SERVICE MANUAL

Boomer™ 35
Boomer™ 40
Tier 4B (final)
Compact Tractor

Boomer™ 35 ROPS - From PIN LSM0B35Rxx0010001 to LSM0B35RVH0010043
Boomer™ 40 Cab - From PIN LSM0B40Cxx0010001 to LSM0B40CAH0010053
Boomer™ 40 ROPS - From PIN LSM0B40Rxx0010001 to LSM0B40REH0010028

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NEW HOLLAND AGRICULTURE

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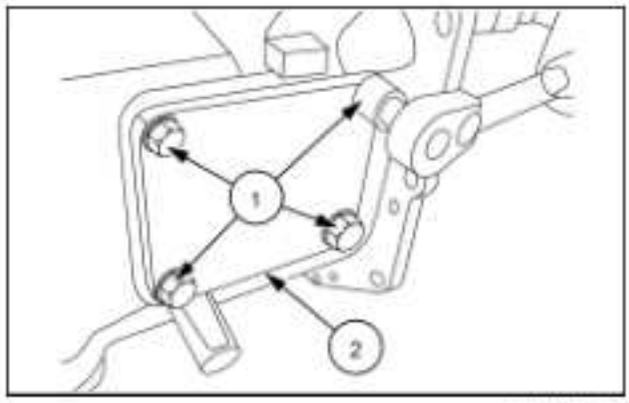
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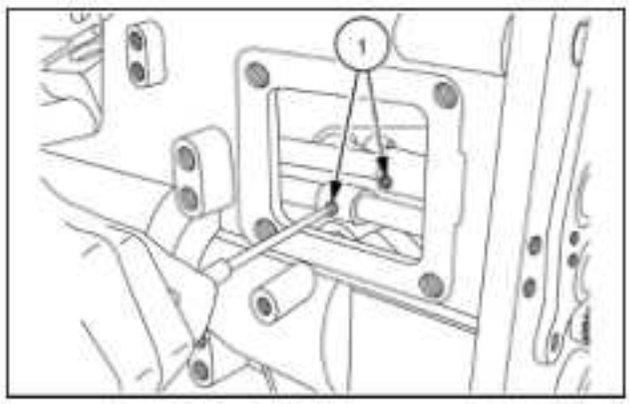
Main gear

16. Remove the four **10 mm** bolts **(1)**.
17. Remove the side cover **(2)**.



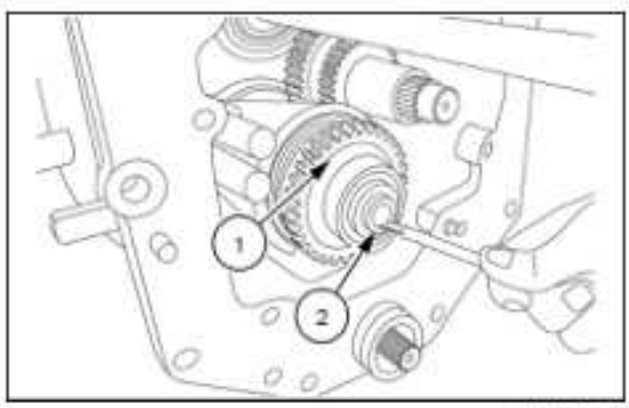
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18. Remove the two spring pins **(1)** from the transmission forks.



14

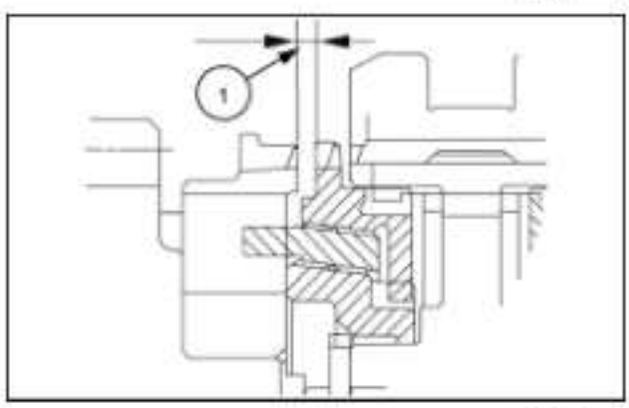
19. Prevent the shaft from rotating.
20. Loosen the nut **(2)**.
21. Remove the snap ring **(1)**.
22. Move the shaft to the front of the clutch housing, and remove the gear and spacer in order.



15

23. Check the wear of the synchronizing ring, if it exceeds the specification **(1) 1.5 mm** (**0.06 in**), replace it.

NOTICE: *The standard clearance specification is* ***1.5 mm (0.06 in)****.*



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Hydraulic systems - Troubleshooting

Problem	Possible Cause	Correction
Relief valve operates when implement is in full raise position	HPL upper stop out of adjustment	Adjust position of upper stop
Relief valve operates when the rear remote is in detent and no attachment connected, cylinder is at end of travel, or hydraulic motor failure.	Control valve in detent.	Move the control valve to the neutral position.
Relief valve operates when the rear remote is in detent and connected cylinder is at the end of travel	Control valve in detent.	Move the control valve to the neutral position.
Relief valve operates when the rear remote is in detent and the attachment hydraulic motor is stalled.	Attachment hydraulic motor is stalled.	Rectify the reason attachment hydraulic motor is stalled.
Hydraulic noise when control valve is in neutral	Unload valve binding in valve body, creating vibration and noise.	Clean unload valve and valve body, check fit of valve in bore.

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Disconnect the engine harness from the ECU **A-009** at connector **X-051** and the engine harness (EN) connector **X-209A** from the engine interface (EI) harness at connector **X-209B**.

