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AgustaWestland Products

SERVICE BULLETIN

OPTIONAL

_{N°} 139-752

DATE: December 15, 2023

REV.: /

TITLE

ATA 46 - MISSION CONSOLE GALAXY INSTALLATION

REVISION LOG

First Issue



1. PLANNING INFORMATION

A. EFFECTIVITY

AW139 helicopters S/N 31952, 31954 and 31965.

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to allow the installation of the mission console removables parts and its dressing with the customized configuration and equipment as requested by the customer.

LH issued this SB for the following reason:

Helicopter Reliability/Maintainability	
Product Improvement	
Obsolescence	
Customization	✓
Product/Capability Enhancement	

E. DESCRIPTION

This Service Bulletin provide all the necessary instructions on how to install the Mission Console removable parts P/N 3G5316A06834 and its modification and dressing according to installation P/N 3G2520P03111.

First, the Mission console removable parts are assembled on the helicopter and then its customized modification is performed by means of the Mission Console Galaxy structural provision P/N 3G5311A73911. The Mission Console Galaxy retrofit P/N 3G2520P03011 is finally performed to install all the necessary electrical harnesses, equipment and control panels.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before



applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives.

If an aircraft listed in the effectivity embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

To comply with this Service Bulletin one hundred forty-two (142) MMH are deemed necessary.

MMH are based on hands-on time and can change with helicopter configuration, personnel and facilities available. MMH are not comprehensive of the overall hours necessary to get access to work areas and to remove all the equipment that interferes with the application of the prescribed instructions.

H. WEIGHT AND BALANCE

WEIGHT (kg)		28
	ARM (mm)	MOMENT (kg·mm)
LONGITUDINAL BALANCE	3298	92545
LATERAL BALANCE	-267	-7483

I. REFERENCES

I.1 PUBLICATIONS

Following Data Modules refer to AMP:

DATA I	MODULE	DESCRIPTION	<u>PART</u>
DM01	39-A-00-20-00-00A-120A-A	Helicopter safety – Pre-operation.	-
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels - General data.	-
DM03	39-A-11-00-01-00A-720A-A	Decal - Install procedure.	-
DM04	39-C-25-23-00-00A-320A-A	Mission console installation - Operation test.	-
Followin	ng Data Modules refer to CSPP:		
DATA I	<u>MODULE</u>	DESCRIPTION	<u>PART</u>
DM05	CSPP-A-20-10-13-00A-622A-D	Electrical contacts - Crimp.	_

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DATA MODULE DESCRIPTION PART

DM06 CSPP-A-20-10-02-00A-622A-D Terminal lug - Crimp.

DM07 CSPP-A-20-10-01-00A-691A-D Wires and cables - Marking.

I.2 ACRONYMS & ABBREVIATIONS

AMDI Aircraft Material Data Information

AMP Aircraft Maintenance Publication

ATP Acceptance Test Procedure

CSPP Common Standard Practices Publication

DM Data Module

DOA Design Organization Approval

EASA European Aviation Safety Agency

IPD Illustrated Parts Data

ITEP Illustrated Tool and Equipment Publication

LH Leonardo Helicopters

MMH Maintenance Man Hours

NVG Night Vision Goggles

N.A. Not Applicable

P/N Part Number

S/N Serial Number

I.3 ANNEX

J. PUBLICATIONS AFFECTED

AW139 AMP

AW139 IPD

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.



2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

A.1 PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	3G2520P03111		MSSN CSNL GALAXY RETROFIT PROVISION INST	REF			-
2	3G2520P03011		MISSION CONSOLE GALAXY RETROFIT	REF			-
3	727-0983/01		Central display 21.5"	1			-
4	4F3310V00151		Utility light (NVG)	1			-
5	A521A-A006	CABL-1588-01-02-030	Keyboard cable assy	1			-
6	PANL-1588-01-02- 54		Keyboard	1			-
7	IU200-240-(4)- (1).(05)		Radar control panel	1			-
8	3G5316A23051		Washer	8			-
9	3G5316A24552		Special bolt	2			-
10	3G9B01L39201		MISSION CONSOLE GALAXY C/A (B1L392)	REF			-
11	A523A-A02		Electrical contact	3			-
12	A532A400-1302C		Backshell	2			-
13	A532A400-1502C		Backshell	1			-
14	A532A400-1702C		Backshell	1			-
15	A532A400-2102C		Backshell	1			-
16	A556A-T20		Electrical wire	5 m			-
17	A556A-T22		Electrical wire	13 m			-
18	A560A-T2-22		Electrical wire	2 m			-
19	D38999/26JC35SN		Electrical connector	1			-
20	D38999/26WC98SN		Electrical connector	1			-
21	D38999/26WD35SN		Electrical connector	1			-
22	D38999/26WE35PN		Electrical connector	1			-
23	D38999/26WG39PN		Electrical connector	1			-
24	M39029/56-348		Electrical contact	8			-
25	M39029/56-351		Electrical contact	9			-
26	M39029/58-360		Electrical contact	2			-
27	M39029/58-363		Electrical contact	19			-
28	M39029/63-368		Electrical contact	5			-
29	M81824/1-1		Splice	2			_
30	M81824/1-2		Splice	3			-
31	MS25036-102		Terminal lug	2			-
32	MS25036-103		Terminal lug	1			-
33	3G9B02L39801		MISSION CONSOLE GALAXY C/A (B2L398)	REF			-
34	034-1042		Electrical connector	4			-
35	A532A400-2302C		Backshell	1			-
36	D-181-1222-90/9		Splice	15			-
37	D38999/26WH21PN		Electrical connector	1			-
38	M17/94-RG179		Cable	16 m			-
39	M23053/8-004-C		Insulation sleeving	40			-
40	M39012/16-0220		Electrical contact	2			-
41	D38999/26WE35SA		Electrical connector	1			-
42	D38999/26WE35SN		Electrical connector	1			-
43	A532A490-1702		Connector adaptor	2			-

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#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
44	A532A400-1702B		Backshell	2			-
45	M39029/58-360		Electrical contact	2			-
46	M39029/56-348		Electrical contact	28			-
47	M39029/76-424		Electrical contact	19			-
48	3G9B02L39901		MISSION CONSOLE GALAXY C/A (B2L399)	REF			-
49	A532A400-0902C		Backshell	1			_
50	A556A-T22		Electrical wire	5 m			_
51	A561A-T1-22		Electrical wire	3 m			_
52	A561A-T2-22		Electrical wire	6 m			_
53	A561A-T2-24		Electrical wire	1.5 m			_
54	A561A-T3-22		Electrical wire	1.5 m			_
55	A590A02		Ferrule	1.5 111			_
56	D20419-21		Screwlock	4			
	D38999/26WA35PN		Electrical connector	1	••••		
57					••••		-
58	EGG.2B.655.ZZM		Electrical contact	4	••••		_
59	M23053/8-003-C		Insulation sleeving	6	••••		-
60	M23053/8-004-C		Insulation sleeving	14			-
61	M24308/2-2F		Electrical connector	1			-
62	M24308/2-3F		Electrical connector	1			-
63	M39029/56-348		Electrical contact	3			-
64	M39029/58-360		Electrical contact	21			-
65	M39029/58-363		Electrical contact	3			-
66	M39029/63-368		Electrical contact	16			-
67	M85049/48-2-2F		Backshell	1			-
68	M85049/48-2-3F		Backshell	1			-
69	MS25036-148		Terminal lug	3			-
70	PKG.2B.314.CYMD 72		Electrical connector	1			-
71	3G9B02L40001		MISSION CONSOLE GALAXY C/A (B2L400)	REF			-
72	034-1042		Electrical connector	1			-
73	11BNC75-2- 15/133NE		Electrical connector	1			-
74	M17/94-RG179		Cable	2 m			-
75	M23053/8-004-C		Insulation sleeving	2			-
76	AW002SC107A		Plate assembly	1			-
77	AW002SC209A		Plate assembly	1			-
78	AW002SC310A		Plate assembly	1			-
79	A574A01-01		Insulation sleeving	1			-
80	A574A01-02		Insulation sleeving	1			-
81	A574A01-03		Insulation sleeving	4			-
82	A574A01-04		Insulation sleeving	2			-
83	AW001CB02H		Clamp	1			-
84	AW001CB05H		Clamp	1			-
85	AW001CB10H		Clamp	1			
86	AW001CL001-N6		Support	12			<u>-</u>
87	AW001CL510B-N6		Support	3			<u>-</u>
88	AW001CLS10B-N0		Anchor nut	2	•••		<u>-</u>
89	ED300A523		Decal	1	•••		
90	ED300A523 ED300DS257		Decal		•••		
				1	•••		-
91	ED300GS2175		Decal	1	•••		-
92	ED300PL265		Decal	1	•••		-
93	ED300S501		Decal	1			-
94	ED300TB2345		Decal	1	•••		-
95	LN29958-0410		Screw	8			-
96	LN9025-0410N		Washer	8			



#	P/N	ALTERNATIVE P/N DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
97	M83413/8-D007BB	Strap	1			-
98	M8805/55-001	Switch	1			-
99	MS21042L04	Nut	1			-
100	MS35207-230	Screw	2			-
101	MS35338-43	Washer	2			-
102	NAS1149D0332J	Washer	4			-
103	NAS1149D0432K	Washer	2			-
104	NAS1149DN432H	Washer	1			-
105	NAS1149DN632J	Washer	2			-
106	NAS1802-04-8	Screw	1			-
107	NAS1802-06-4	Screw	4			-
108	NAS1802-3-15	Screw	1			-
109	NAS1802-3-9	Screw	5			-
110	3G5311A73911	MISSION CONSOLE	REF			
		GALAXY STRUC PROV		••		
111	3G5317A24931	Pendant support assy	1			-
112	3G5318A25732	Pendant support assy	1	•••		-
113	MS27039-1-12	Screw	14			
114	NAS1149C0332R	Washer	14			-
115	3G5316A06834	MISSION CONSOLE REMOVABLE PARTS	REF			-
116	3G2591A04951	Fitting cover	4			-
117	3G5316A02351	Support	1			-
118	3G5316A06931	Mission console structure assy	1			-
119	3G5316A07031	Rack container assy	1			-
120	3G5316A07132	Foldable table assy	1			-
121	3G5316A07231	Central box assy	1			-
122	3G5316A07531	Upper support assy LH	1			-
123	3G5316A07631	Upper foot assy	2			-
124	3G5316A07732	Lower foot assy LH	1			-
125	3G5316A07832	Lower foot assy RH	1			-
126	3G5316A10351	Support stop LH	1			-
127	3G5316A10451	Support stop RH	1			-
128	3G5316A15831	Upper support assy RH	1			-
129	3G5316A16751	Fitting pin	4			-
130	3G5316A22236	Foot switch support assy	1			-
131	3G5316A22731	Light support assy	1			-
132	3G5316A22851	FWD door	1			-
133	3G5316A27451	Plate shim	2			-
134	3G5316A82133	Foot switch support cover	1			-
135	3G5318A01031	Seat track receptacle assy	4			-
136	3G5318A01151	Special washer	4			<u>-</u>
137	3G5318A01251	Teflon block	2			
138	A244A565E14	Decal	1			-
139	40351-10	Stud	2			-
140	AN4-5A	Bolt	4			-
141	MS21042-3	Nut	2			-
142	MS21042-4	Nut	14	••		
143	MS24694-S7	Screw	4	••		
143	MS27039-1-08	Screw	2			
145	MS27039-1-08	Screw	18			
146	MS27039-1-10	Screw	50			<u>-</u>
	MS27039-4-12	Screw	10			<u>-</u>
147			4	••		<u>-</u>
148	NAS1149C0332B	Washer		••		
149	NAS1149D0332J	Washer	68	••		



#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
150	NAS1149D0432J		Washer	20			-
151	NAS1149D0463H		Washer	4			-
152	NAS1149D0463J		Washer	8			-
153	NAS1149D0663K		Washer	6			-
154	3G4620P00112		MISSION CONSOLE DISPLAY RETRO MOD	REF	•		-
155	3G5317A46432		Display support assy LH	1			-
156	3G5317A46532		Display support assy RH	1			-

Refer also to IPD for the spares materials required to comply with the AMP DMs referenced in the accomplishment instructions.

Refer also to Annex A for the spares materials required to comply with this Service Bulletin.

