

International Aero Engines

SERVICE BULLETIN

STARTING - PNEUMATIC STARTER - INTRODUCTION OF A NEW STARTER TRANSMISSION HOUSING TO INCREASE OIL LEVELS - CATEGORY CODE 7 - MOD.ENG-80-0007

1. Planning Information

A. Effectivity

(1) Aircraft : Airbus A320

(2) Engine : V2500 - A1

(3) Pneumatic starters : Units which do not bear the identification

L11 on the mod. plate.

B. <u>Concurrent Requirements</u>

See Sumitomo Service Bulletin 80-2508

C. Reason

(1) Condition

The quantity of oil in the pneumatic starter is not ideally suited to its operation.

(2) Background

A number of measures have been taken to increase the starter motor oil level. Changes were made to increase the height of the filler and overflow tubes. These alterations are now to be made more permanent by the introduction of a new starter transmission housing.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin are designed to maintain unit reliability.

(4) Substantiation

The changes introduced by this Service Bulletin have been shown by extensive rig testing to alleviate the problem.

(5) Effect of Bulletin on Workshop Procedures

None

(6) Supplemental information

None

V2500-ENG-80-0007



D. <u>Description</u>

- (1) The modification contained in Sumitomo Service Bulletin 80-2508 provides a permanent increase to the starter oil capacity.
- (2) Units incorporating this modification will be identified by endorsement of the mod. plate with L11.

E. Approval

The part number changes shown in paragraph 3 of this Service Bulletin have been sanctioned under a product development/control system that has been approved by the D.G.A.C. (Direction Generale de l'Aviation Civile - France).

F. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

G. References

(1) Internal Reference No.

EC91VR002

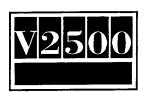
(2) Other References

A320 Aircraft Maintenance Manual.

Sumitomo Service Bulletin 80-2508.

H. Other Publications Affected

- (1) IAE V2500 Illustrated Parts Catalog, Chapter/Section 80-13-41.
- (2) IAE V2500 Engine Manual, Chapter/Section 71-00-00, Servicing-01.



International Aero Engines

SERVICE BULLETIN

2. Accomplishment Instructions

- A. Incorporate the intent of Sumitomo Service Bulletin 80-2508.
- B. Recording Instructions
 - (1) A record of accomplishment is necessary.



3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
790425-2	1		Starter, Pneumatic	790425-2	(S1)(A)(B)
(80-13-41)	ı		Starter, Friedmatic	(01-200)	(31)(A)(B)
(80-13-41)	1		Packing, Preformed	720752-9 (01-288)	(1D)(B)
MS9954-07 (80-13-41)	1		Plug, Blank	MS9954-03 (01-290)	(S1)(1D)(S3) (A)(B)
720752-74 (80-13-41)	1		Ring, Sealing	720752-14 (01-308)	(S1)(1D)(S3) (A)(B)
- (80-13-41)	1		Adapter	806217-1 (01-310)	(1D)(B)

C. <u>Instruction/Disposition Code Statements:</u>

- (S1) New parts coded (S1) must replace old parts coded (S1) as a complete set.
- (S2) Old and new parts are freely and fully interchangeable.
- (1D) Old part becomes redundant on embodiment of this modification.
- (S3) Old and new parts are not interchangeable, either physically or functionally.
- (A) New part is currently available.
- (B) Old part will no longer be available.

NOTE: The estimated 1993 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.



STARTING - PNEUMATIC STARTER - INCORPORATION OF A NEW TRANSMISSION HOUSING

1. Planning Information

A. Effectivity

Pneumatic Starters
PN 790425-2 Not Incorporating
SPP Stock List Number

Serial Number of First Production Incorporation

L11

0296

NOTE:

This bulletin applies to Airbus A320 and A321 aircraft that have IAE/V2500 engines and McDonnell Douglas MD-90 aircraft that have IAE/V2500 engines.

B. Reason

This product improvement adds to lubrication effectiveness by increasing pneumatic starter oil capacity from 10 ounces to 12 ounces.

C. Description

The pneumatic starter transmission housing, which was previously modified, is discarded and replaced with a new transmission housing.

D. Compliance

Category 7

Accomplish when supply of superseded parts has been depleted.

E. Approval

This Service Bulletin 80–2508 (IAE SB V2500–ENG–80–0007) was technically approved by IAE on Oct 21/93. The part number changes shown in paragraph 3 of this Service Bulletin have been sanctioned under a product development/control system that has been approved by the D.G.A.C. (Directic Generale de L'Aviation Civile – Paris).



F. Manpower

No additional man-hours are required to perform this bulletin during component maintenance.

