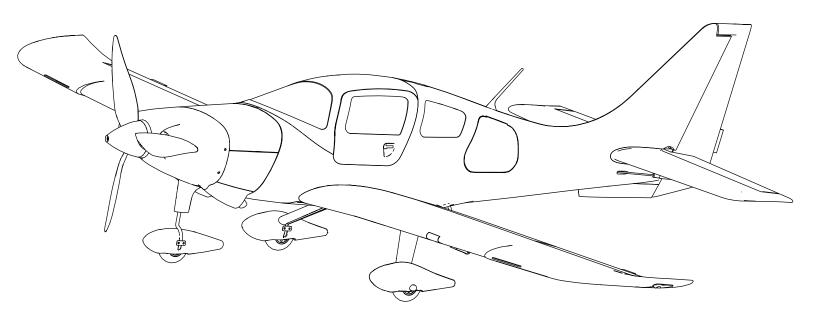
TOWER HOBBIES

Cessna 400 1.1m



INSTRUCTION MANUAL



Scan the QR code and select the Manuals and Support quick links from the product page for the most up-to-date manual information.

T0WA1475



NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit horizonhobby.com or towerhobbies.com and click on the support or resources tab for this product.

MEANING OF SPECIAL LANGUAGE

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

AGE RECOMMENDATION: Not for children under 14 years. This is not a toy.

Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.

- Never operate your model with low transmitter batteries.
- · Always keep aircraft in sight and under control.
- · Always use fully charged batteries.
- Always keep transmitter powered on while aircraft is powered.
- Always remove batteries before disassembly.
- Always keep moving parts clean.
- Always keep parts dry.
- · Always let parts cool after use before touching.
- Always remove batteries after use.
- Always ensure failsafe is properly set before flying.
- · Never operate aircraft with damaged wiring.
- Never touch moving parts.

Registration

Register your product today to join our mailing list and keep up to date with product updates, offers.

Table of Contents

Assembly4
Receiver Selection and Installation9
Battery Installation and ESC Arming10
Center of Gravity (CG)11
General Binding Tips and Failsafe12
Transmitter and Receiver Binding / Enable or Disable Safe Select12
Control Direction Test
AS3X Response Test14
Control Surface Centering and Adjusting a Ball Link15
Control Horn and Servo Arm Factory Settings15
Dual Rates and Control Throws15
In-Flight Trimming16
Post Flight16
Thrust Reversing (Optional)16
Motor Service17
Servo Service
Troubleshooting Guide AS3X17
Troubleshooting Guide18
Troubleshooting20
Replacement Parts20
Recommended Parts
Optional Parts20
Important Federal Aviation Administration (FAA) Information21
AMA National Model Aircraft Safety Code21
Limited Warranty22
Warranty and Service Contact Information
FCC Information
IC Information

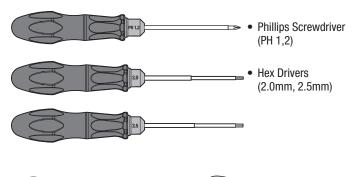
Specifications		
Wingspan	43.3" (1100mm)	
Length	27.56" (700mm)	
Flying Weight	27.8oz (788g)	

Included Equipment		
ESC	30-Amp, IC3 (TOWA147514)	
Motor	3530-1200kv Brushless Outrunner (TOWA147513)	
Proppeller	8 x 4.6E (TOWA147506)	
Servos	(6) 9g Sub-Micro	

Needed to Complete	
Transmitter	5 + Channel (not included)
Receiver	Spektrum ™ AR630 (SPMAR630) recommended (not included)
Flight Battery	1300mAh 3S 11.1V 30C; IC3 (SPMX13003S30M, Not included)

Optional Accessories		
SPMR8200	NX8 8 Channel DSMX Transmitter Only	
SPMXBC100	Checker and Servo Driver	
SPMXBC2050	S155 G2 Smart Charger	
SPMXCA300	Smart Lipo Bag, 16 x 7.5 x 6.5 cm	
ONXT1000	Ultimate Air/Surface Startup Tool Set	

