

TCG GANGWAY LRD LEVER ARM RELEASE HANDLE ADDENDUM

a) GENERAL

- i) The TCG Gangway LRD (Lift Resisting Device) Lever Arm Release Handle instructions contained within this addendum apply to Carbis Manually Operated TCG Gangway Series TCG-1000, TCG-2000, and TCG-2500.
- ii) The Lift Resisting Device is designed to restrict the gangway from being inadvertently or prematurely raised while the top of the vehicle is occupied by operating personnel. The lever arm release handle is designed to release the LRD while simultaneously raising the gangway to the stored position as an operator exits the gangway.
- iii) This addendum is considered an integral part of the instruction manual for the gangway to which the Lift Resisting Device and Release Handle applies.

b) DESCRIPTION

- i) The Lift Resisting Device consists of the following features:
 - (1) A linear rail with ratcheting angled teeth mounted on the underside - The rail is pinned on one end to a lug that is supported on the top rail of the gangway by double U-bolts, and the opposite end of the rail slides into an extension tube that is pinned to a support bolted to the outboard handrail of the gangway.
 - (2) Pinned to a lug mounted on the underside of the linear tube is a ratcheting pawl with a pivoting catch that engages a tooth of the linear rail and holds the gangway in place, which restricts the gangway lift.
 - (3) The LRD Lever Arm Release Handle is designed to replace the pull-up rope that is typically supplied with manually operated gangways. The Release Handle is mounted on the ratcheting pawl of the LRD. When the handle is pulled towards the platform, it causes the ratcheting pawl to pivot, which releases the catch from its engagement with the gear tooth of the rail and allows the gangway to be raised to the stored position.

c) ASSEMBLY

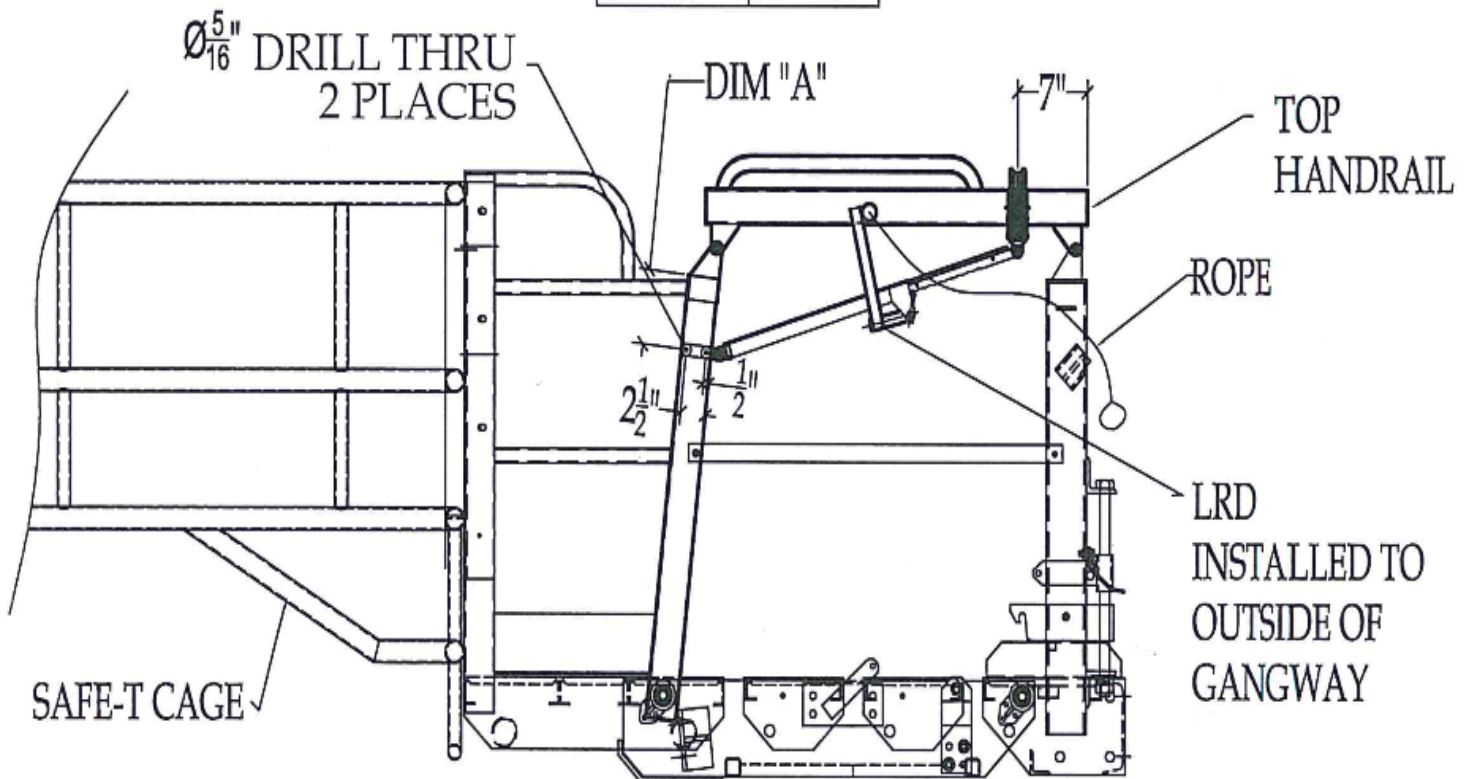
- i) In most instances, the LRD assembly will be installed at the factory and will not require any additional assembly.
- ii) In the event that the LRD assembly was not initially installed by the factory, it can be installed by following these steps:
 - (1) Per Sketch 1, perform the following steps:
 - (a) The LRDs supplied are intended to be installed such that the operating arm extends toward the outside of the gangway.
 - (b) Spot the location for two holes by measuring down a distance equal to DIM "A" from the upper end of the 3" x 1-1/2" aluminum gangway post and 1/2" and 2-1/2" from the edge as shown in Sketch 1. Drill a Dia 5/16" hole at each location (two holes total) completely thru the gangway post.

- (c) Assemble the mounting bracket of the extension tube at the location of the drilled holes using the two 1/4" x 2-3/4" long bolts, two washers, and two lock nuts supplied. Tighten until lock nut is fully engaged and tight.
- (d) Measure and mark a location 7" from the platform side of the handrail pivot bracket as shown in Sketch 1. With the LRD totally assembled, center the linear rail mounting bracket at the location marked. Install the two U-bolts, spacers, and washers as supplied and tighten.
- (e) Test the operation of the lever arm release handle by raising and lowering the gangway. Pull the LRD rope to disengage the locking mechanism in order to raise the gangway.

d) OPERATION

- i) While the deployment of the gangway does not change from the procedures noted in the standard manual, the implementation of the LRD Lever Arm Release Handle does cause the following variation in exiting and storing the gangway:
 - (1) To exit the gangway, face the platform.
 - (2) After stepping off of the gangway onto the platform, turn around facing the gangway and firmly grab the pull-up rope attached to the LRD handle. Pull the rope firmly to disengage the LRD and raise the gangway to the stored position.
 - (3) Make certain that the foot lock has engaged the bolt of the foot lock mechanism.
 - (4) From this point, follow the remaining steps in the standard manual.

SETUP DIM "A"	
LRD-3	1 $\frac{1}{2}$ "
LRD-4	6 $\frac{3}{16}$ "
LRD-5	10 $\frac{3}{16}$ "
LRD-6	10 $\frac{3}{16}$ "
LRD-7	10 $\frac{3}{16}$ "



SKETCH 1