

Service Bulletin

Title: Conversion of the Bell 429EC Air Conditioner Electrical Provisions to accommodate the Allied Blower Motors.

Date: 14 December 2010

Applicability: Bell Helicopter Model 429 Helicopters equipped with the electrical provisions for the Fasco motors.

- Reference:**
1. F.A.A. /S.T.C. # SR00693DE, Bell Helicopter 429 Series Air Conditioning System.
 2. Provisions Installation Drawing #. 429EC-250.
 3. Electrical Provisions Installation Drawing #: 429EC-808.
 4. Wire Harness – Provisions Dwg # 429EC-8004.
 5. Wire Harness – Components Dwg # 429EC-8006.

Compliance: At the discretion of the operator.

I. Discussion:

SECTION I: The Electrical Provisions Installation Drawing 429EC-808 has been revised to include the 429EC-808-2 installation. The 429EC-808-1 is now inactive and all future aircraft should come with the 429EC-808-2 installation. The completion of this bulletin converts the existing 429EC-8004-14 Harness to a 429EC-8004-15 Harness.

SECTION II: This Bulletin also converts the existing 429EC-8006-11 harness into a 429EC-8006-14 harness. The 429EC-8006-14 harness changes the aft evaporator ground circuit from a local ground to a return ground. This section is not applicable to an aircraft with only provisions installed, and is optional at the discretion of the operator.

II. Approval:

The technical aspects of this service bulletin have been FAA approved.

Revision	Issue Date	Inserted By	Description of Changes
N/C	14 Dec 2010	JB	Initial Release
A	27 Jan 2011	JB	Revised to match approved drawing revision: Page 2: "Parts to be installed" NAS6603-11 Bolt was Screw. Page 5: Fig. 3, NAS6603-11 Bolt was Screw. M22759/41-12-9 wire was 04041-12-9. Added missing parts to "Parts to be Installed". Added Fig 6 620HB047B25 Backshell was M85049/43-24W.

SECTION I: PROVISIONS CHANGE

I-1 Bill of Materials:

Parts to be removed:

Part Number	Nomenclature	Qty
ACCB10A12N	M22759/41-12-9	1
ACCB30A12N	M22759/41-12-9	1
D38999/26WG11SN	Connector	1
62011B47B21	Backshell	1
429EC-8430-1	Stowage Bracket	1

Parts to be installed:

Part Number	Nomenclature	Qty
ACCB43A12N	M22759/41	180"
ACCB44A12N	M22759/41	180"
D38999/26WJ19SN	Connector	1
620HB047B25 (Alt 627H122XW25)	Backshell	1
M39029/56-353	Contact	6
M81824/1-3	Splice	2
429EC-8430-3	Stowage Bracket	1
NAS1149C0316R	Washer	6
NAS1149D0316J	Washer	4
NAS1057T3-090	Spacer	1
NAS1802-3-24	Screw	1
NAS1802-3-38	Screw	1
NAS6603-11	Bolt	2
NAS43DD3-32N	Spacer	2
NAS1801-3-7	Screw	2
MS21919WDG4	Clamp	2
MS21919WDG6	Clamp	1
003262-101-00	Clamp	2
CB4001G3AA16-750	Click Bond	1

I-2 Electrical Modification

1. Remove left and right forward evaporator local ground leads ACCB10A12N and ACCB30A12N from GND 1. Find wires between M81824/1-3 Splices and Molex connectors. Cut wires close to the M81824/1-3 splices. See Figure 1.
2. Crimp pins on ACCB43A12N and ACCB44A12N then insert into ACP2 along with ACCB28A12N and ACCB29A12N per
3. Figure 1. Install wire per Figure 3,4,5.
4. De-pin ACP2 connector (D38999/26WG11SN) and replace with new D38999/26WJ19SN. Install new M85049/43-24W backshell on D38999/26WJ19SN connector. See Figure 1,4.
5. Remove relay panel stowage bracket 429EC-8430-1 and replace with new 429EC-8430-3 stowage bracket. Connect ACP2 plug to stowage bracket. See Figure 4.

