



# サービス 通信

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西新宿1-7-2 (スバルビル)

NO : FAS-066B

DATE : May 20, 1972

REV. "A", November 14, 1972

Rev. "B", September 15, 1974

1. SUBJECT : Installation of Oil Separator (Engine Breather).
2. AIRCRAFT AFFECTED : All FA-200-180 Series Aircraft.
3. PRIORITY : Desirable.
4. REASON : To prevent excessive oil loss from the engine breather when a negative g is maintained during acrobatic flight.
5. DESCRIPTION : This modification includes rework of the firewall, installation of an oil separator and change of the engine breather tubing.
6. ACCOMPLISHMENT : Optional.
7. APPROVAL : JCAB Approval (NO-TOKYO-077) July 16, 1974.  
This modification will be a minor alteration and subject to the Aircraft Administration rework inspection.
8. PARTS REQUIRED : The following parts are required to perform the modification.

PART NO.	PART NAME	QTY
AN833-12D	ELBOW	1
AN924-12D	NUT	1
MS28778-12	"O" RING	1
203-914146-051	OIL SEPARATOR	1



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8. PARTS REQUIRED : (cont.)

PART NO.	PART NAME	QTY	
AN3-3A	BOLT	4	
AN960D10	WASHER	4	
AN919-15D	REDUCER	1	B
MS28778-8	"O" RING	1	
SRC79-10-0230	HOSE	1	
MS20822-10D	ELBOW	1	B
MS21919DG8	CLAMP	1	
AN960D8	WASHER	1	
AN737RM-38	CLAMP	2	
F-0454-12050	HOSE	2	
200-914131-129	TUBE ASSY	1	
200-914131-127	TUBE ASSY	1	
MS21919DG12	CLAMP	2	
MS35206-246	SCREW	2	B
NAS679A08W	NUT	2	
AN837-4D	ELBOW	1	
203-914145-003	BRACKET	1	
203-914145-005	BRACKET	1	
MS20470AD4	RIVET	AR	
CEMEDINE #540	ADHESIVE	AR	

9. SPECIAL TOOL : None required.

10. WEIGHT AND BALANCE : Installation of the oil separator results in a weight change as follows:

Change in weight: Plus 0.8 Kg  
Arm: STA1370 (mm)

11. REFERENCE : Not applicable.

12. MANHOUR REQUIRED : 4.0 Manhours required.

13. DETAILED INSTRUCTIONS:

- (1) Remove the upper cowling in accordance with Service Manual, para. 4-3-1.
- (2) Remove the co-pilot seat in accordance with Service Manual, para. 7-7-1.
- (3) Modify the front side of the firewall as shown in Figure 1. Remove insulation sufficiently to obtain access to the work area. Remove bolt (A), AN5-7A, and reinstall the bolt to secure the bracket, 203-914145-005.
- (4) Loosen two clamps, MS21919DG12, and two clamps, AN737RM38, and remove engine breather tube, 200-914131-003, and hose, F-0454-12038. (See Figure 2, Area B.)
- (5) Using four bolts, AN3-3A, and four washers, AN960D10, attach oil separator, 203-914146-051, to the brackets installed in the above step (3).
- (6) Install elbow, AN833-12D, on the top of the oil separator with "O" ring, MS28778-12, and nut, AN924-12D.
- (7) Install reducer, AN919-15D, on the bottom of the oil separator with "O" ring, MS28778-8.
- (8) For aircraft with manifold pressure gage installed, remove tee, AN804-4D, and cap, AN929-4, from the firewall, and install elbow, AN837-4D, in place. (See Figure 2, Area E.)
- (9) Connect tube, 200-914131-127, to the elbow on the top of the oil separator. Drill out the existing rivet on the firewall at indicated C area, and, after enlarging the hole to 170/174 inch diameter, install clamp, MS21919DG12, with screw, MS35206-246, and nut, NAS679A08W.
- (10) Connect the above tube, 200-914131-127, and the breather fitting with hose, F-0454-12050, and secure with the two clamps, AN737RM38, removed in the previous step (4).

- (11) Replace plug, STT-351, at R/H oil sump drain port (Figure 2, Area D) with elbow, MS20822-10D.
- (12) Install hose, SRC79-10-0230 between the reducer attached in step (7) and the above elbow.
- (13) Attach hose, F-0454-12050, to the oil separator fitting, connect tube, 200-914131-129, and then secure with two clamps, AN737RM38.
- (14) Install tube, 200-914131-129, with the two clamps, MS21919DG12, removed in the previous step (4).
- (15) Attach tube, 200-914131-129, to the vacuum pump drain tube with clamps, MS21919DG12 and MS21919DG8, screw, MS35206-246, nut, NAS679A08W, and washer, AN960D8 (See Figure 2, Area E).
- (16) Bond the stripped insulation to the firewall with Cemedine #540.
- (17) Reinstall the co-pilot seat.
- (18) Reinstall the engine upper cowling.

