HARLEY-DAVIDSON®



Screamin' Eagle® Pro Racing Parts

FOR HARLEY-DAVIDSON MOTORCYCLES





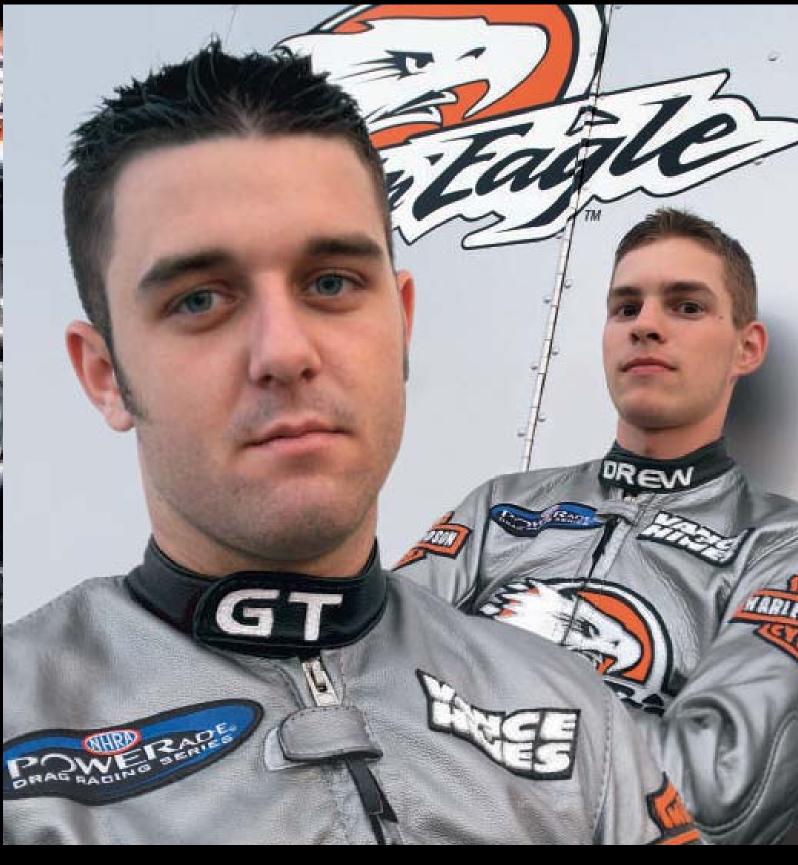
Screamin' Eagle Pro Racing Parts

Designed to race. Engineered to win. Premium, professional-grade performance parts and accessories for motorcycle racing rooted in the spirit and heritage of two-wheeled competition.

- 1 Introduction
- 24 EFI Performance
- 32 Intake & Carburetion
- **40 Engine Components**
- 60 Ignition
- 68 Exhaust
- 90 Accessories
- 96 Index

For more than 90 years, the name Harley-Davidson has been synonymous with innovation and dominance in motorcycle racing. Today, we're proud to continue our long tradition of racing involvement, fielding factory-sponsored teams for AMA flat track and NHRA competition, while also supporting professional dirt track and AHDRA drag racing with direct sponsorship and contingency programs under the Screamin' Eagle banner. Harley-Davidson remains committed to the future of motorcycle racing through our ongoing participation in the sport and the expansion of our Screamin' Eagle® Pro Racing Parts line.





Screamin' Eagle® NHRA® Pro Stock Drag Team

2003 was an historic year for the Screamin' Eagle® Pro Stock Drag Team, as it qualified for the elimination rounds at all 15 NHRA® POWERade® Pro Stock Bike events, reaching the finals and setting new NHRA records in the process. Turning in the best performance by a V-Twin motorcycle in the history of the

Riders **G.T. Tonglet** (left) and **Andrew Hines** piloted the Screamin' Eagle® Pro Stock Drag Bike into NHRA history in 2003.

Photography courtesy of Randy Anderson





AMA® Flat Track

In 2003, factory Harley-Davidson® rider Rich King completed a season sweep of the prestigious Springfield Mile with a victory in the final event of the 2003 AMA Progressive® Insurance Flat Track Championship. Harley-Davidson helped support other AMA flat track competitors throughout the 2003 Racing, log on to 1800flattrack.com.

Harley-Davidson® factory flat track rider **Rich King** (#100) takes the inside line against 2003 Grand National Champion **Chris Carr**.

Photography courtesy of Dave Hoening





Harley-Davidson® Sportster® Performance Series

Established by Harley-Davidson to help riders get a taste of AMA Pro Flat
Track Racing without the high costs often involved with competing at that
level, the Sportster Performance Series showcases budding flat track talent
and classic V-Twin muscle on the Grand National circuit. In 2003, Scott Scherb

2003 Sportster® Performance Series National Champion **Scott Scherb** (#68N) on his way to another first-place finish in the dirt.

Photography courtesy of Dave Hoening







AHDRA® Screamin' Eagle® Nitro Harley® Top Fuel Class

One of four AHDRA drag racing classes currently sponsored by Screamin' Eagle, the Nitro Harley Top Fuel Class may be the hottest show on two wheels. Rider Doug Vancil took top honors in 2003 and set a new AHDRA speed record of 222.66 mph. The top 14 Nitro Harley points leaders were invited to participate in the 2003 NHRA Screamin' Eagle® Nitro Harley Exhibition Tour, which gave these deserving racers the chance to compete next to the biggest names in drag racing at three stops on the NHRA circuit. Get the full story on www.ahdra.com.

2003 AHDRA Screamin' Eagle® Nitro Harley® Top Fuel National Champion **Doug Vancil** warms things up in the burnout box.

Photography courtesy of Mid Coast Studio: Phil Greatorex, photographer





AHDRA® Screamin' Eagle® V-Rod® Class

New for the 2003 AHDRA season, the Screamin' Eagle® V-Rod Class put the blistering performance of the most award-winning motorcycle in Harley-Davidson® history on display for racing enthusiasts across the country. On a Don Tilley-tuned V-Rod, rider Tripp Nobles set the national AHDRA Elapsed

AHDRA® Screamin' Eagle® V-Rod® Class National Champion Tripp Nobles gets the holeshot and the victory in Las Vegas.

Photography courtesy of Mid Coast Studio: Phil Greatorex, photographer





AHDRA® Screamin' Eagle® Performance Parts Class
In 2003, perennial powerhouse Dan DeGood of Mountain Top, PA, scored his first double-class win in AHDRA competition, and won the national championship in the Screamin' Eagle® Performance Parts Class—a favorite among privateer racers. Proving his two-wheeled prowess,

2003 AHDRA Screamin' Eagle® Performance Parts Class National Champion **Dan DeGood** aboard one of many H-D® motorcycles he races competitively.

