

R. C. Tronics, Incorporated

Specializing In Electronic Controls

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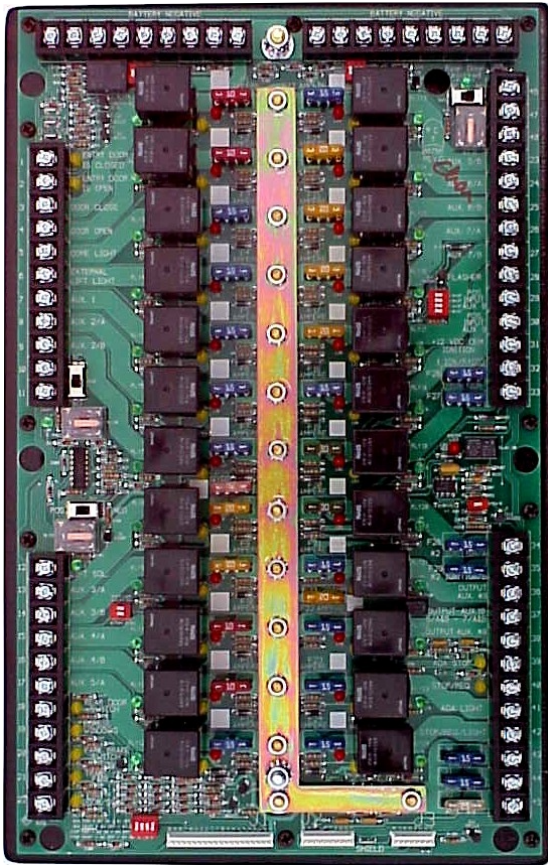
***BPC Power Center
Revision K***



R. C. Tronics Incorporated

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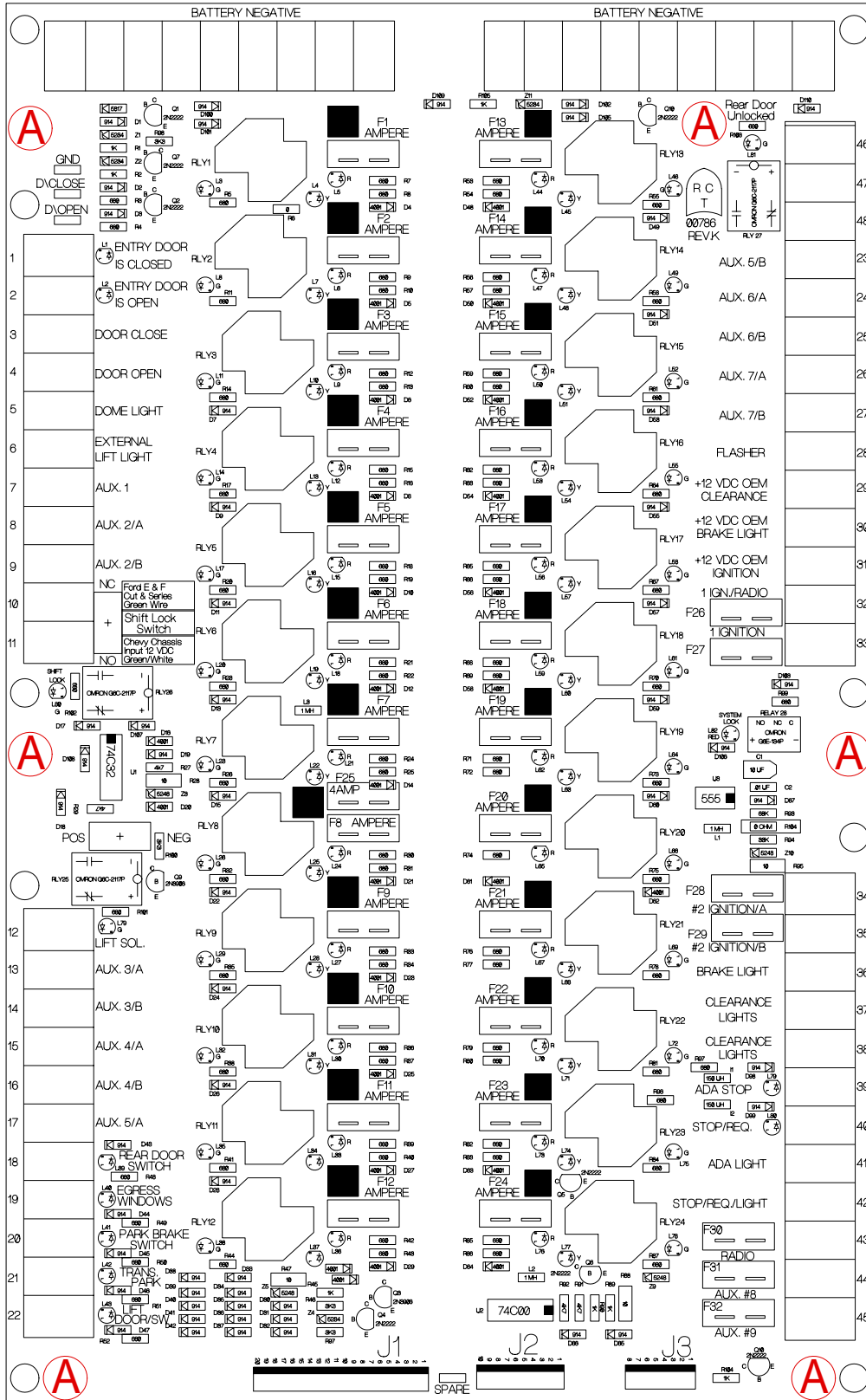
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Six Mounting Openings, Marked A. (See Note #1)



R. C. TRONICS INCORPORATED
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FOR: POWER CENTER, TRANSIT BUSS
 PRINT # 00786 (SEE PRINT 00785)
 DATE SEPTEMBER 24, 2003 REV. K

Note #1
Six Mounting Openings, .5 Inch.
Do Not Caputre PCB with Screw Head.
PCB May Crack Causing Malfunction
Use # 8 or # 10 Screw & Center In Opening.

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Bus Power Center, Revision K

The BPC is a complete system consisting of main power center which houses twenty-four (24) power relays. A field replaceable, standard ATO fuse protects each. Three LED's monitor each power relay. The red led depicts fuse status. A visible led indicates open fuse or circuit breaker. Amber led shows that control system is commanding power relay on. Lastly a green led shows 12 VDC is being supplied to the load, which is connected to the Power Center, via the numbered terminal strip.

There are nine (10) signal inputs on the Power Center. All have green LED's, which are located at the terminal strip. All are taken to battery negative. A lighted led shows the input is grounded and will be referred to as "ON" in the following descriptions.

On board is digital circuitry, which controls the operation of the "***Lift Interlock System***" Four conditions must be met prior to allowing operation of this output.

"LIFT SWITCH," (Located on dash switch center, PCB-790 switch #3)

1st, "PARK BRAKE SWITCH", On. (Terminal #20)

2nd, "TRANMISSION PARK", On. (Terminal #21)

3rd, "Lift Door Switch", (Terminal #22)

Once these four conditions are present, a 12 VDC, rated at 4 Ampere (fuse F25) will be present at "LIFT SOL.", (Terminal #12). In addition, when the Park Brake Switch (Terminal #20), "Lift Door Switch" (Terminal #22) or "Lift Switch" is present a relay (RLY-26) will operate between terminal #10 and #11. This contact is interfaced with, shift lock so as not to permit the shift from being removed from "PARK". There is a slide switch marked, "Shift Lock Switch". By selecting the "NC" you may interface with a Ford chassis series E & F. This is a "Green Wire", cut and series. Placing the "Shift Lock Switch to "NO" you can interface with a Chevy chassis. A +12 VDC wired in parallel will lock the shift; this is a "Green/White wire. Additionally the system cannot be disabled until the lift is stored and the lift door is closed. There is a red led, L82, "System Lock", located on the main RCT-786 Power Center which will not permit system shut down unless the lift is returned to it's stored position and the lift door is closed.

An optional led display is available which shows the status of all inputs and outputs associated with the ***Lift Interlock System***, part number RCT-1010. This status indicator can be located at any location inside or outside the bus.

NOTE:

The above-described "***Lift Interlock System***" complies with the requirements of the American Disabilities ACT (ADA) Title 49 Code of Regulations

4th, "EGRESS WINDOW", (Terminal #19) an "On" here operates a warning buzzer.

present. The power relay will remain operated until “ENTRY DOOR IS OPEN” is “ON”. (Terminal #2)

9th, “ADA STOP REQUEST” (Terminal #39) an “ON” here operates power relay, (RLY-23) rated 12 vdc @ 20 ampere, present at terminal #41. A warning buzzer will operate as long as the signal is present. The power relay will operate until “LIFT DOOR SWITCH” is “ON”. (Terminal #22)

10th, “REAR DOOR UNLOCKED” (Terminal #46) an “ON” here operates relay, (RLT-27) which provides a contact closure between Terminal #47 & Terminal #48. This is rated at 8 Ampere and permits engine start when Rear Door is Unlocked.

LIST OF TERMINAL ASSIGNMENTS

1. Entry Door is closed, to normally open contact, closes when door is closed.
2. Entry Door Is Open, to normally open contact, closes when door is open.
3. Door Closed, 12 vdc out, to operate door close actuator. (2-wire motor)
4. Door Open, 12 vdc out, to operate door open actuator. (2-wire motor)
5. Dome Light, 12 vdc out, operates with, “Entry Door Is Open” & Switch 2, on PCB-790
6. External Lift Light, 12 vdc out, operates with, “Lift Door Switch” (Terminal #22)
7. Aux. #1, 12 vdc out, operates with Switch #4 on PCB-790.
8. Aux. #2/A, 12 vdc out, operates with Switch #1 PCB-789.
9. Aux. #2/B, 12 vdc out, operates with Switch #1 PCB-789.
10. Shift Lock. Shift Lock Switch, Provides either N.O or N.C. Output.
11. Shift Lock. Shift Lock Switch, Provides either N.O or N.C. Output.
12. Lift Solenoid, 12 vdc, sends power or a battery negative to enable Chair Lift Control.
13. Aux. #3/A, 12 vdc out, operates with Switch #2 on PCB-789.
14. Aux. #3/B, 12 vdc out, operates with Switch #2 on PCB-789.
15. Aux. #4/A, 12 vdc out, operates with Switch #3 on PCB-789.
16. Aux. #4/B, 12 vdc out, operates with Switch #3 on PCB-789.
17. Aux. #5/A, 12 vdc out, operates with Switch #4 on PCB-789.
18. Rear Door Switch, N.O. contact to battery negative. (50 ma.)
19. Egress Windows, N.O. contact to battery negative. (50 ma.)
20. Park Switch Brake, N.O. contact to battery negative. (50 ma.)
21. Transmission Park, N.O. contact to battery negative. (50 ma.)
22. Lift Door Switch, N.O. contact to battery negative. (50 ma.)
23. Aux. #5/B, 12 vdc out, operates with Switch #4 on PCB-789.
24. Aux. #6/A, 12 vdc out, operates with Switch #5 on PCB-789.
25. Aux. #6/B, 12 vdc out, operates with Switch #5 on PCB-789.
26. Aux. #7/A, 12 vdc out, operates with Switch #6 on PCB-789.
27. Aux. #7/B, 12 vdc out, operates with Switch #6 on PCB-789.
28. Flasher, 12 vdc out, operates with Switch #7 on PCB-789, rate 1/second, and aprox.
29. +12 VDC OEM Clearance, input, 150 ma. operates Clearance Relay, terminal #37
30. +12 VDC OEM Brake Light, input, 150 ma., operates Brake Relay, terminal #36
31. +12 VDC OEM Ignition, input, 150 ma., operates Ignition relays, terminal #32, #33, #34, and #35. This input must be supplied to enable system. (Master Switch #8 on PCB-789 must be on to enable LMC.
32. Ignition, 12 vdc out, operates with OEM Ignition and Master Switch.
33. Ignition, 12 vdc out, operates with OEM Ignition and Master Switch.
34. Ignition, 12 vdc out, operates with OEM Ignition and Master Switch.
35. Ignition, 12 vdc out, operates with OEM Ignition and Master Switch.
36. Brake Light, 12 vdc out, operates with OEM Brake, terminal #30.
37. Clearance Light, 12 vdc out, operates with OEM Clearance, terminal #29

38. Same as above, dual connection point.
39. Stop Request ADA, N.O. to battery negative. Signals wheel chair stop.(50 ma.)
40. Stop Request, N.O. to battery negative. Signals passenger exit. (50 ma.)
41. ADA Stop Request, 12 vdc out.
42. Stop Request, 12 vdc out.
43. Radio, 12 vdc out.
44. Aux. #8, 12 vdc out.
45. Aux. #9, 12 vdc out.
46. Rear Door Unlock, Input. (To battery negative, 12 VDC @ 30 ma.)
47. Rear Door is Unlocked, Engine Start. (12 VDC @ 8 Ampere)
48. Rear Door is Unlocked, Engine Start. (12 VDC @ 8 Ampere)

The Power Penter, RCT-786 is connected via a (thirty) 30-conductor cable. Which is routed to RCT-948 Dash Switch Panel or RCT-789 Dash Switch Panel, which houses eight switches, warning buzzer and connector J4, which provides six outputs, spare, plus ground they are as follows.

