

Expanded Lineup of Aluminum Roller Rocker Arms



Energizer®



Classic



Gold Race®

Among the many innovations Crane Cams has brought to the world of high performance were aluminum roller rocker arms in 1964. Since then, Crane has manufactured and sold millions of aluminum rockers and established an outstanding reputation for performance and dependability.

Today, Crane Cams has expanded its lineup of stud-mounted, roller rocker arms to include three distinctive models that will fit most any application and budget. These include the Energizer®, Crane Classic and Gold Race® roller rocker arms, and could be termed “good,” “better” and “best.”

First, let’s delve into what makes upgrading to aluminum roller rockers one of the most prolific and cost-effective modifications a performance enthusiast can make. There are three primary factors: reduced friction, less weight and amplified valve train events.

Ordinary stamped steel (or in some instances cast iron) rockers rotate on a pivot ball and have substantial friction, while also “scrubbing” the tip of the valve. Roller lifters have both a roller bearing fulcrum and a roller tip, significantly improving efficiency.

Crane’s aluminum roller rocker arms also reduce valve train weight—especially mass moment of inertia (which is what impacts the valve springs and RPM potential). The aerospace quality aluminum alloys used by Crane also provide an excellent strength-to-weight benefit.

Then there’s the added power that comes from employing an increased rocker arm ratio. When, for example, going from a stock 1.5 ratio to a 1.6 ratio rocker arm the net at-the-valve lift is increased approximately 7%. A cam with a .320” lobe lift will open the valve .480” with a 1.5 ratio rocker and .512” with a 1.6. Duration is also increased nominally, as when the speed of the valve accelerates the engine “thinks” it has 2–4° more camshaft duration.

Add it all up and it’s a 15–30+ horsepower gain for an afternoon’s project. You should also know that all Crane aluminum roller rocker arms come with adjusters and locking screws, as well as detailed installation instructions.

The features of all three models are detailed below. But there are some additional facts that are important. Crane aluminum rocker arms have long proven their reliability. In fact, Ford Motor Company selected Energizer® rocker arms for their Cobra V-8 production engines and backed them with a full factory warranty.

Crane “Classic” rocker arms have returned to the line, providing engine builders with a very competitively priced rocker that’s designed for moderate competition and can handle up to 600 lbs. of spring pressure with ease.

Gold Race® rockers are unquestionably the most rugged and accurate on the planet, and built to handle spring pressures of 700 lbs. (standard) or 900 lbs. (“Wide Body”). One reason this statement can be made is that the latest in multi-axis CNC equipment is used in their manufacture, and only one fixturing operation is employed. This eliminates the tolerance “stacking” that occurs when parts are made on multiple machines, whether they’re moved by men or robots.

These rocker arms also feature Crane’s exclusive Quick-Lift™ technology. In short, the pushrod seat is positioned differently than other rocker arms, with the variance in arcs resulting in an accelerated opening and closing. A 1.7 ratio rocker would initially open the valves at a 1.78 net ratio, then converge to a nominal 1.7 ratio at approximately mid-lift. These accelerated opening and closing events provide increased horsepower and torque that can easily be measured.

All in all, Crane Cams has you covered when it comes to aluminum roller rocker arms!

| Type: | Energizer® | Crane Classic | Gold Race® |
|----------------------|---|---|---|
| Rating: | “Good” | “Better” NEW | “Best” |
| Main Body: | Vacuum Die-Formed Aerospace alloy | Extruded Billet Heat Treated | Extruded Billet Heat Treated |
| Mfg. Method: | CNC-Machined | CNC-Machined | CNC-Machined |
| Max Spring Pressure: | 450 lbs. | 600 lbs. | 700 lbs. (Standard) 900 lbs. (Wide Body) |
| Features: | Needle bearing fulcrum Heat treated steel roller tip Adjustable lock nuts | Needle bearing fulcrum Heat treated steel roller tip Adjustable lock nuts | Needle bearing fulcrum Heat treated steel roller tip Adjustable lock nuts |
| Ideal Use: | Hydraulic or hydraulic roller cams Street performance | Moderate circle track and drag racing Off road & marine | Serious competition applications and ultimate street |
| Applications: | Approximately 20 Most popular V-8, V-6 | Approximately 20 Most popular V-8, V-6 | Approximately 65 Popular V-8, V-6, I-6 and I-4 |

NEW

| | Ratio | Stud | Energizer® | Crane Classic | Gold Race® |
|--|-------|---------------|------------|---------------|------------------------|
| American Motors V8 66-91, 290-401 | 1.6 | 3/8 | 11746-16 | 36774-16 | 36750-16 |
| | 1.6 | 7/16 | 11747-16 | 36775-16 | 86757-16 |
| Chev V8 55-87, 262-400 | 1.5 | 3/8 | 11744-16. | 11774-16 | 11750-16 |
| | 1.5 | 7/16 | 11745-16 | 11775-16 | 11752-16 |
| | 1.6 | 3/8 | 11746-16 | 11776-16 | 11759-16 |
| | 1.6 | 7/16 | 11747-16 | 11777-16 | 11755-16 |
| Chev/Holden LS1-LS2-LS6 | 1.7 | 3/8 | ———— | ———— | 144750-16 ⁺ |
| | 1.8 | 3/8 | ———— | ———— | 144759-16 ⁺ |
| Chev/Holden LS w/ L92/LS3 Heads (Offset Inlet) | 1.7 | 3/8 | ———— | ———— | 201750-16 ⁺ |
| | 1.8 | 3/8 | ———— | ———— | 201759-16 ⁺ |
| Chev V8 396-454-502 | 1.7 | 7/16 | 13744-16 | 13774-16 | 13750-16 |
| Ford V8 302, 5.0L H.O, 351W | 1.6 | 5/16 Pedestal | ———— | 44774-16 | 36759-16 |
| | 1.7 | 5/16 Pedestal | 44746-16 | ———— | 36758-16 |
| Ford V8 289-302-351W | 1.6 | 3/8 | 11746-16 | 36774-16 | 36750-16 |
| | 1.6 | 7/16 | 11747-16 | 36775-16 | 86757-16 |
| | 1.7 | 7/16 | ———— | ———— | 36757-16 |
| Ford X Flow 6cyl. | 1.72 | Bolt-On ADJ* | 52745-12 | ———— | ———— |
| Ford V8 302c-351c | 1.72 | Bolt-On ADJ* | 52745-16 | 27775-16 | ———— |
| Ford V8 351c-351m, 429-460 | 1.72 | 7/16 | 27744-16 | 27774-16 | 27750-16 |
| Holden 6 | 1.5 | 3/8 | 11744-12 | 11774-12 | ———— |
| Holden V8 253-304-308-350 | 1.65 | Bolt-On ADJ* | 24745-16 | 24775-16 | 28745-16 |
| | 1.65 | 7/16 | 24744-16 | 24774-16 | 28758-16 |

* Bolt-on Adjustable kit includes special screw-in studs, guide plates, 7/16 rocker arms & Loctite. No machining needed.

+ Supplied complete with installation kit. Includes studs, guideplates and heavy wall, one-piece pushrods.

This is a list of the most popular Crane Rocker Arms. For the complete range, see the Crane catalog or our website.