Required Tools

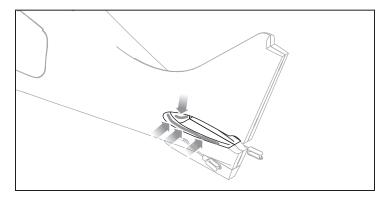


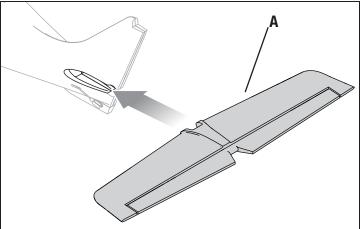


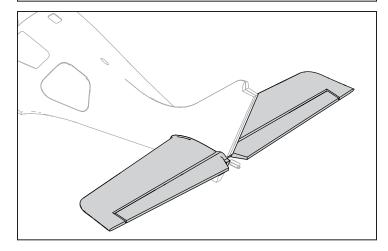
Assembly

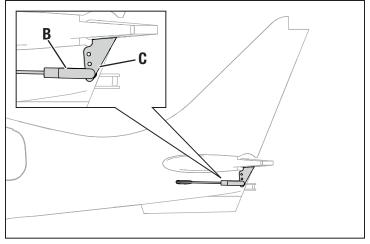
Horizontal Stabilizer Installation

- Apply medium CA glue to the opening in the rear of the fuselage.
 Slide the horizontal stabilizer (A) into position as shown.
 When the glue has cured, attach the elevator clevis (B) to the outer hole of the control horn (C).



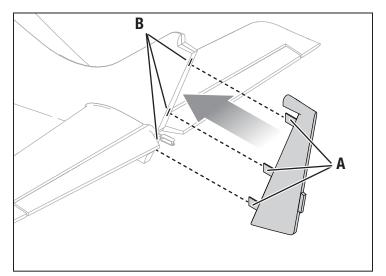


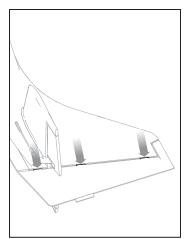


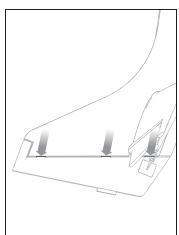


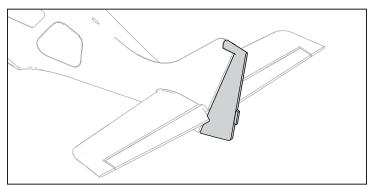
Rudder Installation

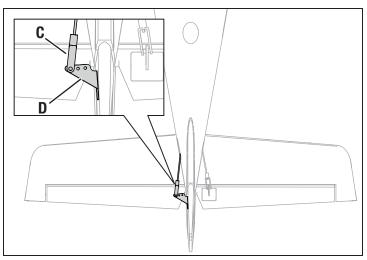
- Slide the rudder's CA hinges (A) in the hinge slots (B) of the vertical stabilizer, leaving a 0.5mm gap between the fin and rudder. Note the locations of the hinges before the next step. You may find it helpful to mark them with a piece of low-tack tape.
- 2. Lay the fuselage on its left side, with the vertical stabilizer horizontal.
- 3. Carefully apply 2-3 drops of thin CA to each hinge in the right side of the hingeline.
- 4. Check that no CA has run onto the fin or rudder surfaces while turning the fuselage over, then apply 2-3 drops of thin CA to the left side of each hinge.
- Check for CA drips, leave the fuselage on its side, and allow at least 30 minutes for the CA to penetrate and cure before handling or moving the rudder. Check carefully and allow more time if needed.





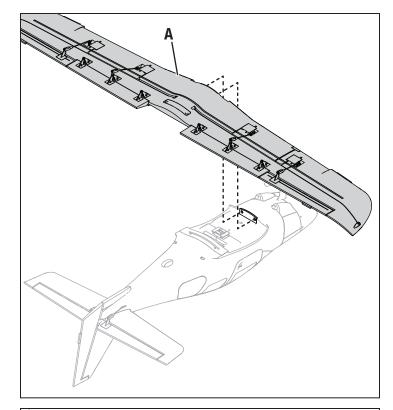


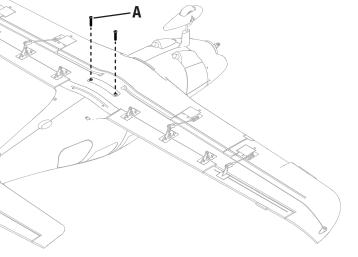




Wing Installation

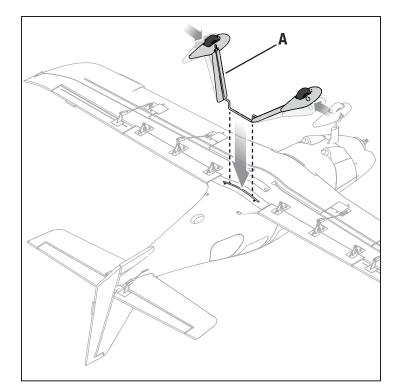
- Align the two tabs in the center of the wing (A) with the holes in the fuselage and slide the wing into place. Ensure the wing tip LEDs, aileron servos and flap servos connectors are free and accessible in the fuselage, and are not pinched between wing and fuselage when the wing is fully seated.
 Secure the wing in place using an M2.5 hex driver and the two M3 x 25mm socket-head cap screws provided (B).

