FARMALL® 35A
FARMALL® 40A
Tier 4B (final)
Compact Tractor

FARMALL® 35A ROPS: PIN LSMF35ARxx0010001 to LSMF35ARVH0010035
FARMALL® 40A ROPS: PIN LSMF40ARxx0010001 to LSMF40ARCH0010034

SERVICE MANUAL

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CASE IH AGRICULTURE

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Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.216] Fuel tanks 10.2

[10.206] Fuel filters 10.3

[10.218] Fuel injection system 10.4

[10.202] Air cleaners and lines 10.5

[10.254] Intake and exhaust manifolds and muffler 10.6

[10.501] Exhaust Gas Recirculation (EGR) exhaust treatment 10.7

[10.400] Engine cooling system 10.8

[10.414] Fan and drive 10.9

Clutch 18

[18.100] Clutch mechanical release control 18.1

[18.110] Clutch and components 18.2

Power coupling 19

[19.110] Flywheel damper 19.1

Transmission 21

[21.114] Mechanical transmission 21.1

[21.130] Mechanical transmission external controls 21.2

[21.140] Mechanical transmission internal components 21.3

[21.110] Master clutch housing 21.4

Four-Wheel Drive (4WD) system 23

[23.314] Drive shaft 23.1

[23.101] Mechanical control 23.2

Front axle system 25

[25.100] Powered front axle 25.1

MidWestTech | Case Farmall 35A, 40A Tier 4B Compact Service Manual | Publication... Order the manual at mid-west-tech.com >

[25.102] Front bevel gear set and differential 25.2
[25.108] Final drive hub, steering knuckles, and shafts 25.3
Rear axle system 27
[27.106] Rear bevel gear set and differential 27.1
[27.120] Planetary and final drives 27.2
Hydrostatic drive 29
[29.200] Mechanical control 29.1
[29.100] Transmission and steering hydrostatic control 29.2
[29.204] Reservoir, cooler, and lines 29.3
[29.218] Pump and motor components 29.4
[29.202] Hydrostatic transmission 29.5
Power Take-Off (PTO) 31
[31.101] Rear mechanical control 31.1
[31.104] Rear electro-hydraulic control 31.2
[31.110] One-speed rear Power Take-Off (PTO) 31.3
[31.120] Central Power Take-Off (PTO) 31.4
Brakes and controls 33
[33.110] Parking brake or parking lock 33.1
[33.120] Mechanical service brakes 33.2
Hydraulic systems 35
[35.000] Hydraulic systems 35.1
[35.300] Reservoir, cooler, and filters 35.2
[35.104] Fixed displacement pump 35.3
[35.350] Safety and main relief valves 35.4
[35.204] Remote control valves 35.5
[35.114] Three-point hitch control valve 35.6
[35.116] Three-point hitch cylinder 35.7
[35.724] Front loader hydraulic system control 35.8

MidWestTech | Case Farmall 35A, 40A Tier 4B Compact Service Manual | Publication... Order the manual at mid-west-tech.com >

Hitches, drawbars, and implement couplings 37
[37.100] Drawbars and towing hitches 37.1
[37.108] Rear three-point hitch external controls 37.2
[37.110] Rear three-point hitch 37.3
Steering 41
[41.101] Steering control 41.1
[41.106] Tie rods 41.2
[41.200] Hydraulic control components 41.3
[41.216] Cylinders 41.4
[41.206] Pump 41.5
Wheels 44
[44.511] Front wheels 44.1
[44.520] Rear wheels 44.2
Electrical systems 55
[55.000] Electrical system 55.1
[55.100] Harnesses and connectors 55.2
[55.525] Cab engine controls 55.3
[55.201] Engine starting system 55.4
[55.301] Alternator 55.5
[55.640] Electronic modules 55.6
[55.031] Parking brake electrical system 55.7
[55.512] Cab controls 55.8
[55.023] Transmission position sensors and switches 55.9
[55.052] Central or middle Power Take-Off (PTO) control system 55.10
[55.610] Ground speed control 55.11
[55.DTC] FAULT CODES 55.12
Platform, cab, bodywork, and decals 90
[90.110] Operator platform less cab 90.1

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Mechanical transmission tractor external brake linkage components

