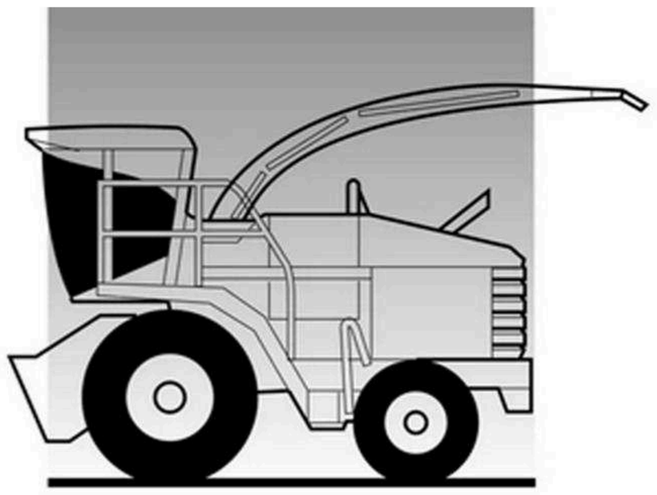


NEW HOLLAND

FX30
FX40
FX50
FX60
Forage Harvester

REPAIR MANUAL

SERVICE

87342121

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FX30, FX40, FX50, FX60
REPAIR MANUAL
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The following pages are the collation of the contents pages from each section and chapter of the FX30, FX40, FX50 and FX60 Repair manual. Complete Repair part # 87342121.

The sections used through out all New Holland product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in each book. The sections listed above are the sections utilized for the FX30, FX40, FX50 and FX60 Forage Harvesters.

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SECTION 00 - GENERAL INFORMATION

