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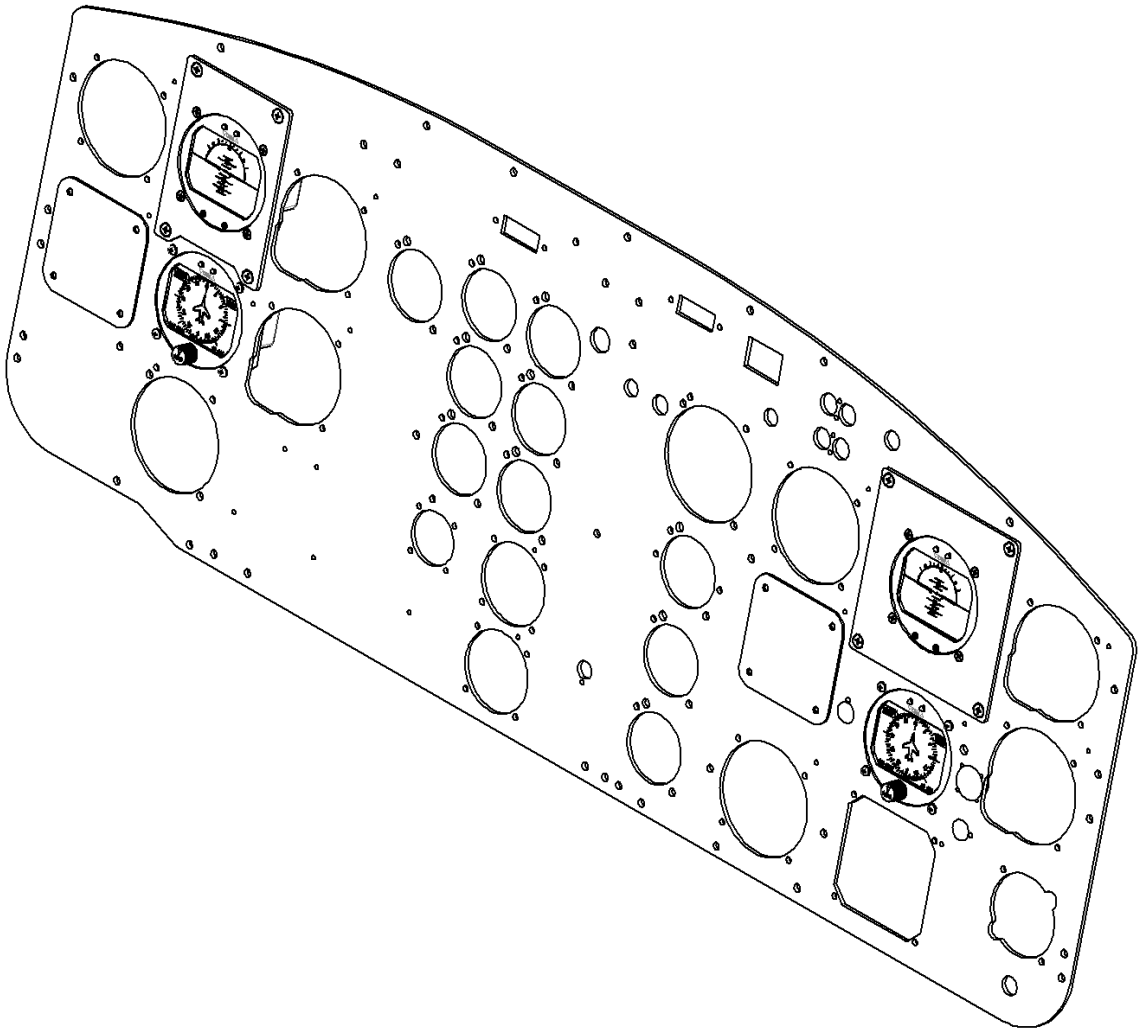

BASIC DIGITAL FLIGHT INSTRUMENT, KIT
INSTRUCTIONS FOR CONTINUING AIRWORTHINESS

MODELS: BELL 205A-1

Read all of the Instructions for Continuing Airworthiness
thoroughly prior to performing any activities relating to this product

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Notes

1. If changes to this document are required, Alpine Aerotech LP shall revise all pages and reissue the entire document.

2. Alpine Aerotech LP shall publish any subsequent revisions of this document to be made freely available. Alpine Aerotech LP also recommends that the end user of this product periodically verify the revision level of this document.

SECTION 1 Introduction

This document comprises Instructions for Continuing Airworthiness that apply to AAL Basic Digital Fight Instrument, Kit installed on Bell 205A-1 rotorcraft. The information and data contained in this document are supplemental to the information contained in the existing ICA for the Bell 205A-1.

Applicability

The Basic Digital Flight Instrument, Kit (AAL-280-070-001) is applicable to all serial numbers of Bell 205A-1 rotorcraft.

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SECTION 2 DESCRIPTION

The following information provides a functional description of the Basic Digital flight Instrument, Kit as defined in Alpine Aerotech LP authority dataset AAL-280-070-001.

The AAL Basic Digital Flight Instrument, Kit allows for the replacement of the OEM attitude and heading instruments with standalone digital instruments. The kit includes instrumentation for both the pilot and co-pilot sides.

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SECTION 3 OPERATION

Heading Indicator

1. START UP

On power-up, heading indicator will display a blue self-test, screen followed by a prominent red "X" across the face of the display. Once the "X" has disappeared the instrument has completed its startup procedure. The red "X" should not be displayed for more than three minutes.

2. DIMMER

The heading indicator has brightness adjustments that can be adjusted in flight. On start-up, the instrument defaults to maximum brightness. The brightness controls are located at the top of the instrument and have an "up" (▲) arrow next to the button that increases brightness and a "down" (▼) arrow next to the button that reduces brightness. Reference Figure 1. Quickly pressing both buttons simultaneously will return the display to its maximum brightness.

CAUTION

Pressing and holding both "DIM" buttons simultaneously for 10 seconds will put the heading indicator into Magnetic Calibration Mode. Reference paragraph 4, "Magnetic Calibration".

3. MAG MODE / NO GPS MODE

On the heading instrument, the "MAG MODE" and "NO GPS" mode indicators will be lit on start-up. The "MAG MODE" indicator signifies that the instrument does not have a GPS signal and is operating as a stabilized magnetic heading indicator. Reference Figure 1. The "MAG MODE" indicator will stay lit until the instrument is able to acquire a GPS signal and/or the aircraft reaches a speed exceeding ten knots at which time the GPS input will become active. In the event the heading indicator loses GPS signal in flight, the "NO GPS" indicator will illuminate. The instrument will continue to work as a magnetic heading instrument and no special intervention is required on the part of the flight crew. When operating in "MAG MODE" the instrument will display magnetic heading based on the direction the aircraft is pointing, not the direction of travel.

When operating in GPS mode, the heading indicator will display magnetic ground track (direction of travel). Additionally, when GPS mode is activated, the heading indicator will determine the GPS coordinates of the aircraft and automatically apply the correct magnetic declination for that position. As such, the indicator will always be in reference to magnetic north. The magnetic declination information is provided by an onboard digital copy of the World Magnetic Model and should be periodically updated per the requirements of Section 4, Maintenance Instructions.

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4. MAGNETIC CALIBRATION

Magnetic calibration should be performed on initial installation, every time new instruments or electrical devices are installed on the aircraft that could affect the magnetic signature of the aircraft and at any time when unacceptable deviations in heading are noted. See Section 7 for Magnetic Calibration procedures.

5. EXTREME MANEUVERS

Extreme control inputs may cause the heading and attitude indicators to become temporarily disabled. This is indicated by a prominent red “X” displayed across the screens and an “Exceed Acc (acceleration) Limit” warning notice on the heading indicator and an “Exceed Bank Angle” warning notice on the attitude indicator. The instruments should automatically reset their respective displays in three to ten seconds after conclusion of the hard maneuver. This information is provided for reference only as the ability of the instruments to respond to extreme maneuvers is beyond the abilities of the rotorcraft as described in the Basic Flight Manual. The instruments will operate in a full 360° pitch & roll, and 360° of turn.

