

Sprint

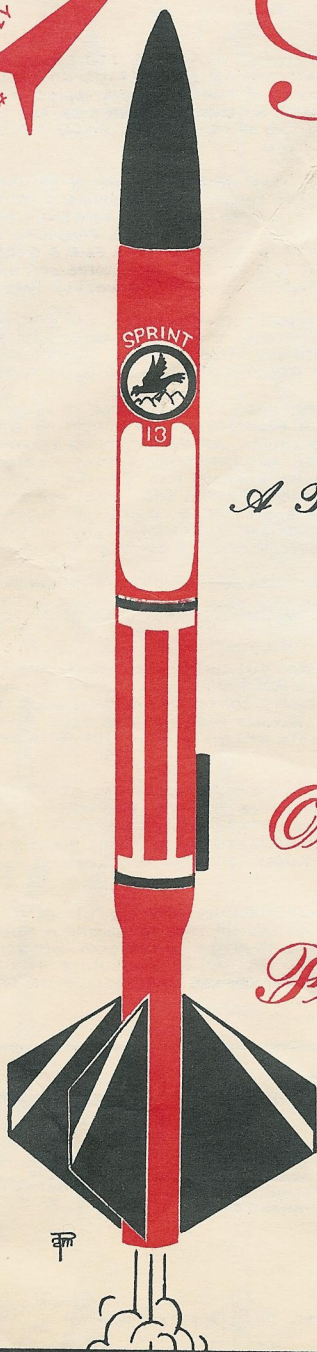
Recommended F.S.I. Engines

B3~4	D18~4
C4~4	D18~6
D4~6	E5~6
D6~6	

A Real Flying Model **15"** long

- ... A Competition and Contest Model
- ... Parachute Recovery
- ... Illustrated Assembly Directions
- ... All Parts Precut
- ... Strong and Durable Parts
- ... No Stick Balsa
- ... Fly Over and Over

*On Your Mark...
Get Set...
Fly With F.S.I.*



KIT NO. MRK.VII



FLIGHT SYSTEMS, INC.

P. O. BOX 145

LOUISVILLE, COLORADO 80027

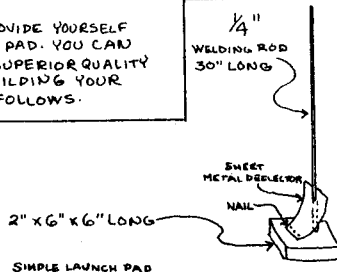
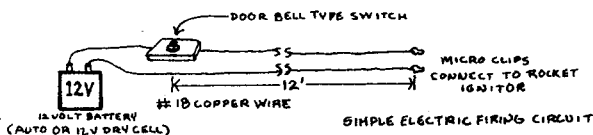
ADDITIONAL INSTRUCTIONS FOR ASSEMBLY

