



Global West Suspension
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Torino coilover instruction sheets for 1968-1971 models

Covers all COMNR-6771 and COMST-6871 kits:

Kit includes the following

- 2 upper shock mounts
 - 2 cover plates
 - 1 drill template for upper shock mounts (triangle)
 - 2 coilover shocks
 - 1 spanner Wrench
 - 2 springs
 - 2 helper springs
 - 2 helper spring spacers
 - 2 sets shock thrust bearing kits
 - 2 sets coilover shock collars
 - 2 bottom coilover shock mounts
 - 2 tubular upper arms - fully assembled
 - 1 drill template for relocating upper control arms on **negative roll kits only**
- Note: Template not included with COMST-6871 kits.**
- 2 tubular lower arms - fully assembled
 - 2 outer shock tower supports
 - 2 adjustable strut rods
 - Eccentric Loc-2 lock out kit.
 - Misc. hardware



Installation requires removing the front suspension components except the steering. A Chiltons or Mitchell shop manual will be helpful if you have never attempted this before. The following steps are based on the suspension off the car. You will also be removing the shock tower supports in the fender well. It will make the job easier.

1. Locate the triangle drill template in your kit. This template will be placed on top of the shock tower where the factory carriage bolts located the shock mount.

Note: The carriage bolts must be removed.

Take the template and align the holes so they locate in the narrow slot where the carriage bolts index. Center punch the inside hole first. Do not center punch all the holes at this time.



Template center punching one hole only
We recommend drilling one hole at a time. This will ensure the holes will line up with the top shock mount.

2. Take a 3/8-drill bit and drill the hole.



3. After you have drilled the hole, take the template again line it up with the slots. Use one 3/8 x 1 3/4 bolts in your kit and drop it down through the template and shock tower.



4. With the 3/8 bolt holding the template in place, center punch the second hole. Make sure that the template holes are in the narrow slots that originally indexed the carriage bolts. Drill the second hole. For the third hole, place the template back on and drop bolts down through the two holes. Now having 2 bolts holding the template, center punch the third hole and drill it.



5. **Note: For this section we are showing a shock/spring tower off the car so you can see what we are discussing.** At this time all three holes should be drilled. Locate in your kit one upper shock mount. The upper shock mount installs from the underside of the fender. Note: The mount goes directly against the tower. Do not use any

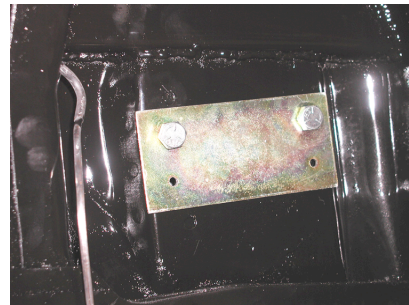


cushions. The Global West Logo will be readable from the fender of the car. The lip of the tower that indexes the spring will sit inside the groove of the shock mount.

6. Sometimes in order to get the upper mount to fit flat in the tower you may have to bend the lip that the factory used to index the spring. The lip bends easily with a vise grip. Once you have the upper mount able to install in the tower we will move onto the upper arm install. Do not install the upper mount yet. (Notice the new holes drilled in the tower from the template.)



7. If you have ordered a Negative Roll System you will have an upper control arm template for drilling different locating holes. **Note: If you did not order a negative roll system no template will be provided however you will have to drill the upper mounting holes out to 9/16 diameter.** The original holes are 1/2 inch diameter. Slide a couple of 1/2 inch bolts through the template and inner shock tower. Position the new holes so they are below the original, center punch the holes.



The picture (right) shows the template in position and center punching the lower holes.



8. Drill the new hole location with a 3/8 drill bit and then step the hole up to a final size of 9/16 diameter.



9. After the holes are drilled install the upper control arm. **There is a passenger and driver side. The way to tell is the ball joint is offset towards the back of**



the car. If you have a negative roll system place the 3/8 thick steel backing plate between the upper control arm shaft and the shock tower. If you do not have a negative roll system you will not have the plate. Just bolt the upper control arm direct. Tighten the control arm bolts to 90 foot pounds.

10. Next install the strut rod, remove the 1-inch nut, lock washer, and flat washer off the pre-assembled strut rod, not the centering spacer.

Slide the clevis with the centering spacer on the bolt up through the frame. The head of the bolt goes up against the frame. Install the large flat washer, lock washer and nut. Torque the clevis to 120 foot pounds.



Install the new tubular lower control arm. The control arm has a silver steel spacer on each side of the bearing. Slide the lower control arm up into the frame and install the loc-out plates and bolt kit. Loc-out plates have 4 holes drilled in them.



Install one plate in between the flanges on the frame. The other side will take the other plate. There are 3 holes in the plates. The plates are numbered 1 through 6: by rotating the plate 3 ways or flipping the plate over and rotating 3 ways. You can adjust camber. To start, we use position marked 1 facing the front of the car. Slide the bolt through the plate, through the frame with the lower arm in position.

