



HO Structure Kit

ART DECO HIGHWAY UNDERPASS

933-3190

Thanks for purchasing this Cornerstone® kit. Please take a few minutes to read these instructions and study the drawings before starting. All parts are styrene plastic, so use compatible glue and paint to finish your model. PLEASE NOTE: This kit builds a double-track bridge. With simple modifications, it can be converted into a single-track model. By combining additional kits, sold separately, a three- or four-track version can be built. Instructions for these conversions are provided on page 2.

If you were in Paris in 1925, you'd have made it a point to attend the glamorous "Exposition Internationale des Arts Decoratifs Industriels et Modernes." A showcase of 20th century progress, the exhibit also provided a world-wide stage for the emerging concepts of Moderne (modern) design, which emphasized the sleek lines, bold colors and geometric patterns of the machine age.

After the Paris exhibition, moderne design and new materials, such as plastic and stainless steel, were incorporated into everything from architecture to automobiles.

But the stock market crash of 1929 put an end to the luxury of hand-crafted moderne and introduced American streamlined design. Based on the study of aerodynamics (reduction of wind resistance), streamlining exemplified the romance of technology. The futuristic elements of moderne design were simplified into styling that could be easily mass produced and still look expensive. (In the 1960s the term "art deco" was first used to describe the moderne and streamlined design styles of the late 20s and 30s.)

The growing unemployment of the Depression coupled with highway expansion and the acceptance of airplanes by wealthy travelers resulted in less business for railroads. In search of a way to revive passenger train revenues, Burlington Railroad President Ralph Budd, went to Edward G. Budd (no relation) in 1932 and commissioned the streamlined, stainless steel Burlington Zephyr (later renamed the Pioneer Zephyr).

On May 26, 1934 the Burlington Zephyr finished its dawn-to-dusk run from Denver to join Union Pacific's M-10,000 (City of Salinas) streamliner at the World Fair's Century of Progress Exposition in Chicago. Breaking records for speed and non-stop train travel along the way, the Zephyr was greeted by an enthusiastic crowd who had followed bulletins of its progress throughout the day. Thousands of fair visitors toured the new Zephyr, which stole the show and ushered in the age of streamlined design. Cars, airplanes, buildings and even kitchen appliances soon followed the design route of the shiny streamlined train.

But in this same period, America's city streets were being overpowered by the sheer numbers of trucks and private automobiles they had to handle each day. Older routes were simply not designed for the volume of traffic. And in virtually every city and town, Main Street was also a state or federal highway which made the problem worse. Traffic jams became common. And as cars were faster and more powerful, railroads, interurbans and streetcar lines noted a sharp increase in grade crossing accidents as drivers tried to beat trains to crossings. All of these problems created a growing demand for new underpasses and overpasses.

Paying for these projects was beyond the means of the railroads or local governments during the Depression. But federal highway funds were soon diverted to The Works Progress Administration (WPA) to provide work for the unemployed. Thousands of Americans were put to work rebuilding and improving highways, many of which received new bridges designed in the streamlined style of the era. Although the major thoroughfares they once served have since been rerouted away from the downtown, many of these historic bridges remain in service today.

On Your Layout

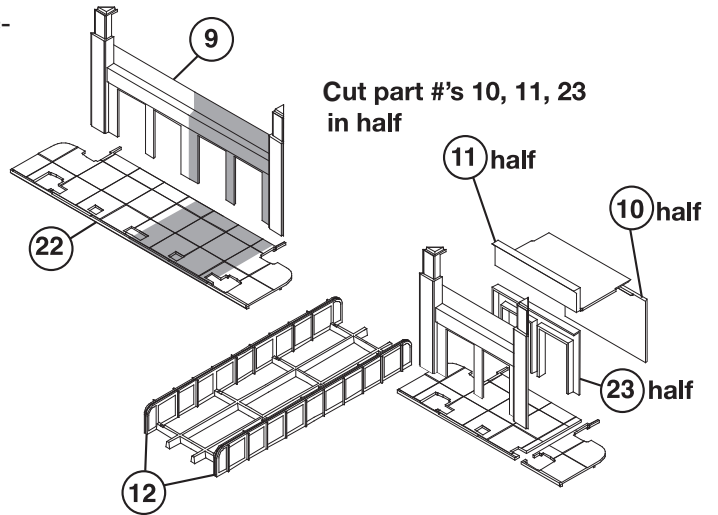
This model is sure to add visual interest to any highway scene, with the handsome design details and simple lines that define art deco styling. It's perfect as a new structure on a layout set in the 1930s, or can be weathered to reflect years of service for a contemporary scene. Bridges of this type were also found in some rural areas where grade crossings were eliminated to make a major highway safer. This kit is a natural with the Concrete Street System (933-3138)S. For additional figures, vehicles and accessories to set the scene, see your dealer, check out the latest Walthers HO Scale Model Railroad Reference Book or visit our Web site at walthers.com for more ideas.

