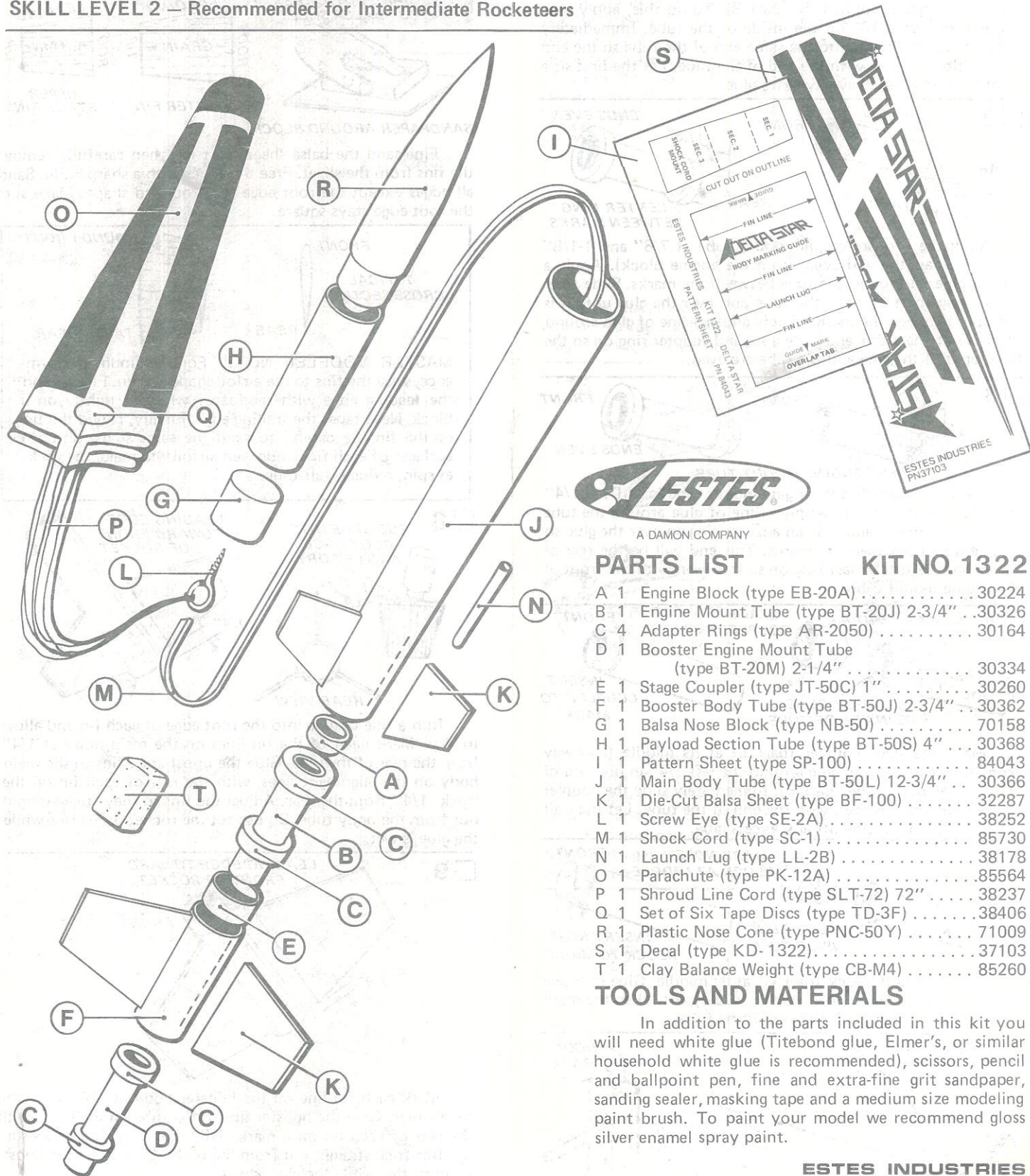


# DELTA STAR

## 2-STAGE SPORT MODEL

SKILL LEVEL 2 – Recommended for Intermediate Rocketeers

Read all instructions before beginning work on your model. Make sure you have all parts and materials. When you are thoroughly familiar with the assembly procedure, begin construction. Check off each step as you complete it. In each step, test-fit the parts together before applying any glue. If some part doesn't fit properly, sand lightly or build up as needed for precision assembly.



