

#0575 - PLASTIC SERVO TRAY INSTRUCTIONS

The following will outline assembly of the Plastic Servo Tray for installation on X-Cell .50 and .60 series. Special notes will be included where applicable for fitting to X-Cell .30 and .40 series.

NOTE: While the standard arrangement is for conventional single throw collective this tray has special provision for conversion to push/pull collective. Should you desire this arrangement, it is necessary to purchase (separately) the #0576 Push/Pull Conversion package containing the bellcrank and hardware along with special supplemental instructions.

#0575 CONTENTS

<u>Quantity</u>	<u>Description</u>
2	#0353 Roll Servo Female Pivots
4	#0575-1 Servo Screw Doubler for Throttle Servo (and collective in standard mode). <u>Size:</u> 20.0 x 8.0 x 5.0mm block with 2 small holes.
1	#0575-2 Adapter Block for X-Cell .30/.40 <u>Only</u> . <u>Size:</u> 20.0 x 8.0 x 9.0mm block with 2 small holes, 1 large hole and 1 radiused edge.
2	#0575-3 Rudder Servo Spacer Blocks. <u>Size:</u> 20.0 x 8.0 x 9.0mm block with 3 small holes.
1	#0575-4 Upper Servo Tray
1	#0575-5 Lower Tray
1	#0575-6 Main Vertical Support and Throttle Mount
1	#0575-7 Secondary Vertical Brace
1	#0575-8 Switch Plate
17	#0027 M2.2 x 9.5 Phillips Tapping Screws for use as follows: 4) for roll servo pivots 2) for rudder spacer blocks 2) for .30/.40 adapter 9) for joint connections
4	#0035 M2.2 x 16 Phillips Tapping Screws for Throttle Servo
4	#0001 M2 Flat Washers for Throttle Servo
2	#0029 M2.2 x 13 Phillips Tapping Screws for #0575-7 Brace

A. ASSEMBLY FOR .30/.40 OR .50/.60

Generally, the tray is very similar to the wooden version previously offered with some important key assembly differences that cannot be overlooked.

Examine the #0575-5 Lower Tray. You will see that long, thin slots are molded in the front and rear of this part. If you are going to install the tray on an X-Cell .50 or .60, it is necessary to cut through the slots at the rear of the lower tray thus removing the last 20.0 mm from the narrow end. This is only for .50/.60 X-Cells and provides the necessary clearance for the #0349 Lower Support Brackets.

Special Note for X-Cell .30/.40: Do not cut as shown above. Instead, it will be necessary to only cut across the front of the tray (wide end) in the (3) grooves provided next to the

slots. This will provide suitable canopy clearance and shorten the tray by 28.5mm.

B. SERVO INSTALLATION

The order of assembly of the various plastic parts is not critical; however, experience has shown that it is more convenient to initially fit the servos prior to overall assembly. The reason for this is due to the adjustable nature of servo openings. Obviously this tray must accept all popular servo sizes, so the following will outline each servo installation.

1. **Rudder Servo:** The output position is to the rear of the tray. The servo is supported by (2) #0575-3 Spacer Blocks. Using original servo hardware, mount the blocks to the servo allowing at least 1.0mm case clearance. Apply a thin coat of cyano (Flex, Poly, Slow, or Gap filling type) to the underside of each block and set the assembly into position on the tray. Install a #0027 M2.2 x 9.5 Phillips Screw through the tray from below up into each block in the center hole provided. Center the servo within the opening and tighten the screws. After curing, the servo can be removed if you wish, although it is not necessary.
2. **Collective Servo:** If you are not opting for the push/pull conversion, the collective servo will be installed directly on top of the upper tray without any spacers, but with the #0575-1 Doubler Blocks. If you are converting to push/pull follow the special instructions provided with the conversion kit. In this installation, the servo output will again be to the rear of the tray. Using original servo hardware, position the servo in the opening flush on the top surface followed by the #0575-1 Doubler Blocks from beneath the top tray with cyano as above. Again, adjust for case clearance before tightening the servo screws and letting the cyano cure. As with the rudder servo, the collective servo can be removed without losing its' position if you like.
3. **Throttle Servo:** Same as collective with the #0575-1 Doublers coming from the opposite side with cyano. Instead of using the original servo screws, it is necessary to use the #0035 M2.2 x 16 Phillips Tapping Screws and #0001 M2 Washers provided.
4. **Roll Servo:** Follow same procedure as with the wooden tray. Simply pre-assemble the Male Pivots #0351 as per Section 7 of the Kit Plan Sheet #0503. Install the female pivots and center the assembly in the upper tray. Add cyano prior to final tightening of the #0027 M2.2 x 9.5 Phillips Tapping Screws through the upper tray in each pivot. Allow no side play in the servo and center the servo output spline with the true center of the tray (the rear hole for the screw to the vertical support is true center).

C. OVERALL ASSEMBLY

It is best if a thin line of cyano is put on the mating surfaces prior to installation of the screws. All screws are #0027 M2.2 x 9.5 Phillips Tapping Screws with the exception of the two upper screws holding the top tray to the secondary vertical support into the lower tray upright. These should be #0029 M2.2 x 13 Phillips Tapping Screws.

The switch plate can go in either of two positions. One will place it to the left rear of the tray allowing switch access from behind the canopy near the main gear area. The other position will place it alongside the rudder servo. This position is good for some fuselages or when you choose to have a small access hole in the canopy side window area.

D. INSTALLATION

Note that the upper tray mounting holes for attachment to the front frame plate are slightly elongated. This allows proper fitting to both .30/.40 and .50/.60 X-Cells. In either case, push the tray up against the frame vertical front plate during the bolt installation.

As previously mentioned for .50/.60 installation, the lower tray was trimmed for clear-

ance of the lower metal brackets #0349. In this installation, utilize the (2) 3.0mm holes lowermost in the tray.

Special Note for X-Cell .30/.40: Note that (1) Special Plastic Block #0575-2 is provided for fitting to .30/.40 models. Apply cyano and install this block on the left side of the main vertical support of the servo tray in the position having (3) holes about 11.0mm up from the bottom edge. Install (2) #0027 M2.2 x 9.5 Phillips Screws from the right side through the vertical support into the smaller (2) holes of the #0575-2 Block. Be sure to have the radiused edge on the outside and to the rear. This radius matches the radius of the 90° mounting tab stamped into the .30/.40 front frame support. Use the original #0073 Socket Bolt and M3 Locknut in this position.

