

ACS-REACTION LABS

RT4-BOX 274 · MARKWELL LN · TAYLORSVILLE, KY 40071

Aerospace Rocket Motors

CATALOG



ACS-REACTION LABS

RT-4 BOX 274 MARKWELL LN TAYLORSVILLE, KY 40071

A Letter to Our Friends and Customers

ACS-REACTION LABS was developed in an effort to provide reliable high performance rocket motors for hobby enthusiast, educational development and research as well as industrial application at a lower price. Our philosophy is simple...we can provide the quality, quantity and specifications required at a reduced price because we do not rely on dealers to sell our products. You can buy direct from us without a dealer adding his cut to your cost. We feel that you would rather have more rocket for less dollar if you had the choice and we are providing you with that choice.

The beginning section of this catalog includes rocket motors which range in total impulse from 80 newton-seconds (4.448 newtons = 1 lb) and go to 975 newton-seconds. The next section is reserved for a comparison and cross-reference of motors offered by Aero Tech and Vulcan with those offered by ACS-REACTION LABS. We also provide a custom motor service which is available upon request and is detailed on page 9 of this catalog. Each motor is supplied with its own ACS-REACTION LABS engine ignitor and instructions on how to fire the motor.

We would like to thank our customers for their overwhelming support in the development and success of ACS-REACTION LABS. We are committed to you to provide the latest technological advances at the lowest possible price available anywhere. We will not be undersold !

We at ACS-REACTION LABS welcome your ideas and suggestions for new products and services that we might provide you with in the future. Feel free to contact us if you have any questions, gripes or other ways in which you feel we may better serve your motor needs. We look forward to hearing from you and seeing you at the LDRS launches.

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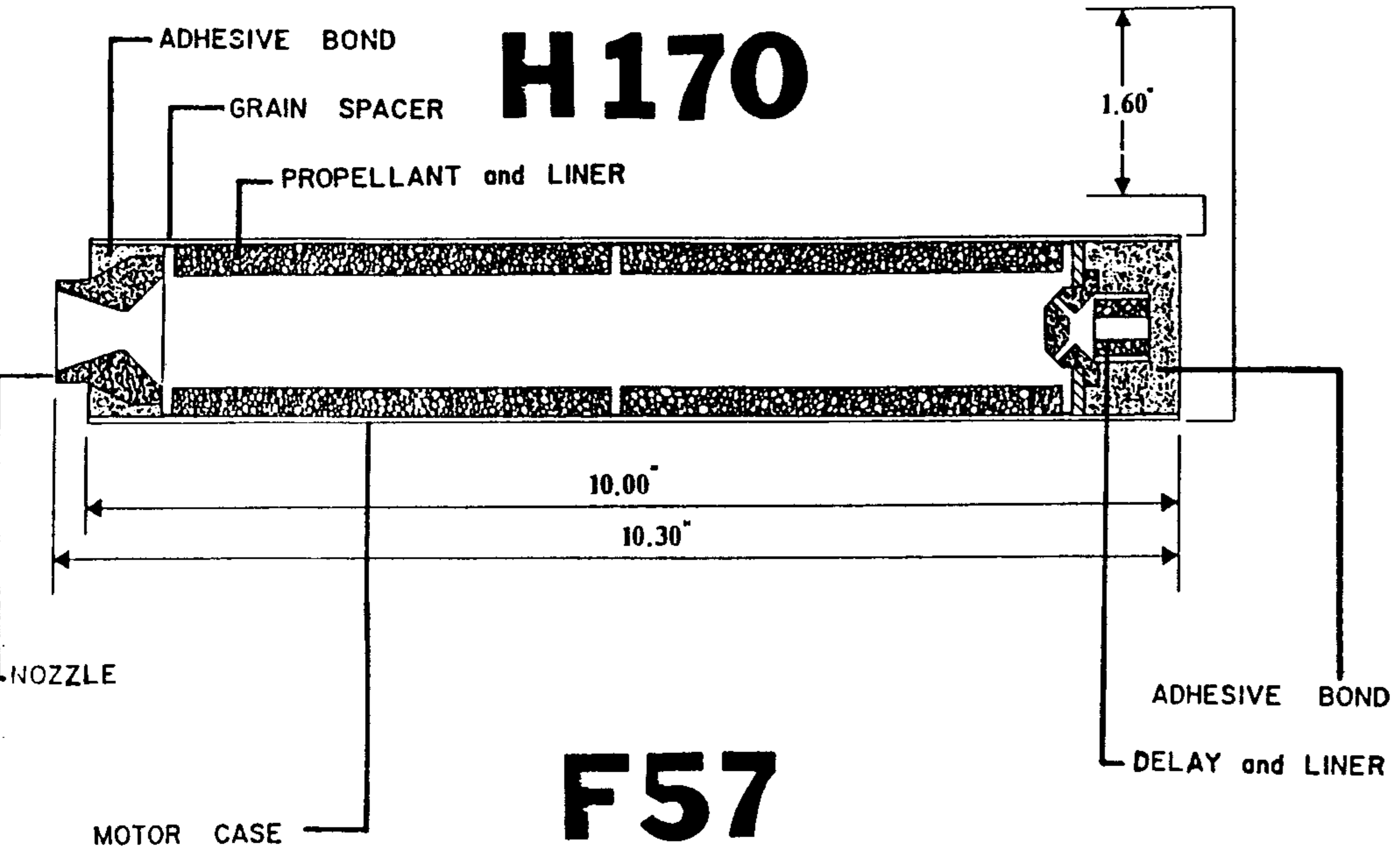


