



**PLEASE  
READ THIS  
FIRST!**

**POLYCOTE™ ECS**

This model is covered with our ULTRA TOUGH  
POLYCOTE ECS Enhanced Covering System.

Please see Page 4 for POLYCOTE ECS  
care & maintenance procedures.

**REMOVE TAPE CAREFULLY**

### **Liability Disclaimer**

It is important that the following liability disclaimer be  
**READ BEFORE ASSEMBLING OR USING THIS PRODUCT**

Model airplanes, model engines, model engine fuel, propellers and related accessories, tools and equipment can be hazardous if improperly used. Be cautious and follow all safety recommendations when using your VMAR model airplane. Keep hands, tools, clothing and all foreign objects well clear of engines when they are operating. Take particular care to safeguard and protect your eyes and fingers and the eyes and fingers of other persons who may be nearby. Use only a good quality propeller that has no cracks or flaws. Stay clear of the propeller and stay clear of the plane of rotation defined by the propeller.

The Manufacturer, Distributor, Retailer and/or other suppliers of this product expressly disclaim any warranties or representations, either expressed or implied, including but not limited to implied warranties of fitness for the purposes of achieving and sustaining remotely controlled flight.

In no event will the Manufacturer, Distributor, Retailer and/or other suppliers of this product have any obligation arising from contract or tort, or for loss of revenue or profit, or for indirect, special, incidental, consequential or other damages arising from the use of this product.

In purchasing and/or using this product, the user accepts all responsibility for its use and accepts all liability associated with such use.

**Proceeding with assembly and use of this product indicates Agreement With and Acceptance of the Liability Disclaimer.**

#### **CAUTION**

A Remote Control Model Aircraft is not a toy. It is a flying model that functions much like a full size airplane. If you do not assemble and operate this product properly you can cause injury to yourself and others and damage property. **DO NOT FLY** this model if you are not qualified.

You are ultimately responsible for the mechanical, aeronautical and electrical integrity of this model and it's structure, control surfaces, hinges, linkages, covering, engine, radio, wiring, battery and all other components. Check all components before and after each flight. Don't fly until it's right!

**PLEASE INSPECT THIS PRODUCT IMMEDIATELY & THOROUGHLY.  
RETURNS MUST BE SHIPPED IN ORIGINAL PACKAGING.**

*Inspect everything carefully immediately upon receipt Retain all packaging until the check out is complete. Damaged, missing or defective components must be reported to your vendor within 30 days of purchase and BEFORE any assembly begins. Neither Richmond RC nor your vendor will be able to provide parts to replace defective or shipping damaged items if they have been assembled or have not been reported within 30 days of purchase. (cont'd Pages 2-4)*



Thanks for purchasing a VMAR ARF product. VMAR Manufacturing and your vendor are proud to offer you this top quality product at an exceptional price. A great deal of attention has gone into assuring the quality of this product. Every component has been checked and double checked to make sure nothing has been left out.

If upon arrival of your model you note shipping damage or you notice that items are damaged, missing or defective **DO NOT PROCEED WITH ASSEMBLY. DO NOT START UNLESS IT IS RIGHT!**

Damaged, missing or defective components reported to your vendor more than 30 days after purchase or after any assembly has started will be treated on a case by case basis and a fee will normally apply for components and shipping thereof.

***If you think something is missing or wrong or is confusing... don't panic! Please check the entire box and inside the fuselage again. If you still can't find it or you appear to have a damaged component or you are just concerned about something that may not seem just right, please see the Troubleshooting Procedure on the opposite page.***

Please check the kit over BEFORE beginning assembly. There is a detailed contents check list on the Parts & Setup sheet or in the Assembly and Operations Manual. **INSPECT & TEST FIT EVERYTHING** before glueing or permanently attaching. Please do not begin assembly if you notice shipping damage, defective or missing parts. We cannot replace components once assembly has started. **Please retain the shipping and display box until you have checked everything out.**

Your model contains a high level of graphic detailing. Occasional ripples or minor fluctuations in the graphics or colors or fibreglass components are normal and do not affect the integrity of the model. Every effort has been made to ensure a quality finish.

