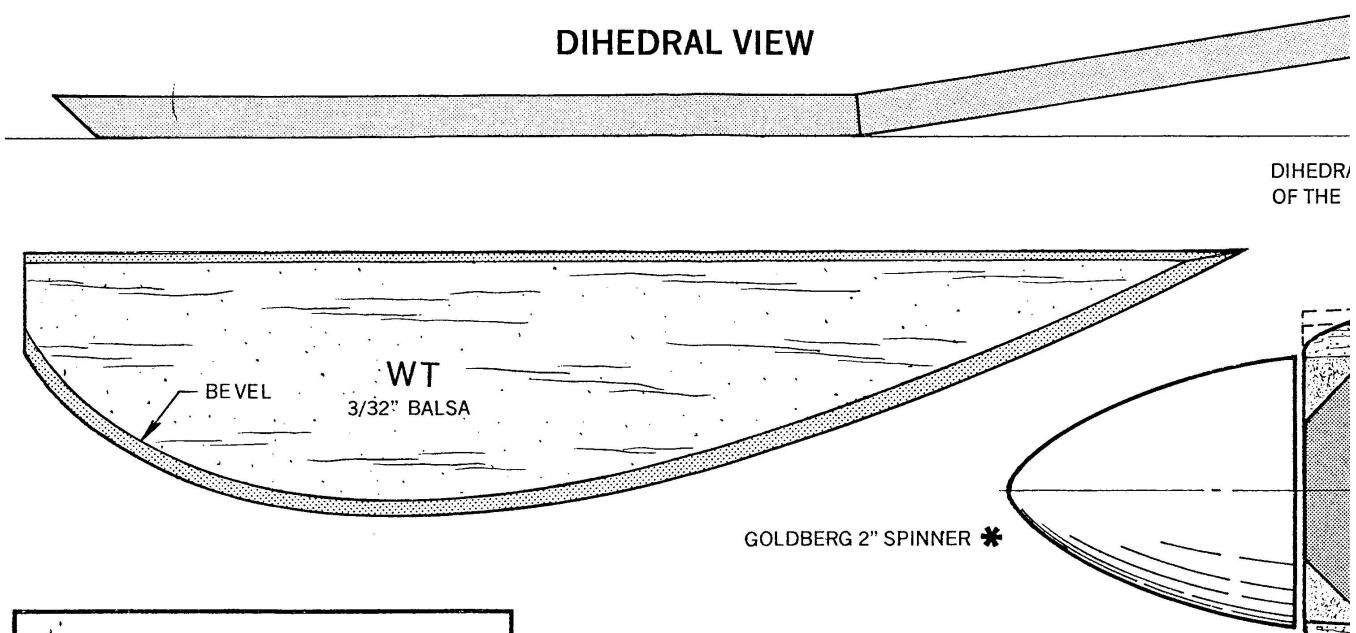
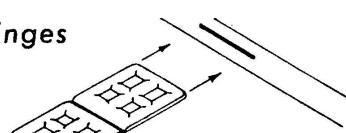
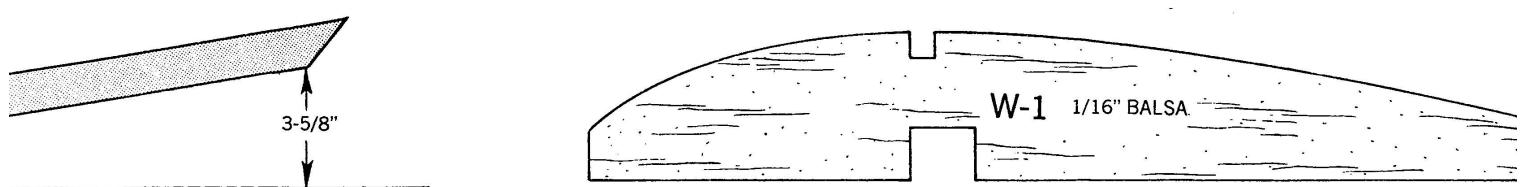
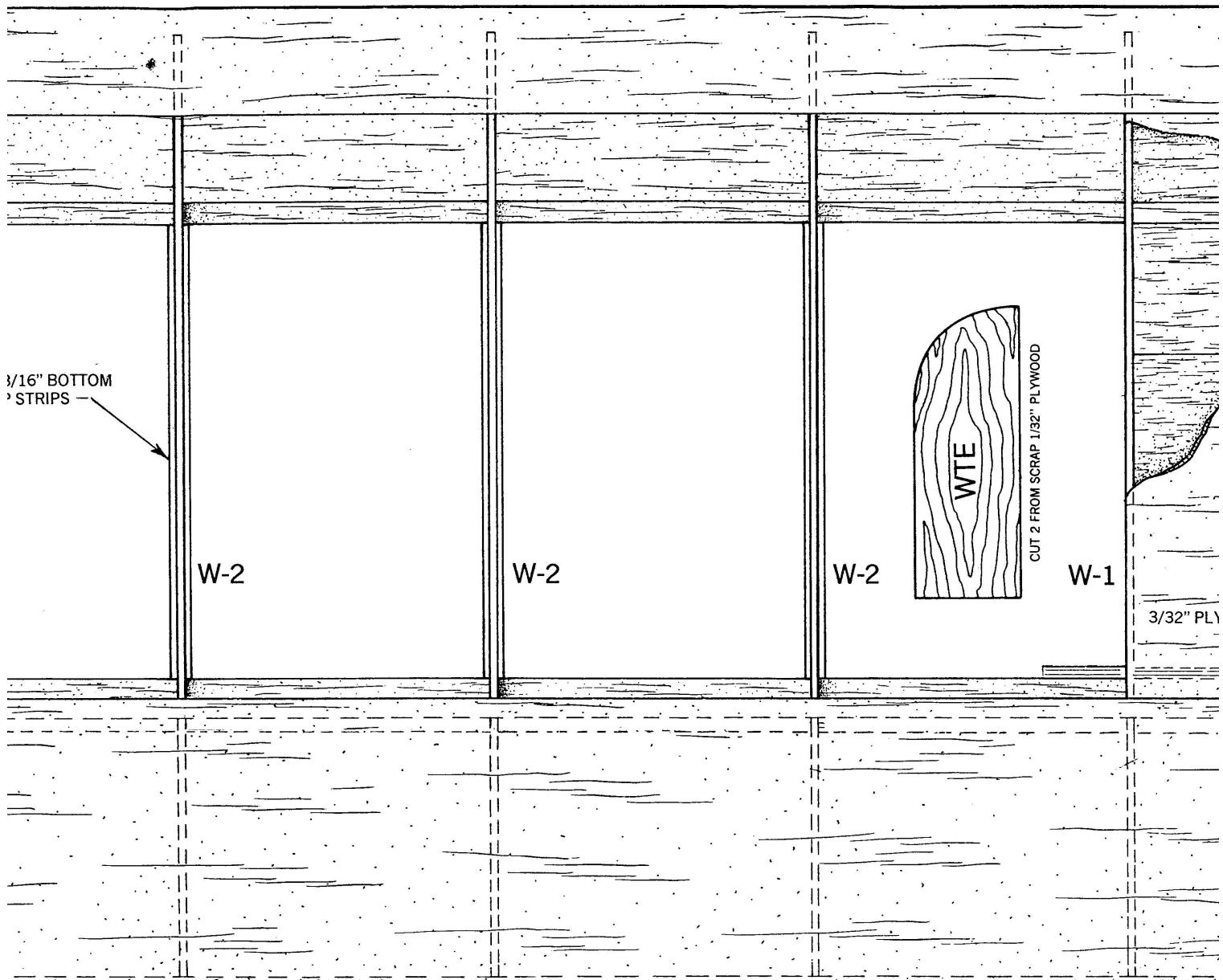


