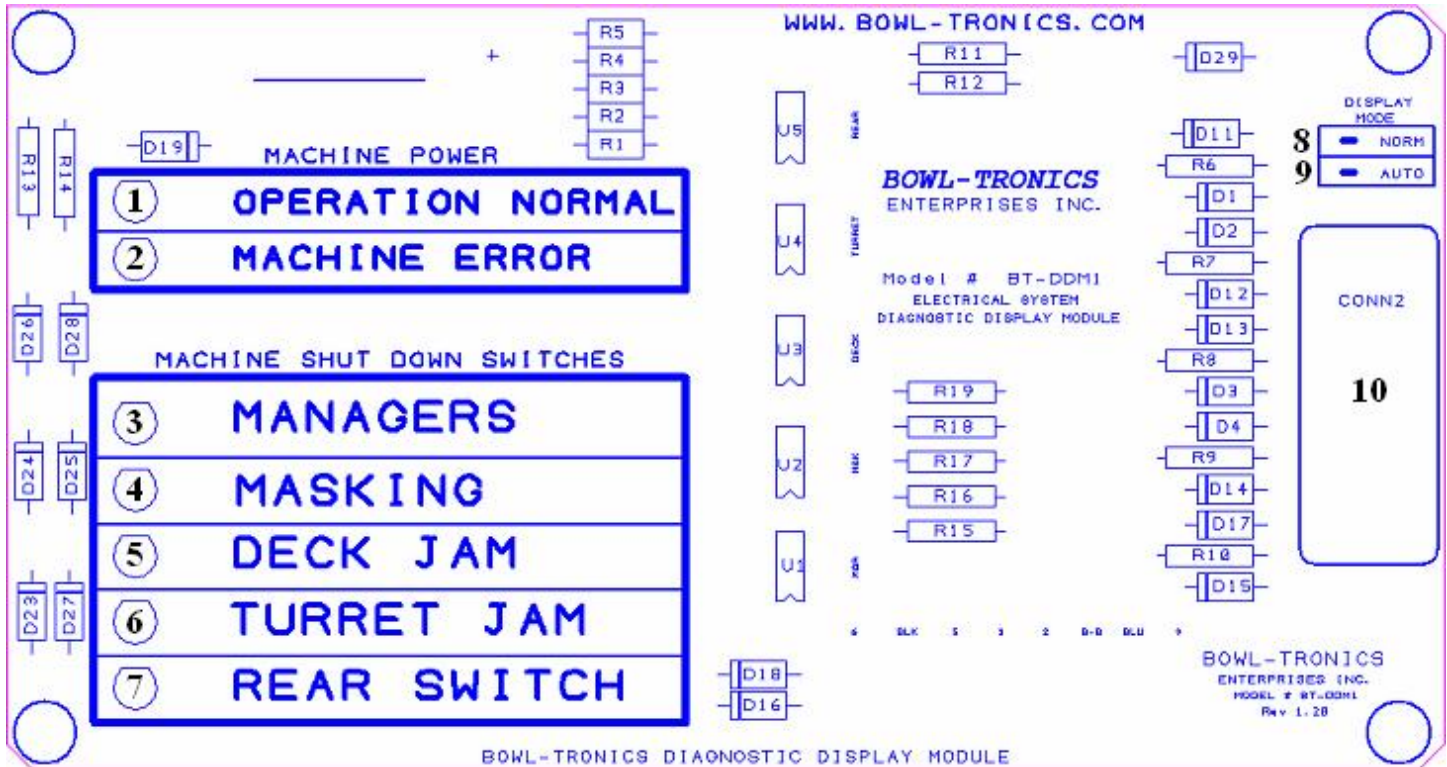


# Bowl-Tronics Enterprises Incorporated

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Elgin IL. 60120  
Website: [www.bowl-tronics.com](http://www.bowl-tronics.com)  
E-mail: [rick@bowl-tronics.com](mailto:rick@bowl-tronics.com)

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## Diagnostic Display Module (BT-DDM1-R)



### PC Board Layout Description Table:

1. Operation Normal LED (LED will be lit if the machine is running normal)
2. Machine Error LED (LED will be lit if the machine is in a black out mode)
3. Managers LED (LED will be lit if the managers switch is open)
4. Masking LED (LED will be lit if the masking switch is open)
5. Deck Jam LED (LED will be lit if the deck jam switch is open)
6. Turret Jam LED (LED will be lit if the turret jam switch is open)
7. Rear Switch LED (LED will be lit if the rear switch is open)
8. Normal Display Mode Jumper (Jumper set if machine has no scoring)
9. Auto Display Mode Jumper (Jumper set if machine has automatic scoring)
10. DB-9 Sub Connector (D-Sub connector for rear mounting location)

## Diagnostic Display Module Theory

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This diagnostic display module (BT-DDM1-R) is designed to diagnose blackouts on the machine due to a safety switch that has opened. For example, deck jam, turret jam LED will come on when the switch has been opened. It also shows if the manager's switch, mechanic switch or the masking switch is open or closed. A lit LED means that the switch is open.

