

SERVICE BULLETIN

INSTALLATION OR RETROFIT OF ALTERNATIVE INSTRUMENT PANEL

SB-001-ZA Rev 0

OPTIONAL

1) Overview

This service bulletin covers the option of the installation or retrofit of an alternative instrument panel, including avionics on any Xenon or Zen model registered in South Africa.

2) Planning information

- i) **Aircraft affected**
All Xenon or Zen models registered in South Africa

- ii) **Reason**
Retrofit of an alternative instrument panel and avionics

- iii) **Compliance**
On customer request

- iv) **Installation**
Installation only to be conducted by an appropriately rated person on the relevant aircraft type and with approved parts.

- v) **Manpower**
Manpower time will depend on installation and therefor no estimate is available.

- vi) **Mass data**
Depending on the instruments and avionics options selected the overall mass can differ from – 2 kg to + 2kg.

vii) C of G data
No significant change

viii) Electrical load data
No significant change

3) Material information

i) Material cost and availability
Prices and availability will be supplied on request by the local Aviation Artur Trendak agent in South Africa, Altair Aviation (Pty) Ltd

ii) Company support information
None

iii) Material requirements

For the installation of the panel, the following existing parts are to be kept in-tact and re-used in the new installation:

- a) Power and Ground bus including fuse and capacitor
- b) All electrical wiring and connectors to and from equipment and sensors

Depending on the equipment options selected, the following new parts and equipment are required:

- a) 1 x Rear centre console unit
 - b) 1 x Front console unit
 - c) 1 x Aluminium throttle panel (Panel 1)
 - d) 1 x Aluminium switch panel (Panel 2 & 3)
 - e) 1 x Aluminium instrument panel (Panel 4B)
 - f) 1 x Aluminium instrument and warning light panel (Panel 4)
 - g) 1 x Aluminium equipment rack
 - h) 12 x Aviation quality circuit breakers
 - i) 9 x Appropriately rated toggle switches
 - j) 1 x Appropriately rated start button
 - k) 2 x Appropriately rated 12V auxiliary power outlet sockets
 - l) Engine and flight instruments as required
 - m) 1 x Warning light to replace factory fitted warning light
 - n) Additional warning lights as required
 - o) Programmable warning light controller if required
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4) Installation instruction

All measurements and installations must be performed by an appropriately rated person.

Warning: Disconnect the battery before any removal or installation can start.

- Label and disconnect all wiring and equipment from the instrument panel and unscrew and remove the existing instrument pod.
- Unscrew the throttle, choke, pre-rotator and master switch from existing aluminium panel and fix in same positions on new instrument panel (Panel 1)
- Place the front and rear console units in place and check and confirm that placement and fitment of the unit is correct. Mark and drill fixing holes and install rivnuts.
- Install the headset jacks in the provided holes of the rear console unit, and slide the unit over the existing centre console, place throttle panel (Panel 1) in position and fix console unit through pre-drilled fixing holes to rivnuts.
- Fix all off panel equipment, including ground and power buss and factory fitted connector holders to equipment rack as required.
- Fix the equipment rack to the factory fitted rivnuts.
- Slide the front console unit over the existing centre console and fix through pre-drilled holes to rivnuts.
- Attach the existing factory wires to the relevant new circuit breakers and switches on the switch panels (Panel 2 & 3) (all as per Attached Annexure B – Wiring diagram).
- Install the gauges and EFIS panel in the relevant opening provided in panels 3 \$B and \$A and connect all necessary wiring (all as per Attached Annexure B – Wiring diagram).
- Place the aluminium panels in the correct position and fix into position with bolts through the fixing holes.

