



MOTOCROSS



ROADRACE



KARTING



VHM 2020 CATALOGUE



CATALOGUE 2020

SPECIAL RACING PRODUCTS

MX | Roadrace | Karting



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VHM racingproducts

VHMspecialracingproducts

www.vhm.nl

PREFACE

INTRODUCTION

We proudly introduce our 2020 catalogue with VHM Special Racing Products. For 25 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
 - ✓ Custom parts and modifications
 - ✓ and many other Special Racing Products

DISTRIBUTOR

In addition to offering VHM Special Racing Products, we are authorized distributor of aftermarket products which are specially selected, with brands such as:

- Afam chains and sprockets
- Athena pistons and gaskets
- 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 and top end piston kits
- V-Force reedvalves

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



Special Racing Products

VHM Manual piston height measurement

1. Setup the dial indicator before each measurement.
2. 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.
3. Check if the big pointer is pointing to 0, if not, turn the outer ring of the dial indicator to 0.
4. Make sure that the piston is at Top Dead Center (TDC)
5. **Piston height** = distance between cylinder deck and top of the piston, when the piston is at Top Dead Center (TDC)



6. **Positive piston height:**
Top of the piston is above the cylinder deck
7. The little pointer has turned to 6.00 mm
8. The big pointer turns counter clockwise and stops at 0.75mm.
9. The piston has travelled $6.00 + 0.75 = 6.75$ mm
10. Because we have adjust the zero level to 5 mm, the piston height is $6.75 - 5.00 = +1.75$ mm



11. **Negative piston height:**
Top of the piston is below the cylinder deck
12. The little pointer has turned to 3.00 mm
13. The big pointer turns clockwise and stops at 0.25 mm
14. The piston has travelled $3.00 + 0.25 = 3.25$ mm
15. 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.

1. Part numbers ending with a letter, for example AE32087-H, are standard inserts. The piston height is measured on a standard engine.
2. 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:

$$\begin{aligned} \text{Volume difference} &= \frac{\pi}{4} \times D^2 \times h & D &= \text{Bore cylinder} = 47 \text{ mm} & h &= \text{difference piston height} \\ \text{Volume difference} &= \frac{\pi}{4} \times 47^2 \times (2.20 - 2.00) = 346,989 \text{ mm}^3 = 0,346 \text{ cm}^3 = 0,346 \text{ cc} = 0,37 \text{ cc} \\ \text{New volume with piston height } +2.00 &= 8.00 + 0,37 = 8,37 \text{ cc} \end{aligned}$$

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	↑	↓	↓

Instagram



VHMracingproducts

YouTube



VHMspecialracingproducts

Facebook



VHMracingproducts

Newsletter email



www.vhm.nl/newsletter

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25 YEARS OF VHM

VHM is officially founded in 1995, March the 14th. In the early 90's, the first VHM part was the blue carburettor. Initially developed for Go-kart engines, later on used for many dirtbikes engines in trial, enduro and motocross.

In 1997 our signature 'golden' VHM head originated. Used by many roadracers and motocross riders. In 1999, Massao Azuma took 5 GP 125cc wins and a 3th place in the standings at the end of the season with our cylinder head. In 2000, Grant Langston won the World title 125cc motocross driving around with our shiney golden VHM head.

In 2002 we started producing VHM crankshafts. In terms of technology, our most special one is the 4-partly crank for the Yamaha TZ250 we made once. In terms of results, the 125cc Rio de Janeiro Grand Prix win in 2003 of Jorge Lorenzo with our VHM crankshaft is very memorable.

In 2009 we started our piston project. After many tests with several engines and production methods, a first large batch was produced in 2011 for the TM KZ10 125cc shirter kart engine.

Want to know more? Read about us at:

www.vhm.nl/aboutus

We continuously develop new parts for better performance and faster lap times. During 2019, we've added among others many CDI units and air intakes. See here all that's new in a glance!

CYLINDER HEAD AA33062 O-RING

KAWASAKI KR150

Inserts AE32077-E O-RING



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CRANKSHAFT AK20240

KTM 125SX '16 - '20 &

HUSQVARNA TC125 '16 - '20

Low inertia



p. 48

PISTON APTM12521729

TM KZ-R1 / KZ10 / KZ10B / KZ10C

Ø53.92 / Ø53.93 / Ø53.94



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CDI CD020319

YAMAHA YZ85 2019 - 2020

Map 1 VHM, Map 2 standard GET



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CDI CD060218

KTM 65SX '18 - '20 &

HUSQVARNA TC65 '18 - '20

Map 1 VHM, Map 2 standard GET



p. 60

CDI CD060318

KTM 85SX '18 - '20 &

HUSQVARNA TC85 '18 - '20

Map 1 VHM, Map 2 standard GET



p. 60

CDI CD060416

KTM 125SX '16 - '20 &

HUSQVARNA TC125 '16 - '20

Map 1 VHM, Map 2 standard GET



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AIR INTAKE AI040919

KAWASAKI **KX450** 2019 - 2020

Use with powerflow kit 151125C



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AIR INTAKE AI060318

KTM **85SX** 2018 - 2020 &
HUSQVARNA **TC85** '18 - '20

Use with powerflow kit 154221C



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AIR INTAKE AI060416

KTM **125SX** 2018 - 2020 &
HUSQVARNA **TC125** '18 - '20

Use with powerflow kit 154223C



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AIR INTAKE AI060619

KTM **250SX-F** / **350SX-F** &
HUSQVARNA **FC250** / **FC350** '19 - '20

Use with powerflow kit 154222C



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AIR INTAKE AI060919

KTM **450SX-F** '19 - '20 &
HUSQVARNA **FC450** '19 - '20

Use with powerflow kit 154222C



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AIR INTAKE AI060919E

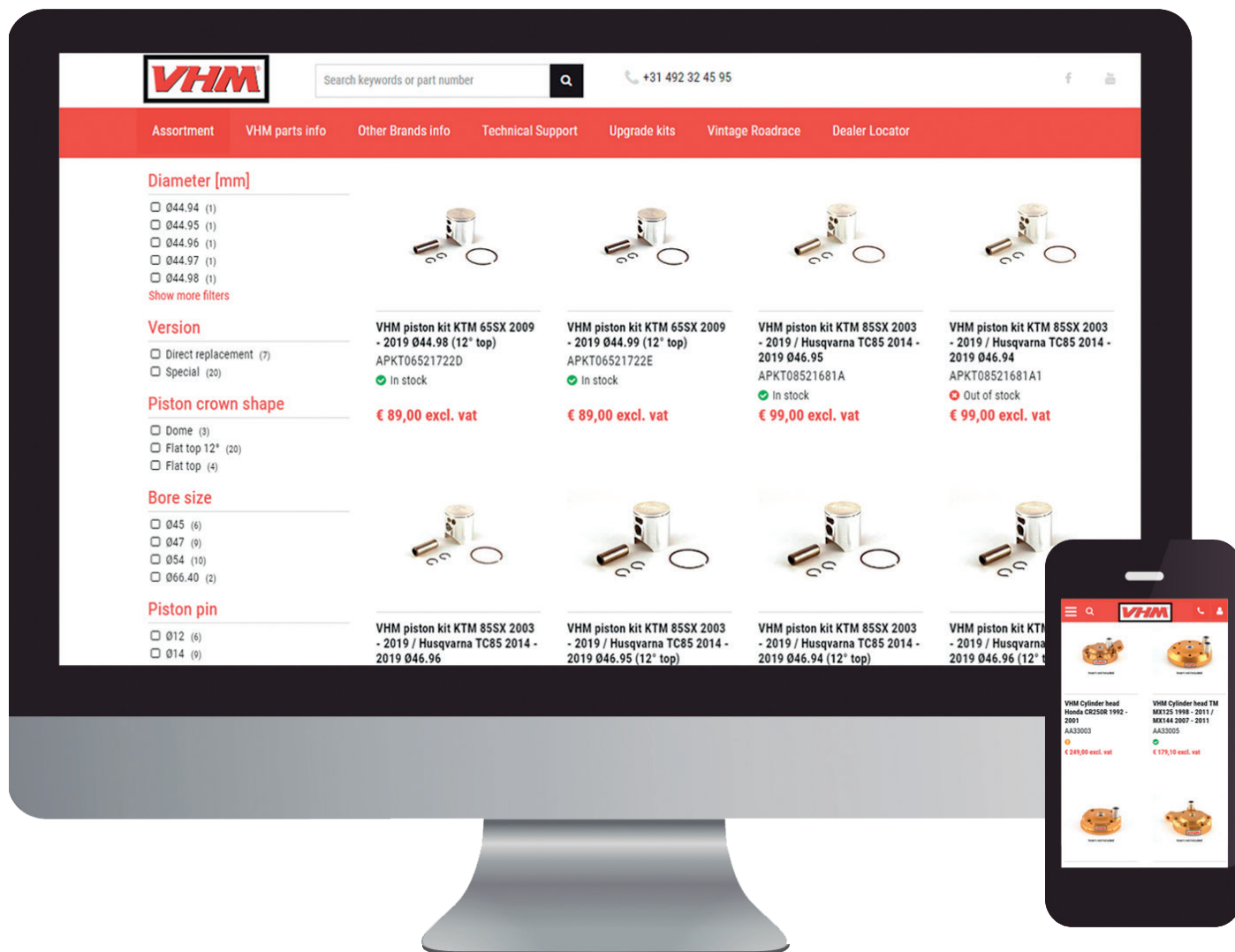
KTM **450EXC-F** '19 - '20

Use with powerflow kit 154222C



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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 new 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



Brand

- ☐ Afam (1142)
- ☐ Athena (160)
- ☐ ...

Part finder

Motocross (4038)	KTM (4038)	Select Model	Select Year	Reset
		85		
		85SX (164)		

4.038 results

KTM 65SX '09 - '20 HUSQVARNA TC65 '17 - '20

VHM UPGRADE PARTS

Cylinder head	AA33112
Insert	AE32167-059
12° Piston kit (Ø44.96)	APKT06521722B
Crankshaft (middle inertia)	AK20097-1
CDI unit (map 1 = VHM)	CD060218
Powervalue adjuster	DA31153
Powervalue base	DA31181
Exhaust flange	DA31194



KTM 85SX '13 - '17 HUSQVARNA TC85 '14 - '17

VHM UPGRADE PARTS

Cylinder head	AA33145
Insert	AE32226-056
12° Piston kit (Ø46.95)	APKT08521707A
Crankshaft modification (high inertia)	AK20161-002
Oil air-vent plug	DA31210



KTM 85SX '18 - '20 Husqvarna TC85 '18 - '20

VHM UPGRADE PARTS

Cylinder head	AA33171
Insert	AE32281-013
12° Piston kit (Ø46.95)	APKT08521707A
Crankshaft (middle inertia)	AK20225
CDI unit (map 1 = VHM)	CD060318
Oil air-vent plug	DA31210
Air intake	AI060318



KTM 125SX '16 - '20 Husqvarna TC125 '16 - '20

VHM UPGRADE PARTS

Cylinder head	AA33156
Insert	AE32257-026
12° Piston kit (Ø53.95)	APKT12511673A
Crankshaft (middle inertia)	AK20213
CDI unit (map 1 = VHM)	CD060416
Air intake	AI060416



KTM 150SX '16 - '20

VHM UPGRADE PARTS

Cylinder head	AA33157
Insert	AE32260-E
Crankshaft (middle inertia)	AK20215



KTM 250SX '17 - '20 Husqvarna TC250 '17 - '20

VHM UPGRADE PARTS

Cylinder head	AA33166
Insert	AE32272-024
12° Piston kit (Ø66.34)	APKT25021754A



KAWASAKI KX85 '00 - '20

VHM UPGRADE PARTS

Cylinder head	AA33151
Insert	AE32240-E
Crankshaft modification (middle inertia)	AK20178-002



TM MX85 '13 - '20

VHM UPGRADE PARTS

Cylinder head	AA33070
Insert	AE32089-H
Piston kit (Ø47.89)	APTM08521702E

YAMAHA YZ85 '19 - '20

VHM UPGRADE PARTS

Cylinder head	AA33176
Insert	AE32286-029
12° Piston kit (Ø47.45)	APYZ08521757A
Crankshaft (high inertia)	AK20235B
CDI unit (map 1 = VHM)	CD020319



YAMAHA YZ125 '05 - '20

VHM UPGRADE PARTS

Cylinder head	AA33077
Insert	AE32100-C
12° Piston kit (Ø53.95) use s/e bearing 20mm width	APYZ12521714A
Crankshaft (high inertia, +3mm conrod)	AK20192-1



www.vhm.nl/upgradekits



VINTAGE 2-STROKE ROADRACE

We loved the 2-stroke era of roadrace and still develop and produce parts for various vintage racebikes.

Piston kits | cylinder heads | inserts | crankshaft and connecting rods

See at a glance what we have for various vintage roadrace bikes! We've designed a roadrace parts brochure that includes all VHM parts for roadrace. It can be downloaded at our website: www.vhm.nl/vintageroadracebrochure

For more information:

www.vhm.nl/vintageroadrace

We have special racing products available for the following models:

APRILIA

- ✓ RSW125
- ✓ RS125 streetbike
- ✓ RSW250
- ✓ RS250 streetbike 1995 - 2002

HONDA

- ✓ RS125 ND4 1984 - 1986
- ✓ RS125 NF4 1987 - 1994
- ✓ RS125 NX4 1995 - 2010
- ✓ RS250 ND5 1985 - 1986
- ✓ RS250 NF5 1987 - 1992
- ✓ RS250 NX5 1993 - 2000
- ✓ RS250 NXA 2001 - 2010
- ✓ NSR50
- ✓ NSR80
- ✓ NSR125
- ✓ NSR150
- ✓ NSR250 1990 - 1999
- ✓ NSR300

KAWASAKI

- ✓ KR150

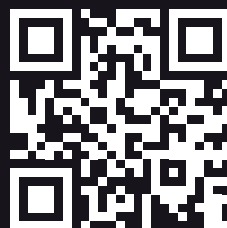
SUZUKI

- ✓ RGV250 1991 - 1996

YAMAHA

- ✓ TZ125 1995 - 1999
- ✓ TZ125 2000 - 2010
- ✓ TZ250 1988 - 1990
- ✓ TZ250 1995 - 1999
- ✓ TZ250 2000 - 2010

Go to www.vhm.nl/vintageroadrace by scanning this QR-code:



VHM CYLINDER HEADS

World famous VHM cylinder heads with exchangeable combustion chambers. 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
- ✔ More resistance to detonation
- ✔ Exchangeable combustion chambers

AVAILABLE FOR

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

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

AA33102

Aprilia RS250 Streetbike 1995 - 2002
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	•	•	•			

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	•					

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	•	•	•			

VHM Cylinder head

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	1990 - 1991	Optional	Dome piston	10.60	+1.90	1.00
AE32256-L	1990 - 1991	VHM standard	Dome piston	10.80	+1.90	1.00
AE32256-M	1990 - 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		10.60	-0.55	1.00
AE32058-E	2000 - 2002	VHM standard		10.80	-0.55	1.00
AE32058-F	2000 - 2002	Optional		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		11.20	-0.45	1.00
AE32070-D	2003	Optional		11.40	-0.45	1.00
AE32070-E	2003	Optional		11.60	-0.45	1.00
AE32070-F	2003	VHM standard		11.80	-0.45	1.00
AE32070-H	2004	Optional		10.40	+2.10	1.00
AE32070-K	2004	VHM standard		10.60	+2.10	1.00
AE32070-L	2004	Optional		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	•	•	•			

