

WOOD PERFORMANCE



KNIGHT PROWLER
HIGH PERFORMANCE CAMS

CATALOG

WOODPERFORMANCEUSA.COM

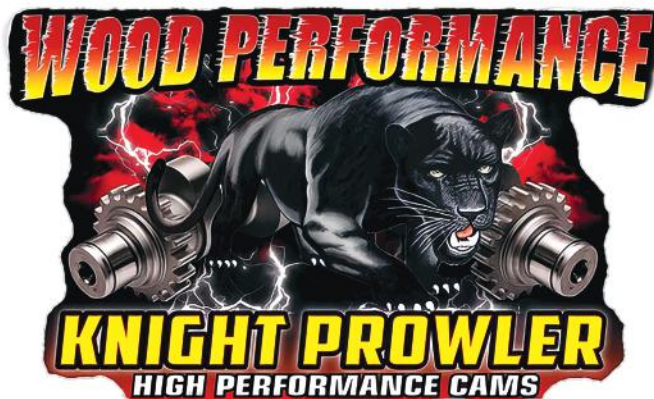
**GET YOUR PERSONALIZED
CAM RECOMMENDATION
(205) 525-4940**



KNIGHT PROWLER®

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KNIGHT PROWLER

MILWAUKEE 8 CAMS

BW-4V Valve Springs & Titanium Retainers
Alpha Series WADL-8012 Directional Roller Lifters
WADL-2.0 Lifters



BEING #1 ALWAYS MATTERS!

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KNIGHT PROWLER

MILWAUKEE 8 CAMS

Part Number	Springs	Application
WM8-22XE	Stock	107-113 c.i. UPDATED WM8-22X Cam that will give an additional 8-10 HP and 5 Ft. lbs. of torque. REQUIRES ADJUSTABLE PUSHRODS
WM8-777XE	Stock	1 Hot Rod, Bolt-In Cam - Updated WM8-777, Ride it like you stole it! REQUIRES ADJUSTABLE PUSHRODS
WM8-408X	BW-4V SPRINGS	107"- 130" Hopped up TW-408 with more torque and HP - 3500 RPM and up- Real Hot Street Cam. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS AND ADJUSTABLE PUSHRODS
WM8-77X	BW-4V SPRINGS	107-135 c.i. A clone of our famous High Torque TW-400 CAMS. Hot Rod maximum Torque Cam for Baggers! REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS AND ADJUSTABLE PUSHRODS
WM8-4860	BW-4V SPRINGS	107-120 c.i. Our #1 Torque monster for 10.5 and up compression. KICK ASS LIGHT-IT-UP IN THE STREETS, MOUNTAINS AND TWISTIES. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS
WM8-999	BW-4V SPRINGS	107-120 c.i. Our #1 Torque monster for 10.5 and up compression. KICK ASS LIGHT-IT-UP IN THE STREETS, MOUNTAINS AND TWISTIES. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS
WM8-9960	BW-4V SPRINGS	107-124 c.i. KICK ASS AND TAKE NAMES CAM! #1 with more lift and duration. 10.5 and up compression. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS
WM8-9F60	BW-4V SPRINGS	107-124 c.i. KICK ASS AND TAKE NAMES CAM! #1 with more lift and duration. 10.5 and up compression. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS
WM8-9FX60	BW-4V SPRINGS	107-150 c.i. Modified extended exhaust duration for more HP. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS
WM8-9FX	BW-4V SPRINGS	107-150 c.i. Modified for additional exhaust timing. REQUIRES HIGH PERFORMANCE PISTONS, BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS
WM8-68	BW-4V SPRINGS	107-130 c.i. DAYTONA DYNO SHOOTOUT WINNER FOR 8 YEARS! 11:5 Min. compression. REQUIRES BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS. TDC LIFTS = INT .244 EX .196
WM8-6860	BW-4V SPRINGS	107-130 c.i. DAYTONA DYNO SHOOTOUT WINNER FOR 8 YEARS! 11:5 Min. compression. REQUIRES BW-4V VALVE SPRINGS, ALPHA SERIES LIFTERS AND ADJUSTABLE PUSHRODS. TDC LIFTS = INT .244 EX .196

BW-4V Valve Springs & Titanium Retainers Alpha Series Lifters



**BEING #1
ALWAYS
MATTERS!**



KNIGHT PROWLER®

TWIN CAMS

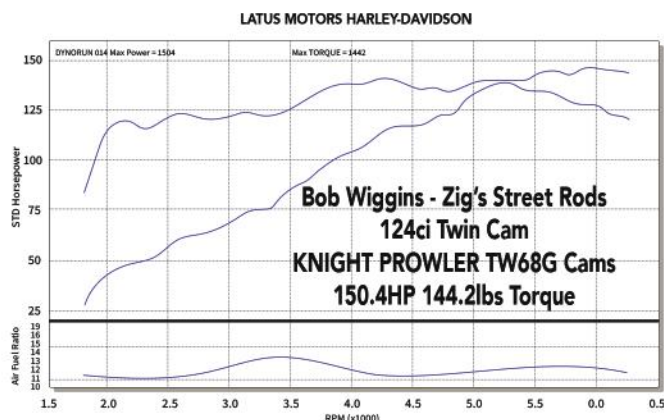
**90HP to
150HP+**



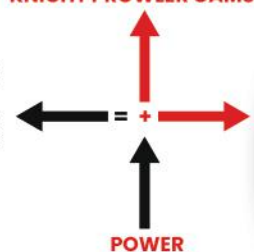
**88ci to
150ci**

Bob Wood - 2 Time NHRA National Record Holder / Fuel Funny Car, Designer / Innovator of the popular King Carburetors and famous **KNIGHT PROWLER® Cams**, Introduces the most advanced, aggressive Camshaft profiles for H.D. Twin Cam engines available anywhere.

These are the most **POWERFUL** Street-able Camshafts in America. With mods to your existing H.D., Heads-Carb-Ign, etc. - A mild 90HP to a street prowling 140+ horsepower can be yours at the twist of your throttle!



