

Date: December 9, 2002

Subject: Transmittal of Revision 1 to Service Bulletin Number V2500-NAC-26-0014

Service Bulletin Revision History:

<u>Event</u> <u>Date</u>

Original Issue October 30, 2002 Revision 1 December 9, 2002

Reasons for issuance of Revision:

(1) To add more detailed information to the Effectivity statement.

Effect on Past Compliance:

None.

List of Effective Pages:

 Page No.
 Rev No.
 Date

 1 - 5
 1
 December 9, 2002

 6 - 9
 Basic
 October 30, 2002



NACELLE - POWERPLANT – FIRE PROTECTION – CORE ZONE FIRE DETECTOR – INSPECTION AND REPLACEMENT OF FIRE DETECTOR CLAMPS (NON-MODIFICATION SERVICE BULLETIN)

MODEL APPLICATION

V2500-A1

V2522-A5

V2524-A5

V2527-A5

V2527E-A5

V2527M-A5

V2530-A5

V2533-A5

BULLETIN INDEX LOCATOR

26-00-00

COMPLIANCE CATEGORY CODE

INTERNAL REFERENCE No PM EC01VN598



NACELLE - POWERPLANT - FIRE PROTECTION — CORE ZONE FIRE DETECTOR — INSPECTION AND REPLACEMENT OF FIRE DETECTOR CLAMPS (NON-MODIFICATION SERVICE BULLETIN)

1. Planning Information

- A. Effectivity
 - (1) Aircraft:
 - (a) Airbus A319
 - (b) Airbus A320
 - (c) Airbus A321
 - (2) Core Fire Detector assembly 7827-02 with Serial Numbers 1928,1929,1931, 1936,1940,1941,1942,1944,1945,1946,1947,1978,1979,1980 and 1987 that are or will be used on V2500-A1 and V2500-A5 engines. Also, spare parts and replacements that are within the suspect population of serial numbers.

<u>NOTE</u>: According to the available records, these core fire detector assemblies were delivered as indicated in the chart below.

FIRE DET S/N	AIRCRAFT MSN	ENGINE S/N	QEC KIT S/N	AIRLINE			
1928	1613	V11095	N/A	TAM			
1929	1626	V11108	N/A	LAN CHILE			
1931	1614	V11107	N/A	CHINA NORTHERN			
1936	N/A	N/A	1000002	N/A			
1940	1593	V11115	N/A	TAM			
1941	1614	V11110	N/A	CHINA NORTHERN			
1942	1593	V11113	N/A	TAM			
1944	N/A	N/A	1010002	N/A			
1945	1619	V11120	N/A	SAS			
1946	1627	V11121	N/A	UAL			
1947	1627	V11126	N/A	UAL			
1978*	N/A	N/A	N/A	N/A			
1979**	N/A	N/A	N/A	N/A			
1980*	N/A	N/A	N/A	N/A			
1987**	N/A	N/A	N/A	N/A			
* In supplier's warehouse on November 14, 2002.							
** Shipped from supplier's warehouse but delivery records are not available.							



B. Reason

(1) Problem/Condition

A number of unapproved clamps have been installed on the core fire detector assembly. These clamps attach the core fire detector responders to the fire detector rail. It has been discovered that the unapproved clamps, part number 10952-16 may not apply sufficient clamping force to hold the responder housings in place. This could cause the responders to become loose inside the clamps.

(2) Background

This condition has been noted during assembly of production engines. An analysis of the core fire detector responder clamps has shown the necessity of replacing unapproved clamp part number 10952-16 with the approved part number TA12C59H16CC (MSSI part number 11-10178).

(3) Objective

The incorporation of this Service Bulletin is intended to replace clamp part number 10952-16 with part number TA12C59H16CC (MSSI part number 11-10178) that will improve the clamping of the responder housings to the core fire detector rail.

(4) Substantiation

The original TA12C59H16CC Clamps have been installed on production engines and have performed satisfactorily.

(5) Effect of Bulletin on:

(a)	Removal/Installation	Not affected
(b)	Disassembly/Assembly	Not affected
(c)	Cleaning	Not affected
(d)	Inspection/Check	Not affected
(e)	Repair	Not affected
(f)	Testing	Not affected

(6) Supplemental Information

None.

C. Description

- (1) Part A (Inspection of the core fire detector responder clamps and sensor tubes)
- (2) Part B (Removal and replacement of the core fire detector responder clamps)



D. Approval

The technical content of this Service Bulletin has been approved under the authority of the DGAC Design Organisation Approval No F.JA.02.

E. Compliance

Category 3

Part A of this service bulletin should be accomplished at the next convenient maintenance opportunity or within 500 flight hours from the issue date on this service bulletin.

Part B of this service bulletin must be accomplished within 1200 flight hours from the issue date on this service bulletin.

F. Manpower

Estimated man-hours to incorporate the full intent of this Service Bulletin:

<u>VENUE</u> <u>ESTIMATED MAN-HOURS</u>

(1) In Service/Shop

(a) To gain access 0.25 M/Hr

(b) To embody 0.15 M/Hr

(c) To return nacelle to service 0.50 M/Hr

Total 1.30 M/Hrs

G. Material Cost and Availability

The parts to accomplish this Service Bulletin are available free of charge from the manufacturer (for listed engine serial numbers only) as kit number P/N 904422 which consists of quantity four each TA12C59H16CC, MSSI P/N 11-10178.

Operators with units listed in Paragraph 1.A. should submit a no charge purchase order for the applicable quantity of kits. The no charge purchase order must specify this service bulletin number and only the kit part number listed herein.

Direct request to:

Meggitt Safety Systems INC 1915 Voyager Avenue Simi Valley, CA 93063-3349 USA.