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	•	•	•			

VHM Cylinder head

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	•	•	•			

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	•	•	•			

VHM *Cylinder head*

AA33121

Honda CR500R

1989 - 2001



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32181-A		Blind	Machine yourself			
AE32181-E		VHM standard		51.00	+6.20	2.50
AE32181-xxx		Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33121	•	•	•			

AA33168

Honda NSR50



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32276-A		Blind	Machine yourself			
AE32276-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		
SK33031	•	•	•			

AA33074

Honda NSR80



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	•	•	•			



VHM *Cylinder head*

AA33173 **Honda NSR125**

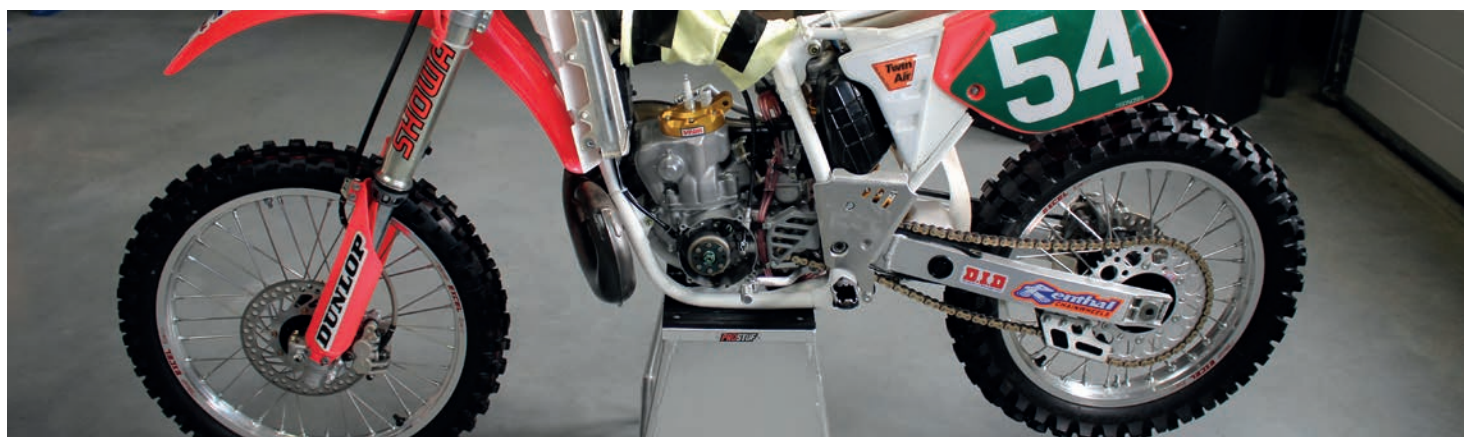

Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32284-A		Blind	Machine yourself			
AE32284-E		VHM standard		12.00	+1.37	0.90
AE32284-xxx		Custom	Special insert according to your specification			
Part number sealkit SK33173	O-ring small	O-ring middle	O-ring big	O-ring various		

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 SK33063	O-ring small	O-ring middle	O-ring big	O-ring various		

AA33054 **Honda NSR250 MC21/MC28 1990 - 1999**


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



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

AA33067 Honda RS125 JHA A-kit RS-V 2004 - 2010



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32067-A	2004 - 2010	Blind	Machine yourself			
AE32067-H	2004 - 2010	Optional	Flat top piston	11.80	-0.48	0.75
AE32067-K	2004 - 2010	VHM standard	Flat top piston	12.00	-0.48	0.75
AE32067-L	2004 - 2010	Optional	Flat top piston	12.20	-0.48	0.75
AE32067-xxx	2004 - 2010	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33000	•					

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	•	•	•			



VHM Cylinder head

AA33052

Honda RS250 A-kit

2001 - 2005

*OUT OF STOCK, contact us to make a request for this cylinder head



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 - 2020

See KTM 50SX 2017 - 2020

AA33017

Husqvarna CR65

2012 - 2015

See KTM 65SX 2000 - 2008

AA33112

Husqvarna TC65

2017 - 2020

See KTM 65SX 2009 - 2020

AA33145

Husqvarna TC85

2014 - 2017

See KTM 85SX 2013 - 2017

AA33171

Husqvarna TC85

2018 - 2020

See KTM 85SX 2018 - 2020

AA33149

Husqvarna TC105

2014 - 2017

See KTM 105SX 2013 - 2017

AA33177

Husqvarna TC105

2018 - 2020

See KTM 105SX 2018 - 2020

AA33039

Husqvarna CR125
Husqvarna WR125

2001 - 2013
2001 - 2013


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32054-A	2001 - 2013	Blind	Machine yourself			
AE32054-C	2001 - 2013	Optional		10.80	-0.50	1.00
AE32054-E	2001 - 2013	Optional		11.00	-0.50	1.00
AE32054-F	2001 - 2013	VHM standard		11.20	-0.50	1.00
AE32054-H	2001 - 2013	Optional		11.40	-0.50	1.00
AE32054-xxx	2001 - 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

VHM Cylinder head

AA33156	Husqvarna TC125	2016 - 2020	See KTM 125SX 2016 - 2020
AA33098	Husqvarna TC/TE 250	2014 - 2016	See KTM 250SX/EXC 2007 - 2016
AA33166	Husqvarna TC250 Husqvarna TE250	2017 - 2020 2017	See KTM 250SX 2017 - 2020 See KTM 250SX 2017 - 2020
AA33175	Husqvarna TE250i	2018 - 2020	See KTM 250EXC TPI 2018 - 2020
AA33109	Husqvarna TE/TC 300	2014 - 2016	See KTM 300SX/EXC 2008 - 2016
AA33167	Husqvarna TE300 Husqvarna TC300 Husqvarna TX300	2017 2017 - 2020 2017 - 2020	See KTM 300SX 2017 - 2020
AA33172	Husqvarna TE300i	2018 - 2020	See KTM 300EXC TPI 2018 - 2020
AA33026	Kawasaki KX65 Suzuki RM65	2000 - 2020 2000 - 2005	



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32032-A	2000 - 2020	Blind	Machine yourself			
AE32032-M	2000 - 2020	Optional		6.90	+1.75	0.70
AE32032-N	2000 - 2020	VHM standard		7.20	+1.75	0.70
AE32032-xxx	2000 - 2020	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 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32240-A	2000 - 2020	Blind	Machine yourself			
AE32240-B	2000 - 2020	Optional		7.60	+1.70	0.90
AE32240-C	2000 - 2020	Optional		7.80	+1.70	0.90
AE32240-E	2000 - 2020	VHM standard		8.00	+1.70	0.90
AE32240-F	2000 - 2020	Optional		8.20	+1.70	0.90
AE32240-xxx	2000 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33151	•	•	•			

VHM Cylinder head

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	•	•	•			

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	•	•	•			

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-E		VHM standard		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

AA33062

O-RING

Kawasaki KR150 / KRR150 / ZX-150RR

NEW



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32077-A		Blind	Machine yourself			
AE32077-E O-RING		VHM standard		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	•	•	•			

AA33017

KTM 50SX

2000 - 2008



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32027-A	2000 - 2008	Blind	Machine yourself			
AE32027-K	2000 - 2008	Optional	VHM (trumpet) shape	5.70	+2.50	0.60
AE32027-L	2000 - 2008	VHM standard	VHM (trumpet) shape	5.90	+2.50	0.60
AE32027-xxx	2000 - 2008	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33000	•					

AA33114

KTM 50SX

2009 - 2020

Husqvarna TC50

2017 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32170-A	2009 - 2020	Blind	Machine yourself			
AE32170-C	2009 - 2020	Optional		4.00	+2.45	0.60
AE32170-E	2009 - 2020	VHM standard		4.20	+2.45	0.60
AE32170-xxx	2009 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33114	•	•	•			



VHM Cylinder head

AA33112

KTM 65SX
Husqvarna TC65

2009 - 2020
2017 - 2020


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32167-A	2009 - 2012	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 - 2020	Optional		5.00	+2.45	0.80
AE32167-H	2013 - 2020	VHM standard		5.20	+2.45	0.80
AE32167-K	2013 - 2020	Optional		5.40	+2.45	0.80
AE32167-101	2009 - 2020	Optional	12° piston: APKT06521722 Raise cylinder 0.10mm	5.00	+0.40	0.80
AE32167-059	2009 - 2020	VHM standard	12° piston: APKT06521722 Raise cylinder 0.10mm	5.20	+0.40	0.80
AE32167-xxx	2009 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33112	•			•		

AA33068

KTM 85SX
2004 - 2012


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
Husqvarna TC85

2013 - 2017
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	•	•	•			

VHM Cylinder head

AA33171

KTM 85SX
Husqvarna TC85

2018 - 2020
2018 - 2020


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32281-A	2018 - 2020	Blind	Blind insert			
AE32281-C	2018 - 2020	Optional		7.80	+2.15	0.80
AE32281-E	2018 - 2020	VHM standard		8.00	+2.15	0.80
AE32281-F	2018 - 2020	Optional		8.20	+2.15	0.80
AE32281-012	2018 - 2020	Optional	For 12° piston: APKT08521707	7.80	+0.55	0.80
AE32281-013	2018 - 2020	VHM standard	For 12° piston: APKT08521707	8.00	+0.55	0.80
AE32281-014	2018 - 2020	Optional	For 12° piston: APKT08521707	8.20	+0.55	0.80
AE32281-xxx	2018 - 2020	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


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
Husqvarna TC105

2013 - 2017
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 - 2020
Husqvarna TC105 2018 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32288-A	2018 - 2020	Blind	Machine yourself			
AE32288-B	2018 - 2020	Optional		9.20	+2.20	0.90
AE32288-C	2018 - 2020	VHM standard		9.40	+2.20	0.90
AE32288-E	2018 - 2020	Optional		9.60	+2.20	0.90
AE32288-F	2018 - 2020	Optional		9.80	+2.20	0.90
AE32288-xxx	2018 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33177	•	•	•			

AA33097 **KTM 125SX/EXC** 2007 - 2015
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-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
AE32128-048	2013 - 2015	VHM standard	For 12° piston: APKT12511673	11.80	+ 0.40	0.90
AE32128-xxx	2013 - 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

AA33156 **KTM 125SX** **2016 - 2020**
Husqvarna TC125 **2016 - 2020**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32257-A	2016 - 2020	Blind	Machine yourself			
AE32257-B	2016 - 2020	Optional		11.20	0.00	0.90
AE32257-C	2016 - 2020	Optional		11.40	0.00	0.90
AE32257-E	2016 - 2020	VHM standard		11.60	0.00	0.90
AE32257-F	2016 - 2020	Optional		11.80	0.00	0.90
AE32257-040	2016 - 2020	Optional	For 12° piston: APKT12511673	11.20	0.00	0.90
AE32257-029	2016 - 2020	Optional	For 12° piston: APKT12511673	11.40	0.00	0.90
AE32257-026	2016 - 2020	VHM standard	For 12° piston: APKT12511673	11.60	0.00	0.90
AE32257-xxx	2016 - 2020	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 / XC **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	•	•	•	•

AA33157 **KTM 150SX / XC** **2016 - 2020**



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32260-A	2016 - 2020	Blind	Machine yourself			
AE32260-B	2016 - 2020	Optional		13.20	0.00	1.10
AE32260-C	2016 - 2020	Optional		13.40	0.00	1.10
AE32260-E	2016 - 2020	VHM standard		13.60	0.00	1.10
AE32260-F	2016 - 2020	Optional		13.80	0.00	1.10
AE32260-G	2016 - 2020	Optional		14.00	0.00	1.10
AE32157-xxx	2016 - 2020	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/EXC 2003 - 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	•					

AA33098 KTM 250SX/EXC 2007 - 2016
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	•	•	•			

AA33166 KTM 250SX 2017 - 2020
Husqvarna TC250 2017 - 2020
KTM 250EXC 2017
Husqvarna TE250 2017


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32272-A	2017 - 2020	Blind	Machine yourself			
AE32272-C	2017 - 2020	Optional		21.80	+3.70	1.60
AE32272-E	2017 - 2020	VHM standard for 250SX / TC250		22.20	+3.70	1.60
AE32272-F	2017 - 2020	Optional		22.60	+3.70	1.60
AE32272-S	2017 - 2020	Optional		23.00	+3.70	1.60
AE32272-T	2017	VHM standard for 250EXC / TE250		24.00	+3.70	1.70
AE32272-024	2017 - 2020	VHM standard	For 12° piston: APKT25021754	22.20	+0.50	1.60
AE32272-xxx	2017 - 2020	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 - 2020
Husqvarna TE250i 2018 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32272-A	2018 - 2020	Blind	Machine yourself			
AE32272-S	2018 - 2020	Optional		23.00	+3.70	1.60
AE32272-T	2018 - 2020	VHM standard		24.00	+3.70	1.70
AE32272-xxx	2018 - 2020	Custom	Special insert according to your specification			
Part number sealkit SK33098	O-ring small	O-ring middle	O-ring big	O-ring various		

AA33109 **KTM 300SX/EXC** 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 SK33109	O-ring small	O-ring middle	O-ring big	O-ring various		

AA33167 **KTM 300EXC** 2017
KTM 300SX 2017 - 2020
Husqvarna TE300 2017
Husqvarna TC300 2017 - 2020
Husqvarna TX300 2017



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32274-A	2017 - 2020	Blind	Machine yourself			
AE32274-B	2017 - 2020	VHM standard for 300SX / TC300		26.25	0.00	1.90
AE32274-E	2017 - 2020	VHM standard for 300EXC / TE300 / TX300		27.50	0.00	1.90
AE32274-xxx	2017 - 2020	Custom	Special insert according to your specification			
Part number sealkit SK33167	O-ring small	O-ring middle	O-ring big	O-ring various		

VHM Cylinder head

AA33172

KTM 300EXC TPI
Husqvarna TE300i
2018 - 2020
2018 - 2020


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32274-A	2018 - 2020	Blind	Machine yourself			
AE32274-C	2018 - 2020	Optional		26.50	0.00	1.90
AE32274-E	2018 - 2020	Optional		27.50	0.00	1.90
AE32274-F	2018 - 2020	VHM standard		28.50	0.00	1.90
AE32274-xxx	2018 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33167	•	•	•			

AA33026

Suzuki RM65
2000 - 2005

See Kawasaki KX65 2000 - 2020

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	Standard	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

1998 - 2008

*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]
AE32088-016	1998-2000, 2003	Optional	Dome piston	11.00	+1.90	1.00
AE32088-003	1998-2000, 2003	VHM standard	Dome piston	11.20	+1.90	1.00
AE32088-015	1998-2000, 2003	Optional	Dome piston	11.40	+1.90	1.00
AE32088-019	2001 - 2002	VHM standard	Dome piston	11.20	+2.10	1.00
AE32088-A	2004	Blind	Blind insert			
AE32088-C	2004	Optional		10.80	-0.50	1.00
AE32088-E	2004	Optional		11.00	-0.50	1.00
AE32088-F	2004	VHM standard		11.20	-0.50	1.00
AE32088-H	2004	Optional		11.40	-0.50	1.00
AE32088-xxx	2004	Custom	Special insert according to your specification			
AE32101-A	2005 - 2008	Blind	Blind insert			
AE32101-B	2005 - 2008	Optional		10.80	-0.50	0.90
AE32101-C	2005 - 2008	Optional		11.00	-0.50	0.90
AE32101-E	2005 - 2008	VHM standard		11.20	-0.50	0.90
AE32101-F	2005 - 2008	Optional		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	•	•	•	

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	•	•	•	

AA33102

Suzuki RGV 250 (VJ22)

