

### Small Block V8

1964-91 273, 318, 340 and 360 "LA" engines are the most popular and most modified of the Mopar small block V8 class. These are often mistakenly referred to as the "A" engine. Many engine variations exist, with a multitude of aftermarket products available.

### Camshafts

Most "A" engines came from the factory with standard hydraulic lifter camshafts. The exceptions to this are the early 273 and 340 "six-pack" engines equipped with solid lifter camshafts, and 1986-91 engines equipped with hydraulic roller camshafts.

Erson's "A" camshafts will fit all 1964-91 "A" engines, including engines originally equipped with hydraulic roller camshafts. However, these camshafts will not fit early 318, pre-1964, "A" engines or 1992-later "Magnum" engines.

### Lifters

Erson's high-performance hydraulic, solid and solid roller lifters fit all 1964-91 "A" engines. Changing from one type of lifter to another may require changing the length and/or type of pushrod. Adjustable rocker arms may also be required.

If solid roller lifters are used, modifications to the oiling system are required (refer to Chrysler's book, Mopar Engines, available from Mopar Performance). A bronze distributor gear must be used with a solid roller camshaft.

### Rocker Arms and Pushrods

All "A" V8 engines were equipped with shaft mounted rocker arms at the factory. Most of these are non-adjustable. When installing a hydraulic lifter camshaft with larger-than-stock lift, pushrod length may have to be changed to correct lifter pre-load. When changing to a solid lifter camshaft, adjustable rockers are required.

Erson Cams offers two types of adjustable rocker arms for "A", "B" and "RB" engines with production heads. The economical cast iron rockers are recommended for camshafts with valve lift under .550" and maximum spring loads of 350 lbs. The full roller aluminum rockers are recommended for camshafts with higher lift and/or spring loads. These rocker arms will not fit 1970 340 "six-pack" engines.

Changing to adjustable rockers will require different pushrods because of the different end types. Erson Cams offers pushrods of two different lengths for use with adjustable rockers: one for solid lifters and one for hydraulic lifters.

### W-2 and W-5 Heads

Erson Cams offers full roller aluminum rockers for "Econo W-2" as well as W-2 and W-5 heads. Special length pushrods are required. Pushrod length can be determined only after the engine is assembled.

### Big Block "B" and "RB" Engines

"B" and "RB" engines include two basic blocks: a low deck block (B) and a high deck or raised deck block (RB). Each block is different in dimension. For example the B block features a crankshaft centerline dimension of 9.98" to the top of the block. The same dimension for the RB block is 10.725". However, both blocks feature a cylinder-to-cylinder bore spacing of 4.80". The same bore spacing on each block makes most valvetrain components interchangeable between the two.

If the B/RB block is hot-tanked for cleaning purposes, the camshaft bearings must be replaced.

### Camshafts

Camshaft sprockets on all B and RB camshafts (except 440-6 bbl) attach to the camshaft with a single bolt. The 440-6 barrel uses a 3-bolt sprocket similar to the Hemi. All "B" and "RB" engines use the same camshaft bearings.

Installing a camshaft with a duration of 286° or more in the "B"/"RB" engine will require valve clearance pockets in the top of the pistons. This does not apply to the low compression engines (8.5:1 or less) built from 1972-78. In the low compression engines, a camshaft with 292° duration and .509" lift can be installed with stock heads and pistons.

High lift hydraulic camshafts (.533" and higher) will require dual valve springs. Stock Chrysler single springs are not designed to handle the added lift. The extra lift may also require shorter guides. Be sure to check keeper-to-guide clearance or retainer to seal clearance if seals are used.

### Rocker Arms

Ductile iron adjustable rocker arms fit all "B" engines 350/440. New 1.75:1 rockers are an easy way to bolt on up to 10% more power. High-ratio rockers increase power in the mid-range and top end, with a slight loss of low end power. To determine valve lift with 1.75 rocker arms, multiply valve lift with 1.5 rockers by 1.167 (eg.: 990SB with 1.5:1 rocker lift is .550 x 1.167 = .642" lift).

### Valve Springs

When installing a high-lift camshaft that requires dual springs, the inner spring seats of Chrysler production heads may have to be cut to the same height as the outer seat. Also, the outside diameter of the valve guides may have to be reduced so that the dual springs will fit over them.

High lift camshafts, along with increased valve spring pressure from dual springs, usually require an adjustable valvetrain. An adjustable valvetrain will allow the valve lash to be set correctly.

### Other information

Lash caps are recommended for any camshaft with more than .700" lift.

### Valve-To-Piston Clearance

"B" and "RB" performance engines that are run with 4- or 5-speed manual transmissions should be set up with the following valve-to-piston clearance:

Intake = .100"      Exhaust = .120"

Engines that are run with automatic transmissions should have a minimum of .090" clearance on intake and exhaust valves.

#### NOTE —

Most American production engines cannot accept more than .500" lift without modifying the valve guides. When installing a camshaft with more than .500" lift, it is absolutely essential that clearance between the valve spring retainer and guide be checked. Do not attempt to operate an engine with less than .150" retainer-to-guide clearance. If you are using valve seals, check the clearance from the top of the seal rather than the top of the guide.

#### NOTE —

When using a flat tappet camshaft and high-pressure valve springs with more than 130 lbs. of seat load or 330 lbs. of nose load, Erson Cams requires a 30 minute break-in period using only the outer springs. Install the inner spring only after the break-in period. Following this procedure will greatly reduce the chance of camshaft or lifter failure.

#### NOTE —

When installing a hydraulic lifter racing camshaft in an engine that does not have adjustable rocker arms, care must be taken to ensure that the lifter is still able to adjust itself. If the camshaft has more than .500" valve lift, or if the heads or block have been milled excessively, the engine must be converted to adjustable rockers or adjustable pushrods.

We recommend that all competition roller camshafts be ordered directly through our Technical Department. By doing so, you will have access to our entire profile selection. You can select any combination of profiles and lobe centers. We will custom grind camshafts with dual patterns, special base circle sizes, etc. See page 72 for more information.

For questions regarding the selection and/or installation of Erson Cams products, call Erson's Technical Service Team at 775.882.1622.