Photography courtesy of Claude McKee





AHDRA® Screamin' Eagle® SYN3 Elapsed Time (ET) Class
Winner of the 2003 AHDRA Dedicated Racer of the Year Award, rider John
Hendrzak of Creswell, OR, scored his first-ever AHDRA win in 2003, and
National Champion finished out the season with 835 national points in the Screamin' Eagle®—sponsored SYN3 E.T. Class, bringing home the national championship. Photography courtesy of Claude McKee

AHDRA® Screamin' Eagle® Las Vegas High Stakes Shootout

Open to all riders with an AHDRA membership and a bike carrying a HarleyDavidson VIN#, the 2nd Annual Screamin' Eagle® High Stakes Shootout drew
150 hopefuls to The Strip at Las Vegas Motor Speedway on October 18, 2003.
Dan Norlin of Aurora, CO, won the final and the \$12,000 first-place prize.

Photography courtesy of Mid Coast Studio:
Phil Greatorex, photographer

2004 Screamin' Eagle® Racing

March 1 2	Coincovillo El	
March 1-3	Gainesville, FL	AHDRA*
March 4	Daytona Beach, FL	
March 18-21	Gainesville, FL	NHRA PAG RACINO
March 26-28	Phoenix, AZ	AHDRA"
April 1-4	Las Vegas, NV	Consumit Lights
April 15-18	Houston, TX	NHRA PAG RACINO
April 16-18	Dallas, TX	AHDRA"
May 1	San Francisco, CA	
May 1-2	Bakersfield, CA	AHDRA"
May 13-16	Atlanta, GA	NHRA MAG RACINO
May 20-23	Chicago, IL	HEAD RACING
May 22	Union, KY	END
May 28-30	Atlanta, GA	AHDRA°
May 29-30	Springfield, IL	
June 10-13	Columbus, OH	CHAMPIONS HO
June 11-13	Norwalk, OH	AHDRA"
June 12	Lexington, KY	EDB
June 17-20	Englishtown, NJ	NHRA MAG RACINO
June 25	Knoxville, TN	
June 26	Lima, OH	
June 25-27	Madison, IL	NHRA PAG RACINO
June 25-27	Seattle, WA	AHDRA*
July 3	Hartford, OH	
July 16-18	Denver, CO	HARA RACING

July 16-18	Budds Creek, MD	AHDRA*
July 17	Moline, IL	
July 30-August 1	Sonoma, CA	NHRA DRAG RACING
July 30-31	Brainerd, MN	AHDRA*
July 31	Hagerstown, MD	
August 7	Farley, IA	
August 12-15	Brainerd, MN	NHRA PAG RACING
August 13-15	Bristol, TN	AHDRA"
August 22	Peoria, IL	
August 27-29	Woodburn, OR	AHDRA*
August 28	Sedalia, MO	
September 1-6	Indianapolis, IN	NHRA DRAG RACING
September 4-5	Springfield, IL	
September 10-12	Indianapolis, IN	AHDRA*
September 11	Vernon, NY	
September 16-19	Reading, PA	NHRA PAG RACING
September 18	Columbus, OH	
September 24-26	Memphis, TN	NHRA DRAG RACING
September 24-25	Du Quoin, IL	
September 30-October 3	Joliet, IL	Corcanin Edito
October 9-10	Rockingham, NC	AHIDRA*
October 14-17	Ennis, TX	Screamin Edgle
October 22-24	Las Vegas, NV	AHDRA*
October 28-31	Las Vegas, NV	CHAMPIONSHIP BARG RACING
November 11-14	Pomona, CA	NHRA ORAG RACING



Cheer on the Screamin' Eagle® Pro Stock Team as riders G.T. Tonglet and Andrew Hines continue their high-speed assault on the competition and the NHRA record books. Visit www.nhra.com or call (626) 914-4761 for more information.



AMA FLAT TRACK

Be there when H-D® factory racer Rich King chases the checkered flag in the AMA Progressive® Insurance U.S. Flat Track Championship. And see future flat track stars compete for Grand National eligibility in the Harley-Davidson® Sportster® Performance Series. For details, log on to 1800flattrack.com or call the AMA at (614) 856-1900.



Experience everything drag racing has to offer, whether you're in the stands or cutting the lights. And pay special attention to the four Screamin' Eagle®-sponsored classes. To learn more, visit www.ahdra.com or call (336) 924-2095.



NHRA SCREAMIN' EAGLE® NITRO HARLEY-DAVIDSON® EXHIBITION TOUR

Watch the top 14 AHDRA Nitro Harley Top Fuel Class riders showcase their skills on drag racing's biggest stage as a part of a three-stop tour on the NHRA circuit. For more information, visit www.nhra.com or call (626) 914-4761.

The Power Of Pro Racing

On the track, skill alone isn't enough. You need the right machinery beneath you—parts engineered to deliver the right amount of power right when you need it. At Harley-Davidson® we've got almost 90 years of racing experience under our belts. And all of that passion and expertise is rolled into every Screamin' Eagle® Pro Racing Part we build. It's a tradition of excellence earned through decades of tuning and sweat in the dealerships, workshops and pits where champions are made. And it'll be right there with you when you twist the throttle.

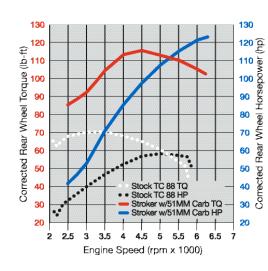
Screamin' Eagle Pro Racing: Information

Horsepower and Torque

While many judge a motorcycle's performance solely in terms of horsepower, torque is an equally, if not more, important factor in the equation. In a nutshell, torque is the twisting force that gets your bike moving, while horsepower is the effort required to keep it moving—meaning that torque influences acceleration and horsepower determines velocity. Your goal should be to reach the balance between horsepower and torque that most closely matches the performance you need. In general, if you're running a lightweight bike, getting more horsepower at a high rpm level is the primary consideration, since you won't need as much accelerating power in the low to mid rpm range. For a heavier bike, generating torque in the low to mid rpm range is essential for getting off the line in a hurry.

The Dyno Chart

Talking about how a configuration can enhance engine performance is one thing, but seeing it is another. That's where dyno charts come in. An invaluable tool in performance modification, dyno charts can directly compare, in visual terms, the performance characteristics of a stock configuration with those of a modified configuration—which can help you decide if a particular set-up will generate the power gains you're after.



