# REPAIR MANUAL

# CRAWLER

# 650K TIER II
# 750KTIER II
# 850KTIER II

87364103NA

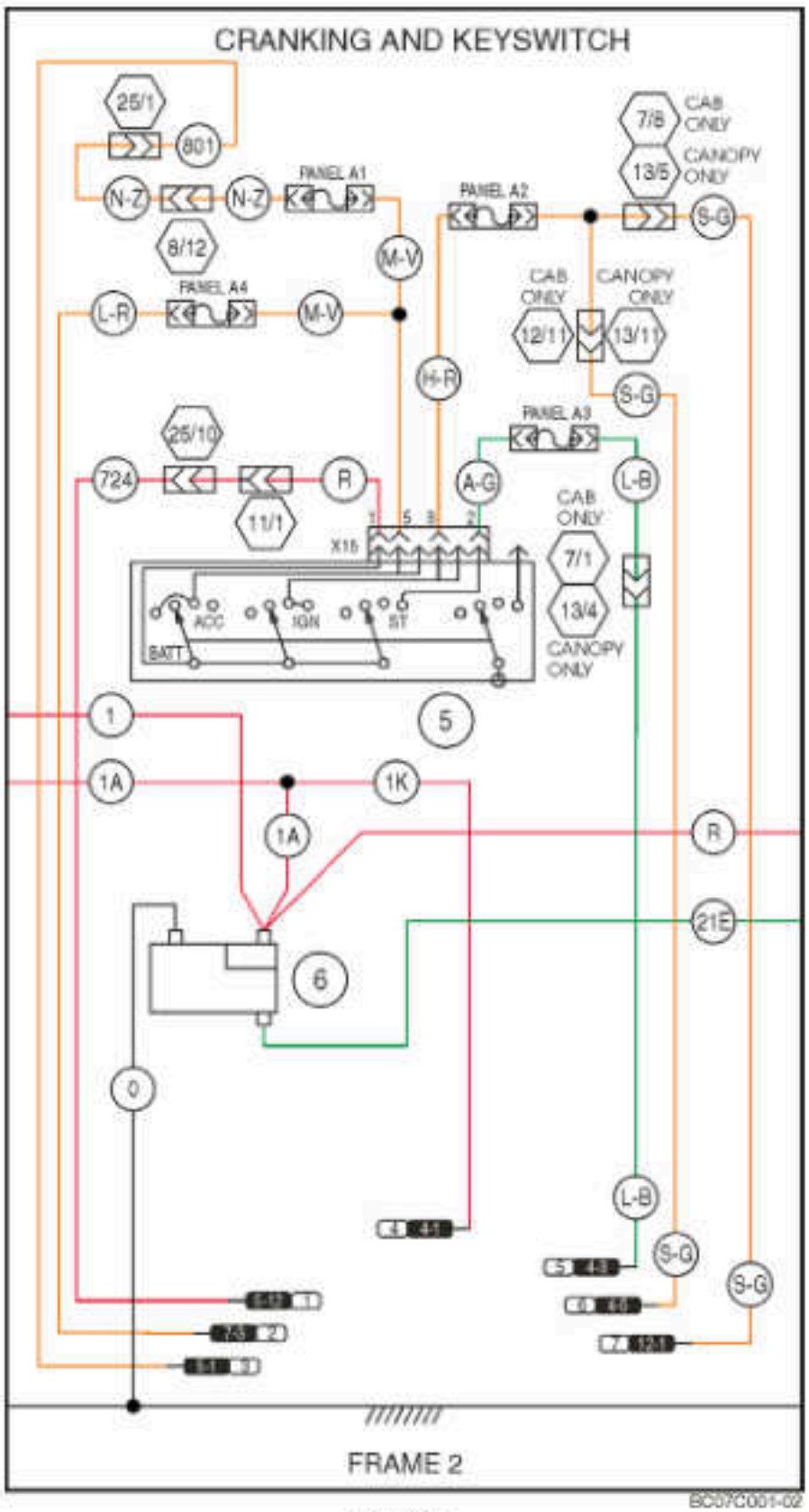
Issued Dec 07

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# Wiring harness - Electrical schematic frame 02

