

Crane's Always Known How to Make Cams Go Rump, Whap and Thump!

In recent years there has been an increased emphasis placed on cams that sound downright nasty and have very rough idle characteristics. Our competitors have sought to capitalize on this trend by marketing camshafts using special branding, like it's a new deal. In reality, Crane Cams has been manufacturing cams that appeal to the drive-in and cruise crowd for decades.

From an engineering standpoint, it's fairly straightforward proposition to design a camshaft with a bad-assed idle. Basically, these are profiles with a very long exhaust duration. They also are ground with tight lobe separation and with 5° of advance. This creates lots of overlap, resulting in a loss of vacuum and a lumpy idle. The cam advance will cause the intake valve to close relatively early (as does the narrow lobe separation), increasing cylinder pressure, which will improve low-end torque. The early opening of the exhaust lobe will contribute to amplifying the exhaust sound. As you might suspect, these cams favor a lower RPM power band (desired for street cruising), as opposed to higher RPM performance/racing applications.

Crane Cams has a number of camshafts in its economical Energizer line that sound just as nasty as anything out there. They're included in the list of popular Energizer cams and cam/hydraulic lifter kits shown here. Crane also manufactures hydraulic roller, mechanical roller and flat tappet (solid lifter) cams with bad-assed idle characteristics. The level of nastiness is, of course, related to the cam's amount of duration and overlap; the more the better for a rough idle. And there is more latitude with a dual-pattern design (intake and exhaust lobes differ).

As a rule of thumb, a camshaft that Crane rates as having a "fair" idle quality is the functional equivalent of specially branded competitor's cams with a "choppy" idle. A profile that Crane rates as "rough" can be compared to their next level of nastiness, and what Crane describes as a "very rough" idle squares off against their top-of-the-line models.

Obviously, these cam profiles do compromise performance to a degree. But if your customers want a camshaft that will turn heads at the drive-in, Crane has just what you need.



Cam / Cam & Lifter Kit	Type Lifter	Idle Quality	Basic RPM Range
Small Block Chevrolet V-8 (1957-87) 262-400 c.i.d.			
10003 / 100032	hydraulic	smooth	1000-4600
10004 / 100042	hydraulic	smooth	1400-5000
10005 / 100052	hydraulic	good	1600-5400
10007 / 100072	hydraulic	fair	2800-6200
10008 / 100082	hydraulic	rough	2400-6200
10011 / 100112	hydraulic	very rough	3400-7000
10013 / 100132	hydraulic	fair	2000-5800
10017 / 100172	hydraulic	rough	1800-5800
10018 / 100182	hydraulic	very rough	3000-6400
Big Block Chevrolet V-8 (1967-95) 396-454 c.i.d.			
10303 / 103032	hydraulic	smooth	1000-4500
10304 / 103042	hydraulic	smooth	1200-4800
10305 / 103052	hydraulic	good	1400-5000
10306 / 103062	hydraulic	fair	2800-6200
10307 / 103072	hydraulic	fair	2200-5600
Pontiac V-8 (1955-81) 265-455 c.i.d.			
10507 / 105072	hydraulic	good	1800-5200
10508 / 105082	hydraulic	fair	2800-6200
Small Block Ford V-8 (1962-87) 221-302 c.i.d.			
13003 / 130032	hydraulic	smooth	1200-4600
13004 / 130042	hydraulic	smooth	1400-4800
13005 / 130052	hydraulic	good	1600-5200
13006 / 130062	hydraulic	fair	2800-6200
13009 / 130092	hydraulic	fair	2200-5600
Ford "Cleveland" V-8 (1970-82) 351-400 c.i.d.			
13303 / 133032	hydraulic	smooth	1400-4800
13304 / 133042	hydraulic	good	1600-5200
13305 / 133052	hydraulic	fair	2600-6400
13313 / 133132	hydraulic	fair	2200-5600
Ford "FE" V-8 (1963-76) 352-428 c.i.d.			
13404 / 134042	hydraulic	smooth	1400-4800
13405 / 134052	hydraulic	good	1800-5200
Chrysler "LA" V-8 (1964-87) 273-360 c.i.d.			
15005 / 150052	hydraulic	good	1800-5200
15006 / 150062	hydraulic	fair	3000-6200
Ford 351W, 302-351 SVO V-8 (1969-93) 302-351 c.i.d.			
18005 / 180052	hydraulic	good	1600-5200