

**Service Bulletin**

**Title:** SB AS350-8420; Airbus Helicopter AS350 Air Conditioner Relay Panel Wiring

**Date:** 13 October 2014

**Applicability:** Airbus Helicopter AS350 Aircraft equipped with Air Comm Air Conditioning Systems with the following serial numbers: AS350-129 through AS350-159. The system serial number is marked on the compressor mount.

**Reference:** FAA STC # SR00643DE

**Compliance:** Within 50 flight hours

**A. Discussion:**

During a routine periodic inspection, an operator discovered evidence of overheated components inside a Relay Panel Assembly on another type of Air Comm system. As a precaution, AS350 operators with aircraft having the above Air Conditioner kit serial numbers must inspect their relay panels for possible damage due to overheating. To date, no operators have reported any problems with any AS350 system. This SB is released only as a precaution.

This bulletin is intended to provide the necessary instructions for operators to inspect their AS350-8420 Relay Panel Assemblies for overheating and if damage is found, provides instructions to obtain and install a replacement panel.

**B. Warranty:**

The new parts referenced in this bulletin can be obtained free of charge from the Air Comm Corporation Service Department. Please contact us at: Phone 303-440-4075, Fax 303-440-6355, or E-mail [service@aircommcorp.com](mailto:service@aircommcorp.com)

**C. Approval:**

This bulletin is based on previously FAA-approved data.

**D. Weight & Balance:**

No change to aircraft weight & balance.

Revision	Issue Date	Inserted By	Approved by	Description of Changes
NC	10/13/14	KDP		Initial Release

## E. Removal and Inspection:

### Removal:

1. Ensure electrical power is removed from the non-essential bus that powers the AC system.
2. Disconnect the two D38999 Circular Connectors from the relay panel.
3. Remove the three screws and washers holding the cover to the enclosure.
4. Carefully pull the panel cover away from the enclosure. The main power and ground wires which enter the enclosure will remain connected, limiting cover removal.
5. Disconnect the ACCA1C6 Power and ACCA36A12N Ground cables from their respective connection points and completely remove the cover from the aircraft for detailed inspection. See Figure 2.

