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Perfect Appearance Excellent Performance

980MM P-47G Razorback

Operating Manual

Specifications

Wingspan.....980 mm (38.6 in)
Length.....865 mm (34.0 in)
Weight (High Speed).....1200 g (42.3 oz)
Weight (Standard Speed).....1000 g (35.3 oz)
Wing Area.....16.8 dm^2 (261 in^2)
Wing Load (High Speed).....71.4 g/dm^2 (0.16 oz/in^2)
Wing Load (Standard Speed)...59.5 g/dm^2 (0.14 oz/in^2)
Radio Controls.....6 Channel

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WARNING

⚠ 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 and NOT a toy. 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.

This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

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. This model is controlled by a radio signal subject to interference from many sources outside your control. This interference can cause momentary loss of control so it is advisable to always keep a safe distance in all directions around your model, as this margin will help avoid collisions or injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

- Never operate your model with low transmitter batteries.
- Always operate your model in an open area away from cars, traffic or people.
- Avoid operating your model in the street where injury or damage can occur.
- Never operate the model in the street or in populated areas for any reason.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children.
- Moisture causes damage to electronics. Avoid water exposure to all equipment not specifically designed and protected for this purpose.
- Never lick or place any portion of your model in your mouth as it could cause serious injury or even death.

FMS Kindly Reminder

Thank you for purchasing a FMS model product. Our goal is to provide high quality products and offer great customer service. If you have any problems with your product or want to offer suggestions for improvements (such as plane design, packaging, building instructions, etc.) please feel free to contact us at

info@fmsmodel.com

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Safety

Lithium Polymer (Li-Po) Battery Warning
CAUTION: Always follow the manufacturer's instructions for safe use and disposal of batteries. Fire, property damage, or serious injury can result from the mishandling of Li-Po Batteries.

- By handling, charging or using a Li-Po Battery you assume all risks associated with lithium batteries.
- If at any time the batteries begin to swell, or balloon, discontinue use immediately! Charging or discharging a swelling or ballooning battery can result in fire.
- Always store the batteries at room temperature in a dry area to extend the life of the battery. Always transport or temporarily store the battery in a temperature range of 40-120F. Do not store the battery or model in a car or in direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.
- Never use a Ni-Mh Charger to charge Li-Po Batteries. Failure to charge the battery with a Li-Po compatible charger may cause fire resulting in personal injury and property damage.
- Never discharge Li-Po Cells below 3V.
- Never leave charging batteries unattended.
- Never charge damaged batteries.

Charging the Flight Battery Warning

- Use a battery charger that is designed to safely charge the Li-Po Battery. Read the charger instructions carefully before use. When charging the battery, make certain the battery is on a heat resistant surface. It is also highly recommended to place the Li-Po Battery inside a fire resistant charging bag readily available at hobby shops or online.

Introduction and History

The Republic P-47 Thunderbolt was the largest, heaviest, and most expensive fighter aircraft in history to be powered by a single piston engine. It was heavily armed with eight .50-caliber machine guns, four per wing. When fully loaded, the P-47 weighed up to eight tons, and in the fighter-bomber ground-attack roles, could carry five-inch rockets or a significant bomb load of 2,500 pounds. It could carry over half the payload of the B-17 bomber on long-range missions (although the B-17 had a far greater range).

The P-47, based on the powerful Double Wasp Engine, was very effective as a short-to-medium range escort fighter, in high-altitude air-to-air combat ,and when unleashed as a fighter-bomber, proved especially adept at ground attack in both the World War II European and Pacific Theaters.

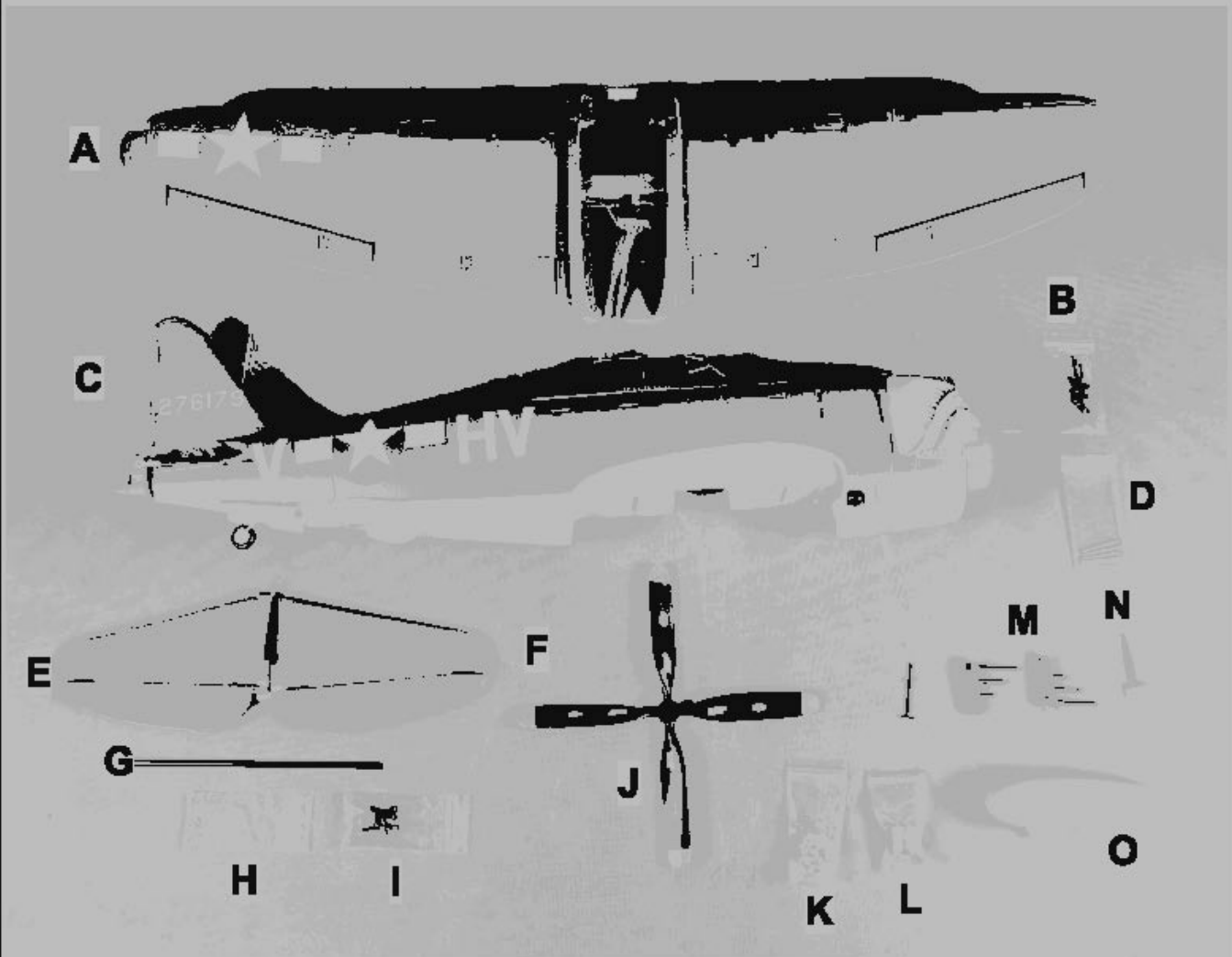
The P-47 was one of the main (USAAF) fighters of World War II, and served with other Allied air forces, notably those of France, Britain, and Russia. Mexican and Brazilian squadrons fighting alongside the U.S. were also equipped with the P-47.

