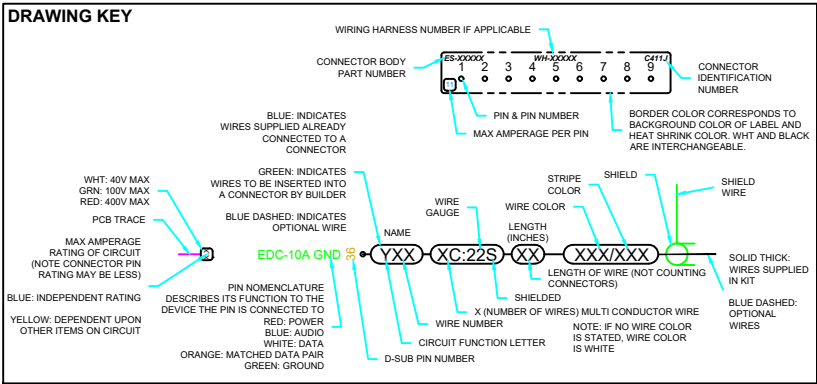


CIRCUIT LETTER FUNCTION	
LETTER	CIRCUITS
C	CONTROL SURFACE
D	INSTRUMENT
E	ENGINE INSTRUMENT
F	FLIGHT INSTRUMENTS
H	HEATING VENTILATING
J	IGNITION
K	ENGINE CONTROL
L	LIGHTING
P	POWER CONTROL
Q	FUEL
R	RADIO
RZ	HEADPHONE
T	SPECIAL ELECTRONIC
TC	RADIO CONTROL
TD	AIRBORNE ANNOUNCING
TP	BEACON
TQ	TRANSMITOR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



ELECTRICAL SYSTEM BENCH TEST PROCEDURE

Avionics Group

- ___ Check PFD & MFD Power On
- ___ Install latest software and settings per the readme files (applicable portions) on the Van's Web Site
 - ___ Setup Xpndr Hex Code
 - ___ Setup AP servos if installed
- ___ Check PFD & MFD recognize all LRU's
- ___ Check Xpndr 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

- ___ Configure GTN 650Xi in accordance with "GTN 650Xi 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

GARMIN GTN 650Xi INTERNAL PRESETS

AIRINC 429 CONFIGURATION

- | | | |
|--------------------|-----|---------------|
| - AIRINC 429 IN 1 | LOW | EFIS FORMAT 2 |
| - AIRINC 429 IN 2 | LOW | OFF |
| - AIRINC 429 OUT 1 | LOW | GARMIN 429 |
| - AIRINC 429 OUT 2 | LOW | OFF |
| - SDI | | LNAV 1 |

RS-232 CONFIGURATION (CHANNEL, INPUT, OUTPUT)

- | | | |
|------------|------------------|------------------|
| - RS-232 1 | MAPMX FORMAT 2 | MAPMX FORMAT 2 |
| - RS-232 2 | OFF | ADS-B+ FORMAT 1 |
| - RS-232 3 | OFF | OFF |
| - RS-232 4 | CONNECT FORMAT 2 | CONNEXT FORMAT 2 |

MAIN SYSTEM CONFIGURATION

- | | |
|-----------------------------|---------------------|
| - AIRFRAME TYPE | FIXED-WING |
| - AIR/GROUND THRESHOLD | 30KT |
| - AIR/GROUND DISCRETE | ACTIVE FOR AIRBORNE |
| - GPS ANT. HEIGHT ABOVE GND | 4FT |
| - GPS SELECT | AUTO |
| - HEADING SRC INPUT | CONNECTED |
| - RADIO ALTIMETER INPUT | NOT CONNECTED |
| - ALTITUDE SRC INPUT | CONNECTED |
| - ENHANCED LIGHTING MODE | ENABLED |
| - CROSSFILL STATUS ALERT | DISABLED |
| - SYSTEM ID | GTN 1 |
| - DATABASE SYNC | PILOT CONTROL |
| - AIRSPACE LABELS | ENABLED |
| - CHECKLIST PAGE TITLE | CHECKLIST |
| - ENHANCED LIGHTING MODE | ENABLED |

COM CONFIGURATION

- | | |
|--------------------|----------|
| - COM RADIO | ENABLED |
| - COM SQUELCH MODE | BASIC |
| - COM RX SQUELCH | 0% |
| - MIC 1 GAIN | +12DB |
| - SIDETONE SOURCE | EXTERNAL |
| - SIDETONE VOLUME | +26DB |

VOR/LOC/GS CONFIGURATION

- | | |
|----------------------------|-------------------------|
| - NAV RADIO | ENABLED |
| - AIRINC 429 CONFIGURATION | TX LOW SDI VOR/ILS 1 |

DISCRETE INPUTS

- | | |
|------------|------------------|
| - J1001-36 | REMOTE GO AROUND |
|------------|------------------|

ENHANCED LIGHTING

SOURCE SETTINGS

- | | |
|------------------|-----------------|
| - DISPLAY SOURCE | LIGHTING BUS 1 |
| - KEYS SOURCE | LIGHTING BUS 1 |
| - LIGHTING BUS 1 | 14V DC 1 SEC |

DAY MODE OPERATION

DISPLAY

- | | |
|-----------------|---------|
| - MINIMUM LEVEL | 0.05% |
| - MAXIMUM LEVEL | 100.00% |

CONFIGURE CURVE

- | | |
|-------------------------|---------|
| - VERTEX 1 INPUT LEVEL | 1.00% |
| - VERTEX 1 OUTPUT LEVEL | 1.00% |
| - VERTEX 2 INPUT LEVEL | 8.00% |
| - VERTEX 2 OUTPUT LEVEL | 1.00% |
| - VERTEX 3 INPUT LEVEL | 88.00% |
| - VERTEX 3 OUTPUT LEVEL | 100.00% |
| - VERTEX 4 INPUT LEVEL | 99.00% |
| - VERTEX 4 OUTPUT LEVEL | 100.00% |

PHOTOCELL OVERRIDE

- | | |
|------------------------|-------|
| - PHOTOCELL TRANSITION | 10.0% |
|------------------------|-------|

KEYS

- | | |
|-----------------|---------|
| - MINIMUM LEVEL | 1.00% |
| - MAXIMUM LEVEL | 100.00% |



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ROTAX 912iS G3X NAVCOM
ELECTRICAL SYSTEM

DATE DRAWN: 04/06/2018

DRAWN BY: T. DE MAN

TOLERANCES: NONE

(UNLESS OTHERWISE SPECIFIED)

UNITS:

