

# B&C SPECIALTY PRODUCTS



## THE ORIGINAL 90-DEGREE OIL FILTER ADAPTER

Why settle for an imitation when you can depend on the original? The B&C Oil Filter Adapter for Lycoming engines is precision CNC machined from a solid billet of aluminum — superior in strength to cheaper castings, and without the natural voids inherent in the casting process. Mounts directly on the accessory case to replace the OEM oil screen, the horizontal-mount AC-brand oil-filter adapter, or other “remote” oil filtration systems (with no complicated hoses and leak-prone fittings).

Since its introduction over 10 years ago, the B&C Oil Filter Adapter has been widely used in the demanding world of aerobatic aircraft. Its

uniquely-angled geometry clears the tach cable and oil cooler return line, while also negotiating the limited space between the engine and firewall found on many airframes. And unlike a firewall-mounted “remote” oil filtration system, there are no hoses to purchase (or replace), nor is there a need to reinforce the firewall to support the oil filter mounting bracket. Weighs only 2.25 lbs. (with the CH48108-1 filter).

Available in STC/PMA (O-235 through IO-720 series) and Homebuilt versions. Ships ready to install, with new mounting hardware, gasket, and a Champion 48108-1 filter.

Three sizes of spacers— all CNC machined from solid billet aluminum—are also available at additional cost, facilitating installation on a wide range of aircraft.



### FEATURES:

- *Exceptional Strength* — CNC machined from a solid billet of aluminum (NOT a casting)
- *No Hoses*
- *No Fittings*
- *Weighs only 2.25 lbs. with CH48108-1 filter*
- *Available with 3 sizes of billet aluminum spacers*
- *STC/PMA: O-235 to IO-720*

### PRICING

BC700-1 (STC/PMA)	\$450
OFA (Homebuilt)	\$395
BC702-1 (STC/PMA)	\$450
BC708-1 (STC/PMA)	\$450
BC708-1 (Homebuilt)	\$395
.75" Spacer	\$45
1.4" Spacer	\$50
2.5" Spacer	\$53
700-304 Temperature Sender Adapter	\$10
AN909B16 Plug	\$35

### SEE PAGE 2 FOR:

- BC700-1 Dimensions
- Getting to Know Your Oil Temperature Sender
- OFA's for Maule STL and Robinson R22

## VERN-A-WHAT?

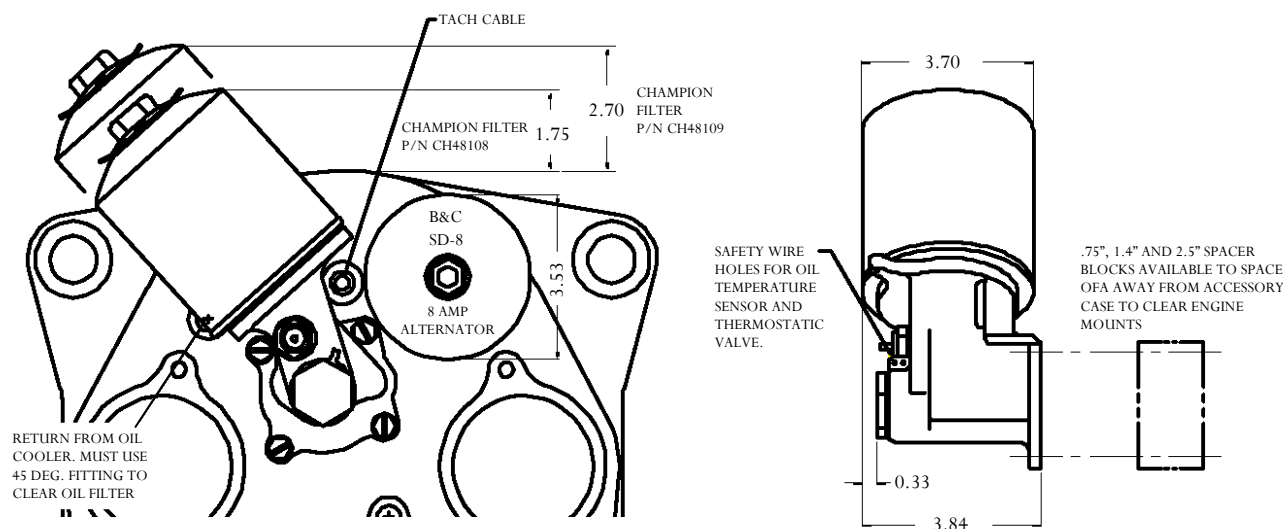
Many Lycoming engines use a device called a “thermostatic control valve”—also known as a “Vern-a-Therm”—to divert engine oil through an oil cooler once it reaches a temperature of 80°C. The “Vern-a-Therm” (where originally present) is retained for continued use with each BC700-series Oil Filter Adapter.

It will be helpful to determine in advance

whether your application utilizes this device, since some early Lycoming engines—most notably, the O-290, O-235, and a few O-320's—were not originally equipped with oil coolers (or “Vern-a-Therms”). In such cases, installation of the BC700-series Oil Filter Adapter will require a special plug (P/N: AN909B16) to fill the opening reserved for the “Vern-a-Therm.” With this plug in place, installation of the Adapter may proceed as normal.



## BC700-1 DIMENSIONS



## GETTING TO KNOW YOUR OIL TEMPERATURE

Every modern Lycoming engine—from the O-235 forward—utilizes an oil temperature probe (or “sender”) to provide cockpit instrumentation with basic engine oil temperature information. This device is retained and used on every BC700-series Oil Filter Adapter. Since two different types of oil temperature senders have been utilized over the years, a hassle-free installation depends on correctly identifying the type used on your engine. The most common (and more recent) style of sender is an electrical device that threads into the



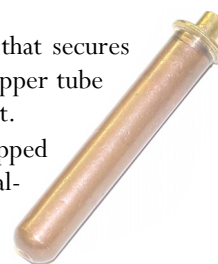
oil screen casting. It is identifiable by the wire that connects it to the aircraft instrumentation. In contrast, the type of

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sender employed on many early engines uses a Freon-filled tube to measure engine oil temperature. This style of sender is recognizable by its unique

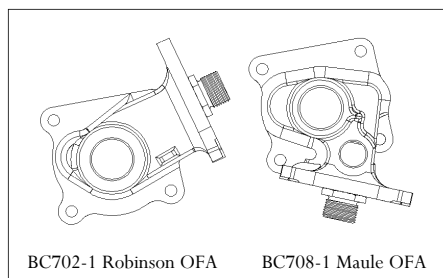
shape, the “B-nut” that secures it, and the small copper tube that emerges from it.

On engines equipped with the electrical-style sender, installation of the BC700-series Oil Filter Adapter involves repositioning the sender to the OFA itself. For engines with the Freon-filled tube-type sender, an adapter fitting (P/N: 700-304) will be required to correctly reposition the sender to the OFA. Sender functionality is unchanged by this, and installation may then proceed as normal.



## OFA'S FOR ROBINSON AND MAULE AIRCRAFT

B&C Specialty Products is pleased to offer Oil Filter Adapters designed specifically for the Robinson R22 and Maule STL aircraft. Each of these have a unique geometry that accommodates the Robinson and Maule airframes, while featuring the same quality construction found on the BC700-1. The BC702-1, designed for the Robinson



R22, orients the oil filter at the 2:30 position. The BC708-1, developed for the Maule, orients the filter at the 6:30 position, and requires the use of a 2.5” spacer (*some purchasing restrictions apply*). Both models are STC/PMA on a wide variety of Lycoming engines. The BC708 is also available without the STC for use on Homebuilt aircraft.