CX800
CRAWLER EXCAVATOR

Service Manual

9-40621

CASE

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CX800 Crawler Excavators
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* *Consult the Engine Service Manual*

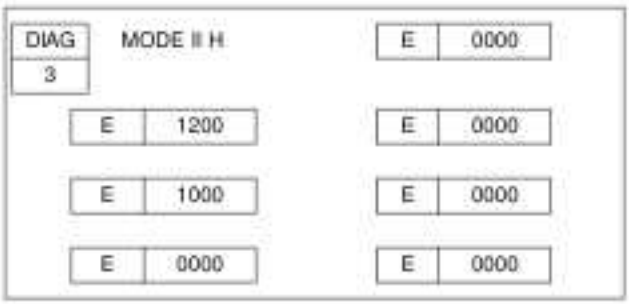
[redacted] *Sections to be distributed at a later date*

NOTE: Case Company reserves the right to make changes in the specification and design of the machine without prior notice and without incurring any obligation to modify units previously sold.
The description of the models shown in this manual has been made in accordance with the technical specifications known as of the date of design of this document.

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3. Previous failures in the engine DIAG3

This screen is connected to the previous screen (DIAG2) as concenms failures involving the hourmeter.



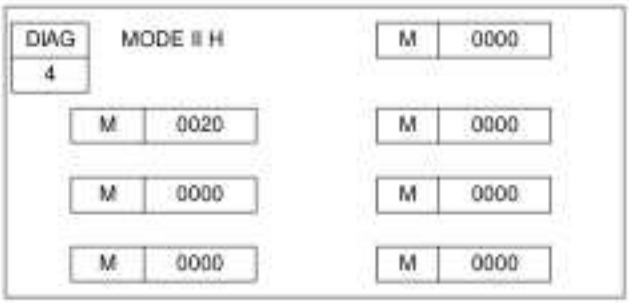
E: Failure code

Example:

The screen above shows that the failure code 0032 (electronic regulator rack position detector) occurred at 1200 H and that failure code 0025 (fuel flow adjustment resistor) occurred at 1000 H.

A. The numbers of hours shown indicate the time at which the failures occurred for the first time since the data was reinitialised.
B. If you wish to erase the failure codes and the number of hours, press the work mode switch for 10 seconds.
C. When data is erased from screens DIAG2 and DIAG3, it is recorded in the electronic control box memory (this data is only visible using an external computer).

4. Excavator failure detection DIAG4



M: Failure code

Failure code

M0000:	No defect
M0010:	Transistor output short-circuit
M0020:	Hydraulic oil temperature sensor
M0030:	Fuel sensor
M0040:	Pump pressure sensor (P1)
M0050:	Pump pressure sensor (P2)
M0060:	Pressure sensor (nega-cont)
M0070:	Key switch
M0080:	Upper or travel pilot pressure switch
M0090:	CAN communication circuit
M00A0:	Computer reinitialisation
M00B0:	Engine controller
M00C0:	Boom cylinder pressure

Example:

The screen above shows a failure in the hydraulic oil temperature sensor (0020).

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SPECIFICATIONS

See Section 1002

Lower roller oil quantity	0.44 gal
Model 1 upper roller oil quantity	0.16 gal
Model 2 upper roller oil quantity	0.19 to 0.20 gal

SPECIAL TORQUE SETTINGS

See Section 1002

SPECIAL TOOLS



B407320M

Use CAS 1450 and CAS 1682 for the leak checks shown below.

1. 80 T capacity supports
2. Micrometer gauges
3. Torque spanner 1180 lb-ft
4. Jack 5 T
5. Roller pump
6. Loctite 262

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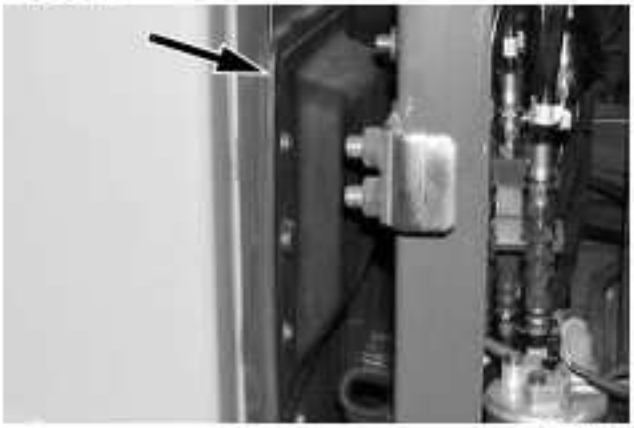
Installation

NOTE: *The numbers within brackets refer to the schematic on page 8.*

STEP 1

Install the heating or air-conditioning block in the cab using screws (6), brake washers and flat washers.

