GENERAL SPECIFICATIONS

DX490LC-3

Shipping Weight	49,000 kg (108,027 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 1,280 kg (2,822 lb) for 800 mm (32") shoes
	Add 1,830 kg (4,034 lb) for 900 mm (36") shoes
Major Component Weights	7,100 mm (23' 4") Boom 3,756 kg (8,281 lb)
	6,300 mm (20' 8") Boom 3,512.5 kg (7,744 lb)
	2,900 mm (9' 6") Arm 1,570 kg (3,461 lb)
	3,350 mm (11' 0") Arm 1,731 kg (3,816 lb)
	3,980 mm (13' 1") Arm 1,854 kg (4,087 lb)
	Boom Cylinders 424 kg (935 lb) each
	Arm Cylinder 625 kg (1,378 lb)
	Bucket Cylinder 370.5 kg (817 lb)
	Counterweight 8,500 kg (18,700 lb), 9,200 kg (20,283 lb)
	Upper Turntable 10,600 kg (23,369 lb)
	Lower - below Swing Bearing 19,330 kg (42,615 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 liters (181 U.S. gal)
Hydraulic System Capacity	500 liters (132 U.S. gal)
Hydraulic Reservoir Capacity	265 liters (70 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
Shoe Width and Optional Sizes	600 mm (24") - standard
	750 mm (30") - optional
	800 mm (32") - optional
	900 mm (36") - optional
Ground Pressure Ratings:	
Standard 600 mm (24") shoe	0.85 kg/cm^2 (12.0 psi)
Optional 750 mm (30") shoe	0.69 kg/cm^2 (9.8 psi)
Optional 800 mm (32") shoe	0.65 kg/cm^2 (9.3 psi)
Optional 900 mm (36") shoe	0.58 kg/cm^2 (8.3 psi)

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

Terrain Type	Recommended 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).

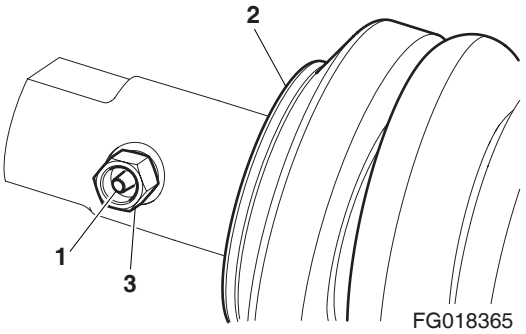


Figure 3

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DTC P0016 (Flash Code 16) Crankshaft Position - Camshaft Position Correlation

DTC P0016 Description of DTC

The CKP sensor generates a pulse when a tooth of the flywheel passes the sensor. The CMP sensor, in the same way as the CKP sensor, also generates a pulse when the sensing hole for signal detection, opened on the camshaft gear, passes the sensor. The ECM sets the DTC when the number of CKP sensor pulses and the number of CMP sensor pulses are normal, but their pulses are not synchronized with each other.

DTC P0016 Condition for Setting the DTC

DTCs P0335, P0336, P0340 and P0341 are not detected.

The starter switch is ON.

Signal pulses of the CKP sensor are detected.

Signal pulses of the CMP sensor are detected.

The ECM detects that CKP sensor signal pulses and CMP sensor signal pulses are not synchronized during engine is running.

DTC P0016 Action Taken When the DTC Sets

Failure is indicated in the monitor on the machine, or the diagnostic light is turned on.

