

PROCEDURE
FOR COUPLING
AND
UNCOUPLING
ALL-ELECTRIC
CARS



CHICAGO TRANSIT AUTHORITY

PROCEDURE TO COUPLE NORMAL COUPLING

SERIES 6000 WITH SERIES 6000 SERIES 6000 WITH SERIES 1-54 SERIES 1-54 WITH SERIES 1-54

1. Make certain that couplers are in alignment for the coupling.
2. Check that at least one of the coupler knuckles is open. If neither knuckle is open, pull uncoupling lever of either unit to open the knuckle.
3. Make certain the covers of both electric couplers are open.
4. Make a five-foot safety stop, check that all persons are clear of cars, then make the coupling moving train at 1-2 MPH.
5. Test the coupling by moving the cineston key to reverse position and applying power momentarily. Check that coupler safety-lock indicating stripes on both couplers are properly aligned. (If they are not properly aligned, break, then remake coupling.)
6. Move the jumper switches on both units to the "coupled" position (away from cab).
7. Hook up safety chains and springs, if car has them.
8. Make certain marker lights and headlights at point of coupling are "off."

SERIES 2001-2180 WITH SERIES 2001-2180 SERIES 2001-2180 WITH SERIES 2201-2350 SERIES 2201-2350 WITH SERIES 2201-2350

1. Make certain that couplers are in alignment for the coupling. If necessary to move couplers out of center position to couple on a curve, take the following steps:

Series 2001-2180 car

- a. Throw jumper switch to "Coupled" position (away from cab).
- b. Move coupler off center.
- c. Throw jumper switch back to "Uncoupled" position (toward cab). (Only done if car is to be moved to make coupling.)

Series 2200-2350 car

- a. Pull handle attached to coupler center lock mechanism.
- b. Move coupler off center.
- c. Release handle.

2. Check that at least one of the coupler knuckles is open. If neither is open, pull uncoupling lever of either unit to open the knuckle.

NOTE: If operating a Series 2201-2350 unit in making the coupling, knuckle need not be opened from track level, since the knuckle can be opened by depressing and holding the "Uncoupling" button in the cab for approximately 10 seconds.

3. Make a five-foot safety stop, check that all persons are clear of cars, then make the coupling, moving train at 1-2 MPH.

NOTE: If operating Series 2201-2350 unit, "Coupling" button must be depressed and held during coupling operation, including test of coupling.

4. Test the coupling by moving the reverser key to reverse position and applying power momentarily. Check that coupler safety lock indicating stripes on both couplers are properly aligned.

5. Move the jumper switch on any Series 2001-2180 unit to the "Coupled" position (away from cab).

NOTE: Coupler switch (jumper) on Series 2201-2350 cars is automatically thrown to proper position when coupling is made.

6. Hook up safety chains.

7. Make certain marker lights and headlights at point of coupling are "off."

NOTE: Marker lights and headlights at point of coupling go "off" automatically on Series 2201-2350 cars when coupling is made.

UNCOUPLING

SERIES 6000 FROM SERIES 6000

SERIES 6000 FROM SERIES 1-54

SERIES 1-54 FROM SERIES 1-54

SERIES 2001-2180 FROM SERIES 2001-2180

1. Unhook safety chains and springs, if car has them.
2. Move jumper switches on both units to the "Uncoupled" position (toward cab).
3. Check that all persons are clear of cars.
4. Pull uncoupling lever of unit which will remain stationary to unlock coupler knuckle and hold until units have separated. Unit is operated in reverse to break coupling.
5. Close electric coupler covers of both units (Series 6000 only).

SERIES 2001-2180 FROM SERIES 2201-2350
SERIES 2201-2350 FROM SERIES 2201-2350

1. Unhook safety chains.
2. Move jumper switch of any Series 2001-2180 unit to "Uncoupled" position (toward cab).
3. Check that all persons are clear of cars.
4. Pull uncoupling lever of unit which will remain stationary to unlock coupler knuckle and hold until units have separated. Unit is operated in reverse to break coupling.

NOTE: If operation during uncoupling will be from a Series 2201-2350 unit, the knuckle need not be unlocked from track level since the knuckle will unlock when the "Uncoupling" button in the cab is operated.