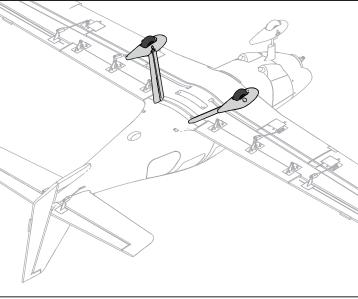




Landing Gear Installation

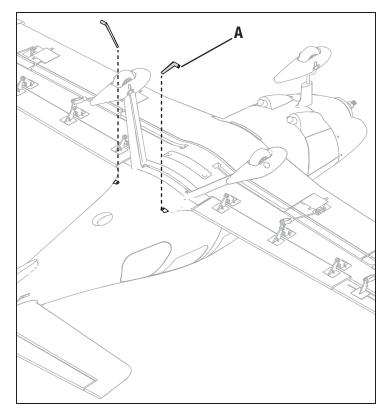
- Press the struts together slightly and rock side-to-side while inserting the landing gear assembly (A) into the slot on the bottom of the fuselage.
 Once the landing gear is fully seated in the slot release the landing gear, and confirm the landing gear is secure. No hardware is needed to retain the landing gear.

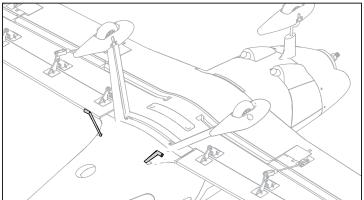




Foot Step Installation

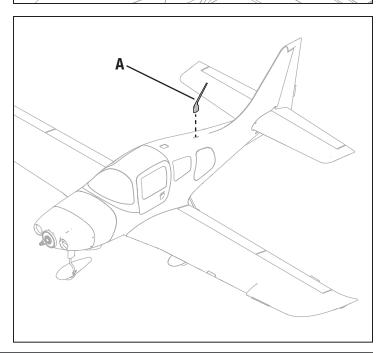
Apply a small amount of medium CA glue to the bottom of each foot step
 (A), and press it into the recess on the bottom of the fuselage just behind the trailing edge of the wing root.





Antenna Installation

1. Press the antenna into place in the recess located in the top of the fuselage. You may choose to use a small amount of adhesive if desired.

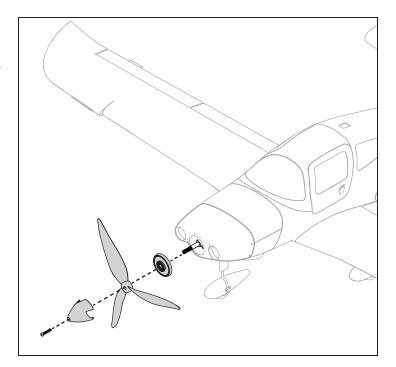


Failure to follow these safety precautions may result in severe injury to yourself and others.

- Wear safety glasses whenever in the proximity of a spinning propeller.
- Do not operate the motor in an area of loose gravel or sand; the propeller may throw such material in your face or eyes.
- Keep spectators as well as your own face and body out of the plane of rotation of the propeller.
- Never connect the battery to the ESC while indoors with the propeller installed.
- · Always remove the propeller when testing or making repairs to the model.
- · Always stay behind the arc of the propeller when handling the model.
- Always assume the motor may start unexpectedly when the flight battery is connected.
- Always remain outside the arc of the propeller when installing and/or removing the flight battery.
- Keep all loose clothing, long hair or any other loose objects such as pencils or screwdrivers that may fall out pockets away from the propeller.

Propeller Installation

- 1. Remove the nut and washer from the propeller shaft.
- 2. Install the spinner backplate and propeller on the propeller shaft.
- 3. Secure the propeller on the propeller shaft with the nut and washer.
- 4. Install the spinner cone over the propeller and secure in place using with the included M3 x 10mm spinner screw and a Phillips screwdriver.

