

A stylized illustration of a diverse crowd of people is positioned on the left side of the page. The figures are rendered in various colors (red, blue, yellow, purple, white, brown) and are shown in profile, looking towards the right. The background behind them is a mix of light blue and yellow.

Quick Reference Guide for CRJ900 handling

Manuals and Forms

› Xfly Ground Operations Manuals and forms:

<https://est.asqs.net>

› Username and Password required, obtain info from ko@xfly.ee

Operational Contacts

- › Contact information: OCC, Flight OPS 24/7
- › e-mail: ops@xfly.ee
- › phone: +372 664 2270

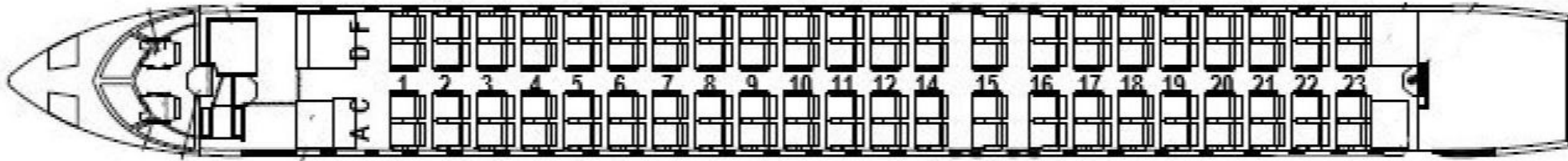
- › Send MVT and LDM to e-mail: ops@xfly.ee

- › Send NOTOC copy to e-mail: ops@xfly.ee

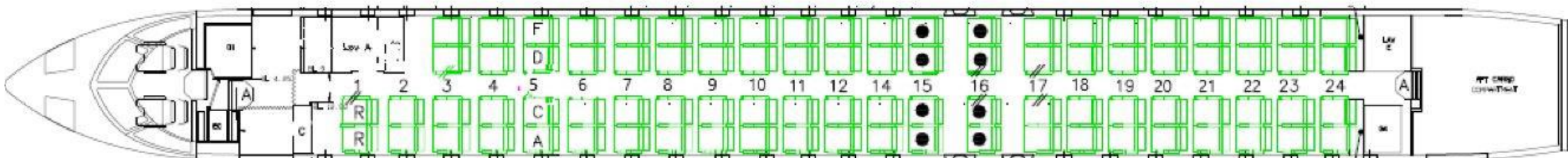
CRJ900 cabin layouts

Diagrams of CRJ900 in version 88 seats:

- › This diagram is valid for a/c reg ESACB, ESACC, ESACD and ESACG. Seat rows are numbered from 1 to 23, **however there is NO row 13**. Seat lettering is A, C on the left side and D, F on the right. Emergency exit rows are 15 and 16



- › This diagram is valid for a/c reg ESACJ, ESACK, ESACM, ESACN and ESACP. Seat rows are numbered from 1 to 24, **however there is NO row 13**. Seat lettering is A, C on the left side and D, F on the right. Emergency exit rows for ESACJ, ESACK, ESACM, ESACN, ESACP are 16 and 17



Special Category Passenger Seating



- › INF should be seated on window seat, only one INF per seat section, e.g. seat pair
- › UMNR either in front or in the aft of the cabin, closest to the cabin crew seat
- › BLND / DEAF may be seated in any row, except for emergency exit row
- › PWD under definition of immobile PWD (PRM) on ordinary flights should be seated at window seat as close as possible to an emergency exit at floor level
- › Unescorted deportees may be seated in any row, except for emergency exit row
- › Escorted deportees must be seated in economy class, whenever possible in the last row, deportee shall always be seated on window seat and escorts next to him/her
- › **Special category passengers may not be seated at emergency exit rows and jumpseats**

Note: For more information, see **Xfly Passenger Handling Manual: Chapter 5**

Special Category Passenger Limitations

› UMR: max 4

› PWD:

Maximum number of unescorted (without bearer), SCPs with codes WCHC, MEDA, BLND&DEAF, under definition of **immobile PWD: max 2**

Maximum number of escorted (with bearer), SCPs with codes WCHC, MEDA, BLND&DEAF, under definition of **immobile PWD: max 6**

