

CONCEPT MODELS

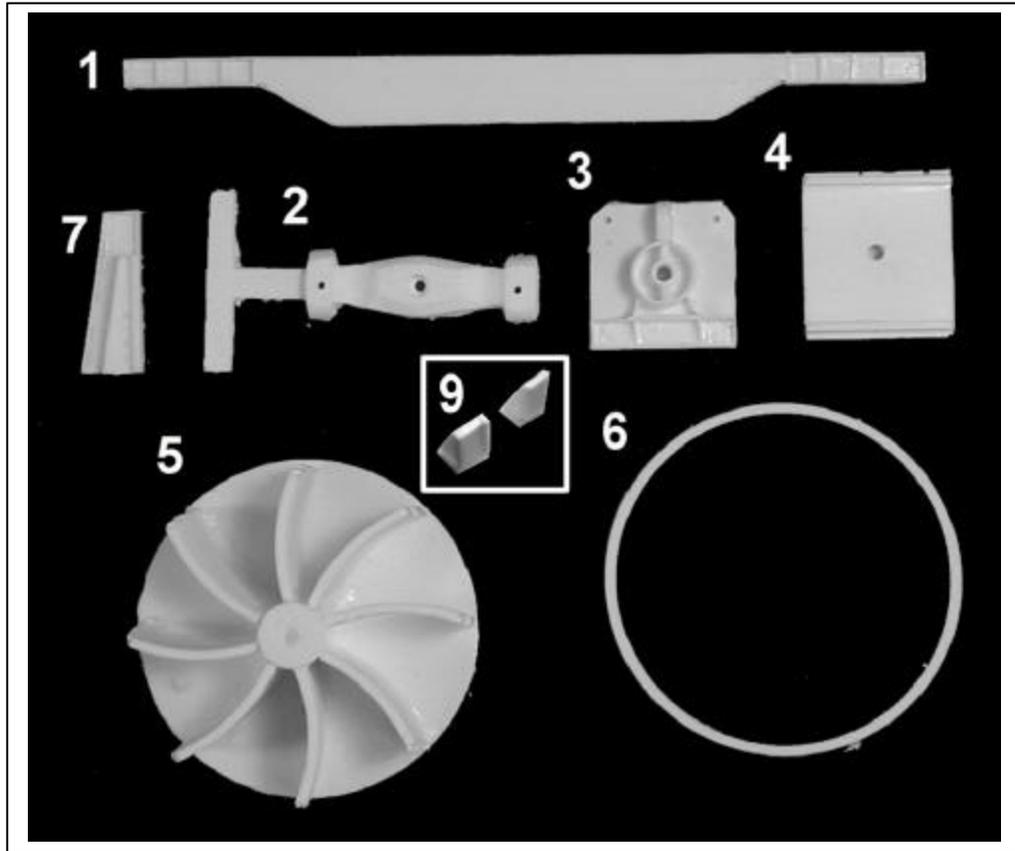
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**INSTRUCTIONS FOR PRODUCT
HQEX 01 WELL CAR**

PARTS



Item No.	Part No.	DESCRIPTION	QTY.
1	3003-1	Side Frame	2
2	7027-5	Truck Bolster	2
3	3003-3	Load Carrier	2
4	3003-4	End Block	2
5	3003-5	Turbine Wheel Body	1
6	3003-6	Turbine Wheel Ring	1
7	3003-7	Turbine Wheel Lock	1
8	3003-8	End Platform .080" styrene sheet 5'6" x 9'	2
9	3003-9	Stops	2

Part No.	GENERIC PARTS	QTY.
1013-0	1/8" Pan Hd. Screws	2
1015-0	3/8" Pan Hd. Screws	2
1020-0	Brake Reservoir	2
1018-0	Brake Valve	2
1019-0	Brake Cylinder	2
1021-0	Brake Stand	2
1010-0	Brake Wheel	2
1011-0	Small Pin	2
1012-0	Coupler Pockets (STD)	2
	1/8" Tube x 2 s.f.	2
	1/8" Tube x 14 s.f.	1
	1/8" I.D. Washers	2
3003-D	Decals (set)	1
3003-I	Instructions	1

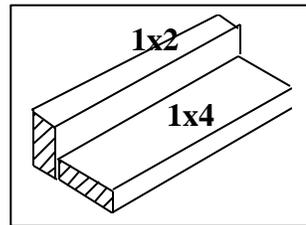
Tools

All basic model workers tools – files, motor-tool with fine burrs, hobby knife, Wood blocks for holding parts square, metal square, etc.