14. INSPECTION OF OIL SEPARATOR SYSTEM

Every 50 hours, inspect oil separator system as follows:

- (1) Inspect oil separator for damage and security.
- (2) Inspect oil separator line for damage and security.
- (3) Check system for leakage.

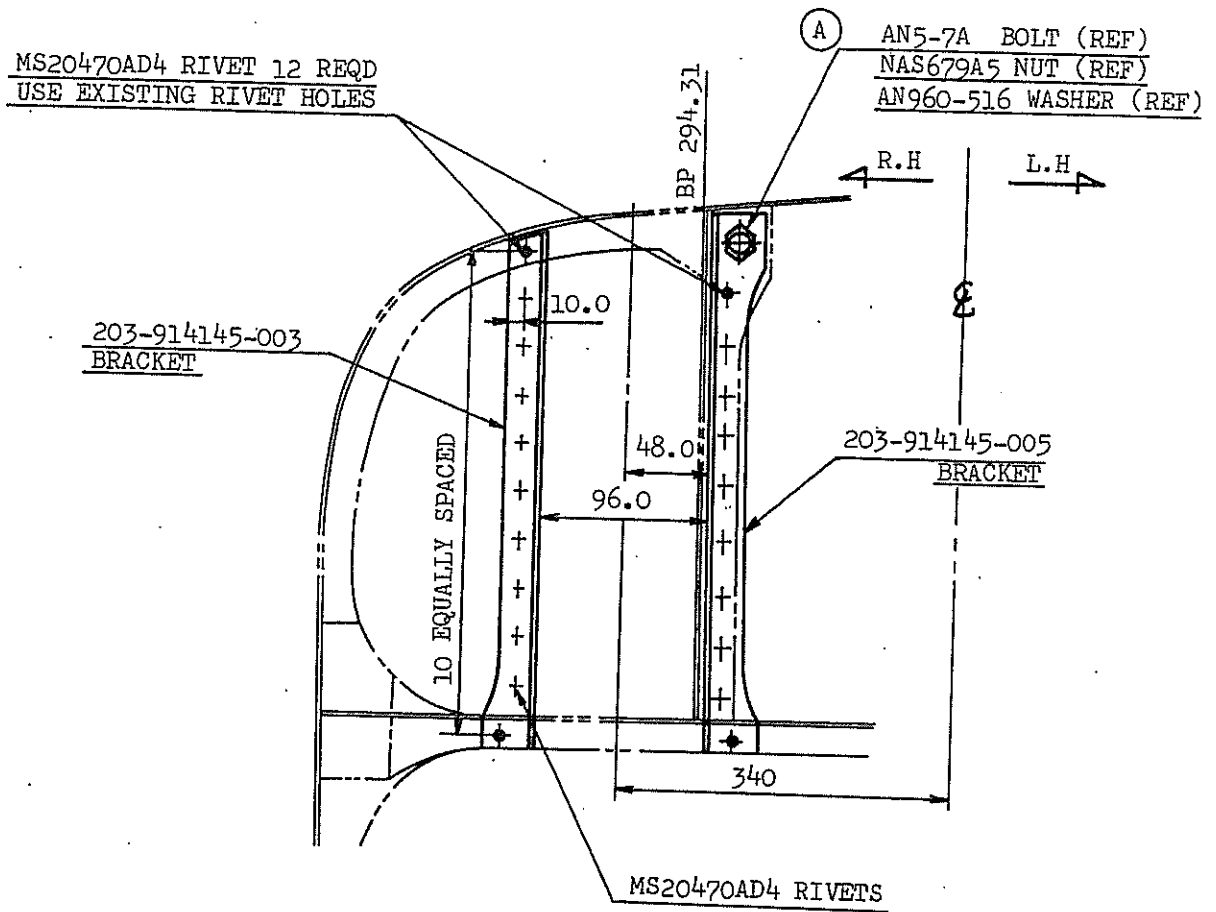


FIGURE 1. INSTALLATION OF BRACKETS ON FIRE WALL  
(VIEW LOOKING AFT)

