CASE

PROFESSIONAL PARTNER

SERVICE MANUAL

SKID STEER
COMPACT TRACK LOADER

410
420
420CT

87364090 NA

Replaces 6-78950 NA

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Issued 02-2005

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410/420 SKID STEER AND 420CT COMPACT TRACK LOADER
Service Manual
Bur 87364090
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90 Turn Signal Switch

Check Points	Reading	Possible Cause of Bad Readings
NOTE: *Turn the ignition switch to the ON position.*		
Terminal for wire 540AA to ground	Approximately 12 volts	Check the circuit between the turn signal switch and the 10 amp fuse in the options fuse block (12) Frame 2. Also check the 10 amp fuse in the options fuse block (12) Frame 2.
Place the turn signal switch in the LEFT turn position. Terminal for wire 757AA to ground.	Approximately 12 volts	Bad turn signal switch. Replace turn signal switch.
Place the turn signal switch in the RIGHT turn position. Terminal for wire 756AA to ground.	Approximately 12 volts	Bad turn signal switch. Replace turn signal switch.

91 Attachment Hydraulic Switch

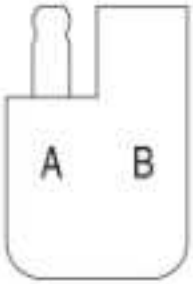
Check Points	Reading	Possible Cause of Bad Readings
NOTE: *Have another person sit in the operators seat. Pull the seat bar down to the operating position. Turn the ignition switch to the ON position.*		
Push and release the hydraulic attachment switch. Terminal for wire 311AB or 311BC or 311BD to ground	Approximately 12 volts	Check the circuit for wire 311AB or 311BC or 311BD to the instrument cluster connector pin 26. Also check the instrument cluster.
Disconnect connector 123B or 123C or 123D. Have another person hold the switch in the FORWARD flow position. Terminal for wire 545AB or 545AC or 545AD to ground.	Approximately 12 volts	Bad hydraulic attachment switch.
Have another person hold the switch in the REVERSE flow position. Terminal for wire 546AB or 546AC or 546AD to ground.	Approximately 12 volts	Bad hydraulic attachment switch.

98 Attachment Hydraulic Forward Flow "ON" Switch

Check Points	Reading	Possible Cause of Bad Readings
NOTE: *Have another person sit in the operators seat. Pull the seat bar down to the operating position. Turn the ignition switch to the ON position.*		
Push and release the hydraulic attachment forward flow "ON" switch. Terminal for wire 311CB or 311CC or 311CD to ground	Approximately 12 volts	Check the circuit for wire 311CB or 311CC or 311CD to the instrument cluster connector pin 26. Also check the instrument cluster.
Place the hydraulic attachment forward flow "ON" switch in the FORWARD position. Terminal for wire 545BB or 545BC or 545BD to ground.	Approximately 12 volts	Bad hydraulic attachment forward flow "ON" switch.

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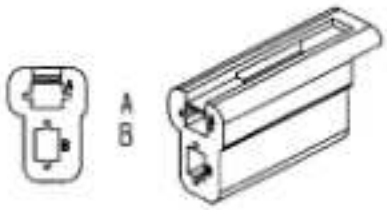
Connector 68



CNH_STYLE-24

Cavity	Circuit ID	Description
A	178AF (B) 1.0	To ground
A	178BZ (B) 1.0	To connector 69 pin A
B	766A (P) 1.0	From connector 67 pin D (rotating beacon switch)

Connector 71A (Euro)



877290R1

Cavity	Circuit ID	Description
B	817D (R) 1.0	From options fuse block T2
A	178BZ (B) 1.0	To ground

