

These are the my install steps for Eagle, Fleet and Finch (mine a 2011 Eagle) which require 40" lift support struts (I chose the 30 lb. as I have Yakima racks, homemade aluminum rack for 3, 2 gallon Roto Pax gas cans as well as a 37 lb. canoe), you might chose a lesser pound strut).

step one: On the front of camper remove the front 2 buckles and clips as there is a need for longer strut distance; be sure to scrape off old butyl tape. Not the clip has a ridge that sits on top of the roof upper lip. The back hardware us okay where it is.



step two: The roof edge screw has to be moved from where you will put the clip so the hole under the clip just removed can be filled with that screw (always put silicone on the treads). The 2 holes left from moving the clip and the buckles can be filled with a great product... JB Weld "Water Weld" , it works and it is white



step three: once Hardware on the front is off, draw a horizontal pencil line across the 2 holes further out. measure 4" from each hole and make a mark. I suggest you use a old drywall screw and put a divot at each spot so when you drill your bit won't wander. (I stuck double side tape on hardware to look at position).



Step four: using a 3/32" drill bit make holes and then using a #8 self tapping screw, go in on all holes.



step five: Put up roof and go in camper, pull out bed a bit and remove the rug from the front wall, it comes out easy... look for wires. Put down roof.

step six: Apply butyl tape to all the backs of clamps and clips. Important note as shown in next step, use a large nail to punch out from the tape side, each hole and enlarge the hole by swiveling the nail ... I found out the screw will grab the butyl tape and corkscrew it off the hardware if you let it. Once the clamps and clips are on trim off excess butyl tape.



step seven: attach the offset ball bracket using 2" self tapping #10 screws by placing it up against the clip. It should be placed so the holes should line up with all the screws that attach the roof to the trim.

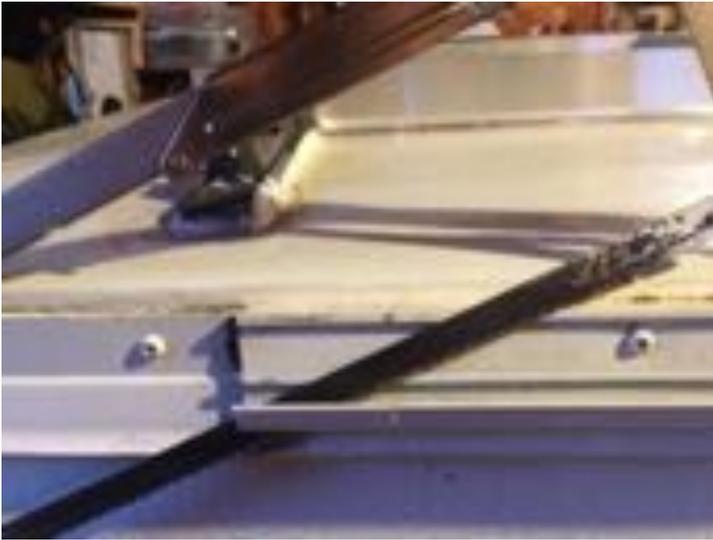




Be sure to pre drill with 3/32" bit and then use the #8 self tapping screws to enlarge the holes as done before, then attach with the 2" #10's.



Step eight: Wouldn't you know it, the rear awning lip edge on roof is 2" too long on either end. Use a hack saw to cut these off and then a file to smooth the edges.



Step nine: The rear offset brackets are done in the same way. I found that one of the roof edge screw holes on each side was in the perfect spot so it could be used to attach the offset clamps.

Step ten: lower the roof. I made a jig from a 1/4" thick piece of wood 1" wide and 42" long to layout the lower strut locations. drill a 1/8" hole about 1/2" from one end and then measure, on center, 40" and make a mark. Drill 7/16" hole. It should be 40" center to center. Hang this on the upper ball bracket and let it hang down then move it towards the center of camper. We are looking to put this mark 2 1/2" up from the bottom edge of the front overhang. Do this to both sides and really take the time to be sure you are spot on! Then make a divot where you are to drill.



step eleven: pre drill a $\frac{1}{8}$ " pilot hole. Then drill a $\frac{5}{16}$ " hole. Using the hardware listed in the FWC install page insert the threaded ball stud through a $\frac{5}{16}$ " fender washer (I used all stainless), being sure to coat with silicone. Go in camper and put on another $\frac{5}{16}$ " fender washer and a $\frac{5}{16}$ " locknut ... you'll need a person outside to hold the stud with a wrench while you tighten inside... front done.



Step twelve: In the back, hang the jig stick on the upper ball bracket and swing to center. Be sure to leave enough room for a $\frac{5}{16}$ " flat washer. place a mark, do the same on the other side and place divots. Important note: you will need 3 drill bits for this last part: a $\frac{1}{8}$ " for the pilot hole. $\frac{5}{16}$ " to drill through the outer wall, check inside for wires...if clear... drill all the way through to inside. The last hole is done from the inside with a $\frac{3}{8}$ " bit. ONLY enlarging the inside hole...DO NOT drill all the way through the outside wall. The 'sex bolt' sometimes called 'barrel bolts' are $\frac{3}{8}$ " on the female piece and $\frac{5}{16}$ " on the male bolt. Use silicone and install the ball studs with a $\frac{3}{8}$ " fender washer inside an a $\frac{5}{16}$ " flat washer outside.



step thirteen: using a small screw driver, lever up the clip (do not remove it) and push with your hand, to pop the strut onto the ball brackets.... done!

Afterthoughts:

In the photos below it shows the offset top bracket is further out than the lower ball stud. Not sure if this is correct as the strut is very close to the wall at the bottom. I was thinking of putting in a 1/4" thick piece of flat aluminum stock plate across between the 2 lower studs to step them out... it might also offer some added rigidity by connecting the two.

Any and all thoughts appreciated. This post is to help and hopefully it will give some you are thinking of doing this, some guidance. As I live on the 'right' side of the country it is nearly impossible to find FWC folk and share work ideas or go to the factory.



Final stage in last 2 photos: I installed aluminum plates to kick out the struts a 1/4" as well as insuring a more robust stress distribution.



