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DATE: Jun. 7/05

V2500-A1/A5 SERIES NACELLE SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin NV2500-78-0213 and the Initial Issue of the Supplement

Bulletin Initial Issue

Remove Incorporate Reason for change

Page 1 and 2 of the Initial issue

Summary

Pages 1 to 11 of the

Service Bulletin

Initial issue

<u>Supplement Initial Issue</u>

Remove Incorporate Reason for change

Page 1 Initial issue

V2500-NAC-78-0213

Printed in Great Britain

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NACELLE - EXHAUST - THRUST REVERSER - SLEEVE - ADDITION OF IDENTIFICATION PLATE

SUMMARY

1. PLANNING

A. EFFECTIVITY

Engines

V2500-A1 and V2500-A5

Nacelles

All V2500-A1 thrust reversers translating sleeve assemblies part numbers 740-0006-XXX with ink-stamped part numbers on units prior to N1287.

All V2500-A5 thrust reversers translating sleeve assemblies part numbers 745-0006-XXX with ink-stamped part numbers on units prior to N6556. (translating sleeve prior to S/N 8581001).

B. CONCURRENT REQUIREMENTS

None.

C. REASON/PROBLEM

Problem

All V2500 thrust reverser translating sleeves, prior to S/N 8581001, were delivered with ink-stamped part number identification instead of with an identification plate installed on each sleeve. The ink-stamped part numbers were prone to being worn off or obscured during service.

Evidence

Several operators have reported cases of missing or obliterated part numbers on thrust reverser translating sleeves in service.

Substantiation

Installation of metallic identification plates with stamped part numbers will alleviate the problem.

Objective

The changes recommended in this Service Bulletin are intended to provide operators with an alternate method of identifying the thrust reverser translating sleeve. An identification plate is being installed on each thrust reverser translating sleeve with four fasteners.

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All A5 thrust reversers translating sleeves from S/N 8581001 and On have an identification plate installed in production.

D. DESCRIPTION

This service bulletin provides instructions to install an identification plate on each thrust reverser translating sleeve with four fasteners.

E. COMPLIANCE

Category 8

Accomplish as necessary based on operators experience with the prior configuration.

F. MANPOWER

Estimated man-hours to incorporate the intent of this Service Bulletin on each thrust reverser:

In Service

1.0 man-hour

At overhaul

1.0 man-hour

G. INTERCHANGEABILITY OF PARTS

Not affected.

2. MATERIAL INFORMATION

A. PARTS PRICES

		Unit Price
Part No.	Desc.	US Dollars

S202N0003-2 Identification 11.00

Plate

CR2663-3-2 Rivet, Cherry Locally procured

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NACELLE - EXHAUST - THRUST REVERSER - SLEEVE - ADDITION OF IDENTIFICATION PLATE

1. Planning Information

A. Effectivity

- (1) Airplane:
 - (a) Airbus A319
 - (b) Airbus A320
 - (c) Airbus A321
- (2) Nacelle
 - (a) All V2500-A1 thrust reversers translating sleeve assemblies prior to N1287 with 740-0006-XXX ink-stamped part numbers.

All V2500-A5 thrust reversers translating sleeve assemblies prior to N6556 (translating sleeve S/N 8581001) with 745-0006-XXX ink-stamped part numbers.

B. Concurrent Requirements

There are no concurrent Service Bulletin requirements.

C. Reason

- (1) Problem
 - (a) All V2500 thrust reverser translating sleeves, prior to S/N 8581001, were delivered with ink-stamped part number identification instead of with an identification plate installed on each sleeve. The ink-stamped part numbers were prone to being worn off or obscured during service use.
- (2) Evidence
 - (a) Not applicable.
- (3) Substantiation
 - (a) Not applicable.

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(4) Objective

- (a) The changes recommended in this Service Bulletin are intended to provide operators with an alternate method of identifying the thrust reverser translating sleeve. An identification plate is being installed on each thrust reverser translating sleeve with four fasteners.
- (b) All A5 thrust reversers translating sleeves from S/N 8581001 and On have an identification plate installed in production.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Scheme

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. <u>Description</u>

This service bulletin provides instructions to install an identification plate on each thrust reverser translating sleeve with four fasteners.

E. Compliance

Category 8

Accomplish as necessary based on operators experience with the prior configuration.

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F. Approval

The technical content of this Service Bulletin has been approved under the authority of the EASA Design Organization Approval No. EASA.21J.031. The authorizing IAE document is EC 03VN606. In addition, part number changes and/or part modifications described in Paragraphs 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved for the equipment model(s) listed.

G. Manpower

Estimated man-hours to incorporate the full intent of this Service Bulletin on one thrust reverser.

- (1) In Service
 - 1.0 man-hour (2.0 man-hours per aircraft).
- (2) At Overhaul
 - 1.0 man-hour.

