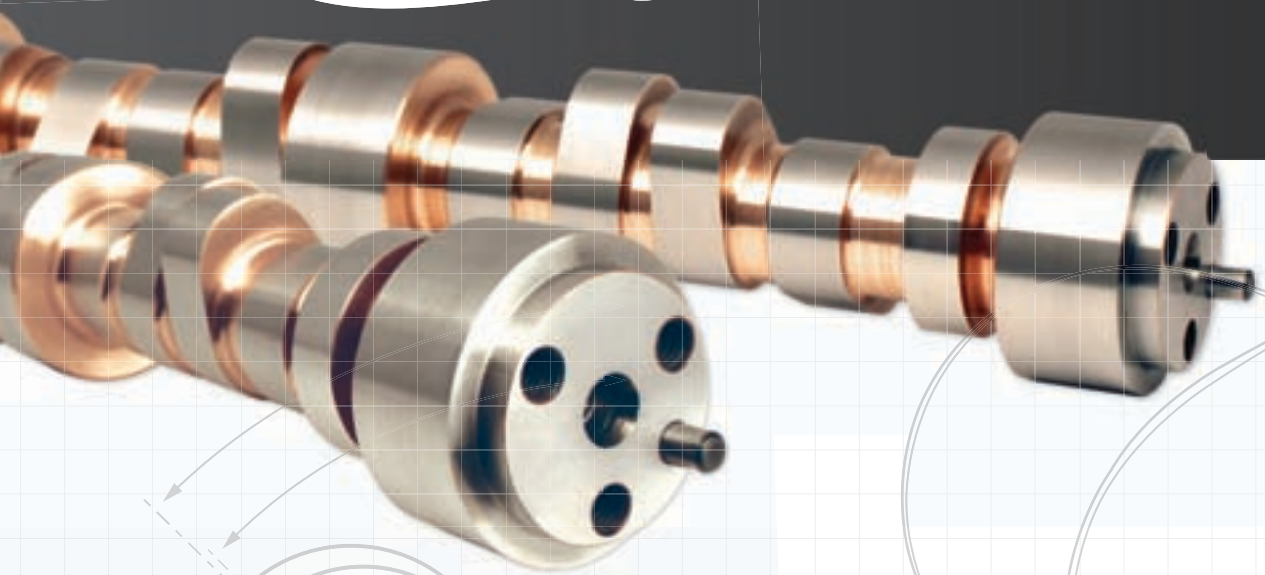
CRANE Cams®



CAM LOBE PROFILE CATALOG

AN EXPANDED LISTING OF ALL CRANE CAMS LOBE PROFILES
FOR PROFESSIONAL RACING ENGINE BUILDERS

CAM LOBE PROFILE CATALOG

CONTENTS

Introduction

This latest version of our Cam Lobe Profile Catalog contains most of the recent and popular recommended lobe shapes that we currently advise. There are literally thousands of additional profiles available, from our early street and racing grinds, to antique restoration and factory replacement grinds dating back to the early 1900's. Virtually any grind that Crane Cams has produced can still be provided.

If you have a specific requirement that isn't listed, please contact our Performance Consultant staff at 866-388-5120 for additional information.

Custom Profile Cams

Although the Crane Cams catalog includes an extensive variety of camshafts, many applications occur that may require a camshaft selection not found in our standard listings. This is not an unusual happening at Crane Cams where custom ground cams are produced daily. We maintain the largest lobe profile library of any performance cam grinder, an accumulation that began with our founding in 1953.

We cover the entire spectrum of internal combustion engine applications, ranging from stationary power plants to Top Fuel dragsters. Prototype work is performed for a variety of clients from the giant Original Equipment Manufacturers to the individual engine builder/racer. Custom production runs are also commonplace for an equally diverse range of customers. Proprietary work is also a function of our diversity throughout the OEM and performance markets.

It is always recommended that our staff of Performance Consultants be contacted at 866-388-5120 as the first step in the initiation of a special camshaft order. Their combined decades of experience in all forms of camshaft applications can easily save the customer time (and money) when refining their particular combination.

Basic Rules to Follow When Considering a Custom-Ground Camshaft

Our hydraulic and mechanical profiles are designed for a particular finished lobe size and lifter diameter. Applying a lobe design to an engine having a smaller base circle diameter than the lobe is intended for, will probably cause the minimum radius of curvature (which usually occurs at, or near, the maximum lift point) to decrease to an unacceptable level. This will cause premature lobe and lifter failure.

Our hydraulic and mechanical roller profiles are also designed for a particular finished lobe size and lifter wheel diameter. These must be known to produce the proper finished cam grind.

Consideration is also given as to the type of valve train. Engines having an overhead valve style valve train (cam-lifter-pushrod-rocker arm-valve), can not utilize as much positive acceleration at the follower as those engines having direct-actuation valve trains (cam-follower-valve), due to the comparative stiffness of each style. Although the minimum tappet diameter and basic specifications may appear quite similar there are serious lobe design differences, mandating that these types not be interchanged.

Hydraulic and mechanical lobe profiles also have design differences, especially in the clearance ramps. Without going into great detail, you should never use hydraulic lifters on a mechanical lifter cam, nor is it advised to use mechanical lifters on a hydraulic lifter cam.

Crane Cams also has available lobe series for most SOHC and DOHC direct actuation and also translating "slipper" follower valve train engines. As virtually each of these engines utilize their own unique valve train geometry, lobe designs can not usually be interchanged among engines, even though their valve trains may appear identical in configuration.

Due to space limitations we cannot list all of these series here, and recommend that you contact the Crane Cams Performance Consultant staff for specific recommendations.

Notes on Minimum Tappet Diameter

For flat tappet grinds this is the smallest tappet face diameter advisable for use with the particular profile. Use of a smaller face diameter tappet will result in the lobe to lifter contact point going off of the edge of the tappet, usually causing immediate lobe and tappet wear and failure. A larger tappet can be used without this wear potential, however you may be sacrificing tappet velocity (which usually increases performance) if other profiles are available for larger tappets.

Common Values for Tappet Diameters

.842"	SB and BB Chevy, Pontiac and Buick V8
.875"	SB and BB Ford V8
.904"	Chrysler and AMC V8

For more information on Minimum Tappet Diameter and how it affects your application, call a Crane Cams Performance Consultant at 866-388-5120.

Important—Lobe Design Size When Choosing a Roller Grind

Our roller profiles are designed for a particular finished lobe size, as determined by roller wheel diameter or base circle radius requirements. We have provided a column indicating the Lobe Design Size for each of the listed profiles.

Coding

A	**1.786" Nominal Journal Diameter** Buick V6 and V8, Cadillac 368–500 V8, or special small base circle diameter, such as Chevrolet 262–400 V8 requiring connecting rod to cam clearance in long stroke applications.
B	**1.868" Nominal Journal Diameter** Chevrolet 262–400 and 348–409 V8, and Pontiac 265–455 V8
C	**1.948"–1.968" or 50 mm Journal Diameter** Chevrolet 262–400 V8 LRB, Chevrolet 396–454 V8 and 8.1L V8, Plymouth-Dodge 273–360 V8, 350–440 V8 and Hemi 426 V8, Oldsmobile 265–455 V8.
D	**2.036" Nominal Journal Diameter** Ford 221–302 and 351C–400 V8, AMC V8
E	**2.125" Nominal Journal Diameter** Ford 352–428 V8, Ford 429–460, Ford 429 Boss Hemi V8, and other engines.
F	**55 mm or 2.165" Nominal Journal Diameter** Chevrolet LS1 V8, Ford LRB, and other engines.
J	**57 mm or 2.245' Journal Diameter** Chrysler 5.7–6.1L Hemi.
K	**2.280" Journal Diameter**
G	**60 mm or 2.362" Nominal Journal Diameter**
H	**65 mm or 2.560" Nominal Journal Diameter**

Some lobe designs have masters generated for more than one size category. These have been indicated where applicable. When a roller lobe designed for one journal size is applied to an engine having a different nominal journal size, a duration change will occur. For example, an **"A"** lobe ground on a **"C"** engine camshaft will realize a four-degree increase at 0.050" cam lift. There is usually a two-degree change between design size series. Caution must be used when selecting a larger sized lobe for a smaller lobe application. If a **"D"** lobe were used on an **"A"** application, not only would a duration loss of six degrees take place, but also a negative radius of curvature (inverted flank) may try to occur during the grinding process, resulting in a finished lobe shape that is not representative of the actual design. This may result in unstable valve train, possibly causing component failure.

Lobes that are intended to have this inverted flank (Crane Cams HIR and IR series) are carefully designed and manufactured using a special process to prevent this condition. Even so, HIR and IR camshafts are not normally advised for high RPM applications due to their relative harshness on the valve train.

Important—Lifter Wheel Size When Choosing a Roller Grind

Our roller profiles are also designed for a particular wheel size on the roller lifter.

Popular Wheel Diameters

.700"	Used on Many Hydraulic Roller Lifters
.750"	Used on Most .842" and .875" Diameter Mechanical Roller Lifters
.815"	Used on Most .904" Diameter Mechanical Roller Lifters
.850"	Used on Most .937" Diameter Mechanical Roller Lifters
.920"	Used on Most 1.000" and 1.062" Diameter Mechanical Roller Lifters

Consideration must be made when changing the size of the wheel from the usual diameter as this will affect the duration of the lobes. As the wheel diameter increases the duration also increases. The duration in the lower lobe lift areas (.001"–025") will not change very much, as the pressure angle between the lobe in the wheel is not greatly affected. However, at .050" lobe lift, as the wheel size increases, the duration will increase nearly two degrees for each diameter increment as listed above. Conversely, as the wheel diameter decreases the duration will also decrease. Lobe lift is not affected by the wheel diameter.

Be sure to specify what wheel diameter that you will be using, as the desired opening and closing figures (and duration) may not be obtained if this isn't compensated for. Many lobe profiles have been generated for more than one wheel size in order to produce the proper lifter motion for these changes.

Special Cam Services Price Schedule

The following basic price schedule (which is subject to change without notice) covers services offered. Additional quotes will be submitted on request. All prices are FOB, Daytona Beach, FL.

Design

Cam Profile Design—Inelastic system with Accelerated Ramps. Lift table with velocities and accelerations in one degree spacing will be furnished.

Each Profile.....**Call for Quote**

Cam Profile Design

Inelastic system with Accelerated Ramps, for slipper follower type applications. Lift table with velocities and accelerations in one degree spacing will be furnished.

Each Profile.....**Call for Quote**

Profile Smoothing

Computer smoothing of your cam profile design. Performs smooth blending of ramps, nose and roughness-smoothed. Lift table will be furnished.

Each Profile.....**Call for Quote**

Tooling (Plate or Masters)

Generate Van Norman/Berco Plate Master Cam Profile. Grind to five decimal place data. (Included verification check of submitted design for errors.)

Each Valve Profile.....**Call for Quote**

Generate Van Norman/Berco Plate for customer-supplied camshaft. (Includes base circle runout correction.)

Each Single Pattern Plate.....**Call for Quote**

Each Dual Pattern Plate Set.....**Call for Quote**

Manufacture

Grind customer's round lobe 8620 steel billet camshaft core—includes copper plate, rough grind, heat treat and finish grind. For roller camshafts that require base circle undercutting, an additional labor charge is required.

Each 1 Cyl. Camshaft..... **Labor PN 98070**

Each 4 Cyl. Camshaft.....**Labor PN 98071**

Each 6 Cyl. Camshaft..... **Labor PN 98072**

Each V8 Camshaft
(Rough Grind/Heat Treat Only)..... **Labor PN 98064**

Each V8 Camshaft..... **Labor PN 98085**

Grind Crane Cams round lobe 8620 steel billet camshaft core. For roller follower camshafts that require base circle undercutting, an additional labor charge is required.

Most V8 Round Lobe Steel Billet Cams Includes Core.....**Labor PN 98061**

Most 6 Cyl. Round Lobe Steel Billet Cams, Includes Core..... **Labor PN 98086**

Most 4 Cyl. Round Lobe Steel Billet Cams, Includes Core..... **Labor PN 98062**

Grind one sample camshaft from customer's unground lobe camshaft and inspect for conformance to design data. Customer to furnish semi-finished cam billet if Crane Cams billet is not available.

Each Camshaft.....**Call for Quote**

Misc. manufacturing services—For services not listed, contact Crane Cams for a quote.
Grind Camshaft with Five Bearing Journals ..... Labor PN 98076
Install 5/16" Dowel Pin ..... Labor PN 98087
Groove One Cam Bearing Journal for Oiling ..... Labor PN 98088
Drill and Tap for Sander Rear Drive ..... Labor PN 98089
Copper Plate Customer's Round Lobe Steel Billet Camshaft Up to 24" Long ..... Labor PN 98098
Grind Gearfit Step on Front Journal ..... Labor PN 98073
Misc. Labor—Per Hour ..... Labor PN 98111

Inspection

Profile Check single intake and exhaust lobe to verify lift and timing against furnished specifications.
Each Camshaft ..... Labor PN 98014

Cam Lobe measurement and computer analysis. Complete report giving lift, velocity, acceleration and graphs.
First Valve Lobe on Camshaft ..... Call for Quote
Each Additional Valve Lobe ..... Call for Quote

Packaging For Shipment

Special wooden crates: For shipment when standard cardboard packaging will not offer adequate protection.
Each Cam ..... Approx. $40.00 Ea.

Prototype Cam Services

Crane Cams utilizes computer programs to perform precision cam profile measurements and design analysis. This enables Crane Cams to constantly update and improve their entire product line, plus prototype development for other cam and engine manufacturers.

Crane Cams offers a broad scope of services and capabilities from a single source—a unique and extremely advantageous feature. This multi-faceted service can provide a complete package of engine cam development and manufacturing, from design through sample cams for developmental evaluation at a low total cost.

The "as measured" cam profile analysis services are the most accurate measurement and analysis data currently available in the industry. A precision measurement facility is located in the Crane Cams facility and is used in many phases of Crane Cams' production and development work, as well as by various other engine and cam manufacturers.

Sharing equal importance with the physical measurements are the computer analysis techniques employed in processing the "as measured" data. This process permits a broad and accurate analysis of the data with corrections to systematic and random errors, which occur in all measurement procedures. The resulting computer printout is an exceedingly accurate lift data (to the nearest 10 millionths of an inch) of the actual measured profile. This data can then be immediately compared to the design data.

One outstanding feature of the cam profile analysis program allows one degree (or 2½ degree) design data to be read into the computer, which will immediately return printout cutting data in one-half degree increments. This unique feature permits a model cam to be generated on one-half degree increments of maximum accuracy, even though the original design was tabulated in one-degree increments.

Only the latest equipment is incorporated into the extensive cam development facilities at Crane Cams. Equipment is only as good as the people that use it, however, and Crane Cams personnel have been one of the main keys to the firm's successful rise to the "Number One" rating in the high performance cam industry. Crane Cams fully appreciates the importance of care, accuracy, speed and competence, and reflects this concern in its total involvement in all cam facets, from design through volume production.

Tooling

From design data, the first step in cam profile production is the generation of the master cam lobe. At Crane Cams this is the most critical and precision step in cam profile manufacturing, since every step from this point forward can result in possible accumulative errors and deviations from the desired profile, requiring extreme detail and attention to be applied to the project.

From the master cam blank, a rough cam shape is first rough ground on a cam grinder. The final rough and finish grinding is performed on a numerically controlled grinder. The grinder has a basic resolution of one millionth of an inch, with a complete system resolution of 10 millionths of an inch, and a grinding accuracy and repeatability of plus or minus 15 millionths.

Manufacturing

Crane Cams utilizes Landis, Berco, Van Norman and Norton Automatic cam grinders for production cam grinding. If production volume run cams are desired, Crane Cams offers the highest quality at competitive prices, backed up by the fastest delivery possible.

Inspection

Crane Cams production run inspection procedures, designed to check production cams for accuracy, plus establishing performance parameters of a given camshaft of profile, is a very useful and rapid measuring device (Adcole 911) with resolution to .0001 inch and one-quarter of one degree.

A custom-built dynamic inspection machine is utilized in many critical inspection areas to rapidly indicate acceleration, velocity, displacement and jerk of a model, or sample cam profile. Relative smoothness can be instantly reviewed for comparison, as well as lobe-to lobe variations in profiles. The viewed trace on the oscilloscope truly gives a “fingerprint” of the cam profile almost instantly, and with a minimum of set-up.

Conclusions can be quickly established relating to dynamic problems due to design or manufacture. This machine is also utilized to select optimum lobes, average lobes, or worst lobes, for further inspection and analysis, or for copying profiles on developmental or test cams.

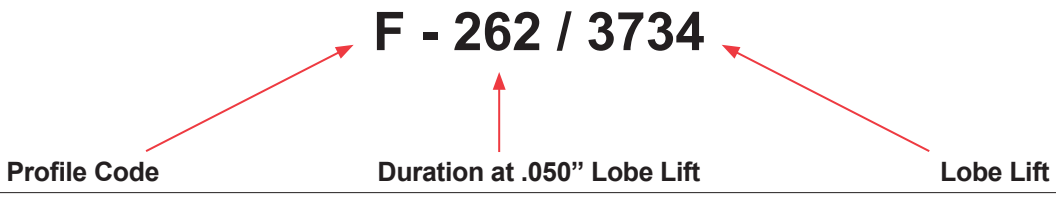
Also located at the Crane Cams facility in Daytona Beach, FL, is the physical measurement equipment. Another custom designed installation, this machine performs precise measurement of “as made” cam profiles, conducts mathematical analysis to correct for systematic and random errors, and provides velocity and acceleration data.

Features include a basic resolution of .000010 inch and two arc seconds. An extremely high accuracy of 20 millionths of an inch (mean standard deviation) is maintained through the operating system employed and close temperature control of the measurement room. Ground and lapped carbide utilized as cam followers, maintain high precision and accuracy.

Our Adcole gauge is considered to be the standard of the industry for camshaft design verification and production. This is the measuring equipment virtually demanded by the original equipment manufacturers for quality control purposes. Measurements are precise to within 1/10 micron (0.0001 mm) and 0.001 degrees. Computer-aided control combines extreme accuracy with speed, and provides for complete plot traces of deviations from the programmed standards.

Lobe Profile Nomenclature

Example:



H Hydraulic
HR Hydraulic Roller
F Mechanical Flat Tappet
R Mechanical Roller Lifter

HYDRAULIC FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

HYDRAULIC FLAT TAPPET PROFILES

HP — HP hydraulic series intended for conservative street use and factory performance upgrades. Designed for .842" diameter or larger tappets.

HP-184/2454	240	.0040	85	.019	.009	.368	.393	.417	.432	.842
HP-194/2654	250	.0040	101	.030	.014	.398	.425	.451	.467	.842
HP-204/2800	260	.0040	113	.044	.022	.420	.448	.476	.493	.842
HP-208/2795	264	.0040	114	.050	.026	.419	.447	.475	.492	.842
HP-214/2947	270	.0040	124	.059	.032	.442	.472	.501	.519	.842
HP-218/2942	274	.0040	125	.066	.037	.441	.471	.500	.518	.842
HP-224/3100	280	.0040	135	.076	.044	.465	.496	.527	.546	.842
HP-228/2942	284	.0040	134	.083	.050	.441	.471	.500	.518	.842
HP-234/3254	290	.0040	145	.093	.059	.488	.521	.553	.573	.842
HP-244/3400	300	.0040	155	.110	.075	.510	.544	.578	.598	.842
HP-254/3554	310	.0040	165	.128	.092	.533	.567	.604	.626	.842
HP-264/3700	320	.0040	175	.145	.109	.555	.592	.629	.651	.842

HMV — HMV (Hydraulic Maximum Velocity) hydraulic series intended for mid-range torque and street use, also fuel economy. Designed to make maximum use of .842" diameter tappets.

H-192/2667	248	.0040	83	.029	.013	.400	.427	.453	.469	.842
H-198/2754	254	.0040	106	.036	.017	.413	.441	.468	.485	.842
H-204/2847	260	.0040	114	.044	.021	.427	.456	.484	.501	.842
H-210/2934	266	.0040	120	.053	.027	.440	.469	.499	.516	.842
H-216/3027	272	.0040	127	.064	.037	.454	.484	.515	.533	.842
H-222/3114	278	.0040	133	.074	.041	.467	.498	.529	.548	.842
H-228/3200	284	.0040	139	.085	.049	.480	.512	.544	.563	.842
H-234/3294	290	.0040	144	.093	.059	.494	.527	.560	.580	.842
H-238/3347	294	.0040	148	.100	.065	.502	.536	.569	.589	.842
H-240/3378	296	.0040	152	.103	.070	.507	.540	.574	.595	.842
H-248/3500	304	.0040	159	.118	.081	.525	.560	.595	.616	.842
H-252/3500	308	.0040	164	.124	.090	.525	.560	.595	.616	.842
H-256/3500	312	.0040	167	.131	.095	.525	.560	.595	.616	.842

Z — The Z hydraulic lobes are our most aggressive series for use with .842" diameter tappets. Short seat timing with maximum area under the curve provides outstanding performance.

H-206/288	256	.0040	117	.047	.021	.432	.461	.490	.507	.842
H-212/297	262	.0040	124	.056	.028	.446	.475	.505	.523	.842
H-218/306	268	.0040	130	.066	.035	.459	.490	.520	.539	.842
H-224/315	274	.0040	137	.077	.044	.473	.504	.536	.554	.842
H-230/324	280	.0040	143	.087	.053	.486	.518	.551	.570	.842
H-236/327	286	.0040	148	.098	.063	.491	.523	.556	.576	.842
H-240/3291	290	.0040	152	.105	.070	.494	.526	.559	.579	.842
H-244/331	294	.0040	156	.112	.077	.497	.530	.563	.582	.842
H-248/333	298	.0040	160	.119	.084	.500	.533	.566	.586	.842

HYDRAULIC FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

HYDRAULIC FLAT TAPPET PROFILES

CCH1 — CCH1 hydraulic series created for performance hydraulic applications requiring higher engine speeds on smaller diameter lobes. Designed for .842" diameter or larger tappets.

H-194/250	252	.0040	90	.031	.015	.375	.400	.425	.440	.842
H-198/255	256	.0040	97	.036	.017	.383	.408	.434	.449	.842
H-202/260	260	.0040	102	.042	.020	.390	.416	.442	.458	.842
H-210/270	268	.0040	112	.053	.028	.405	.432	.459	.475	.842
H-214/275	272	.0040	117	.059	.032	.413	.440	.468	.484	.842
H-218/280	276	.0040	122	.065	.037	.420	.448	.476	.493	.842
H-226/290	284	.0040	131	.078	.047	.435	.464	.493	.510	.842
H-230/295	288	.0040	135	.084	.053	.443	.472	.502	.519	.842
H-234/300	292	.0040	140	.091	.059	.450	.480	.510	.528	.842
H-242/310	300	.0040	149	.105	.071	.465	.496	.527	.546	.842
H-250/320	308	.0040	158	.118	.084	.480	.512	.544	.563	.842

CCH2 — CCH2 hydraulic series created for performance hydraulic applications requiring even higher engine speeds. Designed for .842" diameter or larger tappets.

H-190/260	252	.0040	93	.027	.014	.390	.416	.442	.458	.842
H-194/265	256	.0040	98	.032	.016	.398	.424	.451	.466	.842
H-198/270	260	.0040	103	.037	.019	.405	.432	.459	.475	.842
H-202/275	264	.0040	108	.042	.022	.413	.440	.468	.484	.842
H-206/280	268	.0040	112	.047	.025	.420	.448	.476	.493	.842
H-210/285	272	.0040	116	.053	.029	.428	.456	.484	.502	.842
H-214/290	276	.0040	121	.059	.033	.435	.464	.493	.510	.842
H-218/295	280	.0040	125	.065	.037	.443	.472	.502	.519	.842
H-222/3001	284	.0040	129	.071	.042	.450	.480	.510	.528	.842
H-226/305	288	.0040	134	.078	.047	.458	.488	.519	.537	.842
H-230/3101	292	.0040	138	.084	.053	.465	.496	.527	.546	.842
H-234/315	296	.0040	142	.091	.058	.473	.504	.536	.554	.842
H-238/320	300	.0040	146	.098	.064	.480	.512	.544	.563	.842
H-242/325	304	.0040	150	.104	.070	.488	.520	.553	.572	.842
H-246/330	308	.0040	155	.111	.077	.495	.528	.561	.581	.842
H-254/340	316	.0040	163	.125	.090	.510	.544	.578	.598	.842

H1 — H1 hydraulic series created for engines with large diameter lobes and long rocker ratios, such as big block Chevrolet, used in performance and marine applications. Designed for .842" diameter or larger tappets.

