



GEARING CALCULATIONS

Formula to Calculate MPH:

RPM / GR x SC / 12 x 60 / 5280 = MPH @ 1:1 clutch ratio

GR = gear ratio (divide top sprocket into bottom sprocket)

SC - sprocket circumference

Formula to Calculate Chain:

CD - center distance (drive shaft to jackshaft)

$$\frac{CD \times 2}{.375} + \frac{TS + BS}{2} = \text{Pitch}$$

TS = top sprocket

BS = bottom sprocket

Round number up to even number for proper pitch

7T-2.52" Pitch = 17.64 SC

8T-2.52" Pitch = 20.16 SC

9T-2.52" Pitch (standard OEM size) = 22.68 SC

10T-2.52" Pitch = 25.2 SC

Round number to even number for proper pitch

| | | | |
|--------------------|---------------------------------|--------------------|-----------------------|
| CD (inches) | Arctic Cat Models | CD (inches) | Ski-Doo Models |
| 7.5 | All Arctic Cat Models | 6.8504 | CK3 Chassis |
| CD (inches) | Polaris Models | 7.4803 | ZX & REV |
| 6.625 | 1996 & older models | 7.9724 | RT Mach |
| 7.05 | 1997-01 Gen II models | 9.1929 | RT Summit |
| 11.35 | 2005 900 models | 12.854 | REV XP |
| 8.373 | 2006-07 All Fusion & RMK models | CD (inches) | Yamaha Models |
| 7.92 | All Edge and 440 IQ Race Sleds | 7 | All Yamaha Models |