VANCE & HINES MOTORSPORTS

V-TWIN Retail Catalog

2023 & 2026

King of the Baggers Champions

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At Vance & Hines Motorsports, we don't just serve the V-Twin market—we help define it. Backed by more than four decades of championship-winning experience in racing and performance engineering, our products and services are built to the same uncompromising standards trusted by top teams in MotoAmerica, NHRA, AFT, and beyond. **Every cylinder head, camshaft, exhaust, and performance package is born from real-world competition, refined with precision CNC machining, and proven on the track before it ever reaches you.** When you choose Vance & Hines Motorsports, you're not just buying parts—you're investing in unmatched expertise, race-proven reliability, and a partner committed to making your V-Twin perform at its absolute best.

VANCE & HINES MOTORSPORTS

RACE COMPONENTS

Did you know? Vance & Hines has **nearly 50 years of racing heritage** across NHRA, AMA Superbike, AFT, and MotoAmerica—all driving the development of our V-Twin performance products.

RACE COMPONENTS - PROVENT BREATHER

Part #	Description	Fitment	Retail
41-1000	ProVent Engine Breather (Gen 1 *Non VVT Models)	M8 17-23	$999.99
41-1100	ProVent Engine Breather (Gen 2 *VVT Models) **NEW RELEASE!**	M8 2023.5+	$1,089.99

Unmatched Oil Control for Harley-Davidson Competition Engines

The Harley-Davidson M-8 ProVent Engine Breather is a specialized billet cam cover, **designed specifically for high-performance racing M8 engines like the SE 131 crate engines and SE stage IV kit builds**, particularly those with large cam profiles.

Its primary function is to reduce crankcase pressure, enhancing the engine's overall performance and durability. **This is achieved through an innovative oil separation mechanism using a centrifugal breather, which ensures superior engine oil containment. An integral part of our design is the built-in reed valve system, seamlessly integrated into the cam cover.** This system is engineered to use the stock cam drive system, ensuring ease of installation and compatibility.

- Developed and Built by Vance & Hines Motorsports
- Intended for Use on High-Performance Racing M-8 engines (e.g. SE 131 Crate Engines, SE stage IV Kit Builds, Large Cam, Etc.)
- Reduces Crankcase Pressure
- Oil Separation Through Centrifugal Breather, Which Allows for Better Engine Oil Containment
- Billet Cam Cover with Built-In Reed Valve System
- Uses Stock Cam Drive System
- Compatible with Non and VVT Models
- **Patent Pending**

Did you know? King of the Baggers provides **real-world R&D**, pushing Vance & Hines Motorsports race parts to the limit under every condition.

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RACE COMPONENTS - PRIMARY COVER / REARSET KIT

Part #	Description	Fitment	Retail
41-1006	Primary Cover / Rearset Kit **NEW RELEASE!**	M8 Touring Models	$3,949.99

Designed and Engineered Through Our King of the Baggers Race Program

- Designed to Improve Ground Clearance and Support Increased Lean Angle
- Rearset Position Optimized for Race-Oriented Ergonomics
- Machined From 6061-T6 Aluminum
- Black Anodized Finish
- Designed to Work With Discacciati Thumb Brake System
- Complete Kit Includes:
  - Primary Cover With Engraved V&H Logo
  - Derby Cover
  - Stainless Steel Skid Plate
  - Footpegs
  - Brake Lever and Linkage
  - Shifter Lever and Linkage
  - Hardware
  - Fits M8 Touring Models

Did you know? Hayden Gillim has won King Of The Baggers Championships on **both sides of the American V-Twin rivalry**—Harley-Davidson in 2023 and Indian Motorcycle in 2026, both with Vance & Hines Motorsports.

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RACE COMPONENTS - HI-OUTPUT 2:1 EXHAUST

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

Part #	Description	Fitment	Retail
16200	Hi-Output 2:1 Competition Series Exhaust	M8 17-23 Touring	$1,899.99

Inspired by MotoAmerica King Of The Baggers

Exhaust Features:

- Stepped Headers from 2.000″ to 2.125″ to 2.250″
- Oversized / Rotated Collector for Added Ground Clearance
- 304 Stainless Steel Construction
- Hand TIG Welded
- Available in Brushed Works Finish
- Ceramic Coated Billet End Cap
- Double-Layered Waterjet Cut Riveted V&H Badge
- Designed for Use With Rear Set Controls Only
- O2 sensor bung for wideband air/fuel ratio monitoring
- Designed for Racing Use
- Fitment 17-23.5 M-8 Engines

Did you know Vance & Hines pioneered the **aftermarket 4:1 exhaust system** for sportbikes, setting a standard that's still used across racing today?

FOR CLOSED-COURSE COMPETITION USE ONLY. NOT INTENDED FOR STREET USE.

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RACE COMPONENTS - HI-OUTPUT 2:1 EXHAUST

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

Part #	Description	Fitment	Retail
16201	Hi-Output 2:1 Competition Series Exhaust	M8 Touring (All)	$1,949.99

Born From Bagger Racing League (BRL) Competition

Exhaust Features:

- Stepped Headers from 2.000″ to 2.250″
- Oversized / Rotated Collector for Added Ground Clearance
- Lightweight High Grade 304 Stainless Steel Construction
- Hand TIG Welded
- Available in Brushed Works Finish
- Ceramic Coated Billet End Cap
- Double-Layered Waterjet Cut Riveted V&H Badge
- Designed for Use With Either Rear Or Mid Controls
- O2 sensor Bung for Wideband Air/Fuel Ratio Monitoring
- Designed for Racing Use

Did you know? BRL allows broader technical freedom, making it a proving ground for aftermarket parts, engine builds, and custom setups.

