



GLIDER POWER POD



PREFACE

THANK YOU FOR PURCHASING YOUR NEW
WILLYNILLIES.COM POWER POD.

THIS POD HAS BEEN SPECIFICALLY DESIGNED FOR USE ON
WILLYNILLIES.COM GLIDERS.

IT IS EASY TO BUILD AND EASY TO FLY.

THE POD AS BUILT IN THIS MANUAL WEIGHS 31 GRAMS. THE
POD IS QUICKLY INSTALLED OR REMOVED.

THERE IS NO NEED TO RECONFIGURE BALANCE OR TRIMS
ON YOUR GLIDER.

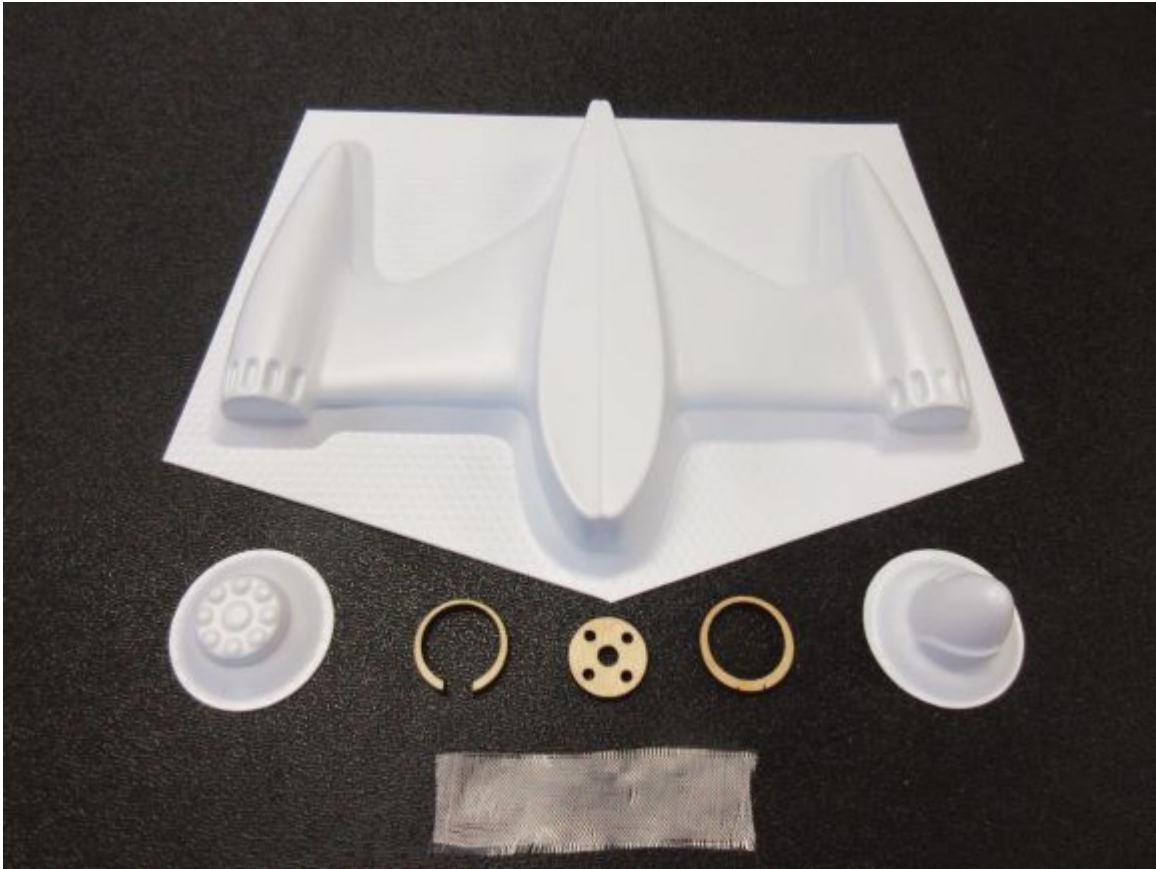
READ THROUGH THIS MANUAL.

TAKE YOUR TIME AND YOU WILL HAVE AN ENJOYABLE
BUILD, A BEAUTIFUL FINAL PRODUCT, AND A PLEASURABLE
EXPERIENCE FLYING WITH YOUR NEW WILLYNILLIES.COM
POWER POD.



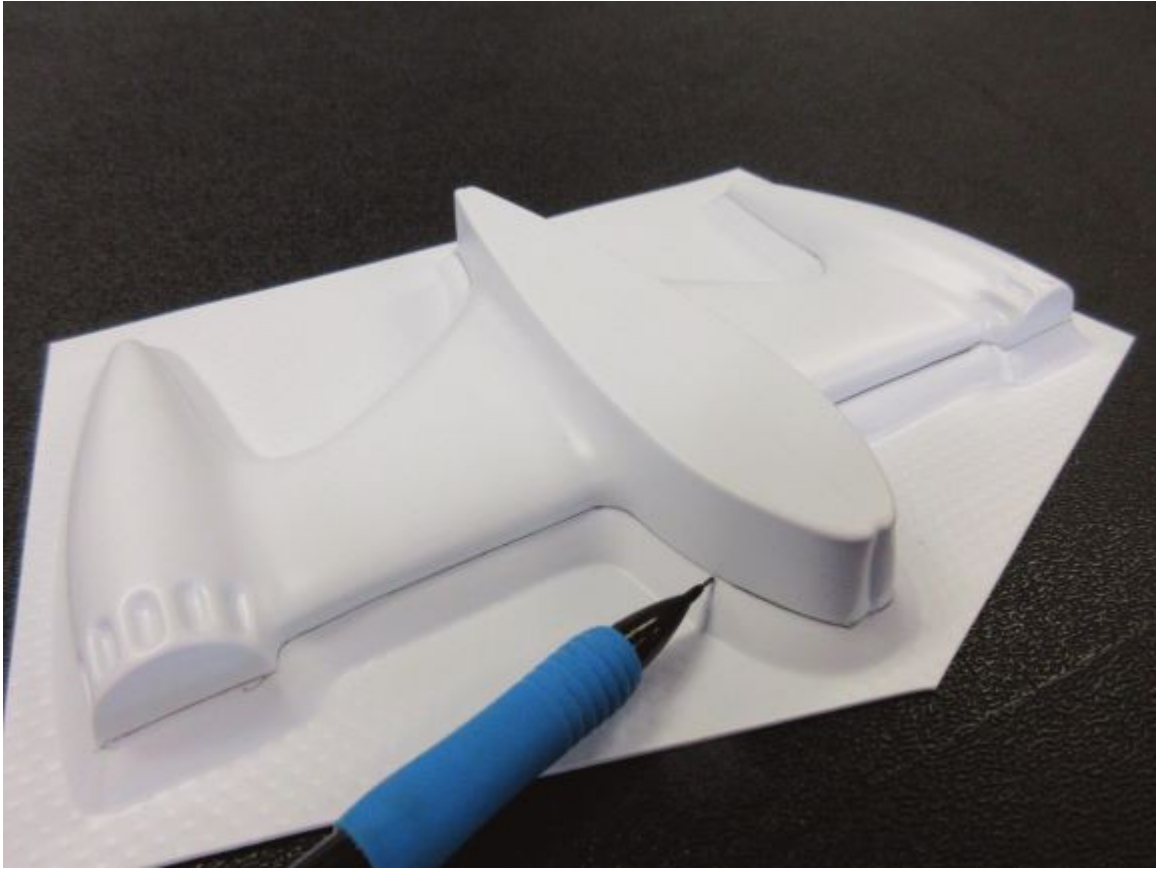
REQUIRED SUPPLIES

- THIN CA
- MED CA
- 5 MINUTE EPOXY
- 15 MINUTE EPOXY
- HOBBY KNIFE / UTILITY KNIFE
- PENCIL
- 400 WET/DRY SAND PAPER
- ROTARY DRUM SANDER/CUTTER
- SMALL SPRING CLAMPS
- CLEAR TAPE



CONTENTS OF KIT

- POD HALVES
- SPINNER BACKPLATE
- FORE FIREWALL MOUNTING RING
- FIREWALL
- AFT FIREWALL MOUNTING RING
- SPINNER CONE
- FIBER GLASS TAPE



MARK VISUAL PARTING LINE IN GROOVE AROUND ENTIRE PART WITH PENCIL.



USING A NEW BLADE, CUT BELOW PENCIL MARK WITH HOBBY KNIFE OR UTILITY KNIFE.



1. ATTACH FULL SHEET OF 400 WET/DRY SANDPAPER TO FLAT SURFACE.
2. WET SAND WITH LIGHT PRESSURE AND LONG STROKES.
3. CHECK OFTEN TO ENSURE EVEN REMOVAL.
4. SAND JUST TO THE POINT OF REMOVING PENCIL LINE.