I-3 Weight & Balance: Negligible change to weight and balance.

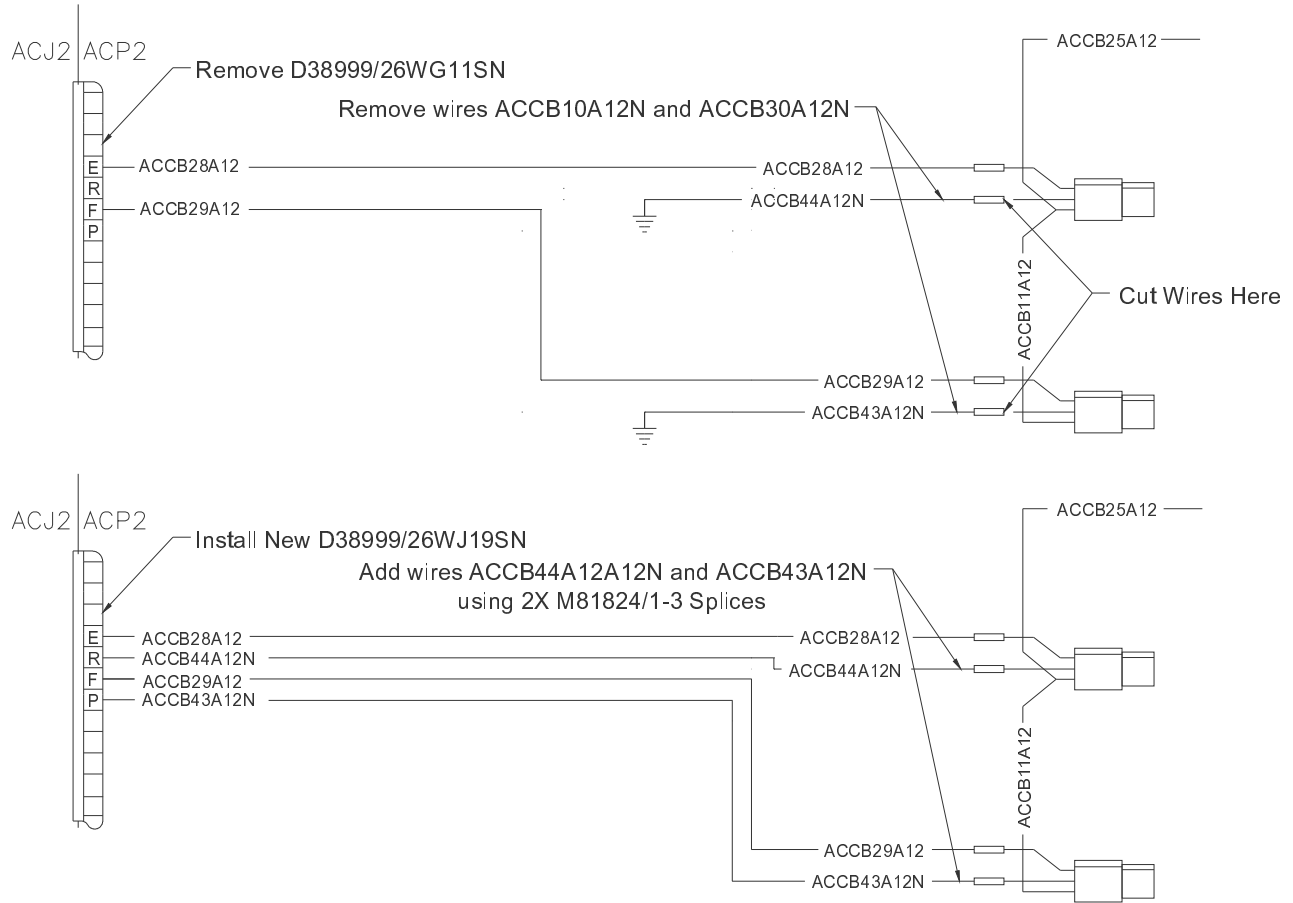


Figure 1: Wire Schematic Change for Section I