1991 - 1996

See Aprilia RS250 Streetbike 1995 - 2002

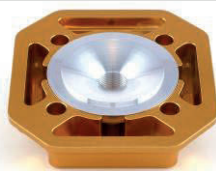


VHM Cylinder head

AA33070

TM MX85

1999 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32089-A	1999 - 2020	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 - 2020	Optional		7.80	-0.80	0.90
AE32089-H	2013 - 2020	VHM standard		8.00	-0.80	0.90
AE32089-K	2013 - 2020	Optional		8.20	-0.80	0.90
AE32089-xxx	1999 - 2020	Custom	Special insert according to your specification			
Part number sealkit SK33000	O-ring small	O-ring middle	O-ring big	O-ring various		

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			
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 SK33000	O-ring small	O-ring middle	O-ring big	O-ring various		

AA33142

TM MX125

2012 - 2019

TM EN125

2012 - 2019



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32223-A	2012 - 2019	Blind	Machine yourself			
AE32223-B	2012 - 2015	Optional		10.80	-1.70	1.00
AE32223-C	2012 - 2015	Optional		11.00	-1.70	1.00
AE32223-E	2012 - 2015	VHM standard		11.20	-1.70	1.00
AE32223-F	2012 - 2015	Optional		11.40	-1.70	1.00
AE32223-G	2012 - 2015	Optional		11.60	-1.70	1.00
AE32223-K	2016 - 2019	Optional		11.00	-1.70	1.20
AE32223-L	2016 - 2019	Optional		11.20	-1.70	1.20
AE32223-M	2016 - 2019	Optional		11.40	-1.70	1.20
AE32223-N	2016 - 2019	VHM standard		11.60	-1.70	1.20
AE32223-O	2016 - 2019	Optional		11.80	-1.70	1.20
AE32223-P	2016 - 2019	Optional		12.00	-1.70	1.20
AE32223-xxx	2012 - 2019	Custom	Special insert according to your specification			
Part number sealkit SK33000	O-ring small	O-ring middle	O-ring big	O-ring various		

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 / MX300 2015 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32255-A	2015 - 2020	Blind	Machine yourself 250cc			
AE32255-C	2015 - 2020	Optional	Ø66.40 - 250cc	20.20	-0.40	1.30
AE32255-E	2015 - 2020	VHM standard MX250	Ø66.40 - 250cc	20.60	-0.40	1.30
AE32255-F	2015 - 2020	Optional	Ø66.40 - 250cc	21.00	-0.40	1.30
AE32255-xxx	2015 - 2020	Custom	Special insert according to your specification			
AE32250-A	2015 - 2020	Blind	Machine yourself for 300cc			
AE32250-C	2015 - 2020	Optional	Ø72 - 300cc	27.00	-0.60	1.60
AE32250-E	2015 - 2020	VHM standard MX300	Ø72 - 300cc	28.00	-0.60	1.60
AE32250-F	2015 - 2020	Optional	Ø72 - 300cc	29.00	-0.60	1.60
AE32250-xxx	2015 - 2020	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

AA33174 Yamaha YZ65 2018 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32285-A	2018 - 2020	Blind	Machine yourself			
AE32285-C	2018 - 2020	Optional		6.80	+1.25	0.80
AE32285-E	2018 - 2020	VHM standard		7.00	+1.25	0.80
AE3285-F	2018 - 2020	Optional		7.20	+1.25	0.80
AE32285-xxx	2018 - 2020	Custom	Special insert according to your specification			

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

VHM Cylinder head

AA33041

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		8.20	+1.60	1.00
AE32059-K	2002 - 2018	VHM standard		8.40	+1.60	1.00
AE32059-L	2002 - 2018	Optional		8.60	+1.60	1.00
AE32059-196	2002 - 2018	VHM standard	For 12° piston: APYA08521757	8.40	+0.00	1.30
AE32059-197	2002 - 2018	Optional	For 12° piston: APYA08521757	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 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32286-A	2019 - 2020	Blind	Machine yourself			
AE32286-C	2019 - 2020	Optional		8.20	+1.60	1.30
AE32286-E	2019 - 2020	VHM standard		8.40	+1.60	1.30
AE32286-F	2019 - 2020	Optional		8.60	+1.60	1.30
AE32286-032	2019 - 2020	Optional	For 12° piston: APYZ08521757	8.20	+0.00	1.30
AE32286-029	2019 - 2020	VHM standard	For 12° piston: APYZ08521757	8.40	+0.00	1.30
AE32286-xxx	2019 - 2020	Custom	Special insert according to your specification			

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

AA33032

Yamaha YZ125

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		10.80	+1.85	1.00
AE32046-K	2001 - 2004	Optional		11.00	+1.85	1.00
AE32046-L	2001 - 2004	VHM standard		11.20	+1.85	1.00
AE32046-M	2001 - 2004	Optional		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	•	•	•	

VHM Cylinder head

AA33077 Yamaha YZ125 2005 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32100-A	2005 - 2020	Blind	Machine yourself			
AE32100-B	2005 - 2020	Optional		10.80	0.00	0.90
AE32100-C	2005 - 2020	Optional		11.00	0.00	0.90
AE32100-E	2005 - 2020	VHM standard		11.20	0.00	0.90
AE32100-F	2005 - 2020	Optional		11.40	0.00	0.90
AE32100-xxx	2005 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33077	•	•	•			

AA33104 Yamaha YZ144 2005 - 2020



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32151-A	2005 - 2020	Blind	Machine yourself			
AE32151-xxx	2005 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33077	•	•	•			

AA33080 Yamaha YZ250 1999 - 2020
Yamaha YZ250X 2016 - 2020


Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32021-A	1999 - 2020	Blind	Machine yourself			
AE32021-D	1999 - 2020	Optional		19.80	+2.80	1.50
AE32021-C	1999 - 2020	Optional		20.20	+2.80	1.50
AE32021-B	1999 - 2020	VHM standard for YZ250		20.60	+2.80	1.50
AE32021-092	2016 - 2020	VHM standard for YZ250X		21.80	+2.80	1.60
AE32021-xxx	1999 - 2020	Custom	Special insert according to your specification			
Part number sealkit	O-ring small	O-ring middle	O-ring big	O-ring various		
SK33080	•	•	•			



VHM Cylinder head

AA33028-1 Yamaha TZ125 1995 - 2010



Part number insert	Year	Insert type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32036-A	1995 - 2010	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 - 2010	Optional	Ø 54 mm piston	11.40	0.00	0.80
AE32036-E	2000 - 2010	VHM standard	Ø 54 mm piston	11.60	0.00	0.80
AE32036-F	2000 - 2010	Optional	Ø 54 mm piston	11.80	0.00	0.80
AE32036-G	2000 - 2010	Optional	Ø 54 mm piston	12.00	0.00	0.80
AE32036-xxx	1995 - 2010	Custom	Special insert according to your specification			

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

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 SK33000 O-ring small O-ring middle O-ring big O-ring various

AA33065 Yamaha TZ250 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 SK33000 O-ring small O-ring middle O-ring big O-ring various

▲ OEM HEAD INSERTS

FOR STANDARD CYLINDER HEAD COVER

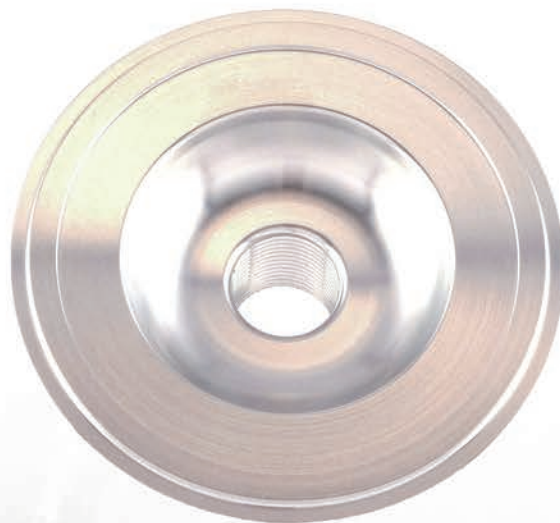
Besides the VHM cylinder headsets we also offer special inserts for certain standard (OEM) cylinder headcovers. See the following pages for which engines we have these inserts available.

- ✓ 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

Aprilia RS125 streetbike

Partnumber insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32008-A		Blind				
AE32008-B		Optional		11.50	+2.00	1.40
AE32008-xxx		Custom	Special insert according to your specification			

2 / 123cc engine


Aprilia RSW125 / RSW250 racebike Type APC

Partnumber insert	Year	Insert Type	Description	Volume [cc]	Piston height [mm]	Squish [mm]
AE32076-A		Blind				
AE32076-AC39		Optional		11.37	+1.50	0.75
AE32076-AC32		Optional		11.22	+1.50	0.75
AE32076-AC37		Optional		11.10	+1.50	0.75
AE32076-AC38		Optional		10.90	+1.50	0.75
AE32076-AC56		Optional		10.77	+1.50	0.75
AE32076-AC68		Optional		10.64	+1.50	0.75
AE32076-AC69		Optional		10.50	+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 / 70cc

Partnumber insert	Year	Insert Type	Description
AE32135-A		Blind	50cc
AE32135-xxx		Custom	50cc, Special insert according to your specification
AE32144-A		Blind	70cc
AE32144-xxx		Custom	70cc, Special insert according to your specification



VHM OEM head inserts

GasGas 65cc

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



lame 125 Screamer

Partnumber insert	Year	Insert type	Description
AE32246-A		Blind	
AE32246-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
AE32191-A		Blind	50cc Minarelli AM6, scooter 7T
AE32191-xxx		Custom	50cc Minarelli AM6, scooter 7T Special insert according to your specification
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) Special insert according to your specification
AE32173B-xxx		Custom	Minarelli AM6, scooter 7T, pitch 54x54 and 56x56 (Derbi) 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

Modena 125

Partnumber insert	Year	Insert Type	Description
AE32234-A		Blind	
AE32234-xxx		Custom	Special insert according to your specification



Pavesi 125

Partnumber insert	Year	Insert Type	Description
AE32055-A		Blind	
AE32055-xxx		Custom	Special insert according to your specification

Note: does not fit the standard cylinder headcover, VHM modification on the headcover needed.



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°
AE32203-334	2010 - 2011	Optional	KZ10 VHM flat top radius piston: APTM12521718	13.80 (13.20 CIK)	-3.55	0.85 mm
AE32203-335	2012	Optional	KZ10 VHM flat top radius piston: APTM12521718	13.80 (13.20 CIK)	-3.65	0.85 mm
AE32203-336	2013 - 2015	Optional	KZ10B VHM flat top radius piston: APTM12521718	13.80 (13.20 CIK)	-3.75	0.85 mm

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



VHM OEM head inserts

TM

K9B, K9C, KZ10, KZ10B

Partnumber

Partnumber Modification cylinder head cover for using VHM inserts AE32203-xxx

OEM Cylinder head

Year

CYLTMKZ10

2008 - 2015

MODCYLKOP-001



TM

KZ10C

Partnumber insert

Year

Insert Type

Description

Volume
[cc]

Piston height
[mm]

Squish
[mm]

AE32270-A	2016 - 2018	Blind		13.80 (13.10 CIK)	-2.20	0.90 mm
AE32270-026	2016 - 2018	Optional		13.80 (13.10 CIK)	-2.30	0.90 mm
AE32270-027	2016 - 2018	Optional		13.80 (13.10 CIK)	-2.40	0.90 mm
AE32270-028	2016 - 2018	VHM standard		13.80 (13.10 CIK)	-2.50	0.90 mm
AE32270-029	2016 - 2018	Optional		13.80 (13.10 CIK)	-2.60	0.90 mm
AE32270-030	2016 - 2018	Optional		13.80 (13.10 CIK)	-3.75	0.85 mm
AE32270-012	2016 - 2018	Optional	For flat top radius piston: APTM12521718	13.80 (13.10 CIK)		
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

Partnumber

Year

OEM Cylinder head

2016 - 2018

CYLTMKZ10C



CUSTOM INSERTS

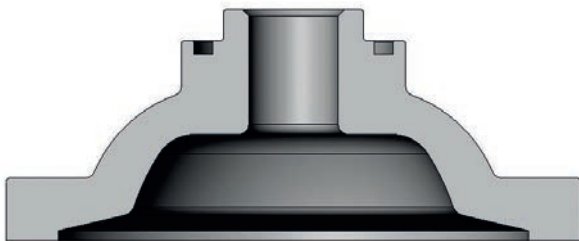
Besides our standard, optional and blind inserts, we also offer the possibility to produce a custom insert. Thereby we machine the insert according to your requested specifications.

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

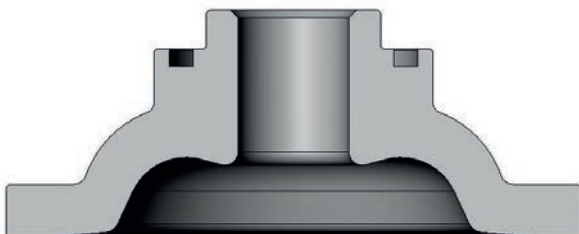
TO YOUR SPECIFICATIONS

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.

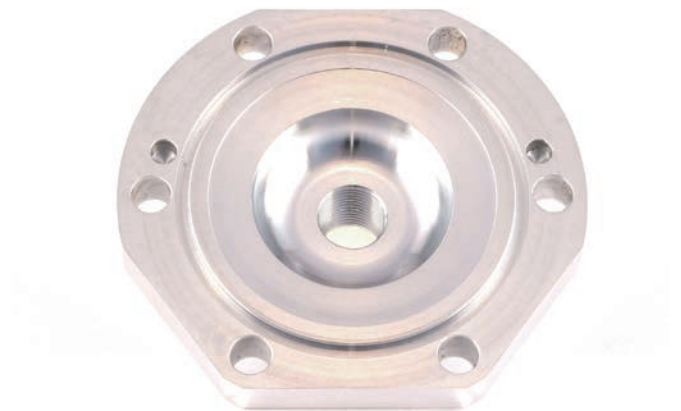
A higher compression ratio, which means less volume, will give the engine more low and middle range torque. This will improve the acceleration and increases torque feeling when accelerating out of the corner. However, this compromises top speed and the insert is more sensitive to detonation.

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 its bottom power.

ORDER FORM CUSTOM INSERT

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

www.vhm.nl/customparts



▲ CRANKSHAFTS AND CONRODS

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: KTM 65SX, 85SX, 125SX, 150SX, Husqvarna TC65, TC85, TC125, Yamaha YZ85 and YZ125. For roadrace: Honda RS125.

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.

