

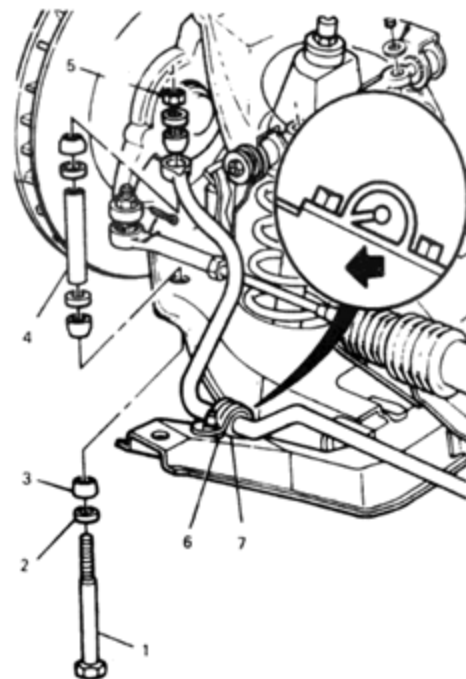
Resolving That Annoying Suspension "Chirp" For All 1988 Fieros

by Jeff Reuter, Farmington Hills, Michigan

This summer, while attending local car shows, I heard several complaints regarding a mysterious "chirping" noise present in the suspension of some Fieros. In the 1997 April and May issues of our Fiero News, owners submitted their ideas of what they believed to be the source of this noise. Read on, and you shall know the real source of this annoying "chirp".

First, let me describe exactly what the noise is, and what you should be listening for. So far, the only people that I have spoken with about this noise on their Fieros are owners of 1988 Formulas and the GT models. The noise is best described as a "chirp", as it does sound like a small bird chirping. This chirp is easily heard, but difficult to pinpoint. For example, it does not seem to emanate from one corner of the car, and it is difficult to tell if it is coming from the front or rear of the vehicle. The chirping is very abrupt, lasting only a fraction of a second, and can usually be heard under all driving conditions; accelerating, coasting and braking. It is typically most noticeable while driving slowly down a smooth street; the suspension will chirp as it "takes up" the imperfections of the road.

The source of the annoying chirp is the sway bar bushings. In the 1988 model year, the Formula and GT models were equipped with front and rear sway bars. The factory bushings degrade over time and tend to dry up. As the sway bar rotates within a dry bushing, the bushing will "chirp". (See Picture - 1-Bolt, 2-Washer (4), 3-Insulator (4), 4-Spacer, 5-Nut, 6-Clamp, 7-Bushing "Note slit must be toward front of vehicle")



There are two ways to eliminate the chirp: (1) replace the sway bar bushings - or (2) grease the bushings on your car. Either of these two options require roughly the same amount of labor to complete, so I would strongly recommend replacing the bushings, if you are experiencing this "chirp" on your 1988 model Fiero.

If you decide to replace the sway bar bushings, you will first purchase the bushings. There are several replacement bushings that will fit a Fiero, but I recommend using *Energy Suspension* bushings. I have used their suspension products on many vehicles as I believe that they make a superior product. The part number for sway bar bushings for the front is #9-5130 and # 9-5126 for the rear. **NOTE:** 1984-1987 Fieros were only equipped with a front sway bar and if you plan to replace those bushings, the part number is #9-5127 for those model years.

I will first discuss the issue of lubricating the bushings. Any sway bar bushing will make some noise if it is not properly lubricated. If you purchase new bushings, they will come with a packet of Silicone grease. This grease must be applied to the entire inner surface of each bushing prior to installation. If you choose to lubricate the original bushings, you should NOT use any petroleum-based product. *I.E.:* motor oil, bearing grease, axle grease, white lithium grease or 3in-1 oil. The reason is that original equipment bushings are made from a rubber compound and petroleum-based lubricants break down the rubber, much like the salt breaks down our roadways in the winter. If you elect to lubricate your E.O. bushings, you should use either a silicon-based grease or spray, though the spray will not last as long as the grease. *Energy Suspension* sells a silicone-based teflon grease that is safe for all bushings, part # 9-11101.

The procedure for replacement and/or greasing is as follows:

- (1) - Starting with either the front or rear, loosen the lug nuts of the front or rear tires. Raise the car up and secure on jack stands. Remove the tires.
- (2) - Locate the sway bar bushings. On the front of

the car, the bushings are at the front of the wheel wells and on the rear of the car, they are at the back of the wheel wells.

(3) - Loosen the mounting hardware, using either 10 mm socket or open end wrench. It is *important* that you only loosen the hardware. If you remove both bushings at the same time, you will encounter untold headaches, attempting to get the sway bar back into position.

(4) - Remove the mounting hardware from *one* of the bushings, pull the clamp off the bushing and then remove the bushing. The bushings have a slit cut in them, so they can be pried off the bar. At this step, you may have to use some persuasion to get the clamp and the bushing off. I recommend you use a hammer and a long, pointed chisel. A large flat blade screwdriver also works well to pry the bushing free

(5) - Apply a liberal amount of grease to the inner portion of the bushing and slip the bushing over the bar. It is a good idea to install the bushing very close to where it will be mounted, because if you put the bushing on the bar at one point, and then slide the bushing along the bar into position, you will leave most of the grease behind in the bar, where it will not serve its intended purpose.

(6) - Place the clamp over the bushing, put the mounting hardware in and snug up the mounting hardware. Do *not* tighten the hardware yet as you still have to do the other side!

(7) - Go around to the other side of the car and repeat steps 4, 5 & 6.

(8) - Tighten the mounting hardware on both sides.

(9) - Put your wheels and snug up the lug nuts.

(10) - Lower the vehicle and tighten all the lug nuts to their torque specifications.

If you are going to keep the original bushings, but want to grease them to eliminate the "chirping" noise, you should use the following procedure to grease the bushings on the front sway bar:

Start with steps 1 & 2 previously mentioned.

-- Loosen the mounting bolts for both the left and the right side bushings, but DO NOT remove them! The front sway bar bushings are mounted to the frame in a very tight location and if you remove the mounting bolts, the bushing may shift and will be extremely difficult to reposition.

-- Tap the heads of the mounting bolts with a hammer. This will push the clamp up slightly and will loosen up the bushing.

-- Now you will have to take a small, thin, flat blade screwdriver and use the tip of the screwdriver to force small amounts of grease between the sway bar and the bushing.

--Once you have applied some grease to the bushings, complete steps 8, 9 and 10. As previously noted.

The cost to purchase replacement bushings for both the front and rear will be less than \$35.00. This will be a low cost repair that will solve that mysterious chirping noise that seems to be fairly common on the 1988 model year Fieros.

The replacement bushings can be purchased either from Summit Racing or Jag's High Performance, both of which are automotive specialty mail order firms. Both companies provide excellent service and their prices are better than any automotive retailer that I have ever dealt with.

You can place orders with both of them 24 hours a day, seven days a week. The phone numbers for them are:

Summit Racing Equipment - 1800-230-3030

Jag's High Performance - 1800-345-4545
