

SERVICE No. 759 BULLETIN

Modification FAA Approved

June 22, 1983

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Subject: Exhaust muffler inspection and modification, Piper Part Number 12433-00, 12433-14, 12232-00.

Models Affected: PA-18 Series Super Cub

Serial Numbers Affected: 18-1 through 18-8109031, 18-8109033 through 18-8309025

Compliance Time: At next scheduled 100 hour or annual inspection whichever comes first.

Purpose:

It has been determined that if the internal baffle in the mufflers of the above referenced aircraft fails, a restriction of the muffler outlet may occur. The resulting engine power loss may be enough to prevent continued flight.

This Service Release contains instructions for the installation of a wire bale assembly, Piper Part Number 452-093, to prevent blockage of the tailpipe should a baffle failure occur.

Instructions:

1. Remove top, sides, and bottom engine cowling panel assemblies.
2. Disconnect tachometer shaft at the engine and vacuum pump hose at the firewall if installed, remove hose from muffler to the cabin heat box.
3. Remove upper and lower right engine mount attach bolts (AN-16) at "U" bracket on firewall to allow engine to swing to the left.
4. Disconnect any remaining lines, wires or hoses that may prevent the engine from swinging to the left and then carefully swing engine enough to allow removal of muffler.
5. Remove right side exhaust stack header.
6. Disconnect air hoses and remove muffler attaching hardware on left side exhaust stack then carefully rotate and pull muffler assembly out to the right side of engine.

Note: On PA-18-95 model aircraft with left side stack and muffler welded together, the left side stack must also be disconnected from engine to allow removal of muffler.

7. Remove shroud from muffler assembly and comply with AD 68-05-01.
8. Drill two 1/4 inch (.250) holes through the tailpipe as shown in the following sketch.
9. Install bale assembly, Piper Part Number 452 093 into tailpipe, curved end toward the muffler until contact is made with the internal baffle. The deflector must be installed so that the opposing legs cover the four holes that have been previously drilled.

Note: A 3/4 inch square x 18 inch long stick of wood or 3/4 inch diameter x 18 inch long metal tube may be fabricated into a special tool to twist the deflector if necessary after installation to locate two of the legs directly inside the 1/8 inch holes in the tailpipe. (See sketch).

10. Rosette weld by suitable method the bale through the four 1/4 inch holes in tailpipe.
11. Reassemble muffler assembly and reinstall on aircraft. Install exhaust system components and reconnect any lines, wire, and hoses that were removed. Attach engine properly and reinstall engine cowling that was removed.
12. Make appropriate log book entry stating compliance of this Service Release.

Material Required:

One (1) each per aircraft, Muffler Bale Assembly, Piper Part Number 452 093.

Availability of Parts:

