

# ALERT =

# Alert Requirements Bulletin B787-81205-SB720007-00 RB ENGINE (TRENT 1000 ENGINES) - Interservices Fairings - Thrust Reverser Upper Splitter Fairing Assembly Change

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#### A. EFFECTIVITY

#### 1. Airplanes

This bulletin is applicable to 787-8, 787-9, 787-10 Airplane(s), line number(s) 7-10, 12-16, 18, 22, 24, 31, 40-42, 47-48, 51, 56, 59, 61, 63, 66-69, 74, 78, 80, 83, 86-88, 97, 101-102, 107-108, 110-114, 118, 120-121, 126, 128, 130, 132-133, 136, 140, 146-149, 153, 156, 161, 165-166, 169, 173, 177-179, 183, 185, 187, 190, 193, 195, 197, 199, 202-203, 205-206, 209-210, 213, 217-218, 226, 228, 234, 236, 239-240, 242-244, 246, 256, 259, 267, 272, 276, 279-280, 284, 287, 294-296, 299, 308-310, 313-316, 319, 322, 325, 327, 329, 331, 335, 337-338, 341, 345-347, 349-351, 357-358, 360-361, 367, 369-370, 373-375, 377, 382, 386, 392, 396-397, 399-401, 403-404, 406, 408, 414-415, 418-419, 421, 424, 426, 428, 431, 433, 435-437, 442, 447, 450-451, 454-456, 460-462, 467-468, 471-472, 474-476, 479, 481-482, 484, 487-488, 490-491, 493, 497, 504-505, 508-509, 513, 521, 524, 528, 532, 534-535, 538, 550, 552, 556-557, 559, 565, 568, 571, 573, 576, 581-584, 588-590, 593, 599-600, 602-605, 607-609, 612, 616, 619, 621-625, 627, 629, 633, 636, 638-639, 645, 647, 651, 656, 658, 660, 662, 664-666, 671-675, 678, 680-682, 685-686, 688-689, 691, 693-695, 697-698, 700-701, 707-710, 714-715, 717, 719, 721, 732-733, 735, 739, 741, 749, 751, 755-756, 760, 762, 765, 769, 771-772, 794, 803-804, 809, 813, 816, 823, 827, 829, 834-839, 843-844, 846, 849, 851-853, 855-856, 861, 863, 869-870, 875, 877-878, 882, 884-885, 888, 896, 901, 904, 907, 914, 919-920, 922, 925, 928, 935, 938, 947, 952, 955-956, 968, 971, 973, 978, 982-985, 988, 992, 995, 997, 1000, 1003, 1006, 1011, 1015, 1023, 1026, 1028, 1033, 1036, 1039-1040, 1042, 1046-1047, 1056, 1060, 1062, 1065, 1068, 1070, 1072, 1076, 1080, 1082-1083, 1085-1086, 1090, 1092, 1098, 1110, 1112, 1120, 1144, 1148 in 1 Group(s). Where the effectivity is presented with hyphens between line numbers, the airplane applicability means "through" and "inclusive", e.g. line numbers 1-9 means line numbers 1 through 9 inclusive.

The Variable Numbers and Group information for the applicable airplanes is given below. *Table 1* 

GROUP	CONFIGURATION	DESCRIPTION
1	-	787-8, 787-9 and 787-10 airplanes with Rolls Royce Trent 1000 Engines.

Airplane Models: 787-10, 787-8, 787-9

Table 2



Variable Number	Group
ZA100 - ZA105	1
ZA116 - ZA124	1
ZA135 - ZA144	1
ZA270 - ZA277	1
ZA445 - ZA459	1
ZA506 - ZA516	1
ZA536 - ZA545	1
ZA576 - ZA580	1
ZA588 - ZA593	1
ZA650 - ZA652	1
ZA665 - ZA677	1
ZA778 - ZA779	1
ZA839	1
ZA842	1
ZA853 - ZA863	1
ZA881 - ZA888	1
ZA949 - ZA950	1
ZA958 - ZA959	1
ZA963 - ZA966	1
ZB001 - ZB012	1
ZB027 - ZB043	1
ZB047 - ZB061	1
ZB127 - ZB136	1