NOTE: *Depending on the manufacturer of the machine, the failure indication may not be shown.*

DTC P0045 (Flash Code 33) Turbocharger Boost Control Solenoid Circuit

DTC P0045 Description of DTC

The opening angle of the variable nozzle on the turbocharger is controlled by the turbo control unit through operating the actuator responding to the signal received from the ECM based on the boost pressure. The turbo control unit is also detecting the opening angle of the variable nozzle with the position sensor built into the actuator. When the engine is free from load, the variable nozzle is opened and free from boost pressure. When the engine is under load, the actuator is controlled to close the variable nozzle. As a result the boost pressure increases. The ECM performs control that changes the boost pressure according to the load requirements for the engine. The ECM

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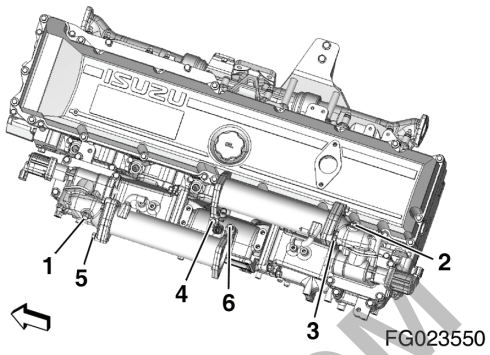
EGR Cooler Installation

1. Temporarily tighten the EGR cooler duct D to the EGR valve A.
2. Temporarily tighten the EGR cooler duct B to the EGR valve B.
3. Temporarily tighten the EGR cooler B to the EGR cooler duct B.
4. Temporarily tighten the EGR cooler D to the EGR cooler duct D.
   - Tightening torque: 5 Nm (0.5 kg•m / 44 lb ft)

   NOTE: *Refer to the diagram to temporarily tighten the bolts.*
5. Temporarily tighten the EGR cooler A to the EGR cooler B.
6. Temporarily tighten the EGR cooler bracket to the EGR cooler C.
7. Temporarily tighten the EGR cooler C to the EGR cooler D.
8. Temporarily tighten the EGR cooler bracket to the EGR cooler A.

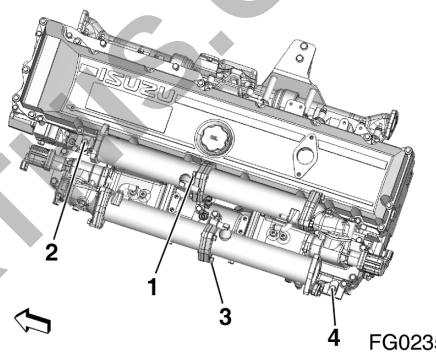
   NOTE: *Refer to the diagram to temporarily tighten the bolts.*
   - Temporary tightening torque: 5 Nm (0.5 kg•m / 44 lb ft)
9. Securely tighten the bolt to the EGR cooler.
10. Securely tighten the EGR cooler A to the EGR cooler B.
    - Tightening torque: 50 Nm (5.1 kg•m / 37 lb ft)
11. Securely tighten the EGR cooler C to the EGR cooler D.
    - Tightening torque: 50 Nm (5.1 kg•m / 37 lb ft)
12. Securely tighten the EGR cooler duct B to the EGR valve B.
    - Tightening torque: 44 Nm (4.5 kg•m / 32 lb ft)
13. Securely tighten the EGR cooler duct D to the EGR valve A.
    - Tightening torque: 44 Nm (4.5 kg•m / 32 lb ft)
14. Securely tighten the EGR cooler bracket to the EGR cooler A.
    - Tightening torque: 50 Nm (5.1 kg•m / 37 lb ft)
    - Tightening torque: 25 Nm (2.5 kg•m / 18 lb ft)
15. Securely tighten the EGR cooler bracket to the EGR cooler C.
    - Tightening torque: 50 Nm (5.1 kg•m / 37 lb ft)
    - Tightening torque: 25 Nm (2.5 kg•m / 18 lb ft)

    NOTE: *Refer to the diagram to securely tighten the bolts.*
16. Temporarily tighten the EGR cooler duct A to the EGR cooler A.



