

MOTORMAN'S TROUBLE SHOOTING GUIDE

Rapid Transit Cars (SERIES 6000)

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

NOTE: When trouble occurs, the crew must perform the following duties in the order listed:

1. Protect the train
2. Notify the Radio Dispatcher
3. Correct the trouble

THERE ARE 3 SECTIONS TO THE GUIDE:

SECTION 1 - "QUICK CHECK TO CORRECT EQUIPMENT TROUBLE"

Listed are the "Quick Checks" that must be made to correct equipment trouble.

If the "Quick Checks" fail to correct the trouble, Motormen must follow the instructions under Section 2.

SECTION 2 - PROCEDURE TO CUT OUT PART OF A TRAIN

If the trouble on a defective car or unit cannot be cleared, cut out part of the train and operate with the remaining unit or units.

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 FOL- LOWING TRAIN TO DEFECTIVE TRAIN

SECTION 1 - "QUICK CHECK" TO CORRECT EQUIPMENT TROUBLE

Place Cineston Handle on First Point of Power momentarily to test for train response

If train responds and

Circuit Breaker Buzzer sounds when Cineston Handle is moved to Power position (Indicates that Circuit Breaker on one or more cars has blown)

Operate Power Reset Switch

If Circuit Breaker Buzzer continues to sound

Cut out Motor Control Cut-out Switch (7 point) on the defective car

Locate defective car by observing on which car the Red Circuit Breaker Light is "On."

Proceed with caution

Circuit Breaker Buzzer does not sound when Cineston Handle is moved to Power position

Check indication lights on panel

If White panel light remains on at all times (Indicates that M.G. Set on one or more cars has stopped running)

Cut out the Motor Control Cut-out Switch (7 point) on the defective car

Locate defective car by checking each car for absence of M.G. sound

Proceed with caution

If Red panel light remains on at all times whether train is standing or moving (Indicates that one or more Drum Brakes on train have not released)

Cut out Drum Brakes manually on defective car

Locate defective car by turning off Control Positive Switch and observing outside Drum Brake Signal Lights while Conductor depresses Cineston Handle in "Coast" position. Cut out Drum Brakes manually by pulling lever on each of the four Actuators

Proceed with caution

If Red panel light comes on immediately when Cineston Handle is moved to a braking position with train moving in excess of 5 mph (Indicates absence of dynamic brakes on one or more cars)

Cut out the Motor Control Cut-out Switch (7 point) on the defective car

Locate defective car by having Conductor observe Drum Brake Signal Light on each car while the train is moving and Cineston Handle is moved to Braking position. Drum Brake Signal Light on defective car will come on immediately when brakes are applied

Proceed with caution

If train does not respond

Check car body lights to make certain that 600 volt power is being received

If 600 volt power is being received

Check indication lights on panel

If indication lights are normal

Cut out part of train Follow procedure in Section 2

If Green panel light does not come "On" (Indicates one or more open doors or B.O. door circuit)

Have Conductor check for open door

If all doors are closed

Block Control Power Relay "In"

Operate with caution on buzzer signals

If Red panel light remains on at all times regardless of the position of the Cineston Handle (Indicates that train is in emergency--all Drum Brakes on all cars are applied)

Operate Brake Reset Switch with Cineston Handle on third point of braking

If this does not clear trouble

Walk towards rear of train, checking each Brake Trip Device and Jumper Switch to make certain that:

1. The arm of each Brake Trip Device is clear and centered
2. Jumper Switches at each end of train are at "uncoupled" position and Jumper Switches between units of train are at "coupled" position

If this does not clear trouble

On cars equipped with Emergency Circuit By-pass Switch
Depress and hold button to move train

Proceed with caution

On cars not equipped with Emergency Circuit By-pass Switch

Cut out part of train - Follow procedure in Section 2

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 or unit cannot be corrected, cut out part of the train and operate with the remaining unit or units as outlined below:

ONE-UNIT TRAIN



Cannot be cut; follow coupling procedure in Section 3.

TWO-UNIT TRAIN



STEP 1. Isolate defective unit by moving both Jumper Switches between units to "Uncoupled" position.

Test for response from each half of train.

Release Actuators on each car of defective unit with Motor Control Cut-out Switches (7 point).

Operate from head cab of operative unit.

STEP 2. If train cannot be operated after completing above step, follow coupling procedure in Section 3.

THREE-UNIT TRAIN



STEP 1. Isolate defective unit by moving both Jumper Switches between first and second units to "Uncoupled" position.

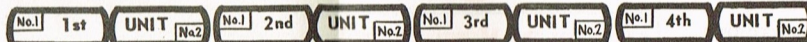
Test for response from each portion of train.

Release Actuators on each car of defective portion of train with Motor Control Cut-out Switches (7 point) and operate from head cab of operative portion of train.

STEP 2. If train does not respond from either portion of train, test second and third units as shown above under "Two-Unit Train".

STEP 3. If train cannot be operated after completing above step, follow coupling procedure in Section 3.

FOUR-UNIT TRAIN



STEP 1. Isolate defective unit by moving both Jumper Switches between second and third units to "Uncoupled" position

Test for response from each portion of train.

Release Actuators on each car of defective portion of train with Motor Control Cut-out Switches (7 point) and operate from head cab of operative portion of train.

STEP 2. If train does not respond from either portion of train, test first and second units as shown above under "Two-Unit Train".

STEP 3. If train still does not respond, test third and fourth units as shown above under "Two-Unit Train".

STEP 4. If train cannot be operated after completing above step, follow coupling procedure in Section 3.

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

1. Have following train couple on
2. Do NOT cut in Jumper Switches between trains
3. Release actuators on each car of defective train with Motor Control Cut-out Switches (7 point).
4. Have train pushed to terminal



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RAPID TRANSIT CARS (SERIES 6001-6470)**

**Training and Accident Prevention
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