

8765432

DWG. NO. 05A-0220-02REV 0

REVISION HISTORY

ZONE	REV	DESCRIPTION	APPR	DATE
ALL	0	RELEASE FOR PROTOTYPE		

NOTES:

FRONT VIEW

MECHANICAL ASSEMBLY FROM BACK VIEW

37363534333231302928272625242322212019181716151413121110987654321

ITEM NO.	WIRE DIAGRAM REF.	QTY	UAV PN:	PART NO.	MFG:	DESCRIPTION	U/M
37		1	103-1087	B0032325LE	AMAZON	CABLE, USB TO SERIAL DUAL	EA
36		2	090-1010	WM2567-ND	DIGIKEY	CONN TERM MALE 22-24AWG GOLD	EA
35		1	091-1015	WM2533-ND	DIGIKEY	CONN HOUSING MALE 2POS .100	EA
34		4	140-0188	96640A120	MCMMASTER CARR	SCREW, 4-40 X 3/4L PFH BLK	EA
33		2	090-1090		DIGIKEY	CONN TERM FEMALE 20-24AWG TIN	EA
32		1	091-1051		DIGIKEY	CONN RECEPT 2POS .100 SINGLE ROW	EA
31		1	105-0041	2029	MONOPRICE	DVI ADAPTER, DVI-D MALE TO HDMI FMALE	EA
30		3	140-0155	96640A123	MCMMASTER CARR	SCREW BLK 8-32 X 3/8L PFH	EA
29		1	129-0005	285-1612-ND	DIGIKEY	PWR SUP 12V 12.5A SNG OUTPUT	EA
28		1	122-0038	F3U134-2.6-RTC	PROVANTAGE	RETRACTIBLE USB EXT	EA
27		1	122-0037		AMAZON	HUB 4- PORT USB	EA
26		1	06A-0112-14		UAV SOLUTIONS	FDM, USB HOUSING, BLK	EA
25		1	210-1011	SPC125	MOUSER	LENS, SPACER	EA
24		1	103-1079	6014	MONOPRICE	CABLE, 3FT HDMI TO DVI	EA
23		3	103-1080	70126625	ALLIED ELEC	CABLE, RJ45 ETHERNET RIGHT ANGLE 2 FT	EA
22		2	090-1022	WM1837CT-ND	DIGIKEY	CONN TERM FEMALE 20-24AWG TIN	EA
21		1	091-1048	43645-0200	DIGIKEY	CONN RECEPT 2POS 3MM SINGLE ROW	EA
20		8	090-1011	16-02-0103	DIGIKEY	CONN TERM FEMALE 22-24AWG GOLD	EA
19		1	091-1275		DIGIKEY	CONN HOUSING 8POS .100 W/LATCH	EA
18		1	210-1037	7101K2ZQE	DIGIKEY	SWITCH TOGGLE SPDT SOLDER LUG	EA
17		1	210-1005	7105P3YZQE	DIGIKEY	SWITCH, TOGGLE ON-OFF-ON	EA
16		1	210-1010	CLB300CTP	MOUSER	LENS, LED, CLEAR	EA
15		1	210-1009	SSL-LX5093PGD	MOUSER	LED, GREEN	EA
14		4	140-0143	94887A171	MCMMASTER CARR	BINDING POST 1-1/2L	EA
13		4	140-0136	96640A129	MCMMASTER CARR	SCREW, BLACK 8-32 X .75 FLAT HD	EA
12		4	140-0188	96640A120	MCMMASTER CARR	SCREW, BLK 6-32 X 3/4 PFH 82 DEG	EA
11		6	140-0024	96640A056	MCMMASTER CARR	SCREW, BLK 4-40 X 3/8 PFH 82 DEG	EA
10		1	210-1037	7101K2ZQE	DIGIKEY	SWITCH TOGGLE SPDT SOLDER LUG	EA
9		1	04A-0140-00		UAV SOLUTIONS	LABEL	EA
8		1	129-0075	EFB0612HHA	DIGIKEY	FAN, 12VDC 60MM X 6MM	EA
7		2	103-1075	B00GY1JED8	AMAZON	CABLE, USB MOUNT	EA
6		3	126-0021	M85528/2-18A	PEI GENESIS	NUTPLATE, SIZE 18	EA
5		3	091-1104	RJF21B	AMPHENOL	CONNECTOR, RJ45 BULKHEAD	EA
4		1	210-1054	450-1670-ND	DIGIKEY	SWITCH ROCKER SPST 20A 125V	EA
3		1		P5157-ND	DIGIKEY	CAP ALUM 2200UF 25V 20% RADIAL	EA
2		1	05A-0212-04		UAV SOLUTIONS	SUBASSEMBLY, LCD TRAY DISPLAY	EA
1		1	06A-0130-06		UAV SOLUTIONS	FRONT PANEL	EA

