

# TOTAL PERFORMANCE VAN'S AIRCRAFT



## 2004 Accessories Catalog

Shop and Order On-Line with Van's Web Store at [www.vansaircraft.com](http://www.vansaircraft.com)

## Table of Contents

Section	Page	PDF	Section	Page	PDF
Engines and Accessories	1	1	Cockpit Heating and Ventilation	58	2
Propellers and Accessories	16	1	Lighting Options	60	2
Engine and Prop Controls	22	1	Electrical	66	2
Engine Instruments	24	1	Miscellaneous Items	73	3
Flight Instruments	33	2	Videos and Publications	78	3
Avionics	39	2	Personal Accessories	84	3
Intercoms and Headsets	44	2	Tools	89	3
Software	47	2	Hardware	91	3
Airframe and Cockpit Accessories	48	2	Index and Order Form	102	3

## Ordering Information and Policies

Here are a few definitions and procedure to make ordering easier.

**Phone Orders:** Call Van's between 8:00 a.m. And 4:30 p.m. Pacific Time any weekday. Van's is closed on weekends. Please have your builders (customer) number and all other necessary information ready: the catalog numbers of the items you are ordering, a valid shipping address (UPS cannot deliver to a Post Office Box), etc.

**Web Orders:** Shop and buy on-line at Van's Web Store. Simple, safe, and secure, the Web Store features an expanded Accessories Catalog and the option to purchase kit parts all through one system. Shop 24 hours a day, 7 days a week. Our web site is located <http://www.vansaircraft.com>

**Mail Orders:** Photocopy and use the order form included at the back of this catalog. Remember to include your builders number.

**Payment:** Builders of Van's Aircraft Kits are extended a credit line of up to \$100.00 on orders placed for parts. These orders will be shipped with an invoice and are NET DUE 30 days. For orders in excess of \$100.00 full payment is required. Either VISA or MC is acceptable. A personal check or certified check in US funds can be accepted with mail orders. COD orders can be accepted and will include associated charges.

**Credit Card Orders:** We accept MasterCard or VISA only.

**Shipments (within USA):** We ship UPS ground or FedEx unless you specify otherwise. UPS Overnight (red label), UPS Two Day (blue label), UPS Three Day (orange label) are available at additional cost. UPS *requires* a street address - a post office box is not sufficient. USPS is available but only *at your own risk* as there is no tracking available.

**Shipments (outside USA):** We ship **FedEx, UPS or USPS Express**. All services *require* a street address - a post office box is not sufficient. On small packages **USPS Air Mail** is available **but only at your own risk as there is no tracking available**. Both **USPS Express** and **USPS Air Mail** shipments are limited to **\$100.00**. All payments must be in US funds.

**Overseas Orders and Shipment:** All payments must be in US funds. If possible, we will ship UPS or Air Mail Post. Large orders will be sent through our usual shipping forwarder unless otherwise specified.

**Returns:** There is a 10% restocking charge on any returned item. Any item returned must be in "AS NEW" condition and be a product that we currently sell. No opened software may be returned. Custom manufactured components cannot be returned. Returns on **Avionics, Batteries, Electronics, Whelen lighting systems, and Instrumentation (gauges)** will only be accepted **within 60 days of purchase**. All other items may be returned within 2 years from the date of purchase. Only the **Original Purchaser may return items**.

**Back-Orders:** On occasion we may be out of an item you have ordered. We will generally ship items we have in stock and ship back ordered items as soon as they are available. However, if the major part of the order must be back ordered, we will hold the entire order until the back order is filled. You can help by giving instructions on dealing with back-orders when you place your order.

**Damaged, Defective Items or Missing Items:** Van's Aircraft is not responsible for shipping damages, but please contact our UPS shipping department here at Van's Aircraft as soon as possible for damaged shipments received through United Parcel Service, Federal Express, and the United States Postal Service. For all damaged shipments received through a trucking company, please contact the trucking company directly.

**Warranty:** All items not manufactured by Van's Aircraft are warranted by the maker. Return defective items to the manufacturer, not to Van's Aircraft.

**Crating and Packing Charges:** A "Handling Charge" and "Shipping Charges" will be added to orders with a minimum "Handling Charge" of \$4.00 per order. Handling and Shipping charges do not apply to Info Pack/Video packages and a printed copy of the Accessories Catalog when shipped by United States Postal Service..

**Prices:** All prices were current at time of printing. Prices are subject to change without notice. Please check our web site for current pricing information.

### THE BUYER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY AND APPLICATION OF THE PRODUCT

#### Van's Aircraft, Inc.

**Postal Mail Address:**

14401 NE Keil Rd.  
Aurora, OR 97002  
USA

**Phone/Fax:**

503.678.6545 phone  
503.678.6560 fax

**Web Site/E-mail:**

[www.vansaircraft.com](http://www.vansaircraft.com)  
[info@vansaircraft.com](mailto:info@vansaircraft.com)  
[support@vansaircraft.com](mailto:support@vansaircraft.com)

**Hours:**

Phone...8:00 am - 4:30 pm Pacific  
Fax...24 hours  
Internet...24 hours

Catalog Cover: Images by Ed Hicks, Bob Wahl and Jerry VanGrunsven

## www.vansaircraft.com

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

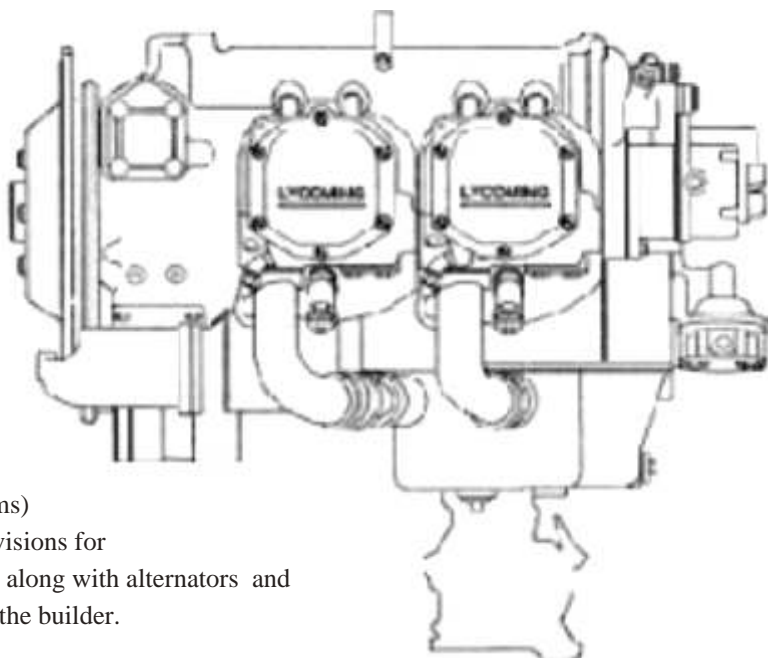
## Firewall Forward

Lycoming Engines, Installation Kits, Stainless Exhaust Systems, Vibration Mounts and Engine Bolt Sets.

### Lycoming Engines

#### Factory New Lycoming Aircraft Engines

An OEM agreement with Lycoming allows us to sell to RV builders factory new engines at prices far below list. This agreement specifies that engines may be sold only to those who have purchased a complete RV kit. The engine must be installed in that aircraft. Only one engine may be sold per RV kit. Five engines are available: O-235-N2C 118hp, O-320-D1A 160hp, O-360-A1A 180hp, IO-360-M1B 180hp, IO-360-1B6 200hp. They are equipped with SkyTech lightweight starters, 149 tooth ring gears, dual magnetos, carburetors (or fuel injection systems) and engine driven fuel pumps. They have provisions for vacuum pumps and prop governors, but these, along with alternators and exhaust systems are supplied and installed by the builder.



The O-320 and (I)O-360 engines can be set up for constant-speed propellers, or may be converted for fixed pitch operation with the crankshaft plugs shown below. All engines from Van's stock are packaged with long term storage at extra cost. With enough lead time (typically 4 months) engines without long term storage may be drop-shipped directly from Lycoming to builders. All engines use Dynafocal 1 mounts. All international sales must have long term storage. Engines now available with Unison's Lasar Electronic Ignition System as original equipment (requires special timing light available for rent or purchase from Van's). The IO-360 180hp and the IO-360 200hp use the forward facing oil sump and injector body permitting the use of Van's "horizontal induction" cowl that does NOT require an external scoop on the lower cowl like our prototype RV-7 or RV-8A. ALL other engines have a vertical draft sump and carburetor that DO require the external scoop on the lower cowl as seen on most currently flying RV's, and our RV-9A.

Part Number	Description	Price
EA IO-360-A1B6	200 HP	\$ 33500.00
EA IO-360-M1B	180HP	\$ 28300.00
EA O-360-A1A	180HP	\$ 23500.00
EA O-320-D1A	160HP	\$ 21990.00
EA O-235-N2C	118HP	\$ 19850.00
EA LONG TERM STORAGE	Long Term Storage	\$ 200.00
EA IO-360 UNISON OPT	Unison Electronic Ignition Option	\$ 2150.00
EA O-320 UNISON OPT	Unison Electronic Ignition Option	\$ 2150.00
EA O-360 UNISON OPT	Unison Electronic Ignition Option	\$ 2150.00
EA 61510 CRANK PLUG	Crank plug for converting from FP to CS prop operation	\$ 13.27
EA STD 1211 PLUG	Crank plug for end of crank on FP props	\$ 4.50

## Firewall Forward Installation Kits

### Firewall Forward Kits

#### MAKE IT EASY

OK, you've finished all that metal stuff on the empennage, wings and fuselage. Now it's time to hang the engine! You've got a choice: you can research, choose, order and install each piece of the engine installation separately. There's the baffles, the cable brackets, the oil cooler, the cable controls, the exhaust system, the alternator, the solenoids, the air filter, the...well, you get the idea.

Or, you can order Van's new Firewall Forward Kit. The kit includes virtually every component necessary to install the engine and make it fly. Not only all the big items are included, but the small, often overlooked, bits and pieces are there, too. For instance, all the fuel and oil hoses are included, professionally built and checked. The breather tube, often an afterthought, is ready to install. Order Van's Firewall Forward Kit for either a fixed-pitch installation, or buy the constant-speed installation which includes the propeller governor.



SEE THE EXAMPLE LIST BELOW.

**CAUTION:** There are engine combinations that occur in the field that don't occur in the kits listed below. An example is a "fuel injected 180hp vertical induction engine". This particular engine would use the carbureted version of our Firewall Forward Kit: FF O-360 or FF O-320. If you have any doubt about your engine applicability **PLEASE CALL FIRST.**

**RV-6/6A builders can also use the RV-7/7A Kits with minimal modification.** Order part number "**FF-6/6A ADDITIONS**" (see page 3) which contains the additional parts and drawings needed to modify the RV-7/7A Kits to work on RV-6/6A's. **EXAMPLE KIT FOR AN RV-7, O-320, WITH A CONSTANT-SPEED PROPELLER:**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>■ 1 VA-129 FUEL SUPPLY HOSE 15.5</li> <li>■ 1 VA-139 FUEL SUPPLY HOSE 16.5</li> <li>■ 1 CT BLK THROTTLE 46 7(320)/9(235)</li> <li>■ 1 CT RED VMIXTURE 47 7(320)/9(235)</li> <li>■ 1 FAB-320 FILTRD AIR BOX O-320</li> <li>■ 1 BAF-6-320 COWL BAF 6/7/8/9</li> <li>■ 1 VA-149-320-PC KIT THRTRLE/MIX BRCKT/320</li> <li>■ 1 CT BLUE VPROP 48 7(ALL)/9(ALL)</li> <li>■ 1 VA-183-PC MT GOV CABLE BRACKET</li> <li>■ 1 PROP GOV MT P-420-3 PROPELLER GOVERNOR</li> <li>■ 2 CT A-740 BLACK PUSH PULL CABLE BLACK</li> <li>■ 1 DUCT CBT-5/8 COOLING BLAST TUBE</li> <li>■ 1 EA CV HOSE 9816 BREATHER HOSE</li> <li>■ 1 EA DYNA BOLT ENGINE MOUNT BOLT SET</li> <li>■ 4 EA DYNA VI-STD VIBRATION ISOLATOR</li> <li>■ 1 EA EXH W/MUFF 320/ RV-6/6A/7/7A/8/8A/9A</li> <li>■ 1 EA OIL COOLER II O-320/360 OIL COOLER</li> <li>■ 1 ES 24021 STARTER SOLENOID 2OUT</li> <li>■ 1 ES 24115 MASTER RELAY</li> <li>■ 1 ES ALTERNATOR 60A ALTERNATOR &amp; BOSS MNT</li> <li>■ 1 ES WH 6/7/9 KIT 6/7/9 WIRING HARNESS</li> <li>■ 1 FF-705 BREATHER TUBE</li> <li>■ 1 FF-709 OIL COOLER DOUBLER</li> <li>■ 1 IE VMP INSTALL KIT FITTINGS/HOSES</li> <li>■ 1 GAS-5 GASCOLATOR</li> <li>■ 1 PT-035X1/4X12 FUEL OVERFLOW TUBE</li> <li>■ 1 VA-102 FUEL PRES. HOSE 15.5</li> <li>■ 1 VA-133 OIL PRESS. HOSE 27.25</li> </ul> | <ul style="list-style-type: none"> <li>■ 1 VA-134 OIL COOLER HOSE 19.0</li> <li>■ 1 VA-135 OIL COOLER HOSE 16.5</li> <li>■ 1 EA LV-1 HEAT SHIEL EXHAUST HEAT SHIELD</li> <li>■ 1 VA-161 GASCOLATOR DOUBLER</li> <li>■ 1 VA-168 SENDER MOUNT</li> <li>■ 1 VENT DL-03 2" ALUM FLANGE</li> <li>■ 1 VENT SCAT 2X6' SCAT TUBE X 6 FT</li> <li>■ 1 VENT TG-10 CABIN HEAT SELECTOR</li> <li>■ 1 BAG 312 AN426AD4-6 (0.01#)</li> <li>■ 1 BAG 607 FF MISC. HDWRE</li> <li>■ 1 BAG 608 FF MISC. HDWRE</li> <li>■ 1 BAG 611 FF MISC. HDWRE</li> <li>■ 1 BAG 613 FF MISC. HARDWARE</li> <li>■ 1 BAG 958 AN426AD3-4 RIVETS</li> <li>■ 1 BAG 991 AN426AD3-3.5</li> <li>■ 1 BAG 1916 AN426AD3-4.5</li> <li>■ 1 BAG 1934 AN426AD3-5 (0.01#)</li> <li>■ 1 BAG 1935 AN426AD3-6 (0.01#)</li> <li>■ 1 BAG 1978 AN470AD4-5</li> <li>■ 1 ES PC680 INSTALL K BATTERY MOUNT ODYSSEY</li> <li>■ 1 AT6-058X5/16X15 7/ ALUM TUBE C-610</li> <li>■ 1 SS304-26GAX1/2X9 SCAT CLAMP</li> <li>■ 1 BAG 1907 AN426AD4-7</li> <li>■ 1 CT BEARING HWR, CA BOLT, NUT, WASHERS</li> <li>■ 1 CT BEARING HWR, PR BOLT, NUT, WASHERS</li> <li>■ 1 FF 3/4 FIREWALL PL SS FIREWALL PLUG</li> <li>■ 1 DOC FWF COMPLETE FWF INSTALL TEXT/DWGS</li> <li>■ 1 AT0-028X3/16X6 FOR F.WALL KIT</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



