

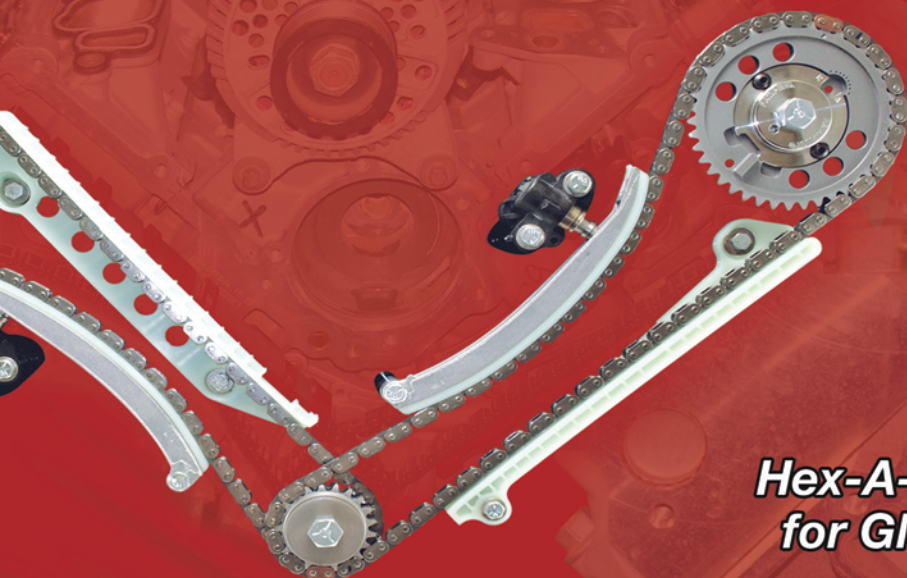
CLOYES® *Performance Products*

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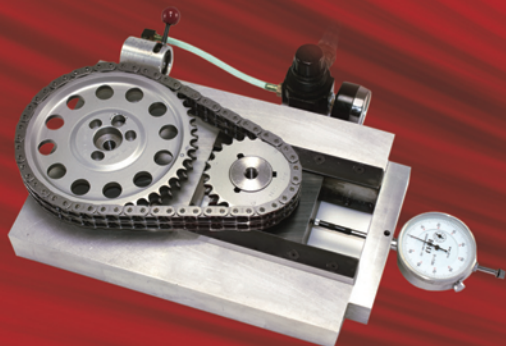
*Hex-A-Just®
for Ford Mod*



*Hex-A-Just®
for GM LS*



*Cloyes Exclusive
Hand Matching!*



Timed... To Perfection!

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Developing and Manufacturing Performance
Timing Drives Since 1970!

WHICH SET DO YOU NEED?

HEAVY DUTY SETS = GOOD

This standard double row chain set offers that little extra durability and peace of mind.
Heavy Duty Sets - Double row sprockets and .200 or .220 double row chain. 100% Made in USA

STREET TRUE® ROLLERS = BETTER

Entry-level True® Roller offerings for the budget-minded street enthusiast.
These sets are 100% Made in USA.
Street True® - offering a .250 True® Roller chain and 3 keyway crank sprocket.

Street Billet - same as above with added features of billet steel cam sprocket and 9 key crank sprocket.

RACE TRUE® ROLLERS = BEST

Race-proven speed sets. These custom hand-matched sets give the professional racer the assurance needed for a race-dedicated engine.
Race True® - Induction heat-treated sprockets hand-matched with Premium .250 True® Roller chain. This Original RACE Set put Cloyes in the race business!

Race Billet - We took a good idea and made it better. Similar to above with the added assurance of all billet sprockets and added benefit of versatility with 3 or 9 keyway crank sprockets.

ADJUSTABLE RACE TRUE® ROLLERS = BEST

Like above, these custom hand-matched sets give the professional racer the assurance needed for a race-dedicated engine, with the added feature of infinite adjustability anywhere between plus or minus 6°.
Hex-A-Just® - Our number one seller to the professional race crowd. All the assurances of our top-of-the-line speed set - billet steel heat-treated sprockets, hand-matched with our Premium .250 True® Roller chain - and infinitely adjustable (from plus 6° to minus 6°) with the simple turn of a wrench. Add our Quick Button Two Piece Timing Cover and you are way ahead of the field!

Quick Adjust® - Highly recommended for our Ford racers. Like above, our top-of-the-line speed set - billet steel heat-treated sprockets, hand-matched with our Premium .250 True® Roller - and infinitely adjustable (from plus 6° to minus 6°) with the turn of a wrench.

"Z-RACING" TRUE® ROLLERS = Z-BEST

Developed for those extreme racing conditions that push your internal engine components to their limits. With the addition of the exclusive Cloyes "Z" Chain, the "Z-Racing" series is available as an upgrade for a select number of popular racing applications on all race categories discussed above. See application listings on pages 9-22 for available coverage.

For more details on "Z-Racing" see page 17. For "Z-Racing" for LS see page 13.

FOR REPLACEMENT CHAIN NUMBERS
FOR ALL SPEED SETS - SEE PAGE 27

Why Advance or Retard Valve Timing?

Adjusting your valve timing gives you the ability to customize your torque and power curves to optimize your desired engine output for your specific application needs.

ADVANCED TIMING = MAXIMUM TORQUE AT LOW RPM

Recommended for towing, performance street driving, and drag racing with automatic transmissions.

RETARDED TIMING = MAXIMUM TORQUE AT HIGH RPM

Recommended for circle track, drag racing with manual transmissions and other all-out racing applications.

How to Advance or Retard Valve Timing

Cloyes offers several different options to adjust your valve timing:

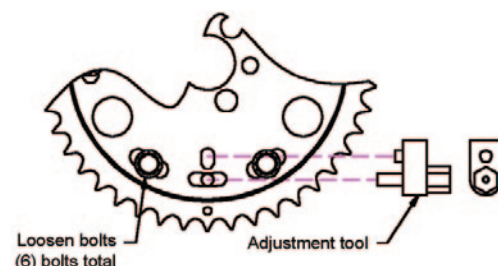
HEX-A-JUST®

With the simple turn of an allen wrench or fuel pump eccentric, our patented Hex-A-Just® systems allow you to infinitely adjust valve timing within a window of + / - 6 degrees.



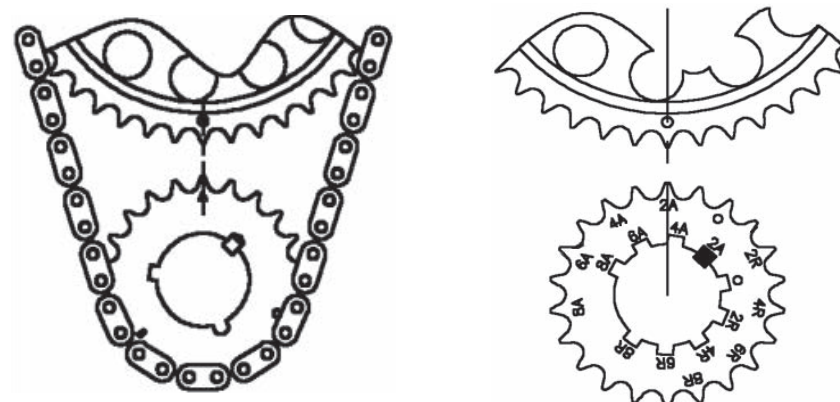
QUICK ADJUST®

Another Cloyes patented and innovative way to adjust your valve timing. By simply loosening the six fasteners and using the supplied tool you can infinitely adjust valve timing within a window of + / - 6 degrees.



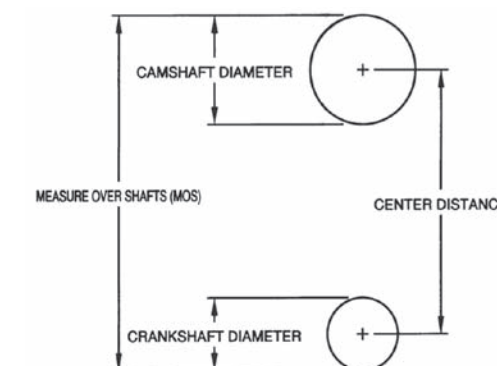
MULTIPLE KEYWAYS

Use our three or nine keyway crank sprockets for incremental adjustments



What is Center Distance?

Center Distance (or CD) is the measurement from the center of the camshaft to the center of the crankshaft. Accurately matching your timing set to the center distance of your engine will determine the performance and longevity of your timing set.



$$CD = MOS - (CRANK\ DIA./2 + CAM\ DIA./2)$$

Hand Matching... A Cloyes Exclusive!

Each and every Cloyes Premium Race set (Hex-A-Just®, Quick Adjust®, Race Billet, and Original Race True®) is hand-matched at the Cloyes facility by trained technicians. This process starts with a detailed component fitment and critical feature analysis. Each set is then measured on a pneumatic matching fixture, allowing rotation of the timing set under a predetermined load to both qualify center distance and control runout. It is this attention to detail that sets Cloyes apart from all competitors.

Accurate and consistent valve timing is a key component to maximizing engine performance. The illustrations below show a typical mass-produced OE timing set versus a hand-matched Cloyes True® Roller Set.

OE Set

Center Distance measures 0.010" too long causing chain deflection, resulting in -

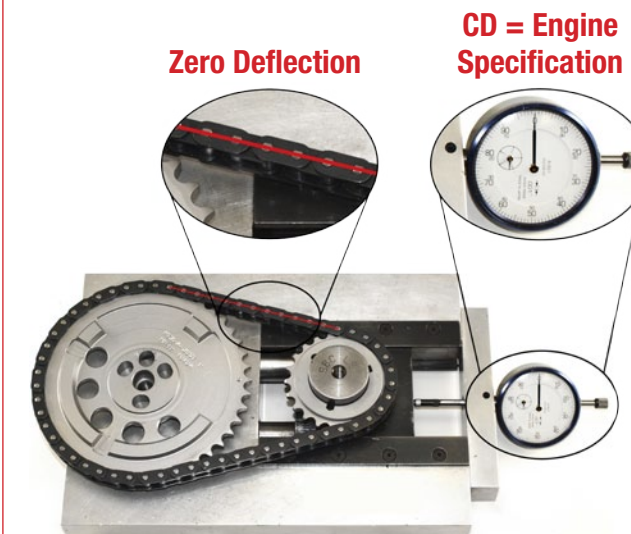
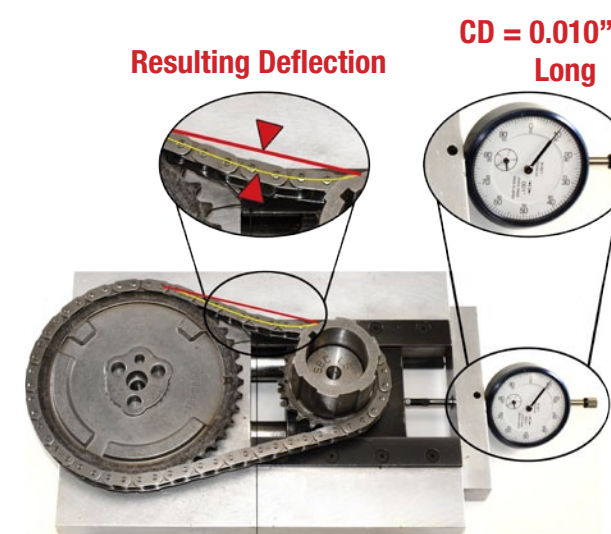
- Timing Variation: The cam sprocket is allowed to rotate a certain number of degrees (relative to amount of deflection) without taking lead from the crank sprocket. This prevents the engine from attaining optimum performance.
- Chain Whip: This will lead to shortened chain fatigue life and can cause ultimate failure.

