P&WC S.B. No. 41120R2

### **BULLETIN INDEX LOCATOR**

TURBOSHAFT ENGINE PT6C-67C BS963 AND BS1019 TO PT6C-67C1 BS1447 AND BS1448 - CONVERSION OF

#### MODEL APPLICATION

PT6C-67C

Compliance: CATEGORY 8

Summary: There is a customer requirement to convert PT6C-67C Build Specification (BS) BS963 engines to PT6C-67C1 BS1447 configuration and PT6C-67C BS1019 engines to PT6C-67C1 BS1448 configuration.

Jun 23/2021 Revision No. 2: Jul 25/2022 PT6C-72-41120 Cover Sheet

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Jul 25/2022

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#### REVISION TRANSMITTAL SHEET TURBOSHAFT ENGINE MODEL PT6C

## SUBJECT: Pratt & Whitney Canada Service Bulletin No. PT6C-72-41120, Rev. No. 2 dated Jul 25/2022 (P&WC S.B. No. 41120R2) PT6C-67C BS963 AND BS1019 TO PT6C-67C1 BS1447 AND BS1448 - CONVERSION 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 Destroy the superseded copy.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 revision is issued to:

• update Para. 1.A., Effectivity to add Engine Serial Number KB2648.

EFFECT OF REVISION ON PRIOR ACCOMPLISHMENT:

None.

**REVISION HISTORY:** 

Original Issue: Jun 23/2021 Revision No. 1: Aug 06/2021 Revision No. 2: Jul 25/2022

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PT6C-67C BS963 AND BS1019 TO PT6C-67C1 BS1447 AND BS1448 - CONVERSION OF

- 1. Planning Information
  - A. Effectivity

PT6C-67C (BS963, BS1019) Engines Serial Number KB2180, KB2192, KB2246, KB2252, KB2255, KB2284, KB2290, KB2308, KB2309, KB2379, KB2402, KB2403, KB2404 and KB2648.

- <u>NOTE</u>: 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 done in conjunction with Special Instruction (SI) 55-2021.

- C. Reason
  - (1) Problem

There is a customer requirement to convert PT6C-67C Build Specification (BS) BS963 engines to PT6C-67C1 BS1447 configuration and PT6C-67C BS1019 engines to PT6C-67C1 BS1448 configuration.

(2) Cause

No documentation exists to allow the engine conversion in the production environment.

(3) Solution

This service bulletin provides the minimum hardware requirements to convert the PT6C-67C BS963 to PT6C-67C1 BS1447 and the PT6C-67C BS1019 to PT6C-67C1 BS1448.

D. Description

Replace data plates and reprogram or replace the electronic engine control .

E. Compliance

CATEGORY 8 - This service bulletin is optional and can be done at the discretion of the operator.

F. Approval

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

P&WC No. CO-0010967, EC-0018037, CO-0013359

Jun 23/2021 P& Revision No. 2: Jul 25/2022

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#### 1. Planning Information (Cont'd)

G. Manpower

Once you have access to the part, an estimate of 5.0 man-hours is required to include this service bulletin at repair.

No more man-hours are necessary to include this service bulletin at overhaul.

H. Weight and Balance

None.

I. Electrical Load Data

Not applicable.

J. Software Accomplishment Summary

Not applicable.

K. References

Illustrated Parts Catalog P/N 3045334 (PT6C-67C/PT6C-67C1)

Maintenance Manual P/N 3045332 (PT6C-67C/PT6C-67C1)

Special Instruction (SI) 55-2021

Hamilton Sundstrand SB EEC67-1-73-10

L. Publications Affected

Illustrated Parts Catalog P/N 3045334 (PT6C-67C/PT6C-67C1)

Hamilton Sundstrand CMM 73-22-06

M. Interchangeability and Intermixability of Parts

Interchangeability - Refer to Para. 2.C.

Intermixability - Not changed.

- 2. Material Information
  - A. Industry Support Information

Not applicable.

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#### 2. Material Information (Cont'd)

B. Material - Price 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, 2022).

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.

