

Preparing the PW-5

*The following is a step-by-step
procedure for assembly and
disassembly*

Begin with opening the trailer

- *Obtain the keys from the green box in the wall power box.*
- *Untie the restraining ropes at each side of trailer at the rear.*
- *Unlock the latches at each side, raise the lid of the trailer, unlatch the rear gate and lower it to the ground.*



Prepare to roll out the fuselage

- *Mount and extend the steel cradle ramp (a) by lowering its two protruding pins into holes in the trailer end rail (b).*
- *Undo the boom restraining strap and pad (c) and lay them in a position out of way of the carriage wheels (d).*



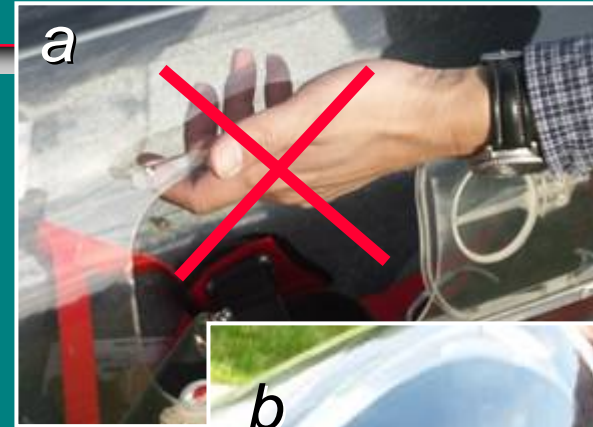
Roll out the fuselage

- Pull the fuselage out of the wheel wells. **Watching the clearance of the vertical fin with the trailer lid (a)**, move rearward until the cradle wheels enter the tracks of the steel ramp (b).
- Position the wooden ramp behind the steel ramp in line with the main gear (c).
- Slowly roll the fuselage further rearward and down the ramp **while keeping the tail low**. Watch carefully the clearance between the nose and the end of the trailer bed (d). Placing the tail wheel on the ground as soon as possible will ensure proper clearance (e).



Care in handling the canopy

- *Undue stress leading to breakage of the canopy can result from grasping and lifting the plexiglass from the window opening (a).*
- *Rather, reach inside through the window to grasp the canopy release handle with one hand and grip the top canopy frame with the other to open properly (b).*



Prepare for mounting the wings

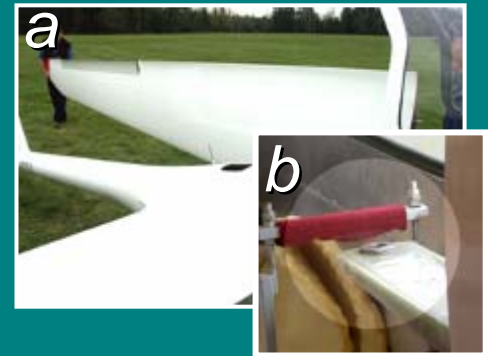
- First remove the strap and wooden beam which secure the fuselage to the cradle, **but leave the fuselage in position on the cradle (a)**.
- Remove the cover of the spar and control connection compartment. **Be careful to slide it in the direction of the nose after releasing the latch before lifting it clear (b)**.
- Now retrieve the wing stand from the front compartment of the trailer and position it for use near the tip of the right wing (c).
- Carefully move the spar retaining pins (there are two for each wing) in forward position (toward nose) so that they may be in place to insert in the spar and rear tab of each wing (d). See **“Special wing mounting notes”** following.
- Move the spoiler control to the full-open position (e)



Attaching the wings

(this takes two people)

- Grasp the tip of the **right wing** (a) and lift it to free its spar from the bracket at the front of the trailer (b). Then, pull it straight out until the spar carriage comes to the end of the trailer.
- Once the wing spar is lifted free of the pin on its carriage, the person holding the wing tip swings around to a position putting the wing perpendicular to the fuselage and the wing is rotated to an attitude level with the ground (c). It can now be moved to insert the spar into the fuselage bringing the wing root flush against the fuselage (d).
- The **left wing** is attached in the same way, but there some additional notes (next).



Special wing mounting notes

- *Upon seating a wing, special **care must be taken not to jostle the fuselage** so that the rear spar pin slides rearward, making it impossible to seat the wing.*
- *The left wing is attached in the same way as the right, however, after seating the right wing and before going further **be sure the pins holding the right wing are set in the half-way position**. This assures that the right wing won't be moved while installing the left.*
- *Also, while inserting and locking the spar pins, **there will be a need to have the second person on the tip of the left wing** ready to move it about to help in slipping the pins into place.*

Connecting controls

- Once the four spar pins are in place and locked (a), the connections to spoilers and ailerons can be made.
- Through the top port, the connection of all four controls is done by 1) depressing the black button so that the outer sleeve can be slid back, 2) hooking the control tube end over the pins in the end of the cockpit control link, and 3) sliding the outer sleeve forward until the black button pops up (b). This procedure is difficult to do while looking in the compartment, but with practice it can be done by feel alone. After connecting have a second person check the connections visually! (c).