650K TIER II [CAL000000 - CAL012143], 750K TIER II [CAL000000 - CAL003346], 850K TIER II [CAL000000 - CAL005666]

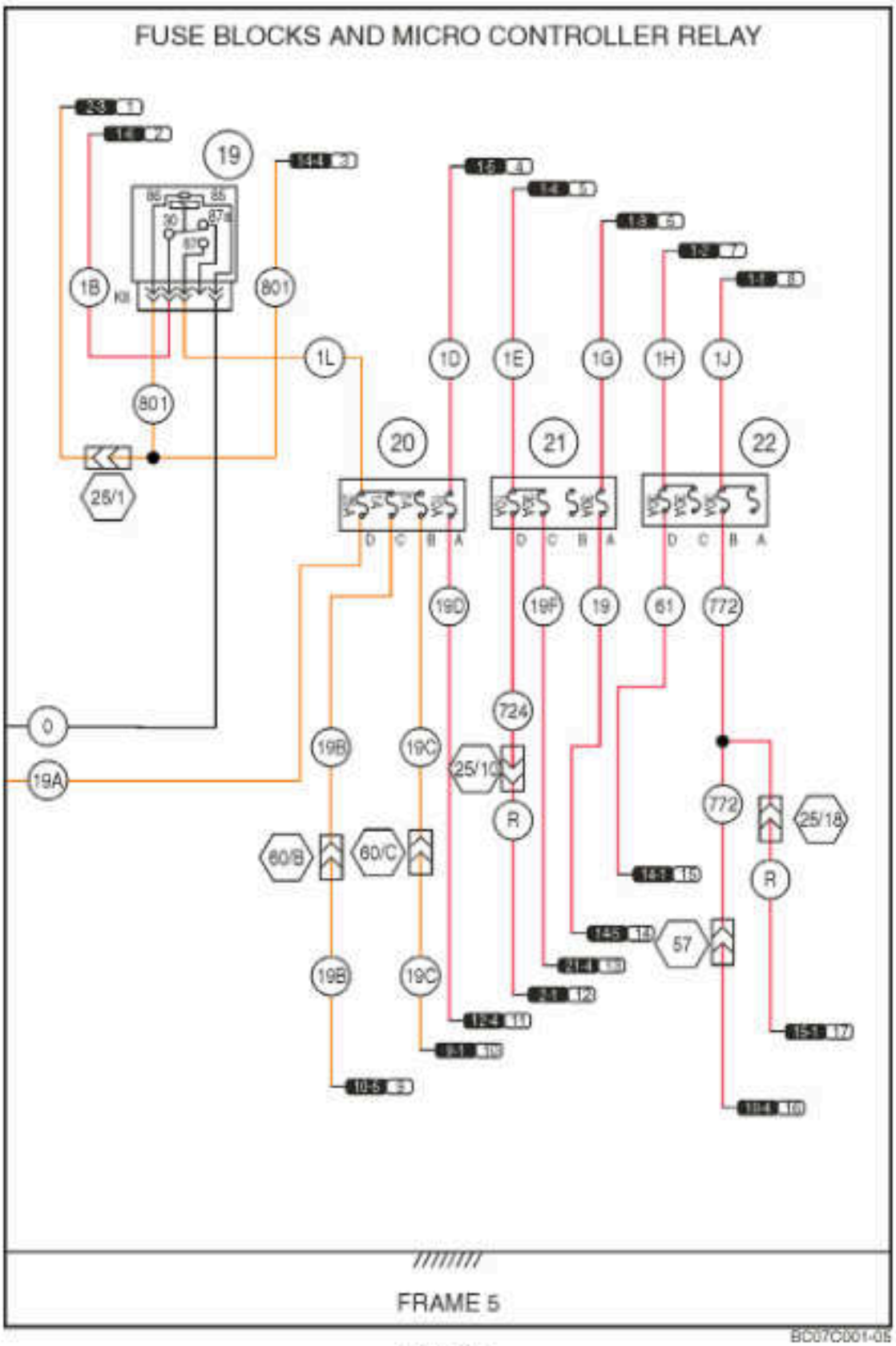





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# Wiring harness - Electrical schematic frame 05

