CX210C
Tier 4
Crawler Excavator

SERVICE MANUAL

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CASE CONSTRUCTION

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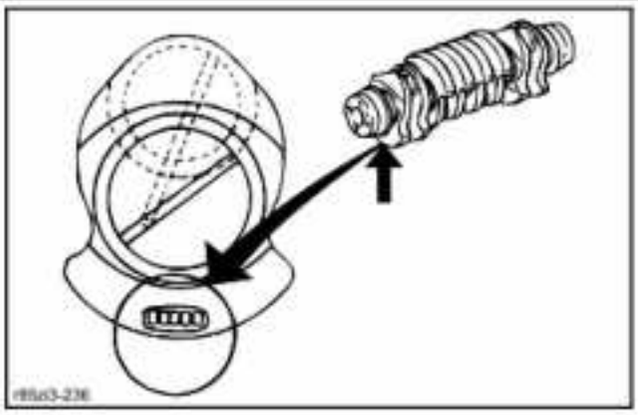
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3) Select the crankshaft bearing.

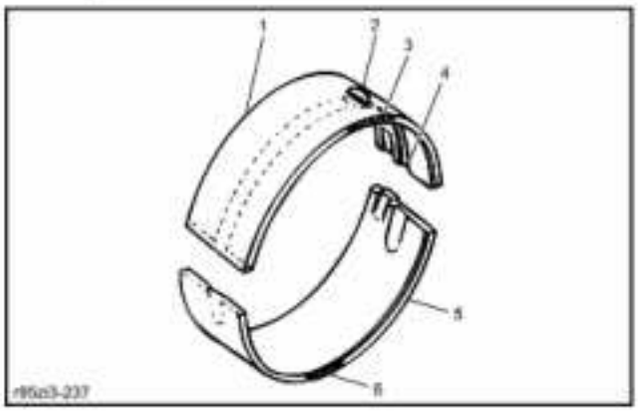
ANNOTATION:

- *Refer to the bearing selection table.*

Bearing selection table			
Grade combination		Oil clearance	
Cylinder block grade	Crank journal grade	1, 2, 4, 5	3
1	1	: 0.041 - 0.068 mm (0.001614 - 0.002677 in.)	: 0.055 - 0.082 mm (0.002165 - 0.003228 in.)
1	2	: 0.039 - 0.065 mm (0.001535 - 0.002559 in.)	: 0.053 - 0.079 mm (0.002087 - 0.003110 in.)
2	1	: 0.043 - 0.070 mm (0.001693 - 0.002756 in.)	: 0.057 - 0.084 mm (0.002244 - 0.003307 in.)
2	2	: 0.041 - 0.067 mm (0.001614 - 0.002638 in.)	: 0.055 - 0.081 mm (0.002165 - 0.003189 in.)

⚠ CAUTION

- **Be careful not to mistake the bearing shape when installing the crankshaft bearing.**



1	Upper bearing
2	Oil hole
3	Grade identification color
4	Oil groove
5	Lower bearing
6	Grade identification color

5. Crankshaft Installation

1) Install the crankshaft bearing to the cylinder block.

ANNOTATION:

- *Install a bearing with an oil hole on the cylinder block.*

⚠ CAUTION

- **Make sure there is no grime or oil on the cylinder block contact surface for the crankshaft bearing.**

2) Apply the grease to the thrust bearing.

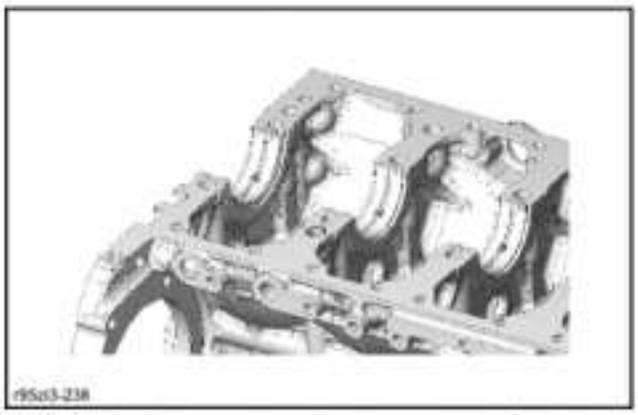
ANNOTATION:

- *Apply a small amount of grease to the thrust bearing to prevent falling.*

3) Install the thrust bearing to the cylinder block.