In the unlikely event that the instruments do not reset themselves after displaying “Exceed Acc (acceleration) Limit” or “Exceed Bank Angle” warnings, reset them manually by cycling power to the instruments via the circuit breakers located on the overhead breaker panel. This will cause the instruments to reboot and go through the standard start-up routine. You do not need to be in level flight while the instruments re-start. If the instruments fail to re-start, land the aircraft using visual reference at the first appropriate opportunity.

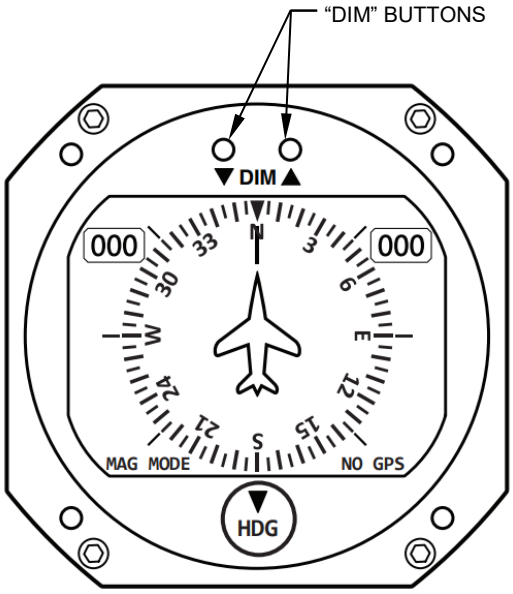

Figure 1
Heading Indicator (Item 6) shown

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Attitude Indicator

1. START UP

On power-up, the attitude instrument will display a blue self-test, screen followed by a prominent red “X” across the face of the display. Once the “X” has disappeared the instrument has completed its startup procedure. The red “X” should not be displayed for more than three minutes.

2. DIMMER

The attitude indicator has brightness adjustments that can be adjusted in flight. On start-up, the instrument defaults to maximum brightness. The brightness controls are located at the top of the instrument and have an “up” (▲) arrow next to the button that increases brightness and a “down” (▼) arrow next to the button that reduces brightness. Reference Figure 2. Pressing both buttons simultaneously will return the display to its maximum brightness.

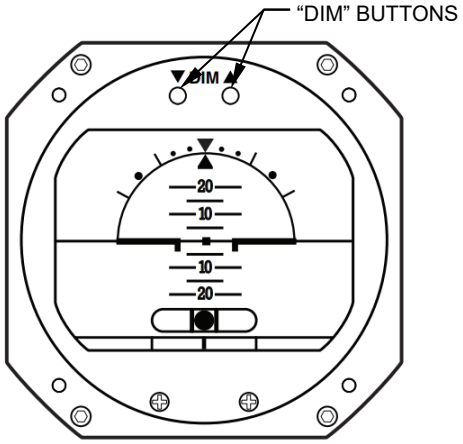
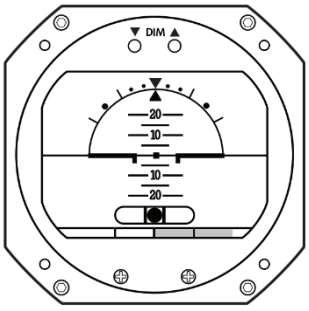
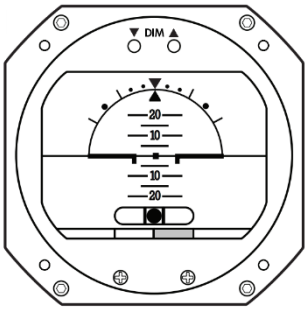


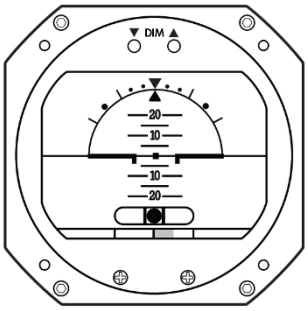
Figure 2
Attitude Indicator (Item 7) shown



1 MINUTE TURN



2 MINUTE TURN



4 MINUTE TURN

Figure 3
Rate of Turn Indication

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SECTION 4 MAINTENANCE INSTRUCTIONS

General Notes

1. The following information defines the instructions for continuing airworthiness, repair allowances and airworthiness limitations for the item(s) referenced within this document.

2. Refer to the current revision of the BHT Maintenance Manual, BHT-205A-1-MM, for the chapter(s) and section(s) referenced within this document.

3. Refer to the Section 6: Removal/Replacement and Section 9: Illustrated Parts Breakdown for the replacement and/or installation of the item(s) referenced within this section.

4. Scheduled inspection for the item(s) referenced within this document shall be accomplished in accordance with (IAW) the Inspection Procedures specified.

5. Repair allowances for the item(s) referenced within this document shall be accomplished IAW Section 5, Troubleshooting.

6. Limitations for the item(s) referenced within this document are IAW Section 8, Airworthiness Limitations.

7. Record instrument serial numbers in the table provided below for future reference.

Pilot (RHS) Attitude S/N		Co-pilot (LHS) Attitude S/N	
Pilot (RHS) Heading S/N		Co-pilot (LHS) Heading S/N	

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Inspection Procedures

Supplement to applicable Maintenance Manual,
Chapter 5, Inspection and Component Overhaul Schedule

Notes

1. Refer to the applicable Maintenance Manual, Chapter 5, for general information on inspections, inspection definitions, inspection intervals, inspection interval tolerances, inspection methods and inspection schedules.

2. General Inspections, as indicated within this document, are defined as visual, non-thorough checks.

3. Detailed Inspections, as indicated within this document, are defined as visual and thorough, searching checks.

4. Perform 300 Hour/12 Month Inspections every 300 hours or every 12 months, whichever occurs first, prior to flight operation. If damage is detected, refer to the Repair Procedures section within this document.

5. Perform 24 Month Inspections every 24 months regardless of accumulated flight hours. The approved tolerance for the 24 Month Inspection is a maximum of six months beyond the specified interval.

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Scheduled Inspections

1. 300 Hour/12 Month Inspections

Data Reference: Section 6: Removal/Replacement
Section 9: Illustrated Parts Breakdown

i. Perform a Detailed Inspection on all materials and finishes in the Basic Digital Flight Instrument, Kit for evidence of corrosion and damage.

ii. Perform a Detailed Inspection on all wiring harnesses, antennas and electrical components in the Basic Digital Flight Instrument, Kit for evidence of corroded contacts, chafing or any other type of mechanical damage and or wear.

iii. Perform a Detailed Inspection on all items, materials and finishes in the Basic Digital Flight Instrument, Kit for proper integrity and condition.

iv. Perform a Detailed Inspection on all hardware and fasteners in the Basic Digital Flight Instrument, Kit for proper security and torque.

CAUTION

Use extreme care when handling the instruments and avoid touching the screen if at all possible. For proper care and handling refer to Kelly Manufacturing publication No. 1401-5 for the Heading Indicator and No. 1401-3 for the Attitude Indicator.

2. 24 Month Inspections (regardless of hours)

Data Reference: Section 6: Removal/Replacement
Section 9: Illustrated Parts Breakdown

i. Contact the instrument manufacturer with the serial numbers of the heading indicators and confirm that the World Magnetic Model (WMM) saved in your instrument(s) is the most current version. If it is not current, the manufacturer will give instruction on how to update the instrument. If it is determined that the WMM is not the most current version, an update must be performed within 90 days.

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Conditional Inspections

1. Battery Condition Inspection

Data Reference: Section 6: Removal/Replacement
Section 9: Illustrated Parts Breakdown

If the “CHK Batt” warning appears on the screen of the Attitude Indicator it likely signifies a problem with the back-up battery capacity. Perform the following conditional inspection procedure.

i. While on the ground, apply power to the instrument until the Battery Charge Status icon reads 100% (minimum 3 minutes).

ii. Adjust “DIM” buttons so that the instrument is set to maximum brightness.

iii. Cut the power to the instrument using the circuit breaker in the overhead panel and allow the instrument to perform its automatic 60 second countdown procedure. During the 60 second countdown, the instrument will measure the rate of battery depletion at maximum brightness and compare it to known depletion values.

