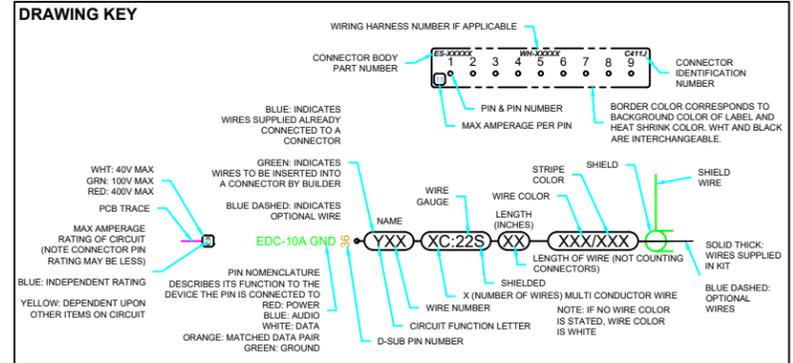


CIRCUIT LETTER FUNCTION	
LETTER	CIRCUITS
C	CONTROL SURFACE
D	INSTRUMENT
E	ENGINE INSTRUMENT
F	FLIGHT INSTRUMENTS
H	HEATING VENTILATING
J	IGNITION
K	ENGINE CONTROL
L	LIGHTING
P	POWER CONTROL
Q	FUEL
R	RADIO
RZ	HEADPHONE
T	SPECIAL ELECTRONIC
TC	RADIO CONTROL
TD	AIRBORNE ANNOUNCING
TQ	BEACON
TP	TRANSMITTER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



WIRE HARNESS NOTES

- USE M22759/16 OR M27500 TEFZEL AIRCRAFT WIRE. CONTACT VAN'S ABOUT USING OTHER EQUIV.
- USE MIL-I-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-WRAPPS 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.
- CANBUS REQUIRES USE OF GIGAFLIGHT 120 OHM CANBUS CABLE

ELECTRICAL SYSTEM BENCH TEST PROCEDURE

Avionics Group

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

Audio Group

1. Configure COM radio in accordance with "GTR 205x Internal Presets"
2. Check Pilot Headset Jack
3. Check Pilot Mic Jack for Xmit
4. Check Co-Pilot Headset Jack
5. Check Co-Pilot Mic Jack for Xmit
6. 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
1. Check Pilot TX Button
 2. Check Pilot Trim Buttons (Both Directions)
 - a. Verify proper trim direction movement on screen indicator and servo with input
 3. Check Co-Pilot TX Button
 4. Check Co-Pilot Trim Buttons (Both Directions)
 - a. Verify proper trim direction movement on screen indicator and servo with input
 5. Check function of AP disconnect switch near throttle.
 6. Check Pilot AP Disconnect Switch
 7. Check Co-Pilot AP Disconnect Switch
 8. Check Pilot COM Freq Swap
 9. Check Co-Pilot Freq Swap
 10. Check Dimmer (Note PCB portion will be checked during AV-60000 Check)
 - a. Turn on all switches. Check that all lighted switches lights turn on and dim. (Ignore wires going to cabin light.)
 11. Check canopy latch switch
 12. Check flap motor function both directions
 13. Check for power output at USB connectors / Power Outlet

Wing Group

1. Check Stall Warning
2. Check NAV/Strobe Lights
3. Check Landing Lights (Both if applicable)
4. Check Wig Wag Function

IS Engine Group

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

GTR 205x 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 205x PRESET NOTES:
- ALL SETTINGS NOT DEFINED BY THIS DRAWING ARE ACCEPTABLE AS CONFIGURED FROM MANUFACTURER.
 - THE ABOVE SETTINGS CORRESPOND TO SOFTWARE SYS 2.60.



VAN'S AIRCRAFT, INC. 14401 NE KEIL RD. NE AURORA, OR 97002 USA

ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18

DRAWN BY: RIAN JOHNSON
TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

UNITS: INCHES
SCALE: NONE

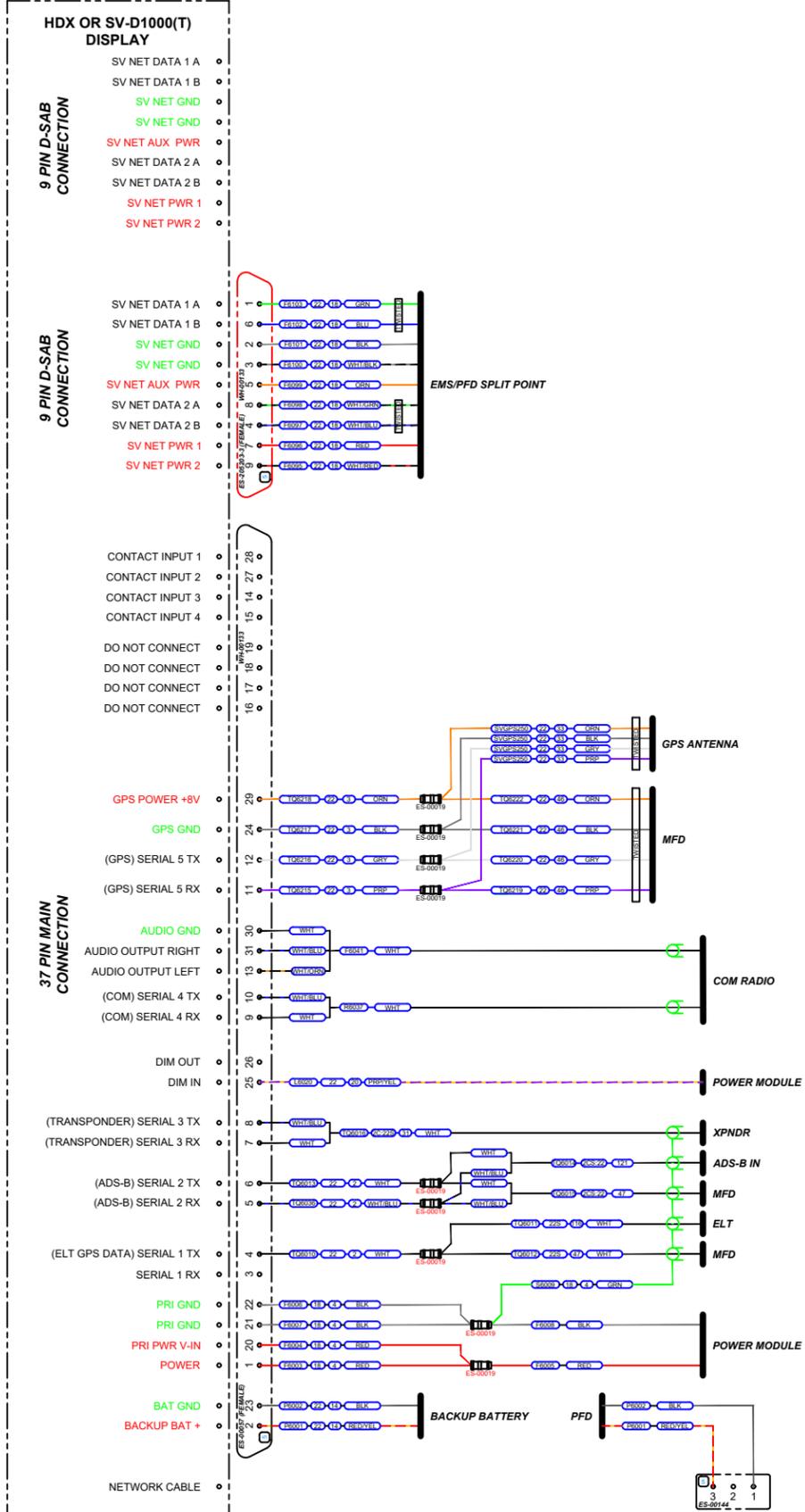
WH-00133-3

PAGE: 1 OF 11

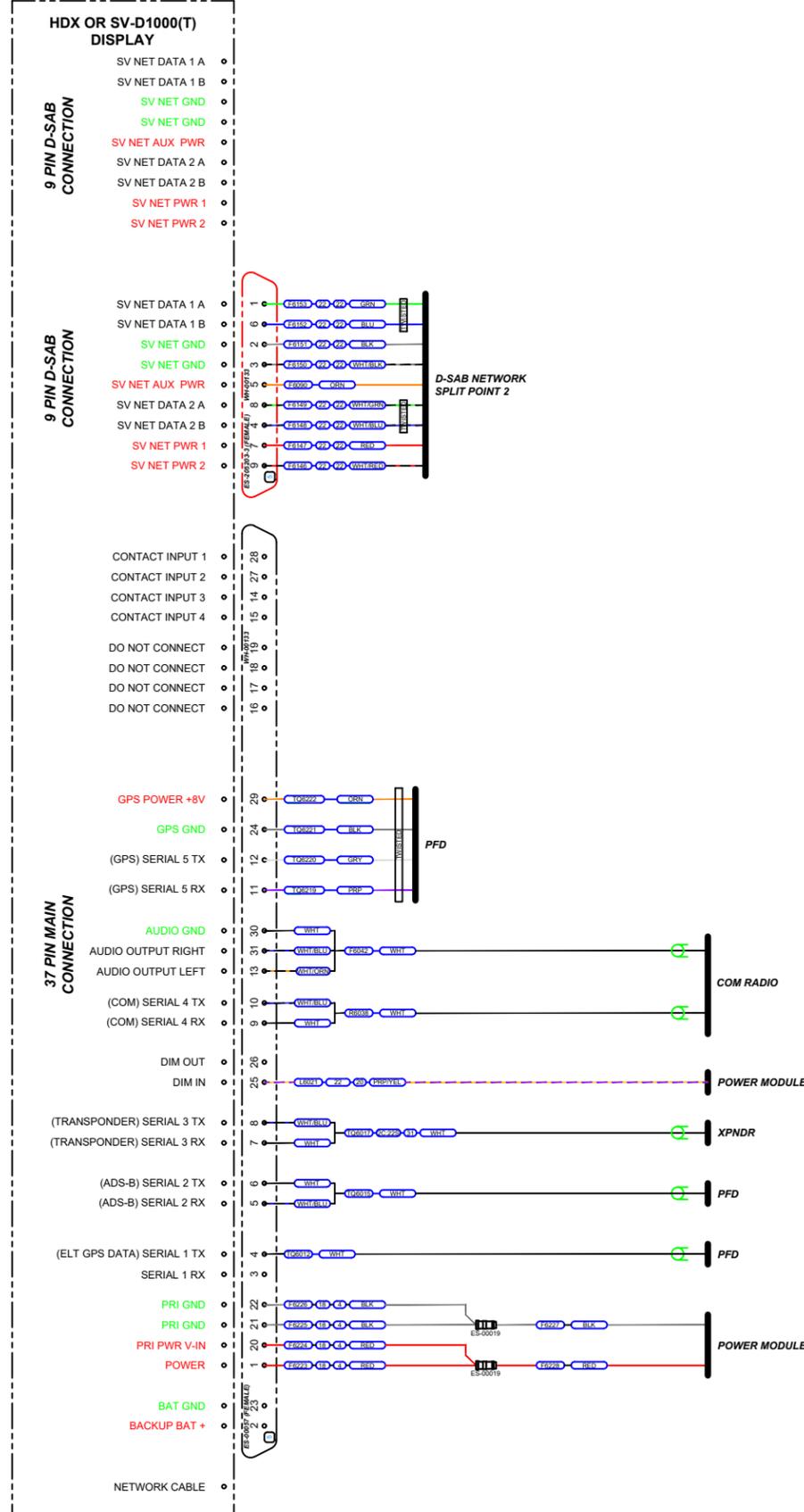
PATHFILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG

