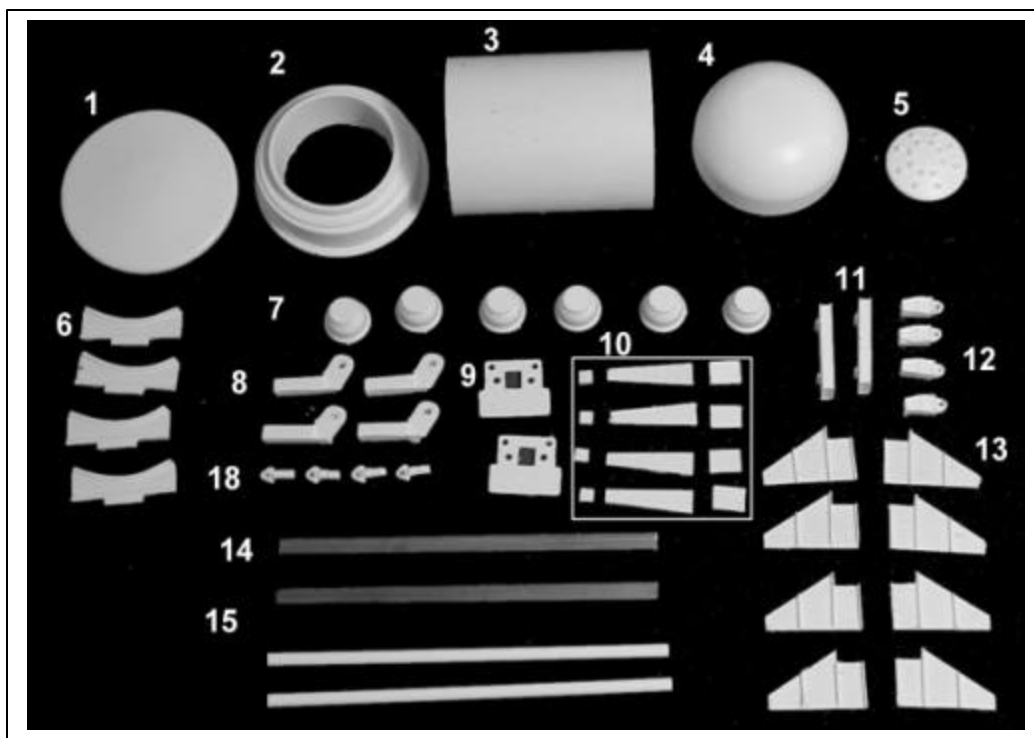


CONCEPT MODELS

<http://www.con-sys.com/Index.htm>

44609 W. Canyon Creek Dr.
Maricopa, AZ 85239-5019

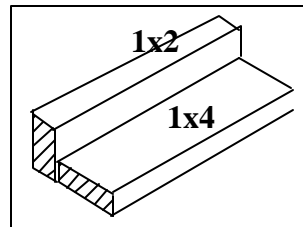


REACTOR LOAD FOR THE WECX 102/301
WESTINGHOUSE SCHNABEL CAR

KIT 301 REACTOR ASSEMBLY INSTRUCTIONS

Tools

All basic model workers tools – files, motor-tool with fine burrs, hobby knife, 1/8” drill, Wood blocks for holding parts square, metal square, etc. A fine toothed Xacto razor saw blade is also helpful.



A gluing fixture is a great aid to assembly. It helps hold parts square while gluing.

Instructions

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! 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.

WARNING

Some parts 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.

