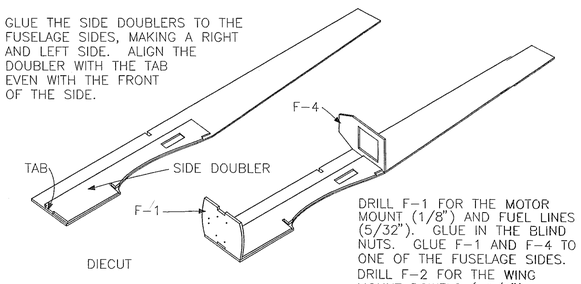
STEP ONE

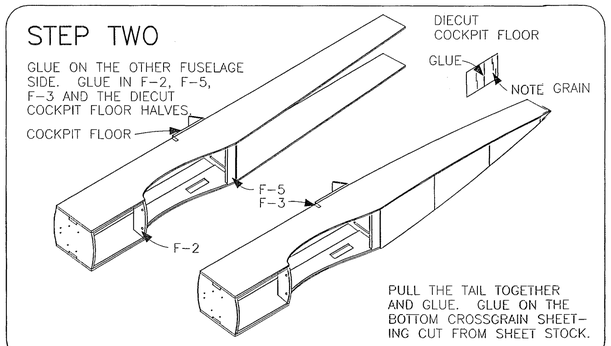
GLUE THE SIDE DOUBLERS TO THE FUSELAGE SIDES, MAKING A RIGHT AND LEFT SIDE. ALIGN THE DOUBLER WITH THE TAB EVEN WITH THE FRONT OF THE SIDE.



DRILL F-1 FOR THE MOTOR MOUNT (1/8") AND FUEL LINES (5/32"). GLUE IN THE BLIND NUTS. GLUE F-1 AND F-4 TO ONE OF THE FUSELAGE SIDES. DRILL F-2 FOR THE WING MOUNT DOWELS (1/8").

STEP TWO

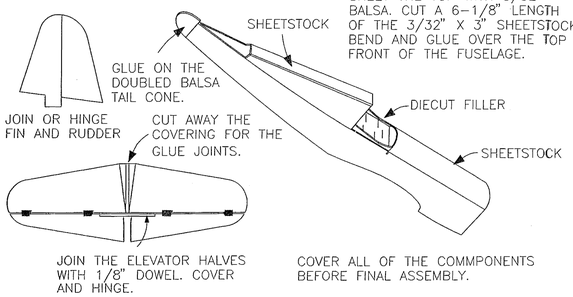
GLUE ON THE OTHER FUSELAGE SIDE. GLUE IN F-2, F-5, F-3 AND THE DIECUT COCKPIT FLOOR HALVES.



PULL THE TAIL TOGETHER AND GLUE. GLUE ON THE BOTTOM CROSSGRAIN SHEETING CUT FROM SHEET STOCK.

STEP THREE

GLUE ON THE TOP REAR SIDES. SHEET THE TOP WITH 3/32" BALSA. CUT A 6-1/8" LENGTH OF THE 3/32" X 3" SHEETSTOCK. BEND AND GLUE OVER THE TOP FRONT OF THE FUSELAGE.



COVER ALL OF THE COMMPONENTS BEFORE FINAL ASSEMBLY.

INSTRUCTIONS

TOOLS AND ADHESIVES TOOLS NEEDED TO BUILD THIS MODEL ARE: X-ACTO KNIFE, PLIERS, SCREWDRIVERS, DRILL WITH 1/16", 1/8" AND 5/32" DRILL BITS AND BOTH MEDIUM AND FINE SANDPAPER. FOR GLUE WE RECOMMEND MEDIUM VISCOSITY CYA GLUE FOR ALL WOOD TO WOOD JOINTS. FOR WOOD TO FOAM USE WHITE GLUE OR EPOXY. USE EPOXY ONLY TO JOIN THE TWO WING HALVES.

STEP ONE BUILD THE MODEL USING THE PICTURE SEQUENCE AS A GUIDE. GLUE THE 3/32" BALSA SIDE DOUBLERS TO THE FUSELAGE SIDES. ALIGN THE DOUBLERS WITH THE BOTTOM OF THE DOUBLER EVEN WITH THE BOTTOM OF THE SIDE AND THE TAB EVEN WITH THE FRONT OF THE SIDE. BE SURE TO MAKE A RIGHT AND LEFT SIDE. DRILL F-1 FOR THE MOTOR MOUNT BOLTS AND FUEL LINES. DRILL F-2 FOR THE TWO 1/8" DOWELS. GLUE F-1 AND F-4 TO ONE OF THE SIDES USING A SQUARE.

