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

FARMALL® 35C ROPS: PIN LSMF35CRxx0010001 to LSMF35CRPH0010029
FARMALL® 40C Cab: PIN LSMF40CCxx0010001 to LSMF40CCJH0010025

SERVICE MANUAL

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CASE IH AGRICULTURE

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Air conditioning - General specification - Ambient temperature versus manifold pressure gauge reading

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Ambient Temperature*	High Pressure Gauge Reading	High Pressure Gauge Reading
21 °C (70 °F)	786 – 924 kPa	114 – 134 psi
24 °C (75 °F)	869 – 1007 kPa	126 – 146 psi
26 °C (80 °F)	972 – 1110 kPa	141 – 161 psi
29.5 °C (85 °F)	1096 – 1234 kPa	159 – 179 psi
32 °C (90 °F)	1158 – 1296 kPa	168 – 188 psi
35 °C (95 °F)	1248 – 1386 kPa	181 – 201 psi
38 °C (100 °F)	1386 – 1524 kPa	201 – 221 psi
40.5 °C (105 °F)	1503 – 1641 kPa	218 – 238 psi
43 °C (110 °F)	1696 – 1834 kPa	246 – 266 psi
46 °C (115 °F)	1910 – 2048 kPa	277 – 297 psi
49 °C (120 °F)	2117 – 2255 kPa	307 – 327 psi

NOTE: **Test procedure based upon ambient temperature of **35 °C (95 °F)**. For proper high side gauge reading of other ambient temperatures, refer to the pressure-temperature chart:* ***Air conditioning - General specification - Temperature/pressure Chart (50.200)***

Air conditioning - General specification - Temperature/pressure Chart

Farmall® 40C Tier 4B (final), Cab [LSMF40CCxx0010001 - LSMF40CCJH0010025]

Ambient Temperature C (°F)	% Relative Humidity		Louver Temps* °C (°F)		Normal Low Side Pressure kPa (psi)		Normal High Side Pressure kPa (psi)	
	Low RH	High RH	Low RH	High RH	Low RH	High RH	Low RH	High RH
21 °C (70 °F)	19 – 21%	81 – 89%	4 °C (40 °F)	11 °C (51 °F)	62 – 62 kPa (9 – 9 psi)	83 – 97 kPa (12 – 14 psi)	779 – 862 kPa (113 – 125 psi)	807 – 889 kPa (117 – 129 psi)
27 °C (80 °F)	18 – 20%	69 – 77%	8 °C (46 °F)	14 °C (57 °F)	69 – 83 kPa (10 – 12 psi)	103 – 117 kPa (15 – 17 psi)	917 – 1014 kPa (133 – 147 psi)	993 – 1103 kPa (144 – 160 psi)
32 °C (90 °F)	16 – 18%	58 – 64%	12 °C (53 °F)	18 °C (64 °F)	90 – 103 kPa (13 – 15 psi)	131 – 145 kPa (19 – 21 psi)	1089 – 1200 kPa (158 – 174 psi)	1207 – 1331 kPa (175 – 193 psi)
38 °C (100 °F)	14 – 16%	48 – 53%	16 °C (60 °F)	21 °C (70 °F)	117 – 131 kPa (17 – 19 psi)	165 – 179 kPa (24 – 26 psi)	1276 – 1413 kPa (185 – 205 psi)	1427 – 1579 kPa (207 – 229 psi)
43 °C (110 °F)	12 – 14%	36 – 40%	19 °C (66 °F)	25 °C (77 °F)	152 – 165 kPa (22 – 24 psi)	200 – 228 kPa (29 – 33 psi)	1510 – 1669 kPa (219 – 242 psi)	1662 – 1841 kPa (241 – 267 psi)
49 °C (120 °F)	10 – 12%	26 – 28%	23 °C (73 °F)	28 °C (83 °F)	200 – 221 kPa (29 – 32 psi)	248 – 276 kPa (36 – 40 psi)	1779 – 1972 kPa (258 – 286 psi)	1910 – 2117 kPa (277 – 307 psi)

