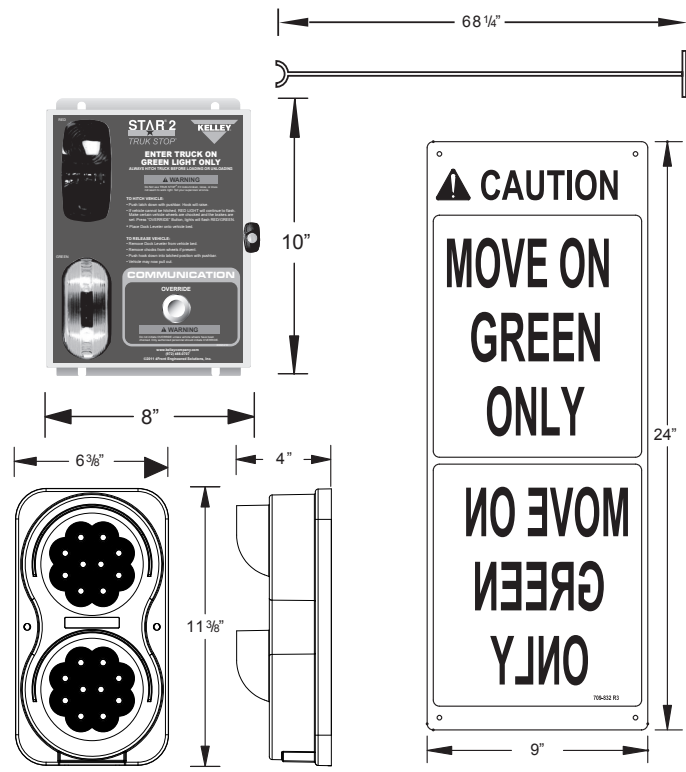


STAR[®] 2 VEHICLE RESTRAINT MECHANICAL RESTRAINT SPECIFICATIONS

Design Highlights

- Simple Manual Activation
- Non-Impact Design & Operation
- Low Profile
- Horizontal Hooking Range 0 - 10" From Face Of 4" Bumper
- Compatible with NHTSA Regulation Rear Impact Guards
- Automatic Interior/Exterior LED Light Communication System
- Sensor Bar Indicates Positive Engagement with Rear Impact Guard



Project Information

Job Name _____
 Address _____
 General Contractor _____
 Distributor _____
 Quantity _____

Certified For Construction

By _____
 Company _____
 Address _____
 Date _____

Available Options

- New Construction Mounting Plate
- Audible Alarm
- Back Plate Cut-Down _____
- Stand-Off _____
- Other _____

Available Accessories

- Master Control Panel
- Dock Seal / Shelter
- Loading Dock Light
- Guard Rail / Rack Protection
- HV Air Exchange Fan
- Other _____



STAR[®] 2 VEHICLE RESTRAINT MECHANICAL RESTRAINT SPECIFICATIONS

1. General: STAR[®] 2 Vehicle restraint is designed to engage the rear impact guard of a trailer or vehicle and secure it in place at the loading dock during loading and unloading operations. Unit to include locking unit, push bar and push bar mounting bracket, sensor bar to indicate contact with the rear impact guard, control panel with printed operating instructions, exterior-mounted caution sign with forward facing and reversed lettering, and interior and exterior LED light communication system. Unit to provide 32,000 lbs. of restraining force and to operate in a range from 11 ½" - 28" above grade. Unit conforms to OSHA standards.

2. Construction: Mounting frame consists of ¾" thick heavy structural plate. A separate ¼" thick steel horizontal mounting plate provides shear strength against pullout loads. Cast ductile iron restraining arm with 45,000 PSI yield strength. Restraining arm moves over T-rail, which is welded to mounting plate with over 60" of continuous ¾" bevel weld. Heavy-duty gas spring provides "float" to assure constant contact with rear impact guard. A ¾" steel rod sensor bar is heat treated and plated. STAR 2 comes standard with zinc-plated finish. Push bar made from 1-½" x ½" x 66" zinc-plated tubular steel.

3. Operation: Once vehicle is backed into position and the brakes are set, the operator uses push bar to trigger the latching lever and activate the restraining arm, which will move vertically along the reinforced T-rail until it contacts the vehicles rear impact guard. The exterior light changes from green to red when the restraint is activated. The interior light changes from red to green only after the hook-mounted sensor bar indicates contact with the rear impact guard. If the hook does not contact the rear impact guard, the interior light changes to flashing red. When loading/unloading is complete, the operator uses the push bar to return the restraining arm to its stored position. The interior light changes to red when the sensor bar breaks contact with the rear impact guard. The exterior light changes to green when the restraining arm has been lowered to its stored position.

4. Hooking Range: The restraint will engage a rear impact guard positioned up to 10" horizontally from the face of a 4" bumper. has a vertical hooking range of 11 ½" - 28" and complies with NHTSA regulations for rear impact guards.

5. Control Panel: Industrial quality NEMA 12 control panel (12"W x 10"H x 8"D) features integral LED visual safety light warning system and printed operational instructions.

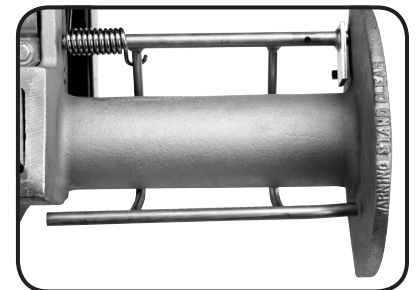
6. Communications: Communication system consists of printed operating instructions on the control panel, interior and exterior compact red/green LED lights, and an exterior-mounted caution sign for the vehicle driver.

7. Exterior Lights: Low profile flashing green and red LED signals (6-¾"W x 11-¾"H x 4"D) indicate safe or unsafe conditions for vehicle movement. Caution sign (9"W x 24"H) with standard and reversed lettering provided.

8. Electrical: 110V AC, 1-¾ Amp. All lights are 12V DC. Power to unit and electrical connections provided by others. All components are UL listed.

9. Installation: STAR 2 vehicle restraint is anchored to the front wall of the loading dock using concrete anchors (provided). The horizontal mounting plate is anchored to the pit floor under the dock leveler and welded to the mounting frame of the vehicle restraint. Lights, signs and control panel to be installed in accordance with provided instructions. Complete operating and installation instructions are included in the Installation and Owner's Manual.

10. Limited Warranty: Kelley warrants all components to be free from defects in material and workmanship, under normal use, for a one year base period from the date of shipment in accordance with Kelley's Standard Warranty Policy. The "Base Warranty Period" will begin on the completion of installation or the sixtieth (60th) day after shipment, whichever is earlier.



Sensor bar indicates hook contact



Dock worker uses push bar to activate and release