The horizontal, or "x," axis indicates engine speed in rpm. The left vertical, or "y," axis shows the amount of torque generated in footpounds, while the right y-axis indicates the horsepower produced. There are four curves in all–one for stock torque, one for modified torque, one for stock horsepower and one for modified horsepower. Each curve can tell you how a configuration performs at a specific rpm value or in a specific rpm range. And it can also tell you where in the rpm range the effects really kick-in and where they begin to flatten out.

Warranty and Caution

Harley-Davidson® has the engineering expertise, sophisticated dyno lab, and complete testing facilities to provide racing enthusiasts with a line of performance products designed to produce good, solid, reliable horsepower in their V-Twin engines and exceptional performance on the race track. Engine related performance parts are intended for the Experienced Rider only.

Warranty

Installation of Screamin' Eagle® products, and similar products from other manufacturers, except some street-legal offerings installed by authorized Harley® dealers, may affect your H-D® limited vehicle warranty. See your dealer for more information.

Caution

Harley-Davidson motorcycles modified with some Screamin' Eagle high-performance engine parts must not be used on public roads and in some cases may be restricted to closed-course competition

Caution Icons







Go Light

These Screamin' Eagle products are 50-state street legal for sale and use on all vehicles, including those that are pollution controlled

Stophand

Harley-Davidson motorcycles modified with some performance engine parts must not be used on public roads and in some cases may be restricted to closed-course competition. Those performance parts identified with a stophand symbol are US EPA legal, but are NOT legal for sale or use in California on pollution controlled motor vehicles. California guidelines on tampering can also lead to substantial fines and penalties

Crossed Flags

Harley-Davidson motorcycles modified with some (Screamin' Eagle) performance engine parts must not be used on public roads and in some cases may be restricted to closed-course competition. In this Screamin' Eagle section, all engine-related performance parts identified with the crossed flags symbol are intended for racing applications only and are not legal for sale or use in California on pollution-controlled vehicles. Alterations of emission related components constitutes tampering under the US EPA guidelines and can lead to substantial fines and penalties.

TWIN CAM 88° SCREAMIN' EAGLE® CARBURETED PERFORMANCE CONFIGURATIONS



CROSSED FLAGS:

Harley-Davidson® motorcycles modified with some (Screamin' Eagle) performance engine parts must not be used on public roads and in some cases may be restricted to closed-course competition.

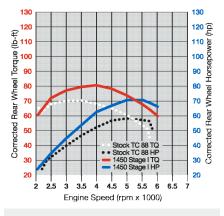
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Alterations of emission related components constitutes tampering under the US EPA guidelines and can lead to substantial fines and penalties. These configurations are not legal for sale or use in California on any pollution controlled motor vehicle. Intended for closed course competition only. May void limited vehicle warranty.

Configurations are intended for use with '99-later carbureted Twin Cam 88-equipped Dyna* models with staggered dual exhaust.

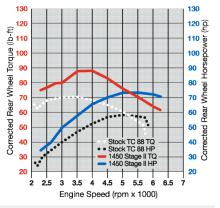
To build your own race motor, order each individual component part number within the list.

Corrected torque and horsepower measured at rear wheel on a Dynojet® Dynamometer. Your results may vary.



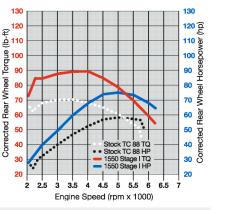
TWIN CAM 1450 STAGE I – CARBURETED

Air Cleaner and Breather Kit	29440-991
6200 rpm Ignition Kit	31763-0
H-D Touring Mufflers	65259-0



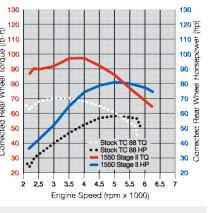
TWIN CAM 1450 STAGE II TORQUE - CARBURETED

Air Cleaner and Breather Kit	29440-99E
42MM Flatslide Carburetor Kit	29640-99
6200 rpm Ignition Kit	31710-01A
Quick-Install Adjustable Pushrods	17997-99A
SE-203 Cam Kit	25937-99E
Screamin' Eagle Pro II Mufflers	80258-99A



TWIN CAM 1550 STAGE I – CARBURETED

Air Cleaner and Breather Kit	29440-99B
42MM Flatslide Carburetor Kit	29640-99
6200 rpm Ignition Kit	31710-01A
Flat Top Pistons	22851-99A
Big Bore Cylinders	16546-99
Screamin' Eagle Pro II Mufflers	80258-99A



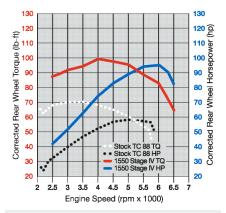
TWIN CAM 1550 STAGE II TORQUE - CARBURETED

Air Cleaner and Breather Kit	29440-99B
42MM Flatslide Carburetor Kit	29640-99
6200 rpm Ignition Kit	31710-01A
Flat Top Pistons	22851-99A
Big Bore Cylinders	16546-99
Quick-Install Adjustable Pushrods	17997-99A
SE-203 Cam Kit	25937-99B
Screamin' Eagle Pro II Mufflers	80258-99A

Stock TC 88 HP Stock TC 88 HP Stage III 1550 HP 20 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 Engine Speed (rpm x 1000)

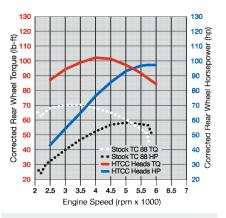
TWIN CAM 1550 STAGE III TORQUE - CARBURETED

Air Cleaner and Breather Kit	29440-99B
42MM Flatslide Carburetor Kit	29640-99
Big Bore Cylinders	16546-99
Quick-Install Adjustable Pushrods	17997-99A
SE-203 Cam Kit	25937-99B
High Compression Cast Pistons	22661-99A
6200 rpm Race Ignition System	31775-01A
Screamin' Eagle Pro II Mufflers	80258-99A



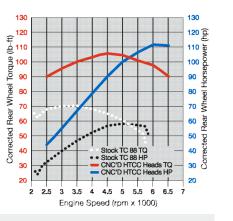
TWIN CAM 1550 STAGE IV TORQUE – CARBURETED

Air Cleaner and Breather Kit	29440-99B
44MM CV Carburetor	27934-99
Big Bore Carburetor Intake Manifold	29635-99
Big Bore Cylinders	16546-99
Twin Cam High Compression	
Big Bore Forged Pistons	22868-00
Twin Cam Performance Heads	16952-99B
SE-257 Cam	25155-00
Quick-Install Adjustable Pushrods	17997-99A
6200 rpm Race Ignition System	31775-01A
Screamin' Eagle Pro II Mufflers	80258-99A



