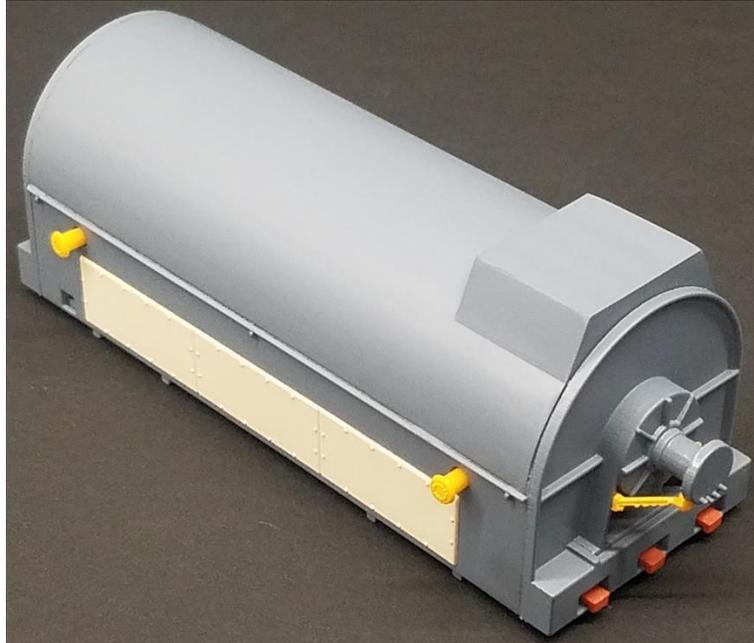


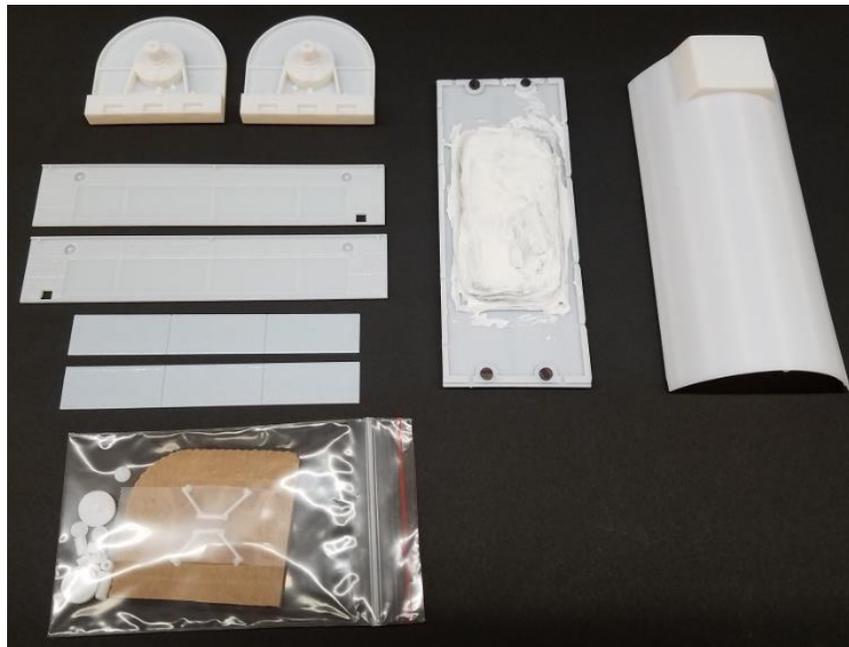
GENERATOR 1 ASSEMBLY INSTRUCTIONS

Please note that the color of parts in your kit may vary from that shown in these instructions. Some pictures may not look exactly as the parts in your kit, but convey the process and what to look for when assembling the kit.