Maximum number of escorted (with bearer), SCPs with codes WCHR, WCHS, DPNA, BLND or DEAF, under definition of **mobile PWD: limited by bearers**

› DEPU/DEPA/INAD:

Max 2 DEPA at the age of 16 and above, in addition own accompanying children

Max 3 DEPU at the age of 16 and above, in addition own accompanying children

Note: The total number of DEPA/DEPU shall not exceed 3

Number of INAD is not limited

Note: For more information, see [Xfly Passenger Handling Manual: Chapters 4 and 5](#)

PETC and AVIH Limitations

› PETC

Number: **max 4** (only cats and dogs)

Cage/bag: max 56x45x25 cm and

Max weight 8 kg per cage/bag including the pet

› AVIH

Number: **max 1 crate per flight**

Weight: **max 60 kg** gross weight per flight

Max dimensions per crate: **L110 x W76 x H73cm**

Must be protected against movement in-flight

Note: For more information, see [Xfly Passenger Handling Manual: Chapter 9](#)

Delivery At Aircraft (DAA) Baggage Procedure



- › DAA procedure shall be applied when more than 50 passengers booked, also apply DAA procedure when passengers are entitled to bring more than one piece (item) of cabin baggage
- › Passenger shall be asked if DAA baggage contains mobile phone, laptop, lithium/lithium ion spare batteries, heat producing articles or mercury baro-, thermometer. Mentioned items must be removed from DAA before loading it to baggage compartment
- › Approved cabin baggage max dimensions: **56 x 45 x 25cm** with maximum weight 8kg
- › Preferred loading location for DAA bags is at FWD compartments
- › Loading staff must inform the Commander about the number and loading location of DAA baggage
- › Cabin baggage with DAA tag shall not be recorded on Loading Report
- › DAA baggage number and loading location must be shown in LDM under SI

Note: For more information, see **Xfly Passenger Handling Manual: Chapter 6.3.2** and **Xfly Load Control Manual: Chapter 4.4.7**

Operation of Aircraft Doors

- › When the aircraft is in operation (arriving/departing), the passenger and service doors may only be opened and closed by the crew.
- › On arrival, ground staff shall knock twice onto the door prior crew may open the door from inside.

- › **WARNING:**

Before opening the aircraft entrance or service doors, make sure the door opening area is clear of personnel and equipment!

Always stand clear of door during opening from outside!

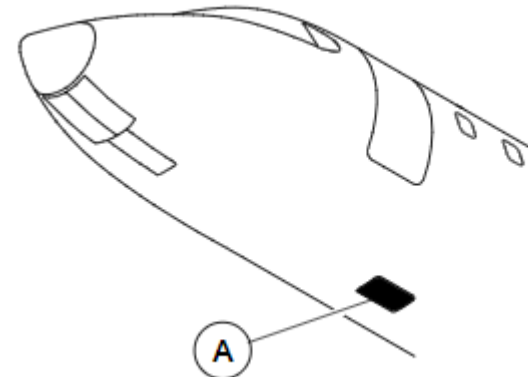
Operation of Aircraft Doors

CAUTION:

When an aircraft is parked with GPU or ACU connected and all doors and outflow valves closed it may result in an undesired build-up of excessive differential pressure between the cabin and the outside environment. As a result, this may cause an explosive door opening.

IMPORTANT:

Open the main avionics compartment door to avoid unintentional pressurization of the cabin.



Operation of Aircraft Doors

Entrance door operation

To open forward entrance door (left):