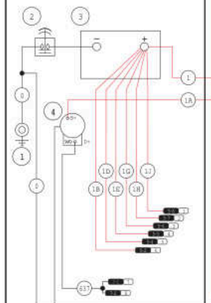
650K TIER II [CAL000000 – CAL012143], 750K TIER II [CAL000000 - CAL003346], 850K TIER II [CAL000000 – CAL005666]






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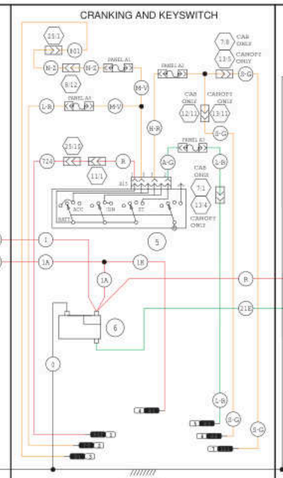
CHARGING



FRAME 1

BC04N028-01

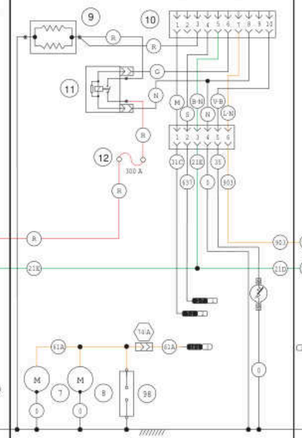
CRANKING AND KEYSWITCH



FRAME 2

BC04N028-02

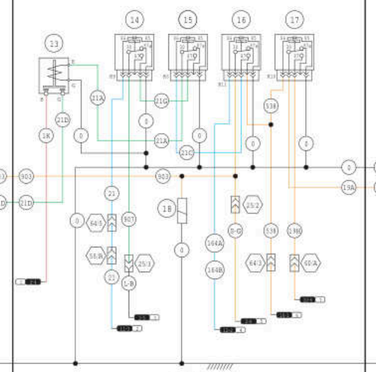
GRID HEATER, ROPS HEATER, AND AIR SUSPENSION SEAT (OPTIONAL)