The FMS 980mm P-47 Razorback is available in two versions. The High Speed version is capable of extreme speeds up to 100 mph while the Standard version offers a more scale like performance.

Contents of Kit

Before assembly, please inspect the contents of the kit. The photo below details the contents of the kit and labels the major components "A" thru "O" for your convenience. If any parts are missing or defective, please identify the name or part number (refer to the spare parts list near the end of the manual), then contact the FMS Team.

FMS Team Product Support
3/F, Building B, 3rd Industry Zone, Matigang, Dalingshan Town,
Dongguan City, P.R.C.
Phone: 0086-769-86976655
Email: info@fmsmodel.com



Additional Required Items

Tools and Adhesives

- ☐ Glue Brush

Transmitter/Receiver (required for PNP and kit version)
This model requires a 6 channel receiver and transmitter.

Battery/Charger (required for PNP and kit version)
A 14.8V 2200 mAh 25C Li-Po Battery is recommended for the High Speed (HS) version. An 11.1V 1800-2200mAh 25C Li-Po Battery is recommended for the Standard version. If using another battery, it must be the same voltage, approximately the same capacity, dimensions, and weight to fit in the fuselage without changing the center of gravity significantly. A standard Li-Po Battery Balancing Charger is required to safely charge the battery. Caution: Using a higher voltage Li-Po Battery than recommended could exceed the maximum capacity of the ESC and motor and result in ESC failure during flight. This would cause a complete loss of control creating a potentially dangerous condition.

Motor/ESC/Servos/Propeller (required for kit version only)
The HS kit version requires a brushless 3648-KV770 motor, a 70A ESC with 5A SBEC, (6) 9g digital metal gear servos, and a 10x8 four blade propeller. The Standard kit version requires a brushless 3536-KV750 motor, a 35A ESC with 5A SBEC, (4) 9g digital metal gear servos, and a 10x8 four blade propeller.

Assembly Instructions

The assembly instructions in this manual have been divided into logical steps. Check boxes have been placed in front of each step to help you keep track of your progress. Please read each step carefully, perform the task per the instructions, and mark when completed. If you are unavoidably interrupted before completing a step, it is advisable to make a detailed notation of any unfinished items to ensure the step is fully completed when you return to the task. Refer to the "Contents of Kit" photos if you need help identifying a part.

Install the aileron control horns

- ☐ 1) Locate the wing "A" and parts bag "B" which contains the aileron control horns, backing plate, screws, and control rod linkages.

- ☐ 2) Insert the control horns into the holes in the bottom surface of each aileron, with the horn pointing towards the hinge line of the wing (fig. 1). Place the control horn backing plate on the top side of the aileron surface. Using the provided screws, secure each control horn from the backing plate side. (fig. 2)

fig. 1

fig. 2

Connect the aileron control rod linkages

☐ 3) Slide the provided piece of fuel tubing over the control rod linkage and then insert the control rod linkage thru the desired hole in the aileron servo arm (fig. 3). Note: For a single rate transmitter use the first hole to achieve a high rate setting. Use the third hole nearest the servo to achieve a low rate setting.

☐ 4) Press the hole in the clevis over the end of the control rod linkage, rotate it and snap the base of the clevis over the control rod linkage (fig. 4).

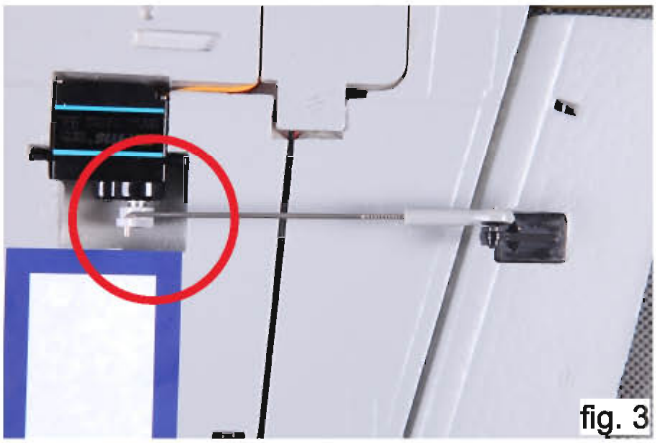


fig. 3

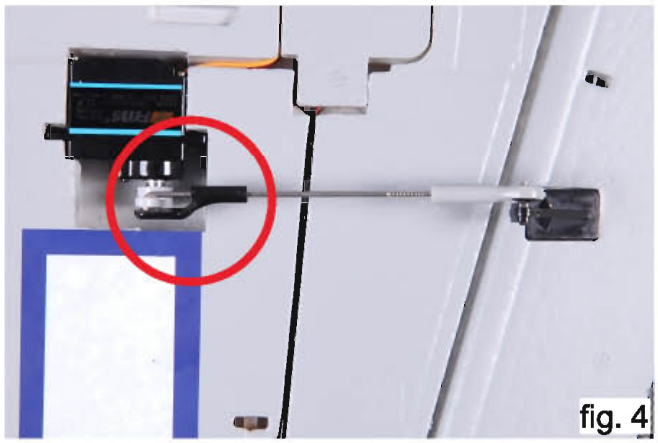


fig. 4

☐ 5) Slide the fuel tubing over the clevis to secure it (fig. 5). Note: Do not slide the fuel tubing too far or binding of the servo arm could result (fig. 6). Repeat steps 3-5 for the other aileron control rod linkage.

Connect the flap control rod linkages(HS version only)

☐ 6) Connect the flap control rod linkages in the same manner as the aileron control rod linkages.

