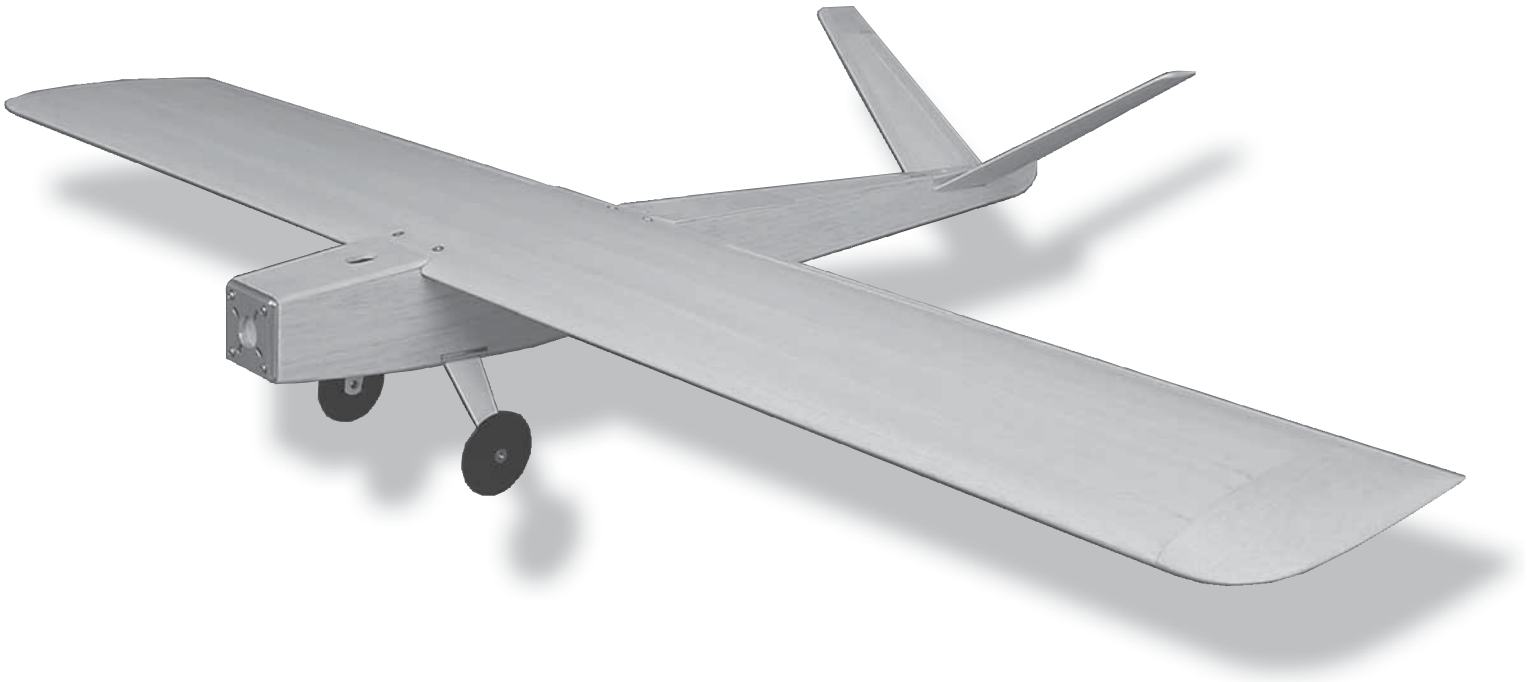
VIPER™ 500 RTC



INSTRUCTION MANUAL SUPPLEMENT

BEFORE YOU PROCEED WITH THE INSTRUCTION MANUAL

This Ready-to-Cover (RTC) version of the Great Planes Viper 500 is supplied to you without the pre-applied fiberglass of the ARF version. Fiberglassing the fuse and wing is necessary for safety so it must be done, but in this RTC version we allow you the choice of how and where you want to glass. You can also, of course, glass and paint the whole airplane, but this is not necessary.

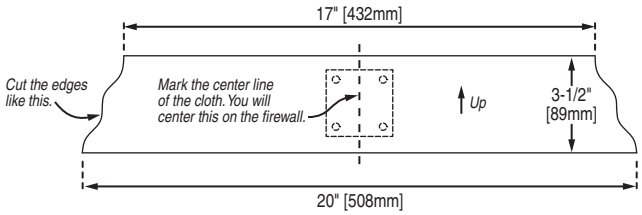
Fiberglassing takes a certain amount of skill, so if you've never done it before we recommend that you seek the help of an experienced modeler. When you're done glassing and covering, please proceed with the included ARF instruction manual.

Please note that when cutting dry fiberglass cloth, the best tool to use is a rotary cutter with a cutting mat. These can be found at most fabric supply and art/craft stores.

