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SIMPLE PROBLEM SOLVING FOR THE MOPAR ENTHUSIAST

Let's say you just put a big mean in your Mopar; now it seems sluggish on the highway end.

It runs a little hot, the headers glow red and the idle, especially with an automatic, isn't that good. Let's address some of the problems with these signs.

The distributor advance curve, initial advance and the carb idle circuit are very important, and must work together in a street car. Total timing should be set first. The best way is out of the ports lead. If the car pings, retard the distributor until it stops, checked with a dial-back timing light or a degree dumper. Most of our street engines like between 30 and 36 degrees. Make sure you run the car through all the gears, as the engine now more strain in high gear/high rpm. Next is initial advance—old a idle timing. Big cars give poor cylinder filling at idle, and compensating it is the fact that a lot of engines and pistons everybody thinks are 10.5:1, are really 9.5:1 or lower. Always check compression ratio when building your engine—don't rely on advertised numbers. There are too many variables: deck height, head on, rod length etc. Poor fill and/or low compression means we have to light the fire in the cylinder earlier with more advance at idle, more initial, that is, lighting the fire earlier keeps the burning mixture contained at the top of the cylinder, not coming out past the exhaust valve like a blow torch lighting the headers red. This also cools the engine by not exposing more cylinder wall to the burning mixture, which is then absorbed in the coolant. Once total timing is known, it's time to set initial or idle timing. Higher compression cars like 0 or

10 degrees—low compression, 15, 18, even 20 degrees. Try different settings driving 30 to 35 mph, max. Don't beat on it. This is best done at night so you can keep an eye on the headers. See if the engine long-comes down and idle improves. Now shut the car off for five minutes, like you're getting gas, let the engine and starter heat up. If the starter feels like a dead hammy back off a few degrees and try again. Now you have your number's initial and total

DIST. DEGREES X 2 + INITIAL = TOTAL

DIST. DEGREES	SLAT
0	340
2	368
4	376
6	384
10	400
11.8	416
12	416
14	432
16	448
18	464
20	480

timing settings, and it's time to curve your distributor. This has to be done because if we set our initial to, say 15 degrees, and we check our total, it could be 40°. Let's go through curving the Chrysler distributors, but even if you buy an aftermarket distributor, or have someone do yours, you still need to know your initial and total numbers. Mount the distributor in a vice gently and remove the reluctor

with two large screwdrivers, prying evenly, noting which slot the coil pin is in. Next, remove the vacuum advance and breaker plate covers. Remove the oil pin in the center of the shaft, then the clips—the threaded clip. A little spread pressure on the yoke and a round pick and it should come out. (The best way is snap ring pliers with two long pins installed.) Look at the bottom of the advance yoke and it will have the amount of distributor degrees stamped on it. Distributors turn at 1/2 of crankshaft revolutions so remember, DIST DEGREES x 2 + INITIAL = TOTAL. For example: the advance yoke is stamped 15, so 15x2 = 30. This means the distributor has 30 degrees and we need 10 initial, so 15x2 = 30+10 = 40. A good curve for a 10:1 340, but a low compression 360 may need 18 degrees initial and 36 total. The total, 36, minus the 18 initial equals 18 crankshaft degrees. The distributor needs 1/2 of 18, which is 9. Now 15x2 = 18+18 initial = 36. Got it? Good! But if you don't have the right advance yoke, or time to file the outer edge of the slots or weld/brace up the outer edges. How much do you need? Good question! Over the years, working with a lot of advances, I've come up with a chart to get you real close for a one shot deal. Ok, what about the springs and a fast curve? The stock unit comes with a light spring and a heavy spring with a hoop on one end. This is good for a pickup or heavy vehicle that can tolerate a lot of timing because of constant heavy load. Most cars like a quick curve, all in by 2,000 or 1,500. So, you go out and buy a Mopar spring 36, and this is where the problem starts. These springs are so light, the advance is coming in at idle. This spring kit worked better with