

Canadair Regional Jet 100/200 - Auxiliary Power Unit

C. Protective Shutdown

The ECU will shut down the APU (on the ground) if any of the following faults occur:

- Overtemperature - APU EGT exceeded schedule limits
- Low oil pressure (LOP) - Low oil pressure exists for 15 seconds with the APU operating
- High oil temperature - Oil temperature exceeded 325°C (617°F) with the APU operating
- Overspeed - APU speed exceeded 107 percent
- DC power loss - Battery power lost
- Loss of EGT signal - EGT sensor failure
- Loss of speed signal - Speed sensor failure
- Overcurrent - Fuel torque motor failure
- Door position - Door not in commanded position
- ECU failure - Internal ECU failure
- Slow start - Starter time period exceeded
- Emergency fire shutdown - APU FIRE PUSH or one the two external stop switches have been activated
- Starter relay - No rotation.

All the above protective shutdowns are inhibited in flight mode by a weight-off-wheels signal from the PSEU, except for the following 5 failures:

- Overspeed
- DC power loss
- ECU failure
- Loss of speed signal
- Emergency fire shutdown.

Canadair Regional Jet 100/200 - Auxiliary Power Unit

D. System Circuit Breakers

| SYSTEM | SUB-SYSTEM | CB NAME | BUS BAR | CB PANEL | CB LOCATION | NOTES |
|----------------------|-----------------------------|--------------|--------------|----------|-------------|-------|
| Auxiliary Power Unit | APU Controls | APU BAT CONT | APU BAT DIR | 5 | B2 | |
| | | APU ACT | MAIN BAT DIR | | A3 | |
| | APU Electronic Control Unit | APU ECU | DC BAT | 1 | N12 | |
| | Battery Charging | APU CHARGER | AC UTIL 2 | 2 | E5 | |
| | Fire Extinguishing | APU FIRE EXT | DC EMERG BUS | 1 | R5-6 | |