NOTE

Holding both “DIM” buttons down during the 60 second countdown will force shutdown of the instrument without completing the battery depletion measurement.

iv. Switch the power back on and ensure no further battery related messages are displayed. If battery warnings are still being displayed by the instrument, then refer to Section 5, Troubleshooting.

Scheduled Maintenance

1. 36 Month Battery Replacement (regardless of hours)

Data Reference: Section 6: Removal/Replacement
Section 9: Illustrated Parts Breakdown

i. Replace the back-up Battery Assy(s) (Item 8) at 36-month intervals. Reference battery replacement procedure in Section 6, Removal/Replacement.

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SECTION 5 TROUBLESHOOTING

1. If either an Attitude or Heading Indicator is unserviceable, replace with a serviceable unit. Contact Kelly Manufacturing for all questions and issues related to the Heading and Attitude Indicators.

2. If battery warnings are still being displayed after performing the Battery Condition inspection, then there is likely a reduced battery charge capacity. Replace the back-up battery. Reference battery replacement procedure in Section 6, Removal/Replacement.

3. Repairs to all other item(s) referenced within this document are **not** permitted. Contact Alpine Aerotech LP for further information if repairs are required to all other item(s) referenced within this document.

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SECTION 6 REMOVAL/REPLACEMENT

General Notes

1. All Removal/Replacement instructions shall be accomplished in accordance with (IAW) standard aircraft practices. Refer to the current revision of the FAA Advisory Circular AC 43.13-1 and AC 43.13-2 for details on standard aircraft practices.

2. Torque fasteners IAW the tension type torque limits indicated in the most current revision of BHT-ALL-SPM, Chapter 2 unless otherwise specified.

3. All dimensions are in imperial measures (inches/pounds).

4. Refer to Section 4: Maintenance Instructions for instructions on maintenance for the item(s) referenced within this section.

5. Refer to Section 9: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

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Removal Instructions

1. Gain access to the aircraft and make the aircraft ready for maintenance.

2. Disconnect the Wiring Harnesses (Items 16, 17, 18 & 19) and associated Coax Cables (Item 14 & 15) and temporarily stow them. Reference Figure 4 and Appendix A.

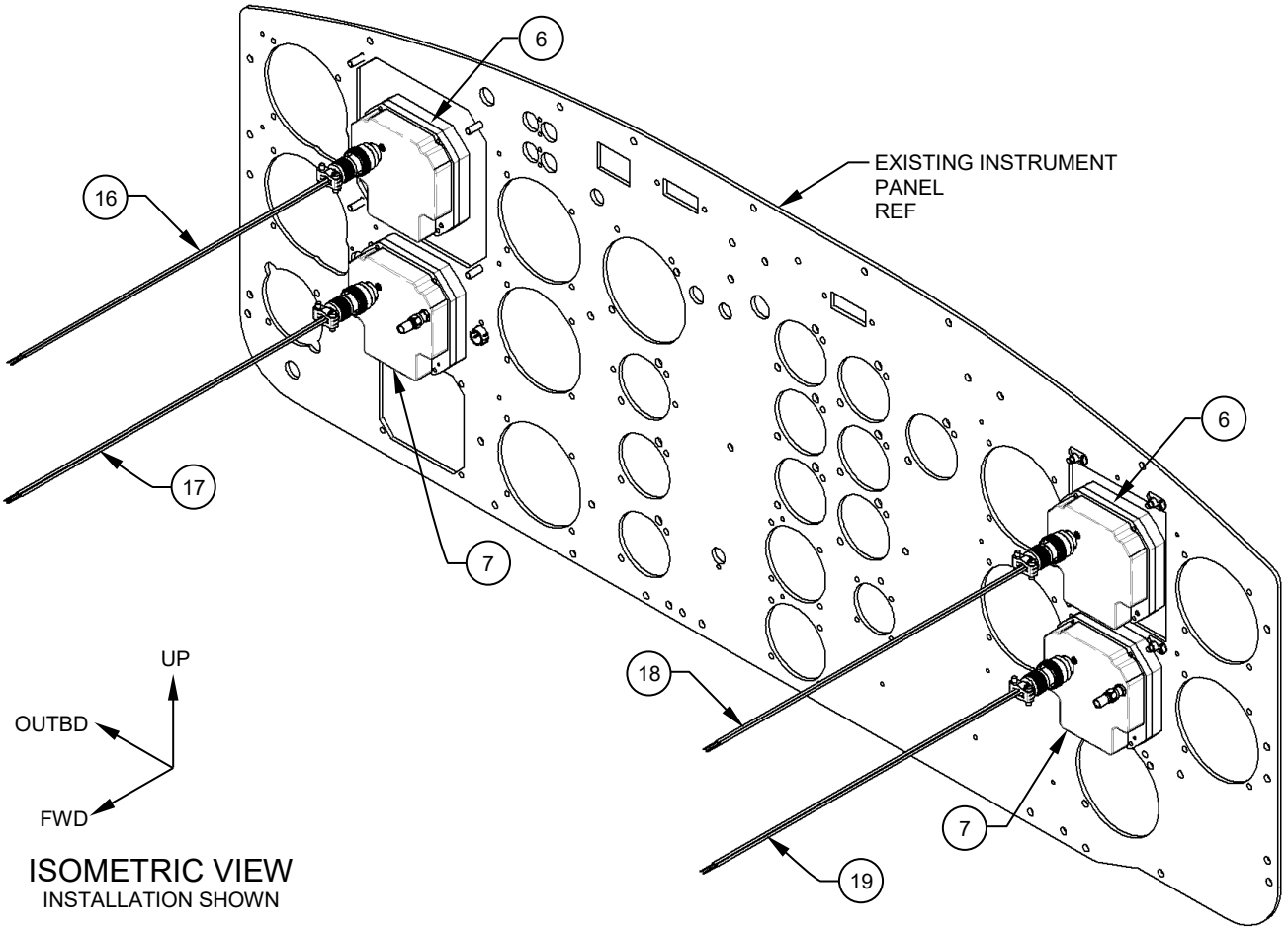

Figure 4
Instrument removal

3. On the RHS of the cockpit, remove all fasteners (Item 2) common to the Adaptor, Detail (Item 1) and remove the Adaptor, Detail, and the Attitude Indicator (Item 7) from the instrument panel as a unit. Remove the Heading Indicator directly from the existing instrument panel. Reference Figures 4 & 5.

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Removal Instructions (cont.)

4. On the LHS of the cockpit, remove all fasteners common to the Adaptor, Detail (Item 5) and remove the Adaptor, Detail, and the Attitude Indicator (Item 7) as a unit or alternately, remove the Attitude Indicator directly from the instrument panel (as applicable). Remove the Heading Indicator (Item 6) directly from the existing instrument panel. Reference Figure 6.

CAUTION

Use extreme care when handling the instruments and avoid touching the screen if at all possible. For proper care and handling refer to Kelly Manufacturing publication No. 1401-5 for the Heading Indicator and No. 1401-3 for the Attitude Indicator.