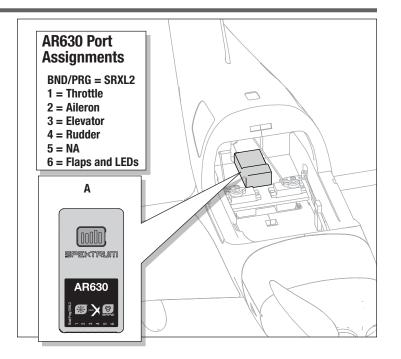


Receiver Selection and Installation

The recommended receiver for this aircraft is the Spektrum AR630. If you choose to install a different receiver, ensure that it is at least a 6-channel full range receiver. Refer to the manual of your chosen receiver for correct installation and operation instructions.

AR630 Installation

- 1. Remove the canopy to access the receiver compartment.
- 2. Connect the control surface servos to the their respective ports on the receiver using the table at the right.
- 3. Using double-sided servo tape (not included) mount the receiver to the flat area of the receiver compartment, as shown. The receiver (A) should be mounted in the orientation shown, parallel to the length of the fuselage, with the label facing up and the servo ports towards the front of the aircraft.



Battery Installation and ESC Arming

Battery Selection

We recommend the Spektrum 1300mAh 11.1V 3S 30C Li-Po battery (SPMX13003S30M). Refer to the Optional Parts List for other suitable batteries. If using a battery other than those listed, the battery should be within the range of capacity, dimensions and weight of the Spektrum Li-Po battery packs to fit in the fuselage. Be sure the model balances at the recommended CG.

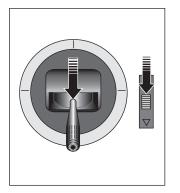
CAUTION: Always keep hands away from the propeller. When armed, the motor will turn the propeller in response to any throttle movement.

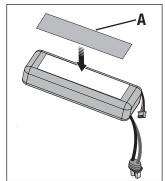
- Lower the throttle and throttle trim to the lowest settings. Power on the transmitter, then wait 5 seconds.
- 2. It is recommended to apply hook and loop tape (loop portion) (A) to the bottom of your battery.
- 3. Pull up and back on the canopy (B) to remove.
- 4. Install the fully charged battery (C) in the battery compartment as shown. See the Adjusting the Center of Gravity instructions for more information.
- 5. Secure the flight battery with the hook and loop straps (**D**).
- 6. Connect the battery to the ESC.
- Keep the aircraft level on its wheels, immobile and away from wind or the system will not initialize.

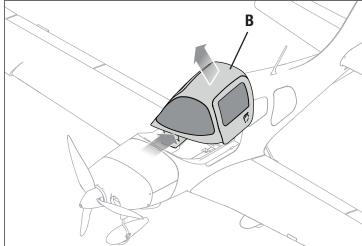
Once armed:

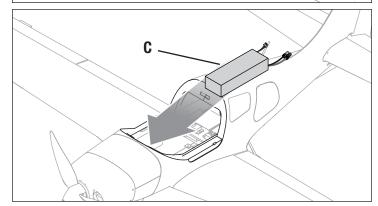
 The ESC will sound a series of tones (number of tones depend on the cell count of the battery).

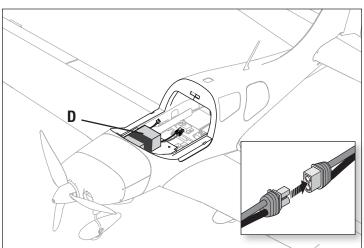
Reinstall the canopy.







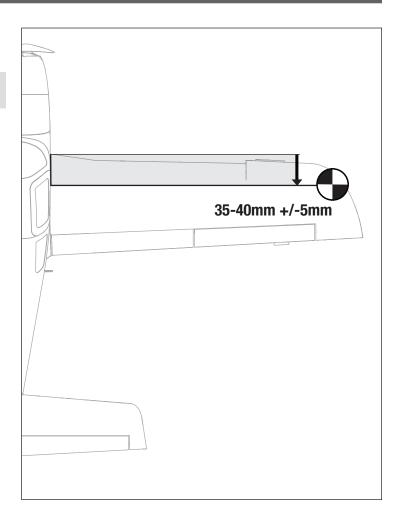




Center of Gravity (CG)

The CG location is measured from the leading edge where the wing meets the fuselage. This CG location has been determined with the recommended 3S 1300mAh battery (SPMX13003S30M). Check the CG with the model upright. Adjust the battery forward or aft as needed to achieve the proper CG location.