H-220/307	280	.0042	128	.067	.040	.461	.491	.522	.540	.842
H-226/314	286	.0042	134	.076	.047	.471	.502	.534	.553	.842
H-230/318	290	.0042	138	.082	.053	.477	.509	.541	.560	.842
H-236/325	296	.0042	144	.092	.061	.488	.520	.553	.572	.842
H-240/329	300	.0042	148	.098	.067	.494	.526	.559	.579	.842
H-246/336	306	.0042	154	.108	.076	.504	.538	.571	.591	.842
H-250/340	310	.0042	158	.115	.082	.510	.544	.578	.598	.842

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

HYDRAULIC FLAT TAPPET PROFILES

H1	*Continued from previous page.*									
H-254/344	314	.0042	162	.122	.089	.516	.550	.585	.605	.842
H-262/353	322	.0042	170	.136	.102	.530	.565	.600	.621	.842
H-270/362	330	.0042	178	.149	.115	.543	.579	.615	.637	.842

HC904	HC904 hydraulic series created for Chrysler and AMC engines using .904" diameter tappets for street and endurance applications.									
H-210/280	260	.0110	113	.052	.032	.420	.448	.476	.493	.904
H-218/293	270	.0100	124	.063	.039	.440	.469	.498	.516	.904
H-224/300	280	.0090	130	.070	.045	.450	.480	.510	.528	.904
H-225/320	280	.0090	136	.073	.046	.480	.512	.544	.563	.904
H-230/306	290	.0080	135	.079	.052	.459	.490	.520	.539	.904
H-230/3201	300	.0080	139	.079	.052	.480	.512	.544	.563	.904
H-235/346	290	.0080	149	.090	.059	.519	.554	.588	.609	.904
H-245/366	300	.0080	160	.111	.075	.549	.586	.622	.644	.904

H2	H2 hydraulic series created for Chrysler and AMC engines using .904" diameter tappets for street and racing applications.									
H-202/2880	274	.0040	114	.039	.023	.431	.461	.490	.507	.904
H-212/3040	284	.0040	125	.053	.032	.456	.486	.517	.535	.904
H-222/3200	294	.0040	136	.069	.044	.480	.512	.544	.563	.904
H-232/3360	304	.0040	146	.087	.058	.504	.538	.571	.591	.904
H-242/3520	314	.0040	156	.105	.073	.528	.563	.598	.620	.904
H-252/3680	324	.0040	166	.122	.089	.552	.589	.626	.648	.904
H-262/3840	334	.0040	176	.141	.107	.576	.614	.653	.676	.904

H3	H3 hydraulic series created for Chrysler and AMC engines using .904" diameter tappets for street and racing applications. More aggressive than the H2 series.									
H-212/306	268	.0040	127	.056	.030	.459	.490	.520	.538	.904
H-220/320	276	.0040	136	.068	.040	.480	.512	.544	.563	.904
H-228/334	284	.0040	145	.082	.050	.501	.534	.568	.588	.904
H-236/348	292	.0040	153	.097	.063	.522	.557	.592	.612	.904
H-244/362	300	.0040	161	.112	.075	.543	.579	.615	.637	.904
H-248/369	304	.0040	166	.119	.082	.554	.590	.627	.649	.904
H-252/376	308	.0040	170	.127	.090	.564	.602	.639	.662	.904
H-256/383	312	.0040	174	.134	.097	.575	.613	.651	.674	.904
H-260/390	316	.0040	178	.142	.104	.585	.624	.663	.686	.904

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

HYDRAULIC ROLLER PROFILES

HR1	HR1 hydraulic roller series created for high lift applications with good stability.									
HR-206/313	268	.0040	124	.047	.026	.470	.501	.532	.551	B
HR-210/319	272	.0040	128	.053	.030	.479	.510	.542	.561	B C
HR-214/325	276	.0040	132	.059	.034	.488	.520	.553	.572	B C
HR-218/332	280	.0040	137	.065	.038	.498	.531	.564	.584	B
HR-222/339	284	.0040	141	.072	.043	.509	.542	.576	.597	B C
HR-226/345	288	.0040	145	.078	.048	.518	.552	.587	.607	B C
HR-230/352	292	.0040	150	.085	.053	.528	.563	.598	.620	B C
HR-234/359	296	.0040	154	.093	.058	.539	.574	.610	.632	B C
HR-238/365	300	.0040	158	.100	.064	.548	.584	.621	.642	B C
HR-240/372	302	.0040	161	.104	.067	.558	.595	.632	.655	C
HR-242/372	304	.0040	163	.108	.070	.558	.595	.632	.655	B C
HR-242/375	306	.0040	161	.104	.070	.563	.600	.638	.660	C
HR-244/372	306	.0040	164	.112	.074	.563	.595	.632	.655	C
HR-246/372	308	.0040	166	.116	.077	.558	.595	.632	.655	B C
HR-248/372	310	.0040	167	.119	.080	.558	.595	.632	.655	C
HR-250/372	312	.0040	170	.124	.084	.558	.595	.632	.655	B
HR-254/372	316	.0040	173	.131	.091	.558	.595	.632	.655	B C
HR-258/372	320	.0040	174	.139	.098	.558	.595	.632	.655	C
HR-260/372	322	.0040	177	.143	.102	.558	.595	.632	.655	C
HR-262/372	324	.0040	179	.146	.106	.558	.595	.632	.655	B
HR-270/372	332	.0040	183	.155	.118	.558	.595	.632	.655	B
HR-278/372	340	.0040	190	.169	.132	.558	.595	.632	.655	B

HR2	HR2 hydraulic roller series used for large cubic inch high lift applications.									
HR-198/311	260	.0040	117	.041	.018	.467	.498	.529	.547	B D
HR-206/325	268	.0040	126	.047	.026	.488	.520	.553	.572	B
HR-210/332	272	.0040	131	.053	.030	.498	.531	.564	.584	B D
HR-214/339	276	.0040	135	.059	.034	.509	.542	.576	.597	B
HR-222/352	284	.0040	144	.070	.041	.528	.563	.598	.620	B
HR-230/365	292	.0040	152	.084	.052	.548	.584	.620	.642	B
HR-238/378	300	.0040	160	.099	.064	.567	.605	.643	.665	B
HR-248/391	308	.0040	170	.120	.080	.586	.626	.665	.688	C
HR-252/391	316	.0040	174	.128	.088	.586	.626	.665	.688	C

HR3	HR3 hydraulic roller series for mild performance and emissions legal camshafts using stock springs. Designed for small block and big block Chevrolet size lobes.									
HR-184/256	240	.0040	89	.022	.009	.384	.410	.435	.451	B C
HR-194/271	250	.0040	102	.032	.015	.407	.434	.461	.477	B C
HR-204/286	260	.0040	115	.044	.023	.429	.458	.486	.503	B C
HR-208/292	264	.0040	119	.050	.027	.438	.467	.496	.514	B C
HR-214/301	270	.0040	127	.059	.033	.452	.482	.512	.530	B C

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

HYDRAULIC ROLLER PROFILES

HR3	*Continued from previous page.*									
HR-220/310	276	.0040	134	.068	.039	.465	.496	.527	.546	B
HR-226/319	282	.0040	140	.079	.047	.479	.510	.542	.561	C
HR-232/328	288	.0040	146	.089	.056	.492	.525	.558	.577	C
HR-238/337	294	.0040	154	.100	.065	.506	.539	.573	.593	C

HR4	HR4 hydraulic roller series for mild performance and emissions legal camshafts using stock springs. Designed for small block Ford size lobes.									
HR-188/262	246	.0040	95	.026	.012	.393	.419	.445	.461	D
HR-198/278	256	.0040	107	.037	.018	.417	.445	.473	.489	D
HR-208/294	266	.0040	119	.050	.027	.441	.470	.500	.517	D
HR-218/310	276	.0040	131	.065	.037	.465	.496	.527	.546	D

HR6	HR6 hydraulic roller series for large displacement engines for serious performance applications, with 50 mm journal diameter.									
HR-242/400	312	.0040	162	.106	.071	.600	.640	.680	.704	C
HR-246/400	316	.0040	166	.114	.077	.600	.640	.680	.704	C
HR-250/400	320	.0040	170	.122	.083	.600	.640	.680	.704	C
HR-254/400	324	.0040	174	.130	.090	.600	.640	.680	.704	C
HR-258/4001	328	.0040	178	.138	.097	.600	.640	.680	.704	C
HR-262/400	332	.0040	182	.145	.105	.600	.640	.680	.704	C
HR-266/400	336	.0040	186	.153	.113	.600	.640	.680	.704	C
HR-270/400	340	.0040	190	.161	.120	.600	.640	.680	.704	C
HR-274/400	341	.0040	187	.156	.124	.600	.640	.680	.704	C
HR-282/400	347	.0040	195	.172	.138	.600	.640	.680	.704	C

HRBR	HRBR hydraulic roller series created for big block or similar engine applications having high rocker ratios, requiring excellent valve train stability and moderate RPM levels (up to 6500).									
HR-222/320	286	.0040	134	.066	.045			.544	.563	E
HR-226/3201	290	.0040	136	.072	.050			.544	.563	E
HR-234/354	298	.0040	151	.086	.061			.602	.623	E
HR-236/330	302	.0040	146	.087	.063			.561	.581	E
HR-236/340	302	.0040	148	.087	.063			.578	.598	E
HR-238/330	304	.0040	147	.090	.066			.561	.581	E
HR-242/350	308	.0040	154	.098	.072			.595	.616	E
HR-242/370	306	.0040	160	.100	.073			.629	.651	E
HR-258/350	324	.0040	168	.125	.097			.595	.616	E
HR-262/350	328	.0040	172	.132	.103			.595	.616	E
HR-264/314	326	.0040	163	.136	.106			.534	.553	D
HR-264/350	330	.0040	173	.136	.107			.595	.616	E
HR-264/420	328	.0040	184	.145	.112			.714	.739	C
HR-268/350	334	.0040	176	.143	.114			.595	.616	E
HR-272/420	336	.0040	191	.161	.127			.714	.739	C

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

HYDRAULIC ROLLER PROFILES

HIR	HIR hydraulic roller series created for very aggressive high lift applications. Designed for small block size lobes with an inverted flank area. Not recommended for high RPM applications.									
HIR-182/2734	238	.0040	98	.020	.009	.410	.437	.465	.481	B
HIR-190/2867	246	.0040	108	.028	.013	.430	.459	.487	.505	B
HIR-194/2934	250	.0040	112	.032	.016	.440	.475	.504	.522	B
HIR-198/3000	254	.0040	117	.037	.018	.450	.480	.510	.528	B
HIR-202/3067	258	.0040	122	.042	.022	.460	.491	.521	.540	B
HIR-206/3134	262	.0040	126	.047	.025	.470	.501	.533	.552	B
HIR-210/3200	266	.0040	131	.053	.029	.480	.512	.544	.563	B
HIR-214/3267	270	.0040	135	.059	.033	.490	.523	.555	.575	B
HIR-218/3334	274	.0040	140	.066	.037	.500	.533	.567	.587	B
HIR-222/3400	278	.0040	144	.073	.042	.510	.544	.578	.598	B
HIR-226/3467	282	.0040	149	.080	.047	.520	.555	.589	.610	B
HIR-230/3534	286	.0040	153	.088	.053	.530	.565	.601	.622	B
HIR-234/3600	290	.0040	157	.095	.059	.540	.576	.612	.634	B
HIR-238/3667	294	.0040	161	.104	.065	.550	.587	.623	.645	B
HIR-242/3735	298	.0040	166	.112	.071	.560	.598	.635	.657	B
HIR-246/3800	304	.0040	167	.116	.079	.570	.608	.646	.669	B
HIR-250/3867	306	.0040	174	.129	.085	.580	.619	.657	.681	B
HIR-254/3867	310	.0040	177	.136	.093	.580	.619	.657	.681	B
HIR-260/3867	316	.0040	182	.148	.104	.580	.619	.657	.681	B
HIR-270/3867	326	.0040	190	.165	.123	.580	.619	.657	.681	B

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.80	SEE PAGE 3

APPLICATION SPECIFIC LT4 AND VORTEC HYDRAULIC ROLLER PROFILES

These profiles may be used in other applications. Consult with the Crane Cams technical staff for recommendations.

HRL4	Chevrolet small block V8 with LT4 heads, HRL4 hydraulic roller series, for applications having limited valve travel.									
HR-238/350	302	.0040	155	.097	.064	.525	.560			B
HR-244/350	308	.0040	160	.109	.074	.525	.560			B
HR-250/350	314	.0040	164	.120	.083	.525	.560			B

HRCV	Chevrolet Vortec 350, HRCV hydraulic roller series, with .475" maximum lift rules.									
HR-214/316	276	.0040	130	.058	.034	.474				B
HR-224/316	286	.0040	137	.074	.046	.474				B

HYDRAULIC ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.80	SEE PAGE 3

CHEVROLET LS ENGINE FAMILY HYDRAULIC ROLLER PROFILES

LSHR1 — Chevrolet LS V8, LSHR1 hydraulic roller series, used in applications using stock valve springs and standard rocker arm ratio.

HR-200/292	262	.0040	114	.039	.021			.496		F
HR-200/294	258	.0040	112	.040	.020			.500		F
HR-206/294	270	.0040	118	.047	.026			.500		F
HR-208/2941	272	.0040	119	.049	.028			.500		F
HR-214/294	278	.0040	123	.058	.034			.500		F
HR-216/294	280	.0040	124	.061	.036			.500		F

LSHR2 — Chevrolet LS V8, LSHR2 hydraulic roller series, with increased ramp rates and more area under the curve.

HR-204/324	264	.0040	126	.044	.023			.551	.583	F
HR-208/312	276	.0040	121	.050	.030			.530	.562	F
HR-210/312	272	.0040	127	.052	.029			.530	.562	F
HR-212/324	272	.0040	132	.055	.031			.551	.583	F
HR-216/312	284	.0040	128	.060	.037			.530	.562	F
HR-216/324	278	.0040	134	.061	.036			.551	.583	F
HR-218/324	280	.0040	135	.065	.038			.551	.583	F
HR-222/312	284	.0040	135	.071	.043			.530	.562	F
HR-222/324	284	.0040	138	.071	.043			.551	.583	F
HR-228/324	290	.0040	143	.081	.051			.551	.583	F
HR-232/350	288	.0040	153	.085	.060			.595	.630	F
HR-234/324	296	.0040	147	.092	.059			.551	.583	F
HR-236/352	292	.0040	156	.093	.067			.598	.634	F
HR-237/355	293	.0040	157	.095	.068			.604	.639	F
HR-238/324	300	.0040	149	.098	.065			.551	.583	F
HR-242/3585	298	.0040	162	.105	.077			.609	.645	F
HR-250/341	314	.0040	161	.117	.082			.580	.614	F
HR-256/350	312	.0040	171	.130	.101			.595	.630	F
HR-258/341	322	.0040	167	.131	.095			.580	.614	F

LSHR3 — Chevrolet LS V8, LSHR3 hydraulic roller series,used in applications requiring stable and quiet valve control.

HR-194/295	254	.0040	110	.031	.016			.502	.531	F
HR-200/295	262	.0040	114	.039	.020			.502	.531	F
HR-200/2951	262	.0040	114	.039	.020			.502	.531	F
HR-208/2951	270	.0040	119	.049	.027			.502	.531	F
HR-210/3121	272	.0040	126	.052	.029			.530	.562	F
HR-210/3241	272	.0040	129	.052	.029			.551	.583	F
HR-214/344	275	.0040	138	.059	.033			.585	.619	F
HR-216/3241	278	.0040	133	.061	.035			.551	.583	F
HR-216/344	277	.0040	139	.062	.035			.585	.619	F
HR-218/3121	280	.0040	131	.064	.038			.530	.562	F

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.80	SEE PAGE 3

CHEVROLET LS ENGINE FAMILY HYDRAULIC ROLLER PROFILES

LSHR3 *Continued from previous page.*

HR-220/3241	282	.0040	136	.068	.040			.551	.583	F
HR-220/3333	281	.0040	140	.068	.040			.567	.600	F
HR-222/3241	284	.0040	137	.071	.041			.551	.583	F
HR-222/344	283	.0040	144	.072	.041			.585	.619	F
HR-224/3241	286	.0040	139	.074	.045			.551	.583	F
HR-224/344	285	.0040	146	.075	.045			.585	.619	F
HR-228/3241	290	.0040	142	.081	.049			.551	.583	F
HR-228/3333	289	.0040	146	.081	.049			.567	.600	F
HR-228/344	287	.0040	149	.082	.049			.585	.619	F
HR-228/353	290	.0040	149	.082	.051			.600	.635	F
HR-232/3241	294	.0040	145	.088	.055			.551	.583	F
HR-232/353	294	.0040	152	.089	.056			.600	.635	F
HR-236/3241	298	.0040	148	.095	.062			.551	.583	F
HR-236/353	298	.0040	155	.096	.062			.600	.635	F
HR-238/3333	299	.0040	153	.100	.066			.567	.600	F
HR-240/3241	302	.0040	150	.102	.068			.551	.583	F
HR-240/353	302	.0040	158	.104	.068			.600	.635	F
HR-246/353	308	.0040	162	.115	.078			.600	.635	F

LSHS347 **Chevrolet LS V8, LSHS347 hydraulic roller series, used in high speed performance applications.**

HR-216/347	273	.0040	140	.058	.038			.590	.625	F
HR-218/347	275	.0040	141	.061	.041			.590	.625	F
HR-220/347	276	.0040	143	.064	.043			.590	.625	F
HR-222/347	278	.0040	144	.067	.046			.590	.625	F
HR-224/3441	279	.0040	145	.071	.049			.585	.619	F
HR-224/347	280	.0040	146	.071	.049			.590	.625	F
HR-226/347	282	.0040	148	.074	.051			.590	.625	F
HR-228/347	283	.0040	149	.078	.054			.590	.625	F
HR-230/347	285	.0040	150	.082	.057			.590	.625	F
HR-232/347	287	.0040	152	.085	.060			.590	.625	F
HR-234/347	289	.0040	154	.089	.064			.590	.625	F
HR-236/347	291	.0040	155	.093	.067			.590	.625	F
HR-238/347	293	.0040	157	.097	.070			.590	.625	F
HR-240/347	295	.0040	158	.100	.074			.590	.625	F
HR-242/347	297	.0040	160	.104	.077			.590	.625	F
HR-244/347	299	.0040	161	.108	.080			.590	.625	F
HR-246/347	300	.0040	163	.112	.084			.590	.625	F
HR-248/347	302	.0040	164	.115	.088			.590	.625	F
HR-250/347	304	.0040	166	.119	.091			.590	.625	F
HR-252/347	308	.0040	167	.123	.094			.590	.625	F

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.80	SEE PAGE 3

CHEVROLET LS ENGINE FAMILY HYDRAULIC ROLLER PROFILES

LSHS367 — Chevrolet LS V8, LSHS367 hydraulic roller series, used in high speed performance applications requiring more lift.

HR-216/367	272	.0040	143	.058	.038			.624	.661	F
HR-218/367	274	.0040	145	.061	.041			.624	.661	F
HR-220/367	276	.0040	146	.064	.043			.624	.661	F
HR-222/367	278	.0040	148	.067	.046			.624	.661	F
HR-224/367	280	.0040	149	.071	.049			.624	.661	F
HR-226/367	283	.0040	151	.074	.051			.624	.661	F
HR-228/367	285	.0040	152	.078	.054			.624	.661	F
HR-230/367	287	.0040	154	.082	.057			.624	.661	F
HR-232/367	289	.0040	156	.086	.060			.624	.661	F
HR-234/367	291	.0040	158	.089	.063			.624	.661	F
HR-236/367	293	.0040	159	.093	.067			.624	.661	F
HR-238/367	295	.0040	160	.097	.070			.624	.661	F
HR-240/367	297	.0040	162	.101	.073			.624	.661	F
HR-242/367	299	.0040	164	.105	.077			.624	.661	F
HR-244/367	301	.0040	165	.109	.080			.624	.661	F
HR-246/367	303	.0040	167	.113	.084			.624	.661	F
HR-248/367	305	.0040	168	.117	.087			.624	.661	F
HR-250/367	307	.0040	170	.121	.091			.624	.661	F
HR-252/367	309	.0040	171	.125	.094			.624	.661	F
HR-254/367	311	.0040	173	.129	.098			.624	.661	F
HR-256/367	313	.0040	174	.133	.102			.624	.661	F
HR-258/367	315	.0040	176	.136	.105			.624	.661	F
HR-260/367	317	.0040	177	.140	.109			.624	.661	F
HR-262/367	319	.0040	179	.143	.113			.624	.661	F
HR-264/367	321	.0040	180	.147	.116			.624	.661	F
HR-266/367	323	.0040	182	.150	.120			.624	.661	F
HR-268/367	325	.0040	183	.154	.123			.624	.661	F
HR-270/367	327	.0040	185	.157	.126			.624	.661	F
HR-272/367	329	.0040	187	.160	.130			.624	.661	F

LSHS382 — Chevrolet LS V8, LSHS382 hydraulic roller series, used in high speed performance applications requiring .650" lift with 1.7 rockers.

HR-220/382	276	.0040	148	.069	.041			.649	.688	F
HR-230/382	287	.0040	156	.079	.057			.649	.688	F
HR-240/382	297	.0040	164	.102	.073			.649	.688	F

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

CNG POWERED INDUSTRIAL HYDRAULIC ROLLER PROFILES

HRNG — Chevrolet 454-502 and 8.1L V8, HRNG hydraulic roller series, used in CNG powered industrial applications.

HR-160/190	228	.0040	—	.007	.005			.323		C
HR-170/165	245	.0040	—	.017	.009			.281		C
HR-170/190	238	.0040	—	.013	.007			.323		C
HR-180/165	255	.0040	—	.024	.014			.281		C
HR-180/190	248	.0040	—	.020	.011			.323		C
HR-190/165	265	.0040	—	.032	.019			.281		C
HR-200/165	275	.0040	—	.042	.026			.281		C

CHRYSLER 5.7–6.12 GEN3 HEMI HYDRAULIC ROLLER PROFILES

HRH1 — Chrysler 5.7–6.1L Hemi V8, HRH1 hydraulic roller series, with 57 mm journal diameter.

HR-208/297	268	.0040	121	.022	.029			.505		J
HR-210/3236	268	.0040	131	.052	.028			.550		J
HR-214/297	274	.0040	125	.054	.036			.505		J
HR-216/3236	274	.0040	136	.062	.035			.550		J
HR-222/3236	280	.0040	140	.072	.042			.550		J
HR-228/3236	286	.0040	145	.083	.051			.550		J

CHEVROLET SMALL BLOCK TOP STOCK HYDRAULIC ROLLER PROFILES

HR7 — IHRA Top Stock, HR7 hydraulic roller series, for restricted lift applications.

HR-260/330	316	.0040	174	.139	.102	.495	.528	.561	.581	B
HR-264/330	320	.0040	178	.147	.109	.495	.528	.561	.581	B
HR-268/330	324	.0040	182	.155	.117	.495	.528	.561	.581	B
HR-272/330	328	.0040	186	.162	.124	.495	.528	.561	.581	B
HR-276/330	332	.0040	191	.169	.132	.495	.528	.561	.581	B

MECHANICAL FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

MECHANICAL FLAT TAPPET PROFILES

F1 — F1 mechanical series created for oval track and marine engines with higher rocker ratios, such as the big block Chevrolet, where stable upper RPM valve motion is required. Recommended lash is .026".

F-236/3177	272	.0200	138	.082	.064	.477	.508	.540	.559	.842
F-246/3294	282	.0200	149	.098	.077	.494	.527	.560	.580	.842
F-256/3412	292	.0200	159	.115	.092	.512	.546	.580	.601	.842
F-266/3528	302	.0200	169	.131	.107	.529	.564	.600	.621	.842
F-276/3648	312	.0200	179	.148	.121	.547	.584	.620	.642	.842
F-286/3765	322	.0200	189	.165	.137	.565	.602	.640	.663	.842

F2 — F2 mechanical series created for street use and mid-range torque applications. Recommended lash is .022".

F-198/270	260	.0140	102	.038	.023	.405	.432	.459	.475	.842
F-218/2933	280	.0140	122	.064	.038	.440	.469	.499	.516	.842
F-228/3067	290	.0140	134	.079	.050	.460	.491	.521	.540	.842
F-238/3200	300	.0140	144	.094	.063	.480	.512	.544	.563	.842
F-248/3334	310	.0140	155	.111	.078	.500	.533	.567	.587	.842
F-258/3468	320	.0140	165	.128	.092	.520	.555	.590	.610	.842

F3 — F3 mechanical series created for racing applicatios with stable valve control. This series has an excellent racing history. Designed to make full use of .842" diameter tappets. Recommended lash is .026".

F-244/3454	280	.0200	152	.104	.072	.518	.553	.587	.608	.842
F-248/3514	284	.0200	156	.111	.078	.527	.562	.597	.618	.842
F-252/3574	288	.0200	160	.118	.084	.536	.572	.608	.629	.842
F-256/3634	292	.0200	164	.124	.091	.545	.581	.618	.640	.842
F-260/3694	296	.0200	169	.132	.097	.554	.591	.628	.650	.842
F-264/3754	300	.0200	172	.139	.104	.563	.601	.638	.661	.842
F-268/3814	304	.0200	177	.147	.109	.572	.610	.648	.671	.842
F-272/3874	308	.0200	180	.153	.117	.581	.620	.659	.682	.842
F-276/3934	312	.0200	184	.158	.124	.590	.629	.669	.692	.842
F-280/3994	316	.0200	189	.166	.132	.599	.639	.679	.703	.842
F-284/4054	320	.0200	192	.174	.139	.608	.649	.689	.714	.842
F-288/4114	324	.0200	196	.181	.145	.617	.658	.699	.724	.842

TLF1 — TLF mechanical series created for oval track racing. Designed to make full use of .842" diameter tappets. Recommended lash is .012".