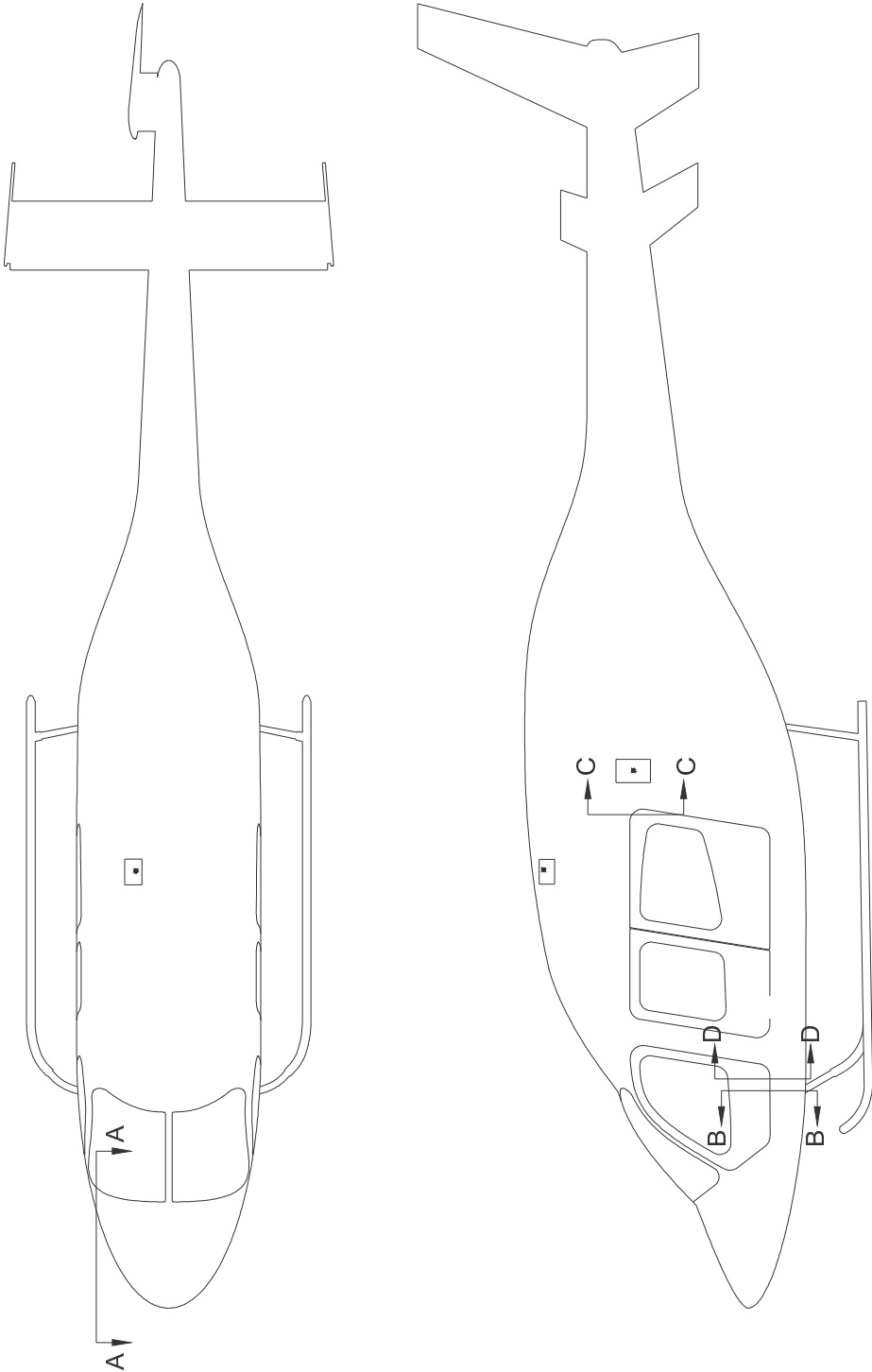


Figure 2: General Arrangement for Section I Views

