

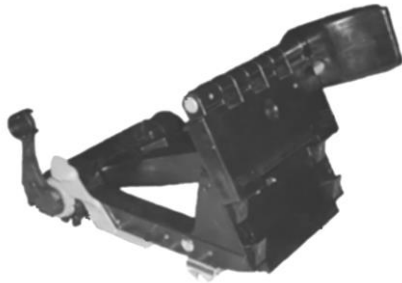
COMMON CHOCK TYPES							
Manuf.	Chock Description	Railcar Type	Profile	Tie-Down Type	Chocks per Vehicle	Strap	
1	Holden	Grate Lock	Bi-Level	Standard	Grating	4	No
2	Holden	Low-Profile Grip Lock	Bi-Level	Low	Grating	8	No
3	Holland	Low-Profile VRS	Bi-Level	Low	Grating	4	Yes
4	Holland	Low-Profile Tri-Low Steel	Tri-Level	Low	3rd Rail	4	Yes
5	Trinity	Thrall Polymer Wedge	Tri-Level	Standard	3rd Rail	2	Yes
6	Trinity	Thrall Steel Wedge	Tri-Level	Standard	3rd Rail	2	Yes
7	Trinity	Low-Profile Polymer	Tri-Level	Low	3rd Rail	4	Yes
8	Zeftek	SCT Co-Polymer	Tri-Level	Standard	3rd Rail	2	Yes
9	Zeftek	Low-Profile Co-Polymer	Tri-Level	Low	3rd Rail	4	Yes
10	Zeftek	Low-Profile Steel	Tri-Level	Low	3rd Rail	4	Yes
11	Zeftek	Low-Profile Stay-Put	Bi-Level	Low	Grating	4	Optional

Hyundai GLOVIS recognizes the Association of American Railroads (AAR) as the standard setting organization for North America’s railroads. The AAR Multi-Level Manual was developed to bring together in one publication all industry standards, specifications, recommended practices and procedures related to rail shipment of motor vehicles. As such, Hyundai GLOVIS mandates that all contracted rail work must conform to the AAR Multi-Level Manual rules and standards. The AAR standards shall be used in conjunction with this manual.

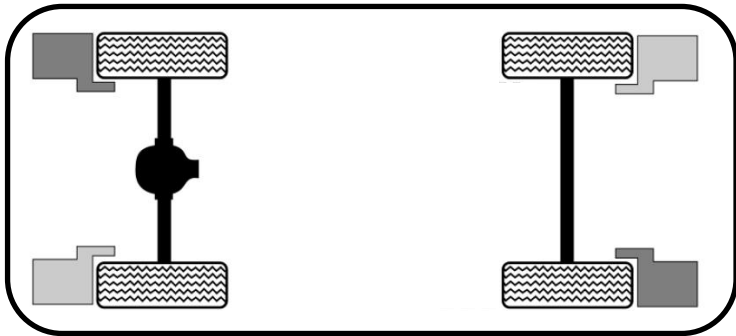
Rail Loading Checklist		
1	Chock Clearance	Minimum 2 inches
2	Adjacent Vehicle Clearance	Minimum 3 inches
3	Roof Clearance	Minimum 3 inches
4	End Door Clearance	Minimum 5 inches
5	Securement Devices	AAR Approved Devices - No chains
6	Automatic Transmission	Park
7	Manual Transmission	1st Gear
8	Parking Brake	Fully Engaged
9	Key Placement	See respective Technical Bulletin
10	Windows / Doors	Closed
11	Glovebox	Closed

HOLDEN GRATE-LOCK CHOCK

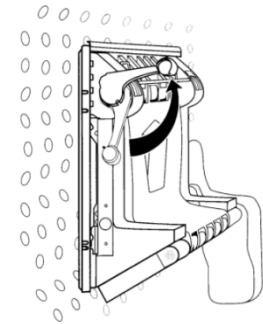
Railcar: Bi-Level
Profile: Standard
Tie-Down: Grate
Chocks/Vehicle: 4
Strap: No