INCHES

SCALE: NONE

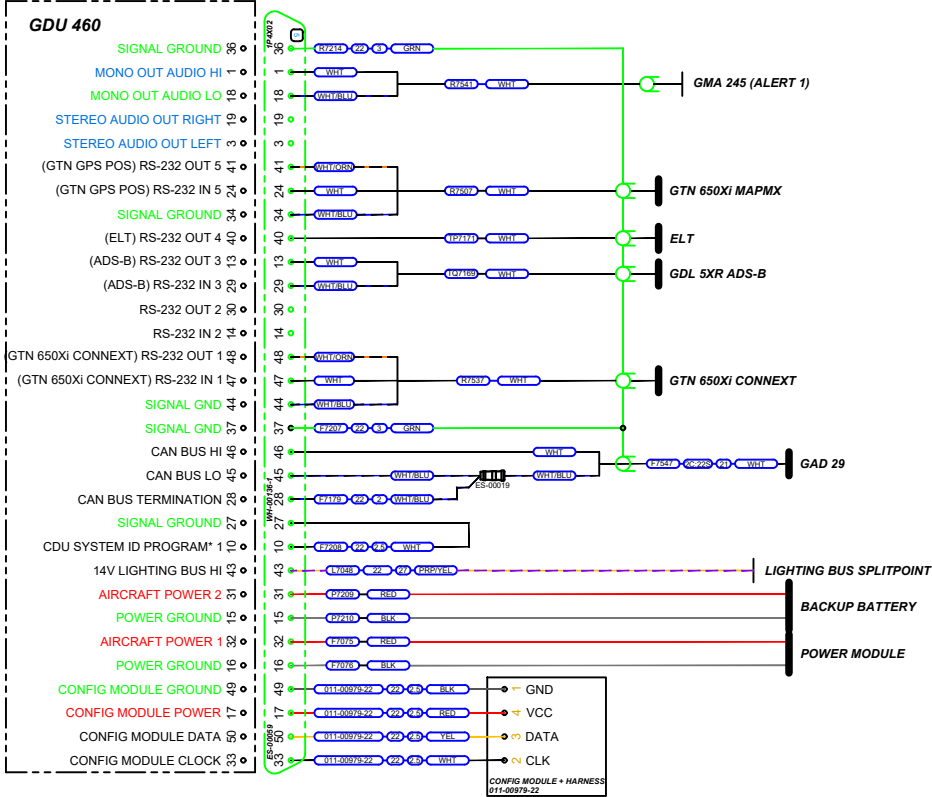
WH-00136-2

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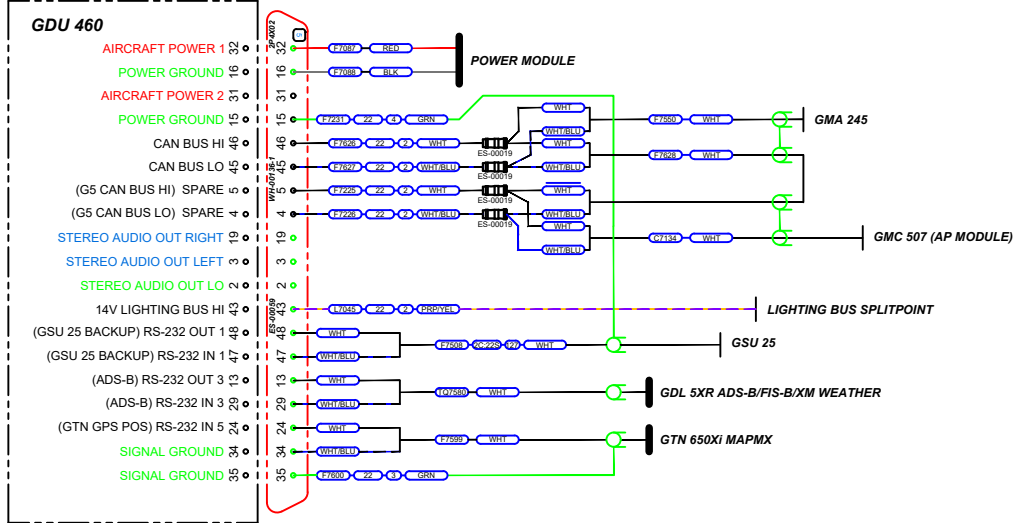
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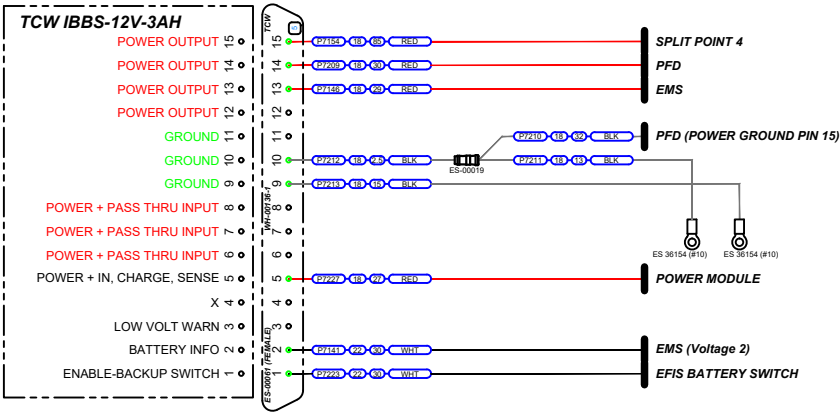
PFD