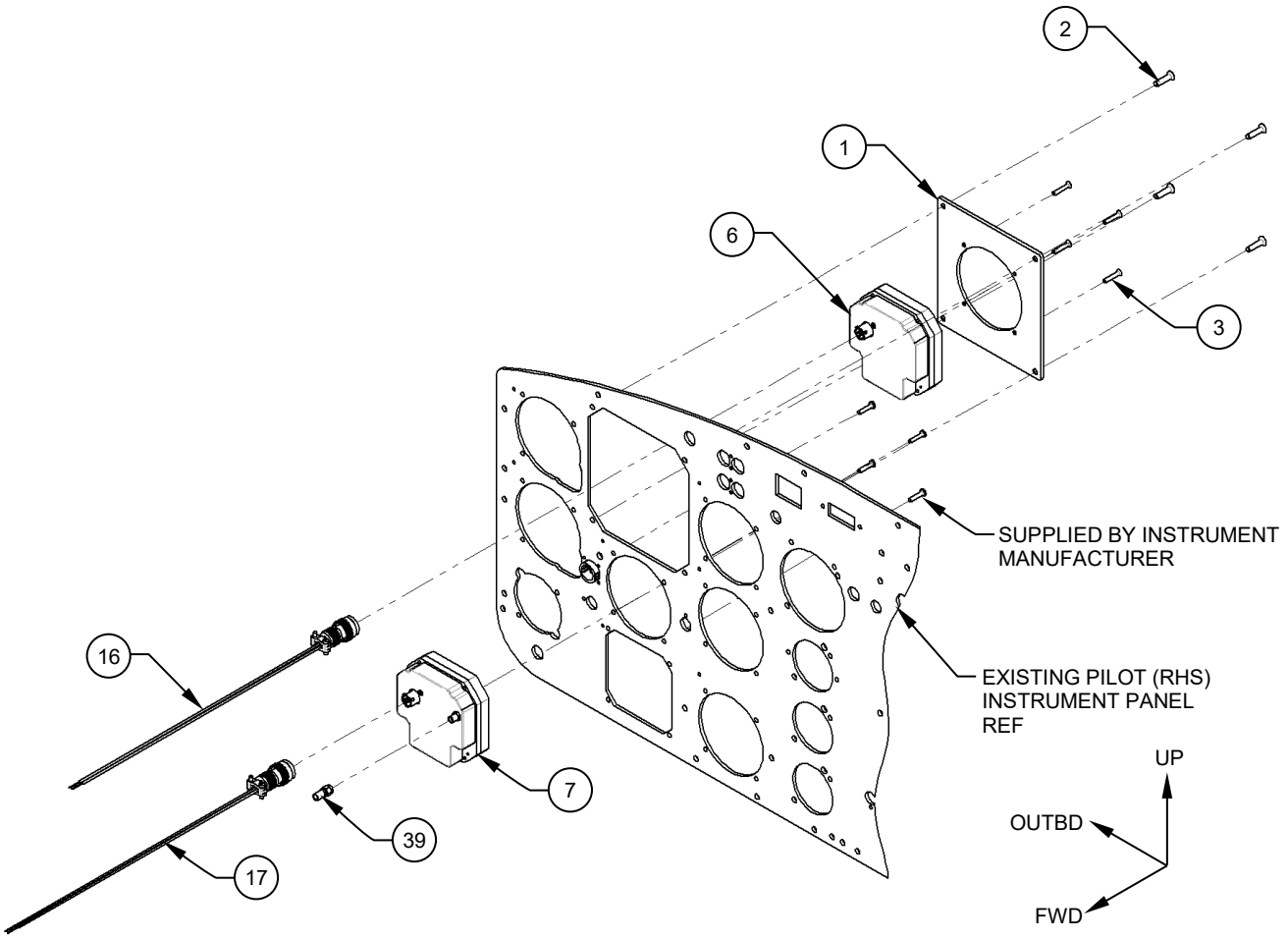

Figure 5
Instrument removal
Pilot (RHS) shown

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Removal Instructions (cont.)

5. With the Adaptor, Details (Items 1 & 5 as applicable) and Attitude Indicator(s) (Item 7) on a bench, remove all fasteners (Item 3) common to the instruments. Treat all unserviceable instruments as if they are new to preserve the possibility of repair.

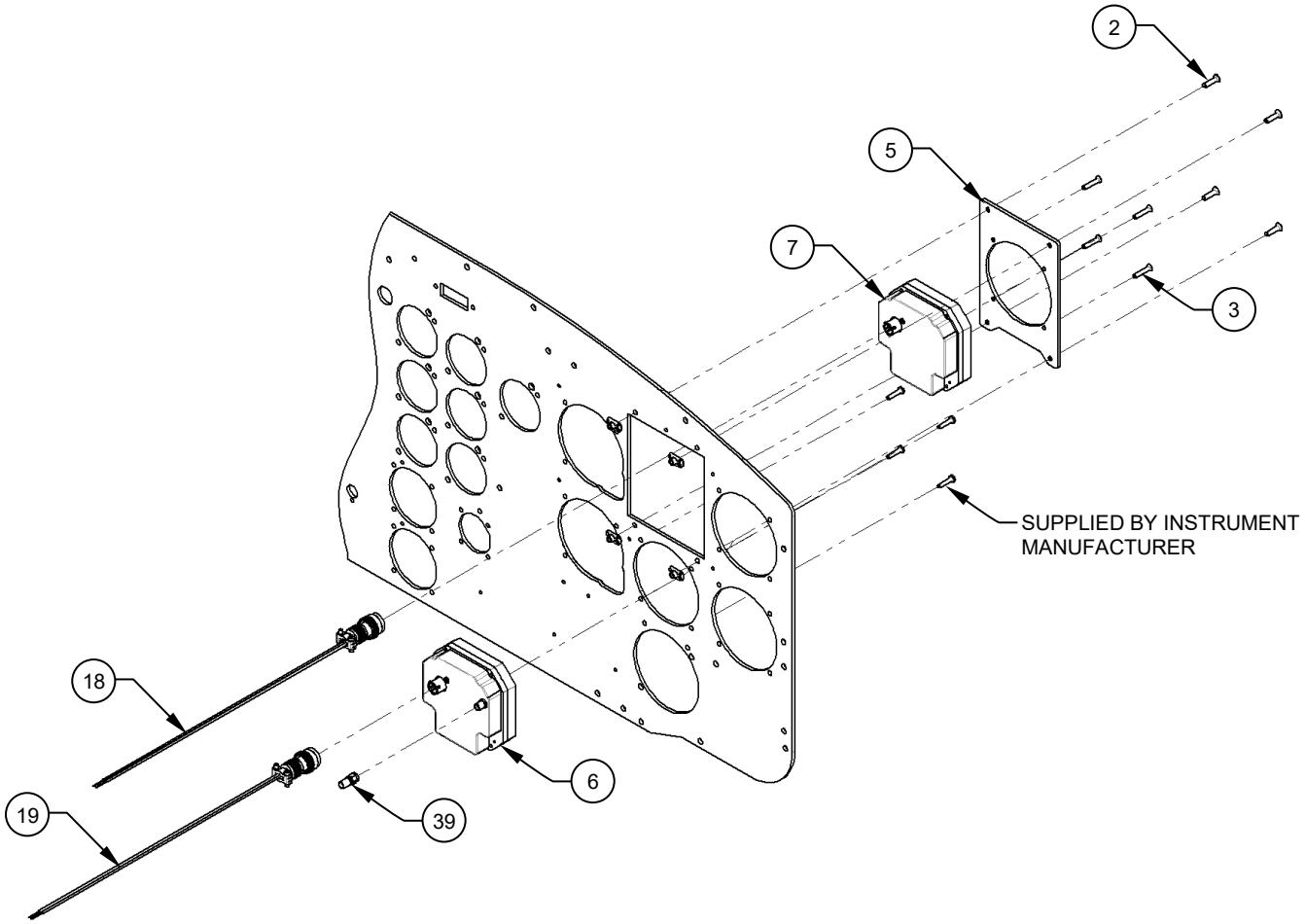

Figure 6
Instrument removal
Co-pilot (LHS) shown

6. Refer to Section 5, Troubleshooting for information regarding the repair of unserviceable instruments.

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Replacement Instructions (cont.)

1. There are no special procedures for replacement of the Attitude (Item 7) and Heading (Item 6) Indicators; as such the replacement can be considered the opposite of the removal procedure.

2. Connect aircraft to external power and power up instruments. On initial start-up the instruments will show a blue “Self-Test” screen that will display a list of data including the instrument serial number. Record the serial number(s) in the ICA document as well as the logbook for future reference. After roughly 30 seconds the “Self-Test” will be cleared from the displays and a prominent red “X” will be displayed across the screens while the instrument initializes. The red “X” should not be present on the screens for more than 3 minutes.

3. Confirm that the instrument readings are stable.

4. Move the aircraft outside to allow the Heading Indicator(s) to acquire a GPS signal. The “NO GPS” indicator should extinguish once the signal is established.