Cloyes Hand-Matched Set

Center Distance measures to exact engine specification -

- Exact and Consistent Timing = Optimum engine performance
- Smooth Chain Operation = Increased chain life

Contact Cloyes Tech Line at (479) 646-1662 ext 228 for the custom center distance needed for your align honed or aluminum block engine.



Quick Button™ Two-Piece Timing Cover

The perfect compliment to our Chevy Hex-A-Just® True® Roller Sets. The Quick Button™ Two Piece Timing Cover provides easy access to cam timing adjustment saving hours of set-up time on the dyno or at the track. The built-in cam button allows you to adjust cam endplay with the cover in place.



- Made from Die Cast Aluminum
- Designed for easy access to Hex-A-Just®
- Easily-Adjustable, Thrust Bearing Cam Button
- O-Ring Seal & Timing Cover Bolts Included
- Accepts OEM-style timing cover gasket and crank shaft seal

Note: Not designed to work with Cloyes Quick Adjust Timing Sets.

Chevy Small Block

	Part #
1955-UP (non-Factory Roller Cam)	9-221
with BB Cam Snout	9-221
with BB Crank Snout	9-227
with BB Cam & Crank Snout	9-227
Rocket Block (Raised Cam)	9-226
with BB Crank Snout	9-229
1985-UP (w/Factory Roller Cam)	9-225
with BB Crank Snout	9-234

Chevy Big Block

	Part #
1965-UP (up to and including Gen 4)	9-231



Replacement Parts

Replacement Plate Only (cam button not included)	
For Cover#	order part#
9-221	9-221B
9-225	9-225B
9-226	9-226B
9-227	9-221B
9-229	9-226B
9-231	9-221B
9-234	9-225B



Repair Kit
Part #9-221D
Includes O-Ring Seal, the 4 mounting bolts, locking screw, and cam button.



Bolt/Ring Kit
Part #9-221E
Includes the O-Ring seal and the 4 mounting bolts.

Hex-A-Just® True® Roller Speed Sets

Hex-A-Just® Sets (9-3100A series) feature:

- Patented Hex-A-Just® allows +/- 6 degrees
- Induction Heat-Treated, Billet Steel Sprockets
- 3 Keyway Billet Steel Crank Sprocket
- Premium True® Roller Chain with .250" Diameter Rollers
- Hand Matched to qualify center distance and control run-out
- Many applications available .005" and .010" undersize
- Some sets available with Z-Chain



Cloyes Tech Tip

*When making cam timing adjustments with a Cloyes Hex-A-Just® set you must **LOOSEN THE CAM BOLTS AND RELEASE THE CAMSHAFT LOAD!***

The Industry Standard in Adjustable Cam Timing.

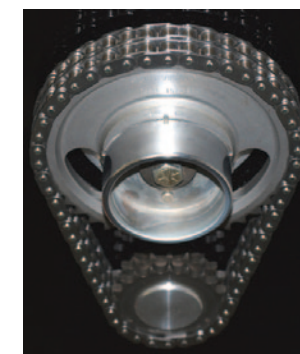
An industry breakthrough when introduced in 1992. Since then the accuracy and simplicity of our Hex-A-Just® system remains unequalled by our competitors. The Hex-A-Just® True® Roller Set is infinitely adjustable to +/- 6 degrees. No machining required and no fumbling with offset bushings. Simply dial in your cam timing with the turn of a wrench, then tighten the cam bolts to lock the cam position in place. When combined with our Quick Button™ Two Piece Timing Cover (see opposite page) this Cloyes' patented technology will ensure accurate timing and save you hours of valuable set-up time. Set it, and forget it!

Sprockets are machined from premium billet steel on our state-of-the-art CNC equipment. Both sprockets are then induction hardened and oil-quenched using our in-house multi-stage heat treat process. Our Premium True® Roller chain features superior strength with full roller action. Side plates are cut and shaved from high strength steel and heat-treated for maximum fatigue resistance. The .250" rollers are "cold rolled" and hardened to exacting standards increasing load and RPM capabilities. All Hex-A-Just® sets are hand-matched at the Cloyes facility to qualify center distance and control run-out. An additional feature on Chevrolet applications is the Cloyes' patented "cheater" sprocket tooth profile that provides exacting center distance and improved load distribution. Check out this and other Cloyes patents at www.USPTO.gov. Whether your destination is the street or the track, Hex-A-Just® will get you there faster!

Visit WWW.CLOYES.COM to see a video simulation of the Hex-A-Just® in action!



Replacement hex bushing for Chevy sets
Part #P9005



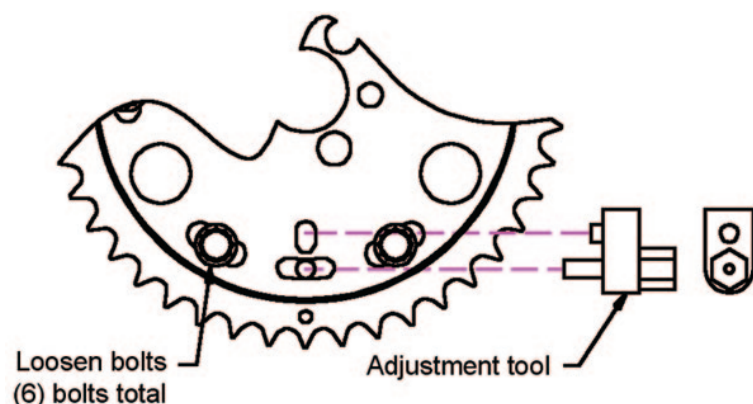
Ford & Oldsmobile Hex-A-Just® works in similar manner using the supplied fuel pump eccentric as the adjustment component.

Note:
All applicable Chevy Sets and BB Chrysler sets include Captured Thrust Bearing.

Quick Adjust® True® Roller Speed Sets

Quick Adjust® Sets (9-3700 series) feature:

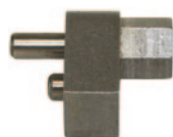
- Patented Quick Adjust® allows +/- 6 degrees
- Induction Heat-Treated, Billet Steel Sprockets
- 3 Keyway Billet Steel Crank Sprocket
- Premium True® Roller Chain with .250" Diameter Rollers
- Hand Matched to qualify center distance and control run-out
- Many applications available in .005" and .010" undersize
- Some sets available with Z-Chain



Adjust your Valve Timing with Confidence!

Cloyes patented Quick Adjust® True® Roller Speed Sets keep you ahead of the competition by offering a new way to adjust cam timing up to +/- 6 degrees. Just loosen the six bolts around the cam sprocket, insert the patented Quick Adjust® tool, and tune your way to faster times. Sprockets are machined from premium billet steel on our state-of-the-art CNC equipment. Both sprockets are then induction hardened and oil-quenched using our in-house multi-stage heat treat process.

Our Premium True® Roller chain features superior strength with full roller action. Side plates are cut and shaved from high strength steel and heat-treated for maximum fatigue resistance. The .250" rollers are "cold rolled" and hardened to exacting standards increasing load and RPM capabilities. All Quick Adjust® sets are hand-matched at the Cloyes facility to qualify center distance and control run-out. An additional feature on Chevrolet applications is the Cloyes patented "cheater" sprocket tooth profile that provides exacting center distance and improved load distribution. Check out this and other Cloyes patents at www.USPTO.gov. Get serious about going fast - Cloyes and Quick Adjust®!



Replacement Quick Adjust® Tool
Part #PQATOOL

Note:

All applicable Chevy Sets and BB Chrysler sets include Captured Thrust Bearing.

Race Billet True® Roller Speed Sets

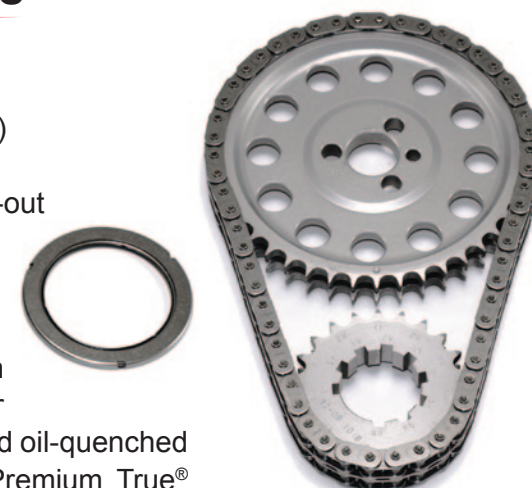
Race Billet Sets (9-3600 series) feature:

- Induction Heat-Treated, Billet Steel Sprockets
- 3 or 9 Keyway Billet Steel Crank Sprocket (+/- 8°, 2° incr)
- Premium True® Roller Chain with .250 Diameter Rollers
- Hand Matched to qualify center distance and control run-out
- Many applications available in .005" and .010" undersize
- Some applications available with Z-Chain

Race Ready Timing Sets!

Cloyes Race Billet True® Roller sets are race ready. Both sprockets are machined from premium billet steel on our state-of-the-art CNC equipment, then induction hardened and oil-quenched using our in-house, multi-stage heat treat process. Our Premium True® Roller chain features superior strength with full roller action. Side plates are cut and shaved from high strength steel and heat-treated for maximum fatigue resistance. The .250" rollers are "cold rolled" and hardened to exacting standards increasing load and RPM capabilities. All Race Billet sets are hand-matched at the Cloyes facility by trained technicians to qualify center distance and control run-out, ensuring you the best with every set. Available with 3 or 9 keyway crank sprocket. An additional feature on Chevrolet applications is the Cloyes patented "cheater" sprocket tooth profile that provides exacting center distance and improved load distribution. Check out this and other Cloyes patents at www.USPTO.gov.

