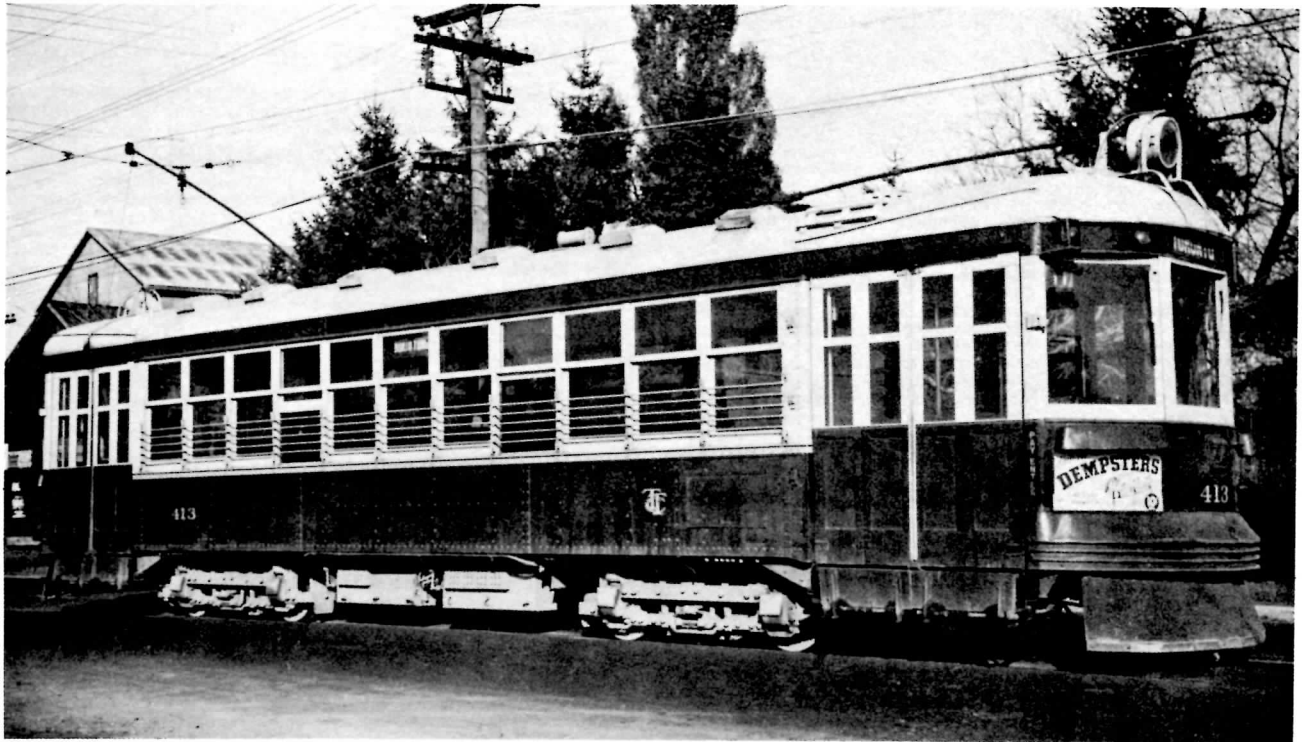




409 - 416

FORMERLY TORONTO & YORK RADIAL RAILWAY 409-416
(H.E.P.C. MANAGEMENT)



413 NEAR THE END OF TRACK AT RICHMOND HILL, ON OCTOBER 27, 1946

The era of the lightweight car all but by-passed the electric railways of the Toronto area. Although the wood body - high wheel era was represented by hundreds of Toronto Railway cars, the heavy steel body era of World War I and the years immediately following by hundreds of Peter Witt cars and trailers, and the PCC era by over 700 examples of that type of car, only eight true representatives of the lightweight car ever operated in this vicinity. These cars were the eight Ottawa-built double truck, double end units of series 409-416.

