PRATT & WHITNEY CANADA

SERVICE BULLETIN

P&WC S.B. No. 28237R2

BULLETIN INDEX LOCATOR
72-41-00 / 72-51-02 / 73-11-40

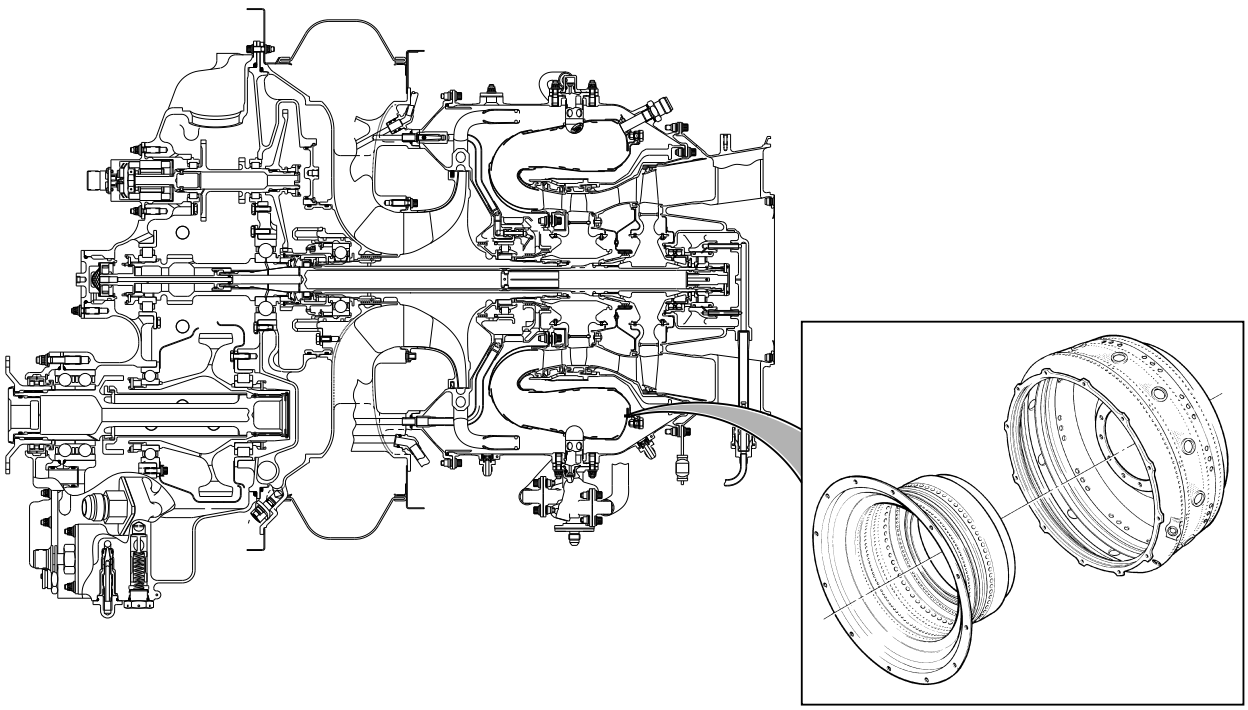
TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF

MODEL APPLICATION

PW206B, PW206C

Compliance: CATEGORY 7

Summary: The current combustion chamber liners are complex to manufacture. Replace the combustion chamber liners with one which is a one-piece welded construction. This necessitates the incorporation of new fuel nozzles and gaskets, fuel manifold, power turbine stator, flow divider and gas generator case to accommodate the new hardware.



Oct 09/2002
Revision No. 2: Sep 28/2021

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Pratt & Whitney Canada
A United Technologies Company

28 September 2021

P&WC S.B. No. 28237R2

REVISION TRANSMITTAL SHEET
TURBOSHAFT ENGINE MODEL PW200

SUBJECT: Pratt & Whitney Canada Service Bulletin No. PW200-72-28237, Rev. No. 2, dated Sep 28/2021 (P&WC S.B. No. 28237R2) COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF

Replace your existing copy of this service bulletin with the attached revised bulletin. Destroy the superseded copy.

Please retain this Revision Transmittal Sheet with the revised bulletin.

SUMMARY: This service bulletin is revised to:

- change the Compliance Code to read “CC 7” in instead of “CC 8” in Para. 1.E., Planning Information.
- add equivalent supplier P/N in Para. 2.C., Material Information and Figure 11 in Para. 4., Appendix.
- prices updated to current year.

EFFECT OF REVISION ON PRIOR ACCOMPLISHMENT:

None.

NOTE: A black bar in the left margin indicates a change in that line of text or figure.

REVISION HISTORY:

Original Issue: Oct 09/2002
Revision No. 1: Feb 07/2006
Revision No. 2: Sep 28/2021

PRATT & WHITNEY CANADA

SERVICE BULLETIN

P&WC S.B. No. 28237R2

TURBOSHAFT ENGINE

COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF

1. Planning Information

A. Effectivity

PW206B Engines which are before and include Serial No. PCE-BB0126
PW206C Engines which are before and include Serial No. PCE-BC0360

NOTE: The above effectivity list does not identify engines that have been converted from one engine model to another via an engine conversion service bulletin. To clarify the effectivity of converted engines, refer to the original engine effectivity above. For the parts embodied during the engine conversion, refer to conversion service bulletin.

B. Concurrent Requirements

This service bulletin must be incorporated in conjunction with:

PW206B: P&WC S.B. No. 28143, 28173, 28187, 28202, 28231 and SPB PW200-44.

PW206C: P&WC S.B. No. 28165, 28173, 28187, 28193, 28202, 28231 and SPB PW200-44.

C. Reason

(1) Problem

The current combustion chamber liners are complex to manufacture.

(2) Cause

Current manufacturing process.

(3) Solution

Replace the combustion chamber liners with one which is a one-piece welded construction. This necessitates the incorporation of new fuel nozzles and gaskets, fuel manifold, power turbine stator, flow divider and gas generator case to accommodate the new hardware.

D. Description

Replace the current two pieces combustion chamber liners with a one-piece welded construction.

E. Compliance

CATEGORY 7 - You can do this service bulletin when the supply of superseded parts is fully used.

P&WC No. D1734B, D2808A, D3209B, DCR29433

1. Planning Information (Cont'd)

F. Approval

D.O.T./D.A.A. approved.

G. Manpower

Estimate of 13.0 man-hours required to include this service bulletin at overhaul.

H. Weight and Balance

The engine weight will decrease by 0.36 pounds (0.16 kgs).

The effect of the weight change on the center of gravity is negligible.

I. Electrical Load Data

Not changed.

J. Software Accomplishment Summary

Not applicable.

K. References

Illustrated Parts Catalog P/N 3039734 (PW206B)
Illustrated Parts Catalog P/N 3043324 (PW206C)
Maintenance Manual P/N 3039732 (PW206B/206B2)
Maintenance Manual P/N 3043322 (PW206C/207C)
Overhaul Manual P/N 3039733 (PW206B/206B2)
Overhaul Manual P/N 3043323 (PW206C/207C)
PWA Overhaul Standard Practices Manual P/N 585005
P&WC S.B. No. 28202
P&WC S.B. No. 28217
P&WC S.B. No. 28231
Spare Parts Bulletin45

L. Publications Affected

Illustrated Parts Catalog P/N 3039734 (PW206B)
Illustrated Parts Catalog P/N 3043324 (PW206C)
Overhaul Manual P/N 3039733 (PW206B/206B2)
Overhaul Manual P/N 3043323 (PW206C/207C)

M. Interchangeability and Intermixability of Parts

Interchangeability - Refer to Para. 2.C.

1. Planning Information (Cont'd)

Intermixability - Old Parts cannot be intermixed with the new parts.

2. Material Information

A. Industry Support Information

Not applicable.

B. Material - Cost and Availability

You can get the procurable parts listed in Para. 2.C. from any Pratt & Whitney Canada Parts Distribution Center.

The estimated total cost of new parts needed to replace old parts is $Quote (US, 2020).

The new parts are available.

C. Material Necessary for Each Engine

The quantity of materials listed in this section is on a per Engine basis.

