



AF1 AutoFold Installation Instructions

Revision 7.0

- ✚ PLEASE REVIEW INSTRUCTIONS & PICTURES BEFORE INSTALLATION FOR IDENTIFICATION OF PARTS, ETC.**
- ✚ IMPORTANT: BEFORE INSTALLING RAMP VERIFY CHAIR WIDTH WILL FIT ON 30" RAMP. USABLE RAMP AREA IS 29". MINIMUM DOOR CLEARANCE OF 33" IS NEEDED FOR RAMP.**

Includes:

1. Ramp assembly
 2. Remote Controls (2) (if applicable). Pre-wired/programmed
 3. Appropriate Wiring Diagram for Corded or Remote System
 4. Mounting Hardware
 - 4 – 3/8" x 4" Bolts (cut to shorter depending on application)
 - 4 – 3/8" Nylon Lock Nuts
 - 8 – 2" Diameter Fender Washers (for under vehicle)
 - C-Pillar Bracket Assembly Kit
- ✓ Hardware provided may vary from actual needed depending on vehicles application.

SIDE DOOR INSTALL NOTE: Most shimming will be needed on the right side to compensate for the slope of the floor. Less shimming will lessen the grade of slope.

REAR DOOR INSTALL NOTE: Likely shimming or slightly raising the unit may be needed for the mechanism not to bottom out on the floor's edge. See images below for rear installation.



DUE TO RECENT HISTORY OF DAMAGE RECEIVED IN SHIPPING, WE ARE SHIPPING THE WHEELS FOR YOUR LOWER APPROACH PLATE UN-ATTACHED. These are found in your Owner's Manual bag with your mounting hardware. Simply thread the bolt with the wheel into the hole on the bottom edge of the wheeled plate from the outside and secure with the provided nylon lock nut.

INSTALLATION STEPS

- 1) Ensure the door opening is a minimum of 33" wide X 48" high.
- 2) Place ramp assembly on van floor.
- 3) Determine the ramp's position inside door so sliding door to clear ramp when closing.
- 4) A 20' length of 12-gauge wire is provided with weather pack 20 Amp fuse link. (12 ga. minimum is recommended) System should be wired direct to battery,
- 5) Once wired to vehicle power, hold or clamp ramp frame down and deploy ramp in/out using either the remote control or pendant switch.
- 6) Close door and locate ramp so the door clears the ramp, mark position of ramp. This will assist in determining how far in from threshold ramp bracket should stand. The up- position limit switch is preset at the factory for the most inward position, but can be adjusted if necessary. Up & bottom stop switches are located inside the power box on side of motor post. Fully deploy the ramp for best positioning.

****Limit switches are set at the factory for testing only. These need to be verified and/or adjusted for EVERY installation. Please see instructions on last page for adjustments if needed. These set both the up stop and down stop position.**

Mounting Ramp Assembly

✓ **Locate all wiring, brake lines, fuel lines, etc. in and under floor, prior to drilling. Ramp should be fully deployed for proper mounting.**

1. Drill four mounting holes through the base of ramp bracket and van floor. *Holes are not pre-drilled in the ramp bracket assembly as your mounting position may vary.*

***Further securing of Bracket Base Plate with 2 additional 3/8" bolts in the middle may be necessary for proper stability w/ some vehicles.**

2. Position ramp assembly on floor. Insert bolts and shim as needed. Raise and lower the ramp for best positioning before securing bracket to van floor. Utilize two fender washers per bolt as under vehicle backing. Secure ramp bracket with lock nuts.

**The use of a bracket to the vehicle C-Pillar is REQUIRED.
Refer to C-Pillar Bracket Addendum.**

**** IMPORTANT NOTE: MANUAL OPERATION OF
AutoFold™ Powered Ramp In Case of Power
Failure****

**PLEASE PASS THIS INFORMATION PAGE ON TO THE
CUSTOMER**

- ✚ **In the event of power failure, ramp may be used in the manual operation mode by removing cotter pin from top of black motor.**

- ✦ **A hammer and punch should be used to remove the pin securing the motor to the bracket as it is under pressure, which makes it difficult to remove by simply pushing it out. (Motor Post View picture). Motor lays back into van and is disconnected from ramp. Simply bi-fold ramp up and down.**
- ✦ **Once problem is corrected simply re-insert pin into motor mount & re-insert clip for normal operation**

NO POWER NOTE: Likely cause is a blown fuse located as an in-line fuse holder in red wire close to the end termination

