

#0596 ADJUSTABLE ROLL SERVO CONTROL ARM FOR ALL X-CELL 30, 40, 50 AND 60 SERIES

This unit provides the following advantages:

- 3 output positions, each with correct differential to minimize collective/roll interaction.
- All collective load is direct to servo spline, instead through a "Bridge" set-up.
- Simplified ball link removal.
- Fit J.R., Futaba and Sanwa(Airtronics).

NOTE: This unit works especially well when used with #0536 adjustable roll bellcranks.

NOTE: (*) Denotes either part #0596-4 or #0596-5 will be in the contents list depending on radio gear used

CONTENTS:

	1	0596-1	Upper Plate (with small center hole)
	1	0596-2	Lower Plate (with large hex hole)
	1	0567-3	M3 Conical Spacer
*	1	0596-4	J.R., Sanwa(Airtronic) Hex Output Wheel
*	1	0596-5	Futaba Hex Output Wheel
	1	0596-6	M2.9x16 Phillips Oval Head Self-Tapping Screw
	4	0536-3	M2 Conical Spacers
	1	0555-1	M3 Ball
	2	0361	M2 Balls
	3	0133	Ball Links
	2	0047	M2x16 Slotted Machine Screws (12.9 Hard)
	2	0018	M2 Locknuts

INSTALLATION:

STEP 1 Select the appropriate hex output wheel (#0596-4 for Airtronics(Sanwa) and J.R. radios and white in color or #0596-5 for Futaba and black in color) and the #0596-2 Lower Plate (with large hex center hole). Neutralize your radio roll trims and position the hex output wheel so that test fitting the lower plate will indicate that it is exactly neutral on the servo. You have two areas of adjustment here, the spline on the servo and the hex. Utilize both should make this step easy.

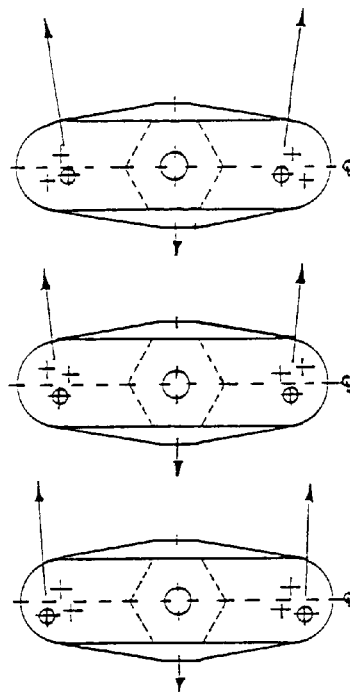
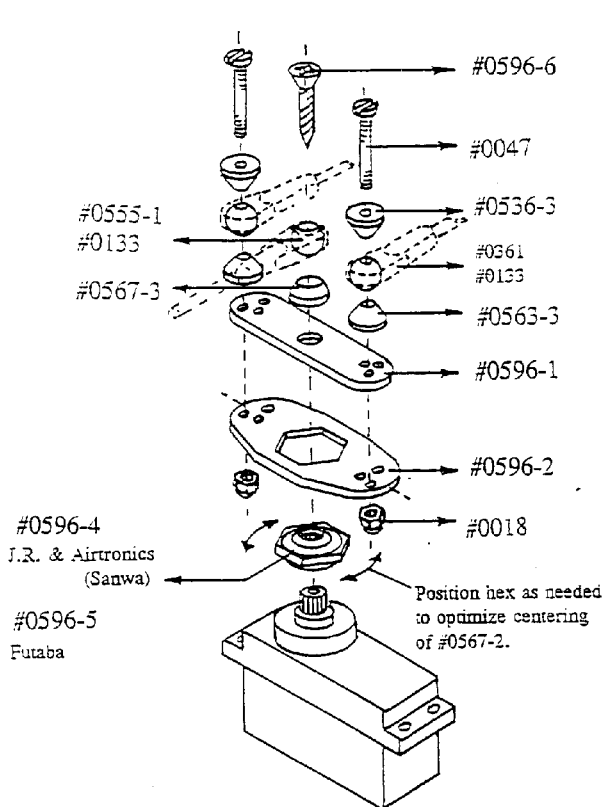
STEP 2 At this stage you must determine which output position you wish to use. Carefully study the positions on the drawing and note this in any of the three positions, the output points will always be ahead (nearer the collective servo) of the centerline. This is accomplished by using parts #0596-1 and -2 upright or inverted.

