

# Airworthiness Bulletins

## AWB 00-6 Issue 1, 18 July 2001

### Micro Switch maintenance

#### Effectivity

Honeywell Micro Switches P/N 1SE1-3

#### Purpose

The purpose of this bulletin is to draw the attention of maintainers to the incompatibility of the elastomer material used as the hermetic seal in these switches with certain lubricants such as LPS1, LPS2 and LPS3. The moulded elastomer seal rapidly deteriorates when it comes in contact with these lubricants.

#### Background

From the SDR system the attention of CASA has been drawn to the failure of these switches installed in PK Devore 3500A floats. This incompatibility is reported to become apparent in a very short time after the lubricant comes in contact with the switch (within 8 to 10 hours). The indications of this incompatibility is initially an expansion in the moulded elastomer seal leading to disintegration of the seal and resulting in the plunger separating from the switch. The manufacturer has confirmed this incompatibility.

The 1SE1-3 switch is also used in many other applications in aircraft. It is possible that significant reductions in the component life of this switch could occur if these switches have come in contact with lubricants such as LPS1 or LPS2.

#### Recommendations

When inspecting switches of these type maintainers should check for deterioration in the moulded elastomer seals. In cases where there are indications of deterioration in the moulded elastomer seals in the 1SE series consideration should be given to replacing these switches with the 5SE series switches. The 5SE series have a Fluorosilicone seal that should be compatible with LPS type of lubricant.

The replacement of the 1SE series with the 5SE series should be carried out under CAR 36 approval.

Failure of the seal in 1SE1-3 switches where the instructions for continuing airworthiness indicate the use of LPS products should be reported to the equipment manufacturer, STC holder and to CASA as required by CAR 52. Refer to AWB 00-004 for further details of the SDR system.

#### [CASA home](#)

#### Airworthiness documents

- [Airworthiness directives](#)
- [Airworthiness bulletins](#)
- [Authorised persons](#)

- [Airworthiness advisory circulars](#)
- [Technical papers](#)
- [Forms](#)
- [Service difficulty reports](#)

## Airworthiness support

- [Subscribe to mailing list](#)
- [Applying for a COA](#)
- [Search for a COA](#)
- [Airworthiness seminars](#)
- [Airworthiness contacts](#)

## Airworthiness Bulletins

- [Recent AWBs](#)
- [General Advice](#)
- [Avionics](#)
- [Airframes](#)
- [Engines](#)

[Contact CASA](#)

[Site help](#) | [Copyright](#) | [Privacy](#)