fuel injection system 10.2

[10.400] Engine cooling system 10.3

[10.414] Fan and drive 10.4

[10.418] Rotary screen 10.5

Main gearbox and drive 14

[14.100] Main gearbox and drive 14.1

Transmission 21

[21.114] Mechanical transmission 21.1

[21.130] Mechanical transmission external controls 21.2

[21.100] Mechanical transmission lubrication system 21.3

[21.145] Gearbox internal components 21.4

[21.182] Differential 21.5

Four-Wheel Drive (4WD) system 23

[23.101] Mechanical control 23.1

[23.304] Four-Wheel Drive (4WD) gearbox 23.2

Front axle system 25

[25.100] Powered front axle 25.1

[25.102] Front bevel gear set and differential 25.2

[25.310] Final drives 25.3

Rear axle system 27

[27.450] Rear-powered steerable axle 27.1

[27.550] Non-powered rear axle 27.2

Hydrostatic drive 29

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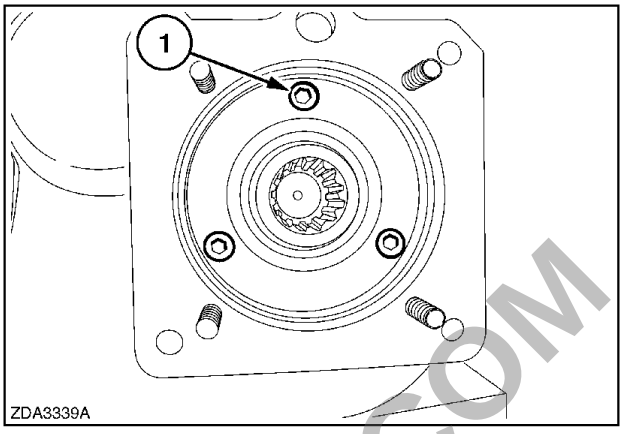
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Item	Description	Item	Description
1	Taper roller bearing **L30212**	**36**	Seal **35x62x7**
2	Retaining ring **Ø120x4**	**37**	Bolt **M16x40 (10.9)**
3	Taper roller bearing **L32213**	**38**	Bevel gear set
4	Shim **110x120**	**39**	Seal cover **120x12**
5	Taper roller bearing **L30313**	**40**	Spacer
6	Splined flange	**41**	Spherical roller bearing **L22311B**
7	Hex socket head screw **M8x25**	**42**	Cooling fan drive shaft
8	Shim 130x140	**43**	Spacer ring
9	Retaining ring **Ø140x4**	**44**	CCLS (Closed Centre Load Sensing) pump drive gear **Z=52**
10	Seal cover **140x12**	**45**	Feed roll pump shaft
11	Cooling fan drive gear **Z=56**	**46**	Taper roller bearing **L32214**
12	Taper roller bearing **L30312**	**47**	Retaining ring **Ø95x3**
13	Seal **55x80x10**	**48**	Shim **85x95**
14	Input shaft **Z=63**	**49**	Taper roller bearing **L 4T-32012X**
15	Shim **115x130**	**50**	Traction pump drive gear **Z=47**
16	Bolt **M12x50**	**51**	Main clutch drive shaft housing
17	Hex socket head screw **M12x50 (10.9)**	**52**	Engine flange
18	O-ring **240x4**	**53**	Dowel **12x6x40**
19	Shim **145x170**	**54**	Gearbox housing
20	Plug **32x8**	**55**	Breather filter
21	Clutch main shaft	**56**	Ring **A16x20**
22	Seal **60x125x12**	**57**	Oil level sight glass
23	Retaining ring **Ø65x 4**	**58**	Ring **A20x31**
24	Retaining ring **Ø100x4**	**59**	Dipstick
25	Ball bearing **L6013**	**60**	Plug
26	Flange shaft	**61**	Ring **A18x22**
27	Seal **135x170x12**	**62**	Oil tube
28	Taper roller bearing **L32022X**	**63**	Groove pin **2x6**
29	Baffle cap **Ø90.5-140x15**	**64**	Breather
30	Taper roller bearing **L32018X**	**65**	Bevel gear shaft housing
31	Lock nut	**66**	Reduction plug
32	Bolt **M12x110**	**67**	Gearbox front cover
33	Baffle cap **Ø110-150x15**	**68**	Bolt **M10x35**
34	Taper roller bearing **L32219**	**69**	Bolt **M12x60**
35	Bevel gear shaft	**70**	Spray bar (not shown)
NOTE: *All the dimensions are in* ***mm****.*			