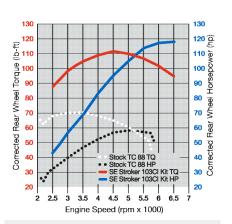
TWIN CAM 1550 STAGE II WITH HTCC HEADS – CARBURETED

Air Cleaner and Breather Kit	29440-99E
44MM CV Carburetor	27934-99
Big Bore Cylinders	16546-99
HTCC Forged Pistons	22439-00
HTCC Cylinder Heads	16933-99
HTCC Intake Manifold	29634-00
SE-211 Cam	25152-00
Quick-Install Adjustable Pushrods	17997-99
6200 rpm Performance	
Ignition System	31710-01 <i>A</i>
Screamin' Eagle Pro II Mufflers	80258-99



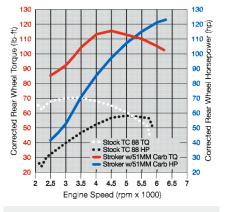
TWIN CAM 1550 WITH HTCC PORTED HEADS – CARBURETED

Air Cleaner and Breather Kit	29440-99E
45MM Flatslide Carburetor	28040-02
Big Bore Cylinders	16546-99
Twin Cam HTCC Forged Pistons	22439-00A
CNC Ported HTCC Heads	16925-02A
Big Bore Intake Manifold	29635-99
SE-257 Cam	25155-00
Quick-Install Adjustable Pushrods	17997-99A
Adjustable Map Ignition System	32704-01
Screamin' Eagle Pro II Mufflers	80258-99A



TWIN CAM 103CI STROKER WITH HTCC PORTED HEADS – CARBURETED

Air Cleaner & Breather Kit	29440-99B
Air Clearier & Breather Kit	2944U-99B
High Tensile Cylinder Stud Kit	16505-01
45MM Flatslide Carburetor	28040-02
Big Bore Carburetor Intake Manifold	29635-99
Flat Top Stroker Pistons	22942-00
Stroker Flywheel And Rod Assembly	23600-00
Big Bore Cylinders	16546-99
CNC Ported HTCC Heads	16925-02A
SE-260 Cam Kit	25122-02
Quick-Install Pushrod Kit	17997-99A
Adjustable Map Ignition	32704-01
Compression Release	29298-02
Bearing Assembly	24004-03
Screamin' Eagle Pro II Mufflers	80258-99A
-	



TWIN CAM 103CI STROKER WITH HTCC PORTED HEADS AND 51MM CARB

51MM CV Carburetor Kit	27926-0
Stroker Flywheel And Rod Assembly	23703-0
HTCC Stroker Pistons	22444-0
Big Bore Cylinders	16546-9
CNC Ported HTCC Heads	16925-02/
High Tensile Cylinder Stud Kit	16505-0
SE-260 Cam Kit	25122-0
Quick-Install Pushrod Kit	17997-99/
Race Ignition System	31775-01/
Exhaust Disc Kit	80110-0
Big Bore High Performance	
Head Gasket Kit	16101-0
Compression Release	29298-0
Bearing Assembly	24004-0
2 into 1 Tunable Exhaust System	80093-0

EVOLUTION® 1340/SPORTSTER® SCREAMIN' EAGLE® CARBURETED PERFORMANCE CONFIGURATIONS



CROSSED FLAGS:

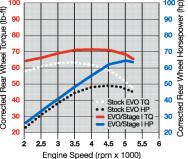
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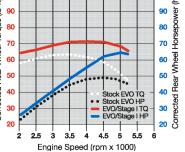
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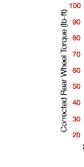
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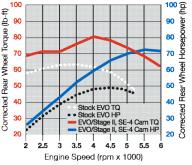
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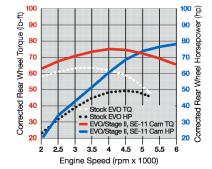
Corrected torque and horsepower measured at rear wheel on a Dynojet® Dynamometer. Your results











Stock EVO HP Engine Speed (rpm x 1000)

Engine Speed (rpm x 1000)

EVOLUTION 1340 STAGE I – CARBURETED

Air Cleaner and Breather K	(it 29543-99B
Dynojet Kit	29045-97A
Slip-Fit Mufflers	(see exhaust pages)

EVOLUTION® 1340 STAGE II -CARBURETED: TORQUE

Air Cleaner and Breather Kir	t 29543-99B
Dynojet Thunderslide Kit	29935-98
SE-4 Bolt-In Camshaft	25752-97
Ignition Module	32630-96
Performance Coil	31653-97
Spark Plugs	32326-91
Slip-Fit Mufflers	(see exhaust pages)

EVOLUTION 1340 STAGE II -CARBURETED: HORSEPOWER

Air Cleaner and Breather Ki	t 29543-99B
Dynojet Thunderslide Kit	29935-98
SE-11 Bolt-In Camshaft	25753-97
Ignition Module	32630-96
Performance Coil	31653-97
Spark Plugs	32326-91
Slip-Fit Mufflers	(see exhaust pages)

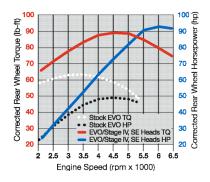
EVOLUTION 1340 STAGE III -CARBURETED: TORQUE

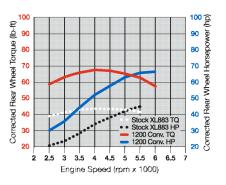
Air Cleaner and Breather Kit	t 29543-99B
Dynojet Thunderslide Kit	29935-98
SE-4 Bolt-In Camshaft	25752-97
Forged 10.2:1 Pistons	22195-98
Ignition Module	32630-96
Performance Coil	31563-97
Spark Plugs	32327-91
Slip-Fit Mufflers	(see exhaust pages)

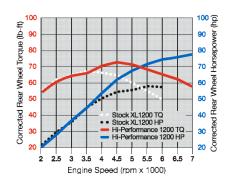
EVOLUTION 1340 STAGE III -CARBURETED: HORSEPOWER

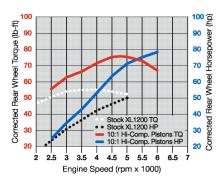
Air Cleaner and Breather K	t 29543-99B
Dynojet Thunderslide Kit	29935-98
SE-11 Bolt-In Camshaft	25753-97
Forged 10.2:1 Pistons	22195-98
Ignition Module	32630-96
Performance Coil	31563-97
Spark Plugs	32327-91
Slip-Fit Mufflers	(see exhaust pages)