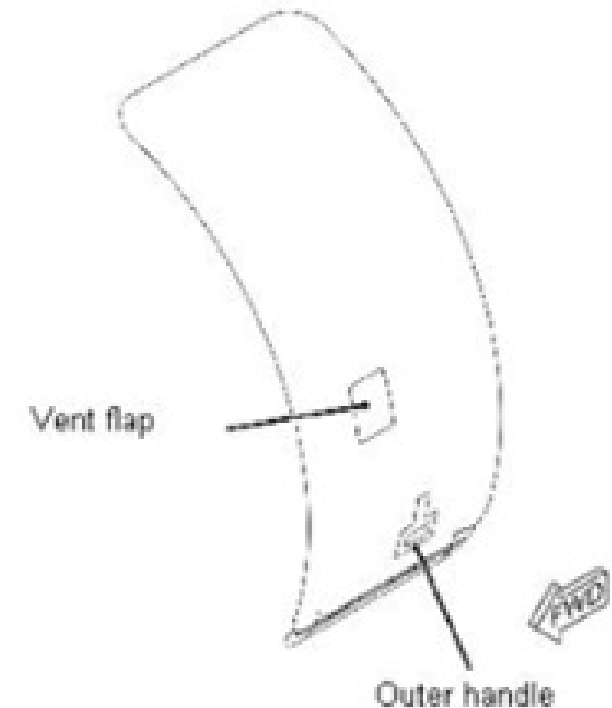
- › Pull the outer handle fully from its recess to disengage latches
- › Ensure the vent flap is fully open.
- › Pull out on the outer handle until the passenger door begins to descend.
- › Make sure it is fully open.
- › Stand to the side when the door begins to descend.

To close forward entrance door (left):

- › Push firmly up on the passenger door until it is in the closed position.
- › Push the outer handle fully into its recess to engage latches.

CAUTION:

- › Do not touch the outer handle until the door is fully in the closed position.
- › Failure to obey this instruction may lead to damage to the door frame due to that the latch pins may ram the structure.
- › Ensure that the vent flap is closed.

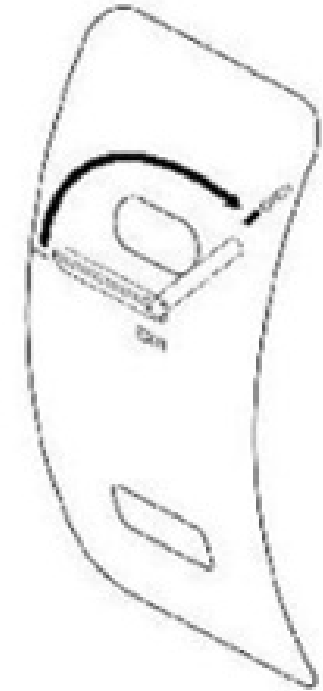


Operation of Aircraft Doors

Service door operation

To open forward service door (right):

- › Push the handle trigger. The door handle extends from the door.
- › Rotate the handle clockwise.
- › Pull the door outwards and push it forward until it engages the door lock mechanism.



To close forward service door (right):

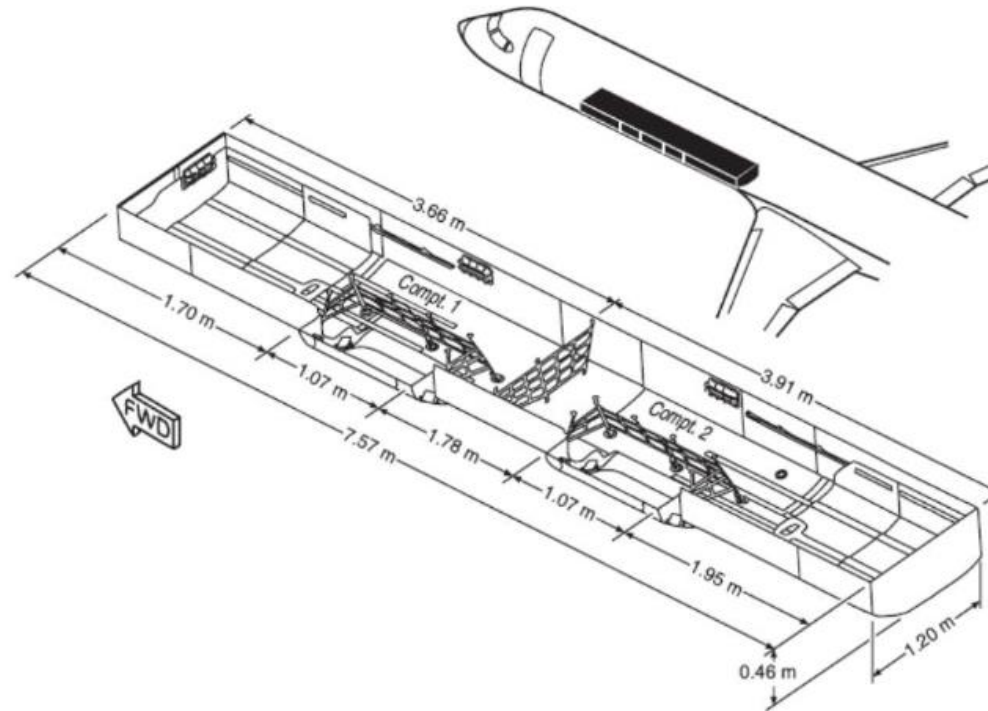
- › Release the door from the stowed position by pulling the hinge latch lever.
- › Rotate the door handle counterclockwise until the handle aligns with the handle recess.
- › Release the handle and secure that the spring tensions pull the handle into the recess.