## Contact Procedures.

***After having worked through the Troubleshooting Procedure documented on the opposite page***, if you need to contact us in order to resolve issues related to damaged, missing or defective components or to get answers to questions specifically related to this model please send us an email to [tech@richmondrc.com](mailto:tech@richmondrc.com). Please provide information related to where you purchased your model, date of purchase, your phone number, your customer and phone number if applicable. Take the time to review the contents check list on the Parts & Setup sheet or in the Assembly and Operations Manual and determine the description and/or legend number of the damaged, missing or defective item. In the case of questions please consult the Assembly and Operations Manual and refer to the step number and page number that relates to your question.

If you cannot send us an email, please phone or fax us. We can be reached by phone at 604-940-1066 or by fax at 604-940-1066 from 10am to 6pm M-F Pacific Time. Customers outside of North or South America may wish to check our web site for contact information in your market area.

In the case of questions, before contacting us please ensure you have thoroughly reviewed all documentation provided with this model and checked our web site at [www.richmondrc.com](http://www.richmondrc.com) for aftermarket information that may assist you. Please be specific in your request so that we can service you quickly and effectively. For damaged, missing or defective items please describe the item with the appropriate part number, legend code or assembly step.

## Return Procedures and Conditions.

**WE DO NOT ACCEPT FREIGHT COLLECT SHIPMENTS.**

***After having worked through the Troubleshooting Procedure documented on the opposite page***, if you need to return your model:

**ALL SHIPMENTS MUST BE PREPAID**

1) Pack the kit exactly as received. Put all components back into their bags and original boxes. Pack and seal the original boxes to enable the kit to withstand a typical shipping episode with a courier or the post office.

2) If you are located in the United States including Alaska, Hawaii, Puerto Rico or USA territory or using a U.S. Military APO, please insure & prepay the shipment and return the model by mail or courier only to... **Richmond RC Supply Ltd, 1574 Gulf Rd., Point Roberts, WA, 98281-9007 (No personal deliveries. Courier or mail only)**

3) If you are located in Canada, Mexico or South America please insure & prepay the shipment and return the model by mail or courier only to... **Richmond RC Supply Ltd, #114 - 7350 72nd Street, Delta, B.C., V4G 1H9, Canada. (No personal deliveries. Courier or mail only).**

4) If you are located elsewhere, please contact your vendor for return information and/or consult our web site at [www.richmondrc.com](http://www.richmondrc.com) for procedures in your market area.

