



***AFS Inlet Barrier Filtration (IBF) System
Bell 205, 210, UH-1H, Huey II***

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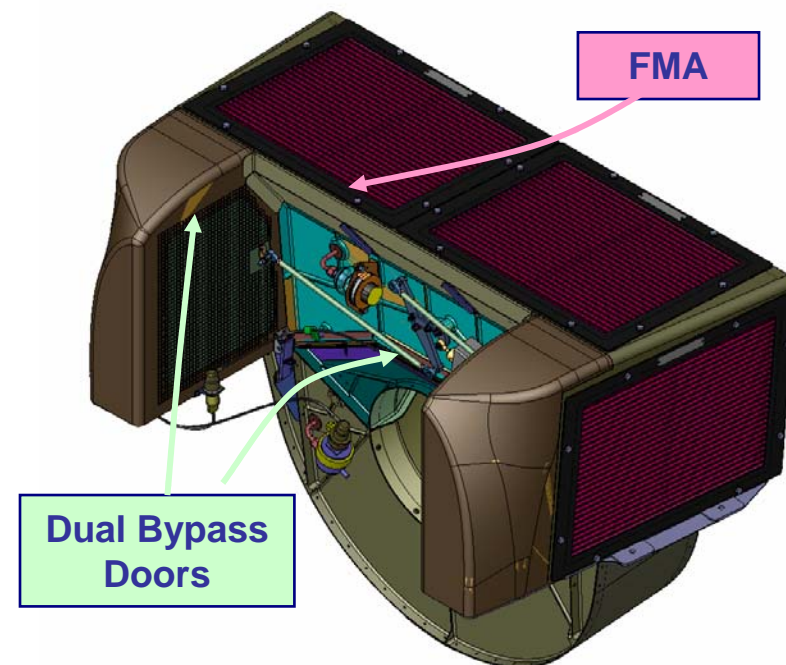


AFS Inlet Barrier Filter (IBF) System Bell 205/210/UH-1H, Huey II



AFS IBF Features

- Sealed plenum design composed of sheet metal, machined aluminum and composite parts
- AFS IBF replaces Engine Air Particle Separator (EAPS), Improved Particle Separator (IPS) or FOD screen assemblies
- Upper plenum houses 4 filters and mounts to aircraft structure similar to IPS
- Compression seal between upper & lower inlet plenum
- Actuator driven dual bypass doors, actuator common with AFS IBF for the Bell 407 and 206L-3/4
- Lower plenum mounts to engine front face
- Dual bypass door to eliminate distortion
- System disassembles in 5 Pieces
 - Quick Release Latches and Fasteners





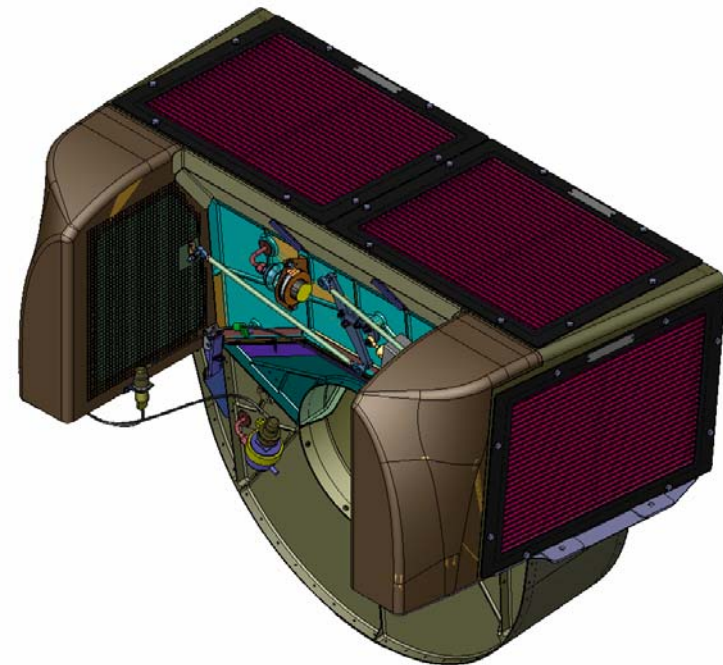
AFS Inlet Barrier Filter (IBF) System Bell 205/210/UH-1H, Huey II



