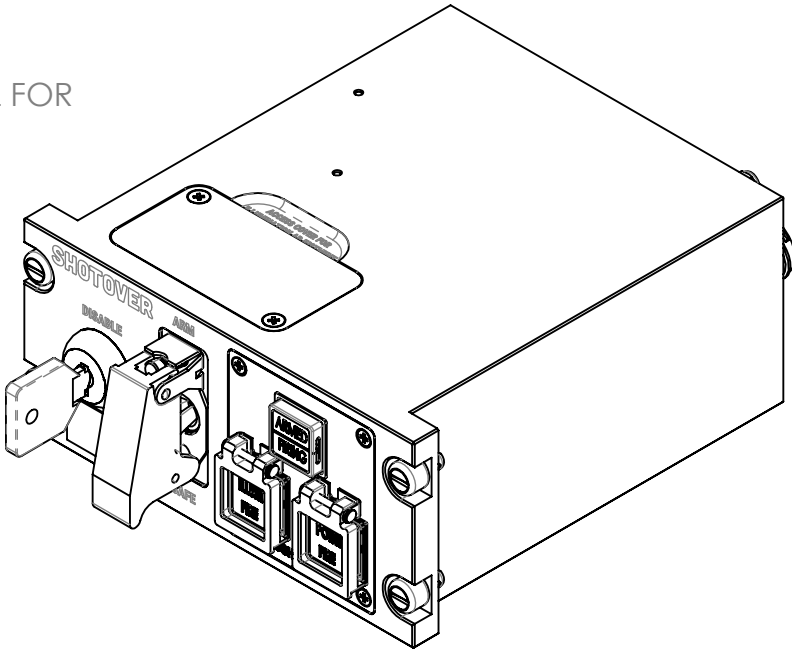


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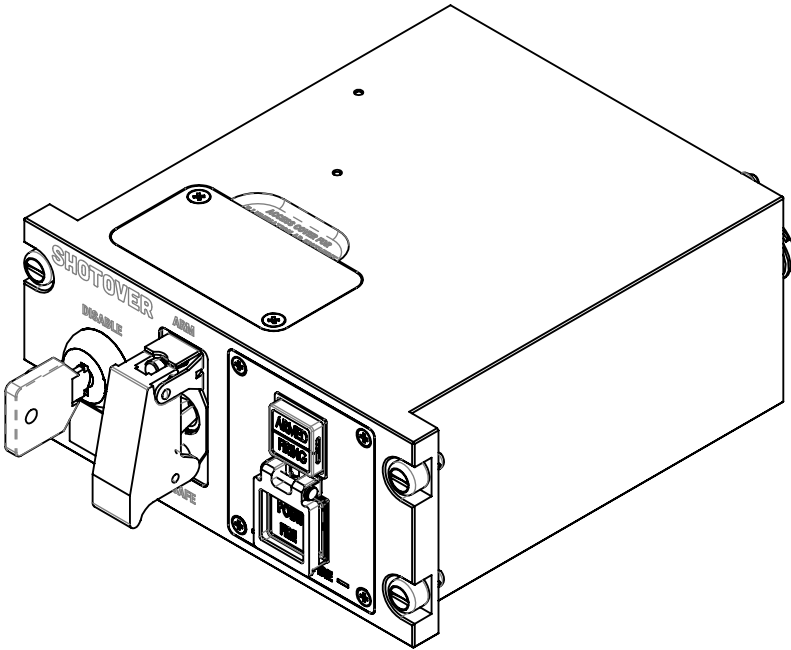
REVISIONS				
REV	EPN	DESCRIPTION	DATE	INIT.
01	140	INITIAL RELEASE	18/06/2024	JM
02	140	LASER WARNING LABEL 3B ADDED	14/10/2024	JM

- INSTALLATION NOTES:
1. LASER ARMING PANEL IS GROUNDED THROUGH DZUS MOUNT. IF THE DZUS MOUNT IS NOT DIRECTLY GROUNDED TO THE CHASSIS, USE A MINIMUM OF 16-GAUGE WIRE TO GROUND THE DZUS MOUNT PRIOR TO LASER ARMING PANEL OPERATION.
 2. M4 GROUNDING LUG AND FASTENERS ARE PROVIDED.
 3. EXPOSED ALUMINIUM IS CHROMATED. DO NOT CHEMICALLY COAT OR COVER WITH NON-CONDUCTIVE MATERIAL.
 4. 28V INPUT IS REVERSE-POLARITY PROTECTED.
 5. ALLOW ATLEAST 100mm OF CLEARANCE BEHIND LASER ARMING PANEL FOR AIR FLOW AND CABLE CLEARANCE.
 6. TWO KEYS PROVIDED, KEYS ARE REMOVABLE IN DISABLED POSITION.

