

Kit # AE-502 Kit Contents: Laser Cut Sheets Qty. NameDescription 1LC-501-E-01	
Qty. Name Description	
1	
1	
Misc. Loose Parts	
QtyNameDescription	
4	PLY
Additional Items Required (Not Inclue QtyNameDescription	aea in Kit)
Additional Items Required for Electric Power Only	<u>y (Not Included in Kit)</u>
OtyNameDescription	
1	lien Aircraft P/N: AE-040)
1 Speed ControlCastle Creation Phoenix ICE 50 Electronic	Speed Control (Alien Aircraft P/N: AE-041)
1Battery ConnectorMale Deans Ultra Style connector (Alien A	ircraft P/N: AE-027)
1Arming SwitchArming Switch with 12 awg & Dean's Ultr	
4 Motor Mounting Screws	Aircraft P/N: AE-050)
1Battery	
1Heat Shrink Tube	

WARNING.....EXTREME DANGER:

Electric motors, propellers and batteries powerful enough to fly this model are extremely dangerous. These motors, propellers and batteries can cause serious property damage, serious bodily injury and death. Maximum safety precautions must be observed at all times when installing, maintaining and operating these items. Maximum safety precautions must be observed at all times when assembling, maintaining and operating this model. You must understand and follow all of the manufactures operating and safety instructions for every piece of equipment and component used with this model.

YOU MUST USE AN ARMING SWITCH BETWEEN THE BATTERY AND SPEED CONTROLLER.

If you have any doubt about the proper safety precautions, you must contact the manufactures to obtain the operating and safety instructions for every piece of equipment and component used with this model.

You must read and follow the important notes on page 6 of this manual.

Building Instructions:

Building the electric powered version of the Taylorcraft 72 is almost identical to building the glow powered version. The main difference between the models are the firewall/motor mount and the bottom hatch. As such, you should *follow the regular instruction manual to build the model with the following exceptions:*

Step 14...The fuel tank tray is now the battery tray. After assembly, glue velcro on the inside bottom.

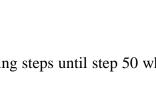
Step 15...Replace F-21A and F-21B with E-02 and E-03. Glue them together as shown. Glue the four E-04's to the front of E-2. NOTE: The four E-04 spacers will mount the Himax HC3528-0800 Brushless Motor in the proper position. If you are using a different motor, measure from the plan to determine haw many spacers are required for your installation.

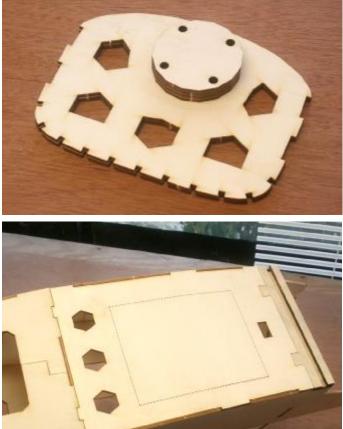
Step 28, 29 and 30...Do not use parts F-17, F-18 and F-19 are not used. Instead, position and glue part E-01 into place on the bottom of the fuselage. Trim the rear edge if required to obtain a good fit.

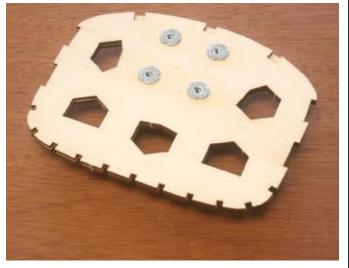
Step 32...You do not to drill the firewall as the holes are laser cut. NOTE: If your motor uses a different mounting pattern, Epoxy birch dowels in the holes and sand flush. Then drill holes as required for your installation.

Step 33...Install the 6-32 blind nuts in the back in part E-03 and secure with thin C/A glue.

Now continue with the remaining steps until step 50 when the fuselage is finished and sanded smooth.







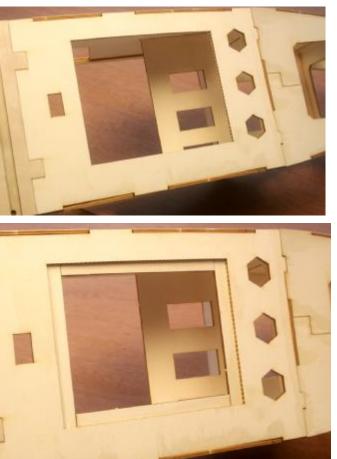
THEN

...Cut out the hatch on the dashed line.

...Glue the E-05's and E-06's to the inside of E-01 to make a frame / ledge for the hatch to sit on.

NOTE: We do not include any latch for the hatch because I have found that everyone seems to secure the hatch differently than I do, and I don't like to sell you parts that you will not use.

