

Concorde Engine Start Procedure

Make sure you complete all the checklists up to and including the before start checklists to get all the relevant switches in the right position to start with, and then:

1) Set DEBOW sws to DEBOW.

NOTE: All starts require the DEBOW switches to be at DEBOW, if you are carrying out a debow start leave the DEBOW switch at DEBOW and when the N₂ stabilises at around 30%, time for one minute, and then place DEBOW switch to NORMAL and observe N₂ rise to around 72% before dropping back slightly. For a non debow start place the DEBOW switch to NORMAL when the N₂ goes through 25% - 32%.

Normal starting order is 3, 4, 2, 1.

For push back departures starting order is 3 and 2 on the ramp, then 4 and 1 (cross bleed) when away from the ramp.

ON ENGINE NO.3.

2) Set START/RELIGHT sel to START.

Observe:

- START/RELIGHT sel is latched at START
- START VALVE MI reads OPEN
- ENGINE DEBOW sw It off
- START PUMP It (yellow) on
- N₂ rises

The minimum recommended air pressure during starting is 29 psi for ambient temperatures above 0°C increasing to 32 psi at an ambient temperature of minus 40°C.

3) When N₂ is between 10-12% set HP VALVE sw to OPEN.

4) When N₂ reaches 25% and the starter reset to neutral position, place the debow switch to Normal.

Repeat the above procedure on Engine No.2.

Once engines are stabilised disconnect ground air supply, pushback can now commence (*make sure you disconnect external power sources etc, to save dragging them round the ramp with you*).

IF:

N₂ fails to rise - check - Air Bleed Control Panel that you have a pressure reading on the gauges for engines 2 & 3.

N₂ rises but fails to get any higher after you open the HP VALVE sw, check that you have turned on the main fuel pump for that engine.

Once pushback complete, you need to do the following for a cross bleed start.

- 1) Switch Ground Idle switch for engines 2 & 3 to HI, N₂ should rise slightly on these engines.
- 2) On the Air Bleed Control Panel open the Cross Bleed switches and observe pressure reading on gauges for engines 1 & 4.
- 3) Now start engine 4 using the same procedure you did for No.3 earlier, and then No.1.
- 4) Once engines are running normally:
 - reset Ground Idle switches to LO
 - close cross bleed valves
 - ensure all bleed valves are open