Note: See [Xfly Ramp Handling Manual Chapter 1.15](#) for operation of aircraft doors

CRJ900 FWD Cargo Compartments



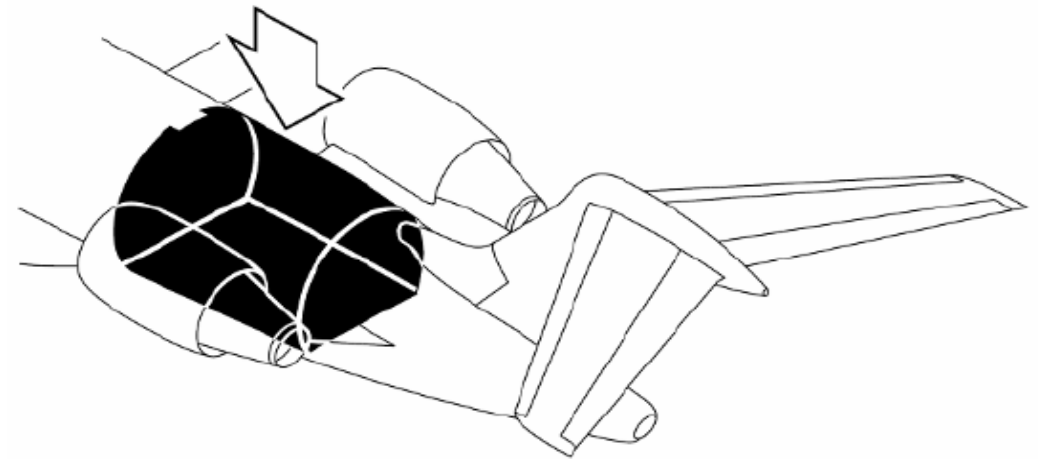
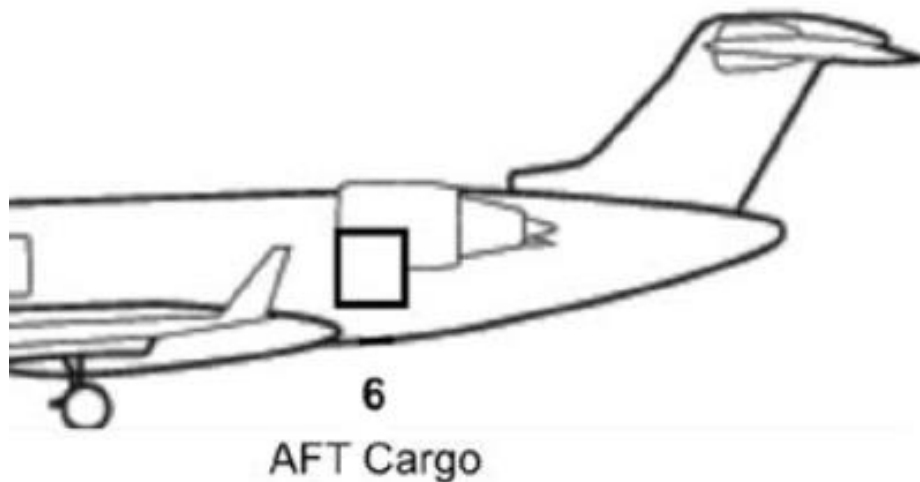
- › A cargo door restraint net is installed across cargo door entrance to prevent damage to the door from possible loose cargo.
- › The net must be positioned when the loading operation is finished.



Note: See [Xfly Ramp Handling Manual Chapter 2.2](#) for operation of compartment doors

CRJ900 AFT Cargo Compartment

- › A cargo door restraint is installed across cargo door entrance to prevent damage to the door from possible loose cargo.
- › The cargo compartment section net and door restraint netting must be positioned when the loading operation is finished.