Use a multimeter to perform the following continuity check:

From	To	Value
X-051 (Plug) pin 28	**X-209A (Receptacle)** pin 3	There should be continuity.

A. If there is continuity, continue with Step **6**.

B. If there is no continuity, there is an open circuit in the shield wire between **X-051 (Plug) pin 28**and **X-209A (Receptacle)** pin 3.Locate and repair the open circuit condition in wire EN-328 BK.

6. Check the knock sensor **A-010** shield wire.

Replace the ECU **A-009**.

Re-check the status of this fault.

A. If this fault is still present and active, there is an open circuit condition on the knock sensor **A-010** shield wire on the engine interface (EI) harness. Locate and repair the open circuit condition on the knock sensor **A-010** shield wire EI-328A BK.

B. If this fault is no longer present, return the machine to field operation and monitor for a recurring fault.

7. Visually inspect the relevant harnesses and connectors for damage, bent or dislocated pins, corroded terminals, or broken wires. Verify that the connectors are fully installed. Flex the harnesses involved to reveal intermittent breaks or shorts in the wiring concerned. Operate the machine while you monitor the display.

A. If you find damage or the display indicates other than normal display readings, then repair the damage discovered during the inspection or locate and repair the other than normal display condition and verify that the error has been resolved.

B. If you do not find damage and the display indicates only normal readings, then erase the fault code and continue operation.

Wiring harnesses - Electrical schematic sheet 03 (55.100)

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NHPH17CT0025TTA(1) 2

Item	Description
(1)	Alternator



NHPH17CT0026STA 3

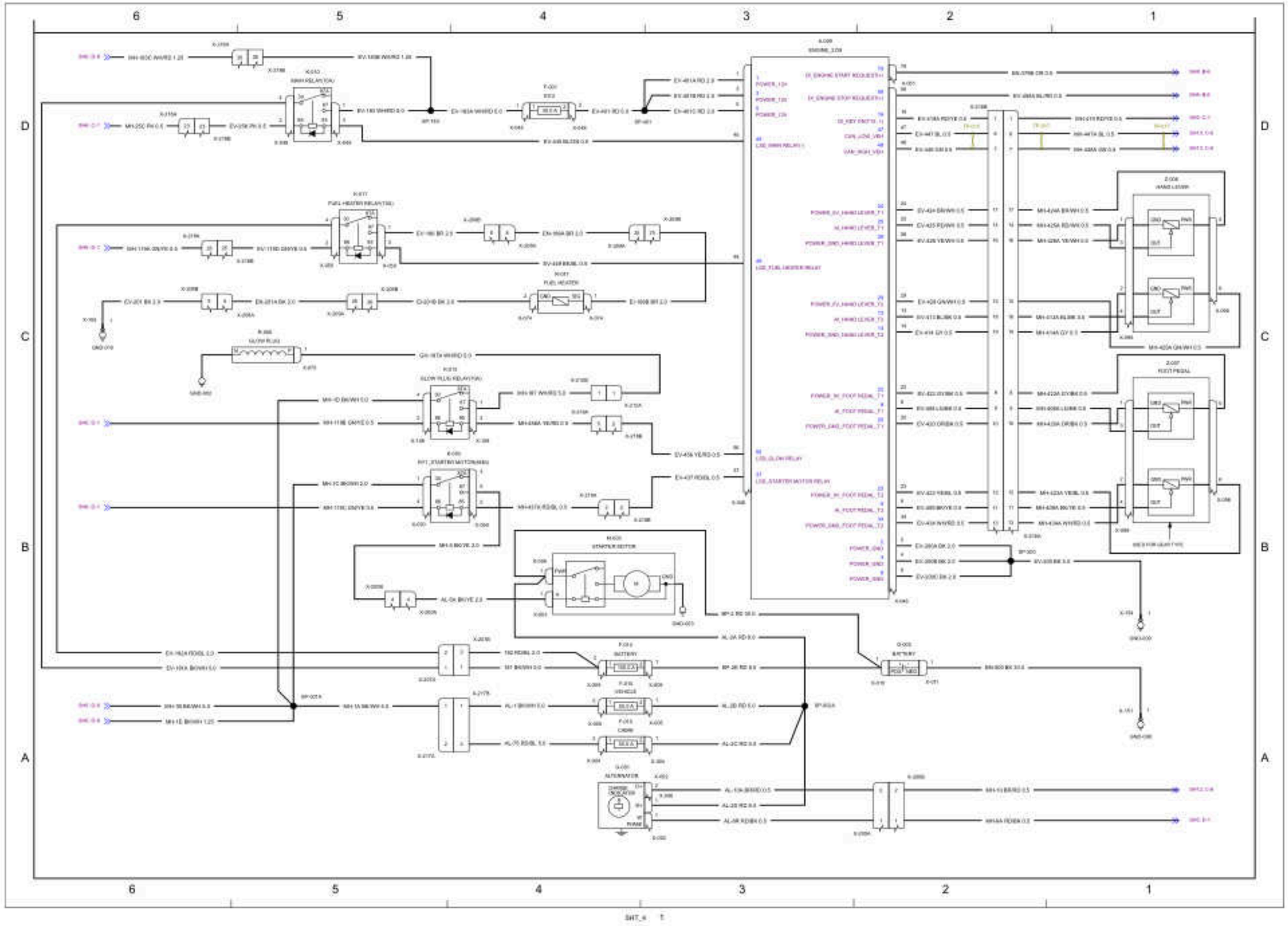
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Hydraulic systems - Component localization



Item	Description	Item	Description
(1)	Steering control valve	(3)	Hydrostatic transmission (HST)
(2)	Hydrostatic transmission (HST) filter	(4)	Transmission/hydraulic oil cooler

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