REACTOR ASSEMBLY

PARTS LIST

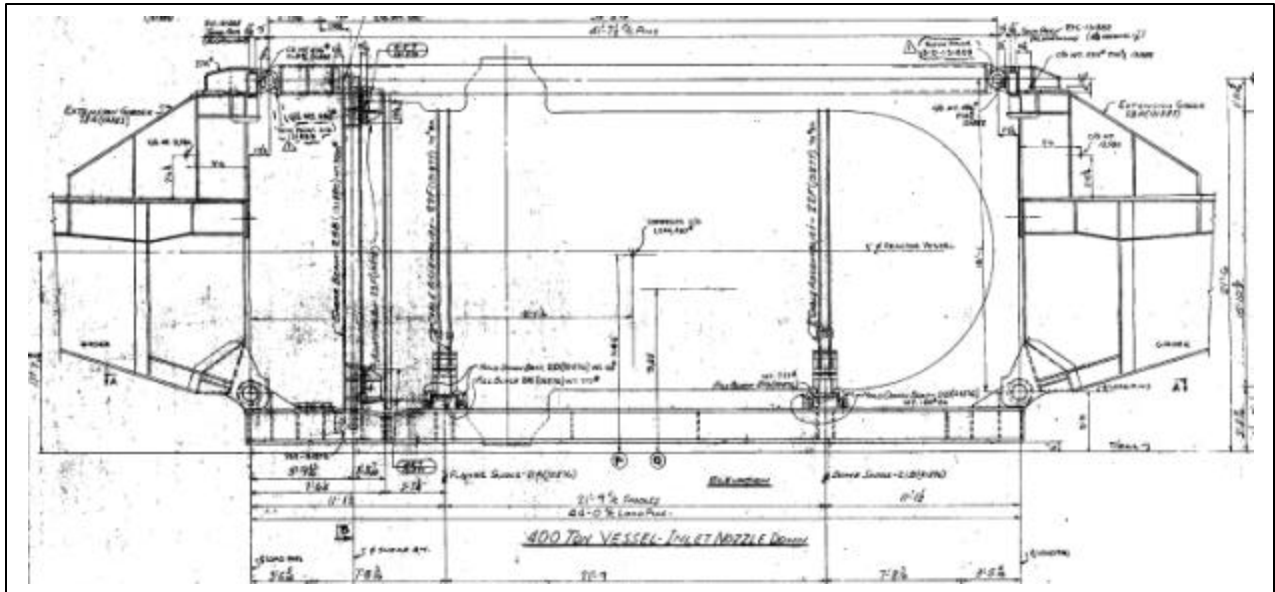
Item No.	DESCRIPTION	QTY
1	End Cap, flat	1
2	Adapter Ring, Full Size	1
3	Reactor Body – PVC/CS Tube	1
4	Reactor Dome	1
5	Reactor Cap	1
6	Load Supports, Reactor	4
7	Ports, Reactor	6
8	Load Tension Brackets	4
9	Face Plate, Extension Girder	2
10	Trim Set, Extension Girder	4
11	Girder Support, Extension Girder	2
12	Extension Girder Assy,	4
13	Brace Plates, Extension Girder, Pairs	4
14	Load Support, 1/4" Sq. Brass Tube (39'6")	2
15	Compression Supports, 3/16" Tube (41sf)	2
16	Spacer, Load Support, .030"x.156"x11sf	2
17	Load Support Connector, .125"x.250"x14sf	1
18	Compression Support Eye	4
19	Pins – 3/32" styrene – 3/16" long	4

1 Cement the reactor shell together as shown in the following photos. Use ACC cement sparingly.



2 After adding the end cap, smooth the surfaces of the shell with Squadron's Green Putty or other suitable medium to get a smooth finish. You may add the port pieces near the adapter ring. You may add as many as 6 but creative license is acceptable for clearance since reactor shells vary greatly.





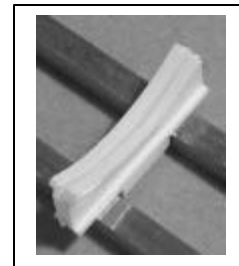
To add the port pieces it is necessary to hollow out the backs close to the curve on the reactor vessel. Coarse sandpaper wrapper around the shell (course side out) will aid in contouring the ports. Use think ACC cement since it can be used as a filler where the port meets the shell.

LOAD SUPPORT STRUCTURE

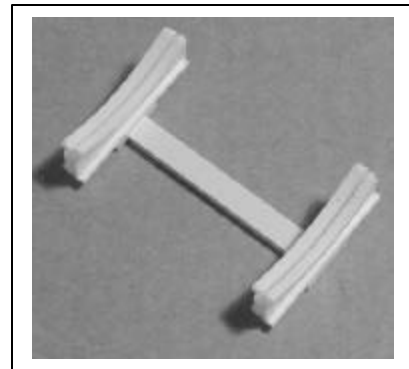
1 File the Load Tension brackets (8) so they will fit inside the Load Support tubes. Make sure the holes are bored to 1/8" and that the slots are clear and will fit the car. Cement in place with thin ACC cement making sure they are equal in length. Use 1/8" tubing in the holes for a guide. (Used on the car.)



2 Prepare the Load Supports (6) by cementing a .030" x .156 spacer between the pair. The curved lips should face outward. Make 2.

