

LIST OF OVERHAUL MODIFICATIONS
WASP R985-AN5 AND AN14B ENGINES

(This EO replaces EO 10A-10AA-6B dated 18 Sep 64)

TABLE OF CONTENTS

EO NO	DATE OR MOD DATA	DESCRIPTION	OVERHAUL CLASS	LEAFLET ISSUED
10A-10AA-6B/1	SB598	(Deleted Refer to EO 10A-10AA-3A)		
/2	SB569	(Deleted Refer to EO 10A-10AA-3A)		
/3	SB633 Rev. A	(Deleted Refer to EO 10A-10AA-3A)		
/4	SB683	Starter Jaw Washer	B	No
/5	SB723 Rev. 5	(Deleted Refer to EO 10A-10AA-3A)		
/6	SB 1488 & Rev. C Supp 1	Crankshaft Threads	A	No
/7	SB871	(Deleted Refer to EO 10A-10AA-3A)		
/8	SB525 Supp.	(Rescinded)		
/9	SB1097	(Deleted Refer to EO 10A-10AA-3A)		
/10		Cancelled		
/11	SB 1658	Incorporation of Plain Type Impeller Bearings (applies to R985-AN14B Engines only)	B	No
/12	SB 1671	Cam Reduction Gears	B	No
/13	SB 823	Rockerbox, Drainage (applies to R985-AN5 only)	B	No

EO 10A-10AA-6B

EO NUMBER	DATE OR MOD DATA	DESCRIPTION	OVERHAUL CLASS.	LEAFLET ISSUED
10A-10AA-6B/14	SB 858	Master Rod Bearing (applies to R985-AN5 Engine Only)	B	No
/15	SB 1266	Lip Type Magneto Drive Seals (applies to R985-AN5 only)	B	No
/16	SB 1364 Rev. B	Crank Shaft Front Plugs (applies to R985-AN5 only)	B	No
/17	24 Sep 63	Installation of Heavy Duty Piston Pins	B	Yes
*	/18 24 Mar 66	Rework of Front Case and Studs Assembly		Yes

*Asterisks appearing opposite entries denote changes since last issue.

ISSUED ON AUTHORITY OF THE CHIEF OF THE DEFENCE STAFF

MODIFICATION

REWORK OF FRONT CASE AND STUDS ASSEMBLY

EQUIPMENT AFFECTED: P&W R985-AN14B engines
 TRAINING AIDS AFFECTED: None
 BY WHOM WORK WILL BE PERFORMED: Overhaul Contractors
 WHEN WORK WILL BE PERFORMED: At Overhaul
 RCAF FORM ENTRIES: L14-6B
 MODIFICATION OF SPARES IN STOCK: NA

PURPOSE

1 To provide improved sealing at the parting face, between front case and stud assembly and front main crankcase. The front case is reworked to permit the incorporation of a groove around case to crankcase oil drain hole to accommodate an "O"-ring packing.

MODIFICATION DATA

2 This modification will be incorporated as follows:

- (a) At overhaul, rework front case and stud assembly, Part 109722 or 39487, as follows:
 - (1) Machine a groove at the location and to the dimensions shown in Figure 1.
 - (2) Install "O"-ring packing.
- (b) Identification of Reworked Parts - Reworked front case and stud assemblies will be identified by marking /SB1767 after the part number.

PARTS REQUIRED

3 The following parts are required:

RCAF REF.	PART	DESCRIPTION	QTY.
	*39487/SB1767	Case and studs assembly	1
	*109722/SB1767	Case and Studs assembly	1
	431176	Packing	1