CUSTOM MADE CRANKSHAFTS

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

CONNECTING RODS

Besides our VHM crankshafts, we also have VHM connecting rod kits for Aprilia RSW125 / RSW250, Honda RS125 '00-'10 and RS250 '93-'10.

www.vhm.nl/crankshafts



VHM Crankshafts & connecting rods

CRK07 Honda RS125 NX4 1995-2010



Description

VHM RS125 A-kit connecting rod kit
Note: fits OEM crankshaft 13300-NX4-711

Content

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

CRK04 Honda RS250 NX5, NXA 1993-2010



Description

VHM RS250 A-kit connecting rod kit
Note: fits OEM crankshaft 13000-NX5-790 and 13000-NXA-610

Content

2x connecting rod, 2x bearing, 4x washer

CRK100 Aprilia RSW125 / RSW250/LE



Description

VHM connecting rod kit

Content

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

AK20107A Honda RS125 NX4 1995 - 2010

Middle inertia


Spare parts
CRK07

Description

VHM RS125 A-kit connecting rod kit

Content

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

AK20107B Honda RS125 NX4 1995 - 2010

High inertia


Spare parts
CRK07

Description

VHM RS125 A-kit connecting rod kit

Content

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

2019



Lotte van Drunen (NED)



Ky Woods (AUS)



Edvards Bidzans (LAT)



Edvards Bidzans (LAT)



Tom Guyon (FRA)



Tom Guyon (FRA)



Simon Laengenfelder (GER)



Mike Kras (NED)

2018



Braden Plath (AUS)



Damien Knuiman (NED)



Kay de Wolf (NED)



Kay Karssemakers (NED)



Camden Mc Lellan (RSA)



Kay de Wolf (NED)



Bailey Malkiewicz (AUS)



Mike Kras (NED)

2017



Ivano van Erp (NED)



Mads Fredsoe Sorensen (DEN)



Kayden Minear (AUS)



Mads Fredsoe Sorensen (DEN)



Damien Knuiman (NED)



Ivano van Erp (NED)



Kay Karssemakers (NED)



Kevin Horgmo (NOR)



Mike Kras (NED)



14 WORLD TITLES

13 EUROPEAN TITLES

AND MANY NATIONAL TITLES



VHM **Crankshafts & connecting rods**

AK20097-1

KTM 65SX 2009 - 2020

Middle inertia

Husqvarna TC65 2017 - 2020



Spare parts	Description	Content
03.6029	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
DA28062-1	Synthetic plates	2x black synthetic plates (middle inertia)
DA28062-2	Aluminum plates	2x aluminum plates (high inertia)

AK20225

KTM 85SX 2018 - 2020

Middle inertia

Husqvarna TC85 2018 - 2020



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

AK20213

KTM 125SX 2016 - 2020

Middle inertia

Husqvarna TC125 2016 - 2020



Spare parts	Description	Content
03.6226	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
28109	Plastic insert	1x
DA28109	Plastic insert	4x

AK20240

KTM 125SX 2016 - 2020

Middle low-key inertia

NEW

Husqvarna TC125 2016 - 2020



Spare parts	Description	Content
03.6226	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
28109	Plastic insert	1x
DA28109	Plastic insert	4x

VHM **Crankshafts & connecting rods**
AK20215
KTM 150SX 2016 - 2020
Middle inertia


Spare parts	Description	Content
03.6226	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
28109	Plastic insert	1x
DA28109	Plastic insert	4x

AK20235B
Yamaha YZ85 2019 - 2020
High inertia


Spare parts	Description	Content
B4B-11650-00	OEM connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer
03.2119	ProX connecting rod kit	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

AK20192
Yamaha YZ125 2005 - 2020
High inertia


Spare parts	Description	Content
03.2225	ProX connecting rod kit, 102 mm	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

AK20192-1
Yamaha YZ125 2005 - 2020
High inertia, +3 mm conrod


Spare parts	Description	Content
03.2221	ProX connecting rod kit, 105 mm	1x connecting rod, 1x big end pin, 1x bearing, 2x washer

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. See the following page for all modifications.

- ✓ 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 is used, the balance is not correct anymore, which results in more vibrations.

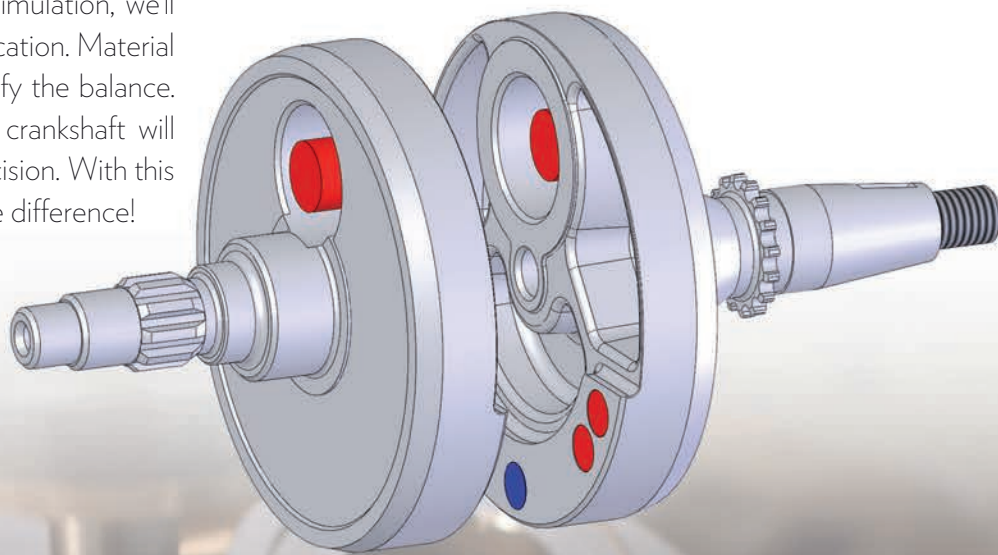
How does it work? When we receive your OEM crankshaft, we'll first determine the total reciprocating weight. With our advanced computer simulation, we'll calculate the best balance for each application. Material like tungsten will often be used to modify the balance. After performing the modification,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

CUSTOM MODIFICATIONS

We can also perform custom 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 custom modification.

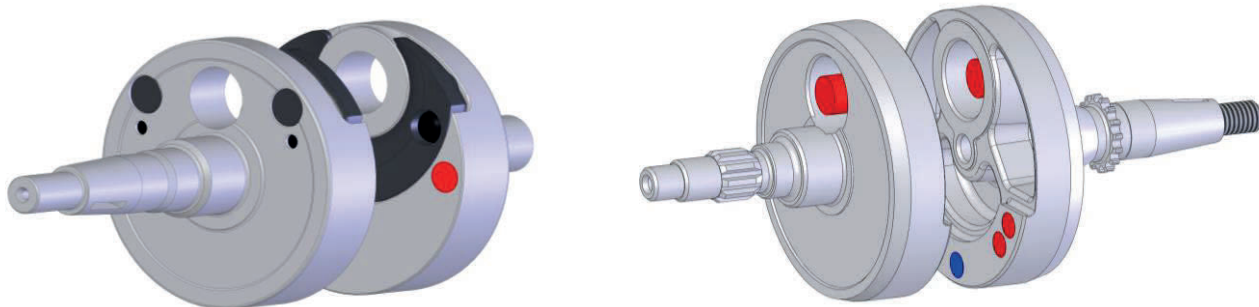
In the past we've already made custom modifications on crankshafts for several engines like Honda CR125R, lame 60cc Waterswift, Kawasaki KX250F, KTM 350SX-F, Maxter MXO 125, Suzuki RM125, RM-Z250, TM MX250, MX300, OK125 S-Junior, 60cc mini, KZ10C, Vortex DDJ 125, DDS 125, Yamaha YZ250 and Yamaha YZ450F.

www.vhm.nl/crankmods



VHM Crankshaft modification

Brand & type	Year	Part number	Description
Honda			
CR250R	2005 - 2007	AK20038-001	Middle inertia, modified balance
CRF450R	2017 - 2020	AK20221-001	High inertia, modified balance
Husqvarna			
TC50	2017 - 2020	AK20123-002	High inertia
TC65	2017 - 2020	AK20136-002	Middle inertia, modified balance
TC85	2014 - 2017	AK20161-002	High inertia, modified balance
	2018 - 2020	AK20224-001	Middle inertia
TC125	2014 - 2015	AK20137-001	High inertia, modified balance
	2016 - 2020	AK20202-001	High inertia
	2016 - 2020	AK20202-002	Middle inertia
TC250	2014 - 2016	AK20133-005	High inertia, std conrod and piston
TC250 Big bore	2008 - 2016	AK20133-004	Using Husqvarna 300 piston, high inertia, modified balance
FC250	2014 - 2015	AK20169-001	Low inertia
FC250	2016 - 2020	AK20203-002	High inertia, modified balance
	2016 - 2020	AK20203-006	Low inertia, modified balance
TE300	2014 - 2016	AK20143-002	Hotrods crankshaft with silver conrod, using OEM 300 piston, high inertia, modified balance
	2014 - 2016	AK20143-003	Hotrods crankshaft with brown conrod (stronger), using OEM 300 piston, high inertia, modified balance
Kawasaki			
KX65	2000 - 2020	AK2066-004	Middle inertia and modified balance
KX85	2006 - 2013	AK20041-007	High inertia, modified balance
	2014 - 2020	AK20178-001	High inertia, modified balance
	2014 - 2020	AK20178-002	Middle inertia, modified balance
KX125	2003 - 2010	AK20033-001	High inertia, modified balance
KTM			
50SX	2009 - 2020	AK20123-002	High inertia
65SX	2009 - 2020	AK20136-002	Middle inertia, modified balance
85SX	2009 - 2012	AK20086-002	High inertia, modified balance
	2013 - 2017	AK20161-002	High inertia, modified balance
	2018 - 2020	AK20224-001	Middle inertia
125SX	2007 - 2015	AK20137-001	High inertia, modified balance
	2016 - 2020	AK20202-001	High inertia
	2016 - 2020	AK20202-002	Middle inertia
150SX	2016 - 2020	AK20210-001	High inertia, modified balance
150SX	2016 - 2020	AK20210-002	Middle inertia, modified balance
250SX	2008 - 2016	AK20133-005	High inertia, std conrod and piston
250SX Big bore	2008 - 2016	AK20133-004	Using KTM 300 piston, high inertia, modified balance
250SX-F	2013 - 2015	AK20169-001	Low inertia
250SX-F	2016 - 2020	AK20203-002	High inertia, modified balance
	2016 - 2020	AK20203-006	Low inertia, modified balance
300EXC	2008 - 2016	AK20143-002	Hotrods crankshaft with silver conrod, using KTM 300 piston, high inertia, modified balance
300EXC	2008 - 2016	AK20143-003	Hotrods crankshaft with brown conrod (stronger), using KTM 300 piston, high inertia, modified balance
450SX-F	2016 - 2020	AK20211-001	Modified balance
Suzuki			
RM85	2003 - 2012	AK20039-001	High inertia, modified balance
Yamaha			
YZ85	2002 - 2018	AK20071-001	High inertia, modified balance
	2019 - 2020	AK20232-001	Middle inertia
YZ125	2005 - 2020	AK20063-002	High inertia, modified balance
YZ125	2005 - 2020	AK20063-006	High inertia, modified balance, using 3 mm longer conrod
YZ144	2005 - 2020	AK20063-001	High inertia, modified balance
YZ250F	2016 - 2018	AK20206-001	High inertia
	2019 - 2020	AK20233-001	Low inertia
	2019 - 2020	AK20233-002	Middle inertia



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. This mitigates engine lockups. Another feature of most of our pistons is a inside coating, which reduces micro welding, lowers the friction on the pin, prevents piston bore galling and provides a very good thermal conduction.

- ✓ High performance
- ✓ Longevity and keeps performance during lifetime
- ✓ Non-circular piston profile (and inside coating)
- ✓ Resistance to detonation

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: KTM 65SX, 85SX, 125SX, 250SX, Husqvarna TC65, TC85, TC125, TC250, TM MX85, Yamaha YZ85 and YZ125. For roadrace: Aprilia RSW125, RSW250, 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 and Minarelli AM6 50cc.

www.vhm.nl/pistons



VHM Piston kits

MOTOCROSS

KTM 65SX
Husqvarna TC65

2009 - 2020
2017 - 2020



Special - 12° top

Part number	Piston diameter
APKT06521722A	Ø44.95
APKT06521722B	Ø44.96
APKT06521722C	Ø44.97
APKT06521722D	Ø44.98
APKT06521722E	Ø44.99

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

Must use special 12° insert!

Year	5.00cc	5.20cc
09-'20	AE32167-101	AE32167-059

KTM 85SX
Husqvarna TC85

2003 - 2020
2014 - 2020



Direct replacement - Flat top

Part number	Piston diameter
APKT08521681A	Ø46.95
APKT08521681B	Ø46.96

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

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	7.80cc	8.00cc	8.20cc
04-'12		AE32087-112	
13-'17	AE32226-056	AE32226-079	AE32226-100
18-'20	AE32281-012	AE32281-013	AE32281-014

KTM 125SX
Husqvarna TC125

2001 - 2020
2014 - 2020



Direct replacement - Flat top

Part number	Piston diameter
APKT12511691A	Ø53.95
APKT12511691B	Ø53.96
APKT12511691C	Ø53.97
APKT12511691D	Ø53.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.35+0.10	APR541.0KEY	APP1545	APC151.1

Special - 12° top

Part number	Piston diameter
APKT12511673A1	Ø53.94
APKT12511673A	Ø53.95
APKT12511673B	Ø53.96
APKT12511673C	Ø53.97
APKT12511673D	Ø53.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.35+0.10	APR541.0KEY	APP1545	APC151.1

Must use special 12° insert!

Year	11.20	11.40	11.60	11.80
07-'15				AE32128-048
16-'20	AE32257-040	AE32257-029	AE32257-026	

VHM Piston kits

KTM 250SX
Husqvarna TC250

2006 - 2020
2014 - 2020



Special - 12° top

Part number	Piston diameter
APKT25021754A2	Ø66.32
APKT25021754A1	Ø66.33
APKT25021754A	Ø66.34

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.06	0.40+0.10	APR6641.0	APP1856	APC181.4SP

Must use special 12° insert!

Year	22.20cc
06-'16	AE32129-068
17-'20	AE32272-024

TM MX85

2013 - 2020



Direct replacement - Bore Ø47.95

Part number	Piston diameter
APTM08521702C	Ø47.87
APTM08521702D	Ø47.88
APTM08521702E	Ø47.89
APTM08521702F	Ø47.90

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.06	0.30+0.10	APR481.0	APP1338.5	APC131.1SP

Yamaha YZ85

2019 - 2020



Special - 12° top

Part number	Piston diameter
APYZ08521757A	Ø47.45
APYZ08521757B	Ø47.46

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.30+0.10	APR4751.0	APP1440	APC141.1SP

Must use special 12° insert!