USE THE FOLLOWING ORDER FOR ASSEMBLY

- ① **THRUST RING**— PLACE A HEAVY BAND OF ELMER'S GLUE ABOUT 2" INSIDE OF BODY TUBE. INSERT THRUST RING BY USING A FS1 A, B, C, OR D ROCKET ENGINE. PUSH THRUST RING FORWARD UNTIL A, B, C, OR D ENGINE PROJECTS 3/4" OUTSIDE BODY TUBE, FOR FS1 "E" ENGINE PUSH FORWARD UNTIL 7/8" OF ENGINE PROJECTS OUTSIDE BODY TUBE. THE THRUST RING FORCES THE GLUE FORWARD AND PROVIDES FOR A STRONG BOND OF THE THRUST RING TO BODY TUBE. NOW EXTRACT ENGINE AND LET GLUE DRY.
- ② **SHOCK CORD MOUNT**— SPREAD HEAVY LAYER OF ELMER'S GLUE ALL OVER THE SIDE OPPOSITE THE SHOCK CORD KNOT AFTER TAKING UP SLACK IN CORD. CURVE SHOCK CORD MOUNT AND INSERT INTO NOSE CONE END OF BODY TUBE AND FIRMLY PRESS IN PLACE, USING FINGER, UNTIL GLUE HOLDS FIRMLY. ASSEMBLY DETAIL SHEET SHOWS PROPER POSITION IN BODY TUBE.
- ③ **FINS**— ALL 3 FINS IN YOUR KIT ARE MARKED WITH RED EDGE. THIS REEDGE IS TO BE PLACED NEXT TO THE BODY TUBE. BEFORE GLUING INTO PROPER POSITION YOU MAY WANT TO SAND AND ROUND OFF ALL FIN EDGES, EXCEPT DO NOT SAND RED EDGE. AFTER SANDING EDGES, PLACE A SMALL AMOUNT OF ELMER'S GLUE ALONG THE REEDGE AND IMMEDIATELY PRESS AGAINST BODY TUBE. HOLD SECURELY UNTIL GLUE SETS STRONG ENOUGH TO SUPPORT FIN. BE SURE FIN IS PARALLEL TO BODY TUBE AND RADIAL THROUGH CENTER OF BODY TUBE. REPEAT FOR THE OTHER TWO REMAINING FINS. YOUR BODY TUBE IS MARKED WITH 3 BLACK MARKS. PLACE FINS ALONG THESE LINES FOR PROPER SPACING OF 120° AND PARALLEL ALIGNMENT. AFTER TACK COAT OF GLUE DRIES HARD PLACE TWO MORE LINES OF GLUE ALONG FIN AND BODY TUBE TO BUILD UP A STRONG FILLET.
- ④ **FLAMEPROOF WADDING**— BE SURE THAT FLAMEPROOF WADDING IS USED EACH TIME ROCKET IS FIRED. PUSH WADDING ALL THE WAY DOWN TO THRUST RING AND PACK IN FIRMLY WITH A 5/8" DOWEL OR SIMILAR TOOL. USE ENOUGH WADDING TO MAKE APPROXIMATELY A 5/8" LONG PLUG. SEE ASSEMBLY DETAIL SHEET.
- ⑤ **PARACHUTE**— THE PARACHUTE IS MARKED IN INCHES. CUT WITH SCISSORS ALONG THE INCH LINES THAT GIVE YOU THE SIZE PARACHUTE YOU DESIRE (FOR MICRO ROCKET—12"). LAY PARACHUTE ON FLAT SURFACE AND ATTACH SHROUD LINES TO PARACHUTE USING STRIPPABLE TABS (SEE DETAIL C), CAUTION: LET NON-PORTION OF TAB PROJECT BEYOND PARACHUTE AS GLUE ON TAB WILL STICK PARACHUTE TOGETHER AND INTERFERE WITH ITS OPENING. TRY NOT TO TOUCH THE GLUE SIDE OF TAB WITH FINGERS.
- ⑥ **SHOCK CORD & PARACHUTE**— AFTER INSERTING WADDING INTO BODY TUBE, COIL SHOCK CORD AROUND YOUR FINGER AND STUFF INTO BODY TUBE. NEXT FOLD PARACHUTE AS SHOWN ON ASSEMBLY DRAWING, GATHER TOGETHER LIGHTLY, THE PARACHUTE, THEN WRAP SHROUD LINES GENTLY AROUND FOLDED PARACHUTE AS SHOWN IN DETAIL C. DIAMETER OF FOLDED PARACHUTE SHOULD BE SLIGHTLY SMALLER THAN INSIDE DIAMETER OF BODY TUBE. ALL DETAILS ARE SHOWN ON ASSEMBLY DETAIL SHEET. BE SURE NOSE CONE IS A GENTLE FIT INTO BODY TUBE. LIGHT SANDING MAY BE NEEDED.
- ⑦ **ROCKET ENGINE**— WRAP A SMALL AMOUNT OF 1/2" WIDE MASKING TAPE AROUND THE ROCKET ENGINE AT THE POSITION SHOWN ON DETAIL A. USE ENOUGH TAPE TO SECURE A SNUG FIT INTO THE BODY TUBE AS TO REQUIRE A FIRM PUSH ON ENGINE TO PLACE IN CONTACT WITH THRUST RING. IF ENGINE DOES NOT FIT SNUGLY, IT WILL BE EJECTED INSTEAD OF PARACHUTE AND YOUR ROCKET WILL FREE FALL.