ACS-REACTION LABS

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ROCKET MOTOR DATA SHEETS

CROSS SECTIONALS OF TYPICAL ACS-REACTION LABS MOTORS

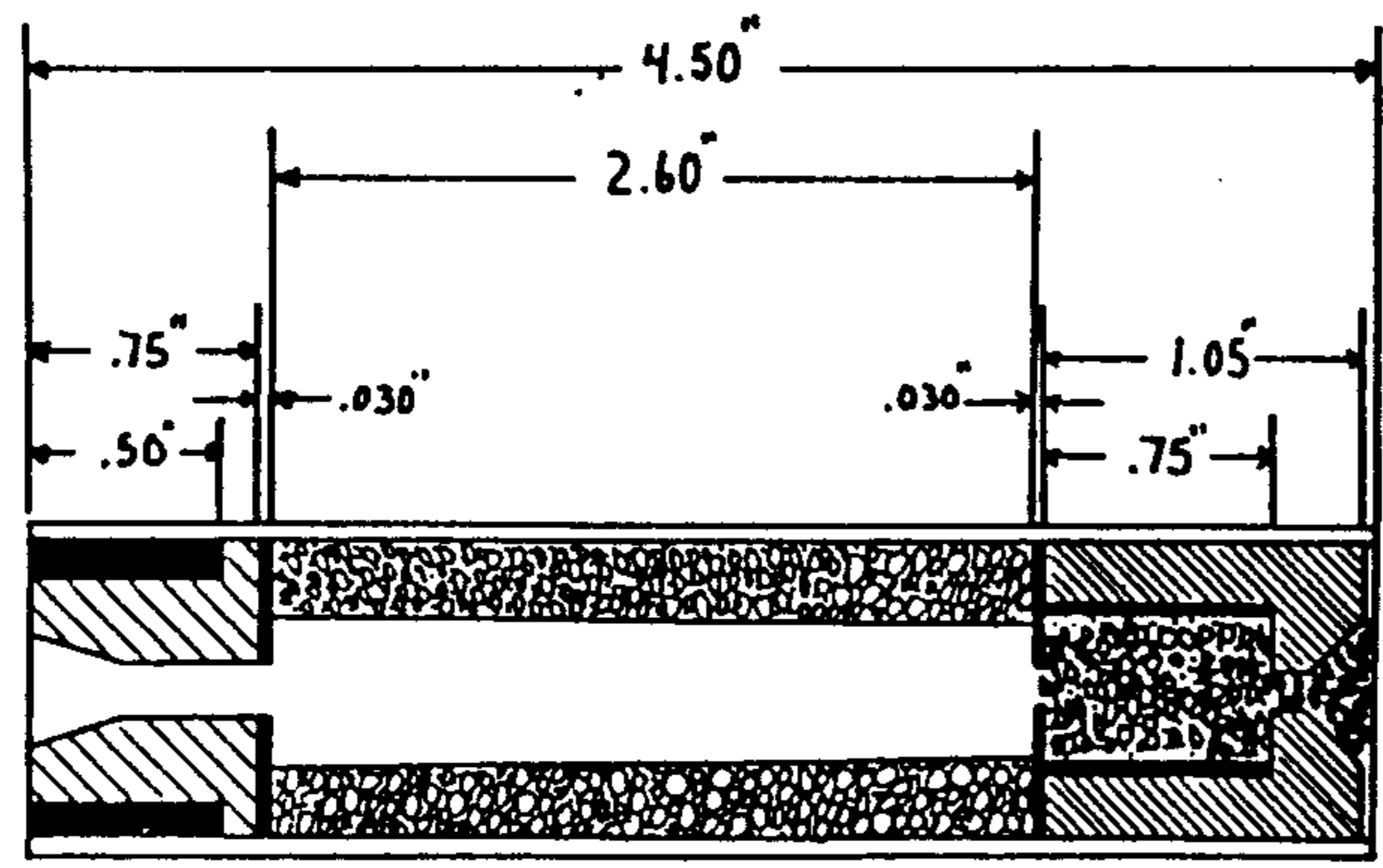


<u>MOTOR DESIGNATION:</u>	F57
<u>TOTAL IMPULSE:</u>	80 newton-seconds
<u>DIMENSIONS:</u>	4.5" X 29 mm
<u>THRUST DURATION:</u>	1.4 seconds
<u>PROPELLANT WEIGHT:</u>	39 grams
<u>CASE MATERIAL:</u>	Filament-wound glass/epoxy
<u>NOZZLE MATERIAL:</u>	Graphite/epoxy
<u>Ave. OPERATING PRESSURE:</u>	500 PSI
<u>D.O.T. SHIPPING CLASS:</u>	Class "C" Explosive
<u>F.A.A. REQUIREMENTS:</u>	No waiver required
<u>DELAYS AVAILABLE:</u>	6, 9 & 15 sec.

2.6" prop

NOTES: You must be 21 years of age or older to purchase this motor. Please submit proof of age, previous rocket experience and intended application with first order. Shipment will be UPS or parcel post.

AVAILABILITY: Shipped from stock or within 4 weeks of order.



<u>MOTOR DESIGNATION:</u>	G78
<u>TOTAL IMPULSE:</u>	120 newton-seconds
<u>DIMENSIONS:</u>	5.9" X 29 mm
<u>THRUST DURATION:</u>	1.4 seconds
<u>PROPELLANT WEIGHT:</u>	58 grams
<u>CASE MATERIAL:</u>	Filament-wound glass/epoxy
<u>NOZZLE MATERIAL:</u>	Graphite/epoxy
<u>Ave. OPERATING PRESSURE:</u>	500 PSI
<u>D.O.T. SHIPPING CLASS:</u>	Class "C" Explosive
<u>F.A.A. REQUIREMENTS:</u>	No waiver required
<u>DELAYS AVAILABLE:</u>	6, 9 & 15 sec.

4" prop

NOTES: You must be 21 years of age or older to purchase this motor. Please submit proof of age, previous rocket experience and intended application with first order. Shipment will be UPS or parcel post.

AVAILABILITY: Shipped from stock or within 4 weeks of order.

ROCKET MOTOR DATA SHEET

MOTOR DESIGNATION: H170
TOTAL IMPULSE: 240 newton-seconds
