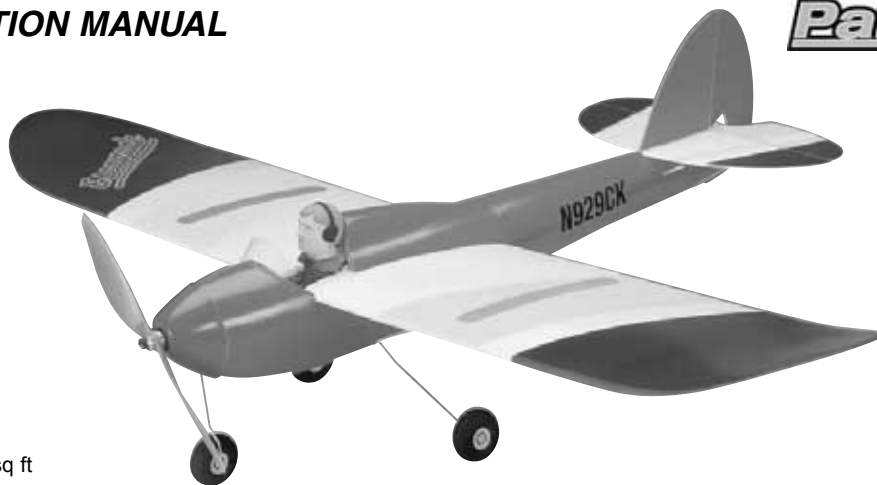




Escapade™

INSTRUCTION MANUAL

Park Flyers™



Wing Span - 39.5 in
Wing Area - 288 sq in
Weight - 13 oz
Wing Loading - 6.5 oz/sq ft
Fuse Length - 26 in



WARRANTY

Great Planes® Model Manufacturing Co. guarantees this kit to be free from defects in both material and workmanship at the date of purchase. This warranty does not cover any component parts damaged by use or modification. **In no case shall Great Planes' liability exceed the original cost of the purchased kit.** Further, Great Planes reserves the right to change or modify this warranty without notice.

In that Great Planes has no control over the final assembly or material used for final assembly, no liability shall be assumed nor accepted for any damage resulting from the use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting liability.

If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

GREAT PLANES MODEL MANUFACTURING COMPANY

P.O. Box 788
Urbana, IL 61803
(217) 398-8970

WWW.GREATPLANES.COM

READ THROUGH THIS MANUAL BEFORE STARTING CONSTRUCTION. IT CONTAINS IMPORTANT INSTRUCTIONS AND WARNINGS CONCERNING THE ASSEMBLY AND USE OF THIS MODEL.

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INTRODUCTION

Thank you for purchasing the Great Planes Escapade. The Escapade is a lightweight, slow-flying *Park Flyer* that can be flown just about anywhere there is an open area clear of obstacles. Since the Escapade is constructed mostly of molded plastic foam, it is durable and does not require the application of film coverings used on wood models. And since the Escapade features tricycle landing gear, ROG (rise off ground) takeoffs from smooth surfaces are a snap.

PROTECT YOUR MODEL, YOURSELF & OTHERS...FOLLOW THESE IMPORTANT SAFETY PRECAUTIONS

1. Although the Escapade is a slow-flying electric powered model, just the same as any R/C plane, it should still be flown with care. Even while gliding with the motor off the Escapade could possibly cause injury to yourself or spectators and damage property.

2. You must assemble the Escapade **according to the instructions**. Modifications may reduce performance. In cases where the instructions differ from the photos, the written instructions are correct.

3. You must use an R/C radio system that is reliable and in good condition. You must properly install all components so that the model operates correctly on the ground and in the air.

4. You must check the operation of the model before **every** flight to insure that all equipment is operating and that the model has remained structurally sound.

We, as the kit manufacturer, provide you with a top quality kit and instructions, but ultimately the quality and flyability of your finished model depends on how you build it; therefore, we cannot in any way guarantee the performance of your completed model, and no representations are expressed or implied as to the performance or safety of your completed model.

Remember: Take your time and follow the instructions to end up with a well-built model that is straight and true.

Before starting to build, compare the parts in this kit with the Parts List, and note any missing parts. Also

inspect all parts to make sure they are of acceptable quality. If any parts are missing, broken or defective, or if you have any questions about building or flying this airplane, please call us at (217) 398-8970, or e-mail us at productsupport@greatplanes.com. If you are contacting us for replacement parts, please be sure to provide the full kit name (Great Planes Escapade) and the part numbers as listed in the Parts List.

You can also check our web site at www.greatplanes.com for the latest Escapade updates.

To make your R/C modeling experience totally enjoyable, if this is your first R/C model, we recommend that you get the assistance of an experienced pilot. If you're not currently a member of an R/C club, your local hobby shop has information about clubs in your area whose membership includes experienced pilots.

If you're not already an Academy of Model Aeronautics (AMA) member, we strongly urge you to join. There are over 2,500 AMA chartered clubs across the country. Among other benefits, the AMA provides insurance to its members who fly at sanctioned sites and events. Additionally, training programs and instructors are available at AMA club sites to

help you get started the right way. Contact the AMA at the address or toll-free phone number below:



Academy of Model Aeronautics

5151 East Memorial Drive
Muncie, IN 47302-9252

Tele. (800) 435-9262

Fax (765) 741-0057

Or via the Internet at:

<http://www.modelaircraft.org>

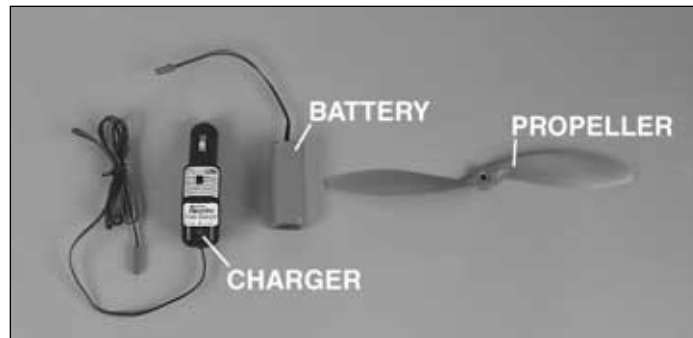
ADDITIONAL ITEMS REQUIRED

Flight Equipment



The Escapade requires a three-channel radio with two micro servos, a receiver and a speed control. Hobbico® CS-5

Nano™ servos (HCAM0090), the Hitec Feather receiver (HRCL1535) and the Great Planes C-5 (GPMM2000) or C-10 speed control (GPMM2010) are recommended. The receiver comes without a crystal, which must be purchased separately. The order number for the crystal is HRCL23**. Substitute the “**” with the channel number you require. For example, if the transmitter you plan to fly the Escapade with is on channel 44, order receiver crystal HRCL2344.



Additionally, an 8-cell (7.2 volt) 150 to 350 mAh battery pack (GPMP0050 – 150 mAh, shown in photo, GPMP0060 – 270 mAh, GPMP0070 – 350 mAh) and an APC 9 x 6 Slo-Flyer propeller (APCQ5013) are required. For charging the battery, the Great Planes ElectricFly Peak Charger (GPMM3000) is recommended.

Building Supplies

In addition to common household tools, here is the list of items used to build the Escapade.

- 30-minute epoxy (GPMR6047)
- 1/2 oz. Medium CA+ (GPMR6007)
- Hobby knife (HCAR0105)
- #11 blades (HCAR0211)
- Builder's triangle (HCAR0480)

- Drill and 1/16" drill bit
- Cellophane tape (for hinging elevator and rudder)
- Double-sided foam tape (GPMQ4440) for mounting receiver and speed control
- Sandpaper and sanding block
- Soldering iron and electrical solder
- Modeling paint and paintbrush for painting pilot (optional)
- Small Phillips screwdriver (#1)
- Small T-pins (HCAR5100) or craft pins

Metric Conversions

1/64" = .4mm

1/32" = .8mm

1/16" = 1.6mm

3/32" = 2.4mm

1/8" = 3.2mm

5/32" = 4mm

3/16" = 4.8mm

1/4" = 6.4mm

3/8" = 9.5mm

1/2" = 12.7mm

5/8" = 15.9mm

3/4" = 19mm

1" = 25.4mm

2" = 50.8mm

3" = 76.2mm

6" = 152.4mm

12" = 304.8mm

15" = 381mm

18" = 457.2mm

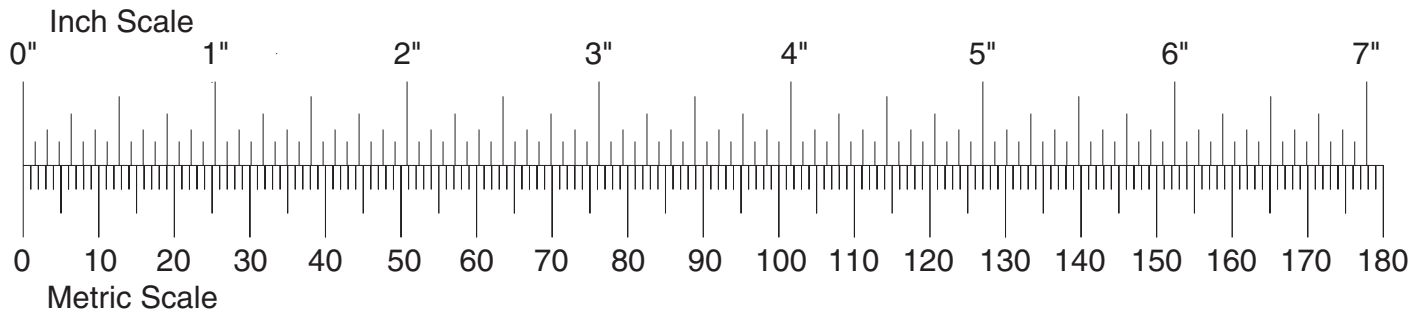
21" = 533.4mm

24" = 609.6mm

30" = 762mm

36" = 914.4mm

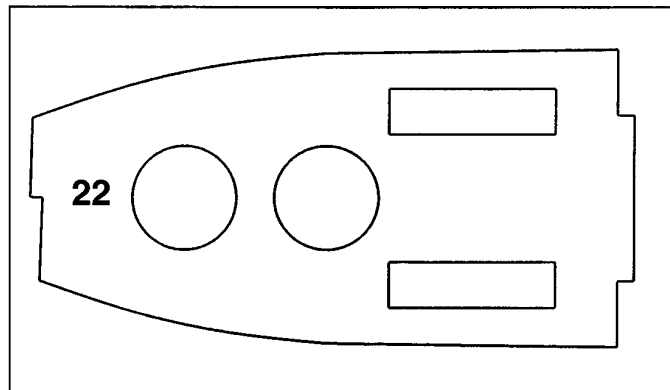
To convert inches to millimeters, multiply inches by 25.4



