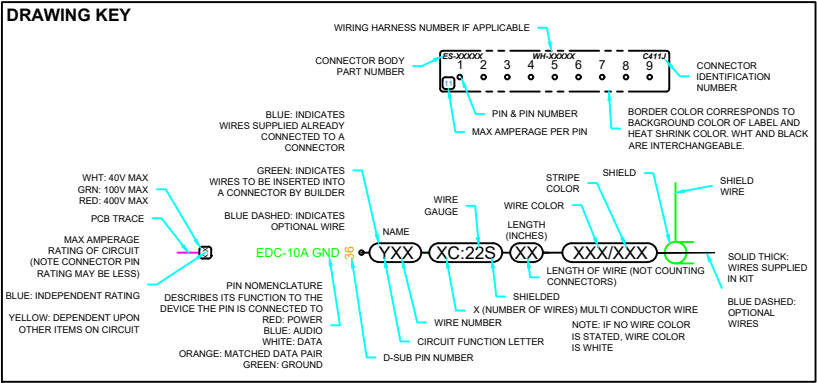


CIRCUIT LETTER FUNCTION	
LETTER	CIRCUITS
C	CONTROL SURFACE
D	INSTRUMENT
E	ENGINE INSTRUMENT
F	FLIGHT INSTRUMENTS
H	HEATING VENTILATING
J	IGNITION
K	ENGINE CONTROL
L	LIGHTING
P	POWER CONTROL
Q	FUEL
R	RADIO
RZ	HEADPHONE
T	SPECIAL ELECTRONIC
TC	RADIO CONTROL
TD	AIRBORNE ANNOUNCING
TP	BEACON
TQ	TRANSMITOR RECEIVER
W	WARNING EMERGENCY



WIRE HARNESS NOTES

- USE M22759/16 OR M27500 TEFZEL AIRCRAFT WIRE. CONTACT VAN'S ABOUT USING OTHER EQUIV.

- USE MIL+23053 HEATSHRINK. CONTACT VAN'S ABOUT USING OTHER EQUIV.

- LABEL THE FLYING LEAD OF EACH WIRE WITH THE TRUNCATED NOMENCLATURE AND WIRE NUMBER.

- CONNECT ALL 20-24 AWG WIRES TO D-SUBS USING ES-SA-1017 SOCKETS OR ES-SA-1018 PINS. PERMISSIBLE TO STRIP 18 AWG WIRE TO FIT ES-SA-1017 SOCKETS OR ES-SA-1018 PINS. ALL CRIMPS TO BE MADE PER MIL-C-22520F (1.2.2) USING A TYPE 1 TOOL.

- USE ONLY NOR-COMP BACKSHELLS ON D-SUB CONNECTORS (WITH THE EXCEPTION OF 50-PIN CONNECTORS)

- HARNESS MUST BE TESTED WITH ALL AVIONICS IN ACCORDANCE WITH THE "ELECTRICAL SYSTEM BENCH TEST PROCEDURE". RESULTS ARE TO BE SUPPLIED TO VAN'S FOR EACH HARNESS.

-CRIMPED MOLEX, TYCO, AND AMP TERMINALS ARE TO BE CRIMPED WITH THE MANUFACTURER'S RECOMMENDED CRIMPING TOOL.

- CRIMPED TERMINALS ARE TO BE INDIVIDUALLY PULL TESTED.

-DO NOT COVER WIRES WITH WIRE NET.

- HARNESSES ARE TO BE BUNDLED WITH LACING CHORD, WITH THE EXCEPTION OF BLUE TIE-WRAPS USED AT BULKHEAD STATIONS.

- ALL 3 CONDUCTOR JACKETED NON-SHIELDED WIRE MAY BE REPLACED WITH TWISTED WIRES OF THE SAME AWG SIZE AND THE SAME WIRE COLOR.

- ADJUST SOLDER SPLICE / RING TERMINAL SIZE AS REQUIRED TO ACCOMMODATE DESIRED WIRE GAUGE(S). MAINTAIN RING TERMINAL STUD/TAB SIZE.

ELECTRICAL SYSTEM BENCH TEST PROCEDURE

Avionics Group

- ___ Check PFD & MFD Power On
- ___ SkyView Check PFD and MFD recognize a USB stick
- ___ Install latest software and settings per the readme files (applicable portions) on the Van's Web Site
 - ___ Setup X Pndr Hex Code
 - ___ Setup AP servos if installed
- ___ Check PFD & MFD recognize all LRU's
- ___ Check X pndr will transmit.
- ___ Check COM turns on.
- ___ Check PFD recognizes COM, and can push frequencies to COM radio
- ___ Check Backup Battery Function PFD
- ___ If installed check AP Control Head function (knobs function for SkyView as well)

Audio Group

1. ___ Configure COM radio in accordance with "GTR 200B Internal Presets" or "Trig TY96 Internal Presets"

- ___ Check Pilot Headset Jack
- ___ Check Pilot Mic Jack for Xmit
- ___ Check Co-Pilot Headset Jack
- ___ Check Co-Pilot Mic Jack for Xmit
- ___ If installed check XM music output to headset.

Cockpit Group

NOTE: If customer has selected the pre-wired stick option then use their control sticks

- ___ Check Pilot TX Button
- ___ Check Pilot Trim Buttons (Both Directions)
 - ___ Verify proper trim direction movement on screen indicator and servo with input
- ___ Check Co-Pilot TX Button
- ___ Check Co-Pilot Trim Buttons (Both Directions)
 - ___ Verify proper trim direction movement on screen indicator and servo with input
- ___ Check function of AP disconnect switch near throttle.
- ___ Check Pilot AP Disconnect Switch
- ___ Check Co-Pilot AP Disconnect Switch
- ___ Check Pilot COM Freq Swap
- ___ Check Co-Pilot Freq Swap
- ___ Check Dimmer (Note PCB portion will be checked during AV-60000 Check)
 - ___ Turn on all switches. Check that all lighted switches lights turn on and dim. (Ignore wires going to cabin light.)
- ___ Check canopy latch switch
- ___ Check flap motor function both directions
- ___ Check for power output at USB connectors / Power Outlet

Wing Group

- ___ Check Stall Warning
- ___ Check NAV/Strobe Lights
- ___ Check Landing Lights (Both if applicable)
- ___ Check Wig Wag Function

iS Engine Group

- ___ Check Master Relay Switch grounds out wire going to master relay
- ___ Check Key switch connects HIC connector start pins
- ___ Check spar pin light comes on when spar pin switches are not grounded.
- ___ Check emergency switch provides power to Power X3 connector Pin 3
- ___ Check Emergency LI Bat Warn Wire turns on warning in EFIS when grounded. (NOTE Check this error)
- ___ Check fuel pump A and B switches for function

GTR 200B INTERNAL PRESETS

"MENU" BUTTON OPTIONS

- MUSIC VOL 75%
- ICS VOL 80%
- ICS SQLCH AUTO
- COM MUTE ON
- COM MUTE ICS OFF
- ICS MUTE MUSIC OFF
- MUTE LEVEL FULL
- COM 3D ON
- ICS 3D ON
- COCKPIT NOISE NORMAL
- MUSIC BASE BOOST OFF
- MUSIC EQ OFF
- KEY BEEP VOL 50%
- CONTRAST +0

INTERNAL MENU SETTINGS

- SIDETONE 05
- MIC GAIN 05
- RF SQLCH 00
- MON SWAP ON
- INTERCOM ENABLE YES
- RECIEVE OUT GAIN 100%
- AUX 1 SQLCH 30%
- AUX 1 VOL 50%
- AUX 1 MUTE NO
- AUX 2 SQLCH 30%
- AUX 2 VOL 50%
- AUX 2 MUTE NO
- PILOT RT NO

SOFTKEY SETUP

- 1 USER LISTS
- 2 TUNE EMERGENCY

DISCRETE SETUP

- 1 FREQ SWAP
- 2 DISABLED

LIGHTING SOURCE 14V

GTR 200B PRESET NOTES:

- ALL SETTINGS NOT DEFINED BY THIS DRAWING ARE ACCEPTABLE AS CONFIGURED FROM MANUFACTURER.
- THE ABOVE SETTINGS CORRESPOND TO SOFTWARE SYS 2.60.

TRIG TY96 INTERNAL PRESETS

INTERCOM VOLUME:

AUX IN VOLUME:

MUSIC IN VOLUME:

SIDETONE VOLUME:

INTERCOM SQLCH:

MIC 1 GAIN:

MIC 2 GAIN:

RADIO SQLCH:

TY96 PRESET NOTES:

- SET FREQUENCY STEP SIZE APPROPRIATE FOR REGION.
- ALL SETTINGS NOT DEFINED BY THIS DRAWING ARE ACCEPTABLE AS CONFIGURED FROM MANUFACTURER.

REV	REVISIONS		DATE	APPROVED
	DESCRIPTION			
R0	INITIAL RELEASE		10/24/18	TDM
R1	ADDED TEST PROC AND NEW WING WIRES		11/7/18	TDM
R2	ADDED TRIG TY96		12/01/18	TDM
R3	CHANGED GTR 200 TO 200B, ADDED PTT, GEN B TERM. CHANGED TO ES 35110		01/29/19	TDM
R4	E8023 WIRES CROSSED AT HIC TO NEGATE AV-60000 PCB ERROR: WHT NOW LO & WHT/BLU NOW HI. ADDED OPTIONAL CO DETECTOR. TY96 CONNECTOR NOW ES-00060, ADDED NOTE FOR TY96 UNUSED PINS. ON F6262 & Q6300 ES 31880 WAS ES 36152, Q6300 27 WAS 40, ADDED CABIN LIGHT DIMMER. DELETE L6029, NUMEROUS CORRECTIONS		11/08/19	BPM
R5	CHANGED CO DETECTOR WIRING, ADDED WH-00144		01/06/20	BPM
R6	CORRECTED CABIN LIGHT TO OPTIONAL, CO DETECTOR WIRE COLORS TO M27500 STD		02/14/20	BPM
R7	REPLACED FUEL PRESSURE SENSOR P4055-75G with ES-103757-000		05/07/20	RMS
R8	RENUMBERED WHITE/ORANGE WIRE FROM MASTER RELAY, ES 24115, TO IGNITION MODULE FROM K6284 TO K6350; CORRECTED "ES-205203-3" TO "ES-00321" ON PILOT/COPILOT STICK GRIPS; C6351 WAS C6286; CHANGED WHT/BLK TO BLK ON PIN 6 OF WH-P30-1 CONNECTOR INTO AV-60000 POWER MODULE		06/30/20	RMS
R9	REPLACED P155 WITH P158 ADDED BACKSHELL TO PILOT/COPILOT		10/21/20	SEO
R10	MOVED COMM ANTENNA BREAKOUT LOCATION, ADDED TERMINATION FOR ELT PHONE LINE. UPDATED 8-PIN MOLEX CONNECTOR AND PINS ON HIC MODULE, SHORTENED TRIM MOTOR WIRES		09/22/21	SEO



VAN'S AIRCRAFT, INC.