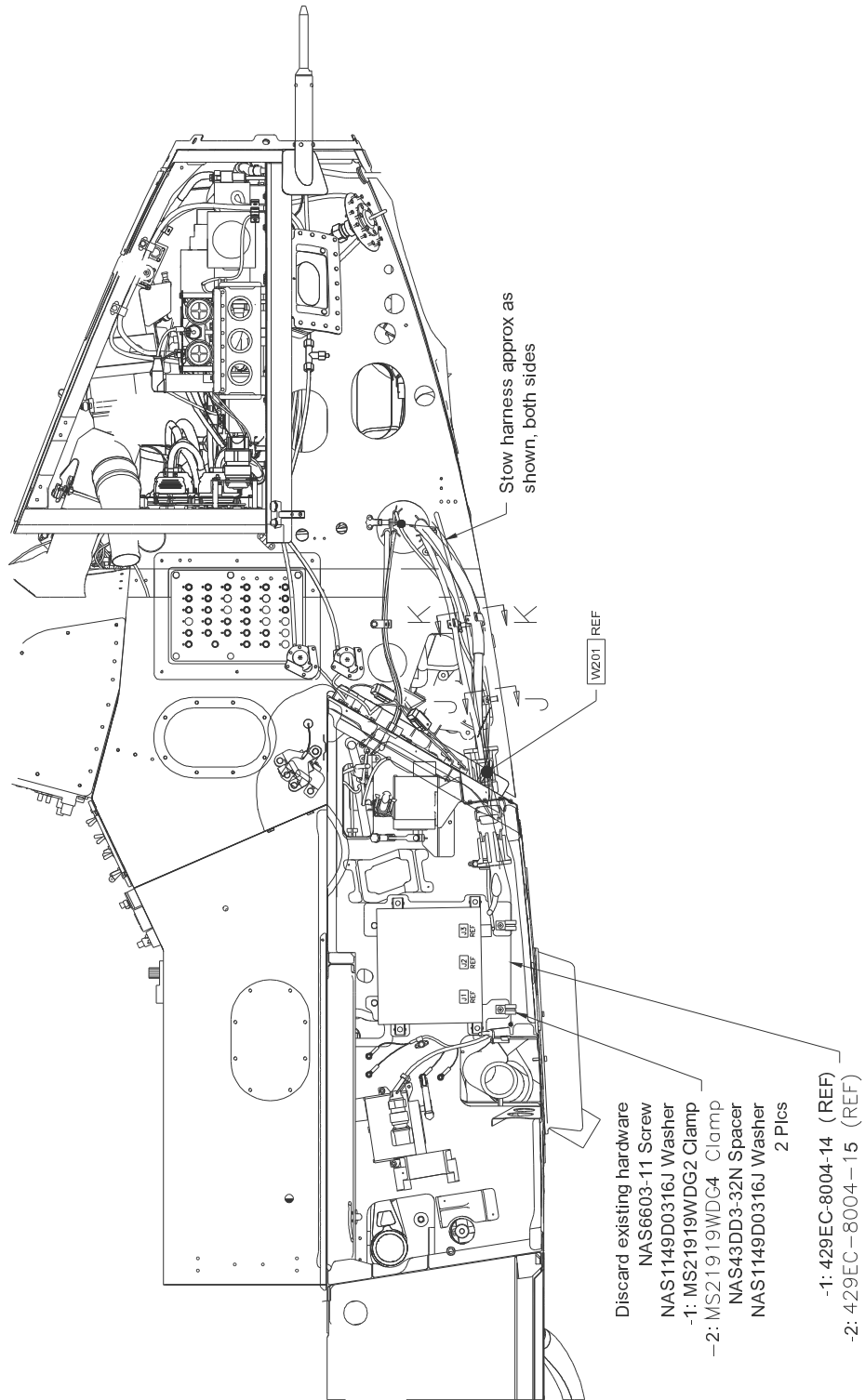
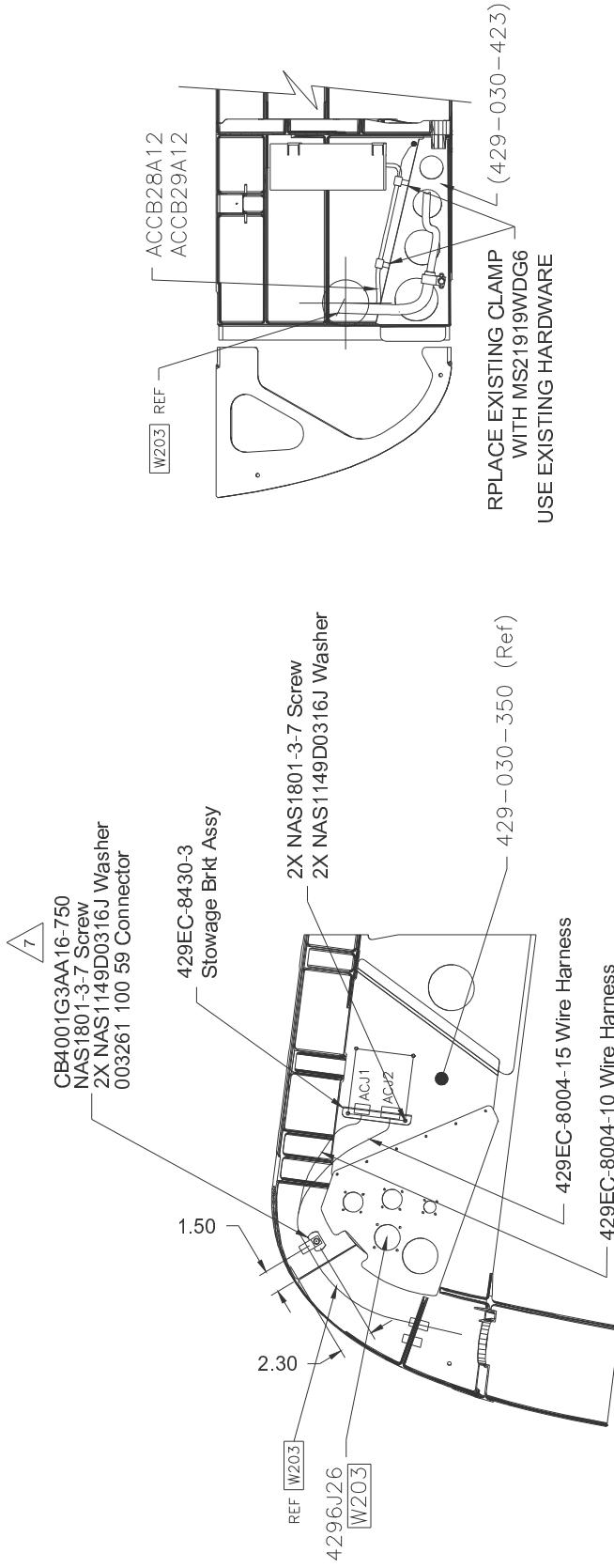


