

BUS AND COACH

MARCH 1966

FIVE SHILLINGS

Special export and overseas number

Torque converters in Vienna buses

What can Britain offer abroad?

Amsterdam Show reviewed



Duple/Daimler in Canada

Duple and Daimler beat severe international competition in winning contracts for 28 44-passenger transit coaches for the City of Edmonton and a further 3 for the City of Calgary. These are the first all-British buses exported to Canada for many years. Bodies are all-metal, with double glazing and special heating systems to cope with extreme temperature variations. Chassis are the latest rear-engine Daimler Roadliners, with left-hand drive and air suspension.

Duple Group Sales Ltd.
The Hyde Hendon London NW9
Colindale 6412
London, Loughborough and Blackpool

Duple

Daimler

DAIMLER NEWS SERVICE

THE DAIMLER CO. LTD., PRESS OFFICE, COVENTRY, ENGLAND, Tel: ALLESLEY 2121
A SUBSIDIARY OF JAGUAR CARS LTD

NEW DAIMLER-DUPLE S.R.C. ROADLINER ON SHOW AT EDMONTON

Northwest Canadian Trade Fair, May 2nd., to 7th. 1966.

The Daimler-Duple S.R.C. Roadliner bus on view at the above exhibition is one of 28 such vehicles for the Edmonton Transit System of Alberta, Canada, who placed the order with Transport Vehicles (Daimler) Ltd. and Duple Group Sales Ltd.

The buses, specially designed to meet Canadian requirements, represent a combined project between Daimler and Duple. The chassis is the new Daimler Roadliner, which has a low height frame, full air suspension, automatic chassis lubrication, and numerous other special features.

Power comes from the Cummins V6 9.6-litre diesel engine which develops 192 b.h.p. and is mounted vertically at the extreme rear of the chassis.

Transmission is by a fully automatic Allison MT 41 unit, comprising a single-stage 3-element torque converter, a lockup clutch, and a planetary gear train providing six forward speeds plus reverse. Driven from the torque converter, the planetary gear train is in constant mesh and includes splitter, low-range, intermediate range, and reverse range planetaries, the splitter planetary providing two ratios in each forward range. This transmission unit incorporates a built-in hydraulic retarder.

Amongst the many safety features is an interlock system whereby the brakes are applied and the throttle retained in the idling position when the entrance doors are open. Moisture ejection valves are fitted in all air systems to prevent freezing. Daimler and Duple engineers visited Canada to observe personally the winter conditions, and thus became fully conversant with the extremes and sudden changes of temperature which are characteristic of this part of Canada. It immediately became evident that an exceptionally efficient heating and ventilation system was necessary in Edmonton. Co-operation between Daimler, Duple, and Clayton Dewandre has resulted in fitting of the Clayton "Compass" fully automatic heating and ventilation system. This built-in system incorporates two heat exchangers, capable of full engine cooling and mounted on each side of the chassis forward of the rear wheels. When a predetermined saloon temperature is reached, the fans which draw air into the exchangers are reversed, and thus discharge air from the interior. The system provides fresh air to the interior at all times, without drain on the vehicle's electrical system.

The Duple body has been specially designed to take full advantage of the features of the Daimler Roadliner chassis and to meet exactly the requirements of the operator. A bus designed to seat 44 persons plus driver, it features a step-free central gangway and large standee area for peak load operation. The

body (built by Willowbrook Ltd. of Loughborough - one of the Duple Group companies) is of all-metal construction and the interior has been specially designed to provide a light modern decor requiring the minimum of maintenance and cleaning. As a result, lavish use is made of plastic and laminate finishes.

Special provision has been made to obviate icing-up of saloon windows, and an additional feature is the fitting of special heating equipment to prevent snow and ice accumulating and obstructing the doors. Heating of the driver's compartment is such that the driver is able to operate the vehicle in all conditions (even in sub-zero temperatures) dressed in normal indoor clothing.

