BOMBARDIER CRJ (All)

These procedures are based on the CRJ 200 Aircraft Maintenance Manual - Pressure Refuel/Defuel System – Adjustment/Test ATA 28-25-00 as at February 2020 and the CRJ 200 Aircraft Maintenance Manual – Replenishing, Fuel Tank – Servicing ATA 12-11-28 as at February 2020.

Version #	Revision Date (DD-MMM-YYYY)	SLA/Task #	Description of change Latest version available at www.iata.org/iftp-adoption
1.00	21-FEB-2020		Updated and validated for use in IFTP solution.

Fueling Procedures (Service Level 2 & 3)

SLA	Task #	Task (SET-UP tasks for AUTOMATIC or MANUAL fueling)
1	Set-up 01	Position the fueling vehicle.
1	S.02	If APU or GPU electrical power is not available, inform the airline representative or flight crew.
1	S.03	Take note of the requested fuel quantity from the FUEL SHEET.
1	S.04	Bond between the fueling vehicle and the aircraft.
1	S.05	Open the Fueling Adapter access door located at the leading edge fairing of the right hand wing.
1	S.06	Remove the cap from the Aircraft Fueling Adapter.
1	S.07	Ensure the coupling of the refueling hose is clean and that the connection lugs are not damaged or missing.
1	S.08	Connect the fuel service nozzle to the Aircraft Fueling Adapter.
1	S.09	When fueling is performed with hydrant dispenser / servicer : • If applicable, attach lanyard to hydrant pit valve, and extend lanyard on the apron such that it is free of obstructions and readily accessible. • Remove any dirt or moisture from the pit valve adapter and hydrant coupler. • Connect hydrant coupler to hydrant pit valve. • Open hydrant coupler and adapter if it is manually operated.
1	S.10	Make sure that the fuel pressure on the fuel tender is set to 50 ± 5 psi (345 ± 34 kPa) maximum.

SLA	Task #	Task (SET-UP tasks for AUTOMATIC or MANUAL fueling)
2	S.11	Open the Refuel / Defuel Control Panel access door located at the fuselage forward of the Pressure – Refuel Adapter access door.
2	S.12	Make sure that the three ON-OFF refuel-shutoff –valves (SOV) switches (2) are set to OFF.
2	S.13	Make sure that the ON – OFF refuel start switch (3) is set to OFF.
2	S.14	Perform the operational test of the refuel / defuel system by completing the following steps:
2	S.15	Lift the guard of the POWER switch (4) and set the POWER switch (4) to on and make sure that the POWER ON light (5) comes on.
2	S.16	Make sure that the FAULT ANNUNC Indicator light (6) does not come on. If it comes on, stop the fueling procedure and inform the airline representative or flight crew. ***NOTE:*** Refueling is permitted when: 1. Any fault code without a dot is annunciated on the refuel/defuel panel 2. Fault code 703 or 930 with or without a dot is annunciated on the refuel/defuel panel
2	S.17	Push and hold the LAMP-TEST pushbutton (7) and make sure that all lights on the Refuel/ Defuel Control Panel come on. All digits on quantity displays (9 and 10) should show 8.
2	S.18	Release the LAMP-TEST pushbutton and make sure that POWER ON indicator light (5) stays on and all other lights on the Refuel / Defuel Control Panel go off.
2	S.19	Set the mode selector switch (11) to FUEL AUTO
2	S.20	Push and hold the BITE INITIA. pushbutton (8). • Make sure that the RIGHT, CTR and LEFT fuel–tank quantity displays (9) show 888. • ***NOTE:*** If fault codes are present in the fuel computer memory, fault codes will appear. • Make sure that the PRES. TOTAL QTY preselected–fuel quantity display (10) shows 888. • Release the BITE INITIA. pushbutton (8).
1	S.21	Activate the DEADMAN Control to pressurize the fuel system.
1	S.22	Check fuel hose and adapter connection for leaks. If any leakage is observed, release the DEADMAN and notify airline representative or flight crew.
2	S.23	Set the mode selector switch (11) to TEST: • Make sure that the three shutoff-valve (SOV) indicator lights CL (12) go off. • Make sure that the three shutoff-valve (SOV) indicator lights OP (13) come on for approximately 5 to 20 seconds in sequence. • Make sure that the three H.LEVEL DETECTOR indicator lights (14) also come on and then go off in sequence. • Make sure that the three SOV indicator lights OP (13) go off and that the SOV indicator lights CL (12) come on.

