

SKYFORCE[®]

OB2112-001 LIMITER KIT

INSTALLATION MANUAL

MANUAL NUMBER OB2201-004

**THIS MANUAL HAS BEEN COMPILED IN ACCORDANCE
WITH THE GENERAL REQUIREMENTS OF BCAR A7-4.**

**SKYFORCE AVIONICS LTD.
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Authorised for Release for and on Behalf of Skyforce Avionics Limited:



.....
Steve White – Hardware Design Specialist

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FLIGHT MANUAL

The information contained with this manual is for reference use only. If any information herein conflicts with similar information contained within the Aeroplane Flight Manual Supplement, the information in the Aeroplane Flight Manual Supplement shall take precedence.

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CONTENTS

1. INTRODUCTION:	4
2. GENERAL NOTES:	4
2.1 PURPOSE OF MANUAL	4
2.2 WEIGHT	4
2.3 OB2112-001 LIMITER KIT CONTENTS	4
2.4 MATERIALS	4
3. EQUIPMENT INSTALLATION:	5
4. INSTALLATION CHECK OUT:	7
5. ENVIRONMENTAL:	7
6. GENERAL ASSEMBLY DRAWING:	8
.....	8
7. APPENDIX A – WARRANTY:	9
7.1 DEFINITIONS	9
7.2 STANDARD WARRANTY	9
7.3 MAINTENANCE	10
7.4 USE AND CONTROL OF DATA AND HARDWARE	10
7.5 GOVERNING LAW	11

NOTE: All drawings incorporated herein are available from the factory as *.pdf format files electronically on application to sales@skyforce.co.uk

END OF SECTION

1. INTRODUCTION:

This installation manual provides details for the installation of the OB2112-001 Limiter Kit. It defines all the items supplied as the kit, and the necessary checks to ensure that the equipment, once assembled on the aircraft/rotorcraft, will perform its intended function.

The Limiter Kit has been designed for retro fit installations as well as new installations. This document concerns the former and details the procedure for fitting the OB2112-001 Limiter Kit into a previous complete installation of an OB2109-001 Rack Install Kit. As such this Install manual should be read in conjunction with OB2201-001 (Install Kit Rack & Connections Installation Manual)

For details of the production requirements for the creation of the Kit please see Service Bulletin TRSY078 (Latest Revision)

2. GENERAL NOTES:

2.1 PURPOSE OF MANUAL

This manual is intended to give guidance, and to identify the tools required in completing a successful installation.

2.2 WEIGHT

The Observer Limiter Kit Including fasteners weighs 325 grams.

2.3 OB2112-001 LIMITER KIT CONTENTS.

The OB2109 Install Kit defined herein comprises the following components:

2x #2010211923..... Bracket Limiter Lower Sub-Assembly.

2x #3020111865..... Bracket Limiter Upper.

2x #3010111863..... Screw, S/S M5 x 16 Pan Head Pozi drive type.

2x #3010111864..... Screw, S/S M5 x 16 Countersunk Pozi drive type.