1. J4-1, Lift Door Light, sink @ 1 ampere. (From J1-8)
2. J4-2, ADA Stop Request, sink @ 1 ampere. (From J1-7)
3. J4-3, Egress Windows, sink @ 1 ampere. (From J1-6)
4. J4-4, Rear Door Light, sink @ 1 ampere. (From J1-5)
5. J4-5, Stop Request, sink @ 1 ampere. (From J1-4)
6. J4-6, Entry Door Light, sink @ 1 ampere. (From J1-3)
7. J4-7 Spare. (From J2-10)
8. J4-8 Ignition (+12 VDC Switched) (From J1-1)

Switches on RCT-789 printed circuit board.

1. Aux. #2A/B Switch #1
2. Aux. #3A/B Switch #2
3. Aux. #4A/B Switch #3
4. Aux. #5A/B Switch #4
5. Aux. #6A/B Switch #5
6. Aux. #7A/B Switch #6
7. Flasher Switch #7
8. Master Switch #8

A second eight conductor is routed from RCT-789 to RCT-790. This printed circuit board houses four switches, which are as follows.

1. Entry Door Open and Door Close Switch #1
2. Dome Light Switch #2
3. Lift Switch #3
4. Aux. #1 Switch #4

Battery Negative should be connected to the 1/4 x 20 stud mounted to top center of RCT-786. Conductor should be large enough to carry all currents to be imposed upon it. There are eighteen terminal openings, which may be used for returns from circuit loads.

The +12 VDC supply conductor should be mounted to center buss bar and connected to 1/4 x 20 stud provided. This conductor should be large enough to carry the total current of all connected loads.

The size of power center, 2.5 deep x 16.5 bottom/top x 10.5 left/right weight 9 lb. LMC total weight including front switch assembly and data cable 10 lb.

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RCT-786 Power Center

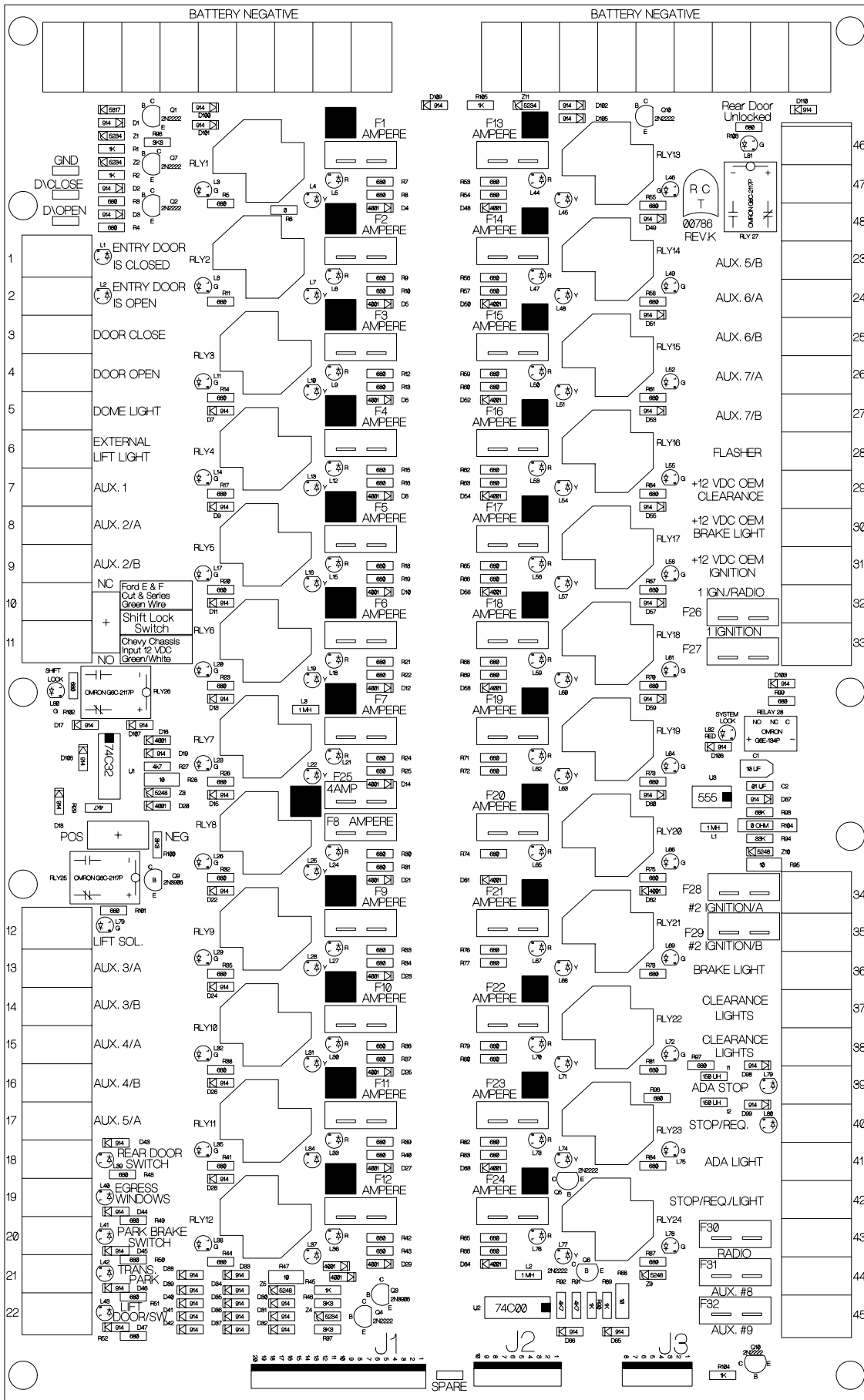
J1 and J2, Interface Between Power Center PCB and Dash Switch PCB.


- J1-1 Ignition +12 VDC (To J4-8)***
- J1-2 Buzzer Output (Sink)***
- J1-3 Entry Door Light (Sink) (To J4-6)***
- J1-4 Stop Request (Sink) (To J4-5)***
- J1-5 Rear Door Light (Sink) (To J4-4)***
- J1-6 Egress Windows (Sink) (To J4-3)***
- J1-7 ADA Stop Request (Sink) (To J4-2)***
- J1-8 Lift Door Light (Sink) (To J4-1)***
- J1-9 Aux. 5/A Switch (Sink) (To J3-)***
- J1-10 Aux 4/B Switch (Sink) (To Aux. 4-T/SW)***
- J1-11 Aux. 4/A Switch (Sink) (To Aux. 4-B/SW)***
- J1-12 Aux 3/B Switch (Sink) (To Aux. 3-T/SW)***
- J1-13 Aux. 3/A Switch (Sink) (To Aux. 3-B/SW)***
- J1-14 Aux. 2/A Switch (Sink) (To Aux.2-T/SW)***
- J1-15 Aux. 2/B Switch (Sink) (To Aux.2-B/SW)***
- J1-16 Aux. 1 Switch (Sink)***
- J1-17 Lift Solenoid Switch (Sink)***
- J1-18 Dome Light Switch (Sink)***
- J1-19 Entry Door Close Switch (Sink)***
- J1-20 Entry Door Open Switch (Sink)***

- J2-1 Aux. 5/B Switch (Sink) (To J3-5)***
- J2-2 Aux. 6/A Switch (Sink) (To J3-4)***
- J2-3 Aux 6/B Switch (Sink) (To J3-3)***
- J2-4 Aux 7/A Switch (Sink) (To J3-2)***
- J2-5 Aux. 7/B Switch (Sink) (To J3-1)***
- J2-6 Master Switch (Sink)***
- J2-7 Flasher Switch (Sink)***
- J2-8 Battery Negative***
- J2-9 Clearance Light Power +12 VDC***
- J2-10 Ignition (+12 VDC, Switched)(to J4-7)***

Interface between RCT-786 Power Center and ADA PCB, RCT-01010

- J3-1 Shift Lock Indicator. (Sink 1-Ampere Maximum)***
- J3-2 Transmission In Park. (Sink 1-Ampere Maximum)***
- J3-3 Lift Enabled Indicator. (Sink 1-Ampere Maximum)***
- J3-4 Park Brake Set Indicator. (Sink 1-Ampere Maximum)***
- J3-5 Lift Door Open Indicator. (Sink 1-Ampere Maximum)***
- J3-6 Lift Switch On. (Sink 1 Ampere Maximum)***
- J3-7 Ignition (+12 VDC, Switched)***
- J3-8 Ignition (+12 VDC, Switched)***




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FOR: POWER CENTER, TRANSIT BUSS
 PRINT # 00786 (SEE PRINT 00785)
 DATE SEPTEMBER 24, 2003 REV. K

RCT-789 or RCT-948 J1
 To Switch Center

RCT-789 or RCT-948 J2
 To Switch Center

RCT-747 or RCT-1010
 ADA Information PCB

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RCT-789 & RCT-790 Switch Panel

Use with Power Center RCT-786

RCT-789, PCB J1 & J2 30 Conductor Data Cable, Interface to Power Center

J1-1 Ignition, Switched +12 VDC
J1-2 Buzzer Output (Sink)
J1-3 Entry Door Light (Sink) (to J4-6)
J1-4 Stop Request (Sink) (to J4-5)
J1-5 Rear Door Light (Sink) (to J4-4)
J1-6 Egress Windows (Sink) (to J4-3)
J1-7 ADA Stop Request (Sink) (to J4-2)
J1-8 Lift Door Light (Sink) (to J4-1)
J1-9 Aux. 5/A Switch (Sink) (to Aux. 5 – T/SW)
J1-10 Aux 4/B Switch (Sink) (to Aux. 4 – B/SW)
J1-11 Aux. 4/A Switch (Sink) (to Aux. 4 – T/SW)
J1-12 Aux 3/B Switch (Sink) (to Aux. 3 – B/SW)
J1-13 Aux. 3/A Switch (Sink) (to Aux. 3 – T/SW)
J1-14 Aux. 2/A Switch (Sink) (to Aux. 2 – T/SW)
J1-15 Aux. 2/B Switch (Sink) (to Aux. 2 – B/SW)
J1-16 Aux. 1 Switch (Sink)
J1-17 Lift Solenoid Switch (Sink)
J1-18 Dome Light Switch (Sink)
J1-19 Entry Door Close Switch (Sink)
J1-20 Entry Door Open Switch (Sink)

J2-1 Aux. 5/B Switch (Sink) (to Aux. 5 – B/SW)
J2-2 Aux. 6/A Switch (Sink) (to Aux. 6 – T/SW)
J2-3 Aux 6/B Switch (Sink) (to Aux. 6 – B/SW)
J2-4 Aux 7/A Switch (Sink) (to Aux. 7 – T/SW)
J2-5 Aux. 7/B Switch (Sink) (to Aux. 7 – B/SW)
J2-6 Master Switch (Sink)
J2-7 Flasher Switch (Sink)
J2-8 Battery Negative
J2-9 Clearance Light Power +12 VDC
J2-10 Spare (to J4-7)

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RCT-789 & RCT-790 Switch Panel

Use with Power Center RCT-786

RCT-789, PCB J1 & J2 30 Conductor Data Cable, Interface to Power Center

- J1-1 Ignition, Switched +12 VDC***
- J1-2 Buzzer Output (Sink)***
- J1-3 Entry Door Light (Sink) (to J4-6)***
- J1-4 Stop Request (Sink) (to J4-5)***
- J1-5 Rear Door Light (Sink) (to J4-4)***
- J1-6 Egress Windows (Sink) (to J4-3)***
- J1-7 ADA Stop Request (Sink) (to J4-2)***
- J1-8 Lift Door Light (Sink) (to J4-1)***
- J1-9 Aux. 5/A Switch (Sink) (to Aux. 5 – T/SW)***
- J1-10 Aux 4/B Switch (Sink) (to Aux. 4 – B/SW)***
- J1-11 Aux. 4/A Switch (Sink) (to Aux. 4 – T/SW)***
- J1-12 Aux 3/B Switch (Sink) (to Aux. 3 – B/SW)***
- J1-13 Aux. 3/A Switch (Sink) (to Aux. 3 – T/SW)***
- J1-14 Aux. 2/A Switch (Sink) (to Aux. 2 – T/SW)***
- J1-15 Aux. 2/B Switch (Sink) (to Aux. 2 – B/SW)***
- J1-16 Aux. 1 Switch (Sink)***
- J1-17 Lift Solenoid Switch (Sink)***
- J1-18 Dome Light Switch (Sink)***
- J1-19 Entry Door Close Switch (Sink)***
- J1-20 Entry Door Open Switch (Sink)***

