SkyView HDX

System Installation Manual

AML STC SA02594SE

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Dynon Avionics offers a number of Internet sites for support:
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Record of Revision

Rev	Date	ECO	Description
A	3/5/2018		Initial Release
B	9/31/2018	312857	• Added Second Display, VHF COM, AP Panel, Knob Panel. • Added more specific instructions on mounting SkyView HDX per STC02594SE
C	4/4/2019	326312	• Created Section 8.5.22 Landing Gear Position Indication • Revised Landing Gear information in Section 8.6 Contacts to address logic change for landing gear to include GEAR 1, GEAR 2, GEAR 3, and GEAR 4 • Adjusted formatting on title page • Updated references table
D	7/2/2019	327067	• Revision Bars indicate new information or significant changes to existing information • Revised Table 64 - SV-COM-PANEL D15M Pinout to meet SV-COM-X83 Transceiver wiring requirements • Added Section 2.0: Instrument Panel Design • Added Section 2.1: Regulatory Considerations • Added Section 2.2: Volumetric Requirements • Section 1 (old) moved to formatter content • Section 1.10 (old) removed because content outdated • Section 2.1-5 (old) moved to Section 1 (new) • Section 2.6 (old) removed because content outdated • Section 2.7 (old) renamed and moved to Section 1.15 (new) • Added Section 3.1 (new): Avionics Tray Installation • Sections 3, 6, 8-19 re-organized to better match typical order of assembly • Sections 4.10-13 (old) removed because content outdated • Section 5 (old) moved to Section 21 (new) • Section 7 (old) moved to Section 22 (new) • Section 8.5.18 (old) removed because outdated • Section 11.1.1 (old) moved to Section 20 and updated. • Section 11.1.2 (old) moved to Section 19 and updated. • Section 27 (old) removed because no longer applicable. • Section 23.3.2 (old) renamed. • Section 23.3.3 (old) removed because no longer applicable • Tables 6, 35, 39 (old) removed because outdated • Figure 59 (old) removed because outdated • Replaced all component mounting dimension figures with updated drawings. • All subsequent sections, figures, tables renumbered • Edited new content, fixed headers/footers, fixed cross-references • Incorporated internal review feedback. • Updated doc in response to FAA review feedback, specifically Sections 2.3.1, 2.3.2, 3.1.2, 10.8.3.2, 12.1.2, 12.4, 14.3, 21.7, 22.2, 25.4.1, 25.4.2, 25.6.7.
E	5/6/2020	339966	• Change Bars indicate new information or significant changes to existing information. • Created new Section 10.2.4 for Certified Sensors table. Subsequent Section 10 headings renumbered. • Updated 10.2.11, and 10.2.12 with new fluid sensors sold by Dynon. • Added new Section 3.2: Instrument Panel Material Requirements. Subsequent Section 3 headings renumbered.
F	8/6/2020	347671	• Section 10.3.1 updated with correct part number for Oil Temp Sensor • Sections 10.1, 10.3, 10.3.1, 10.8, 10.9 updated for dual EMS installation, twin engine EMS configuration file requirement, and twin engine display layouts • Added new Section 4.4 for required display configurations information. • Added new Section 20 for Angle of Attack (AoA) sensor installation and configuration information. • Added Section 1.4 STC Approval and 1.5 Third-Party Products • Revised section 13.2.2 ARINC Third-Party Connection to include Garmin GPS 175 connection and configuration instructions.

Rev	Date	ECO	Description
G	9/23/2020	356787	• Updated Section 3 and 3.2 per with notes about instrument panel materials and fasteners. • Added Section 7.5.3 AoA In-Flight Calibration. • Updated Section 7.6 with new system function.
H	10/28/2020	360446	• Updated Section 3: Instrument Panel Design (page 3-1) with an additional Important Note about FAA-compliant installations.

10.2.11 Oil Pressure Sensor

Mount the oil pressure sensor securely to the airplane's structure using appropriate AN/MS hardware fittings, clamps, and flexible hose. Do not mount the sensor directly to the engine's pressure port. The pressure sensor has a 1/8-27 NPT pipe thread fitting.

DO NOT mount the sensor directly to engine or other areas of high vibration.

Always mount the sensor to the airframe structure, and connect it with flexible hose to minimize vibration effects.

Mounting the sensor directly to the engine may cause sensor failure/leakage and possibly fire.

Avoid damaging plastic portion of the sensor when threading it into the matching fitting.

Damaging the plastic portion of sensor may cause sensor failure/leakage and possibly fire.

Make sure the restrictor fitting required by §23.1337 is installed when connecting the sensor to the engine's pressure port.

Restrictor fittings minimize fluid leakage in event of failure of any components downstream of the pressure port connection, allowing time for an emergency landing.

Not having a restrictor fitting may result in rapid fluid leakage in event of failure of any components downstream of the pressure port connection, which could lead to the complete loss of fluid and possibly fire.

As of 2020, Dynon Avionics no longer supplies the original 0-150 PSI Kavlico sensor (P/N 503388-000). For new installations, use the new 150 PSI Kavlico sensor (P/N 503851-000). The new sensor is a direct mechanical and electrical replacement for the original sensor. Installation methods (see above) are the same for both sensors. Updated software sensor definitions are available from Dynon's software download page.

Before installing Kavlico sensors, reference the Dynon Technical Advisory website (https://www.dynonavionics.com/support-bulletins.php) for important information regarding Kavlico sensors sold by Dynon.