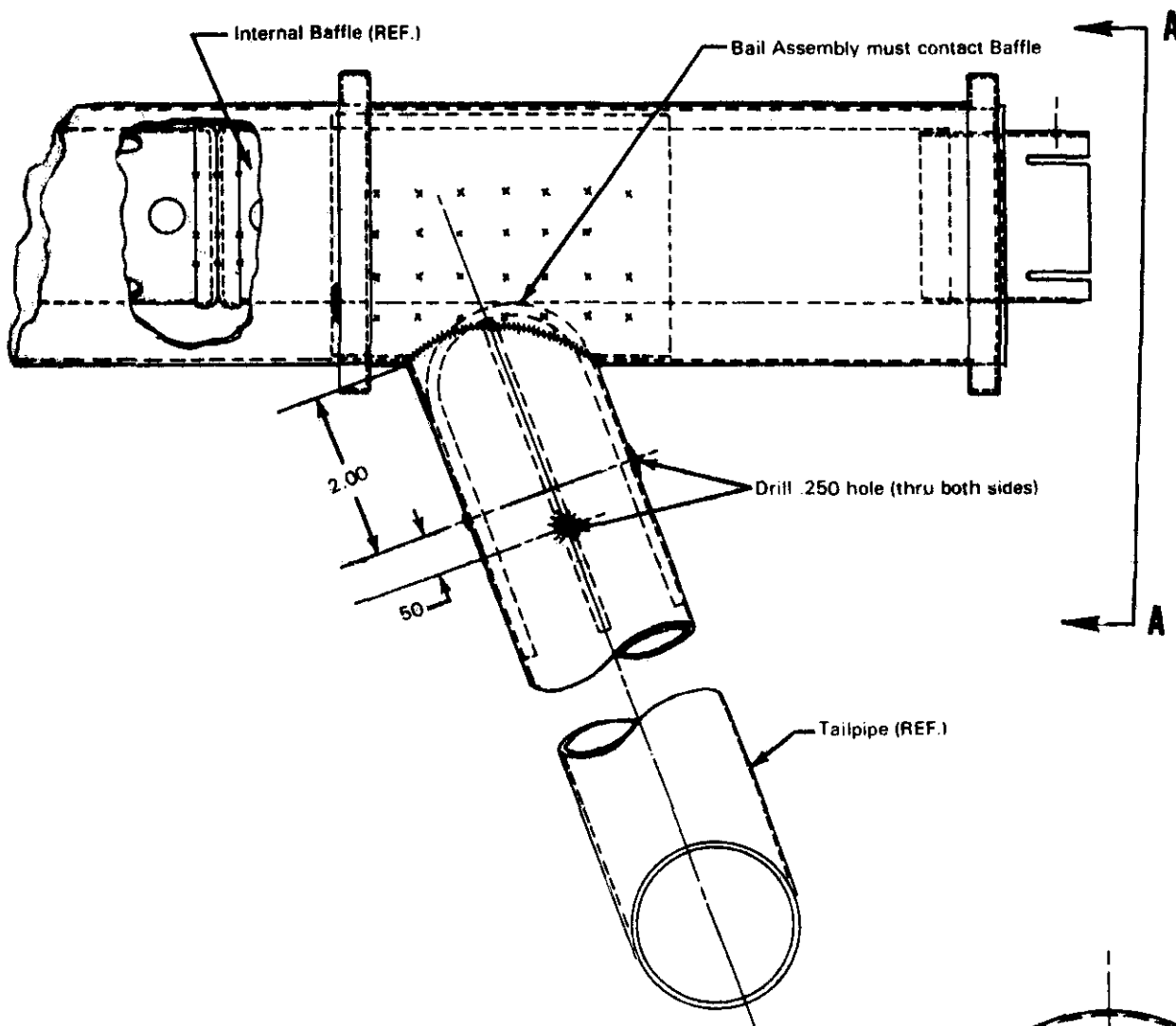
Your Piper Field Service Facility.

Effectivity Date:

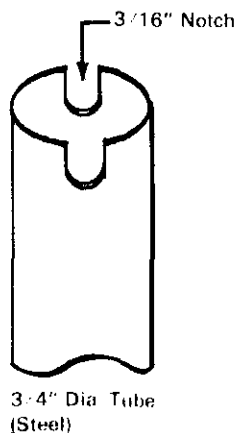
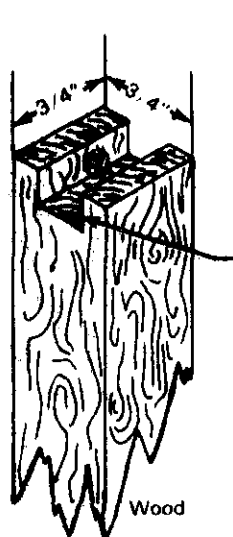
This Service Release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to arrange for compliance with the provisions of this Service Release in accordance with Compliance Time, above.



SPECIAL TOOLS FABRICATION DETAIL



Muffler (REF)

Rosette Weld (4 Required)

Bail Assembly (P/N 452 093)
(Should Be A Light Press Fit With The Four Rods Making Contact With Inside Wall Of Tailpipe. Slight Reshaping May Be Required)

VIEW A-A