Chevy (non factory roller) and BB Chrysler sets include captured needle bearing.



Original Race True® Roller Speed Sets

Original True Roller® Sets (9-3100 series) feature:

- Ductile Iron or Induction Heat-Treated Cast Iron Cam Sprocket
- Induction Heat-Treated, Billet Steel, Crank Sprocket
- 3 Keyways allow +/- 4 degrees
- Premium True® Roller Chain with .250 Diameter Rollers
- Hand Matched to qualify center distance and control run-out
- Many applications available in .005" and .010" undersize
- Some applications available with Z-Chain

Introduced in 1970 — the one that started it all!

Our competitors may say they have a true roller but only Cloyes has the Original. The Original Race True® Roller remains the benchmark against which all others are measured. Cam sprockets are machined from premium ductile iron or induction hardened cast iron. The three keyway billet steel crank sprockets are induction hardened then oil-quenched using our in-house multi-stage heat treat process. Our Premium True® Roller chain features superior strength with full roller action. Side plates are cut and shaved from high strength steel and heat-treated for maximum fatigue resistance. The .250" rollers are "cold rolled" and hardened to exacting standards increasing load and RPM capabilities. All Original True® sets are hand-matched at the Cloyes facility to qualify center distance and control run-out, ensuring you the best with every set. An additional feature on Chevrolet applications is the Cloyes' patented "cheater" sprocket tooth profile that provides exacting center distance and improved load distribution. Check out this and other Cloyes patents at www.USPTO.gov.



Street Billet True® Roller Speed Sets

Street Billet Sets (9-3500 series) feature:

- Billet Steel Cam Sprocket
- Induction Heat-Treated, Billet Steel Crank Sprocket
- 9 Keyways allow +/- 8 degrees
- Adjustability in 2 crank degree increments
- True® Roller Chain with .250" Diameter Rollers
- Set is 100% Made in USA

Serving the needs of the Weekend Racer!

Offering a new level of True® Roller advantage for the value driven racer. We upgraded the cam sprockets to feature the strength of billet steel and added critical functioning features. The billet steel durability, 9 keyway induction hardened crank sprocket, .250 True® Roller chain, and precise CNC machining, together offer unmatched quality and adjustability in its class.

Street True® Roller Speed Sets

Street True® Roller Sets (9-1100 series) feature:

- Cast Iron Cam Sprocket
- Induction Heat-Treated, Billet Steel Crank Sprocket (3 keyway)
- True® Roller Chain with .250" Diameter Rollers
- Set is 100% Made in USA

Performance and Value brought to you by Cloyes!

These sets feature cast iron cam sprockets, 3 keyway induction hardened billet steel crank sprockets, and .250 True® Roller chains. These, combined with our precision CNC machining offer unmatched quality in its class.

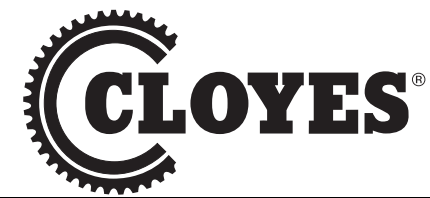
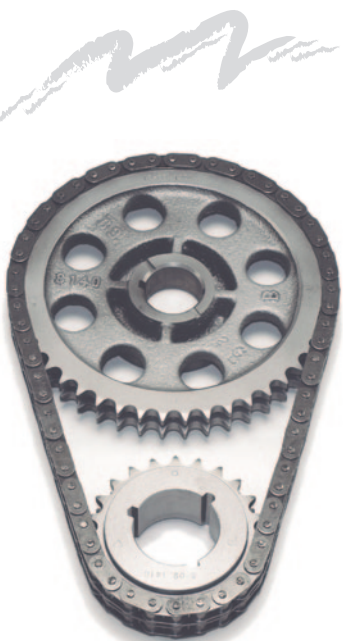
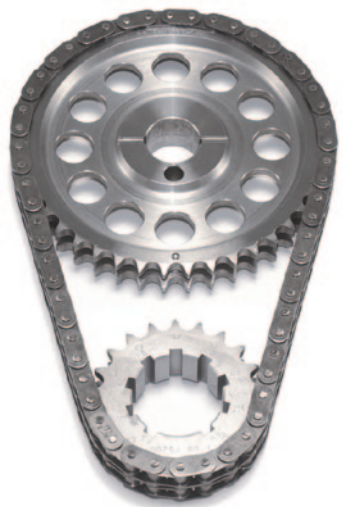
Heavy Duty Speed Sets

Heavy Duty Sets feature:

- Cast Iron Cam Sprocket
- Induction Heat-Treated, Billet Steel Crank Sprocket
- Heavy Duty .200 or .222 Diameter Double Roller Chain
- Set is 100% Made in USA

High Quality / Low Cost Performance

Cam sprockets machined from cast iron, induction hardened crank sprockets, .200" diameter double roller chains for small blocks or .222" double roller chains for big blocks. These sets are the industry's most reliable workhorse!



GOOD → BETTER → BEST

STREET SETS			RACE TRUE® SETS		
HEAT-TREATED, BILLET STEEL CRANK			BOTH SPROCKETS INDUCTION HEAT-TREATED and HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN		
HEAVY DUTY	STREET TRUE®	STREET BILLET	RACE TRUE®	RACE BILLET TRUE®	
X = 3 KEYWAY DBL ROLLER	3 KEYWAY .250 TRUE ROLLER CHAIN	9 KEYWAY	3 KEYWAY	3 KEYWAY	9 KEYWAY

Make/Engine/Year

AMERICAN MOTORS CORPORATION (AMC)

I-4 250 (2.5) <i>center distance = 5.045</i>	1983-84	---	---	---	9-3127	---	---
I-6 199, 232, 258 <i>center distance = 5.045</i>	1964-88	---	---	---	9-3127	---	---
V-8 290 thru 401 <i>center distance = 4.965</i>	1966-79	---	9-1118	---	9-3118	---	---

BUICK

V-6 198, 225, 231 <i>w/out Integral Distributor Drive Gear</i> <i>center distance = 4.335</i>	1962-82	---	9-1132	9-3532X9	9-3132 <i>optional -5 -10</i>	9-3632X3 <i>optional -5 -10</i>	9-3632X9 <i>optional -5 -10</i>
V-6 181, 198, 225, 231(RWD) <i>with Integral Distributor Drive Gear</i> <i>center distance = 4.335</i>	1977-88	---	9-1134	9-3534X9	9-3134 <i>optional -5 -10</i>	9-3634X3 <i>optional -5 -10</i>	9-3634X9 <i>optional -5 -10</i>
V-8 215,300,340,350H,J,X <i>center distance = 4.335</i>	1962-82	---	9-1132	9-3532X9	9-3132 <i>optional -5 -10</i>	9-3632X3 <i>optional -5 -10</i>	9-3632X9 <i>optional -5 -10</i>
V-8 400, 430, 455 <i>center distance = 5.045</i>	1967-76	---	9-1144	---	9-3144		

CADILLAC

V-8 368, 425, 472, 500 <i>1/2" pitch single roller chain</i> <i>center distance = 5.045</i>	1968-84	---	---	9-3539X3	---	9-3639X3	---
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REDUCED CENTER DISTANCE FOR ALIGN HONED APPLICATIONS

Some Race True Roller sets are available in reduced center distance as noted by optional -5 and -10. To order, just add suffix to the part number. For example, 9-3100 becomes 9-3100-5 (for .005 undersized).




UPGRADE YOUR CADILLAC LS with CLOYES Z-SERIES!!

Z-SERIES FOR CADILLAC, PLEASE REFER TO CHEVROLET ENGINE LISTINGS.

		GOOD ➔ BETTER		
MAKE / ENGINE / YEAR		STREET SETS		
		HEAT-TREATED, BILLET STEEL CRANK		
		HEAVY DUTY X = 3 KEYWAY DBL ROLLER	STREET TRUE® 3 KEYWAY .250 TRUE ROLLER CHAIN	STREET BILLET 9 KEYWAY
CHEVROLET				
1	V-6 2.8 S, X, Z V-6 3.1T (Camaro Only) <i>center distance = 6.261</i>	1980-92	Available in Race Sets Only ➔	
2	V-6 & Small Block V-8 <small>except factory roller cam</small> V-6 200, 229, 262, 4.3 w/o Bal Shaft V-8 262, 265, 267, 283, 302, 305G, 305H, 307, 327, 350L, 350K, 400 <i>center distance = 4.521</i>	1955-96	C-3023X <small>three keyway</small> C-3055 <small>single roller single keyway</small>	9-1100 9-1100T 9-3500TX9
	with Big Block Crank Snout	ALL	Available in Race Sets Only ➔	
	with Big Block Cam Snout	ALL	Available in Race Sets Only ➔	
	with Big Block Crank & Cam Snout	ALL	Available in Race Sets Only ➔	
SEE NEXT PAGE FOR QUICK BUTTON TIMING COVERS				
3	V-6 Truck 4.3L w/Balance Shaft <small>1/2" pitch single roller chain</small> <i>center distance = 4.521</i>	1992-06	C-3211 <small>single keyway</small>	---
4	V-6 & Small Block V-8 <small>factory roller cam</small> V-6 262, 4.3 w/o Bal Shft V-8 305E, F, G, H, 350 (5.7-7, 5.7-8) <small>(excl LT1/LT4)</small> <i>center distance = 4.521</i>	1985-02	C-3092 <small>single roller single keyway</small>	9-1145 9-3545X9
	with BB Crank Snout	ALL	Available in Race Sets Only ➔	
5	V-8 Small Block "Rocket" <i>cam raised 0.391"</i> <i>center distance = 4.912</i>	ALL	---	9-1146 9-1146T 9-3546TX9
	with BB Crank Snout	ALL	Available in Race Sets Only ➔	
6	V-8 348, 409 <i>center distance = 5.045</i>	1958-65	---	9-1101
7	V-8 Small Block Vortec (L31) <small>1/2" pitch single roller chain</small> <i>center distance = 4.521</i>	1996-02	---	9-1157
8	LT-1 / LT-4 (Vented Opti-Spark) <small>1/2" pitch single roller chain</small> <i>center distance = 4.521</i>	1995-97	Available in Race Sets Only ➔	