F-246/3467	282	.0160	155	.109	.076	.520	.555	.589	.610	.842
F-250/3534	286	.0160	159	.116	.082	.530	.565	.601	.622	.842
F-254/3600	290	.0160	163	.123	.087	.540	.576	.612	.634	.842
F-258/3667	294	.0160	167	.130	.094	.550	.587	.623	.645	.842
F-262/3734	298	.0160	171	.137	.100	.560	.597	.635	.657	.842
F-264/3767	300	.0160	173	.141	.104	.565	.603	.640	.663	.842
F-266/3800	302	.0160	175	.144	.107	.570	.608	.646	.669	.842
F-270/3867	306	.0160	179	.151	.114	.580	.619	.657	.681	.842

Continued on next page.

MECHANICAL FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

MECHANICAL FLAT TAPPET PROFILES

TLF1 *Continued from previous page.*

F-274/3934	310	.0160	183	.158	.121	.590	.629	.669	.692	.842
F-278/4001	314	.0160	187	.165	.128	.600	.640	.680	.704	.842
F-282/4067	318	.0160	191	.172	.135	.610	.651	.691	.716	.842

F13 F13 mechanical series created for racing mechanical flat tappet. Designed to make full use of .842" diameter tappets. Recommended lash is .014" to .016".

F-234/332	259	.0200	146	.092	.059	.498	.531	.564	.584	.842
F-236/3355	261	.0200	148	.096	.062	.503	.537	.570	.590	.842
F-238/339	263	.0200	150	.099	.066	.509	.542	.576	.597	.842
F-240/3425	265	.0200	152	.103	.069	.514	.548	.582	.603	.842
F-242/346	267	.0200	154	.106	.072	.519	.554	.588	.609	.842
F-244/3495	269	.0200	156	.110	.075	.524	.559	.594	.615	.842
F-246/353	271	.0200	158	.113	.079	.529	.565	.600	.621	.842
F-248/3565	273	.0200	160	.117	.082	.535	.570	.606	.627	.842
F-250/3601	275	.0200	162	.120	.085	.540	.576	.612	.634	.842
F-252/3635	277	.0200	164	.124	.089	.545	.582	.618	.640	.842
F-254/367	279	.0200	166	.127	.092	.550	.587	.624	.646	.842
F-256/370	281	.0200	168	.129	.094	.555	.592	.629	.651	.842
F-258/374	283	.0200	170	.134	.099	.561	.598	.636	.658	.842
F-260/3775	285	.0200	172	.138	.103	.566	.604	.642	.664	.842
F-262/381	287	.0200	174	.141	.106	.572	.610	.648	.670	.842
F-264/3845	289	.0200	176	.145	.110	.577	.615	.654	.677	.842
F-266/388	291	.0200	178	.147	.112	.582	.621	.660	.683	.842
F-268/3915	293	.0200	180	.152	.117	.587	.626	.666	.689	.842
F-270/395	295	.0200	182	.155	.120	.593	.632	.672	.695	.842
F-274/402	299	.0200	186	.161	.129	.603	.643	.683	.708	.842

FIT842 FIT842 mechanical series created for racing mechanical flat tappet. Designed to make full use of .842" diameter tappets. High ratio rocker arms advised. Recommended lash is .020" to .022".

F-254/372	283	.0200	166	.120	.092	.558	.595	.632	.655	.842
F-256/3401	285	.0020	164	.122	.094	.510	.544	.578	.599	.842
F-258/379	287	.0020	170	.127	.098	.569	.606	.644	.667	.842
F-260/3401	289	.0020	167	.130	.101	.510	.544	.578	.599	.842
F-262/350	297	.0020	164	.122	.097	.525	.560	.595	.616	.842
F-266/3552	301	.0020	168	.129	.103	.533	.568	.604	.625	.842

FC18 FC18 mechanical series created for racing mechanical flat tappet. Designed to make full use of .842" diameter tappets, using 1.8 rocker arm ratios. Recommended lash is .020" to .022".

									1.8	
F-238/310	270	.0200	141	.091	.062				.558	.842
F-248/310	280	.0200	148	.107	.076				.558	.842
F-250/325	282	.0200	154	.110	.079				.585	.842

Continued on next page.

MECHANICAL FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

MECHANICAL FLAT TAPPET PROFILES

FC18 *Continued from previous page.*

									1.8	
F-254/330	286	.0200	158	.117	.084				.594	.842
F-262/340	294	.0200	166	.131	.097				.612	.842

F4 — F4 mechanical series created for NASCAR® racing applications. This series has an excellent racing history. Designed to make full use of .875" diameter tappets. Recommended lash is .018".

F-262/3851	298	.0200	174	.137	.101	.578	.616	.655	.678	.875
F-264/388	300	.0200	176	.141	.105	.582	.621	.660	.683	.875
F-266/391	302	.0200	178	.144	.108	.587	.626	.665	.688	.875
F-268/394	304	.0200	180	.149	.112	.591	.630	.670	.693	.875
F-270/397	306	.0200	182	.152	.115	.596	.635	.675	.699	.875
F-272/400	308	.0200	184	.156	.118	.600	.640	.680	.704	.875
F-274/403	310	.0200	186	.159	.122	.605	.645	.685	.709	.875
F-276/406	312	.0200	188	.163	.126	.609	.650	.690	.715	.875
F-278/409	314	.0200	190	.167	.130	.614	.654	.695	.720	.875
F-280/4125	316	.0200	192	.171	.133	.619	.660	.701	.726	.875
F-284/4125	320	.0200	196	.179	.141	.619	.660	.701	.726	.875
F-286/4125	322	.0200	198	.182	.144	.619	.660	.701	.726	.875

F5 — F5 mechanical series created for NASCAR® racing applications. Designed to make full use of .875" diameter tappets. Recommended lash is .018".

F-246/370	278	.0200	158	.109	.076	.555	.592	.629	.651	.875
F-250/376	282	.0200	162	.116	.082	.564	.602	.639	.662	.875
F-254/382	286	.0200	166	.123	.088	.573	.611	.649	.672	.875
F-258/388	290	.0200	170	.130	.095	.582	.621	.660	.683	.875
F-260/391	292	.0200	172	.134	.098	.587	.626	.665	.688	.875
F-262/394	294	.0200	174	.137	.102	.591	.630	.670	.693	.875
F-264/397	296	.0200	176	.141	.105	.596	.635	.675	.699	.875
F-266/400	298	.0200	178	.145	.109	.600	.640	.680	.704	.875
F-268/403	300	.0200	180	.148	.112	.605	.645	.685	.709	.875
F-270/406	302	.0200	182	.152	.116	.609	.650	.690	.715	.875
F-272/409	304	.0200	184	.156	.119	.614	.654	.695	.720	.875
F-274/412	306	.0200	186	.159	.123	.618	.659	.700	.725	.875
F-276/415	308	.0200	188	.163	.126	.623	.664	.706	.730	.875
F-278/4181	310	.0200	190	.167	.130	.627	.669	.711	.736	.875
F-280/421	312	.0200	192	.170	.134	.632	.674	.716	.741	.875
F-286/430	318	.0200	198	.181	.145	.645	.688	.731	.757	.875

TLF2 — TLF2 mechanical series created for NASCAR® racing applications. Designed to make full use of .875" diameter tappets. Recommended lash is .012".

F-258/3642	294	.0160	170	.133	.094	.546	.583	.619	.641	.875
F-260/3821	296	.0160	172	.136	.098	.573	.611	.650	.672	.875

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

MECHANICAL FLAT TAPPET PROFILES

TLF2 *Continued from previous page.*

F-262/3642	298	.0160	174	.140	.101	.546	.583	.619	.641	.875
F-264/3881	300	.0160	176	.144	.104	.582	.621	.660	.683	.875
F-266/3911	302	.0160	178	.147	.108	.587	.626	.665	.688	.875
F-268/3700	304	.0160	180	.151	.111	.555	.592	.629	.651	.875
F-268/3941	304	.0160	180	.151	.111	.591	.631	.670	.694	.875
F-270/3700	306	.0160	182	.155	.114	.555	.592	.629	.651	.875
F-270/3975	306	.0160	182	.155	.114	.596	.636	.676	.700	.875
F-272/4001	308	.0160	183	.158	.118	.600	.640	.680	.704	.875
F-274/4032	310	.0160	186	.162	.122	.605	.645	.685	.710	.875
F-276/4063	312	.0160	188	.166	.125	.609	.650	.691	.715	.875
F-278/4063	314	.0160	190	.170	.129	.609	.650	.691	.715	.875
F-280/4063	316	.0160	192	.173	.132	.609	.650	.691	.715	.875
F-282/4063	318	.0160	194	.177	.136	.609	.650	.691	.715	.875
F-284/4188	320	.0160	196	.181	.140	.628	.670	.712	.737	.875
F-286/4063	322	.0160	198	.184	.143	.609	.650	.691	.715	.875
F-288/4250	324	.0160	200	.188	.147	.638	.680	.723	.748	.875

F6 **F6 mechanical series is designed for unrestricted NASCAR® engines with 50 mm cam journals, using 1.8 rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.**

									1.8	
F-270/376	304	.0200	176	.142	.108				.677	.875
F-274/384	308	.0200	180	.150	.115				.691	.875
F-278/392	312	.0200	184	.157	.121				.706	.875

F7 **F7 mechanical series is designed for unrestricted NASCAR® engines with 50 mm cam journals, using 1.9 rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.**

									1.9	
F-259/353	294	.0200	164	.120	.090				.671	.875
F-263/359	298	.0200	168	.127	.096				.682	.875
F-265/362	300	.0200	170	.130	.099				.688	.875
F-267/365	302	.0200	172	.134	.102				.694	.875
F-269/368	304	.0200	174	.137	.105				.699	.875
F-271/371	306	.0200	176	.141	.108				.705	.875
F-273/374	308	.0200	178	.145	.111				.711	.875
F-275/377	310	.0200	180	.149	.115				.716	.875
F-277/380	312	.0200	182	.152	.118				.722	.875
F-279/383	314	.0200	184	.156	.121				.728	.875
F-281/386	316	.0200	186	.160	.125				.733	.875
F-283/389	318	.0200	188	.163	.128				.739	.875
F-285/392	320	.0200	190	.167	.131				.745	.875

MECHANICAL FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

MECHANICAL FLAT TAPPET PROFILES

F10 — F10 mechanical series is designed for unrestricted NASCAR® engines with 50 mm cam journals, using 1.8 rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.

									1.8	
F-270/392	302	.0200	177	.145	.110				.706	.875
F-272/3981	304	.0200	180	.149	.113				.717	.875
F-274/404	306	.0200	183	.153	.117				.727	.875
F-276/4103	308	.0200	185	.157	.120				.739	.875
F-278/4101	311	.0200	185	.158	.121				.738	.875
F-280/4102	314	.0200	185	.158	.122				.738	.875
F-286/428	319	.0020	194	.173	.136				.770	.875
F-288/432	321	.0020	195	.177	.139				.778	.875

FN55 — FN55 mechanical series is designed for unrestricted NASCAR® engines with 55 mm cam journals, using high rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.

									1.9	1.95	
F-270/4061	320	.0020	178	.146	.110				.772	.792	.875
F-274/415	306	.0020	183	.154	.117				.789	.809	.875
F-278/428	311	.0020	186	.158	.121				.813	.835	.875
F-280/428	313	.0020	187	.162	.125				.813	.835	.875
F-284/4281	317	.0020	194	.169	.132				.813	.835	.875

F8 — F8 mechanical series designed for restricted NASCAR® engines with 50 mm cam journals, using 2.0 rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.

									2.0	
F-232/330	264	.0200	140	.082	.055				.660	.875
F-238/336	270	.0200	146	.091	.062				.672	.875
F-242/340	274	.0200	150	.098	.068				.680	.875
F-246/344	278	.0200	154	.104	.073				.688	.875
F-258/356	290	.0200	166	.125	.091				.712	.875

F9 — F9 mechanical series designed for restricted NASCAR® engines with 50 mm cam journals, using 1.8 rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.

									1.8	
F-234/310	266	.0200	138	.080	.060				.558	.875
F-240/348	272	.0200	148	.094	.065				.626	.875
F-244/354	276	.0200	152	.100	.070				.637	.875
F-248/3601	280	.0200	157	.107	.076				.648	.875
F-252/366	284	.0200	161	.114	.081				.659	.875
F-264/384	296	.0200	173	.135	.100				.691	.875

MECHANICAL FLAT TAPPET PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

MECHANICAL FLAT TAPPET PROFILES

F11 — F11 mechanical series created for Chrysler and AMC engines using .904" diameter tappets for street and mid-range torque applications. Recommended lash is .028" to .030".

F-228/3334	264	.0200	140	.078	.050	.500	.533	.567	.587	.904
F-238/3467	274	.0200	148	.093	.063	.520	.555	.589	.610	.904
F-248/3600	284	.0200	158	.110	.077	.540	.576	.612	.634	.904

F904 — F904 mechanical series created for Chrysler and AMC engines using .904" diameter tappets with stable valve motion for conservative performance and endurance racing applications. Recommended lash is .022" intake and .026" exhaust.

F-255/370	296	.0200	163	.115	.083	.555	.592	.629	.651	.904
F-265/385	306	.0200	173	.135	.101	.578	.616	.655	.678	.904
F-275/400	316	.0200	183	.155	.119	.600	.640	.680	.704	.904
F-285/410	326	.0200	193	.173	.137	.615	.656	.697	.722	.904
F-295/410	336	.0200	203	.191	.154	.615	.656	.697	.722	.904
F-305/410	346	.0200	212	.208	.172	.615	.656	.697	.722	.904

F904A — F904A mechanical series created for Chrysler and AMC engines using .904" diameter tappets with stable valve motion for racing applications.

F-258/3734	294	.0200	168	.127	.093	.560	.597	.635	.657	.904
F-268/3867	306	.0200	176	.142	.107	.580	.619	.657	.681	.904
F-278/4000	316	.0200	185	.158	.121	.600	.640	.680	.704	.904
F-288/4133	326	.0200	195	.176	.140	.620	.661	.703	.727	.904
F-298/4133	330	.0200	204	.194	.156	.620	.661	.703	.727	.904

F12 — F12 mechanical series created for Chrysler and AMC engines using .904" diameter tappets for racing applications. Recommended lash is .026".

F-248/3602	284	.0200	156	.104	.080	.540	.576	.612	.634	.904
F-258/3735	294	.0200	166	.119	.097	.560	.598	.635	.657	.904
F-268/3868	304	.0200	177	.137	.113	.580	.619	.658	.681	.904
F-278/4002	314	.0200	186	.155	.130	.600	.640	.680	.704	.904
F-288/4134	324	.0200	196	.173	.147	.620	.661	.703	.728	.904

NOPOP1 — NOPOP1 mechanical series originally created for Chrysler Hemi fuel drag race applications. Recommended lash is .028".

F-292/398	332	.0162	200	.184	.150	.597	.637	.677	.700	.904
F-298/414	338	.0162	206	.194	.161	.621	.662	.704	.729	.904
F-304/414	344	.0162	212	.206	.172	.621	.662	.704	.729	.904

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

SR	SR Street Roller series created for late model engines running mechanical rollers requiring quiet valve train operation, due to monitoring by knock sensors. Recommended lash is .020".									
SR-212/314	262	.0150	123	.055	.034	.471	.502	.534	.553	B
SR-220/326	270	.0150	132	.066	.041	.489	.522	.554	.574	B
SR-228/338	278	.0150	140	.077	.050	.507	.541	.575	.595	B
SR-236/350	286	.0150	149	.090	.060	.525	.560	.595	.616	B
SR-240/356	290	.0150	153	.097	.065	.534	.570	.605	.627	B
SR-244/362	294	.0150	157	.104	.071	.543	.579	.615	.637	B
SR-248/368	298	.0150	162	.111	.078	.552	.589	.626	.648	B
SR-250/374	300	.0150	164	.115	.081	.561	.598	.636	.658	B
SR-252/374	302	.0150	166	.118	.084	.561	.598	.636	.658	B
SR-254/374	304	.0150	168	.122	.087	.561	.598	.636	.658	B
SR-256/374	306	.0150	169	.126	.090	.561	.598	.636	.658	B
SR-260/374	310	.0150	172	.133	.097	.561	.598	.636	.658	B
SR-262/374	312	.0150	174	.136	.100	.561	.598	.636	.658	B
SR-264/374	314	.0150	176	.140	.104	.561	.598	.636	.658	B
SR-268/374	318	.0150	179	.147	.111	.561	.598	.636	.658	B
SR-270/374	320	.0150	182	.150	.114	.561	.598	.636	.658	B
SR-274/374	324	.0150	185	.157	.121	.561	.598	.636	.658	B
SR400	**SR400 Street Roller .400" lift series for mechanical rollers in serious street and marine performance applications. Recommended lash is .020" intake and .022" exhaust.**									
SR-236/400	274	.0200	157	.089	.060	.600	.640	.680	.704	B
SR-240/400	278	.0200	159	.096	.066	.600	.640	.680	.704	B
SR-244/400	282	.0200	163	.103	.070	.600	.640	.680	.704	B
SR-248/400	286	.0200	167	.111	.076	.600	.640	.680	.704	B
SR-252/400	290	.0200	170	.119	.082	.600	.640	.680	.704	B
SR-256/400	294	.0200	174	.127	.089	.600	.640	.680	.704	B
SR-258/400	296	.0200	176	.131	.093	.600	.640	.680	.704	B
SR-260/400	298	.0200	178	.135	.097	.600	.640	.680	.704	B
SR-264/400	302	.0200	182	.143	.104	.600	.640	.680	.704	B
CDS	**CDS Cam Dynamics roller series created for oval track and endurance racing applications. Gentle valve motion with a proven history. Recommended lash is .030".**									
R-250/395	287	.0200	164	.112	.079	.593	.632	.672	.467	B
R-252/395	289	.0200	167	.117	.082	.593	.632	.672	.467	C
R-255/395	292	.0200	169	.121	.087	.593	.632	.672	.467	B
R-257/395	294	.0200	172	.126	.090	.593	.632	.672	.467	C
R-260/395	297	.0200	173	.132	.094	.593	.632	.672	.467	B
R-265/395	302	.0200	178	.140	.103	.593	.632	.672	.467	B
R-270/400	307	.0200	181	.148	.112	.600	.640	.680	.704	B
R-275/3987	315	.0200	182	.152	.116	.598	.638	.678	.702	B
R-280/400	320	.0200	188	.161	.125	.600	.640	.680	.704	B

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

CDS	*Continued from previous page.*									
R-285/4194	325	.0200	194	.172	.134	.629	.671	.713	.738	B
R-290/4200	330	.0200	200	.178	.143	.630	.672	.714	.739	B

TR	**TR Track Roller series created for oval track and endurance racing applications with a proven history. A benchmark from which other cams are measured. Recommended lash is .022".**									
TR-242/3867	282	.0195	158	.094	.071	.580	.619	.657	.681	B
TR-250/400	290	.0195	166	.110	.082	.600	.640	.680	.704	B
TR-252/4036	286	.0200	171	.117	.089	.605	.646	.686	.710	C
TR-256/4167	296	.0195	171	.123	.093	.625	.667	.708	.733	B
TR-260/4167	300	.0195	175	.129	.099	.625	.667	.708	.733	B
TR-260/4200	294	.0200	179	.134	.104	.630	.672	.714	.739	B
TR-262/4036	296	.0200	181	.137	.107	.605	.646	.686	.710	C
TR-266/4167	306	.0195	181	.141	.108	.625	.667	.708	.733	B
TR-270/4167	310	.0195	185	.152	.116	.625	.667	.708	.733	B
TR-270/4200	304	.0020	189	.155	.120	.630	.672	.714	.739	B
TR-274/410	314	.0195	186	.156	.117	.615	.656	.697	.722	C
TR-276/4167	316	.0195	191	.162	.126	.625	.667	.708	.733	B
TR-276/4200	310	.0200	195	.170	.132	.630	.672	.714	.739	B
TR-280/4167	320	.0195	194	.166	.134	.625	.667	.708	.733	B
TR-282/4200	316	.0200	200	.183	.144	.630	.672	.714	.739	B
TR-286/4167	326	.0195	200	.179	.142	.625	.667	.708	.733	B

395	**395 Roller series created for oval track and endurance racing applications with 55 mm journals, usually with 1.6, and up to 2.0, rocker arm ratios. Easy on valve springs. Recommended lash is .020" intake and .022" exhaust.**									
R-252/3951	284	.0200	169	.117	.088	.593	.632	.672	.695	F
R-256/395	288	.0200	173	.125	.094	.593	.632	.672	.695	F
R-262/395	296	.0200	174	.129	.100	.593	.632	.672	.695	F
R-264/395	298	.0200	175	.132	.103	.593	.632	.672	.695	F
R-268/395	302	.0200	178	.138	.109	.593	.632	.672	.695	F

400	**400 roller series created for oval track and endurance racing applications with 2.036" journals, usually with 1.6 or higher rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.**									
R-240/400	272	.0200	159	.092	.072	.600	.640	.680	.704	D
R-244/400	276	.0200	163	.099	.078	.600	.640	.680	.704	D
R-248/400	280	.0200	166	.107	.084	.600	.640	.680	.704	D
R-252/400	284	.0200	170	.138	.109	.600	.640	.680	.704	D

405	**405 roller series created for oval track and endurance racing applications with 55 mm journals, usually with 1.6 or higher rocker arm ratios. Recommended lash is .020" intake and .022" exhaust.**									
R-258/4051	290	.0200	177	.131	.099	.608	.648	.689	.713	E G
R-264/4051	296	.0200	182	.142	.112	.608	.648	.689	.713	E
R-266/405	298	.0200	184	.148	.116	.608	.648	.689	.713	E

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

415 — 415 roller series created for oval track and endurance racing applications with 50 mm journals. Recommended lash is .020" intake and .024" exhaust.

R-266/415	300	.0200	180	.138	.108	.623	.664	.707	.730	C	
R-270/415	304	.0200	183	.144	.114	.623	.664	.707	.730	C	
R-276/415	310	.0200	187	.154	.124	.623	.664	.707	.730	C	

420 — 420 roller series created for oval track racing applications including sprint cars, and endurance applications, up to 8,200 RPM. Proven performance and reliability. Recommended lash is .020", allowing for a tight cold setting on aluminum engines.

R-244/420	276	.0200	166	.105	.070	.630	.672	.714	.739	B	
R-246/420	278	.0200	169	.109	.073	.630	.672	.714	.739	B	
R-248/420	280	.0200	169	.113	.081	.630	.672	.714	.739	A B	
R-252/420	284	.0200	173	.121	.087	.630	.672	.714	.739	A B	
R-256/420	288	.0200	176	.129	.094	.630	.672	.714	.739	A B	
R-258/420	290	.0200	178	.133	.098	.630	.672	.714	.739	B	
R-260/420	292	.0200	180	.137	.101	.630	.672	.714	.739	A B	
R-262/420	294	.0200	182	.141	.105	.630	.672	.714	.739	B	G
R-264/420	296	.0200	183	.145	.109	.630	.672	.714	.739	A B	G
R-266/420	298	.0200	185	.150	.113	.630	.672	.714	.739	B	
R-268/420	300	.0200	187	.154	.116	.630	.672	.714	.739	A B	F
R-270/420	302	.0200	189	.158	.120	.630	.672	.714	.739	B	
R-272/420	304	.0200	191	.162	.124	.630	.672	.714	.739	A B	
R-274/420	306	.0200	193	.166	.128	.630	.672	.714	.739	B	
R-276/420	308	.0200	195	.170	.132	.630	.672	.714	.739	A B	
R-278/420	310	.0200	196	.174	.136	.630	.672	.714	.739	B	
R-280/420	312	.0200	198	.178	.140	.630	.672	.714	.739	B	
R-282/420	314	.0200	200	.182	.145	.630	.672	.714	.739	B	
R-284/420	316	.0200	202	.186	.147	.630	.672	.714	.739	B	
R-286/420	318	.0200	202	.190	.149	.630	.672	.714	.739	B	
R-290/420	322	.0200	203	.198	.154	.630	.672	.714	.739	B	

438 — 438 roller series created as a step up from the 420 series with improved high-RPM dynamics. Recommended lash is .016" intake and .018" exhaust.