FRAME 3

BC04N028-03

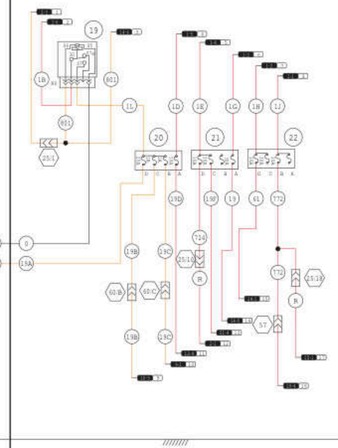
START RELAYS AND FUEL SHUTOFF SOLENOID



FRAME 4

BC04N028-04

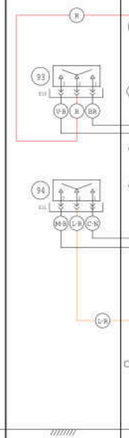
FUSE BLOCKS AND MICRO CONTROLLER RELAY



FRAME 5

BC04N028-05

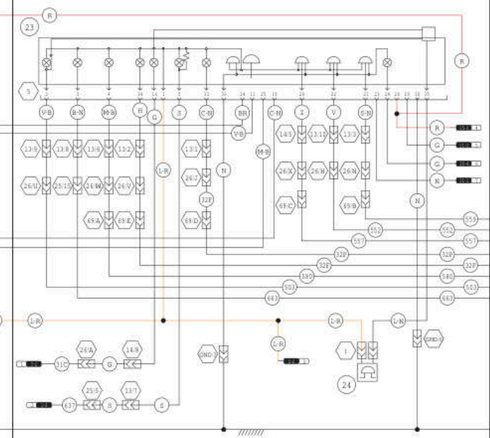
MENU/SERVICE UP/ DOWN SWITCHES



FRAME 6

BC04N028-06

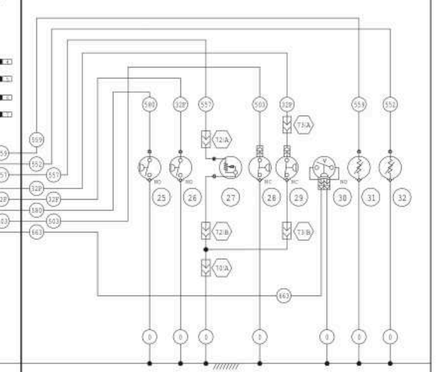
INSTRUMENT CLUSTER



FRAME 7

BC04N028-07

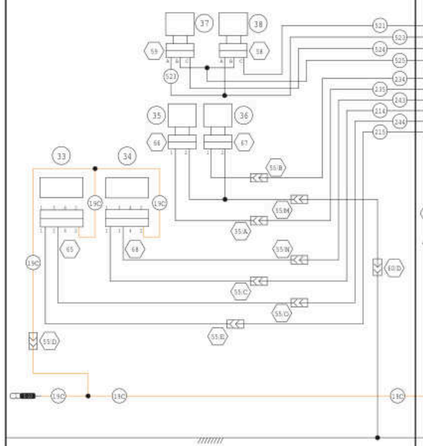
INSTRUMENT CLUSTER SENDERS AND SWITCHES



FRAME 8

BC04N028-08

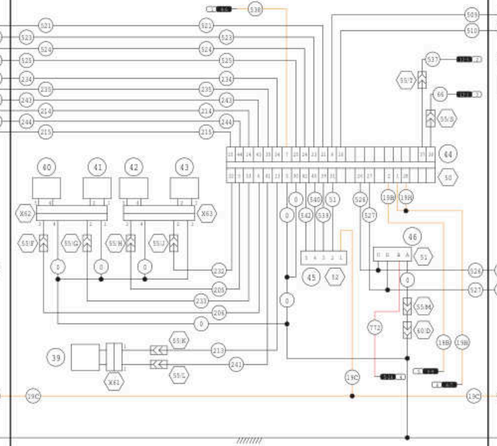
LEFT AND RIGHT HYDROSTAT MOTORS, BRAKE AND THROTTLE POTENTIOMETERS



FRAME 9

BC04N028-09

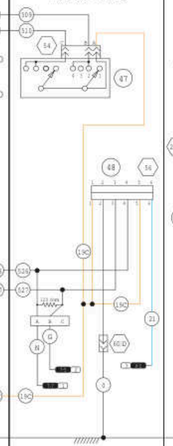
DRIVE TRAIN CONTROL MODULE



FRAME 10

BC04N028-10

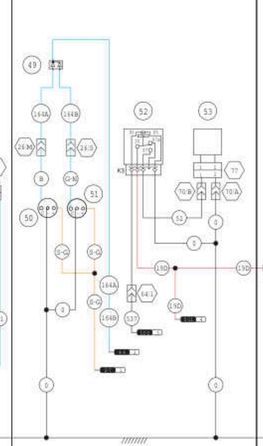
