

Global West Suspension

655 SOUTH LINCOLN AVE / SAN BERNARDINO CA. 92408 PHONE 877-470-2975 / FAX 909-890-0703 Web address: globalwest.net

COF-79, COF-79S, COF-79BS, COF-79D, COF-79BD, COF-79PS, COF-79PBS, COF-79PD, COF-79PBD

The kit you have purchased requires fabricating and welding to your frame. If you feel that you are not qualified to properly install this kit, we ask that you have your local Hot Rod or automotive shop perform the installation.

- 4 7/16 x 2 ¾ x 20 grade 8 bolts
- 4 7/16 AN washers
- 4 7/16 x 20 stover nuts
- 2 7/16 x 1 ¼ x 20 grade 5 bolts
- 2 7/16 x 20 standard nuts
- 2 ½ x 5 x 20 grade 8 bolts
- 2 12mm washers
- $2 \frac{1}{2} \times 20$ flex lock

Tools for the job

Hardware

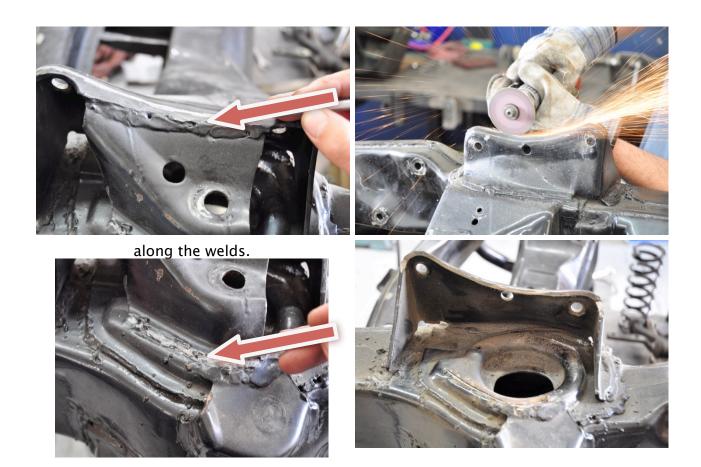
- Marker or Sharpie
- Hammer
- Standard socket and wrench set
- Die grinder
- Cut of wheel
- Scotch bright/ Buffing wheel
- Plasma cutter (If Available)
- MIG/ TIG welder



Step 1:

Remove the original springs, shocks and upper control arms. You will also want to remove the upper control arm frame bolts at this time. They are pressed into your frame so it might take a little effort to remove them.

Step 2:



Step 4: Measure 3/8" from the engine side of the upper control arm frame bracket. Using a pneumatic cut off wheel or 4" grinder cut along the top of the upper arm bracket.

Note: Don't use a plasma or torch cutter at this time. The cut needs to be straight because you will be welding along this edge!

Note: Your frame sould look like the picture on the right!

Step 5:









Note: Use a pneumatic cut off wheel or 4" grinder to remove the bump stop. Cut along the welds and try not to cut into the frame rail!

Step 6:

Cut out the spring index on top of the frame rail. This is the stamped area on top of the frame rail. A torch or Plasma cutter can be used to make this cut. The new bracket will lay on top of this cut and mask any unpleasent edges made by the torch or plasma cutter.

Note: The raised portion of the stamping needs to be completely removed so the extended travel bracket will fit flush against the top of the frame rail.





Step: 7 Use your scotch bright pad, buffing wheel or wire wheel to clean the areas you are going the weld.





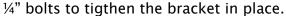


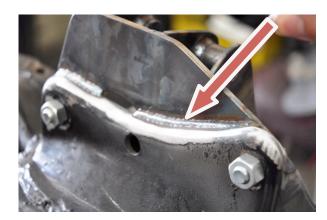


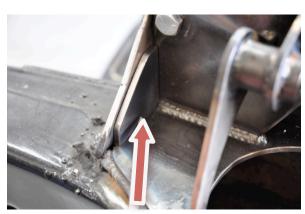
Note: Take your time durning this process. The cleaner the frame rail the stronger and cleaner the welds will be.

Step 8: Locate the extended travel bracket on top of the frame rail. Make sure there is a gap between the extended travel bracket and the stock upper arm mounting bracket. This will insure the extended travel bracket is flush against the the frame. Use the 7/16" x 1

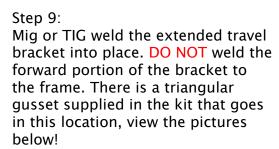






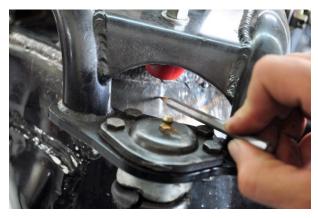


Note: Make sure there is a gap!





Note: In the picture to the right notice the location of the gusset plate. DO NOT WELD IN THIS LOCATION UNTIL THE GUSSET PLATE IS IN PLACE.





Step 10: Your extended travel bracket is now welded in place and it should look like the picture below.



Step 11:

It is now time to locate the upper control arm bumpstop. Remove the $7/16 \times 1 \ 1/4$ " bolts and replace them with the $7/16 \times 2 \ 3/4$ " bolts. Side the upper control arm into place and lower it into the full droop position (see picture below). Mark the location of the bumpstop with a marker and lift the arm away from the frame rail.

