

Electrical Equipment

AD/ELECT/59
Amdt 1

Ignition Switches

11/93

Applicability: Ignition switches manufactured by ACS Products Company or Gerdes Products Company fitted to, but not limited to the following aircraft models:

Piper PA-38-112;

Schweizer GA-164 series and 2-37 series;

Cessna 150 series, 152 series, 172 series, 177 series, 180, 182 series, 185, U206, 207, 210 series.

Note: Serial number ranges for Cessna aircraft are identified in Cessna Service Bulletin SEB91-5 Revision 1 dated 14 June 1991.

Requirement: 1. Inspect the ignition switch for wear or corrosion and lubricate the switch in accordance with ACS Service Bulletin SB92-01 Revision A dated 21 January 1993 or for Cessna aircraft Cessna Service Bulletin SEB91-5 Revision 1 dated 14 June 1991. If corrosion or wear is detected either replace the damaged components or replace the ignition switch before further flight.

Note: This requirement does not apply to ACS ignition switches that do not have a "start" position (models A-150-1 and A-510-5) manufactured on or after 20 February 1989, that have not accumulated 2000 hours time in service. (Switches manufactured after 20 February 1989 may be identified by the presence of red paint in the screw heads on the back of the switch and by the manufacturing date stamped on the switch body.)

2. Inspect the ignition switch installation to determine if a diode or other surge suppressor is installed on the starter solenoid. If one is not installed, prior to further flight, install a starter solenoid diode in accordance with ACS Service Bulletin SB92-01 Revision A dated 21 January 1993 or for Cessna aircraft Cessna Service Bulletin SEB91-5 Revision 1 dated 14 June 1991.

Compliance: Requirement 1. Within 100 hours time in service after 24 June 1993 or at the next periodic servicing, whichever occurs first, and thereafter, at intervals not to exceed 2000 hours time in service.

Requirement 2. Within 100 hours time in service after 24 June 1993.

Note: FAA AD 93-05-06 Amdt 39-8511 refers.

Background: The FAA has received numerous reports of ignition switch failures caused by internal wear and arcing of the contact surfaces.

Compliance with this Directive will decrease the likelihood of an inability to control electrical power supply to the engine occurring.

This amendment eases the compliance period of Requirement 2 due to spares not being readily available.