CONNECTORS SCHEMATIC FRAME 14

Connector 71

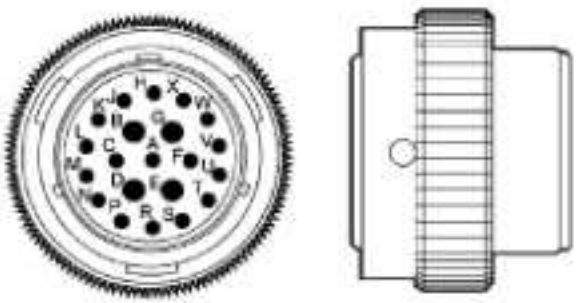


877291R1

Cavity	Circuit ID	Description
B	817B (R) 1.0	From options fuse block T2
A	178AD (B) 1.0	To ground

CONNECTORS SCHEMATIC FRAME 15

Connector 70

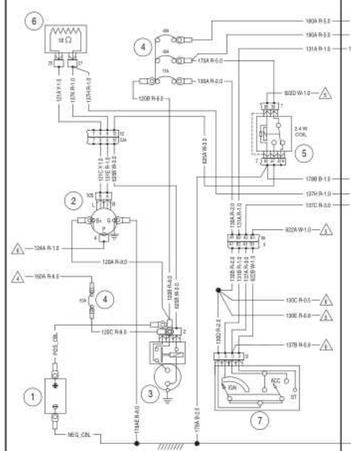


DE_HDP26-24-21S

Cavity	Circuit ID	Description
S	540A (R) 1.0	From connector 75 pin A
C	547A (T) 1.0	From connector 75 pin B

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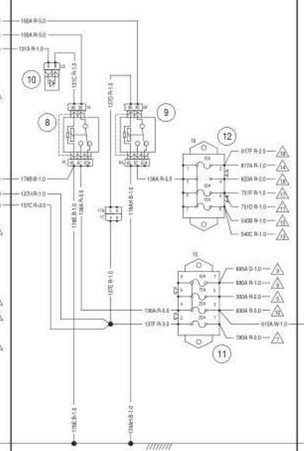
STARTING SYSTEM



FRAME 1

BC04M092-01A

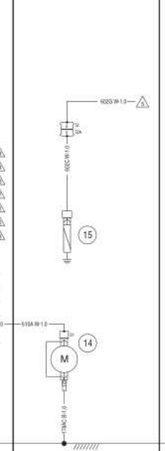
POWER DISTRIBUTION



FRAME 2

BC04M092-02A

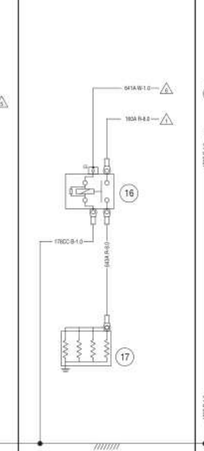
FUEL SUPPLY SYSTEM



FRAME 3

BC04M092-03A

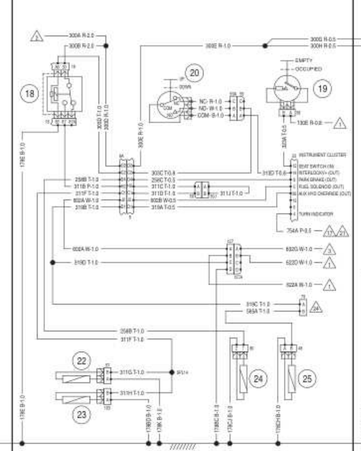
ENGINE PRE-HEAT SYSTEM



FRAME 4

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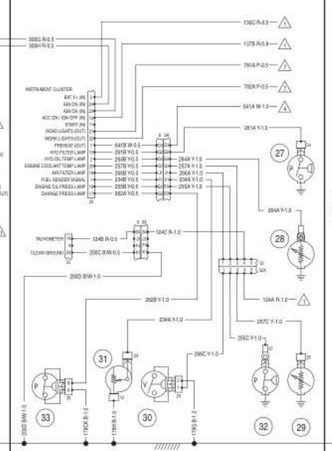
SAFETY INTERLOCK SYSTEM