BOOK 1 - 87342122

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SECTION 10 - ENGINE

BOOK 1 - 87342122

Chapter 1 - IVECO Engine F3A - General

Model	IVECO Engine
FX 30	F3AE0684D*B001

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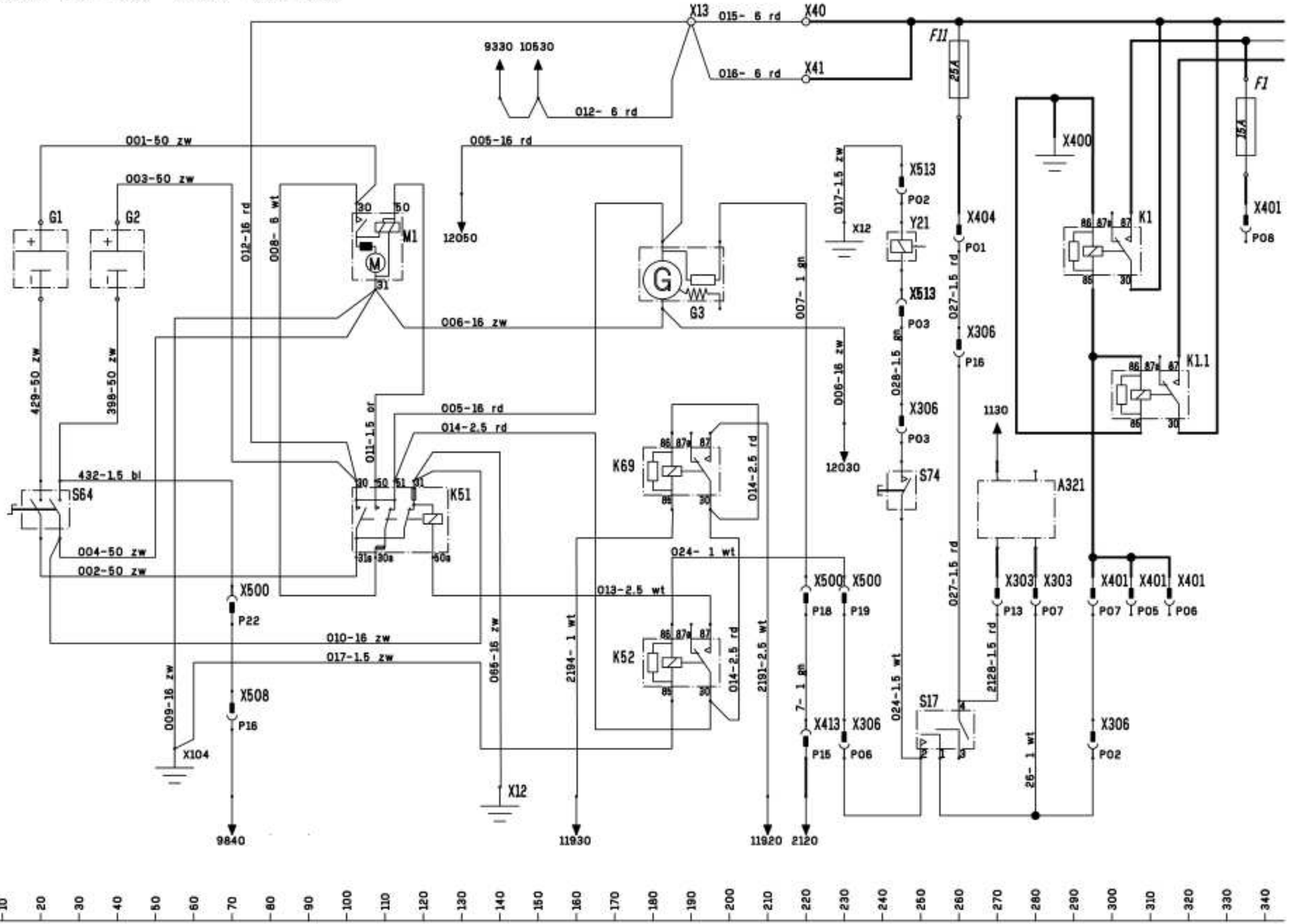
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Item	Servicing interval	Amount/unit [litres]	NEW HOLLAND Brand name	NEW HOLLAND Specification	Lubricant grade	International specification
Traction gear-box	Change: - after first 100 h - every 600 h or annually	15	AMBRA HYPOIDE 90 NH80W90	NH520A	SAE 80W-90	API GL5 MIL-L-2105 D
Final drive gearbox	Change: - after first 100 h - every 600 h or annually	5	AMBRA HYPOIDE 90 NH80W90	NH520A	SAE 80W-90	API GL5 MIL-L-2105 D
Four-wheel drive gearbox [if installed]	Change: - after first 100 h - every 300 h or annually	1.4	AMBRA HYPOIDE 90 NH80W90	NH520A	SAE 80W-90	API GL5 MIL-L-2105 D
Four wheel drive steering axle [if installed]	Change: - after first 100 h - every 600 h or annually	10	AMBRA HYPOIDE 90 NH80W90	NH520A	SAE 80W-90	API GL5 MIL-L-2105 D
4WD steering axle planetary final drives [if installed]	Change: - after first 100 h - every 600 h or annually	1	AMBRA HYPOIDE 90 NH80W90	NH520A	SAE 80W-90	API GL5 MIL-L-2105 D
Engine (oil + filters)	Check daily Change: - after first 100 h FX30-40-50: - every 600 h FX60: - every 500 h	FX30: 29 FX40-50: 35 FX60: 34	AMBRA MASTER-GOLD, HSP, SAE 15W-40.	NH330H	SAE 15W-40	API CH-4 ACEA E3/E5
Brake system	Change every two years	0.5 (reservoir) 2 (system)	AMBRA SYNTFLUID 4/DOT4	NH800A	-	NHTSA 116 DOT4, ISO 4925

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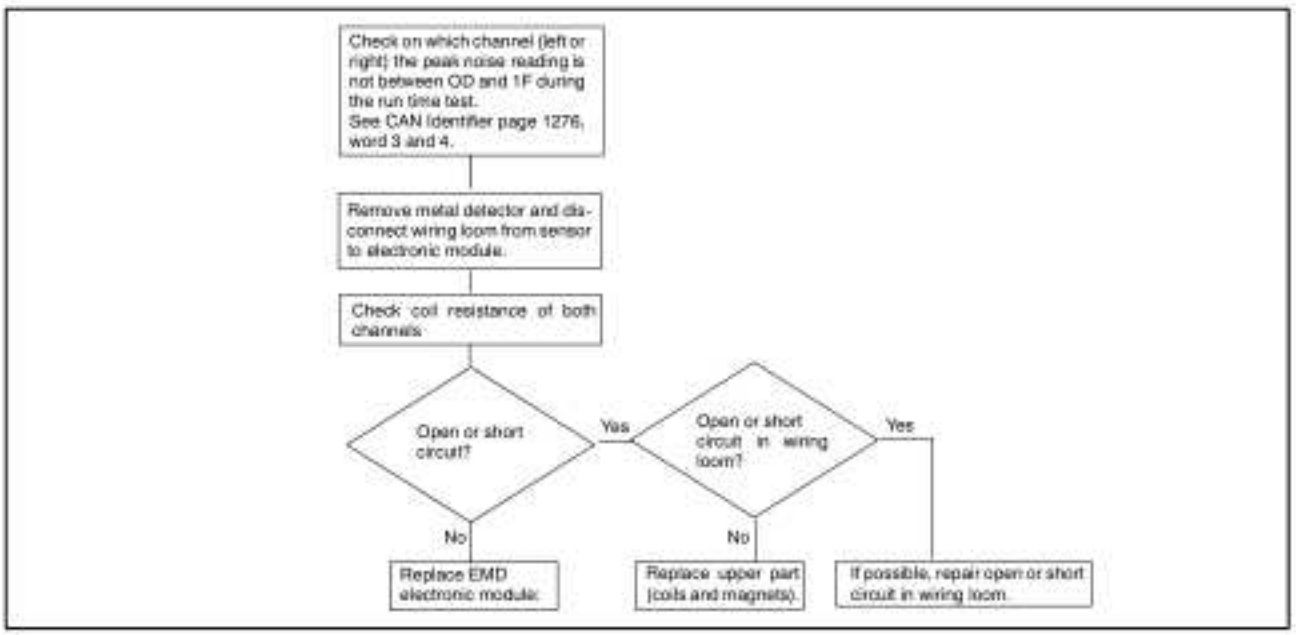
1a STARTER CIRCUIT 24V IVECO

