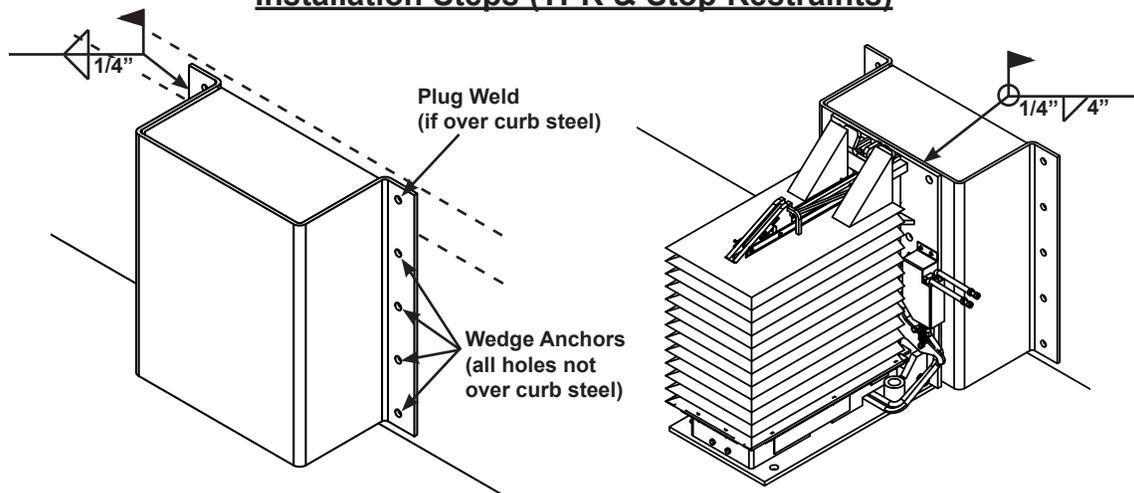


## Restraint Cantilever Bracket Install

Poweramp, McGuire and DLM transport vehicle restraints are designed for flexible mounting options to meet customer needs. In some situations, a cantilever bracket may be required to maintain a mounting surface for the restraint while spacing the vehicle restraint off of the exterior wall. This TSB provides an overview of installing these cantilever brackets.

**Note:** Systems, LLC can provide vehicle restraint cantilever brackets in various projections and configurations to meet specific customer install requirements. Kits including all necessary hardware are also available. A generic cantilever bracket is shown to provide an example.

### Installation Steps (TPR & Stop Restraints)

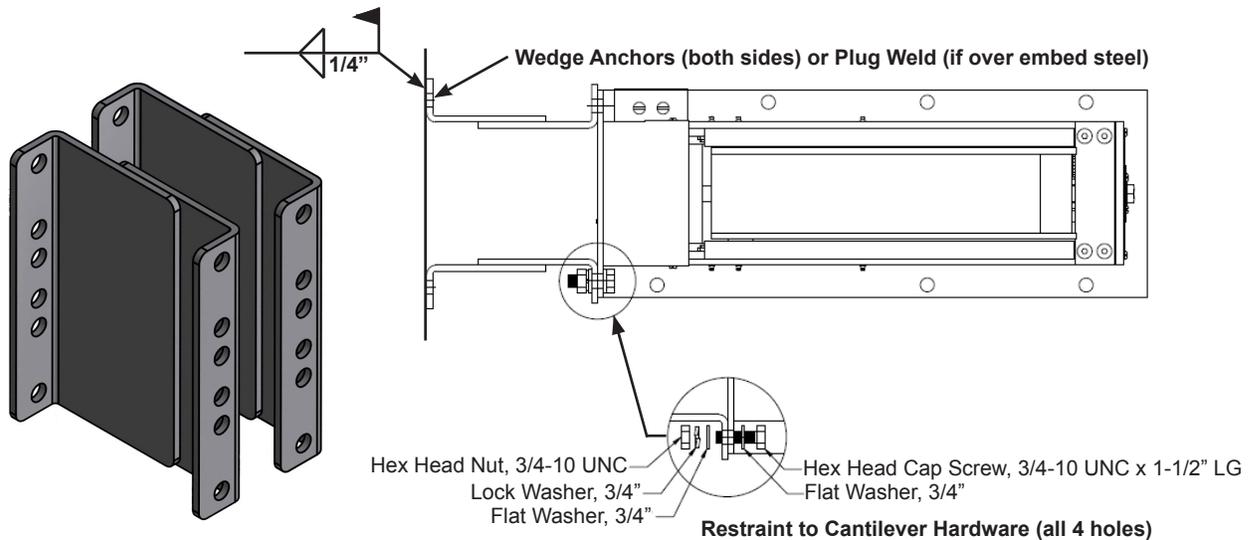


1. Locate cantilever bracket at desired location on dock face. Space bracket 1/2" above drive apron.
2. Using the cantilever bracket back plate as a guide, drill all holes for wedge anchors (3/4" x 5-1/4" minimum), then install wedge anchors. Torque to manufacturer's specs.
3. Apply a continuous 1/4" fillet weld and plug weld mounting holes where cantilever bracket meets curb steel.
4. Mount vehicle restraint to cantilever bracket:
  - **TPR restraints:** Position roller track on cantilever bracket, spaced 1/2" above the drive. Stitch weld restraint track to cantilever bracket with 4" long, 1/4" fillet welds. Plug weld all restraint mounting holes to cantilever bracket.
  - **PowerStop/Stop-Tite restraints:** Position restraint back plate on cantilever bracket, with floor plate resting on drive. Stitch weld restraint to cantilever bracket with 4" long, 1/4" fillet welds.
5. Continue with vehicle restraint installation per instructions in Owner's/User's Manual.

## Restraint Cantilever Bracket Install (continued)

**Note:** Systems, LLC can provide vehicle restraint cantilever brackets in various projections and configurations to meet specific customer install requirements. Kits including all necessary hardware are also available. A generic cantilever bracket is shown to provide an example.

### Installation Steps (Hold Restraints)



1. Bolt vehicle restraint to cantilever brackets using all four (4) available holes.
2. Locate assembly at desired location on dock face.
3. Using the cantilever brackets as a guide, drill all holes for wedge anchors (3/4" x 5-1/4" minimum), then install wedge anchors. Torque to manufacturer's specs.
4. Apply a continuous 1/4" fillet weld on outer perimeter and plug weld mounting holes where cantilever bracket meets embedded mounting plate.

**Note:** A minimum of eight (8) holes must be either anchored or plug welded to the dock face.

5. Continue with vehicle restraint installation per instructions in Owner's/User's Manual.