This important order for 28 British Daimler-Duple S.R.C. Roadliner buses was achieved against the strong opposition of numerous tenders from manufacturers of many nationalities.

Calgary Municipal Transit System have also placed an order for three similar vehicles.

ABOUT DAIMLER

Transport Vehicles (Daimler) Ltd. of Coventry, England, is a member of the internationally-famous Jaguar group of companies. Daimler's first Coventry factory was opened in 1896, and the 1966 Northwest Canadian Trade Fair thus coincides with the Company's 70th. anniversary. The first Daimler cars were built in 1897; the manufacture of Daimler buses commenced shortly after the turn of the century and, in the intervening period, these have become renowned among bus operators throughout the world. In addition to Canada, orders for the new Roadliner have also been received from Australia and New Zealand, South Africa and, of course, the U. K.

Daimler buses and coaches are currently in operation in well over 50% of all the municipal fleets of Britain, and are exported to all parts of the world in a wide variety of specifications to suit every operating condition.

ABOUT DUPLE.

Founded in 1919, by Mr. H.R. White (the present president, now aged 89, and father of the present managing director), Duple are today Britain's largest independent manufacturers of luxury coach and service bus bodywork, and their average annual output is now over 1500 units.

The Duple Group factories in Britain are located at Hendon (N.W. London), Blackpool (N. England), and Loughborough (Midlands). Hendon and Blackpool produce a wide range of coaches on a variety of chassis, whilst the two Loughborough factories produce express and service buses for use at home and overseas - including the 28 Roadliner vehicles for Edmonton, of which the bus on show at the forthcoming trade fair is an example.

Exports play an important role in Duple Group activities, and their coaches are to be found in operation in Hawaii, Cyprus, India, and Australia.

TRANSPORT VEHICLES (DAIMLER) LTD.
COVENTRY,
ENGLAND.

DUPLE GROUP SALES LTD.
THE HYDE, HENDON,
LONDON N.W.9, ENGLAND.

DUPLE GROUP SALES LTD.

THE SALES ORGANISATION FOR THE DUPLE GROUP COMPANIES

THE HYDE, HENDON, LONDON, N.W.9

Telephone: Colindale 6412
Telegrams: "Duple, Hyde, Hendon."
Cables: "Duple, Hendon, London."

Your Ref :

Our Ref :

S P E C I F I C A T I O N

44 PASSENGER ALL METAL TRANSIT SERVICE BUS BODY

1. GENERAL

The DUPLE Transit Bus body is 36ft 8 ins long, 8ft 2½ ins wide and 9 ft 8 ins (approximately) high when mounted on the Daimler SRC6 'Roadliner' 18'6" wheelbase chassis. Seating a total of 44 passengers, excluding the driver, there is ample room for 20 additional standing passengers. The body structure is all metal with panelling in aluminium and moulded glass fibre reinforced polyester resin sheet and the interior finishing employs the most modern materials. A high degree of illumination is provided by continuous fluorescently illuminated panels and passenger comfort is ensured by a thermostatically controlled combined warm air heating and ventilating system. Double glazing is employed for all the main saloon windows which are of deep dimensions and air operated doors are fitted interlocked with the driving controls for safety.

2. CONSTRUCTION.

The main body framing is built up from press-formed steel sections with solid 20 s.w.g. Zintec steel sheet truss panelling below the waist level. The body pillars are of double top-hat built up sections and are bolted through gusset plates to heavy rectangular box section main bearers connected directly to the chassis. A continuous steel channel section is provided at the cantrail bolted to the main pillars and to the roof framing. The roof framing is formed of pressed steel transverse roof 'sticks' and longitudinals both of top hat section. Local reinforcing of Zintec sheet steel is provided over all door bays.

Panelling to the body sides below the windows and to the centre roof section is of 18 s.w.g. aluminium sheet, secured by pop-rivetting to the side framing and by solid rivetting to the roof framing. The exterior front dome, rear canopy, the front panel below the windscreen and the rear panel are each one piece moulded in glass-reinforced polyester resin of 1/16" minimum thickness.