MFD



EFIS BATTERY



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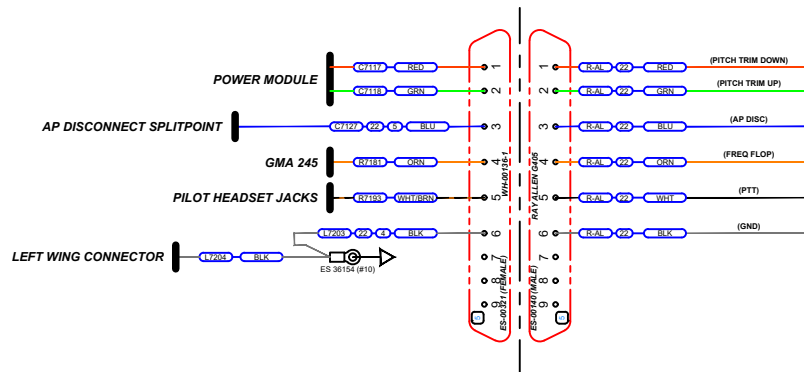
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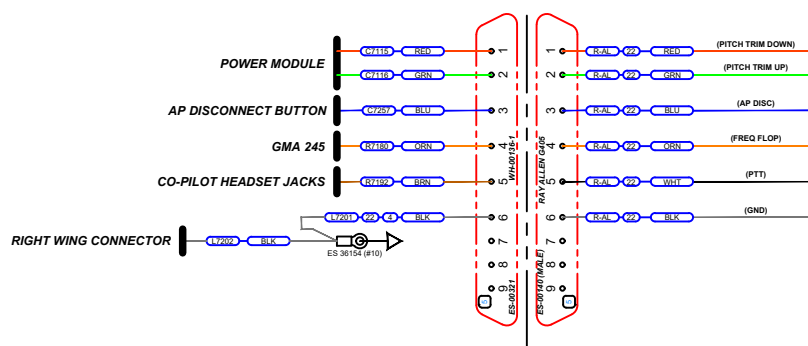
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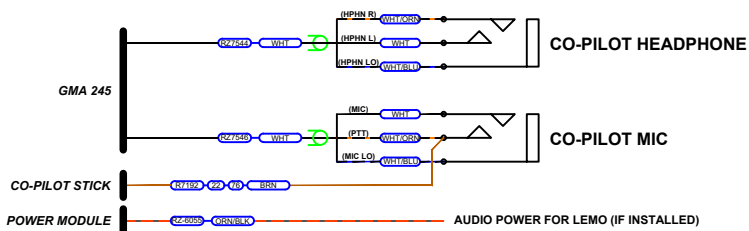
PILOT STICK GRIP



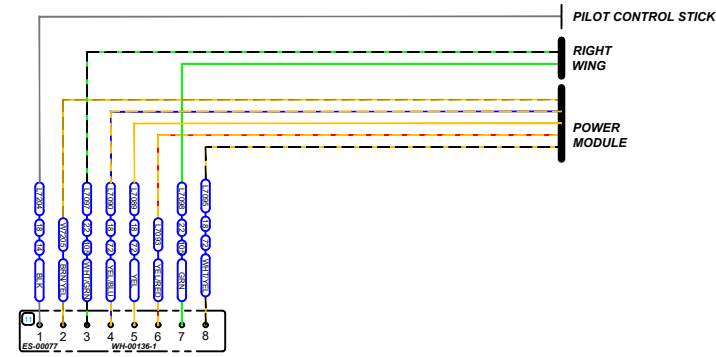
CO-PILOT STICK GRIP



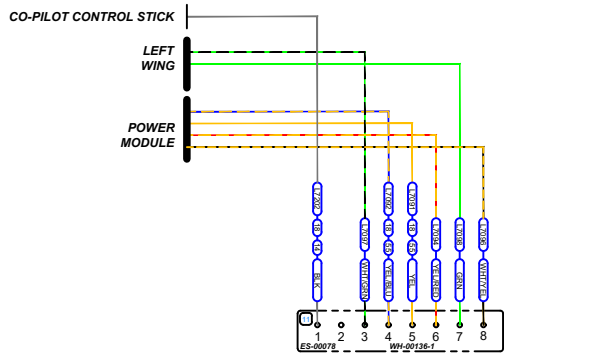
CO-PILOT HEADSET JACKS



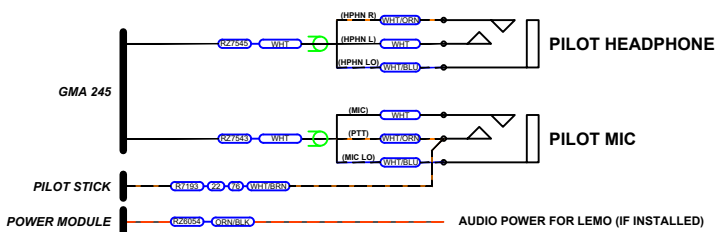
LEFT WING CONNECTOR



RIGHT WING CONNECTOR

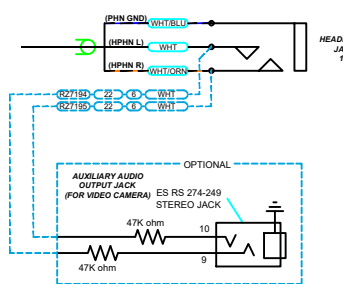


PILOT HEADSET JACKS

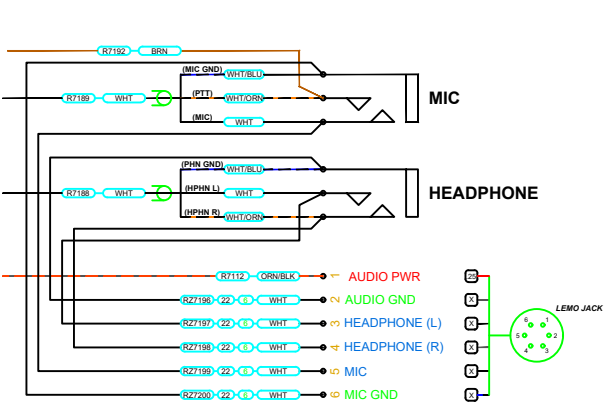


OPTIONAL AUDIO OUTPUT

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



OPTIONAL LEMO JACK



THESE COMPONENTS NOT INCLUDED IN AVIONICS KIT, NOR PART OF THE WH-00136-1 . SEE WH-00032 AND WH-00033 RV-12IS WING HARNESS DRAWINGS.

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UNITS:

INCHES

SCALE: NONE

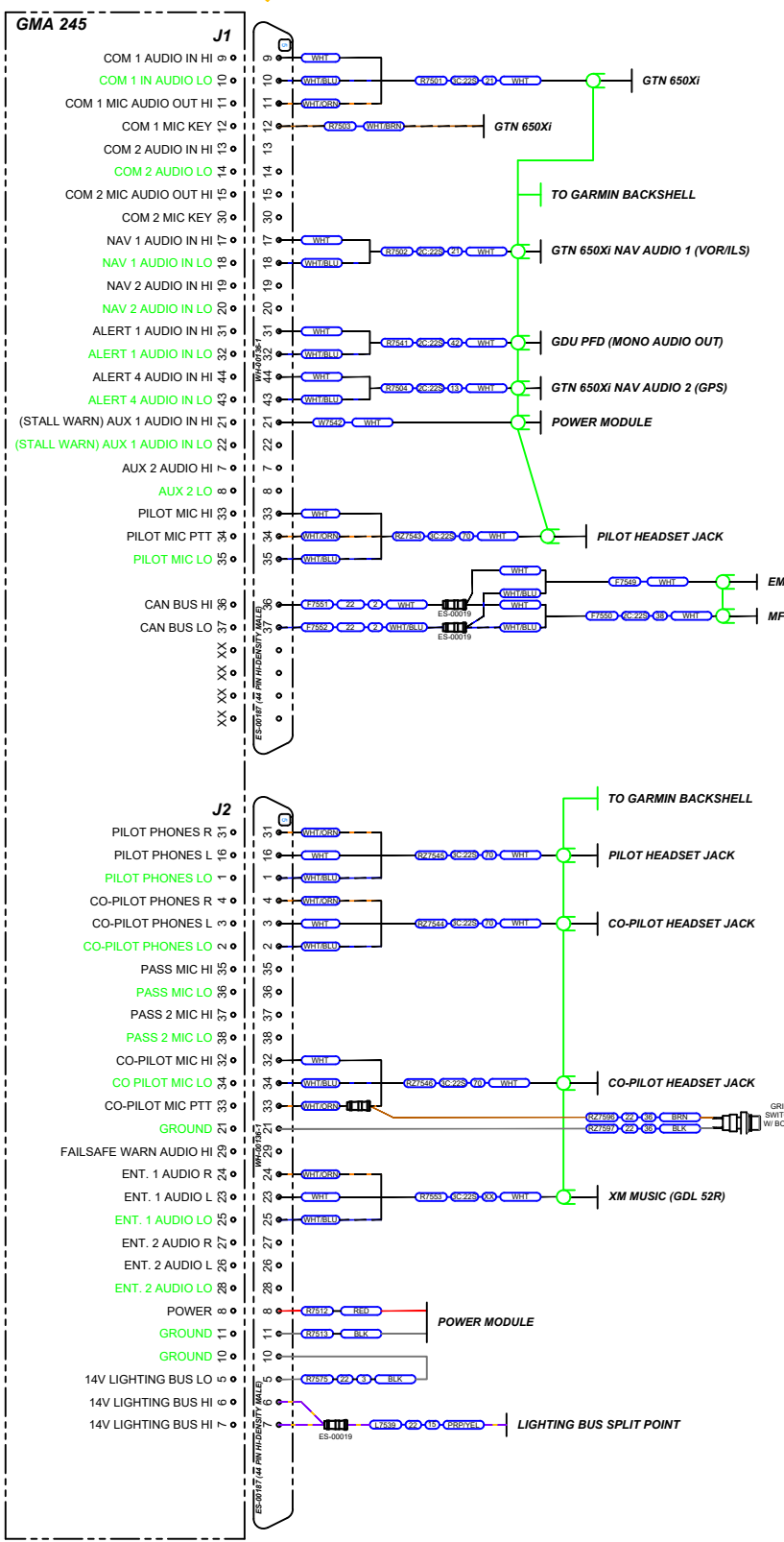
WH-00136-2

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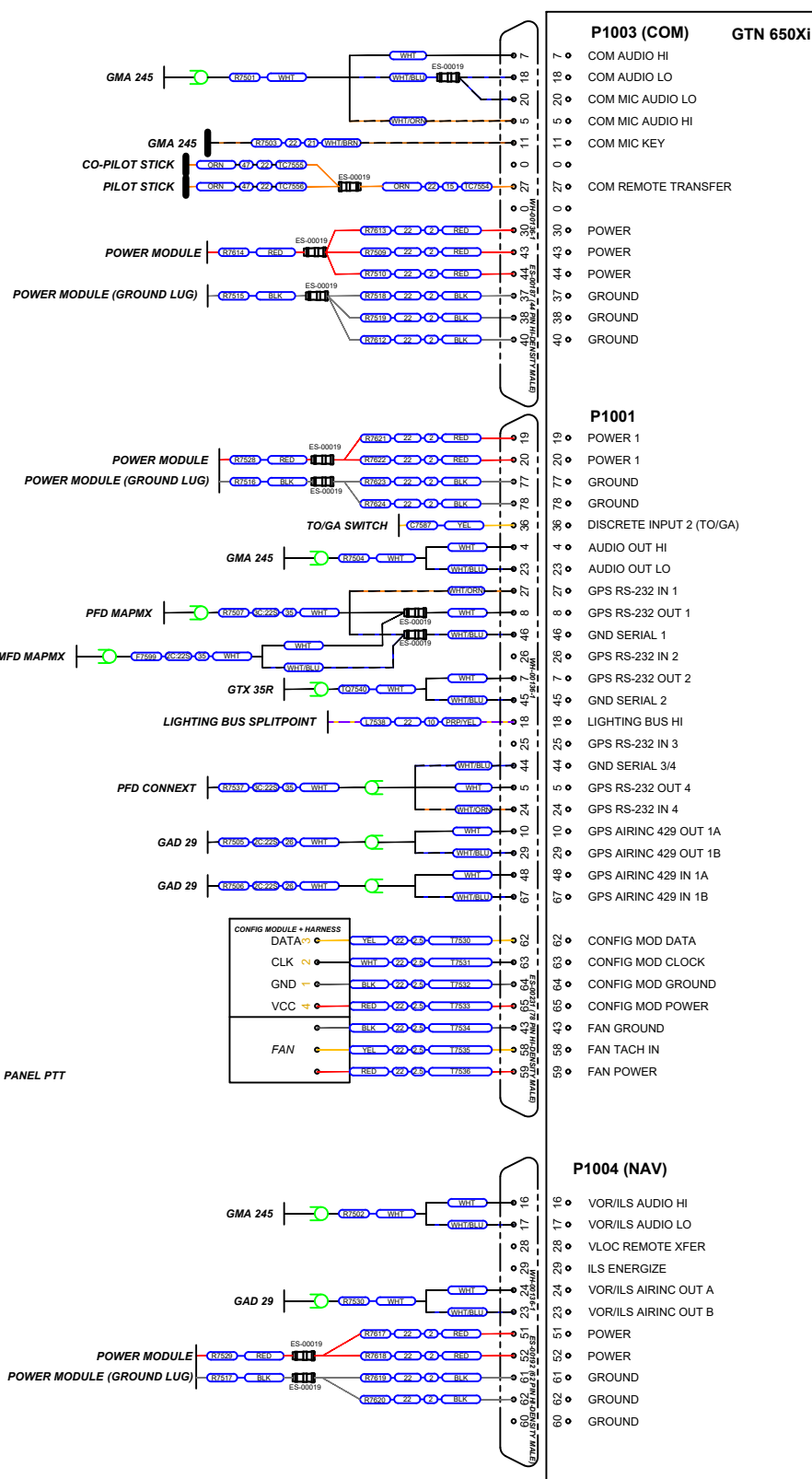
USE GARMIN BACKSHELL

