



# AVIATION ACTION ALERT

AA-98-2

**TO:** Bombardier Aerospace

**SUBJECT:** Champion 28VS100Y-10B (MS17976-2) Transformer Rectifier Units for CRJ Aircraft

**BACKGROUND INFORMATION:** Champion 28VS100Y-10B TRU'S Manufactured under date codes 1/98 and 2/98 may contain AC-filter capacitors susceptible to loosening under vibratory environments. The focus of this Aviation Action Alert letter is to delineate the scope of actions required to:

- (1) Identify the potentially affected Champion 28VS100Y-10B TRU's in the Bombardier fleet.
- (2) Outline the identification procedure to evaluate the units in the field.
- (3) Define the policy for returning 28VS100Y-10B TRU's identified with this condition.

**UNITS AFFECTED:** Champion 28VS100Y-10B TRU's manufactured under date code 1/98, Serial Numbers 0780 to 0861, and date code 2/98, Serial Numbers 0862 to 0879.

**FIELD INSPECTION PROCEDURE:** Prior to the field inspection procedure, it is recommended that the operator have the component maintenance manual for the Champion Part Number 28VS100Y-10A and 28VS100Y-10B, 100 ampere, 28VDC, fan cooled, static converter. The ATA number for this manual is 24-31-03, revised on 10-25-96. With the aircraft power OFF, and the converter installed in the aircraft, remove the three (3) nuts, item 10 on IPL Figure 1, and the converter end bell, item 5 on IPL Figure 1 from the converter assembly. After removal of the end bell assembly, locate the three (3) AC filter capacitors, item 80 on IPL Figure 3. (IPL Figures 1 and 3 are attached to this document).

After location of the three (3) capacitors, item 80 on IPL Figure 3, on the motor ring assembly, item 175 on IPL Figure 3, the operator must check the capacitor connection to the motor ring. This test is performed by applying torsional force to each capacitor in a counterclockwise rotation. The inspection force required for this test is limited to finger pressure applied by the operator to the capacitor body. If any of the three (3) filter capacitors physically move or rotate while this procedure is applied, this converter is identified as having the loose filter capacitor problem. For those units in spares inventory, perform the same inspection on the bench.

**AFFECTED UNIT CATEGORIZATION:** If there are no adverse affects to the aircraft operation, and the unit continues to provide 28 Volts DC, a loose capacitor is not to be considered a part failure. The aircraft and TRU serial numbers should be recorded, and the TRU should be replaced at the operator's earliest convenience. If adverse affects are noted, the identified TRU should be removed from the aircraft, and replaced by a non-affected TRU. For affected TRU's in spare stock, arrange for repairs through Allied International as outlined in this letter.

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