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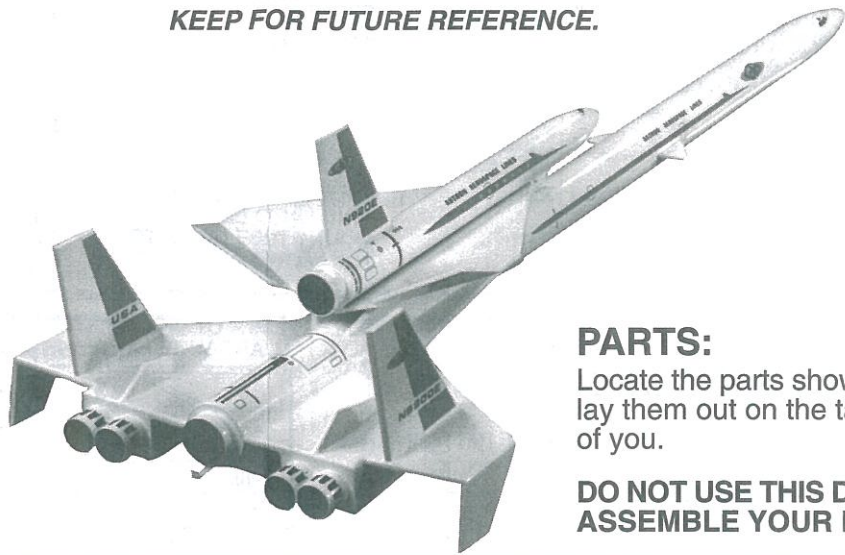
ESTES® INDUSTRIES
1295 H Street
Penrose, CO 81240
PRINTED IN USA

ORBITAL TRANSPORT™

FLYING MODEL ROCKET KIT INSTRUCTIONS

EST 1259

KEEP FOR FUTURE REFERENCE.



ASSEMBLY TIP

Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

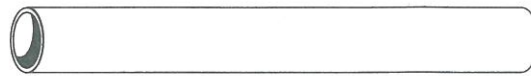
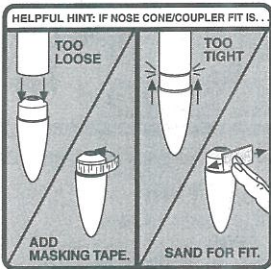
TEST-FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE.

If any parts don't fit properly, sand as required for precision assembly.

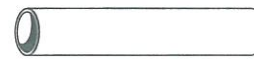
PARTS:

Locate the parts shown below and lay them out on the table in front of you.

DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.



BOOSTER BODY TUBE BT-50 (1)
(30352)



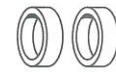
ORBITER BODY TUBE BT-20D (1)
(30317)



BLUE ENGINE MOUNT TUBE 20J (1)
30326-1



WHITE BODY TUBE BT-5 (4)
(31174)



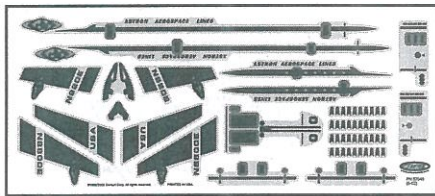
GREEN ADAPTER RING AR 2050 (2)
(30164-2)



NOSE CONE INSERT PIN-50YR (1)
(072605)



NOSE CONE PNC-50YR (1)
(072604)



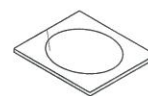
Decal Sheet (1)
(37040)



ENGINE HOOK (1)
(35021)



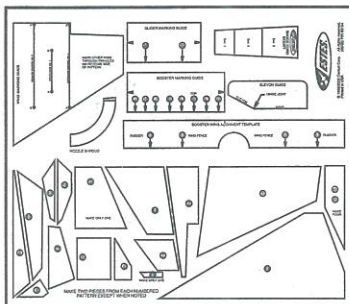
LAUNCH LUG LL2B (1)
38178



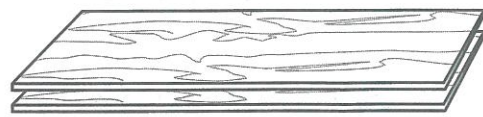
DIE CUT DISC NB-20 (1)
(32474)