A.2 CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
157	Commercial	Adhesive CB200-40 (C356)	AR	(1)	-
158	EN6049-003-04-5	Tubing braided	AR	(1)	-
159	EN6049-003-06-5	Tubing braided	AR	(1)	=
160	EN6049-003-08-5	Tubing braided	AR	(1)	-
161	EN6049-003-10-5	Tubing braided	AR	(1)	-
162	EN6049-006-25-5	Self-wrap braided	AR	(1)	=
163	AW001CK03LC	Lacing cord	AR	(1)	-
164	A236A01AB	Edging	AR	(1) (2)	-
165	A582A05 or EN6049-006-05-5	Tubing braided	AR	(1) (2)	-
166	A578A07-9	Marker Sleeve	AR	(1) (2)	-
167	EE267-02-075B	Tape	AR	(1)	-
168	M81969/14-01 or M81969/14-02 or M81969/14-03	Inserter extractor	AR	(1)	-

Refer also to AMDI for the consumable materials required to comply with the AMP DM referenced in the accomplishment instructions.

Refer also to Annex A for the consumable materials required to comply with this Service Bulletin.

A.3 LOGISTIC MATRIX

N.A.

NOTES

- (1) Item to procured as local supply.
- (2) Indicated P/N refer to a specific size. The last digits can be different based on the actual required installation.



B. SPECIAL TOOLS

The following special tools, or equivalent, are necessary to accomplish this Service Bulletin:

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
169	N.A.	USB flash drive storing the applicable configuration file	1	-	-

Refer also to ITEP for the special tools required to comply with the AMP DM referenced in the accomplishment instructions.

Refer also to Annex A for the special tools required to comply with this Service Bulletin.

C. INDUSTRY SUPPORT INFORMATION

Customization.

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3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

- a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later reuse.
- b) Shape the cables in order to prevent interference with the structure and the other existing installations, using where necessary suitable lacing cords and plastic cable tiedown.
- c) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.
- d) After drilling, remove all swarf and sharp edges. Apply on bare metal a light film of primer unless the hole is used for ground connection.
- e) During the installation of bonding braids or components requiring grounding, clean the surface structure in order to obtain a good ground contact.
- f) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
- g) Exposed thread surface and nut must be protected using a layer of tectyl according to MIL-C-16173 grade I.
- h) All lengths are in mm.
- In accordance with AMP DM 39-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
- 2. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 1 thru 3, remove all external panels, internal panels and internal liners as required to gain access to the area affected by the installation and perform the mission console removable parts P/N 3G5316A06834 as described in the following procedure:
 - 2.1 With reference to Figure 2 View A, install the support stop LH P/N 3G5316A10351 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of n°4 screws P/N MS27039-1-12 and n°4 washers



- P/N NAS1149D0332J.
- 2.2 Repeat step 2.1 for the installation of the support stop RH P/N 3G5316A10451 on the mission console structure assy P/N 3G5316A06931.
- 2.3 With reference to Figure 1 Front View, Figure 2 View A, and Figure 3 View C and Section G-G, install the upper support assy LH P/N 3G5316A07531 and the plate shim P/N 3G5316A27451 on the mission console structure assy P/N 3G5316A06931 by means of n°4 screws P/N MS27039-1-12 and n°4 washers P/N NAS1149D0332J.
- 2.4 Repeat step 2.3 for the installation of the upper support assy RH P/N 3G5316A15831 and the plate shim P/N 3G5316A27451 on the mission console structure assy P/N 3G5316A06931.
- 2.5 With reference to Figure 2 View A and Section B-B, install the upper foot assy P/N 3G5316A07631 on the upper support assy LH P/N 3G5316A07531 in accordance with the dimensions shown.
- 2.6 With reference to Figure 2 Section B-B, install n°2 fitting pins P/N 3G5316A16751, n°2 fitting covers P/N 3G2591A04951, n°4 washers P/N NAS1149D0463J and n°2 nuts P/N MS21042-4 on the upper foot assy P/N 3G5316A07631.
- 2.7 Repeat the steps 2.5 and 2.6 for the upper support assy RH P/N 3G5316A15831 on the mission console structure assy P/N 3G5316A06931.
- 2.8 With reference to Figure 1 Front View and Figure 2 View A, install the display support assy LH P/N 3G5317A46432 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of n°4 screws P/N MS27039-1-12 and n°4 washers P/N NAS1149D0332J.
- 2.9 Repeat step 2.8 for the installation of the display support assy RH P/N 3G5317A46532 on the mission console structure assy P/N 3G5316A06931.
- 2.10 With reference to Figure 1 Front View, Figure 2 View A and Figure 3 View C, install the rack container assy P/N 3G5316A07031 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of n°6 screws P/N MS27039-1-12 and n°6 washers P/N NAS1149D0332J.
- 2.11 With reference to Figure 1 Front View and Figure 2 View A, install the foldable table assy P/N 3G5316A07132 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of n°10 screws P/N MS27039-1-12 and n°10 washers P/N NAS1149D0332J.
- 2.12 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 1 Front View, install the decal P/N A244A565E14 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown.
- 2.13 With reference to Figure 1 Front View and Figure 2 View A, install the central box



- assy RH P/N 3G5316A07231 on the mission console structure assy P/N 3G5316A06931 by means of n°6 screws P/N MS27039-1-12 and n°6 washers P/N NAS1149D0332J.
- 2.14 With reference to Figure 1 Front View and Figure 2 View A, install the light support assy P/N 3G5316A22731 on the mission console structure assy P/N 3G5316A06931 by means of n°2 screws P/N MS27039-1-12 and n°2 washers P/N NAS1149D0332J.
- 2.15 With reference to Figure 1 Front View and Figure 3 View C and Section H-H, temporarily locate the support P/N 3G5316A02351 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown and countermark n°2 hole-positions on the structure.
- 2.16 With reference to Figure 3 Section H-H, drill n°2 holes Ø5.10÷5.30 previously countermarked thru the mission console structure assy P/N 3G5316A06931.

NOTE

Remove protection from the console structure zone in contact with the support.

- 2.17 With reference to Figure 1 Front View and Figure 3 View C and Section H-H, install the support P/N 3G5316A02351 on the mission console structure assy P/N 3G5316A06931 by means of n°2 screws P/N MS27039-1-08, n°4 washers P/N NAS1149C0332B and n°2 nuts P/N MS21042-3.
- 2.18 With reference to Figure 3 View C, temporarily locate the FWD door P/N 3G5316A22851 on the mission console structure assy P/N 3G5316A06931 and countermark n°18 hole-positions on the FWD door.
- 2.19 With reference to Figure 3 View C, drill n°18 holes Ø5.20÷5.50 previously countermarked thru the FWD door P/N 3G5316A22851.
- 2.20 With reference to Figure 3 View C, install the FWD door P/N 3G5316A22851 on the mission console structure assy P/N 3G5316A06931 by means of n°18 screws P/N MS27039-1-10 and n°18 washers P/N NAS1149D0332J.
- 2.21 With reference to Figure 1 Front View, Figure 2 View A, and Section D-D, install the lower foot assy RH P/N 3G5316A07832 and the lower foot assy LH P/N 3G5316A07732 on the mission console structure assy P/N 3G5316A06931 by means of n°10 screws P/N MS27039-4-12, n°20 washers P/N NAS1149D0432J and n°10 nuts P/N MS21042-4.
- 2.22 With reference to Figure 2 Section D-D and Section E-E, install n°2 seat track receptacle assemblies P/N 3G5318A01031 on the lower foot assy RH P/N 3G5316A07832 by means of n°2 bolts P/N AN4-5A, n°2 washers



- P/N NAS1149D0463H and n°2 special washers P/N 3G5318A01151.
- 2.23 Repeat step 2.22 for the lower foot assy LH P/N 3G5316A07732.
- 2.24 With reference to Figure 1 Front View and Figure 2 Section D-D, install the foot switch support assy P/N 3G5316A22236 on the lower foot assy LH P/N 3G5316A07732 by means of n°2 screws P/N MS27039-1-12 and n°2 washers P/N NAS1149D0332J.
- 2.25 With reference to Figure 3 View F-F, install the teflon block P/N 3G5318A01251 on the lower foot assy RH P/N 3G5316A07832 by means of n°2 screws P/N MS24694-S7.
- 2.26 Repeat step 2.25 for the lower foot assy LH P/N 3G5316A07732.
- 2.27 With reference to Figure 1 Front View, Figure 2 Section D-D, and Section J-J, install the foot switch support cover P/N 3G5316A82133 on the foot switch support assy P/N 3G5316A22236 by means of n°2 studs P/N 40351-10 and n°6 washers P/N NAS1149D0663K.
- 2.28 With reference to Figure 1 Front View and Figure 2 View A, install the mission console structure previously assembled on existing rails at STA 335.0, STA 3415.0, BL 355.6 RH and WL 1050.0, refer to applicable steps of the AMP DM 39-C-25-23-06-00A-720A-A.
- 3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 4 thru 19, remove all external panels, internal panels and internal liners as required to gain access to the area affected by the retrofit provision installation P/N 3G2520P03111.
- 4. With reference to Figures 4 and 5, perform the mission console galaxy structural provision P/N 3G5311A73911 as described in the following procedure:
 - 4.1 With reference to Figure 5 Detail B and View C-C, install the pendant support assy P/N 3G5317A24931 on the mission console structure assy P/N 3G5316A06931 by means of n°7 screws P/N MS27039-1-12 and n°7 washers P/N NAS1149C0332R.
 - 4.2 Repeat step 4.1 for the installation of the pendant support assy P/N 3G5318A25732 on the mission console structure assy P/N 3G5316A06931.
 - 4.3 With reference to Figure 5 View D, drill the hole Ø2.85÷2.90 thru the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown.
 - 4.4 With reference to Figure 5 View D, prepare surface around n°4 holes Ø10.0 for good electrical bonding.
- 5. With reference to Figure 6 thru 19, perform the mission console galaxy retrofit P/N 3G2520P03011 as described in the following procedure:
 - 5.1 With reference to Figure 10 View "Looking Front Mission Console" and Figure 11 View "Looking Back Mission Console", install n°12 supports P/N AW001CL001-N6



- on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of adhesive CB200-40 (C356).
- 5.2 With reference to Figure 11 View "Looking LH Side Mission Console", install n°2 anchor nuts P/N AW001TL3A08T on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of adhesive CB200-40 (C356).
- 5.3 With reference to Figure 11 View "Looking Back Mission Console", install n°3 supports P/N AW001CL510B-N6 on the mission console structure assy P/N 3G5316A06931 in accordance with the dimensions shown by means of adhesive CB200-40 (C356).
- 5.4 With reference to Figure 6 View "Isometric Mission Console", install the utility light (NVG) (DS257) P/N 4F3310V00151 on the light support assy P/N 3G5316A22731 by means of n°2 screws NAS1802-3-9 and n°2 washers P/N NAS1149D0332J.
- 5.5 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 6 View "Isometric Mission Console", install the decal ED300DS257 near the utility light (NVG) DS257.
- 5.6 With reference to Figure 8 Detail B, fix the junction in line TB2345 to the support P/N AW001CL001-N6 previously installed.
- 5.7 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 Detail B, install the decal ED300TB2345 near the junction in line TB2345.
- With reference to Figure 8 View C and Figure 10 Detail G, install the ground stud GS2175 in the existing hole of the mission console structure assy P/N 3G5316A06931 by means of the screw P/N NAS1802-04-8, the washer P/N NAS1149DN432H, n°2 washer P/N NAS1149D0432K and the nut P/N MS21042L04.
- 5.9 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View C, install the decal P/N ED300GS2175 near the ground stud GS2175.
- 5.10 With reference to Figure 6 View "Isometric Mission Console", install the switch mission foot SW (S501) P/N M8805/55-001 on the foot switch support assy P/N 3G5316A22236 and the foot switch support cover P/N 3G5316A82133 by means of n°2 screws P/N MS35207-230 and n°2 washers P/N NAS1149DN632J.
- 5.11 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 6 View "Isometric Mission Console", install the decal ED300S501 near the switch mission foot SW S501.
- 5.12 With reference to Figures 13, 16, and 18 Wiring Diagram, assemble the mission console Galaxy C/A (B1L392) P/N 3G9B01L39201 as described in the following



procedure:

- 5.12.1 Assemble the following connectors:
 - the connector A523P1 by means of the electrical connector P/N D38999/26WC98SN and the backshell P/N A532A400-1302C;
 - the connector A523P2 by means of the electrical connector P/N D38999/26WD35SN and the backshell P/N A532A400-1502C;
 - the connector P2079 by means of the electrical connector P/N D38999/26WE35PN and the backshell P/N A532A400-1702C;
 - the connector P2099 by means of the electrical connector P/N D38999/26WG39PN and the backshell P/N A532A400-2102C;
 - the connector PL198P1 by means of the electrical connector P/N D38999/26JC35SN and the backshell P/N A532A400-1302C.
- 5.12.2 With reference to Figure 13 Wiring Diagram, cut n°1 wire P/N A556A-T22 of adequate length and lay down between the junction in-line TB2345 and the ground stud GS2175.
- 5.12.3 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connection to the junction in-line TB2345.
- 5.12.4 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connection of the terminal lug GS2175-1 on the end of the wire.
- 5.12.5 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 13 Wiring Diagram, mark wire as 2520-002N-22-G by means of marker sleeve.
- 5.12.6 With reference to Figure 13 Wiring Diagram, cut n°1 wire P/N A560A-T2-22 of adequate length and lay down between the connector P2079 and the switch S501.
- 5.12.7 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connections to the connector P2079.
- 5.12.8 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connections of the terminal lugs S501-1-1 and S501-G-1 respectively on the end of the wire respectively WHITE and BLUE.
- 5.12.9 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 13 Wiring Diagram, mark wire as 2520-001-22-G by means of marker sleeve.