C-SIZE ORIGINAL

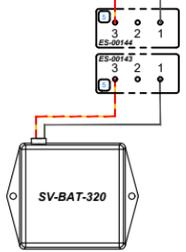
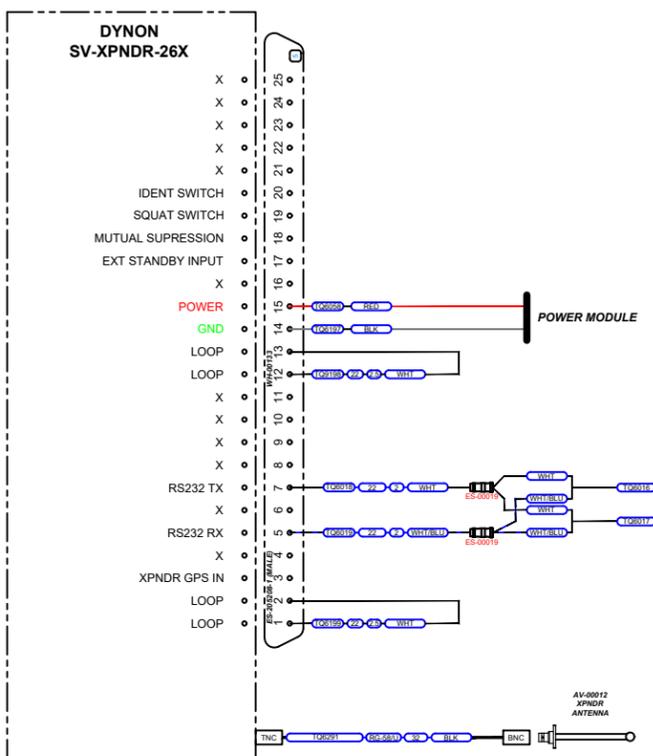
PFD



MFD



XPNDR



VAN'S AIRCRAFT, INC. 14401 NE KEIL RD. NE
AURORA, OR 97002 USA

**ROTAX 912iS SKYVIEW
ELECTRICAL SYSTEM**

DATE DRAWN: 06/11/18

DRAWN BY: RIAN JOHNSON
TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

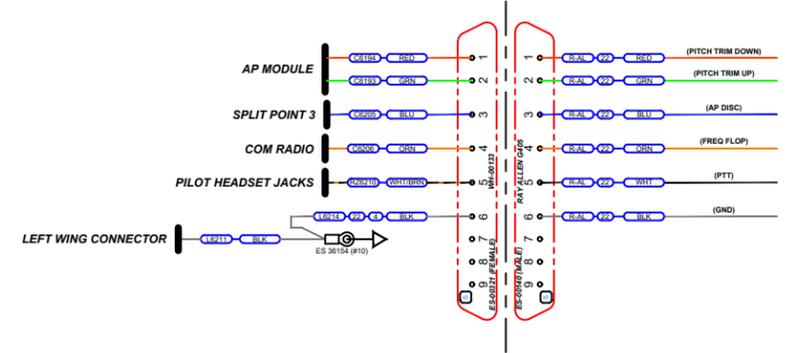
UNITS: INCHES
SCALE: NONE

WH-00133-3
PAGE: 2 OF 11

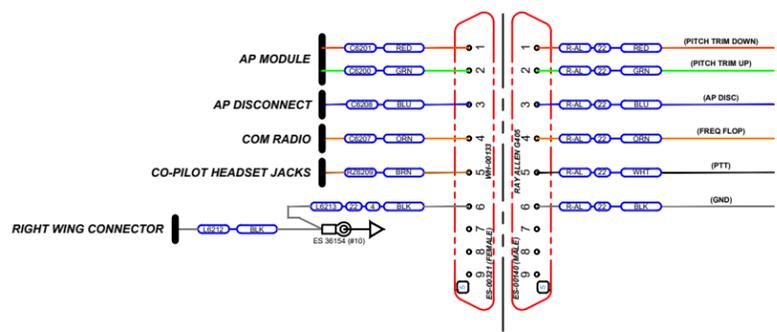
PATH/FILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG

C-SIZE ORIGINAL

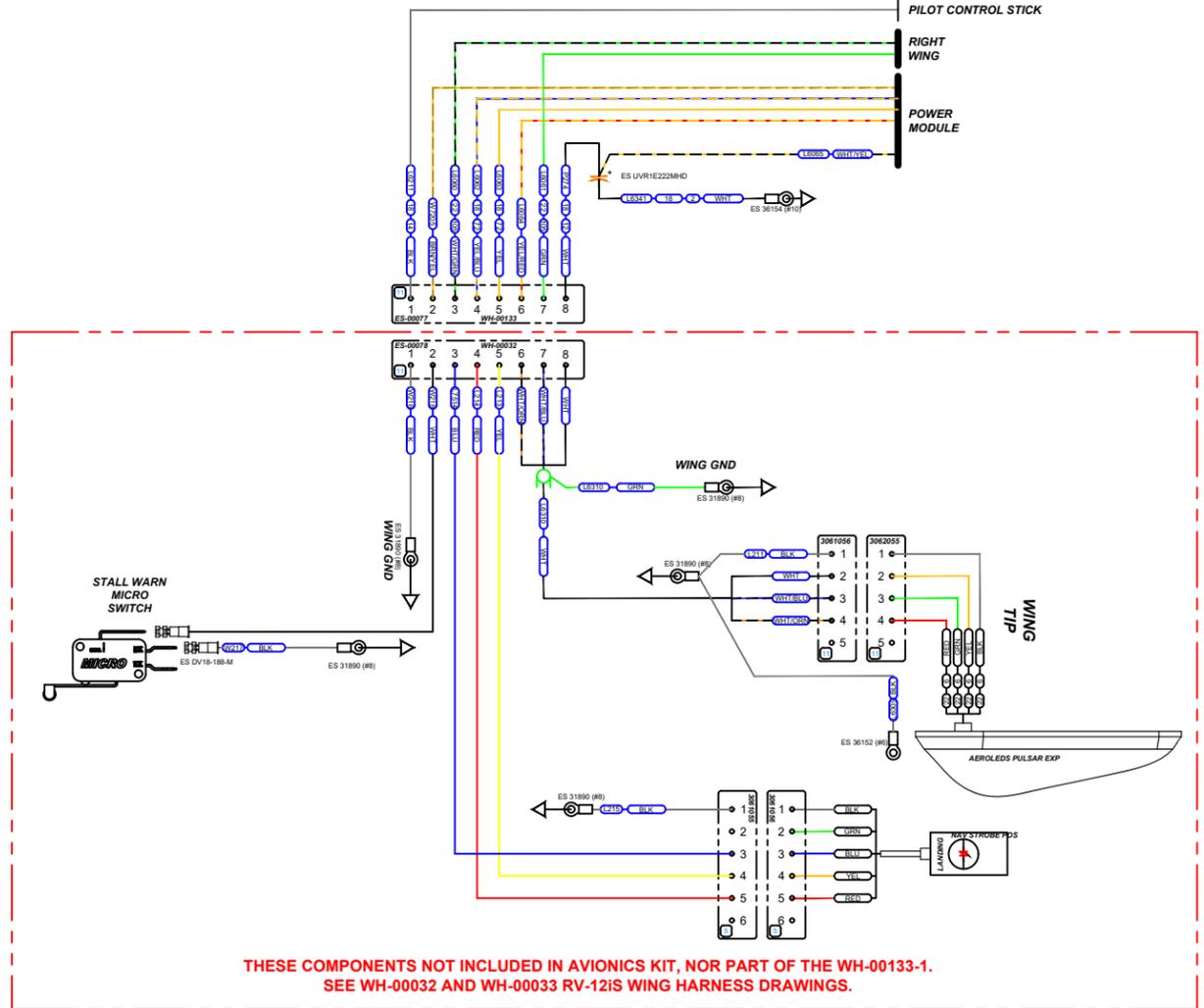
PILOT STICK GRIP



CO-PILOT STICK GRIP

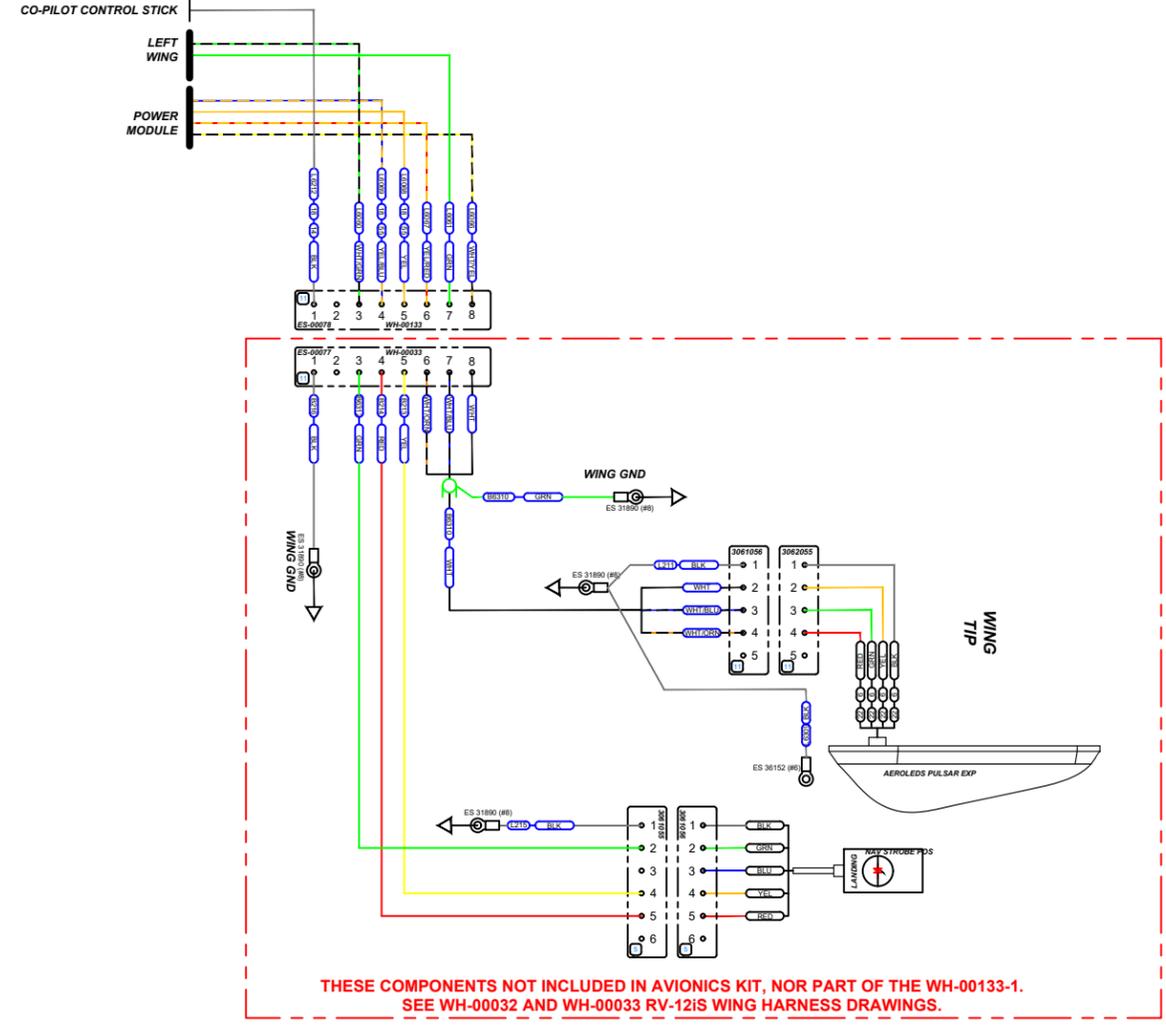


LEFT WING CONNECTOR



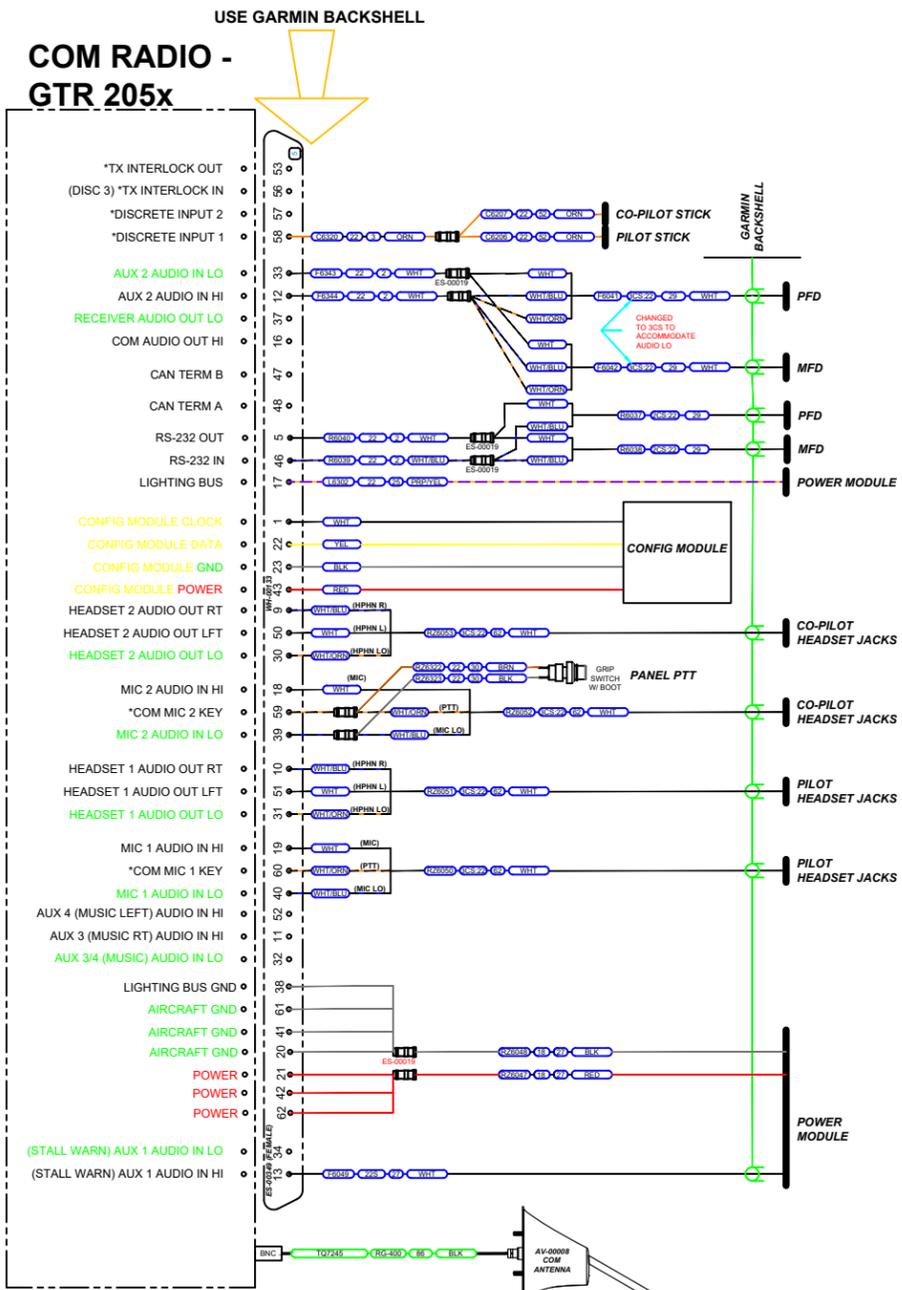
THESE COMPONENTS NOT INCLUDED IN AVIONICS KIT, NOR PART OF THE WH-00133-1.
SEE WH-00032 AND WH-00033 RV-12IS WING HARNESS DRAWINGS.

RIGHT WING CONNECTOR

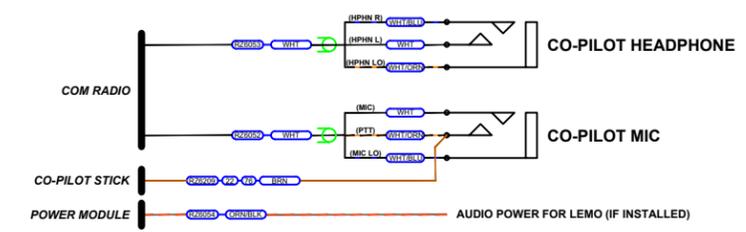


THESE COMPONENTS NOT INCLUDED IN AVIONICS KIT, NOR PART OF THE WH-00133-1.
SEE WH-00032 AND WH-00033 RV-12IS WING HARNESS DRAWINGS.

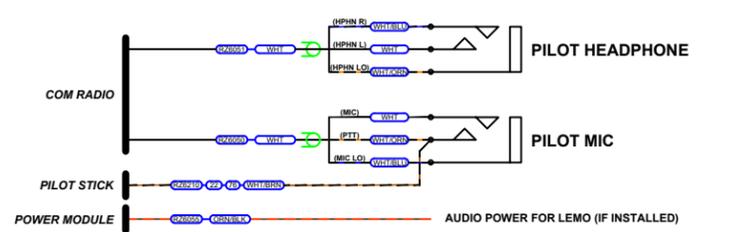
	VAN'S AIRCRAFT, INC.		14401 NE KEIL RD. NE AURORA, OR 97002 USA
	ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM		
DATE DRAWN: 06/11/18	UNITS: INCHES	WH-00133-3	
DRAWN BY: RIAN JOHNSON TOLERANCES: NONE (UNLESS OTHERWISE SPECIFIED)	SCALE: NONE	PAGE: 3 OF 11	
PATHFILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG			C-SIZE ORIGINAL



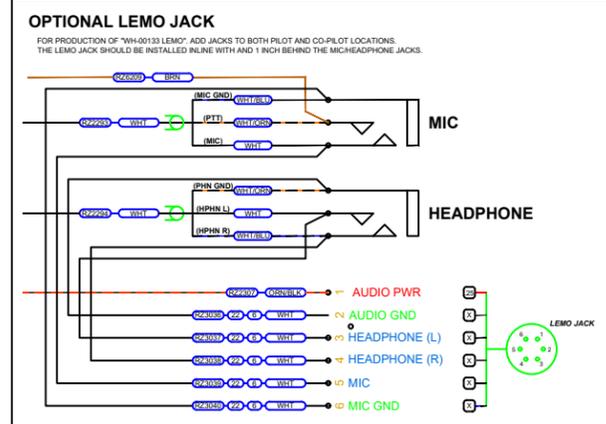
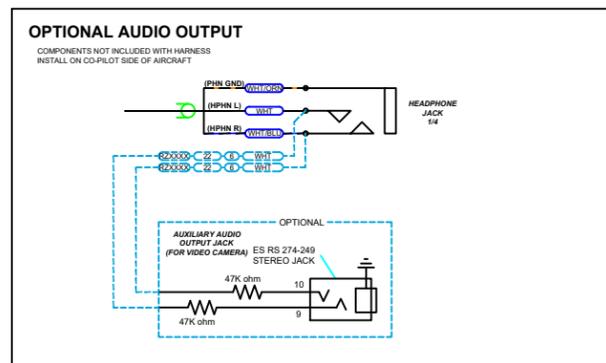
CO-PILOT HEADSET JACKS