## HIGH PERFORMANCE MECHANICAL FLAT TAPPET CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
Smooth idle, broad torque range cam for passenger cars, station wagons, pickups and RVs.	1,000-4,000	<b>E470301</b> RV10M	254° IN 254° EX	210° IN 210° EX	.435" IN .435" EX	111°	4°	.022" IN .022" EX
Strong mid-range power. OK with torque flyte with gears. Fair idle.	2,000-5,000	<b>E470621</b> TQ20M	270° IN 270° EX	220° IN 220° EX	.465" IN .465" EX	111°	4°	.022" IN .022" EX
<b>Hot Street/E.T. Brackets.</b> Strong mid-range performance from slightly modified engines with 9.5-10.5:1 compression. Should have 4-speed transmission and low gears for best results.	3,000-6,000	<b>E470302</b> TQ30M	280° IN 280° EX	230° IN 230° EX	.465" IN .465" EX	110°	4°	.022" IN .022" EX
<b>E. T. Brackets.</b> Dodge Darts, Plymouth Valiants and other Chrysler products seeking mid-range torque and top end horsepower need modified cylinder heads, aftermarket aluminum 4-barrel manifold with up to 600 cfm carburetion, 1 5/8" primary tube header and low gears for winning results.	3,800-6,800	<b>E470521</b> Hi Flow AM	286° IN 294° EX	242° IN 246° EX	.510" IN .510" EX	108°	0°	.022" IN .022" EX

### CAMSHAFT ACCESSORY KIT FOR CHRYSLER/DODGE/PLYMOUTH ENGINES EQUIPPED WITH MECHANICAL FLAT TAPPET CAMSHAFTS

#### E847011 KIT INCLUDES THESE COMPONENTS:

12 mechanical tappets.....	E914292
12 valve springs, 1.680.....	E915022
12 H.T. steel retainers, 7° x 3/8.....	E961042
12 pair H.T. valve locks.....	E911200
1 tube Moly Lube, 1/4 oz.....	E911001

*The springs in this kit are designed to fit stock heads. No machine work is required.*

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER/DODGE/PLYMOUTH ENGINES EQUIPPED WITH MECHANICAL FLAT TAPPET VALVETRAINS

Valve springs, 1.700.....	E915310
H.T. steel retainers, 7° x 3/8.....	E961311
Lash caps, 3/8.....	E911531
Degree wheel.....	E911004
Moly Lube, 2 oz. tube.....	E911002



## PROFERAL BILLET

1964-86 273, 340, 360 CID ENGINES

1967-85 318 CID ENGINES

## HIGH PERFORMANCE HYDRAULIC FLAT TAPPET CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>The "Commuter".</b> More power through entire range. Stop and go traffic and expressway driving use. Good idle, throttle response and fuel efficiency.	800-3,800	E420111 RV5H	274° IN 280° EX	202° IN 208° EX	.410" IN .420" EX	108°	0°	.000" IN .000" EX
Broad power range. City and expressway driving or towing. Cars, wagons, pickups or heavier rigs. Good idle, throttle response and high fuel efficiency.	1,000-4,000	E420101 RV10H	280° IN 280° EX	208° IN 208° EX	.420" IN .420" EX	111°	4°	.000" IN .000" EX
Dodge vans and pickups seeking improved low end and mid-range performance. Good on- or off-road driveability with slightly modified engine. OK for towing light to moderate loads. Compatible with stock converter and gearing.	1,250-4,250	E420112 RV12H	280° IN 288° EX	208° IN 214° EX	.420" IN .429" EX	110°	4°	.000" IN .000" EX
Good idle and fuel efficiency with more low end and mid-range power. Excellent replacement camshaft for passenger cars or light trucks with campers, towing moderate loads. Works best with aftermarket, dual plane intake, 600 cfm 4-barrel and headers with free flowing, dual exhaust. OK with small shot of nitrous oxide!	1,250-4,500	E421011 MP/1	280° IN 292° EX	208° IN 214° EX	.420" IN .449" EX	114°	4°	.000" IN .000" EX
Strong mid-range power. City, fast expressway and open road towing. Delivers maximum, mid-range torque. Good idle, throttle response and fuel efficiency.	1,500-4,600	E420201 RV15H	288° IN 288° EX	214° IN 214° EX	.429" IN .429" EX	110°	4°	.000" IN .000" EX
<b>The "Performer".</b> Super low- and mid-range power. Good idle, fuel efficiency and driveability. 4-barrel and headers recommended.	1,800-4,800	E420121 TQ20H	292° IN 292° EX	214° IN 214° EX	.449" IN .449" EX	112°	4°	.000" IN .000" EX
Excellent choice for slightly modified, daily drivers, i.e.: Dodge Darts or Plymouth Challengers with 8.75-9.5:1 compression in 318-340 CID engines. Should have aftermarket aluminum, dual plane style intake with up to 650 cfm 4-barrel carburetion and gasket-matched cylinder heads for best results. Largest camshaft with stock converter and mid-3 series gearing.	2,000-5,000	E420721 Hi Flow AH	284° IN 284° EX	220° IN 220° EX	.472" IN .472" EX	108°	0°	.000" IN .000" EX
High-lift, dual pattern. Needs 4-barrel, headers, lower gears and medium stall speed converter if used with automatic. Extremely strong mid-range camshaft.	2,250-5,200	E420222 TQ40H	284° IN 296° EX	220° IN 228° EX	.472" IN .472" EX	110°	0°	.000" IN .000" EX
Noticeable idle and increased mid-range performance from 318-340 CID engines with 9.5-10.5:1 compression using an aftermarket single or dual plane intake manifold, 600-650 cfm 4-barrel carburetion, lightly modified stock cast iron cylinder heads and headers. May require vacuum canister if used with power brakes.	2,500-5,500	E420221 TQ30H	310° IN 310° EX	226° IN 226° EX	.462" IN .462" EX	111°	4°	.000" IN .000" EX
<b>Hot Street, E.T. Brackets, etc.</b> High-lift, short duration. Delivers broad power range and strong top end. Fair idle. Needs 4-barrel, headers, compression and gears.	2,700-5,700	E420421 Hi Flow IH	296° IN 296° EX	228° IN 228° EX	.472" IN .472" EX	108°	0°	.000" IN .000" EX
High-lift, dual pattern. Needs 4-barrel, headers and lower gears. Works best with stick or high-stall automatic. Strong top end camshaft. Rough idle. Should have at least 9:1 compression ratio.	2,800-6,200	E420223 TQ50H	296° IN 306° EX	228° IN 235° EX	.472" IN .472" EX	110°	0°	.000" IN .000" EX
Runs strong 3,500-7,000 RPM. Stick or automatic, with gears. Needs good intake and headers. 9.5:1 or more compression. Lopey idle.	3,000-6,000	E420521 Hi Flow IIH	306° IN 306° EX	235° IN 235° EX	.472" IN .472" EX	108°	0°	.000" IN .000" EX
Strong past 7,000 RPM in well set up engine. Needs headers and good carburetion. Excellent for E.T. Bracket racing. Rough idle.	3,500-6,500	E420321 Hi Flow IIIH	316° IN 316° EX	240° IN 240° EX	.472" IN .472" EX	108°	0°	.000" IN .000" EX
<b>Hot Street/E.T. Brackets.</b> Super mid-range torque and top end horsepower from 318-360 CID engines with 10.5-11.5:1 compression. Should have ported and polished stock or W-2 style cylinder heads with gasket-matched, open plenum, intake manifold and 750 cfm 4-barrel or multiple carburetion, headers and 2.5"-3" free flowing exhaust for best results. Automatic cars use 3,500-4,000 RPM converter and 4.10 or lower gears.	4,000-7,000	E420621 Hi Flow IVH	312° IN 320° EX	248° IN 256° EX	.503" IN .517" EX	110°	4°	.000" IN .000" EX

CAMSHAFT ACCESSORY KIT FOR  
CHRYSLER "A" ENGINES EQUIPPED WITH  
HYDRAULIC FLAT TAPPET CAMSHAFTS

## E842010 KIT INCLUDES THESE COMPONENTS:

16 hydraulic tappets .....	E914651
16 valve springs, 1.680 x 1.430 .....	E915021
16 H.T. steel retainers .....	E961041
16 pair 7° x 3/8 H.T. valve locks .....	E911271
1 tube Moly Lube, 1/4 oz. ....	E911001

## NOTE —

1992-later 5.2L and 5.9L "magnum" engines came with 1.6:1 pedestal-mount rockers as opposed to 1.5:1 shaft-mount in earlier engines.