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- 5.12.10 With reference to Figure 13 Wiring Diagram, cut n°2 wires P/N A556A-T22 of adequate length and lay down between the connector P2099 and the junction in-line TB2345.
- 5.12.11 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connections to the connector P2099 and the junction in-line TB2345.
- 5.12.12 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 13 Wiring Diagram, mark wires as 2520-003-22-G and 2520-004-22-G by means of marker sleeve.
- 5.12.13 With reference to Figure 13 Wiring Diagram, cut n°2 wires P/N A556A-T20 of adequate length and lay down one between the connector P2099 and the splice SP22390 and one between the connector P2099 and the splice SP22391. Use n°2 splices P/N M81824/1-2.
- 5.12.14 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connections to the connector P2099 and the splices SP22390 and SP22391.
- 5.12.15 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to 13 Wiring Diagram, mark wires as 2520-005-20-G and 2520-008-20-G by means of marker sleeve.
- 5.12.16 With reference to Figure 13 Wiring Diagram, cut n°2 wires P/N A556A-T22 of adequate length and lay down one between the connector P2099 and the splice SP22392 and one between the connector P2099 and the splice SP22393. Use n°2 splices P/N M81824/1-1.
- 5.12.17 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connections to the connector P2099 and the splices SP22392 and SP22393.
- 5.12.18 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 13 Wiring Diagram, mark wires as 2520-011-22-G and 2520-014-22-G by means of marker sleeve.
- 5.12.19 With reference to Figure 13 Wiring Diagram, cut n°4 wires P/N A556A-T20 of adequate length and lay down n°2 between the connector A523P1 and the splice SP22390 and n°2 between the connector A523P1 and the splice SP22391.



- In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with 5.12.20 reference to Figure 13 Wiring Diagram, perform the electrical connections to the connector A523P1 and the splices SP22390 and SP22391.
- 5.12.21 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 13 Wiring Diagram, mark wires as 2520-006-20-G, 2520-007-20-G, 2520-009-20-G and 2520-010-20-G by means of marker sleeve.
- 5.12.22 With reference to Figure 13 Wiring Diagram, cut n°4 wires P/N A556A-T22 of adequate length and lay down n°2 between the connector A523P1 and the splice SP22392 and n°2 between the connector A523P1 and the splice SP22393.
- In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with 5.12.23 reference to Figure 13 Wiring Diagram, perform the electrical connections to the connector A523P1 and the splices SP22392 and SP22393.
- In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with 5.12.24 reference to Figure 13 Wiring Diagram, mark wires as 2520-012-22-G, 2520-013-22-G, 2520-015-22-G and 2520-016-22-G by means of marker sleeve.
- 5.12.25 With reference to Figure 13 Wiring Diagram, cut n°1 wire P/N A556A-T22 of adequate length and lay down between the connectors P2099 and A523P1.
- 5.12.26 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 13 Wiring Diagram, perform the electrical connections to the connectors P2099 and A523P1.
- In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with 5.12.27 reference to Figure 13 Wiring Diagram, mark wire as 2520-017-22-G by means of marker sleeve.
- 5.12.28 With reference to Figure 13 Wiring Diagram, cut n°5 wires P/N A556A-T22 of adequate length and lay down between the connectors A523P2 and P2099.
- In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with 5.12.29 reference to Figure 13 Wiring Diagram, perform the electrical connections to the connectors A523P2 and P2099.
- 5.12.30 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 13 Wiring Diagram, mark wires as 2520-018-22-G,



- 2520-019-22-G, 2520-020-22-G, 2520-021-22-G and 2520-022-22-G by means of marker sleeve.
- 5.12.31 With reference to Figure 16 Wiring Diagram, cut n°3 wires P/N A556A-T22 of adequate length and lay down between the connectors PL198P1 and P2099.
- 5.12.32 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 16 Wiring Diagram, perform the electrical connections to the connectors PL198P1 and P2099.
- 5.12.33 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 16 Wiring Diagram, mark wires as 2520-024-22-G, 2520-025-22-G and 2520-026-22-G by means of marker sleeve.
- 5.12.34 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A556A-T20 of adequate length and lay down between the connectors P2099 and PL265P1.
- 5.12.35 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connectors P2099 and PL265P1.
- 5.12.36 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-036-20-G by means of marker sleeve.
- 5.12.37 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A556A-T20 of adequate length and lay down between the connector P2099 and the splice SP22394. Use the splice P/N M81824/1-2.
- 5.12.38 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connector P2099 and the splice SP22394.
- 5.12.39 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-037-20-G by means of marker sleeve.
- 5.12.40 With reference to Figure 18 Wiring Diagram, cut n°2 wires P/N A556A-T20 of adequate length and lay down between the connector PL265P1 and the splice SP22394.
- 5.12.41 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connector PL265P1 and the splice SP22394.



- 5.12.42 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-038-20-G and 2520-039-20-G by means of marker sleeve.
- 5.12.43 With reference to Figure 18 Wiring Diagram, cut n°2 wires P/N A556A-T22 of adequate length and lay down between the connectors PL265P2 and P2099.
- 5.12.44 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connectors PL265P2 and P2099.
- 5.12.45 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-040-22-G and 2520-041-22-G by means of marker sleeve.
- 5.12.46 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figures 13, 16 and 18 Wiring Diagram, mark the cable assembly so obtained as B1L392 by means of marker sleeve.
- 5.13 With reference to Figures 14, 15 and 17 Wiring Diagram, assemble the mission console Galaxy C/A (B2L398) P/N 3G9B02L39801 as described in the following procedure:
 - 5.13.1 Assemble the following connectors:
 - the connector A523P6 by means of the electrical connector P/N M39012/16-0220;
 - the connector A523P7 by means of the electrical connector P/N M39012/16-0220;
 - the connector P2199 by means of the electrical connector P/N D38999/26WH21PN and the backshell P/N A532A400-2302C;
 - the connector PL198P2 by means of the electrical connector P/N 034-1042;
 - the connector PL198P3 by means of the electrical connector P/N 034-1042;
 - the connector PL198P4 by means of the electrical connector P/N 034-1042;
 - the connector PL198P6 by means of the electrical connector P/N 034-1042;
 - the connector A523P3 by means of the electrical connector P/N D38999/26WE35SA, the connector adaptor P/N A532A490-1702 and the backshell P/N A532A400-1702B;



- the connector A523P4 by means of the electrical connector P/N D38999/26WE35SN, the connector adaptorP/N A532A490-1702 and the backshell P/N A532A400-1702B.
- 5.13.2 With reference to Figure 14 Wiring Diagram, cut n°1 wire P/N M17/94-RG179 of adequate length and lay down between the connectors P2199 and A523P7.
- 5.13.3 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 14 Wiring Diagram, perform the electrical connection to the connector P2199. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.4 With reference to Figure 14 Wiring Diagram, perform the electrical connection to the connector A523P7. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.5 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 14 Wiring Diagram, mark wire as 2520-057-CO-S by means of marker sleeve.
- 5.13.6 With reference to Figure 14 Wiring Diagram, cut n°8 wires P/N M17/94-RG179 of adequate length and lay down:
 - one between the connector P2199 and the splice SL2519;
 - one between the connector P2199 and the splice SL2520;
 - one between the connector P2199 and the splice SL2521;
 - one between the connector P2199 and the splice SL2522;
 - one between the connector P2199 and the splice SL2523;
 - one between the connector P2199 and the splice SL2524;
 - one between the connector P2199 and the splice SL2525;
 - one between the connector P2199 and the splice SL2526; Use n°8 splices P/N D-181-1222-90/9.
- 5.13.7 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 14 Wiring Diagram, perform the electrical connections to the connector P2199. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.8 With reference to Figure 14 Wiring Diagram, perform the electrical connections to the splices SL2519, SL2520, SL2521, SL2522, SL2523, SL2524, SL2525 and SL2526. Apply the insulation sleeving P/N M23053/8-004-C as required.



- 5.13.9 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 14 Wiring Diagram, mark wires as 2520-058-CO-S, 2520-059-CO-S, 2520-060-CO-S, 2520-061-CO-S, 2520-062-CO-S, 2520-063-CO-S, 2520-064-CO-S and 2520-065-CO-S by means of marker sleeve.
- 5.13.10 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 14 Wiring Diagram, perform the electrical connections between the connector A523P3 and the wires of the splices previously installed.
- 5.13.11 With reference to Figure 14 Wiring Diagram, cut n°1 wire P/N M17/94-RG179 of adequate length and lay down between the splices SL2527 and SL2528. Use n°2 splices P/N D-181-1222-90/9.
- 5.13.12 With reference to Figure 14 Wiring Diagram, perform the electrical connections to the splices SL2527 and SL2528. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.13 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 14 Wiring Diagram, mark wire as 2520-023-CO-S by means of marker sleeve.
- 5.13.14 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 14 Wiring Diagram, perform the electrical connections between the connector A523P4 and the wires of the splice SL2528 previously installed.
- 5.13.15 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 14 Wiring Diagram, perform the electrical connections between the connector P2079 and the wires of the splice SL2527 previously installed.
- 5.13.16 With reference to Figure 15 Wiring Diagram, cut n°5 wires P/N M17/94-RG179 of adequate length and lay down:
 - one between the connector P2199 and the splice SL2529;
 - one between the connector P2199 and the splice SL2530;
 - one between the connector P2199 and the splice SL2531;
 - one between the connector P2199 and the splice SL2532;
 - one between the connector P2199 and the splice SL2533. Use n°5 splices P/N D-181-1222-90/9.
- 5.13.17 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 15 Wiring Diagram, perform the electrical



- connections to the connector P2199. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.18 With reference to Figure 15 Wiring Diagram, perform the electrical connections to the splices SL2529, SL2530, SL2531, SL2532 and SL2533. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.19 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 15 Wiring Diagram, mark wires as 2520-066-CO-S, 2520-067-CO-S, 2520-068-CO-S, 2520-069-CO-S and 2520-070-CO-S by means of marker sleeve.
- 5.13.20 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 15 Wiring Diagram, perform the electrical connections between the connectors A523P4 and the wires of the splices previously installed.
- 5.13.21 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 15 Wiring Diagram, perform the electrical connections between the connectors A523P3 and the wires of the splice SL2533 previously installed.
- 5.13.22 With reference to Figure 15 Wiring Diagram, cut n°1 wire P/N M17/94-RG179 of adequate length and lay down between the connectors P2199 and A523P6.
- 5.13.23 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 15 Wiring Diagram, perform the electrical connection to the connector P2199. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.24 With reference to Figure 15 Wiring Diagram, perform the electrical connection to the connector A523P6. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.25 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 15 Wiring Diagram, mark wire as 2520-071-CO-S by means of marker sleeve.
- 5.13.26 With reference to Figure 17 Wiring Diagram, cut n°4 wires P/N M17/94-RG179 of adequate length and lay down:
 - one between the connectors P2199 and PL198P4;
 - one between the connectors P2199 and PL198P3;
 - one between the connectors P2199 and PL198P6;
 - one between the connectors P2199 and PL198P2.