Continued.

3. GLAZING.

The front windscreen is in two pieces of double curvature 1/4" thick laminated plate glass fixed in rubber glazing. The backlight is a single full width panel in 1/4" thick toughened flat plate glass with sprung single curvature fixed in rubber glazing.

The main saloon side windows, of which there are five each side, are framed in anodised aluminium alloy with the lower part of fixed glass and the top section sliding. The fixed portions of the windows are double glazed each panel being 32 oz toughened sheet glass. The driver's signalling window has top and bottom sliding glasses in 32 oz toughened sheet the whole unit being framed in anodised aluminium alloy.

4. HEATING AND VENTILATION.

The combined heating and ventilating system is supplied with warm air from two heat exchangers which are fed with engine cooling water. Air is passed through the heat exchangers by controllable speed fans and thence to two ducts, one each side, running the length of the body in the floor cooves. Warm air passes through grilles to heat the main saloon and is exhausted through specially shaped ventilators in the roof. Fresh air can also be drawn through these ventilators into the saloon and passes through the grilles in the ducting being exhausted through the heat exchangers under control of the fans. The whole system is thermostatically controlled and so maintains an equable and buoyant atmosphere at a temperature determined by the thermostat setting.

A separate small heat exchanger is fitted at the front end of the vehicle with forced air circulation to defrost and de-ice the windscreen and to heat the driver's cab.

The body sides, roof and front and rear end are all fully insulated with 1 1/2" thick glass fibre between skins to conserve saloon heat.

5. SEATING.

Seating for 44 passengers is provided largely on forward facing double seats but with longitudinal seats over the wheel arches and a rear seat for five passengers. The double seats are tubular framed with a stainless steel top rail. The cushion fillings are of moulded foamed latex mounted on plywood bases, the seat back fillings being 1 1/2" thick profile cut polyether foam.

The seat coverings are of top quality fabric backed PVC, colours being to choice and are plain style trimmed with end and centre pleats. Seat backs are fitted with melamine plastic sheet at the rear and the frames are stove enamelled.

The driver's seat is of the fully adjustable type mounted on a pedestal and is trimmed in similar material to the saloon seating and provided with a ventilated seat back.

6. INTERIOR FINISH.

The interior of the body utilises plastic materials throughout providing durability with pleasing appearance. The side panels between floor and waist are of melamine sheet affixed to the steel truss panels and the whole centre of the interior roof including the underside of the roof ventilating units is lined with the same material bonded to hardboard.

The dome and canopy linings are colour impregnated glass reinforced polyester mouldings with a textured finish and the front dash is manufactured of the same material.

Window pillar facias and the inside faces of access doors to the destination and route indicators are covered with melamine sheet.

The floor covering is of heavy duty fabric reinforced PVC colour impregnated and of 1/4" thickness. Patterned aluminium sheet is used throughout for kicking panels and step risers, the steps being covered with 1/4" fabric reinforced PVC bonded to 1/2" thick waterproof plywood.

7. LIGHTING AND ELECTRICAL.

The main saloon lighting is provided by ten 3ft long fluorescent tubes mounted in the roof quarters, five to each side and operating on 110 volts. The tubes are covered by translucent plastic panels running the full length of the vehicle each side (except over door bays) providing light diffusion and designed to accept advertisement cards.

Step illumination lamps are provided in each stepwell and are controlled by the opening and closing of the doors when the circuits are switched on.

A four headlamp system is fitted the lamps being mounted to blend with the front grille design. Regulation lights including width marker lamps are fitted, direction indicator lamps being controlled by foot-operated switches in the driver's cab.

The batteries are mounted on a roll-out tray accessible from the body side and all electrical circuits are controlled from a multi-way switchboard under the control of the driver.

8. GENERAL EQUIPMENT AND FINISH.

A full specification for urban operation is provided with passenger and driver convenience in mind.