Year	8.20cc	8.40cc
19-'20	AE32286-032	AE32286-029

Yamaha YZ125

2005 - 2020



Direct replacement

Part number	Piston diameter
APYZ12521705A1	Ø53.94
APYZ12521705A	Ø53.95
APYZ12521705B	Ø53.96
APYZ12521705C	Ø53.97

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.30+0.10	APR541.0	APP1545	APC151.1SP

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



Special + 3mm longer conrod

Part number	Piston diameter
APYZ12521714A1	Ø53.94
APYZ12521714A	Ø53.95
APYZ12521714B	Ø53.96
APYZ12521714C	Ø53.97
APYZ12521714D	Ø53.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.05	0.30+0.10	APR541.0	APP1545	APC151.1SP

Use +3mm longer conrod (105mm) ProX 03.2221 / VHM crankshaft AK20192-1)
Use s/e bearing 20mm width, ProX 21.3206 or Vertex WB111

ROADRACE

Aprilia RSW125
Aprilia RSW250



Direct replacement

Part number	Piston diameter
APAP12521745A	Ø53.93
APAP12521745B	Ø53.94

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.07	0.30+0.10	APR541.0	APP1545	APC151.1SP

Prototype piston

VHM Piston kits

Honda RS125 ND4 1984 - 1986
Honda RS250 ND5 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 1987 - 1994
Honda RS250 NF5 1987 - 1992



Direct replacement - Ø14 piston pin

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

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					

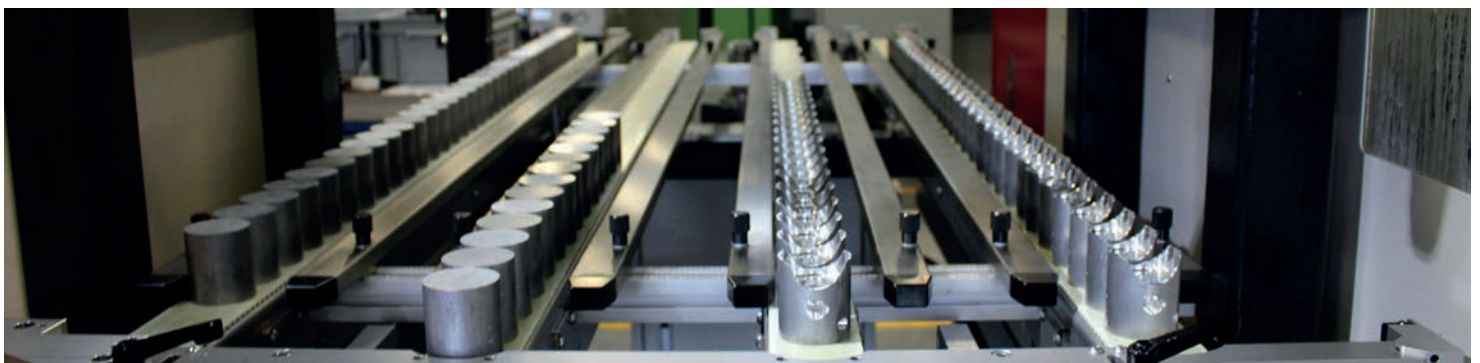
Must be used in combination with a VHM flat top insert and head when not driving with an A-kit. It can be used as direct replacement for an A-kit.

Yamaha TZ250 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					



VHM Piston kits

Yamaha TZ125
Yamaha TZ250

1995 - 1999
1995 - 1999

Direct replacement - Bore Ø56



Part number	Piston diameter
APYA12521724A1	Ø55.92
APYA12521724A	Ø55.93
APYA12521724B	Ø55.94
APYA12521724C	Ø55.95

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.07	0.35+0.10	APR561.0	APP1647	APC161.1SP

Yamaha TZ125
Yamaha TZ250

2000 - 2010
2000 - 2010

Direct replacement - Bore Ø54



Part number	Piston diameter
APYA12521716A	Ø53.93
APYA12521716B	Ø53.94

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.07	0.30+0.10	APR540.8	APP1545	APC151.1SP

MOPED

Kreidler 50cc Air Cooled

Ø14 piston pin



Part number	Piston diameter
APKR05011715A	Ø39.95
APKR05011715B	Ø39.96
APKR05011715C	Ø39.97
APKR05011715D	Ø39.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.04	0.20+0.10	APR401.0	APP1433	APC141.1

Ø12 piston pin



Part number	Piston diameter
APKR05011676A1	Ø39.94
APKR05011676A	Ø39.95
APKR05011676B	Ø39.96
APKR05011676C	Ø39.97
APKR05011676D	Ø39.98
APKR05011676E	Ø39.99
APKR05011676F	Ø40.00

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.04	0.20+0.10	APR401.0	APP1233	APC121.0

Kreidler 60cc Air Cooled

Ø14 piston pin



Part number	Piston diameter
APKR06011705A	Ø43.95
APKR06011705B	Ø43.96
APKR06011705C	Ø43.97
APKR06011705D	Ø43.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.04	0.20+0.10	APR441.0	APP1437	APC141.1

Cylinder modification and adjusted insert needed!

Ø12 piston pin



Part number	Piston diameter
APKR06011683A1	Ø43.94
APKR06011683A	Ø43.95
APKR06011683B	Ø43.96
APKR06011683C	Ø43.97
APKR06011683D	Ø43.98

Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
0.04	0.20+0.10	APR441.0	APP1237	APC121.0

Cylinder modification and adjusted insert needed!

VHM Piston kits

Malossi 50cc



20mm compression height, for aluminium 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					



25mm compression height, for aluminium 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					

Malossi 50cc Derbi

2015 - 2019



20mm compression height, for aluminium cylinder

Part number	Piston diameter	Piston-cylinder clearance [mm]	Piston ring end gap [mm]	Piston ring	Piston pin	Piston clip
APMA05011710A	Ø39.83	0.05	0.20+0.10	APR3991.0	APP1233	APC121.0
APMA05011710B	Ø39.84					
APMA05011710C	Ø39.85					



25mm compression height, for aluminium cylinder

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

Minarelli AM6 50cc



For aluminium 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					

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 ¹	APP1433	APC141.0
APSA05011702A	Ø40.26					
APSA05011703A	Ø40.56					

¹Piston ring APR401.0 for Ø39.96, APR4031.0 for Ø40.26, APR4061.0 for Ø40.56

VHM *Piston kits*

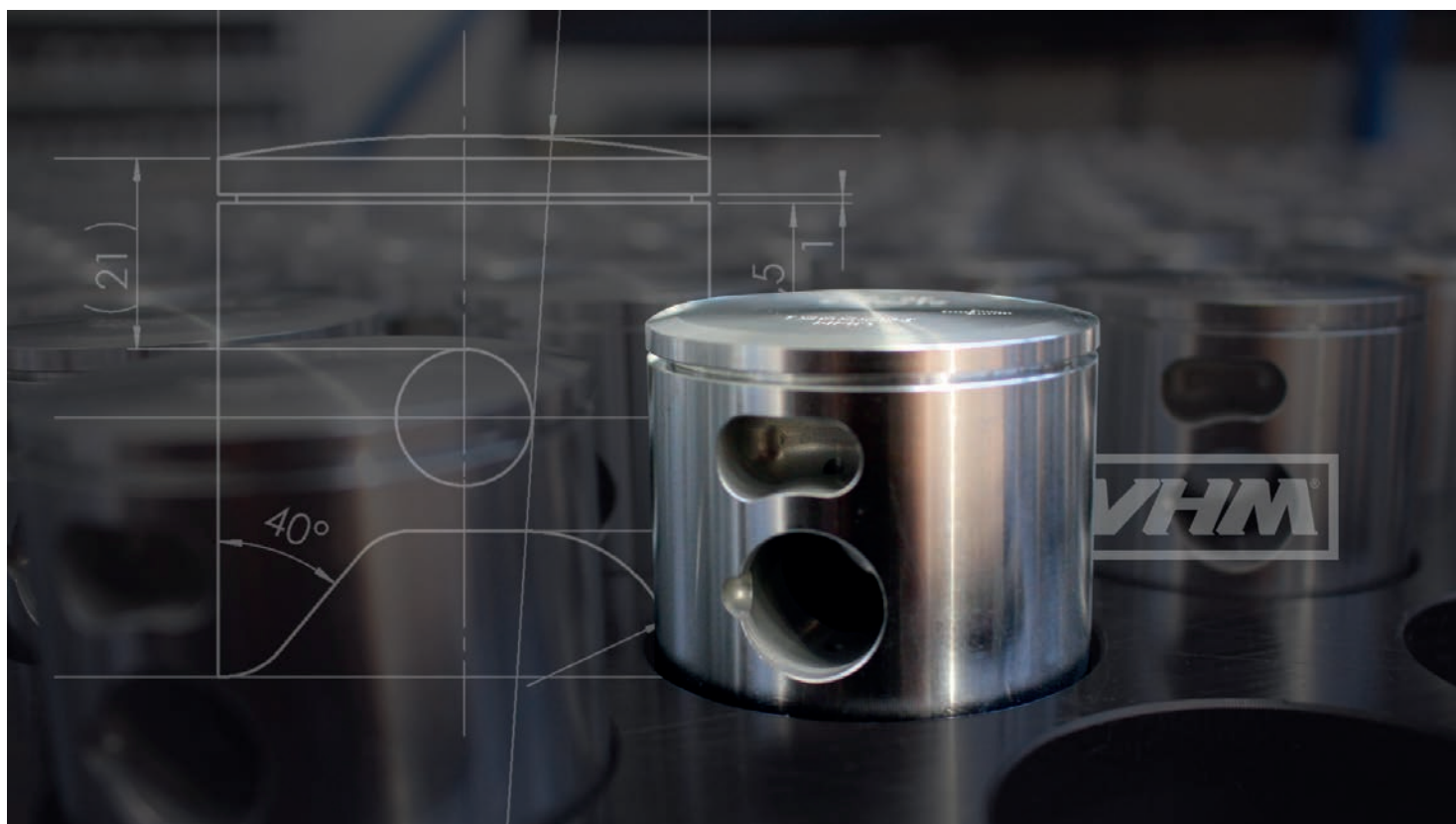
KARTING

TM KZ10	2010 - 2012
TM KZ10B	2013 - 2015
TM KZ10C	2016 - 2018
TM KZ-R1	2019 - 2020



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 x2	APP1545	APC151.1SP
APTM12521729A	Ø53.93					
APTM12521729B	Ø53.94					



VHM CDI UNITS

New in our assortment since April 2019: 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
- ✓ For 85SX / 125SX Including aluminium plate

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. You can switch between maps with the included switch for on the steering bar.

AVAILABLE FOR

The VHM CDI units are available for Husqvarna TC65, TC85, TC125, KTM 65SX, 85SX, 125SX and Yamaha YZ85.

www.vhm.nl/cdi



VHM **CDI units**

CD060218 **KTM 65SX** **2018 - 2020**
Husqvarna TC65 **2018 - 2020**



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

CD060318 **KTM 85SX** **2018 - 2020**
Husqvarna TC85 **2018 - 2020**



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

CD060416 **KTM 125SX** **2016 - 2020**
Husqvarna TC125 **2016 - 2020**



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

CD020319 **Yamaha YZ85** **2019 - 2020**



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



VHM AIR INTAKES

New in our assortment since August 2019: VHM air intakes for 2 and 4 stroke dirtbike engines. Developed for an optimum air flow and made of real carbon. When the engine is running and temperatures rise, the airbox rubber usually deforms. This is due to the high temperatures as it gets more soft, which leads to an even less optimal air flow. Our carbon intake prevents the airbox rubber from deforming and ensures an optimal airflow. There's a massive bottom power improvement for the 4-stroke models. The 2-stroke models improve the top-end.

- ✓ Made of real Carbon
- ✓ Optimum air flow
- ✓ Easy to mount
- ✓ Prevent the airbox rubber from deforming at running temperatures
- ✓ Including hole for temperature sensor for the 4-stroke models
- ✓ Ensures that mud is evenly spread over the whole airbox no worries about mud piling up during a long race

MOUNTING

All air intake models must be used in combination with a powerflow kit from Twin Air. Furthermore, the AI060416 for KTM 125SX needs to be glued with Innotec adheseal, which is included in the box. We've created mounting video's for each air intake model, which you can easily watch through the url below.

www.vhm.nl/mountingairintake

AVAILABLE FOR

The VHM air intakes are available for Husqvarna TC85, TC125, FC250, FC350, FC450, KTM 85SX, 125SX, 250SX-F, 350SX-F, 450SX-F, 450EXC-F and Kawasaki KX450.

www.vhm.nl/airintakes



VHM Air Intakes

AI040919 Kawasaki KX450 2018 - 2020



Description	Content
VHM Air Intake	1x carbon air intake

Must be used in combination with Twin Air powerflow kit 151125C.

AI060318 KTM 85SX 2018 - 2020
Husqvarna TC85 2018 - 2020



Description	Content
VHM Air Intake	1x carbon air intake

Must be used in combination with Twin Air powerflow kit 154221C.

AI060416 KTM 125SX 2016 - 2020
KTM 150SX 2016 - 2020
Husqvarna TC125 2016 - 2020



Description	Content
VHM Air Intake	1x carbon air intake, 1x innotec adheseal

Note: Use innotec adheseal for mounting

Must be used in combination with Twin Air powerflow kit 154223C (for 2019 - 2020) or 154219C (for 2016 - 2018).

AI060619 KTM 250SX-F 2019 - 2020
KTM 350SX-F 2019 - 2020
Husqvarna FC250 2019 - 2020
Husqvarna FC350 2019 - 2020



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.

AI060919 KTM 450SX-F 2019 - 2020
Husqvarna FC450 2019 - 2020



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.

VHM **Air Intakes**

AI060919E

KTM 450EXC-F

2019 - 2020



Description

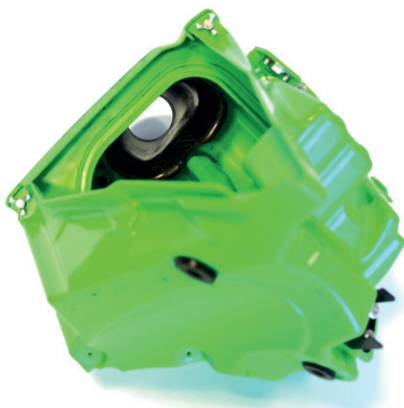
VHM Air Intake

Content

1x carbon air intake

Note: Including hole for temperature sensor, **must be used with Twin Air powerflow kit 154222C**

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



VHM VARIOUS PARTS

Besides our well-known cylinder heads, crankshafts and pistons, we also produce many other parts for your engine, such as a reed valve, powervalue 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 measuring 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	2020
DA31181	Husqvarna	TC65	2017	2020



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 2 stage spring

Partnumber	Brand	Type	Year from	Year till
DA31153	KTM	65SX	2009	2020
DA31153	Husqvarna	TC65	2017	2020



Spare parts	Description	Content
31155KIT001	Progressive spring + holder	1x progressive spring, 1x holder

When using another exhaust pipe, it will influence the opening of the power valve. With the VHM power valve adjuster with 2 stage spring, you are able to adjust the opening timing of the power valve easily with the screw. The first stage of the spring allows the power valve to open very easily for a better and direct response. The second part of the spring keeps the power valve fully open for a maximum exhaust flow. The VHM power valve adjuster is made from high quality aluminum machined from solid.

The VHM power valve adjuster fits the VHM cylinder head (part number AA33112), 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	2020
DA31194	Husqvarna	TC65	2017	2020



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	2020
DA31028	Husqvarna	TC65	2017	2020



Bush kickstarter gear

Partnumber	Description	Brand	Type	Year from	Year till
DA31235		KTM	85SX	2018	2020
DA31235		Husqvarna	TC85	2018	2020



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.

VHM Various parts

Ignition covers

Partnumber	Description	Brand	Type	Year from	Year till
DA31196		KTM	85SX	2013	2017
DA31196		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.

Handlebar stabilizers

Partnumber	Description	Brand	Type	Year from	Year till
DA31079	Ø28	Honda	CR125R, CR250R, CRF250R, CRF450R		
DA31086	Ø28	KTM	125SX, 150SX, 250SX/EXC/SX-F, 300SX/EXC, 350SX-F/EXC-F, 450SX-F/EXC-F		



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
DA31166	aluminum/steel	Suzuki	RM-Z450	2008	2018



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
DA31173		KTM	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.

VHM Various parts

Reedvalve spacers

Partnumber	Description	Brand	Type	Year from	Year till
S37002	4mm	KTM	50SX	2009	2020
S37002	4mm	Husqvarna	TC50	2017	2020
S37002	4mm	KTM	65SX	2009	2020
S37002	4mm	Husqvarna	TC65	2017	2020
S37004	4mm	KTM	85SX	2004	2020
S37004	4mm	Husqvarna	TC85	2014	2020
S37007	4mm	KTM	125SX	2016	2020
S37007	4mm	Husqvarna	TC125	2016	2020



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

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.