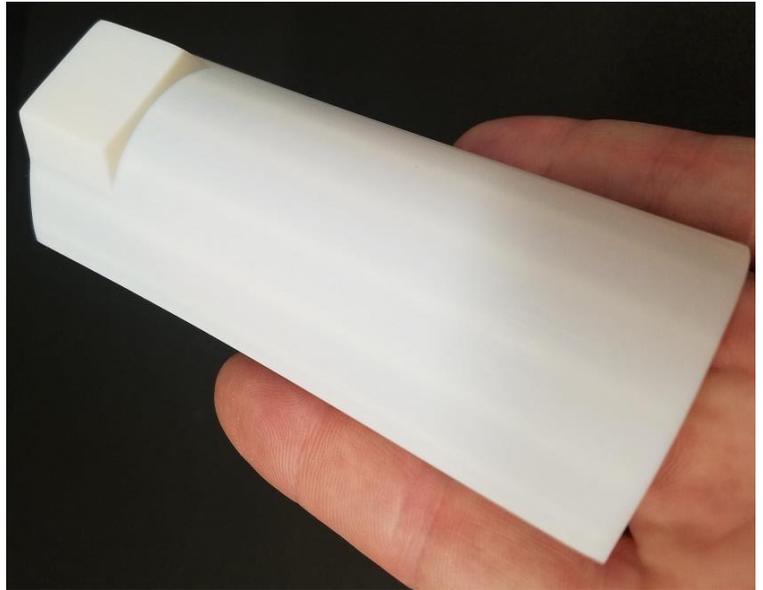
Unpacking

1. Carefully remove the parts from the two poly bags. One bag contains the arched top of the generator, and the other bag everything else. The small bag with detail parts should remain closed until needed later.



Preparation

1. You will need a clean flat work area 3 to 4 square feet in size.
2. Tools required are a #1 Phillips screw driver, small file, small angled needle nose pliers, hobby knife, toothpicks, small container to hold water for decals, "setting" solution for decals, and optionally a magnifier and 400 grit wet/dry sand paper.
3. Spray booth or well ventilated and clean area to paint.
4. Area where parts can be set aside without getting dirty or damaged.
5. **While the surface finish on most parts does not need any preparation before painting, we recommend that you spray primer on the arched top part, and wet sand with 400 grit paper to make sure you are happy with the look of the part before proceeding with assembly.** Priming is best accomplished with an airbrush, but the small hobby specific rattle cans will work too. Avoid the large hardware store rattle cans though. After assembly, this step will be much harder to accomplish. **Be sure to hold this part with two fingers underneath while applying any sanding pressure as shown to the right.**

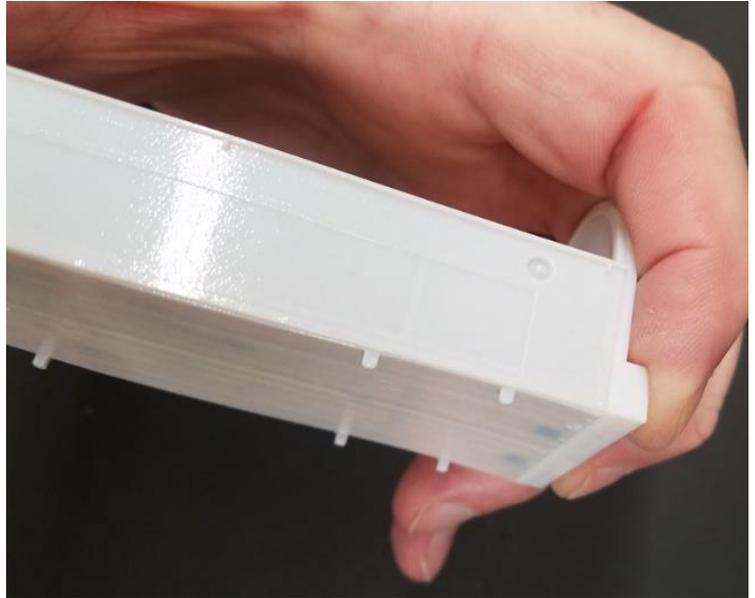
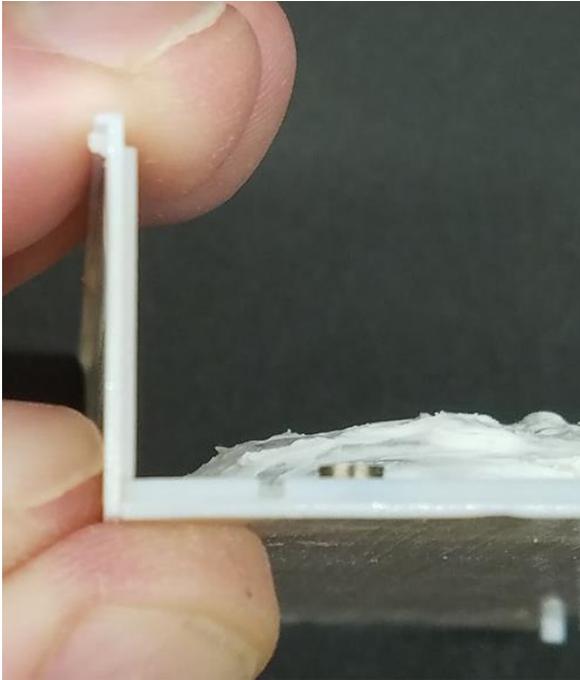