2.4 MATERIALS

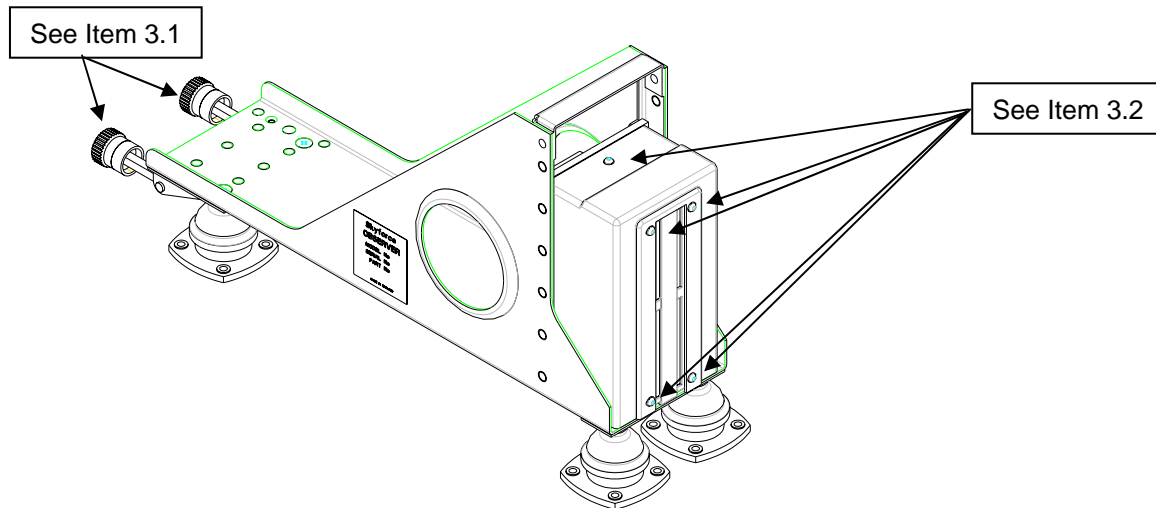
All materials used in the OB2109 install kit are non flammable and/or self quenching,

END OF SECTION

3. EQUIPMENT INSTALLATION:

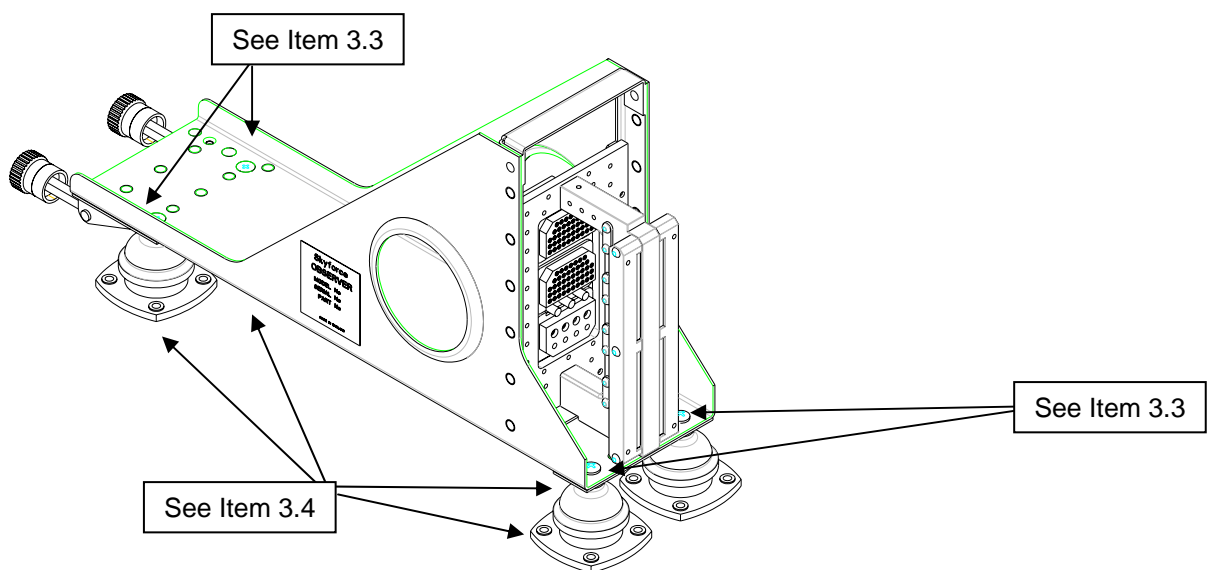
3.1 Loosen the 2 hold down fixtures at the front of the Processor Box assembly and remove the Processor Box from the rack by sliding it out of the tray.

3.2 Remove the 5 Screws and 5 Washers holding the Cover over the cable clamp arrangement at the rear of the Rack assembly. See Image below. Keep these to refit later.

