CASE

REPAIR MANUAL

Crawler Excavator

CX330
CX350

9-43570

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CX330 and CX350 Crawler Excavators
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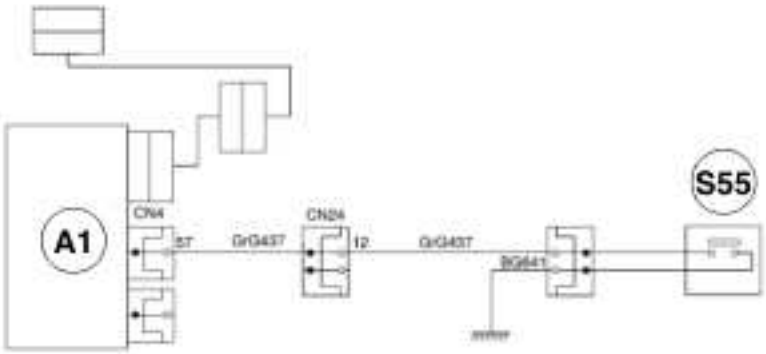
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Add coolant solution

Description of problem No. 2

- The message is still displayed even after adding coolant solution.



CM05F002

A1 Computer

S55 Reserve tank LSW

Troubleshooting	Cause	Action
Key switch ON		
Disconnect the reserve tank LSW connector (S55) to see if the message disappears → YES	Defective reserve tank LSW (S55)	Replace the reserve tank LSW (S55)
NO → Disconnect connector CN24 to see if the message disappears → YES	Short-circuit on wire GrG between the reserve tank LSW (S55) and CN24	Repair wire GrG
NO → Disconnect connector CN4 to see if the message disappears → YES	Short-circuit on wire GrG between CN24 and CN4	Repair wire GrG
NO	Defective computer (A1)	Replace the computer (A1)

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Assembly

NOTE: *The numbers within brackets in the following steps refer to the schematic on page 15.*

NOTE: *When installing, install new seal rings.*

STEP 1

Install an O-ring (37) on the valve body (39).

STEP 2

Install the spring seat (34) in the valve body (39).

STEP 3

Oil the inside of the spring seat (34). Install the check valve (35) in the spring seat (34).

STEP 4

Install the spring (36) on the valve body (39).

STEP 5

Install an O-ring (41) on the liner (46). Install a shim (38) on the spring (36).

STEP 6

Install the liner (46) in the valve body (39), taking care not to damage the O-ring (41).

STEP 7

Install the piston (40) in the sleeve (45). Install the sleeve (45) in the liner (46).

STEP 8

Install a back up ring (42) and an O-ring (43) on the plug (44). Install the plug (44) in the liner (46).