Reference	Description	Quantity
1	Assembly, Brake rod	2
2	Shaft, brake pedal	1
3	O - ring, Diameter M24.7 x Width 3.5mm	2
4	Bushing	2
5	Bracket, Brake	1
6	Bolt, Hex M10 x 1.25 x 25mm	1
7	Spring, Diameter M2.3 x 22mm x Length 7mm	1
8	Ratchet, brake	1
9	Knob, Park brake	1
10	Bolt, Hex M10 x 1.25 x 35mm	1
11	Pedal, Brake Left hand	1
12	Pedal, Brake Right hand	1
13	Bumper, Rubber M8 x 1.25mm x 20mm	1
14	Spring, Diameter M2.6 x 18 x Length 115	1
15	Pin, spring Diameter M8 x Length 40mm Washer, O.D. M44 x I.D. 25mm x 4T	1
16	Washer, O.D. M44 x I.D. 25 x 20mm	1
17	Snap ring, M25	1
18	Spacer, OD M45 x ID 25mm x Length 74mm	1
19	Pin, O.D. M14 x I.D. 10mm x 26mm O.L.	4
20	Pin, split Diameter M25 x Length 20mm	4
21	Switch, proximity	1
22	Bolt, hex M5 x PO 0.8 x length 30mm	2
23	Nut, flange M5 x PO .8	2
24	Switch, neutral (Micro) **125 V** (**125 V**) AC / **15 A·h** (**15 A·h**)	1
25	Clamp, switch	1
26	Screw M4 x 0.7 x 30mm	1

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s157 F03 (P0193) - Rail Pressure Sensor signal high fault

Control Module: ECU

Context:
The Engine Control Unit (ECU) **A-009** monitors the fuel rail pressure sensor **B-007** signal circuit. If the ECU **A-009** determines that the voltage in the rail pressure sensor **B-007** signal circuit is higher than expected, this fault will occur. Because of this fault, a reduction in engine torque or engine stoppage may result.

Cause:
The ECU **A-009** has detected a value greater than **4.95 V**.

Possible failure modes:

1. Faulty rail pressure sensor **B-007** reference voltage, excessive.
2. Faulty rail pressure sensor **B-007**, internal failure.
3. Faulty rail pressure sensor **B-007** signal circuit, short to high source or open circuit condition.
4. Faulty ECU **A-009**, software.

Solution:

1. Verify the fault is present and active.

   Use the Electronic Service Tool (EST) to check the status of this fault.

   A. If the fault is present and active, continue with Step **2**.

   B. If the fault is no longer present or in an inactive state, the fault may be intermittent and not currently active. Continue with Step **6**.

2. Check for the following related faults:

   s1079 F11 (P0641) – ECU Internal 5V Supply 1 fault, **s1080 F11 (P0651) – ECU Internal 5V Supply 2 fault** or **s1080 F11 (P0697) – ECU Internal 5V Supply 2 auxillary fault**

   A. If these faults are active, resolve these faults. Then determine that fault, **s157 F03 (P0193) – Rail Pressure Sensor signal high fault** is also resolved.

   B. If those faults are not active, continue to Step **3**.

3. Check the rail pressure sensor **B-007** signal circuit for an open circuit condition.

   Disconnect connector **X-061** from the rail pressure sensor **B-007** and connector **X-051** from the ECU **A-009**.

   The key must be in the OFF position.

   Use a multimeter to perform the following continuity check:

From	To	Value
X-051 (Plug) pin 35	**X-061 (Plug) pin 1**	There should be continuity.

   A. If there is continuity, leave the connectors disconnected and continue to Step **4**.

   B. If there is no continuity, there is an open circuit condition in the rail pressure sensor **B-007** signal circuit, wire EN-335 or EH-335A. Locate and repair the open conductor.

4. Check the rail pressure sensor **B-007** signal circuit for a short to another wire condition.

   With the key switch **S-009** in the OFF position, use a multimeter to perform the following continuity check:

From	To	Value
X-051 (Plug) pin 35	**X-051 (Plug) pin 38**	There should be no continuity.
X-051 (Plug) pin 35	All other **X-051** pins	There should be no continuity.

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A. If there is continuity on all of the checks, check the ECU **A-009** for the appropriate software and re-flash, if necessary.

B. If there is no continuity on one or more of the checks, use the electrical schematics to locate and repair the failure.