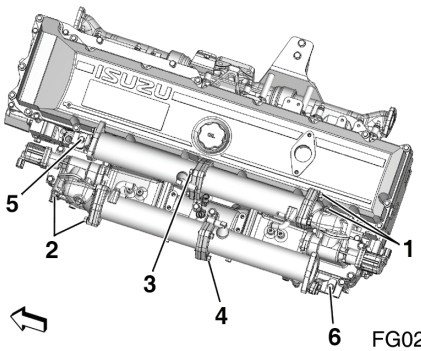
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Figure 242



FG023549

Figure 243



FG023551

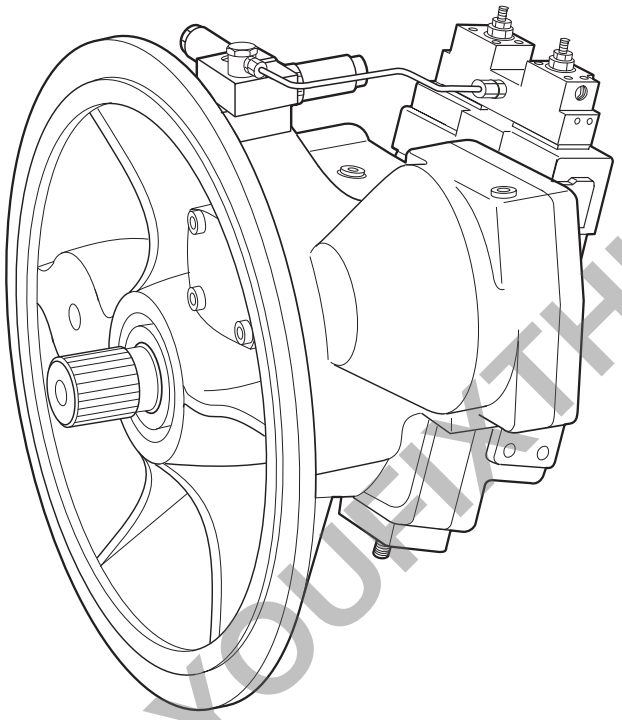
Figure 244

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SECTIONAL VIEW

A8VO200LA1KH1/63



ASS0010L

Figure 1

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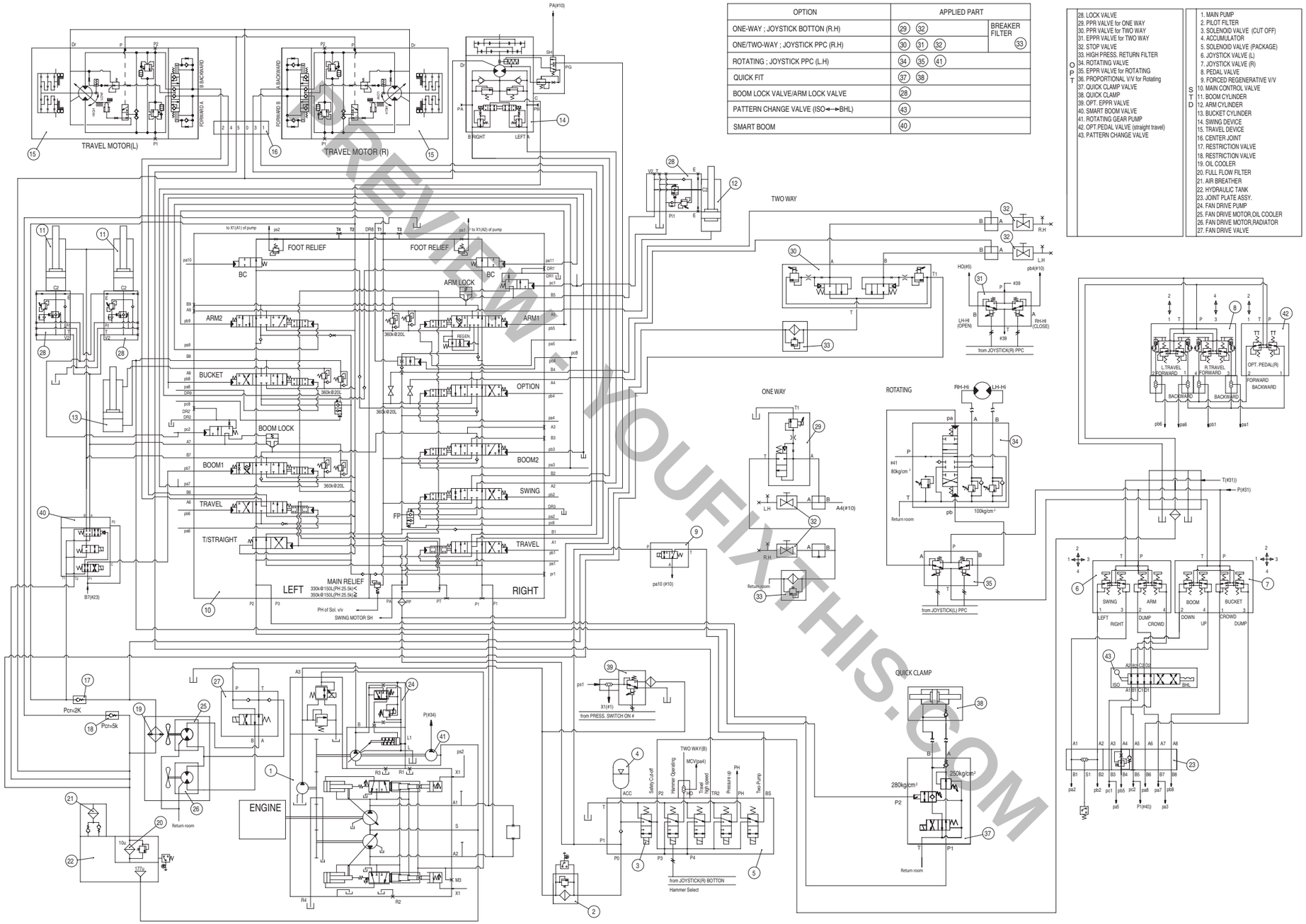
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DX490LC-3/DX530LC-3