PILOT HEADSET JACKS



OAT PROBE



VAN'S AIRCRAFT, INC. 14401 NE KEIL RD. NE
AURORA, OR 97002 USA

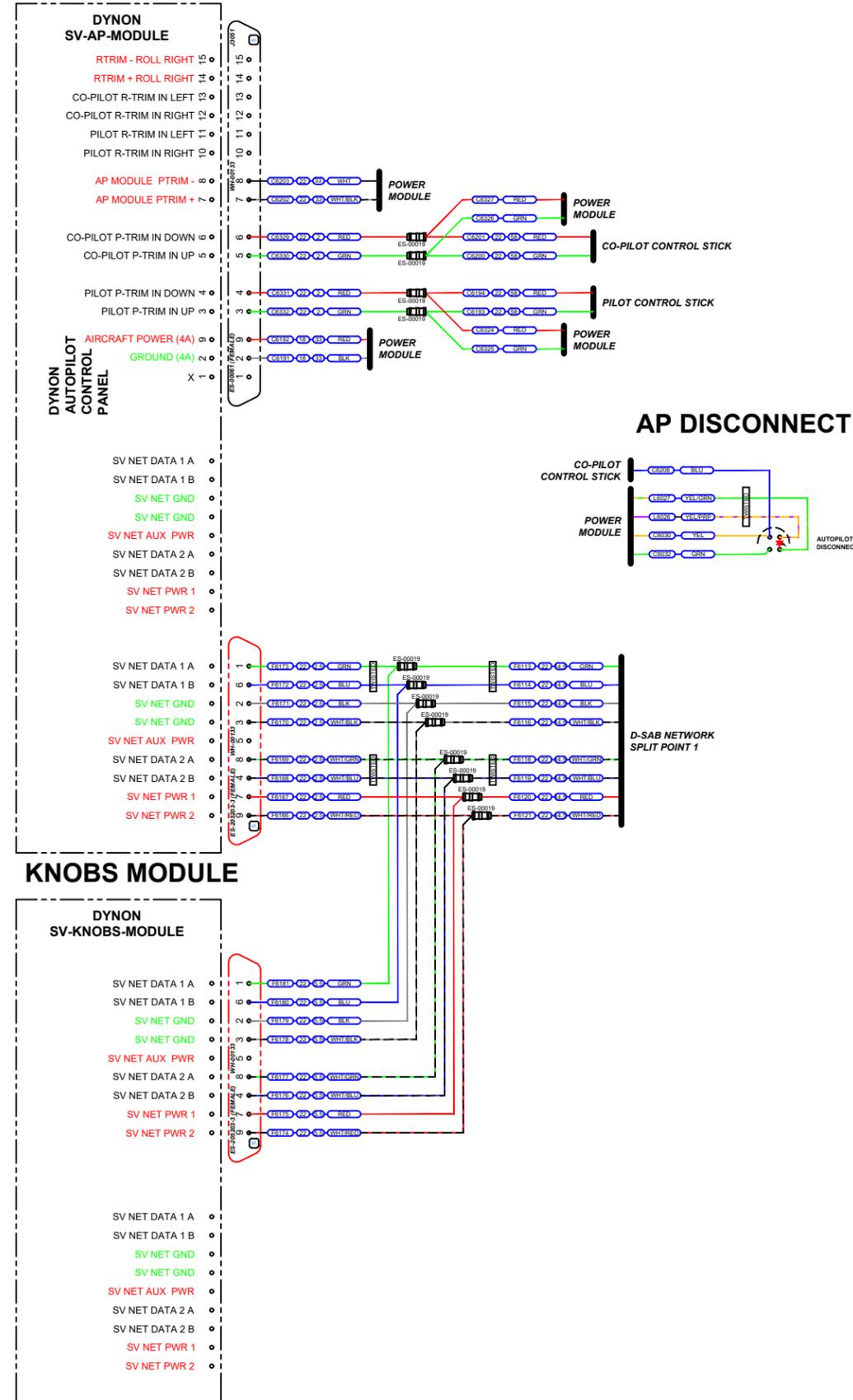
ROTAX 912iS SKYVIEW
ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18
DRAWN BY: RIAN JOHNSON
TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

