**FLYER INDUSTRIES LIMITED**
64 HOKA STREET • BOX 245 TRANSCONA P.O. • WINNIPEG, MANITOBA, CANADA R2C 3T4
PHONE: (204) 224-1251 • TELEX 07-57523

February 2, 1983

[redacted]

Please find enclosed the Technical Specifications and brochure on Flyer Transit Bus Series D901 as requested.

Your interest in our Canadian manufactured transit buses is appreciated.

Should you require additional information, please do not hesitate to contact us at your convenience.

Sincerely,

FLYER INDUSTRIES LTD.

Alice Morley

[redacted]
Administrative Assistant
Marketing Department

AM/lc
Encl.

Flyer is continually investing in research and development assessing technical progress and innovations to meet the present and future market demands.

We are a progressive company and are continually striving for excellence in transit bus production.

The 901 series coach, our latest design, is consistent with Flyer's policy of constantly up-grading the product to meet the transportation needs of tomorrow.

Appearance/Visibility

The new front end has been designed to substantially increase driver visibility and enhance the appearance of the large passenger window desired by transit operators.

Structure

The load bearing structure is a composite structural "chassisless" frame made from high tensile steel (SAE S410 GR950D) and is not dependent on exterior side panelling for structural integrity. Full length longitudinals are utilized in the lower frame section with cross members and bulkheads. Integrated into the lower frame are the structural pillars of the side frame, roof bows and longitudinals which complete the structural frame of the coach.



Ongoing structural analysis and testing has resulted in a reduction of coach weight while maintaining the original capacity of the frame. Combined with redistribution of components the weight distribution on the axles has been improved.

The advantage of the structural design enables a Flyer Coach to maintain its full rated capacity in the event of damage to exterior side panels in an accident. Side panels can be replaced without the concern of impairing structural safety of the coach.

Coaches utilizing exterior side panelling as a composite part of the structural integrity are subject to frame distortion in the event of exterior panel damage in an accident.

Capabilities

Flyer production facilities are the finest in Canada and the support staff includes Operations, Engineering and Manufacturing executives with many years experience in the industry.

In the last two years the company has increased its production 300% and forecasts an increase of 100% per year over the next two years.

On the following pages you will find:

- a general specification sheet on the D901 the most current model and,
- general dimensions for the D901 coach.

Detailed specifications for the D901 are available upon request.

Detailed inquiries are welcomed and can be addressed to:

Henry Poirier or Bob Blahnik
64 Hoka Street
Box 245, Transcona P.O.
Winnipeg, Manitoba
R2C 3T4

# MODEL 901 GENERAL SPECIFICATIONS

FRAME: Fully integrated structure.

ENGINE:

D.D.A. 6V-71N
Injector sizes available as follows:

| | | | |
|---|---|---|---|
| 50 mm develops | 172 B.H.P. | @ | 2100 r.p.m. |
| | Peak Torque = 562 lb. ft. | @ | 1000 r.p.m. |
| 55 mm develops | 185 B.H.P. | @ | 2100 r.p.m. |
| | Peak Torque = 574 lb. ft. | @ | 1000 r.p.m. |
| 60 mm develops | 200 B.H.P. | @ | 2100 r.p.m. |
| | Peak Torque = 583 lb. ft. | @ | 1000 r.p.m. |

D.D.A. 6V-92TA
Injector sizes available as follows:

| | | | |
|---|---|---|---|
| 65 mm develops | 253 B.H.P. | @ | 2100 r.p.m. |
| | Peak Torque = 766 lb. ft. | @ | 1200 r.p.m. |
| 70 mm develops | 277 B.H.P. | @ | 2100 r.p.m. |
| | Peak Torque = 816 lb. ft. | @ | 1300 r.p.m. |
| 75 mm develops | 294 B.H.P. | @ | 2100 r.p.m. |
| | Peak Torque = 873 lb. ft. | @ | 1200 r.p.m. |



AXLE: Rockwell Standard

RATIO's

| | | |
|---|---|---|
| 4 5/8 (4.625) top speed | = | 67 m.p.h. (109 Km/hr) |
| 5 1/8 (5.125) top speed | = | 57 m.p.h. ( 93 Km/hr) |
| 5 3/8 (5.375) top speed | = | 54 m.p.h. ( 88 Km/hr) |

VEHICLE WEIGHT:

23,000 lbs. (includes fuel and driver).