FRAME 5

BC04M092-05A

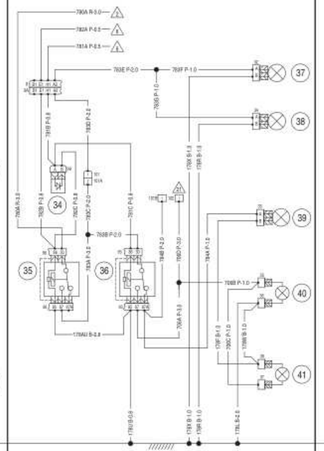
INSTRUMENT CLUSTER



FRAME 6

BC04M092-06A

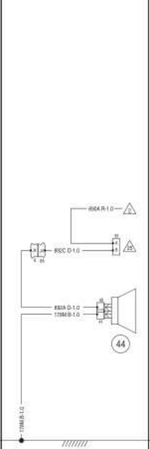
STANDARD LAMPS



FRAME 7

BC04M092-07A

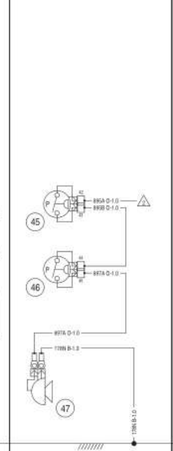
HORN (OPTIONAL)



FRAME 8

BC04M092-08A

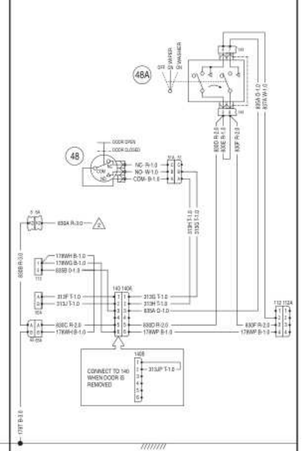
BACK-UP ALARM (OPTIONAL)



FRAME 9

BC04M092-09A

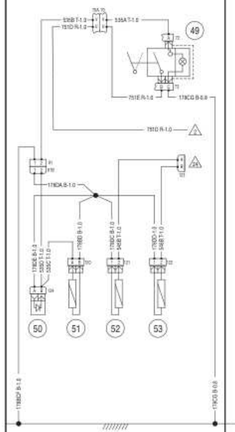
FRONT DOOR (OPTIONAL)



FRAME 10

BC04M092-10A

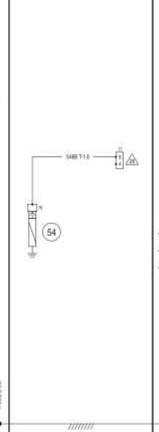
HIGH FLOW ELECTRO-HYDRAULIC ATTACHMENT FLOW (OPTIONAL)



FRAME 11

BC04M092-11A

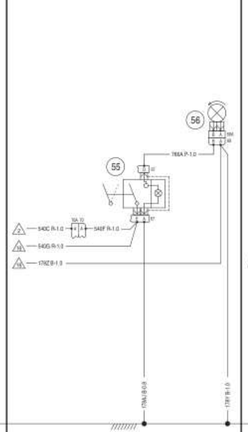
RIDE CONTROL (OPTIONAL)



FRAME 12

BC04M092-12A

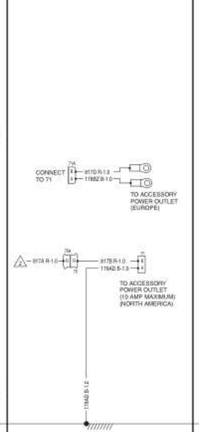
ROTATING BEACON (OPTIONAL)



FRAME 13

BC04M092-13A

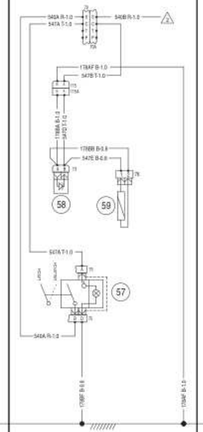
ELECTRICAL ACCESSORY OUTLET (OPTIONAL)