PLEASE READ BEFORE BEGINNING CONSTRUCTION

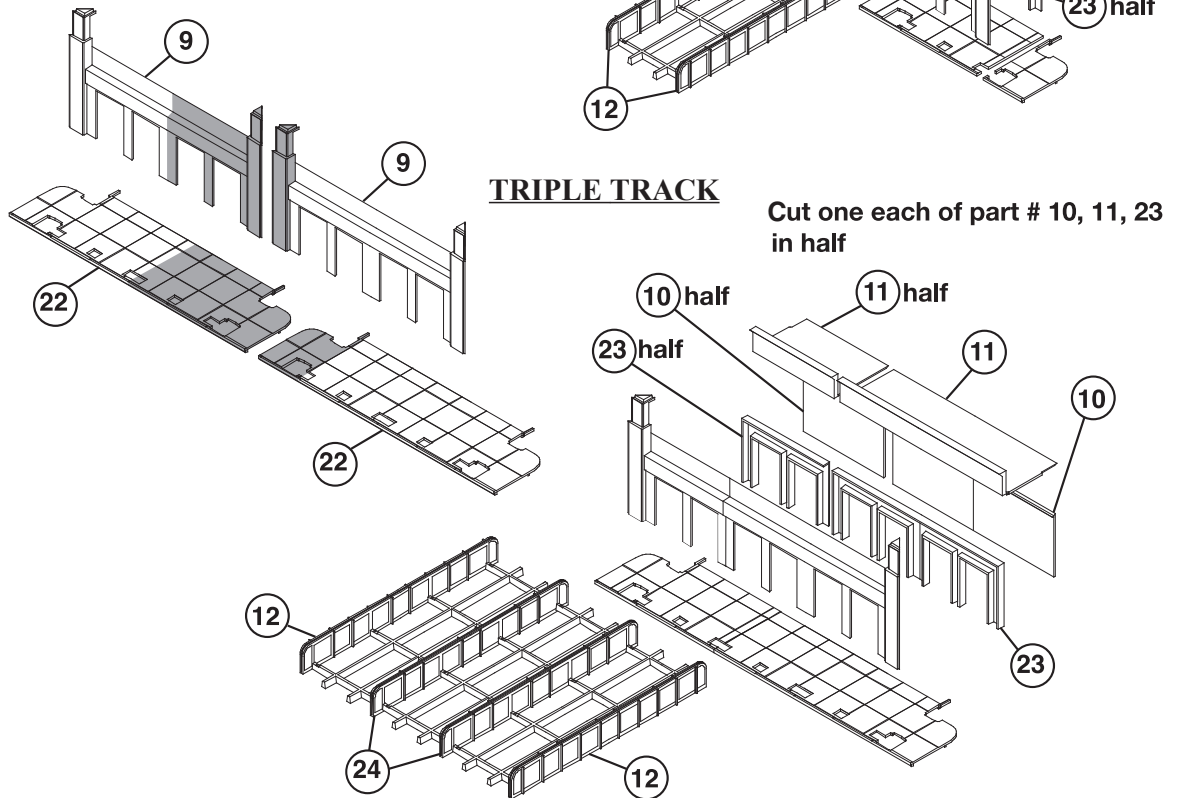
This kit was designed to make more than one bridge setup. With this kit alone, you can build the standard two-track overpass (instruction for this version starts on page 3) or one single-track overpass. By combining more kits, you can expand to even more tracks. This page shows some possibilities. The grayed areas need to be cut and removed (there are cut lines on the backs of these parts for you to aid in cutting) and glued back together. The illustrations on this page show only the parts that need to be modified. Consult the detailed steps on the following pages to complete your version. **Note:** These drawings show only one street side of the abutments.