OPTION	APPLIED PART	
ONE-WAY ; JOYSTICK BOTTON (R.H)	(29) (32)	BREAKER FILTER
ONE/TWO-WAY ; JOYSTICK PPC (R.H)	(30) (31) (32)	(33)
ROTATING ; JOYSTICK PPC (L.H)	(34) (35) (41)	
QUICK FIT	(37) (38)	
BOOM LOCK VALVE/ARM LOCK VALVE	(28)	
PATTERN CHANGE VALVE (ISO↔BHL)	(43)	
SMART BOOM	(40)	

OPT
28. LOCK VALVE
29. PPR VALVE for ONE WAY
30. PPR VALVE for TWO WAY
31. EPPR VALVE for TWO WAY
32. STOP VALVE
33. HIGH PRESS. RETURN FILTER
34. ROTATING VALVE
35. EPPR VALVE for ROTATING
36. PROPORTIONAL V/V for Rotating
37. QUICK CLAMP VALVE
38. QUICK CLAMP
39. OPT. EPPR VALVE
40. SMART BOOM VALVE
41. ROTATING GEAR PUMP
42. OPT.PEDAL VALVE (straight travel)
43. PATTERN CHANGE VALVE

STD
1. MAIN PUMP
2. PILOT FILTER
3. SOLENOID VALVE (CUT OFF)
4. ACCUMULATOR
5. SOLENOID VALVE (PACKAGE)
6. JOYSTICK VALVE (L)
7. JOYSTICK VALVE (R)
8. PEDAL VALVE
9. FORCED REGENERATIVE V/V
10. MAIN CONTROL VALVE
11. BOOM CYLINDER
12. ARM CYLINDER
13. BUCKET CYLINDER
14. SWING DEVICE
15. TRAVEL DEVICE
16. CENTER JOINT
17. RESTRICTION VALVE
18. RESTRICTION VALVE
19. OIL COOLER
20. FULL FLOW FILTER
21. AIR BREATHER
22. HYDRAULIC TANK
23. JOINT PLATE ASSY.
24. FAN DRIVE PUMP
25. FAN DRIVE MOTOR,OIL COOLER
26. FAN DRIVE MOTOR,RADIATOR
27. FAN DRIVE VALVE