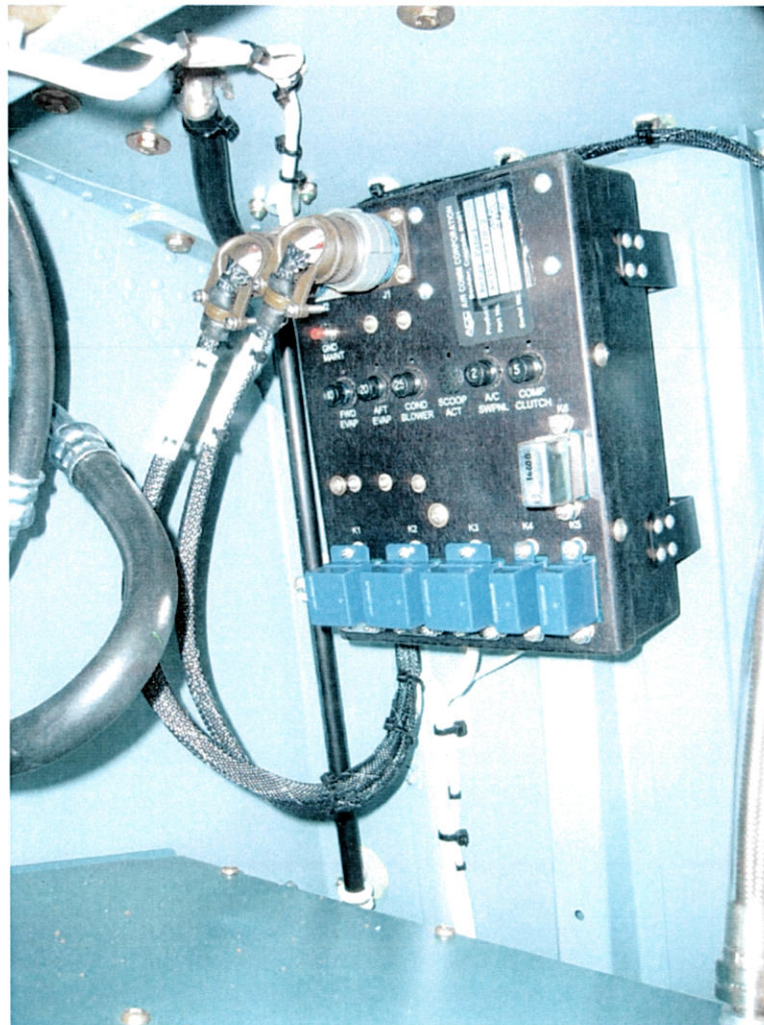


Figure 1: Relay Panel location forward bulkhead of RH baggage compartment

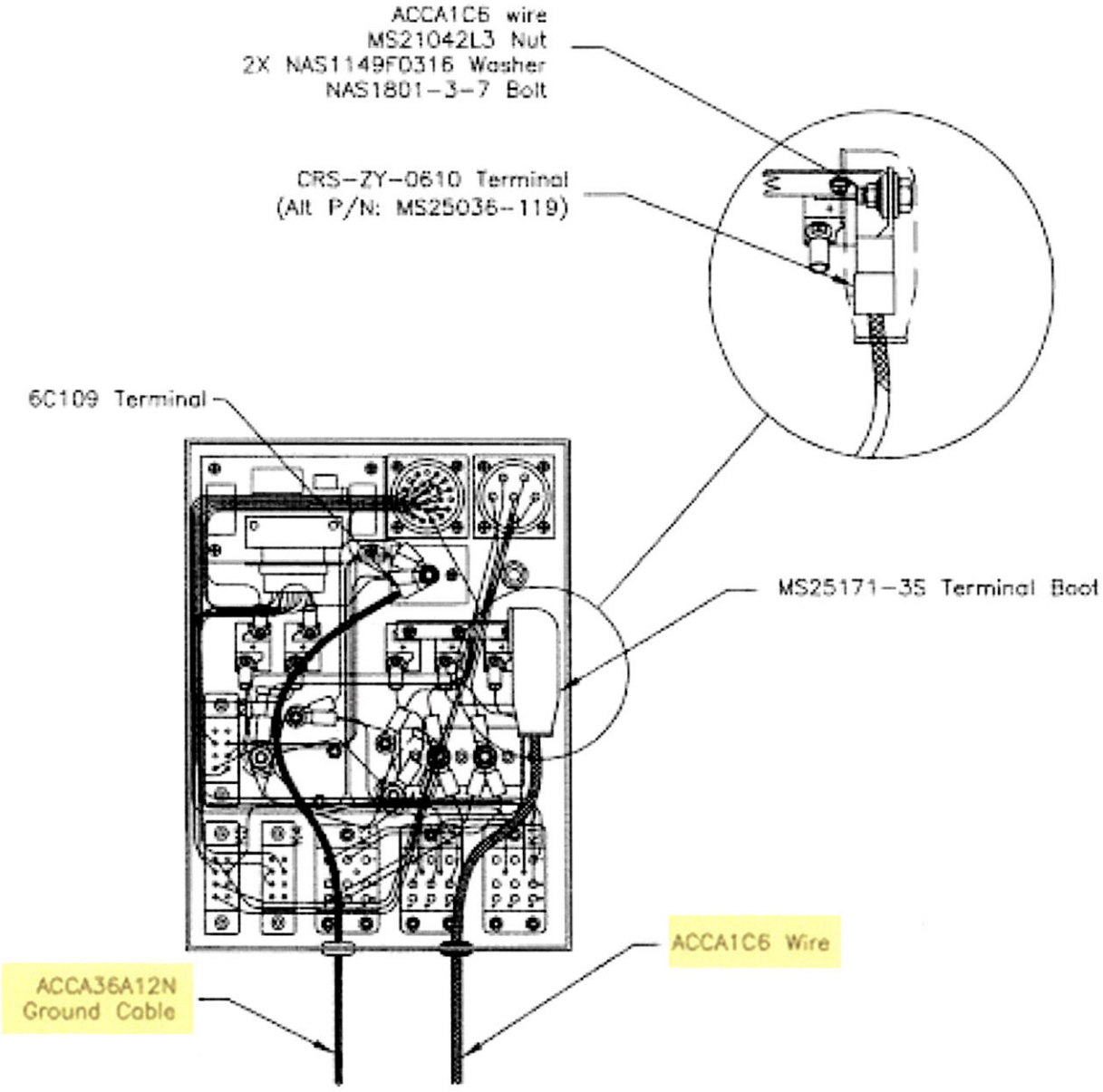
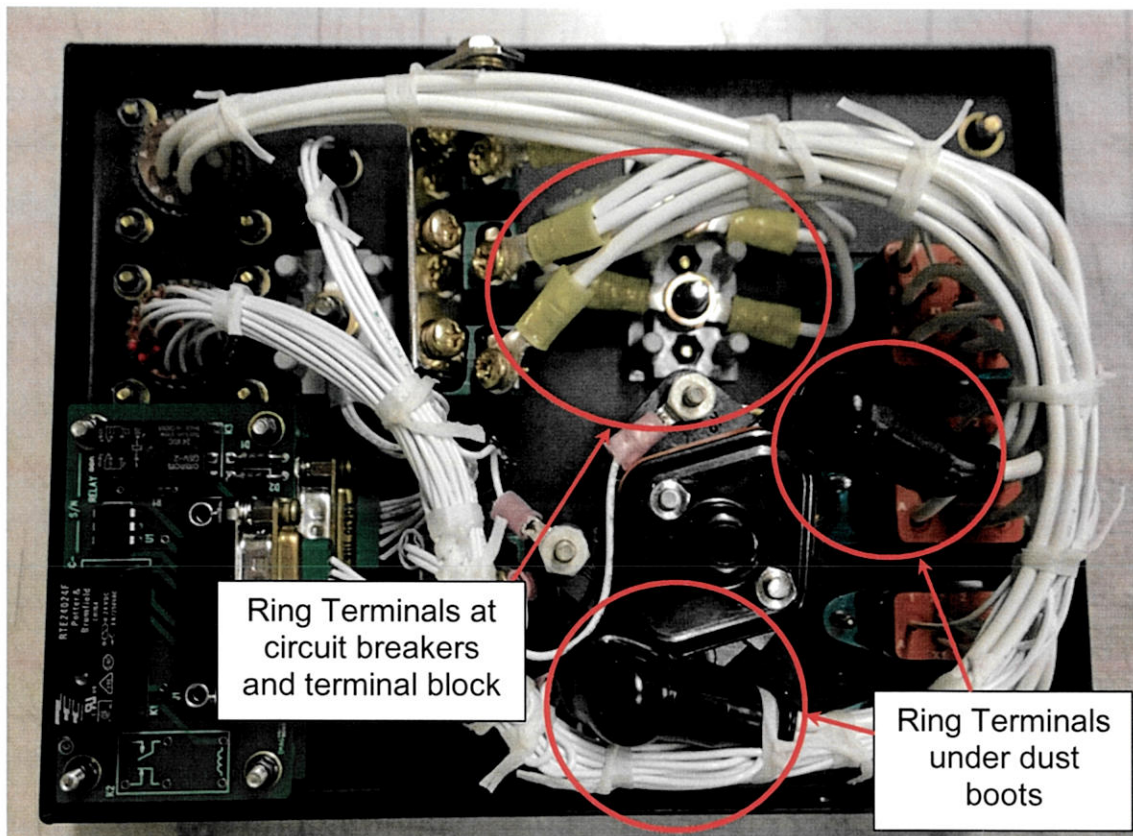


