



Donaldson
FILTRATION SOLUTIONS
AEROSPACE & DEFENSE

**ROTORCRAFT ENGINE INLET BARRIER
FILTER SYSTEMS for MILITARY AIRCRAFT**



On today's battlefields, military helicopters can be the difference between victory and defeat. Successful mission completion depends on safe and reliable aircraft operation, that depends on safe and reliable engine operation, so depend on Donaldson to keep your engines running healthy. Donaldson Aerospace & Defense produces military qualified or commercially certified Inlet Barrier Filter (IBF) systems for a variety of U.S. and Allied military helicopters. IBFs virtually eliminate FOD, dirt, and other threats that reduce engine power and damage critical components.

Donaldson Military platform Engine IBF Systems are available for the OH-58A/C Kiowa, AH/MH-6 Little Bird, UH-1H Huey, OH-58D Kiowa Warrior and UH-60 BLACK HAWK/SH-60 SEAHAWK.

INSTALL BEFORE FLIGHT

Military helicopters constantly fly in dangerous, dirty conditions. Installing an IBF system is the best and most effective way to protect engines from damage ranging from lost efficiency to catastrophic failure while adding significant advantages.

- More power available than alternate filtration solutions
- Reduced engine turbine operating temperatures over alternate systems
- Reduced engine maintenance over alternate systems
- Extends engine life due to elimination of erosion
- Meets established engine time between overhaul limits
- Available factory-direct

PERFORMANCE AT-A-GLANCE

Features	OH-58A/C Kiowa TH-57, TH-67 Part number 109000-103	AH/MH-6 Little Bird Part number 102200-101	UH-1H Huey, TH-1H Part number 111001-103	OH-58D/F Kiowa Warrior Part number 101000-101	H-60 BLACK HAWK Part number 107000-103, -105
Design Features	Structurally integrated kit; two rugged flat filters for fast filter exchange via top access door; simple installation with minimal modifications; maintains firewall integrity; utilizes original mount provisions for particle separator; includes improved water wash manifold	Structurally integrated kit; two rugged flat filters with quarter turn fasteners for fast exchange; all new engine inlet fairing engineered to be structurally sound, lighter, and less complex; reduction in parts compared to original OEM design; unique dual entry inlet optimizes airflow in hover and forward flight	Structurally integrated kit; four interchangeable rugged, lightweight, flat filters designed for fast filter exchange; self-contained kit integrated into existing inlet plenum; new forward firewall interface; improved drive shaft and coupling access; minimal aircraft modification; includes improved water wash manifold	Structurally integrated kit; two rugged, lightweight, flat engine inlet filters; separate system for protection of the engine inducer bleed system with one small flat filter; designed for fast filter exchange after removal of blast shields; self-contained inside existing inlet plenum; maintains existing engine wash system	Structurally integrated Sikorsky A-kit; removable Donaldson B-kit; modular design; transition module mounts to engine inlet; filter & bypass module mount to aircraft; eight interchangeable filters; swings open for maintenance access; cruise flight bypass system; inherent bird strike protection capability
Emergency Bypass	Internal compartment bypass door to protect against dirt, ice & snow; activation allows flight in all environments	Conformal external bypass door with fewer parts than original OEM design; activation allows flight in all environments	Dual access bypass system with vertical doors to protect against dirt & snow; activation allows flight in all environments	Internal compartment bypass door protects against dirt & snow; activation allows flight in all environments	Unique bypass system with forward ram air entry for use as bypass or for power recovery in forward flight
Components	Easily accessible via lower side access doors; non-intrusive cockpit installation; filter maintenance aid for on-condition filter assessment	Easily accessible externally and inside forward inlet fairings; Uses OEM cockpit annunciation system; filter maintenance aid for on-condition filter assessment	Easily accessible externally and inside forward cover; non-intrusive cockpit installation; filter maintenance aid for on-condition filter assessment	Easily accessible via lower side access doors; Filters protected by blast shields; non-intrusive cockpit installation	Easily accessible B-Kit with components mounted for quick change out; modular design for fast combat damage repairs
Performance	Operate with more power margin than EAPS, uses basic inlet charts with backup EAPS charts; lower pressure drop than other options with superior particle separation efficiency	Per TMs, significant performance improvement over EAPS with lower inlet pressure drop and a flat pressure drop characteristic with forward airspeed; fully qualified for weapons fire	Operate with more power margin than EAPS, uses basic inlet charts; lower pressure drop than other options with superior particle separation efficiency	Per TMs, lower pressure drop than EAPS; superior particle separation efficiency; fully qualified for weapons fire	Per TMs, designed to provide lowest possible inlet loss with fully contaminated filters in a hover condition with superior particle separation efficiency
Proven	The US Army is equipping 100% of its TH-67 fleet and has equipped over 25% of its OH-58A/C fleet with the IBF. The Iraqi Air Force operates the IBF. Commercial kits used by law enforcement and commercial operators worldwide.	Standard configuration on the US Army Special Operations Little Bird; Standard equipment on the MD Helicopters production line. The Royal Jordanian Air Force and Republic of Korea Army OH/AH-6 operate the IBF. Commercial kits used by law enforcement and commercial operators worldwide.	Fielded by the US Department of State on its fleet of UH-1H Huey II aircraft. The Iraqi Air Force, Royal Thai Air Force and Georgian Air Force operate the IBF. Commercial kits used by law enforcement and commercial operators worldwide.	Standard configuration on the US Army fleet. Engines routinely make published TBO even while operating in Iraq and Afghanistan. The significant advantages of the filter led to it being specified on the new US Army Armed Reconnaissance Aircraft.	The US Army has equipped 25% of its UH-60 fleet with the IBF. The United Arab Emirates Air Force operates the IBF.



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