Drills: 1/8", #76, #72, #68, #50 (2-56 tap drill), #65

Music Wire .020" for handrails. Athearn stanchions for tanks cars.

Pins (dressmaker type) for attaching brake wheels and other items.



This fixture is a great aid to assembly. It helps hold parts square while gluing and aids in drawing horizontal lines on tanks for tank cars.

WARNING

Some parts may have lead encapsulated within them. In the event the lead is exposed for any reason, do not allow it to remain on the skin. Dispose of any lead shavings that may result. Obey all safety precautions of all suggested cements and assembly materials.

NOTE: This kit consists of resin castings and must be assembled with an ACC cement (not provided) – both the thicker types as well as the thin. Solvent cements will **NOT** bond the parts together! They can dissolve them. Resin parts are more fragile than common styrene plastic used in injection molded models. Use reasonable care in handling and do not apply any solvents. The illustrations at the front show the general layout of parts for the car. Work very carefully when positioning the parts for gluing. ACC cements adhere very quickly and permanently.

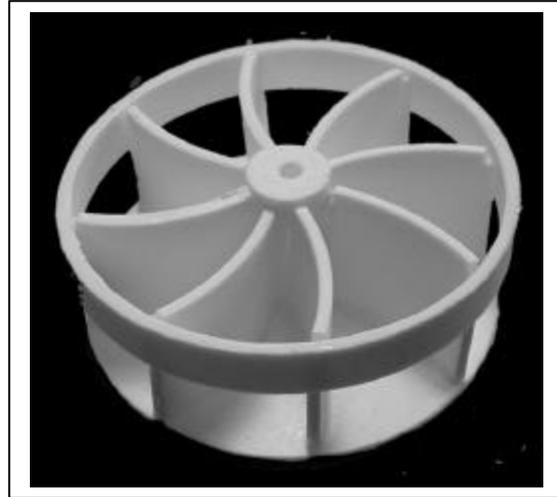
Gluing with ACC Cements – USE WITH CARE

ACC cements allow the modeler to work very quickly. A general rule is to use the thin cements to glue long joints taking advantage of capillary action that makes the cement run the length of the seam. The thicker cement is suited to applying large area parts to each other. An accelerator can be applied sparingly. One technique is to apply the glue to one part and the accelerator to the other part to be joined. I also use a Q-tip to apply a minute amount of accelerator to the glue after the parts have been joined. The accelerator triggers the ACC cement to set very quickly. It is only slightly slower with the thicker cement.

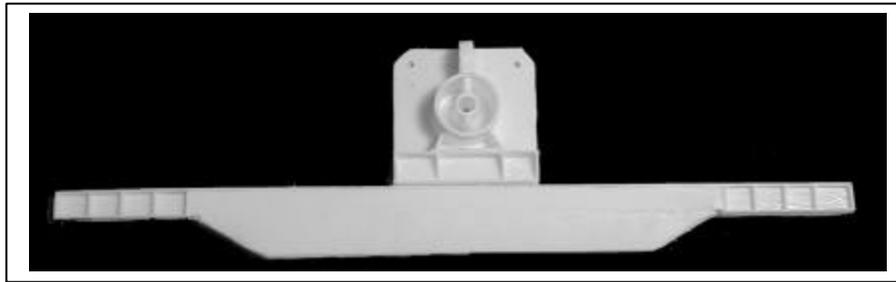
PREPARATION Wash the parts before assembling with a dish washing detergent such as “Dawn”. Rub lightly with a soft sponge.