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Wiring harnesses - Electrical schematic sheet 12 - WORK LAMP, BEACON LAMP

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Type	Component	Connector / Link	Description
ECU	**A-003**	**X-023**	BEACON LAMP JUMPER
Lamp	**E-001**	**X-034**	RIGHT-HAND (RH) BEACON SOCKET
Lamp	**E-002**	**X-033**	LEFT-HAND (LH) BEACON SOCKET
Lamp	**E-003**	**X-025**	DOME LAMP
Lamp	**E-004**	**X-026**	REAR WORK LAMP OPTION (LEFT-HAND (LH))
Lamp	**E-005**	**X-027**	REAR WORK LAMP OPTION (RIGHT-HAND (RH))
Lamp	**E-006**	**X-028**	FRONT WORK LAMP OPTION (LEFT-HAND (LH))
Lamp	**E-007**	**X-029**	FRONT WORK LAMP OPTION (RIGHT-HAND (RH))
Power outlet	**J-001**	**X-122**	POWER OUTLET
Relay	**K-001**	**X-016**	WORK LAMP RELAY FRONT
Relay	**K-002**	**X-016**	WORK LAMP RELAY REAR
Switch	**S-003**	**X-013**	WORK LAMP SWITCH (FRONT)
Switch	**S-004**	**X-015**	WORK LAMP SWITCH (REAR)
Switch	**S-007**	**X-032**	BEACON LAMP SWITCH
Connector	X-013	**X-013**	WORK LAMP SWITCH (FRONT)
Connector	X-015	**X-015**	WORK LAMP SWITCH (REAR)
Connector	X-016	**X-016**	WORK LAMP RELAY PANEL
Connector	X-023	**X-023**	JUMPER
Connector	X-025	**X-025**	DOME LAMP
Connector	X-026	**X-026**	REAR WORK LAMP OPTION (LEFT-HAND (LH))
Connector	X-027	**X-027**	REAR WORK LAMP OPTION (RIGHT-HAND (RH))
Connector	X-028	**X-028**	FRONT WORK LAMP OPTION (LEFT-HAND (LH))
Connector	X-029	**X-029**	FRONT WORK LAMP OPTION (RIGHT-HAND (RH))
Connector	X-032	**X-032**	BEACON LAMP SWITCH
Connector	X-033	**X-033**	LEFT-HAND (LH) BEACON SOCKET
Connector	X-034	**X-034**	RIGHT-HAND (RH) BEACON SOCKET
Connector	X-122	**X-122**	POWER OUTLET
Connector	X-201A	**X-201A**	CAB UPPER HARNESS (CH) TO CAB LOWER HARNESS (CL)
Connector	X-201B	**X-201B**	CAB LOWER HARNESS (CL) TO CAB UPPER HARNESS (CH)
Connector	X-203A	**X-203A**	LEFT-HAND BEACON SOCKET HARNESS TO CAB UPPER HARNESS (CH)
Connector	X-203B	**X-203B**	CAB UPPER HARNESS (CH) TO LEFT-HAND BEACON SOCKET HARNESS
Connector	X-204A	**X-204A**	RIGHT-HAND BEACON SOCKET HARNESS TO CAB UPPER HARNESS (CH)
Connector	X-204B	**X-204B**	CAB UPPER HARNESS (CH) TO RIGHT-HAND BEACON SOCKET HARNESS
Sub-Assembly	**Z-002**	**X-016**	WORK LAMP RELAY PANEL

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B. If the continuity checks are not as expected, locate and repair the open or shorted wires.

4. Replace the knock sensor **A-010** .

   Use the EST to verify the status of **s731 F11 (P0325) – Accelerometer 1 fault**.