 $\begin{tabular}{ll} \textbf{CAUTION:} Install the battery but do not arm the ESC while checking the CG. \\ Personal injury may result. \\ \end{tabular}$



Control Direction Test

Switch on the transmitter and connect the battery. Use the transmitter to operate the aileron, elevator and rudder controls. View the aircraft from the rear when checking the control directions.

Elevator

- 1. Pull the elevator stick back. The elevators should move up, which will cause the aircraft to pitch up.
- 2. Push the elevator stick forward. The elevators should move down, which will cause the aircraft to pitch down.

Ailerons

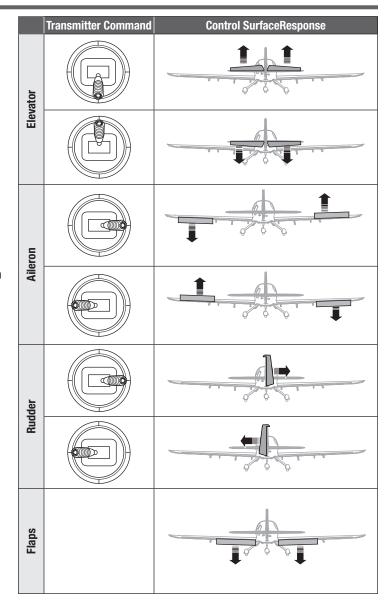
- 1. Move the aileron stick to the right. The right aileron should move up and the left aileron down, which will cause the aircraft to bank right.
- 2. Move the aileron stick to the left. The left aileron should move up and the right aileron down, which will cause the aircraft to bank left.

Rudder

- 1. Move the rudder stick to the right. The rudder should move to the right, which will cause the aircraft to yaw right.
- 2. Move the rudder stick to the left. The rudder should move to the left, which will cause the aircraft to yaw left.

Flaps

- 1. Move the flap control switch.
- 2. Confirm the flaps move down.



Control Surface Centering and Adjusting a Clevis

IMPORTANT: Perform the Control Direction Test before performing control surface centering.

While SAFE is inactive, mechanically center the control surfaces.

IMPORTANT: Correct operation of the SAFE system requires sub-trim and trim at 0.

After binding a transmitter to the receiver, set the trims and sub-trims to 0, ensure the servo arms are in the correct positions, then adjust the linkages to center the control surfaces.

Remove the clevis

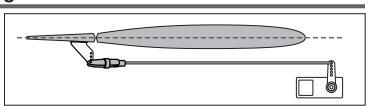
- 1. Slide the retaining tube off the clevis.
- 2. Carefully spread the clevis and remove the clevis pin from the control horn.

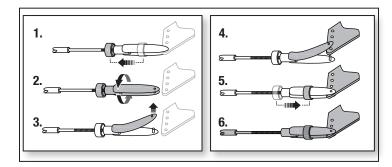
Adjust the clevis

3. Turn the clevis to adjust the length of the pushrod.

Re-install the clevis

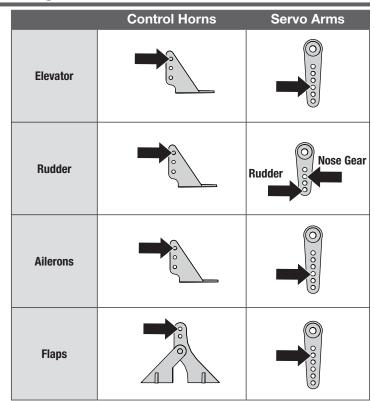
- 4. Carefully spread the clevis, then insert the clevis pin into the specified hole in the control horn.
- 5. Move the retaining tube to secure the clevis on the control horn.





Control Horn and Servo Arm Factory Settings

The table to the right shows the factory settings for the control horns and servo arms.



Dual Rates and Control Throws

Program your transmitter to set the rates and control throws to the values given. These values have been tested and are a good starting point to achieve successful flight.

After flying, you may choose to adjust the values for the desired control response.

	High Rate	Low Rate
Aileron	▲ = 10mm	▲ = 7mm
Alleiuli	▼ = 10mm	▼ = 7mm
Elevator	▲ = 8mm	▲ = 5mm
Elevator	▼ = 8mm	▼ = 5mm
Rudder	► = 12mm	▶ = 9mm
nuuuei	⋖ = 12mm	⋖ = 9mm
Flaps	▼ = 10mm	▼ = 20mm

In-Flight Trimming

During your first flight, trim the aircraft for level flight at 80-100% throttle. Make small trim adjustments with your transmitter's trim switches to achieve straight and level flight.

