CASE

REPAIR MANUAL

Crawler Excavator

CX130

7-29021

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CX130 Crawler Excavators
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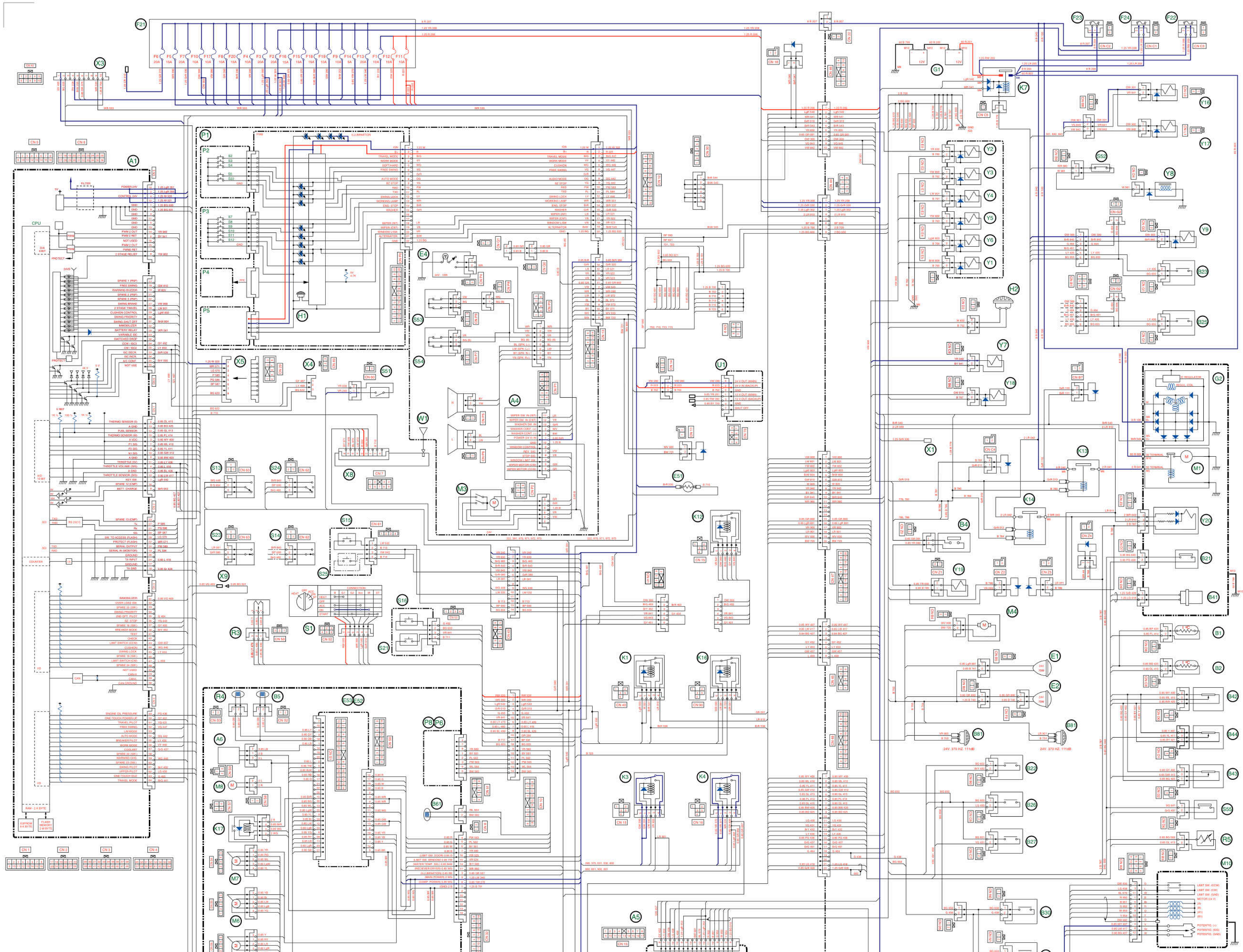
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CX 130 - CX 160 EXCAVATOR ELECTRICAL SCHEMATIC

