

 DC 9/80 OPERATIONS MANUAL	Auxiliary Power Unit	I	
	Chapter 4 - 1/3	07/04/20	Rev 1

GENERAL INFORMATION

The Auxiliary Power Unit is a turbine installed to provide pneumatic pressure to conditioned air system or to start the engines on when the airplane is on the ground. Thanks to a dedicated generator, The APU can provide electricity for the normal functioning of all systems. It is possible to use this unit even during flight, exclusively for electrical power.

The APU is situated in the rear part of the fuselage, in a not-pressurized section. The exhaust gas of the APU, are discharged overboard through a duct that ends near the right engine.

OPERATION

The APU starter works with direct current, to start it the battery switch must be in ON position. The START PUMP provides fuel to the APU, when no other pumps are operational. Gas temperature is always monitored and display by an EGT indicator in the overhead panel.

COCKPIT CONTROL PANEL

EGT INDICATOR:

Display the temperature of exhaust gas in degree Celsius. Maximum temperature is 760° C

APU AIR SWITCH:

See chapter. 16: PNEUMATICS

APU RPM

INDICATOR:

is made of two indicators that displays APU RPM percentage. Smaller indicator has increments of 1% from 0 to 9; bigger indicator increases of 2% from 0 to 100.

FIRE AGENT

Discharge switch
APU FIRE CONT
switch

See chapter 8: FIRE PROTECTION



APU DOORS Switch (guarded to AUTO):

AUTO: The opening and closing sequence is automatically performed.

RAM: Momentary position that provides manual override to open RAM doors.

NON RAM: Momentary position that provides manual override to open RAM doors.

OFF: Removes power from doors control circuit. The doors remain in their last position.

APU MASTER SWITCH:

APU master switch has three positions:

START: momentary position to initiate starting sequence

NOTE:

to start the APU the START PUMP switch must be ON if no other pumps are active. Battery switch must be ON and battery power available.

RUN: normal position for APU operations.

OFF: to switch the APU off. It closes the pneumatic air valve, regardless of APU AIR SWITCH position.

NOTE:

At start up the APU has an automatic 60 seconds warm up period before APU air is available regardless of the APU AIR switch position.

The APU has a 60 seconds unload operation delay before shutting down. Pneumatic pressure is not available.

APU ANNUNCIATOR LIGHTS

APU STARTER ON Light:

ON: APU starter is energized

OFF: starter not energized.



WAAP

APU OIL PRESSURE LOW Light:

ON: when the APU start switch is in the ON position, and oil pressure is low. During APU starting it is on until oil pressure reaches normal values.



EOAP