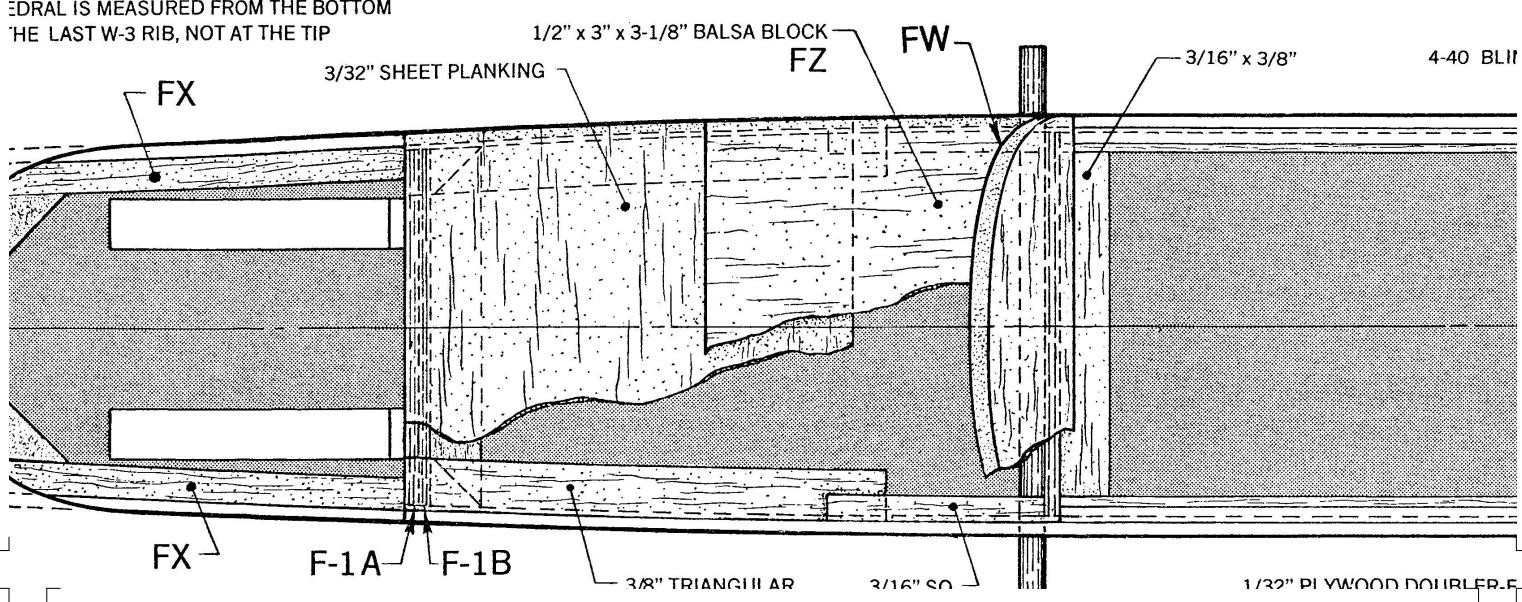
DIHEDRAL VIEW

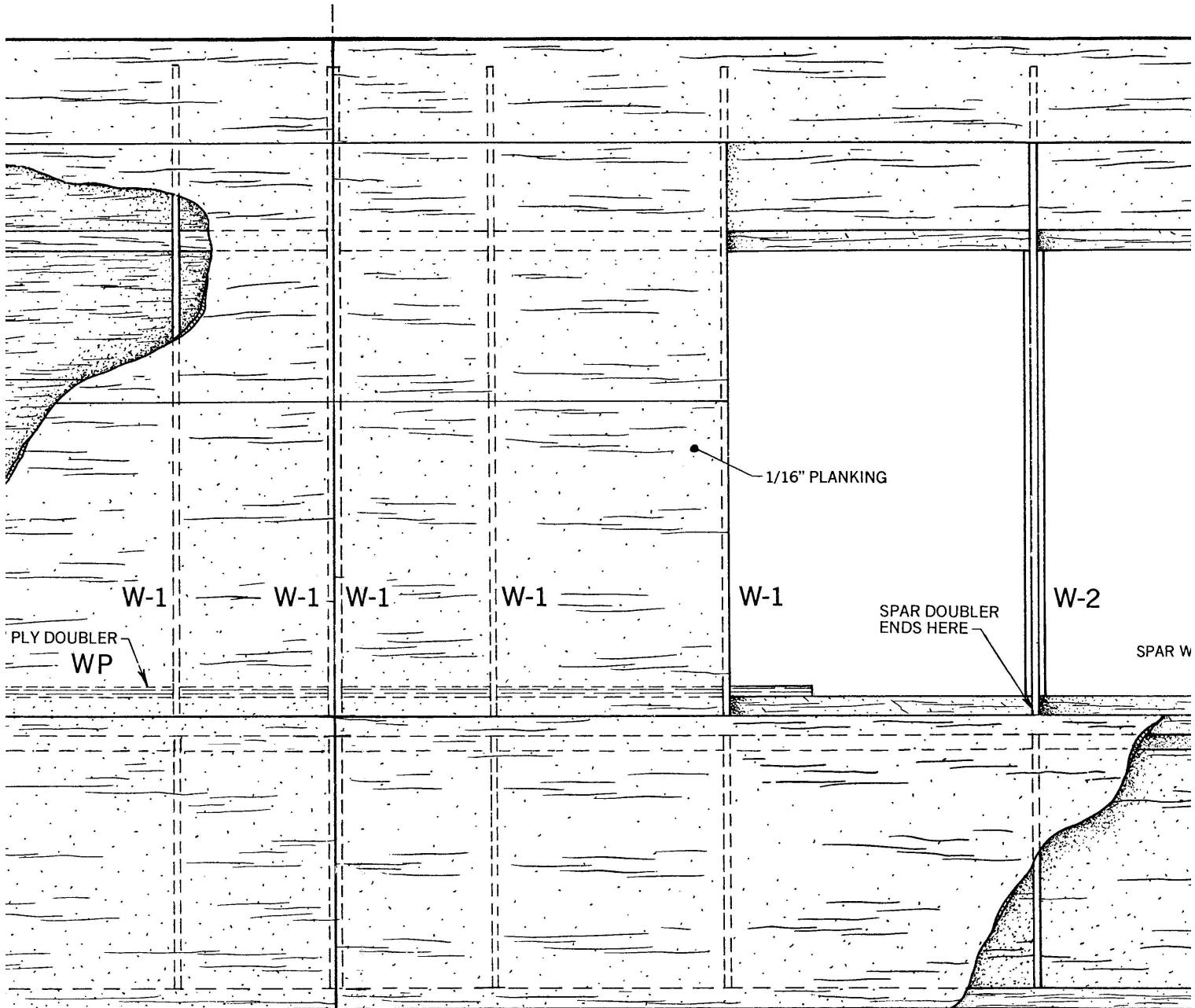
**Hinges****ABOUT BALSA WOOD:**

We do our best to put as good a grade of balsa in our kits as the supply situation permits. The world-wide increase in demand for balsa has made it impossible

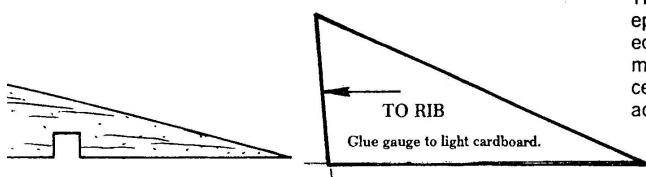


EDRAL IS MEASURED FROM THE BOTTOM
THE LAST W-3 RIB, NOT AT THE TIP

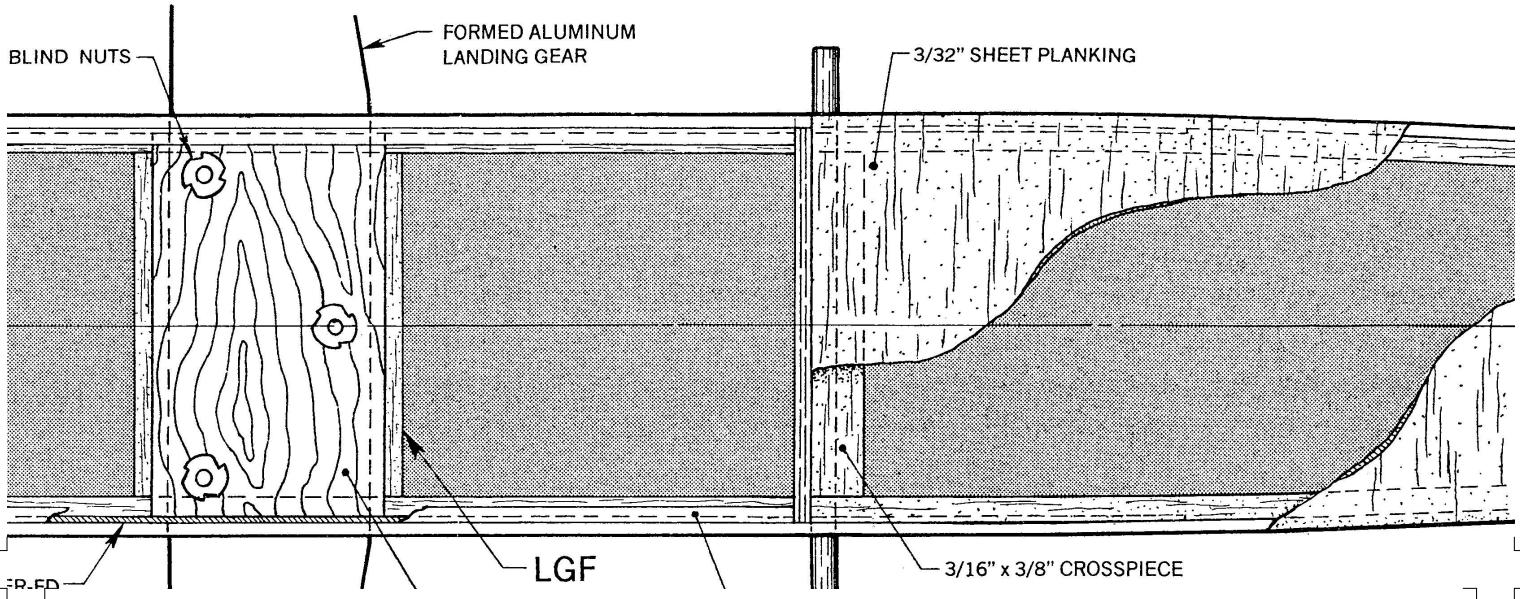
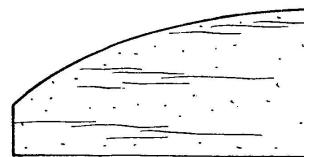