14401 NE KEIL RD. NE
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97002 USA

ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18

DRAWN BY: RIAN JOHNSON

TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

UNITS:

INCHES

WH-00133

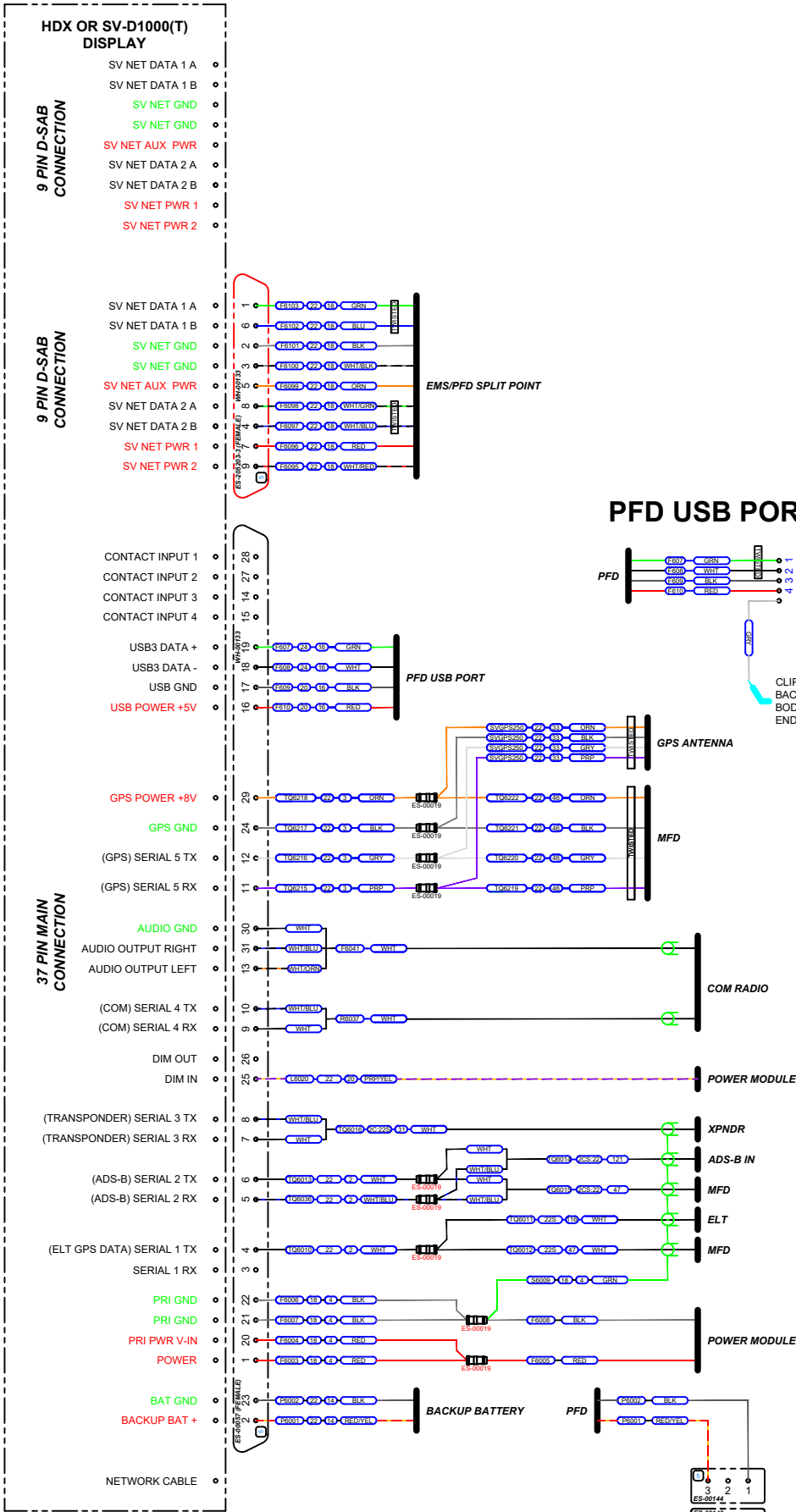
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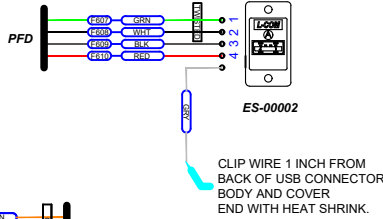
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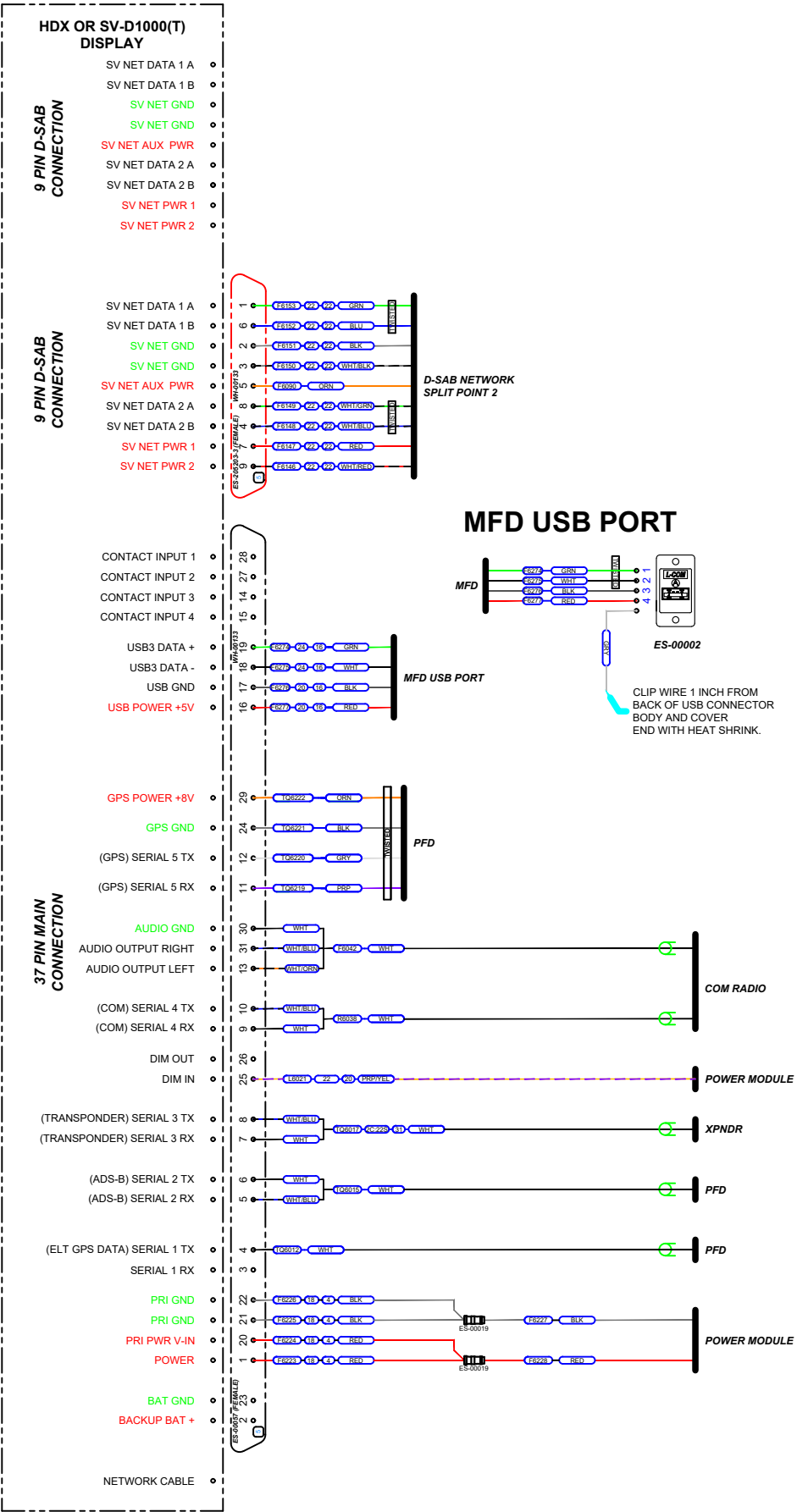
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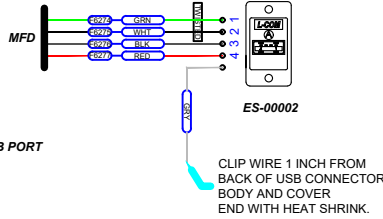
PFD USB PORT



