



CATALOGUE 2026

SPECIAL RACING PRODUCTS

Motocross | Roadrace | Karting



VHM 2026 CATALOGUE



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VHM racingproducts

Tuning updates



www.vhm.nl/newsletter



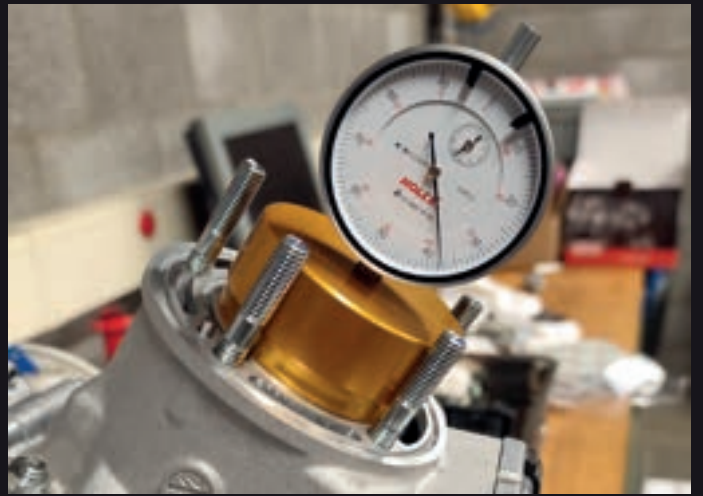


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What's new from 2025? We've summarized it here for you. Want to stay updated the whole year round? Subscribe to www.vhm.nl/newsletter

CYLINDER HEAD AA33206

SUZUKI **RG400** 1985 - 1986 /
RG500 1985 - 1987

Various inserts AE32331-



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CYLINDER HEAD AA33221

FANTIC **XE300** 2024 - 2025

Various inserts AE32360-



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CYLINDER HEAD AA33223

KTM **150SX** / HUSQVARNA **TC150** /
GASGAS **MC150** 2025

Various inserts AE32365-



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CYLINDER HEAD AA33224

KTM **105SX** / HUSQVARNA **TC105** /
GASGAS **MC105** 2025 - 2026

Various inserts AE32363-



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CYLINDER HEAD AA33225

KTM **112SX** / HUSQVARNA **TC112** /
GASGAS **MC112** 2025 - 2026

Various inserts AE32364-



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CYLINDER HEAD AA33226

TM **MX125** 2025 - 2026

Various inserts AE32367-



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INSERT RANGE AE32089

TM **MX85** 2025 - 2026

VHM standard, high RPM, optional,
blind and custom



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INSERT RANGE AE32255

TM **MX250** 2025 - 2026

VHM standard, optional, blind
and custom



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CRANKSHAFT AK20283R1

YAMAHA **YZ125** / FANTIC
XX125 2022 - 2026

Middle inertia, incl lightweight conrod



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PISTON KIT APKT10521765

KTM **105SX** '04 - '26 /
HUSQVARNA **TC105** '14 - '26 /

GASGAS **MC105** '21 - '26

Ø51.94 / Ø51.95 / Ø51.96



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PISTON KIT APKT11221766

KTM **112SX** '04 - '26 /
HUSQVARNA **TC112** '14 - '26 /
GASGAS **MC112** '21 - '26

Ø51.94 / Ø51.95 / Ø51.96 / Ø51.97



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CONNECTING ROD CRK1302

KTM **65SX** '09 - '26 /
HUSQVARNA **TC65** '17 - '26 /
GASGAS **MC65** '21 - '26

Lightweight



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CONNECTING ROD CRK2002

YAMAHA YZ125 '22 - '26 /
FANTIC XX125 '22 - '26

Lightweight



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SPARK PLUG RING DA31109 3.75MM

Stainless steel



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SEAL RING DA31262

SUZUKI RG500

Thermostatic valve replacement



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HOODIE MCHM01Z

VHM CASUAL HOODIE BLACK

Sizes S, M, L and XL



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HOODIE MCHM01R

VHM CASUAL HOODIE RED

Sizes S, M, L and XL



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SHIRT MCSM02Z

VHM CASUAL SHIRT BLACK

Sizes S, M, L and XL



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SHIRT MCSM02R

VHM CASUAL SHIRT RED

Sizes S, M, L and XL



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O-RING EXHAUST SK306101

KTM 50SX '09 - '26 /

HUSQVARNA TC50 '17 - '26 /

GASGAS MC50 '21 - '26



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O-RING EXHAUST SK306201

KTM 65SX '02 - '26 /

HUSQVARNA TC65 '17 - '26 /

GASGAS MC65 '21 - '26



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VHM UPGRADE KITS

Want to improve your bike's performance? We have created several VHM upgrade kits, tested and used by many top riders!



Tune your bike with the same VHM high performance parts as used by many previous World, European and National champions!



We have VHM upgrade kits available for the following dirtbikes:

FANTIC

- ☑ XX125 '21->

GASGAS

- ☑ MC65 '21->
- ☑ MC85 '21->
- ☑ MC105 '21->
- ☑ MC112 '21->
- ☑ MC125 '21->
- ☑ MC250 '22->

HUSQVARNA

- ☑ TC65 '17->
- ☑ TC85 '14->
- ☑ TC105 '18->
- ☑ TC112 '21->
- ☑ TC125 '16->
- ☑ TC250 '17->

KAWASAKI

- ☑ KX85 '00->

KTM

- ☑ 65SX '09->
- ☑ 85SX '13->
- ☑ TC105 '18->
- ☑ 112SX '21->
- ☑ 125SX '16->
- ☑ 250SX '17->

RIEJU

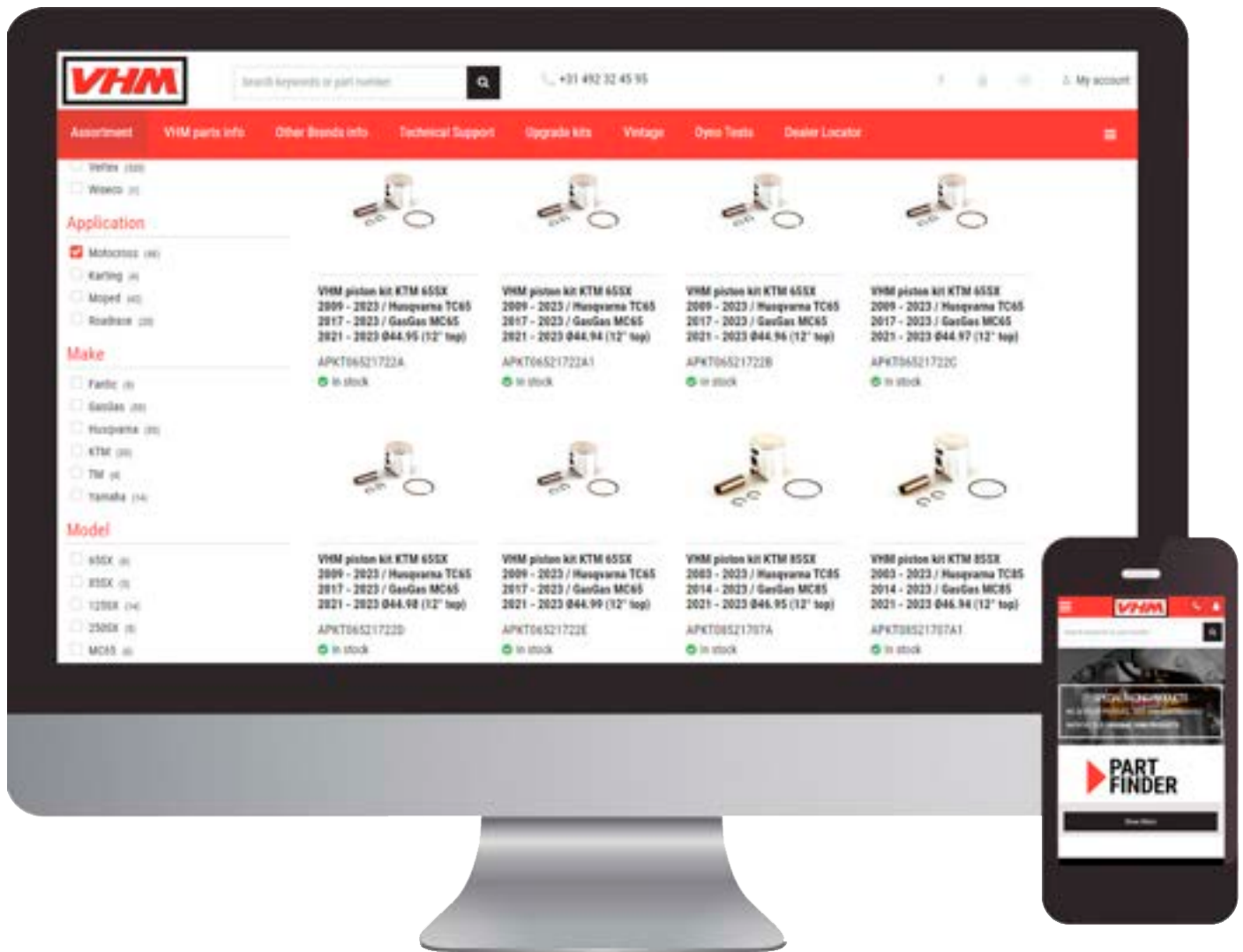
- ☑ MR250 '21->

TM

- ☑ MX85 '13->

YAMAHA

- ☑ YZ65 '18->
- ☑ YZ85 '19->
- ☑ YZ125 '05->



VHM WEBSITE

- ✔ Easy access to information concerning ALL parts like price, applications and specifications
- ✔ Quickly find parts for your bike with the Part finder
- ✔ Find your nearest VHM dealer with the Dealer Locator

DEALER LOCATOR

Our website contains a Dealer Locator, which enables you to search for your nearest VHM dealer. Just fill in your zip code, country or city and the locator will show you the nearest dealer.

B2B WEBSHOP

Our website also contains a B2B webshop for our business customers.

EASILY FIND PARTS FOR YOUR BIKE

To make it easy for you to find parts for your bike / engine, we've added a Part Finder. Just fill in the application, make, model and year and the website will show you all parts we have in our assortment for it.

www.vhm.nl



VINTAGE ROADRACE

We loved the 2-stroke era of roadrace and still develop and produce parts like piston kits, cylinder heads, inserts, crankshafts and connecting rods for various vintage racebikes:

- ✔ **APRILIA** RSW125 | RS125 '95 - '10 | RSW250 | RS250 '95 - '02
- ✔ **HONDA** RS125 ND4 '84 - '86 | NF4 '87 - '94 | NX4 '95 - '10 | RS250 ND5 '85 - '86 | NF5 '87 - '92 | NX5 '93 - '00 | NXA '01 - '10 | NSR50 | NSR80 | NSR125 | NSR150 | NSR250 MC16 '86 - '87 | MC18 '88 - '89 | MC21 / MC28 '90 - '99 | NSR300
- ✔ **KAWASAKI** KR150
- ✔ **SUZUKI** RGV250 VJ21 '88 - '91 | VJ22 '91 - '96 | VJ23 '97 - '98 | RG400 '85 - '86 | RG500 '85 - '87
- ✔ **YAMAHA** TZ125 '95 - '99 | '00 - '10 | TZ250 '88 - '90 | '95 - '99 | '00 - '10 | TZR250 '91 - '92

VINTAGE MOTOCROSS

Joining classic dirtbike races in the category Pre '90 or Pre '95? Then we got you covered with our VHM cylinder heads and exchangeable inserts for the following vintage dirtbikes:

- ✔ **HONDA** CR125R '87 - '99 | CR250R '92 - '01 | CR500R '89 - '01
- ✔ **KAWASAKI** KX500 '89 - '04
- ✔ **YAMAHA** YZ250 '88 - '98

www.vhm.nl/vintage



▲ CYLINDERHEADS

VHM CYLINDER HEADS

The well-known VHM cylinder heads with exchangeable combustion chambers and their signature golden color. Specially developed for optimal power output during the whole race. The head features special designed water duct for optimal water flow.

- ✔ More engine power
- ✔ Better heat transference
- ✔ Exchangeable combustion chambers

AVAILABLE FOR

The VHM cylinder headsets are available for the most common MX 2-stroke engines from 50cc - 500cc for Beta, Fantic, GasGas, Honda, Husaberg, Husqvarna, Kawasaki, KTM, Rieju, Sherco, Suzuki, TM and Yamaha. The VHM cylinder heads are also available for 2 stroke roadrace engines: Aprilia, Honda, Kawasaki, Suzuki and Yamaha.

DECOMPRESSION VALVE

For the big boys, the Fantic XE300, Honda CR500 and Kawasaki KX500 we have a cylinder head with decompression valve to easily start those mighty engines.

www.vhm.nl/cylinderheads

VHM HEAD INSERTS

The combustion chamber can be quickly adjusted, depending on the track and weather conditions. There are various types of inserts available for each cylinder head; VHM standard, optional, blind and custom inserts. The inserts are sold separately! These inserts do not fit the standard (OEM / stock) heads, only our VHM heads.

- ✔ Quick to adjust
- ✔ Many choices VHM standard, optional and blind
- ✔ Custom specifications possible

www.vhm.nl/inserts



VHM *Cylinder head*

AA33190 **Aprilia RS125** **1995 - 2010**
Rotax 122 / 123



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32008-A	1995 - 2010	Blind	Machine yourself			
AE32008-E	1995 - 2010	Optional		11.40	+2.00	0.90
AE32008-F	1995 - 2010	VHM standard		11.60	+2.00	0.90
AE32008-G	1995 - 2010	Optional		11.80	+2.00	0.90
AE32008-xxx	1995 - 2010	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33190	•	•	•	

AA33102 **Aprilia RS250** **1995 - 2002**
Suzuki RGV250 vJ21 **1988 - 1991**
Suzuki RGV250 vJ22 **1991 - 1996**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32149-A	1995 - 2002	Blind	Machine yourself			
AE32149-B	1995 - 2002	Optional		11.80	-0.35	0.90
AE32149-C	1995 - 2002	VHM standard		12.00	-0.35	0.90
AE32149-D	1995 - 2002	Optional		12.20	-0.35	0.90
AE32149-E	1995 - 2002	Optional		12.40	-0.35	0.90
AE32149-F	1995 - 2002	Optional		12.60	-0.35	0.90
AE32149-xxx	1995 - 2002	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33102	•	•	•	

AA33184 **Beta RR125 2T** **2018 - 2024**
Beta RR125 2T Racing **2019 - 2024**
Beta RR125 X-PRO **2025**



Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32297-A	2018 - 2025	Blind	Machine yourself			
AE32297-C	2018 - 2025	Optional		10.80	-0.10	1.10
AE32297-E	2018 - 2025	VHM standard		11.00	-0.10	1.10
AE32297-F	2018 - 2025	Optional		11.20	-0.10	1.10
AE32297-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33184	•	•	•	

VHM *Cylinder head*

AA33184-1 **Beta RR200 2T** 2018 - 2024
Beta RR200 2T Race 2025
Beta RR200 2T Racing 2019 - 2024
Beta RR200 2T X-PRO 2025 - 2026



Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32293-A		Blind	Machine yourself			
AE32293-C		Optional	RR200 2T '18-24, Racing '21, X-PRO '25-26	17.20	+1.50	1.40
AE32293-E		VHM standard	RR200 2T '18-24, Racing '21, X-PRO '25-26	17.60	+1.50	1.40
AE32293-F		Optional	RR200 2T '18-24, Racing '21, X-PRO '25-26	18.00	+1.50	1.40
AE32293-H		Optional	RR200 2T Racing '22-24, Race '25	15.60	+1.50	1.40
AE32293-K		VHM standard	RR200 2T Racing '22-24, Race '25	16.00	+1.50	1.40
AE32293-L		Optional	RR200 2T Racing '22-24, Race '25	16.40	+1.50	1.40
AE32293-M		Optional	RR200 2T Racing '22-24, Race '25	16.80	+1.50	1.40
AE32293-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33184	•	•	•	

AA33183 **Beta RR250 2T** 2018 - 2024
Beta RR250 2T Racing 2018 - 2024
Beta RR250 2T X-PRO 2025



Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32296-A	2018 - 2025	Blind	Machine yourself			
AE32296-C	2018 - 2025	Optional		21.0	+3.70	1.70
AE32296-E	2018 - 2025	VHM standard		21.5	+3.70	1.70
AE32296-F	2018 - 2025	Optional		22.0	+3.70	1.70
AE32296-xxx	2018 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33183	•	•	•	

VHM Cylinder head

AA33182	Beta RR300 2T	2013 - 2024	<i>Use short spark plug BR8ECM</i>
	Beta RR300 2T Racing	2018 - 2023	
	Beta Xtrainer 300 2T	2019 - 2025	
	Beta RX300 2T Enduro	2021 - 2022	
	Beta RX300 2T Cross	2023 - 2024	



Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32305-A	2013 - 2017	Blind	Machine yourself			
AE32305-C	2013 - 2017	Ø72 - Optional		27.50	0.00	1.80
AE32305-E	2013 - 2017	Ø72 - VHM standard	RR300 2T '13-17	28.50	0.00	1.80
AE32305-F	2013 - 2017	Ø72 - Optional		29.50	0.00	1.80
AE32305-xxx		Ø72 - Custom	Special insert according to your specification			
AE32295-A	2018 - 2024	Blind	Machine yourself			
AE32295-C	2018 - 2024	Ø72 - Optional		27.50	+3.50	1.80
AE32295-E	2018 - 2024	Ø72 - VHM standard	RR300 2T '18-21	28.50	+3.50	1.80
			RR300 2T Racing '18-21			
			Xtrainer 300 2T '19-21			
			RX300 2T Enduro '21-22 RX300 2T Cross '23-24			
AE32295-F	2018 - 2024	Ø72 - Optional		29.50	+3.50	1.80
AE32295-xxx		Ø72 - Custom	Special insert according to your specification			
AE32328-A	2022 - 2025	Blind	Machine yourself			
AE32328-C	2022 - 2025	Ø73 - Optional		27.00	+3.10	1.80
AE32328-E	2022 - 2025	Ø73 - VHM standard	RR300 2T '22-24, X-PRO '25-26	28.00	+3.10	1.80
			RR300 2T Racing '22-23 Xtrainer 300 2T '22-25			
AE32328-F	2022 - 2025	Ø73 - Optional		29.00	+3.10	1.80
AE32328-G	2022 - 2025	Ø73 - Optional		30.00	+3.10	1.80
AE32328-xxx		Ø73 - Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33182	•	•	•			

AA33077	Fantic XX125	2021	See Yamaha YZ125 2005 - 2021
	Fantic XE125	2021	

AA33203	Fantic XX125	2022 - 2026	See Yamaha YZ125 2022 - 2026
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AA33080	Fantic XX250	2021 - 2026	See Yamaha YZ250 1999 - 2026
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AA33221	Fantic XE300	2024 - 2025	
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Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32360-A	2024 - 2025	Blind	Machine yourself			
AE32360-C	2024 - 2025	Optional	MX insert	29.00	+2.25	1.60
AE32360-E	2024 - 2025	VHM standard	Enduro insert	31.00	+2.25	2.00
AE32360-F	2024 - 2025	Optional	Hard enduro insert	32.00	+2.25	2.25
AE32360-xxx	2024 - 2025	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33221	•	•	•			

AA33114	GasGas MC50	2021 - 2023	See KTM 50SX 2009 - 2023
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AA33216	GasGas MC50	2024 - 2026	See KTM 50SX 2024 - 2026
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AA33112	GasGas MC65	2021 - 2023	See KTM 65SX 2009 - 2023
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VHM Cylinder head

AA33217	GasGas MC65	2024 - 2026	See KTM 65SX 2024 - 2026
AA33171	GasGas MC85	2021 - 2024	See KTM 85SX 2018 - 2024
AA33222	GasGas MC85	2025 - 2026	See KTM 85SX 2025 - 2026
AA33177	GasGas MC105	2021 - 2024	See KTM 105SX 2018 - 2024
AA33224	GasGas MC105	2025 - 2026	See KTM 105SX 2025 - 2026
AA33211	GasGas MC112	2021 - 2024	See KTM 112SX 2018 - 2024
AA33225	GasGas MC112	2025 - 2026	See KTM 112SX 2025 - 2026
AA33090	GasGas EC125/MC125	2000 - 2011	



Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32117-A	2000 - 2011	Blind	Machine yourself			
AE32117-C	2000 - 2011	Optional		11.40	-3.55	1.00
AE32117-E	2000 - 2011	VHM standard		11.60	-3.55	1.00
AE32117-F	2000 - 2011	Optional		11.80	-3.55	1.00
AE32117-xxx	2000 - 2011	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33156	GasGas MC125	2021 - 2023	See KTM 125SX 2016 - 2023
AA33208	GasGas MC125	2024 - 2026	See KTM 125SX 2023 - 2026
AA33166	GasGas MC250	2022 - 2023	See KTM 250SX 2017 - 2022
AA33209	GasGas MC250	2024 - 2026	See KTM 250SX 2023 - 2026
AA33201	GasGas EC250	2018 - 2019	See Rieju MR250 / MR300 2021 - 2022
AA33214	GasGas EC250	2024 - 2025	See KTM 250EXC 2024 - 2025
AA33172	GasGas EC300 GasGas EX300	2021 - 2023 2021 - 2023	See KTM 300EXC TPI 2018 - 2023
AA33215	GasGas EC300	2024 - 2025	See KTM 300EXC 2024 - 2025