ANNOTATION:

- *Install the thrust bearing on the No.5 journal so that the oil groove faces the engine front.*



4) Apply the engine oil to the crankshaft bearing.
5) Apply the engine oil to the crankshaft.
6) Put the crankshaft on the cylinder block.

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Abnormal noise

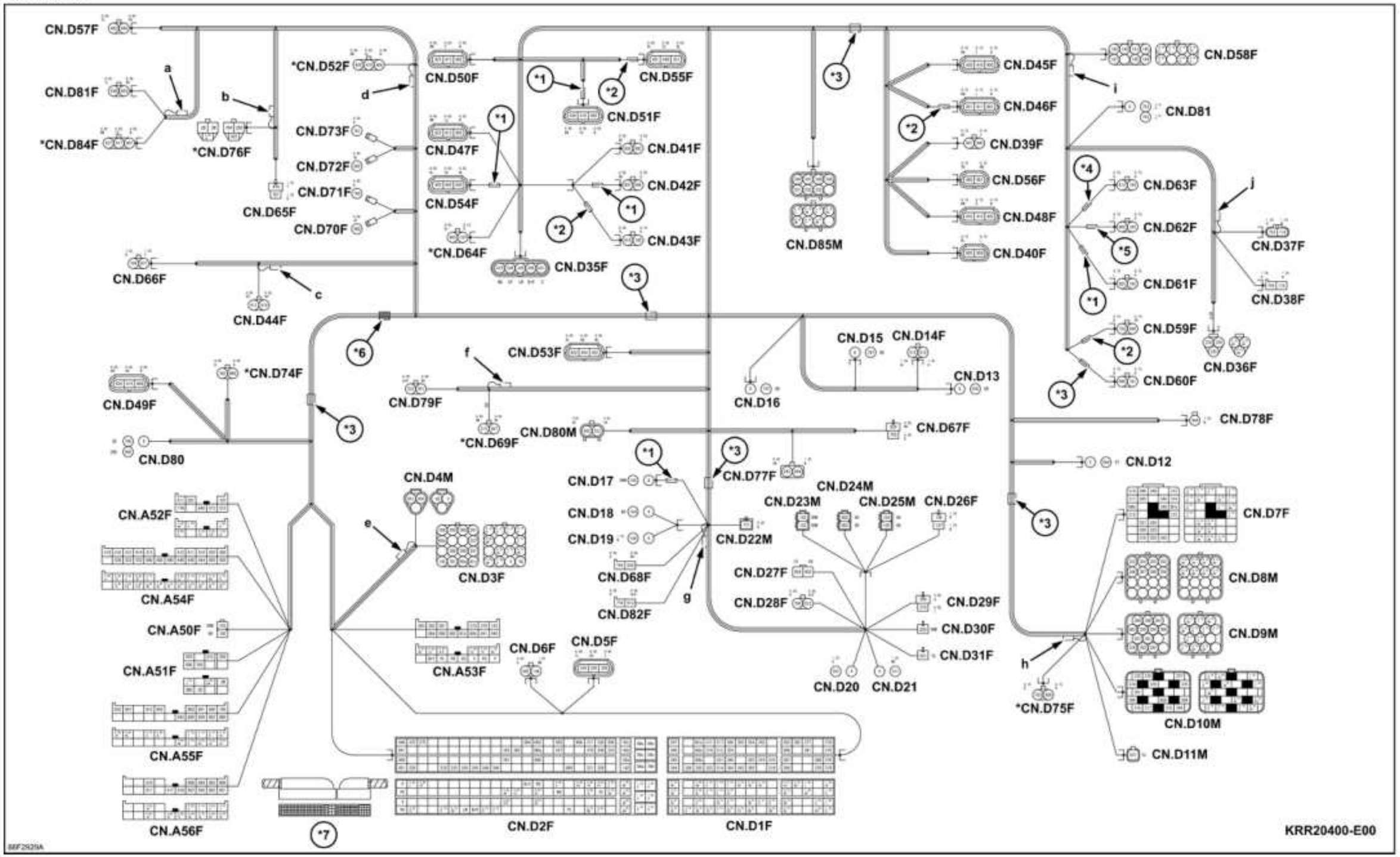
1. Abnormal noise Description of Symptom
   Engine combustion noise is abnormal.
2. Abnormal noise Diagnostics