G. Material - Cost and Availability

The new parts required to accomplish this modification are listed in Section 3, Material Information, and are available at the price and lead times indicated. Orders for new or spare parts should be addressed to:

Hamilton Standard Product Services Incorporated

United Technologies Corporation

Attention: Supervisor, Spares Services

V2500 Distribution Products

Mail Stop: 1-2-B13

P.O. Box 2403

Windsor Locks, CT 06096-2403

H. Tooling

None

Weight and Balance

None

J. Electrical Load Data

None

K. Reference

Component Maintenance Manual 80-13-41

L. Other Publications Affected

Component Maintenance Manual 80-13-41

2. <u>Accomplishment Instructions</u>

- A. Modify pneumatic starter as follows:
 - (1) Disassemble pneumatic starter in accordance with existing component maintenance manual and discard transmission housing PN 738274–101, plug PN MS9954–03, adapter PN 806217–1, and packings PN 720752–9 and 720752–14.

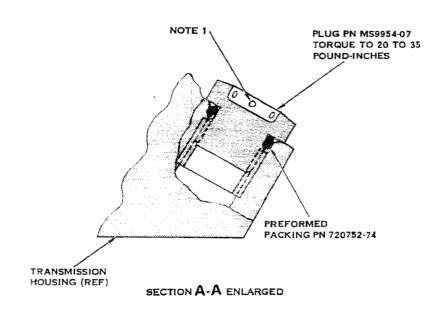


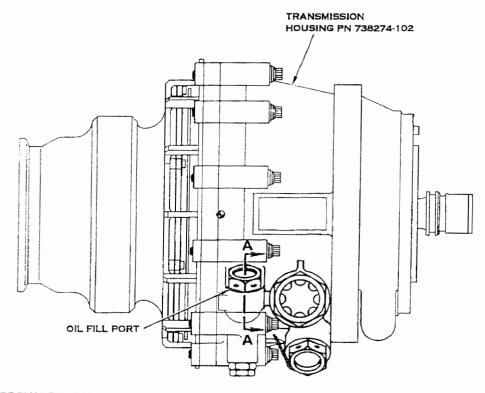
- (2) Assemble pneumatic starter in accordance with existing component maintenance manual except as follows:
 - (a) Install new packing PN 720752–74 onto new plug PN MS9954–07 and install into new transmission housing PN 738274–102 oil fill port per Section A–A, Figure 1.
 - (b) Torque plug to 20 to 35 pound-inches and lockwire to new transmission housing per AS567, see Section A-A Figure 1 using lockwire MS20995C20.

B. Reidentification

Incorporation of this bulletin is identified by Sumitomo Precision Products Co. LTD. (SPP) stock list number. Reidentify modified pneumatic starters PN 790425-2 by including "L11" on units identification plate. The Sumitomo Precision Products Co., LTD. (SPP) part number is not affected by this bulletin.







NOTE:

LOCKWIRE PLUG PN MS9954-07
 TO TRANSMISSION HOUSING PER AS567

11-27745

Pneumatic Starter – External View Figure 1



3. Material Information

The basis for the following data is per pneumatic starter. Any prices shown herein are the net prices F.O.B. Hamilton Standard Product Services Incorporated, United Technologies Corporation, P.O. Box 2403, Windsor Locks, CT 06096-2403 in effect as of date of bulletin and are based on the condition that Hamilton Standard Products Services Incorporated's Standard Terms and Conditions of Sale pertaining to commercial contracts in effect when the order is accepted will apply. These prices are firm subject to ninety days notice of change, except that corrections, additions, or deletions shall be effective immediately and in the event prices for these parts are included in a related general parts price list, prices shown in such parts price list shall be deemed to have superseded the prices shown herein on the effective data of such price list. Quantities ordered must be in accordance with the specified Minimum Sales Quantity (MSQ) or multiples thereof. Lead times listed herein apply to all orders placed for modification parts, are based on the number of days from acceptance of order, and are subject to change without notice. Lead times for parts ordered as replenishment for inventory will be established in accordance with Hamilton Standard Product Services current product support policy. The maintenance/overhaul factors (M/OH) shown are estimated replacement percentages for the individual parts based on 100 maintenance actions (usage between overhauls) and 100 overhauls, respectively. These estimated factors are furnished for your convenience and they shall not constitute either representations or guarantees.

NOTE:

The tabulation below includes code numbers in the "Instructions/Disposition" column identified as "I/D Code". These code numbers designate the following dispositions.

- Added Part
- 2. Scrap Part
- 3. Rework and Reidentify Part
- 4. Use for Other Applications

A. New Parts Required

New PN	Qty	Unit Price	Lead Time	M/OH	MSQ	Nomenclature	Old PN	I/D Code
720752-74	1	10.20	30	110/110	001	Packing	720752-14*	1
MS9954-07	1	30.00	20	3/10	001	Plug	MS9954-03*	1
738274-102	1	2650.00	30	-/5	001	Transmission Housing	738274-101*	1



B. Parts to be Discarded (No equivalent new parts)

New PN	Qty	Unit Price	Lead Time	м/он	MSQ	Nomenclature	Old PN	I/D Code
	1	_		_	_	Adaptor	806217-1	2
	1			_		Packing	720752-9	2

^{*} Spares of superseded parts will not be maintained by Hamilton Standard Product Services.

Hamilton Standard Internal Reference Number 193565-2 Hamilton Standard Internal Identification Number 80-2508