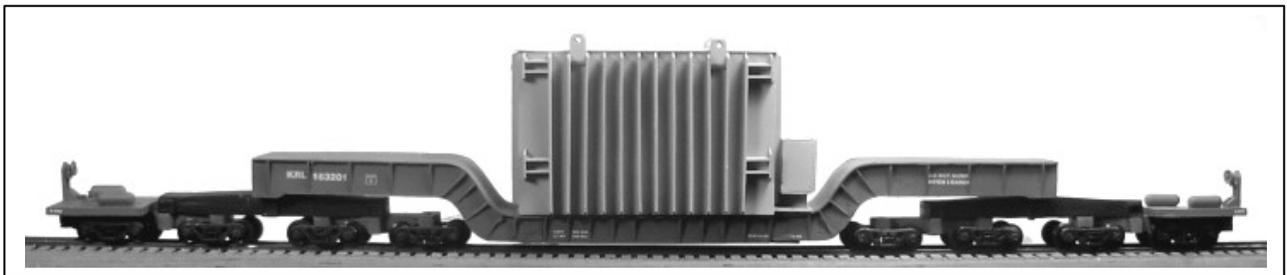


CONCEPT MODELS

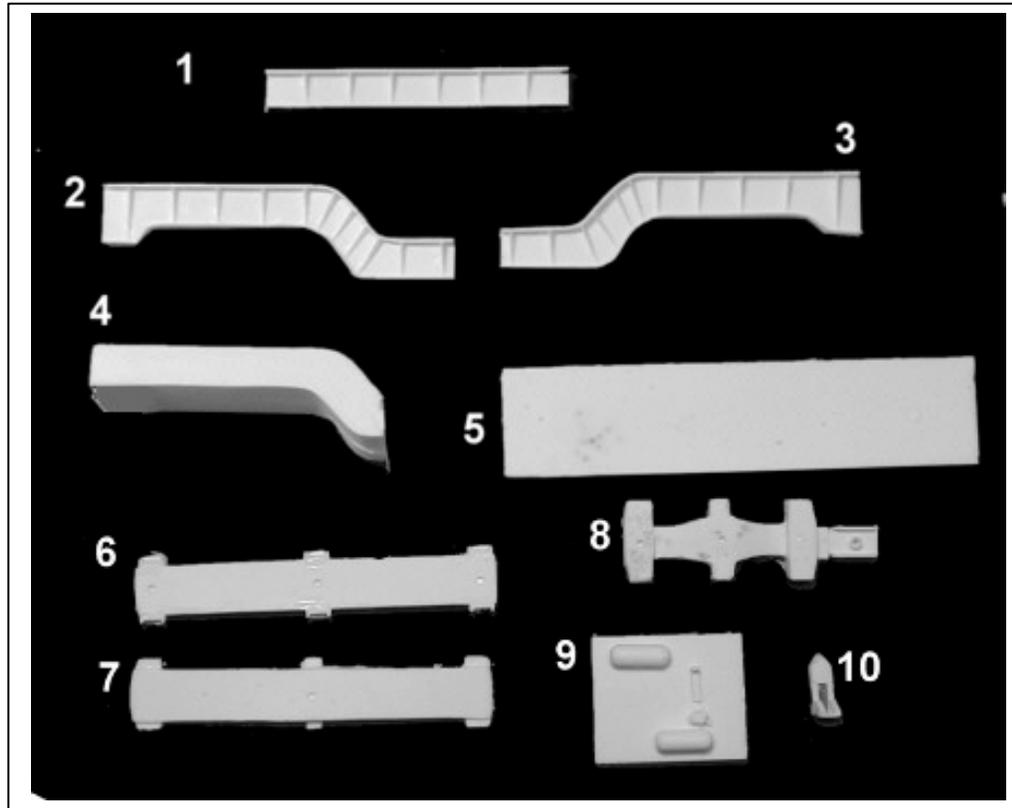
Web Address: <http://www.con-sys.com>
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8810 El Toro Way
Stockton, CA 95210