   - Preliminary inspection
     Before using this section, perform the functional inspection and OBD system check to check all of the following.
     Refer to the actual unit manual and inspect the abnormal noise.
     The ECM and monitor are operating correctly.
     DTC check.
     The scan tool data is within the normal operating range.
     Check the condition of the actual unit, and locate the appropriate symptom.
     Check with the customers whether they are using the specified engine oil and fuel.
   - Visual inspection
     Careful visual inspection is required for several symptom procedures.
     This can lead to fixing a problem without further inspections, and can save valuable time.
     The inspection includes the following.
     Proper wiring connections, tightening, and disconnection
     Whether the ECM ground is free of dirt, etc. and securely installed in the correct location.
     Proper connections, cracks, and twists in the pipes and hoses related to fuel, air, and oil.
     Extensively check for any leaks or blockage.
     Whether there are any fuel leaks, pipe damage, or dents in the fuel system.
     Abnormalities of the air intake system parts
     Abnormalities of the exhaust system parts
   - Diagnostic aids
     Fuel system abnormalities such as fuel running out, fuel freezing, mixture of air into the fuel piping, filter abnormalities, piping abnormalities, fuel quality, fuel tank, etc.
     Air intake system abnormalities such as EGR valve abnormalities, etc.
     Abnormalities of the injector, no fuel injection
     Engine body abnormalities such as seizure, insufficient compression pressure, and other mechanical failures, etc.
     Failure related to the actual unit equipment such as the oil pressure pump, etc.
     ECM failure Inspect the connector for connection failures and the harness for abnormalities such as abrasions, bending, etc.
     Inspect that the wires inside the harness are separate and have not caused a short circuit with other circuits.
     Perform inspections for functional diagnosis, and confirm the operation, control of each part, etc.
     Repair if abnormalities are found.

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CX210C LR

Main Frame



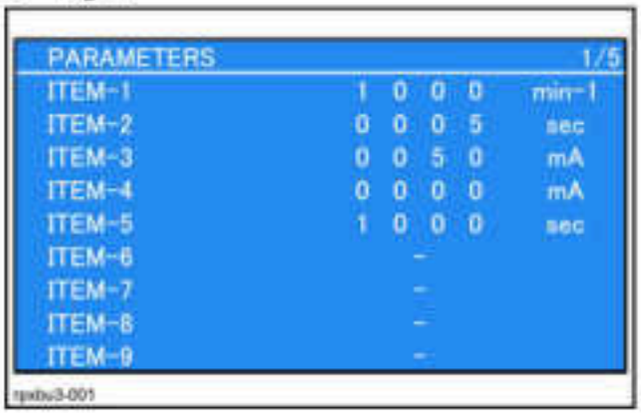
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PARAMETERS