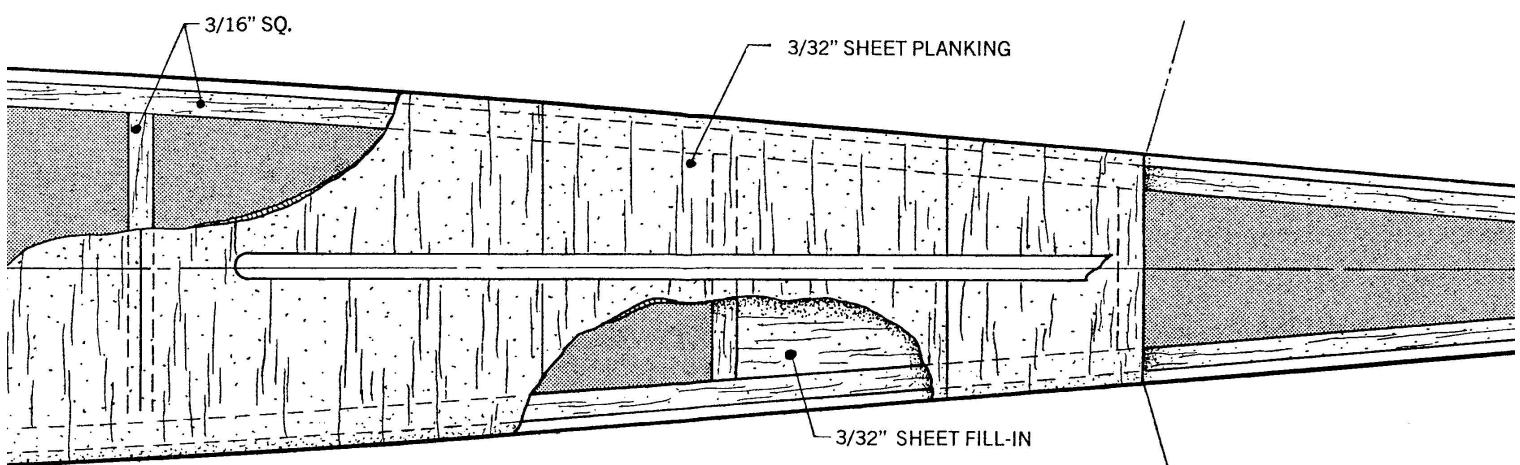
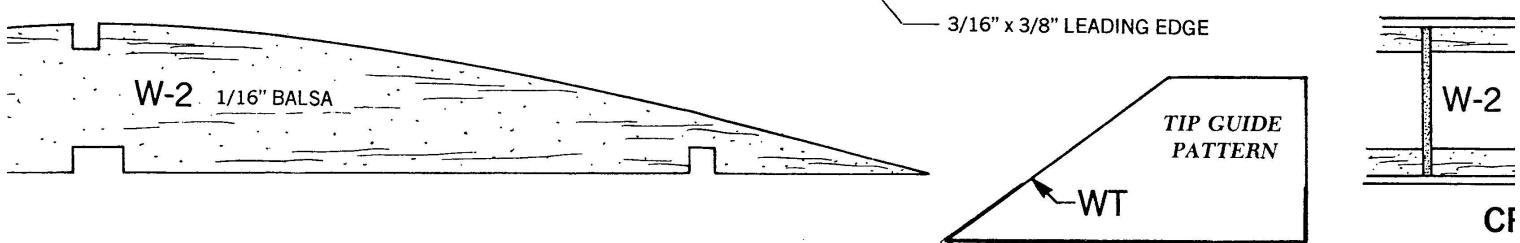
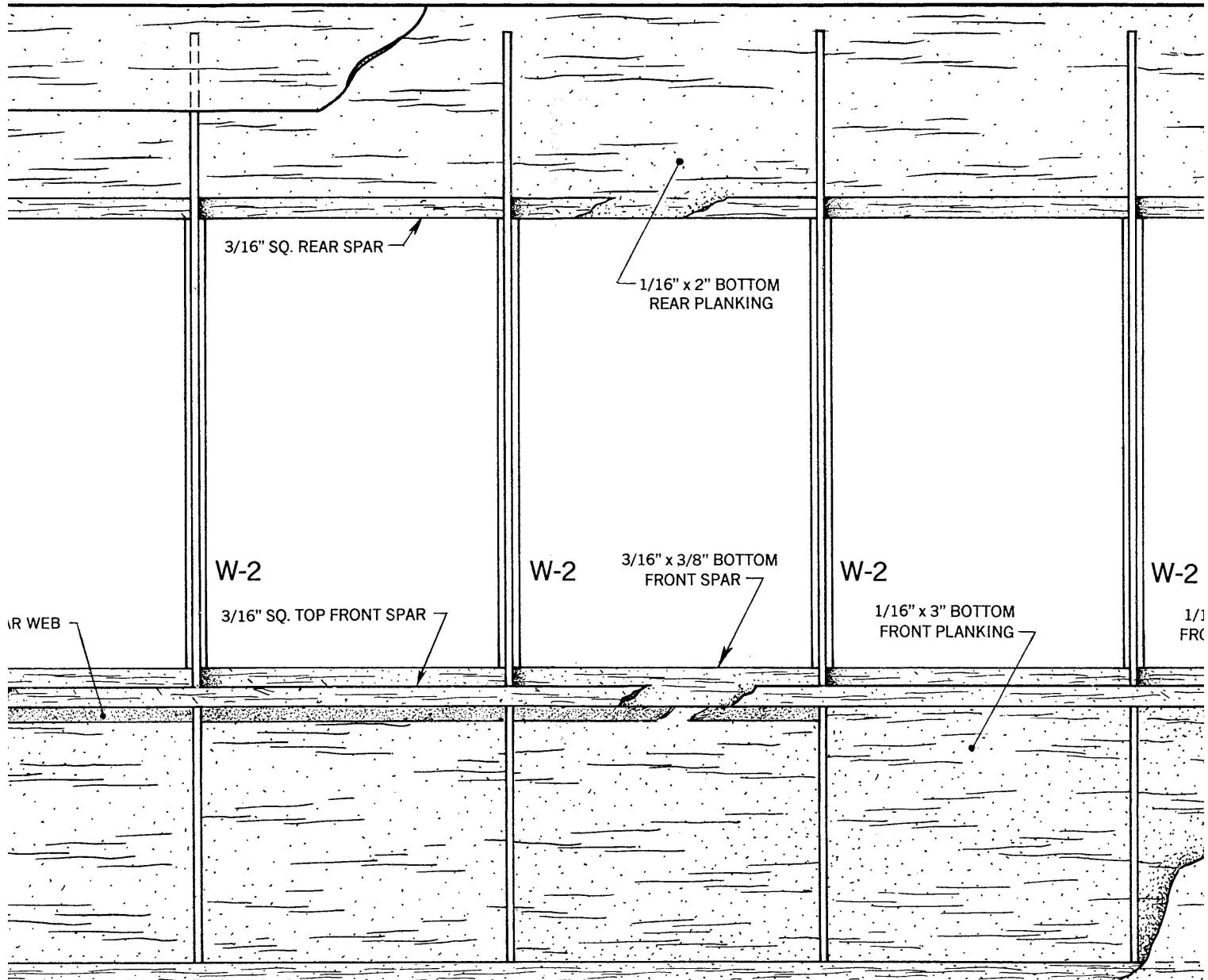


