



HO Structure Kit TRAVELING CRANE WITH BRICK STREET

933-4096

Thanks for purchasing this Cornerstone kit. Please take a few minutes to read these instructions and study the drawings before starting assembly. All parts are styrene plastic, so use compatible paint and glue to finish and assemble your model; you may find it easier to paint smaller parts before removing them from the sprues then do a little touch up after final assembly. PLEASE NOTE: This kit includes parts to model three Brick Street sections, matching parts are available in kit #933-4097 Brick Craneway Base and Street 3-Pack, sold separately, if you wish to model a larger facility.

Waterfront cities were the first industrial centers in North America as local settlements were completely dependent on supply ships from home. To accommodate bigger vessels, piers were constructed to transfer cargo to waiting wagons and later to railcars. This was acceptable when loads and ships were both small, but as bulk shipments became increasingly common and ships grew larger, other methods had to be found. To speed the operation, small cranes began appearing along the docks. Using block and tackle to lift large nets, bundles of cargo could be hoisted to and from the ship's holds, however, the ship had to be moved frequently to reach the crane. As iron and steam technology matured, larger cranes capable of lifting heavy loads were developed, with the actual crane and machinery on a tall support structure known as a gantry. Able to lift much heavier loads, these cranes used shorter booms and provided a better view of the work below, but also left the area below the crane completely open. Wagons could now be parked directly below for faster handling, and sufficient space was available to install tracks so that rail cars could be used for even heavier loads. To make access to the area easier, especially during wet weather, the surrounding area was paved with durable paving bricks that could stand up to these heavier vehicles and increased traffic. Although some were designed to be moved short distances, it was clear that moving the crane to all of the loading and unloading areas would speed the process. By the early 1900s, self-propelled cranes driven by steam and later electricity appeared. Adapting railroad technology, flanged wheels were mounted on the bottom of the gantry supports, riding on widely spaced rails laid in the paving, creating a separate craneway. These big mobile cranes soon became a fixture of waterfront docks and heavy industrial areas, where they remained in regular use well into the 20th century. Standing tall above the surrounding scenery, your new model is sure to be an eye-catching addition to a harbor scene or major industry. For additional figures, vehicles, structures, freight cars and other accessories to complete your scene, see your participating dealer, check out the current Walthers Model Railroad Reference Book, or visit us online at walthers.com.

BASE ASSEMBLY

1) Insert Cab Retaining Ring (5) through opening on underside of Cab Platform (3); so that the cab can be turned, carefully glue bottom of Cab Floor (4) to top of Ring only where these parts meet - avoid getting glue on the Platform.

2) Glue Support Sides (2x 1) and Ends (2x 2) at inside edges where parts meet. Glue completed Platform assembly to the top of the support assembly.

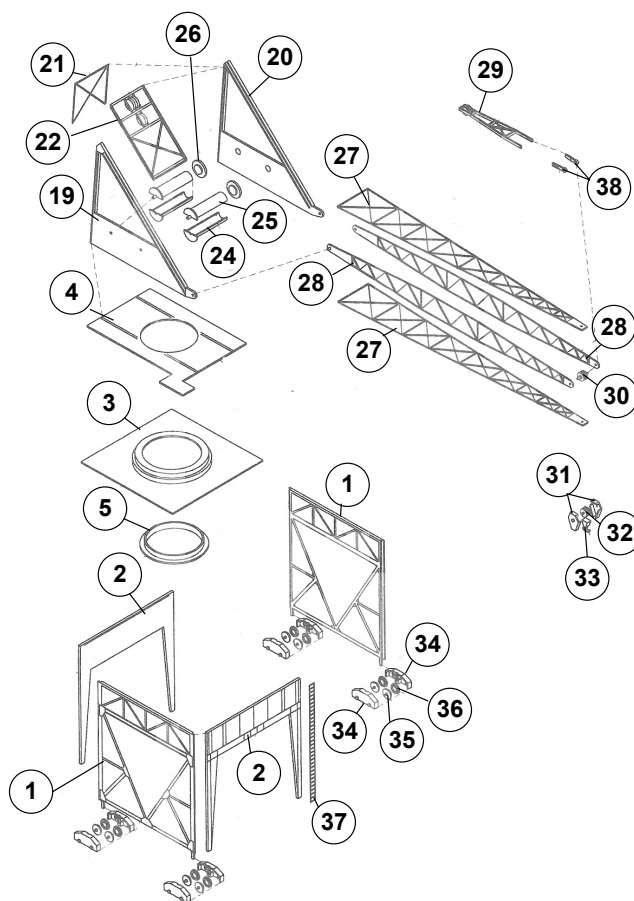
3) Make four drive wheel assemblies as follows: glue Left (2x 35) Wheel Half to back of Right (2x 36) Wheel Half. Insert - do not glue - the pins one the end of the wheels into the openings along the bottom of the Sideframes (2x 34); insert the larger pin on the top of each sideframe into the opening and carefully glue where parts meet - avoid getting glue on the wheels. Repeat these steps for the remaining three wheel assemblies. Glue square tabs on bottom of Support Sides to openings in the top of each completed wheel assembly. Glue Ladder (37) to right front corner of support assembly as shown.