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price ($US, 2020)	Instructions Disposition
Turbomachinery Module:					
For Engines Not Incorporating P&WC SPB45:					
3058551-01	Turbomachinery Module	3045480-01	Ref.		
3057926-01	. Plate, Identification, Turbomachinery Module	3039530	1	Quote	(A)(E)
3018356	. Rivet, Blind, Universal	3018356	4	13.92	(A)(D)
For Engines Incorporating P&WC SPB45:					
3058551-01	Turbomachinery Module	3045480-01	Ref.		
3057926-01	. Plate, Identification, Turbomachinery Module	3057926-01	1	Quote	(A)(E)
3018356	. Rivet, Blind, Universal	3018356	4	13.92	(A)(D)
Fuel Nozzles Installation:					
	Nozzle, Fuel, Hybrid Equivalent to Supplier P/N 70132	3044285-01	5		(A)(C)

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price ($US, 2020)	Instructions Disposition
3056042-02	Nozzle, Fuel, Hybrid Equivalent to Supplier P/N 135678		5	9665.50	(A)
	Packing, Preformed	AS3209-014	5		(A)(D)
AS3209-010	Packing, Preformed	AS3209-012	5	1.19	(A)(D)
AS3209-010	Packing, Preformed	AS3209-010	5	1.19	(F)
	Nozzle Set, Fuel, Air Blast Equivalent to Supplier P/N 69332-4	3044180-01	7		(A)(C)
3056565-02	Nozzle Set, Fuel, Air Blast Equivalent to Supplier P/N 135677		7	Quote	(A)
AS3209-012	Packing, Preformed	AS3209-010	7	1.62	(A)(D)
3056068-01	Gasket, Fuel Nozzle	3044897-02	12	29.60	(A)(D)
Fuel Flow Divider Installation:					
	Flow Divider Assy Supplier Code (66503) P&WC P/N 3044134-02	8063-173	1		(A)(C)
8063-174	Flow Divider Assy Supplier Code (66503) P&WC P/N 3044134-03		1	29268.00	(A)
3056068-01	Gasket, Fuel Nozzle	3044897-02	1	29.60	(A)(D)
Fuel Manifold Cover Installation:					
	Cover, Packing	3044282-01	1		(A)(C)
	Gasket, Fuel Accumulator	3122999-01	1		(A)(D)
	Packing, Preformed	AS3209-010	1		(A)(D)
For Engines Not Incorporating P&WC S.B. No. 28231:					
	Bolt, Mach, Dbl Hex	MS9208-08	2		(A)(C)
	Nut Option (IC)	ST3032-09	2		(A)(C)
For Engines Incorporating P&WC S.B. No. 28231:					

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price ($US, 2020)	Instructions Disposition
	Bolt, Mach, Dbl Hex	MS9556-08	2		(A)(C)
	Nut Option (IC)	ST3030-09	2		(A)(C)
Fuel Manifold Installation:					
3056066-01	Manifold, Fuel, Flexible	3044063-01	1	31763.00	(A)(C)
	Tube, Transfer, Two-Groove	3104225-01	1		(A)(B)
	Packing, Preformed	AS3209-010	1		(A)(D)
AS3209-010	Packing, Preformed	AS3209-010	1	1.19	(F)
3056068-01	Gasket, Fuel Nozzle	3044897-02	11	29.60	(A)(D)
For Engines Not Incorporating P&WC S.B. No. 28231:					
ST3032-10	Nut Option (IC)	ST3032-09	5	20.11	(A)(C)
For Engines Incorporating P&WC S.B. No. 28231:					
ST3030-10	Nut Option (IC)	ST3030-09	5	10.82	(A)(C)
Fuel Tube Support Bracket Not Incorporating P&WC S.B. No. 28217:					
	Bracket Assy, Angle	3044796-01	1		(A)(C)
	. Bracket, Angle	3044920-01	1	NP	
	. Nut, Self Locking, Two-Lug Floating	ST3176-09	1		
	. Rivet, Solid, Flush	AN123470	2		
3056067-01	Bracket, Angle		1	391.40	(A)
ST3032-09	Nut Option (IC)		1	9.58	(A)
Fuel Tube Support Bracket P&WC S.B. No. 28217:					
3056067-01	Bracket, Angle	3055095-01	1	391.40	(A)(C)
Power Turbine Stator Installation:					
3057532CL03	Stator Assembly, Power Turbine	3049992CL03	1	Quote	(A)(B)
3057542CL03	. Stator Assembly, Power Turbine (Machined)	3049702CL03	1	NP	

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price ($US, 2020)	Instructions Disposition
Combustion Chamber Liner Installation:					
	Liner Assy, Combustion Chamber, Outer	3044926-01	1		(A)(C)
	. Bracket, Suspension Collar	3043738-01	2		
	. Collar, Suspension, Combustion Chamber Liner	3043739-01	2		
	. Boss, Igniter	3043737-01	2	NP	
	. Nut Option (IC)	ST3297-01	12		
	Liner Assy, Combustion Chamber, Inner	3044924-01	1		(A)(C)
	Bolt, Mach, Dbl Hex	MS9696-06	12		(A)(C)
3057623-01	Liner Assy, Combustion Chamber		1	Quote	(A)
Gas Generator Case Assembly Installation:					
For Engines Not Incorporating P&WC S.B. No. 28202:					
01R3043675-01	Case Assy, Gas Generator	3043675-01	RWK		(A)(G)
	. Stud, Stepped	ST3264-033	26		(A)(D)
ST3264-033	. Stud, Stepped		2	107.40	(A)
ST3755-14	. Stud, Key, Locked		5	381.80	(A)
ST3468-12	. Stud, Key, Locked		19	Quote	(A)
For Engines Incorporating P&WC S.B. No. 28202:					
3056069-01	Case Assy, Gas Generator	3053077-01	1	63712.00	(A)(B)
ST3755-14	. Stud, Key, Locked	ST3648-12	5	381.80	(A)(D)
PW206B System Components Identification Drawing:					
3119884-11	System Components Identification Drawing	3119884-10	Ref.		
3056066-01	. Manifold, Fuel, Flexible	3044063-01	1	Ref.	

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price ($US, 2020)	Instructions Disposition
	. Nozzle, Fuel, Hybrid Equivalent to Supplier P/N 70132	3044285-01	5		
3056042-02	. Nozzle, Fuel, Hybrid Equivalent to Supplier P/N 135678		5	Ref.	
	. Nozzle, Fuel, Air Blast Equivalent to Supplier P/N 69332-4	3044180-01	7		
3056565-02	. Nozzle, Fuel, Air Blast Equivalent to Supplier P/N 135677		7	Ref.	
	. Flow Divider Assy Supplier (66503) P&WC P/N 3044134-02	8063-173	1		
8063-174	. Flow Divider Assy Supplier (66503) P&WC P/N 3044134-03		1	Ref.	
PW206C System Components Identification Drawing:					
3120010-07	System Components Identification Drawing	3120010-06	Ref.		
3056066-01	. Manifold, Fuel, Flexible	3044063-01	1	Ref.	
	. Nozzle, Fuel, Hybrid Equivalent to Supplier P/N 70132	3044285-01	5		
3056042-02	. Nozzle, Fuel, Hybrid Equivalent to Supplier P/N 135678		5	Ref.	
	. Nozzle, Fuel, Air Blast Equivalent to Supplier P/N 69332-4	3044180-01	7		
3056565-02	. Nozzle, Fuel, Air Blast Equivalent to Supplier P/N 135677		7	Ref.	

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price ($US, 2020)	Instructions Disposition
	• Flow Divider Assy Supplier (66503) P&WC P/N 3044134-02	8063-173	1		
8063-174	• Flow Divider Assy Supplier (66503) P&WC P/N 3044134-03		1	Ref.	

(A) RESTRICTED INTERCHANGEABILITY - (ATA 200 Explanation Code 07):
All the old parts must be replaced by all the new parts as an assembly.

(B) To get the new part it is possible to make a modification to the old part: refer to the Accomplishment Instructions, or you can get the new part from any Pratt & Whitney Canada Distribution Center.

(C) Discard the part if it is unserviceable. Return a serviceable part to stock.

(D) Discard. Do not use again in any application.

(E) Return old parts to a P&WC Representative.

(F) Standard replacement part. Latest at the time of SB issue.

(G) To get the new part it is necessary to make a modification to the old part.

D. Reidentified Parts

The following list of parts can be reworked:

OLD P/N	NEW P/N
3053077-01	3056069-01
3049992CL03	3057532CL03
3049702CL03	3057542CL03
3043675-01	01R3043675-01

E. Tooling - Price and Availability

Not applicable.

3. Accomplishment Instructions

A. Remove the parts listed under Old P/N column in Para. 2.C., Material Information, in accordance with the maintenance or overhaul manual instructions as follows:

• Ref. OHM 72-01-00 ENGINE EXTERNALS (PW206B) - DISASSEMBLY-1.

3. Accomplishment Instructions (Cont'd)

- Ref. OHM 72-01-00 ENGINE EXTERNALS (PW206C) - DISASSEMBLY-1.
- Ref. OHM 72-03-00 TURBOMACHINERY - DISASSEMBLY.
- Ref. MM 72-00-30 HSI (PW206B (PRE-SB28187)) - HEAVY MAINTENANCE.
- Ref. MM 72-00-30 HSI (PW206C (PRE-SB28187)) - HEAVY MAINTENANCE.
- Ref. MM 72-00-31 HSI (PW206C (POST-SB28187), PW207C) - HEAVY MAINTENANCE.
- Ref. MM 72-00-31 HSI (PW206B (POST-SB28187), PW206B2 AND PW206B3) - HEAVY MAINTENANCE.
- Ref. MM 73-11-40 FUEL MANIFOLDS AND FUEL NOZZLES - MAINTENANCE PRACTICES.
- Ref. MM 73-11-60 FUEL FLOW DIVIDER - MAINTENANCE PRACTICES.

NOTE: 1. Refer to Figure 4 for the PRE and the POST combustion chamber liners configurations.

NOTE: 2. Refer to Figure 5 for the hybrid and the air blast fuel nozzles configuration and to Figure 6 for the flexible fuel manifold and the flow divider configuration.

B. Do the steps that follow to change the configuration of the **Pre-SB28202** gas-generator case assembly (Ref. Fig. 1):

NOTE: The tools necessary for the key-locked stud installation are available from:
Fairchild Fasteners
Fastener Division
3000 W. Lomita Blvd.
Terrance, CA 90505
U.S.A.

(1) Remove the 24 studs P/N ST3264-033 from the fuel nozzle bosses per SPOP 416 (Task 70-00-00-350-006). Discard the studs.