KNIGHT PROWLER CAMS



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KNIGHT PROWLER®

2007-2017 ALL TWIN CAMS
Includes 2006 Dyna

SINGLE ROLLER LINK CHAIN DRIVE CAMS

Part#	.053 Timing	Duration .053	Valve Lift	Lift TDC	Springs	Application
TW-222-6	14/34 34/14	228 228	.555 .555	.156 .156	Stock	TRIPLE DEUCE: "HOLD ON TIGHT" SUPER LOW- MID RANGE & RUNS LIKEHELL UP TOP!! 96" thru110" - 2006 Dyna, all 2007-2017 models
TW-5-6	17 / 37 39 / 15	234 234	.575 .575	.174 .160	Stock	Maximum Low-End Torque - Bolt-In w/Stock Heads
TW-555	21/41 43/19	242 242	.555 .555	.189 .178	Stock	2006 Dyna & 2007 thru 2017 Bolt-in Cams Ultra High Performance for your 96", 103" &110" Street or Touring bike
TW-777	22/42 44/20	244 244	.575 .575	.200 .187	Stock	2006 Dyna & 2007 thru 2017 Bolt-in Cams "Hot 555 on Steroids" Street
TW-888	23/43 43/23	246 246	.575 .575	.205 .202	Stock	TW 888: Fits 2006 Dyna & all 2007 thru 2017 Twin Cam engines. TRIPLE 888, HOLD ON TIGHTER!! Ripping mid thru 6,000RPM HP & TQ. BOLTIN-STOCK HEADS. TAKES NO PRISONERS
TW-7H-6	20/40 42/18	240 240	.575 .575	.194 .176	Stock	2006 Dyna & 2007 thru 2017 Bolt-In Super High Torque fits 96" thru110" with Stock Heads
TW-8-6	19/47 49/17	246 246	.590 .590	.183 .176	HI-LIFT	Best Bar Hopping - High Performance Cam available. Aggressive ramps - High Lift -96 to 114 cubic inch
TW-9-6	22/50 52/20	252 252	.580 .580	.205 .187	HI-LIFT	88 - 120 cu. in.+ Hot Bar Hopper - Bolt-In with S.E. Heads - Loves 3.37 Gear Ratio
TW-9B-6	22/50 52/20	252 252	.630 .630	.208 .191	HI-LIFT	The Real Twin-Cam Boss for 96 thru 124 ci - Minimum 10.5 cr
TW-9F-6	24/52 54/22	256 256	.650 .650	.220 .201	HI-LIFT	HOT-HOT #1 Knight Prowler Street cam 95-130 cu. In. for the Real Bad Street Bike
TW-10F-6	24/54 52/22	256 256	.750 .750	.225 .202	Stock	CHAIN DRIVE TWIN CAM. 96"-150" SUPER HIGH LIFT- SHORT DURATION- Street Cam for Pro's ONLY LOW TDC's!! Easy Install!!

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KNIGHT PROWLER®

07-17 ALL
Includes '06 Dyna

TWIN CAMS

SINGLE ROLLER LINK CHAIN DRIVE CAMS

Part#	.053 Timing	Duration .053	Valve Lift	Lift TDC	Springs	Application
TW-62-6	31/51 39/15	262 262	.650 .650	.249 .236	HI-LIFT	212 Brutal Street Cams for the Roller Link Chains
TW-68-6	30/58 62/26	268 268	.678 .678	.260 .226	HI-LIFT	Twin Cam 95 ci Class WINNER 2003 DAYTONA AMI Shootout
TW-400-6	22/42 44/20	244 244	.650 .650	.210 .190	HI-LIFT	Maximum Torque, 2000RPM & Up Bolt-In for SE Ported & 103 + Heads
TW-408-44	24/44 46/22	248 248	.530 .530	.213 .199	Stock	Hot Rod 2007-2013 Bolt-In - Stock Heads, Springs, C/R Max Torque and HP
TW-408-6	24/44 46/22	248 248	.650 .650	.218 .200	HI-LIFT	Hot Rod Cam for 96 thru 124 ci need gearing + 10.5 min CR
TW-999-6	24/48 48/24	252 252	.590 .590	.222 .215	HI-LIFT	SUPER HOT 10.5 C/R 96, 106, 107 & up. Head work, springs required. 50mm & up EFI TB or Carb. 135 + HP & TQ
TW-999-6A	26/46 46/26	252 252	.575 .575	.230 .225	HI-LIFT	2015/2016 - BOLT IN - SPECIAL GRIND. 96" thru 120" - FOR STOCK HEADS!!! FOR THOSE THAT WANT TO BE #1. AWESOME SOUND. 3,000 RPM & UP. ALSO LOVES COMPRESSION CVO HEADS REQUIRE MINOR VALVE WORK

NOTE: 216020+4 Advance Gear is available for these Roller Link Chain Drive Cams

SPECIAL NOTES: All of our KNIGHT PROWLER® Gear Drive Cams, 1999 thru 2006 will work in all 2006 Dyna, and 2007 thru 2017 models with minor changes.



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KNIGHT PROWLER®

1999-2006
Except '06 Dyna

TWIN CAMS

SINGLE ROLLER LINK CHAIN DRIVE CAMS

Part #	.053 Timing	.053 Duration	Valve Lift	Lift TDC	Springs	Application
TW-222-1	14/34 34/14	228 228	.510 .510	.156 .156	Stock	Triple Deuce - "HOLD ON TIGHT" Super Low- Mid range and runs like hell up top!
TW-6	20/40 42/18	240 240	.510 .510	.189 .178	Stock	Bolt in Street/Touring. Very Strong from Idle through 5500 RPM. Light or Heavy Bike.
TW-6H	20/40 42/18	240 240	.590 .590	.218 .200	HI-LIFT	Most Advanced Powerful Torque Cam available anywhere. 80 ci. Well over 100 lbs
TW-8	19/47 49/17	246 246	.590 .590	.183 .176	HI-LIFT	Best torque - High Performance Cam available. Aggressive Ramps - High Lift - 90+ H.P. Light/Heavy Bike
TW-9	22/50 52/20	252 252	.580 .580	.205 .187	HI-LIFT	Twin-Cam Boss - 125 H.P. & 116 lbs Torque, 95ci
TW-9B	22/50 52/20	252 252	.630 .630	.208 .191	HI-LIFT	Twin-Cam Boss - 125 H.P. & 116 lbs Torque, 95ci
TW-408-48	24/44 46/22	248 248	.510 .510	.211 .197	Stock	For 99 thru 06 HOT ROD BOLT IN!! Stock Heads, Springs Stock to 11.1 C/R
TW-408-65	24/44 46/22	248 248	.650 .650	.218 .200	HI-LIFT	SUPER HIGH TQ & HP FOR 1999-2006 using Old Style Chains or SE Chain Conversion Kit