Two full length roof handpoles, thirteen vertical stanchions, grab rails to entrance doorway and a stanchion at the rear of the driving position are fitted. A bell operated by two full length nylon cords positioned on the cant rails, a buzzer operated by opening of the emergency door, two exterior and one interior mirrors, an adjustable depth sun visor, concertina night blind and twin heavy duty air-operated screen wipers, are provided for maximum driver convenience.

8. CONTINUED.

Partitions are fitted behind the driver and at the rear of entrance and exit doors and safety rails at the open ends of longitudinal seats.

The entrance doors are of glider type and are pneumatically operated under control of the driver. The exit doors are passenger-operated 'push out' type with automatic closure. Both door operating systems are interlocked with the driving controls for safety.

A coach type emergency door is fitted on the left hand side of the body between floor and cantrail.

Two destination indicators and a route number indicator are fitted in the front dome and route number indicators are also fitted on the right hand side and at the rear. All indicators are fed with warm air to keep the glasses clear under all weather conditions.

The exterior is finished in synthetic enamel and heavy duty chromium plated stand-off bumpers are fitted to front and rear. An attractive layout of pressed stainless steel mouldings with a coloured plastic filler strip is fitted to the exterior sides. The complete underside of the body including stepwells and wheel arches is covered with a heavy protective coating and the engine compartment is fitted with sound deadening glass fibre sheets.

JB/EM

10.5.66.

ROUTE NO INDICATOR
SIGHT SIZE 10' x 17'

STAINLESS STEEL MOLDINGS
WITH COLOURED PLASTIC INSERTS

MANUFACTURER'S MARKS

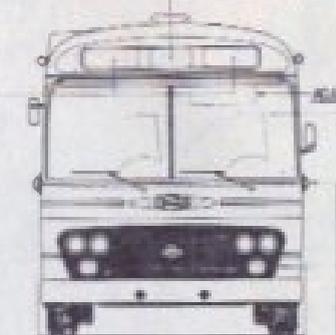
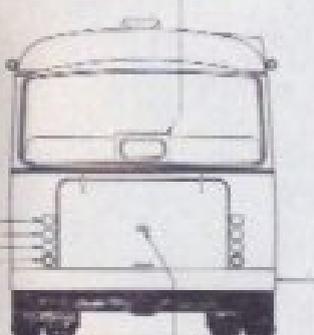
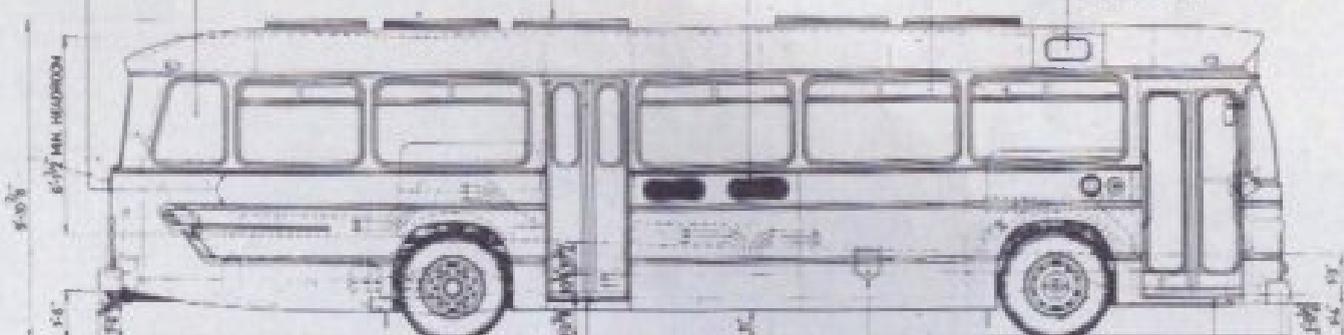
AIR RELEASES TO
NEAR DOORWAYS