Note: See **Xfly Ramp Handling Manual Chapter 2.2** for operation of compartment doors

CRJ900 Compartment Max Weights

- › This table shows data valid for a/c reg ESACB, ESACC, ESACD, ESACG, ESACJ, ESACK, ESACM, ESACN, ESACP

	Compartment		
	1	2	6
Weight (Kg)	385	385	1496
Combined weight (Kg)	771		1496
Running load (Kg)	102	102	744
Floor load (Kg/m ²)	146	146	366
Volume (m ³)	2,2	2,2	9,3

CRJ900 Loading in Compartments



WARNING:

- › Do not stack ballast sacks on top of each other due to limited floor load capacity in FWD compartments.
- › CPT6 has restricted loading area due to tail-mounted engine. Special attention shall be paid to avoid engine cowl damage during belt-loader maneuvering and loading of big items.
- › Conveyor belt and the boom of the belt loader must never be positioned into cargo compartments, except specially designed belt loaders (e.g. Ramp Snake or Powerstow), that require the equipment to be positioned inside the cargo hold.

Loading Restrictions

HEA TRANSPORTED ON CRJ900

- › It is not allowed to load items weighing more than 80kg on CRJ900.

LIVE ANIMALS

- › May only be loaded in CPT6.

DANGEROUS GOODS

- › May only be loaded in compartment 6.
- › Maximum TI for radioactive materials is 3TI.
- › Maximum amount of Dry Ice (ICE) per aircraft per flight is 50kg.

Loading Instruction / Report

- › Loading Instruction and Loading Report is required for all flights.
- › Verbal Loading Instructions/Reports are prohibited.

Loading Instruction / Report CRJ900



All weights in Kilos

Station:	Flight:	Date:	A/C reg:	Prepared by:
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LOADING INSTRUCTION	Compartment 1		Compartment 2		Compartment 6	
	Max.allowable weight :		Max.allowable weight :		Max.allowable weight :	
	Planned:		Planned:		Planned:	
	Remarks:		Remarks:		Remarks:	
Off	Thru	Off	Thru	Off	Thru	
LOADING REPORT	Actual:		Actual:		Actual:	
	B:	x =	B:	x =	B:	x =
	BT:	x =	BT:	x =	BT:	x =
	C:	=	C:	=	C:	=
	M:	=	M:	=	M:	=
Total:	kgs	Total:	kgs	Total:	kgs	

General remarks:	<p>This aircraft has been loaded in accordance with the instructions and the deviations shown on this report. The container/pallets and bulk load have been secured in accordance with company regulations. A security check of the compartments has been performed before loading. No items which do not belong to the compartments were found.</p> <p>There is no evidence that any damaged or leaking packages containing dangerous goods have been loaded on the aircraft.</p>
	<p>Loading Supervisor:</p>

Loading Instruction / Report

At stations where load planning and load control is not done by station staff (or central load control) and flight crew completes manual loadsheet the following shall be done:

- › prior loading the a/c Xfly manual LIR form must be printed out at the station and handed over to flight crew;
- › station staff must obtain onload distribution info from flight crew;
- › flight crew shall complete on LIR form the loading instruction part;
- › flight crew shall also indicate on LIR loading instruction part under „thru“ any transit load that must remain on board;
- › in case the arrival station has not received inbound flight LDM the staff shall contact flight crew and ask for offload info;
- › in case there is no paper loadsheet copy available the flight crew shall write on LIR loading instruction part under „Off“ the offload info;
- › after offloading / loading is done the station staff must complete on LIR form the loading report part and signed LIR form must be presented to flight crew for manual loadsheet preparation.

Cautions and Warnings

GROUND STABILITY

WARNING:

- › Risk of tail tipping due to the length of the aircraft.
- › Do not load more than 780kg in CPT 6 before crew are onboard.
- › If towing empty aircraft the fuel tanks must contain minimum 1000kg or the forward galley must be fully equipped.
- › Parking under normal circumstances is without any ballast required.
- › If there is flight deck and/or cabin crew on board the aircraft, there is no risk for tail tipping in normal conditions.