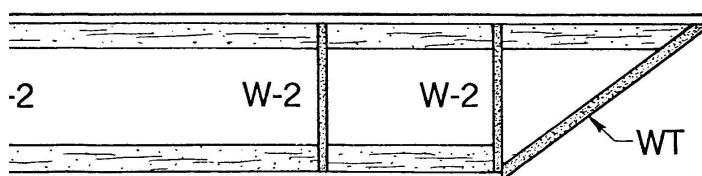
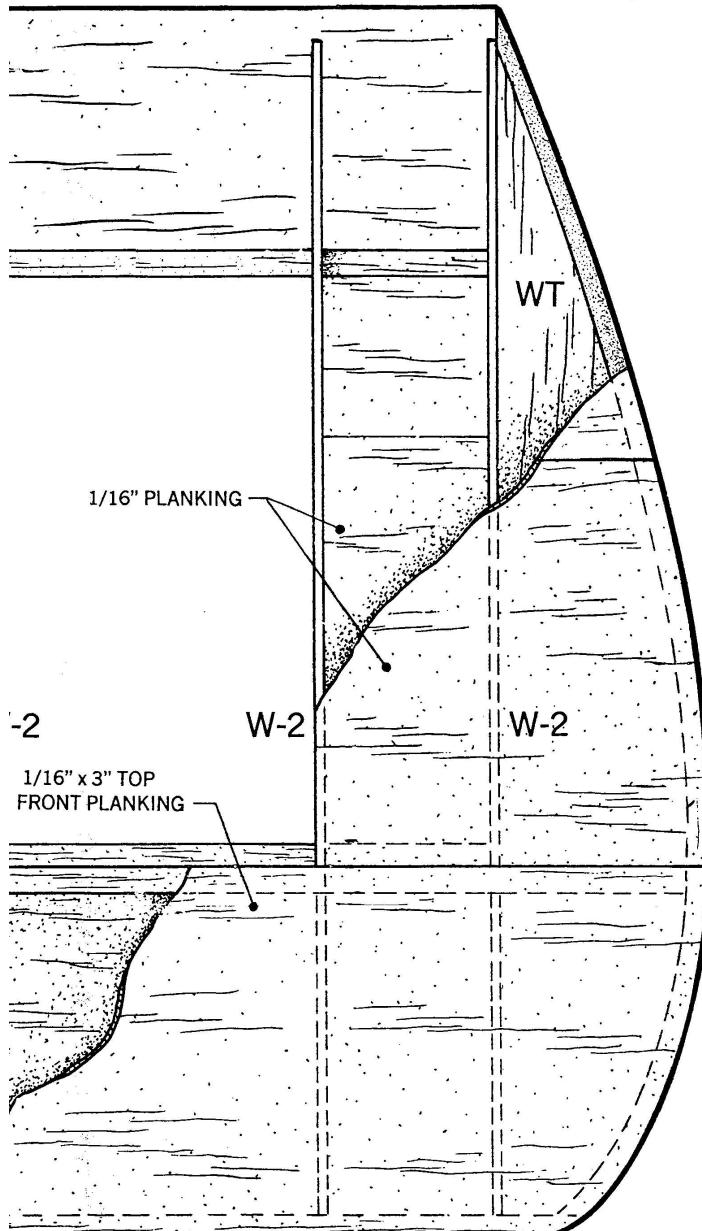
DIHEDRAL GAUGE PATTERN



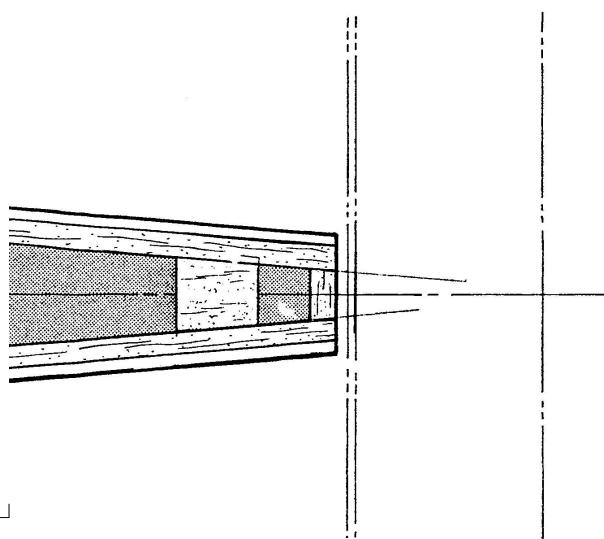
The Kadet, Jr. prototype did not use fiberglass cloth and epoxy glue coating on the center wing joint. A properly joined and silk covered wing does not need this extra reinforcement. However, for iron-on covering jobs or if you feel the center joint in your model is not perfect, then it would be advisable to add the fiberglass and epoxy.







CROSS-SECTION OF WING TIP

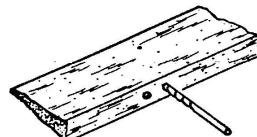




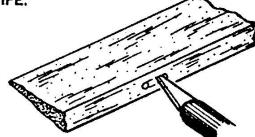
Cut slots in the control surface to receive the hinges.

MAKING A HINGE SLOT

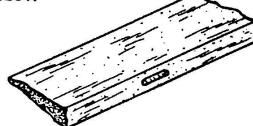
- 1.) DRILL TWO 1/16" DIA. HOLES INTO THE WOOD.



- 2.) CUT BETWEEN THE HOLES WITH A MODELING KNIFE.



- 3.) USE EPOXY GLUE TO FASTEN THE HINGE IN THE SLOT.

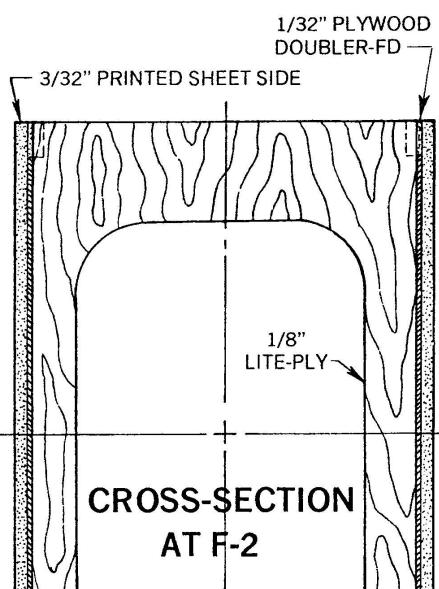


NOTE: AN X-ACTO KEYHOLE SAW BLADE NO. 15 IS ALSO HANDY FOR CUTTING HINGE SLOTS.

Here are some pointers for a good hinge installation.

- 1.) Pre-flex the hinges by bending them back and forth to extreme angles several times before using.
- 2.) The hinges have a flat and un-flat side. Have the same side down on all the hinges.
- 3.) The extra-wide slot provided by the 1/16" hole method is intentional. It allows the last half of the hinge to take a non-binding position as the glue sets up if the hinge didn't happen to be perfectly aligned when the first half was glued in place.
- 4.) Use plenty of Sig Kwik-Set epoxy glue in the slot. A pin hole into the bottom of the slot prevents air lock. Be sure glue gets into the holes in the hinge by putting some there before inserting it in the slot.
- 5.) Leave the thin, bendable portion in the center of the hinge completely out of the slot. The gap between the surfaces should be as small as possible without restricting the movement of the controls.
- 6.) Let the glue set up for several minutes. During the time from about 7 to 15 minutes after mixing, the excess glue that has squeezed from the slot can be peeled off easily. Don't leave glue covering the thin, bendable portion in the center.

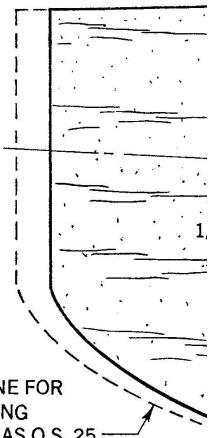
RIB AND FORMER PATTERNS ARE SHOWN ON THE PLAN AND IN THE BOOK FOR THE CONVENIENCE OF THE KIT BUILDER IF RÉPARAIS SHOULD BE NECESSARY.



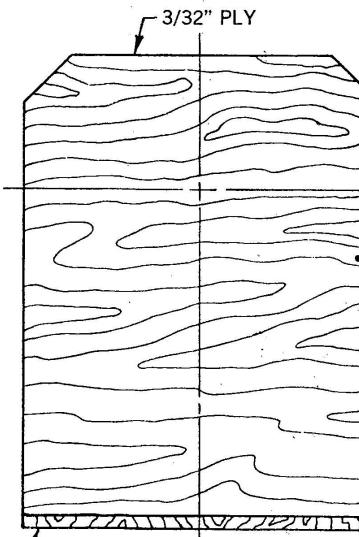
**CROSS-SECTION
AT F-2**

kits as the supply situation permits. The world-wide increase in demand for balsa has made it impossible to obtain as high an average quality as used to be the case.

Every piece of balsa supplied cannot be 100% perfect or kit prices would have to be greatly increased. Mineral stains or small knots do not affect wood strength. Even with the very best grades of balsa, there is a natural tendency for some sticks or sheets to immediately bow upon being cut off from a perfectly square block because of built-in stresses. In most cases, these can be bowed back into alignment during building. True up the edges of bowed sheets by trimming, using a metal straightedge.

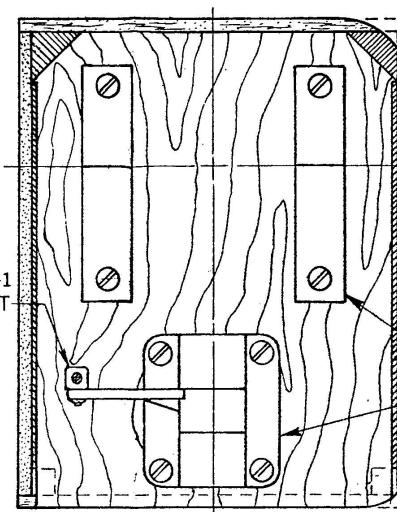


DOTTED OUTLINE FOR UNUSUALLY LONG ENGINES SUCH AS O.S. 25.