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KNIGHT PROWLER®

1999-2006
Except '06 Dyna

TWIN CAMS

ROLLER LINK CONVERSION CAMS

Part#	.053 Timing	Duration .053	Valve Lift	Lift TDC	Springs	Application
TW-222-6R	14/34 34/14	228 228	.510 .510	.156 .154	Stock	TRIPLE DEUCE: "HOLD ON TIGHT" SUPER LOW- MID RANGE & RUNS LIKE HELL UP TOP!! 96" thru 110" - Except 2006 Dyna, all 1999-2006 models
TW-5-6R	17/37 39/15	234 234	.575 .575	.174 .160	HI-LIFT	Maximum Low-End Torque - Bolt-In w/S.E. Heads
TW-6-6R	20/40 42/18	240 240	.510 .510	.191 .173	Stock	Bolt in street/touring. Very strong from idle through 5500 RPM. Light or Heavy Bike.
TW-8-6R	19/47 49/17	246 246	.590 .590	.183 .176	HI-LIFT	Best Bar Hopping - High Performance Cam available. Aggressive Ramps - High Lift - 96 to 114 cubic inch
TW-9B-6R	22/50 52/20	252 252	.630 .630	.208 .191	HI-LIFT	The Real Twin-Cam Boss for 96 thru 124 ci - Minimum 10.5 cr
TW-9F-6R	24/52 54/22	256 256	.650 .650	.210 .190	HI-LIFT	HOT-HOT #1 Knight Prowler Street Cam 95-130 cu. In. for the Real Bad Street Bike
TW-400-6R	22/42 44/20	244 244	.650 .650	.210 .190	HI-LIFT	Maximum Torque, 2000 RPM & Up Bolt-In for SE Ported & 103 + Heads
TW-408-44R	24/44 46/22	248 248	.530 .530	.213 .199	Stock	Hot Rod 1999-2006 Bolt-In - Stock Heads, Springs, Stock thru 11:1 C/R
TW-408-6R	24/44 46/22	248 248	.650 .650	.218 .200	HI-LIFT	Hot Rod Cam for 96 thru 124 ci Stock thru 11:1 C/R
TW-555-6R	21/41 43/19	242 242	.555 .555	.189 .178	Stock	Famous TW555 triple nickel: Bolt in 05 & 06 Max HP & TQ 1999-2004 Stock Heads require Springs
TW-68-6R	30/58 62/26	268 268	.678 .678	.260 .226	HI-LIFT	Twin Cam 95 ci Class WINNER 2003-2008 Daytona Shootout

NOTE: 216020+4 Advance Gear is available for these Roller Link Chain Drive Cams

SPECIAL NOTES: Cams with "R" suffix are in stock now.

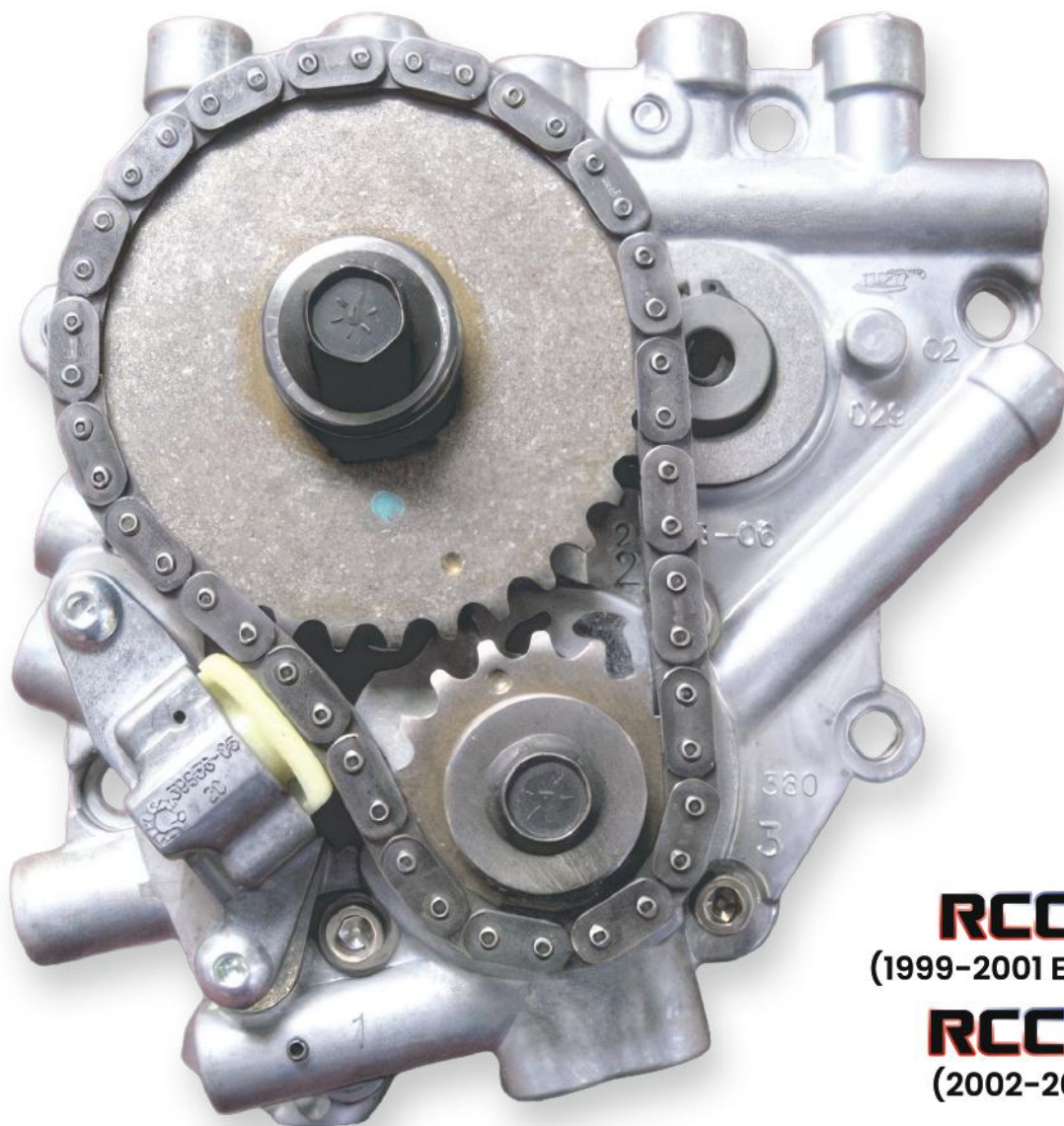
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KNIGHT PROWLER

ROLLER CHAIN CONVERSION KIT



RCC-1
(1999-2001 EFI ONLY)

RCC-2
(2002-2006)

Update your 1999 thru 2006 bike (except 2006 Dyna) to the 'Roller Link Chain/ Hydraulic Tensioner System'. Kit comes complete with everything you need, including the high volume oil pump used on all 2007 thru 2017 models.

Your choice of Knight Prowler® Cams sold separately.

Refer to your Harley-Davidson® service manual for installation.



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EXCLUSIVELY FROM WOOD PERFORMANCE **KNIGHT PROWLER**

"DESIGNER SERIES" CAMS FOR YOUR SPECIAL BIKE! **TWIN-CAM DESIGNER CAMS-GEAR DRIVE**

1999-2006 Except '06 Dyna

Wood Performance will design camshafts specifically for Your Custom Ride with the specifications to produce the horsepower and torque that it demands!

These gear-driven cams, available for Twin Cam engines, (some with chain drive) will be individually custom designed by Wood Performance with lift and duration numbers created to produce maximum horsepower and torque specifically for use in Your Custom engine!