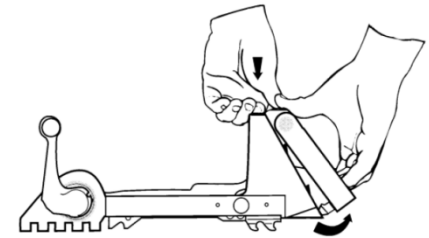
A minimum of 4 chocks are required on each vehicle. The chock faceplates should be adjusted to maximum allowable height position but must maintain a 2 inch clearance from vehicle components. The faceplate must be positioned as close to the tire as possible and no further than 3/4 inch from the tire when chocks are locked in place



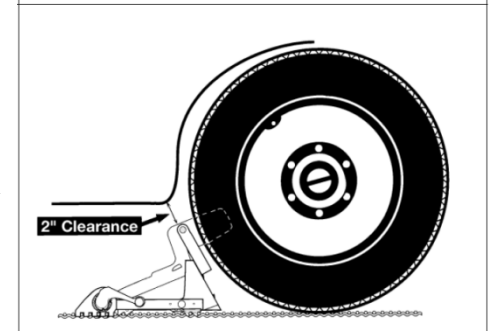
Remove chock from storage pan by rotating locking lever up.



Chock is stored in lowest setting. Place chock on deck to adjust height. Disengage the spring-loaded faceplate and adjust the height adjustment to the highest possible setting that will provide no less than 2" of clearance between the top of the chock and any portion of the vehicle.

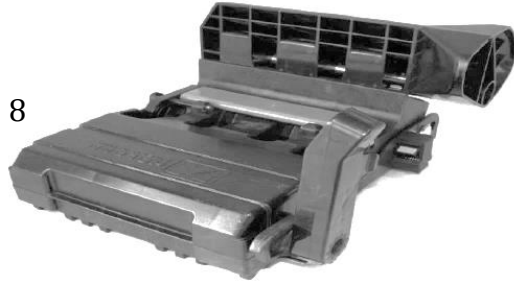


Seat chock into deck grating as close as possible to the tire, with the chock lateral restraint paddle to the inside of the tire. Lock chock in place by rotating the locking lever down.

