

SERVICE BULLETIN

ENGINE FUEL AND CONTROL — INTRODUCTION OF A5 SELECTTWO™
ENGINE WITH REDUCED GROUND IDLE (RGI)

MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

BULLETIN ISSUE SEQUENCE

V2500 Series 73-0239

ATA NUMBER

73-22-35

IAE PROPRIETARY INFORMATION

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

Compliance Category

8

P&W Distribution Code

V2500

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V2500-ENG-73-0239

Summary

The purpose of this Service Bulletin is to provide information regarding SCN22/AB V2500-A5 software enhancement which contain options to activate Reduced Ground Idle (RGI) via Data Entry Plug (DEP) variants for the A5 SelectTwo™ engine. RGI improves fuel burn during ground operations.

Planning Information

Effectivity Data

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5
Engine Serial No. — All engines

Concurrent Requirements

This Service Bulletin must be done at the same time as Reference 2, Service Bulletin No. V2500-ENG-72-0285.

This Service Bulletin must be done at the same time or after Reference 3, Service Bulletin No. V2500-ENG-72-0328, Reference 4, Service Bulletin No. V2500-ENG-72-0565, Reference 5, Service Bulletin No. V2500-ENG-73-0236 and Reference 6, Service Bulletin No. V2500-ENG-73-0237 and Reference 7, Service Bulletin No. V2500-ENG-79-0106.

Reason

1. Condition: The A5 SelectTwo™ engine configuration incorporates a mission fuel burn improvement.
2. Background: This is a new feature that has been introduced into the A5 SelectTwo™ engine configuration by utilizing SCN22/AB software.
3. Objective: Introduce RGI in the A5 SelectTwo™ engine configuration by selection of a DEP RGI variant.

NOTE: The Front Bearing Compartment (FBC) vent tube, Reference 7, Service Bulletin No. V2500-ENG-79-0106, is a prerequisite for RGI.

The following Variant Numbers have been introduced:

- 15: A321 V2533 A5 SelectTwo™ Engine with RGI
- 16: A321 V2533 A5 SelectTwo™ Engine with RGI, Enhanced MCL
- 17: A321 V2533 A5 SelectTwo™ Engine with RGI, Bump enabled
- 18: A321 V2533 A5 SelectTwo™ Engine with RGI, Bump enabled, Enhanced MCL
- 19: A321 V2530 A5 SelectTwo™ Engine with RGI
- 20: A320 V2527 A5 SelectTwo™ Engine with RGI
- 21: A320 V2527E A5 SelectTwo™ Engine with RGI
- 22: A320 V2527E A5 SelectTwo™ Engine with RGI, Bump enabled
- 23: A319 V2527M A5 SelectTwo™ Engine with RGI
- 24: A319 V2524 A5 SelectTwo™ Engine with RGI
- 25: A319 V2522 A5 SelectTwo™ Engine with RGI

26: A320 V2524 A5 SelectTwo™ Engine with RGI (reserved for future use)

NOTE: IAE has established the following Marketing nomenclature for the V2500-A5 engine.

V2500-A5 Standard Configuration: V10001 thru V13190 as delivered from production.

V2500-A5 SelectOne™ — V15001 and up, as delivered from production.

V2500-A5 SelectOne™ retrofit — Any A5 Standard that incorporated the retrofit package.

V2500-A5 SelectTwo™ — Any SelectOne™ or SelectOne retrofit that incorporates SCN22 and Reduced Ground Idle (RGI) is ONLY an option for SelectTwo configurations.

4. Substantiation: The DEP variant was successfully tested on the closed loop bench. The test validated that the software reads and correctly responds to the new wiring configurations. The testing was accomplished as part of the SCN22 software certification testing.

The V2500 series turbofan engine (V2500-A5 models) incorporating this software revision, SCN22/AB complies with the code of Federal Regulations, 14 C.F.R. Part 33. The means of compliance are documented in the FAA approved substantiation plan IAE-0275 SP Rev 3 and the substantiation summary report IAE-0275.

5. Effects of Bulletin on:

Removal/Installation: Not affected.

Disassembly/Assembly: Not affected.

Cleaning: Not affected.

Inspection/Check: Not affected.

Repair: Not affected.

Testing: Not affected.

6. Supplemental Information

None.

Description

SCN22/AB V2500-A5 software contains an option to activate Reduced Ground Idle (RGI) via Data Entry Plug (DEP) variants for the A5 SelectTwo™ engine. RGI improves fuel burn during ground operations.

Compliance

Category 8

Accomplish based upon experience with the prior configuration.

Approval Data

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

The technical content under the JAR 25 regulation of this document is approved under the authority of DOA Ref. EASA.21J.031.

Manpower

1. In Service
..... Not Applicable.
2. At Overhaul
..... Not Applicable.

Weight and Balance

1. Weight Change
None.
2. Moment Arm
No Effect.
3. Datum
Engine Front Mount Centerline (Power Plant Station (PPS) 100)

Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

Software Accomplishment Summary

Not Applicable.

References

1. ATA Locator — 73-22-35.
2. V2500 Service Bulletin V2500-ENG-72-0285 (Engine — Conversion — Provide Instructions To Change The V2500-A5 Engine Rating By Modifying The Data Entry Plug).
3. V2500 Service Bulletin V2500-ENG-72-0328 (Engine — High Pressure Turbine Rotor And Stator Assembly — Introduce A New Stage 2 High Pressure Turbine Blade Retaining Plate).
4. V2500 Service Bulletin V2500-ENG-72-0565 (Engine — Provide The Requirements For Modification To The V2500 SelectOne™ Retrofit Standard).
5. V2500 Service Bulletin V2500-ENG-73-0236 (Engine Fuel And Control — Control, Electronic Engine (EEC) — Replacement Or Modification Of, To Incorporate SCN22/AB Software For Introduction Of V2500-A5 SelectTwo™ Configuration).
6. V2500 Service Bulletin V2500-ENG-73-0237 (Engine Fuel And Control — Data Entry Plug (DEP) — Replacement Or Modification Of, To Provide SCN22/AB Software And Reduced Ground Idle (RGI) Capability).
7. V2500 Service Bulletin V2500-ENG-79-0106 (Oil — Tube Assy, Front Bearing Chamber Oil Vent — Introduction Of A New Tube Assy With A Vent Line Restrictor For Reduced Ground Idle).
8. This Service Bulletin is subject to Aircraft Modification No. 156736 P13171 (classified minor).

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Other Publications Affected

1. None

Interchangeability of Parts

None.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (No)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

Material Information

Material — Price and Availability

1. None

Industry Support Program

Not Applicable.

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

Not Applicable.

Other Material Information Data

Not Applicable.

Accomplishment Instructions

1. Refer to the latest Reference 2, Service Bulletin V2500-ENG-72-0285 for rewiring the DEP to obtain the desired engine variants with RGI capability.

NOTE: Contact IAE Tech Services for any questions/clarifications.

2. Recording Instructions

A. A record of accomplishment is required.

Appendix

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC11VA031	PStO/IEL