PARTS DRAWINGS (not actual size)

3/32" Balsa

#22 Crutch



3/32" Balsa

#14 Servo Trays (2)

Battery Holder Parts:

#17

#18

#19

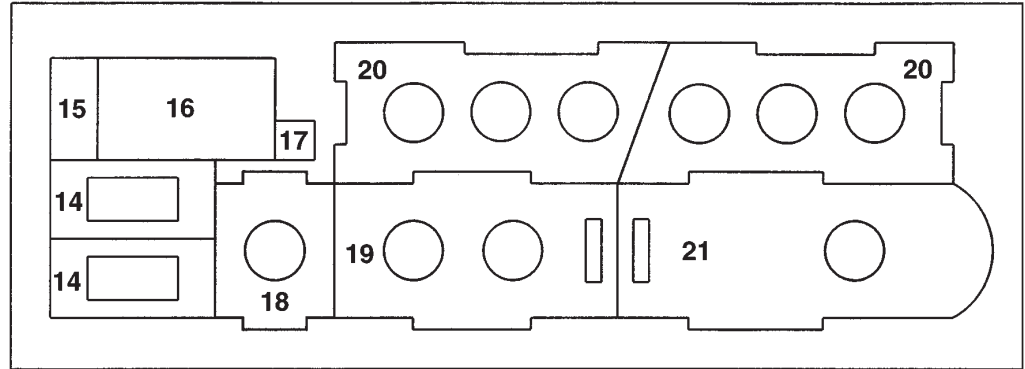
#20 (2)

#21

Battery Holder Cover Parts:

#15

#16



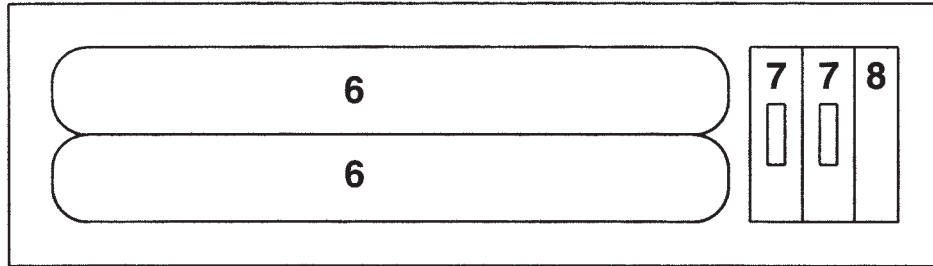
Optional Wing Struts (material not included, see page 21)

OPTIONAL REAR WING STRUT

OPTIONAL FRONT WING STRUT

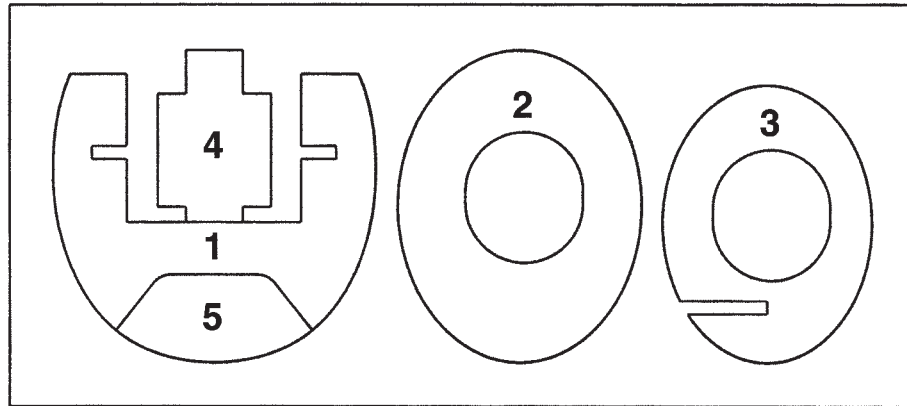
1/32" Plywood

- #6 Wing Braces (2)
- #7 (2)
- #8 Tab



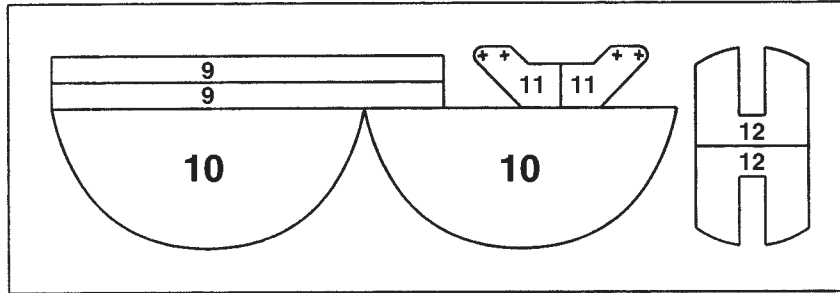
3/32" Plywood

- #1 Landing Gear Former
- #2 Firewall
- #3 Front Former
- #4 (2)
- #5 Retainer

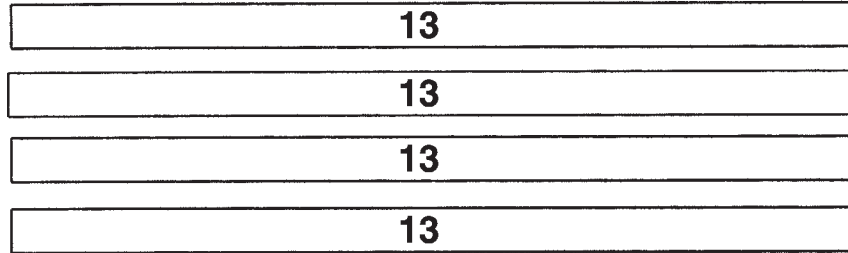


1/32" Plywood

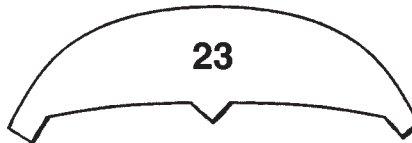
- #9 Tail Struts (2)
- #10 Doublers (2)
- #11 Control Horns (2)
- #12 Spacers (2)



- 1/16" Balsa**
- #13 Wing Struts (4)



- #23 Clear Plastic
Windscreen

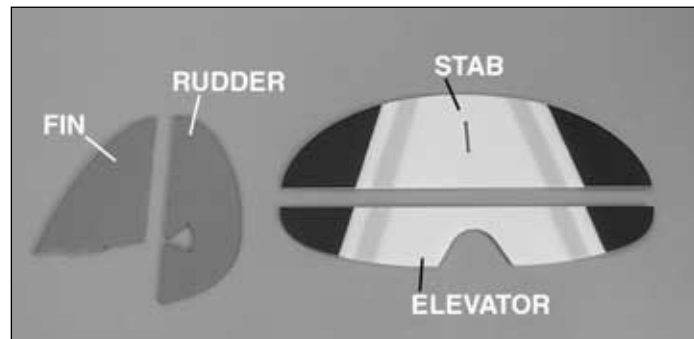


IMPORTANT BUILDING NOTES

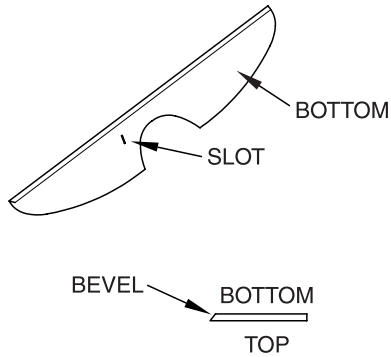
- Since the Escapade is made mostly of foam, and since CA adhesives commonly used to build R/C model airplanes dissolve foam, CA should not be used when gluing foam parts. Therefore, 30-minute epoxy, which is compatible with foam, is used for most of the construction. Unless otherwise specified in the instructions, 30-minute epoxy is to be used for gluing all parts of the model together. There are a few instances where CA may be used for gluing wood to wood.
- For the strongest bond apply epoxy to both parts being joined.
- Before beginning construction, refer to the parts drawings and use a ballpoint pen to write the part number on all the wood parts.