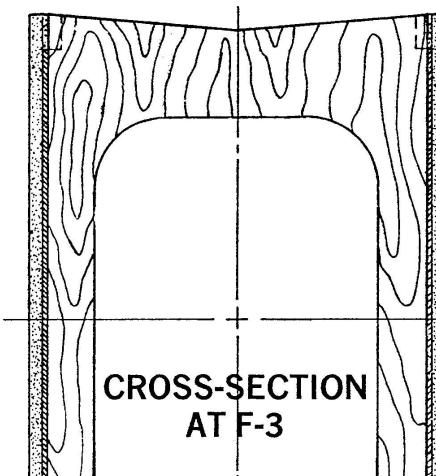
BACK VIEW OF F-1

ROUND CORNER AFTER ASSEMBLY

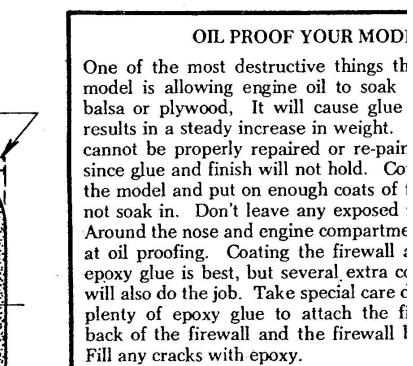


**SECTION AT FIREWALL
F-1**

FX NOT SHOWN IN THIS VIEW



**CROSS-SECTION
AT F-3**



K & B.1

OIL PROOF YOUR MODEL
One of the most destructive things that can happen to a model is allowing engine oil to soak into the balsa or plywood. It will cause glue to fail, resulting in a steady increase in weight. This cannot be properly repaired or re-paired since glue and finish will not hold. Coating the model and putting on enough coats of paint will not soak in. Don't leave any exposed areas around the nose and engine compartment uncoated. Around the nose and engine compartment, use oil proofing. Coating the firewall with epoxy glue is best, but several extra coats will also do the job. Take special care to apply plenty of epoxy glue to attach the firewall to the back of the firewall and the firewall to the fuselage. Fill any cracks with epoxy.

ALUMINUM MOTOR MOUNTS

NYLON NOSE WHEEL BRACKET

FUSELAGE DATUM LINE

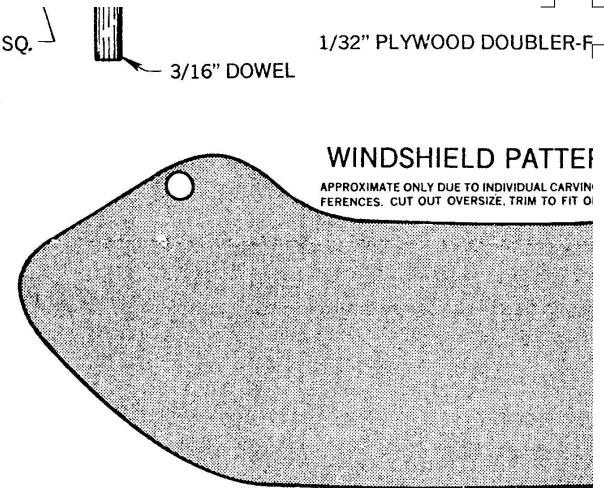
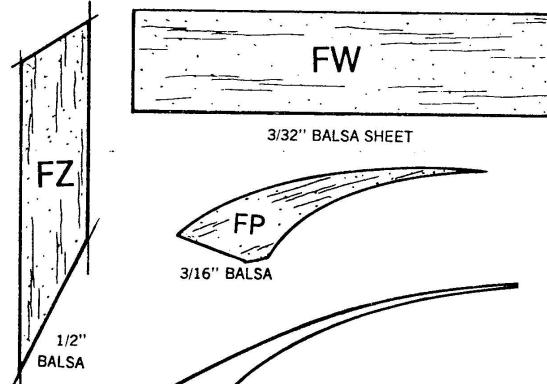
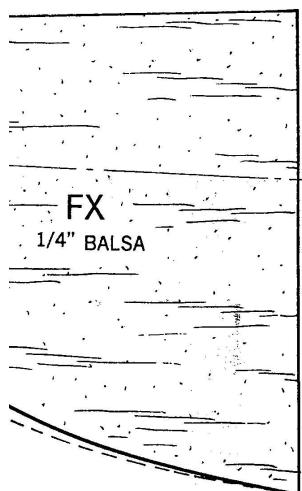
ENGINE THRUST LINE
3 DEGREES DOWNTHERST

A GOLDBERG 2" SPINNER WAS USED ON THE KADET, JR. PROTOTYPE.
BOT

WHY MODELS MUST BE INDIVIDUAL

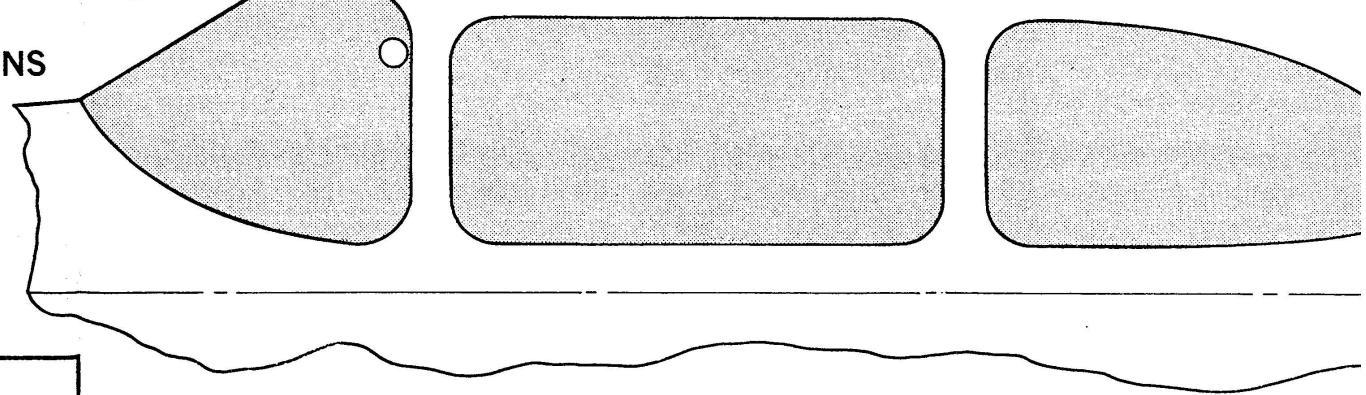
It is impossible to produce a kit that will have the correct Center of Gravity (C.G.). Wood varies in weight and it is easily possi-

F-1A F-1B



V PATTERNS

tic film windows individual carving lets it is not possible front pattern.



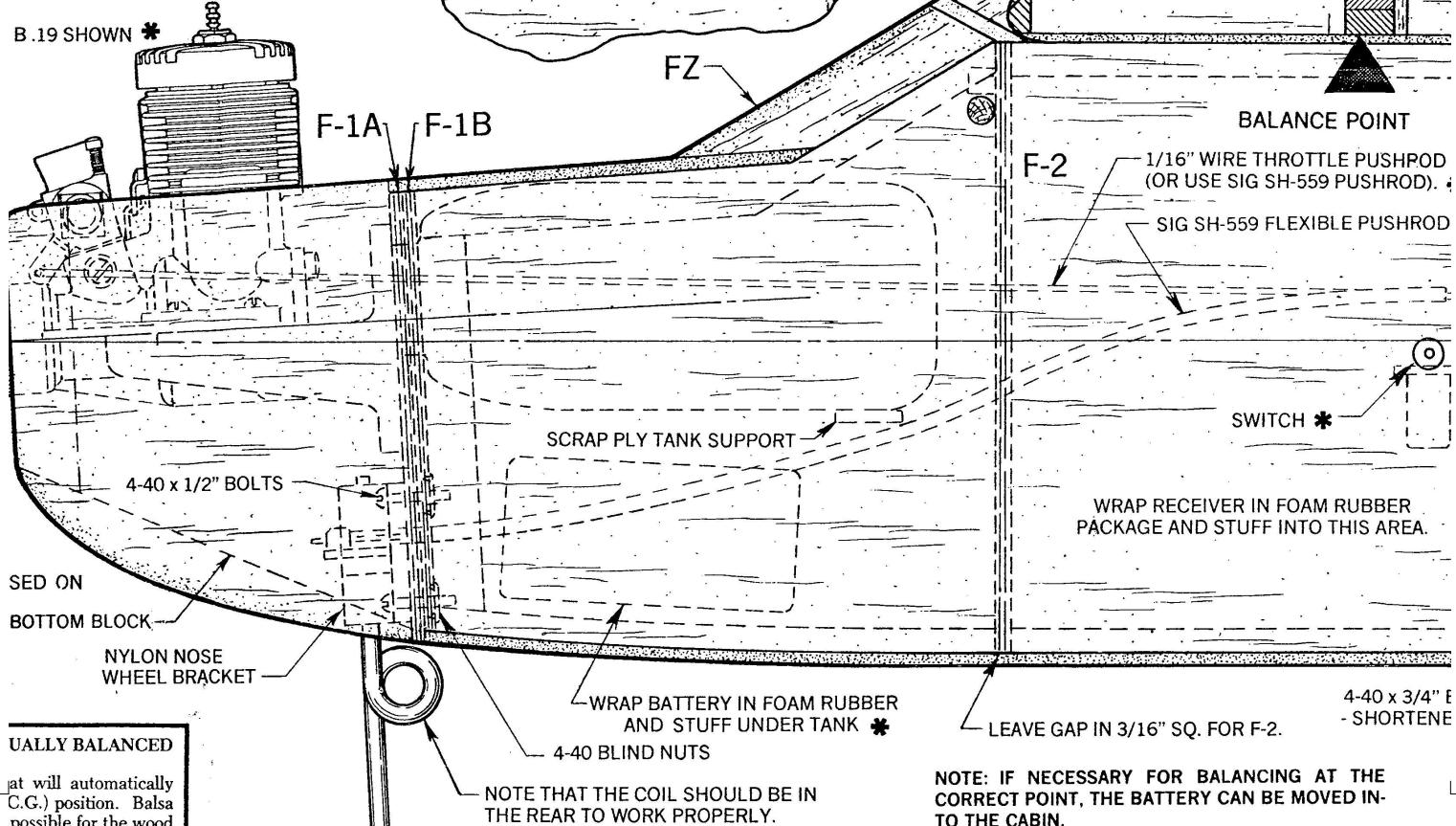
MODEL!