Figure 2: Power and Ground cables route through bottom of enclosure and connect to cover components.



**Inspection:**

1. Turn the relay panel over to observe the wiring and components.
2. Carefully inspect all heavy-gauge wiring and ring terminal crimps.
3. Inspect for signs of heat-related discoloration (brown/black) on cables, ring terminals, relays and connectors.
4. Pull back the flexible dust boots covering the terminals of the condenser contactor. Inspect these ring terminals for heat-related damage.
5. Check wires for signs of nicks and cuts due to chafing against other components or sheet metal.
6. If any overheated components are found, the air conditioning system must be placed in a non-operational state and remain deactivated until the panel is replaced. Further flight is permitted as long as the air conditioner remains deactivated. Contact Air Comm for instructions on how to obtain a replacement unit.
7. It is an FAA requirement that the results of this inspection be reported to Air Comm to demonstrate full compliance.



**Figure 3: Components mounted inside the panel cover**

**Installation:**

1. Replace any cable ties or lacing tape removed. Ensure the wire bundles are well-secured and immobilized from chafing.
2. Replace the dust boots over the terminals of the contactor.
3. Place the panel cover in proximity to the enclosure and re-connect the main power and ground wires.
4. Replace the cover onto the enclosure and fasten with three screws and washers.
5. Re-connect the D38999 connectors onto the cover receptacles.
6. Restore bus power and test air conditioning system for proper operation.