UNITS: INCHES
SCALE: NONE
PAGE: 4 OF 11

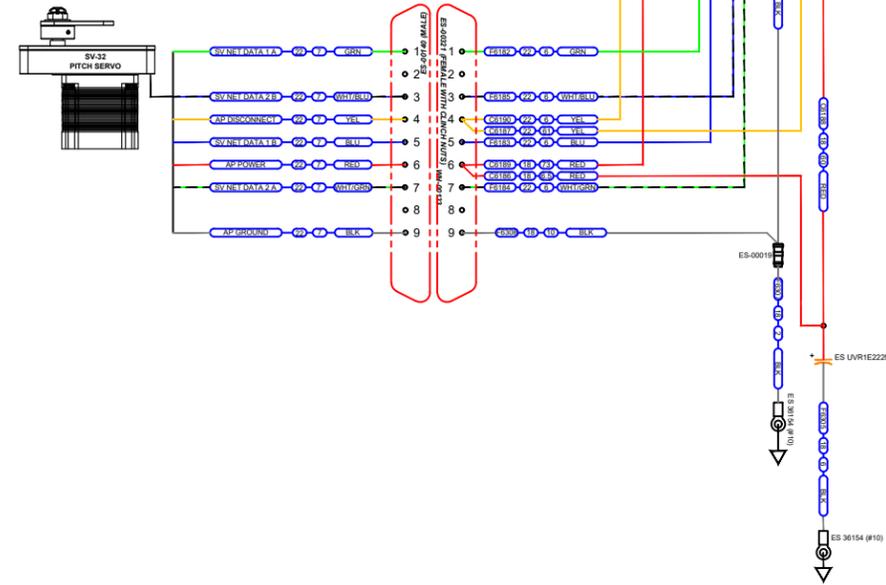
WH-00133-3

AP MODULE



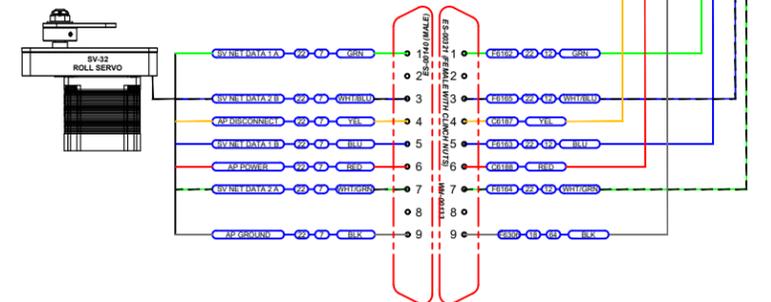
AUTOPILOT PITCH SERVO

DYNON SV-32

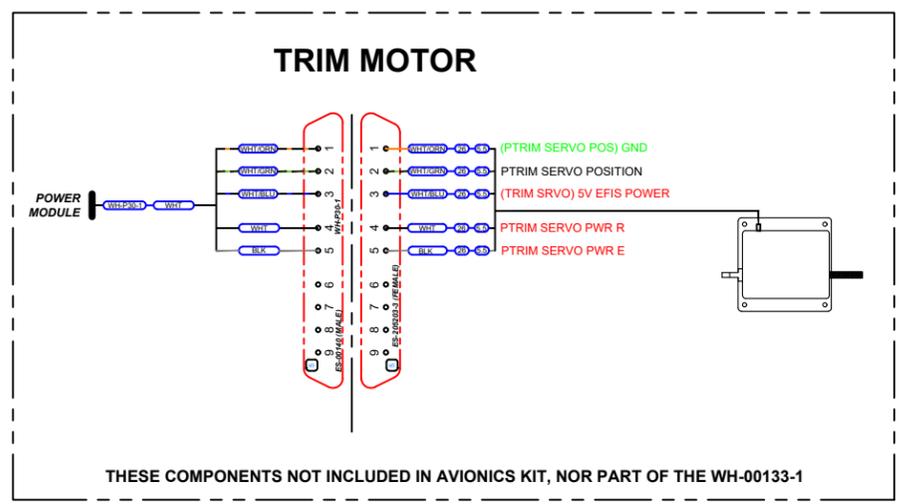
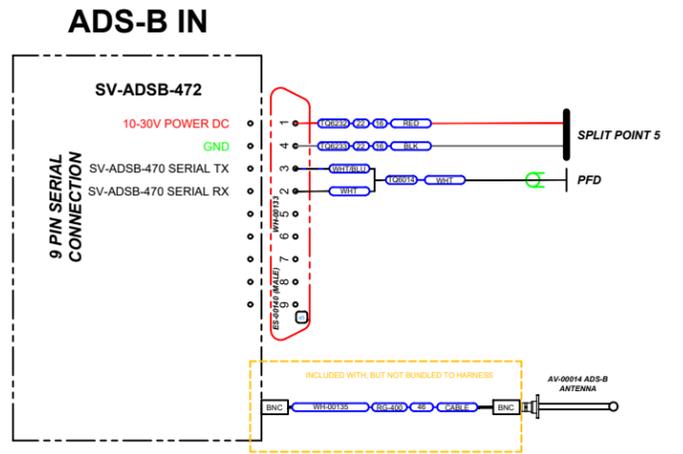
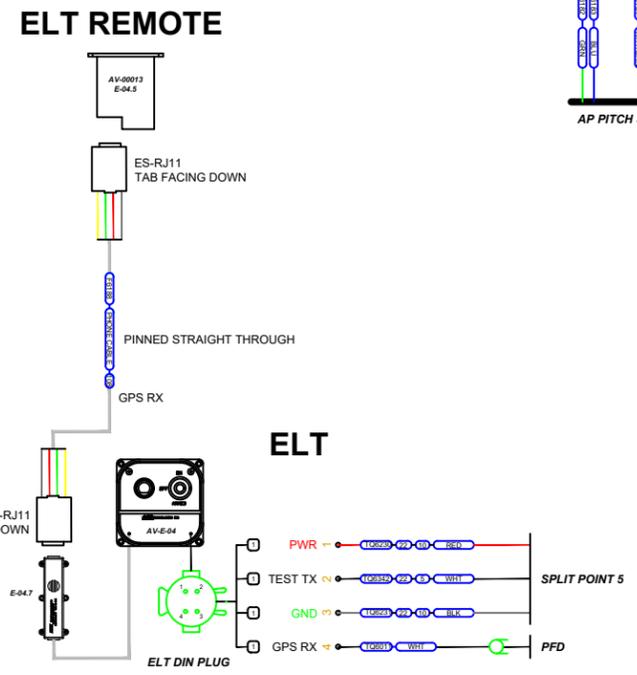
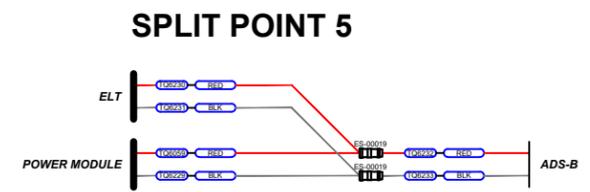
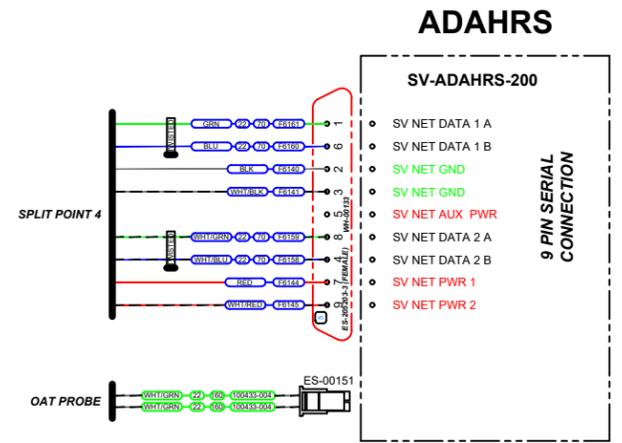
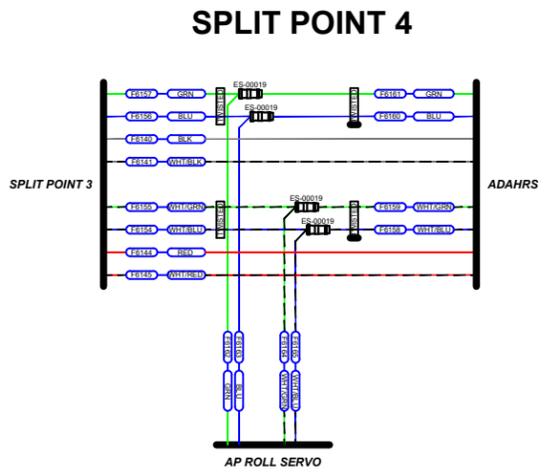
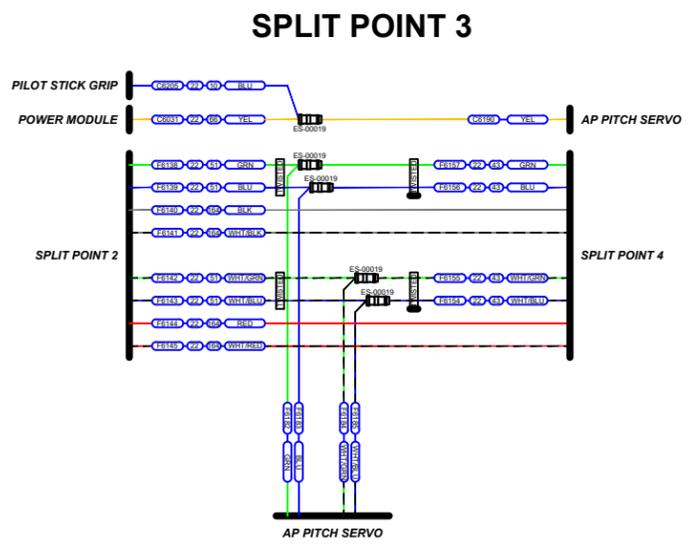
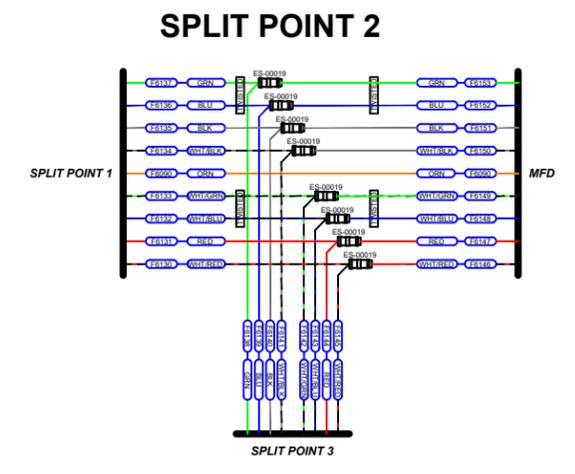
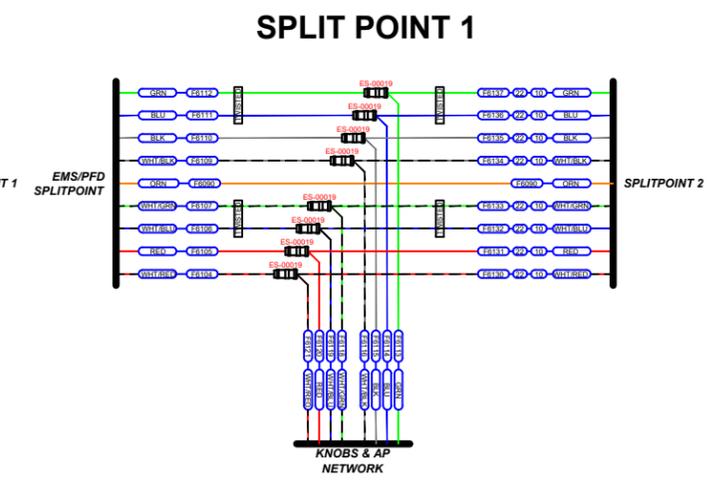
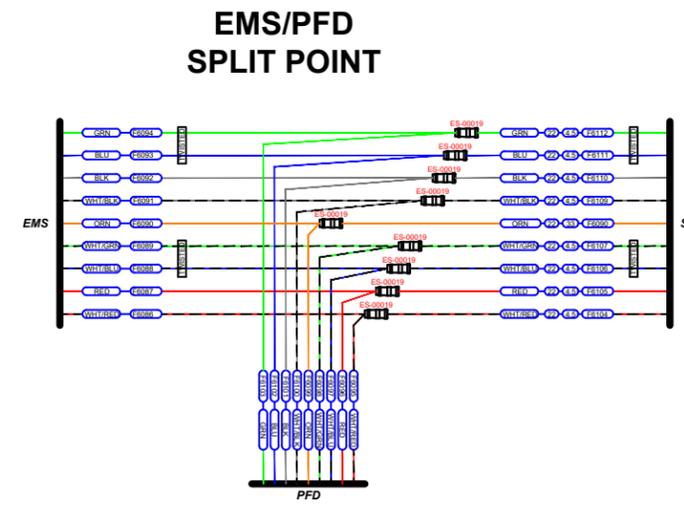
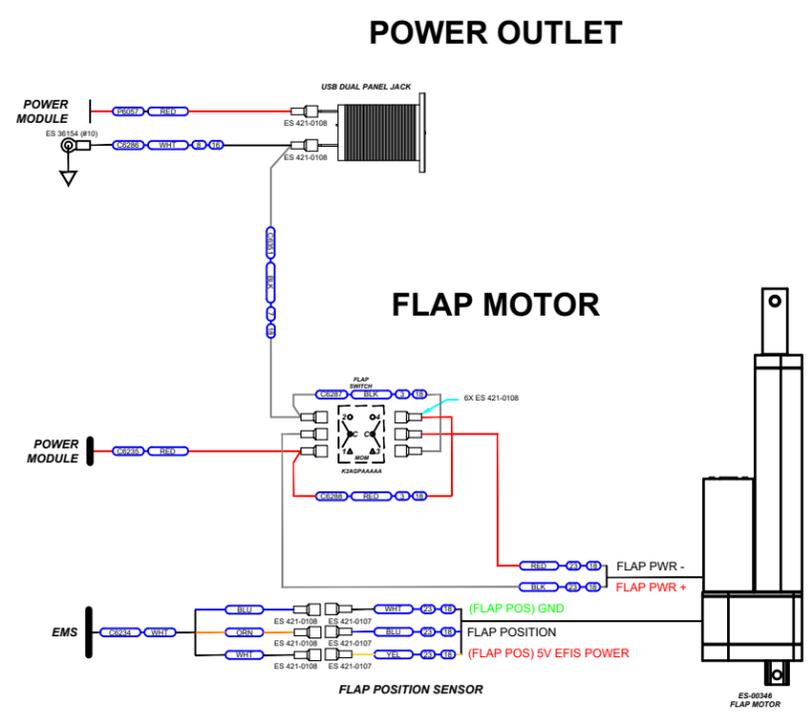


