GENERAL SPECIFICATIONS

DX490LC-5

Shipping Weight	Variable Track (Wide) - 48,915 kg (107,839 lb) Variable Track (Standard) - 49,135 kg (108,324 lb) Fixed Track - 47,655 kg (105,061 lb)	
	Includes 10% fuel, 7,100 mm (23' 4") boom, 3,350 mm (11' 2") arm, 1,682 mm (5' 6") backhoe bucket and standard shoes	
Operating Weight	Add weight of full fuel tank and operator.	
Shipping Weights With Optional Track Shoes	Add 1,000 kg (2,204 lb) for 750 mm (30") shoes	
	Add 1,300 kg (2,866 lb) for 800 mm (32") shoes	
	Add 1,800 kg (3,968 lb) for 900 mm (36") shoes	
Major Component Weights	7,100 mm (23' 4") Boom 3,845 kg (8,477 lb)	
	6,300 mm (20' 8") Boom 3,540 kg (7,804 lb)	
	2,900 mm (9' 6") Arm 1,640 kg (3,616 lb)	
	3,350 mm (11' 0") Arm 1,760 kg (3,880 lb)	
	3,980 mm (13' 1") Arm 1,895 kg (4,178 lb)	
	Boom Cylinders 425 kg (937 lb) each	
	Arm Cylinder 625 kg (1,378 lb)	
	Bucket Cylinder 375 kg (827 lb)	
	Counterweight 8,500 kg (18,700 lb), 9,200 kg (20,283 lb)	
	Upper Turntable 10,930 kg (24,097 lb)	
	Lower - below Swing Bearing 19,335 kg (42,626 lb)	
Digging Forces (At Power Boost, ISO)		
Bucket Cylinder	302 KN or 30,800 kg (68,000 lb) with Standard Front + GP Bucket	
Arm Cylinder	223 KN or 22,700 kg (50,050 lb) with 3,350 mm (11' 0") standard arm	
Fuel Tank Capacity	685 L (181 U.S. gal)	
Hydraulic System Capacity	500 L (132 U.S. gal)	
Hydraulic Reservoir Capacity	392 L (103.5 U.S. gal)	
Bucket Heaped Capacity Range	SAE 1.71 ~ 3.6 m^3 (2.24 ~ 4.71 yd^3)	
	NOTE: Refer to the Load Weight, Bucket and Arm Length Compatibility Table for information on which bucket sizes are approved with which arm length and workload material weights.	
Shoe Type	Triple Grouser	Double Grouser
Shoe Width and Optional Sizes	600 mm (24") - standard	600 mm (24") - optional
	750 mm (30") - optional	
	800 mm (32") - optional	
	900 mm (36") - optional	
Ground Pressure Ratings:		
Standard 600 mm (24") shoe	0.86 kg/cm^2 (12.2 psi)	
Optional 750 mm (30") shoe	0.70 kg/cm^2 (10.0 psi)	
Optional 800 mm (32") shoe	0.66 kg/cm^2 (9.4 psi)	
Optional 900 mm (36") shoe	0.59 kg/cm^2 (8.4 psi)	
Optional 600 mm (24") double grouser shoe	0.86 kg/cm^2 (12.2 psi)	

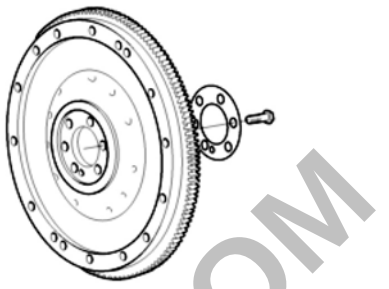
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Crank Mechanism

Flywheel

- M18 flange screw: 180 Nm + 120°

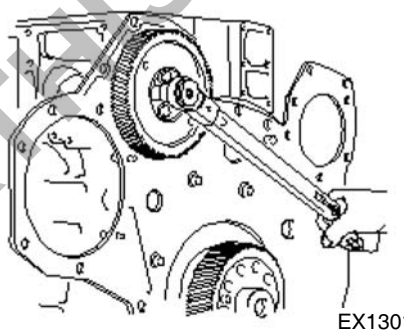

EX1301829

Torsion Damper

- Torsion damper hub: 90 Nm + 30°

Timing Gear

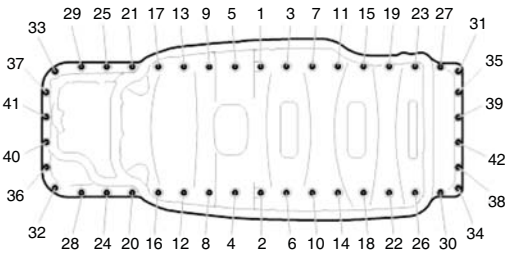
- Intermediate gear: 50 Nm + 60°
- Camshaft gear: 20 Nm + 40°