* Obtained by rework of old parts

PARTS RENDERED SURPLUS OR OBSOLETE

4 Nil.

**RELEASE IS AUTHORIZED
BY ENGINEERING**

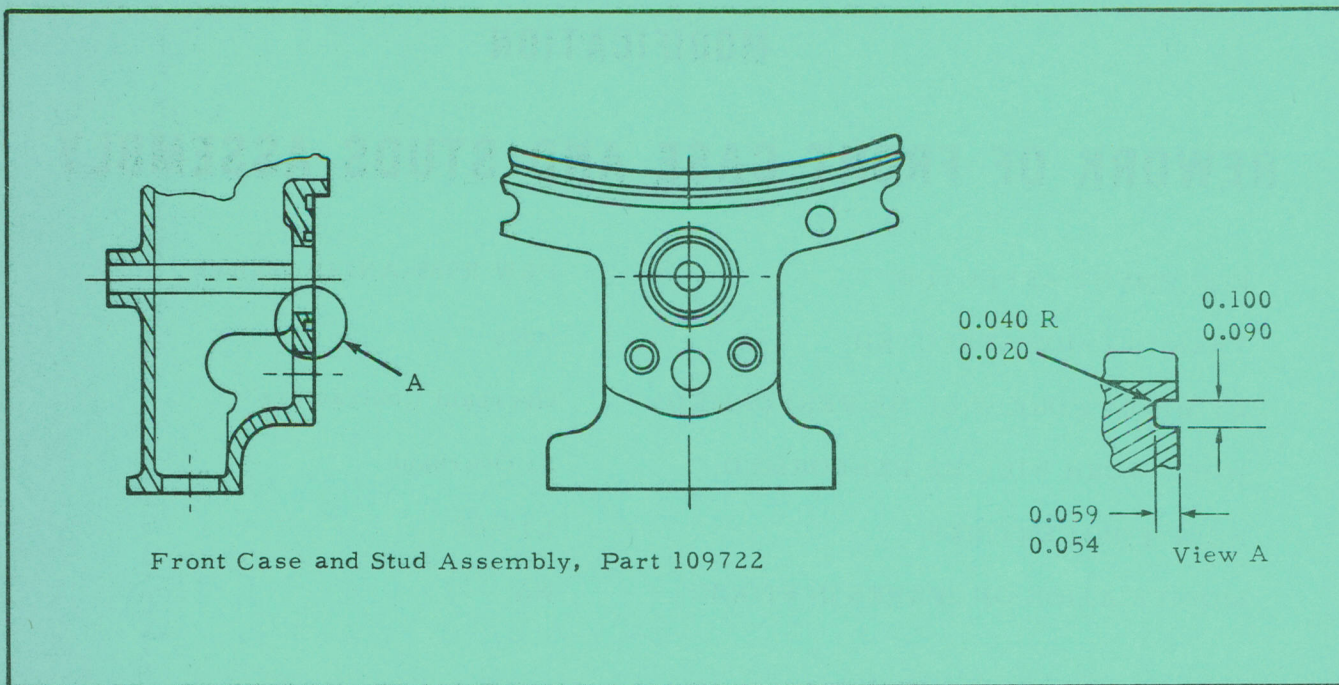


Figure 1 Rework of Front Case and Stud Assembly, Part 39487 or 109722

WEIGHT, LOADING OR BALANCE DATA

5 There is no change in the weight or center of gravity due to this modification.

ADDITIONAL DATA

6 The following additional data applies:

- (a) This modification is a re-write of Pratt & Whitney Service Bulletin #1767.
- (b) Effectivity Date: Date of publication of this EO.

ISSUED ON AUTHORITY OF THE CHIEF OF THE DEFENCE STAFF

Prepared by:
MATCOM/SAMO/PA5

MODIFICATION

INSTALLATION OF HEAVY DUTY PISTON PINS

EQUIPMENT AFFECTED: R985-AN14B, AN5 Engines

BY WHOM WORK WILL BE PERFORMED: Contractor

WHEN WORK WILL BE PERFORMED: Overhaul

RCAF FORM ENTRIES: L14-6B

MODIFICATION OF SPARES IN STOCK: NA

PURPOSE

1 To improve the durability of the piston pins, in particular their resistance against the effects of corrosion on the inside diameter.

