

**75¢**

# **COMPOSITE DYNAMICS**

**PRODUCT  
CATALOG**

**1981**

**NEW!**

**9.75**

# STARFIRE

LARGE KIT for F-Series Engines  
Computer-Designed for Trans-Sonic Flights

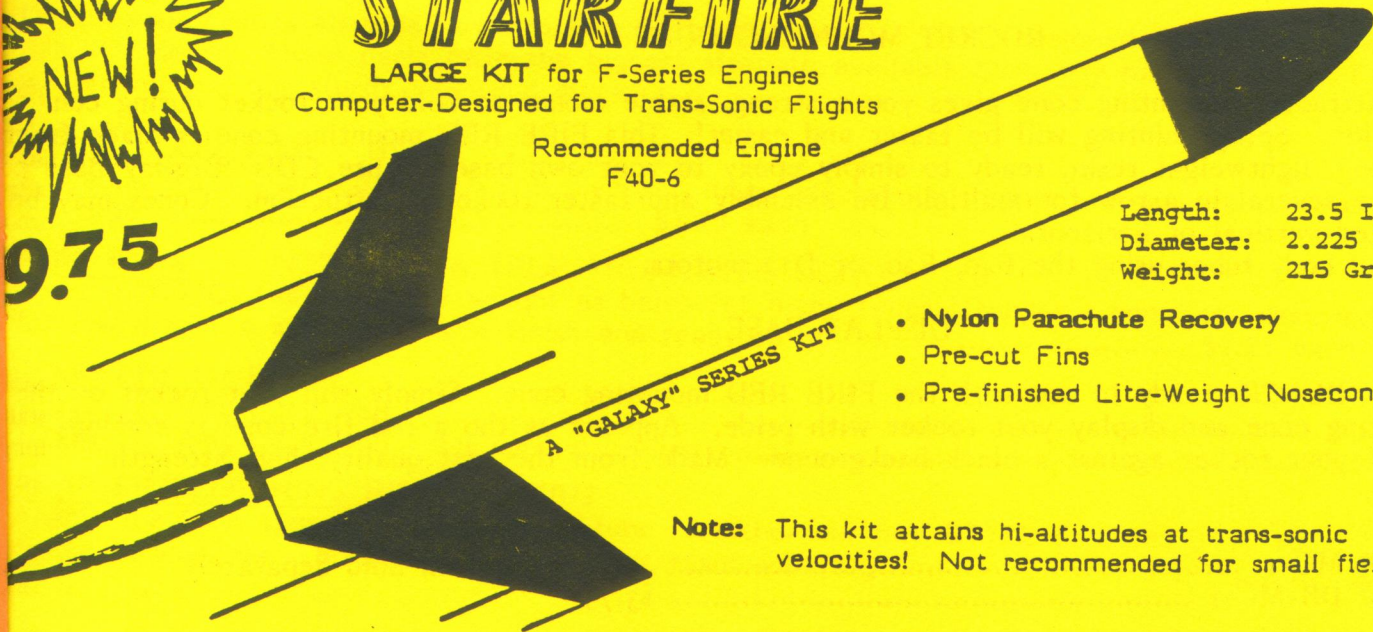
Recommended Engine  
F40-6

Length: 23.5 Inches  
Diameter: 2.225 Inches  
Weight: 215 Grams

- Nylon Parachute Recovery
- Pre-cut Fins
- Pre-finished Lite-Weight Nosecone.

A "GALAXY" SERIES KIT

**Note:** This kit attains hi-altitudes at trans-sonic velocities! Not recommended for small fields! !



## ROCKET MOUNTING CONE

This attractive mounting cone gives you a strong, stable mount to hold your rocket during construction. Spray painting will be faster and easier! This FIRE RED mounting cone is made from a strong, lightweight resin, ready to simply epoxy to your own base (or use CD's "Display Base"). We use several in a row for multiple fin assembly and faster rocket construction. Cones may be mounted vertical or horizontal.

Fits all body tubes using the F40, E20, or D12 motors.