FRAME 14

BC04M092-14A

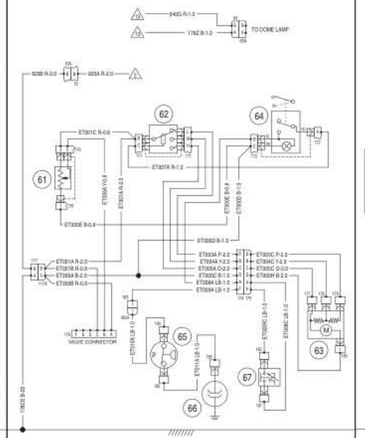
HYDRAULIC COUPLER (OPTIONAL)



FRAME 15

BC04M092-15A

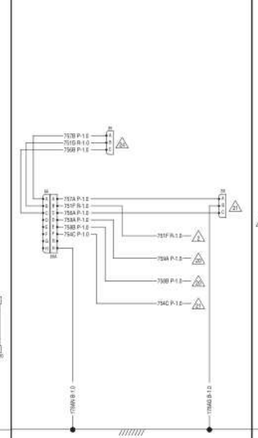
DOME LIGHT/HEATER (OPTIONAL)



FRAME 16

BC04M092-16A

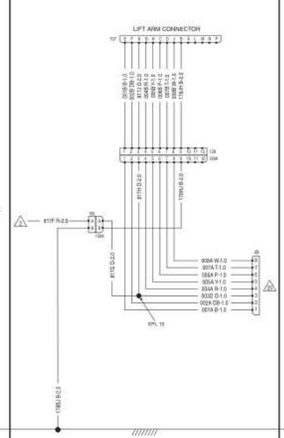
TURN SIGNALS (OPTIONAL)



FRAME 17

BC04M092-17A

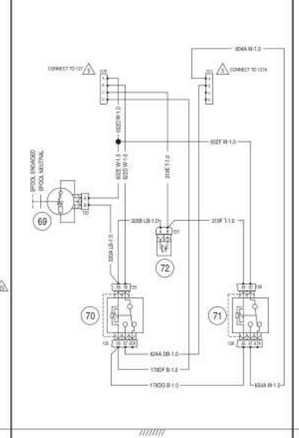
LOADER ARM AUXILIARY ELECTRIC (OPTIONAL)



FRAME 18

BC04M092-18A

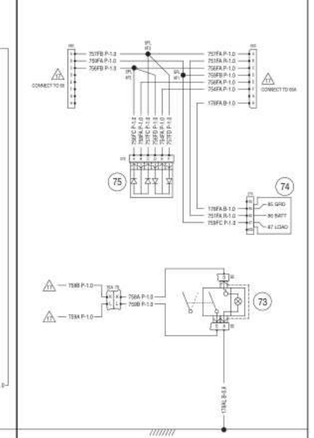
AUXILIARY OVERIDE SYSTEM



FRAME 19

BC04M092-19A

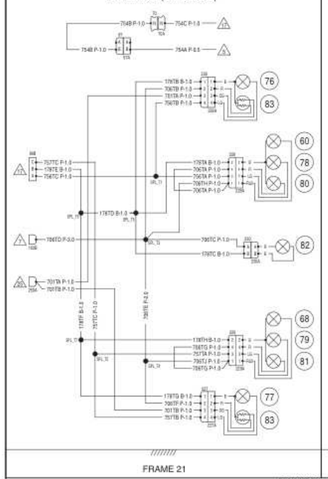
HAZARD SWITCH AND FLASHER HARNESS (OPTIONAL)



FRAME 20

BC04M092-20A

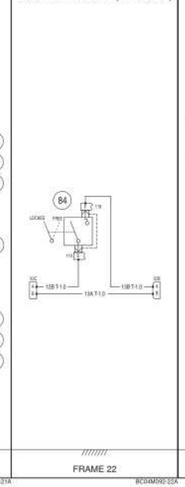
LIGHTING (OPTIONAL)