- J2-1 Aux. 5/B Switch (Sink) (to Aux. 5 – B/SW)***
- J2-2 Aux. 6/A Switch (Sink) (to Aux. 6 – T/SW)***
- J2-3 Aux 6/B Switch (Sink) (to Aux. 6 – B/SW)***
- J2-4 Aux 7/A Switch (Sink) (to Aux. 7 – T/SW)***
- J2-5 Aux. 7/B Switch (Sink) (to Aux. 7 – B/SW)***
- J2-6 Master Switch (Sink)***
- J2-7 Flasher Switch (Sink)***
- J2-8 Battery Negative***
- J2-9 Clearance Light Power +12 VDC***
- J2-10 Spare (to J4-7)***

RCT-789, PCB J3 Eight Conductor Data Cable to RCT-790 PCB

- J3-1 Clearance Light Power +12 VDC***
- J3-2 Battery Negative***
- J3-3 Entry Door Open Switch (Sink)***
- J3-4 Entry Door Close Switch (Sink)***
- J3-5 Dome Light Switch (Sink)***
- J3-6 Lift Solenoid Switch (Sink)***
- J3-7 Aux. 1 Switch (Sink)***
- J3-8 Ignition, Switched +12 VDC***

RCT-789, PCB J4 Eight Conductor Data Cable To RCT-747 Indicator Panel

- J4-1 Lift Door Light (Sink) (to J1-8)***
- J4-2 ADA Stop Request (Sink) (to J1-7)***
- J4-3 Egress Windows (Sink) (to J1-6)***
- J4-4 Rear Door Light (Sink) (to J1-5)***
- J4-5 Stop Request (Sink) (to J1-4)***
- J4-6 Entry Door Light (Sink) (to J1-3)***
- J4-7 Ignition, Switched +12 VDC***
- J4-8 Ignition, Switched +12 VDC***

RCT-789, PCB J3 Eight Conductor Data Cable to RCT-790 PCB

- J3-1 Clearance Light Power +12 VDC***
- J3-2 Battery Negative***
- J3-3 Entry Door Open Switch (Sink)***
- J3-4 Entry Door Close Switch (Sink)***
- J3-5 Dome Light Switch (Sink)***
- J3-6 Lift Solenoid Switch (Sink)***
- J3-7 Aux. 1 Switch (Sink)***
- J3-8 Ignition, Switched +12 VDC***

RCT-789, PCB J4 Eight Conductor Data Cable To RCT-747 Indicator Panel

- J4-1 Lift Door Light (Sink) (to J1-8)***
- J4-2 ADA Stop Request (Sink) (to J1-7)***
- J4-3 Egress Windows (Sink) (to J1-6)***
- J4-4 Rear Door Light (Sink) (to J1-5)***
- J4-5 Stop Request (Sink) (to J1-4)***
- J4-6 Entry Door Light (Sink) (to J1-3)***
- J4-7 Ignition, Switched +12 VDC***
- J4-8 Ignition, Switched +12 VDC***

To RCT-790 / J1

Ignition +12 VDC (To J4-8)
 Aux. 1 Switch (Sink)
 Lift Solenoid Switch (Sink)
 Dome Light Switch (Sink)
 Entry Door Close Switch (Sink)
 Entry Door Open Switch (Sink)
 Battery Negative
 Clearance Light Power +12VDC

To RCT-786 / J2

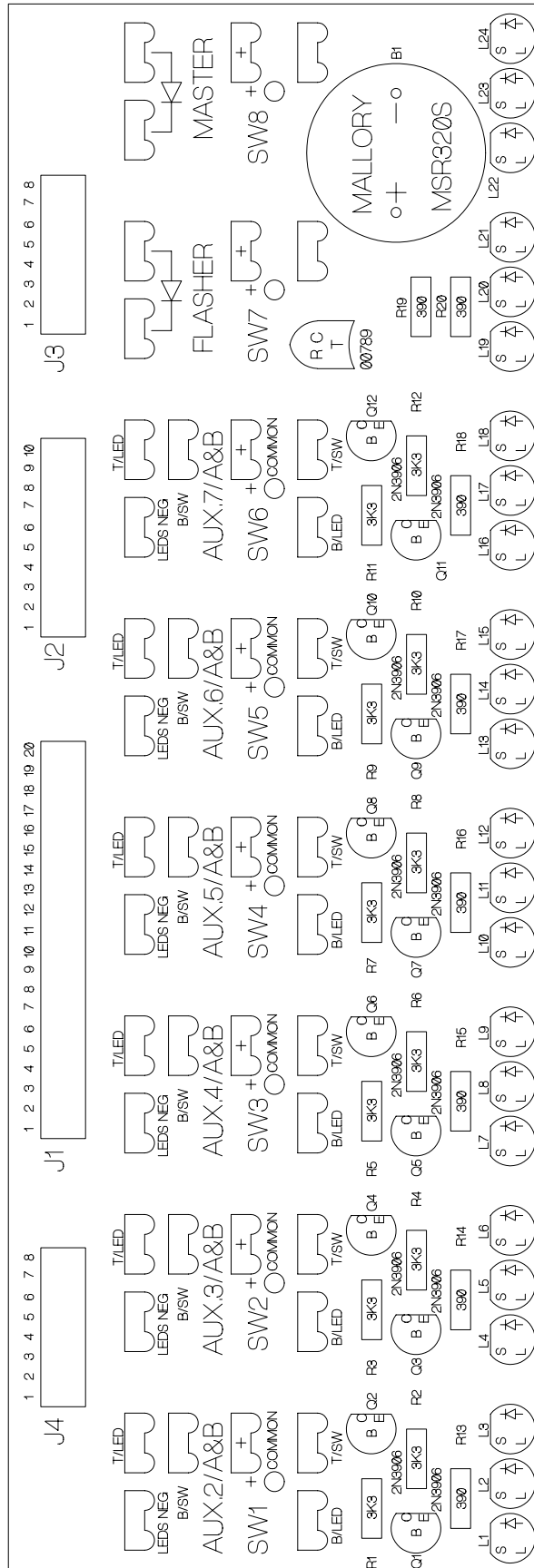
Spare (To J1-7)
 Clearance Light Power +12VDC
 Battery Negative
 Flasher Switch (Sink)
 Master Switch (Sink)
 Aux. 7/B Switch (Sink)(To J3-1)(to Aux. 7 - B/SW)
 Aux. 7/A Switch (Sink)(To J3-2)(to Aux. 7 - T/SW)
 Aux. 6/B Switch (Sink)(To J3-3)(to Aux. 6 - B/SW)
 Aux. 6/A Switch (Sink)(To J3-4)(to Aux. 6 - T/SW)
 Aux. 5/B Switch (Sink)(to J3-5)(to Aux. 5 - B/SW)

RCT-786 / J1

Entry Door Open Switch (Sink)
 Entry Door Close Switch (Sink)
 Dome Light Switch (Sink)
 Lift Solenoid Switch (Sink)
 Aux. 1 Switch (Sink)
 Aux. 2/B Switch (Sink) (to Aux. 2 - B/SW)
 Aux. 2/A Switch (Sink) (to Aux. 2 - T/SW)
 Aux. 3/A Switch (Sink) (to Aux. 3 - T/SW)
 Aux. 3/B Switch (Sink) (to Aux. 3 - B/SW)
 Aux. 4/A Switch (Sink) (to Aux. 4 - T/SW)
 Aux. 4/B Switch (Sink) (to Aux. 4 - B/SW)
 Aux. 5 Switch (Sink) (to Aux 5 - T/SW)
 Lift Door Light (Sink)(To J4-1)
 ADA Stop Request (Sink)(To J4-2)
 Egress Windows (Sink)(To J4-3)
 Rear Door Light (Sink)(To J4-4)
 Stop Request (Sink)(To J4-5)
 Entry Door Light (Sink)(To J4-6)
 Buzzer Output (Sink)
 Ignition +12 VDC (To J4-8)

To RCT-747 PCB, Indicator

Ignition, Switched, +12VDC
 Ignition, Switched, +12VDC
 Entry Door Light (Sink @ 1 ampere)(From J1-3)
 Stop Request (Sink @ 1 Ampere)(From J1-4)
 Rear Door Light (Sink @ 1 Ampere)(From J1-5)
 Egress Windows (Sink @ 1 Ampere)(From J1-6)
 ADA Stop Request (Sink @ 1 Ampere)(From J1-7)
 Lift Door Light (Sink @ 1 Ampere)(From J1-8)

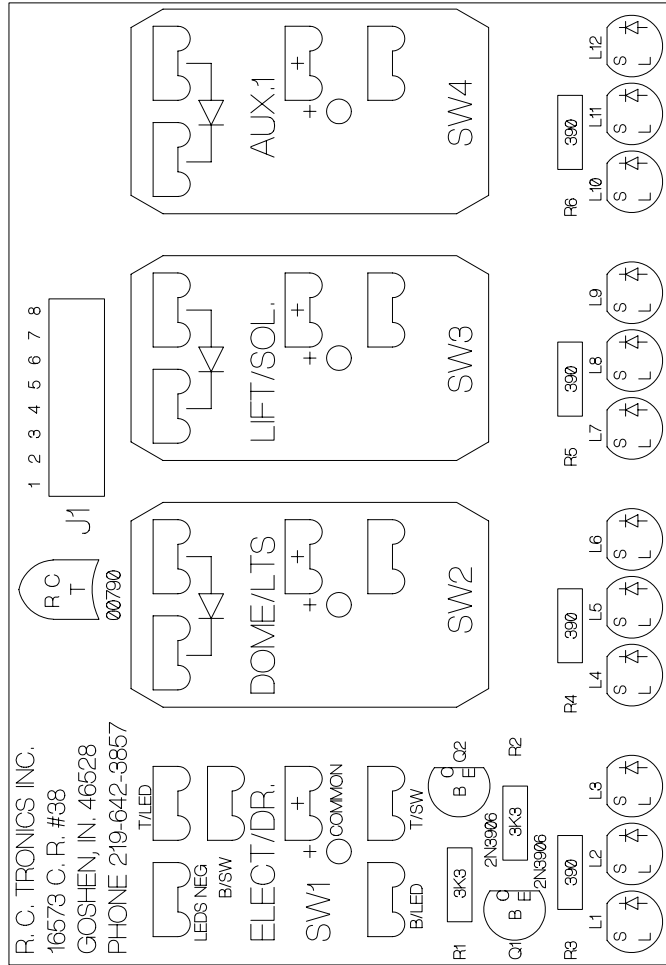


R. C. TRONICS INCORPORATED
 2573 EAST KERCHER ROAD
 GOSHEN, INDIANA 46528
 PHONE 1-574-642-3857
 FAX 1-574-642-3858

FOR: SWITCH PANEL FOR RCT 786
 PRINT # 00789 (785-786-787-788-790)
 DATE NOVEMBER 10, 1999

To RCT-789 / J3

- Ignition +12 VDC (To J4-8)
- Aux. 1 Switch (Sink)
- Lift Solenoid Switch (Sink)
- Dome Light Switch (Sink)
- Entry Door Close Switch (Sink)
- Entry Door Open Switch (Sink)
- Battery Negative
- Clearance Light Power +12VDC



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FOR: SWITCH PCB FOR RCT 786

PRINT # 00790 (785-786-788-789-790)

DATE NOVEMBER 10, 1999

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RCT-948 Switch Panel. Used with Power Center RCT-786

J1 and J2, Interface Between Power Center PCB and Dash Switch PCB.

J1-1 Ignition +12 VDC (To J4-8)
J1-2 Buzzer Output (Sink)
J1-3 Entry Door Light (Sink) (To J4-6)
J1-4 Stop Request (Sink) (To J4-5)
J1-5 Rear Door Light (Sink) (To J4-4)
J1-6 Egress Windows (Sink) (To J4-3)
J1-7 ADA Stop Request (Sink) (To J4-2)
J1-8 Lift Door Light (Sink) (To J4-1)
J1-9 Aux. 5/A Switch (Sink) (To J3-)
J1-10 Aux 4/B Switch (Sink) (To Aux. 4-T/SW)
J1-11 Aux. 4/A Switch (Sink) (To Aux. 4-B/SW)
J1-12 Aux 3/B Switch (Sink) (To Aux. 3-T/SW)
J1-13 Aux. 3/A Switch (Sink) (To Aux. 3-B/SW)
J1-14 Aux. 2/A Switch (Sink) (To Aux.2-T/SW)
J1-15 Aux. 2/B Switch (Sink) (To Aux.2-B/SW)
J1-16 Aux. 1 Switch (Sink)
J1-17 Lift Solenoid Switch (Sink)
J1-18 Dome Light Switch (Sink)
J1-19 Entry Door Close Switch (Sink)
J1-20 Entry Door Open Switch (Sink)

J2-1 Aux. 5/B Switch (Sink) (To J3-5)
J2-2 Aux. 6/A Switch (Sink) (To J3-4)
J2-3 Aux 6/B Switch (Sink) (To J3-3)
J2-4 Aux 7/A Switch (Sink) (To J3-2)
J2-5 Aux. 7/B Switch (Sink) (To J3-1)
J2-6 Master Switch (Sink)
J2-7 Flasher Switch (Sink)
J2-8 Battery Negative
J2-9 Clearance Light Power +12 VDC
J2-10 (Ignition (+12 VDC, Switched))(to J4-7)

J3 Connector, Spare Relays on Power Center PCB.

