

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 |