

# Minimize Contaminants Maximize Airflow

Tempest AeroGuard™ induction air filters  
from the brand you trust for quality and innovation

Greater media surface area  
provides maximum airflow for  
longer service intervals.

Greater than 99% of  
contaminants larger than  
5 microns are filtered out.



Reuseable and washable  
synthetic (non-paper) media  
maximizes airflow and filters  
contaminants more effectively.

Screen design prevents  
fragmented media from being  
ingested, improving safety,  
complying with FAR23.1107(b).

Synthetic (non-paper) media means no need to  
comply with AD84.26.02

**TEMPEST**  
CORPORATION

visit [www.tempestplus.com](http://www.tempestplus.com) for most recent installation eligibility

Tempest® Part Number	Airframe OEM P/N	Donaldson P/N	Bracket P/N	Aircraft Model
<b>AERONCA</b>				
AA10-7150		P10-7150	BA-4106	(Army L-3F) 65-CA, S-65-CA
<b>AIRCOUPE – SEE UNIVAIR</b>				
<b>ALEXANDRIA AIRCRAFT – SEE BELLANCA</b>				
<b>AMERICAN CHAMPION</b>				
AA10-6150	P10-4145	P10-6150	BA-8110	7ECA (1974 and Newer), 7GCAA (1974 and Newer), 7GCBC (1974 and Newer), 7KCAB (1974 and Newer), 8KCAB, 8GCBC
AA10-7150		P10-7150	BA-4106	(Army L-16A) 7BCM, (Army L-16B) 7CCM, S7CCM, 7DC, S7DC, 7EC, S7EC, 7ECA (O-200-A), 7FC, 7JC, 7KC
<b>AMERICAN GENERAL</b>				
AA10-7150	13203	P10-7150	BA-4106	AA-1, AA-1A-C, AA-5
AA8994656	8994656, 5500015-501		BA-120	AA-5B, GA-7
<b>AUGUSTAIR</b>				
AA10-7150		P10-7150	BA-4106	2150A
<b>AVIAT</b>				
AA10-7150	81630, 81631	P10-7150	BA-4106	A-1
<b>BEECHCRAFT (TEXTRON AVIATION)</b>				
AA10-5304	35-380035-1, 35-380035-5	P10-5304	BA-7210	35-C33A, E33A, F33A, F33C, G33, S35, V35, V35A, V35B, V35TC, 36, A36
AA12-4439	50-389070-23	P12-4439	N/A	58P, 58TC
AA12-7996	121128-2, AM101120FP	P12-7996	BA-6210-1	95-C55, 95-C55A, D55, D55A, E55, E55A, 58
AA12-8167	96-389005-1	P12-8167	BA-7710	E55, E55A, 58
AA13-0374	49-921210, 13917	P13-0374	BA-7110	35-33, 35-B33, 35-C33, E33, F33, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35
AA617058	169-380011	P617058	BA-104	19A, 23, A23, A23A, A23-19, A23-24, B23
<b>BELLANCA (ALEXANDRIA AIRCRAFT)</b>				
AA10-6150		P10-6150	BA-8110	14-19-3A, 17-30
AA617058	AF-2, BA-104, 6485710	P617058	BA-104	17-30A
<b>B-N GROUP</b>				
AA617058	AF-2, BA-104, 638873, 6485710, CA161PL	P617058	BA-104	BN-2, BN-2A, BN-2A-2, -3, -6, -8, -9, -20, -21, -27, BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN2A MK III, BN2A MK III-2, BN2A MK III-3
<b>CESSNA (TEXTRON AVIATION)</b>				
AA198290	CA3717	P198290	N/A	182S (80001 Thru 80244 if SB-98-71-02 is complied with), 182S (80245 Thru 80944)
AA198281	CA3559	P198281	BA-5810	172S, 172R
AA10-6150	0750038-4	P10-6150	BA-8110	180A-H, J-K, 182, 182A-H, 182J-N, 182P-R, 182T, T182T, 185, 185A-E, A185E, A185F, F182P-Q
AA10-7150	C-294510-0201	P10-7150	BA-4106	120, 140, 140A, 150, 150A-H, J-M, A150K-M, F150G-H, J-M, FA150K-L, 152, A152, F152, FA152
AA10-7172	C-294510-0301	P10-7172	BA-5110	170, 170A-B, 172, 172A-G, I, K-N, P, Q, 172F (USAF T-41A), 172H, (USAF T-41A), F172D-H, K-N, P
AA11-0172	C-294510-0601	P11-0172, AM107635FP	BA-5710	177, 177A-B, RG
AA13-1367	C-294510-0901	P13-1367	BA-2510	R182, T182, TR182
<b>CIRRUS AIRCRAFT</b>				
AA198290	31077-002	P198290	N/A	SR20 (2339 and up)
AA27166-001	27166-001	P616824	N/A	SR22T