<u>NOTE</u>: Man-hour estimate is provided for planning purposes only. No labor reimbursement is provided under the terms of this service bulletin offering.

H. Material Price and Availability

The identification plates and fasteners required to accomplish this service bulletin are available from the manufacturer.

Operators with units listed in Paragraph 1.A. should submit a charge purchase order for the parts necessary for the thrust reverser translating sleeves they wish to modify. The purchase order must specify this service bulletin number and only the part numbers listed herein. Upon receipt of purchase order, Goodrich shall provide a delivery schedule for parts ordered.

Direct Purchase Order to:

Goodrich Aerostructures

850 Lagoon Drive

Chula Vista

CA 91910-2098

U.S.A.

Attn.: Regional Business Manager - MZ 107A

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NOTE: Please do not submit orders for service bulletin parts via the Spec 2000

ordering system.

I. Tooling and Availability

Special tools are not required.

J. <u>Industry Support Information</u>

Not applicable.

K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(3) Datum

Engine front mount centreline (Powerplant Station PS 100).

L. Electrical Load Data

Not applicable.

M. <u>Software Accomplishment Summary</u>

Not applicable.

N. References

IAE Standard Practices/Processes Manual (SPP-V2500-1IA) - 70-09-00-400-001.

Overhaul Processes and Consumable Index (PCI-V2500-1IA).

IAE Engineering Change Number - 03VN606.

ATA Ref 78-30-00.

0. Other Publications Affected

Thrust Reverser Component Maintenance Manual (CMM-TR-V2500-1IA) - 78-30-00.

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P. <u>Interchangeablity of Parts</u>

Not affected.

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2. <u>Material Information</u>

A. Kits required consist of the following parts:

None.

 $\underline{\text{NOTE}}$: The two S202N0003-2 identification plates required to accomplish the

intent of this service bulletin are available from Goodrich

Aerostructures and the eight CR2663-3-2 fasteners can be procured from

operator's stock or purchased locally.

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
11-480 12-480	\$202N0003-2	2	Identification Plate	-	-	(A)
11-490 12-490	CR2663-3-2	8	Rivet	-	-	(A)

B. Parts to be reworked:

None.

C. New production parts:

None.

D. Redundant parts:

None.

E. <u>Instruction Disposition Codes:</u>

(A) New parts are currently available

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F. <u>Materials required to do this Service Bulletin:</u>

CoMat 01-438 Solvent

CoMat 02-099 Cloth, Lint Free

CoMat 07-028 Chromate Conversion Coating for Aluminum

CoMat 07-139 Catalyst

CoMat 07-140 Epoxy Primer

CoMat 07-144 Thinner

NOTE: To identify the consumable materials, refer to the Overhaul Processes

and Consumables Index PCI-V2500-1IA.

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3. Accomplishment Instructions

NOTE: V2500 Thrust Reverser sleeves have been manufactured in two distinct configurations, one is aluminum and the other uses composite materials. A simple tap test can determine the sleeve material at the identification plate installation area and determine which installation option is appropriate. Option 1 applies to sleeves with aluminum construction and Option 2 applies to those with composite construction.

<u>NOTE</u>: This service bulletin has been written with the assumption the thrust reverser sleeve assembly, part number 740-0006-XXX or 745-0006-XXX is accessible for plate installation.

A. Option 1: Modify the aluminum thrust reverser translating sleeve by installing the identification plate as shown in Figure 1.

WARNING:

BEFORE YOU USE CHEMICALS, READ, UNDERSTAND AND OBEY ALL SAFETY INSTRUCTIONS FOR THE CHEMICALS. THESE INSTRUCTIONS INCLUDE INSTRUCTIONS FROM THE MANUFACTURER, THE MATERIAL SAFETY DATA SHEET (MSDS), AND GOVERNMENT REGULATIONS. CHEMICALS MAY CAUSE INJURY TO YOU OR MAKE YOU SICK WHEN SAFETY INSTRUCTIONS ARE NOT OBEYED. AN MSDS GIVES INSTRUCTIONS ON HOW YOU MUST SAFELY USE, KEEP AND DISCARD CHEMICALS. GET INSTRUCTIONS FROM YOUR EMPLOYER ON HOW YOU MUST SAFELY USE, KEEP AND DISCARD CHEMICALS.

- (1) Prepare the area to receive the identification plate. Use CoMat 01-438 solvent and a clean, lint-free cloth (CoMat 02-099) to remove all contamination. Refer to Figure 1.
- (2) Use the \$202N0003-2 identification plate as a hole template to locate and make four marks on the sleeve where the four fasteners will be installed. Locate the edge of identification plate a minimum of 1.0 inch (25.4mm) from the center of the adjacent row of rivets as shown in Figure 1.
- (3) Mark the identification plate with the appropriate part number as previously ink-stamped on the translating sleeve. Use vibroetch or electroetch method. Refer to the IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00-400-001.