ITEM NO.

WIRE DIAGRAM REF.

QTY

UAV PN:

PART NO.

MFG:

DESCRIPTION

U/M

BILL OF MATERIALS

ORIG. ENG. SKTCH NO.:	INITIALS	DATE	TITLE:		
	DRAFTER: RGB	04/18/14	FRONT DISPLAY ASSEMBLY		
	CHECKER:				
	ENG. APPR:				
WORKMANSHIP PER QOP ISO STD 001-XXX			SIZE B	DWG. NO. 05A-0220-02	REV 0
			CAGE CODE: 61F14	SCALE: NTS	SHEET 1 OF 5

PORTABLE GCS

NEXT ASSY

USED ON

APPLICATION

THIRD ANGLE PROJECTION IN ACCORDANCE WITH ASME Y14.5

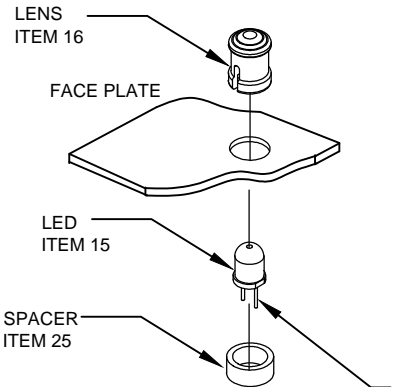
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR +/- 5 BEND +/- .3 TWO PLACE DECIMAL +/- .01 THREE PLACE DECIMAL +/- .005

PROPRIETARY AND CONFIDENTIAL

UAV SOLUTIONS. NOTIFICATION OF PROPRIETARY INFORMATION OR BUSINESS CONFIDENTIAL INFORMATION: THIS PROPOSAL INCLUDES DATA THAT WILL NOT BE DISCLOSED OUTSIDE THE GOVERNMENT AND WILL NOT BE DUPLICATED, USED, OR DISCLOSED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN TO EVALUATE THIS PROPOSAL. IF, HOWEVER, A CONTRACT IS AWARDED TO THIS OFFER OR AS A RESULT OF, OR IN CONNECTION WITH, THE SUBMISSION OF DATA, THE GOVERNMENT WILL HAVE THE RIGHT TO DUPLICATE, USE, OR DISCLOSE THESE DATA TO THE EXTENT PROVIDED IN THE CONTRACT. THIS RESTRICTION DOES NOT LIMIT THE GOVERNMENT'S RIGHT TO USE THE INFORMATION CONTAINED IN THESE DATA IF THEY ARE OBTAINED FROM ANOTHER SOURCE WITHOUT RESTRICTION. ALL DATA CONTAINED WITHIN THIS PROPOSAL ARE SUBJECT TO THIS RESTRICTION.

