COMPARING 14.5° AND 20° RACK AND PINION GEARS

1. Start by measuring the distance between two individual adjacent teeth.
2. Using calipers or a steel rule, measure from the inside edge of one tooth (A), and then measure over to the inside edge of the next tooth (B) shown in (Fig. 1).
3. The 14.5° rack will measure approximately 0.170 inches (Fig. 2.1). The 20° rack will measure approximately 0.231 inches (Fig. 3.1).
4. The 14.5° rack will have 4 teeth per inch (Fig. 2.2). The 20° rack will have 3 teeth per inch (Fig. 3.2).

The simplest way to differentiate between the 14.5° spur gear and the 20° spur gear is the number of teeth on the gear. Spur gear 122739 (Fig. 4) has 18 teeth. Spur gear 101941 (Fig. 5) has 15 teeth.