



**PLEASE  
READ THIS  
FIRST!**

**V-COTE™**

This model is covered with  
V-COTE Thermally Reactive Film.

Please see Page 4 for V-COTE  
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!

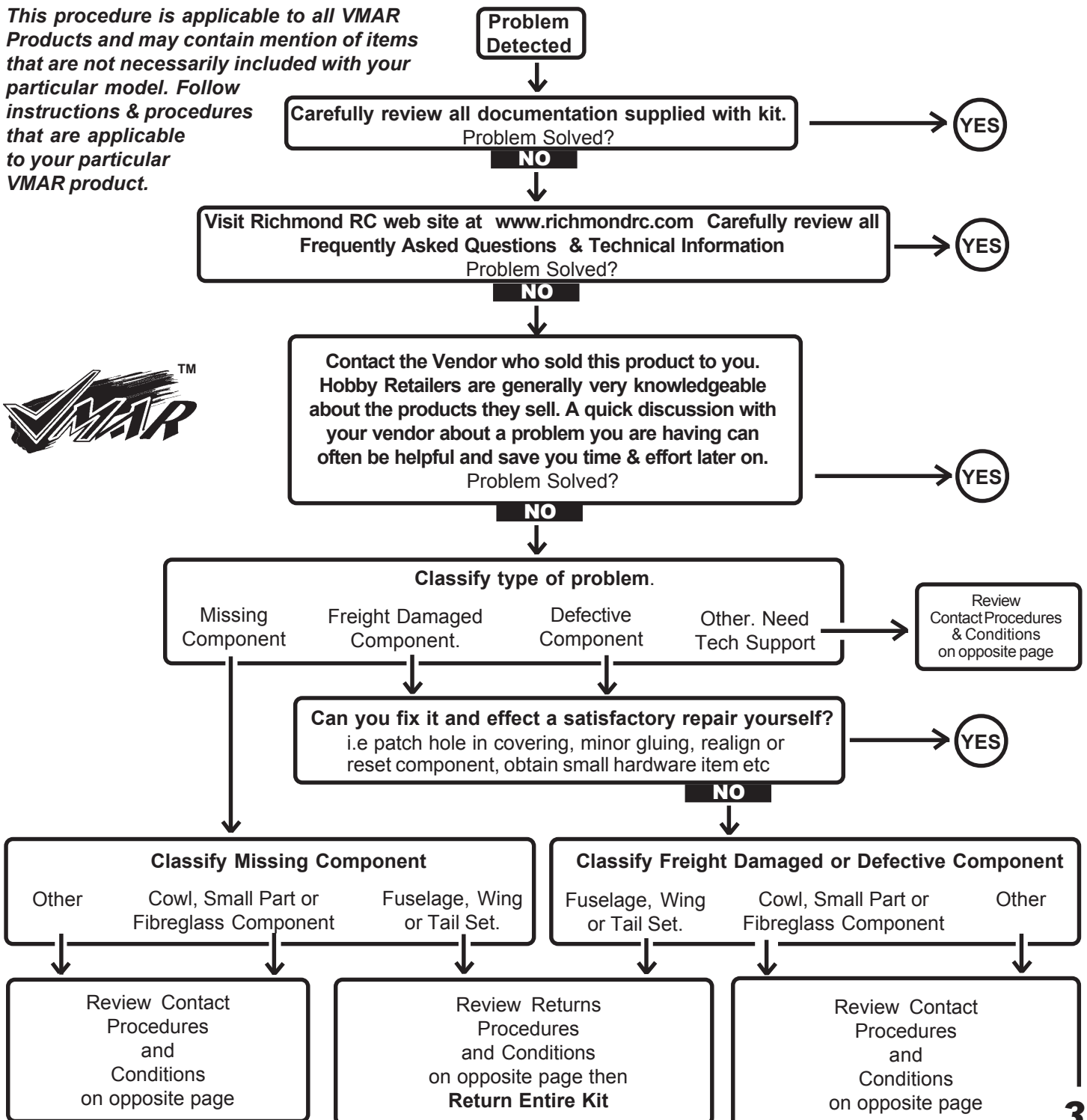
**Avoid 90% of Problems by doing these 10 things.**

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 & MAINTENANCE OF V-COTE™ COVERING.