Oil air-vent plugs

Partnumber	Description	Brand	Type	Year from	Year till
DA31204		TM	K9B/C - KZ10 - KZ10B - KZ10C	2007	2018
DA31210		KTM	85SX	2013	2020
DA31210		Husqvarna	TC85	2014	2020



The OEM oil plug needs a hose for air breathing, but oil can flood out of the engine through the hose of the plug. With the VHM oil air-vent plug, no oil can flood out of the plug. The plug has separate chambers where air can extract, but oil remains in the engine.

VHM Measuring tools & spare parts

Piston height measuring tools

Partnumber	Description	Content
AM34012	Measuring tool 85 cc (also compatible for many 65 cc engines)	1x Measuring tool 85 cc, dial indicator not included
AM34012B	Measuring tool 105cc	1x Measuring tool 105 cc, dial indicator not included
AM34013	Measuring tool 125 cc - 150 cc	1x Measuring tool 125 cc, dial indicator not included
AM34014	Measuring tool 250 cc	1x Measuring tool 250 cc, dial indicator not included
AM34016	Measuring tool 300 cc	1x Measuring tool 300 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 5 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 Holes	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
BD35032	Copper Washer 6.5 x 14 x 1.5	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 1 mm stainless steel	1x ring
DA31109 3MM	Spark plug ring 1 mm stainless steel	1x ring
DA31109 4MM	Spark plug ring 1 mm steel	1x ring
M6X6 INBUS	Galvanized low screw	1x screw
M6X8 INBUS	Galvanized low screw	1x screw
M6X10 INBUS	Galvanized low screw	1x screw



Washer



Nutcap



Spark plug ring



Galvanized low screw

CASUAL CLOTHING

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

www.vhm.nl/merchandise



VHM Merchandise

Beanie (knit hat)

Partnumber	Description	Size
MCBE01Z	VHM beanie (knit hat) black	One size fits all



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

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!

Cap

Partnumber	Description	Size
MCC01Z-58	VHM snapback cap	58



Nice looking cap to wear at the track, in your workshop or whenever you feel like it. The cap is designed with a 3D embroidery and digital background printing on the front. There's also a woven VHM label next to the plastic adjustable back strap. In addition, we've designed a sticker which is attached on top of the red brim. It demonstrates our in total 11 World championships and 9 European championship titles until 2017. One size fits most!

Shirts

Partnumber	Description	Size
MCSM01Z-S	VHM shirt black	S
MCSM01W-S	VHM shirt white	S
MCSM01W-M	VHM shirt white	M
MCSM01W-L	VHM shirt white	L



This shirt is 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 shirt has a nice long fit and is made of high quality cotton.

AFTERMARKET PRODUCTS

We also sell a special selection of aftermarket products from the brands displayed here. If you are looking for products from these brands which are not in this catalogue, you can always ask us about them by mail or phone. Then we can try to arrange it for you.



Pistons and gaskets

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Clutch components

p. 71



4-stroke pistons

p. 75



Connecting rods, gaskets, clutch plates and other parts

p. 78



Powerflow kits and replacement filters

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V-Force reedvalves

p. 91



Chains and sprockets

p. 64



2- and 4-stroke exhaust systems

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Connecting rods

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Spark plugs

p. 76



Slipper clutches

p. 79



2- and 4 stroke pistons and top end piston kits

p. 81



CHAINS AND SPROCKETS

AFAM's chains and sprockets exceed OEM quality. These light sprockets ensure a better transmission efficiency and less unsprung weight, while retaining the strength due to superior quality alloy, hardening and a perfect tooth profile. With AFAM chains and sprockets the promise is a longer drive for every bike!

- ✓ More mileage
- ✓ Increased power transmission
- ✓ Easier maintenance

APPLICATION LIST

For AFAM parts we have a short application list on the following pages. You can also find the AFAM parts on our website by scanning the QR-code.



PART NOT IN CATALOGUE?

If there are parts not listed in this catalogue, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/afam

PRODUCT GROUPS



Front sprockets



Rear sprockets



Chains



Connecting links



Chains



Sport	Engine capacity	Chain type	Seal ring	Chain pitch	Length	Part number Chain	Connecting link	Remark
Motocross								
	50 cc			415	94	A415F 94L	AR A415GR-G	Split link, gold
				415	98	A415F 98L	AR A415GR-G	Split link, gold
	65 cc	MX-G	-	420	132	A420MX-G 132L	AR A420MX-G	Split link, gold
	85 cc	MX-G	-	428	132	A428MX-G 132L	ARS A428MX-G	Split link, gold
	125 - 450 cc	MX4-G	-	520	118	A520MX4-G 118L	ARS A520MX4-G	Split link, gold
					120	A520MX4-G 120L	ARS A520MX4-G	Split link, gold
		XRR2-G	XS-ring	520	118	A520XRR3-G 118L	MRS A520XRR3-G	Standard rivet link
							ARS A520XRR3-G	Option split link
					120	A520XRR2-G 120L	MRS A520XRR2-G	Standard rivet link
							ARS A520XRR2-G	Option split link
					130	A520XRR2-G 130L	MRS A520XRR2-G	Standard rivet link
							ARS A520XRR2-G	Option split link
Roadrace 2-stroke								
	125 cc	GPR-G	-	415	126	A415GPR-G 126L	AR A415GPR-G	Split link, gold
					132	A415GPR-G 132L	AR A415GPR-G	Split link, gold
	250 cc	XSR-G	XS-ring	520	112	A520XSR-G 112L	MRS A520XSR-G	Standard rivet link, gold
							ARS A520XSR-G	Option split link, gold
					114	A520XSR-G 114L	MRS A520XSR-G	Standard rivet link, gold
							ARS A520XSR-G	Option split link, gold
					118	A520XSR-G 118L	MRS A520XSR-G	Standard rivet link, gold
							ARS A520XSR-G	Option split link, gold
Roadrace 4-stroke								
	600 cc	XSR-G	XS-ring	520	112	A520XSR-G 112L	MRS A520XSR-G	Standard rivet link, gold
							ARS A520XSR-G	Option split link, gold
					114	A520XSR-G 114L	MRS A520XSR-G	Standard rivet link, gold
							ARS A520XSR-G	Option split link, gold
					118	A520XSR-G 118L	MRS A520XSR-G	Standard rivet link, gold
							ARS A520XSR-G	Option split link, gold

XS Ring: The Afam XS-Ring is designed to improve sealing and internal lubrication of the chain, and thus dramatically improve the life span of your chain. Its particular shape gives it great flexibility, reducing friction and increasing agility, flexibility and performance of your chain.

MX-G Gold colored chain for 65-85cc

MX4-G Standard motocross chain with gold colored plates

GPR-G High quality light weight AFAM racing chain especially for 125cc racing bikes; gold colored

XRR2-G Enhanced quality chain with AFAM XS-ring

XSR-G Super enhanced quality chain with AFAM XS-ring. Additional hardening of the plates





Sprockets



				Front sprockets			Rear sprockets aluminum				Rear sprockets steel	
Brand & model	Years		Pitch	Part number	Range	Range Selfcleaning	Part number	Range	Range Selfcleaning	Remark	Part number	Range
Honda												
CR85R	2003	2007	420	20105-15	-13/-15	+14/+15	11104+49	-47/-56	+47/+56			
			428	20108-15	-14/-15	+14/+15	11111+55	-49/-56	+49/+56			
CR125R	2000	2003	520	20206-13	-12/-14	+12/+14	11212+51	-36/-53	+47/+53		10212-51	-47/-52
			520			11212PR+51		+48/+52	Red sprocket			
	2004	2007	520	20210-13	-13/-14	+13/+14	11212+52	-36/-53	+47/+53		10212-52	-47/-52
520				11212PR+52		+48/+52	Red sprocket					
CR250R	1988	2007	520	20311-13	-13/-14	+13/+14	11212+49	-36/-53	+47/+53		10212-49	-47/-52
			520		11212PR+49		+48/+52	Red sprocket				
CR500R	1988	2000	520	20311-14	-13/-14	+13/+14	11212+49	-36/-53	+47/+53		10212-49	-47/-52
			520		11212PR+49		+48/+52	Red sprocket				
CRF150R	2007	2016	420	20211-15	-14/-15		11104+55	-47/-56	+47/+56			
			428	20212-15	-14/-15		11111+55	-49/-56	+49/+56			
CRF250R	2004	2017	520	20210-13	-13/-14	+13/+14	11212+49	-36/-53	+47/+53		10212-49	-47/-52
			520		11212PR+49		+48/+52	Red sprocket				
CRF450R	2018	2020	520	20324-13	-13/-14	+14		-41/-53	+43/+54			
			520	20311-13	-13/-14	+13/+14	11212+49	-36/-53	+47/+53		10212-49	-47/-52
			520				11212PR+49		+48/+52	Red sprocket		
RS125			415	20207	-14/-18		11207	-32/-43				
RS250	1990	1992	520	20316	-15/-16		11314	-40				
			520	20318	-15/-18		11323	-31/-41				
			520				11333	-34/-41				
Kawasaki												
KX65	2000	2020	420	30100-13	-12/-14		17107-47	-46/-47	48			
KX85	2001	2020	420	30100-14	-12/-15		17104-50	-50/-55	+50	Small wheels		
			420	30100-13	-12/-15		17104-51	-50/-55	+50	Big wheels		
			428	24100-14	-13/-14		17105-50	-50/-51		Small wheels		
			428	24100-13	-13/-14		17105-51	-50/-51		Big wheels		
KX125	1994	2008	520	24201-13	-12/-13	+12/+13	17206+51	-38/-53	+48/+52		16204-50	-48/-50
KX250	1999	2008	520	27500-13	-13/-15	+13/+14	17206+51	-38/-53	+48/+52		16204-50	-48/-50
KX250F	2004	2005	520	24304-13	-13		17206+48	-38/-53	+48/+52		16204-48	-48/-50
			520	24305-13	-13/-14		17206+49	-38/-53	+48/+52		16204-49	-48/-50
KX450F	2006	2020	520	27502-13	-13/-14		17206+50	-38/-53	+48/+52		16204-50	-48/-50
KTM												
50SX	2009	2013	415	94124-10	-10/-13		72105-40	-40				
			415	94124-10	-10/-13		72106-40	-40				
65SX	2001	2020	420	94120-14	-12/-14		72101+48	-46/-50	+46/+48			
85SX	2003	2020	428	94202-14	-11/-14	+14	72102+46	-46/-49	+46/+51	Small wheels		
			428	94202-14	-11/-14	+14	72102+49	-46/-49	+46/+51	Big wheels		
125SX	1994	2020	520	73301-13	-12/-15	+13/+14	72304+50	-41/-52	+45/+52		71304-50	-45/-52
150SX	2009	2020	520	73301-13	-12/-15	+13/+14	72304+48	-41/-52	+45/+52	2-4 stroke models	71304-48	-45/-52
250SX	1993	2020	520	73301-13	-12/-15	+13/+14	72304+50	-41/-52	+45/+52		71304-50	-45/-52
250SX-F	2006	2020	520	73301-14	-12/-15	+13/+14	72304+52	-41/-52	+45/+52		71304-52	-45/-52
350SX-F	2010	2020	520	73301-14	-12/-15	+13/+14	72304+52	-41/-52	+45/+52		71304-52	-45/-52
450SX-F	2003	2020	520	73301-14	-12/-15	+13/+14	72304+52	-41/-52	+45/+52		71304-52	-45/-52
Suzuki												
RM85	2002	2013	428	28200-14	-11/-14		15104+47	-46/-52	+47/+53	Small wheels		
			428	28200-13	-11/-14		15104+47	-46/-52	+47/+53	Big wheels		
RM125	1987	2011	520	22203-12	-12/-14	+11/+14	15203+50	-49/-52	+43/+52		14203-50	-48/-51
RM250	1983	2008	520	22303-13	-12/-15	+12/+14	15203+50	-49/-52	+43/+52		14203-50	-48/-51
RM-Z250	2007	2012	520	22203-13	-13		15203+49	-38/-53	+48/+52		14203-49	-48/-51
			520	22309-13	-13	+13	15203+49	-38/-53	+48/+52		14203-49	-48/-51
	2013	2017	520	22311-13	-13	+13	15203+49		+45/+53			
RM-Z450	2005	2014	520	22406-13	-13/-15		15203+50	-49/-52	+43/+52		14203-50	-48/-51
			520	22408-13	-13/-14	+13/+14	15203+50	-43/-53	+43/+53			
Yamaha												
YZ65	2018	2020	420	21108-14	-14		13116+47	+47				
YZ85	2002	2020	428	21202-14	-13/-16		15104+48	-46/-52	+47/+53	Small wheels		
			428	21202-14	-13/-16		15104+52	-46/-52	+47/+53	Big wheels		
YZ125	1987	2004	520	21203-13	-13/-14	+13/+14	13323+48	-48/-52	+47/+52		10304-48	-47/-53
			520	21309-13	-12/-14		13323+48	-44/-46	+42/+52			
YZ250	1999	2020	520	27500-14	-13/-15	+13/+14	13323+50	-48/-52	+47/+52		10304-50	-47/-53
YZ250F	2001	2020	520	21309-13	-13/-14		13323+51	-48/-52	+47/+52		10304-51	-47/-53
YZ450F	2003	2020	520	27500-13	-13/-15	+13/+14	13323+49	-48/-52	+47/+52		10304-49	-47/-53



GASKETS

Athena offers a complete range of gaskets for every motorcycle, which quality exceeds the OEM seal.

- ✓ Complete gasket range
- ✓ Improved sealing

APPLICATIONS

You can find the Athena parts on our website by scanning the QR-code.



PART NOT ON WEBSITE?

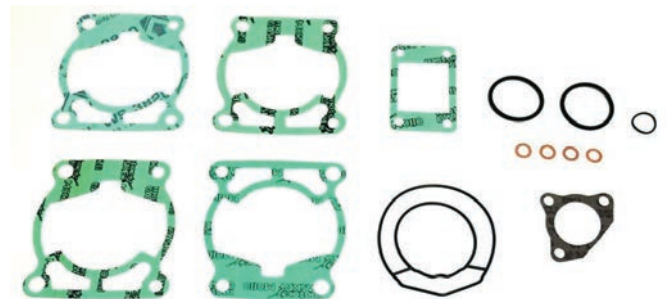
If there are parts not listed on our website, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/athena

PRODUCT GROUPS



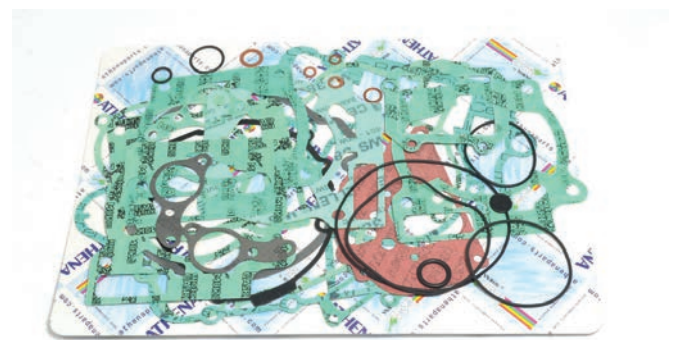
Cylinder base gaskets



Top end gasket kits



Clutch cover gaskets and various other gaskets



Complete gasket kits



Engine oil seals kits



2-AND 4 STROKE EXHAUST SYSTEMS

HGS exhaust systems has a complete range of exhaust pipes for off-road engines, all dyno tested at a high operating temperature to ensure the best performance. They also manufacture complementary silencers, which are available in multiple colors to ensure the best look for your bike as well. Their slogan says where it's all about: "Power is one thing, controlling it is everything."