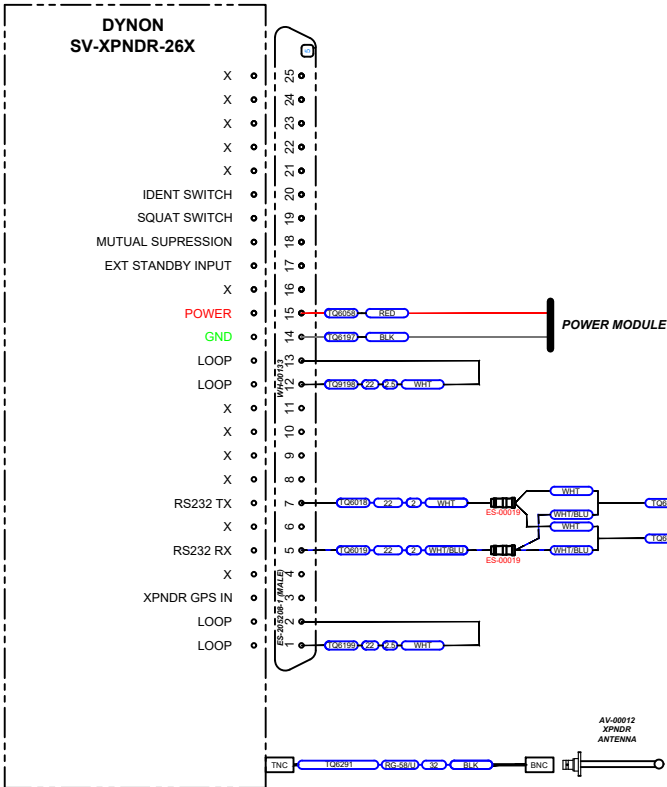
MFD



MFD USB PORT



XPNDR



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UNITS:

INCHES

SCALE: NONE

WH-00133

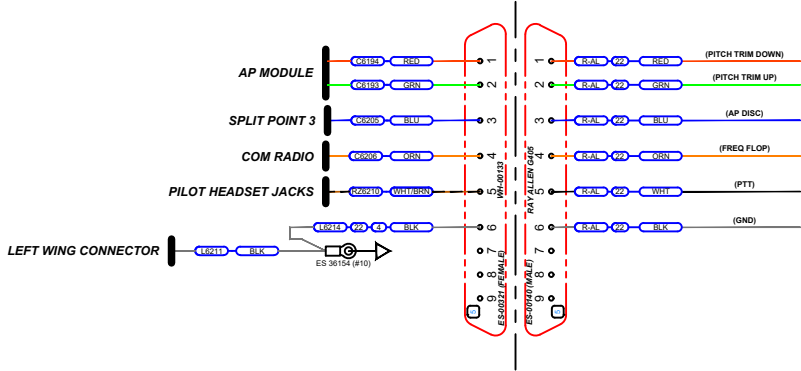
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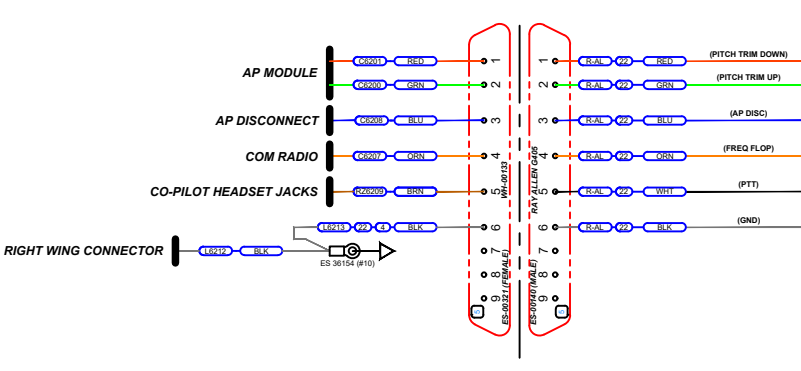
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
R9	SEE PAGE 1		

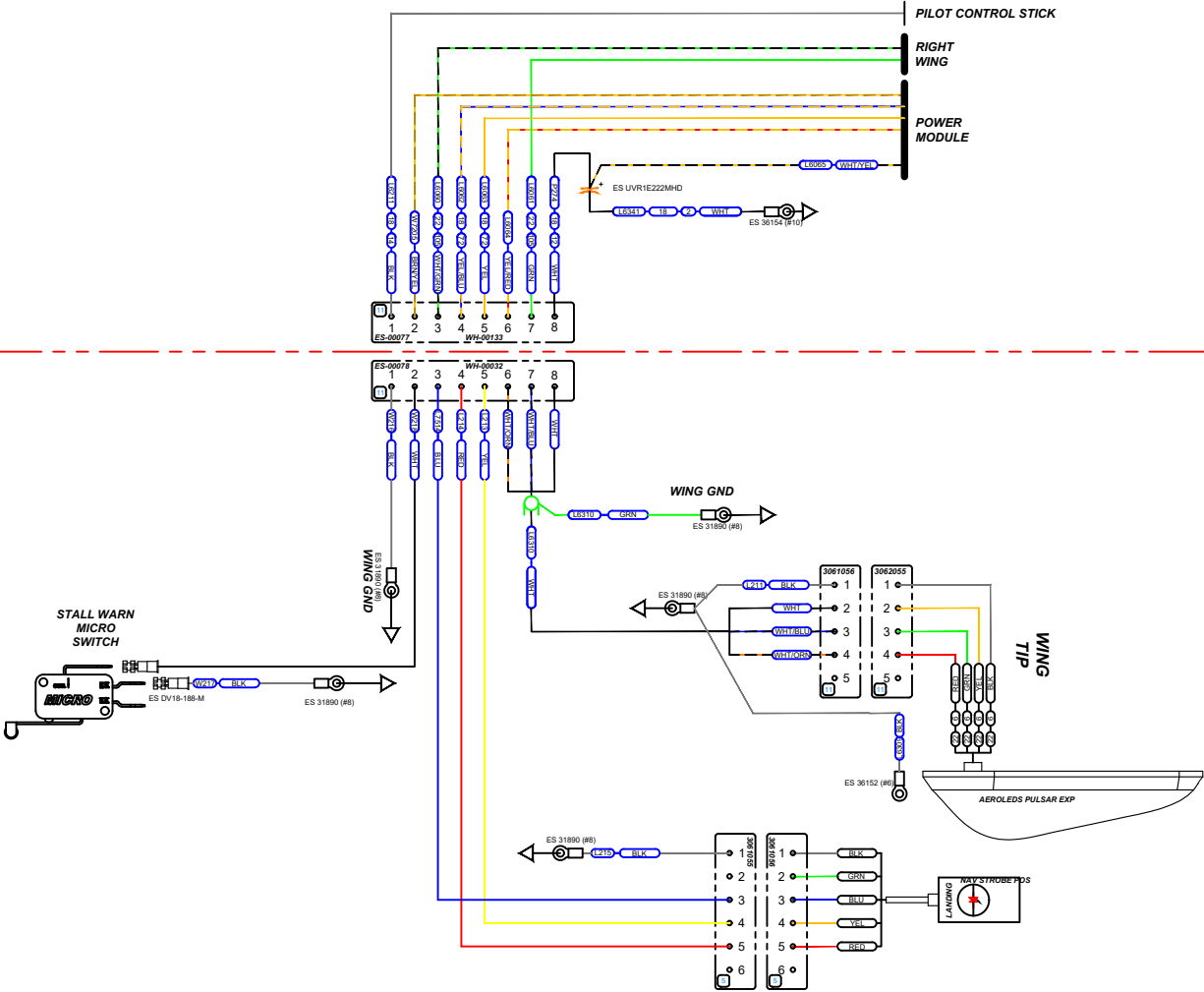
PILOT STICK GRIP



CO-PILOT STICK GRIP

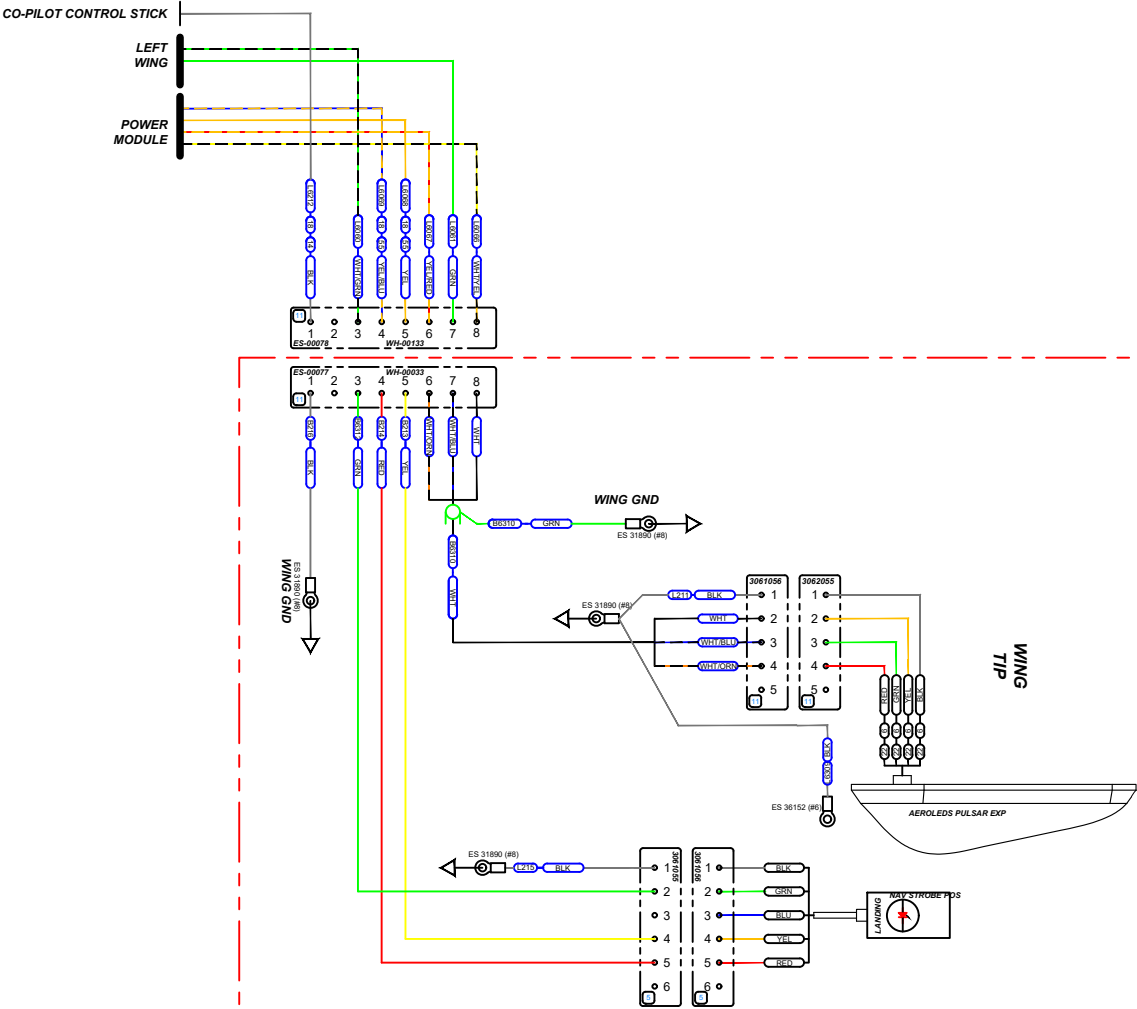


LEFT WING CONNECTOR



THESE COMPONENTS NOT INCLUDED IN AVIONICS KIT, NOR PART OF THE WH-00133.
SEE WH-00032 AND WH-00033 RV-12IS WING HARNESS DRAWINGS.