ASSEMBLY

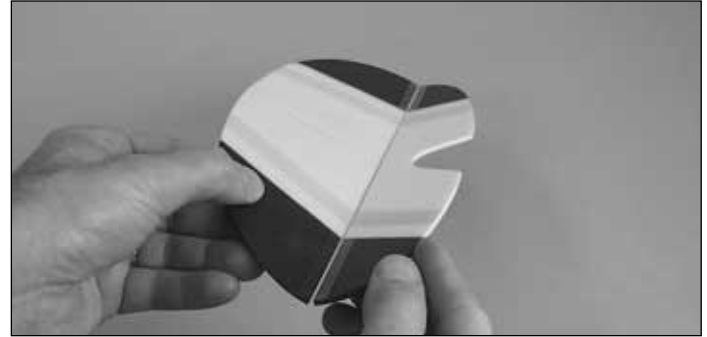
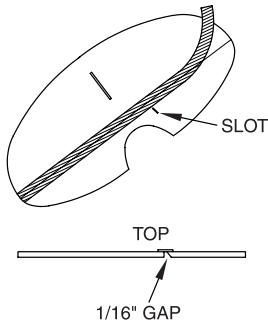
Assemble the Tail Surfaces



1. Using the precut lines as a guide, use a sharp hobby knife to cut the **rudder** from the **fin** and the **elevator** from the **stabilizer (stab)**.



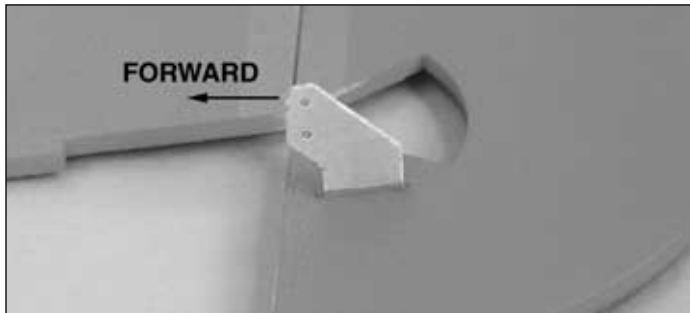
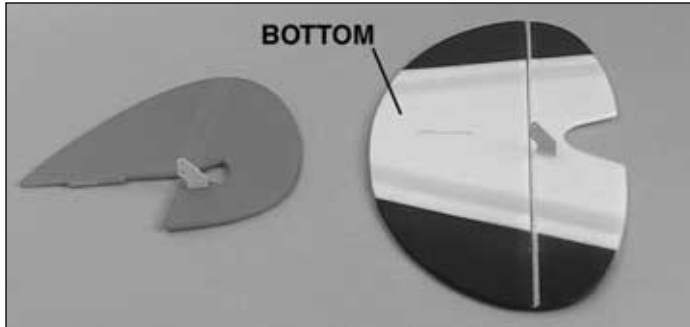
- ❑ 2. Sand a bevel to the **bottom** of the leading edge of the elevator. The elevator is upside-down when the slot for the control horn is on the **left** side.



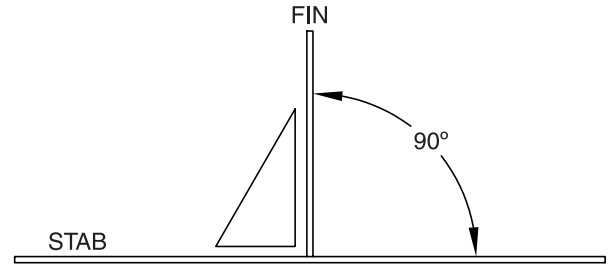
- ❑ 3. Lay the stab and elevator on your workbench with the slot in the elevator on the right side. Be certain there is a $1/16$ " gap between the elevator and the stab. Use one piece of cellophane tape on the top to join the elevator to the stab.

- ❑ 4. Sand a bevel to one side of the rudder (it doesn't matter which side), then use cellophane tape to join the rudder to the fin just the same as you joined the elevator to the stab.

- ❑ 5. Use a hobby knife to carefully widen the slot in the rudder and the elevator for the $1/32$ " plywood **control horns (11)**. Only a small sliver of foam is to be removed.

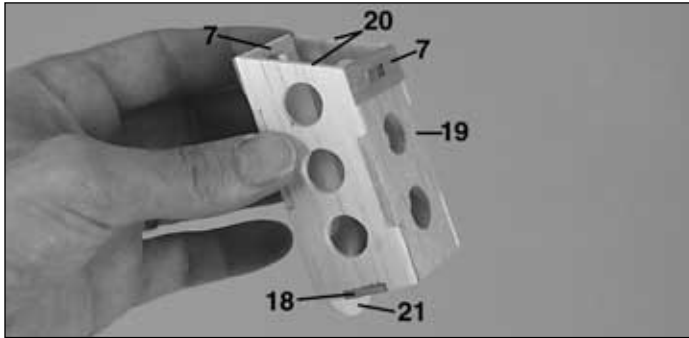
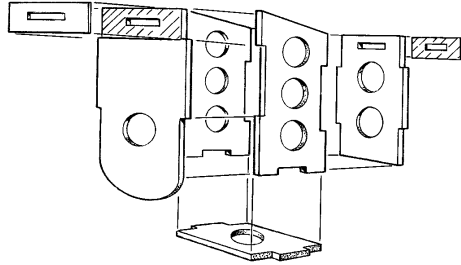


❑ 6. Glue the control horns into the slots. Be certain the elevator control horn is on the **bottom** and the rudder control horn is on the **left** (the stab and elevator are shown upside-down in the photo). Also be certain the control horns are facing forward.

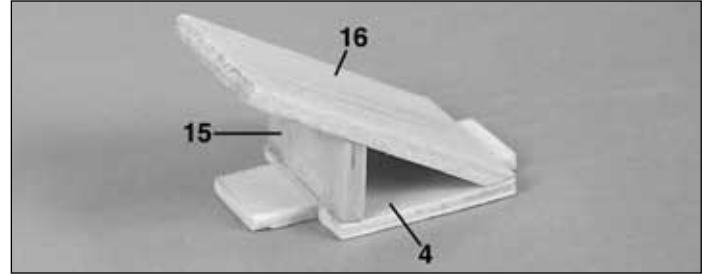


❑ 7. Use epoxy to glue the fin to the stab. Use a small builder's square to get the fin perpendicular to the stab, then use tape or small T-pins to hold them together until the epoxy hardens.

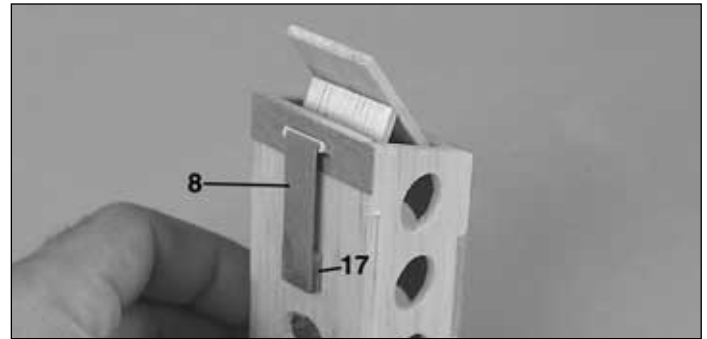
Assemble the Battery Holder



1. Without using any glue, assemble all the $\frac{3}{32}$ " balsa parts of the **battery holder** (7 x 2, 18, 19, 20 x 2, 21) as shown in the sketch. Once all the parts are joined, use medium CA to permanently hold them together.



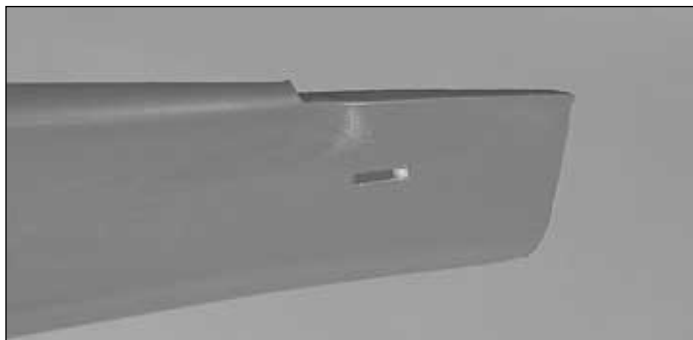
2. Build the **battery holder cover** from the parts shown in the photo (4, 15, 16). Before gluing on 16, sand the top of 15 and the bottom of 16 at an angle.



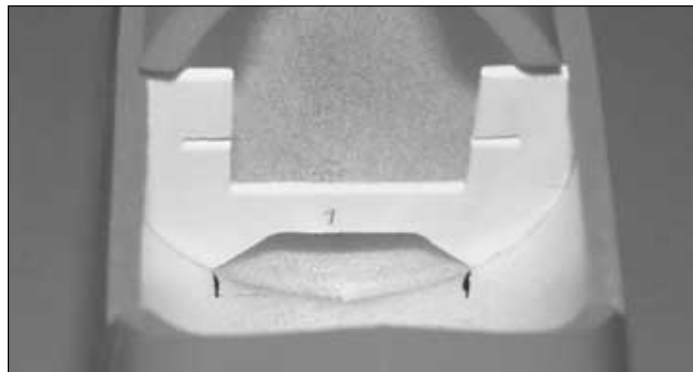
3. Fit the battery holder cover into the battery holder. Glue the $\frac{1}{32}$ " plywood **tab** (8) and the **tab mount** (17) to

the holder as shown. The tab will hold the cover in position, until removal or installation of the battery is required.