## DISPLAY BASE

PITCH BLACK, ready to use with the FIRE RED mounting cone. Simply slip your rocket on the mounting cone and display your rocket with pride. Appears as tho a red fire cone is coming out of your rocket against a black background. Made from the best quality, high strength resins.

CAT.# MC-I .....	.55 Cents (Each) Sold Separately
CAT.# DB+MC-I .....	\$3.75



Design your own hi-altitude large rockets with the new C.D. parts designed for the hi-power of the E & F motors. These parts have the highest strength available from any manufacturer. For fins, we recommend our sturdy basswood stock.

**LARGE BODY TUBE** BT72C (2.175 ID/2.225 OD/17 1/2 L)

A special thick wall tube which will give you many spectacular flights - A smooth surface finish for low drag ..... \$1.75 each

**NOSE CONE** - NC72C - A TRUE TRUNCATED OGIVE!

For the BT72C, the same low weight as balsa yet many times stronger - computer designed shape for low drag - a smooth surface finish and ready to go! ..... \$2.25 each

**COUPLERS** for BT72C

TC722 2" long/thick wall ..... \$.35 each  
TC724 4" long/thick wall - for special designs ..... \$.55 each

**ADAPTER/CENTERING RING** AD1072

Adapts the C.D. type BT10 hi-strength tube to either our own BT72C or Estes BT70 tube. A new design in adapters - hi-strength/light weight resin with a geometry you will like! ..... \$.60 each

**\*\*DESIGNERS SPECIAL KIT .... \$13.75\*\***

A selected list of the most useful parts for your special designs. Plenty of parts to build several hi-altitude birds!!

2	Large body tubes	BT72C
1	2" coupler	TC722
1	4" Coupler	TC724
1	Large Nose Cone	NC72
2	Adapter/Center Ring	AD1072
2	Body Tubes	BT10/12
2	Body Tubes	BT10/15
2	Couplers/Engine Blocks	TC110
2	Nose Cones	NC10L
3	Basswood Sheets	I-FS3A
1	5 Min. Epoxy Kit	SP-5

This KIT saves you \$\$\$ and gives you the best rocket parts available!

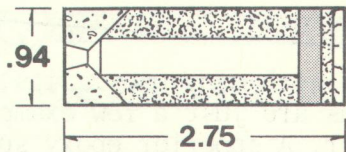
Parts purchased separately total: \$17.75

\$\$\$      SAVE \$4.00      \$\$\$

Catalog # DSK-1 ..... \$13.75

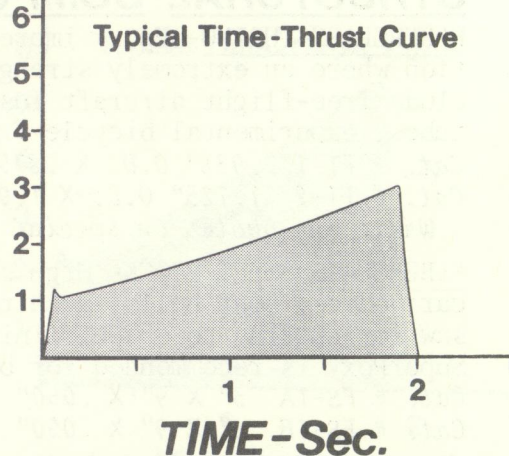
# Pro-Jet® E20

## ROCKET MOTOR DATA SHEET



N.A.R. SAFETY  
AND CONTEST  
CERTIFIED

THRUST - Kg



*\* Same size as the Estes D12!*

*\* High Altitudes with Light Rockets!*

*Flights over 4,000'!*

*Low - Priced!*

*Lifts 1/2 Pound!*

Catalog No.	Total Impulse	Ave. Thrust	Duration	Initial Wgt.	Prop. Wgt.	Delay
E20-4	40 N - sec	20 N	2.0 sec	51g	21g	4
E20-7						7 sec
E20-10						10



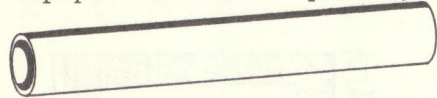
# STRUCTURAL COMPONENTS:

FIBERGLASS TUBING- Epoxy impregnated filament wound fiberglass tubing is useful for any application where an extremely strong, lightweight structural member is required. Suggested uses include free-flight aircraft fuselages, high-pressure vessels, coil winding forms, rocket body tubes, experimental bicycle frames & electrical conduit pipe. Use CD's SuperPoxy for bonding.