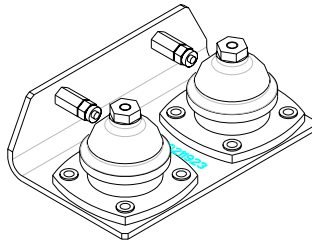
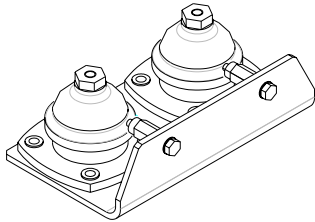


3.3 Remove the 2 Pan Head M5 Screws and 2 Countersunk M5 Screws from the Rack so that it is now free from the Anti- Vibration Mounts. These screws are no longer required and can be discarded.

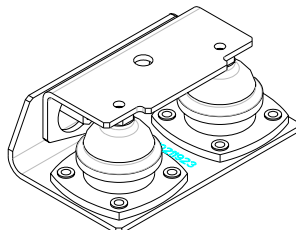
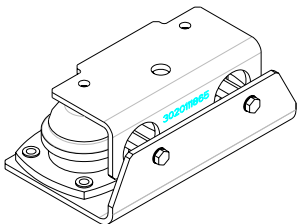
3.4 There is no need to modify the wiring of your assembly, simply slide the Rack assembly to one side so that you have access to the 16 screws holding the Vibration mounts to the aircraft, and remove all the fasteners so that the Anti Vibration mounts are free.



3.5 Align the 2 Bracket Limiter Sub-assemblies as shown in the view below so that the two vertical arms are closest to each other and line up with the 16 holes in your aircraft. Position the Anti-Vibration mounts so they also line up with the pre drilled holes, and refit your fasteners. Check these have sufficient depth as the bracket adds 3.0 mm to the assembly height and this may reduce the number of active threads on your chosen fastener. Ensure these are thread locked if machine screws or similar are used.

