

Service Letter

SL-MD10-001-R02

Revision 2 supersedes Revision 1

1 Technical Details

1.A Aircrafts affected

JS-MD 3, All Serial numbers up to and including 3.MD116

1.B Subject

Failing of Jet Electronic Fuel Board

1.C Reason

A few of Jet Refuel boards have failed during operation. After investigation it was discovered that components on the circuit board may fail when operated not in accordance with the operating instructions.

1.D Information

The Jet refuel boards may fail under the following conditions:

- 1) When the fuel shut off valve is in the closed position when refuelling and especially during the defueling operation. In this case the fuel pressure builds up, resulting in the current supplied to the fuel pumps increases to the stall current. This current is exceeding the continues current that the fuel board can supply, resulting in a component failure.
- 2) Although the unit is reverse polarity protected, if the battery connectors are forced the wrong way in and the jet is powered up, the board may fail. A refuel circuit board failure is expected when it is no longer possible to perform refuelling/defueling using the internal pump.
- 3) The current fuel board design may fail when the refuel/defuel switch is switched directly from the refuel position to the defuel position or vice versa. A current spike induced by the rapid change of direction of the electrical fuel pump may exceed the current limits of certain components on the board resulting in a component failure.

A new PCB board has been developed and is available with Service Bulletin SB-MD10-010. If a board failure occurs, the faulty board should be replaced with the new designed board.

Even though avoid moving the refuel/defuel switch instantaneously from refuelling to defueling or vice versa. Move the switch first to the centre position (Operation) for a couple of seconds to allow the fuel pump to stop before moving the switch in the opposite direction.

1.E References

/1/ SB-MD10-010

1.F Appendices

None