FUEL CONSUMPTION:

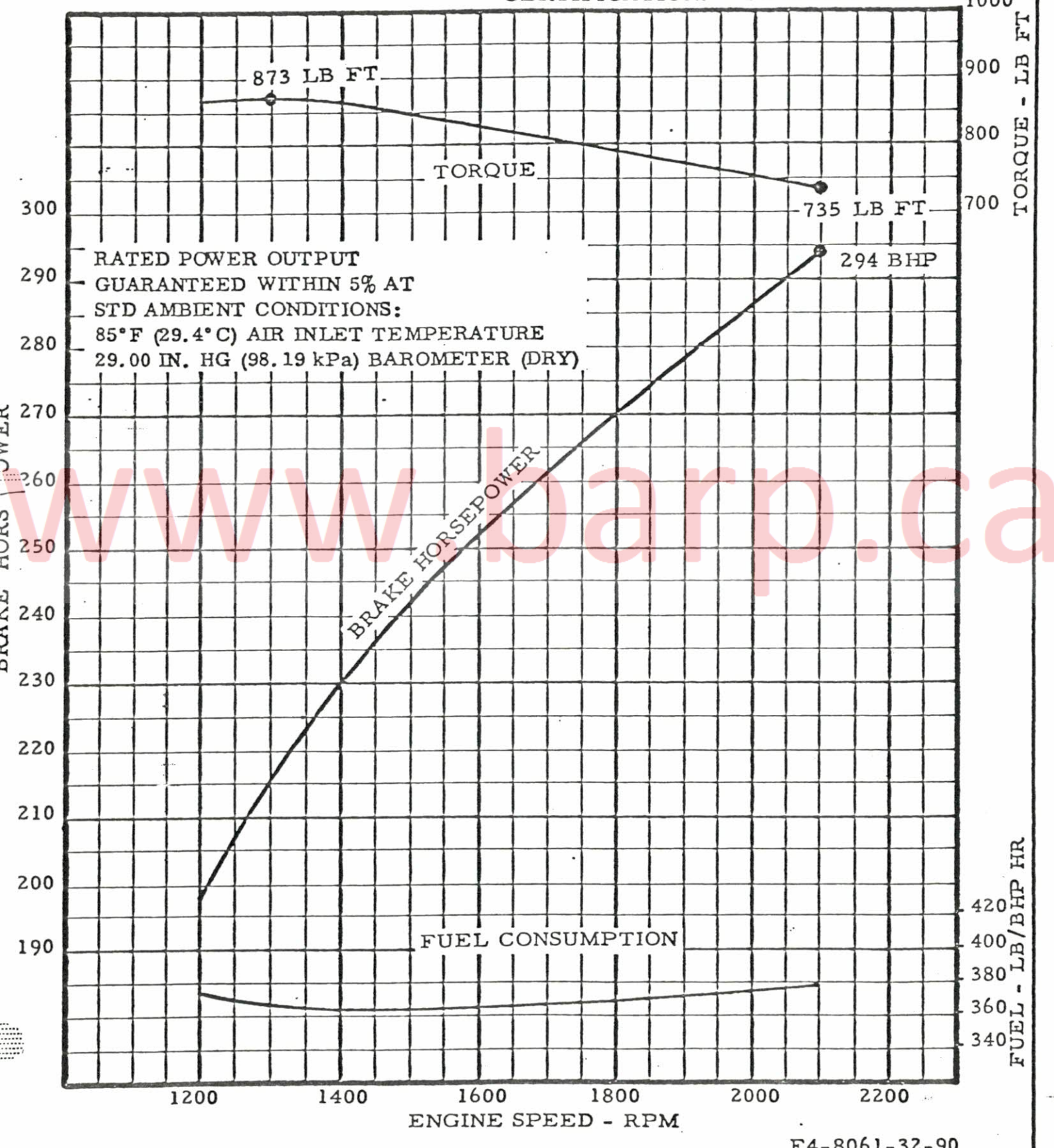
6V7IN engine = as per attached Basic Engine Performance sheet.
6V92TA engine = as per attached Basic Engine Performance sheet.

SUSPENSION:

Air Ride.

**Detroit Diesel Allison**
Division of General Motors Corporation

| | |
|---|---|
| MODEL: | 6V-92TA COACH |
| APPLICATION: | AUTOMOTIVE |
| INJECTOR: | 7G75 (1.470 TIMING) |
| TURBOCHARGER: | TV7101 (1.39 A/R) |
| FUEL: | NO. 2 DIESEL |
| CERTIFICATION: | FEDERAL 1980, 81 |





