

**PLEASE CAREFULLY READ ALL INSTRUCTIONS BEFORE ATTEMPTING TO
INSTALL THIS PRODUCT.**

Vertical Doors Inc. assumes no responsibility for any damages caused by improper
installation

Suicide Door Hinge Installation

Before installing:

This is a very involved project.

Have a "game plan" before installation. Read and understand these instructions before starting. You or someone helping with the installation will need to be experienced in metal working, welding and paint preparation.

**Modified or installed parts cannot
be returned for a refund.**

On a standard installation, the steel mount plates are intended to be welded into the structure. The aluminum hinges are not intended to be cut, drilled or modified. The aluminum hinges are by far, the most expensive part of this kit, so make sure you keep this in mind before making any changes to them.

If you have any questions or problems with this kit, please call us.

Caution: Corrosion Prevention

Whenever aluminum comes in contact with bare steel, there is a good chance that it will increase the speed of corrosion of the aluminum.

- **Use stainless steel fasteners for any fastener in direct contact with aluminum.**
- **Make a barrier between the aluminum or steel. The barrier can be plastic or a coat of paint on the steel part.**
- **Exclude Oxygen from the area by the use of a sealant or undercoating.**
- **Avoid allowing moisture and salt to contact the aluminum.**
- **Clear coat or anodize the aluminum parts. Clear coating is recommended for polished parts, anodizing is recommended for brush finish or machine finish parts.**

Included In This Kit

One hinge consists of each of these items:

- Aluminum door hinge assemblies with bushings, shoulder bolts, installed in a steel mount flange.
- Door-side steel mount plate. Depending on the kit, this will have three or four small holes that bolt to the "paddle" of the aluminum hinge. There will be one per hinge. The steel mount flange of the hinge is to be bolted to the steel mount plate with a large hole. This mount plate is to be welded into the door.
- Jamb-side mount plate. This plate has one or more large holes to mount the hinge flange to the door jamb.
- Hardware Pack. This pack holds the bolts, nuts and other hardware for this kit.



Wrapped hinge



Wrapped mount plates and hardware.



Assembled hinge



Door side mount plate, shown upper left, jamb side mount plate, shown lower left, hardware bag shown to the right.

Pre-Installation:

The steel mount plates may have a thin film of cutting oil or other protective oil on them, we suggest cleaning them with a degreaser before welding or painting.

Mounting

The steel flange mount plates are intended to be welded the inside of the body structure. Place the mounts so the pivot point is as close to the outer body skin as possible, and between an inch to two inches away from the door edge, usually as far back as possible and still have the radius of the arc of the hinge clear the door opening. It is recommended to recess the Mounting Plate and Flanges into the quarter panel as much as 1/2" to 3/4" for best results.

If you have more than one hinge per door, it is critical to have the pivot pins are lined up exactly with each other thus it is important that the mounting plate is not cut between the hinges.

Misalignment will cause the hinges to bind and the door will either be hard to open or not open at all, possibly causing damage to the hinges, body or door if excessively forced.

The steel plates may need to be cut to fit your application, although cutting the steel mount flange is not recommended. Additional reinforcement will likely be needed. For best results, the pivot pins should be as close to the body outer skin as possible.

Wherever possible, weld the mount plates to the structure and not to the outer body skin. The door and the jamb structure **must** be reinforced to take the added stress of the door weight in both the closed and open positions. Be careful to not allow weld spatter to mar the aluminum hinge surface.

When the mounts are completed, the steel mount areas should be painted to prevent corrosion between the aluminum mount face and the steel mount plate.





The mounting of the hinge to the door jamb, from several perspectives.



The custom mounting of the door-side that will bolt to the hinge, from several different perspectives.



Suicide hinge installed, before painting

Latching

There are a few ways to do the latch depending on the desired final outcome. If you leave the outside handles where they are it is difficult to open the door because of the leverage and the linkage could be a challenge. If you want to re-locate the outside handles to the front edge of the door, opposite the front door handles, then you can take the left handle and latch to the right door and visa-versa.

If you planning the operate the latch electrically you could consider mounting the latch on the jamb and the Striker on the door. That way you don't have to run the wires into the door for the latch. Power can be run into the door via the new Billet wire loom that you can get from us or by using door jamb contacts.

The inside linkage can be hooked up with the use of a lever to change the direction of pull as need to operate the latch.

It is always a good idea to have an automatic lock on the door so it can't be opened while the vehicle is in motion.



An end-on view of the custom latch mount.



An edge view of the custom latch mount.