AUXILIARY POWER UNIT

GENERAL

The Auxiliary Power Unit (APU) is located in the rear section of the right-hand nacelle. The APU can operate on the ground only to supply bleed-air for airconditioning and electrical power. Failures will be detected and the relevant alerts presented.

OPERATION

The APU panel, which contains all controls and indicators necessary for control and operation of the APU, is located at the right-hand side of the lower overhead panel. Starting the APU requires DC power. Operation is automatic after selecting start. Fuel is supplied from the RH collector tank. An APU maintenance panel for fault code displays is located, behind a cover, at the top RH side of the overhead panel. Faults detected that do not cause the APU to shut down, or when the APU is not operating, are also presented at the APU maintenance panel.

NOTE: APU start is inhibited during engine starting or if a fault exists in the engine start system.

Amongst various other failures the APU will automatically shut down:

• An APU fault is detected:
  - High Exhaust Gas Temperature (EGT)
  - High oil temperature
  - Low oil pressure
  - APU overspeed during operation
  - APU underspeed during operation

• Other internal failures:
  - APU control malfunction
  - Bleed-air valve open at shut command
  - Start contactor sticking
  - Start cycle time exceeded
  - No start motor declutch
  - Engine start contactor sticking
  - Ventilation valve not open

• If APU fire is detected. See FIRE PROTECTION section.
• At lift-off if the APU was running during the take-off.
CONTROLS AND INDICATORS

FAULT LIGHT
FAULT (amber)
- APU fault.

APU GENERATOR P/B
See ELECTRICAL SYSTEM.

APU PANEL

FAULT
OFF
ON
START
BLEED
AVAIL
ON

GEN
AVAIL
ON

APU
AGENT
FIRE

TEST
ON
DISCH

APU START SELECTOR
OFF
- APU manually switched off.
ON
- Selector position after APU start.
START (springloaded to ON)
- Automatic start sequence.

NOTE: APU can be operated on the ground only.

APU FIRE CONTROLS AND INDICATORS
See FIRE PROTECTION.

APU BLEED P/B
See BLEED–AIR SYSTEM.
### ALERTS

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<td>APU FAULT</td>
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- **AUERAL**: CAUTION
- **LOCAL**: FAULT

Fokker 50 - Auxiliary Power Unit
SYSTEM OPERATION

General

The APU cannot run in flight.

APU bleed should be switched OFF during aircraft de-icing.

SCD the APU is normally started prior to engine start, shut down before take-off and started again during taxiing in.

APU operation is allowed during aircraft refueling. However, during fuelling operation the APU should not be started nor stopped.

Starting procedure

When START is selected too quickly, a FAULT results.

The FAULT annunciation clears automatically when the APU start selector is left in the ON position for 10 seconds. Do not attempt more than two consecutive APU starts and allow two for drainage between starts. If the start is unsuccessful, the APU start selector must be set to OFF before attempting another start.

Air conditioning with APU bleed air

The normal procedure for use of air conditioning on the ground with APU bleed air is:

ECONOMY ................................................................. ON
BOTH RECIRC FANS .................................................. ON
TEMPERATURE CONTROL ................................... AUTO
BLEED ......................................................................... ON

In case one recirculation fan is inoperative, switch off the air conditioning pack at the corresponding side. When both recirculation fans are inoperative, do not select full cold on either automatic or manual mode temperature control. When automatic temperature control is not available, use manual control but do not select full cold.

CAUTION: Non-compliance with the procedures for manual temperature control and recirculation fans inoperative may result in damage of the air conditioning packs.

When ECONOMY mode is not available, use normal mode.

APU shutdown procedure

APU start selector ....................................................... OFF