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Document IS-AG-010  
Revision L  
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## Installation & Maintenance Specification IS-AG-010

### Av-DEC Aircraft Antenna Gasket Installation

**NOTE: Read this specification completely before antenna installation.**

#### 1. SCOPE

This specification describes the method for antenna and aircraft surface preparation and antenna installation using the Av-DEC **Hi-TAK Polyurethane Gasket™** series antenna gasket, **HT3326-5 Self-Leveling Green** sealant, and **Hi-TAK Polyurethane StretchSeal™** tape. This method is to be used only for antenna gasket installations between an antenna and aluminum aircraft skin or ground plane.

#### 2. APPLICABLE DOCUMENTS

Engineering orders, aircraft maintenance manual, avionics installation manual, and/or user maintenance manual as applicable.

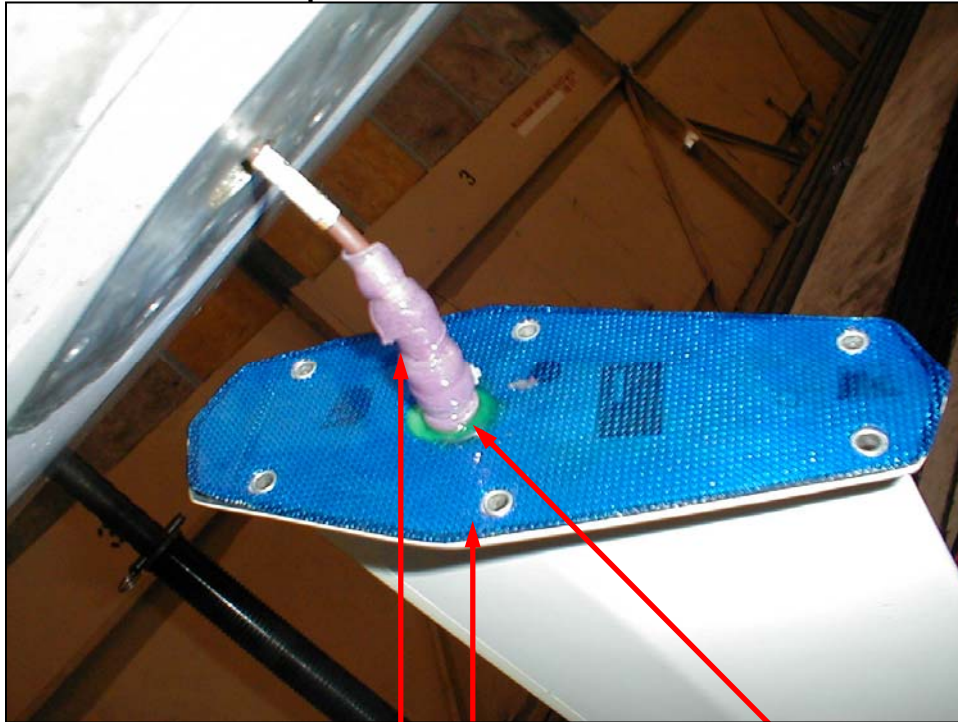
#### 3. REQUIREMENTS

**3.1 MATERIALS - Cleaning Solvent** - Isopropyl alcohol or other approved cleaning solvent.

**3.2 SURFACE PREPARATION** - Surfaces that will come in contact with the antenna gasket shall be free of paint, dust, oil, grease, fingerprints, and other contamination prior to antenna installation. Any primer or paint shall be removed to expose clean bare metal. As a means of adding extra protection it is recommended to paint 3/16" under the footprint of the antenna. The surface shall be wiped with a clean, solvent dampened cloth, followed immediately by wiping with a clean dry cloth. Residue of previously applied adhesives, sealants, or fillet sealing materials shall also be removed. An appropriate chemical conversion coating may be applied to the aircraft skin surface and allowed to dry per manufacturer's instructions. Inspect surface areas for corrosion and take corrective action based upon current maintenance manual requirements.

