POINTS on operating SURFACE-LINERS

STARTING AND OPERATING

Start the car only on the conductor's signal - the rear doors are not interlocked with the power.

Remember your passengers-accelerate no faster than

necessary.

Apply power smoothly and steadily - avoid pumping the power handle.

Avoid excessive speed - don't test the car's speed. Surface-Liners are wider - watch your clearances. Use the gong freely - these cars are so quiet that prospective passengers and traffic are often unaware of your approach.

MAKING SERVICE STOPS

Always release power before applying brakes. Remember your passengers - brake no faster than required.

For normal stops use the SERVICE brake (motor brakes and drum brakes) * - for emergency stops use the TRACK brake with the SERVICE brake.

* - If buzzer rings, press AUX, BRAKE RESET for two seconds before applying power. Do not use this emergency section of the SERVICE brake more than once in two miles.

Release brake handle completely as soon as car stops, except at locations where car may drift.

Brakes must be "Off" 2 sec. before applying power. When motors are cut out use only the TRACK brakes. Always start the sand just before braking.

If the SERVICE brakes fail, use the TRACK brakes - if this is not sufficient, hold the TRACK brake "On" and "buck" the motors by pushing the REVERSE handle to the forward end of the slot. Do not move the handle from this position until the car stops.

Report BUCKING of motors on the "Sign In" sheet so

the car can be checked.

USING THE REVERSE HANDLE

Always take the REVERSE handle when the car is left alone on the street.

Depress the SERVICE brake handle when removing or

inserting the REVERSE handle.

Never move the REVERSE handle unless the POWER handle is in "Off" position and the car is stopped, except when making EMERGENCY stops by BUCKING the motors.

The REVERSE handle is the operating handle for the

BACK-UP controller.

HOW TO BACK UP

Use the BACK-UP controller at the rear of the car whenever backing.

Place the gong pin in the operating position in the

floor of the car.

Always operate slowly when backing up.

PRECAUTIONS WHEN CUTTING OUT MOTORS

Pull the trolley pole and wait for the M.G. to stop before pulling either motor switch.

Before car is pushed or pulled open both motor switches.

When the line breaker blows three times in close succession, cut out one pair of motors and operate the car to see if the trouble has been cleared. If not, pull the trolley pole again and cut in the first pair of motors and cut out the other pair. Remember - No motor braking is available when motors are cut out.

When motors must be cut out, DISCHARGE ALL PASSEN-GERS and operate car slowly to the depot - travel slowly and

use only the TRACK brake for stopping.

FUSE AND FUSE BOX PRECAUTIONS

Never change fuses with the trolley pole up.

Never use a fuse of higher amperage than that indicated on door panels directly opposite fuse blown.

Never use a ribbon fuse in emergency.

Protect yourself from burns. Before changing 32 volt fuses, shut off all switches. Before changing 600 volt fuses, pull trolley pole.

When necessary to operate the car using the center door interlock switch (at top of fuse cabinet) the fuse cabinet door

must be open.

Report on "Sign In" sheet each fuse blown so the car can

MISCELLANEOUS PRECAUTIONS

Don't touch the trolley pole or base unless you are on the wooden catwalk.

Shut off the M.G. set if power fails or pole breaks. Push the \overline{AUX} . $\overline{BR}AKE$ TRIP switch before leaving the car alone on the street.

Don't leave car with M.G. off unless HEAD LIGHT and CAB HEAT switches are also "Off". These items draw power from the battery.

Don't sweep dust or moisture on floor or center step well

with M.G. running.

Shut off all switches when leaving the car in depot.

PRE PULLOUT CHECKS

- 1. ROOF STEPS--See that steps are in running position.
- HINGED PARTS--See that skirts over track shoes, the rear window and the rear compartment doors are closed.
- BACK-UP CONTROLLER--See that the BACK-UP controller cover (at rear of car) is locked.
- 4. DOORS-- Check satisfactory operation of all doors.
- SAND--See that both sand boxes are filled. Check the discharge of sand on both rails.
- LIGHTS--Check the headlight, sign lights, marker lights and rear stop light. Check body lights - both circuits.
- 7. SIGNS--Adjust the "destination" and "side" signs.
- 8. FENDER--Raise the basket fender.
- M.G.SET--Start the M.G. set. Check normal operation by sound. See that the voltmeter hand is in the "white" section.
- 10. AUX. BRAKE RESET--Release the AUXILIARY brakes by operating the AUX. BRAKE RESET and checking that the red lights on the dash are turned "Off".
- 11. COASTING AND MOTOR BRAKE TEST--When first starting the car, apply a little power, then coast to make sure that the car rolls freely. Then stop the car by depressing the SERVICE brake handle slightly to test the MOTOR brakes.
- CLEARANCES--Be careful on non-clearance curves when pulling out of depot.

TROUBLE ON THE STREET

I. IF THE CAR WILL NOT START

1. CHECK THE POWER--Turn on the body lights.

 CHECK THE M.G. SET SWITCH--If the M.G. set is not running, check as described in Section III.

3. CHECK THE DRUM BRAKES--Operate the AUX.
BRAKE RESET to release the DRUM brakes, hold this switch for two seconds. While the dash lights should burn if these brakes are "On" the lights may be burned out.

 MOTOR BRAKE INTERLOCK--Raise the SERVICE brake handle and hold it up while power is applied to

check this interlock.

 TREADLE DOOR AND CONDUCTOR'S SWITCHES--Ask the conductor to close the rear and center doors and then operate his TREADLE door switches while the POWER

handle is held in the "On" position.

6. EMERGENCY POWER--Hold the EMERGENCY POWER switch forward while applying power. Operate in this way only to pull off a railroad track, out of an intersection, or in like situations. Travel no more than 50 feet on EMERGENCY POWER.

After using the EMERGENCY POWER switch to move the car, call the Dispatcher. If the DRUM brakes are applied (evidence-car not coasting normally) open the four skirt doors so Wreck Wagon crew can release brakes quickly.

If the car is to be pulled or pushed, open both motor cut-

out switches.