*Firewall Forward Installation Kit (Continued)*

Part Number		Model	Engine	Propeller Type	Price
FF-7 0-320	CS	RV-7	O-320	CONSTANT SPEED	\$ 4300.00
FF-7 0-320	FP	RV-7	O-320	FIXED PITCH	\$ 3170.00
FF-7 0-360	CS	RV-7	O-360	CONSTANT SPEED	\$ 4300.00
FF-7 0-360	FP	RV-7	O-360	FIXED PITCH	\$ 3170.00
FF-7A 0-320	CS	RV-7A	O-320	CONSTANT SPEED	\$ 4300.00
FF-7A 0-320	FP	RV-7A	O-320	FIXED PITCH	\$ 3170.00
FF-7A 0-360	CS	RV-7A	O-360	CONSTANT SPEED	\$ 4300.00
FF-7A 0-360	FP	RV-7A	O-360	FIXED PITCH	\$ 3170.00
FF-7/7A IO-360	CS	RV-7/7A	IO-360	CONSTANT SPEED	\$ 4600.00
FF-7/7A IO-360M1B	CS	RV-7/7A	IO-360 M1B	CONSTANT SPEED	\$ 4595.00
FF-8 0-320	FP	RV-8	O-320	FIXED PITCH	\$ 3095.00
FF-8 0-320	CS	RV-8	O-320	CONSTANT SPEED	\$ 4175.00
FF-8A 0-320	FP	RV-8A	O-320	FIXED PITCH	\$ 3095.00
FF-8A 0-320	CS	RV-8A	O-320	CONSTANT SPEED	\$ 4175.00
FF-8 0-360	CS	RV-8	O-360	CONSTANT SPEED	\$ 4175.00
FF-8 0-360	FP	RV-8	O-360	FIXED SPEED	\$ 3095.00
FF-8A 0-360	CS	RV-8A	O-360	CONSTANT SPEED	\$ 4175.00
FF-8A 0-360	FP	RV-8A	O-360	FIXED SPEED	\$ 3095.00
FF-8 IO-360 200	CS	RV-8	IO-360	CONSTANT SPEED	\$ 4425.00
FF-8A IO-360 200	CS	RV-8A	IO-360	CONSTANT SPEED	\$ 4425.00
FF-8 IO-360M1B C/S		RV-8	IO-360M1B	CONSTANT SPEED	\$ 4425.00
FF-8A IO-360M1B C/S		RV-8A	IO-360M1B	CONSTANT SPEED	\$ 4425.00
FF-9 0-320	CS	RV-9	O-320	CONSTANT SPEED	\$ 4300.00
FF-9 0-320	FP	RV-9	O-320	FIXED PITCH	\$ 3170.00
FF-9A 0-320	CS	RV-9A	O-320	CONSTANT SPEED	\$ 4300.00
FF-9A 0-320	FP	RV-9A	O-320	FIXED PITCH	\$ 3170.00
FF-6/6A ADDITIONS		RV-6/6A			\$ 28.75

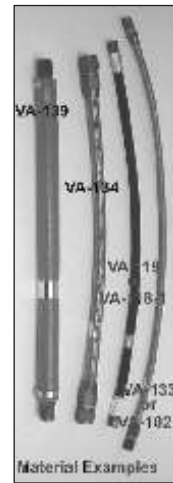


**Premanufactured Hoses**  
 Fuel, Oil and Manifold Pressure Lines

The premanufactured hoses listed below are used in our firewall forward kits. We are listing them separately for use in aircraft builder's applications where they may be suitable.

The fuel supply hoses have integral fireshields.

OTHER LENGTHS ARE NOT AVAILABLE.



Part Number	Type of Line	Length and Diameter	Price
VA-119	MANIFOLD PRESSURE	21.50" x 1/4"	\$ 31.20
VA-102	FUEL PRESSURE	15.50" x 1/4"	\$ 52.50
VA-133	OIL PRESSURE	27.25" x 1/4"	\$ 62.00
VA-135	OIL COOLER	16.50" x 1/2"	\$ 60.25
VA-134	OIL COOLER	19.00" x 1/2"	\$ 63.35
VA-136	FUEL SUPPLY	23.00" x 3/8"	\$ 120.00
VA-138	FUEL SUPPLY	14.00" x 3/8"	\$ 62.85
VA-129	FUEL SUPPLY	15.50" x 3/8"	\$ 63.50
VA-139	FUEL SUPPLY	16.50" x 3/8"	\$ 62.50
VA-118-1	BRAKE	28.50" x 1/4"	\$ 32.50

**Exhaust Systems**

Vetterman Stainless Steel Exhausts

Vetterman exhaust systems have become the overwhelming choice of RV builders worldwide. Beautifully made of stainless steel, excellent service history. Problems and cracks are almost unheard of, even on high time systems. 4-pipe and crossover systems are available. Tests indicate negligible performance differences. Supplied complete with all mounting hardware and gaskets. Mounting system must be fabricated from the supplied parts for the individual aircraft.



**EA EXH W/MUFF 320/360**

A crossover exhaust system for the following aircraft: RV-6/6A, RV-7/7A, RV-8/8A, and RV-9A with the parallel valve engines O-320 or O-360. The system comes complete with a cabin heat muff that is adjustable for virtually any installation.

<b>EA EXH W/MUFF 320/360</b>	RV-6/6A/7/7A/8/8A/9/9A Crossover System	\$ 775.00
<b>EA EXH4P RV3CON320</b>	RV-3, 4-pipe, conical mt, O-320	\$ 630.00
<b>EA EXH4P RV3DYN320</b>	RV-3, 4-pipe, dynafocal mt, O-320	\$ 630.00
<b>EA EXH4P RV4CON320</b>	RV-4, 4-pipe, conical mt, O-320	\$ 630.00
<b>EA EXH4P RV4DYN320</b>	RV-4, 4-pipe, dynafocal mt, O-320 (except H2AD)	\$ 630.00
<b>EA EXH4P RV4DYN360</b>	RV-4, 4-pipe, dynafocal mt, O-360	\$ 630.00
<b>EA EXHCO RV4DYN320</b>	RV-4, crossover, dynafocal mt, O-320	\$ 720.00
<b>EA EXHCO RV4DYN360</b>	RV-4, crossover, dynafocal mt, O-360	\$ 720.00
<b>EA EXHCO 7/7A IO-360</b>	RV-7/7A, cross over, IO-360 200hp	\$ 775.00
<b>EA EXH 7/7A IO-360M1B</b>	RV-7/7A, cross over, IO-360M1B 180hp	\$ 775.00
<b>EA EXHCO RV8 IO-360</b>	RV-8, crossover, IO-360 200hp	\$ 735.00
<b>EA EXHCO RV8A IO-360</b>	RV-8A, crossover, IO-360 200hp	\$ 760.00
<b>EA EXH 8 IO-360M1B</b>	RV-8, crossover, IO-360M1B 180hp	\$ 775.00
<b>EA EXH 8A IO-360M1B</b>	RV-8A, crossover, IO-360M1B 180hp	\$ 775.00

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
 2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
 4. Use the order form to mail your order.

Van's Aircraft  
 Ordering Options

## Engine Vibration Mounts

Vibration Absorber Between Engine and Engine Mount

The "EA DYNA VI-STD" and "EA DYNA VI-AEROBATIC" fit Van's standard large cup Dynafocal engine mount. Priced per pair.

**NOTE that four pairs are required for one engine installation!**

Two types available: standard and aerobic. Aerobic is stiffer and allows less deflection of the engine under G loads, but transmits more vibration to the airframe. Unless you intend competition style aerobatics, we recommend the standard. Does not come with bolts so you must order in addition part number: "EA DYNA BOLT".



The "EA CON VIBRATION ISO" is the Conical engine vibration mount. Adapts Van's CONICAL engine mounts to the older conical Lycoming engines. These are a very high quality model that transmits the least possible vibration to the airframe. Priced per pair.

**NOTE that four pairs are required for one engine installation!**

Does not come with bolts so you must order in addition part number: "EA CONICAL BOLT KIT"

<b>EA DYNA VI-STD</b>	Standard DYNAFOCAL	\$	68.00
<b>EA DYNA VI-AEROBATIC</b>	Aerobatic DYNAFOCAL	\$	85.45
<b>EA CON VIBRATION ISO</b>	Standard CONICAL	\$	75.00

## Engine Bolt Set

Engine Bolt Set Attaches Engine to Mount Through Vibration Mounts

All engines sold by Van's Aircraft are "Dynafocal-1" mount style.

These engines require the use of the bolt set "EA DYNA BOLT".

Some older engines in the field have a mount style referred to as "Conical" or "Straight". These engines require the use of the "EA CONICAL BOLT KIT".

Dynafocal and Conical Bolt sets include all the necessary bolts, castle nuts, washers and cotter pins.



<b>EA DYNA BOLT</b>	Dynafocal Bolt Set	\$	28.50
<b>EA CONICAL BOLT KIT</b>	Conical Bolt Set	\$	38.00

## Electronic Ignitions, Baffles, Alternators, Airboxes

Things to hang on that power plant.

### Unison Electronic Ignition

Lasar System Replaces Both Mags

Designed and manufactured by the makers of Slick magnetos, this system is eventually destined for certified aircraft, but it is available to homebuilders now. It replaces both conventional magnetos with special electronically controlled units. These automatically retard the spark for starting and advance it when conditions are right for maximum economy. If the electronics fail, the system reverts to conventional magneto operation. O-320 system has 2600 rpm warning light for use with Sensenich prop.



<b>EA LASAR IGNITION-320</b>	Ignition For O-320	\$	2600.00
<b>EA LASAR IGNITION-360</b>	Ignition For O-360	\$	2600.00
<b>EA LASAR IGNIT IO-360</b>	Ignition For IO-360	\$	2600.00
<b>EA T-300</b>	Timing Light	\$	177.00

## Lightspeed Electronic Ignition

### Plasma CDI System Replaces One Mag or Both

Light Speed Engineering (LSE) is a pioneer in the design and production of ignition systems for experimental aircraft. Sixteen years of research and development have been invested in producing the PLASMA CDI (Capacitive Discharge Ignition) system product line. LSE's Plasma CD systems are the ideal replacement for yesterday's magneto technology. You can replace one mag with a Plasma CDI or, for maximum performance, replace both magnetos with these state of the art systems.



- **No Moving Parts**    ■ **Hotter Spark**
- **Reduced Maintenance Downtime & Costs**    ■ **Instant Start**
- **Designed Specifically For Aircraft**    ■ **Easy To Install**    ■ **Saves Fuel**

#### Standard Plasma CDI Kits for Van's Aircraft include:

Hall Effect Module, high tension leads, harness, spark plugs, spark plug adapters, and ignition coils with mounting bracket. One or two systems can be used.

#### PLASMA II

The Plasma II is Light Speed Engineering's basic electronic ignition system for aircraft. It is a lightweight, high-energy capacitor discharge system containing all of the essential Plasma CDI features. Its smaller size and lighter weight sets it apart from any other ignition source.

Like all LSE ignition systems it features automatic ignition advance based on engine load and RPM, auto retard for starting and a standard pulse tachometer output. The Plasma II was designed to provide a high tech ignition source at the cost of magnetos.

#### PLASMA II+

The Plasma II Plus is the same high performance Capacitor Discharge Ignition system as the Plasma II with the following capabilities and output features installed.

- Key start option- Allows the use of aircraft key switch
- Output 1 - Timing Advance
- Output 2 - Manifold Pressure
- Output 3 - RPM
- Output 4 - (+)5V Power for the optional LCD Display
- Cockpit adjustable timing advance
- Interconnect for Dual Plasma CDI - provides automatic timing optimization if only one system is functioning.

#### PLASMA III

The Plasma III is Light Speed Engineering's high performance continuous spark capacitor ignition system. This system has a long duration spark, which improves horsepower and smoothness, especially with poor mixture distribution and extra-lean engine operation. Racers choice! This system has the following additional capabilities:

- Key start option - Allows the use of aircraft key switch.
- Timing Advance Output
- Manifold Pressure Output
- RPM
- (+)5V Power for the optional LCD Display
- Cockpit adjustable timing advance
- Interconnect for Dual Plasma CDI - provides automatic timing optimization if only one system is functioning.

