

# VORTEX GENERATORS – AIR VENTS



## HALL BROTHERS VORTEX GENERATORS FOR HOMEBUILTS

These Vortex Generators can be temporarily attached to the wing with tape for testing without harming the wing surface and then moved or attached permanently. This temporary attachment capability allows the pilot to prove out their effectiveness before permanent attachment. The design also gives a generous surface area for bonding. The Vortex Generators are made from .025" 6061-T6 aluminum for maximum durability. Hall Brothers Vortex Generators are not just used for lowering the stall speed. The stall characteristics are normally improved as well as aileron response. Some pilots have reported an increase in the rate of climb of their airplane. Many pilots say that the overall "feel" and handling of their airplane has improved throughout its speed range. The Hall Brothers Vortex Generator Kit includes enough Vortex Generators for a typical homebuilt wing (46 pairs) and stabilizer (16 pairs), tape for temporary attachment, adhesive for permanent attachment and instructions.

P/N 05-01480 .....



## VORTEX GENERATORS FOR CESSNA AIRCRAFT

Manufactured under our FAA PMA from aircraft grade aluminum and are anodized to a mil-spec, ready to accept paint before installation. Included in each kit are installation tools, computer cut templates, detailed illustrated drawings and instructions, and Loctite Depend™ Adhesive for installing the vortex generators on your airplane.

Description	Part No.	Price
Cessna 310L/310J	05-04258	.
Cessna 402B	05-04259	.
Cessna 421C	05-04261	.
Cessna (T)210 SER	05-04264	.
Cessna P210N	05-04265	.
Cessna P210R	05-04266	.

## STOLSPPEED VORTEX GENERATORS



Stolspeed VGs are streamlined for less drag and better appearance than other VGs. Stolspeed VGs have no sharp points and are flexible, so it's easier to wash or cover the wings. The special 3M adhesive is removable without damaging aircraft paint. Stolspeed VGs have a very slim rounded fin to give them good flexibility, and a rounded, tapered base that 'flows' into the wing surface. In clear material they're almost invisible.

80 (Enough for the tail)..... P/N 05-04458 .....

120 (Enough for the main wing plus spares) .. P/N 05-04457 .....



## ALUMINUM EYEBALL AIR VENTS

Aluminum airline style "eyeball" air vent swivels to direct air where needed. Knurled collar of outlet rotates to control air volume. Mounts in 1-7/8" dia. hole.

P/N 05-04065.....



## EYEBALL AIR VENT ADAPTER

The extension on the back of these aluminum eyeball air vents is very narrow and allows little room to attach SCAT ducting. This adapter enables the user to attach 2" diameter SCAT ducting to the back of the vent using a stainless steep clamp.

P/N 05-04067.....



## EYEBALL SWIVEL VENT

This high quality, economical swivel air vent is made from 2024T351 aluminum and is available anodized black or grey. Diameter of the flange is 2.75" and the vent is designed to attach with a standard 2" air duct flange. The vent hole of this eyeball swivel vent is 7/8". The knurled collar on the vent swivels 60° to adjust air volume and direct air flow as desired. The vent features 4 mounting holes (1/8" dia.) which are spaced 2-3/8" apart or a mounting plate with a thickness of .71". Made in USA Eyeball Swivel Vent - Black..... P/N 05-00779 .....

Eyeball Swivel Vent - Grey..... P/N 05-00787 .....

## PLASTIC EYEBALL AIR VENTS



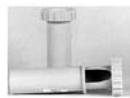
These ball and socket air vents are injection molded T grade ABS. The vent orifice is 1" dia., and the ball swivels 45°. The mounting flange is 2-1/8" square, and the distance between mounting hold centers is 1-11/16". Mounts in 1.75" dia. hole & uses 1-3/4" ducting. Wt: 1.25 oz. ea.

Gray..... P/N 05-04082 .....

White..... P/N 13-01943 .....

Black..... P/N 05-04079 .....

Beige.... P/N 05-04081 .....