Variable Number	Group
ZB197 - ZB198	1
ZB219 - ZB220	1
ZB224 - ZB229	1
ZB251 - ZB258	1
ZB265 - ZB268	1
ZB362 - ZB379	1
ZB407 - ZB421	1
ZB611 - ZB618	1
ZB646 - ZB649	1
ZB688 - ZB702	1
ZB733 - ZB735	1
ZB742 - ZB743	1
ZB749 - ZB751	1
ZB753 - ZB757	1
ZB766 - ZB767	1
ZB818 - ZB821	1
ZB828 - ZB845	1
ZB858 - ZB863	1
ZB874 - ZB876	1
ZB890	1
ZB990 - ZB991	1
ZB997	1
ZC001 - ZC020	1

Variable Number	Group
ZC101 - ZC107	1
ZC116 - ZC118	1
ZD001 - ZD008	1
ZD038	1
ZE003 - ZE010	1
ZE013 - ZE014	1
ZE016 - ZE019	1
ZE075	1
ZE085 - ZE086	1
ZE090 - ZE091	1
ZE095 - ZE096	1
ZE100	1
ZE115	1
ZE150	1
ZE195 - ZE198	1
ZE270 - ZE273	1
ZE310 - ZE314	1
ZE375	1
ZE380 - ZE381	1
ZE425 - ZE428	1
ZE481	1
ZE486 - ZE488	1
ZE586	1

# 2. Spares Affected

Examine your spares supply for the parts identified below. If any parts are found, refer to Accomplishment Instructions - Step 2., Work Instructions for the recommended action.

Table 3

Part I	Numbers
KH60	0375



#### **B. CONCURRENT REQUIREMENTS**

None.

### C. COMPLIANCE

Federal Aviation Administration (FAA) Airworthiness Directive AD 2020-26-08 is related to this service bulletin. The effective date of AD 2020-26-08 is January 27, 2021.

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to Requirements Bulletin B787-81205-SB720007-00 RB. The Airworthiness Directive will make the compliance tasks and times given in Requirements Bulletin B787-81205-SB720007-00 RB mandatory.

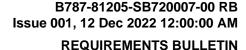
Accomplish the required actions, based on the applicable conditions in Table 5, in accordance with Accomplishment Instructions.

The Conditions, Actions and Compliance times shown apply to each engine independently.

Table 5 Rolls Royce Trent 1000 Engine Upper Splitter Fairing Assembly Change

Condition	Action	Compliance Time	Repeat Interval (Not to Exceed)
All Airplanes	Remove Rolls Royce Engine upper splitter fairing assembly and replace with new upper splitter fairing assembly with ramp fairing incorporated.  Do a General Visual Inspection (GVI) of the left and right Thrust Reverser (TR) Inner Fixed Structure (IFS) forward upper fire seal and thermal blanket for any damage.  Within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Sequirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Requirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Sequirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Sequirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Sequirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Sequirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the Issue 001 date of Sequirements Bulletin B787-81205-SB720007-00 RB or within 7 years after the date of issuance of the original export certificate of airworthiness, whichever occurs later.	-	
		of airworthiness or the original export certificate of airworthiness, whichever	
CONDITION 1: NO DAMAGE FOUND ON IFS FORWARD UPPER FIRE SEAL AND NO DAMAGE FOUND ON THERMAL BLANKET	No further action.	-	-
CONDITION 2: ANY IFS FORWARD UPPER FIRE SEAL DAMAGE FOUND	Replace IFS forward fire seal.	Before further flight.	-
CONDITION 3: ANY THERMAL BLANKET DAMAGE FOUND	Replace thermal blankets.	Before further flight.	-

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# D. APPROVAL

This Requirements Bulletin was examined by the Federal Aviation Administration (FAA). The changes specified in this document comply with the applicable regulations and are FAA approved, as well as European Union Aviation Safety Agency (EASA)/Joint Aviation Authorities (JAA) approved for all EASA/JAA approved airplanes listed in this Requirements Bulletin effectivity. This document and its approval were based on the airplane in its original Boeing delivery configuration or as modified by other Boeing changes.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this Requirements Bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this Requirements Bulletin.