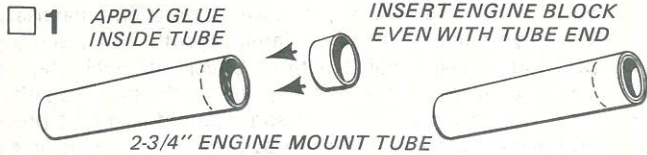
### PARTS LIST KIT NO. 1322

A	1	Engine Block (type EB-20A)	30224
B	1	Engine Mount Tube (type BT-20J) 2-3/4"	30326
C	4	Adapter Rings (type AR-2050)	30164
D	1	Booster Engine Mount Tube (type BT-20M) 2-1/4"	30334
E	1	Stage Coupler (type JT-50C) 1"	30260
F	1	Booster Body Tube (type BT-50J) 2-3/4"	30362
G	1	Balsa Nose Block (type NB-50)	70158
H	1	Payload Section Tube (type BT-50S) 4"	30368
I	1	Pattern Sheet (type SP-100)	84043
J	1	Main Body Tube (type BT-50L) 12-3/4"	30366
K	1	Die-Cut Balsa Sheet (type BF-100)	32287
L	1	Screw Eye (type SE-2A)	38252
M	1	Shock Cord (type SC-1)	85730
N	1	Launch Lug (type LL-2B)	38178
O	1	Parachute (type PK-12A)	85564
P	1	Shroud Line Cord (type SLT-72) 72"	38237
Q	1	Set of Six Tape Discs (type TD-3F)	38406
R	1	Plastic Nose Cone (type PNC-50Y)	71009
S	1	Decal (type KD-1322)	37103
T	1	Clay Balance Weight (type CB-M4)	85260

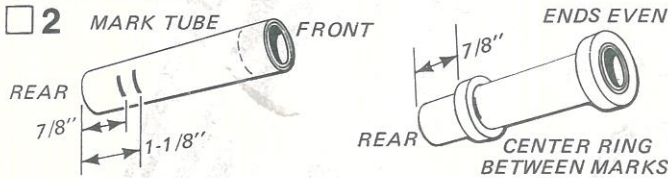
### TOOLS AND MATERIALS

In addition to the parts included in this kit you will need white glue (Titebond glue, Elmer's, or similar household white glue is recommended), scissors, pencil and ballpoint pen, fine and extra-fine grit sandpaper, sanding sealer, masking tape and a medium size modeling paint brush. To paint your model we recommend gloss silver enamel spray paint.

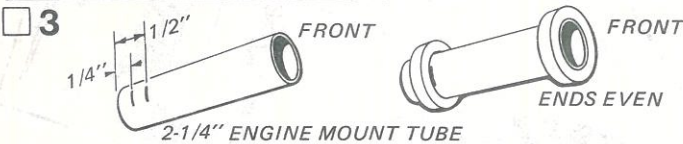
# ASSEMBLY INSTRUCTIONS



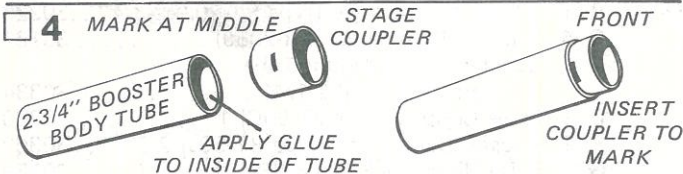
Glue the engine block (part A) in one end of the longer (forward) engine mount tube (part B). To do this, apply glue around the last 3/16" on the inside of the tube. Immediately slide the engine block into the same end of the tube so the end of the block is even with the end of the tube. Let the unit sit a minute, then wipe away any extra glue.



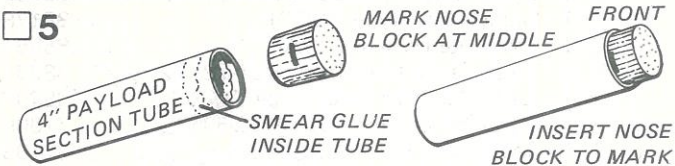
Mark the forward engine mount tube at 7/8" and 1-1/8" from the rear (the end away from the engine block). Apply a line of glue all around the tube between the marks. Slide an adapter ring (part C) onto the tube and over the glue until it is centered between the marks. Apply another line of glue around the tube at the front and slide a second adapter ring on so the front ends of the ring and the tube are even.



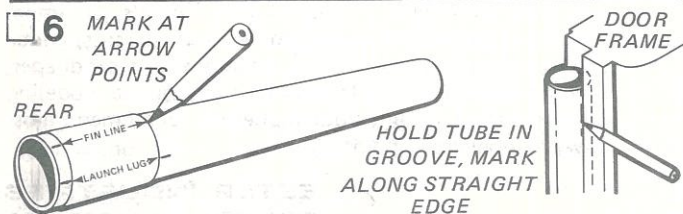
Mark the shorter (rear) engine mount tube (part D) at 1/4" and 1/2" from one end. Apply a line of glue around the tube between the marks and slide an adapter ring on over the glue so it is centered between the marks. This end will be the rear of the mount. Glue the last ring on so it is even with the front of the engine mount tube.



