SERVICE MANUAL

E265C EVO
Crawler Excavator

Part number 48034217
English
June 2016

NEW HOLLAND CONSTRUCTION

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Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.102] Pan and covers 10.2

[10.106] Valve drive and gears 10.3

[10.101] Cylinder heads 10.4

[10.105] Connecting rods and pistons 10.5

[10.103] Crankshaft and flywheel 10.6

[10.216] Fuel tanks 10.7

[10.206] Fuel filters 10.8

[10.218] Fuel injection system 10.9

[10.202] Air cleaners and lines 10.10

[10.250] Turbocharger and lines 10.11

[10.254] Intake and exhaust manifolds and muffler 10.12

[10.501] Exhaust Gas Recirculation (EGR) exhaust treatment 10.13

[10.400] Engine cooling system 10.14

[10.414] Fan and drive 10.15

[10.310] Aftercooler 10.16

[10.304] Engine lubrication system 10.17

[10.408] Oil cooler and lines 10.18

Hydraulic systems 35

[35.000] Hydraulic systems 35.1

[35.300] Reservoir, cooler, and filters 35.2

[35.104] Fixed displacement pump 35.3

[35.106] Variable displacement pump 35.4

[35.102] Pump control valves 35.5

[35.359] Main control valve 35.6

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[35.357] Pilot system 35.7
[35.355] Hydraulic hand control 35.8
[35.356] Hydraulic foot control 35.9
[35.352] Hydraulic swing system 35.10
[35.353] Hydraulic travel system 35.11
[35.354] Hydraulic central joint 35.12
[35.736] Boom hydraulic system 35.13
[35.737] Dipper hydraulic system 35.14
[35.738] Excavator and backhoe bucket hydraulic system 35.15
[35.360] Hammer and rotating bucket hydraulic system 35.16

Frames and ballasting 39

[39.140] Ballasts and supports 39.1

Tracks and track suspension 48

[48.130] Track frame and driving wheels 48.1
[48.100] Tracks 48.2
[48.134] Track tension units 48.3
[48.138] Track rollers 48.4

Cab climate control 50

[50.100] Heating 50.1
[50.200] Air conditioning 50.2

Electrical systems 55

[55.000] Electrical system 55.1
[55.100] Harnesses and connectors 55.2
[55.525] Cab engine controls 55.3
[55.015] Engine control system 55.4
[55.201] Engine starting system 55.5
[55.301] Alternator 55.6
[55.302] Battery 55.7

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[55.202] Cold start aid 55.8
[55.010] Fuel injection system 55.9
[55.014] Engine intake and exhaust system 55.10
[55.989] Exhaust Gas Recirculation (EGR) electrical system 55.11
[55.012] Engine cooling system 55.12
[55.013] Engine oil system 55.13
[55.640] Electronic modules 55.14
[55.512] Cab controls 55.15
[55.036] Hydraulic system control 55.16
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls 55.17
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system 55.18
[55.416] Swing control system 55.19
[55.417] Travel control system 55.20
[55.530] Camera 55.21
[55.518] Wiper and washer system 55.22
[55.404] External lighting 55.23
[55.514] Cab lighting 55.24
[55.408] Warning indicators, alarms, and instruments 55.25
[55.992] Anti-theft system 55.26
[55.DTC] FAULT CODES 55.27

Booms, dippers, and buckets 84

[84.910] Boom 84.1
[84.912] Dipper arm 84.2
[84.100] Bucket 84.3

Platform, cab, bodywork, and decals 90

[90.150] Cab 90.1
[90.156] Cab windshield and windows 90.2
[90.120] Mechanically-adjusted operator seat 90.3

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Cylinder head assembly installation