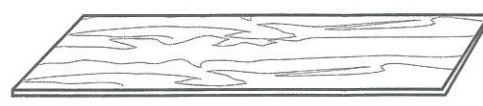
NOSE CONE PNC-20 (1)
(72606)



PATTERN SHEET (1)
(83154)



BALSA SHEET 3/32" X 3" X 12" (2)
(32110)



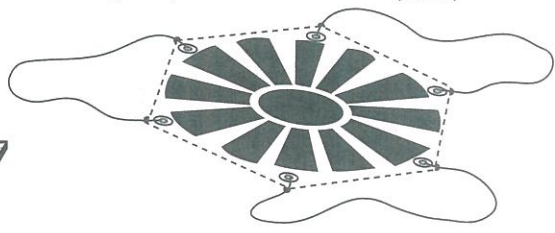
BALSA SHEET 1/16" X 3" X 12" (1)
(32106)



WOOD DOWEL 1/8 X 3/4" (1)
(32053)



SHOCK CORD 1/4" X 36" (1)
(38382)



ASSEMBLED 18" PARACHUTE (1)
(35802)

ALL GLUED AREAS ARE SHADED IN GRAY

SUPPLIES

In addition to the parts included in the kit you will also need:



SCISSORS



PENCIL



RULER



FINE SAND PAPER (#400-600 GRIT)



CARPENTER'S GLUE



MODELING KNIFE



MASKING TAPE



PRIMER (WHITE)



SPRAY PAINT: BLACK & WHITE



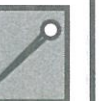
SPRAY CLEAR COAT (OPTIONAL)



PLASTIC CEMENT



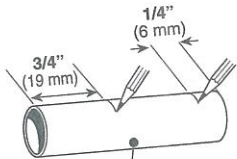
WAX PAPER



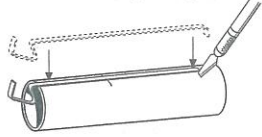
STRAIGHT PIN

1. ASSEMBLE ENGINE MOUNT

- A. MARK TUBE. B. CUT A 1/8" (3 mm) WIDE SLIT AT 1/4" (6 mm) MARK.
- D. APPLY GLUE JUST IN FRONT OF 3/4" (19 mm) MARK.
- F. APPLY GLUE BAND AROUND FRONT OF TUBE.



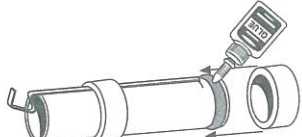
BLUE ENGINE MOUNT TUBE



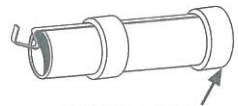
C. POSITION ENGINE HOOK.



E. SLIDE GREEN ADAPTER RING ONTO ENGINE MOUNT TUBE DOWN TO THE 3/4" (19 mm) MARK.



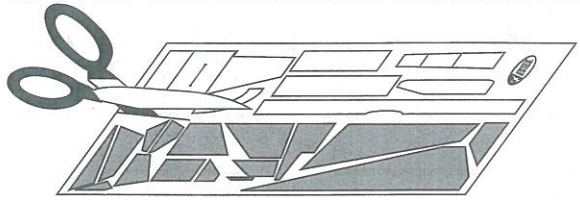
G. SLIDE OTHER GREEN ADAPTER RING SO IT IS EVEN WITH THE END OF THE TUBE.



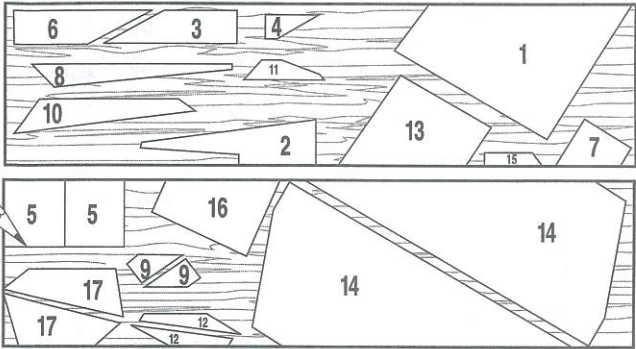
ENDS EVEN

2. BALSA SHEET LAYOUTS

- A. CUT OUT THE BALSA PATTERNS FROM THE PATTERN SHEET.