Key Benefits:

- Proven technology with over 1,000,000 flight hours
- Reduced life cycle costs over alternate systems
- Maximum protection, reduced maintenance costs
- Improved performance, certified with basic inlet charts
- Improved engine inlet and drive shaft access
- Filter maintenance aid (FMA) for on-condition assessment
- Non-intrusive cockpit installation with minimal modifications
- Common components with other AFS certified systems
- Long lasting, flat filter assemblies for easy cleaning
- Integrated engine water wash capability does not require filter removal
- Over 10 pounds lighter than IPS
- Environmental cover included in kit

AFS Bell 205/210/UH-1H/Huey II IBF



QUICK SPECS

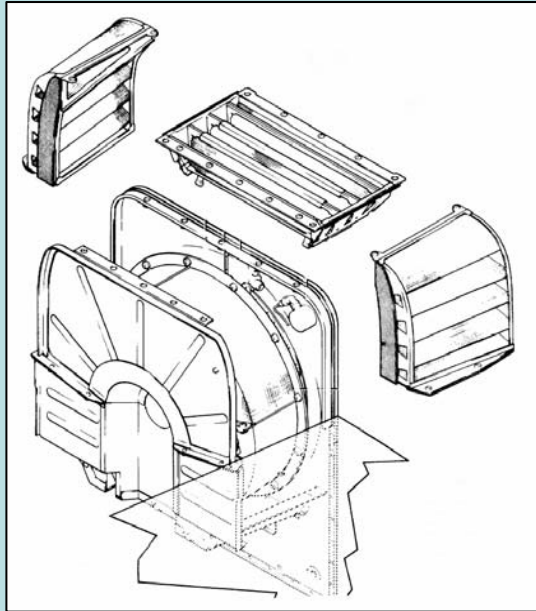
IBF Kit Weight 52 pounds
Installation Time50 man hours



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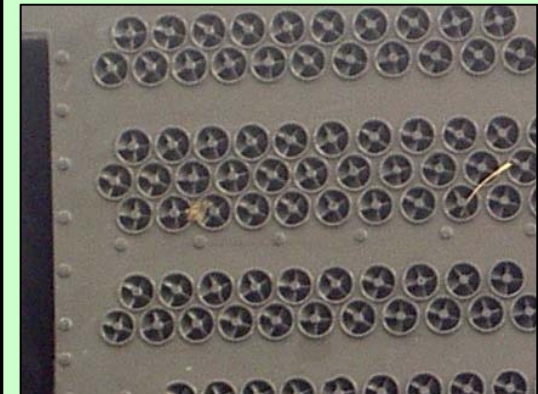
Previous 205/210/UH-1H EAPS & IPS Systems