If the model does not track straight on the ground, adjust the nosewheel position by altering the length of the nosewheel pushrod. This is done at the quick connector on the rudder servo, with a 1.5mm hex driver. This allows adjustment of the nose wheel without affecting the rudder trim.

Post Flight

- 1. Disconnect the flight battery from the ESC
- 2. Power OFF the transmitter.
- 3. Remove the flight battery from the aircraft.
- 4. Recharge the flight battery.
- 5. Repair or replace all damaged parts.

- Store the flight battery apart from the aircraft and monitor the battery charge.
- Make note of the flight conditions and flight plan results, planning for future flights.

Motor Service

CAUTION: Always disconnect the flight battery before performing motor service.

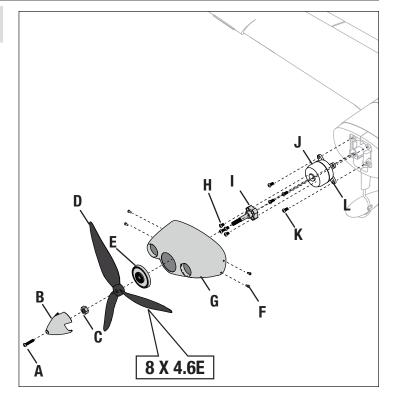
Disassembly

- Remove the spinner screw (M3 x 10mm hex machine screw) (A), spinner (B), propeller nut (M5) (C), propeller (D) and spinner back plate (E).
- 2. Remove 4 screws (M2 x 8mm hex self-tapping screws) (**F**) and remove the motor cowling (**G**).
- 3. Remove 3 screws (M2.5 x 7mm machine screws) (H) and remove the prop adapter (I) from the motor (J).
- 3. Remove the 4 screws (M3 x 12mm hex self-tapping screws) (K) from the motor mount (L).
- 4. Remove the motor and motor mount from the fuselage.
- 5. Disconnect the motor wires from the ESC wires.

Assembly

Assemble in reverse order.

- · Correctly align and connect the motor wire colors with the ESC wires.
- Install the propeller as shown.
- Tighten the spinner nut by using wrench.
- Tighten the spinner screw by using a Phillips #1 screwdriver.



Servo Service

Control Surface	Replacement Servo	Description	Replacement Adhesive
Elevator	T0WA147509	9g Sub-Micro Digital Servo; 90mm Lead	Deluxe Materials Foam 2 Foam (DLMAD34)
Rudder	T0WA147509	9g Sub-Micro Digital Servo; 90mm Lead	Deluxe Materials Foam 2 Foam (DLMAD34)
Aileron	T0WA147510	9g Sub-Micro Digital Servo; 300mm Lead	Deluxe Materials Foam 2 Foam (DLMAD34)
Left Flap	T0WA147511	9g Sub-Micro Digital Servo; 180mm Lead	Deluxe Materials Foam 2 Foam (DLMAD34)
Right Flap	T0WA147512	9g Sub-Micro Digital Servo; Reverse; 180mm Lead	Deluxe Materials Foam 2 Foam (DLMAD34)

