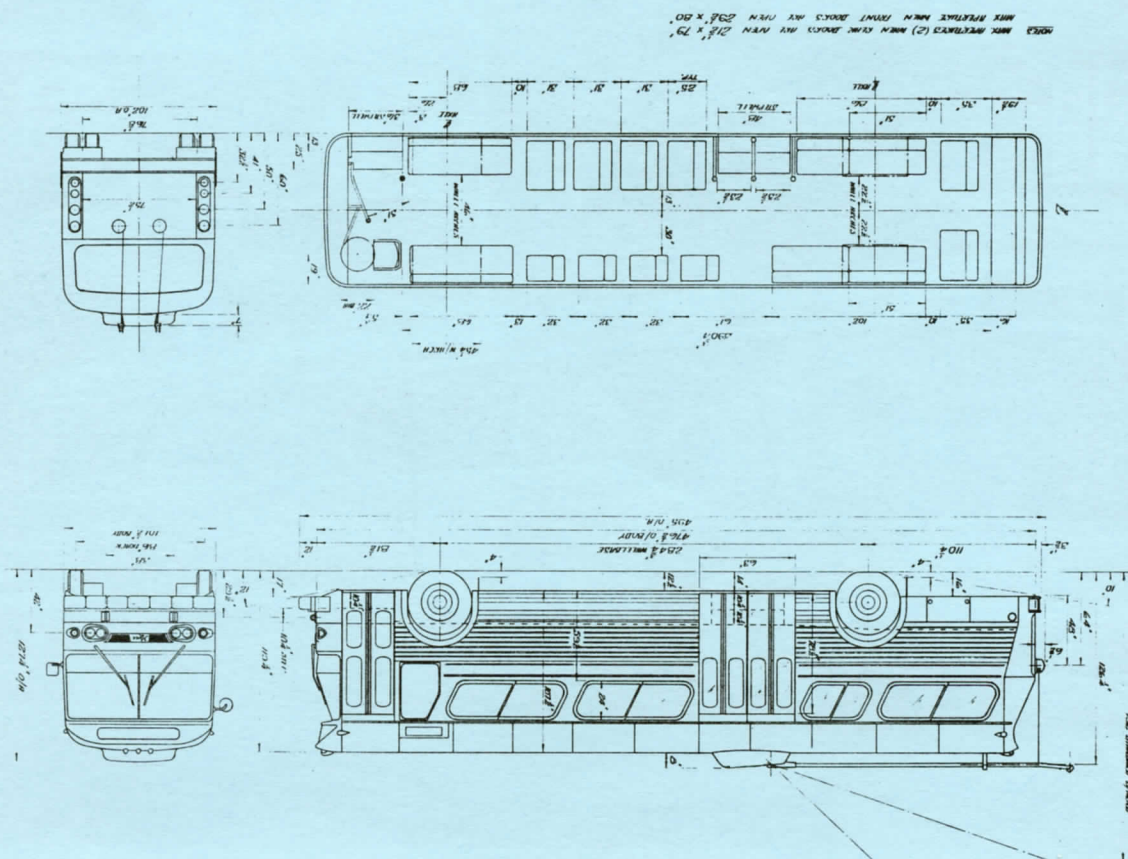


# TROLLEY COACH

## CC & F AND FLYER COACHES

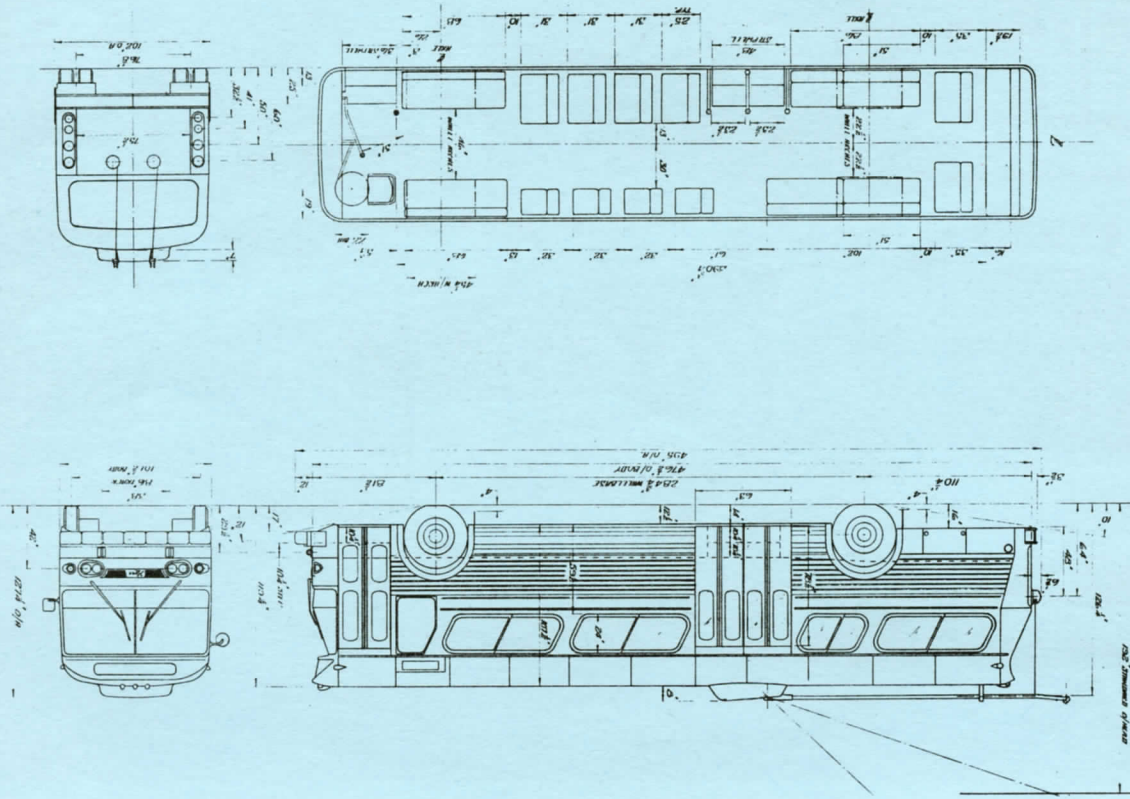
**SEPTEMBER 1982 (RFC)**





# Principal Specifications:

Class	Fleet Numbers	Builder	Model	Delivered	Length (overall)	Width	Height (over roof)	Wheelbase	Seating	Weights	Control:	Motor Rating:	Performance:	Initial Acceleration Rate: 3.5 MPHPS
T1/2/3	9000-9049 9050-9074 9075-9084	CC & F	T44	Feb. 47 - April/48	35' 7"	8' 6"	9' 7"	20' 9"	44	18,510 lbs.	— Normal (W1) — Normal (Service) (W4) — Crush (W5) (Passgrs)	One CGE-1213, 123 HP continuous, 140 HP one hour, compound wound.	(No load weighing; based on 26000 lb total weight).	
T4	9085-9124	M-H	T48A	Aug. - Nov./53	38' 9 1/2"	9' 5"	9' 9 3/4"	20' 7"	48	19,500 lbs.	Canadian General Electric (CGE), Type MRC, cam controller, with regenerative brake speed control and rheostatic brake (blended with air).	Time to Speed: (550 volts)	Braking Rate:	Jerk Rate:
T5	9125-9139	CC & F	T48A	May-June/53 (built 1948; ex CSR 1345 - 1349)	39' 3"	9' 5"	9' 9 3/4"	22' 0"	48	18,000 lbs.				