VHM Cylinder head
AA33057 Honda CR85R 2003 - 2007


Part number insert	Year	Insert Types	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32071-A	2003 - 2007	Blind	Machine yourself			
AE32071-C	2003	Optional		7.80	+2.40	1.00
AE32071-E	2003	VHM standard		8.00	+2.40	1.00
AE32071-F	2003	Optional		8.20	+2.40	1.00
AE32071-K	2004	Optional		7.80	+2.40	1.20
AE32071-L	2004	VHM standard		8.00	+2.40	1.20
AE32071-M	2004	Optional		8.20	+2.40	1.20
AE32071-N	2005 - 2007	Optional		7.80	+2.20	0.80
AE32071-O	2005 - 2007	VHM standard		8.00	+2.20	0.80
AE32071-P	2005 - 2007	Optional		8.20	+2.20	0.80
AE32071-xxx	2003 - 2007	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33057	•	•	•	

AA33155 Honda CR125R 1987 - 1999


Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32256-A	1987 - 1999	Blind	Machine yourself			
AE32256-K	1987 - 1991	Optional	Dome piston	10.60	+1.90	1.00
AE32256-L	1987 - 1991	VHM standard	Dome piston	10.80	+1.90	1.00
AE32256-M	1987 - 1991	Optional	Dome piston	11.00	+1.90	1.00
AE32256-C	1992 - 1999	Optional	Flat top piston	10.60	-0.70	1.00
AE32256-E	1992 - 1999	VHM standard	Flat top piston	10.80	-0.70	1.00
AE32256-F	1992 - 1999	Optional	Flat top piston	11.00	-0.70	1.00
AE32256-xxx	1987 - 1999	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33025	•	•	•	

AA33055 Honda CR125R 2000 - 2004


Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32058-A	2000 - 2002	Blind	Machine yourself			
AE32058-C	2000 - 2002	Optional	Flat top piston	10.60	-0.55	1.00
AE32058-E	2000 - 2002	VHM standard	Flat top piston	10.80	-0.55	1.00
AE32058-F	2000 - 2002	Optional	Flat top piston	11.00	-0.55	1.00
AE32058-xxx	2000 - 2002	Custom	Special insert according to your specification			
AE32070-A	2003 - 2004	Blind	Machine yourself			
AE32070-C	2003	Optional	Flat top piston	11.20	-0.45	1.00
AE32070-D	2003	Optional	Flat top piston	11.40	-0.45	1.00
AE32070-E	2003	Optional	Flat top piston	11.60	-0.45	1.00
AE32070-F	2003	VHM standard	Flat top piston	11.80	-0.45	1.00
AE32070-H	2004	Optional	Dome piston	10.40	+2.10	1.00
AE32070-K	2004	VHM standard	Dome piston	10.60	+2.10	1.00
AE32070-L	2004	Optional	Dome piston	10.80	+2.10	1.00
AE32070-xxx	2003-2004	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33024	•	•	•	

VHM Cylinder head
AA33083 Honda CR125R 2005 - 2007


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32104-A	2005 - 2007	Blind	Machine yourself			
AE32104-B	2005 - 2007	Optional		11.00	+2.25	1.00
AE32104-C	2005 - 2007	VHM standard		11.20	+2.25	1.00
AE32104-E	2005 - 2007	Optional		11.40	+2.25	1.00
AE32104-F	2005 - 2007	Optional		11.60	+2.25	1.00
AE32104-xxx	2005 - 2007	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33024	•	•	•	

AA33155-1 Honda CR144 1987 - 1999


Part number insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32256-A	1987 - 1999	Blind	Machine yourself			
AE32256-xxx	1987 - 1999	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33083-1 Honda CR144 2005 - 2007


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32140-A	2005 - 2007	Blind	Machine yourself			
AE32140-xxx	2005 - 2007	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33003 Honda CR250R 1992 - 2001


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32020-A	1992-2001	Blind	Machine yourself			
AE32020-E	1992-1996	Optional	Dome piston	19.80	+3.00	1.60
AE32020-F	1992-1996	Optional	Dome piston	20.20	+3.00	1.60
AE32020-G	1992-1996	VHM standard	Dome piston	20.60	+3.00	1.60
AE32020-D	1997-2001	Optional	Flat top piston	19.80	-0.40	1.60
AE32020-C	1997-2001	Optional	Flat top piston	20.20	-0.40	1.60
AE32020-B	1997-2001	VHM standard	Flat top piston	20.60	-0.40	1.60
AE32020-xxx	1992-2001	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33003	•	•	•	

VHM Cylinder head
AA33042 Honda CR250R 2002 - 2004


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32060-A	2002 - 2004	Blind	Machine yourself			
AE32060-L	2002 - 2004	Optional		19.80	-0.30	1.30
AE32060-H	2002 - 2004	Optional		20.20	-0.30	1.30
AE32060-K	2002 - 2004	VHM standard		20.60	-0.30	1.30
AE32060-F	2002 - 2004	Optional		21.00	-0.30	1.30
AE32060-xxx	2002 - 2004	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33042	•	•	•	

AA33084 Honda CR250R 2005 - 2007


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32106-A	2005 - 2007	Blind	Machine yourself			
AE32106-B	2005 - 2007	Optional		19.80	+3.25	1.50
AE32106-C	2005 - 2007	VHM standard		20.20	+3.25	1.50
AE32106-E	2005 - 2007	Optional		20.60	+3.25	1.50
AE32106-xxx	2005 - 2007	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33084	•	•	•	

AA33200 Honda CR500R 1989 - 2001


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32319-A	1989 - 2001	Blind	Machine yourself			
AE32319-B	1989 - 2001	Optional		45.00	+6.20	2.50
AE32319-C	1989 - 2001	VHM standard		48.00	+6.20	2.50
AE32319-E	1989 - 2001	Optional		51.00	+6.20	2.50
AE32319-F	1989 - 2001	Optional		54.00	+6.20	2.50
AE32319-xxx	1989 - 2001	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33200	•	•	•	

VHM Cylinder head
AA33168 Honda NSR50


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32276-A		Blind	Machine yourself			
AE32276-C		Optional		5.70	+2.20	0.50
AE32276-E		VHM standard		5.90	+2.20	0.50
AE32096-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33031	•	•	•	

AA33168BB Honda NSR50 BIG BORE (70cc)


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32276-A BB		Blind	Machine yourself			
AE32096-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33031	•	•	•	

AA33074 Honda NSR80 / MBX80


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32096-A		Blind	Machine yourself			
AE32096-E		VHM standard				
AE32096-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33074	•	•	•	

AA33173 Honda NSR125


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32284-A		Blind	Machine yourself			
AE32284-E		VHM standard		12.00	+1.37	0.90
AE32284-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33173	•	•	•	•

VHM Cylinder head
AA33063 Honda NSR150


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32078-A		Blind	Machine yourself			
AE32078-E		VHM standard		14.20	+2.88	0.65
AE32078-xxx		Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33063	•	•	•			

AA33192 Honda NSR250 MC16 1986 - 1987


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32308-A	1986 - 1987	Blind	Machine yourself			
AE32308-B	1986 - 1987	Optional		12.00	+1.95	1.00
AE32308-C	1986 - 1987	Optional		12.20	+1.95	1.00
AE32308-D	1986 - 1987	VHM standard		12.40	+1.95	1.00
AE32308-E	1986 - 1987	Optional		12.60	+1.95	1.00
AE32308-F	1986 - 1987	Optional		12.80	+1.95	1.00
AE32308-xxx	1986 - 1987	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33191	•	•	•			

AA33191 Honda NSR250 MC18 1988 - 1989


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32308-A	1988 - 1989	Blind	Machine yourself			
AE32308-B	1988 - 1989	Optional		12.00	+1.95	1.00
AE32308-C	1988 - 1989	Optional		12.20	+1.95	1.00
AE32308-D	1988 - 1989	VHM standard		12.40	+1.95	1.00
AE32308-E	1988 - 1989	Optional		12.60	+1.95	1.00
AE32308-F	1988 - 1989	Optional		12.80	+1.95	1.00
AE32308-xxx	1988 - 1989	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33191	•	•	•			

AA33054 Honda NSR250 MC21/MC28 1990 - 1999


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32069-A	1990 - 1999	Blind	Machine yourself			
AE32069-E	1990 - 1999	VHM standard		12.60	+1.37	1.07
AE32069-xxx	1990 - 1999	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33054	•	•	•			

VHM Cylinder head
AA33169 Honda NSR300


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32078-A		Blind	Machine yourself			
AE32078-E		VHM standard		14.20	+2.88	0.65
AE32078-xxx		Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33169	•	•	•			

AA33035 Honda RS125 NX4 2000 - 2010


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32050-A	2000 - 2010	Blind	Machine yourself			
AE32050-D	2000 - 2010	Optional	Dome piston	11.20	+2.00	0.65
AE32050-E	2000 - 2010	VHM standard	Dome piston	11.40	+2.00	0.65
AE32050-F	2000 - 2010	Optional	Dome piston	11.60	+2.00	0.65
AE32052-G	2000 - 2010	Optional	Flat top piston	11.20	-0.45	0.65
AE32052-H	2000 - 2010	VHM standard	Flat top piston	11.40	-0.45	0.65
AE32052-K	2000 - 2010	Optional	Flat top piston	11.60	-0.45	0.65
AE32050-xxx	2000 - 2010	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33035	•	•	•			

AA33056 Honda RS125 A-kit 2001 - 2003


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32050-A	2001 - 2003	Blind	Machine yourself			
AE32050-D	2001 - 2003	Optional	Dome piston R150	11.20	+2.00	0.65
AE32050-E	2001 - 2003	VHM standard	Dome piston R150	11.40	+2.00	0.65
AE32050-F	2001 - 2003	Optional	Dome piston R150	11.60	+2.00	0.65
AE32050-xxx	2001 - 2003	Custom	Special insert according to your specification			
AE32052-D	2001	Optional	A-kit 2001 R300	11.20	+0.80	0.65
AE32052-E	2001	VHM standard	A-kit 2001 R300	11.40	+0.80	0.65
AE32052-F	2001	Optional	A-kit 2001 R300	11.60	+0.80	0.65
AE32052-G	2001 - 2003	Optional	Flat top piston	11.20	-0.45	0.65
AE32052-H	2001 - 2003	VHM standard	Flat top piston	11.40	-0.45	0.65
AE32052-K	2001 - 2003	Optional	Flat top piston	11.60	-0.45	0.65
AE32052-xxx	2001 - 2003	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33000	•					

VHM Cylinder head
AA33036 **Honda RS250 NX5** **1993 - 2000**
Honda RS250 NXA **2001 - 2010**


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32051-A	1993 - 2010	Blind	Blind insert			
AE32051-023	1993 - 2000	Optional	Dome piston	10.20	+2.00	0.65
AE32051-021	1993 - 2000	Optional	Dome piston	10.40	+2.00	0.65
AE32051-022	1993 - 2000	Optional	Dome piston	10.60	+2.00	0.65
AE32051-118	1993 - 2000	Optional	Dome piston	10.80	+2.00	0.65
AE32051-016	1993 - 2000	Optional	Dome piston	11.40	+2.00	0.65
AE32051-017	1993 - 2000	Optional	Dome piston	11.60	+2.00	0.65
AE32051-018	1993 - 2000	VHM standard	Dome piston	11.80	+2.00	0.65
AE32051-019	1993 - 2000	Optional	Dome piston	12.00	+2.00	0.65
AE32051-068	1993 - 2000	Optional	Dome piston	12.20	+2.00	0.65
AE32051-D	2001 - 2010	Optional	Dome piston	11.80	+2.10	0.65
AE32051-E	2001 - 2010	Optional	Dome piston	12.00	+2.10	0.65
AE32051-F	2001 - 2010	VHM standard	Dome piston	12.20	+2.10	0.65
AE32051-G	2001 - 2010	Optional	Dome piston	12.40	+2.10	0.65
AE32051-H	2001 - 2010	Optional	Dome piston	12.60	+2.10	0.65
AE32051-J	2001 - 2010	Optional	Dome piston	12.80	+2.10	0.65
AE32051-101	2001 - 2010	Optional	Flat top piston: APHO12521750	10.60	-0.30	0.65
AE32051-073	2001 - 2010	Optional	Flat top piston: APHO12521750	11.20	-0.30	0.65
AE32051-072	2001 - 2010	Optional	Flat top piston: APHO12521750	11.40	-0.30	0.65
AE32051-071	2001 - 2010	Optional	Flat top piston: APHO12521750	11.60	-0.30	0.65
AE32051-070	2001 - 2010	Optional	Flat top piston: APHO12521750	11.80	-0.30	0.65
AE32051-069	2001 - 2010	Optional	Flat top piston: APHO12521750	12.00	-0.30	0.65
AE32051-061	2001 - 2010	VHM standard	Flat top piston: APHO12521750	12.20	-0.30	0.65
AE32051-xxx	2001 - 2010	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33036	●	●	●	

AA33052 **Honda RS250 A-kit** **2001 - 2005**


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32067-A	2001 - 2005	Blind	Machine yourself			
AE32067-C	2001 - 2005	Optional	Flat top piston	11.80	-0.30	0.65
AE32067-E	2001 - 2005	VHM standard	Flat top piston	12.00	-0.30	0.65
AE32067-F	2001 - 2005	Optional	Flat top piston	12.20	-0.30	0.65
AE32067-xxx	2001 - 2005	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	●			

AA33097 **Husaberg TE 125** **2012 - 2014** See KTM 125SX / EXC 2007 - 2015

AA33098 **Husaberg TE 250** **2011 - 2014** See KTM 250SX / EXC 2007 - 2016

AA33109 **Husaberg TE 300** **2011 - 2014** See KTM 300SX / EXC 2008 - 2016

AA33114 **Husqvarna TC50** **2017 - 2023** See KTM 50SX 2017 - 2023

AA33216 **Husqvarna TC50** **2024 - 2026** See KTM 50SX 2024 - 2026

VHM Cylinder head

AA33112	Husqvarna TC65	2017 - 2023	See KTM 65SX 2009 - 2023
AA33217	Husqvarna TC65	2024 - 2026	See KTM 65SX 2024 - 2026
AA33145	Husqvarna TC85	2014 - 2017	See KTM 85SX 2013 - 2017
AA33171	Husqvarna TC85	2018 - 2024	See KTM 85SX 2018 - 2024
AA33222	Husqvarna TC85	2025 - 2026	See KTM 85SX 2025 - 2026
AA33149	Husqvarna TC105	2014 - 2017	See KTM 105SX 2013 - 2017
AA33177	Husqvarna TC105	2018 - 2024	See KTM 105SX 2018 - 2024
AA33224	Husqvarna TC105	2025 - 2026	See KTM 105SX 2025 - 2026
AA33211	Husqvarna TC112	2018 - 2024	See KTM 112SX 2018 - 2024
AA33225	Husqvarna TC112	2025 - 2026	See KTM 112SX 2025 - 2026
AA33039	Husqvarna CR125 Husqvarna WR125	1998 - 2013 2001 - 2013	



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32054-A	1998 - 2013	Blind	Machine yourself			
AE32054-C	1998 - 2013	Optional		10.80	-0.50	1.00
AE32054-E	1998 - 2013	Optional		11.00	-0.50	1.00
AE32054-F	1998 - 2013	VHM standard		11.20	-0.50	1.00
AE32054-H	1998 - 2013	Optional		11.40	-0.50	1.00
AE32054-xxx	1998 - 2013	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33097	Husqvarna TC125 Husqvarna TE125	2014 - 2015 2015 - 2016	See KTM 125SX / EXC 2007 - 2015
AA33156	Husqvarna TC125	2016 - 2022	See KTM 125SX 2016 - 2022
AA33208	Husqvarna TC125	2023 - 2026	See KTM 125SX 2023 - 2026
AA33098	Husqvarna TC/TE 250	2014 - 2016	See KTM 250SX/EXC 2007 - 2016
AA33166	Husqvarna TC250 Husqvarna TE250	2017 - 2022 2017	See KTM 250SX 2017 - 2022
AA33209	Husqvarna TC250	2023 - 2026	See KTM 250SX 2023 - 2026
AA33175	Husqvarna TE250i Husqvarna TE250	2018 - 2022 2023	See KTM 250EXC TPI 2018 - 2023
AA33214	Husqvarna TE250	2024 - 2025	See KTM 250EXC 2024 - 2025
AA33109	Husqvarna TE/TC 300	2014 - 2016	See KTM 300SX/EXC 2008 - 2016

VHM Cylinder head

AA33167	Husqvarna TE300	2017 - 2018	
	Husqvarna TC300	2017 - 2022	See KTM 300SX 2017 - 2022
	Husqvarna TX300	2017 - 2022	
AA33210	Husqvarna TX300	2023 - 2025	See KTM 300SX 2023 - 2025
AA33172	Husqvarna TE300i	2018 - 2022	See KTM 300EXC TPI 2018 - 2023
	Husqvarna TE300	2023	
AA33215	Husqvarna TE300	2024 - 2025	See KTM 300EXC 2024 - 2025
AA33026	Kawasaki KX65	2000 - 2025	
	Suzuki RM65	2000 - 2005	



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32032-A	2000 - 2025	Blind	Machine yourself			
AE32032-M	2000 - 2025	Optional		6.90	+1.75	0.70
AE32032-N	2000 - 2025	VHM standard		7.20	+1.75	0.70
AE32032-xxx	2000 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33026	●	●	●	

AA33151 Kawasaki KX85 2000 - 2025


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32240-A	2000 - 2025	Blind	Machine yourself			
AE32240-B	2000 - 2025	Optional		7.60	+1.70	0.90
AE32240-C	2000 - 2025	Optional		7.80	+1.70	0.90
AE32240-E	2000 - 2025	VHM standard		8.00	+1.70	0.90
AE32240-F	2000 - 2025	Optional		8.20	+1.70	0.90
AE32240-xxx	2000 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33151	●	●	●	

AA33151-1 Kawasaki KX100 2000 - 2021
Kawasaki KX112 2022 - 2025


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32240B-A	2000 - 2025	Blind	Machine yourself			
AE32240B-001	2000 - 2021	Optional	KX100	9.00	+1.17	1.00
AE32240B-002	2000 - 2021	VHM standard	KX100	9.30	+1.17	1.00
AE32240B-B	2022 - 2025	Optional	KX112	9.50	+0.75	1.00
AE32240B-C	2022 - 2025	Optional	KX112	9.75	+0.75	1.00
AE32240B-D	2022 - 2025	VHM standard	KX112	10.00	+0.75	1.00
AE32240B-E	2022 - 2025	Optional	KX112	10.25	+0.75	1.00
AE32240B-F	2022 - 2025	Optional	KX112	10.50	+0.75	1.00
AE32240B-xxx	2022 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33151-1	●	●	●	

VHM Cylinder head
AA33189 Kawasaki KX125 1998 - 2002


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32306-A	1998 - 2002	Blind	Machine yourself			
AE32306-B	1998 - 2000	Optional		10.80	+0.32	1.00
AE32306-C	1998 - 2000	VHM standard '98-00		11.00	+0.32	1.00
AE32306-E	1998 - 2000	Optional		11.20	+0.32	1.00
AE32306-K	2001 - 2002	Optional		10.80	+1.80	1.00
AE32306-L	2001 - 2002	Optional		11.00	+1.80	1.00
AE32306-M	2001 - 2002	VHM standard '01-02		11.20	+1.80	1.00
AE32306-N	2001 - 2002	Optional		11.40	+1.80	1.00
AE32306-xxx	1998 - 2002	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33002	•	•	•	

AA33043 Kawasaki KX125 2003 - 2008


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32061-A	2003 - 2008	Blind	Machine yourself			
AE32061-C	2003 - 2008	Optional		11.20	+1.80	1.00
AE32061-E	2003 - 2008	Optional		11.40	+1.80	1.00
AE32061-F	2003 - 2008	VHM standard '04-08		11.60	+1.80	1.00
AE32061-G	2003 - 2008	VHM standard '03		11.80	+1.80	1.00
AE32061-xxx	2003 - 2008	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33043	•	•	•	

AA33189-1 Kawasaki KX144 1998 - 2002


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32306-A	1998 - 2002	Blind	Machine yourself			
AE32306-xxx	1998 - 2002	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33002-1	•	•	•	

VHM *Cylinder head*
AA33043-2 Kawasaki KX144 2003 - 2008


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32122-A	2003 - 2008	Blind	Machine yourself			
AE32122-xxx	2003 - 2008	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK32122	•	•	•			

AA33015 Kawasaki KX250 1995 - 2002


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32026-A	1995 - 2002	Blind	Machine yourself			
AE32026-C	1995 - 2002	Optional		20.20	+2.85	1.60
AE32026-E	1995 - 2002	VHM standard		20.60	+2.85	1.60
AE32026-F	1995 - 2002	Optional		21.00	+2.85	1.60
AE32026-xxx	1995 - 2002	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33015	•	•	•			

AA33045 Kawasaki KX250 2003 - 2004


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32062-A	2003 - 2004	Blind	Machine yourself			
AE32062-C	2003 - 2004	Optional		20.20	+2.85	1.60
AE32062-E	2003 - 2004	VHM standard		20.60	+2.85	1.60
AE32062-F	2003 - 2004	Optional		21.00	+2.85	1.60
AE32062-xxx	2003 - 2004	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33015	•	•	•			