ASSEMBLY

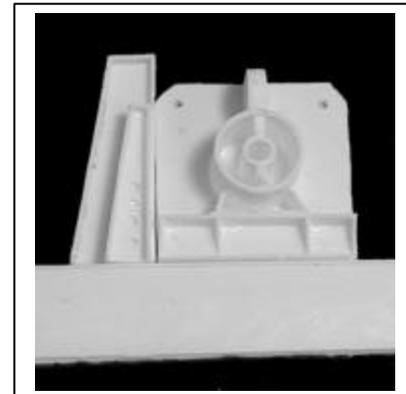
1 Sharpen the edges of the Turbine Wheel Ring, then cement the Turbine Wheel Ring (6) to the Turbine Wheel Body (5). Turn the wheel and ring face down (opposite of picture), and apply ACC cement behind the blades to get a web effect.



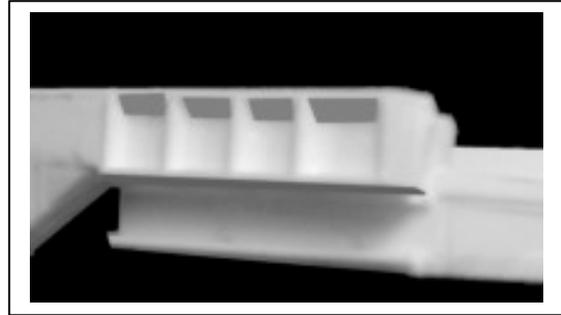
2 On a flat surface cement the Load Carrier (3) in the center of the Side Frame (1). Only do one side at this time.



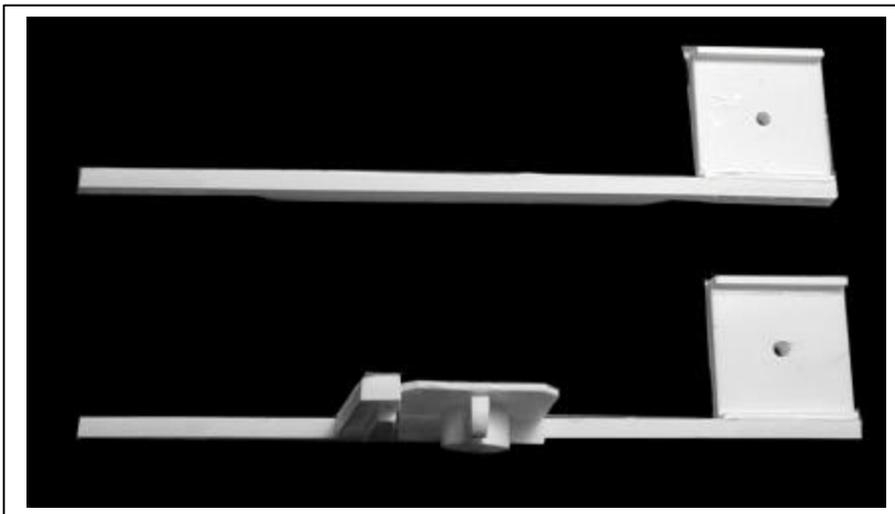
3 Add the Turbine Wheel Lock (7) as shown.



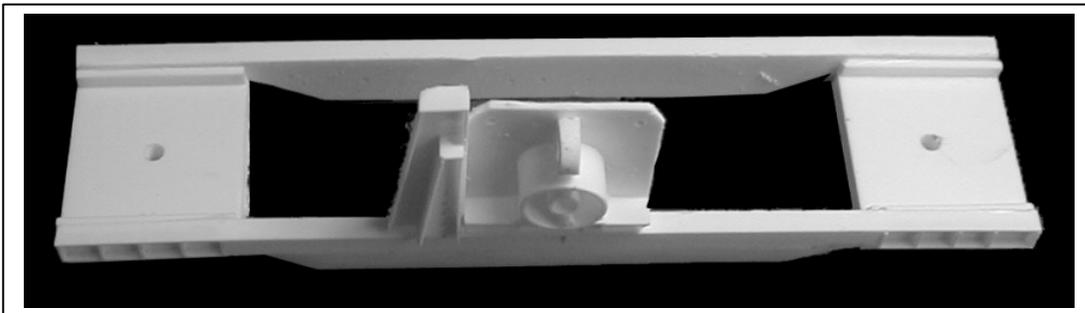
4 Cement the Side Frame (1) to the End Block (4) so it rests in the indentation which is the top of the part.



