

## HANDLING TRAIN DOOR FAILURES

**Work description:** Handling one or more pairs of train doors unable to open or close

**Scope:** This Work Instruction is written specifically for OCC operating staff of Honolulu Rail Transit.

**References:** HNL-09510 Minimum Operating Conditions, HNL-XXXXX Train Operator Duty Event Form

PPE and precautions	Competencies or qualifications	Licenses or permits required
Nil	Train Controller, Train Operator, OCC Supervisor	Nil

### Tools and equipment required

Train Key

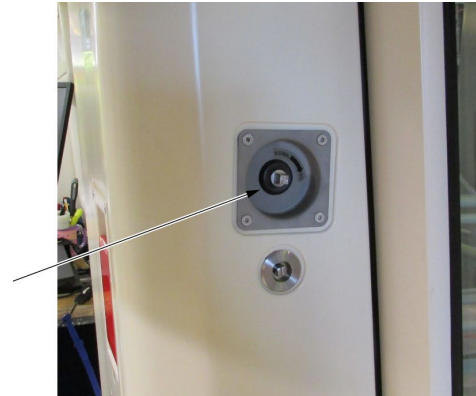


### Warning

*Under any circumstances, Train Operator MUST NOT ALLOW any passengers to remain on board when the train is driven manually with an open door.*

### Train Door Isolation

The Door Isolation device allows the operation personnel to remove a door from service, by rotating the shaft clockwise (provided that the door is closed). The out of service lamp should then be illuminated



### One pair of train doors fails to open/close

*Train Controller*

There is one pair of train doors which cannot open or close while the train is having a stop at station.

On a report of one pair of train doors unable to open or close, you must:

- hold the train at the current station platform
- if there is no staff already on board the train, deploy a Train Operator to board the train
- instruct the Train Operator to remove (if any) obstacle at the train doors
- remotely open/close the train doors, if the fault is rectified as confirmed by the Train Operator on board, resume normal train service
- if the problem remains, instruct the Train Operator to close and isolate the faulty train doors manually
- if isolation is completed, inform Information Controller to make public announcement to the train and stations of the “out-of-service” train doors to prevent passengers from queuing up at the corresponding PSD
- if the train doors cannot be mechanically isolated, then on OCC Supervisor’s authorization:
  - instruct the Train Operator to detrain passengers
  - instruct the Train Operator to bypass the train doors on the Switch Panel on EDC
  - instruct the Train Operator to change the train operating mode to ATO/ATP and set a route for the train to reach the nearest siding track or to the yard
  - authorize the Train Operator to operate the train manually to the nearest siding track or the yard
- report the faulty train doors to the Engineering & Fault Controller to arrange for maintenance Intervention from the rolling stock maintainer

**Approved By:** ☐ Director, Operations and Maintenance ☐ Department Manager ☐ Manager, HSE (Operations and Maintenance)

**Signature:**

**Date:**

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<i>Train Operator</i>	<p>Under instruction and authorization from the Train Controller, you must:</p> <ul style="list-style-type: none"> <li>ask passengers to stay away from the faulty doors</li> <li>remove the obstacle (if any) blocking the train door from opening/closing and report to the Train Controller. If the fault is rectified, then the train can resume normal operations</li> <li>if train door problem remains, wait for the Train Controller to remotely command the opening and closing of the faulty train doors</li> <li>if cycling the door does not rectify the problem, then on authorization from the Train Controller, proceed to isolate the faulty train doors – the isolation switch is located at the side of each doorway:               <ul style="list-style-type: none"> <li>close the train door manually</li> <li>insert a Train Key to the door isolation switch and rotate the Train Key clockwise</li> <li>put an “Out-of-Service” sign on the isolated door or stand there to prevent passengers from using it</li> <li>report to the Train Controller that you have isolated the faulty train doors</li> </ul> </li> <li>If the faulty train doors cannot be isolated, then on OCC Supervisor’s authorization:               <ul style="list-style-type: none"> <li>detrain all passengers at the station</li> <li>activate the EDC for manual driving</li> <li>bypass the train doors on the Switch Panel on EDC</li> <li>change the train operating mode to ATO/ATP</li> <li>manually operate the train to the nearest siding track or yard</li> <li>record the incident on the Train Operator Duty Event Form</li> </ul> </li> </ul>
OCC Supervisor	<p>On notification from Train Controller that the faulty train doors cannot be isolated, you must:</p> <ul style="list-style-type: none"> <li>decide on whether to take the train out of or to retain the train in commercial service based on the service demand, spare train availability and the guidance from the minimum operating requirements (HNL-09510 Minimum Operating Conditions)</li> <li>when a decision is made, instruct the Information Controller to make public announcement on the affected train and stations, instruct the Train Controller to remove the train from service</li> </ul>
<b>Two or more pairs of train doors fail to open/close</b> <i>Train Controller</i>	<p>There are two or more pairs of train doors on the same side which cannot open or close while the train is having a stop at station.</p> <p>On a report of two or more pairs of train doors unable to open or close, you must:</p> <ul style="list-style-type: none"> <li>hold the train at the current station platform</li> <li>if there is no staff already on board the train, deploy a Train Operator to board the train</li> <li>instruct the Train Operator to remove (if any) obstacle at the train doors</li> <li>remotely open/close the train doors, if the fault is rectified as confirmed by the Train Operator on board, resume normal train service</li> <li>if the problem remains, instruct the Train Operator to open/close all train doors using the EDC and to confirm the result. If the fault is rectified, resume normal train service</li> <li>if the faults remain, instruct the Train Operator to close and isolate the faulty train doors manually</li> <li>then on OCC Supervisor’s authorization:               <ul style="list-style-type: none"> <li>continue service to the terminal station; or</li> <li>instruct the Train Operator to detrain passengers immediately                   <ul style="list-style-type: none"> <li>instruct the Train Operator to bypass the train doors on the Switch Panel on the EDC (if the isolation fails)</li> <li>instruct the Train Operator to change the train operating mode to ATO/ATP and set a route for the train to reach the nearest siding track or to the yard</li> <li>authorize the Train Operator to operate the train manually to the nearest siding track or to the yard</li> </ul> </li> </ul> </li> <li>report the faulty train doors to the Engineering &amp; Fault Controller to arrange for maintenance Intervention from the rolling stock maintainer</li> </ul>