Main Body Assembly

1. Lay out the sides and ends around the bottom. The bottom should have the magnets and weight facing up. The ends and sides are keyed to the bottom, so they will only fit one side correctly.



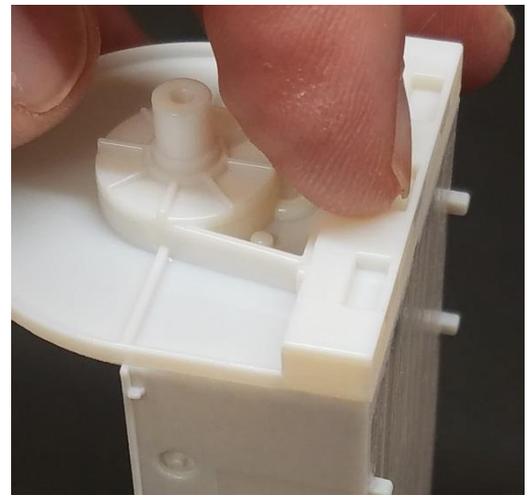
2. Dry fit the sides and ends with the bottom to ensure a tight a proper fit with each piece. The corners should not have any gaps. Do not move to the next step until you are satisfied with the fitting of the parts.



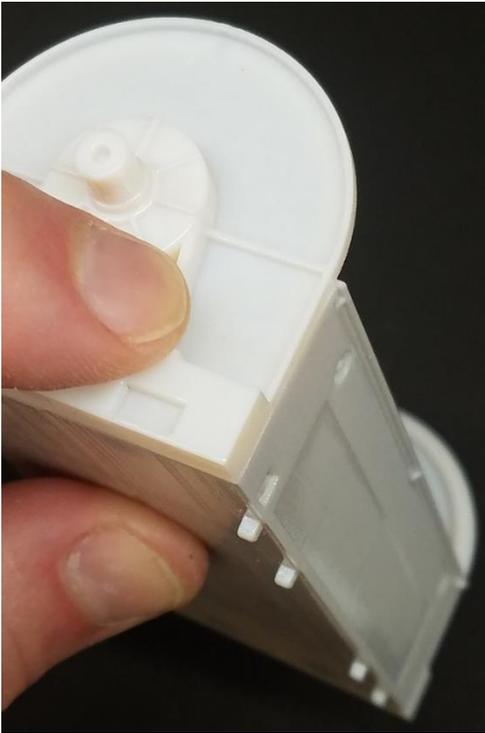
3. Use medium viscosity CA glue only. No other glue will hold the parts together. Only a small amount of glue is necessary. Place a small amount of glue on one side of the joint of the parts and spread the CA with a toothpick so all the joint surface is covered. Error on the side of less glue, as you do not want glue to ooze out the joints.
4. Start with one of the sides and the bottom. Place CA on the inside edge of the bottom. Place the side on the bottom, holding the two parts perpendicular for about 8 seconds. The CA cures quickly with this material.



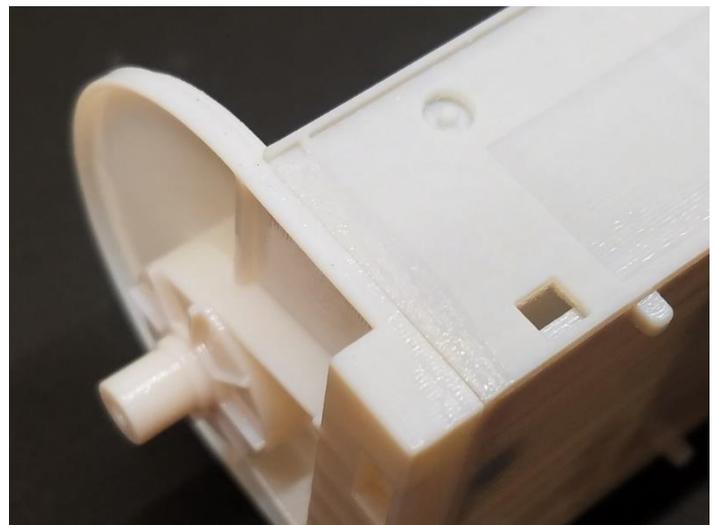
5. Next dry fit one of the ends to make sure the corner with the side still fits with no gaps.
6. Apply the CA to the mating surfaces of the bottom and the side and place the end piece into position.