Listed below are Twin-Cam KNIGHT PROWLERS® that are already roaming the streets, choosing their prey at will!

Part*	.053 Timing	Duration .053	Valve Lift	Lift TDC	Application
TW400G	22 / 42 44 / 20	244 244	.650 .650	.210 .190	Most Popular, Super High Torque, Low RPM Bolt-In for HTCC Ported S.E. Heads
TW408G	24 / 44 46 / 22	248 248	.650 .650	.218 .200	Super High Torque, 95 to 140 inch Gear Drive Only
TW10FG	24/52 54/22	256 256	.750 .750	.225 .202	Twin Cam Gear Drive 80" - 140" Super Hi-Lift Short Duration Street Cam for Pro's Only Low TDC's!! Easy Install!!
TW62G	31 / 51 53 / 29	262 262	.652 .652	.249 .248	Twin Cam (Gear Drive Only) Street version of TW68G
TW68G	30 / 58 62 / 26	268 268	.678 .678	.260 .226	Twin Cam 95 ci Class WINNER 2003-2008 Daytona Shootout
TW72G	34 / 54 56 / 32	268 268	.720 .720	.286 .265	Twin Cam 95 ci Class WINNER 2003-2008 Daytona Shootout
TW75G	34 / 62 66 / 30	276 276	.750 .750	.285 .252	Twin Cam Unlimited Class WINNER 2009-2008 Daytona Shootout

SMOKE THE COMPETITION!
With Genuine Wood Performance Products!



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GEAR DRIVE KNIGHT PROWLER®

07-17 ALL
Includes '06 Dyna

TWIN CAMS

Part#	.053 Timing	Duration .053	Valve Lift	Lift TDC	Springs	Application
TW-6G-7	20/40 42/18	240 240	.510 .510	.191 .173	Stock	Bolt in street/touring. Very strong from idle through 5500 RPM. Light or Heavy Bike.
TW-7HG-7	20/40 42/18	240 240	.575 .575	.194 .176	HI-LIFT	2006-2017 Super High Torque Gear Drive
TW-8G-7	19/47 49/17	246 246	.590 .590	.183 .176	HI-LIFT	Best Bar Hopping - High Performance Cam available. Aggressive ramps - High Lift - 96 to 114 cubic inch
TW-9BG-7	22/50 52/20	252 252	.630 .630	.208 .191	HI-LIFT	The Real Twin-Cam Boss for 96 thru 124 ci - Minimum 10.5 cr
TW-9FG-7	24/52 54/22	256 256	.650 .650	.220 .201	HI-LIFT	HOT-HOT #1 Knight Prowler Street Cam 95 - 130 cu. In. for the Real Bad Street Bike
TW-400G-7	22/42 44/20	244 650	.650 .650	.210 .190	HI-LIFT	Maximum Torque, 2000RPM & Up Bolt-In for SE Ported & 103+ Heads
TW-408G-7	24/44 46/22	248 248	.650 .650	.218 .200	HI-LIFT	Hot Rod Cam for 96 thru 124 ci need gearing + 10.5 min CR
TW-68G-7	30/58 62/26	268 268	.678 .678	.260 .226	HI-LIFT	Twin Cam 95 ci Class WINNER 2003 Daytona AMI Shootout
TW-75G-7	34/62 66/30	276 276	.750 .750	.285 .252	HI-LIFT	Twin Cam Unlimited Class WINNER 2008-2009 Daytona Shootout

SPECIAL NOTES: All of our **KNIGHT PROWLER®** Gear Drive Cams, 1999 thru 2006 will work in all 2006 Dyna and 2007 thru 2017 models with minor changes.

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GEAR DRIVE KNIGHT PROWLER® TWIN CAMS

More than two years of testing and development went into these one-of-a-kind gear driven cams manufactured by Andrews Products for our Award Winning **Knight Prowler®** Cams.

As we all know, gear drives require less power to operate than chain drives.

Dyno test results show gains of 4 horsepower over similar engines with chain driven cams.

**1999-2006
except '06 Dyna**



Part#	.053 Timing	Duration .053	Valve Lift	Lift TDC	Springs	Application
TW-6G	20/40 42/18	240 240	.510 .510	.189 .178	Stock	Bolt in street/touring. Very Strong from Idle through 5500 RPM. Light or heavy bike.
TW-6HG	20/40 42/18	240 240	.590 .590	.194 .176	HI-LIFT	88 & 95 cu.in. & larger-more Torque than any Cam available anywhere!
TW-8G	19/47 49/17	246 246	.590 .590	.183 .176	HI-LIFT	Best torque - High Performance Cam available. Aggressive Ramps - High Lift - 110 + H.P. Light/Heavy bike
TW-9G	22/50 52/20	252 252	.580 .580	.205 .187	HI-LIFT	88 - 120 cu. in.+ Hot Bar Hopper - Bolt-In with S.E. Heads - Loves 3.37 Gear Ratio
TW-9BG	22/50 52/20	252 252	.630 .630	.208 .191	HI-LIFT	The Real Twin-Cam Boss - 130 H.P. & 144 lbs of Torque on 95 cu. in. with Rebel 435 Carb.
TW-9FG	24/52 54/22	256 256	.650 .650	.220 .201	HI-LIFT	HOT-HOT #1 Knight Prowler® Street Cam 95-130 cu. In. for the Real Bad Street Bike
TW72G	34/54 56/32	268 268	.720 .720	.286 .265	HI-LIFT	The "ULTIMATE" KNIGHT PROWLER® It Doesn't Get Any Better

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KNIGHT PROWLER®

TWIN CAMS

1999-2006

Except '06 Dyna

HELICAL TWIN CAM GEARS



Helical gears have been around for some time and are not new to the automotive industry. Automotive transmissions have been using helical gears for decades for a smoother and quieter transmission. The motorcycle industry is just now beginning to realize the vast improvements gained by using helical transmission gear technology.

Helical designed gears function with less noise than traditional gear designs as they roll smoothly together, not producing the slapping sounds that are common with straight cut gears, not to mention the huge problem with slightly bent or out-of-round Twin-Cam crankshafts.

Being more complex and difficult to manufacture, helical gears are more expensive.

KNIGHT PROWLER® Helical Gears are made only with aircraft quality 8620 steel. Besides being ground to extremely close tolerances (.0001), the Helical teeth are Ground with a **"CROWN"** meaning a Convex Crown of approximately .0002 is ground into each tooth on the rear cam gear that results in a much smoother and quieter engagement of the teeth. Bottom line is "Silence is Golden!"

Thousands of phone calls over the years regarding whining or noisy gears prompted **Wood Performance** to re-evaluate the entire noise issue with Twin Cam engines, not to mention the huge problem with slightly bent or out-of-round Twin-Cam crankshafts.

Complicated? Maybe... but **Wood Performance** has a unique simple solution: Belt drives on the external gears and helical gears on the inside.