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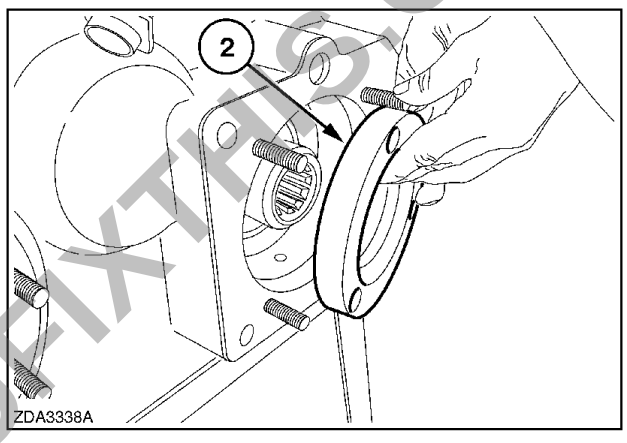
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4. Remove the three Allen screws **(1)**.



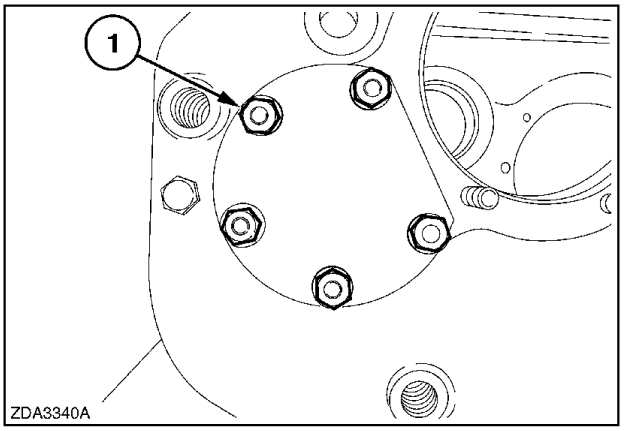
ZDA3339A 4

5. Remove the flange **(2)** with the lip-seal and the O-ring.



ZDA3338A 5

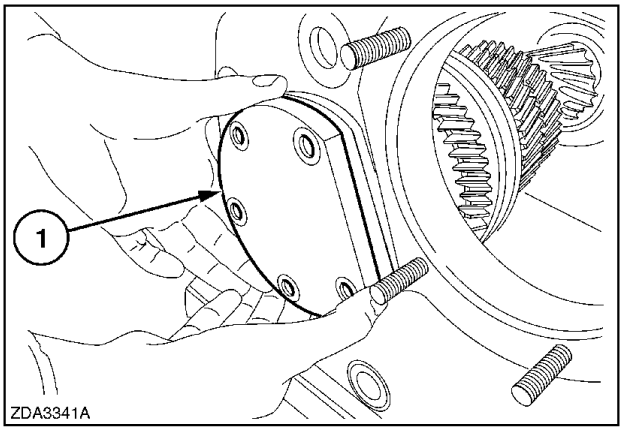
6. Remove the five nuts and washers **(1)**.



ZDA3340A 6

7. Remove the cover **(1)**.

NOTICE: *Keep the shims and the O-ring with the cover **(1)**.*



ZDA3341A 7

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Index

Front axle system - 25

Final drives - 310

Driven gears and shaft Wheel stud - Replace 17
Final drive - Assemble 11
Final drive - Disassemble 8
Final drive - Exploded view 6
Final drive - General specification 3
Final drive - Install 16
Final drive - Overview 4
Final drive - Remove 7
Final drive - Sectional view 5
Final drive - Torque 3

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Hydrostatic transmission - Hydrostatic schema standard configuration

1	Hydraulic tank	11	Hydrostatic motor - feed rolls (and attachment, in case of single drive)
2	-	12	Hydrostatic motor - attachment (if installed, in case of double drive)
3	Hydrostatic pump - feed rolls (and attachment, in case of single drive)	13	-
4	Hydrostatic pump - attachment (if installed, in case of double drive)	14	Oil cooler by-pass/thermostat valve
5	Hydrostatic pump - traction (for details, **Pump - Hydrostatic schema standard configuration (29.218)**)	15-22	-
6-9	-	23	Oil cooler
10	Hydrostatic motor - traction	100a	Screen filter inside the oil cooler