REVERSE RATIO SWITCH AND JOYSTICK



FRAME 11

BC04N028-11

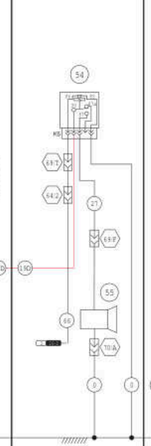
BRAKES



FRAME 12

BC04N028-12

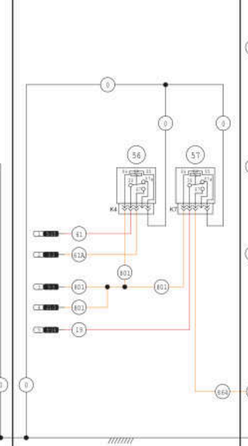
BACKUP ALARM AND RELAY



FRAME 13

BC04N028-13

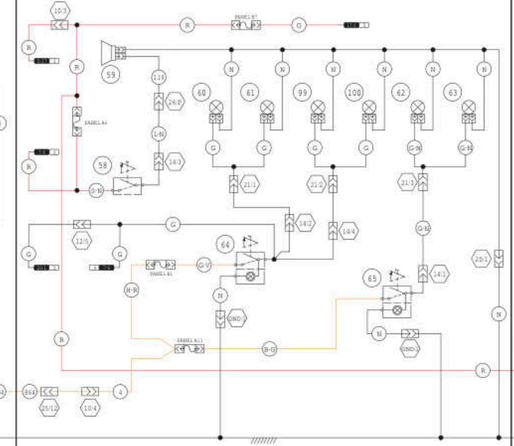
HEATER/SEAT AND LIGHTS RELAY



FRAME 14

BC04N028-14

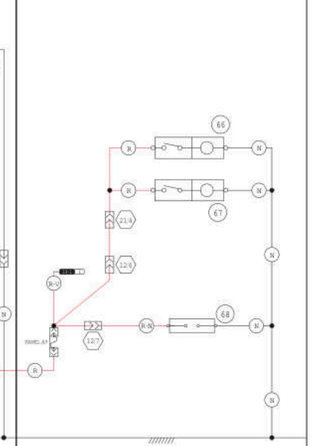
FRONT ROAD LAMPS, REAR ROAD LAMPS, AND HORN



FRAME 15

BC04N028-15

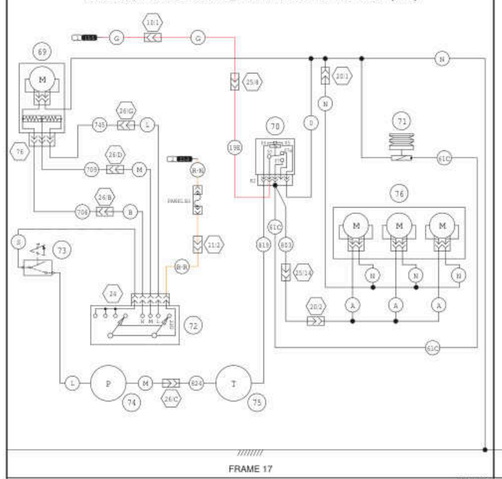
INTERIOR LAMPS (CAB), AND JACK 12V



FRAME 16

BC04N028-16

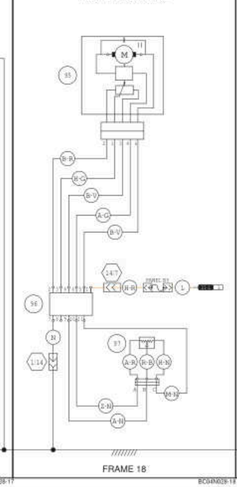
BLOWERS, AIR CONDITIONING, AND AIR CONDITIONING RELAY (CAB)



FRAME 17

BC04N028-17

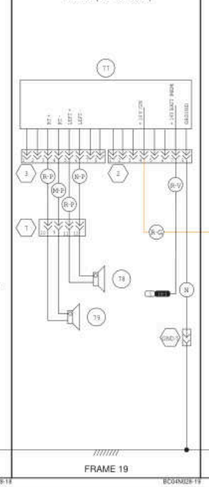
HEATER CONTROL



FRAME 18

BC04N028-18

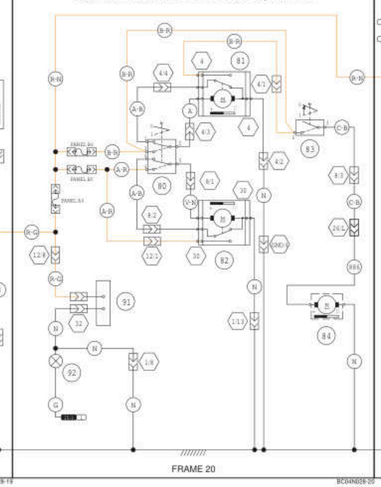
RADIO (OPTIONAL)