				Est. Unit List Price (\$US,	Instructions
New P/N	Keyword	Old P/N	<u>Qty</u>	<u>2022)</u>	Dispositions
For PT6C-67C (E	<b>3</b> S963):				
	PT6C-67C	BS963	Ref.		
BS1447	PT6C-67C1		Ref.		
	Control-Engine Electronic P&WC P/N 3059071-08	822835-5-108	1		(A)(B)
822835-5-201	Control-Engine Electronic P&WC P/N 3136943-01		1	Quote	(A)(K)
For PT6C-67C (E	3S1019):				
	PT6C-67C	BS1019	Ref.		
BS1448	PT6C-67C1		Ref.		
	Control-Engine Electronic P&WC P/N 3059071-08	822835-5-108	1		(A)(B)
822835-5-201	Control-Engine Electronic P&WC P/N 3136943-01		1	Quote	(A)(K)
For PT6C-67C B	S963 and BS1019:				
Gas Generator a	and Engine Data Plates:				
<u>3035984</u>	Plate Instruction, Gas Generator	3035984	1	209.50	(C)(D)(E)
<u>ST3203-12</u>	Rivet Blind,.125x.094 Grip, Universal	ST3203-12	2	25.72	(C)(D)

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2. Material Information (Cont'd)

				Est. Unit List Price	Instructions
New P/N	Keyword	Old P/N	Qty	<u>(</u> <u></u>	Dispositions
<u>3057917-01</u>	Plate Identification, Engine and Gas Generator	3057917-01	1	185.60	(C)(D)(E)
ST3203-12	Rivet Blind,.125x.094 Grip, Universal	ST3203-12	4	25.72	(C)(D)
Identification Pla	ate Power Section:				
3058005-01	Plate, Identification, Power	3058005-01	1	290.00	(C)(D)(E)
<u>ST3203-13</u>	Rivet Blind,.125x.156 Grip, Universal	ST3203-13	4	25.49	(C)(D)
The parts that for	ollow are approved for use o	on a converted <b>F</b>	PT6C-670	C1 Engines	s:
3037278	Brg Option (IC)		1		(F)
3044080-01	Gearshaft Spur, PMA Drive		1		(F)
3048676-11	Fuel Management Module		1		(G)
3127503-01	Insulation Blanket		1		(H)
EEC Reidentifica procedure is opt	ation - OEM Procedure (OEM tional):	I procedure is p	referred	method, F	Field
	EEC Identification Plate		1		(D)(l)
	Isopropyl Alcohol		AR		(J)
	Lint-Free Cloth		AR		(J)
	Soft Rubber Roller		1		(J)
EEC Reidentifica	ation - Field Procedure:				
	Red, Fine-Ballpoint Pen (Permanent-Indelible Ink Type)		1		(J)
	Black or Blue, Ballpoint Pen (Permanent-Indelible Ink Type)		1		(J)

- (A) ONE WAY INTERCHANGEABLE (ATA 200 Explanation Code 01): The old part can only replace the old part; the new part can replace the old and the new part.
- (B) Discard the part if it is unserviceable. Return a serviceable part to stock.

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2. Material Information (Cont'd)

				Est. Unit List Price	
New P/N	Keyword	Old P/N	Qty	(\$US, 2022)	Instructions Dispositions

(C) TWO WAY INTERCHANGEABLE - (ATA 200 Explanation Code 02): The old or the new part can replace the old or the new part.

- (D) Standard replacement part. Latest at time of issue.
- (E) Ref SI 55-2021.
- (F) For replacement purposes refer to P&WC SB 41110.
- (G) For replacement purposes refer to P&WC SB 41112.
- (H) For replacement purposes refer to P&WC SB 41114.
- (I) Procured from Hamilton Sundstrand.
- (J) Commercially available.
- (K) To get the new part it is possible to reprogram the old part or you can get the new part from any Pratt & Whitney Canada Distribution Center. See Appendix for reprogramming instructions.
  - D. Reidentified Parts

<u>OLD P/N</u> 822835-5-108 (PWC P/N 3059071-08) <u>NEW P/N</u> 822835-5-201

(PWC P/N 3136943-01)

E. Tooling - Price and Availability

<u>Tool No.</u>	Nomenclature	Est. Price <u>(\$US, 2021)</u>	<u>Delivery</u>
Laptop	Refer to Appendix Section 2 for computer requirements	N/A	Local Purchase
3137022-01	Media, USB, EEC Programming, PT6C-67C1	Quote	Available

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#### 2. Material Information (Cont'd)

Tool No.	Nomenclature	Est. Price ( <u>\$US, 2021)</u>	<u>Delivery</u>
PWC77701 Rev.A	PT6C-67C/C1 Field reprogramming kit (the following 5 items are part of the kit)	Quote	Available
.PWC77729	EEC Reprogramming Cable (Bench)	Quote	Available
.PWC65485	Extension Adapter Cable	Quote	Available
.PWC89953	Field Reprogramming Unit, Includes Power Supply and USB Cable	Quote	Available
.PWC65488	GSE Reprogramming cable	Quote	Available
.Commercial	USB Key (for storage)	N/A	Available

- 3. Accomplishment Instructions
  - A. Remove the parts in the Old P/N list in Para. 2.C., Material Information, in accordance with the maintenance manual instructions as follows:

Ref. MM 73-20-10 (EEC Removal).