OPTIONAL HIGH PERFORMANCE PARTS FOR  
CHRYSLER "A" ENGINES EQUIPPED WITH  
HYDRAULIC FLAT TAPPET VALVETRAINS

Valve springs, 1.800 x 1.450 .....	E915310
H.T. steel retainers, 7° x 3/8 .....	E961311
H.T. machined valve locks, 7° x 3/8 4130 .....	E911121
Roller timing chain set .....	E991908
P.C. seals, 3/8 .....	E910213
Lash caps, 3/8 .....	E911531
C.M. pushrod, 5/16 x 7.470 .....	E917412
C.M. pushrod, 5/16 x 7.500 .....	E917413
C.M. pushrod, 3/8 x 7.470 .....	E917415
Adjustable ductile iron, shaft-mount rockers .....	E918571
Adjustable billet aluminum, shaft-mount rockers .....	E918572
Degree wheel .....	E911004
Moly Lube, 2 oz. tube .....	E911002

## NOTE —

Erson Cams does not offer hydraulic roller camshafts for 1986-91, 318 (5.2L) or 1987-92, 360 (5.9L) engines. Nor do we offer hydraulic roller camshafts for 1992-later 5.2L or 5.9L "Magnum" V8 engines. However, as billets become available, we will be ready to grind. Call Erson's Technical Service Team at 775.882.1622 for information regarding availability.

1964-92 273, 340, 360 CID ENGINES

1967-91 318 CID ENGINES

PROFERAL BILLET

## HIGH PERFORMANCE MECHANICAL FLAT TAPPET CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
Excellent choice for 273-340 cubic inch, early Mopars with 9.5-10.5:1 compression, seeking improved low end and mid-range performance without expensive engine and cylinder head modifications. Use 1.6:1 shaft-mount rockers, aluminum dual plane intake, 600 cfm 4-barrel and headers to enhance flow characteristics.	2,800-5,800	E420305 TQ30M	280° IN 280° EX	230° IN 230° EX	.465" IN .465" EX	110°	4°	.022" IN .022" EX
<b>Hot Street/E.T. Brackets.</b> Great mid-range performance from 318-340 CID engines with 10.5-11.5:1 compression. Needs modified stock or W-2 style cylinder heads, gasket-matched, single plane, open plenum intake manifold and up to 750 cfm 4-barrel carburetion, 3,200-3,600 lb. Bracketeers can use 4-speed manual or torque flyte automatic with 3,500 RPM converter and low gears.	3,500-6,500	E420306 Hi Flow AM	286° IN 294° EX	242° IN 246° EX	.510" IN .510" EX	108°	0°	.022" IN .022" EX
<b>Hot Street/E.T. Brackets/Oval Track.</b> Excellent choice for Darts and Dusters seeking uncompromised mid-range and top end power. 318-360 CID engines with 11.0-12.5:1 compression using modified W-2 or W-5 cylinder heads, "Victor Jr." style intake, single blueprinted 750 cfm 4-barrel and 1.750" diameter, equal length headers will see large gains. Also works well in modified sportsman cars on fast 1/4-3/8 mile dirt or asphalt tracks with no carburetor restrictions.	3,800-7,000	E420307 F-288-2	288° IN 296° EX	250° IN 258° EX	.562" IN .562" EX	106°	0°	.027" IN .027" EX
<b>Oval Track.</b> Proven winner and repeated track champion in well set up, modified sportsman cars running on 1/4-1/2 mile tracks. Works best in 340-360 CID engines with up to 12.5:1 compression using ported and polished, W-2 style cylinder heads, aftermarket 1.6:1 rockers, single plane manifold with 500 cfm 2-barrel and headers.	4,000-7,300	E420308 F-302-3	302° IN 296° EX	264° IN 258° EX	.562" IN .562" EX	106°	6°	.027" IN .027" EX
<b>E.T. Brackets.</b> Recommended for 2,600-3,000 lb. door-slamers with 340 cubic inch or larger engines having 12.5-13.5:1 compression. Needs modified W-2 or W-5 cylinder heads, large valves, roller rockers, matched intake and single or multiple carburetion on alcohol or gas. Open headers or large diameter free flowing exhaust, enhance performance. Automatic cars, use 4,500 RPM 8" converter, 4.56 gear and 28" tire.	4,500-7,800	E420309 F-308-1A	308° IN 308° EX	272° IN 272° EX	.612" IN .612" EX	106°	4°	.020" IN .020" EX

CAMSHAFT ACCESSORY KIT FOR  
CHRYSLER "A" ENGINES EQUIPPED WITH  
MECHANICAL FLAT TAPPET CAMSHAFTS

## E842012 KIT INCLUDES THESE COMPONENTS:

16 mechanical tappets.....	E914291
16 valve springs, 1.680 x 1.430.....	E915021
16 H.T. steel retainers, 7° x 3/8.....	E961041
16 H.T. valve locks, 7° x 3/8.....	E911271
1 tube Moly Lube, 1/4 oz. ....	E911001

*The springs in this kit are intended for stock (non W-2) cylinder heads with stock length valves. No machine work is required.  
This kit fits camshafts E420305 and E420306.*

## E842051 KIT INCLUDES THESE COMPONENTS:

16 mechanical tappets.....	E914291
16 valve springs, 1.900 x 1.440.....	E915251
16 H.T. steel retainers, 7° x 3/8.....	E961011
16 H.T. valve locks, 7° x 3/8.....	E911271
1 tube Moly Lube, 1/4 oz. ....	E911001

*This kit is intended for W-2 or W-5 long valve cylinder heads with 3/8 stems. For 11/32 hardware, see our Optional Accessories list.*