- 5.13.27 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 17 Wiring Diagram, perform the electrical connections to the connector P2199. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.28 With reference to Figure 17 Wiring Diagram, perform the electrical connections to the connectors PL198P4, PL198P3, PL198P6 and PL198P2. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.13.29 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 17 Wiring Diagram, mark wires as 2520-072-CO-S, 2520-073-CO-S, 2520-074-CO-S and 2520-075-CO-S by means of marker sleeve.
- 5.13.30 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figures 14, 15 and 17 Wiring Diagram, mark the cable assembly so obtained as B2L398 by means of marker sleeve.
- 5.14 With reference to Figures 16, 18, and 19 Wiring Diagram, assemble the mission console Galaxy C/A (B2L399) P/N 3G9B02L39901 as described in the following procedure:
 - 5.14.1 Assemble the following connectors:
 - the connector A276J1 by means of the electrical connector P/N PKG.2B.314.CYMD72;
 - the connector P2189 by means of the electrical connector P/N D38999/26WA35PN and the backshell P/N A532A400-0902C;
 - the connector PL265P1 by means of the electrical connector P/N M24308/2-3F, the backshell P/N M85049/48-2-3F and n°2 screwlocks P/N D20419-21;
 - the connector PL265P2 by means of the electrical connector P/N M24308/2-2F, the backshell P/N M85049/48-2-2F and n°2 screwlocks P/N D20419-21.
 - 5.14.2 With reference to Figure 16 Wiring Diagram, cut n°1 wire P/N A561A-T1-22 of adequate length and lay down one between the connectors P2099 and PL198P1.
 - 5.14.3 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 16 Wiring Diagram, perform the electrical connections to the connectors P2099 and PL198P1. Apply the insulation sleeving P/N M23053/8-003-C as required.

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- 5.14.4 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 16 Wiring Diagram, mark wire as 2520-027-22-S by means of marker sleeve.
- 5.14.5 With reference to Figure 16 Wiring Diagram, cut n°1 wire P/N A561A-T2-24 of adequate length and lay down one between the connectors P2099 and PL198P1.
- 5.14.6 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 16 Wiring Diagram, perform the electrical connections to the connectors P2099 and PL198P1. Apply the insulation sleeving P/N M23053/8-003-C as required.
- 5.14.7 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 16 Wiring Diagram, mark wire as 2520-028-24-S (WH and BL) by means of marker sleeve.
- 5.14.8 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A561A-T2-22 of adequate length and lay down between the connectors P2079 and PL265P1.
- 5.14.9 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connectors P2079 and PL265P1. Apply n°2 ferrules P/N A590A02 and apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.14.10 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-030-22-S (WH and BL) by means of marker sleeve.
- 5.14.11 With reference to Figure 18 Wiring Diagram, cut n°2 wires P/N A556A-T22 of adequate length and lay down one between the connector P2079 and the splice SL2534 and one between the connector P2079 and the splice SL2535.
- 5.14.12 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connector P2079 and the splices SL2534 and SL2535.
- 5.14.13 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-032-22-S and 2520-035-22-S by means of marker sleeve.



- 5.14.14 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A556A-T22 of adequate length and lay down one between the splice SL2536 and the connector PL265P1.
- 5.14.15 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connector PL265P1 and the splice SL2536.
- 5.14.16 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-031-22-S by means of marker sleeve.
- 5.14.17 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A556A-T22 of adequate length and lay down one between the splice SL2537 and the connector PL265P1.
- 5.14.18 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the splice SL2537 and the connector PL265P1.
- 5.14.19 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-034-22-S by means of marker sleeve.
- 5.14.20 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A561A-T3-22 of adequate length and lay down between the connectors P2079 and PL265P1.
- 5.14.21 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connectors P2079 and PL265P1. Apply n°2 ferrules P/N A590A02 and apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.14.22 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-033-22-S (WH, BL and OR) by means of marker sleeve.
- 5.14.23 With reference to Figure 18 Wiring Diagram, cut n°3 wires P/N A561A-T2-22 of adequate length and lay down between the connectors P2079 and PL265P2.
- 5.14.24 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connectors P2079 and PL265P2. Apply n°5 ferrules P/N A590A02 and apply the insulation sleeving P/N M23053/8-004-C as required.



- 5.14.25 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-042-22-S, 2520-045-22-S and 2520-050-22-S by means of marker sleeve.
- 5.14.26 With reference to Figure 18 Wiring Diagram, cut n°2 wires P/N A556A-T22 of adequate length and lay down one between the connector P2079 and the splice SL2538 and one between the connector P2079 and the splice SL2539.
- 5.14.27 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connector P2079 and the splices SL2538 and SL2539.
- 5.14.28 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-043-22-S and 2520-046-22-S by means of marker sleeve.
- 5.14.29 With reference to Figure 18 Wiring Diagram, cut n°3 wires P/N A556A-T22 of adequate length and lay down one between the connector PL265P2 and the splice SL2540, one between the connector PL265P2 and the splice SL2541 and one between the connector PL265P2 and the splice SL2543.
- 5.14.30 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connector PL265P2 and the splices SL2540, SL2541 and SL2543.
- 5.14.31 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-044-22-S, 2520-047-22-S and 2520-051-22-S by means of marker sleeve.
- 5.14.32 With reference to Figure 18 Wiring Diagram, cut n°2 wires P/N A556A-T22 of adequate length and lay down between the connectors P2079 and PL265P2.
- 5.14.33 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the connectors P2079 and PL265P2. Apply the ferrule P/N A590A02 and apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.14.34 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wires as 2520-048-22-S and 2520-052-22-S by means of marker sleeve.



- 5.14.35 With reference to Figure 18 Wiring Diagram, cut n°1 wire P/N A556A-T22 of adequate length and lay down between the splice SL2542 and the connector PL265P2.
- 5.14.36 In accordance with CSPP DM CSPP-A-20-10-02-00A-622A-D and with reference to Figure 18 Wiring Diagram, perform the electrical connections to the splice SL2542 and the connector PL265P2.
- 5.14.37 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 18 Wiring Diagram, mark wire as 2520-049-22-S by means of marker sleeve.
- 5.14.38 With reference to Figure 19 Wiring Diagram, cut n°2 wires P/N A561A-T2-22 of adequate length and lay down between the connectors P2189 and A276J1.
- 5.14.39 In accordance with CSPP DM CSPP-A-20-10-13-00A-622A-D and with reference to Figure 19 Wiring Diagram, perform the electrical connections to connectors P2189 and A276J1. Apply the insulation sleeving P/N M23053/8-004-C as required.
- 5.14.40 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 19 Wiring Diagram, mark wire as 2520-053-22-S and 2520-054-22-S (WH and BL) by means of marker sleeve.
- 5.14.41 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figures 16, 18 and 19 Wiring Diagram, mark the cable assembly so obtained as B2L399 by means of marker sleeve.
- 5.15 With reference to Figure 17 Wiring Diagram, assemble the mission console Galaxy C/A (B2L400) P/N 3G9B02L40001 as described in the following procedure:
 - 5.15.1 Assemble the connector A523P9 by means of the electrical connector P/N 11BNC75-2-15/133NE and assemble the connector PL198P9 by means of the electrical connector P/N 034-1042.
 - 5.15.2 With reference to Figure 17 Wiring Diagram, cut n°1 wire P/N M17/94-RG179 of adequate length and lay down between the connectors PL198P9 and A523P9.
 - 5.15.3 With reference to Figure 17 Wiring Diagram, perform the electrical connections to the connectors PL198P9 and A523P9. Apply the insulation sleeving P/N M23053/8-004-C as required.
 - 5.15.4 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 17 Wiring Diagram, mark wire as 2520-029-CO-S by means of marker sleeve.



5.15.5 In accordance with CSPP DM CSPP-A-20-10-01-00A-691A-D and with reference to Figure 17 Wiring Diagram, mark the cable assembly so obtained as B2L400 by means of marker sleeve.

NOTE

Use the edging P/N A236A on edges which are liable to cause damage to cable assemblies or where abrasion may occur.

NOTE

Install the tubing braided P/N A582A where protection against chafing and prevention of contact with structure may occur, but the tubing protection is no substitute for good routing practice.

NOTE

To ensure a proper installation, it is allowed to use:

- wires/harnesses clamps (diameter only) two dash greater or lesser than the nominal one;
- bolts (length only) two dash shorter or longer than the nominal one;
- screws (length only) two dash shorter or longer than the nominal one;
- washers (thickness only) two dash greater or lesser than the nominal one;
- spacers (length only) two dash shorter or longer than the nominal one.

NOTE

When necessary, replace existing clamp with suitable clamp.

- 5.16 With reference to Figures 6 thru 12 and Figures 13 thru 19 Wiring Diagram, lay down the following cable assemblies on the existing routes unless otherwise indicated on the figures:
 - 3G9B01L39201 mission console galaxy C/A (B1L392)
 - 3G9B02L39801 mission console galaxy C/A (B2L398)
 - 3G9B02L39901 mission console galaxy C/A (B2L399)
 - 3G9B02L40001 mission console galaxy C/A (B2L400)
- 5.17 With reference to Figure 6 thru 12, secure the cable assemblies laid down at the



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- previous step by means of existing hardware and lacing cords.
- 5.18 With reference to Figure View "Looking Back Mission Console" and View A-A and Figure 8 Detail B and Figure 9 Detail F, apply n°3 tubing braided P/N EN6049-003-08-5, P/N EN6049-003-06-5 and P/N EN6049-003-04-5 as required on the C/A B1L392 where indicated.
- 5.19 With reference to Figure View "Looking Back Mission Console" and View A-A and Figure 8 Detail B and Figure 9 Detail F, apply n°4 tubing braided P/N EN6049-003-10-5, P/N EN6049-003-08-5, P/N EN6049-003-06-5 and P/N EN6049-003-04-5 as required on the C/A B2L398 where indicated.
- 5.20 With reference to Figures View "Looking Back Mission Console" and View A-A and Figure 9 Detail F, apply n°2 tubing braided P/N EN6049-003-08-5 and P/N EN6049-003-06-5 as required on the C/A B2L399 where indicated.
- 5.21 With reference to Figure 8 Detail B and Figure 9 Detail F, apply the tubing braided P/N EN6049-003-04-5 as required on the C/A B2L400 where indicated.
- 5.22 With reference to Figure 7 View A-A, apply the insulation sleeving P/N A574A01-04 on the connector P2199 and C/A B2L398 where indicated.
- 5.23 With reference to Figure 7 View A-A, apply the insulation sleeving P/N A57401-01 on the connector P2189 and the C/A B2L399 where indicated.
- 5.24 With reference to Figure 7 View A-A, apply the insulation sleeving P/N A57401-03 on the connector P2079, the C/A B1L392, the C/A B2L398 and the C/A B2L399 where indicated.
- 5.25 With reference to Figure 7 View A-A, apply the insulation sleeving P/N A57401-04 on the connector P2099, the C/A B1L392 and the C/A B2L399 where indicated.
- 5.26 With reference to Figure 8 Detail B, apply the insulation sleeving P/N A57401-03 on the connector A532P2 and the C/A B1L3392 where indicated.
- 5.27 With reference to Figure 8 Detail B, apply the insulation sleeving P/N A57401-02 on the connector A532P1 and the C/A B1L392 where indicated.
- 5.28 With reference to Figure 8 Detail B, apply the insulation sleeving P/N A57401-03 on the connector A532P4 and the C/A B2L398 where indicated.
- 5.29 With reference to Figure 8 Detail B, apply the insulation sleeving P/N A57401-03 on the connector A532P3 and the C/A B2L398 where indicated.
- 5.30 With reference to Figure 7 View "Looking Back Mission Console", install the clamp P/N AW001CB02H on the C/A B1L392 by means of the screw P/N NAS1802-3-9 and the washer P/N NAS1149D0332J.
- 5.31 With reference to Figure 8 Detail B, install the clamp P/N AW001CB05H and the clamp P/N AW001CB10H on the C/A B1L392, C/A B2L398 and C/A B2L399 by means of the screw P/N NAS1802-3-9 and the washer P/N NAS1149D0332J.