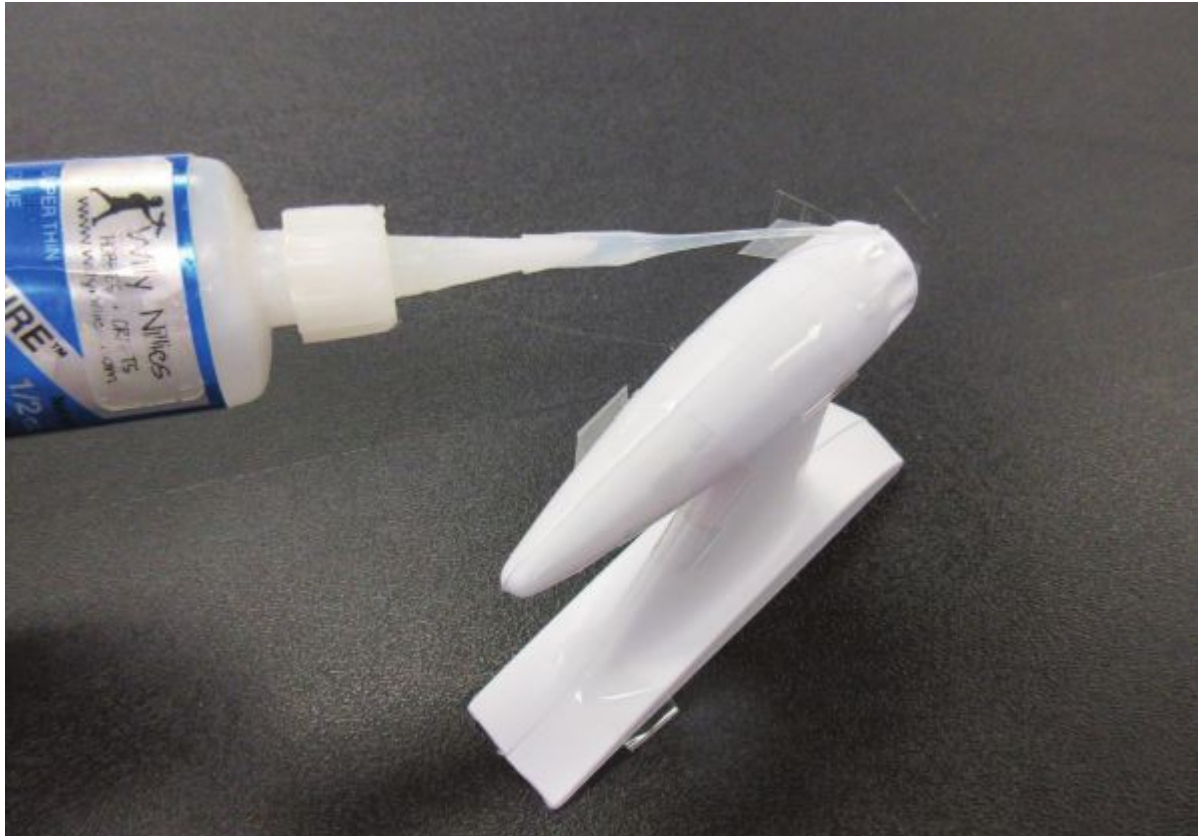
SEPARATE HALVES.



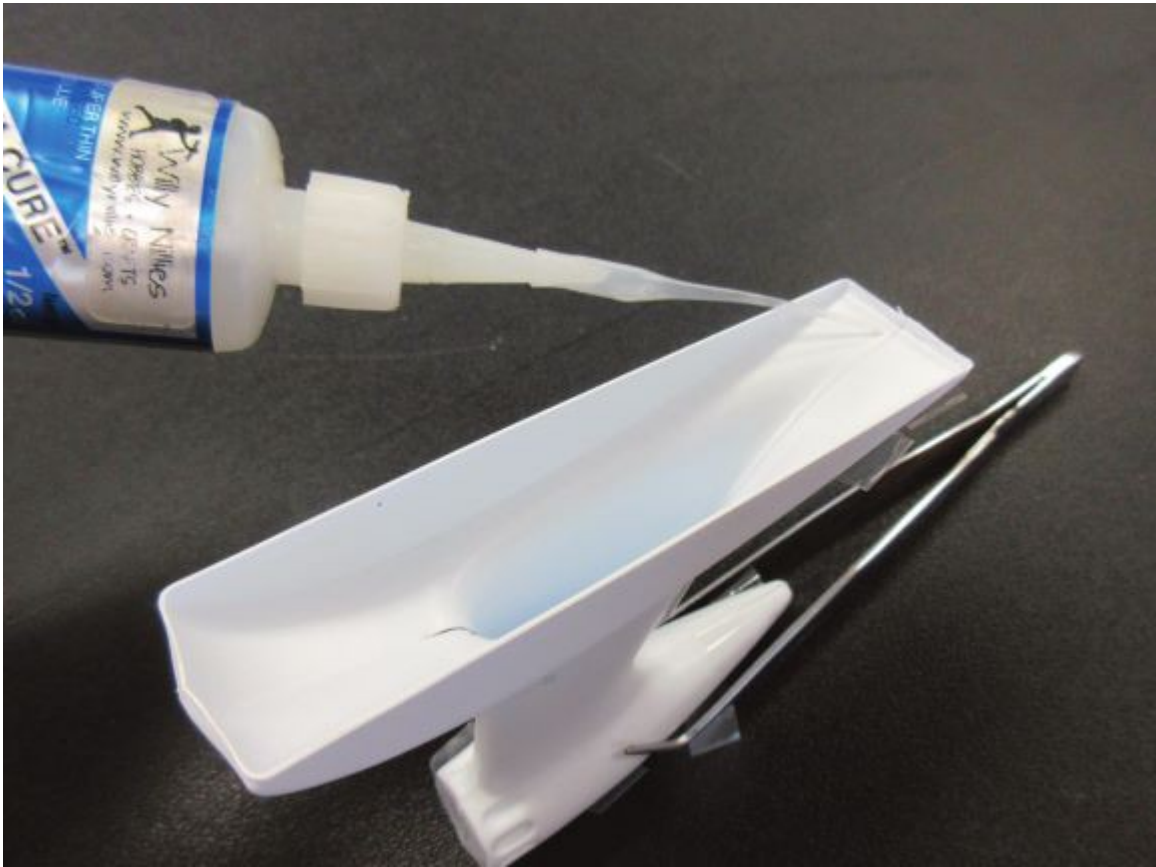
PREPARE A NUMBER OF 1" LENGTHS OF CLEAR TAPE BY FOLDING OVER ONE END THIS WILL AID IN ADJUSTMENTS AND REMOVAL.



1. APPLY CLEAR TAPE TO HOLD POD HALVES TOGETHER.
2. HALVES SHOULD LINE UP PERFECTLY WITH NO GAPS IN BETWEEN. ADJUST TAPE AS NECESSARY

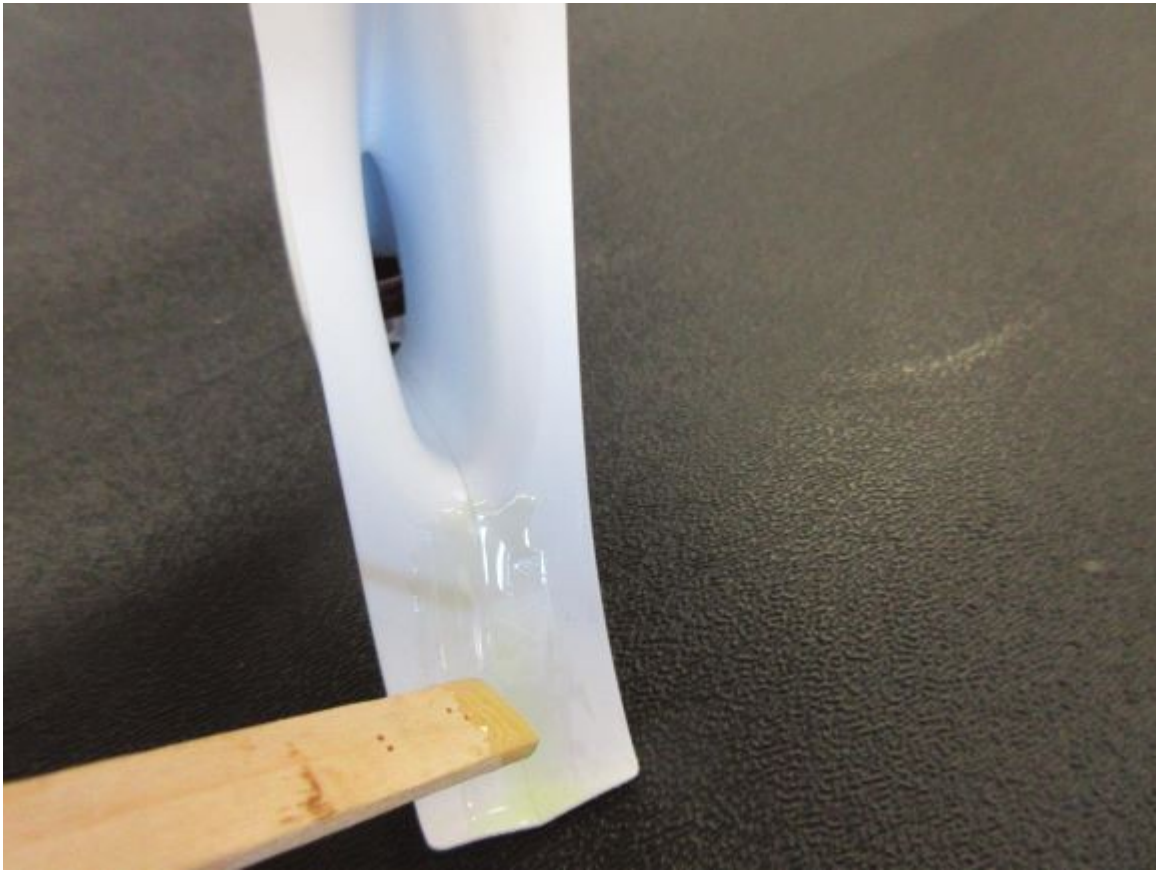


USE THIN CA TO TACK IN SEVERAL SPOTS ON OUTSIDE SEAM.