SLA	Task #	Task (SET-UP tasks for AUTOMATIC or MANUAL fueling)
		• Make sure that the FAULT ANNUNC. (6) indicator light has not come on. If the system has a fault, stop the fueling operation and inform the airline representative or the flight crew.
1	S.24	Release the DEADMAN Control.
2	S.25	Set the mode selector switch (11) to OFF.
2	S.26	Set the POWER switch (4) to OFF and lower the guard. Make sure that the POWER ON light (5) goes off.
2	S.27	Perform the pressure refueling as follows: **CAUTION: STOP THE REFUEL OPERATION IMMEDIATELY IF A "H. LEVEL" DETECTOR LIGHT COMES ON. IF YOU DO NOT DO THIS, YOU CAN CAUSE DAMAGE TO THE EQUIPMENT.** **CAUTION: DO NOT CREATE A FUEL IMBALANCE OF MORE THAN 800 LBS (363 KG) BETWEEN THE LEFT AND RIGHT TANKS WHEN REFUELING. LEFT AND RIGHT TANKS SHOULD BE FILLED AT THE SAME TIME.**
2	S.28	Lift the guard of the POWER switch (4) and set the POWER switch (4) to on and make sure that the POWER ON light (5) comes on.
3	S.29	If required, record the fuel quantity of each tank before uplift and record on FUEL SHEET.
3	S.30	If required, calculate the fuel quantity to be uplifted and convert to volume. Record on FUEL SHEET.
1	S.30	Activate the DEADMAN Control to pressurize the fuel system.

For AUTOMATIC fueling continue with this procedure flow:

SLA	Task #	Task (AUTOMATIC)
2	Automatic 01	Set the mode selector switch (11) to FUEL AUTO.
2	A.02	Use the INC.- DEC. selector switch (15) and set the required fuel quantity on the PRES.TOTAL QTY preselected fuel quantity display (10).
2	A.03	Set the ON-OFF refuel start switch (3) to ON. Make sure that the applicable Shutoff-valve (SOV) indicator lights OP (13) come on. NOTE: The minimum pressure and flow required at the R/D manifold to maintain the three R/D SOVs open during refueling

For MANUAL fueling continue with this procedure flow:

SLA	Task #	Task (MANUAL)
3	Manual 01	Set the mode selector switch (11) to FUEL MANUAL.
3	M.02	**CAUTION: TO PREVENT FUEL MISLOADING, FUEL IS ONLY TO BE ADDED TO THE CENTER TANK AFTER THE LEFT AND RIGHT MAIN TANKS HAVE BEEN FILLED, OR WHEN ALL TANKS ARE BEING FILLED AT THE SAME TIME, WHERE THE LEFT AND RIGHT TANKS ARE BEING FILLED AT THE SAME TIME TO MIN. 4000 LBS (CRJ 200) / 4400LBS (OTHER TYPES) EACH.** **CAUTION: DO NOT CREATE A FUEL IMBALANCE OF MORE THAN 800 LBS (363 KG) BETWEEN THE LEFT AND RIGHT**

		is 10 PSI and 110 USG/min. If these values are not reached within three seconds after auto−refuel is commanded, it may be inhibited.
2	A.04	Look for any fuel imbalance and monitor the RIGHT, CTR and LEFT fuel tank quantity displays until the requested fuel quantity is reached.
2	A.05	Make sure that the applicable shutoff-valve (SOV) indicator lights CL (12) come on when the preselected fuel quantity has been reached.
2	A.06	Wait a minimum of 10 seconds after the three SOV indicator lights CL have come on. This will prevent stopping the automatic pressure refueling before it is completed.
1	A.07	Release the DEADMAN Control.
2	A.08	Set the refuel start switch (3) to OFF.

		TANKS WHEN REFUELING. LEFT AND RIGHT TANKS SHOULD BE FILLED AT THE SAME TIME.
3	M.03	Set the applicable refuel−SOV toggle switch (2) to ON.
3	M.04	Make sure that the applicable shutoff−valve (SOV) indicator−light OP (10) comes on.
3	M.05	Monitor the RIGHT, CTR and LEFT fuel−tank quantity displays (9) and set the applicable refuel−SOV toggle switch (2) to OFF at 110 pounds (50 kg) less than the necessary quantity.
3	M.06	Make sure that the applicable shutoff−valve (SOV) indicator−light CL (12) comes on.
3	M.07	Ensure all refuel-SOV toggle switches are in OFF position.
1	M.08	Release the DEADMAN Control.

