Replacing the Flip Rods in a 89-92 F-Body Convertible: By Lon Salgren lonsal@adelphia.net

FAQ:

Q: What the heck is a "Flip Rod?"

A: First off, "Flip Rod" is a name Top Down Solutions coined for lack of a better one. This part was installed in the convertible top on 89-92 (AKA ThirdGen) F-Body convertibles converted for GM by ASC (American Sunroof Company) www.ascglobal.com. (It's strange that the ThirdGen F-Body convertible conversions don't even rate a blip on ASC's "history" time-line, but I digress). The part doesn't appear in either the 1988 or 1990 Chevrolet Camaro Service Manual (AKA Helm's manual) or the 1982-1991 Chevrolet F-Body Parts and Illustration Catalog I have as reference material.

Q: Where can I get new Flip Rods?

A: They are not from the dealer. I also tried getting them from the place in Florida that is supposed to have the leftover parts from ASC, non available. They are now available from Top-Down Solutions (contact info below). The Flip Rods are sold in a pair and are TDS p/n 104121.

Q: What is the purpose of the Flip Rods?

A: When lowering the convertible top the Flip Rods lift the #2 bow up and back. If the flip rods are present you'll see the #2 bow lift off of the side rail as you lower the top. See figures 1 & 2. If the rods are not present or are broken the #2 bow will continue resting on the top rail as you lower the top.



Figure 1: Shown with no flip rod. Notice the #2 bow is still nearly resting on the side seal (top lining pulled back to show the #2 bow).



Figure 2: Shown with flip rod installed. Notice the #2 bow is now raised by the flip rod as the top is lowered.

Q: How can I tell if I have a Flip Rod?

A: ASC made several changes to the design or the convertible tops through the production life. The early designs (87-88) didn't have a lined top and also didn't include this rod. The lined convertible tops began in 1989 and included this part.

Q: Where is the Flip Rod?

A: The Flip Rod is mounted to the frame of the top and the #2 roof bow. The roof bows run from one side of the car to the other and hold up the folding top cover, maintaining its shape. They are attached to the side rails are numbered #1 through #5 starting with the #1 bow, which latches the convertible top to the windshield header. The #2 is the next one back from the windshield or #1 bow.

Q: How do I know if I need to replace my old flip rods?

A: The symptoms of a broken or missing flip rod are the top will not retract properly. The top will fold-up short and want to hit the back of the rear seat (if it is upright).

FAQ: (Continued)

Q: How do the flip rods become broken or bent?

A: If the top isn't folded down properly (by failing to first lower the windows). The side seal supports which seal along the top of the windows will catch on the rear corner of the window if it isn't first lowered. Continuing to try and lower the top will cause the flip rods to bend or in some cases break. The flip rods are heat-treated to prevent them from bending easily, but they can be bent or broken as described.

Tools needed: 3/8" wrench.

Installing the replacement Flip Rods:

- 1. Release and raise the #5 bow to its full vertical position.
- 2. Release and raise the tonneau cover to its full vertical position.
- 3. Lower the #5 bow to its original position.
- 4. Unlatch the top from the windshield and lower the top halfway.
- 5. Install one nut on each end of the new flip rods all the way until it bottoms out.
- 6. Install a nylon washer onto the flip rod ends.
- 7. With the bow of the flip rod facing toward the front of the car, install the flip rods one end of the flip rod through the hole that is 1" forward of the #2 bow. The rod must enter from the outside of the car through the hole with the exposed threads now on the inside.
- 8. Install a nylon washer and nut onto the exposed threads.
- 9. Hand-tighten the nut.
- 10. Swing the other end of the rod down as you lift the #2 bow. Install the other end of the rod into the hole in the convertible top frame.
- 11. Install a nylon washer and nut.
- 12. Repeat the installation method for the other rod.
- 13. With both rods installed, test the function of the rods. They should lift the #2 bow up and back as the top is lowered. Make sure there is no binding as the top is lowered and raised.
- 14. Return the top to the full vertical position and tighten the nuts $\frac{1}{2}$ to $\frac{3}{4}$ turn beyond hartight with a $\frac{3}{8}$ wrench.
- 15. Test the function of the top again. If it is binding or difficult to lower, loosen the nuts slightly and try again.
- 16. Congratulations, job done.

Tips for care and use of the flip rods:

As was mentioned before these flip rods have been heat-treated just as the OEM rods. This makes it more difficult to bend or break the rods than if they were just raw steel formed rods. But they can be bent or broken if the top isn't lowered properly. The most important thing to remember when lowering the top is to LOWER THE WINDOWS FIRST. GM cars are notorious for having slow moving electric windows. It is important to keep them in working order, so there isn't the temptation to try and lower the top without first lowering the windows. It isn't necessary to fully lower the windows, just a few inches. If the windows aren't lowered the side rail that seals along the top of the window glass will hang-up on the rear corner of the window. If the windows are causing you problems, you can open the doors instead so the top can lower properly.

The nuts on the flip rods should be checked occasionally and tightened if necessary. It is a good idea to add this to the items inspected at oil change time. Also check the condition of the nylon washers. The washers are a #10 nylon washer, with an ID of .200", OD of .450" and are .031" thk. They are a common item available from most hardware stores.