STEP 2



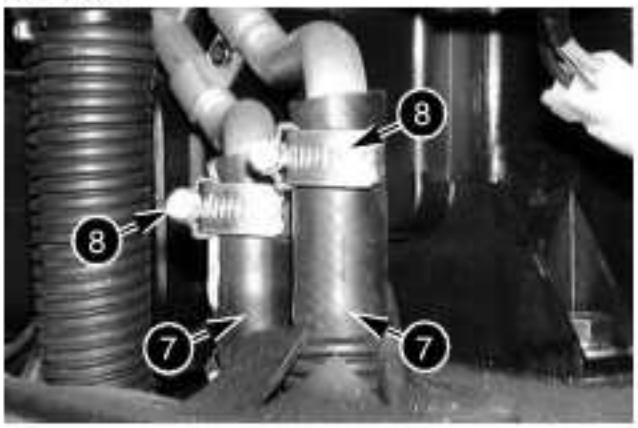
CD00G007

Install the conduit (5), the pollen filter (4) and the pollen filter guard.

STEP 3

Install the ventilation conduits (1), (2) and (3) of the cab (see page 8).

STEP 4

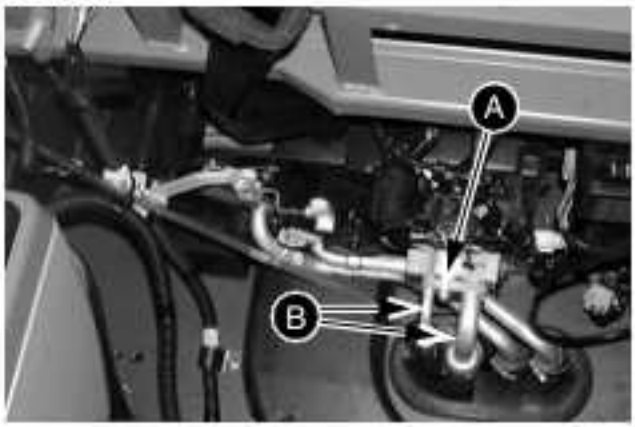


CD00G044

Install the heater hoses (7) and tighten the retaining clips (8).

NOTE: *Carry out Steps 5 and 6 only on air-conditioned machines.*

STEP 5



CD00G006

Remove the plugs from the air-conditioner and the hoses (B), install new O-rings on the hoses (B) and install the hoses (B) on the air-conditioner, tighten the screw (A) to a torque of 5.7 to 8.7 lb-ft.

STEP 6

Fill the air-conditioning circuit, contact an authorized engineer.
Type of coolant: HFC (R) 134a
Capacity of the circuit: 1 kg +/- 0.05

STEP 7

Connect the blower supply electrical harness.