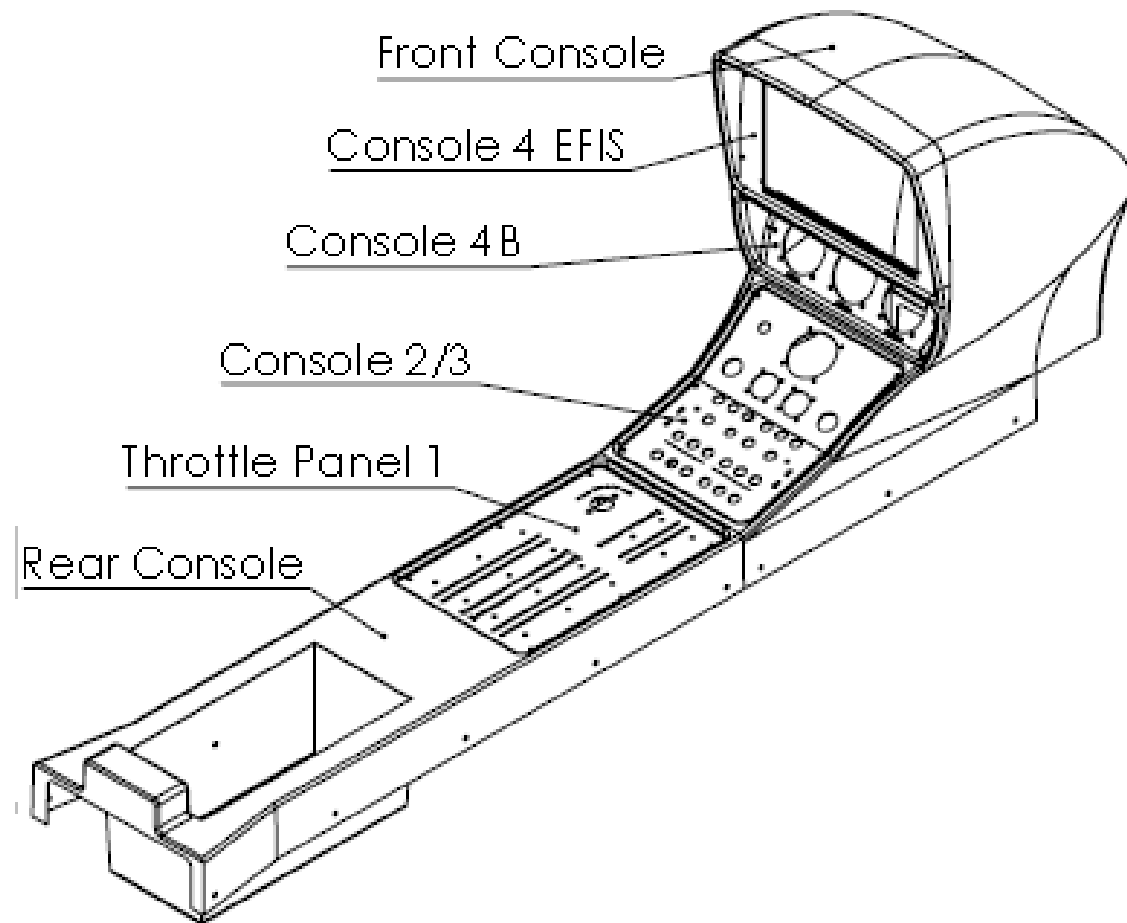
- Place the aluminium panels in the correct position and fix into position with bolts through the fixing holes.
- Check and confirm all electrical wiring and connections before re-connecting the battery.
- Re-connect battery and confirm operation of all equipment, circuit breakers, switches, gauges and engine parameters before engine start.
- Conduct proper ground tests of all equipment and gauges, including ignition check and testing individual circuit breakers and switches. Observe all engine parameters for abnormalities.
- A proper test flight by an appropriately rated pilot to be conducted.