5. Cycle power to the instruments one at a time using the associated circuit breakers in the overhead breaker panel to ensure proper breaker function.

6. Update the aircraft logbook for the replacement of the affected components of the Basic Digital Instrument, Kit.

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Battery Replacement Instructions

1. Gain access to the back of the Attitude Indicator (Item 7).

2. Remove the two screws common to the battery cover and remove the cover. Reference Figure 7.

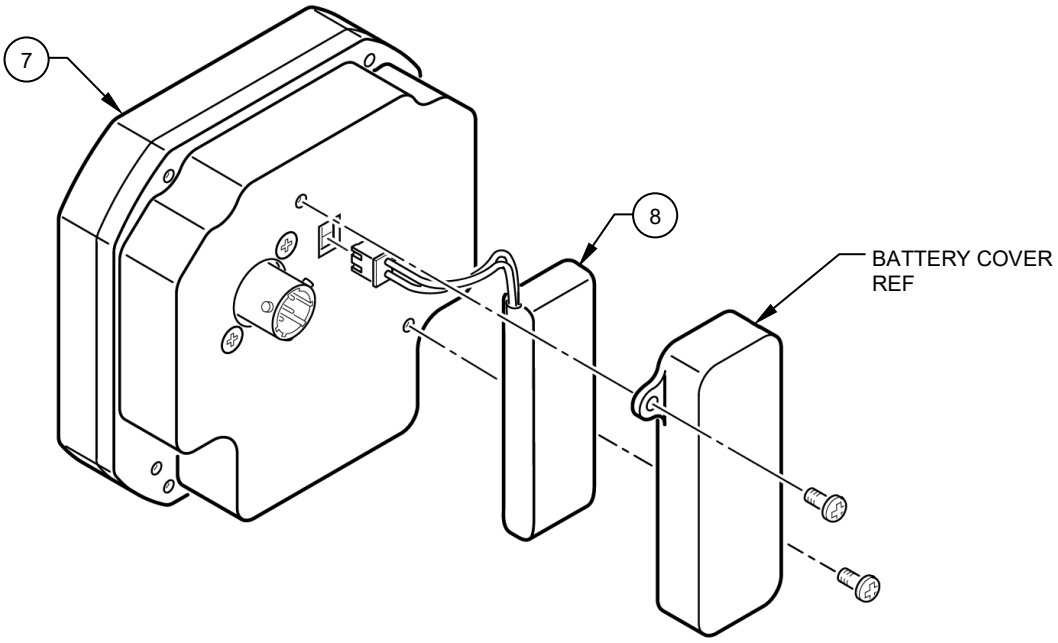

Figure 7
Back-up Battery
Replacement

3. Disconnect the Battery, Assy plug (Item 8) from the back of the Attitude Indicator (Item 7) and discard battery. Reference Figure 7.

4. Connect a new Battery, Assy and re-install the battery cover. Reference Figure 7.

5. Perform the Battery Condition inspection.

6. Update the aircraft logbook for the replacement of the back-up battery.

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SECTION 7 GENERAL

Magnetic calibration

1. Perform magnetic calibration procedure as detailed below (Heading Indicators only).

   i. While in flight, and after at least three minutes after turning on the instrument, depress and hold the two “DIM” buttons simultaneously for about ten seconds until the message “Gathering Mag Data” is displayed on the instrument. The instrument will gather data for the next ten minutes. Reference Figure 1.

   ii. Within the next ten minutes perform four slow (approximately 2 minute) 360° turns; two to the right and two to the left alternately, while maintaining a speed greater than ten knots. Reference Figure 3.

NOTE

The Heading Indicator requires a minimum forward speed of ten knots for the GPS to become active. At speeds below ten knots the instrument will operate as a stabilized magnetic heading indicator only and the “MAG MODE” indicator will be illuminated on the instrument.

   iii. When ten minutes has elapsed, the instrument will display the message “Mag Data Saved”. Turn the instrument(s) off, then back on by cycling power to the instruments via the circuit breakers located on the overhead breaker panel. The message will then disappear and the instrument is calibrated for the magnetic field of the aircraft.

   iv. The magnetic calibration procedure should be repeated every time another instrument is added/removed or any significant change has been made to the electrical system that could change the magnetic signature of the aircraft.

NOTE

During the calibration procedure the Heading Indicator(s) could behave erratically due to the calibration process. This is normal.

   v. When the magnetic calibration procedure is complete, ensure proper function of the instruments.

   vi. Update the aircraft logbook to record magnetic calibration.

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SECTION 8 AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is approved by the Minister and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

Supplement to applicable Maintenance Manual,
Chapter 4, Airworthiness Limitations Schedule

Notes

1. Refer to the BHT-205A-1-MM, Chapter 4, for general information on airworthiness limitations and airworthiness limitation schedules.

2. Item(s) **not** listed in the Scheduled Airworthiness Limitations section within this document have an unlimited airworthiness life.

Scheduled Airworthiness Limitations

1. There are no airworthiness limitations associated with the item(s) referenced within this document.

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SECTION 9 ILLUSTRATED PARTS BREAKDOWN

General Notes

1. Alternate items listed where applicable. Duplicate item numbers signify an alternate part number.

△1 Typical item number for all like items in this view unless otherwise specified.

△2 Equipped from the manufacturer complete with a Battery, Assy (Item 8). Battery, Assy part number provided for replacement purposes.

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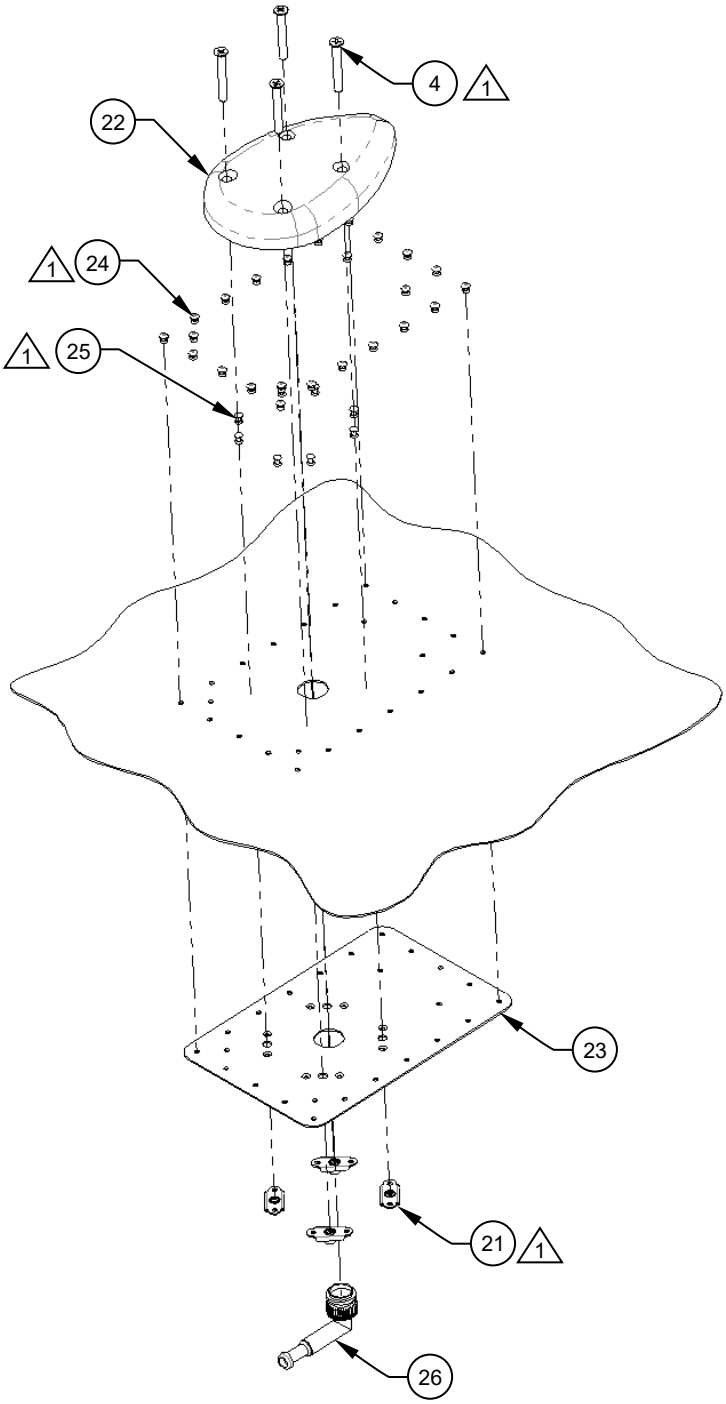
Illustrated Parts Breakdown (cont.)