VHM Cylinder head
AA33075 Kawasaki KX250 2005 - 2008


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32098-A	2005 - 2008	Blind	Machine yourself			
AE32098-C	2005 - 2008	Optional		20.20	+3.00	1.50
AE32098-E	2005 - 2008	VHM standard		20.60	+3.00	1.50
AE32098-F	2005 - 2008	Optional		21.00	+3.00	1.50
AE32098-xxx	2005 - 2008	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33075	•	•	•	

AA33193 Kawasaki KX500 1998 - 2004


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32310-A	1998 - 2004	Blind	Machine yourself			
AE32310-B	1998 - 2004	Optional		41.00	+0.75	2.00
AE32310-C	1998 - 2004	Optional		43.00	+0.75	2.00
AE32310-E	1998 - 2004	Optional		45.00	+0.75	2.00
AE32310-F	1998 - 2004	Optional		47.00	+0.75	2.00
AE32310-G	1998 - 2004	Optional		49.00	+0.75	2.00
AE32310-xxx	1998 - 2004	Custom	Special insert according to your specification			

OEM cylinder head specifications	Cylinder head gasket [mm]	Volume [cc]
This chart shows the volume of the OEM cylinder head depending on the thickness of the cylinder head gasket.	0.20	43.50
	0.40	44.70
	1.00	48.20

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33193	•	•	•	•

AA33062 Kawasaki KR150 / KRR150 / ZX-150RR


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32077-A		Blind	Machine yourself			
AE32077-B			for cyl. 1855	13.90	+2.55	0.70
AE32077-C		VHM standard	for cyl. 1855	14.20	+2.55	0.70
AE32077-D			for cyl. 1855	14.50	+2.55	0.70
AE32077-E		VHM standard	for cyl. 1878	14.20	+2.93	0.70
AE32077-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33062	•	•	•	

VHM Cylinder head

AA33112	KTM 65SX	2009 - 2023
	KTM 65SXS	2012 - 2015
	KTM 65XC	2009
	Husqvarna TC65	2017 - 2023
	GasGas MC65	2021 - 2023



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32167-A	2009 - 2022	Blind	Machine yourself			
AE32167-B	2009 - 2012	Optional		5.00	+2.25	0.80
AE32167-C	2009 - 2012	VHM standard		5.20	+2.25	0.80
AE32167-E	2009 - 2012	Optional		5.40	+2.25	0.80
AE32167-G	2013 - 2023	Optional		5.00	+2.45	0.80
AE32167-H	2013 - 2023	VHM standard		5.20	+2.45	0.80
AE32167-K	2013 - 2023	Optional		5.40	+2.45	0.80
AE32167-101	2009 - 2023	Optional	12° piston: APKT06521722 Raise cylinder 0.10mm	5.00	+0.40	0.80
AE32167-059	2009 - 2023	VHM standard	12° piston: APKT06521722 Raise cylinder 0.10mm	5.20	+0.40	0.80
AE32167-xxx	2009 - 2023	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33112	•				•	

AA33217	KTM 65SX	2024 - 2026
	Husqvarna TC65	2024 - 2026
	GasGas MC65	2024 - 2026



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32353-A	2024 - 2026	Blind	Machine yourself			
AE32353-B	2024 - 2026	Optional		5.10	+2.50	0.75
AE32353-C	2024 - 2026	Optional		5.25	+2.50	0.75
AE32353-D	2024 - 2026	VHM standard		5.40	+2.50	0.75
AE32353-E	2024 - 2026	Optional		5.55	+2.50	0.75
AE32353-F	2024 - 2026	Optional		5.70	+2.50	0.75
AE32353-010	2024 - 2026	Optional	12° piston: APKT06521722 With OEM base gasket 0,70mm	5.25	+0.55	0.75
AE32353-011	2024 - 2026	VHM standard	12° piston: APKT06521722 With OEM base gasket 0,70mm	5.40	+0.55	0.75
AE32353-012	2024 - 2026	Optional	12° piston: APKT06521722 With OEM base gasket 0,70mm	5.55	+0.55	0.75
AE32353-020	2024 - 2026	Optional	12° piston: APKT06521722 Raise cylinder 0,20mm	5.25	+0.40	0.75
AE32353-021	2024 - 2026	VHM standard	12° piston: APKT06521722 Raise cylinder 0,20mm	5.40	+0.40	0.75
AE32353-022	2024 - 2026	Optional	12° piston: APKT06521722 Raise cylinder 0,20mm	5.55	+0.40	0.75
AE32353-xxx	2024 - 2026	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33217	•	•			•	

VHM Cylinder head

AA33068 **KTM 85SX** **2004 - 2012**
KTM 85SXS **2012**
KTM 85XC **2009**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32087-A	2004 - 2012	Blind	Machine yourself			
AE32087-G	2004 - 2012	Optional		7.80	+2.20	0.80
AE32087-H	2004 - 2012	VHM standard		8.00	+2.20	0.80
AE32087-K	2004 - 2012	Optional		8.20	+2.20	0.80
AE32087-112	2004 - 2012	VHM standard	For 12° piston: APKT08521707	8.00	+0.60	0.80
AE32087-xxx	2004 - 2012	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33068	•	•	•	

AA33145 **KTM 85SX** **2013 - 2017**
KTM 85SXS **2013 - 2015**
Husqvarna TC85 **2014 - 2017**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32226-A	2013 - 2017	Blind	Machine yourself			
AE32226-C	2013 - 2017	Optional		7.80	+2.20	0.80
AE32226-E	2013 - 2017	VHM standard		8.00	+2.20	0.80
AE32226-F	2013 - 2017	Optional		8.20	+2.20	0.80
AE32226-079	2013 - 2017	Optional	For 12° piston: APKT08521707	7.80	+0.60	0.80
AE32226-056	2013 - 2017	VHM standard	For 12° piston: APKT08521707	8.00	+0.60	0.80
AE32226-100	2013 - 2017	Optional	For 12° piston: APKT08521707	8.20	+0.60	0.80
AE32226-xxx	2013 - 2017	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33145	•	•	•	

AA33171 **KTM 85SX** **2018 - 2024**
Husqvarna TC85 **2018 - 2024**
GasGas MC85 **2021 - 2024**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32281-A	2018 - 2024	Blind	Blind insert			
AE32281-C	2018 - 2024	Optional		7.80	+2.15	0.80
AE32281-E	2018 - 2024	VHM standard		8.00	+2.15	0.80
AE32281-F	2018 - 2024	Optional		8.20	+2.15	0.80
AE32281-012	2018 - 2024	Optional	For 12° piston: APKT08521707	7.80	+0.55	0.80
AE32281-013	2018 - 2024	VHM standard	For 12° piston: APKT08521707	8.00	+0.55	0.80
AE32281-014	2018 - 2024	Optional	For 12° piston: APKT08521707	8.20	+0.55	0.80
AE32281-xxx	2018 - 2024	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33145	•	•	•	

VHM Cylinder head

AA33222 **KTM 85SX** **2025 - 2026**
Husqvarna TC85 **2025 - 2026**
GasGas MC85 **2025 - 2026**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32361-A	2025 - 2026	Blind	Blind insert			
AE32361-C	2025 - 2026	Optional		6.80	+2.15	0.80
AE32361-E	2025 - 2026	VHM standard		7.00	+2.15	0.80
AE32361-F	2025 - 2026	Optional		7.20	+2.15	0.80
AE32361-025	2025 - 2026	Optional	For 12° piston: APKT08521707	6.80	+0.50	0.80
AE32361-026	2025 - 2026	VHM standard	For 12° piston: APKT08521707	7.00	+0.50	0.80
AE32361-027	2025 - 2026	Optional	For 12° piston: APKT08521707	7.20	+0.50	0.80
AE32361-xxx	2025 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33145	●	●	●	

AA33110 **KTM 105SX** **2003 - 2012**
KTM 105XC **2008 - 2009**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32161-A	2003 - 2012	Blind	Machine yourself			
AE32161-C	2003 - 2012	Optional		9.20	+2.20	0.90
AE32161-E	2003 - 2012	VHM standard		9.40	+2.20	0.90
AE32161-F	2003 - 2012	Optional		9.60	+2.20	0.90
AE32161-xxx	2003 - 2012	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	●			

AA33149 **KTM 105SX** **2013 - 2017**
Husqvarna TC105 **2014 - 2017**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32161-A	2013 - 2017	Blind	Machine yourself			
AE32161-C	2013 - 2017	Optional		9.20	+2.20	0.90
AE32161-E	2013 - 2017	VHM standard		9.40	+2.20	0.90
AE32161-F	2013 - 2017	Optional		9.60	+2.20	0.90
AE32161-xxx	2013 - 2017	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	●			

VHM Cylinder head

AA33177 **KTM 105SX** **2018 - 2024**
Husqvarna TC105 **2018 - 2024**
GasGas MC105 **2021 - 2024**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32288-A	2018 - 2024	Blind	Machine yourself			
AE32288-B	2018 - 2024	Optional		9.20	+2.20	0.90
AE32288-C	2018 - 2024	VHM standard		9.40	+2.20	0.90
AE32288-E	2018 - 2024	Optional		9.60	+2.20	0.90
AE32288-F	2018 - 2024	Optional		9.80	+2.20	0.90
AE32288-xxx	2018 - 2024	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33177	•	•	•	

AA33224 **KTM 105SX** **2025 - 2026**
Husqvarna TC105 **2025 - 2026**
GasGas MC105 **2025 - 2026**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32363-A	2025 - 2026	Blind	Machine yourself			
AE32363-C	2025 - 2026	Optional		8.75	+2.15	0.90
AE32363-E	2025 - 2026	VHM standard		9.00	+2.15	0.90
AE32363-F	2025 - 2026	Optional		9.25	+2.15	0.90
AE32363-025	2025 - 2026	Optional	For 12° piston: APKT10521765	8.75	+0.50	0.90
AE32363-026	2025 - 2026	VHM standard	For 12° piston: APKT10521765	9.00	+0.50	0.90
AE32363-027	2025 - 2026	Optional	For 12° piston: APKT10521765	9.25	+0.50	0.90
AE32363-xxx	2025 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33177	•	•	•	

AA33211 **KTM 112SX** **2018 - 2024**
Husqvarna TC112 **2018 - 2024**
GasGas MC112 **2021 - 2024**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32341-A	2018 - 2024	Blind	Machine yourself			
AE32341-B	2018 - 2024	Optional	Use with VHM crankshaft AK20227	9.50	+4.05	0.90
AE32341-C	2018 - 2024	VHM standard	Use with VHM crankshaft AK20227	9.75	+4.05	0.90
AE32341-E	2018 - 2024	Optional	Use with VHM crankshaft AK20227	10.00	+4.05	0.90
AE32341-F	2018 - 2024	Optional	Use with VHM crankshaft AK20227	10.25	+4.05	0.90
AE32341-xxx	2018 - 2024	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33177	•	•	•	

VHM Cylinder head

AA33225 **KTM 112SX** 2025 - 2026
Husqvarna TC112 2025 - 2026
GasGas MC112 2025 - 2026



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32364-A	2025 - 2026	Blind	Machine yourself			
AE32364-C	2025 - 2026	Optional	Use with VHM crankshaft AK20227	9.25	+4.05	0.90
AE32364-E	2025 - 2026	VHM standard	Use with VHM crankshaft AK20227	9.50	+4.05	0.90
AE32364-F	2025 - 2026	Optional	Use with VHM crankshaft AK20227	9.75	+4.05	0.90
AE32364-025	2025 - 2026	Optional	12° piston: APKT10521765 and AK20227	9.25	+2.35	0.90
AE32364-026	2025 - 2026	VHM standard	12° piston: APKT10521765 and AK20227	9.50	+2.35	0.90
AE32364-027	2025 - 2026	Optional	12° piston: APKT10521765 and AK20227	9.75	+2.35	0.90
AE32364-xxx	2025 - 2026	Optional	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33177	●	●	●	

AA33022 **KTM 125SX** 1998 - 2001



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32334-A	1998 - 2001	Blind	Machine yourself			
AE32334-B	1998 - 2000	Optional		11.00	-0.40	1.10
AE32334-C	1998 - 2000	Optional		11.20	-0.40	1.10
AE32334-E	1998 - 2000	VHM standard		11.40	-0.40	1.10
AE32334-F	1998 - 2000	Optional		11.60	-0.40	1.10
AE32334-G	1998 - 2000	Optional		11.80	-0.40	1.10
AE32334-H	2001	Optional		11.00	0.00	1.00
AE32334-J	2001	Optional		11.20	0.00	1.00
AE32334-K	2001	Optional		11.40	0.00	1.00
AE32334-L	2001	VHM standard		11.60	0.00	1.00
AE32334-M	2001	Optional		11.80	0.00	1.00
AE32334-xxx	1998 - 2001	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33022	●	●	●	

AA33049 **KTM 125SX** 2002 - 2006
KTM 125EXC 2002 - 2006
KTM 125SXS 2001 - 2005



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32065-A	2001 - 2006	Blind	Machine yourself			
AE32065-H	2001 - 2006	Optional		11.40	0.00	1.00
AE32065-K	2001 - 2006	Optional		11.60	0.00	1.00
AE32065-L	2001 - 2006	VHM standard		11.80	0.00	1.00
AE32065-M	2001 - 2006	Optional		12.00	0.00	1.00
AE32065-xxx	2001 - 2006	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33049	●	●	●	

VHM Cylinder head

AA33097	KTM 125SX	2007 - 2015
	KTM 125SXS	2007 - 2008
	KTM 125EXC	2007 - 2016
	Husqvarna TC125	2014 - 2015
	Husqvarna TE125	2015 - 2016
	Husaberg TE125	2012 - 2014



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32128-A	2007 - 2012	Blind	Machine yourself			
AE32128-B	2007 - 2012	Optional		11.20	0.00	0.90
AE32128-C	2007 - 2012	Optional		11.40	0.00	0.90
AE32128-E	2007 - 2012	VHM standard for 125SX		11.60	0.00	0.90
AE32128-F	2007 - 2012	VHM standard for 125EXC / TE125		11.80	0.00	0.90
AE32128-H	2007 - 2012	Optional		12.00	0.00	0.90
AE32128-I	2013 - 2015	Optional		11.20	0.00	1.00
AE32128-J	2013 - 2015	Optional		11.40	0.00	1.00
AE32128-K	2013 - 2015	VHM standard for 125SX / TC125		11.60	0.00	1.00
AE32128-L	2013 - 2015	VHM standard for 125EXC / TE125		11.80	0.00	1.00
AE32128-M	2013 - 2015	Optional		12.00	0.00	1.00
AE32128-089	2007 - 2015	Optional	For 12° piston: APKT12511673	11.60	+ 0.40	0.90
AE32128-048	2007 - 2015	VHM standard	For 12° piston: APKT12511673	11.80	+ 0.40	0.90
AE32128-xxx	2007 - 2015	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33097	●	●	●	●

AA33156	KTM 125SX	2016 - 2022
	KTM 125 XC-W	2017 - 2019
	Husqvarna TC125	2016 - 2022
	Husqvarna TX125	2017 - 2019
	GasGas MC125	2021 - 2023



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32257-A		Blind	Machine yourself			
AE32257-B		Optional		11.20	0.00	0.90
AE32257-C		Optional		11.40	0.00	0.90
AE32257-E		VHM standard		11.60	0.00	0.90
AE32257-F		Optional		11.80	0.00	0.90
AE32257-040		Optional	For 12° piston: APKT12511673	11.20	0.00	0.90
AE32257-029		Optional	For 12° piston: APKT12511673	11.40	0.00	0.90
AE32257-026		VHM standard	For 12° piston: APKT12511673	11.60	0.00	0.90
AE32257-031		Optional	For 12° piston: APKT12511673	11.80	0.00	0.90
AE32257-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33156	●	●	●	●

VHM *Cylinder head*

AA33208	KTM 125SX	2023 - 2026
	KTM 125XC	2023 - 2026
	Husqvarna TC125	2023 - 2026
	GasGas MC125	2024 - 2026



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32335-A	2023 - 2026	Blind	Machine yourself			
AE32335-B	2023 - 2026	Optional	Fuel RON 110	10.80	0.00	0.90
AE32335-C	2023 - 2026	Optional	Fuel RON 105	11.00	0.00	0.90
AE32335-D	2023 - 2026	Optional	Fuel RON 105	11.20	0.00	0.90
AE32335-E	2023 - 2026	Optional	Fuel RON 98	11.40	0.00	0.90
AE32335-F	2023 - 2026	VHM Standard	Fuel RON 98	11.60	0.00	0.90
AE32335-G	2023 - 2026	Optional	Fuel RON 98	11.80	0.00	0.90
AE32335-H	2023 - 2026	Optional	Fuel RON 95	12.00	0.00	0.90
AE32335-030	2023 - 2026	Optional	12° piston: APKT12511725, Fuel RON 110	10.80	0.00	0.90
AE32335-031	2023 - 2026	Optional	12° piston: APKT12511725, Fuel RON 105	11.00	0.00	0.90
AE32335-032	2023 - 2026	Optional	12° piston: APKT12511725, Fuel RON 105	11.20	0.00	0.90
AE32335-033	2023 - 2026	Optional	12° piston: APKT12511725, Fuel RON 98	11.40	0.00	0.90
AE32335-034	2023 - 2026	VHM Standard	12° piston: APKT12511725, Fuel RON 98	11.60	0.00	0.90
AE32335-035	2023 - 2026	Optional	12° piston: APKT12511725, Fuel RON 98	11.80	0.00	0.90
AE32335-035	2023 - 2026	Optional	12° piston: APKT12511725, Fuel RON 95	12.00	0.00	0.90
AE32335-xxx	2023 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33156	•	•	•	

AA33103	KTM 144SX	2007 - 2008
	KTM 150SX	2009 - 2015
	KTM 150XC	2009 - 2015



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32150-A	2008 - 2015	Blind	Machine yourself			
AE32150-B	2008 - 2015	Optional		13.20	0.00	1.10
AE32150-C	2008 - 2015	Optional		13.40	0.00	1.10
AE32150-E	2008 - 2015	VHM standard		13.60	0.00	1.10
AE32150-F	2008 - 2015	Optional		13.80	0.00	1.10
AE32150-xxx	2008 - 2015	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33097	•	•	•	•

VHM Cylinder head

AA33157 **KTM 150SX** **2016 - 2022**
KTM 150XC-W **2017 - 2019**
Husqvarna TE150 **2017 - 2019**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32260-A	2016 - 2022	Blind	Machine yourself			
AE32260-B	2016 - 2022	Optional		13.20	0.00	1.10
AE32260-C	2016 - 2022	Optional		13.40	0.00	1.10
AE32260-E	2016 - 2022	VHM standard		13.60	0.00	1.10
AE32260-F	2016 - 2022	Optional		13.80	0.00	1.10
AE32260-G	2016 - 2022	Optional		14.00	0.00	1.10
AE32260-xxx	2016 - 2022	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33157	●	●	●	

AA33223 **KTM 150SX** **2025**
Husqvarna TC150 **2025**
GasGas MC150 **2025**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32365-A	2025	Blind	Machine yourself			
AE32365-B	2025	Optional		13.00	0.00	1.10
AE32365-C	2025	Optional		13.20	0.00	1.10
AE32365-D	2025	Optional		13.40	0.00	1.10
AE32365-E	2025	VHM standard		13.60	0.00	1.10
AE32365-F	2025	Optional		13.80	0.00	1.10
AE32365-xxx	2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33223	●	●	●	

AA33185 **KTM 150XC-W TPI** **2020 - 2022**
KTM 150XC-W **2023**
Husqvarna TE150i **2020 - 2022**
Husqvarna TE150 **2023**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32298-A	2020 - 2023	Blind	Machine yourself			
AE32298-B	2020 - 2023	Optional		13.60	0.00	1.10
AE32298-C	2020 - 2023	Optional		13.80	0.00	1.10
AE32298-E	2020 - 2023	VHM standard		14.00	0.00	1.10
AE32298-F	2020 - 2023	Optional		14.20	0.00	1.10
AE32298-G	2020 - 2023	Optional		14.40	0.00	1.10
AE32298-xxx	2020 - 2023	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33157	●	●	●	

VHM *Cylinder head*

AA33046
KTM 200SX **2003 - 2016**
KTM 200EXC **2003 - 2016**
KTM 200MXC **2003**
KTM 200XC **2006 - 2009**
KTM 200XC-W **2006 - 2016**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32063-A	2003 - 2016	Blind	Machine yourself			
AE32063-C	2003 - 2016	Optional		16.30	0.00	1.20
AE32063-E	2003 - 2016	VHM standard for 200SX		16.60	0.00	1.20
AE32063-F	2003 - 2016	VHM standard for 200EXC		16.90	0.00	1.20
AE32063-xxx	2003 - 2016	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33053 **KTM 250SX** **2003 - 2006**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32068-A	2003 - 2006	Blind	Machine yourself			
AE32068-C	2003 - 2006	Optional		20.20	+3.70	1.40
AE32068-E	2003 - 2006	Optional		20.60	+3.70	1.40
AE32068-F	2003 - 2006	VHM standard		21.00	+3.70	1.60
AE32068-G	2003 - 2006	Optional		21.40	+3.70	1.60
AE32068-xxx	2003 - 2016	Custom	Special insert according to your specification			

Part number sealkit	Year	O-ring small	O-ring middle	O-ring big	O-ring various
SK33053A	2003 - 2004	•	•	•	
SK33053B	2005 - 2006	•	•	•	

AA33098
KTM 250SX/EXC/XC-W **2007 - 2016**
KTM 250XC **2007 - 2013**
KTM 250XS **2007**
Husqvarna TC/TE250 **2014 - 2016**
Husaberg TE250 **2011 - 2014**



