

# VO 1000

Manufactured by Ajin Precision Mfg. in South Korea for:  
Bowser - Stewart Hobbies, Inc.  
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## Part I

### GENERAL INSTRUCTIONS AND TOOL SUGGESTIONS

Small Flat Screwdriver	Pin Vise
#66 Drill Bit (0.0330")	#42 Drill Bit (0.0935")
Modelers Knife	Plastic Cutters
	Small Tweezers

Note: Refer to the exploded view during assembly. The front, rear, left, and right side of each unit is identified. Remove parts from the sprue carefully, verifying that all gate material has been removed.

## Part II

### SUPERSTRUCTURE ASSEMBLY

**Step (1).** While viewing the unit from below, find the location where the tabs on the hood (1 or 2) interlock with the frame (6). Use a small flat screwdriver to press on the tabs to release the hood (1 or 2), cab (3 or 4) and walkway (5).

**Step (2).** Separate the hood (1 or 2) from the cab (3 or 4) and walkway (5) by releasing the snap located at the bottom front of the hood (1 or 2). Slide the hood (1 or 2) away from the cab (3 or 4).

**Step (3).** Reference a photo of the prototype locomotive that you choose to model. Note the stack configuration. The model can be configured for the single stack, or the four stack (high or low) versions. Each version requires the use of a #42 drill bit to open the hole(s) to locate the stack(s). Drill bit starter guides are molded inside the shell, offset to the fireman's side inside the roof.

**Step (4).** **SINGLE STACK VERSION ONLY:** Open the rear hole (nearest the cab) and install the single stack (44).

**Step (5).** **FOUR STACK VERSIONS ONLY:** Open the front four holes and install each high stack (45) or low stack (46).

**Step (6).** Remove the Cab (3 or 4) and walkway (5) assembly from the chassis.

**Step (7).** Install the handrails. Locate the detail parts sprue marked "A". Install the body handrail – right (31) and body handrail – left (32) into the provided holes in the side of the hood (1 or 2). Locate the "D-3" identification on a detail parts sprue. Install the two stepped hand grabs (40) into the provided holes in the right side of the hood (1 or 2). Locate the "D-1" identification on a detail parts sprue. Install the straight hand grabs (41) into the provided holes in the top of the hood (1 or 2). An extra hand grab (41) has been provided on the sprue. Locate the "D-2" identification on a detail parts sprue. Install the front hand grab (42) into the provided holes in the front of the hood (1 or 2). Locate the "D-4" identification on a detail parts sprue. Install the top portion the right rear handrail (36) and the left rear handrail (36) into the provided holes in the back corner of the cab (3 or 4). The bottom portion of each handrail is installed in the provided holes in the side of the walkway, near the second step from the bottom. Locate the "D-6" identification on a detail parts sprue. Install the cab door right handrail (38) and the cab door left handrail (39) into the provided holes in the back of the cab (3 or 4). Locate the "D-5" identification on a detail parts sprue. Install the cab front handrail (43) into the provided holes in the front of the cab (3 or 4). Locate the "C-1" identification on a detail parts sprue. Install the front right handrail (34) and the front left handrail (35) into the provided holes in the top front of the walkway (5). Locate the "C-2" identification on a detail parts sprue. Install each coupler lift bar (33) into provided holes in the front and back pilot on the walkway (5). Locate the "B" identification on a detail parts sprue. Install each pilot handrail (30) into provided holes in the front and back pilot on the walkway (5).

**Step (8).** Locate the sprue containing an air hose (68). Install into the provided hole in each pilot. Note: An extra air hose (68) has been provided.

## Part III FINAL ASSEMBLY

**Step (1).** Reference a photo of the prototype locomotive that you choose to model. Note the horn location. Use a #66 Drill bit to open a hole and install the horn (47).

**Step (2).** Locate the etched stainless steel sprue containing the windshield wipers (62, 63, and 64). Note: One extra short wiper (62) and medium wiper (63) has been provided on the sprue. Install a short wiper (62) in the provided hole at the front left cab window. Install the medium wiper (63) at the provided hole in the front right cab window. Install the long wiper (64) in the provided hole at the provided holes in the rear of the cab.

**Step (3).** Snap the assembled superstructure onto the frame (6). **Note: The frame (6) must be properly oriented to allow the superstructure to seat properly. Notice that the rear of the frame (6) is notched to clear the cab (3 or 4).** Turn the assembly upside down and place on a padded flat surface. Assemble each coupler (54) and place each into a coupler box (55) and install the coupler lid (56). Slide each coupler assembly into the opening at each pilot. Install each assembly using the provided coupler clip (67).

## Part IV GENERAL INFORMATION

### Painting Truck Sideframes

Modelers who wish to paint or weather truck sideframes (18) may wish to remove them to prevent paint over spray from impairing electrical pickup. Begin disassembly by disconnecting the wires from the circuit board (24). Remove the circuit board (24). Each worm housing (20) has two legs extending inward. Release the housings by prying the legs outward with a small flat screwdriver. The worm gear assembly (21, 22, 23, 59) and universal shaft (58) can be removed by prying upward with a small flat screwdriver. The frame (6) can now be lifted upward and away from the trucks. The sideframes (18) are press fit into the gearbox (12, 13). Sideframes (18) can now be pulled away.

### DCC Information

For DCC users, a DCC compatible plug socket has been provided. Remove the DCC Plug (25) from the main circuit board (24). Reference your DCC manual for proper decoder installation.

### Questions or Problems

We hope that you will be happy with this finely detailed kit. If any questions or problems occur, please inform us. Any problems with defective parts will be responded to promptly.