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RACE COMPONENTS - RACE PRO KIT

Part #	Description	Fitment	Retail
35-5063P	Race Pro Kit	M8 17-23	$2,949.99

Unlock Untapped Power – Designed for 131ci and Larger Engines

Race Pro Kit Features:

- CNC Porting for Improved Airflow
- Welding and Decking of Head Surfaces to Optimize Compression
- Installation of High-Grade Intake and Exhaust Seats
- Precision CNC Full Radius Valve Job to Enhance Airflow Dynamics
- Blended Ports and Chambers for Smooth Transitions
- VHM 1.650” Intake and 1.340” Exhaust Valves (+2mm)
- .625” Lift Spring Kit for Superior Valve Control
- Viton Valve Seals for Enhanced Sealing Under Extreme Conditions
- Optimized 88.8cc Chamber Volume for Increased Power Output.

Intake Plenum Kit (Included):

- 2.100” Hi-Performance Intake Plenum for Increased Air Volume
- Integrated Fuel Rail for Improved Fuel Delivery
- Advanced Air Cleaner System to Enhance Filtration
- Dyno-Tested on a 131ci Engine with VHM Spec Enhancements
- 12% Increase in Horsepower and a 3.5% Increase in Torque Across the RPM Range (V5 vs V3 VHM Head Packages)
- Up to 209% More Horsepower and 41% More Torque Compared to a Stock 114ci Engine
- Enhanced Throttle Response, High-Flow Efficiency, and Smoother Powerband
- Ideal for Racing and Performance Enthusiasts

(Modified Customer-Supplied Cylinder Heads)

Did you know Vance & Hines developed the original **Harley-Davidson Screamin’ Eagle V-Rod drag bike**, which dominated NHRA competition for years?

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2026 King of the Baggers Champions

HAYDEN GILLIM

TROY HERFOSS

Factory Indian rider Hayden Gillim finished **1st in the 2026 season championship**, with teammate Troy Herfoss securing **3rd overall**.

VALVETRAIN COMPONENTS

Question: Which iconic race series **directly influences the cylinder head packages and V-Twin performance parts** available from Vance & Hines Motorsports? Answer: MotoAmerica King of the Baggers

VALVETRAIN - VALVES SOLD INDIVIDUALLY

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

Part #	Description	Fitment	Retail
40-5-0010	1.575” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-0011	1.610” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-0012	1.630” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-12IN	1.630” Exhaust Inconel 7mm Stem	Twin Cam 05-17	$39.50
40-5-0013	1.650” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-0015	1.260” Exhaust Inconel	M8 17- Current	$39.50
40-5-0016	1.300” Exhaust Inconel +1mm	M8 17- Current	$39.50
40-5-0017	1.340” Exhaust Inconel +2mm	M8 17- Current	$39.50
40-5-0018	1.380” Exhaust Inconel +3mm	M8 17- Current	$39.50
40-5-0019	1.410” Exhaust Inconel +4mm	M8 17- Current	$39.50
40-5-0020	1.805” Intake Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-0021	1.900” Intake Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-0022	2.000” Intake Stainless 7mm Stem	Twin Cam 05-17	$33.25
40-5-22HS	2.000” Intake Stainless 7mm Hollow Stem	Twin Cam 05-17	$61.25
40-5-0025	1.570” Intake Stainless	M8 17- Current	$33.25
40-5-0026	1.610” Intake Stainless +1mm	M8 17- Current	$33.25
40-5-0027	1.650” Intake Stainless +2mm	M8 17- Current	$33.25
40-5-0028	1.690” Intake Stainless +3mm	M8 17- Current	$33.25
40-5-0029	1.730” Intake Stainless +4mm	M8 17- Current	$33.25

- Precision CNC Machined from a One-Piece Forging for Higher Strength & Durability
- High-Grade Alloy to Withstand High Heat and Maintain Roundness
- Micro Polished Stem for Smoother Finish and Less Friction Resulting in Improved Performance
- Multi Angle Back Cuts for Enhanced Flow

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VALVETRAIN - VALVES SOLD AS KIT

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

Part #	Description	Fitment	Retail
35-4510	1.575” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4511	1.610” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4512	1.630” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4514	1.630” Exhaust Inconel 7mm Stem	Twin Cam 05-17	$79.00
35-4513	1.650” Exhaust Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4515	1.260” Exhaust Inconel	M8 17- Current	$158.00
35-4516	1.300” Exhaust Inconel +1mm	M8 17- Current	$158.00
35-4517	1.340” Exhaust Inconel +2mm	M8 17- Current	$158.00
35-4518	1.380” Exhaust Inconel +3mm	M8 17- Current	$158.00
35-4519	1.410” Exhaust Inconel +4mm	M8 17- Current	$158.00
35-4520	1.805” Intake Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4521	1.900” Intake Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4522	2.000” Intake Stainless 7mm Stem	Twin Cam 05-17	$66.50
35-4524	2.000” Intake Stainless 7mm Hollow Stem	Twin Cam 05-17	$116.50
35-4525	1.570” Intake Stainless	M8 17- Current	$133.00
35-4526	1.610” Intake Stainless +1mm	M8 17- Current	$133.00
35-4527	1.650” Intake Stainless +2mm	M8 17- Current	$133.00
35-4528	1.690” Intake Stainless +3mm	M8 17- Current	$133.00
35-4529	1.730” Intake Stainless +4mm	M8 17- Current	$133.00