Troubleshooting Guide

Problem	Possible Cause	Solution
	Throttle not at idle and/or throttle trim too high	Reset controls with throttle stick and throttle trim at lowest setting
Aircraft will not respond to throttle but responds to	Throttle servo travel is lower than 100%	Make sure throttle servo travel is 100% or greater
other controls	Throttle channel is reversed	Reverse throttle channel on transmitter
outer controls	Motor disconnected from ESC	Make sure motor is connected to the ESC
Fotos ausasilau asias au	Damaged propeller and spinner, prob adapter or motor	Replace damaged parts
Extra propeller noise or extra vibration	Propeller is out of balance	Balance or replace propeller
OXII a VIDI ation	Prop nut is too loose	Tighten the prop nut
	Flight battery charge is low	Completely recharge flight battery
Dodugod flight time or	Propeller installed backwards	Install propeller with numbers facing forward
Reduced flight time or aircraft underpowered	Flight battery damaged	Replace flight battery and follow flight battery instructions
anorari unacrpowerea	Flight conditions may be too cold	Make sure battery is warm before use
	Battery capacity too low for flight conditions	Replace battery or use a larger capacity battery
	Transmitter too near aircraft during binding process	Move powered transmitter a few feet from aircraft, disconnect and reconnect flight battery to aircraft
Aircraft will not Bind (during	Aircraft or transmitter is too close to large metal object, wireless source or another transmitter	Move aircraft and transmitter to another location and attempt binding again
binding) to transmitter	The bind plug is not installed correctly in the bind port	Install bind plug in bind port and bind the aircraft to the transmitter
	Flight battery/transmitter battery charge is too low	Replace/recharge batteries
	Bind switch or button not held long enough during bind process	Power off transmitter and repeat bind process. Hold transmitter bind button or switch until receiver is bound
	Transmitter too near aircraft during connecting	Move powered transmitter a few feet from aircraft, disconnect and
	process	reconnect flight battery to aircraft
	Aircraft or transmitter is too close to large metal	Move aircraft and transmitter to another location and attempt connecting
	object, wireless source or another transmitter	again
Aircraft will not connect (after binding) to transmitter	Bind plug left installed in bind port	Rebind transmitter to the aircraft and remove the bind plug before cycling power
(altor billarily) to transmitter	Aircraft bound to different model memory (ModelMatch™ radios only)	Select correct model memory on transmitter
	Flight battery/Transmitter battery charge is too low	Replace/recharge batteries
	Transmitter may have been bound to a different aircraft using different DSM protocol	Bind aircraft to transmitter
	Control surface, control horn, linkage or servo damage	Replace or repair damaged parts and adjust controls
	Wire damaged or connections loose	Do a check of wires and connections, connect or replace as needed
Control surface does not move	Transmitter is not bound correctly or the incorrect airplanes was selected	Re-bind or select correct airplanes in transmitter
	Flight battery charge is low	Fully recharge flight battery
	BEC (Battery Elimination Circuit) of the ESC is damaged	Replace ESC
Controls reversed	Transmitter settings are reversed	Perform the Control Direction Test and adjust the controls on transmitter appropriately
	ESC uses default soft Low Voltage Cutoff (LVC)	Recharge flight battery or replace battery that is no longer performing
Motor pulses then motor	Weather conditions might be too cold	Postpone flight until weather is warmer
loses power	Battery is old, worn out, or damaged	Replace battery
	Battery C rating might be too low	Use recommended battery

Troubleshooting

Problem	Possible Cause	Solution
Aircraft will not respond to the throttle	ESC is not armed	Lower throttle stick and throttle trim to lowest settings
but responds to other controls	Throttle channel is reversed	Reverse throttle channel on the transmitter
	Damaged spinner, propeller, motor or mount	Replace damaged parts
Extra propeller noise or vibration	Loose propeller and spinner parts	Tighten parts for propeller adapter, propeller and spinner
	Propellor installed backwards	Remove and install the propeller correctly
	Flight battery charge is low	Completely recharge flight battery
Reduced flight time	Propeller installed backwards	Remove and install the propeller correctly
or aircraft is underpowered	Flight battery damaged	Replace the flight battery and follow flight battery instructions
Control surface does not move, or is	Control surface, control horn, linkage or servo damage	Replace or repair damaged parts and adjust controls
slow to respond to control inputs	Wire damaged or connections loose	Do a check of connections for loose wiring
Controls reversed	Channels are reversed in the transmitter	Do the control direction test and adjust controls for aircraft and transmitter
Motor loses power or pulses then loses power	Damage to motor or battery	Do a check of batteries, transmitter, receiver, ESC, motor and wiring for damage and replace as needed
	ESC uses default soft Low Voltage Cutoff (LVC)	Land aircraft immediately and recharge the flight battery
		Check connection from the ESC to the receiver
LED on receiver flashes slowly	Power loss to the receiver	Check servos for damage
		Check linkages for binding

Replacement Parts

Part #	Description
T0WA147501	Fuselage: Cessna 400 1.1M
T0WA147502	Wing: Cessna 400 1.1M
T0WA147503	Landing Gear Set: Cessna 400 1.1M
T0WA147504	Canopy Hatch: Cessna 400 1.1m
T0WA147505	Horizontal Stabilizer: Cessna 400 1.1m
T0WA147506	Propeller; 8 x 4.6E: Cessna 400 1.1m
T0WA147507	Spinner: Cessna 400 1.1m
T0WA147508	Cowling: Cessna 400 1.1m
T0WA147509	9g Sub-Micro Digital Servo; 90mm Lead (Elevator, Rudder): Cessna 400 1.1m
T0WA147510	9g Sub-Micro Digital Servo; 300mm Lead (Aileron): Cessna 400 1.1m
T0WA147511	9g Sub-Micro Digital Servo; 180mm Lead (Left Flap): Cessna 400 1.1m
T0WA147512	9g Sub-Micro Digital Servo, Reverse; 180mm Lead (Right Flap): Cessna 400 1.1m
T0WA147513	Brushless Outrunner Motor; 3530-1200Kv, 14 Pole: Cessna 400 1.1m
T0WA147514	ESC; 30-Amp, IC3: Cessna 400 1.1m
T0WA147515	LED Light Set: Cessna 400 1.1m

