

REV	DESCRIPTION	INITIAL	YYYY-MM-DD
A	NEW ISSUE	EB	2021-09-09
B	TERMINAL BLOCK PINS REVISED	EB	2021-10-15

NOTES:

- NEW WIRE / UNIT
- EXISTING WIRE / UNIT
- PERFORM ALL WORK IN ACCORDANCE WITH BELL HELICOPTER STANDARD PRACTICES MANUAL BHT-ELEC-SPM.
 - ALL NEW UNSHIELDED WIRE USE M22759/41-(XX)-9 OR EQUIVALENT TYPE WIRE. (M22759/41-(XX)-9 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). ALL WIRES 22 AWG UNLESS OTHERWISE SPECIFIED BY WIRE CODE. ALL JUMPERS TO BE LESS THAN 6 INCHES.
 - ALL NEW SHIELDED WIRE USE M27500-(XX)SM(X)N23 OR EQUIVALENT TYPE WIRE. (M27500-(XX)SM(X)N23 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). SOLDER SLEEVES SHALL USE SN96 SOLDER, USE P/N S200-X-00 OR EQUIVALENT.
 - ALL SHIELD TERMINATIONS SHALL BE INSTALLED PER MIL-S-83519 OR EQUIVALENT. SHIELD TERMINATIONS SHOWN AS "DAISY-CHAINED" ARE FOR DRAWING CLARITY ONLY. INDIVIDUAL SHIELD EXTENSIONS SHALL BE SPLICED AT A COMMON TIE POINT TO THE TERMINATING WIRES. THE BACK SHELL OR AIRFRAME GROUND MAY BE USED.
 - ALL AIRFRAME GROUNDS SHALL BE VIA AMP LUG OR GROUNDING BLOCK AND PROVIDE SEPARATE GROUND STUD LOCATIONS FOR DC POWER GROUNDS, AC POWER GROUNDS, CHASSIS GROUNDS, SIGNAL GROUNDS AND SHIELD GROUNDS.
 - ALL EQUIPMENT BONDING TO ADJACENT AIRFRAME STRUCTURE TO BE 0.003 OHM OR LESS. ALL ELECTRICAL GROUNDING AND BONDING TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 8.
 - ALL TERMINALS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 4 PARAGRAPH 4-9.
 - ALL CONNECTORS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 5 AND / OR CIRCULAR CONNECTOR INSTALLATION INSTRUCTIONS (GARMIN DOCUMENT 190-00313-12). ENSURE ALL UNUSED CONNECTOR CONTACTS ARE FILLED WITH SPARE PINS/SOCKETS OR PLASTIC GROMMET SEALING PLUGS. ENSURE ALL BULKHEAD MOUNTED CONNECTORS ARE PROPERLY BONDED TO AIRFRAME.
 - ENSURE ALL SWITCHES, CIRCUIT BREAKERS, AND REMOTE MOUNTED BOXES ARE LABELED WITH A CONSISTENT SIZE, FONT, COLOR, BACKGROUND AND ARE ILLUMINATED CONSISTENT AS EXISTING LABELS.
 - ROUTE ALL WIRES AND CABLES WITH EXISTING WIRE ROUTES WHERE POSSIBLE AND CLAMP IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 6. WIRES MUST BE ROUTED WITH A MINIMUM OF 6 INCHES OF SEPARATION FROM OXYGEN AND FLUID LINES (MIN 2 INCHES IF WIRES IN CONDUIT).
 - INSTALL SYSTEM IN ACCORDANCE WITH THE LATEST REVISION OF THE MANUFACTURERS INSTALLATION MANUAL.
 - LOWERCASE LETTER CONNECTOR PIN DESIGNATORS ARE SHOWN AS UNDERLINED UPPERCASE LETTERS.
 - INCLUDED IN KIT PN: 011-02325-02
 - INCLUDED IN KIT PN: 011-02326-02
 - THE CUMULATIVE COAX CABLE LENGTH BETWEEN LRU AND ANTENNA NOT TO EXCEED 50 FT WHEN USING P/N S44193 FOR GPS.
 - THE CUMULATIVE COAX CABLE LENGTH BETWEEN LRU AND ANTENNA NOT TO EXCEED 35 FT WHEN USING P/N RG142B FOR GPS.
 - POWER WIRES NOT TO EXCEED 20 FT FROM A 5A CIRCUIT BREAKER.