- Precision CNC Machined from a One-Piece Forging for Higher Strength & Durability
- High-Grade Alloy to Withstand High Heat and Maintain Roundness
- Micro Polished Stem for Smoother Finish and Less Friction Resulting in Improved Performance
- Multi Angle Back Cuts for Enhanced Flow

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VALVETRAIN - VHM SPEC CAMSHAFT

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

Part #	Description	Fitment	Retail
41-0083	VHM Race Spec Camshaft	M8 17- Current	$424.99
41-0091	VHM Race Spec Vented Camshaft **NEW RELEASE!**	M8 17- Current	$469.99

Engineered for 131ci and Larger Displacement Engines

This camshaft is **tailored for high-compression setups of 11.5:1 and above**, making it an excellent match for your M-8 engine. It **enhances power** and **torque throughout the mid and upper RPM ranges**, ensuring your motorcycle performs at its best, especially when combined with our VHM Race Pro cylinder head package and 2.100" intake plenum system.

- Silent Ramp Profile to Reduce Valvetrain Noise, Providing a Smoother and Quieter Ride
- Requires High-Lift Springs (minimum 0.560") to Accommodate the Enhanced Lift
- Hydraulic Roller Cam Type to Minimize Friction and Wear at High RPMs
- Operates Efficiently Across a Wide Range from 2,000 to 6,800 RPM
- Proudly Made in the U.S.A.
- **Non VVT Engines**
- **Patent Pending**

Position	Valve Lift	Open	Close	Duration @ .050"	Lift @ TDC	Lobe Centerline
Intake	0.560"	22	52	254	0.200"	105
Exhaust	0.560"	69	18	267	0.118"	115

Did you know? Every new product line, from race exhausts to camshafts, **gets proven on the track** with Vance & Hines' racing teams **before reaching customers.**

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VALVETRAIN - SPRING KIT, VALVE SEAT, VALVE GUIDE

Part #	Description	Fitment	Retail
35-4500	.600” Lift Beehive Spring Kit	Twin Cam 05-17	$210.00
35-4506	Intake Valve Seat	Twin Cam 05-17	$10.50
35-4507	Exhaust Valve Seat	Twin Cam 05-17	$10.50
35-4508	Valve Guide 7mm	Twin Cam 05-17	$13.00
35-4509	Intake Valve Seat (Oil-Cooled)	M8 17- Current	$21.99
35-4529	Intake Valve Seat (Water-Cooled)	M8 17- Current	$21.99
35-4571	.675” Lift Beehive Spring Kit (Non-VVT) **NEW RELEASE!**	M8 17- Current	$564.99

- Supports High-Lift Camshafts with up to .675" Lift
- Provides 100 lbs. of Seat Pressure
- Pre-hardened 4140 Alloy Steel Top Retainers
- Triple-Groove Billet Valve Locks
- Includes 4140 Steel .030" Spring Base
- Optional .045" Spring Base Available
- Viton Valve Seals
- Maintains Proper Lift Clearance at the Stock 1.715" Valve Stem Height
- Developed and Tested through our King of the Baggers Race Program
- Made in the USA

- Proprietary Alloy Designed with High-Level Thermal Properties
- Engineered and Tested to Perform Under the Most Extreme Conditions
- Designed for Durability and Longevity
- Excellent Machinability and Wear Resistance

- Direct O.E. Replacement
- Shouldered Guide for Positive Stop
- Designed for Durability and Longevity
- Precision Machined for Concentricity
- Tapered to Prevent Galling During Installation

Did you know many of today’s **cylinder head and valvetrain technologies** in this catalog **trace directly back to R&D** from Vance & Hines’ factory race programs?

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x15 NHRA PSM CHAMPIONS

Did you know Vance & Hines Motorsports is the **winningest team in NHRA Pro Stock Motorcycle history**, with *dozens of championships and over 100 Wally trophies*?

CYLINDER HEAD SERVICES

Did you know the same **Serdi valve seat cutting machines and Centroid CNC porting equipment** trusted for MotoAmerica race heads are used daily on customer jobs at Vance & Hines Motorsports?

CYLINDER HEAD SERVICES - H-D TWIN CAM

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

V1 - PERFORMANCE PLUS

This package is designed to enhance engine performance for stock-style rebuilds with up to 10.5:1 compression, addressing the limitations of factory power output. Our Street Port offers significant gains, maximizing the performance of a "streetable" bike using original cylinder head components. It is crafted to improve lower and mid-level performance without sacrificing driveability. **This Head Package Includes:**

• CNC Porting • Head Surfacing .010″ • CNC Valve Job • Port / Chamber Blending • VHM 1.805" Intake SS Valve • VHM 1.575" Exhaust Inconel Valve • VHM .600" Lift Spring Kit • Viton Valve Seals
• Machined VHM Logo

V2 - PERFORMANCE PRO

The Vance & Hines Motorsports cylinder head service package is intended for modified engines up to 113ci and 10.5:1 compression. It is designed to enhance mid and upper RPM range performance while increasing top-end power. **This Head Package Includes:**