RIGHT WING CONNECTOR



THESE COMPONENTS NOT INCLUDED IN AVIONICS KIT, NOR PART OF THE WH-00133.
SEE WH-00032 AND WH-00033 RV-12IS WING HARNESS DRAWINGS.



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UNITS:

INCHES

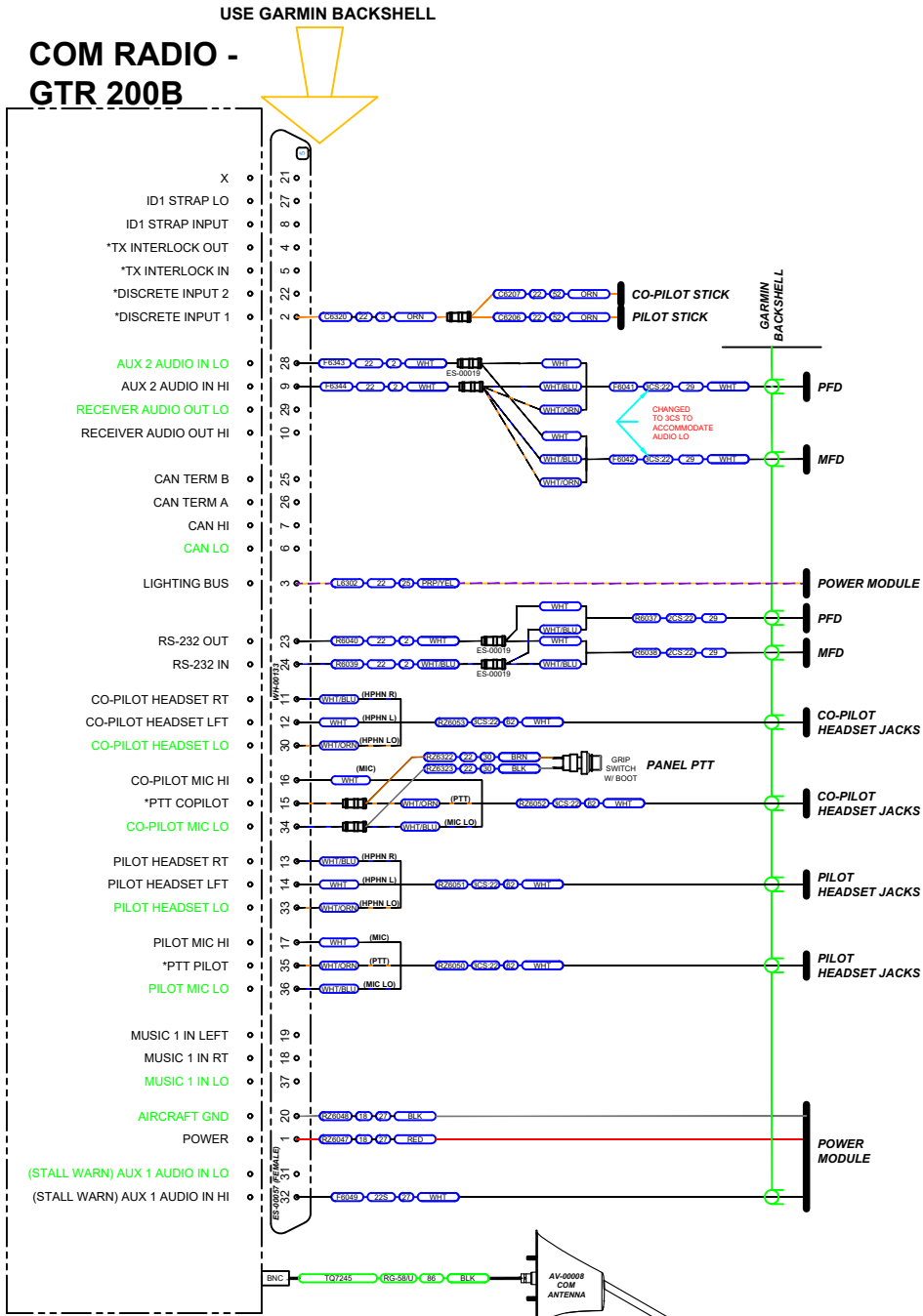
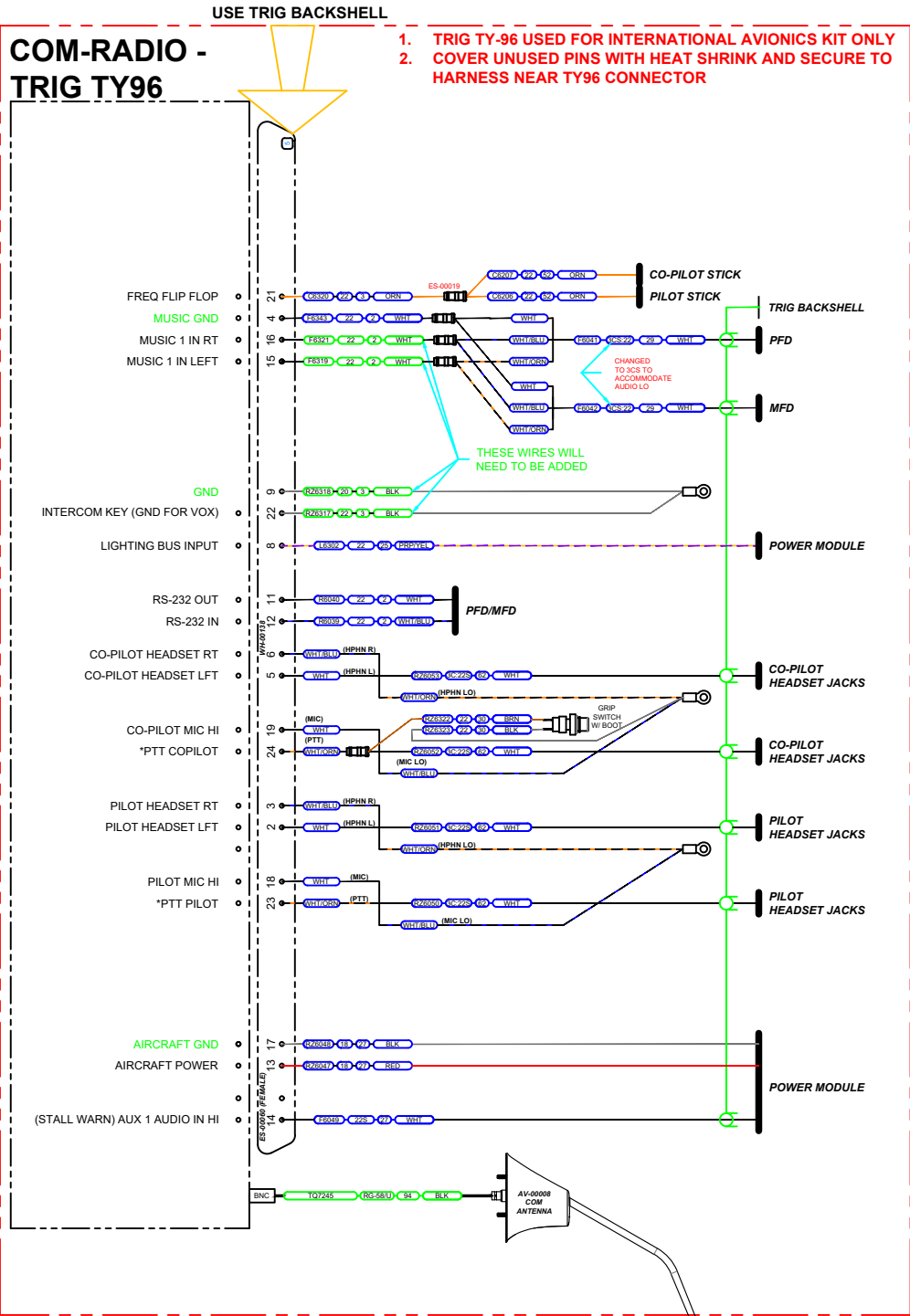
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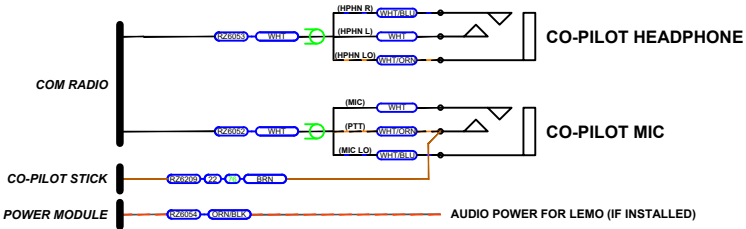
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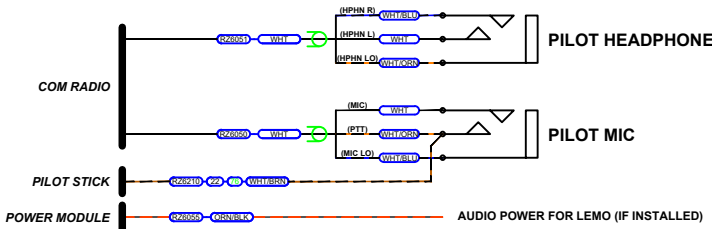
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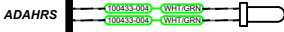
CO-PILOT HEADSET JACKS