T6	9140-9144	M-H	TC48	Nov/59 - Jan./60 (built 1951; ex OTC 2006 - 2010)	38' 9 1/2"	9' 5"	9' 9 3/4"	20' 7"	48	19,500 lbs.				
T7	9145-9152	M-H	TC44	June/63 (built 1947 -48; ex CTS 1201/05/07 09/11/12/18/24)	36' 8"	9' 5"	19' 7"	19' 7"	38 (ex 44)	17,700 lbs.				
T8	9200-9251	WFC	E-700A	Aug/70 - Apr./72 (outshopped) Jan/71-Aug/ 72)	41' 3"	9' 11 1/4"	23' 8 3/4"	23' 8 3/4"	40	19,840 lbs.				
										19,840 lbs.		30 MPH in 15 secs.	22 ft. stop from 20 mph	
										32,440 lbs.		38 1/2 MPH (maximum) in 75 secs.		
										32,250 lbs.				
										32,250 lbs.				
										35,890 lbs.				
										(106)				
										(83)				
										(76)				
										(94)				
										(78)				
										(98)				
										(86)				
										(72)				
										(87)				
										(94)				



NOTES: SEE INSTRUCTIONS (2) FOR DIMENSIONS AND WEIGHTS. SEE DIMENSIONS AND WEIGHTS (2) FOR DIMENSIONS AND WEIGHTS.



## The Trolley Coach

While the era of the trolley coach in Canada on a major (production) scale is recognized as commencing after World War II, Toronto was one of two Canadian cities which experimented with this new vehicle a quarter of a century earlier.

