



SECURITY VERIFICATION

INTERNATIONAL RIDE OPERATOR CERTIFICATION
RESTRAINT DEVICE SECURITY VERIFICATION STANDARDS OF
PERFORMANCE

(revised April 6, 2020)

1. iROC Critical Component Standards of Performance require effective verification of restraint device security. For a restraint verification to be “effective” requires that the operator/attendant is able to objectively determine that the restraint device is properly positioned and secured in the manner designed for the particular ride unit. Generally, effective verification may be accomplished via direct-operator verification, operator observed rider verification, or, in appropriate circumstances, visual verification. Please note, however, that these restraint security verification methods are not exclusive and iROC facilities may use other methods of restraint device security verification so long as they are effective as defined above.
2. The restraint device security verification processes described below assume consistency with manufacturer recommendations for a particular ride. To the extent that a particular ride manufacturer specifies a restraint security verification method that is inconsistent with the processes described below, per ASTM F770-19 Section 5.1, those manufacturer recommendations should be followed. In an IRT certification audit, IRT does not confirm manufacturer requirements, but rather audits to ensure that the verification method used, assuming it is consistent with manufacturer guidelines, complies with International Ride Operator Certification Critical Component standards of performance.
3. **Direct-Operator Physical Verification:**
 - a. As set forth in the International Ride Operator Instructor Resource Manual, verification of restraint security on lap bar restraints generally requires the ride operator/attendant, using a whole hand, to push the restraint down to its lowest comfortable position and pull up to ensure it is secure.
 - b. Verification of restraint security on over-the-shoulder restraints is similarly accomplished by the operator/attendant, using both hands on the restraint, pushing the restraint toward the rider to ensure it is in the lowest comfortable position and pulling back and up on the restraint to ensure it is secure.



- c. Verification of lap seat belts is accomplished by grasping the buckle in one hand and pulling the loose end of the belt away from the buckle to ensure it is secured snugly across the rider's lap. Alternatively, lap seat belt security may be physically verified by firmly pulling on an auxiliary strap on the seat belt, typically red in color, designed for verification purposes.
- d. Verification of secondary seat belt restraints on over-the-shoulder harnesses is accomplished by ensuring the belt is properly buckled and then firmly pulling the belt away from the buckle to ensure it is secure.
- e. Verification of gates and doors on ride units is accomplished by locking or latching the gate or door and firmly pushing and pulling on it to ensure it is locked.

4. **Operator Observed Rider Verification**

- a. This method may be used where 1) placement of the restraint makes direct-operator verification impracticable or 2) reasonable health concerns require the operator/attendant to remain distanced from the rider during the restraint security verification process.
- b. Verification of lap bar restraints requires the operator/attendant to stand next to the row or individual ride unit in which the rider is sitting. Riders should be directed to pull down the lap bar to the lowest comfortable position and push up on the bar to ensure it is secured. The operator/attendant must visually observe this process for each rider to ensure that all restraints are verified and secure. Care must be taken to ensure that all restraints are in the lowest comfortable position on the rider. Where possible, operators/attendants visually confirm that the lap bar is physically touching the rider's thighs, mid-section, or other body part intended by the restraint's design. All restraints in a particular row must be verified before the operator/attendant moves to the next row.
- c. The process for over-the-shoulder restraints is similar. Operators/Attendants verify one row of riders at a time. Riders are to be instructed to pull the restraint down and toward the rider until it is in the lowest comfortable position. Riders are then instructed to push forward and up on the restraint to ensure it is secure.





Operators/attendants must visually observe this process for each rider to ensure that all restraints are verified as secure. Care must be taken to ensure that all restraints are in the lowest comfortable position on the rider. Where possible, operators/attendants should visually confirm that the over-the-shoulder restraint is physically touching the guest's torso, midsection, or other body part intended by the restraint's design. All restraints in a particular row must be verified before the operator/attendant moves to the next row.