The numbering of this series had no significance on either the T.&Y.R.R. or the T.T.C., being far removed from the numbers of the other passenger equipment on both systems; this was because the group fitted into the numbering system of the Sandwich, Windsor and Amherstburg Electric Railway. This anomaly is explained by the fact that the eight cars formed only part of a group of twenty (401-420) which were ordered by the Hydro in 1924 and 1925 for the rehabilitation and modernization of electric railway properties which passed under its control around 1920, and which were to form the nuclei of a vast and comprehensive system of electric railways in the Province of Ontario, according to then current plans. Twelve of the cars were ordered in 1924, essentially as the modification of a group of four cars (301-304) which had been ordered for the Windsor lines shortly before. Of the twelve, 401-408 were assigned to the S.W.&A., while 409-412 were placed on the Mimico Division of the Toronto & York Radial Railway, at that time operating from the Humber River (terminus of the T.T.C. BEACH route) to Port Credit. An order for eight more followed in 1925, and this group was split evenly between the two properties; 413-416 going to the Mimico line and 417-420 to the S.W.&A.

All 20 cars were ordered as multiple unit equipment with Westinghouse HL switch group control and Tomlinson couplers, and were so delivered. The intention behind ordering MU equipment on these cars is not very clear - there is no record of multiple unit operation having taken place on either system as a regular practice. It seems possible that the Hydro management envisioned that this equipment might eventually be used elsewhere on the great projected system

in a more heavily trafficked territory. The door arrangement was specifically designed for suburban (roadside) operation. There were four doors at each end (two on each side) and selector valves gave control over all four doors individually, so that left side loading was possible. Roof headlights were applied, being equipped with dimmer switches. The cars were delivered painted dark green with the lettering "HYDRO ELECTRIC RAILWAYS" on the letterboard; this name was painted out before very long, and the cars bore no identification other than numbers for the rest of their career under the Hydro management.

When the Toronto & York Radial Railway was transferred by the city from Hydro to T.T.C. management on January 12, 1927, the cars became T.T.C. property. Their use on the Mimico line continued until early 1929, when, because of the extension of the city car service (LAKE SHORE route) to Long Branch, only a few cars were required for the small stub remnant of the Mimico line (Long Branch to Port Credit) and the 400's were not among the cars chosen to continue service here. The Commission, at this time little suspecting that the cars would ever again be required for radial service, converted them provisionally to two man, single end city cars, with a fixed conductor's position adjacent to the rear door. It was not entirely certain, however, that they would not again be required for double end service, and the controls at the rear end were not removed, but boxed over. Some of the MU equipment was removed at this time, including the coupler at the front end. The cars were then assigned to St. Clair Division, operating on the BATHURST route. It was while in this service that car 412 went out of control on the Bathurst St. hill in one of the most famous runaways in T.T.C. history.

However, events transpired in Toronto's northern suburbs not many months afterwards which led to the formation of the North Yonge Railways, as described in Bulletin No. 40, the somewhat unique suburban line which lasted until comparatively recent times.

Cars 409-416 were taken to Hillcrest Shops again in mid - 1930 for further conversion. They were returned to their original double end operation, with roof headlights



Upper Canada Railway Society
BOX 122, TERMINAL "A"
TORONTO, CANADA

BULLETIN 44

June 1956

and rakish slat type pilots. All couplers were removed, but much in the way of MU wiring and drum switches remained on the cars, and the Westinghouse HL control was retained, as it was as long as the cars operated. The cars were to prove to be the only passenger equipment used during the 18 - year history of the North Yonge Railways.

Minor modifications were made in later years (aisles widened, linoleum floor covering installed, pilots covered with sheet metal and Nichols-Lintern stop lights applied to the dash in 1942-43 and rattan seats covered with leather in 1945.) However, heavy wartime traffic took its toll of the cars and they spent an increasing amount of time in the shops; in addition, only a few shop personnel were acquainted with the maintenance of the HL control system, as it was unlike that on any other T.T.C. cars at this time.

