SERVICE MANUAL

T8010 / T8020 / T8030 / T8040 / T8050

Tractors

Print No. 84318454

NEW HOLLAND AGRICULTURE

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Grade 10.9 bolts, nuts and studs

Size	Nm	lb in/lb ft
4 mm	4 - 5 Nm	36 - 48 lb in
5 mm	9 - 11 Nm	84 - 96 lb in
6 mm	15 - 18 Nm	132 - 156 lb in
8 mm	37 - 43 Nm	324 - 384 lb in
10 mm	73 - 87 Nm	54 - 64 lb ft
12 mm	125 - 150 Nm	93 - 112 lb ft
14 mm	200 - 245 Nm	149 - 179 lb ft
16 mm	310 - 380 Nm	230 - 280 lb ft
20 mm	610 - 730 Nm	450 - 540 lb ft
24 mm	1050 - 1275 Nm	780 - 940 lb ft
30 mm	2000 - 2400 Nm	1470 - 1770 lb ft
36 mm	3500 - 4200 Nm	2580 - 3090 lb ft

Grade 12.9 bolts, nuts and studs

Size	Nm	lb in/lb ft
Typically the torque values specified for grade 10.9 hardware can be used satisfactorily on grade 12.9 hardware.		

Steel hydraulic fittings

37° flare fitting

Tube outside diameter/Hose inside diameter		Thread size	Nm	lb in/lb ft
inch	mm			
6.4 mm	1/4 in	7/16-20 in	8 - 16 Nm	72 - 144 lb in
7.9 mm	5/16 in	1/2-20 in	11 - 22 Nm	96 - 192 lb in
9.5 mm	3/8 in	9/16-18 in	14 - 34 Nm	120 - 300 lb in
12.7 mm	1/2 in	3/4-16 in	20 - 57 Nm	180 - 504 lb in
15.9 mm	5/6 in	7/8-14 in	34 - 79 Nm	300 - 696 lb in
19.0 mm	3/4 in	1-1/16-12 in	54 - 108 Nm	40 - 80 lb ft
22.2 mm	7/8 in	1-3/16-12 in	81 - 135 Nm	60 - 100 lb ft
25.4 mm	1 in	1-5/16-12 in	102 - 158 Nm	75 - 117 lb ft
31.8 mm	1-1/4 in	1-5/8-12 in	169 - 223 Nm	125 - 165 lb ft
38.1 mm	1-1/2 in	1-7/8-12 in	285 - 338 Nm	210 - 250 lb ft

Straight threads with O-ring

Tube outside diameter/Hose inside diameter		Thread size	Nm	lb in/lb ft
inch	mm			
6.4 mm	1/4 in	7/16-20 in	16 - 26 Nm	144 - 228 lb in
7.9 mm	5/16 in	1/2-20 in	22 - 34 Nm	192 - 300 lb in
9.5 mm	3/8 in	9/16-18 in	34 - 54 Nm	300 - 480 lb in
12.7 mm	1/2 in	3/4-16 in	57 - 91 Nm	540 - 804 lb in
15.9 mm	5/6 in	7/8-14 in	79 - 124 Nm	58 - 92 lb ft
19.0 mm	3/4 in	1-1/16-12 in	108 - 174 Nm	80 - 128 lb ft
22.2 mm	7/8 in	1-3/16-12 in	136 - 216 Nm	100 - 160 lb ft
25.4 mm	1 in	1-5/16-12 in	159 - 253 Nm	117 - 187 lb ft
31.8 mm	1-1/4 in	1-5/8-12 in	224 - 357 Nm	165 - 264 lb ft
38.1 mm	1-1/2 in	1-7/8-12 in	339 - 542 Nm	250 - 400 lb ft

Split flange mounting bolts

Size	Nm	lb in/lb ft
5/16-18 in	20 - 27 Nm	180 - 240 lb in
3/8-16 in	27 - 34 Nm	240 - 300 lb in
7/16-14 in	47 - 61 Nm	420 - 540 lb in
1/2-13 in	74 - 88 Nm	55 - 65 lb ft
5/8-11 in	190 - 203 Nm	140 - 150 lb ft

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ATC 129-High pressure switch cycling error (2 times in 1 minute)

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Control Module : Automatic temperature control

NOTE: *If fault codes ATC 125, ATC 126, ATC 127 or ATC 128 are active with this code, follow the troubleshooting for that code.*

Cause:
The ATC controller has detected a cycling error (2 times in 1 minute).