NOTE: If you cannot remove the stud easily, use a heat gun (ES No.628) to increase the temperature of the stud area for 10 minutes minimum.

(2) Make sure that the internal threads from the fuel nozzle bosses are clean and show no signs of damage.

NOTE: If necessary, use a bottoming tap (0.250-28UNJF-3) to clean the threads.

(3) Drill and tap new threads at five locations (Location C) to the dimensions shown on the figure.

3. Accomplishment Instructions (Cont'd)

(4) Examine the reworked areas (Location C) for cracks per SPOP 70 (Ref. SPM, Chapter 70-33-00). Reject the case if there are cracks.

(5) Use the installation tool to install the 19 key-locked studs P/N ST3648-12 and the five key-locked studs P/N ST3755-14 until the locking kees touch Face AA of the fuel nozzle boss.

NOTE: 1. Install the five key-locked studs P/N ST3755-14 at Location C of the fuel nozzle bosses as shown on the figure.

NOTE: 2. You can install the key-locked studs with fingers.

(6) Use the installation tool to push down the stud locking kees below Face AA of the fuel nozzle boss.

(7) Make sure that the key-locked studs are correctly installed and the protrusion is in the specified limits.

WARNING: USE EYE PROTECTION WHEN YOU WRITE WITH THE VIBRATION PEENING PROCEDURE.

(8) Put a line across the old part number. Use the vibration peening procedure, 0.003 to 0.006 in. (0.08-0.15 mm) deep, and write the new part number in the same area.

(9) If necessary, apply aluminum coating (PWA 110) on the reworkrd areas of the case per SPOP 144 (Task 70-41-03-380-038) to get a thickness the same as the adjacent surface. Make sure the overlap on the adjacent surface is 1/8 in. (3 mm) minimum.

NOTE: Coating is not permitted on the studs.

C. Do the steps that follow to change the configuration of the **Post-SB28202** gas-generator case assembly (Ref. Fig. 2):

NOTE: The tools necessary for the key-locked stud removal and installation are available from:
Fairchild Fasteners
Fastener Division
3000 W. Lomita Blvd.
Terrance, CA 90505
U.S.A.

(1) Cut the five key-locked-stud nut ends P/N ST3648-12 from Location C at a point just above the surface (Ref. Fig. 2, Step 1). Discard the studs.

3. Accomplishment Instructions (Cont'd)

(2) Use a No.12 (4.8 mm) diameter drill with a drill bushing to drill the stud material between the locking kees to a maximum depth of 0.125 in. (3.18 mm) (Ref. Fig. 2, Step 2).

(3) Use a punch to break the locking kees into holes (Ref. Fig. 2, Step 3).

(4) Use the easy-out tool to remove the stud ends from the fuel nozzle bosses (Ref. Fig. 2, Step 4). Discard the stud ends.

(5) Drill and tap new threads at five locations (Location C) to the dimensions shown on the figure.

NOTE: Threads dimension is 0.3125-24UNJF-3B.

(6) Examine the reworked areas (Location C) for cracks per SPOP 70 (Ref. SPM, Chapter 70-33-00). Reject the case if there are cracks.

(7) Use the installation tool to install the five new key-locked studs P/N ST3755-14 until the locking kees touch Face AA of the fuel nozzle boss.

NOTE: 1. Install the five key-locked studs P/N ST3755-14 at Location C of the fuel nozzle bosses as shown on the figure.

NOTE: 2. You can install the key-locked studs with fingers.

(8) Use the installation tool to push down the stud locking kees below Face AA of the fuel nozzle boss.

(9) Make sure that the key-locked studs are correctly installed and the protrusion is in the specified limits.

WARNING: USE EYE PROTECTION WHEN YOU WRITE WITH THE VIBRATION PEENING PROCEDURE.

(10) Put a line across the old part number. Use the vibration peening procedure, 0.003 to 0.006 in. (0.08-0.15 mm) deep, and write the new part number in the same area.

(11) If necessary, apply aluminum coating (PWA 110) on the reworkrd areas of the case per SPOP 144 (Task 70-41-03-380-038) to get a thickness the same as the adjacent surface. Make sure the overlap on the adjacent surface is 1/8 in. (3 mm) minimum.

NOTE: Coating is not permitted on the studs.

D. Modify the power-turbine stator assembly as follows (Ref. Figure 3):

3. Accomplishment Instructions (Cont'd)

(1) Machine Face B of the stator to the dimensions shown on the figure.

(2) Break the sharp edges to get 0.003 to 0.015 in. (0.08-0.38 mm) radii .

(3) Examine the machined area for cracks per SPOP 62 (Ref. SPM, Chapter 70-33-00). Reject the stator if there are cracks.

WARNING: USE EYE PROTECTION WHEN YOU WRITE WITH THE VIBRATION PEENING PROCEDURE.

(4) Put a line across the old part number. Use the vibration peening procedure, 0.003 to 0.006 in. (0.08-0.15 mm) deep, and write the new part number in the same area.

E. Install the parts listed under New P/N column in Para. 2.C., Material Information, in accordance with the maintenance or overhaul manual instructions as follows:

- Ref. OHM 72-01-00 ENGINE EXTERNALS (PW206B) - ASSEMBLY-1.
- Ref. OHM 72-01-00 ENGINE EXTERNALS (PW206C) - ASSEMBLY-1.
- Ref. OHM 72-03-00 TURBOMACHINERY SECTION - ASSEMBLY-3 (For PW206C).
- Ref. OHM 72-03-00 TURBOMACHINERY - ASSEMBLY-3 (For PW206B).
- Ref. MM 72-00-30 HSI (PW206B (PRE-SB28187)) - HEAVY MAINTENANCE.
- Ref. MM 72-00-30 HSI (PW206C (PRE-SB28187)) - HEAVY MAINTENANCE.
- Ref. MM 72-00-31 HSI (PW206C (POST-SB28187), PW207C) - HEAVY MAINTENANCE.
- Ref. MM 72-00-31 HSI (PW206B (POST-SB28187), PW206B2 AND PW206B3) - HEAVY MAINTENANCE.
- Ref. MM 73-11-40 FUEL MANIFOLDS AND FUEL NOZZLES - MAINTENANCE PRACTICES.
- Ref. MM 73-11-60 FUEL FLOW DIVIDER - MAINTENANCE PRACTICES.

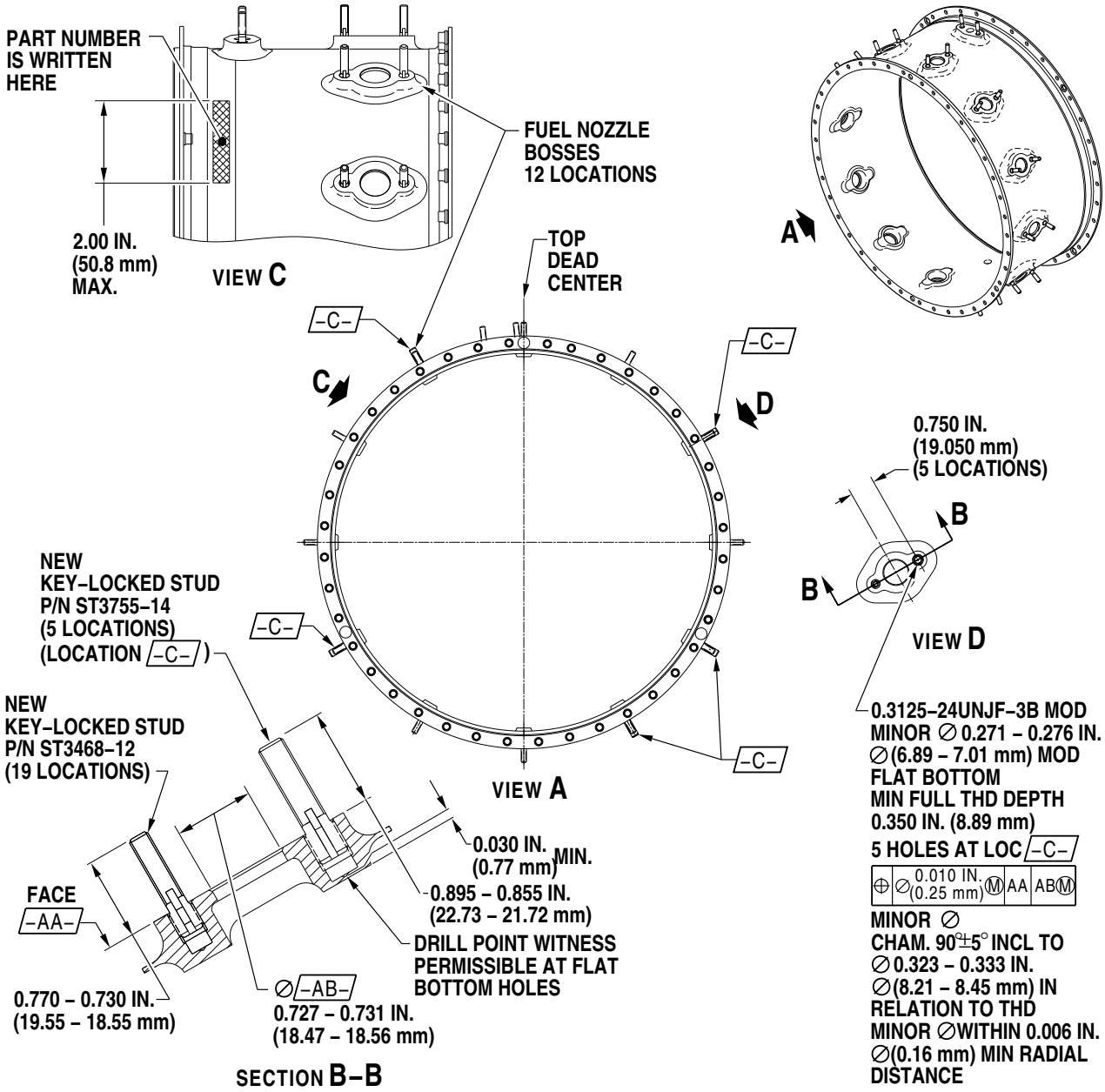
NOTE: 1. Refer to Figure 4 for the PRE and the POST combustion chamber liners configurations.