## Installation Instructions (Rear Mounted)

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*Remember to remove power before performing any installation!!*

First, start by mounting the (BT-DDM1-R) to your rear catwalk. View the drawing in this manual for the location to mount it. Next, run the wire along the channel and use wire ties to secure. Run the wire through the utility hole, if there isn't a utility hole, punch or drill a hole in the chassis as in the schematic in this manual shows. Finally, hook up your connections to the low voltage terminal strip as shown in the schematic. Note one wire is spliced into the B & B wire of the canon plug and one wire is spliced into the #18 wire of the motor start relay. If you have autoscore view the schematic on the last page for proper installation and display mode jumper selection.

### For Repair Send Faulty Parts to:

Address: BOWL-TRONICS  
1115 Sherwood Ave.  
Elgin IL. 60120

Phone: 847-741-4500  
Fax: 847-741-0914

Visit our web site at [www.bowl-tronics.com](http://www.bowl-tronics.com)

Notes:

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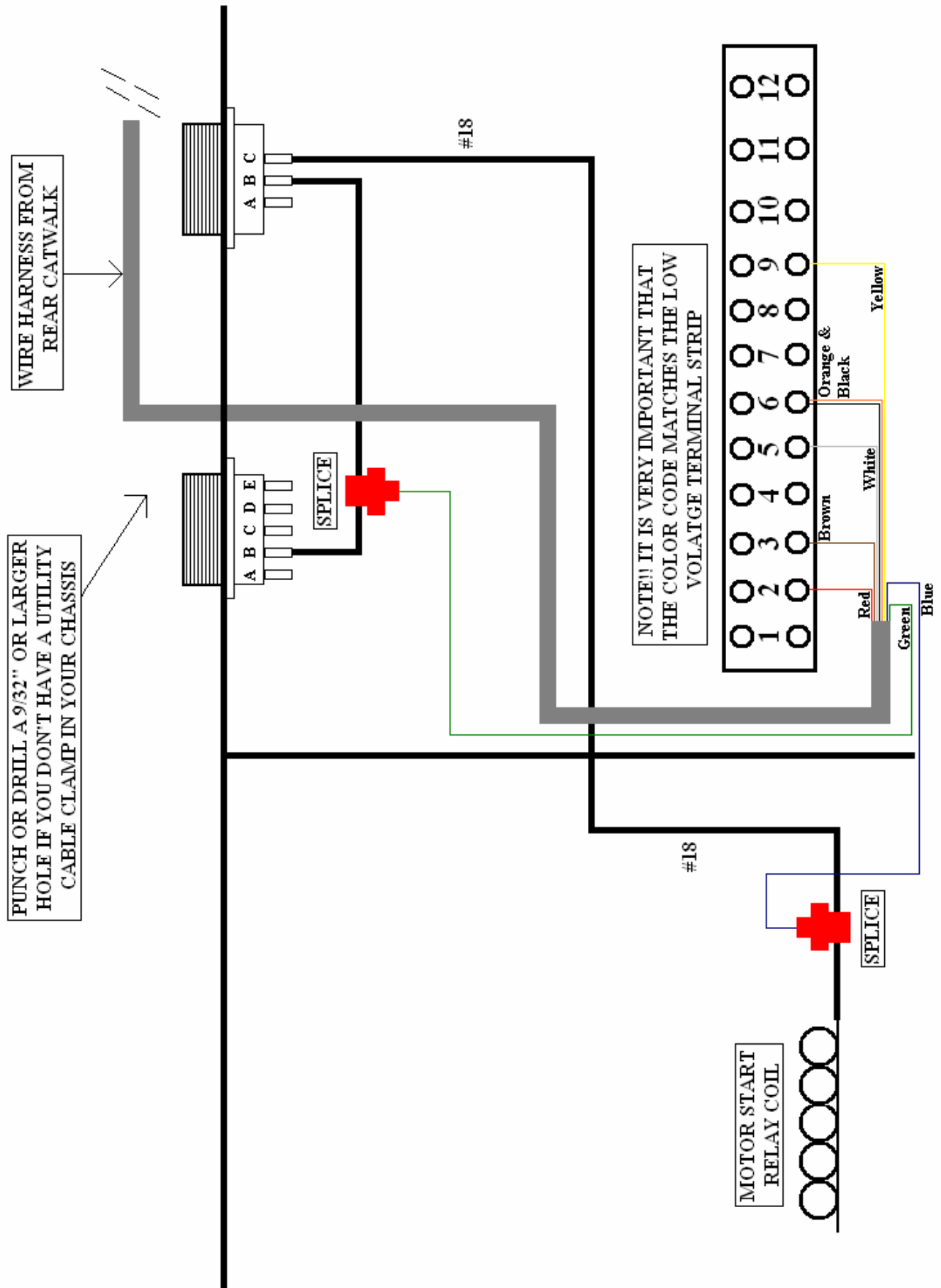
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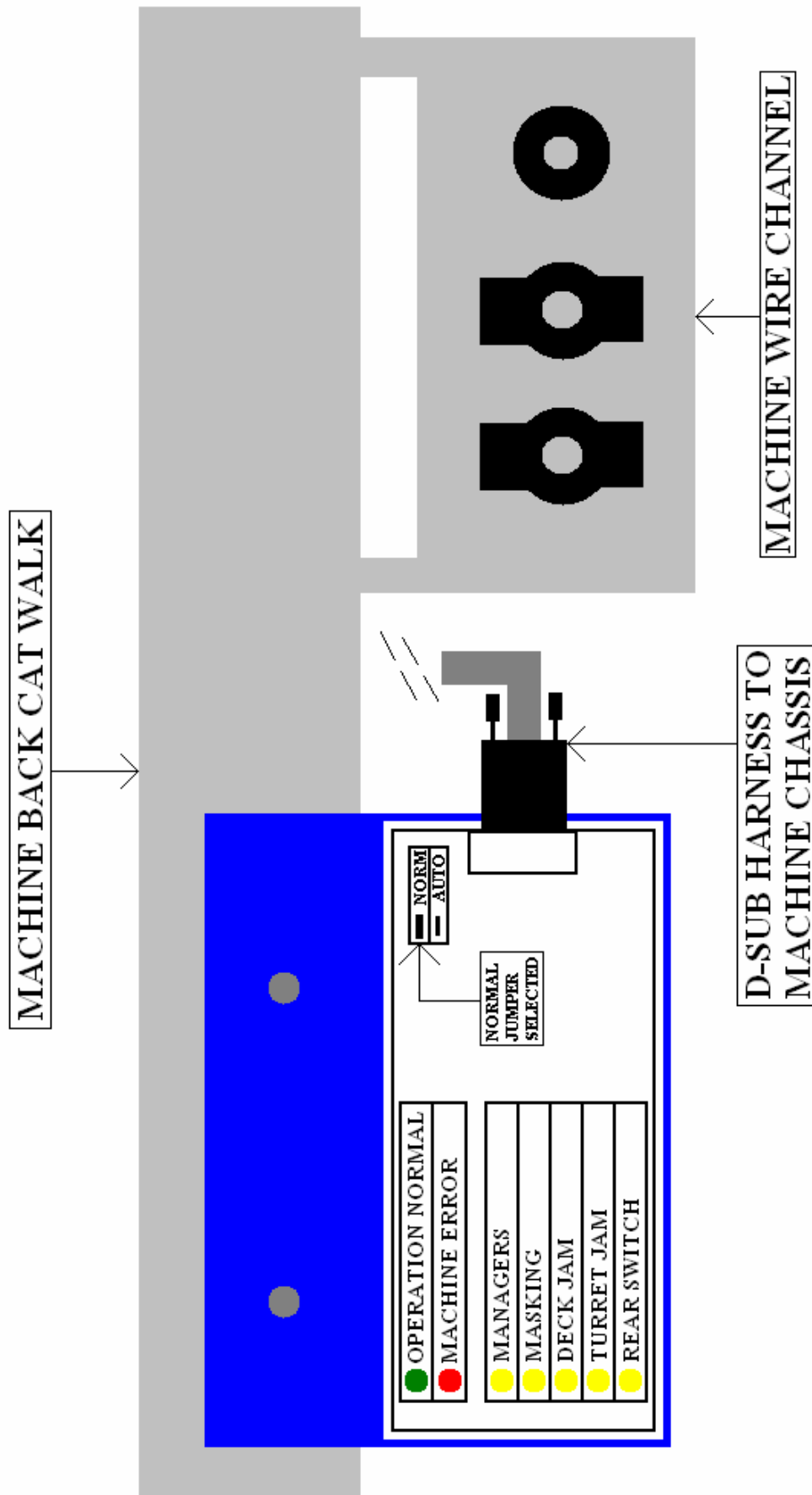
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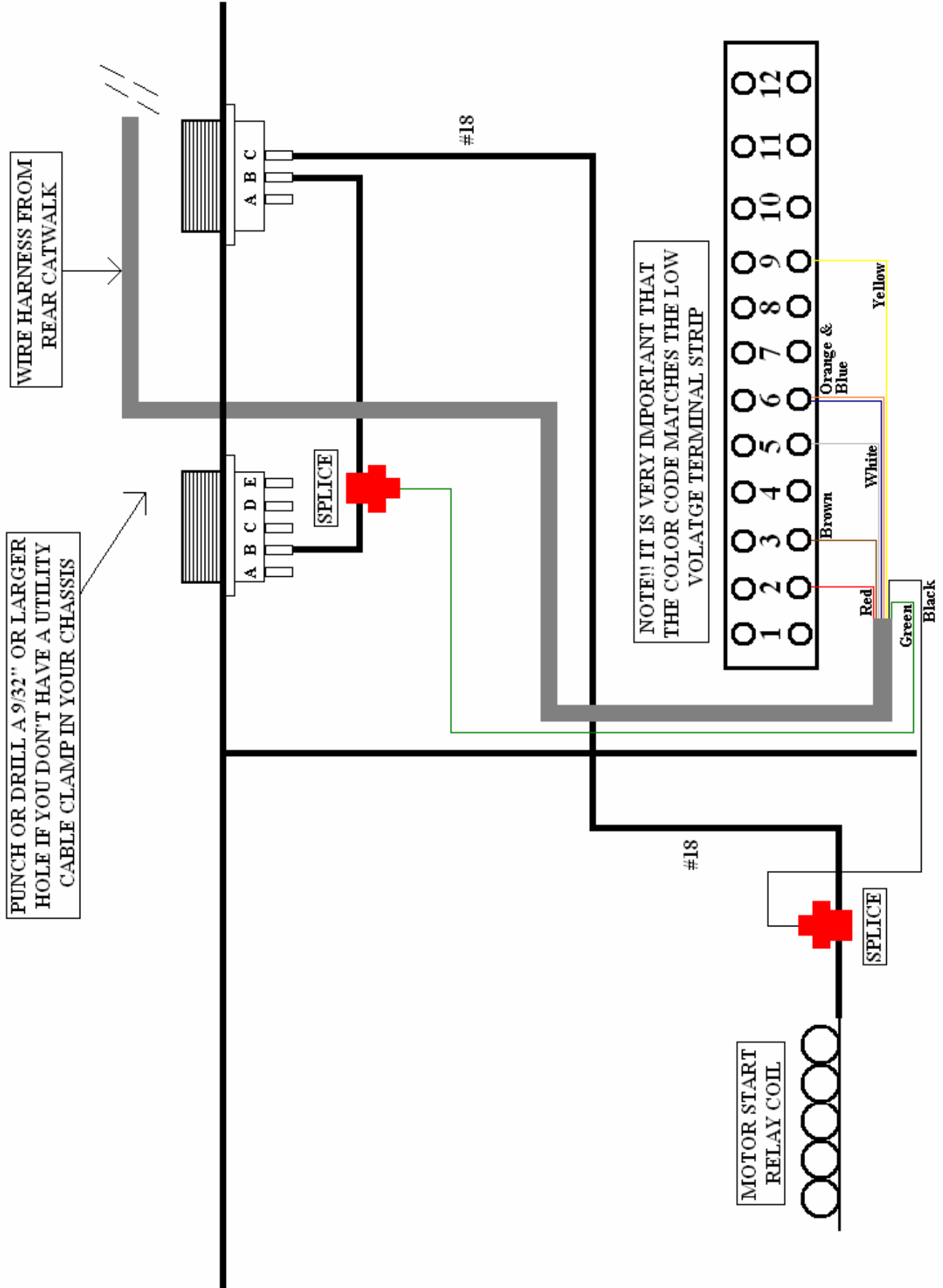
# Diagnostic Display Module Schematic (Normal Mode)



# Diagnostic Display Module Rear Mounting Diagram (Normal Mode)



# Diagnostic Display Module Schematic (Autoscore Mode)



# Diagnostic Display Module Rear Mounting Diagram (Autoscore Mode)