RELEASED

EC ECN 22-120

2022-02-24 MC

AVIONICS DESIGN SERVICES
APPROVED FOR RELEASE

BY *[Signature]* 20 OCT 2021
DATE

ORIGINAL IN RED

DESIGN	EB	 CALGARY, ALBERTA, CANADA
DRAWN	EB	
CHECKED	WK	
MFG. APPR.	LJ / CD	
DM RLSED.	EB	
DE RLSED.	N/A	TITLE: GARMIN 750 XI AND 650 XI WIRING DIAGRAM
SCALE: NTS		NO: E2006-11-3
DATE: 2021-10-15		
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GARMIN GTN 750 XI
GPS/NAV/COMM

①

(2006-1P1003) ⑤ ⑦ ⑩

AIRCRAFT POWER
AIRCRAFT POWER
AIRCRAFT POWER
AIRCRAFT GND
AIRCRAFT GND
AIRCRAFT GND

30
43
44
37
38
40
2006-1GTN012A20
2006-1GTN015A20N

2006-1N3
E 2

LOC: AFT CTR CONSOLE

AIRCRAFT POWER
AIRCRAFT POWER
AIRCRAFT GND
AIRCRAFT GND

51
52
61
62
2006-1GTN001A20
2006-1GTN003A20N

2006-1N4
D 2

LOC: AFT CTR CONSOLE

AIRCRAFT POWER
AIRCRAFT POWER
AIRCRAFT GND
AIRCRAFT GND

19
20
77
78
2006-1GTN007A20
2006-1GTN005A20N

2006-1N3
K 2

LOC: AFT CTR CONSOLE

LIGHTING BUS 1 HI
LIGHTING BUS 1 LO

18
17
2006-1GTN009A22
2006-1GTN010A22N

2006-1N1
N 2

LOC: AFT CTR CONSOLE

FAN POWER OUT
FAN GROUND
FAN TACH IN

59
43
58
R BK BK
Y Y

FAN

CONFIG MOD ⑫

CONFIG MODULE PWR
CONFIG MODULE GND
CONFIG MODULE DATA
CONFIG MODULE CLOCK

65
64
62
63
R BK
Y Y
W W

4
1
3
2

AUDIO OUT HI
AUDIO OUT LO

4
23
W B
2006-1GTN201A22

500 Ω VOR/LOC AUDIO OUT HI
500 Ω VOR/LOC AUDIO OUT LO

16
17
W B
2006-1GTN202A22

500 Ω COMM AUDIO HI
500 Ω COMM AUDIO LO

7
18
W B
2006-1GTN203A22

COMM MIC HI
COMM MIC LO

5
20
W B
2006-1GTN204A22

COMM MIC KEY

11
2006-1GTN017A22

CONT. ON SHEET 3

NO 1 ②
5A ②
ESS AVIONICS BUSS
VHF REF: D212-725-2-G2 REV. C

NO 2 ②
5A ②
NON-ESS AVIONICS BUSS
REF: D212-725-2-G2 REV. C

NO 1 ②
5A ②
ESS AVIONICS BUSS
NAV/ GPS REF: D212-725-2-G2 REV. C

NO 2 ②
5A ②
NON-ESS AVIONICS BUSS
NAV/ GPS REF: D212-725-2-G2 REV. C

TB12
1
2
3
4

REF: D212-725-2-G2 REV. C

27 TB 1
MJ 2

REF: D212-725-2-G2 REV. C

(2006-20P1)

EAGLE P178
AUDIO MIXER

(2006-20P1)

6 19
INPUT 5 HI
INPUT 5 LO
7 20
INPUT 6 HI
INPUT 6 LO
REF: 7002-MI-001
LOC: LOWER NOSE SHELF

(2006-5P1)

EAGLE P139-HD
AUDIO ROUTER

(2006-5P2)