- B. Remove the plate(s) as follows:
  - (1) Drill the heads of the rivets. Discard the rivets.
  - (2) Remove the old plate.
    - <u>NOTE</u>: Do not discard the identification plates. Return them to your P&WC representative.
- C. Install the parts in the New P/N list in Para. 2.C., Material Information, in accordance with the maintenance manual instructions as follows:

Ref. MM 73-20-10 (EEC Installation).

- (1) Install new data plates on output section and on accessory gearbox.
  - <u>NOTE</u>: Make sure that the data plate and T5 trim values calculated from the SI 55-2021, are correctly stamped on trim value instruction plate and on data plate.

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- 3. Accomplishment Instructions (Cont'd)
  - (2) Secure data plates with the appropriate rivets (Ref. P/N list in Para. 2.C., Material Information) using a suitable rivet gun.
  - D. Write the accomplishment of P&WC SB41120 in the engine module log book.
- 4. Appendix
  - A. You can reprogram the EEC with the tools described in Section 2.E as follows:
    - <u>NOTE</u>: 1. Two EEC Units must to be reprogrammed in parallel. A single unit cannot be reprogrammed using this process. The reprogramming process will take approximately 30 minutes.
    - <u>NOTE</u>: 2. The EEC Software programming media, contains EEC software. The EEC must be removed and reprogrammed off-wing. P&WC recommends that the EEC reprogramming be accomplished under the supervision of the local P&WC Field Service Manager (FSM).
    - <u>NOTE</u>: 3. The Field Reprogramming Unit (FRU) requires having external power supply connected to a 110/220 VDC power.
    - <u>NOTE</u>: 4. Special care should be taken with the USB key. It should be kept in a safe place. Access to the USB Key should be strictly monitored and the loss of a USB key should be regarded as security incident. Lost USB keys that have been recovered must not be used.

#### (1) For field EEC reprogramming:

- (a) Remove the EEC units from aircraft. (Refer to the Aircraft Maintenance Manual (AMM))
- (b) Connect the EEC Reprogramming Cable PWC77729, "TO EEC ENGINE 1 J2" to the first EEC J2 connector.
- (c) Connect the EEC Reprogramming Cable PWC77729, "TO EEC ENGINE 2 J2" to the second EEC J2 connector.
- (d) Connect the EEC Reprogramming Cable PWC77729 "TO ADAPTER PWC45221" to "TO FIELD REPROGRAMMING UNIT" to the Field Reprogramming Unit (FRU) PWC89953 "J1".
- **CAUTION:** DURING THE REPROGRAMMING PROCESS, USE THE "EXTERNAL POWER 24 VDC" SWITCH ON THE FIELD REPROGRAMMING UNIT PWC89953 TO TURN THE EEC POWER ON/OFF WHEN INSTRUCTED BY THE SOFTWARE LOADER.
- (e) Make sure the "the external power 24 VDC", switch on the Field Reprogramming Unit PWC89953 is in the "OFF" position.

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- 4. Appendix (Cont'd)
  - (f) Connect the 24V external power supply jack, to the Field Reprogramming Unit PWC89953.
  - (g) Connect the other end of the 24V external power supply jack to the 110/220 VDC.
    - <u>NOTE</u>: The reprogramming kit contains two power cord adapters (US and EU standard) which can be used for connecting the 24V external power supply.
  - (h) Connect the USB Cable between the Field Reprogramming Unit and the USB port on the laptop.