NOTE: 2. Refer to Figure 5 for the hybrid and the air blast fuel nozzles configuration and to Figure 6 for the flexible fuel manifold and the flow divider configuration .

F. Write accomplishment of P&WC S.B. No. 28237 in the engine module log book.

SERVICE BULLETIN

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF



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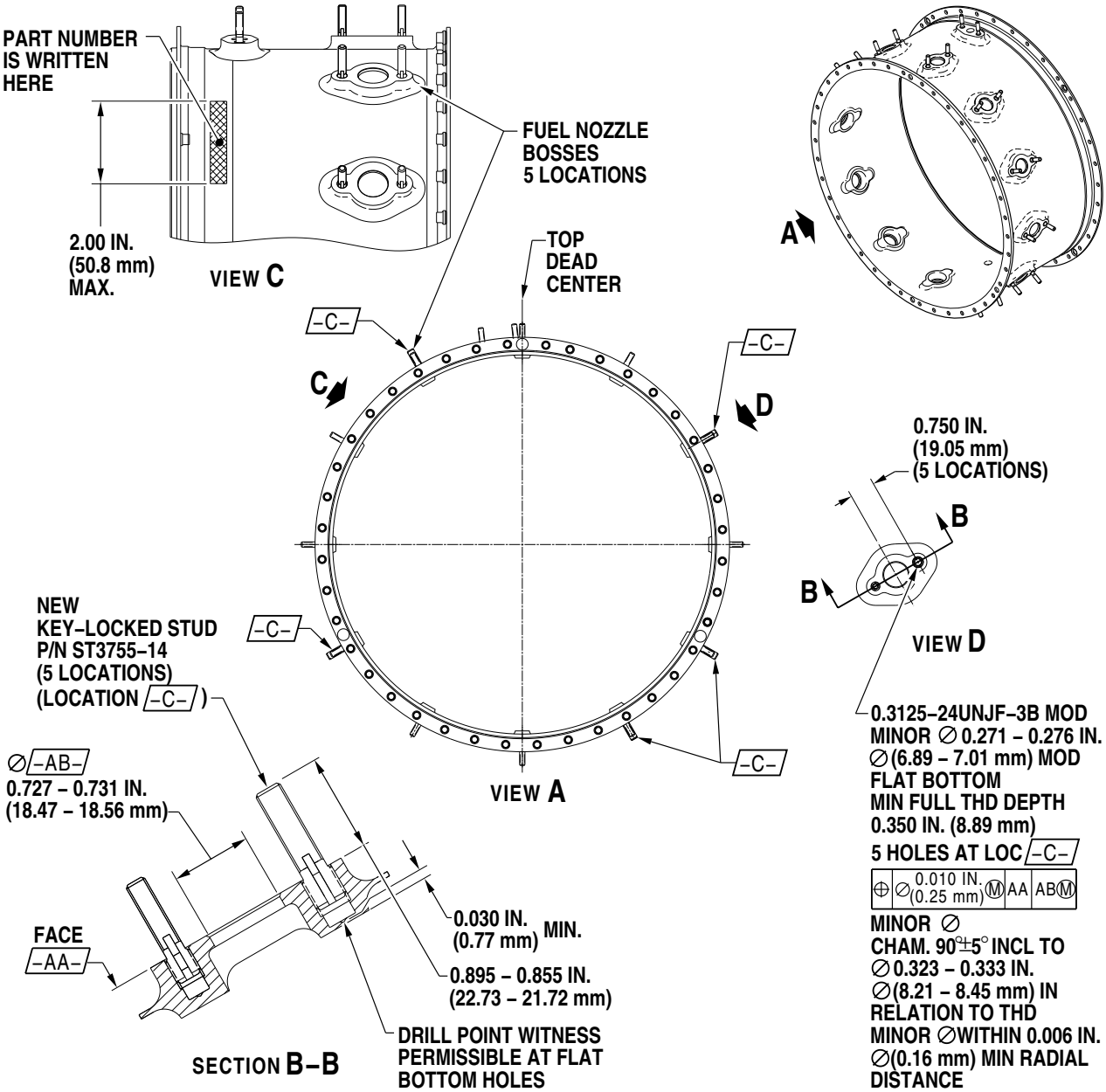
Gas-generator Case Assy - Modification of P/N 3043675-01 (**Pre-SB28202**)
Figure 1

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF



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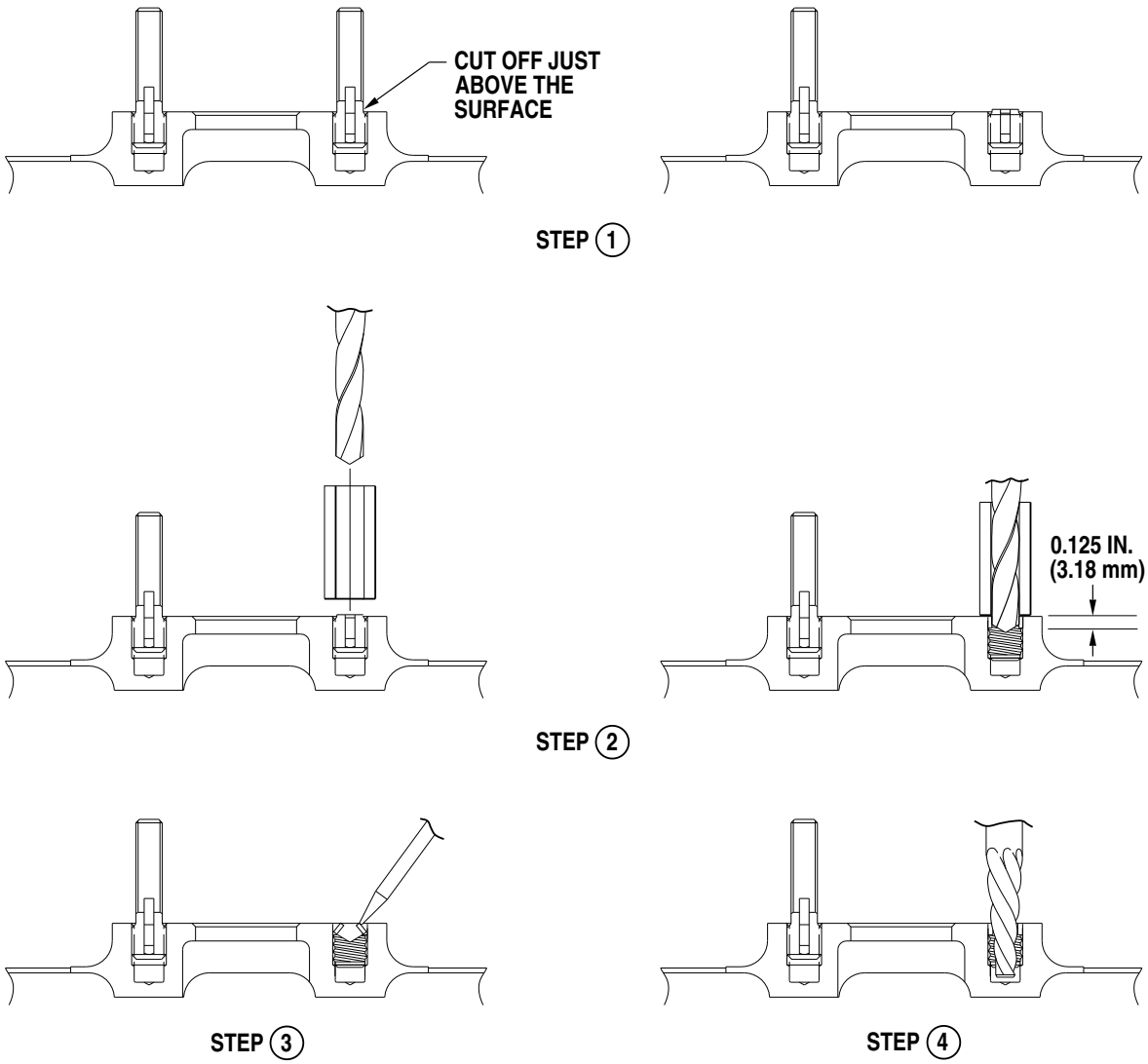
Gas-generator Case Assy - Modification of P/N 3053077-01 (**Post-SB28202**)
Figure 2 (Sheet 1 of 2)