R-236/438	266	.0200	160	.094	.061	.657	.701	.745	.771	B	
R-240/438	270	.0200	164	.102	.067	.657	.701	.745	.771	B	
R-246/438	276	.0200	169	.113	.076	.657	.701	.745	.771	B	F
R-250/438	280	.0200	173	.121	.083	.657	.701	.745	.771	B	F
R-258/438	290	.0200	178	.129	.098	.657	.701	.745	.771	C	
R-262/438	294	.0200	181	.137	.105	.657	.701	.745	.771	C	
R-264/438	296	.0200	183	.141	.110	.657	.701	.745	.771	C	
R-268/438	300	.0200	187	.150	.117	.657	.701	.745	.771		F
R-272/438	304	.0200	191	.163	.121	.657	.701	.745	.771	C	F
R-274/438	306	.0200	193	.167	.125	.657	.701	.745	.771	C	

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

438 *Continued from previous page.*

R-276/438	308	.0200	194	.164	.134	.657	.701	.745	.771	F
R-286/438	318	.0200	204	.191	.149	.657	.701	.745	.771	C

4381 **4381 roller series created as a step up from the 420 series with improved high-speed dynamics. Very stable, especially with small BCD lobes. Stable to 9000 RPM with a 1.75 rocker ratio, 9500 RPM with a 1.7 rocker ratio with a properly set-up stable, lightweight valve train. Recommended lash is .020" intake and .022" exhaust.**

R-248/4381	280	.0200	168	.107	.084	.657	.701	.745	.771	C
R-250/4381	282	.0200	170	.111	.087	.657	.701	.745	.771	C
R-252/4381	284	.0200	172	.115	.090	.657	.701	.745	.771	C
R-254/4381	286	.0200	174	.119	.094	.657	.701	.745	.771	C
R-256/4381	288	.0200	176	.123	.097	.657	.701	.745	.771	B C D F
R-258/4381	290	.0200	178	.127	.101	.657	.701	.745	.771	B C
R-260/4381	292	.0200	180	.131	.104	.657	.701	.745	.771	B C F
R-262/4381	292	.0200	181	.135	.108	.657	.701	.745	.771	B F
R-264/4381	296	.0200	183	.139	.111	.657	.701	.745	.771	B C F
R-266/4381	298	.0200	185	.144	.115	.657	.701	.745	.771	B C F
R-268/4381	300	.0200	187	.147	.119	.657	.701	.745	.771	B C D F
R-270/4381	302	.0200	189	.152	.123	.657	.701	.745	.771	B C F
R-272/4381	304	.0200	190	.156	.126	.657	.701	.745	.771	F
R-274/4381	306	.0200	192	.160	.130	.657	.701	.745	.771	C F
R-276/4381	308	.0200	194	.164	.134	.657	.701	.745	.771	B C D
R-278/4381	310	.0200	196	.169	.137	.657	.701	.745	.771	B
R-280/4381	312	.0200	198	.172	.142	.657	.701	.745	.771	C
R-282/4381	314	.0200	200	.177	.146	.657	.701	.745	.771	C
R-284/4381	316	.0200	201	.180	.149	.657	.701	.745	.771	B F
R-286/4381	318	.0200	203	.184	.153	.657	.701	.745	.771	C
R-288/4381	320	.0200	205	.188	.157	.657	.701	.745	.771	C
R-290/4381	322	.0200	207	.192	.161	.657	.701	.745	.771	C
R-292/4381	324	.0200	208	.196	.165	.657	.701	.745	.771	C
R-294/4381	326	.0200	210	.200	.169	.657	.701	.745	.771	C
R-296/4381	328	.0200	212	.203	.172	.657	.701	.745	.771	C
R-298/4381	330	.0200	214	.207	.176	.657	.701	.745	.771	C
R-300/4381	332	.0200	215	.210	.180	.657	.701	.745	.771	C

LH **LH Low Harmonic roller series minimizes valve spring excitation in the RPM range of maximum engine output. Results of testing have shown an increase of valve spring life in circle track, marine, and bracket racing applications. Recommended lash is .020" intake and .022" exhaust.**

R-250/406	282	.0200	166	.111	.081	.609	.650	.690	.715	D
R-252/410	284	.0200	168	.115	.084	.615	.656	.697	.722	B
R-256/418	288	.0200	173	.123	.091	.627	.669	.711	.736	D
R-258/422	290	.0200	175	.127	.094	.633	.675	.717	.743	C D

Continued on next page.

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

LH Low Harmonic roller series minimizes valve spring excitation in the RPM range of maximum engine output. Results of testing have shown an increase of valve spring life in circle track, marine, and bracket racing applications. Recommended lash is .020" intake and .022" exhaust.

LH										
R-260/426	292	.0200	177	.131	.097	.639	.682	.724	.750	C D
R-262/430	294	.0200	179	.135	.100	.645	.688	.731	.756	B C D
R-264/434	296	.0200	181	.139	.103	.651	.694	.738	.764	B C D
R-266/438	298	.0200	183	.143	.107	.657	.701	.745	.771	B C D
R-268/442	300	.0200	185	.147	.111	.663	.707	.751	.778	B C D
R-268/5201	298	.0200	187	.151	.111	.780	.832	.884	.915	G
R-270/446	302	.0200	187	.151	.114	.669	.714	.758	.785	B C D
R-272/450	304	.0200	189	.156	.118	.675	.720	.765	.792	C D
R-272/5152	302	.0200	191	.161	.119	.773	.824	.876	.907	F
R-274/454	306	.0200	191	.160	.122	.681	.726	.772	.799	C D
R-274/525	304	.0200	193	.165	.123	.788	.840	.893	.924	G
R-276/458	308	.0200	193	.164	.125	.687	.733	.779	.806	B C D
R-276/5152	306	.0200	195	.170	.127	.773	.824	.876	.907	F
R-276/5202	305	.0200	198	.176	.131	.780	.832	.884	.916	F
R-276/540	305	.0200	198	.176	.131	.810	.864	.918	.950	G
R-278/462	310	.0200	195	.169	.129	.693	.739	.785	.813	B C D
R-278/5201	308	.0200	197	.173	.130	.780	.832	.884	.915	F
R-280/466	312	.0200	197	.173	.133	.699	.746	.792	.820	B
R-280/5201	310	.0200	199	.178	.134	.780	.832	.884	.915	F
R-284/474	316	.0200	201	.183	.141	.711	.758	.806	.834	B
R-286/478	318	.0200	203	.188	.145	.717	.765	.813	.841	C D
R-286/5201	316	.0200	205	.192	.147	.780	.832	.884	.915	F
R-286/540	314	.0200	211	.208	.157	.810	.864	.918	.950	F
R-288/472	320	.0200	205	.192	.149	.723	.771	.819	.831	C
R-288/5201	317	.0200	210	.204	.156	.780	.832	.884	.915	C
R-290/486	322	.0200	207	.197	.153	.729	.778	.826	.855	C D
R-302/520	334	.0200	216	.218	.173	.780	.832	.884	.915	G
R-302/5202	332	.0200	221	.231	.182	.780	.832	.884	.916	G
R-304/5201	334	.0200	223	.236	.187	.780	.832	.884	.915	G
R-308/5201	338	.0200	227	.246	.197	.780	.832	.884	.915	F G
R-310/5201	340	.0200	229	.250	.201	.780	.832	.884	.915	F
R-312/5201	342	.0200	231	.254	.206	.780	.832	.884	.915	F
R-316/5201	346	.0200	235	.263	.216	.780	.832	.884	.915	F
R-318/5151	350	.0200	231	.254	.208	.773	.824	.876	.907	E
R-318/525	348	.0200	237	.267	.221	.788	.840	.893	.924	F
R-320/5152	350	.0200	238	.268	.224	.773	.824	.876	.907	F
R-320/525	350	.0200	239	.271	.225	.788	.840	.893	.924	F

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

LH2 — LH2 Low Harmonic roller series minimizes valve spring excitation in the RPM range of maximum engine output. Higher RPM potential than the original LH. Recommended lash is .020" intake and .022" exhaust.

R-268/432	298	.0200	181	.149	.111	.648	.691	.734	.760	C
R-270/436	300	.0200	184	.153	.115	.654	.698	.741	.767	C
R-272/440	302	.0200	186	.157	.119	.660	.704	.748	.774	C
R-276/448	306	.0200	191	.166	.126	.672	.717	.762	.788	C D F
R-278/452	308	.0200	194	.171	.130	.678	.723	.768	.796	C
R-280/456	310	.0200	196	.176	.134	.684	.730	.775	.802	C D
R-282/4601	312	.0200	199	.180	.138	.690	.736	.782	.810	C F

422 — 422 roller series is used primarily as an intake lobe with high rocker arm ratios. The lobes are sized on a .950 base circle diameter. Recommended lash is .012".

R-256/422	284	.0220	177	.131	.096	.633	.675	.717	.743	A
R-260/422	288	.0220	181	.139	.103	.633	.675	.717	.743	A
R-264/422	292	.0220	184	.147	.110	.633	.675	.717	.743	A
R-268/422	296	.0220	188	.155	.118	.633	.675	.717	.743	A
R-272/422	300	.0220	192	.164	.126	.633	.675	.717	.743	A

428 — 428 roller, aggressive series for up to 1.8:1 rocker ratio. Popular oval track series. Recommended lash is .020" intake and .022" exhaust.

R-256/428	286	.0200	175	.127	.090	.642	.685	.723	.753	B F
R-258/428	288	.0200	176	.131	.094	.642	.685	.723	.753	A C F
R-260/428	290	.0200	178	.135	.097	.642	.685	.723	.753	A C F G
R-262/428	292	.0200	180	.138	.101	.642	.685	.723	.753	A C F G
R-264/428	294	.0200	182	.143	.104	.642	.685	.723	.753	A C F G
R-266/428	296	.0200	184	.147	.108	.642	.685	.723	.753	A C F G
R-268/428	298	.0200	186	.151	.111	.642	.685	.723	.753	A C F G
R-270/428	300	.0200	188	.155	.115	.642	.685	.723	.753	A
R-272/428	302	.0200	190	.160	.119	.642	.685	.723	.753	A
R-274/428	304	.0200	190	.161	.124	.642	.685	.723	.753	F
R-276/428	306	.0200	191	.162	.129	.642	.685	.723	.753	C
R-278/428	308	.0200	191	.163	.132	.642	.685	.723	.753	A C
R-282/428	312	.0200	194	.172	.133	.642	.685	.723	.753	C
R-/428	330	.0200	210	.206	.167	.642	.685	.723	.753	C

430 — 430 roller, aggressive high RPM series created for oval track racing applications including sprint cars. Can be used with 1.85 ratio rockers with 55 mm journals and stiff valve train. Basic RPM potential about 500 less than comparable 4381 series grinds. Recommended lash is .020" intake and .022" exhaust.

R-256/4301	284	.0200	181	.134	.100	.645	.688	.731	.757	B
R-258/4301	286	.0200	182	.138	.104	.645	.688	.731	.757	B
R-258/4302	286	.0200	182	.138	.104	.645	.688	.731	.757	F
R-259/4301	287	.0200	183	.140	.106	.645	.688	.731	.757	D
R-260/4301	288	.0200	184	.143	.108	.645	.688	.731	.757	F
R-262/4521	290	.0200	188	.148	.112	.678	.723	.769	.796	F

Continued on next page.

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

430 *Continued from previous page.*

R-262/4302	290	.0200	186	.146	.112	.645	.688	.731	.757	A B C
R-262/4303	290	.0200	186	.147	.112	.645	.688	.732	.757	F
R-262/4521	290	.0200	188	.148	.112	.678	.723	.769	.796	F
R-263/4301	291	.0200	187	.149	.114	.645	.688	.731	.757	D
R-263/4302	290	.0200	189	.153	.117	.645	.688	.731	.757	D
R-264/4302	292	.0200	187	.150	.115	.645	.688	.731	.757	A B
R-264/4303	292	.0200	188	.151	.116	.645	.688	.732	.757	F
R-266/4301	294	.0200	190	.155	.120	.645	.688	.731	.757	D F
R-266/4302	292	.0200	189	.155	.119	.645	.688	.731	.757	A C
R-266/4781	294	.0200	193	.158	.121	.717	.765	.813	.841	F
R-268/4301	296	.0200	191	.159	.123	.645	.688	.731	.757	A B
R-268/4302	296	.0200	191	.160	.124	.645	.688	.731	.757	F
R-272/4301	301	.0200	193	.163	.129	.645	.688	.731	.757	F

452 **452 roller, aggressive series for up to 1.8:1 rocker ratio. Recommended lash is .020" intake and .022" exhaust.**

R-252/452	281	.0200	173	.122	.085	.678	.723	.768	.796	D
R-254/452	283	.0200	175	.126	.089	.678	.723	.768	.796	C
R-256/452	285	.0200	177	.130	.092	.678	.723	.768	.796	C D
R-258/452	287	.0200	179	.134	.095	.678	.723	.768	.796	C F G
R-260/452	289	.0200	181	.138	.099	.678	.723	.768	.796	B C
R-262/452	291	.0200	183	.142	.103	.678	.723	.768	.796	B C F
R-264/452	293	.0200	185	.147	.106	.678	.723	.768	.796	B C G
R-266/452	295	.0200	187	.151	.110	.678	.723	.768	.796	B C F G
R-268/452	297	.0200	189	.156	.114	.678	.723	.768	.796	B C F G
R-270/452	299	.0200	191	.160	.118	.678	.723	.768	.796	B C G
R-272/452	301	.0200	193	.165	.122	.678	.723	.768	.796	B C F G
R-274/452	303	.0200	195	.169	.126	.678	.723	.768	.796	B C F G
R-276/452	305	.0200	196	.174	.131	.678	.723	.768	.796	B C
R-280/452	309	.0200	200	.183	.139	.678	.723	.768	.796	C G
R-282/452	311	.0200	202	.187	.143	.678	.723	.768	.796	A C F G
R-284/452	313	.0200	204	.192	.147	.678	.723	.768	.796	B
R-286/452	315	.0200	206	.196	.152	.678	.723	.768	.796	A

4467 **4467 roller series created for oval track and drag racing that gives a .700"+ net valve lift when used with a 1.6:1 or greater rocker ratio. Recommended lash is .012".**

R-252/4467	284	.0202	177	.126	.089	.670	.715	.759	.786	B
R-256/4467	288	.0202	180	.139	.096	.670	.715	.759	.786	B
R-258/4467	290	.0202	182	.142	.100	.670	.715	.759	.786	B F
R-260/4467	292	.0202	184	.144	.104	.670	.715	.759	.786	B F
R-262/4467	294	.0202	186	.148	.108	.670	.715	.759	.786	B C F G

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

4467 *Continued from previous page.*

R-264/4467	296	.0202	187	.152	.112	.670	.715	.759	.786	B C F G
R-266/4467	298	.0202	189	.156	.115	.670	.715	.759	.786	B C F G
R-268/4467	300	.0202	191	.161	.120	.670	.715	.759	.786	B C F
R-270/4467	302	.0202	193	.165	.124	.670	.715	.759	.786	B C
R-272/4467	304	.0202	195	.170	.128	.670	.715	.759	.786	B F
R-274/4467	306	.0202	197	.174	.132	.670	.715	.759	.786	F
R-276/4467	308	.0202	198	.178	.136	.670	.715	.759	.786	B C
R-278/4467	310	.0202	200	.183	.140	.670	.715	.759	.786	B
R-280/4467	312	.0202	202	.187	.144	.670	.715	.759	.786	B C
R-282/4467	314	.0202	204	.191	.149	.670	.715	.759	.786	B
R-284/4467	316	.0202	206	.195	.153	.670	.715	.759	.786	B
R-288/4467	320	.0202	210	.203	.161	.670	.715	.759	.786	B
R-292/4467	324	.0202	214	.212	.170	.670	.715	.759	.786	B

4541 **4541 roller, stable high RPM series (when ground on 55 mm journal, or larger, core) created for oval track and drag racing that gives a .726"+ net valve lift when used with a 1.6:1 or greater rocker ratio. Recommended lash is .020" intake and .022" exhaust.**

R-262/4541	293	.0200	182	.136	.108	.681	.727	.772	.799	F G
R-264/4541	295	.0200	184	.140	.111	.681	.727	.772	.799	C G
R-264/4542	297	.0200	183	.140	.108	.681	.727	.772	.799	F
R-264/4543	296	.0200	184	.146	.107	.681	.727	.772	.800	B
R-266/4541	297	.0200	185	.143	.115	.681	.727	.772	.799	B F
R-268/4541	299	.0200	187	.147	.118	.681	.727	.772	.799	B
R-270/4542	303	.0200	188	.151	.118	.681	.727	.772	.799	F
R-272/4542	303	.0200	190	.158	.124	.681	.727	.772	.799	C
R-274/4541	305	.0200	196	.172	.128	.681	.727	.772	.799	B C
R-278/4541	309	.0200	199	.181	.136	.681	.727	.772	.799	B
R-282/4541	313	.0200	203	.189	.145	.681	.727	.772	.799	B
R-284/4541	315	.0200	205	.193	.149	.681	.727	.772	.799	B
R-294/4541	328	.0200	205	.188	.159	.681	.727	.772	.799	C
R-304/4541	339	.0200	212	.203	.174	.681	.727	.772	.799	C

471 **471 roller series created for sprint car and drag racing applications that give .750"+ lift with 1.6 or greater rocker ratios. Also, large CID bracket racing engines and high torque Engine Masters Challenge type of applications. Recommended lash is .020" intake and .022" exhaust.**

R-252/471	284	.0200	177	.122	.090	.707	.754	.801	.829	C
R-256/471	288	.0200	180	.130	.098	.707	.754	.801	.829	C
R-260/471	292	.0200	183	.138	.105	.707	.754	.801	.829	B
R-264/471	296	.0200	186	.145	.112	.707	.754	.801	.829	B
R-268/471	300	.0200	188	.150	.117	.707	.754	.801	.829	G
R-274/471	306	.0200	193	.161	.127	.707	.754	.801	.829	G
R-280/471	312	.0200	198	.173	.138	.707	.754	.801	.829	C E G

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

471	*Continued from previous page.*										
R-286/471	318	.0200	202	.183	.145	.707	.754	.801	.829	B C	G
R-294/471	328	.0200	207	.194	.160	.707	.754	.801	.829	B	H

4168 IR — 4168 IR roller series created for oval track applications with aggressive inverted flank areas for small block Chevrolet size lobes. Recommended lash is .012". Not recommended for high RPM applications.

IR-248/410	284	.0160	169	.114	.082	.615	.656	.697	.722	B	
IR-252/4134	288	.0160	173	.122	.088	.620	.661	.703	.728	B	
IR-256/4168	292	.0160	176	.131	.094	.625	.667	.709	.734	B	
IR-260/4168	296	.0160	180	.139	.101	.625	.667	.709	.734	B	
IR-264/4168	300	.0160	184	.148	.108	.625	.667	.709	.734	B	
IR-268/4168	304	.0160	188	.157	.116	.625	.667	.709	.734	B	
IR-272/4168	308	.0160	191	.165	.123	.625	.667	.709	.734	B	
IR-276/4168	312	.0160	195	.173	.131	.625	.667	.709	.734	B	
IR-280/4168	316	.0160	199	.181	.139	.625	.667	.709	.734	B	

4334 IR — 4334 IR roller series created from the Cam Dynamics series of masters for oval track applications with aggressive inverted flank areas. Recommended lash is .012". Not recommended for high RPM applications.

IR-254/4334	278	.0245	179	.133	.093	.650	.693	.737	.763	B	
IR-258/4334	282	.0245	182	.142	.100	.650	.693	.737	.763	B	
IR-262/4334	286	.0245	186	.150	.107	.650	.693	.737	.763	B	
IR-266/4334	290	.0245	190	.160	.115	.650	.693	.737	.763	B	
IR-270/4334	294	.0245	193	.168	.122	.650	.693	.737	.763	B	
IR-274/4334	298	.0245	197	.176	.130	.650	.693	.737	.763	B	
IR-278/4334	292	.0245	201	.185	.139	.650	.693	.737	.763	B	

422 — 422 roller series created for oval track and drag racing that gives a .650"+ net valve lift when used with a 1.6:1 or higher rocker ratio. Sized on a .950" diameter base circle for Buick and long stroke (small base circle) Chevrolet with a .012" recommended lash.

R-262/422	290	.0200	183	.143	.106	.633	.675	.714	.743	A	
R-266/422	294	.0200	186	.151	.121	.633	.675	.714	.743	A	

4403 — 4403 roller series created as a step up from the 420 series with improved high-speed dynamics, popular oval track intake lobes. Use with up to a 1.8 rocker ratio. Recommended lash is .020" intake and .022" exhaust, allowing for a tight cold setting on aluminum engines.

R-260/4403	290	.0200	182	.140	.102	.660	.704	.785	.775	B	F
R-262/4403	292	.0200	184	.144	.105	.660	.704	.785	.775	B C	F
R-264/4403	294	.0200	186	.148	.109	.660	.704	.785	.775	B C	F
R-266/4403	296	.0200	188	.153	.113	.660	.704	.785	.775	B C	F
R-268/4403	298	.0200	190	.157	.117	.660	.704	.785	.775	B C	F
R-270/4403	300	.0200	192	.161	.121	.660	.704	.785	.775	B C	

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

4440 — 4440 roller series created for oval track and drag racing that gives a .700"+ net valve lift when used with a 1.6:1 or higher rocker ratio. Sized on a .900" diameter base circle for Buick and long stroke (small base circle) Chevrolet. Recommended lash is .012".

R-258/4440	286	.0220	181	.138	.099	.660	.710	.755	.781	A
R-262/4440	290	.0220	185	.146	.107	.660	.710	.755	.781	A
R-266/4440	294	.0220	189	.155	.115	.660	.710	.755	.781	A
R-270/4440	298	.0220	192	.164	.123	.660	.710	.755	.781	A
R-274/4440	302	.0220	196	.173	.131	.660	.710	.755	.781	A
R-278/4440	306	.0220	200	.181	.139	.660	.710	.755	.781	A
R-282/4440	310	.0220	204	.190	.148	.660	.710	.755	.781	A

4188 IR — 4188 IR roller series created for oval track, marine, and drag racing applications with aggressive inverted flank areas for the big block Chevrolet and similar engines. Use with limited RPM applications. Recommended lash is .012".

IR-252/4188	290	.0140	174	.125	.088	.628	.670	.712	.737	C
IR-262/4188	300	.0140	183	.147	.105	.628	.670	.712	.737	C
IR-268/4188	306	.0140	189	.160	.116	.628	.670	.712	.737	C
IR-272/4188	310	.0140	193	.169	.124	.628	.670	.712	.737	C
IR-278/4188	316	.0140	198	.181	.135	.628	.670	.712	.737	C
IR-286/4188	324	.0140	205	.196	.152	.628	.670	.712	.737	C

IR — IR roller series created for Super Stock drag racing where aggressive lobes are used with limited RPM. Recommended lash is .012".

IR-272/4714	310	.0140	195	.168	.128	.707	.754	.801	.830	C
IR-276/4714	314	.0140	199	.177	.136	.707	.754	.801	.830	C
IR-280/4778	318	.0140	203	.186	.145	.717	.764	.812	.841	C
IR-284/500	322	.0140	208	.197	.154	.750	.800	.850	.880	C
IR-288/500	326	.0140	211	.205	.163	.750	.800	.850	.880	C
IR-292/500	330	.0140	215	.213	.172	.750	.800	.850	.880	C

R1 — R1 roller series created for oval track and marine for the big block Chevrolet and other higher rocker ratio engines, where stable high RPM valve motion is required. Recommended lash is .026".

R-236/3177	272	.0200	139	.082	.064	.477	.508	.540	.559	C
R-246/3294	282	.0200	150	.098	.077	.494	.527	.560	.580	C
R-256/3412	292	.0200	159	.114	.092	.512	.546	.580	.601	C
R-266/3528	302	.0200	166	.126	.107	.529	.564	.600	.621	C
R-276/3648	312	.0200	179	.147	.123	.547	.584	.620	.642	C
R-286/3765	322	.0200	189	.165	.130	.565	.602	.640	.663	C
R-296/394	332	.0200	201	.185	.156	.591	.630	.670	.693	C

R2 — R2 roller series created for drag racing applications for engines like the big block Chevrolet and Chrysler engines where stable high RPM valve motion is required. Recommended lash is .028".

R-280/4468	312	.0225	192	.168	.129	.670	.715	.760	.786	C
R-290/446B	322	.0225	202	.188	.148	.669	.714	.758	.785	C
R-290/4618	322	.0225	202	.188	.148	.693	.739	.785	.813	B C

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

R2 *Continued from previous page.*

R-296/4778	328	.0225	209	.200	.161	.717	.764	.812	.841	B C
R-300/4778	332	.0225	213	.207	.167	.717	.764	.812	.841	G
R-300/5098	332	.0225	215	.213	.173	.765	.816	.867	.897	C

4706 4706 roller series created for drag racing applications for engines like the big block Chevrolet and Chrysler engines, where stable exhaust valve motion is required. Recommended lash is .030".

R-280/4706	320	.0198	192	.165	.126	.706	.753	.800	.828	C
R-282/4706	322	.0198	194	.169	.129	.706	.753	.800	.828	C
R-284/4706	324	.0198	196	.173	.133	.706	.753	.800	.828	C
R-286/4706	326	.0198	198	.178	.137	.706	.753	.800	.828	C
R-288/4706	328	.0198	200	.182	.141	.706	.753	.800	.828	C
R-290/4706	330	.0198	202	.186	.145	.706	.753	.800	.828	C
R-292/4706	332	.0198	204	.190	.149	.706	.753	.800	.828	C
R-294/4706	334	.0198	206	.195	.153	.706	.753	.800	.828	C
R-296/4706	336	.0198	208	.199	.157	.706	.753	.800	.828	C
R-300/4706	340	.0198	212	.205	.163	.706	.753	.800	.828	C E
R-302/4706	342	.0198	214	.212	.169	.706	.753	.800	.828	E
R-304/4706	344	.0198	217	.218	.175	.706	.753	.800	.828	C E
R-308/4706	348	.0198	219	.224	.182	.706	.753	.800	.828	C E
R-310/4706	350	.0198	221	.228	.186	.706	.753	.800	.828	C E
R-312/4706	352	.0198	223	.232	.190	.706	.753	.800	.828	E
R-314/4706	354	.0198	225	.236	.194	.706	.753	.800	.828	C E
R-316/4706	356	.0198	227	.240	.198	.706	.753	.800	.828	E
R-318/4706	358	.0198	229	.245	.203	.706	.753	.800	.828	C E
R-320/4706	360	.0198	231	.249	.207	.706	.753	.800	.828	E F
R-322/4706	362	.0198	233	.252	.211	.706	.753	.800	.828	C E F
R-326/4706	366	.0198	237	.257	.215	.706	.753	.800	.828	C

490 490 roller series created for drag racing applications for engines like the big block Chevrolet and Chrysler engines, where stable exhaust valve motion is required. Recommended lash is .026" intake and .030" exhaust.