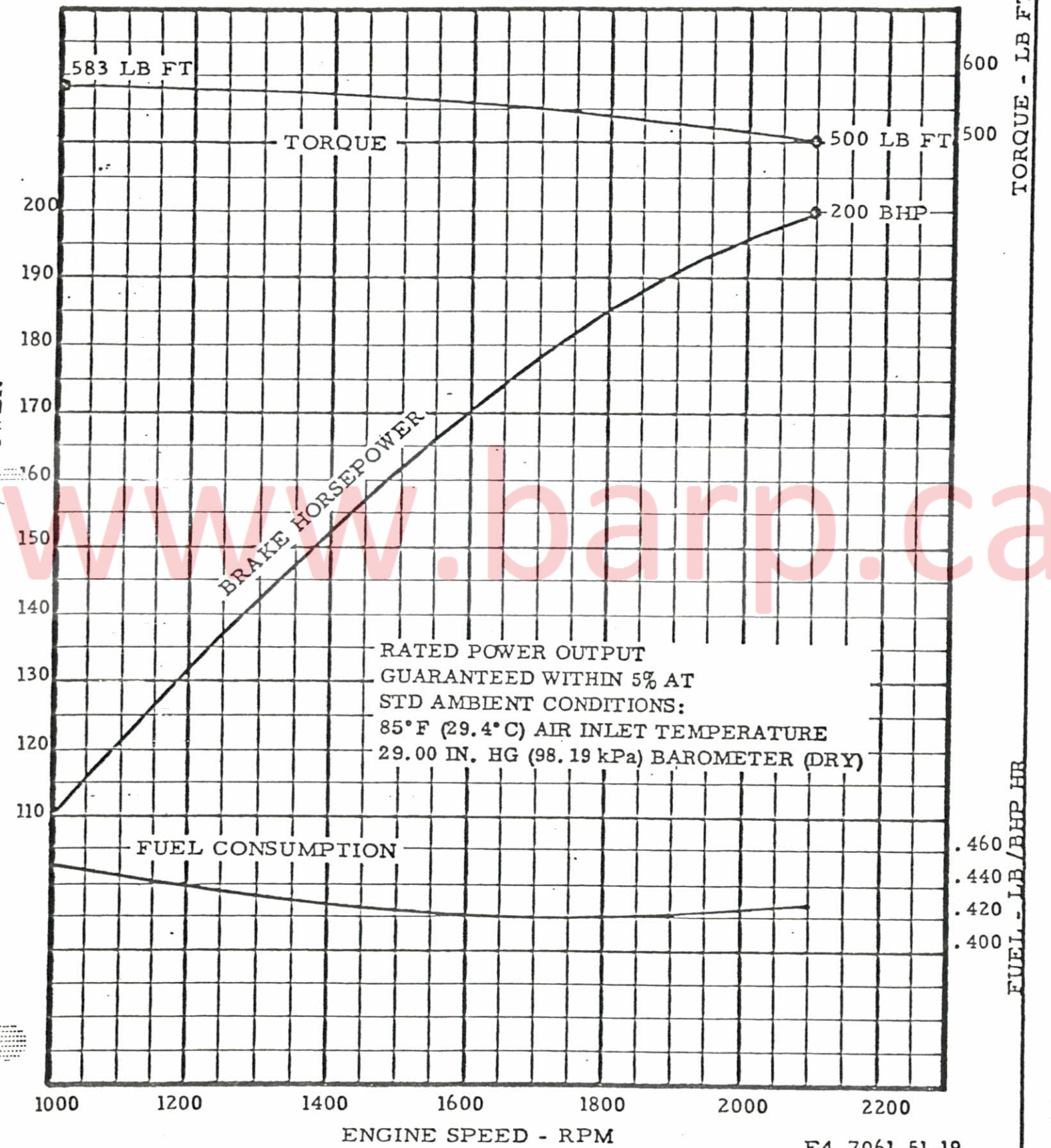

ENGINEERING-TECHNICAL DATA DEPT.

E4-8061-32-90
Rev. 1-16-81


DE 3769

**Detroit Diesel Allison**
Division of General Motors Corporation

| | |
|---|---|
| MODEL: | 6V-71N (2V) |
| APPLICATION: | COACH |
| INJECTOR: | 7E60 (1.500 TIMING) |
| FUEL: | NO. 2 DIESEL |
| CERTIFICATION: | FEDERAL 1979, 80, 81 |






GINEERING-TECHNICAL DATA DEPT.

E4-7061-51-19
Sheet 1 of 2
10-31-80

3769

STEERING:

Manual - Ross Gear.
Power - Shepperd Hydraulic Assist.

Lock to Lock = 8.5 turns.

SEATING:

American Seating.
Otaco Seating.

SEATING CAPACITY:

40 Ft. Bus = 51 passengers.
35 Ft. Bus = 43 passengers.

MAJOR OPTIONS:

Wheelchair lifts.
Air Conditioning.
Kneeling System.
Double entrance and exit doors.