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<i>Train Operator</i>	<p>Under instruction and authorization from the Train Controller, you must:</p> <ul style="list-style-type: none"> <li>ask passengers to stay away from the faulty doors</li> <li>remove the obstacle (if any) blocking the train door from opening/closing and report to the Train Controller. If the fault is rectified, then the train can resume normal operations</li> <li>if train door problem remains, wait for the Train Controller to remotely command the opening and closing of the faulty train doors. If the fault is rectified, then resume normal operations</li> <li>if cycling the door does not rectify the problem, open/close all train doors using the EDC. If the fault is rectified, then resume normal operations</li> <li>if the problem remains, then on authorization from the Train Controller, proceed to isolate the faulty train doors – the isolation switch is located at the side of each doorway: <ul style="list-style-type: none"> <li>close the train door manually</li> <li>insert a Train Key to the door isolation switch and rotate the Train Key clockwise</li> <li>put an “Out-of-Service” sign on the isolated doors or stand there to prevent passengers from using it</li> <li>report to the Train Controller that you have isolated the faulty train doors</li> </ul> </li> <li>on OCC Supervisor’s authorization: <ul style="list-style-type: none"> <li>continue service to the terminal station; or</li> <li>detrain passengers immediately <ul style="list-style-type: none"> <li>bypass the train doors on the Switch Panel on EDC (if the isolation fails)</li> <li>change the train operating mode to ATO/ATP</li> <li>operate the train manually to the nearest siding track or the yard upon a route is established by the Train Controller</li> </ul> </li> </ul> </li> </ul>
<i>OCC Supervisor</i>	<p>On notification from Train Controller that two or more pairs of train doors are unable to open/close, you must:</p> <ul style="list-style-type: none"> <li>decide on whether to take the train out of or to retain the train in commercial service based on the service demand, spare train availability and the guidance from the minimum operating requirements (HNL-09510 Minimum Operating Conditions)</li> <li>when a decision is made, instruct the Information Controller to make public announcement on the affected train and stations, instruct the Train Controller to remove the train from service</li> </ul>

<b>Unintended door opening when the train is running between stations</b>  <i>Train Controller</i>	<p>In this case, the ATP system will immediately apply a Slide Controlled Emergency Brake to stop the train.</p>
	<p>On a report of unintended door opening when the train is running between stations, you must:</p> <ul style="list-style-type: none"> <li>hold and stop all trains in that region</li> <li>if there is staff on board, instruct the Train Operator to prevent passengers from leaving the train</li> <li>if there is no staff already on board the train, deploy a Train Operator to board the train</li> <li>if it is uncertain whether any passenger has left the faulty train, tell the Engineering &amp; Fault Controller to de-energize the third rail of that section</li> <li>inform the Information Controller to make announcement to trains and platforms about the possible delay and instruct passengers on the affected train to remain onboard.</li> <li>instruct the Train Operator to close and isolate the train doors</li> <li>tell the Engineering &amp; Fault Controller to re-energize the third rail of that section if it was de-energized</li> <li>instruct the Train Operator to drive the train manually in ATP mode at 10mph to the next platform</li> <li>on OCC Supervisor’s authorization: <ul style="list-style-type: none"> <li>continue service to the terminal station; or</li> <li>detrain passengers immediately at the nearest platform <ul style="list-style-type: none"> <li>bypass the train doors on the Switch Panel on EDC (if the isolation fails)</li> <li>change the train operating mode to ATO/ATP</li> <li>operate the train manually to the nearest siding track or the yard upon a route is established by the Train Controller</li> </ul> </li> </ul> </li> <li>report the faulty train doors to the Engineering &amp; Fault Controller to arrange for maintenance Intervention from the rolling stock maintainer</li> </ul>

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### *Train Operator*

Under instruction and authorization from the Train Controller, you must:

- check if any passengers have left the faulty train, and report to the Train Controller
- ask passengers to stay away from the faulty doors
- close and isolate the faulty train doors when instructed
- drive the train manually in ATP mode at 10mph to the next platform when instructed
- on OCC Supervisor's authorization:
  - continue service to the terminal station; or
  - detrain passengers immediately
    - bypass the train doors on the Switch Panel on EDC (if the isolation fails)
    - change the train operating mode to ATO/ATP
    - operate the train manually to the nearest siding track or the yard upon a route is established by the Train Controller

### OCC Supervisor

On notification from Train Controller of unintended door opening when the train is running between stations, you must:

- decide on whether to take the train out of or to retain the train in commercial service based on the service demand, spare train availability and the guidance from the minimum operating requirements (HNL-09510 Minimum Operating Conditions)
- when a decision is made, instruct the Information Controller to make public announcement on the affected train and stations, instruct the Train Controller to remove the train from service