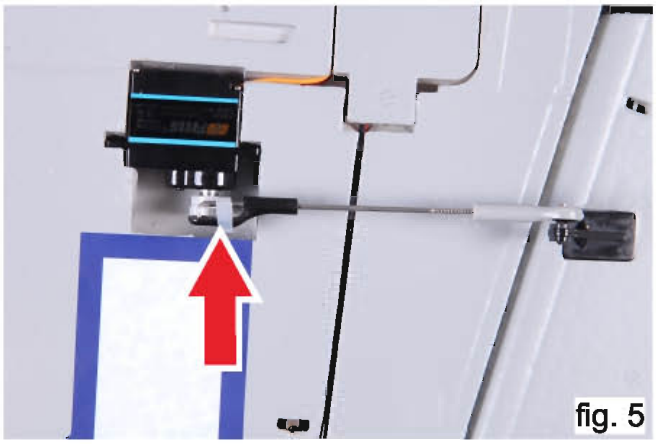


fig. 5

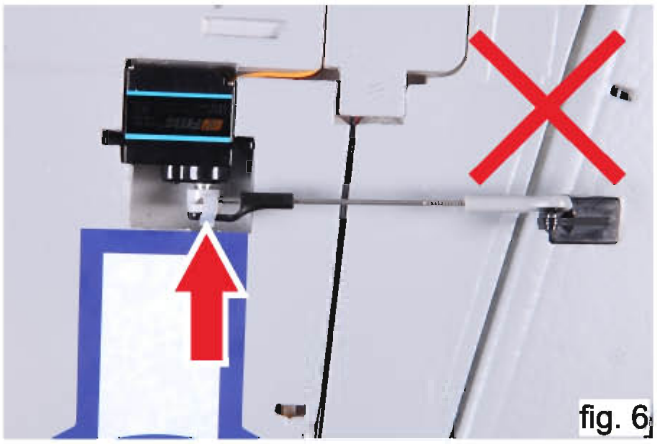


fig. 6

Install the Wing

☐ 7) Locate the fuselage “C”, remove the canopy, and turn the fuselage over so the bottom side is facing up (fig. 7).

☐ 8) Begin to install the wing by guiding the servo leads thru the opening in the bottom of the fuselage as you lower the wing into position (fig. 8).

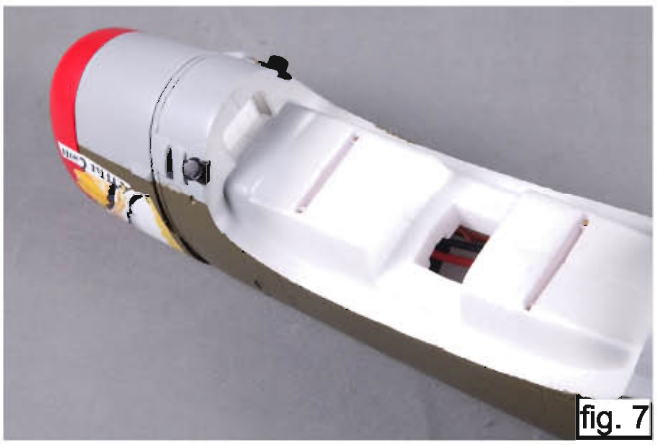


fig. 7

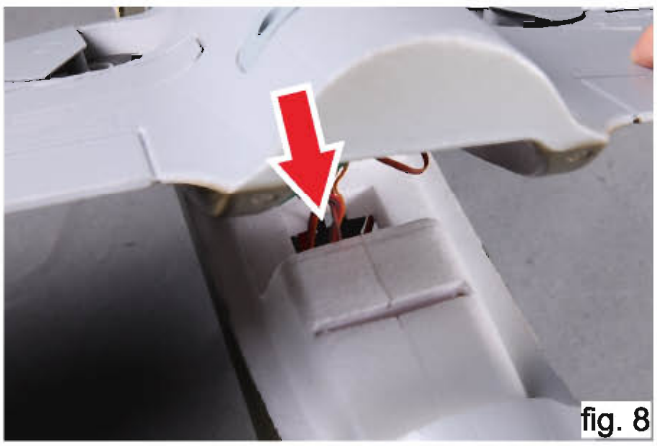


fig. 8

☐ 9) Insert the nose on the leading edge side of the wing into the notch in the fuselage (fig. 9). Continue to guide the servo leads thru the opening in the fuselage by pulling on them from the canopy side of the fuselage as you fully seat the wing in position.

☐ 10) Secure the wing with the four provided machine screws “D” (fig. 10).

fig. 9

fig.10

Install the horizontal stabilizer

☐ 11) Locate the left half of the horizontal stabilizer “E”. Align the notch in the stabilizer with the plastic tongue protruding from the fuselage (fig. 11).

☐ 12) Press the left half of the horizontal stabilizer into position (fig. 12).

fig.11

fig.12

☐ 13) Insert the fiberglass connecting tube “G” into the left side stabilizer (fig. 13). Slide the tube approximately halfway in. Do not force it in farther than it will slide. This will push the connecting tube into the foam and prevent it from fully inserting into the right side stabilizer half.

☐ 14) While holding the left side stabilizer in place, guide the right side stabilizer “F” over the connecting tube and align the notch with the plastic tongue (fig. 14).

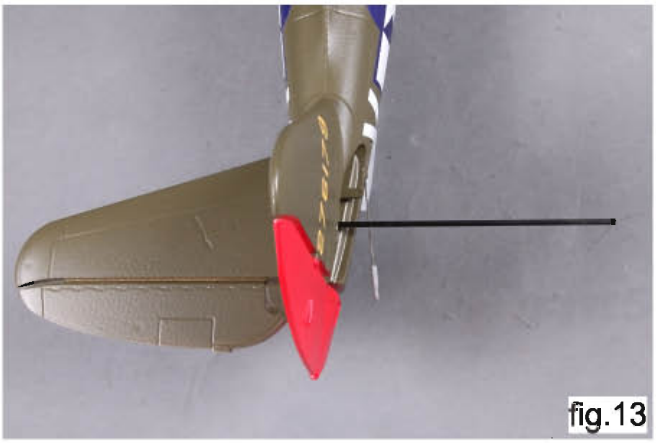


fig.13

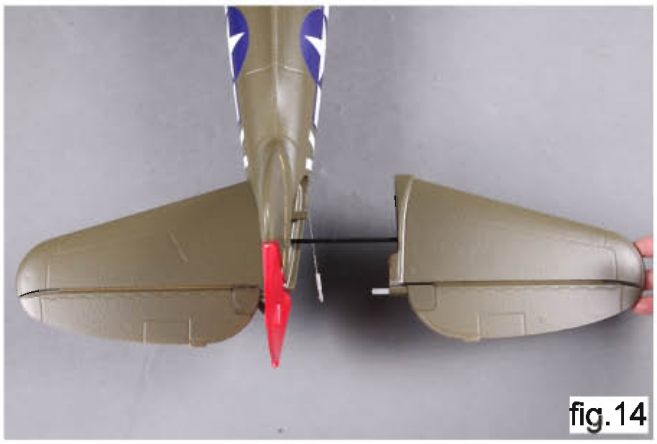


fig.14

☐ 15) Press the right side stabilizer into place (fig. 15).

☐ 16) Turn the fuselage over. Secure the horizontal stabilizer with the two supplied screws from bag “H” (fig. 16).