STEP TWO GLUE ON THE OTHER FUSELAGE SIDE. GLUE IN F-2 AND F-5, THE WING HOLD DOWN. GLUE IN F-3, CENTERED IN THE NOTCHES. GLUE THE TWO PARTS OF THE COCKPIT FLOOR TOGETHER WITH THE GRAIN CROSS TO THE LENGTH AND GLUE ONTO THE TOP OF THE FUSELAGE BEHIND F-3. PULL THE TAIL TOGETHER AND GLUE. GLUE ON THE BOTTOM REAR SHEETING CUT FROM SHEETSTOCK.

STEP THREE GLUE THE TOP REAR SIDES BY FIRST GLUING THEM TO F-4 AND THE FIRST INCH OF THE SIDES. GLUE ON THE TOP REAR SHEETING CUT FROM SHEETSTOCK. CUT A 6-1/8" LENGTH OF SHEETSTOCK, WET THE TOP, AND GLUE OVER THE TOP FRONT BETWEEN F-1 AND F-3. GLUE ON THE DIECUT FILLERS ALONG THE SIDES OF THE COCKPIT FLOOR. GLUE ON THE BOTTOM REAR CUT FROM SHEETSTOCK. JOIN THE TWO ELEVATOR HALVES WITH A 3" LENGTH OF 1/8" DOWEL. COVER AND HINGE. TRIM AWAY THE COVERING IN THE CENTER FOR THE FUSELAGE AND RUDDER. JOIN THE RUDDER HALVES AND COVER.

STEP FOUR GLUE THE 1/8" X 1/4" STRIPS TO THE TRAILING EDGES OF THE WING PANELS WITH WHITE GLUE. CUT THE INBOARD SECTIONS OF 3/4" TRAILING EDGE FROM THE LONG PIECES AND GLUE TO THE WING PANELS WITH THE REAR OF THE PANELS AND THE TRAILING EDGE FLAT ON THE TABLE. EPOXY THE PANELS TOGETHER USING STEP FOUR OF THE PICTURE SEQUENCE AS A GUIDE. SAND OFF THE FLASHING ON THE LEADING EDGE AND THE SURFACE BUMPS WITH FINE SANDPAPER. INSTALL THE AILERON CABLE AND FILL THE NOTCHES WITH LIGHT WEIGHT SPACKLE. BEFORE COVERING, APPLY A STRIP OF 3/4" NYLON FILAMENT STRAPPING TAPE TOP AND BOTTOM OF THE WING ALONG THE THICKEST SECTION OF THE WING (NOT SUPPLIED).

STEP FIVE USING THE HOLES IN F-2 AS A GUIDE, DRILL TWO 1/8" HOLES INTO THE FOAM WING FOR THE MOUNTING DOWELS AND EPOXY THE DOWELS INTO THE WING. INSTALL THE TWO REAR MOUNTING SCREWS. REMOVE THE SCREWS AND APPLY A DROP OF GLUE INTO THE HOLES TO HARDEN THE WOOD. CUT A 2-3/4" LENGTH OF THE 3/32" BALSA SHEETSTOCK, WET THE OUTSIDE AND GLUE OVER THE FUSELAGE BOTTOM BETWEEN F-1 AND F-2. EPOXY IN THE THREE 1/2" SQUARE PLYWOOD COWL MOUNTS. POSITION THE COWL AS SHOWN ON THE PLAN AND MOUNT WITH THREE #4 SM SCREWS. HARDEN THE HOLES IN THE FUSELAGE WITH GLUE. JOIN THE ELEVATOR HALVES AND RUDDER PIECES.

COVERING AND TRIM SAND THE MODEL WITH FINE SANDPAPER AND COVER WITH LOW TEMPERATURE FILM SUCH AS ULTRACOTE. HIGH TEMPERATURES WILL MELT THE FOAM WING. COVER AND DECORATE THE TAIL PARTS BEFORE GLUING TO THE FUSELAGE. TRIM AWAY ANY STRIPS OF COVERING WHERE THERE IS TO BE A GLUE JOINT. CUT THE 1/4" X 3/8" X 2-5/8" BALSA PIECE DIAGONALLY TO MAKE THE FILLER WEDGES BETWEEN THE FIN AND STABILIZER. GLUE THEM IN PLACE AND COVER. TRIM THE CANOPY TO FIT AND MARK THE POSITION ON THE FUSELAGE. MAKE A ROW OF PIN HOLES THROUGH THE COVERING ALONG THE CANOPY GLUE LINE. GLUE THE CANOPY IN PLACE WITH EPOXY OR FORMULA 560 CANOPY GLUE. HOLD THE CANOPY IN PLACE WITH RUBBER BANDS UNTIL THE GLUE SETS. CUT, PEEL AND STICK THE DECALS IN PLACE. FUELPROOF THE FIREWALL WITH EPOXY.