MODIFICATION DATA

2 This modification will be incorporated as follows:

(a) At overhaul, install a heavy duty piston pin assembly Part 354954, in place of Part 234221 or 31795 in each of the nine pistons in accordance with EO 10A-10AA-3.

NOTE

Heavy duty piston pin assemblies are not to be used interchangeably with other piston pin assemblies in individual pistons, but must be installed as a complete set in an engine.

When the heavy duty piston pin assemblies are installed, the crankshaft assembly must be reworked to incorporate two compensating counterweights Part 395645, on the front inner cheek, as shown in Figure 1. Lockwire the bolts which secure the counterweights, using AS10029 wire. Incorporation of the counterweights does not require rebalancing of the crankshaft.

PARTS REQUIRED

3 The following parts are required:

RCAF REF.	PART	DESCRIPTION	QTY.
36P	354954	Pistonpin, Assembly	9
36P	395645	Counterweight	2
28	AN104017	Bolt	4

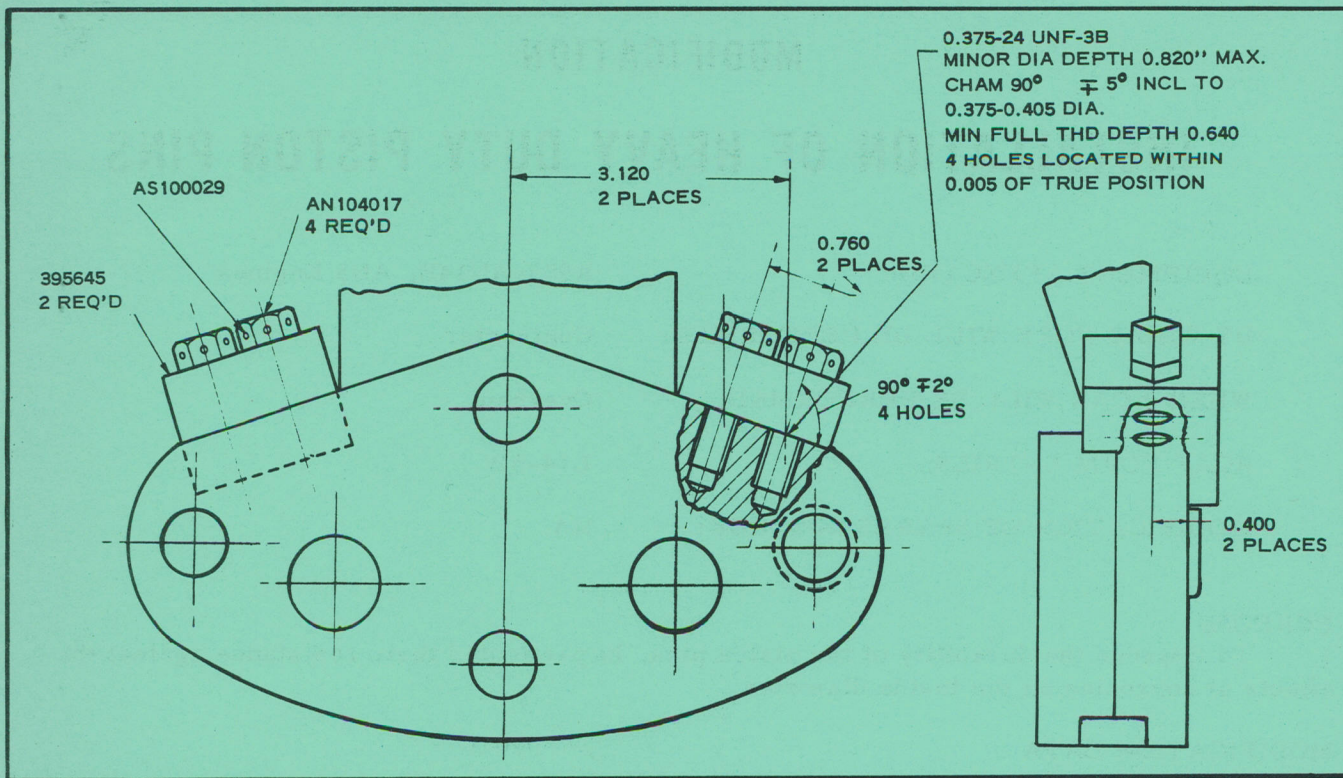


Figure 1

PARTS RENDERED SURPLUS OR OBSOLETE

4 Items removed as a result of this modification are of no further use to the RCAF. Serviceable items in stock are required.