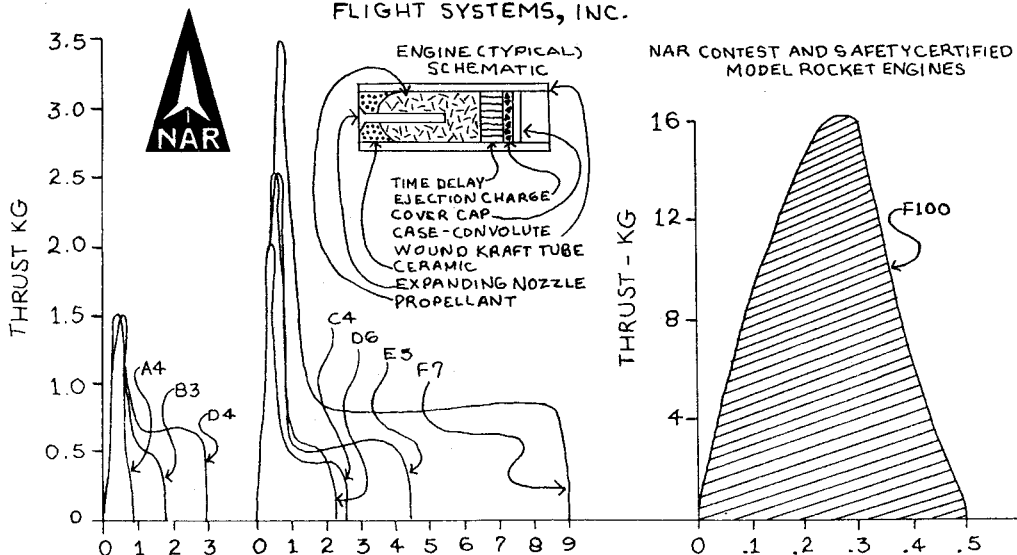
MODEL ROCKET FIRING & LAUNCHING EQUIPMENT

TO FLY YOUR FS1 MODEL ROCKET PROPERLY YOU WILL NEED TO PROVIDE YOURSELF WITH A 12 VOLT FIRING CIRCUIT AND A SIMPLE ROCKET LAUNCH PAD. YOU CAN EASILY BUILD YOUR OWN OR PURCHASE FROM YOUR DEALER. FS1 SUPERIOR QUALITY LAUNCHERS AND ELECTRIC IGNITION PANEL. DETAILS FOR BUILDING YOUR OWN LAUNCHER AND ELECTRIC IGNITION CIRCUIT ARE AS FOLLOWS.



TYPICAL THRUST/TIME CURVES for MODEL ROCKET ENGINES

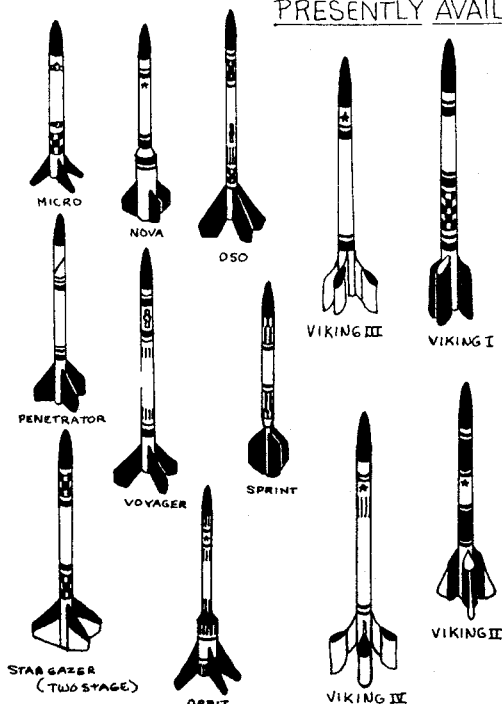
FLIGHT SYSTEMS, INC.



ALL OF THE ABOVE ROCKET ENGINES ARE AVAILABLE AT MOST OF THE BETTER HOBBY SHOPS THROUGHOUT THE UNITED STATES. IF YOUR FAVORITE HOBBY STORE DOES NOT STOCK THE F.S.I. LINE, HAVE HIM WRITE US FOR OUR LATEST CATALOG AND PRICES. IF YOU DESIRE YOUR OWN CATALOG, SEND 25¢ TO FLIGHT SYSTEMS, INC.

YOU HAVE JUST PURCHASED ONE OF FSI'S SUPERIOR QUALITY MODEL ROCKETS. OTHER FINE FSI KITS ARE ALSO AVAILABLE. THE FSI ROCKET FLEET IS CONSTANTLY BEING ADDED TO. SEE ALL OF THESE MODELS AT YOUR HOBBY DEALER.

