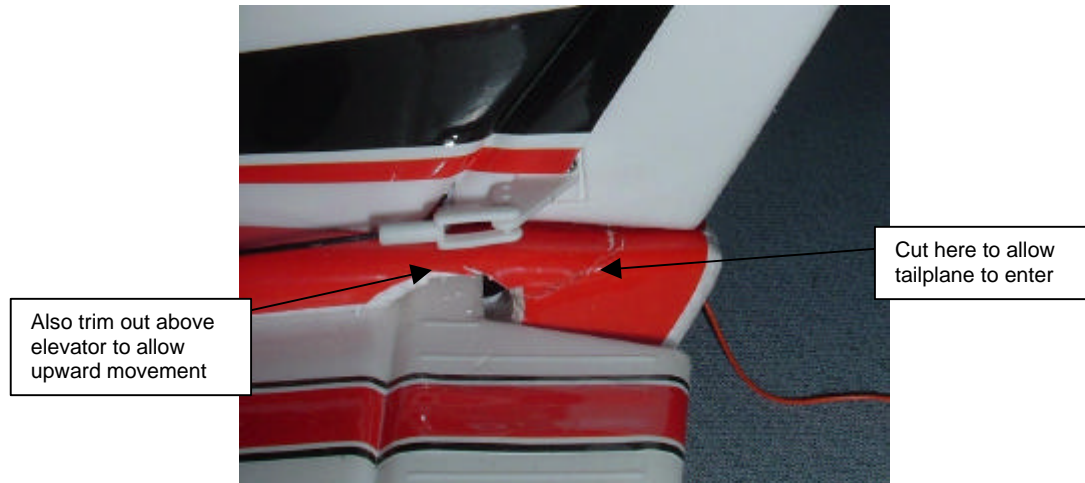


PLEASE READ THIS !!

Skyartec Cessna 182 Notes, Corrections and Recommendations.

There are a number of omissions and errors in the manual. The following are the important ones.

- 1) Assembly of the airplane Step 1. The manual goes to great lengths to warn about the glue. The glue provided is PVA glue or craft glue commonly given to children. Danger is limited.
- 2) Assembly of the airplane Step 3. The manual says to push the wing in from the rear. To do so, you need to cut the fuselage to open the rear as shown in the next picture.



You will also need to trim above the elevator to allow the elevator some upward movement. Glue the tailplane in place and glue the cut in the fuselage. Hold together with tape till dry. Note also the control link is in the outer hole. This comes next.

- 3) Step 7 & 8. There is a huge error in the manual in these steps. The closer the control link goes to the control surface, **THE MORE SENSITIVE WILL BE THE CONTROLS.** The complete opposite of what is stated in the manual. These steps should be done with the Tx/Rx on, and the rudder/elevator trims centred. Screw the white end of the control rods on to or off of the control link until the rudder and elevator are exactly straight with the fin and rear wing (tailplane) when the link is connected. Push the ends together firmly to clip the pins into the opposite leg of the links (forked ends of the control link). I suggest you only use the outer hole in the control arm, as anything else will be too sensitive for most pilots.
- 4) Step 8.5. The manual makes no mention of the aerial wire. It is coiled up beside the transmitter. If you leave it there the plane will crash on take off. The wire needs to be uncoiled and made as straight as possible. I pierced a small hole in the side of the fuselage under the wing mount and 2 in the tail, and threaded the aerial through. Make sure it does not foul any movements of control surfaces. Check the following pictures for a good layout.



- 5) Step 8.75. I also suggest that the movement on the ailerons on the main wing are too great, especially for a new flier. Adjust the control rods on the servos to a more inner hole. The very inner for a beginner. You may have to increase the size of the holes in the servo arms to take the wire. To move the link, first separate the legs of the white end of the control link at the aileron end. A small flat screwdriver or blunt knife is good for assistance. Remove the link first from the control arm, and then feed the wire from the servo arm. Refit the link in the required hole in the servo arm and then in the outer hole in the aileron control arm. Plug in the aileron servo plug and turn on the plane and transmitter. Check the ailerons are straight with the wing when the aileron trim on the transmitter is centred. Adjust the length of the control links if necessary. See picture.



- 6) Nose wheel. I was modifying the nose wheel steering arm myself, but find I don't have sufficient time. The problem is that when you have a heavy landing on grass, the steering arm does not have enough control over the nose wheel, which turns 90° left, and makes the plane flip over. Also, as sent, the nose wheel turns in the wrong direction (recently changed by Skyartec). So here are some instructions to fix on the nose wheel.
- Minimum fix. Before attaching the nose wheel, make sure the nose wheel turns the correct direction. If the rudder moves to the right side of the aircraft, the nose wheel should turn right also. Skyartec have recently changed how this worked. The steering arm on the nose wheel used to have to be changed so that it pointed to the left side of the aircraft. Now check to see if both linkages on the rudder servo are on the same side. If so no change should be necessary. Also make sure the wheel is pointing directly forward when the rudder is straight. Tighten grubscrews firmly. If the screws fail, they are M2.5 standard metric grubscrew. If you send me an email, I will send you a couple for free.
 - Better fix. To reduce the movement of the nose wheel, move the linkage to the very inner hole on the servo arm. You will have to open the hole a little to make the linkage fit.
 - Buy a longer steering arm, or extend the one in the plane. Maximum length is 20mm from centre of arm to very outer tip. A longer one can be cut down.



Picture of modified steering arm. If anyone can find me a source for a suitable off then shelf item, drop me an email. The modified piece can be made from strong plastic, or old circuit board. The one I was making had a groove at the back to fit around the boss of the old arm. It was then pinned and glued in place (superglue)

- iv. Better still. Buy some 2mm (5/64") piano wire. Remove the triangular motor mount and drill a 2.5mm (3/32") hole in the bottom side of the rectangular part of the motor mount right against the rear of the triangular piece (this is straight above the steering shaft). Replace the steering shaft with a piece of the piano wire so that it goes all the way up into the motor mount. Make sure it still moves freely.
- v. Still better. Dismantle the nose wheel and bend a piece of piano wire to replace the entire steering shaft from wheel to motor mount.

Additional Notes: on Mode 1 to Mode 2 transmitter swap.

There is a problem if you only perform the steps in the manual. The throttle OFF and FULL positions move about requiring reprogramming. Here's why.

It says in the manual that elevator, rudder and aileron reset to neutral every time you turn on the transmitter, at whatever position the sticks and trims are on, and says to centre them every time before you turn on the transmitter. Throttle is different. When you change to mode 2 the elevator becomes the throttle and resets to centre at whatever position the throttle stick is in, causing the programmed positions to move.

Below is a work around and below that a permanent fix.

Work Around

Move the throttle to minimum before you turn on the transmitter, and always turn it on at this position. Move the throttle to full, and then plug in the plane battery. Wait for the 2 beeps, then move the throttle to minimum and wait for Suzanna (the music). If you always turn the transmitter on with the throttle at minimum, or in the same position every time, then it should always work the same.

Fix

For a proper fix, it is necessary to unsolder the 2 small circuit boards that are attached to the throttle and elevator controls, and swap sides, resoldering them to the opposite control. Leave the wires at the bottom of the circuit board. i.e. don't turn the boards around before resoldering them. Make sure no tracks are joined with solder before reassembling.

Contact

If you have any problems or require spare parts, send me an email iarmstrong@austarnet.com.au or go to the Power Master website at <http://home.austarnet.com.au/iarmstrong> and follow the links there.

Following is a list of spares as detailed in the manual. Only 4 ch brushless parts are listed. Postage is extra and varies depending on size and your location.