EX1301830

Lubrication System

Ladder Frame

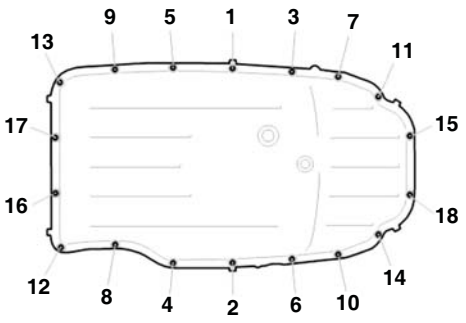
- Ladder frame to cylinder block, 8.8 screw: 26 Nm
- Ladder frame to cylinder block, 10.9 screw: 32 Nm
- Ladder frame against cylinder block, 8.8 screw with spacer: 26 Nm



EX1301831

Oil sump

- Cylinder block, 8.8 screw: 26 Nm
- Cylinder block, 10.9 screw: 32 Nm
- Against cylinder block, 8.8 screw with spacer: 26 Nm



EX1301832

Oil Sump, Plastic

- Oil sump, spring screw: 20 Nm

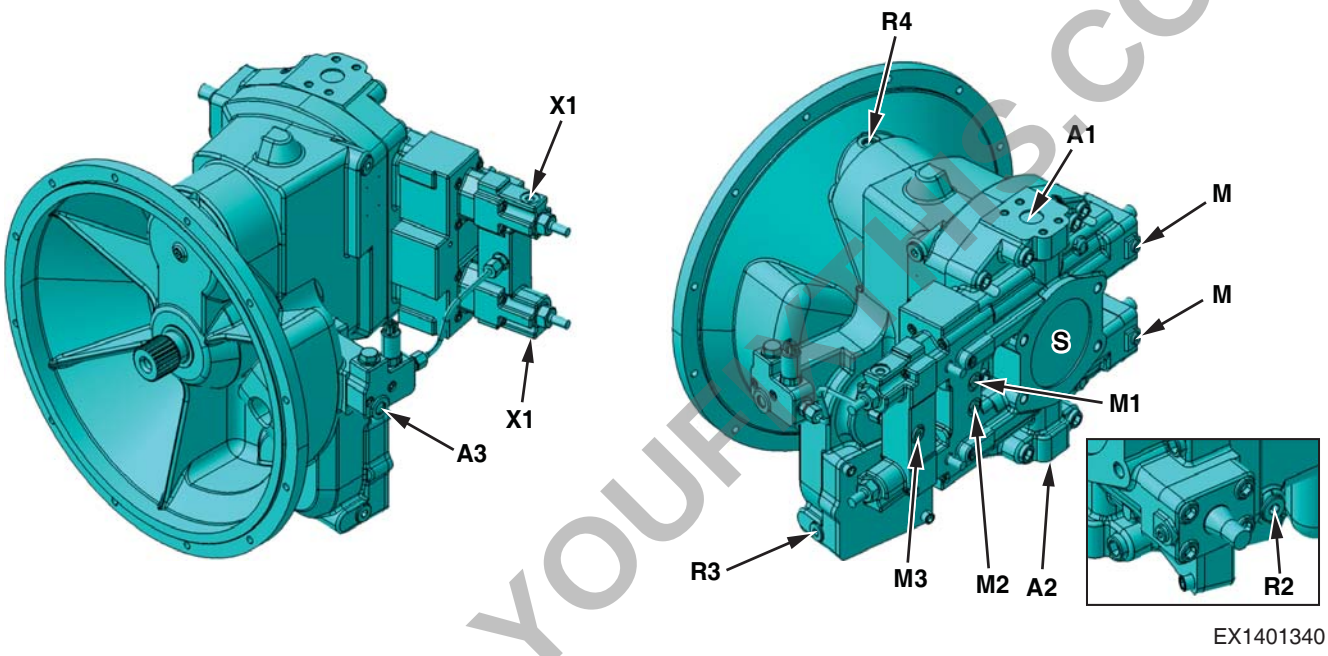
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Overview

This pump is a pressure control type which has an axial piston variable double pump structure equipped with two axial piston rotary groups in a joint shaft design for hydraulic drive. It consists of the EPPR valve to control the pump's pressure, regulator to control the swivel angle of the pump, pilot sensor to convert the pump displacement flow into an electric signal, gear pump for pilot pressure, PTO for an optional pump, and pump cover to be engaged with the engine to fix the pump.