Part #	Description
T0WA147516	Propeller Adapter: Cessna 400 1.1m
T0WA147517	Pushrod Set with Control Horns: Cessna 400 1.1m
T0WA147518	Servo Arm Set with Screws: Cessna 400 1.1m

Recommended Parts

Part #	Description
SPMAR630	AR630 DSMX 6-Channel AS3X, SAFE Receiver
SPMR7100	NX7e 7-Channel DSMX Transmitter
SPMX13003S30M	1300mAh 3S 11.1V Smart 30C; IC3
SPMXC2050	S155 G2 Smart AC Charger, 1 x 55W

Optional Parts

Part #	Description		
GEA133S45E3GT	11.1V 1300mAh 3S 45C LiPo: EC3		
SPMR8200	NX8 8 Ch DSMX Transmitter Only		

Important Federal Aviation Administration (FAA) Information

Use the QR code below to learn more about the Recreational UAS Safety Test (TRUST), as was introduced by the 2018 FAA Reauthorization Bill. This free test is required by the FAA for all recreational flyers in the United States. The completed certificate must be presented upon request by any FAA or law enforcement official. If your model aircraft weighs more than .55lbs or 250 grams, you are required by

the FAA to register as a recreational flyer and apply your registration number to the outside of your aircraft. To learn more about registering with the FAA, use the QR code below.





Recreational UAS Safety Test

FAA DroneZone

AMA National Model Aircraft Safety Code

Effective January 1, 2018

A model aircraft is a non-human-carrying device capable of sustained flight within visual line of sight of the pilot or spotter(s). It may not exceed limitations of this code and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and related AMA guidelines, any additional rules specific to the flying site, as well as all applicable laws and regulations.

As an AMA member I agree:

- I will not fly a model aircraft in a careless or reckless manner.
- I will not interfere with and will yield the right of way to all human-carrying aircraftusing AMA's See and Avoid Guidance and a spotter when appropriate.
- I will not operate any model aircraft while I am under the influence of alcohol
 or any drug that could adversely affect my ability to safely control the model.
- I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- I will fly Free Flight (FF) and Control Line (CL) models in compliance with AMA's safety programming.
- I will maintain visual contact of an RC model aircraft without enhancement other than corrective lenses prescribed to me. When using an advanced flight system, such as an autopilot, or flying First-Person View (FPV), I will comply with AMA's Advanced Flight System programming.
- I will only fly models weighing more than 55 pounds, including fuel, if certified through AMA's Large Model Airplane Program.
- I will only fly a turbine-powered model aircraft in compliance with AMA's Gas

Turbine Program.

- I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's Competition Regulation.
- I will use an established safety line to separate all model aircraft operations from spectators and bystanders.

Limited Warranty

What this Warranty Covers

Horizon Hobby, LLC, (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, (vi) Product not compliant with applicable technical regulations, or (vii) use that violates any applicable laws, rules, or regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

Law

These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

WARRANTY SERVICES

Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.

Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not

designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at https://www.horizonhobby.com/content/service-center_render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

NOTICE: Do not ship LiPo batteries to Horizon. If you have any issue with a LiPo battery, please contact the appropriate Horizon Product Support office.

Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Service

Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/service-center_render-service-center.

ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.

10/15

Warranty and Service Contact Information

Country of Purchase	Horizon Hobby	Contact Information	Address	
United States of America	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/RequestForm/		
	Horizon Product Support	productsupport@horizonhobby.com	2904 Research Rd	
	(Product Technical Assistance)	877-504-0233	Champaign, IL 61822	
	ISales	websales@horizonhobby.com		
		800-338-4639]	

FCC Information

Supplier's Declaration of Conformity Tower Cessna 400 1.1m PNP (TOWA1475)

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or

television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

Horizon Hobby, LLC 2904 Research Road Champaign, IL 61822

Email: compliance@horizonhobby.com

Web: HorizonHobby.com

IC Information

IC: 6157A-SPMAR630 CAN ICES-3 (B)/NMB-3(B)

This device contains license-exempt transmitter(s)/receivers(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following 2 conditions:

- 1. This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