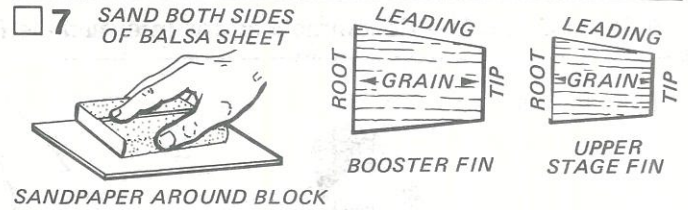
Mark the stage coupler (part E) at its middle (half-way from each end). Apply glue around the last 1/4" in one end of the booster body tube (part F). Immediately slide the coupler in until the mark is even with the end of the tube. Let the unit set a minute, then wipe off any excess glue.



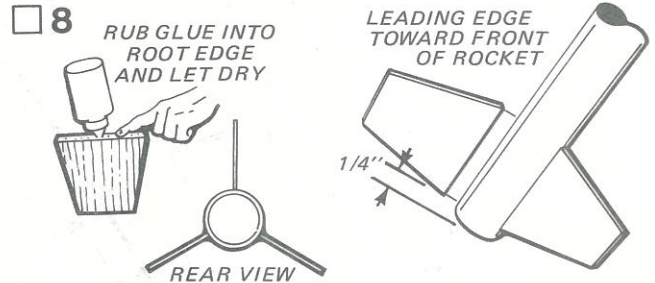
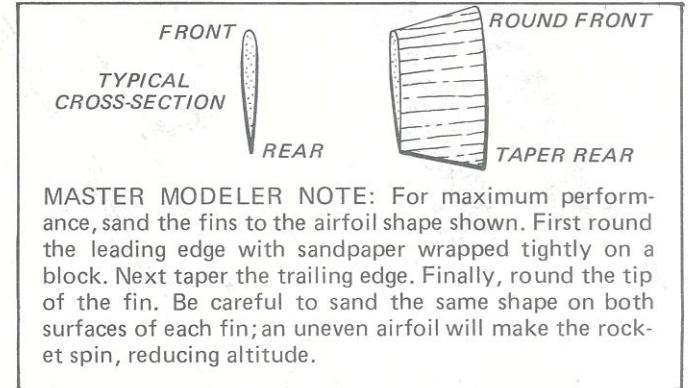
Mark the nose block (part G) at its middle. Glue it in one end of the 4" long payload section tube (part H) so the mark on the block is even with the end of the tube.



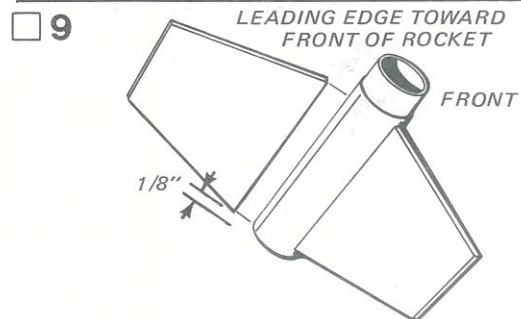
Cut out the body tube marking guide from the pattern sheet (part I). Wrap it around one end of the 12-3/4" long main body tube (part J). Mark the tube at each arrow point, front and rear. Draw a straight line connecting each matching front and rear mark. The "V" formed by the side of the stop on a door frame makes a good guide for drawing straight lines on a tube. Extend the launch lug line forward 6". Mark the booster tube for three fins in the same way.



Fine-sand the balsa sheet (part K), then carefully remove the fins from the sheet. Free the edges with a sharp knife. Sand all edges except the root edge to a rounded shape. Make sure the root edge stays square.



Rub a line of glue into the root edge of each fin and allow to dry. Mark each of the fin lines on the main body at 1/4" from the rear of the tube. Glue the upper stage fins to the main body on the alignment lines, with the rear of each fin on the mark, 1/4" from the rear. Adjust the fins so they stick straight out from the body tube. Do not set the rocket on its fins while the glue is wet.



Mark each fin line on the booster body at 1/8" from the tube's rear. Glue the booster fins to the tube on the lines, with the rear of each fin on a mark, 1/8" from the rear. Make sure the fins stick straight out from the body. Do not set the booster on its fins while the glue is wet.