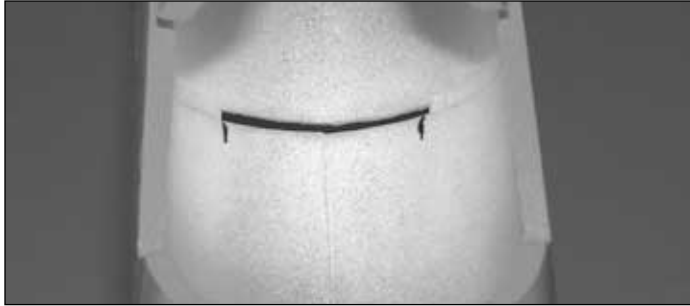
Assemble the Fuselage



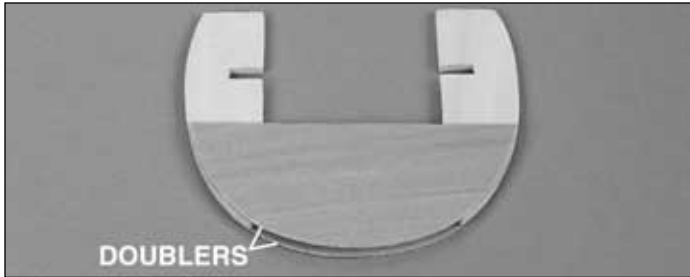
❑ 1. Using the indentations in the aft end of the fuselage as a guide, cut the slots for the elevator and rudder pushrods.



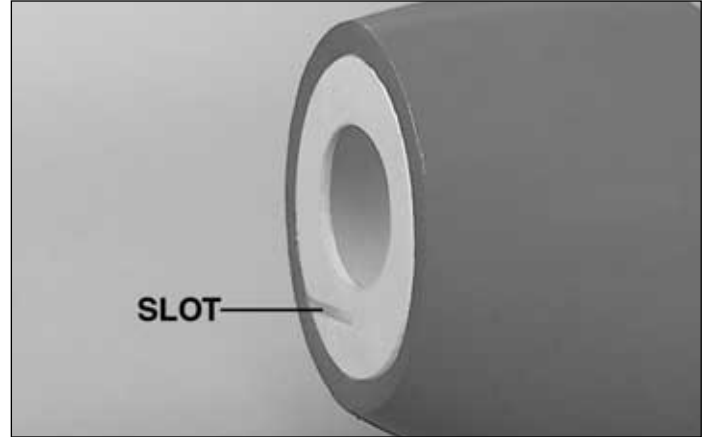
❑ 2. Temporarily fit the plywood **landing gear former (1)** into the fuselage. Be certain it is centered and in the groove in the fuselage. Use a fine-point felt-tip pen to mark the inside of the fuselage on both sides of the opening in the bottom of the landing gear former for the landing gear wires.



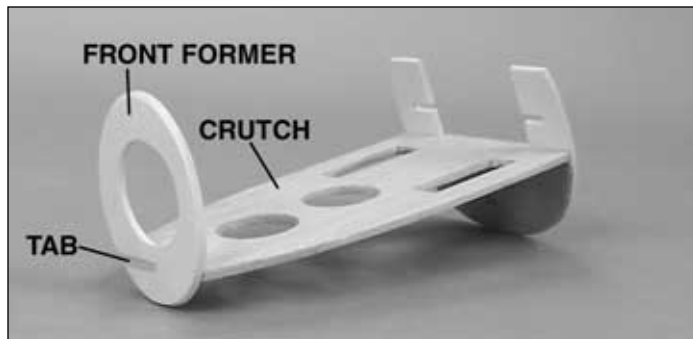
- ❑ 3. Remove the landing gear former. Cut a slot, centered in the groove, from one mark to the other. Keep the piece of foam that was removed from the slot you cut, so it can be glued back into position after the former and the landing gear have been installed.



- ❑ 4. Use medium CA to glue both 1/32" plywood **doublers (10)** to both sides of F1.



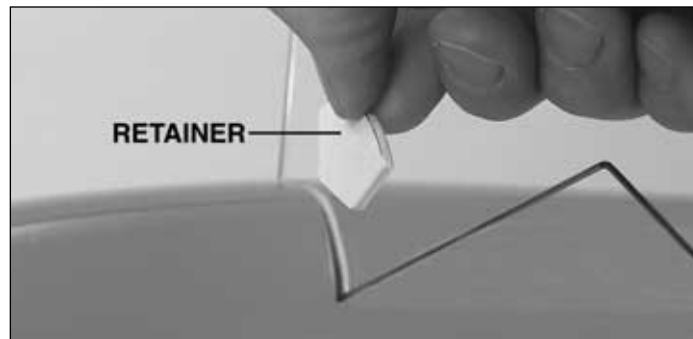
- ❑ 5. Test fit the 1/8" plywood **front former (3)** into the front of the fuselage. Trim the former as necessary, so it is even with the front of the fuse. Note the position of the slot.



❑ 6. Test fit the front former and the landing gear former to the balsa **crutch (22)**. Note that the tab on the front of the crutch should be on the **right** side. Sand the front of the crutch until it is the same width as the front former.

❑ 7. Test fit the crutch, the front former and the landing gear former into the fuselage. The parts will have to be inserted one at a time, then joined inside. Make adjustments as necessary so the front former is even with the front of the fuselage and the landing gear former rests in the groove.

❑ 8. Once you have fit all the parts into position, permanently glue them in place with 30-minute epoxy.

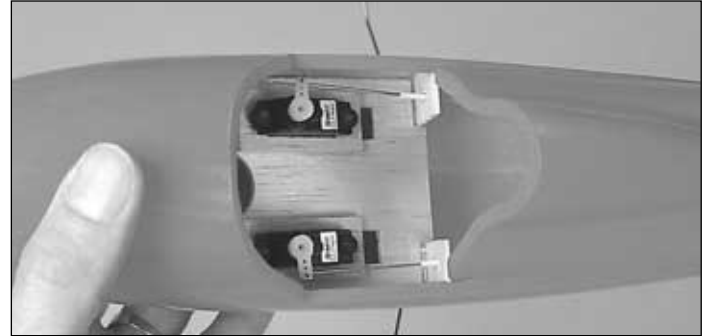
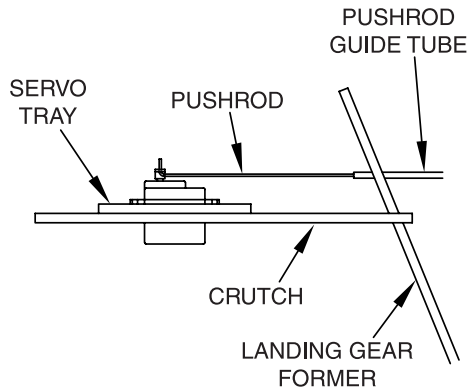


❑ 9. After the epoxy from the previous step has hardened, glue the main landing gear wire and the plywood **retainer (5)** into position. Before the epoxy hardens, fit the section of foam that you removed back into the slot in the fuse.

Install the Servos

1. Install the **pushrods** and **guide tubes** into the fuselage, but **do not** glue them into position until instructed to do so. The pushrods cross inside the fuselage.

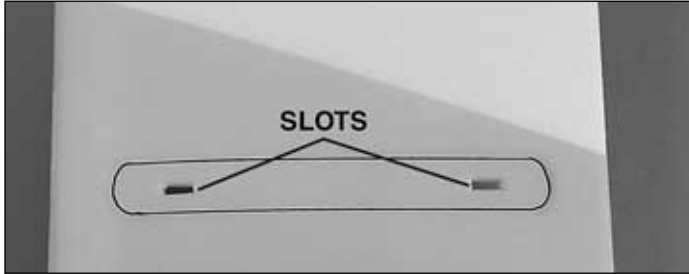
Refer to this sketch and the photo for the following two steps.



2. Fit the servos into the balsa **servo trays (14)**. Drill 1/16" holes through the trays, then mount the servos to the trays with the screws that came with the servos.

3. Fit the servo trays with the servos into the crutch. **Do not** glue the servo trays to the crutch until instructed to do so. Connect the pushrods to the servos. If the pushrods do not align with the servos, cut slots in the landing gear former that will allow the pushrods to align as shown in the photo and in the sketch.

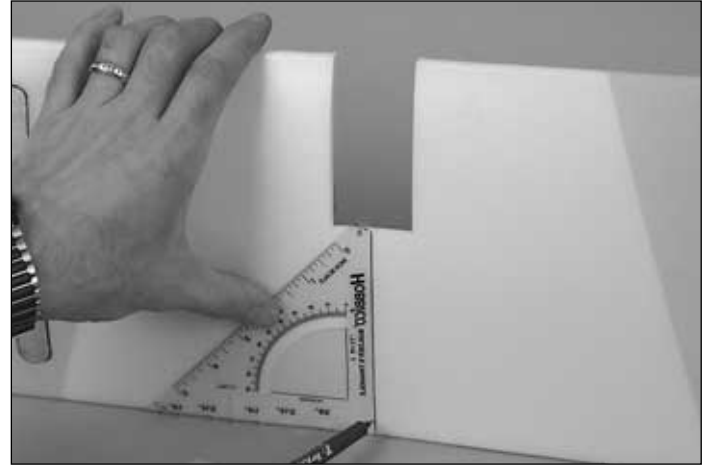
Assemble the Wing



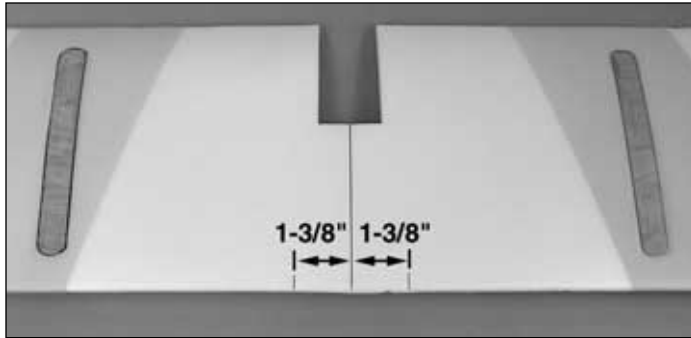
1. Cut the slots in the wing for the wing struts.



