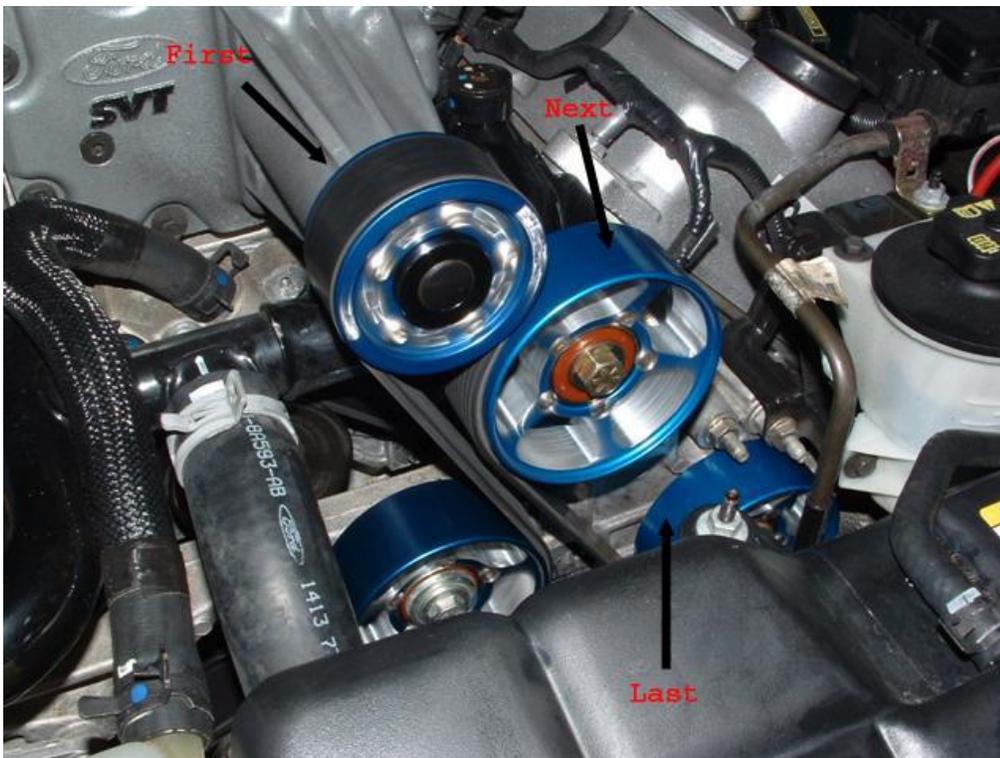
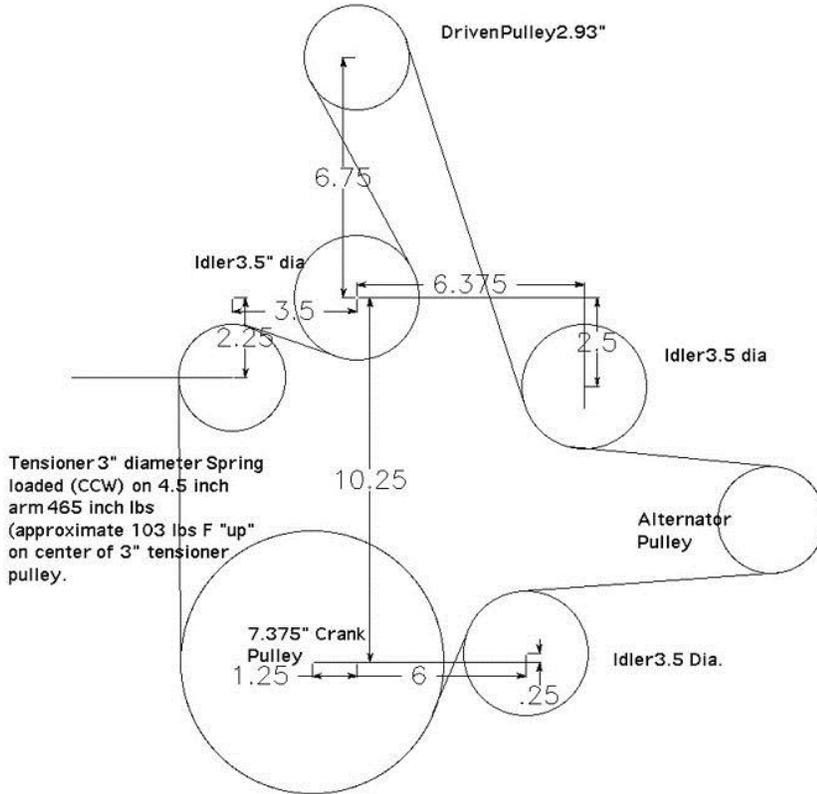