- J3-1 Aux 7/B Switch (Sink) (From J2-5)*
- J3-2 Aux 7/A Switch (Sink) (From J2-4)*
- J3-3 Aux 6/B Switch (Sink) (From J2-3)*
- J3-4 Aux 6/A Switch (Sink) (From J2-2)*
- J3-5 Aux 5/B Switch (Sink) (From J2-1)*
- J3-6 Aux 5/A Switch (Sink) (From J1-9)*
- J3-7 Spare*
- J3-8 Battery Negative*

J4 Connector, Indicating Lights

- J4-1 Lift Door Light, sink @ 1 ampere. (From J1-8)*
- J4-2 ADA Stop Request, sink @ 1 ampere. (From J1-7)*
- J4-3 Egress Windows, sink @ 1 ampere. (From J1-6)*
- J4-4 Rear Door Light, sink @ 1 ampere. (From J1-5)*
- J4-5 Stop Request, sink @ 1 ampere. (From J1-4)*
- J4-6 Entry Door Light, sink @ 1 ampere. (From J1-3)*
- J4-7 Ignition (+12 VDC, Switched) (From J1-1)*
- J4-8 Ignition (+12 VDC, Switched) (From J1-1)*

To RCT-747
PCB
Indicator

Ignition, Switched, +12VDC
Ignition, Switched, +12VDC
Entry Door Light (Sink @ 1 ampere)(From J1-3)
Stop Request (Sink @ 1 Ampere)(From J1-4)
Rear Door Light (Sink @ 1 Ampere)(From J1-5)
Egress Windows (Sink @ 1 Ampere)(From J1-6)
ADA Stop Request (Sink @ 1 Ampere)(From J1-7)
Lift Door Light (Sink @ 1 Ampere)(From J1-8)

Spare Relay
Interface

Battery Negative
Spare
Aux. 5/A Switch (Sink) (From J1-9)
Aux. 5/B Switch (Sink) (From J2-1)
Aux. 6/A Switch (Sink) (From J2-2)
Aux. 6/B Switch (Sink) (From J2-3)
Aux. 7/A Switch (Sink) (From J2-4)
Aux. 7/B Switch (Sink) (From J2-5)

To RCT-786 / J2

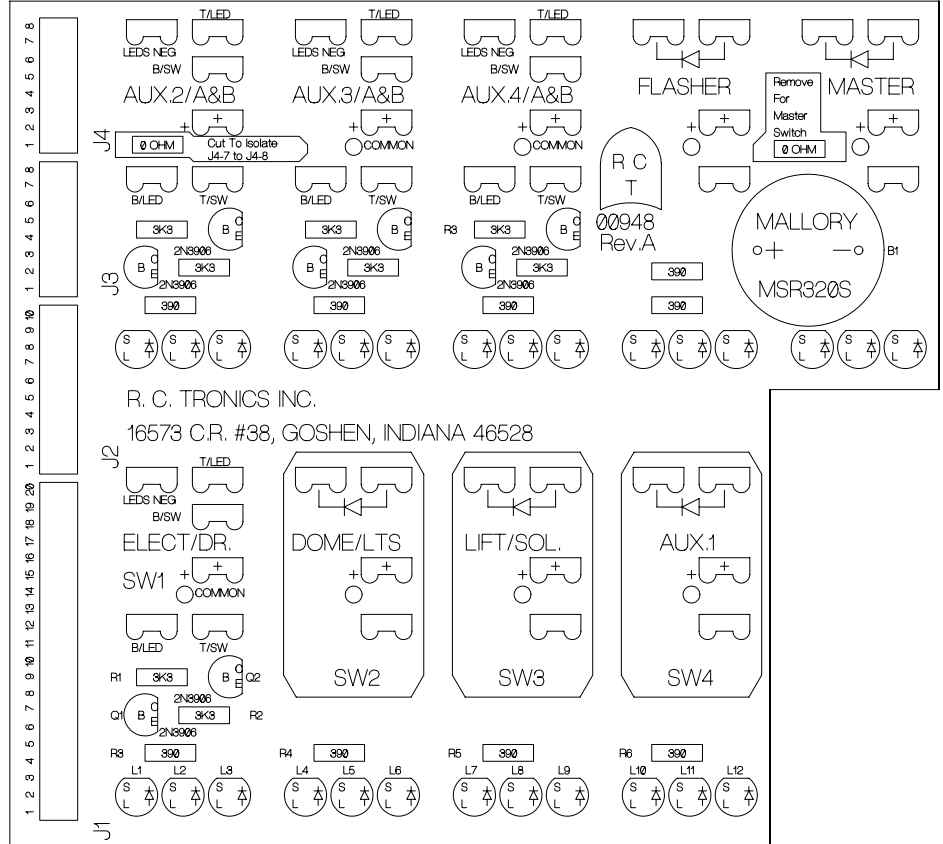
Spare (To J1-7)
Clearance Light Power +12VDC
Battery Negative
Flasher Switch (Sink)
Master Switch (Sink)
Aux. 7/B Switch (Sink)(To J3-1)
Aux. 7/A Switch (Sink)(To J3-2)
Aux. 6/B Switch (Sink)(To J3-3)
Aux. 6/A Switch (Sink)(To J3-4)
Aux. 5/B Switch (Sink)(To J3-5)

To RCT-786 / J1

Entry Door Open Switch (Sink)
Entry Door Close Switch (Sink)
Dome Light Switch (Sink)
Lift Solenoid Switch (Sink)
Aux. 1 Switch (Sink)
Aux. 2/B Switch (Sink)(To Aux.2-B/Switch)
Aux. 2/A Switch (Sink)(To Aux.2-T/Switch)
Aux. 3/A Switch (Sink)(To Aux.3-B/Switch)
Aux. 3/B Switch (Sink)(To Aux. 3-T/Switch)
Aux. 4/A Switch (Sink)(To 4-B/Switch)
Aux. 4/B Switch (Sink)(To Aux. 4-T/Switch)
Aux. 5/A Switch (Sink)(To J3-6)
Lift Door Light (Sink)(To J4-1)
ADA Stop Request (Sink)(To J4-2)
Egress Windows (Sink)(To J4-3)
Rear Door Light (Sink)(To J4-4)
Stop Request (Sink)(To J4-5)
Entry Door Light (Sink)(To J4-6)
Buzzer Output (Sink)
Ignition +12 VDC (To J4-8)

Remove 0 Ohm Resistor to Isolate J4-7 from J4-8

Remove 0 Ohm Resistor when installing "Master Switch"



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PHONE 1-574-642-3857
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FOR: SWITCH PCB, FOR RCT-786
PRINT # 00948 (USE W/RCT-786)
DATE SEPTEMBER 4, 2001

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RCT-1067, RCT-1068 & RCT-1069 **Use with Power Center RCT-786**

RCT-1067 PCB, J1 & J2, 30 Conductor Data Cable, Interface to Power Center

- J1-1 Ignition +12 VDC (To J5-7&8)*
- J1-2 Buzzer Output (Sink)*
- J1-3 Entry Door Light (Sink) (To J5-6)*
- J1-4 Stop Request (Sink) (To J5-5)*
- J1-5 Rear Door Light (Sink) (To J5-4)*
- J1-6 Egress Windows (Sink) (To J5-3)*
- J1-7 ADA Stop Request (Sink) (To J5-2)*
- J1-8 Lift Door Light (Sink) (To J5-1)*
- J1-9 Aux. 5/A Switch (Sink) (To J3-10)*
- J1-10 Aux 4/B Switch (Sink) (To J3-9)*
- J1-11 Aux. 4/A Switch (Sink) (To J3-8)*
- J1-12 Aux 3/B Switch (Sink) (To J3-7)*
- J1-13 Aux. 3/A Switch (Sink) (To J3-6)*
- J1-14 Aux. 2/A Switch (Sink) (To J3-4)*
- J1-15 Aux. 2/B Switch (Sink) (To J3-5)*
- J1-16 Aux. 1 Switch (Sink)*
- J1-17 Lift Solenoid Switch (Sink)*
- J1-18 Dome Light Switch (Sink)*
- J1-19 Entry Door Close Switch (Sink)*
- J1-20 Entry Door Open Switch (Sink)*

- J2-1 Aux. 5/B Switch (Sink) (To J3-5)*
- J2-2 Aux. 6/A Switch (Sink) (To J3-4)*
- J2-3 Aux 6/B Switch (Sink) (To J3-3)*
- J2-4 Aux 7/A Switch (Sink) (To J3-2)*
- J2-5 Aux. 7/B Switch (Sink) (To J3-1)*
- J2-6 Master Switch (Sink) (To J4-8)*
- J2-7 Flasher Switch (Sink) (To J4-8)*
- J2-8 Battery Negative (J3-1 & J4-3)*
- J2-9 Clearance Light Power +12 VDC (To J3-2 & J4-2)*
- J2-10 Open*

RCT-1067 PCB TO RCT-1068 PCB.

- J3-1 Battery Negative (J2-8 & J4-3)
- J3-2 Clearance Light Power (+12 VDC) (To J2-9 & J4-2)
- J3-3 Ignition (+12 VDC, Switched) (J1-1, J4-1 & J5-7 & 8)
- J3-4 Aux. 2/A Switch (Sink) (J1-14) (To Aux. 2 – T/SW)
- J3-5 Aux. 2/B Switch (Sink) (J1-15) (To Aux. 2 – B/SW)
- J3-6 Aux. 3/A Switch (Sink) (J1-13) (To Aux. 3 – T/SW)
- J3-7 Aux. 3/B Switch (Sink) (J1-12) (To Aux. 3 – B/SW)
- J3-8 Aux. 4/A Switch (Sink) (J1-11) (To Aux. 4 – T/SW)
- J3-9 Aux. 4/B Switch (Sink) (J1-10) (To Aux. 4 – B/SW)
- J3-10 Aux. 5/A Switch (Sink) (J1-9) (To Aux. 5 – T/SW)
- J3-11 Aux. 5/B Switch (Sink) (J2-1) (To Aux. 5 – B/SW)
- J3-12 Open
- J3-13 Open
- J3-14 Open
- J3-15 Open

RCT-1067 PCB to RCT-1069 PCB

- J4-1 Ignition (+12 VDC, Switched) (J2-9, J3-2 & J5-7&8)
- J4-2 Clearance Light Power (+12 VDC) (J2-9 & J3-2)
- J4-3 Battery Negative (J2-8 & J3-1)
- J4-4 Aux. 7/B Switch (Sink) (J2-5) (To Aux. 7 – B/SW)
- J4-5 Aux. 7/A Switch (Sink) (J2-4) (To Aux. 7 – T/SW)
- J4-6 Aux. 6/B Switch (Sink) (J2-3) (To Aux. 6 – B/SW)
- J4-7 Aux. 6/A Switch (Sink) (J2-2) (To Aux. 6 – T/SW)
- J4-8 Flasher Switch (Sink) (J2-7)
- J4-9 Master Switch (Sink) (J2-6)
- J4-10 Open