#### (2) EEC Software Reprogramming Instructions:

- (a) Laptop Requirements:
  - <u>NOTE</u>: The reprogramming process will generate a log file that must be stored on a USB key provided with the PT6C-67C/C1 Reprogramming Kit PWC77701 Rev. A (Ref. Non-encrypted USB key is Mandatory).
  - 1 The P&WC Software Programming Utility (SPU), runs from a Reprogramming Media USB key that launches the software into a closed Linux environment. The SPU does not depend on any windows application or operating system on your laptop. The SPU can run on any laptop that complies with the following system requirements:
    - The laptop must have three physical USB ports. Alternately a USB hub/splitter can be used.
    - The laptop must have the ability to boot from the USB port (Refer to your Information Technology Administrator, if support is required).
      - <u>NOTE</u>: 1. For laptops that do not detect a USB port boot and have UEFI setting, go to the BIOS setup to Advanced Boot Options and enable Legacy Option ROM's. Apply the change and exit.
      - <u>NOTE</u>: 2. Laptops that do not support Legacy BIOS Option are not compatible with the SPU and cannot be used for EEC reprogramming using this procedure.
    - The laptop must have the certification to run Ubuntu version 16. The list of computer certifications can be viewed on the following link https://certification.ubuntu.com/desktop
- (b) Do a laptop shutdown.

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#### 4. <u>Appendix</u> (Cont'd)

- (c) Make sure the laptop is connected to a dependable power supply or is fully charged.
- (d) Insert the EEC Reprogramming Media USB key (P/N 3137022-01) in one of the USB ports of the laptop.
- (e) Make sure that a USB cable is connected between the Field Reprogramming Unit and a USB port on your laptop.
- (f) To boot the laptop from the USB drive, power up the laptop and press the keyboard F12 repetitively until you see the boot menu displayed.
  - <u>NOTE</u>: (The F12 key functions are specific to DELL products. Other manufacturers may use different keys).
- (g) In the Boot menu, select "USB Storage Device" and press enter.
- **CAUTION:** INTERRUPTION OF THE ELECTRICAL POWER OR INTERRUPTION OF THE USB COMMUNICATION DURING THE REPROGRAMMING PROCESS MAY RENDER THE EEC NO LONGER REPROGRAMMABLE. EECs NO LONGER REPROGRAMMABLE MUST BE RETURNED TO P&WC FOR REPAIRS.
- **CAUTION:** THE MAXIMUM NUMBER OF RETRY ATTEMPTS TO REPROGRAM THE EEC IS TWO TIMES. AFTER WHICH THE EEC CANNOT BE REPROGRAMMED AND MUST BE RETURNED TO P&WC FOR REPAIRS.
- (h) The SPU will request the user to enter the Username and Password. This must be requested from P&WC via e-mail at the following email:
  - pwchelo@pwc.ca
- (i) The SPU will be launched automatically after the laptop boots into Ubuntu environment.

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#### 4. Appendix (Cont'd)

- (j) Connect the USB key for log files storage, included in PWC77701 Rev. A into the laptop and close the explorer window that opens.
  - <u>NOTE</u>: 1. This USB key for log files must be used only for the reprogramming process defined in this Service Bulletin.
  - <u>NOTE</u>: 2. During the reprogramming process, the user needs to follow the on-screen instructions:

Under normal operations the operator's actions are limited to selecting "Next" and performing EEC power ON/OFF on the Field Reprogramming Unit.

If any error or interruptions occurs the operator must follow instructions to restore communications (Up to 5 retries are possible to restore communications).

NOTE: In the event a step fails proceed to step (u).

#### (k) Screen 1:

Browse the location of the non-encrypted USB key to save the log file which is located under /media/SPU/USBkeydrive (ex: /media/SPU/ KINGSTON if the provided USB key is Kingston brand) then select Open and Next.

<u>NOTE</u>: USB keys should be formatted in FAT32. NTFS may cause issues in a Linux environment.

#### (I) Screen 2, EEC Target Configuration after Reprogramming:

- <u>1</u> Validate that the EEC configuration after reprogramming Software version shows 57010511.
- 2 Validate that EEC configuration after reprogramming Part number shows 822835-5-201.
- 3 Check the box to confirm validation.
- 4 Enter the Operator's Name.
- 5 Enter EEC 1 and EEC 2 serial numbers.
- 6 Select Next.
- (m) Screen 3, Reprogramming Unit Switches Automatically to Activate in TEST Mode:

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- 4. Appendix (Cont'd)
  - <u>1</u> Follow the instructions on the screen and set the EEC power ON/OFF by selecting the ON/OFF switch on the EXTERNAL POWER on the Field Reprogramming Unit (PWC89953).
  - 2 Select "Next".
    - <u>NOTE</u>: The 4 LED on the FRU box will be turned on to indicate that the BOOT/COMM switches has been activated.
  - (n) **Screen 4, Verification of Compatibility of Current EEC Configuration:** The software loader verifies both EEC current configurations.
    - Verify that "TO BE LOADED" status is displayed for Engine 1 and 2 EECs. If the "MISMATCH" status is displayed, the reprogramming process will be aborted (Ref. Step t).
    - 2 Select "Next".
      - <u>NOTE</u>: Status "MISMATCH" means that Engine 1 or 2 EEC units are not compatible with the current EEC Software Programming Media.