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KNIGHT PROWLER®

+4° TWIN CAM GEAR

288015+4
1999–2006



216020+4
2006 Dyna
2007 – 2017

ANOTHER EXCLUSIVE FROM WOOD PERFORMANCE

- Advances both cams 4 crankshaft degrees
- No need for Gear Drives
- Higher cranking and running compression
- Fits any Stock or High Performance Cam
- More torque & HP... Quicker
- Eliminates lost Cam motion (Cams Retarding)
- Splined Cams or Keyed Cams
- Quick Install

Designed by Wood Performance for our KNIGHT PROWLER® CAMS



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KNIGHT PROWLER

EVO CAMS

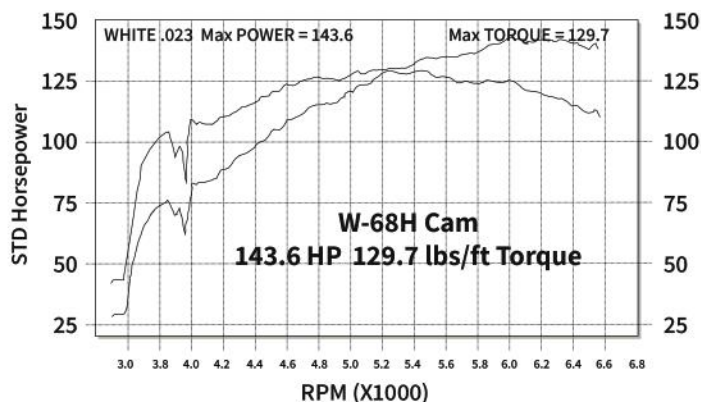
**112HP to
143HP +**



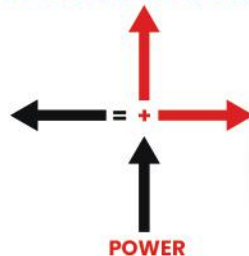
**88ci to
113ci**

Bob Wood - 2 Time NHRA National Record Holder / Fuel Funny Car, Designer / Innovator of the popular King Carburetors and Famous **KNIGHT PROWLER® Cams**, Introduces the most advanced, aggressive Camshaft profiles for H.D. Evolution Engines available anywhere...

These are the most **POWERFUL** Streetable Camshafts in America. With mods to your existing HD, Heads-Carb-Ign, etc. - A mild 112HP to a Street Prowling 143+ Horsepower can be yours at the twist of your throttle!



KNIGHT PROWLER CAMS



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KNIGHT PROWLER

EVO CAMS

**112HP to
143HP +**



**88ci to
113ci**

Part #	.053 Timing	.053 Duration	Valve Lift	Lift TDC	Springs	Application
W6	20/40 42/18	240 240	.510 .510	.189 .178	Stock	Bolt in Street/Touring. Very strong from idle through 5500 RPM. Light or heavy bike.
W6H	20/40 42/18	240 240	.590 .590	.218 .200	HI-LIFT	Most advanced powerful torque Cam available anywhere. 80 ci. Well over 100 lbs
W-6HE	20/40 42/18	240 240	.631 .631	.196 .177	HI-LIFT	Max Torque - Short Duration, High Lift EVO
W-6HF	24/44 46/22	248 248	.650 .650	.218 .200	HI-LIFT	Monster Torque, 80-140 inch EVO
W7	20/46 48/20	248 248	.500 .500	.198 .184	Stock	Bolt-In 2000 through 6000 RPM. Great Sound Quick Ramps - Hot Street Cam
W8	19/47 49/17	246 246	.590 .590	.183 .176	HI-LIFT	Best torque - High performance Cam available. Aggressive Ramps - High Lift - 90+ H.P. Light/Heavy bike
W9	22/50 52/20	252 252	.580 .580	.205 .187	HI-LIFT	80 in. - 113.9 Horsepower Winner - 1997 Daytona Dyno Shootout
W9B	22/50 52/20	252 252	.630 .630	.208 .191	HI-LIFT	The Real EVO Boss - 117 H.P. 80 c.i. Daytona 1997
W9F	24/52 54/22	256 256	.650 .650	.220 .201	HI-LIFT	HOT-HOT #1 Knight Prowler Street Cam 80-130 in. for the Real Bad Street Bikes
W10F	24/52 54/22	256 256	.750 .750	.225 .202	HI-LIFT	EVO - 80" thru 140" Super Hi-Lift Short Duration Street Cam for Pro's Only - Low TDC's!! Easy Install!!
W62	31/51 53/29	262 262	.652 .652	.249 .248	HI-LIFT	EVO / Twin Cam (Gear Drive) Street Version of TW68G
W68	30/58 62/26	268 268	.678 .678	.260 .260	HI-LIFT	EVO / Twin Cam (Gear Drive) Winner 2003-2008 Daytona Shootout
W72	34/54 56/32	268 268	.720 .720	.286 .265	HI-LIFT	Twin Cam 95 ci Class WINNER 2004 Daytona AMI Shootout]

• For best overall performance we recommend using a **Andrews 30** tooth transmission pulley on any bike with any type camshaft! **W-9** or **W-9B** cams & any high compression engines should use at least **3.37** ratio or higher.

• Recommend using the time saver pushrods on all camshafts for easier installation.

Special Note: Please call Tech Department for any questions/information you need regarding your selection of a camshaft. **We will Take the Time** to inform you completely on what combination you need for your bike. We take personal pride in knowing that our customers are the most informed and satisfied riders on the road. No more "Lost in the Cam Fog" feeling when you speak with us.

KNIGHT PROWLER®

SHOVELHEAD CAMS



Part #	.053 Timing	.053 Duration	Valve Lift	Lift TDC	Springs	Application
W-6S- SHOVELHEAD	20/42 40/18	240 240	.510 .510	.169 .155	Stock	1978 thru 1984 SHOVELHEAD Engines

Years of listening to our Shovelhead enthusiasts and their performance needs have prompted us to release our famous high torque

KNIGHT PROWLER® W-6 Cam profile for all 1978 thru 1984 Shovels!

They can now enjoy all the torque, horsepower and throttle response
Evo lovers have enjoyed for the past 30 years.

These are the most **POWERFUL** Streetable Camshafts in America.



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EXCLUSIVELY FROM WOOD PERFORMANCE KNIGHT PROWLER®

"DESIGNER SERIES" CAMS FOR YOUR SPECIAL BIKE! DESIGNER CAMS FOR SPORTSTER, EVO AND SHOVELHEADS

Wood Performance will design camshafts specifically for Your Custom Ride with the specifications to produce the horsepower and torque that it Demands!

These gear-driven Cams, available for Sportster, EVO and Shovelhead engines will be individually custom designed by **Wood Performance** with lift and duration numbers created to produce maximum horsepower and torque specifically for use in your custom engine!

