

TECH & TUNING TIPS

MAMMOTH 2.8H '03 COBRA

PULLEY / BOOST / RATIO / HP / BELT

PULLEY / GATES BELT GUIDE

Supercharger Pulley	Gates Belt Part# Stock 7.5" Crank	Idler	Gates Belt Part# Stock 6.5" Crank	Idler
3-3/4"	K080765	74MM	K080765	74MM
3-1/2"	K080765	90MM	K080765	90MM
3-1/4"	K080760	90MM	K080760	90MM
3"	K080760	90MM	K080760	90MM
2-3/4"	K080740	90MM	K080745	90MM

↑
AFTERMARKET HOOD
USE WITH STOCK HOOD
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These are "real" dyno tests performed with calibrated sensors. A Ford NGS Scanner also monitored fuel, spark, load, temps etc. to guarantee accuracy of tests. The vehicle was a 100% stock '03 Cobra. The Kenne Bell BOOST-A-SPARK™ was added at 10 psi to insure adequate ignition. The fuel system was 100% stock except for the Kenne Bell BOOST-A-PUMP™ and SWITCH CHIP®. The Kenne Bell BOOST-A-PUMP™ was necessary to increase fuel pressure.

CRANK PULLEYS - There is a wide selection of crank pulleys available from Metco (7.8", 8.5", 9" and 9.5"). The chart covers the stock 7.5" and 6.55" Metco. The 6.55" Metco ring **MUST** be used if 15.0 psi is required. The largest pulley that will fit under the hood with the Mammoth™ is a 3-1/2". **DO NOT EVER USE AN 8.5", 9.0" or 9.5" ON THIS KIT. THE BOOST AND SUPERCHARGER RPM WILL BE EXCESSIVE.**

SUPERCHARGER PULLEYS - Use **ONLY** Kenne Bell billet steel pulleys. Warranty void with other pulleys. Mammoth™ 2.8H sits higher on engine so the 3.5" (17 psi) is max for hood clearance. Use the 6.55"x3.5" (15 psi) or 3.25" (17 psi) for max street. Some hoods may clear 3-3/4" depending on engine height.

OCTANE GUIDE (Pump Gas)

15 psi - 91 octane

17 psi - 94 octane or 91 w/Torco Octane Booster

BOOST - Boost ratings are at 6500 rpm with Bassani exhaust. Stock exhaust will have slightly higher boost. Cams and headers also reduce boost.

IDLER KITS - A Kenne Bell 3" pulley will make 23.5 psi without "idler kits" etc. The Kenne Bell 2.8H requires 56 less HP to turn than other twin screws - and much less than an Eaton - so the big 8 rib provides a lot of belt surface area.

PULLEY SIZE / BOOST / PULLEY RATIO

Supercharger Pulley	7.5" Crank (stock)		HP	6.55" Crank	
	Boost	Ratio		Boost	Ratio
3.75"	17.0	2.00	601	13.5	1.75
3.50"	18.5	2.14	665	15.0	1.87
3.25"	21.5	2.30	704	17.0	2.00
3.00"	23.5	2.50	744	18.5	2.18
2.75"	25.5	2.72	763	22.0	2.38

↑
AFTERMARKET HOOD
USE WITH STOCK HOOD
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$\frac{\text{Crankshaft Pulley}}{\text{Supercharger Pulley}} = \text{Ratio}$. $\text{Ratio} \times \text{engine rpm} = \text{Supercharger rpm}$. Maximum rpm for racing is 18,000 rpm.

Example: Max RPM = 6000 engine x 3.0 Ratio = 18000 Supercharger rpm

NOTE: Keep engine rpm at 6000. If raising rpm to 6500, reduce ratio to 2.76. $18000 \div 6500 = 2.76$.

NEVER USE A "HOT AIR" UNDERHOOD FILTER KIT