# GENERAL DIMENSIONS

| | | MODEL 901 | | |
|---|---|---|---|---|
| | | D10235 | D10240 | E10240 |
| LENGTH | - Over Bumpers | 35 Ft. | 40 Ft. | 40 Ft. 8 In. |
| | - Over Body | 34 Ft. 8 In | 39 Ft. 8 In | 39 Ft. 8 In. |
| | - Rear Seat to Dash | 360.0 In. | 431.0 In. | 431.0 In. |
| WIDTH | - Over Body - Outside | 101.9 In. | 101.9 In. | 101.9 In. |
| | - Over Body - Inside | 98.0 In. | 98.0 In. | 98.0 In. |
| | - Aisle | 25.0 In. | 25.0 In. | 25.0 In. |
| | - Entrance Door | 38.0 In. | 38.0 In. | 38.0 In. |
| | - Exit Door | 26.5 In. | 26.5 In. | 26.5 In. |
| | - Double Entrance & Exit | 53.0 In. | 53.0 In. | 53.0 In. |
| HEIGHT | - Front at Axle | 118.8 In. | 118.8 In. | 118.8 In. |
| | - Rear at Axle | 119.8 In. | 119.8 In. | 119.8 In. |
| | - Maximum | 120.5 In. | 120.5 In. | 132.5 In. |
| | - Maximum (with A/C) | 126.0 In. | 126.0 In. | 132.5 In. |
| | - Front Step from Ground | 13.5 In. | 13.5 In. | 13.5 In. |
| | - Rear Step from Ground | 14.0 In. | 14.0 In. | 14.0 In. |
| | - Second and Third Step | 10.7 In. | 10.7 In. | 10.7 In. |
| | - Floor from Ground | 34.9 In. | 34.9 In. | 34.9 In. |
| | - Front Bumper from Ground | 21.0 In. | 21.0 In. | 21.0 In. |
| | - Rear Bumper from Ground | 21.6 In. | 21.6 In. | 21.6 In. |
| HEADROOM | - Front | 81.5 In. | 81.5 In. | 81.5 In. |
| | - Rear | 79.2 In. | 79.2 In. | 79.2 In. |
| | - Entrance Door | 81.5 In. | 81.5 In. | 81.5 In. |
| | - Exit Door | 79.2 In. | 79.2 In. | 79.2 In. |
| OVERHANG | - Front | 83.4 In. | 83.4 In. | 83.4 In. |
| | - Rear | 111.9 In. | 111.9 In. | 117.2 In. |
| TRACK | - Front Axle | 85.2 In. | 85.2 In. | 85.2 In. |
| | - Rear Axle | 76.5 In. | 76.5 In. | 76.5 In. |
| APPROACH ANGLE | | 10° | 10° | 10° |
| DEPARTURE ANGLE | | 9° | 9° | 9° |
| BREAKOVER ANGLE | | 10° | 10° | 10° |
| WHEELBASE | | 224.75 In. | 284.75 In. | 284.75 In. |
| TURNING RADIUS (OVER BODY) | | 439.0 In. | 504.0 In. | 504.0 In. |
| TIRE SIZE | | 22.0x12.5 In. | 22.0x12.5 In. | 22.0x12.5 In. |
| FUEL TANK CAPACITY - IMP. GAL. | | 116 Gal. | 116 Gal. | N/A |
| | - U.S. GAL. | 138 Gal. | 138 Gal. | N/A |
| ELECTRICAL SYSTEM & A/C | | 12VDC | 12VDC | 12VDC |
| TROLLEY OVERHEAD POWER | | N/A | N/A | 600VDC |

# FLYER INDUSTRIES LIMITED

Flyer ranks among North America's foremost builders of Diesel and Electric Transit Buses. Flyer Industries has been manufacturing buses for 50 years, commencing with Troop Transport buses and School buses. Flyer, with its Manufacturing plants located in Winnipeg, Manitoba, Canada employs in excess of 500 employees.

Product range includes Transit buses of 10240, 10235 "New Look" Diesel buses and 10240 "New Look" Trolley buses. Buses have been produced for customers such as:

## DIESEL BUSES

| | |
|---|---|
| Regina, Sask. | 11 |
| Hamilton, Ont. | 30 |
| Toronto, Ont. | 225 |
| Mississauga, Ont. | 57 |
| Kitchener, Ont. | 32 |
| Winnipeg, Man. | 463 |
| Calgary, Alta. | 74 |
| Vancouver, B.C. | 145 |
| Edmonton, Alta. | 29 |
| Saskatoon, Sask. | 29 |
| Brandon, Man. | 8 |
| Seattle, WA. | 259 |
| San Mateo, CA. | 113 |
| Oakland, CA. | 190 |
| Snohomish, WA. | 54 |
| Syracuse, N.Y. | 25 |
| Anchorage, Alaska | 38 |
| Hauppauge, N.Y. | 25 |
| Ottawa, Ont. | 18 |
| Montreal, P.Q. | 10 |
| Torrance, CA. | 17 |
| New Bedford, Mass. | 8 |
| Volusia, Florida | 5 |
| Boston, Mass. | 168 |
| | 2033 |

## TROLLEY BUSES

| | |
|---|---|
| Toronto, Ont. | 151 |
| Hamilton, Ont. | 56 |
| Edmonton, Altas. | 37 |
| Vancouver, B.C. | 250 |
| San Francisco, CA. | 343 |
| Dayton, Ohio | 65 |
| Boston, Mass, | 50 |
| | 952 |