Listed below are the latest Designer Cams for *Sportsters, EVO and Shovelheads*.

Part#	.053 Timing	Duration .053	Valve Lift	Lift TDC	Application
W6S	20 / 40 42 / 18	240 240	.510 .510	.189 .178	1987 thru 1984 Shovelhead Engines
W8S	19 / 47 49 / 17	246 246	.590 .590	.183 .176	Sportster 5 Spd XL
W9BS	22 / 50 52 / 20	252 252	.630 .630	.208 .191	Sportster 5 Spd XL
W68S	30 / 58 62 / 26	268 268	.678 .678	.260 .226	Sportster 5 Spd XL
W6HE	20 / 40 42 / 18	240 240	.631 .631	.196 .177	Max Torque - Short Duration, High Lift EVO
W6HF	24 / 44 46 / 22	248 248	.650 .650	.218 .200	Monster Torque, 80 - 140 inch EVO
W10F	24 / 52 54 / 22	256 256	.750 .750	.225 .202	EVO 80" - 140" Super Hi-Lift Short Duration Street Cam for Pro's Only Low TDC's!! Easy Install!!!
W62	31 / 51 53 / 29	262 262	.652 .652	.249 .248	For EVO - Street version of Twin Cam TW68G
W68	30 / 58 62 / 26	268 268	.678 .678	.260 .226	EVO Duplicate of Twin Cam 95" Class Winner 03-08 DAYTONA SHOOTOUT
W72	34 / 54 56 / 32	268 268	.720 .720	.286 .265	Duplicate of Twin Cam 95" Class Winner 03-08 DAYTONA SHOOTOUT
W75	34 / 62 66 / 30	276 276	.750 .750	.285 .252	EVO Duplicate of Twin Cam 95" Class Winner 03-08 DAYTONA SHOOTOUT

SMOKE THE COMPETITION!
With Genuine Wood Performance Products!



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VISIT OUR WEBSITE
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CHECK OUT OUR DYNO RUNS



**GET YOUR PERSONALIZED CAM
RECOMMENDATION**



**MEET OUR SATISFIED
CUSTOMERS**



**LOOK THROUGH OUR
INVENTORY**



**GET YOUR PERSONALIZED CAM
RECOMMENDATION FROM BOB WOOD**



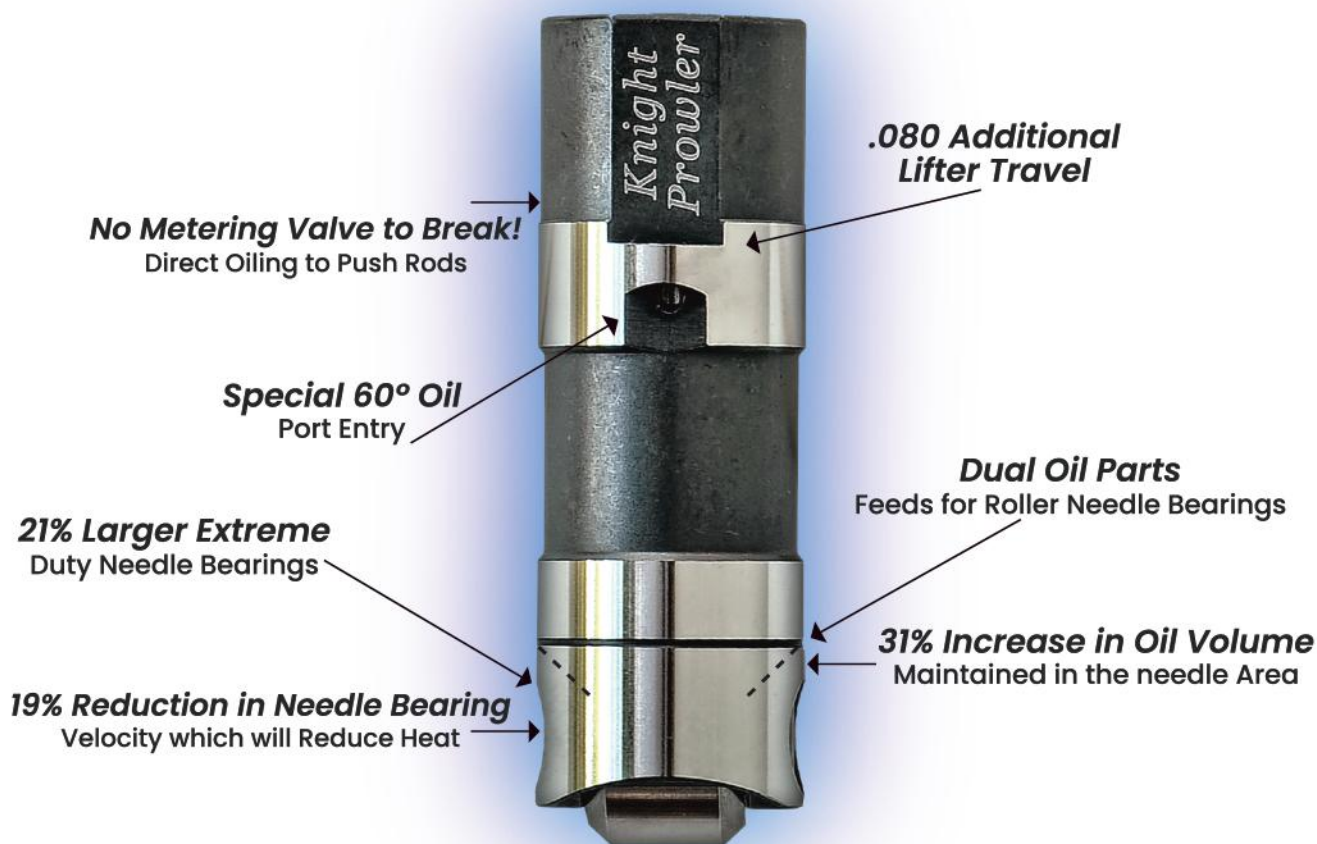
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KNIGHT PROWLER®

ALPHA 2.0 LIFTERS

WADL-2.0 - TWIN CAM & M8 DIRECTIONAL LIFTERS

- FITS ALL M8 & TWIN CAM ENGINES • UP TO .650 LIFT ON M8 ENGINES
- NO LIFT LIMITS ON TWIN CAM ENGINES



3 YEAR MFG. WARRANTY **MADE IN THE USA**

Wood Performance has partnered with Topline Hylift-Johnson Automotive to produce these proprietary, multi-fit high performance lifters. They are made to fit all the above HD engines using the Knight Prowler® specifications. They also include the EDM technology for the dual port oil ports to feed the lifter needle bearings.