➔ <i>BEST</i> ➔ <i>BEST and ADJUSTABLE</i>							
RACE TRUE® ROLLER SETS							
INDUCTION HEAT-TREATED SPROCKETS HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN or Z-CHAIN (where available)							
	RACE TRUE® 3 KEYWAY	RACE BILLET TRUE® X3 = 3 KEYWAY TRUE®	X9 = KEYWAY Z-Racing	HEX-A-JUST® ADJUSTABLE + or - 6° TRUE®	Z-Racing	QUICK ADJUST® ADJUSTABLE + or - 6° TRUE®	Z-Racing
CHEVROLET							
1	9-3137	---	---	---	---	---	---
2	9-3100 <small>optional -5 -10</small>	9-3600TX3 9-3600TX9 <small>optional -5 -10</small>	9-3600TX3Z 9-3600TX9Z	9-3100A <small>optional -5 -10</small>	9-3100AZ	9-3700 <small>optional -5 -10</small>	9-3700Z
	---	9-3600BTX3 <small>optional -5 -10</small>	9-3600BTX3Z	9-3100B <small>optional -5 -10</small>	9-3100BZ	9-3700B <small>optional -5 -10</small>	9-3700BZ
	---	---	---	9-3100C <small>optional -5 -10</small>	---	---	---
	---	---	---	9-3100D <small>optional -5 -10</small>	---	---	---
- THE PERFECT COMPLIMENT TO HEX-A-JUST®							
3	---	9-3654X3	---	---	---	---	---
4	9-3145 <small>optional -5 -10</small>	9-3645X3 9-3645X9 <small>optional -5 -10</small>	---	9-3145A <small>optional -5 -10</small>	---	---	---
	---	---	---	9-3145B <small>optional -5 -10</small>	---	---	---
5	9-3146 <small>optional -5 -10</small>	9-3646TX3 9-3646TX9 <small>optional -5 -10</small>	9-3646TX3Z 9-3646TX9Z	9-3146A <small>optional -5 -10</small>	9-3146AZ	9-3746 <small>optional -5 -10</small>	9-3746Z
	---	9-3646BTX3 <small>optional -5 -10</small>	9-3646BTX3Z	9-3146B <small>optional -5 -10</small>	9-3146BZ	9-3746B <small>optional -5 -10</small>	9-3746BZ
6	---	9-3601X3	---	---	---	---	---
7	9-3157 <small>three keyway</small> 9-3157X1 <small>single keyway</small>	---	---	---	---	---	---
8	---	9-3651X3	---	---	---	---	---

		GOOD → BETTER		
MAKE / ENGINE / YEAR		STREET SETS		
		HEAT-TREATED, BILLET STEEL CRANK		
		HEAVY DUTY X = 3 KEYWAY DBL ROLLER	STREET TRUE® 3 KEYWAY .250 TRUE ROLLER CHAIN	STREET BILLET 9 KEYWAY
CHEVROLET - continued (for LS coverage - see next page)				
9	V-8 Big Block 396, 400, 402, 427, 454 <i>non-factory roller cam</i> <i>center distance = 5.152</i>	1965-98	C-3024X three keyway	9-1110 9-1110T 9-3510TX9
10	V-8 Big Block "Merlin" 454 <i>cam raised 0.399"</i> <i>center distance = 5.551</i>	ALL		9-1147 9-3547TX9
11	V-8 Big Block Vortec 454 (7.4-J) w/crank sensor ring <i>1/2" pitch single roller chain</i> <i>center distance = 5.152</i>	1996-00	Available in Race Sets Only →	
12	V-8 Big Block Gen VI <i>factory roller cam</i> <i>center distance = 5.152</i>	ALL	Available in Race Sets Only → DOUBLE ROLLER VERSION SINGLE ROLLER VERSION	

Quick Button™ Two-Piece Timing Cover

The perfect compliment to our Chevy Hex-A-Just® True® Roller Sets. The Quick Button™ Two Piece Timing Cover provides easy access to cam timing adjustment saving hours of set-up time on the dyno or at the track. The built-in cam button allows you to adjust cam endplay with the cover in place.

- Made from Die Cast Aluminum
- Designed for easy access to Hex-A-Just®
- Easily-Adjustable, Thrust Bearing Cam Button
- O-Ring Seal & Timing Cover Bolts Included
- Accepts OEM-style timing cover gasket and crank shaft seal



Note: Not designed to work with Cloyes Quick Adjust Timing Sets.

→ BEST → BEST and ADJUSTABLE							
RACE TRUE® ROLLER SETS							
INDUCTION HEAT-TREATED SPROCKETS HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN or Z-CHAIN (where available)							
	RACE TRUE® 3 KEYWAY	RACE BILLET TRUE® X3 = 3 KEYWAY TRUE®	X9 = KEYWAY Z-Racing	HEX-A-JUST® ADJUSTABLE + or - 6° TRUE®	Z-Racing	QUICK ADJUST® ADJUSTABLE + or - 6° TRUE®	Z-Racing
9	9-3110 optional -5 -10	9-3610TX3 9-3610TX9 optional -5 -10	9-3610TX3Z 9-3610TX9Z	9-3110A optional -5 -10	9-3110AZ	9-3710 optional -5 -10	9-3710Z
10	9-3147	9-3647TX3 9-3647TX9	---	9-3147A	---	9-3747	---
11	---	9-3655X3	---	9-3155A	---	---	---
12	---	9-3670X3 9-3649X3	call tech ---	9-3170A 9-3149A	call tech ---	---	---

Quick Button™ Two-Piece Timing Cover

CHEVY SMALL BLOCK		CHEVY BIG BLOCK	
	Part #		Part #
1955-UP (non-Factory Roller Cam)	9-221	1965-UP (up to and including Gen 4)	9-231
with BB Cam Snout	9-221		
with BB Crank Snout	9-227		
with BB Cam & Crank Snout	9-227		
Rocket Block (Raised Cam)	9-226		
with BB Crank Snout	9-229		
1985-UP (w/Factory Roller Cam)	9-225		
with BB Crank Snout	9-234		





Take your LS engine to the next level with the #1 choice of top professional teams in Sprint, Circle Track, Drag, and Off-Road racing.

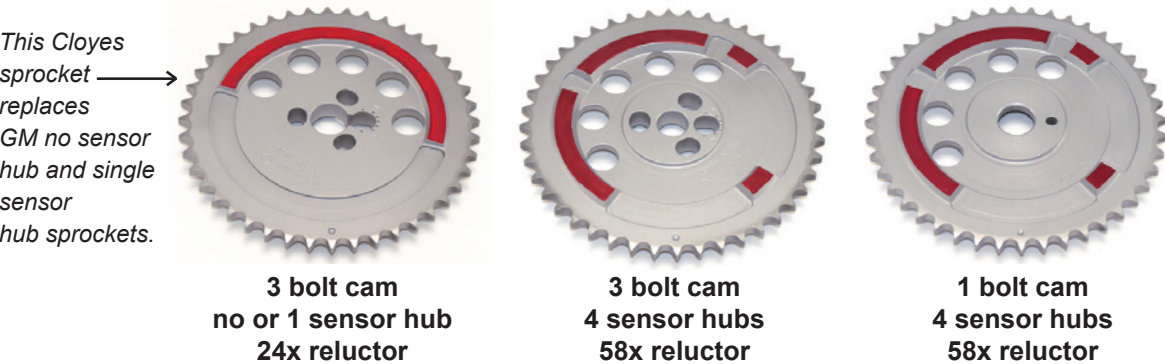
For All-Out racing, Cloyes offers its single roller “Z-Racing” series for GM LS applications featuring the race-proven Cloyes “Z” chain. Our custom hand-matched sets offer center distance accuracy, easy installation (no engine modifications required), exact cam timing and race-proven durability. Starting with precision machined induction heat-treated billet steel sprockets, we hand-match every set for center distance correction and runout control. Exact cam timing is achieved with our patented Hex-A-Just® system for infinite adjustability or our Race Billet for incremental adjustability. Our LS “Z-Racing” series has exceeded expectations in the most demanding of race environments, including high horsepower, high valve spring pressure, and while driving ignition/fuel/accessories off the cam nose.

“Z-RACING” TRACK-PROVEN FOR:

- Abusive on-and-off throttle applications
- Power levels exceeding 1200 horsepower
- Valve spring pressures approaching 800 lb/in open
- Drive mechanical fuel pumps/distributor ignition systems
- Drive your front accessory drive units (water pump, oil pump, etc.)

If you’re looking for the ultimate in valve train stability, Cloyes Z-Racing series is the answer! LS sets also available for 0.390 raised blocks!

How to Identify your LS Engine Management System



For the weekend racer, our LS sets are also available with our standard Cloyes Premium True® Roller chains. See listings on opposite page.

Not sure what you need? Contact our Tech Line for help - (479) 646-1662 ext 228.

TRUE® ROLLER SETS FOR GM's LS ENGINES

APPLICATION	HEX-A-JUST® TRUE® ROLLER	RACE BILLET TRUE® ROLLER		Chain Only
STANDARD CENTER DISTANCE		3 KEYWAY	9 KEYWAY	
LS1 / LS2 / LS6 1997-2005 5.7, 6.0 (three bolt cam / no or one sensor hub) - this also includes 2006 Pontiac GTO				
single roller	9-3158A	9-3658TX3	9-3658TX9	9-304
single roller "Z-Racing"	9-3158AZ	9-3658TX3Z	9-3658TX9Z	9-303
double roller (no bearing)	9-3159A	9-3659X3		9-131
LS2 2006 6.0 (three bolt cam / four sensor hub)				
single roller	9-3172A	9-3672TX3	9-3672TX9	9-304
single roller "Z-Racing"	9-3172AZ	9-3672TX3Z	9-3672TX9Z	9-303
LS2/LS3 2007-2009 6.0, 6.2 (single bolt cam / four sensor hub) - these sets also include the chain damper				
single roller		9-3673TX3	9-3673TX9	9-304
single roller "Z-Racing"		9-3673TX3Z	9-3673TX9Z	9-303
LS7 2006-10 (three bolt cam / four sensor hub)				
single roller	9-3167A	9-3667TX3		9-304
single roller "Z-Racing"	9-3167AZ	9-3667TX3Z		9-303
RAISED BLOCK SETS - center distance raised .390" - damper #9-5491 recommended				
		3 KEYWAY	9 KEYWAY	
LS1 / LS2 / LS6 5.7, 6.0 (three bolt cam / no or one sensor hub)				
single roller "Z-Racing"	9-3158AZR	9-3658TX3ZR	9-3658TX9ZR	9-302
double roller (no bearing)	9-3159AR	9-3659X3R		9-132
LS2 6.0 (three bolt cam / four sensor hub)				
single roller "Z-Racing"	9-3172AZR	9-3672TX3ZR	9-3672TX9ZR	9-302
LS2/LS3 6.0, 6.2 (single bolt cam / four sensor hub)				
single roller "Z-Racing"		9-3673TX3ZR	9-3673TX9ZR	9-302
LS7 (three bolt cam / four sensor hub)				
single roller "Z-Racing"	9-3167AZR	9-3667TX3ZR		9-302

REPLACEMENT NEEDLE BEARING for LS sets = Part #9-232

REPLACEMENT DAMPER
PART #9-5491




Damper included on single bolt sets as noted above, but can be ordered as option for all your LS applications.