CRANE BOOM ASSEMBLY

4) Using raised ridges on underside to align parts, glue Boom Sides (2x 28) to Upper and Lower Boom (2x 27) as shown - before parts dry, carefully insert - do not glue - pins on ends of Boom Point Sheave (30) to openings at end as shown.

5) Make two Winding Drums by gluing Bottom (2x 24) and Top (2x 25) Halves together as shown, and Retainer Caps (2x 26) to open end.

6) Be sure side openings align and glue Left (19) and Right (20) A-Frames to raised ridges on Cab Floor (4) as shown. Gently bend frames outward and insert - do not glue - pins on ends of completed Winding Drums in openings. PLEASE NOTE: With flanges on cross bars of Top Spreader (22) facing upwards, align Rear Cross Brace (21) and Top Spreader (22) at upper end of A-Frames and glue in place.

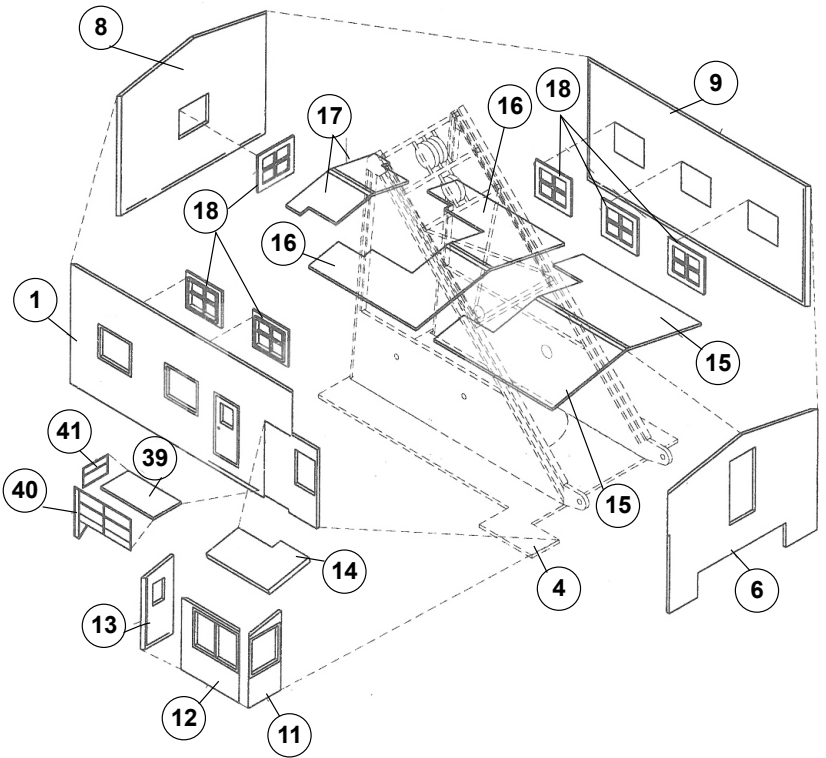


CAB ASSEMBLY

7) Glue Cab Windows (6x 18) to inside openings of Left (1), Right (9) and Rear (8) Cab Wall. Glue clear Window Glass (6x)

Using raised ridges on backs to align parts, glue Walls (1, 6, 8, 9) to top of Cab Floor and at inside corners where parts meet. Using raised ridges on backs to align parts, assemble Operator's Cab by gluing Front (11), Side (12) and Rear (13) Walls to top of Cab Floor as shown, and at inside corners where parts meet.