1. Apply the liquid gasket to the cylinder block.
   - Use ThreeBond 1207B.

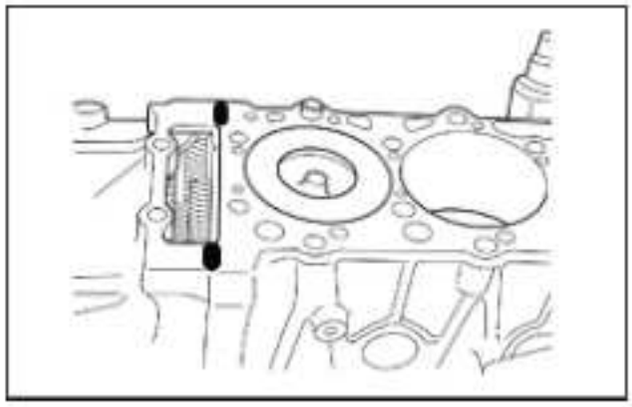
NOTICE: *Clean the aligning surface of the cylinder head and cylinder block before installing the cylinder head assembly.*
Be careful not to damage the cylinder head and cylinder block while cleaning.
Bead width: **3.0 mm (0.1181 in)**
After applying liquid gasket, install the cylinder head within **5 min**.

2. Install the cylinder head gasket to the cylinder block.

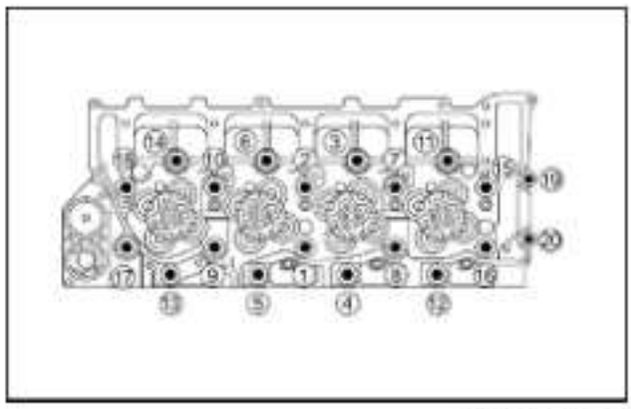
NOTICE: *Use a new cylinder head gasket.*

3. Install the cylinder head assembly to the cylinder block.
   - Tightening order of the head bolts
   - 1 - 18 in the diagram indicate the **M14** bolts.
   - 19 and 20 in the diagram indicate the **M10** bolts.

NOTICE: *Be careful not to damage the cylinder head gasket.*

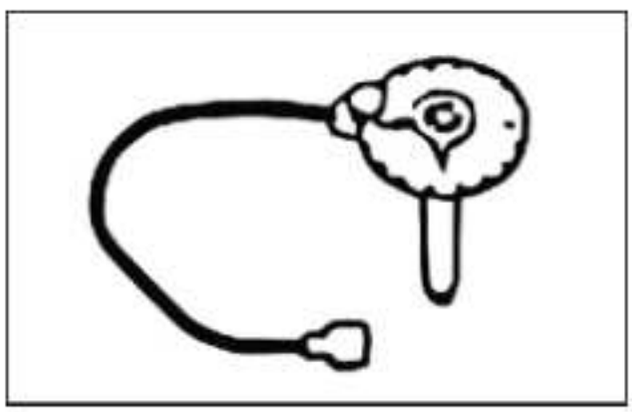


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8

4. Prepare the head bolt.
   - Apply molybdenum disulfide grease to the seat surface and threaded portion of the **M14** head bolts.
   - Apply engine oil to the seat surface and threaded portion of the **M10** head bolts.
5. Tighten the head bolt using the torque wrench.
   Tightening torque: **157 N·m (116 lb ft)**
6. Tighten the head bolt using the torque wrench.
   Tightening torque: **165 N·m (122 lb ft)**
   Special tool: angle gauge (Refer to **Cylinder heads - Special tools (10.101)**)
7. Tighten the head bolt using the special tool.
   Tightening angle: **55 ° M14** bolt
8. Tighten the head bolt using the torque wrench.
   Tightening torque: **38 N·m (28 lb ft) M10** bolt
9. Tighten the head bolt using the torque wrench.
   Tightening torque: **167 N·m (123 lb ft)** check the tightening **M14** bolt



9

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Wiring harnesses - Electrical schematic sheet 01 - Starting circuit