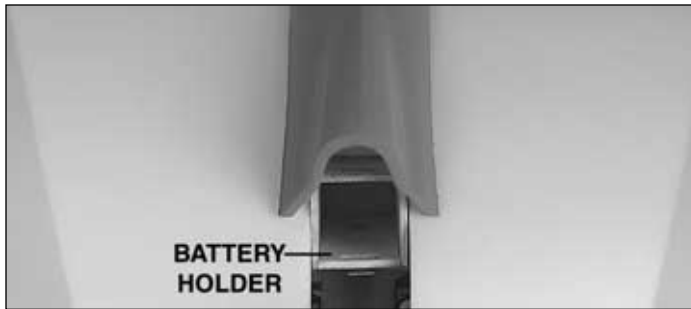
2. Glue the 1/32" plywood **wing braces (6)** into the indentations on the top of the wing.



3. Use a felt-tip pen to mark the center of the aft edge of the opening in the wing. Place the wing on your workbench resting on its trailing edge. Use a small builder's square to mark a centerline on the wing from the mark you made down to the TE.



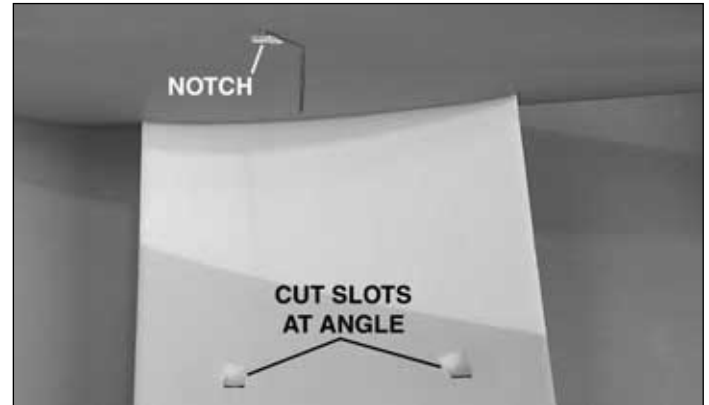
- ❑ 4. Mark two additional lines 1-3/8" on both sides of the centerline.



- ❑ 5. Slide the wing into the fuselage until it is centered. When the marks on the trailing edge of the wing and the opening in the front of the wing are equally spaced between the

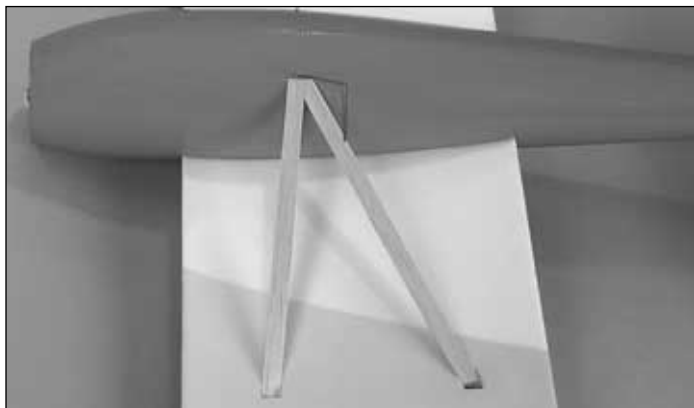
fuselage sides, the wing is centered. Test fit the battery holder into fuse. If necessary, trim the edges of the opening in the wing or sand the sides of the battery holder until it fits in the fuse without disturbing the wing.

- ❑ 6. Glue the wing to the fuselage with 30-minute epoxy. If necessary, use pins to hold it in place until the epoxy hardens.



- ❑ 7. Use a hobby knife with a #11 blade to cut a small notch for the wing struts in the bottom of the right side of the fuse directly above the landing gear. Similarly, cut the slots in the bottom of the wing at an angle to accommodate the top of the wing struts.

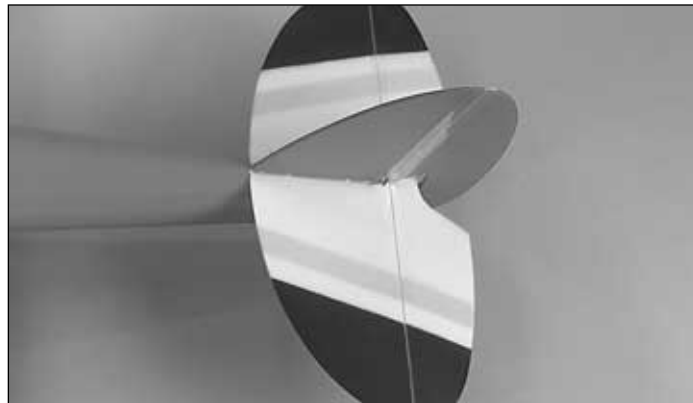
Optional slow-speed performance enhancement for inexperienced pilots: To improve rudder control and stall characteristics of the Escapade at slow speeds, use the templates on page 8 to make the optional wing struts from 1/16" x 3/8" medium hardness balsa (not included). The longer optional struts will increase the wing dihedral and build in washout (an upward twist in the trailing edge of the wing near the tips). This option is not necessary for experienced pilots.



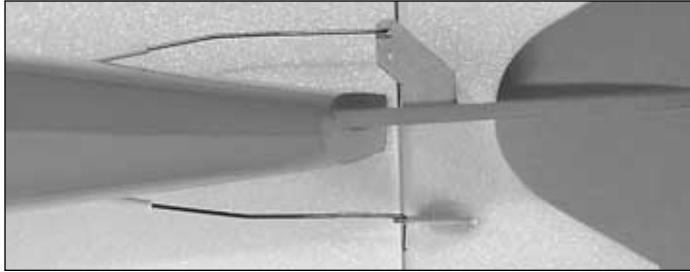
❑ 8. Trim the ends of two 1/16" balsa **wing struts (13)** to fit the wing and fuse. Enlarge the slots if necessary. Cut the bottom of the aft strut at an angle to fit the bottom of the front strut. Permanently glue the struts into position.

❑ 9. Fit, then glue the wing struts to the other side of the fuselage and the wing the same way.

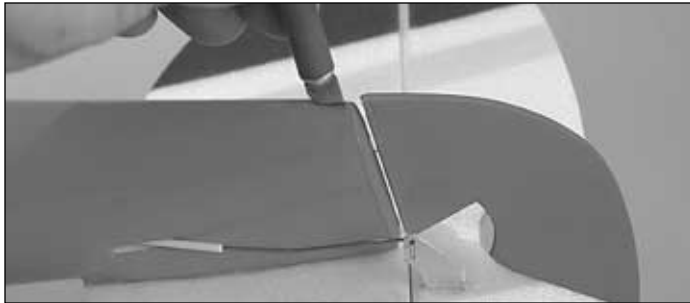
Hook Up the Controls



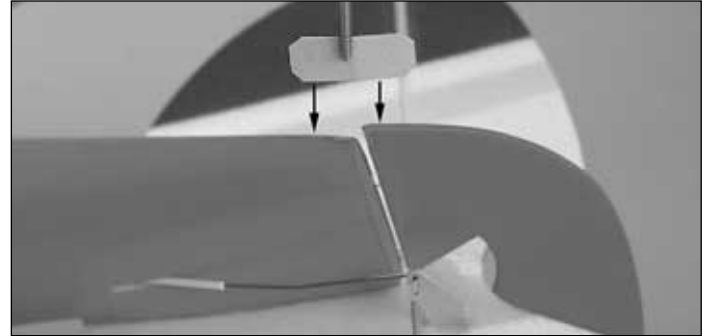
❑ 1. Glue the stab and fin to the fuselage with 30-minute epoxy. Make sure the fin is centered on the molded-in seam on the top of the fuselage. Before the epoxy hardens, view the wing and fuse from behind. If necessary, raise or lower one side of the stab until it is parallel with the wing. Fill any gaps between the fuse and the bottom of the stab with additional epoxy. Use pins to hold the stab in position until the epoxy has fully hardened.



❑ 2. Connect the aft end of the pushrods to the control horns on the elevator and rudder. If necessary, make small bends in the pushrods to get them to align with the holes in the horns. Be certain there is a small amount of sideways tension in the rods so they remain connected to the horns.



❑ 3. Use a #11 blade to cut a slit in the center of the bottom of the fuse and in the rudder to accommodate a hinge.