STEP 1:

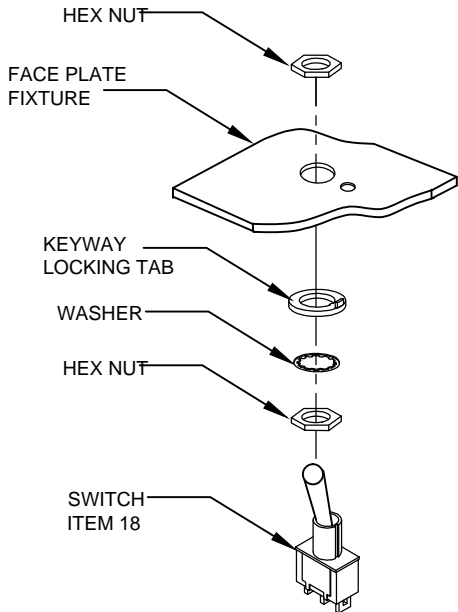
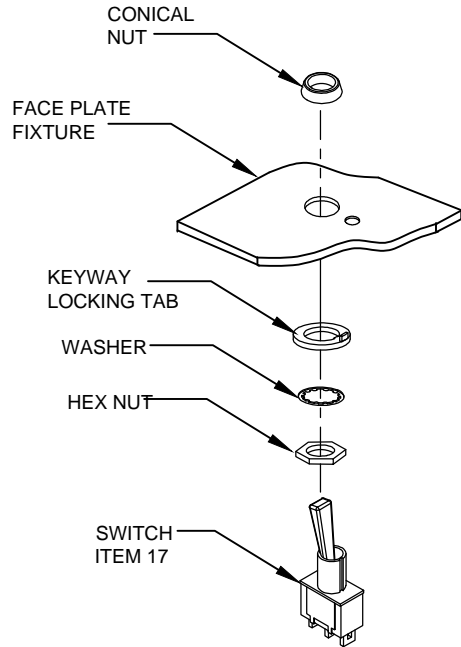
ASSEMBLY A



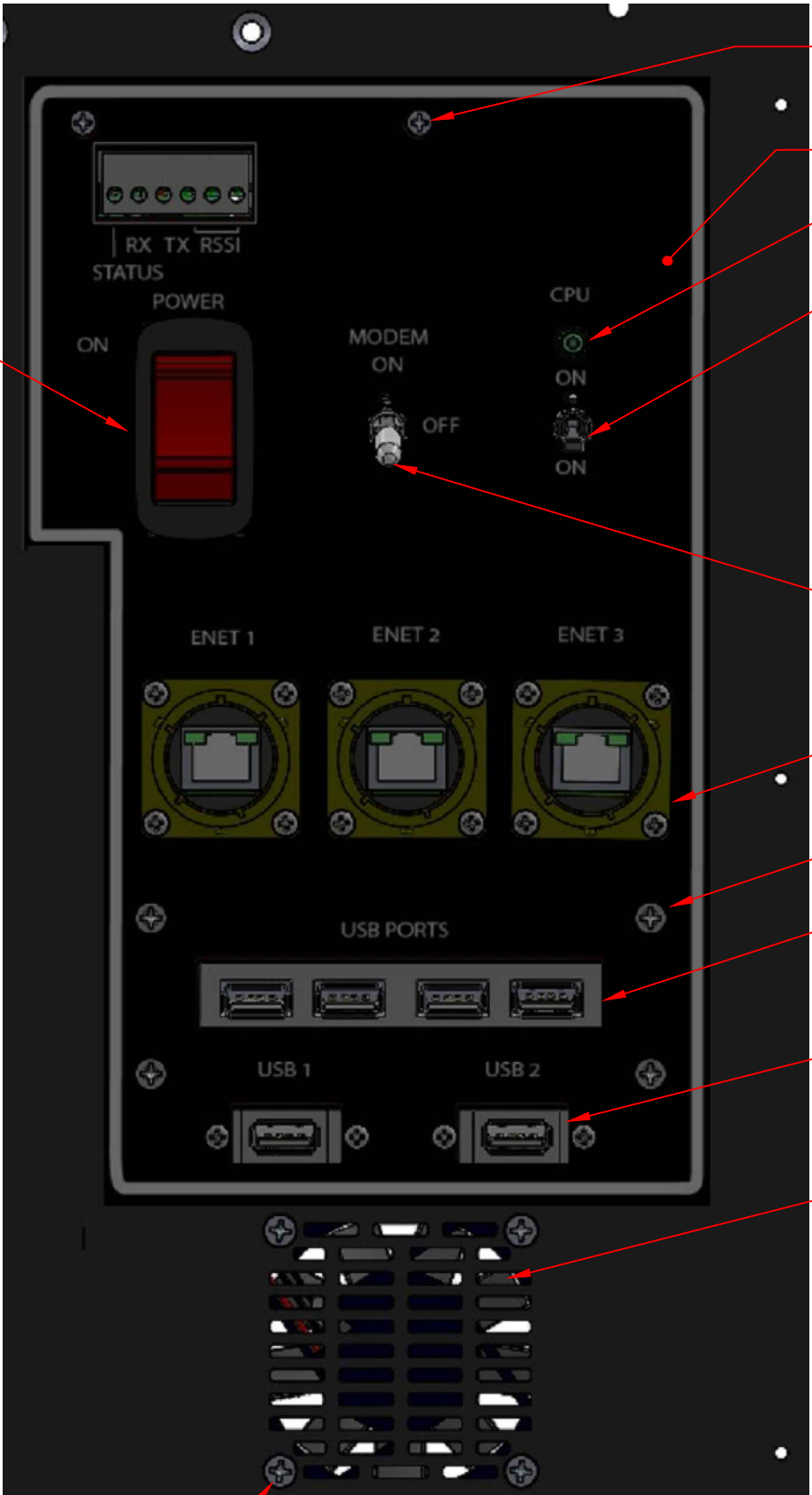
CUT LED LEADS 1/4" LONG. DETERMINE POSITIVE AND NEGATIVE LEADS OF LED USING A MULTIMETER. POSITIVE LEAD OF LED SHALL MATCH THE WHITE WIRE OF LED HOLDER AS WELL AS THE NEGATIVE LEAD RESPECTIVELY.