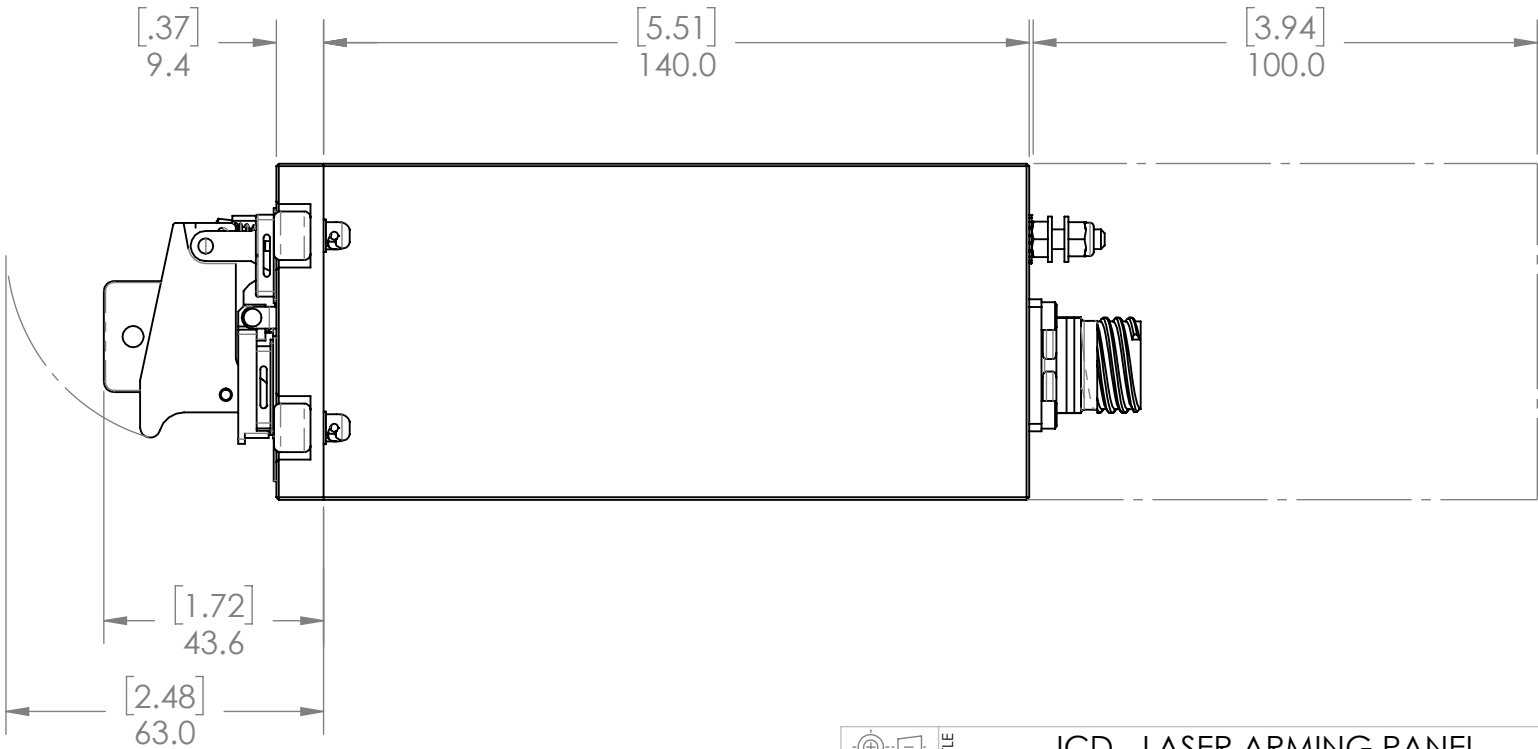
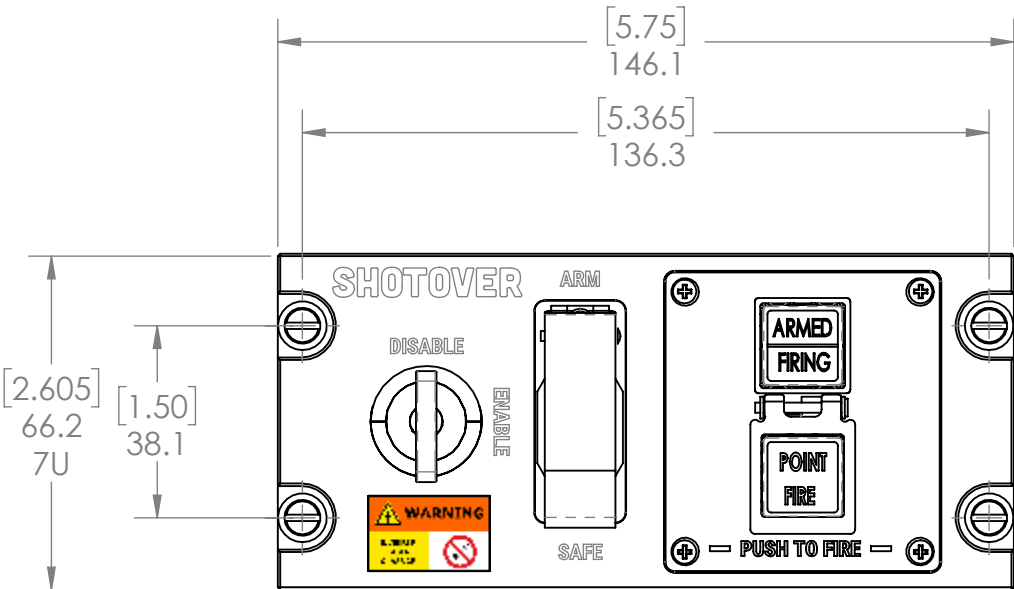
SPECIFICATIONS	
WEIGHT :	1.13kg (2.5lb)
SURFACE COATING :	ANODISED & CHROMATE