You must make the same modification on the other side as well.

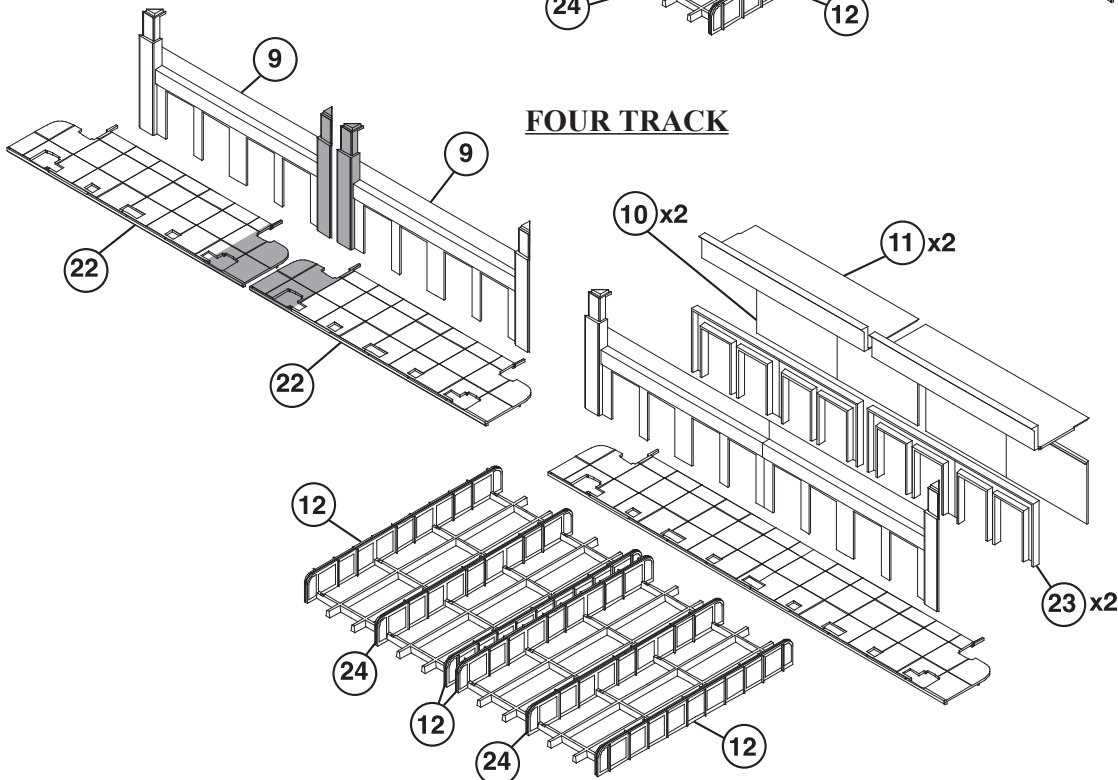
SINGLE TRACK



TRIPLE TRACK



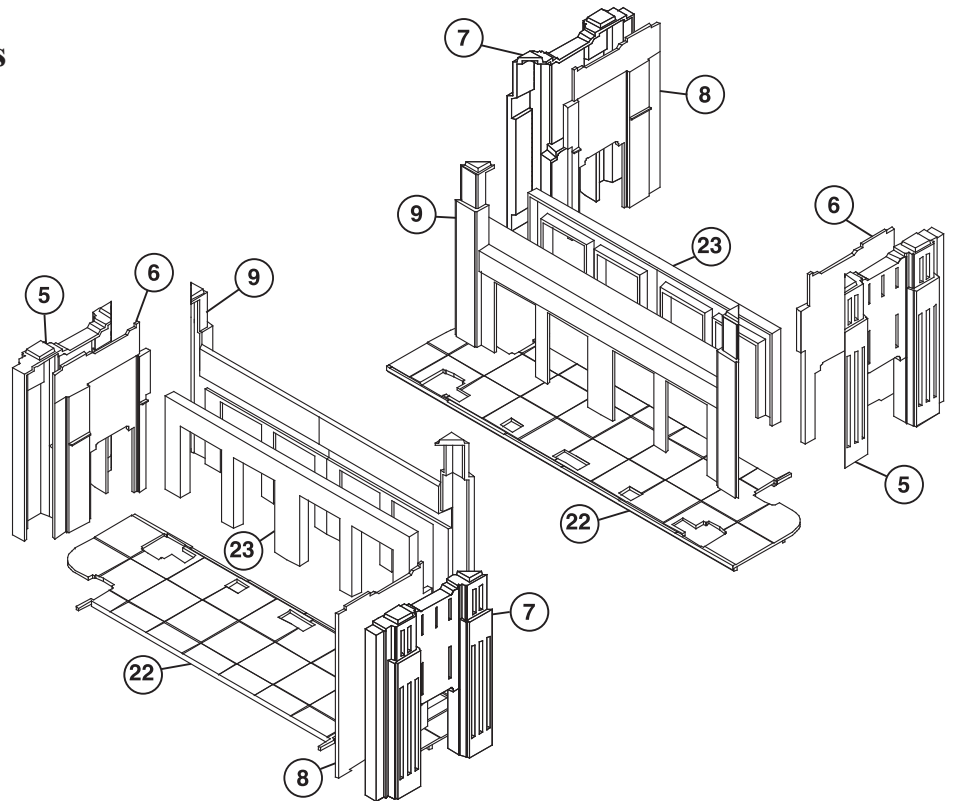
FOUR TRACK



Step-By-Step Instructions for Two-Track Overpass

1. Glue the Abutment Fronts pieces (9, 23) together. Glue the Abutment Sides (5, 6, 7, 8, 9) together and then to the front as illustrated.