Port



EX1401340

Figure 3

Port	Description	Size
S	Suction Port	5"
A1	Piston Pump Delivery Port	SAE 1 1/4", D31.8
A2	Piston Pump Delivery Port	SAE 1 1/4", D31.8
A3	Gear Pump Delivery Port (39 bar (40 kg/cm^2))	M18 x 1.5
X1	Control Pressure Ports for Negative Control (ps1 and ps2)	M14 x 1.5
M	Measurement Port	M12 x 1.5
M1	Measurement Port A1	9/16"-16UN-2B
M2	Measurement Port A2	9/16"-16UN-2B
M3	Measurement Port for Power Override	M14 x 1.5
R1	Air Bleed Port	M22 x 1.5
R2	Drain port	M22 x 1.5
R3	Air Bleed Port	M22 x 1.5
R4	Flushing port	3/4-16UNF-2B

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4. The increased clearance recommended for muddy, sandy or snowy ground conditions is between distance "C" on below table.

Terrain Type	Distance "A"
Normal "B"	380 - 410 mm (14.96 - 16.14 in)
Muddy, Sandy or Snowy "C"	410 - 460 mm (16.14 - 18.11 in)

WARNING

AVOID DEATH OR SERIOUS INJURY

The track adjusting mechanism is under very high-pressure. NEVER release grease pressure too fast. The track tension grease valve should never be loosened more than one (1) complete turn from the fully tightened down position. Bleed off grease pressure slowly. Keep your body away from the valve always. Always wear eye and face protection when adjusting track tension.

5. Track tension adjustments are made through the grease fitting (1, Figure 3) in the middle of each side frame. Adding grease increases the length of an adjustment cylinder (2). Extending the adjustment cylinder, increases the pressure on the tension spring pushing the track idler wheel outward.

6. If there is not enough slack or clearance in the tracks and the adjustment is too tight, the idler wheel and adjusting cylinder can be retracted by bleeding off grease through hole in adjustment cylinder (2, Figure 3).

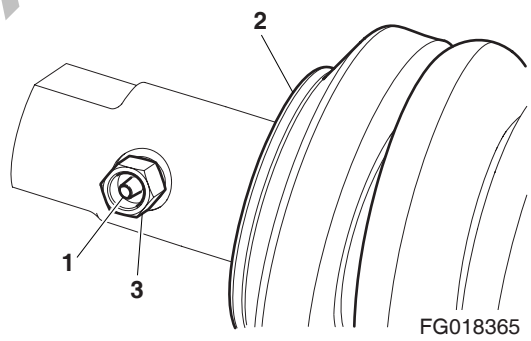


Figure 3

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Failure Code at Engine

GP (Graphic Panel): Code displays on Panel Gauge
SPN (Suspect Parameter Number), FMI(Failure Mode Identifier): Code displays on DMS
DTC (Diagnostic Trouble Code): Code displays on Scania Diagnostic tool
HEX: Hexadecimal, DEC: Decimal number