Engine Speed (rpm x 1000)









EVOLUTION 1340 STAGE III -CARBURETED: FULL RACE

Big Bore 44MM CV Carb Kit	27934-99
Air Cleaner and Breather Kit	29543-99A
Big Bore Intake Manifold	29636-99
SE-57 Camshaft	25754-97
Performance Valve Springs	18223-98
Roller Rocker Arms	17378-98
Chrome Moly Adjustable Pus	shrods 17900-87
Forged 10.2:1 Pistons	22195-98
Selectable Curve Ignition Mo	dule 32654-98
Performance Coil	31653-97
Spark Plugs	32327-91
Slip-Fit Mufflers	(see exhaust pages)

EVOLUTION 1340 STAGE IV -CARBURETED: ELIMINATOR

Evolution 1340 Cylinder Head	s (black) 16854-98A
Forged 10.5:1 Pistons	22766-98
Big Bore 44MM CV Carb Kit	27934-99
Air Cleaner and Breather Kit	29543-99A
Big Bore Intake Manifold	29636-99
SE-57 Camshaft	25754-97
Roller Rocker Arms	17378-98
Tappets and Guides Kit	18572-98
Quick Install Adjustable Push	rods 17987-98A
Selectable Curve Ignition Mo	dule 32654-98
Performance Coil	31653-97
Spark Plugs	32321-91
Slip-Fit Mufflers	(see exhaust pages)

'04 XL883 STOCK VS. 1200 CONVERSION

III Camanagaian VI 000 ta 1000

HI-Compression XL883 to 1200	
Conversion Piston Kit	22698-01
1200 Cylinders	16954-02
High-Flow Air Cleaner Kit	29042-04
14MM CV Carburetor	27934-04
14MM CV Intake Manifold	27689-04
Performance Cam	25197-04
Performance Ignition	31758-04
Screamin' Eagle Pro II Muffler	80415-04

'04 XL1200 STOCK VS. STAGE II CARBURETED

High-Flow Air Cleaner Kit 29042-0	
44MM CV Carburetor	27934-99
44MM CV Intake Manifold	27689-04
Performance Cam	25197-04
Performance Ignition	31759-04
Screamin' Eagle Pro II Muffler	80415-04

XL1200 STOCK VS. 10:1 HIGH COMPRESSION PISTONS

High Flow Air Cleaner Kit	29041-88B
10:1 Pistons, Pins and Clips	22694-01
Big Bore 44MM CV Carburetor	27934-99
44MM CV Carburetor Intake Manifold	27644-00
Adjustable Ignition System	32942-02
High Performance Cam Kit	25647-91A
Screamin' Eagle Pro II+ Mufflers	80217-02
Billet Style End Caps	65147-02

EFI Performance

INJECT SOME MUSCLE

Despite what you may be thinking, Electronic Fuel Injection (EFI) isn't as complicated as it sounds. On the race track, you need to move more air and more fuel through the engine. And with Screamin' Eagle® Pro Racing Parts, you have a wide range of options that allow you to produce the specific kind of track performance you're looking for.

EFI BASIC

First offered on a Harley-Davidson® motorcycle in 1995, electronic fuel injection now comes standard or as an option on 19 of the 23 models in the 2004 line-up. Unlike a carbureted model, in which the fuel and air mixture delivered to the engine cylinder's combustion chamber is regulated mechanically through jetting, a motorcycle equipped with electronic fuel injection relies on a special processor called an Electronic Control Module (ECM) to determine the precise moment at which fuel should be released into the combustion chamber to optimize engine performance. This means that if any trackside

change is made to the engine and/or intake and exhaust systems of an EFI-equipped Harley®, its ECM must be recalibrated to maximize performance and prevent serious engine damage. Whenever you're planning or making performance upgrades, make sure to consult a true expert, your Harley-Davidson dealer, about the results you want to achieve and the best way to way achieve them.

TAGE KITS

Developed specifically for fuel-injected Harley-Davidson® motorcycles, Screamin' Eagle® Pro EFI Stage Kits offer complete, pre-packaged racing performance configurations engineered to help you generate specific torque and horsepower gains at a given engine calibration. Eliminating all the guesswork and trial-and-error testing normally associated with racing

performance modifications, Stage Kits include everything you need to enhance your bike's on-track performance, including big-bore cylinders high-compression pistons, racing cams and high-flow air cleaners. Always consult with your dealer about any Stage Kit-related modifications.

PERFORMANCE TUNING

Modifying an EFI-equipped motorcycle for racing is similar to modifying a carbureted model, in that freer-flowing intake and exhaust systems will require more fuel, and increased displacement and compression will require more fuel as well as spark timing changes. Although a carburetor can be tuned for three different engine speeds—idle, low and high—it's still a mechanical system that lacks the precision and flexibility allowed by EFI technology, and it also requires constant manual readjustment depending on racing and track conditions. EFI systems enable you to make fuel flow and ignition timing changes electronically—trackside or in the pits. A self-contained unit that requires no computer interface, the Screamin' Eagle® Pro Race Fueler allows quick tuning of fuel flow on your EFI-equipped bike for high-

volume, performance intake and exhaust systems. Offering the ultimate in EFI performance tuning, the Screamin' Eagle Pro Race Tuner Kit provides tools with which you can edit up to nine different ECM tuning tables that affect not only fuel delivery, but also spark timing using your personal computer. In Tuning Mode, you can alter specific variables in your EFI system, while Data Mode enables you to record and display real-time vehicle data, after which your computer can graphically represent the results of the tuning changes you've made on screen. The Race Tuner Kit software also includes a variety of pre-tuned Screamin' Eagle calibrations for race use that can be saved and loaded into your ECM.

