

PDMCC

Pendle District Model Car Club

www.pdmcc.co.uk

Setup Guide

Adjusting your gear mesh

October 2009

Source:rcracingusa.net

One of the most important areas of R/C is making sure you have your gear mesh set properly. It is one of the most difficult items for those new to R/C to understand and to get properly set. Every time the motor is removed for servicing we see even experienced racers struggle to get the gear mesh just right.

If the gear mesh is too loose, it can cause stripped gears. Too tight of a mesh can cause poor performance, gears to wear out, excessive bushing and bearing wear, motor overheating and in some cases motor failure. This is why getting it set properly is important. Follow these simple steps to get your gear mesh set just right.

Mount the motor in your car or truck.

Put a small piece of notebook paper between the spur and pinion gear, position the motor so the pinion and spur gears pinch the paper snug and then tighten the motor mount screws.

Pull the paper out from between the gears (with the wheels off the ground). The paper should pull from the gears without tearing. If it tears, the mesh is too tight and you need to try it again.

Take a close look at the clearance between the pinion and spur gears. The gears should just barely have clearance between them but yet not be too loose as to allow the gears to strip. After you use the "paper" method a few times and see what the proper clearance is between the gears, you will be able to adjust the gear mesh without using the paper.

Good luck and happy racing,