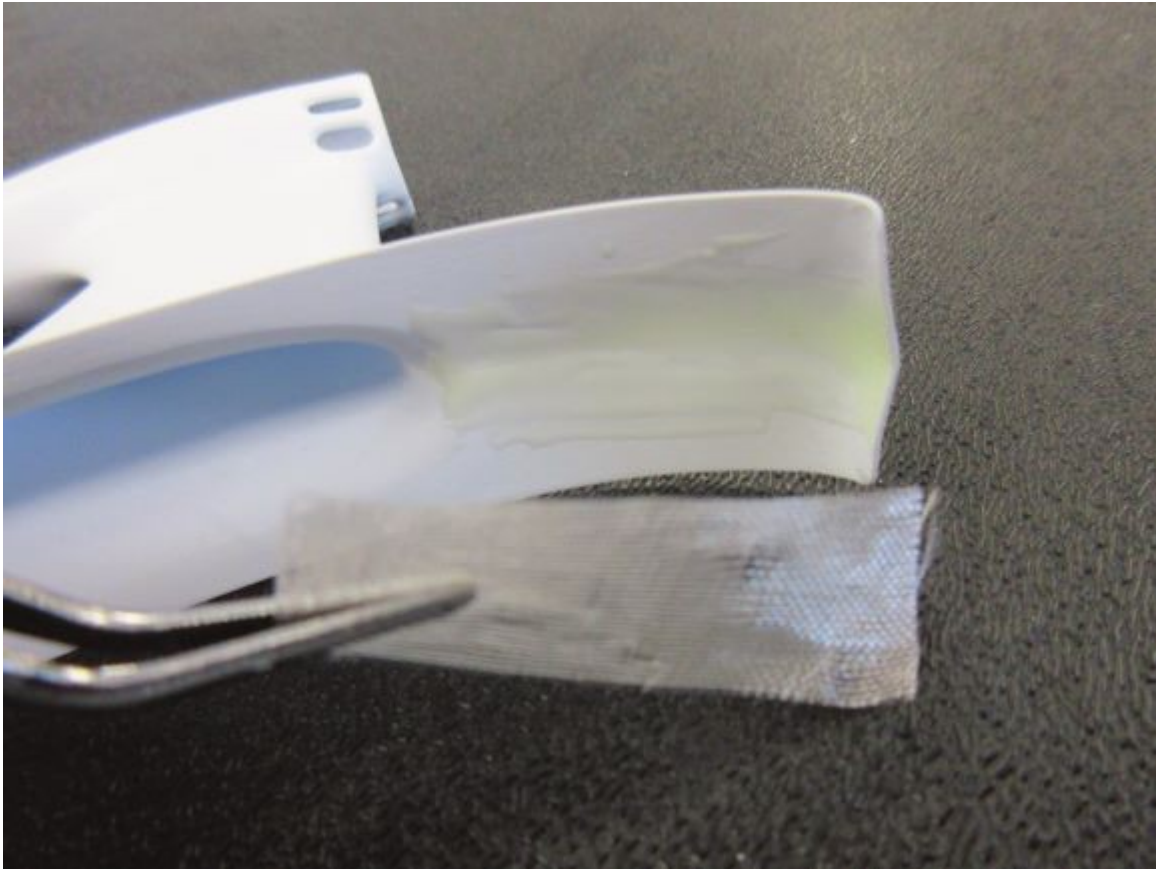


RUN THIN CA ON THE ENTIRE SEAM INSIDE.

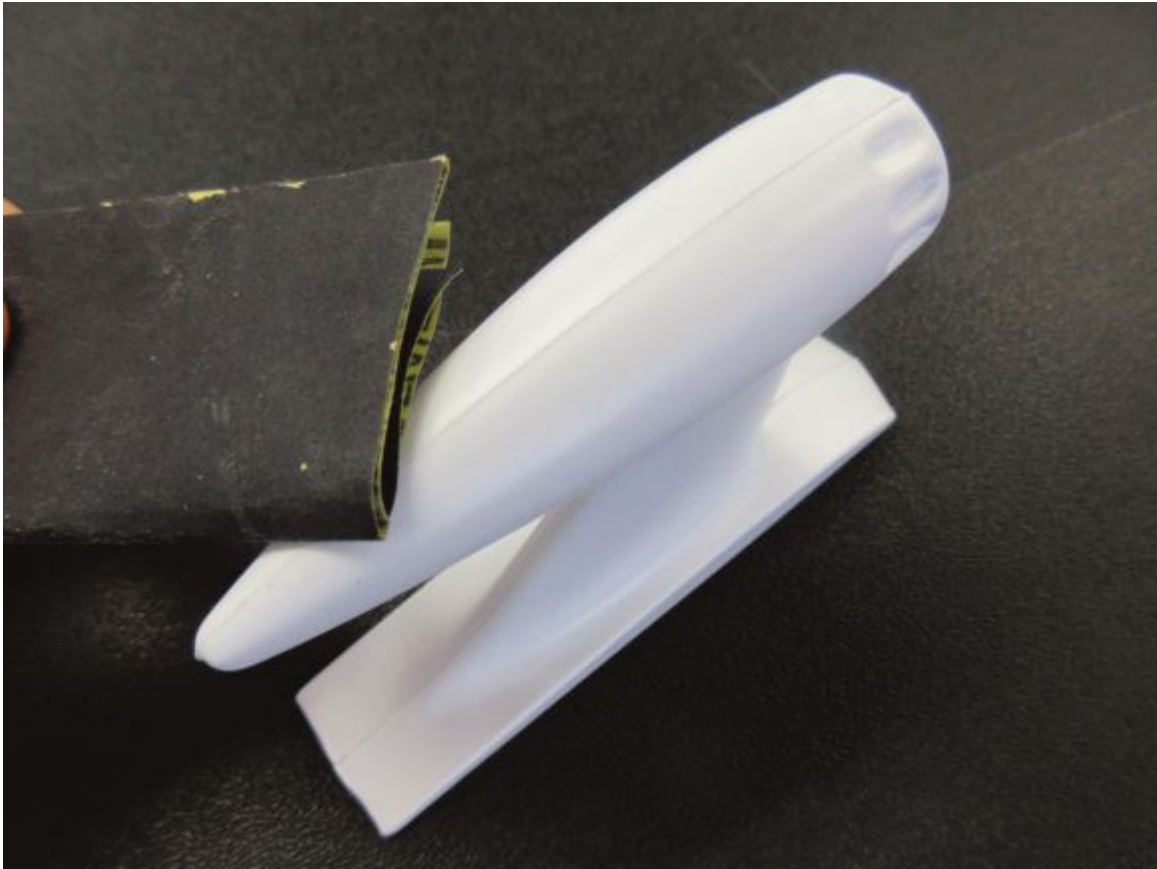
ROLLING THE POD HELPS TO FLOW CA TO ENTIRE LENGTH OF SEAM.



APPLY 15 MINUTE EPOXY TO FRONT OF INSIDE SEAM FROM
EDGE TO OPENING IN PYLON.



APPLY AND SMOOTH OUT FIBERGLASS TAPE ONTO EPOXY
ENSURING THE FIBERGLASS TAPE EXTENDS COMPLETELY TO
THE FRONT EDGE.

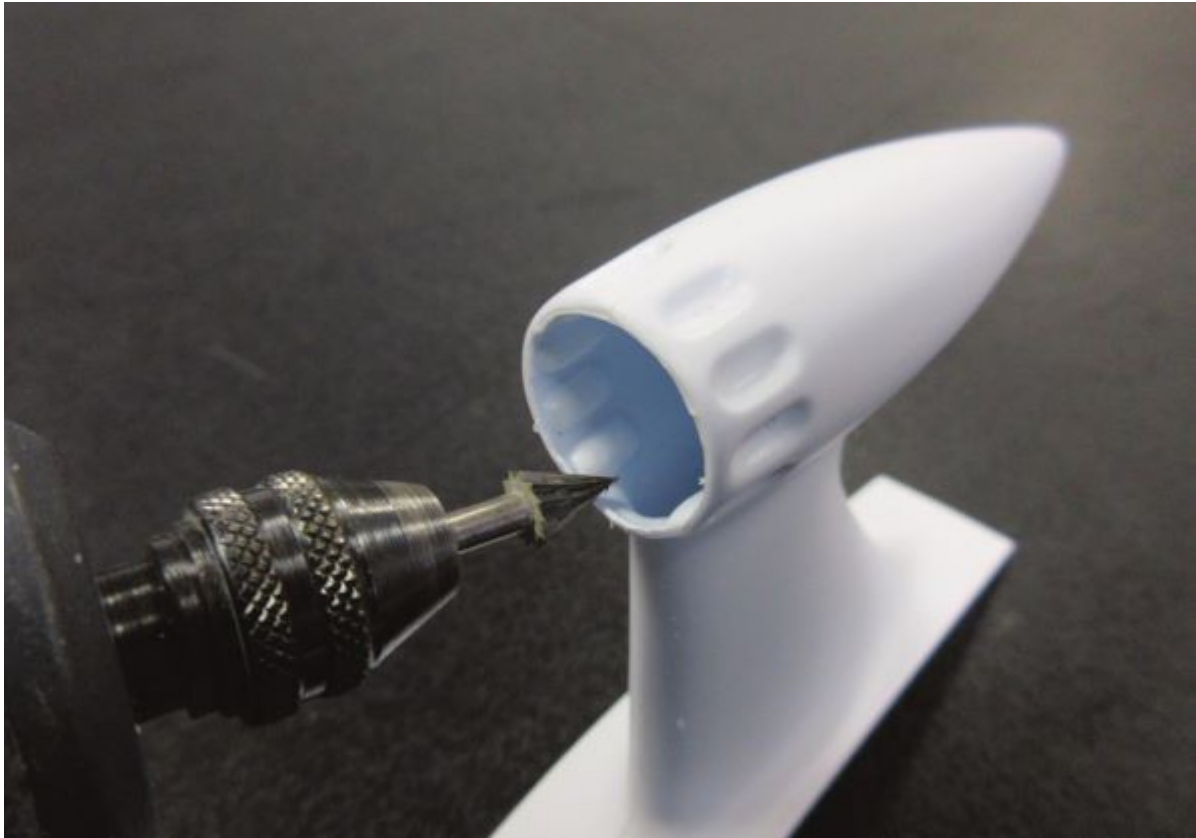


REMOVE CLEAR TAPE.

WET SAND SEAMS EVEN WITH 400 PAPER.