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF



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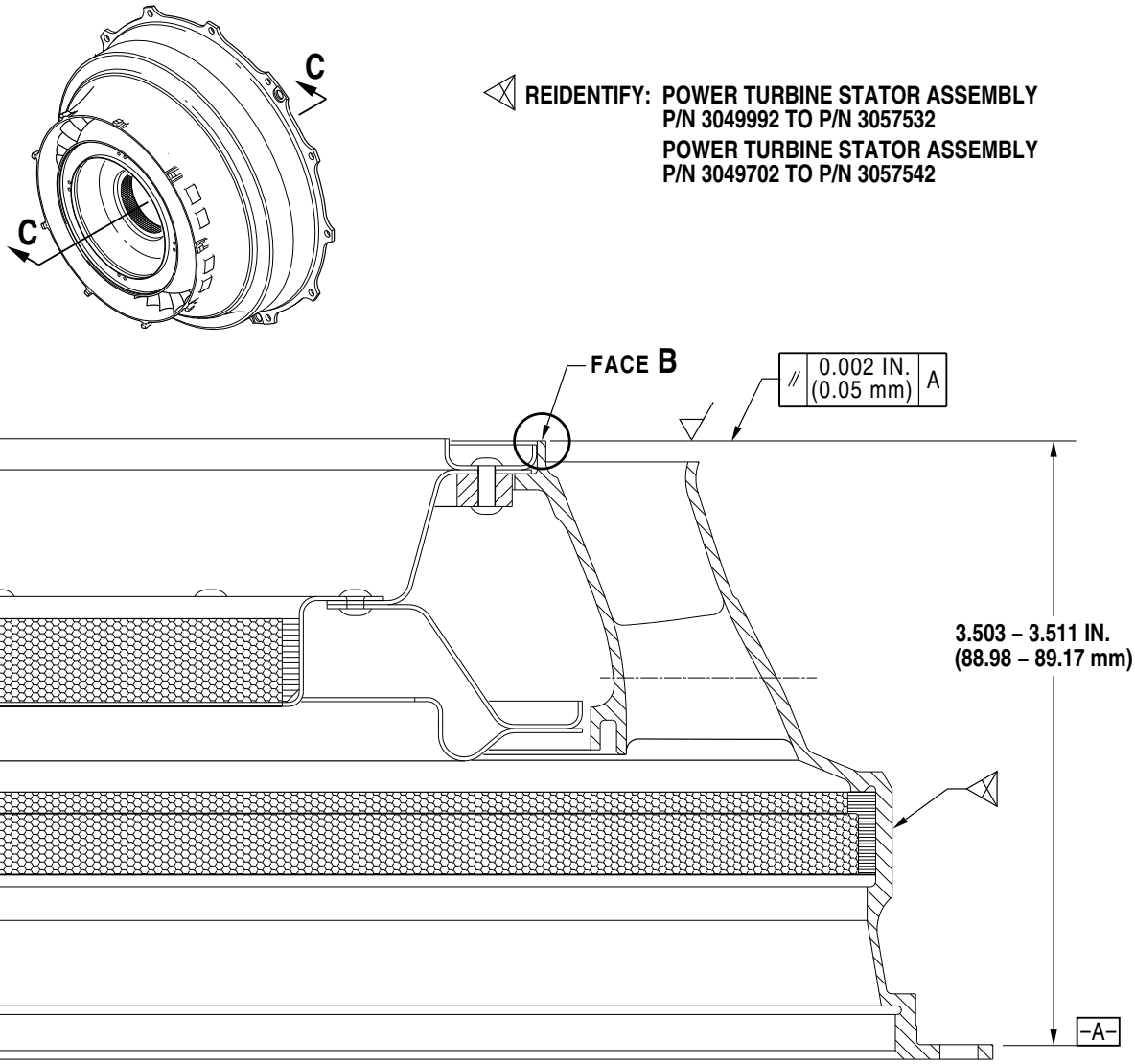
Gas-generator Case Assy - Modification of P/N 3053077-01 (**Post-SB28202**)
Figure 2 (Sheet 2)

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF

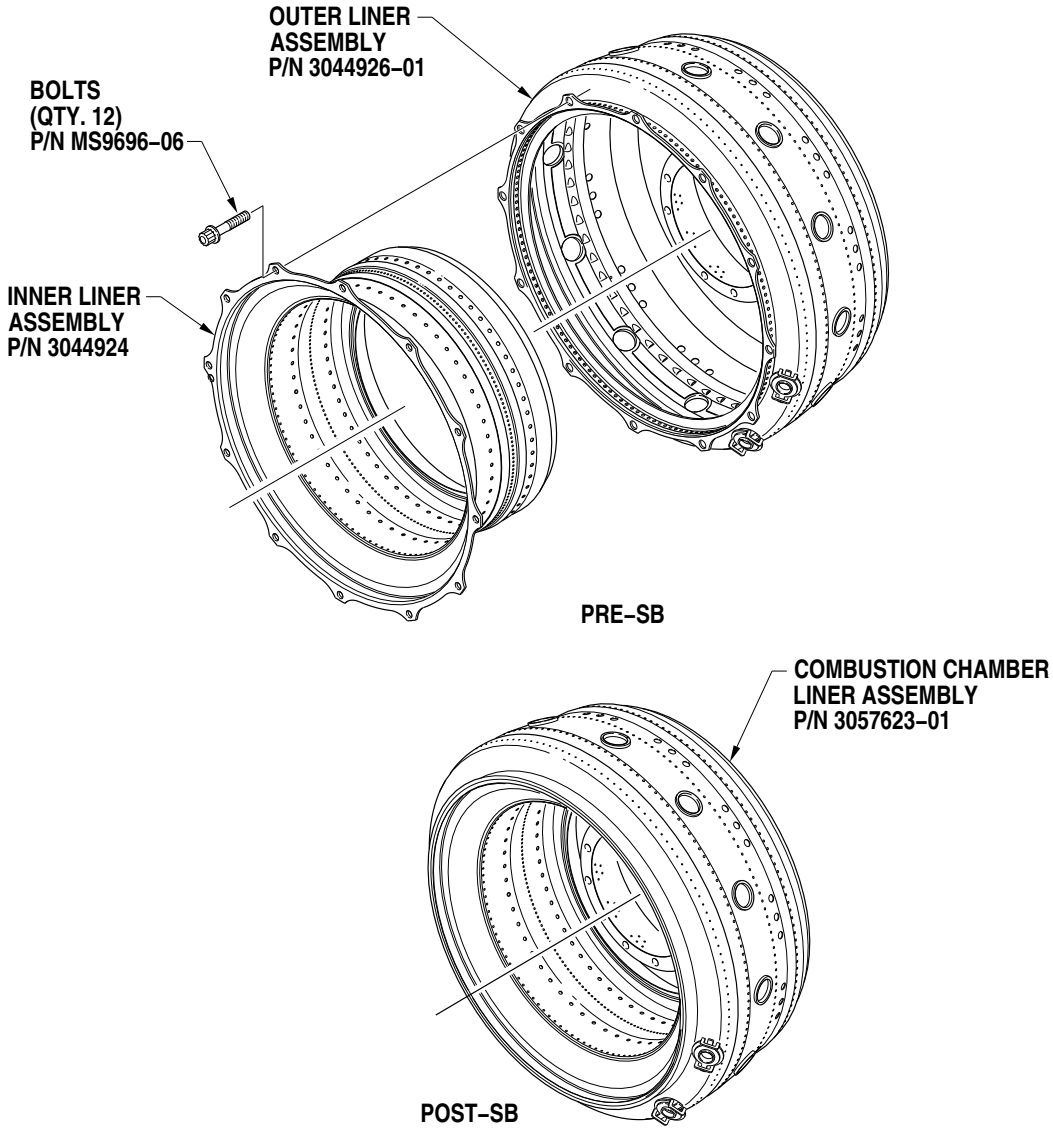


SECTION C–C

C82524

Power-turbine Stator Assy - Modification of
Figure 3

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF



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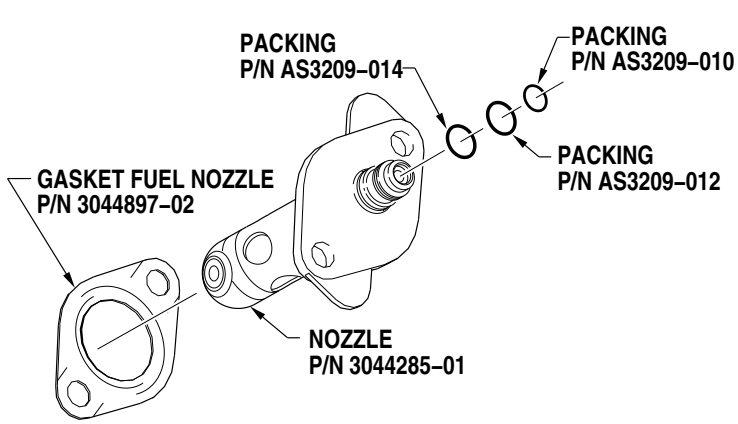
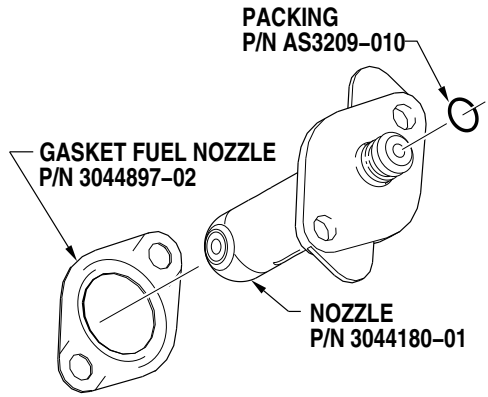
Combustion Chamber Liners Configurations
Figure 4

