

# Duluth St. Rwy. No. 78 LOCATION EXERCISE



Locate each item given and explain where you found it. If you have any questions, be sure to ask the trainer about them. Identify the purpose and manipulation of each item

You may follow any sequence that is convenient for you, but be sure to locate every item indicated herein.

## A - No. 1 end air tank drain (bleeder) valve



#1 End drain (bleeder) valve for air tank – close (lever horizontal) when running, open (lever vertical, as shown) when the car is parked in the barn and power is off. This is one of two tank bleeder valves on this side of the car.

Moisture builds up in the air tanks when the car is in operation. Opening the bleeders while the air pressure is up allows the water to drain out.

### B - Center air tank drain (bleeder) valve



This valve should be closed (lever across pipe) when running, open (lever parallel to pipe, as shown) when the car is parked in the barn and power is off. This is one of two such bleeders on this side of the car.

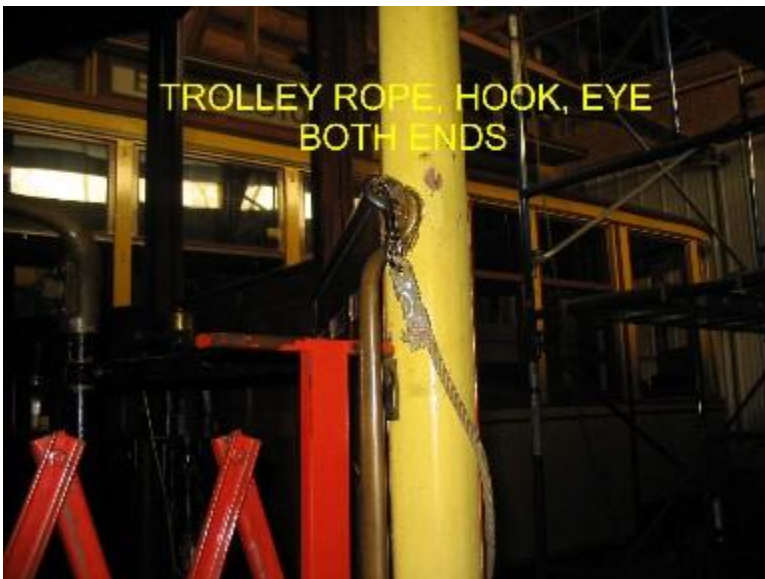
Across the car from this valve is the connection for a shop air hose that can be powered from the car's compressor. a maximum of 20 lbs. air pressure is available.

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### C - Trolley rope, hook, and eye



Eyes are at both ends; there is one rope and attached hook. The rope is used when swinging the pole at the ends of the line and when entering the barn. The rope must be hooked in the eye when the car is in motion.

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### D - Gate secured in open position



Gate is shown secured in the open (folded) position; the handle peg is in the bracket on the bulkhead. Must be in this position to load and unload passengers or when entering or exiting the car.

Under no circumstances shall any passengers be permitted to ride on the platforms when the car is moving.

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### E - Gate secured in closed position



Gate is shown secured in the closed (unfolded) position; the handle peg is in the bracket on the dasher. Must be in this position when car is in motion.

Under no circumstances shall any passengers be permitted to ride on the platforms when the car is moving.

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## F - Brake Controls



The handbrake to the right of the air brake valve can be used to park the car or as a service brake. To use for parking, engage the pawl at floor level and lock the brake in the set position. **Release before attempting to move the car!**

The button just above the bracket is used to disengage the handle from the brake shaft when the button is pulled and rotated; and as a ratchet when seated to allow applying the brakes by always pushing on the gooseneck.

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## G - Air Brake Controls and Operations



The air brake lever is sprung to the right (emergency application) position and must be held in any other position. Air pressure gauge is to the left of the brake stand, and shows both tank pressure and cylinder pressure. The lever being pointed to is the changeover valve, and the indicator rod (when up) signals that air control is at the other end of the car and this end should not be used to apply the brakes. Changeover valves should never be set to the up position at both ends at the same time. The First Aid kit is to the right of pipes on floor.

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## H - Controller and reversing



The controller regulates the car speed. To the right of the main handle is a shaft onto which the reversing key fits. The key can only be removed in Neutral with the controller handle in the OFF position (as shown). The key must be removed and carried by the operator whenever the car is left unattended. Note that the changeover valve indicator is shown in the “down” position; this end of the car has control of the brakes. At least one end must be down at all times.

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## I - Fire extinguisher and first aid kit.



Note the location of the fire extinguisher before starting a shift, and check the reading to be sure it is fully charged. If it is not, so note on the defect report.

A first aid kit box is also located at this end, and should be checked to ensure it is fully stocked. It is to the right of the air brake pipes on the floor in a marked wooden box (see air brake controls picture, previous page).

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## J - Light switch and communicator bell pull-cord



There is one light switch to control all inside lights for this car. It is usually off for daytime running. Crews are not to change burnt-out lamps; note them on the trouble report.

Above and to the right of the switch is the bell pull-cord the motorman uses to signal the conductor. This cord is always above the motorman's left shoulder when he is facing out the front window. The conductor uses the one above his right shoulder as he looks through the car.

## K - Canopy switch and communication bell



The canopy switch is shown in the ON position. This is a main switch and main circuit breaker for this car, and is located at the #1 end over the motorman's head. Moving the handle towards the camera shuts off all power to the car.

There is a communication bell at each end, operated by separate pull cords.



## L - Electrical box and storage area cover



This panel is under the seat opposite the stove. It holds the electrical box and a small storage area. The key is kept inside the trim panel over the #1 end passenger door.

Inside the cover, the fuses and switches are to the left, the storage area to the right. All main wiring along the car runs under this seat.

## M - Interior of electrical cabinet



In the left side of the electrical cabinet are the fuses and switches:

### Fuses:

- 1 - Interior light fuse
- 2 - Air Compressor and controls fuse
- 3 - Headlight fuse

### Switches:

- 4 - Air Compressor and controls switch
- 5 - Headlights switch
- 6 - Spare switch

A storage area is to the right of the electrical cabinet.