   A. If the fault is resolved, return the machine to service.

   B. If the fault is not resolved, check the ECU **A-009** for the appropriate software and re-flash, if necessary.

5. 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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2

Item	Description
(1)	Alternator

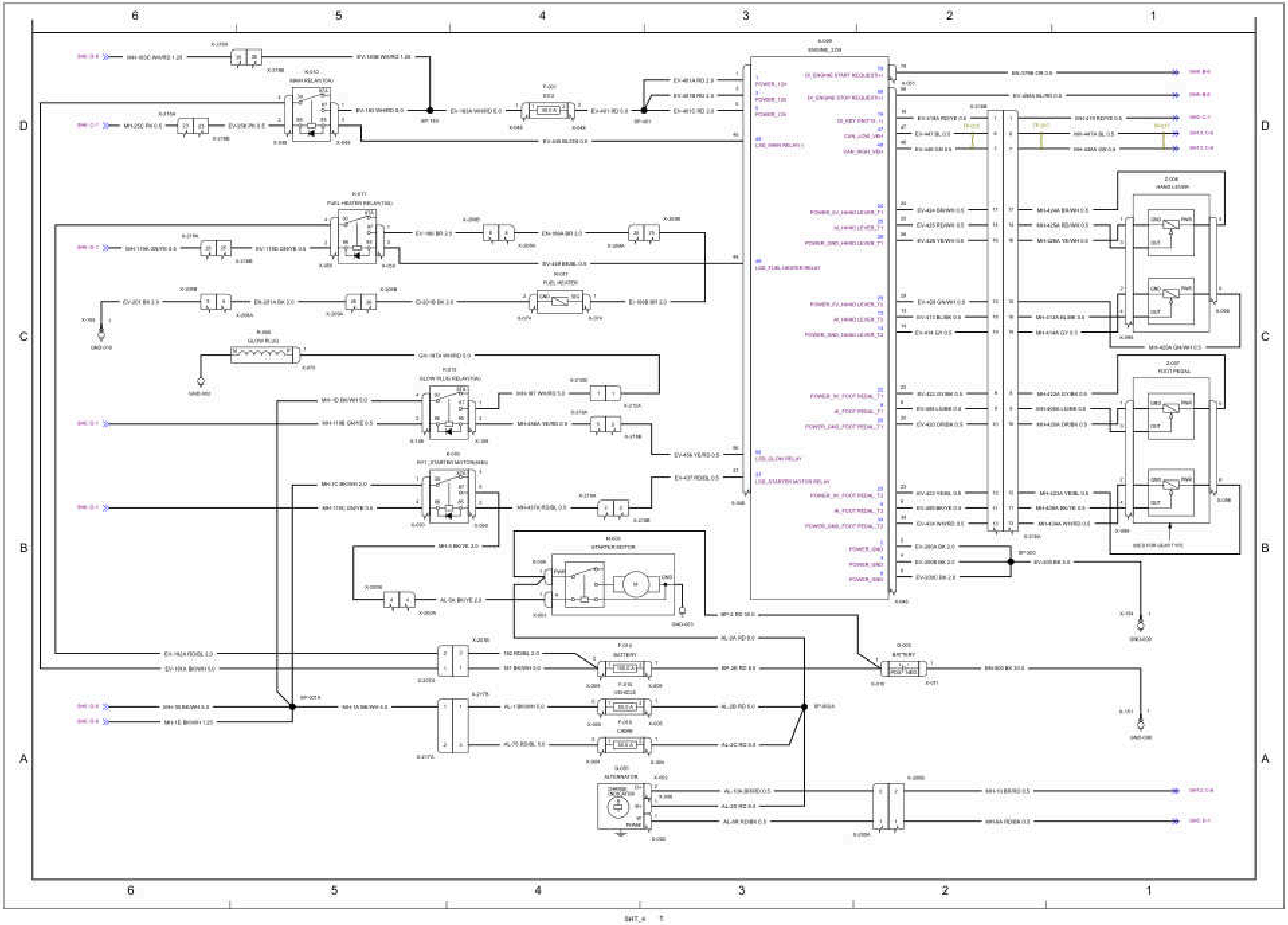
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NHPH17CT00264TA 2

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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