**WE DO NOT ACCEPT FREIGHT COLLECT SHIPMENTS.**

**2**

**ALL SHIPMENTS MUST BE PREPAID**

# TOP 10 MUST DO'S!

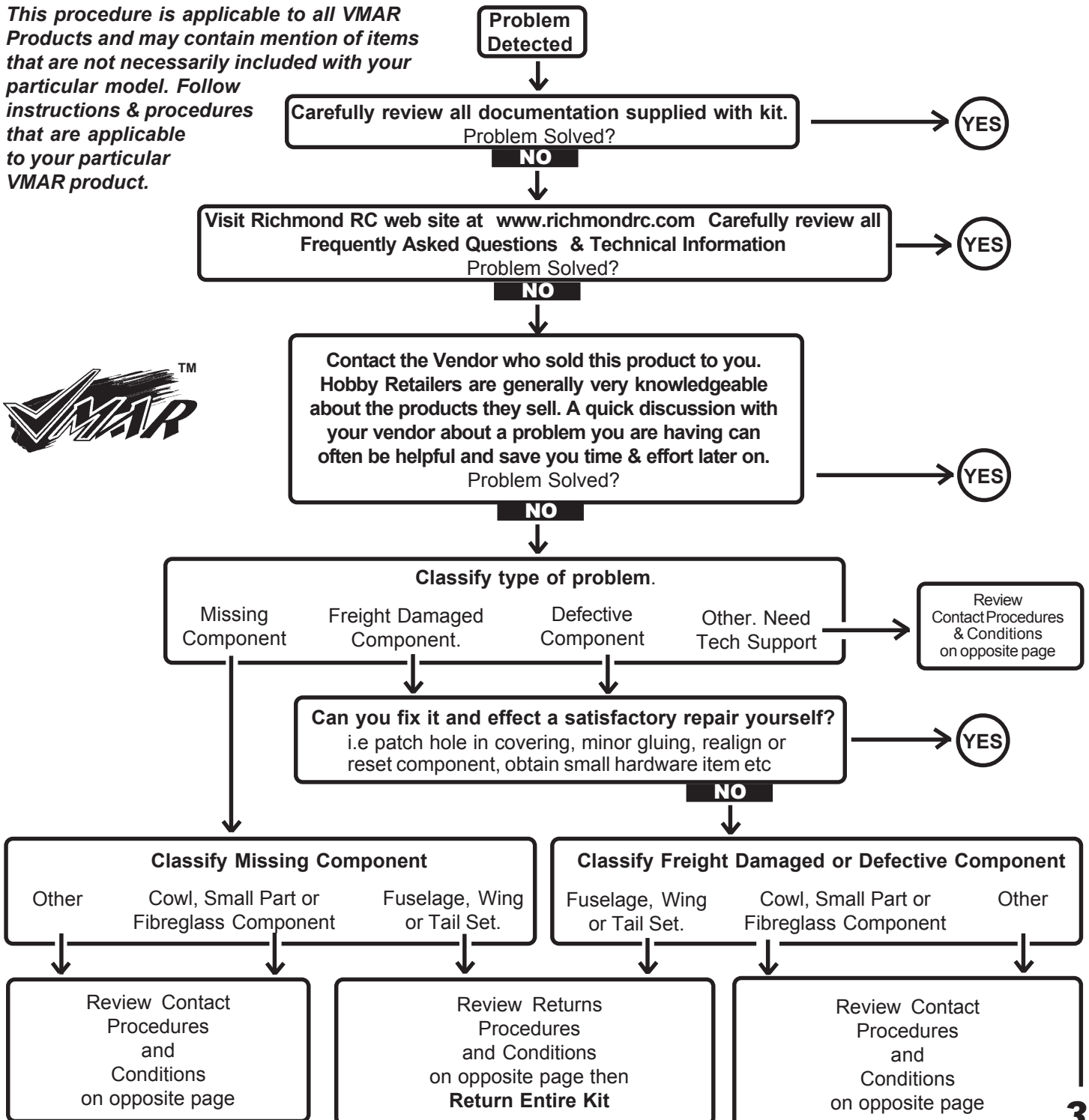
**Avoid 90% of Problems by doing these 10 things.**

1. Read all the Documentation before doing anything else!
2. Read the liability disclaimer! You are responsible for all aspects of this model and how it flies. You're it!
3. Inspect carefully immediately upon arrival! Retain all packaging until the check out is complete!
4. Read & Look! At everything! Do it once & then again!
5. Remember it's an ARF & requires some modelling skills!

6. Allow enough time to enjoy the assembly process!
7. Dry test assemble everything before you glue anything!
8. Use 30 Minute Epoxy when joining wings and installing stabilizers only after you have test assembled without glue! Once parts are glued they cannot be unglued and they cannot be returned!
9. Plan ahead! Be careful! If you get in Trouble... Don't Panic! Follow the Troubleshooting Guide below.
10. Before and after each flight... Test Test! Tug Tug!

## TROUBLESHOOTING PROCEDURE

*This procedure is applicable to all VMAR Products and may contain mention of items that are not necessarily included with your particular model. Follow instructions & procedures that are applicable to your particular VMAR product.*



# CARE & CLEANING OF POLYCOTE™ ECS.



**POLYCOTE ECS is a proprietary Enhanced Covering System engineered in Canada & available only from VMAR.** With POLYCOTE ECS the graphics are inside the covering... not stuck on top. No Decals! No Layers! No Strips! No Stripes! POLYCOTE ECS utilizes ULTRA TOUGH polyester and our SURE SEAL system to ensure that the seams stay down! Best of all POLYCOTE is totally fuel proof! Quite simply... **POLYCOTE ECS leads the pack in ARF covering systems!**

By putting the graphics where they belong... inside the POLYESTER covering... we've reduced the need for maintenance to a minimum. No seams to pick up, very few edges, extraordinary fuel proofing etc. With POLYCOTE ECS you will spend more time flying and less time reworking the covering! Polyester offers the best in covering performance and as with any POLYESTER covering here are a few tips to make it even easier to keep POLYCOTE ECS looking it's best!