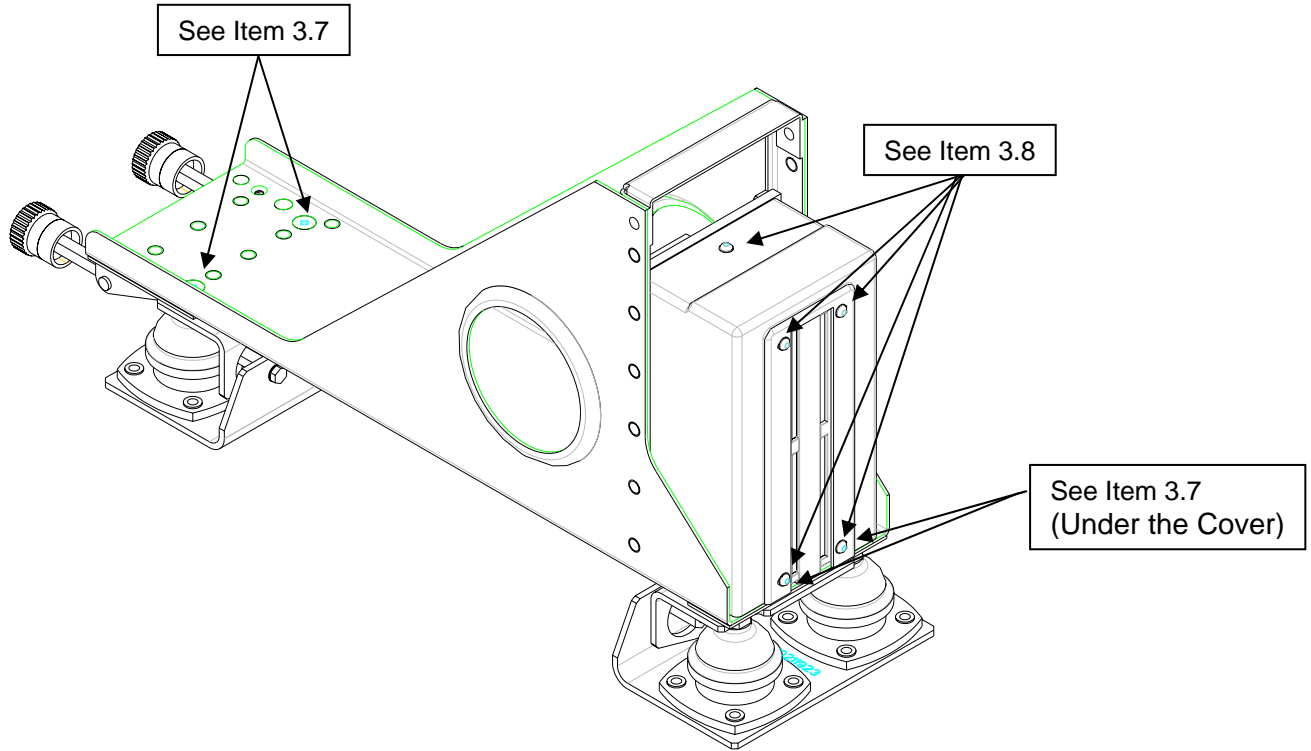


3.6 Slide the Bracket, Limiter, Upper Brackets over the hexagonal standoffs on the Limiter Bracket Sub-assemblies as shown so that they line up with the location pillars on the Anti-Vibration mounts, **NOTE ORIENTATION AS SHOWN BELOW** and reposition the Rack so that it too lines up with the four Anti Vibration Location Holes.



3.7 Secure the Rack and Limiter Upper Brackets using the two M5 x 16 Pan Head Pozi Drive screws and the two M5 x 16 Countersunk Pozi Drive Screws. Ensure these are thread locked.

3.8 Replace the Cable Cover using the 5 Screws and 5 Washers you removed earlier and apply thread lock. (See next page).



Finally slide home and lock off your Processor Box into the Rack in the usual manner. You have completed the installation of the OB2112-001 Limiter Kit.

END OF SECTION

4. INSTALLATION CHECK OUT:

4.1 To ensure you have not caused a failure of any of the connections. Follow procedures in OB2201-001 (Install Kit Rack & Connections Installation Manual) Section

END OF SECTION

5. ENVIRONMENTAL:

The below table defines the environmental test standard for the OB2112-001Limiter Kit. Testing was conducted at a suitable Test House to ensure traceability of all testing back to UK national standards.