AUDIO PANEL



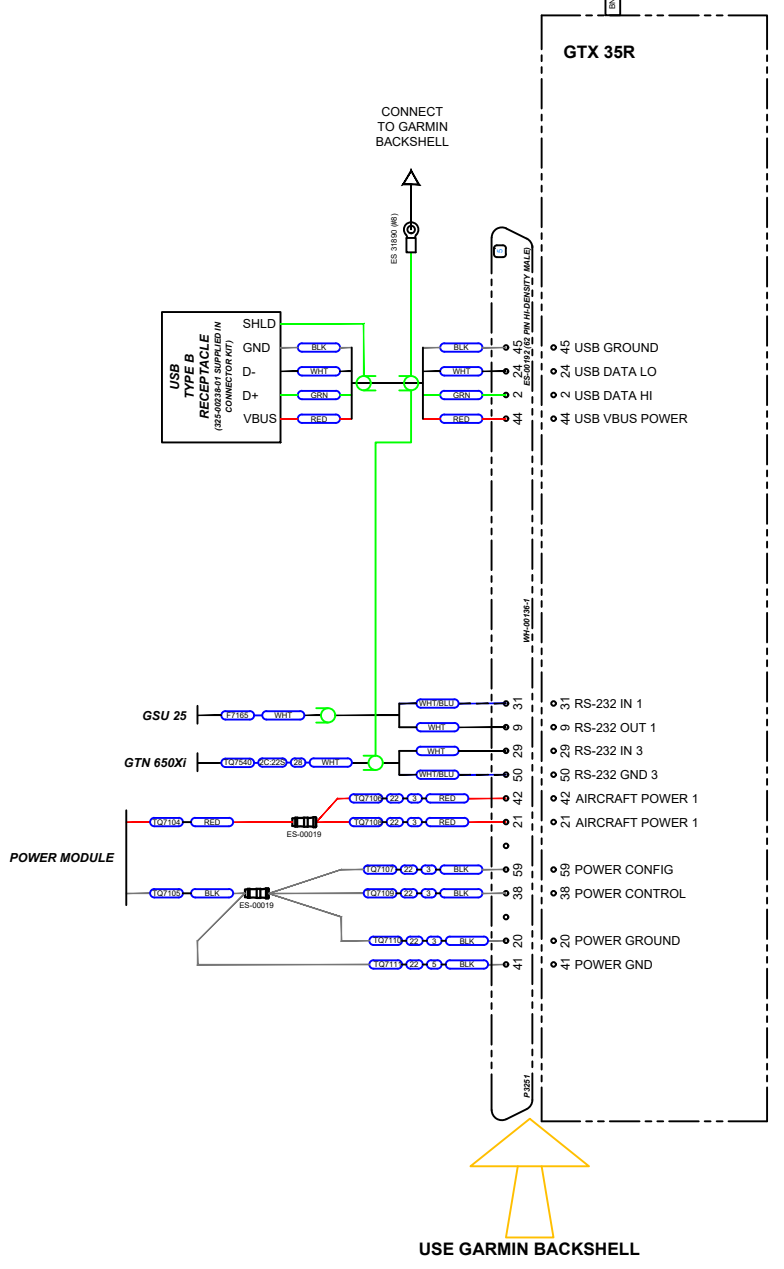
USE GARMIN BACKSHELL

GTN NAV/COM



TRIM CABLE TO LENGTH AND CRIMP ON BNC CONNECTOR.
(LENGTH SHOWN IS FROM FARTHEST RING TERMINAL)

XPNDR



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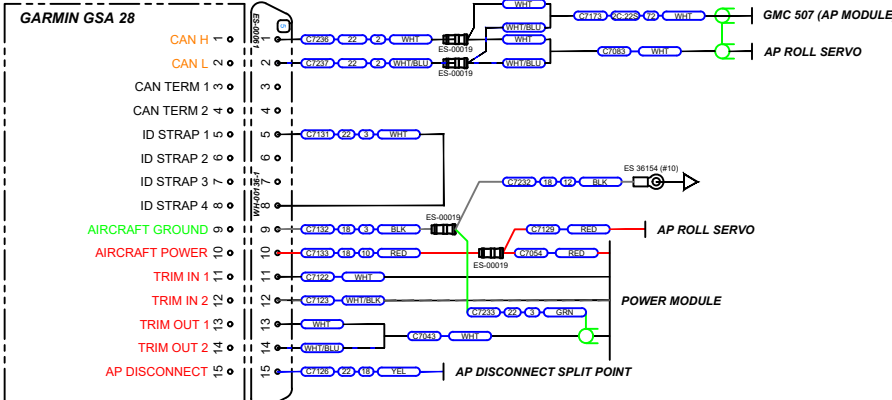
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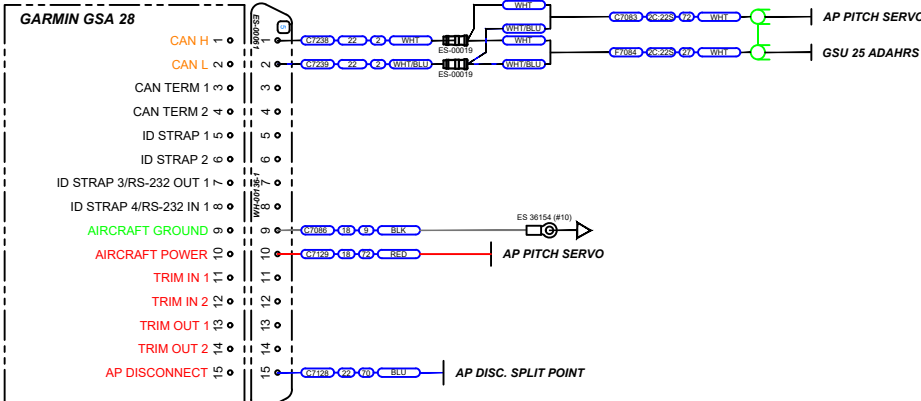
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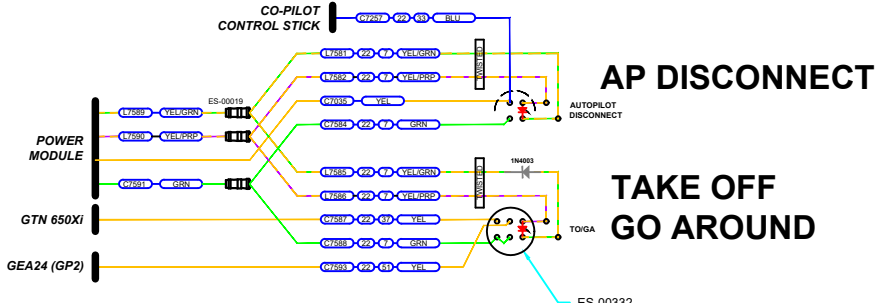
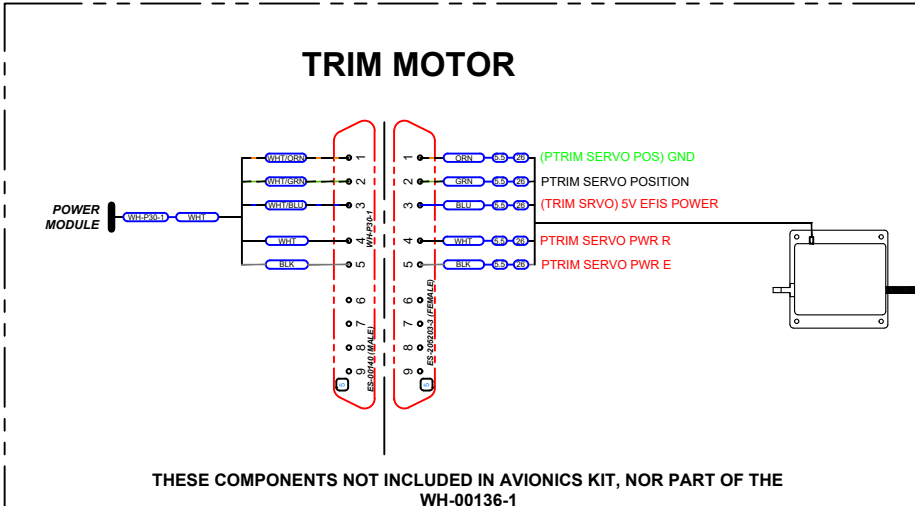
AUTOPILOT PITCH SERVO