**3.3 GASKET INSTALLATION** - Av-DEC Hi-TAK Polyurethane Gaskets™ are supplied with protective release film on both sides of the gasket. Leave release film in place until ready to install gasket. Remove gasket from the protective packaging, taking care not to fold or bend it. Verify that fastener holes and connector cutouts in the gasket will align with the antenna when positioned for installation. Trim the perimeter of the gasket flush with the antenna if needed. Remove release film from the side of the gasket marked "antenna side" and position gasket over the antenna. Beginning at one side or corner of the antenna, place gasket into position, carefully aligning gasket fastener holes with antenna fastener holes. Release film should remain on exposed "aircraft side" of gasket until immediately prior to antenna installation.

**Figure 1 Typical Antenna Gasket Installation with HT3326-5 Self-Leveling Green Sealant and StretchSeal Tape**



**StretchSeal Tape on connector**  
**Antenna Gasket in place on antenna**  
**HT3326-5 Self-Leveling Green Sealant applied to connector base**

**3.4 SEALING ANTENNA CONNECTOR BASE** - A major source of antenna corrosion occurs from moisture leakage into the base of the antenna connector. Although the antenna can be mounted with only the sealed antenna gasket installed, Av-DEC highly recommends the application of HT3326-5 Self-Leveling Green sealant to the connector mounting area. HT3326-5 sealant will prevent moisture ingress through the connector base.

**Do not open HT3326-5 package until ready for use. Follow instructions for priming and mixing on the HT3326-5 cartridge. Dispose of cartridge if it has been removed from package for more than 24 hours.**

Apply a layer of Av-DEC **HT3326-5 Self-Leveling Green** sealant to the antenna-mounting surface of the antenna connector, as shown in Figure 1. Allow the sealant to cure for thirty minutes before mounting the antenna on the aircraft.



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**3.5 SEALING ANTENNA CONNECTOR** - An additional source of corrosion occurs from moisture leakage into the antenna connector. Although the antenna can be mounted with only the sealed antenna gasket installed, Av-DEC highly recommends the application of **Hi-TAK Polyurethane StretchSeal™** (EN110589 or AD89513) tape over the connector. StretchSeal tape will prevent moisture ingress into the connector.

To apply the StretchSeal tape, remove the tape from the package and unroll a small length of tape. Wrap the StretchSeal Tape around the mated connector with a 50% overlap while stretching the tape 25% to 50% to ensure a tight wrap. A tight wrap is necessary to ensure a proper seal. Coverage shall be from the base of the antenna to at least ½” beyond the connector and onto the insulation jacket of the coaxial cable.

Note: Aircraft cutout hole must be at least ¼” greater in diameter than the connector outer diameter when using StretchSeal tape.

Apply cable ties immediately above and below the mated connector and the free end of tape.

**3.6 ANTENNA INSTALLATION** - Remove release film from the “aircraft side” of the gasket. Pre-position at least two fasteners through the antenna and gasket. Align fasteners at correct locations on the aircraft surface. Tighten each fastener one to two turns to hold the antenna in place on the aircraft. Install remaining fasteners through the antenna and gasket. Tighten fasteners in accordance with approved maintenance manual procedures. Wait at least 15 minutes and retighten the fasteners.

**3.7 FILLET SEAL** - Fillet sealing is not required, or needed, with Av-DEC antenna gaskets. However, a fillet seal may be used along with the gasket if required by maintenance or installation documentation.

**4. MAINTENANCE** - Installation of the Av-DEC Hi-TAK Polyurethane Gaskets™, HT3326-5 Self-Leveling Green sealant and Hi-TAK Polyurethane StretchSeal tape requires no additional maintenance tasks than those already specified in the approved maintenance manual procedures. Av-DEC recommends replacing the Hi-TAK Polyurethane Gasket™, HT3326-5 Self-Leveling Green sealant and Hi-TAK Polyurethane StretchSeal tape each time the antenna is removed from the aircraft.

**5. GASKET REMOVAL** - After removing antenna fasteners, use a phenolic or wooden tool as a wedge between the antenna and aircraft surface to separate antenna from the aircraft. After the antenna is removed, cut the cable ties from the connector wrap (if present) and remove wrap. Disconnect aircraft coax cable(s) and peel antenna gasket from aircraft. Remove Self-Leveling Green sealant from the antenna. Use isopropyl alcohol or other approved cleaning solvent to remove any remaining residue.