SERVICE BULLETIN SB/EUR/021¹ Issue 6

Evektor EV-97 Eurostar Aircraft, Trim Lever Modification - 26th Mar 2025

- Iss. 2 Rectification action period was 10 flight hours, no time period. Note added to "Rectification Action"
- Iss. 3 Rectification Action, 1, bullet point 5 was Iss. 2 or 3.
- Iss. 4 Aircraft Affected: SL amended to optional.
- Iss. 5 Determination of individual aircraft tab angles added. SB/EUR/022 accomplishment added.
- Iss. 6 EV97A added. SL trim lever shortening added.

Classification: - Essential

Nature of Defect

The elevator trim system fitted to all UK Evektor EV-97, EV97A Eurostar aircraft must be modified to reduce the risk of inadvertent operation; nose down trim poses the greater risk.

Airworthiness Implications

Accidental movement of the trim could result in rapid and dramatic pitch changes which are dangerous, particularly close to the ground.

Aircraft Affected

All UK-registered EV-97 Eurostar aircraft are to be modified. <u>Modification of the trim lever range of the Eurostar SL</u> is optional; only lever length shortening is required.

Inspection Required – flap lever gaiter

The modification includes replacement of the trim lever/flap lever cover with a restricted trim range and reduction in the trim lever's length. The cover's flap lever slot is protected by a fabric gaiter which prevents debris from falling into the trim and flap mechanism below. Inspect this gaiter to ensure that there are no holes in it and that it is properly secured to the flap lever slot's perimeter. If the gaiter needs replacement, use the one provided with the modification kit from Airmasters UK Ltd.

Rectification Action

Within the next 25 flight hours, or 6 months, carry out the following:

- 1. Obtain an "EV-97 Trim Lever Modification Kit" from Airmasters UK Ltd. This kit contains:
 - a replacement flap/trim lever cover with restricted trim range;
 - replacement decals for trim and flap levers' positions;
 - fastener for refitting the trim lever knob;
 - replacement flap lever gaiter, with double sided tape and thread;
 - Installation Instructions, II/EV97/002, Iss. 6

2. Carry out the inspection and necessary rectification action of SB/EUR/022, Issue 3 to ensure that the trim system is in proper working order and that its operation is consistent and repeatable. It is particularly important to ensure that no slack is present in the trim cables and that they are tensioned in accordance with the Maintenance Manual's instructions. (no trim tab angle adjustment is necessary here, only cable tension and condition).

3. Carry out the kit installation in accordance with the Installation Instructions. This includes checking, and if necessary adjusting, the trim tab deflections on the elevator from the results of test flights. These test flights determine the required trim tab limits for each individual aircraft. Note that the Eurostar SL has different trim tab deflections (-40° ±5°, 0° ±2°, as stated in the SL Maintenance Manual) from those of the EV-97 and EV-97A Eurostar.

¹ Previously incorrectly referenced as "SB/EV97/002".

4. Have the work inspected, (duplicate inspection required) and signed off in the log book by an authorised inspector: Airmasters, BMAA, LAA or CAA Licenced Engineer, as appropriate. The log book must record the new trim tab angle limits, where appropriate, and be marked "Modification installed satisfying SB/EUR/021".

Note: - The modification was developed using the in-flight trim behaviour of two EV-97 Eurostars. On a small number of modified aircraft it has been found that subsequent trim behaviour has not matched that of the development aircraft. For this reason it is necessary to carry out short flight tests, as described in the Installation Instructions, II/EV97/002 Issue 6, and make additional adjustments if necessary.

Gary Masters

Airmasters UK Ltd. 26/3/2025