FOR RACE APPLICATION ONLY



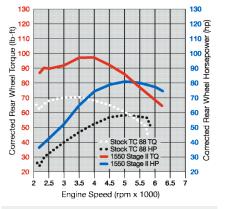
SCREAMIN' EAGLE® CUSTOM CALIBRATIONS FOR YOUR EFI VEHICLE - BIG TWIN

MODEL NAME	CALIBRATION NAME	KIT / CONFIGURATION REQUIRED
	1550 Stage II with or without	Stage II Big Bore Kit P/N 29775-02A, Performance Heads P/N 16952-99B or 16953-99B, and
	Performance Heads	Screamin' Eagle Pro II Slip-fit Mufflers
	1550 Stage II (for FLSTSI only)	Stage II Big Bore Kit P/N 29775-02A and Slip-fit Mufflers P/N 65116-98A
'01-'04 Dyna & Softail®	1550 High Output	1550 Big Bore Cylinders P/N 16546-99 or 16549-99, SE-257 Cam P/N 25155-00, Air Cleaner P/N 29440-99 Performance Heads P/N 16952-99B or 16953-99B, High-Compression Forged Pistons P/N 22868-00, and Screamin' Eagle Pro II Slip-fit Mufflers (65116-98A for FLSTS models only)
	103 CI Stroker High Output	103 CI Stroker Flywheels P/N 23703-02, 1550 Big Bore Cylinders P/N 16546-99 or 16549-99, Stroker Forged Pistons P/N 22942-00, SE-258 Cam P/N 25137-00, Air Cleaner P/N 29440-99B, Performance Heads P/N 16952-99B or 16953-99B, and Slip-fit Mufflers
	1550 Stage II	Stage II Big Bore Kit P/N 29775-02A and
	1000 dtage II	Slip-fit Mufflers P/N 65115-98B
	1550 Stage II with Performance heads	Stage II Big Bore Kit P/N 29775-02A, Performance Heads P/N 16952-99B or 16953-99B, and Slip-fit Mufflers P/N 65115-98B
	1550 High Output	1550 Big Bore Cylinders P/N 16546-99 or 16549-99, SE-257 Cam P/N 25155-00, Air Cleaner P/N 29440-99
'02-'04 Touring		Performance Heads P/N 16952-99B or 16953-99B, High-Compression Forged Pistons P/N 22868-00, and Slip-fit Mufflers P/N 65115-98B
	103 Cl Stroker High Output	103 CI Stroker Flywheels P/N 23600-00, 1550 Big Bore Cylinders P/N 16546-99 or 16549-99, Stroker Forged Pistons P/N 22942-00, SE-258 Cam P/N 25137-00, Air Cleaner P/N 29440-99B, Performance Heads P/N 16952-99B or 16953-99B, and Slip-fit Mufflers P/N 65115-98B
	103 Cl Stage I Race	Air Cleaner P/N 29440-99B
	(2003 FLHRSEI ² or 2004 FLHTCSE)	Slip-fit Mufflers P/N 65115-98B
	1550 Stage II	Stage II Big Bore Kit P/N 29492-99C and
	1000 Stage II	Slip-fit Mufflers P/N 65115-98B
'99-'01 Touring	1550 High Output	1550 Big Bore Cylinders P/N 16546-99 or 16549-99, SE-257 Cam P/N 25155-00, Air Cleaner P/N 29440-99. Performance Heads P/N 16952-99B or 16953-99B, High-Compression Forged Pistons P/N 22868-00
	103 CI Stroker	and Slip-fit Mufflers P/N 65115-98B 103 CI Stroker Flywheels P/N 23600-00, 1550 Big Bore Cylinders P/N 16546-99 or 16549-99,
	with 43MM Induction Module	Stroker Frywheels P/N 23000-00, 1330 Big Bore Cyllinders P/N 16340-39 of 16349-99, Stroker Forged Pistons P/N 22942-00, 43MM Induction Module P/N27615-00, SE-258 Cam P/N 25137-00, Performance Heads P/N 16952-99B or 16953-99B, and Slip-fit Mufflers P/N 65115-98B
	Stage II	Stage II Kit P/N 29934-97B and Performance Mufflers P/N 65259-00
' 95-'98 Touring (EVO)	Stage II High Compression	Stage II Kit P/N 29934-97B with raised compression (up to 10.2:1) and Performance Mufflers P/N 65259-0
	Stage II with Screamin' Eagle Heads	Stage II Kit P/N 29934-97B, Evolution® Heads P/N 16851-98A, 16854-98A, or 16976-99A, and Performance Mufflers P/N 65259-00
5 and '96 models require new ECM, P/N 32423-97B.	43MM Induction Module High Output	43MM Induction Module P/N 27941-00, Evolution Heads P/N 16851-98A, 16854-98A, or 16976-99A, High-
	Towns anduction would riight Output	Compression Pistons P/N 22766-98, SE-57 Cam P/N 25754-97 and Performance Mufflers P/N 65259-00

SCREAMIN' EAGLE® CUSTOM CALIBRATIONS FOR YOUR EFI VEHICLE - V-ROD® + V-

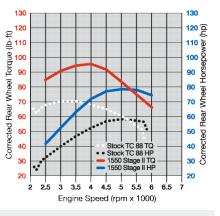
MODEL NAME	CALIBRATION NAME	KIT / CONFIGURATION REQUIRED
	Performance Slip-fit Muffler	Slip-fit Muffler Kit P/N 65030-02
4-later VRSCA		Performance Air Cleaner P/N 29793-02
(DOMESTIC)	16 Gauge Double Barrel Muffler Kit	16 Gauge Double Barrel Muffler Kit P/N 64798-02
		Performance Air Cleaner P/N 29793-02
	28 Tooth Sprocket Kit	28 Tooth Sprocket Kit P/N 40014-04K
		Stock Exhaust
		Stock Air Cleaner
	Performance Slip-fit Muffler	Slip-fit Muffler Kit P/N 65030-02
		Performance Air Cleaner P/N 29793-02
	16 Gauge Double Barrel Muffler Kit	16 Gauge Double Barrel Muffler Kit P/N 64798-02
02-'03 VRSCA (DOMESTIC)		Performance Air Cleaner P/N 29793-02
(DOMESTIC)	Performance Slip-fit Muffler	Slip-fit Muffler Kit P/N 65030-02
	and 28 Tooth Sprocket Kit	Performance Air Cleaner P/N 29793-02
		28 Tooth Sprocket Kit P/N 40014-04K
	16 Gauge Double Barrel Muffler and	16 Gauge Double Barrel Muffler Kit P/N 64798-02
	28 Tooth Sprocket Kit	Performance Air Cleaner P/N 29793-02
		28 Tooth Sprocket Kit P/N 40014-04K
	Performance Slip-fit Muffler	Slip-fit Muffler Kit P/N 65030-02
	· ·	Performance Air Cleaner P/N 29793-02
	16 Gauge Double Barrel Muffler Kit	16 Gauge Double Barrel Muffler Kit P/N 64798-02
02-'04 VRSCA		Performance Air Cleaner P/N 29793-02
(HDI)	Performance Slip-fit Muffler and	Slip-fit Muffler Kit P/N 65030-02
	28 Tooth Sprocket Kit ('02 & '03 only)	Performance Air Cleaner P/N 29793-02
		28 Tooth Sprocket Kit P/N 40008-04K

V-Rod calibrations listed can be used with or without airbox lid. Removing lid will increase horsepower output. Dealer modification required.