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- 5.32 With reference to Figure 7 View A-A and Figures 13, 14 and 18 Wiring Diagram, perform the electrical connection of the connector J2079 and the connector P2079.
- 5.33 With reference to Figure 7 View A-A and Figures 13, 16 and 18 Wiring Diagram, perform the electrical connection of the connector J2099 and the connector P2099.
- 5.34 With reference to Figure 7 View A-A and Figures 14, 15 and 17 Wiring Diagram, perform the electrical connection of the connector J2199 and the connector P2199.
- 5.35 With reference to Figure 7 View A-A and Figure 19 Wiring Diagram, perform the electrical connection of the connector J2189 and the connector P2189.
- 5.36 With reference to Figure 8 View D, remove n°2 existing screws from the structure and the upper support assy LH P/N 3G5316A07531.
- 5.37 With reference to Figure 7 View "Looking Back Mission Console" and Figure 8 View D, install the strap P/N M83413/8-D007BB on the structure and the upper support assy LH P/N 3G5316A07531 by means of the screw P/N NAS1802-3-9, the screw P/N NAS1802-3-15 and n°2 washers P/N MS35338-43.
- 5.38 With reference to Figure 6 View "Isometric Mission Console", install the central display 21.5" (A523) P/N 727-0983/01 on the display support assy LH P/N 3G5317A46432 and the display support assy RH P/N 3G5317A46532 by means of n°8 screws P/N LN29958-0410, n°8 washers P/N LN9025-0410N and n°8 washers P/N 3G5316A23051.
- 5.39 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 6 View "Isometric Mission Console", install the decal P/N ED300A523 near the central display 21.5" A523.
- 5.40 With reference to Figure 8 Detail B and Figure 13 Wiring Diagram, perform the connections of the connector A523P1 (C/A B1L392) and the connector A523P2 (C/A B1L392) to the central display 21.5" A523.
- 5.41 With reference to Figure 8 Detail B and Figures 14 and 15 Wiring Diagram, perform the connections of the connector A523P3 (C/A B2L398) and the connector A523P4 (C/A B2L398) to the central display 21.5" A523.
- 5.42 With reference to Figure 8 Detail B and Figures 14 and 15 Wiring Diagram, perform the connections of the connector A523P6 (C/A B2L398) and the connector A523P7 (C/A B2L398) to the central display 21.5" A523.
- 5.43 With reference to Figure 8 Detail B and Figure 17 Wiring Diagram, perform the connection of the connector A523P9 to the central display 21.5" A523.
- 5.44 With reference to Figure 8 Detail B and View C and Figure 13 Wiring Diagram, connect the junction in line TB2345 to the utility light (NVG) DS257.
- 5.45 With reference to Figure 6 View "Isometric Mission Console", install the radar control panel (PL265) P/N IU200-240-(4)-(1).(05) on the rack container assy



- P/N 3G5316A07031 by means of the existing four quick-release fasteners.
- 5.46 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 6 View "Isometric Mission Console", install the decal P/N ED300PL265 near the radar control panel PL265.
- 5.47 With reference to Figure 9 Detail F and Figure 18 Wiring Diagram, perform the connection of the connector PL265P1 (C/A B1L392, C/A B2L399) to the radar control panel PL265.
- 5.48 With reference to Figure 9 Detail F and Figure 18 Wiring Diagram, perform the connection of the connector PL265P2 (C/A B2L399) to the radar control panel PL265.

NOTE

Perform following steps 5.49 and 5.50, only if DVAR control panel must be moved from the interseat console to the mission console.

- 5.49 With reference to Figure 6 View "Isometric Mission Console", relocate the video recorder avalex control panel (DVAR) (PL198) from interseat console to the rack container assy P/N 3G5316A07031 on mission console structure by means of the existing four quick-release fasteners. Stow the existing connector in the interseat console by means of a protective plug, self-wrap braided P/N EN6049-006-25-5 and lacing cord P/N AW001CK03LC.
- 5.50 Install the plate assembly P/N AW002SC209A in the previous position of the DVAR control panel on the interseat console.

NOTE

Perform following step 5.51, only if DVAR control panel is NOT moved from the interseat console to the mission console.

- 5.51 With reference to Figure 6 View "Isometric Mission Console", install the plate assembly P/N AW002SC209A on the rack container assy P/N 3G5316A07031 by means of the existing four quick-release fasteners.
- 5.52 With reference to Figure 9 Detail F and Figure 16 Wiring Diagram, perform the connection of the connector PL198P1 (C/A B1L392 and C/A B2L399) to the corresponding connector on the video recorder avalex control panel (DVAR) (PL198).
- 5.53 With reference to Figure 9 Detail F and Figure 17 Wiring Diagram, perform the connections of the connector PL198P2 (C/A B2L398), the connector PL198P3 (C/A B2L298), the connector PL198P4 (C/A B2L398) and the connector PL198P6

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- (C/A B2L398) to the corresponding connectors on the video recorder avalex control panel (DVAR) (PL198).
- 5.54 With reference to Figure 9 Detail F and Figure 17 Wiring Diagram, perform the connection of the connector PL198P9 (C/A B2L400) to the corresponding connector on the video recorder avalex control panel (DVAR) (PL198).
- 5.55 With reference to Figure 6 View "Isometric Mission Console", install n°2 plate assemblies P/N AW002SC107A and P/N AW002SC310A on the rack container assy P/N 3G5316A07031 by means of the existing four quick-release fasteners.
- 5.56 With reference to Figure 6 View "Isometric Mission Console" and Figure 9 View E-E, install the keyboard (A276) P/N PANL-1588-01-02-54 on the foldable table assy P/N 3G5316A07132 by means of n°2 special bolts P/N 3G5316A24552.
- 5.57 With reference to Figure 6 View "Isometric Mission Console", install the keyboard cable assy P/N A521A-A006 on the keyboard A276.
- 5.58 With reference to Figure 6 View "Isometric Mission Console" and Figure 7 View "Looking Back Mission console" and Figure 19 Wiring Diagram, perform the electrical connections of the connector A276P1 and the connector A276J1.
- 5.59 With reference to Figure 13 Wiring Diagram, connect the terminal S501-G-1 (C/A B1L392) and the terminal S501-1-1 (C/A B1L392) to the switch mission foot SW S501.

NOTE

Perform step 5.60, only if FLIR Wescam MX-10 removable parts P/N 3G9350A10111 are installed on the helicopter.

5.60 With reference to Figure 6 View "Isometric Mission Console", relocate the hand control unit A772 on the pendant support assy P/N 3G5318A25732 by means of n°4 screws P/N NAS1802-06-4.

NOTE

Perform step 5.61, only SRCH LT A800 trakka removable parts P/N 3G3340A11312 are installed on the helicopter.

- 5.61 With reference to Figure 6 View "Isometric Mission Console", relocate the pendant searchlight trakka A800 A280 on the pendant support assy P/N 3G5317A24931.
- 5.62 With reference to Figure 12 Views H-H "Was" and "Become", relocate the connector P2513 (C/A B2L281) from the position of the CARGO CAM DVAR 1 to the position of the CARGO CAM DVAR 2 and relocate the 75-ohm termination P/N 65BNC75-0-1 from the position of the CARGO CAM DVAR 2 to position of the



CARGO CAM DVAR 1.

- 5.63 With reference to Figure 12 Views H-H "Was" and "Become", relocate the connector P2517 (C/A B2L284) from the position of the EVS CAM DVAR 1 to the position of the EVS CAM DVAR 2 and relocate the 75-ohm termination P/N 65BNC75-0-1 from the position of the EVS CAM DVAR 2 to the position of the EVS CAM DVAR 1.
- 5.64 With reference to Figure 12 Views H-H "Was" and "Become", relocate the connector P2521 (C/A B2L289) from the position of the RADAR DVAR 1 to the position of the RADAR DVAR 2 and relocate the 75-ohm termination P/N 65BNC75-0-1 from the position of the RADAR DVAR 2 to the position of the RADAR DVAR 1.
- 5.65 Perform a pin-to-pin check of all the electrical connections made.
- 6. In accordance with AMP DM 39-C-25-23-00-00A-320A-A perform the operation test of the mission console installation (skip the step for the operational software loading procedure and instead refer to paragraph 3.2 of Annex A).
- 7. In accordance with Annex A, perform the function test of the Acceptance Test Procedure.
- 8. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels, internal panels and internal liners previously removed.
- 9. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
- 10. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
- 11. Gain access to My Communications section on Leonardo WebPortal and compile the "Service Bulletin Application Communication".

As an alternative, send the attached compliance form to the following mail box:

engineering.support.lhd@leonardo.com

and (for North, Central and South America) also to:

AWPC.Engineering.Support@leonardocompany.us



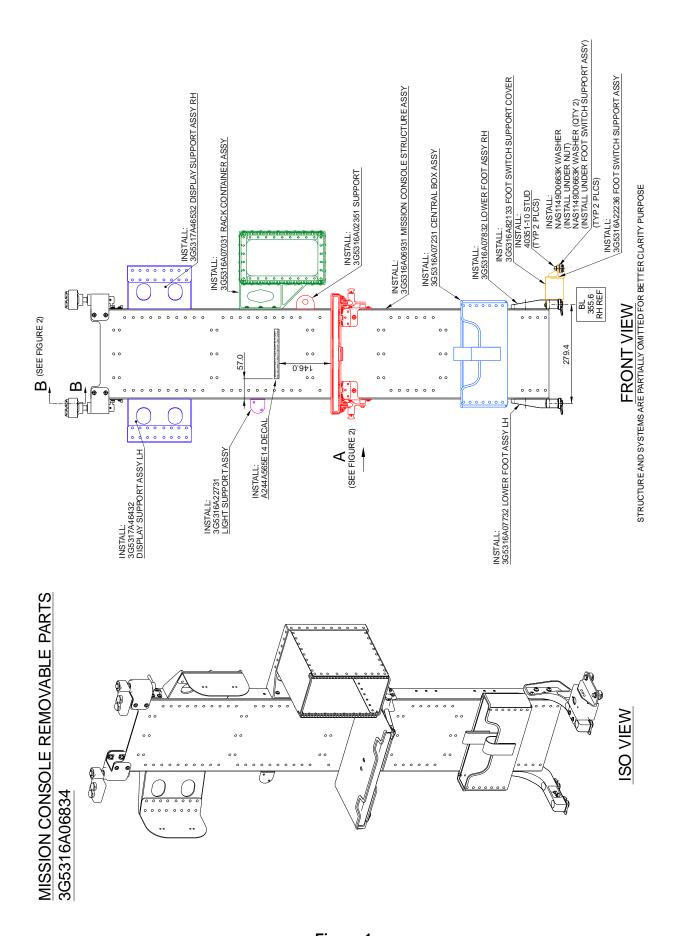


Figure 1



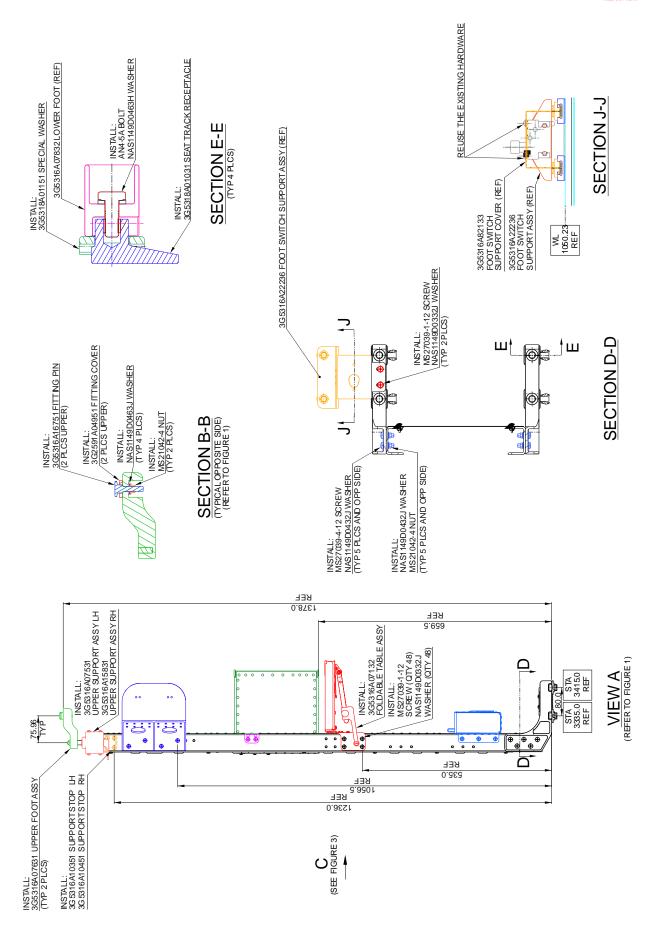


Figure 2



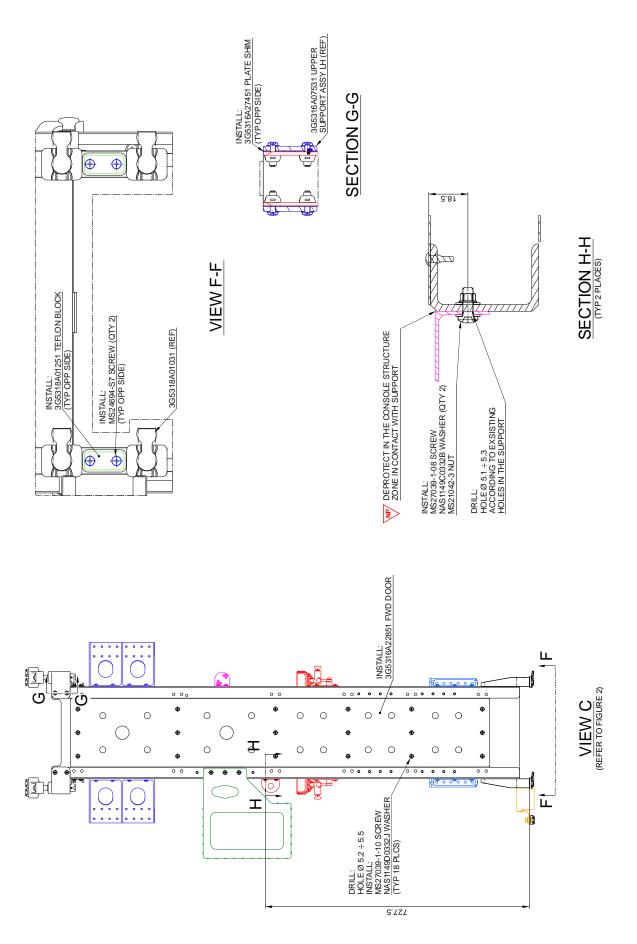
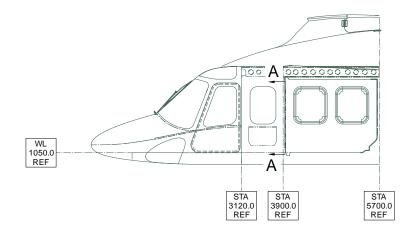