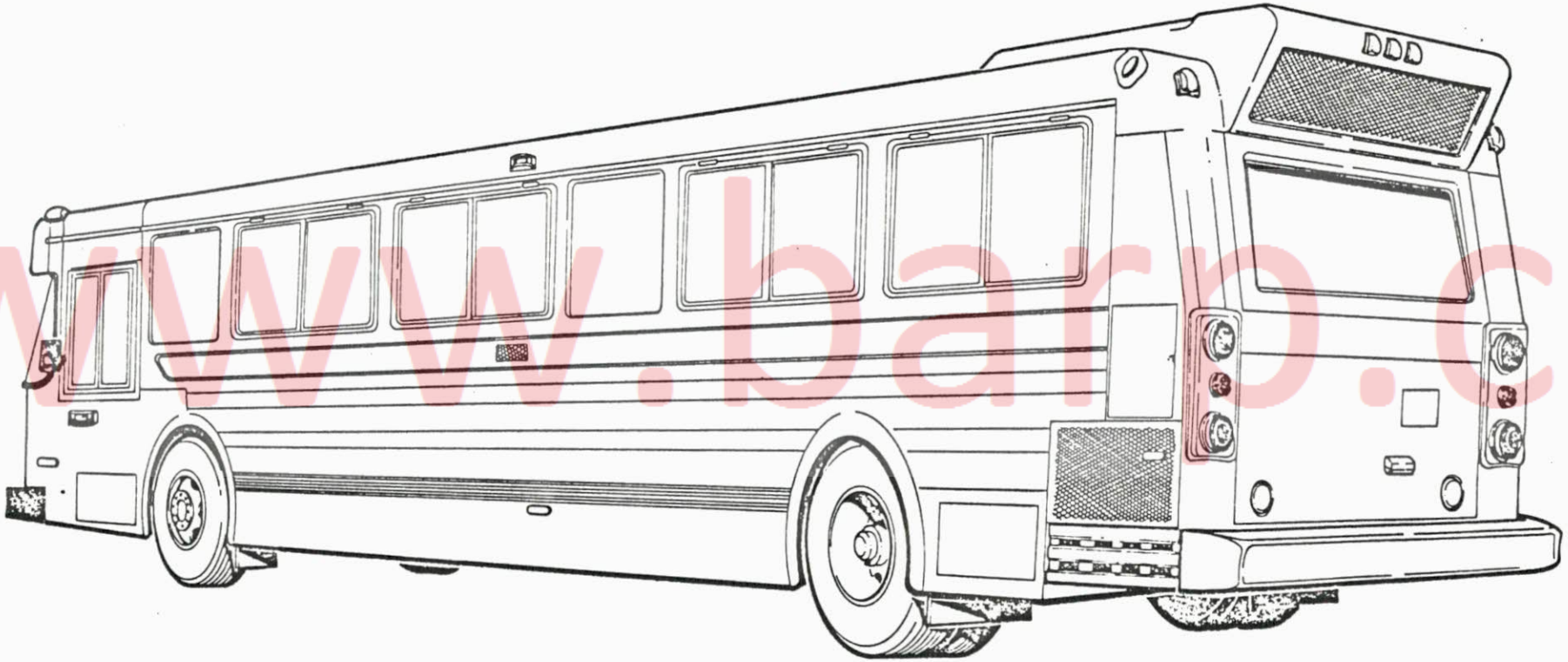
Of no less importance is Flyer's range of services from Engineering, Consulting, Maintenance Training and After Sales Service.

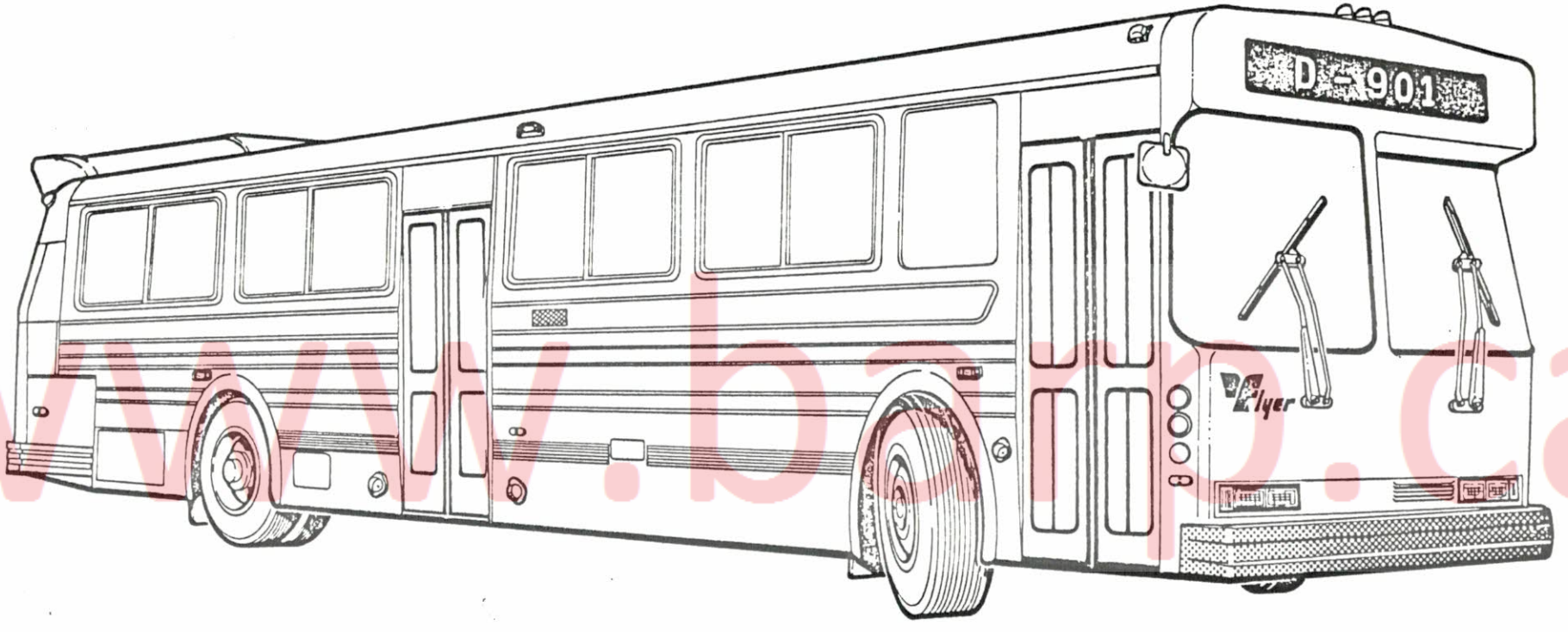
The Service Department and Spare Parts Division are located in Winnipeg. A complete Service staff is available at 24 hours notice on an emergency basis to aid our customers with any Service problems. From past history, we have been capable of supplying most emergency spare part needs on a 24 hour basis.