• CNC Porting • Head Surfacing up to .025″ • CNC Valve Job • Port / Chamber Blending • VHM 1.900″ Intake SS Valve • VHM 1.610″ Exhaust Inconel Valve • VHM .600" Lift Spring Kit • Viton Valve Seals
• Machined VHM Logo

V3 - RACE PLUS

The Vance & Hines Motorsports cylinder head service package is intended for modified engines up to 117ci and above 10.6:1 compression, as well as those with power adders. It is designed to enhance mid and upper RPM range performance while increasing top-end power. **This Head Package Includes:**

• CNC Porting • Head Surfacing up to .025″ • CNC Valve Job • Port / Chamber Blending • VHM 1.900″ Intake SS Valve • VHM 1.630″ Exhaust Inconel Valve • VHM .600" Lift Spring Kit • Viton Valve Seals
• Machined VHM Logo

V4 - RACE PRO

Designed for high-performance, heavily modified, large-displacement engines up to 131ci, this is the top-tier cylinder head service offered by Vance & Hines Motorsports. Utilizing technology developed in collaboration with many factory teams and some of racing's most accomplished riders, this package is engineered for optimal power output for your V-Twin engine. **This Head Package Includes:**

• CNC Porting • Head Surfacing up to .025″ • CNC Valve Job • Port / Chamber Blending • VHM 2.000″ Intake SS Valve • VHM 1.630″ or 1.650" Exh Inconel • Viton Valve Seals • Valve Guides
• Intake & Exhaust Seats • .675 Steel Retainer Dual Spring Kit • Machined VHM Logo

Did you know Vance & Hines played a key role in the birth of **AMA Superbike racing in the 1980s**, helping Yamaha and Suzuki secure championships?

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CYLINDER HEAD SERVICES - H-D MILWAUKEE-EIGHT

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

V1 - PERFORMANCE PLUS

The **V1 Performance Plus** package is specifically crafted to optimize 107ci to 117ci displacement engines, delivering increased horsepower and torque. Engineered to maximize head potential, this package achieves impressive gains while maintaining the original valve sizes. **This Head Package Includes:**

• CNC Porting • Weld & Deck Head Surfaces .010” • Blend Ports and Chambers • CNC Full Radius Valve Job • VHM 1.570" Intake Stainless Steel Valve • VHM 1.260" Exhaust Inconel Valve • .550" Lift Beehive Spring Kit with Steel Retainers • Viton Valve Seals • 86.2cc Chamber Volume • Machined VHM Logo

V2 - PERFORMANCE PRO

The **V2 Performance Pro** cylinder head service package is designed for race-modified engines ranging from 107 to 128 ci displacement. The Pro Performance Port enhances mid-to-upper RPM ranges, delivering significant horsepower and torque gains through the rev limit, all without sacrificing drivability. For optimal results, pairing this package with a larger throttle body is recommended to further boost head performance. **This Head Package Includes:**

• CNC Porting • Weld & Deck Head Surfaces .010” • Blend Ports and Chambers • CNC Full Radius Valve Job • VHM 1.610" Intake Stainless Steel Valve +1mm • VHM 1.300" Exhaust Inconel Valve +1mm • .550" Lift Beehive Spring Kit with Steel Retainers • Viton Valve Seals • 87.2cc Chamber Volume • Machined VHM Logo

V3 - RACE PLUS

Designed for race performance and highly-modified 131 ci and larger engines, the **V3 Race Plus** is a proven cylinder head service with exceptional performance and throttle response offered by Vance & Hines Motorsports. Using technology learned by our factory teams, including some of racing’s most accomplished riders, this package is designed for optimal torque and power output for your V-Twin engine.
This Head Package Includes:

• CNC Porting • Weld & Deck Head Surfaces .010” • Intake & Exhaust Seats Installation • CNC Full Radius Valve Job • Blend Ports and Chambers • VHM 1.650" Intake Stainless Steel Valve +2mm • VHM 1.340" Exhaust Inconel Valve +2mm • .625” Lift Sprint Kit • Viton Valve Seals Installation • 88.8cc Chamber Volume Gen 1 • 87cc Chamber Volume Gen 2 • Machined VHM Logo

V4 - RACE PRO

The **V4 Race Pro** delivers race-proven power with CNC porting, oversized +2mm stainless and Inconel valves, .625” spring kit, optimized chamber volumes, and manifold match for maximum airflow and performance. **This Head Package Includes:**

• CNC Porting • Weld & Deck Head Surfaces .010” • Intake & Exhaust Seats Installation • CNC Full Radius Valve Job • Blend Ports and Chambers • VHM 1.650" Intake Stainless Steel Valve +2mm • VHM 1.340" Exhaust Inconel Valve +2mm • .625” Lift Spring Kit • Viton Valve Seals Installation • 88.8cc Chamber Volume Gen 1 • 87cc Chamber Volume Gen 2 • Oversized Intake Manifold Match & Port Blend • Machined VHM Logo • Customized Intake Port Matching Upon Request

Did you know our cylinder head packages (*V1 – V4*) are modeled after real racing development stages?