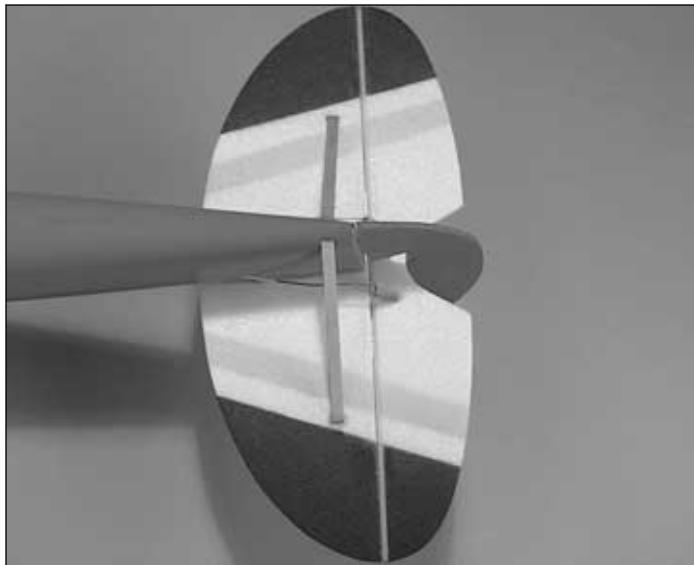


❑ 4. Use epoxy to glue the hinge into the slots you cut in the rudder and the fuse.

❑ 5. Temporarily connect the speed control and servos to the receiver. Connect the charged battery to the speed control. Turn on the transmitter, then center the trims. If the servo arms are not centered, remove the arms from the servos and center the arms.

❑ 6. With the pushrods connected to the servos and the control surfaces, position the servo trays so the elevator and rudder are neutral. Carefully glue the servo trays to the crutch.

❑ 7. Now that the servos have been positioned and the controls are centered, glue the ends of the pushrod guide tubes to the slots in the fuselage and the slots in the landing gear former.

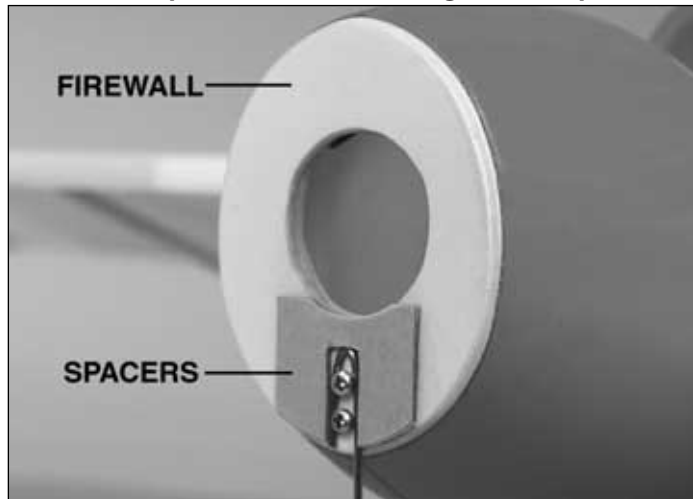


❑ 8. The same as you mounted the balsa wing struts to the wing, mount the plywood **tail struts (9)** to the bottom of the stab and the fuse. Cut a small slot in the bottom of the fuse

to accommodate the ends of the struts, but do not cut slots the stab. Glue the struts into position.

Mount the Motor

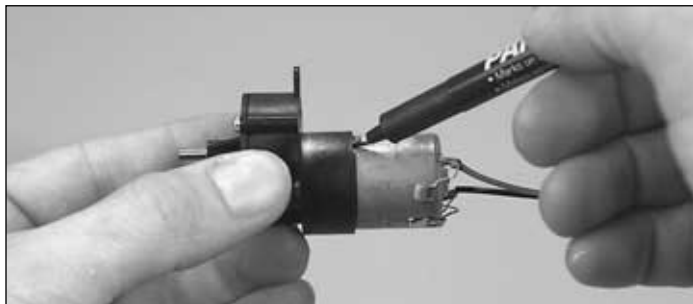
Refer to this photo for the following three steps.



❑ 1. Without using any glue, position the plywood **firewall (2)** on the front former. If necessary, trim the firewall until it matches the front of the fuselage. Glue the firewall into position.

❑ 2. Glue both 1/32" plywood **spacers (12)** to the firewall as shown. Trim the top of the spacers even with the hole in the firewall.

❑ 3. Position the wire **nose gear** on the firewall, then drill 1/16" holes for the screws. Mount the nose gear to the firewall with two wood screws.



❑ 4. Without using tools, use your fingers to press the motor all the way into the gearbox. Spin the shaft on the gearbox. If there is resistance and the shaft does not spin freely, back the motor out of the gearbox **just enough** to allow the shaft to spin freely. Use a fine-point felt-tip pen to mark the end of the gearbox onto the motor. This is how far the motor is to be installed after the pinion gear is mounted.

❑ 5. Remove the motor from the gearbox.

❑ 6. The pinion gear fits onto the motor shaft easier one way than it does the other. Using only your fingers (no tools), determine which way is the easiest by test-fitting the gear onto the shaft. The “easy way” is the way the gear goes on and is to be permanently installed.



❑ 7. Remove the pinion gear from the motor. Add a small drop of the cement included with this kit to the hole in the end of the gear that fits onto the shaft. Install the gear onto the shaft. The top of the gear should be even with the end of the motor shaft.

❑ 8. Use a toothpick to apply a **small** dab of lubricating oil to both ends of the motor shaft where it exits the motor. **Do not** apply oil directly from the container because you may apply too much.



❑ 9. Reinstall the motor into the gearbox up to the line you marked. Fit the prop adapter to the gearbox. Insert the appropriate nylon spacer ring into the prop, then test fit the prop to the gearbox (be certain to use the prop washer). If necessary, use a hobby knife to enlarge the hole in the nylon spacer ring so it will fit onto the prop adapter.

❑ 10. Tighten the prop nut with an 8mm wrench. If necessary, use a pliers to hold the drive washer while tightening the prop. Wrap the drive washer with a cloth to keep the pliers from marring it.

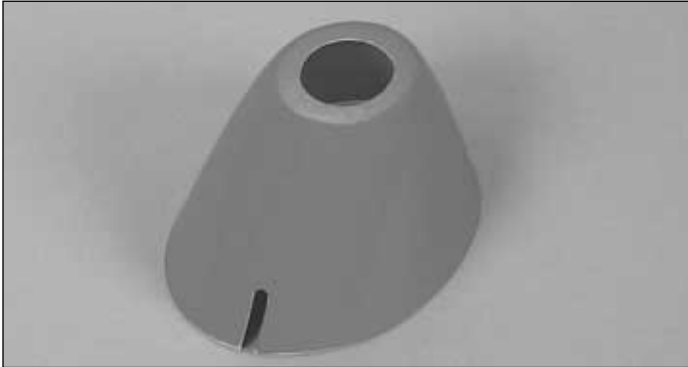
❑ 11. Spin the propeller by hand. It should spin somewhat freely, but due to the resistance of the motor, the propeller

should not “coast” or freewheel indefinitely. If there is much resistance, back the motor out of the gearbox the same as you did before until the propeller spins as it should.

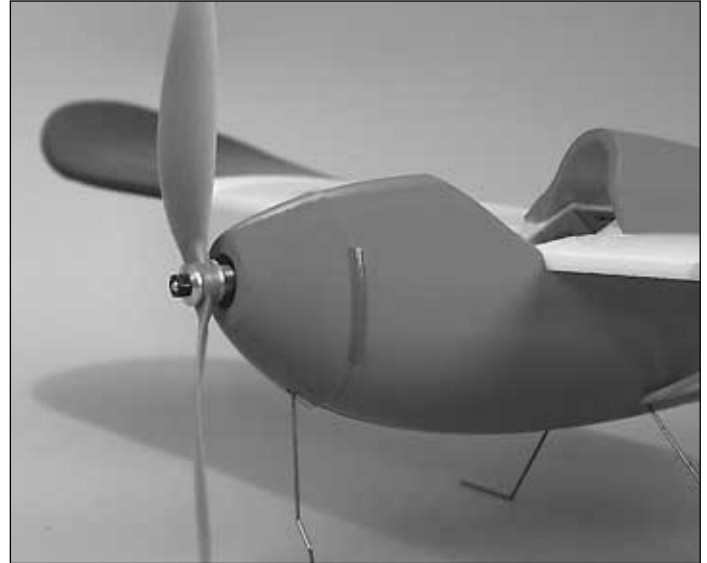


❑ 12. Remove the propeller from the gearbox. Position the motor and gearbox on the firewall. Using the holes in the mounting tabs on the gearbox as a guide, drill three 1/16" holes through the firewall for the mounting screws. Mount the gearbox to the firewall with three wood screws.

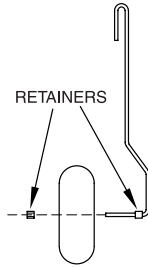
Final Assembly



1. Trim the excess material from the aft edge of the molded plastic **cowling**. Cut a hole in the middle for the prop shaft, then cut a slot for the nose gear.



2. Mount the cowling to the fuselage with tape. Any kind of tape will do, but we used 1/4" red striping tape. Mount the prop adapter and prop to the gearbox. **Note:** If you are not able to tighten the prop nut because the drive washer keeps turning, remove the prop adapter assembly from the gearbox. Tighten the prop to the adapter off of the gearbox. Loosen the prop and separate the drive washer from the adapter. Rejoin the assembly to the gearbox and tighten.



3. Cut six 1/8" **retainers** from the plastic tube. Mount the wheels to the landing gear with a retainer on both sides of each wheel. Using care not to get any glue on the wheels, secure the retainers to the landing gear with medium CA.



4. Cutting along the molded-in lines, use small scissors to cut out the two halves of the pilot. Note how the front half of the pilot fits over the rear half.



