
Preflight Inspection

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Exterior (General)

Accomplish the following prior to the actual walkaround inspection.

Battery Power AVAILABLE

Certain battery bus items (e.g., auxiliary hydraulic pump, door or compartment lights, voltmeter) can drain the batteries if left on with the aircraft unattended. Reconnect battery(ies) if required.

Aircraft General Condition CHECK

Check for security, condition, and cleanliness of the aircraft and components.

Keys REMOVE

Safety Covers REMOVE/STOW

Fuel SUPERVISE SERVICING

See Servicing chapter.

Cockpit Inspection

Documents ON BOARD

- certificate of airworthiness
- certificate of registration
- radio license
- approved flight manual
- weight and balance data

Equipment LOCATE/INSPECT

- pilot's checklist
- required navigation publications
- microphones and headsets
- oxygen masks
- flashlight and batteries
- first aid kit
- smoke goggles

Left Hand Circuit Breakers IN

Oxygen Pressure 1,600 TO 1,850 PSI

Oxygen Masks ADJUSTED/100%/STOWED

Passenger Oxygen AUTO

If operating at airports at or above 12,000 ft, select oxygen to OFF.

Flood/Center Panel Lights AS REQUIRED

For operations at night, turn battery switch to BATT, and rotate the lights clockwise to full bright for maximum illumination during preflight.

Emergency Lights ON/CHECK/OFF

Interior and exterior illumination.

Preflight Inspection

| | |
|---|--------------------|
| Left Gyro Slave Switch | AUTO |
| Ignition Switches | NORMAL |
| Aircraft Generators: | |
| Battery Start/Generator Assist | GEN |
| External Power/Both Engine Starts | OFF |
| APU/Both Engines | OFF |
| Anti-Skid Switch | ON |
| Fuel Boost Pumps | NORMAL |
| FUEL COMP LH/RH Switches | NORMAL |
| Throttles | CUTOFF |
| Ensure throttles cannot be moved forward. | |
| PAC BLD SELECT Switch | NORM |
| Aileron/Spoiler Disconnect T-Handle | IN |
| Gear Handle | DOWN |
| RH Gyro Slave Switch | AUTO |
| Environmental Control Panel Knobs | 12 O'CLOCK |
| If starting with APU (with hydraulic fan): | |
| CKPT/CAB PACs | OFF |
| Portable Fire Extinguisher | 150 LB CHARGE |
| RH Circuit Breakers | IN |
| All Other Switches | OFF OR NORMAL |
| Battery Switch | BATT |
| Voltmeter | 24V DC (MIN) |
| Ground External Power | CONNECT (28.5V DC) |

| | |
|--|-------------|
| Voltage | CHECK |
| APU Generator (if operating) | OFF |
| Battery Disconnect Switch | BATT DISC 2 |
| Battery 1 Voltage | 24V MINIMUM |
| Battery Disconnect Switch | BATT DISC 1 |
| Battery 2 Voltage | 24V MINIMUM |
| Battery Disconnect Switch | NORM |
| APU Generator (if needed) | ON |
| Fuel Quantity Gages | PROPER LOAD |
| Engine Fire Switches | TEST |

If the ground temperature is -15°C (+5°F) or below, lift the LH ENG FIRE switchlight cover, push the switchlight, and verify that the HYD/F/W SHUTOFF LH and FUEL F/W SHUTOFF LH annunciators illuminate. Push the switchlight again to extinguish the annunciators. Repeat the process for the RH ENG FIRE switchlight; verify the corresponding annunciators illuminate.

It may require more than one push of the engine fire switchlight to obtain proper light indication; this is normal.

| | |
|--|-------------------------|
| Auxiliary Hydraulic Pump | NORM |
| Hydraulic Pressure | 2,900 PSI MINIMUM |
| Volume Indicator | 300 TO 430 CUBIC INCHES |
| Parking Brake | SET |
| Auxiliary Hydraulic Pump | OFF |
| Horizontal Stabilizer Trim Indicator | NOTE POSITION |

This trim setting should match the visual stabilizer trim setting on the walkaround.

Preflight Inspection

Flaps Lever SET 20°

NOTE: If the flap handle is not positioned to a detent, the system will show FLAPS INOP. Position the flap handle to respective detent and reset the flap system (**units 001 to 206 with SB650-27-37 or 650-27-39 [DC flap system]**).

Flap Position Indicator INDICATES 20°

RAT and PITOT/STATIC

Heater Switches ON 30 SECONDS/OFF

Physically check the heater on the exterior walkaround.