## VENTUBE FOR CESSNAS

The Ventube is a plastic unit that consists of an exterior tube and a lockable interior tube with a cap. Air flow control is accomplished by extending or retracting the interior tube. Ventube enhances pilot and passenger comfort, allows reliable closure of the air vent, controls vent direction and flow, and reduces air vent noise and leakage. FAA approved for Cessna 120, 140, 150, 152, 170, 172, 175, 180, 182, 185, 190, 195, 205, 206, 207, 210-210F, and 305. Detailed instructions, STC, FAA Form 337, etc. are enclosed with each pair.

P/N 05-04091..... /pr.



## AIRFLOW ENHANCEMENT KIT

Improves the cabin airflow in General Aviation aircraft, specifically Cessnas. Combined with Ventubes they enhance the pilot and passengers comfort (cooling & heating), allow reliable closure of the inlet air vents, control cabin air direction, increase cabin air flow, and reduce inlet air noise and leakage. The kit consists of two cabin exit vents, CEV, to allow the cabin air to exit into the aft fuselage and the fuselage exit vent, FEV in the modified inspection plate, to allow the cabin air to exit the fuselage of the aircraft.

P/N 05-04080 .....

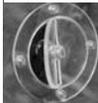


## THE COMPLETE AIRFLOW KIT

The Kit includes:

- Ventubes™ (pair) - controls air flow into the cabin.
- Cabin Exit Vents - allows air to exit to fuselage.
- Fuselage Exit Vent - allows air to exit the aircraft.

P/N 13-03577 .....



## VISTA-VENTS

Knob adjustment permits complete control of cabin air. Mounts at four points in 2-1/2" dia. hole.

P/N 13-03500 .....



## CABIN AIR VENTILATOR

Aluminum 90° elbow type. Knurled collar rotates to control air volume. Mounts to a 2 1/2 in. Dia flange. For 11/4 Id scat ducting. Also good for cabin heat vents.

P/N 05-04075 .....



## "WHISPERFLO" VENTILATORS

Large molded plastic vent with 40° swivel. Thumb operated closure controls degree of opening. Mounts in 2-1/2" dia. hole. Large orifice (1-3/4") provides maximum cooling. Mounting in floor of aircraft assures full cabin ventilation.

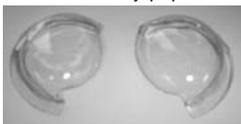
Use with CAT-11 ducting. Black..... P/N 05-04073 .....

Ivory..... P/N 05-04071 .....



## ULTIMATE VENTILATOR

The Ultimate Ventilator is machined from aluminum block and comes with holes tapped for 4-40 screws. 1.75" disk articulates out into airstream and does not leak when closed. Very popular with T-18 & RV builders. P/N 05-04090 .....



## SNAP VENTS

Adjustable plastic ventilators for use as fresh air intakes or air exhausts. Easily installed in plastic windshield or metal cowling. Two sizes:

**MODEL A-2-100** Mounts in a 2" dia. opening. Can be turned to provide any degree of ventilation. The "Off" position is with the opening downward. P/N 05-01178 .....

**MODEL CC3251** Mounts in 31/4" dia. opening. Rotates to provide any degree of ventilation. Retracts to a closed position nearly flush with the mounting surface. P/N 05-01179 .....

**MODEL F325A** Large tabs on lower flange and tapered profile make this vent ideal for higher airspeeds. Mounts in 3-1/4" opening in plastic windshield or metal cowling. P/N 05-04088 .....

**MODEL F318** Tapered in profile in back provides a more direct flow of air. Mounted in 3-3/16" opening in plastic windshields or metal cowling. P/N 05-04089 .....

## CESSNA 210 FRESH AIR VENT SYSTEM

This fresh air vent system replaces the forward cabin vent. It features durable Wemac air vents which deliver full/partial closure, directional control, and positive shut-off. Focused air control improves cabin comfort. All metal construction. Completely replaces the old style, plastic overhead fresh air vents in most Cessna 210 aircraft. Includes the forward center, and aft systems, or purchase the systems separately. STC approved.

Full system..... P/N 05-04092 .....

Pilot & Co-Pilot..... P/N 05-04083 .....

Center Vents (total of 2 units)..... P/N 05-04085 .....

Rear Vents (total of 2 units)..... P/N 05-04087 .....