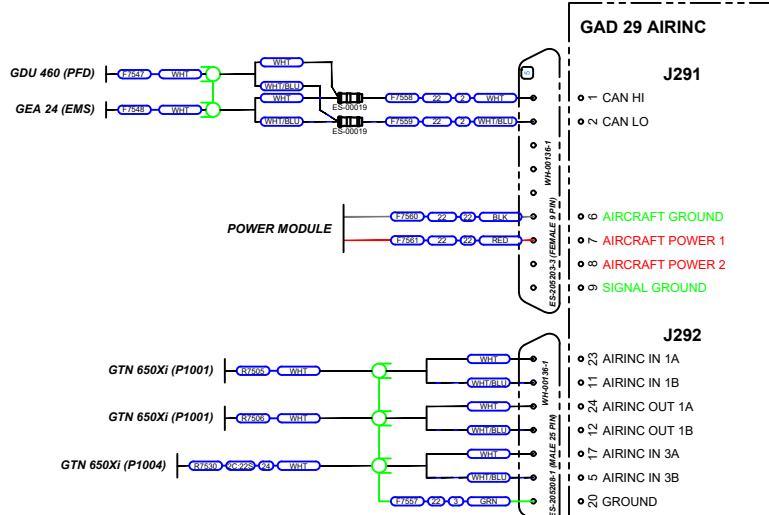
AUTOPILOT ROLL SERVO



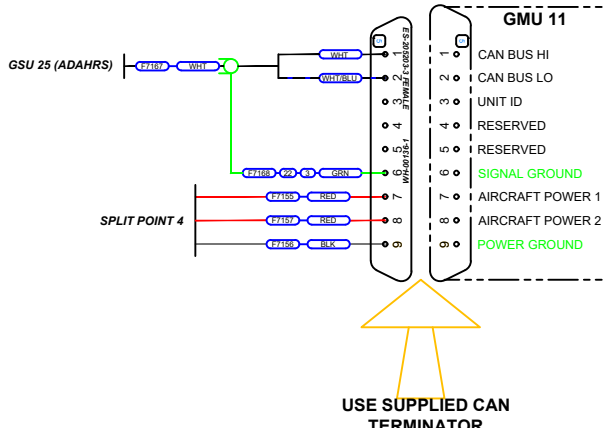
TRIM MOTOR



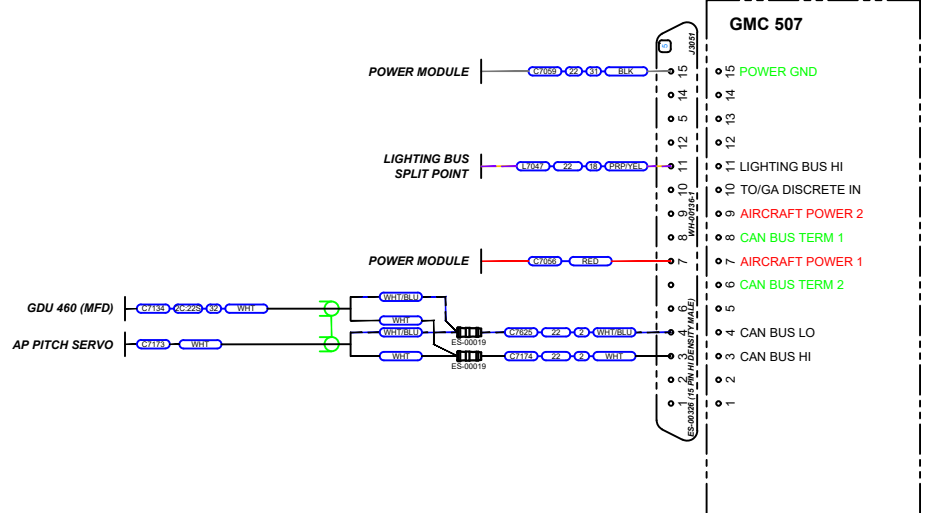
DATA BUS ADAPTER



MAGNETOMETER



AP MODULE



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UNITS:

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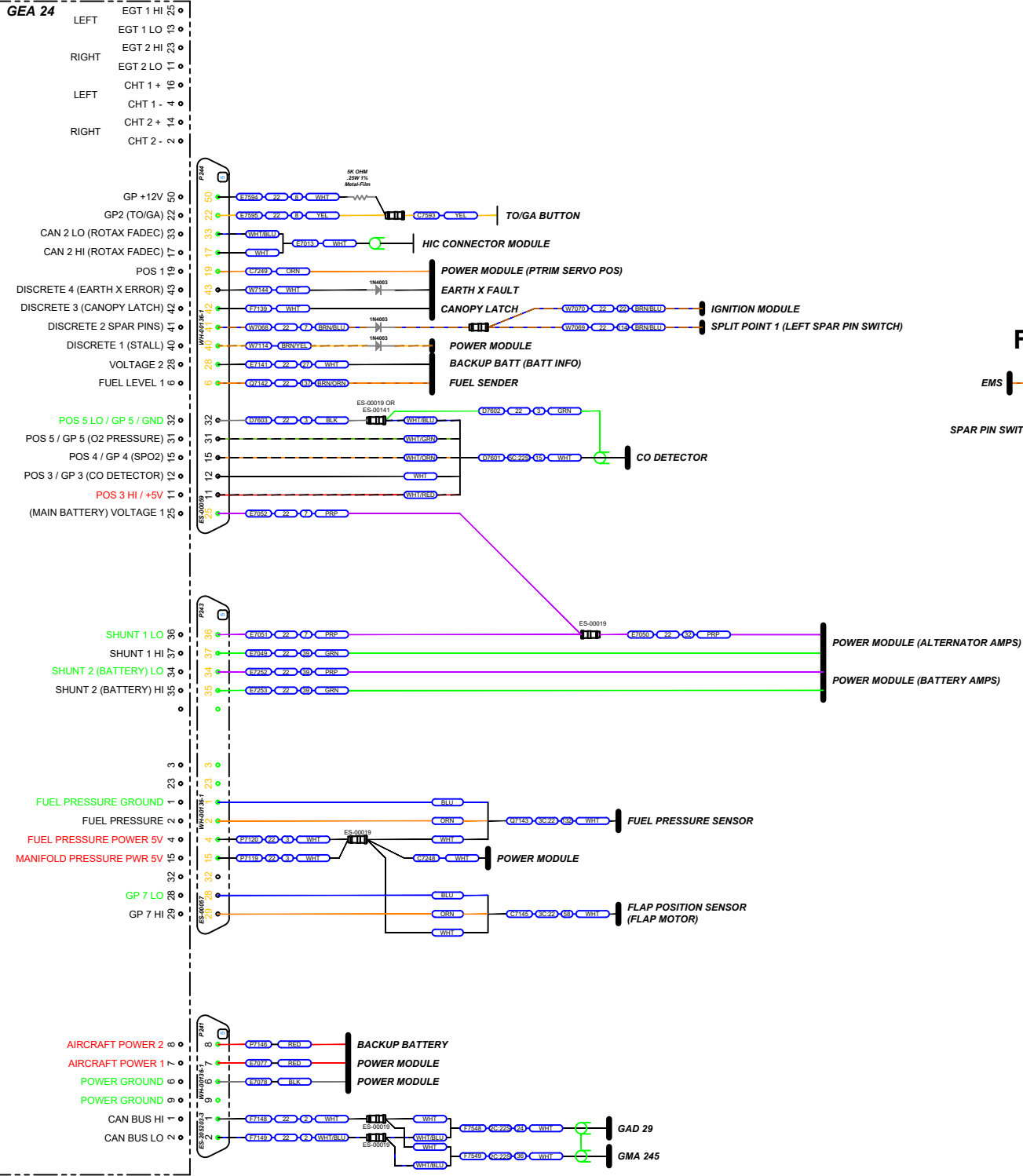
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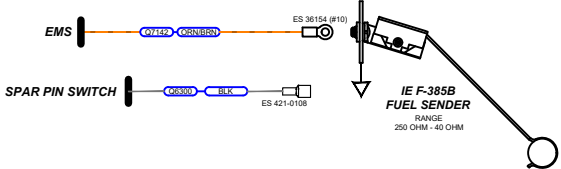
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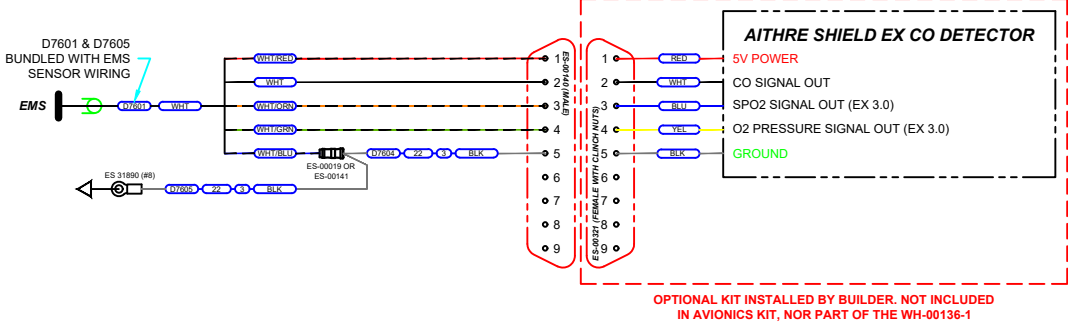
EMS