R-292/490	328	.0200	210	.204	.160	.735	.784	.833	.862	C
R-302/490	338	.0200	219	.224	.180	.735	.784	.833	.862	C
R-306/490	342	.0200	223	.232	.189	.735	.784	.833	.862	C
R-312/490	348	.0200	228	.244	.201	.735	.784	.833	.862	C

NOPOP2 NOPOP2 roller series created for various drag race applications where stable high RPM valve motion is required. Recommended lash is .026".

R-264/4334	304	.0162	176	.132	.103	.650	.693	.737	.763	C
R-268/4834	308	.0162	180	.139	.109	.725	.773	.822	.851	C
R-274/4334	314	.0162	197	.176	.130	.650	.693	.737	.763	C
R-278/413	318	.0162	187	.157	.125	.620	.661	.702	.727	B C

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

NOPOP2 *Continued from previous page.*

R-280/450	320	.0162	191	.165	.125	.675	.720	.765	.792	B C
R-280/500	320	.0162	192	.165	.129	.750	.800	.850	.880	C
R-282/4701	322	.0162	194	.167	.135	.705	.752	.799	.827	C
R-282/5001	322	.0162	195	.168	.136	.750	.800	.850	.880	E
R-284/427	324	.0162	194	.170	.136	.641	.683	.726	.752	C
R-284/456	324	.0162	195	.171	.136	.684	.730	.775	.803	B C
R-284/5003	322	.0162	200	.172	.140	.750	.800	.850	.880	C E
R-286/4588	326	.0162	198	.177	.140	.688	.734	.780	.807	C
R-286/4668	326	.0162	197	.176	.139	.700	.747	.794	.822	B C
R-286/4701	326	.0162	198	.175	.142	.705	.752	.799	.827	C
R-286/500	326	.0162	200	.182	.142	.750	.800	.850	.880	C E
R-286/5203	324	.0162	203	.186	.147	.780	.832	.884	.915	C
R-288/4254	328	.0162	198	.179	.144	.638	.681	.723	.749	B C
R-288/4588	328	.0162	200	.182	.144	.688	.734	.780	.807	B C
R-288/4714	328	.0162	199	.180	.144	.707	.754	.801	.830	B C E
R-288/5251	328	.0162	200	.181	.148	.787	.840	.892	.908	E
R-290/415	330	.0162	199	.182	.147	.623	.664	.706	.730	B C
R-290/4778	330	.0162	201	.184	.147	.717	.764	.812	.841	C
R-290/480	330	.0162	201	.185	.147	.720	.768	.816	.845	C
R-292/4254	332	.0162	202	.187	.151	.638	.681	.723	.749	B C
R-292/480	332	.0162	202	.187	.150	.720	.768	.816	.845	B C
R-292/500	332	.0162	203	.190	.150	.750	.800	.850	.880	C E G
R-294/440	334	.0162	204	.190	.154	.660	.704	.748	.774	C
R-294/4778	334	.0162	205	.193	.154	.717	.764	.812	.841	C
R-296/435	336	.0162	206	.195	.159	.653	.696	.740	.766	B C
R-296/500	336	.0162	207	.198	.159	.750	.800	.850	.880	B C E G
R-296/515	336	.0162	209	.198	.163	.773	.824	.876	.906	C F
R-296/525	336	.0162	209	.198	.163	.788	.840	.893	.924	C G
R-298/515	338	.0162	211	.202	.167	.773	.824	.876	.906	E G
R-300/500	340	.0162	212	.206	.169	.750	.800	.850	.880	E
R-300/515	340	.0162	313	.208	.170	.773	.824	.876	.906	G
R-300/525	340	.0162	213	.207	.171	.788	.840	.893	.924	C E
R-302/467	342	.0162	212	.206	.169	.701	.747	.794	.822	C
R-302/5066	342	.0162	213	.210	.170	.760	.811	.861	.892	C F
R-304/500	344	.0162	216	.216	.172	.750	.800	.850	.880	E
R-304/525	344	.0162	218	.218	.180	.788	.840	.893	.924	G
R-306/500	346	.0162	218	.221	.181	.750	.800	.850	.880	E
R-308/525	346	.0162	224	.237	.193	.788	.840	.892	.924	C
R-310/467	350	.0162	220	.223	.185	.701	.747	.794	.822	C
R-312/525	350	.0162	228	.246	.201	.788	.840	.893	.924	C

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

481 — 481 roller series created for high RPM large cubic inch drag race engines. Recommended lash is .016".

R-268/481	312	.0120	184	.147	.109	.722	.770	.818	.847	C
R-272/481	316	.0120	188	.156	.116	.722	.770	.818	.847	C
R-274/481	318	.0120	190	.160	.120	.722	.770	.818	.847	C
R-276/481	320	.0120	192	.164	.124	.722	.770	.818	.847	C
R-280/481	324	.0120	196	.173	.131	.722	.770	.818	.847	C
R-282/481	326	.0120	198	.177	.135	.722	.770	.818	.847	C
R-284/481	328	.0120	200	.181	.139	.722	.770	.818	.847	C
R-286/481	330	.0120	201	.185	.143	.722	.770	.818	.847	C
R-288/481	332	.0120	203	.189	.147	.722	.770	.818	.847	C
R-290/481	334	.0120	205	.194	.151	.722	.770	.818	.847	C
R-292/481	336	.0120	207	.198	.155	.722	.770	.818	.847	C
R-294/481	338	.0120	209	.202	.159	.722	.770	.818	.847	C
R-296/481	340	.0120	211	.207	.164	.722	.770	.818	.847	C
R-296/502	340	.0120	212	.209	.164	.688	.734	.780	.808	F
R-298/481	342	.0120	213	.211	.168	.722	.770	.818	.847	C
R-300/481	344	.0120	215	.215	.172	.722	.770	.818	.847	C
R-302/530	346	.0120	218	.224	.177	.795	.848	.901	.933	G
R-304/481	348	.0120	219	.225	.181	.795	.848	.901	.933	C
R-304/502	348	.0120	220	.227	.181	.753	.803	.853	.884	F G
R-304/530	348	.0120	220	.227	.181	.795	.848	.901	.933	G
R-306/481	350	.0120	221	.229	.185	.795	.848	.901	.933	C
R-306/502	350	.0120	222	.231	.186	.753	.803	.853	.884	F G
R-308/502	352	.0120	224	.235	.190	.753	.803	.853	.884	F
R-308/530	352	.0120	224	.238	.191	.795	.848	.901	.933	G
R-310/5301	354	.0120	226	.243	.196	.795	.848	.901	.933	G

4765 — 4765 roller series, symmetrical design created for high RPM drag race applications from the Cam Dynamics series of masters. Primarily used as an intake lobe with a recommended lash of .030" to .035".

R-278/4765	312	.0240	190	.161	.121	.715	.762	.810	.839	B
R-280/4765	314	.0240	192	.164	.125	.715	.762	.810	.839	B
R-282/4765	316	.0240	194	.169	.129	.715	.762	.810	.839	B G
R-284/4765	318	.0240	196	.173	.132	.715	.762	.810	.839	B G
R-286/4765	320	.0240	197	.177	.136	.715	.762	.810	.839	B C
R-290/4765	324	.0240	201	.185	.144	.715	.762	.810	.839	B
R-294/4765	328	.0240	205	.194	.152	.715	.762	.810	.839	B
R-298/4765	332	.0240	209	.202	.160	.715	.762	.810	.839	B
R-302/4765	336	.0240	212	.208	.166	.715	.762	.810	.839	B
R-304/4765	338	.0240	215	.214	.172	.715	.762	.810	.839	B

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

4589 — **4589 roller series, symmetrical design created for high RPM drag race applications from the Cam Dynamics series of masters. Primarily used as an exhaust lobe with a recommended lash of .030" to .035".**

R-278/4589	312	.0240	183	.149	.115	.688	.734	.780	.808	B
R-282/4589	316	.0240	187	.157	.121	.688	.734	.780	.808	B
R-286/4589	320	.0240	191	.164	.128	.688	.734	.780	.808	B
R-288/4589	322	.0240	193	.169	.131	.688	.734	.780	.808	B
R-290/4589	324	.0240	195	.172	.135	.688	.734	.780	.808	B
R-294/4589	328	.0240	198	.180	.142	.688	.734	.780	.808	B
R-298/4589	332	.0240	202	.188	.147	.688	.734	.780	.808	B
R-302/4589	336	.0240	206	.196	.157	.688	.734	.780	.808	B
R-306/4589	340	.0240	210	.204	.164	.688	.734	.780	.808	B
R-308/4589	342	.0240	212	.208	.168	.688	.734	.780	.808	B
R-312/4589	346	.0240	216	.216	.176	.688	.734	.780	.808	B
R-314/4589	348	.0240	218	.220	.180	.688	.734	.780	.808	B
R-316/4589	350	.0240	220	.224	.184	.688	.734	.780	.808	B
R-318/4589	352	.0240	222	.227	.187	.688	.734	.780	.808	B

484 — **484 roller series is used primarily as an intake lobe on large cubic inch drag race engines. Recommended lash is .016".**

R-262/484	306	.0120	180	.139	.101	.726	.774	.823	.852	C
R-262/4841	306	.0120	181	.131	.108	.726	.775	.823	.852	C
R-262/4843	306	.0120	184	.144	.103	.726	.775	.823	.852	C
R-264/4841	308	.0120	183	.135	.111	.726	.775	.823	.852	C
R-266/484	310	.0120	185	.147	.108	.726	.774	.823	.852	C
R-266/4841	310	.0120	184	.139	.115	.726	.775	.823	.852	C
R-266/4843	310	.0120	188	.153	.111	.726	.775	.823	.852	C
R-268/4841	312	.0120	186	.143	.119	.726	.775	.823	.852	C
R-270/484	314	.0120	188	.156	.115	.726	.774	.823	.852	C
R-270/4841	314	.0120	188	.147	.123	.726	.775	.823	.852	C
R-270/4842	314	.0120	188	.139	.130	.726	.775	.823	.852	C
R-280/5003	324	.0120	198	.168	.143	.750	.800	.850	.881	F
R-292/484	336	.0120	208	.200	.158	.726	.774	.823	.852	C
R-294/4841	338	.0120	210	.198	.172	.726	.775	.823	.852	C

4841+ — **4841+ roller series is used primarily as an intake lobe on large cubic inch drag race engines. Recommended lash is .016".**

R-268/550	308	.0120	193	.152	.125	.825	.880	.935	.968	G
R-270/550	310	.0120	194	.156	.129	.825	.880	.935	.968	G
R-272/500	316	.0120	190	.151	.127	.750	.800	.850	.880	F
R-272/550	316	.0120	196	.161	.134	.825	.880	.935	.968	G
R-274/520	312	.0120	198	.159	.133	.780	.832	.884	.915	G
R-274/550	314	.0120	198	.166	.138	.825	.880	.935	.968	G

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

4841+ *Continued from previous page.*

R-276/500	320	.0120	194	.160	.134	.750	.800	.850	.880	C F G
R-276/520	318	.0120	196	.163	.137	.780	.832	.884	.915	F G
R-276/550	316	.0120	200	.171	.143	.825	.880	.935	.968	G
R-276/5501	316	.0120	202	.179	.143	.825	.880	.935	.968	G
R-277/520	319	.0120	196	.163	.139	.780	.832	.884	.915	G
R-278/500	322	.0120	196	.164	.138	.750	.800	.850	.880	F
R-278/520	320	.0120	198	.168	.141	.780	.832	.884	.915	F
R-278/550	318	.0120	204	.175	.147	.825	.880	.935	.968	G
R-280/520	322	.0120	200	.172	.145	.780	.832	.884	.915	G
R-280/5503	320	.0120	204	.180	.152	.825	.880	.936	.969	G
R-282/520	324	.0120	202	.177	.150	.780	.832	.884	.915	F

515 **515 roller series is used primarily as an intake lobe on large cubic inch drag race engines. Recommended lash is .024".**

R-274/515	308	.0200	196	.171	.125	.773	.824	.876	.906	C
R-280/515	314	.0200	200	.183	.137	.773	.824	.876	.906	C
R-284/515	318	.0200	204	.192	.145	.773	.824	.876	.906	C
R-288/515	322	.0200	208	.199	.153	.773	.824	.876	.906	C
R-292/515	326	.0200	211	.208	.161	.773	.824	.876	.906	C

560 **560 roller series is used primarily on very large cubic inch drag race engines. Recommended lash is .020" intake and .022' exhaust.**

R-284/600	312	.0200	209	.203	.152	.900	.960	1.020	1.056	G H
R-310/560	341	.0200	227	.246	.197	.840	.896	.952	.986	G H

LH3 **LH3 rollers, a collection of low harmonic lobes used in large cubic inch drag race engines. Recommended lash will vary per profile.**

R-268/470	299	.0200	188	.151	.113	.705	.752	.799	.872	C
R-272/480	303	.0200	192	.160	.121	.720	.768	.816	.845	C
R-274/470	306	.0200	194	.159	.135	.705	.752	.799	.872	D
R-278/5151	312	.0200	194	.169	.127	.773	.824	.876	.906	E
R-280/5001	311	.0200	199	.179	.137	.750	.800	.850	.880	C
R-282/515	316	.0200	198	.178	.135	.773	.824	.876	.906	F
R-284/510	318	.0200	202	.184	.141	.765	.816	.867	.898	E
R-284/5152	318	.0200	201	.183	.139	.773	.824	.876	.906	F
R-286/515	320	.0200	202	.188	.143	.773	.824	.876	.906	F G
R-288/510	322	.0200	206	.193	.157	.765	.816	.867	.898	C E F
R-296/5201	330	.0200	213	.213	.166	.780	.832	.884	.915	E
R-298/520	332	.0200	214	.216	.168	.780	.832	.884	.915	F
R-300/520	334	.0200	216	.221	.173	.780	.832	.884	.915	F
R-300/5001	334	.0200	209	.202	.161	.750	.800	.850	.880	F
R-302/5201	336	.0200	218	.226	.178	.780	.832	.884	.915	E F

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

LH3 *Continued from previous page.*

R-304/520	304	.0200	220	.231	.183	.780	.832	.884	.915	F
R-308/520	342	.0200	224	.240	.192	.780	.832	.884	.915	F
R-310/520	344	.0200	226	.244	.196	.780	.832	.884	.915	F
R-312/500	347	.0200	222	.232	.187	.750	.800	.850	.880	E F
R-312/520	346	.0200	230	.250	.202	.780	.832	.884	.915	F G
R-318/5001	352	.0200	227	.241	.197	.750	.800	.850	.880	E F

LH4 **LH4 roller series, a collection of low harmonic lobes used in large cubic inch engines that are slightly more aggressive than the LH3. Recommended lash is .020" intake and .022" exhaust.**

R-255/5002	285	.0200	174	.125	.089	.750	.800	.850	.880	G K
R-258/5002	288	.0200	177	.130	.094	.750	.800	.850	.880	K
R-266/5002	296	.0200	185	.147	.108	.750	.800	.850	.880	G
R-270/5002	300	.0200	189	.156	.115	.750	.800	.850	.880	F K
R-272/4171	304	.0200	185	.151	.113	.626	.667	.709	.734	C
R-272/5002	302	.0200	191	.160	.119	.750	.800	.850	.880	F
R-274/5002	304	.0200	193	.164	.123	.750	.800	.850	.880	F
R-276/5002	306	.0200	195	.169	.126	.750	.800	.850	.880	B F
R-276/5201	306	.0200	195	.169	.126	.780	.832	.884	.915	G
R-278/4201	310	.0200	191	.163	.124	.630	.672	.714	.736	C
R-278/5002	308	.0200	197	.173	.130	.750	.800	.850	.880	F
R-278/5402	308	.0200	200	.179	.138	.810	.864	.918	.951	G
R-280/4401	312	.0200	193	.167	.128	.660	.704	.748	.774	C F
R-280/5002	310	.0200	198	.178	.134	.750	.800	.850	.880	F K
R-282/4201	314	.0200	194	.172	.132	.630	.672	.714	.736	C
R-282/5002	312	.0200	201	.182	.138	.750	.800	.850	.880	F
R-282/530	312	.0200	201	.182	.138	.795	.848	.901	.933	E
R-284/5002	314	.0200	202	.187	.143	.750	.800	.850	.880	F
R-284/5153	314	.0200	203	.187	.143	.773	.824	.876	.906	F
R-286/5002	316	.0200	205	.192	.147	.750	.800	.850	.880	F
R-286/5152	316	.0200	205	.192	.147	.773	.824	.876	.906	F
R-288/5002	318	.0200	206	.197	.151	.750	.800	.850	.880	F
R-288/5152	318	.0200	206	.197	.151	.773	.824	.876	.906	E F G
R-290/5002	320	.0200	208	.202	.155	.750	.800	.850	.880	F G
R-290/5152	320	.0200	208	.202	.155	.773	.824	.876	.906	F
R-292/5002	322	.0200	210	.207	.160	.750	.800	.850	.880	F
R-292/5152	322	.0200	210	.207	.160	.773	.824	.876	.906	F
R-294/5002	326	.0200	207	.198	.155	.750	.800	.850	.880	F
R-294/5152	324	.0200	212	.211	.164	.773	.824	.876	.906	E
R-294/525	324	.0200	212	.212	.164	.788	.840	.893	.924	E
R-296/5151	327	.0200	212	.209	.164	.773	.824	.876	.906	E
R-298/5002	330	.0200	211	.207	.163	.750	.800	.850	.880	F

Continued on next page.

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

LH4 *Continued from previous page.*

R-300/5002	332	.0200	213	.212	.167	.750	.800	.850	.880	F
R-300/530	330	.0200	218	.227	.178	.795	.848	.901	.933	E
R-300/540	333	.0200	215	.216	.171	.810	.864	.918	.950	G
R-302/5002	334	.0200	215	.217	.172	.750	.800	.850	.880	F
R-304/5002	336	.0200	217	.221	.176	.750	.800	.850	.880	F
R-304/540	337	.0200	219	.225	.180	.810	.864	.918	.950	G
R-306/5002	338	.0200	219	.226	.180	.750	.800	.850	.880	F
R-306/540	339	.0200	221	.230	.184	.810	.864	.918	.950	G
R-308/5002	340	.0200	221	.231	.185	.750	.800	.850	.880	F
R-308/540	341	.0200	223	.234	.188	.810	.864	.918	.950	G
R-310/5002	342	.0200	223	.235	.189	.750	.800	.850	.880	F
R-310/530	340	.0200	229	.251	.202	.795	.848	.901	.933	F
R-310/540	343	.0200	225	.239	.193	.810	.864	.918	.950	G
R-312/5002	344	.0200	225	.239	.193	.750	.800	.850	.880	F
R-312/530	342	.0200	230	.256	.207	.795	.848	.901	.933	F
R-312/540	345	.0200	227	.243	.197	.810	.864	.918	.950	G
R-314/5002	346	.0200	227	.244	.198	.750	.800	.850	.880	F
R-316/500	348	.0200	229	.248	.203	.750	.800	.850	.880	E
R-316/5002	348	.0200	229	.248	.203	.750	.800	.850	.880	F
R-318/5002	350	.0200	231	.252	.207	.750	.800	.850	.880	F G
R-318/515	351	.0200	229	.247	.201	.773	.824	.876	.906	E
R-320/5001	354	.0200	228	.245	.201	.750	.800	.850	.880	F
R-320/515	352	.0200	232	.258	.212	.773	.824	.876	.906	E
R-320/535	353	.0200	234	.260	.214	.803	.856	.910	.942	F
R-322/515	355	.0200	232	.257	.210	.773	.824	.876	.906	E F
R-322/540	354	.0200	236	.266	.218	.810	.864	.918	.950	D

LHM **LHM roller series, Low Harmonic designs for very large cubic inch applications. Minimizes valve spring excitation in the RPM range of maximum engine output. Higher RPM potential than the original LH. Recommended lash is .020" intake and .022" exhaust.**

R-274/5202	302	.0200	198	.175	.129	.780	.832	.884	.916	G
R-284/5202	312	.0200	208	.200	.151	.780	.832	.884	.916	F
R-286/5202	314	.0200	205	.206	.156	.780	.832	.884	.916	F
R-286/530	314	.0200	210	.206	.156	.795	.848	.901	.933	E
R-288/530	316	.0200	212	.211	.160	.795	.848	.901	.933	E
R-330/540	358	.0200	253	.301	.258	.810	.864	.918	.950	F

LHP **LHP roller series, Low Harmonic designs for high RPM 500 cu.in. applications. Minimizes valve spring excitation in the RPM range of maximum engine output. Higher RPM potential than the original LH. Recommended lash is .020".**

R-276/525	306	.0200	195	.170	.127	.788	.840	.893	.924	F
R-278/525	308	.0200	197	.174	.131	.788	.840	.893	.924	F

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

LHP *Continued from previous page.*

R-278/540	307	.0200	200	.180	.135	.810	.864	.918	.950	F G
R-280/525	310	.0200	199	.178	.134	.788	.840	.893	.924	E F
R-282/525	312	.0200	201	.182	.138	.788	.840	.893	.924	F
R-290/525	320	.0200	209	.203	.156	.788	.840	.893	.924	E
R-296/525	326	.0200	209	.198	.163	.788	.840	.893	.924	E
R-306/530	337	.0200	222	.234	.186	.795	.848	.901	.933	F

5401 **5401 roller series for large displacement engines with large journal diameters. Recommended lash is .020" intake and .022" exhaust.**

R-266/576	295	.0200	193	.161	.115	.864	.922	.979	1.014	E
R-270/5401	299	.0200	196	.169	.123	.810	.864	.918	.950	E G
R-270/576	299	.0200	197	.171	.124	.864	.922	.979	1.014	E
R-276/5401	305	.0200	201	.183	.136	.810	.864	.918	.950	G
R-276/576	305	.0200	202	.185	.137	.864	.922	.979	1.014	E
R-276/600	305	.0200	202	.185	.136	.900	.960	1.02	1.056	G
R-278/5401	307	.0200	203	.188	.140	.810	.864	.918	.950	G
R-278/5501	307	.0200	204	.189	.140	.810	.864	.918	.950	F
R-280/5301	309	.0200	205	.192	.144	.795	.848	.901	.933	G
R-280/5401	309	.0200	205	.192	.144	.810	.864	.918	.950	F G
R-280/550	309	.0200	205	.194	.145	.825	.880	.935	.968	G
R-280/615	309	.0200	207	.197	.146	.923	.984	1.046	1.082	G
R-280/640	310	.0200	208	.200	.147	.960	1.024	1.088	1.126	G
R-282/5401	311	.0200	207	.198	.149	.810	.864	.918	.950	G
R-282/610	311	.0200	210	.205	.153	.915	.976	1.037	1.074	G
R-282/615	311	.0200	209	.203	.151	.923	.984	1.046	1.082	G
R-284/530	313	.0200	209	.202	.154	.795	.848	.901	.933	E F
R-284/5401	313	.0200	209	.203	.154	.810	.864	.918	.950	F G
R-284/550	313	.0200	209	.203	.154	.825	.880	.935	.968	F
R-284/580	313	.0200	210	.205	.155	.870	.928	.986	1.021	G
R-284/615	313	.0200	212	.211	.158	.923	.984	1.046	1.082	G
R-286/5401	315	.0200	211	.207	.158	.810	.864	.918	.950	E F G
R-286/550	315	.0200	211	.208	.159	.825	.880	.935	.968	E G
R-286/5501	315	.0200	211	.208	.159	.825	.880	.935	.968	G
R-286/560	315	.0200	211	.209	.159	.840	.896	.952	.986	E
R-286/580	315	.0200	212	.210	.159	.870	.928	.986	1.021	G
R-288/525	317	.0200	212	.211	.163	.788	.840	.893	.924	F
R-288/5401	317	.0200	213	.212	.163	.810	.864	.918	.950	G
R-292/5401	321	.0200	217	.222	.172	.810	.864	.918	.950	F
R-300/5601	331	.0200	219	.227	.178	.840	.896	.952	.986	G
R-304/600	335	.0200	223	.239	.189	.900	.960	1.02	1.056	G
R-306/5401	337	.0200	225	.242	.194	.810	.864	.918	.950	G

Continued on next page.

MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

5401 *Continued from previous page.*

R-310/5401	340	.0200	231	.256	.207	.810	.864	.918	.950	F G
R-310/5601	341	.0200	228	.251	.201	.840	.896	.952	.986	G
R-310/600	340	.0200	233	.266	.213	.900	.960	1.020	1.056	G
R-312/615	342	.0200	236	.274	.220	.923	.984	1.046	1.082	G
R-314/530	344	.0200	235	.262	.216	.795	.848	.901	.933	E
R-314/5401	345	.0200	233	.259	.212	.810	.864	.918	.950	E
R-314/550	344	.0200	235	.266	.218	.825	.880	.935	.968	G
R-314/560	345	.0200	234	.262	.213	.840	.896	.952	.986	E
R-314/5601	345	.0200	232	.261	.211	.840	.896	.952	.986	G
R-314/580	345	.0200	234	.265	.215	.870	.928	.986	1.021	G
R-314/600	344	.0200	237	.277	.224	.900	.960	1.020	1.056	G
R-316/515	347	.0200	234	.258	.213	.773	.824	.876	.906	F
R-316/550	346	.0200	237	.271	.222	.825	.880	.935	.968	F
R-316/580	347	.0200	237	.271	.222	.870	.928	.986	1.021	G
R-318/580	348	.0200	241	.282	.232	.870	.928	.986	1.021	G
R-320/5401	351	.0200	240	.272	.225	.810	.864	.918	.950	F
R-324/5401	354	.0200	244	.284	.238	.810	.864	.918	.950	F G

555 **555 roller series for engines with large cam journal diameters. This series provides very good high speed stability. Will run to 10,000+ RPM with properly set up valve train. Proven excellent performer. Recommended lash is .020" intake and .022" exhaust.**

R-266/540	296	.0200	192	.156	.118	.810	.864	.918	.950	E
R-270/500	302	.0200	193	.158	.121	.750	.800	.851	.880	C E
R-270/5402	302	.0200	195	.162	.125	.810	.864	.918	.951	G
R-272/5003	304	.0200	194	.162	.126	.750	.800	.851	.880	F
R-274/5601	304	.0200	201	.177	.137	.840	.896	.952	.986	G
R-274/5602	304	.0200	201	.178	.136	.840	.896	.952	.986	G
R-276/5402	308	.0200	200	.175	.137	.810	.864	.918	.951	G
R-276/555	306	.0200	202	.181	.141	.833	.888	.944	.977	G
R-276/5601	306	.0200	203	.181	.142	.840	.896	.952	.986	G
R-278/5251	310	.0200	201	.177	.140	.788	.840	.893	.924	E
R-278/555	302	.0200	204	.185	.145	.833	.888	.944	.977	G
R-278/600	308	.0200	207	.192	.149	.900	.960	1.020	1.056	G
R-280/5202	313	.0200	202	.180	.142	.780	.832	.884	.915	G
R-280/555	312	.0200	204	.182	.148	.833	.888	.944	.977	G
R-280/6401	309	.0200	212	.205	.159	.960	1.024	1.088	1.127	H
R-282/5003	314	.0200	202	.181	.145	.750	.800	.851	.880	F
R-282/5402	314	.0200	205	.188	.149	.810	.864	.918	.951	G
R-282/555	314	.0200	206	.188	.152	.833	.888	.944	.977	G
R-282/565	313	.0200	207	.191	.156	.848	.904	.961	.994	G
R-284/5203	316	.0200	205	.188	.151	.780	.832	.884	.915	E

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PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES

555 *Continued from previous page.*

R-284/525	316	.0200	206	.189	.152	.788	.840	.893	.924	G
R-284/555	316	.0200	208	.194	.155	.833	.888	.944	.977	E
R-288/5202	320	.0200	208	.196	.158	.780	.832	.884	.915	E
R-290/520	322	.0200	209	.200	.162	.780	.832	.884	.915	E
R-292/5001	326	.0200	208	.197	.161	.750	.800	.851	.880	G
R-292/525	326	.0200	211	.202	.164	.788	.840	.893	.924	G
R-294/5003	328	.0200	210	.201	.165	.750	.800	.851	.880	H
R-296/5001	330	.0200	212	.205	.168	.750	.800	.851	.880	E
R-296/5252	330	.0200	214	.210	.172	.788	.840	.893	.924	G
R-296/540	330	.0200	215	.213	.174	.810	.864	.918	.950	E
R-298/500	332	.0200	213	.208	.172	.750	.800	.851	.880	H
R-298/550	332	.0200	218	.219	.179	.825	.880	.935	.968	G
R-300/510	334	.0200	216	.214	.177	.756	.816	.867	.898	G
R-304/5502	338	.0200	222	.231	.191	.825	.880	.953	.968	G
R-306/5201	340	.0200	221	.227	.189	.780	.832	.884	.915	E
R-310/5302	342	.0200	225	.236	.198	.795	.848	.901	.933	E
R-310/5551	345	.0200	226	.247	.197	.833	.888	.944	.977	G
R-314/640	346	.0200	238	.277	.231	.960	1.024	1.088	1.126	H

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.80	SEE PAGE 3

ENGINE OR APPLICATION SPECIFIC MECHANICAL ROLLER PROFILES

HC **Originally designed for Hooters Cup type .625" lift rule, HC roller series. Also used in other applications without lift rule. Recommended lash is .020" intake and .022" exhaust.**

R-252/390	283	.0200	166	.116	.083	.585	.625	.624	.663	C
R-254/347	285	.0200	165	.118	.093	.521	.555	.555	.590	D
R-254/365	287	.0200	162	.115	.083	.548	.584	.584	.621	C
R-256/366	286	.0200	171	.124	.098	.549	.586	.586	.622	D
R-256/3661	286	.0200	171	.121	.101	.549	.586	.586	.622	D
R-256/390	287	.0200	170	.124	.089	.585	.625	.624	.663	C
R-258/347	289	.0200	168	.125	.099	.521	.555	.555	.590	B D
R-258/3471	286	.0200	170	.126	.102	.521	.555	.555	.590	B
R-258/3472	286	.0200	170	.126	.102	.521	.556	.556	.590	B
R-258/365	291	.0200	166	.121	.089	.548	.584	.584	.621	C G
R-258/3651	288	.0200	172	.133	.096	.548	.584	.584	.621	F
R-258/390	289	.0200	172	.127	.092	.585	.625	.624	.663	C
R-260/3901	292	.0200	172	.128	.094	.585	.625	.624	.663	C

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MECHANICAL ROLLER PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.80	SEE PAGE 3

ENGINE OR APPLICATION SPECIFIC MECHANICAL ROLLER PROFILES

HC *Continued from previous page.*

R-260/3903	287	.0200	181	.141	.110	.585	.624	.664	.703	D
R-262/347	293	.0200	171	.132	.106	.521	.555	.590	.625	D
R-262/365	295	.0200	170	.129	.095	.548	.584	.621	.657	C
R-262/385	290	.0200	176	.140	.103	.578	.616	.655	.693	C
R-262/3901	295	.0200	172	.129	.095	.585	.624	.663	.702	C
R-264/365	297	.0200	172	.133	.099	.548	.584	.621	.657	C
R-264/3651	294	.0200	177	.143	.107	.548	.584	.621	.657	B D
R-264/378	295	.0200	177	.138	.108	.567	.605	.643	.680	C
R-264/3783	291	.0200	182	.147	.117	.567	.605	.643	.681	D
R-264/390	296	.0200	176	.135	.100	.585	.624	.663	.702	C
R-266/365	300	.0200	170	.134	.101	.548	.584	.621	.657	G
R-266/3651	296	.0200	178	.147	.110	.548	.584	.621	.657	F
R-266/366	297	.0200	177	.139	.112	.549	.586	.622	.659	D
R-266/390	298	.0200	178	.139	.103	.585	.624	.663	.702	C
R-266/417	295	.0200	188	.151	.120	.626	.667	.709	.751	C
R-268/365	302	.0200	173	.136	.103	.548	.584	.621	.657	C G
R-268/366	299	.0200	179	.143	.116	.549	.586	.622	.659	D
R-268/390	300	.0200	179	.143	.107	.585	.624	.663	.702	C
R-270/390	303	.0200	179	.143	.108	.585	.624	.663	.702	C
R-272/385	300	.0200	185	.157	.120	.578	.616	.655	.693	C
R-272/390	305	.0200	181	.147	.111	.585	.624	.663	.702	C
R-274/390	307	.0200	182	.151	.115	.585	.624	.663	.702	C
R-274/417	304	.0200	192	.161	.131	.626	.667	.709	.751	C
R-278/390	311	.0200	186	.159	.121	.585	.624	.663	.702	C
R-280/3901	313	.0200	188	.162	.125	.585	.624	.663	.702	C
R-286/390	319	.0200	194	.173	.136	.585	.624	.663	.702	C

RLDP **Chevrolet LS V8, RLDP mechanical roller series, stable lobes used in endurance racing applications. Recommended lash is .020" intake and .022" exhaust.**

R-242/353	273	.0200	157	.097	.074			.600	.635	F
R-248/353	279	.0200	162	.108	.083			.600	.635	F
R-254/353	286	.0200	165	.122	.087			.600	.635	F
R-260/353	292	.0200	169	.131	.096			.600	.635	F

RLS **Chevrolet LS1 V8, RLS mechanical roller series, used in high speed performance applications. Recommended lash is .020" intake and .022" exhaust.**

R-232/382	263	.0200	156	.091	.059			.649	.688	F
R-240/3821	269	.0200	161	.102	.068			.649	.688	F
R-244/382	273	.0200	164	.110	.074			.649	.688	F
R-248/382	277	.0200	167	.117	.081			.649	.688	F
R-252/382	281	.0200	171	.125	.088			.649	.688	F
R-260/382	289	.0200	177	.140	.102			.649	.688	F
R-276/382	302	.0200	190	.168	.130			.649	.688	F

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				CAM DYNAMICS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	GRIND #

PROFILES FOR FLAT TAPPET STOCK LIFT RULES APPLICATIONS

CD1	CD1 hydraulic and mechanical lifter Cam Dynamics stocker series—Non Dwell.									
H-206/254	263	.0030	94	.048	.025	.381	.406	.432	.447	731
H-209/239	266	.0030	89	.053	.031	.359	.382	.406	.421	735
H-221/259	254	.0030	103	.069	.043	.389	.414	.440	.456	730
H-224/278	285	.0030	118	.070	.043	.417	.445	.473	.489	726
H-224/258	299	.0030	116	.072	.045	.462	.493	.524	.542	750
H-227/249	284	.0030	108	.077	.052	.374	.398	.423	.438	738
H-227/265	283	.0030	122	.079	.048	.398	.424	.451	.466	751
H-228/2254	284	.0030	104	.078	.050	.338	.361	.383	.397	734
H-228/282	286	.0030	124	.079	.051	.423	.451	.479	.496	727
H-235/269	290	.0030	124	.089	.061	.404	.430	.457	.473	724
H-236/285	290	.0030	136	.092	.061	.428	.456	.484	.502	797
H-236/285	293	.0030	131	.091	.061	.428	.456	.484	.502	725
H-242/247	302	.0030	113	.096	.070	.371	.395	.420	.435	721
H-242/260	296	.0030	134	.099	.069	.390	.416	.442	.458	788
H-242/272	299	.0030	123	.093	.067	.408	.435	.462	.479	711
H-242/2764	298	.0030	136	.099	.069	.415	.442	.470	.486	729
H-242/285	296	.0030	142	.101	.070	.428	.456	.484	.502	793
H-245/264	307	.0030	123	.100	.071	.396	.422	.449	.465	722
H-246/286	300	.0030	146	.108	.076	.429	.458	.486	.503	659
H-247/278	305	.0030	137	.104	.075	.420	.445	.473	.489	715
H-248/240	302	.0030	136	.110	.079	.360	.384	.408	.422	609
H-248/296	302	.0030	150	.111	.079	.444	.474	.503	.521	602
H-248/307	302	.0030	152	.111	.079	.461	.491	.522	.540	639
H-249/264	308	.0030	130	.106	.078	.396	.422	.449	.465	712
H-250/238	307	.0030	104	.100	.076	.357	.381	.405	.419	740
H-250/278	304	.0030	148	.114	.082	.417	.445	.473	.489	798
H-250/286	304	.0030	150	.114	.082	.429	.458	.486	.503	696
H-250/300	306	.0030	145	.110	.080	.450	.480	.510	.528	619
H-252/2601	306	.0030	150	.118	.086	.390	.416	.442	.458	615
H-252/260	308	.0030	144	.114	.084	.390	.416	.442	.458	790
H-252/296	306	.0030	154	.118	.085	.444	.474	.503	.521	606
H-252/301	306	.0030	154	.118	.083	.452	.482	.512	.530	728
H-252/307	306	.0030	155	.118	.086	.461	.491	.522	.540	611
H-254/2764	314	.0030	137	.111	.083	.416	.443	.471	.488	723
H-254/280	306	.0040	153	.120	.088	.420	.448	.476	.493	684
H-254/301	326	.0030	148	.111	.081	.451	.482	.512	.530	625
H-256/260	310	.0030	154	.124	.092	.390	.416	.442	.458	617
H-256/272	314	.0030	157	.118	.101	.408	.435	.469	.479	679
H-256/296	310	.0030	158	.124	.092	.444	.474	.503	.521	618
H-256/324	311	.0030	160	.125	.092	.486	.518	.551	.570	736

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				CAM DYNAMICS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	GRIND #

PROFILES FOR FLAT TAPPET STOCK LIFT RULES APPLICATIONS

CD1 *Continued from previous page.*

H-258/240	312	.0030	145	.125	.094	.360	.384	.408	.422	610
H-258/280	312	.0030	156	.126	.095	.420	.448	.476	.493	648
H-258/290	312	.0030	158	.127	.095	.435	.464	.493	.510	604
H-258/301	330	.0030	151	.117	.086	.451	.482	.512	.530	626
H-258/307	312	.0030	161	.128	.095	.461	.491	.522	.540	612
H-259/238	319	.0030	110	.109	.086	.357	.381	.405	.419	719
H-260/2601	314	.0030	154	.129	.098	.390	.416	.442	.458	622
H-260/278	319	.0030	142	.120	.092	.417	.445	.473	.489	713
H-260/2781	312	.0040	158	.130	.098	.417	.445	.473	.489	660
H-260/296	314	.0030	162	.130	.098	.444	.474	.503	.521	620
H-260/315	314	.0030	164	.131	.098	.473	.504	.536	.554	794
H-261/248	323	.0030	124	.114	.089	.372	.397	.422	.436	720
H-262/301	316	.0030	164	.134	.101	.452	.482	.512	.530	791
H-262/3011	334	.0030	152	.122	.092	.452	.482	.512	.530	640
H-262/325	316	.0030	167	.135	.102	.488	.520	.553	.572	607
H-264/260	320	.0030	152	.131	.102	.390	.416	.442	.458	799
H-264/282	322	.0030	166	.130	.113	.451	.451	.479	.496	698
H-264/2844	320	.0030	152	.128	.100	.427	.455	.483	.501	716
H-264/285	318	.0030	163	.136	.104	.428	.456	.485	.502	628
H-264/296	318	.0030	165	.137	.105	.444	.474	.503	.521	637
H-265/3034	322	.0030	162	.136	.106	.455	.485	.516	.534	714
H-266/260	320	.0030	161	.138	.107	.390	.416	.442	.458	796
H-266/273	320	.0030	160	.136	.105	.410	.437	.464	.480	789
H-266/294	318	.0030	157	.133	.104	.441	.470	.500	.517	768
H-266/307	320	.0030	168	.140	.108	.461	.491	.522	.540	613
H-268/296	322	.0030	169	.143	.111	.444	.474	.503	.521	603
H-268/301	340	.0030	158	.131	.101	.452	.482	.512	.530	627
H-268/315	322	.0030	172	.144	.111	.473	.504	.536	.554	601
H-270/301	324	.0030	172	.146	.114	.452	.482	.512	.530	792
H-272/273	326	.0030	172	.150	.118	.410	.437	.464	.480	616
H-272/273	328	.0030	162	.143	.114	.410	.437	.464	.480	272A
H-272/280	326	.0030	170	.148	.117	.420	.448	.476	.493	649
H-272/290	326	.0030	172	.149	.117	.435	.464	.493	.510	605
H-272/315	326	.0030	175	.151	.118	.473	.504	.536	.554	795
H-272/325	326	.0030	177	.151	.118	.488	.520	.553	.572	608
H-274/296	328	.0030	174	.152	.121	.444	.474	.503	.521	621
H-276/307	330	.0030	180	.147	.138	.461	.491	.522	.540	755
H-278/326	332	.0030	180	.158	.126	.489	.522	.554	.574	757
F-246/318	282	.0120	155	.113	.078	.477	.509	.541	.560	685
F-252/318	288	.0120	159	.123	.088	.477	.509	.541	.560	686

Continued on next page.

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				CAM DYNAMICS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	GRIND #

PROFILES FOR FLAT TAPPET STOCK LIFT RULES APPLICATIONS

CD1 *Continued from previous page.*

F-254/301	326	.0030	148	.111	.081	.451	.482	.512	.530	625
F-254/3101	292	.0120	156	.121	.093	.465	.496	.527	.546	695
F-258/301	330	.0030	151	.117	.086	.451	.482	.512	.530	626
F-258/3071	318	.0300	157	.124	.093	.461	.491	.522	.540	644
F-260/260	314	.0030	154	.129	.098	.390	.416	.442	.458	622
F-260/3060	322	.0030	156	.125	.095	.459	.490	.520	.539	260M
F-260/310	296	.0120	161	.133	.100	.465	.496	.527	.546	691
F-261/307	328	.0030	155	.124	.094	.461	.491	.522	.540	832
F-261/3071	324	.0300	161	.129	.097	.461	.491	.522	.540	643
F-262/3234	324	.0030	162	.130	.098	.485	.517	.550	.569	262M
F-262/329	328	.0030	166	.132	.097	.494	.526	.559	.579	631
F-264/285	318	.0030	163	.136	.104	.428	.456	.485	.502	628
F-266/310	302	.0120	165	.140	.109	.465	.496	.527	.546	692
F-268/301	340	.0030	158	.131	.101	.452	.482	.512	.530	627
F-268/3060	330	.0030	164	.137	.107	.459	.490	.520	.539	268M
F-272/3095	337	.0030	166	.141	.111	.465	.496	.527	.546	869
F-270/329	336	.0030	167	.138	.107	.494	.526	.559	.579	868
F-270/3451	306	.0120	180	.155	.121	.518	.552	.587	.607	693
F-272/3234	334	.0030	172	.145	.113	.485	.517	.550	.569	272M
F-272/345	326	.0030	186	.161	.124	.518	.552	.587	.607	636
F-274/345	310	.0120	193	.161	.127	518	.552	.587	.607	694
F-274/360	310	.0120	187	.165	.129	.540	.576	.612	.634	687
F-276/3090	338	.0030	170	.149	.119	.464	.494	.525	.544	276M
F-278/3290	340	.0030	176	.154	.123	.494	.526	.559	.579	278M
F-278/345	332	.0030	192	.171	.135	.518	.552	.587	.607	867
F-278/370	314	.0120	192	.174	.138	.555	.592	.629	.651	688

CD2 **CD2 hydraulic and mechanical lifter Cam Dynamics stocker series—Dwell at Max Lift**

H-235/261	289	.0030	131	.091	.064	.392	.418	.444	.459	742
H-236/265	302	.0030	132	.056	.056	.398	.424	.451	.466	752
H-242/2600	300	.0030	135	.092	.063	.390	.416	.442	.458	754
H-242/265	298	.0030	138	.101	.070	.398	.424	.451	.466	741
H-244/307	297	.0030	150	.085	.096	.461	.491	.522	.540	747
H-250/307	304	.0030	155	.103	.096	.461	.491	.522	.540	748
H-252/2603	302	.0030	154	.121	.088	.390	.416	.443	.458	654
H-252/316	302	.0040	161	.121	.087	.474	.506	.537	.556	666
H-253/260	309	.0030	148	.118	.088	.390	.416	.442	.458	744
H-253/307	307	.0030	159	.108	.101	.461	.491	.522	.540	746
H-254/272	308	.0030	150	.120	.088	.408	.435	.462	.479	753
H-254/2721	308	.0030	159	.125	.091	.408	.435	.462	.479	676

Continued on next page.

SPECIALIZED PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				CAM DYNAMICS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	GRIND #

PROFILES FOR FLAT TAPPET AND HYDRAULIC ROLLER STOCK LIFT RULES APPLICATIONS

CD2 *Continued from previous page.*

H-256/242	308	.0030	146	.121	.091	.363	.387	.411	.426	682
H-256/2603	306	.0030	160	.129	.095	.390	.416	.443	.458	678
H-256/269	306	.0030	160	.128	.094	.404	.430	.457	.473	661
H-258/284	312	.0030	166	.133	.098	.426	.454	.483	.500	677
H-258/312	308	.0040	166	.131	.097	.468	.499	.530	.549	664
H-260/2603	310	.0030	162	.134	.101	.390	.416	.443	.458	656
H-260/2604	310	.0030	166	.138	.103	.390	.417	.443	.458	699
H-262/309	315	.0030	166	.120	.112	.461	.491	.522	.540	749
H-260/260	316	.0030	148	.125	.096	.390	.416	.442	.458	260A
H-260/269	310	.0030	164	.134	.101	.404	.430	.457	.473	673
H-264/2603	314	.0030	166	.140	.108	.390	.416	.443	.458	663
H-264/2604	314	.0030	170	.144	.110	.390	.417	.443	.458	700
H-264/318	314	.0040	174	.142	.107	.477	.509	.541	.560	665
H-266/262	318	.0030	163	.138	.107	.393	.419	.445	.461	683
H-266/277	316	.0030	169	.142	.109	.416	.443	.471	.488	662
H-266/316	316	.0040	175	.145	.111	.474	.506	.537	.556	667
H-268/307	322	.0030	172	.134	.125	.461	.491	.522	.540	756
H-272/2733	322	.0030	177	.154	.121	.410	.437	.465	.481	655
H-276/273	332	.0030	165	.148	.120	.410	.437	.464	.480	600
H-276/2733	328	.0030	184	.164	.131	.410	.437	.465	.481	679
H-276/2734	328	.0030	186	.167	.133	.410	.437	.635	.481	701
H-276/3082	328	.0030	184	.161	.127	.462	.493	.524	.542	276M
H-278/326	326	.0030	180	.159	.126	.489	.522	.554	.574	757
H-284/308	338	.0030	191	.162	.152	.462	.493	.524	.542	745
F-252/244	286	.0120	151	.122	.089	.366	.390	.415	.429	849
F-254/310	305	.0030	164	.126	.091	.465	.496	.527	.546	671
F-260/244	294	.0120	159	.135	.102	.366	.390	.415	.429	850
F-262/3101	313	.0030	172	.140	.105	.465	.496	.527	.546	681
F-264/244	298	.0120	163	.141	.109	.366	.390	.415	.429	852
F-268/310	319	.0030	178	.151	.116	.465	.496	.527	.546	672
F-276/258	310	.0120	179	.161	.130	.387	.413	.439	.454	851

CD3 **CD3 hydraulic roller Cam Dynamics stocker series—Non Dwell.**

HR-238/300	298	.0040	150	.097	.065	.450	.480	.510	.528	295HR
HR-244/268	300	.0030	136	.104	.073	.402	.429	.456	.472	292HR
HR-244/278	300	.0030	152	.105	.073	.417	.445	.473	.489	263HR
HR-246/286	302	.0030	158	.114	.078	.429	.458	.486	.503	702HR
HR-246/300	306	.0040	156	.111	.077	.450	.480	.510	.528	296HR
HR-250/286	306	.0030	162	.121	.085	.429	.458	.486	.503	703HR
HR-250/300	306	.0040	165	.121	.084	.450	.480	.510	.528	

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PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				CAM DYNAMICS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	GRIND #

PROFILES FOR HYDRAULIC ROLLER STOCK LIFT RULES APPLICATIONS

CD3 *Continued from previous page.*

HR-252/268	308	.0030	142	.116	.085	.402	.429	.456	.472	293HR
HR-252/290	306	.0040	151	.116	.084	.435	.464	.493	.510	646HR
HR-252/300	312	.0040	162	.122	.087	.450	.480	.510	.528	297HR
HR-252/3001	306	.0040	153	.116	.084	.450	.480	.510	.528	645HR
HR-252/316	308	.0040	159	.120	.086	.474	.506	.537	.556	650HR
HR-252/3161	308	.0040	164	.124	.087	.474	.506	.537	.556	674HR
HR-254/278	310	.0030	150	.120	.089	.417	.445	.473	.489	264HR
HR-254/310	310	.0040	160	.123	089	.465	.496	.527	.546	670HR
HR-256/345	312	.0030	173	.133	.096	.518	.552	.587	.607	668HR
HR-258/300	318	.0040	156	.125	.093	.450	.480	.510	.528	629HR
HR-258/3001	312	.0040	158	.125	.098	.450	.480	.510	.528	455HR
HR-258/306	314	.0040	178	.140	.100	.459	.490	.520	.539	689HR
HR-258/310	314	.0040	164	.130	.096	.465	.496	.527	.546	652HR
HR-258/354	314	.0030	177	.138	.099	.531	.566	.602	.623	657HR
HR-260/268	316	.0030	150	.128	.097	.402	.429	.456	.472	294HR
HR-260/290	314	.0040	158	.128	.097	.435	.464	.493	.510	647HR
HR-264/340	320	.0040	174	.142	.107	.510	.544	.578	.598	651HR
HR-264/3401	320	.0040	179	.147	.109	.510	.544	.578	.599	675HR
HR-266/306	326	.0040	164	.138	.106	.459	.490	.520	.538	630HR
HR-266/3061	320	.0040	167	.138	.106	.459	.490	.520	.539	456HR
HR-266/320	322	.0040	173	.144	.110	.480	.512	.544	.563	653HR
HR-266/360	322	.0030	184	.153	.114	.540	.576	.612	.634	658HR
HR-268/3121	324	.0040	188	.160	.119	.468	.499	.531	.549	690HR
HR-270/345	326	.0030	188	.161	.122	.518	.552	.587	.607	669HR

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

PROFILES FOR SPECIALTY OHV AND FLATHEAD APPLICATIONS

These profiles may be used in other applications. Consult with the Crane Cams technical staff for recommendations.

