



1585 Aviation Center Parkway
 Hangar 804
 Daytona Beach, FL 32114

**MANDATORY
 SERVICE BULLETIN**

MSB-2007-001

Technical Data FAA Approved

- DATE:** August 20, 2007
- SUBJECT:** Installation, Fuel Drip Shield
- MODELS AFFECTED:** All 200HP Mooney M20 Series Aircraft with PFS-16201 exhaust systems installed (Exhaust System Serial Number 089 and below).
 All Diamond DA40 Aircraft with PFS-15102 exhaust systems installed (Exhaust System Serial Number 080 and below).
- TIME OF COMPLIANCE:** Unless already accomplished, at next Annual or 100 hr inspection (whichever comes first), or sooner if practical, but no later than 10/30/2008.
- DESCRIPTION:** Power Flow Systems, Inc. (PFS) tuned exhaust systems are designed to have individual header pipes slip fit into a collector assembly that is located beneath the engine sump. A stainless steel shroud encloses most or all of the collector assembly to provide heat for the aircraft cabin. The heat shrouds on the PFS-16201 and PFS-15102 exhaust systems do not enclose all of the collector tubes. These tubes are physically located beneath the fuel servo on 200HP M20 and Diamond DA40 aircraft. While the lower part of the servo does not contain fuel, there are three fuel lines connected to the top of the servo. The potential exists for one of the fittings to be left loose and leak. A leak in this location could cause fuel to contact unshielded exhaust pipes and may lead to an engine fire.
- CORRECTIVE ACTION:** Power Flow Systems, Inc. has developed two separate solutions for the affected kits. See Applicability Table to determine which kit is used. Alternative Means of Compliance are listed later in this Service Bulletin.

APPLICABILITY TABLE:

Aircraft* / Configuration	SK07-001A	SK07-001B	Replacement P/N ⁺⁺
Mooney M20E, M20F		X	40300
Mooney M20J	X		40300
Mooney M20E, F, and J w/ LoPresti Cowling		X	40300
Diamond DA40		X	41303

*Only applies to aircraft with PFS exhaust systems installed.

⁺⁺ Alternate Means of Compliance

SERVICE KITS:

The following service kits are available to comply with this Service Bulletin:

SK07-001A contains one heat shield (P/N 2002). This aluminum shield, to be attached to the fuel servo will serve as a “drip-pan” to catch any leaking fluids before they could contact an exhaust component. The shield is manufactured in a way that if it were to overflow, would do so safely onto the exhaust shroud, rather than the exhaust tubing.

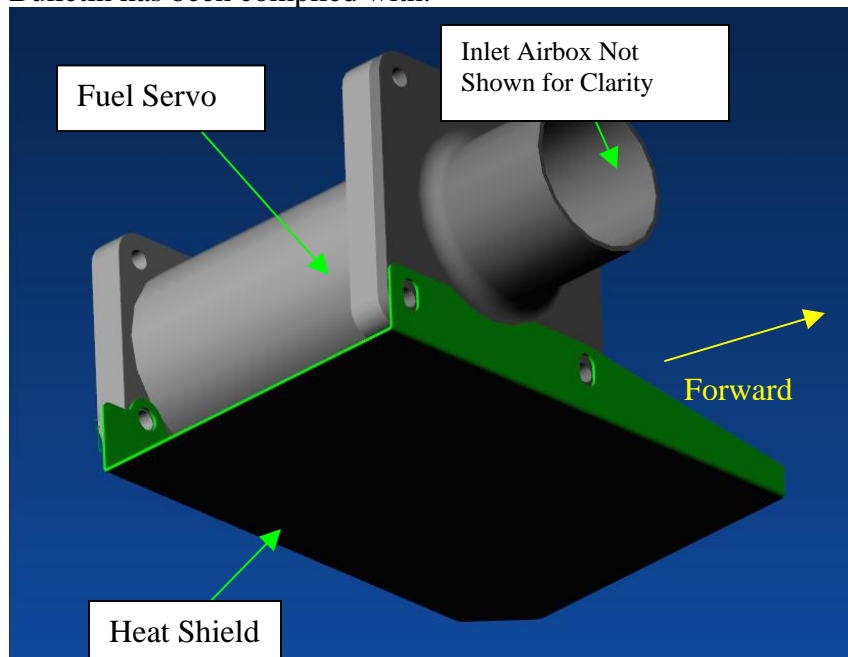
SK07-001B contains one heat shield (P/N 2003) five screws and five Tinnerman clips for installation. This stainless steel shield, to be attached to the collector assembly would effectively extend the existing heat shroud to cover the top and forward portions of the collector tubes. Any fuel leaks would hit this shroud rather than the exhaust tubing.