VVT
TENSIONER
ELIMINATION
KIT FOR LS



FOR THE RACER THAT WANTS TO TUNE FOR OPTIMUM PERFORMANCE, THIS KIT ELIMINATES THE COMMON PROBLEM AREA - TENSIONER FAILURE.

<div></div> <div>Make/Engine/Year</div>		GOOD → BETTER → BEST					
		STREET SETS			RACE TRUE® SETS		
		HEAT-TREATED, BILLET STEEL CRANK			BOTH SPROCKETS INDUCTION HEAT-TREATED and HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN		
		HEAVY DUTY X = 3 KEYWAY DBL ROLLER	STREET TRUE® 3 KEYWAY .250 TRUE ROLLER CHAIN	STREET BILLET 9 KEYWAY	RACE TRUE® 3 KEYWAY	RACE BILLET TRUE® 3 KEYWAY	RACE BILLET TRUE® 9 KEYWAY
CHRYSLER							
V-6 238 (3.9) V-8 273, 315, 318, 325, 326, 340, 354, 360, 392 Hemi <i>center distance = 6.125</i>	1956-91	C-3028X	9-1103	9-3503X9	9-3103	9-3603X3	9-3603X9
Big Block - One Bolt V-8 350, 361, 383, 400, 413W, 426W, 426 Hemi, 440 <i>center distance = 5.152</i>	1958-78	C-3044 single keyway	9-1104	9-3504X9	9-3104	9-3604X3	9-3604X9
Big Block - Three Bolt V-8 350, 361, 383, 400, 413W, 426W, 426 Hemi, 440 <i>center distance = 5.152</i>	1958-78	C-3045 single keyway	9-1125	9-3525TX9	9-3125 optional -5 -10	9-3625TX3 optional -5 -10	9-3625TX9 optional -5 -10
Hex-A-Just® for CHRYSLER BB 3 BOLT - Part #9-3125A (also optional in -5 and -10)							
V-10 8.0L Viper (3 Bolt) <i>center distance = 6.125</i>	1996-02	Hex-A-Just® for VIPER - Part #9-3152A					
REDUCED CENTER DISTANCE FOR ALIGN HONED APPLICATIONS Some Race True Roller sets are available in reduced center distance as noted by optional -5 and -10. To order, just add suffix to the part number. For example, 9-3100 becomes 9-3100-5 (for .005 undersized).							



UPGRADE YOUR THREE BOLT TO Z-RACING!!

CHRYSLER BB THREE BOLT	"Z-Racing" Series Race Billet True® Roller with 9 Keyway Part #9-3625TX9Z
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See opposite page for more details of Cloyes "Z-Racing"



Z-Racing

The only choice for SERIOUS RACING!

The exclusive Cloyes “Z” chain is the most durable and dependable chain available today - offering 33% more overall strength than our current premium chain.

The double roller Z-Chain is made from high strength steel with proprietary heat-treat processing. The fine blanked links reduce stress risers, thus reducing fractures under severe load. The press fit center links improve load share by reducing load spikes on any single component and providing greater overall strength.





The “Z Racing” series is the choice for those extreme custom engine builds that demand no compromise.

Available for These (and More) Popular Engines

"Z-Racing" Series Application Listing	RACE BILLET		HEX-A-JUST®
	3 KEY	9 KEY	
Chevy Small Block	9-3600TX3Z	9-3600TX9Z	9-3100AZ
Chevy Small Blk w/ BB Crank Snout	9-3600BTX3Z		9-3100BZ
Chevy Small Block "Rocket" Block	9-3646TX3Z	9-3646TX9Z	9-3146AZ
Chevy SB "Rocket" w/BB Crank Snout	9-3646BTX3Z		9-3146BZ
Chevy Big Block	9-3610TX3Z	9-3610TX9Z	9-3110AZ
Ford SB - factory one pc f/p eccentric	9-3635X3Z	9-3635X9Z	9-3135AZ

See application listings for complete offerings.

FORD

		GOOD  BETTER			
MAKE / ENGINE / YEAR		STREET SETS			
		HEAT-TREATED, BILLET STEEL CRANK			
		HEAVY DUTY X = 3 KEYWAY DBL ROLLER	STREET TRUE® 3 KEYWAY .250 TRUE ROLLER CHAIN	STREET BILLET 9 KEYWAY	
FORD					
1	V-6 SVO 3.8 V-6 3.8-3, 3.8-4 <i>center distance = 5.192</i>	All Years 1982-87	Available in Race Sets Only		
2	V-8 Small Block 221, 255, 260, 289 Std, 302 H/O, 351 Std, 351W H/O (to 03/21/84) <i>factory one-pc fuel pump eccentric</i> <i>center distance = 4.804</i>	1962-84	C-3054X	9-1135	9-3535X9
3	V-8 Small Block 302 Std, 302 (5.0) H/O (from 03/21/84), 351W Std <i>factory two-pc fuel pump eccentric</i> <i>center distance = 4.804</i>	1972-01	C-3057X	9-1138	---
4	V-8 351C, 351M, 400 <i>center distance = 5.044</i>	1970-82	---	9-1121	9-3521X9
5	V-8 FE 352, 360, 390, 410, 427, 428 <i>center distance = 5.044</i>	1963-73	C-3029X	9-1108	9-3508X9
6	V-8 Big Block 429, 460 <i>factory set Top Dead Center</i> <i>center distance = 6.078</i>	1968-71	C-3079X	9-1122	9-3522X9
7	V-8 Big Block 429, 460 <i>factory set 8 Degree Retard</i> <i>center distance = 6.078</i>	1972-87	Available in Race Sets Only		
8	V-8 Big Block 460 <i>factory set Top Dead Center</i> <i>center distance = 6.078</i>	1988-92	C-3079X	9-1122	9-3522X9

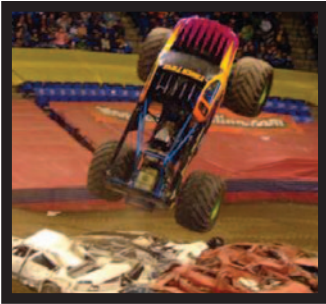


FORD

<div> <div>→ BEST →</div> <div>BEST and ADJUSTABLE</div> </div>							
RACE TRUE® ROLLER SETS							
INDUCTION HEAT-TREATED SPROCKETS HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN or Z-CHAIN (where available)							
	RACE TRUE® 3 KEYWAY	RACE BILLET TRUE® X3 = 3 KEYWAY X9 = KEYWAY TRUE® Z-Racing		HEX-A-JUST® ADJUSTABLE + or - 6° TRUE® Z-Racing		QUICK ADJUST® ADJUSTABLE + or - 6° TRUE® Z-Racing	
1	9-3148	---	---	---	---	---	---
2	9-3135 <i>optional -5 -10</i>	9-3635X3 9-3635X9 <i>optional -5 -10</i>	9-3635X3Z 9-3635X9Z <i>optional -5 -10</i>	9-3135A <i>optional -5 -10</i>	---	9-3735 <i>optional -5 -10</i>	9-3735Z <i>optional -5 -10</i>
3	9-3138 <i>optional -5 -10</i>	---	---	9-3135A <i>optional -5 -10</i>	---	9-3738 <i>optional -5 -10</i>	call tech
4	9-3121	9-3621X3 9-3621X9	---	9-3121A	---	---	---
5	9-3108	9-3608X3 9-3608X9	---	9-3108A	---	---	---
6	9-3122 <i>optional -5 -10</i>	9-3622X3 9-3622X9 <i>optional -5 -10</i>	9-3622X9Z	9-3122A <i>optional -5 -10</i>	---	9-3722 <i>optional -5 -10</i>	---
7	9-3130	---	---	---	---	---	---
8	9-3122 <i>optional -5 -10</i>	9-3622X3 9-3622X9 <i>optional -5 -10</i>	9-3622X9Z	9-3122A <i>optional -5 -10</i>	---	9-3722 <i>optional -5 -10</i>	---

“We have been using Cloyes Quick Adjust Timing sets with their Premium chains and cam sprockets in our big block Ford blown alcohol injected engines for three years. Our monster trucks put these components to the test as we run high temperatures in our motors during the 90 second to 3 minute freestyle competitions and during racing. In the 27 years we have been racing monster trucks we haven’t come across a roller chain set that lasts as long with little stretch as Cloyes. We also like the adjustability of the cam sprocket which enables us to dial our cam degree in easier than other brands. Based on our experience and compared to other products Cloyes is your best bet for any application be it performance or street vehicles.”

Michael Vaters
 Black Stallion Monster Truck Racing



Hex-A-Just® on Ford Modular

Increase both torque and horsepower with improved cam timing

HEX-A-JUST® DESIGN

This exclusive Hex-A-Just® product utilizes a one-piece cam sprocket design that functions in the same way as the OE configuration. It uses a stainless steel adjuster plate of specified hardness and thickness that replaces the OE cam sprocket washer. The sprockets are precision machined from premium billet steel on our state-of-the-art CNC equipment. They are then induction hardened and oil-quenched using our in-house multi-stage heat treat process.

In addition to this unique design, every Hex-A-Just® cam sprocket is hand-matched by a qualified technician. Much effort is applied to the indexing features of these parts. This ensures proper fitment and accurate adjustability.