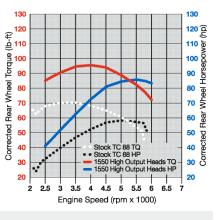
EFI TWIN CAM 88 STOCK VS. 1550 STAGE II KIT

Big-Bore Stage II Kit	29914-01
Slip-fit Mufflers	65115-98E



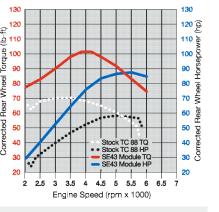
EFI TWIN CAM 88 STOCK VS. 1550 STAGE II KIT WITH HEADS

Big-Bore Stage II Kit	29914-01
Twin Cam Performance Heads	16952-99A
Calibration Cartridge	32103-01
Slip-Fit Mufflers	80349-00A



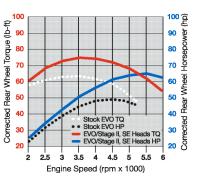
EFI TWIN CAM 88 STOCK VS. 1550 HIGH OUTPUT

Air Cleaner and Breather Kit	29440-994
Big Bore Cylinders	16549-99
Quick-Install Adjustable Pushrods	17997-99A
SE-257 Cam Kit	25155-00
Twin Cam High Compression	
Big Bore Forged Pistons	22868-00
Twin Cam Performance Heads	16952-99A
Calibration Cartridge	32109-01
Slip-Fit Mufflers	80349-00A



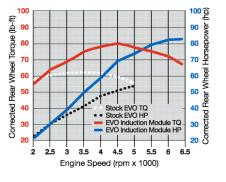
EFI TWIN CAM 88 STOCK VS. 103 C.I. WITH 43MM INDUCTION MODULE

103 CI Stroker Flywheels	23600-00
1550 Big Bore Cylinders	16546-99
Stroker Forged Pistons	22942-00
43MM Induction Module	27615-00
SE-258 Cam	25137-00
Performance Heads	16952-99A
Slip-fit Mufflers	65115-98B



EFI EVOLUTION 1340 STAGE II WITH HEADS

EVO Stage II EFI Kit	29934-97B
Evolution 1340 Cylinder Heads	16854-98A
Calibration Cartridge	32452-00
Performance Mufflers	65115-98B



EFI EVOLUTION 1340 WITH 43MM INDUCTION MODULE AND HEADS

43MM Induction Module	27941-00
Evolution 1340 Cylinder Heads (silver) 16851-98A
High Compression Pistons	22766-98
SE-57 Cam	25754-97
Performance Mufflers	65259-00

29

This larger bore (43mm versus 38mm stock) induction module is designed to flow more air and fuel to support high-revving, high horsepower race-use engines, and works in conjunction with Stroker Flywheels, Screamin' Eagle Twin Cam performance heads, SE257 cams, and 10.5:1 compression ratio Big Bore pistons. The module houses 2 fuel injectors, that are targeted directly at the intake valves for precise fuel delivery. These injectors utilize the same advance technology and design as found in today's Original Equipment EFI system. Kit includes the induction module, fuel lines, and unique Screamin' Eagle high flow air cleaner and breather. Requires ECM recalibration. For race application only.

27615-00 Fits '99-'01 Twin Cam EFI Touring models. '99 models also require (2) fuel tank adapters, P/N 62026-00. Sold separately. \$ 149.95 \$1.149.90 Required ECM Calibration.* Total Package Price.

27941-00 Fits '95-'98 Evolution® 1340-equipped EFI models. '95-'96 models require installation of ECM P/N 32423-97B to allow required recalibration. Sold Separately.

Required ECM Calibration.** \$ 149.95 \$1.189.90 Total Package Price.

*Recalibration is required for proper installation, and will allow engine to rev to 6200 RPM. See dealer for details. Labor cost not included.

SCREAMIN' EAGLE PRO EFI INDUCTION MODULE FUEL TANK ADAPTER (not shown) Sold individually, two are required for installation.

62026-00 Required for installation of Screamin' Eagle EFI Induction Module P/N 27615-00 on '99 Twin Cam-equipped models. \$19.95

SCREAMIN' EAGLE PRO EFI INDUCTION MODULE REBUILD KIT (not shown)

This rebuild kit includes the proper O-rings, washers and retainers required to rebuild the Screamin' Eagle Induction Module. For race application only.

27500-01 Fits Screamin' Eagle Induction Module P/N 27615-00 or 27941-00. **\$44**.

C. SCREAMIN' EAGLE EVOLUTION 1340

EFI STAGE II PERFORMANCE KIT This 50-state legal kit increases torque over 15% at 4000 RPM with a peak horsepower increase of over 20% percent. Stage II Kit includes air cleaner and breather kit, unique cam shaft (SE3), larger capacity (41%) high flow fuel injectors, and all required hardware.

29934-97B Fits '97-'98 Evolution 1340-equipped EFI models only. Also fits '95-'96 Evolution 1340-equipped EFI models when used with ECM P/N 32423-97B. (Does not fit Twin Cam \$389.95

88-equipped models.) Required ECM Calibration.* Total Package Price.

\$149.95

\$139.95

*Recalibration is required for proper installation, and will allow engine to rev to 6000 RPM. See dealer for details. Labor cost not included.

CAUTION: Harley-Davidson EFI systems will not compensate for any component changes. Do not mill heads or increase compression in any way. Do not use any camshaft other than the one supplied in the kit. Failure to comply may result in engine damage.

D. SCREAMIN' EAGLE PRO AIR CLEANER AND BREATHER KITS FOR TWIN CAM EQUIPPED MODELS

These kits are designed to provide large volumes of clean, stable air to the engine. The die-cast backplate and high-flow, oiled, washable air filter provide superior form & function. The crankcase breather system now utilizes individual breather hoses that direct the breather gases directly into the mouth of the carburetor, or EFI induction module, to minimize excess oil in the system Kit includes all required hardware and installation instructions. For race application only.

29440-99B Fits all '99-later Dyna, '00-later Softail®, '99-later Touring models (except '99-'01 EFI) with EFI, or, stock, Screamin' Eagle Flatslide or Screamin' Eagle CV carburetors (except

CV51 Super Bore).

29441-99A Fits '99-'01 EFI Touring models. (not shown)

CAUTION: Installation of this kit requires jetting or recalibration for proper function. Failure to do so may cause a lean fuel condition which may result in engine damage.