**INSTRUCTIONS FOR PRODUCT:
KRL 163200-201 DEPRESSED CENTER FLAT CAR**

PARTS KRL 163201



Item No.	Part No.	DESCRIPTION	QTY.
1	7033-1	Floor Trim	2
2	7033-2	Left Girder Face	2
3	7033-3	Right Girder Face	2
4	7033-4	Girder Core	2
5	7033-5	Floor Core	1
6	7033-6	Span Bolster Top	2
7	7033-7	Span Bolster	2
8	7031-8	Truck Bolster	4
9	7033-9	Bolster Deck	2
10	7031-10	Brake Stand	2
11	1008	Coupler Covers (CM)	2

Part No.	GENERIC PARTS	QTY.
1014	3/16" Pan Hd. Screws	2
1041	Brake Mechanism	2
1010	Brake Wheel	2
1011	Small Pins	2
	1/8" Tube x 4 s.f.	2
	.060" End Spacer 7'-6" x 4'-0"	2
1015	1/4" X 2-56 Screws	8
1016	3/8" x 2-56 Screws	4
	Decals (set)	1
	Instructions	1

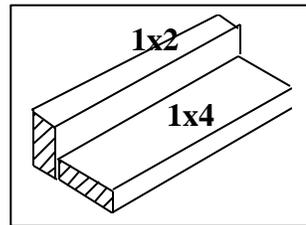
Tools

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.

IF YOU WANT PAINT TO STICK Wash the parts before assembling with a dish washing detergent such as “Dawn”. Rub lightly with a soft sponge.

ASSEMBLY

1 Cement the .060" end spacer over the ends of the Girder Cores (4).



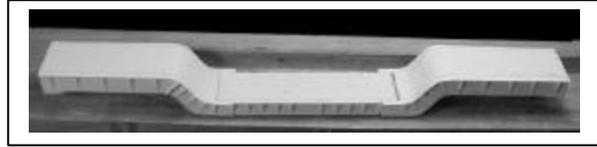
2 A fixture as we describe on page 3 is a great aid for the following steps. Cement the Left Lift Girder Face (2) exactly flush with the end and the top of the Floor Core (5). Do the same with the Right Lift Girder Face (3). Make both ends the same.



3 Turn the floor core with the best side facing down then attach the Floor Beams (1) to each side of the Floor Core (5) wide edge down. Make sure that the Floor Beams are centered evenly on the floor core



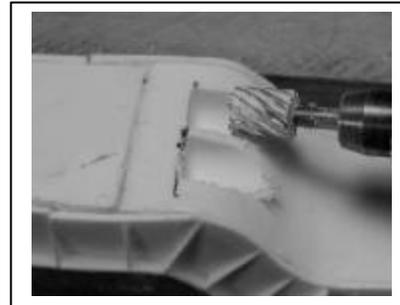
4 Cement the car ends to the floor sub assembly. Make sure that the tops of the ends are parallel to the floor and that both ends have the same elevation.



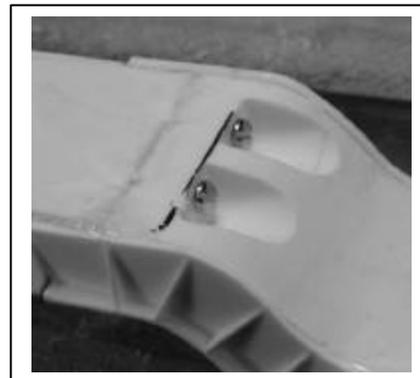
5 The next steps are optional to provide additional strength between the floor and girder cores. Draw two lines $\frac{1}{4}$ " from the seam between the floor core and girder cores.