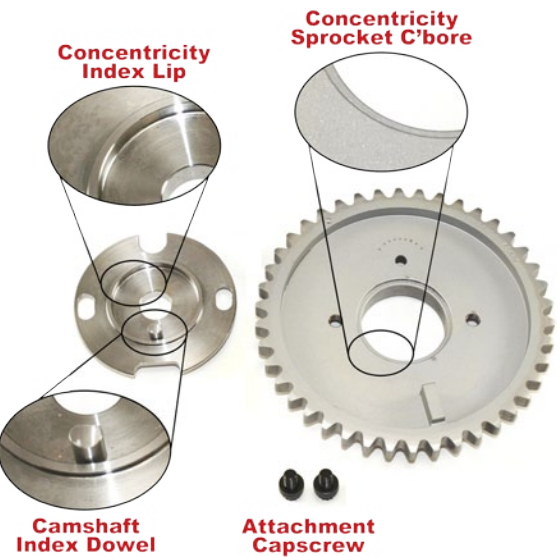
HEX-A-JUST® BENEFITS

The patented Cloyes Hex-A-Just® system allows you to fine tune your modular engine to meet any custom camshaft requirement to maximize engine output.

The 2V engine contains individual bank valve trains that are controlled by two separate chains and cam sprockets. The patented Cloyes Hex-A-Just® system allows you to quickly make adjustments to balance the right and left banks.

In addition, the 4V engine contains secondary drives to control the intake cams. The Hex-A-Just® primary cam sprockets allow you to balance the banks, while the 9-keyway secondary cam sprockets give you the tools required to adjust exhaust cam to intake cam overlap.

EXCLUSIVE ONE-PIECE SPROCKET



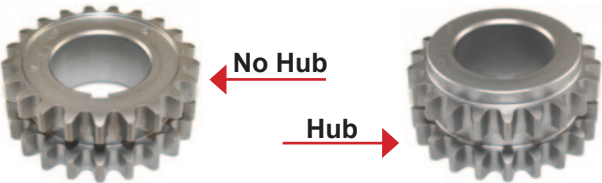
Our design is what makes the Cloyes product unique!

The Dowel indexes with the camshaft keyway and the adjuster Plate Index Feature locates the cam sprocket C'Bore. With everything now concentric, the Capscrews only purpose is to hold the selected adjustment until the camshaft bolt is torqued to specification.



This adjusting tool with keychain is included in all kits. The keychain is both for your Mustang Key and to keep you from dropping the adjustment tool somewhere difficult to retrieve!

These two crank sprockets are used with the appropriate OE reluctor wheels.



For use with OE thick reluctor.

For use with OE thin reluctor.

▼ FORD 4.6L 2V ▼

YEARS	UPGRADE KIT	SPROCKET KIT
96-00	9-3165A	9-3169A
01-04	9-3166A	Primary

2V



9-3169A



9-3165A



9-3166A

▼ FORD 4.6L 4V ▼

YEARS	UPGRADE KIT	SPROCKET KIT	SPROCKET KIT
96-99	9-3174A	9-3169A	9-3676X9
01-04	9-3175A	Primary	Secondary



9-3169A



9-3676X9

4V



9-3174A



9-3175A

- Patented Hex-A-Just® allows +/- 4°
- Precision machined, billet steel sprockets
- Induction heat-treated for wear resistance
- 9-keyway secondary cam sprockets allow +/- 4°
- Secondary sprockets adjustable in 1° increments
- Upgraded Z-Racing secondary racing roller chains
- All components compatible with OE




9-3179A

NEW!

Get the Most Out of Your Racecar!




HIGH PERFORMANCE SPEED SETS

<div></div> <div>Make/Engine/Year</div>		GOOD			BETTER		BEST		
		STREET SETS			RACE TRUE® SETS				
		HEAT-TREATED, BILLET STEEL CRANK			BOTH SPROCKETS INDUCTION HEAT-TREATED and HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN				
		HEAVY DUTY X = 3 KEYWAY DBL ROLLER	STREET TRUE® 3 KEYWAY .250 TRUE ROLLER CHAIN	STREET BILLET 9 KEYWAY	RACE TRUE® 3 KEYWAY	RACE BILLET TRUE® 3 KEYWAY		9 KEYWAY	
JEEP									
I-4 150 (2.5) <i>center distance = 5.045</i>	1983-02	---	---	---	9-3127	---	---		
I-6 232, 242, 258 <i>center distance = 5.045</i>	1964-98	---	---	---	9-3127	---	---		
V-8 304, 360, 401 <i>center distance = 4.965</i>	1971-81	---	9-1118	---	9-3118	---	---		
OLDSMOBILE									
V-8 260F, 307, 330, 350R, 400, 403, 425, 455 <i>center distance = 5.044</i>	1964-87	---	9-1113	9-3513X9	9-3113	9-3613X3	9-3613X9		
HEX-A-JUST® SET FOR OLDSMOBILE V8 - PART #9-3113A									
PONTIAC									
V-8 287, 316, 326, 347, 350P, 370, 389, 400, 421, 428, 455 <i>center distance = 5.192</i>	1955-79	C-3043	9-1112	9-3512X9	9-3112 optional -5 -10	9-3612X3 optional -5 -10	9-3612X9 optional -5 -10		
FOR PONTIAC LT and LS ENGINES, see CHEVROLET APPLICATIONS									
RANGE ROVER									
V-8 215 (3.5) <i>center distance = 4.335</i>	1969-74	---	9-1132	9-3532X9	9-3132	9-3632X3	9-3632X9		
REDUCED CENTER DISTANCE FOR ALIGN HONED APPLICATIONS Some Race True Roller sets are available in reduced center distance as noted by optional -5 and -10. To order, just add suffix to the part number. For example, 9-3100 becomes 9-3100-5 (for .005 undersized).									


UPGRADE YOUR PONTIAC with Cloyes Z-RACING!!

See page 17 for more details

Pontiac Coverage	Part #
Race Billet 3 Key	9-3612X3Z
Race Billet 9 Key	9-3612X9Z



"Grocery Getter" 1963 Tempest



DAK RYDS RACING HA.
HOME OF THE GROCERY GETTER

Michael Garbik, Owner/Crew Chief of the Grocery Getter 1963 Pontiac Tempest Drag Car with Traditional Pontiac Power

"Producing over 1500 reliable HP with a traditional Pontiac engine is a challenge. I have been utilizing the Cloyes True Roller Timing sets on these engines for 12 years without a single timing system failure. This is with open valve spring pressures in excess of 1800 PSI and engine speeds in excess of 8000 RPM. In a match race environment, consistent performance and reliability are paramount. We have never had a cam timing related issue with the Cloyes chain drive"

Michael Garbik
Owner/Crew Chief
March 19, 2009

DUAL IDLER GEAR DRIVE

Replace your stock timing chain with a Precision Gear Drive. Known for years to simulate that “blower” sound. The gears are machined from premium billet steel on our state-of-the-art CNC equipment then induction hardened and oil-quenched using our in-house multi-stage heat treat process. Our Idler Gear assembly, with its honed idler gear bores, precision ground pins, and heavy duty idler brackets, ensures precise timing through the entire RPM range.

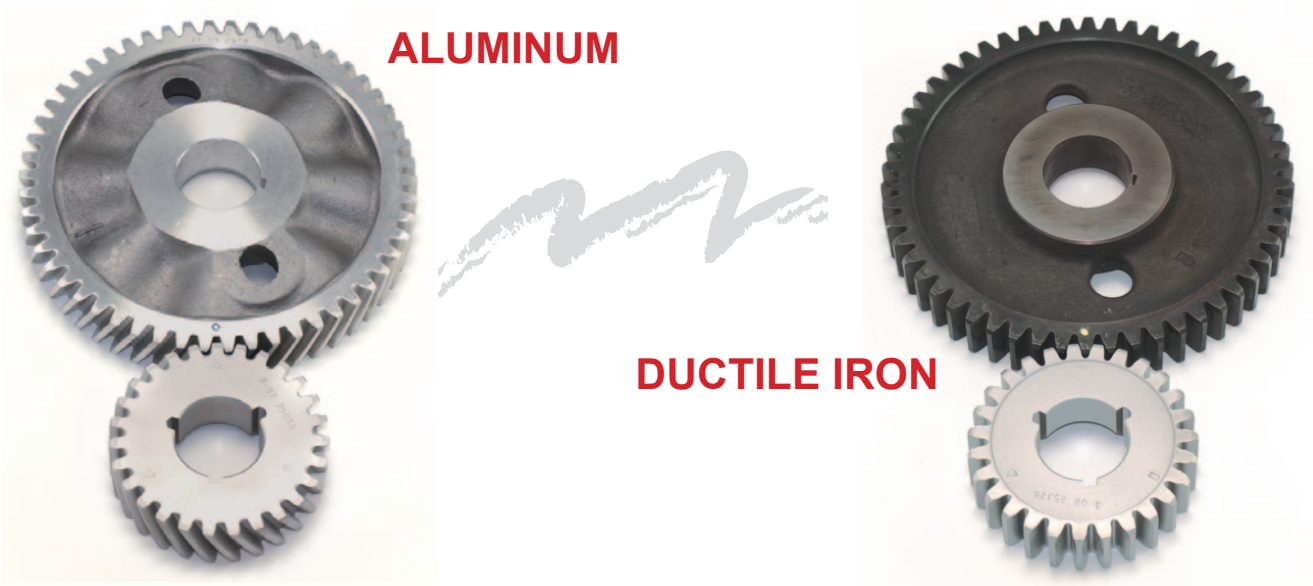


- Dual Idler Gear Drive features:
- Induction Heat-Treated, Billet Steel Gears
 - 3 Keyway Crank Gear, +/- 4o
 - Precision Idler Gear Assembly
 - Includes Cam Button and Thrust Washer (where appl)
 - Designed to fit under stock cover (see GM note below)
 - Hand-Assembled for Quality Assurance

SMALL BLOCK CHEVY #8-5100 COMES IN ATTRACTIVE DISPLAY PACKAGING

CHEVROLET SMALL BLOCK	GEAR DRIVE	REPLACEMENT PARTS	
		CAM BUTTON	THRUST WASHER
1955-1996 non-Factory Roller Cam V-6 200 229 262 (4.3Z w/o Balance Shaft) V-8 262 265 267 283 302 305G 305H 307 327 350L 400	8-5100 8-5100Q (quiet)	9-205	P9070
1985-2002 with Factory Roller Cam V-6 200 229 262 (4.3Z w/o Balance Shaft) V-8 262 265 267 283 302 305G 305H 307 327 350L 400	8-5145	NOT REQUIRED	P9075
CHEVROLET BIG BLOCK	GEAR DRIVE	CAM BUTTON	THRUST WASHER
1965-1998 non-Factory Roller Cam V-8 396 400 402 427 454	8-5110	9-205	P9082
GM Application notes: 1. Only functions properly with GM-style sheet metal timing covers. 2. Not designed for use on engines with crank reluctor wheels.			