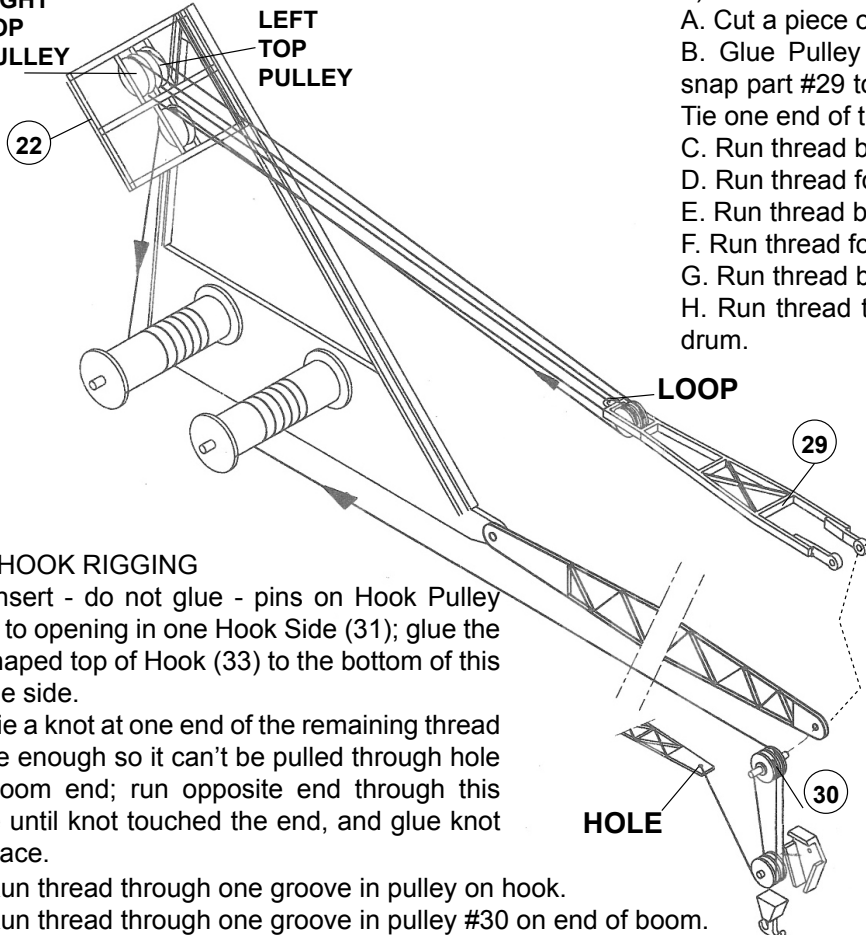
8) Note the raised ridge on the underside of the Small Walkway (39) is the outside edge and faces to the left as shown here, away from the Operator's Cab; glue Walkway to raised ridge under doorway on Left Wall (1) as shown. Glue raised ridge on inside of Large Railing (40) to bottom edge of Walkway. Glue top edge of Small Railing (41) to raised ridge on underside of Walkway. PLEASE NOTE: Roofs (15, 16, 17) will be installed after the rigging is complete.



RIGGING INSTRUCTIONS

RIGHT
TOP
PULLEY

LEFT
TOP
PULLEY



10) HOOK RIGGING

A. Insert - do not glue - pins on Hook Pulley (32) to opening in one Hook Side (31); glue the V-shaped top of Hook (33) to the bottom of this same side.

B. Tie a knot at one end of the remaining thread large enough so it can't be pulled through hole in boom end; run opposite end through this hole until knot touched the end, and glue knot in place.

C. Run thread through one groove in pulley on hook.

D. Run thread through one groove in pulley #30 on end of boom.

E. Run thread down to remaining groove in hook pulley.

F. Run thread up to remaining groove in part #30. Insert - do not glue - pins on opposite side of pulley in remaining Hook Side (31), align the second side with the top of the hook as before and carefully glue where parts meet - avoid getting glue on thread or pulley.

G. Gently pull hook down to ground level.

H. Run thread under front winding drum. Wrap thread around drum twice and tape or glue end to drum.

I. Turn drum with small screwdriver to raise hook to desired position.

9) BOOM RIGGING

A. Cut a piece of thread about 4-1/2' (1.37m) long.

B. Glue Pulley Outrigger End (38) to Pulley Outrigger (29); snap part #29 to Boom and tape in place for ease of handling. Tie one end of thread to loop on part #29.