#### (o) Screen 5: Software loading status:

The software components loading process will proceed.

- 1 Wait for the software loading to be completed on both EEC.
- 2 Select "Next".
- (p) Screen 6: Clearing EEC EEPROM/Verification of EEC Software Version:
  - <u>1</u> Wait until "DONE" status is displayed for each Engine Clearing EEC EEPROM (1 and 2).
  - 2 Verify that "MATCH" status is displayed for each Engine software verification (1 and 2). If the "MISMATCH" status is displayed, the reprogramming process will be aborted.
  - <u>3</u> Verify that "MATCH" status is displayed for each EEC software CRC (1 and 2). If the "MISMATCH" status is displayed, the reprogramming process will be aborted.
  - 4 Select "Next".
- (q) Screen 7: Software Verification:

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#### 4. Appendix (Cont'd)

- Verify that "MATCH" status is displayed for each Engine software verification (1 and 2). If the "MISMATCH" status is displayed, the reprogramming process will be aborted.
- 2 Follow the on-screen instructions for operator actions.
- 3 Select "Next".

#### (r) Screen 8: EEC Functional Test Verification:

- <u>1</u> Verify that "SUCCESS" status is displayed for each Engine EEC Functional Test Verification (1 and 2). If the "FAILED" status is displayed, the reprogramming process will be aborted.
- 2 Follow the on-screen instructions for operator actions.
- <u>3</u> Select "Next".

### (s) Screen 9: Clearing EEC EEPROM/Update and Verification of both EEC units Part Numbers:

- <u>1</u> Wait until "DONE" status is displayed for each Engine Clearing EEC EEPROM (1 and 2).
- 2 Verify that "MATCH" status is displayed for each Engine Update and verification of EEC Part Number (1 and 2). If the "MISMATCH" status is displayed, the reprogramming process will be aborted.
- <u>3</u> Select "Next".

#### (t) Screen 10: Reprogramming Session is Completed:

- <u>1</u> After the reprogramming process is completed, verify that "THE REPROGRAMMING PROCESS IS SUCCESSFUL" is displayed on screen. If the process has failed, go to step (u).
- 2 The reprogramming log will automatically be displayed in a separate text window. Verify that "Target configuration for AS Version" (second line) shows "57010511".
- <u>3</u> Provide a copy of the log file to the P&WC FSM for attachment in a Field Service Report (CRM case).
  - <u>NOTE</u>: The Log file titles do not contain the EEC Units S/N. If necessary, open the Log File using a notepad application and read the EEC Units S/N in the detailed reprogramming messages.

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(u) If the SPU indicates "THE REPROGRAMMING PROCESS HAS FAILED", do the instructions again from Step (1) For Field EEC Reprogramming and follow all the above steps.

#### (3) Disconnect Reprogramming Setup:

- (a) After successfully completing the reprogramming process, proceed with the following steps:
  - <u>1</u> Make sure the "EXTERNAL POWER 24 VDC" switch on the Field Reprogramming Unit (PWC89953) is switched to the "OFF" position.
  - 2 Disconnect the EEC Reprogramming Cable PWC77729.
  - <u>3</u> Disconnect the USB Cable.
  - 4 Disconnect the 24 VDC external power supply.
  - 5 Remove the EEC re-programming media USB key 3137022-01 from laptop and store it safely.
  - 6 Remove USB key log file from laptop and store safely.
    - <u>NOTE</u>: If another set of 2 EEC units is ready to be reprogrammed, the reprogramming process may be started after the new connections are setup by selecting the SPU icon on the desktop (No need to do a laptop reboot).

#### B. Re-Identify the EECs:

After successfully completing the reprogramming process, use the consumable materials listed Para. 2.C., to do the reidentification of the EEC as follows:

- (1) If EEC was reprogrammed at the Original Equipment Manufacturer (OEM), the preferred method to re-identify the EEC is as follows:
  - (a) Make sure the new identification plate received from Hamilton Sundstrand has the same information as the old identification plate with the following two exceptions:
    - 1 CUSTOMER NO. must be "3136943-01"
    - 2 PART NO. must be "822835-5-201"
  - (b) If required, record any data not already printed on the new plate and advise Hamilton Sundstrand representative.