OPTIONAL HIGH PERFORMANCE PARTS FOR  
CHRYSLER "A" ENGINES EQUIPPED WITH  
MECHANICAL FLAT TAPPET VALVETRAINS

## 273, 318, 340, 360 ENGINES EQUIPPED WITH MECHANICAL VALVETRAINS:

Roller timing chain set .....	E991908
Valve springs, 1.900.....	E915261
H.T. steel retainers, 7° x 11/32 .....	E961051
H.T. steel retainers, 7° x 3/8 .....	E961101
H.T. steel retainers, 7° x 11/32 .....	E961091
Titanium retainers, 10° .....	E961408
Valve locks, 10° x 11/32 .....	E911140
Valve locks, 10° x 3/8.....	E911160
H.T. machined valve locks, 7° x 3/8 4130 .....	E911121
H.T. machined valve locks, 7° x 11/32 4130.....	E911111
Stock head shaft-mount billet rockers.....	E918572
Econo W-2 shaft-mount billet rockers.....	E918573
W-2, W-5 shaft-mount billet rockers .....	E918574
Lash caps, 11/32 .....	E911541
Lash caps, 3/8 .....	E911531
P.C. seals, 11/32 .....	E910243
P.C. seals, 3/8 .....	E910213
Degree wheel .....	E911004
Moly Lube, 2 oz. tube.....	E911002



## 1967-91 318 CID "A" ENGINES

## HIGH PERFORMANCE SOLID ROLLER CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>Hot Street/E.T. Brackets.</b> Excellent choice for high-performance Street Machines seeking an entry level camshaft with stout mid-range performance. Recommended for 318-360 cubic inch engines with 10.5-11.5:1 compression, modified stock or aftermarket cylinder heads, matched single plane intake, 750 cfm 4-barrel and headers. Also works well with 1.6:1 rockers and small shot of nitrous oxide. Automatic cars use 3,500 RPM converter.	3,600-6,600	<b>E420991</b> R-286-1	286° IN 294° EX	246° IN 254° EX	.555" IN .555" EX	108°	0°	.026" IN .026" EX
<b>E.T. Brackets/Oval Track.</b> Strong mid-range torque and top end horsepower from modified 340-360 CID engines with 11.5-12.5:1 compression. Should have ported and polished W-2 or W-5 cylinder heads, shaft-mount roller rockers, match-ported and flowed single plane intake with blueprinted 750 cfm 4-barrel and headers for best results. Also works well in alcohol injected 360 cubic inch limited sprinters on 3/8-1/2 mile tracks.	4,500-7,600	<b>E420992</b> R-286-5A	286° IN 294° EX	260° IN 268° EX	.675" IN .645" EX	106°	4°	.032" IN .032" EX
<b>Pro Brackets/Super Categories.</b> Roadsters, altered and other full chassis cars weighing 2,000-2,600 lbs. will reap substantial gains in upper mid-range and top end power from 340 cubic inch and larger engines boasting 13.5-14.5:1 compression. For best results, use heavily modified Mopar or aftermarket aluminum cylinder heads, 1.6 shaft mount roller rockers, single or multiple carburetion on alcohol or gas and open headers. 2-speed automatic cars use 5,000 RPM converter, 5.13 gears and 14" x 32" slick.	5,000-8,000	<b>E420993</b> R-302-7	302° IN 310° EX	276° IN 284° EX	.675" IN .645" EX	106°	0°	.032" IN .032" EX

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER "A" ENGINES EQUIPPED WITH SOLID ROLLER VALVETRAINS

**ENGINES EQUIPPED WITH SOLID ROLLER VALVETRAINS.**

8	pair solid roller tappets .....	E919292
16	valve springs, 1.900 x 1.630 .....	E915150
16	H.T. steel retainers, 7° x 3/8.....	E961466
16	pair H.T. valve locks, 7° x 3/8.....	E911160
1	tube Moly Lube, 1/4 oz. ....	E911001

Valve springs, 2.000 x 1.625.....	E915160
Titanium retainer, 10° (fits E915160 spring).....	E961406
Titanium retainer, 10° (fits E915057 spring).....	E961408
Valve locks, 10° x 11/32.....	E911140
Valve locks, 10° x 3/8.....	E911160
H.T. valve locks, 7° x 11/32.....	E911111
H.T. steel retainers, 7° x 11/32.....	E961091
Lash caps, 11/32.....	E911541
Lash caps, 3/8.....	E911531
P.C. seals, 11/32.....	E910243
P.C. seals, 3/8.....	E910213
Roller timing chain set.....	E991908
C.M. pushrod, 3/8 x 7.670.....	E917414
Stock head shaft-mount billet rockers.....	E918572
Econo W-2 head shaft-mount billet rockers.....	E918573
W-2 W-5 head shaft-mount billet rockers.....	E918574



## 361, 383, 400 CID "B" ENGINES

## 413, 426W, 440 CID "RB" ENGINES

## PROFERAL BILLET

## HIGH PERFORMANCE HYDRAULIC FLAT TAPPET CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
Erson's first choice over stock for heavy passenger cars and trucks seeking a good idle and driveability with improved low end and mid-range performance. Compatible with stock compression, converter and gearing. OK for towing light to moderate loads.	1,250-4,250	E411011 MP/1	280° IN 292° EX	208° IN 214° EX	.420" IN .449" EX	114°	4°	.000" IN .000" EX
The "Performer". Super low- and mid-range power. Good idle, fuel efficiency and driveability. 4-barrel and headers recommended.	1,500-4,500	E410121 TQ20H	292° IN 292° EX	214° IN 214° EX	.449" IN .449" EX	111°	4°	.000" IN .000" EX
Good idle and throttle response from larger engines. Dodge power wagons and Ram Chargers with stock or aftermarket dual plane intake manifolds, 4-barrel carburetion and headers with dual exhaust will see noticeable gains when towing moderate to heavy loads. Works best with 4- or 5-speed manual transmission and low gears.	1,500-4,750	E411021 MP/2	292° IN 310° EX	214° IN 226° EX	.449" IN .462" EX	114°	4°	.000" IN .000" EX
Excellent choice for slightly modified street machines or muscle trucks seeking improved low-end torque and mid-range horsepower. 383-440 cubic inch engines run best with 8.75-9.5:1 compression, aftermarket aluminum dual plane intake, 650-750 cfm carburetion and headers with large diameter, free flowing dual exhaust.	1,800-4,800	E410321 Hi Flow AH	284° IN 284° EX	220° IN 220° EX	.472" IN .472" EX	112°	4°	.000" IN .000" EX
High-lift, dual pattern. Needs 4-barrel, headers, lower gears and medium stall speed converter if used with automatic. Extremely strong mid-range camshaft.	2,000-5,000	E410222 TQ40H	284° IN 296° EX	220° IN 228° EX	.472" IN .472" EX	110°	0°	.000" IN .000" EX
Expect a noticeable idle and strong mid-range performance from 383-440 cubic inch engines with 9.5-10.5:1 compression. Use mildly-ported stock cylinder heads, gasket-matched to an aftermarket dual plane intake with up to 750 cfm carburetion for best results. May require a vacuum canister if used with power brakes.	2,500-5,500	E410221 TQ30H	310° IN 310° EX	226° IN 226° EX	.462" IN .462" EX	111°	4°	.000" IN .000" EX
Hot Street, E.T. Brackets, etc. High-lift, short duration, delivers broad power range and strong top end. Fair idle. Needs 4-barrel, headers, compression and gears.	5,500-5,500	E410421 Hi Flow IH	296° IN 296° EX	228° IN 228° EX	.472" IN .472" EX	108°	0°	.000" IN .000" EX
High-lift, dual pattern. Needs 4-barrel, headers and lower gears. Works best with stick or high-stall automatic. Strong top end camshaft. Rough idle. Should have at least 9:1 compression.	2,600-5,800	E411223 TQ50H	296° IN 306° EX	228° IN 235° EX	.472" IN .472" EX	110°	0°	.000" IN .000" EX
Runs strong 3,500-7,000 RPM. Stick or automatic, with gears. Needs good intake and headers with 9.5:1 or more compression. Lopey idle.	3,000-6,000	E410521 Hi Flow IHH	306° IN 306° EX	235° IN 235° EX	.472" IN .472" EX	108°	0°	.000" IN .000" EX
Hot Street/E.T. Brackets. Strong mid-range torque and top end power from 413-440 cubic inch "RB" engines with 10.5-11.5:1 compression. Use modified big valve, Stage V or Stage VI aluminum cylinder heads, 1.6 shaft-mount roller rockers, "Victor Jr." style intake, 850 cfm 4-barrel, and 2.0"-2.125" headers for best results. 3,000-3,400 lb. automatic cars use 3,500 RPM converter, 4.56 gear and 28"-30" soft compound tire.	3,500-6,500	E411322 Hi Flow IVH	312° IN 320° EX	248° IN 256° EX	.503" IN .517" EX	110°	4°	.000" IN .000" EX
Hot Street/E.T. Brackets. Increased upper mid-range and top end power in 2,800-3,200 lb. door-slamers using 440 cubic inch or larger Chrysler big blocks with no less than 11.5:1 compression. Must have good cylinder heads, 1.6 shaft-mount roller rockers, single or 2x4 barrel open plenum intake and 850(+) cfm carburetion. Torque flyte automatic cars, use 4,000 RPM converter and 4.30 gears with 30"-32" tire.	4,000-7,000	E411224 TQ60H	316° IN 324° EX	252° IN 260° EX	.517" IN .517" EX	108°	0°	.000" IN .000" EX