Three competitive models had been demonstrated in Detroit in 1921, and following this Windsor used one design to initiate a route in May 1922, while on June 19, 1922 the Commission converted the "Mount Pleasant" bus route utilizing four 29 passenger Packard vehicles with Westinghouse twin motor drive. With the extension of street car service, the operation was abandoned after August 31, 1925. Fifty years later one of these pioneer vehicles was discovered in relatively sound condition on a farm, and is currently planned for restoration by the OERHA museum.

In 1945 Canadian Car & Foundry (Fort William, Ont.) had completed arrangements with ACF-Brill (USA) to build the T-44 model coach in Canada. Kitchenner, Calgary, Edmonton & Toronto placed orders for the new design in late 1945, and from November 16, 1946 the first coach produced by CC & F, a demonstrator, was tested by the Commission.

The first routes in 1947 using the new vehicles were "Lansdowne" (June 19), "Annette" (Oct. 16) and "Ossington" (Dec. 8) for which 75 coaches had been delivered. Another 10 arrived in 1948 with a subsequent purchase of 40 of the enlarged T48 model in 1953, just as CC & F closed production with an essentially "saturated" market. As TTC expanded operations (to a total of 9 basic routes, plus 7 extensions), 28 second-hand coaches were purchased in 1953—1963 from Cincinnati, Ottawa and Cleveland, including 23 built by Marmont-Herrington (USA).

With the opening of the Bloor-Danforth subway in 1966, and the approaching physical obsolescence of the earliest vehicles, the Commission studied the role of the trolley coach with respect to the realigned and revised feeder routes, and concluded that it was still an essential system element (in company with diesel bus or street car alternates). Recognizing that the major components, particularly the CGE traction motor and control, had useful life left, and that North American manufacture was not active, the Commission authorized the trial "rebuilding" of 2 vehicles, No. 9020 by Western Flyer Coach (Winipeg) and No. 9144 by Robin-Nodwell (England) on May 2, 1967. WFC (only) produced a new chassis and body, with remanufactured components, delivered to Hillcrest on July 22, 1968.

The prototype was evaluated over 27,500 miles on 4 routes for a year, during which retrofits and modifications were made. Recommendations were then made to replace the original fleet with vehicles produced similar to the prototype except:

- A number of design changes/improvements were to be made.
- Hillcrest Shops would rebuild and install all sub-systems and components on the vehicles which would be delivered with wheels, air suspension, air brakes and doors only.





This modernization program was approved on November 11, 1969. While the WFC units were being received from August 11, 1970 to April 26, 1972, a production line was set up at Hillcrest to process both the component rebuild and coach assembly/installation, and in the 19 months between January 22, 1971 and August 16, 1972, 151 of the Model E-700A coaches were outshopped which (with 9020 renumbered as 9200) become 9201-9251. (Coach 9144 from the prototype program was never rebuilt). Electrical components were salvaged from 13 Cornwall and 10 Halifax retired vehicles to substitute for non-standard parts on the 23 original Marmon-Herrington coaches.

On March 10, 1981 the Commission approved a plan to progressively convert ten diesel bus routes to complete or "mixed" trolley coach operation in order to fully utilize the present fleet and to reduce energy costs.

## Trolley Coach Route Data

NAME (AND NUMBER)	DATE	ROUND TRIP MILES	DETAILS
Lansdowne (47)	June 19, 1947	5.4	Streetcar
Annette (4)	Oct. 6, 1947	8.5	New
	Feb. 28, 1963	3.4	Ext'n
		11.9	
Ossington (63)	Dec. 8, 1947	6.3	Streetcar
	Jan. 2, 1960	4.8	Ext'n
	June 28, 1964	-1.6	Cut back
	July 21, 1974	3.0*	Street car
	Jan. 28, 1978	0.5	Ext'n
		10.0 or 11.5*	
Weston Road (89)	Sept. 15, 1948	6.2	Streetcar
	Dec. 17, 1949	3.7	Ext'n
	July 26, 1959	1.3	Ext'n
	Feb. 26, 1966	1.2	Ext'n
	Apr. 20, 1973	0.2	Ext'n
		12.6	
Nortown (61)	March 7, 1954	10.0	Bus
	March 30, 1954	4.2	Streetcar/
			Bus
	March 31, 1973	-4.2	Removed
		0.0	(Subway)
Junction (40)	May 11, 1968	3.8	Streetcar
	Sept. 5, 1976	7.3	Bus
Mt. Pleasant (74)	Nov. 20, 1977	3.5	Streetcar/
			Bus

\* Alternate route, additional to 8.5 R.T. miles of "common" mileage.