FRAME 21

BC04M092-21A

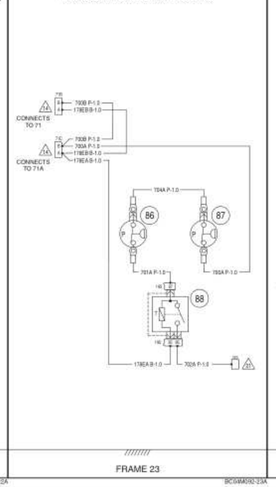
LOADER LOCK OUT (OPTIONAL)



FRAME 22

BC04M092-22A

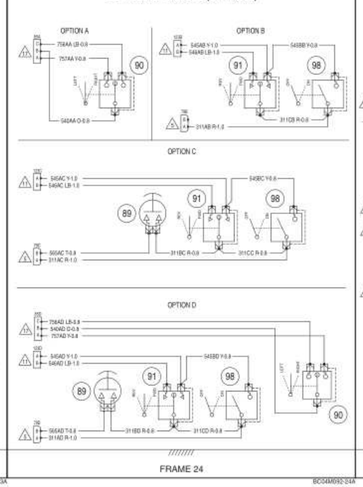
EURO ON ROAD BRAKE LIGHTS



FRAME 23

BC04M092-23A

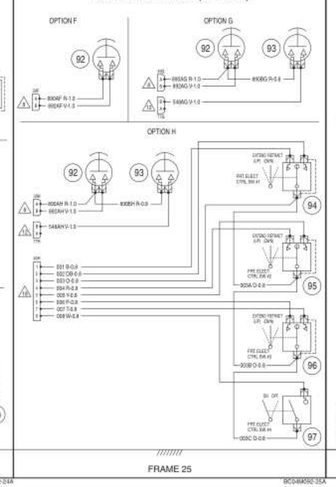
LEFT-HAND HANDLE (OPTIONS)



FRAME 24

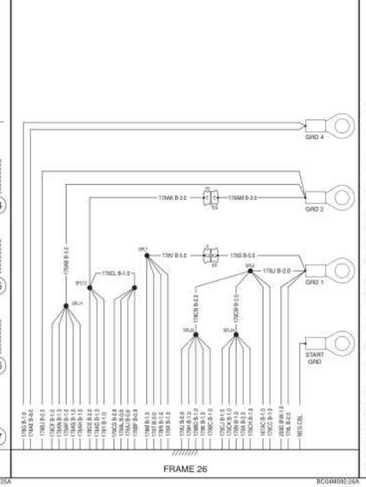
BC04M092-24A

RIGHT-HAND HANDLE (OPTIONS)