011-0184
LASER ARMING PANEL
DUAL FIRE BUTTON



011-0185
LASER ARMING PANEL
SINGLE FIRE BUTTON - POINTER



TITLE		ICD - LASER ARMING PANEL		DWG		REV		STATE		APPROVED		CHKD		TC	
THIRD ANGLE PROJECTION	SHEET SIZE: A3	SCALE: 1:5	SHEET 1 OF 6	002-9353	2	APPROVED									

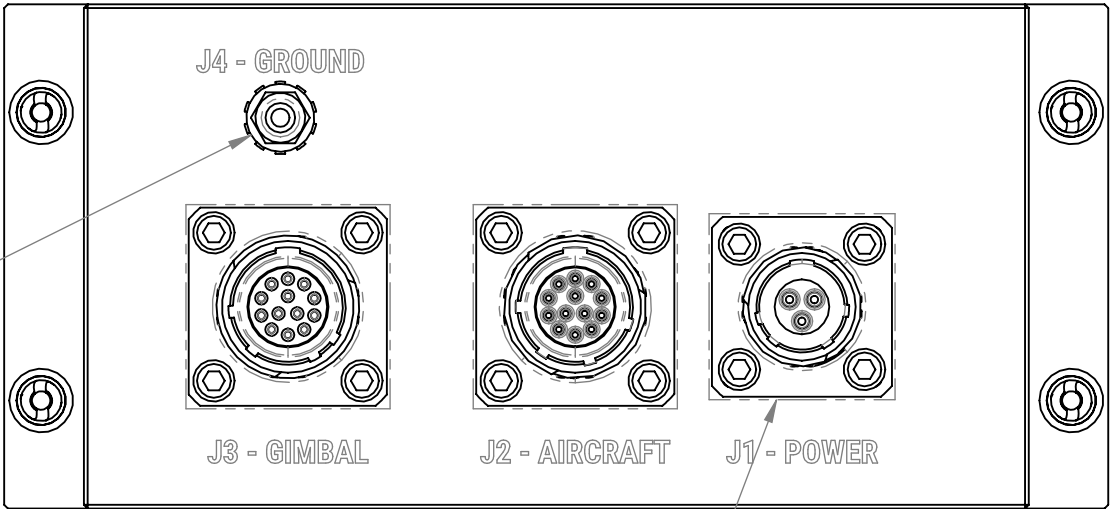


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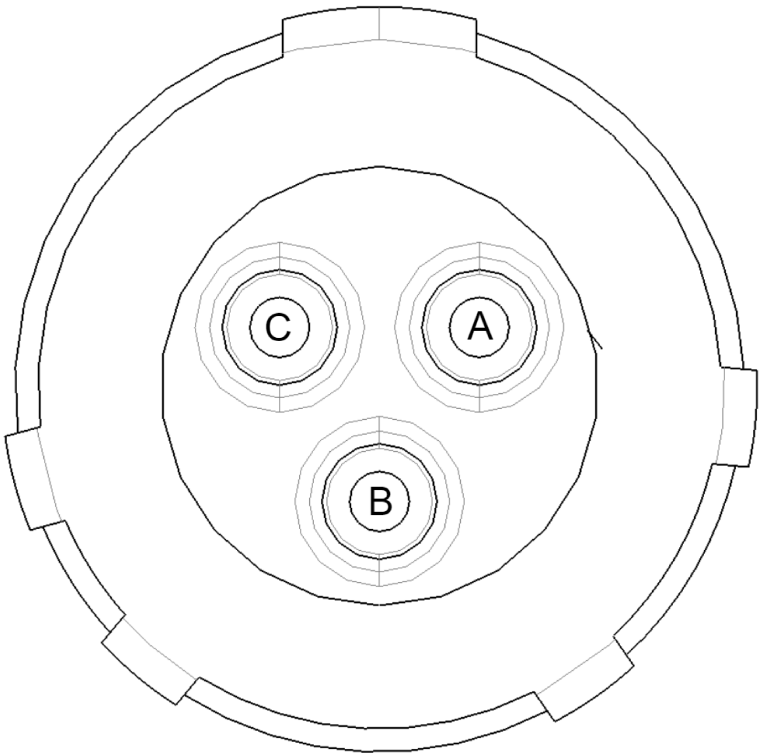
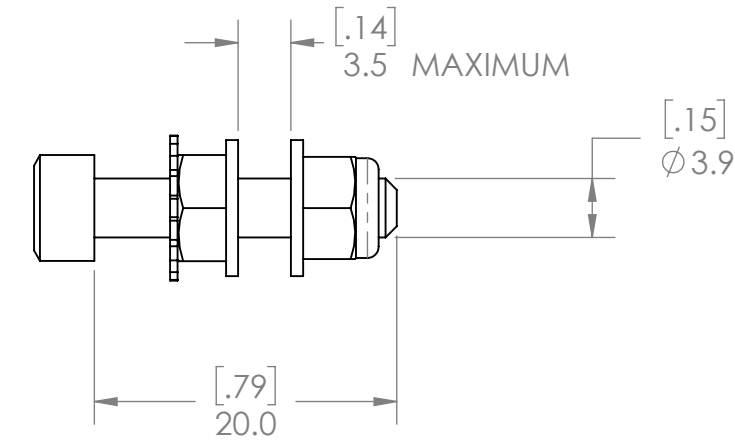
- THE LASER ARMING PANEL HAS NON ISOLATED INPUT EMC AND SURGE FILTER.
- RECOMMENDED ALL CABLES ARE SHIELDED.
- TORQUE GROUNDING NUTS TO 2.9 Nm/2.14 ft lb.

POWER SPECIFICATIONS		
VOLTAGE	INPUT RANGE	22-31VDC
	TYPICAL	28VDC
POWER	TYPICAL	22W
	MAXIMUM	30W
CURRENT	TYPICAL	0.786A
	MAXIMUM	1.07A



J4: GROUND CONNECTOR

- 1X SHCS M4 X 20 ZINC PLATED
- 1X M4 STAR WASHER
- 1X M4 HEX NUT
- 2X M4 X 9 X 0.7 SS WASHERS
- 1X M4 NYLOCK NUT
- MINIMUM GROUNDING WIRE SIZE: 16 GAUGE