12. 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 02 - ENGINE SIDE 1 (55.100.DP-C.20.E.02)
Wiring harnesses - Electrical schematic sheet 04 - ENGINE VEHICLE SIDE (55.100.DP-C.20.E.04)

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2

Item	Description
(1)	Alternator

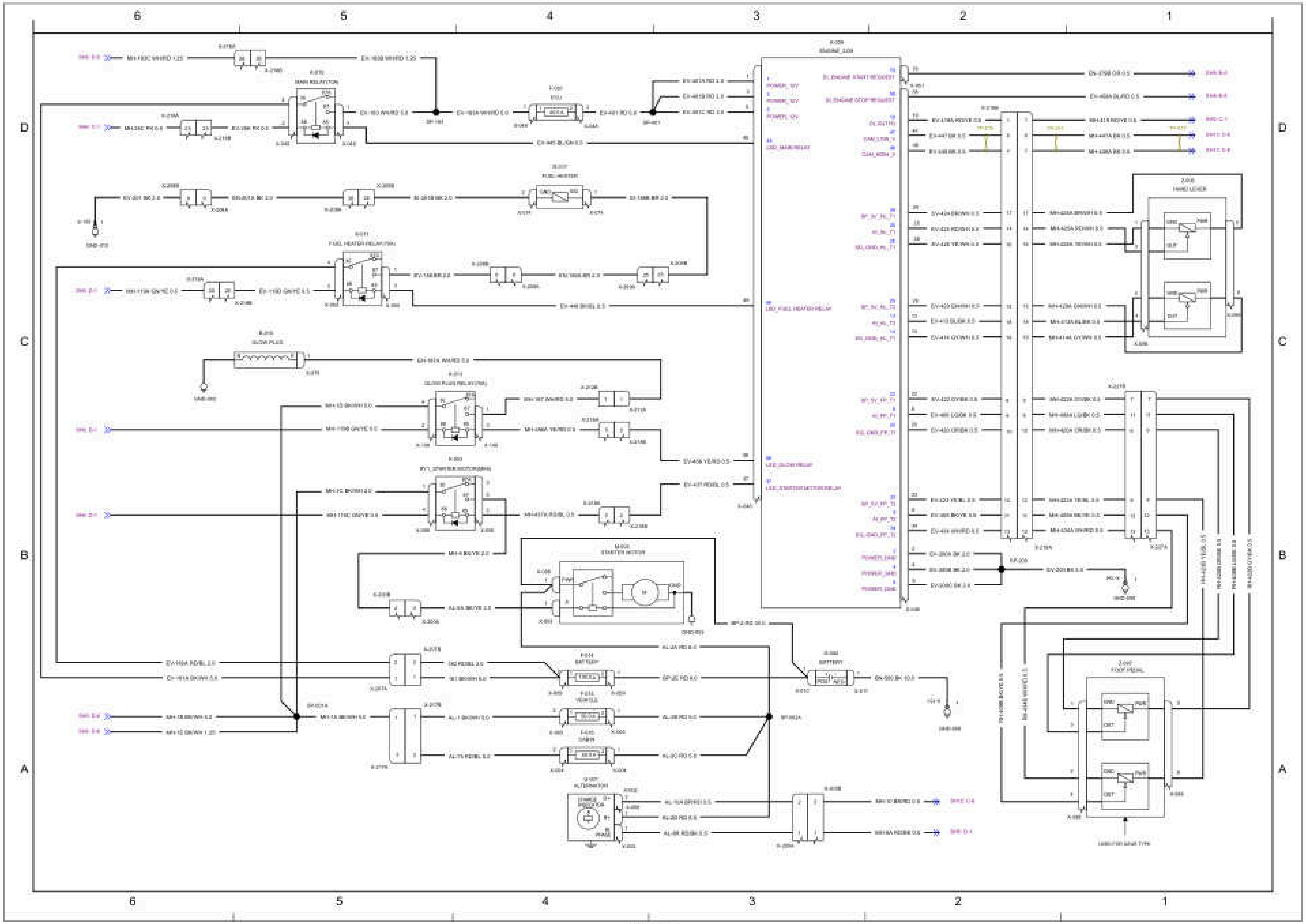
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NHPH17CT00264TA 2

Item	Description	Item	Description
(1)	Hydraulic Power Lift (HPL) Housing	(5)	Mid mount control valve
(2)	Hydraulic Power Lift (HPL) valve		Hydraulic suction filter
(3)	Steering/charge pump	(6)	Rear control valve
(4)	Main hydraulic pump		

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