5) Paperwork

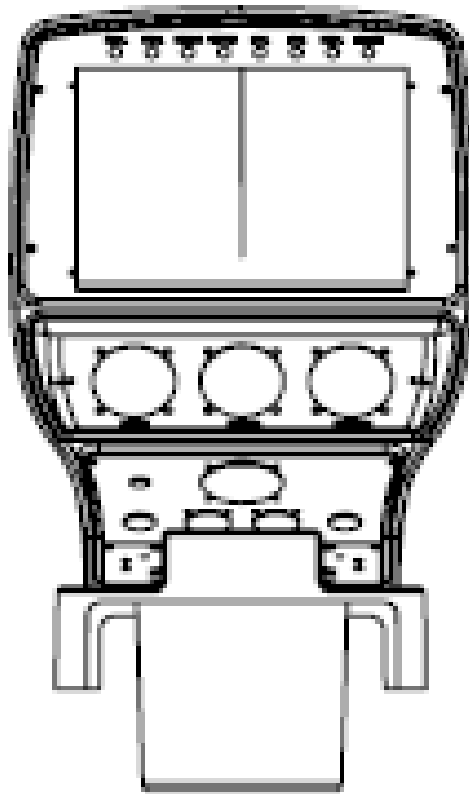
The installation must be documented in the Aircraft Logbook and duly signed by the appropriately rated person/s that conducted the relevant work.

ANNEXURE A – ILLUSTRATIONS

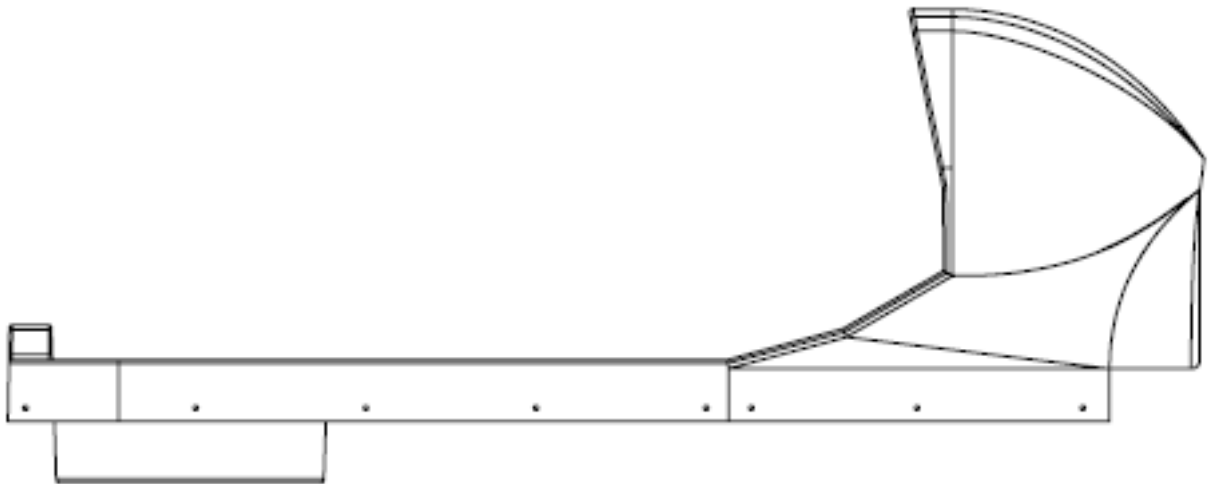
(See also attached console assembly drawing)



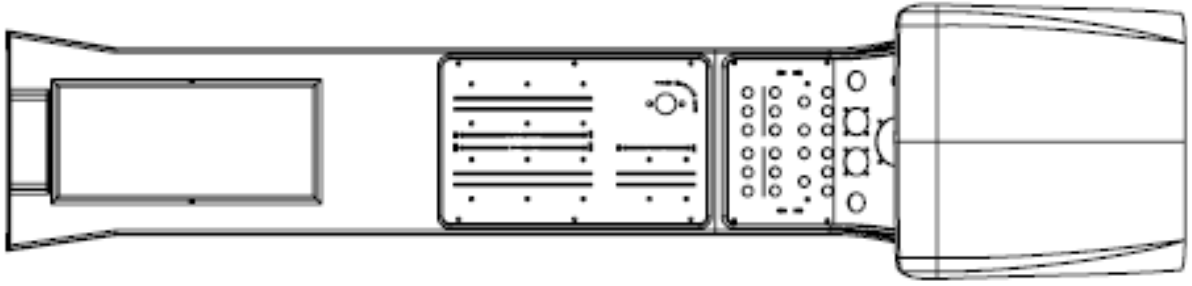
ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW



TOP VIEW

Annexure B - Wiring Diagram

(See attached wiring diagram)