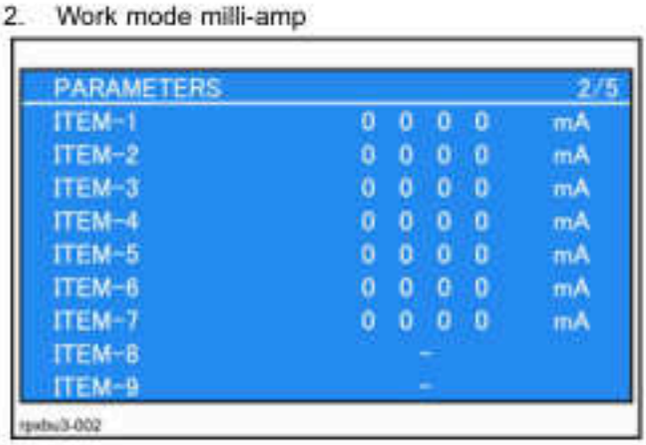
The work mode speed and pump milli-amps can be set.

1. Engine



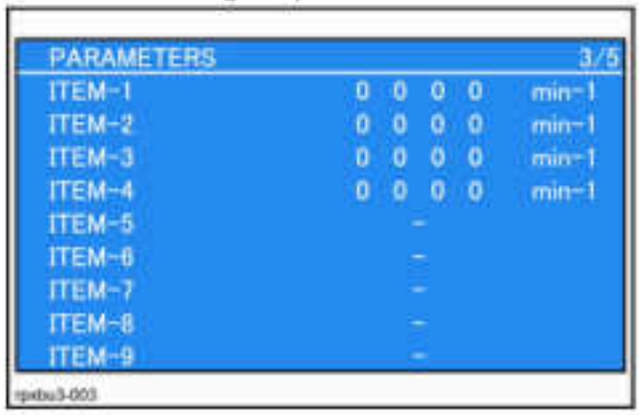
ITEM-1	min^{-1} (rpm)	Auto idling speed
ITEM-2	ms*100	Auto idle time
ITEM-3	mA	Transient load minimum milli-amp (normally 50 mA)
ITEM-4	mA	Semi-transient load minimum milli-amp
ITEM-5	ms*100	Eco gauge update period (normally 1000 ms)

2. Work mode milli-amp



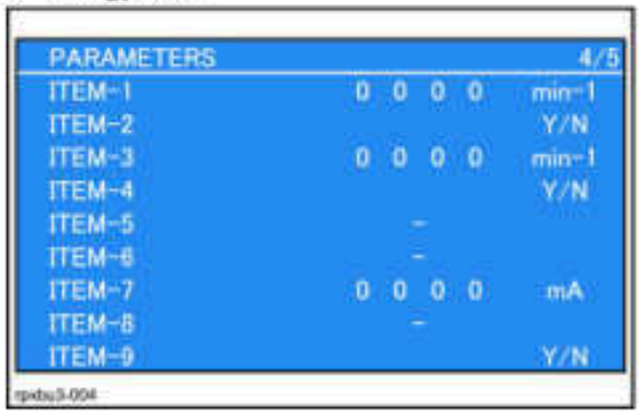
ITEM-1	mA	SP mode milli-amp (Hi)
ITEM-2	mA	SP mode milli-amp (Low)
ITEM-3	mA	H mode milli-amp (Hi)
ITEM-4	mA	H mode milli-amp (Low)
ITEM-5	mA	A mode milli-amp (Hi)
ITEM-6	mA	A mode milli-amp (Low)
ITEM-7	mA	Minimum milli-amp

3. Work mode engine speed



ITEM-1	min^{-1} (rpm)	SP mode speed
ITEM-2	min^{-1} (rpm)	H mode speed
ITEM-3	min^{-1} (rpm)	A mode speed
ITEM-4	min^{-1} (rpm)	Idling speed