Tempest® Part Number	Airframe OEM P/N	Donaldson P/N	Bracket P/N	Aircraft Model
<b>DIAMOND AIRCRAFT</b>				
AA10-7172	BA5110	P10-7172	BA-5110	DA 40 F
<b>GRUMMAN/TIGER – SEE AMERICAN GENERAL</b>				
<b>LUSCOMBE</b>				
AA10-7150		P10-7150	BA-4106	8, 8A-F, T-8F
<b>MAULE</b>				
AA10-7172	P12-6491	P10-7172	BA-5110	M-4, M-4C, S, T, M-4-180C, S, T, M-4-220, M-4-220C, S, T, M-5-180C, M-5-210C, TC, M-5-220C, M-5-235C, M-6-180, M-6-235, M-7-235, MX-7-160, MX-7-180
<b>MOONEY</b>				
AA10-7150		P10-7150	BA-4106	M10
AA10-7172	13219	P10-7172	BA-5110	M-18C, M20, M20A-D, G
<b>PIPER</b>				
AA10-3210	17775-02		BA-3210	PA-24-250 (24-103 Thru 24-1476)
AA10-6590	460-817, 560-747	P10-6590	BA-100	PA-31, PA-31-300, PA-31-325, PA-31-350, PA-32RT-300T
AA10-7150	P12-0494, 560-772	P10-7150	BA-4106	J3, J3C-65, J3C-65S, J4A, J4A-S, J4E (Army L-4E), J5A (Army L-4F), J5A-80, PA-11, PA-11S, PA-12, PA-12S, PA-16, PA-17, PA-18, PA-18A, PA-18S, PA-18 "125" (Army L-21A), PA-18S "125", PA-18AS "125", PA-18 "135" (Army L-21B), PA-18S "135", PA-18AS "135", PA-18 "150", PA-18A "150", PA-18S "150", PA-18A (Restricted), PA-18A "135" (Restricted), PA-18A "150" (Restricted), PA-19 (Army L-18C), PA-20, PA-20 "115", PA-20 "135", PA-22, PA-38-112
AA15-1936	561-020, PS60007-3	P15-1936		PA-32R-301, PA-32R-301T (3257001 and up), PA-32-301XTC, PA-46-310P, PA-46-350P
AA617053	PS60007-1, 460-630, 89309, CA144PL, AFP-1, 638876	P617053	BA-105	PA-28R-180, 200, 201, PA-28RT-201, 201T, PA-30, PA-34-200, PA-39, PA-44-180
AA617058	PS60007-2, 460-632, 89308, CA161PL, AFP-2, 638873, 601-819	P617058	BA-104	PA-23-235, -250, PA-24, PA-24-250, -260, PA-28-140, -150, -160, -180, -181, PA-28-201T, -235, PA-28R-201T, PA-28RT-201T, PA-32-260, -300, -301, -301FT, PA-32R-300, PA-32RT-300, PA-32R-301 (SP), PA-32R-301 (HP), PA-34-200T, -220T, PA-36-285, -300, -375
AA617774	460-629, 32198-00, CA162, BA-115, 6487894	P617774	BA-115	PA-23-250, PA-E23-250, PA-32-300
<b>SWIFT (GLOBE)</b>				
AA10-7150		P10-7150	BA-4106	GC-1A-B
<b>TAYLORCRAFT</b>				
AA10-7150		P10-7150	BA-4106	BC-65, BCS-65, BC12-65 (Army L-2H), BCS12-65, BC12-D1, BCS12-D1, BC12D-85, BCS12D-85, BC12D-4-85, BCS12D-4-85, BF-65, BFS-65, (Army L-2K) BF12-65, 19, F19, F21, F22, F22A-C, (Army L-2, L-2C) DC-65 (Army L-2A, -2B, -2M) DCO-65
<b>UNIVAIR/AIRCOUPE</b>				
AA10-7150		P10-7150	BA-4106	A-2, A2-A, F-1, F-1A
<b>VAN'S (*Experimental Aircraft)</b>				
AA10-3260	E-3260			*Van's Aircraft Using Filtered Airbox FAB-320-1
AA10-3450	E-3450			*Van's Aircraft Using Filtered Airbox FAB-360/540
<b>VARGA – SEE AUGUSTAIR</b>				

## INSTALLATION INSTRUCTIONS

1. Inspect the filter and airframe sealing surfaces to ensure they are clean and free of debris or contaminants.
2. Install the filter. Please note: the filter must be mounted properly and securely in order to avoid air leaks. Always install the air filter with the airflow arrow pointing in the correct direction of airflow.
3. **Do Not** apply oil to the filter - it is not necessary and WILL clog the filter, rendering it unserviceable.