PILOT HEADSET JACKS

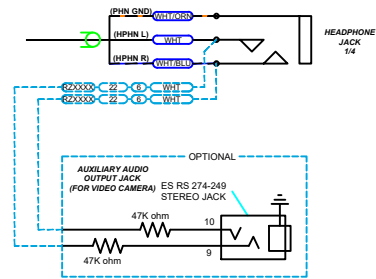


OAT PROBE



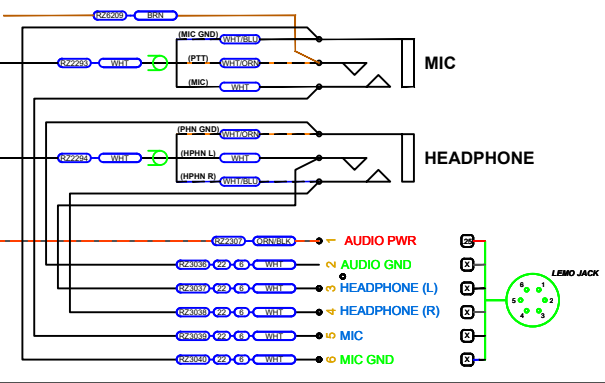
OPTIONAL AUDIO OUTPUT

COMPONENTS NOT INCLUDED WITH HARNESS
INSTALL ON CO-PILOT SIDE OF AIRCRAFT



OPTIONAL LEMO JACK

FOR PRODUCTION OF "WH-00133 LEMO". ADD JACKS TO BOTH PILOT AND CO-PILOT LOCATIONS.
THE LEMO JACK SHOULD BE INSTALLED IN LINE WITH AND 1 INCH BEHIND THE MIC/HEADPHONE JACKS.



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TOLERANCES: NONE

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UNITS:

INCHES

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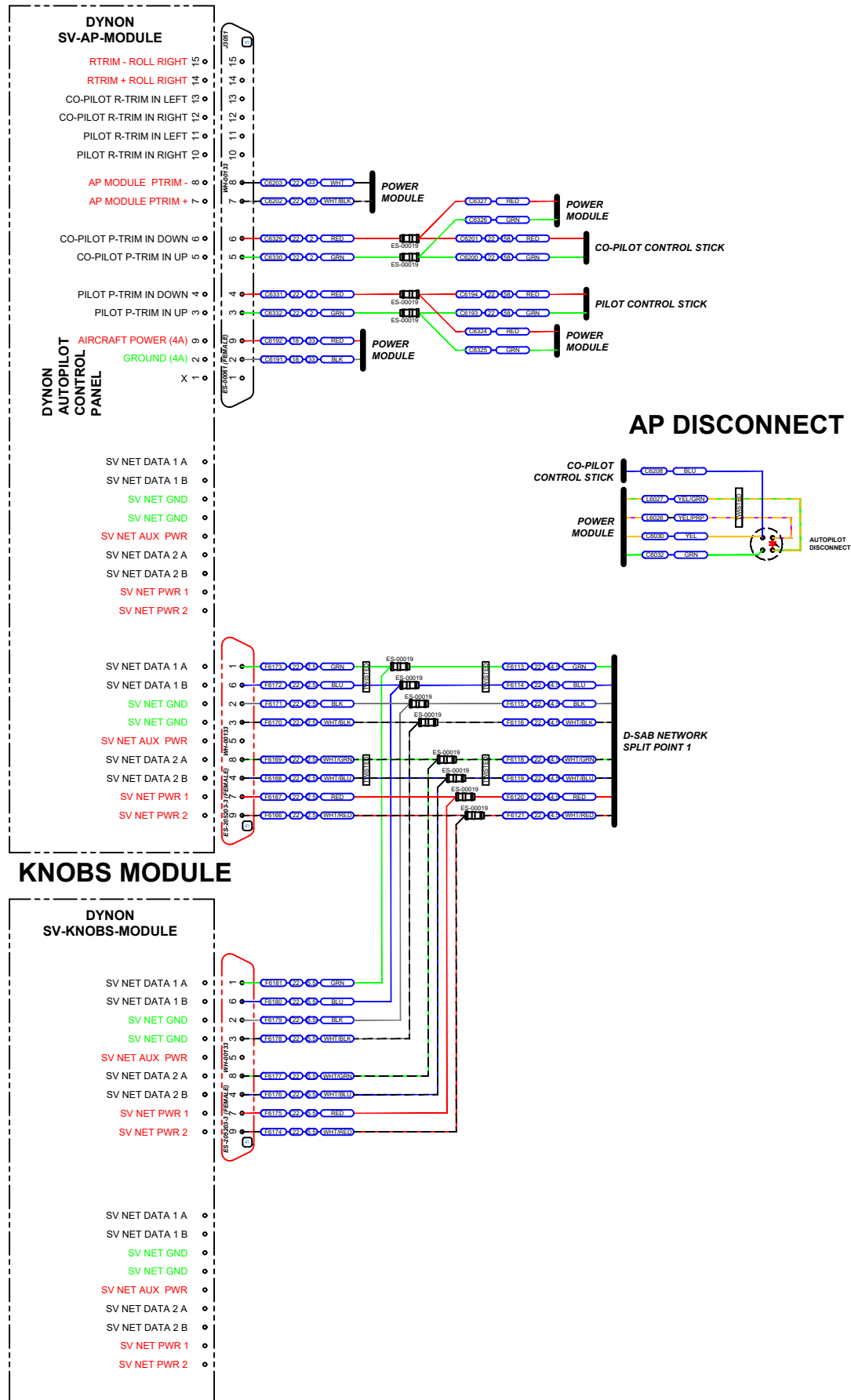
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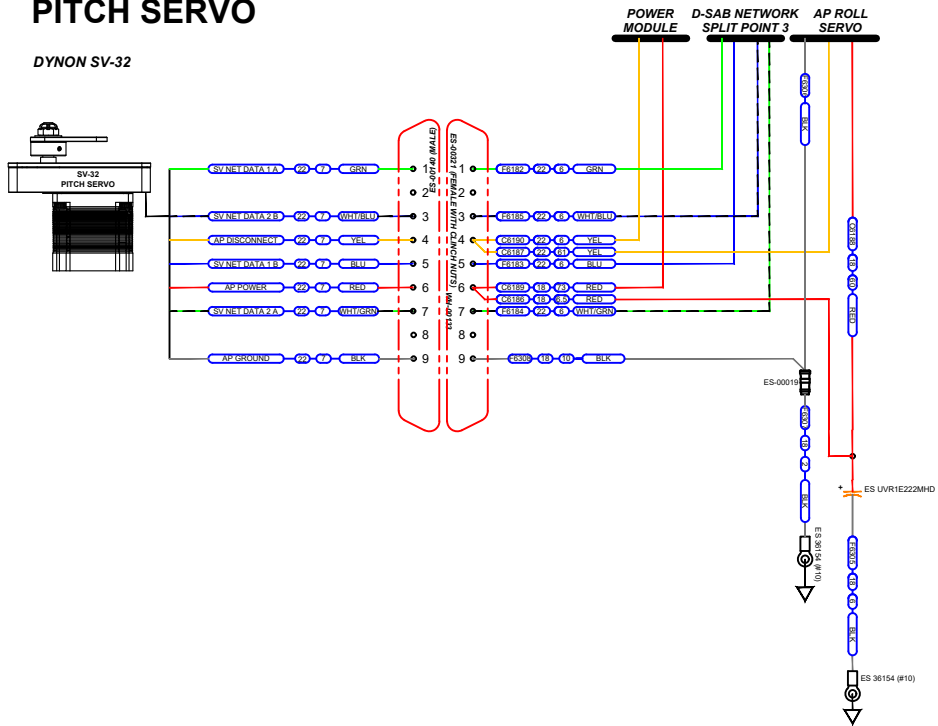
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AP MODULE