FX30NA 5262 > 5298 FX40NA 5262 > 5298



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Error Code	Description	Importance
273	EMD CHANNEL FAULT	Medium
Explanation :	In case the coil and amplifier test fails during the run time test, this error code will be displayed. The expected signal is a peak noise reading of 16 (hex). The allowed tolerance on the signal ranges from OD to 1F (hex).	
Action :	Remove the detector and check the connections between the sensor and the electronic module.	

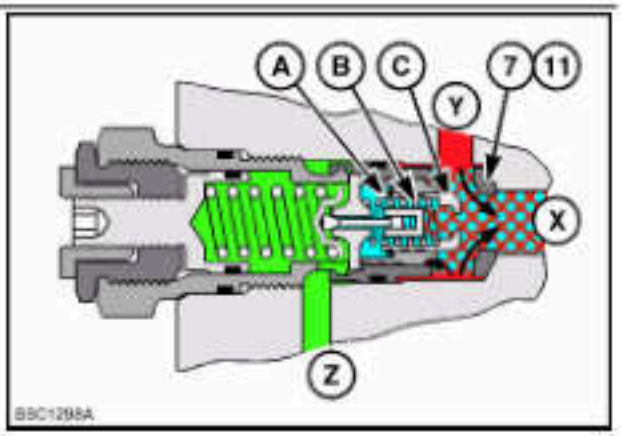


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1. Charge Check Valve 6a

When the pressure on carrier (A) is greater than the pressure of spring (B), carrier (A) moves to the left taking piston (C) with it.

Oil will flow from (Y) to (X) to fill up the system.



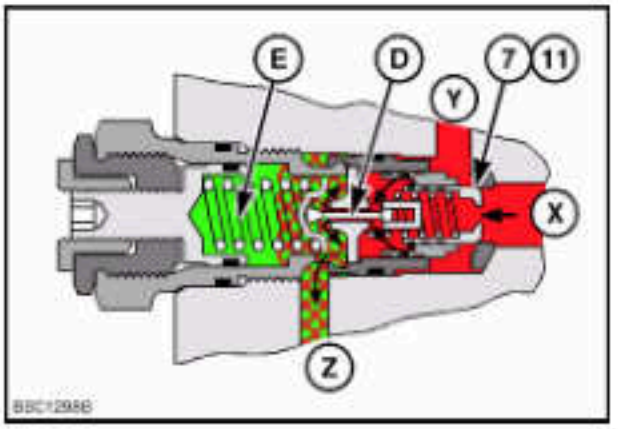
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2. Pressure Limiter 6b

When the high pressure exceeds 420 bar (6090 psi), poppet (D) will move to the left, compressing spring (E).

Oil will flow from (X) to (Z) to the main servo cylinder.

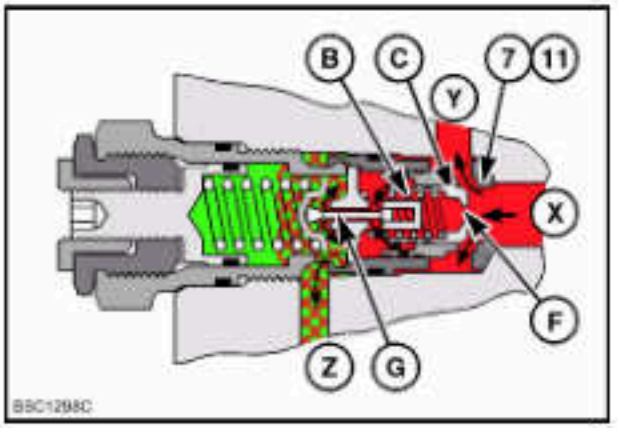
The main servo cylinder will then move the swash plate of the hydrostatic pump towards neutral when the transmission is in drive mode and towards maximum displacement when the transmission is in brake mode.