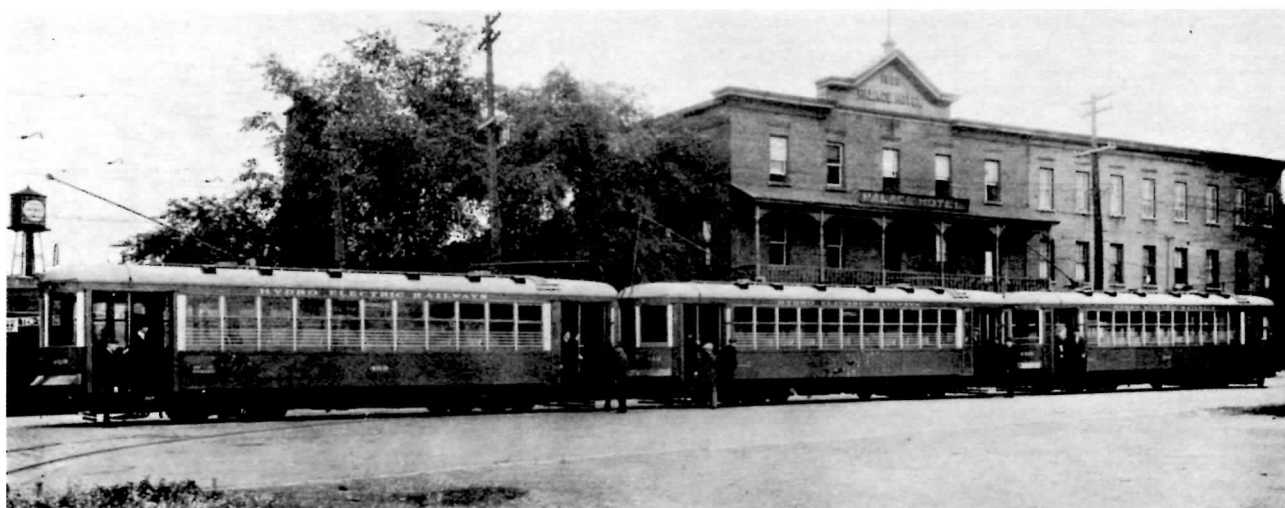
In 1940, the 400's were almost reunited with their cousins from the Sandwich, Windsor & Amherstburg Rly; the S.W. & A. had offered its cars for sale following abandonment of all rail service, but inspection revealed that they were in poor condition in comparison to the Toronto cars, so the T.T.C. declined to purchase them.

During their stay on the North Yonge Railways, the 400's were seen quite often on the city streets during the summer months, notably on charter trips to the ferry docks and to High Park in the city's west end; for people who never had cause to see them in their natural habitat they presented an unusual sight in the downtown area, and many a head turned to watch them pass as they thundered noisily along with their large-flanged wheels kicking up the dirt from the flangeways.

The abandonment of the North Yonge Railways, supposedly on a temporary basis, on October 10, 1948, meant the end of service for the 400's. The cars were moved to inside storage (409 - 415 at Danforth Division and 416 at Russell) immediately after the abandonment, and some light maintenance was done on one or two of the cars. However, by mid-1949, even before the farcical vote on the restoration of service, it was obvious that further care for the cars was unwarranted, and they were moved to outside storage on Track 22 at Russell Division. While here, they were sold to Western Iron & Metal Company in the fall of 1949, and were towed away to George Street yard for scrap during December 1949-January 1950.