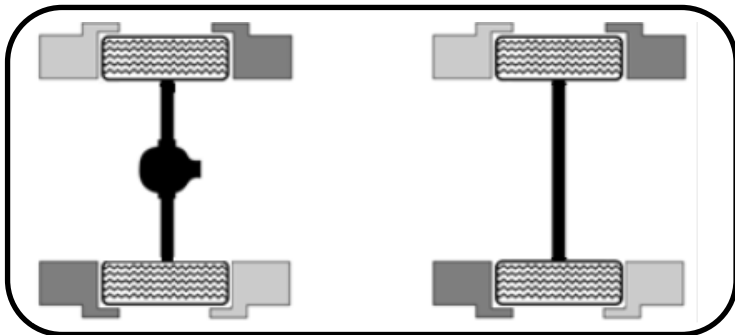


HOLDEN LOW-PROFILE GRIP-LOCK CHOCK

Railcar: Bi-Level
Profile: Low
Tie-Down: Grate
Chocks/Vehicle: 8
Strap: No



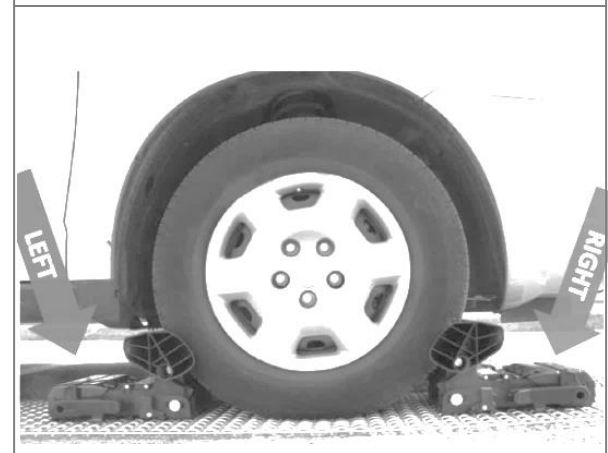
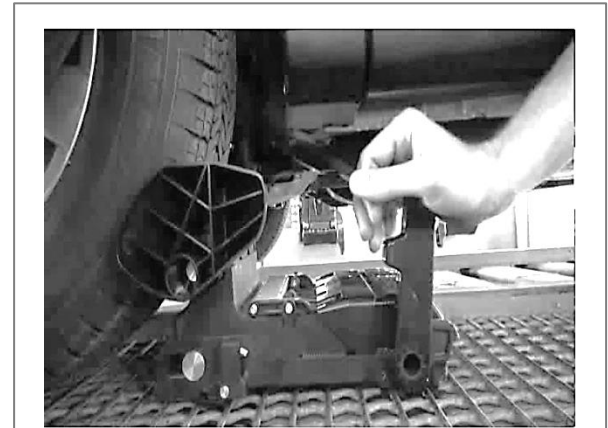
A minimum of 8 chocks are required on each vehicle. The chock Flip-Face should be adjusted to maximum allowable height position but must maintain a 2 inch clearance from vehicle components.



Seat chock into deck grating as close as possible to the tire, with the chock wedge paddle to the OUTSIDE of the tire.

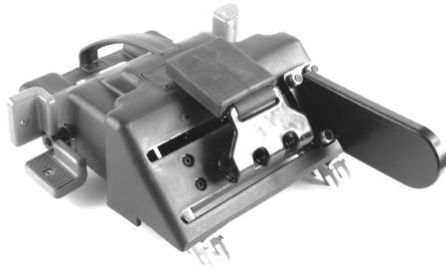
There are four (4) left hand and four (4) right hand chocks. The left hand chocks have a green handle and the right hand chocks have a red handle.

- The recommended final position:
- Face must be in contact with tire tread
 - Wedge should be as close as possible to the tire tread edge
 - No more than 5/8 inch between the tire tread's edge and the wedge
 - The green 'Tell-Tale' indicator must be visible

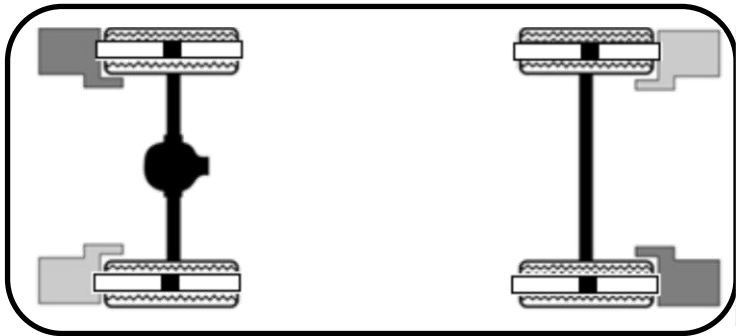


HOLLAND LOW-PROFILE VEHICLE RESTRAINT SYSTEM (VRS) CHOCK

Railcar: Bi-Level
Profile: Low
Tie-Down: Grate
Chocks/Vehicle: 4
Strap: Yes



A minimum of 4 chocks are required on each vehicle. The chock must be positioned as close to the tire as possible and no further than 3/4 inch from the tire when chocks are locked in place



Seat chock into deck grating as close as possible to the tire, with the VRS paddle to the INSIDE of the tire.