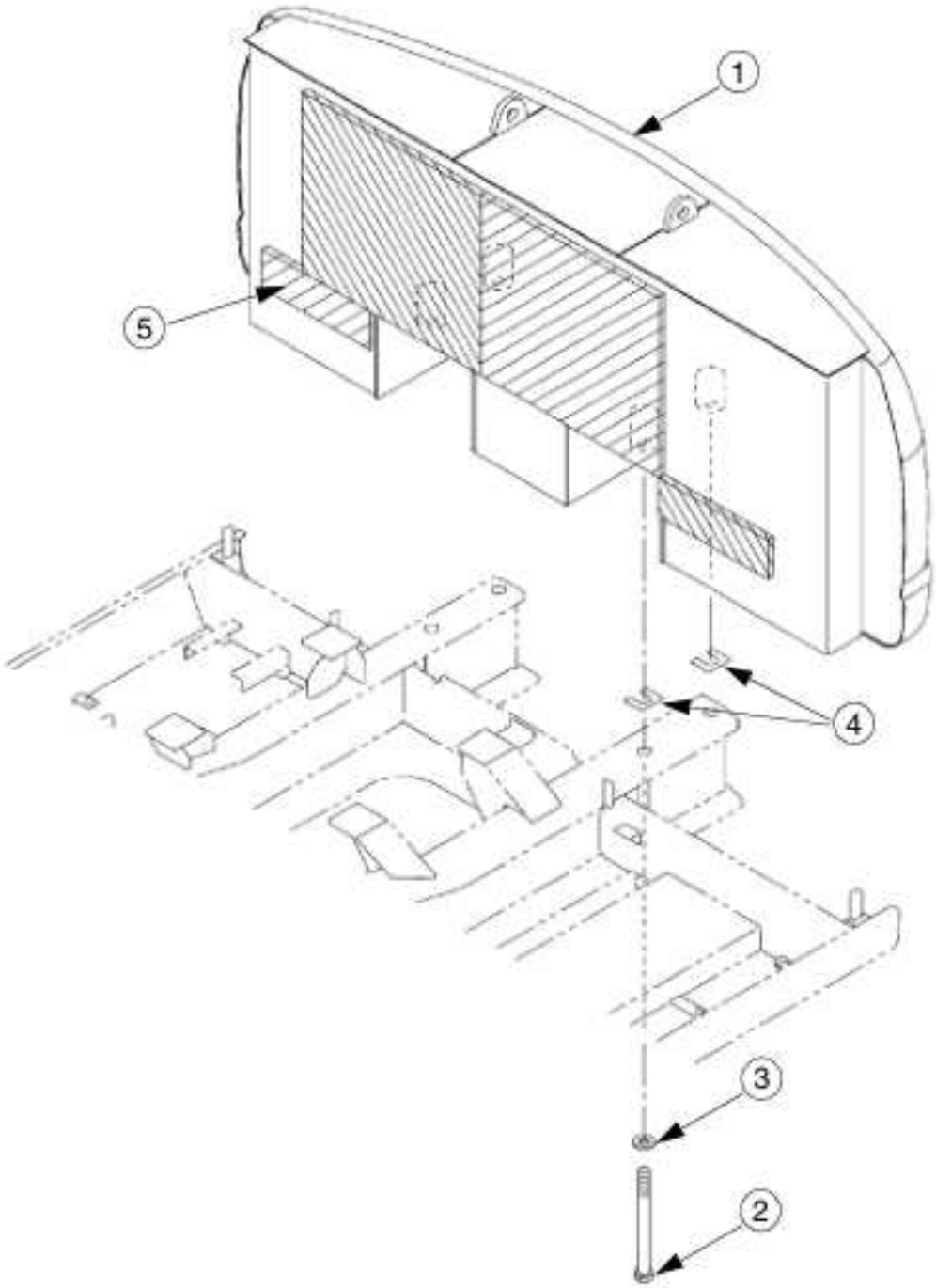
STEP 9

Install the blank nut (47).