Finish fueling by completing CLOSE OUT tasks below:

SLA	Task #	Task (CLOSE OUT tasks for AUTOMATIC or MANUAL fueling)
2	Close out 01	Set the mode selector switch (11) to OFF.
3	C.02	If required, record actual fuel quantities on display and vehicle meter on the FUEL SHEET.
3	C.03	If required, verify the fuel load is in a valid pre-flight distribution.
3	C.04	If required, complete discrepancy check and verify if within the limits.
2	C.05	Set the POWER switch (4) to OFF and make sure that the POWER ON light (5) goes off.
2	C.06	Close the guard over the POWER switch.
2	C.07	Close and securely latch the Refuel Control Panel access door.
1	C.08	Disconnect the fueling nozzle from the aircraft Fueling Adapter, install the cap to the aircraft Fueling Adapter and close the access planel.

SLA	Task #	Task (CLOSE OUT tasks for AUTOMATIC or MANUAL fueling)
1	C.09	When fueling has been performed with hydrant dispenser / servicer : • Close the pit valve if manually operated, then disconnect the hydrant coupler from the hydrant pit valve and remove the lanyard, if applicable.
1	C.10	Disconnect the bonding cable.
3	C.11	If required, complete the FUEL SHEET and pass one copy to the airline representative or to the flight crew.
1	C.12	If required, complete the Delivery Receipt and pass one copy to the airline representative or flight crew.

Procedure version 21-FEB-2020

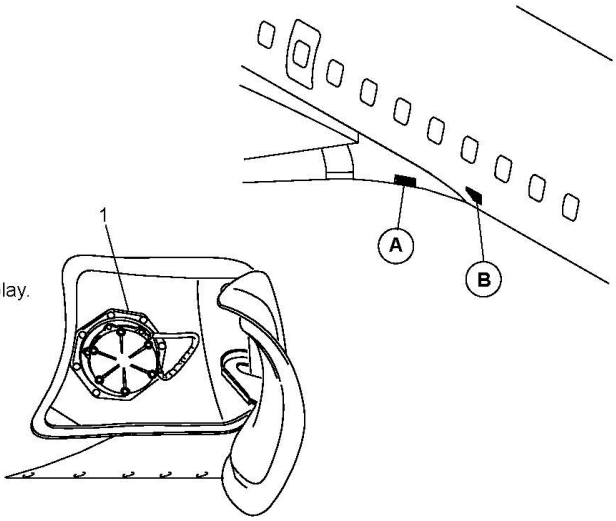
SLA = Service Level Agreement. For further information on service level definitions see www.iata.org/iftp-adoption

CRJ
Fueling Locations

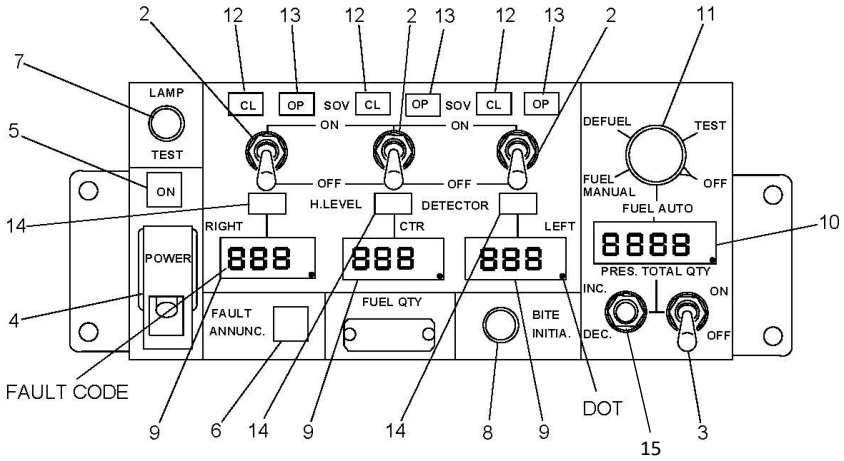
WARNING: Units may be in lbs or kg

LEGEND

1. Refuel/defuel single-point adapter.
2. Refuel SOV toggle-switch.
3. Refuel start switch.
4. Toggle switch.
5. Indicator light.
6. Indicator light.
7. Pushbutton.
8. Pushbutton.
9. Fuel-tank quantity display.
10. Preselected-fuel quantity display.
11. Mode selector switch.
12. SOV indicator light.
13. SOV indicator light.
14. Indicator light.
15. INC. -DEC. selector switch