**REMOVING & USING TAPE:** You may find that tape strips have been used to hold control surfaces or other parts in place during shipping. When removing tape from POLYCOTE ECS, peel the tape back on itself so that the pulling is parallel to the surface of the covering. Do not pull the tape up at right angles to the covering. If you use tape during the assembly process use a low tack masking tape and remove it using the procedure noted above.

**CLEANING INITIALLY:** POLYCOTE ECS has very few seams and we use our SURE SEAL system to really lock the seams down. Upon initial inspection if you see a thin streaky film on any of the POLYCOTE ECS when looked at under bright light this is a light residue from the SURE SEAL process. It is easily removed using Mineral Spirits (Paint Thinner, Varsol). If you've ever painted with oil base paints you probably have Mineral Spirits on hand already, if not, it is readily available at a paint or hardware store. **It is recommended that you work with Mineral Spirits outdoors and follow the directions on the container.** Use a paper towel and wipe a slightly wet film of Mineral Spirits over 1/4 of a wing or half a fuselage at a time. Rub gently while still wet. Change towels frequently. Use a clean towel to buff dry. If you want to accentuate the deep "clear coat" gloss of POLYCOTE ECS even more, use a bit of Armorall and buff shiny with a clean paper towel. Discard all soiled paper towels into a metal garbage can stored outdoors.

**CLEANING AFTER FLYING:** To clean POLYCOTE ECS after flying we recommend Fantastic household cleaner and disposable paper towels. You can use just about any cleaner and we are not aware of any cleaner that will damage POLYCOTE but it is a good idea to always test a small out of the way spot first. Wipe along seams, not across. To really show off your POLYCOTE ECS covering, after cleaning with Fantastic... use a bit of Armorall and buff dry & shiny.

**CARE:** Avoid puncturing. Avoid leaving your model in a closed car exposed to direct heating from the sun for lengthy periods. Temperatures under such conditions can exceed 50C (122F) and sagging may occur.

**TIGHTENING:** To tighten POLYCOTE ECS we recommend using a medium-high temperature **heat iron on the seams, edges, around perimeters and over solid surfaces.** Use a heat iron "sock" on the iron and push down firmly on the covering over solid areas to bond the covering to the underlying substrate. Work with the iron set at 250-300F. You may also work with a heat gun over solid surfaces provided that all edges and seams are set with a heat iron first. If using a heat gun over solid surfaces, make sure the edges are firmly set with a heat iron first then use the heat gun to heat about 1 square foot of area at a time, then rub the warm covering down firmly with a soft cotton cloth to bond the covering to the underlying substrate. Higher temperatures may assist with complex curved surfaces. Use a medium-high temperature **heat gun on POLYCOTE ECS applied over open bays.** Always practise on the bottom of a less noticeable section first. Be patient and work systematically... you will likely only have to tighten POLYCOTE once or twice to accommodate any shrinkage of the airframe in dry hot conditions.

**RESEALING SEAMS:** POLYCOTE ECS seams are sealed with our SURE SEAL system and will not normally lift. If you find a loose edge, clean any oil residue from the area and the edge and reseal with thin CA.

**PATCHING:** If you puncture POLYCOTE ECS, clean any oil residue from the area of the puncture. We clean using Fantastic and then a paper towel with a bit of Pacer De-Bonder to remove any remaining oil residue from the surface. The patch should be 1/2" bigger than the hole on all sides. We recommend polyester covering such as POLYCOTE, ULTRACOTE or ORACOVER and the use of a heat iron and soft cloth. Monokote, SolarFilm or VMAR peel and stick covering material will also work. Cut the patch with rounded corners. See Tightening tips above. To repair larger more extensive damage areas, you may wish to obtain the appropriate POLYCOTE ECS covering set for this model.

**CUTTING:** POLYCOTE ECS is made from ULTRA TOUGH POLYESTER. Where possible, use scissors to cut POLYCOTE. Scissors work well. Otherwise use a new sharp #11 Blade. **The blade must be SHARP.**

Check for updates and more information about POLYCOTE ECS at [www.richmondrc.com/polycote](http://www.richmondrc.com/polycote)