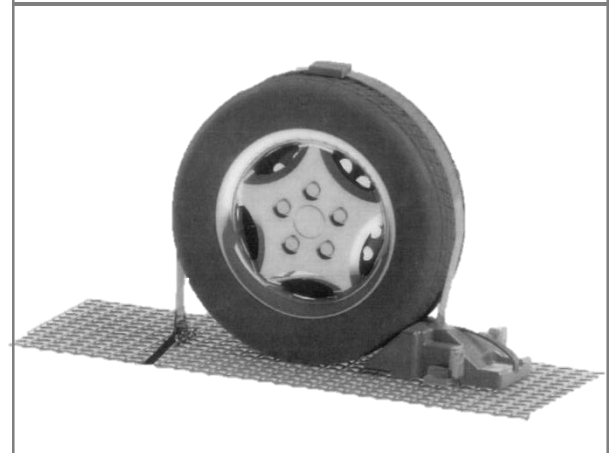
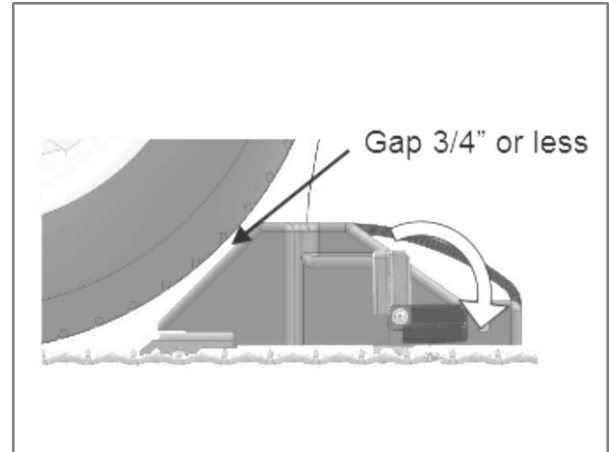
There are two (2) left hand and two (2) right hand chocks.

Engage the rubber cleat with top center of tread groove.

Strap at the center of the tire.

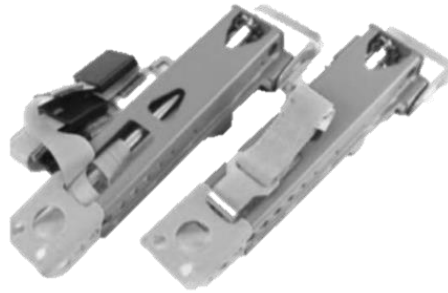
Center the hook to the tire and attach to grating.

Position chock no further than 3/4 inch from the tire. Ensure teeth are secured properly in grating and lock pedals.

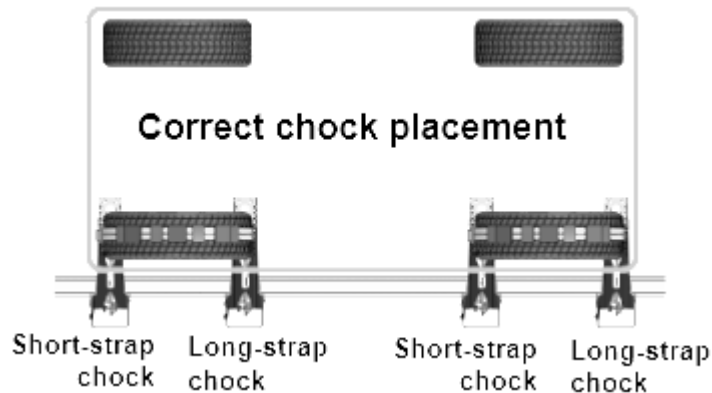


HOLLAND LOW-PROFILE TRI-LO CHOCK

Railcar: Tri-Level
Profile: Low
Tie-Down: Rail
Chocks/Vehicle: 4
Strap: Yes



A minimum of 4 chocks are required on each vehicle. The chocks must be positioned as close to the tire as possible and no further than 3/4 inch from the tire when chocks are locked in place.



Place the chocks as close as possible to the tire.

Place the short-strap chock in front of the tire and the long-strap chock behind the tire.

Push down the handle to lock chock securely to the tie-down rail.