**Pleated Screen/Foam Filters
With FOD Screen**



**Inertial Particle Separator
With Pleated Screen**



**Improved Particle Separator
(61 Lbs)**



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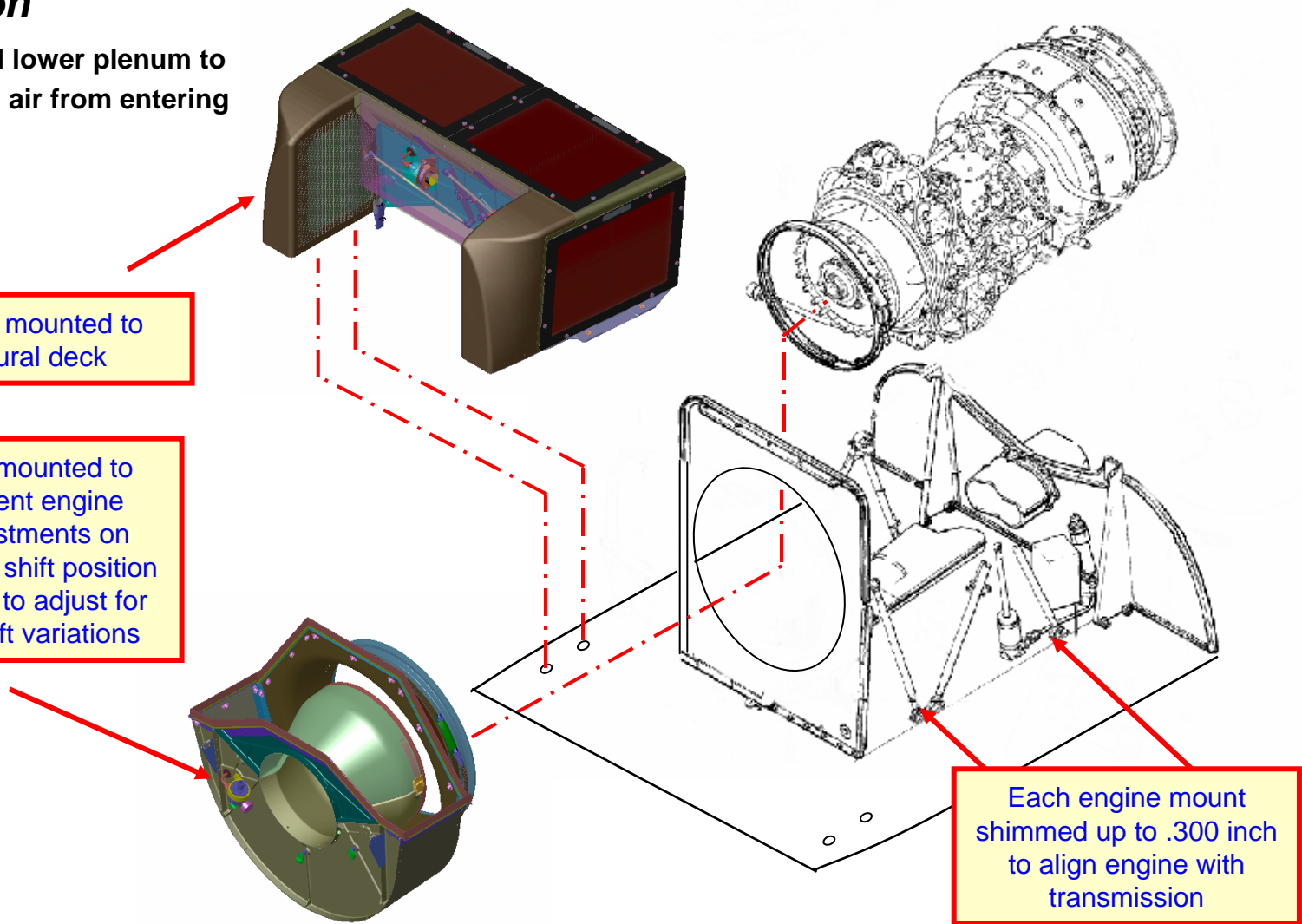


IBF Installation

- Sealed upper and lower plenum to restrict unfiltered air from entering engine inlet

Upper plenum mounted to fixed structural deck

Lower plenum mounted to engine. Different engine shimming adjustments on individual aircraft shift position of lower plenum to adjust for aircraft to aircraft variations