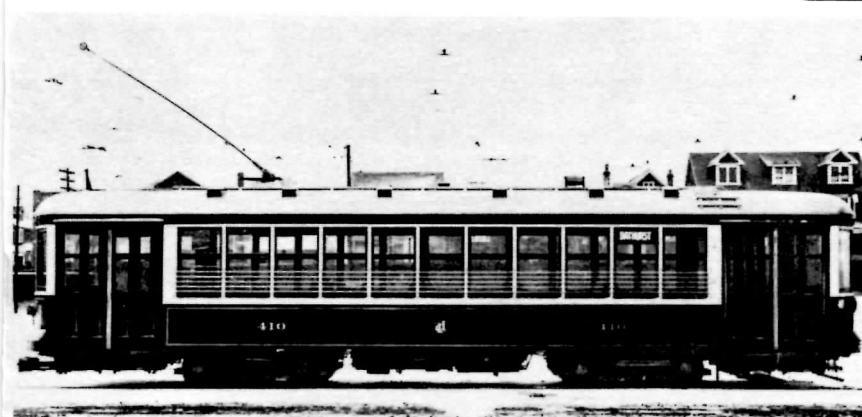
SPECIFICATIONS

Class	- (T.T.C.) P-3, later R.
Builder & Date	- Ottawa Car Company, Ottawa, Ontario. 1924 (409-412) 1925 (413-416)
Construction	- Steel.
Length Overall	- 45' 5 3/4".
Width Overall	- 8' 2 7/8".
Height Overall	- 10' 10 3/4".
Net Weight	- 44000 lbs.
Seat. Capacity	- 44 (9 reversible each side, one double seat placed longitudinally adjacent to bulkhead at all corners.
Type of Seats	- Rattan, leather covered 1945.
Control	- West. HL with 15-B-16 master controller.
Motors	- 4 GE 265A.
Gear Ratio	- 14 : 69 helical.
Air Brakes	- West. SME & Safety car devices, M-28F valve
Hand Brakes	- 2 Ackley.
Compressor	- West. DH-16.
Trucks	- (409-412) Taylor. (413-416) Taylor (CC&F pattern).
Wheelbase	- 5' 4".
Truck Centres	- 20' 0".
Wheels	- 26".
Heating	- Electric (Consolidated).
Lifeguard	- HB (1924-1930), Pilot (1930-1949).
Max. Capacity	- 114 passengers.
Scrapped	- December, 1949 - 411, 412, 413, 416. January, 1950 - 409, 410, 414, 415.

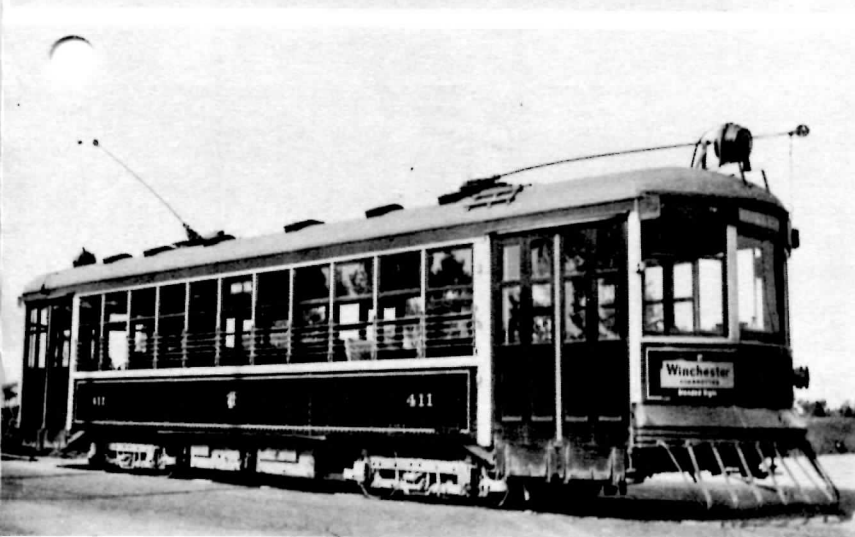


409, 412 & 410 make an impressive three-car train in this August, 1924, photograph

Interior of 410, showing
rear-vestibule arrangement during
the days of single-end operation.
Photo taken Jan. 4, 1929