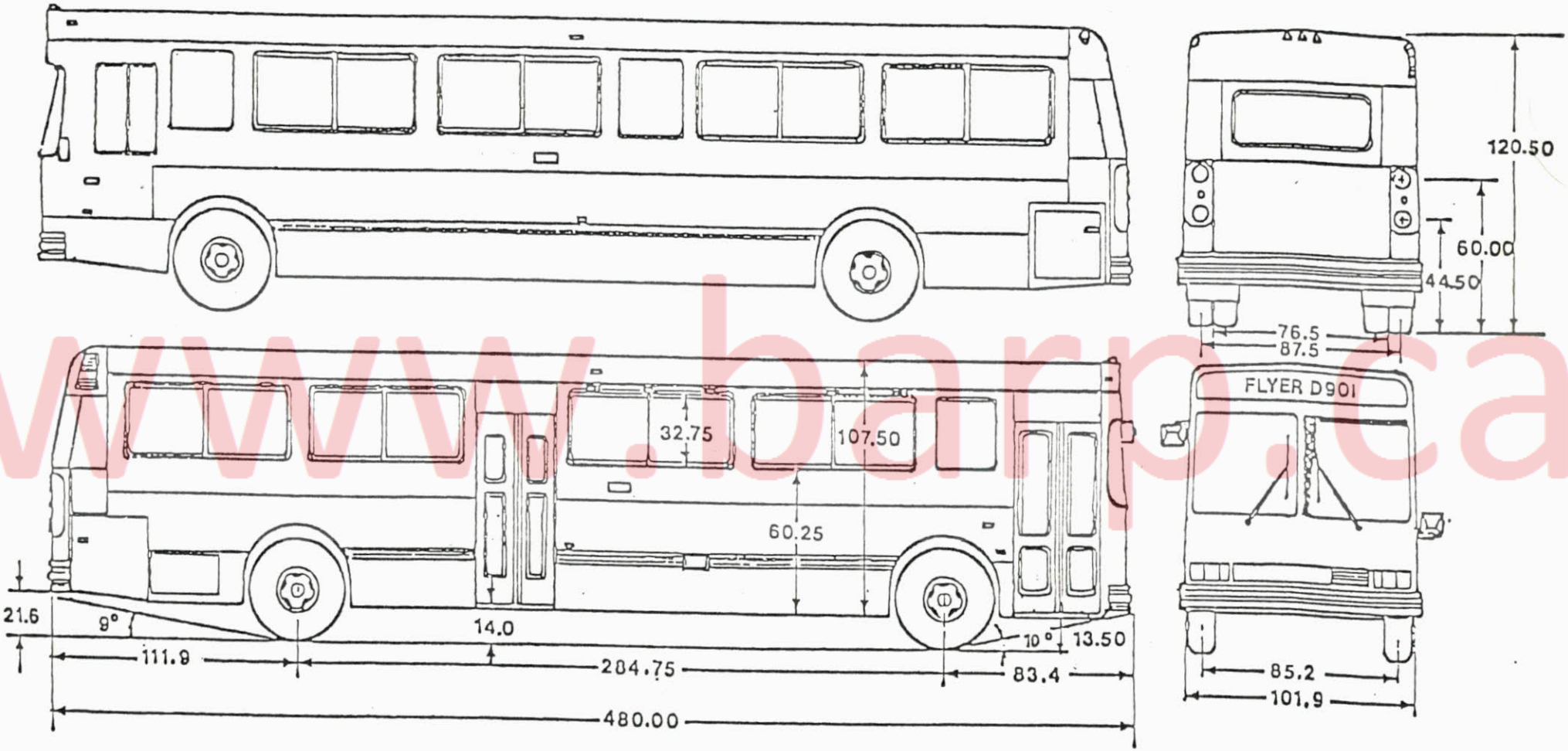
# GENERAL DIMENSIONS

METRIC

| | | MODEL 901 | | |
|---|---|---|---|---|
| | | D10235 | D10240 | E10240 |
| LENGTH | - Over Bumpers | 10,668 mm | 12,192 mm | 12,421 mm |
| | - Over Body | 10,566 mm | 12,090 mm | 12,090 mm |
| | - Rear Seat to Dash | 9,144 mm | 10,947 mm | 10,947 mm |
| WIDTH | - Over Body - Outside | 2,588 mm | 2,588 mm | 2,588 mm |
| | - Over Body - Inside | 2,489 mm | 2,489 mm | 2,489 mm |
| | - Aisle | 635 mm | 635 mm | 635 mm |
| | - Entrance Door | 965 mm | 965 mm | 965 mm |
| | - Exit Door | 673 mm | 673 mm | 673 mm |
| | - Double Entrance & Exit | 1,346 mm | 1,346 mm | 1,346 mm |
| HEIGHT | - Front at Axle | 3,017 mm | 3,017 mm | 3,017 mm |
| | - Rear at Axle | 3,042 mm | 3,042 mm | 3,042 mm |
| | - Maximum | 3,060 mm | 3,060 mm | 3,365 mm |
| | - Maximum (with A/C) | 3,200 mm | 3,200 mm | 3,365 mm |
| | - Front Step from Ground | 342 mm | 342 mm | 342 mm |
| | - Rear Step from Ground | 355 mm | 355 mm | 355 mm |
| | - Second and Third Step | 272 mm | 272 mm | 272 mm |