Part number insert	Year	Insert types	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32129-A	2007 - 2016	Blind	Machine yourself			
AE32129-C	2007 - 2016	Optional		20.60	+3.70	1.40
AE32129-E	2007 - 2016	Optional		21.00	+3.70	1.40
AE32129-F	2007 - 2016	Optional		21.45	+3.70	1.60
AE32129-H	2007 - 2016	VHM standard for 250SX / TC250		21.80	+3.70	1.60
AE32129-K	2007 - 2016	VHM standard for 250EXC / TE250		22.20	+3.70	1.60
AE32129-068	2007 - 2016	VHM standard	For 12° piston: APKT25021754	22.20	+0.50	1.60
AE32129-xxx	2007 - 2016	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33098	•	•	•	

VHM *Cylinder head*

AA33175	KTM 250EXC TPI	2018 - 2022
	KTM 250EXC	2023
	KTM 250XC-W TPI	2019 - 2022
	KTM 250XC-W	2023
	KTM 250XC TPI	2020 - 2022
	Husqvarna TE250i	2018 - 2022
	Husqvarna TE250	2023
	GasGas EC250	2021 - 2023



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32272-A	2018 - 2023	Blind	Machine yourself			
AE32272-S	2018 - 2023	Optional		23.00	+3.70	1.60
AE32272-T	2018 - 2023	VHM standard		24.00	+3.70	1.70
AE32272-080	2018 - 2023	Special	More mid to top power, best for enduro. Use with cylinder base gasket DA31247	23.00	+3.25	1.60
AE32272-xxx	2018 - 2023	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33098	•	•	•			

AA33214	KTM 250EXC	2024 - 2025
	Husqvarna TE250	2024 - 2025
	GasGas EC250	2024 - 2025



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32348-A	2024 - 2025	Blind	Machine yourself			
AE32348-xxx	2024 - 2025	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33209	•	•	•			

AA33109	KTM 300XC	2008 - 2016
	KTM 300XC-W	2008 - 2016
	Husqvarna TE/TC300	2014 - 2016
	Husaberg TE300	2011 - 2014



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32160-A	2008 - 2016	Blind	Machine yourself			
AE32160-H	2008 - 2016	VHM standard for 300SX / TC300		26.25	0.00	1.90
AE32160-E	2008 - 2016	VHM standard for 300EXC / TE300		28.50	0.00	1.70
AE32160-xxx	2008 - 2016	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33109	•	•	•			

VHM Cylinder head

AA33167
KTM 300EXC/XC/XC-W 2017 - 2018
KTM 300SX 2017 - 2022
Husqvarna TE300 2017 - 2018
Husqvarna TC300 2017 - 2022
Husqvarna TX300 2017 - 2018



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32274-A	2017 - 2022	Blind	Machine yourself			
AE32274-B	2017 - 2022	VHM standard for 300SX / TC300		26.25	0.00	1.90
AE32274-E	2017 - 2022	VHM standard for 300EXC / 300XC / 300XC-W / TE300 / TX300		27.50	0.00	1.90
AE32274-xxx	2017 - 2022	Custom	Special insert according to your specification			

Part number sealkit	Year	O-ring small	O-ring middle	O-ring big	O-ring various
SK33167	2017 - 2019	•	•	• 105x2	
SK33172	2020 - 2023	•	•	• 107x2	

AA33172
KTM 300EXC TPI 2018 - 2022
KTM 300EXC 2023
KTM 300XC-W TPI 2019 - 2022
KTM 300XC-W 2023
Husqvarna TE300i 2018 - 2022
Husqvarna TE300 2023
Husqvarna TX300i 2020 - 2022
GasGas EC300 2021 - 2023
GasGas EX300 2021 - 2023



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32274-A	2018 - 2023	Blind	Machine yourself			
AE32274-C	2018 - 2023	Optional		26.50	0.00	1.90
AE32274-E	2018 - 2023	Optional		27.50	0.00	1.90
AE32274-F	2018 - 2023	VHM standard		28.50	0.00	1.90
AE32274-031	2018 - 2023	Special	Improved power, best for deep sand tracks. Use with cylinder base gasket DA31247	28.00	-0.50	1.80
AE32274-xxx	2018 - 2023	Custom	Special insert according to your specification			

Part number sealkit	Year	O-ring small	O-ring middle	O-ring big	O-ring various
SK33167	2017 - 2019	•	•	• 105x2	
SK33172	2020 - 2023	•	•	• 107x2	

VHM Cylinder head

AA33210 **KTM 300SX / 300XC** **2023 - 2025**
Husqvarna TX300 **2023 - 2025**
GasGas EX300 **2024 - 2025**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32339-A	2023 - 2025	Blind	Machine yourself			
AE32339-B	2023 - 2025	Optional		25.00	0.00	1.90
AE32339-C	2023 - 2025	Optional		25.50	0.00	1.90
AE32339-D	2023 - 2025	VHM standard	Fuel RON 98	26.00	0.00	1.90
AE32339-E	2023 - 2025	Optional		26.50	0.00	1.90
AE32339-F	2023 - 2025	Optional		27.00	0.00	1.90
AE32339-010	2023 - 2025	Special	Use with OEM +	25.00	-0.30	1.90
AE32339-011	2023 - 2025	Special	cylinder base gasket S410270006135	25.50	-0.30	1.90
AE32339-012	2023 - 2025	Special standard	(0,50 + 0,30 = 0,80mm)	26.00	-0.30	1.90
AE32339-013	2023 - 2025	Special		26.50	-0.30	1.90
AE32339-xxx	2023 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33210	•	•	•	

AA33215 **KTM 300EXC** **2024 - 2025**
KTM 300XC-W **2024 - 2025**
Husqvarna TE300 **2024 - 2025**
GasGas EC300 **2024 - 2025**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32350-A	2024 - 2025	Blind	Machine yourself			
AE32350-B	2024 - 2025	Optional		26.00	0.00	1.90
AE32350-C	2024 - 2025	Optional		26.50	0.00	1.90
AE32350-D	2024 - 2025	Optional		27.00	0.00	1.90
AE32350-E	2024 - 2025	VHM standard		27.50	0.00	1.90
AE32350-F	2024 - 2025	Optional		28.00	0.00	1.90
AE32350-G	2024 - 2025	Optional		28.50	0.00	1.90
AE32350-H	2024 - 2025	Optional		27.00	0.00	1.90
AE32350-xxx	2024 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33210	•	•	•	

VHM Cylinder head

AA33201 **RIEJU MR250** **2021 - 2022**
Rieju MR300 **2021 - 2022**
GasGas EC250 **2018 - 2019**
GasGas EC300 **2018 - 2019**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32321-A		Blind	Machine yourself for 250cc			
AE32321-B		Optional	250cc	19.50	-1.00	1.60
AE32321-C		VHM standard	250cc	20.00	-1.00	1.60
AE32321-E		Optional	250cc	20.50	-1.00	1.60
AE32321-F		Optional	250cc	21.00	-1.00	1.60
AE32321-xxx		Custom	Special insert according to your specification			
AE32320-A		Blind	Machine yourself for 300cc			
AE32320-C		Optional	300cc	26.50	-1.25	1.90
AE32320-E		VHM standard	300cc	27.50	-1.25	1.90
AE32320-F		Optional	300cc	28.50	-1.25	1.90
AE32320-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33202 (250cc)	•	•	•	
SK33201 (300cc)	•	•	•	

AA33207 **Sherco 125SE Factory** **2022 - 2025**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32332-A	2022 - 2025	Blind	Machine yourself			
AE32332-B	2022 - 2025	Optional		10.80	+0.10	0.85
AE32332-C	2022 - 2025	Optional		11.00	+0.10	0.85
AE32332-E	2022 - 2025	VHM standard		11.20	+0.10	0.85
AE32332-F	2022 - 2025	Optional		11.40	+0.10	0.85
AE32332-G	2022 - 2025	Optional		11.60	+0.10	0.85
AE32332-H	2022 - 2025	Optional		11.80	+0.10	0.85
AE32332-xxx	2022 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33207	•	•	•	

AA33204 **Sherco 250SE-R** **2021 - 2022**
Sherco 250SE-F **2021 - 2025**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32329-A	2021 - 2025	Blind	Machine yourself			
AE32329-B	2021 - 2025	Optional		21.00	0.00	1.60
AE32329-C	2021 - 2025	Optional		22.00	0.00	1.60
AE32329-E	2021 - 2025	VHM standard		23.00	0.00	1.60
AE32329-F	2021 - 2025	Optional		24.00	0.00	1.60
AE32329-G	2021 - 2025	Optional		25.00	0.00	1.60
AE32329-xxx	2021 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33204	•	•	•	

VHM Cylinder head
AA33205 Sherco 300SE-R 2021 - 2022
Sherco 300SE-F 2021 - 2025


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32330-A	2021 - 2025	Blind	Machine yourself			
AE32330-B	2021 - 2025	Optional		26.00	-0.15	1.80
AE32330-C	2021 - 2025	Optional		27.00	-0.15	1.80
AE32330-E	2021 - 2025	VHM standard		28.00	-0.15	1.80
AE32330-F	2021 - 2025	Optional		29.00	-0.15	1.80
AE32330-G	2021 - 2025	Optional		30.00	-0.15	1.80
AE32330-xxx	2021 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33204	●	●	●	

AA33026 Suzuki RM65 2000 - 2005 See Kawasaki KX65 2000 - 2022

AA33009 Suzuki RM85 1998 - 2017


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32014-A	1998 - 2017	Blind	Machine yourself			
AE32014-E	1998	Optional	RM79	7.20	+1.65	1.00
AE32014-D	1998	Optional	RM79	7.40	+1.65	1.00
AE32014-C	1998	VHM standard	RM79	7.60	+1.65	1.00
AE32014-M	1999	Optional	RM82	7.40	+1.65	1.00
AE32014-L	1999	Optional	RM82	7.60	+1.65	1.00
AE32014-K	1999	VHM standard	RM82	7.80	+1.65	1.00
AE32014-N	2000 - 2017	Optional	RM85	8.00	+1.40	1.00
AE32014-O	2000 - 2017	VHM standard	RM85	8.20	+1.40	1.00
AE32014-xxx	1998 - 2017	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33009	●	●	●	

AA33126 Suzuki RM112 Supermini 2000 - 2012


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32195-A	2000 - 2012	Blind	Machine yourself			
AE32195-xxx	2000 - 2012	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33009	●	●	●	

VHM Cylinder head
AA33078 Suzuki RM125 1996 - 2008
Suzuki RM144 2000 - 2003
**New model, old model inserts: AE32005-F '98, AE32005-M '01-'02, AE32005-R '03*


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32088-A	1996 - 2004	Blind	Blind insert			
AE32088-016	1996-2000, 2003	Optional	RM125, Dome piston	11.00	+1.90	1.00
AE32088-003	1996-2000, 2003	VHM standard	RM125, Dome piston	11.20	+1.90	1.00
AE32088-015	1996-2000, 2003	Optional	RM125, Dome piston	11.40	+1.90	1.00
AE32088-019	2001 - 2002	VHM standard	RM125, Dome piston	11.20	+2.10	1.00
AE32088-C	2004	Optional	RM125	10.80	-0.50	1.00
AE32088-E	2004	Optional	RM125	11.00	-0.50	1.00
AE32088-F	2004	VHM standard	RM125	11.20	-0.50	1.00
AE32088-H	2004	Optional	RM125	11.40	-0.50	1.00
AE32088-xxx	1996 - 2004	Custom	Special insert according to your specification			
AE32101-A	2005 - 2008	Blind	Blind insert			
AE32101-B	2005 - 2008	Optional	RM125	10.80	-0.50	0.90
AE32101-C	2005 - 2008	Optional	RM125	11.00	-0.50	0.90
AE32101-E	2005 - 2008	VHM standard	RM125	11.20	-0.50	0.90
AE32101-F	2005 - 2008	Optional	RM125	11.40	-0.50	0.90
AE32101-xxx	2005 - 2008	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33078	●	●	●	

AA33014 Suzuki RM250 1996 - 2000


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32024-A	1996 - 1997 + 1999	Blind	Machine yourself			
AE32024-B	1996 - 1997 + 1999	Optional	Dome piston	19.80	+3.15	1.50
AE32024-C	1996 - 1997 + 1999	Optional	Dome piston	20.20	+3.15	1.50
AE32024-E	1996 - 1997 + 1999	VHM standard	Dome piston	20.60	+3.15	1.50
AE32024-F	1996 - 1997 + 1999	Optional	Dome piston	21.00	+3.15	1.50
AE32024-xxx	1996 - 1997 + 1999	Custom	Special insert according to your specification			
AE32037-A	1998 + 2000	Blind	Machine yourself			
AE32037-D	1998 + 2000	Optional	Flat top piston	20.20	-0.60	1.40
AE32037-E	1998 + 2000	VHM standard	Flat top piston	20.60	-0.60	1.40
AE32037-F	1998 + 2000	Optional	Flat top piston	21.00	-0.60	1.40
AE32037-G	1998 + 2000	Optional	Flat top piston			
AE32037-xxx	1998 + 2000	Custom	Special insert according to your specification			

Part number sealkit	Year	O-ring small	O-ring middle	O-ring big	O-ring various
SK33014	1996 - 2000	●	●	●	

AA33038 Suzuki RM250 2001 - 2008


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32053-A	2001 - 2008	Blind	Machine yourself			
AE32053-C	2001 - 2002	Optional		20.20	-0.50	1.30
AE32053-E	2001 - 2002	VHM standard		20.60	-0.50	1.30
AE32053-F	2003 - 2008	Optional		20.20	+3.00	1.50
AE32053-H	2003 - 2008	VHM standard		20.60	+3.00	1.50
AE32053-xxx	2001 - 2008	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33038	●	●	●	

VHM Cylinder head

AA33102 **Suzuki RG 250 vJ21** **1988 - 1991** See Aprilia RS250 Streetbike 1995 - 2002
Suzuki RG 250 vJ22 **1991 - 1996**

AA33188 **Suzuki RG 250 vJ23** **1997 - 1998**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32302-A	1997 - 1998	Blind	Machine yourself			
AE32302-xxx	1997 - 1998	Custom	Special insert according to your specification			
Part number seakit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33000	•					

AA33206 **Suzuki RG 400** **1985 - 1986**
Suzuki RG 500 **1985 - 1987**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32331-A	1985 - 1987	Blind	Machine yourself			
AE32331-B	1985 - 1987	Optional	RG500	11.80	+4.30	0.80
AE32331-E	1985 - 1987	VHM standard	RG500	12.00	+4.30	0.80
AE32331-F	1985 - 1987	Optional	RG500	12.20	+4.30	0.80
AE32331-G	1985 - 1987	Optional	RG500	12.40	+4.30	0.80
AE32331-xxx	1985 - 1987	Custom	Special insert according to your specification			
Part number seakit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33206	•	•	•	•		

AA33070 **TM MX85** **1999 - 2026**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32089-A	1999 - 2026	Blind	Machine yourself			
AE32089-C	1999 - 2012	Optional		7.40	-0.60	1.00
AE32089-E	1999 - 2012	Optional		7.60	-0.60	1.00
AE32089-F	1999 - 2012	VHM standard		7.80	-0.60	1.00
AE32089-G	2013 - 2024	Optional		7.80	-0.80	0.90
AE32089-H	2013 - 2024	VHM standard		8.00	-0.80	0.90
AE32089-K	2013 - 2024	Optional		8.20	-0.80	0.90
AE32089-L	2025 - 2026	Optional		7.40	-0.90	0.65
AE32089-M	2025 - 2026	VHM standard		7.60	-0.90	0.65
AE32089-N	2025 - 2026	Optional		7.80	-0.90	0.65
AE32089-P	2025 - 2026	Optional	High RPM / Overrev	7.60	-0.90	0.65
AE32089-xxx	2025 - 2026	Custom	Special insert according to your specification			
Part number seakit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33000	•					

VHM Cylinder head

AA33005 **TM MX125** **1998 - 2011**
TM EN125 **1998 - 2011**
TM MX144 **2007 - 2011**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32017-A	1998 - 2011	Blind	Machine yourself for MX125/EN125			
AE32017-A 56MM	2007 - 2011	Blind	Machine yourself for MX144			
AE32017-O	1998 - 2011	Optional	MX125 / EN125	10.80	-1.60	0.90
AE32017-N	1998 - 2011	Optional	MX125 / EN125	11.00	-1.60	0.90
AE32017-M	1998 - 2011	VHM standard	MX125 / EN125	11.20	-1.60	0.90
AE32017-L	1998 - 2011	Optional	MX125 / EN125	11.40	-1.60	0.90
AE32017-xxx	1998 - 2011	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33142 **TM MX125** **2012 - 2024**
TM EN125 **2012 - 2021**
TM MX144 **2013 - 2026**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32223-A	2012 - 2025	Blind	Machine yourself			
AE32223-B	2012 - 2015	Optional	MX125 / EN125	10.80	-1.70	1.00
AE32223-C	2012 - 2015	Optional	MX125 / EN125	11.00	-1.70	1.00
AE32223-E	2012 - 2015	VHM standard	MX125 / EN125	11.20	-1.70	1.00
AE32223-F	2012 - 2015	Optional	MX125 / EN125	11.40	-1.70	1.00
AE32223-G	2012 - 2015	Optional	MX125 / EN125	11.60	-1.70	1.00
AE32223-K	2016 - 2024	Optional	MX125 / EN125 2016 - 2021	11.00	-1.70	1.20
AE32223-L	2016 - 2024	Optional	MX125 / EN125 2016 - 2021	11.20	-1.70	1.20
AE32223-M	2016 - 2024	Optional	MX125 / EN125 2016 - 2021	11.40	-1.70	1.20
AE32223-N	2016 - 2024	VHM standard	MX125 / EN125 2016 - 2021	11.60	-1.70	1.20
AE32223-O	2016 - 2024	Optional	MX125 / EN125 2016 - 2021	11.80	-1.70	1.20
AE32223-P	2016 - 2024	Optional	MX125 / EN125 2016 - 2021	12.00	-1.70	1.20
AE32223-068	2013 - 2026	Optional	MX144	13.20	-1.65	0.95
AE32223-069	2013 - 2026	VHM standard	MX144	13.40	-1.65	0.95
AE32223-070	2013 - 2026	Optional	MX144	13.60	-1.65	0.95
AE32223-xxx	2012 - 2025	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33226 **TM MX125** **2025 - 2026** **Carb. version**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32367-A	2025 - 2026	Blind	Machine yourself			
AE32367-B	2025 - 2026	Optional		9.80	-1.55	1.10
AE32367-C	2025 - 2026	Optional		10.00	-1.55	1.10
AE32367-D	2025 - 2026	Optional		10.20	-1.55	1.10
AE32367-E	2025 - 2026	VHM standard		10.40	-1.55	1.10
AE32367-F	2025 - 2026	Optional		10.60	-1.55	1.10
AE32367-G	2025 - 2026	Optional		10.80	-1.55	1.10
AE32367-xxx	2025 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

VHM Cylinder head
AA33105 TM MX250 / MX300 1999 - 2014


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32152-A	1999 - 2014	Blind	Machine yourself for 250cc			
AE32152-C	1999 - 2014	Optional	250cc	20.20	-0.40	1.30
AE32152-E	1999 - 2014	VHM standard MX250	250cc	20.60	-0.40	1.30
AE32152-F	1999 - 2014	Optional	250cc	21.00	-0.40	1.30
AE32152-xxx	1999 - 2014	Custom	Special insert according to your specification			
AE32153-A	1999 - 2014	Blind	Machine yourself for 300cc			
AE32153-C	1999 - 2014	Optional	300cc	27.00	-0.50	1.80
AE32153-E	1999 - 2014	VHM standard MX300	300cc	28.00	-0.50	1.80
AE32153-F	1999 - 2014	Optional	300cc	29.00	-0.50	1.80
AE32153-xxx	1999 - 2014	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33000	●					

AA33154 TM MX250 2015 - 2026
TM MX300 2015 - 2026


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32255-A	2015 - 2026	Blind	Machine yourself for 250cc			
AE32255-C	2015 - 2024	Optional	Ø66.40 - 250cc	20.20	-0.40	1.30
AE32255-E	2015 - 2024	VHM standard MX250	Ø66.40 - 250cc	20.60	-0.40	1.30
AE32255-F	2015 - 2024	Optional	Ø66.40 - 250cc	21.00	-0.40	1.30
AE32255-K	2025 - 2026	Optional	Ø66.40 - 250cc	20.20	-0.80	1.30
AE32255-L	2025 - 2026	VHM standard MX250	Ø66.40 - 250cc	20.60	-0.80	1.30
AE32255-M	2025 - 2026	Optional	Ø66.40 - 250cc	21.00	-0.80	1.30
AE32255-xxx	2015 - 2026	Custom	Special insert according to your specification			
AE32250-A	2015 - 2026	Blind	Machine yourself for 300cc			
AE32250-C	2015 - 2024	Optional	Ø72 - 300cc	27.00	-0.60	1.60
AE32250-E	2015 - 2024	VHM standard MX300	Ø72 - 300cc	28.00	-0.60	1.60
AE32250-F	2015 - 2024	Optional	Ø72 - 300cc	29.00	-0.60	1.60
AE32250-H	2025 - 2026	Optional	Ø72 - 300cc	27.00	-0.90	1.60
AE32250-K	2025 - 2026	VHM standard MX300	Ø72 - 300cc	28.00	-0.90	1.60
AE32250-L	2025 - 2026	Optional	Ø72 - 300cc	29.00	-0.90	1.60
AE32250-xxx	2015 - 2026	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various	Remark	
SK33154	●	●	●		Only for MX300	