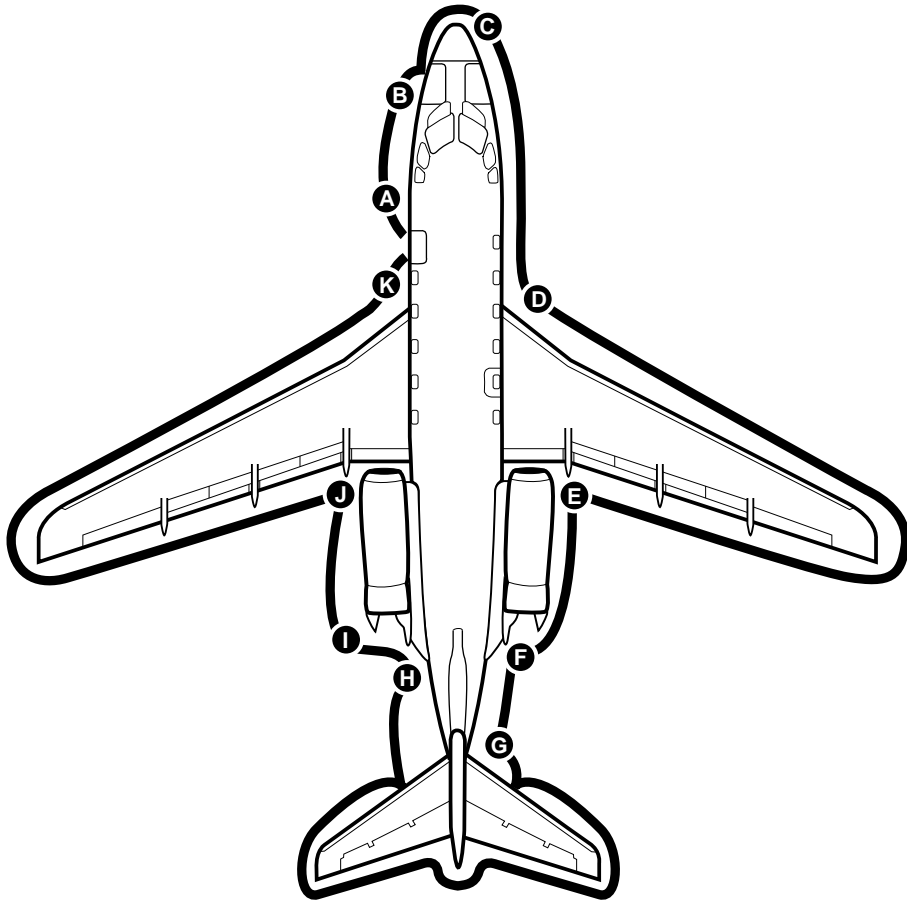
ENG ANTI-ICE L/R Switches ON 30 SECONDS/OFF

Physically check the wing fairings and generator inlets on the exterior walkaround.

Flood Lights OFF

Battery Switch (if APU not operating) OFF

Preflight Inspection Walkaround Path



Exterior Walkaround

Before starting the aircraft exterior inspection, obtain the following:

- flashlight
- standard screwdriver
- fuel sampler cup
- ladder.

The following checklists correspond to segments A through K on the Preflight Inspection Walkaround Path.

A Left Nose

- Fairing Tank Fuel Vents CLEAR
- Left Static Ports (3) WARM/CLEAR
- Left Angle-of-Attack Probe HOT/SECURE/FREE/CLEAR
- Landing Gear/Brakes Emergency
 - Air Bottle Vents CLEAR/UNDAMAGED
 - Alcohol Bottle Vent Line CLEAR/UNDAMAGED
- Static Port Quick Drain
 - (unit 0179 and subs.) DRAIN/CLOSED
- Oxygen Green Blowout Disc IN PLACE/INTACT
- Left Landing Light SECURE/UNDAMAGED

B Left Nose Compartment

- Nose Compartment Door UNLOCK/OPEN
- Emergency Gear/Brake
 - Pressure Gages GREEN ARC (1,800 TO 2,050 PSI)
- Windshield Alcohol Anti-Ice Reservoir FULL
 - Ball should be at the top of reservoir sight gage.
- Nosewheel Steering
 - Accumulator Pressure 1,300 PSI MINIMUM
- Oxygen Filler Cap SECURE
- Nose Compartment Door CLOSE/LOCK
 - Key REMOVE
- Nose Gear/Doors/Strut CONDITION
- Oleo Strut Extension 2 INCHES (Approx.)