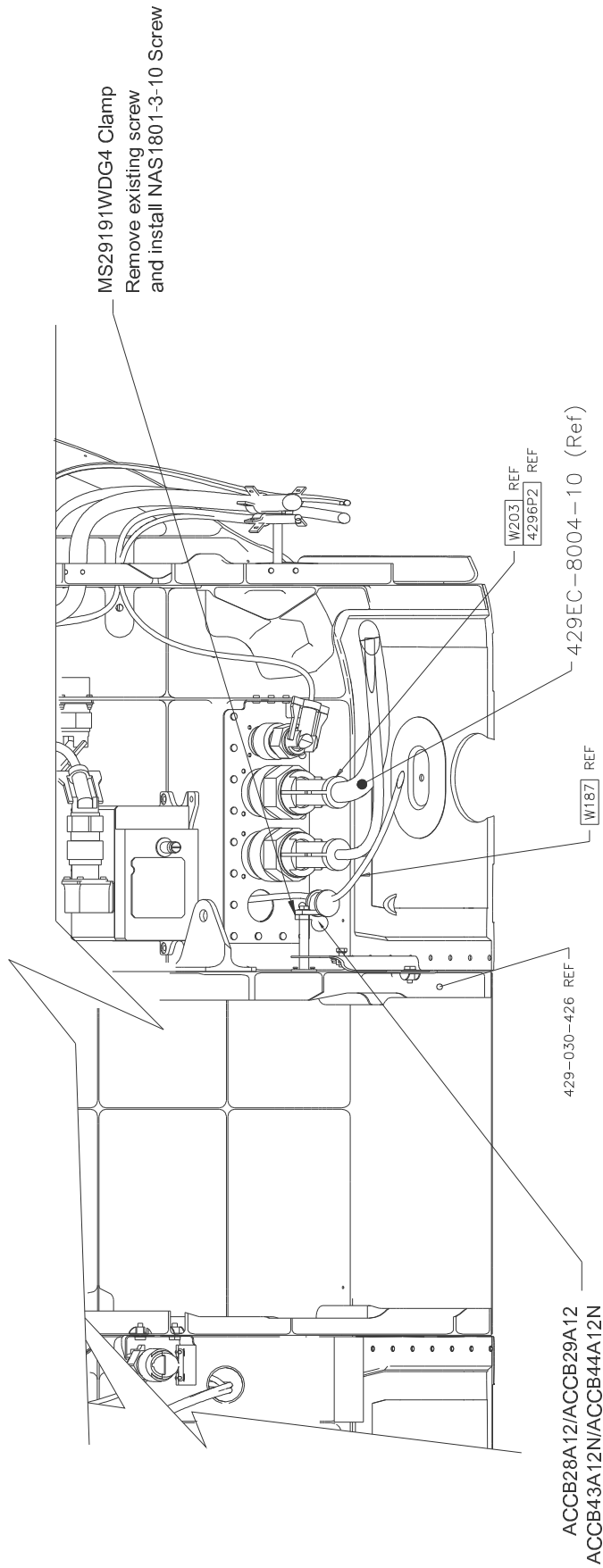
Figure 3: Right Side of Fwd Cabin Harness Installation Details



SECTION D-D
 View Looking AFT

SECTION C-C
 View Looking AFT

Figure 4: 429EC-8004-10 and -15 Provision Harness Installation Details



SECTION B-B

Figure 5: View Looking FWD, RH Side, Provision Harness Install Details.