AA33186 TM EN300Fi 2020 - 2026


Part number insert	Year	insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32299-A	2020 - 2026	Blind	Machine yourself			
AE32299-C	2020 - 2026	Optional		27.00	-0.80	1.75
AE32299-E	2020 - 2026	VHM standard		28.00	-0.80	1.75
AE32299-F	2020 - 2026	Optional		29.00	-0.80	1.75
AE32299-xxx	2020 - 2026	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various	Remark	
SK33000	●					

VHM Cylinder head
AA33174 Yamaha YZ65 2018 - 2026


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32285-A	2018 - 2026	Blind	Machine yourself			
AE32285-C	2018 - 2026	Optional		6.80	+1.25	0.80
AE32285-E	2018 - 2026	VHM standard		7.00	+1.25	0.80
AE32285-F	2018 - 2026	Optional		7.20	+1.25	0.80
AE32285-xxx	2018 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33174	•	•	•	

**AA33041 Yamaha YZ80 1999 - 2001
Yamaha YZ85 2002 - 2018**


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32059-A	2002 - 2018	Blind	Machine yourself			
AE32059-H	2002 - 2018	Optional	YZ85	8.20	+1.60	1.00
AE32059-K	2002 - 2018	VHM standard	YZ85	8.40	+1.60	1.00
AE32059-L	2002 - 2018	Optional	YZ85	8.60	+1.60	1.00
AE32059-196	2002 - 2018	VHM standard	YZ85 for 12° piston: APYZ08521757	8.40	+0.00	1.30
AE32059-197	2002 - 2018	Optional	YZ85 For 12° piston: APYZ08521757	8.60	+0.00	1.30
AE32059-xxx	2002 - 2018	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33041	•	•	•	

AA33176 Yamaha YZ85 2019 - 2026


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32286-A	2019 - 2026	Blind	Machine yourself			
AE32286-C	2019 - 2026	Optional		8.20	+1.60	1.30
AE32286-E	2019 - 2026	VHM standard		8.40	+1.60	1.30
AE32286-F	2019 - 2026	Optional		8.60	+1.60	1.30
AE32286-032	2019 - 2026	Optional	For 12° piston: APYZ08521757	8.20	+0.00	1.30
AE32286-029	2019 - 2026	VHM standard	For 12° piston: APYZ08521757	8.40	+0.00	1.30
AE32286-xxx	2019 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33041	•	•	•	

AA33023 Yamaha YZ125 1996 - 2000


Part number insert	Year	insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32333-A	1996 - 2000	Blind	Machine yourself			
AE32333-B	1996 - 2000	Optional		10.80	+1.75	1.10
AE32333-C	1996 - 2000	Optional		11.00	+1.75	1.10
AE32333-E	1996 - 2000	VHM standard		11.20	+1.75	1.10
AE32333-F	1996 - 2000	Optional		11.40	+1.75	1.10
AE32333-G	1996 - 2000	Optional		11.60	+1.75	1.10
AE32333-xxx	1996 - 2000	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33077	•	•	•	

VHM Cylinder head
AA33032 **Yamaha YZ125** **2001 - 2004**
Yamaha YZ144 **2001 - 2004**


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32046-A	2001 - 2004	Blind	Machine yourself			
AE32046-H	2001 - 2004	Optional	YZ125	10.80	+1.85	1.00
AE32046-K	2001 - 2004	Optional	YZ125	11.00	+1.85	1.00
AE32046-L	2001 - 2004	VHM standard	YZ125	11.20	+1.85	1.00
AE32046-M	2001 - 2004	Optional	YZ125	11.40	+1.85	1.00
AE32046-xxx	2001 - 2004	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33077 (YZ125)	•	•	•	

Cylinder head AA33032 also fits the Kawasaki KX125 '03-07 Athena standard bore cilinder Ø54 , P400250100001. Custom inserts must be ordered.

AA33077 **Yamaha YZ125** **2005 - 2021**
Fantic XX125 **2021**
Fantic XE125 **2021**
Yamaha YZ144 **2005 - 2021**


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32100-A	2005 - 2021	Blind	Machine yourself			
AE32100-B	2005 - 2021	Optional	YZ125 / XX125 / XE125	10.80	0.00	0.90
AE32100-C	2005 - 2021	Optional	YZ125 / XX125 / XE125	11.00	0.00	0.90
AE32100-E	2005 - 2021	VHM standard	YZ125 / XX125	11.20	0.00	0.90
AE32100-F	2005 - 2021	Optional	YZ125 / XX125 / XE125	11.40	0.00	0.90
AE32100-xxx	2005 - 2021	Custom	Special insert according to your specification for YZ125 / YZ144			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33077	•	•	•	

AA33203 **Yamaha YZ125** **2022 - 2026**
Fantic XX125 **2022 - 2026**


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32327-A	2022 - 2026	Blind	Machine yourself			
AE32327-B	2022 - 2026	Optional		10.80	-0.10	1.00
AE32327-C	2022 - 2026	Optional		11.00	-0.10	1.00
AE32327-E	2022 - 2026	Optional		11.20	-0.10	1.00
AE32327-F	2022 - 2026	VHM standard		11.40	-0.10	1.00
AE32327-G	2022 - 2026	Optional		11.60	-0.10	1.00
AE32327-H	2022 - 2026	Optional		11.80	-0.10	1.00
AE32327-I	2022 - 2026	Optional		12.00	-0.10	1.00
AE32327-xxx	2022 - 2026	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33077	•	•	•	

VHM Cylinder head
AA33187 Yamaha YZ250 1988 - 1998


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32300-A	1988 - 1998	Blind	Machine yourself			
AE32300-B	1988 - 1998	Optional		19.50	+3.00	1.50
AE32300-C	1988 - 1998	Optional		20.00	+3.00	1.50
AE32300-E	1988 - 1998	VHM standard		20.50	+3.00	1.50
AE32300-F	1988 - 1998	Optional		21.00	+3.00	1.50
AE32300-xxx	1988 - 1998	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33080 Yamaha YZ250 1999 - 2026
Yamaha YZ250X 2016 - 2026
Fantic XX250 2021 - 2026


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32021-A	1999 - 2026	Blind	Machine yourself			
AE32021-D	1999 - 2026	Optional		19.80	+2.80	1.50
AE32021-C	1999 - 2026	Optional		20.20	+2.80	1.50
AE32021-B	1999 - 2026	VHM standard	YZ250	20.60	+2.80	1.50
AE32021-009	1999 - 2026	Optional		21.00	+2.80	1.50
AE32021-092	2016 - 2026	Custom	YZ250X	21.80	+2.80	1.60
AE32021-K	2021 - 2026	VHM standard	XX250	20.60	+3.00	1.50
AE32021-L	2021 - 2026	Optional	XX250	21.00	+3.00	1.50
AE32021-xxx		Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33080	•	•	•	

AA33028-1 Yamaha TZ125 4JT1 / 4JT4 1994 - 1997
Yamaha TZ125 4JT5 1998 - 2010


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32036-A	1994 - 2010	Blind	Machine yourself			
AE32036-122	1994 - 1997	VHM standard	Ø 56 mm piston	11.80	0.00	0.80
AE32036-134	1994 - 1997	Optional	Ø 56 mm piston	12.00	0.00	0.80
AE32036-C	1998 - 2010	Optional	Ø 54 mm piston	11.40	0.00	0.80
AE32036-E	1998 - 2010	VHM standard	Ø 54 mm piston	11.60	0.00	0.80
AE32036-F	1998 - 2010	Optional	Ø 54 mm piston	11.80	0.00	0.80
AE32036-G	1998 - 2010	Optional	Ø 54 mm piston	12.00	0.00	0.80
AE32036-xxx	1994 - 2010	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

VHM Cylinder head
AA33028 Yamaha TZ250 1995 - 2002


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32036-A	1995 - 2002	Blind	Machine yourself			
AE32036-122	1995 - 1999	VHM standard	Ø 56 mm piston	11.80	0.00	0.80
AE32036-134	1995 - 1999	Optional	Ø 56 mm piston	12.00	0.00	0.80
AE32036-C	2000 - 2002	Optional	Ø 54 mm piston	11.40	0.00	0.80
AE32036-E	2000 - 2002	VHM standard	Ø 54 mm piston	11.60	0.00	0.80
AE32036-F	2000 - 2002	Optional	Ø 54 mm piston	11.80	0.00	0.80
AE32036-G	2000 - 2002	Optional	Ø 54 mm piston	12.00	0.00	0.80
AE32036-xxx	1995 - 2002	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33065 Yamaha TZ250 5KE4 2003 - 2010


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32080-A	2003 - 2010	Blind	Machine yourself			
AE32080-C	2003 - 2010	Optional		11.80	0.00	0.80
AE32080-E	2003 - 2010	VHM standard		12.00	0.00	0.80
AE32080-F	2003 - 2010	Optional		12.20	0.00	0.80
AE32080-xxx	2003 - 2010	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33000	•			

AA33195 Yamaha TZR250R 3xv1 1991 - 1992


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32313-A	1991 - 1992	Blind	Machine yourself			
AE32313-B	1991 - 1992	Optional		12.00	+2.10	1.00
AE32313-C	1991 - 1992	Optional		12.20	+2.10	1.00
AE32313-D	1991 - 1992	VHM standard		12.40	+2.10	1.00
AE32313-E	1991 - 1992	Optional		12.60	+2.10	1.00
AE32313-F	1991 - 1992	Optional		12.80	+2.10	1.00
AE32313-xxx	1991 - 1992	Custom	Special insert according to your specification			

Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various
SK33195	•	•	•	•

▲ OEM HEAD INSERTS

FOR STANDARD CYLINDER HEAD COVER

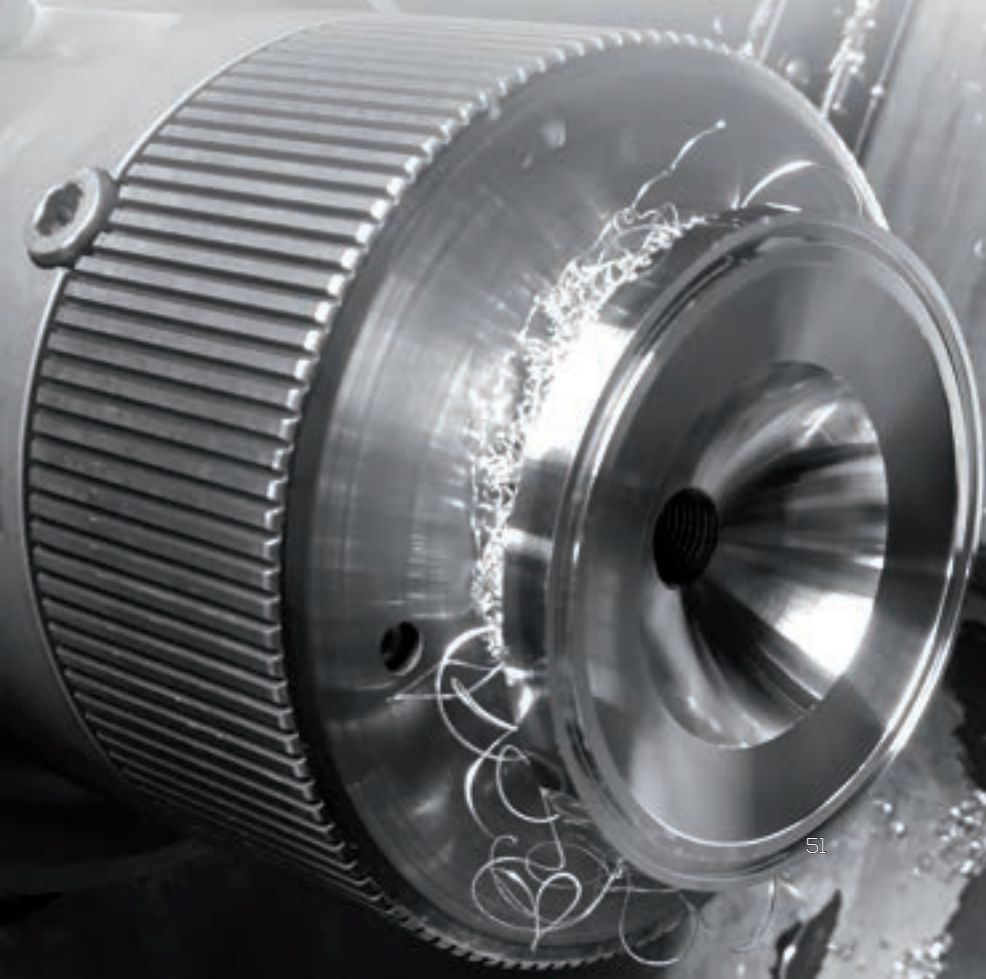
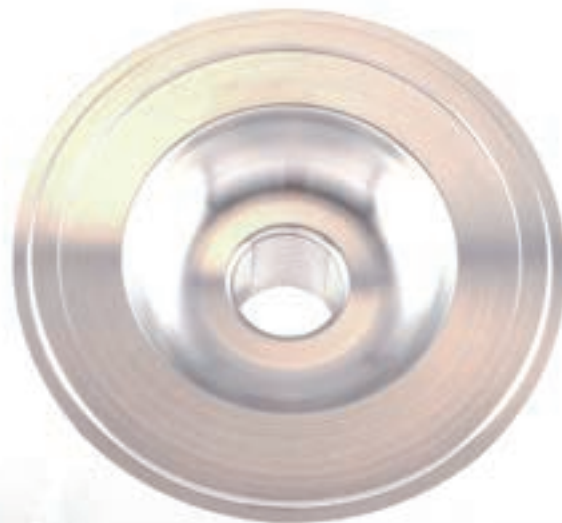
Besides the VHM cylinder headsets we also offer special inserts for certain standard OEM cylinder headcovers. On the following pages you can see for which engines we have these inserts available.

- ✔ Quick to adjust
- ✔ Fit standard cylinder head in some cases head mod needed
- ✔ Custom specifications possible

MACHINE YOURSELF

All inserts are available with a machined combustion chamber or not machined 'blind insert'. With the 'blind' insert, you are able to machine the combustion chamber by yourself.

www.vhm.nl/inserts



VHM OEM head inserts
2Fast4Race

Partnumber insert	Year	Insert type	Description
AE32231-A		Blind	
AE32231-xxx		Custom	Special insert according to your specification


Aprilia RSW125 / RSW250 racebike Type APC

Partnumber insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32076-A		Blind insert				
AE32076-AC69		Optional		10.50	+1.50	0.75
AE32076-AC68		Optional		10.64	+1.50	0.75
AE32076-AC56		Optional		10.77	+1.50	0.75
AE32076-AC38		Optional		10.90	+1.50	0.75
AE32076-AC37		Optional		11.10	+1.50	0.75
AE32076-AC32		Optional		11.22	+1.50	0.75
AE32076-AC39		Optional		11.37	+1.50	0.75
AE32076-xxxx		Custom	Special insert according to your specification			


Aprilia RSW125 / RSW250 racebike Type APE

Partnumber insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32085-A		Blind insert				
AE32085-004		Optional	For RSW125 APE	10.20	+1.50	0.75
AE32085-005		Optional	For RSW125 APE	10.40	+1.50	0.75
AE32085-AC69		Optional	For RSW125 APE	10.50	+1.50	0.75
AE32085-AC56		Optional	For RSW125 APE	10.77	+1.50	0.75
AE32085-AC38		Optional	For RSW125 APE	10.90	+1.50	0.75
AE32085-006		Optional	For RSW125 APE	10.60	+1.50	0.75
AE32085-AC39		Optional	For RSW125 APE	11.37	+1.50	0.75
AE32085-xxxx		Custom	Special insert according to your specification			


Derbi 50cc

Partnumber insert	Year	Insert Type	Description
AE32135-A		Blind	50cc
AE32135-xxx		Custom	50cc, Special insert according to your specification


GasGas 65cc

Partnumber insert	Year	Insert type	Description
AE32118-A		Blind	
AE32118-xxx		Custom	Special insert according to your specification



VHM OEM head inserts
Iame 125 Screamer

Partnumber insert	Year	Insert type	Description
AE32246-A		Blind	
AE32246-xxx		Custom	Special insert according to your specification


Iame 125 Screamer III

Partnumber insert	Year	Insert type	Description
AE32323-A		Blind	
AE32323-xxx		Custom	Special insert according to your specification


Kreidler 50/60cc Air Cooled

Partnumber insert	Year	Insert type	Description
AE32185-A		Blind	
AE32185-xxx		Custom	Special insert according to your specification

Note: does not fit the standard cylinder headcover, VHM modification on the headcover needed: MODCYLKOP-001


Malossi Minarelli AM6, scooter 7T

Partnumber insert	Year	Insert Type	Description
AE32173-A		Blind	Minarelli AM6, scooter 7T, pitch 50x50 and 52x52
AE32173-xxx		Custom	Minarelli AM6, scooter 7T, pitch 50x50 and 52x52 Special insert according to your specification
AE32173B-A		Blind	Minarelli AM6, scooter 7T, pitch 54x54 and 56x56 (Derbi)
AE32173B-xxx		Custom	Minarelli AM6, scooter 7T, pitch 54x54 and 56x56 (Derbi) Special insert according to your specification
AE32303-A		Blind	Minarelli AM6, 70cc, 2020
AE32303-xxx		Custom	Minarelli AM6, 70cc, 2020 Special insert according to your specification


Malossi Piaggio

Partnumber insert	Year	Insert Type	Description
AE32172-A		Blind	
AE32172-xxx		Custom	Special insert according to your specification



VHM OEM head inserts
Polini
Minarelli

Partnumber insert	Year	Insert Type	Description
AE32091-A		Blind	
AE32091-xxx		Custom	Special insert according to your specification


TM
K9B, K9C, KZ10, KZ10B

Partnumber insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32203-A	2008 - 2015	Blind	K9B, K9C, KZ10, KZ10B			
AE32203-xxx	2008 - 2015	Custom	K9B, K9C, KZ10, KZ10B, Special insert according to your specification			
AE32203-277	2010 - 2011	Optional	KZ10 4° piston, APTM12521729	13.80 (13.20 CIK)	-2.20	1.05 mm 5.5°
AE32203-278	2012	Optional	KZ10 4° piston, APTM12521729	13.80 (13.20 CIK)	-2.30	1.05 mm 5.5°
AE32203-279	2013 - 2015	Optional	KZ10 4° piston, APTM12521729	13.80 (13.20 CIK)	-2.40	1.05 mm 5.5°

Note: VHM inserts does not fit the standard cylinder headcover (CYLTMKZ10), VHM modification on the headcover needed: **MODCYLKOP-001**


TM
KZ10C, KZ-R1

Partnumber insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32270-A	2016 - 2018	Blind	KZ10C / KZ-R1			
AE32270-026	2016 - 2018	Optional	KZ10C	13.80 (13.10 CIK)	-2.20	0.90 mm
AE32270-027	2016 - 2018	Optional	KZ10C	13.80 (13.10 CIK)	-2.30	0.90 mm
AE32270-028	2016 - 2018	VHM standard	KZ10C	13.80 (13.10 CIK)	-2.40	0.90 mm
AE32270-029	2016 - 2018	Optional	KZ10C	13.80 (13.10 CIK)	-2.50	0.90 mm
AE32270-030	2016 - 2018	Optional	KZ10C	13.80 (13.10 CIK)	-2.60	0.90 mm
AE32270-180	2019 - 2022	VHM standard	KZ-R1 Flat top 4° piston APTM12521762	13.80 (13.10 CIK)	-3.60	0.85 mm
AE32270-xxx	2016 - 2018	Custom	Special insert according to your specification			

Note: VHM inserts fit the standard cylinder headcover CYLTMKZ10C without any modifications.


TM
KZ10C, KZ-R1, KZ-R2

Partnumber	Year	Insert Type	Description
OEM Cylinder head			
CYLTMKZ10C	2016 - 2024	Fits KZ10C, KZ-R1 and KZ-R2	



CUSTOM INSERTS

Besides our standard, optional and blind inserts, we also offer the possibility to produce a custom insert. Thereby we machine the insert according to your requested specifications.

- ✔ Your specifications
- ✔ VHM high quality
- ✔ Already possible from 1 piece

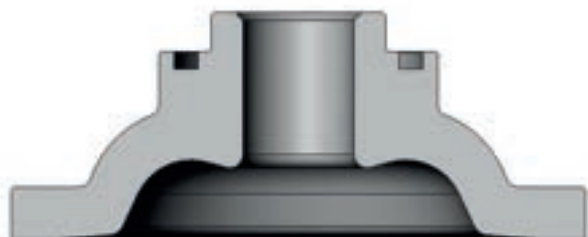
TO YOUR SPECIFICATIONS

When ordering a custom insert, we need to know the following desired values from you:

- Volume [cc]; total volume combustion chamber including spark plug hole measured on the engine
- Squish [mm]; minimum space / distance between piston and insert
- Piston height [mm]; Difference between top of cylinder and top of piston when piston at top dead center
- Piston crown radius or height [mm]; The radius on top of the piston (flat piston R=0mm)
- Amount [pieces]; Possible from 1 piece
- Shape; Shape A or B



Insert shape A



Insert shape B

COMPRESSION RATIO

The compression ratio can be adjusted, by increasing or decreasing the volume of the combustion chamber. What compression you need, depends on the track and weather conditions.