Cat. # FT-1 .938" O.D. X .875" I.D. X 15" long

Cat. # FT-2 1.125" O.D. X 1.063" I.D. X 15" long

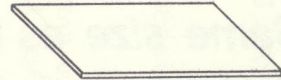
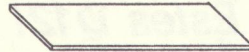
Write for quotes on special lengths (up to 46"!!)



FIBERGLASS SHEET STOCK- High strength structural material with many uses: Jigs, fixtures, R/C car bodies, boat hulls, architectural models & rocket fins are just a few examples. Use a hacksaw for cutting to shape, finish with a file and sandpaper. A superior epoxy such as CD's SuperPoxy is recommended for bonding.

Cat. # FS-1A 3" X 9" X .050" thick

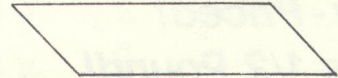
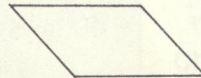
Cat. # FS-1B 6" X 9" X .050" thick



ULTRATHIN FIBERGLASS SHEETING- A new space-age product available only from Composite Dynamics! Lightweight model coverings, electrical insulation & rocket body tube reinforcement are but a few of the applications of this material that combines the strength of fiberglass with the weight & thickness of paper.

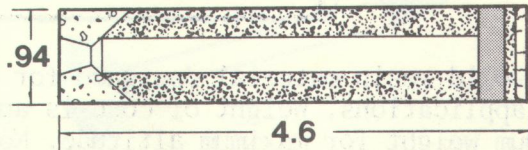
Cat. # FS-2A 12" X 12" X .003" thick

Cat. # FS-2B 12" X 24" X .003" thick

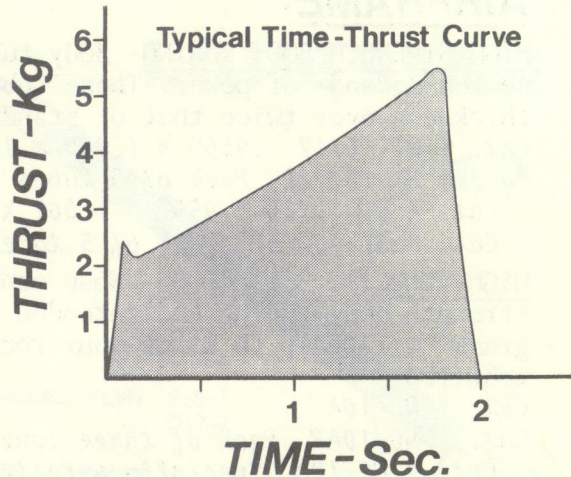


# Pro-Jet® F40

## ROCKET MOTOR DATA SHEET



N.A.R. SAFETY  
AND CONTEST  
CERTIFIED



*\* Highest Performance Available!*

*\* Same diameter as the Estes D12!*

***Supersonic Power!***

***Flights over 1 Mile!***

***Fits Estes BT-50!***

Catalog No.	Total Impulse	Ave. Thrust	Duration	Initial Wgt.	Prop. Wgt.	Delay
F40-6	75 N - sec	40 N	2.0 sec	78 g	42 g	6
F40-10						10 sec
F40-15						15



## AIRFRAME:

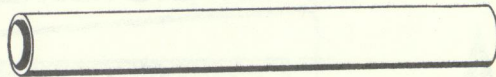
HIGH STRENGTH BODY TUBING- Body tubes especially made for Pro-Jet motors will handle up to 80 newton-seconds of power. These tubes have an outside diameter of 1.0" which results in a wall thickness over twice that of standard body tubing. Perfect for those supersonic flights!