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Index

Hydraulic systems - 35

Variable displacement pump - 106

Pump Closed Center Load Sensing (CCLS) pump - Adjust 16
Pump Closed Center Load Sensing (CCLS) pump - Component diagram 12
Pump Closed Center Load Sensing (CCLS) pump - Exploded view - Control exploded view. 10
Pump Closed Center Load Sensing (CCLS) pump - General specification - Pressure measurement 3
Pump Closed Center Load Sensing (CCLS) pump - Hydraulic schema 14
Pump Closed Center Load Sensing (CCLS) pump - Inspect - Control inspection. 21
Pump Closed Center Load Sensing (CCLS) pump - Install 23
Pump Closed Center Load Sensing (CCLS) pump - Overview - Ports and adjustments. 6
Pump Closed Center Load Sensing (CCLS) pump - Remove 18
Pump Closed Center Load Sensing (CCLS) pump - Replace - Shaft seal replacement. 19
Pump Closed Center Load Sensing (CCLS) pump - Sectional view - Pump and control sectional view. 8
Pump Closed Center Load Sensing (CCLS) pump - Service instruction - Control remove and disassemble. . . . 20
Pump Closed Center Load Sensing (CCLS) pump - Service instruction Control assemble and install. 22
Pump Closed Center Load Sensing (CCLS) pump - Static description 5
Pump Closed Center Load Sensing (CCLS) pump - Troubleshooting 24
Variable displacement pump - Pressure test LS and PC 15

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Contents

Hydraulic systems - 35

Spout rotation circuit - 530

DIAGNOSTIC

Spout rotation circuit
Testing 3

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41. Note that only equipment capable of recovering and cleaning **R134A** to meet **SAE J2099** purity levels can be certified as meeting **SAE** standards. Recycling equipment capable of purifying **R134A** to **SAE J2099** purity levels will carry a label which contains the phrase "Design certified by Underwriters Laboratories, Inc. for compliance with **SAE J2099** ." Note that the Underwriters Laboratories label which certifies that the machine is free of reasonable shock or other safety hazards to the user is NOT an indication of compliance with **SAE** standards. The UL label must specifically state that the machine is "design certified" to the applicable **SAE** standard.

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Y9

Topic	Reference
Name	Reverser clutch solenoid
Frame	**Wire harnesses - Electrical schematic frame 15 (55.100)**
Connector	**X131**
Technical	
Functional	
Diagnostic	**E0573-05-Reverser clutch valve , Current below normal or open circuit (55.640)**
Service	

Y10

Topic	Reference
Name	Park brake solenoid
Frame	**Wire harnesses - Electrical schematic frame 15 (55.100)**
Connector	**X130**
Technical	
Functional	
Diagnostic	**E0319-05-Park brake valve , Current below normal or open circuit (55.640)**
Service	

Y11

Topic	Reference
Name	Spout flipper up solenoid
Frame	**Wire harnesses - Electrical schematic frame 15 (55.100)**
Connector	**X128**
Technical	
Functional	
Diagnostic	**E0320-05-Spout flipper up valve , Current below normal or open circuit (55.640)**
Service	

Y12

Topic	Reference
Name	Spout flipper down solenoid
Frame	**Wire harnesses - Electrical schematic frame 15 (55.100)**
Connector	**X129**
Technical	
Functional	
Diagnostic	**E0315-05-Spout flipper down valve , Current below normal or open circuit (55.640)**
Service	

Y13

Topic	Reference
Name	4-wheel drive solenoid
Frame	**Wire harnesses - Electrical schematic frame 15 (55.100)**
Connector	**X127**
Technical	
Functional	
Diagnostic	**E0306-05-4WD clutch valve , Current below normal or open circuit (55.640)**
Service	

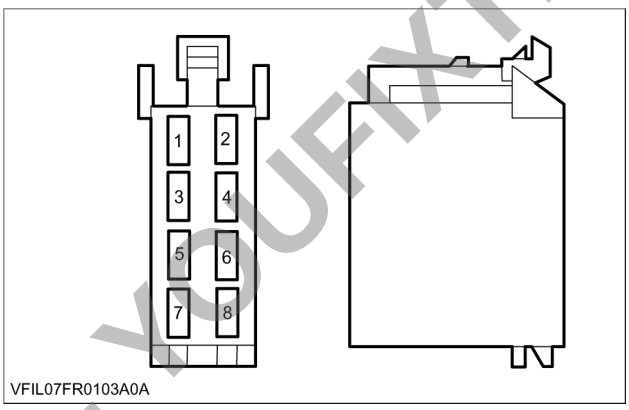
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Radio c