Next install the back plate. The number 1 position is still facing forward but will now be up against the frame. The number you will see is number 6. Note: Remember you always read the plates looking from the front of the car. Make sure both plates are using the same holes. The bolt must be straight and not on an angle. Then install the 1/2 inch lock nut, torque to 70 foot pounds.

11. Time to bolt the lower shock mount, strut rod, and the lower arm together. The shock mount has 3 bolts welded



to it. You will slip the lower shock mount through the strut rod and then place that assemble into the lower arm.



The bolts are 9/16 and 1/2. Install a 1/2 inch flat washer and lock nut on the 1/2 inch bolts. Install one 9/16 washer on each 9/16 bolt and use the 9/16 lock nuts supplied in the kit. Torque all 3 nuts to 70 foot pounds.

12. The coilover shock and spring need to be assembled next.

A. First install the threaded collars on the shock. The collar without a step goes on first. It acts like a jam nut to the stepped threaded collar. **Thread the collar almost all the way down on the shock.**

Install the stepped collar next. The step goes up. Thread the stepped collar down the shock body till it contacts the first collar.

B. Next install the needle bearing kit onto the shock collar.

First slide one thin washer over then the bearing and then the last thin washer. **Do not lubricate the bearing. The lube will collect dirt over time and stop the bearing from rotating.**



C. Slide the spring over the shock.



D. On top of the spring install a small stepped ring. The ring will index inside the spring and the helper spring.



E. Next install the small helper spring.

F. The upper shock spring cap slides over the shaft as shown to the right.



G. Remove the ½ inch bolt from the top shock mount. Install the shock in the mount and slide the ½ inch bolt back through and tighten. 50 foot pounds.



H. Adjust the collar at the bottom of the shock, up until it touches the upper cone for installation. We suggest adjusting the collar up to about 3 ¼ inches from the top of the shock where the threads start down. This can be done after the top and bottom of the coilover is mounted to the car.



13. Install the shock through the upper control arm.



13. Place the top plate onto the shock tower and install three – 3/8 x 24 bolts, lock washers, and flat washers through the top plate and into the upper shock mount.



14. Slide the bottom of the shock into the lower mount on the control arm. Take one of the 1/2 inch shortened bolts provided in your kit and slide it through, torque to 70 foot pounds.

15. Install the spindle. The lower arm has a silver spacer included with the ball joint. The spacer goes on top of the spindle below the nut see photo.



Install as shown and also install the upper ball joint through the spindle.



Tighten down the spindles to 80 foot pounds on the lower and 70 foot pounds on the upper.



16. Install the tubular outer shock mount. This replaces the factory bump stop. Use the instructions provided with the component.

17. After the ball joints are torque, lubricate the ball joints.

18. Hook up your steering and the sway bar. Many times it's easier to put the sway bar end links on after the cars ride height is set and on the ground.
19. Drop the car on the ground and check the ride height. Note: When checking ride height the vehicle must be rolled at least the distance of the wheel base and bounced



before a measurement can be taken. Adjusting the ride height requires raising the front end off the ground. A spanner wrench (provided in your kit) is used to rotate the adjusting collar. Screwing the collar up on the shock raises the car, down lowers the car. When installed most of the time the collar will be close to the top of the threads on the shock.

20. Once ride height is set, jam the adjusting nut up against the stepped collar.
21. Install the sway-bar, (If it isn't already) – with the vehicle on the ground or the lower arms supported by jack stands.

Alignment specifications 68-71 – MNR- NEGATIVE ROLL KITS	
Street Manual steering	Manual Aggressive street
Passenger side caster 2 degrees positive	Passenger side caster 2-1/2 degrees positive
Driver side caster 1-1/2 degrees positive	Driver side 2degrees positive.
Camber both sides 0 to ¼ degree negative	Camber 1 ½ negative both sides
Toe-in 3/32 to 1/8 total	Toe-in 3/32 total
Street Power steering	Handling Aggressive street power
Passenger side caster 3-1/2 degrees positive	Caster both sides 3 1/2 degrees positive
Driver side caster 3 degrees positive	Note: clearances allowing
Camber both sides 0 to ¼ degree negative	Camber 1 1/4 negative both sides
Toe-in 3/32 to 1/8 total	Toe-in 3/32 total

Alignment specifications for 68-71 Torino ST kits	
Street Manual steering	
Passenger side caster 2 1/2 degrees positive	
Driver side caster 2 degrees positive	
Camber both sides 1/2 degree negative	
Toe-in 3/32 to 1/8 total	

Street Power steering
Passenger side caster 3 degrees positive
Driver side caster 2 ½ degrees positive
Camber both sides 1/2 degree negative
Toe-in 3/32 to 1/8 total