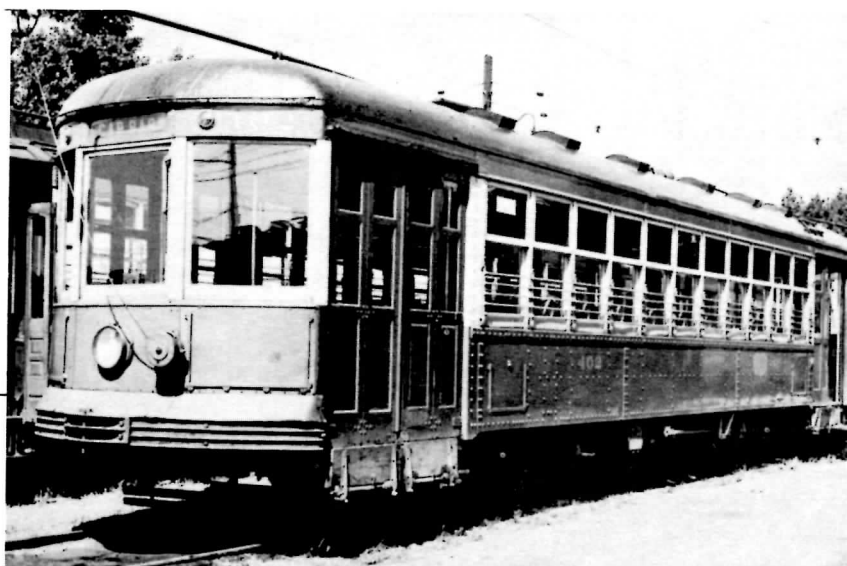


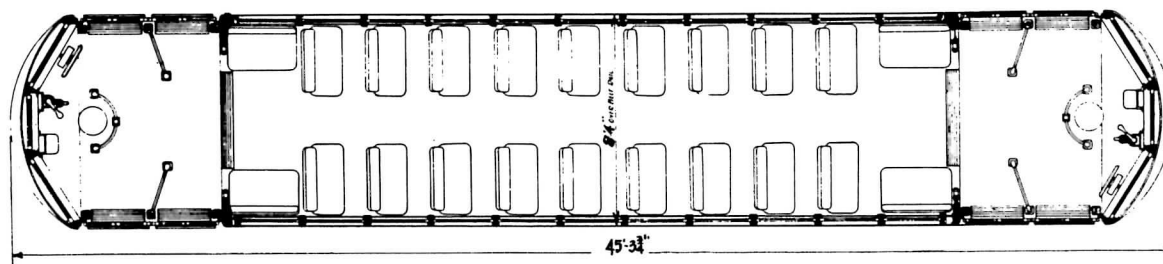
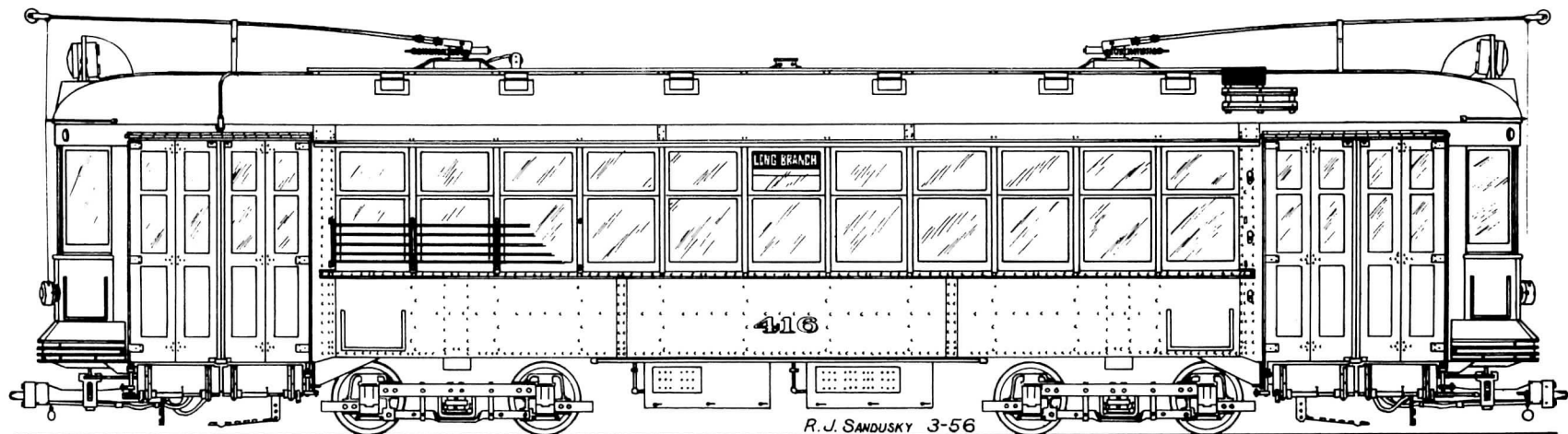
This is how the 400's looked
as single-enders.
Here is No. 410, photographed
at St. Clair carhouse
on January 4, 1929.



Number 411 at Steele's, June 15, 1937.
Note the paint job of that time,
with striped body and end panels.

402, of the same group as
Nos. 409-416, is pictured
at the carhouse in
Windsor, Ontario, in
August of 1938.





ELEVATIONS & INTERIOR ARRANGEMENT
CARS 409-416 AS BUILT