

## FALCON 900EX FAULT ISOLATION MANUAL

---

### TASK 20-90-01-910-901 DESIGN OF LOCALLY PROCURED BREAK-OUT BOXES

#### 1. OVERVIEW

- A. This procedure provides the instructions to identify and order all the components necessary to fabricate locally a break-out-box, based on information from the AMM maintenance procedures.

#### 2. USE OF INFORMATION FROM AMM PROCEDURES TO DETERMINE THE PARTS TO BE ORDERED

- A. Information provided by AMM procedures

Refer to **fig. 1**

- (1) The AMM procedure provides the EAL (Equivalences Approved List) reference code of the aircraft wiring side connector (example: 01C0R3026R18-32SN1L).
- B. How to determine the cable to be used for the break-out box harness
- (1) Cable type:
- (a) The cable used is of the KZ type (CAN203-1-##).  
NOTE: "##" is the wire gauge.
- (2) Wire gauge - first method:
- (a) Using this EAL reference code as a search key in the Wiring Diagram Manual, you can identify all the components which have a connector with the same EAL reference code.
- (b) You must then identify the largest wire gauge used on this connector by reviewing the gauges of all the wires installed on this connector for all the components identified.
- (c) Example with EAL reference code 01C0R3026R18-32SN1L: using this reference as a search key, you will identify X components which have a connector with this EAL reference code. Then, on all the identified components, you will determine the largest wire gauge used. The wire gauge used to make the break-out box harness must correspond to this largest wire gauge (to prevent any overcurrent hazard).
- (3) Wire gauge - second method:
- (a) Use the maximum permissible wire gauge corresponding to the electrical pin used.
- C. How to determine the connector parts to be ordered
- (1) The electrical connector identified by the EAL reference code is the aircraft wiring side connector. You must also order the mating connector (one plug and one socket connector per adapter kit).
- (2) The EAL reference code of the mating connector is obtained by replacing:
- the letter pair in the EAL reference code (i.e., "SN" by "PN" or "PN" by "SN"),
  - the number corresponding to the connector type (i.e., "6" by "0" or "0" by "6").
- Example with EAL reference code 01C0R3026R18-32SN1L: the mating connector EAL reference code is 01C0R3020R18-32PN1L.

## FALCON 900EX FAULT ISOLATION MANUAL

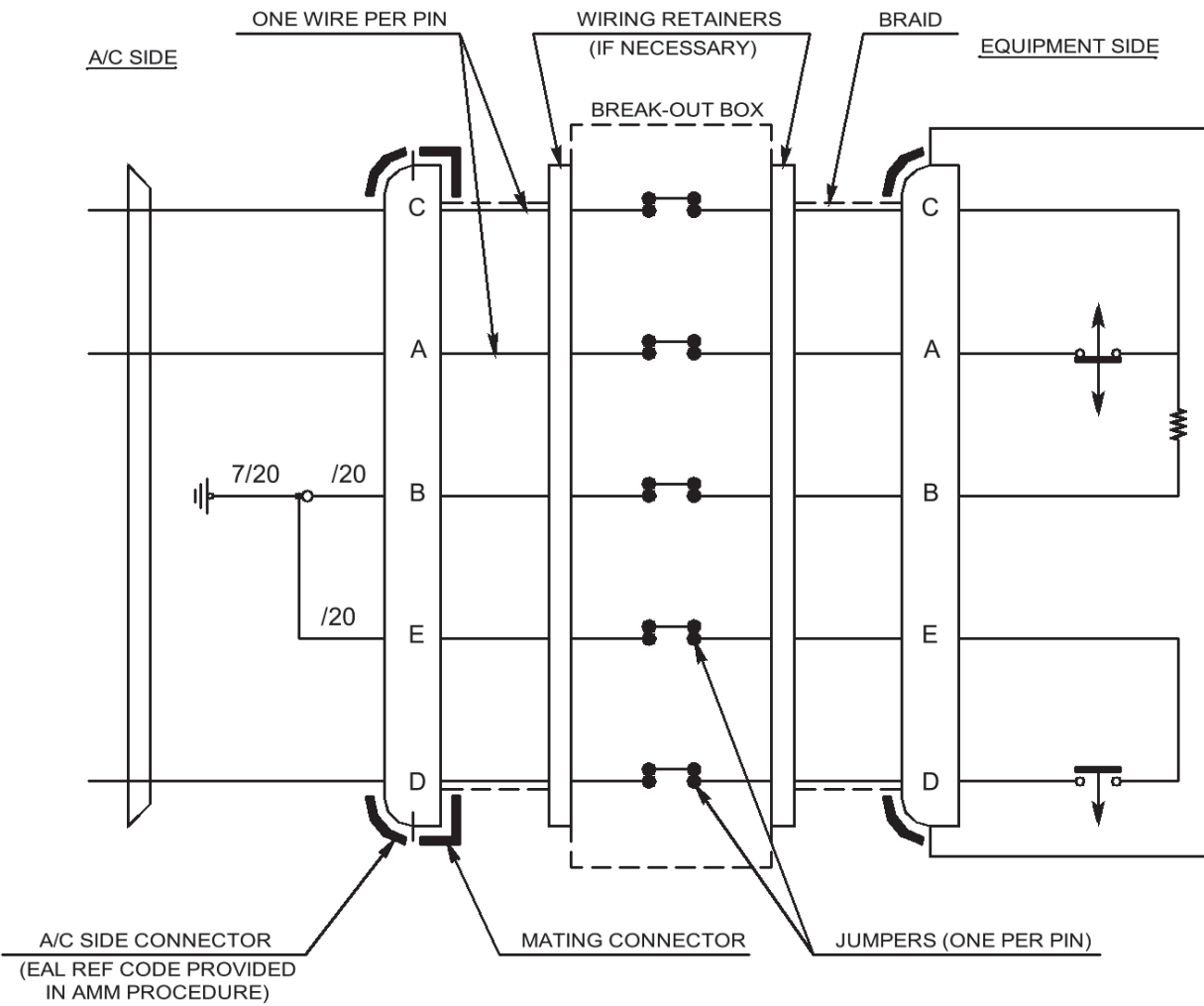
---

- (3) The EAL reference code identifies the electrical connector only. You must also order the corresponding electrical pins (to match the wire gauge used) and, if necessary, other electrical components (e.g. wiring retainers).

### **3. BREAK-OUT BOX SPECIFICATIONS**

- A. The electrical connector must have all its pins installed and wired, whatever the number of pins used by the component tested.
- B. The break-out box must be designed with one jumper per pin.
- C. Any type of jumper can be used.

**FALCON 900EX  
FAULT ISOLATION MANUAL**



**Figure 1: BREAK-OUT BOX DESIGN DRAWING**