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SERVICE KIT NUMBER SK-105

DATE: May 28, 1969
 SUBJECT: Engine Cooling System Modifications
 MODELS AFFECTED: AA1-0001 through AA1-0108, AA1-0110 through AA1-0115
 WEIGHT & BALANCE CHANGE: Negligible

Parts List - Service Kit Number SK-105-1 (AA1-0074 through AA1-0115)

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	500008-502	Baffle Assy
1	500008-502	Baffle Assy
1	502028-501	Baffle Assy
1	502029-501	Baffle Assy
1	502030-1	Baffle
1	102370-1	Cuff
1	102370-2	Cuff
16	1601-0410	Rivet
1	AN500-416-6	Screw
1	AN936A-416	Washer
13	A1181-6Z-1	Nut
13	AES-1021Z6-6	Screw
1	16-500008	Field Modification Instructions

Parts List - Service Kit Number SK-105-2 (AA1-0001 through AA1-0073)

NOTE: This Kit includes all parts listed in SK-105-1 plus the following.

1	502006-501	Baffle Assy
1	502007-501	Baffle Assy

Description of Modification

1. Removal of both front and both rear baffle assemblies (AA1-0074 through AA1-0115). Removal of both front, both rear, and both side baffles (AA1-0001 through AA1-0073).
2. Installation of replacement baffles. Addition on one new baffle and firewall cuffs.

Modification Instructions - Removal

1. Remove upper and lower engine cowling.
2. Disconnect the four upper spark plug lead wires and pull through rear baffles after first removing grommets.

3. Loosen clamp holding blast tube and remove blast tube from rear baffle.
4. Remove cotter pins from straps holding rear baffles against rear cylinders, and completely remove strap assemblies.
5. Detach both rear baffles from engine by removing nine (9) sheet metal screws and nuts. Do not remove center support which holds left-hand baffle in position.
6. Loosen upper and lower breather flex tube clamps, and remove flex tube.
7. Detach both front baffles from engine by loosening clamp holding cabin heat flex hose and removing four (4) sheet metal screws and nuts, one (1) 1/4-20 screw, and one (1) 5/16-18 starter attach bolt (located under left-hand front baffle).
8. NOTE: This step applies to Serial AAL-0001 through AAL-0073 only. Remove the eight (8) 1/4-20 screws holding side baffles to cylinders and detach side baffles from engine.

Modification Instructions - Installation (Ref. Drawing 500008)

1. Install new inner cylinder baffle (Part No. 502030-1) between No. 2 and No. 4 cylinders and secure to No. 2 cylinder by installing AN500-416-6 screw and AN936A-416 washer in upper hole. For ease of installation, remove paint from screw hole before installing.
NOTE: Aircraft Serials 0074 through 0115 will require removal of one side baffle screw from No. 4 cylinder before inner cylinder baffle can be installed. Reinstall screw after assembly.
2. NOTE: This step applies to Serial AAL-0001 through AAL-0073 only. Install both side baffles supplied in SK-105-2 locating longer baffle assembly on left-hand side and secure by installing eight (8) 1/4-20 screws and washers.
3. Position both new rear baffles and secure nine (9) places using the AES-1021Z6-6 screws and A1181-62-1 nuts supplied with the Service Kit.
4. Position rear baffle holding straps through slots in baffle and secure with cotter pin. Check to make sure that chafe strip is located between push rod tube and strap.
5. Reinstall blast tube through left-hand rear baffle. Position blast tube so that cooling air is directed at the junction of the thermister and oil screen housing, and tighten clamp located at oil temperature thermister.
6. Feed spark plug leads through grommets and assemble to their respective plugs. Install plug wire grommets in baffles.
7. Install both front baffles and secure using four (4) AES-1021Z6-6 screws and four (4) A1181-62-1 nuts supplied in the Service Kit. Also reinstall one (1) 1/4-20 screw (with washers) and one (1) 5/16-18 starter attach bolt (located under left-hand front baffle).

8. Feed crankcase breather tube through left-hand front baffle, assemble to fittings, and tighten clamps.
9. Install cabin heat flex hose to tube on right hand baffle assembly and secure with clamps.
10. Locate two cuffs (Part No. 102370-1 and 102370-2) on lower firewall edge per Drawing 500008 and match drill 16 No. 29 holes x 1/4 deep through pilot holes in cuffs into firewall and floor panels.

NOTE: Do not drill through inside surface of honeycomb firewall and floor panels.

Rivet the cuffs in place using sixteen (16) 1601-0410 rivets supplied with the Service Kit. These rivets can be set with a "pop" rivet tool (United Shoe Machinery No. PRG410 or equivalent).

11. Check all baffle assemblies for close fit around cylinders and that front seals clear ring gear.
12. Install cowlings making sure all baffle seals are forced inward after upper cowling is installed.

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