Bring the long-strap buckle over the center of the tire and attach to the short-strap hook. The hook should point away from the tire.

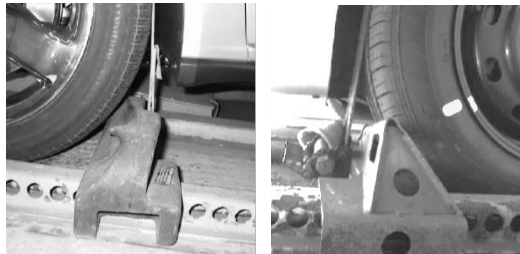
Place the cleat ridges in the tire tread.

Use a 1/2 inch drive ratchet to tighten the winch - rotate counter-clockwise. Remove the slack from both sides, then tighten two more clicks.



TRINITY THRALL WEDGE CO-POLYMER CHOCK TRINITY THRALL WEDGE STEEL CHOCK

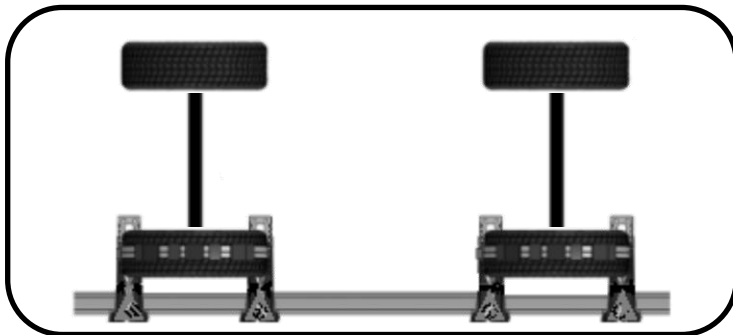
Railcar: Tri-Level
Profile: Standard
Tie-Down: Rail
Chocks/Vehicle: 4
Strap: Yes



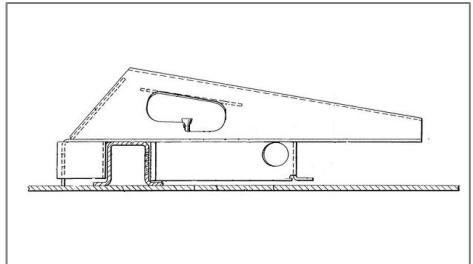
Co-Polymer

Steel

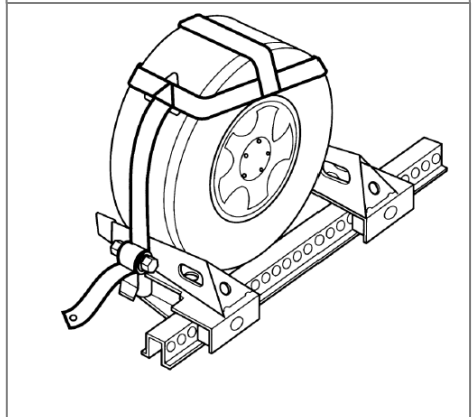
A minimum of 4 chocks are required on each vehicle. The chock must be positioned as close to the tire as possible and no further than 1¼ inch from the tire when chocks are locked in place. The strap can be either the harness type or single strap with rubber cleats.



Lock the chock in place by activating the spring loaded locking pin. Push down on the locking pin handle, then moving the chock back and forth until the pin slides into a hole in the track.



If the chock is more than 1-1/4" away from the tire, then unlock chock and move it closer to the tire.



Harness Strap:
Remove all slack or excess harness by pulling the harness through the ratchet until harness is taut.

Single Strap:
The single strap with rubber cleats is to be placed over the center of the tire with the cleat ridges in the tire tread.

Tighten the ratchet until the strap is tight. Use a 1/2" drive ratchet with a short extension and a six-sided 29mm socket.