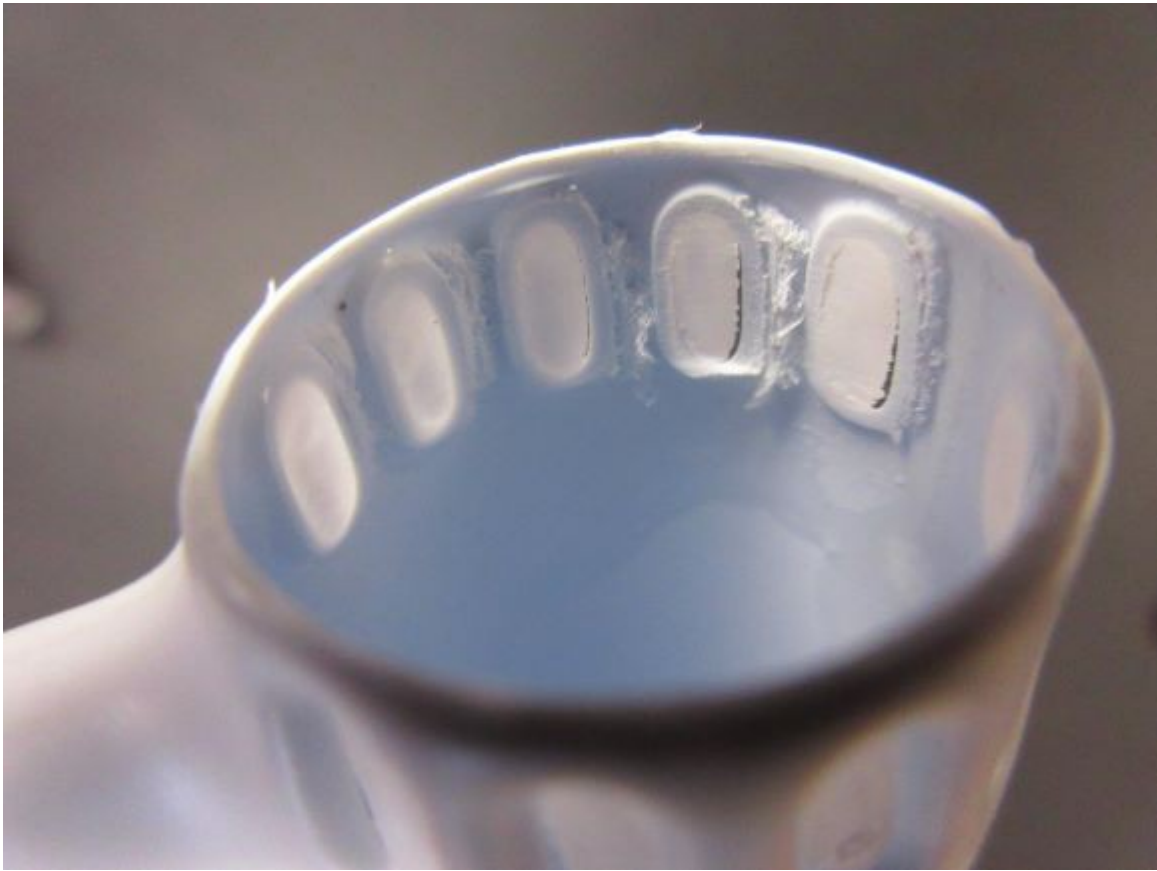
START CENTER HOLE.



OPEN FRONT FACE USING ROTARY TOOL.
DO NOT CUT COMPLETELY TO EDGE.



1. USING FINE GRIT DRUM SANDER ON LOW SPEED, FINISH OPENING. LEAVE FULL RADIUS.
2. SAND EACH COOLING VENT NEAR TO THE POINT CENTERS SEPARATE. DO NOT SAND FLUSH.



STOP WITH DRUM SANDER AT THIS POINT.



FINISH WET SANDING FRONT OPENING AND COOLING VENT WITH 400 PAPER ON CYLINDER SLIGHTLY SMALLER THAN OPENING.

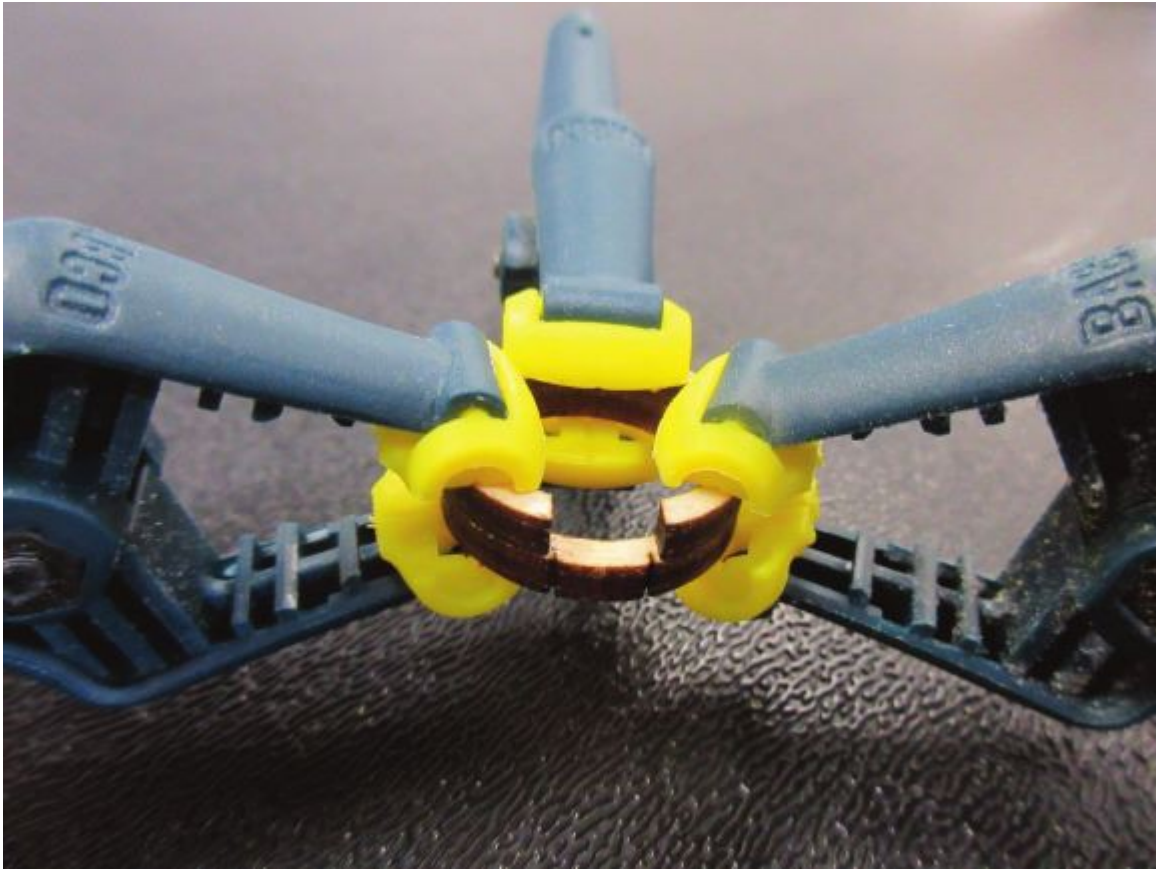
WET SAND JUST TO THE POINT THE COOLING VENT BOTTOMS RELEASE. DO NOT SAND FLUSH.



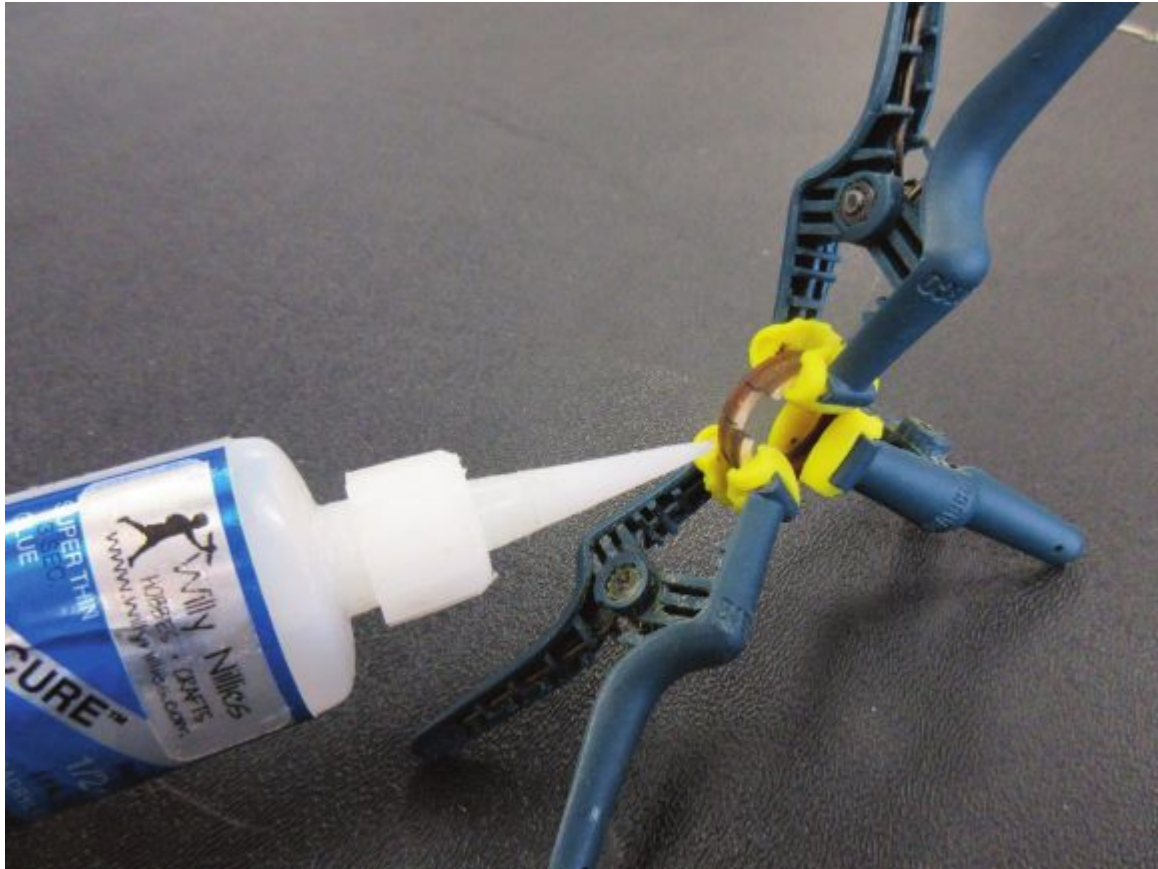
COOLING VENT BOTTOMS RELEASED.



FIREWALL MOUNTING RING WILL BE GLUED TOGETHER USING THESE INDEX MARKS.