### CAMSHAFT ACCESSORY KIT FOR CHRYSLER "B" AND "RB" ENGINES EQUIPPED WITH HYDRAULIC FLAT TAPPET CAMSHAFTS

#### E841010 KIT INCLUDES THESE COMPONENTS:

16 hydraulic tappets .....	E914641
16 valve springs, 1.820 x 1.500.....	E915011
16 H.T. steel retainers, 7° x 3/8 .....	E961311
16 pair H.T. valve locks, 7° x 3/8.....	E911271
1 Moly Lube, 1/4 oz. tube.....	E911001

#### NOTE —

All hydraulic camshafts are ground on single-bolt, Chrysler big block billets. To have a particular camshaft ground on a 3-bolt, high-performance billet, call Erson's Technical Service Team at 775.882.1622.

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER "B" AND "RB" ENGINES EQUIPPED WITH HYDRAULIC FLAT TAPPET VALVETRAINS

Valve springs, 1.900 .....	E915051
H.T. machined valve locks, 7° x 3/8 4130 .....	E911121
Ductile iron 1.5:1 adjustable rockers .....	E918531
Ductile iron 1.75:1 adjustable rockers .....	E918010
C.M. pushrods, 3/8 x 8.575, "B" block .....	E917341
C.M. pushrods, 3/8 x 8.500, "B" block .....	E917342
C.M. pushrods, 3/8 x 9.300, "RB" block.....	E917351
C.M. pushrods, 3/8 x 9.210, "RB" block.....	E917352
P.C. seals, 3/8 .....	E910213
Lash caps, 3/8 .....	E911531
Roller timing chain set, single-bolt .....	E991907
Roller timing chain set, 3-bolt.....	E991912
Roller rockers, stock head .....	E918532
Degree wheel .....	E911004
Moly Lube, 2 oz. tube .....	E911002

## 3-BOLT PROFERAL BILLET

350, 361, 383, 400 CID "B" ENGINES

413, 426W, 440 CID "RB" ENGINES

## HIGH PERFORMANCE MECHANICAL FLAT TAPPET CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>Hot Street/E.T. Brackets.</b> Excellent choice for 3,400-3,800 lb. "B"-bodied Chrysler products seeking strong mid-range performance. Works best in 383-440 CID engines with 10.0-11.0:1 compression using modified stock cylinder heads, single or multiple carburetion and headers with 3" diameter, dual exhaust system. Use 4-speed manual transmission with 4.10 gear and nitrous oxide for best results.	3,500-6,500	<b>E410001</b> F-282-6	282° IN 290° EX	246° IN 254° EX	.510" IN .510" EX	110°	4°	.027" IN .027" EX
<b>Hot Street/E.T. Brackets.</b> Maximum street performance from 413-440 cubic inch engines boasting 11.0-12.0:1 compression. Should have mildly-ported, Stage IV or V cylinder heads, gasket-matched to a single plane intake with 750-850 cfm carburetion and 2" diameter headers. Works well with 4-speed or automatic with 4,000 RPM converter and low gears.	3,800-6,800	<b>E410002</b> F-296-2	296° IN 306° EX	258° IN 268° EX	.562" IN .562" EX	108°	0°	.027" IN .027" EX
<b>E.T. Brackets.</b> 2,800-3,200 lb. E.T. Bracket cars, i.e: Darts, Challengers, Cudas, etc.; using 413-440 cubic inch engines with 11.5-12.5:1 compression will notice increased mid-range and top end performance. Good heads and intake a must! Automatic cars use 4,500 RPM converter and 4.88-5.13 gear, depending on tire.	4,250-7,400	<b>E410003</b> F-304-2	304° IN 304° EX	266° IN 266° EX	.612" IN .612" EX	108°	0°	.018" IN .020" EX
<b>E.T. Brackets.</b> Increased upper mid-range and top end power when used in light bracket cars using 440-452 cubic inch engines with 12.5-13.5:1 compression. Suggest ported, polished and flowed Stage V or VI aluminum cylinder heads; single plane, high-rise, open plenum intake with 850(+) cfm carburetion. Use 2"-2.125" primary tube, open headers. Automatic cars use 5,000 RPM converter, 4.88 gear and 30" tire.	4,600-7,600	<b>E410004</b> F-308-1	308° IN 308° EX	272° IN 272° EX	.612" IN .612" EX	108°	4°	.018" IN .020" EX
<b>E.T. Brackets/Super Categories.</b> Maximum effort bracket cars using 440-482 CID engines with 13.5-14.5:1 compression, produce exceptional big end power. Works best with modified, aftermarket cylinder heads, single 1,050 cfm 4-barrel or 2 x 750 cfm carburetors, mounted on tunnel ram or cross-ram style intake, burning alcohol or gas with 2.250" primary tube headers. 2-speed automatic cars use 5,000 RPM converter, 4.56 gears and 32" tire.	5,000-8,000	<b>E410005</b> F-320-1	320° IN 320° EX	280° IN 280° EX	.612" IN .612" EX	108°	0°	.018" IN .020" EX