Step 12:

Center the bumpstop on the marking and measure down a 1/4". MIG or TIG weld the bumpstop in place.

Step 13:

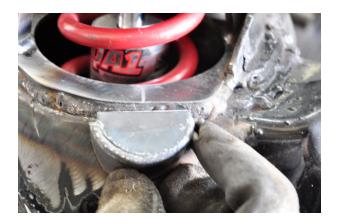
Paint the frame rail to protect it from corrosion. If the frame is out of the vehicle we highly recommend power coating or professionally painted by a paint shop.

Step 14:

Reassemble the suspension. The coil over can be assembled outside the vehicle and lifted into possition. Use the 1/2" x 5" bolts in the top mount of the coil over, tighten to 72 foot lbs. The coil over utilizes a T-bar to attach to the lower control arm. We highly recommend using Global West part number CTA-79H rather then a stock control arm. The stock control arm is not designed to carry the loads of a coil over shock and you run the risk of breaking the stock lower control arm.

Step 15:

Set ride height and align your car! If you are using Global West part number CTA-79A the new alignment specs are included in those instruction sheets.







655 South Lincoln Ave. San Bernardino, CA. 92408 PHONE: 877-470-2975 -- FAX: 909-890-0703 www.globalwest.net

The following instruction sheet applies to the following applications:

Part # CTA-79EXT

LOWER CONTROL ARM INSTALLATION

This lower arm is used with coilover shocks and can be used with Shockwave air bags.

- 1. Use the floor jack to raise the car and wheels off the ground.
- 2. Place the jack stands on appropriate areas of the frame to support the car. Do **NOT** place the stands under the lower control arms. Lower the car on to the jack stands and remove the floor jack.
- 3. Remove both front wheels and tires.
- 4. Remove the nuts, bolts, bushings, washers and spacer tube from the front sway bar end links and set aside.
- 5. Starting on one side of the care, remove the upper shock mounting nuts, washers and bushing. Remove the shock absorber lower mounting bolts and slowly lower the shock and remove from the bottom of the lower control arm and set aside.
- 6. Using a coil spring compressor, install the spring compressor inside the coil spring. Using suitable tools compress the spring until pressure is removed off the lower arm.
- 7. Using suitable tools remove the lower ball joint cotter pin and loosen the slotted hex nut. Only loosen the lower ball joint nut so you can see about a 1/8 of an inch gap between the nut and spindle.
- 8. Use a ball joint pickle fork and separate the lower ball joint from the brake/spindle assembly. Place the floor jack under the lower ball joint and raise the jack enough to relieve pressure on the lower ball joint. Remove the lower ball joint nut. Slowly lower the jack and swing the spindle out of the way. Allow the upper control/spindle assembly to rest on the bump stop against the frame.
- 9. Remove the floor jack and coil spring.
- 10. Loosen and remove the lower control arm pivot bolts and nuts. Remove the lower control arm.
- 11. Install the new lower control arm using the factory bolts and nuts. Torque both bolts to 70 ft-lbs. Del-a-lum and Polyurethane bushings can be tightened with the arm hanging.
- 12. If you have a coilover shock kit with a bar through the bushing, you will need to remove the cross bar at the base of the shock and install a steel sleeve in the bushings. In the kit you will find a pair of steel sleeves.



13. First remove the bar from the base of the shock. Almost all the shock companies make something similar. They have a c-clip on each side of the bushing.



14. Remove the bar by tapping it out of the bushing with a dead blow hammer. If you have a small press you can use that.



15. Next install the steel sleeve in the bushing, place grease inside the bushing and around the pin. We recommend synthetic grease like NEO Z-12, however any water resistant synthetic grease will work.



16. The steel sleeve will push into the bushing fairly easy. Push the sleeve in till it bottoms out with the bushing.



Your next step will be to install the shock and spring onto the car.



17. Springs: The top of the coil spring will index in the frame pocket. **NOTE: The spring is conical wound so the large end (3.625 id) goes up into the frame and the small flat ground side (2.5 id) indexes on the shock adjusting collar.** Place the spring on the shock with the shock collars already assembled on the shock body. Adjust the collars all the way down to the bottom of the shock. Slide the spring over the shock with the small end down, extend the shock shaft all the way out of the shock body until it stops, and install the steel shock shaft washer and rubber bushing. Next slide the shock into the frame shock hole and index the spring in the pocket. Place the upper rubber shock bushing on the shock shaft and then the steel washer. Install the shock nut so the shock is supported in the frame. Recheck

the spring index in the frame. Raise the lower control arm up to the shock and install the lower shock bolts through the shock cross shaft and into the lower arm. Note: The shock bolts on the top of the lower arm.

18. Slowly raise the arm to fit the shock in the lower arm.





- 19. Next lift the lower ball joint up into the spindle. Install the castle nut on the ball joint and torque to 80 ft-lbs. Next, tighten the nut to line up the slot in the nut and hole in the ball joint and install a new cotter pin.
- 20. Repeat steps 6 through 12 on the other side
- 21. Install the sway bar end link hardware on both sides but do not torque the bolts until the car is back on the ground. Replace the wheels and tires, raise the car, remove the jack stands and lower the car on to the ground. Torque the sway bar end link bolts to 25 ft-lbs.