A PRESSURE-REFUEL ADAPTER DOOR

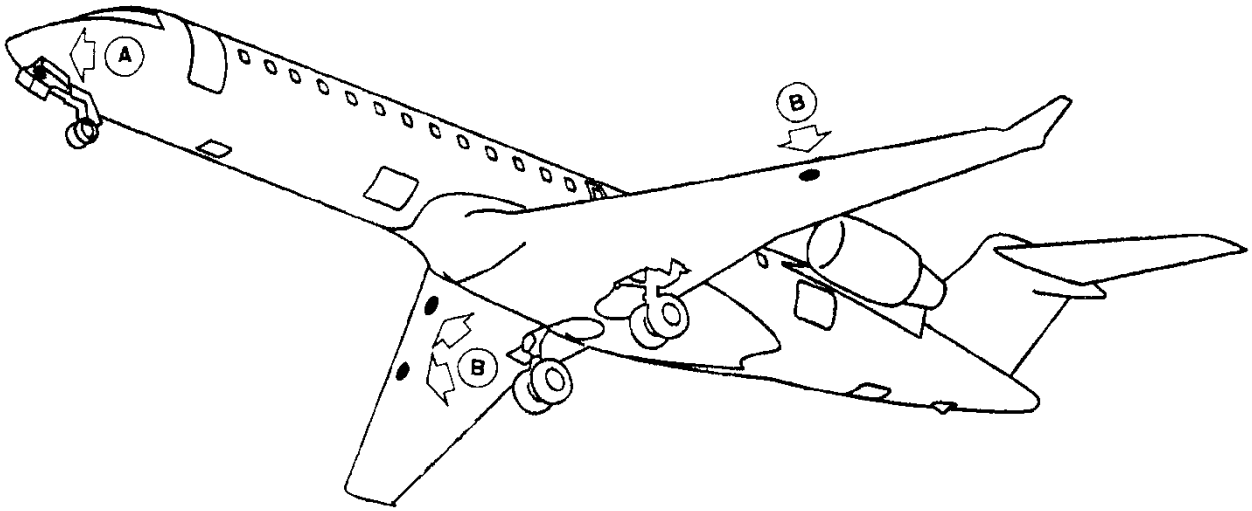


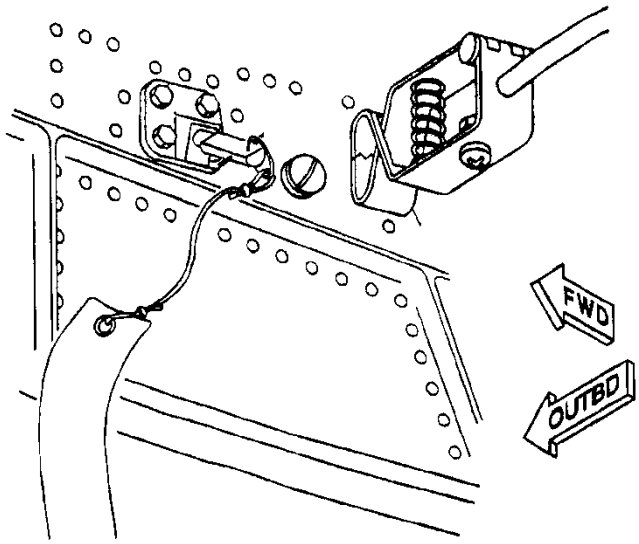
B REFUEL/DEFUEL CONTROL PANEL

Note: Label for item 15 (INC-DEC selector switch) has been added to diagram B.

CRJ 100 / 200
Aircraft Bonding Points

If the grounding wire has an alligator clamp, attach the clamp to the grounding lug on the right side wall of the nose gear compartment. If the grounding wire has a ground stud, put the stud in the nearest ground stud receptacle on the wing leading edge *(preferred).*