GPS Antenna
Installation Shown

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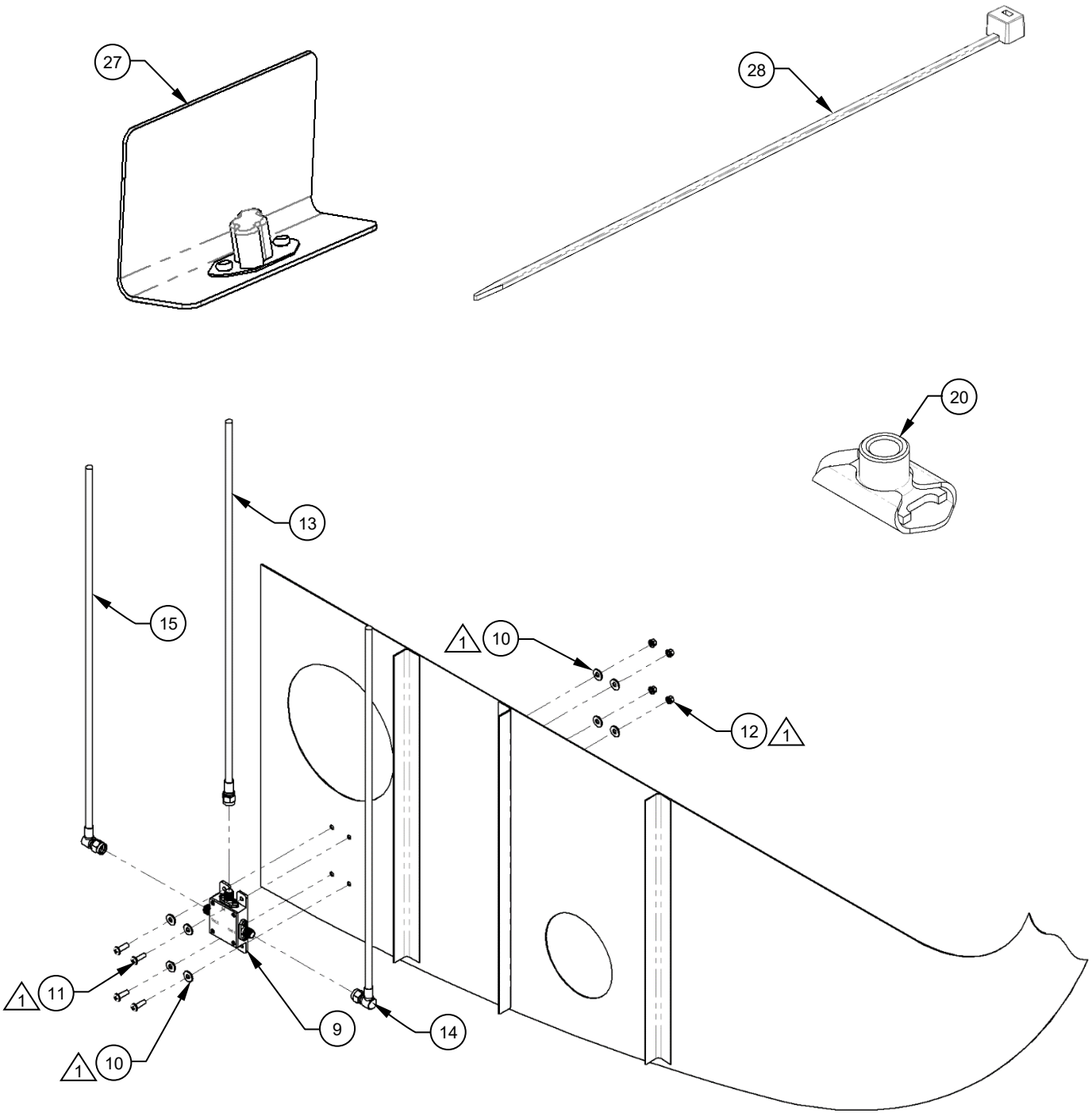
Illustrated Parts Breakdown (cont.)



Splitter Installation shown

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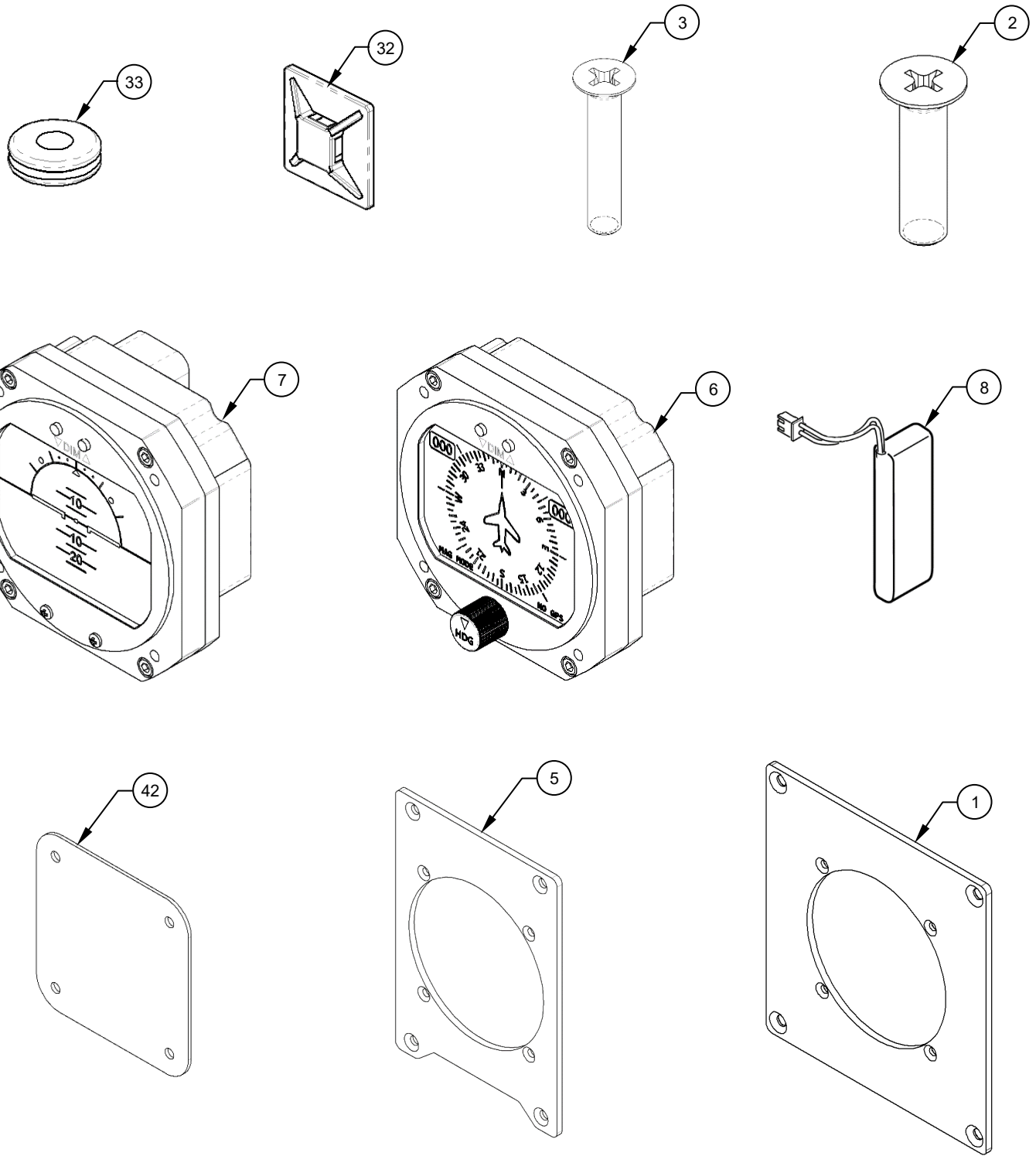
Illustrated Parts Breakdown (cont.)