CAMSHAFT ACCESSORY KIT FOR CHRYSLER  
"B" AND "RB" ENGINES EQUIPPED WITH  
MECHANICAL FLAT TAPPET CAMSHAFTS

## E841012 ACCESSORY KIT INCLUDES:

16 mechanical tappets .....	E914291
16 valve springs, 1.900 x 1.540.....	E915051
16 H.T. steel retainers, 7° x 3/8 .....	E961101
16 pair H.T. valve locks, 7° x 3/8 (single groove) .....	E911271
1 tube Moly Lube, 1/4 oz .....	E911001

*Erson camshaft accessory kits for Chrysler "B" and "RB" engines include 3/8 x 7" single-groove H.T. valve locks.*

*Erson offers 8-3/8 x 7" 2-groove and 8-3/8 x 7" 4-groove*

*H.T. valve locks. Part number E911191 for engines with stock valves.*

## E841013 ACCESSORY KIT INCLUDES:

16 mechanical tappets .....	E914291
16 valve springs, 1.900 x 1.440.....	E915251
16 H.T. steel retainers, 7° x 3/8 .....	E961011
16 pair H.T. valve locks, 7° x 3/8 (single-groove) .....	E911271
1 tube Moly Lube, 1/4 oz .....	E911001

OPTIONAL HIGH PERFORMANCE  
PARTS FOR CHRYSLER  
"B" AND "RB" ENGINES EQUIPPED WITH  
MECHANICAL FLAT TAPPET VALVETRAINS

Roller timing-chain set, 3-bolt.....	E991912
Stock heads shaft-mount roller rockers, 1.6:1 .....	E918532
Indy 440-1 heads shaft-mount roller rockers, 1.6:1 .....	E918533
Stage 4/5 and BI-BS heads shaft-mount roller rockers, 1.6:1 .....	E918534
Brodix BI heads shaft-mount roller rockers, 1.6:1 .....	E918535
Ductile iron 1.5:1 adjustable rockers.....	E918531
Ductile iron 1.75:1 adjustable rockers.....	E918010
Valve springs, 1.900 x 1.530.....	E915261
H.T. machined valve locks, 7° x 3/8 4130 (single-groove) .....	E911121
H.T. machined valve locks, 10° x 3/8 .....	E911160
Titanium retainers, 10° (fits E915261) .....	E961408
P.C. seals, 3/8.....	E910213
Offset timing bushing (for 3 bolt-sprockets) .....	E911451
Lash caps, 3/8 .....	E911531
C.M. pushrods, 3/8 x 9.400 "RB" .....	E917353
C.M. pushrods, 3/8 x 8.650 "B" .....	E917343
Chrysler hub for pro degree wheel .....	E916008
Professional degree wheel 16 .....	E916001
Moly Lube, 2 oz. tube.....	E911002

**IMPORTANT NOTE** — Mechanical flat tappet racing cams have been the staple of the high-performance industry for years. Setting numerous speed records and winning many championship events even as we speak. Not until recently have solid roller cams gained such wide spread popularity. However, solid roller cams are not ideal for all driving conditions. Mechanical flat tappet cams however deliver adequate power for most high-performance applications with much less cost and maintenance. The one draw back is as with any cast iron camshaft and rotating lifter assembly, that they are sensitive to wear induced during the break-in procedure. Erson Cams recommends that all high-performance mechanical flat tappet camshafts with heavier than stock OEM valve spring loads, be broken-in on the outer spring only. Erson also recommends the use of any good engine break-in oil supplement.

350, 361, 383, 400 CID "B" ENGINES

413, 426W, 440 CID "RB" ENGINES

3-BOLT ALLOY STEEL BILLET

## HIGH PERFORMANCE SOLID ROLLER TAPPET CAMSHAFTS

APPLICATIONS / CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>Pro Street/E.T. Brackets.</b> Recommended for 3,200-3,600 lb. "A" or "B" bodied street machines using 413-440 cubic inch engines with 11.0-12.0:1 compression. Excellent mid-range performance when used with modified cast iron or aluminum cylinder heads, single plane intake, 850 cfm 4-barrel, 2" diameter primary tube headers and 150 horsepower shot of nitrous oxide. Torque flye cars use 3,500 RPM converter, 4.56 gear and 28" soft-compound tires.	3,500-6,500	<b>E419705</b> R-276-1	276° IN 286° EX	252° IN 260° EX	.675" IN .645" EX	110°	4°	.032" IN .032" EX
<b>E.T. Brackets.</b> Weekend warriors seeking reliable top end power and valvetrain stability from big block Chrysler engines up to 452 cubic inches with no less than 11.5:1 compression. Smaller engines (i.e: 383-400 CID), may need higher compression to run well. Should have modified Stage V big valve or Stage VI aluminum cylinder heads, gasket-matched MI® or similar single plane intake, blueprinted 850 cfm 4-barrel and 2.125" primary tube headers for best results. Needs 4,500 RPM converter and can be used with 1.6:1 rockers.	4,500-7,500	<b>E419706</b> R-294-7	294° IN 302° EX	268° IN 276° EX	.645" IN .615" EX	108°	0°	.032" IN .032" EX
<b>Super Gas/Super Stock.</b> Excellent upper mid-range torque and top end horsepower can be found in 2,400-2,800 lb. super gassers using tall deck Chrysler big block engines up to 482 cubic inches with 12.5-13.5:1 compression. Works best with modified B-1 or Indy type cylinder heads, matched single plane intake with 1,050 cfm Dominator or tunnel ram with 2 x 750s, can be used with 1.6 shaft-mount roller rockers, clearance permitting and 2.250" diameter primary tube headers. Also works well in 4-speed, 383 cubic inch super stockers.	5,000-8,000	<b>E419707</b> R-308-4	308° IN 312° EX	278° IN 282° EX	.727" IN .712" EX	108°	4°	.032" IN .032" EX
<b>Super Gas/Super Comp.</b> When you come off the throttle stop and you need to charge, this is the camshaft for you! Intended for 1,800-2,400 lb. altered, dragsters and roadsters using up to 500 cubic inch engines with 13.5-14.5:1 compression. Compatible with B1-T5 or similar aftermarket cylinder heads, 1.6 or 1.7 roller rockers, single dominator on gas or tunnel ram style injected alcohol induction and large diameter headers. 2-speed automatic cars use 5,500 RPM converter, 4.10 gear and 32" tires.	5,500-8,500	<b>E419708</b> R-316-2	316° IN 318° EX	286° IN 292° EX	.712" IN .675" EX	110°	2°	.032" IN .032" EX