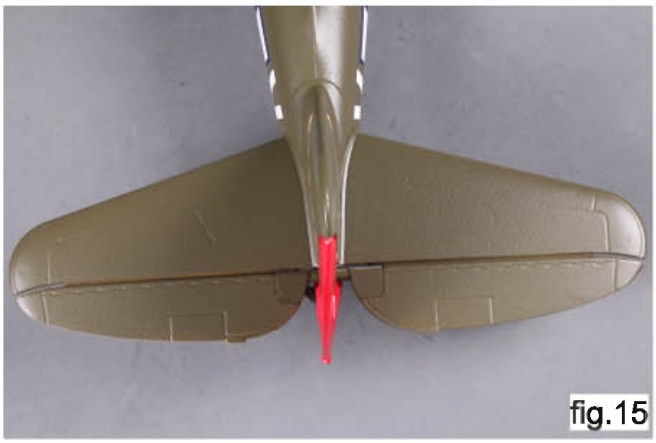


fig.15

fig.16

☐ 17) Connect the left and right elevator surfaces by installing the provided screw from bag “H” as shown (fig. 17).

fig.17

Connect the elevator control rod linkages

☐ 18) Press the socket-style linkage connectors over the corresponding ball end on the two control horns located on the underside of the elevator. Use the two supplied screws from bag "I" to secure them in place (fig.18).

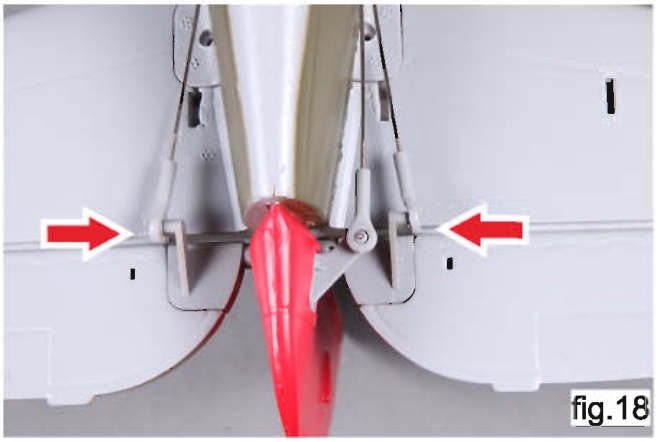


fig.18

Attach the hub to the propeller

☐ 19) Using the two pieces from bag "K", place the side with a hex shaped notch on the back side of the propeller. There is no writing on the back side of the propeller (fig. 19). Place the other half of the hub on the front side of the propeller "J" (fig. 20).

fig.19

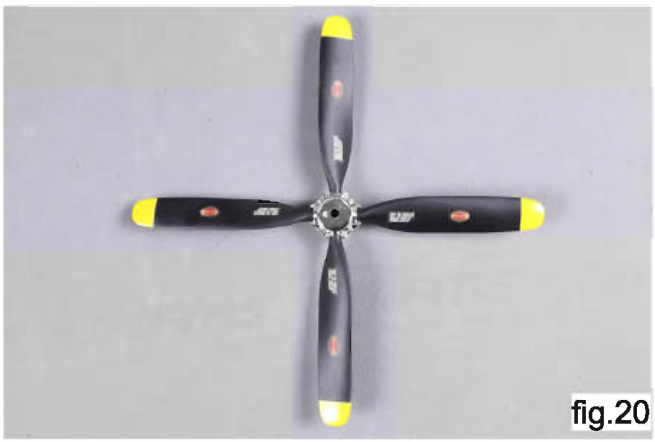


fig.20

Receiver Connection

☐ 20) Connect the labeled leads per the receiver connection diagram (fig. 21). There is a Y-harness for the ailerons and a connection board for the retractable gear and LED lights that must be used to combine the leads prior to making a connection to the receiver (fig. 22).

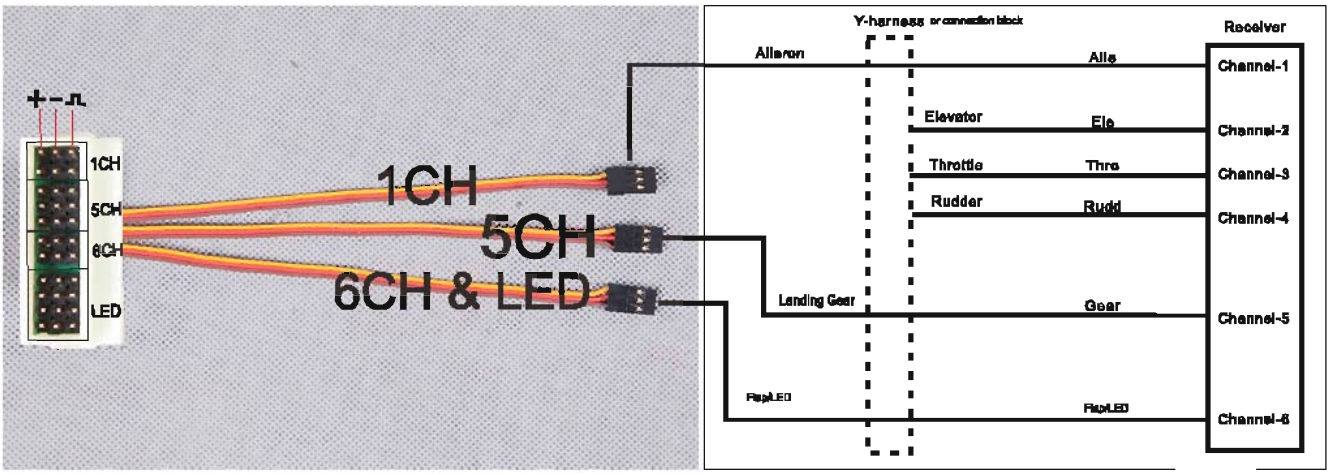


fig.21

Install the battery

- 21) Insert the battery into the battery compartment as shown (fig. 23). Secure the battery in place with the hook and loop strap. please notice the high speed and standard speed battery position, the standard speed is more forward than the high speed.