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF



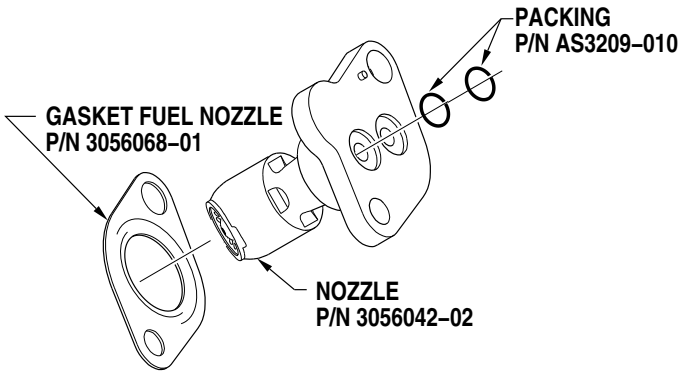
HYBRID CONFIGURATION
(AT 5 LOCATIONS)

(PRE–SB)



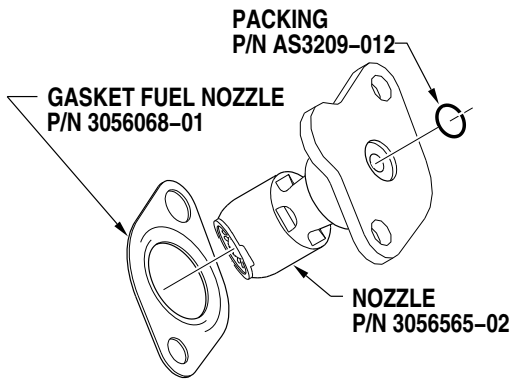
AIRBLAST CONFIGURATION
(AT 7 LOCATIONS)

(PRE–SB)



HYBRID CONFIGURATION
(AT 5 LOCATIONS)

(POST–SB)

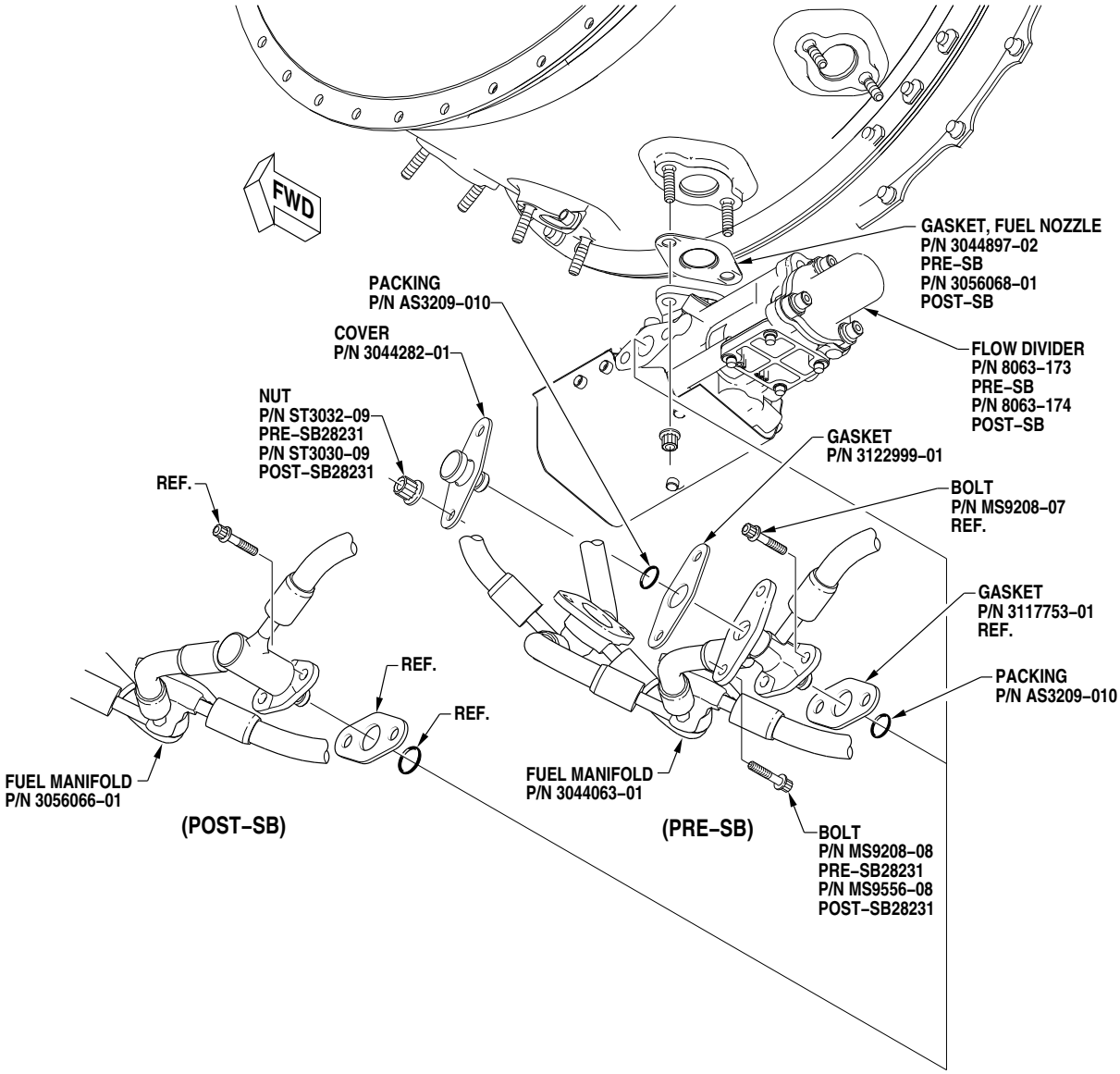


AIRBLAST CONFIGURATION
(AT 7 LOCATIONS)

(POST–SB)

C85597

Hybrid and Airblast Fuel Nozzles - Installation of
Figure 5



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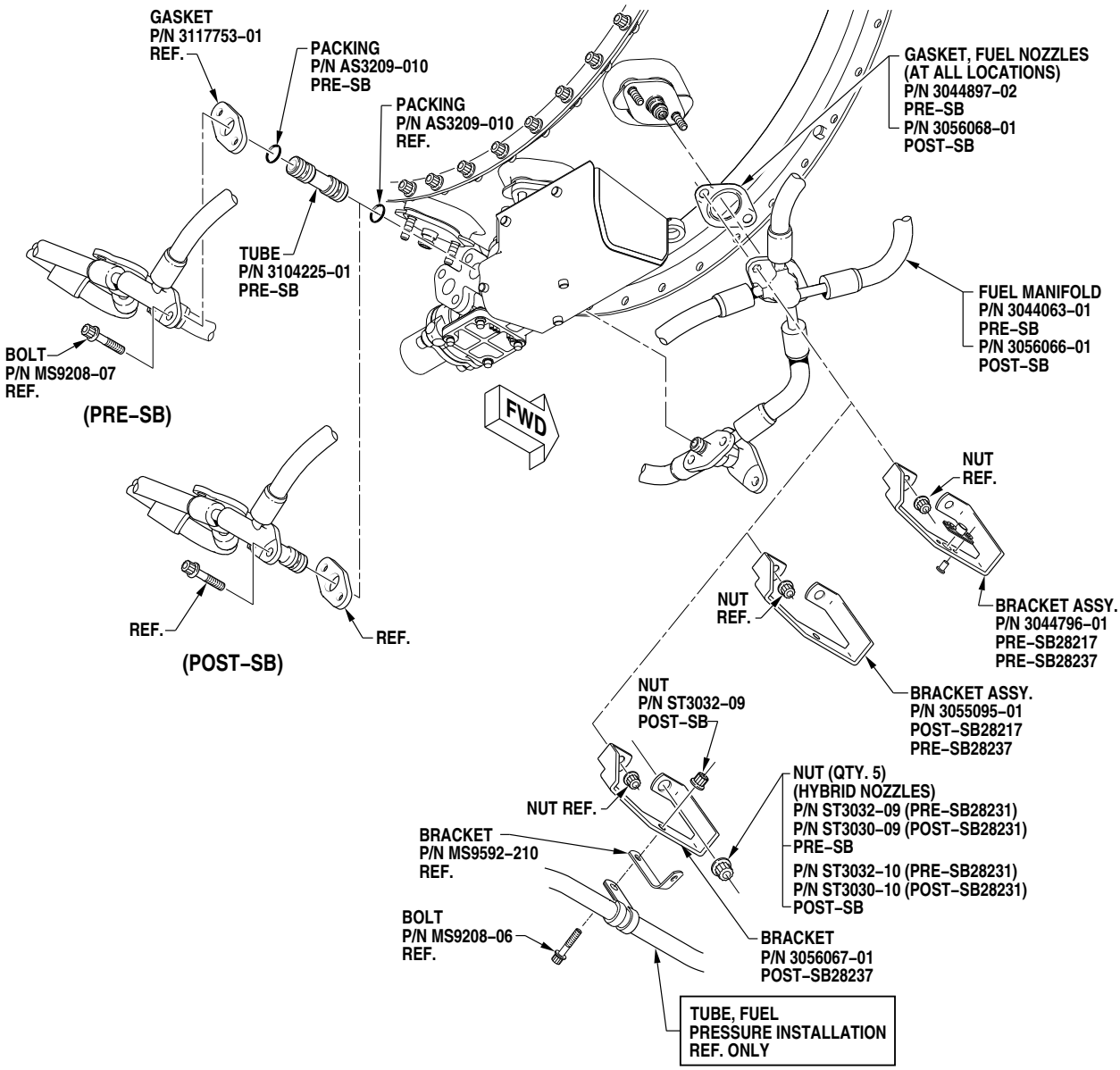
Fuel Manifold Flexible and Flow Divider - Installation of
Figure 6 (Sheet 1 of 2)