FORD SMALL BLOCK	GEAR DRIVE	CAM BUTTON	THRUST WASHER
1962-2001 V-8 289 302 351W	8-5135	NOT REQUIRED	P9075
Ford Application notes: 1. Only functions properly with one piece or no fuel pump eccentric. 2. Designed to work with both non-roller and roller cam.			



Cloyes has been making engine timing gears since the 1920's. No other company has the experience of Cloyes in making precision engine gears. Designed for true performance!

Matched Gear Sets feature:

- Precision Hobbed and Crown Shaved Gears
- Billet Steel, Three Keyway Crank Gears allow +/- 4° Adjustment
- Hand Matched to Qualify Proper Center Distance and Backlash

CHEVROLET I-4 & I-6	PART #
1962-1993 (also used in GMC) Steel Crank Gear – Aluminum Cam Gear	8-1016
1962-1993 (also used in GMC) Steel Crank Gear – Ductile Iron Cam Gear (SPUR CUT)	8-1018
FORD I-6	PART #
1965-1996 Steel Crank Gear – Aluminum Cam Gear	8-1014
PONTIAC I-4	PART #
1980-1990 (also used in Buick & Oldsmobile) Steel Crank Gear – Ductile Iron Cam Gear (SPUR CUT)	8-1018

CAM BUTTONS

CAM BUTTON IS A MUST FOR AFTERMARKET ROLLER CAMS

CAM BUTTONS	Part #
SB/BB Chevrolet .925 (59/64") long used with old style 3 spoke covers	9-200
SB/BB Chevrolet .640 (41/64") long used with newer style covers	9-202
BB Chrysler .714 (23/32") long	9-204

THRUST WASHERS and BEARINGS

STEEL THRUST WASHER	Part #
SB Chevy .030" thick	9-201
BB Chevy .030" thick	9-203
BRONZE THRUST WASHER	Part #
SB/BB Chevy & BB Chrysler .150" thick	9-220B
CAPTURED THRUST BEARINGS	Part #
SB/BB Chevy & BB Chrysler .150" thick	9-220
Cloyes LS Applications Only	9-232

Cam Buttons, Thrust Washers and Thrust Bearings prevent the cam from walking and provide anti-friction surface between block and cam sprocket.

REPLACEMENT ADJUSTING TOOLS FOR HEX-A-JUST® and QUICK ADJUST®			
HEX-A-JUST®	HEX-A-JUST®	HEX-A-JUST®	QUICK ADJUST®
Used in all SB/BB Chevrolet & BB Chrysler HEX-A-JUST® sets	Use <u>ONLY</u> with Cloyes Ford HEX-A-JUST® sets	Use with Ford Modular V-8 Adjustable Cam Sprockets	Used in all QUICK ADJUST® sets
Part #P9005	Part #9-215	Part #P9138	Part #PQATOOL

FOR REPLACEMENT GEAR DRIVE PARTS, REFER TO PAGE 23

FOR REPLACEMENT QUICK BUTTON PARTS, REFER TO PAGE 4

MARINE ENGINE GUIDE	
Engine Make / Description	Recommended
Chevrolet	Set #
2.5L I-4	2528S
4.3L V-6 w/o Balance Shaft	9-3600WX3 or X9
4.3L V-6 w/Balance Shaft	9-3654X3
350 V-8 Small Block w/o Factory Roller Cam	9-3600WX3 or X9
350 V-8 Small Block w/Factory Roller Cam	9-3645X3 or X9
350 V-8 SB Vortec (L31)	9-3157
454 V-8 Big Block w/o Factory Roller Cam	9-3610WX3 or X9
Gen 5 V-8 Big Block w/o Factory Factory Cam	9-3610WX3 or X9
Gen 5/6 V-8 Big Block w/Factory Roller Cam	9-3670X3
8.1L V-8 Big Block	9-9110
Chrysler	Set #
318/360 V-8 Big Block - single bolt	9-3604X3 or X9
318/360 V-8 Big Block - three bolt	9-3625X3 or X9
Ford	Set #
289/302/351 V-8 – one pc fuel pump eccentric	9-3635X3 or X9
289/302/351 V-8 – two pc fuel pump eccentric	9-3138
351C/351M/400 V-8	9-3621X3 or X9
428 V-8 FE	9-3608X3 or X9
429/460 V-8 Big Block	9-3622X3 or X9
All of the above are Standard Rotation sets. Refer to our Stock Replacement Catalog for OE Reverse Rotation sets	

REPLACEMENT CHAIN GUIDE				
		REPLACEMENT CHAIN INFO		
Set #	Make	CHAIN #	STYLE	LINKS
Heavy Duty Timing Sets				
C-3023X	Chevrolet	C163	Double Roller	58
C-3024X	Chevrolet	C168	Double Roller	66
C-3028X	Chrysler	C160	Double Roller	68
C-3029X	Ford	C169	Double Roller	64
C-3043	Pontiac	C165	Double Roller	60
C-3044	Chrysler	C168	Double Roller	66
C-3045	Chrysler	C168	Double Roller	66
C-3054X	Ford	C163	Double Roller	58
C-3055	Chevrolet	9-4149	Single Roller	46
C-3057X	Ford	C163	Double Roller	58
C-3079X	Ford	C168	Double Roller	66
C-3092	Chevrolet	9-4149	Single Roller	46
Street True® Rollers				
9-1100	Chevrolet	9-145	Double Roller	58
9-1100T	Chevrolet	9-145	Double Roller	58
9-1101	Chevrolet	9-4160	Double Roller	48
9-1103	Chrysler	9-147	Double Roller	68
9-1104	Chrysler	9-146	Double Roller	66
9-1108	Ford	9-149	Double Roller	64
9-1110	Chevrolet	9-146	Double Roller	66
9-1110T	Chevrolet	9-146	Double Roller	66
9-1112	Pontiac	9-148	Double Roller	60
9-1113	Oldsmobile	9-149	Double Roller	64
9-1118	AMC	9-142	Double Roller	62
9-1121	Ford	9-149	Double Roller	64
9-1122	Ford	9-146	Double Roller	66
9-1125	Chrysler	9-146	Double Roller	66
9-1132	Buick	9-143	Double Roller	54
9-1134	Buick	9-143	Double Roller	54
9-1135	Ford	9-145	Double Roller	58
9-1138	Ford	9-145	Double Roller	58
9-1139	Cadillac	9-4160	Double Roller	48
9-1144	Buick	9-149	Double Roller	64
9-1145	Chevrolet	9-145	Double Roller	58
9-1146	Chevrolet	9-148	Double Roller	60
9-1146T	Chevrolet	9-148	Double Roller	60
9-1147	Chevrolet	9-147	Double Roller	68
9-1157	Chevrolet	9-4149	Single Roller	46
Street Billet True® Rollers				
9-3500TX9	Chevrolet	9-145	Double Roller	58
9-3503X9	Chrysler	9-147	Double Roller	68
9-3504X9	Chrysler	9-146	Double Roller	66
9-3508X9	Ford	9-149	Double Roller	64
9-3510TX9	Chevrolet	9-146	Double Roller	66
9-3512X9	Pontiac	9-148	Double Roller	60
9-3513X9	Oldsmobile	9-149	Double Roller	64
9-3521X9	Ford	9-149	Double Roller	64
9-3522X9	Ford	9-146	Double Roller	66
9-3525TX9	Chrysler	9-146	Double Roller	66
9-3532X9	Buick	9-143	Double Roller	54
9-3534X9	Buick	9-143	Double Roller	54
9-3535X9	Ford	9-145	Double Roller	58
9-3545X9	Chevrolet	9-145	Double Roller	58
9-3546TX9	Chevrolet	9-148	Double Roller	60
9-3547TX9	Chevrolet	9-147	Double Roller	68

REPLACEMENT CHAIN GUIDE				
		REPLACEMENT CHAIN INFO		
Set #	Make	CHAIN #	STYLE	LINKS
Original Race True® Rollers				
9-3100	Chevrolet	9-130	Double Roller	58
9-3103	Chrysler	9-135	Double Roller	68
9-3104	Chrysler	9-134	Double Roller	66
9-3108	Ford	9-133	Double Roller	64
9-3110	Chevrolet	9-134	Double Roller	66
9-3112	Pontiac	9-131	Double Roller	60
9-3113	Oldsmobile	9-133	Double Roller	64
9-3118	AMC	9-132	Double Roller	62
9-3121	Ford	9-133	Double Roller	64
9-3122	Ford	9-134	Double Roller	66
9-3125	Chrysler	9-134	Double Roller	66
9-3127	AMC	9-133	Double Roller	64
9-3130	Ford	9-134	Double Roller	66
9-3132	Buick	9-138	Double Roller	54
9-3134	Buick	9-138	Double Roller	54
9-3135	Ford	9-130	Double Roller	58
9-3137	Chevrolet	9-133	Double Roller	64
9-3138	Ford	9-130	Double Roller	58
9-3144	Chevrolet	9-133	Double Roller	64
9-3145	Chevrolet	9-130	Double Roller	58
9-3146	Chevrolet	9-131	Double Roller	60
9-3147	Chevrolet	9-135	Double Roller	68
9-3148	Ford	9-131	Double Roller	60
9-3157	Chevrolet	9-193	Single Roller	46
9-3157X1	Chevrolet	9-193	Single Roller	46
Race Billet True® Rollers				
9-3600BTX3	Chevrolet	9-130	Double Roller	58
9-3600BTX3Z	Chevrolet	9-130Z	Double Roller	58
9-3600TX3	Chevrolet	9-130	Double Roller	58
9-3600TX3Z	Chevrolet	9-130Z	Double Roller	58
9-3600TX9	Chevrolet	9-130	Double Roller	58
9-3600TX9Z	Chevrolet	9-130Z	Double Roller	58
9-3601X3	Chevrolet	9-133	Double Roller	64
9-3603X3	Chrysler	9-135	Double Roller	68
9-3603X9	Chrysler	9-135	Double Roller	68
9-3604X3	Chrysler	9-134	Double Roller	66
9-3604X9	Chrysler	9-134	Double Roller	66
9-3608X3	Ford	9-133	Double Roller	64
9-3608X9	Ford	9-133	Double Roller	64
9-3610TX3	Chevrolet	9-134	Double Roller	66
9-3610TX3Z	Chevrolet	9-134Z	Double Roller	66
9-3610TX9	Chevrolet	9-134	Double Roller	66
9-3610TX9Z	Chevrolet	9-134Z	Double Roller	66
9-3612X3	Pontiac	9-131	Double Roller	60
9-3612X3Z	Pontiac	9-131Z	Double Roller	60
9-3612X9	Pontiac	9-131	Double Roller	60
9-3612X9Z	Pontiac	9-131Z	Double Roller	60
9-3613X3	Oldsmobile	9-133	Double Roller	64
9-3613X9	Oldsmobile	9-133	Double Roller	64
9-3621X3	Ford	9-133	Double Roller	64
9-3621X9	Ford	9-133	Double Roller	64
9-3622X3	Ford	9-134	Double Roller	66
9-3622X9	Ford	9-134	Double Roller	66