WARNING:

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(4) Drill four 0.098 - 0.106 inch (2,49 - 2,69mm) diameter holes. Remove burrs from the holes. Apply conversion coating (CoMat 07-028) to any bare aluminum surfaces.

WARNING:

BEFORE YOU USE CHEMICALS, READ, UNDERSTAND AND OBEY ALL SAFETY INSTRUCTIONS FOR THE CHEMICALS. THESE INSTRUCTIONS INCLUDE INSTRUCTIONS FROM THE MANUFACTURER, THE MATERIAL SAFETY DATA SHEET (MSDS), AND GOVERNMENT REGULATIONS. CHEMICALS MAY CAUSE INJURY TO YOU OR MAKE YOU SICK WHEN SAFETY INSTRUCTIONS ARE NOT OBEYED. AN MSDS GIVES INSTRUCTIONS ON HOW YOU MUST SAFELY USE, KEEP AND DISCARD CHEMICALS. GET INSTRUCTIONS FROM YOUR EMPLOYER ON HOW YOU MUST SAFELY USE, KEEP AND DISCARD CHEMICALS.

- (5) Mix the catalyst (CoMat 07-139), primer (CoMat 07-140) and thinner (CoMat 07-144). Refer to the manufacturer's instructions.
- (6) Wet install the four CR2663-3-2 rivets into each corner of the identification plate. Make sure the identification plate is face-side up and secure.
- (7) Return the modified thrust reverser translating sleeve to a serviceable condition.
- B. Option 2: Modify the composite thrust reverser translating sleeve by installing the identification plate as shown in Figure 1.

WARNING:

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- (1) Prepare the area to receive the identification plate. Use CoMat 01-438 solvent and a clean, lint-free cloth (CoMat 02-099) to remove all contamination. Refer to Figure 1.
- (2) Use the \$202N0003-2 identification plate as a hole template to locate and make four marks on the sleeve where the four fasteners will be installed. Locate the edge of identification plate a minimum of 1.0 inch (25.4mm) from the center of the adjacent row of rivets as shown in Figure 1.
- (3) With a drill bit for composites, drill four 0.098 0.106 inch (2,49 2,69mm) diameter holes.

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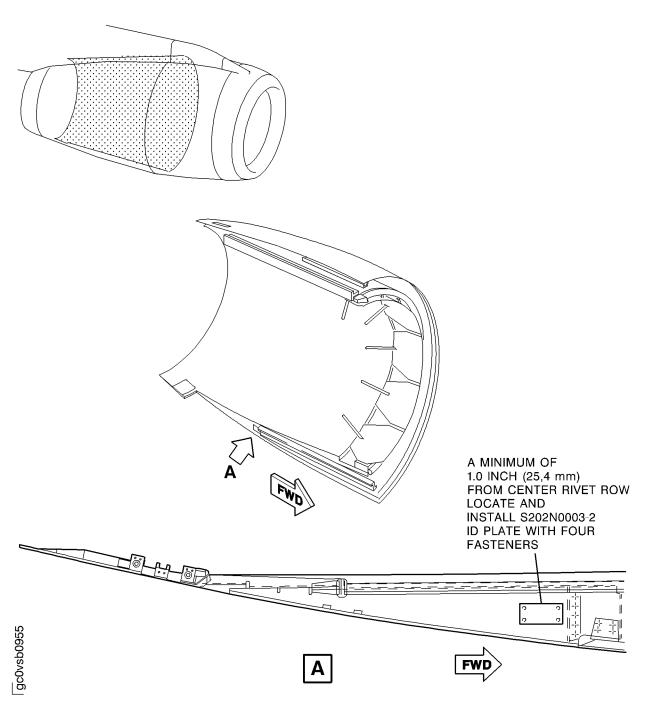
- (4) Mark the identification plate with the appropriate part number as previously ink-stamped on the translating sleeve. Use vibroetch or electroetch method. Refer to the IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00-400-001.
- (5) Install the four CR2663-3-2 rivets into each corner of the identification plate. Make sure the identification plate is face-side up and secure.
- (6) Return the modified thrust reverser translating sleeve to a serviceable condition.

C. Recording Instructions

(1) A record of accomplishment is required. Mark that Service Bulletin V2500-NAC-78-0213 has been incorporated in the applicable documents as required.

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Thrust Reverser Identification Plate Installation Figure 1

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NACELLE - EXHAUST - THRUST REVERSER - SLEEVE - ADDITION OF IDENTIFICATION PLATE

SUPPLEMENT - PRICES AND AVAILABILITY

The prices (if shown) are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to Goodrich Spares and/or current price catalogue for current prices.

1. Modification Kit:

Not applicable.

Part No.

2. Parts Required:

Unit Price
Description US Dollars

S202N0003-2 Identification 11.00

Plate

CR2663-3-2 Rivet

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