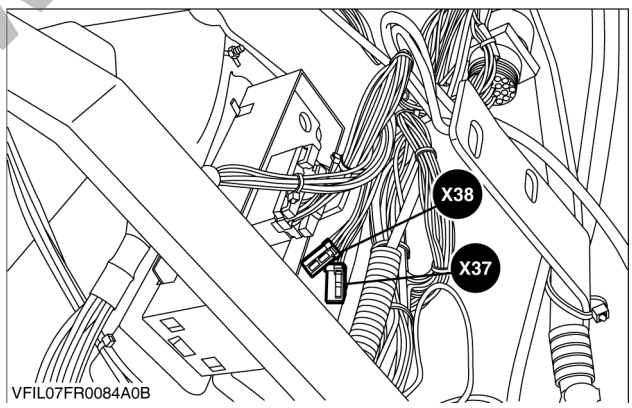
Connector X37 Radio c(A37)			
Position	Wire number	Circuit reference	Electrical schematic frame
1	-	-	-
2	-	-	-
3	-	-	-
4	633-1 (RD)	B(+)	**Wire harnesses - Electrical schematic frame 09 (55.100)**
5	-	-	-
6	-	-	-
7	172-1 (OR)	Ignition B(+)	**Wire harnesses - Electrical schematic frame 09 (55.100)**
8	643-1 (ZW)	Ground	**Wire harnesses - Electrical schematic frame 09 (55.100)**

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



VFIL07FR0103A0A 18

NOTE: *For connector service tools refer to,* ***Wire harnesses - Special tools 2 (55.100)****.*



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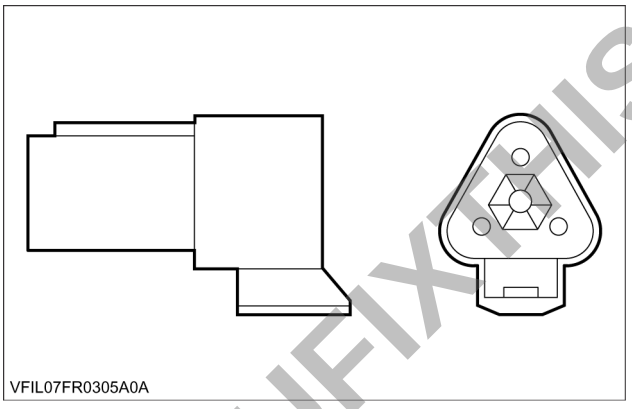
Cab roof

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Machine ground speed sensor

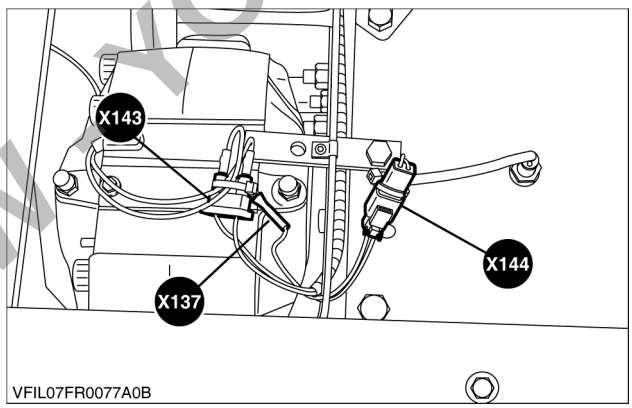
Connector X144 Machine ground speed sensor (B46)			
Position	Wire number	Circuit reference	Electrical schematic frame
A	699-1 (OR)	Reference voltage	**Wire harnesses - Electrical schematic frame 22 (55.100)**
B	860-1 (GE)	Signal	**Wire harnesses - Electrical schematic frame 22 (55.100)**
C	861-1 (BL)	Ground	**Wire harnesses - Electrical schematic frame 22 (55.100)**

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



VFIL07FR0305A0A 9

NOTE: *For connector service tools refer to,* ***Wire harnesses - Special tools 3 (55.100)****.*