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REPLACEMENT CHAIN GUIDE				
		REPLACEMENT CHAIN INFO		
Set #	Make	CHAIN #	STYLE	LINKS
9-3622X9	Ford	9-134	Double Roller	66
9-3622X9Z	Ford	9-134Z	Double Roller	66
9-3625TX3	Chrysler	9-134	Double Roller	66
9-3625TX9	Chrysler	9-134	Double Roller	66
9-3625TX9Z	Chrysler	9-134Z	Double Roller	66
9-3632X3	Buick	9-138	Double Roller	54
9-3632X9	Buick	9-138	Double Roller	54
9-3634X3	Buick	9-138	Double Roller	54
9-3634X9	Buick	9-138	Double Roller	54
9-3635X3	Ford	9-130	Double Roller	58
9-3635X3Z	Ford	9-130Z	Double Roller	58
9-3635X9	Ford	9-130	Double Roller	58
9-3635X9Z	Ford	9-130Z	Double Roller	58
9-3639X3	Cadillac	9-190	Single Roller	48
9-3645X3	Chevrolet	9-130	Double Roller	58
9-3645X9	Chevrolet	9-130	Double Roller	58
9-3646BTX3	Chevrolet	9-131	Double Roller	60
9-3646BTX3Z	Chevrolet	9-131Z	Double Roller	60
9-3646TX3	Chevrolet	9-131	Double Roller	60
9-3646TX3Z	Chevrolet	9-131Z	Double Roller	60
9-3646TX9	Chevrolet	9-131	Double Roller	60
9-3646TX9Z	Chevrolet	9-131Z	Double Roller	60
9-3647TX3	Chevrolet	9-135	Double Roller	68
9-3647TX9	Chevrolet	9-135	Double Roller	68
9-3649X3	Chevrolet	9-192	Single Roller	50
9-3651X3	Chevrolet	9-193	Single Roller	46
9-3654X3	Chevrolet	9-193	Single Roller	46
9-3655X3	Chevrolet	9-192	Single Roller	50
9-3658TX3	Chevrolet	9-304	Single Roller	60
9-3658TX3Z	Chevrolet	9-303	Single Roller	60
9-3658TX3ZR	Chevrolet	9-302	Single Roller	60
9-3658TX9	Chevrolet	9-304	Single Roller	60
9-3658TX9Z	Chevrolet	9-303	Single Roller	60
9-3658TX9ZR	Chevrolet	9-302	Single Roller	60
9-3659X3	Chevrolet	9-131	Double Roller	60
9-3659X3R	Chevrolet	9-132	Double Roller	62
9-3667TX3	Chevrolet	9-304	Single Roller	60
9-3667TX3Z	Chevrolet	9-303	Single Roller	60
9-3667TX3ZR	Chevrolet	9-302	Single Roller	60
9-3670X3	Chevrolet	9-134	Double Roller	66
9-3672TX3	Chevrolet	9-304	Single Roller	60
9-3672TX3Z	Chevrolet	9-303	Single Roller	60
9-3672TX3ZR	Chevrolet	9-302	Single Roller	60
9-3672TX9	Chevrolet	9-304	Single Roller	60
9-3672TX9Z	Chevrolet	9-303	Single Roller	60
9-3672TX9ZR	Chevrolet	9-302	Single Roller	60
9-3673TX3	Chevrolet	9-304	Single Roller	60
9-3673TX3Z	Chevrolet	9-303	Single Roller	60
9-3673TX3ZR	Chevrolet	9-302	Single Roller	60
9-3673TX9	Chevrolet	9-304	Single Roller	60
9-3673TX9Z	Chevrolet	9-303	Single Roller	60
9-3673TX9ZR	Chevrolet	9-302	Single Roller	60

REPLACEMENT CHAIN GUIDE				
		REPLACEMENT CHAIN INFO		
Set #	Make	CHAIN #	STYLE	LINKS
Hex-A-Just® True® Rollers				
9-3100A	Chevrolet	9-130	Double Roller	58
9-3100AZ	Chevrolet	9-130Z	Double Roller	58
9-3100B	Chevrolet	9-130	Double Roller	58
9-3100BZ	Chevrolet	9-130Z	Double Roller	58
9-3100C	Chevrolet	9-130	Double Roller	58
9-3100D	Chevrolet	9-130	Double Roller	58
9-3108A	Ford	9-133	Double Roller	64
9-3110A	Chevrolet	9-134	Double Roller	66
9-3110AZ	Chevrolet	9-134Z	Double Roller	66
9-3113A	Oldsmobile	9-133	Double Roller	64
9-3121A	Ford	9-133	Double Roller	64
9-3122A	Ford	9-134	Double Roller	66
9-3125A	Chrysler	9-134	Double Roller	66
9-3135A	Ford	9-130	Double Roller	58
9-3145A	Chevrolet	9-130	Double Roller	58
9-3145B	Chevrolet	9-130	Double Roller	58
9-3146A	Chevrolet	9-131	Double Roller	60
9-3146AZ	Chevrolet	9-131Z	Double Roller	60
9-3146B	Chevrolet	9-131	Double Roller	60
9-3146BZ	Chevrolet	9-131Z	Double Roller	60
9-3147A	Chevrolet	9-135	Double Roller	68
9-3149A	Chevrolet	9-192	Single Roller	50
9-3152A	Dodge	9-135	Double Roller	68
9-3155A	Chevrolet	9-192	Single Roller	50
9-3158A	Chevrolet	9-304	Single Roller	60
9-3158AZ	Chevrolet	9-303	Single Roller	60
9-3158AZR	Chevrolet	9-302	Single Roller	60
9-3159A	Chevrolet	9-131	Double Roller	60
9-3159AR	Chevrolet	9-132	Double Roller	62
9-3167A	Chevrolet	9-304	Single Roller	60
9-3167AZ	Chevrolet	9-303	Single Roller	60
9-3167AZR	Chevrolet	9-302	Single Roller	60
9-3170A	Chevrolet	9-134	Double Roller	66
9-3172A	Chevrolet	9-304	Single Roller	60
9-3172AZ	Chevrolet	9-303	Single Roller	60
9-3172AZR	Chevrolet	9-302	Single Roller	60
Quick Adjust True® Rollers				
9-3700	Chevrolet	9-130	Double Roller	58
9-3700B	Chevrolet	9-130	Double Roller	58
9-3700BZ	Chevrolet	9-130Z	Double Roller	58
9-3700Z	Chevrolet	9-130Z	Double Roller	58
9-3710	Chevrolet	9-134	Double Roller	66
9-3710Z	Chevrolet	9-134Z	Double Roller	66
9-3722	Ford	9-134	Double Roller	66
9-3735	Ford	9-130	Double Roller	58
9-3735Z	Ford	9-130Z	Double Roller	58
9-3738	Ford	9-130	Double Roller	58
9-3746	Chevrolet	9-131	Double Roller	60
9-3746B	Chevrolet	9-131	Double Roller	60
9-3746BZ	Chevrolet	9-131Z	Double Roller	60
9-3746Z	Chevrolet	9-131Z	Double Roller	60
9-3747	Chevrolet	9-135	Double Roller	68

Quick Reference Lookup
for our Most Popular Racing Applications

PRODUCT CATEGORY	STREET SETS		PREMIUM RACE TRUE® ROLLER SETS				
	HEAT-TREATED, BILLET STEEL CRANK .250 TRUE® ROLLER CHAIN		INDUCTION HEAT-TREATED, CAST, DUCTILE or BILLET STEEL SPROCKETS, HAND-MATCHED with PREMIUM TRUE® ROLLER CHAIN. (AVAILABLE 5 & 10 UNDERSIZED)				
	STREET TRUE®	STREET BILLET 9 Keyway	RACE TRUE®	RACE BILLET 3 or 9 Keyway	HEX-A-JUST®	QUICK BUTTON TWO PC COVER	QUICK ADJUST®

CHEVROLET

CHEVY SMALL BLOCK	9-1100	9-3500TX9	9-3100	9-3600TX3 or X9	9-3100A	9-221	9-3700
CHEVY SB "Rocket"	9-1146	9-3546TX9	9-3146	9-3646TX3 or X9	9-3146A	9-226	9-3746
- with BB Crank Snout				9-3646BTX3	9-3146B	9-229	9-3746B
CHEVY SB Factory Roller	9-1145	9-3545X9	9-3145	9-3645X3 or X9	9-3145A	9-225	
CHEVY LS Engines			Over 30 LS sets available - see full details on page 15				
CHEVY BIG BLOCK	9-1110	9-3510TX9	9-3110	9-3610TX3 or X9	9-3110A	9-231	9-3710
CHEVY BB Gen VI				9-3670X3	9-3170A		

CHRYSLER

CHRYSLER SB V6/V8	9-1103	9-3503X9	9-3103	9-3603X3 or X9			
CHRYSLER BB - THREE BOLT CAM	9-1125	9-3525TX9	9-3125	9-3625TX3 or X9	9-3125A		

FORD

FORD 4.6 MOD 2V & 4V			Ford Modular 2v and 4v Coverage see pages 20-21				
FORD V8 SB - Early - ONE PC FUEL PUMP ECC	9-1135	9-3535X9	9-3135	9-3635X3 or X9	9-3135A		9-3735
FORD V8 SB - Late - TWO PC FUEL PUMP ECC	9-1138		9-3138		9-3135A		9-3738
FORD BB 429, 460 TDC	9-1122	9-3522X9	9-3122	9-3622X3 or X9	9-3122A		9-3722

THIS IS A PARTIAL LISTING OF THE MOST POPULAR APPLICATIONS. FOR ADDITIONAL APPLICATIONS PLEASE REFER TO FULL APPLICATION LISTINGS BEGINNING PAGE 9

FOR REPLACEMENT CHAIN LISTINGS FOR ALL SPEED SETS REFER TO PAGES 27-28



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