Type	Components	Connectors/link	Description
Battery	G1		Battery
Battery	G1A		Battery
Alternator	G2		Alternator
Relay	K2		Relay glow
Relay	K7		Relay battery
Relay	K69		Relay starter
Motor	M1		Starter motor
Plug	R1		Glow plug
Switch	S94		Battery switch
Connector	CN.D11	**CN.D11**	Glow plug
Connector	CN.D12	**CN.D12**	Starter motor
Connector	CN.D13	**CN.D13**	Alternator
Connector	CN.D14	**CN.D14**	Alternator
Connector	CN.D15	**CN.D15**	Alternator
Connector	CN.D16	**CN.D16**	Ground 11
Connector	CN.D17	**CN.D17**	Relay battery
Connector	CN.D18	**CN.D18**	Relay battery
Connector	CN.D19	**CN.D19**	Relay battery
Connector	CN.D20	**CN.D20**	Relay battery
Connector	CN.D21	**CN.D21**	Relay battery
Connector	CN.D22	**CN.D22**	Relay battery
Connector	CN.D27	**CN.D27**	Relay starter
Connector	CN.D28	**CN.D28**	Relay starter
Connector	CN.D29	**CN.D29**	Relay glow
Connector	CN.D30	**CN.D30**	Relay glow
Connector	CN.D31	**CN.D31**	Relay glow
Connector	CN.D82	**CN.D82**	PN diode
Connector	CN.D90	**CN.D90**	Starter motor
Connector	CN.D91	**CN.D91**	Battery switch
Connector	CN.D92	–	Battery switch
Connector	CN.D93	**CN.D93**	Battery
Connector	CN.D94	–	Battery
Connector	CN.D95	**CN.D95**	Battery
Connector	CN.D96	–	Battery
Connector	CN.D97	**CN.D97**	Relay battery
Connector	CN.D98	**CN.D98**	Relay battery

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P0340-Camshaft position sensor circuit

Control Module : ECM

Solution:

1. Check the trouble code setting conditions before you proceed with the diagnostics code P0340.

   Diagnostic trouble codes P0016, P0335, P0336 and P0651 are not set.
   The CKP sensor signal pulse is detected.
   While the engine is running, the ECM detects that the CMP sensor signal pulse is not generated.

2. Check and diagnose the below fault codes before you proceed with the diagnostics code P0340.

   Diagnostic trouble code P0601
   Diagnostic trouble code P0651

3. Turn OFF the starter switch.

   Disconnect the harness connector **CN.E12** from the camshaft position sensor.

   Turn ON the starter switch.

   Measure the voltage between the **5 V** power supply circuit and normal GND of t he camshaft position sensor harness connector **CN.E12**.

   If the voltage is less than or equal to **4.5 V**, inspect to see if there is an open circuit or high resistance with the **5 V** power supply circuit between the ECM and the camshaft position sensor.

   NOTE:
   *• The CMP sensor shares use of the **5 V** power supply circuit with other sensors.*
   • A diagnostic trouble code may be detected for the sensors sharing use of this circuit.

   A. If a problem is found, repair the **5 V** power supply circuit.

   B. If there are no problems, proceed to Step **4**.

4. Measure the voltage between the signal circuit and normal GND of the camshaft position sensor harness connector **CN.E12**.

   If the voltage is more than or equal to **5.5 V**, inspect to see if there is a short circuit to the battery or ignition power supply with the signal circuit between the ECM and the camshaft position sensor.

   A. If a problem is found, repair the signal circuit.

   B. If there are no problems, proceed to Step **5**.

5. Measure the voltage between the signal circuit of the camshaft position sensor harness connector **CN.E12** and a normal GND again.

   If the voltage is less than or equal to **4.5 V**, inspect the signal circuit between the ECM and the camshaft position sensor.

   Make sure that there is no open circuit or high resistance.

   Make sure that there is no short to GND.