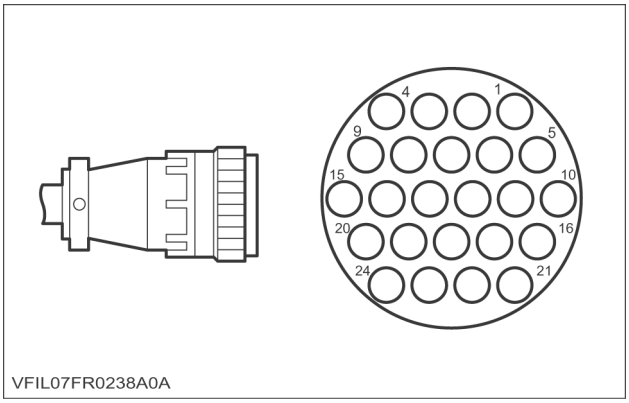


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Top of gearbox

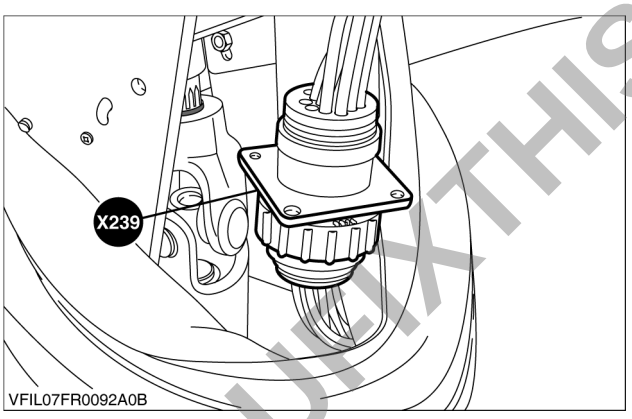
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VFIL07FR0238A0A 17

NOTE: *For connector service tools refer to,* ***Wire harnesses - Special tools 2 (55.100)****.*



VFIL07FR0092A0B 18

Bottom of steering column

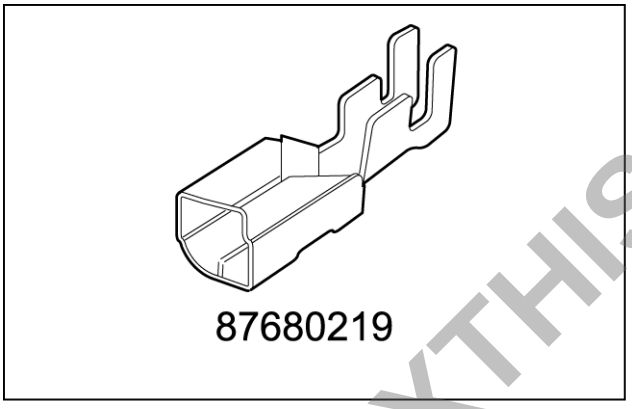
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Roller wind guard (from series 5764)

Connector X345 Roller wind guard (S59)			
Position	Wire number	Circuit reference	Electrical schematic frame
1	168-1 (GR)	Supply	**Wire harnesses - Electrical schematic frame 18 (55.100)**

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



87680219 3

NOTE: *For connector service tools refer to,* ***Wire harnesses - Special tools 2 (55.100)****.*

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4b	Power Control Module (CM) 3

FR9040 5620> ....
FR9050 5620> ....
FR9060 5620> ....
FR9080 5620> ....
FR9090 5620> ....

Code	Description	Line
A3	Power CM3	910
F61	3A CM3 ignition switch supply fuse	860
K24	Ignition switch supply CM3 relay	930

Line: 860 - 1020

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18h	pickup Header Controls and Lighting Europe
	FR9040 5764> ....
	FR9050 5764> ....
	FR9060 5764> ....
	FR9080 5764> ....
	FR9090 5764> ....

Code	Description	Line
A49	pickup header recognition	5540
A50	Control module (CM) pickup header controls	5520
B14	Auger speed sensor	5480
B50	RPM reel pickup sensor	5560
E39	pickup left hand marker light	5650
E40	pickup right hand marker light	5650
E48	Trailer pickup left flasher light	5680
E49	Trailer pickup right flasher light	5730
E50	Trailer pickup left rear light	5700
E51	Trailer pickup right rear light	5740
E52	Trailer pickup left brake light	5710
E53	Trailer pickup right brake light	5760
E54	Trailer pickup plate illumination 1	5680
E55	Trailer pickup plate illumination 2	5700
X70	Trailer outlet pickup Europe	5710
Y41	Oil pump pickup solenoid	5600
Y42	Valve wheels pickup solenoid	5630
S59	Switch roller windguard	5540

Line: 5440 - 5760

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32c	Mirrors Adjust and Heating
	FR9040 5620> ....
	FR9050 5620> ....
	FR9060 5620> ....
	FR9080 5620> ....
	FR9090 5620> ....