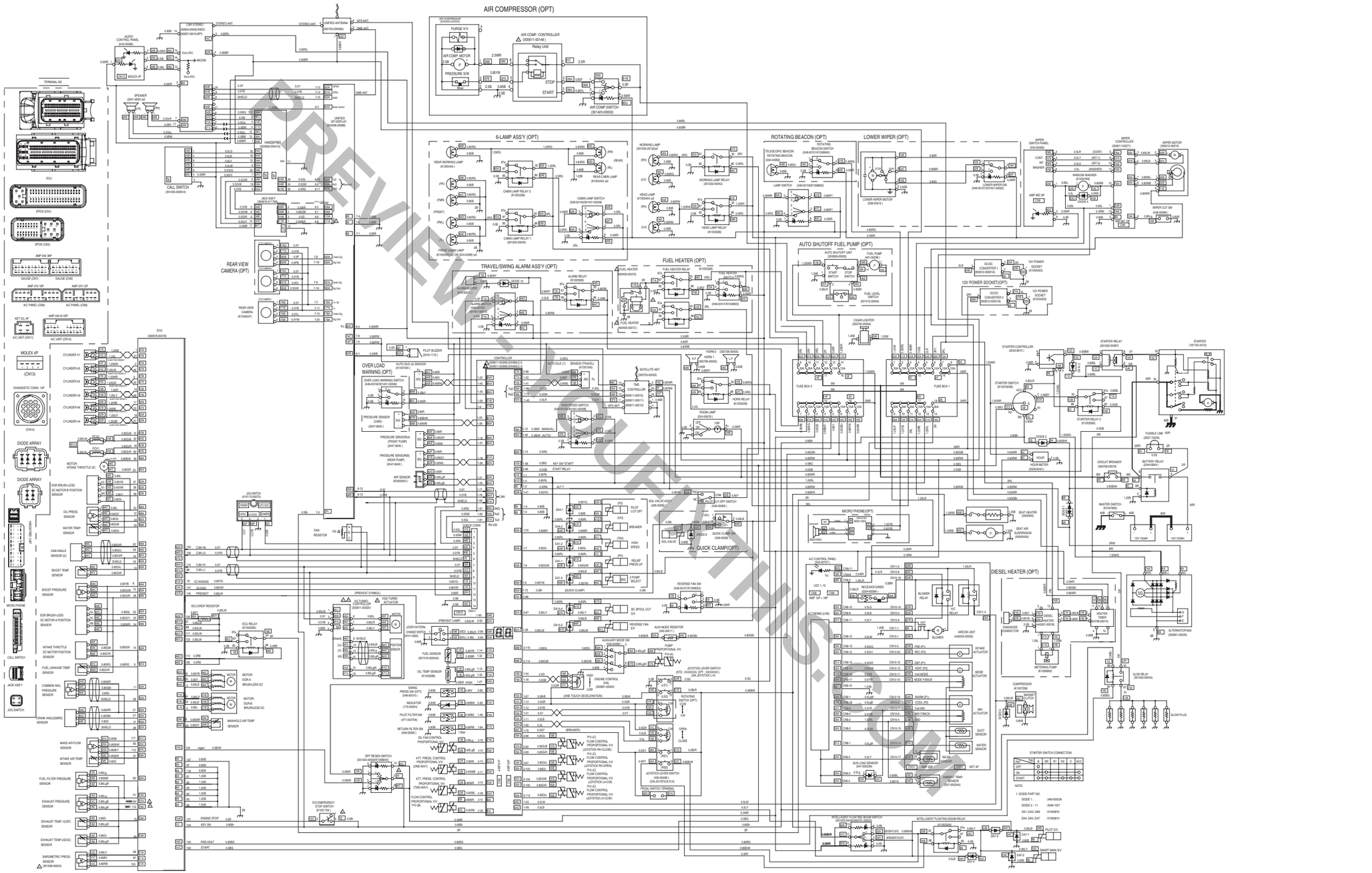
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Figure 1

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DX420LC-3/DX490LC-3/DX530LC-3



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Figure 1

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