FUEL SENDER



CO DETECTOR



FUEL PRESSURE SENSOR



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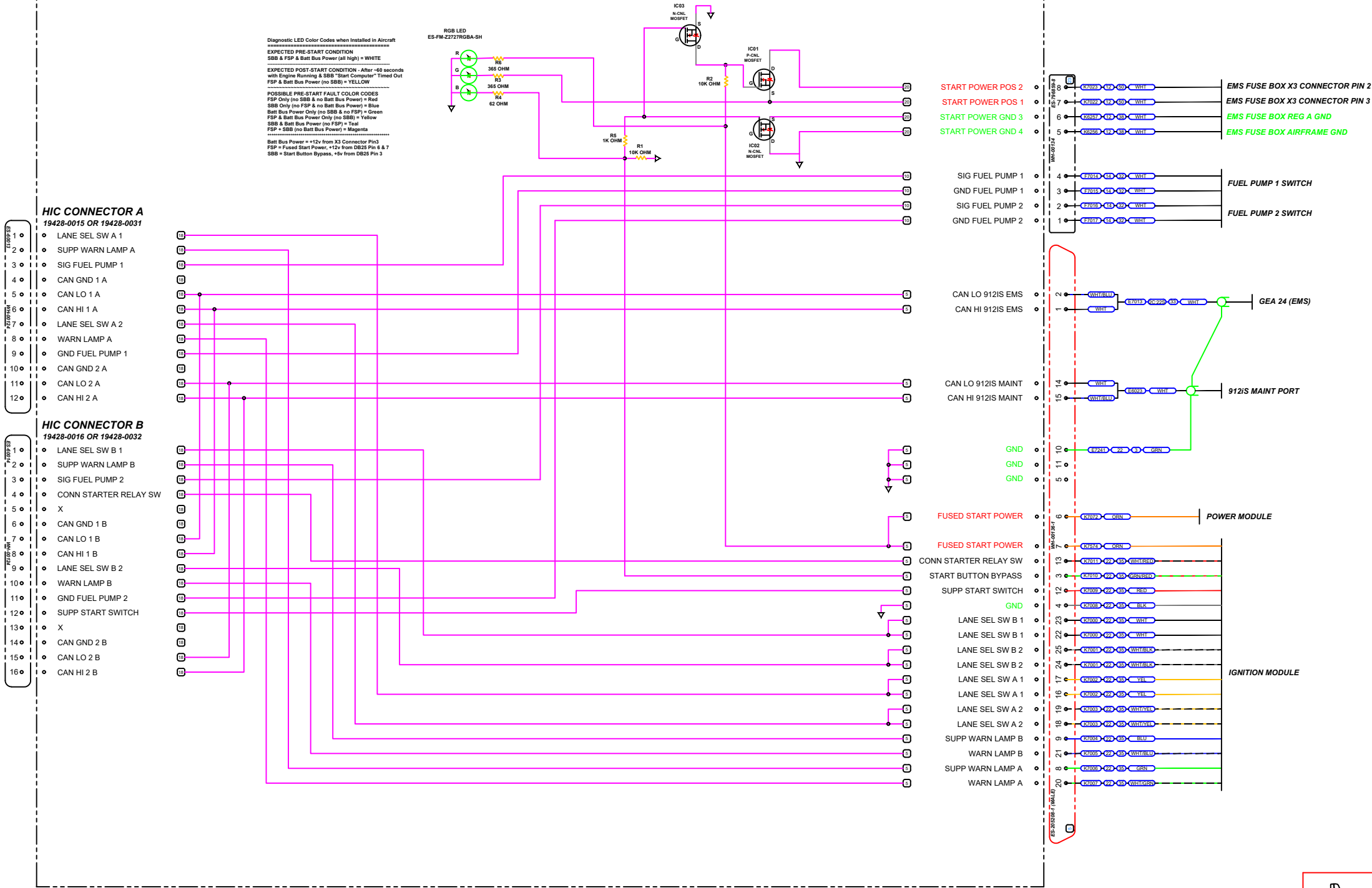
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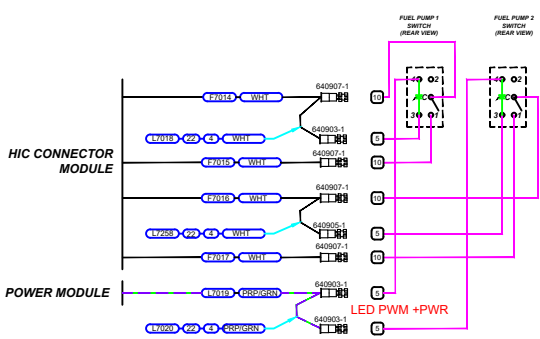
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C-SIZE ORIGINAL

ES-60009-2 HIC CONNECTOR MODULE iS PCB



FUEL PUMP SWITCHES



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DRAWN BY: TONY KIRK

TOLERANCES: NONE

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UNITS:

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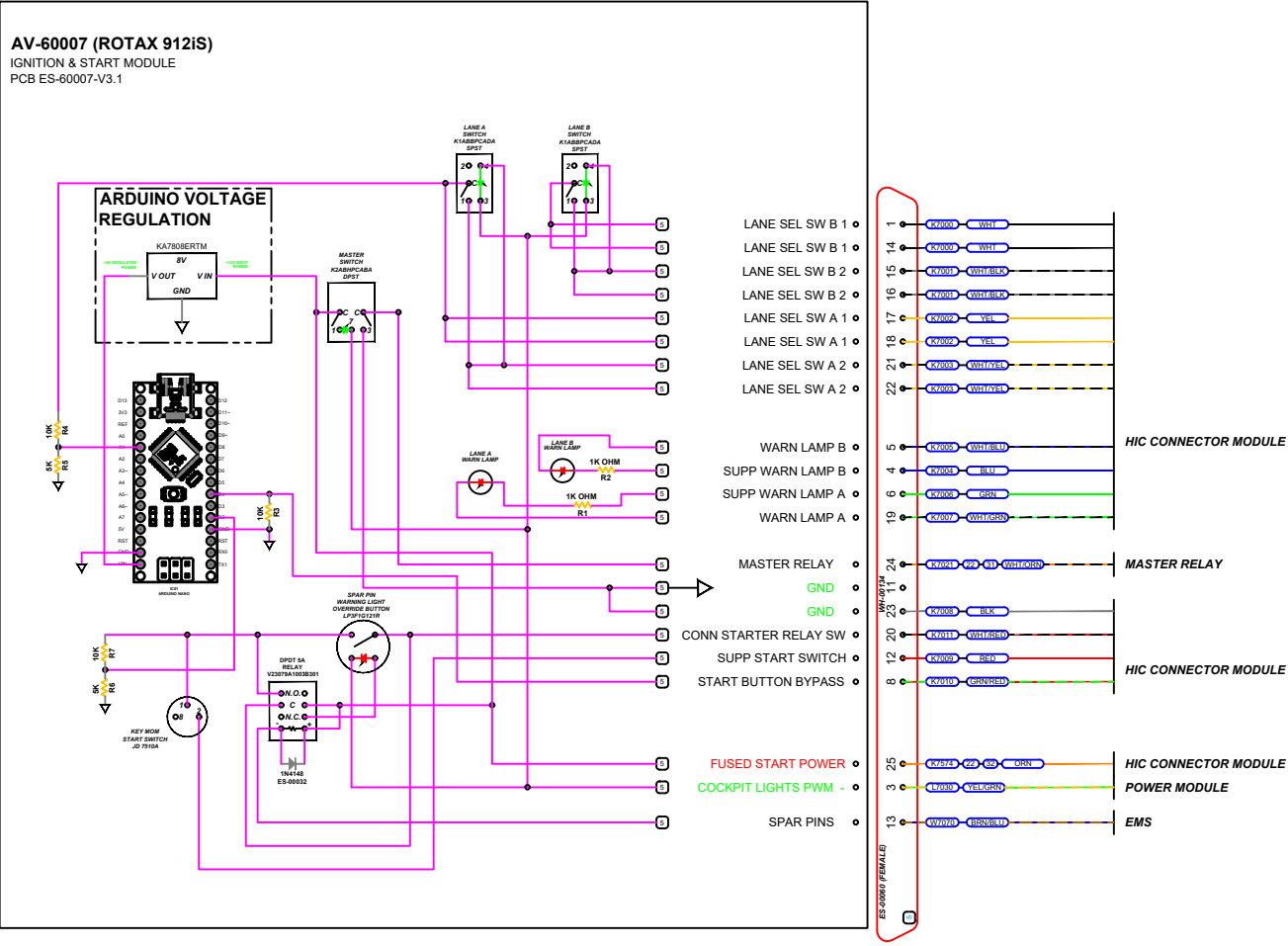
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WH-00136-2

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C-SIZE ORIGINAL



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UNITS: INCHES	WH-00136-2
SCALE: NONE	PAGE: 10 OF 11