| | - Floor from Ground | 886 mm | 886 mm | 886 mm |
| | - Front Bumper from Ground | 533 mm | 533 mm | 533 mm |
| | - Rear Bumper from Ground | 548 mm | 548 mm | 548 mm |
| HEADROOM | - Front | 2,070 mm | 2,070 mm | 2,070 mm |
| | - Rear | 2,011 mm | 2,011 mm | 2,011 mm |
| | - Entrance Door | 2,032 mm | 2,032 mm | 2,032 mm |
| | - Exit Door | 1,993 mm | 1,993 mm | 1,993 mm |
| OVERHANG | - Front | 2,423 mm | 2,423 mm | 2,423 mm |
| | - Rear | 2,842 mm | 2,842 mm | 2,978 mm |
| TRACK | - Front Axle | 2,118 mm | 2,118 mm | 2,118 mm |
| | - Rear Axle | 1,943 mm | 1,943 mm | 1,943 mm |
| APPROACH ANGLE | | 10° | 10° | 10° |
| DEPARTURE ANGLE | | 9° | 9° | 9° |
| BREAKOVER ANGLE | | 10° | 10° | 10° |
| WHEELBASE | | 5,708 mm | 7,232 mm | 7,232 mm |
| TURNING RADIUS (OVER BODY) | | 11,150 mm | 12,801 mm | 12,801 mm |
| TIRE SIZE | | 559mm x 317.5mm | 559mm x 317.5mm | 559mm x 317.5mm |
| FUEL TANK CAPACITY | | 522 L | 522 L | N/A |
| ELECTRICAL SYSTEM & A/C | | 12VDC | 12VDC | 12VDC |
| TROLLEY OVERHEAD POWER | | N/A | N/A | 600VDC |