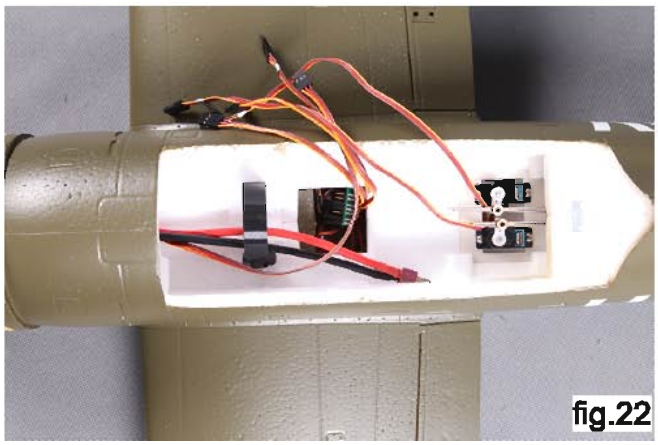


fig.22

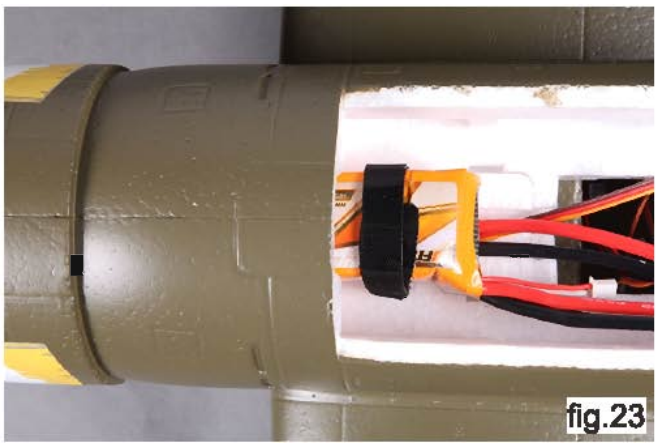
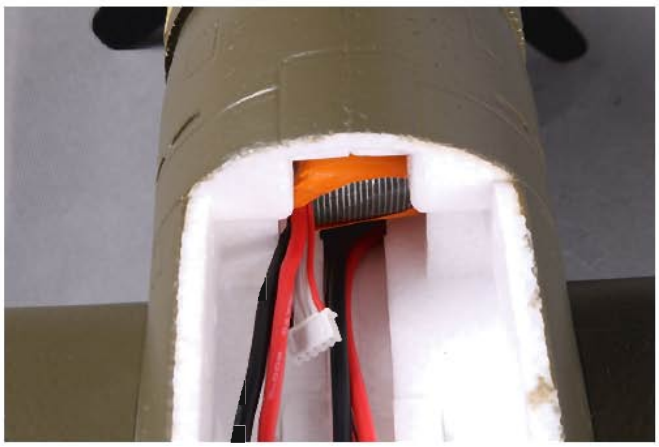


fig.23

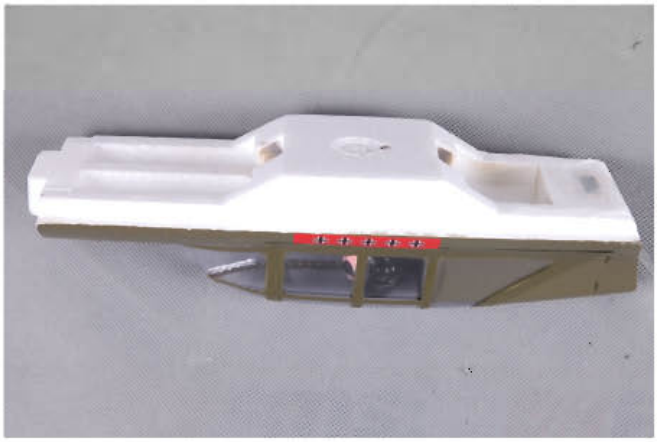
High speed battery position



Standard speed battery position

□ 22) Notice the canopy between high and standard speed is different, if you want to update to high speed from standard speed, please cut the block foam at the front of the standard speed canopy to make sure the big battery can fit it.

Standard speed canopy.



High speed canopy

Generic Binding Instructions

Binding is the process of programming your receiver to respond to your specific transmitter. Always follow your radio equipment manufacturer's specific binding instructions. Below is a typical generic procedure for reference:

1. Power off the transmitter.
2. Set the throttle control on the transmitter to its lowest position (all other controls should be at their neutral position).
3. Install binding plug in receiver bind port.
4. Connect the battery to the ESC.
5. The receiver LED will flash rapidly.
6. Turn on the transmitter while holding the bind button or switch in the bind position.
7. When the receiver binds, the LED on the receiver will turn on and remain steady.
8. Remove the binding plug from the receiver.

Note: We recommend re-binding the radio after all the control throw settings are adjusted. This will keep the servos from moving full stroke while the transmitter and receiver connect.

ESC Information

Please refer to the separate ESC Manual for detailed information about your programmable ESC.

Motor Rotation

The motor and ESC comes pre-connected. The direction of motor rotation should be counterclockwise (fig. 24). If the motor is rotating in the wrong direction, simply reverse two of the three motor wires to change the direction of rotation.

fig.24

Control Surfaces

Center Adjustment (trim)

1. Follow all safety precautions as outlined in this manual and your transmitter manufacturer's manual, including setting the throttle to the off position.
2. Turn on the transmitter and plug in the ESC battery.
3. Center all the trim controls on the transmitter.
4. Look at all the control surfaces to determine which ones need adjustment.
5. Unplug the ESC battery and turn off the transmitter before attempting any adjustments.
6. Adjust clevises as necessary to center control surfaces to their neutral position.
7. Repeat steps 1 thru 4 to verify adjustments.
8. If more adjustment is required, repeat steps 5 and 6 until process is completed.

Please see the following for reference; ailerons (fig. 25), rudder, elevator and, rear landing gear (fig. 26). Note: the rudder and rear landing gear neutral position is adjusted by loosening one of the screws on the control connector and moving the linkage rod. Tighten the screw when the adjustment is complete (fig. 27). The other control surfaces are adjusted by disconnecting the appropriate end of the control rod linkage and turning the threaded connector on the linkage rod.

fig.25

fig.26

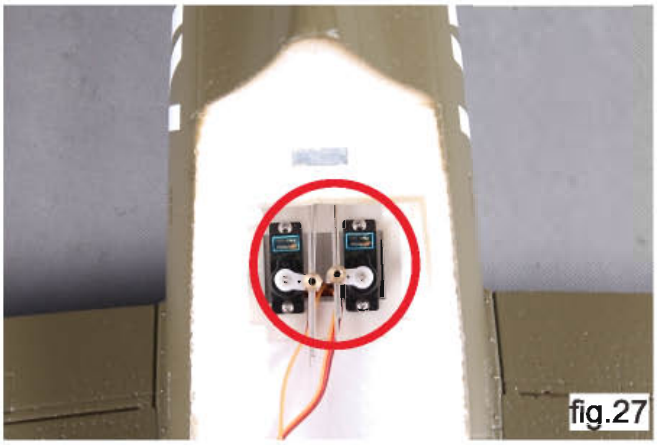


fig.27

Direction Check
Turn on your transmitter and receiver. Viewing the model from the rear, move the controls on the transmitter per the instructions that follow and verify the control surfaces are responding in the appropriate direction. You may have to reverse the direction of one or more channels on your transmitter to correct any issues.

1. Move the left joystick to the right. The rudder should move to the right. Move the joystick to the left. The rudder should move to the left. Reverse channel on transmitter if necessary.
2. Move the right joystick down towards the bottom of the transmitter. The elevator should move up. Move the joystick towards the top of the transmitter. The elevator should move down.
3. Move the right joystick to the right. The right aileron should go up. The left aileron should go down. Move the joystick to the left. The right aileron should go down. The left aileron should go up.

Travel Settings (throw)
Adjust the throw by moving the clevis position on the control surface horns. A commercially available gauge is helpful in this task though not required. If you have a single rate transmitter, adjust throws to low rate settings. If you have a dual rate transmitter, adjust the throws to achieve high rate settings.