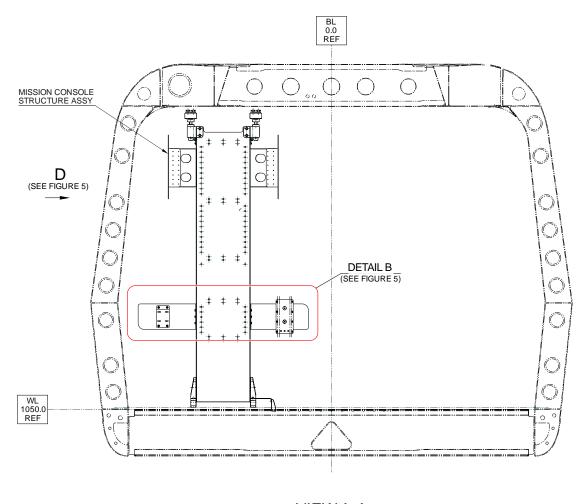
Figure 3



MISSION CONSOLE GALAXY STRUCTURAL PROVISION 3G5311A73911



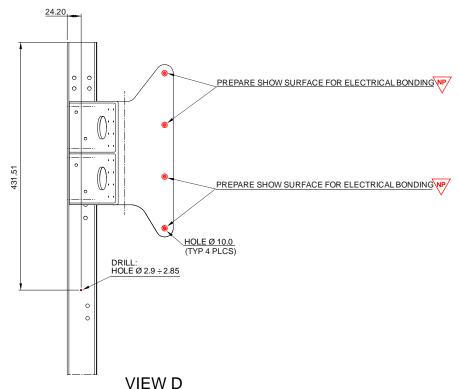
VIEW LOOKING INBOARD LEFT SIDE



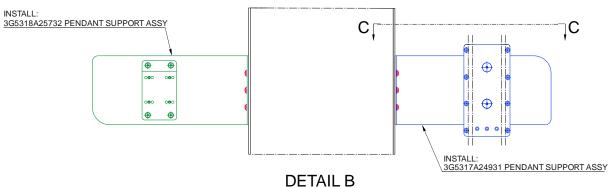
VIEW A-A

Figure 4





VIEW D
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 4)



STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 4)

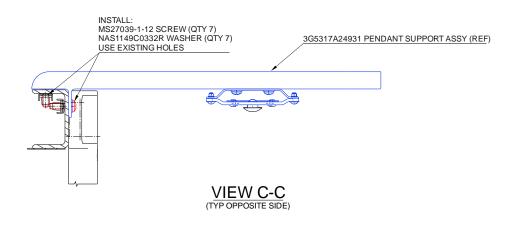
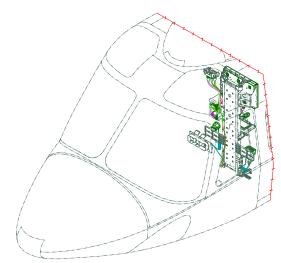


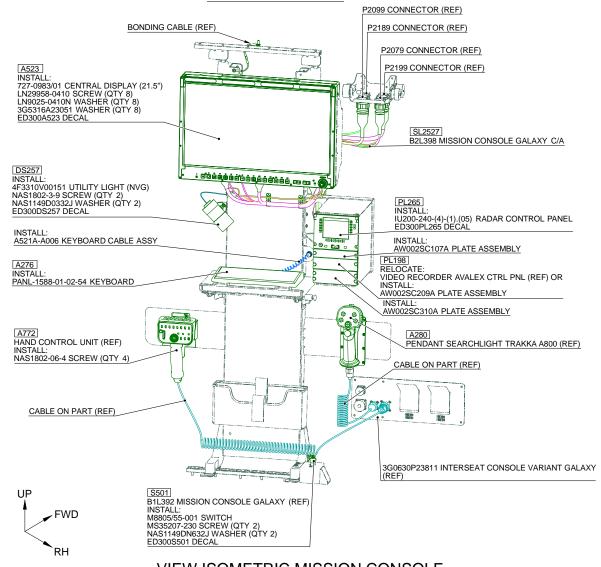
Figure 5







ISOMETRIC VIEW



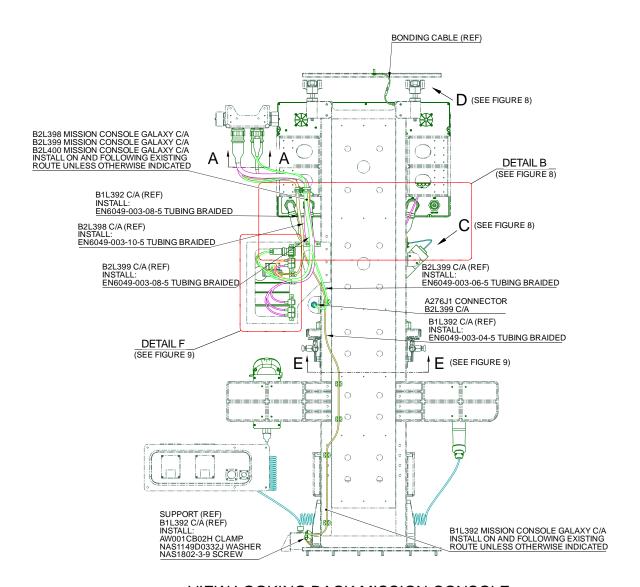
VIEW ISOMETRIC MISSION CONSOLE STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 6

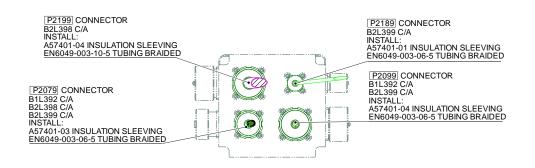
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VIEW LOOKING BACK MISSION CONSOLE STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



VIEW A-A
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED



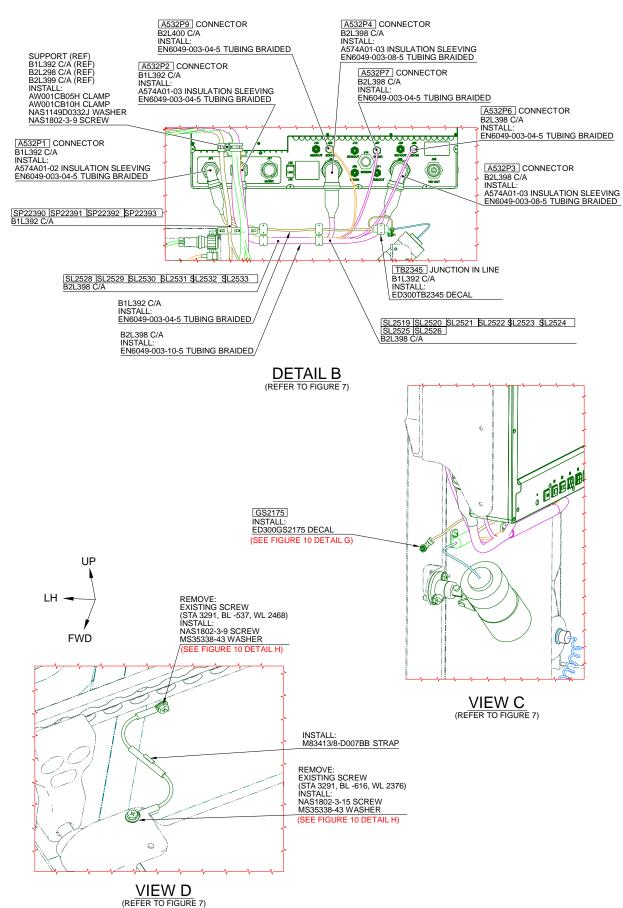
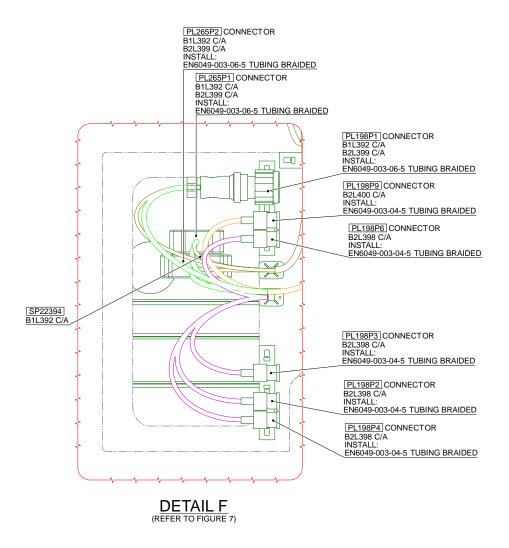
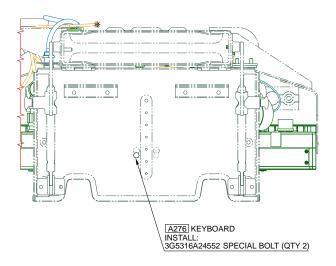


Figure 8



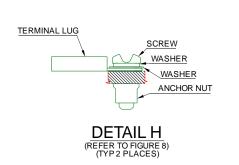




VIEW E-E (REFER TO FIGURE 7)

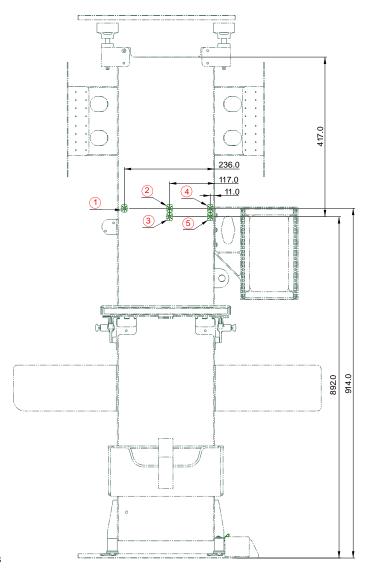
Figure 9







DETAIL G (REFER TO FIGURE 8)



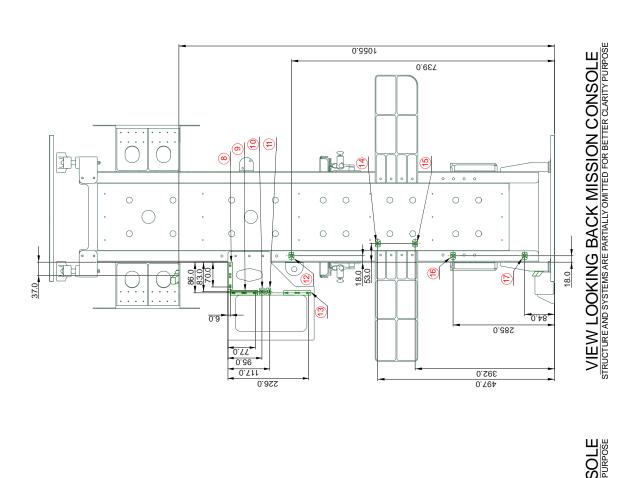
INSTALL ELECTRICAL SUPPORTS (USE CB200-40 (C356)) REPORTED IN TABLE BELOW:

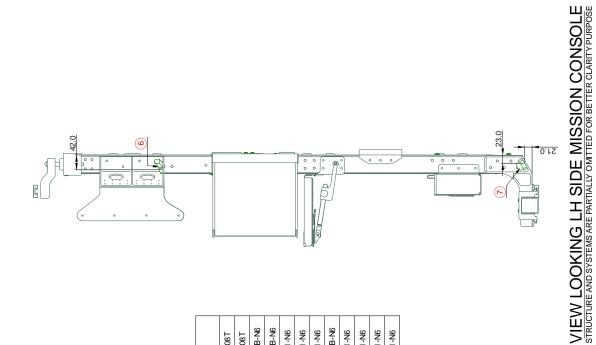
LOCATION NUMBER	P/N
1	AW001CL001-N6
2	AW001CL001-N6
3	AW001CL001-N6
4	AW001CL001-N6
5	AW001CL001-N6

VIEW LOOKING FRONT MISSION CONSOLE STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 10







N/A	AW001TL3A08T	AW001TL3A08T	AW001CL510B-N6	AW001CL510B-N6	AW001CL001-N6	AW001CL001-N6	AW001CL001-N6	AW001CL510B-N6	AW001CL001-N6	AW001CL001-N6	AW001CL001-N6	AW001CL001-N6
LOCATION	9	(2)	8	6	(1)	\bigoplus	(1)	E)	(P)	(SI)	9 J	4

Figure 11



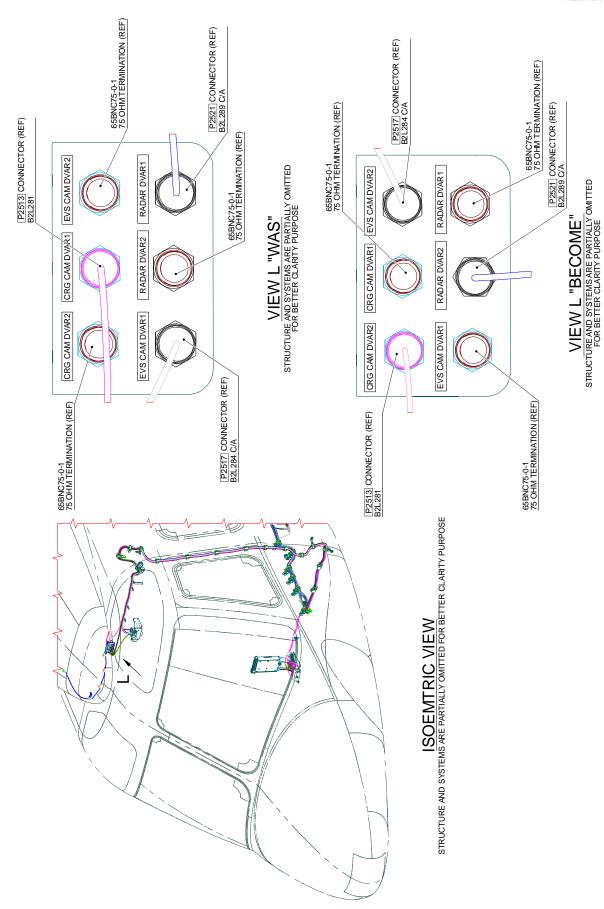


Figure 12



WIRING DIAGRAM MISSION CONSOLE GALAXY

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INSULATION SLEEVING																								•	•									
CONTACT PIN	MS25036-103	A523A-A02	M39029/58-360	MS25036-102	M39029/58-360	MS25036-102	M39029/58-363	A523A-A02	M39029/58-363	A523A-A02	M39029/58-363	M39029/58-363	M39029/58-363	M39029/58-363	M39029/58-363	M39029/56-351	M39029/58-363	M39029/56-348	M39029/56-351															
N N		18	9		7		4	14	В	10	ď	s	o	¥	۵	ш	σ	35	Ь	37	I	52	×	23	9	56	О	Q	4	В	I	o	У	ш
REF-DES	G S2175-1	TB2345	P2079	S501-1-1	P2079	S501-G-1	P2099	TB2345	P2099	TB2345	P2099	P2099	P2099	P2099	P2099	A523PI	P2099	A523P2	A523PI	A523P1	A523PI	A523PI	A523PI	A523PI	A523PI	A523PI								
CABLEASSY	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392

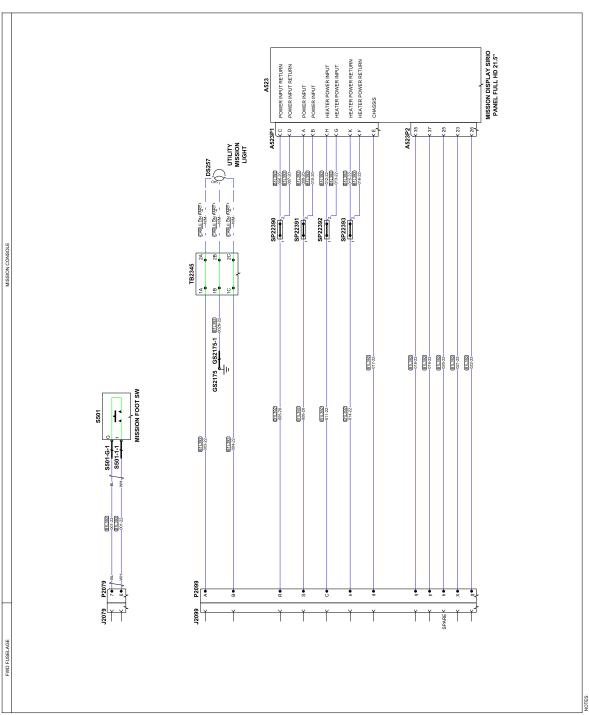


Figure 13

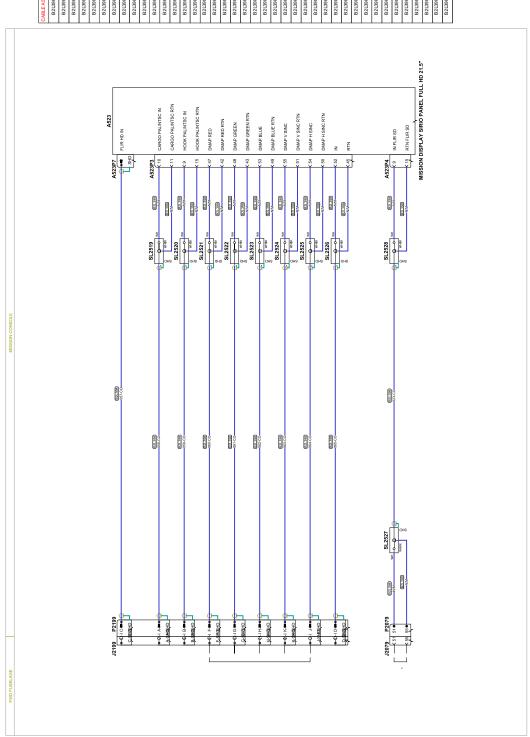


Figure 14

S.B. N°139-752 OPTIONAL DATE: December 15, 2023

INSULATION SLEEVING	M23053/8-004-C																					
CONTACT PIN	M39029/76-424		M39029/56-348																			
NIA	Μ÷		ž		P-I	٠	ž		ŵ		₹	-	8	31	23	22	16	54	9	11	40	41
REF-DES	P2199	SL2529	P2199	SL2530	P2199	SL2531	P2199	SL2532	P2199	SL2533	P2199	A523P6	A523P4	A523P3	A623P3							
CABLEASSY	B2L398	B2L398	B2L398	B2L398	B2L398	B2L398	B2L398	B2L398	B2L398	B2L398	B2L398											

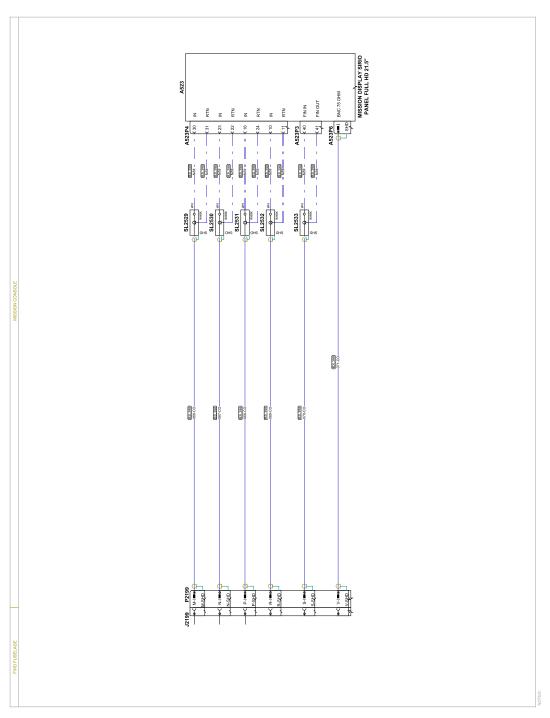


Figure 15

(0						_				_		_
INSULATION SLEEVING							M230538-003-C	M230538-003-C	M230538-003-C	M230538-003-C	M230538-003-C	M230538-003-C
CONTACT PIN	M39029/58-363	M39029/56-348										
M	D	-	ш	2	ш	3	۵	22	o	5	Ι	4
REF-DES	P2099	PL198P1										
CABLEASSY	B1L392	B1L392	B1L392	B1L392	B1L392	B1L392	B2L399	B2L399	B2L399	B2L399	B2L399	B2L399

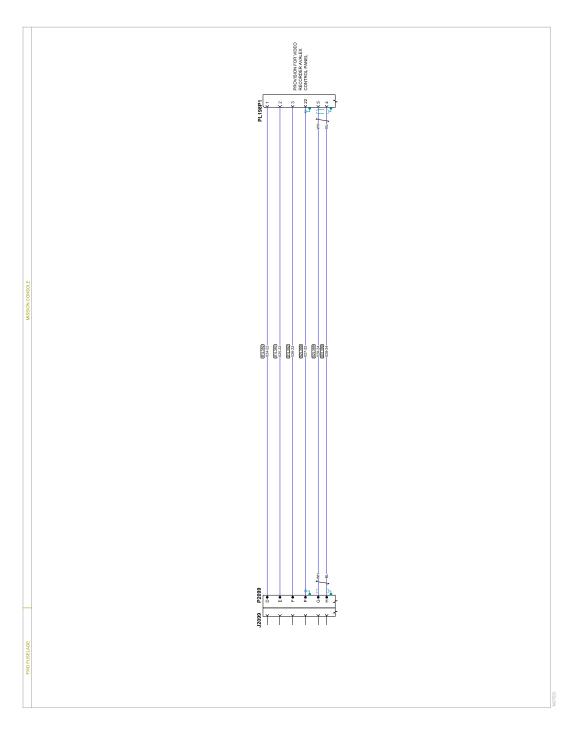


Figure 16

S.B. N°139-752 OPTIONAL DATE: December 15, 2023

CABLEASSY	REF-DES	NI N	CONTACT PIN	INSULATION SLEEVING
B2L400	PL198P9	-		M23053/8-004-C
B2L400	A523P9	-		M23053/8-004-C
B2L398	P2199	Ē	M39029/76-424	M23053/8-004-C
B2L398	PL198P4	-		M23053/8-004-C
B2L398	66 KZd	13	M39029/76-424	M23053/8-004-C
B2L398	PL198P3	-		M23053/8-004-C
B2L398	P2199	I-n	M39029/76-424	M23053/8-004-C
B2L398	PL198P6	-		M23053/8-004-C
B2L398	P2199	Ē	M39029/76-424	M23053/8-004-C
B2L398	PL198P2	-		M23053/8-004-C