Nose Wheel/Tire CONDITION/INFLATION

Left Pitot Tube HOT/CLEAR/SECURE

CAUTION: Use care when checking the pitot tube; it may be hot enough to burn the skin.

C Right Nose

Windshield CONDITION

Right Pitot Tube HOT/CLEAR/SECURE

CAUTION: Use care when checking the pitot tube; it may be hot enough to burn the skin.

Right Nose Compartment Door SECURE/LOCKED

Right Landing Light CONDITION

RAT Probe WARM/CLEAR

Static Port Quick Drain
(unit 0179 and subs.) DRAIN/CLOSE

Right Static Ports (3) WARM/CLEAR

Angle-of-Attack Probe HOT/CLEAR/SECURE

Ensure probe rotates freely. To avoid skin burns, use caution when checking the probe heat.

D Right Wing

- Dorsal Fin Air Inlet CLEAR
- Wing Ice Inspection/Emergency Exit Light CONDITION
- Engine Fan/Fan Duct CONDITION
- Right Wing Root Fairing Surface WARM
- Purge Air Inlet CLEAR
- Emergency Exit Door FLUSH
- Fuel Quick Drains DRAIN SAMPLE/INSPECT
 - Insert fuel sample cup straight up; if rotation occurs, the quick drain may lock open.
- Right Main Gear/Door/Strut CONDITION
- Oleo Strut Extension 5 INCHES (Approx.)
- Taxi Light CONDITION
- Right Main Wheels/Tires CONDITION/INFLATION
- Right Wheel Well INSPECT
- Right Wing Leading Edge CONDITION
- Vortex Generators (11) SECURE

Vortex Limitation

No more than one vortex generator may be missing from either the left or right wing to dispatch for flight.

- Fuel Filler Cap Locking Latch CLOSED/DIRECTED AFT
 - Cover (**if installed**) CLOSED/SECURE

- Wing Anti-Ice Air Vent CLEAR/UNDAMAGED
- Fuel Tank Vent CONDITION
- Recognition/Navigation/Anti-Collision Lights CONDITION
- Static Wicks (6) CONDITION
 - To ensure proper control surface balance, replace missing static wick(s) on the aileron before flight.
- Aileron/Flaps/Spoilers CONDITION
- Wing Fuel Relief Valve CHECK
- Right Main Gear Brakes
 - Depth of Wear Indicators 0.25 INCH ABOVE ACCESS HOLE

E Right Nacelle

- Generator/Alternator Air Inlet Lip CLEAR/WARM
 - Cooling Air Exhausts CLEAR
- Drain Lines CLEAR
- Oil Level CHECK WHILE ENGINE HOT
(WITHIN 15 MINUTES AFTER SHUTDOWN)
 - Filler Cap/Access Door SECURE
- Right Engine Oil
 - Bypass Valve Indicator RED PIN NOT VISIBLE
 - If the red indicator pin is extended, the oil filter is in bypass;
determine the cause prior to flight.
- Engine Cowling Fasteners ENGAGED
 - When properly engaged, the three hook latches show green;
pin latch shows black.
 - Access Doors CLOSED
 - Cowling CONDITION
- Thrust Reverser Buckets CONDITION/STOWED
- Engine Exhaust/
Bypass Ducts CONDITION
- APU Intake/Exhaust Ports CONDITION

F Lower Aft Fuselage

Fuselage Fuel Tank

Quick Drains DRAIN SAMPLE/INSPECT

Insert fuel sample cup straight up; if rotation occurs, the quick drain may lock open.

Fuel Tank Vents CLEAR

APU Drain (if **applicable**) CLEAR

Single Point/Refueling Cap/Access Door SECURE

Hydraulic Access Panel SECURE

Reservoir Vents CLEAR

Locator Beacon Plug SECURE

Tail Skid CONDITION

Antennas CONDITION

Tailcone Stinger/Static Wick CONDITION

G Empennage

PAC Heat Exchanger Port CLEAR

Horizontal Stabilizer CONDITION/POSITION

Ensure stabilizer position corresponds to that of the cockpit trim indicator.

Elevator CONDITION

Rudder/Trim Tab INSPECT

Check rudder system for proper operation if aircraft is exposed to high or gusty winds.

Static Wicks (10) IN PLACE

Replace missing wick(s) before flight.

