

IS THIS ALTERNATOR CORRECT FOR YOUR APPLICATION???

Some higher output alternators REQUIRE a smaller pulley on them to charge well at engine idle RPM. In many applications, it is not advisable to change the pulley to a larger pulley to prevent over-spinning the alternator. In those applications it is better to purchase one of our lower output alternators that can tolerate a larger pulley and still charge well at idle RPM. Overspinning an alternator WILL cause it to fail catastrophically. MechMan units have some of the highest RPM thresholds in the industry, but it is still necessary to calculate your pulley ratio to determine which unit is best for your application.

STEP 1:

Measure pulley diameters. Measurements should be taken at the V-groove points. The front and rear flanges vary and are irrelevant to the effective ratio. Only the alternator and crank pulley need to be measured.



MECHMAN ALTERNATOR PULLEY DIAMETER

	(mm)	46	54	60	66	74
ENGINE CRANK PULLEY DIAMETER	INCH	1.8	2.1	2.4	2.6	2.9
	3	1.7	1.4	1.3	1.2	1.0
	3.5	1.9	1.6	1.5	1.3	1.2
	4	2.2	1.9	1.7	1.5	1.4
	4.5	2.5	2.1	1.9	1.7	1.5
	5	2.8	2.4	2.1	1.9	1.7
	5.5	3.0	2.6	2.3	2.1	1.9
	6	3.3	2.8	2.5	2.3	2.1
	6.5	3.6	3.1	2.8	2.5	2.2
	7	3.9	3.3	3.0	2.7	2.4
	7.5	4.1	3.5	3.2	2.9	2.6
8	4.4	3.8	3.4	3.1	2.7	

STEP 2:

YOUR CRANK PULLEY
DIAMETER



YOUR ALTERNATOR
PULLEY DIAMETER



YOUR PULLEY RATIO

***Note, the chart above can be used to do this step without a calculator.

STEP 3:

YOUR PULLEY RATIO



YOUR HIGHEST ENGINE
RPM



YOUR ALTERNATOR'S
PEAK RPM

EXAMPLE:

An 8" crank pulley divided by a 1.8" alternator pulley equals a 4.4 ratio. Then, 4.4 times 6500 engine RPM equals 28,600 alternator RPM.

WARNING: Maximum Alternator RPM should never exceed 20,000 for any amount of time. Overspinning the alternator will cause internal rotating component to be stressed beyond their intended duty.

OVERSPINNING YOUR MECHMAN ALTERNATOR WILL VOID THE WARRANTY!