TCRT No. 1239 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.

A- Retriever and retriever rope

The retriever, at the center rear of the car, acts as a reel to keep the trolley rope taut. If the pole should leave the wire, the retriever yanks it back down to limit damage to the pole and the overhead wire system. Keep hands clear of the rope if actuating the retriever manually! Few transit systems used retrievers on most cars. More common was a “catcher,” which also reels the rope but serves only to limit the pole flying upward if it dewires. It looks very similar to this retriever, but has no big center bulge.
B- Air tank bleeder.

There is one bleeder valve for both air tanks on this car. The valve should be open (handle parallel to pipes, as shown) when the car is parked in the barn and chocked. It should be closed (handle at right angle to the pipe) at any time the car is in use.

Moisture builds up in the tanks while in use, and opening this valve with air pressure up allows the water to drain out.

C- Wheel chocks.

Boards are used when the car is parked as wheel chocks to prevent it from moving. They must be in place when car is parked before bleeding air from the tanks.

Make sure they are removed after air pressure is built up and before moving the car.
D- Backup Switches (left-to-right, Start, Stop) and Airbrake Control in LAP and folded.

These controls are used when backing the car. Speed control is handled from the controller at the front, which is usually set to the first or second point.

The airbrake valve is shown in the LAP position and folded away, which is its normal setting.

This system was originally used so the motorman could have a better view when backing the car at wyes or into a storage track.

E- Intercom Bell and pull-cord

The intercom bell is used to signal between the motorman and conductor. Pulling the cord toward the bell at this end rings the bell at the other end. Standard bell signals are used.
F- Farebox and intercom bell.

The farebox is used on 1239 to collect tokens from boarding passengers. After tokens are dropped into the box, the lever just below the sloped section is pressed down to drop the tokens into the counter, and then the crank handle is turned clockwise to register them and update the counter. The counter must be read at the beginning and end of each shift, and indicates the number of paid fares during that shift.

The handle dangling to the right of the farebox is the intercom bell cord.

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G- Master ("Canopy") Switch.

This switch is located in the left side of the electrical cabinet, on the pole side bulkhead behind the motorman. This is the master switch for the car and is an automatic circuit breaker. It is shown in the ON position. If the handle is moved to the left, all power is removed from the car.

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**H- Fuses and Switches**

The switches and fuses are located in the right side of the electrical box on the pole side bulkhead behind the motorman. They are listed by number:

1 - Air compressor  
2 - Controls  
3 - Interior lights, normally off during daytime operations  
4 - Destination signs, headlight, and taillight, normally on while in operation.

**CAUTION:** the fuses carry 600 volts DC; do not touch them while the trolley pole is on the wire!

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**I- Fire Extinguisher**

The fire extinguishers are the dry powder type. There is one in the motorman’s compartment by the controller, another at the rear of the car. Check the gauge pressure to ensure full charge, and note on the trouble report if either or both need recharging or are out of date.
J- Controller and Reversing Switch

The controller regulates the speed and acceleration of the car. The post to the right of the handle is for the reversing key (not shown). The key can be removed with the controller in the OFF position and the reverser in NEUTRAL (as shown).

Just to the right of the controller is seen the air brake pressure gauge. It shows both the tank pressure (red hand) and the pressure in the brake cylinder (black hand).

K- Reverser key.

The reverser keys fit the reversers on the car controllers. No. 1239 uses a standard reverser key that is kept next to electrical cabinet #4 in the maintenance barn.
L- Air gauge, ammeter, brake changeover valve.

The air gauge is to the left, and has two hands; red shows tank pressure and black is brake cylinder pressure.

The ammeter shows how much current the car is pulling. Except when starting, it should always be under 70 amperes.

The air changeover lever, on the left-hand pipe, transfers airbrake control to the rear of the car. Just above the valve is a switch that monitors when the valve is not in the “front control” position.

M- Airbrake valve, handbrake wheel, gate control lever.

The airbrake is in full application position, spring controlled, and must be held to the left for other positions.

The handbrake is used if airbrakes fail or power is lost on the overhead for any reason, and can be used to “park” the car. Be sure the handbrake is released before trying to move the car.

The gate control lever is above brake handle, and is shown with the gates OPEN. If the lever is moved to the right, the gates are CLOSED.