   A. If a problem is found, repair the signal circuit.

   B. If there are no problems, proceed to Step **6**.

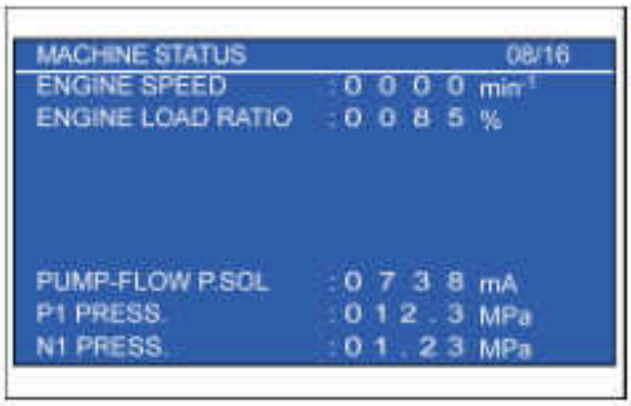
6. Connect the test light between the signal circuit and normal GND of the camshaft position sensor harness connector **CN.E12**.

   Measure the voltage between the probe of the test light and a normal GND.

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8. Engine

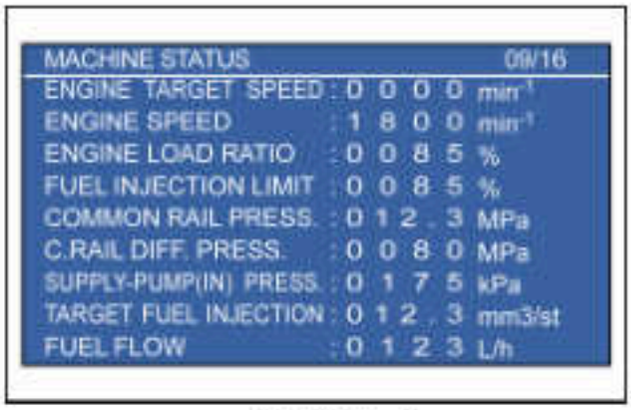
ENGINE SPEED	min^{-1} (rpm)	Engine speed
ENGINE LOAD RATIO	%	Engine load ratio
PUMP-FLOW P.SOL.	mA	Actual milli-amp for flow proportional valve
P1 PRESS.	MPa (psi)	P1 pressure
N1 PRESS.	MPa (psi)	N1 pressure



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9. Engine

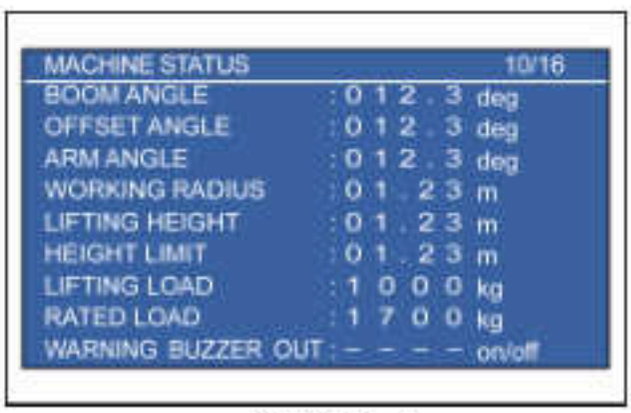
ENGINE TARGET SPEED	min^{-1} (rpm)	Engine target speed
ENGINE SPEED	min^{-1} (rpm)	Engine speed
ENGINE LOAD RATIO	%	Engine load ratio
FUEL INJECTION LIMIT	%	Fuel injection quantity limit level
COMMON RAIL PRESS.	MPa (psi)	Common rail pressure
C. RAIL DIFF. PRESS.	MPa (psi)	Common rail differential pressure
SUPPLY-PUMP (IN) PRESS.	kPa (psi)	Supply pump inlet pressure
TARGET FUEL INJECTION	mm^3 /st	Target fuel injection quantity
FUEL FLOW	L/h	Fuel flow