<b>EA PLASMA II</b>	LIGHTSPEED IGNITION WITH HALL EFFECT	\$ 935.00
<b>EA PLASMA II PLUS</b>	LIGHTSPEED IGNITION WITH HALL EFFECT	\$ 1075.00
<b>EA PLASMA III</b>	LIGHTSPEED IGNITION WITH HALL EFFECT	\$ 1375.00

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

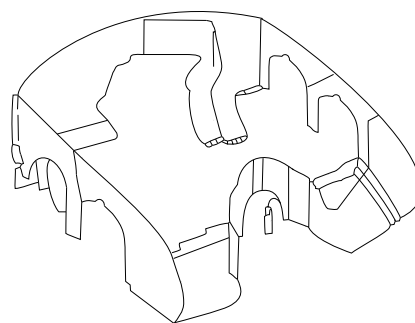
Van's Aircraft  
Ordering Options



## Engine Cooling Baffle and Accessories

Complete Kits, Replacement Fabric, Plans

A fast airplane with a cool engine requires good engine baffling to direct the right amount of air to the right place. This kit will save many hours of work and lots of wasted aluminum, while producing excellent results. Includes pre-bent aluminum baffles, cowl air seal material, all hardware and instructions. If you're the type who just has to do everything from scratch, you can order just the baffle plans and form your own material. The cowl air seal material is good, but it doesn't last forever; you can purchase replacement air seal fabric.



<b>BAF-4-320</b>	RV-3/4 O-320 Kit	\$ 190.00
<b>BAF-4-360</b>	RV-4 O-360 Kit	\$ 190.00
<b>BAF-6-320</b>	RV-6/6A/7/7A/8/8A/9A O-320 Kit	\$ 190.00
<b>BAF-6-360</b>	RV-6/6A/7/7A/8/8A (I)O-360 180hp Kit	\$ 190.00
<b>BAF-8-IO360</b>	RV-7/7A/8/8A w/IO-360 200hp	\$ 205.00
<b>DOC RV-4 BAFFLE 320</b>	RV-4 O-320 Plans Only	\$ 7.00
<b>DOC RV-4 BAFFLE 360</b>	RV-4 O-360 Plans Only	\$ 7.00
<b>DOC RV-6/6A BAFFLE E320</b>	O-320 Plans Only	\$ 7.00
<b>DOC RV-6/6A BAFFLE E360</b>	O-360 Plans Only	\$ 7.00
<b>AIRSEAL FABRIC 12X56</b>	Replacement Airseal Fabric	\$ 38.08

## Alternators and Accessories

Alternators, Complete Alternator Kits, Voltage Regulators, and Plugs

Rebuilt automotive style alternators available through Van's:

**ES 14184 W/O FAN:** A small lightweight alternator that develops a maximum of 35 amperes (12 volt DC) and is usually enough for most RV's. This unit requires the use of an external voltage regulator.



**ES 14684:** A small lightweight high output unit that is capable of developing 60 amperes (12 volt DC). This unit is INTERNALLY voltage regulated and will work fine with any of the batteries sold by Van's Aircraft.

**ES ALTERNATOR 35A KIT:** Kit includes alternator, bracket, and hardware for mounting on the boss mount style Lycoming engines. Does not include belt or voltage regulator ( belts are not available at Van's ).

**ES ALTERNATOR 60A KIT:** Kit includes the alternator and a bracket for mounting on boss mount style Lycoming engines.

If you just need the alternator bracket, the generic design, " ES ALT-BKT ", fits most automotive alternators used on homebuilts. Designed for boss mount Lycoming engines, adjusts to fit alternator. Support arm included.

Different battery technologies require different charging voltages. Small, light 14v solid state adjustable unit or fixed voltage regulators are available.

<b>ES 14184 W/O FAN</b>	35A ALTERNATOR ONLY	\$ 90.00
<b>ES 14684</b>	60 AMP ALTERNATOR ONLY	\$ 185.00
<b>ES ALTERNATOR 35A KIT</b>	Complete Alternator Kit 35 AMP	\$ 160.00
<b>ES ALTERNATOR 60A KIT</b>	Complete Alternator Kit 60 AMP	\$ 250.00
<b>ES 50-01205</b>	CONNECTOR PLUG FOR 35 AMP ALTNR	\$ 5.40
<b>ES 50-12159</b>	CONNECTOR PLUG FOR 60 AMP ALTNR	\$ 15.00
<b>ES ALT-BKT</b>	Boss Mount Alternator Bracket Kit Only	\$ 27.50
<b>VA-235-PC</b>	Case Mount Alternator Bracket	\$ 10.84
<b>ES M5-150A</b>	Adjustable Voltage Regulator	\$ 50.00
<b>ES VR-1751</b>	Fixed 13.8v Voltage Regulator	\$ 40.00

## Filtered Airbox Accessories

### Filter Recharge Kit and Replacement Filters

The filter element needs periodic cleaning and re-oiling. Sometimes, the filter element may need to be replaced.



<b>EA K&amp;N 99-5050 KIT</b>	K&N Recharge Kit	\$	6.36
<b>E-3260</b>	O-320 Filter Element	\$	25.93
<b>E-3450</b>	O-360 Filter Element	\$	25.27
<b>E-33-2060</b>	RV-7/7A, 8/8A IO-360-200hp Filter Element	\$	27.83

## Electronic Ignitions, Baffles, Alternators, Airboxes

Things to hang on that power plant.

### Aerosance

#### Full Authority Digital Engine Control

Aerosance's PowerLink™ Full Authority Digital Engine Control (FADEC) system eliminates magnetos and brings modern digital precision to the controls of light general aviation aircraft piston engines. The introduction of PowerLink FADEC brings the same promise of operational simplicity and enhancement to light general aviation aircraft that has been realized in turbine and automotive engines for a number of years. Advantages Beyond the Obvious.



1. Protection of a very Significant Investment - brings precision and responsiveness to the control of your engine for exceptionally clean fuel burn, cleaner engine and simplified maintenance.
2. Reduced Fuel Consumption - improves your return on investment with fuel savings of up to 15% demonstrated on our RV test aircraft. Actual savings may vary.
3. High-Tech Service and Maintenance - enjoy the informational advantages of next-generation analytical technology, with data downloads leading directly to real-time engine diagnostics.
4. Reduced Pilot Workload - eliminate the mixture control. Optional electronic prop governor (in-development) can be added later for true single lever control.
5. Automotive-Like Starting - turn the key and start!
6. Operational Economy, Maximized Performance - throttle-switch-selectable between best power and best economy.
7. Smoother Operation - more balanced fuel mixtures throughout the flight envelope.
8. More Power Available at Takeoff (up to 5%). (Check with prop manufacturer for CS prop selection).

Convert an existing engine or install on a new engine from VANS and save:

The PowerLink FADEC kit includes everything you need to upgrade an existing Lycoming O-360 to full authority digital electronic controls. Kit consists of: Pressure sensors (4), fuel injectors, fuel distributor with filter, two ECUs, speed sensor, low voltage wire harness, high voltage wire harness, throttle body with mode switch, fuel filter, magneto hole cover, timing gear exchange. Requires Hi-pressure mechanical pump and electric boost pump sold separately. (see: Van's: ES AIRFLOW PERFORMANCE fuel pump)

Buy a new Lycoming O-360 from Vans and get a \$1,050 trade-in on the magnetos, carburetor, mechanical fuel pump.

Note: FADEC requires dual independent power sources. Choice determines cabin kit selection. All systems are 12 volt. Cabin Components Option 1: Use the main alternator/battery as primary, use battery/HSA for secondary. Cabin components kit includes cabin harness, Battery Monitor and annunciator (HSA), switches (2), battery with battery tray, relay and data connector.

Cabin Components Option 2: Use two independent alternators and batteries. Cabin components kit includes cabin harness, simplified HSA, switches (2), relay, data connector.

Optional Engine Instrument Interface- Serial Bus Control box to feed engine data to one of several display options (see Aerosance website [www.fadec.com/engine\\_displays.html](http://www.fadec.com/engine_displays.html)). Only required if FADEC data to be supplied to display.

Purchasers should consult propeller manufacturer for compatibility.

<b>EA FADEC O-360 6/7</b>	PowerLink FADEC Engine Kit for RV6/7 O-360	\$	Call
<b>EA FADEC O-360 8</b>	PowerLink FADEC Engine Kit for RV-8 O-360	\$	Call
<b>EA FADEC CABIN OPT. 1</b>	PowerLink Cabin Kit - Option 1	\$	Call
<b>EA FADEC CABIN OPT. 2</b>	PowerLink Cabin Kit - Option 2	\$	Call
<b>EA FADEC INTERFACE</b>	Optional Engine Instrument Interface	\$	Call

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

### Filtered Airbox - Horizontal Draft

FAB System for: 180hp (IO-360M1B) or 200hp (IO-360A1B6) in the RV-7/7A and 8/8A ONLY

The kit includes one HIGH pressure Airflow Performance electric pump with filter and the necessary components to install it. The AIRFLOW PERFORMANCE pump and filter is appropriate for any of the fuel injected Lycoming engine.



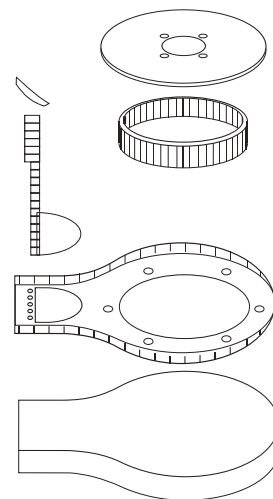
<b>FAB-HORIZ INDUCTION</b>	RV-7/7A, and RV-8/8A ONLY with IO-360M1B or IO-360A1B6	\$ 200.00
----------------------------	--------------------------------------------------------	-----------

### Filtered Airbox - Vertical Draft

Standard FAB (Filtered Air Box) System Filters Air to Engine

Offers all the advantages of a ram air induction system but with an efficient filter. Excellent manifold pressure recovery for maximum power and economy. Provision for alternate air may be adapted to carb heat. Requires cowl modification when retro-fit to older RV-3/4. Order the system that fits your aircraft, engine and induction device.

NOT FOR RV-7/7A or RV-8/8A w/IO-360 (200hp).



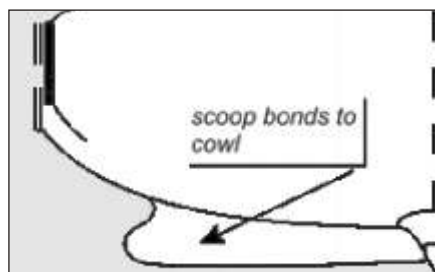
<b>FAB-320</b>	O-320 Marvel carb	\$ 120.00
<b>FAB-360</b>	O-360 Marvel carb; IO-320 or IO-360 (180hp) Bendix	\$ 120.00
<b>FAB-320 ELLISON</b>	O-320 Ellison Throttle Body Injector	\$ 120.00
<b>FAB-360 ELLISON</b>	O-360 Ellison Throttle Body Injector	\$ 120.00
<b>FAB-320 AP</b>	O-320 Airflow Performance Injector	\$ 120.00
<b>FAB-360 AP</b>	O-360 Airflow Performance Injector	\$ 120.00

### Cowl Air Scoop

Separate Scoop for Custom Adaptations or Engine Changes

If you are changing engine sizes on an existing cowl installation you may need one of these!

Also, early RV-4's that don't have an engine air filtration system can use one of these air scoops to accommodate a Filtered Air Box (sold separately).



<b>FAB-4-SCOOP-320</b>	RV-3/4 with O-320	\$ 60.00
<b>FAB-4-SCOOP-360</b>	RV-4 with O-360	\$ 60.00
<b>FAB-6-SCOOP-320</b>	RV-6/6A with O-320	\$ 60.00
<b>FAB-6-SCOOP-360</b>	RV-6/6A with O-360	\$ 60.00
<b>FAB-6-SCOOP-320-1</b>	RV-6/6A with O-320 Type S cowl	\$ 160.00
<b>FAB-6-SCOOP-360-1</b>	RV-6/6A with O-360 Type S cowl	\$ 160.00

Van's Aircraft  
Ordering Options

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

**Oil Coolers, Gascolators, Fuel Pumps, Starters**  
More accessories for that engine.

**Fuel Injection Fuel Pump and Installation Kit**  
For the IO-320 or IO-360 Engines

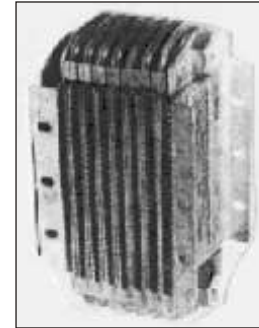
The kit includes one HIGH pressure Airflow Performance electric pump with filter and the necessary components to install it.  
The AIRFLOW PERFORMANCE pump and filter is appropriate for any of the fuel injected Lycoming engines.



<b>7/7A F.I. PUMP INSTAL</b>	Installation Kit for RV-7/7A including Pump and Filter	\$	575.00
<b>8/8A F.I. PUMP INSTAL</b>	Installation Kit for RV-8/8A including Pump and Filter	\$	555.00
<b>ES AIRFLOW FUEL PUMP</b>	Pump Only	\$	375.00
<b>ES AIRFLOW FILTER</b>	Filter Only	\$	132.00

**Stewart Warner Style Oil Cooler**  
Traditional Harrison/Stewart Warner Style Oil Cooler

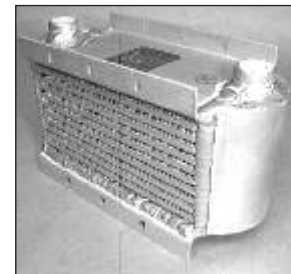
Traditional Harrison/Stewart Warner style oil cooler. PMA'd. Seven tube style suitable for either O-320 or O-360. Size 8-1/4" x 5-1/2" x 3-5/8". Weight 1.94 lbs. 3/8" NPT ports. Leak tested.



<b>EA OIL COOLER II</b>	Fits O-320 or O-360	\$	195.00
-------------------------	---------------------	----	--------

**Positech Oil Cooler**  
New Style Oil Coolers  
High quality all aluminum coolers with 3/8" NPT ports. Three models:

- #4211 for the O-320 and O-360 in all RVs. Cooling area 3.3" x 5.6". Mounting holes (in flanges) 4" between centers. 3.34 lbs.
- #4212 for the O-235 in all RVs. Cooling area 2.8" x 5.6". Mounting holes (in flanges) 3.5" between centers. 2.92 lbs.
- #4215 for IO-360 200 hp engines in RV-8/8A, or O-360 RVs in hot climates. Cooling area 4.3" x 5.6". Mounting holes (in flanges) 5" between centers. 4.1 lbs.



