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 airflow - 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 activeley 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 dishwashing 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.

CLEANING (CONT.)

Detergent & Water Cleaning (CONT.)

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.
5. Allow the filter to dry. Use compressed air (below 45 psi) 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 degrees 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 degrees 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 the filter 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. Make sure all the fasteners and cross pins (where used) are present.
4. Inspect the filter box for loose parts, adhesive debonding, dents or cracks, 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 the 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 airplane, 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.

TEMPEST excellence

www.tempestplus.com

Minimize Contaminants Maximize Airflow

with Tempest AeroGuard™

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

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

Reusable and washable synthetic media maximizes airflow and filters contaminants more effectively.

Screen design prevents fragmented media from being ingested, improving safety, complying with FAR 23.1107(b).

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

TEMPEST excellence

Tempest® Part Number	Airframe OEM Part Number	Donaldson® Part Number	Brackett Part Number	Aircraft Model
AERONCA				
AA10-6150		P10-6150	BA-8110	7KCAB, 8KCAB, 7GCBC, 8GCBC, 7GCAA
AA10-7150		P10-7150	BA-4106	(Army L-3F) 65-CA, S-65-CA,
AIRCOUPE - SEE UNIVAIR				
ALEXANDRIA AIRCRAFT- SEE BELLANCA				
AMERICAN CHAMPION				
AA10-6150	P10-4145	P10-6150	BA-8110	7GCAA, 7GCBC, 7KCAB, 8KCAB, 8GCBC
AA10-7150		P10-7150	BA-4106	7AC, 7ACA, S7AC, (Army L-16A) 7BCM, (Army L-16B) 7CCM, S7CCM, 7DC, S7DC, 7EC, S7EC, 7ECA, 7FC, 7GCAA, 7GCBC, 7JC, 7KC, 7KCAB
AMERICAN GENERAL				
AA10-7150	13203	P10-7150	BA-4106	AA-1, AA-1A-C, AA-5
AUGUSTAIR				
AA10-7150		P10-7150	BA-4106	2150A
AVIAT				
AA10-7150	81630, 81631	P10-7150	BA-4106	A-1
BEECHCRAFT (TEXTRON AVIATION)				
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, TC
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	45-921210, 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, -24, B23
BELLANCA (ALEXANDRIA AIRCRAFT)				
AA10-6150		P10-6150	BA-8110	14-19-3A, 17-30
AA617058	AF-2, BA-104, 6485710	P617058	BA-104	17-30A
B-N GROUP				
AA617058	AF-2, BA-104, 6485710	P617058	BA-104	BN-2, -2A, BN-2A-2, -3, -6, -8, -9, -20, -21, -27, BN-2B-20, BN-2B-21, BN-S2-26, BN-2B-27
CESSNA (TEXTRON AVIATION)				
AA198281	CA3559	P198281	BA-5810	172R, S
AA10-6150	0750038-4	P10-6150	BA-8110	180A-H, J-K, 182, 182A-H, 182J-N, 182P-T, 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

Tempest® Part Number	Airframe OEM Part Number	Donaldson® Part Number	Brackett Part Number	Aircraft Model
DIAMOND AIRCRAFT				
AA10-7172	BA5110	P10-7172	BA-5110	DA 40 F
GRUMMAN/TIGER - SEE AMERICAN GENERAL				
LUSCOMBE				
AA10-7150		P10-7150	BA-4106	8, 8A-F, T-8F
MAULE				
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
MOONEY				
AA10-7150		P10-7150	BA-4106	M10
AA10-7172	13219	P10-7172	BA-5110	M18C, M20, M20A-D, G
PIPER				
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
AA617053	PS60007-1, 460-630, 89309, CA144PL, AFP-1, 638876	P617053	BA-105	PA-28R-180, PA-28R-200, PA-28R-201, PA-28RT-201, PA-28RT-201T, PA-30, PA-34-200, PA-39, PA-44-180
AA617058	PS60007-2, 460-632, 89308, CA161PL, AFP-2, 638873	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
SWIFT (GLOBE)				
AA10-7150		P10-7150	BA-4106	GC-1A-B
TAYLORCRAFT				
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
UNIVAIR/AIRCOUPE				
AA10-7150		P10-7150	BA-4106	A-2, A2-A, F-1, F-1A
VARGA - SEE AUGUSTAIR				