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Fuel Manifold Flexible and Flow Divider - Installation of
Figure 6 (Sheet 2)

3. Accomplishment Instructions (Cont'd)

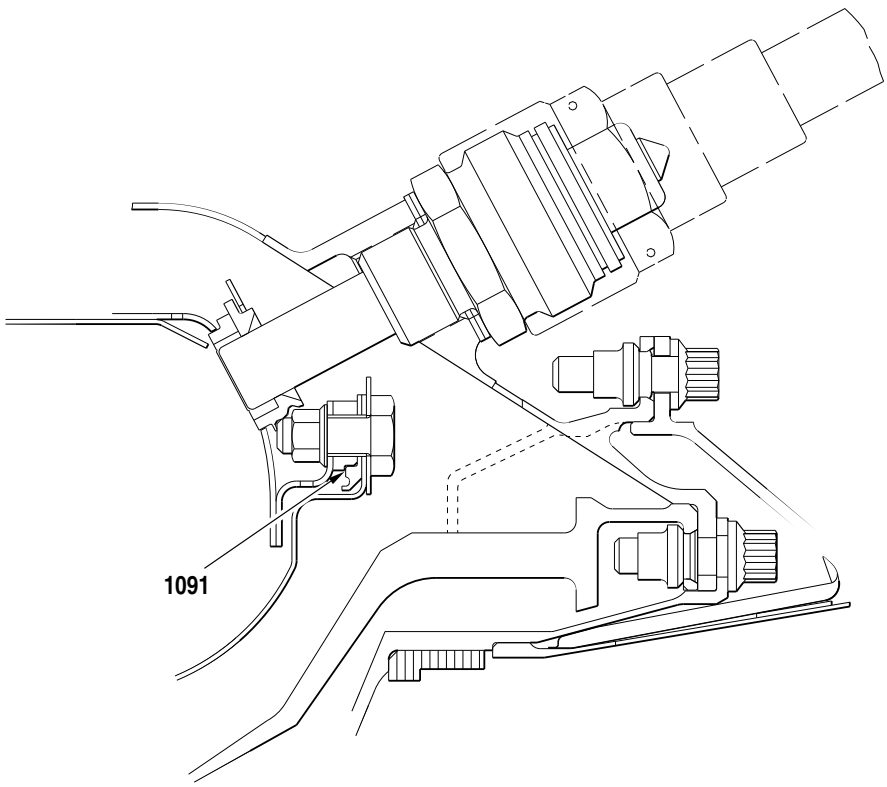
4. Appendix

A. Refer to Tables 1 and 2 and Figures 7 and 8 for revision to the Fits and Clearances.

B. Refer to Figures 9,10 and 11 for the progression of the parts.

TABLE 1, Combustion Chamber Revised Fits and Clearances (Ref. Fig. 7)

REF. NO.	IFR	Name	Dim. for Ref. inches (mm) Min.	Dim. for Ref. inches (mm) Max.	Limits inches (mm) Min.	Limits inches (mm) Max.	Limits inches (mm) Replace
Pre-SB							
1091	A	Combustion-chamber Inner Liner	10.712 (272.09)	10.716 (272.18)	0.002 (0.05)	0.010 (0.25)	
		Combustion-chamber Outer Liner	10.718 (272.24)	10.722 (272.33)			
Post-SB							
1091	A	DELETED					



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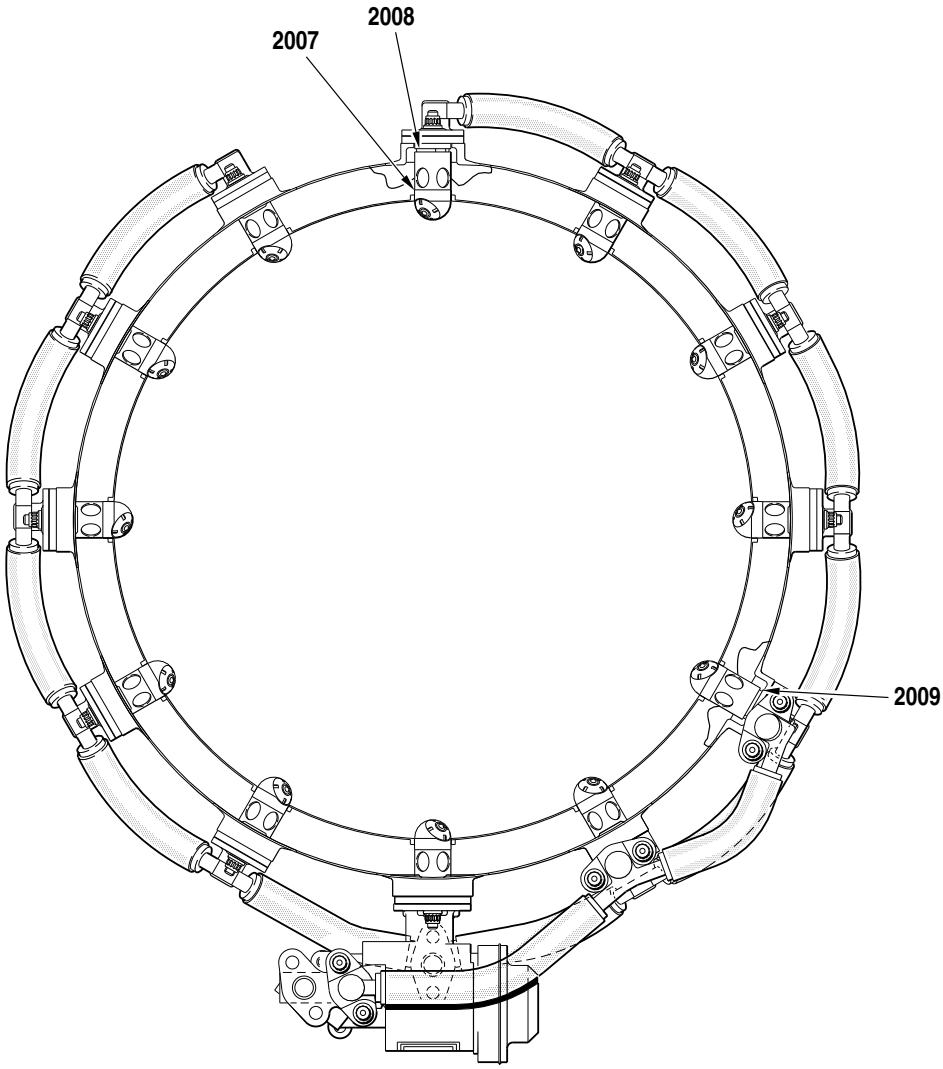
Combustion Chamber - Fits and Clearances (Ref. Table 1)
Figure 7

4. Appendix (Cont'd)

TABLE 2, Liner and Gas Generator Revised Fits and Clearances (Ref. Fig. 8)

REF. NO.	IFR	Name	Dim. for Ref. inches (mm) Min.	Dim. for Ref. inches (mm) Max.	Limits inches (mm) Min.	Limits inches (mm) Max.	Replace
(PRE-SB)							
2007	C	Sheath, Fuel Nozzle	0.6870 (17.450)	0.6920 (17.577)	0.0070 (0.178)	0.0130 (0.330)	
		Liner, Combustion Chamber	0.6990 (17.755)	0.7010 (17.805)			
(POST-SB)							
2007	C	Sheath, Fuel Nozzle	0.6950 (17.653)	0.6970 (17.704)	0.0015 (0.038)	0.0075 (0.191)	
		Liner, Combustion Chamber	0.6985 (17.742)	0.7025 (17.844)			
(PRE-SB)							
2008	C	Nozzle, Fuel, Air Blast	0.6955 (17.666)	0.6970 (17.704)	0.0300 (0.762)	0.0360 (0.902)	
		Case, Gas Generator	0.7270 (18.466)	0.7310 (18.567)			
(POST-SB)							
2008	C	Nozzle, Fuel, Air Blast	0.693 (17.61)	0.697 (17.70)	0.030 (0.77)	0.038 (0.96)	
		Case, Gas Generator	0.727 (18.47)	0.731 (18.56)			
(PRE-SB)							
2009	C	Nozzle, Fuel, Air Blast	0.6955 (17.666)	0.6970 (17.704)	0.0300 (0.762)	0.0360 (0.902)	
		Case, Gas Generator	0.7270 (18.466)	0.7310 (18.567)			
(POST-SB)							
2009	C	Nozzle, Fuel, Air Blast	0.6930 (17.602)	0.6970 (17.704)	0.0300 (0.762)	0.0380 (0.965)	
		Case, Gas Generator	0.7270 (18.466)	0.7310 (18.567)			