P_{t2} Drains (L/R) DRAIN/CLOSE
Windshield Deice Heat Exchanger
Overboard Exhaust CLEAR
Hydraulic Overflow Vent CLEAR
Ground Recognition Light CONDITION

H Tailcone Compartment/Aft Baggage Compartment

Tailcone Access Door OPEN
APU Oil Level Sight Gage
(if installed) PROPER LEVEL
Tailcone Access Door CLOSE/LOCK
Baggage Compartment Access Door OPEN
Baggage Compartment Light Switch ON
Battery Compartment Cover OPEN
Batteries/Cables/Compartment CONDITION
Battery Compartment Cover SECURE
Starter Disable Switch NORMAL
GPU Battery Charge Switch NORMAL
Spoiler Hold Down
Accumulator BLEED EXCESS PRESSURE
Manual Bleed Down Valve Lever ACTIVATE
Precharge Pressure 1,300 PSI MINIMUM
Manual Bleed Down Valve Lever
(spring-loaded) CLOSE

Hydraulic Accumulator
Pressure Gage 1,300 PSI MINIMUM

Access Cover CLOSE

APU Oil Level Sight Gage
(if applicable) PROPER LEVEL

Baggage Light Switch OFF

Baggage Compartment Access Door SECURE

Ground Power Receptacle Cover SECURE

I Left Nacelle

Engine Exhaust/Bypass Ducts CONDITION

Thrust Reverser Buckets CONDITION/STOWED

Oil Level CHECK WHILE ENGINE HOT
(WITHIN 15 MINUTES AFTER SHUTDOWN)

Filler Cap/Access Door SECURE

Left Engine Oil

Bypass Valve Indicator RED PIN NOT VISIBLE

If the red indicator pin is extended, the oil filter is in bypass;
determine the cause prior to flight.

Engine Cowling Fasteners ENGAGED

When properly engaged, the three hook latches show green;
pin latch shows black.

Access Doors CLOSED

Cowling CONDITION

Generator/Alternator Inlet Lip CLEAR/WARM

Cooling Air Exhausts CLEAR

Drain Lines CLEAR

J Left Wing

Left Main Gear Brakes Depth of
Wear Indicators 0.25 INCH ABOVE
ACCESS HOLE

Flaps/Spoilers/Aileron CONDITION

Fuel Tank Relief Valve CHECK

Vortex Generators (11) SECURE

Vortex Limitation

No more than one vortex generator may be missing from either the left or right wing to dispatch for flight.

Fuel Filler Cap Locking Latch . . . CLOSED/DIRECTED AFT
Cover (if installed) CLOSED/SECURE

Static Wicks(6) SECURE

To ensure proper control surface balance, replace missing static wick(s) on the aileron before flight.

Fuel Tank Vent CONDITION

Wing Anti-Ice Air Vent CLEAR/UNDAMAGED

Fuselage Tank Transfer Door CLOSED/SECURE

The door also serves as the outflow vent for the left wing anti-ice air. Ensure the vent is unobstructed.

Recognition/Navigation/Anti-Collision Lights . . . CONDITION

Left Wing Leading Edge CONDITION

Left Main Gear/Door/Strut CONDITION

Oleo Strut Extension 5 INCHES (Approx.)

Taxi Light CONDITION

- Left Main Wheels/Tires CONDITION/INFLATION
- Left Wheel Well INSPECT
- Fuel Quick Drains DRAIN SAMPLE/INSPECT
 Insert fuel sample cup straight up; if rotation occurs, the quick drain may lock open.
- Engine Fan/Fan Duct CONDITION
- Left Wing Fairing Surface WARM
- Purge Air Inlet CLEAR
- Wing Ice Inspection Light CONDITION

K Cabin Door

- Cabin Door INSPECT
 - Door Seals CONDITION
 - Door Frame CONDITION
 - Precatch Button FLUSH

Cabin Inspection

| | |
|--|------------------|
| Portable Oxygen Bottle | SERVICED/SECURE |
| Portable Fire Extinguisher | SERVICED/SECURE |
| Door Entry Lights | OFF |
| Cabin Door Water Barrier (aircraft with 10 or more passenger seats) | ABOARD/STOWED |
| Luminescent Exit Placard | SECURE |
| Passenger Seats | UPRIGHT/OUTBOARD |
| Emergency Exit | SECURE |
| Handle Lock Pin | REMOVE |
| Gear Retract Hydraulic Shutoff Valve Handle | DOWN |
| Manual FUS TANK XFER T-Handle (S/N 0092 and subs.) | STOWED |