MF5 **MF5 mechanical series for performance and racing applications on smaller diameter lobes. Recommended lash is .016" intake and .018" exhaust.**

F-202/252	240	.0160	96	.042	.023	.378	.403	.428	.444	.800
F-212/266	250	.0160	110	.055	.032	.399	.426	.452	.468	.800
F-222/280	260	.0160	123	.070	.043	.420	.448	.476	.493	.800
F-232/294	270	.0160	135	.086	.055	.441	.470	.500	.517	.800
F-242/308	280	.0160	146	.102	.070	.462	.493	.524	.542	.800
F-252/322	290	.0160	157	.119	.085	.483	.515	.547	.567	.800

Continued on next page.

SPECIALIZED PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				MINIMUM TAPPET DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 2

PROFILES FOR SPECIALTY OHV AND FLATHEAD APPLICATIONS

MF5 *Continued from previous page.*

F-262/336	300	.0160	168	.136	.102	.504	.538	.571	.591	.800
F-272/350	310	.0160	179	.153	.119	.525	.560	.595	.616	.800

VW1 VW1 mechanical series for VW Type 4 opposed-4, with .941" tappet diameter. Recommended cold lash is .006" intake and .008" exhaust.

						1.30	1.36			
F-230/328	278	.0160	142	.082	.053	.426	.446			.941
F-240/335	288	.0160	150	.098	.066	.436	.456			.941
F-250/3677	296	.0140	166	.121	.084	.478	.500			.941

OHC1 OHC1 mechanical series for VW Type 1 opposed-4, with 1.000" tappet diameter. Recommended cold lash is .002".

						1.13				
F-210/305	264	.0120	129	.053	.026	.345				1.000
F-220/320	274	.0120	140	.071	.039	.362				1.000
F-230/340	284	.0120	150	.089	.053	.384				1.000
F-240/360	294	.0120	162	.109	.070	.407				1.000
F-250/380	304	.0120	174	.129	.089	.429				1.000
F-260/400	314	.0120	184	.149	.108	.452				1.000

MF6 MF6 mechanical series for flathead engines with a minimum tappet diameter of .996". Minimum design base circle radius is .900" minus lobe lift. Recommended cold lash is .010" intake, and .014" exhaust.

F-198/290	238	.0080	117	.033	.012					.996
F-208/310	248	.0080	130	.050	.019					.996
F-218/330	258	.0080	141	.069	.033					.996
F-228/350	254	.0140	152	.089	.050					.996
F-238/370	264	.0140	162	.109	.069					.996
F-248/390	274	.0140	172	.129	.089					.996
F-258/410	284	.0140	183	.149	.109					.996

MF7 MF7 mechanical series for industrial engines used in tractor pulling competition with a minimum tappet diameter of 1.100". Recommended lash is .016" to .018".

F-200/302	240	.0100	124	.037	.016	.453	.483	.513	.532	1.100
F-210/322	250	.0100	136	.054	.024	.483	.515	.547	.567	1.100
F-220/342	260	.0100	148	.074	.037	.513	.547	.581	.602	1.100
F-230/362	270	.0100	160	.096	.054	.543	.579	.615	.637	1.100
F-240/382	280	.0100	171	.119	.074	.573	.611	.649	.672	1.100

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3

MECHANICAL ROLLER PROFILES FOR SPECIALTY OHV APPLICATIONS

MR3 — MR3 mechanical roller series for industrial engines used in tractor pulling competition with a minimum journal size of 2.200" diameter. Recommended lash is .016" to .018".

R-200/302	252	.0100	117	.040	.021	.453	.483	.513	.532	F
R-210/322	262	.0100	129	.053	.029	.483	.515	.547	.567	F
R-220/342	272	.0100	141	.068	.038	.513	.547	.581	.602	F
R-226/354	278	.0100	148	.078	.047	.531	.566	.602	.623	F
R-230/362	282	.0100	152	.085	.053	.543	.579	.615	.637	F
R-236/374	288	.0100	159	.096	.061	.561	.598	.636	.658	F
R-240/382	292	.0100	163	.104	.068	.573	.611	.649	.672	F
R-250/402	302	.0100	173	.125	.085	.603	.643	.683	.708	F

MR4 — MR4 mechanical roller series for industrial engines used in tractor pulling competition with a minimum journal size of 2.200" diameter. Recommended lash is .020" to .022".

R-192/380	219	.0200	124	.029	.014	.570	.608	.646	.669	F
R-200/375	236	.0200	126	.041	.024	.563	.600	.638	.660	F
R-208/385	236	.0200	136	.047	.029	.578	.616	.655	.678	F
R-210/390	246	.0200	136	.054	.033	.585	.624	.663	.686	F
R-212/395	240	.0200	140	.053	.033	.593	.632	.672	.693	F
R-212/405	240	.0200	141	.053	.033	.608	.648	.689	.713	F
R-214/370	250	.0200	140	.058	.035	.555	.592	.629	.651	F
R-214/380	246	.0200	139	.056	.035	.570	.608	.646	.669	F
R-220/405	256	.0200	146	.066	.041	.608	.648	.689	.713	F
R-224/380	260	.0200	149	.073	.045	.570	.608	.646	.669	F
R-224/425	252	.0200	152	.072	.047	.638	.680	.723	.748	F
R-226/380	258	.0200	146	.072	.050	.570	.608	.646	.669	F
R-230/420	266	.0200	156	.082	.052	.630	.672	.714	.739	F
R-232/380	264	.0200	150	.081	.058	.570	.608	.646	.669	F
R-234/390	270	.0200	158	.090	.058	.585	.624	.663	.686	F
R-236/429	272	.0200	162	.092	.060	.644	.686	.729	.755	F
R-240/435	276	.0200	166	.099	.066	.653	.696	.740	.766	F
R-250/450	286	.0200	175	.120	.081	.675	.720	.765	.792	F

TPR400 — TPR400 mechanical roller series with .400" lobe lift, for industrial engines used in tractor pulling competition with a minimum journal size of 2.200" diameter. Recommended lash is .020" to .022".

R-216/400	252	.0200	142	.060	.037	.600	.640	.680	.704	F
R-226/400	262	.0200	151	.075	.048	.600	.640	.680	.704	F
R-228/400	264	.0200	153	.078	.050	.600	.640	.680	.704	F
R-230/400	266	.0200	155	.082	.052	.600	.640	.680	.704	F
R-236/400	272	.0200	160	.092	.060	.600	.640	.680	.704	F
R-246/400	282	.0200	169	.112	.075	.600	.640	.680	.704	F
R-248/4001	284	.0200	171	.116	.078	.600	.640	.680	.704	F
R-250/4001	286	.0200	172	.121	.082	.600	.640	.680	.704	F

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN				DESIGN LOBE SIZE CODE
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.50	1.60	1.70	1.76	SEE PAGE 3
MECHANICAL ROLLER PROFILES FOR SPECIALTY OHV APPLICATIONS										
TPR450	**TPR450 mechanical roller series with .450" lobe lift, for industrial engines used in tractor pulling competition with a minimum journal size of 2.200" diameter. Recommended lash is .020" to .022".**									
R-234/450	270	.0200	160	.088	.058	.675	.720	.765	.792	F
R-236/450	272	.0200	162	.092	.060	.675	.720	.765	.792	F
R-238/450	274	.0200	164	.095	.053	.675	.720	.765	.792	F
R-248/450	284	.0200	174	.115	.078	.675	.720	.765	.792	F
R-250/450	286	.0200	175	.120	.081	.675	.720	.765	.792	F
R-256/450	292	.0200	181	.133	.092	.675	.720	.765	.792	F
R-258/450	294	.0200	183	.138	.095	.675	.720	.765	.792	F

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH	MINIMUM FOLLOWER DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST		SEE PAGE 2
PROFILES FOR DIRECT ACTUATION FOLLOWER SOHC AND DOHC APPLICATIONS							
OHC2	**OHC2 hydraulic series for OHC engines using bucket style followers with a minimum diameter of 1.308" and a minimum design base circle radius of 1.000" minus lobe lift.**						
H-224/384	268	.0040	160	.086	.042	.384	1.308
H-232/402	276	.0040	169	.106	.058	.402	1.308
H-240/420	284	.0040	178	.126	.076	.420	1.308
H-248/438	292	.0040	186	.146	.095	.438	1.308
H-256/456	300	.0040	195	.168	.115	.456	1.308
OHC3	**OHC3 hydraulic series for OHC engines using bucket style followers with a minimum diameter of 1.500" and a minimum design base circle radius of .700".**						
H-192/325	232	.0040	126	.019	.007	.325	1.500
H-212/395	252	.0040	154	.059	.023	.395	1.500
H-222/430	262	.0040	164	.085	.038	.430	1.500
H-232/430	272	.0040	173	.111	.058	.430	1.500
H-232/460	272	.0040	176	.112	.059	.460	1.500
H-242/480	282	.0040	186	.141	.083	.480	1.500
H-252/480	292	.0040	195	.167	.109	.480	1.500
H-262/480	302	.0040	204	.191	.135	.480	1.500
OHC5	**OHC5 mechanical series for OHC engines using bucket style followers with a minimum tappet diameter of .960" and a base circle radius of .550". Recommended cold lash is .008" intake, and .010" exhaust.**						
F-230/318	258	.0160	144	.089	.053	.318	.960
F-238/342	266	.0160	156	.106	.068	.342	.960
F-244/360	272	.0160	165	.118	.079	.360	.960

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH	MINIMUM FOLLOWER DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST		SEE PAGE 2

PROFILES FOR DIRECT ACTUATION FOLLOWER SOHC AND DOHC APPLICATIONS

OHC1	OHC1 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.000". Recommended cold lash is .012".						
F-210/305	264	.0120	129	.053	.026	.305	1.000
F-220/320	274	.0120	140	.071	.039	.320	1.000
F-230/340	284	.0120	150	.089	.053	.340	1.000
F-240/360	294	.0120	162	.109	.070	.360	1.000
F-250/380	304	.0120	174	.129	.089	.380	1.000
F-260/400	314	.0120	184	.149	.108	.400	1.000

OHC4	OHC4 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.020" and a minimum design base circle radius of .510". Recommended cold lash is .006" intake, and .010" exhaust.						
F-236/340	284	.0052	156	.104	.065	.340	1.020
F-242/360	290	.0052	163	.115	.076	.360	1.020
F-246/380	294	.0052	170	.126	.083	.380	1.020
F-252/360	298	.0050	172	.134	.095	.360	1.020
F-252/388	298	.0052	178	.140	.097	.388	1.020
F-256/397	302	.0052	182	.148	.104	.397	1.020
F-262/400	308	.0052	186	.159	.119	.400	1.020
F-272/412	318	.0052	198	.179	.139	.412	1.020

OHC6	OHC6 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.020" and a minimum design base circle radius of .510". Recommended cold lash is .006" intake, and .010" exhaust.						
F-264/390	306	.0120	184	.154	.115	.390	1.020
F-268/398	310	.0120	188	.162	.123	.398	1.020
F-274/410	316	.0120	194	.174	.134	.410	1.020
F-278/418	320	.0120	198	.181	.142	.418	1.020
F-288/438	330	.0120	208	.199	.163	.438	1.020

OHC7	OHC7 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.100" and a minimum design base circle radius of .500".						
F-240/380	280	.0140	168	.114	.072	.380	1.100
F-260/420	300	.0140	188	.157	.113	.420	1.100

OHC8	OHC8 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.125" and a minimum design base circle radius of .925" Recommended cold lash is .006" intake, .008" exhaust. minus lobe lift.						
F-206/310	250	.0050	128	.047	.019	.310	1.125
F-216/330	260	.0050	140	.065	.031	.330	1.125
F-226/350	270	.0050	152	.085	.046	.350	1.125
F-236/370	280	.0050	164	.107	.065	.370	1.125
F-246/390	290	.0050	176	.130	.086	.390	1.125
F-256/410	300	.0050	186	.153	.108	.410	1.125
F-266/430	310	.0050	196	.177	.131	.430	1.125
F-276/450	320	.0050	208	.200	.154	.450	1.125
F-286/470	330	.0050	218	.224	.178	.470	1.125

SPECIALIZED PROFILES

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH	MINIMUM FOLLOWER DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST		SEE PAGE 2

PROFILES FOR DIRECT ACTUATION FOLLOWER SOHC AND DOHC APPLICATIONS

OHC9 — OHC9 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.180" and a minimum design base circle radius of .970" minus lobe lift.. Recommended cold lash is .006" intake, and .008" exhaust.

OHC9							
F-258/450	300	.0040	194	.168	.119	.450	1.180
F-268/470	310	.0040	204	.190	.142	.470	1.180

OHC11 — OHC11 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.200" and a minimum design base circle radius of .970" minus lobe lift. Recommended cold lash is .008" intake, and .010" exhaust.

OHC11							
F-260/450	292	.0100	200	.180	.130	.450	1.200
F-270/465	302	.0100	214	.204	.155	.465	1.200
F-280/480	312	.0100	219	.227	.179	.480	1.200

OHC12 — OHC12 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.220" and a minimum design base circle radius of 1.150" minus lobe lift. Recommended cold lash is .018".

OHC12							
F-222/408	270	.0140	157	.072	.045	.408	1.220
F-232/428	280	.0140	167	.095	.061	.428	1.220
F-242/448	290	.0140	176	.117	.078	.448	1.220
F-252/468	300	.0140	186	.143	.099	.468	1.220
F-284/492	332	.0140	220	.231	.182	.492	1.220

OHC13 — OHC13 mechanical series for OHC engines using bucket style followers with a minimum diameter of 1.375" and a minimum design base circle radius of 1.130" minus lobe lift. Recommended cold lash is .018".

OHC13							
F-234/432 (.012"lash)	258	.0200	176	.116	.063	.432	1.375
F-260/525	308	.0140	200	.175	.122	.525	1.375
F-270/545	318	.0140	209	.201	.148	.545	1.375
F-276/558	324	.0140	215	.219	.165	.558	1.375
F-282/570	330	.0140	221	.238	.181	.570	1.375

OHC10 — OHC10 mechanical miscellaneous profiles for OHC engines using bucket style followers of various tappet diameters and lobe sizes. Contact the Crane Cams technical staff for recommendations.

OHC10							
F-230/440	292	.0140	168	.095	.053	.440	1.300
F-240/470	302	.0140	180	.121	.072	.470	1.300
F-262/420	300	.0100	197	.176	.129	.420	1.200
F-262/450	300	.0100	200	.181	.131	.450	1.200
F-280/530	322	.0050	220	.233	.178	.530	1.300
F-284/488	324	.0140	219	.227	.177	.488	1.180

PROFILE CODE DUR. AT .050"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH	MINIMUM FOLLOWER DIAMETER
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST		SEE PAGE 2

ENGINE SPECIFIC PROFILES FOR DIRECT ACTUATION FOLLOWER SOHC AND DOHC APPLICATIONS

These profiles may be used in other applications. Consult with the Crane Cams technical staff for recommendations.

OHC14	Ford Zetec DOHC 2.0L 4-valve I-4, mechanical series. These lobes use a base circle radius of .709". Recommended lash is .006" intake and .010" exhaust. (223 prefix)						
F-206/366	228	.0200	142	.046	.020	.366	1.181
F-210/374	232	.0200	146	.054	.024	.374	1.181
F-214/382	236	.0200	150	.063	.029	.382	1.181
F-218/390	240	.0200	154	.072	.033	.390	1.181
F-226/410	248	.0200	164	.090	.046	.410	1.181
F-236/435	258	.0200	174	.115	.068	.435	1.181
F-246/460	268	.0200	184	.139	.090	.460	1.181

OHC16	Ford Duratec DOHC 2.3L 4-valve I-4, mechanical series. These lobes use a base circle radius of .650". Recommended lash is .010" intake and .012" exhaust. (224 prefix)						
F-204/354	224	.0200	140	.042	.017	.354	1.220
F-212/374	232	.0200	150	.068	.024	.374	1.220
F-216/385	238	.0200	154	.066	.030	.385	1.220
F-226/410	248	.0200	164	.090	.046	.410	1.220
F-236/435	258	.0200	174	.115	.068	.435	1.220
F-246/460	268	.0200	184	.139	.090	.460	1.220
F-256/485	278	.0200	194	.165	.115	.485	1.220

OHCHYU	Hyundai DOHC 2.7L 4-valve V6, hydraulic series. These lobes use a base circle radius of .709".						
H-202/341	236	.0060	136	.038	.011	.341	1.181
H-216/370	252	.0060	152	.068	.028	.370	1.181

OHC4AG	Toyota DOHC 1.6L 4-valve 4AG I-4, mechanical series. These lobes use a base circle radius of .550". Recommended lash is .008" intake and .010" exhaust.						
F-242/410	268	.0200	173	.119	.075	.410	1.100
F-248/424	274	.0200	179	.133	.087	.424	1.100

OHC15	Toyota DOHC 3.0L 4-valve I-6, mechanical series. These lobes use a base circle radius of .709". Recommended lash is .008" intake and .012" exhaust. (705 prefix)						
F-214/362	236	.0200	146	.061	.022	.362	1.093
F-222/378	244	.0200	154	.079	.039	.378	1.093
F-230/394	252	.0200	162	.097	.054	.394	1.093
F-238/410	260	.0200	170	.115	.071	.410	1.093
F-246/426	268	.0200	178	.133	.088	.426	1.093
F-254/442	276	.0200	186	.151	.105	.442	1.093
F-262/458	284	.0200	192	.169	.122	.458	1.093

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			

ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS

These profiles may be used in other applications. Consult with the Crane Cams technical staff for recommendations.

ACU	Acura DOHC 1.8L 4-valve B18A1 I-4, mechanical series. Recommended lash is .004" intake and .008" exhaust. (Crane Cams 101 prefix)							
ACU-202/400INT	228	.0200	97	.041	.020	.224	.400	0.551
ACU-206/400INT	232	.0200	99	.047	.023	.224	.400	0.551
ACU-204/388EXH	242	.0200	94	.044	.025	.218	.388	0.551
ACU-208/388EXH	246	.0200	95	.050	.027	.218	.388	0.551
ACU-212/388EXH	250	.0200	97	.056	.031	.218	.388	0.551
ACU-218/433	246	.0200	114	.067	.036	.240	.433	0.551
ACU-226/453	254	.0200	125	.083	.047	.250	.453	0.551
ACU-234/472	262	.0200	134	.101	.060	.260	.472	0.551

GMHEC	Chevrolet / GM DOHC 2.2L 4-valve Ecotec I-4, hydraulic series.							
GM-197/428	238	.0060	101	.039	.008	.252	.428	0.590
GM-201/440	242	.0060	106	.045	.011	.259	.428	0.590
GM-224/475	266	.0060	128	.090	.033	.280	.475	0.590

GMMEC	Chevrolet / GM DOHC 2.2L 4-valve Ecotec I-4, mechanical series. Recommended lash is .007" intake and .009" exhaust, set between the follower and base circle.							
GM-236/520	261	.0200	139	.102	.063	.3067	.520	0.590
GM-246/520	271	.0200	147	.126	.081	.3067	.520	0.590
GM-250/502	275	.0200	148	.136	.089	.2960	.502	0.590
GM-256/520	281	.0200	155	.152	.102	.3067	.520	0.590
GM-266/520	291	.0200	163	.178	.126	.3067	.520	0.590
GM-266/550	294	.0200	160	.167	.116	.3243	.550	0.590
GM-280/540	308	.0200	169	.198	.149	.3180	.540	0.590
GM-290/540	318	.0200	178	.223	.172	.3180	.540	0.590

CHR1	Chrysler SOHC 2.0L 4-valve I-4, hydraulic roller series. Lobes designed for a base radius of .550" or less, and require Ferrea lash caps #C10008. (Crane 158 prefix)							
CHR-196/335INT	242	.0060	60	.021		.216	.335	0.591
CHR-204/355INT	250	.0060	76	.031		.230	.355	0.583
CHR-216/355INT	262	.0060	80	.051		.230	.355	0.583
CHR-226/355INT	272	.0060	84	.072		.230	.355	0.583
CHR-232/400INT	280	.0060	108	.080		.245	.400	0.550
CHR-236/440INT	280	.0060	120	.091		.269	.440	0.542
CHR-200/315EXH	250	.0060	40		.020	.207	.315	0.591
CHR-212/345EXH	262	.0060	72		.031	.228	.345	0.585
CHR-226/345EXH	282	.0060	76		.047	.228	.345	0.585
CHR-230/400EXH	285	.0060	104		.052	.257	.400	0.550

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			

ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS

CHR2	Chrysler DOHC 2.0-2.4L 4-valve I-4, hydraulic roller series. (Crane 180 and 193 prefix)							
CHR-196/345	238	.0060	68	.033	.012	.198	.345	0.591
CHR-200/354	242	.0060	76	.038	.016	.204	.354	0.591
CHR-204/364	246	.0060	82	.044	.019	.210	.364	0.591
CHR-208/374	250	.0060	88	.050	.023	.216	.374	0.591
CHR-216/394	258	.0060	100	.064	.034	.228	.394	0.591
CHR-224/413	266	.0060	112	.078	.044	.239	.413	0.591
CHR-232/433	274	.0060	122	.096	.057	.251	.433	0.591
CHR-240/453	282	.0060	132	.114	.070	.264	.453	0.591
CHR-248/472	290	.0060	142	.134	.087	.275	.472	0.591
CHR-256/492	298	.0060	152	.154	.104	.287	.492	0.591
CHR-264/492	306	.0060	158	.175	.123	.287	.492	0.579
CHR-268/492	310	.0060	161	.185	.133	.287	.492	0.573
CHR-272/500	314	.0060	166	.196	.144	.292	.500	0.567
CHR-290/550	334	.0060	186	.244	.190	.3233	.550	0.540
CHR3	**Chrysler SOHC 4.7L V8, hydraulic roller series. Regrind base circle radius of .826". Must use 99424-16 lash caps.**							
CHR-206/502	242	.0060	124	.044	.015	.271	.502	0.826
CHR-212/502	248	.0060	128	.056	.022	.271	.502	0.826
CHR-218/463	254	.0060	126	.070	.030	.251	.463	0.826
CHR-218/502	254	.0060	134	.070	.030	.271	.502	0.826
CHR-224/520	260	.0060	140	.085	.044	.280	.520	0.826
FOR1	**Ford SOHC 2.0L I-4, mechanical series, using stock base circle size and stock length valve, with no lash cap. Recommended lash is .008" intake, and .010" , set between the follower and base circle. (Crane 14 prefix)**							
FOR-222/410	262	.0120	112	.079	.040	.253	.410	0.590
FOR-232/435	272	.0120	128	.103	.058	.267	.435	0.590
FOR-242/460	282	.0120	140	.130	.080	.282	.460	0.590
FOR2	**Ford SOHC 2.0L I-4, mechanical series, using a .050" longer valve than stock or a stock length valve with a .050" thick lash cap. Recommended lash is .010", set between follower and base circle. (Crane 14 prefix)**							
FOR-264/510	300	.0160	160	.179	.128	.314	.510	0.500
FOR-274/535	310	.0160	172	.208	.154	.326	.535	0.500
FOR-284/560	320	.0160	184	.237	.182	.336	.560	0.500
HFOR3	**Ford SOHC 2.3L I-4, hydraulic series, using cast followers and stock hydraulic adjusters.Cams are ground on the stock base circle size and use a stock length valve with no lash cap. (Crane 19 prefix)**							
HFOR-220/454	270	.0060	123	.074	.037	.285	.454	0.590
HFOR-226/420	272	.0060	120	.091	.046	.245	.420	0.590
HFOR-230/479	280	.0060	135	.097	.054	.300	.459	0.590
HFOR-234/420	280	.0060	126	.111	.062	.245	.420	0.590

Continued on next page.