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10. Work radius and height

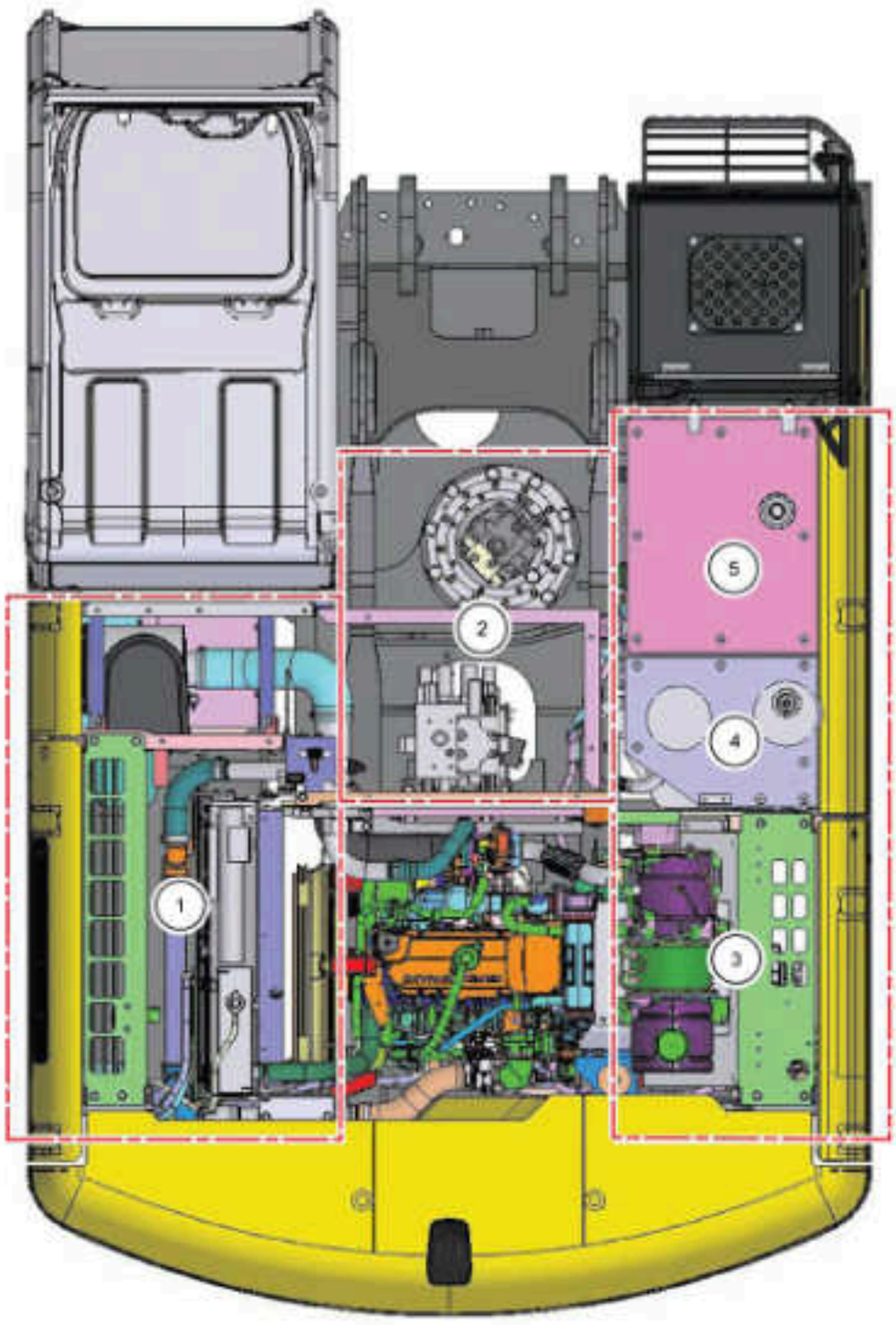
BOOM ANGLE	deg	Boom angle
OFFSET ANGLE	deg	Offset angle
ARM ANGLE	deg	Arm angle
WORKING RADIUS	m (ft.)	Work radius
LIFTING HEIGHT	m (ft.)	Hanging work height
HEIGHT LIMIT	m (ft.)	Hanging height limit
LIFTING LOAD	kg (lb)	Actual load
RATED LOAD	kg (lb)	Rated load
WARNING BUZZER OUT	on/off	Warning buzzer output