I held the hatch in place with a tongue in the front and two #2 sheet metal screws in the rear corners. You can use this method, magnets, wire clips, or what ever method you prefer.



Now follow steps 51 through 151 to build the wing, struts, cover, and the beginning of the final assembly.

Follow the remainder of the final assembly steps in the main manual with the following exceptions:

Step 182, 183 and 184 are not required. Instead, mount your motor on the firewall. ...Mount the electronic speed control.

Step 196...This step is not required.

...WITH THE PROPELLER REMOVED...Turn the transmitter on. Place the throttle stick in the low position. Plug the battery into the speed controller. Check the motor for proper operation and direction of rotation. Follow the instructions with the speed controller to make any adjustments.

265...Check the servos for proper operation and direction. Adjust the control throws to the values shown on the plan. Now disconnect the battery and then turn off the transmitter.

266...Install the propeller Place the battery in the nose of the model and install the hatch.

267...Check the balance of the model. It should balance at the position shown on the plan. Move the battery forward or aft to achieve the proper balance. Use the velcro straps to secure the battery in the model in this position. Mark the location of the battery on the fuselage side. This will allow you to quickly reinstall the battery at the location that gives the proper balance. Note: If moving the battery will not achieve the proper balance, you will have to add weight to the nose or tail. Glue any weight securely to the model.

268...Your model is now ready to fly. Fully charge the transmitter and airborne battery before attempting to fly the model. Always range check and do a thorough pre-flight of the model before every flight. Always follow established safety guidelines while operating the motor, radio and flying your model.

NOTES ABOUT THE ARMING SWITCH:

*<u>YOU MUST USE THE ARMING SWITCH</u>. THIS IS AN IMPORTANT SAFETY ITEM.

*THE PLUG SHOULD ONLY BE INSERTED IN THE ARMING SWITCH IMMEDIATELY PRIOR TO FLIGHT. *ALWAYS REMOVE THE PLUG FROM THE ARMING SWITCH IMMEDIATELY AFTER EVERY FLIGHT. *THE PLUG SHOULD NEVER BE INSERTED IN THE ARMING SWITCH WHILE CHANGING OR INSTALLING THE BAT-TERY IN THE MODEL.

*BE ABSOLUTELY SURE THAT THERE ARE NO OBJECTS, CLOTHING, BODY PARTS, ETC. ANYWHERE NEAR THE PROPELLER AND THAT THE MODEL IS SECURELY RESTRAINED BEFORE INSTALLING THE PLUG IN THE ARMING SWITCH.

LIPO BATTERY SAFETY ALERT

Lithium Battery Fires

Lithium batteries are becoming very popular for powering the control and power systems in our models. This is true because of their very high energy density (amp-hrs/wt. ratio) compared to NiCd's or other batteries. With high energy comes increased risk in their use. The principal risk is FIRE which can result from improper charging, crash damage, or shorting the batteries. All vendors of these batteries warn their customers of this danger and recommend extreme caution in their use. In spite of this, many fires have occurred as a result of the use of Lithium Polymer batteries resulting in loss of models, automobiles, and other property. Homes and garages and workshops have also burned. A lithium battery fire is very hot (several thousand degrees) and is an excellent initiator for ancillary (resulting) fires. Fire occurs due to contact between Lithium and oxygen in the air. It does not need any other source of ignition, or fuel to start, and burns almost explosively. These batteries must be used in a manner that precludes ancillary fire. The following is recommended:

1. Store, and charge, in a fireproof container; never in your model.

2. Charge in a protected area devoid of combustibles. Always stand watch over the charging process. Never leave the charging process unattended

3. In the event of damage from crashes, etc, carefully remove to a safe place for at least a half hour to observe. Physically damaged cells could erupt into flame and after sufficient time to ensure safety, should be discarded in accordance with the instructions which came with the batteries. Never attempt to charge a cell with physical damage, regardless of how slight.

4. Always use chargers designed for the specific purpose, preferably having a fixed setting for your particular pack. Many fires occur in using selectable/adjustable chargers improperly set. Never attempt to charge Lithium cells with a charger which is not specifically designed for charging Lithium cells. Never use chargers designed for Nickel Cadmium batteries.

5. Only use charging systems that monitor and control the charge state of each cell in the pack. Unbalanced cells can lead to disaster if it permits overcharge of a single cell in the pack. If the batteries show any sign of swelling, discontinue charging and remove them to a safe place outside as they could erupt into flames.

6. Most important: NEVER PLUG IN A BATTERY AND LEAVE IT TO CHARGE UNATTENDED OVERNIGHT. Serious fires have resulted from this practice.

7. Do not attempt to make your own battery packs from individual cells.

These batteries CANNOT be handled and charged casually such as has been the practice for years with other types of batteries. The consequence of this practice can be very serious resulting in major property damage and/or personal harm.

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