- ✓ Best performance during the whole race
- ✓ Great look for your bike

APPLICATION LIST

For HGS parts we have a short application list on the following pages. You can also find the HGS parts on our website by scanning the QR-code.



PART NOT IN CATALOGUE?

If there are parts not listed in this catalogue, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/hgs

PRODUCT GROUPS



2-stroke exhausts



2-stroke silencers blue color



2-stroke silencers aluminum color



2-stroke silencers orange color



4-stroke complete exhaust systems



4-stroke complete exhaust systems blue color



Brand & model	Year	Year till	Exhaust pipe 2-stroke	Silencer (color) 2-stroke	Complete exhaust system 4-stroke	Silencer 4-stroke	Remarks
Honda							
CR85R	1996	2004	HG01E309	HG01S309			
	2005	2007	HG01E310	HG01S310			
CR125R	1991	1997	HG01E405	HG01S404			
	1998	1999	HG01E406				
	2000	2001	HG01E407	HG01S406			
	2002		HG01E408	HG01S407			
	2003	2004	HG01E409	HG01S408			
	2005	2007	HG01E410	HG01S410			
CRF150R					HG01C510F		
CR250R	1992	1996	HG01E606	HG01S607			
	1997	1999	HG01E607	HG01S608			
	2000	2001	HG01E608	HG01S609			
	2002	2004	HG01E609	HG01S610			
				HG01S610B (Blue)			
				HG01S610E (Enduro)			
	2005	2007	HG01E610	HG01S610			
				HG01S610B (Blue)			
				HG01S610E (Enduro)			
CRF250R	2014	2017			HG01C611F		Double RED T1 oval silencers, carbon end cap
	2018	2020			HG01C612F		Double RED T1 oval silencers, carbon end cap
CRF450R	2013	2016			HG01C911F		Double RED T1 oval silencers, carbon end cap
	2017	2020			HG01C912F		Double RED T1 oval silencers, carbon end cap
					HG01C912F std		Double ALUMINIUM T1 oval silencers, carbon end cap
CR500R	1989	2017	HG01E910	HG01S910			
Husqvarna							
CR65		2012	HG05E210	HG05S210			
CR125	2009	2013	HG05E410	HG05S410			
CR250	2001	2010	HG05E610	HG05S610			
TC50	2017	2020	HG06E110	HG06S111			
				HG06S111B (Blue)			
				HG06S111O (Orange)			
				HG06S211			
				HG06S211B (Blue)			
				HG06S211BC			
				(Blue+carbon)			
	2017	2020	HG06E211-2				High RPM
TC85	2014	2017	HG06E311	HG06S311			
				HG06S311B (Blue)			
	2018	2020	HG06E312	HG06S312			
				HG06S612B (Blue)			
				HG06S612BC			
				(Blue+carbon)			
TC125	2014	2015	HG06E410	HG06S410			
				HG06S410B (Blue)			
	2016	2018	HG06E411	HG06S411			
				HG06S411B (Blue)			
				HG06S411BC (Blue+carbon)			
				HG06S411O (Orange)			
	2019	2020	HG06E412	HG06S412			
				HG06S412B (Blue)			
				HG06S412BC			
				(Blue+carbon)			
TC250	2014	2016	HG06E610	HG06S610			
	2017	2018	HG06E611	HG06S611			
				HG06S611C (carbon)			
	2019	2020	HG06E612	HG06S612			
				HG06S612C (carbon)			
FC250	2016	2018			HG06C613F	HG06S613F	T1 silencer, carbon end cap, fixed bracket
					HG06C613F Blue		
	2019	2020			HG06C614F		T1 silencer, carbon end cap, fixed bracket
TE250	2017	2019			HG06C613FE		T1 silencer, steel end cap, fixed bracket
FC350	2016	2018			HG06C812F		T4 silencer, carbon end cap, fixed bracket
	2019	2020			HG06C813F		T4 silencer, carbon end cap, fixed bracket
TE350	2017	2019			HG06C812FE		T1 silencer, steel end cap, fixed bracket
	2020				HG06C813FE		T1 silencer, steel end cap, fixed bracket
FC450	2016	2018			HG06C912F	HG06S912F	T4 silencer, carbon end cap, fixed bracket
	2019	2020			HG06C913F		T4 silencer, carbon end cap, fixed bracket
TE450	2017	2019			HG06C912FE		T1 silencer, steel end cap, fixed bracket
	2020				HG06C913FE		T1 silencer, steel end cap, fixed bracket



Brand & model	Year	Year till	Exhaust pipe 2-stroke	Silencer (color) 2-stroke	Complete exhaust system 4-stroke	Silencer 4-stroke	Remarks
Kawasaki							
KX65	2003	2019	HG04E210	HG04S210			
KX85	2005	2019	HG04E310	HG04S310			
KX125	1999		HG04E408				
	2003			HG04S409			
	2004	2010	HG04E410	HG04S410			
KX250		1995		HG04S605			
	2001	2002		HG04S607			
	2003		HG04E608				
	2004		HG04E609				
	2005	2010	HG04E610	HG04S610			
KX250F	2016				HG04C612F		T1 silencer, carbon end cap, fixed bracket
	2017	2019			HG04C613F		T1 silencer, carbon end cap, fixed bracket
	2020				HG04C614F		T1 silencer, carbon end cap, fixed bracket
KX450F	2009	2015			HG04C910F		T3 silencer, carbon end cap, fixed bracket
	2016	2018			HG04C911F		T4 silencer, carbon end cap, fixed bracket
	2019	2020			HG04C912F		T4 silencer, carbon end cap, fixed bracket
KTM							
50SX	2009	2018	HG06E110				
	2009	2015		HG06S110 HG06S110B (Blue) HG06S110O (Orange)			
	2016	2020		HG06S111 HG06S111B (Blue) HG06S111O (Orange)			
65SX	2009	2015	HG06E210	HG06S210 HG06S210B (Blue)			
	2016	2020	HG06E211	HG06S211 HG06S211B (Blue) HG06S211BC (Blue+carbon)			
	2016	2020	HG06E211-2				High RPM
85SX	2004	2017	HG06E311	HG06S311 HG06S311B (Blue) HG06S311O (Orange)			
	2018	2020	HG06E312	HG06S312 HG06S312B (Blue) HG06S312BC (Blue+carbon)			
125SX	2012	2015	HG06E410	HG06S410 HG06S410B (Blue) HG06S410E (Enduro) HG06S410O (Orange)			HG06S410E -> longer oval shape enduro 94dB silencer
	2016	2018	HG06E411	HG06S411 HG06S411B (Blue) HG06S411BC (Blue+carbon)			
	2019	2020	HG06E412	HG06S412 HG06S412B (Blue) HG06S412BC (Blue+carbon)			
150SX	2007	2015	HG06E510	HG06S510			
	2016	2018	HG06E411	HG06S411 HG06S411B (Blue) HG06S411BC (Blue+carbon)			
	2019	2020	HG06E412	HG06S412 HG06S412B (Blue) HG06S412O (Orange)			
250SX	2012	2016	HG06E610	HG06S610			
	2017	2018	HG06E611	HG06S611 HG06S611C (carbon)			
	2019	2020	HG06E612	HG06S612 HG06S612C (carbon)			
250SX-F	2016	2018			HG06C613F HG06C613F Blue	HG06S613F	T1 silencer, carbon end cap, fixed bracket
	2019	2020			HG06C614F		
250EXC-F	2017	2019			HG06C613FE		T1 silencer, steel end cap, fixed bracket
300SX	2012	2016	HG06E710	HG06S710			
	2017	2018	HG06E611	HG06S611			
300EXC	2017	2018	HG06E611	HG06S711E			
350SX-F	2016	2018			HG06C812F		T4 silencer, carbon end cap, fixed bracket
	2019	2020			HG06C813F		T4 silencer, carbon end cap, fixed bracket



Brand & model	Year	Year till	Exhaust pipe 2-stroke	Silencer (color) 2-stroke	Complete exhaust system 4-stroke	Silencer 4-stroke	Remarks
KTM							
350EXC-F	2017	2019			HG06C812FE		T1 silencer, steel end cap, fixed bracket
	2020				HG06C813FE		T1 silencer, steel end cap, fixed bracket
450SX-F	2016	2018			HG06C912F	HG06S912F	T4 silencer, carbon end cap, fixed bracket
	2019	2020			HG06C913F		T4 silencer, carbon end cap, fixed bracket
450EXC-F	2017	2019			HG06C912FE		T1 silencer, steel end cap, fixed bracket
	2020				HG06C913FE		T1 silencer, steel end cap, fixed bracket
Suzuki							
RM65	2003	2006	HG03E210				
RM85	2001	2019	HG03E310	HG03S310			
RM125	2003		HG03E409	HG03S409			
	2004	2011	HG03E410	HG03S410			
RM250	2001	2002	HG03E608				
	2003	2005	HG03E609				
	2006	2012	HG03E610	HG03S610			
				HG03S610E (Enduro)			
RM-Z250	2010	2018			HG03C612F	HG03S612F	T4 silencer, carbon end cap, fixed bracket
	2019	2020			HG03C613F		T4 silencer, carbon end cap, fixed bracket
RM-Z450	2014	2017			HG03C911F	HG03S911F	T4 silencer, carbon end cap, fixed bracket
	2018	2020			HG03C912F		T4 silencer, carbon end cap, fixed bracket
Yamaha							
YZ65	2018		HG02E210	HG02S210			
YZ85	2002	2018	HG02E310	HG02S310			
	2019	2020	HG02E311	HG02S311			
YZ125	2003		HG02E409	HG02S410			
				HG02S410 94dB (enduro)			
				HG02S410B (Blue)			
	2005	2020	HG02E410	HG02S410			HG02S410 94dB -> longer oval shape enduro 94dB silencer
				HG02S410 94dB (enduro)			
				HG02S410B (Blue)			
YZ250	1996	1998	HG02E607				
	1999	2000	HG02E608	HG02S610			
	2001	2004	HG02E609	HG02S610			
	2005	2020	HG02E610	HG02S610			
YZ250F	2006	2009			HG02C610F		T1 silencer, carbon end cap, fixed bracket
	2014	2018			HG02C612F		T1 silencer, carbon end cap, fixed bracket
					HG02C612F Blue	HG02612F	
	2019	2020			HG02C613F		T1 silencer, carbon end cap, fixed bracket
YZ450F	2014	2017			HG02C912F	HG02S912F	T4 silencer, carbon end cap, fixed bracket
	2018	2019			HG02C913F		T4 silencer, carbon end cap, fixed bracket
					HG02C913F Blue		
	2020				HG02C914F		T4 silencer, carbon end cap, fixed bracket
					HG02C914F STEEL		T4 silencer, steel end cap, fixed bracket

Optional	Description
T2	Type 1 oval shape silencer with carbon end cap
T4	Type 4 droplet hexagonal shape silencer with carbon end cap
94dB	Silencer silent 94dB
HGV00014	HGS Muffler packing 2T/4T
HGV0004-T1	HGS Carbon end cap T1 model
HGV0004-T2	HGS Carbon end cap T2 model
HGV0004-T4	HGS Carbon end cap T4 model





CLUTCH COMPONENTS

Hinson clutch components is the choice of most major factory teams and riders and has proven itself to be the best quality for many years. A complete clutch kit consists of a clutch cover, basket, inner hub, pressure plate, fiber & steel plates and springs.

- ✓ Improves clutch performance and life
- ✓ Improves heat dissipation
- ✓ Helps eliminate clutch chatter

APPLICATION LIST

For Hinson parts we have a short application list on the following pages. You can also find the Hinson parts on our website by scanning the QR-code.



PART NOT IN CATALOGUE?

If there are parts not listed in this catalogue, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/hinson

PRODUCT GROUPS



Clutch covers



Clutch baskets



Inner hubs & pressure plate kits



Clutch plates and springs



Oil filler caps



Cushion kits

PRODUCT GROUPS



CONNECTING RODS

Hotrods has over a decade of experience with connecting rods. All Hotrods are created from 8620 case hardened steel and undergo a process of double forging, which helps to improve grain flow for superior strength. To improve fatigue durability, all the rods are also shot peened. The connecting rod kits feature the best bearing, crankpin and washers.

- ✓ Superior strength
- ✓ Improved fatigue durability
- ✓ High quality bearing, crankpin and washers

APPLICATIONS

You can find the Hotrods parts on our website by scanning the QR-code.



PART NOT ON WEBSITE?

If there are parts not listed on our website, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/hotrods



Connecting rods



Crankshafts



Transmission bearings



Main bearings & seal kits



4 STROKE PISTONS

With over 60 years of experience, JE-Pistons specializes in 4 stroke forged pistons and they are used at the highest level, like the AMA supercross. They developed a NEW Pro Series FSR forging for off-road motorcycles, which allows for reduced overall weight while maintaining strength.

- ✓ Proven race-winning 4 stroke pistons
- ✓ Enlarged pin boss and ring belt to ensure optimum strength
- ✓ Big bore pistons available

APPLICATIONS

You can find the JE-Pistons parts on our website by scanning the QR-code.



PART NOT ON WEBSITE?

If there are parts not listed on our website, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/je-pistons

PRODUCT GROUP



4-stroke pistons





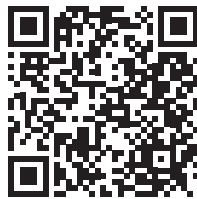
SPARK PLUGS

For many years NGK spark plugs have been firing race engines. To withstand the severe conditions, the spark plugs feature electrode materials and the following configurations: fine iridium tip that ensures durability (iridium spark plug), laser welded iridium tip that ensures precise gap over plug life (laser iridium & laser platinum spark plug).

- ✓ Durability
- ✓ Slight throttle response improvement

APPLICATION LIST

For NGK parts we have a short application list on the following pages. You can also find the NGK parts on our website by scanning the QR-code.



PART NOT IN CATALOGUE?