In addition, the Manager of the FAA Seattle ACO Branch approves accomplishment of the inspection and upper splitter fairing assembly replacement defined in this bulletin issue on an affected engine as an alternative method of compliance and the termination of the repetitive General Visual Inspection (GVI) of the IFS forward upper fire seal and thermal blanket inspection required by paragraph (g) of AD 2020-26-08 for that modified engine. All provisions of AD 2020-26-08 that are not specifically referenced in the above statement remain fully applicable and must be complied with accordingly.



#### E. ACCOMPLISHMENT INSTRUCTIONS

#### 1. GENERAL INFORMATION

NOTE: 1. This is an Enhanced Required for Compliance document. There will be a separate Service Bulletin (SB) and a separate Requirements Bulletin (RB). If an RB is mandated by an Airworthiness Directive (AD), then all applicable requirements specified in the RB must be done. For the related SB, some locations are marked RC Start and RC End to identify the requirements that are restated from the RB. For the related SB, the areas between RC Start and RC End, including sub-steps and any figures identified between RC Start and RC End, must be done to comply with the AD. Therefore, an Alternative Method of Compliance (AMOC) is required for any deviations to steps between RC Start and RC End, including substeps and identified figures. For the related SB, the steps not between RC Start and RC End may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC; this is provided that the steps between RC Start and RC End, including sub-steps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition. Figures not required for compliance are omitted from the RB.

- This is an Enhanced Required for Compliance document. The Boeing processes used
  to create the Service Bulletin (SB) and the Requirements Bulletin (RB) ensure that the
  information between "RC Start" and "RC End" in the SB are identical to the information
  in the same sections (Compliance, Work Instructions...) of the RB which the SB refers to
  as the related document.
- 3. These work instructions refer to procedures included in other Boeing documents. When the words "refer to" are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used. When the words "in accordance with" are included in the instruction, the procedure in the Boeing document must be used.
- 4. The compliance times for the actions in work instructions are in Compliance.
- 5. Unless shown differently, these dimensions and tolerances are used:
  - Linear dimensions are in inches
  - Tolerance on linear dimensions, other than rivet and bolt edge margins, is plus or minus 0.03 inch
  - Tolerance on rivet and bolt edge margin is plus or minus 0.05 inch
  - Angular tolerance is plus or minus 2 degrees
  - Hole dimensions for standard solid rivets and fasteners are in SRM Chapter 51
  - Torque Values:
    - Values for structural fasteners are given in 787 Structural Repair Manual, Chapter 51.
    - Values for airframe maintenance tasks are included in Chapter 20 of 787 Aircraft Maintenance Manual (AMM).
    - Values for electrical maintenance tasks are included in Chapter 20 of Standard Wiring Practices Manual (SWPM).





- Values for engine maintenance tasks are included in Chapter 70 of 787 Aircraft Maintenance Manual (AMM).
- Non-standard torque values for maintenance tasks are included in the applicable installation step.
- 6. Use the approved fastener, process and material substitutions in accordance with SRM Chapter 51.
- 7. If it is necessary to remove more parts for access, you can remove those parts. If you can get access without removing identified parts, it is not necessary to remove all of the identified parts. Jacking and shoring limitations must be observed.
- 8. The CONDITIONS, and ACTIONS shown apply to each affected engine independently.
- 9. Inner Fixed Structure (IFS) forward upper fire seal damage is defined as any cuts, splits, nicks, punctures, and missing sections.
- 10. IFS forward upper thermal blanket damage is defined as any tears, cuts, missing metal skin, missing insulation, and over-temperature conditions shown by discoloration or scorching.