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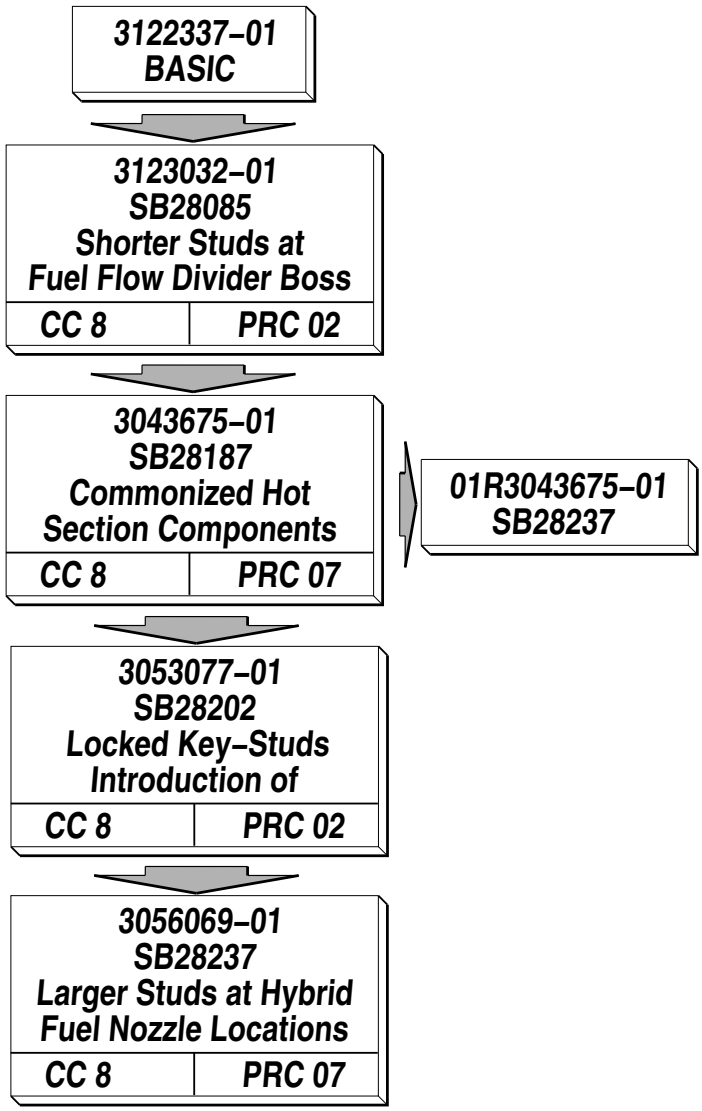
Gas Generator and Fuel Nozzle - Fits and Clearances (Ref. Table 2)
Figure 8



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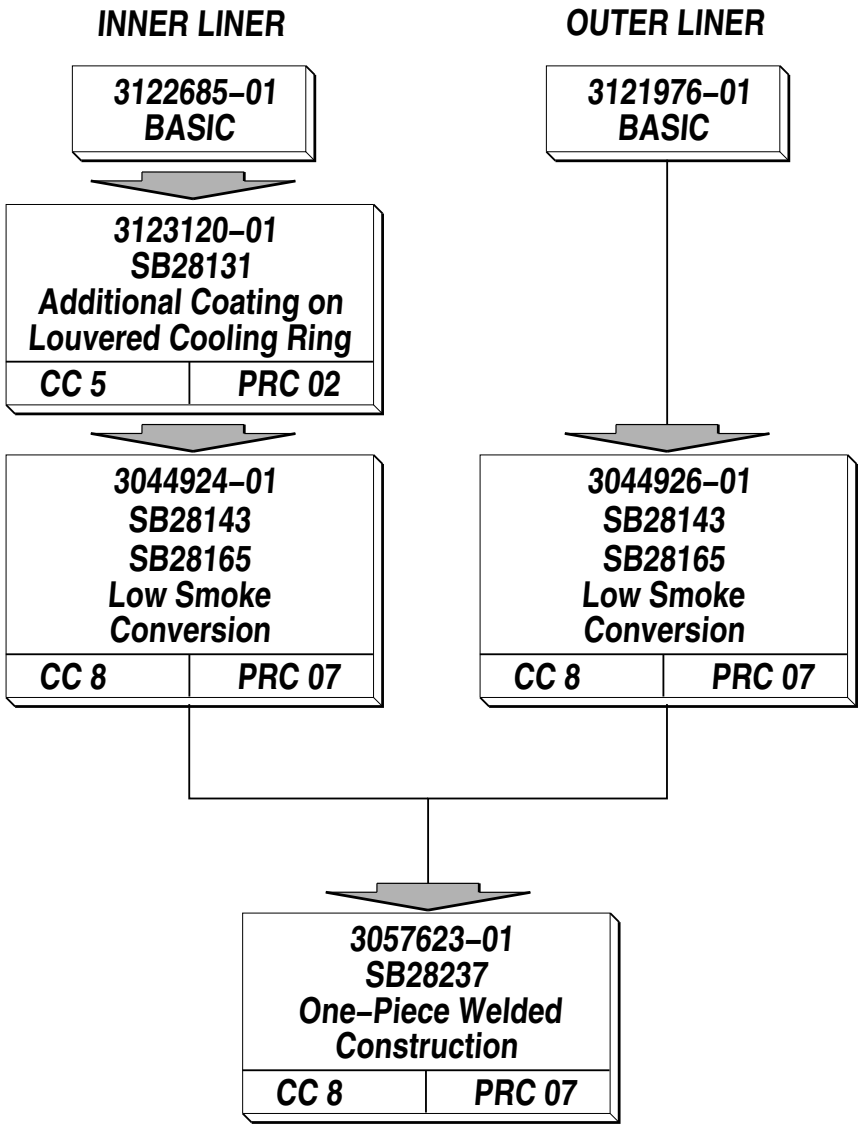
Gas Generator Case Assembly - Part Progression
Figure 9

TURBOSHAFT ENGINE
COMBUSTION CHAMBER LINERS ASSEMBLY - MODIFICATION/REPLACEMENT OF



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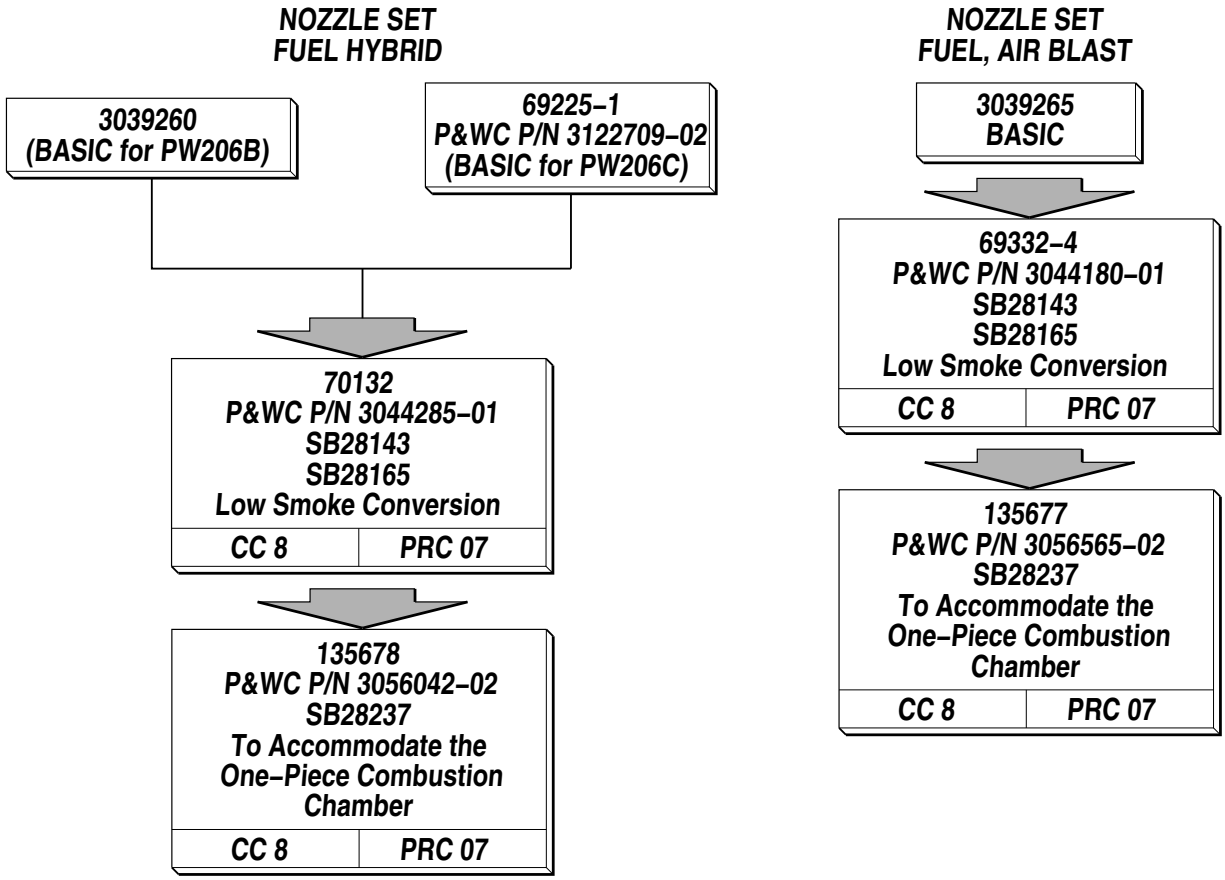
Combustion Chamber Liners - Part Progression
Figure 10



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Nozzle Set, Fuel - Part Progression
Figure 11