

# HO Structure Kit TRUCK DUMP

933-4058

Thanks for purchasing this Cornerstone kit. All parts are styrene so use compatible glue and paint to assemble and finish your model. Please take a few minutes to read these instructions and study the drawingsbefore starting construction. From the start, coal traffic has been an important part of railroading. As demand grew, so did the mines, processing plants and tipples, and it was common to find several companies working in the same general area. Assured of plenty of car loadings, railroads would gladly extend a siding or branch from the main line to serve these bigger customers. Railroads weren't about to turn down any potential traffic, so for mines located too far from the tracks, or those too small to warrant a branch of their own, short sidings and a hillside loading ramp, later known as a "truck dump," were installed alongside the main line. Coal was hauled in one truckload at a time, the driver backed onto the ramp and dumped his load directly into a waiting hopper below – except a driver in a hurry could easily overshoot the ramp with disastrous results. Once the truck was empty, the driver would release the handbrake on the hopper enough to allow it to roll a few feet, then reapply the hand brakes so it was spotted for the next load; on flat ground, mechanical car pullers were installed to tow the car into place. To reduce the potential danger of this type of operation, later truck dumps were built with an access ramp and a separate dump house. Drivers still backed in to dump their loads, but the cargo was fed into a crusher to produce more uniform size material then moved into the hopper by a second conveyor. Today, these types of dumps are especially common in the Appalachian coalfields, but are also used to transfer sand, gravel and other bulk loads from road to rail. See your local hobby shop, the current Walthers HO Model Railroad Reference Book or visit us online at walthers.com for additional ideas and accessories.

#### **Loader Assembly**

PLEASE NOTE: The Dump House and Ramp can be installed at the left, right or rear of the base to best fit your available layout space.

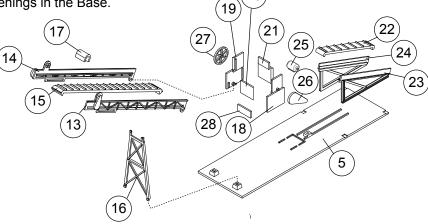
- 1) Glue Crusher Motor (25) to raised mounting pad on Base (5) with pin facing right as shown.
- 2) Using raised ridges in center of Base as a guide, glue Crusher Rear (21), Right (18) and Left (19) Sides to Base and at inside corners where parts meet.
- 3) Glue the Left (24) and Right (23) Transfer Conveyor Sides to bottom of Transfer Conveyor Belt (22) as shown.
- 4) Glue Left (14) and Right (13) Loading Conveyor Sides to bottom of Loading Conveyor Belt (15) as shown.
- 5) PLEASE NOTE: The Loading Conveyor can be assembled as an adjustable or fixed version. Be sure to leave enough clearance below the conveyor for passing locos and cars with either version.

#### Adjustable Model

- A) Slip do not glue small openings on ends of Loading Conveyor sides over mounting pins on inside of Crusher Walls.
- B) Glue Lower Crusher Front Wall (28) to Base and at inside corners where parts meet.

C) Carefully insert – do not glue – the small pins at the top of the Loading Conveyor Support (16) into the openings on lower edge of Left and Right Sides. We suggest using a flexible adhesive such as WoodlandScenics Hob-E-Tac® (#785-195 sold separately) to hold the pins on the lower end in the openings in the Base.

- D) Fixed Model follow the above steps, but glue parts in place.
- 6) Glue Upper Crusher Front Wall (20) at inside corners of Side Walls where parts meet.
- 7) Glue Flywheel (27) to Left Crusher Wall. Glue Drive Belt Guard (26) to mounting points on Right Crusher Wall and Motor as shown.
- 8) Glue Transfer Conveyor assembly to ridges on rear of Base as shown.

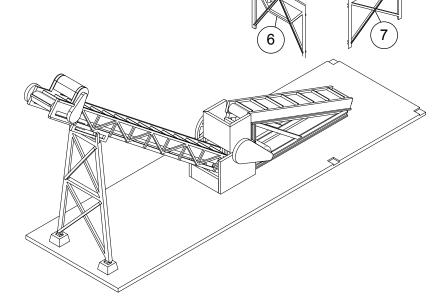


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9) Glue Dump House Conveyor Support (6) to raised areas on base as shown. Glue Dump House Supports (3x 7) to Base and to Support at inside corners where parts meet.

10) Using the raised ridges and inset areas on the rear of all Dump House Walls to align parts, glue Right (7), Left (10) and Rear Dump House Walls to Discharge Chute (8) and at inside corners where parts meet. Note the molded roof support details on the underside of the Dump House Roof (12): the open end is the front. With the roof ridges inside the bracing on the walls, glue Roof to completed wall assembly.

11) Remember, the Dump House can be installed with the opening at left (as shown on sketches), right or rear. Choose one and cement completed Dump House to raised ridges on Conveyor Supports.



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## **Loading Ramp Assembly**

- 1) Note the molded bending line on the underside of the Deck (4): working carefully, make a few light passes with your hobby knife on the line but don't cut through the Deck.
- 2) Note the raised ridge on the inside edge of all three Walls is the top. Insert beams on Rear Ramp Wall (3) into openings on the Left (1) and Right (2) Side Walls and glue at inside edge where parts meet.
- 3) Bend the Deck to match the angle of the Side Walls and glue to raised ridges.
- 4) If desired, the completed Ramp can simply be set in place or glued to the Conveyor Supports (7). The vertical cross braces on the Rear Wall are the same width as the Supports: align and slide the two assemblies together.

### **Car Puller**

- 1) Glue Winch (31) to top of Base (30).
- 2) Glue Car Puller Motor (29) to open side of Base.
- 3) Install the completed Car Puller a few car lengths down the tracks from the dump. The "ties" on the bottom of the base (30) should be parallel with the track ties. A rope or steel cable can be modeled with a length of appropriately colored thread (not included).