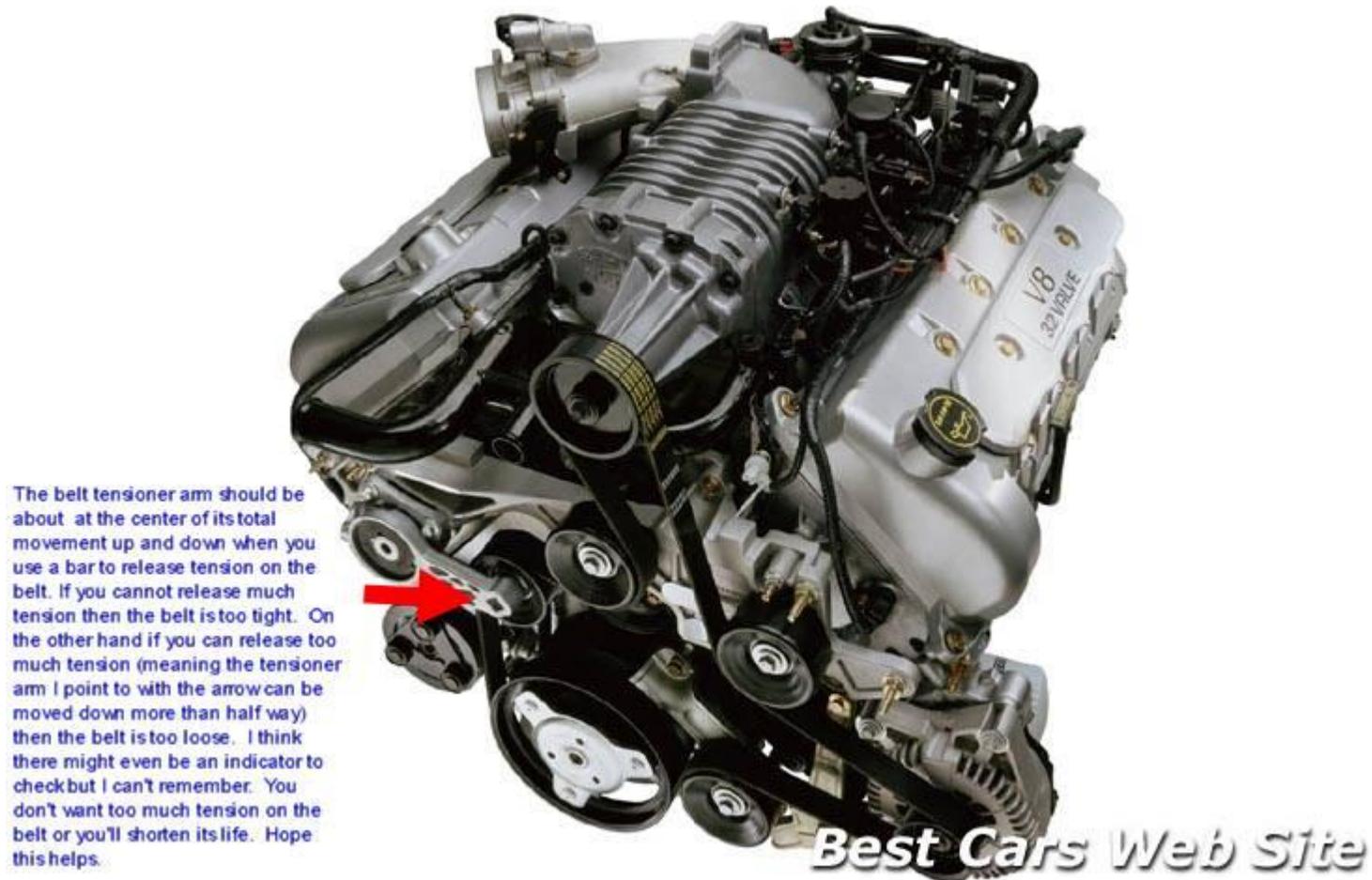
## How To Change The 2003-2004 Cobra Pulley Belt