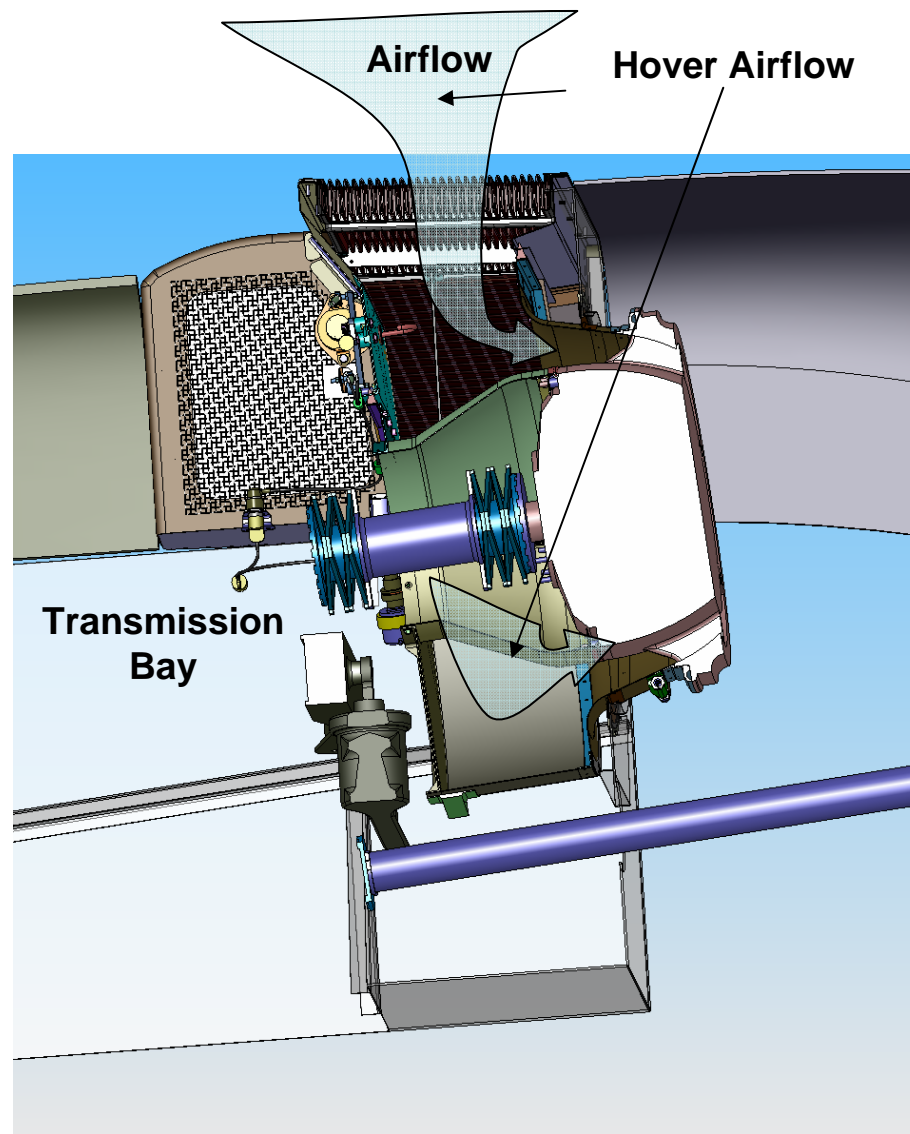
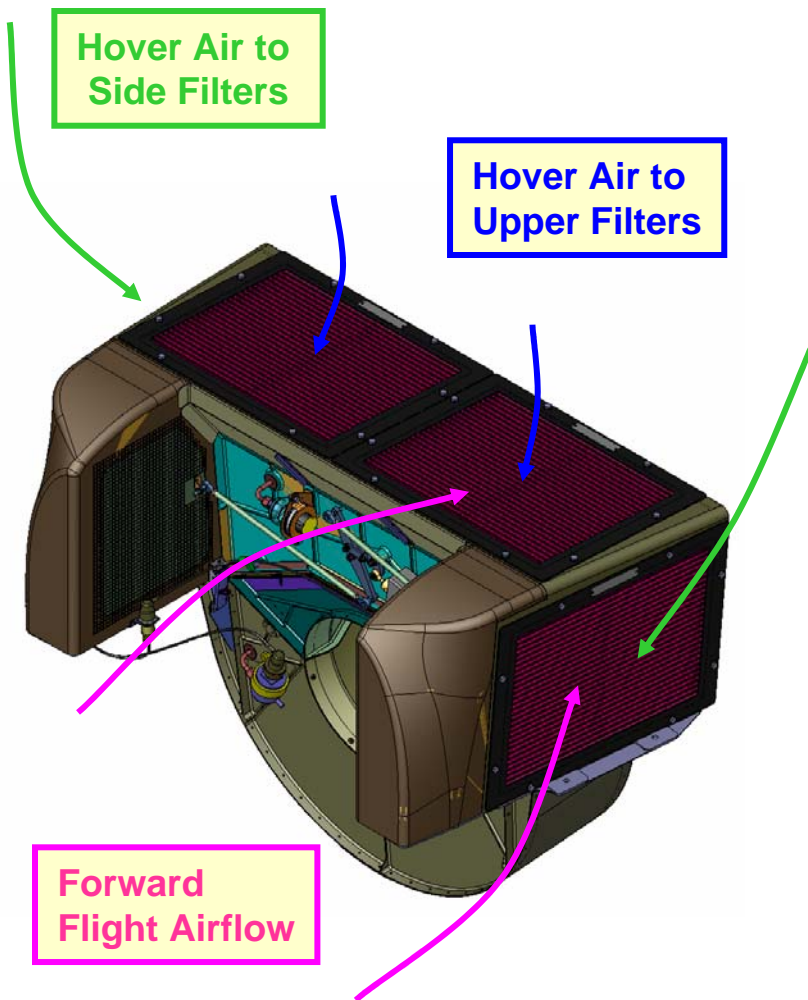