5. Glue the pilot together. Glue the pilot to the battery holder cover. You can cut a notch in the back of the pilot so that he fits over the top of the cover, or simply glue him into position resting on top. You may paint the pilot now, or wait until the rest of the model is finished.



6. Test fit the clear plastic windscreen to the front of the fuselage. Use a hobby knife with a #11 blade to make three

small slits in the fuselage for the pointed tabs on the windscreen, then glue it into position.

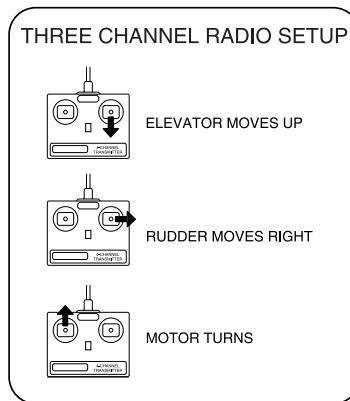
❑ 7. Use double-sided foam mounting tape (GPMQ4440) to mount the speed control and receiver to the crutch inside the fuselage. Be certain to mount them in a location that will not interfere with the motor, servos or pushrods.

❑ 8. Route the receiver antenna out of the bottom of the fuselage. Tape the antenna to the bottom of the aft end of the fuselage. **Never cut the antenna or coil it up.** It is tuned to a specific length. Be certain the antenna will not interfere with the pushrods or come into contact with the propeller.

PREPARE THE MODEL FOR FLYING

Set the Control Throws

IMPORTANT: Whenever connecting the battery always hold onto the fuselage in case the motor accidentally receives power and the propeller turns.



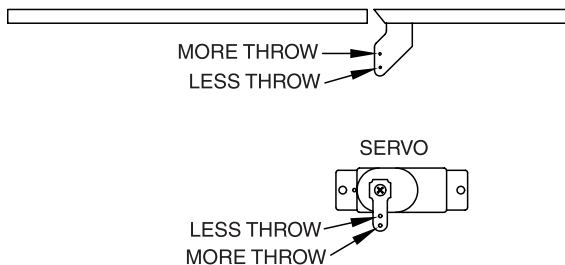
❑ 1. Turn on the transmitter and connect the battery to the speed control in the model. Be certain the rudder, elevator and motor respond as shown in the chart. If required, use the reversing function in the transmitter to reverse any controls necessary so they respond correctly.

Note: Unless you are specifically checking the operation of the motor, for safety remove the propeller from the model while setting it up on your workbench.

❑ 2. Use the ATV function in the transmitter or adjust the position of the pushrods on the servo arms or the control

horns on the elevator and rudder to get the control surface throws shown in the chart that follows. The throws are measured at the widest part of the control surface.

CONTROL SURFACE



3. To **increase** the control surface throw, move the pushrod to the innermost hole of the control horn on the control surface, or move the pushrod to the hole that is farther out on the servo arm. To decrease the control surface throw, do the opposite.

Set up the Escapade so it has the following control surface throws:

ELEVATOR: 5/8" [16mm] up
 5/8" [16mm] down

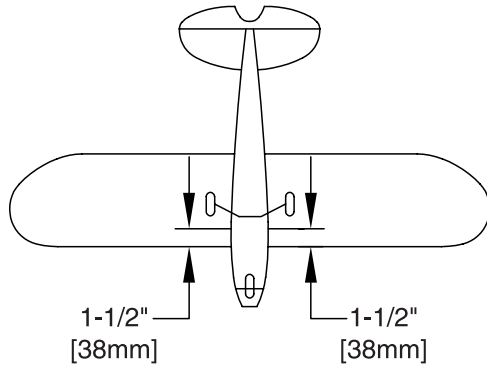
RUDDER: 9/16" [14mm] right
 9/16" [14mm] left

Second to the C.G., the control throws have the greatest effect on the way a model flies. Set the throws as close to these settings as possible. If you have too much control throw the model may respond too quickly. If you do not have enough throw you may not be able to maneuver the model or have enough control to land it when the motor is off.

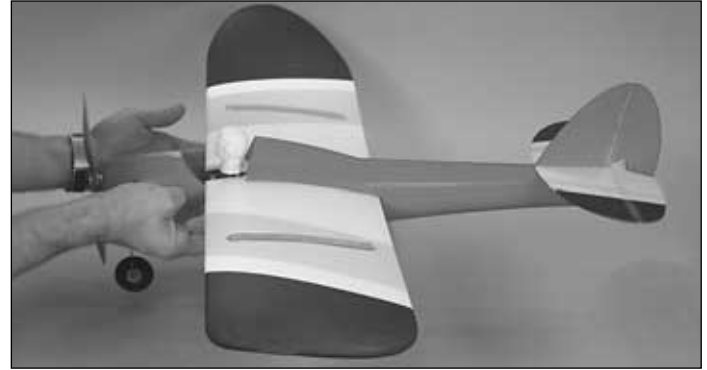
Balance the Model (C.G.)

IMPORTANT: The C.G. (center of gravity), or balance point has the greatest effect on how a model flies. Do not overlook this important procedure. Modelers who do so often find that the airplane is difficult to control, or out of control after it is too late. Protect your model and insure that the first flight won't be the last by balancing the model according to the following instructions.

The C.G. (center of gravity) must be checked when the model is ready to fly with the propeller and battery installed.



❑ 1. Use a felt-tip pen or narrow strips of tape to mark the balance point on the **bottom** of the wing 1-1/2" [38mm] from the leading edge on both sides of the fuselage.



❑ 2. Lift the model right-side-up at the balance point you marked on the bottom of the wing. If the nose drops, the model is nose-heavy and you must add weight to the tail. If the tail drops, the model is tail-heavy and you must add weight to the nose. In some cases you can relocate the receiver to achieve the correct balance without adding additional weight.

❑ 3. If additional weight is required to balance the model, use small pieces of Great Planes stick-on weight (GPMQ4485). If weight is required in the nose, do not stick weight to the cowl. Remove the cowl and stick the weight to the firewall. If weight is required in the tail, it can be stuck to the top or bottom of the stab next to the fuselage.

❑ 4. After placing weight on the model where necessary, recheck the C.G. to confirm that it is correct.

Identify Your Model

No matter if you fly at an AMA sanctioned R/C club site or if you fly somewhere on your own, you should always have your name, address, telephone number and AMA number on or inside your model. It is **required** at all AMA R/C club flying sites and AMA sanctioned flying events. Fill out the identification tag on page 39 and place it on or inside your model.

Charge the Transmitter Batteries

Be certain the transmitter batteries are fully charged. Follow the battery charging instructions that came with your radio control system to charge the batteries.

Ground Inspection

Before you fly you should perform one last overall inspection to make sure the model is truly ready to fly and that you haven't overlooked anything. If you are not thoroughly familiar with the operation of R/C models, ask an

experienced modeler to perform the inspection. Check to see that you have the radio installed correctly and that all the controls are connected properly. The motor must also be checked by confirming that the prop is rotating in the correct direction and the motor sounds like it is reaching full power. Make certain the elevator and rudder are secure, the pushrods are connected, the controls respond in the correct direction, radio components are securely mounted, and the C.G. is correct.

Range Check

Ground check the operational range of your radio before the first flight of the day. With the transmitter antenna collapsed and the receiver and transmitter on, you should be able to walk at least 100 feet away from the model and still have control. Have an assistant stand by your model and, while you work the controls, tell you what the control surfaces are doing. Repeat this test **with the motor running** at various speeds with an assistant holding the model, using hand signals to show you what is happening. If the control surfaces do not respond correctly, **do not fly!** Find and correct the problem first. Look for loose servo connections or broken wires, corroded wires on old servo connectors, poor solder joints in your battery pack or a defective cell, or a damaged receiver crystal from a previous crash.

Performance Tips

Use fine sandpaper to remove imperfections along the edges of the propeller. For the best performance, use a Top Flite Precision Magnetic Prop Balancer™ (TOPQ5700) to balance the propellers (this is a necessity on glow-powered engines, but less critical on small electric models).

Using multiple battery packs for successive flights may cause the motor to become excessively hot, thus causing damage. Allow the motor to cool for at least 10 minutes between flights.

Motor Safety Precautions

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

Get help from an experienced pilot when learning to operate motors.

Use safety glasses when running motors.

Do not run the motor in an area of loose gravel or sand; the propeller may throw such material in your face or eyes.

Keep your face and body as well as all spectators away from the path of the propeller as you start and run the motor.

Keep items such as these away from the prop: loose clothing, shirt sleeves, ties, scarfs, long hair or loose objects (pencils, screwdrivers) that may fall out of shirt or jacket pockets into the prop.

The electric motor and motor battery used in the Escapade are very powerful and the spinning propeller has a lot of momentum; therefore, if you touch the propeller while it is spinning it may inflict severe injury. Respect the motor and propeller for the damage they are capable of and take whatever precautions are necessary to avoid injury. Always disconnect and remove the motor battery until you are ready to fly again and always make sure the switches are turned off before connecting the battery.

AMA SAFETY CODE (excerpt)

Read and abide by the following Academy of Model Aeronautics Official Safety Code:

GENERAL

1. I will not fly my model aircraft in competition or in the presence of spectators until it has been proven to be airworthy by having been previously successfully flight tested.

2. I will not fly my model aircraft higher than approximately 400 feet within 3 miles of an airport without notifying the airport operator. I will give right of way to and avoid flying in the proximity of full-scale aircraft. Where necessary an observer shall be utilized to supervise flying to avoid having models fly in the proximity of full-scale aircraft.

