

WARBIRD DROP TANK INSTRUCTIONS

Thank you for purchasing the **Top Flite 75 Gallon Drop Tank** kit. This tank will add a great deal of realism and presence to many 1/7th scale warbirds. The tank is lightweight and easy to assemble and finish. It is easy to make droppable on a warbird under construction. If you are going to add it to a model that is already built, it would be easier to make it removable manually, without servo control.

TANK ASSEMBLY

□ 1. Lightly sand the outside of the drop tank halves with 400-grit sandpaper. This will help the primer and paint adhere to the surface.



□ 2. Draw a line around the perimeter of each tank half about 1/8" larger than the tank. This will leave a 1/8" flange for gluing.



□ 3. Trim off the excess plastic with scissors or a hobby knife. Use 220-grit sandpaper to even up the edge of the flanges.



□ 4. Use 220 or 150-grit sandpaper to roughen the inside of the flange where the two halves will be glued together.



 \Box 5. The supplied 0.046" dia x 3" steel wire supplied needs to be bent by following these steps:

A. Mark the midpoint on the wire.



B. Using Sketch #1 as a template, bend the wire to create a "U" shape as shown in the above image. The center section is 1/4" wide.



□ C. Using Sketch #2 as a template, bend the legs in opposite directions as shown in the above image. The center section has a height of 1/4".



□ 6. Cut out the slot in the top half of the tank to allow the **Release Loop** to protrude through the top of the tank from the inside.



□ 7. Use 150-grit sandpaper to thoroughly roughen the inside of the tank where the release hook is secured. With the Release Loop inserted through the top half of the tank, test fit the Release Loop to the **Release Mechanism** to make sure there is no interference.

□ 8. Roughen the portion of the Release Loop that will be glued to the tank with 150-grit sandpaper.



 \Box 9. Glue the Release Loop to the inside of the top half of the tank with 30-minute epoxy and the supplied 1" x 3" fiberglass tape. Allow the epoxy to cure.

□ 10. Check the fit of the top and bottom halves of the tank carefully. Sand away any obstructions so you have a good fit.

□ 11. You may wish to add about 1/4 oz of nose weight (not included) to the inside nose of the tank. This will make the tank more neutrally balanced when it falls. If you choose to add nose weight, roughen the inside surface thoroughly and use epoxy to glue the weight securely in place. A couple of old washers work well for this.

□ 12. Tape the two halves of the tank together in several places with masking tape. Glue the two halves together by wicking thin CA into the seam. Do not use accelerator, as it will weaken the plastic.



 \Box 13. Even up the flange with coarse sandpaper. It should be about 3/32" wide when you are finished.

□ 14. Prime and paint the tank as desired.

TYPICAL INSTALLATION OF THE RELEASE MECHANISM

Note: These are the latest instructions for the installation of this drop tank. Please disregard any earlier instructions from any of our plans or manuals.

Note: These are generic instructions explaining how to install the Release Mechanism on a Warbird's wing. Depending on the airplane or location on the airplane that you are installing your Release Mechanism on, the procedure may vary slightly.

□ 1. Reinforce the area that you are going to install the Release Mechanism on with hardwood blocks, or stringers. You can also use fiberglass if you wish.

□ 2. Position the Release Mechanism in the location where you want to install it. Route a thin flexible cable (Sullivan #507) from the release servo to the release tab. Tin the cable with silver solder at the release end and put a Z-bend in it. If you wish, you could also use a string tied to the release tab and to the servo arm.



□ 3. Drill two 1/16" holes for the Release Mechanism's mounting screws. Using the sketch above as a sample, drill four holes for the drop tank positioning screws. The location of these screws will vary from airplane to airplane. Use thin CA to harden all the holes. Install the mechanism with two $#2 \times 3/8$ " screws included. Install four $#4 \times 5/8$ " sheet metal screws included at the outer holes. These screws will be used to position the tank in the correct attitude.



 \Box 4. Install the tank on the Release Mechanism and tighten or loosen the #4 x 5/8" screws until you get the desired tank position.

Ideally, the tank should have a slightly negative attitude so that it falls away from the airplane as soon as it is released. Wick thin CA on the screws to keep them from moving.

PARTS LIST

Part #	<u>Qty.</u>	Description
FORQ2219	1	Release Mechanism
P406DT1	1	Tank Bottom
P406DT2	1	Tank Top
SCRW024	2	#2 x 3/8" Sheet Metal Screws
SCRW010	4	#4 x 5/8" Sheet Metal Screws
GLTP018	1	1" x 3" Fiberglass Tape
WIRES114	1	0.046" x 3" Music Wire

If you need to order replacement parts, send a check or money order for the total amount (IL residents add 7.25% tax) plus \$3.50 shipping. Add \$5.00 for C.O.D. orders to:

Top Flite Models P.O. BOX 788 Urbana, IL, 61801 (217) 398-8970



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