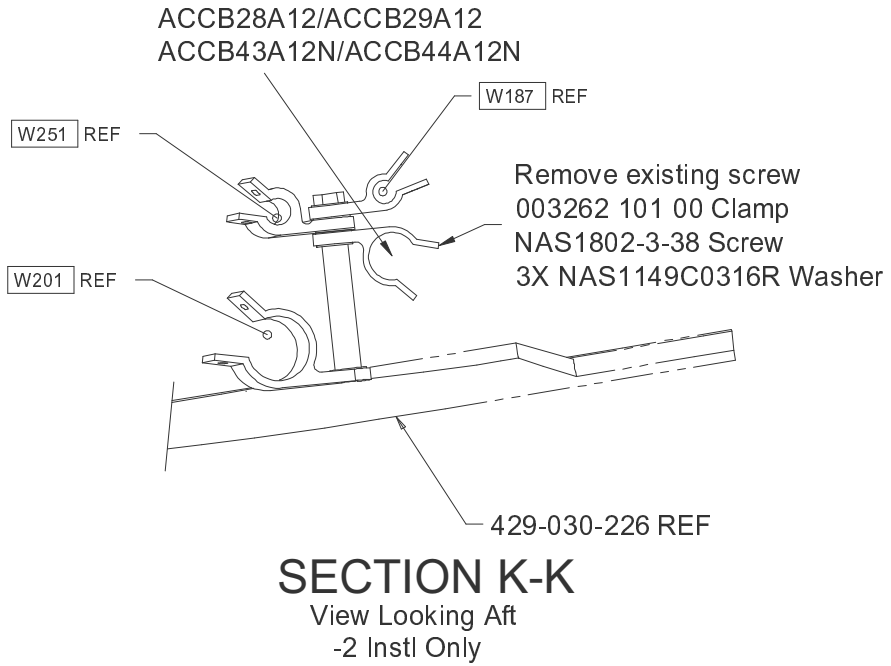
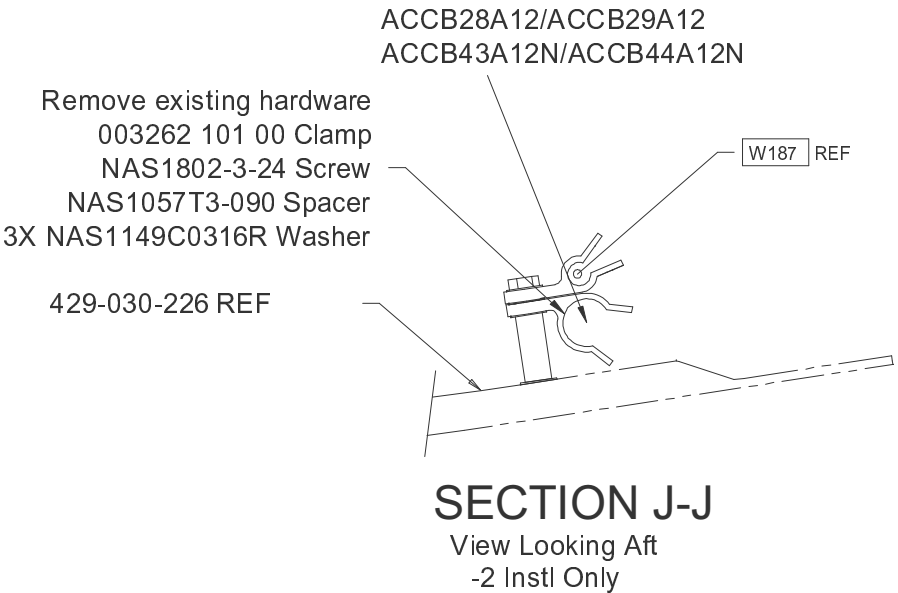


Figure 6: Section J-J and K-K from Fig 3

SECTION II: COMPONENT WIRING HARNESS CHANGE

II-1 Bill of Materials:

Parts to be removed:

Part Number	Nomenclature	Qty
ACCB40B12N	M22759/41-12-9	1
ACCB32B12N	M22759/41-12-9	1

Parts to be installed:

Part Number	Nomenclature	Qty
ACCB40A12N	M22759/41-12-9	180"
ACCB32A12N	M22759/41-12-9	180"
M39029/56-353	Contact	4

II-2 Electrical Modification

1. Remove left and right aft evaporator local ground leads ACCB40B12N and ACCB32B12N and discard. Install new left and right aft evaporator ground return leads ACCB32B12N and ACCB40B12N. Use 4x M39029/56-353 Pins at ACJ5 and ACP2 Cannon Plug. See Figure 6.
2. Crimp M39029/56-353 contacts on wire ACCB32B12N and ACCB40B12N. Insert wires into ACP2 connector. See Figure 6.