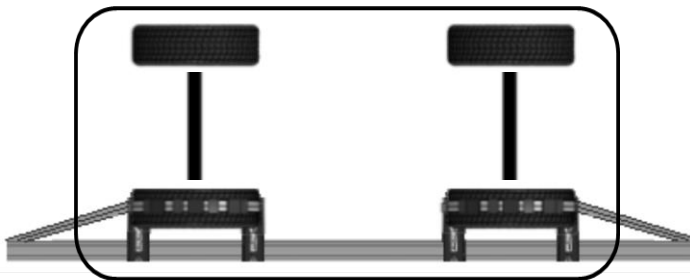


TRINITY GREEN LOW PROFILE CHOCK

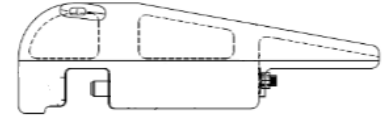
Railcar: Tri-Level
Profile: Low
Tie-Down: Rail
Chocks/Vehicle: 4
Strap: Yes



A minimum of 4 chocks are required on each vehicle. The chock must be positioned as close to the tire as possible and no further than 1¼ inch from the tire when chocks are locked in place. The strap is a single strap with rubber cleats.



From the side of the vehicle, a pair of chocks with the orange strap are placed on the rear tire (right-hand side) and a pair of chocks with the yellow strap are placed on the front tire (left-hand side).



The chock must be positioned as close to the tire as possible.

With the strap latch positioned on the chock stud, pull the strap over the tire and verify the cleats are face down in the tire tread. Center the cleats at the top of the tire.



Insert the winch hand ratchet 'J' hook into a chock rail hole that positions the ratchet beyond the bumper.

Tighten the strap with the hand ratchet. Ensure the hand ratchet is at an angle that allows it to fully close.

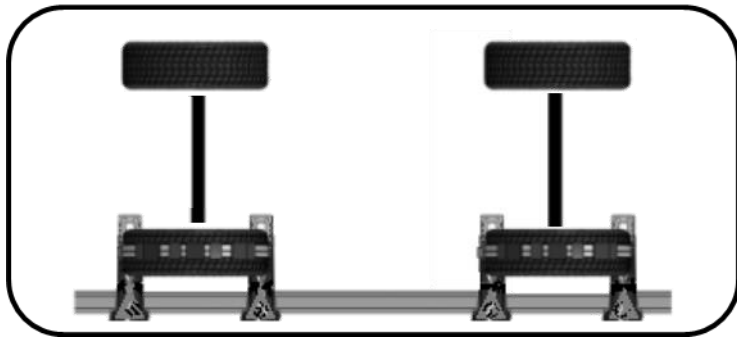


STANDARD CAR TRUCK (SCT) CO-POLYMER CHOCK

Railcar: Tri-Level
Profile: Standard
Tie-Down: Rail
Chocks/Vehicle: 4
Strap: Yes



A minimum of 4 chocks are required on each vehicle. The chock must be positioned as close to the tire as possible and track pins engaged in the first available railing holes. The straps can be a harness type or a single strap with rubber cleats.



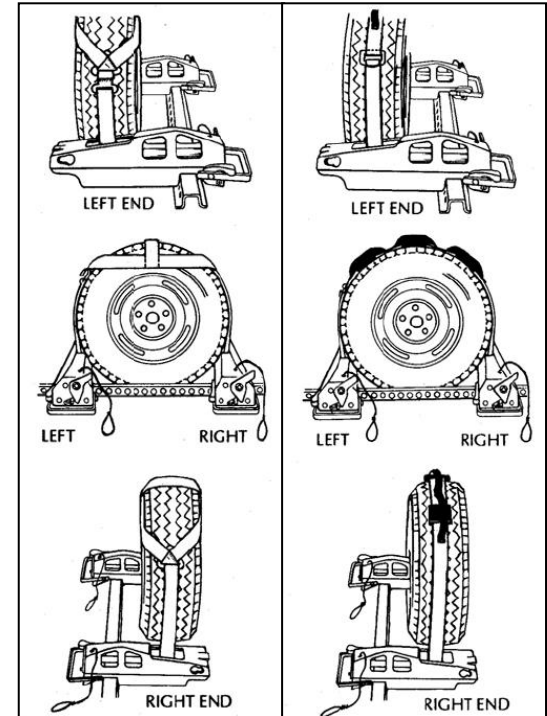
Position the wheel chock so that the track pins engage the first available holes in the track closest to the tire.

