

## 73-79 F-Series installation

Tools required: ½" wrenches, 9/16" wrenches, 5/16" & 3/8" drill bit, 1 ¼" hole saw, ¾" wrenches

Remove hood.

Remove hood hinges from inner fender apron.

Save these bolts to reuse or you can use the new ones provided.

Install the rear roller brackets, with the u-shaped end towards the firewall, in place of the hood hinges at the inner fender apron.

You can use the original hinge bolts or the supplied 5/16" X 1 ¼" bolts with a flat washer.



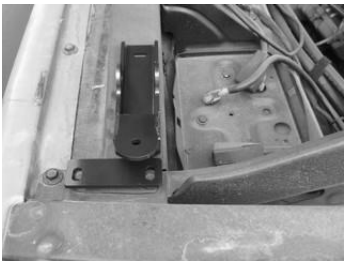
Remove the battery side mount that goes to the inner fender apron if it is still on the truck.

Remove the cage nut that is in the inner fender on the passenger side. (This is not on all models)



If you want the side battery mount reinstalled, you will need to reshape it and mount it to the side of the new bracket.

Remove 2 bolts at the inner fender and the core support to install new hinge bracket.



Install 2 new 5/16" X 1 ¼" bolts with flat washers. Mark the center of the rear slotted hole, remove the bracket and drill a 5/16 hole. Reinstall the hinge bracket with a 5/16" X 1 ¼" bolt with a flat washer on the bolt and a flat washer and nylock nut on the bottom. Leave these loose at this time. Repeat for the opposite side.

Install rod ends into the aluminum tubes. Adjust the rod ends to approximately 16 1/8" from center to center of rod ends. Tighten jam nuts.

Install the tube assembly into the hinge bracket with the 2 ½" bolt and nylock nut. Leave these bolts loose at this time.

**The passenger side tube must have the knurled end towards the hood bracket.**

**The driver's side tube must have the knurled end towards the hinge bracket at the core support.**



**This is important because the gas shocks will push on the jam nuts. If they are installed improperly, they will push on the tubes, loosen the jam nuts and pop the gas shocks out of the mounting balls.**

Install shaft collar on the aluminum tube approximately 1" down from the top of the tube to the top of the shaft collar with the shock mount facing towards the outside of the truck.



Parallel the tubes to approximately 61 1/2" apart center of rod end to center of rod end. Snug the bolts on the hinge bracket.

Install the long hood brackets to the original hinge mounts using the factory bolts or the supplied 5/16" x 1 1/4" bolts and flat washers. Mount this bracket with it pushed as far towards the front of the hood as possible.

Parallel the hood brackets (66 1/8" outside to outside), install new flat bracket(fixed hole) to hood mount(slotted hole towards outside of hood) with 3/8"x1" bolt, flat washers and nylock nuts. Mark the center of the slotted hole to drill a 3/8" hole. Cut the supplied pvc to the length of your drill bit with approximately 3/8" of the 3/8" bit remaining out of the guide. This will keep the bit from binding and pulling the bit into the outside of the hood. Drill a 3/8" hole.

Drill a 1 1/4" hole in the side of inner hood frame with a hole saw to allow access for the front washer and nut. Drill this hole either in front or behind the dimple, whichever will be easier to get the washer and nut in. Some hoods are not solid and it is accessible to get the washer and nut on without the 1 1/4" hole.



Be careful not to bind the hole saw and dimple the outside of the hood. Install the 3<sup>rd</sup> bolt(3/8") with a flat washer on the bolt along with a flat washer and nylock nut inside of the hood. Install supplied plastic plug after all bolts are tightened for the final time. Repeat for the opposite side.

Option: If you are familiar with nutcerts, this would be the preferred method for installation of the bracket to the hood. We don't supply these because there are too many people that are not familiar with them and don't know how to install them correctly.

Install flat L-shape roller mounts onto the outside of the hood bracket with 3/8" x 1" bolts, flat washers and nylock nuts approximately 5/8" from the back of the hood bracket. Install a flat washer on the bolt and under the nut.

Install the rollers on the flat bracket with the roller facing towards the outside of the truck. Install the thin 3/8" flat washer on the outside of the bracket with the thin nylock nut. Center the roller in the slotted hole. This can be adjusted later for final fitting.

Remove the aluminum tubes and rod ends from the hinge brackets. Mount them to the hood bracket in the proper direction with the 4 1/2" x 1/2" bolts, using a flat washer on each side of the rod end. See attached picture. Install the 1/2" nylock nut on the outside of the hood bracket. A flat washer is not needed under the nut. Tighten these nuts and bolts.

Install the gas shocks from the shaft collar to the front of the hood bracket with the shaft end of the shock mounted to the shaft collar.



With an assistant, install the hood assembly back into the hinge bracket, re-install the bolts, nuts and tighten. Tighten all nuts and bolts at this time.

Final adjustments:

If the hood is too close to the cowl, shorten the aluminum tubes. The rod ends on the tubes are left and right hand threads. Use a clamp behind the roller to keep the hood from closing when you remove the shock.

Remove the shocks, loosen the jam nuts and turn the tubes to shorten. One revolution will move the hood approximately 1/8". If the hood is too far away from the cowl, turn the tube the opposite direction. Tighten the jam nuts, install the shocks and check the hood for fit.

If the hood is too high in the back, adjust the flat roller bracket, forward or backwards until it sits correctly.

The roller can also be adjusted on an angle to allow the hood to sit properly.

The back of the hood bracket can be moved from side to side to help align the side of the hood with the cowl.

This all takes time, but you can get a perfect alignment.

If you have questions,

My cell phone number is 602-376-7467 7 AM until 8 PM (MST)

Kevin Stone

Copperstate Components LLC

18631 N. 19<sup>th</sup> Ave.

Suite 158-206

Phoenix, AZ. 85027

[kevin@copperstatecomponents.com](mailto:kevin@copperstatecomponents.com)

[www.copperstatecomponents.com](http://www.copperstatecomponents.com)

[www.forwardtilthoodkits.com](http://www.forwardtilthoodkits.com)