### CAMSHAFT ACCESSORY KIT FOR CHRYSLER "B" AND "RB" ENGINES EQUIPPED WITH SOLID ROLLER TAPPET CAMSHAFTS

#### E841014 KIT INCLUDES THESE COMPONENTS:

8 pair roller tappets.....	E919291
16 valve springs, 1.900 x 1.535.....	E915057
16 H.T. steel retainers, 7° x 3/8 .....	E961101
16 pair H.T. valve locks, 7° x 3/8 (single-groove).....	E911121
1 tube Moly Lube, 1/4 oz. ....	E911001

#### E841015 KIT INCLUDES THESE NEW COMPONENTS:

8 pair roller tappets.....	E919291
16 valve springs, 1.900 X 1.625 .....	E915150
16 titanium retainers, 10° .....	E961406
16 pair valve locks, 10° x 3/8 .....	E911160
1 tube Moly Lube, 1/4 oz. ....	E911001

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER "B" AND "RB" ENGINES EQUIPPED WITH SOLID ROLLER TAPPET VALVETRAINS

Roller timing chain set, 3 bolt .....	E991912
Valve springs, 2.000 x 1.625 .....	E915160
Valve springs, 2.000 x 1.625 .....	E915213
Titanium retainers, 10° .....	E961407
C.M. pushrod, 3/8 x 8.650 .....	E917343
C.M. pushrod, 3/8 x 9.400 .....	E917353
P.C. seals, 3/8 .....	E910213
Lash caps, 3/8 .....	E911531
Degree wheel .....	E911004



## ALLOY STEEL BILLET

## 392 CID EARLY HEMI, 417 DONOVAN ENGINES

## HIGH PERFORMANCE SOLID ROLLER CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>A/Gas Supercharged.</b> Excellent choice for serious blown gas coupes seeking that big top end charge. 392(+) CID engines would have modified big valve cylinder heads, race-prepped 6.71 supercharger, Hilborn or equivalent fuel injection and 2- or 3-speed transmission for best results.	5,000-8,500	<b>E480141</b> R-304-2	304° IN 314° EX	278° IN 288° EX	.675" IN .645" EX	110°	0°	.032" IN .032" EX
<b>Top Fuel.</b> Newcomers and teams on a budget seeking an excellent baseline camshaft. Easy on parts yet highly competitive. Also compatible with 1.7:1 Titan rockers.	5,000-8,500	<b>E480151</b> R-310-5	310° IN 310° EX	284° IN 284° EX	.615" IN .615" EX	110°	0°	.032" IN .032" EX
<b>Top Fuel.</b> Recommended for front engine top fuelers with up to 430 cubic inch restricted engines seeking relentless yet controllable torque and horsepower. Intake opens at 33° B.T.D.C. and exhaust opens at 77° B.B.D.C. Overlap at .050" equals 62°.	5,500-9,000	<b>E480161</b> R-312-4	312° IN 312° EX	286° IN 286° EX	.675" IN .675" EX	112°	2°	.032" IN .032" EX
<b>Top Fuel.</b> When qualifying isn't everything and winning is, this cam is for you. Nationally competitive points chasers using the best parts and technology money can buy will receive championship performance from this cam.	5,500-9,000	<b>E480171</b> R-318-4	318° IN 308° EX	288° IN 282° EX	.712" IN .675" EX	112°	0°	.032" IN .032" EX

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER HEMI ENGINES EQUIPPED WITH SOLID ROLLER VALVETRAINS

## EARLY MODEL CHRYSLER 392 CID HEMIS AND DONOVANS

Valve springs, 1.900 x 1.625 (double with damper).....	E915150	Lash caps, 11/32 .....	E911541
Valve springs, 1.875 x 1.535 (double with damper).....	E915057	Lash caps, 3/8 .....	E911531
Titanium retainers, 10° (fits E915150) .....	E961406	Valve spring shims .....	E911974
Titanium retainers, 10° (fits E915057) .....	E961408	Valve spring shims .....	E911994
H.T. machined valve locks, 10° x 11/32 4130 .....	E911140	Degree wheel .....	E911004
H.T. machined valve locks, 10° x 3/8 4130 .....	E911160	Professional degree wheel .....	E916001
		Blank hub .....	E916002

## 1.57:1 INTAKE/1.52:1 EXHAUST STOCK ROCKER RATIO

## CHRYSLER/DODGE/PLYMOUTH

## ALLOY STEEL BILLET

## 426 HEMI 45° BLOCK ENGINES (INCLUDES KEITH BLACK, STAGE VI &amp; EARLIER BLOCKS)

## HIGH PERFORMANCE SOLID ROLLER CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>Super Comp/Top Sportsman.</b> Good top end power from 1,800-2,200 lb. dragsters and alters using 426-500 cubic inch engines with 13.5-15.0:1 compression. Should use modified aluminum cylinder heads, single dominator, 2x4 barrel or injected alcohol type induction for best results. Automatic cars use 5,000 RPM converter.	4,800-7,800	<b>E469500</b> R-318-3	318° IN 322° EX	288° IN 292° EX	.761" IN .737" EX	110°	2°	.034" IN .034" EX
<b>E.T. Brackets/Super Stock.</b> Excellent choice for 2,600-3,100 lb. door-slammers, i.e.: SS/AA through SS/BA with 426-439 CID engines. Single or 2x4 barrel carburetion recommended with 2.125"-2.250" x 28" long primary tube headers for best results.	5,000-8,000	<b>E469501</b> R-312-3	312° IN 312° EX	288° IN 288° EX	.800" IN .775" EX	108°	4°	.034" IN .034" EX
<b>Alcohol Dragsters/Flat Bottoms/Hydros.</b> Primarily intended for 430-480 cubic inch blown alcohol engines. Should have high-helix or screw-type supercharger with 3-speed planetary transmission and high-ratio intake rockers for increased power.	5,500-9,500	<b>E469502</b> R-324-3	324° IN 326° EX	294° IN 298° EX	.761" IN .760" EX	114°	0°	.034" IN .034" EX
<b>Top Fuel.</b> Proven winner! Intelligent choice for top fuel teams on a budget. Excellent match race camshaft. Easy on parts.	4,800-7,800	<b>E469503</b> R-326-3	326° IN 314° EX	296° IN 288° EX	.745" IN .684" EX	110°	0°	.034" IN .034" EX
<b>Top Fuel.</b> Highly competitive profile! Needs good heads, prefers high-ratio intake rocker.	5,000-8,000	<b>E469504</b> R-326-4	326° IN 326° EX	296° IN 296° EX	.745" IN .722" EX	112°	0°	.034" IN .034" EX

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER HEMI ENGINES EQUIPPED WITH SOLID ROLLER VALVETRAINS

Valve springs, 2.000 x 1.630 .....	E915160	Valve locks, 10° x 3/8 .....	E911160
Valve springs, 2.000 x 1.630 .....	E915216	Lash caps, 11/32 .....	E911541
Valve springs, 2.000 x 1.650 .....	E915213	Lash caps, 3/8 .....	E911531
Valve springs, 2.100 x 1.650 .....	E915214	P.C. seals, 11/32 .....	E910243
Titanium retainers (fits E915160) .....	E961406	P.C. seals, 3/8 .....	E910213
Titanium retainers (fits E915216, E915213, E915214) .....	E961407	Professional degree wheel .....	E916001
Valve locks, 10° x 11/32 .....	E911140	Chrysler hub for degree wheel .....	E916008

**NOTE —**

Erson does not offer a camshaft accessory kit for the Chrysler Hemi engine. Refer to our Optional Accessories list or call Erson's Technical Service Team at 775.882.1622 for information regarding this engine family.