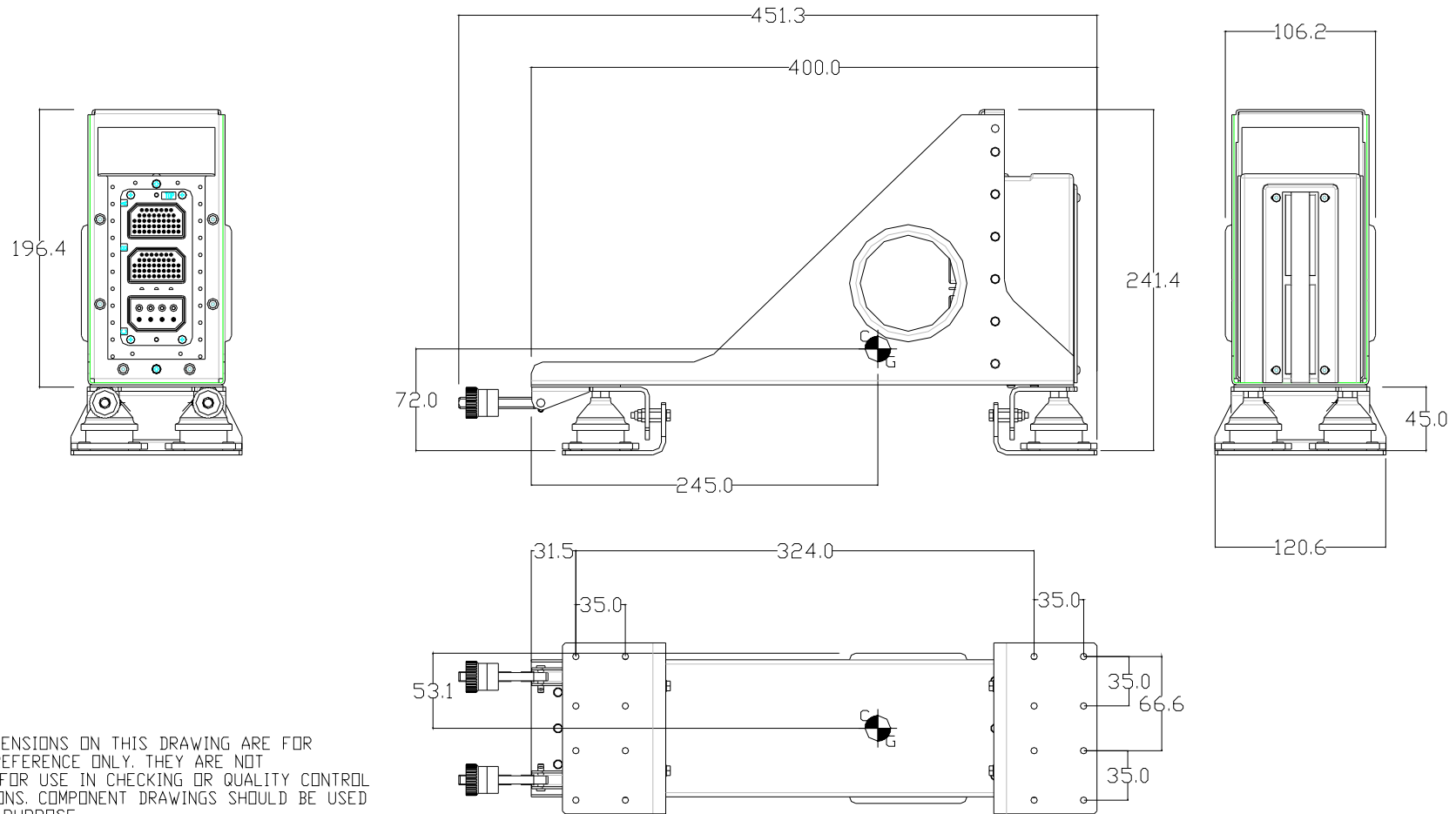
5.1 SCHEDULE OF TESTS

RTCA/DO-160D Section	Category	Description
Section 7 - Operational Shocks and Crash Safety	B	Aircraft Type 5 Test Type R (20g)

END OF SECTION

6. GENERAL ASSEMBLY DRAWING:

The drawing below shows the OB2112-001 Limiter Kit fitted to the OB2109-001 Rack Install Kit.



NOTE:

1. THE DIMENSIONS ON THIS DRAWING ARE FOR GENERAL REFERENCE ONLY. THEY ARE NOT INTENDED FOR USE IN CHECKING OR QUALITY CONTROL APPLICATIONS. COMPONENT DRAWINGS SHOULD BE USED FOR THIS PURPOSE.

2. C OF G BASED ON ASSEMBLY AS SHOWN ABOVE, INCLUDING ARINC 404 CHASSIS MOUNTED CONNECTOR, EXCLUDING ALL OTHER CABLES AND CONNECTORS.

END OF SECTION

7. APPENDIX A – WARRANTY:

7.1 DEFINITIONS

For the clarification and avoidance of doubt the following definitions apply:

“Company” – means Skyforce Avionics Limited whose Registered Office is Honeywell House, Arlington Business Park, Bracknell, Berkshire RG12 1EB and whose normal place of business is 5 The Old Granary, Boxgrove, Chichester, West Sussex, PO18 0ES.

“Purchaser” – means the legal registered entity that is responsible for payment of the invoice for the supply of the equipment. In the instance that this is the end use customer, they shall ensure that the terms in the warranty are clearly communicated to the installer who has entered into a separate contract for the installation and commissioning of the equipment with the end use customer.

“End Use Customer” – means the individual or legal entity that the Purchaser has entered into a contract with to supply the system defined herein to in whole or part, i.e. in some instances the system will be delivered as a hardware platform excluding software/firmware.