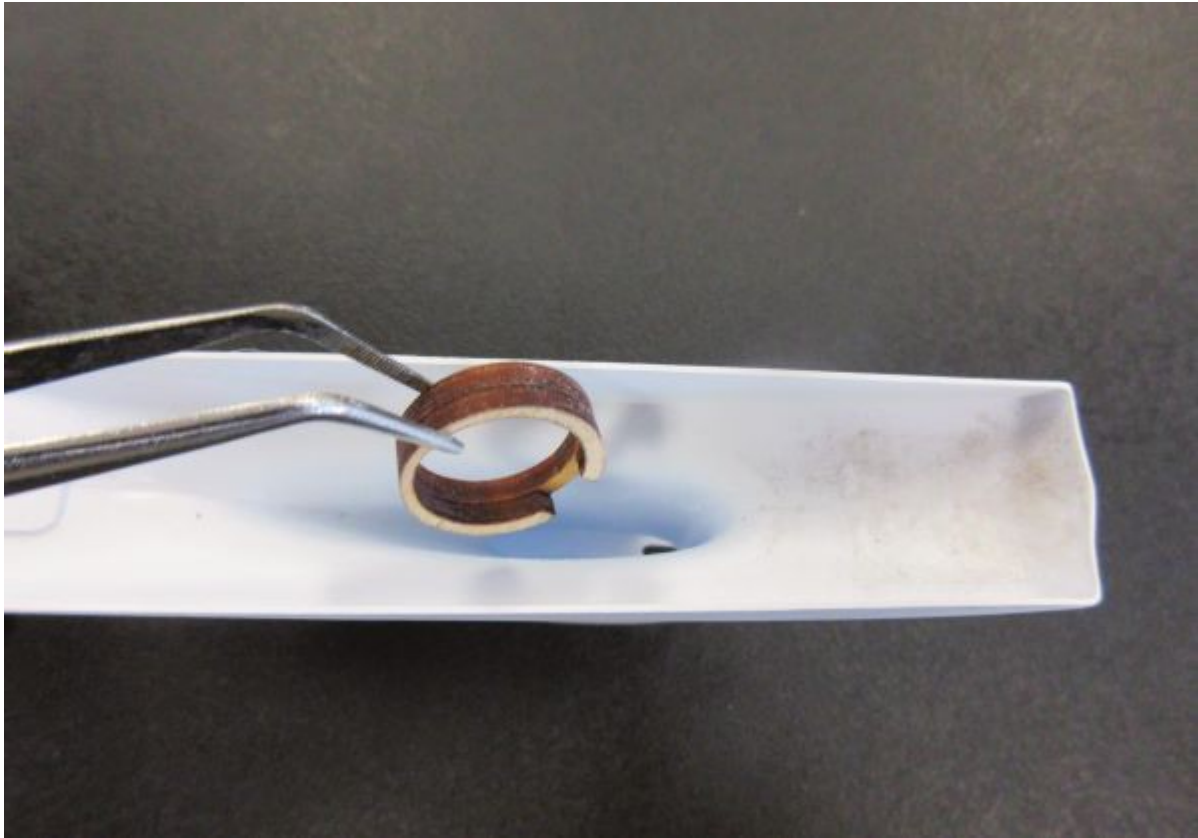
USING SMALL SPRING CLAMPS, ALIGN RINGS. ADJUST UNTIL MARKS ARE CENTERED AND RINGS ALIGN ON INSIDE AND OUTSIDE DIAMETER.



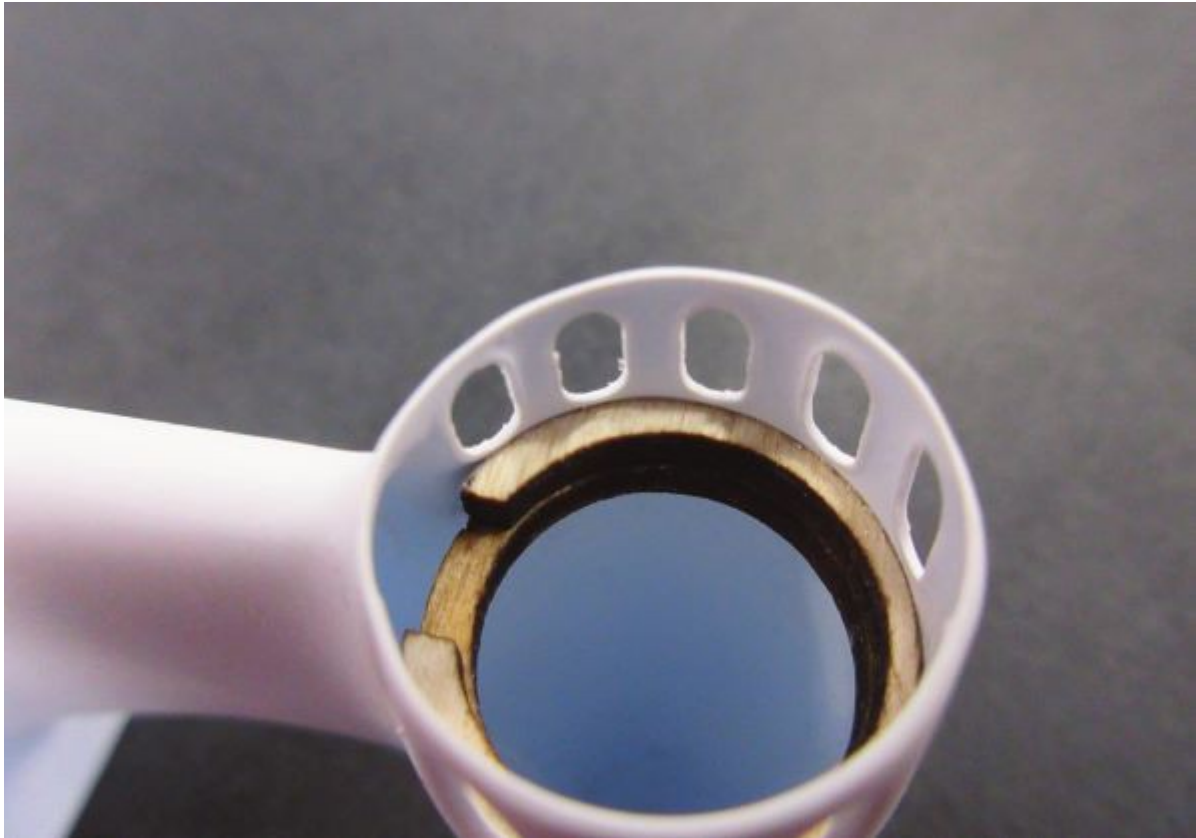
USING THIN CA, TACK AT OPENING.



REMOVE TWO SPRING CLAMPS. APPLY THIN CA TO OUTSIDE SEAM. REMOVE CLAMP. APPLY THIN CA TO INSIDE SEAM. ONLY SAND WITH FINE PAPER TO REMOVE EXCESS CA AND SPRUES LEFT FROM SEPARATING RINGS FROM MOTHER SHEET



DROP RINGS THROUGH PYLON.



CHECK FIT.

THE SLOTTED RING WILL FACE FORWARD WITH SLOT ON
BOTTOM ALIGNED WITH PYLON OPENING.

FACE OF RING WILL MATE UP TO SHOULDERS OF COOLING VENT
OPENINGS.

RING SHOULD NOT BE FORCED INTO PLACE.

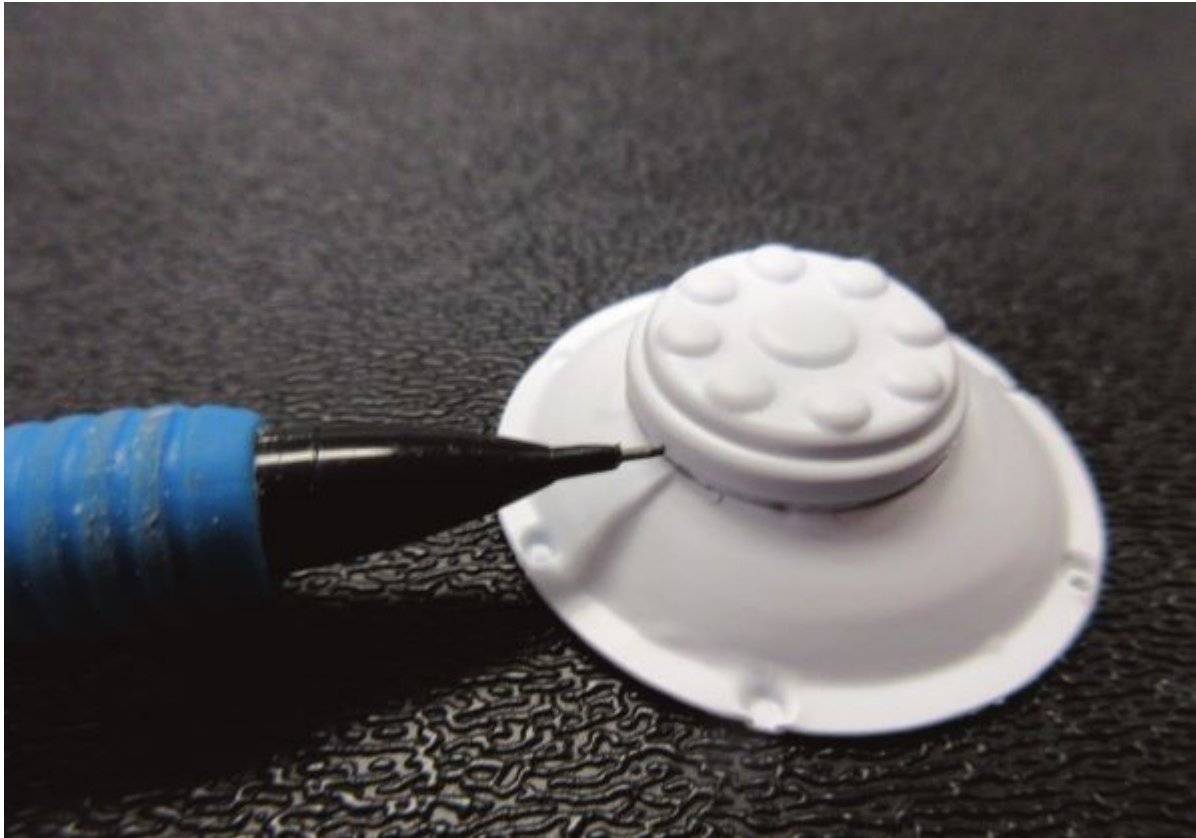
SAND WITH FINE GRIT IF NECESSARY UNTIL RING EASILY SEATS
INTO PLACE.



APPLY A THIN LAYER OF 15 MINUTE EPOXY BEHIND COOLING VENT OPENINGS.

REINSERT FIREWALL MOUNTING RINGS AND ENSURE CORRECT LOCATION UNTIL EPOXY IS CURED.