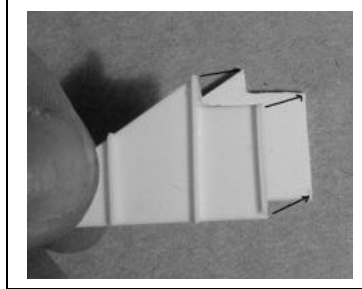


3 Cement the Load Support Connector, a .125x.250 styrene strip, to the bottom edges of the Load Support assemblies.



GIRDER EXTENSION ASSEMBLIES

1 Cement the left and right pairs of the Girder Extensions (13) using ACC cement. Make 4.

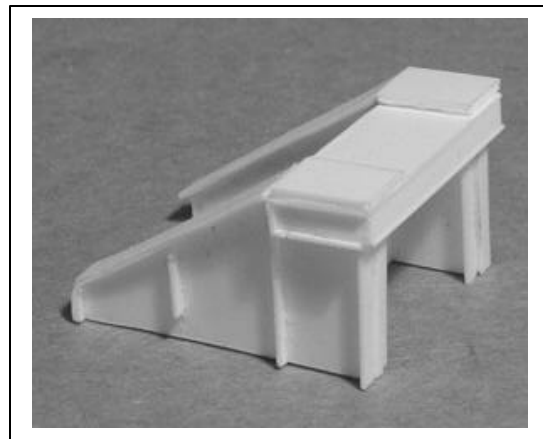


2 Assemble the girder extension using the following parts as shown:

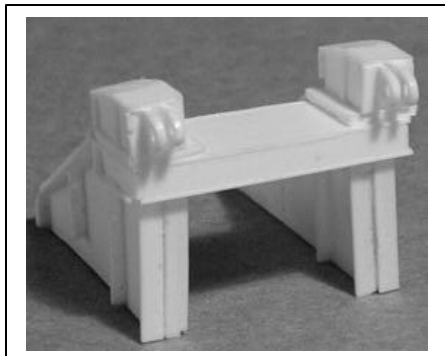
Girder Support (11)

Trim Set (10)

Make sure the tabs on the Girder Support nest on the inside of the girder frames. Make sure the sides stay parallel. Add the trim set.



3 Cement the Extension Girder Assemblies (12) as shown. This is the configuration shown in the engineering drawing.

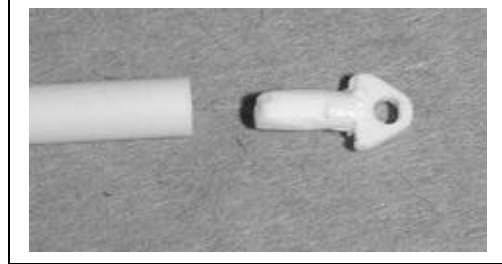


4 It is suggested that you cover the car with plastic wrap for this next step. Attach the Face Plate (9) as shown when installed on top of the car. Apply ACC cement **ONLY** to the places where the face plate touches the extension girder.

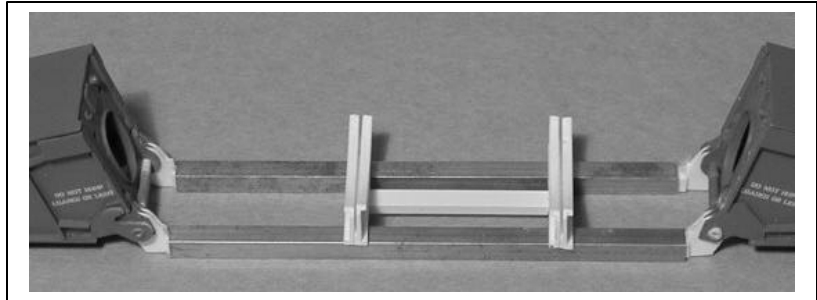


FINAL ASSEMBLY

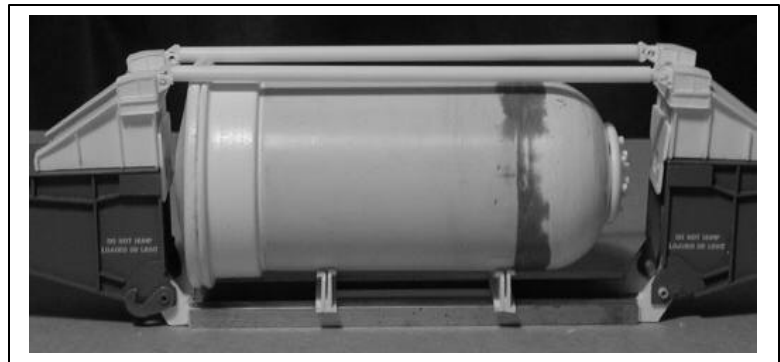
1 Insert and cement a Compression Support Eye (18) into the end of the Compression Support Tube (15). Do not do the other end yet. The other end will be trimmed during the install process. Make 2.



2 Connect the assembled Load Supports (14) and Load Tension Brackets (8) to the girder part of the car. Set the Load Support Assembly in place as shown.



3 Set the Reactor on the load support assembly and set the Compression Rods in place. Adjust the care ends to be level. Trim the Compression Rods from the loose end to length and set the loose end with ACC cement when the assembly will bear load and the car ends remain parallel to the ground. The compression rods will touch the load. This is by design since without it, the shape could become a parallelogram rather than a rectangular structure.



4 After painting, secure the Reactor Support assembly to the main Load Support. If the assembly is not stable in operation, consider cementing the Reactor shell to its support and also to the compression rods. The Girder Extensions may be secured with screws. There is a mating hole in the girder face for this.