AUTOPILOT ROLL SERVO

DYNON SV-32



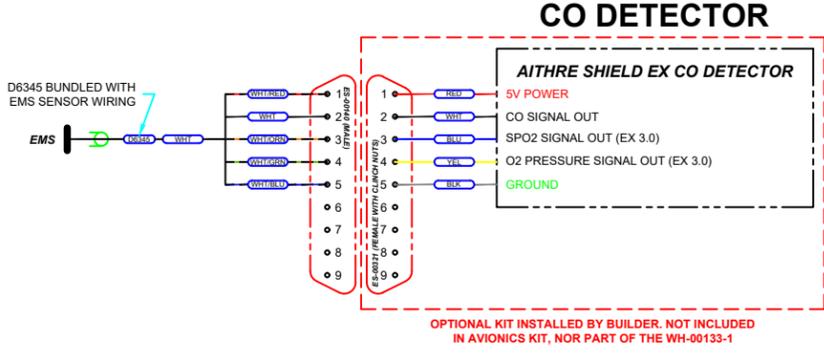
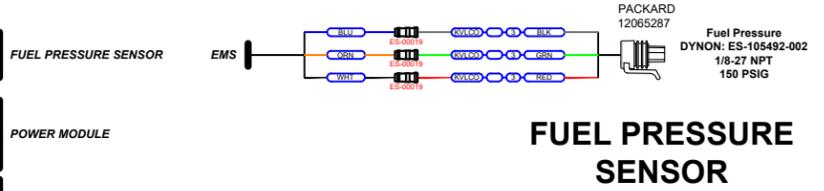
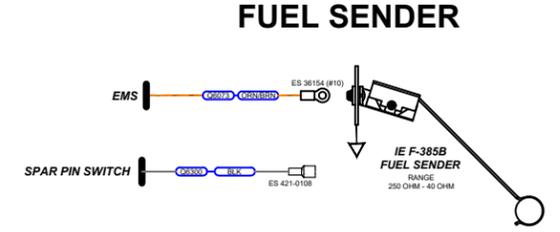
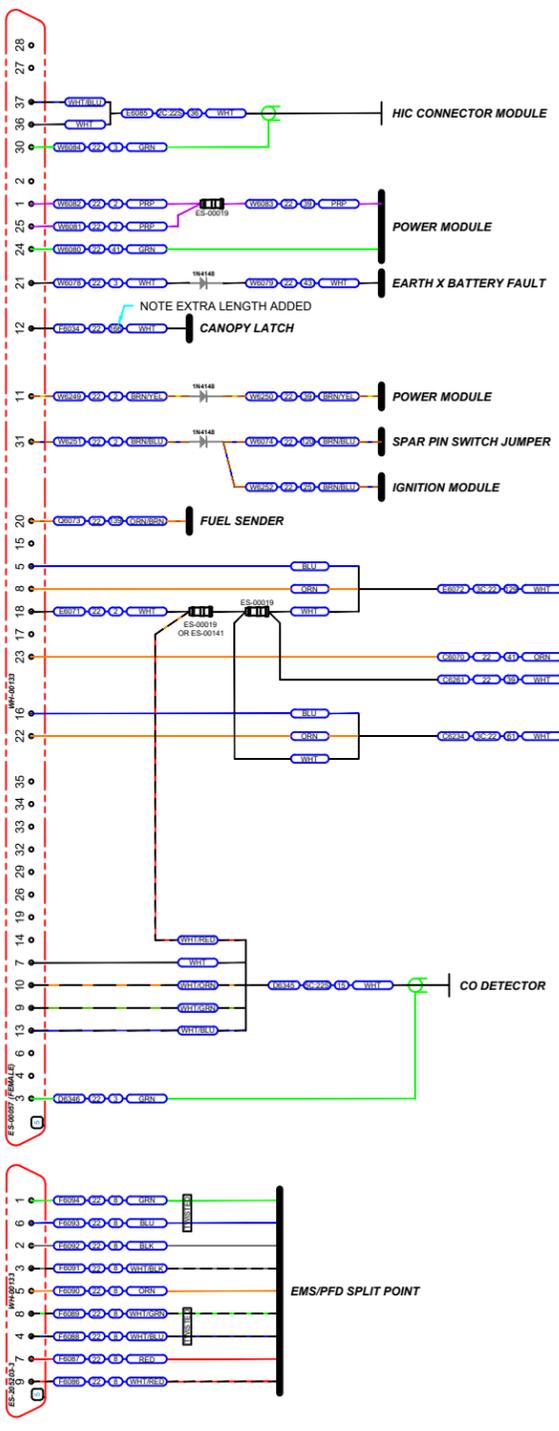
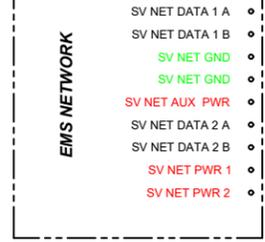
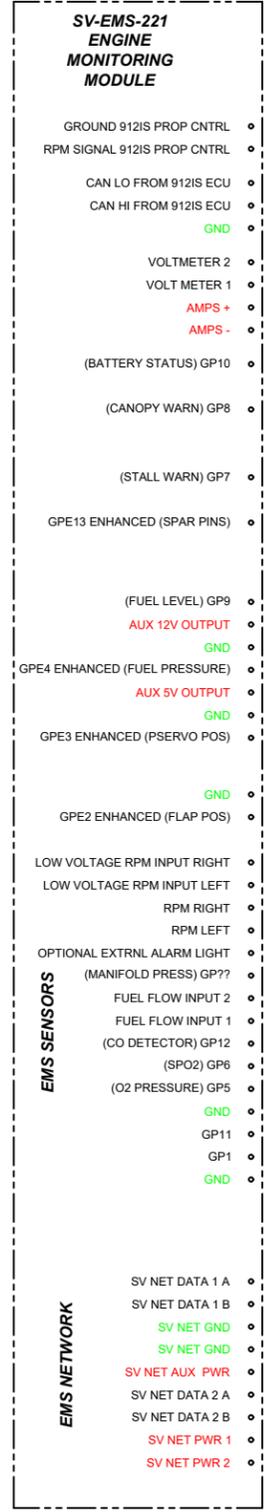
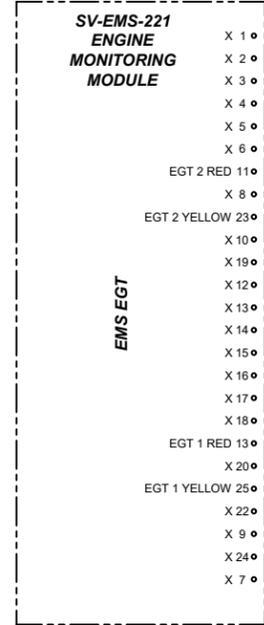
	VAN'S AIRCRAFT, INC.		14401 NE KEIL RD. NE AURORA, OR 97002 USA
	ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM		
DATE DRAWN: 06/11/18	UNITS: INCHES	WH-00133-3	
DRAWN BY: RIAN JOHNSON TOLERANCES: NONE (UNLESS OTHERWISE SPECIFIED)	SCALE: NONE	PAGE: 5 OF 11	
PATH/FILENAME: O:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG			C-SIZE ORIGINAL



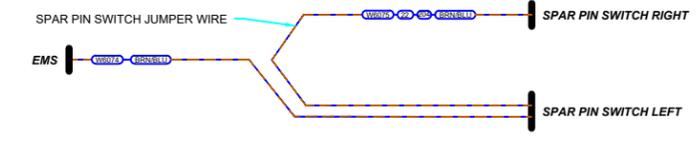
	VAN'S AIRCRAFT, INC. 14401 NE KEIL RD. NE AURORA, OR 97002 USA	
	ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM	
DATE DRAWN: 06/11/18 DRAWN BY: RIAN JOHNSON TOLERANCES: NONE (UNLESS OTHERWISE SPECIFIED)	UNITS: INCHES SCALE: NONE	WH-00133-3 PAGE: 6 OF 11
PATHFILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG		C-SIZE ORIGINAL

EMS

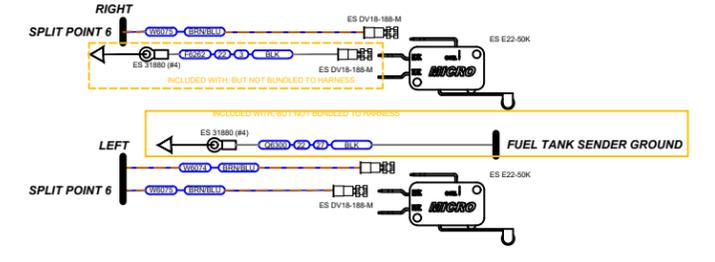
EMS



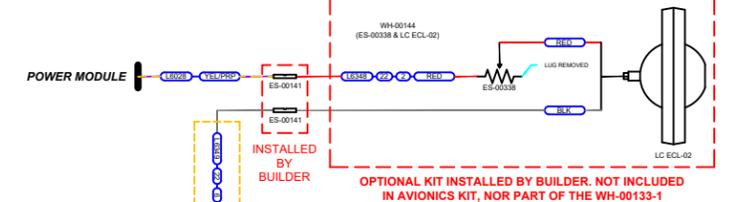
SPLIT POINT 6



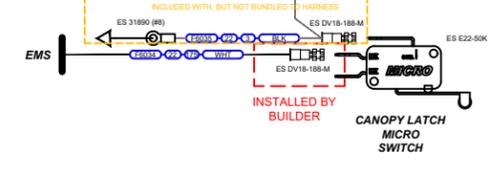
SPAR PIN SWITCHES



CABIN LIGHT & DIMMER



CANOPY SWITCH



VAN'S AIRCRAFT, INC.

14401 NE KEIL RD. NE
AURORA, OR
97002 USA

ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18

DRAWN BY: RIAN JOHNSON

TOLERANCES: NONE
(UNLESS OTHERWISE SPECIFIED)