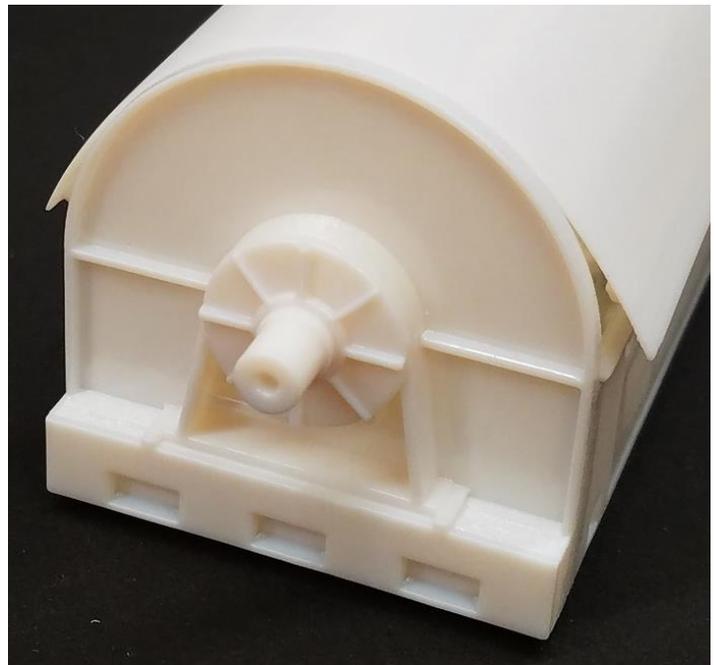
7. Repeat for the opposite end.



8. Dry fit the remaining side. If it does not fit, lightly file or sand as necessary so the side fits easily, but not so much as to create a gap.
9. Apply CA to the mating surfaces of the sides and bottom, then insert the side so it is flush with the bottom and ends.
10. A small bead of CA can be applied to any gap and spread out smoothly with a toothpick. Wet sand the CA after 5 minutes to smooth the area out. The CA works much better than putty to fill small gaps.



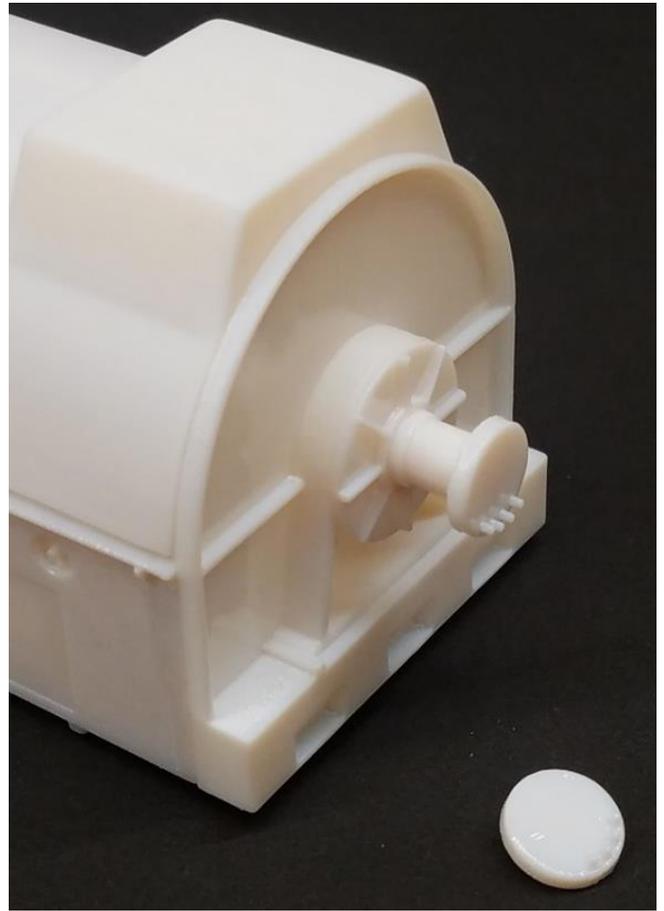
11. Test fit the top. Please note there is a tab on the inside of the top on one end. Make sure you line it up with the slot on the end piece before setting the top in place. It will most likely look like the photo to the right, which is normal. **(Please note the top has not been primed yet in these photos.) If you have not already primed and sanded the top, we highly recommend that you do so NOW, before gluing into place.**