“Equipment” – means the system in its entirety, i.e. parts, sub-assemblies, assemblies and all embedded software and firmware associated with the operation and use of the system.

7.2 STANDARD WARRANTY

Company warrants that all of its products will at the time of delivery be free from defects in materials and workmanship and will conform to Company’s applicable specifications in force at the time of the sale. Company’s obligation herein shall be limited to, at the Company’s option, correcting, replacing or refunding the purchase price of any non-conforming product. This warranty does not cover costs associated with call out, removal, or on-site rectification of the equipment. Normal warranty service is repair and rectification free of charge at the factory or designated agent during normal working hours on a standard turn around time of 15 days. For enhanced services relating to maintenance and support these will be subject to negotiation with the end customer.

The Purchaser acknowledges that the warranty offered by the Company is deemed to be void if the equipment has been subjected to abnormal or excessive use, abused or misused in any way or if an unauthorised person has opened any of the equipment housings.

The Company shall not be liable for and the Purchaser shall indemnify and hold Company harmless against any claim by or loss or damage to any person or property directly or indirectly occasioned or arising from the use or operation or possession of any equipment or goods supplied by the Company.

The warranty will commence from the date of invoice of the goods and shall be 24 months in duration, unless specifically agreed to be otherwise as part of the contract. The general warranty and its specific terms are transferable to the end use customer, excluding the refund of purchase price and subject to the restrictions and limitations specified within Company's Standard Terms and Conditions of Sale and the appropriate handbook supplied with the product. All warranty claims will be reviewed in accordance with the foregoing conditions.

Purchaser has a duty of care to ensure that the terms of this warranty are communicated to the end use customer. By accepting the equipment the Purchaser is deemed to have accepted the obligation to flow down the Company's terms within this warranty.

7.3 MAINTENANCE

Either Company or an authorised agent may undertake maintenance of the equipment inclusive of warranty action (subject to Company's prior approval). Company's criterion for authorised agents is that they are EASA/FAR145 Approved as a repair organisation for the equipment and form part of the Bendix/king Dealer Support Network, details of which are to be found at www.bendixking.com. A listing of authorised agents for the Company's product is published periodically on the web site, however the Purchaser is advised to confirm with Company that the approval for the agents listed therein remains current should he require to make use of their services.

7.4 USE AND CONTROL OF DATA AND HARDWARE

The Purchaser, his authorised agents and end use customers acknowledge that the use of Company's equipment does not in any way eliminate, replace, supersede or in any way affect the need to consult, refer to or obtain information from all appropriate and applicable charts, publications or sources of information from relevant Air Navigation Authorities.

The data sources for the mapping contained within the system is derived from third party sources all of which will be identified as part of the deliverable data/software embedded in the end-use equipment. In accepting the equipment Purchaser automatically accepts the flow down non-exclusive, non-transferable licence terms associated with each and all the applicable aforementioned third parties. No representations as to the accuracy or currency of the data provided is expressed or implied in the purchase of the equipment. The Purchaser will indemnify and hold harmless the Company against any third party or consequential claims arising either directly or indirectly through the use of the data and/or the equipment.

No part of the program in the memory of the equipment may be reproduced, transmitted, transcribed, translated or altered in any way, form or by any means, without prior written permission of the Company.

Without the prior written authorisation of Company, the Purchaser will not knowingly re-export or ship, or cause to be re-exported, exported or shipped directly, any technical data or hardware obtained from Company to any destination defined as prohibited or controlled under the Export of Goods (Control) Order 1994, as amended from time to time by Her Majesty's Government by way of the Dual Use and Related Goods (Export Control) Regulations.

7.5 GOVERNING LAW

This Warranty shall be governed by English Law, any disputes arising out of any contract made between the Company and the Purchaser shall be heard and determined by an English Court of competent jurisdiction. Alternatively at the option of the Company, any claim shall be submitted to arbitration in England in accordance with and subject to the provisions of the Arbitration Act 1950 or any statutory modifications or re-enactment thereof for the time being in force.

END OF SECTION