Harness Strap:
 Remove all slack or excess harness by pulling the harness through the ratchet until harness is taut.

Single Strap:
 The single strap with rubber cleats is to be placed over the center of the tire with the cleat ridges in the tire tread. Ensure the 'J' hook is facing away from the tire.

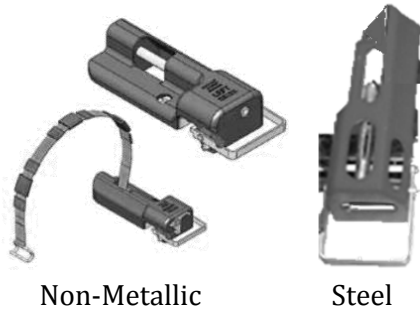
Insert the 8" x 1/2" drive ratchet wrench into the ratchet gear hole to tighten the straps.

Rotate the wrench counter clockwise to take up the slack in each strap of both chocks. Make sure the strap hood remains centered on the tire. Tighten each strap equally until slack is removed. Further tighten two and only two "clicks" on both chocks.



ZEFTEK LOW-PROFILE NON-METALLIC CHOCK ZEFTECK LOW-PROFILE STEEL CHOCK

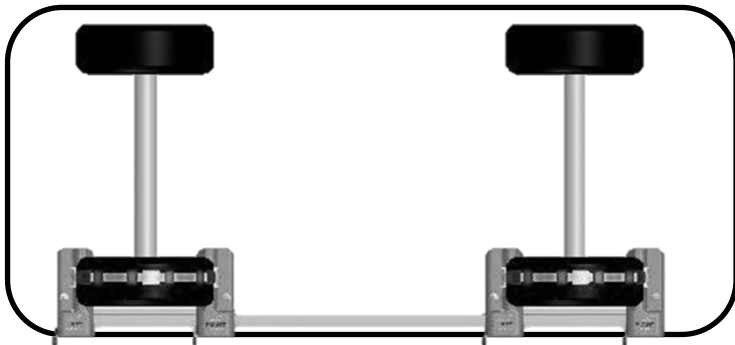
Railcar: Tri-Level
Profile: Low
Tie-Down: Rail
Chocks/Vehicle: 4
Strap: Yes



Non-Metallic

Steel

A minimum of 4 chocks are required on each vehicle. The chocks must be positioned as close to the tire as possible and no further than 3/4 inch from the tire when chocks are locked in place.



The procedure is the same for both the Non-Metallic and Steel chock.

Place the chocks as close as possible to the tire.

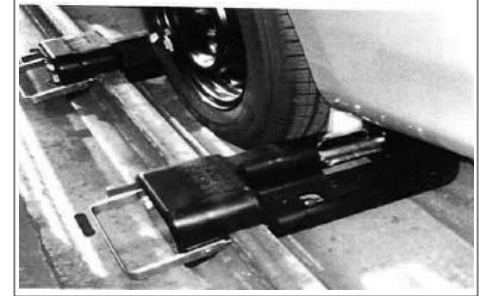
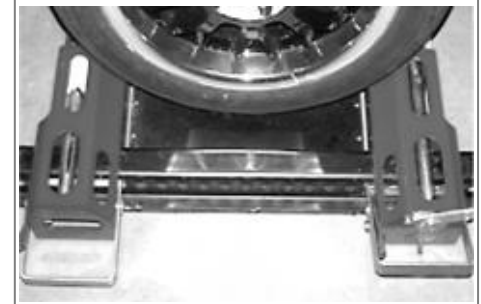
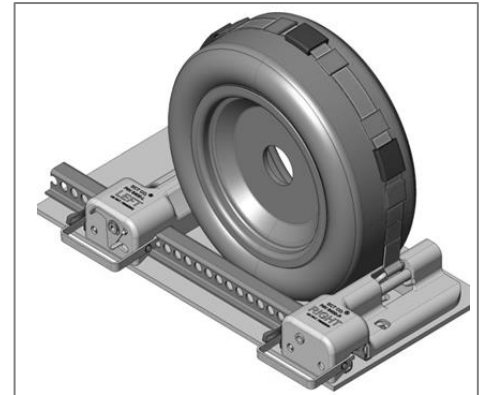
Pull the strap over the tire and hook the 'J' hook onto the left-hand chock torque tube.