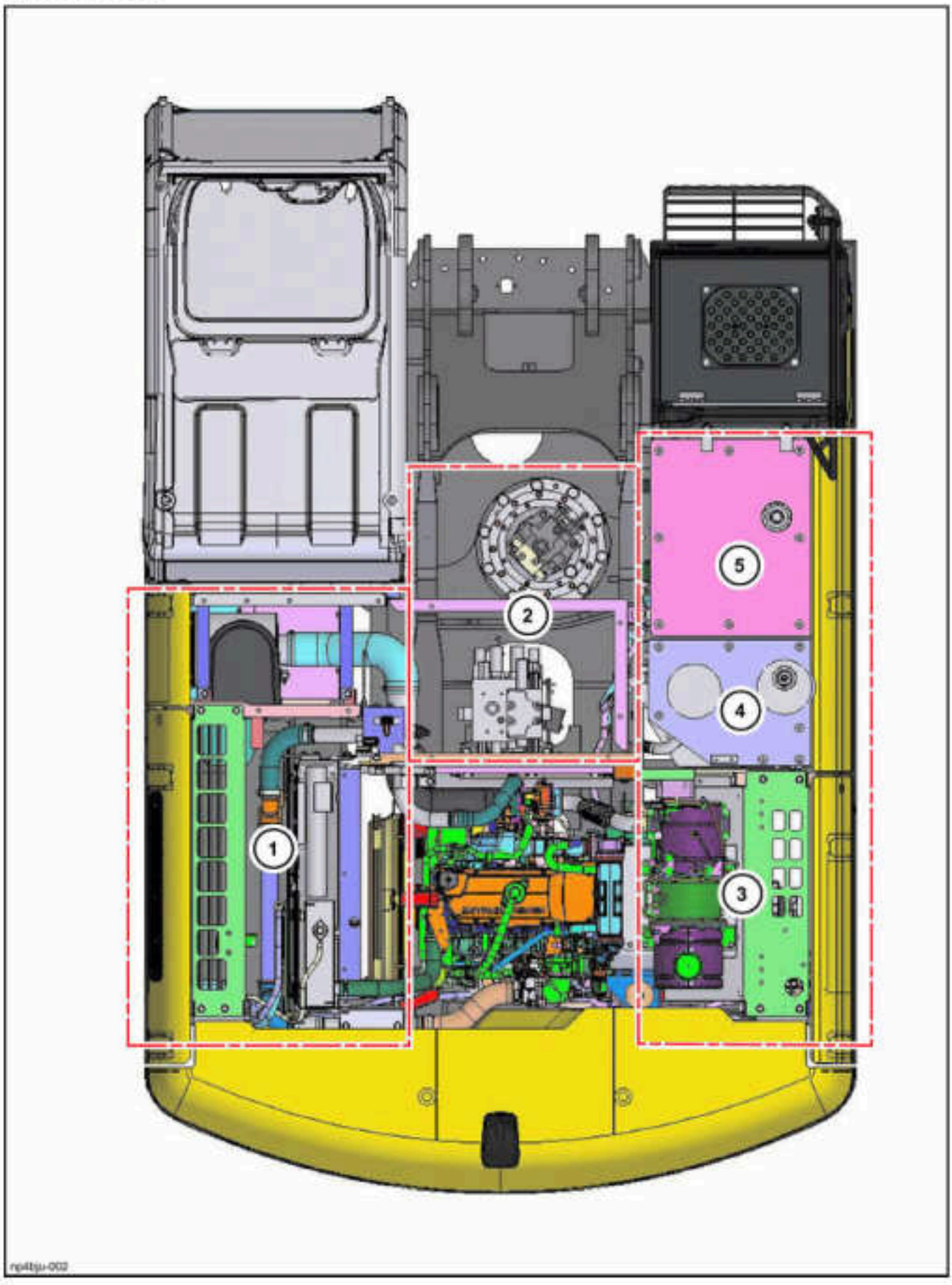
4. Energy save



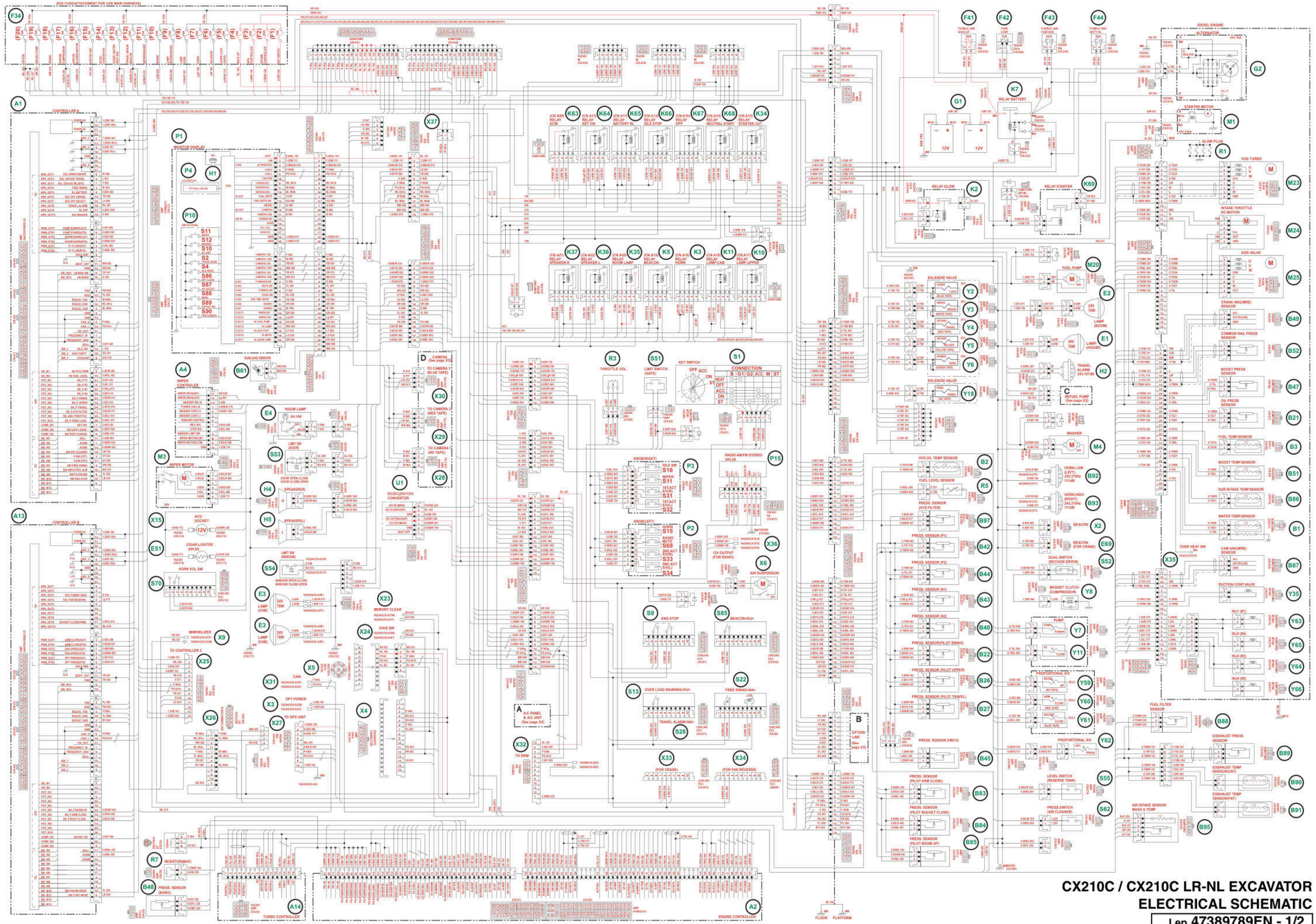
ITEM-1	min^{-1} (rpm)	Speed change amount during boom-down swing operation
ITEM-2	-	-
ITEM-3	min^{-1} (rpm)	Semi-auto idling speed change amount
ITEM-4	-	-
ITEM-5	-	-
ITEM-6	-	-
ITEM-7	mA	Speed limit milli-amp

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Overall view



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