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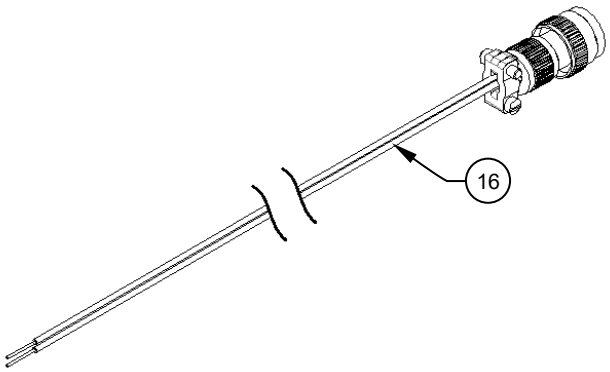
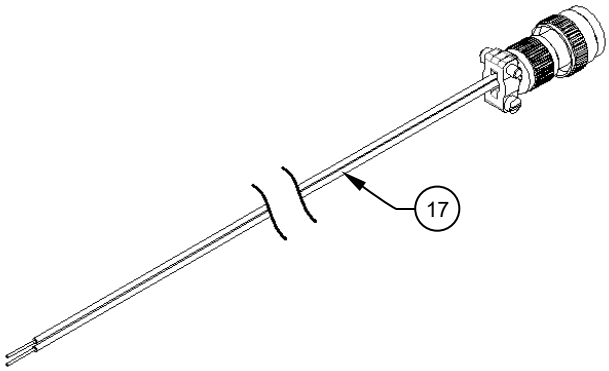
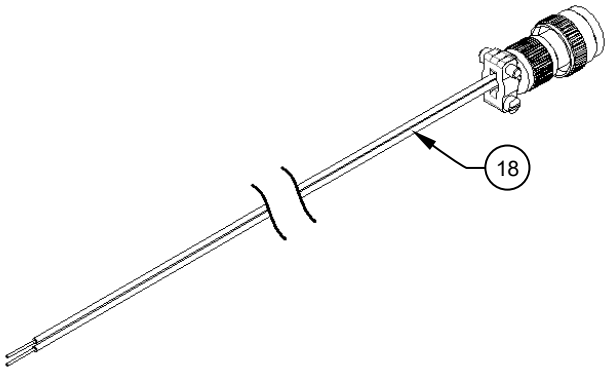
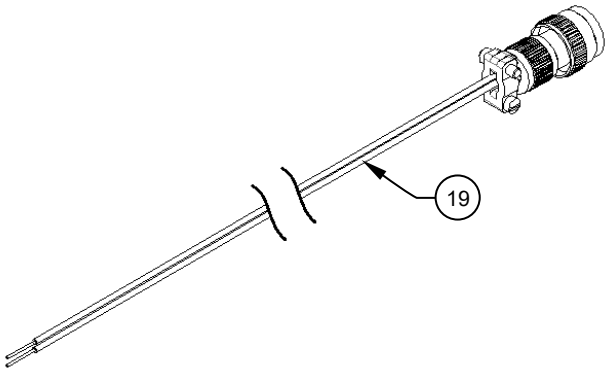
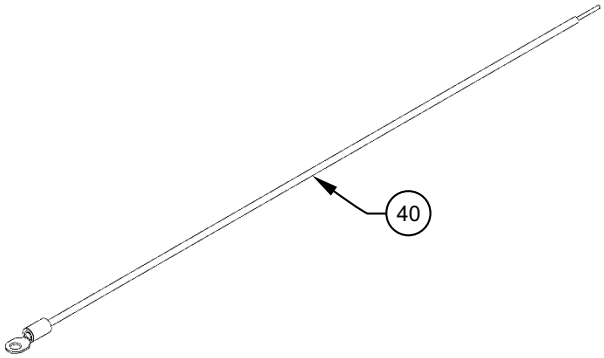
Illustrated Parts Breakdown (cont.)

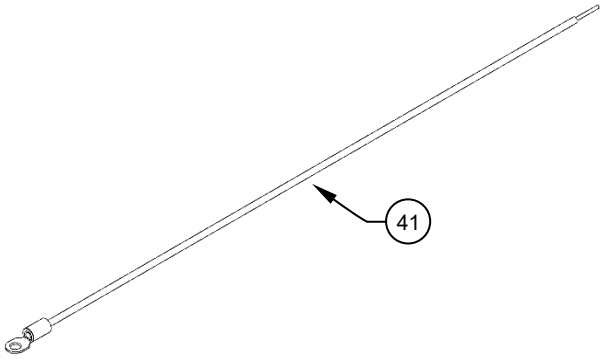












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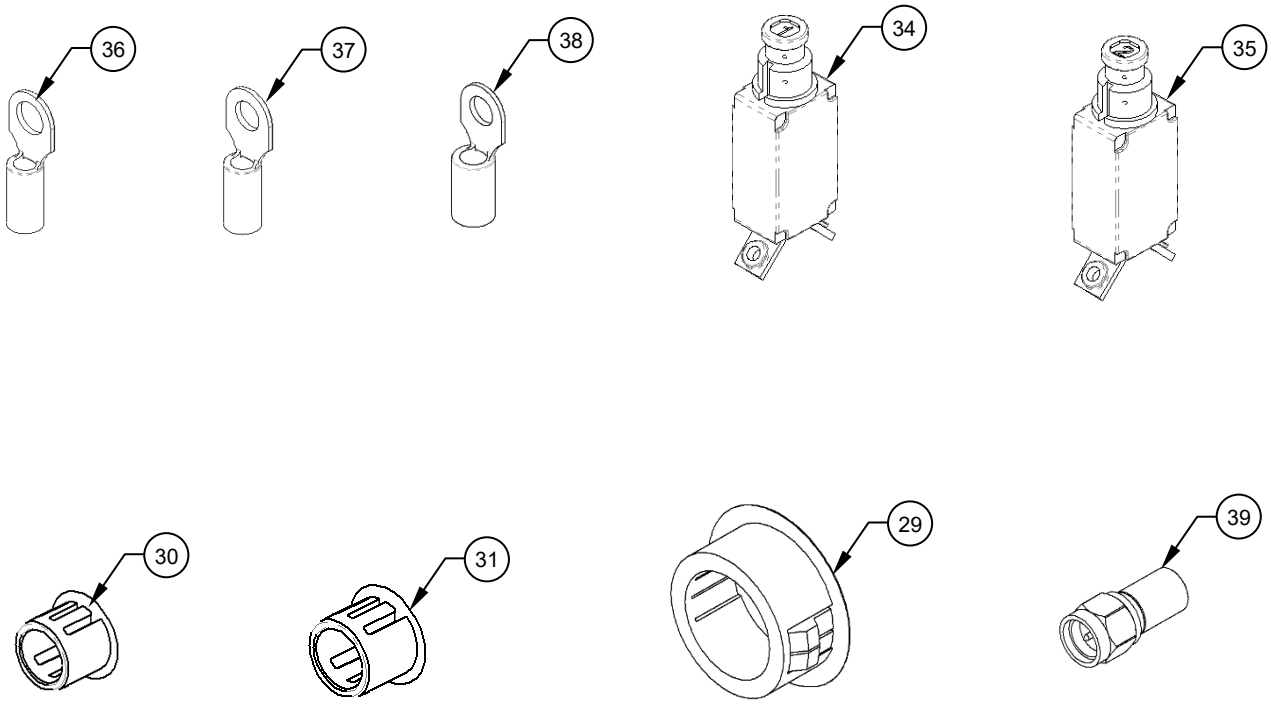
Illustrated Parts Breakdown (cont.)