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COUNTERWEIGHT

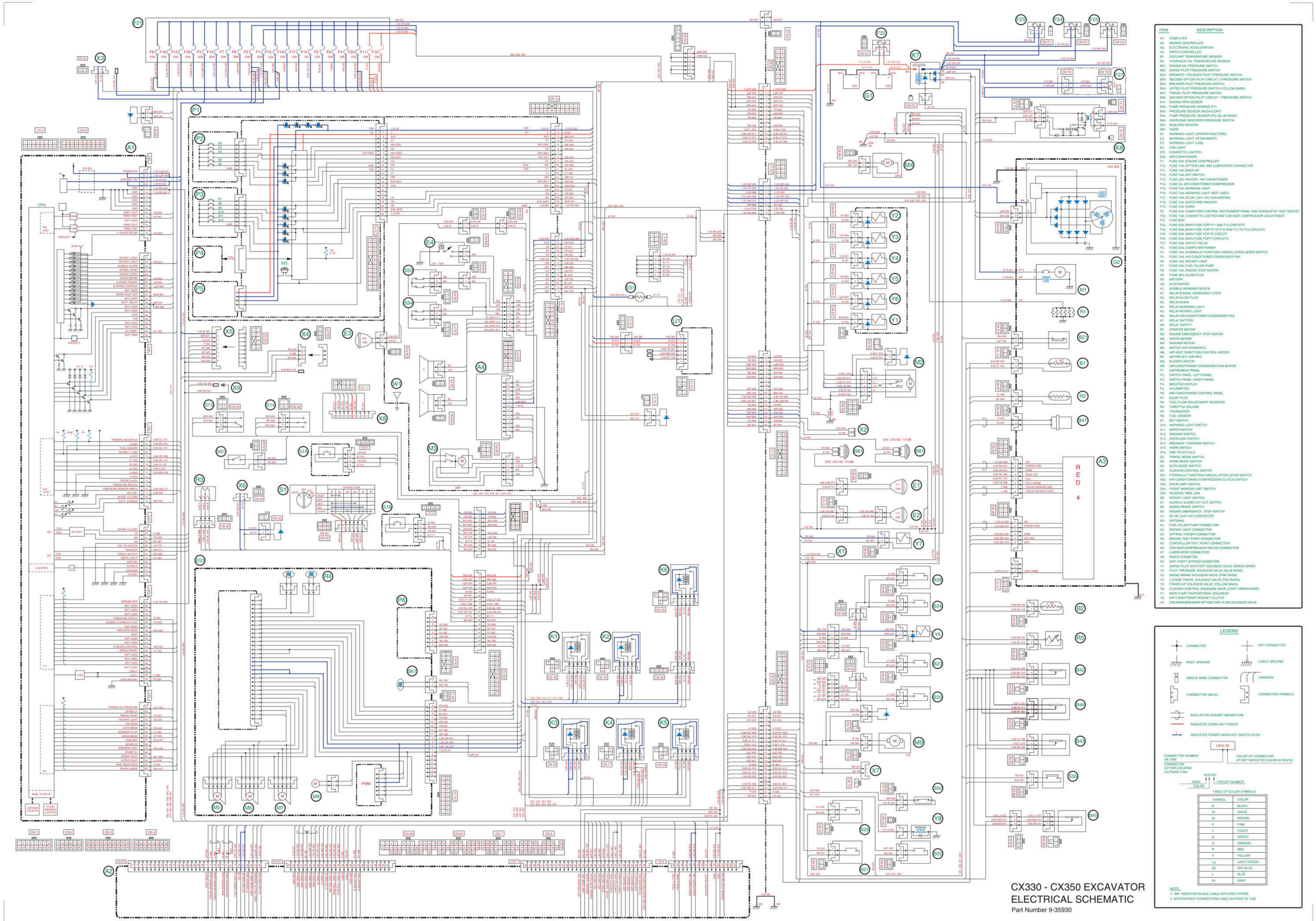
Description



CS02C507

1 COUNTERWEIGHT
2 SCREW
3 WASHER
4 SHIM
5 INSULATING MATERIAL

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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
B21.	ENGINE OIL PRESSURE SWITCH
B22.	SWING PILOT PRESSURE SWITCH
B23.	BREAKER / CRUSHER PILOT PRESSURE SWITCH
B24.	SECOND OPTION PILOT CIRCUIT 2 PRESSURE SWITCH
B25.	BREAKER PILOT PRESSURE SWITCH
B26.	UPPER PILOT PRESSURE SWITCH (YELLOW BAND)
B27.	TRAVEL PILOT PRESSURE SWITCH
B28.	SECOND OPTION PILOT CIRCUIT 1 PRESSURE SWITCH
B41.	ENGINE RPM SENSOR
B42.	PUMP PRESSURE SENSOR (P1)
B43.	PRESSURE SENSOR (NEGA-CONT)
B44.	PUMP PRESSURE SENSOR (P2) (BLUE BAND)
B45.	OVERLOAD INDICATOR PRESSURE SWITCH
B61.	SUNLOAD SENSOR
B81.	HORN
E1.	WORKING LIGHT (UPPERSTRUCTURE)
E2.	WORKING LIGHT (ATTACHMENT)
E3.	WORKING LIGHT (CAB)
E4.	CAB LIGHT
E51.	CIGARETTE LIGHTER
ES2.	AIR CONDITIONER
F1.	FUSE 20A, ENGINE CONTROLLER
F10.	FUSE 10A, OPTION LINE AND LUBRICATOR CONNECTOR
F11.	FUSE 10A, BACK-UP
F12.	FUSE 10A, KEY SWITCH
F13.	FUSE 20A, HEATER / AIR CONDITIONER
F14.	FUSE 5A, A/R CONDITIONER COMPRESSOR
F15.	FUSE 15A, WORKING LIGHT
F16.	FUSE 15A, WORKING LIGHT (NOT USED)
F17.	FUSE 10A, DC-DC (24V-12V) CONVERTER
F18.	FUSE 15A, WIPER AND WASHER
F19.	FUSE 10A, 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 65A, MAIN FUSE FOR F3 TO F10 AND F13 TO F29 CIRCUITS
F24.	FUSE 20A, MAIN FUSE FOR F2 CIRCUIT
F25.	FUSE 20A, MAIN FUSE FOR F1CIRCUITS
F27.	FUSE 55A, SAFETY RELAY
F3.	FUSE 20A, COMPUTER POWER
F4.	FUSE 10A, HYDRAULIC FUNCTION CANCELLATION LEVER SWITCH
F5.	FUSE 10A, A/R CONDITIONER CONDENSER FAN
F6.	FUSE 10A, ROTARY LIGHT
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
K1.	RELAY-ENGINE EMERGENCY STOP
K2.	RELAY-GLOW PLUG
K3.	RELAY-HORN
K4.	RELAY-WORKING LIGHT
K5.	RELAY-ROTARY LIGHT
K6.	RELAY-AIR CONDITIONER CONDENSER FAN
K7.	RELAY BATTERY
K8.	RELAY SAFETY
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
M9.	AIR CONDITIONER CONDENSER FAN MOTOR
P1.	INSTRUMENT PANEL
P2.	SWITCH PANEL (LEFT-HAND)
P3.	SWITCH PANEL (RIGHT-HAND)
P4.	MONITOR DISPLAY
P5.	HOURMETER
P6.	AIR CONDITIONER CONTROL PANEL
R1.	GLOW PLUG
R2.	FUEL FLOW ADJUSTMENT RESISTOR
R3.	THROTTLE VOLUME
R4.	THERMISTOR
R5.	FUEL SENSOR
S1.	KEY SWITCH
S10.	WORKING LIGHT SWITCH
S11.	WIPER SWITCH
S12.	WASHER SWITCH
S13.	OVERLOAD SWITCH
S14.	BREAKER / CRUSHER SWITCH
S15.	HORN SWITCH
S16.	ONE TOUCH IDLE
S2.	TRAVEL MODE 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 LOW
S6.	ROTARY LIGHT SWITCH
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
X2.	ROTARY LIGHT CONNECTOR
X3.	OPTIONAL POWER CONNECTOR
X4.	ENGINE TEST POINT CONNECTOR
X5.	CONTROLLER TEST POINT CONNECTOR
X6.	CAB SEAT/COMPRESSOR MOTOR CONNECTOR
X7.	LUBRICATOR CONNECTOR
X8.	RADIO CONNETOR
X9.	ANTI-THEFT SYSTEM CONNETOR
Y1.	SWING PILOT SHUT-OFF SOLENOID VALVE (GREEN BAND)
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

CN12 (IN)

CONNECTOR NUMBER (IN CAB)
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.

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