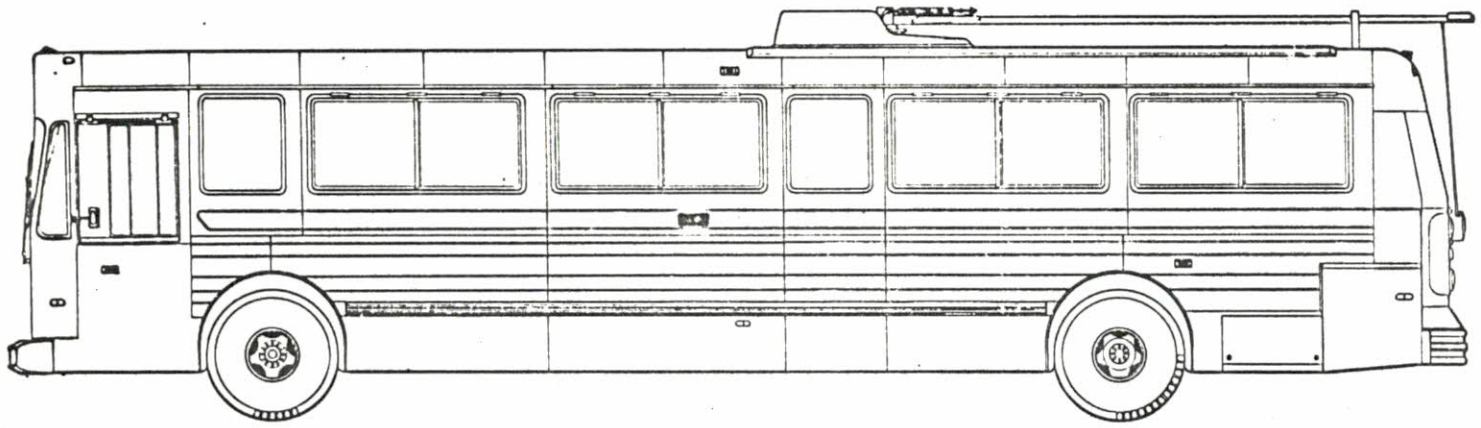


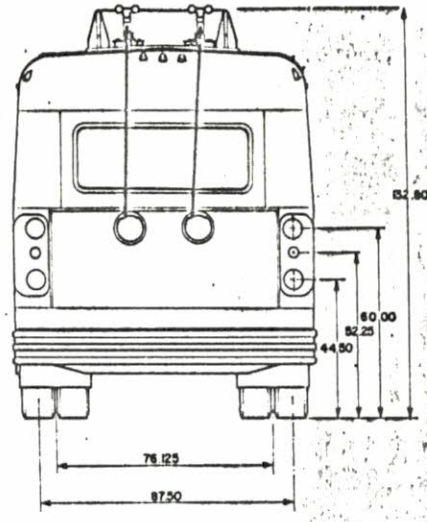





EXTERIOR GENERAL ARRANGEMENT

FLYER D901 MODEL 10240

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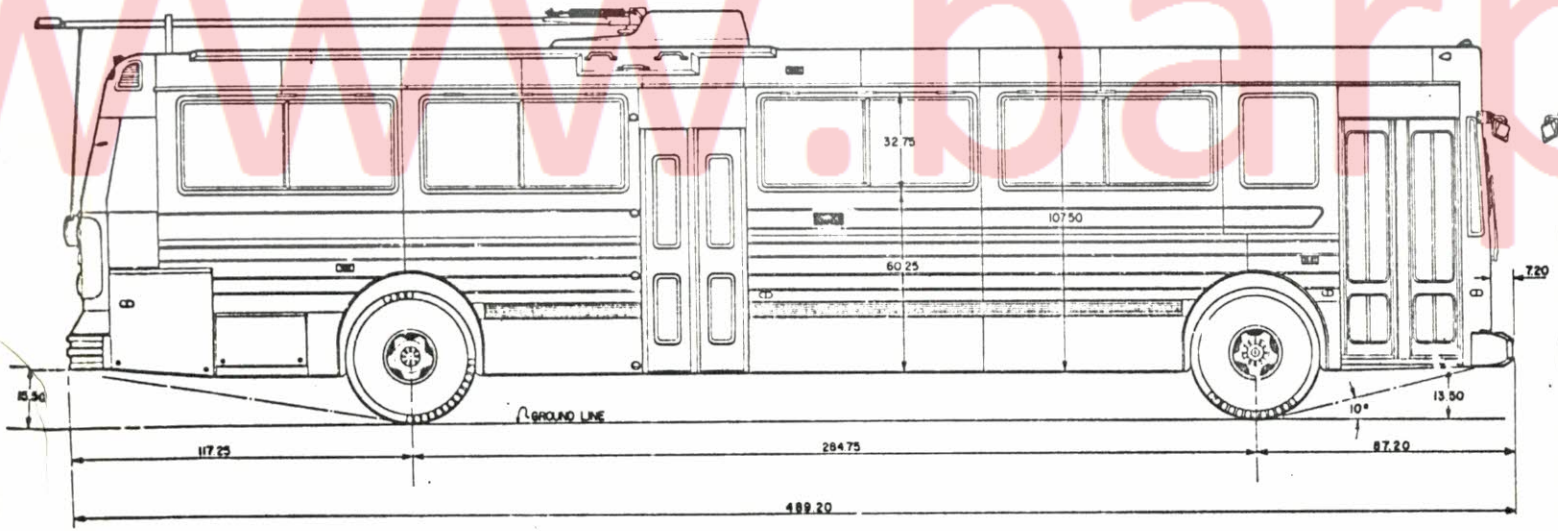
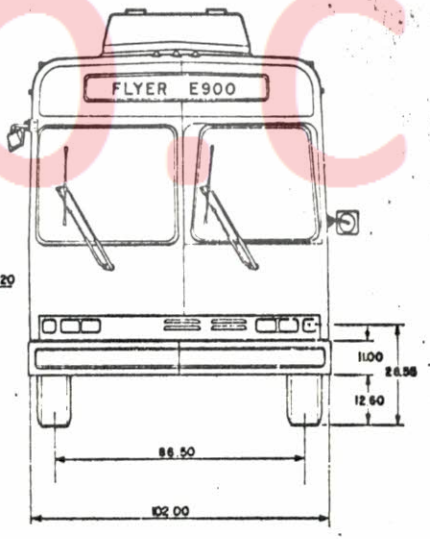
60.00
52.25
44.50
76.125
87.50


32.75
107.50
60.25
7.20
15.50
GROUND LINE
10°
13.50
117.25
284.75
87.20
489.20


FLYER E900
11.00
26.58
12.60
86.50
102.00