A. SCREAMIN' EAGLE® PRO BIG BORE STAGE II KIT FOR EFI MODELS

When stock cams just won't do. This Big Bore Kit provides the parts you need to increase the horsepower of your EFI-equipped model. The kit increases the displacement of your Twin Cam 88° from 88 cubic inches (1450cc) to 95 cubic inches (1550cc). Includes Stage II (SE203) cams, cylinders, pistons, clips, air cleaner and breather, high performance clutch spring, hardware and gaskets. Cam Spacer Kit P/N 25938-00 is recommended. This kit contains an assortment of 5 different spacers to achieve proper sprocket alignment. Individual spacers can be purchased separately. Requires separate purchase of primary cover gasket. (Not all components shown.) For race application only.

29859-04 Silver. Fits '01-later EFI Softail® models, '02-later EFI Touring models and '04-later EFI Dyna models. \$809.95 Required FCM Calibration * \$149.95 Total Package Price. 29775-02A Black.

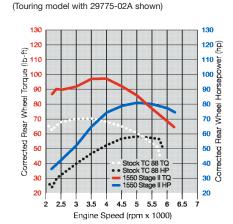
Fits '01-later EFI Softail® models, '02-later EFI Touring models and '04-later EFI Dyna models. \$809.95 Required ECM Calibration.* \$149.95 Total Package Price. 29492-99C Black

Fits '99-'01 fuel-injected Touring models, '99 models require Splined Cam Sprocket P/N 25716-99. (not shown) \$809.95 Required ECM Calibration. **\$149.95** Total Package Price.

*Recalibration is required for proper installation, and will allow engine to rev to 6200 RPM. See dealer for details. Labor cost not included.

NOTE: Refer to the Screamin' Eagle Custom Calibration Matrix on page 26 to determine which Screamin' Eagle Mufflers are applicable for EFI Stage Kits. Failure to use the designated muffler may lead to driveability issues.

TWIN CAM 88 STOCK VS. 1550 STAGE II KIT



Corrected torque and horsepower measured at rear wheel on a Dynojet® chassis Dynamometer. Your results may vary.

CAUTION: Harley-Davidson® EFI systems will not compensate for any component changes. Do not mill heads or increase compression in any way. Do not use cams other than those supplied in the kit. Do not change kit components. Failure to comply may result in engine damage.

CAUTION: Dealer installation required - failure to comply may result in a lean fuel condition and severe engine damage.













D. SCREAMIN' EAGLE PRO AIR CLEANER AND BREATHER KITS FOR TWIN CAM EQUIPPED MODELS

Tune the fuel flow on your EFI bike. The tuner can elec-

tronically add fuel in much the same manner as increas-

ing jet size on a carbureted system. It allows for quick

tuning for the addition of less restrictive, free flowing intake and exhaust systems. The Fueler offers "bands

of adjustment that take into account operating ranges,

such as idle, acceleration, and steady speed. The Fueler

is a self-contained unit that requires no computer inter-

face. Adjustments are made by setting fuel. RPM and

accelerator pump potentiometers, with changes moni-

tored on LED indicators. The compact unit is designed

for "plug-in" installation, and the small size allows the

Fueler to remain on the bike for convenient tuning. Tuner

affects fuel delivery only and can not change rev limit or

models, '02-later EFI Touring models, '04 EFI Dyna models

and '02-later V-Rod® models.

spark timing. For race application only.

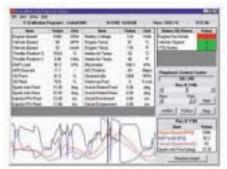
32132-04 Fits '01-later EFI Softail®

B. SCREAMIN' EAGLE® PRO

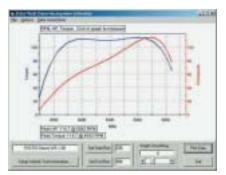
EFI RACE FUELER

A. SCREAMIN' EAGLE® PRO EFI RACE TUNER Updated to include '04 models, V-Rod® tuning capabilities and calibrations for 103 CI Stroker engines. This race-use only software package is a great product for making tuning adjustments to your fuel-injected Harley-Davidson® racer and has much greater capabilities than most competitive EFI tuning products. The EFI Race Tuner software is divided into two modes. Tuning Mode, which allows you to tune certain variables of the EFI system, and Data Mode, which can record and display real-time vehicle data. It can then graphically represent the tuning changes that have been made. This is exactly what racers of EFI-equipped Harley-Davidson® motorcycles have been asking for...a way to tune their vehicle for ever-changing track conditions and performance product combinations. Data Mode can even produce horsepower and torque charts and multiple speed-to-distance estimates based upon the recorded data from your last run down the drag strip. The software is capable of monitoring up to 28 variables and with such sophistication, it is the ultimate tool for tuning and gaining that edge on the track. Performance is the key and this product comes complete with many raceuse Screamin' Eagle calibrations, which may be downloaded and tuned to maximize the horsepower and torque of your EFI racer. The complete kit includes the tuning software on a CD, a communications interface that electronically locks to the ECM, and the required cables to connect to a PC and the vehicle. The software also contains an electronic User's Manual that explains the Harley-Davidson EFI system and the EFI Race Tuner's capabilities. This manual can be referred to as you are tuning on the track or in the pits. Installation and effective tuning requires a high degree of skill and therefore dealer installation is required. Minimum PC requirements are Windows 98, CD-ROM drive, serial port, 32 MB RAM, and 10 MB hard drive space. For race appli-

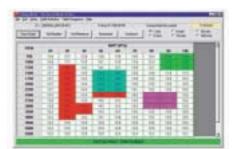
32107-01B Fits '01-later EFI Softail® models, '02-later EFI Touring models, '04-later EFI Dyna and '02-later VRSC models. **\$459.95**



Data Mode Screen



Horsepower Screen



Air/Fuel Ratio Screen



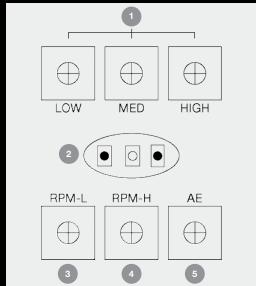
A. SCREAMIN' EAGLE PRO EFI RACE TUNER

A. SCREAMIN' EAGLE PRO EFI RACE TUNER

B. SCREAMIN' EAGLE PRO EFI RACE FUELER



B. SCREAMIN' EAGLE PRO EFI RACE FUELER



1 Low, Mid and High Range Fuel Potentiometer.

2 Low, Mid and High Range LED Indicators.

3 Mid to Mid RPM Range Potentiometer.

4 Mid to High RPM Range Potentiometer.

5 Accelerator Pump Output Potentiometer.

RACE FUELER ADJUSTMENTS