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#### 4. <u>Appendix</u> (Cont'd)

CAUTION: DO NOT USE SHARP TOOLS TO REMOVE THE OLD PLATE.

- (c) Carefully remove the old EEC identification plate.
- (d) Clean the area where the new plate will be attached (Ref. Fig. 2) with isopropyl alcohol and wipe dry with a clean, lint-free cloth. Make sure to fully remove the old adhesive.
- (e) Let the area dry thoroughly.
- (f) Remove the paper from the back of the new EEC identification plate.
- (g) Put the new plate in position on the EEC.
- (h) Use a soft rubber roller or equivalent soft tool and apply pressure to the plate to have firm contact with the EEC housing. Make sure there are no air bubbles caught between the identification plate and EEC housing.

NOTE: Do not disturb the plate surface for 72 hours while curing.

- (2) If the EEC was reprogrammed in the field proceed as follows (Ref. Fig. 3):
  - <u>NOTE</u>: Apply enough pressure to the pen to make an indent in the aluminum surface.
  - (a) Use a ballpoint pen (red) with the small straight edge and make an indent (single red line) through the CUSTOMER NO. on the identification plate.
  - (b) Use a ballpoint pen (black or blue) to write the new customer number "3136943-01" adjacent to the mark over the "CUSTOMER NO." of the existing identification plate.
  - (c) Use the ballpoint pen (red) and small straight edge and make an indent (single red line) through the old software configuration ("-108") on the identification plate.
  - (d) Use the ballpoint pen (black or blue) to write the new software number "-201" adjacent to the mark over the "-108" of the existing identification plate.

NOTE: Last three digits 108 = Old software configuration.

- (e) Identify the new software configuration on the Software Identification Plate (Ref. Fig. 3) as follows:
  - <u>NOTE</u>: The EEC software identification plate (Figure 3.) must include the new software configuration 201 and the date of the incorporation of this new configuration.

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- 4. <u>Appendix</u> (Cont'd)
  - <u>1</u> Use a ballpoint pen (black or blue) to write the new software configuration *"*-201*"* in the first S/W NO. Section available.
  - 2 With the same pen, write the date that the new software "-201" was installed in the adjacent DATE section.

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ICN-00198-G000046454-001-01

EEC Reprogramming kit PWC 77701 Rev.A Figure 1 (Sheet 1 of 2)

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CONTENT OF BOX						
PART NO. DESCRIPTION QTY						
PWC65490	EEC Reprogramming Adapter	1				
PWC65488	GSE Reprogramming Cable	1				
PWC65485	Extension Adapter Cable	1				
PWC88953	Field Reprogramming Unit (FRU)	1				
PWC77729	EEC Reprogramming Cable (Bench)	1				
CSMU AB-03M USB Cable Type A MALE - B MALE						
SCANDISK/EQUIV USB KEY 3.0 (16GB) 1						
PELICAN 1450 MEDIUM	CASE – BLACK WITH FOAM	1				
NOTE: P/N PWC65490 IS NOT USED FOR SB41120						

ICN-00198-G000046594-001-01

EEC Reprogramming kit PWC 77701 Rev.A Figure 1 (Sheet 2)

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Location of identification and software identification plates on EEC Figure 2

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**TURBOSHAFT ENGINE** 

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0	HAMILTON SUNDST UNITED TECHNOLOGIES © WINDSOR LOCKS, CONNECTICUT		
PAR	Γ NAME	SERIAL NO.	
ELECTRONIC E	NGINE CONTROL	XXXXX	
PART NO.	MODEL NO.		
822835-5-1	<del>0</del> 8 –201	EEC67-1	
CUSTOMER			
CPW			
HS REF	CUSTO	MER NO.	
AC	AC <del>3059071–08</del> 3		
DSGN ACT.	MOD DATA		
(   ) <b>73030</b>	L2		
$\langle -$	(B) – REGISTERED TRAD	EMARK	

		S/W NO.	DATE
HAMILTON SUNDSTRAND • WINDSOR LOCKS, CONNECTICUT S/W NO. DATE			
-201	MM/DD/YYYY		

ICN-00198-G000046456-001-01

Identification Plate Figure 3

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