

# HEAT BOXES – EXHAUST COMPONENTS

## WARM/COOL AIR SELECTOR/MIXER



This unit has not only the capability of providing warm air to the cockpit, but also cool air, or both. There are two parts to the unit. The "T" section (engine side of firewall) has a flapper to direct cool air from one side and/or warm from the other side. This section is designed to be riveted or bolted to the firewall. The short expanded section slips over the protruding tube and is clamped with a stainless steel hose clamp. The flap in this section closes off all air from the unit. The hose clamp, a gasket and 4 stainless steel blind rivets are furnished. The shafts, arms, and flapper valves

are all stainless steel. The bushings are brass and the tubing is 2" O.D. 6061-T4. Weight: 5.2 oz. P/N 08-00629..... ea.

## DELUXE HOMEBUILDER'S CABIN HEAT BOX



This cabin box is a modification of our popular standard heat box. Re-engineered as a one-piece unit with two tube-end outlets, rather than one tube-end outlet and one flush outlet; it is smooth, efficient and very light. Originally designed for use on the popular RV series of aircraft, it is applicable to most homebuilts. They are constructed of aircraft grade aluminum and weigh only 5.5 oz. The new design

enables the cabin box to be more easily mounted to the forward face of the firewall with the 2" outside diameter outlet tube extending through the firewall; and is useful in ducting hot exhaust air out of the plenum area. (Both the inlet and outlet tubes are 2" outside diameter.) The outlet tubes are designed to accept a 2" inside diameter "Y" tube for leak-free ducting of warm air to more than one location. Cabin boxes are furnished with a gasket and four LP4-3 pop rivets for installation on the firewall. Superior craftsmanship and quality.

P/N 08-04005.....

Also available: Identical to the regular deluxe cabin heat box P/N 08-04005 with these exceptions: •Stainless steel mounting surface, box to firewall •Steel shaft and stainless flapper.

Extra protection in case of high temperatures, no smoke or flame could reach the cabin area through the cabin heat box.

Box with 2" outlets..... P/N 08-04010.....  
Box with 2.5" inlet & outlet w/ 2" dump tube. P/N 08-04015.....

## DELUXE HOMEBUILDER'S CABIN HEAT BOX – ALL STAINLESS

This cabin heat box is identical to the Deluxe Homebuilder's Cabin Heat Box except that the tubing that goes through the firewall and the mounting flange are also stainless steel for extra protection from fire. Features one inlet (2"O.D.) & two outlets (2"O.D.). All stainless except bushings.

P/N 08-04025..... ea.

## CARBURETOR HEAT BOX FOR ELLISON TBI



P/N 08-00813

View 1

View 2

P/N 08-00814

The carburetor heat box and air grid are designed specifically for the Ellison TBI to eliminate carburetor icing problems. There must always be a constant flow of air through a heat muff. The carburetor heat box has an automatic dump of hot air when carb heat is not being used, thereby eliminating the chance of heat muff burnout. The box has a 2.5" inlet for ram air and a 2" inlet for carb heat. The box is made of 5052 aluminum, stainless steel and 6061-T4 tube. The mounting surfaces, shaft, flapper, arm and rivets are stainless. In

addition, the box is strengthened in the mounting hole area to eliminate the possibility of metal fatigue. A 4" inspection/ mounting hole with a cover plate secured by nut plates and screws is located on the bottom of the box (not visible in the photo.) The purpose of the air grid is to eliminate air flow turbulence. The 1/2" stainless steel vanes straighten the air before it reaches the throat of the carburetor and achieves better air/fuel distribution. This is a proven performance enhancement technique.

Carburetor Heat Box..... P/N 08-00813 .....  
Air Grid (w/one gasket)..... P/N 08-00814 .....  
Extra Gaskets..... P/N 08-00815 .....

## HOMEBUILDERS CABIN HEAT SHUTTLE KIT



Easily assembled and designed so that it can be modified for custom applications. Kit includes construction plans and directions along with installation hints for the popular Vans RV series of homebuilt aircraft. Controlled by ratchet type control cable such as ACS model A740 (P/N 05-12500). Order control cable separately.