VIEWED FROM FRONT FACE MALE PINS
(I.E. BULKHEAD CONNECTOR)
#20 CONTACT

J1: POWER CONNECTOR

BULKHEAD CONNECTOR: RECEPTACLE 38999 9-98PN 3 MALE PINS

- SHOTOVER PART NO.: 002-63107
- MANUFACTURER PART NO.: D38999/20TA98PN

MATING CONNECTOR: PLUG 38999 9-98SN 3 FEMALE SOCKETS

- SHOTOVER PART NO.: 002-63110
- MANUFACTURER PART NO.: D38999/26TA98SN
- SHOTOVER RECOMMENDED WIRE SIZE: 20-24 AWG

PINOUT	FUNCTION	DIRECTION	DESCRIPTION
A	28VDC	POWER	POWER SOURCE INPUT FOR LASER ARMING PANEL AND GIMBAL LASERS.
B	RESERVED		DO NOT CONNECT.
C	0V	REFERENCE	POWER SOURCE REFERENCE FOR LASER ARMING PANEL AND GIMBAL LASERS.
D	SHIELD		CONNECT THE CABLE SHIELD TO THE CONNECTOR SHELL.

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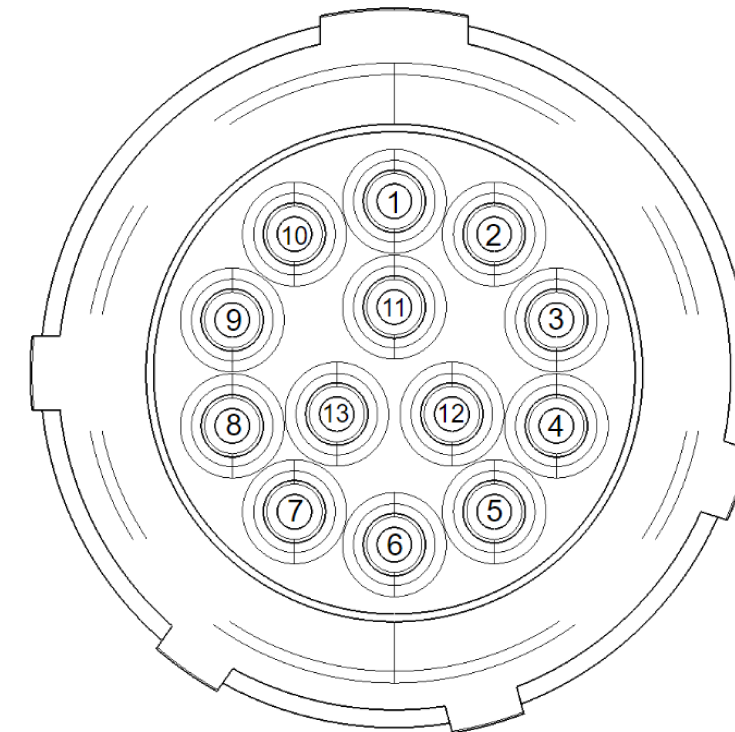
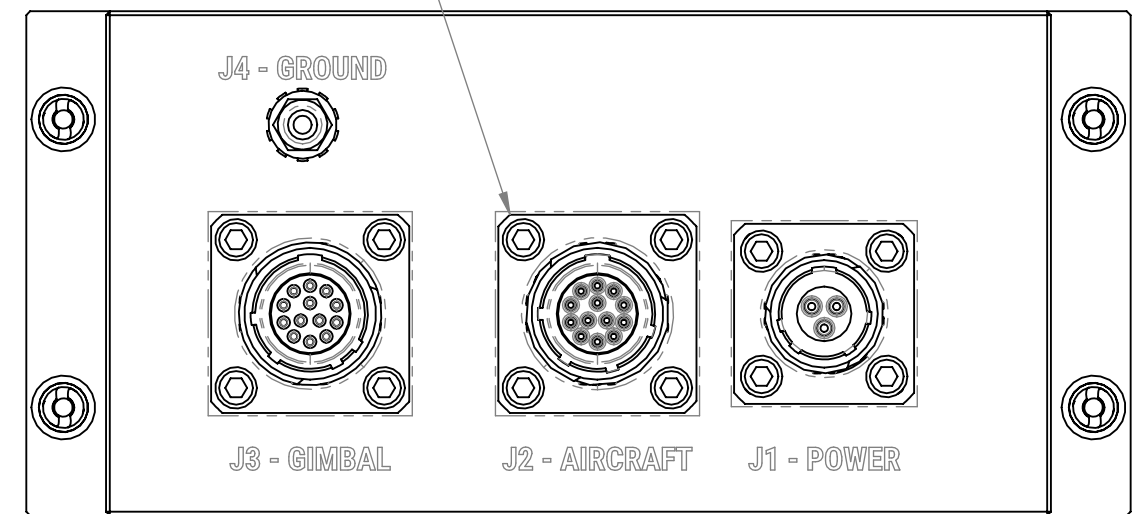
J2: AIRCRAFT CONNECTOR
BULKHEAD CONNECTOR: RECEPTACLE 38999 11-35PB 13 MALE PINS