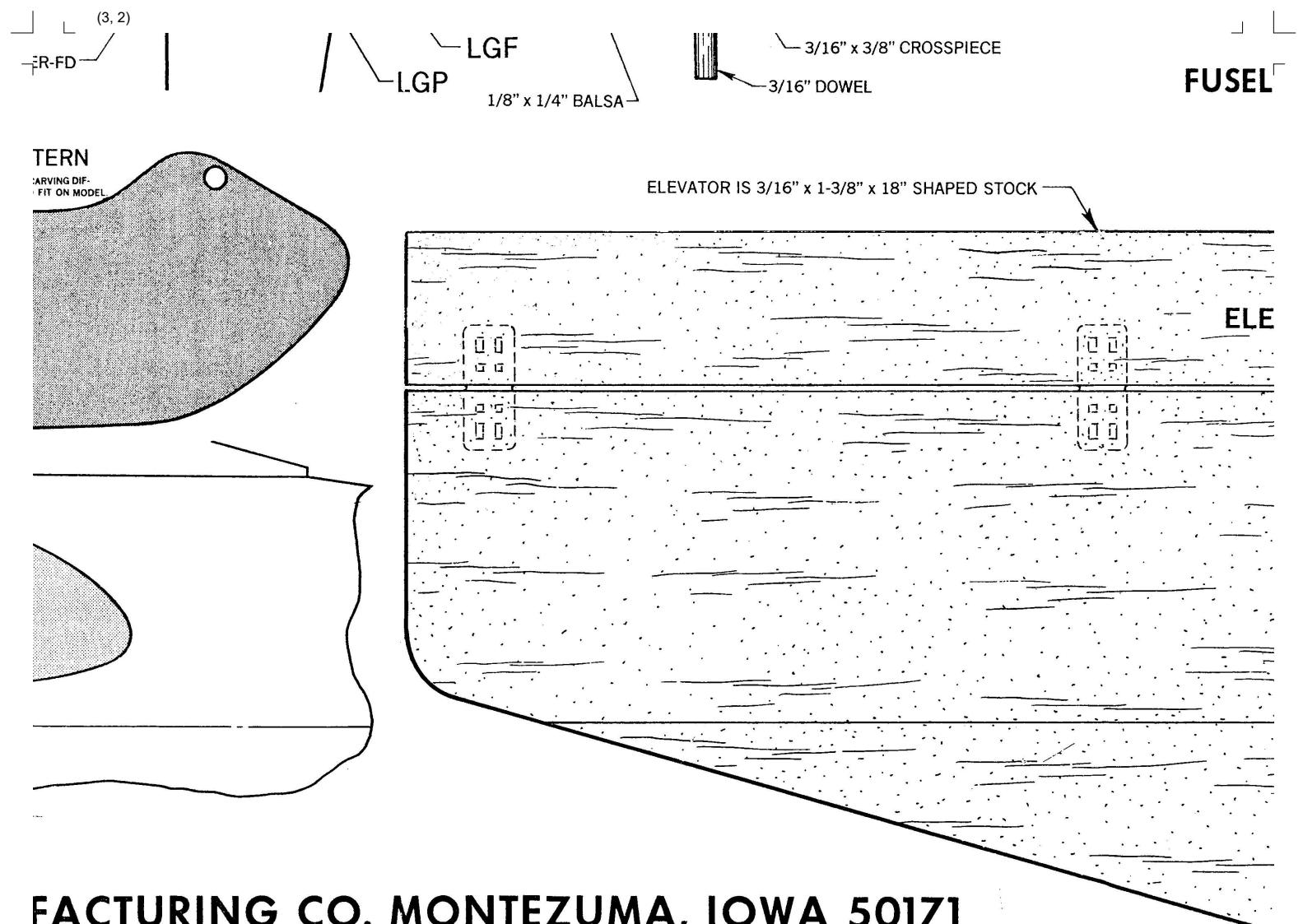
gs that can happen to a oak into bare, untreated glue joints to loosen and tight. An oil soaked model painted after a crackup,

Cover all wood parts of s or finish so that oil can't get on the outside. treatment, apply extra effort to all and front joints with coats of dope or paint are during building to use the fire wall and coat the wall braces with the glue.

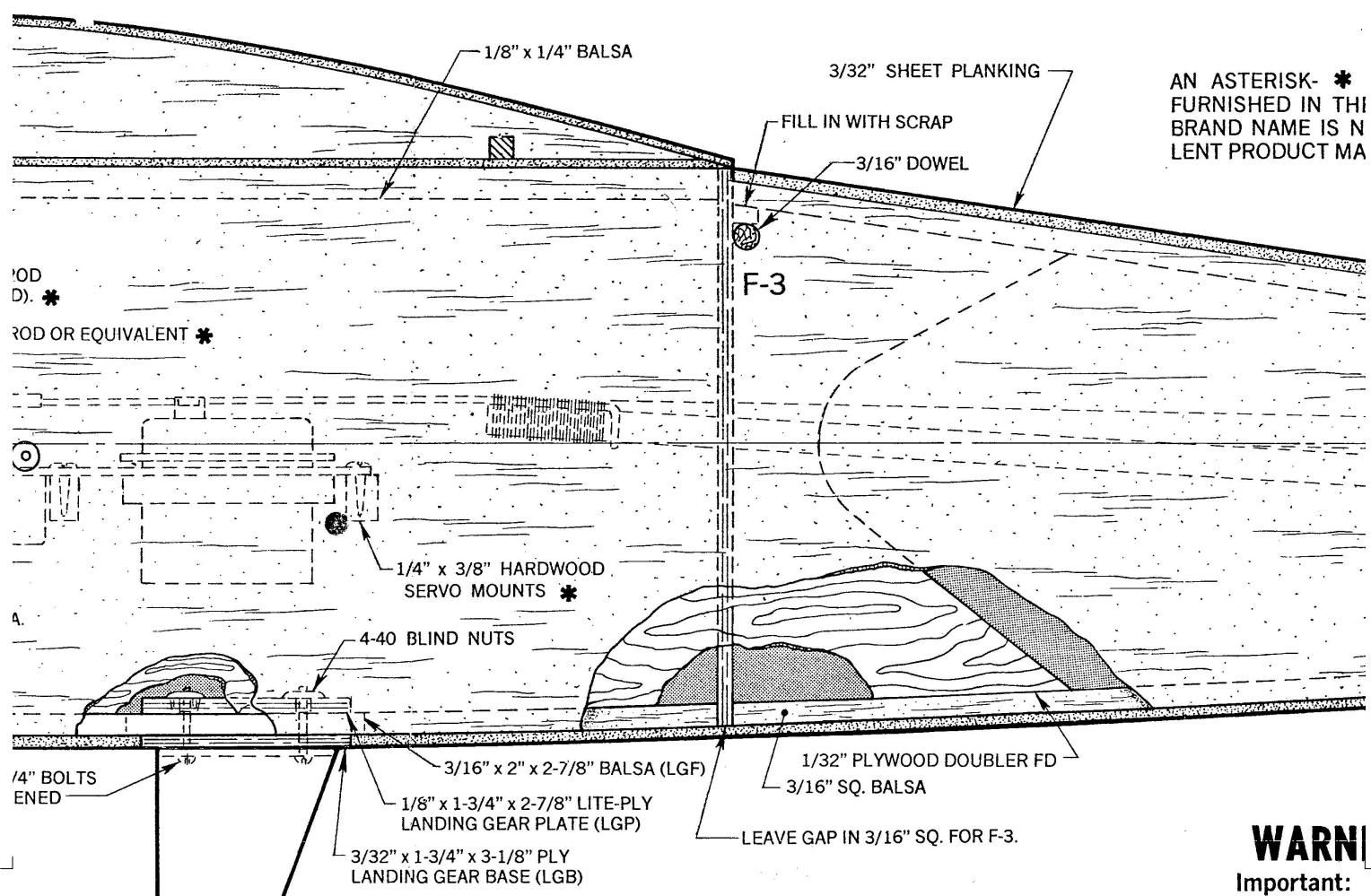
OPTIONAL SIMPLIFIED CABIN

If desired, construction and wing-fuselage matching time can be reduced by substituting a piece of $\frac{3}{32}$ " sheet for the $\frac{1}{4}$ " block FZ and leaving off FP, FW and the wing fairing. See instruction book.