<u>Aileron Control Throw Setting (low rate)</u>
10 mm up/down (fig. 28-30). Pictures are for reference only on how to use the gauge.

fig.28

fig.29

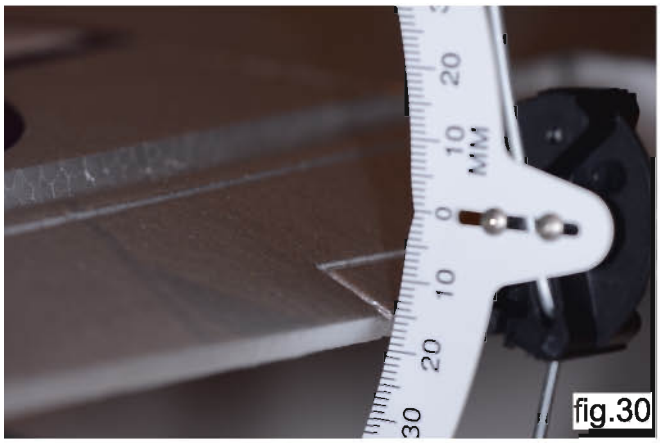


fig.30

Elevator Control Throw Setting (low rate)
8 mm up/down

Rudder Control Throw Setting (low rate)
7 mm left/right

Flap Control (HS version only) Throw Setting
10 mm mid down
25 mm full down
Note: Measure the throw (deflection) at the widest point (chord) of each control surface.

Dual Rates and Exponential Recommendations
On many transmitters, dual rates can be setup for aileron, elevator, and rudder channels. If your transmitter is capable, designate a switch on the transmitter to change between a low and high rate of servo travel for each channel. Low rates are for normal flying. High rates are for extreme aerobatics.

To use dual rates, the control surface throw settings should be set to equal the high rate settings. When the transmitter switch is in the high rate position, the control surface will travel 100%. When the transmitter switch is in the low rate position, the servo will travel less than 100% (a percentage that you determine) to make the control surface throw equal to the low rate deflection.

Aileron high rate	20 mm up/down
Elevator high rate	15 mm up/down
Rudder high rate	12 mm left/right

Final Assembly, Detailing, and Propeller Set

- ☐ 1) Locate the machine gun sets “M”. Test fit one of the gun sets on the leading edge side of the wing. Match the color and taper of top side of the wing to the corresponding color and taper of the gun set (fig. 31). Each gun set only fits correctly on one side.

- ☐ 2) Once you have determined where each gun set fits, remove them, apply glue evenly, and re-install (fig.32).

fig.31

fig.32

☐ 3) Evenly apply a small amount of glue on the antenna "N" and insert it into the corresponding slot on the top of the fuselage behind the canopy (fig.33).

☐ 4) Slide the external fuel tank "O" into the slot on the bottom of the fuselage as shown (fig.34). Note: This step is optional as the external fuel tank could reduce performance.

fig.33

fig.34

Install the Propeller Assembly

☐ 5) Prior to installing the propeller assembly, balancing is recommended. There are commercially available balancers for this task. Please follow the manufacturer's instructions carefully.

☐ 6) Key the propeller assembly to the motor shaft by fitting the assembly over the hex nut on the shaft (fig. 35).

☐ 7) Secure the propeller assembly by installing the spinner nut "L" on the motor shaft (fig. 36)

fig.35

fig.36

Center of Gravity

Before balancing your model, make sure the it is completely assembled, the battery is installed, and the retractable landing gear is in the lowered position. The recommended center of gravity (CG) for your model is 50-55 mm from the wing's leading edge (measured at point of contact with fuselage). Lightly mark the ideal center of gravity position on the top surface of the wing on each side of the fuselage. Support the plane inverted at the marks made on the top of the wing with your fingers or a commercially available balancing stand. It should be level or just slightly nose down. Adjust the position of battery as necessary to achieve the proper balance.

Pre-flight Checklist

Prior to first flight:

1. Ensure your transmitter and ESC batteries are fully charged per manufacturer's instructions.
2. Ensure propeller is properly secured.
3. Ensure receiver and ESC battery are secure.
4. Check all control surface actuating hardware (linkages, screws, nuts, bolts, etc.)
5. Perform a range test on the radio equipment.
6. Check control surfaces for proper direction and throw.
7. Check center adjustment of each control surface.
8. With someone holding the aircraft, start the motor and make sure it runs smoothly and in a CCW direction when viewed from the front. Ensure it will transition from off to high throttle and back to off.

Flight Safety

1. Do not fly in strong winds or bad weather.
2. Never fly in crowded areas near people, cars, buildings, power lines, airports, etc. The plane can travel at high speed so choose a wide open space and give yourself plenty of room to operate. Remember you are responsible for the safety of others.
3. Not recommended for children under 14 years of age. Children under 12 must have adult supervision.
4. Never use or leave the battery charger in a wet environment.
5. Keep the model away from heat which can easily destroy the foam structure of the plane, the electronics, or the battery.
6. Do not attempt to catch the model while flying.
7. Stay clear of the propeller at all times, even when it is not moving because the transmitter could easily be bumped and cause the propeller to move without warning.
8. Never leave the model unattended with a battery installed. Injury could be caused by children or unaware adults turning on the transmitter.
9. When preparing for flight, turn the transmitter on and ensure the throttle is off before connecting the battery.

Daily Flight Checks

Prior to first flight:

1. Check condition of major components. Ensure wing, tail, motor, and landing gear are secure.
2. Check condition of propeller.
3. Check all control surface actuating hardware (linkages, screws, nuts, bolts, etc.)
4. Check the voltage on the transmitter and ESC batteries.
5. Perform a range test on the radio equipment.
6. Check control surfaces for proper direction and throw.
7. Check center adjustment of each control surface.

Post flight:

1. Disconnect ESC battery
2. Turn off transmitter
3. Remove ESC battery from model.
4. Recharge ESC battery.
5. Store ESC battery away from model in fire proof container.
6. Repair or replace any damaged parts on the model airplane.

Maiden Flight Tips

If this is your first RC Model Airplane, you may want to seek the help of an experienced pilot to assist you on the first flight. You can usually find people that are happy to assist at a local RC Club. You can also inquire at your local hobby shop. Often hobby shop employees will know where to go locally for flight assistance.
Whether you are a new or experienced pilot, the maiden flight for any new RC model can often be challenging. Even if you have followed all the instructions exactly and adjusted all the control surfaces to their neutral positions, the model will likely need to be "trimmed out". Once you have the plane in the air, immediately climb to a safe altitude. Many RC Pilots will tell you that a safe altitude is "three mistakes high". Reduce throttle to half. Put the plane on a straight and level trajectory. While trimming, hold your transmitter up high near eye level; this will make it easier to see your plane and your trim settings at the same time. The goal of trimming the plane is to adjust it so it will maintain straight and level flight with no control inputs. For example, if the plane climbs, add down elevator trim. If it dives, add up trim. You may also need to adjust rudder trim (and aileron trim if applicable). Make as many passes as necessary, putting the plane on a straight and level trajectory and making required trim corrections until the plane flies straight and level.