Cat. # BT-10/12 .955" X 1.00" X 12" long

Cat. # BT-10/12P Pack of 5 tubes

Cat. # BT-10/15 .955" X 1.00" X 15" long

Cat. # BT-10/15P Pack of 5 tubes



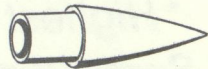
HIGH-VELOCITY SUPERCONES- Nose cones molded of a solid resin material designed for our high-strength body tubing and intended for high-speed applications. Weight of cone is approx. 18 grams- will help to bring your rocket up to optimum weight for maximum altitude. No painting required!

Cat. # NC-10A

Cat. # NC-10AP Pack of three cones

Cat. # NC-10S Specially selected cone with glass-smooth outer surface

Cat. # NC-10SP Pack of three selected cones



BODY TUBE COUPLERS- These couplers are perfect for use with our body tubing listed above. They have a natural paper surface (no glassine) which accepts glue readily.

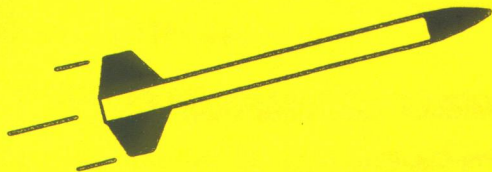
Cat. # TC-110

Cat. # TC-110P Pack of 5 couplers



# SONICS 80

COMPUTER DESIGNED  
FOR  
SUPER-SONIC FLIGHTS



Length: 17 1/2 Inches  
Diameter: 1 Inch  
Weight: 60 Grams

Designed for the F40-15 Engine

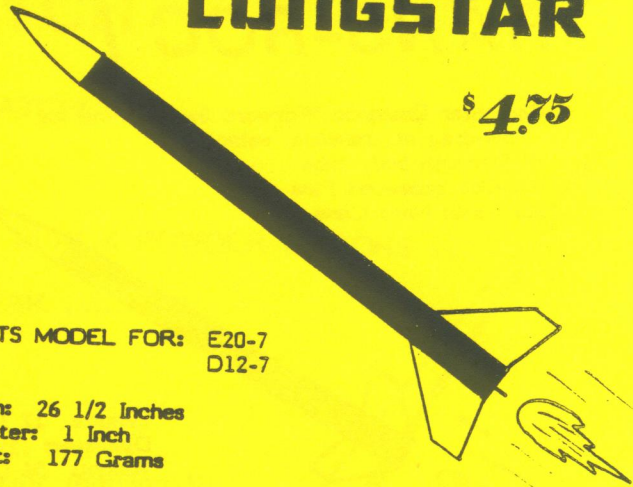
**WARNING:** Very Hi-Altitude flights...  
do not launch on small fields !!

**\$ 4.95**

- Nose Cone made with hi-temperature Resin
- Pre-Cut Fins & Hi-Strength body tube

# LONGSTAR

**\$ 4.75**



SPORTS MODEL FOR: E20-7  
D12-7

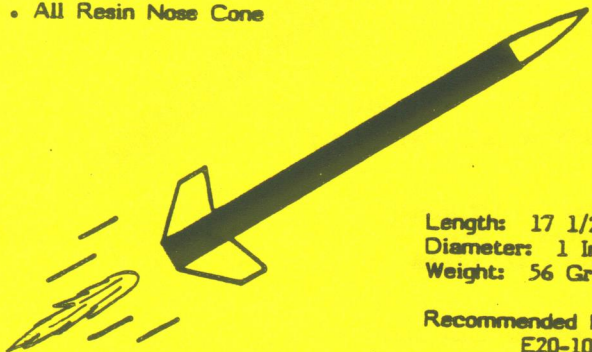
Length: 26 1/2 Inches  
Diameter: 1 Inch  
Weight: 177 Grams