Center the strap over the middle of the tire with the cleats in the tread grooves.

The middle cleat is centered at the top of the tire between 10 and 2 O'clock.

Pull the strap slack away from the 'J' hook then ratchet the right-hand chock to tighten the strap.

When the strap slightly compresses the tire, tighten an additional three clicks of the ratchet wrench.

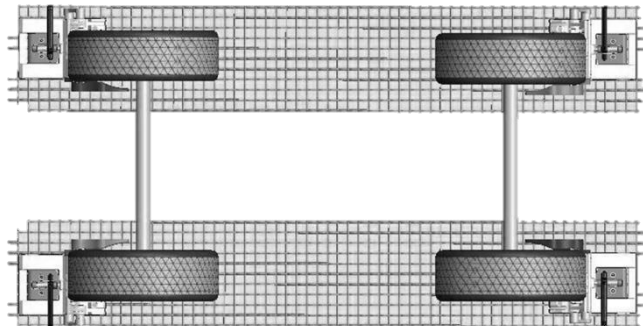


ZEFTEK LOW-PROFILE STA-PUT CHOCK (w/optional strap)

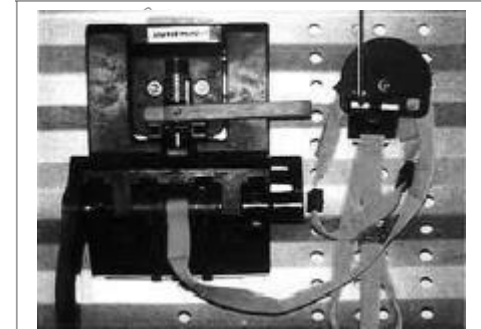
Railcar: Bi-Level
Profile: Low
Tie-Down: Grate
Chocks/Vehicle: 4
Strap: Optional



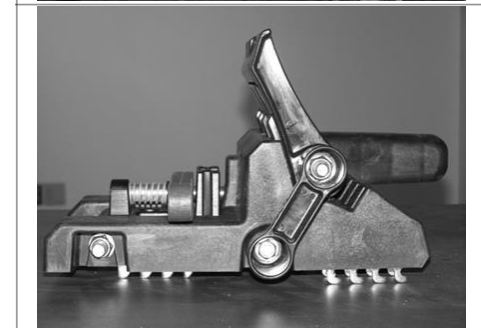
A minimum of 4 chocks are required on each vehicle. The chock faceplates should be adjusted to maximum allowable height position but must maintain a 2 inch clearance from vehicle components. The faceplate must be positioned as close to the tire as possible and no further than 3/4 inch from the tire when chocks are locked in place



Remove chock from storage pan by pulling upward on the chock release handle. (Shown with optional strap)



Chock is stored in lowest setting. Place chock on deck to adjust height. Disengage the spring-loaded faceplate and adjust the height adjustment to the highest possible setting that will provide no less than 2" of clearance between the top of the chock and any portion of the vehicle.



Seat chock into deck grating as close as possible to the tire, with the chock lateral restraint paddle to the inside of the tire. Lock chock in place by rotating the locking lever down.