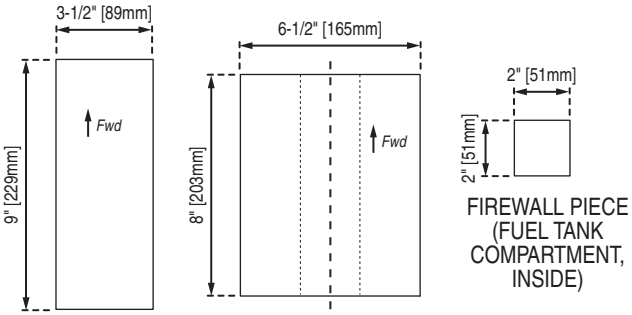
ITEMS REQUIRED FOR COMPLETION

3/4oz [21g] Fiberglass Cloth (HCAR5000)
8oz [236cc] Coverite™ Balsarite™, film (COVR2515)
4oz [118cc] Top Flite® Trim Solvent (TOPR6020)
9oz [255cc] Great Planes® Finishing Resin (GPMR6049)
Epoxy brushes (GPMR8060)
Mixing sticks (GPMR8055)
Mixing cups (GPMR8056)
Vaseline® petroleum jelly
Great Planes Easy-Touch™ hand sander 5.5" (GPMR6169)
220-grit Easy-Touch Sand Paper (GPMR6185)
400-grit sand paper
Tack cloth
Masking tape (TOPR8018)
Piece of 1/16" [1.6mm] scrap balsa sheet or an old credit card for use as a squeegee
Plan Protector (GPMR6167) or waxed paper
Acetone (for clean-up)
Sharp scissors
Olfa® Rotary Cutter
Self-Healing Cutting Mat (HCAR0454)
HobbyLite™ White-Colored Balsa Filler (HCAR3400)

Fiberglass the Forward Fuselage



FIREWALL & FUSE SIDES PIECE (OUTER)



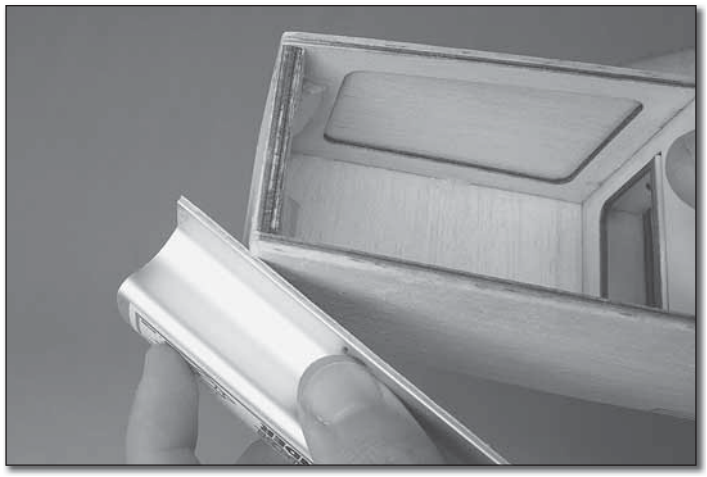
FUSE BOTTOM PIECE (OUTER)

FUEL TANK COMPARTMENT PIECE

FIREWALL PIECE (FUEL TANK COMPARTMENT, INSIDE)

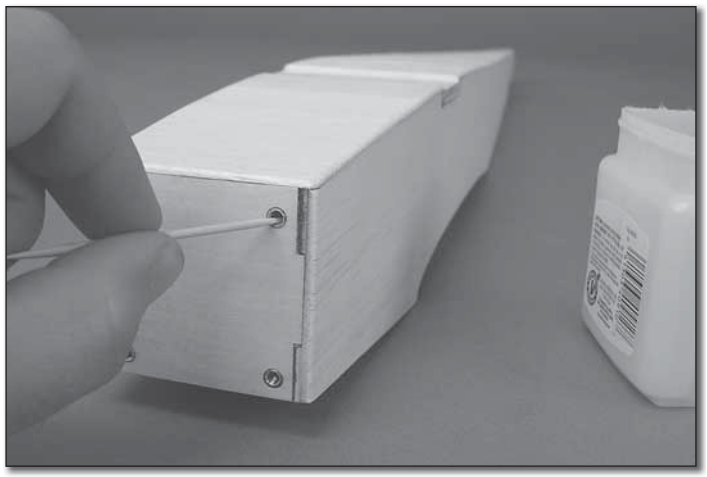
❑ 1. Cut out the following pieces for the fuselage from 3/4oz [21g] fiberglass cloth:

A. One 3-1/2" x 20" [89 x 508mm] strip and trim the sides as shown
B. One 3-1/2" x 9" [89 x 229mm] rectangular piece (for the fwd fuse bottom)
C. One 6-1/2" x 8" [165 x 203mm] rectangular piece (for the fuel tank compartment sides and bottom)
D. One 2" x 2" [51 x 51mm] square (for the back side of the firewall)

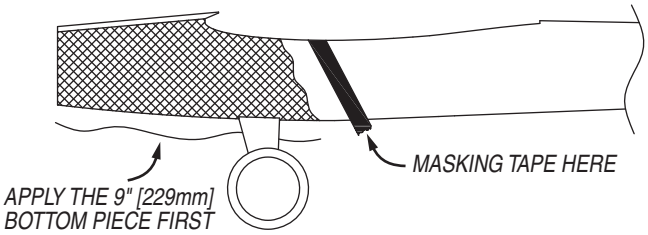


❑ 2. Lightly sand the forward part of the fuselage where you will apply the fiberglass. Round the edges of the fuse sides slightly. Use compressed air or a tack cloth to clean any dust from the fuse before you begin glassing.