STEP SIX INSTALL THE ELEVATOR SERVO IN THE FUSELAGE. MOUNT THE AILERON SERVO WITH DOUBLE SIDED FOAM SERVO TAPE TO THE TOP OF THE WING. SLIDE THE CABLE INTO THE TUBE AND PASS IT THROUGH THE EZ CONNECTOR IN THE SERVO, THEN DOWN THE OTHER SIDE OF THE TUBE. CYA A NYLON CLEVIS ONTO ONE END OF THE CABLE. WITH THE CLEVIS ATTACHED, MOUNT THE CONTROL HORN. TRIM THE OTHER END OF THE CABLE AND CYA THE CLEVIS ONTO THE CABLE AND MOUNT THE SECOND CONTROL HORN WITH THE AILERONS ALIGNED, TIGHTEN THE SET SCREW ON THE EZ CONNECTOR AT THE SERVO. INSTALL THE 1/16" WIRE ELEVATOR PUSHROD WITH A NINTY DEGREE BEND AND A NYLON KEEPER AT THE CONTROL HORN AND AN EZ CONNECTOR AT THE SERVO.

FLYING SOLDER AN ALLEN SCREW HEAD TO THE NEEDLE VALVE SO IT CAN BE ADJUSTED THROUGH A HOLE IN THE COWL. SOLDER A WIRE TO THE GLOW HEAD AND AN ENGINE MOUNT BOLT AND BRING THEM OUT THE BACK OF THE COWL TO LIGHT THE ENGINE. USE A COX 6 X 3 GRAY COMPETITION PROPELLOR AND COX SUPER POWER FUEL FOR BEST PERFORMANCE FROM THE COX .049-.051 ENGINES. HAND LAUNCH THE SIMPLE CORSAIR TO GET IT FLYING AND LAND ON GRASS.

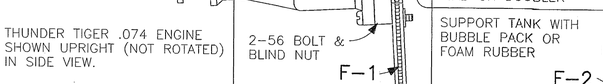
STEP FOUR

GLUE THE 1/8" X 1/4" STRIPS TO THE BACK EDGE OF EACH OF THE WING PANELS. GLUE THE 3/4" AILERON STOCK TO BOTH INBOARD SECTIONS AND THE CENTER SECTION. SAND THE ENDS EVEN WITH THE FOAM PANELS. FIT THE AILERONS TO THE OUTBOARD SECTIONS.

PLACE THE CENTER SECTION UPSIDE DOWN OVER WAXED PAPER AND EPOXY THE INBOARD SECTIONS TO THE CENTER USING THE INBOARD DIHEDRAL GUAGE. TURN THE WING OVER AND EPOXY ON THE OUTBOARD SECTIONS USING THE TIP GUAGE.

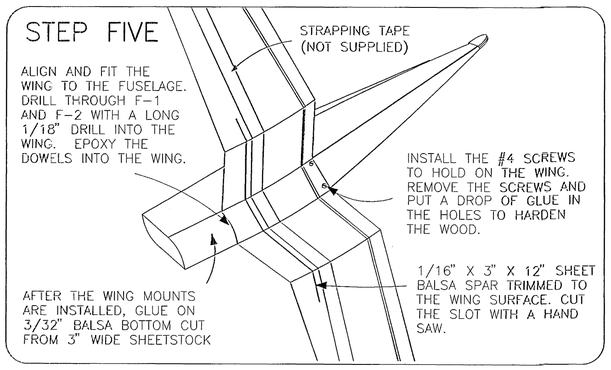
CUT A SLOT WITH A HAND SAW FOR THE 1/16" X 3" X 12" BALSA SPAR. GLUE THE SPAR IN PLACE AND TRIM OFF EVEN WITH THE SURFACE OF THE WING.

CUT A SLOT DOWN THE TOP OF THE INBOARD SECTIONS FOR THE AILERON CABLE. PUSH A PIECE OF 1/16" WIRE DOWN THE SLOT AND OUT THE BOTTOM OF THE WING. USING THE LITE PLY TEMPLATE AND A 1/16" TO 3/32" DRILL, ROUT A CURVED SLOT FOR THE CABLE TO THE AILERON HORNS. EPOXY THE CABLE INTO THE SLOT. CUT THE 1" LENGTH OF 1/16" BRASS TUBE IN HALF. INSERT THE CABLE INTO THE WING AND THROUGH THE EZ CONNECTOR IN THE CENTER. SOLDER THE BRASS TUBE AND CLEVIS TO THE CABLE ENDS. BOLT THE CONTROL HORNS TO THE AILERONS AND ADJUST THE CABLE LENGTH IF NEEDED.