Attn: Lyell Linne-Hicks Tel: 805-584-4100 ext 8248

Fax: 805-584-9157

E-mail llinne-hicks@safetysystem.com

H. Tooling - Price and Availability

None required.

I. Weight and Balance

(1) Weight change(2) Moment armNoneNo effect

(3) Datum Engine Front Mount Centreline (Powerplant Station PPS 100.00)

J. Electrical Load Data

Not affected.

K. References

V2500 Aircraft Maintenance Manual (M-V2500-1IA)

L. Other Publications Affected

None.



2. Material Information

Applicability: For each V2500-A1 and V2500-A5 Nacelle to incorporate this Bulletin.

A. Kit associated with this Bulletin:

KIT No	<u>QTY</u>	EST'D UNIT PRICE (\$)	<u>KEYWORD</u>	INSTR/DISPOS
P/N 904422 Consisting of:	1		Kit	(A)
TA12C59H16CC (MSSI P/N 11-10178)	4		.Clamp	(S1)

- C. Instructions/Dispositions Code statements:
 - (A) Kit is available.
 - (S1) Part number TA12C59H16CC must replace part number 10952-16 as a complete set per nacelle
- D. Tooling Price and Availability

None.

E. Materials required to incorporate this service bulletin.

None



3. <u>Accomplishment Instructions</u>

NOTE: THESE INSTRUCTIONS ARE WRITTEN ON THE BASIS THAT THE AIRCRAFT HAS BEEN MADE SAFE FOR MAINTENANCE.

<u>WARNING</u>: BE CAREFUL WHEN YOU WORK ON THE ENGINE COMPONENTS IMMEDIATELY AFTER THE ENGINE IS SHUT DOWN. THE ENGINE

COMPONENTS CAN STAY HOT FOR UP TO ONE HOUR.

<u>Part A.</u> Inspection of the core fire detector and fire detector responder clamps.

- (1) Open the left and right fan cowls as instructed in the Aircraft Maintenance Manual (M-V2500-1IA) Task 71-13-00-010-010.
- (2) Open the thrust reverser halves as instructed in the Aircraft Maintenance Manual (M-V2500-1IA) Task 78-32-00-010-010.
- (3) Do a general visual inspection of the core fire detector (4001WD1) 7827-02 and (4001WD2) 7827-02 and the responder housing clamps as follows. Refer to Figure 1.
 - (a) Identify the clamps that attach the two 3601-97 responder housings to the 8246 firewire bracket.
 - (b) If the responder housing clamps are identified as ADEL Part Number 10952-16 with a braided wire insert they must be removed and replaced with Part Number TA12C59H16CC clamps as instructed in Part B.
 - (c) If the clamps are identified as ADEL Part Number 10952-16 you must also examine the core fire detector for damage (damage will be visibly apparent and the detector sensor tube could be fractured/broken). If the fire detector is damaged then it must be removed and replaced as instructed in the Aircraft Maintenance Manual (M-V2500-1IA) Task 26-12-17-000-010.
 - (d) If the clamps are identified as Part Number TA12C59H16CC then do Part B steps (4) and (5) and return the aircraft to service.

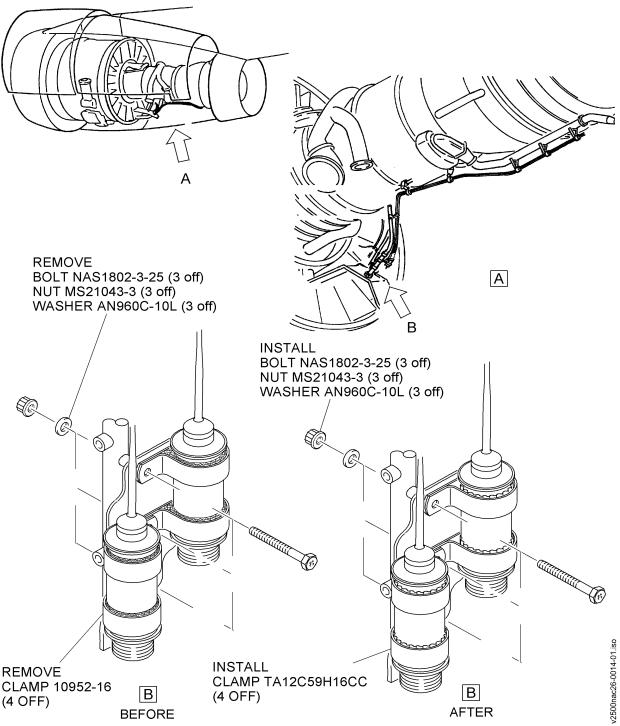
<u>Part B.</u> Removal and replacement of the core fire detector responder clamps

- (1) Remove the three NAS1802-3-25 Bolts, MS21043-3 Nuts and AN960C-10L Washers that attach the four 10952-16 Clamps to the responder housings. Remove and discard the four 10952-16 Clamps and the braided wire inserts.
- (2) Install four new TA12C59H16CC Clamps and inserts with the NAS1802-3-25 Bolts, MS21043-3 Nuts and AN960C-10L Washers removed in Step (1).



- (3) Torque the NAS1802-3-25 Bolts to between 20 and 25 pounds inches (2.26-2.83Nm). Make sure the responder housings do not rotate or slide within the clamps.
- (4) Close the thrust reverser halves as instructed in the Aircraft Maintenance Manual (M-V2500-1IA) Task 78-32-00-410-010.
- (5) Close the left and right fan cowls as instructed in the Aircraft Maintenance Manual (M-V2500-1IA) Task 71-13-00-410-010.





Removal and installation of the responder housing clamps Figure 1