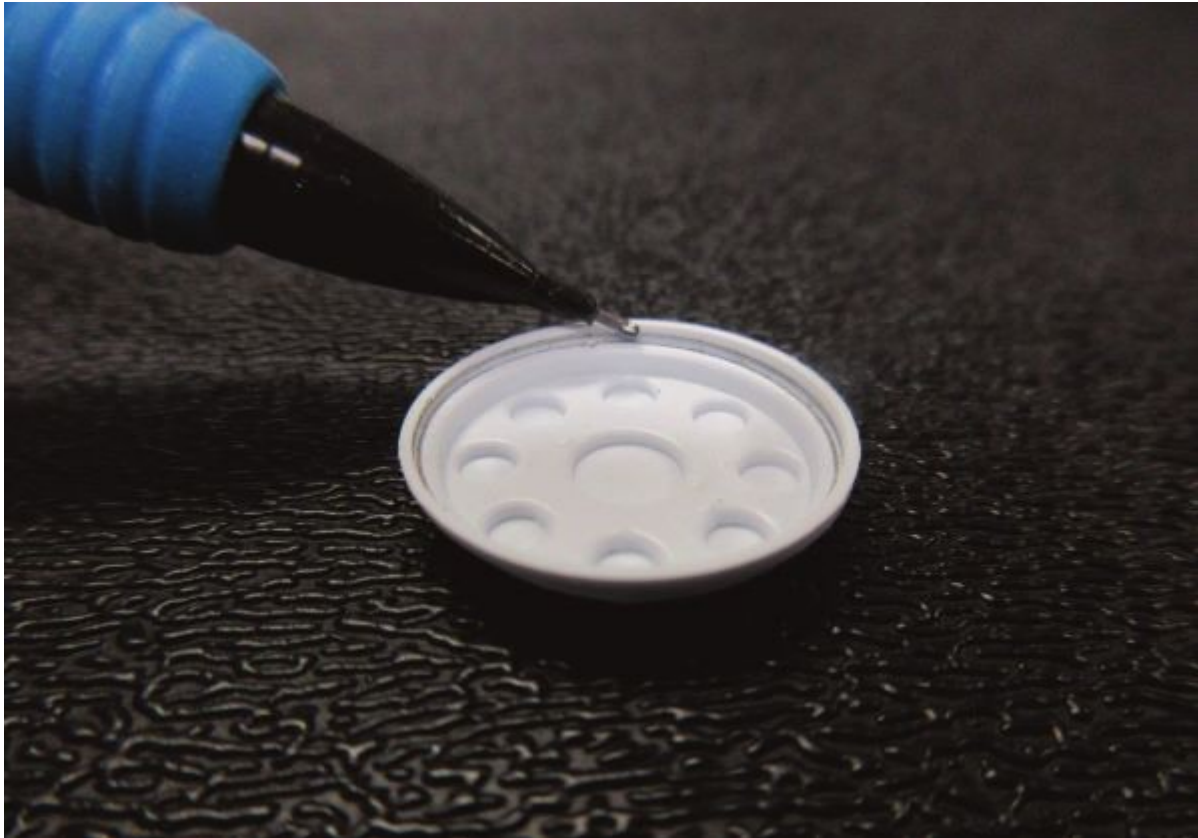
PREPARE SPINNER WHILE EPOXY ON FIREWALL MOUNTING RINGS CURES.



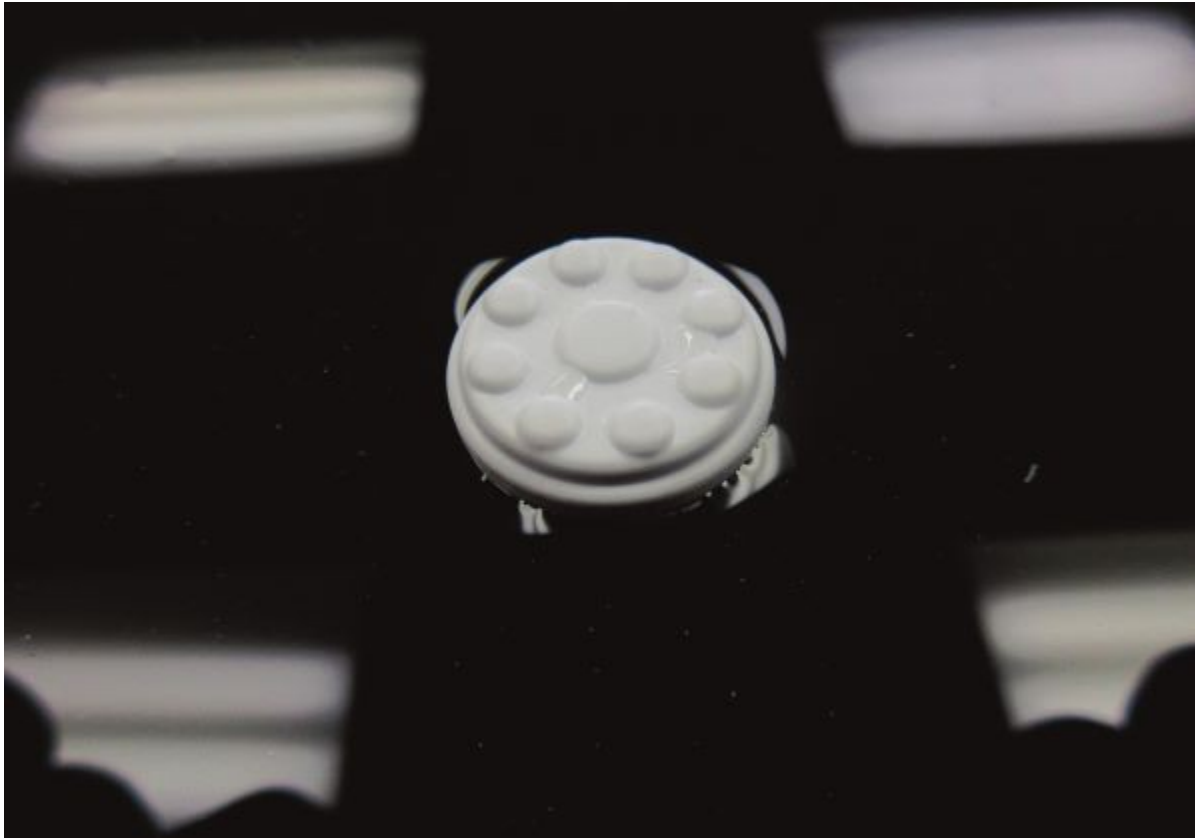
MARK PARTING LINE WITH PENCIL.



CUT WITH NEW BLADE.



MARK THIS LINE WITH PENCIL



WET SAND WITH 400 PAPER ATTACHED TO A FLAT SURFACE
UNTIL FLUSH WITH SHOULDER FLANGE.

CHECK OFTEN AND KEEP EVEN.



STOP HERE.



TOP VIEW OF FLANGE AFTER FINAL SANDING.



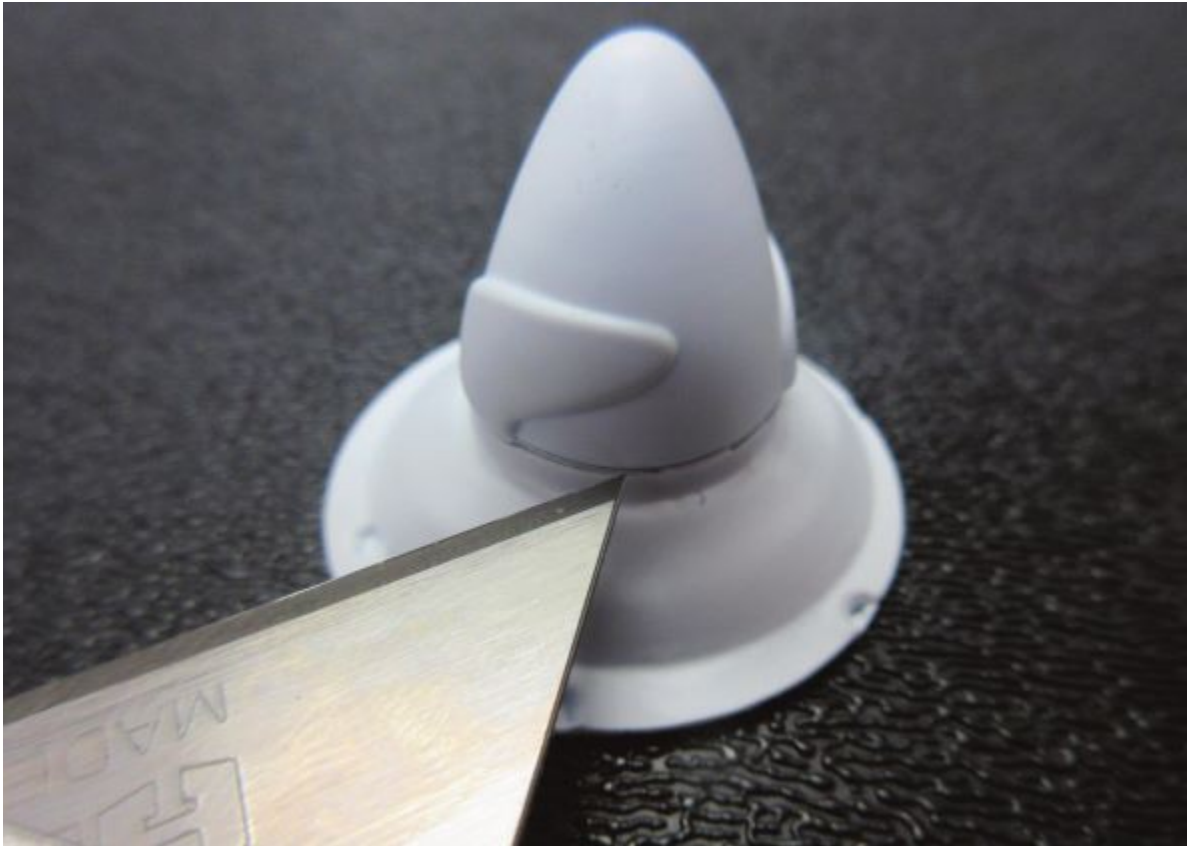
WET SAND WITH 400 PAPER ATTACHED TO FLAT SURFACE TO REMOVE CENTER HOLE AND COOLING VENT PROTRUSIONS.