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CYLINDER HEAD SERVICES - H-D TWIN CAM

Part #	Description	Fitment	Retail
35-5000	V1 – Performance Plus	Twin Cam 99-05	$999.99
35-5001	V2 – Performance Pro	Twin Cam 99-05	$1,119.99
35-5002	V3 – Race Plus	Twin Cam 99-05	$1,349.99
35-5003	V4 – Race Pro	Twin Cam 99-05	$1,694.99
35-5010	V1 – Performance Plus	Twin Cam 06-16	$999.99
35-5011	V2 – Performance Pro	Twin Cam 06-16	$1,119.99
35-5012	V3 – Race Plus	Twin Cam 06-16	$1,349.99
35-5013	V4 – Race Pro	Twin Cam 06-16	$1,694.99

CYLINDER HEAD SERVICES - H-D MILWAUKEE-EIGHT

Part #	Description	Fitment	Retail
35-5060	V1 – Performance Plus	M8 17-23.5 O/C	$1,599.99
35-5061	V2 – Performance Pro	M8 17-23.5 O/C	$1,749.99
35-5062	V3 – Race Plus	M8 17-23.5 O/C	$1,999.99
35-5063	V4 – Race Pro	M8 17-23.5 O/C	$2,199.99
35-5070	V1 – Performance Plus	M8 17-23.5 W/C	$1,599.99
35-5071	V2 – Performance Pro	M8 17-23.5 W/C	$1,749.99
35-5072	V3 – Race Plus	M8 17-23.5 W/C	$1,999.99
35-5073	V4 – Race Pro	M8 17-23.5 W/C	$2,199.99

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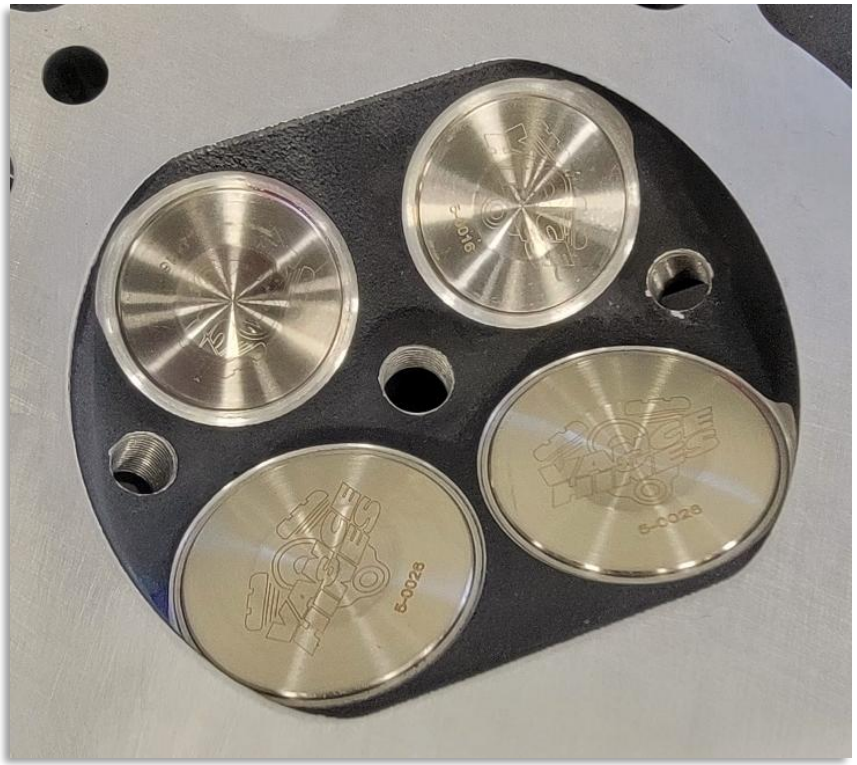
CYLINDER HEAD SERVICES - H-D MILWAUKEE-EIGHT

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

Part #	Description	Fitment	Retail
35-5090	V1 – Performance Plus	M8 23.5+ W/C	$1,599.99
35-5091	V2 – Performance Pro	M8 23.5+ W/C	$1,749.99
35-5092	V3 – Race Plus	M8 23.5+ W/C	$1,999.99
35-5093	V4 – Race Pro	M8 23.5+ W/C	$2,199.99
35-5192	V3 – Race Plus +2mm, +2mm	SCREAMIN' EAGLE S4 M8 23.5+ W/C	$1,999.99
35-5193	V4 – Race Pro +3mm, +3mm	SCREAMIN' EAGLE S4 M8 23.5+ W/C	$2,199.99
35-5194	V4 – Race Pro +3mm, +3mm Power Adder /Moldstar Seats	SCREAMIN' EAGLE S4 M8 23.5+ W/C	$2,379.99



Did you know Vance & Hines played a key role in the birth of **AMA Superbike racing in the 1980s**, helping **Yamaha and Suzuki secure championships?**

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CYLINDER HEAD SERVICES - INDIAN CHALLENGER

This product is not legal for street use on an emissions-controlled vehicle. It may be used on dedicated competition or pre-pollution-controlled vehicles only.