## PREFLIGHT INSPECTION

For filters that are visible from outside the aircraft, such as Cessna 150s and 172s for example, inspect the air filter during the preflight inspection to assure that it is not occluded by foreign material, leaves, etc.

## CLEANING

The following cleaning guidelines are for the engine induction air filters only. NO ATTEMPT TO CLEAN INSTRUMENT AIR FILTERS SHOULD BE MADE. REPLACE THEM IF THEY ARE DIRTY OR SUSPECT.

Tempest® induction air filters can be cleaned using either compressed air or a mixture of water and detergent. Tempest® recommends use of compressed air when only dry dust is present in the filter. When oil, cleaning solvent, carbon or other contaminants are present, we recommend a detergent and water cleaning.

### Compressed Air Cleaning for Dusty Filters

1. Use compressed air at 45 psi or less to blow dust from the filter element. Keep the nozzle at least 1 inch away from the filter to avoid damage to the filter media.
2. Blow the air through the filter backwards - in the opposite direction of normal air flow - see the airflow arrow on the filter label.
3. Continue blowing air through the filter until no evidence of dust or other contaminants are being actively removed.

### Detergent & Water Cleaning

**CAUTION - DO NOT USE** a pressure washer to clean the filter. Use water from a spigot or hose at approximately 40 psi or less.

1. To soften and remove large contaminants, use a hose and spray nozzle to spray water through the filter backwards - in the opposite direction of normal airflow - see the airflow arrow on the filter label. Keep the nozzle at least 4 inches from the filter to prevent damage to the media.
2. In a clean container, mix 1/2 to 1 ounce of general-purpose detergent such as dish washing liquid per gallon of water.
3. Place the filter in the solution to soak for at least 15 minutes (agitating periodically) or until contaminants can be sprayed off satisfactorily as described in Step 1. If the filter cannot be cleaned satisfactorily after an hour or two of soaking - replace it.
4. Spray the filter until no signs of detergent (bubbles) remain. At this point, you can spray water through the filter in either direction to ensure the detergent is thoroughly removed.

## CLEANING (CONT.)

### Detergent & Water Cleaning (Cont.)

5. Allow the filter to dry. Use compressed air (below 45psi) or a fan to speed drying time. A hair dryer, oven or other source of heated air may also be used, but the temperature of the air must be 160° F or lower. Don't put a concentrated heat source such as a light bulb or space heater close enough to the filter to exceed 160°F at the filter's surface.

**Note: Air Filters should not be washed with hard solvents such as, but not limited to, MEK, toluene, acetone or oily solvents.**

## INSPECTION

1. When the filter is dry, hold a bright light behind the filter. Inspect thoroughly by looking 'through' it towards the light to identify holes, rips, tears or visual damage to the media.
2. Inspect the filter for physical damage paying special attention to the gasket (if used) and sealing surfaces for damage, cracks, tears or missing material that may prevent satisfactory sealing to the airframe.
3. Ensure all fasteners and cross pins (where used) are present.
4. Inspect the filter box for loose parts, adhesive debonding dents or crack, and the fasteners for airworthiness condition.

Replace damaged filters. **Do not** attempt to repair them.

**Do not** install a damaged filter.

## STORAGE

Keep filters stored in a clean environment away from dust and dirt, and where they are protected from physical damage.

## SERVICING/REPLACEMENT SCHEDULE

Induction air filters should be replaced after 5 cleanings or 500 flight hours, whichever comes first. They should also be inspected during preflight (where possible), and at 100 hour and annual inspections, or more often if airplane is operated in harsh conditions.

An indication of an excessively dirty induction air filter is that normal high manifold pressure cannot be achieved with the engine running at full power. In general, in a normally aspirated engine, when a 1 to 1.5-inch drop in manifold pressure is caused by the air filter, the filter is considered to be excessively 'dirty' and should be cleaned or replaced. Clean the air filter during each 100 hour and annual inspections, or whenever needed. Replace damaged air filters when found at any time.