C. Run thread back to left side of top pulley on part #22.

D. Run thread forward to left groove in pulley on part #29.

E. Run thread back to right top pulley on part #22.

F. Run thread forward to right groove in pulley on part #29.

G. Run thread back to center (lower) pulley on part #22.

H. Run thread to rear winding drum - make two turns around drum.

I. Lower boom to horizontal position for maximum extension of rigging.

J. Glue or tape thread to rear winding drum. Remove tape applied in step #1.

K. Insert a small screwdriver through window and turn drum until boom is raised to desired position or about 45 degrees.

FINAL ASSEMBLY

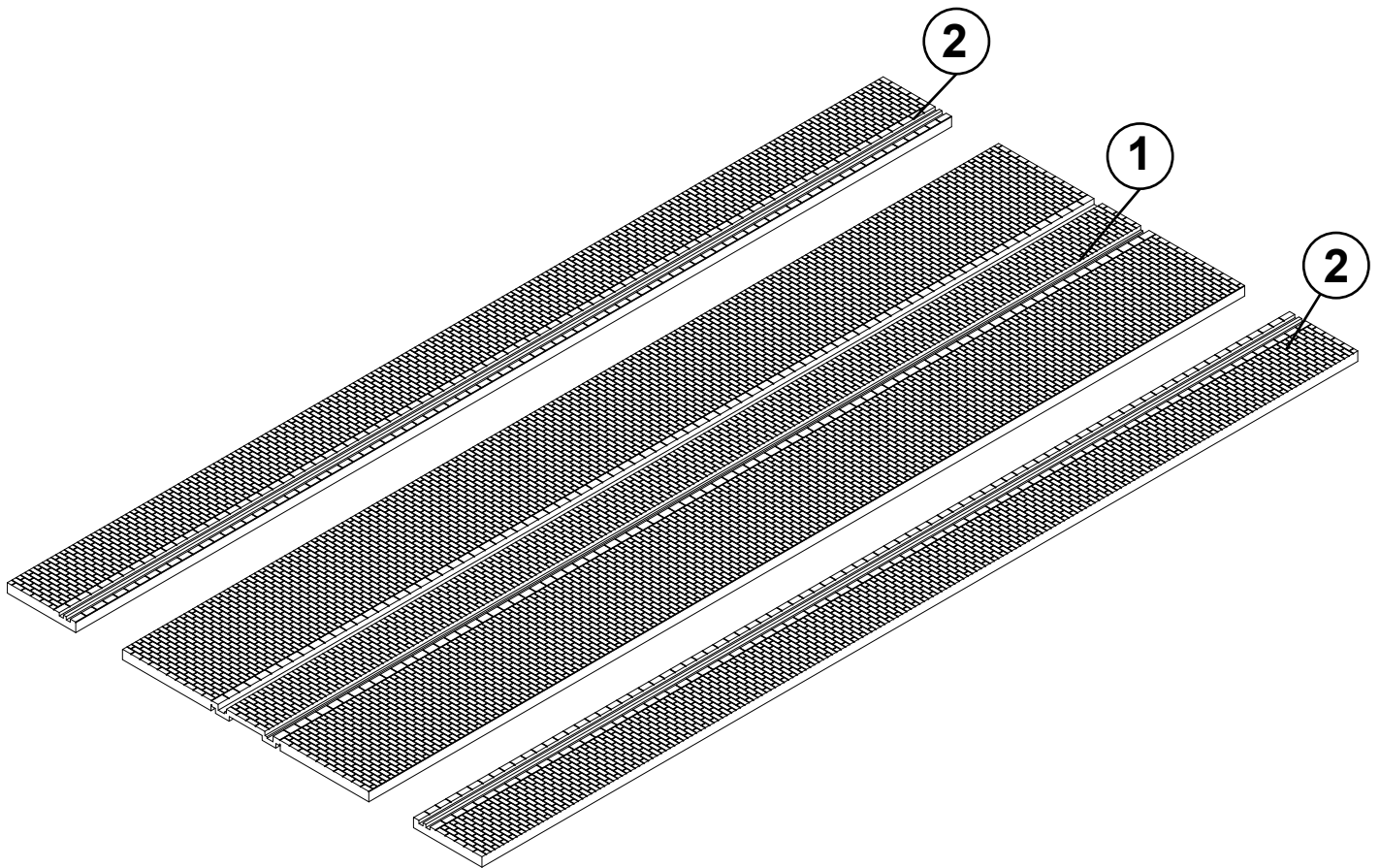
11) Using the raised ridges on the underside to align parts, Cab Roof sections (15, 16, 17) may be set in place or glued to the top of the cab walls as desired.

BRICK PAVING

PLEASE NOTE: Parts are included to build three complete sections, which may be assembled with outside craneways, or plain brick edges; choose one and keep or discard any left over parts as desired. Molded cut lines are also provided to remove the center rail sections if a narrower street is desired.

With Craneway

12) Note the correct alignment of the Craneway (2x 2) with the molded rails facing towards the center. Align edges of Craneway and Center Section (1), and glue from underside where parts meet.