- SHOTOVER PART NO.: 002-63108
- MANUFACTURER PART NO.: D38999/20TB35PB

MATING CONNECTOR: PLUG 38999 11-35SB 13 FEMALE SOCKETS

- SHOTOVER PART NO.: 002-63111
- MANUFACTURER PART NO.: D38999/26TB35SB
- SHOTOVER RECOMMENDED WIRE SIZE: 22-26 AWG

PINOUT	FUNCTION	DIRECTION	DESCRIPTION
1	FIRE SOURCE	OUTPUT	SOURCE VOLTAGE TO FIRE POINT/ILLUM BUTTONS.
2	FIRE POINT	INPUT	CONNECT TO FIRE SOURCE TO ACTIVATE LASER POINTER. FLOAT TO DEACTIVATE.
3	FIRE ILLUM	INPUT	CONNECT TO FIRE SOURCE TO ACTIVATE LASER ILLUMINATOR. FLOAT TO DEACTIVATE.
4	RESERVED		DO NOT CONNECT.
5	RESERVED		DO NOT CONNECT.
6	RESERVED		DO NOT CONNECT.
7	INTERLOCK AIRCRAFT -	INPUT	INPUT FROM AIRCRAFT INTERLOCK DRY CONTACTS (VOLTS FREE).
8	DIM+	INPUT	INPUT VOLTAGE DETERMINES BACKLIGHT INTENSITY (REFER TO BACKLIGHT DETAILS).
9	RESERVED		DO NOT CONNECT.
10	RESERVED		DO NOT CONNECT.
11	LASER GROUND	REFERENCE	GROUND REFERENCE FOR LASER FIRING SIGNAL.
12	LASER FIRING	OUTPUT	ASSERTS HIGH LEVEL TO INDICATE THAT ONE OR MORE LASERS ARE ACTIVE. 28V @300MA.
13	INTERLOCK AIRCRAFT +	OUTPUT	OUTPUT TO AIRCRAFT INTERLOCK DRY CONTACTS (VOLTS FREE).
SHELL	SHIELD		CONNECT THE CABLE SHIELD TO THE CONNECTOR SHELL.