A higher compression ratio, which means less volume, will give the engine more low and middle range torque. This will improve the acceleration and increases torque feeling when accelerating out of the corner. However, this compromises top speed and the insert is more sensitive to detonation.

Lowering the compression ratio, which means more volume, will result in better overrevolution characteristics. We advise MX drivers to use inserts with a bigger volume on fast tracks to improve topspeed. However, this can compromise it's bottom power.

ORDER FORM CUSTOMIZED INSERT

You can find an order form for customized inserts on our website.

www.vhm.nl/projects



VHM CRANKSHAFTS

VHM crankshafts are designed with a different inertia and balance for a better handling and performance. These crankshafts' high performances are the result of engineering, design and many years of close collaboration with the most professional race teams. All VHM crankshafts can be overhauled many times due to the crankwebs that have been heat treated.

✔ Faster lap times

better mid and top over revolutions due to increased inertia

✔ Longevity

can be rebuild many times without losing the strength and stiffness

✔ Accuracy

runout within 0.01mm

✔ Less vibration

due to better balance factor

LINE-UP

The line-up for the VHM crankshafts for MX: GasGas MC65, MC85, MC112, MC125, KTM 65SX, 85SX, 112SX, 125SX, Husqvarna TC65, TC85, TC112, TC125, Yamaha YZ85, YZ125 and Fantic XX125.

REBUILDING

We also rebuild crankshafts. They will be disassembled and the connecting rod, big end pin, needle bearing and side washers will be replaced. Contact us for more information at info@vhm.nl.

PROJECT CRANKSHAFTS

We can also produce special crankshaft batches. From design, calculations, crank web production to assembly of the complete crankshafts. Contact us for more information at info@vhm.nl.

www.vhm.nl/crankshafts



VHM Crankshafts

AK20286	KTM 65SX	2024 - 2026	Middle inertia
	Husqvarna TC65	2024 - 2026	
	GasGas MC65	2024 - 2026	



Spare parts
03.6029
DA28160

Description
ProX connecting rod kit
Synthetic plates

Content
1x connecting rod, 1x big end pin, 1x bearing, 2x washer
2x

AK20286R3	KTM 65SX	2024 - 2026	Middle inertia + lightweight conrod CRK1302
	Husqvarna TC65	2024 - 2026	
	GasGas MC65	2024 - 2026	



Spare parts
CRK1302
DA28160

Description
VHM lightweight connecting rod kit
Synthetic plates

Content
1x connecting rod, 1x big end pin, 1x bearing, 2x washer
2x

AK20225	KTM 85SX	2018 - 2026	Middle inertia
	Husqvarna TC85	2018 - 2026	
	GasGas MC85	2021 - 2026	



Spare parts
03.6113
DA28127

Description
ProX connecting rod kit
Synthetic plates

Content
1x connecting rod, 1x big end pin, 1x bearing, 2x washer
2x

AK20225R3	KTM 85SX	2018 - 2026	Middle inertia + lightweight conrod CRK1402
	Husqvarna TC85	2018 - 2026	
	GasGas MC85	2021 - 2026	



Spare parts
CRK1402
DA28127

Description
VHM lightweight connecting rod kit
Synthetic plates

Content
1x connecting rod, 1x big end pin, 1x bearing, 2x washer
2x

VHM Crankshafts

AK20227	KTM 112SX	2018 - 2026	Middle inertia
	Husqvarna TC112	2018 - 2026	
	GasGas MC112	2021 - 2026	



Spare parts	Description	Content
03.6113	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
DA28127	Synthetic plates	2x

AK20227R3	KTM 112SX	2018 - 2026	Middle inertia + lightweight conrod CRK1402
	Husqvarna TC112	2018 - 2026	
	GasGas MC112	2021 - 2026	



Spare parts	Description	Content
CRK1402	VHM lightweight connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
DA28127	Synthetic plates	2x

AK20278	KTM 125SX	2023 - 2026	Middle inertia
	Husqvarna TC125	2023 - 2026	
	GasGas MC125	2024 - 2026	



Spare parts	Description	Content
03.6226	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
DA28157	Synthetic plates	2x

AK20278R3	KTM 125SX	2023 - 2026	Middle inertia + lightweight conrod CRK1502
	Husqvarna TC125	2023 - 2026	
	GasGas MC125	2024 - 2026	



Spare parts	Description	Content
CRK1502	VHM lightweight connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
DA28157	Synthetic plates	2x

VHM Crankshafts

AK20235B **Yamaha YZ85** **2019 - 2026** **High inertia**



Spare parts	Description	Content
B4B-11650-00	OEM connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

AK20283 **Yamaha YZ125** **2022 - 2026** **Middle inertia**
Fantic XX125 **2022 - 2026**



Spare parts	Description	Content
03.2232	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

AK20283R1 **Yamaha YZ125** **2022 - 2026** **Middle inertia + VHM CRK2002**
Fantic XX125 **2022 - 2026**



Spare parts	Description	Content
CRK2002	VHM light weight connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

AK20283R3 **Yamaha YZ125** **2022 - 2026** **Middle inertia + Long conrod 113 mm**
Fantic XX125 **2022 - 2026**



Spare parts	Description	Content
CRK2001	VHM long connecting rod kit 110+3 = 113 mm	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

AK20283R3 can only be used in combination with VHM piston kit APYZ12521714 or APYZ12511734

MODIFICATIONS

We can perform modifications on certain OEM crankshafts for better performance. We then change the balance percentage and inertia of the crankshaft, using tungsten and / or aluminium material. This results in a better feeling and handling of the bike and leads to reduced vibrations.

- ✔ Better feeling and handling
- ✔ Reduced vibrations
- ✔ Better performance

Why modify the OEM crankshaft? Most of the tuned engines use an OEM crankshaft, which is not optimal balanced for a tuned engine. When a lighter or heavier piston and connecting rod are used, the balance is not correct anymore, which results in more vibrations.

How does it work? When we receive your OEM crankshaft, we'll first determine the total reciprocating weight. With our advanced computer simulation, we'll calculate the best balance for each application. Material like tungsten will often be used to modify the balance factor. After performing the modification, the crankshaft will be assembled and aligned with high precision. With this modified crank, you'll definitely notice the difference!

CUSTOMIZED MODIFICATIONS

We can also perform customized crankshaft modifications on your OEM crankshaft. If you have a specific idea or an OEM crankshaft which is not mentioned in this catalogue, you can always ask us for a customized modification.

In the past we've already made customized modifications on crankshafts for several engines like Honda CR125R, lame 60cc Waterswift, Kawasaki KX250F, KTM 350SX-F, Maxter MXO 125, Suzuki RM125, RM-Z250, TM MX250, MX300, OK125 S-Junior, 60cc mini, KZ10C, Vortex DDJ 125, DDS 125, Yamaha YZ250 and Yamaha YZ450F.

www.vhm.nl/crankmods



VHM Crankshaft modification

Brand & type	Year	Part number	Description
GasGas			
MC50	2021 - 2026	AK20123-002	High inertia
MC65	2021 - 2023	AK20136-002	Middle inertia, modified balance
	2024 - 2026	AK20287-003	Middle inertia, modified balance
MC85	2021 - 2026	AK20224-001	Middle inertia
MC125	2021 - 2023	AK20202-002	Middle inertia
	2024 - 2026	AK20277-004	Middle inertia
MC250F	2021 - 2023	AK20203-002	High inertia, modified balance
	2021 - 2023	AK20203-006	Low inertia, modified balance
	2024 - 2026	AK20279-001	Low inertia, modified balance
MC450F	2021 - 2023	AK20211-003	Middle inertia, modified balance
	2024 - 2026	AK20272-002	Middle inertia, modified balance
Fantic			
XX125	2021	AK20063-002	High inertia, modified balance
	2021	AK20063-006	High inertia, modified balance, using +3 mm longer Prox conrod 03.2221
	2022 - 2026	AK20269-001	Low inertia
	2022 - 2026	AK20269-002	Middle inertia, using 3 mm longer conrod CRK2001
Honda			
CR250R	2005 - 2007	AK20038-001	Middle inertia, modified balance
CRF250R	2019 - 2021	AK20246-001	High inertia
CRF450R	2017 - 2026	AK20221-001	High inertia, modified balance
Husqvarna			
TC50	2017 - 2026	AK20123-002	High inertia
TC65	2017 - 2023	AK20136-002	Middle inertia, modified balance
	2024 - 2026	AK20287-003	Middle inertia, modified balance
TC85	2018 - 2026	AK20224-001	Middle inertia
TC125	2016 - 2022	AK20202-002	Middle inertia
	2023 - 2026	AK20277-004	Middle inertia
FC250	2016 - 2022	AK20203-002	High inertia, modified balance
	2016 - 2022	AK20203-006	Low inertia, modified balance
	2023 - 2026	AK20279-001	Low inertia, modified balance
FC450	2019 - 2022	AK20211-003	Middle inertia, modified balance
	2023 - 2026	AK20272-002	Middle inertia, modified balance
Kawasaki			
KX65	2000 - 2026	AK20066-004	Middle inertia and modified balance
KX85	2006 - 2013	AK20041-007	High inertia, modified balance
	2014 - 2025	AK20178-001	High inertia, modified balance
	2014 - 2025	AK20178-002	Middle inertia, modified balance
KX125	2003 - 2010	AK20033-001	High inertia, modified balance
KTM			
50SX	2009 - 2026	AK20123-002	High inertia
65SX	2009 - 2023	AK20136-002	Middle inertia, modified balance
	2024 - 2026	AK20287-003	Middle inertia, modified balance
85SX	2018 - 2026	AK20224-001	Middle inertia
125SX	2016 - 2022	AK20202-002	Middle inertia
	2023 - 2026	AK20277-004	Middle inertia
150SX	2016 - 2022	AK20202-003	Middle inertia
250SX-F	2016 - 2022	AK20203-002	High inertia, modified balance
	2016 - 2022	AK20203-006	Low inertia, modified balance
	2023 - 2026	AK20279-001	Low inertia, modified balance
450SX-F	2016 - 2022	AK20211-003	Middle inertia, modified balance
	2023 - 2026	AK20272-002	Middle inertia, modified balance
Suzuki			
RM85	2003 - 2012	AK20039-001	High inertia, modified balance
Yamaha			
YZ65	2018 - 2026	AK20230-002	Middle inertia
YZ85	2019 - 2026	AK20232-001	Middle inertia
YZ125	2005 - 2021	AK20063-002	High inertia, modified balance
	2005 - 2021	AK20063-006	High inertia, modified balance, using +3 mm longer Prox conrod 03.2221
	2022 - 2026	AK20269-001	Low inertia
	2022 - 2026	AK20269-002	Middle inertia, using 3 mm longer conrod CRK2001
YZ250F	2019 - 2023	AK20233-001	Low inertia
	2019 - 2023	AK20233-002	Middle inertia
	2024 - 2026	AK20291-001	Low inertia

CONNECTINGRODS

SPECIAL CONRODS FOR MX

We have a lightweight conrod for KTM 65SX, 85SX, 112SX, 125SX, Husqvarna TC65, TC85, TC112, TC125 and GasGas MC65, MC85, MC112, MC125. A lightweight and +3mm longer conrod for Yamaha YZ125 and Fantic XX125. And a conrod designed for extra strength around the small end for the KTM 250SX, Husqvarna TC250 and GasGas MC250.

- ✔ Special features
- ✔ Less oval deforming
- ✔ High resistance to fractures
- ✔ Improved throttle response

CONRODS FOR ROADRACE

For roadracers we have VHM connecting rod kits available for the Aprilia RSW125 / RSW250, Honda RS125 '00-'10, RS250 '93-'10, NSR250 MC18 / MC21 / MC28.

- ✔ Less oval deforming
- ✔ High resistance to fractures

PROJECT CONRODS

We can also produce special conrod batches. For example a longer rod or a conrod for a rare engine? Contact us for more information at info@vhm.nl.

www.vhm.nl/conrods



VHM *Connecting rods*
CRK07 **Honda RS125 NX4 1995-2010**


Description	Content
VHM RS125 A-kit connecting rod kit Note: fits OEM crankshaft 13300-NX4-711	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

CRK04 **Honda RS250 NX5, NXA 1993-2010**


Description	Content
VHM RS250 A-kit connecting rod kit Note: fits OEM crankshaft 13000-NX5-790 and 13000-NXA-610	2x connecting rod, 2x bearing, 4x washer

CRK09 **Honda NSR250 MC18 / MC21 / MC28 1989 - 1996**


Description	Content
VHM connecting rod kit	2x connecting rods only

CRK100 **Aprilia RSW125 / RSW250/LE**


Description	Content
VHM connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

CRK1302 **KTM 65SX 2009 - 2026**
Husqvarna TC65 2017 - 2026
GasGas MC65 2021 - 2026


Description	Content
VHM lightweight connecting rod kit Note: OEM length 88 mm, connecting rod 34 grams lighter	1x lightweight connecting rod, 1x big end pin, 1x bearing, 2x washer

CRK1402 **KTM 85SX 2013 - 2026**
Husqvarna TC85 2014 - 2026
GasGas MC85 2021 - 2026


Description	Content
VHM lightweight connecting rod kit Note: OEM length 96 mm, connecting rod 20 grams lighter	1x lightweight connecting rod, 1x big end pin, 1x bearing, 2x washer

VHM *Connecting rods*

CRK1502

KTM 125SX 2016 - 2026
Husqvarna TC125 2016 - 2026
GasGas MC125 2021 - 2026



Description	Content
VHM lightweight connecting rod kit	1x lightweight connecting rod, 1x big end pin, 1x bearing, 2x washer
Note: OEM length 110 mm, connecting rod 19 grams lighter	

CRK1602

KTM 250SX 2003 - 2026
Husqvarna TC250 2014 - 2026
GasGas MC250 2022 - 2026



Description	Content
VHM connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
Note: OEM length 125 mm, connecting rod 6 grams lighter	

CRK2001

Yamaha YZ125 2022 - 2026



Description	Content
VHM +3mm connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
Note: OEM length 110 mm + 3 mm = 113mm Use VHM piston: APYZ12521714 or APYZ12511734	

CRK2002

Yamaha YZ125 2022 - 2026



Description	Content
VHM +3mm connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
Note: OEM length 110 mm, 7,7 grams lighter	

VHM BILLET PISTONS

VHM pistons are 100% CNC machined from high quality solid billet material. With our Takisawa piston lathe we are able to turn elliptical shaped pistons with very high precisions.

- ✔ High performance
- ✔ Longevity and keeps performance during lifetime
- ✔ Non-circular piston profile
- ✔ Resistance to detonation

www.vhm.nl/pistons

DIRECT REPLACEMENT / SPECIAL MODELS

We produce two piston models. One is a standard, direct replacement model, which can be placed into your engine with no other adjustments needed. The other is a special model for maximum performance gain, which can only be used in combination with a special VHM insert or longer conrod.

AVAILABLE FOR

VHM pistons are available for MX: Fantic XX125, GasGas MC65, MC85, MC105, MC112, MC125, MC250, KTM 65SX, 85SX, 105SX, 112SX, 125SX, 250SX, Husqvarna TC65, TC85, TC105, TC112, TC125, TC250, TM MX85, Yamaha YZ85 and YZ125. For roadrace: Honda RS125, RS250 and Yamaha TZ125, TZ250. For karting: TM KZ10/B/C and KZ-R1. For moped: Kreidler 50cc Air Cooled, 60cc Air Cooled, Malossi 50cc, 50cc Derbi, Puch Maxi 70cc and Minareli AM6 50cc.



VHM Piston kits
MOTOCROSS

KTM 65SX 2009 - 2026
Husqvarna TC65 2017 - 2026
GasGas MC65 2021 - 2026


Special - 12° top

Part number	Piston diameter
APKT06521722A1	Ø44.94
APKT06521722A	Ø44.95
APKT06521722B	Ø44.96
APKT06521722C	Ø44.97
APKT06521722D	Ø44.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
Minimum 0.04	0.25+0.10	APR451.0	APP1238	APC121.0
Maximum 0.05				

Must use special 12° insert!

Year	Optional	VHM standard	Optional
09-'23	AE32167-101	AE32167-059	
24-'26	AE32353-010	AE32353-011	AE32353-012
24-'26 with base gasket 0.20mm	AE32353-020	AE32353-021	AE32353-022

KTM 85SX 2003 - 2026
Husqvarna TC85 2014 - 2026
GasGas MC85 2021 - 2026


Special - 12° top

Part number	Piston diameter
APKT08521707A1	Ø46.94
APKT08521707A	Ø46.95
APKT08521707B	Ø46.96
APKT08521707C	Ø46.97
APKT08521707D	Ø46.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.30+0.10	APR471.0	APP1440	APC141.1SP

Must use special 12° insert!

Year	Optional	VHM standard	Optional
04-'12		AE32087-112	
13-'17	AE32226-079	AE32226-056	AE32226-100
18-'24	AE32281-012	AE32281-013	AE32281-014
25-'26	AE32361-025	AE32361-026	AE32361-027

KTM 105SX 2004 - 2026
Husqvarna TC105 2014 - 2026
GasGas MC105 2021 - 2026


Special - 12° top

Part number	Piston diameter
APKT10521765A1	Ø51.94
APKT10521765A	Ø51.95
APKT10521765B	Ø51.96

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.30+0.10	APR521.0	APP1445	APC141.1SP

Must use special 12° insert!

Year	Optional	VHM standard	Optional
04-'12	AE32161-xxx		
13-'17	AE32161-xxx		
18-'24	AE32288-xxx		
25-'26	AE32363-025	AE32363-026	AE32363-027

KTM 112SX 2004 - 2026
Husqvarna TC112 2014 - 2026
GasGas MC112 2021 - 2026


Special - 12° top

Part number	Piston diameter
APKT10521766A1	Ø51.94
APKT10521766A	Ø51.95
APKT10521766B	Ø51.96
APKT11221766C	Ø51.97

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.30+0.10	APR521.0	APP1445	APC141.1SP

Must use special 12° insert!

Year	Optional	VHM standard	Optional
18-'24	AE32341-xxx		
25-'26	AE32364-025	AE32364-026	AE32364-027

VHM Piston kits
KTM 125SX
 Husqvarna TC125
 GasGas MC125

2001 - 2026
2014 - 2026
2021 - 2026

Direct replacement - Flat top - 2 rings

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKT12511726A1	Ø53.94	0.05	0.35+0.10	APR541.0KEY	APP1545	APC151.1
APKT12511726A	Ø53.95					
APKT12511726B	Ø53.96					
APKT12511726C	Ø53.97					


Special - 12° top - 2 rings

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKT12511725A1	Ø53.94	0.05	0.35+0.10	APR541.0KEY	APP1545	APC151.1
APKT12511725A	Ø53.95					
APKT12511725B	Ø53.96					
APKT12511725C	Ø53.97					

Must use special 12° insert!

Year	Optional	VHM standard	Optional
07-'15	AE32128-089	AE32128-048	
16-'22 carburetor engine	AE32257-029	AE32257-026	AE32257-031
'23-26 injection engine	AE32335-032	AE32335-033	AE32335-034

KTM 250SX
 Husqvarna TC250
 GasGas MC250

2006 - 2026
2014 - 2026
2022 - 2026

Special - 12° top

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKT25021754A2	Ø66.32	0.07	0.40+0.10	APR6641.0	APP1856	APC181.4SP
APKT25021754A1	Ø66.33					
APKT25021754A	Ø66.34					
APKT25021754B	Ø66.35					
APKT25021754C	Ø66.36					
APKT25021754D	Ø66.37					

The pistons has a black coloured coating on the piston skirt to reduce friction and wear.

Must use special 12° insert!

Year	Optional	VHM standard	Optional
06-'16		AE32129-068	
17-'22 carburetor engine	AE32272-087	AE32272-024	AE32272-037
'23-26 injection engine	AE32337-022	AE32337-023	AE32272-024

TM MX85
2013 - 2026

Direct replacement - Bore Ø47.95

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APTM08521702B	Ø47.86	0.06	0.30+0.10	APR481.0	APP1338.5	APC131.1SP
APTM08521702C	Ø47.87					
APTM08521702D	Ø47.88					

Yamaha YZ85
2002 - 2026

Special - 12° top

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYZ08521757A1	Ø47.44	0.05	0.30+0.10	APR4751.0	APP1440	APC141.1SP
APYZ08521757A	Ø47.45					
APYZ08521757B	Ø47.46					
APYZ08521757C	Ø47.47					
APYZ08521757D	Ø47.48					

Must use special 12° insert!

Year	Optional	VHM standard	Optional
02-'18		AE32059-196	AE32059-197
19-'26	AE32286-032	AE32286-029	AE32286-040

VHM Piston kits
Yamaha YZ125
Fantic XX125
2005 - 2026
2021 - 2026

Direct replacement

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYZ12521705A1	Ø53.94	0.05	0.30+0.10	APR541.0	APP1545	APC151.1SP
APYZ12521705A	Ø53.95					
APYZ12521705B	Ø53.96					
APYZ12521705C	Ø53.97					

Use s/e bearing 20mm width, ProX 21.3206 or Vertex WB111


Direct replacement, 2 rings

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYZ12511736A1	Ø53.94	0.05	0.30+0.10	APR541.0	APP1545	APC151.1
APYZ12511736A	Ø53.95					
APYZ12511736B	Ø53.96					
APYZ12511736C	Ø53.97					

Use s/e bearing 20mm width, ProX 21.3206 or Vertex WB111

Yamaha YZ125
Fantic XX125
2005 - 2026
2021 - 2026

Special + 3mm longer conrod

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYZ12521714A2	Ø53.93	0.05	0.30+0.10	APR541.0	APP1545	APC151.1SP
APYZ12521714A1	Ø53.94					
APYZ12521714A	Ø53.95					
APYZ12521714B	Ø53.96					
APYZ12521714C	Ø53.97					
APYZ12521714D	Ø53.98					

Use s/e bearing 20mm width, ProX 21.3206 or Vertex WB111

Must use with +3 mm longer conrod!