Cautions and Warnings



CHOCKS AND SAFETY CONES

Chocks:

- › A minimum of **four (4) chocks (two pairs)** must be used per aircraft 1 forward and 1 aft of the nose gear; and 1 forward and 1 aft of the main landing gear during turnaround. During night stop, long term and high wind parking the nose gear and both main gears must be chocked.

Safety cones:

- › A minimum of 4 safety cones must be placed, one at each wingtip, one in front of nose and one behind the tail.

WARNING:

- › Staff must NOT approach main gear wheels until the anti-collision lights have been switched off and engines have spooled down.
- › GSE, including fuel service equipment may approach the aircraft only after the cones are in place.

Cautions and Warnings

GPU REQUIREMENTS

- › Voltage: 115V +/- 5V
- › Frequency: 400Hz +/- 20Hz
- › Only standard 115V/400Hz GPU with compatible plug is allowed to be used.
- › Connect and disconnect GPU only in switched off mode.
- › Position and connect Ground Power Unit (GPU) after the aircraft has come to a complete stop (if required, before engine shut down) and the wheel chocks are in place.

Security – Aircraft Protection

- › During turn-around with crew remaining on board, the crew is responsible for controlling access to the cabin - checking IDs and operational need.
- › When parking without crew, external doors must either be closed, or appropriately trained and authorized staff shall control access to the aircraft - checking IDs and operational need.
- › When parking outside the CSRA with the doors closed, doors and hatches must be sealed by crew or trained and authorized ground staff.
- › Sealing of aircraft cabin doors for night stop or other unattended parking is required when aircraft is parked outside the critical part of security restricted area (C-SRA) of a Community airport or at a third country airport.

Security – Sealing of Aircraft Cabin Doors



- › Seals must be placed on areas defined below:

FWD service door
Passenger entrance door

- › Seal numbers must be recorded on the Security Label Control Chart (SLCC)
- › Completed SLCC shall be signed and placed in the cockpit

- › Supply of Xfly security seals and Control Charts are on-board aircraft, kept with aircraft documents

REGIONAL JET

CRJ700/900 Security Label Control Chart

Station: _____

Aircraft: _____

No.	Location	Seal Number
1	FWD service door	
2	Passenger entrance door	

Closed/Sealed: _____
(Date/Time/Signature)

Checked/Opened: _____
(Date/Time/Signature)

NOTE: Sealed parts are not applicable for security search.
NOTE: Completed Security Label Control Chart shall be retained in the flight file at the departure station.

FORM SEC-004 / Rev.1 / 05.03.2017

Security – Sealing of Aircraft Cabin Doors

- › When aircraft cabin doors have been sealed, only the crew or trained and authorized staff may open these doors.
- › Ground staff may NOT break any seals and should not open external compartment doors/hatches that are sealed on permanent basis.
- › Seals must be checked for signs of tampering before opening the door. Any discrepancy must immediately be reported to the airport security and to Xfly OCC.
- › If doors are to be re-sealed, new seal numbers must be recorded on SLCC with a comment from the authorized staff member re-sealing the doors.

Example of the seal:



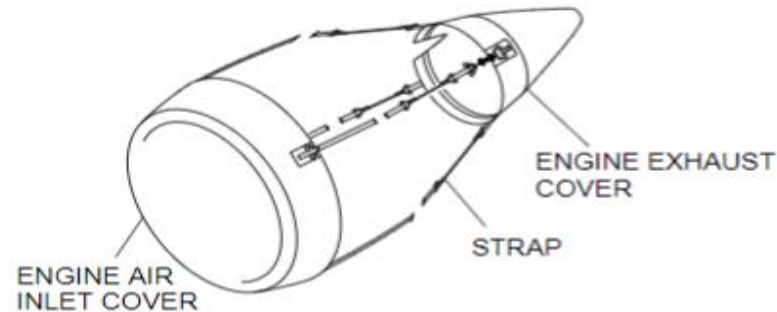
Example of the tampered seal:



Note: See [Xfly Ramp Handling Manual Chapter 7.3](#) for more info about aircraft sealing

Aircraft Parking

- › When aircraft is not in service or when parking for more than 3 hours in areas outside hangars the engine plugs or covers shall be installed (if available at the station).
- › Put the ladder in safe distance when installing the covers to avoid any damage to the engine.
- › Install engine cover (if available at station) according to the picture.