V3 - RACE PLUS

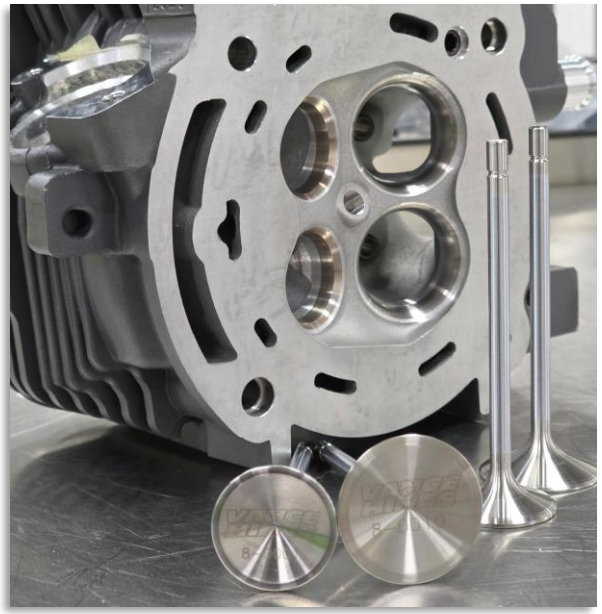
Designed for stock or modified engines with 11.0:1 to 13.0:1 compression, the **V3 Race Plus** utilizes all stock components. This package enhances performance across all RPM ranges while maintaining dependability and can be used with stock or modified induction systems, as well as with power adders. When using stock springs, proper cam selection will further increase power delivery and maximize the effectiveness of the porting work. Before final installation, all valve buckets must be measured to ensure proper lash with the cams. **This Head Package Includes:**

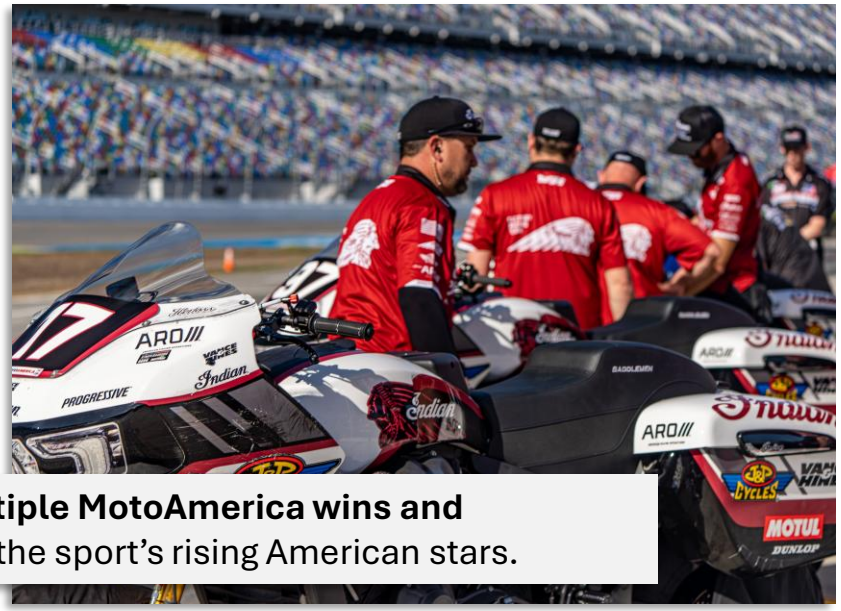
• CNC Porting • Head Surfacing Up to .010” Or Flat • CNC Valve Job • Port / Chamber Blending • Valve Grinding of Stock Valves • Assemble for Installation • Additional Parts Are Extra • 73-74cc Combustion Chamber

V3 - RACE PLUS W/ PARTS

This **V3 Race Plus** package is compatible with stock or modified engines, specifically those with a compression ratio between 11.0:1 and 13.0:1. It can be integrated with various induction systems, including stock, modified, or those utilizing power adders. Careful cam selection is crucial to maximize power delivery and fully leverage the enhancements provided by this work. Expected gains of 42% horsepower and 13% torque over stock as tested. **This Head Package Includes:**

• CNC Porting • Head Surfacing Up to .030” Or Flat • CNC Valve Job • Port / Chamber Blending • 1.693” Intake Valves • 1.417” Exhaust Valves • .520” Lift Beehive Spring Kit • Viton Seals
• Assemble for Installation • Additional Parts Are Extra • 69-73cc Combustion Chamber





Did you know? Rocco Landers has already scored **multiple MotoAmerica wins and championships** in smaller classes, making him one of the sport’s rising American stars.

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CYLINDER HEAD SERVICES - INDIAN CHALLENGER

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Part #	Description	Fitment	Retail
44-5001	V3 – Race Plus	Indian 20-26	$1,599.99
44-5002	V3 – Race Plus (*Parts Included)	Indian 20-26	$2,289.99

Did you know? The 2026 Factory Indian Vance & Hines team includes **two King Of The Baggers Champions** – Troy Herfoss (2024) and Hayden Gillim (2023).