Possible failure modes:

1. Incorrect charge on system.
2. Wiring issue or bad switch.

Solution:

1. Visually inspect the wiring harness and all connectors between high pressure switch and ATC controller for damage.

   A. Damage to connectors or wiring found. Repair or replace harness. Clear all fault codes, and return unit to field operation.

   B. No damage to connectors or wiring found. Go to Step **2**.
2. Check charge pressure on the air conditioning system. See the repair manual air conditioning troubleshooting.

   A. Charge was not correct. Recover R134A. Make repairs as required. Evacuate and recharge the system. Clear all fault codes, and return unit to field operation.

   B. Charge was correct. Go to Step **3**.
3. Check switch continuity.

   Disconnect connector **71F** from connector **71M** at the high pressure switch. Measure resistance between pins A and B of connector **71M** at the switch. Expected reading is less than **1.0 Ω**.

   A. Expected reading found. Go to Step **4**.

   B. Expected reading not found. Replace high pressure switch. Clear all fault codes, and return unit to field operation.
4. Test for an open circuit between the ATC controller and the high pressure switch.

   Measure resistance between pin A of harness connector **71F** and pin Z of connector **139A** to the HVAC box, and between pin B of harness connector **71F** and pin B of connector **139A**. Expected reading is less than **1.0 Ω**.

   A. Expected reading found. Go to Step **5**.

   B. Expected reading not found. Locate and repair open circuit, or replace the harness. Clear all fault codes, and return unit to field operation.
5. Replace the ATC controller.

   Clear all fault codes. Test operation of the HVAC.

   A. Fault code re-displays. Reinstall the original controller. Submit a concern to ASIST.

   B. Fault code does not re-display. Write the fault code on the failed controller. Return unit to field operation.

Wiring harness - Electrical schematic frame 58 (A.30.A.88 - C.20.E.58)
Wiring harness - Electrical schematic frame 59 (A.30.A.88 - C.20.E.59)
Wiring harness - Electrical schematic frame 60 (A.30.A.88 - C.20.E.60)
Wiring harness - Electrical schematic frame 61 (A.30.A.88 - C.20.E.61)

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Wiring harness - Electrical schematic frame 49 (A.30.A.88 - C.20.E.49)
Wiring harness - Electrical schematic frame 51 (A.30.A.88 - C.20.E.51)
Wiring harness - Electrical schematic frame 52 (A.30.A.88 - C.20.E.52)
Wiring harness - Electrical schematic frame 53 (A.30.A.88 - C.20.E.53)

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Sensing system Temperature sensor - General specification - Cab sensor - Temperature versus resistance