The schematic (courtesy of Doug @ Billetflow) shows the stock idler setup with a 2.93 upper pulley. The auxiliary idler, if added, would be in the location labeled 'Next' in the photo below. Follow the order shown on the photo if you have an auxiliary idler. If not, eliminate the one labeled 'Last' .



Use a socket wrench handle to loosen the tensioner. Slide the belt under the pulley labeled 'Last'. Release the tension on the wrench handle carefully.

Here is another photo (courtesy Best Cars Web Site) showing both the belt routing and the tensioner.



### Tips to help minimize belt slippage and maximize pulley bearing and belt life.

**1. Belt Tension is Important.** The serpentine belt system on the 2003-2004 Cobra is designed to operate at a specific tension. The factory belt tensioner has a carefully-engineered spring mechanism to maintain the designed tension on the belt. The use of a manual belt tensioner or an incorrect belt length can lead to improper tension on the belt. Serpentine belts are prone to stretch when over-tensioned, and stretching will lead to slippage and ultimately belt failure. Also, the majority of bearing failures in stock and aftermarket pulleys can be traced to over-tensioned belts. So use care when selecting a belt length for your non-stock setup. See my [Belt Selection Guide](#) for assistance. Manual tensioners should be adjusted with caution.

**2. How to Read Your Belt Tensioner.** The 2003-2004 Cobra belt tensioner has a convenient indicator to show when the belt is properly tensioned. The indicator is comprised of a pair of raised ¼"-long pads on the tensioner housing and a corresponding raised rib on the tensioner arm. The tensioner indicator is most easily viewed from the passenger side of the engine bay. When the belt is properly tensioned the raised rib will appear centered between the high and low pad on the tensioner housing. Variations of +/- 1/16" are considered normal and acceptable.

**3. Bearing Deflection is Part of Bearing Design.** The sealed bearings used in both OEM idler pulleys and in most aftermarket pulleys are of a common design. This bearing design is engineered to ensure that these bearings last for many thousands of miles. Some Terminator owners complain of a perceived ‘wobble’ in the bearing at rest, but this deflection is the result of a designed .015” clearance to allow for heat expansion. Idler pulleys are subjected to speeds in excess of 20,000 RPM, and if no clearance existed when the pulley was at rest, the bearings would quickly seize as speeds and heat increased.

**4. Changing Pulley Ratios and Using Aftermarket Superchargers Will Make Belt Tension More Critical and May Affect Pulley Choice.** The use of smaller supercharger pulleys and larger crank pulleys will affect belt loads, belt speeds, and the speeds of any accessories that share the supercharger drive belt (like the alternator). Also, most high-performance blowers typically take more power to drive them, and extra care should be used to maintain proper belt tension. In extreme cases, the use of heavy-duty double-bearing idler pulleys (like the **Metco Motorsports 90mm Double-Bearing Idler Pulley**) should be considered.