Year	Conrod length
05-'21	Use 102+3 = 105mm length conrod. ProX 03.2221
22-'26	Use 110+3 = 113mm length conrod. VHM CRK2001


Special + 3mm longer conrod, 2 rings

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYZ12511734A1	Ø53.94	0.05	0.35+0.10	APR541.0	APP1545	APC151.1
APYZ12511734A	Ø53.95					
APYZ12511734B	Ø53.96					
APYZ12511734C	Ø53.97					

Use s/e bearing 20mm width, ProX 21.3206 or Vertex WB111

Must use with +3 mm longer conrod!

Year	Conrod length
05-'21	Use 102+3 = 105mm length conrod. ProX 03.2221
22-'26	Use 110+3 = 113mm length conrod. VHM CRK2001

ROADRACE
Honda RS125 ND4
Honda RS250 ND5
1984 - 1986
1985 - 1986

Direct replacement - Ø14 piston pin

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APHO12521743A	Ø55.93	0.07	0.35+0.10	APR561.0	APP1445	APC141.1SP
APHO12521743B	Ø55.94					

Honda RS125 NF4
Honda RS250 NF5
1987 - 1994
1987 - 1989

Direct replacement - Ø14 piston pin

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APHO12521717A1	Ø53.92	0.07	0.30+0.10	APR540.8	APP1445	APC141.1SP
APHO12521717A	Ø53.93					
APHO12521717B	Ø53.94					
APHO12521717C	Ø53.95					

VHM Piston kits

Honda RS125 NX4 **1995 - 2010**
Honda RS250 NX5 **1993 - 2000**
Honda RS250 NXA **2001 - 2010**


Direct replacement - Dome - Ø15 piston pin

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APHO12521708A1	Ø53.92	0.07	0.30+0.10	APR540.8	APP1545	APC151.1SP
APHO12521708A	Ø53.93					
APHO12521708B	Ø53.94					
APHO12521708C	Ø53.95					


Special - Flat top - Ø15 piston pin

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APHO12521750A	Ø53.93	0.07	0.30+0.10	APR540.8	APP1545	APC151.1SP
APHO12521750B	Ø53.94					

Must be used in combination with a VHM flat top insert and head when not driving with an A-kit. It can be used as direct replacement for an A-kit.

Yamaha TZ250 **1986 - 1987**


Direct replacement - Bore Ø56

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYA12521764B	Ø55.94	0.07	0.35+0.10	APR561.0	APP1647	APC161.1SP

Yamaha TZ250 **1988 - 1990**


Direct replacement - Bore Ø56

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYA12521747A	Ø55.93	0.07	0.35+0.10	APR561.0	APP1647	APC161.1SP
APYA12521747B	Ø55.94					

Yamaha TZ125 **1994 - 1997**
Yamaha TZ250 **1992 - 1999**


Direct replacement - Bore Ø56

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYA12521724A	Ø55.93	0.07	0.35+0.10	APR561.0	APP1647	APC161.1SP
APYA12521724B	Ø55.94					
APYA12521724C	Ø55.95					

Yamaha TZ125 **1998 - 2010**
Yamaha TZ250 **2000 - 2010**


Direct replacement - Bore Ø54

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APYA12521716A1	Ø53.92	0.07	0.30+0.10	APR540.8	APP1545DLC	APC151.1SP
APYA12521716A	Ø53.93					
APYA12521716B	Ø53.94					
APYA12521716C	Ø53.95					
APYA12521716D	Ø53.96					

VHM Piston kits
MOPED
Kreidler 50cc Air Cooled

Ø14 piston pin - 24.8mm compression height

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKR05011715A	Ø39.95	0.04	0.20+0.10	APR401.0	APP1433	APC141.1
APKR05011715B	Ø39.96					
APKR05011715C	Ø39.97					
APKR05011715D	Ø39.98					
APKR05011715E	Ø39.99					

Note: For use in air cooled engine only!


Ø12 piston pin - 20mm compression height

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKR05021763A	Ø39.95	0.04	0.20+0.10	APR401.0	APP1233DLC	APC121.0
APKR05021763B	Ø39.96					
APKR05021763C	Ø39.97					
APKR05021763D	Ø39.98					
APKR05021763E	Ø39.99					

Note: For use in air cooled engine only!


Ø12 piston pin - 24.8mm compression height

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKR05011676A1	Ø39.94	0.04	0.20+0.10	APR401.0	APP1233	APC121.0
APKR05011676A	Ø39.95					
APKR05011676B	Ø39.96					
APKR05011676C	Ø39.97					
APKR05011676D	Ø39.98					
APKR05011676E	Ø39.99					
APKR05011676F	Ø40.00					

Note: For use in air cooled engine only!

Kreidler 60cc Air Cooled

Ø14 piston pin - 23.3mm compression height

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKR06011705A	Ø43.95	0.04	0.20+0.10	APR441.0	APP1437	APC141.1
APKR06011705B	Ø43.96					
APKR06011705C	Ø43.97					
APKR06011705D	Ø43.98					
APKR06011705E	Ø43.99					

Cylinder modification and adjusted insert needed!
Note: For use in air cooled engine only!


Ø12 piston pin - 23.3mm compression height

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APKR06011683A1	Ø43.94	0.04	0.20+0.10	APR441.0	APP1237	APC121.0
APKR06011683A	Ø43.95					
APKR06011683B	Ø43.96					
APKR06011683C	Ø43.97					
APKR06011683D	Ø43.98					

Cylinder modification and adjusted insert needed!
Note: For use in air cooled engine only!

Malossi 50cc

20mm compression height, for nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APMA05011689A1	Ø39.94	0.05	0.20+0.10	APR401.0	APP1233	APC121.0
APMA05011689A	Ø39.95					
APMA05011689B	Ø39.96					
APMA05011689C	Ø39.97					
APMA05011689D	Ø39.98					
APMA05011689E	Ø39.99					

Note: For use in water cooled engine only!


25mm compression height, for nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APMA05011712A	Ø39.95	0.05	0.20+0.10	APR401.0	APP1233	APC121.0
APMA05011712B	Ø39.96					
APMA05011712C	Ø39.97					
APMA05011712D	Ø39.98					

Note: For use in water cooled engine only!

VHM Piston kits
Malossi 50cc Derbi
2015 - 2019

20mm compression height, for nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APMA05011710B	Ø39.84	0.05	0.20+0.10	APR3991.0	APP1233	APC121.0
APMA05011710C	Ø39.85					

Note: For use in water cooled engine only!

25mm compression height, for nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APMA05011709A	Ø39.83	0.05	0.20+0.10	APR3991.0	APP1233	APC121.0
APMA05011709B	Ø39.84					
APMA05011709C	Ø39.85					

Note: For use in water cooled engine only!
Minarelli AM6 50cc

For nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APMI05011694A	Ø40.25	0.04	0.20+0.10	APR4031.0	APP1233	APC121.0
APMI05011694B	Ø40.26					

Note: For use in water cooled engine only!
Puch Maxi 70cc Air cooled

For nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APPU07011732A1	Ø44,94	0.05	0.25+0.10	APR451.0	APP1238	APC121.0
APPU07011732A1	Ø44,95					

Sachs 50cc

For nikasil cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APSA05011701A	Ø39.96	0.04	0.20+0.10	APR401.0	APP1433	APC141.0

KARTING
TM KZ10
2010 - 2012
TM KZ10B
2013 - 2015
TM KZ10C
2016 - 2018
TM KZ-R1
2019 - 2022
TM KZ-R2
2023 - 2024

4° top

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APTM12521729A1	Ø53.92	0.07	0.35+0.10	APR540.8	APP1545	APC151.1SP
APTM12521729A	Ø53.93					
APTM12521729B	Ø53.94					


Flat top 4°

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APTM12521762A	Ø53.93	0.07	0.35+0.10	APR540.8	APP1545	APC151.1SP
APTM12521762B	Ø53.94					

Note: must be used in combination with VHM insert AE32270-180 or a custom insert

VHM CDI UNITS

VHM CDI units for 2 stroke race engines. Map by VHM, units are made by GET. Specially developed to get the maximum performance in combination with our VHM upgrade kit parts. We've developed and improved the ignition curve.

- ✔ VHM map pre-installed
- ✔ High power output
- ✔ Plug & play
- ✔ Including map switch
- ✔ High quality by GET

PRE-INSTALLED MAPS

VHM CDI's are plug and play and have 2 maps pre-installed. Map 1 is with a VHM ignition curve, which is developed, tested and programmed by VHM in combination with our VHM upgrade kit parts for optimal performance. Map 2 is a standard ignition curve by GET or a VHM soft map. You can switch between maps with the included switch for on the steering bar.

AVAILABLE FOR

The VHM CDI units are available for GasGas MC65, MC85, MC105, MC112, MC125, MC250, Husqvarna TC65, TC85, TC105, TC112, TC125, TC250, KTM 65SX, 85SX, 105SX, 112SX, 125SX, 250SX, Rieju MR250, Yamaha YZ65, YZ85 and YZ125.

www.vhm.nl/cdi



VHM CDI units

CD060218 **KTM 65SX** **2015 - 2020**
 Husqvarna TC65 **2017 - 2020**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

CD060221 **KTM 65SX** **2021 - 2023**
 Husqvarna TC65 **2021 - 2023**
 GasGas MC65 **2021 - 2023**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

CD060224 **KTM 65SX** **2024 - 2026**
 Husqvarna TC65 **2024 - 2026**
 GasGas MC65 **2024 - 2026**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

CD060318 **KTM 85SX** **2018 - 2024**
 Husqvarna TC85 **2018 - 2024**
 GasGas MC85 **2021 - 2024**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch, 1x aluminium plate (DA31237)
Note: Map 1: VHM, Map 2: standard GET	

CD060325 **KTM 85SX** **2025 - 2026**
 Husqvarna TC85 **2025 - 2026**
 GasGas MC85 **2025 - 2026**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

CD060318-105/112 **KTM 112SX** **2018 - 2024**
 Husqvarna TC112 **2018 - 2024**
 GasGas MC112 **2021 - 2024**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM best performance, Map 2: VHM smooth power	

VHM CDI units

CD060325-105/112	KTM 112SX	2025 - 2026
	Husqvarna TC112	2025 - 2026
	GasGas MC112	2025 - 2026



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM best performance, Map 2: VHM smooth power	

CD060416	KTM 125SX	2016 - 2022	Carburator engine
	Husqvarna TC125	2016 - 2022	
	GasGas MC125	2021 - 2023	



Description	Content
VHM CDI unit	1x CDI unit, 1x switch, 1x aluminium plate (DA31237)
Note: Map 1: VHM, Map 2: standard GET	

ECU060423	KTM 125SX	2023 - 2026
	Husqvarna TC125	2023 - 2026
	GasGas MC125	2024 - 2026



Description	Content
VHM CDI unit	1x CDI unit
Note: Map 1: VHM best performance, Map 2: VHM deep sand track	

CD060617	KTM 250SX	2017 - 2022	Carburetor engine
	Husqvarna TC250	2017 - 2022	
	GasGas MC250	2022 - 2023	



Description	Content
VHM CDI unit	1x CDI unit, 1x switch, 1x aluminium plate (DA31237)
Note: Map 1: VHM, Map 2: standard GET	

CD020218	Yamaha YZ65	2019 - 2025
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Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

CD020319	Yamaha YZ85	2019 - 2025
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Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

VHM *CDI units*

CD020422 **Yamaha YZ125** **2022 - 2025**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

CD080621 **Rieju MR250** **2021**
GasGas EC250 **2018 - 2019**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM HIGH performance, Map 2: VHM SOFT	

CD070520 **Beta RR200 2T Racing** **2020 - 2023**



Description	Content
VHM CDI unit	1x CDI unit, 1x switch
Note: Map 1: VHM, Map 2: standard GET	

▲ AIR INTAKES AND AIRBOX COVER

VHM AIR INTAKES

VHM air intakes for 4 stroke dirtbike engines. Developed for an optimum air flow. When the engine is running and temperatures rise, the airbox rubber usually deforms. This is due to the high temperatures as it get's more soft, which leads to an even less optimal air flow. Our intake prevents the airbox rubber from deforming and ensures an optimal airflow. There's a massive bottom power improvement.

- ✔ Optimum air flow
- ✔ Easy to mount
- ✔ Prevent the airbox rubber from deforming
- ✔ Including hole for temperature sensor
- ✔ Ensures that mud is evenly spread over the wole airbox so no mud piling up during a long race

AVAILABLE FOR

The VHM air intakes are available for many 4-stroke Honda, GasGas, Husqvarna, KTM, and Kawasaki models.

MOUNTING

Many of the air intake models must be used in combination with a powerflow kit from Twin Air. Furthermore, a few of the intakes need to be glued with Innotec adheseseal, which is included in the box. We've created mounting video's for almost all air intake models, which you can easily watch through the url below.

www.vhm.nl/mountingairintake

VHM AIRBOX COVERS

VHM carbon airbox covers for Yamaha YZ250F and YZ450F. The airbox cover does not only look terribly good on your bike, it also greatly improves over the whole power curve, from bottom to top power!

- ✔ More power from bottom to top
- ✔ Made of real carbon
- ✔ Optimum air flow
- ✔ Awesome look
- ✔ Very easy to mount

www.vhm.nl/airintakes



VHM Air Intakes & cover
AI010622 Honda CRF250R 2022 - 2024


Description	Content
VHM Air Intake	1x air intake

AI010921 Honda CRF450R 2021 - 2024


Description	Content
VHM Air Intake	1x carbon air intake, 3x screws

AI040620 Kawasaki KX250 2020


Description	Content
VHM Air Intake	1x carbon air intake
Note: Including hole for temperature sensor	

AI040621 Kawasaki KX250 2021 - 2022


Description	Content
VHM Air Intake	1x carbon air intake
Note: Including hole for temperature sensor	

AI060623 KTM 250SX-F 2023 - 2024
Husqvarna FC250 2023 - 2024
GasGas MC250F 2024


Description	Content
VHM Air Intake	1x air intake Short

AI060823 KTM 350SX-F 2023 - 2024
Husqvarna FC350 2023 - 2024
GasGas MC350F 2024


Description	Content
VHM Air Intake	1x air intake Middle

VHM Air Intakes & cover

AI060923	KTM 450SX-F	2023 - 2024
	Husqvarna FC450	2023 - 2024
	GasGas MC450F	2024



Description	Content
VHM Air Intake	1x air intake long

Must be used with Twin Air powerflow kit 154224C

AI060919E	KTM 450EXC-F	2019 - 2023
	Husqvarna FE450	2019 - 2023
	Husqvarna FE501	2020 - 2023



Description	Content
VHM Air Intake	1x carbon air intake

Note: Including hole for temperature sensor

Must be used in combination with Twin Air powerflow kit 154222C.

AB020918	Yamaha YZ250F	2019 - 2022
	Yamaha YZ450F	2018 - 2022
	Fantic XXF250 / XEF250	2021 - 2024
	Fantic XXF450 / XEF450	2021 - 2024



Description	Content
VHM "high volume" carbon air box cover	1x carbon cover

Note: Yamaha washer (5TJ-21757-00) is included in the box, as the one on your bike might need to be replaced when mounting the carbon airbox cover.

VARIOUSPARTS

VHM VARIOUS PARTS

Besides our well-known cylinder heads, crankshafts and pistons, we also produce many other parts for your engine, such as power valve adjusters, clutch covers, handlebar stabilizers and exhaust flanges. See an overview of all our various products on the next pages.

www.vhm.nl/variousparts

MEASURING TOOLS

Furthermore we have some measuring tools available to measure the piston height and volume of the combustion chamber. See our manual and video of piston height measurement at www.vhm.nl/pistonheight.

www.vhm.nl/tools



VHM Various parts
Powervalue base

Partnumber	Brand	Type	Year from	Year till
DA31181	KTM	65SX	2009	2026
		65XC	2009	
		65SXS	2012	2015
	Husqvarna	TC65	2017	2026
	GasGas	MC65	2021	2026



The VHM power valve base is made from high quality aluminum machined from solid. The power valve base is designed with a stronger center base which provides a better support and guidance of the power valve. The power valve will always function during all circumstances.

The VHM power valve base fits the VHM cylinder head (part number AA33112) as well as the OEM cylinder head.

Powervalue adjuster with compression spring

Partnumber	Brand	Type	Year from	Year till
DA31153	KTM	65SX	2009	2026
		65XC	2009	
		65SXS	2012	2015
	Husqvarna	TC65	2017	2026
	GasGas	MC65	2021	2026



Spare parts	Description	Content
31258KIT001	Compression spring + holder	1x compression spring, 1x holder

When using another exhaust pipe, it will influence the opening of the power valve. With the VHM power valve adjuster with compression spring, you are able to adjust the opening timing of the powervalue easily with the screw. The VHM powervalue adjuster is made from high quality aluminium.

The VHM power valve adjuster fits the VHM cylinder head (part number AA33112 and AA33217), VHM power valve base (part number DA31181) as well as the OEM cylinder head and power valve base.

Exhaust flange

Partnumber	Brand	Type	Year from	Year till
DA31194	KTM	65SX	2009	2026
		65XC	2009	
		65SXS	2012	2015
	Husqvarna	TC65	2017	2026
	GasGas	MC65	2021	2026



Use the VHM exhaust flange and exhaust leaking is history. The exhaust pipe with O-ring seals fits perfectly on the VHM exhaust flange.

The VHM exhaust flange is made of high grade aluminum and has a another design with springholder. The original bracket for the spring is not necessary.

Powervalue + axle

Partnumber	Brand	Type	Year from	Year till
DA31028	KTM	65SX	2009	2026
		65XC	2009	
		65SXS	2012	2015
	Husqvarna	TC65	2017	2026
	GasGas	MC65	2021	2026


Bush kickstarter gear

Partnumber	Description	Brand	Type	Year from	Year till
DA31235		KTM	85SX	2018	
		Husqvarna	TC85	2018	



The original bush of the kickstarter gear turned out to be some little trouble-maker, with the stock washer being weak and thin. As no one is waiting for a DNF, we've produced these superior bushes for the kickstarter gear. So it prevents engine failures and is a stronger lock washer for the starter intermediate gear.

Ignition covers

Partnumber	Description	Brand	Type	Year from	Year till
DA31196		KTM	85SX	2013	2017
		Husqvarna	TC85	2014	2017



VHM ignition cover made from one piece billet material, stronger than the stock ignition cover. The cover is precision machined, hard anodized for a high wear resisting surface.

VHM Various parts
Handlebar stabilizer

Partnumber	Description	Brand	Type	Year from	Year till
DA31079	∅28	Honda	CR125R, CR250R, CRF250R, CRF450R		



The VHM handlebar stabilizer provides more stability and assures the handlebar is always fixed on the clamp.

Clutch axles

Partnumber	Description	Brand	Type	Year from	Year till
DA31171	aluminum/steel	Honda	CRF250R	2010	2013
DA31205	aluminum/steel	Honda	CRF250R	2014	2015
DA31160	aluminum/steel	Honda	CRF450R	2009	2012
DA31197	aluminum/steel	Honda	CRF450R	2013	2016
DA31229	aluminum/steel	Honda	CRF450R	2017	2020
DA31261	aluminum/steel	Honda	CRF250R	2018	2024



The standard clutch axle is made from one piece of steel. With a engine running at higher operating , the standard clutch axle expand less than the rest of the engine, which gives more play on the clutch lever. This will result in a bad performing clutch. The VHM clutch axle is made from hard anodised steel and the middle of the axle is made from aluminum. The VHM clutch axle will expand and shrink exactly the same as the rest of the engine. Whether the engine is hot or cold, the clutch lever will always work perfectly.

Powertubes

Partnumber	Description	Brand	Type	Year from	Year till
DA31173		KTM	250SX-F, 350SX-F	2011	2012
			250EXC-F, 350EXC-F	2012	
DA31168		Suzuki	RM-Z250	2010	2014
DA31172		Yamaha	YZ450F	2010	2013



After installing the power tube on the throttle body, it improves bottom power at part throttle openings, a better and smooth throttle response without re-mapping the ECU.

The power tube is manufactured from solid aluminum, it's lightweight with a high quality finish.

Cylinder base gasket

Partnumber	Description	Brand	Type	Year from	Year till
DA31247		KTM	250EXC TPI	2018	2023
			250SX-W TPI	2019	2023
			250XC TPI	2020	2023
			300EXC TPI	2018	2023
		Husqvarna	TE250i	2018	2022
			TE300i	2018	2022
		GasGas	EC250	2021	2023
			EC300	2021	2023



VHM cylinder base gasket with extra thickness, must be used in combination with:
 - for 250cc: with insert AE32272-080 and head AA33175
 - for 300cc: with insert AE32274-031 and head AA33172

Reedvalve spacers

Partnumber	Description	Brand	Type	Year from	Year till
S37002	4mm	KTM	50SX	2009	2023
			50SXS	2011	2016
			65SX	2009	2026
			65SXS	2012	2015
			65XC	2009	
		Husqvarna	TC50	2017	2023
			TC65	2017	2026
		GasGas	MC50	2021	2023
			MC65	2021	2026
S37004	4mm	KTM	85SX	2004	2026
			85SXS	2012	2015
			85XC	2009	
		Husqvarna	TC85	2014	2026
		GasGas	MC85	2021	2026



This 4mm thick reedvalve spacer can be used to enlarge the crankcase volume.