Code	Description	Line
A43	Left hand mirror	11290
A44	Right hand mirror	11470
F10	7.5A mirrors adjust and heating fuse	11280
F62	10A bridge mirror switch fuse- Germany	11410
F63	10A bridge mirror switch fuse - Germany	11430
S42	Mirror adjust switch	11350
S44	Mirror heat switch	11450

Line: 11220 - 11550

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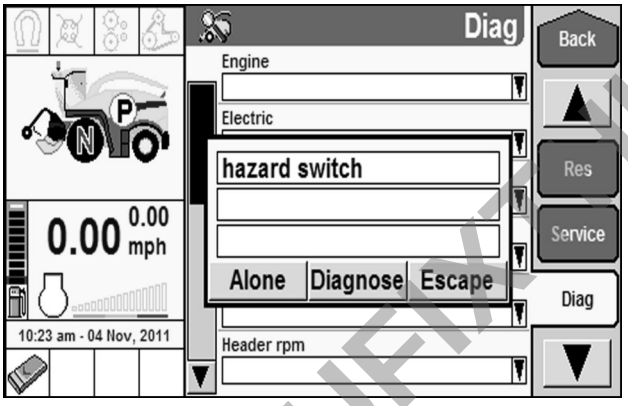
Selecting the position

Once the item has been chosen a position needs to be assigned. The advanced diagnose offers the possibility to diagnose up to three items at the same time. In this step the user needs to choose where to put the selected item. For this a popup is opened with three selection boxes and three buttons as shown in the image below.

The first three selection boxes represent the three positions in the advanced diagnose. The user can place an item on any of the three positions overwriting any previous item that was there.

The user can also choose to diagnose “Alone”, which will result in putting the selected item on the first position and clearing positions two and three. After a choice is made the user can choose to “Diagnose” or to “Escape” here and select another item or leave diagnose.

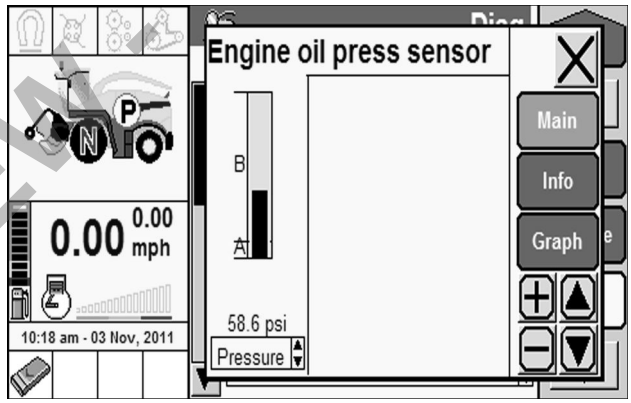
It is also possible that a “Group :” item was chosen which will result in overwriting all items in case the group consists of three items or, in case of two items, in overwriting the first two items and clearing the third.



23119452 25

Overview of Diagnose screens

The Diagnose function provides a three screen format; Main, Info and Graph screens. A title bar, indicates the currently selected item.



NHPH11FR00022AA 26

A selection bar, displayed on the right-hand side, contains three soft keys.

The top soft key, the "Main" tab is used to display component / device operational information and possible output diagnose options.

The middle soft key, the "info" tab is used to display identification and configuration information about the currently selected component / device.

The bottom soft key, the "Graph" tab is used to display a scope like view of the electrical circuit activity for the currently selected component / device.

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5. Check for a short to positive voltage.

   A. Disconnect connector **X21**. Turn the ignition key ON. Check for a voltage between connector: **X21** pin **37** (GE) and ground.
   If a voltage is indicated, repair or replace the harness as required.

   B. If a voltage is not indicated, remove and replace the stone worn state sensor. If the fault is still present, download the correct level of software. If the fault recurs, remove and replace the controller.

Wire harnesses - Electrical schematic frame 19 (55.100.DP-C.20.E.19)

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E0292-04-Gear 3 state , Voltage below normal or shorted to low source

Control Module : CM2

NOTE: *The forage harvester monitor diagnostic capability can be used to assist in troubleshooting the electrical system, for further 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 controller has detected a voltage less than **0.5 V** at connector **X23** pin **37**.

Possible failure modes:

1. Faulty connector
2. Faulty harness
3. Faulty gear shift position sensor
4. Faulty controller

Solution:

1. Enter the display monitor "Diagnose info" screen.
   Select "traction" main menu.
   Select "Gear 3 state", and check voltage range. Refer to **Instrument cluster - Detailed view (55.408)** if necessary.