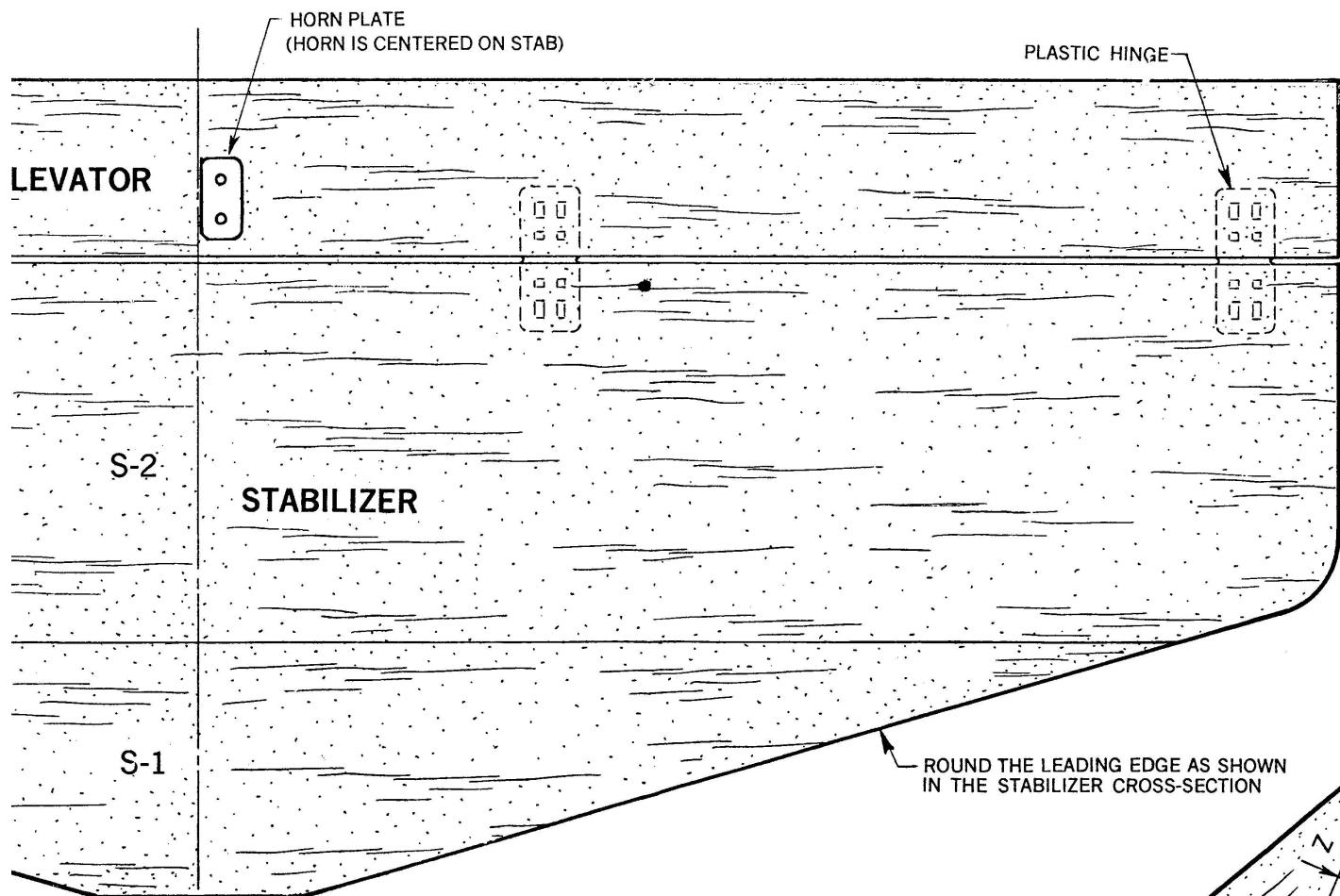
FACTURING CO. MONTEZUMA, IOWA 50171



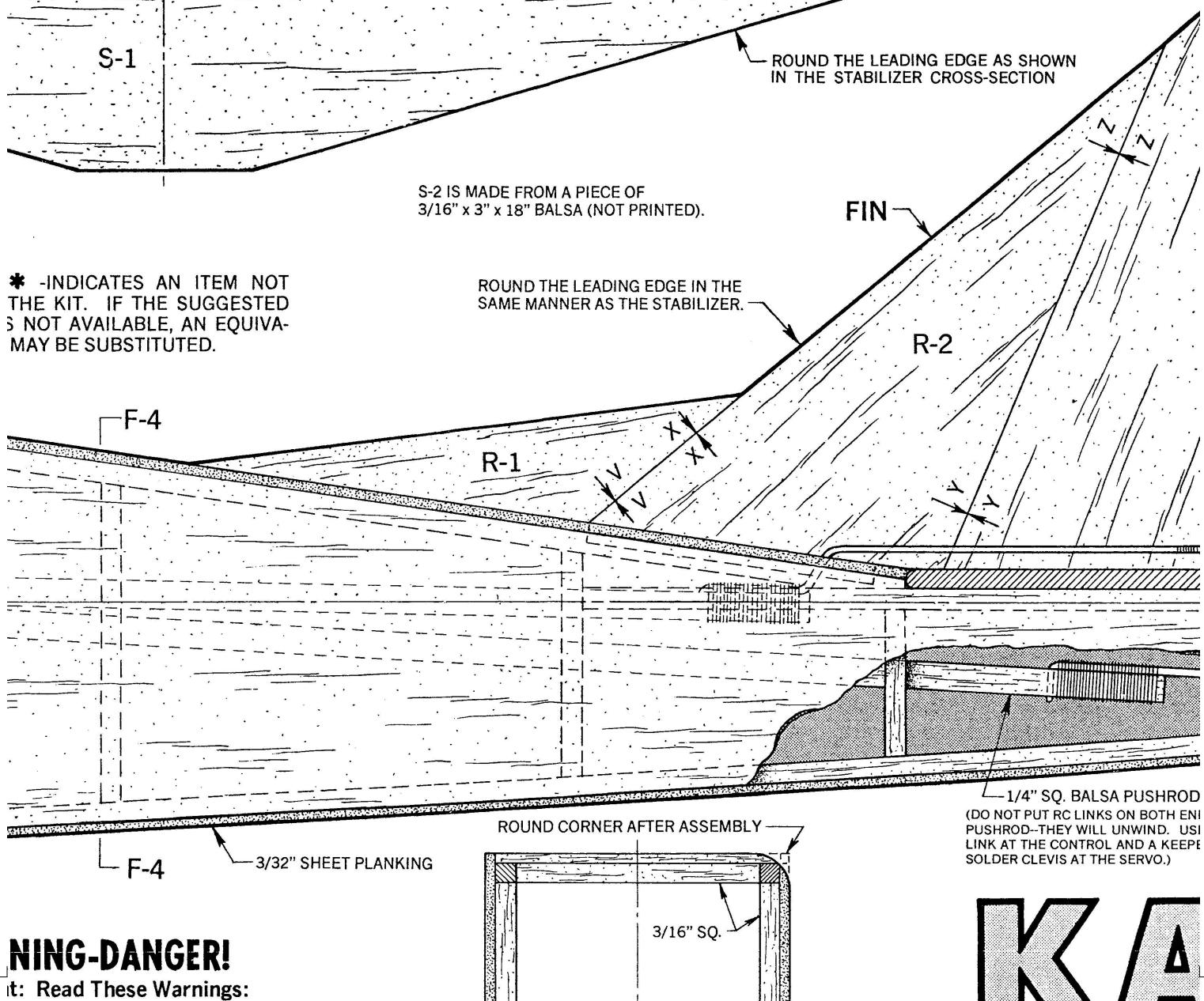
WARN!
Important:

ELAGE TOP VIEW

IN ANY CONFLICT BETWEEN THE PLAN AND THE BOOKLET,
FOLLOW THE BOOKLET INSTRUCTIONS. THEY ARE RE-
VISED MORE FREQUENTLY THAN THE PLAN.



* -INDICATES AN ITEM NOT
THE KIT. IF THE SUGGESTED
IS NOT AVAILABLE, AN EQUIVA-
LENT MAY BE SUBSTITUTED.