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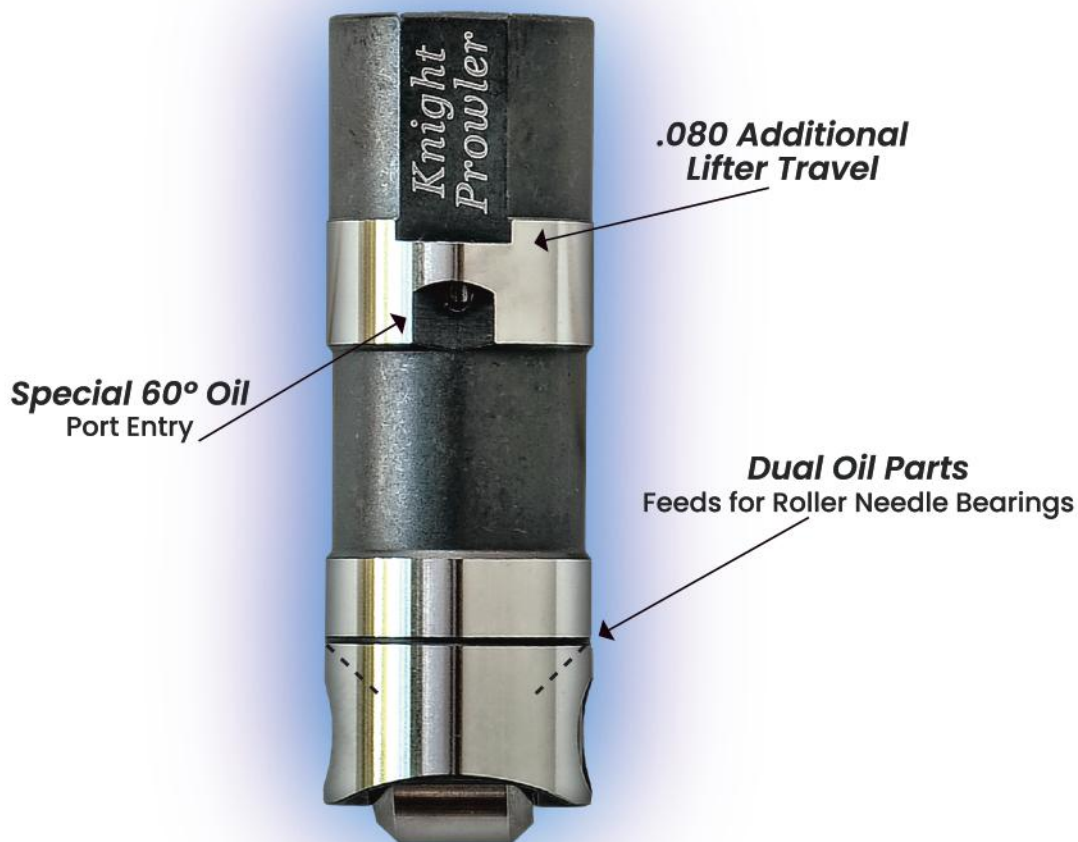
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KNIGHT PROWLER®

ALPHA SERIES LIFTERS

WADL-8012 - MILWAUKEE 8 DIRECTIONAL LIFTERS

- FITS ALL MW8 & TWIN CAM ENGINES • UP TO .600 LIFT ON M8 ENGINES
- NO LIFT LIMITS ON TWIN CAM ENGINES



"AMERICAN MADE"

Wood Performance has partnered with Johnson HY-LIFT, Top Line Automotive to produce these proprietary, multi-fit high performance lifters. They are made to fit all the above HD engines using the Knight Prowler® specifications. They also include the EDM technology for the dual port oil ports to feed the lifter needle bearings.



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KNIGHT PROWLER®

EVO LIFTERS WEVO-1012



Wood Performance has stepped up to the plate to design and produce another first! A very unique hydraulic roller lifter made exclusively for EVO engines.
100% American made.

- **New Load Divider** lifter bearing race designed to distribute an even load across the Cam lobes. This feature reduces heat and stress that leads to increased Cam and lifter life.
- A newly designed push rod **Lifter Cup** that ensures even, proper oil flow through the pushrod to the top end.
- New hydraulic **Piston Cup and Check Valve** that increase bleed time rate. This corrective action gives you performance like a solid lifter but with **Anti-Pump Up** hydraulic operation.

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KNIGHT PROWLER

VALVE SPRINGS

ANNOUNCING ANOTHER 1ST

UNCONDITIONAL LIFETIME WARRANTY

Over 30 years of Over-the-Road testing by thousands of EVO
and Twin Cam Engines with valve lifts of up to .750
lift has resulted in

**NOT ONE SINGLE REPORTED FAILURE OR LOSS OF
SEAT PRESSURE WITH ANY KNIGHT PROWLER®
VALVE SPRING!**

**WE DON'T COPY
AND WE DON'T IMITATE!**

**WE ARE THE ORIGINATORS OF KNIGHT PROWLER® CAMS
AND VALVE SPRINGS FOR HD ENGINES.**



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KNIGHT PROWLER

VALVE SPRINGS

BW-4V MILWAKEE 8 SPRINGS

1.585 = 84lbs

1.535 = 113lbs

.985 = 260lbs

.925 = COIL BIND

MANDATORY FOR USE ON

- WM8-4860 CAMS / BW-4V SPRINGS ONLY
- WM8-9960 CAMS / BW-4V SPRINGS ONLY
- WM8-9F60 CAMS / BW-4V SPRINGS ONLY
- WM8-68 & WM8-6860 CAMS / BW-4V SPRINGS ONLY

ALSO RECOMMENDED FOR USE WITH

- WM8-408 CAMS
- WM8-999 CAMS
- WM8-77X CAMS

BW-4V Valve Springs & Titanium Retainers Alpha Series WADL-8012 Directional Roller Lifters WADL-2.0



**BEING #1
ALWAYS
MATTERS!**



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KNIGHT PROWLER®

VALVE SPRINGS

W160-PSW-10L

Outside Dia. = 1.445

1.850 = 160 lbs

1.800 = 180 lbs

1.775 = 190 lbs

1.200 = 430 lbs

1.040 = Coil Bind



W188-1200-10L

Outside Dia. = 1.445

1.850 = 188 lbs

1.825 = 198 lbs

1.800 = 208 lbs

1.200 = 430 lbs

1.100 = Coil Bind

EVO or TWIN-CAM

Bob Wood of Wood Performance an innovator of the **KNIGHT PROWLER® CAMSHAFTS**, is a 2-time NHRA national record holder, Fuel Funny Cars etc. He spent over two years in research and testing trying to find valve springs that were specifically designed for **EVO/TWIN-CAM** bikes including his own **KNIGHT PROWLER® CAMS**. There weren't any out there to meet our criteria.

We needed a special valve spring that would meet every possible condition from a simple **BOLT-IN** application, to an every day street and tour rider, to a ground-pounding, tire-smoking **EVO/TWIN-CAM** using a .750 lift **KNIGHT PROWLER® CAM** for maximum street performance.