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PERFORMANCE SERVICES - BACKCUT TRANSMISSION

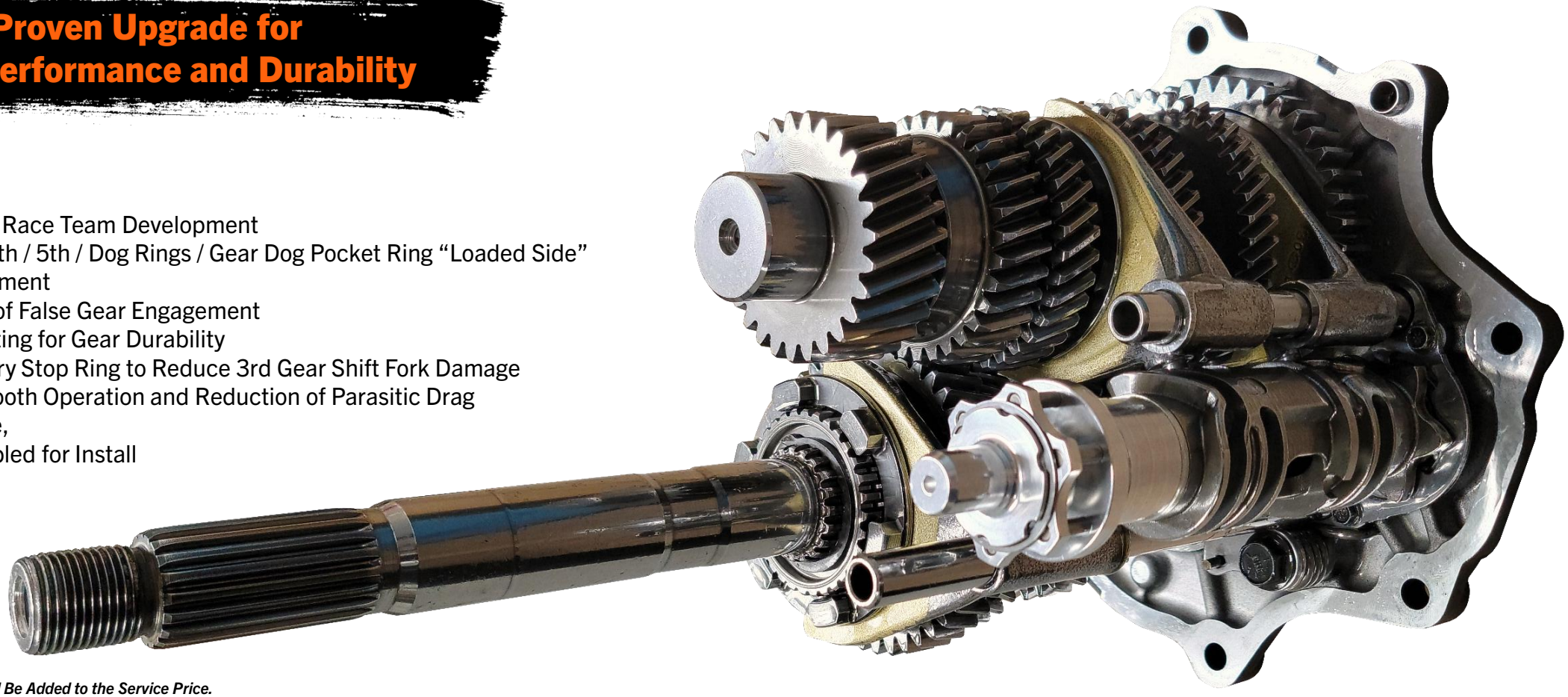
Part #	Description	Fitment	Retail
BACKCUT-GEAR	Backcut Transmission Gears	Noted Below	$1,449.99

Race-Proven Upgrade for Unmatched Performance and Durability

Features:

- VHM King of the Bagger Race Team Development
- Back cut of 2nd / 3rd / 4th / 5th / Dog Rings / Gear Dog Pocket Ring “Loaded Side”
- Better Gear Dog Engagement
- Reduces the Possibility of False Gear Engagement
- Annealed after CNC cutting for Gear Durability
- Includes VHM Proprietary Stop Ring to Reduce 3rd Gear Shift Fork Damage
- REM ISF® Finish for Smooth Operation and Reduction of Parasitic Drag
- Send Cassette Complete,
  Serviced, and Reassembled for Install

Applications
06-17 Twin Cam 6 Speeds
17-Current M8 6 Speeds
21-25 Pan America 1250



** Note: Any Additional Parts Needed Will Be Added to the Service Price.*

Did You Know? Every MotoAmerica Bike We Field Runs Backcut Transmission Gears With REM Superfinish®

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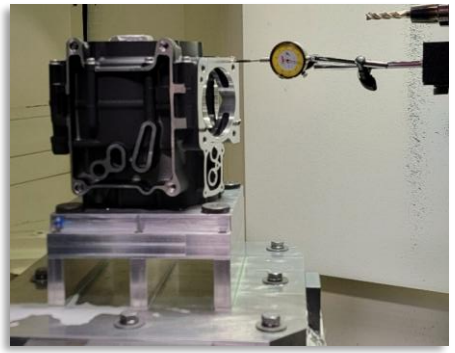
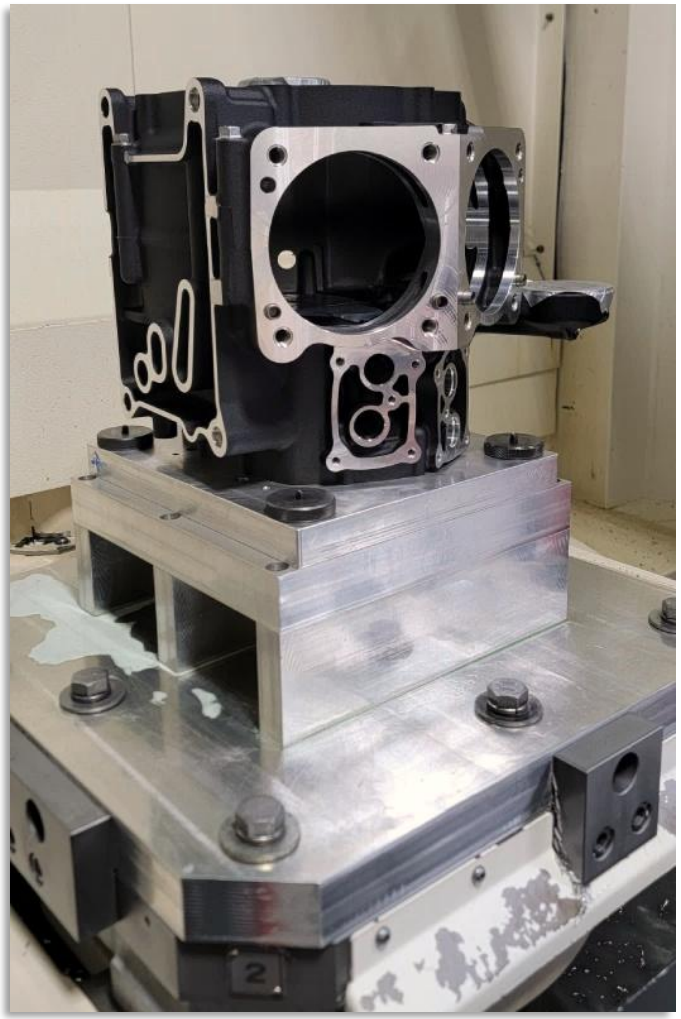
PERFORMANCE SERVICES - PRECISION CASE BORING

