

# FIERO TECH TALK

## Air Conditioning Compressor Belt Replacement ('87 GT):

Most of our cars have several thousand miles on them and time takes its toll on most rubber parts. Most tires are deemed not to be road worthy after 10 years and some folks say in as few as 7 years. Think of all the other rubber parts on our cars and what they can do to sabotage the reliability of our vehicles. I had a situation with my 1987 GT this summer where not an old, but a new AC belt (replaced on 5/16) broke on my way home from a cruise. While this was not a catastrophic event, it was unpleasant in the summer heat and could have been much worse if the failed belt had gotten entangled with the main serpentine belt.

The belt that failed was a Gates 7330XL 11A0940 cogged belt .44" x 33.57". While the mechanic that installed this belt said it would work, obviously it was not the proper belt to use. I did some research on the internet and determined that a 1/2" x 38" V-belt would be the best choice for my car. After some searching I turned up a Kevlar V-belt (blue in color) at my local Tractor Supply Company store for \$12.99. It was a Huskee Heavy Duty Series and is used on a variety of riding mowers and lawn and garden equipment. The Kevlar cord provides optimum strength and much better heat resistance than conventional belts. This is not a cogged belt, but I think that was one of the reasons the first belt failed. Even though a cogged belt is more efficient when going around tight radius pulleys, it loses some of its strength due to the notches for the cogs. The AC pulley and crankshaft drive pulley on my '87 2.8L V-6 are both around 5" in diameter, so a full section belt should not cause any significant efficiency loss.

Installation was not difficult but if you have availability to a lift it is much easier. Most of the work can be done from below the car. You will need to remove the serpentine belt first, as the AC belt is the closest belt to the engine. Once I loosened the AC unit at the adjustment bracket and pushed the AC compressor back as far as I could towards the engine, I was able to get the belt on the engine and then work it, with a little effort, onto the AC pulley. Once it was installed I adjusted it and found, unlike the previous belt, that I had lots of travel left for future adjustment should that be necessary. Once the AC belt is installed, reinstall the serpentine belt and adjust the tensioner from above the vehicle.

So far the new belt is working great and has totally eliminated the chirping and squealing I would occasionally get from the belt that failed. This will help make your car more reliable for those long hot summer trips and should help eliminate any belt noise you may be experiencing with your old belt. Below is the packaging from the belt I used.

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