<b>EA OIL COOLER 4211</b>	O-320, or O-360	\$	165.00
<b>EA OIL COOLER 4212</b>	O-235	\$	165.00
<b>EA OIL COOLER 4215</b>	IO-360; O-360 Hot Climates	\$	165.00

**Oil Cooler Installation Kit**  
For Firewall Mounted Oil Coolers, "EA OIL COOLER 4211",  
or "EA OIL COOLER" ONLY

The oil cooler can be mounted in several places. If you choose to mount it on the firewall, this kit provides the metal duct and brackets necessary. Cooling air is supplied through a 3" SCAT tube (not provided).



<b>EA 3" OIL COOLER DUCT</b>	Mounting Kit	\$	31.25
------------------------------	--------------	----	-------

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



### Andair Gascolator

Chromic Anodized Aluminum Gascolator

Chromic anodized aluminum gascolator. Cleanable internal finger screen provides extensive filter area. Female ports accept standard AN hardware. Standard ports for primer/drain. Very high quality. Note: Must also order quick drain bottom. If not using a primer system, you must also purchase the brass plug for the top.



<b>GAS-2</b>	Gascolator	\$	125.00
<b>CAV-110</b>	Quick Drain Bottom	\$	8.90
<b>F 1/8 PIPE PLUG BRASS</b>	Brass Plug	\$	0.64

### Van's Gascolator

Aluminum Gascolator and Mounting Bracket

Made of anodized aluminum, with a simple disc screen. The bottom is tapered so it drains completely. The side is drilled for mounting.

Note: Quick drain for bottom is NOT INCLUDED.

If not using a primer system, you must also purchase the brass plug for the primer port.



<b>GAS-5</b>	Gascolator	\$	76.00
<b>CAV-110</b>	Quick Drain Bottom	\$	8.90
<b>F 1/8 PIPE PLUG BRASS</b>	Brass Plug	\$	0.64

### Engine Primer System

Prime for Easy Starting

A complete kit that provides an electrically activated solenoid system for priming your Lycoming. Kit includes the solenoid, the fittings, hardware, and documentation needed to install in any experimental aircraft. This system is not needed in moderate climates but very cold temperatures may require priming for easy starting.



<b>EA ENGINE PRIMER SYS</b>	2 CYLINDER ELECTRIC PRIME	\$	99.00
-----------------------------	---------------------------	----	-------

### Electric Fuel Pump - Carbureted Engine

Facet Auxiliary Fuel Pump

By Facet. 12v solid state fuel pump for all RV models. 3/8" male outlet ports with 37 degree aircraft fittings. Provides 6 psi. NOT for use with high pressure (fuel injection) systems.



<b>ES 40108</b>	Facet Pump	\$	36.00
-----------------	------------	----	-------

### Fuel Pump Fittings

Lycoming Pumps Require Special Fittings

Fits the mechanical fuel pump on a Lycoming engine. Beware! The pump does not take the tapered thread common to most AN fittings! Available in straight, 45 degree and right angle fittings, all with 3/8" AN flare outlets that mate with aircraft hoses. Also available is a tee fitting, w/tapped 1/8" pipe thread port for fuel pressure fitting.



<b>KB-000</b>	Straight	\$	5.00
<b>KB-045</b>	45 Degree	\$	7.50
<b>KB-090</b>	90 Degree	\$	7.50
<b>KB-090-T</b>	Tee Fitting	\$	9.00

Van's Aircraft  
Ordering Options

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

### Sky-Tec Flyweight™ Starters

Permanent Magnet Lightweight Starter

Now a factory option on new and factory remanufactured Lycoming engines. Weighs only 7.8 lbs. Features "no-Bendix" electromechanical engagement, very high torque, low current draw (only 185A @ 42 ft. lbs), maintenance free design, 2-year factory warranty and unlimited toll-free factory support (see [www.skytecair.com](http://www.skytecair.com)). Part number specifies number of teeth on engine ring gear.



<b>ES 122-12 LS</b>	122 tooth	\$	355.00
<b>ES 149-12 LS</b>	149 tooth	\$	355.00

### Miscellaneous Items

#### Aviation Spark Plugs

Unison's Autolite Spark Plugs

Unison's Autolite spark plugs feature superior heat transfer and leakage protection, advanced reliability, and long life for maximum cost-effectiveness.



<b>EA SPARKPLUG UREM37BY</b>	AUTOLITE	\$	13.75
<b>EA SPARKPLUG UREM38E</b>	AUTOLITE	\$	13.75
<b>EA SPARKPLUG UREM40E</b>	AUTOLITE	\$	13.75

#### Champion Oil Filter

CH-48110

The Champion CH-48110 is the common filter used in nearly all RV's with Lycoming engines. Compatibility (I)O-320/360.



<b>EA OIL FILTER 48110</b>	(I) O-320/360 LYCOMING	\$	15.00
----------------------------	------------------------	----	-------

#### Aircraft Engine Oil Analysis Kit

Aviation Laboratories

Powerful preventative maintenance tool.

- Diagnose abnormal wear
- Establish trends
- Decrease repair costs
- Evaluate prepurchase samples



Oil analysis can accurately detect the abnormal wear modes of specific oil wetted engine components, even on the very first sample, before the wear becomes severe. The results are compared to the interpretive guidelines developed for the engine make and model. Aviation Laboratories has been the leader in the development of oil analysis and oil results interpretation since 1985. Oil samples are analyzed within 24 hours by Inductively Coupled Plasma Spectrometry. Abnormal results are communicated by telephone. The postage is pre-paid to the laboratory. Just drop the test kit in the mail.

Price of Kit Includes:   ▪ Wear Metal Analysis of one oil sample   ▪ 1 Sampling hose   ▪ 1 Sampling bottle   ▪ 1 Shipping label   ▪ 1 CIF form   ▪ 1 Zip-lock bag

<b>EA OIL ANALYSIS KIT</b>	AVIATION LABS GA-001	\$	12.00
----------------------------	----------------------	----	-------

#### Air Wolf Filter Cutter

Oil Filter Inspection Tool

Oil filter cutter by Air Wolf.

It's a good idea to examine the interior of your used oil filter at each oil change. This unit is the best we have used for cutting the housing away.



<b>EA OIL FILTER CUTTER</b>	AIR-WOLF	\$	74.95
-----------------------------	----------	----	-------

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

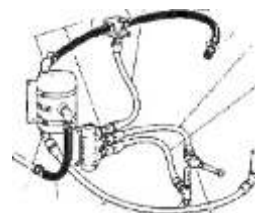
3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

### Inverted Oil System

Christen System is the Standard for Sustained Inverted Flight

Keep your engine healthy while you enjoy (?) sustained inverted flight. Christen system is standard in many competition aerobatic airplanes. Provides lubrication and prevents oil loss during negative maneuvers. Installs without disassembling engine. All three components below necessary for complete installation. Not cheap, but what did your engine cost?



**Note:** Lead time for the **EA 801-4 INV OIL SYS** is approximately 4 months.

<b>EA 801-4 INV OIL SYS</b>	Basic 4-Cylinder System	\$ 777.00
<b>EA 807-4 FITTING KIT</b>	Deluxe Hose and Fitting Kit	\$ 990.00
<b>EA 811-A SUMP KIT</b>	Sump Kit	\$ 385.00

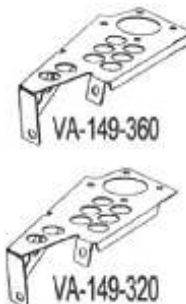
### Throttle / Mixture Cable Bracket

Supports Cables at Engine Attach

Van's now carries a complete line of throttle brackets with integral mixture attach points for the Lycoming O-320 and O-360 engines. These 4130 steel brackets are to be installed between the carburetor and the engine sump. This simple method only requires one additional carburetor gasket and we include it with the units listed.

A system for installing either the throttle or mixture cable on the 200HP-IO-360 is also available. See below.

IT IS UP TO THE BUILDER TO DETERMINE THE SUITABILITY OF THIS ITEM TO HIS/HER INSTALLATION.



<b>VA-149-320-PC KIT</b>	THR TLE/MIX BRCKT/320	\$ 18.00
<b>VA-149-360-PC KIT</b>	THR TLE/MIX BRCKT/360	\$ 18.00
<b>IO-360 THROTTLE/MIX</b>	THROTTLE MIX KIT	\$ 95.00

### Governor Cable Bracket

For Constant Speed Prop Control Cable

Powered Coated 4130 steel bracket designed to mount control cable to McCauley governors that we sell.



<b>VA-153-PC</b>	Bracket	\$ 10.71
------------------	---------	----------

### Accessory Case Cover Plate

For Engines Using a Fixed Pitch Propeller

If your engine is going to be operated with a **FIXED PITCH** propeller use this cover plate to cover the hole in the accessory case where the propeller governor would normally be installed. The Gasket listed below is sold separately and is **NOT** included with the cover plate.



<b>PROP GOV COVER</b>	Cover Plate	\$ 23.00
<b>PROP GOV COVER GASKET</b>	Gasket for the Cover Plate	\$ 1.30

### Oil Quick Drain

Makes Changing Oil Quick and Easy

A great price on a real time saver. Speeds oil changes and saves burned fingers. No more fishing around in a bucket of hot oil for that @#% oil plug!



<b>F P5000</b>	Plug	\$ 50.00
----------------	------	----------

### Air-Oil Separator

Reduce Oil Fouling

This Air-Oil separator is intended to reduce the oil fouling on the belly of the aircraft. Inserts into breather hose, and mounts on engine mount on firewall. An alternative is to terminate the breather tube over one of the exhaust stacks effectively burning off any oil before it can foul the belly.

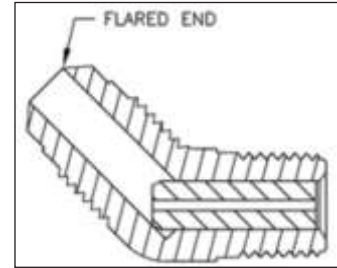


<b>EA AIR-OIL SEPARATOR</b>	Engine blowby for all models	\$	157.00
-----------------------------	------------------------------	----	--------

### Oil/Fuel Restrictor

Oil/Fuel Flow Restrictor Fitting

An oil/fuel flow restrictor fitting designed to fit the Lycoming engine oil pressure port as well as the fuel pressure port on the KB-090-T. This fitting is a modified AN823-4 and the restriction is a .040" hole. Threaded end is 1/8" NPT.

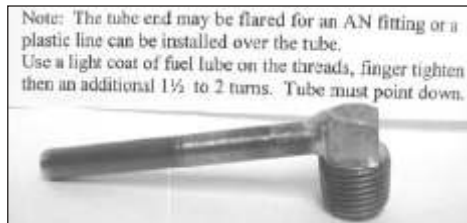


<b>VA-128</b>	OIL/FUEL RESTRICTOR	\$	17.20
---------------	---------------------	----	-------

### RV-4 Fuel Pump Overflow Fitting

Standard AN Fittings Won't Clear Firewall

A standard AN fitting on the overflow vent of a mechanical fuel pump will not clear the RV-4 firewall. This fitting solves the problem. Allows 1/4 inch plastic tube to route fuel away from the exhaust system should the mechanical fuel pump diaphragm fail.

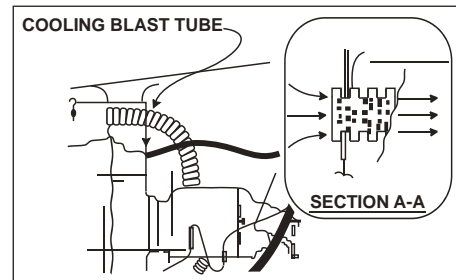


<b>F OVERFLOW PLUG 1/8"</b>	Plug	\$	6.75
-----------------------------	------	----	------

### Cooling Blast Tubes

Corrugated Blast Tubes 5/8" x 18"

Simple, light and inexpensive. 5/8" diameter, 18" length. Corrugated tubes withstand rigors of the engine compartment and direct cooling air to magnetos, fuel pumps, alternators, etc.



<b>DUCT CBT-5/8</b>	Cooling Blast Tube	\$	3.32
---------------------	--------------------	----	------

### Heat Shield

Clamps to Exhaust Pipes

Clamp these to exhaust pipes to shield fuel lines, etc, from the radiant heat. Requires separate clamp (AN737TW-66).



<b>EA LV-1 HEAT SHIELD</b>	Shield	\$	11.00
<b>AN737TW-66</b>	2" HOSE CLAMP	\$	1.25

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



**Cowl Heat Protector**  
Heat Reflective Material

A self adhesive heat reflective material designed to place on the interior of the cowl in locations where the proximity of the exhaust pipes might damage the resins.

**30 inches wide. Sold by the foot.**

This page does not allow ordering quantities that are not whole numbers. As a workaround, please select 1 ft., click "Add Item", then change the quantity by using decimal fractions for the desired amount when your shopping cart is displayed. e.g. |2-1/2ft.| would be |2.5|Remember to click "recalculate" after changing a quantity in your cart!



<b>EA EXHST/COWL SHIELD</b>	Cowl Heat Shield 30" Wide \$/FT	\$	4.00
-----------------------------	---------------------------------	----	------

**Fuel Check Valve**

Option For Fuel Injected Engines

Usually used with fuel injected engines when designing by-pass system for some boost pumps. Male 37 degree fitting on each end fits 3/8" fuel lines.



<b>FUEL CHECK VALVE-375</b>	Check V valve	\$	36.11
-----------------------------	---------------	----	-------

**Carb Heat Connector**

Mounts on FAB to Accept Heated Air

Mounts on FAB airbox. Flange accepts 2" SCAT tube from muff. Stand-off design allows hot air to escape when carb heat is not selected and allows full operation of lever opening alternate air door.