Both service kits include the latest approved revision of the Exhaust System Installation Instructions and Instructions for Continued Airworthiness and a labor reimbursement form.

INSTALLATION:**SK07-001A
(M20J Only)**

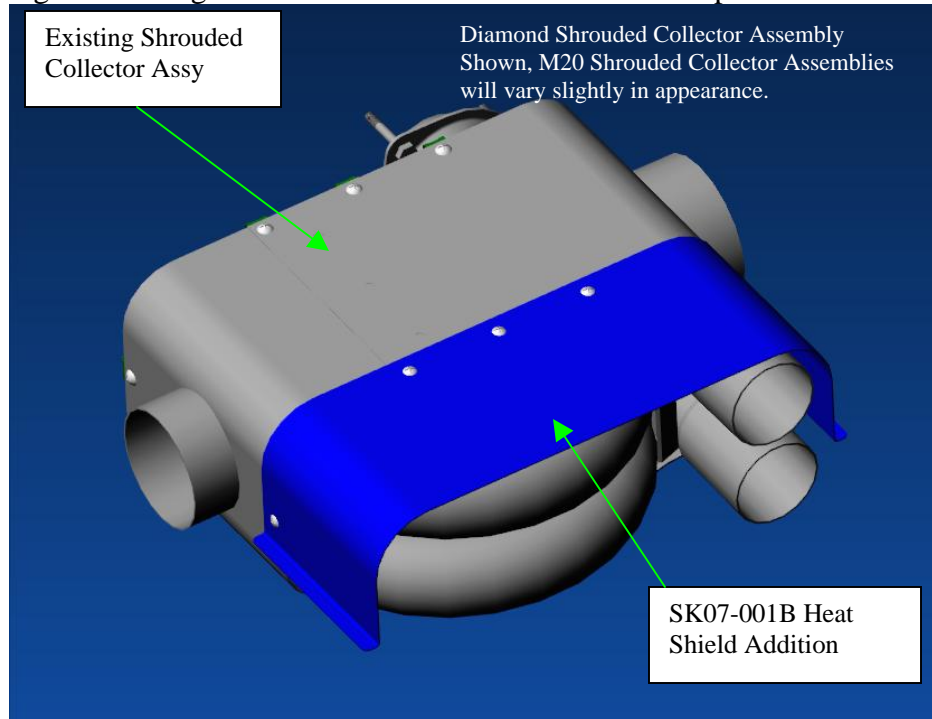
To be accomplished during the next 100hr or annual inspection. It may be easier to install kits when exhaust is removed for inspection (see Instructions for Continued Airworthiness for the installed exhaust system).

Install heat shield to bottom of fuel servo using two forward and one aft attach bolts as shown. If equipped with a ram-air door, the ram-air actuating cable may need to be rerouted slightly for clearance. Torque and Safety in accordance with the latest approved revision of the applicable Mooney Service Manual. Make an entry in the airframe logbook stating that this Service Bulletin has been complied with.



SK07-001B
(All Others)

To be installed when re-installing the cabin heat shroud during the next 100hr or annual inspection (see Instructions for Continued Airworthiness for the installed exhaust system). Install heat shield using three top fastener locations and forward and rear fastener locations as shown (note that the collector assembly may vary slightly in appearance). Make an entry in the airframe logbook stating that this Service Bulletin has been complied with.



RELATED DOCUMENTS: Kit PFS-16201 Installation Instructions and Instructions for Continued Airworthiness, Report # PFS-16150-00 Rev B or later.
 Kit PFS-15102 Installation Instructions and Instructions for Continued Airworthiness, Report # PFS-15250-00 Rev C or later.

PRICING INFORMATION: One Service kit will be provided to each affected customer free of charge. Installation labor allowance up to 1.0 hours not to exceed \$75.00 / hr is also available. Customers may receive this labor reimbursement by mailing or faxing a signed logbook entry showing compliance with this Service Bulletin to Power Flow Systems, Inc. along with a completed labor reimbursement form located at the back of this Service Bulletin.

**ALTERNATE MEANS
 OF COMPLIANCE:**

This service bulletin may also be complied with by replacing the existing heat shroud subassembly with the latest approved revision of the heat shroud subassembly or shrouded collector assembly, as the heat shields are integrated therein. For PFS-16201, use P/N 40300 Rev IR or Later. For PFS-15102, install shrouded collector, P/N 41303 Rev IR or Later. There is no labor allowance for any alternate means of compliance. Replacement heat shroud subassemblies may not be available at the time of this service bulletin release.

Please contact Power Flow Systems, Inc. to obtain a service kit or additional information

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