39 40
RX 9 HI
RX 9 LO
1 2
RX 1 HI
RX 1 LO
3 4
TX 1 HI
TX 1 LO
5
TX 1 KEY
REF: G13004
LOC: LOWER NOSE SHELF

RX 17 HI
RX 17 LO

RX 2 HI
RX 2 LO

TX 2 HI
TX 2 LO

TX 2 KEY

(10 ⑦ ⑤) (2006-2P1003)

GARMIN GTN 650 XI
GPS/NAV/COMM

⑭

AIRCRAFT POWER
AIRCRAFT POWER
AIRCRAFT POWER
AIRCRAFT GND
AIRCRAFT GND
AIRCRAFT GND

30
43
44
37
38
40
2006-2GTN012A20
2006-2GTN015A20N

2006-2N1
2 E

LOC: AFT CTR CONSOLE

51
52
61
62
2006-2GTN001A20
2006-2GTN003A20N

2006-2N1
2 H

LOC: AFT CTR CONSOLE

19
20
77
78
2006-2GTN008A20
2006-2GTN005A20N

2006-2N1
2 K

LOC: AFT CTR CONSOLE

2006-2GTN009A22
2006-2GTN010A22N

2006-2N2
2 T

LOC: AFT CTR CONSOLE

FAN

FAN POWER OUT
FAN GROUND
FAN TACH IN

59
43
58
R BK BK
Y Y

CONFIG MOD ⑫

CONFIG MODULE PWR
CONFIG MODULE GND
CONFIG MODULE DATA
CONFIG MODULE CLOCK

65
64
62
63
R BK
Y Y
W W

4
1
3
2

AUDIO OUT HI
AUDIO OUT LO

4
23
W B
2006-2GTN201A22

500 Ω VOR/LOC AUDIO OUT HI
500 Ω VOR/LOC AUDIO OUT LO

16
17
W B
2006-2GTN202A22

500 Ω COMM AUDIO HI
500 Ω COMM AUDIO LO

7
18
W B
2006-2GTN203A22

COMM MIC HI
COMM MIC LO

5
20
W B
2006-2GTN204A22

COMM MIC KEY

11
2006-2GTN017A22

CONT. ON SHEET 3

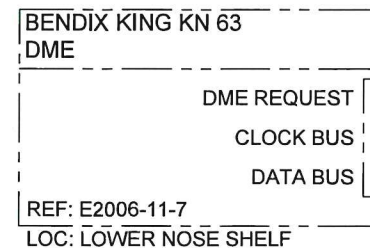


TITLE
GARMIN 750 XI AND 650 XI
WIRING DIAGRAM

DATE: 2021-10-15 DWG: E2006-11-3 REV: B SHEET: 3 OF 5

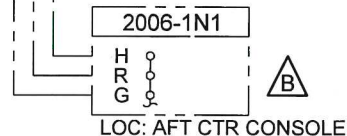
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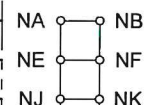
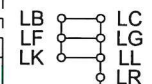
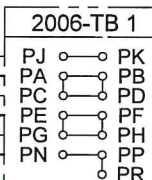


(2006-P631)

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2006-DME102A22
2006-DME101A22N
2006-DME103A22
2006-DME102A22N

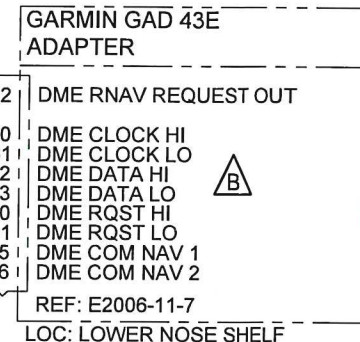


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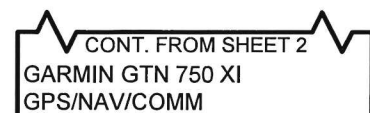


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2006-DME104A22
2006-1GTN021A22
2006-2GTN021A22

(2006-P432)



B



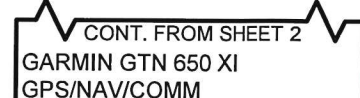
(2006-1P1004)