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3. High Pressure Relief Valve 6c

When the pressure limiter opens at 420 bar (6090 psi) a certain oil flow will escape through (Z). If the pressure from the high pressure port (X) increases to 450 bar (6525 psi) due to shock loading, the pressure difference which is created over the plunger, C, will move the plunger towards the left against spring (B) and high pressure oil will be allowed to flow from (X) to (Y). In this phase, the pressure limiter function remains active as well (oil keeps flowing from (X) to (Z).

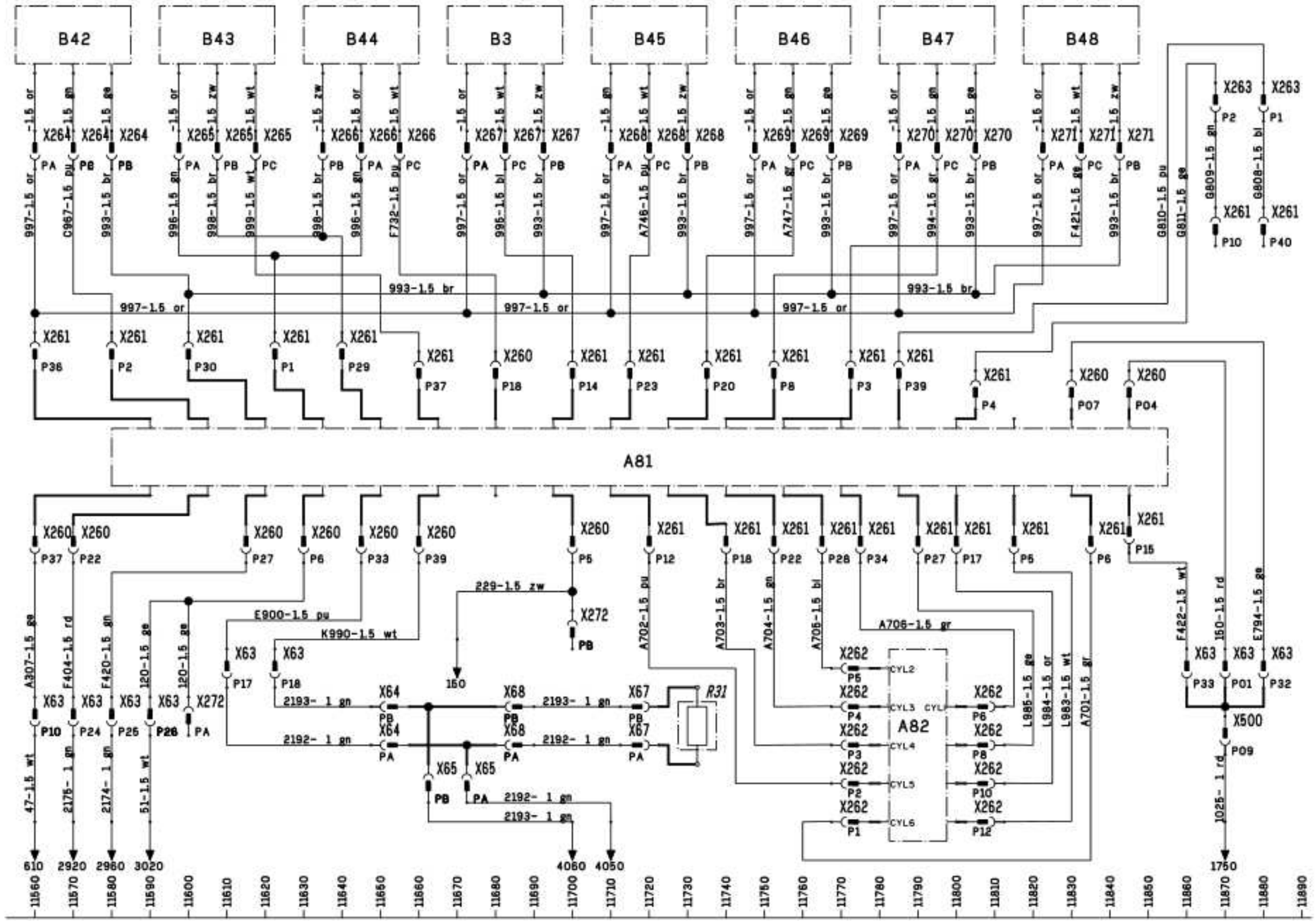


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30a ELECTRONIC ENGINE CONTROL CATERPILLAR

FX60NA 5262 > ....



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