

# JWR Boarding Ramp Operations & Parts Manual

Maintenance Schedule



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### • Overview •



The KCI Turboway Passenger Boarding Ramp is a universal ramp designed to serve regional aircraft such as the Q-400 up to the CRJ 900. The Turboway Boarding Ramp allows for a seamless boarding process for all passengers. This ramp, with its adjustable slope and pivoting bridge, provides for a faster, safer, and more economical means of boarding and deplaning. The Turboway Passenger Ramp is comfortably sloped, non-motorized, and easy to operate. The combination of steel and aluminum construction, non-skid surface, provides strength and versatility.



### • Tow Bar and Towing the Ramp •

- 1. Remove the safety clip from the tow bar hitch pin, grasp the tow bar with one hand and remove the hitch pin with the other. Lower the tow bar and connect to towing apparatus.
- 2. When towing, do not exceed 10 MPH as damage to the swivel castors can occur.
- 3. Do not back up using the tow bar.
- 4. The tow bar should always be stowed and secured with hitch pin and safety clip when not in use.











#### •Positioning the JWR Ramp•

Once the JWR Ramp has been towed to the designated gate, it will need to be detached from the towing apparatus and final positioning completed manually with 2-3 personnel.

- 1. Manually maneuver the JWR Ramp so as to center the docking plate with the Jet Bridge Rotunda.
- 2. Push the JWR Ramp towards the Jet Bridge until contact has been made to the impact bumper.





Images showing contact between impact bumpers and proper placement at Jet Bridge Rotunda.



Image showing example of final placement.



#### •Wheel Chocks•

1. Remove wheel chock from stowing mount and place firmly against the wheel of the ramp.





#### •Stabilizer Feet•

- 1. While grasping the stabilizer foot arm, articulate the arm 180 degrees so as to deploy the stabilizer foot, repeat for opposing side.
- 2. Reverse procedure to stow the stabilizer feet





Image showing deployment

Image showing preparation to stow



To prevent injury, stand to one side of the stabilizer when disengaging. Once unlocked the handle will continue forward rapidly and forcefully!



### •Adjusting the Stabilizer Feet•





Stabilizer feet are also adjustable in height. Use the provided wrench to loosen the lock nut, spin the foot plate to raise or lower the foot. Do not over increase the height as it will become difficult to set the stabilizer.



#### •Lower Bridge•

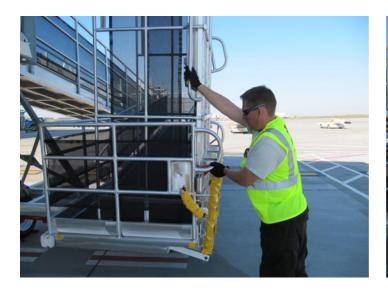


Do not allow the lower bridge or flip down section to drop of their own weight, damage to bridge can occur!



Never stand directly under bridge when lowering, personal injury could occur. The lower bridge weighs approximately 200 lbs.

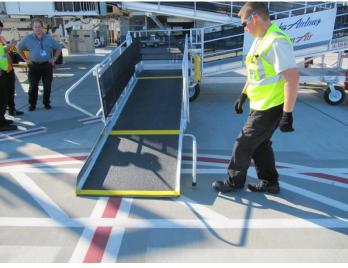
- 1. While lifting the latch with one hand, start to lower the bridge with the other.
- 2. Continue to lower the bridge until it is in contact with the ground.





- 1. Grasp the handle of the flip down section of the bridge
- 2. Articulate the flip down section of the bridge 180 degrees.







### • Docking Plate and Telescopic Gates •

- 1. Lift the Docking Plate Arm safety latch and articulate forward so as to deploy the docking plate.
- 2. Open the telescopic gates, extend as required and install locking pin, extend and pin the locking arms.
- 3. The JWR Ramp is now ready for passenger traffic.











It is the responsibility of the operating staff to verify gates are securely pinned and locked. It is the responsibility of the operating staff to verify no trip hazards exist at the transition from the Jet Bridge to the JWR Ramp.



## • Optional Light Kit •

### • Light Kit (If Equipped) •

If selected as an option, the SGR Ramp can be equipped with LED Lighting.

Located under the level deck is the battery/drive control enclosure. On the front panel of the enclosure is the ON/OFF switch for controlling the lights.