FRAME 19

BC04N028-19

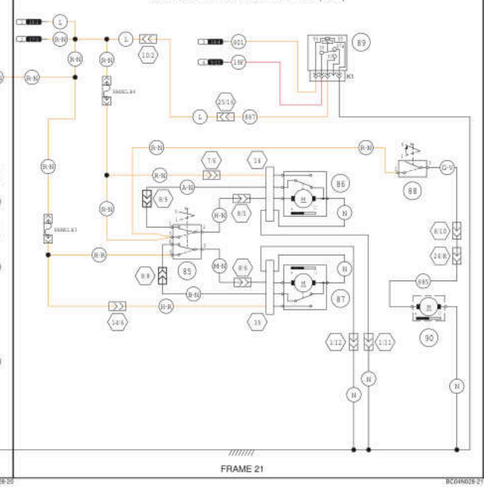
FRONT AND REAR WIPER AND WASHER, LIGHTER



FRAME 20

BC04N028-20

DOOR WIPER AND WASHER RELAY (CAB)



FRAME 21

BC04N028-21

1. GROUND
2. MASTER DISCONNECT SWITCH
3. BATTERY
4. ALTERNATOR
5. IGNITION SWITCH
6. STARTER
7. ROPS HEATER
8. AIR SUSPENSION SEAT
9. GRID HEATER
10. GRID HEATER CONTROLLER
11. GRID HEATER RELAY
12. GRID HEATER FUSE 300 AMP
13. STARTER RELAY 100 AMP
14. START IGNITION RELAY
15. HANDLE NEUTRAL OK RELAY
16. NEUTRAL OK RELAY
17. SAFETY RELAY
18. FUEL SHUTOFF SOLENOID
19. MICROCONTROLLER RELAY
20. MICROCONTROLLER FUSE BLOCK
21. MAIN FUSE BLOCK
22. ACCESSORY FUSE BLOCK
23. INSTRUMENT CLUSTER
24. ENGINE OIL AND COOLANT TEMP ALARM
25. HYDRAULIC FILTER RESTRICTION SWITCH
26. HYDROSTAT FILTER RESTRICTION SWITCH
27. FUEL LEVEL SENDER
28. OIL PRESSURE SWITCH
29. TRANSMISSION CHARGE PRESSURE
30. AIR FILTER RESTRICTION SWITCH
31. TRANSMISSION TEMP SENDER
32. ENGINE COOLANT TEMP SENDER
33. SPEED SENSOR RIGHT MOTOR
34. SPEED SENSOR LEFT MOTOR
35. RIGHT MOTOR SOLENOID
36. LEFT MOTOR SOLENOID
37. THROTTLE POTENTIOMETER
38. BRAKE POTENTIOMETER
39. ENGINE SPEED PICKUP
40. LEFT SOLENOID REAR PUMP
41. RIGHT SOLENOID REAR PUMP
42. LEFT SOLENOID FRONT PUMP
43. RIGHT SOLENOID FRONT PUMP
44. DRIVE TRAIN CONTROL MODULE
45. SERIAL COMMUNICATION PORT
46. DIGITAL
47. REVERSE RATIO SWITCH
48. JOY STICK
49. DIODES
50. PROXIMITY SWITCH
51. PROXIMITY SWITCH
52. BRAKE RELAY
53. BRAKE SOLENOID
54. BACKUP ALARM RELAY
55. BACKUP ALARM
56. HEATER/SEAT RELAY
57. LIGHTS RELAY
58. HORN PUSH BUTTON SWITCH
59. HORN
60. FRONT FLOODLIGHT
61. FRONT FLOODLIGHT
62. REAR FLOODLIGHT
63. REAR FLOODLIGHT
64. FRONT FLOODLIGHT AND MONITOR LIGHT SWITCH
65. REAR FLOODLIGHT SWITCH
66. CAB INTERIOR LAMP
67. CAB INTERIOR LAMP
68. 12 VOLT JACK
69. THREE SPEED FAN
70. AIR CONDITIONER RELAY
71. AIR CONDITIONER CLUTCH ON ENGINE
72. BLOWER SWITCH
73. AIR CONDITIONER SWITCH
74. PRESSURE SWITCH
75. THERMOSTAT SWITCH
76. CONDENSER FANS
77. RADIO
78. LEFT SPEAKER
79. RIGHT SPEAKER
80. FRONT AND REAR WIPER SWITCH
81. FRONT WINDSHIELD WIPER MOTOR
82. REAR WINDSHIELD WIPER MOTOR
83. FRONT AND REAR WINDSHIELD WASHER SWITCH
84. FRONT AND REAR WINDSHIELD WASHER PUMP
85. DOOR WIPER SWITCH
86. LEFT HAND DOOR WIPER MOTOR
87. RIGHT HAND DOOR WIPER MOTOR
88. DOOR WINDSHIELD WASHER PUMP SWITCH
89. CAB RELAY
90. DOOR WINDSHIELD WASHER PUMP
91. LIGHTER
92. LAMP
93. DISPLAY/SERVICE SWITCH
94. UP/DOWN SWITCH
95. HEATER CONTROL VALVE
96. HEATER CONTROL MODULE
97. TEMPERATURE CONTROL
98. ROPS POWER PLUG
99. OPT FRONT LIGHTS
100. OPT FRONT LIGHTS

