### Association of Professional Engineers

of the

Province of Manitoba

# Certificate of Engineering Achievement

to

#### **MOTOR COACH INDUSTRIES**

and the

#### ECONOMIC INNOVATION AND TECHNOLOGY COUNCIL

for

## THE 45 FOOT PROTOTYPE FULLY-ACCESSIBLE INTERCITY COACH

The Certificate of Engineering Achievement is awarded to Motor Coach Industries' 45-Foot Prototype Fully-Accessible Intercity Coach: the world's first fully-accessible intercity coach designed for regularly scheduled service.

The coach is designed to provide comfort and ease of accessibility to regular, elderly and disabled passengers. Disabled persons' access to the coach is provided with an automated, self-contained power lift with 600 pounds' lifting capacity. The coach's washroom is designed to be used by passengers with a wide range of mobility limitations. Some of the features include: fully automatic air-powered lavatory doors, opening at the touch of a push button; a water faucet automatically activated by an infrared sensor when hands are placed beneath it; and switches and controls to accommodate passengers with limited dexterity and strength.

The coach chassis offers a number of improvements, including a self-steering trailing axle that steers in forward or reverse; full-length uninterrupted overhead handrails; a dual-circuit air-braking system; and an improved overall design which simplifies manufacturing and improves quality while exceeding previous product-performance standards.

The overall design of the Prototype Fully-Accessible Intercity Coach was completed by the New Product Development Department of Motor Coach Industries in concert with representatives of the disabled community. The lift was designed by the Economic Innovation and Technology Council of Manitoba.

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