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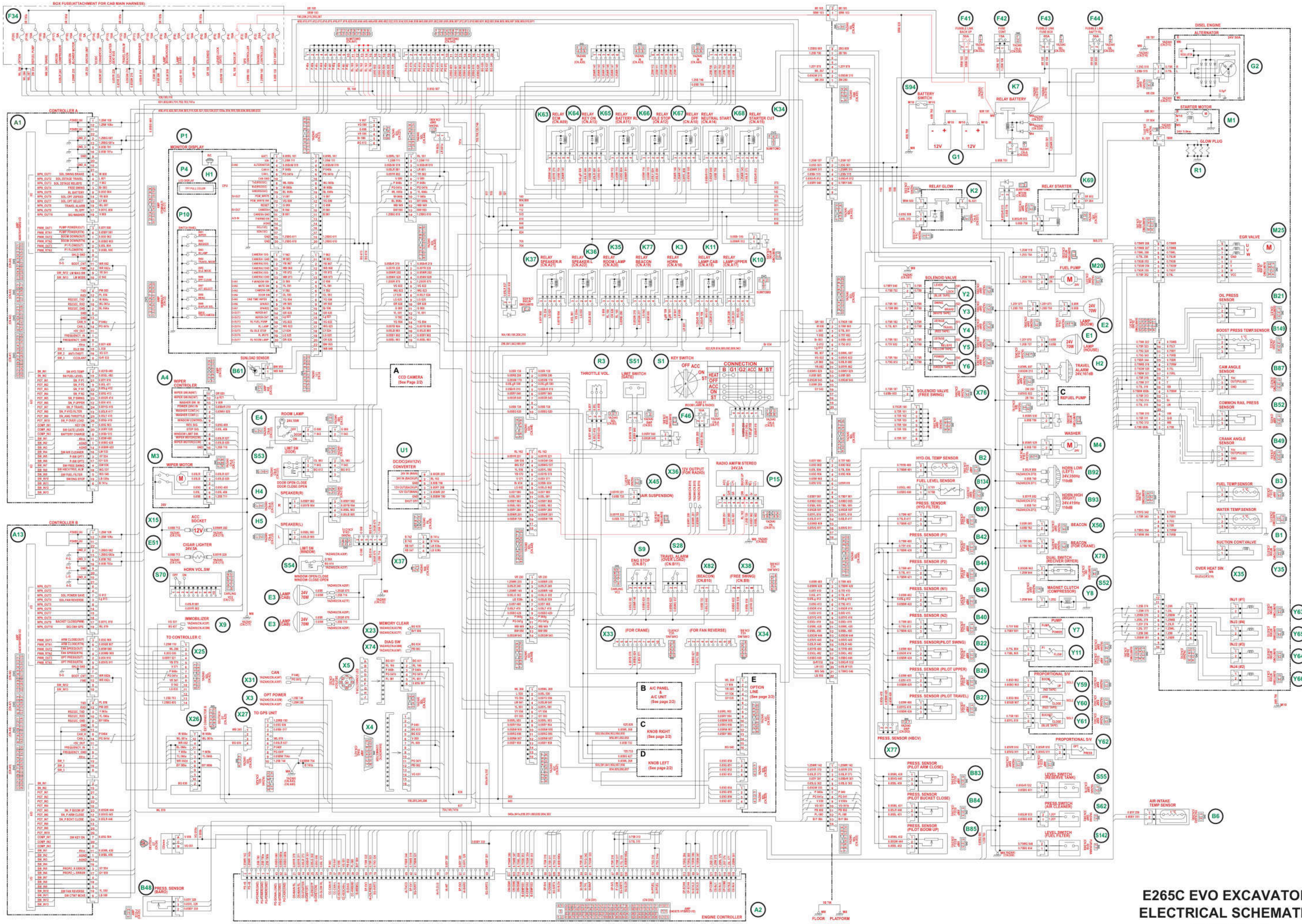
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Hydraulic systems - Overview



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