<b>VENT DL-07</b>	Connector	\$	9.38
-------------------	-----------	----	------

**Carb Heat Muff**

Straps on Crossover Type Exhaust

It can't get much simpler! Just strap this muff on the cross-over exhaust pipe and hook it up to a Vent DL-07 fitting on the airbox.

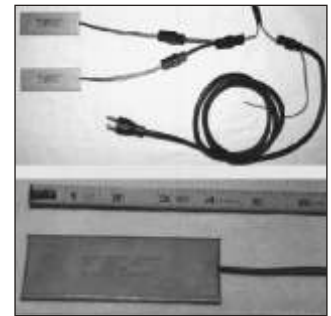


<b>EA CARB HEAT MUFF</b>	Preheat Muff	\$	22.50
--------------------------	--------------	----	-------

**Engine Warmer**

Hotpadd Warmer Bonds to Engine Sump

A warm engine starts easier and suffers less damage than a cold one. Made of steel for maximum durability. Uses a high tech thermally conductive epoxy that heat cures in just a few minutes by plugging in the heater. Works as a stand-alone oil sump heater. Bonds to the bottom or side of the oil sump and electrically heats the oil. Heat is then transferred by conduction and convection to the rest of the engine. Thermostat bonds to sump and limits oil temp to about 150° F. The system includes two 100w elements, thermostat, power cord, and epoxy.



<b>EA ENGINE WARMER</b>	Engine Warmer	\$	145.00
-------------------------	---------------	----	--------

## Propeller Basics

Traditionally, RVs have used wooden fixed pitch propellers. These are available direct from the manufacturer (a partial list is included in the Builders Manual) and have given excellent service. They are light, reasonably priced and smooth running. They also offer a measure of protection to the engine in the unlikely event of a prop strike: the prop shatters, but usually leaves the much more expensive engine unhurt. However, wooden propellers require constant attention to bolt torque and blade condition. They are prone to damage if flown in rain or operated on gravel.

To overcome the drawbacks of wood props, many builders have expressed an interest in fixed pitch metal propellers. Previously, Van's recommended against this, because there was no metal prop that could be repitched to handle the speed of an RV without exceeding the twist or pitch limits established by the manufacturer. Several accidents in high speed homebuilts have been traced to propeller blade failure in repitched props. The Sensenich Propeller Company has designed a fixed-pitch metal prop specially for high-speed homebuilts like the RV. On the plus side, this prop is quite efficient and very low maintenance. On the debit side, it is more expensive than a wood prop.

An increasing number of airplanes are being equipped with constant-speed units. With a constant-speed, the engine can develop full power on take-off and climb, increasing performance considerably. Cruise speed increases only slightly, but fuel efficiency is improved. There is no doubt that a constant-speed prop is more efficient and flexible than a fixed pitch, but this is balanced by the dramatically greater expense and complexity. Choosing a propeller is a series of compromises. The 'correct' prop depends on many factors.

## Sensenich Spinner Front Plates

Different Spinner Plate is Required For the Sensenich Prop

Because the metal prop is not as thick as the typical wood prop, a different spinner front plate is required.

<b>S-403 SEN</b>	Spinner bulk head for RV-3 or 4 with fixed pitch cowl (4" prop ext).	\$	32.00
<b>S-605 SEN</b>	Spinner bulk head for all 13" spinners ( ALL OTHER ACFT )	\$	51.62

## Sensenich Metal Props

Fixed Pitch Metal Props Specifically for RVs

The Sensenich metal propellers we sell were developed specifically for the RV series and are the **ONLY** fixed pitch metal propellers approved by Van's Aircraft, Inc. for use on RV aircraft. Propellers from production aircraft are not suitable, and unfortunate experience has shown that modified production propellers can fail without warning with deadly consequences.



Because the metal prop is not as thick as the typical wood prop, a different spinner front plate is required.

### **NOTE: 70CM (150/160 HP) PROPELLERS ARE LIMITED TO MAXIMUM 2600 RPM**

Use the charts below to choose the proper propeller. Start by determining the length of crankshaft spacer required by the cowl in your Finish Kit. Kits shipped since late 1993 include the short cowl (shown on the packing list or inventory sheet as C/S) which uses a 2-1/4" extension. Prior to 1993, cowls for fixed pitch props used long cowls (shown on the packing list or inventory sheet as Fixed Pitch or FP). This uses a 4" spacer. You must also choose the diameter of the prop bolts required by your engine, and the horsepower rating of your engine. New 160 hp engines from Van's use 7/16" bolts, new 180 hp engines use 1/2" bolts. Prop pitch recommendations (in parentheses on the chart below) are based on cruise speeds for RVs equipped with gearleg fairings, landing gear intersection fairings and Van's Pressure Recovery (PR) wheel fairings. Cruise speeds for RVs with older wheel fairings (narrow cross-section w/ brake blisters) will be 5-6 mph slower and require a prop with approximately 2" less pitch. A rule of thumb: 1" of pitch change equals about 25 rpm static and about 30-40 rpm at full throttle cruise.

Here's how to decode the part numbers: PROP 70CM7S9-0 (81) means: 70 = design diameter in inches, CM = designator for O-320, 7 = bolt diameter in 16ths of an inch, S = requires crank spacer, 9 = length of spacer in 1/4s of an inch, 0=full length blade (not cut down) (81) = pitch in inches. This prop is suitable for a 150 hp RV-3 or a 160 hp RV-4, using a 2-1/4" spacer and requiring 7/16" crank bolts.

Price includes extension and mounting bolts.

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

### Sensenich Metal Props (Continued)

Determine the pitch required for your aircraft from the chart below:

AIRCRAFT	HORSE-POWER	REQUIRED PITCH	AIRCRAFT	HORSE-POWER	REQUIRED PITCH
RV-3	150/160	(81)	RV-6A/7A/8A/9A	150	(77)
RV-4	150	(79)	RV-6A/7A/8A/9A	160	(79)
RV-4	160	(81)	RV-4	180	(85)
RV-6/7/8	150	(78)	RV-6/7/8	180	(85)
RV-6/7/8	160	(80)	RV-6A/7A/8A	180	(85)

Currently the The Sensenich metal propellers for the O-360 that have part numbers starting with PROP 72FM8S(xx-x) are NOT CERTIFIED, and are considered an EXPERIMENTAL prop. The Sensenich metal propellers for ALL of the O-320's ARE CERTIFIED propellers.

<b>PROP 70CM6S9-0 (77)</b>	Sensenich O-320, 2 1/4" spacer, 3/8"bolt, 77" pitch	\$ 1935.00
<b>PROP 70CM6S9-0 (78)</b>	Sensenich O-320, 2 1/4" spacer, 3/8"bolt, 78" pitch	\$ 1935.00
<b>PROP 70CM6S9-0 (79)</b>	Sensenich O-320, 2 1/4" spacer, 3/8"bolt, 79" pitch	\$ 1935.00
<b>PROP 70CM6S9-0 (80)</b>	Sensenich O-320, 2 1/4" spacer, 3/8"bolt, 80" pitch	\$ 1935.00
<b>PROP 70CM6S9-0 (81)</b>	Sensenich O-320, 2 1/4" spacer, 3/8"bolt, 81" pitch	\$ 1935.00
<b>PROP 70CM7S9-0 (77)</b>	Sensenich O-320, 2 1/4" spacer, 7/16"bolt, 77" pitch	\$ 1935.00
<b>PROP 70CM7S9-0 (78)</b>	Sensenich O-320, 2 1/4" spacer, 7/16"bolt, 78" pitch	\$ 1935.00
<b>PROP 70CM7S9-0 (79)</b>	Sensenich O-320, 2 1/4" spacer, 7/16"bolt, 79" pitch	\$ 1935.00
<b>PROP 70CM7S9-0 (80)</b>	Sensenich O-320, 2 1/4" spacer, 7/16"bolt, 80" pitch	\$ 1935.00
<b>PROP 70CM7S9-0 (81)</b>	Sensenich O-320, 2 1/4" spacer, 7/16"bolt, 81" pitch	\$ 1935.00
<b>PROP 70CM6S16-0 (77)</b>	Sensenich O-320, 4" spacer, 3/8"bolt, 77" pitch	\$ 1935.00
<b>PROP 70CM6S16-0 (78)</b>	Sensenich O-320, 4" spacer, 3/8"bolt, 78" pitch	\$ 1935.00
<b>PROP 70CM6S16-0 (79)</b>	Sensenich O-320, 4" spacer, 3/8"bolt, 79" pitch	\$ 1935.00
<b>PROP 70CM6S16-0 (80)</b>	Sensenich O-320, 4" spacer, 3/8"bolt, 80" pitch	\$ 1935.00
<b>PROP 70CM6S16-0 (81)</b>	Sensenich O-320, 4" spacer, 3/8"bolt, 81" pitch	\$ 1935.00
<b>PROP 70CM7S16-0 (77)</b>	Sensenich O-320, 4" spacer, 7/16"bolt, 77" pitch	\$ 1935.00
<b>PROP 70CM7S16-0 (78)</b>	Sensenich O-320, 4" spacer, 7/16"bolt, 78" pitch	\$ 1935.00
<b>PROP 70CM7S16-0 (79)</b>	Sensenich O-320, 4" spacer, 7/16"bolt, 79" pitch	\$ 1935.00
<b>PROP 70CM7S16-0 (80)</b>	Sensenich O-320, 4" spacer, 7/16"bolt, 80" pitch	\$ 1935.00
<b>PROP 70CM7S16-0 (81)</b>	Sensenich O-320, 4" spacer, 7/16"bolt, 81" pitch	\$ 1935.00
<b>PROP 72FM8S9-1 (85)</b>	Sensenich O-360, 2 1/4" spacer, 1/2" bolt, 85" pitch	\$ 1970.00
<b>PROP 72FM8S16-1 (85)</b>	Sensenich O-360, 4" spacer, 1/2" bolt, 85" pitch	\$ 1970.00

### Spinner Kits

Spinner Kits for Fixed Pitch and Constant Speed

These spinner kits are part of the Finish Kits. However, should you upgrade to a constant speed prop, then you may need one of these kits. Kits include bulkheads, hardware, spinner bowl and instructions. The three kits are:

- **SPINNER, C/S-13** This is the standard spinner kit for all constant speed models. The rear bulkhead is 13 inches in diameter. The spinner cone and rear bulkhead are the same components used on the fixed pitch models.
- **SPINNER, FP-13** This is the standard spinner kit for all fixed pitch installations today. The rear bulkhead is 13 inches in diameter.
- **SPINNER, FP-12** This was the standard spinner kit for the fixed pitch RV-3 and 4 until mid 1995. The rear bulkhead is 12" in diameter.



<b>SPINNER, C/S-13</b>	13" Constant speed spinner kit	\$ 125.00
<b>SPINNER, FP-12</b>	12" Fixed pitch spinner kit for Wooden props	\$ 125.00
<b>SPINNER, FP-13</b>	13" Fixed pitch spinner kit for Wooden props	\$ 125.00
<b>SPINNER, FP-12 SEN</b>	12" Fixed pitch spinner kit for Sensenich, metal props	\$ 125.00
<b>SPINNER, FP-13 SEN</b>	13" Fixed pitch spinner kit for Sensenich, metal props	\$ 125.00



## MT Propellers

Constant Speed 2-Blade and 3-Blade Models

MT propellers are manufactured by MT-Propeller Entwicklung GmbH of Alting, Germany. They are used on many certified and experimental airplanes all over the world. MT propellers blades feature a compressed beechwood core, wrapped in two layers of composite/fiberglass. A stainless steel inset in the leading edge of the blade protects against erosion. Hubs are machined from high quality aluminum. Propellers include a kevlar spinner assembly. Pitch change is accomplished by either an electric or a hydraulic system. The hydraulic system is preferred, because the pitch change is about 6 times faster than the electric. However, if your engine is not compatible with a hydraulic system, the electric constant-speed gives you an alternative. Electric props are NOT recommended for aerobatics. Both two-blade and three-blade models are available, with either electric or hydraulic pitch change. Blades are white with red tips. All MT hydraulic propellers work with governors sold by Van's. Van's Aircraft, Inc. has not had the opportunity to test all MT models, so it is up to the customer to determine the proper propeller for his/her engine and aircraft.



Please see the MT PROPELLER ORDER FORM for Weights w/spinner and additional details.

MT PROPS FOR THE LYCOMING (I)O-320 150/160 hp and the (I)O-360 180/200 hp are listed below.

The 3 blade hydraulic and 3 blade electric MT propellers have a restricted operation range when used on the Lycoming O-360A1A engine. The restriction is: "no continuous operation between 2050 - 2300 rpm".

<b>PROP MTV11C/183-59</b>	O-320, 72" 2 Blade, hydraulic pitch change	\$ 6425.00
<b>PROP MTV12C/180-119D</b>	O-320, 71" 3 Blade, hydraulic pitch change	\$ 7635.00
<b>PROP MTV17C/183-59</b>	O-320, 72" 2 Blade, electric pitch change	\$ 7325.00
<b>PROP MTV18C/180-119D</b>	O-320, 71" 3 Blade, electric pitch change	\$ 8965.00
<b>PROP MTV15B/183-109</b>	O-360, 72" 2 Blade, hydraulic pitch change	\$ 7150.00
<b>PROP MTV12B/183-59</b>	O-360, 72" 3 Blade, hydraulic pitch change	\$ 7635.00
<b>PROP MTV20B/183-109</b>	O-360, 72" 2 Blade, electric pitch change	\$ 8315.00
<b>PROP MTV18B/183-59</b>	O-360, 72" 3 Blade, electric pitch change	\$ 8965.00



1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



## New Hartzell Constant Speed Propellers

### Constant-Speed Propeller for the (I)O-320 or (I)O-360 Engines

Van's has an OEM agreement with the Hartzell Propeller Company which enables us to offer brand new constant-speed propellers for RV aircraft. This agreement requires that propellers purchased from Van's be used in RVs. These props weigh 50 to 55 lbs. They require a constant-speed cowl unless noted otherwise. Since mid 1994, this has been the standard cowl shipped with all kits. These props go to a flat pitch (take-off position) with no oil pressure and go to maximum pitch with maximum control pressure which is supplied by a prop governor attached to the engine. The recently developed "blended airfoil" propeller from Hartzell (PROP C2YR-1BF/F7496) is at this time only approved for the (I)O-360 parallel valve engines that produce 180hp. Hartzell will be testing the propeller on the angle valve IO-360 200hp engines in the near future. We will add it to the list when it is available.