- B. ARRANGE PATTERNS AS SHOWN AND TRACE ON BALSA SHEETS.

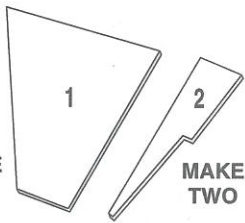


USE THIS LAYOUT FOR THE TWO 3/32" THICK BALSA SHEETS.

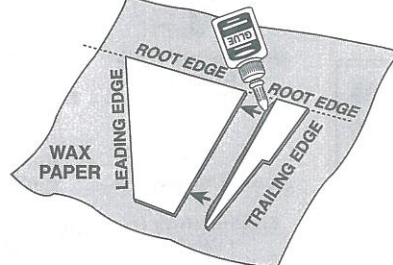
USE THIS LAYOUT FOR THE ONE 1/16" THICK BALSA SHEET.

3. FORWARD WING CONSTRUCTION

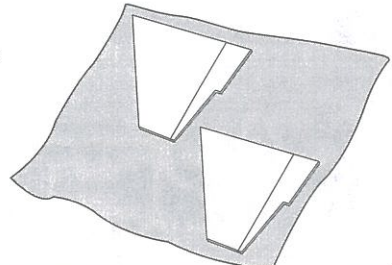
- A. USING A HOBBY KNIFE, CAREFULLY CUT PATTERN #1 AND PATTERN #2 FROM EACH 3/32" THICK BALSA SHEET.



- B. GLUE EACH WING SECTION TOGETHER AS SHOWN. ALIGN BOTH ROOT EDGES.

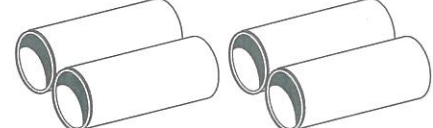
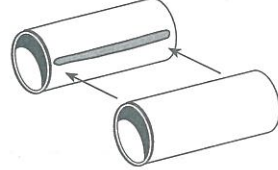
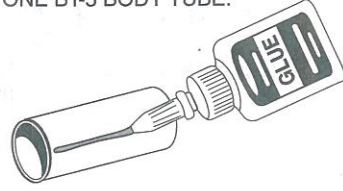


- C. LET DRY.



4. ASSEMBLE SCRAMJET TUBES

- A. APPLY A THIN STRAIGHT LINE OF GLUE ALONG ONE BT-5 BODY TUBE.
- B. ATTACH IT TO ANOTHER BT-5 TUBE SO THE TUBE ENDS ARE EVEN.
- C. REPEAT STEPS A & B FOR REMAINING BT-5 TUBES.



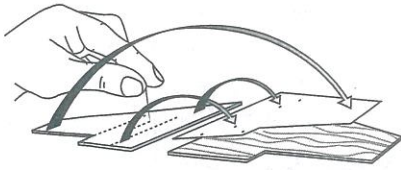
COMPLETED SCRAMJETS

5. PREPARE FORWARD WING

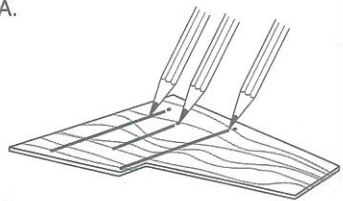
- A. CUT OUT WING MARKING GUIDE FROM PATTERN SHEET.



- B. PLACE BOTH WINGS ON A FLAT SURFACE. LAY WING MARKING GUIDE ON TOP OF WING, PRINTED SIDE UP. USING A PIN, POKE THROUGH PATTERN SHEET AT DOTS. DO NOT POKE ALL THE WAY THROUGH BALSA.



- C. CAREFULLY DRAW LINES TO CONNECT PINHOLES.



- C. FLIP PATTERN SHEET OVER ONTO OTHER WING AND REPEAT PROCESS TO MARK WING.