## • Removing the JWR Ramp •

- 1. Reverse all procedures listed previously
- 2. Remove lock pins from telescopic arms and gates, retract gates fully and stow.
- 3. With the safety latch up, pull the docking plate arm towards oneself and secure with safety latch.
- 4. Fold the flip down section of the lower bridge to the stowed position.
- 5. Lift the lower bridge up until the safety latch is engaged.
- 6. Remove the wheel chock and stow in the stowing mount.
- 7. Articulate the stabilizer foot arms to the stowed position.
- 8. With 2-3 personnel, pull the JWR Ramp away from the jet bridge.
- 9. Release the tow bar hitch pin and lower the tow bar, connect to towing apparatus.
- 10. Tow JWR Ramp to designated parking area.
- 11. Position a forklift with forks under the upper ramp section.
- 12. Using a 9/16" wrench, remove 3/8"x 1" bolts from the two upright braces, remove braces.
- 13. Install original shipping brace to frame using 3/8"x 1" bolts, hand tighten only at this time.
- 14. Ensure no personnel are under the ramp and lower the upper ramp so as to be secured to the shipping brace, secure with 3/8"x 1" bolts.
- 15. Using a 9/16" wrench, tighten all bolts in shipping brace.
- 16. Having retained original padding material, place upright braces on frame of ramp with rubber padding between each of the braces and ramp frame, secure for shipping using shipping wrap.
- 17. Using original rubber padding, and shipping wrap, securely wrap gates on upper ramp for shipping.

#### Repeat this process for the following

- Docking plate arm
- Stabilizer feet
- · Wheel chock
- Tow bar
- Lower bridge, (to include flip down section)

Refer to the shipping illustration provided below for proper shipping preparation.







#### • Warnings and Restrictions Summary •



- 1. It is the responsibility of the operating staff to ensure that the Jet Bridge is not damaged when positioning the JWR Ramp.
- 2. Only authorized personnel should adjust the bridges, operate or position the ramp.
- 3. The ramp is to be maneuvered from the end with caster wheels; this end will be farthest from the Jet Bridge when in place.
- 4. To prevent injury, stand to the side of the stabilizer when disengaging. Once unlocked the handle will continue forward rapidly and forcefully.
- 5. Disabled passengers in an aisle chair must never be left unattended on the ramp.
- 6. Two attendants are required to assist disabled passengers who are large of stature.
- 7. Under no circumstances should the ramp be moved or towed with any person on it.
- 8. Water, ice, snow, or any other natural or foreign substance should not be allowed to accumulate on the ramp's surface.
- 9. The ramp should be inspected before each use to assure a clean and unobstructed pathway.
- 10. The ramp is not to be towed at speeds exceeding 10 mph and should always be stowed when not in use. Do not back up using the tow bar.
- 11. The lower bridge should always be up and locked when not in use.
- 12. The ramp has a maximum capacity of 3,000 lbs., and the lower bridge 1,000 lbs.
- 13. Do not let the upper or lower bridge drop of its own weight.
- 14. The wheel chock must be in place, securing the axle wheel, whenever the ramp is stationary or positioned at the Jet Bridge.
- 15. Qualified airport ground crew personnel or airline personnel should always be present when the ramp is in use.
- 16. No passengers are allowed on or near the ramp except when it has been properly positioned at the Jet Bridge and wheel chocks are in place, stabilizer feet deployed, and gates in the fully open, locked and properly adjusted position.



### • Preventative Maintenance Checklist •

The following is a general maintenance checklist which covers the major components of your JWR Ramp. It is recommended that the following be checked regularly as scheduled to ensure proper function and safety of your JWR Boarding Ramp.

COMPONENT	SUGGESTED ACTION	SCHEDULE		
COMICINE	SUGGESTED ACTION	Monthly	Quarterly	Bi-Annually
WHEELS	Grease swivel wheels and pillow block bearings.			
STRUCTURAL	General Check: Loose bolts, etc. tightened. Cracks, broken areas.			
TIRES	Inspect for serviceability.			
BRAKES	Inspect for proper function, adjust as needed.			
WALKING SURFACE	General check for adequate traction, No loose rivets in Safeguard panels.			
HANDRAIL CABLES	General check, adjust or replace as needed.			

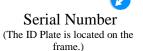
## • How to Order Replacement Parts •

Please have model number and serial number available when ordering replacement parts

When ordering replacement parts:

- a. Contact the KCI parts dept. at (541) 830-4877 or email msankey@kci.nu
- b. Give the Model Number, Serial Number, and Mfg. Date) to the parts representative.
- c. If possible, give the part number and a description from the parts list. Or describe the needed part(s) to the best of your ability.
- d. If you are in a breakdown situation, please tell us, we will try to get your unit operational as soon as possible.