.174 DIA HOLE (DRILL OUT EXISTING RIVET IN FIREWALL)  
 .170

MS21919DG12 CLAMP  
 MS35206-246 SCREW  
 NAS679A08W NUT

AN737RM38 CLAMP 2 REQD  
 AN855-12D ELBOW  
 AN924-12D NUT  
 MS28778-12 "O" RING

O540-12038 HOSE (OLD)  
 O540-12050 HOSE (NEW)

AN737RM38 CLAMP 2 REQD  
 (REUSE)

REMOVE 200-914131-003  
 WEATHER TUBE

ADDED)  
 S21919DG12 CLAMP 1 REQD  
 S21919DG8 CLAMP 1 REQD  
 S35206-246 SCREW 1 REQD  
 AS679A08W NUT 1 REQD  
 N960D8 WASHER 1 REQD

200-914131-129  
 TUBE ASSY

VACUUM PUMP DRAIN TUBE

200-914131-127  
 TUBE ASSY

BREATHER FITTING

F-0454-12050 HOSE

(OLD) LINE

MS20822-10D ELBOW  
 REMOVE PLUG (R.H)  
 LYC P/N STD-551

203-914146-051  
 OIL SEPARATOR  
 AN3-3A BOLT 4 REQD  
 AN960D10 WASHER 4 REQD  
 MS28778-8 "O" RING  
 AN919-15D REDUCER 1REQD

SRC79-10-0230 HOSE  
 (NEW) LINE

ENGINE COMPARTMENT VIEW LOOKING FWD

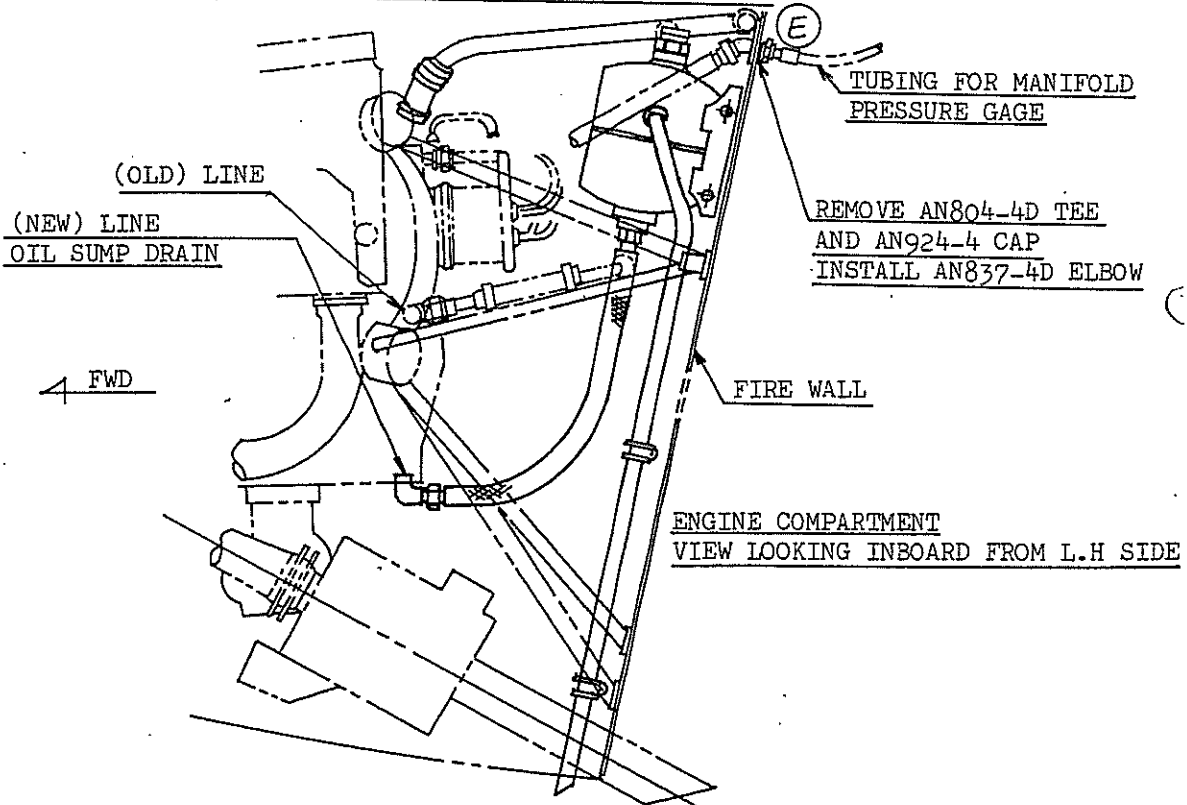


FIGURE 2. INSTALLATION OF OIL SEPARATOR