VIEWED FROM FRONT FACE MALE PINS
(I.E. BULKHEAD CONNECTOR)
#22D CONTACT

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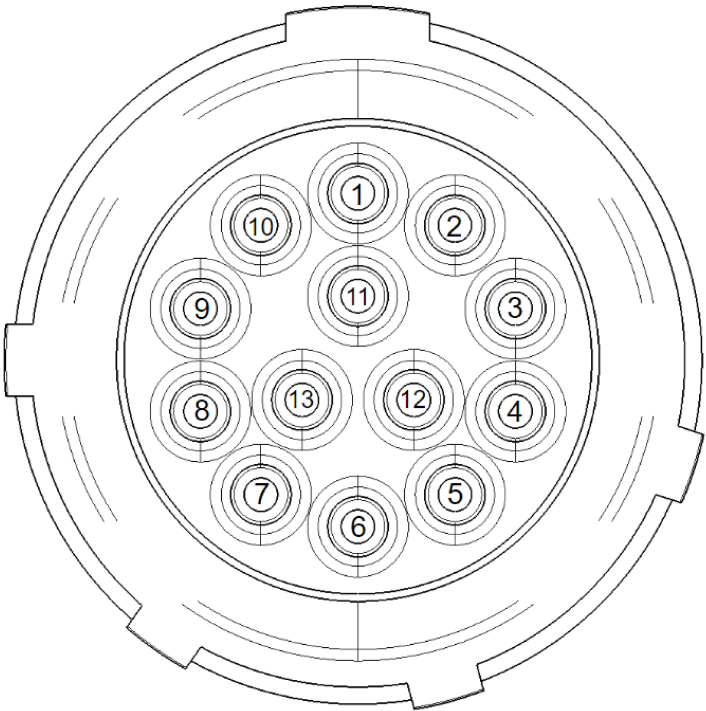
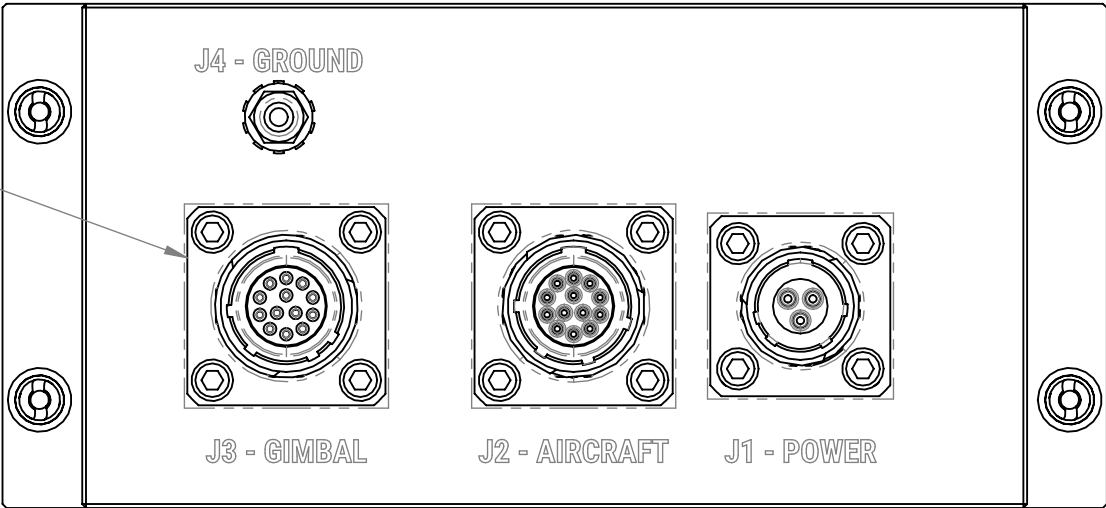
J3: GIMBAL CONNECTOR
BULKHEAD CONNECTOR: RECEPTACLE 38999 11-35SN - MIL PN

- SHOTOVER PART NO.: 002-62671
- MANUFACTURER PART NO.: D38999/20TB35SN

MATING CONNECTOR: PLUG 38999 11-35PN - MIL PN

- SHOTOVER PART NO.: 002-62672
- MANUFACTURER PART NO.: D38999/26TB35PN
- SHOTOVER RECOMMENDED WIRE SIZE: 22-26 AWG

PINOUT	FUNCTION	DIRECTION	DESCRIPTION
1	LASER ARM	POWER	POWER SOURCE OUTPUT FOR GIMBAL LASERS.
2	INTLK+	OUTPUT	OUTPUT TO GIMBAL INTERLOCK CIRCUIT.
3	INTLK-	INPUT	INPUT FROM GIMBAL INTERLOCK CIRCUIT.
4	FIRE A	OUTPUT	ASSERTS HIGH LEVEL TO ENABLE LASER POINTER OPERATION.
5	FIRE B	OUTPUT	ASSERTS HIGH LEVEL TO ENABLE LASER ILLUMINATOR OPERATION.
6	RESERVED		DO NOT CONNECT.
7	RESERVED		DO NOT CONNECT.
8	RESERVED		DO NOT CONNECT.
9	RESERVED		DO NOT CONNECT.
10	RESERVED		DO NOT CONNECT.
11	LASER GROUND	REFERENCE	GROUND REFERENCE FOR GIMBAL LASER CIRCUITS.
12	LASER FIRING	INPUT	HIGH LEVEL INDICATES THAT ONE OR MORE LASERS ARE FIRING.
13	RESERVED		DO NOT CONNECT.
SHELL	SHIELD		CONNECT THE CABLE SHIELD TO THE CONNECTOR SHELL.