#### 2. WORK INSTRUCTIONS

## A. Actions Required for Compliance

(1) Requirements

Table 1 Rolls Royce Trent 1000 Engine Upper Splitter Fairing Assembly Change

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB720007-00 Issue 001 or later approved issues as an accepted procedure
All Airplanes	Remove Rolls Royce En-	-	PART 1 - OPEN ACCESS
	gine upper splitter fairing assembly and replace wit new upper splitter fairing assembly with ramp fairin incorporated.	Task 1	-
	Do a General Visual Inspection (GVI) of the left and right Thrust Reverser (TR) Inner Fixed Structure (IFS) forward upper fire seal and thermal blanket for any damage.	-	PART 2 - IFS FORWARD UPPER FIRE SEAL AND THERMAL BLANKET IN- SPECTION



# Table 1 Rolls Royce Trent 1000 Engine Upper Splitter Fairing Assembly Change

Condition	Action	Method of Compliance	Refer to the listed procedures in SB B787-81205-SB720007-00 Issue 001 or later approved issues as an accepted procedure
CONDITION 1: NO DAMAGE FOUND ON IFS FORWARD UPPER FIRE SEAL AND NO DAMAGE FOUND ON THERMAL BLANKET	No further action.	-	-
CONDITION 2: ANY IFS FORWARD UPPER FIRE SEAL DAMAGE FOUND	Replace IFS forward fire seal.	-	PART 3 - IFS FORWARD UPPER FIRE SEAL RE- PLACEMENT
CONDITION 3: ANY THERMAL BLANKET DAMAGE FOUND	Replace thermal blankets.	-	PART 4 - THERMAL BLANKET REPLACE- MENT
-			PART 5 - CLOSE AC- CESS



# Task 1 – ENGINE - UPPER SPLITTER FAIRING ASSEMBLY - REPLACEMENT [Group 1:]

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# **Procedure**

This Task applies only to: Group 1.

**ENGINE - UPPER SPLITTER FAIRING ASSEMBLY - REPLACEMENT** 



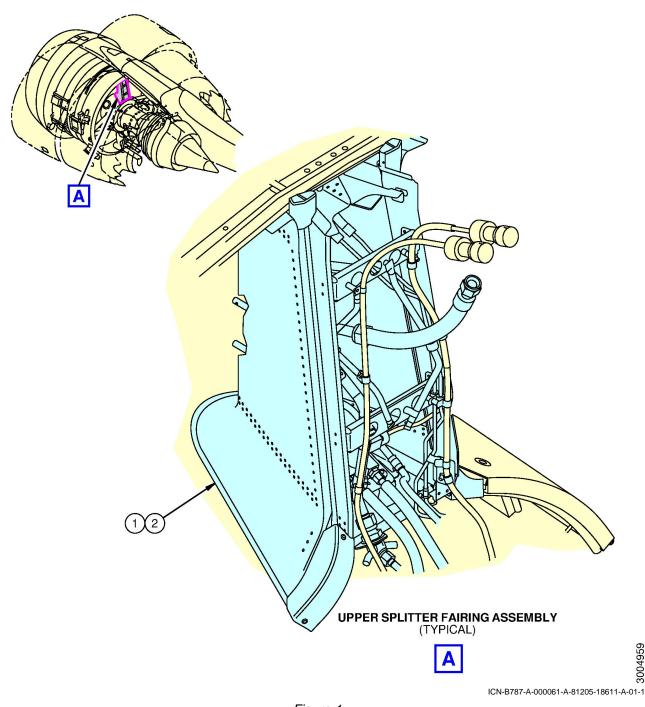
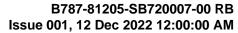


Figure 1

1. The step numbers shown below agree with the numbers shown in the circle symbols in the Task. The QTY numbers shown below are the number of parts necessary for each Engine.

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# Table 1

Step	Action	Name	Identification	Qty	More Data
1	Remove	UPPER SPLITTER FAIRING ASSEMBLY	-	1	*[1]
2	Install (New)	UPPER SPLITTER FAIRING ASSEMBLY	-	1	*[1]

<sup>\*[1]</sup> Replace existing Upper Splitter Fairing Assembly with new Upper Splitter Fairing Assembly in accordance with Rolls Royce Service Bulletin TRENT 1000 72-AK759, Initial Issue, dated Jul. 28/22.