- Hi-strength Body Tubes
- Pre-Cut Fins

# TRANS-ROC I

\$ 4.95

- Computer Designed "Forward Swept" Fins for low-drag at transonic velocity
- Hi-Strength body tube
- Pre-Cut Basswood Fins
- All Resin Nose Cone



Length: 17 1/2 Inches  
Diameter: 1 Inch  
Weight: 56 Grams

Recommended Motors  
E20-10  
D12-7

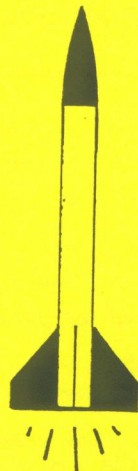
# SONICS 40

\$ 3.95

Hi-Altitude Competition Model

- Pre-Cut Fins
- Hi-Strength Body Tube

Length: 14 1/2 Inches  
Diameter: 1 Inch  
Weight: 58 Grams



Recommended Motors E20-10 or D12-7



# ELECTRO-MATCH

SPECIALLY DESIGNED "ECONOMICAL" ELECTRIC MATCHES

FOR USE WITH ...

... HIGH PERFORMANCE COMPOSITE MOTORS OR BLACK POWDER MOTORS ...

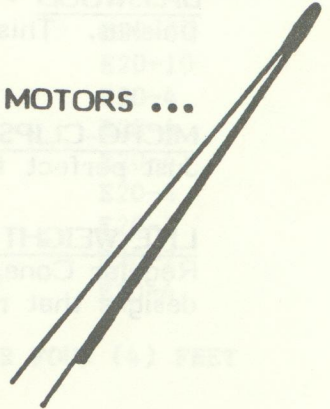
CDI-E for the A, B, C, D, AND E MOTORS ... 4/PAK ..... .95

CDI-EM Master Pack ... 25/PAK... \$5.00

CDI-F for "F" motors ... 4/PAK... \$1.20

CDI-FM Master Pack ... 25/PAK... \$6.25

The newest and most advanced ignitor available. A high energy pyrogen (electrically ignited) will give your motor superior ignition !!



**"5 BOND" 5 Minute Epoxy** - A fast-curing epoxy for quick attachments and repairs. An easy 1:1 mix, by volume. Gels in 5 minutes. This epoxy even cures at super-cold temperatures. Developed by Composite Dynamics Resin Division and available only through CD.

Cat. # SP-5 (\$2.95)

Cat # SP-5K (\$8.50) Pack of three kits

**BASSWOOD** - Hard to find. Stronger than balsawood and has a finer grain for smoother finishes. This is the ideal fin material for general use.

Cat. # FS3A (3 Sheets for \$1.75)

Cat. # FS3AK (10 Sheets for \$4.95) Sheet Size: 3" W X 12"L X 3/32" T

**MICRO-CLIPS** - A strong, miniature alligator clip which easily attaches to those small igniters. Just perfect for the new CD ELECTRO-MATCH® ignitors! Gives more reliable ignitor contact.

Cat. # AG-1 (2 for \$0.75)

**LITE-WEIGHT NOSECONES** - These new "economy" nosecones are about 1/2 the weight of a Regular Cone, but with a tough, strong surface finish! Just right for those special rocket designs that require a low-weight system! Fits CD's BT10 tubing.

Cat. # NC-10L (\$0.75)

Cat. # NC-10LK (\$1.95) Pack of Three

The Pro-Jet E20 Motor by COMPOSITE DYNAMICS has 2 1/2 times the power of a "D" motor, however, it is the same size and can be used in the following models without any modification. The E20 will amaze you with it's high altitude flights that only this motor can provide.