Indeed our research paid off when we discovered the coveted, well kept secret of what particular type of valve springs are being used by most Winston Cup race teams, including the national champ. It doesn't take a rocket scientist to figure out that a valve spring that can run 8,500 rpm + with High Lift Cams for 500 miles with no signs of fatigue would be perfect for 99.99% of our customers.

Yes, we needed this particular spring to be redesigned for our **KNIGHT PROWLER® CUSTOMERS**.

The results are **ENDURANCE** and **LONG LASTING** performance with absolutely **NO LIMITATIONS**.

1200 SERIES

As spring technology progresses, a very new and unique heat treat process has been added to our famous **KNIGHT PROWLER®** High Lift Valve Springs. Realizing the demand for higher lift cams was on the rise, we had PSI incorporate this new process into our new **1200** Series springs. An unparalleled result yielded a 250% increase in strength and durability over our already unmatched **W160** Springs. We realize that these springs are an overkill for the average hot rod Harley.

However, like time, things change. The demand for bigger engines, higher compression and high lift cams is here to stay! High lift, short duration cams are our "Exclusive Signature." Keeping our **KNIGHT PROWLERS** number one is our main goal - and, yes, a new super High Lift (.750) **KNIGHT PROWLER®** has just been released, and is on the prowl now!

All of our **KNIGHT PROWLER®** Valve Springs come with custom made (to our specifications) titanium retainers with a special .070 inner-spring shelf and a zero fit inner and outer spring register. They are topped off with 10° valve locks that can be used with or without lash caps. Also included are steel heat-treated stock diameter spring seats.



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KNIGHT PROWLER®

VALVE SPRINGS



W200-1200-10L

Outside Dia. = 1.445

1.850 = 200 lbs

1.825 = 210 lbs

1.800 = 220 lbs

1.200 = 450 lbs

1.020 = Coil Bind

YES! WE DID IT AGAIN!

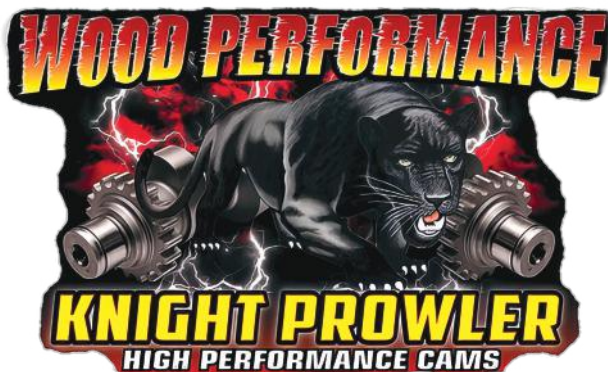
Requests for 200 horsepower cams and valve springs for large cubic inch Harleys just keep pouring in! As we all know, our competition has never even reached the 150 HP level we reached last year for street bikes on pump gas. **KNIGHT PROWLERS** never sleep but they needed a new type of valve spring to control these fast, ramp-high lift cams that never seem to run out of power. In order to meet this challenge, we decided to release our new, huge .750 Lift Cams with 276° duration that will again keep **KNIGHT PROWLER®** Cams the absolute leader for high performance street bikes for quite some time.

Every spring that is manufactured for our **KNIGHT PROWLER®** Cams comes from PSI with wire that is made from the highest quality chrome-silicone alloys. The hard to find rod material for these alloys is 100% Kobe steel, long considered necessary to manufacture the cleanest, purest Valve Spring available in the world.

Max Life Surface Preparation

KNIGHT PROWLER® Valve Springs have an optional, proprietary, multi-step, surface enhancement process that has been proven to increase a spring's endurance limit. This process can be applied to any level of the **KNIGHT PROWLER®** series of springs. It is a very beneficial process for those looking for an increase in endurance while maintaining their existing setup.

See our "Designer Cams" on page 17 for camshaft specifications.



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KNIGHT PROWLER

BILLET OFFSET ROCKER ARM SUPPORT



ORS-2

As we all know a problem exists when the pushrod is at its lowest and highest points, especially with high lift cams. Thanks to a good idea from Gary Williams & Company, these Rocker Arm supports move the pushrods out .030 away and towards center of the pushrod tube, thus eliminating the normal rubbing contact points between the pushrod tube and the pushrod. When using Roller Rocker Arms with 7 millimeter stem valves, the problem gets worse as the Roller Rocker tip tries to roll off the forward edge of the tip of the valve stem. This additional .030 inward motion helps to eliminate this problem also.



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KNIGHT PROWLER®

HIGH PERFORMANCE COMPRESSION RELEASES



An Absolute Must for High Compression Harley's

Another fact of life besides death and taxes: sooner or later you're going to blow your starter drive out while attempting a hot-restart on your Hot Rod Harley, just ask around!

Recognizing this fact, **Wood Performance** has designed the ultimate compression release featuring the largest **"Dual Channel"** air release ports available

- Extra Tall
- Easy to Reach

WCR-1

- Large Contact Stem
- Short Thread Length

America's #1 King of the Streets



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KNIGHT PROWLER

KT SERIES

MAXIMUM PERFORMANCE TITANIUM FUEL NEEDLES



KT1

130+ H.P. Twin Cams



KT3



KT5

113+ H.P. 80 in Evos

Our "KT Series" Titanium Fuel Needles for ALL CV Carbs
Mate these with our KNIGHT PROWLER® King or Rebel Carbs
High Capacity Bowl Kits - Max Jet System and Air Package



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ADDITIONAL GEAR DRIVE INSTALLATION PROCEDURE



Figure 1

Inner Cam Gear Alignment



Figure 2

Photos courtesy of Performance Techniques

1. **YOU MUST CHECK CRANK RUN-OUT AT PINION END OF CRANKSHAFT!!**
2. No oil or lube on gears while doing these lash/gear check procedures.
3. Make sure inner cam gear timing marks are lined up as in photo. (Figure 2)
4. Install cam plate and cams into block and torque to specs. Do not install crank/pinion drive gear at this time.
5. Install aluminum or wooden drift approximately .835 diameter and approximately 6" long into front exhaust lifter hole and press firmly to lock down front cam shaft. Zero dial indicator and check for backlash while moving rear outer cam gear back and forth. Clearance should be .000 to .001 maximum. Check backlash every 90 degrees of rotation of rear cam drive gear. Inner rear cam gears are available in oversize and undersize.
6. Install crank pinion gear and align timing marks together. While holding pinion gear firmly, check backlash at outer drive cam gear every 90 degrees of rotation. Backlash should be .000 to .001. Oversize and under size outer Cam drive gears are available. (Figure 1)
7. Failure to check these clearances will result in excessive whine or excessive valve train noise. **CLEARANCE CHECK PROCEDURE MUST BE DONE PRIOR TO ENGINE START UP!!**

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