RCT-789, PCB J4 Eight Conductor Data Cable To RCT-747 Indicator Panel

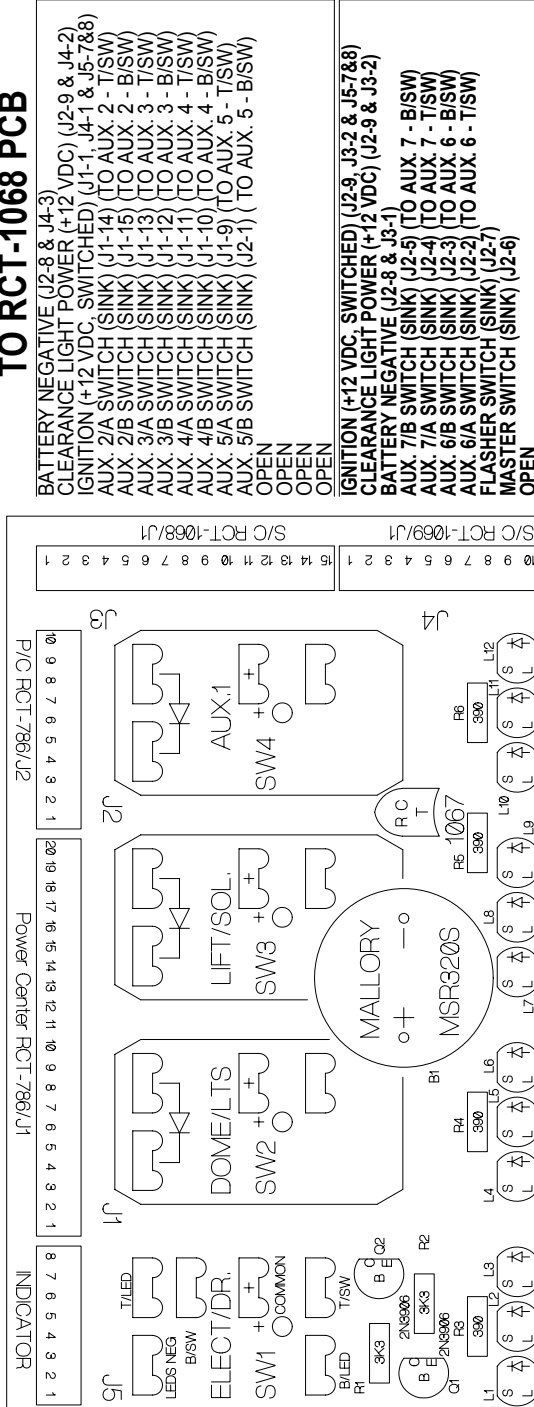
- J5-1 Lift Door Light (Sink) (To J1-8)
- J5-2 ADA Stop Request (Sink) (To J1-7)
- J5-3 Egress Windows (Sink) (To J1-6)
- J5-4 Rear Door Light (Sink) (To J1-5)
- J5-5 Stop Request (Sink) (To J1-4)
- J5-6 Entry Door Light (Sink) (To J1-3)
- J5-7 Ignition, Switched +12 VDC (To J1-1)
- J5-8 Ignition, Switched +12 VDC (To J1-1)

RCT-786 / J1 POWER CENTER

<p>OPEN CLEARANCE LIGHT POWER +12 VDC (TO J3-2 & J4-2) BATTERY NEGATIVE (J3-1 & J4-3) FLASHER SWITCH (SINK) (TO J4-8) MASTER SWITCH (SINK) (TO J4-8) AUX. 7/B SWITCH (SINK) (J3-1) AUX. 7/A SWITCH (SINK) (TO J3-2) AUX. 6/B SWITCH (SINK) (TO J3-3) AUX. 6/A SWITCH (SINK) (TO J3-4) AUX. 5.B SWITCH (SINK) (TO J3-5)</p>	<p>ENTRY DOOR OPEN SWITCH (SINK) ENTRY DOOR CLOSED SWITCH (SINK) DOME LIGHT SWITCH (SINK) LIFT SOLENOID SWITCH (SINK) AUX. 1 SWITCH (SINK) AUX. 2/B SWITCH (SINK) (TO J3-5) AUX. 2/A SWITCH (SINK) (TO J3-4) AUX. 3/A SWITCH (SINK) (TO J3-6) AUX. 3/B SWITCH (SINK) (TO J3-7) AUX. 4/A SWITCH (SINK) (TO J3-8) AUX. 4/B SWITCH (SINK) (TO J3-9) AUX. 5/A SWITCH (SINK) (TO J3-10) LIFT DOOR LIGHT (SINK) (TO J5-1) ADA STOP REQUEST (SINK) (TO J5-2) EGRESS WINDOWS (SINK) (TO J5-3) REAR DOOR LIGHT (SINK) (TO J5-4) STOP REQUEST (SINK) (TO J5-5) ENTRY DOOR LIGHT (SINK) (TO J5-6) BUZZER OUTPUT (SINK) IGNITION +12 VDC (TO J5-7&8)</p>
<p>IGNITION, SWITCHED +12 VDC (TO J1-1) IGNITION, SWITCHED +12 VDC (TO J1-1) ENTRY DOOR LIGHT (SINK) (TO J1-3) STOP REQUEST (SINK) (TO J1-4) REAR DOOR LIGHT (SINK) (TO J1-5) EGRESS WINDOWS (SINK) (TO J1-6) ADA STOP REQUEST (SINK) (TO J1-7) LIFT DOOR LIGHT (SINK) (TO J1-8)</p>	

RCT-786 / J2 POWER CENTER

TO RCT-1068 PCB



TO RCT-1069 PCB

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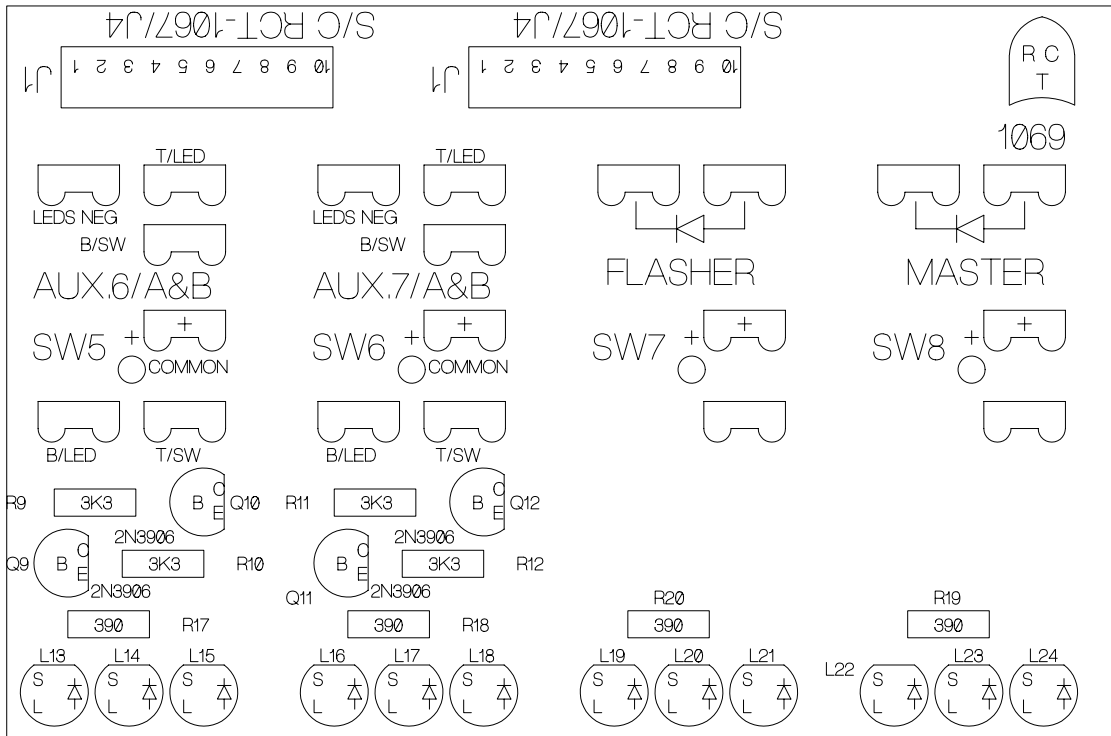
FOR: PCB, SWITCH FOR RCT-786 P/C
PRINT # 1067 (SEE 1068 & 1069)
DATE NOVEMBER 1, 2002

IGNITION (+12 VDC, SWITCHED) (J2-9, J3-2 & J5-7&8)
 CLEARANCE LIGHT POWER (+12 VDC) (J2-9 & J3-2)
 BATTERY NEGATIVE (J2-8 & J3-1)
 AUX. 7/B SWITCH (SINK) (J2-5) (TO AUX. 7 - B/SW)
 AUX. 7/A SWITCH (SINK) (J2-4) (TO AUX. 7 - T/SW)
 AUX. 6/B SWITCH (SINK) (J2-3) (TO AUX. 6 - B/SW)
 AUX. 6/A SWITCH (SINK) (J2-2) (TO AUX. 6 - T/SW)
 FLASHER SWITCH (SINK) (J2-7)
 MASTER SWITCH (SINK) (J2-6)
 OPEN

To RCT-1067 PCB

IGNITION (+12 VDC, SWITCHED) (J2-9, J3-2 & J5-7&8)
 CLEARANCE LIGHT POWER (+12 VDC) (J2-9 & J3-2)
 BATTERY NEGATIVE (J2-8 & J3-1)
 AUX. 7/B SWITCH (SINK) (J2-5) (TO AUX. 7 - B/SW)
 AUX. 7/A SWITCH (SINK) (J2-4) (TO AUX. 7 - T/SW)
 AUX. 6/B SWITCH (SINK) (J2-3) (TO AUX. 6 - B/SW)
 AUX. 6/A SWITCH (SINK) (J2-2) (TO AUX. 6 - T/SW)
 FLASHER SWITCH (SINK) (J2-7)
 MASTER SWITCH (SINK) (J2-6)
 OPEN

To RCT-1067 PCB

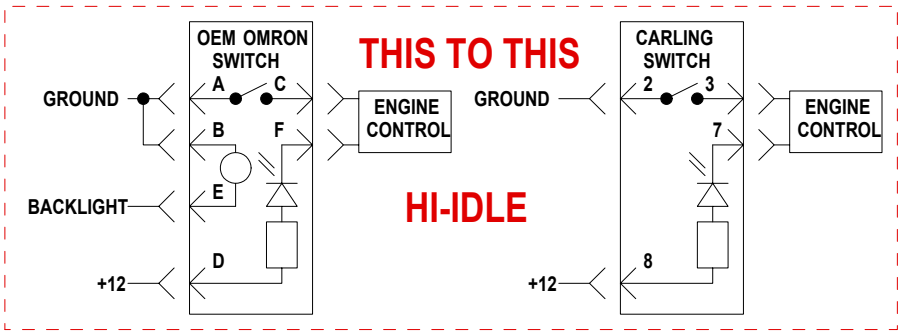
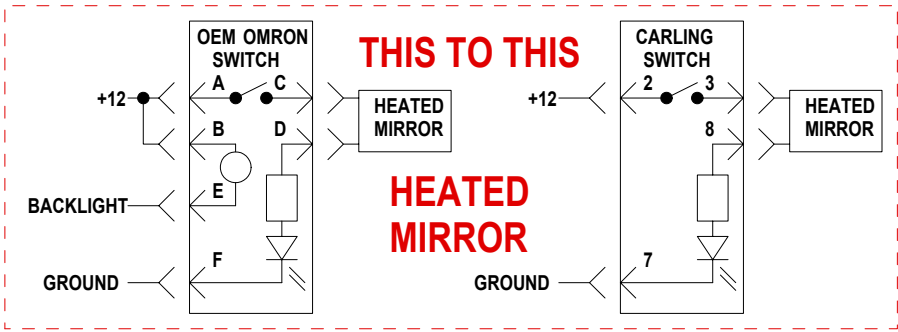
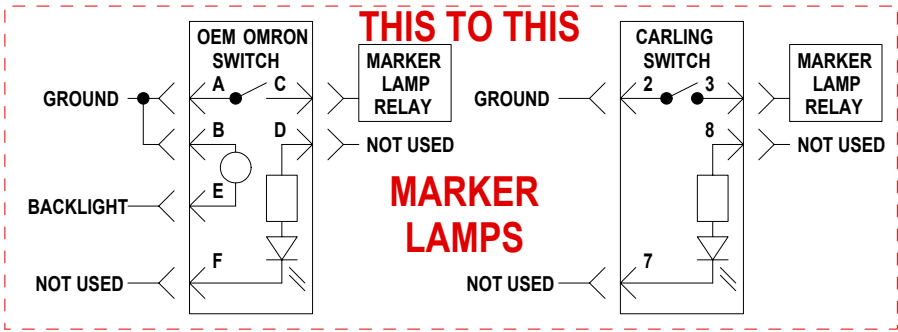
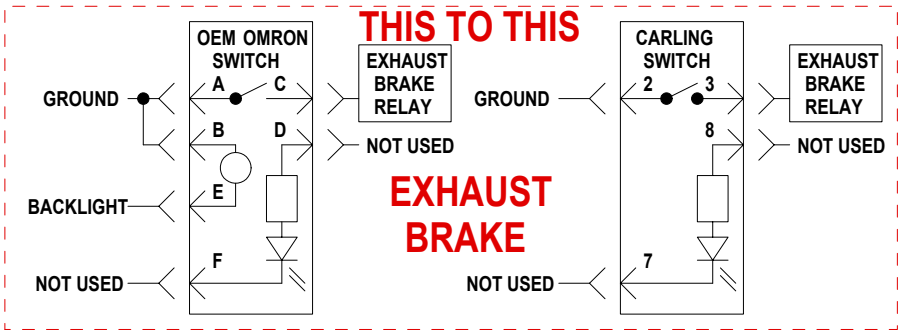


