

# Mincomp's Corner

April, 99



I do believe we have found a fix for our hot street and race engines!

Mini Mania has begun producing a new style of crankshaft damper. Its basic concept is that of a friction-plate self balancing system rather than the ambiguous rubber isolated out-of-balance harmonic absorbing unit.

Its operation is pretty simple. Construction wise it is like a Big Mac, with three metal plates (bread) and two spring loaded friction plates (meat) sandwiched between the metal plates. Vibration causes the

metal plates to rotate around their centers until they find a balance point.

Why is this system better than the original? I don't know the answer, but I can tell you that it is! The new damper is the same design as the damper I have used on my GT5 since 1992, when Joe Huffaker recommended it to me.

Huffaker began looking for an improved damper for the A-Series after having a problem breaking cranks on his 1275 FP Midget. Joe recalled an experience from the days working on the Huffaker Fiero racing project. The 4-cylinder cast iron Fiero motor would walk all over the dyno room with any other damper. With a friction damper it would instantly smooth out. A natural progression was to adapt this same friction-damper technology to the A-Series.

What I have been witness to happened while balancing a race crank that was a little out. We installed the friction damper and it still read out of balance. We then increased the RPM of the balancing machine and let it run a couple of minutes, turned it off and rechecked. It read a perfect zero balance. Imagine how well it will work on a balanced engine!

Internally, the Mini Mania damper is very much the same as Huffaker's. If it should duplicate the success we have had with limited quantity of Huffaker's units.

*Joe Gilmore*