GP Display Code	SPN Code	SPN Name	Scania DTC Code		FMI	GP Display Description	Light Status	Remarks
			HEX	DEC				
E000051	51	Engine Throttle Position	2123	8483	3	Throttle position sensor 1, short circuit to battery.	Yellow	
			2122	8482	4	Throttle position sensor 1, short circuit to ground	Yellow	
			2121	8481	7	Adapted throttle position sensor voltage, at closed end position, is outside permitted range.	Yellow	
			1091	4241	8	Adapted throttle position sensor voltage, at open end position, is outside permitted range.	None	
			2138	8504	9	Throttle position sensor(s) bad performance, correlation error.	Yellow	
E000094	94	Engine Fuel Delivery Pressure	1100	4352	0	Accumulator pressure is too high	Yellow	
E000098	98	Engine Oil Level	250A	9482	2	Oil level sensor (L_Oil), faulty	None	
			250D	9485	3	Oil level sensor (L_Oil), short circuit to +24 V	None	
			250C	9484	4	Oil level sensor (L_Oil), short circuit to ground or open load	None	
			1715	5909	10	Oil level sensor stuck (T110)	None	
E000100	100	Engine Oil Pressure	0524	1316	1	Oil press sensor, pressure too low	Red	
			0521	1313	2	Oil press sensor (P_Oil), faulty	Yellow	
			0523	1315	3	Oil press sensor (P_Oil), short circuit to +24 V	Yellow	
			0522	1314	4	Oil press sensor (P_Oil), short circuit to ground or open load	Yellow	
			1522	5410	13	Oil press sensor (T5)	Yellow	
			1520	5408	16	Oil press sensor, press above normal	Yellow	
			134F	4943	17	Indicates low oil pressure, will optionally result in engine protective action	None	
			1521	5409	18	Oil press sensor, press below normal	Yellow	
E000102	102	Engine Intake Manifold #1 Pressure	0234	564	0	Boost pressure higher than reference	Yellow	
			0299	665	1	Boost pressure lower than reference	Yellow	
			0108	264	3	Boost press sensor (P_Boost), short circuit to +24 V	Yellow	
			0107	263	4	Boost press sensor (P_Boost), short circuit to ground or open load	Yellow	
			2262	8802	7	Turbocharger/supercharger boost pressure not detected - mechanical	Yellow	
			1081	4225	8	Boost pressure (T122) not plausible	None	
			107C	4220	9	Boost pressure (T122) not plausible	None	
			006C	108	10	Correlation error, map higher than intercooler pressure	None	
			006B	107	15	Correlation error, map higher than exp	None	
			1234	4660	16	Boost pressure higher than reference at part load	Yellow	
			1299	4761	18	Boost pressure lower than reference at part load	Yellow	
			1066	4198	20	Plausibility error, map too high	Yellow	
			1067	4199	21	Plausibility error, map too low	Yellow	
E000105	105	Engine Intake Manifold 1 Temperature	16EA	5866	0	Boost temperature sensor excessive high	Yellow	
			16EB	5867	1	Boost temperature sensor excessive low	Yellow	
			0096	150	2	Boost temp sensor (T_Boost), faulty	Yellow	
			0098	152	3	Boost temp sensor (T_Boost), short circuit to +24 V or open load	Yellow	
			0097	151	4	Boost temp sensor (T_Boost), short circuit to ground	Yellow	
			16EE	5870	9	boost temperature sensor above normal, plausibility test during low load and no EGR	None	
			16F3	5875	15	Boost temperature (T121) high	Yellow	
			16C3	5827	16	High boost temp.	Yellow	
			16EF	5871	17	Boost temperature sensor below normal, plausibility test during low load and no EGR	None	
			16F0	5872	20	Boost temperature sensor above normal, plausibility test when EGR active	None	
			16F1	5873	21	Boost temperature sensor below normal, plausibility test when EGR active	None	

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DX490LC-5 / DX530LC-5
Hydraulic Schematic

OPTION	APPLIED PART			
ONE-WAY ; JOYSTICK BOTTON (R.H)	(31) (32) (37)		TWO-PUMP	BREAKER FILTER
ONE/TWO-WAY ; JOYSTICK PPC (R.H)	(31) (33) (34) (37)	PEDAL (35) (36)	(16)	(38)
ROTATING ; JOYSTICK PPC (L.H)	(39) (40) (41) (42)			
QUICK COUPLER	(30)			
BOOM LOCK VALVE/ARM LOCK VALVE	(25) / (27)			
PATTERN CHANGE VALVE (ISO ↔ BHL)	(28)			
STRAIGHT TRAVEL PEDAL	(29)			
INTELLIGENT BOOM	(26)			

OPT

25. BOOM LOCK VALVE
26. BOOM FLOATING VALVE
27. ARM LOCK VALVE
28. PATTERN CHANGE VALVE
29. STRAIGHT TRAVEL PEDAL VALVE
30. QUICK COUPLER VALVE
31. ONE/TWO WAY FLOW C/V
32. ONE-WAY PPR VALVE
33. TWO-WAY PPR VALVE
34. TWO WAY EPPR VALVE
35. TWO WAY PEDAL VALVE
36. TWO WAY PEDAL SAFETY VALVE
37. STOP VALVE
38. HIGH PRESSURE RETURN FILTER
39. GEAR PUMP FOR ROTATING
40. POWER TAKE-OFF
41. ROTATING CONTROL VALVE
42. ROTATING EPPR VALVE