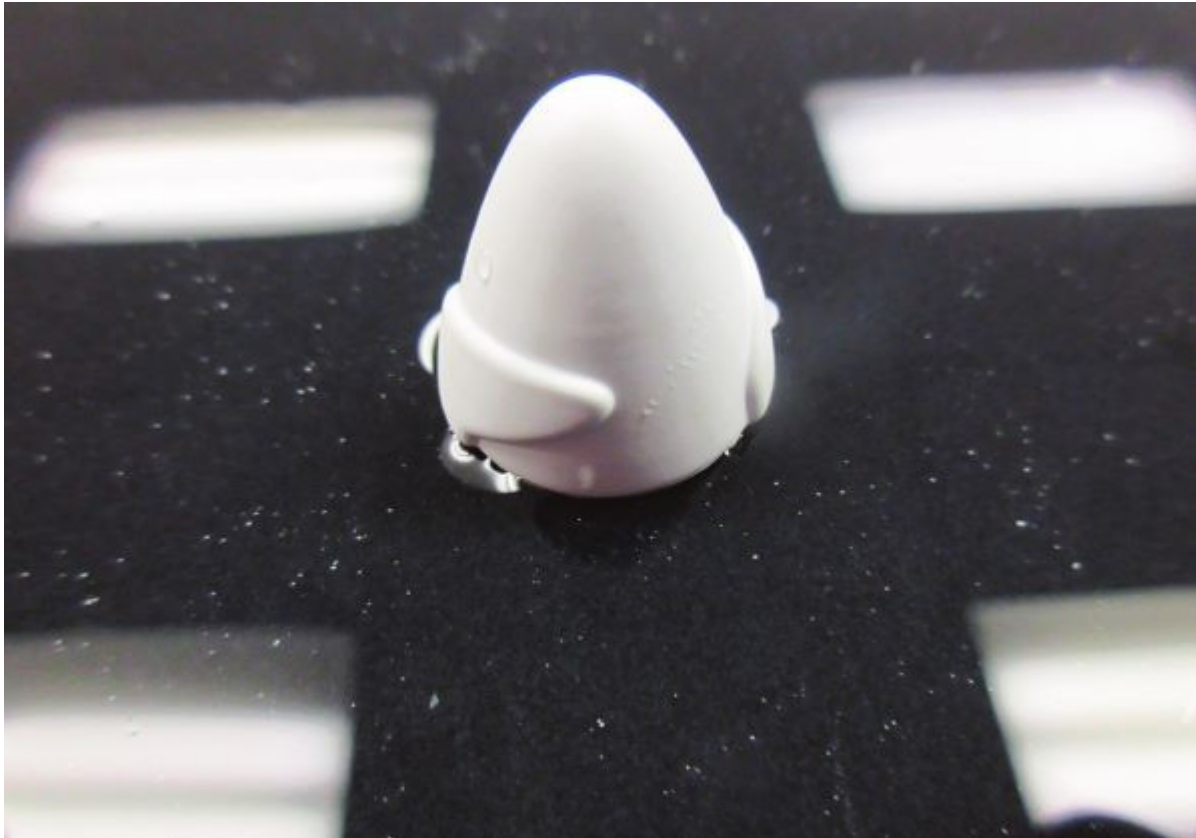
SAND FLUSH WITH FACE.



MARK PARTING LINE WITH PENCIL.



CUT ON LINE WITH NEW BLADE.



WET SAND SPINNER WITH 400 PAPER ATTACHED TO A FLAT SURFACE.



WET SAND UNTIL RIDGE ON INSIDE IS JUST GONE.

CHECK OFTEN AND KEEP EVEN.



WET SAND PROP OPENING PROTRUSIONS OFF.



FINISHED PARTS.



USE A SPACER SUCH AS AN OVERSIZED NUT TO TEMPORARILY
MOUNT THE SPINNER BACK PLATE.

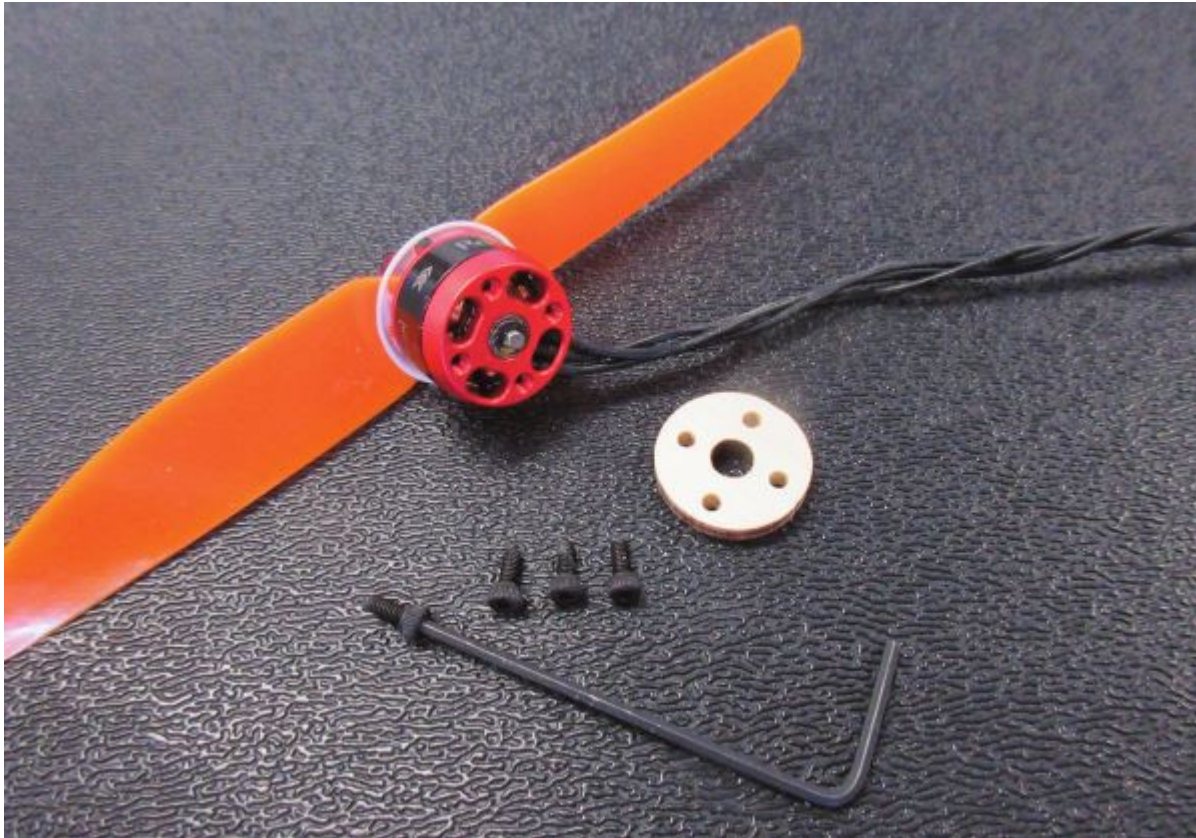


WILLYNILLIES.COM POWER POD WAS SPECIFICALLY DESIGNED TO USE:

RACER STAR BR1306

HTIRC HORNET 6A ESC

GEMFAN 5030



INSTALL FIREWALL USING A LIGHT SEAT PRESSURE
ON ALL FOUR SCREWS.

Use of a light thread locking compound is highly recommended!



TEST FIT FIREWALL INTO MOUNTING RINGS. A PIECE OF HEAT SHRINK TUBING OR STRAW HELPS IN FEEDING MOTOR WIRE INTO PYLON.



CHECK FIREWALL FOR EASE OF FITMENT INTO RINGS. SAND
EVENLY UNTIL FIREWALL SLIDES INTO RINGS WITH LITTLE
EFFORT.



A CONSISTENT GAP OF .020"-.030" SHOULD BE OBSERVED ALL
AROUND BACK PLATE TO POD.



APPLY 5 MINUTE EPOXY TO INSIDE OF FIREWALL MOUNTING RINGS.



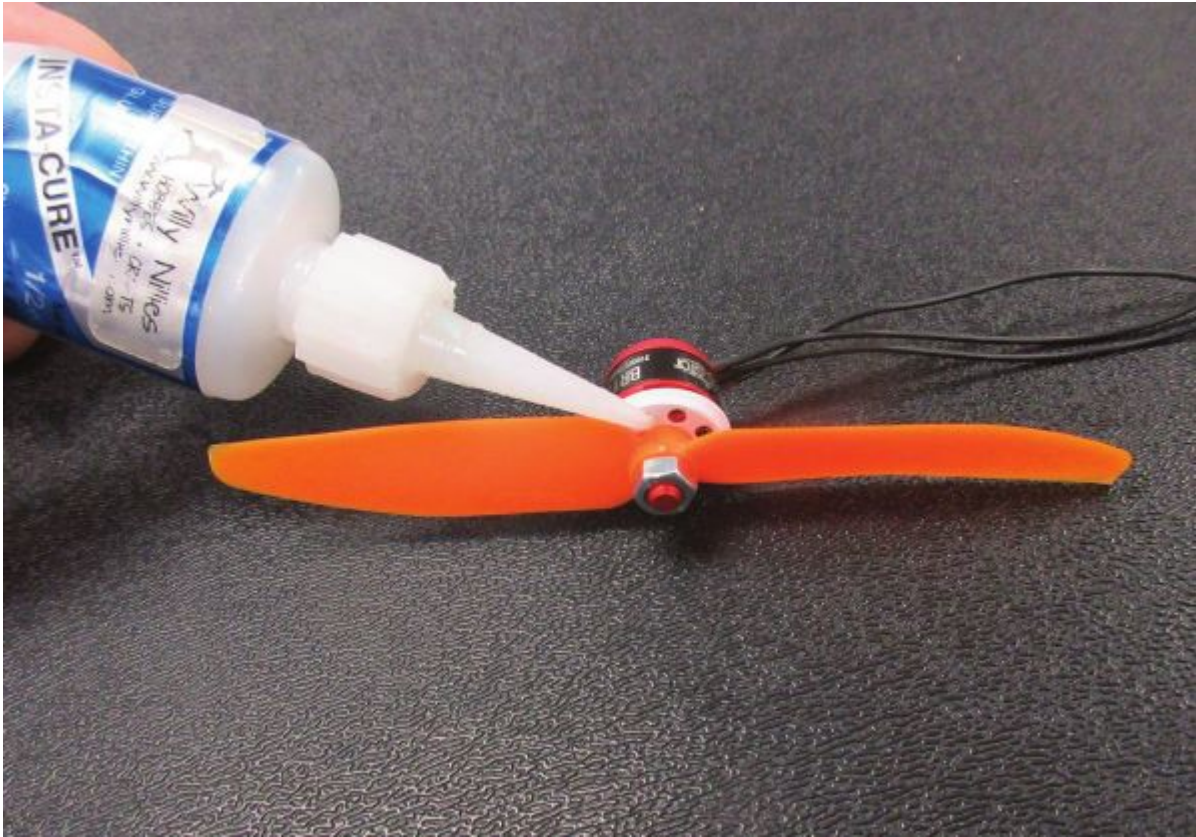
INSTALL MOTOR AND FIREWALL.