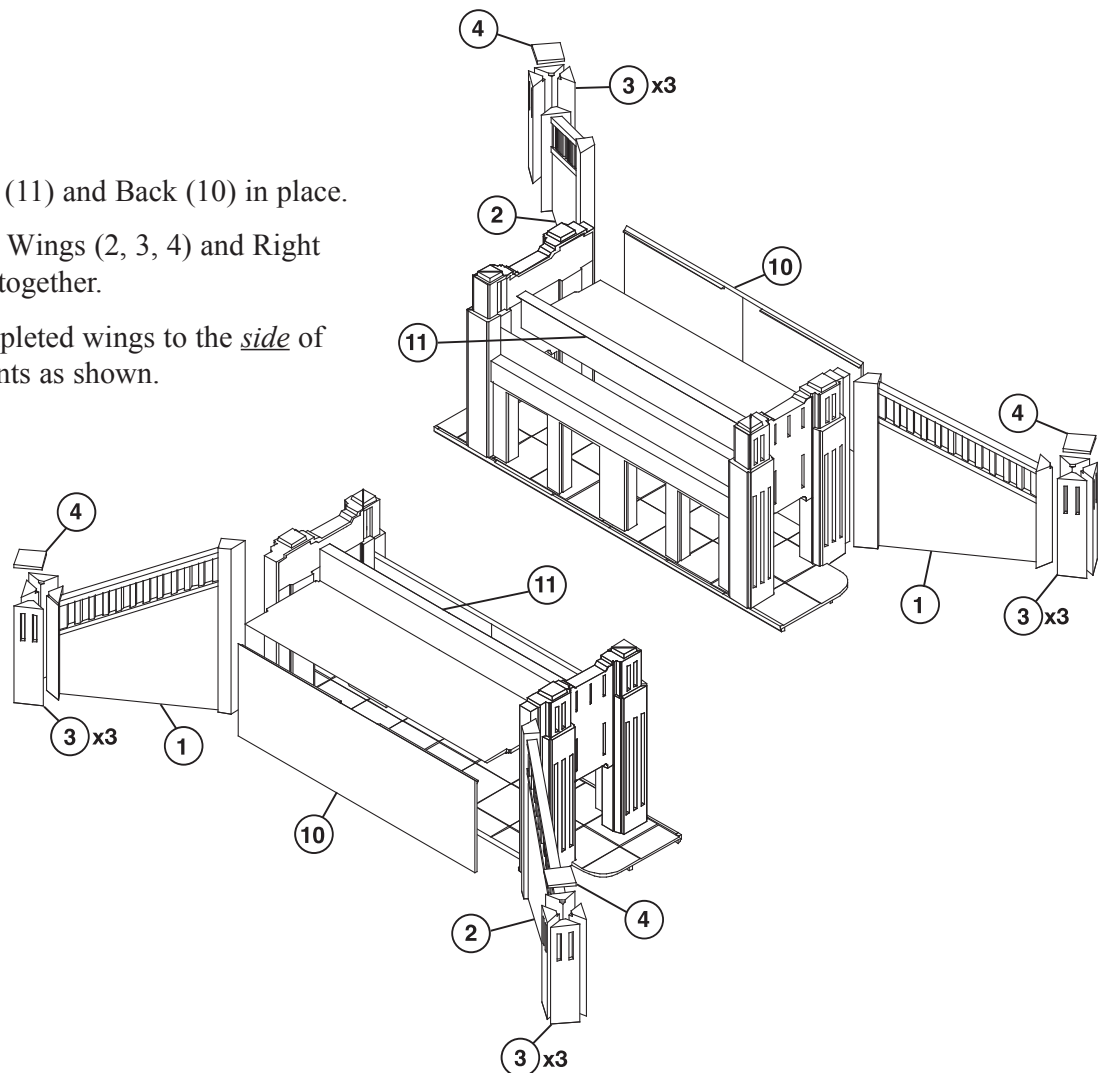
2. After glue has dried, glue this assembly into the holes in Sidewalk (22). Note: Lightly sand the insides of the holes to allow easier insertion. Make sure columns go through the holes all the way so as to be even with the bottom of the sidewalk. Repeat these steps to assemble second abutment.