- PROP C2YL-1BF/F7663-4 (I)O-320 diameter: 72"  
Application: RV-3, RV-4, RV-6/6A, RV-7/7A, RV-8/8A, RV-9/9A
- \*\* PROP C2YR-1BF/F7496-2 (I)O-360 (180hp) diameter:72"  
Application: RV-3, RV-4, RV-6/6A, RV-7/7A, RV-8/8A, RV-9/9A
- \* PROP C2YK-1BF/F7666A4(I)O-360 (180hp or 200hp) diameter: 72"  
Application: RV-4, RV-6/6A, RV-7/7A, RV-8/8A
- PROP F2YL-1F/7663-4 (I)O-320 diameter:72"  
Application: RV-3, RV-4, RV-6/6A with extended cowls (pre-1993).  
This propeller is not approved for aerobatic flight and is limited to 3.8g's.
- \*\* PROP C2YR-1BF/F7496 (I)O-360 (180hp) diameter: 74"  
Application: RV-6A, RV-7A, RV-8/8A

\* With the following restrictions:

1: When installed on a Lycoming O-360-A1A (180hp) avoid continuous operation between 2000 and 2250 rpm. Note: When installed on an engine with an aftermarket electronic ignition, LASAR system, or FADEC system then the following additional restrictions apply:

2: Operation above 2600 rpm is limited to takeoff. As soon as practical after takeoff the rpm should be reduced to 2600 rpm or less

3: The propeller blade life will be limited to 8,700 hours of operation.

\*\* With the following restrictions: Note: When installed on an engine with magnetos, aftermarket electronic ignition, LASAR system,

or FADEC system then the following restrictions apply:

1: Do not operate above 22" manifold pressure below 2350 rpm.

2: Operation above 2600 rpm is limited to takeoff. As soon as practical after takeoff the rpm should be reduced to 2600 rpm or less.

3: FADEC equipped aircraft maximum engine RPM must be limited to 2650 RPM at ALL times.

For further information concerning Hartzell propeller applications see the Hartzell letters on our web page at:

**<http://www.vansaircraft.com/public/notices.htm>**

ALL HARTZELL PROPS INCLUDE BOLTS AND MOUNTING HARDWARE. BECAUSE OF THE O.E.M. AGREEMENT, THESE PROPELLERS MUST BE ORDERED IN WRITING.

<b>PROP C2YL-1BF/F7663-4</b>	Compact hub Constant-speed prop for (I)O-320	\$ 5250.00
<b>PROP C2YK-1BF/F7666A4</b>	Compact hub Constant-speed prop for (I)O-360 (180hp, 200hp)	\$ 5250.00
<b>PROP C2YR-1BF/F7496</b>	Compact hub Constant-speed prop for (I)O-360 (180hp)	\$ 5500.00
<b>PROP C2YR-1BF/F7496-2</b>	Compact hub Constant-speed prop for (I)O-360 (180hp)	\$ 5500.00
<b>PROP F2YL-1F/7663-4</b>	Extended hub Constant-speed prop for (I)O-320	\$ 5995.00

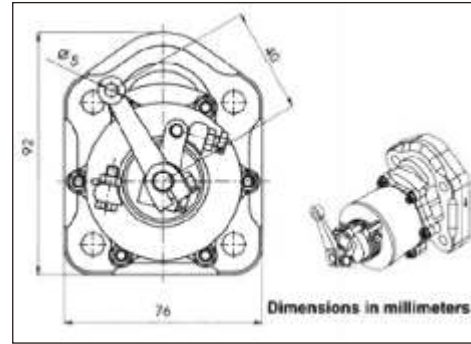
## Prop Governors

Constant-Speed Props Require an Engine Mounted Governor

Constant-speed propellers require an engine mounted governor to control RPM. New engines from Van's have a governor drive and mounting pad, but do not include the governor. There are three brands of governors in general use in the aircraft industry: McCauley, Woodward and the MT (German manufacture). The MT is a recently offered unit from Van's that is very high quality and lighter in weight than either of the other brands and less expensive. Van's also has the control cable attach brackets specifically for each unit.

For McCauley, or Woodward order: **VA-153-PC**

For MT order: **VA-183-PC**



<b>VA-153-PC</b>	McCauley governor cable bracket	\$	10.71
<b>PROP GOV MT P-420-3</b>	MT governor	\$	1050.00
<b>VA-183-PC</b>	MT governor cable bracket	\$	13.20

## Wood Propellers Accessories

Van's does not supply wood propellers. We prefer to let the builder order direct from the manufacturer; we provide a partial list of wood prop manufacturers in the Builder's Manual. We do supply the mounting hardware necessary for a typical wood prop.

Before 1994, all fixed pitch installations used a 4" spool type prop extension between the crankshaft and the prop, while the constant-speed prop had an integral 2-1/4" extension. In 1994 we began offering a 2-1/4" cylindrical extension for fixed pitch props and standardized on the shorter cowl, which is still known as the 'constant-speed' cowl, even though both constant-speed or fixed pitch props can now be installed.

We still stock extensions and bolts for the 4" extension for older kits and repairs. Study the charts and drawings so you are sure you are ordering the correct parts for your aircraft. Along with a propeller extension, a wood prop requires a crush plate on the forward face, between the bolt heads and the prop. Crush plates differ, depending on whether you are using the spool or cylindrical extension.

## Prop Extension Bolts

Used to Mount 4" Spool Extension to Crank Flange on Older Kits With Long Cowl

Bolt size determined by engine crankshaft (new engines from Van's use 7/16" [O-320] or 1/2" [O-360]). In addition to this set of bolts, a set of 6 each prop bolts are required to attach the prop to the extension. Priced as a set of six bolts.

<b>PROP EXT BOLT KIT 3/8</b>	Set of 6 each 3/8" bolts to attach 4" spool extension to engine flange	\$	21.00
<b>PROP EXT BOLT KIT 7/16</b>	Set of 6 each 7/16" bolts to attach 4" spool extension to engine flange	\$	21.00
<b>PROP EXT BOLT KIT 1/2</b>	Set of 6 each 1/2" bolts to attach 4" spool extension to engine flange	\$	45.00

## Propeller Bolts

Used to Mount Wood Propellers

Includes washers and self-locking nuts. Length based on typical prop thickness of 4-3/8" - 4-1/2". There are two styles of prop extensions and each style requires a different type of prop bolt. The 4" spool extension uses a 3/8" bolt with an O-320 or a 1/2" bolt with an O-360 engine. The 2-1/4" cylindrical extension uses a bolt through the crush plate, prop, extension and into the engine crank flange. Not available in 3/8". If your crank requires 3/8", the bushings must be replaced with 7/16" bushings (not available in this catalog). The O-360 uses 1/2". Priced as a set of six.

<b>PROP BOLT KIT 3/8"</b>	Set of 6 each 3/8" bolts to attach prop to 4" spool extension	\$	36.84
<b>PROP BOLT KIT 1/2"</b>	Set of 6 each 1/2" bolts to attach prop to 4" spool extension	\$	75.00
<b>PROP BOLT KIT AN7*82</b>	Set of 6 each 7/16" bolts to attach prop to 2 1/4" cylindrical extension	\$	79.00
<b>PROP BOLT KIT AN8*82</b>	Set of 6 each 1/2" bolts to attach prop to 2 1/4" cylindrical extension	\$	88.00

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

### Prop Extensions for Wood Props

Prop extensions come in two styles, depending on the vintage of cowl used. The pre-1994 cowls require a 4" 'spool' style extension while the post-1994 cowl, also known as the 'constant-speed' cowl or 'short' cowl uses a 2-1/4" 'cylindrical' style extension for fixed pitch operation.

The part numbers below are for the 2-1/4" Cylindrical.

The 4" 'Spool' type extensions are not stocked. Call for availability.

Over the years it has become evident that a 6" diameter interface between the metal extension and the wood prop is marginal and we have started using a 7" interface with the wood. This is especially true for the O-320 and the O-360 engines.



Part Number	Engine	Dia	Prop Bolt	Ext Bolt		Price
<b>PROP EXT 2.25" -320</b>	-320	7	7/16	7/16	\$	190.00
<b>PROP EXT 2.25" -360</b>	-360	7	1/2	1/2	\$	200.00

### Crush Plate for Wood Props

Wood props require a large washer under the heads of the prop bolts to keep the bolts from damaging the prop. This washer is called a crush plate and actually performs a function of clamping the prop between the crush plate and the extension. There are two style of crush plates. The newer cylindrical style extension uses the PCP-320/360X7" which works with either the O-320 or O-360 engine. The 4" spool extension uses a different style crush plate that retains the bolt heads, not allowing them to rotate.

Part Number	Dia	Bolt Size	Thickness		Price
<b>PROP PCP-320/360X7"</b>	7	7/16 & 1/2	1/2	\$	39.50

### Crush Plate Spacers for Proper Spinner Bulkhead Spacing

Wood props from different manufacturers vary. If yours is thinner, you may need a spacer between the prop face and the front plate of the spinner to position the plate correctly. This spacer is 1/8" thick, 7" diameter. May be used with 4" or 2-1/4" extension and any engine.

<b>PROP SPACER 1/8"</b>	1/8" thick spacer	\$	9.00
-------------------------	-------------------	----	------



## Control Cables

Vernier and Quadrant Style Control Cables, Several Sizes, Styles, and Applications. Engine control cables are available in vernier and push-pull styles. Several different lengths are available so try to measure your application before ordering. Routing will make a difference. The length of the cable is measured from tip-to-tip on the quadrant cables (CT Q-XX) or from the mounting surface of the vernier style cable (CT V-XX) to the tip of the cable when the control is in the forward position. All cables are "bulkhead mounted". This means the outer sheathing is captured on each end with nuts. A swivel of about 15 degrees allows the ends to flex without wearing the cable.

### Quadrant Cables

Cables with 10-32 Thread on Each End

The following cables are designed for use with quadrants. 10-32 (AN3) thread on each end. Primarily used on tandem and single place aircraft.



Part Number	Use	A/C	Length	Price
CT Q-48	GOV ACC Case	4/8	48"	\$ 35.00
CT Q-55	Throttle/Mixture: O-320/O-360	3/4	55"	\$ 36.50
CT Q-60	Throttle/Mixture: O-320/O-306/IO-360	8	60"	\$ 38.00
CT Q-67	Fwd Gov	8	67"	\$ 39.50
CT Q-CUSTOM	Any	All	Custom	\$ 50.00 plus \$2/ft over 5'

### Vernier & Push-Pull Panel Mount Cables

Cables with Knobs on Cockpit End

The following cables are equipped with a vernier \* knob on one end intended to be mounted on a panel with a 10-32 thread on the engine end. Primarily used on side-by-side (SxS) aircraft.

\* Except: "CT BLK THROTTLE" which are friction lock.



Part Number	Use	A/C	Length	Price
CT V-45.5	Gov, Throt	6(all)	45.5"	\$ 55.00
CT V-60	Misc	6(all)	60"	\$ 57.00
CT V-CUSTOM	Any	All	Custom	\$ 65.00 plus \$2/ft over 5'
CT BLUE VPROP 45.5	Governor	6(all)	45.5"	\$ 55.00
CT BLUE VPROP 48	Governor	7(all) 9(all)	48"	\$ 59.00
CT RED VMIXTURE 41.5	Mixture	6(all)	41.5"	\$ 52.00
CT RED VMIXTURE 45	Mixture	7(360) 9(320)	45"	\$ 54.00
CT RED VMIXTURE 47	Mixture	7(320) 9(235)	47"	\$ 58.00
CT RED VMIXTURE 49.5	Mixture	7(IO-360)	49.5"	\$ 60.00
CT RED VMIXTURE 50.5	Mixture	7A(IO-360)	50.5"	\$ 62.00
CT BLK THROTTLE 44.5	Throttle	6(all) 7(360) 9(320)	44.5"	\$ 47.00
CT BLK THROTTLE 46.5	Throttle	7(320) 9(235)	46.5"	\$ 47.00
CT BLK THROTTLE 50.5	Throttle	7(IO-360)	50.5"	\$ 49.00

### Simple Detented Push-Pull Cables

Cables for Carb Heat, Cabin Heat, Mixture, Etc.

The Belden cable has many uses. We use this as the mixture control (Red Knob) in our side-by-side models. The Black knob version is used as cabin heat control, carb heat and purge valve control in fuel injected versions of the engine. The cable is a push-pull with a detent to keep the cable from creeping.



Part Number	Use	A/C	Length	Price
CT A-740 RED	Mixture Red Knob	All	72"	\$ 22.45
CT A-740 BLACK	Cabin/Carb heat	All	72"	\$ 24.30
CT A-740 CABLE CLAMP	Clamp for securing cable sheathing.	All	n/a	\$ 10.50

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



## Cable Fittings and Throttle Quadrants

Fittings to attach cable ends to items controlled; throttle quadrants.

## Rod End Bearings and Hardware

Ends for the Firewall Fwd End of Cable

10-32 female thread matches cables shown above. 3/16" bearing hole.



<b>CT BEARING MW-3M</b>	Rod End Bearing	\$	6.75
<b>CT BEARING HWR, CARB</b>	Attachment hardware for throttle or mixture	\$	0.65
<b>CT BEARING HWR, PROP</b>	Attachment hardware for prop governor	\$	0.66

## Clevis Fittings

Attaches Cabin End of Cables to Quadrant

Steel clevis attaches cabin end of RV-3, RV-4, RV-8 control cables to quadrant. 10-32 female thread, 3/16 bearing hole. Comes with clevis pin and cotter key. The nylon clevis is lighter, suitable for attachments in cabin.