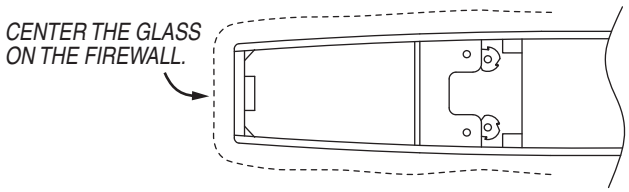
❑ 3. Apply masking tape to the fuselage sides and bottom about 1" [25.4mm] back from where you will be applying fiberglass. See the sketches for more details.



❑ 4. Fill the threads of the blind nuts with petroleum jelly using a toothpick.



❑ 5. Mix up about 3/4oz [22cc] of finishing resin. Brush on a thin coat of resin to the bottom of the forward fuse. Apply the 3-1/2" x 9" [89 x 229mm] rectangular piece of fiberglass to the bottom of the forward fuse. Align the forward edge of the glass with the edge of the firewall. Stipple the glass cloth down to the fuse. Squeegee any excess resin out of the glass so that the surface is smooth. Allow the resin to cure. Sand the fiberglass smooth feathering the glass into the balsa.

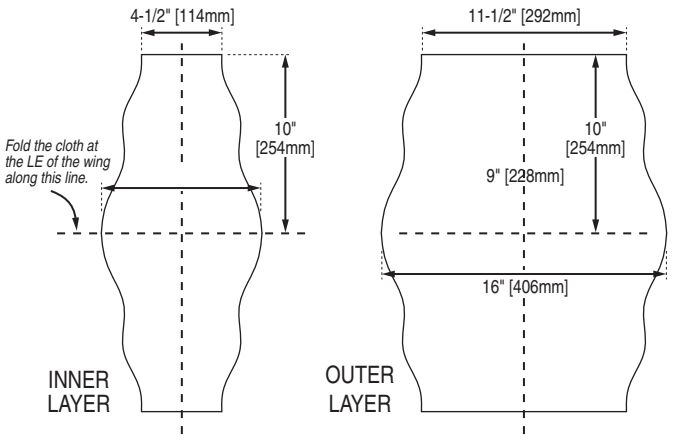


FIREWALL/FUSE SIDES PIECE WILL WRAP AROUND THE FIREWALL LIKE THIS.

❑ 6. Mix up another batch of finishing resin and brush a thin coat onto the firewall and forward fuse sides. Center the 3-1/2" x 20" [89 x 508mm] piece of glass cloth on the firewall and wrap it around to cover the fuse sides. Stipple and squeegee the glass cloth smooth. Allow the resin to cure and sand the fiberglass smooth.

❑ 7. Fiberglass the inside of the fuel tank compartment using the 6-1/2" x 8" [165 x 203mm] rectangular piece for the fuse bottom and sides, and the 2" x 2" [51 x 51mm] square piece for the back side of the firewall. Allow the resin to cure. Use your hobby knife to open up the front and back sides of the blind nuts on the firewall. Clean out any remaining petroleum jelly from the threads of the nuts.

Fiberglass the Wing Center Section



❑ 1. Cut out the following pieces for the wing from 3/4oz [21g] fiberglass cloth:

A. One 9" x 20" [229 x 508mm] piece (center wing, inner layer)
B. One 16" x 20" [406 x 508mm] piece (center wing, outer layer)

❑ 2. Study the sketch below. Notice that the smaller piece of glass cloth (inner layer) is applied first. Lightly sand the center section of the wing and dust it off. Apply masking tape where shown. Mix up enough finishing resin to wet out the inner layer shown in the sketch. If you are confident with the working time of the resin, you may mix up enough to laminate both the inner and outer layers simultaneously. If not, apply only the inner layer now. Center the cloth on the wing along the leading edge of the wing and fold it over so that it covers the top and bottom surfaces of the wing. Stipple and squeegee out the excess resin and allow the resin to cure. Trim the excess fiberglass from the trailing edge of the wing and sand the surface and edges of the glass smooth. If you applied the inner layer only, go ahead and apply the outer layer now.

❑ 3. Trim the wing bolt holes open. Sand the surface smooth feathering the edges of the glass into the balsa sheeting. Use HobbyLite™ balsa filler (HCAR3400) to fill in any imperfections. Finish-sand the model using 400-grit sandpaper.

❑ 4. Apply one or two coats of Coverite Balsarite (COVR2515) per the manufacturer's instructions.

❑ 5. Apply your choice of film covering to each part per the manufacturer's instructions.