   The proper voltage for the sensor when blocked by ferrous metal should be between **5.6 - 7.3 V**, typical value: **6.7 V**.
   The proper voltage for the sensor when not blocked by ferrous metal should be between **0.5 - 5.6 V**, typical value: **3.4 V**.
   The proper voltage the sensor disconnected should be between **7.3 - 9.0 V**, typical value: **7.4 V**.

   Before proceeding, clear the error code with the approved diagnostic equipment. Run the machine under normal conditions and retest.

   A. If the error code is not indicated, check that the system is operating correctly.

   B. If the error code is indicated, continue to step **2**.
2. Check the gear shift position sensor **X142** pin **4** and the controller connector **X23** pin **37**.

   A. Make sure that the connectors are connected, not damaged, the pins are in the correct position and that the fit is tight. Repair or replace as required.

   B. If the connectors are okay, continue to step **3**.
3. Check for a short to ground.

   A. Disconnect connector **X142**. Check between connector **X142**, pin **4** (GE) and ground. If a short to ground is indicated, repair or replace the harness as required.

   B. If the harness is okay, remove and replace the gear shift position sensor. If the fault is still present, download the correct level of software. If the fault recurs, remove and replace the controller.

Wire harnesses - Electrical schematic frame 22 (55.100.DP-C.20.E.22)

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E0576-05-Main clutch valve , Current below normal or open circuit

Control Module : CM3

NOTE: *The forage harvester monitor diagnostic capability can be used to assist in troubleshooting the electrical system, for further 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.*

Possible failure modes:

1. Faulty connector
2. Faulty harness
3. Faulty main clutch solenoid
4. Faulty controller

Solution:

1. Enter the display monitor "Diagnose info" screen.
   Select "hydraulic" main menu.
   Select "main clutch valve", and check voltage range. Refer to **Instrument cluster - Detailed view (55.408)** if necessary.
   Before proceeding, clear the error code with the approved diagnostic equipment. Run the machine under normal conditions and retest.

   A. If the error code is not indicated, check that the system is operating correctly.

   B. If the error code is indicated, continue to step **2**.
2. Check the main clutch solenoid connector **X132** pin **2** and the controller connector **X25** pin **21**.

   A. Make sure that the connectors are connected, not damaged, the pins are in the correct position and that the fit is tight. Repair or replace as required.

   B. If the connectors are okay, continue to step **3**.
3. Check for an open circuit.

   A. Disconnect connector **X132** and the controller connector **X25**. Check between connector **X132** pin **2** (WT) and connector **X25** pin **21** (WT). If an open circuit is indicated, repair or replace the harness as required.

   B. If the harness is okay, remove and replace the main clutch solenoid. If the fault is still present, download the correct level of software. If the fault recurs, remove and replace the controller.

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

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B. If a short circuit is not indicated, continue to step **7**.

7. Check for a short to positive voltage.

   A. Turn the ignition key ON. Check between connector:
   X903 pin **1** (WT) and ground
   X903 pin **2** (ZW) and ground
   If a voltage is indicated, repair or replace the harness as required.

   B. If a voltage is not indicated, remove and replace the crankshaft speed sensor. If the fault is still present, download the correct level of software. If the fault recurs, remove and replace the engine controller.

Wire harnesses - Electrical schematic frame 36 (55.100.DP-C.20.E.36)

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E1322-02-Spout setpoint left 1, Data erratic or intermittent or incorrect

Control Module : RHM

NOTE: *The forage harvester monitor diagnostic capability can be used to assist in troubleshooting the electrical system, for further 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.*

Possible failure modes:

1. Faulty connector
2. Faulty harness
3. Faulty multi-function handle (MFH)
4. Faulty controller

Solution:

1. Before proceeding, clear the error code with the approved diagnostic equipment. Run the machine under normal conditions and retest.
   A. If the error code is not indicated, check that the system is operating correctly.
   B. If the error code is indicated, continue to step **2**.
2. Check the multi-function handle (MFH) connectors **X334** and **X110** and the controller connector **X333**.
   A. Make sure that the connectors are connected, not damaged, the pins are in the correct position and that the fit is tight. Repair or replace as required.
   B. If the connectors are okay, remove and replace the multi-function handle (MFH). If the fault is still present, download the correct level of software. If the fault recurs, remove and replace the controller.