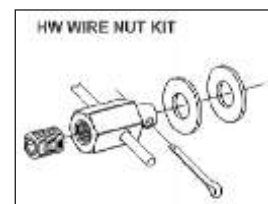


<b>F-453A</b>	Steel Clevis	\$	9.25
<b>HW NYLON CLEVIS 1032</b>	Nylon Clevis (not for control quadrants)	\$	5.83

## Wire Nut Kit

Termination End for Bowden Type Cables

(HW WIRE NUT KIT) is often referred to as a "bug nut" and is an alternative termination end for the same Bowden type cables. It is specifically designed for carburetor heat/alternate air cable to actuator arms, cabin heat actuator arms or similar cable device connections.

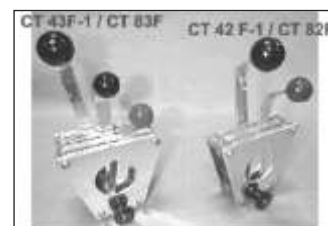


<b>HW WIRE NUT KIT</b>	Bowen cable wire end	\$	6.10
------------------------	----------------------	----	------

## Throttle Quadrants

2 and 3 Lever Versions Available

2 and 3 lever versions available. Two lever versions for throttle and mixture. Three lever version for throttle, prop and mixture. Requires clevis end for each lever. The rear seat quadrant is complete with all hardware for installation and connecting to main quadrant.



<b>CT 42F-1</b>	RV-3/4 2-Lever quadrant	\$	37.00
<b>CT 43F-1</b>	RV-3/4 3-Lever quadrant	\$	43.03
<b>CT 82F</b>	RV-8/8A 2-Lever quadrant	\$	39.00
<b>CT 83F</b>	RV-8/8A 3-Lever quadrant	\$	45.00
<b>CT 81R</b>	RV-8/8A 1-Lever quadrant for Rear Seat	\$	30.00

## RV-8/8A Deluxe Throttle Quadrants

CT 83F DELUXE - 3 Lever

CT 82F DELUXE - 2 Lever

The CT 83F DELUXE is a throttle quadrant for the RV-8/8A. It is a direct replacement for the standard CT 83F but includes engraved wording to identify "THROTTLE-R.P.M.-MIXTURE" and it is black anodized with appropriately colored knobs.

The CT 82F DELUXE is the same as above but is designed for fixed pitch propeller installations.



<b>CT 83F DELUXE</b>	3 LEVER DELUXE -8/8A	\$	151.00
<b>CT 82F DELUXE</b>	2 LEVER DELUXE -8/8A	\$	120.00

## Van's Aircraft Series Engine Instruments

A brand new line of engine gauges, developed by Van's Aircraft, Inc., and usable in almost any experimental airplane. Compare the quality and price to other gauges and expensive monitoring systems. Features:

- High quality movements in injection molded cases.
- Standard aircraft 2-1/4" hole and mounting pattern.
- Internally lit (12v only).
- Electric design uses transducers and senders. No pressurized fuel and oil in the cabin.
- Wires attached with nuts (included) to 6/32 studs on instrument. No spade fittings.
- Cases have brass inserts for #6 mounting screws. No need to use instrument "grasshopper" nuts.
- Clear and sharp lettering with the appropriate operating arcs and redlines screened directly on the face.
- All gauges warranted by Van's Aircraft, Inc. for 1 year from the date of purchase (original purchaser only).

### Van's Series Tachometer

2-1/4" Lighted, Uses Transducer

Range 0-3500 RPM. Green arc from 500-2700. Red line at 2700. Requires transducer. Installation in aircraft with vacuum system requires the tach with 12 inch extension cable. Works with all magneto systems, whether Bendix, Slick or any of the Electronic systems. Does not have an hour recorder function.

Available separately is hour meter activated by oil pressure switch, records engine time. System requires ordering both components (Meter and switch) separately. Optional oil pressure switch can be wired to run Hour Meter and illuminate a panel light if the oil pressure drops below 15 psi. Besides being a monitor should you loose oil pressure, this effectively works as a warning to turn the Master Switch off when the engine shuts down provided a large enough red light is mounted on the panel.



<b>IE VTACH3500</b>	Tach Gauge	\$	40.00
<b>IE VTACHGEN 2</b>	Transducer for systems without vacuum pumps	\$	60.00
<b>IE VTACHGEN 12</b>	Transducer for systems with Vacuum Pump Equipped Engines	\$	67.00
<b>IE VTACH EXT12</b>	Drive extension if you add a vacuum pump later	\$	21.11
<b>IE 104152X2.625</b>	Replacement drive key for VTACHGEN 2	\$	8.33
<b>IE R8864</b>	Hour Meter	\$	20.00
<b>IE M4006-4</b>	Oil Pressure Switch for hour meter	\$	25.50
<b>IE SPDT PRES-15 SW</b>	Oil pressure switch for activating Hour Meter and light	\$	24.84

### Van's Series Manifold Pressure Gauge

2-1/4" Lighted

Range 10 to 35 inches.  
Manifold Pressure Gauge includes sender.



<b>IE VMP35</b>	MAN PRES 35" W/SENDER	\$	72.00
-----------------	-----------------------	----	-------

### Install Kit for Van's Series Manifold Pressure Gauge

Fittings and Hoses to Install the Gauge and Sender

Fittings and Hoses to install the IE VMP35 gauge and sender.

<b>IE VMP INSTALL KIT</b>	FITTINGS/HOSES	\$	50.00
---------------------------	----------------	----	-------

### Van's Series Oil Temperature Gauge

2-1/4" Lighted, Uses Transducer

Range 50-250°F. Yellow arc from 50°-140°. Green arc from 140°-245°. Red line at 245°. Requires transducer and adapter.



<b>IE VOT250</b>	Oil Temp Gauge	\$	33.00
<b>IE 02017-00</b>	Required Transducer	\$	7.00
<b>VA-147</b>	Adapter required on most engines	\$	7.50

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

### Van's Series Oil Pressure Gauge

2-1/4" Lighted, Uses Transducer

Range 0-100 PSI. Yellow arc from 25-55. Green arc from 55-95. Red line at 95. Requires transducer.



<b>IE VOP100</b>	Oil Pressure Gauge	\$ 34.00
<b>IE 411K</b>	Required Transducer	\$ 32.00

### Van's Series Fuel Gauge

2-1/4", Uses Same SW Senders (IE F-385B & C) as Always

Fuel gauge with markings in gallons and color bands. Calibrated for RV-4/6/8/9 wing tanks. We recommend one gauge for each tank. Replacement gaskets for sending units are available if you damage your gaskets during construction or replacement (Not usually required).



<b>IE VFL14</b>	FUEL LEVEL RV-9	\$ 34.00
<b>IE VFL15</b>	FUEL LEVEL RV-4/6/7/8	\$ 34.00
<b>IE F-385B</b>	Sending unit for left tank	\$ 23.00
<b>IE F-385C</b>	Sending unit for right tank	\$ 23.00
<b>IE F-385 GASKET</b>	Replacement gaskets for remounting sending units	\$ 1.25

### Van's Series Fuel Pressure Gauge

2-1/4" Lighted, Uses Transducer; Carb or Injected Available

Carb and fuel injection systems use different instruments. Carb gauge range 0-15 PSI. Red lines at 0.5 and 8. Green arc from 0.5-8. Injection gauge range 0-50 PSI. Red lines at 15 and 45. Green arc from 14-45. Both require transducer.



<b>IE VFP15</b>	Pressure Gauge For Carbureted Engines	\$ 34.00
<b>IE 411AB</b>	Carbureted Transducer	\$ 31.00
<b>IE VFP50</b>	Pressure Gauge For Injected Engines	\$ 34.00
<b>IE 411L</b>	Injected Transducer	\$ 32.00

### Van's Series Voltmeter

2-1/4" Lighted

Range 8-16 volts. Green arc from 13-15. Yellow arcs from 12-13 and 15-16.



<b>IE VV16</b>	Voltmeter	\$ 34.00
----------------	-----------	----------

### Van's Series Ammeter

Ammeter (+/- 40 amp) Using External Shunt

Ammeter (requires external shunt) for monitoring either the alternator current or the battery current. Both systems can be monitored by using two shunts and a switch with one Ammeter display.



<b>IE VAM40</b>	40 amp (+/-) range	\$ 36.00
<b>IE VAMSHUNT40</b>	Shunt for ammeter	\$ 15.00

Van's Aircraft  
Ordering Options

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560
4. Use the order form to mail your order.

### Van's Series CHT

2-1/4" Lighted Cylinder Head Temperature Gauge

Cylinder Head temperature gauge. Complete with color bands representing the proper operating range for the O-320, O-360, and IO-360 engines. You must use the Electronics International Probes ( IE P-100 ), and wire extensions ( IE XS-6 ) with these units.



<b>IE VCHT600</b>	Cylinder Head Temperature gauge	\$ 44.00
-------------------	---------------------------------	----------

### Van's Series EGT

2-1/4" Lighted Exhaust Gas Temperature Gauge

Exhaust gas temperature gauge. A quality low cost gauge designed to work with Electronics International probes ( IE P-110 ) and wire extensions ( IE XS-6 ).



<b>IE VEGT1600</b>	Exhaust Gas Temperature gauge	\$ 44.00
--------------------	-------------------------------	----------

### Electronics International Engine Instruments

EI makes a complete line of TSO'd digital instruments accurate to within 1%. Large backlit LCD displays are easy to read.

#### Electronics International Dual Fuel Gauge

Digital Readout Plus Simulated Analog Display

Single display; switch on front selects left tank, right tank or total fuel remaining on digital display. Displays simulated analog display for left tank and right tank. Calibrated during initial filling in 2 gallon increments to correct for sender position for very accurate fuel level readings. Available for either resistive or capacitive senders. The resistive fuel system (IE FL-2R) requires float type senders: (IE F-385B and IE F-385C).

The Capacitive system uses capacitive probes built into the tanks during construction. When ordering the fuel gauge (IE FL-2C) you must also order two converters (IE P-300C).

**The capacitive system is not available on QuickBuild models.**



<b>IE FL-2R</b>	Resistive type dual fuel gauge	\$ 345.00
<b>IE FL-2C</b>	Capacitive type dual fuel gauge with 2ea. Converters	\$ 345.00
<b>IE CAPACITIVE PROBE A</b>	Capacitive probes for RV-4/6/7/8 tanks	\$ 60.00
<b>IE CAPACITIVE PROBE 9</b>	Capacitive probes for RV-9 tanks	\$ 60.00
<b>IE P-300C</b>	Capacitive to voltage converter	\$ 45.00

#### Electronics International 3-Function Gauge

Single Display, Switch on Front Selects EGT/OAT/CHT

Switch on face selects between Exhaust Gas Temperature/Outside Air Temperature/Cylinder Head Temperature ie: EGT/OAT/CHT. Fits 2-1/4" hole. Supplied with one probe per channel. Add double deck switch with additional probes to provide 4 cylinder monitoring.



<b>IE EAC-1</b>	Single channel EGT/OAT/CHT Gauge	\$ 375.00
<b>IE RS4-2S</b>	Double deck Switch with 3 EGT and 3 CHT probes	\$ 379.00

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



## Electronics International EGT/CHT Bar Graph

2-1/4" Display

Single display with bar graph of EGT and CHT for all 4 cylinders simultaneously. Excellent tool for leaning engine and getting all cylinders functioning at their peak. Fits 2-1/4" hole. Supplied with 4 EGT and 4 CHT probes. (Note: Six cylinder model shown in picture.)



<b>IE UBG-16</b>	EGT/CHT Bar Graph Display	\$ 1395.00
------------------	---------------------------	------------

## Electronics International Volt/Ammeter

Switch On Front Selects Volt or Amp Function; Has Warnings

Switch on face selects between volt and amps. Gauges are available with internal shunt, or with external shunt. External shunt variety can be easier to wire into many panels. All gauges come with preset warnings.



<b>IE VA-1A</b>	With Internal Shunt	\$ 320.00
<b>IE VA-1A-50</b>	With EXTERNAL Shunt (included)	\$ 328.00

## Electronics International Tachometer

Digital Readout Plus Simulated Analog Display

Digital read-out in center, progressive lit LEDs around perimeter simulate analog needle. Includes tach timer, flight timer. Operates on mags, CDI and auto ignitions. Easy installation. 2-1/4" hole, 3-1/2" long. Connects to mag lead through isolator.



<b>IE R-1</b>	Digital Tach	\$ 399.00
<b>IE RC-1 CAP</b>	Cap for tach drive port on engine	\$ 6.00

## Electronics International Manifold Gauge

Digital Readout Plus Simulated Analog Display

Accurate and precise. Same digital/analog format as tach. Recommended even for fixed pitch installations. 2-1/4" hole, 3-1/2" long.



<b>IE M-1</b>	Manifold Pressure Gauge	\$ 417.13
---------------	-------------------------	-----------

## Electronics International Oil Pressure/Temperature

Single Digital Readout Plus Two Simulated Analog Displays

Pressure to 1 lb and temp to 1 degree F. Overtemp warning lights. Digital/analog display. 2-1/4" hole, 3-1/2" long. Includes sensors and cables.



<b>IE OPT-1</b>	Oil Temp/Pressure Gauge	\$ 510.00
-----------------	-------------------------	-----------

### Electronics International Ultimate Analyzer

Programmable System Has 2 Displays and 16 Channels

Automatically scans up to 16 channels. Shows simultaneous digital data on two display windows. Programmable alerts for temp limits, cooling rates, etc. Includes 4 EGT and 4 CHT probes. Order other probes to expand functions to OAT, Oil temp, Carb temp, etc.



<b>IE US-8A</b>	Ultimate Analyzer	\$ 1031.28
-----------------	-------------------	------------

### Electronics International Smart Analyzer

Programmable System Has 1 Display and 8 Channels

Scans 8 channels. Programmable alerts for temp limits, cooling rates, etc. Save a bunch of panel space by putting all EGT/CHT information in one 2-1/4" hole. Includes 4 EGT & 4 CHT probes.