## CIRCUIT DIAGRAM LEGEND

- SHOWS CIRCUIT CROSSING NOT CONNECTED
- SHOWS CIRCUIT CONNECTED
- 56 COMPONENT NUMBER
- J5 WIRE TAG NUMBER
- 8 CONNECTOR NUMBER
- △ NUMBERS REFER TO THE FRAME NUMBER AT THE BOTTOM CENTER OF EACH FRAME.
- MALE TERMINAL / FEMALE TERMINAL
- INDICATES EXTERNAL GROUND
- INDICATES INTERNALLY GROUNDED COMPONENT
- GROUND

## WIRE IDENTIFICATION COLORS

| | | | |
|---|---|---|---|
| A . . LIGHT BLUE | G . . YELLOW | M . . BROWN | S . . PINK |
| B . . WHITE | H . . GREY | N . . BLACK | V . . GREEN |
| C . . ORANGE | L . . BLUE | R . . RED | Z . . PURPLE |

## COMPONENT IDENTIFICATION

| | | |
|---|---|---|
| F . . FUSES | M . . MOTOR | X . . HARNESS CONNECTOR/ CAVITY IDENTIFICATION |
| K . . RELAY | S . . SWITCH | |

## NOTES

1. △ NUMBERS REFER TO THE FRAME NUMBER AT THE BOTTOM CENTER OF EACH BLOCK.
2. FUSES DRAWN AS INLINE ARE LOCATED IN FUSE PANEL A OR FUSE PANEL B. THESE PANELS ARE LOCATED ON THE LEFT SIDE OF THE DASH.
3. (X1) IDENTIFIES THE CONNECTOR (X) AND PIN (Y).
4. 650K Serial Number CAL 012143 and below.
5. 750K Serial Number CAL 003348 and below.
6. 850K Serial Number CAL 005666 and below.

## LEGEND

- INDICATES CONSTANT POWER WITH MASTER SWITCH ON
- INDICATES POWER WHEN KEY SWITCH IS IN ON POSITION
- INDICATES MOMENTARY POWER WHEN KEY SWITCH IS IN START POSITION
- FNR JOYSTICK IN NEUTRAL, PARKING BRAKES APPLIED

# ELECTRICAL SCHEMATIC
## 650K, 750K, AND 850K SERIES 2 DOZER

Additional copies of this Hydraulic and Electrical Schematic can be ordered through Technical Publications Distribution System. The part number is 6-78871

BC07C001



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