STEP 8



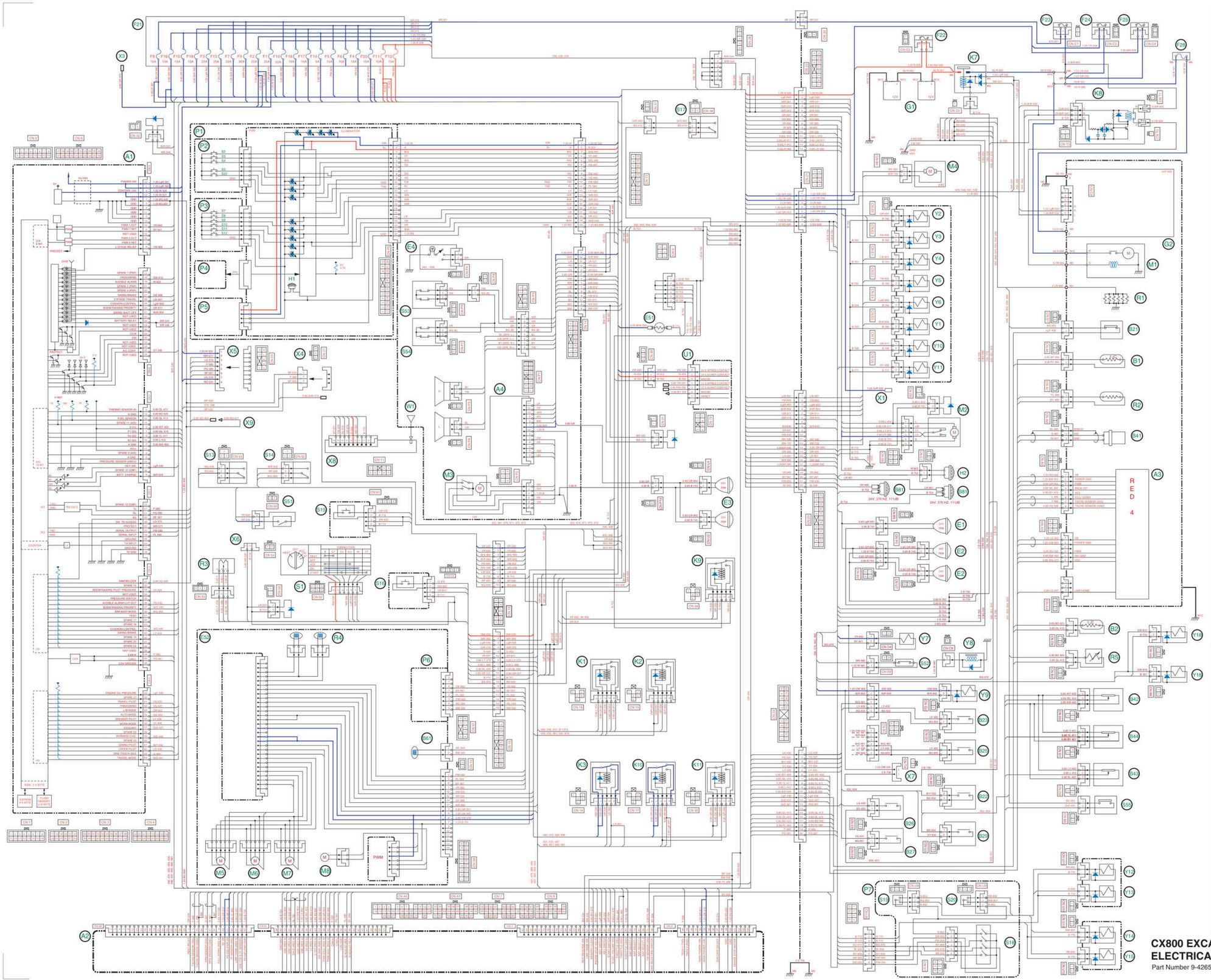
CD00G003

Install the trim at the rear of the cab, taking care to reconnect the connector for the cigarette lighter and the solar radiation detector (only on air-conditioned models).

STEP 9

Install the operator's seat in the cab (see Section 9004).