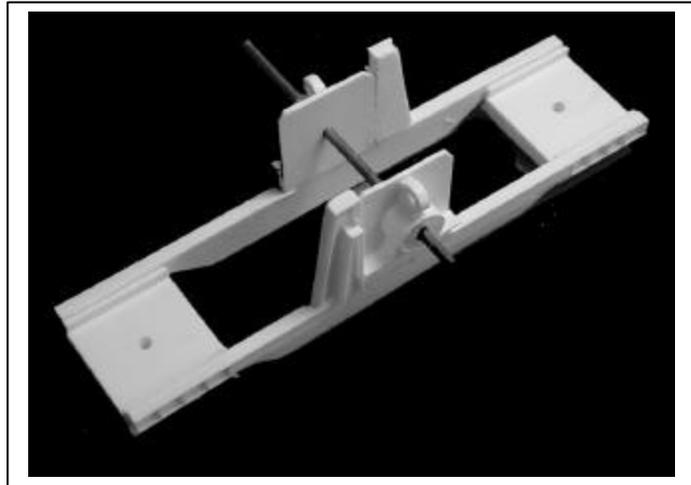
5 Make another so that you have a pair like this.



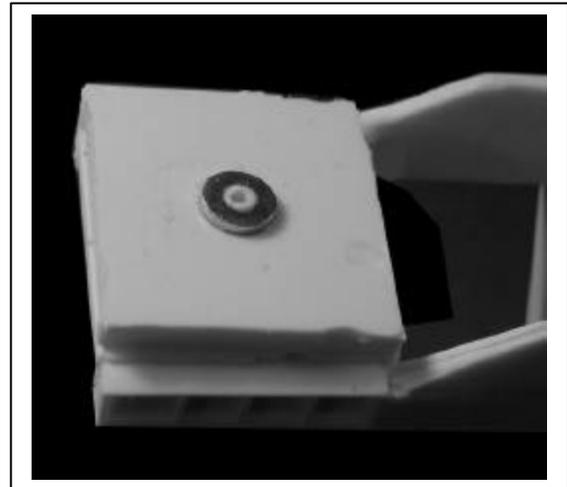
6 Now cement the two halves together as shown.



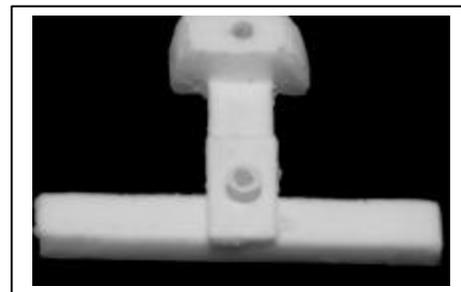
7 Use a 1/8" brass rod to align the second Load Carrier (3) and cement to the Side Frame (1). The alignment rod should be perpendicular to the side frames.



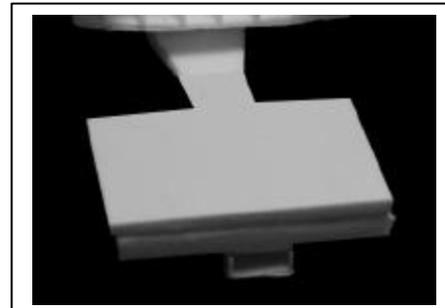
8 Place a 1/8" I.D. washer over the 1/8" hole on the bottom side of the end block. Now drive a 1/8" tube into the washer and end block so that it is flush as shown. Cement the washer so that it stays in place.



