Embraer Phenom 100

Pre-inspection

- Documents - on board
- Walk around aircraft - complete
- Landing gear - extended, struts, doors, tires checked
- Chocks and tie-downs - removed
- Pitot and static ports - clear, heated
- Control surfaces - free and correct
- Fuel quantity - verified per fuel slip
- Fuel caps - secure
- Engine inlets and fan blades - clear, no damage
- Engine exhaust - clear
- APU intake - clear

Before engine start

- Seats and seat belts - fastened
- Battery - on
- Ground power or APU - as required
- Avionics - boot up
- Fuel selectors - auto / on
- Throttles - idle / cutoff
- Beacon - on
- Area - clear

Engine start

- Engine start switch - select engine
- Engine 1 start - auto-start initiated
- N2 - monitor rise
- Fuel introduction - at appropriate N2
- Light off - verify ITT rise
- Engine 1 stabilize - idle reached
- Engine 2 start - same auto-start sequence
- Generators - online both engines
- APU - off after engine generators online

After engine start

- Avionics - complete initialization
- PFD / MFD / FMS - verify all functional
- FMS - position, route, performance loaded
- Radios and audio - set
- ATIS / weather - obtain
- Altimeter - set to QNH
- Transponder code - set, mode standby
- Pressurization - set destination altitude
- Bleed air and packs - configured

Before taxi

- Flaps - set per POH
- Doors - closed and secured

- Flight controls - free and correct
- Trim - takeoff position
- Brakes - check
- Hydraulics - check
- Anti-ice - as required

Before takeoff

- Takeoff data - V-speeds set on PFD
- Engine instruments - green
- Flight controls - checked free
- Flaps - takeoff position
- Anti-ice - as required
- Pressurization source - set
- Lights - landing, strobe, beacon, recognition
- Transponder - TA/RA
- Crew brief - V1 abort criteria, single-engine plan

Takeoff

- Thrust - TO / TOGA per FADEC
- N1 and N2 - verify
- Airspeed - alive
- Rotation - at Vr
- Positive rate - verify

Climb

- Landing gear - UP at positive rate
- Flaps - up per schedule
- Climb thrust - set via FADEC
- Pressurization - monitor
- Anti-ice - as required
- Autopilot - engage above 400 ft AGL
- Engine instruments - monitor N1 and ITT

Cruise

- Cruise thrust - set via FADEC
- Altitude - verify level off
- Pressurization - verify cabin altitude
- Anti-ice - as required
- Fuel monitoring - balance and cross-feed if needed
- FMS - performance and progress monitored

Descent

- Top of descent - verify FMS calculation
- Thrust - reduce per FMS or manual
- ATIS at destination - obtain
- Approach briefing - complete
- Pressurization - set destination QNH
- Anti-ice - as required

Before landing

- Landing gear - DOWN below Vlo
- Gear lights - three green confirmed
- Flaps - set per phase
- Anti-ice - as required
- Lights - landing on
- Speeds - per PERF page
- Speedbrakes / ground spoilers - armed
- Auto-throttle - as required

Landing

- Final approach - Vref per PERF
- Gear - verify down on short final
- Touchdown - smooth on mains
- Spoilers - deploy automatically or manual
- Thrust reverse - deploy as required
- Braking - as needed via autobrake or manual

After landing

- Flaps - up
- Speedbrakes / spoilers - stowed
- Anti-ice - off
- Strobe - off
- Transponder - standby
- APU - on if required for ground
- Taxi - to parking

Shutdown

- Parking brake - set
- Thrust levers - idle / cutoff
- ITT cooldown - observe per POH
- APU - off after cooldown
- Bleed air and packs - off
- Avionics - off
- Battery - off
- Beacon - off