DIMENSIONS: 10" X 29 mm
THRUST DURATION: 1.4 seconds
PROPELLANT WEIGHT: 116 grams
CASE MATERIAL: Filament-wound glass/epoxy
NOZZLE MATERIAL: Graphite/epoxy
Ave. OPERATING PRESSURE: 500 PSI
D.O.T. SHIPPING CLASS: Class "B" Explosive
F.A.A. REQUIREMENTS: No waiver required
DELAYS AVAILABLE: 9, 15 & 20 sec.

NOTES: You must be 21 years of age or older to purchase this motor. Please submit proof of age, previous rocket experience and intended application with first order. Shipment will be UPS or parcel post.

AVAILABILITY: Shipped from stock or within 4 weeks of order.

MOTOR DESIGNATION: H160
TOTAL IMPULSE: 325 newton-seconds
DIMENSIONS: 7.1" X 1.6" O.D. 1.5 I.D.
THRUST DURATION: 2.1 seconds
PROPELLANT WEIGHT: 160 grams
CASE MATERIAL: Filament-wound glass/epoxy
NOZZLE MATERIAL: Graphite/epoxy
Ave. OPERATING PRESSURE: 500 PSI
D.O.T. SHIPPING CLASS: Class "B" Explosive
F.A.A. REQUIREMENTS: Waiver required for flight
DELAYS AVAILABLE: 9, 15 & 20 sec.

NOTES: You must be 21 years of age or older to purchase this motor. Please submit proof of age, previous rocket experience and intended application with first order. Shipment will be UPS or parcel post.

AVAILABILITY: Shipped from stock or within 4 weeks of order.

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ROCKET MOTOR DATA SHEET

MOTOR DESIGNATION: I300
TOTAL IMPULSE: 650 newton-seconds
DIMENSIONS: 1.6" O.D. 1.5" I.D. x 12.3"
THRUST DURATION: 2.1 seconds
PROPELLANT WEIGHT: 320 grams
CASE MATERIAL: Filament-wound glass/epoxy
NOZZLE MATERIAL: Graphite/epoxy
Ave. OPERATING PRESSURE: 500 PSI
D.O.T. SHIPPING CLASS: Class "B" Explosive
F.A.A. REQUIREMENTS: Waiver required for flight
DELAYS AVAILABLE: 9, 15 & 20 sec.