<u>MODEL NAME</u>	<u>RECOMMENDED PRO-JET MOTOR</u>	<u>MODEL NAME</u>	<u>RECOMMENDED PRO-JET MOTOR</u>
Maxi-Alpha	E20-7	Astrocam 110	E20-10
Colossus	E20-4	Goblin	E20-10
Maxi-Alpha 3	E20-4	V2	E20-4
Sky Bolt	E20-10	Honest John	E20-4
Cherokee - D	E20-10	Pershing 1-A	E20-4
Renegade	E20-7	Saturn V	E20-4
Maxi-Icarus	E20-7	Hornet (Magnum)	E20-7
Sky Raider	E20-7	JayHawk (Magnum)	E20-7
Challenger II	E20-10	Thunder Roc	E20-4

NOTE: FOR YOUR SAFETY, COMPOSITE DYNAMICS DOES NOT RECOMMEND ROCKETS OVER FOUR (4) FEET LONG OR ROCKET MODELS WITH SHARP NOSE CONES.



# ROCKET PLANS:

MINI-CINEROC MODIFICATION PLANS- Due to the phase-out of the Cineroc aerial movie camera by Estes Industries, this modification will be limited to Cinerocs or Cineroc parts you may have now. Finished camera specifications are: DIAMETER- 1.25" (Fits BT-55) FILM TYPE & CAPACITY- 9 feet of Kodak G160 Super-8 NET WEIGHT- 2.5 oz. RUNNING SPEED- 31 frames per second. Approx. 30% less weight and 40% less drag than the standard camera.

Cat. # MC-4P

ENERJET 2250 SOUNDING ROCKET PLANS- Scale drawing of the Enerjet 2250 Sounding Rocket. Original parts are no longer available but a good scale model may be built from these plans. This rocket was used by the U.S. Air Force in a cadet ballistics training program at the USAF Academy.

Cat. # 2250P

UPDATED 2650 SOUNDING ROCKET PLANS- Originally intended to replace the 2250 Sounding Rocket, our version was built with a booster for greater altitudes. When built around an Estes BT-60 or Centuri ST-16, the model is a challenge to your building & flying skills- each stage uses a cluster of three rocket motors. The full-size version was flown at the California Mojave Test Area (MTA) to an altitude of 8,000 feet. (As with the 2250, original parts are no longer available.)

Cat. # 2650P

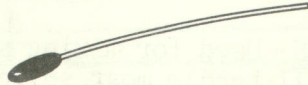
## IGNITORS & RESINS:

ROCKET MOTOR IGNITORS- These ignitors will ignite any type of port-burning plastic composite propellant model rocket motor. They will also work with standard black powder motors having a nozzle throat diameter greater than .150". Superior to our standard ignitors- a high-energy pyrogen provides quicker & more efficient ignition. You can see the difference! Shipped in packs of 5 ignitors each.

Cat. # CDI-1 E20 Ignitor approx. 3.3" long

Cat. # CDI-2 F45 Ignitor approx. 4.0" long

Cat. # CDI-3 F40 Ignitor approx. 5.0" long



SUPERPOXY KIT- An 80 gram, moderate cure time epoxy with superior strength characteristics. More heat resistant than standard adhesives, formulated in CD's Resins Division and not available from any other source. Easy 1:1 mixing ratio that actually gets stronger with heat! Suitable for bonding, laminating, casting and any other application where a strong, high-quality epoxy is needed.

Cat. # SP-1

Cat. # SP-1K Pack of three kits

## RESINS & APPLICATION AIDS:

HOBBYFOAM KIT- Same foam normally available only in 2-quart quantities, now packaged in a convenient 80 gram kit. Great for flotation, insulation, reinforcing areas around R/C gear, rocket motor mounts, making egg capsules, encapsulating payloads, model railroad scenery, etc. Cures in 15 minutes!

Cat. # HF-1

Cat. # HF-1K Pack of three kits

ALUMINUM MIXING PANS- Used for mixing small quantities of resins and chemicals. Unlike paper cups, these pans will handle most solvents without degradation. Reusable too!

Cat. # MP-1 Pack of 10 pans

MIXING SPATULAS- Suitable for mixing both HobbyFoam & SuperPoxxy resins, or any other mixing application. Made from selected hardwoods- will not contaminate resins with harmful chemicals

Cat. # MS-1 Pack of 10 Spatulas

RESIN APPLICATORS- Extra-long reach hardwood dowels with absorbent cotton tips for applying HobbyFoam, SuperPoxxy and other resins to small or hard-to-reach areas. Disposable!