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ITEM	DESCRIPTION
A1.	COMPUTER
A2.	ENGINE CONTROLLER
A3.	ELECTRONIC ACCELERATION
A4.	WIPER CONTROLLER
B1.	COOLANT TEMPERATURE SENSOR
B2.	HYDRAULIC OIL TEMPERATURE SENSOR
B31.	ENGINE OIL PRESSURE SWITCH
B22.	SWING PILOT PRESSURE SWITCH
B33.	BREAKER / CRUSHER PILOT PRESSURE SWITCH
B26.	BREAKER PILOT PRESSURE SWITCH
B36.	UPPER PILOT PRESSURE SWITCH (YELLOW BAND)
B27.	TRAVEL PILOT PRESSURE SWITCH
B28.	BOOM RAISING PILOT PRESSURE SWITCH
B41.	ENGINE RPM SENSOR
B40.	PUMP PRESSURE SENSOR (P1)
B43.	PRESSURE SENSOR (NEGA-CON1)
B44.	PUMP PRESSURE SENSOR (P2) (BLUE BAND)
B61.	SUNLOAD SENSOR
B81.	HORN
E1.	WORKING LIGHT (UPPERSTRUCTURE)
E2.	WORKING LIGHT (ATTACHMENT)
E3.	WORKING LIGHT (CAB)
E4.	CAB LIGHT
ES1.	CIGARETTE LIGHTER
ES2.	AIR CONDITIONER
F1.	FUSE 20A; ENGINE CONTROLLER
F10.	FUSE 20A; LUBRICATOR (OPTION) CONNECTOR
F11.	FUSE 15A; BACK-UP
F12.	FUSE 10A; KEY SWITCH
F13.	FUSE 20A; HEATER / AIR CONDITIONER
F14.	FUSE 5A; AIR CONDITIONER COMPRESSOR
F15.	FUSE 15A; WORKING LIGHT (UPPERSTRUCTURE/ATTACHMENT)
F16.	FUSE 15A; WORKING LIGHT (CAB); AND OPTION CONNECTOR
F17.	FUSE 10A; DC-DC (24V-12V) CONVERTER
F18.	FUSE 15A; WIPER AND WASHER
F19.	FUSE 15A; HORN
F2.	FUSE 20A; COMPUTER CONTROL INSTRUMENT PANEL AND DIAGNOSTIC TEST SOCKET
F20.	FUSE 15A; CIGARETTE LIGHTER AND CAB SEAT COMPRESSOR ADJUSTMENT
F21.	FUSE BOX
F22.	FUSE 20A; MAIN FUSE FOR F11 AND F12 CIRCUITS
F23.	FUSE 40A; MAIN FUSE FOR F13 TO F19 AND F13 TO F26 CIRCUITS
F24.	FUSE 20A; MAIN FUSE FOR F2 CIRCUIT
F25.	FUSE 20A; MAIN FUSE FOR F1CIRCUITS
F28.	FUSE 120A; B+ ALTERNATOR
F3.	FUSE 20A; COMPUTER POWER
F4.	FUSE 10A; HYDRAULIC FUNCTION CANCELLATION LEVER SWITCH
F5.	FUSE 10A;COUNTERWEIGHT REMOVAL
F6.	FUSE 10A; NOTE USED
F7.	FUSE 20A; FUEL FILLER PUMP
F8.	FUSE 15A; ENGINE STOP MOTOR
F9.	FUSE 30A; GLOW PLUG
G1.	BATTERY
G2.	ALTERNATOR
H1.	AUDIBLE WARNING DEVICE
H2.	TRAVEL ALARM
K1.	RELAY;ENGINE EMERGENCY STOP
K10.	RELAY;WORKING LIGHT (UPPERSTRUCTURE/ATTACHMENT)
K11.	RELAY;WORKING LIGHT (CAB)
K2.	RELAY;GLOW PLUG
K3.	RELAY;HORN
K7.	RELAY BATTERY
K8.	RELAY SAFETY
K9.	RELAY;COUNTERWEIGHT REMOVAL
M1.	STARTER MOTOR
M2.	ENGINE EMERGENCY STOP MOTOR
M3.	WIPER MOTOR
M4.	WASHER MOTOR
M5.	MOTOR (AIR CHANGING)
M6.	AIR VENT DIRECTION CONTROL MOTOR
M7.	MOTOR ACT (AIR MIX)
M8.	BLOWER MOTOR
P1.	INSTRUMENT PANEL
P2.	SWITCH PANEL (LEFT-HAND)
P3.	SWITCH PANEL (RIGHT-HAND)
P4.	MONITOR DISPLAY
P5.	HOURMETER
P6.	AIR CONDITIONER CONTROL PANEL
P7.	COUNTERWEIGHT REMOVAL CONTROL PANEL
R1.	GLOW PLUG
R2.	FUEL FLOW ADJUSTMENT RESISTOR
R3.	THROTTLE VOLUME
R4.	THERMISTOR
R5.	FUEL SENSOR
S1.	KEY SWITCH
S16.	WORKING LIGHT SWITCH
S11.	WIPER SWITCH
S12.	WASHER SWITCH
S13.	OVERLOAD SWITCH
S14.	BREAKER / CRUSHER SWITCH
S15.	HORN SWITCH
S16.	ONE TOUCH IDLE
S17.	BOOM RAISING PRIORITY SWITCH
S18.	COUNTERWEIGHT REMOVAL MAIN SWITCH
S19.	COUNTERWEIGHT RAISING/ LOWERING SWITCH
S2.	TRAVEL MODE SWITCH
S20.	COUNTERWEIGHT ARM RAISING/LOWERING SWITCH
S22.	FREEWRING SWITCH
S3.	WORK MODE SWITCH
S4.	AUTO MODE SWITCH
S5.	CUSHION CONTROL SWITCH
S51.	HYDRAULIC FUNCTION CANCELLATION LEVER SWITCH
S52.	AIR CONDITIONING COMPRESSOR CLUTCH SWITCH
S53.	DOOR LIMIT SWITCH
S54.	FRONT WINDOW LIMIT SWITCH
S55.	RESERVE TANK LSW
S7.	AUDIBLE ALARM CUT OUT SWITCH
S8.	SWING BRAKE SWITCH
S9.	ENGINE EMERGENCY STOP SWITCH
U1.	DC-DC (24V-12V) CONVERTER
W1.	ANTENNA
X1.	FUEL FILLER PUMP CONNECTOR
X3.	OPTINAL POWER CONNECTOR
X4.	ENGINE TEST POINT CONNECTOR
X5.	CONTROLLER TEST POINT CONNECTOR
X6.	CAB SEATCOMPRESSOR MOTOR CONNECTOR
X7.	LUBRICATOR CONNECTOR
X8.	RADIO CONNECTOR
X9.	ANTI-THEFT SYSTEM CONNECTOR
Y1.	SWING PILOT SHUT-OFF SOLENOID VALVE (GREEN BAND)
Y10.	BOOM RAISING PRIORITY SOLENOID (BLACK BAND)
Y11.	NEGATIVE FLOW CONTROL (WHITE BAND)
Y12.	COUNTERWEIGHT RAISING SOLENOID VALVE
Y13.	COUNTERWEIGHT LOWERING SOLENOID VALVE
Y14.	COUNTERWEIGHT ARM RAISING SOLENOID VALVE
Y15.	COUNTERWEIGHT ARM LOWERING SOLENOID VALVE
Y18.	FREE SWING SOLENOIDE VALVE
Y2.	PILOT PRESSURE SOLENOID VALVE (BLUE BAND)
Y3.	SWING BRAKE SOLENOID VALVE (PINK BAND)
Y4.	2 STAGE TRAVEL SOLENOID VALVE (RED BAND)
Y5.	POWER-UP SOLENOID VALVE (YELLOW BAND)
Y6.	CUSHION CONTROL SOLENOID VALVE (LIGHT GREEN BAND)
Y7.	MAIN PUMP PROPORTIONAL SOLENOID
Y8.	AIR CONDITIONER MAGNET CLUTCH
Y9.	CRUSHER/BREAKER OPTION TWO FLOW SOLENOID VALVE