Part Number 7-28511

ITEM	DESCRIPTION
A1.	COMPUTER
A4.	WIPER CONTROLLER
A5.	THROTTLE MOTOR DRIVER
A6.	BLOWER AMP
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
B25.	BREAKER PILOT PRESSURE SWITCH
B26.	UPPER PILOT PRESSURE SWITCH (YELLOW BAND)
B27.	TRAVEL PILOT PRESSURE SWITCH
B30.	BLADE PILOT PRESSURE SWITCH
B31.	BLADE PILOT PRESSURE SWITCH
B4.	ETHER SOLENOID VALVE THERMO SWITCH
B41.	ENGINE RPM SENSOR
B42.	PUMP PRESSURE SENSOR (P1)
B43.	PRESSURE SENSOR (NEGA-CONT)
B44.	PUMP PRESSURE SENSOR (P2) (YELLOW BAND)
B5.	EVA SENSOR
B61.	SUNLOAD SENSOR
B81.	HORN
E1.	WORKING LIGHT (UPPERSTRUCTURE)
E2.	WORKING LIGHT (ATTACHMENT)
E4.	CAB LIGHT
E51.	CIGARETTE LIGHTER
E52.	AIR CONDITIONER
E53.	HEATER
F1.	FUSE 10A: OPTION LINE CONNECTOR
F10.	FUSE 10A: BREAKER AND CRUSHER OPTION / SECOND OPTION / THUMB OPTION
F11.	FUSE 10A: BACK-UP
F12.	FUSE 10A: KEY SWITCH
F13.	FUSE 20A: HEATER / AIR CONDITIONER
F14.	FUSE 5A: AIR CONDITIONER COMPRESSOR
F15.	FUSE 15A: WORKING LIGHT
F16.	FUSE 15A: OPTIONAL POWER CONNECTOR
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 10A: CIGARETTE LIGHTER
F21.	FUSE BOX
F22.	FUSE 20A; MAIN FUSE FOR FI, F11 AND F12 CIRCUITS
F23.	FUSE 65A; MAIN FUSE FOR F3 TO F10 AND F13 TO F20 CIRCUITS
F24.	FUSE 20A; MAIN FUSE FOR F2 CIRCUIT
F3.	FUSE 20A: COMPUTER POWER / THROTTLE MOTOR DRIVER
F4.	FUSE 10A: HYDRAULIC FUNCTION CANCELLATION LEVER SWITCH
F5.	FUSE 15A: OPTIONAL POWER CONNECTOR
F6.	FUSE 20A: OPTION LINE CONNECTOR
F7.	FUSE 20A: FUEL FILLER PUMP
F8.	FUSE 10A: CAB SEAT AIR SUS
F9.	FUSE 10A: CONDENSOR FAN RELAY
G1.	BATTERY
G2.	ALTERNATOR
H1.	AUDIBLE WARNING DEVICE
H2.	TRAVEL ALARM
K1.	RELAY-ENGINE EMERGENCY STOP
K12.	RELAY-THUMB
K13.	RELAY-STARTER
K14.	RELAY-FUEL SHUTOFF
K16.	RELAY-ETHER START
K17.	BLOWER OFF RELAY
K3.	RELAY-HORN
K4.	RELAY-WORKING LIGHT
K7.	RELAY BATTERY
M1.	STARTER MOTOR
M3.	WIPER MOTOR
M4.	WASHER MOTOR
M5.	MOTOR-ACT (AIR-CHG)
M6.	AIR VENT DIRECTION CONTROL MOTOR
M7.	MOTOR-ACT (AIR-MIX)
M8.	BLOWER MOTOR
M10.	THROTTLE MOTOR
P1.	INSTRUMENT PANEL
P2.	SWITCH PANEL (LEFT-HAND)
P3.	SWITCH PANEL (RIGHT-HAND)
P4.	MONITOR DISPLAY
P5.	HOURMETER
P6.	AIR CONDITIONER CONTROL PANEL
P8.	HEATER CONTROL PANEL
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
S21.	ONE TOUCH POWER-UP/MULTIPURPOSE (R)
S22.	FREE SWING SWITCH
S23.	ETHER START SWITCH
S24.	OPTION LINE SWITCH (MULTI PURPOSE/ THUMB)
S25.	ONE TOUCH MULTIPURPOSE (L)
S3.	WORK MODE SWITCH
S4.	AUTO MODE SWITCH (NOT USED)
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.	OPTIONAL POWER CONNECTOR
X4.	ENGINE TEST POINT CONNECTOR
X5.	CONTROLLER TEST POINT CONNECTOR
X8.	RADIO CONNECTOR
X9.	ANTI-THEFT SYSTEM CONNECTOR
Y1.	SWING PILOT SHUT-OFF SOLENOID VALVE (GREEN BAND)
Y16.	MULTI-PURPOSE SOLENOID VALVE (R) (OPTIONAL)
Y17.	MULTI-PURPOSE SOLENOID VALVE (L) (OPTIONAL)
Y18.	FREE SWING SOLENOID VALVE
Y19.	ETHER SOLENOID VALVE
Y2.	PILOT PRESSURE SOLENOID VALVE (BLUE BAND)
Y20.	FUEL SHUT-OFF SOLENOID VALVE
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 CONDITIONNER 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 (R)
CONNECTOR NUMBER (IN CAB)
CONNECTOR LETTER LOCATED (OUTSIDE CAB)
COLOR OF CONNECTOR (IF NOT INDICATED COLOR IS WHITE)

60 B 001
AREA
COLOR
CIRCUIT NUMBER

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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