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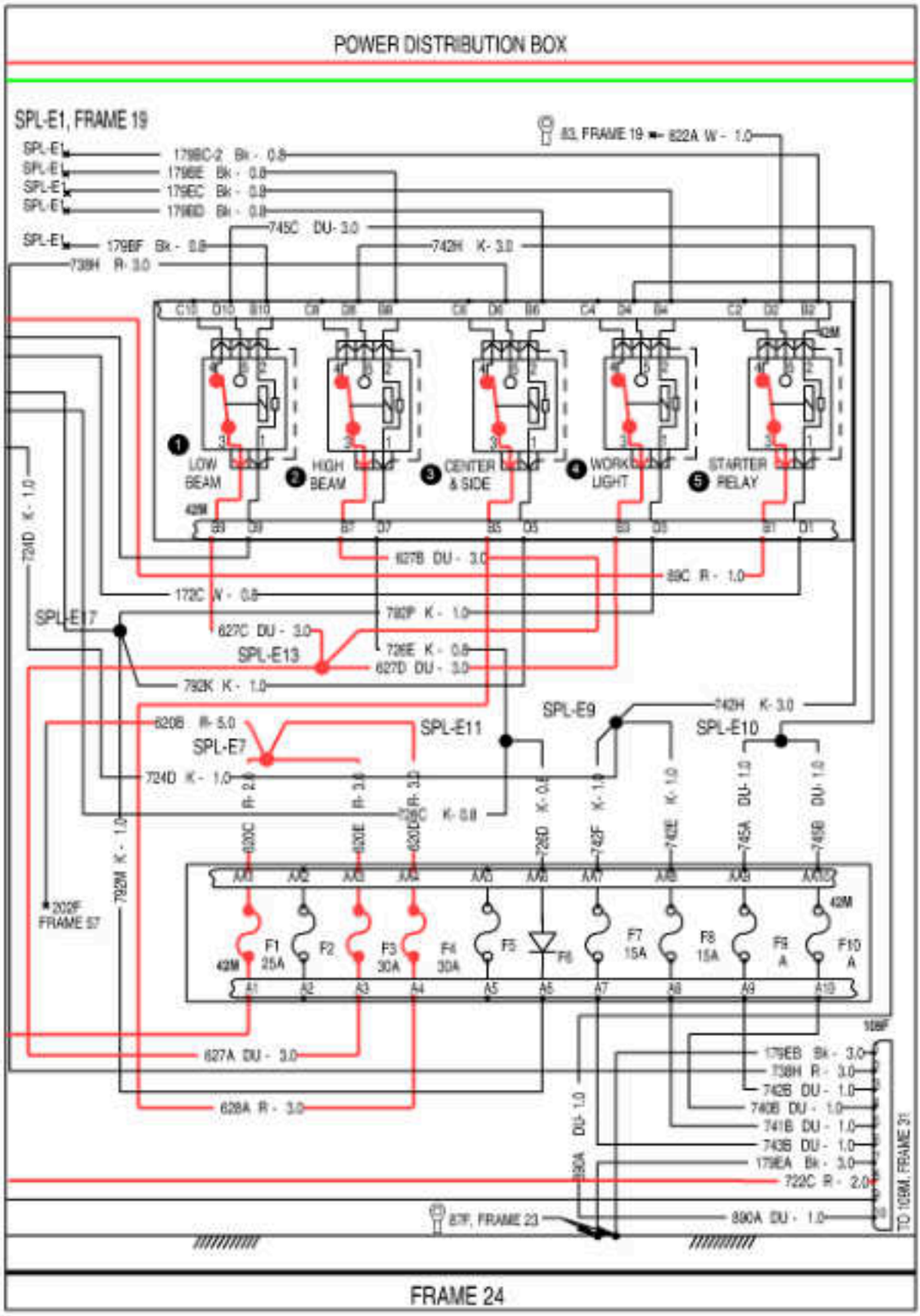
°C	°F	Ohm
-40 °C	-40 °F	100865 Ω
-35 °C	-31 °F	72437 Ω
-30 °C	-22 °F	52594 Ω
-25 °C	-13 °F	38583 Ω
-20 °C	-4 °F	28582 Ω
-15 °C	5 °F	21371 Ω
-10 °C	14 °F	16120 Ω
-5 °C	23 °F	12261 Ω
0 °C	32 °F	9399 Ω
5 °C	41 °F	7263 Ω
10 °C	50 °F	5658 Ω
15 °C	59 °F	4441 Ω
20 °C	68 °F	3511 Ω
25 °C	77 °F	2795 Ω
30 °C	86 °F	2240 Ω
35 °C	95 °F	1806 Ω
40 °C	104 °F	1465 Ω
45 °C	113 °F	1195 Ω
50 °C	122 °F	980.3 Ω
55 °C	131 °F	808.8 Ω
60 °C	140 °F	670.9 Ω
65 °C	149 °F	559.4 Ω
70 °C	158 °F	468.7 Ω
75 °C	167 °F	394.6 Ω
80 °C	176 °F	333.8 Ω
85 °C	185 °F	283.5 Ω
90 °C	194 °F	241.8 Ω
95 °C	203 °F	207.1 Ω
100 °C	212 °F	178.0 Ω
105 °C	221 °F	153.6 Ω
110 °C	230 °F	133.0 Ω
115 °C	239 °F	115.7 Ω
120 °C	248 °F	100.9 Ω
125 °C	257 °F	88.32 Ω
130 °C	266 °F	77.54 Ω
135 °C	275 °F	68.29 Ω
140 °C	284 °F	60.32 Ω
145 °C	293 °F	53.43 Ω
150 °C	302 °F	47.46 Ω

Sensing system Evaporator temperature sensor - General specification - Temperature versus resistance

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Temperature		Resistance	Temperature		Resistance
32 °F	0 °C	66.0 k Ω	56 °F	13.3 °C	34.10 k Ω
33 °F	0.6 °C	64.14 k Ω	57 °F	13.9 °C	33.22 k Ω
34 °F	1.1 °C	62.33 k Ω	58 °F	14.4 °C	32.36 k Ω
35 °F	1.7 °C	60.58 k Ω	59 °F	15 °C	31.52 k Ω
36 °F	2.2 °C	58.89 k Ω	60 °F	15.6 °C	30.71 k Ω
37 °F	2.8 °C	57.25 k Ω	61 °F	16.1 °C	29.93 k Ω

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