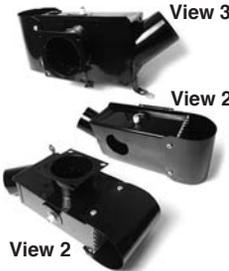
P/N 08-04460.....

## HOMEBUILDER'S CABIN HEAT BOX



This cabin box has been engineered to be the smoothest, most efficient and lightest heat box built. Fabricated from aircraft-grade aluminum with stainless steel shaft, arm and flapper. Originally designed for use on the popular RV-4 homebuilt, but is applicable to most other designs. Total weight is only 5.2 oz. Furnished with a gasket flange for the forward side of the firewall for leak-free ducting of warm air to anywhere the builder wants it. Inlet and outlet are 2" OD 6061-T4 seamless aluminum. The body of the box is constructed of 5052-032 aluminum. Can be either riveted or bolted to the firewall of aircraft. The mounting flanges have holes for both bolts and rivets. The outlet tube extends through the firewall so that scat tubing can be attached to route the warm air. 4 stainless steel blind rivets and a mounting gasket are furnished. Superior craftsmanship and quality.

P/N 08-04000..... ea.



View 3

View 2

View 2

## VAGABOND CARB HEAT BOX

This air grid carburetor heat box designed to fit the Piper PA-15 Vagabond. Dimension: 11" x 3-1/2" x 4"

P/N 08-06290.....

## TUBING CONNECTORS

**2" ALUMINUM FLANGE** - Accepts 2" scat tube. Flange allows riveting to firewall, baffles, etc. Wt: 0.2 oz.

P/N 08-04135.....

**CARB HEAT CONNECTOR** - Mounts on FAB airbox or similar airbox. Flange accepts 2" scat tube from muff. Standoff design allows hot air to escape when carb heat is not selected. Weight: 0.9 oz.

P/N 08-04145.....

**FLANGED DUCT** - Accepts 2" ducting on both ends. Helps route ducting through bulkheads, firewalls, etc. Especially useful for getting heat to the back seat of the aircraft. 3" square plate with 2" tubing projecting 1" from each side. Wt:0.7 oz.

P/N 08-04140.....

## CABIN HEAT BOX



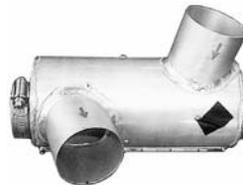
Custom built aluminum box mounts to firewall. Lever on butterfly may be attached to push-pull control for close adjustment of cabin air flow. Two 2" intake ports, one 2" outlet. Wt. 1 lb. 7-1/2" long. Fine quality construction.

P/N 08-01500.....

## HOMEBUILDER'S HEAT MUFFS



P/N 08-03900



P/N 08-00473

These superior quality heat muffs are made entirely of 6061 and 5052 aircraft grade aluminum, offset from the center to clear the close cowling of most homebuilts. The muff can be installed anywhere on the exhaust system where there is 12" of straight pipe, baffle, or even on an aft vertical baffle. The reason for using forced air through the muffs rather than just taking warm air from the low pressure plenum is that in order to have cabin heat you have to have forced air. The muff is constructed so that it can be used for either cabin heat or carb heat, or both, as there is 1 outlet & 1 inlet. The muff is split and piano-hinged to "clam-shell" over the exhaust pipe. This is necessary if you have downturns on your exhaust pipes and do not want to cut off the downturns should you later want to remove the muff. Stainless steel clamps are furnished with the muff. Inlet and outlets are 2" dia. and will fit 1.75" dia. pipes. The standard 9" body has 1 inlet & 1 outlet and generally used for cabin heat (wt:10.4 oz.). The shorter 6.5" body 1 inlet & 1 outlet and generally used on the front crossover section of the exhaust to duct heat to the carburetor box (wt: 8.9oz.).

Standard 9" body..... P/N 08-03900.....

Standard 6.5" body..... P/N 08-00473.....