II-3 Weight & Balance: Negligible change to weight and balance.

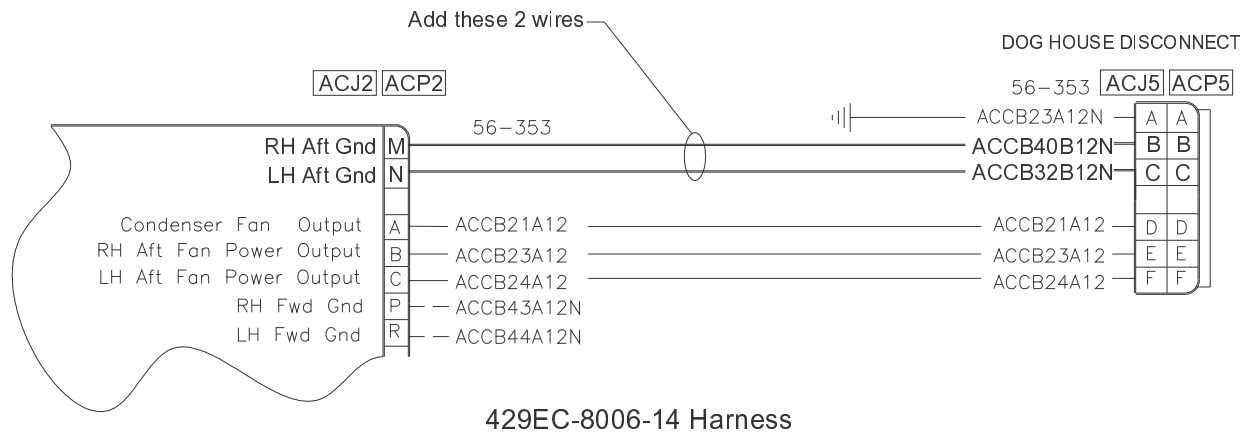
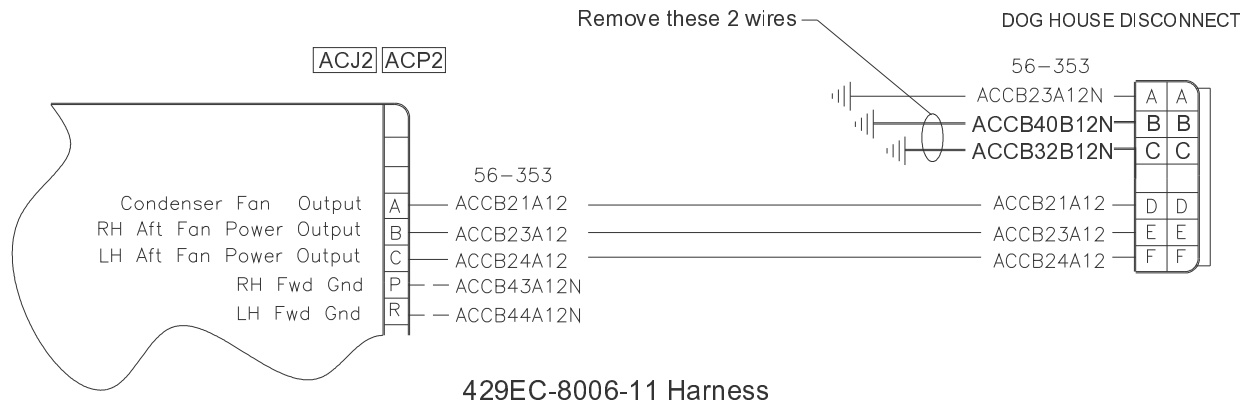


Figure 6: Wire Schematic Change Section II