If there are parts not listed in this catalogue, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/ngk

PRODUCT GROUP



Spark plugs



Spark plug caps





Brand	Model	Year	Sparkplug part number	Heat range	Remark
Honda					
	CR85	2003	2008 BR10EG	10	
	CR125	1988	2007 BR9EG	9	
	CR250	1988	2007 BR9EG	9	
	CR500	1993	2001 BR8EG	8	
	CRF250R	2004	IMR8C-9H	8	
		2005	2008 R0409B-8	8	
		2009	2019 R0451B-8	8	
		2020	R0451B-9	9	
	CRF450R	2002	2008 IFR8H-11	8	
		2009	2020 SILMAR9A9S	9	
Husqvarna					
	TC85	2014	2020 BR10ECMIX	10	
	TC125	2014	2020 BR9ECMIX	9	
	TC250	2014	2020 BR8ECM	8	
Kawasaki					
	KX65	2000	2020 BR10EG	10	
	KX85	2001	2020 R6252K-105	10,5	
	KX125	2003	2008 BR9ECMIX	9	
	KX250	2003	2004 BR8EIX	8	
		2005	2005 BR8ECM	8	
		2007	2007 BR8EG	8	
	KX250F	2006	2010 CR8E	8	
		2011	2019 CPR8EB-9	8	
	KX250	2020	CR9EIB-9	9	
	KX450F	2006	2019 CPR8EB-9	8	
	KX450	2020	CPR8EB-9	8	
KTM					
	50SX	2010	2020 LR8B	8	
	65SX	2003	2008 BR8ECM	8	
		2009	2020 LR8B	8	Standard
			CR8HIX + 99900	8	Optional
	85SX	2004	2020 BR10ECMIX	10	
	105SX	2004	2020 BR10ECMIX	10	
	125SX	2003	2020 BR9ECMIX	9	
	150SX	2010	2020 BR9ECMIX	9	
	250SX	2003	2020 BR8ECM	8	
	250SX-F	2006	2012 CR9EKB	9	Ø10mm Plug (19mm Thread Reach)
		2013	2020 LMAR9AI-8	8	Ø10mm Plug (26.5mm Thread Reach)
	350SX-F	2011	2020 LMAR9AI-8	8	Ø10mm Plug (26.5mm Thread Reach)
	450SX-F	2007	2012 CR9EKB	9	
			CR9EIX		
		2013	2015 LKAR8AI-9	9	
		2016	2020 LMAR9AI-8	8	
Suzuki					
	RM65	2000	2005 BR10EG	10	
	RM85	1998	2017 BR10EG	10	
	RM125	1998	2008 BR9EG	9	
	RM250	2001	2008 BR8EG	8	
	RM-Z250	2004	2006 CR8EB	8	
		2007	2013 CR8EIA-10	8	
		2014	2019 CR8EIB-10	8	
	RM-Z450	2005	2007 CR8EIB-10	8	
		2008	2017 DIMR8A10	8	
		2018	2020 DIMR8C10	8	
Yamaha					
	YZ65	2018	2020 BR9ECM	9	
	YZ85	2008	2020 BR10EG	10	
	YZ125	2001	2012 BR9EG	9	
		2013	2020 BR9EIX	9	
	YZ250	1995	2020 BR8EG	8	
	YZ250F	2001	2013 CR8E	8	
		2014	2018 LMAR8G	8	
		2019	2020 LMAR9E-J	9	
	YZ450F	2010	2017 CR9E	9	
		2018	2019 CPR8EA-9	8	Standard
			CPR9EA-9	9	Optional
		2020	LMAR8G	8	Standard
			CPR9EA-9	9	Optional
Karting, roadrace					
	Kart, roadrace		R7282-10	10	Must be used with spark plug cab TRS1225
	Kart, roadrace		R7282-105	10,5	Must be used with spark plug cab TRS1225
	Kart, roadrace		R7282-11	11	Must be used with spark plug cab TRS1225
Spare parts					
TRS1225	NGK Plugcab for sparkplug R7282 blue color				
99900	NGK Terminal nut				



REPLACEMENT PARTS

ProX racing parts has a very wide range of products, such as connecting rod kits, gaskets, bearings, suspension parts and transmission parts. Perfect for direct replacement. These parts are manufactured from first class materials, mainly in Japan. ProX racing parts can be considered as one of the leading brands in the engine part replacement market.

- ✓ Enormous range of replacement parts
- ✓ Trouble free performance

APPLICATIONS

You can find the ProX parts on our website by scanning the QR-code.



PART NOT ON WEBSITE?

If there are parts not listed on our website, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/prox

PRODUCT GROUPS



Brake parts



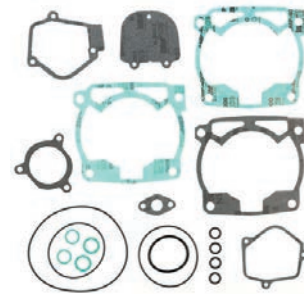
Clutch parts



Connecting rod parts



Crankshaft parts



Gaskets



Sprockets



Valve train parts



Wheel and steering parts

PRODUCT GROUPS



SLIPPER CLUTCHES

The slipperclutches from SuterClutch offers better running characteristics and smoothness across the entire range. No more real wheel hopping, easier controllable slides and a smoother, more precise response result in improved stability during braking, a better steering behaviour and hence faster lap times. The slipper clutch is also very easy to install, without any special installation tools.

- ✓ Fully adjustable anti-hopping effect
- ✓ Improved braking performance
- ✓ Reduced engine braking
- ✓ Easy to install

APPLICATIONS

You can find the SuterClutch parts on our website by scanning the QR-code.



PART NOT ON WEBSITE?

If there are parts not listed on our website, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/suterclutch



Slipperclutches



Various clutch parts



POWERFLOW KITS AND AIR FILTERS

Twin Air filters are designed to increase air volume around the filter to improve airflow into the intake. More air means more power for your engine. Flow bench tests have proven that Twin Air filters provide increased airflow while reducing the filters tendency to clog.

The complementary powerflow kits ensure a leak-proof, fool-proof fit. Twin Air's fused-dual-layer design combines performance and protection.

- ✓ Improved airflow meaning more power
- ✓ Reduced tendency to clog
- ✓ Pre-oiled air filters available

APPLICATIONS

You can find the Twin Air parts on our website by scanning the QR-code.



PART NOT ON WEBSITE?

If there are parts not listed on our website, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/twinair

PRODUCT GROUPS



(Pre-oiled) Air filters



Powerflow kits



GP covers



Airbox covers



Oil filters



Sealing rings



2- AND 4 STROKE PISTONS

Well known Vertex pistons from Italy. They make a complete range of 2 and 4 stroke race pistons for the off-road markets of motocross and enduro. Two stroke pistons are made from gravity cast aluminum alloy with silicone content. Four stroke pistons are forged for superior strength and durability.

- ✓ Complete range of models
- ✓ Improved strength and durability compared to OEM
- ✓ Top-end piston kits available

APPLICATION LIST

For Vertex parts we have an application list on the following pages. You can also find the Vertex parts on our website by scanning the QR-code.



PART NOT IN CATALOGUE?

If there are parts not listed in this catalogue, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/vertex

PRODUCT GROUPS



Top end piston kits



2-stroke piston kits



4-stroke piston kits



Small end bearings



Piston rings

PRODUCT GROUPS



REED VALVES

V-Force reed valve systems from Moto Tassinari are the #1 choice of the factory race teams. The unique design features a double reed tip surface, which ensures a better airflow, better opening and sealing of the reed petals. Using the V-Force reed valve gives you more efficiency, with instant throttle response, horsepower gains and wider peak power. The latest reed valve system is the V-Force 4 reed valve system.

- ✓ More airflow, more HP
- ✓ Reduced petal wear

APPLICATION LIST

For V-Force parts we have a short application list on the following pages. You can also find the V-Force parts on our website by scanning the QR-code.



PART NOT IN CATALOGUE?

If there are parts not listed in this catalogue, don't hesitate to contact us. We'll try our best to help you with the parts you need.

www.vhm.nl/v-force



V-Force 4 reed valves



V-Force 3 reed valves



Reed valve gaskets



Reed petals



By MOTO TASSINARI



Brand & model	Year	V-Force 3	Petal kit V-Force 3	V-Force 4	Petal kit V-Force 4	Remark
GasGas						
125 cc		V302A	3P602H			
250 cc		V305A	3P682M			
300 cc		V305A	3P682M			
Honda						
CR85R	2003 - 2007	V381S	3P462H	V4R81A	4PR461M	
CR125R	1987 - 2000	V301A	3P602H	V4R01D	4PR612M	
	2002					
	2003 - 2004	V311A	3P682H			
	2005 - 2008	V321A	3P602H			
CR250R	1986 - 2001	V305A	3P682M			
	2002	V315A	3P682M			
	2003 - 2004	V315B	3P682M			
	2005 - 2008	V325A	3P602H			
CR500R	1986 - 2001	V3170B	3P794B			
Husqvarna						
125cc	2000 - 2006	V301A	3P602H			
250cc		V305A	3P682M			
TC50	2017 - 2020	V355B	3P412H			
TC65	2017 - 2020	V355B	3P412H			
TC85	2014 - 2020	V385S	3P462H	V4R85A	4PR461M	
TC125	2014 - 2015	V306A-H	3P682H			
	2016 - 2020			V4R26	4PR612M	
TC250	2014 - 2016			V417A	4P672H	
	2017 - 2020			V4R26	4PR612M	
TE250	2017 - 2020			V4R26	4PR612M	
TE250i	2018 - 2020			V4R26	4PR612M	
TE300	2017 - 2020			V4R26	4PR612M	
TE300i	2018 - 2020			V4R26	4PR612M	
Kawasaki						
KX60/65	2000 - 2020	V364A	3P352H			
KX80/85/100	2000 - 2020	V384A	3P411H			
KX125	2003 - 2010	V303A	3P682H			
KX250	2005 - 2009	V307B	3P682M			
	1987 - 2004	V308A	3P682M			
KTM						
50SX	2000 - 2008	V351A	3P412M			
	2009 - 2014	V355A	3P412H			
	2015 - 2020	V355B	3P412H			
65SX	2009 - 2020	V355B	3P412H			
85SX/105SX	2008 - 2020	V385S	3P462H	V4R85A	4PR461M	
125SX/EXC	1998 - 2015	V306A-H	3P682H			
125SX	2016 - 2020			V4R26	4PR612M	
150SX	2016 - 2020			V4R26	4PR612M	
200SX/EXC		V306A-M	3P682M			V306FM-M with AG682D airguide
250SX	2000 + 2002	V306A-M	3P682M			V306FM-M with AG682D airguide
	2004 - 2016			V417A	4P672H	
	2017 - 2020			V4R26	4PR612M	
250XC	2017 - 2020			V4R26	4PR612M	
250EXC TPI	2018 - 2020			V4R26	4PR612M	
250/300 EXC	Thru 2003	V306A-M	3P682M			V306FM-M with AG682D airguide
	2007 - 2016			V417A	4P672H	
300XC	2017 - 2020			V4R26	4PR612M	
300EXC TPI	2018 - 2020			V4R26	4PR612M	
200 ALL	2003	V306FM-M	3P682M			
200-380 XC/MXC/EXC	1994 - 1999	V306FM-M	3P682M			
250EXC, 300-380 SX/MXC/EXC	2000	V306FM-M	3P682M			
200/380 ALL	2002	V306FM-M	3P682M			
380 ALL	2001	V306FM-M	3P682M			
Suzuki						
RM65	2000 - 2005	V364A	3P352H			
RM85	1998 - 2020	V383S-A	3P462H	V4R83A-i	4PR461M	Intake manifold included with reedvalve
RM100	ALL	V384A	3P411H			
RM125	1989 - 2012	V302B	3P602H			
RM250	1996 - 1997	V307A	3P682M			
	2003 - 2009					
TM						
K9, KZ10	2008 - 2017	V3110A-H				
Yamaha						
YZ65	2018 - 2020	V382S-A	3P462H	V4R82B-i	4PR461M	Intake manifold included with reedvalve
YZ85	2002 - 2020	V382S-A	3P462H	V4R82A-i	4PR461M	Intake manifold included with reedvalve
YZ125	1995 - 2004	V302A	3P602H			
	2005 - 2020			V4R04	4PR612M	
YZ250	1997 - 2020	V307A	3P682M			
Various						
Minarelli 50cc		V352A	3P352M			
Piaggio 50cc		V354A	3P352H			
Polini 50cc		V353A	3P412M			

#1 PRICELISTS

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

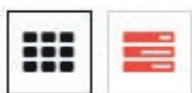
#2 ASSORTMENT

How to find ALL parts on our website? Click on the menu button [Assortment] and go from there. We've categorized our parts into 4 main groups; Chassis parts, Engine parts, Merchandise & Tools.

Assortment

#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 PDF FILE VHM CRANKMOD LIST

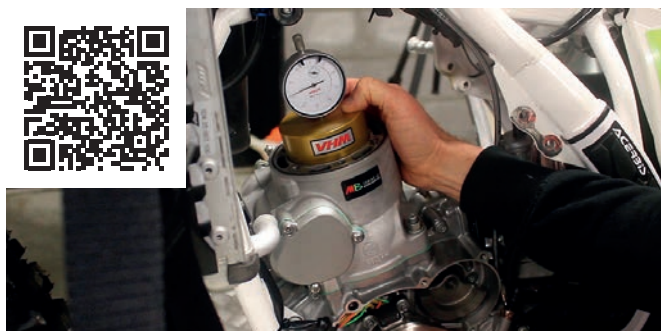
You can also download the complete VHM crankshaft modifications list on our website as a PDF. The crankshaft modifications can't be found in our website assortment, thus can only be requested by email.



#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.

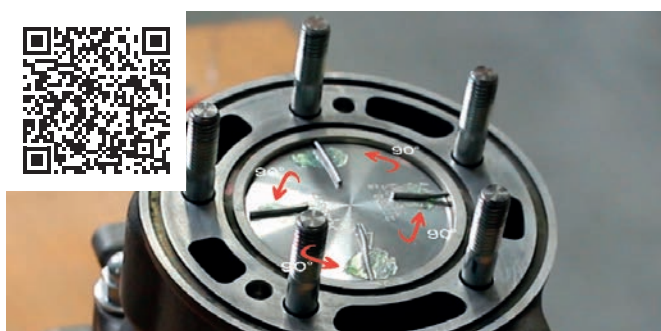




www.vhm.nl/pistonheight



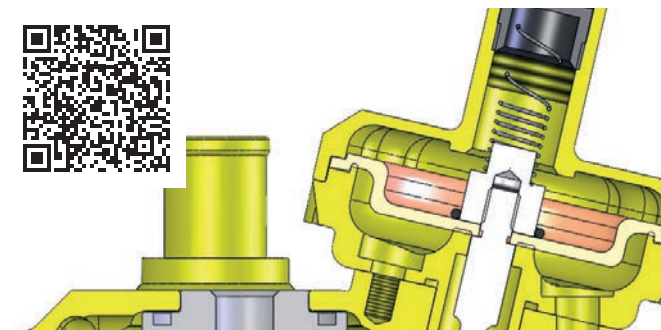
www.vhm.nl/volumemmeasurement



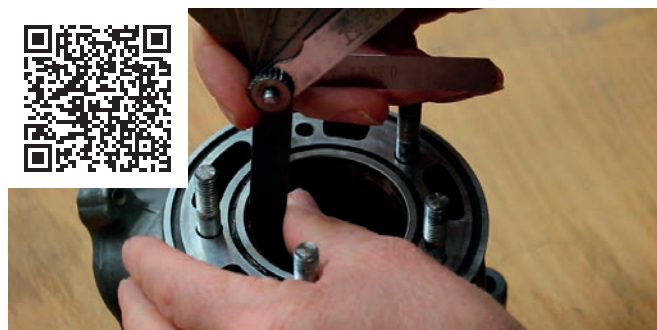
www.vhm.nl/squishmeasurement



www.vhm.nl/insertcalculator



www.vhm.nl/powervalveassembly



www.vhm.nl/pistonringendgap



www.vhm.nl/mountingzclips



www.vhm.nl/pistoncylinderclearance

CUSTOM PARTS

We have 5 custom categories. Note that we always need to review custom project requests and are not always able to produce.

CUSTOM CRANKSHAFTS

Need a crankshaft for a big bore cylinder? Or need a crankshaft for a rare engine? In the past, we've already produced many custom crankshafts. Ask us for the possibilities! Minimum quantity for a custom batch is 10 pieces.

CUSTOM CONNECTING RODS

Need a special connecting rod? For example a longer rod, or a conrod for a rare engine? Contact us for the possibilities. Minimum order quantity for a custom conrod is 10 pieces.

CUSTOM PISTONS

We do sometimes make custom pistons. We have a minimum order quantity of 50 pieces with potential repetitive orders, but it also depends on the specifications of the piston. Our focus lies on the range of Ø40 - Ø60mm with a piston pin Ø12/13/14/15/16/18.

CUSTOM INSERTS

See page 43 for more information on our custom inserts.

OTHER CUSTOM PROJECTS

Looking for another custom part for your engines? Get in touch and ask for the possibilities! In the past we've produced, among others, a clutch basket, special customer-oriented measure tool and triple clamp.

www.vhm.nl/customparts



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