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 GOSHEN, INDIANA 46528
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 FAX 1-574-642-3858

FOR: PCB, SWITCH FOR RCT-786 P/C
 PRINT # 1069 (SEE 1067 & 1068)
 DATE NOVEMBER 1, 2002

GMT-560 CHASSI

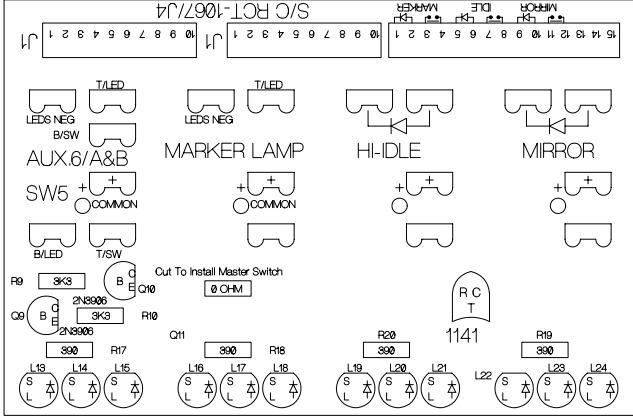
NOTE: THIS PCB IS USED IN PLACE OF RCT-1069
MARKER SWITCH RELPACES AUX 7/8 OF RCT-1069
HI-IDLE SWITCH REPLACES FLASHER SWITCH OF RCT-1069
MIRROR SWITCH REPLACES MASTER SWITCH OF RCT-1069
ENGINE CONTROL, HEATED MIRROR, MARKER LAMP & EXHAUST BRAKE,
ARE ROUTED TO SEPERATE 15 PIN HEADER.
(PLEASE SPECIFY CABLE LENGTH) (ALL SWITCHES MOMENTARY)




To RCT-1067 PCB
 IGNITION (+12 VDC SWITCHED) (J2-9, J3-2, J5-7, J8-8)
 CLEARANCE LIGHT POWER (+12 VDC) (J2-9 & J3-2)
 BATTERY NEGATIVE (J2-8 & J3-1)
 AUX. 7/B SWITCH (SINK) (J2-5) (TO AUX. 7 - B/SW)
 AUX. 7/A SWITCH (SINK) (J2-4) (TO AUX. 7 - T/SW)
 AUX. 6/B SWITCH (SINK) (J2-3) (TO AUX. 6 - B/SW)
 AUX. 6/A SWITCH (SINK) (J2-2) (TO AUX. 6 - T/SW)
 FLASHER SWITCH (SINK) (J2-7)
 MASTER SWITCH (SINK) (J2-6)
 OPEN

To RCT-1067 PCB
 IGNITION (+12 VDC SWITCHED) (J2-9, J3-2 & J5-7, J8-8)
 CLEARANCE LIGHT POWER (+12 VDC) (J2-9 & J3-2)
 BATTERY NEGATIVE (J2-8 & J3-1)
 AUX. 7/B SWITCH (SINK) (J2-5) (TO AUX. 7 - B/SW)
 AUX. 7/A SWITCH (SINK) (J2-4) (TO AUX. 7 - T/SW)
 AUX. 6/B SWITCH (SINK) (J2-3) (TO AUX. 6 - B/SW)
 AUX. 6/A SWITCH (SINK) (J2-2) (TO AUX. 6 - T/SW)
 FLASHER SWITCH (SINK) (J2-7)
 MASTER SWITCH (SINK) (J2-6)
 OPEN

MARKER LED NEGATIVE INPUT (12 VDC)
 MARKER LED POSITIVE INPUT (12 VDC)
 MARKER SWITCH INPUT NORMALLY OPEN
 MARKER SWITCH INPUT NORMALLY OPEN
 HI-IDLE LED NEGATIVE INPUT (12 VDC)
 HI-IDLE POSITIVE INPUT (12 VDC)
 HI-IDLE SWITCH INPUT NORMALLY OPEN
 MIRROR LED NEGATIVE INPUT (12 VDC)
 MIRROR LED POSITIVE INPUT (12 VDC)
 MIRROR SWITCH INPUT NORMALLY OPEN
 MIRROR SWITCH INPUT NORMALLY OPEN
 NOT USED
 NOT USED
 NOT USED




R. C. TRONICS INCORPORATED
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 PHONE 1-574-642-3857
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FOR: PCB, SWITCH FOR RCT-786 P/C
 PRINT # 1069 (SEE 1067 & 1068)
 DATE AUGUST 26, 2003 (OEM SW.)

R. C. Tronics, Incorporated

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Phone 1-574-642-3857
1-800-642-8171

www.rctronics.com

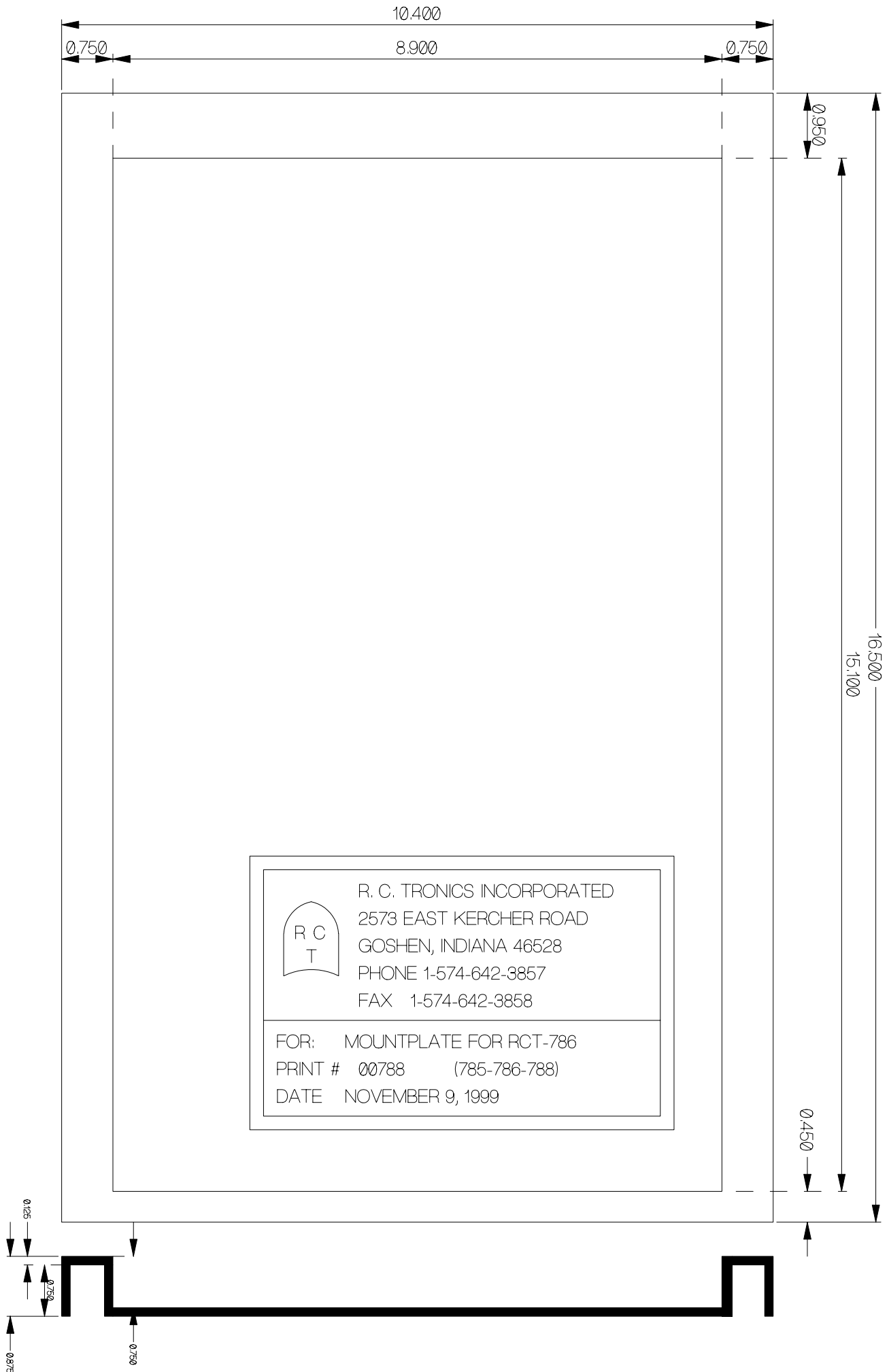
Goshen, Indiana 46528
Fax 1-574-642-3858
Email; dchiddister@rctronics.com

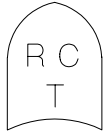
Test RCT-786

1. Connect Dash Switch Panel Via 20 pin and 10-pin Pancon connector.
2. Connect Battery Negative to top center of PCB and + VDC to Buss Bar.
3. With + VDC, perform the following.
 - A. Connect to terminal #29 (+12 vdc OEM Clearance), relay 22 should operate.
 - B. Connect to terminal #30 (+12 vdc OEM Brake Light), relay 21 should operate.
 - C. Connect to terminal #31 (+12 vdc OEM Ignition), Operate switch # 8, located Dash switch panel (PCB 789), relay's 19 & 20 should operate.
4. With a jumper connected to batter negative, connect to the following terminals.
 - A. #1 (Entry Door Is Closed) Amber Led Light. Relay 3 deenergizes.
 - B. #2 (Entry Door is Open) Amber Led Light.
 - C. #18 (Rear Door Switch) Amber Led Light and Audible Alarm.
 - D. #19 (Egress Windows) Amber Led Light and Audible Alarm.
 - E. #20 (Park Brake Switch) Amber Led Light.
 - F. #21 (Trans. Park) Amber Led Light.
 - G. #22 (Lift Door Switch) Amber Led Light, Audible Alarm & relay #4 operates.
 - H. #39 (ADA Stop Request Switch) Led Light, Audible Alarm & relay 23 operates.
 - I. #40 (Stop Request Switch) Led Light, Audible Alarm & relay 24 operates.
 - J. #2 (Entry Door Is Open) relay 24 de-energizes.
 - K. #22 (Lift Door Switch) relay 23 de-energizes.
5. Operate Switch #1 down, located on PCB 790. Relay #1 should operate. Then De-energize by connecting battery negative to terminal #1.
Operate Switch #1 up, located on PCB 790. Relay #2 should operate. Then De-energize by connecting battery negative to terminal #2, Relay #3 should operate.
6. Operate the following Switches on PCB 790.
 - A. Switch #2 (Dome Lights). Relay #3 operates. (Note:) Ground Terminal #1.
 - B. Switch #3 (Lift Enable). With three jumper's, connected to battery negative Connect to the following three terminals. #20 (Park Brake Switch), #21 (Trans. Park). Lastly connect to terminal #22 (Lift Door Switch). Relays' 4, 25 and 26 Should operate.
 - C. Switch #4 (Aux. #1), relay #5 operates.
7. Operate the following Switches on PCB 789.
 - A. Switch #1, up, Aux. #2/A operates. Switch #1, down, Aux. #2/B operates.
 - B. Switch #2, up, Aux. #3/A operates. Switch #2, down, Aux. #3/B operates.
 - C. Switch #3, up, Aux #4/A operates. Switch #3, down, Aux. #4/B operates.
 - D. Switch #4, up, Aux. #5/A operates. Switch #4, down, Aux. #5/B operates.
 - E. Switch #5, up, Aux. #6/A operates. Switch #5, down, Aux. #6/B operates.
 - F. Switch #6, up, Aux. #7/A operates. Switch #6, down, Aux. #7/B operates.
 - H. Switch #7 operates relay 18 (Flasher)

8. RCT-786, Revision E PCB only.
 - A. With Master Switch # 8 in the “ON” position and 12 VDC to “OEM Ignition”, terminal # 31, perform the following. (Completed step 3 C.)
 - B. Connect “Battery Negative” to, terminal # 22. (Lift Door Switch)
 - C. Operate Master Switch to “OFF”. System should not shut down.
 - D. Remove + 12 VDC “OEM Ignition” terminal #31. System should not shut down.
 - E. Remove “Battery Negative” from terminal #22. (Lift Door Switch) System will now shut down.

9. A. Ground Terminal #46, Green LED should operate. “Rear Door Unlocked”, Relay #27 should operate permitting a contact closure between Terminal’s #47 and Terminal #48.