ASSEMBLY B

ASSEMBLY C



4



11 2X

9

15 16 25 SEE ASSEMBLY A

17 SEE ASSEMBLY B

18 SEE ASSEMBLY C

3X 3X
5 6

12X SCREW, 4-40 X 3/8L PPH

11 4X

26 27 28

2X
7

6X SCREW, 4-40 X 1/4L PPH

8 34 4X

LOCATED BEHIND PANEL. FAN LABEL FACES FRONT

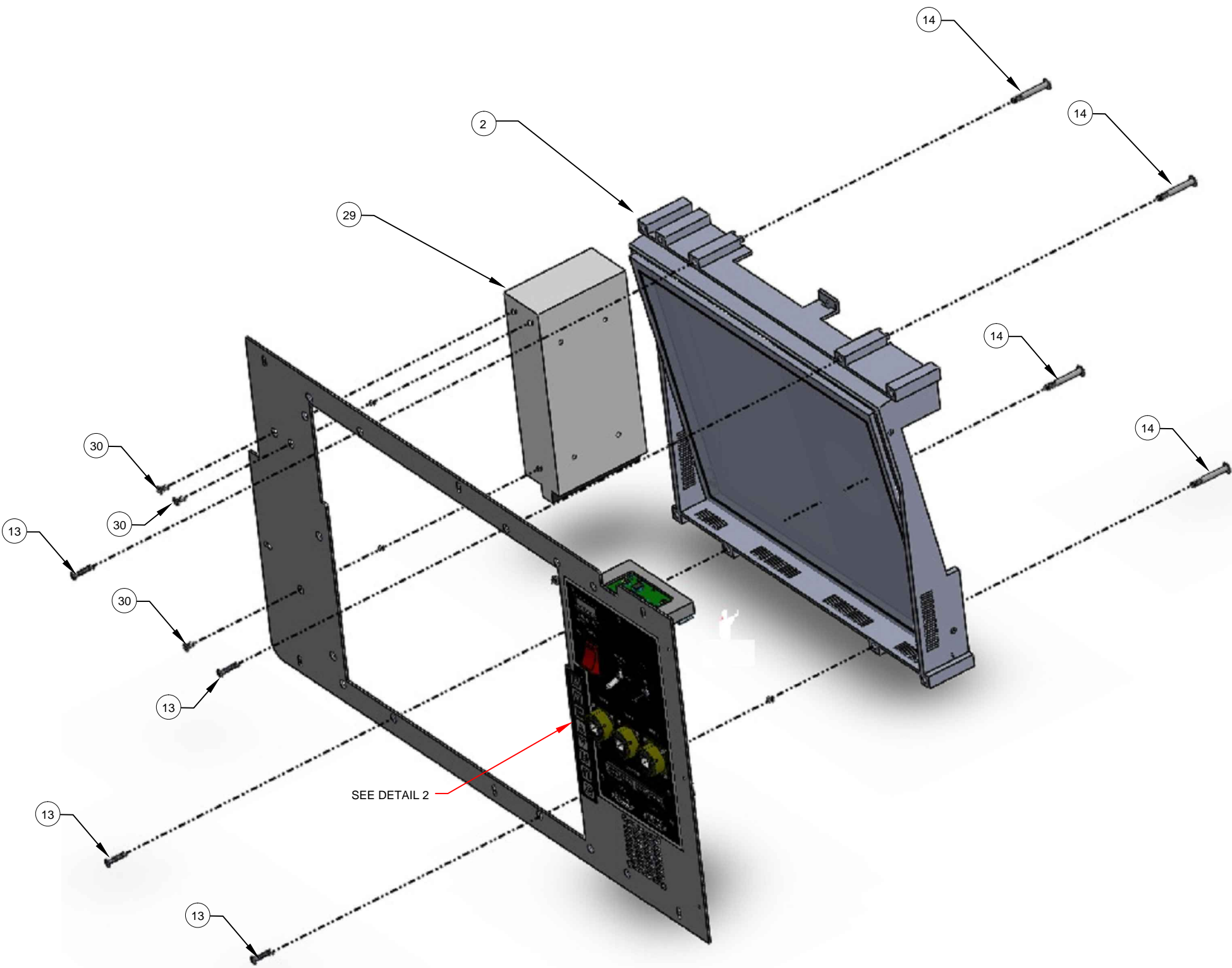
12
4X NUT

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STEP 2:

DETAIL 2

FROM LCD TRAY
ASSEMBLY
(COVER OVER HOLE)



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1- ALL WIRES ARE 24 AWG UNLESS OTHERWISE SPECIFIED.
2- WIRING FOR 05A-0212-04 NOT SHOWN FOR CLARIFICATION
3- PIN COUNT IS ARRANGED ACCORDING TO PCB