STEP FIVE

ALIGN AND FIT THE WING TO THE FUSELAGE. DRILL THROUGH F-1 AND F-2 WITH A LONG 1/18" DRILL INTO THE WING. EPOXY THE DOWELS INTO THE WING.

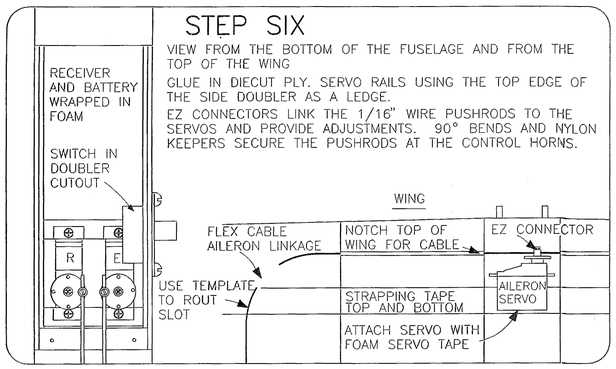


STEP SIX

VIEW FROM THE BOTTOM OF THE FUSELAGE AND FROM THE TOP OF THE WING

GLUE IN DIECUT PLY. SERVO RAILS USING THE TOP EDGE OF THE SIDE DOUBLER AS A LEDGE.

EZ CONNECTORS LINK THE 1/16" WIRE PUSHRODS TO THE SERVOS AND PROVIDE ADJUSTMENTS. 90° BENDS AND NYLON KEEPERS SECURE THE PUSHRODS AT THE CONTROL HORNS.



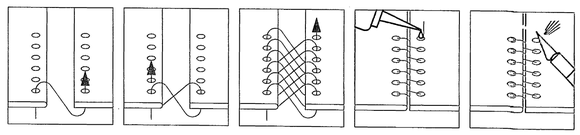
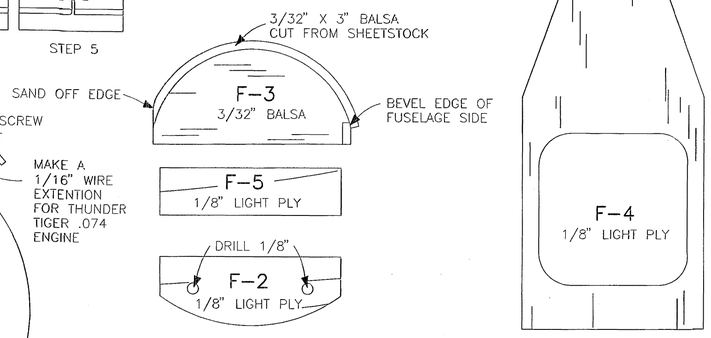
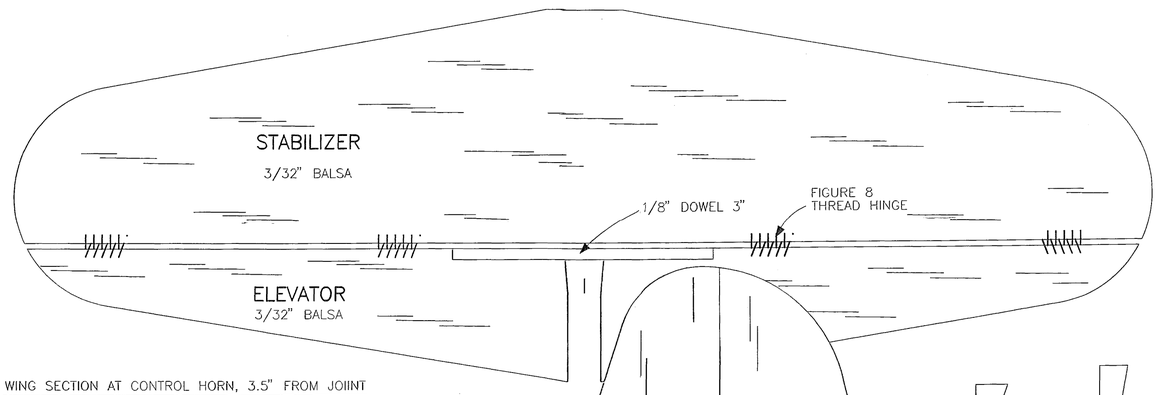