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			

ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS

HFOR3	*Continued from previous page.*							
HFOR-240/504	288	.0060	148	.131	.076	.315	.504	0.590
HFOR-254/420	298	.0060	132	.142	.097	.245	.420	0.590

FOR4 — Ford SOHC 2.3L I-4, hydraulic series, using cast followers and stock hydraulic adjusters. Cams are ground on a reduced base circle requiring a .100" longer valve than stock, or a stock length valve with a .100" thick lash cap. (Crane 19 prefix)

HFOR-234/460INT	278	.0060	133	.109	.061	.284	.460	0.545
HFOR-242/480EXH	286	.0060	143	.130	.078	.295	.480	0.545

FOR5 — Ford SOHC 2.3LI-4,mechanical series, using cast followers and a .100" longer valve than stock,or a stock length valve with a .100" thick lash cap. Recommended lash is .010", set between follower and base circle.(Crane 19 prefix)

FOR-254/485	290	.0160	148	.152	.103	.279	.485	0.500
FOR-264/510	300	.0160	160	.179	.128	.293	.510	0.557
FOR-268/520	304	.0160	165	.191	.138	.2975	.520	0.500
FOR-274/460	312	.0160	150	.165	.123	.283	.460	0.525
FOR-274/535	310	.0160	172	.208	.154	.306	.535	0.545
FOR-284/560	320	.0160	184	.237	.182	.319	.560	0.533

HFOR6 — Ford SOHC 2.3L I-4, hydraulic roller series, using stock roller followers and an 8620 steel camshaft. Valve train is based on hydraulic adjusters and a stock-length Ford valve. (Crane 19 prefix)

RFOR-214/420	252	.0060	112	.061	.028	.227	.420	0.590
RFOR-226/420	274	.0060	119	.087	.047	.228	.420	0.590
RFOR-234/420	282	.0060	124	.106	.060	.228	.420	0.590
RFOR-234/450	282	.0060	131	.106	.060	.243	.450	0.590
RFOR-242/480	290	.0060	142	.127	.076	.259	.480	0.590
RFOR-250/510	298	.0060	152	.148	.094	.274	.510	0.590

FOR7 — Ford SOHC 2.3L I-4, mechanical roller series, using stock roller followers and 8620 steel camshafts. Valve train geometry is based on a 4.900" length valve. Recommended lash is .010" intake and .012" exhaust, set between roller and base circle. (Crane 19 prefix)

RFOR-244/536	276	.0220	145	.118	.074	.298	.536	0.500
RFOR-252/560	284	.0220	154	.140	.092	.311	.560	0.500
RFOR-256/572	288	.0220	161	.153	.101	.317	.572	0.500
RFOR-260/584	292	.0220	163	.162	.110	.323	.584	0.500
RFOR-264/596	296	.0220	170	.176	.120	.330	.596	0.500
RFOR-268/608	300	.0220	171	.185	.130	.336	.608	0.500
RFOR-272/620	304	.0220	178	.202	.141	.342	.620	0.500
RFOR-276/632	308	.0220	180	.210	.151	.349	.632	0.500
RFOR-284/656	316	.0220	188	.235	.174	.361	.656	0.500
RFOR-292/680	324	.0220	196	.261	.198	.374	.680	0.500
RFOR-296/692	328	.0220	200	.275	.210	.380	.692	0.500

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			
ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS								
HR2V	**Ford SOHC 4.6–5.4L 2-valve V8, hydraulic roller series. (Crane 37 prefix)**							
HR-218/500	254	.0060	133	.072	.032	.274	.500	0.947
HR-218/550	254	.0060	139	.072	.032	.300	.550	0.947
HR-228/500	264	.0060	140	.097	.050	.274	.500	0.947
HR-228/550	264	.0060	146	.098	.050	.300	.550	0.947
HR-230/575	266	.0060	151	.104	.054	.313	.575	0.947
HR-234/500	270	.0060	144	.114	.062	.274	.500	0.947
HR-234/550	270	.0060	151	.116	.063	.300	.550	0.947
HR-234/575	270	.0060	154	.116	.063	.313	.575	0.947
HR-236/600	272	.0060	158	.122	.067	.326	.600	0.947
HR-238/575	274	.0060	157	.124	.072	.313	.575	0.947
HR-242/575	278	.0060	161	.141	.082	.313	.575	0.947
HR-242/600	278	.0060	163	.142	.082	.326	.600	0.947
HR2VH	**Ford SOHC 4.6–5.4L 2-valve V8, hydraulic roller high lift series. (Crane 37 prefix)**							
HR-212/550	248	.0060	134	.058	.024	.300	.550	0.947
HR-216/565	252	.0060	138	.067	.029	.308	.565	0.947
HR-220/580	256	.0060	143	.077	.036	.315	.580	0.947
HR-224/595	260	.0060	147	.087	.042	.323	.595	0.947
HR-228/610	264	.0060	152	.098	.050	.331	.610	0.947
HR-232/625	268	.0060	156	.110	.058	.339	.625	0.947
HR-236/625	272	.0060	160	.122	.067	.339	.625	0.947
HR-240/625	276	.0060	163	.135	.077	.339	.625	0.947
HR3V	**Ford SOHC 4.6–5.4L 3-valve V8, hydraulic roller high lift series. (Crane 39 prefix)**							
HR-208/468	256	.0060	116	.050	.025	.2293	.468	0.886
HR-216/492	264	.0060	125	.064	.033	.2406	.492	0.886
HR-224/516	272	.0060	134	.080	.044	.2519	.516	0.886
HR-228/528	276	.0060	139	.088	.050	.2575	.528	0.886
HR-236/552	284	.0060	147	.107	.064	.2687	.552	0.886
HR-248/576	292	.0060	155	.128	.080	.2799	.576	0.886
HR-252/600	300	.0060	163	.151	.097	.2910	.600	0.886
HR3VL	**Ford SOHC 4.6–5.4L 3-valve V8, hydraulic roller series for restricted lift rules. (Crane 39 prefix)**							
HR-218/480	266	.0060	124	.067	.036	.2350	.480	0.886
HR-224/480	272	.0060	128	.079	.044	.2350	.480	0.886
HR-230/480	278	.0060	133	.092	.053	.2350	.480	0.886
HR-242/480	291	.0060	139	.117	.074	.2350	.480	0.886
HR2V	**Ford SOHC 4.6–5.4L 4-valve V8, hydraulic roller series. (Crane 40 prefix)**							
HR-218/500	254	.0060	133	.072	.032	.274	.500	0.947
HR-228/500	264	.0060	140	.097	.050	.274	.500	0.947
HR-234/500	270	.0060	144	.114	.062	.274	.500	0.947

SPECIALIZED PROFILES

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			

ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS

HR4V	Ford SOHC 4.6–5.4L 4-valve V8, hydraulic roller high lift series. (Crane 40 prefix)							
HR-246/575	282	.0060	164	.154	.093	.313	.575	0.947
HR-254/510	294	.0060	159	.164	.108	.2791	.510	0.947
HR-260/540	300	.0060	168	.184	.125	.2947	.540	0.947

HON1	Honda SOHC 1.6L 4-valve D16A6 I-4, mechanical series. Recommended lash is .008" intake and .010" exhaust. (Crane 251 prefix)							
HON-200/384INT	226	.0200	91	.037	.019	.236	.384	0.610
HON-206/394INT	232	.0200	98	.047	.023	.242	.394	0.610
HON-216/425INT	242	.0200	114	.065	.032	.260	.425	0.610
HON-202/376EXH	228	.0200	89	.040	.020	.201	.376	0.629
HON-208/386EXH	234	.0200	96	.050	.024	.206	.386	0.629
HON-218/416EXH	244	.0200	112	.070	.035	.220	.416	0.629

HON2	Honda SOHC VTEC 4-valve D16Y8 I-4, mechanical series. Recommended lash is .008" intake and .010" exhaust. (Crane 252 prefix)							
HON-186/319INT	214	.0200	44	.024		.200	.319	0.630
HON-190/327INT	218	.0200	53	.028		.205	.327	0.630
HON-224/423INT	258	.0200	115	.077		.259	.423	0.630
HON-228/433INT	262	.0200	120	.085		.264	.433	0.630
HON-232/443INT	266	.0200	125	.094		.270	.433	0.630
HON-232/453INT	254	.0200	131	.102		.275	.453	0.630
HON-210/386EXH	238	.0200	96		.096	.214	.386	0.646
HON-218/406EXH	246	.0200	107		.107	.224	.406	0.646
HON-234/445EXH	262	.0200	128		.128	.244	.445	0.646

HON3	Honda DOHC VTEC 4-valve B16A I-4, mechanical series. Recommended lash is .006" intake and .008" exhaust. (Crane 253 prefix)							
HON-180/210	216	.0200	—	.024	.016	.145	.210	0.581
HON-180/295	205	.0200	—	.018	.010	.199	.295	0.581
HON-190/288	222	.0200	—	.031	.018	.1947	.288	0.581
HON-190/315	215	.0200	40	.026	.012	.211	.315	0.581
HON-200/307	232	.0200	30	.040	.022	.207	.307	0.581
HON-200/315	225	.0200	43	.038	.018	.211	.315	0.581
HON-200/335	225	.0200	62	.038	.018	.224	.332	0.581
HON-210/355	235	.0200	78	.053	.026	.236	.355	0.581
HON-220/354	245	.0200	83	.071	.038	.235	.354	0.581
HON-230/425	254	.0200	121	.096	.053	.272	.425	0.581
HON-236/441	260	.0200	132	.111	.065	.281	.441	0.581
HON-242/457	266	.0200	138	.127	.077	.289	.457	0.581
HON-248/472	272	.0200	145	.143	.091	.297	.472	0.581
HON-254/488	278	.0200	153	.160	.106	.306	.488	0.581
HON-260/472	284	.0200	153	.172	.121	.297	.472	0.581
HON-260/504	284	.0200	160	.177	.122	.315	.504	0.581

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			

ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS

RHON	Honda DOHC 4-valve B16A I-4, mechanical series. Recommended lash is .006" intake and .008" exhaust. Use 8620 steel camshaft and Ferrea roller followers. (Crane 253 prefix)							
RHON-224/425	248	.0200	114	.077	.044	.277	.425	0.581
RHON-230/441	254	.0200	122	.090	.053	.287	.441	0.581
RHON-236/457	260	.0200	130	.102	.063	.297	.457	0.581
RHON-242/472	266	.0200	137	.116	.074	.307	.472	0.581
RHON-248/488	272	.0200	144	.131	.086	.317	.488	0.571
RHON-254/504	278	.0200	151	.146	.098	.326	.504	0.561
RHON-260/504	284	.0200	156	.162	.111	.326	.504	0.561
RHON-266/520	290	.0200	163	.181	.128	.336	.520	0.551
RHON-272/520	296	.0200	168	.194	.140	.336	.520	0.551
RHON-278/536	302	.0200	174	.212	.156	.347	.536	0.541
HK20S	**Honda DOHC VTEC 2.0L 4-valve K20 I-4, mechanical street series. Recommended valve lash is .009" intake and .012" exhaust. (Crane 254 prefix)**							
RHON-206/374INT	233	.0200	87	.047		.2168	.374	0.561
RHON-240/410INT	266	.0200	120	.109		.2371	.410	0.561
RHON-258/524INT	284	.0200	157	.151		.3012	.524	0.561
RHON-262/536INT	288	.0200	161	.162		.3080	.536	0.561
RHON-266/548INT	292	.0200	166	.173		.3147	.548	0.561
RHON-206/374EXH	233	.0200	87		.024	.2160	.374	0.561
RHON-232/360EXH	258	.0200	93		.056	.2083	.360	0.561
RHON-254/500EXH	276	.0200	147		.093	.2842	.400	0.561
RHON-254/512EXH	280	.0200	152		.102	.2893	.512	0.561
RHON-258/524EXH	284	.0200	157		.111	.2970	.524	0.561
HK20R	**Honda DOHC VTEC 2.0L 4-valve K20 I-4, mechanical race series. Recommended valve lash is .009" intake and .012" exhaust. (Crane 254 prefix)**							
RHON-258/545INT	286	.0200	157	.153		.3086	.545	0.561
RHON-276/550INT	304	.0200	172	.198		.3114	.550	0.561
RHON-280/570INT	308	.0200	176	.206		.3224	.570	0.561
RHON-284/615INT	308	.0200	190	.239		.3518	.615	0.561
RHON-292/640INT	317	.0200	198	.267		.3657	.640	0.561
RHON-260/5041EXH	288	.0200	150		.105	.2831	.5041	0.561
RHON-272/5201EXH	300	.0200	163		.132	.2915	.5201	0.561
RHON-276/535EXH	304	.0200	167		.142	.2994	.535	0.561
RHON-284/615EXH	309	.0200	190		.179	.3447	.615	0.561
MIT	**Mitsubishi DOHC 2.0L 4-valve 4G63 I-4 and the EVO VIII DOHC I-4, hydraulic roller series. (Crane 435 and 440 prefix)**							
MIT-200/384	240	.0060	90	.032	.019	.221	.384	0.591
MIT-204/394	244	.0060	96	.038	.023	.227	.394	0.591
MIT-208/404	248	.0060	102	.045	.027	.233	.404	0.591

Continued on next page.

PROFILE CODE DUR. AT .050"/ VALVE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .300" VALVE LIFT	VALVE LIFT AT TOP DEAD CENTER		CAM LIFT	GROSS VALVE LIFT WITH ZERO LASH	DESIGN BASE CIRCLE RADIUS
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST			

ENGINE SPECIFIC PROFILES FOR TRANSLATING FOLLOWER SOHC AND DOHC APPLICATIONS

MIT	*Continued from previous page.*							
MIT-216/424	256	.0060	112	.060	.037	.245	.424	0.591
MIT-224/444	264	.0060	122	.077	.048	.256	.444	0.591
MIT-232/464	272	.0060	132	.096	.062	.268	.464	0.591
MIT-240/484	280	.0060	142	.117	.077	.280	.484	0.591
CHR2	**Mitsubishi DOHC 4-valve 420A I-4, hydraulic roller series. (Crane 431 prefix)**							
CHR-196/345	238	.0060	68	.033	.012	.198	.345	0.591
CHR-200/354	242	.0060	76	.038	.016	.204	.354	0.591
CHR-204/364	246	.0060	82	.044	.019	.210	.364	0.591
CHR-208/374	250	.0060	88	.050	.023	.216	.374	0.591
CHR-216/394	258	.0060	100	.064	.034	.228	.394	0.591
CHR-224/413	266	.0060	112	.078	.044	.239	.413	0.591
CHR-232/433	274	.0060	122	.096	.057	.251	.433	0.591
CHR-240/453	282	.0060	132	.114	.070	.264	.453	0.591
CHR-248/472	290	.0060	142	.134	.087	.275	.472	0.591
CHR-256/492	298	.0060	152	.154	.104	.287	.492	0.591
CHR-264/492	306	.0060	158	.175	.123	.287	.492	0.579
CHR-268/492	310	.0060	161	.185	.133	.287	.492	0.573
CHR-272/500	314	.0060	166	.196	.144	.292	.500	0.567
CHR-290/550	334	.0060	186	.244	.190	.3233	.550	0.540
PORLD	**Porsche 911 and 930 SOHC opposed-6, mechanical series, using standard rocker arms, with 49 mm diameter cam journals. Recommended cold lash is .004".**							
POR-230/430	270	.0120				.2890	.430	0.624
POR-238/444	278	.0120				.2983	.444	0.624
POR-248/462	288	.0120				.3101	.462	0.624
POR-256/476	296	.0120				.3193	.476	0.624
POR-266/494	306	.0120				.3312	.494	0.624
POR-274/508	314	.0120				.3423	.508	0.624
POR-284/526	324	.0120				.3542	.529	0.624
TOY	**Toyota 20R-22R SOHC I-4, mechanical series, using cast rocker arms and stock length valves. Recommended lash is .010" intake and .012" exhaust. (Crane 704 prefix)**							
T20-214/416	262	.0100	110	.062	.029	.269	.416	0.706
T20-224/430	272	.0100	120	.083	.043	.278	.430	0.701
T20-234/444	282	.0100	130	.107	.061	.287	.444	0.697
T20-244/458	292	.0100	140	.133	.083	.296	.458	0.692
T20-254/472	302	.0100	152	.160	.107	.305	.472	0.688
T20-264/430	304	.0100	150	.179	.130	.282	.430	0.688

HARLEY DAVIDSON® V2 APPLICATIONS

PROFILE CODE DUR. AT .053"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN	
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.60	1.70
HARLEY DAVIDSON® EVOLUTION V2 HYDRAULIC ROLLER SERIES							
HEV490							
HEV-226/3064	270	.014	136	.077	.053	.490	
HEV-236/3064	280	.014	144	.094	.066	.490	
HEV-242/3064	286	.014	147	.104	.075	.490	
HEV-252/3064	296	.014	153	.118	.090	.490	
HEV550							
HEV-226/344	270	.014	140	.074	.053	.550	
HEV-236/344	286	.014	148	.090	.065	.550	
HEV-246/344	298	.014	156	.104	.077	.550	
HEV-254/344	306	.014	163	.118	.088	.550	
HEV-256/344	311	.014	169	.131	.098	.550	
HEV581							
HEV-236/363	286	.014	149	.090	.065	.581	
HEV-240/363	290	.014	153	.097	.070	.581	
HEV-248/363	298	.014	160	.110	.082	.581	
HEV-252/363	302	.014	165	.117	.087	.581	
HEV600							
HEV-246/375	296	.014	160	.107	.079	.600	
HEV-254/375	304	.014	167	.121	.091	.600	
HEV-260/375	310	.014	172	.132	.100	.600	
HEV-262/375	314	.014	173	.132	.100	.600	
HEV-265/375	317	.014	175	.137	.104	.600	
HEV-266/375	316	.014	177	.142	.110	.600	
HEV630							
HEV-262/394	308	.014	183	.147	.108	.630	
HEV-265/394	311	.014	185	.153	.113	.630	
HEV-270/394	316	.014	190	.163	.123	.630	
HEV-276/394	322	.014	195	.174	.134	.630	
HEV650							
HEV-254/406	304	.014	171	.122	.090	.650	
HEV-266/406	316	.014	186	.145	.109	.650	
HEV-278/406	330	.014	190	.163	.126	.650	
HEV-286/406	338	.014	197	.178	.140	.650	
HEV680							
HEV-262/425	314	.014	175	.132	.100	.680	
HEV-265/425	317	.014	178	.137	.105	.680	

HARLEY DAVIDSON® V2 APPLICATIONS

PROFILE CODE DUR. AT .053"/ LOBE LIFT	ADVERTISED DUR. AT TAPPET LIFT		DUR. AT .200" TAPPET LIFT	TAPPET LIFT AT TOP DEAD CENTER		GROSS VALVE LIFT WITH ZERO LASH AT THEORETICAL ROCKER RATIO SHOWN	
	DEG.	IN.		104 DEG. INTAKE	114 DEG. EXHAUST	1.60	1.70
HARLEY DAVIDSON® TWIN-CAM 88 HYDRAULIC ROLLER SERIES							
HTC505							
HTC-220/306	255	.0200	129	.068	.044		.505
HTC-226/306	261	.0200	134	.077	.051		.505
HTC-236/306	271	.0200	141	.092	.063		.505
HTC-242/306	277	.0200	145	.102	.071		.505
HTC-252/306	287	.0200	152	.118	.086		.505
HTC538							
HTC-254/326	289	.0200	160	.114	.090		.538
HTC570							
HTC-240/3456	275	.0200	153	.099	.070		.570
HTC-248/3456	283	.0200	159	.113	.081		.570
HTC-252/3456	287	.0200	162	.119	.087		.570
HTC-262/3456	297	.0200	170	.136	.103		.570
HTC600							
HTC-254/3637	290	.0200	166	.121	.088		.600
HTC-260/3637	296	.0200	172	.132	.097		.600
HTC-266/3637	302	.0200	177	.143	.107		.600
HTC619							
HTC-246/375	296	.0140	160	.107	.079		.619
HTC-254/375	304	.0140	167	.121	.091		.619
HTC660							
HTC-246/4001	281	.0200	164	.111	.079		.660
HTC-254/4001	289	.0200	171	.126	.091		.660
HTC-258/4001	291	.0200	175	.133	.098		.660
HTC-260/4001	295	.0200	177	.137	.101		.660
HTC-266/400	301	.0200	183	.149	.100		.660
HTC670							
HTC-270/406	305	.0200	186	.156	.119		.670
HTC-274/406	309	.0200	190	.164	.126		.670

CAMSHAFT RECOMMENDATION FORM

PERSONAL INFORMATION

NAME: **EMAIL ADDRESS:**

ADDRESS:

TELEPHONE NUMBER: **FAX:**

TYPE OF CAM INTERESTED IN: ☐ HYDRAULIC ☐ HYDRAULIC ROLLER ☐ MECHANICAL ☐ MECHANICAL ROLLER

VEHICLE INFORMATION

MAKE **YEAR:**

MODEL: **WEIGHT:**

☐ COMPUTER CONTROLLED ☐ EMISSIONS CONTROLLED WITHOUT COMPUTER ☐ NON-EMISSIONS CONTROLLED

VEHICLE USE

☐ STREET ☐ STREET/STRIP ☐ OFF ROAD ☐ TOWING

MARINE USE

HULL TYPE: **LENGTH:** **WEIGHT:**

DRIVE: ☐ JET ☐ PROP EXPLAIN:

EXHAUST SYSTEM: **BRAND:** ☐ WET ☐ DRY

DOES EXHAUST EXIT: ☐ ABOVE WATER LINE ☐ BELOW WATER LINE

OPTIONS

RPM POWER RANGE DESIRED: ☐ 1000–4000 ☐ 1500–4500 ☐ 2000–5000 ☐ 2500–5500

☐ 3000–6000 ☐ 3500–6500 ☐ 4000–7000

ENGINE IDLE CHARACTERISTICS: ☐ SMOOTH ☐ CHOPPY ☐ ROUGH

NOTE: COMPUTER CONTROLLED VEHICLES MUST USE SMOOTH IDLE CAMSHAFTS ONLY.

ENGINE INFORMATION

MAKE: **YEAR:** **NUMBER OF CYLINDERS:**

CUBIC INCHES: **COMPRESSION RATIO:** **CYLINDER HEAD TYPE:**

PORTED: ☐ YES ☐ NO **VALVE SIZE:** INT. EXH.

ROCKER ARM TYPE: ☐ STOCK ☐ ROLLER **ROCKER RATIO:** INT. EXH.

INTAKE MANIFOLD TYPE: **CARBURETOR:**

TYPE OF INJECTION: ☐ SPEED DENSITY ☐ MASS AIR ☐ SPECIAL

NITROUS OXIDE SYSTEM: **SUPERCHARGER TYPE:** **DRIVE RATIO:**

TURBOCHARGER TYPE: **P.S.I. BOOST:**

CRANKING COMPRESSION P.S.I.:

TRANSMISSION MODEL: ☐ STANDARD ☐ AUTOMATIC ☐ AUTOMATIC WITH OVERDRIVE

CONVERTER STALL SPEED: **REAR GEAR RATIO:**

CRUISE RPM @ 60 MPH: **TIRE DIAMETER/SIZE:**

CAM NOW USED: **PART NUMBER:**

☐ HYDRAULIC ☐ HYDRAULIC ROLLER ☐ MECHANICAL ☐ MECHANICAL ROLLER

LIFT: INT. EXH. **DURATION @.050:** INT. EXH.

LOBE SEPARATION: **IMPROVEMENT NEEDED:** ☐ LOW END TORQUE ☐ UPPER RPM POWER

CONTACT US

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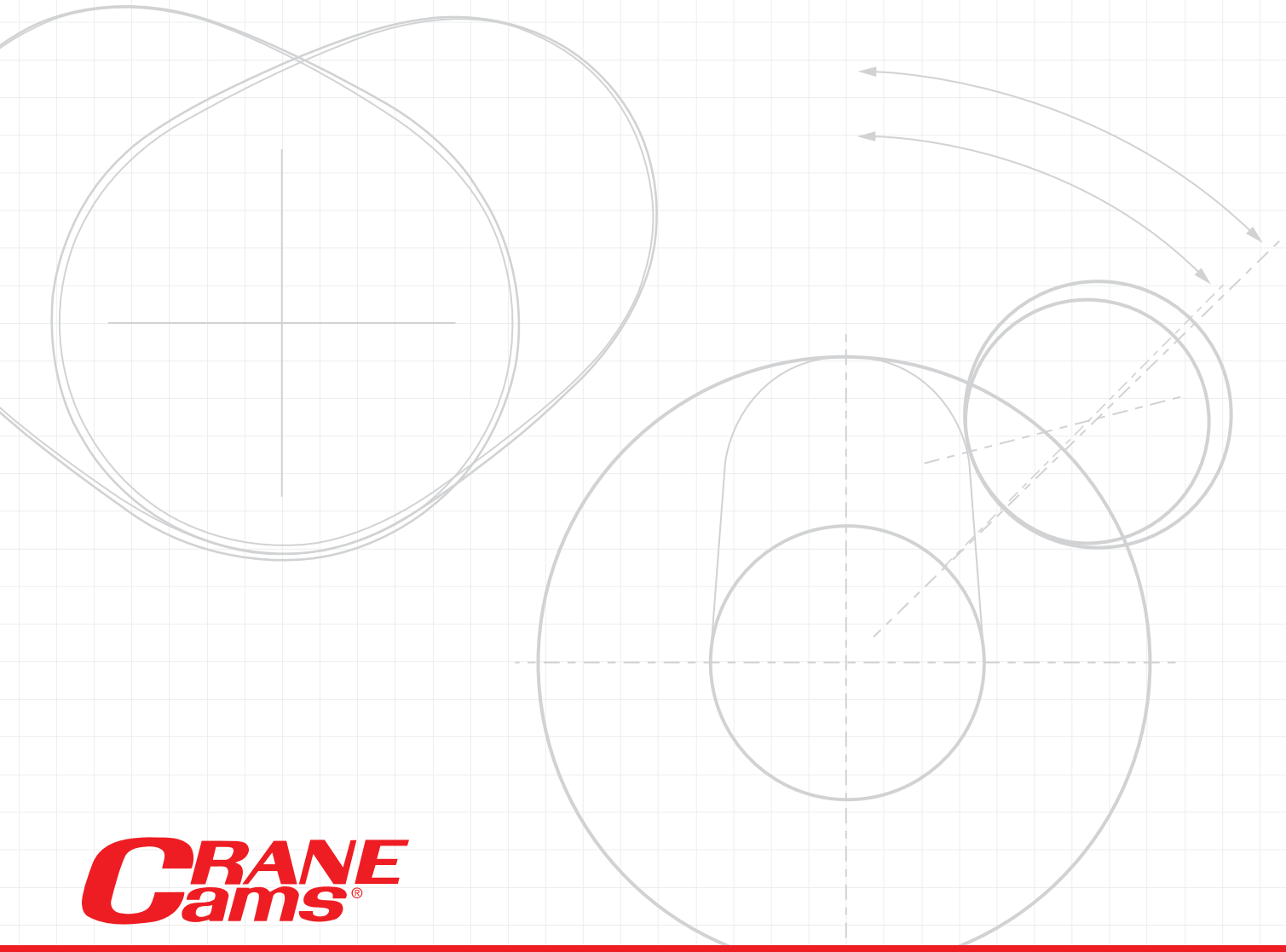

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