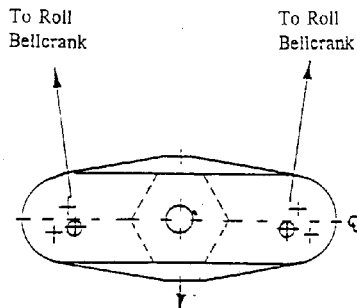
- Position A:**
 - 24.0mm ball-to-ball
 - Output similar to original #0359 but with differential.
- Position B:**
 - 26.0mm ball-to-ball
 - Greater output with differential suitable for hot-dog flying.
 - Pushrods can be used without bends in some cases.
- Position C:**
 - 29.0mm ball-to-ball
 - Output for use with adjustable bellcranks and straight pushrods #106-34 (optional parts) not included.

STEP 3 Install the #0555-1 M3 ball into a #0133 ball link and replace the existing link on your collective servo pushrod. Select (1) #0596-6 M2.9x16 Phillips oval head screw, (1) #0567-3 M3 conical spacer, (1) #0596-1 Upper plate and the previously selected hex output wheel and lower plate. Assemble these components in order (as per Drawing and your position choice) making sure that all holes are aligned prior to tightening. Tighten this screw as you would any servo wheel screw.

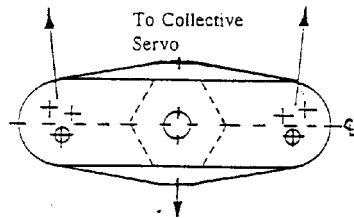
STEP 4 Install (2) #0361 M2 balls into (2) #0133 links and screw then onto your roll pushrods. Select (2) #0047 M2x16 Slotted screws, (4) #0536-3 M2 conical spacers and (2) #0018 M2 locknuts. Install these in correct order as per the drawing into your chosen output holes. Be sure you have oriented the plates so your chosen output holes are ahead of the centerline.

After installation, you will see that each link is captured by conical spacers and change in output positions will require disassembly to enable inverting of the plates.

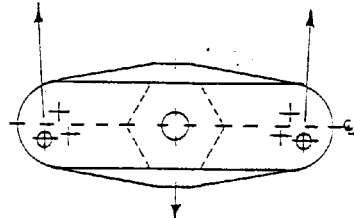




Pos. (A)
24.0mm Output Spacing
(As on original X-Cell Parts)
with Differential



Pos. (B)
26.0mm Output Spacing
(2.0mm over original)
with Differential



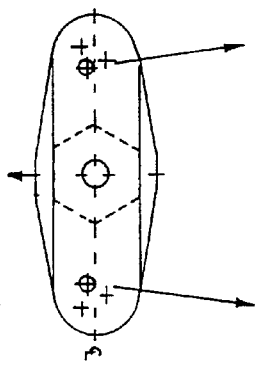
Pos. (C)
29.0mm Output Spacing
(5.0mm over original)
with Differential

NOTE:

Always orientate so output holes in use
are ahead of centerline towards collective servo.

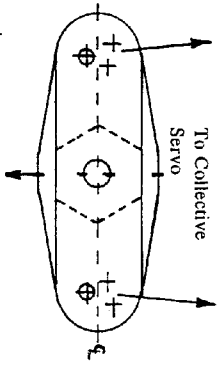
To Roll
Bellcrank

To Roll
Bellcrank

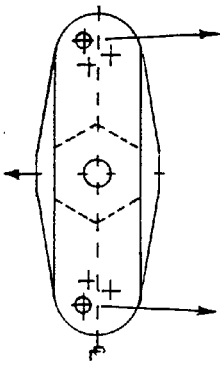


Pos. (A)
24.0mm Output Spacing
(As on original X-Cell Parts)
with Differential

To Collective
Servo



Pos. (B)
26.0mm Output Spacing
(2.0mm over original)
with Differential



Pos. (C)
29.0mm Output Spacing
(5.0mm over original)
with Differential

NOTE:

Always orientate so output holes in use
are ahead of centerline towards collective servo.