# **Amtrak Horizon**

Thank you for purchasing Rapido's museum-quality model of the Bombardier Horizon passenger car. These cars remain an essential part of daily operations for Amtrak, and now they can become an essential part of operations on your own layout.

#### HISTORY

Introduced by Amtrak in April 1989, the Horizon fleet was based on the Pullman-Standard Comet-series commuter cars built since 1970. The new Horizon fleet consisted predominantly of two basic car types - Coach and Dinette with 86 and 18 cars respectively forming the 104-car order placed with Bombardier. For the most part, few changes have been made to the cars since their introduction, with the replacement of the original power sliding doors for manuallyoperated parlor doors and the replacement of the fold-down stairs with fixed steps being the two most noticeable ones. Additionally, some interiors have been reconfigured to allow for accessibility compliance, and some coaches have even been modified with fewer seats for long distance service.

# LIGHTING

Your Horizon car model features interior lighting and working end marker lights – both work on DC and DCC track power systems – and can be controlled using the Rapido Lighter magnetic wand. Wave the wand sideways across the roof near the middle of the car to toggle the interior lights on/off. Likewise, wave the wand across the roof about an inch or two inward from the ends to turn the end markers on/off as well. Please note that it is not designed for high-voltage (over 15V) DC power packs or European AC systems. Use of your Horizon car on either of these systems will void the warranty and it may also set your car on fire or cause it to melt. We don't want that, and you probably don't want that either.

# COUPLERS

The Horizon car has medium-length couplers installed from the factory, which will easily navigate most curves down to a 24" radius. If your model railroad has tighter curves, we recommend replacing one of the couplers with the long-shank coupler included. For operation on curves under 22" radius, or for instances where you have aggressive grade changes or track irregularities on corners, the stabilizer arm on the sides of the truck may interfere with its bracket mounted on the body. The part attached to the body is designed to come off easily with a little bit of persuasion.

#### **TUNE-UP**

All model passenger cars need to be tuned up before they hit the tracks, and with so many fiddly parts, our cars are no exception. Before you run your Horizon car, we recommend going through the following steps:

- Check that all wheelsets are in gauge using a National Model Railroad Association (NMRA) RP-2 Standards Gauge. If any wheelsets are tight or loose, they can be re-gauged by gently twisting the wheels.
- 2. One passenger car truck should freely swivel from sideto-side, and the other should swivel both side-to-side and up-and-down. Tighten or loosen the truck screws as necessary.

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- 3. Replace one standard-length coupler with the longshank coupler if required for your layout.
- 4. Check that none of the underbody piping has been bent out of position during shipping. In most cases, it can be bent back into shape with your fingers.
- 5. Check the height of the coupler trip pins and bend them up if they foul your switches and crossings. We recommend using Kadee part #237 (Trip Pin Pliers) or Micro-Mark part #80600 (Trip Pin Bending Plier). The coupler heads should be at the correct height.

If after the tune up your car wobbles, check the wheelsets again. If you have any wheelsets which are not 100% true, we will replace them at no additional charge – just give us a shout.

#### **INTERIOR ACCESS**

Should you wish to install passengers or need access inside your Horizon car, each type opens a little differently. For the coaches, you'll see 2 screws on each end of the underbody. Remove the screws, then spread the body shell in the middle to disengage the clips, and then pull the shell off. For the Dinette cars, there are only two screws located in the middle. Remove these, then spread the body shell at each end to disengage the clips. As a little tip, toothpicks are also a great tool when trying to separate the body shell and the chassis.

# LOOSE OR MISSING PARTS

Your Horizon car contains over 200 parts, and we can't guarantee that nothing will come loose in transit. Should anything come loose, we suggest that you re-attach it with PVA/white glue. If anything is missing, please contact us and we will gladly send you a replacement provided we have it in stock.

# WARRANTY

Your Horizon car comes with a five-year warranty from build date (mid 2020). If there is any factory defect we will do our best to repair or replace your model. If you damage your model, do not hesitate to call or e-mail us. There may be a small fee, but we will still try and fix it for you if it is possible to fix. Please bear in mind we usually only have spare shells in stock for a few months, so we highly advise you inspect the cars for any paint defects before packing them in your crawl space for 20 years.

# THANKS

Our Horizon fleet of cars would not have been possible without the kind assistance of Bradley Cooper, Matt Donnelly, Corey Fischer, TJ Van Haag and Alex Stroshane. Thanks also to the transportation and mechanical staff at Amtrak's 14th Street Coach Yard for access to measure and photograph the cars for this project.

# FUN FACT

Early on in their development and until the "Horizon" name was applied in the early years of operation, these cars were given the working name "Amfleet IIIs". The name even appears on various manuals and documentation.



**RAPIDO**