Monitor and limit your flight time using a timer (in your transmitter if available, or a wrist watch). To avoid a dead-stick landing on your first flight, conservatively set the timer to four minutes. When you hear the alarm, land your plane as soon as possible.

Routine Maintenance

Store Li-Po batteries at room temperature in a dry environment in a fire proof container. Periodically check the cell voltage. Do not let the voltage drop below the manufacturer's recommended minimum storage voltage (typically around 3.3V per cell).

Repairs to foam should be made with foam safe adhesives such as hot glue, foam safe CA, and 5 min epoxy.

Troubleshooting Guide

Troubleshooting Guide		
Problem	**Possible Causes**	**Solution**
Receiver will not bind to transmitter	Transmitter is too close to the receiver	Move transmitter a few feet away from receiver and then unplug and reconnect the ESC battery
	Transmitter or receiver is too close to a large metal object	Move transmitter a few feet away from receiver and then unplug and reconnect the ESC battery
	ESC battery or Transmitter battery is not charged	Charge ESC battery or Transmitter battery
	Bind plug installed incorrectly in receiver	Follow manufacturer's instructions for binding and re-bind receiver
Control Surface(s) will not move	Transmitter/receiver not bound correctly	Re-bind receiver to transmitter per manufacturer's instructions
	Incorrect model selected on transmitter	Select correct model on transmitter
	Loose connection	Check battery, ESC, and receiver connections
	Control linkage, clevis, horn not connected, binding or damaged	Check all control linkage connections
	Servo damaged	Replace servo
	ESC battery or Transmitter battery is not charged	Recharge/replace batteries
Control Directions reversed	Transmitter servo direction settings are reversed	Perform Control Surfaces Direction Test and reverse transmitter settings as necessary
Model responds to all controls except throttle	Throttle channel is reversed	Reverse throttle channel setting on transmitter
	Throttle is not at idle or trim is too high on transmitter	Move throttle stick and trim to lowest setting
Motor pulses then loses power	Low ESC battery charge or damaged battery	Re-charge/replace ESC battery
	Battery "C" rating too small	Use proper battery
Excessive noise or vibration at high throttle	Damaged propeller or motor	Replace damaged part
	Propeller is not balanced	Replace defective propeller
Model underpowered or has a reduced flight time	Propeller installed backwards	Install propeller with numbers facing towards you
	Propeller rotation direction incorrect	Perform Control Surfaces Direction Test and reverse transmitter settings as necessary
	ESC battery charge is too low or battery damaged	Recharge/replace battery
Model will not climb	Elevator trim not adjusted correctly	Adjust elevator trim
Model keeps turning in same direction	Rudder trim not adjusted correctly	Adjust rudder trim
	Aileron trim not adjusted correctly	Adjust aileron trim
Model is difficult to control	Wing or tail damaged	Repair/replace as necessary
	Center of Gravity incorrect	Check center of gravity and correct as necessary. Make sure battery is secure (not moving in flight)
	Inadequate or excessive control throw settings	Verify control throws are at recommended settings

Customer Support and Spare Parts Contact Information

FMS Team Product Support
3/F, Building B, 3rd Industry Zone, Matigang, Dalingshan Town,
Dongguan City, P.R.C.
Phone: 0086-769-86976655
Email: info@fmsmodel.com

Spare Parts List

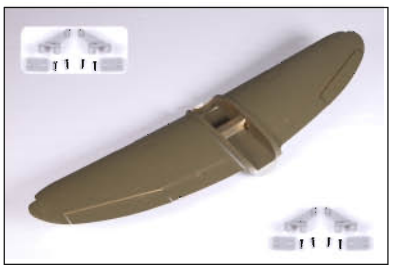
Replacement parts for the FMS P-47 Razorback are available using the order numbers in the spare parts list that follows. The fastest, most economical service can be provided by your hobby dealer or mail-order company.

Spare parts list content

SS 101 Fuselage (With all the plastic parts and rudder installed)
SS 102 Main wing set (With the control horn in stored)
SS 103 Horizontal stabilizer (With the elevator connector installed)
SS 104 Cockpit
SS 105 Cowl
SS 106 Spinner
SS 107 Propeller
SS 108 Oil Tank
SS 109 Machine Gun
SS 110 Airspeed Head
SS 111 Wing bolt plate
SS 112 Antenna
SS 113 Motor Mount
SS 114 Motor Board
SS 115 Main Landing Gear Set
SS 116 Main Landing Grear System
SS 117 Rear Landing Gear Set
SS 118 The outer fairing door
SS 119 Motor Shaft (3536-kv750)
SS 120 Motor Shaft (3648-kv770)
SS 121 Linkage Rod
SS 122 Screw Set
SS 123 Decal Sheet
SS 124 Pipe
SS 125 LED
SS 126 Lamp Cover
SS 127 E-retract
FMS-Motor-3536 Kv750
FMS-Motor-3648 Kv770
FMS-ESC-35A 3A SBEC
FMS-ESC-70A 3A SBEC
FMS-Servo-9g metal
Note: All of the parts are painted with no decal applied.

Spare Parts Illustration

SS-101



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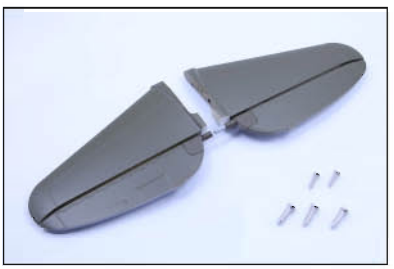

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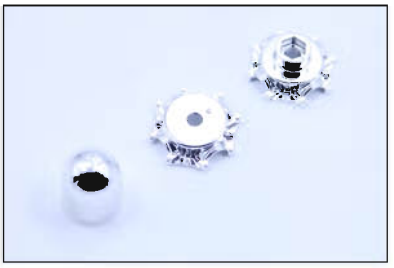

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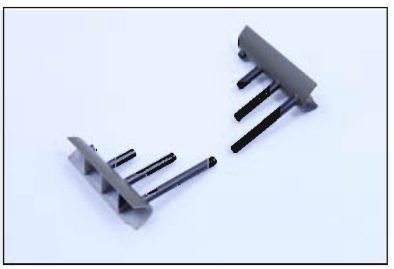

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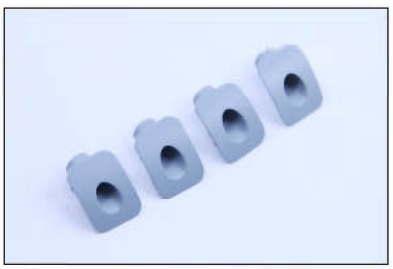

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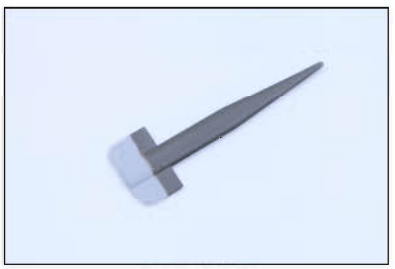