A CONSISTENT GAP OF .020"-.030" SHOULD BE OBSERVED ALL AROUND BACK PLATE TO POD.



BACK PLATE SHOULD BE CONCENTRIC WITH POD.

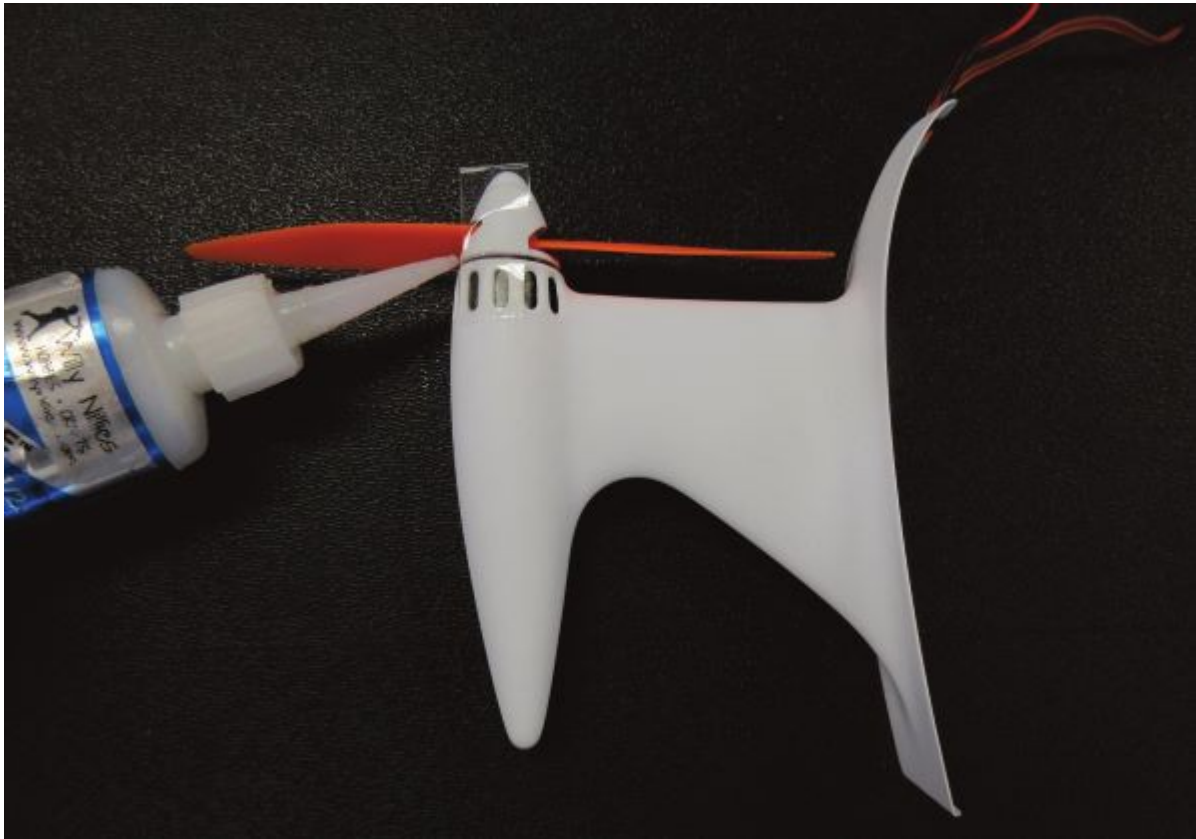


INSTALL BACK PLATE, BALANCED PROP, AND NUT.

A SMALL DRIP OF THIN CA TO SECURE BACK PLATE, PROP, AND SHAFT WILL HELP TO TIGHTEN NUT WITHOUT SPINNING.

DO NOT OVER TIGHTEN. BACK PLATE MAY DISTORT.

ADD A DRIP OF CA TO NUT AND THREADS

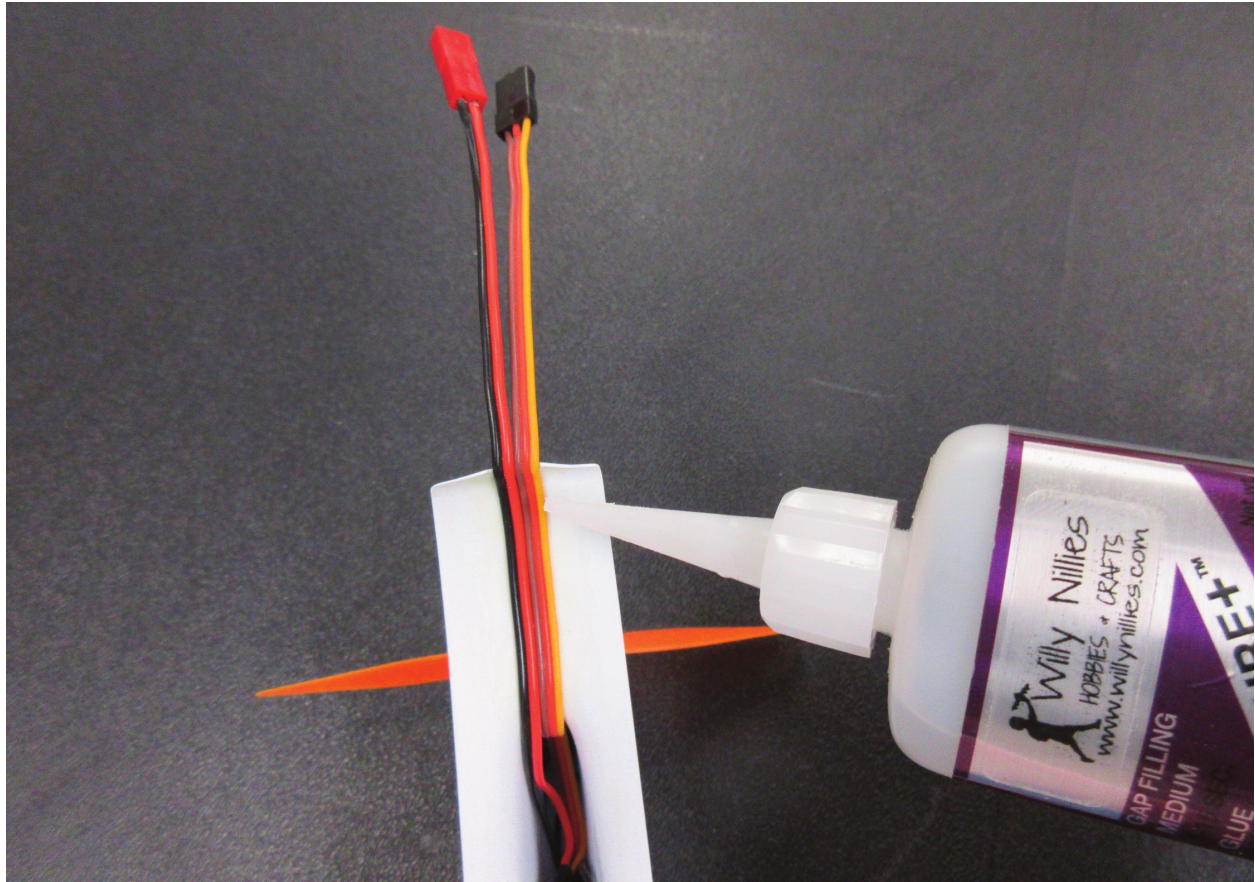


TAPE SPINNER CONE IN PLACE.

WHEN ALIGNED, SECURE WITH SMALL DRIP OF THIN CA AT
FRONT AND BACK OF PROP OPENING ON BACK PLATE



NOTCH FRONT LOWER EDGE TO ROUTE WIRES.



You may either run the 3 motor leads out of the pod and hook up to an ESC mounted in the fuselage

OR

You may install an ESC in the POD itself, then run the throttle receiver wire and battery connector to the fuselage.

It is entirely up to you, but be sure to secure the wires with medium CA glue!



SECURE POWER POD TO GLIDER UNDER WING MOUNTING BANDS.

CONNECT THROTTLE TO RX OR THE THREE MOTOR WIRES DEPENDING ON YOUR INSTALLATION.

FIRST FLIGHT

ENSURE BALANCE, CONTROL SURFACE THROWS, AND CONTROL SURFACE DIRECTIONS ARE SET CORRECTLY.

WITH THROTTLE AT ¼ POWER, “RELEASE” GLIDER WITH A “FOLLOW THROUGH” MOTION IN A HORIZONTAL ATTITUDE.

THERE IS NO NEED TO “THROW” THE GLIDER.

CONCENTRATE ON A LEVEL RELEASE.

ADVANCE THROTTLE FOR CLIMB OUT.

IMMEDIATE LOW TO HIGH THROTTLE DOES NOT EXHIBIT ANY UNDESIRABLE PITCH OR TORQUE ATTITUDES.

HOWEVER, DO NOT SUDDENLY CUT THROTTLE.

THROTTLE SHOULD BE SLOWLY DECREASED TO AVOID A STALL SITUATION.

ENJOY YOUR NEW POWER POD AND PLEASE GIVE US YOUR FEEDBACK AT WILLYNILLIES.COM.

THANK YOU!

Have fun and God bless,

*Doug and Becky
WillyNillies.com*