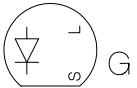




R. C. TRONICS INCORPORATED
 2573 EAST KERCHER ROAD
 GOSHEN, INDIANA 46528
 PHONE 1-574-642-3857
 FAX 1-574-642-3858

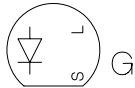
FOR: PCB, ADA Indicator
 PRINT # 01010 (u/w RCT-786)
 DATE May 25, 2002

089



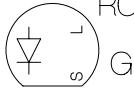
Lift Switch

089



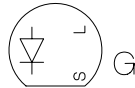
Park Brake

089



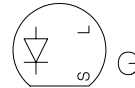
In Park

089



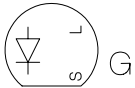
Shift Lock

089



Lift Door

089



Lift Enabled

R. C. Tronics, Incorporated
 16573 County Road 38
 Goshen, Indiana 46528
 Phone 1-574-642-3857

RCT-01010



Use With
 RCT-786 J3

To Power Center

RCT-786 / J3

- Shift Lock Indicator. (Sink 1-Ampere Maximum)
- Transmission In Park. (Sink 1-Ampere Maximum)
- Lift Enable Indicator. (Sink 1-Ampere Maximum)
- Park Brake Set Indicator. (Sink 1-Ampere Maximum)
- Lift Door Open Indicator. (Sink 1-Ampere Maximum)
- Lift Switch On. (Sink 1-Ampere Maximum)
- Ignition (+12 VDC, Switched)
- Ignition (+12 VDC, Switched)

Code Red
Code Amber
Code Green
Common

To Power Center

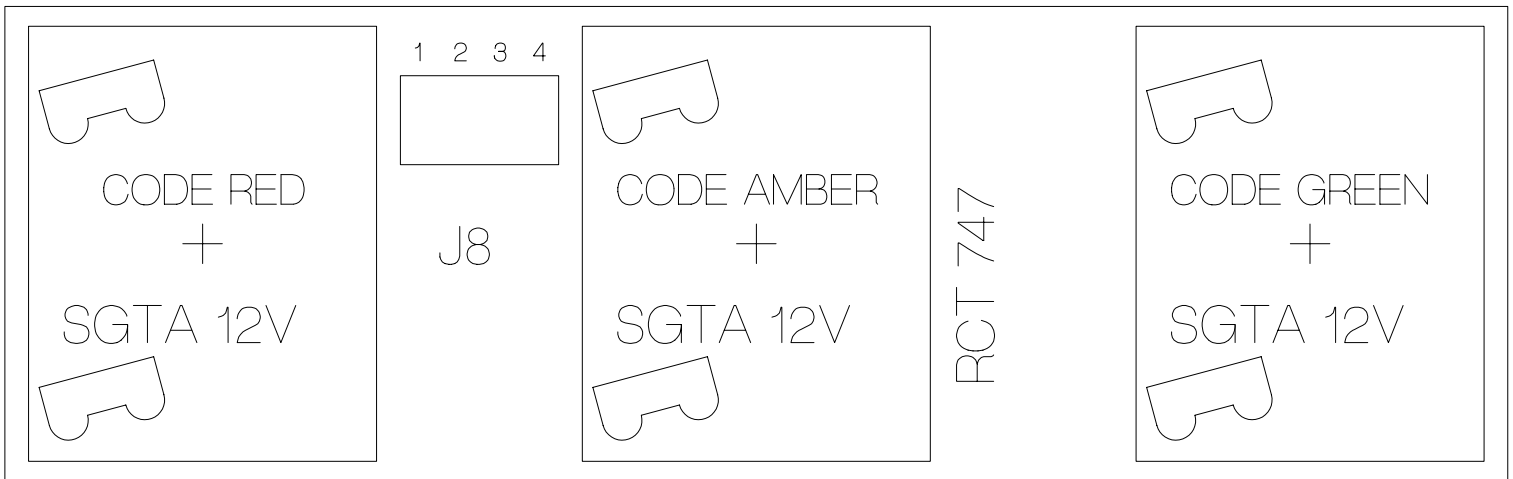
RCT-786 / J3

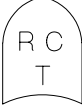
or

Switch Center

RCT-786 / J3

RCT-948 / J4





R. C. TRONICS INCORPORATED
2573 EAST KERCHER ROAD
GOSHEN, INDIANA 46528
PHONE 1-574-642-3857
FAX 1-574-642-3858

FOR: CODE LIGHT PCB
PRINT # 00747(742-743-744-745-746)
DATE APRIL 21, 1999

Eight Conductor Data Cable

Pin #1 - Black

Pin #5 - Blue

Pin #2 - Red

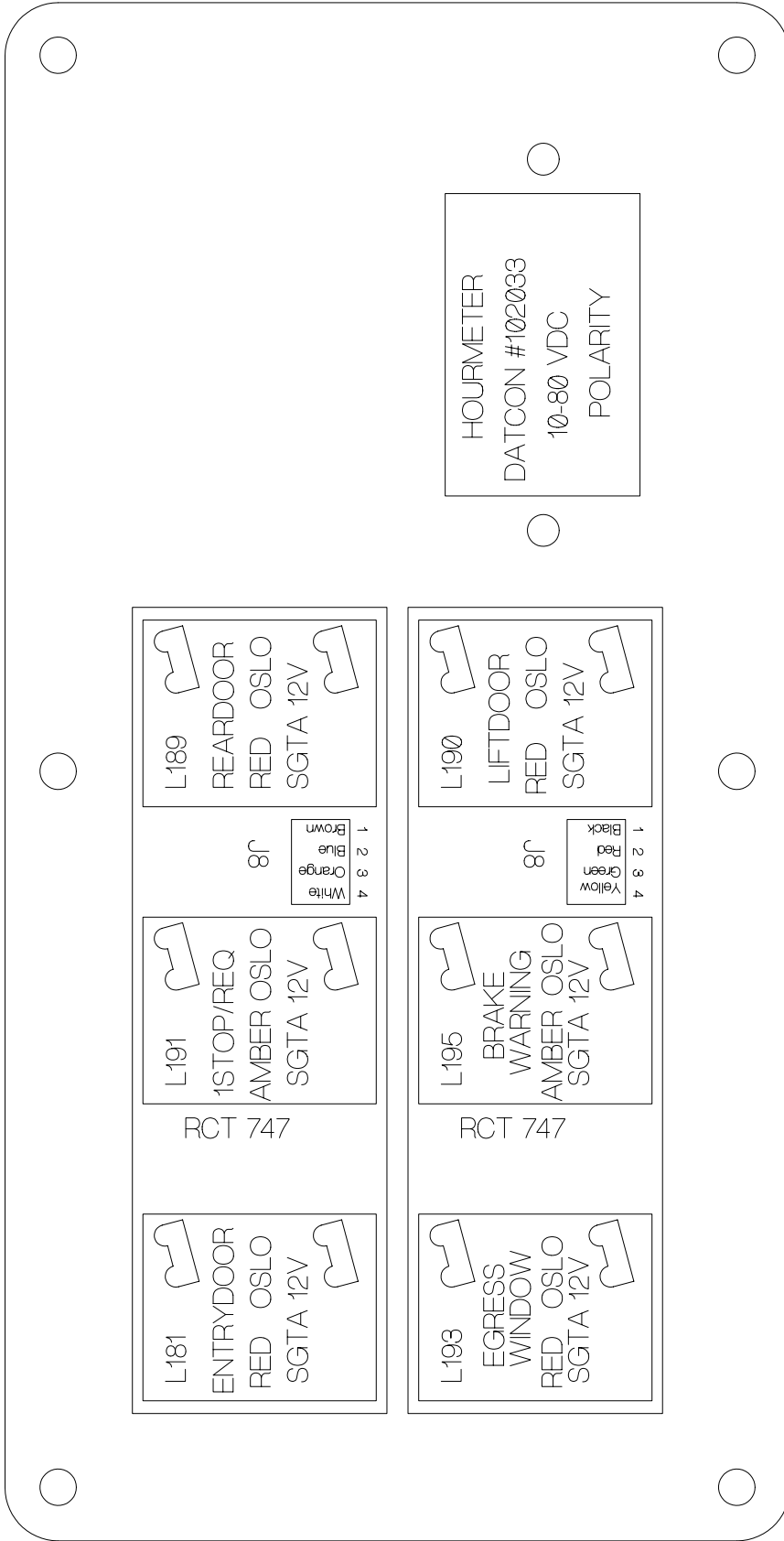
Pin #6 - Orange

Pin #3 - Green

Pin #7 - Yellow

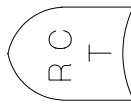
Pin #4 - Brown

Pin #8 - White



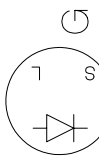
"Lift Door Light-Black-(J8-1 bottom) to RCT-789 or RCT-948/J4-1
 "#2 Stop Request"-Red-(J8-2 bottom) to RCT-789 or RCT-948/J4-2
 "Egress Window"-Green-(J8-3 bottom) to RCT-789 or RCT-948/J4-3
 Yellow (J8-4 bottom) to RCT-789 or RCT-948/J4-7
 "Rear Door Light"-Brown-(J8-1 top) to RCT-789 or RCT-948/J4-4
 "#1 Stop Request"-Blue-(J8-2 top) to RCT-789 or RCT-948/J4-5
 "Entry Door Light"-Orange-(J8-3 top) to RCT-789 or RCT-948/J4-6
 White (J8-4 top) to RCT-789 or RCT-948/J4-8

L81 Entry Door
 L189 Rear Door Ajar
 L190 Lift Door Ajar
 L191 Stop Request
 L193 Window Ajar
 L195 Brake Warning

	<p>R. C. TRONICS INCORPORATED 2573 EAST KERCHER ROAD GOSHEN, INDIANA 46528 PHONE 1-574-642-3857 FAX 1-574-642-3858</p>
<p>FOR: Faceplate, Star Craft PRINT # 00947 DATE November 14, 2001</p>	

Egress Window

089

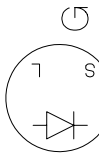


Lift Switch

R. C. Tronics, Incorporated
16573 County Road 38
Goshen, Indiana 46528
Phone 1-574-642-3857

Stop Request

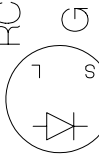
089



Park Brake

Lift Door

089



In Park

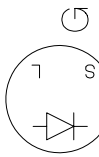
RCT-01010



Shift Lock

ADA Stop

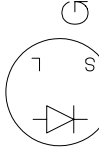
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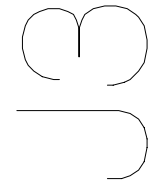
Shift Lock

Rear Door

089



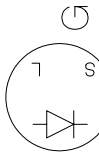
Lift Door



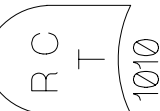
Lift Enabled

Entry Door

089



Lift Enabled



Use With
RCT-786 J3

Light & Terminal Identification when connected to RCT-789 J4
Light & Terminal Identification when connected to RCT-948 J4

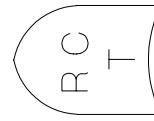
- Shift Lock Indicator. (Sink 1-Ampere Maximum)**
- Transmission In Park. (Sink 1-Ampere Maximum)**
- Lift Enable Indicator. (Sink 1-Ampere Maximum)**
- Park Brake Set Indicator. (Sink 1-Ampere Maximum)**
- Lift Door Open Indicator. (Sink 1-Ampere Maximum)**
- Lift Switch On. (Sink 1-Ampere Maximum)**
- Ignition (+12 VDC, Switched)**
- Ignition (+12 VDC, Switched)**