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AFS IBF Flow Path

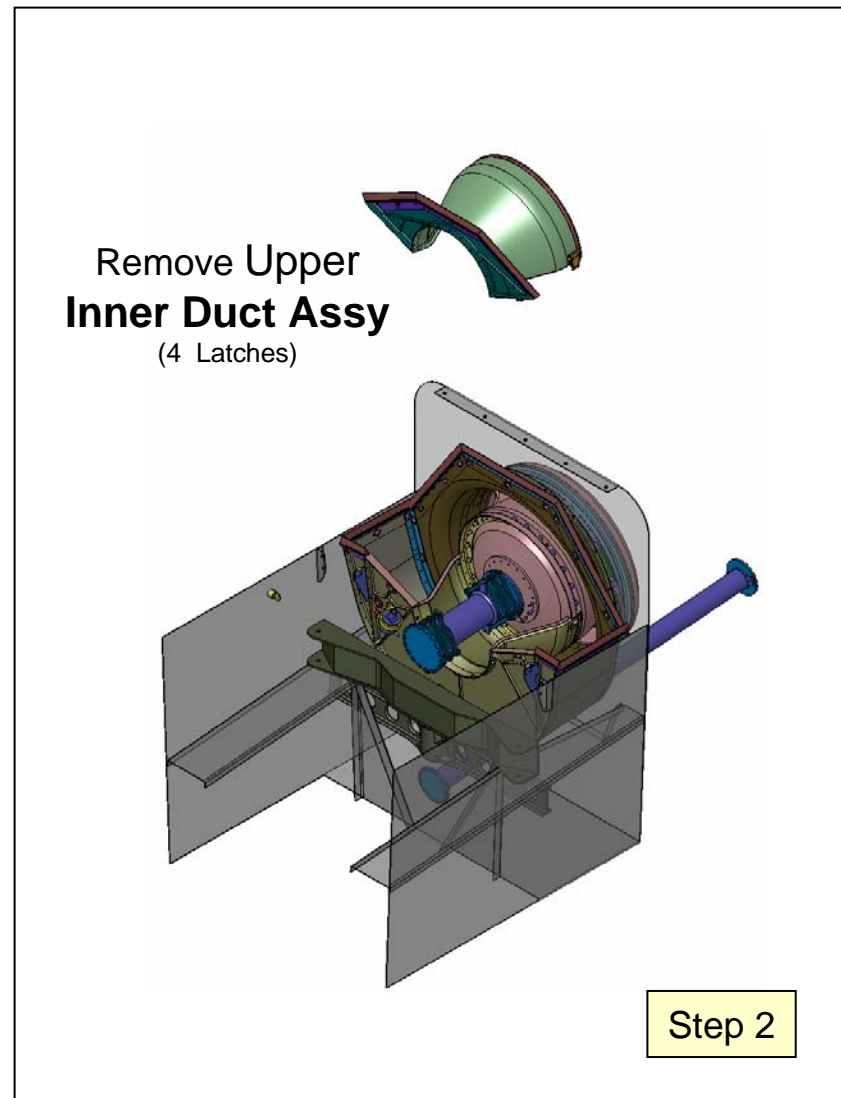
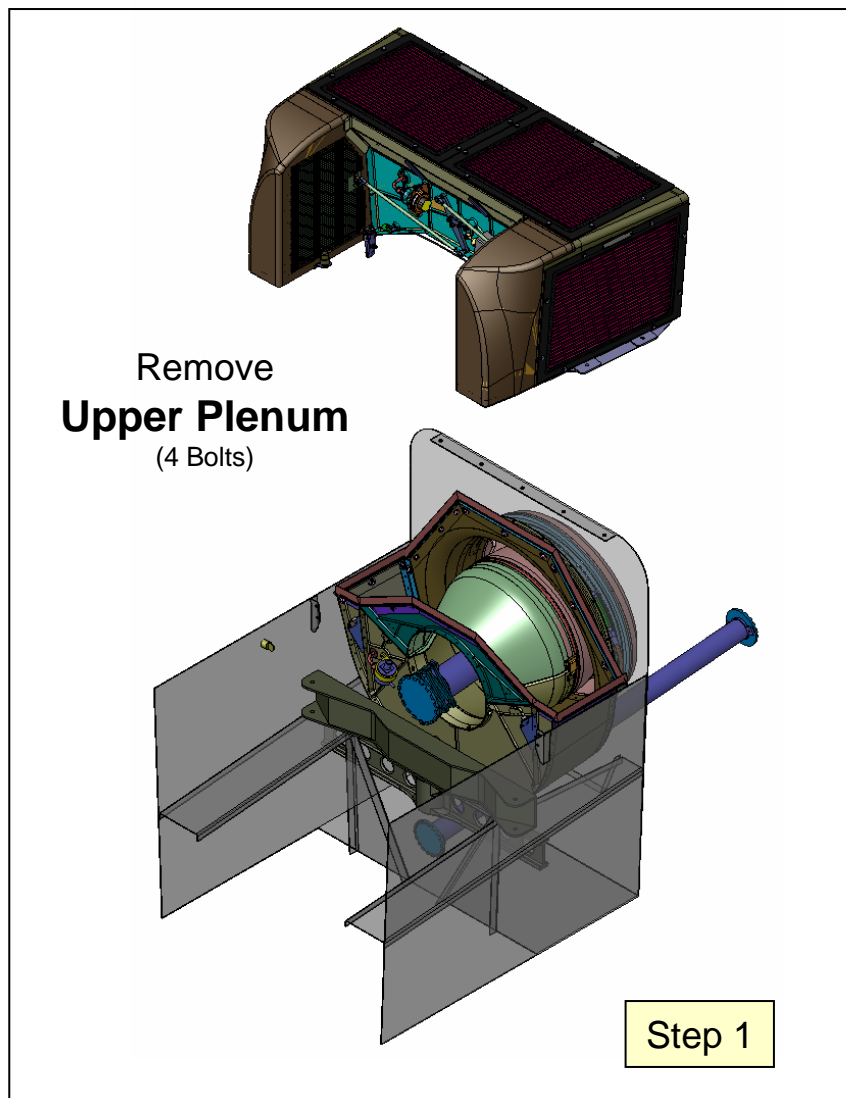