LEGEND

- CONNECTED
- NOT CONNECTED
- BOOT GROUND
- CABLE GROUND
- SINGLE WIRE CONNECTOR
- HARNESS
- CONNECTOR (MALE)
- CONNECTOR (FEMALE)
- INSULATION AGAINST MAGNETISM
- INDICATES CONSTANT POWER
- INDICATES POWER WHEN KEY SWITCH IS ON

CONNECTOR NUMBER (IN CAB) — CN12 (R) — COLOR OF CONNECTOR (IF NOT INDICATED COLOR IS WHITE)

CONNECTOR LETTER LOCATED (OUTSIDE CAB)

60 B 001 — AREA | CIRCUIT NUMBER — COLOR

TABLE OF COLOR SYMBOLS

SYMBOL	COLOR
B	BLACK
W	WHITE
Br	BROWN
P	PINK
V	VIOLET
G	GREEN
O	ORANGE
R	RED
Y	YELLOW
Lg	LIGHT GREEN
Sb	SKY BLUE
L	BLUE
Gr	GRAY

NOTE:
1. "BR" INDICATES BLACK CABLE WITH RED STRIPE.
2. WATERPROOF CONNECTORS USED OUTSIDE OF CAB.

CX800 EXCAVATOR ELECTRICAL SCHEMATIC

Part Number 9-42650

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