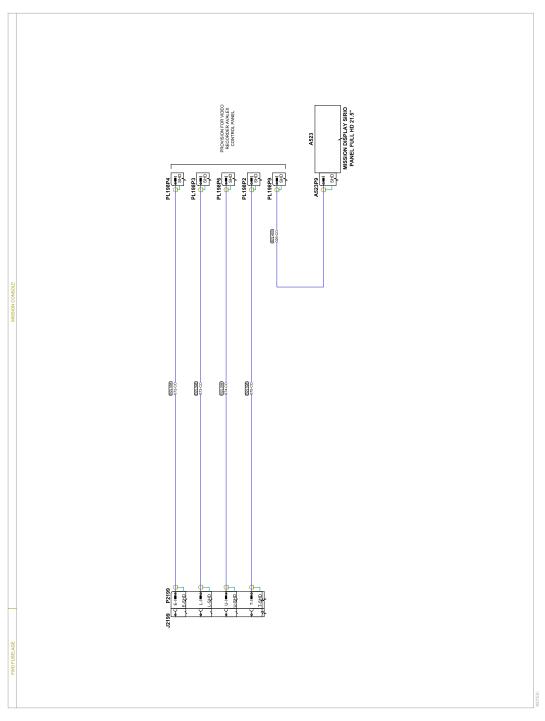


Figure 17

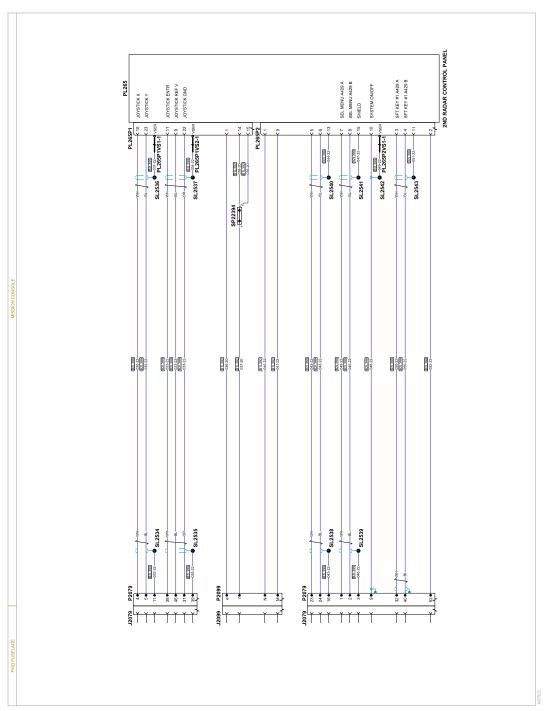


Figure 18

S.B. N°139-752 OPTIONAL DATE: December 15, 2023

	_			_	_		_	_
INSULATION SLEEVING	M230538-004-C	M230538-004-C	J-+00-8E30EZW	M230538-004-C	M230538-004-C	D-100-865062M	M230538-004-C	M230538-004-C
CONTACT PIN	M39029/58-360	EGG.2B.655.ZZM	M39029/58-360	EGG.2B.655.ZZM	M39029/58-360	EGG.2B.655.ZZM	M39029/58-360	EGG.2B.655.ZZM
M	-	9	2	8	3	12	4	11
REF-DES	P2189	A276J1	P2189	A276J1	P2189	A276J1	P2189	A276J1
CABLEASSY	B2L399	B2L399	B2L399	B2L399	B2L399	B2L399	B2L399	B2L399

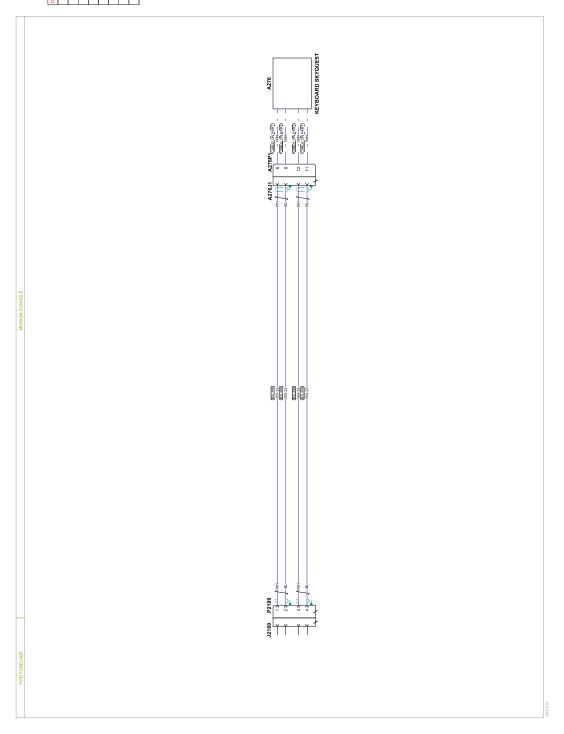


Figure 19



ANNEX A

ACCEPTANCE TEST PROCEDURE

S.B. N°139-752 OPTIONAL DATE: December 15, 2023



1. SAFETY PROVISIONS

- During all ATP Tests, disconnect if installed, the wires from the Fire extinguishing bottles and suitable stow them (E1- MTR1 & MTR2, E2- MTR1 & MTR2)
- If other Electro-Explosive Devices (EED) are fitted, ensure that they are electrically disconnected.
- Electrical connector plugs and receptacles not to be connected, disconnected, or otherwise handled when electrical power is applied to the connector in question.

2. TEST EQUIPMENTS

- DC External Power Bench (28VDC).
- Conductor Pins and Wire Extensions for troubleshooting operation.
- Light source.
- USB device, SD card or other applicable memory storage device compatible with download form the DVAR system (necessary only if control panel has been moved from the interseat console to the mission console).

Verify that all the Electrical Power Distribution System Circuit Breakers are pushed in except for the

MFD21 circuit breakers and "IGN #1/2" and "START #1/2" which shall be pulled out;

3. MFD21 FULL HD ACCEPTANCE TEST PROCEDURE

3.1. PREREQUISITES

1.

2.	Verify that all the Avionic Devices Circuit Breakers are pushed in (at least navigation, communication, Modular Avionic Units and Displays, lighting system CBs pushed in);	
3.	Before all the test procedures verify that the External Power Bench is operative and set to the appropriate voltage (28 VDC).	
	3.2. CONFIGURATION FILE LOAD PROCEDURE	
1.	Push the ON pushbutton of the display and verify that it powers on.	
2.	Press P9 pushbutton to open the OSD menu, below "PC Setting" activate the internal PC through the OSD command "PC_ON". During the boot will appear a "Waiting" label in menu window.	
3.	Insert in the USB key on connector J15 or J16 behind the unit	
4.	When the internal PC has finished Windows boot system operations (the "PC_OFF" selection is now available in "PC Setting" menu) the system will check if a valid Configuration File is present on the USB Key.	
5.	If a valid Configuration File is present on the OSD menu, below "Conf Setting", will appear a new entry "USB_LOAD"	
6.	Select the "USB_LOAD" and press ENT button on the Bezel	



7.	Wait for about 30-60sec (it will be displayed the "Waiting" label) until the MFD21 will apply the new configuration loaded.	
8.	Select the "DEFAULT_STORE" entry and press "ENT" button to store the new Video Configuration.	
9.	Wait until the "Waiting" label disappears.	
10.	Activate the "OSD menu" and check, below "Conf Setting" menu, that the "square" flag relative to "DEFAULT_LOAD" is now black filled.	
11.	Press and old ON pushbutton for 3 seconds ca. to turn OFF the display.	
	3.3. DIMMING AND ALS TEST	
1.	Push the ON pushbutton of the display.	
2.	Press P1 pushbutton.	
3.	Rotate the NIGHT control knob and verify the luminance of the image and the bezels/labels change coherently.	
4.	Activate the NVG mode and verify the luminance of the image and the bezels/labels change coherently.	
5.	Restore the "DAY MODE" condition.	
6.	Use a flashlight to light up the ALS sensor and verify that the DISPLAY luminance increases.	
7.	Switch off the flashlight and verify that the DISPLAY luminance reduces.	
8.	Use the brightness rocker [-BRT+] to variate the display brightness. (+) increases the brightness while (-) decreases it.	
9.	Use a flashlight to light up the ALS sensor and verify that the DISPLAY luminance does NOT increases.	
	3.4.1. ZOOM FUNCTION TEST	
1.	Press P1 pushbutton.	
2.	Press the [ZOOM] pushbutton to zoom the image. Verify the "Zoom level 1%" message appears on the image.	
3.	Increase the zoom level up to 5% rotating the Joystick clockwise. NOTE: Zoom level changes by 0.5 step.	
4.	Use the Joystick panning the video in all directions (up, down, left and right).	
5.	Press the [FULL] pushbutton to close zoom function.	
6	Verify the image restore to normal dimensions and the "Zoom level 5%" message is no more visible	

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3.4.2. FREEZE FUNCTION TEST

1.	Press P1 pushbutton.	
2.	Press the freeze [FRZ] pushbutton to freeze the image.	
3.	Verify the image freezes and "Freeze" message is shown.	
4.	Press the freeze [FRZ] pushbutton.	
5.	Verify the message "Freeze" disappears and the image unfreezes.	

3.4.3. IMAGE CONTRAST FUNCTION TEST

To change the contrast in **P2**, **P3**, **P4**, **P5** and **P11** screen layouts, the operator shall perform the following steps:

- Press once the [-CNT+] contrast rocker (+) or (-).
- The first image is highlighted by a yellow border.
- Rotate the Joystick to highlight the desired sub-screen (OR use the P8 [+] and P7 [-]
 pushbutton)
- Use the [-CNT+] contrast rocker pressing either (+) to increase or (-) to decrease contrast.
- Press [ESC] pushbutton to confirm selection or wait 10 seconds ca.

1.	Press P4 pushbutton. Change the contrast of the images following the procedure described on top of this paragraph.	
2.	Press P1 pushbutton. Select the images present in quad layout and verify the contrast level has been kept.	
3.	Press the ON pushbutton to shutdown the display.	
4.	Wait 10 seconds. Press the ON pushbutton to power on the display.	
5.	Press the P4 pushbutton and verify the images are displayed with default contrast levels.	

4. VIDEO CUSTOMIZATION ACCEPTANCE TEST PROCEDURE

4.1. UNITS POWER ON

Before starting the test, perform the following pre-checks:

1.	The helicopter external power port shall be connected to the External Power Bench set to 28 VDC output. Power up the External Power Bench before starting with the test procedure.					
2.	Push in the Circuit breakers relevant to the following equipment: • Video Management Unit • Skyforce Map • SD cameras (the ones installed) • FLIR • RADAR					



	 DVAR Central display Mission Display 	
3.	Power ON the H/C	
4.	Check all the equipment powered; if not, power on the specific equipment with the relevant switch.	

4.2. TEST PROCEDURE

Check the presence of the following video inputs and their clearness and signal stability:

VIDEO NAME	VIDEO TYPE			
CARGO	CARGO CAMERA SD			
НООК	HOOK CAMERA SD			
FIN	FIN CAMERA SD			
EVS-BL	MAX VIZ BL SD			
EVS_CL	MAX VIZ CL SD			
DMAP	MAP VGA			
FLIR HD	FLIR HD			
FLIR SD	FLIR SD			
PL-BCK HD 1	PLAYBACK DVAR1 HD			
PL-BCK HD 2	PLAYBACK DVAR2 HD			

NOTE: test DVAR video inputs only if its control panel has been moved from the interseat console to the mission console.

4.2.1. DVAR AVALEX INPUT

Perform this procedure only if DVAR control panel has been moved from the interseat console to the mission console.

Record the following inputs, download them and check the correct recording:

VIDEO NAME	VIDEO TYPE		
CHANNEL SD 1	CARGO CAMERA		
CHANNEL SD 2	EVS BL CAMERA		
CHANNEL SD 3	RADAR		

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CHANNEL HD 1	FLIR (HD 1)	
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5. KEYBOARD TEST

1.	Check the MINI KEYBOARD PANL-1588-01-02-54 connected to the MISSION CONSOLE					
	Verify that the MINI KEYBOARD can be easily managed and verify that the key: F1, F2, F3, F4, F5, F6 and the arrows keys function properly:					
	Entry	Effect				
	F1	Top softkey				
	F2	Second softkey]	Ì		
	F3	Middle softkey				
	F4	Fourth softkey				
	F5	Bottom softkey				
	F6	TBD				
2.	F7	TBD				
2.	F8	TBD		Ш		
	F9	TBD				
	F10	TBD				
	†	Move cursor up (on map or in a list) or changes character to next possible value when editing text				
	1	Move cursor down (on map or in a list) or changes character to next possible value when editing text				
	→	Move cursor right (on map or in a list) or selects next character or field to the right when editing text				
	-	Move cursor left (on map or in a list) or selects next character or field to the left when editing text				
		·		ı		

NOTE: the effects of function keys F6, F7, F8, F9 and F10 depend on the specific configuration.



Please send to the followi	SERVICE BULLETIN COMPLIANCE FORM		Date:					
LEONARDO S.p.								
CUSTOMER SUPPORT & SE	Number:							
PRODUCT SUPPORT ENGINEE	RING & LICENSES DEPT.							
Via Giovanni Agusta, 520 21017 Cascina Costa di Samara	ate (VA) - ITALY	Revision:						
Tel.: +39 0331 225036 Fax: +39	0331 225988							
Customer Name and Addre	ess:			Telephone:				
				Fax:				
				B.T. Compliance Date:				
Helicopter Model	S/N		Total N	umber	Total Hours	T.S.O.		
Remarks:								
Information:								
We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in								

Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.