PATH:FILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG

UNITS: INCHES

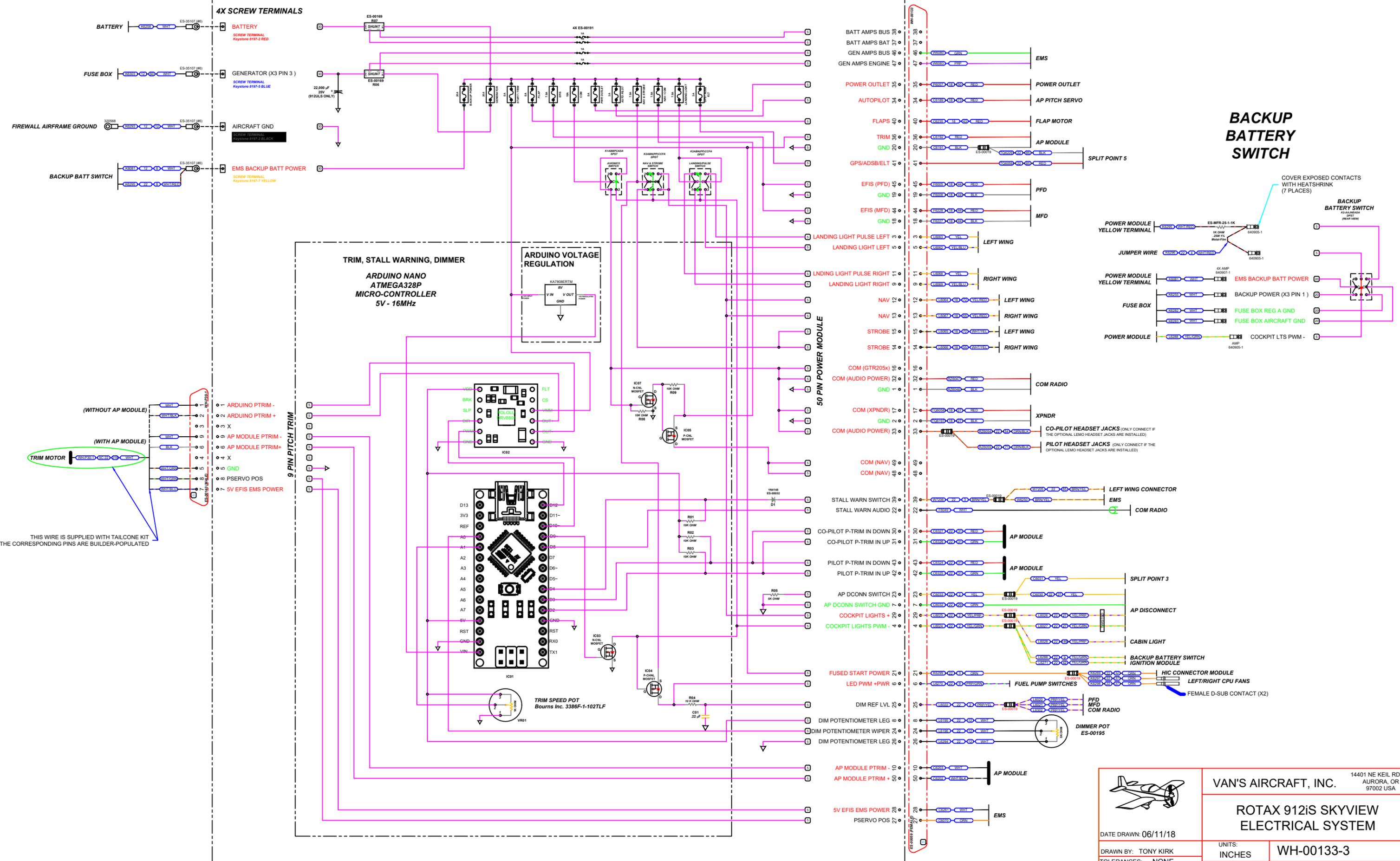
SCALE: NONE

WH-00133-3

PAGE: 7 OF 11

C-SIZE ORIGINAL

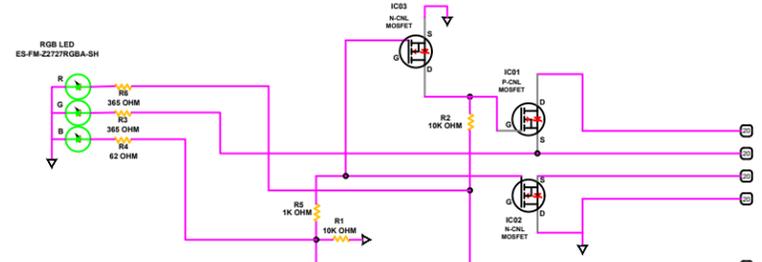
AV-60000 POWER MODULE iS-ULS PCB V3.4



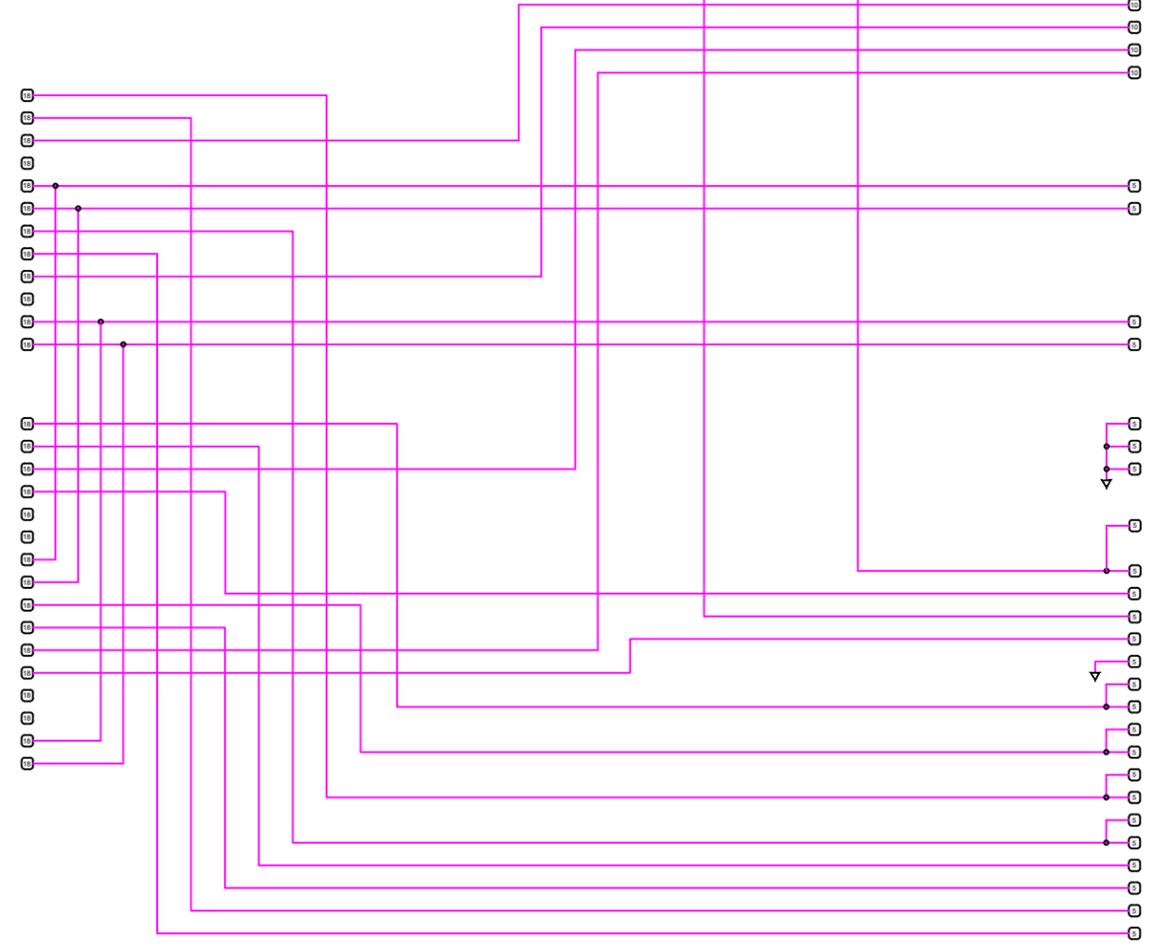
	VAN'S AIRCRAFT, INC.		14401 NE KEIL RD. NE AURORA, OR 97002 USA
	<h2>ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM</h2>		
DATE DRAWN: 06/11/18 DRAWN BY: TONY KIRK TOLERANCES: NONE (UNLESS OTHERWISE SPECIFIED)	UNITS: INCHES	WH-00133-3	PAGE: 8 OF 11
PATH/FILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912S SkyView (WH-00133-3).DWG			C-SIZE ORIGINAL

ES-6009-2 HIC CONNECTOR MODULE is PCB V3.5

Diagnostic LED Color Codes when Installed in Aircraft
EXPECTED PRE-START CONDITION
 SBB & FSP & Batt Bus Power (all high) = WHITE
EXPECTED POST-START CONDITION - After ~60 seconds with Engine Running & SBB "Start Computer" Timed Out
 FSP & Batt Bus Power (no SBB) = YELLOW
POSSIBLE PRE-START FAULT COLOR CODES
 FSP Only (no SBB & no Batt Bus Power) = Red
 SBB Only (no FSP & no Batt Bus Power) = Blue
 Batt Bus Power Only (no SBB & no FSP) = Green
 FSP & Batt Bus Power Only (no SBB) = Yellow
 SBB & Batt Bus Power (no FSP) = Teal
 FSP = SBB (no Batt Bus Power) = Magenta
 Batt Bus Power = +12v from X3 Connector Pin3
 FSP = Fused Start Power, +12v from DB25 Pin 6 & 7
 SBB = Start Button Bypass, +5v from DB25 Pin 3

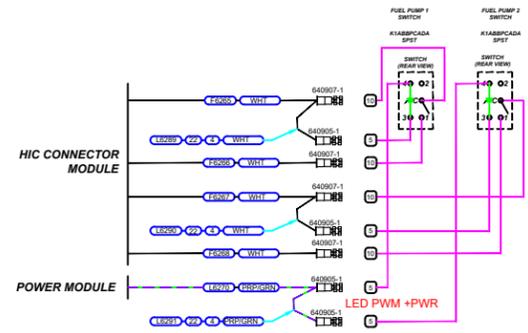


- HIC CONNECTOR A**
19428-0015 OR 19428-0031
 - 1 LANE SEL SW A 1
 - 2 SUPP WARN LAMP A
 - 3 SIG FUEL PUMP 1
 - 4 CAN GND 1 A
 - 5 CAN LO 1 A
 - 6 CAN HI 1 A
 - 7 LANE SEL SW A 2
 - 8 WARN LAMP A
 - 9 GND FUEL PUMP 1
 - 10 CAN GND 2 A
 - 11 CAN LO 2 A
 - 12 CAN HI 2 A
- HIC CONNECTOR B**
19428-0016 OR 19428-0032
 - 1 LANE SEL SW B 1
 - 2 SUPP WARN LAMP B
 - 3 SIG FUEL PUMP 2
 - 4 CONN STARTER RELAY SW
 - 5 X
 - 6 CAN GND 1 B
 - 7 CAN LO 1 B
 - 8 CAN HI 1 B
 - 9 LANE SEL SW B 2
 - 10 WARN LAMP B
 - 11 GND FUEL PUMP 2
 - 12 SUPP START SWITCH
 - 13 X
 - 14 CAN GND 2 B
 - 15 CAN LO 2 B
 - 16 CAN HI 2 B