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Illustrated Parts Breakdown (cont.)

ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-280-070-001	BASIC DIGITAL FLIGHT INSTRUMENT, KIT	C/O ITEMS BELOW				ALPINE AEROTECH LP	L0171
1	1	AAL-280-042-008	ADAPTOR, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
2	8	MS24693-BB274	SCREW, MACHINE	SEE SPEC	SEE SPEC	NASM24693	SEE SPEC	SOURCE AS REQUIRED	NA
3	8	MS24693-BB30	SCREW, MACHINE	SEE SPEC	SEE SPEC	NASM24693	SEE SPEC	SOURCE AS REQUIRED	NA
4	4	MS24693-C56	SCREW, MACHINE	SEE SPEC	SEE SPEC	NASM24696	SEE SPEC	SOURCE AS REQUIRED	NA
5	1	AAL-280-072-003	ADAPTOR, DETAIL	2024-T3	0.125	AMS 4462	SEE SPEC	ALPINE AEROTECH LP	L0171
6	2	103-0503-03-01	RCA1510-3 HEADING INDICATOR	NA	NA	NA	NA	KELLY MFG CO	08AF1
7	2	102-0403-11-11	RCA2610-3-G ATTITUDE INDICATOR	NA	NA	NA	NA	KELLY MFG CO	08AF1
2 8	2	635-0002-01	BATTERY, ASSY	SEE MFR	1.85 WATT HRS	SEE MFR	SEE MFR	KELLY MFG	08AF1
9	1	S12T-E-SF	SPLITTER, GPS	SEE MFR	SEE MFR	SEE MFR	SEE MFR	GPS SOURCE INC.	1RTJ5
10	8	NAS1149CN432R	WASHER, FLAT	SEE SPEC	SEE SPEC	NAS1149	SEE SPEC	SOURCE AS REQUIRED	NA
11	4	MS35206-215	SCREW, MACHINE, PAN-HEAD	SEE SPEC	SEE SPEC	NASM35206	SEE SPEC	SOURCE AS REQUIRED	NA
12	4	MS21043-04	NUT, SELF LOCKING	SEE SPEC	SEE SPEC	NASM21043	SEE SPEC	SOURCE AS REQUIRED	NA
13	1	AAL-280-071-001	COAX CABLE, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
14	1	AAL-280-071-002	COAX CABLE, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
15	1	AAL-280-071-003	COAX CABLE, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
16	1	AAL-280-041-008	WIRING HARNESS, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
17	1	AAL-280-041-007	WIRING HARNESS, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
18	1	AAL-280-041-006	WIRING HARNESS, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
19	1	AAL-280-041-005	WIRING HARNESS, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
20	4	CB6014CR08-1P	CLICK-BOND, FLOATING TWO LUG NUT PLATE	SEE MFR	SEE MFR	SEE MFR	SEE MFR	CLICK BOND	66530
21	4	MS21059L08	NUT PLATE, SELF LOCKING	SEE SPEC	SEE SPEC	NASM21060	SEE SPEC	SOURCE AS REQUIRED	NA
22	1	013-00235-00	GA 35 GPS ANTENNA	SEE MFG	SEE MFG	SEE MFG	SEE MFG	GARMIN	NA
23	1	AAL-280-042-002	DOUBLER, DETAIL	2024-T3	0.04	AMS 4036	SEE SPEC	ALPINE AEROTECH LP	L0171
24	24	MS20470AD3-3-5	RIVET, SOLID, UNIVERSAL HEAD	SEE SPEC	SEE SPEC	NASM20470	SEE SPEC	SOURCE AS REQUIRED	NA
25	8	MS20426AD3-4	RIVET, SOLID, COUNTERSUNK HEAD	SEE SPEC	SEE SPEC	NASM20426	SEE SPEC	SOURCE AS REQUIRED	NA
26	1	225554-6	TNC CONNECTOR, RIGHT ANGLE	SEE SPEC	SEE SPEC	MIL-STD-348	SEE SPEC	TE CONNECTIVITY	U0HF6
27	1	AAL-280-041-009	CLIP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
28	30	MS3367-()-9	STRAP, TIE DOWN, ELECTRICAL	SEE SPEC	SEE SPEC	AS33671	SEE SPEC	SOURCE AS REQUIRED	NA

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Illustrated Parts Breakdown (cont.)

ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
29	1	85985K21	CAP-PLUG, PLASTIC	SEE MFR	SEE MFR		SEE MFR	COMMERCIAL	
30	16	245-049	CAP-PLUG, PLASTIC	SEE MFR	SEE MFR	SEE MFR	SEE MFR	SPAENAUR	94223
31	2	245-044	CAP-PLUG, PLASTIC	SEE MFR	SEE MFR	SEE MFR	SEE MFR	SPAENAUR	94223
32	4	ABMM-A-C	CABLE TIE MOUNT	ABS	.75 X .75	SEE MFR	SEE MFR	PANDUIT CORP.	6383
33	2	MS35489-6	GROMMET, RUBBER	SEE SPEC	SEE SPEC	MS35489	SEE SPEC	SOURCE AS REQUIRED	NA
34	2	MS22073-1	CIRCUIT BREAKER, TRIP FREE, PUSH-PULL	SEE SPEC	SEE SPEC	AS22073	SEE SPEC	SOURCE AS REQUIRED	NA
35	2	MS22073-2	CIRCUIT BREAKER, TRIP FREE, PUSH-PULL	SEE SPEC	SEE SPEC	AS22073	SEE SPEC	SOURCE AS REQUIRED	NA
36	4	MS25036-103	TERMINAL LUG, CRIMP STYLE	SEE SPEC	SEE SPEC	SAE-AS25036	SEE SPEC	SOURCE AS REQUIRED	NA
37	4	MS25036-149	TERMINAL LUG, CRIMP STYLE	SEE SPEC	SEE SPEC	SAE-AS25036	SEE SPEC	SOURCE AS REQUIRED	NA
38	2	MS25036-153	TERMINAL LUG, CRIMP STYLE	SEE SPEC	SEE SPEC	SAE-AS25036	SEE SPEC	SOURCE AS REQUIRED	NA
39	2	142-0408-011	SMA CONNECTOR, STRAIGHT	SEE SPEC	SEE SPEC	MIL-STD-348	SEE SPEC	CINCH CONNECTIVITY	34078
40	1	AAL-280-071-004	WIRING HARNESS, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
41	1	AAL-280-071-005	WIRING HARNESS, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
42	2	AAL-280-072-006	BLANKING PLATE, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
C01	1	NA	SEALANT, CORROSION INHIBITIVE	PS 870 CLASS B	SEE MFR	MIL-PRF-81733	NA	PRC-DESOTO INTERNATIONAL	83574
C02	1	HYSOL EA 9309.3NA	HYSOL EPOXY PASTE ADHESIVE	EA 9309.3NA	NA	SEE MFR	NA	HENKEL LOCTITE	79436

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APPENDIX: A ELECTRICAL CONNECTIONS

Electrical Notes

This appendix outlines the electrical details associated with the installation of the Basic Digital Flight Instrument, Kit and includes the wiring schematic.

1. Unless otherwise specified, all wiring terminations at connectors shall be IAW BHT-ELECT-SPM Chapters 4, 5 and 7 and the connector manufacturer's instructions or applicable military or commercial standard for stripping procedures, crimping procedures and required tooling.

2. Use existing ground stud or ground block if available. If new ground studs or ground blocks are required, install IAW BHT-ELECT-SPM, Chapter 8.

3. All wiring shall be routed and secured IAW BHT-ELECT-SPM, Chapter 6. Particular attention to minimum bend radii, clamp spacing, service loop separation from control, and fluid and oxygen systems must be observed.

4. Refer to ICA document AAL-280-075-701, Section 9: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this appendix.

5. All solder connections are to be made using a rosin flux cored solder wire (63% tin, 37% lead) and following standard aircraft practices.

⚠1 Connect to 28VDC essential bus. Trim Wiring Harness, Assys (Item 40 & 41) as short as is practical.

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1. Wiring Schematic