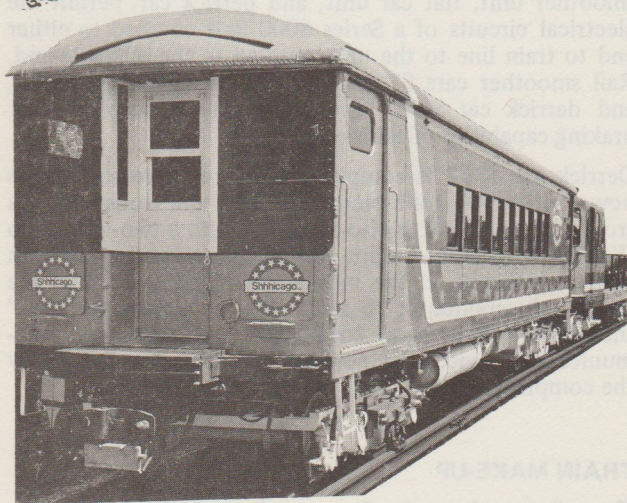


CHICAGO TRANSIT AUTHORITY  
TRANSPORTATION DEPARTMENT

**INSTRUCTIONS FOR WORK AND RAIL  
SMOOTHER TRAINS EQUIPPED WITH  
OHIO BRASS, SERIES 6000-TYPE  
MECHANICAL COUPLERS**



**cta**



## GENERAL INFORMATION

The following are equipped with Ohio Brass, Series 6000-type mechanical couplers:

- Rail smoother cars S1 and S2
- Flat cars S109 and S110
- Derrick car S332

Rail smoother cars S1 and S2 are permanently coupled together as are flat cars S109 and S110. The rail smoother unit (S1 and S2) and the flat car unit (S109 and S110) are equipped with Ohio Brass, Series 6000-type mechanical couplers at each **uncoupled** end. Derrick car S332 is equipped with an Ohio Brass, Series 6000-type mechanical coupler at **each** end.

The uncoupled ends of the rail smoother unit, the flat car unit, and the derrick car are also equipped with electrical couplers consisting of 56 contact points. The electrical couplers, in conjunction with a train line cable on the rail smoother unit, flat car unit, and derrick car, permit the electrical circuits of a Series 6000 unit coupled to either end to train line to the unit coupled to the opposite end. Rail smoother cars S1 and S2, flat cars S109 and S110, and derrick car S332 have no motive power or service braking capability of their own.

Derrick car S332 is equipped with a compressor that is powered by 600 volts picked up from the trolley rail via trolley shoes. S332 is also equipped with a two-way radio (KSA-977) a "Mars" light, and adequate lighting on both ends. A buzzer in the motor cab of S332 permits the work train conductor to signal the motorman to "spot" the derrick car at work locations. All lighting and communication devices are powered by batteries charged by the compressor.

## TRAIN MAKE-UP

The rail smoother unit, flat car unit, or derrick car may be coupled to one (1) Series 6000 unit on each end, two (2) Series 6000 units on each end, or one (1) Series 6000 unit on one end and two (2) Series 6000 units on the other end. **AT NO TIME IS THE RAIL SMOOTHER UNIT, THE FLAT CAR UNIT, OR THE DERRICK CAR TO BE OPERATED ON THE LINE-OF-ROAD WITHOUT AT LEAST ONE SERIES 6000 UNIT ON THE FRONT END AND ONE ON THE REAR.**

Any Series 6000 unit may be used to make up a work or rail smoother train but such units must have no operating defects and must have operative cab signaling systems.

## STORAGE OF EQUIPMENT

Prior to their use, Series 6000 units will normally be drawn from 61st Street Yard, but may be drawn from any yard on the line that the work or rail smoother train is operating on. Series 6000 units must be returned to their yard of origin immediately following their use to prevent a car service shortage to regular revenue service.

Each rail smoother car, each flat car, and the derrick car is equipped with a hand brake. Wedges are also provided for wedging the wheels. When storing the rail smoother unit, flat car unit, or derrick car, as in a yard or on an incline, the hand brake must be applied and the wheels must be wedged.

## COUPLING AND UNCOUPLING

Coupling Series 6000 unit(s) to rail smoother unit, flat car unit or derrick car.

1. Make certain all hand brakes on equipment being coupled to are applied.
2. Make certain all wheels are properly wedged.
3. Couple to equipment.

NOTE: Due to a more pronounced vertical mobility of draw bars on work or rail smoother equipment (as compared to Series 6000 draw bars), a high-low condition may exist with regard to vertical draw bar alignment when attempting to couple the equipment to a Series 6000 car. This may necessitate the use of a wedge under the draw bar of the work or rail smoother equipment when a coupling is to be made.

- a. When the rail smoother unit, flat car unit or derrick car, or any combination thereof, is coupled to on **one end only**, as when maneuvering within the yard limits, leave jumper switch at point of coupling in the **uncoupled** position.
- b. When the rail smoother unit, flat car unit or derrick car, or any combination thereof, is coupled to on **both ends** for line-of-road operation, move jumper switches at both points of coupling to the **coupled** position.

Uncoupling Series 6000 unit(s) from rail smoother unit, flat car unit or derrick car.

If there is a Series 6000 unit(s) at **each end**,

1. Uncouple first end in normal manner.
2. Set hand brakes on work equipment.
3. Wedge wheels if necessary.
4. Uncouple second end in normal manner.

If there is a Series 6000 unit(s) at **one end** only,

1. Set hand brakes on work or rail smoother equipment before attempting to uncouple Series 6000 unit(s).
2. Wedge wheels if necessary.
3. Uncouple in normal manner.

PERSONNEL DEVELOPMENT  
REVISED 7/76