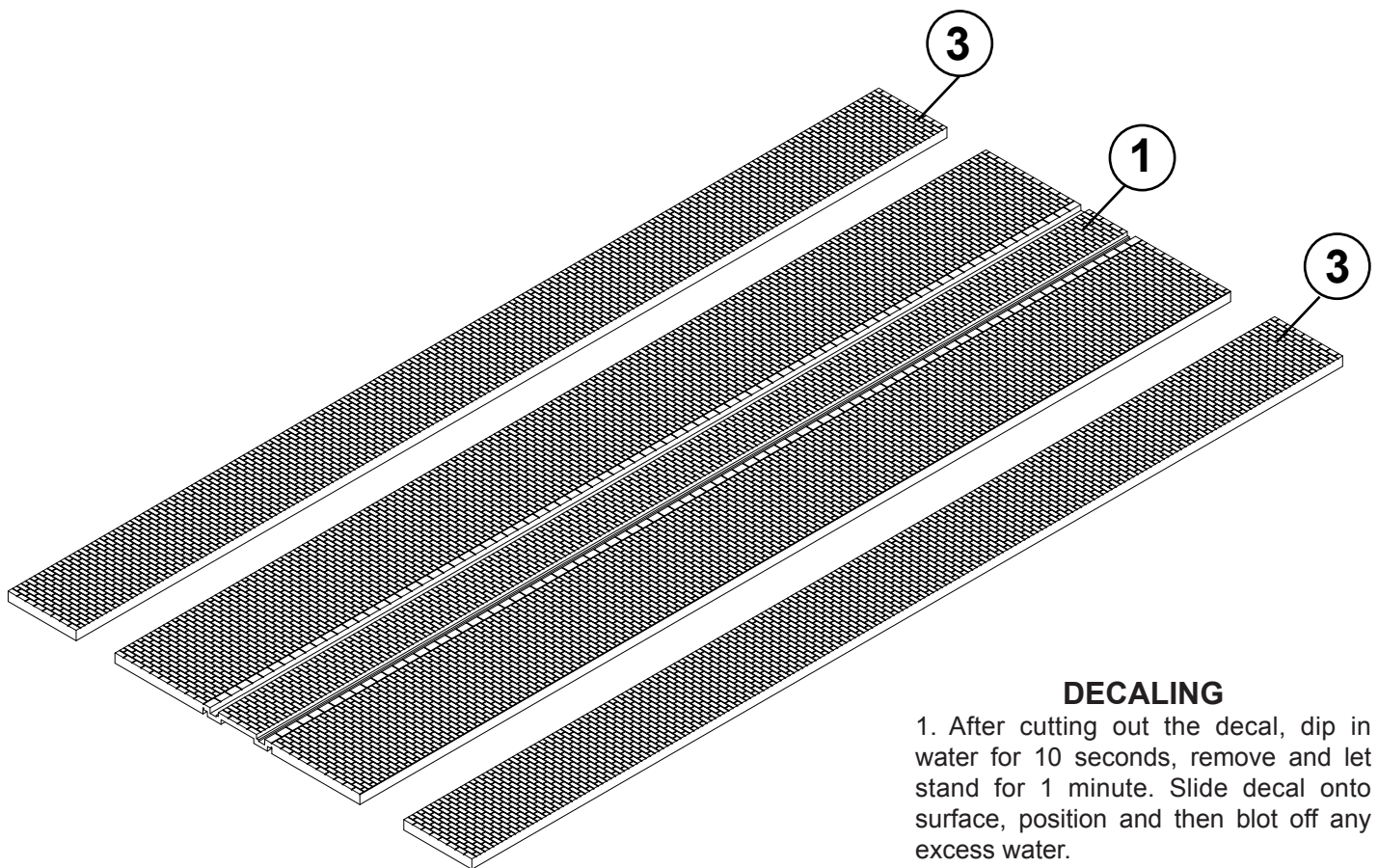


Center Rail Only

13) Align edges of Outside Brick Sections (2x 3) with Center Section (1), and glue from underside where parts meet.

Both Versions

14) The Center Section is designed to accept Code 83 rail, sold separately. You may find it easier to use a section of flexible track and remove the ties from the center; leave some ties at each end, and rest the last tie against the outside edge of the paving section. This will allow you to use standard rail joiners to power the track; some modification of the paving will be needed for other power routing. Center the rail in the grooves and glue in place with CA adhesive.



DECALING

1. After cutting out the decal, dip in water for 10 seconds, remove and let stand for 1 minute. Slide decal onto surface, position and then blot off any excess water.
2. Lightly brush Micro Sol® on top. This will soften the decal allowing it to conform to irregular surfaces. DO NOT TOUCH DECAL while wet!
3. When the decal is thoroughly dry, check for any trapped air bubbles. Prick them with the point of a small pin or hobby knife blade and apply more Micro Sol®.