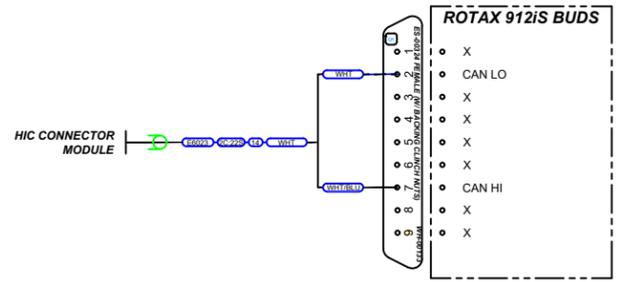


- START POWER POS 2
- START POWER POS 1
- START POWER GND 3
- START POWER GND 4
- SIG FUEL PUMP 1
- GND FUEL PUMP 1
- SIG FUEL PUMP 2
- GND FUEL PUMP 2
- CAN LO 912iS EMS
- CAN HI 912iS EMS
- CAN LO 912iS MAINT
- CAN HI 912iS MAINT
- GND
- GND
- GND
- FUSED START POWER
- FUSED START POWER
- CONN STARTER RELAY SW
- START BUTTON BYPASS
- SUPP START SWITCH
- GND
- LANE SEL SW B 1
- LANE SEL SW B 1
- LANE SEL SW B 2
- LANE SEL SW B 2
- LANE SEL SW A 1
- LANE SEL SW A 1
- LANE SEL SW A 2
- LANE SEL SW A 2
- SUPP WARN LAMP B
- WARN LAMP B
- SUPP WARN LAMP A
- WARN LAMP A

FUEL PUMP SWITCHES



912iS MAINT PORT

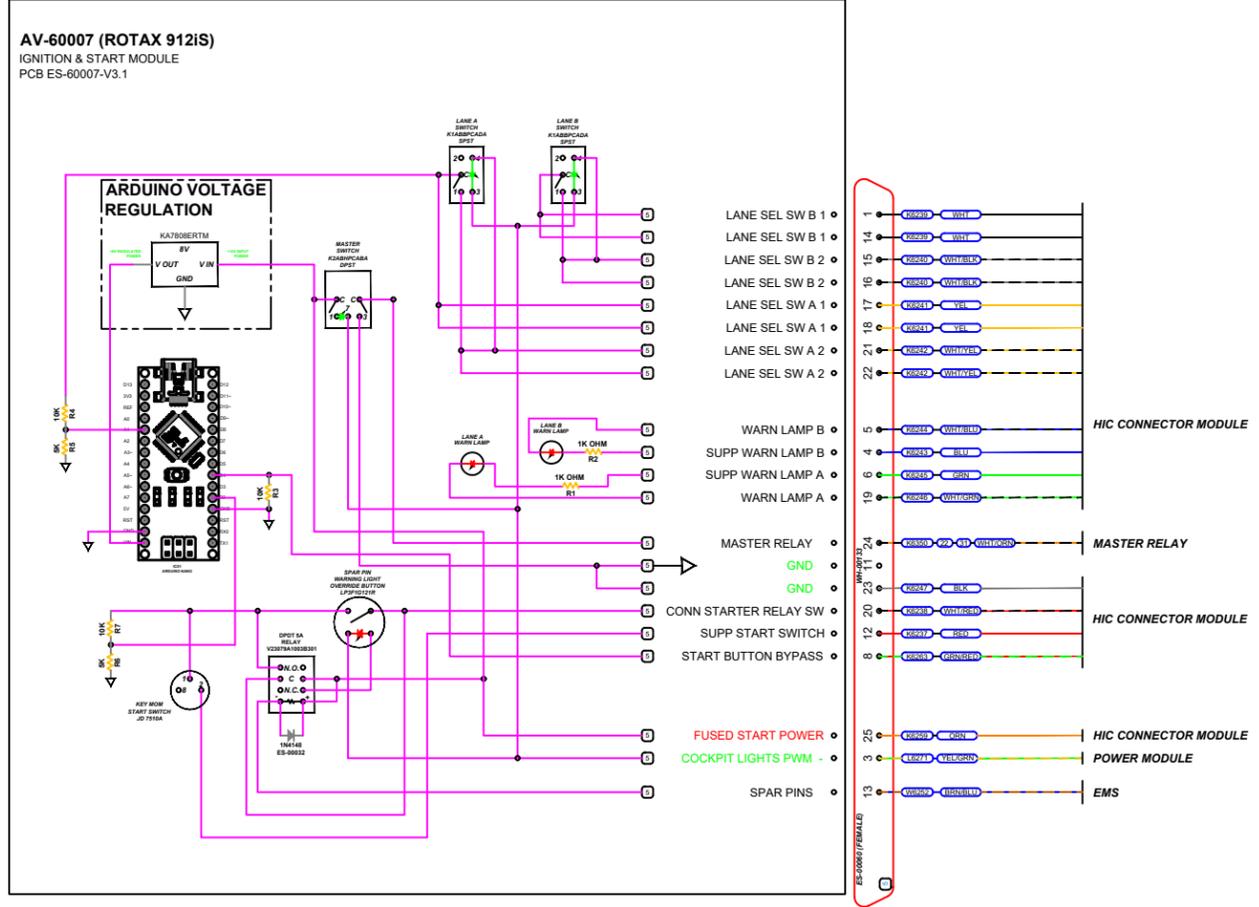


VAN'S AIRCRAFT, INC. 14401 NE KEIL RD. NE AURORA, OR 97002 USA

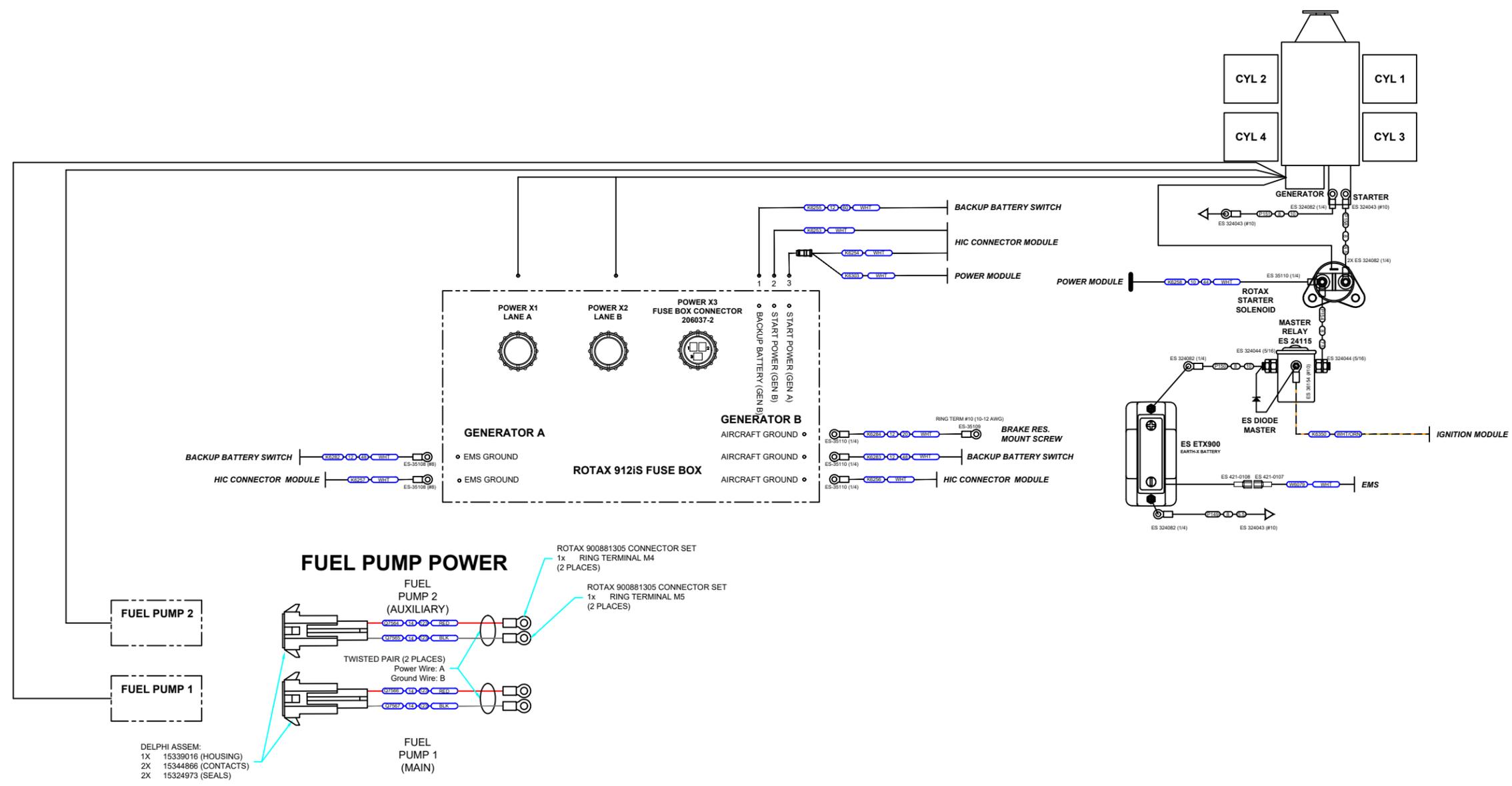
ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM

DATE DRAWN: 06/11/18
 DRAWN BY: TONY KIRK
 TOLERANCES: NONE
 (UNLESS OTHERWISE SPECIFIED)

UNITS: INCHES
 SCALE: NONE
 WH-00133-3
 PAGE: 9 OF 11



	VAN'S AIRCRAFT, INC.		14401 NE KEIL RD. NE AURORA, OR 97002 USA
	ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM		
DATE DRAWN: 06/11/18	UNITS: INCHES	WH-00133-3	
DRAWN BY: TONY KIRK TOLERANCES: NONE (UNLESS OTHERWISE SPECIFIED)	SCALE: NONE	PAGE: 10 OF 11	
PATH/FILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG			C-SIZE ORIGINAL



	VAN'S AIRCRAFT, INC. 14401 NE KEIL RD. NE AURORA, OR 97002 USA	
	ROTAX 912iS SKYVIEW ELECTRICAL SYSTEM	
DATE DRAWN: 06/11/18 DRAWN BY: RIAN JOHNSON TOLERANCES: NONE (UNLESS OTHERWISE SPECIFIED)	UNITS: INCHES SCALE: NONE	WH-00133-3 PAGE: 11 OF 11
PATH:FILENAME: Q:\Components\Electrical\Wiring Harness\WH-00133\Electrical System 912iS SkyView (WH-00133-3).DWG		C-SIZE ORIGINAL