<b>IE SR-8A</b>	Smart Analyzer	\$ 832.08
-----------------	----------------	-----------

### Electronics International Panel Mount Clocks

Time, Timer, Density Altitude, Encoder Display

Two models. ASC-5 includes local/Zulu, up/down timer, density altitude, encoder display, programmable alerts and intervals-for changing fuel tanks etc. It does not make coffee. The simpler SC-5 has all the same time features, but not the altitude functions.



<b>IE ASC-5</b>	Full Version	\$ 474.14
<b>IE SC-5</b>	Light Version	\$ 300.00

### Electronics International Fuel Flow/Fuel Pressure

Programmable For Fuel Management Functions

Accurately measures fuel pressure and flow. Computes fuel remaining, fuel consumed, time until empty. Programmable alarm limits and units: US gallons, Imperial gallons, liters or pounds. Includes flow transducer, all wires and connectors.

Also available with data port for connection with Loran/GPS.

For systems with continuous fuel return lines, a fuel flow differential probe is required.



<b>IE FP-5</b>	FP-5 w/Flow & Pressure	\$ 749.17
<b>IE FP-5L</b>	FP-5L w/Loran/GPS Data Port & w/Flow & Pressure	\$ 848.00
<b>IE FFDM-1</b>	Return Fuel Flow Probe	\$ 329.00

### Electronics International Rotary Switches

Expands Capabilities of EI Gauges

Single channel instruments may be combined with rotary switches to display multiple channels. For instance, an EAC-1 combined with a RS4-2S switch will provide nine channels; enough for 4-cylinder EGT/CHT and a carb temp or OAT.

RS4-1A is a single deck switch for one function gauge. Three probes included. When added to probe that comes with gauge, all four cylinders may be monitored.

RS4-2S is a double deck switch for two functions. 3 EGT and 3 CHT probes and extensions included.



<b>IE RS4-1S CHT</b>	Single deck Switch with 3 CHT probes	\$ 275.00
<b>IE RS4-1S EGT</b>	Single deck Switch with 3 EGT probes	\$ 275.00
<b>IE RS4-2S</b>	Double deck Switch with 3 EGT and 3 CHT probes	\$ 379.00

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

## Electronics International Probes and Accessories

Expands Capabilities of EI Gauges

Use these sensors and connectors to expand the capability of Electronics International gauges. These are type 'K' probes and may not be compatible with other manufacturers instrumentation.

<b>IE P-100</b>	Screw-in CHT Probe	\$	55.00
<b>IE P-101</b>	Bayonet CHT Probe	\$	60.00
<b>IE A-101</b>	Bayonet Adapter (Mounts in Cylinder, Accepts CHT Probe)	\$	10.59
<b>IE P-110</b>	EGT Probe w/Hose Clamp	\$	55.00
<b>IE P-120</b>	Oil Temp Probe (5/8-18 thread)	\$	55.00
<b>IE XS-6</b>	Cable, 6', Connects P Probe to Gauge(flat blade male/female fittings on each end)	\$	32.00
<b>IE P-128</b>	OAT Probe	\$	55.00
<b>IE XP-6</b>	OAT 6' Extension Cable	\$	32.81
<b>IE XCS-6</b>	6' Extension Cable for systems with Circular Connector	\$	32.00
<b>IE CP-1</b>	LED Intensity Control	\$	26.52
<b>IE P-300C</b>	Capacitance to voltage converter	\$	45.00

## Vision Microsystems

VM has combined computer technology and new ideas in graphic presentation in their engine instrument and monitoring systems. Systems are supplied with all necessary sensors, switches and wiring harnesses.

### VM1000 Engine Management Systems

Full 4 Cylinder Engine Monitoring System; Also Reduced System

The VM1000 is a light, compact system displaying all engine functions in a 5" x 5" square panel cut-out. Price includes DPU, all sensors, connectors and wiring harness. Backlit, easy to read day or night. Capacitive fuel quantity system can be added. Transducers must be built into the tanks during construction.

The VM1000 includes: rpm, manifold pressure, fuel pressure, oil pressure, volts, fuel flow and totalizer, oil temp, amps, 4 cylinder EGT, 4 cylinder CHT, engine time and some limits which can be accessed from the panel. The VM1000L includes: rpm, (no manifold pressure), fuel pressure, oil pressure, volts, (no fuel flow nor totalizer), oil temp, amps, 1 cylinder EGT, 1 cylinder CHT, engine time and some limits which can be accessed from the panel. The unit can be upgraded to the full VM-1000 when the wallet recovers from the final stage of building an aircraft.

Fuel level system (capacitive probes) can be added to either unit.

Units are built on demand and require a lead time.

**Not available on QuickBuild models.**



<b>IE VM1000</b>	Engine monitoring system with 4 cylinder reporting	\$	3149.00
<b>IE VM1000L</b>	Engine monitoring system with single cylinder reporting	\$	2259.00
<b>IE EPI-17</b>	Two tank fuel level system	\$	640.00

### EC-100 Electronic Check List

Checklist and Warning Lights

Designed to work with the VM1000. Operational parameters and checklist for your aircraft. Audible and visual alarms alert pilot to abnormal conditions.

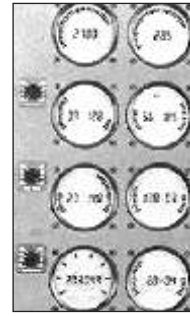


<b>IE EC-100</b>	Electronic check list	\$	575.00
------------------	-----------------------	----	--------

## EPI 800 Engine Management System

### Individual Electronic Engine Gauges Working as a System

Individual gauges. Systems work together but may be bought separately. The Data Processing Unit (DPU) is required with any system, but has enough capacity to handle all, so only one is required. By using IO board, fuel level and annunciator can be combined with VM-1000. All instruments are backlit, approximately 3 oz., and fit 2-1/4" hole.



<b>IE EPI-01</b>	Tachometer	\$	277.22
<b>IE EPI-02</b>	Manifold Pressure	\$	284.00
<b>IE EPI-03</b>	Fuel Computer	\$	649.76
<b>IE EPI-04</b>	Oil Monitor	\$	405.18
<b>IE EPI-05</b>	Air Temp	\$	286.90
<b>IE EPI-06</b>	Electric Sys Monitor	\$	246.20
<b>IE EPI-07</b>	4-cyl Engine Analyzer	\$	744.35
<b>IE EPI-09</b>	Chronometer	\$	223.75
<b>IE EPI-10</b>	Fuel Level System	\$	363.80
<b>IE EPI-11</b>	Annunciator	\$	426.16
<b>IE EPI-12</b>	I/O Board	\$	96.93
<b>IE EPI-13</b>	Extra Fuel Transducer	\$	139.56
<b>IE EPI-14</b>	Transducer Mount Kit	\$	42.65
<b>IE EPI-15</b>	Display Cable w/connector	\$	48.91
<b>IE EPI-16</b>	Manual	\$	39.49
<b>IE EPI-17</b>	Two Tank Fuel Level System	\$	640.00
<b>IE EPI-PROCESSOR</b>	DPU	\$	449.59

## Advanced Control Systems

The ACS 2002 is a complete aircraft monitoring and data acquisition system designed for aircraft with 4 or 6 cylinder engines. The system continuously monitors and displays all of the aircraft engine data on a sunlight readable color LCD display, and checks current engine readings against user adjustable set points.

### ACS 2002

#### Aircraft Monitoring System

Unlike other systems, the display can be customized to the user's preference. Any of the standard instruments can be eliminated or added to the screen. The system also supports two different instrument representations: analog and digital or digital only. The display can be mounted in any of three configurations (vertical, buttons left, buttons right) and the screen can be rotated in the software.



**Checklists:** The ACS 2002 can store up to 10 user checklist pages, including graphics.

Checklist pages can be any image converted to a bitmap and downloaded from your computer. Thus you could for example include diagrams of systems as well as traditional text checklists, or combinations of both.

**Engine Functions:** -Manifold Pressure -RPM -Manifold Pressure -RPM -Fuel PSI -GPH -Oil PSI -Oil Temperature -Amps -Volts -Outside Air Temperature -Exhaust Gas Temperature -Cylinder Head Temperature -Carburetor Temperature -Tachometer Time -Hobbs Time -Last Flight Time -Today's Flight Time

**Aircraft Functions:** -Flap Position -Elevator Trim Position -Aileron Position -4 user inputs (Canopy Latched - User2 - User3 - User4) -Flight Time -Local Time -GMT Time

**Fuel Tank Functions:** -Tank Level Left -Tank Level Right -Gallons Used -Gallons Left -Works with Float or Capacitance Senders

The fuel tank levels are calibrated on installation in 2 gallon increments to correct for sender position. The fuel gauges store two calibration tables, one for plane level and one for tail down. Unlike other instruments, the fuel gauges will read correct for a tail wheel airplane when it is on the ground as well as in level flight.

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options



*ACS 2002 (Continued)*

**Features:** -Separate data processing module for easy wiring -2" Deep remote screen unit -EGT/CHT Bar Chart or Digital Display

**Specifications**Display

- Overall size: 6.25" x 4.50" x 2.5"
- Faceplate (panel cut-out): 6.25" x 4.25"
- Luminosity: Reflective & Backlight dimmable to 0 nits
- Weight: 1.5 lbs

Controller

- Size: 8.5" x 5.5" x 1.25"
- Weight: 1.5 lbs

Temperature

- Operating: -30 deg. C to +65 deg. C
- Non-operating: -30 deg. C to +85 deg. C

Power

- 9 to 36 Volts, 1 Amp @ 12 Volts
- Select "CARBURETED" or "FUEL INJECTED" when ordering. **Special Order Item** 50% deposit required when item is ordered. Balance due at time of shipment.

<b>IE ACS 2002 MONITOR C</b>	ENGINE MONITOR SYSTEM "CARBURETED"	<b>\$ 3500.00</b>
<b>IE ACS 2002 MONITOR I</b>	ENGINE MONITOR SYSTEM "FUEL INJECTED"	<b>\$ 3500.00</b>

## Analog Gauges

Available from several manufacturers. Most engine instrumentation functions available.

## UMA Electronic Analog Tachometer

2-1/4" and 3-1/8" Sizes Available. Operates Off "P" Lead

Made by UMA. The 3-1/8" version (shown), includes a built-in hour meter; however, the small 2-1/4" size does not. Both units operate off mag "P" lead, SLICK MAGNETOS "ONLY".

**This unit will only check one magneto unless an additional switch is installed.**



<b>IE UMA-19-506-11G</b>	2 1/4" Tachometer	<b>\$ 153.75</b>
<b>IE UMA-19-806-11G</b>	3 1/8" Tachometer	<b>\$ 198.75</b>

## UMA Manifold Pressure Gauge

2-1/4" Gauge

Manifold pressure. Made by UMA. 2-1/4".

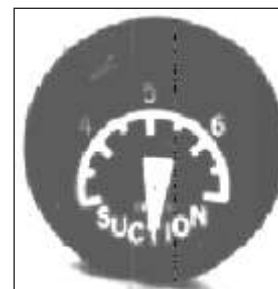


<b>IE UMA-7-100-20</b>	Manifold Pressure Gauge	<b>\$ 88.75</b>
------------------------	-------------------------	-----------------

## UMA Suction Gauge

1" Miniature Gauges Saves Panel Space

1" miniature gauge saves panel space. Made by UMA.

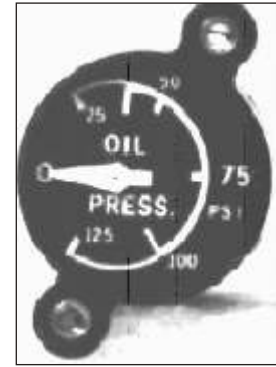


<b>IE UMA-3-200-10</b>	Suction Gauge	<b>\$ 63.75</b>
------------------------	---------------	-----------------

### UMA Oil Pressure Gauge

1-1/4" Miniature Gauge

1-1/4" miniature gauge. Range 0-125 psi. Made by UMA.



<b>IE UMA-3-311-30</b>	Oil Pressure Gauge	<b>\$ 103.75</b>
------------------------	--------------------	------------------

### UMA Fuel Pressure Gauges

1-1/4" Miniature Gauge for Carbureted or Fuel Injected Systems

1-1/4" miniature gauge. Range 0-10 or 0-35 psi. Made by UMA.



<b>IE UMA-3-311-23</b>	0-10 psi Fuel Pressure Gauge	<b>\$ 117.00</b>
<b>IE UMA-3-313-10</b>	0-35 psi Fuel Pressure Gauge	<b>\$ 116.25</b>

### Mechanical Tachometer

3-1/8" Includes Hour Meter; Requires Cable

Does not include cable (available from auto speedometer shops). 3-1/8". Includes tach hour meter.



<b>IE TH-007</b>	Mechanical Tachometer	<b>\$ 82.86</b>
------------------	-----------------------	-----------------

### ISSPRO Hour Meter

Records Time; Activated by Oil Pressure Switch

Hour meter activated by oil pressure switch, records engine time. System requires ordering both components (Meter and switch) separately. Optional oil pressure switch can be wired to run Hour Meter and illuminate a panel light if the oil pressure drops below 15 psi. Besides being a monitor should you loose oil pressure, this effectively works as a warning to turn the Master Switch off when the engine shuts down provided a large enough red light is mounted on the panel.



<b>IE R8864</b>	Hour Meter	<b>\$ 20.00</b>
<b>IE M4006-4</b>	Oil Pressure Switch	<b>\$ 25.50</b>
<b>IE SPDT PRES-15 SW</b>	Oil pressure switch for activating Hour Meter and light	<b>\$ 24.84</b>

1. Shop on-line at [www.vansaircraft.com](http://www.vansaircraft.com)  
2. Call our order line at 503.678.6545

3. Fax your order to 503.678.6560  
4. Use the order form to mail your order.

Van's Aircraft  
Ordering Options

***TOTAL PERFORMANCE***  
***VAN'S AIRCRAFT***

You can see more of

**2004**

**Van's Aircraft, Inc.**

**Accessories Catalog**

by going to "Catalog 2004 Part 2.pdf"