PRESENTLY AVAILABLE FSI MODEL ROCKET KITS



RECOMMENDED FSI ENGINES

MICRO: A4-4, B3-4, C4-4, D4-6

PENETRATOR: A4-4, B3-4, C4-4, D4-6, D6-6, E5-6

STAR 1st stage: B3-0, C4-0, D6-0, E5-0
GAZER 2nd stage: B3-6, C4-6, D6-8, D4-8, E5-6

NOVA: B3-4, C4-4, D4-4, D6-6, E5-6, F7-6

VOYAGER: D6-6, F7-6, F100-8

ORBIT: B3-4, C4-4, D4-6, D6-6, E5-6, F7-6

OSO: D6-6, F7-6, F100-8

SPRINT: C4-4, D4-6, D6-6

VIKING I: A4-4, B3-4, C4-4, D4-6, D6-6, E5-6

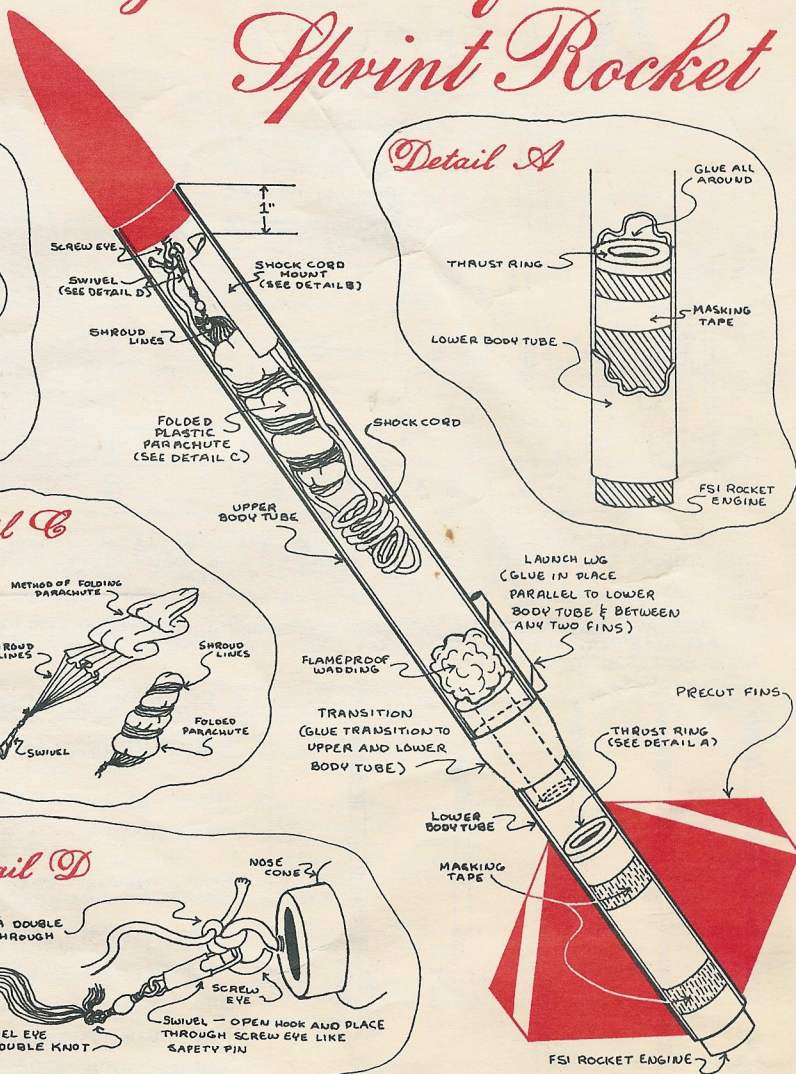
VIKING II: A4-4, B3-4, C4-4, D4-6, D6-6, E3-6

VIKING III: A4-4, B3-4, C4-4, D4-6, D6-6, E5-6

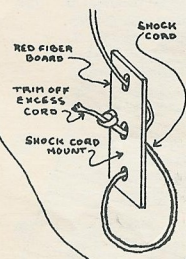
VIKING IV: F7-6, F100-8

A COMPLETE LINE OF QUALITY FIRING CIRCUITS, LAUNCH GEAR, MODEL ROCKET ACCESSORIES AND INSTRUMENTS ARE ALSO AVAILABLE FROM FSI. SEE YOUR DEALER FOR DETAILS.