### • Lubrication Points •



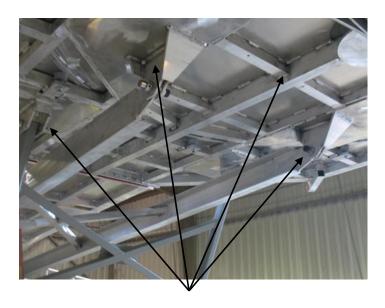


Wheels and bearings should be greased with multi-purpose grease such as Lubriplate® No. 1200-2

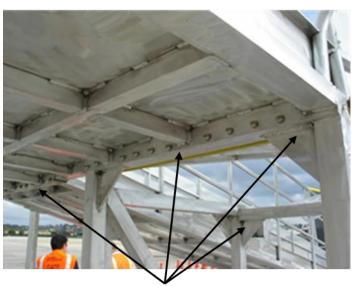


### • Structural Check Points •

Check all areas indicated by arrows, these areas should be free from cracks and all hardware should be secure.









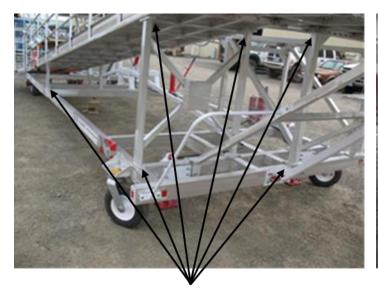


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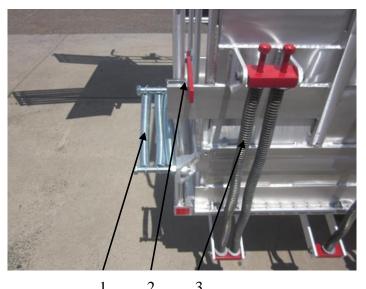


## • Canopy Check •

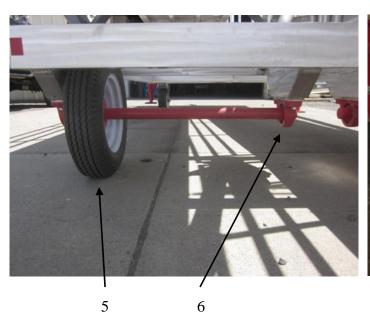


Canopy cover should be tight and free from cuts or tears





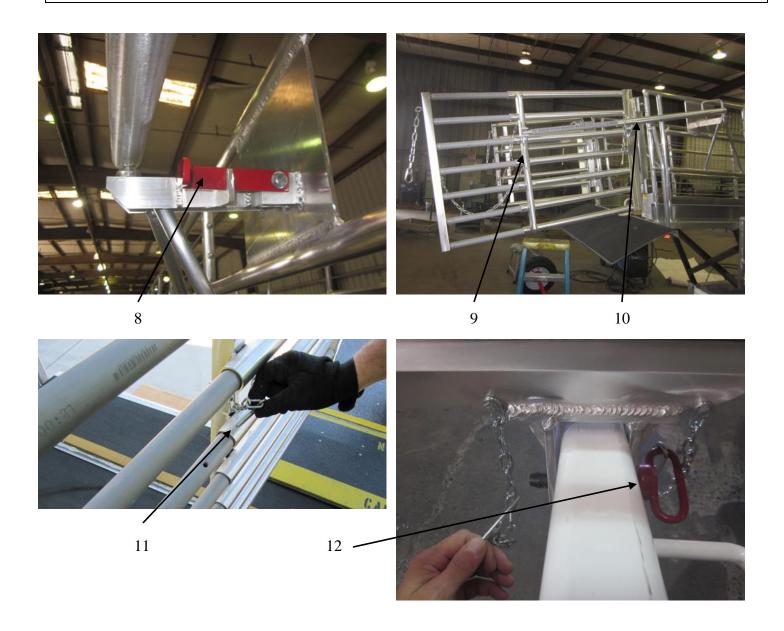






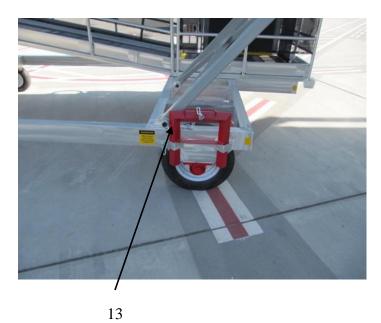
Item	Description	Part Number
1	Lower Bridge Side Springs	P00179
2	Lower Bridge Safety Latch	WJ-S375-6
3	Lower Bridge Spring Rod Assy.	B-SK2
4	Stabilizer Foot Assy.	JWR-K00086 (R/S)
	(Specify Left or Right Side)	JWR-K00087 (L/S)
5	22" Foam Filled Wheel	P00096
6	Pillow Block Bearing	P00032
7	Swivel Wheel Assy.	P-00031





Item	Description	Part Number
8	Docking Plate Arm Safety Latch	P00107
9	Telescopic Gate Assy.	JWR-K00340
10	Telescopic Gate Locking Arm	JWR-K00350
11	Telescopic Gate Locking Pin	P00180
12	Tow Bar Hitch Pin	P00068