**Contact the Roll-A-Ramp Distribution Center
for Technical Support 1.866.883.4722
We may request digital images**

C-Pillar Bracket

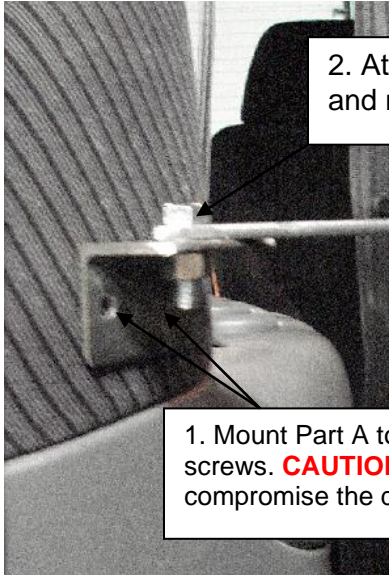
There are three main parts to the C-Pillar Bracket. One short 90 degree L piece Part (A). Two flat straight angle pieces Parts (B & C).



Depending how far in the AF1 is positioned from the threshold; Part C may not be necessary.

Once the AutoFold has been securely positioned (shim as needed) and bolted to the vehicle floor, wired, and tested; proceed with C-Pillar Bracket installation. The ramp should be fully deployed during this step. Ensure there is no stress on the L-Bracket of the AF1.

At the proper height and angle - mark and drill 3/16" bolt holes. Attach Part A to the C-Pillar with two 1/4" x 1" Self Tapping screws. **CAUTION: Be sure to position Part A as to not compromise the door or outer panel of vehicle.** Attached part B to part A with one 3/8" x 1" bolt with nylon lock nut.

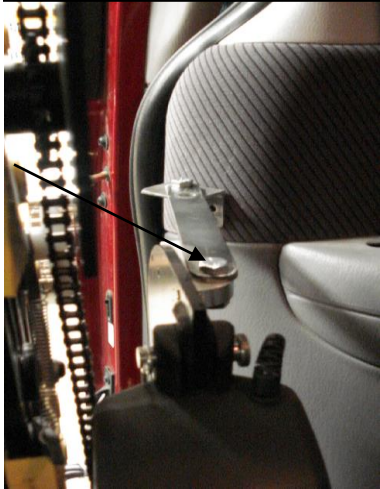


2. Attach Part B to Part A with 3/8" x 1" bolt and nylon lock nut.

1. Mount Part A to C-Pillar with 2- 1/4" x 1" Self Tapping screws. **CAUTION:** Position Part A so that it does not compromise the door or outer panel of vehicle.

If Part B reaches the aluminum Pivot Block on the ramp attach Part B with 3/8" x 1" bolt nylon lock nut. If part B does not meet the Pivot Block completely, incorporate Part C (length may need to be shortened). Align parts B & C in the location needed and clamp with c-clamp. Mark location needed for bolt holes. Using a 3/8" drill bit - drill two holes through part C.

Example of mount with Parts A & B only.



Aluminum Pivot Block.

Securing cotter pin & motor release pin

Clamp Parts B & C together at optimal position – Drill Two 3/8" bolt holes - Apply bolts and nylon lock nuts.

Example of utilizing Parts B & C of C-Pillar Bracket.



Actuator Bracket & C-Pillar Bracket on upper part of bracket to van pillar.

INSTALLATION EXAMPLES



Roll-A-Ramp MiniFold™/AutoFold Limit Switch Adjustments

Notice:

During installation, placement of the limit switches needs to be verified. Limit Switches are set at the factory for testing of these units, but need to be checked and may need to be re-set for each installation. Therefore, if adjustments to the location of these switches need to be made, use the following instructions.

Start by removing the cover for the electrical box on the upright of the base plate. Run the ramp up and down and verify that the cam is striking the limit switches and stopping the ramp deployment and retraction at the correct positions for your application. If not, see below,

The upper limit switch needs to be set so that when the ramp is completely retracted and the actuator shaft does not continue to extend or strike frame.

The lower limit switch needs to be set so that when the ramp is completely deployed, the cam arm does not hit the sill plate of the van – some shimming of the base plate or modifications to the sill plate may need to be made.

To make adjustments to the limit switches, loosen set screw on limit switch mounting block and then move the ramp into correct position as indicated above. Set limit switch by moving block so that the switch makes a click noise when striking the cam and then tighten the set screw. Run the ramp through a full cycle to verify adjustment(s).

If further adjustments are required, please call Roll-A-Ramp Technical Service at 866-883-4722.

