

FOR PLANNING PURPOSES

SERVICE BULLETIN

SERVICE BULLETIN NO: 24-023

REF NO: 194

MODIFICATION NO: 03-0203

ATA CHAPTER: 24

ELECTRICAL POWER - DC GENERATION SYSTEM SECOND GENERATOR WIRING - MODIFICATION

1. Planning Information

A. Effectivity

PC-12 and PC-12/45 aircraft, MSN 101 thru MSN 600. This modification will be incorporated on aircraft MSN 601 and subsequent.

B. Concurrent Requirements

None

C. Reason

By design, the second generator (Generator 2) provides less output than Generator 1. If Generator 1 fails, Generator 2 is required to support all equipment needed for safe flight. If Generator 2 capacity is exceeded the battery will discharge. To prevent battery discharge, the pilot is required to load shed (Ref, Pilots Operating Handbook (POH), Section 3).

The modification detailed in this Service Bulletin optimises the Generator 2 wiring and allowing higher generator output therefore reducing pilot workload related to load monitoring and shedding.

D. Description (Ref. Table: Generator/GCU Type, Effectivity and Work Required)

This Service Bulletin gives the data and instructions necessary to modify aircraft with the following Generator 2 configurations (configs.):

Config. 1	
Generator	ElectroSystems (978.87.24.121)
GCU/VR	ElectroDelta (988.21.15.101)
Effectivity	MSN 101 thru 230 (Pre-SB 24-010)
Work	<ul style="list-style-type: none"> • Incorporate Service Bulletin 24-010 to make the aircraft Config. 2 standard <li style="text-align: center;">or • Incorporate Service Bulletin 24-010 and 24-019 to make aircraft Config. 3 standard (PILATUS recommend) • Obey the instructions given in Table - Config. 2 or Config. 3, to make aircraft Post-Service Bulletin 24-023

Config. 2	
Generator	Hedinger/Bosch (524.32.12.158)
GCU/VR	ElectroDelta (988.21.15.101)
Effectivity	MSN 101 thru 230 (Post-Service Bulletin 24-010), MSN 231 thru 320 (Pre-Service Bulletin 24-019), MSN 322 thru 400 (Pre-Service Bulletin 24-019)
Work	<ul style="list-style-type: none"> Change the ground cable - from 4AWG (P75A4N) to 2AWG (P75A2N) Move ground point (P234) from FR16 to FR10

Config. 3	
Generator	Hedinger/Bosch (524.32.12.158)
GCU/VR	Hedinger (988.21.15.102) or (988.21.15.103)
Effectivity	MSN 101 thru 320 (Post-Service Bulletin 24-019), MSN 322 thru 400 (Post-Service Bulletin 24-019), MSN 321 and 401 thru 601 and Subsequent
Work	<ul style="list-style-type: none"> Change the ground cable - from 4AWG (P75A4N) to 2AWG (P75A2N) Move ground point (P234) - from FR16 to FR10 Replace the field circuit wires 20 AWG (P112A20) and (P68A20) to 16AWG (P112A16) and (P68A16)

Revision 1 to this Service Bulletin:

- Gives identification numbers for specified cables in Modification Kit 500.50.12.298
- Changes the lengths of given cables in Modification Kit 500.50.12.298

E. Compliance

Recommended.

F. Approval

The technical content of this document is approved under the authority of FOCA DOA No. FOCA. 21J. 002.

PILATUS advises Operators/Owners to check with their local Airworthiness Authorities for any changes, local regulations or sanctions that may affect the embodiment of this Service Bulletin.

G. Manpower

	Total Config 2	Total Config 3
Preparation	0.75	0.75
Removal of the Wires	1.25	1.50
Installation of the Wires and Ground Point	2.50	3.00
Close up	1.25	1.25
TOTAL MAN-HOURS	5.75	6.50

NOTE: Man-hours figures do not include the time required to cure or dry consumable materials.

H. Weight and Balance

(1) Weight Change

Negligible.

(2) Moment Change

Negligible.

I. Electrical Load Data

Negligible.

J. Software

Not changed.

K. References

Aircraft Maintenance Manual (AMM), 06-20-00, 11-00-00, 20-20-01, 24-00-00, 24-30-00, 24-30-07 and 71-00-00.

POH, Section 3.

L. Publications Affected

Aircraft Wiring Manual (AWM), 24-30-30.

M. Interchangeability of Parts

Not applicable

2. Material Information

A. Material - Price and Availability

Operators should send orders for Service Bulletin Modification Kits, to their Authorized Pilatus Service Center, or to:

PILATUS AIRCRAFT LTD.,
CUSTOMER SUPPORT MANAGER,
CH-6371 STANS,
SWITZERLAND

General Aviation:
Tel: + 41 41 619 6208
Fax: + 41 41 619 7311
eMail: SupportPC12@pilatus-aircraft.com

Government:
Tel: + 41 41 619 6509
Fax: + 41 41 619 6224
eMail: rpaterson@pilatus-aircraft.com

PILATUS BUSINESS AIRCRAFT LTD.,
PRODUCT SUPPORT DEPARTMENT
11755 AIRPORT WAY
BROOMFIELD, CO 80021.
UNITED STATES OF AMERICA

Tel: 303 465 9099
Fax: 303 465 6040
eMail: Productsupport@PilBal.com

PILATUS AUSTRALIA (Pty.) LTD.,
PO BOX 732
MARLESTON SA 5033
AUSTRALIA

Tel: (08) 8234 4433
Fax: (08) 8234 4499
Free Call: 1800 445 007
eMail: info@pilatus.com.au

Operators are requested to advise Pilatus Aircraft Ltd, of the Manufacturer's Serial Number (MSN) and the flying hours of aircraft which are affected by this Service Bulletin.