MEMBRANE SWITCH CONNECTOR IS CONNECTED OPPOSITE PCB
PIN COUNT. DETAIL 1
4-PRE-CUT ALL WIRES TO 3 FT, SOLDER AND CRIMP PRIOR TO
CONNECTING TO CONNECTOR 1.

091-1015
090-1010

1 2

35 36
2

5 TWIST VIO
6 GRN
3 TWIST GRY
4 BLK
7 RED
8 BLK TWIST

CONNECTOR 1.

2 BLK
1 YEL TWIST

20 IN +/- .5 IN

19 20
8

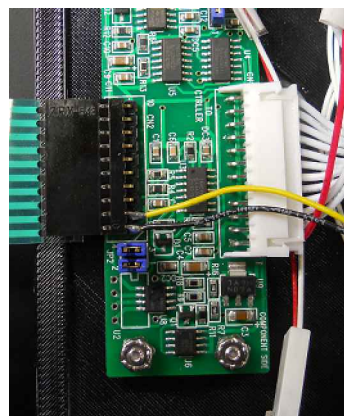
3 2 1

3 2 1

RED BLK

RED BLK

RED BLK



POWER SUPPLY

2200uf@ 25V
P5157-ND

AC IN

12V - +	G L N
------------	-------

RN ☐ ☐
 K ☐ ☐
 WHT ☐

BLK 20 AWG

1-1051
0-1090

FROM FLIR ROTATOR POWER SUPPLY
CORD

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CAGE CODE: 61F14	SCALE: NTS	SHEET 4 OF 5