If operating a Series 2201-2350 unit during uncoupling:

(1) Depress and hold "Uncoupling" button for approximately 10 seconds before attempting to move unit (this allows motor to drive coupler knuckle open).

(2) Continue to hold "Uncoupling" button while separating units.

(3) After units have separated, wait approximately 15 seconds for automatic coupler switch to throw to "Uncoupled" position before moving train.

COUPLING TO A TRAIN WITH EQUIPMENT TROUBLE

(NOTE: When operating from a cab other than the head cab of a train with cab signalling, the Emergency Circuit By-pass must be used.)

SERIES 6000 WITH SERIES 6000

1. Raise coupler cover on one of the units so that it covers contacts.
2. Have following train couple.
3. Leave jumper switches between trains in the "Uncoupled" position.
4. Cut out 7 pt. switches on all cars of defective train.
5. Have defective train pushed to terminal.

SERIES 2001-2180 WITH SERIES 6000

1. Depress and wedge open electric coupler cover of Series 2001-2180 unit.
2. Raise coupler cover of Series 6000 unit so that it covers contacts.
3. Have following train couple, then remove wedge from Series 2001-2180 coupler cover.
4. Leave jumper switches between trains in the "Uncoupled" position.
5. Cut out 7 pt. switches on all cars of defective train.
6. Have defective train pushed to terminal.

SERIES 2201-2350 WITH SERIES 6000

1. Depress and wedge open electric coupler cover of Series 2201-2350 unit.
2. Retract contacts in Series 2201-2350 electric coupler by moving manual contact retraction lever on top of electric coupler to position toward the cab.
3. Have following train couple and remove wedge from Series 2201-2350 coupler cover.
4. Leave jumper switch of Series 6000 unit in "Uncoupled" position.
5. If Series 6000 train is defective, cut out 7 pt. switches on all cars.
If Series 2201-2350 train is defective, cut out Remote Control Cut-Out and manually cut out actuators on all cars.
6. Have defective train pushed to terminal.

NOTE: If operating from Series 2201-2350 unit, before moving train, move "Emergency Circuit Interrupter" switch to "Interrupt" position and rotate power control Relay By-pass Switch (Flag Switch) to by-pass position.

SERIES 2001-2180 WITH SERIES 2001-2180

- A. If train has any defect other than a ground in the emergency circuit or a controller which must be left open
 1. Have following train couple.
 2. Move jumper switches between trains to "Coupled" position.
 3. Operate train from head cab, if possible. If not possible to operate from head cab, operate from cab closest to front of train in which response can be obtained.
- B. If defective train has a ground in the emergency circuit or a defective controller which must be left open.
 1. Obtain insulating material (cardboard, plastic, etc.) and insert between electric couplers, then have following train couple.
 2. Leave jumper switches in "Uncoupled" position.
 3. Cut out 7 pt. switches on all cars of defective train.
 4. Have defective train pushed to terminal.

SERIES 2001-2180 WITH SERIES 2201-2350 SERIES 2201-2350 WITH SERIES 2201-2350

- A. If train has any defect other than a ground in the emergency circuit or a controller which must be left open
 1. Have following train couple.
 2. Move jumper switch of 2001-2180 unit to the "Coupled" position.

3. Operate train from head cab, if possible. If not possible to operate from head cab, operate from cab closest to front of train in which response can be obtained.
- B. If defective train has a ground in the emergency circuit or a defective controller which must be left open
1. Retract contacts in Series 2201-2350 electric coupler by moving manual contact retraction lever on top of electric coupler to position toward the cab.
 2. Have following train couple.
 3. Leave jumper switch of any Series 2001-2180 unit in the "Uncoupled" position.
 4. If Series 2001-2180 train is defective, cut out 7 pt. switches on all cars.
If Series 2201-2350 train is defective, cut out Remote Control Cut-Out and manually cut out actuators on all cars.
 5. Have defective train pushed to terminal.
- NOTE: If operating from Series 2201-2350 unit, before moving train, move "Emergency Circuit Interrupter" switch to "Interrupt" position.