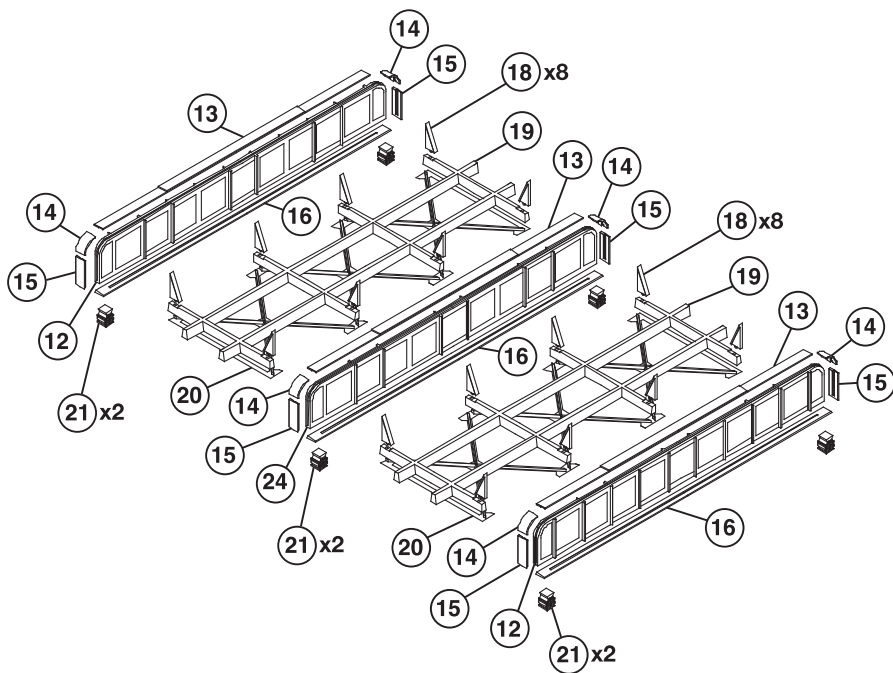


3. Glue the Top (11) and Back (10) in place.

4. Glue the Left Wings (2, 3, 4) and Right Wings (1, 3, 4) together.

5. Glue the completed wings to the *side* of the side abutments as shown.





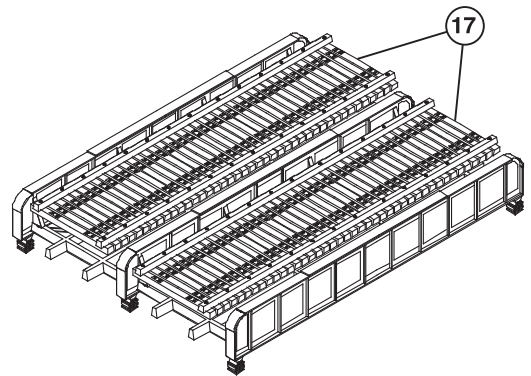
6. Glue End Girders (12, 13, 14, 15, 16, 21) together.

7. Glue Center Girder (13, 14, 15, 16, 21, 24) together.

8. Glue the Cross Bracing (20) to the bottom of Horizontal Beams (19). Then glue Flanges (18) on the ends as shown.

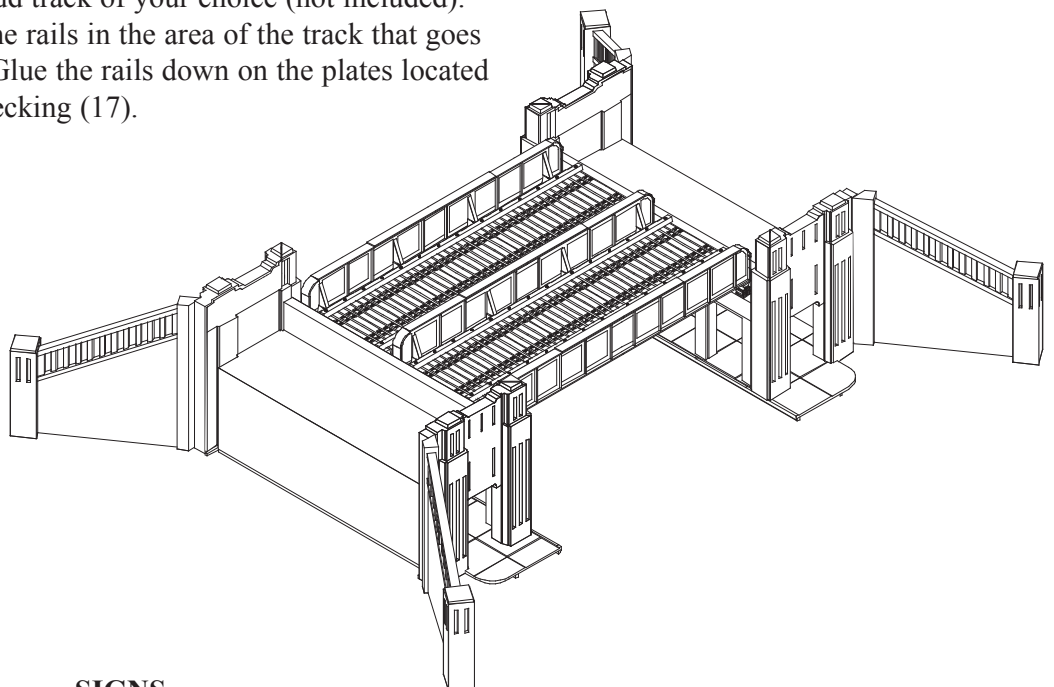
9. Now glue the beams to the inside of the end girders and both sides of the center girder. Note: The flanges will fit alongside the rivets on the sides of the girders in the areas where there are no vertical ridges.

10. Glue the wooden decking (17) on top of the beams.



11. Glue the completed bridge in place on the abutments. Note: The span of the bridge coincides with the width of the Cornerstone® Street System (sold separately).

12. You can now add track of your choice (not included). Cut the ties from the rails in the area of the track that goes across the bridge. Glue the rails down on the plates located on the top of the decking (17).



SIGNS

To mount signs, simply cut the desired image and, using a small drop of white glue on the back, glue it in place on the abutment and/or bridge.