DME COMMON 41
SERIAL DME-CLOCK 18
SERIAL DME-DATA 19
SERIAL DME-RNAV / CO REQ 20

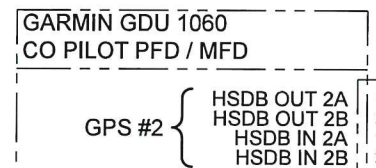
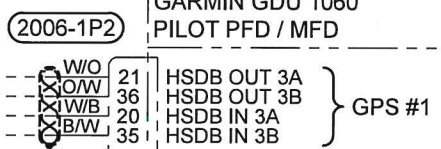
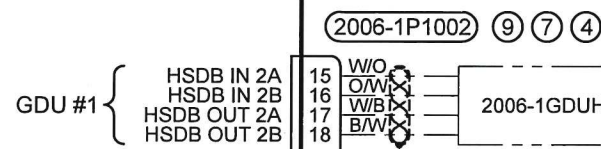
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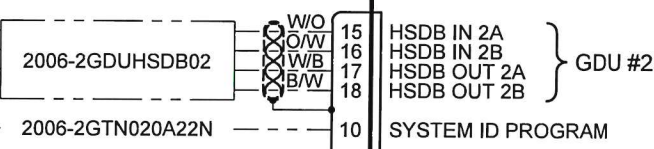
(2006-2P1004)



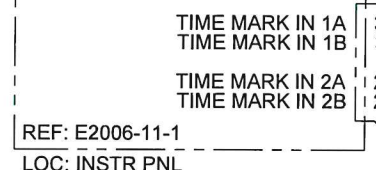
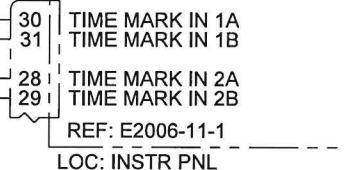
DME COMMON 41
SERIAL DME-CLOCK 18
SERIAL DME-DATA 19
SERIAL DME-RNAV / CO REQ 20



(9) (7) (4) (2006-2P1002)



(2006-1P3)

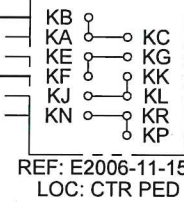


TIME MARK

OUT A + 3
OUT B - 22

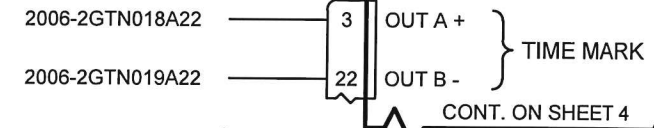
(2006-1P1001)

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2006-1GDU009A22
2006-1GDU010A22
2006-1GTN019A22
2006-1GDU011A22
2006-1GDU012A22



2006-2GDU009A22
2006-2GDU010A22
2006-2GTN018A22
2006-2GDU011A22
2006-2GDU012A22
2006-2GTN019A22

(2006-2P1001)



RS 232 OUT 1 8
RS 232 IN 1 27
RS 232 GND 1 46

TAWS AUDIO ACTIVE 35

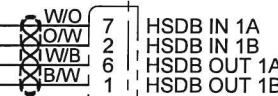
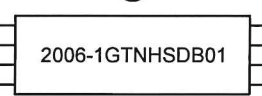
(2006-1P1002)

(23)

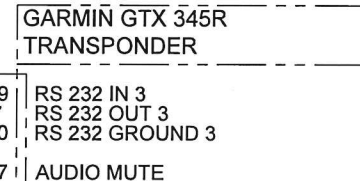
(2006-P3252)

XPDR

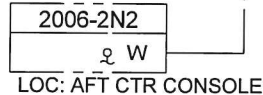
HSDB OUT 3A 25
HSDB OUT 3B 26
HSDB IN 3A 23
HSDB IN 3B 24



(2006-P3251)



2006-1GTN301A22
2006-1GTN020A22



TITLE
GARMIN 750 XI AND 650 XI
WIRING DIAGRAM

DATE: 2021-10-15 DWG: E2006-11-3 REV B SHEET 4 OF 5

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