3. Where established, I will abide by the safety rules for the flying site I use and I will not willfully and deliberately fly my models in a careless, reckless and/or dangerous manner.

7. I will not fly my model unless it is identified with my name and address or AMA number, on or in the model.

RADIO CONTROL

1. I will have completed a successful radio equipment ground check before the first flight of a new or repaired model.

2. I will not fly my model aircraft in the presence of spectators until I become a qualified flyer, unless assisted by an experienced helper.

3. I will perform my initial turn after takeoff away from the pit, spectator and parking areas and I will not thereafter perform maneuvers, flights of any sort or landing approaches over a pit, spectator or parking area.

4. I will operate my model using only radio control frequencies currently allowed by the Federal Communications Commission.

FIND A SAFE PLACE TO FLY

Though the Escapade is a “Park Flyer,” the **best** place to fly **any** model is at an AMA chartered club field. Club fields are set up for R/C flying, making your outing safer and more enjoyable. We recommend that you join the AMA and a local club so you can have a safe place to fly and have insurance to cover you in case of a flying accident. The AMA address and telephone number are in the front of this manual.

If there is no club or R/C flying field in your area, find a suitable site that is clear of trees, telephone poles, buildings, towers, busy streets and other obstacles. Since you are not flying at a sanctioned AMA site, be aware that there may be others like yourself who could be flying nearby. If both of your models happen to be on the same frequency, interference will likely cause one or both of the models to crash. An acceptable minimum distance between flying models is five miles, so keep this in mind when searching for a flying site.

In addition to obstacles, it is important to be aware of people who may wander into the area once you begin flying. At

AMA club flying sites it is a severe rule infraction to fly over others, and this is a good practice if flying elsewhere. R/C models tend to attract onlookers whose numbers can soon multiply, forming small, uncontrolled crowds. Onlookers pose two main problems. First is the danger of actually crashing your model into a person, causing injury. Second is the distraction from those who ask you questions while you are trying to concentrate on flying. To minimize or avoid this problem, have an assistant standing by who can spot people who wander into your flying site (so you can avoid flying over them) and who can perform “crowd control” if people start to gather.

FLYING

IMPORTANT: If you are an inexperienced modeler we strongly urge you to seek the assistance of a competent, experienced R/C pilot to check your model for airworthiness AND to teach you how to fly. No matter how stable or “forgiving” the Escapade is, attempting to learn to fly on your own is dangerous and may result in destruction of your model or even injury to yourself and others. Therefore, find an instructor and fly only under his or her guidance and supervision until you have acquired the skills necessary for safe and fully controlled operation of your model.

Takeoff

We recommend flying the Escapade when the wind is no greater than five miles per hour. Less experienced flyers should fly the Escapade only in calm (less than one mile per hour) conditions. Frequently, winds are calm in the early morning and early evening. Often these are the most enjoyable times to fly anyway!

Until you have the Escapade properly trimmed for level flight, we recommend having an assistant hand-launch the model instead of taking off from the ground.

Turn on the transmitter and plug the battery into the speed control. Turn on the receiver by following the instructions that came with your speed control.

IMPORTANT: Confirm that the transmitter operates the controls by moving the sticks and watching the surfaces respond. Occasionally, electric models have been launched with the transmitter turned off or the battery disconnected from the speed control!

When ready to launch, the assistant should hold the bottom of the fuselage behind the main landing gear, then raise the model high above his head and point it **into the wind**. With

the pilot (*that would be you!*) standing behind the plane, fully advance the throttle to start the motor. As soon as the motor is at full power, the hand launcher should gently toss the plane into the air at a **level** or **slightly** nose-up attitude. Be certain the model is being launched **into** the wind and be immediately ready to make corrections to keep the airplane flying straight, level and into the wind.

When the model has gained adequate flying speed under its own power, **gently** pull the elevator stick back until the airplane starts a gradual climb. Many beginners tend to pull too hard causing the model to stall, so be gentle on the elevator and don't panic. If you do pull too hard and you notice the model losing speed, release the elevator stick and allow the model to regain airspeed.

Continue a **gradual** climb and establish a gentle turn (away from yourself) until the airplane reaches an altitude of 75 to 100 feet.

Flight

The main purpose of the first few flights is to learn how the model behaves and to adjust the trims for level flight. After the model has climbed to a safe altitude reduce the throttle

slightly to slow the model, yet maintain altitude. The Escapade should fly well and maintain adequate airspeed at about 1/2 to 3/4 throttle.

Adjust the elevator trim so the model flies level at the throttle setting you are using. Adjust the rudder trim so the model flies straight. It may take a few minutes to get the trims adjusted, but this should be your first priority once at a comfortable altitude. Continue to fly around, executing turns and making mental notes (or having your assistant take notes for you) of what additional adjustments or C.G. changes may be required to fine tune the model so it flies the way you like.

If the Escapade reaches a high enough altitude, you may periodically cut off the motor power and glide. This may extend the flight time by several minutes, especially if you fly into a rising air current.

Landing

Because the Escapade flies slowly, it requires little room to land. Begin the landing approach by flying downwind at an altitude of approximately 20 feet [6 meters]. When the airplane is approximately 50 to 100 feet [15 to 30 meters] past you, gradually reduce power and make the "final"

180-degree turn into the wind aligning the airplane with the runway or landing area. Do not dive the airplane, as it will pick up too much speed. Instead, allow the airplane to establish a gradual descent. Concentrate on keeping it heading into the wind toward the runway. When the plane reaches an altitude of about 4 feet [1 meter], gently apply a little “up elevator” to level the plane, but be careful as too much up elevator will cause it to stall. While holding a slight amount of up elevator the airplane will slow and descend as it loses flying speed, thus touching-down on the runway.

Until you are able to accurately judge how far the Escapade can glide, it may be helpful to reserve some battery power to run the motor so the plane can be flown back to the runway.

ROG (Rise Off Ground) Takeoff

When speaking of small models, frequently a takeoff from the ground is called a “ROG” (*rise off ground*) takeoff. Landings on grass will be a little rough, but doing a ROG takeoff from grass will probably not be possible with the Escapade. If planning a ROG takeoff, find a paved surface.

After you have trimmed the Escapade for flight and have become familiar with its flight characteristics, you may try some ROG takeoffs. With the model on the runway and

pointing into the wind, gently apply power. Initially, the plane may turn to the left or right because it has not gained enough speed for the controls to become effective. Do your best to get through this brief moment and maintain a heading down the runway and into the wind. Make corrections with the rudder to keep it rolling straight into the wind. If the model veers too far off, cut the throttle and try again. As the model begins to gain speed the controls will become effective.

After the airplane has gained adequate speed (this requires experience to gauge), gently pull back on the elevator stick allowing the airplane to become airborne. Establish a gentle climb the same as when you were hand-launching.

Best of luck and happy flying!



OTHER ITEMS AVAILABLE FROM GREAT PLANES



ElectriFly™ C-10 Micro Ultra High Frequency Electronic Speed Control

Its solid-state design enables the ElectriFly C-10 Micro to offer a wide array of flight benefits in an incredibly compact, ultralight package. Intended for loads of up to 12A and motors up to 400-size, it features fully proportional forward, brake, plus the throttle smoothness and extended run time of high-frequency operation. Factory-installed radio and battery connectors ease installation. A Safe-Start feature prevents unintentional motor starts. Low voltage cut-off

reserves power for safe landing. Built-in BEC eliminates unnecessary weight. 180-day warranty. **GPMP2010**



ElectriFly Sanyo® 8-Cell, 150 N-Size NiCd Pack

Assembled with genuine Sanyo N-size NiCd cells, this powerful pack weighs just 2.6 ounces and features a preinstalled, 2-pin male connector for “plug in and fly” simplicity. 1-year guarantee. Recharge with the ElectriFly Peak Charger (GPMM3000). **Note:** If a peak charger is not used, the pack must be charged at 45mA for 4-6 hours before use. **GPMP0050**



ElectriFly Sanyo 8-Cell, 270mAh NiCd Pack

Compact but powerful, this ElectriFly battery pack arrives assembled with connection lead and 2-pin connector. Best of all, it adds only 3.7 ounces of weight to your park flyer model! 1-year guarantee. Recharge with an AC overnight charger at 50mA rate, or use the ElectriFly Peak Charger (GPMM3000). **GPMP0060**



ElectriFly Sanyo 8-Cell, 350mAh NiCd Pack

Its higher 350mAh capacity means more flight time – but this ElectriFly NiCd pack remains featherlight at just 3.8 ounces, and continues the advantages of having Sanyo cells, preinstalled connectors, and a 1 year guarantee. Recharge with an AC overnight charger at 50mA rate, or use the ElectriFly Peak Charger (GPMM3000). **GPMP0070**



ElectriFly Peak Charger

Designed for small, lightweight electrics and transmitter batteries, this charger can also be used with any 6- 8-cell NiCd or NiMH pack. It plugs into a power supply or cigarette lighter for fast charges. Pulsed current charging protects small packs from overheating. Charge rate adjusts to 200 mAh or 600mAh. A 15mA trickle charge keeps packs topped off for use anytime. Includes 2-pin connector for ElectriFly packs; adapters available separately. 1-year warranty.

GPMM3000

IDENTIFICATION TAG

This model belongs to:

Name

Address

City, State Zip

Phone number

AMA number

Photocopy this tag

