

MBTA

– MASSACHUSETTS BAY TRANSPORTATION AUTHORITY –

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Recently, Boston has become famous among Japanese thanks to the athletic feats of Daisuke Matsuzaka as a member of Boston Red Socks. This capital of Massachusetts is a large city in the northernmost area of the East Coast. The city, located at about the same latitude as Muroran (a city in the Hokkaido Island of Japan), has a population of about 600,000.

Boston is among the most traditional areas in America, and its history dates back to the settlement of Puritans who landed the area from the Mayflower in 1620.

The Port of Boston is a natural deep-water port where gourmets relish seafood produced by local fishery. Boston is also famous as the stage for the Boston Tea Party, which triggered the movement toward the independence of America. This event made the city a highly important place in the country's history.

The long history of Boston has contributed to creating the pleasant atmosphere of the city, where old European-style buildings match modern ones.

Boston also has another face as an educational city, with the presence of MIT (Massachusetts Institute of Technology), Harvard University and many other universities.

Street railroads in Boston have a long history. As early as toward the end of the 19th century, Tremont Street Subway inaugurated a subway line in the city; this was the first time in the world when a streetcar ran on a subway line. Among lines currently managed and operated by MBTA is a LRV line including this subway line and aboveground lines linked to both ends of the former line. Vehicles manufactured by Kinki Sharyo run on this LRV line, called Green Line.

The LRV line consists of a main line linking Riverside and Lechmere, and three branch lines leading to Boston University etc. The downtown section of the line is the subway section mentioned earlier, while special or road tracks are used for the aboveground sections. Vehicles used for the line are basically designed as articulated cars, each consisting of two bodies (with one articulated car as a unit). Sometimes, multiple units are joined to meet a larger demand for transportation.

How Kinki Sharyo's LRVs Came into Being

These vehicles are the memorable first LRVs delivered to the U.S. by Kinki Sharyo.

Prior to the entrance of Kinki Sharyo, LRVs for Green Line were supplied by Boeing. As Boeing is a manufacturer specialized in aircraft, these LRVs were designed by aircraft designers based mostly on desk

computing. With the train car industry relying heavily on experience-based engineering, Boeing's LRVs were scarcely usable and caused many troubles. Eventually, the company lost a lawsuit initiated by MBTA, paid a large amount of compensation and wound up its vehicle division.

In its first entrance to the U.S., Kinki Sharyo took a great care in preparing for the Boston project by securing the cooperation of Itochu Corp., though it is wrong to suppose that Boeing's failure influenced us in any way.

Lacking any experience of delivering train cars to a U.S. customer, we first proposed a design based on that of streetcars we were producing for Egypt. However, this design was far from meeting the specifications required by our new customer. Therefore, we cooperated with SIG, a Swiss vehicle manufacturer experienced in the manufacture of modern articulated cars with a high acceleration, a high deceleration and a light design. Based on this cooperation, we tried to improve our design to better suit customer specifications, seeking an example from SIG's LRVs that was delivered to Utrecht, Holland and set a European standard.

Thanks to these efforts, we succeeded in developing light articulated train cars (each consisting of two bodies) using a dual chopper control, whose appearance matched the streets of Boston that remind some European city.

This project was the first for us in which we manufactured bodies in Japan, and conducted final assembly on the local site; and as such, it involved many challenges. However, more than 20 years after inauguration, vehicles delivered by us are still in operation, and enjoy a high reputation without encountering any significant troubles. As a transport used every day by local citizens, the vehicles have become part of life in Boston, and run the streets of the city redolent of its long history.

The number of Kinki Sharyo's LRVs delivered to MBTA:

120 (total)



Color Change

The design of the first vehicles delivered to Boston (illustration at left) featured the upper and lower parts painted in white and green respectively. Recently delivered vehicles (illustration at right) feature a new design with a new color scheme.