NOTES: You must be 21 years of age or older to purchase this motor. Please submit proof of age, previous rocket experience and intended application with first order. Shipment will be UPS or parcel post.

AVAILABILITY: Shipped from stock or within 6 weeks of order.

MOTOR DESIGNATION: J460
TOTAL IMPULSE: 975 newton-seconds
DIMENSIONS: 1.6" O.D. 1.5" I.D. x 17.5"
THRUST DURATION: 2.1 seconds
PROPELLANT WEIGHT: 480 grams
CASE MATERIAL: Filament-wound glass/epoxy
NOZZLE MATERIAL: Graphite/epoxy
D.O.T. SHIPPING CLASS: Class "B" Explosive
F.A.A. REQUIREMENTS: Waiver required for flight
DELAYS AVAILABLE: 9, 15 & 20 sec.

NOTES: You must be 21 years of age or older to purchase this motor. Please submit proof of age, previous rocket experience and intended application with first order. Shipment will be UPS or parcel post.

AVAILABILITY: Shipped from stock or within 6 weeks of order.

MOTOR DESIGNATION: K500
information on request
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PRICE SHEET

<u>MOTOR DESIGNATION</u>	<u>PRICE</u>
F57	\$8.50 ea 7.50
G78	\$11.00 ea 10.50
H170	\$16.00 ea 11.95
H160	\$22.00 ea 19.95
I300	\$46.00 ea 29.95
J460	\$60.00 ea 44.95
K500 L900	\$100.00 ea 129.95

Prices are subject to change without notice. We believe we have the best motor on the market. We will provide you with the motor you need at the price you won't find from our competitors. Compare and you will always chose ACS-REACTION LABS for quality, quantity and the best price.

SHIPPING: Enclose \$3.00 shipping and handling for orders containing D.O.T. Class "C" motors, please request current rates before ordering.

TAX: Kentucky residents add 5% Sales Tax.



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CROSS REFERENCE GUIDE TO ACS-REACTION LABS ROCKET MOTORS

AERO TECH		VULCAN		ACS-REACTION LABS	
Motor	Total Impulse	Motor	Total Impulse	Motor	Total Impulse
F44	80 n-seconds	F67	80 n-seconds	F57	80 n-seconds
G70	120 n-seconds	G58	120 n-seconds	G78	120 n-seconds
H120	240 n-seconds	H142	240 n-seconds	H170	240 n-seconds
		H316	312 n-seconds	H160	325 n-seconds
		I283	631 n-seconds	I300	650 n-seconds
J100	900 n-seconds			J460	975 n-seconds
				K500	500 1b-second



ACS-REACTION LABS

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Date: _____

Customer Name: _____ Telephone Numbers: _____

Address: _____

City: _____ State: _____ Zip: _____

Age: _____ NAR MEMBER (yes/no) _____

Please read notes at the bottom of this page and sign here:

Signature: _____ *

Quantity	Motor Designation	Price	Total
SUB TOTAL		_____	_____
SHIPPING AND HANDLING		_____	_____
SALES TAX		_____	_____
TOTAL ORDER		_____	_____

- NOTES:
- #1. Money order or certified check for immediate shipment. Personal checks will cause a delay in shipment.
 - #2. Orders require special shipping and handling and customer must pay for Class 'B' shipping.
 - #3. ACS-REACTION LABS certifies that it has exercised reasonable care in the design and manufacture of its products. As ACS-REACTION LABS cannot control the storage and use of its products, once sold, ACS-REACTION Labs cannot assume any responsibility for product storage, transportation, or usage. ACS-REACTION LABS shall not be held responsible for any personal injury or property damage resulting from the handling, storage, or use of the products sold through the company. The buyer assumes all risk and liability therefrom and accepts and uses ACS-REACTION LABS products on these conditions. No warranty, either expressed or implied, is made regarding ACS-REACTION LABS products, except for the replacement of the products which are proven to be defective in manufacture.

CUSTOM MOTOR INFORMATION

We offer custom designed motors which are not listed in this catalog. If you have a need for a specific motor with specific characteristics necessary for your intended use, we would be glad to discuss the matter with you. Please send the following information:

1. Motor Diameter
2. Total Impulse
3. Thrust Duration
4. Thrust Curve Shape
5. Length Requirements
6. Maximum Thrust
7. Mass Fraction
8. Initial Order Quantity
9. Other Pertinent Information

We will be happy to provide you with a quote on your special motor requirements at no cost. ACS-REACTION LABS will provide professional consultant information at a nominal fee.

*ORDERS CANNOT BE SHIPPED WITHOUT A SIGNATURE AT THE TOP OF...