FIGURE 8 HINGE TECHNIQUE



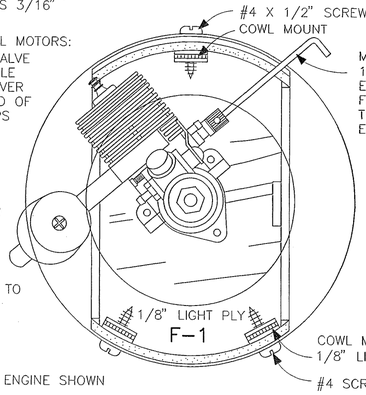


DRILL MOTOR MOUNT HOLES 1/8" AND FUEL LINE HOLES 3/16"

FOR COX AND NORVEL MOTORS: TO ADJUST NEEDLE VALVE FILE A SLOT IN NEEDLE VALVE FOR SCREWDRIVER OR SOLDER THE HEAD OF AN ALLEN OR PHILLIPS SCREW ONTO THE NEEDLE VALVE AND TURN THROUGH A HOLE IN THE COWL.

CUT A HOLE IN THE COWL FOR THE GLOW PLUG LIGHTER

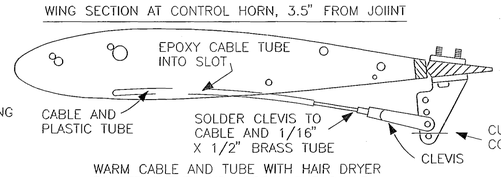
CUT AWAY THE COWL TO CLEAR THE MUFFLER



ROTATE ENGINE AS SHOWN TO CLEAR THE MUFFLER.

CANOPY FRAMING IS SIG OR PACTRA MODEL AIRCRAFT DOPE APPLIED WITH A BRUSH. USE 1/4" AUTOMOTIVE VINYL MASKING TAPE TO MASK THE LINES.

WING SECTION AT CONTROL HORN, 3.5" FROM JOIINT



WARM CABLE AND TUBE WITH HAIR DRYER TO SET CURVE AND LOOSEN THE CABLE.

FIN 3/32" BALSA

RUDDER 3/32" BALSA

DIHEDRAL GAUGE INBOARD

DIHEDRAL GAUGE WING TIP

ENGINE

THUNDER TIGER .074 ENGINE SHOWN

USE ACE RC 1/2A MOTOR MOUNT OR DAVE BROWN 0405 MOUNT ON COX .049-.051 ENGINES. USE DAVE BROWN MOUNT 0506 ON NORVEL .049 AND .061 ENGINES.

3° DOWN THRUST
0° RIGHT THRUST

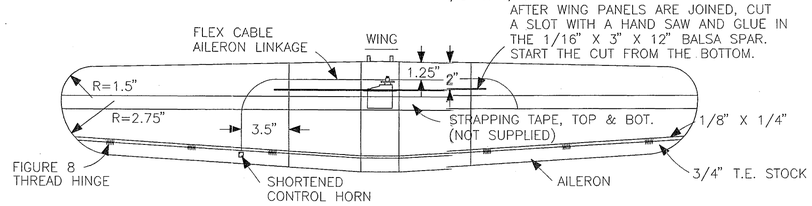
THUNDER TIGER .074 ENGINE SHOWN UPRIGHT (NOT ROTATED) IN SIDE VIEW.

NOTE:
MINI SERVOS ARE SHOWN ABOVE. IF A STANDARD SERVO IS USED FOR THE ELEVATOR, ADD A SPACER TO THE SERVO RAILS SO THE BASE OF THE SERVO WILL CLEAR THE COCKPIT FLOOR. ADJUST THE REAR SERVO RAIL TO THE SIZE SERVO USED.

A MINI OR MICRO SERVO MUST BE USED FOR THE AILERON CONTROL.

STEP ONE OF JOINING THE WING PANELS

PLACE THE WING CENTER SECTION UPSIDE DOWN OVER WAXED PAPER THEN EPOXY THE INBOARD WING SECTIONS TO THE CENTER USING THE INBOARD DIHEDRAL GUAGE TO SUPPORT THE PANEL. (SHORT GUAGE)



CONTROL MOVEMENT

AILERONS: 5/32" UP AND DOWN
ELEVATOR: 3/8" UP AND DOWN
RUDDER: 1/2" RT. AND LEFT
(OPTIONAL)

SIMPLE CORSAIR

DESIGNED AND DRAWN BY FRED REESE

WINGSPAN	36"
WING AREA	190 SQ. IN.
LENGTH	24 1/2"
WEIGHT	16-20 OZ.
ENGINE	.049-.074
RADIO	2-4 CHANNEL

ACE R/C
116 W 19 ST, POB 472, HIGGINSVILLE, MO 64037-0472