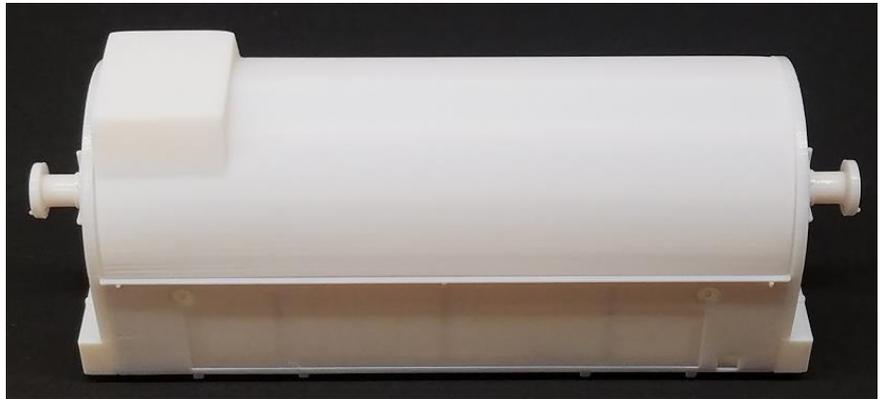
12. Carefully squeeze both ends of the top so that the tabs on the bottom slide inside the top of the sides, and press into place. Leave it in this position for 30 minutes to an hour before trying to glue the top in place. This way it will be easier to place when the glue is applied.
13. Apply CA to the inside mating surfaces of the ends and sides of the base part (no glue should be placed on the top part you are about to place).
14. After checking the top is aligned properly with the correct end pieces, carefully place the top into position, making sure the tabs along the side of the top fit inside of the sides of the base.



15. Pull the two larger diameter flanges from the small bag. The pins on the bottom of these parts should easily fit inside the hole on the shafts protruding from the ends of the generator. Note that the 4 bolt heads should be facing the bottom as shown here.



16. Place a small drop of CA on the pin and place on the end of the shaft. Repeat for the other side.



17. The main body of the generator is now ready to prime and paint. The base color of the prototype is a medium gray.

Detail Parts

1. The only assembly of the detail parts are the 4 lifting pins. They consist of a barrel with hollow center, and an end piece with a center pin on the bottom. These pieces can be found in the small bag of parts.



2. Dry fit the end piece with the barrel first. When ready to proceed, apply a small drop of CA on the pin and insert into the barrel.
3. Repeat until all 4 parts are assembled.
4. The parts are ready to be primed and painted. Any bright yellow will work.



5. No assembly is required for the 2 parts taped to cardboard inside the small bag. Carefully remove the parts from the tape.
6. They can be primed and painted the same bright yellow as the lifting pins above.
7. No assembly is required for the 6 L-bracket looking parts. They can be primed and painted any rust color.
8. The two Access Panels that fit into the recessed portions of the sides, should be painted a tan color.

Final Assembly

1. Once all the parts have been painted and the paint has dried, the detail parts can be glued in place on the main body.
2. Each of the small parts will only need a drop of CA where they join the main body. A little more CA can be applied to the tan Access Panels, but you don't want it to ooze out from underneath when pressing into place. Use the pictures below to locate where the detail parts go.
3. **Congratulations**, your generator is now ready to place on the Railfan Models Kasgro 12 Axle, 48' Straight Deck Flat Car. Be sure to hold the car with one hand while placing or removing the generator with the other hand.
4. **Do not try to lift the car by lifting the generator only. While the magnets do have a good grip, they are not that strong, and the car can easily fall away from the generator, damaging the car.**