9 Add the coupler body to the Truck Bolster (2) and cement as shown.



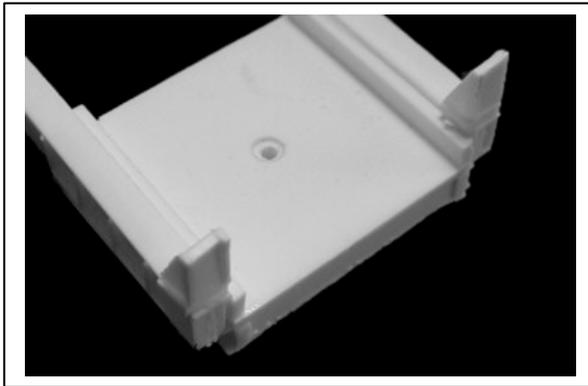
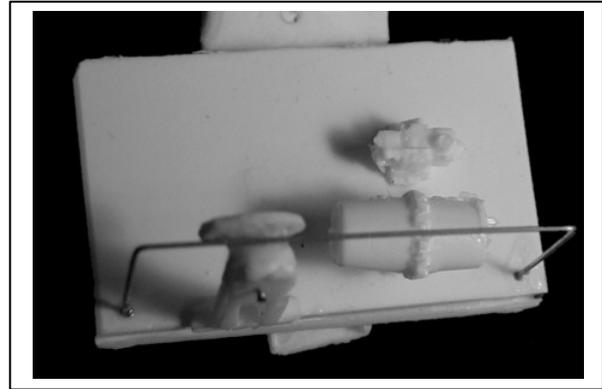
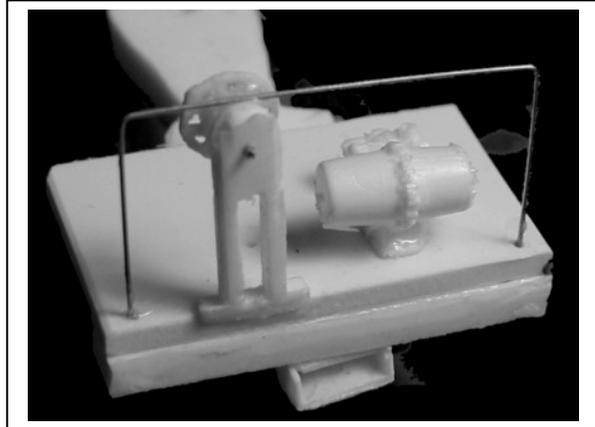
10 Cement the End Platform (8) to the top of the truck bolster as shown.



11 Use the small pin to attach the brake wheel to the brake stand. Add the brake reservoir and brake valve as shown.

Add the small stop details at one end of the car. (Don't ask me why they didn't have them on both ends.)

Add end railing from .015" or .020" wire in the same manner as found on cabooses. (not supplied)



PAINING

If you followed the instructions for cleaning the parts before assembly, you are ready to paint. A primer is recommended. Allow to dry overnight before proceeding with any of the color coats. When painting with white do not over dilute with thinner. Twenty five percent thinner should be sufficient and will improve coverage.

- 1) Now that Floquil has left the scene I'm buying primer from ACE hardware as an enamel part of their rust proof line. A half pint goes a long way. Especially when you thin it 3 parts lacquer thinner to 1 part paint.
- 2) Dark colors can be diluted up to 50-50. Two coats of white with plenty of drying time in between are recommended. White on top of primer is recommended for light colors yellow through red. It improves the color.
- 3) After painting overcoat entire car with Testor's Glosscote prior to decaling. If you decal over the Glosscote as soon as it is just dry to the touch, decal adhesion is improved.

DECALING

NOTE: The decals provided are a very thin film decal film. Success with these decals depends on following these instructions. The glue used for the decal sheet is different than what has been used in the past. The water does not dissolve the glue. Water causes a chemical reaction causing an almost immediate release of the decal. For this reason once the decal has been wetted it must be used quickly. It cannot be re-wetted later for use.

- 1) Cut out the decal segment you are going to apply.
- 2) Dip the decal in warm water which has had 1 drop of DAWN kitchen detergent. Do **NOT** leave the decal to soak in the water and slide off the backing..
- 3) Slide the decal directly off of the backing onto the wetted surface with a small brush or tweezers. Position with the brush. Remove excess water with a tissue.
- 4) A decal setting solution is recommended for best adhesion.
- 5) Top coat the decals with Testor's Dullcote for best results.