Cat. # RA-1 Pack of 25 Applicators



# ORDER FORM

SHIP TO:

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Age \_\_\_\_\_

MAIL TO:

Composite Dynamics  
Box 5142  
Torrance, CA 90510

Cat. #	Quan.	Description	Price	Total

SUB TOTAL

Discount (If applicable)

Calif. Residents add 6% Sales Tax

Shipping Charge from Chart

Additional Postage- Canadian Orders

Insurance (If desired)

TOTAL ENCLOSED

# PRICE LIST

E20-4, 7, 10 \$4.00 each  
\$11.25/3 PAK

F40-6, 10, 15 \$5.95 each  
\$17.25/3 PAK

BT-10/12 .75  
BT-10/12P 3.50  
BT-10/15 .90  
BT-10/15P 4.25  
BT-72C 1.75  
NC-10A .99  
NC-10AP 2.75  
NC10S 1.25  
NC10SP 3.50  
NC10L .75  
NC10LK 1.95  
NC72C 2.25  
TC-110 .20  
TC-110P .79  
TC-722 .35  
TC-724 .55  
AQ1072 .80  
MC-4P 3.50  
2250P 1.25  
SONICS 80 4.95  
SONICS 40 3.95  
TRANS-ROC I 4.95

2650P 1.25  
FT-1 2.99  
FT-2 3.50  
FS-1A 1.50  
FS-1B 2.99  
FS-2A 2.50  
FS-2B 4.99  
FS-3A 1.75  
FS-3AK 4.95  
CDI-1 2.50  
CDI-2 2.50  
CDI-3 2.50  
CDI-E .95  
CDI-EM 5.00  
CDI-F 1.20  
CDI-FM 6.25  
SP-1 2.95  
SP-1K 8.50  
SP-5 2.95  
SP-5K 8.50  
HF-1 1.99  
HF-1K 5.75  
MP-1 .99  
MS-1 .49  
RA-1 .39  
AG-1 .75  
LONGSTAR 4.75  
STARFIRE 9.75  
OSK-1 13.75

# POSTAGE CHART

Sub Total	Shipping Charge
\$0-\$9.99	\$1.75
10-19.99	2.35
20-29.99	2.75
30-39.99	3.00
40-49.99	3.25
50-74.99	3.75
75-99.99	4.50

Orders over \$100.00 - Add 4% for postage and handling.

Canadian orders add to the above figures:

\$20. to \$39.99 Purchase- \$1.50  
\$40. to \$99.99 Purchase- \$3.00  
\$100. up add 3%

Notice: The prices in this catalog are current as of May 1, 1981. This catalog supercedes all previous catalogs, data sheets and price lists. Prices subject to change without notice.

**"We guarantee shipment the same week of receipt on "instock" items. Specialty orders may take slightly longer."**

**\*\*NOTE:** See "NEW PRODUCTS" insert sheets for prices of "new" products.

# IMPORTANT ORDER INFORMATION:

COMPOSITE DYNAMICS will not be responsible for uninsured orders. If you desire insurance, add \$1.10 to your order.

Canadian orders require extra postage for shipment. Current Canadian customs regulations allow only six (6) rocket motors per package, therefore extra postage is required to ship multiple packages. Please see postage chart on order form for details.

**NOTICE:** These products are intended for experimental and educational usage only. COMPOSITE DYNAMICS shall not be held responsible for any personal injury or property damage resulting from the handling, storage, or use of these products. The buyer assumes all risks and liabilities therefrom and uses our products on these conditions. The only obligation of COMPOSITE DYNAMICS or its authorized distributors shall be the replacement of our products which are proven to be defective. No warranty, either express or implied, is made regarding the reliability or performance of our products.

**USE ONLY UNDER N.A.R. SUPERVISION. FOLLOW ALL N.A.R. SAFETY REGULATIONS.**



# **COMPOSITE DYNAMICS**

Box 5142, Torrance, CA 90510