- d. Verification of lap seat belts is accomplished in a similar fashion. Verification is conducted one row or one ride unit at a time. The Operator/Attendant visually confirms that the belt is inserted into the buckle and that the belt is comfortably tightened so it rests across the rider's midsection generally between the rider's thighs and waist. If the belt is too loose, the Operator/Attendant directs the rider to pull on the loose end of the belt to tighten it to the proper level. The Operator/Attendant then asks the rider to pull on the belt to ensure it is securely fastened.
- e. Verification of secondary seat belts on over-the-shoulder harnesses is accomplished by the operator/attendant visually confirming that the belt is inserted into the buckle. The Operator/Attendant then asks the rider to firmly pull the belt away from the buckle to ensure it is secure.
- f. Verification of doors and gates on ride units is accomplished by the operator/attendant visually confirming that the door or gate is fully closed. The operator/attendant then asks the rider to push and pull on the door or gate to ensure it is locked. The operator may not proceed to the next ride unit until the door or gate is verified secure.

NOTE: Doors and gates often have front-facing locking/latching mechanisms that are inaccessible to riders and thus require physical manipulation by the operator/attendant. Operators/attendants, therefore, may be required in these circumstances to make physical contact with the ride unit.

5. Visual Verification:

- a. This method may be used on rides where the operator/attendant is able to objectively ascertain whether the restraint is secured solely through visual means. Visual verification may also be appropriate



for latching restraints (as opposed to locking restraints) that may be released by riders at any time and on their own volition. Generally, visual verification should not be the chosen method of restraint device security verification if the design of the ride unit or restraint makes it difficult to determine, through visual means alone, whether the restraint is properly positioned and/or secured. The following is a non-exclusive list of examples of rides that, depending upon the specific ride and restraint design, visual verification may be effective.

- b. River Rapids Rides: Many river rapids rides utilize seat belts that may be determined to be unfastened solely by visual means. For example, operators/attendants can objectively determine whether hook-and-loop fastened belts are fastened properly simply by observing the belt. Similarly, operators/attendants can generally objectively determine whether airline-style buckles are properly fastened through visual verification. These restraints are designed so that riders can release them at any time to prevent riders from being secured should the raft capsizes. As such, operators/attendants generally need not physically verify the security of these restraints.
- c. Chair swing rides (i.e. Wave Swingers, Flying Carousels, Yo-Yo's): Chair swing rides frequently use a restraint bar that is fastened in place with a belt or chain extending from below the rider's seat. These belts or chains are generally fastened, though not locked, to the restraint bar using a dog-clip or buckle. Operators/attendants may determine visually whether these clips are fastened. Additionally, Operators/attendants may also effectively determine whether these restraints are fastened through visual observation as unfastened restraints will, by force of gravity, hang below the operator's seat.
- d. Children's Umbrella-Style Rides (i.e. Hampton kiddie rides): Many children's umbrella-style rides use a simple nylon belt with a dog-clip fastener or plastic buckle that is latched, but not locked, in place. Operators/attendants generally can objectively determine whether these restraints are fastened through visual observation.
- e. Antique Cars / Sports Cars (not go-karts): Some antique car or sports car type rides have automobile-style seatbelts installed. These seatbelts may be released by riders at any time and

operators/attendants may generally determine if they are buckled through visual observation.

- f. Bumper Cars: Most bumper car rides use a non-adjustable seatbelt that is simply looped under the riders' arms or across the chest. These seatbelts generally have no buckle. Operators/Attendants can generally determine whether a rider is properly wearing the belt through visual observation.
 - g. Aquatic Attractions: Most aquatic attractions in water parks use body positioning and/or mat or tube handles as the restraint device. Because these restraints are entirely dependent upon the rider's conduct, aquatic operators can assess their security prior to dispatch through visual means alone.
6. IRT Auditors will assess ride operator's execution of restraint device security verification regardless of the methodology adopted at a particular facility. In the event that a facility chooses to verify restraint security using Operator Observed Security Verification or Visual Verification, auditors will make every reasonable effort to observe the proper procedure being undertaken. IRT reserves the right, however, for auditors to assess operator performance of visual verification by riding and intentionally leaving a restraint mispositioned or a seat belt unfastened or insufficiently tightened to determine if the operator takes the appropriate and required action under these circumstances.