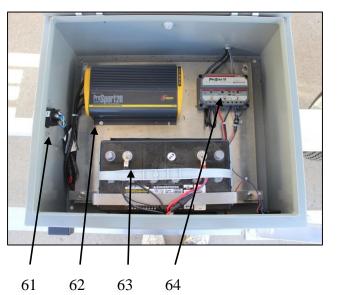


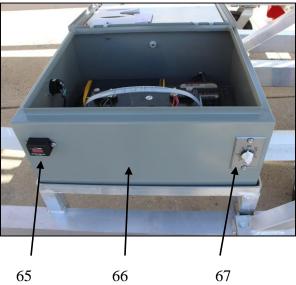
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Item	Description	Part Number
13	Wheel Chock	JWR-WC22
14	Docking Plate	JWR-K00345
15	Fold Out Handrail	B-LBHR-G4636
16	Flip Bridge	K00485



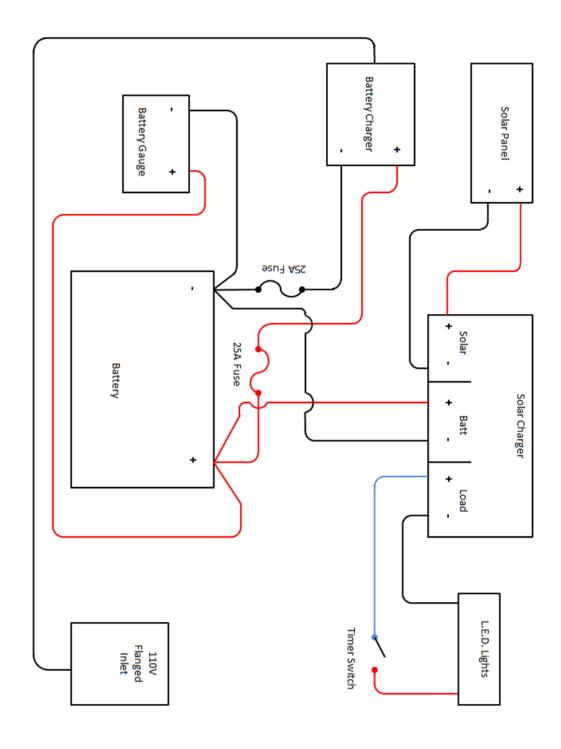




Item	Description	Part Number
61	Flanged Power Inlet	P00333
62	Battery Charger	P00312
63	Battery	P00277
64	Solar Charger Control	P00338
65	Battery Charge Indicator	P00156
66	Locking Enclosure Box	P00341
67	Timer Switch	P00362
68	Solar Panel (Not Pictured)	P00337
69	Solar Panel Frame (Not Pictured)	K00824
70	Solar Panel Support Arm (Not Pictured)	SPA0047



# • Electrical Schematic •





### • Warranty •

This warranty is in lieu of all other warranties, either expressed or implied.

#### What is Covered:

This warranty covers equipment manufactured by KCI, Inc. from any defects in materials, workmanship and/or installations performed.

#### **Period of Coverage:**

This warranty lasts for a period of two years, electrical component coverage is for one year from the date the product ships, or until the original ownership of the ramp is transferred to another party, whichever comes first. Any repairs or modifications without the express written consent of KCI, Inc. will be grounds to immediately void all or part of this warranty.

#### What is Not Covered:

This warranty does not cover the following:

- 1. Accidental damage.
- 2. Misuse or abuse.
- 3. Damage caused by adverse weather, disasters, or other forces of nature.
- 4. Worn out adhesive skid walk.
- 5. Worn out tires/wheels.
- 6. Worn out/faded canvas canopies.
- 7. Any other wear or damage caused by the equipment's general use.
- 8. Any consequential or incidental damages to include:
  - a. Any loss of profit.
  - b. Loss by reason of airport or flight line shutdown.
  - c. Non-operation or increased expense of operation.
  - d. Loss of passengers or business.

#### What KCI Will Do:

Repair or replace any original part, component or piece of equipment that is found to have defects from time of shipment through the end of the period of coverage.

#### How to Make a Service Claim:

Provide a claim in writing within the period of coverage to the address listed below or email to <a href="msankey@kci.nu">msankey@kci.nu</a>. We will then determine if the problem is a defect with the product. Once the nature of the problem is ascertained, we will notify the buyer of our planned resolution. This may include an on-site visit by KCI, Inc. for repairs, or that the buyer ships the defective part or component to us for inspection and replacement at KCI's expense.

KCI GSE Inc. 1718 Antelope Road White City, Oregon 97503