VHM Various parts
Intakes

Partnumber	Description	Brand	Type	Year from	Year till
DA31195	Short intake (L19) + plastic reed valve insert	TM	K9B/C - KZ10	2007	2012



Using the short intake plate and reed valve insert will improve the engine response. The intake plate is made of high grade aluminum and includes an O-ring seal. No liquid gaskets and cleaning is necessary. The plate is extra strong due to the reinforcement ribs. The reed valve insert has a better shape and another volume for better engine performance. The OEM rubber intake fits perfectly on the aluminum plate (rubber intake not included).

Excenters

Partnumber	Description	Brand	Year from	Year till
CRG001	16 position caster camber pills 2.25 mm Stainless Steel	CRG / Zanardi / Maddox / Maranello		
CRG002	16 position caster camber pills offset 2.25 mm aluminium	CRG / Zanardi / Maddox / Maranello		
CRG003	16 position caster camber pills offset 1.125 mm aluminium	CRG / Zanardi / Maddox / Maranello		



With the VHM excenters the adjustment of the camber and caster is increased by the 16 hole. On the excenter a trust edge has been introduced so that the camber and caster can be adjusted very easy by hand without any special tool.

The VHM excenters are made of aluminum or stainless steel and are suitable for the CRG, Zanardi, Maddox and Maranello karts.

Decompression valve

Partnumber	Description	Brand	Type	Year from	Year till
DA31204		Honda	CR500 (AA33200)	1989	2001
		Kawasaki	KX500 (AA33193)	1989	2004
		Fantic	XE300 (AA33221)	2025	



VHM decompression valve for VHM cylinder head.

Seal ring

Partnumber	Description	Brand	Type	Year from	Year till
DA31262		Suzuki	RG500	1985	1987



VHM seal ring for Suzuki RG500 thermostatic valve replacement.

O-ring set exhaust

Partnumber	Description	Brand	Type	Year from	Year till
SK302301	2x O-ring	Yamaha	YZ85	2019	2026
SK302401	2x O-ring	Yamaha	YZ125	2022	2026
		Fantic	XX125	2022	2026
SK306101	2x O-ring	KTM	50SX	2009	2026
		Husqvarna	TC50	2017	2026
		GasGas	MC50	2021	2026
SK306201	2x O-ring	KTM	65SX	2002	2026
		Husqvarna	TC65	2017	2026
		GasGas	MC65	2021	2026
SK306301	2x O-ring	KTM	85SX	2004	2026
		Husqvarna	TC85	2017	2026
		GasGas	MC85	2022	2026
SK306401	2x O-ring	KTM	125SX	2000	2015
SK306402	2x O-ring	KTM	125SX	2016	2026
		Husqvarna	TC125	2017	2026
		GasGas	MC125	2021	2026
SK306601	2x O-ring	KTM	250SX	2003	2026
		Husqvarna	TC250	2017	2026
		GasGas	MC250	2021	2026



VHM O-ring set for exhaust front pipe.

VHM Measuring tools & spare parts
Piston height measuring tools

Partnumber	Description	Content
AM34012	Measuring tool 65-85 cc, max. \varnothing 48 mm	1x Measuring tool 65-85 cc, dial indicator not included
AM34012B	Measuring tool 105 cc, max. \varnothing 52 mm	1x Measuring tool 105 cc, dial indicator not included
AM34013	Measuring tool 125 cc, max. \varnothing 54 mm	1x Measuring tool 125 cc, dial indicator not included
AM34013B	Measuring tool 150 cc, max. \varnothing 58 mm	1x Measuring tool 150 cc, dial indicator not included
AM34014	Measuring tool 250 cc, max. \varnothing 67 mm	1x Measuring tool 250 cc, dial indicator not included
AM34016	Measuring tool 300 cc, max. \varnothing 72 mm	1x Measuring tool 300 cc, dial indicator not included
AM34017	Measuring tool 500 cc, max. \varnothing 91 mm	1x Measuring tool 500 cc, dial indicator not included



To use the VHM cylinder head correctly, the piston height is a very important value to set up. The piston height measuring tool is a very clever tool to measure the piston height. There are 7 types available depending on the capacity of the engine. The tool comes complete with the upper and lower part of the tool. The dial indicator is separate available.

Partnumber	Description	Content
AM36007	Dial indicator Horex	1x Dial indicator


Volume measuring parts

Partnumber	Description	Content
AM36018	Pipet 20 ml	1x pipet 20 ml
AM36019	Pipet 25 ml	1x pipet 25 ml



With the pipet you are able to easily measure the volume of each combustion chamber. The graduation of the pipet is very accurate with 0.10 ml.

Partnumber	Description	Content
AM36020	Tap for pipette	1x tap



The tap for the pipette is very easy to use when measuring the combustion chamber volume.

Nutcaps, rings, screws and washers

Partnumber	Description	Content
BD35030	Copper Washer 8 x 18 x 2	1x copper washer
BD35033	Copper Washer 6.4 x 12 x 1.6	1x copper washer
BD36006	Copper Washer 6 x 10 x 1	1x copper washer
BD36009	Nutcap 8 mm	1x Nutcap
BD36021	Nutcap 6 mm	1x Nutcap
DA31109 1MM	Spark plug ring 1 mm stainless steel	1x ring
DA31109 2MM	Spark plug ring 2 mm stainless steel	1x ring
DA31109 3MM	Spark plug ring 3 mm stainless steel	1x ring
DA31109 3.75MM	Spark plug ring 3.75 mm stainless steel	1x ring
M6X6 INBUS	Galvanized flat round screw, cylinder head	1x screw, hexagon socket
M6X8 INBUS	Galvanized flat round screw, cylinder head	1x screw, hexagon socket
M6X10 INBUS	Galvanized flat round screw, cylinder head	1x screw, hexagon socket
BD37010	Hexagon bolt M6x8 for VHM cylinder head	1x screw, hexagon bolt



Washer



Nutcap



Spark plug ring



Galvanized low screw

VHMMERCHANDISE

CASUAL CLOTHING

Perfect for working in your garage, when walking through the paddock or standing on the podium! We have beanies, caps, gloves and shirts available.

ACCESSORIES

We've designed an awesome little piston with conrod, which can be used as a bottle opener and as a keychain! We also have VHM stickers available in 3 sizes, bidon, gymbag and keycords.

www.vhm.nl/merchandise



VHM Merchandise
Beanie (knit hat)

Partnumber	Description	Size
MCBE01R	VHM beanie (knit hat) red	One size fits all
MCBE01W	VHM beanie (knit hat) white	One size fits all
MCBE01X	VHM beanie (knit hat) grey	One size fits all
MCBE01Z	VHM beanie (knit hat) black	One size fits all

Nice fitting and warm knitted hat with subtle VHM embroidery on the front. One size fits all and various colors available! Perfect for the cold winter days during the pre-season training and early races.


Bidon

Partnumber	Description	Size
MVBD01Z-500	VHM drink bottle	500ml



Fuel your body! This bottle has a metallic look with a capacity of 500ml. Perfect for hydration when sporting, but also when prepping your bike or engine and during the race weekends of course.

Bottle opener / keychain

Partnumber	Description
MVB01G	Keychain ring included



Awesome little piston with conrod, which can be used as a bottle opener and as a keychain! A keychain ring is included, so you can easily attach it to your key(s). It's gold anodized with the VHM logo lasered on each side of the conrod. A real eyecatcher for everyone crazy about engines!

Caps

Partnumber	Description	Size
MCC03Z-58	VHM casual cap black	58



Nice looking casual cap to wear at the track, in your workshop or whenever you feel like it. The cap is designed with 3D embroidery of our logo on the front. In addition, there's an engraved back metal buckle with our logo, which ensures an adjustable closure. The cap's model is 'baseball', with curved brim.

Partnumber	Description	Size
MCC03X-58	VHM casual cap grey	58



Nice looking casual cap to wear at the track, in your workshop or whenever you feel like it. The cap is designed with 3D embroidery of our logo on the front. In addition, there's an engraved back metal buckle with our logo, which ensures an adjustable closure. The cap's model is 'baseball', with curved brim.

VHM Merchandise
Bag

Partnumber	Description	Size
MVGB01Z	VHM gym bag	40x48cm



Hitting the gym? Or just in need of a bag to take your belongings with you? This drawstring bag has a size of 40x48cm and includes a small side pocket with zipper. The side pocket can hold your phone, keys and other small stuff in it.

Backpack

Partnumber	Description	Size
MVBP01Z	VHM backpack	30x41,5x13cm



This backpack is perfect as a daybag to visit a race or event or use when traveling or when going to work. It has a large main compartment with a small zip pocket inside. It also has a smaller compartment at the front with zipper. The backpack has a size of 30x41,5x13cm.

Keycards

Partnumber	Description	Kolom1
MVKY01R	VHM keycord red	
MVKY01Z	VHM keycord black	



Going to a race or event and need to carry an access pass? The VHM keycord is perfect for that! You can also use it to hold your keys or even attach your phone to it. The keycord has a plastic buckle and metal hook.

Working gloves

Partnumber	Description	Size
MCG01X-8	VHM working gloves	8
MCG01X-9	VHM working gloves	9
MCG01X-10	VHM working gloves	10
MCG01X-11	VHM working gloves	11



Are you the mechanic? Or the tuner? Busy with engines day and night? Then these working gloves are something for you! The gloves have a slim fit with excellent grip. These gloves are available in different sizes.

Stickers

Partnumber	Description	Size
MVST-5x1.9	VHM sticker small	5x1.9cm
MVST-10x3.8	VHM sticker medium	10x3.8cm
MVST-45x17	VHM sticker large	45x17cm



Our VHM stickers are of thick, outdoor quality. You

VHM Merchandise
Shirts

Partnumber	Description	Size
MCSM01W-S	VHM shirt white	S



This shirts are designed with a nice front embroidery, containing our slogan 'Special Racing Products' and many other quotes like 'Born to race' and 'In it to win it'. There's also a small stitched label at the front bottom of the shirt, showing our logo and a laurel wreath surrounding it. The shirts have a nice long fit and are made of high quality cotton.

Casual Shirts

Partnumber	Description	Size
MCSM02R-S	VHM shirt red	S
MCSM02R-M	VHM shirt red	M
MCSM02R-L	VHM shirt red	L
MCSM02R-XL	VHM shirt red	XL
MCSM02Z-S	VHM shirt black	S
MCSM02Z-M	VHM shirt black	M
MCSM02Z-L	VHM shirt black	L
MCSM02Z-XL	VHM shirt black	XL

This shirts are designed with a nice embroidered front VHM logo. The shirts have a nice long fit and are made of high quality 100% cotton.


Casual Hoodie

Partnumber	Description	Size
MCHM01R-S	VHM hoodie red	S
MCHM01R-M	VHM hoodie red	M
MCHM01R-L	VHM hoodie red	L
MCHM01R-XL	VHM hoodie red	XL
MCHM01Z-S	VHM hoodie black	S
MCHM01Z-M	VHM hoodie black	M
MCHM01Z-L	VHM hoodie black	L
MCHM01Z-XL	VHM hoodie black	XL

You need a warm hoodie for winter training on the bike? Or just a nice casual hoodie? This VHM hoodie in red or black with embroidered logo's on front, sleeve and back is the hoodie you want to have in your collection!



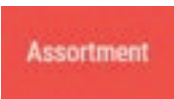
WEBSITE TIPS & TRICKS

#1 PRICELISTS

Did you know that we (still) have an Excel file of our price list available on our website? You can find it at www.vhm.nl/downloads

#2 ASSORTMENT

How to find ALL parts on our website? Click on the menu button [Assortment] and go from there. We've categorized our parts into 5 main groups; Chassis parts, Engine parts, Merchandise, Tools & Sale.



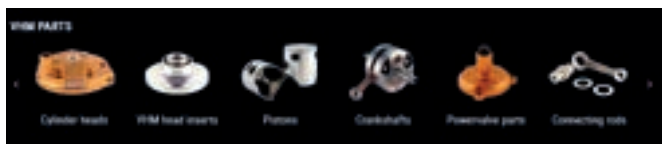
#3 TABLE OR TILE VIEW

Scroll through our assortment with a table or tile view! The table view is a compact view and only shows the necessities. The tile view is an extended view and also shows the properties of parts. Quite handy when searching for inserts!



#4 QUICK LINKS

Want to look at an overview of our cylinder heads, inserts, pistons or crankshafts? Use the quick links on our homepage! In just one click you'll get the overview you'd like to see by clicking on the parts picture.



#5 OTHER MENU

Want to see and read more about us? Check out the 'other menu' on our homepage. It contains pages like news, VHM champions, downloads, FAQ and about us.



#6 TRANSLATION OPTION

Difficult reading English? We've built in a google translate option, so you can select your own language. You can find the button at the top right of our website. Please note that the translations might not be perfect.



#7 PARTS PER PAGE

Like to scroll through our complete assortment? You can select how many results you'd like to see at once. You can choose from 12, 24, 48 and 96 parts per page!



#8 PART FINDER SKIP FIELDS

Used our partfinder yet? Did you know you could skip fields? You do not necessarily have to start with filling the 'select application' field. You can also immediately start your search with 'select make' or even 'select model' to speed up your search.



#9 EASILY CHECK YOUR VHM INSERT SPECS

Quickly check / find your VHM insert specifications on our website: just type in the number of the insert in our search bar and click on the insert you want to know the specifications from.

#10 PARTS NOT ON OUR WEBSITE

Can't find the part you were looking for from the other brands we sell? Don't hesitate to contact us about it. We've added many parts on our website, but not all there is. Send an e-mail to info@vhm.nl and we'll do our best to help you with the parts you need.

#11 VHM CRANK MODIFICATION LIST

You can also check the complete VHM crankshaft modifications list on our website. The crankshaft modifications can't be found in our regular website assortment, thus can only be requested by email.

www.vhm.nl/crankmods

#12 NAVIGATION PATH

When clicking through our assortment, a navigation path under the menu bar will be shown. When you'd like to go back or see the complete category again, just click on it in the path. For example, when viewing our cylinder head AA33177, you will see the navigation path Engine parts > cylinder parts > cylinder heads > AA33177.

Engine parts > Cylinder parts > Cylinder heads > AA33177



www.vhm.nl/pistonheight



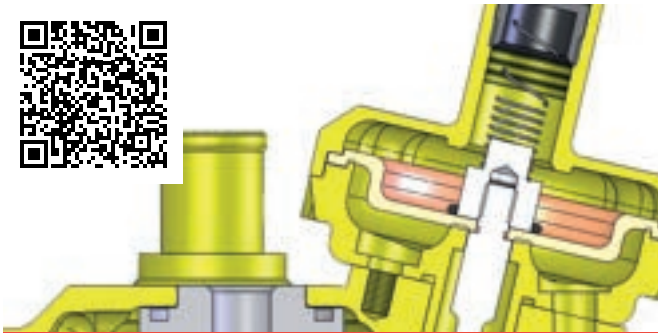
www.vhm.nl/volumemeasurement



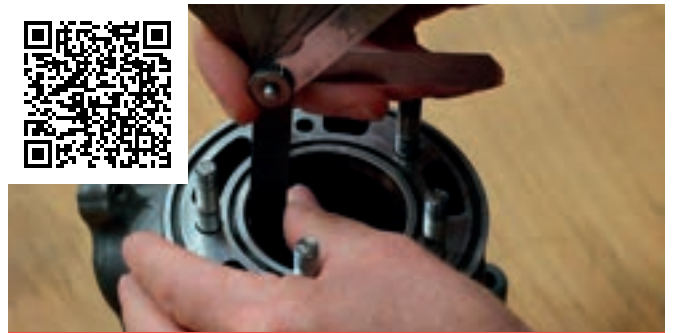
www.vhm.nl/squishmeasurement



www.vhm.nl/insertcalculator



www.vhm.nl/powervalveassembly



www.vhm.nl/pistonringendgap



www.vhm.nl/mountingairintake



www.vhm.nl/pistoncylinderclearance

ABOUT VHM

We proudly introduce our 2026 catalogue with VHM Special Racing Products. For more than 30 years, we have been developing, testing and offering Special Racing Products for motocross, roadrace and karting.

- ✔ Gold anodized cylinder heads with exchangeable combustion chamber inserts
- ✔ Crankshafts with improved inertia and better balance percentage
- ✔ Pistons for high performance and longevity
 - ✔ Rocksolid and lightweight conrods
 - ✔ Modifications and crankshaft rebuilds
 - ✔ CDI units with VHM ignition maps
 - ✔ and many other Special Racing Products

DISTRIBUTOR

In addition to offering our VHM parts, we are also authorized distributor of aftermarket brands such as:

- Afam chains and sprockets
- Athena gaskets, seals and Athesil
- HGS 2- and 4 stroke exhaust systems
- Hinson clutch components
- Hotrods connecting rods
- JE-Pistons 4-stroke pistons
- NGK sparkplugs
- Prox replacement parts
- Suterclutch slipperclutches
- Twin Air powerflow kits and air filters
- Vertex 2- and 4-stroke pistons
- V-Force reedvalves

Check www.vhm.nl/otherbrandsinfo for more on this!

VHM IS YOUR #1 SUPPLIER OF HIGH QUALITY PRODUCTS, PROVIDING TECHNICAL SERVICE AND FAST DELIVERY



PRODUCT AVAILABILITY

We have a large stock in our warehouse to make fast delivery possible. If you need products that we don't have in our product list, don't hesitate to contact us for a request. Our products are available through VHM dealers worldwide. Find more information on www.vhm.nl/dealerlocator

<ol style="list-style-type: none"> Setup the dial indicator before each measurement. Put the top part of the tool on the flat bottom tool. Fit the dial indicator on the top part and adjust the zero level to 5.00 mm, by moving the dial indicator up or downwards. Then fix the dial indicator to the top part with the screw. Check if the big pointer is pointing to 0, if not, turn the outer ring of the dial indicator to 0. Make sure that the piston is at Top Dead Center (TDC) Piston height = distance between cylinder deck and top of the piston, when the piston is at Top Dead Center (TDC) 		
<ol style="list-style-type: none"> Positive piston height: <i>Top of the piston is above the cylinder deck</i> The little pointer has turned to 6.00 mm The big pointer turns counter clockwise and stops at 0.75mm. The piston has travelled 6.00 + 0,75 = 6,75 mm Because we have adjust the zero level to 5 mm, the piston height is 6,75 – 5,00 = + 1.75 mm 		
<ol style="list-style-type: none"> Negative piston height: <i>Top of the piston is below the cylinder deck</i> The little pointer has turned to 3.00 mm The big pointer turns clockwise and stops at 0.25 mm The piston has travelled 3.00 + 0,25 = 3,25 mm Because we have adjust the zero level to 5.00 mm, the piston height is 3,25 – 5.00 = - 1.75 mm 		

Now that we have measured the piston height, we can install the VHM cylinder head and insert. Adjust your measured piston height with the piston height shown on the insert box to get the correct volume and squish. The piston height can be adjusted using thicker or thinner cylinder base gaskets. The specifications of each insert is shown on the top of the insert box.

Piston height	Distance between top of the piston and cylinder deck when the piston is at Top Dead Center. (Also called; deck height) [mm]
Volume	Volume of the combustion chamber including volume spark plug hole, when the piston is at Top Dead Center. [cc]
Squish	Distance between the piston and combustion chamber in the squish band area, when the piston is at Top Dead Center. [mm]

Every VHM insert has a unique part number.

- Part numbers ending with a letter, for example AE32087-H, are standard inserts. The piston height is measured on a standard engine.
- Part numbers ending with numbers, for example AE32087-006, are special inserts. These inserts are special made and may have another piston height, volume, squish or shape of the combustion chamber.

A great advantage of our system is that the squish and volume is always known, whether by increasing or decreasing the piston height. For example insert AE32087-H for the KTM 85cc engine has a piston height +2.20mm, squish 0.80mm and volume 8.00 cc. If we use a 0.20 mm thicker cylinder base gasket the piston height will be +2.20 -0.20 mm = +2.00 mm. The squish will be 0.80 + 0.20 = 1.00 mm. When we change the piston height with this insert, the volume will also change. Using a thicker cylinder base gasket will increase the volume. The new volume can be calculated as following:

$$\text{Volume difference} = \frac{\pi}{4} \times D^2 \times h \quad D = \text{Bore cylinder} = 47 \text{ mm} \quad h = \text{difference piston height}$$

$$\text{Volume difference} = \frac{\pi}{4} \times 47^2 \times (2.20 - 2.00) = 346,989 \text{ mm}^3 = 0,346 \text{ cm}^3 = 0,346 \text{ cc} \approx 0,35 \text{ cc}$$

$$\text{New volume with piston height } +2.00 = 8.00 + 0,35 = 8,35 \text{ cc}$$

With the same calculation, the volume can also be calculated with a thinner cylinder base gasket, which means a higher piston height.

	Piston height	Volume	Squish
Thicker cylinder base gasket	↓	↑	↑
Thinner cylinder base gasket	↑	↓	↓