RCAF REF.	PART	DESCRIPTION	QTY.
36P	234221	Piston pin, Assembly	9

WEIGHT, LOADING AND BALANCE DATA

5 Effect on weight and C of G is negligible.

ADDITIONAL DATA

6 The following instructions are to apply to Field Units when replacing cylinder kits on R985 engines:

(a) If, during a cylinder change, it is found that the engine incorporates heavy duty piston pins Part 354954, the piston pin, in the affected cylinder, if serviceable, should not be replaced by the lighter piston pin Part 234221, supplied in the cylinder kit. If the heavy duty piston pin, in the affected location is found to be unserviceable, piston pin Part 234221 may be installed. However, due to the weight difference between the heavy duty piston pins Part 354954 and the superseded parts, not more than two of the lighter piston pins Part 234221 are to be installed in an engine incorporating the heavier pins.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

Prepared by:
AMC/SAMO/PA1

INDICATE DEGREE OF PRECEDENCE	FOR MESSAGE CENTRE USE ONLY	
OPERATIONAL IMMEDIATE		
PRIORITY		
ROUTINE		
IF NOT MARKED WILL BE TRANSMITTED DEFERRED	FROM	
BOOK MESSAGE	TO	

✓ W. E. ROBINSON - INFO
PLATOCKI - INFO
R. E. LER - INFO

GR UNCLAS

10 TSU LINCOLN PARK ALTA

1001 TSD BAE W VANCOUVER	1006 TSD SAE WINNIPEG
1002 TSD NWI EDMONTON	10 TSU DET WINNIPEG AREA
1004 TSD MBA WINNIPEG	1003 TSD CPA(R) LINCOLN PARK
1005 TSD TCA WINNIPEG	

INFO

ORIGINATOR'S NO.

7910 7 OCT 54.

R2/15/4 AS LISTED IN EO 10A-10AA-6B/1 IN ERROR AMEND TO READ
R2/15/4. PRATT AND WHITNEY SERVICE BULLETIN 598 COVERS. FOR
1002 TSD YOUR T162 DATED 22 SEPT REFERS.

*J. Smith
see amend EO
and return signal
for file.*

ORIGINATOR	TELEPHONE	DATE - TIME GROUP	FILE NO.
		Z	MBA SAE 1210

AMEND
FO 10A-10A-6511

MESSAGE FORM
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INDICATE DEGREE
OF PRECEDENCE

OPERATIONAL
IMMEDIATE

PRIORITY

ROUTINE

IF NOT MARKED
WILL BE
TRANSMITTED
DEFERRED

BOOK MESSAGE

UNCLAS

GR

✓ WE 508.424 info
4/14/00 info
R 5:55 info

FROM

TO

1007 TSD TGA WINNIPEG
1004 TSD MSA WINNIPEG
1002 TSD NMI KIMMERTON
1001 TSD BAE W VANCOUVER
1006 TSD BAE SAN WINNIPEG
1003 TSD CPA(R) LINCOLN PARK

INFO

ORIGINATOR'S NO.

1007 1 007 54

1007 TSD YOUR TGS DATED 22 SEPT 1998.
10/25/98. PRATT AND WHITNEY SERVICE BULLETIN 598 COVERS. FOR
10/25/98 AS LISTED IN NO 10A-10AA-6511 IN ERROR AMEND TO READ

Handwritten notes:
1007 TSD
1004 TSD
1002 TSD
1001 TSD
1006 TSD
1003 TSD

ORIGINATOR

TELEPHONE

DATE - TIME GROUP

FILE NO.

MM 548 1570

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