To Switch Center

RCT-789 / J4

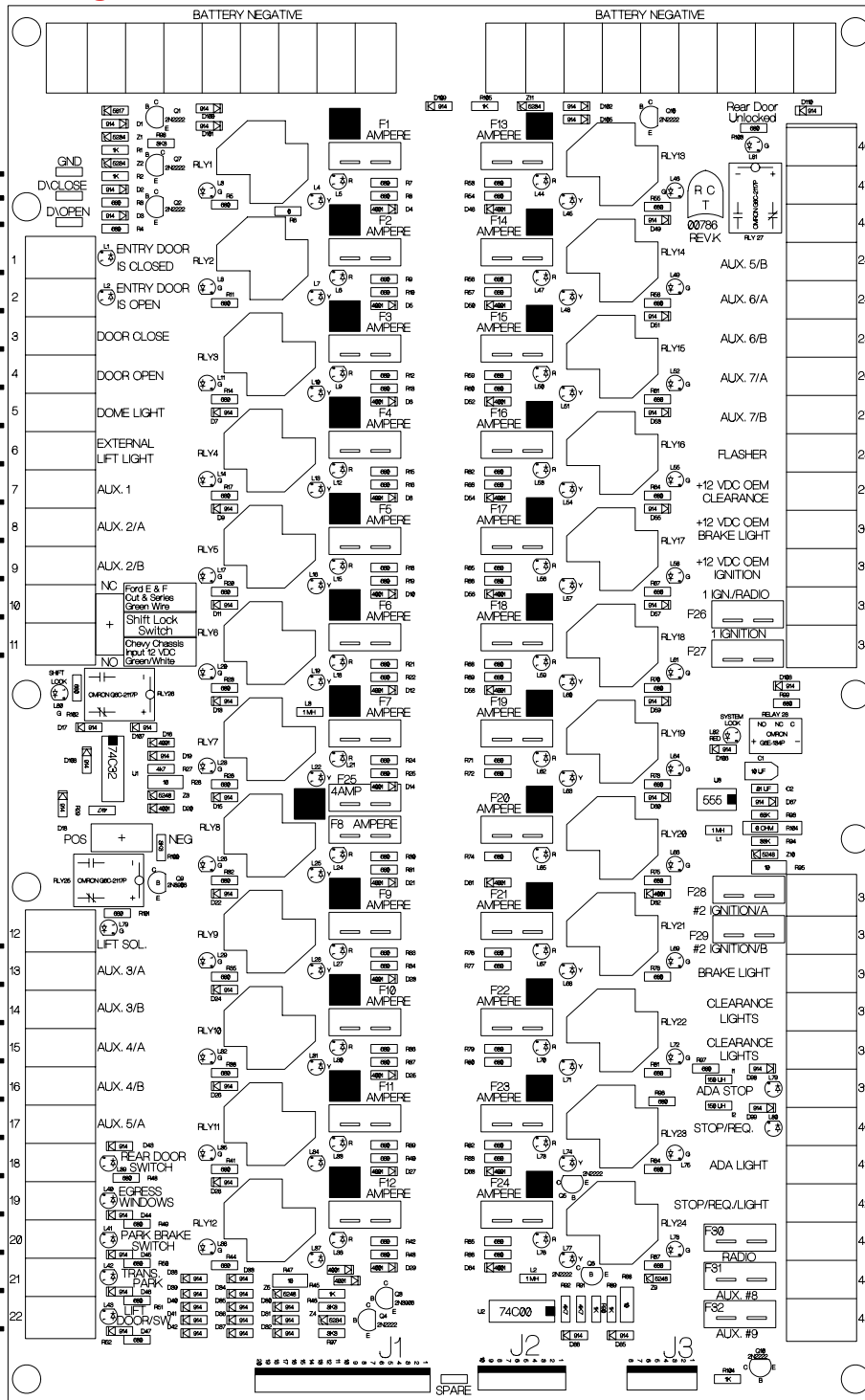
RCT-948 / J4

R. C. TRONICS INCORPORATED
2573 EAST KERCHER ROAD
GOSHEN, INDIANA 46528
PHONE 1-574-642-3857
FAX 1-574-642-3858



FOR: PCB, ADA Indicator
PRINT # 01010 (u/w RCT-786)
DATE May 25, 2002

Before Removing PCB, Note All Wire Colors For Reconnection To New PCB.



R. C. Tronics, Incorporated

2573 East Kercher Road
Phone 1-574-642-3857
1-800-642-8171

www.rctronics.com

Goshen, Indiana 46528
Fax 1-574-642-3858
Email; dchiddister@rctronics.com

Policy, Warranty Repair, Bus Power Center RCT-786

The following steps required to provide repair of Bus Power Center RCT-786.

1. Vehicle user will be required to contact original vehicle manufacture and obtain a ***reference number***.
2. Call R. C. Tronics, Inc. at 1-800-642-8171, ask for Warranty Repair. You will then be required to provide the following information.

Contact Name:

Company Name:

Address:

City, State & Zip Code:

Phone Number:

Fax Number:

E-Mail Address:

Shop Rate/Hour:

Today's Date:

Reference Number:

Manufacturer of Vehicle:

Unit Number or VIN Number & Year:

RCT PCB Number with Revision: (*Example 786 Rev. N, this number can be found below our LOGO, which looks like a tombstone with RCT in the center of the LOGO, on PCB.*)

Credit Card Type & Number:

Expiration Date:

Card Rear Code Number:

3. You will then be transferred to warranty repair. *You will then be required to provide an accurate detailed description of the failure.* In an effort to isolate the problem from between the ***front switch panel, data cable & power center***, you may be asked to make a signal check at J1 or J2 on the Power Center PCB-786. This may be accomplished with a standard automotive test lamp.
4. Our warranty repair technician will then provide you with an ***RMA Number***. He will also indicate which part or parts will be shipped to resolve the failure. All shipments will be ground. Next day air will be approved, if requested.
5. Any ***warranty claim request*** will be then submitted to the original vehicle manufacture. The claim will be limited to a maximum one hour for trouble shooting and one hour for replacement of the control at the posted prevailing shop rate. The only exception to this policy will be thru the warranty repair technician, upon completion of the trouble shooting phase.
6. Remittance will be direct from R. C. Tronics, Inc. to the end user. This will occur when the control in question has been examined and the ***warranty claim request*** has been received from the original vehicle manufacture.

The Following Conditions Will Apply.

1. If the control is not returned within 15 days it will be charged out against the credit card on file. A call tag will be issued by RCT if requested by vehicle user.
2. Post RMA on the shipping label. Failure to do so will result in material being returned.
3. If upon receipt and subsequent testing, the control is found to be failure free. R. C. Tronics will not pay any warranty claims. All shipping charges will be billed out against the credit card on file.
4. Any time spent trouble shooting Prior to calling either the vehicle manufacturer or R. C. Tronics, Inc. will not be considered for payment.
5. We offer a one year warranty on the *Bus Power Center, RCT-786* this warranty only relates to defects in our controls. It does not include damage that occurs as a result of improper installation or unauthorized trouble shooting. Extended warranty can be obtained at additional cost upon request.

Notes:

It is our policy to provide you with a rapid resolution to all failures on controls produced by R. C. Tronics, Inc. We also recognize that fair compensation must be allowed for any repairs made to our equipment.

Both **Warranty Policy & Procedure and Control Failure Form** can be found in our booklet pertaining to the Bus Power Center. Additionally the two documents can be electronically transmitted to your location, filled out with Microsoft Word and then be retransmitted to the **Manufacturer of Vehicle** who will provide your with the **authorization number**.

All forms can be obtained from either the **Manufacturer of Vehicle** or **R. C. Tronics, Inc.**

ATTENTION

FOR WARRANTY CONSIDERATION ON CHASSIS ELECTRICAL RELATED PROBLEMS, PLEASE CALL THE TELEPHONE NUMBER LISTED BELOW FOR TECHNICAL ASSISTANCE AND AUTHORIZATION **PRIOR** TO SERVICING OR TROUBLESHOOTING THIS UNIT. FAILURE TO DO SO MAY RESULT IN DENIAL OR REDUCTION IN WARRANTY CLAIMS.

- ILLUMINATED LED INDICATES RELAY COMMANDED ON
- ILLUMINATED LED INDICATES POWER TO LOAD
- ILLUMINATED LED INDICATES OPEN FUSE

R. C. TRONICS, INCORPORATED

1-800-642-8171

R. C. Tronics, Incorporated, Warranty

2573 East Kercher Road
Phone 1-574-642-3857
1-800-642-8171

www.rctronics.com

Goshen, Indiana 46528
Fax 1-574-642-3858
Email: dchiddister@rctronics.com

Control Failure Form

Contact Name:
Company Name:
Address:
City, State & Zip:
Phone Number:
Fax Number:
E-mail:
Labor Rate / Hour:
Today's Date:

Vehicle Manufacturer:
Reference Number from Vehicle Manufacturer:
Unit Number or VIN Number & Year:

Credit Card Type & Number:
Expiration Date:
Card Rear Code:

- Note #1 If unit is not returned within 15 days it will be charged out against this credit card.
- Note #2 Please post RMA number provided by R. C. Tronics, Inc. on the outside of the box. Failure to do so will result in material being returned.
- Note #3 If the control being tested is found to be operating correctly or has been damaged due to improper handling, i.e. burnt traces it then becomes the responsibility of the end user for any repairs. Additionally, any troubleshooting done prior to calling the control installer or R. C. Tronics, Inc. at 1-800-642-8171 will be the responsibility of the end user.

Information below this line to be filled in by R. C. Tronics, Incorporated

RMA Number:
RCT Control Requested:
Carrier: UPS Fed X - Method: Ground Blue Red - Date Shipped:

++++
Technical Description of Failure:
++++

Date Received:
Action Taken:
Repaired By:
Labor Hours:

WAS THE PROBLEM SOLVED BY THIS CHANGE? YES NO

R. C. Tronics, Incorporated

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www.rctronics.com

Goshen, Indiana 46528
Fax 1-574-642-3858
Email; dchiddister@rctronics.com

WARRANTY

We warranty our ***Bus Power Center*** for a period of one year from the time of delivery to the end user. An additional two years of warranty may be obtained from R. C. Tronics, Inc. upon request and at an additional cost of \$250.00.

Covered are all items which are mounted or plugged into the following printed circuit boards (PCB), Bus Power Center PCB-786, Front Switch Panel, ADA display PCB 8 & 30 conductor data cable.

When a determination has been made as to the item to be replaced we will ship the replacement part ***ground***. When requested, ***next day air*** will be granted if the vehicle is ***out of service***. Additionally a ***call tag*** will be granted when requested by the end user.

A warranty claim for repair may be placed thru the manufacturer of the vehicle. The claim will be limited to one hour trouble shooting and one hour change out time. The total dollar amount of remittance will then be at the prevailing posted shop rate. The only exception to this policy will be thru the technician, upon the completion of the trouble shooting phase. Remittance will be direct from R. C. Tronics, Inc. to the end user. This will occur when the control in question has been examined and the ***warranty claim request*** has been received from the original vehicle manufacture.

We do not provide warranty for damage occurring as a result of improper installation by the vehicle manufacturer or damage that may occur as a result of unauthorized trouble shooting by the end user. All failures must be conveyed to the vehicle manufacturer. Along with an authorization number a call must be placed to R. C. Tronics, Inc. prior to trouble shooting the controls. A printed circuit board found to have circuit traces burnt open generally indicates a direct short has been presented to the PCB by someone attempting a repair. The loads imposed on current traces have been pre-determined and there fore the trace has been sized so as to protect itself even in an event of a component failure.

R. C. Tronics, Incorporated

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Email; dchiddister@rctronics.com

January 29, 2005

Supplying Power to R. C. Tronics, Inc. Power Centers.

To determine the power feed cable + 12 VDC and the negative power return cable the following procedures must be followed.

Because all current which is supplied by the feed cable +12 VDC must return to the battery by the negative power return cable. Both cables must be sized with the same size cable.

Total all loads connected to the power center. The loads will be rated in watts. The loads which rated in amperes must be multiplied by the rated voltage. The resulting number will then be the wattage. (Amperage x voltage = wattage) Example; (A total connected load of 2,800 watts with a voltage rating of 14 volts will produce a current of 200 ampere.)

The cable size will then be determined by multiplying the total connected load in amperes times 125%. (Example; 200 ampere times 125% = 250 ampere.)

As a general rule of thumb, the following wire size will accommodate the currents listed below. For extended lengths of 50 feet the current rating must be de-rated for a given size conductor requiring an increased wire size to accommodate the same load.

16 awg. = 10 ampere

14 awg. = 15 ampere

12 awg. = 20 ampere

10 awg. = 30 ampere

8 awg. = 40 ampere

6 awg. = 50 ampere

4 awg = 75 ampere

2 awg = 100 ampere

0 awg. = 125 ampere

00 awg. = 150 ampere

000 awg. = 175 ampere

0000 awg. = 200 ampere

Additional Notes:

Main +12 vdc feed cable will be fuse or circuit breaker protected with a current rating equal to the size in awg. of the feed cable.

All branch circuit will be fuse or circuit breaker protected with a current rating equal to the size in awg. of each branch conductor.

All battery negative returns will be brought to the power center or battery negative with an insulated conductor. (The chassis will only be used for short circuit protection only and will not be used for normal load current returns.)

Final Thoughts

The above design criteria are biased on sound engineering principles. Not only will it provide your finished product with electrical integrity but will insure the connected loads will receive the proper voltage which can be supplied by the battery.

Improper conductor sizing and connections to the chassis will cause increased voltage drops across the conductors which should supply the loads with the voltage available at the battery.



R.C.Tronics Inc.

SPECIALIZING IN ELECTRONIC CONTROLS

2573 East Kercher Road

GOSHEN, IN 46528

Phone 1-574-642-3857

Fax 1-574-642-3858

Toll Free 1-800-642-8171

<http://www.rctronics.com>

Custom Design of Electronic Controls

Transit Bus Systems
Ambulance Systems
Tensile Testing Systems

Printed Circuit Board Layout

Computer Generated Artwork
FR-4 PCB Material
Double-Sided Plated-Thru Hole

Complete Manufacturing Facility

New Era Wave Soldering Machine
Universal Laser System
K.F. Hot Stamp Machine

R. C. Tronics can solve your Electrical / Electronic Control needs