STD

01. MAIN PUMP
02. MAIN CONTROL VALVE
03. SWING DEVICE
04. TRAVEL DEVICE
05. CENTER JOINT
06. BOOM CYLINDER
07. ARM CYLINDER
08. BUCKET CYLINDER
09. FAN DRIVE PUMP
10. FAN DRIVE MOTOR
11. JOYSTICK VALVE(L.H)
12. JOYSTICK VALVE(R.H)
13. PEDAL VALVE
14. PILOT FILTER
15. ACCUMULATOR
16. SOLENOID PACKAGE VALVE
17. BY-PASS VALVE
18. BY-PASS VALVE
19. OIL COOLER
20. FULL FLOW FILTER
21. AIR BREATHER
22. HYDRAULIC TANK
23. JOINT PLATE WITH SHUTTLE V/V
24. PT BLOCK

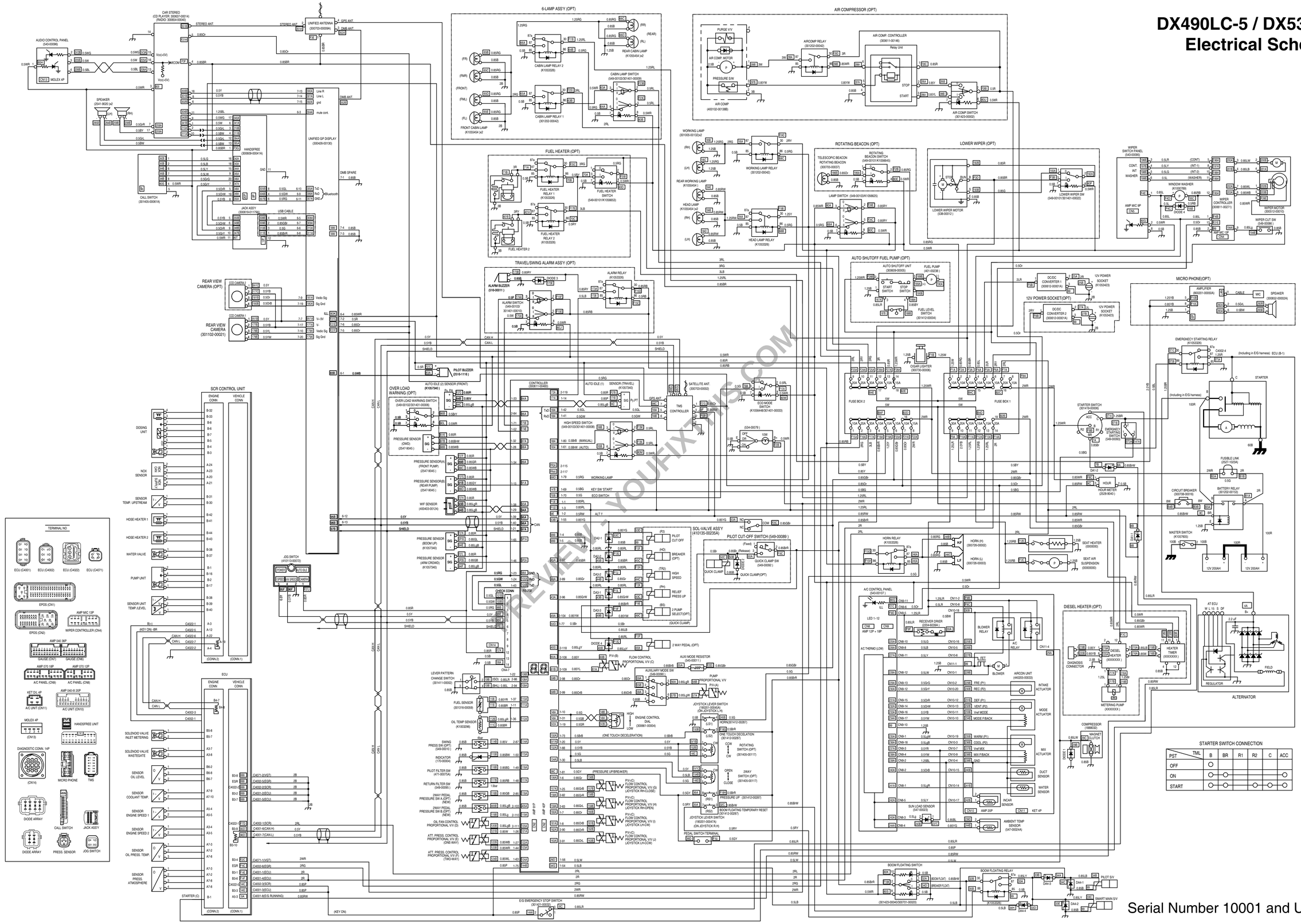
Serial Number 10001 and Up

EX1401611

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DX490LC-5 / DX530LC-5
Electrical Schematic



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