

# APU Panel

## AGENT DISCH Fire Handle

### Illuminates when an APU fire is detected, and automatically commands:

- Master Warning lights on
- EAD alert
- APU FIRE illuminates (red) on APU Fire Handle
- Fire Horn sounds near external APU Panel (nose gear area)
- APU shuts down
- Aural Warning sounds
- If equipped with 3<sup>rd</sup>, dedicated fire bottle, it will automatically discharge

### Pulling the APU Fire Handle:

- Emergency APU shutdown
- Fire extinguishing agent is armed to discharge
- APU Generator disconnects / de-energized
- APU Fuel Valve closes
- #2 Engine bleed valve closes

### Rotating the handle (after pulling):

- (Clockwise) Discharges fire bottle #1 (shared with engine 2)
- (Counterclockwise) Discharges fire bottle #2 (shared with engine 2)

## APU In-Flight Parameters

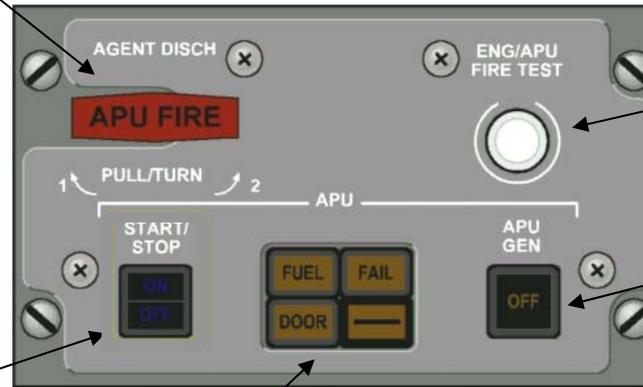
- |       |                                   |
|-------|-----------------------------------|
| Start | Up to 25,000 ft.                  |
| Run   | Up to 30,000 ft (electrical only) |

## ENG/APU FIRE TEST Button

When pressed:

- ENG and APU Fire Handles illuminate
- Fuel Switches illuminate
- Both Master Warning lights flash
- Fire Bell and aural warning tone sounds
- ENG 1,2,3 and APU FIRE alerts display
- ENG FIRE voice warning sounds
- (6) Eng FIRE AGT LOW lights and (2) APU FIRE AGENT LOW (if installed) illuminate

*\*When on battery power only, the Master Warning lights, Fire Bell and FIRE alerts will not activate*



## APU GEN Switch

**Pressed**

- Resets APU Gen if Elec in manual mode

**OFF** (illuminated)

- Gen on speed, but malfunction has occurred

## APU START/STOP Switch

Starts and stops the APU manually

If this switch is used to start the APU, it must also be used to shut it down

**ON** (Switch pressed and ON illuminated)

- Flashes when APU is starting. Steady when started and ready for use
- If APU shuts down due to fire, light flashes until the switch is selected to OFF

**OFF** (When pressed)

- Illuminates steady when APU shutdown is initiated
- APU bleed valve automatically closes
- APU shuts down 90 seconds after no longer supplying air
- Remains illuminated until shutdown is complete

## APU FUEL/FAIL/DOOR Status lights

**FUEL** (illuminated)

- Fuel pressure is too low

**DOOR** (illuminated)

- APU inlet door not fully open during start
- APU inlet door not fully closed after shutdown (*The door begins to close approx 60 seconds after shutdown. Shutdown occurs approx 90 seconds after APU is no longer supplying air. The door takes approx 12 seconds to close*)

**FAIL**

- APU has failed, and start is not possible

## APU FIRE AGENT (1,2) Low Light

Associated with APU fire bottles 1 & 2 that are shared with engine 2. *These lights are not installed on all MD-11s*

**LOW** (illuminated)

- Associated fire bottle has been manually discharged



## APU FIRE AGENT 3 DISC/LOW Switch

This switch is only installed on aircraft that have the third, dedicated APU fire bottle installed.

**LOW** (illuminated)

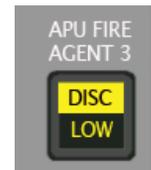
- Respective fire bottle has been automatically or manually discharged

**DISC** (illuminated)

- APU Fire Handle has been pulled

**DISC Switch Pressed**

- Manually discharges fire bottle 3 (if auto discharge fails – APU fire handle must be pulled before switch is pressed)



## APU Auto Shutdown:

- |                                       |   |
|---------------------------------------|---|
| -Overspeed or loss of N1 or N2 signal | -High EGT or loss of EGT signal           |
| -Low oil pressure or high oil temp    | -No light-off during start, or slow start |
| -Reverse flow in bleed air system     | -Inlet door not open, or power failure    |
| -Fire warning                         | -Loss of DC power                         |