WARNING:

WHEN YOU INSTALL THE ENGINE PLUGS OR COVERS, MAKE SURE THAT THE ENGINE IS COOL. YOU CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

Note: Bear in mind to remove the engine plugs or covers in preparation of the aircraft for departure!

Parking and Servicing in Cold Weather Conditions



Both of the freshwater systems (FWD and AFT) and toilet system(s) must be drained in the following situations:

- If a planned ground stop exceeds more than 24 hours.
- When parked in cold weather conditions (0 °C to -19 °C) and external power and/or ground cabin heater cannot be connected.
- If it is forecasted -20 °C or colder and the ground stop exceeds 8 hours, or the aircraft will night stop.

- › Drain the potable water system, potable water valve / flap should be left open.

- › Aircraft maintenance staff (or flight crew) shall separately pressurize the system to purge any remaining water from the pipes.

- › Heater shall be connected minimum 2 hours before departure.

- › Refill of the water tanks not earlier than 30 minutes before departure.

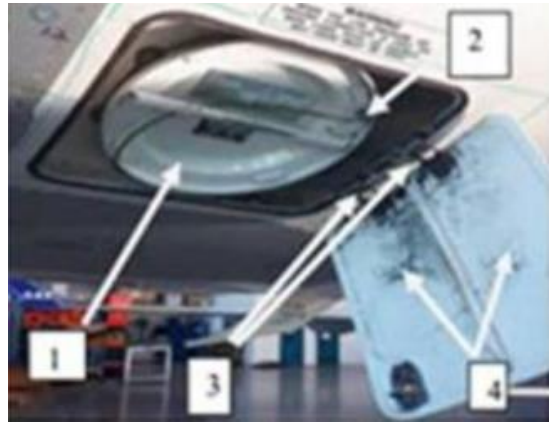
Parking and Servicing in Cold Weather Conditions



Aircraft Heating

- › Aircraft must be heated in case temperature is below +5 Celsius. Unless otherwise requested by operator then minimum 2 hours before departure.
- › Connect GPU at the same time as heater in case heating is provided less than 2 hours before departure.
- › Do not fill any potable water until GPU has been connected and heating provided for minimum 1 hour.
- › Open the main avionic compartment door to prevent the unintentional pressurization of the aircraft cabin.

Parking and Servicing in Cold Weather Conditions



No.	Description
1	Cover
2	Cover Lock Pin
3	Gust Lock
4	Cover Holder Hooks

- › After Cover (no1) has been removed, place it in the Cover holder hooks (no4) on the backside of the outer service hatch. Push the Cover backwards against the Gust locks (no3). It will prevent the cover fall of the Cover holder locks and give more free space when connecting the hose to the aircraft. If handle of the hose conflicts with the Cover when positioned on Cover holder hooks remove the house and secure correct in correct position



Parking and Servicing in Cold Weather Conditions



In some cases the wire attached to the Low Pressure Air Ground Connection cover may seem too short. This may happen when the cover lock pin is obstructing the wire due to incorrect positioning of the pin. The two photos on the left show examples of incorrect positioning of the pin. The photo on the right shows an example of when the pin is correctly positioned. This should be paid attention to when operating the LPGC cover.



Parking and Servicing in Strong Wind Conditions

- › Handling Agents should monitor weather conditions, particularly strong winds (25 knots and above) that may affect their Operations.
- › During periods of actual or forecast strong winds, where practical, it will be necessary to park the aircraft in a sheltered position pointing into the prevailing wind.
- › The aircraft position should represent the best compromise between the requirements of the airport and air traffic control, the wind direction and the proximity to buildings and other aircraft.
- › Parking in adverse weather conditions (wind speed is 40 knots or more, back sloping tarmac, snowfall) load ballast in FWD galley or FWD cargo cpt.
- › Actions in addition required when sustained winds/or gusts of wind exceed 25 knots are shown in the table on the following slide.