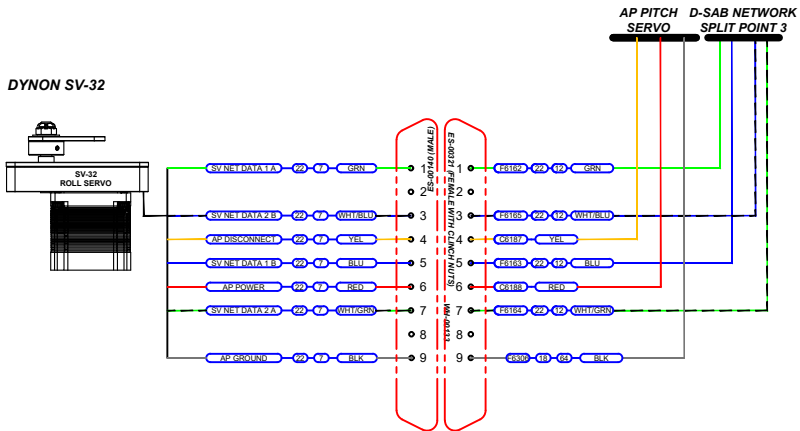
AUTOPILOT PITCH SERVO

DYNON SV-32



AUTOPILOT ROLL SERVO

DYNON SV-32



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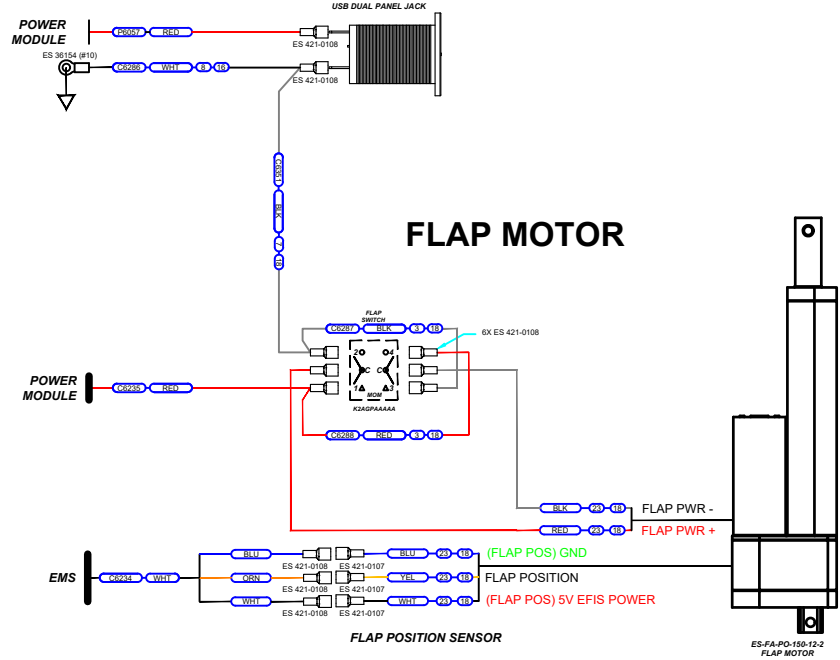
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TOLERANCES: NONE
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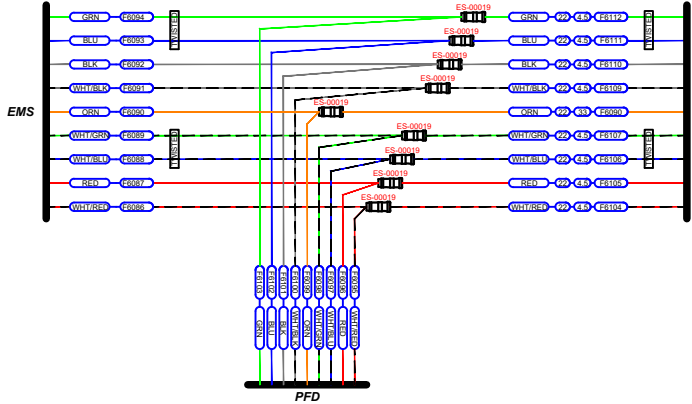
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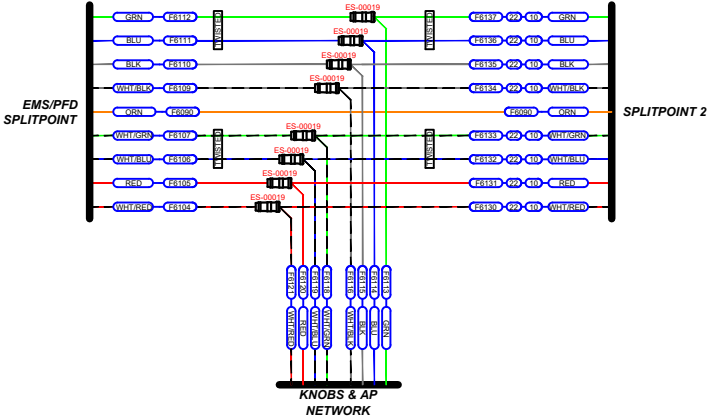
POWER OUTLET



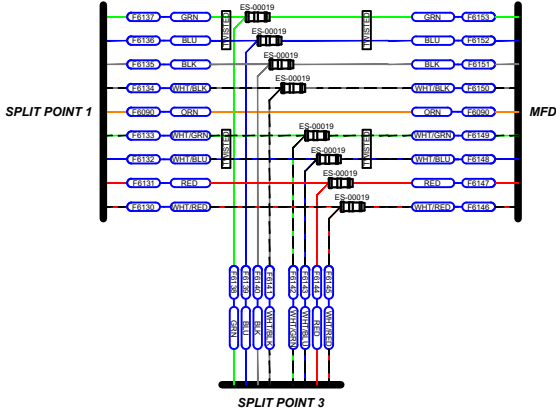
EMS/PFD
SPLIT POINT



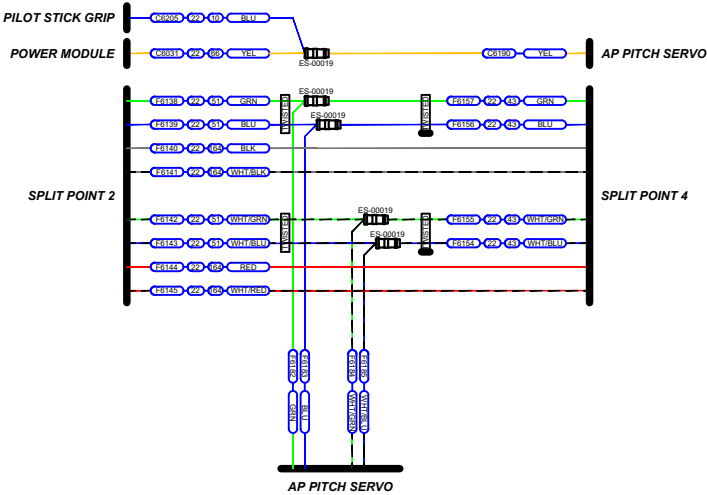
SPLIT POINT 1



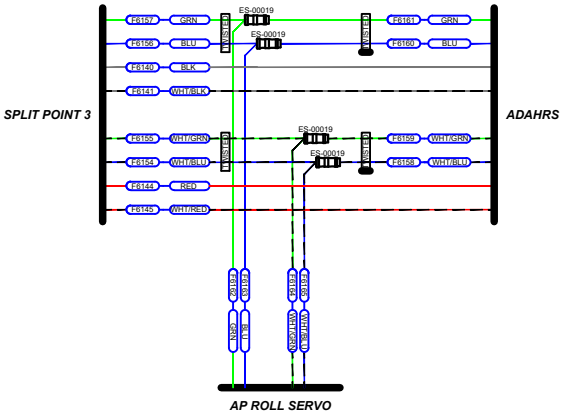
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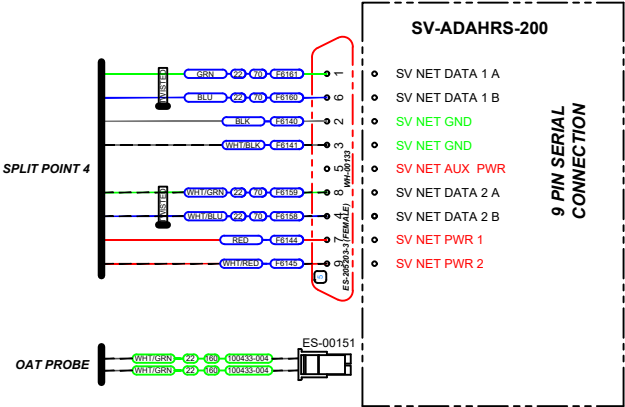
SPLIT POINT 3



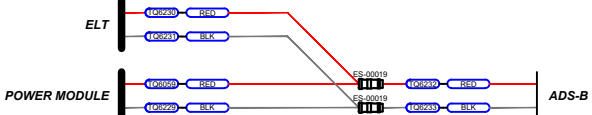
SPLIT POINT 4



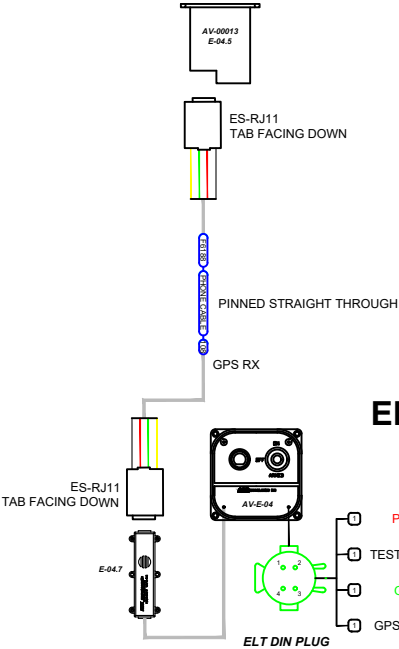
ADAHRS



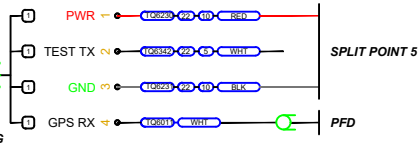
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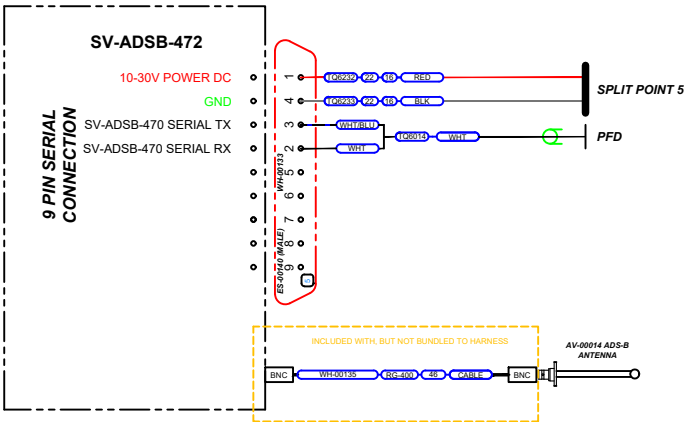
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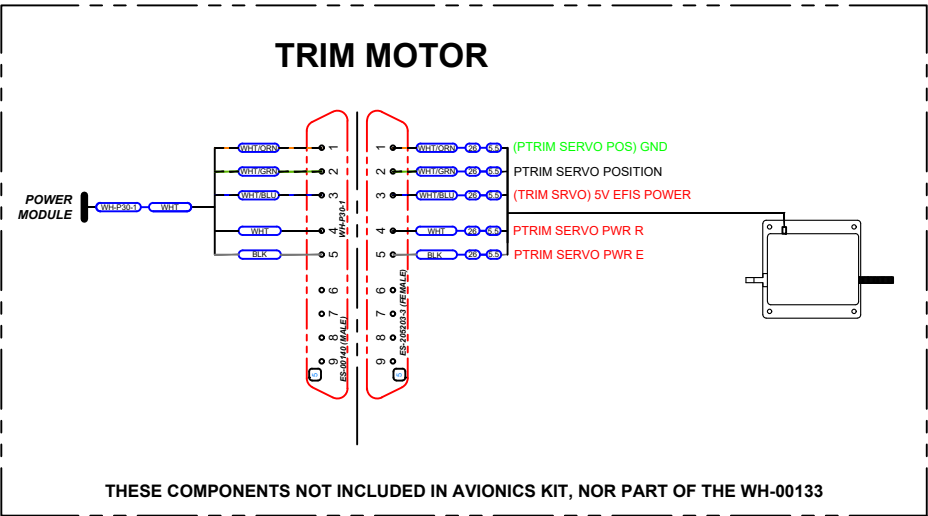
ELT



