

SERVICE BULLETIN #85-02

November 8, 1985

TO: ALL USERS OF ELLISON THROTTLE BODY INJECTORS

SUBJECT: Throttle Pin Inspection

MODEL AFFECTED: EFS-2, EFS-3, EFS-4, EFS-4-5

DISCUSSION:

Two cases have been reported of throttle binding. In both cases the roll pin which locks the throttle arm to the slide assembly had shifted, causing the throttle to bind. In these installations, a full open throttle stop was either improperly adjusted or simply not installed as is required by the Installation and Operation Manual. Both were in competitive aerobatic aircraft where greater than normal full throttle input forces from the pilot may have been present. If the throttle slide reaches full open before the throttle linkage reaches the full open stop, excessive load concentrated at the roll pin could cause it to loosen and back out.

COMPLIANCE:

The following inspection must be accomplished within the next 10 flight hours or immediately if binding occurs during throttle movement. Failure to comply could result in engine failure.

PROCEDURE:

1. While another person operates the cockpit throttle handle, observe the movement of the throttle slide by viewing through the bell mouth. Determine that the throttle control stop is contacted at or slightly before the slide reaches full open. If it does not, appropriate adjustments should be made to the control stop.
2. Disconnect the throttle cable from the throttle arm by removing the lock ring and releasing the ball swivel fitting. With the throttle slide closed, reach in through the bell mouth and restrain the slide from movement by pressing in on its flat surface. At the same time, check for rotation of the arm in the slide with the application of torque applied by the thumb and index finger.
3. If any movement is observed, the unit must be shipped to Ellison Fluid Systems for modification.
4. If no movement is detected, repeat this inspection after each 25 hours of operation. Alternatively, the unit may be shipped to Ellison Fluid Systems for modification, which will eliminate the requirement for repeating this inspection.

SHIPPING:

Ellison Fluid Systems will modify the Throttle Body Injector at no charge. Units will be returned to customers, freight collect, within two weeks of receipt.

Please call Ellison Fluid Systems, Inc. at (425) 271-3220 if any difficulties arise in inspection or interpreting the results.

NOTE: If you are not longer in possession of the Throttle Body Injector, please forward this information to the present owner/operator and notify Ellison Fluid Systems, Inc. of owner/address change. Notification should include the serial number and current owner's name and address. Direct all corrections/changes to the address appearing on the letterhead.