Note: For more information, see **Xfly Ramp Handling Manual Chapter 1.19 and 1.20**

Parking and Servicing in Strong Wind Conditions



STAFF ACTIONS	25-39 KT 46-72 KM/H	40-59 KT 73-110 KM/H	+60 KT +111 KM/H
SECURE BAG/CARGO CARTS, DOLLIES, LADDERS/MAINTENANCE STANDS, TOW BARS AND PLACE NEAR OR AGAINST THE BUILDING	✓	✓	✓
ENSURE PARKING BRAKES ARE SET ON ALL GSE	✓	✓	✓
ENSURE EMPTY ULDS ARE SECURED AND DOORS/CURTAINS ARE CLOSED	✓	✓	✓
ENSURE LANDING GEAR IS CHOCKED FOR HIGH WIND CONDITIONS	✓	✓	✓
REMOVE SAFETY CONES	✓	✓	✓
SUSPEND USE OF PRE-CONDITIONED AIR HOSES AND STORE SECURELY	✓	✓	✓
REMOVE FOD	✓	✓	✓
REMOVE ULDS FROM THE STAND	✓	✓	✓
STRAP ALL PROPELLERS ON PROPELLER AIRCRAFT	✓	✓	✓
DO NOT ELEVATE CABIN SERVICE/CATERING HIGHLIFTS AND STAIRS NOT EQUIPPED WITH STABILIZERS	✓	✓	✓
DO NOT ELEVATE CABIN SERVICE/CATERING HIGHLIFTS AND STAIRS EQUIPPED WITH STABILIZERS		✓	✓
CLOSE CARGO HOLD, PASSENGER DOORS AND ACCESS PANELS		✓	✓
DO NOT ELEVATE BOOMS OR DEICERS		✓	✓
REMOVE GSE FROM AIRCRAFT VICINITY TO A PROTECTED POSITION AND SECURE		✓	✓
SECURE BOARDING BRIDGE AND POSITION TO MINIMIZE SURFACE EXPOSED TO THE DIRECT FORCE OF THE WIND		✓	✓
RETRACT AND LOWER BOARDING BRIDGE. POSITION SO THAT BOARDING BRIDGE LENGTH POINTS AWAY FROM THE WIND			✓

Departure Procedure

- › Pre-departure walkaround check is required, and it must be performed before aircraft pushback, towing or taxi-out when all other ground handling services have been completed.
- › Ensure all doors and hatches are closed and external handles properly stowed.
- › Any abnormalities observed on the aircraft (e.g. obvious damage, fluid leakage) must be immediately brought to the attention of the flight crew.

DEPARTURE COMMUNICATION

- › Aircraft departure must always be conducted using interphone communications.
- › If proper contact cannot be established via interphone the flight crew and ground personnel shall agree on the respective hand or visual signals, which confirm, that walk around is completed, doors and hatches are closed, and ground is ready for push back / start-up of engines.
- › Conventional hand signals as defined in IATA IGOM must be used for departure.

Pushback and Towing

- › CRJ has no by-pass pin and confirmation of nosewheel release shall be received from crew.
- › Xfly accepts for CRJ900 towbarless equipment certified by aircraft manufacturer.

CAUTION:

- › Do not exceed the maximum turning angle of 70°
- › Do not exceed the maximum towing speed limits.

TOWING

- › Towing without a cockpit brake operator is strictly prohibited.
- › The cockpit brake operator must be a maintenance technician, or a flight crew member or approved ground staff authorized for the aircraft type.

Note: for more information see **Xfly Ramp Handling Manual Chapter 4.5-4.8.**

De-/Anti-Icing

General

Make sure that the representative surfaces of the aircraft are de-/anti-iced first and that the critical surfaces of the aircraft are de-iced/anti-iced last. The application of the de-/anti-icing fluid mixture should follow the sequence that follows:

- › Spray the horizontal stabilizer
- › Spray the vertical stabilizer
- › Spray the top of the fuselage
- › Spray the sides of the fuselage
- › Spray the wings

Thin hoar frost on the upper surface of the fuselage is acceptable, provided all vents and ports are clear and not obstructed. Accumulations of maximum 3 mm layer of frost on the underside of the wing fuel tank area are permissible.

Note: For more information, see [Xfly De-/Anti-Icing Manual: Chapter 4](#)

De-/Anti-Icing

- › Contamination check by pilots, ladders needed.
- › Clear ice check by ground staff, on pilot request.

Note: For more information, see **Xfly Deicing/Anti-Icing Manual Chapter 1.2 and 1.3**