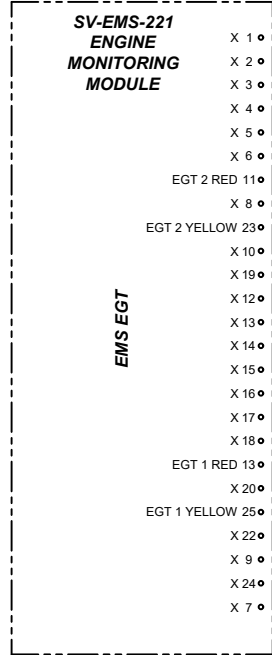
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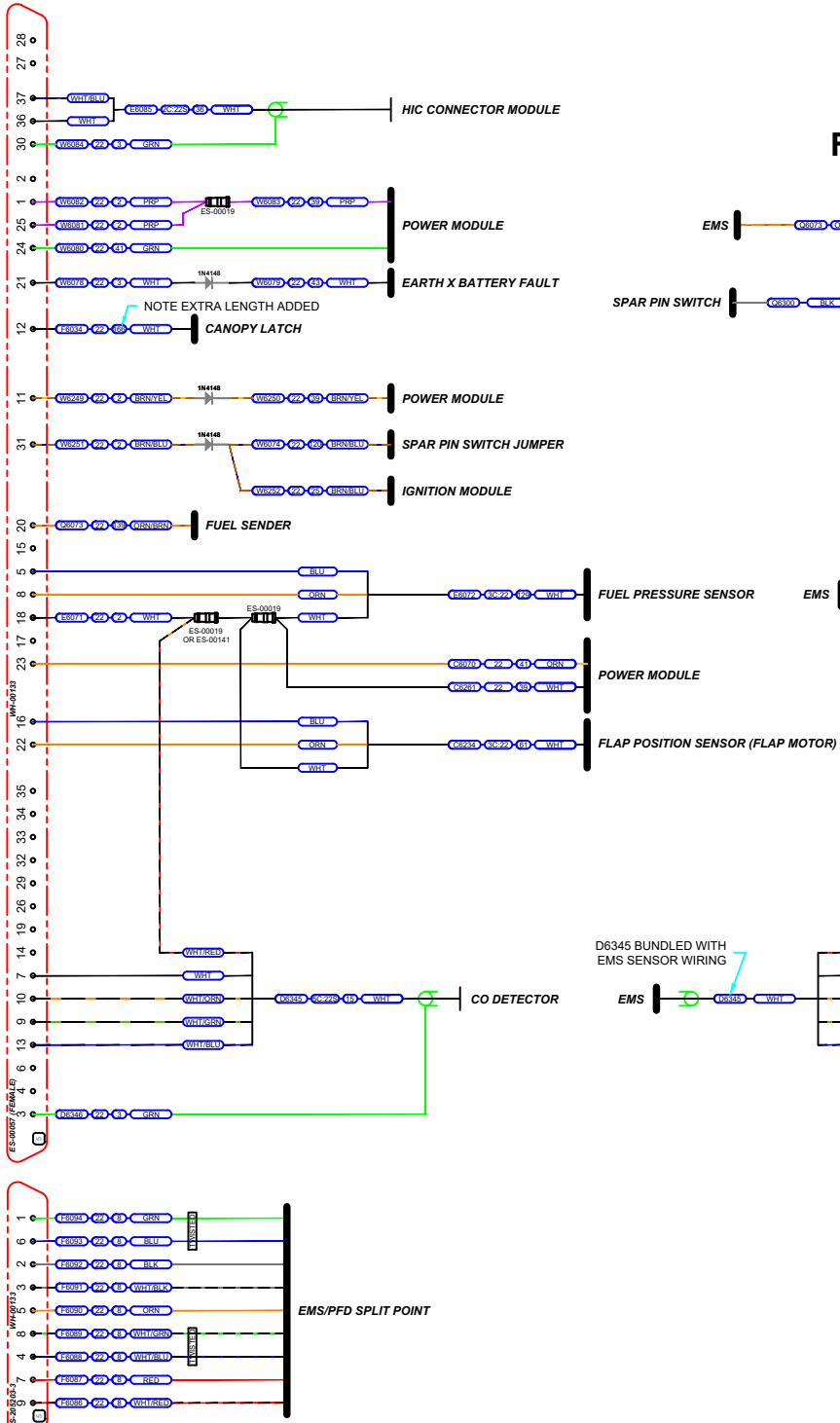
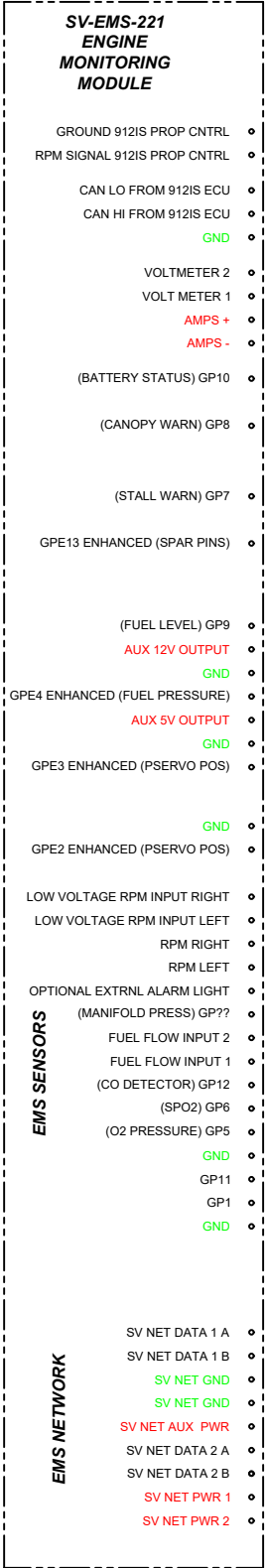
TRIM MOTOR



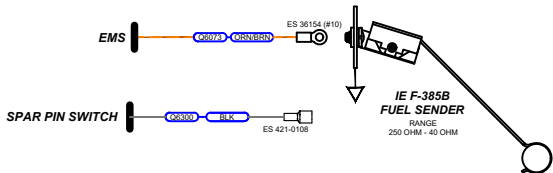
EMS



EMS



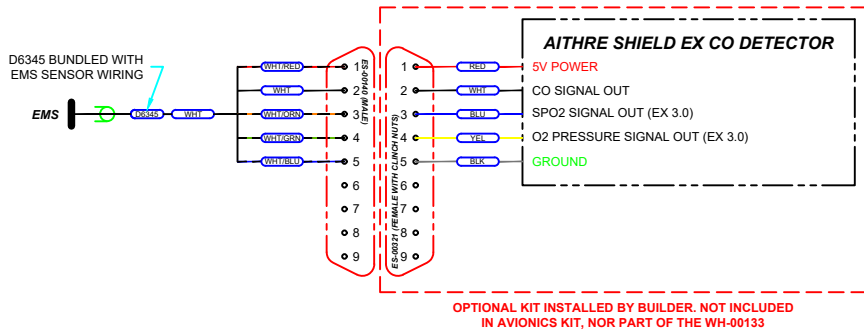
FUEL SENDER



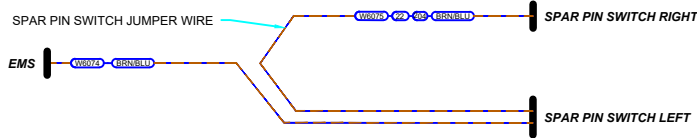
FUEL PRESSURE SENSOR



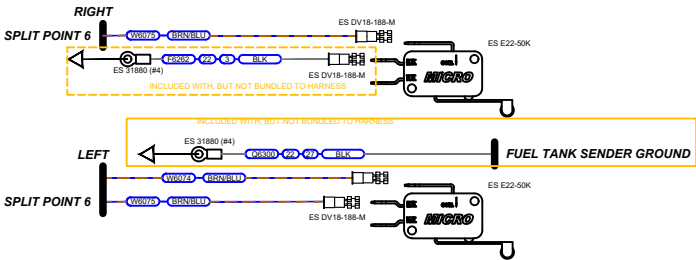
CO DETECTOR



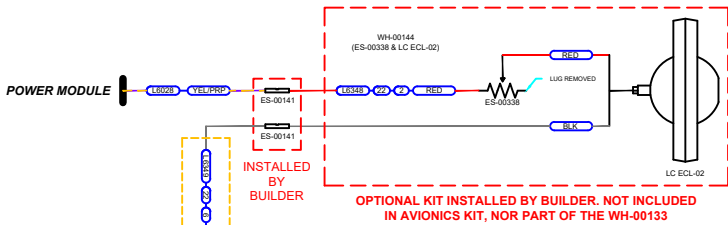
SPLIT POINT 6



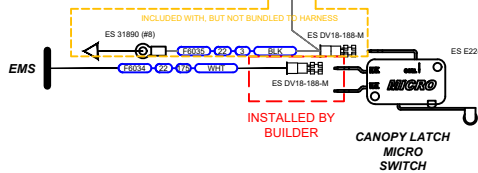
SPAR PIN SWITCHES



CABIN LIGHT & DIMMER



CANOPY SWITCH



VAN'S AIRCRAFT, INC.

