

# **RAPID TRANSIT CARS (SERIES 4001-4455)**

## **MOTORMAN'S TROUBLE SHOOTING GUIDE FOR**

# **Electrical Trouble**

The purpose of this guide is to aid Motormen in correcting equipment trouble quickly, thereby minimizing delays in service.

**NOTE:** Notify Radio Dispatcher or other supervisory personnel at first opportunity when trouble develops.

**THERE ARE 3 SECTIONS TO THE GUIDE**

### **Section 1 - "Quick Check" to Correct Electrical Trouble**

Listed are the "Quick Checks" that must be made to correct trouble when a car or train has electrical trouble.

If the "Quick Check" fails to correct the trouble, Motorman must follow the instructions under Section 2.

### **Section 2 - Procedure to Cut Out Part of a Train**

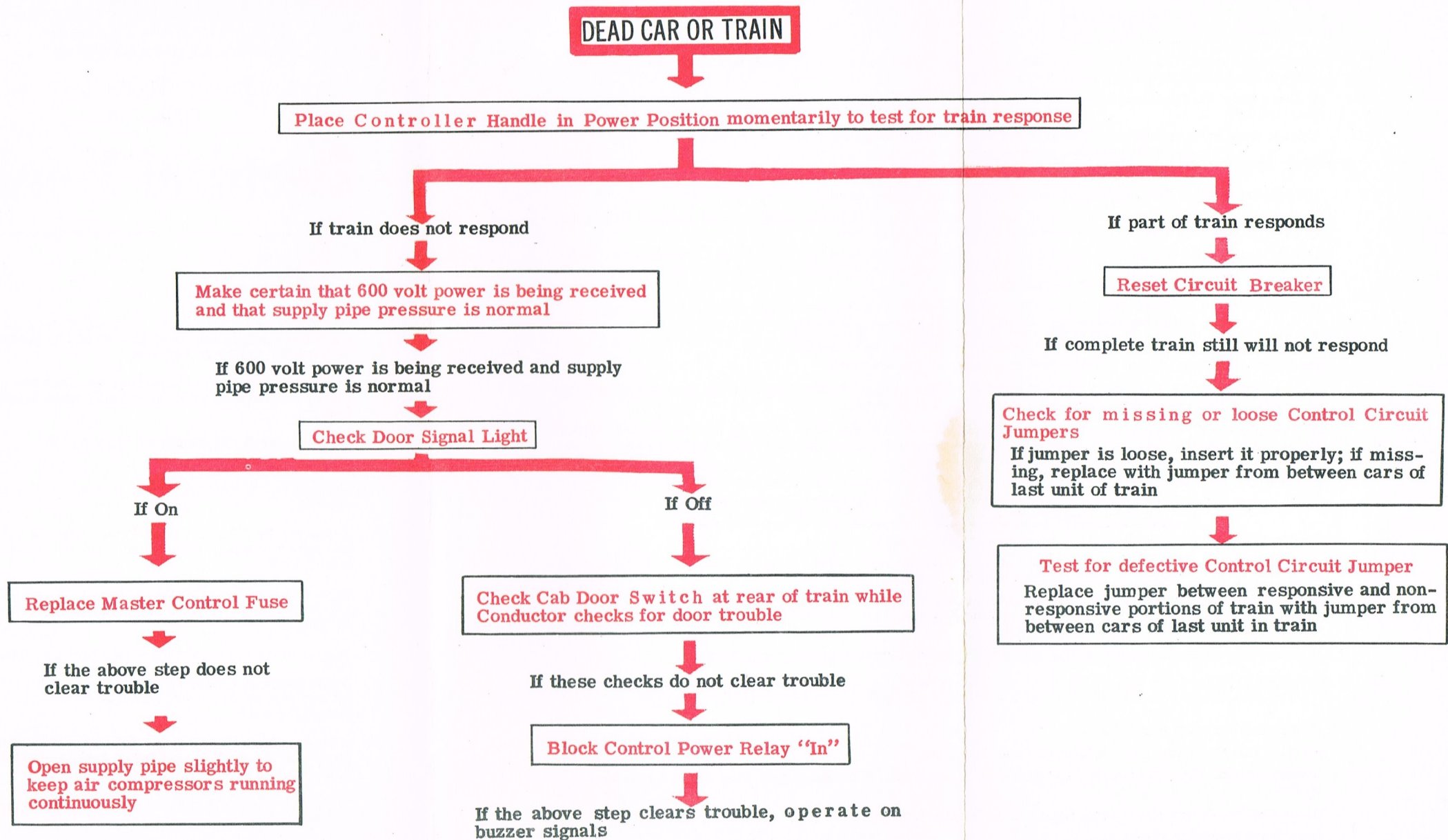
If the trouble on a defective car cannot be corrected, cut out part of the train and operate with the remaining cars.