DOUBLE TRILING WINDOWS IN
FRONT AND REAR PANELS

DESTINATION INDICATORS
SIGHT SIZE 10' x 17'

ROUTE NO INDICATOR
SIGHT SIZE 10' x 17'

ROUTE NO INDICATOR
SIGHT SIZE 10' x 17'

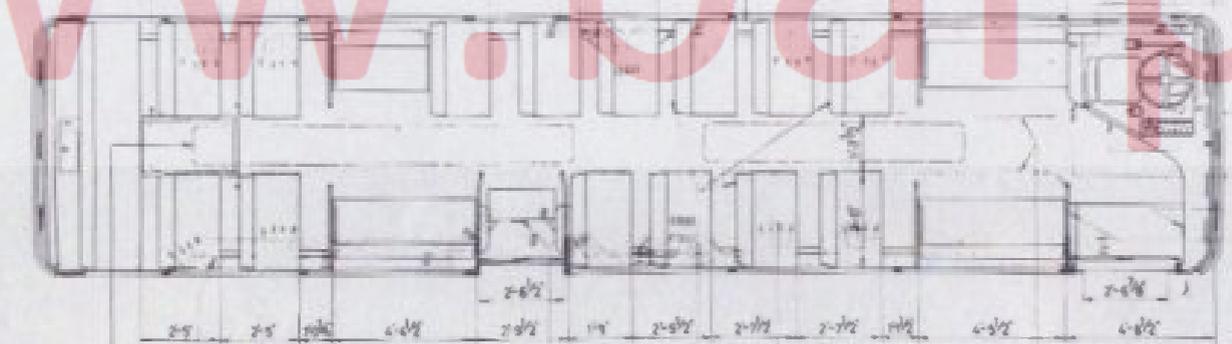
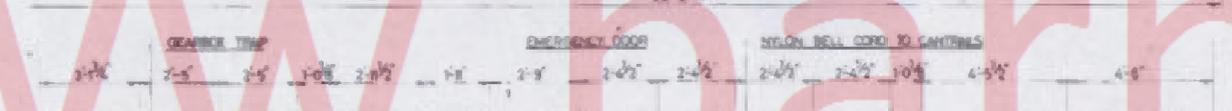


REG. NO. LAMP

1 1/2 IN. CHROMIUM PLATED STEEL BUMPER

- REFLECTOR
- STOP LAMP
- REAR LAMP
- FLASHING INDICATOR

PASSENGER OPERATED OUTWARD OPENING DOOR FUEL FILLER FLAP AIR OPERATED SLIDER DOORS



10 1/2" x 30W FLUORESCENT TUBES
ILLUMINATING PERSPECTIVE ADJUSTMENT PANELS
SIGHT SIZE 10' x 17'

STEP LAMP

TUBULAR FRAMED BUS SEATS
(Daimler Duple type with type B top rail)