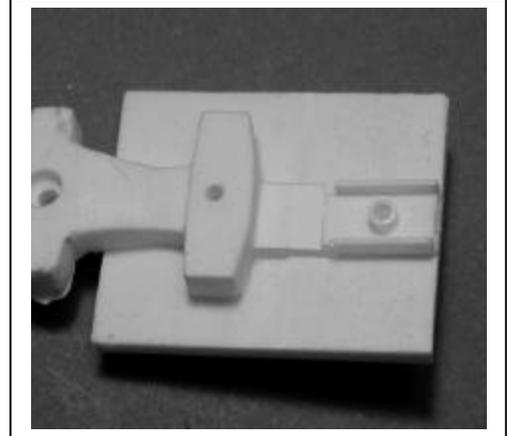
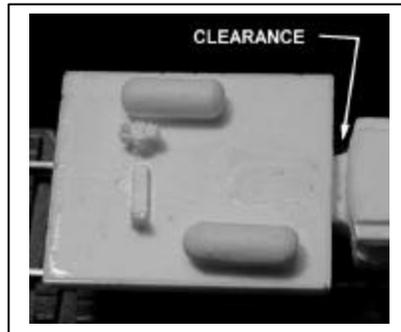
6 Use a motor tool to create two recesses for adding screws.



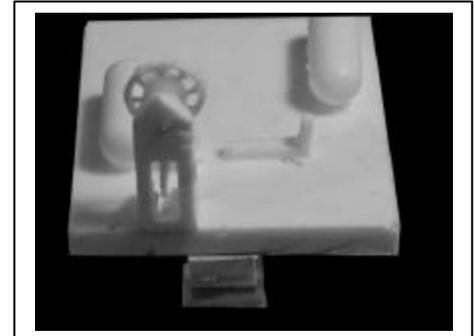
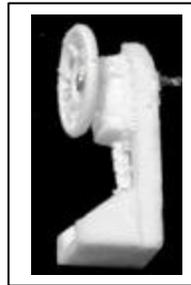
7 Drill and tap for 2-56 screws. Apply the screws as shown. The screws may be covered with Bondo in desired.



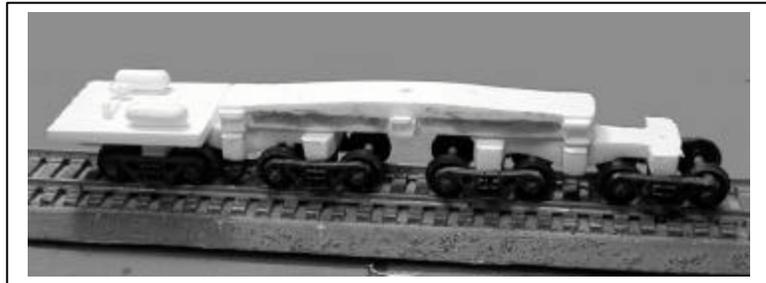
8 Attach the Deck (9) to the Truck Bolster (8) with the coupler pocket as shown. Check clearance to the span bolster



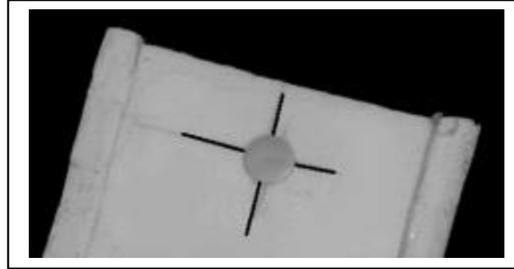
9 Add the Brake Mechanism to the Brake Stand (10). Use the small pin to attach the brake wheel to the assembled brake stand. It is suggested that ACC cement be added to the pin as assembled. Grind off the excess pin. Install the brake stand assembly as shown on each end of the car.



10 Cement the Span Bolster Top (6) to the Span Bolster Bottom (7) and mount as shown. Photo varies slightly from the actual model but the configuration is correct. Drill a 1/8" hole at the center mounting position for mounting the car body.



11 Turn the depressed girder assembly upside down. Mark for drilling 3/16" from each end (centered) for the tube which will act as pivot. Use an 1/8" drill and be careful to only drill half way through.



12 To hide all deck seams, coat the deck surface and side seams with "BONDO." Bondo is an easily sandable medium. This ensures a smooth finish. Sand smooth before painting.

PAINING

- 1) If you followed the instructions for cleaning the parts before assembly, you are ready to paint. A primer such as Floquil's 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. 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 improved the color.
- 2) Overcoat entire car with Testor's Glosscoat prior to decaling. If you decal over the Glosscoat as soon as it is 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.