NING-DANGER!
it: Read These Warnings:

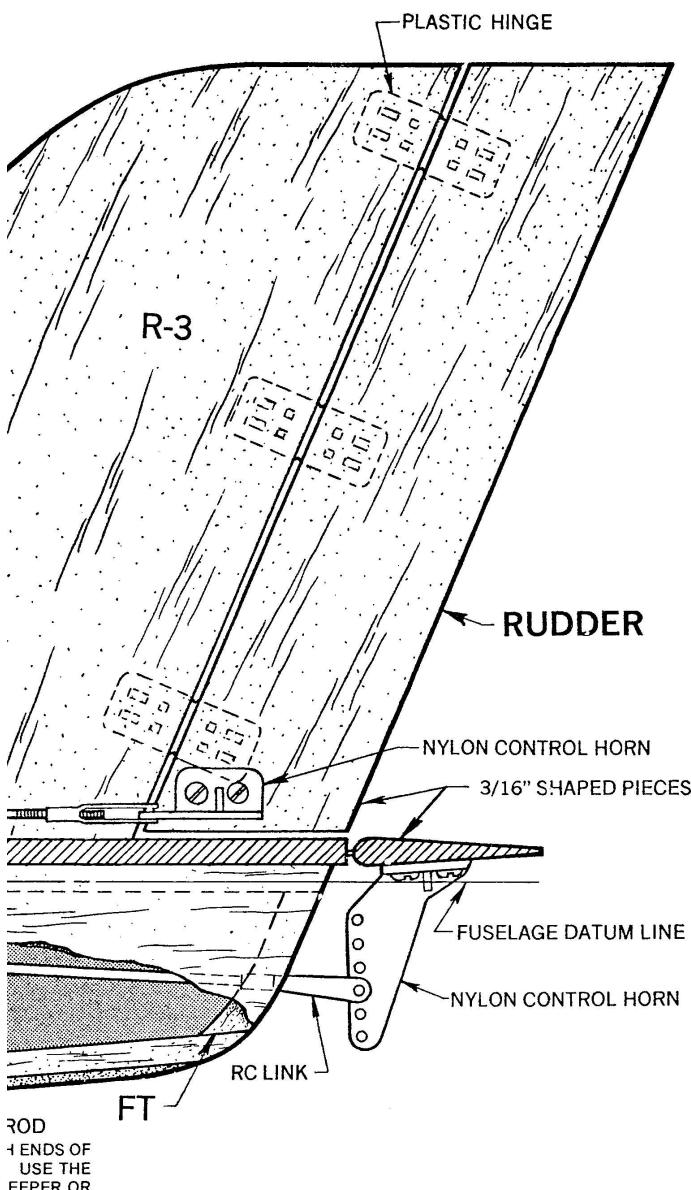
K A

BE SURE AND READ THE KADET, JR. INSTRUCTION BOOK COMPLETELY BEFORE BEGINNING TO BUILD, SO THAT YOU WILL HAVE A MORE COMPLETE PICTURE OF THE CONSTRUCTION STEPS REQUIRED.

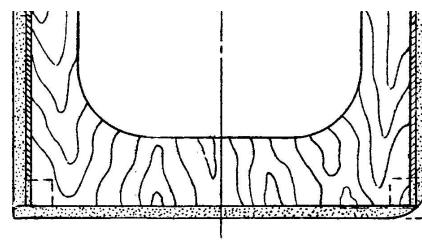
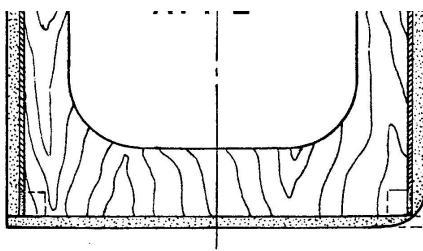
NOTE: THE PLAN PAPER CAN SHRINK OR EXPAND WITH HUMIDITY AND TEMPERATURE CHANGES, SOMETIMES AS MUCH AS $1/4"$. THE ORIGINAL DRAWINGS WERE DRAWN ON STABLE MYLAR FILM AND ALL THE PART PATTERNS WERE CHECKED AGAINST THEM. THEREFORE THE PARTS SHOULD ALL FIT TO EACH OTHER WITHOUT MUCH MISMATCH. ANY SMALL VARIATION OF THE PLAN DRAWING FROM THE PART THAT MAY BE NOTICED WILL NOT CAUSE SERIOUS DIFFICULTY DURING ASSEMBLY BECAUSE THE VARIATION WILL BE SMALL IN ANY ONE AREA OF THE PLAN.



GO EASY ON PAINTING THE TAIL. AN EXTRA OUNCE HERE NEEDS A LOT MORE IN THE NOSE TO COUNTERBALANCE.



KADET



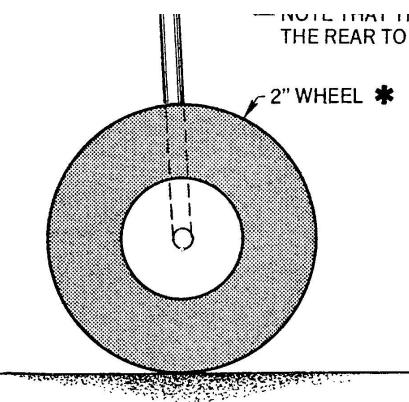
© Sig Mfg. Co., Inc. 1979
Printed in U.S.A.

RC-46 KADET, JR.

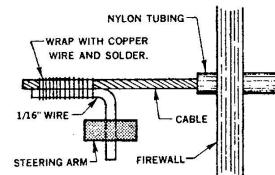
have the correct Center of Gravity (C.G.). wood varies in weight and it is easily possible in the tail to be an ounce or more heavier than average. One ounce of extra weight in the tail can be countered by about 3 ounces in the nose, of fillercoat or finish, use excess glue or weights on the tail surfaces. The motor you choose, a muffler is fitted, the size and placement of equipment, etc. all affect the balance. If your usually heavy motor or muffler you may have to battery in the radio compartment instead of the tail. Don't consider the model builds out to as "good enough" fully and make whatever adjustments are necessary to get the C.G. properly located, a Sig design only minor trim changes required.

(2, 3)

C.G.) position. Balsa
possible for the wood
easier or lighter than
in the tail has to be
nose. Don't pile a lot
or make large fillets
nose, whether or not
cement of your radio
e. If you use an
may have to carry the
stead of the nose or
that whatever C.G.
tough". Check care-
s are required. With
sign should fly with



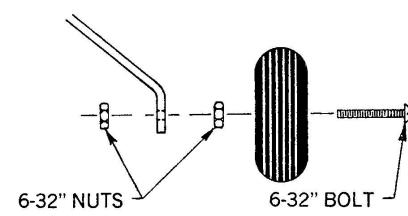
NOTE THAT THE COIL SHOULD BE IN
THE REAR TO WORK PROPERLY.

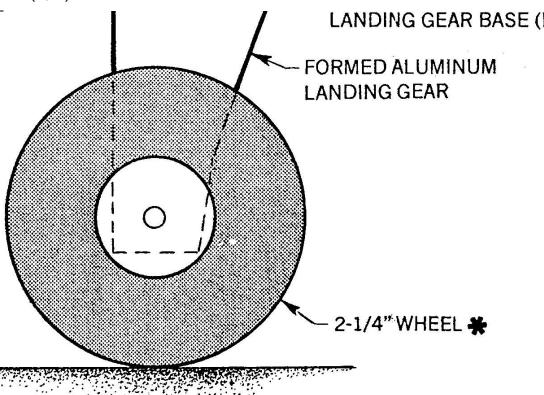


OPTIONAL HOOKUP TO STEERING ARM

CORRECT POINT, THE BATTERY CAN BE MOVED IN-
TO THE CABIN.

LANDING GEAR AXLE ASSEMBLY





LANDING GEAR BASE (LGB)

FORMED ALUMINUM
LANDING GEAR

2-1/4" WHEEL *

FUSELAGE SIDE VIEW

Important:

Do Not fly control line or tow lines. Instant death from elec Direct contact is not necessary

A model airplane motor gets not touch the motor during o ler. It can cut off a finger or securely fastened in place and mable and poisonous. Take t using it that you would with a c

LIMIT OF LIABILITY

In use of our products, SIG Manufacturing Co.'s only obligation shall be to replace such quantity of the product proven to be defective. User shall determine the suitability of the product for his or her intended use and shall assume all risk and liability in connection therewith.

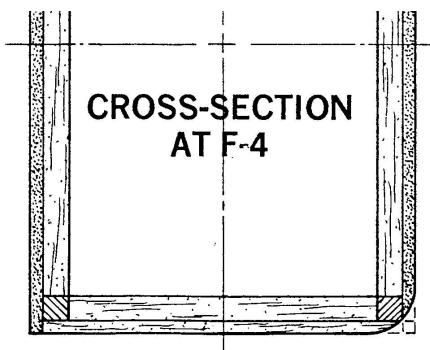
Remember that it is possible in locations where the model control occurs. Check your i is in safe operating condition.

It: Read These Warnings:

towline models within 300 feet of electric power electrocution can result from coming near them. ssary.

gets very hot and can cause serious burns. Doing or after operation. Keep clear of the propeller or put out an eye. Make sure the propeller is and is not cracked. Model airplane fuel is flammable the same precautions while transporting and a can of gasoline or a bottle of poison.

ble to lose control of a model airplane. Do not fly model may hit people or damage property if loss of our model and equipment regularly to insure it on.

**DESIGNED AND DRAWN**

(5, 3)

Junior

RC-46

DRAWN BY CLAUDE McCULLOUGH