Wire harnesses - Electrical schematic frame 25 (55.100.DP-C.20.E.25)

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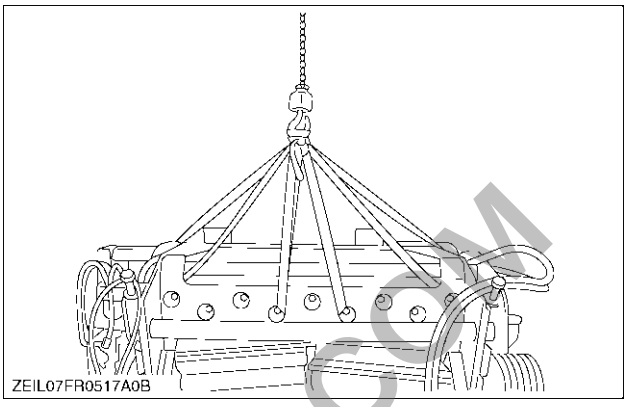
56	-
57	Gear
58	Shim
59	Bearing
60	Smooth roll drive shaft
61	Seal
62	Retaining ring
63	Cover
64	Housing
65	Retaining ring
66	Shim
67	Gear
68	Plug
69	Plug
70	-
71	-
72	-
73	Cover
74	Cover
75	O-ring
76	Shim
77	-
78	Cover
79	Shimpac
80	Elbow
81	-
82	-
83	-
84	-
85	Extension
86	-
87	-
88	-
89	Bolt
90	Shim
91	Bearing
92	Protective shield
93	Plug

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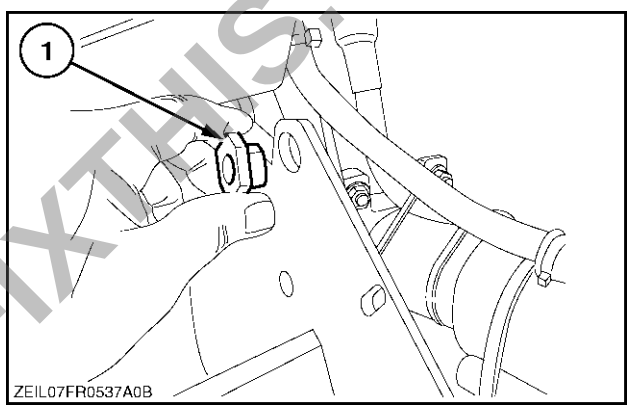
Sharpening system - Install

1. Install the sharpening system on the cutterhead, using an adequate lifting device.



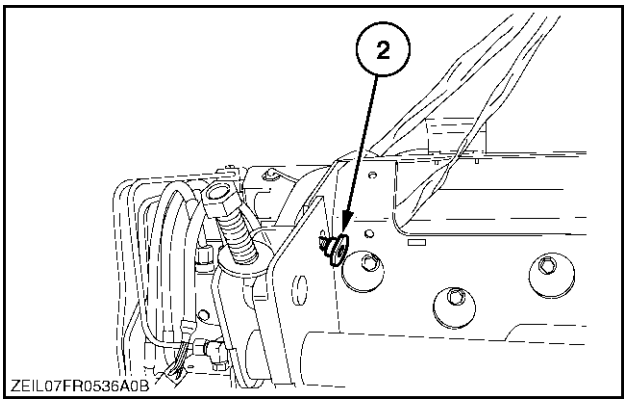
ZEIL07FR0517A0B 1

2. On both sides, install the nut **(1)** as shown.



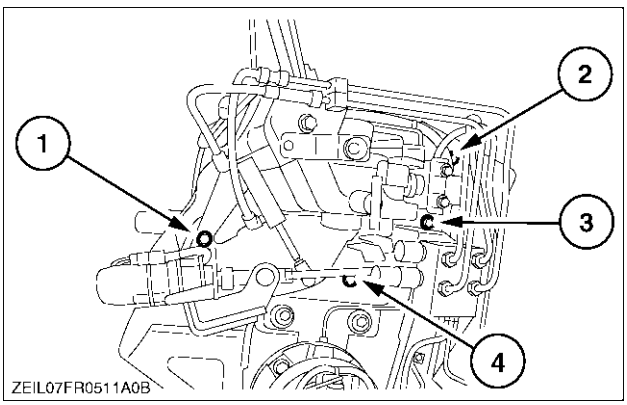
ZEIL07FR0537A0B 2

3. On both sides, install the nut **(2)** as shown.



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4. On the right-hand side, secure the sharpening system with the bolts **(1)**, **(2)**, **(3)** and **(4)**.



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