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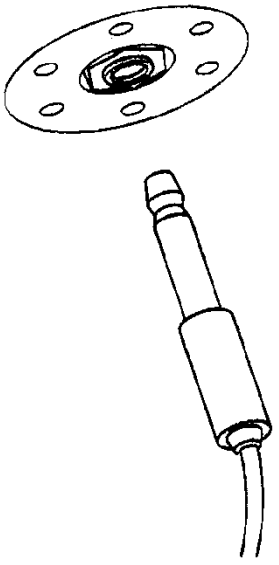
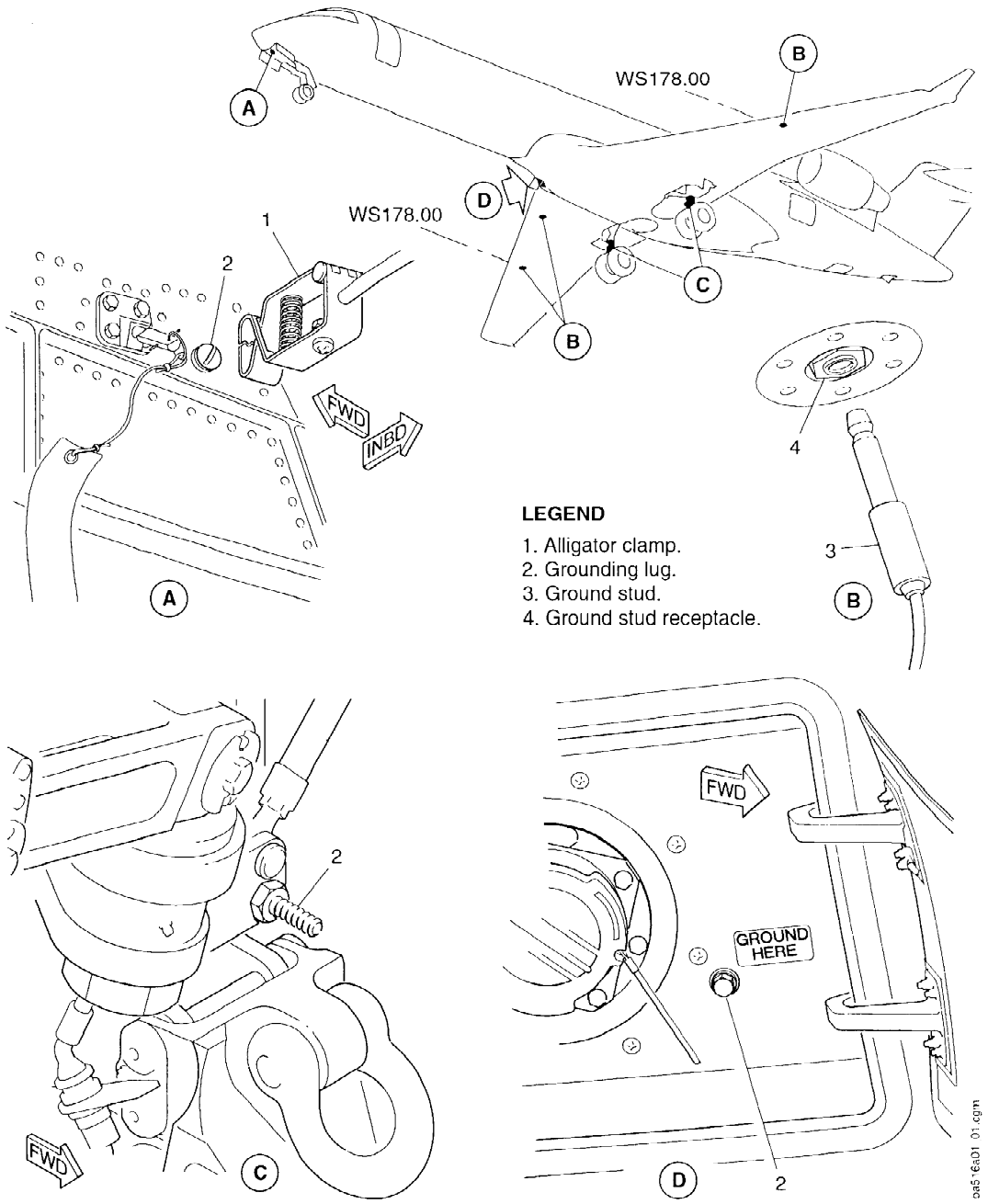


B

CRJ 700 / 900 /1000
Aircraft Bonding Points

If the grounding wire has an alligator clamp, attach the clamp to the grounding lug on the right side wall of the nose gear compartment or at the Main Gear grounding location (C). If the grounding wire has a ground stud, put the stud in the nearest ground stud receptacle on the wing leading edge *(preferred)*.



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