If this procedure fails, the following train must couple on and push the defective train as outlined in Section 3.

### **Section 3 - Procedure to Couple Following Train to Defective Train.**

# SECTION 1 - "QUICK CHECK" TO CORRECT ELECTRICAL TROUBLE

WHEN TROUBLE OCCURS, FOLLOW THE "QUICK CHECK" AS INDICATED BY ARROWS UNTIL THE TROUBLE IS CLEARED



If the "Quick Check" has not cleared the trouble, follow the instructions under Section 2

## SECTION 2 - PROCEDURE TO CUT OUT PART OF A TRAIN

If the trouble on a defective car cannot be corrected, cut out part of the train and operate with the remaining cars as outlined below: (This procedure must be varied when traction power is not sufficient to move the train.)

### One Unit Train



Disconnect Control Circuit Jumper between first and second car. Try operating from Cab No. 1 of unit. If train responds operate from Cab No. 1 of unit.

If train does NOT respond, try operating from Cab No. 2 of unit. If train responds, operate from Cab No. 2 of unit.

If train does not respond after taking above steps, follow coupling procedure in Section 3.

### Two Unit Train



Disconnect Control Circuit Jumper between first and second units.

Try operating from Cab No. 2 of first unit by holding Control Power Relay in and applying first point of power. If train responds, operate from Cab No. 1 of first unit.

If train does NOT respond, try operating from Cab No. 1 of second unit by holding Control Power Relay in and applying first point of power. If train responds, block Control Power Relay in and operate on buzzer signals from Cab No. 1 of second unit.

If train does not respond after taking above steps, follow coupling procedure in Section 3.

### Three Unit Train



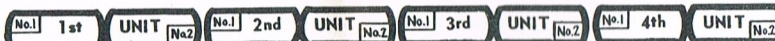
Disconnect Control Circuit Jumper between first and second units.

Try operating from Cab No. 2 of first unit by holding Control Power Relay in and applying first point of power. If train responds, operate from Cab No. 1 of first unit.

If train does NOT respond, try operating from Cab No. 1 of second unit by holding Control Power Relay in and applying first point of power. If train responds, block Control Power Relay in and operate on buzzer signals from Cab No. 1 of second unit.

If train does not respond after taking above steps, follow coupling procedure in Section 3.

### Four Unit Train



Disconnect Control Circuit Jumper between second and third units.

Try operating from Cab No. 2 of second unit by holding Control Power Relay in and applying first point of power. If train responds, operate from Cab No. 1 of first unit.

If train does NOT respond, try operating from Cab No. 1 of third unit by holding Control Power Relay in and applying first point of power. If train responds, block Control Power Relay in and operate on buzzer signals from Cab No. 1 of third unit.

If train does not respond after taking above step, follow coupling procedure in Section 3.

## SEC. 3- PROCEDURE TO COUPLE FOLLOWING TRAIN TO DEFECTIVE TRAIN

Have following train couple on.

Do NOT insert Control Circuit Jumper between trains.

Connect Brake Pipe and Supply Pipe Hoses and open Brake Pipe and Supply Pipe Angle Cocks between trains.

Block Control Power Relay in and operate on buzzer signals.

Have train pushed to terminal.

Operate with caution.