14401 NE KEIL RD. NE
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ROTAX 912iS SKYVIEW
ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18

DRAWN BY: RIAN JOHNSON

TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

UNITS:

INCHES

SCALE: NONE

WH-00133

PAGE: 7 OF 11

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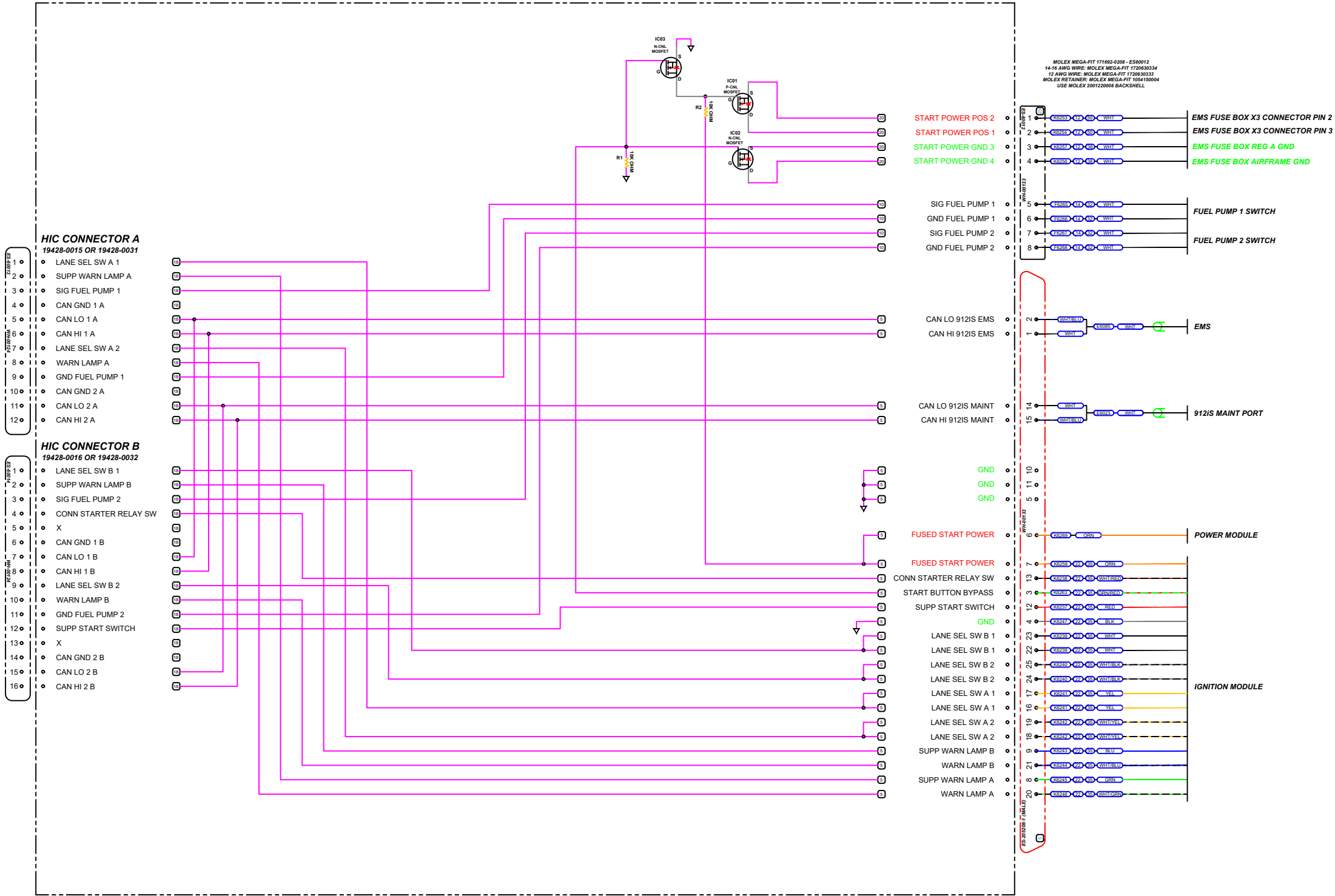
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
R9	SEE PAGE 1		

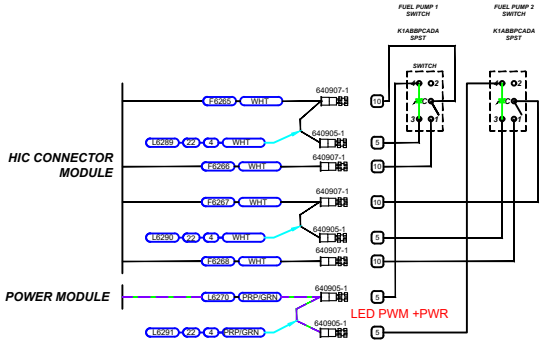


HIC CONNECTOR MODULE iS PCB
ES-60009 V3.1

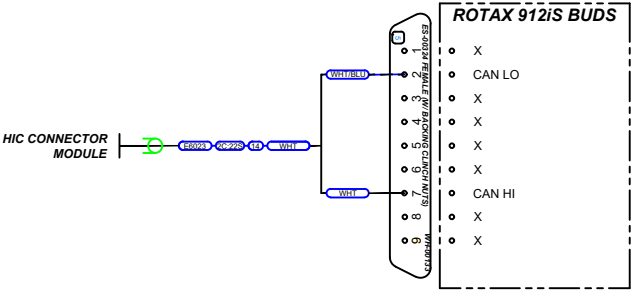
REV		DESCRIPTION	REVISIONS	DATE	APPROVED
R9		SEE PAGE 1			



FUEL PUMP SWITCHES



912iS MAINT PORT



NOTE: THE HIC CONNECTOR MODULE MUST BE ATTACHED TO F-1202B WITH STAR WASHERS UNDER THE SCREWS



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DRAWN BY: TONY KIRK

TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

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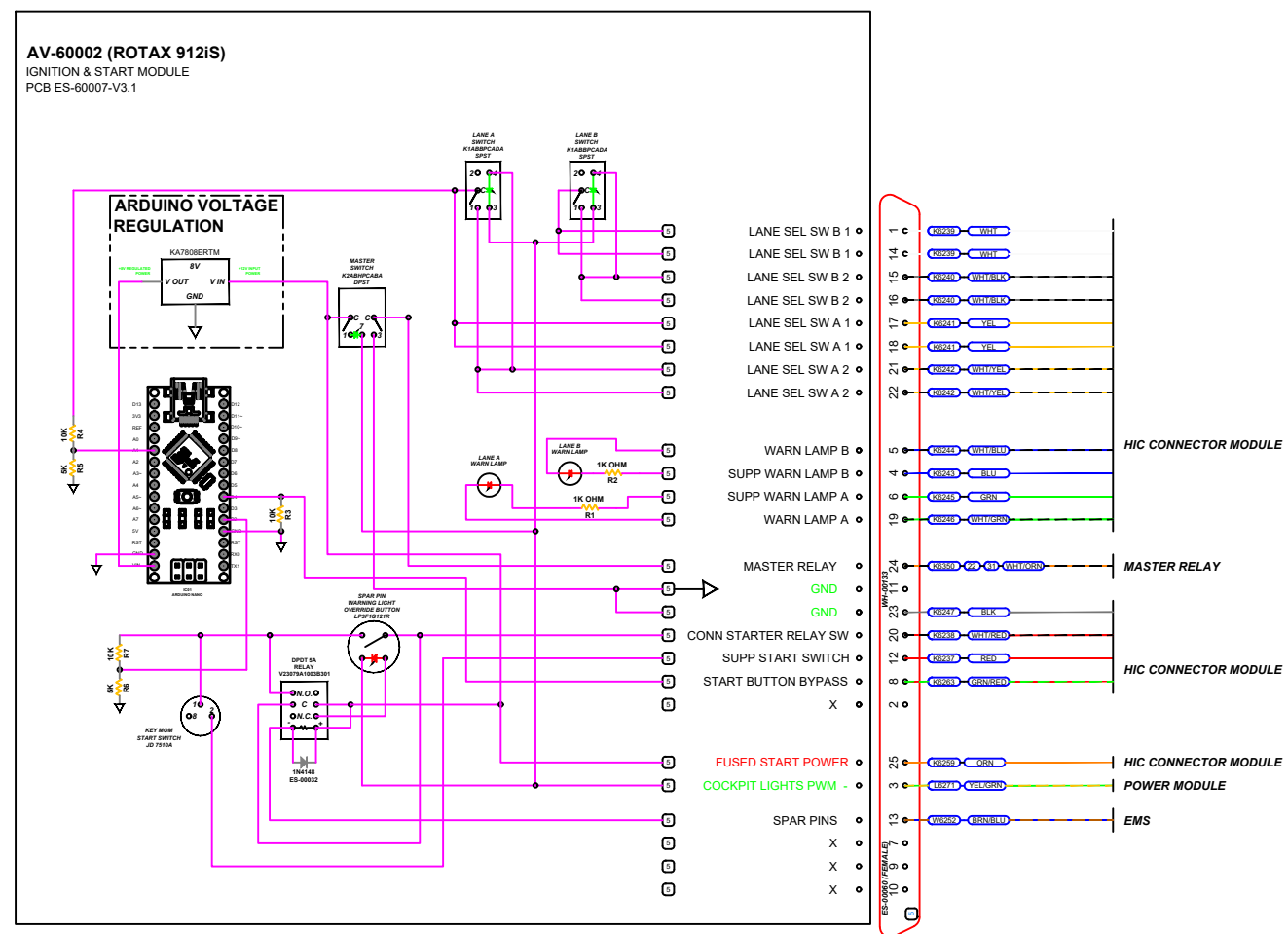
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WH-00133

PAGE: 9 OF 11

C-SIZE ORIGINAL

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
R9	SEE PAGE 1		



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AURORA, OR
97002 USA

ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18

DRAWN BY: RIAN JOHNSON

TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

UNITS:
INCH

WH-00133

SCALE: NONE

PAGE: 10 OF 11

PATH/FILENAME: Q:\RV-12\Systems\SI\Electrical System\SI\Electrical System 912\SI SkyView (WH-00133).DWG

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