FRAME 25

BC04M092-25A



FRAME 26

BC04M092-26A

LEGEND

1. BATTERY
2. ALTERNATOR
3. STARTER AND SOLENOID
4. CIRCUIT BREAKER
5. STARTER RELAY
6. RESISTOR (50 OHMS)
7. IGNITION SWITCH
8. MAIN POWER RELAY
9. OPTIONS POWER RELAY
10. DIODE (REVERSE POLARITY)
11. PRIMARY FUSE BLOCK
12. OPTIONS FUSE BLOCK
13. NOT USED
14. FUEL PUMP
15. FUEL HOLD-IN SOLENOID
16. COIL
17. GLOW PLUGS
18. INTERLOCK RELAY
19. SEAT SWITCH
20. SEAT BAR SWITCH
21. NOT USED
22. LOADER VALVE SOLENOID
23. LOADER VALVE SOLENOID
24. BRAKE RELEASE/TANDEM PUMP NEUTRAL OVERRIDE SOLENOID
25. OPTION NOT AVAILABLE 410,420
26. NOT USED
27. HYDRAULIC FILTER PRESSURE SWITCH
28. HYDRAULIC OIL TEMPERATURE SENDER
29. ENGINE COOLANT TEMPERATURE SENDER
30. AIR FILTER RESTRICTION SWITCH
31. FUEL SENDER
32. ENGINE OIL PRESSURE SWITCH
33. CHARGE PRESSURE SWITCH
34. DIODE
35. LIGHT RELAY No. 1
36. LIGHT RELAY No. 2
37. LEFT FRONT WORKLIGHT
38. RIGHT FRONT WORKLIGHT
39. REAR WORKLIGHT
40. LEFT REAR INDICATOR LIGHT
41. RIGHT REAR INDICATOR LIGHT
42. NOT USED
43. NOT USED
44. HORN
45. BACKUP ALARM SWITCH (LEFT)
46. BACKUP ALARM SWITCH (RIGHT)
47. BACKUP ALARM
48. CAB DOOR SWITCH
48A. WIPER/WASHER SWITCH
49. ELECTRO HYDRAULIC HIGH FLOW SWITCH
50. DIODE
51. COMBINATION SOLENOID
52. FORWARD SOLENOID
53. REVERSE SOLENOID
54. RIDE CONTROL SOLENOID
55. ROTATING BEACON SWITCH
56. ROTATING BEACON
57. HYDRAULIC COUPLER SWITCH
58. DIODE
59. HYDRAULIC COUPLER RELEASE SOLENOID
60. LEFT-HAND FRONT HEADLAMP
61. HEAT CONTROL SWITCH
62. FAN SPEED SWITCH
63. BLOWER MOTOR
64. OPTION NOT AVAILABLE 410,420
65. OPTION NOT AVAILABLE 410,420
66. OPTION NOT AVAILABLE 410,420
67. OPTION NOT AVAILABLE 410,420
68. RIGHT-HAND FRONT HEADLAMP
69. AUXILIARY HYDRAULIC NEUTRAL SPOOL SWITCH
70. STARTING INTERLOCK RELAY
71. FUEL SOLENOID RELAY
72. DIODE
73. HAZARD SWITCH
74. FLASHER MODULE
75. DIODE PACK
76. LEFT REAR TURN LIGHT
77. RIGHT REAR TURN LIGHT
78. LEFT FRONT TURN LIGHT
79. RIGHT FRONT TURN LIGHT
80. LEFT FRONT POSITION LIGHT
81. RIGHT FRONT POSITION LIGHT
82. LICENSE PLATE LIGHT
83. RESISTOR
84. LOADER LOCKOUT SWITCH (OPTIONAL)
85. NOT USED
86. LEFT BRAKE LIGHT SWITCH (EURO)
87. RIGHT BRAKE LIGHT SWITCH (EURO)
88. BRAKE LIGHT TIMER RELAY (EURO)
89. OPTION NOT AVAILABLE 410,420
90. TURN SIGNAL SWITCH
91. ATTACHMENT HYDRAULIC SWITCH
92. HORN SWITCH
93. RIDE CONTROL SWITCH
94. FRONT ELECTRIC CONTROL SWITCH No. 1
95. FRONT ELECTRIC CONTROL SWITCH No. 2
96. FRONT ELECTRIC CONTROL SWITCH No. 3
97. FRONT ELECTRIC CONTROL SWITCH No. 4
98. ATTACHMENT HYDRAULIC FORWARD FLOW "ON" SWITCH

CIRCUIT DIAGRAM LEGEND

SHOWS CIRCUIT CROSSING NOT CONNECTED

SHOWS CIRCUIT CONNECTED

54 COMPONENT NUMBER

30 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

GROUND

INDICATES INTERNALLY GROUNDED COMPONENT

WIRE IDENTIFICATION

702A P-1.0

WIRE NUMBER / WIRE COLOR / WIRE SIZE

B . . BLACK
B/W BLACK/WHITE
LB . . LIGHT BLUE
O . . ORANGE
P . . PURPLE
R . . RED

NOTES

ELECTRICAL SCHEMATIC
410, 420 SKID STEER AND 420CT COMPACT TRACK LOADER

Additional copies of this Hydraulic and Electrical Schematic can be ordered through Technical Publications Distribution System.
The part number is 6-78971

BC04M092-00A

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