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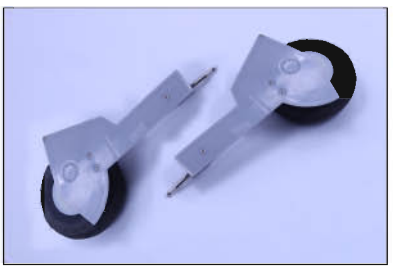

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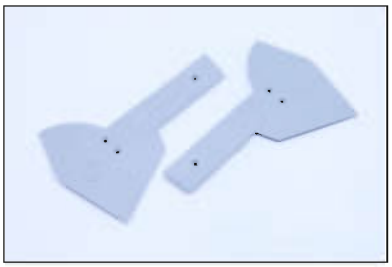

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SS-119

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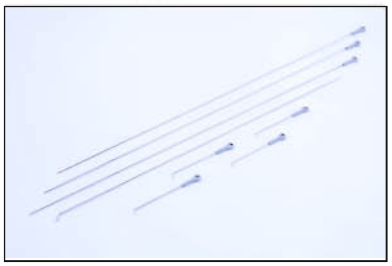

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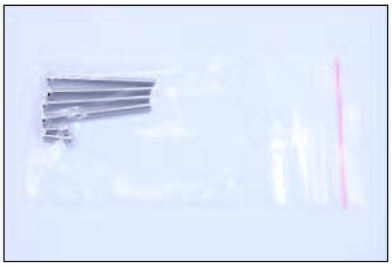

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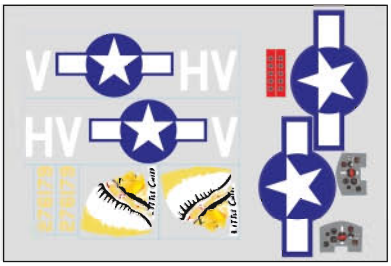

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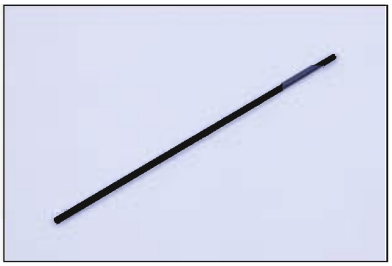

SS-124

SS-125

SS-126

SS-127

FMS-Motor-3536 Kv750

FMS-Motor-3648 Kv770

FMS-ESC-35A 3A SBEC

FMS-ESC-70A 3A SBEC

FMS-Servo-9g metal

AMA

If you are not already a member of the AMA, please join, The AMA is the governing body of model aviation and membership provided liability insurance coverage, protects modelers' rights and interests and is required to fly at most R/C sites.

Academy of Model Aeronautics
5151 East Memorial Drive
Muncie, IN 47302-9252
Ph.(800)435-9262
Fax(765)741-0057
Or via the Internet at: http//www.modelaircraft.org

Academy of Model Aeronautics National Model Aircraft Safety Code
Effective January 1, 2011

A. GENERAL: A model aircraft is a non-human-carrying aircraft capable of sustained flight in the atmosphere. It may not exceed limitations of this code and is intended exclusively for sport, recreation and/or competition.
All model flights must be conducted in accordance with this safety code and any additional rules specific to the flying site.

1. Model aircraft will not be flown:
   (a) In a careless or reckless manner.
   (b) At a location where model aircraft activities are prohibited.
2. Model aircraft pilots will:
   (a) Yield the right of way to all man carrying aircraft.
   (b) See and avoid all aircraft and a spotter must be used when appropriate. (AMA Document #540-D-See and Avoid Guidance.)
   (c) Not fly higher than approximately 400 feet above ground level within three (3) miles of an airport, without notifying the airport operator.
   (d) Not interfere with operations and traffic patterns at any airport, heliport or seaplane base except where there is a mixed use agreement.
   (e) Ensure the aircraft is identified with the name and address or AMA number of the owner on the inside or affixed to the outside of the model aircraft. (This does not apply to model aircraft flown indoors).
   (f) Not operate aircraft with metal-blade propellers or with gaseous boosts except for helicopters operated under the provisions of AMA Document #555.
   (g) Not operate model aircraft while under the influence of alcohol or while using any drug which could adversely affect the pilot's ability to safely control the model.
   (h) Not operate model aircraft carrying pyrotechnic devices which explode or burn, or any device which propels a projectile or drops any object that creates a hazard to persons or property.

Exceptions:

- Free Flight fuses or devices that burn producing smoke and are securely attached to the model aircraft during flight.
- Officially designated AMA Air Show Teams (AST) are authorized to use devices and practices as defined within the Team AMA Program Document (AMA Document #718).

3. Model aircraft will not be flown in AMA sanctioned events, air shows or model demonstrations unless:
   (a) The aircraft, control system and pilot skills have successfully demonstrated all maneuvers intended or anticipated prior to the specific event.
   (b) An inexperienced pilot is assisted by an experienced pilot.
4. When and where required by rule, helmets must be properly worn and fastened. They must be OSHA, DOT, ANSI, SNELL or NOCSAE approved or comply with comparable standards.

B. RADIO CONTROL (RC)

1. All pilots shall avoid flying directly over unprotected people, vessels, vehicles or structures and shall avoid endangerment of life and property of others.
2. A successful radio equipment ground-range check in accordance with manufacturer's recommendations will be completed before the first flight of a new or repaired model aircraft.
3. RC model aircraft must use the radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly licensed by the FCC are authorized to operate equipment on Amateur Band frequencies.
4. RC model aircraft will not operate within three (3) miles of any pre-existing flying site without a frequency-management agreement (AMA Documents #922-Testing for RF Interference; #923- Frequency Management Agreement)
5. With the exception of events flown under official AMA Competition Regulations, excluding takeoff and landing, no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flight line.
6. Under no circumstances may a pilot or other person touch a model aircraft in flight while it is still under power, except to divert it from striking an individual. This does not apply to model aircraft flown indoors.
7. RC night flying requires a lighting system providing the pilot with a clear view of the model's attitude and orientation at all times.
8. The pilot of a RC model aircraft shall:
   (a) Maintain control during the entire flight, maintaining visual contact without enhancement other than by corrective lenses prescribed for the pilot.
   (b) Fly using the assistance of a camera or First-Person View (FPV) only in accordance with the procedures outlined in AMA Document #550.

C. FREE FLIGHT

1. Must be at least 100 feet downwind of spectators and automobile parking when the model aircraft is launched.
2. Launch area must be clear of all individuals except mechanics, officials, and other fliers.
3. An effective device will be used to extinguish any fuse on the model aircraft after the fuse has completed its function.

FMS

Email:info@fmsmodel.com
Http://www.fmsmodel.com

http://www.facebook.com/FMSmodel

www.fmsmodel.com

MADE IN CHINA