ROOF HANDRAILS

SLIDE TO CEILING STRAPINGS

Air operated doors, under seats

FLASHING INDICATORS

3/4" LAMINATED PLATE GLASS SCREENS
WITH HEAVY DUTY AIR OPERATED WEIGHS

CALL DEPTH HANDBOOK GLAZED PANEL TO CAB
& FITTED WITH AIR-TIGHT CONSTRUCTION BAND

LOW HEIGHT FIXED PARTITION

VERTICAL HANDRAIL

STEP LAMP

HANDBOOK & CONNECTION TO WAIST
WITH WAIST HIGH PARTITION TO LEFT
OF ENTRANCE & DOOR

44 PASSENGER TRANSIT BUS
DAIMLER ROADLINER CHASSIS

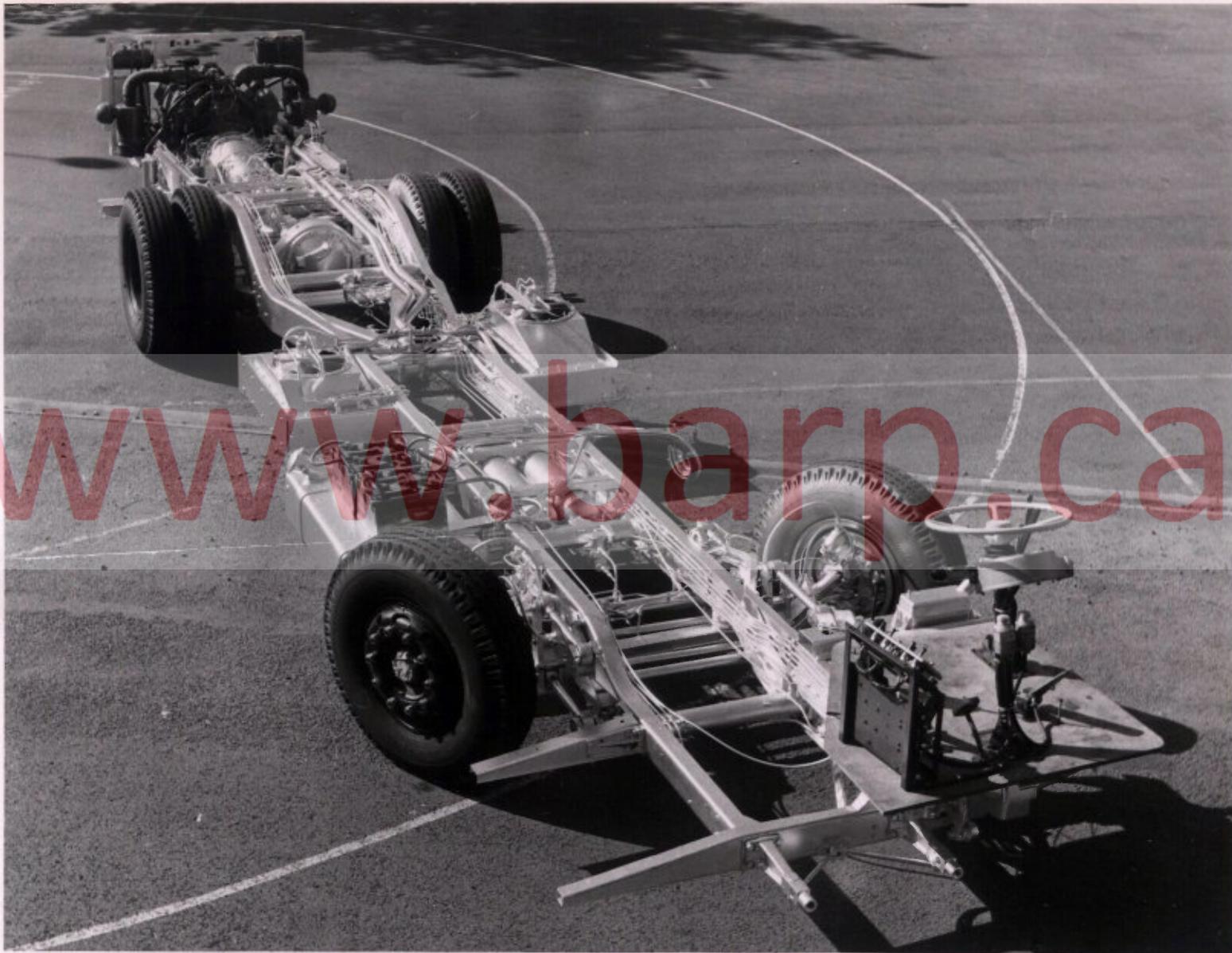
DUPLE GROUP SALES LTD
THE BIDE BRANCH LONDON N.W.4 ENGLAND

DATE	8-1-68	ORDER NO.	20486
BY	L.T.S.		
SCALE	1/4"		

WILLERVOIS LTD LONDON
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Daimler

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ROADLINER



for

EDMONTON TRANSIT SYSTEM

Northwest Canadian Trade Fair, Edmonton, May 1966