VIEWED FROM FRONT FACE MALE PINS
(I.E. PLUG)
#22D CONTACT

011-0181 KIT - M2 LASER CONNECTORS				
DESCRIPTION		MANUFACTURER	MANUFACTURER PN.	SHOTOVER PN.
<u>M2 GIMBAL LASER CONNECTOR PARTS:</u>				
PLUG 38999 11-35SN 13 FEMALE SOCKETS		AMPHENOL AEROSPACE	D38999/26TB35SN	002-63099
38999 STRAIN RELIEF SIZE 11 BAND LOCK		AMPHENOL PCD	M85049/88-11N03	002-62471
BOOT 154-42GW24		HELLERMANNTYTON	154-42-G-W24	006-6221
38999 BAND STRAP. 0.25"		AMPHENOL PCD	M85049/128-4	002-62472
<u>LASER ARMING PANEL J1 POWER CONNECTOR PARTS:</u>				
PLUG 38999 9-98SN 3 FEMALE SOCKETS		AMPHENOL AEROSPACE	D38999/26TA98SN	002-63110
BACKSHELL - STRAIGHT SHELL SIZE 9		AMPHENOL AEROSPACE	M85049/38-9N	002-62991
<u>LASER ARMING PANEL J2 AIRCRAFT CONNECTOR PARTS:</u>				
PLUG 38999 11-35SB 13 FEMALE SOCKETS		AMPHENOL AEROSPACE	D38999/26TB35SB	002-63111
BACKSHELL - STRAIGHT SHELL SIZE 11		AMPHENOL PCD	M85049/38-11N	002-63235
<u>LASER ARMING PANEL J3 GIMBAL CONNECTOR PARTS:</u>				
PLUG 38999 11-35PN - MIL PN		AMPHENOL AEROSPACE	D38999/26TB35PN	002-62672
BACKSHELL - STRAIGHT SHELL SIZE 11		AMPHENOL PCD	M85049/38-11N	002-63235
TOOLS REQUIRED				
CONNECTOR	CRIMP TOOL	POSITIONER	PINS/SOCKETS	INSERTION/REMOVAL TOOL
D38999/26TA98SN	M22520/1-01	M22520/1-04	M39029/56-351	M81969/14-10
D38999/26TB35SB	M22520/2-01	M22520/2-07	M39029/56-348	M81969/14-01
D38999/26TB35PN	M22520/2-01	M22520/2-09	M39029/58-360	M81969/14-01

 THIRD ANGLE PROJECTION	TITLE							
	ICD - LASER ARMING PANEL							
SHEET SIZE:	A3							
	SCALE: 1:5							
SHEET 5 OF 6	DWG	002-9353	REV	2 ND	STATE	APPROVED	CHKD	TC

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BACKLIGHT DETAILS

- NOTES:
- 1. THE DIM+ INPUT (J2 PIN8) DETERMINES THE BRIGHTNESS OF THE BACKLIGHT.
 - 2. THE ILLUMINATION ADJUSTMENT MULTI-TURN POTENTIOMETERS PROVIDE THE ABILITY TO ADJUST THE SHAPE OF THIS CURVE.
 - 3. USE 2.3mm SLOTTED SCREWDRIVER FOR POTENTIOMETER ADJUSTMENT.

	ADJUSTMENT	FUNCTION
POINTER/ ILLUMINATOR SWITCHES NVIS GREEN B	GREEN G	VOLTAGE GAIN FOR GREEN ILLUMINATION. SET TO 1V/V AT FACTORY.
	GREEN -	SETS MINIMUM GREEN BRIGHTNESS. SET TO MINIMUM (FULLY CCW) AT FACTORY.
	GREEN +	SETS MAXIMUM GREEN BRIGHTNESS. SET TO MAXIMUM (FULLY CW) AT FACTORY.
ARMED/FIRING ANNUNCIATORS NVIS YELLOW A	YELLOW G	VOLTAGE GAIN FOR YELLOW ILLUMINATION. SET TO 1V/V AT FACTORY.
	YELLOW -	SETS MINIMUM YELLOW BRIGHTNESS. SET TO MINIMUM (FULLY CCW) AT FACTORY.
	YELLOW +	SETS MAXIMUM YELLOW BRIGHTNESS. SET TO MAXIMUM (FULLY CW) AT FACTORY.

DEFAULT INPUT VOLTAGE VS LUMINANCE CURVE