**V-COTE covering is engineered in Canada & available only from VMAR.** V-COTE is a thermally reactive film that shrinks well with standard hobby heat guns and hobby irons intended for model airplane covering. We bond the graphic elements to the rugged thermal film using a proprietary process that results in an economical highly detailed finish without the need for decals, layers, strips or stripes! Best of all, you get the detailing without having to put in hours and hours of work... we've done it all for you! With VMAR models and V-COTE covering you will spend more time flying and less time building and detailing! Here are a few tips to make it easy to keep your V-COTE covering 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 V-COTE, 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:** V-COTE 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 covering when looked at under bright light this is a residue from the SURE SEAL process. Use alcohol with a paper towel and wipe the residue away. V-COTE and the graphics detailing are resistant to alcohol but it is always a good idea to test alcohol or any other cleaner or solvent you are using on a small out of the way area first! Change towels frequently. If you want to accentuate the gloss of V-COTE even more, use a bit of Armorall and buff shiny with a clean paper towel. Test the Armorall on a small out of the way area first! Discard all soiled paper towels into a metal garbage can stored outdoors.

**CLEANING AFTER FLYING:** To clean V-COTE after flying we recommend Fantastic household cleaner and disposable paper towels. You can use other similar cleaners but avoid cleaners with solvents or abrasives. 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 V-COTE 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. V-COTE is resistant to fuels having up to 15% nitro methane. If you must use higher nitro fuels, avoid spilling raw fuel onto the V-COTE covering and remove fuel residue as soon as possible using soft paper towels and gentle wiping when doing so. Some color bleeding and deterioration may be experienced with prolonged exposure to high nitro fuels.

**TIGHTENING:** To tighten V-COTE we recommend using a medium-high temperature **heat gun. Work with the gun set at 250-300F.** Experiment on small areas first to get comfortable with the temperature and the process described below.

**a) To seal and bond the seams, edges, around perimeters and over solid surfaces** use a heat gun set at 250F and a soft cotton cloth or glove. Heat a small area of the covering and then press the warm covering down firmly with a soft cotton cloth to bond the covering to the underlying substrate. Avoid hard rubbing side to side while the covering is warm. Higher temperatures may assist with complex curved surfaces. Avoid using more heat than required to prevent bubbles from forming beneath the covering. Be patient and work systematically starting with a small out of the way area first to gain experience.

**b) To shrink V-COTE over open bays** use a medium-high temperature heat gun set at 250-300F. Practise on a single bay on the bottom of a less noticeable section first. Heat the V-COTE until it is warm and sags slightly then remove the heat and the V-COTE will shrink tight. Try this repeatedly until the covering over the open bay is tight. Be patient and work systematically. As you gain experience you will be able to judge better how much heat to apply and for how long. You will likely only have to tighten V-COTE once or twice to accommodate any shrinkage of the airframe in dry hot conditions.

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

**PATCHING:** If you puncture V-COTE, thoroughly clean any oil residue from the area of the puncture. We clean using Fantastic and a paper towel. Once you have all the oil residue removed, wipe the area again with a fresh clean towel moistened with water or plain alcohol. The patch should be 1/2" bigger than the hole on all sides. We recommend using the V-COTE patch sheets provided with your model or after market V-COTE patch material. You can also use polyester covering such as POLYCOTE, ULTRACOTE or ORACOVER. Monokote or SolarFilm covering material will also work. Cut the patch with rounded corners. Seal the patch in place with a heat iron set at 250F first and then tighten the patch and the original covering around the patch using a heat gun as outlined in the tightening section above. To repair larger more extensive damage areas, you may wish to obtain the appropriate V-COTE covering set for this model.

**CUTTING:** V-COTE is made from a thermally reactive film. Where possible, use scissors to cut V-COTE. Scissors work well. Otherwise use a new sharp #11 Blade. **The blade must be SHARP.**

Check for updates and more information about V-COTE at [www.richmondrc.com/documents.htm](http://www.richmondrc.com/documents.htm)