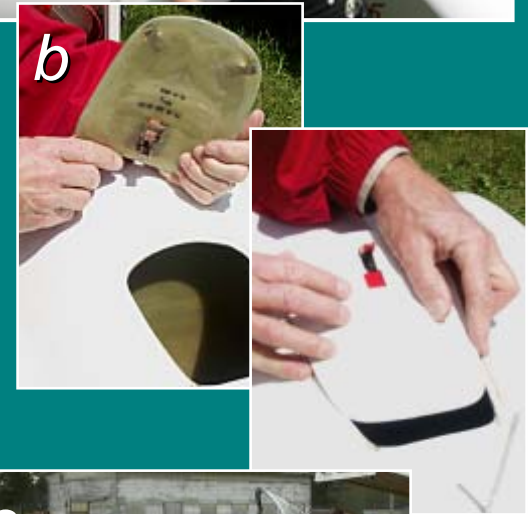
Attaching the horizontal stabilizer

- *After removing the horizontal stabilizer from its retaining brackets in the lid of the trailer, remove the stabilizer retaining pin at the base of the tail by first depressing the red spring (a) before easing the stabilizer into position at the tail. However, before this, push the rudder to one side (b). There are three pins in the tail which will align with two holes in the forward edge of the stabilizer and one hole in the movable elevator. It is necessary to raise the elevator controller arm to a level attitude to get the stabilizer to seat properly (c). Once in place the retaining pin must be reinserted and secured with the red spring (d). **Be sure the red spring is aligned with the red line on the fuselage.***



Final checks before flight

- *At this point a check should be made that all equipment is accounted for and in place followed by a **positive control check**. (a).*
- *Once it has been determined that all connections are correct, the cover of the spar and control connections compartment can be re-secured. Be sure that you start sliding the cover in place from a forward position to assure that the clips engage properly (b). Then it's a simple matter to depress the latch.*
- *Now that the aircraft is assembled, move it off the cradle and free of the trailer (c) followed by returning the cradle and ramps to the trailer bed and closing the lid. **The keys should be left in the lock of the front storage compartment.***



Disassembling and returning glider to trailer

Taking the PW-5 apart is simply a reversal of the assembly procedure. However, there are some important things to pay attention to:

1) Putting away the horizontal stabilizer

- After pulling the retainer pin and freeing the stabilizer, be sure the retaining pin is returned to its position and locked with the red spring (a).
- Orient the stabilizer correctly for stowing in its lid brackets (b).
- Finally, be sure to lock the rear bracket by pulling the latch out (c) and put restraining cord in place.



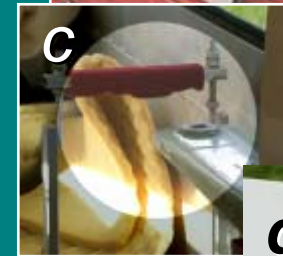
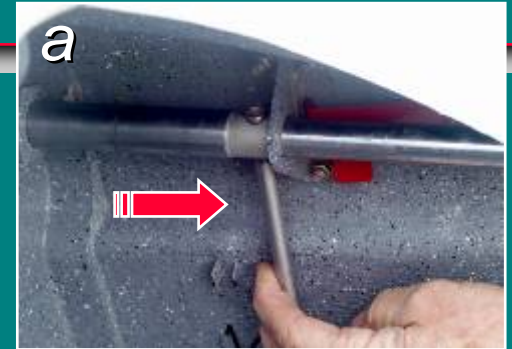
2) *Mounting fuselage on cradle*

- *After positioning the wooden ramp at the base of the metal ramp, move the cradle into position under the fuselage between front and main wheels (a).*
- *Next, push fuselage and cradle into position with cradle wheels in the track of the metal ramp (b).*
- *Now, push the fuselage up until the cradle meets the main gear skirt, **but with a foot holding the cradle wheels** (c).*



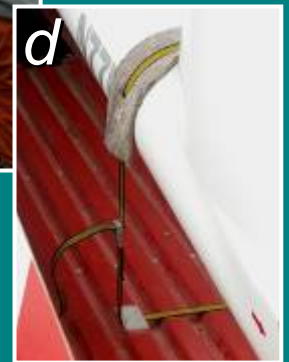
3) *Derigging and stowing wings*

- Start by removing the hatch cover, unhook the four control connections, and pull the spar retaining pins (a) **but only to half-way position** (to hold other wing in place).
- Being sure the right wing is supported by the wing stand, remove the left wing first, swing and rotate it to bring the spar to its carriage, and drop it on the pin at the point closest to the wing root (b). Repeat with the right wing.
- Don't forget to lift the wing tip at the end to clear under the bracket at the front of the trailer (c).
- Last, place aileron locks on each wing before lowering lid (d).



4) *Returning fuselage to trailer*

- *Secure fuselage to carriage by inserting wooden beam and strap around cradle (a)*
- *When traveling, attach the canopy cover (b).*
- *Move fuselage up ramp into trailer, again **keeping tail boom low watching the clearance of vertical fin with trailer lid** as glider is slid forward into wheel wells (c).*
- *Reattach the pad and strap over the tail boom (d).*



Buttoning up

- A checklist :
 - *Check the moisture absorption unit for need of replacement.*
 - *Stow ramp, secure tailgate and close lid.*
 - *Stow all equipment in forward compartment.*
 - *Secure all locks (hatch and two tailgate latches).*
 - *Return keys to green box*
 - *Return chute to bag and hang in shed*



Good flying!

PSSA hopes you will enjoy your time in our sweet little bird.

Your enjoyment and success as well as that of other club members will be determined by the care we all give to its use.

Please fly safely and may the cu's take you high and wide.