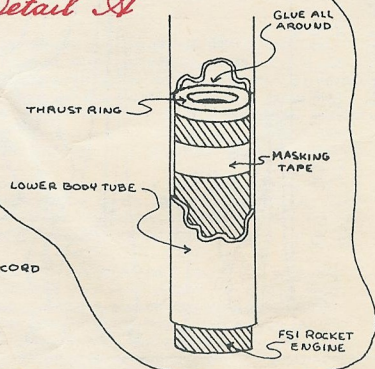
Assembly Details for Sprint Rocket



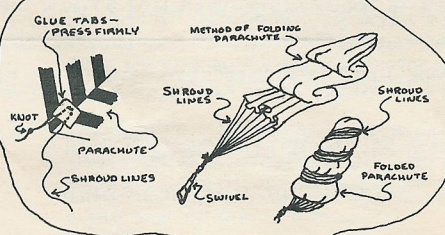
Detail B



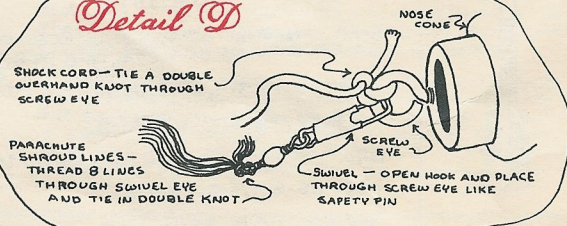
Detail A



Detail C



Detail D

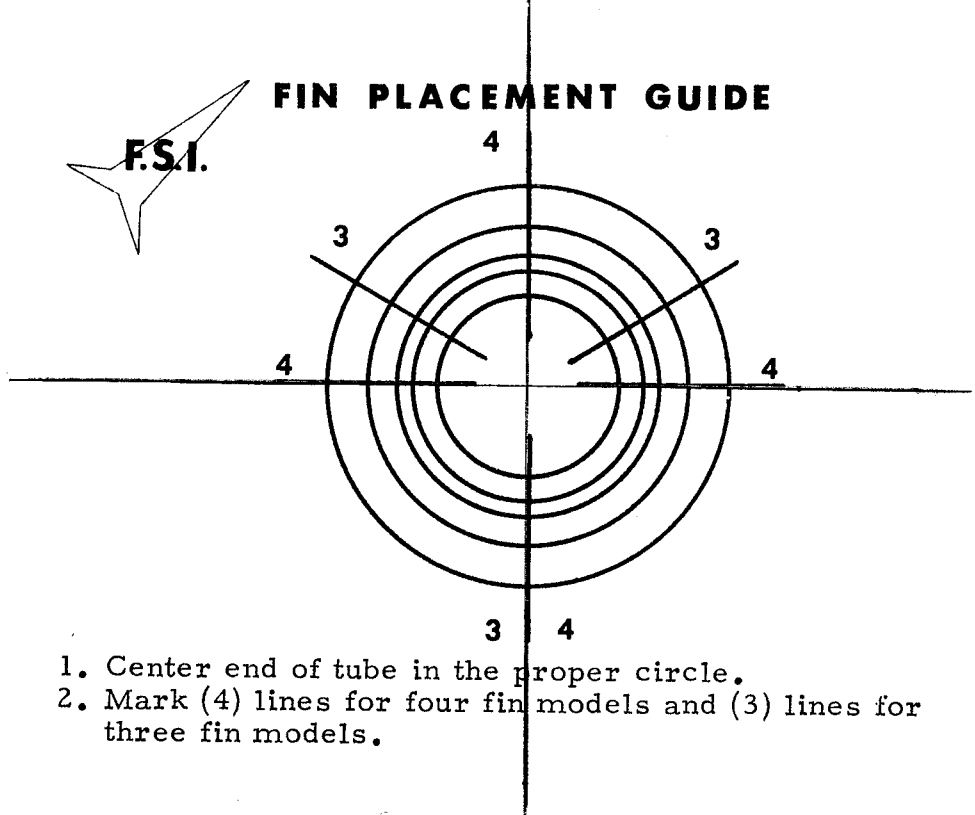


Parts List

- Nose Cone
- Upper Body Tube
- Transition
- Lower Body Tube
- Shock Cord Mount
- Flameproof Wadding
- Plywood Fins
- Launch Lug
- Screw Eye
- Swivel
- Thrust Ring
- Shock Cord
- Parachute Glue Tabs
- Plastic Parachute



FIN PLACEMENT GUIDE



1. Center end of tube in the proper circle.
2. Mark (4) lines for four fin models and (3) lines for three fin models.