Part #	Description	Fitment	Retail
CASE-BORE	Precision Case Boring	99+ V-Twin	$314.99

Proven Precision for Exact Fits on Big Bore Kits

- Precision Case Boring for 1999-Present Harley-Davidson V-Twin Engine Cases
- Tailored for Exact Fits with Big Bore Cylinder Kits
- Comprehensive Inspection & Prep of Engine Cases Prior to Machining
- Advanced Mazak HCN-5000 Precision Boring Process
- Damaged Component Replacement Available
- Powder Coating Available As Optional Finishing Service
- Additional Parts & Powder Coating May Affect Overall Cost Lead Time





Did you know Vance & Hines is the **only team to have competed and won at the highest levels** in drag racing, flat track, road racing, and now King of the Baggers?

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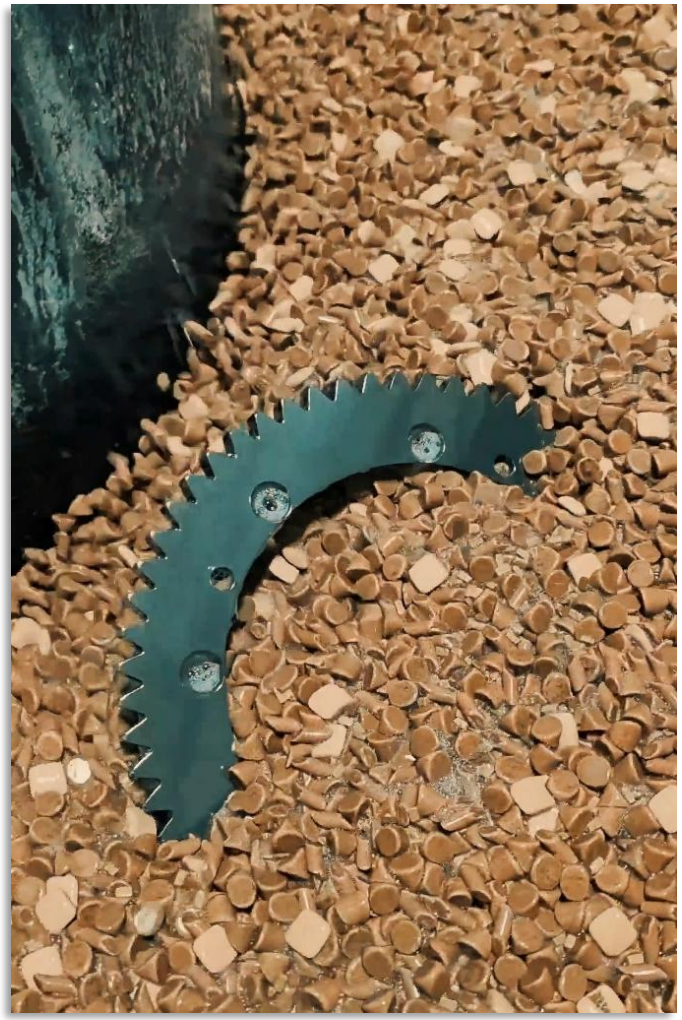
PERFORMANCE SERVICES - REM SUPERFINISH®

Part #	Description	Fitment	Retail
REM-10	REM / Superfinish®	All	$349.99

Reduced Friction for Peak Engine Performance

- Isotropic Superfinishing Process Proven in Racing Applications
- Reduces Friction and Heat for Smoother Component Operation
- Extends Component Life by Minimizing Wear
- Enhances Oil Retention for Better Lubrication and Cooling
- Improves Gear and Bearing Efficiency Under Extreme Loads
- Maximizes Power Transfer and Overall Engine Efficiency
- Ideal for Transmissions, Crankshafts, and Cams in Performance Engines
- Race-Proven Technology Trusted in MotoAmerica and NHRA Competition



What process reduces friction and improves durability in transmission gears?
Answer: REM Superfinish® (combined with backcutting)

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