**NOTE —**

All gross lift figures are calculated using stock rocker ratios.

# CHRYSLER/DODGE/PLYMOUTH

1.57:1 INTAKE/1.52:1 EXHAUST STOCK ROCKER RATIO

## 426 HEMI 48° STANDARD CORE ENGINES

(INCLUDES KEITH BLACK, STAGE VII & LATER BLOCKS, EXCEPT STAGE X & RODECK TFX BLOCKS)

ALLOY STEEL BILLET

### HIGH PERFORMANCE SOLID ROLLER CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>Blown Alcohol.</b> Top alcohol funny cars equipped with 500(+) cubic-inch engines with no less than 11.5:1 compression. Should be used with screw-type superchargers, good flowing cylinder heads with high-ratio rockers and 3-speed planetary transmission.	5,500-9,500	<b>E466004</b> R-324-4	324° IN 324° EX	296° IN 296° EX	.785" IN .760" EX	116°	3°	.034" IN .034" EX
<b>A/Fuel.</b> 480(+) cubic inch engines with no less than 13.5:1 compression, need big valve, high-flow cylinder heads with high-ratio intake rockers, state-of-the-art fuel system and clutch management system for National Event winning performance.	2,500-6,500	<b>E466005</b> R-322-6A	322° IN 316° EX	294° IN 288° EX	.785" IN .760" EX	114°	2°	.034" IN .034" EX
<b>Top Fuel.</b> Top fuel dragsters and funny cars who haven't made the change to the large core billet, this one's for you! A standard of the industry, 4-second E.T.'s at 300 mph.	5,000-8,300	<b>E466006</b> R-328-4	328° IN 328° EX	298° IN 298° EX	.745" IN .722" EX	113°	0°	.034" IN .034" EX

#### NOTE —

For more up to date information regarding Erson's complete list of computer designed lobe profiles or more information about our championship grinds not listed, please call Erson's Technical Service Team at 775.882.1622.

# CHRYSLER/DODGE/PLYMOUTH

1.57:1 INTAKE/1.52:1 EXHAUST STOCK ROCKER RATIO

## 426 HEMI, LG. CORE, 2.125" JOURNAL 48° ENGINES

(INCLUDES: B.A.E. BLOCK, RODECK TFX, KEITH BLACK STAGE 10)

ALLOY STEEL BILLET

### HIGH PERFORMANCE SOLID ROLLER CAMSHAFTS

APPLICATIONS/CHARACTERISTICS	BASIC RPM RANGE	PART NO. GRIND NO.	DURATION ADVERTISED	DURATION @ .050"	GROSS LIFT	LOBE CENTER	ADVANCE	VALVE LASH
<b>A/Fuel.</b> Baseline camshaft for 480(+) cubic inch injected nitro cars with no less than 13.5:1 static compression. Big valve cylinder head and high cfm runners add to winning performance. Use 1.7" intake and 1.6" exhaust rockers, state-of-the-art fuel system and high-tech clutch management for best results. Designed for use with 1" lifters.	4,000-6,500	<b>E466901</b> R-318-4	318° IN 314° EX	294° IN 288° EX	.785" IN .737" EX	114°	2°	.034" IN .034" EX
<b>Blown-Alcohol Catagories.</b> Primarily intended for 500(+) cubic inch funny cars with no less than 11.5:1 static compression. This camshaft also works well in blown alcohol hydros. The use of high-flow billet cylinder heads with 1.7" intake and 1.6" exhaust rockers, screw-type supercharger and 3-speed planetary transmission yield highly competitive results.	5,500-9,500	<b>E466902</b> R-322-7	322° IN 322° EX	296° IN 296° EX	.785" IN .760" EX	116°	3°	.034" IN .034" EX
<b>Top Fuel.</b> Attention Top Fuel Crew Chiefs! Excellent choice for 500 cubic inch nitro burners when atmospheric conditions indicate bad air, i.e.: high altitude. Intake opens at 34° B.T.D.C. eliminating aggressive behavior at the hit and exhaust opens at a safe 82° B.B.D.C. with overlap at .050" at 68°. Camshaft produces high M.E.P.	5,000-8,000	<b>E466903</b> R-324-5	324° IN 324° EX	296° IN 296° EX	.746" IN .722" EX	114°	0°	.034" IN .034" EX
<b>Top Fuel Dragsters/Funny Cars.</b> Regarded as one of the best good air camshafts in the industry. Intake opens at 37° B.T.D.C. and the exhaust opens at a conservative 81° B.B.D.C. Overlap at .050" equals 74°, reducing cylinder pressure and cooling combustion chamber, requiring high-fuel volume. Use high-ratio rockers for best results.	5,300-8,300	<b>E466904</b> R-326-5	326° IN 326° EX	298° IN 298° EX	.746" IN .722" EX	112°	0°	.034" IN .034" EX
<b>Top Fuel/Funny Cars.</b> Well funded teams seeking low 4-second E.T.s and 320+ MPH speeds need this camshaft! A good blower, high-flow billet cylinder heads, strong magnetos, high-tech fuel system and state-of-the-art clutch management is required for championship performance. Also works well in blown fuel hydros. Intake opens at 36° B.T.D.C. and exhaust opens at 82° B.B.D.C. with 70° of overlap at .050" lift.	5,200-8,200	<b>E466905</b> R-326-6	326° IN 324° EX	300° IN 296° EX	.746" IN .722" EX	114°	0°	.034" IN .034" EX

### OPTIONAL HIGH PERFORMANCE PARTS FOR CHRYSLER HEMI ENGINES EQUIPPED WITH SOLID ROLLER VALVETRAINS

Valve springs, 2.000 x 1.630 (double with damper) .....	E915160	H.T. machined valve locks, 10° x 3/8 4130 .....	E911160
Valve springs, 2.000 x 1.630 (triple) .....	E915216	Lash caps, 11/32 .....	E911541
Valve springs, 2.000 x 1.650 (triple) .....	E915213	Lash caps, 3/8 .....	E911531
Valve springs, 2.100 x 1.650 (triple) .....	E915214	Professional degree wheel .....	E916001
Titanium retainers, 10° (fits E915160) .....	E961406	Chrysler hub for degree wheel .....	E916008
Titanium retainers, 10° (fits E915216, E915213, E915214) .....	E961407	Moly Lube, 2 oz. tube .....	E911002
H.T. machined valve locks, 10° x 11/32 4130 .....	E911140		