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Access and Basic Components





AFS Inlet Barrier Filter (IBF) System Bell 205/210/UH-1H, Huey II



Access and Basic Components

Remove OEM Drive Shaft
(2 V-Band Clamps)

Remove Lower Driveshaft Cover Assy
(4 Bolts, 4 Stud Nuts)

Step 3

Remove Lower Plenum Assy
(8 Bolts)

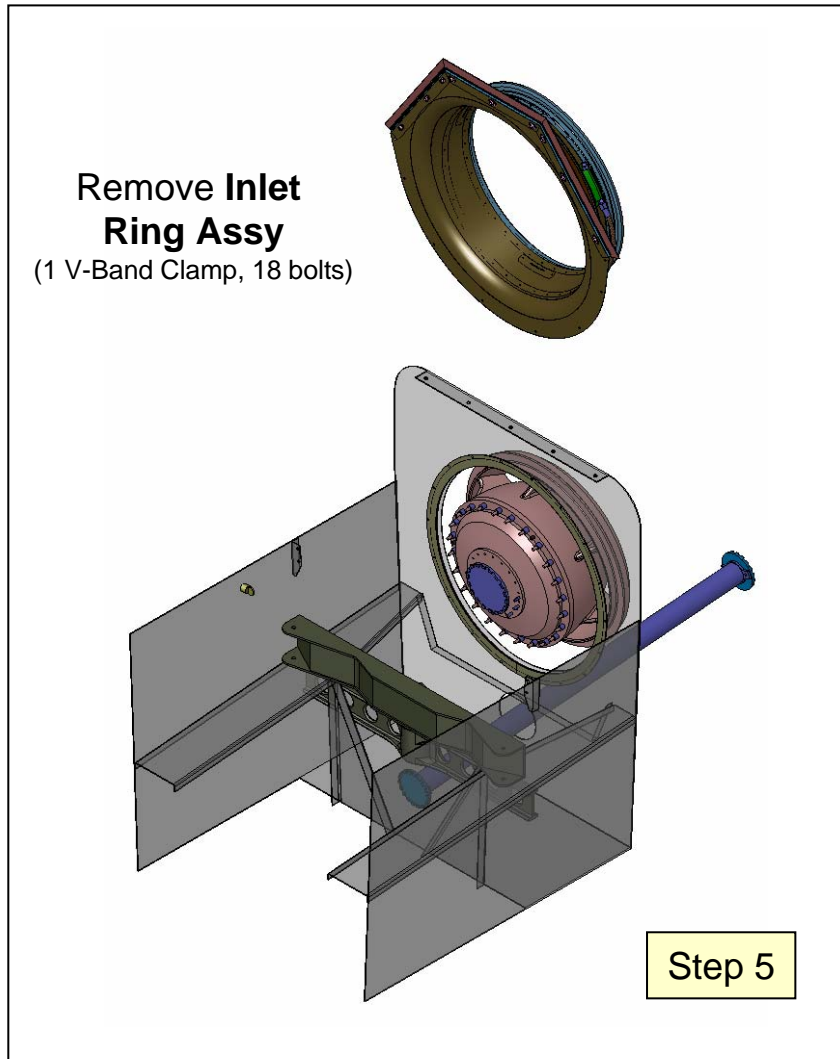
Step 4



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Access and Basic Components



<i>Component</i>	<i>Est. Weight (Lbs.)</i>
4 Filters**	19.6
Upper Plenum Assy	16.1
Upper Inner Duct Assy	1.7
Lower Plenum Assy	6.1
Inlet Ring Assy	7.7
Total	51.2*

*IPS & Drain Weight = 65 lbs

**Weight of dirt not included



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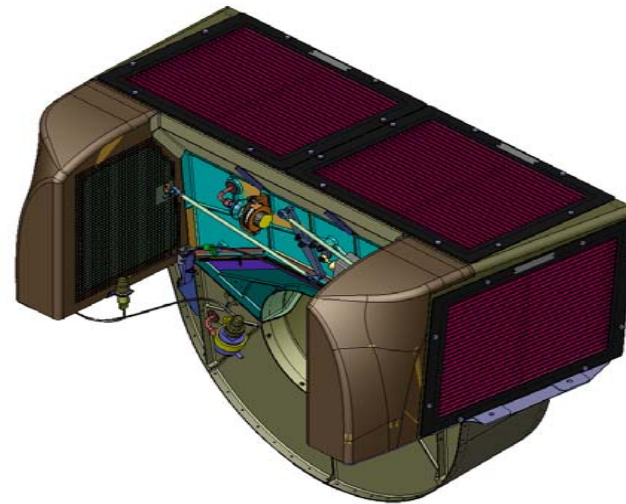


AFS Bell 205/210/UH-1H/Huey II IBF Benefits

- **Proven design based on current IPS interface and AFS IBF technology**
- **Lower drag compared to IPS, tighter mold line**
- **External filters allow easy access for removal and maintenance**
- **Captive fasteners on all filters, interchangeable with NSN OH-58D filter**
- **Impact on inlet performance and distortion negligible or improved, utilize current performance charts**
- **Proven filter technology certified on MD500, Bell 407, Bell 206L3/L4, Bell 206B and military qualified on OH-58D, AH/MH-6, UH-60, CH-47 & AH-64**
- **Provides engine protection from erosion and FOD, improves performance, gives easier access to driveshaft at an economical price**
- **Installation requires very minor modification to aircraft structure**
- **Integral bypass capability, not available with particle separator**
- **On condition filter service cycle, 300 hours or one year, 15 service cycles, 4,500 hour maximum filter life**
- **All weather capability proven on similar design configurations, no issues for flight in rain or falling and blowing snow**



AFS Inlet Barrier Filter (IBF) System Bell 205/210/UH-1H, Huey II



AFS Inlet Barrier Filters Offer:

- ✓ ***Rugged, Efficient, Safe Design***
- ✓ ***Improved Engine Protection***
- ✓ ***Reduced Operating Costs***
- ✓ ***Improved Performance***
- ✓ ***Reduced Maintenance***
- ✓ ***Improved Safety***



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AFS Contact Information

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**Inlet Barrier Filters from AFS:
Install Before Flight.**



www.AFSfilters.com



The AFS Team