

There is simply no motorcycle on which a bearing does not wear out at some point.

This can happen, especially with the Hayabusa, where the bearings are subjected to extreme loads due to the high speeds.

In my experience, especially the wheel bearings are very often "due" after 50-60,000 km at the latest - regardless of whether they are Gen I or Gen II.

(I already had to swap the front of a Gen II at 38,300 km and the rear was due at 38,900 km!)

However, it should be urgently warned against installing any bearings that still have additional abbreviations, just because they are lying around in the company or you can get them from someone for free!

You will almost certainly do the work for nothing!

But if you go to the bearing supplier with the names given below and ask about wheel bearings, he will definitely sell you the right bearing.

A little hint:

If you **carefully** ! heat the bearing seat (e.g. in the rim) with a hot air dryer to approx. 60-80 ° C and place the bearing itself in the freezer before using it for approx. 1-2 hours (packed) at -18 ° C, the assembly goes a lot easier.

Standard bearing designations

Additions:

Z = one-sided steel cover plate (non-rubbing seal) against coarse contamination

ZZ = double-sided steel cover plate (non-rubbing seal) against coarse contamination

2RS / 2HRS = "rubber" seal on both sides (rubbing seal) against dust and moisture

In the case of bearings with sealing washers, grease can leak out from the inner ring under extreme operating conditions. So don't panic if some grease leaks out of the bearing in the sprocket pot over time. (personal experience)

Manufacturers of the new bearings are usually FAG, INA, Timken, TOYO or SKF.(if it's different, they are explicitly named)

Note on the oil seals in the rims:

If you install closed bearings (2RS) on both sides, the "Simmerrings" / seals are basically only there to hold the respective spacer sleeve in the middle and to keep the coarsest dirt away from the bearing.

The water-repellent function of the "Simmerrings" / seals is no longer necessary with the new bearing because the seal against penetrating water is now made in the bearing itself.

When re-installing the wheel, in my opinion you can safely use the old "Simmerrings" / seals at least once, were they driven out together with the bearings

and not previously levered out and damaged or even completely destroyed in the process.

And even if they are a little bent, you can safely knock them in again with gentle hammer blows.

You should definitely always apply a finger full of bearing grease to the inside.

Note on removing the wheel bearings:

If a sharp-edged internal extractor is not available, the bearings can only be removed by driving them out with a punch and a 500 gram hammer.

It should be noted that one side of the rim has a larger diameter on the inside than the other.

So there is space here to gently drive the spacer to the side with the punch and hammer so that the inner ring of the bearing to be driven out can be "caught" from the other side of the rim and the bearing can be driven out with **alternating** punches.

"**alternating**" means that you can only ONE! impact on the inner ring, then the opposite side of the inner ring with just ONE! impact applied and then changes back to the first side, back and forth until the bearing (including the "Simmerring" / sealing) falls out.

Which side this is for each rim can be seen from the pictures in the WHB.

If one bearing is outside, you can go to the other.

### Warning # 1:

Anyone who has never done this bearing „**drive out**“ should better go to someone who has experience with it, because incorrectly punched out, it can destroy the bearing seat so permanently that the rim is just scrap!

### Warning # 2:

A bearing that has been driven out with a hammer generally belongs in the metal scrap !  
- a new one has to come in - otherwise it should lead to considerable issues very soon!

original spare part (A) / alternatives (B)

$\varnothing_o \times \varnothing_i \times T/L = \text{dia}_{\text{outside}} \times \text{dia}_{\text{inside}} \times \text{Thickness / Length}$

# Hayabusa "Chassis" Bearings - dimensions

[ mm ]

**! ALL dimensions in "milli meter" [ mm ] !**

1999 – 2007 <span style="background-color: #FFD700;">Gen I</span>						since 2008 <span style="background-color: #FFD700;">Gen II</span>	
Nr.	"built in" - place	no's	Type / Art.-No.	$\varnothing_o \times \varnothing_i \times T/L$ [ mm ]	additions	Type / Art.-No.	$\varnothing_o \times \varnothing_i \times T/L$
1.1	Front Rim	2 B	6205 - 2RS (see X 1)	52 x 25 x 15		identical (see X 3)	
1.2	Simmerring lh. + rh.	2 B		52 x 32 x 7		identical	
1.3	Spacer betw. bearings	1 A		Length : 106,5 mm		??	
2.1	Rear Rim orig. 6 x 17" & 5,5 x 17" Type BOD	2 B	60 / 32, 2 RS (see X 2)	58 x 32 x 13	KOYO + NSK	60 / 28, 2 RS (see X 4)	52 x 28 x 12
2.2	Simmerring rh.	1 B		58 x 38 x 7		??	
2.3	Spacer betw. bearings	1 A		Length : 121,5 mm		??	
3.1	Chain Drum (sprocket carrier)	1 B	62 / 32, 2 RS	65 x 32 x 17	KOYO + NSK	identical	
3.2	Simmerring	1 B		65 x 39 x 7		identical	
4	Steering Head	2 B	32006 X/Q upper = lower	55 x 30 x 17	tapered roller bearings	identical	
5	Swingarm (Head)	2 A	KOYO - BHTM3025-1	40 x 30 x 25	only @ Suzuki	identical	
5.1		2 B	SKF / INA - NK 30 / 30	40 x 30 x 30	length fits !	identical	
5.2		2 A	6 1 25 1-17 E 10	30 x 25 x 35	only @ Suzuki	identical	
6	"Bones" to Swing Arm	2 A	KOYO - BKM2024JAU	27 x 20 x 23,5	only @ Suzuki	identical	
6.1		2 B	NSK - RLM 2025	INA HK 27 x 20 x 25	length fits !	identical	
6.2		1 A	6 2 6 2 6-24 F 00	12 x 20 x 93 o. 94	only @ Suzuki	identical	
7	"Bones" to "Block"	2 A	KOYO - BKM2024JAU	27 x 20 x 23,5	Special-needle bearing	identical	
7.1		2 B	NSK - RLM 2025	INA HK 27 x 20 x 25	length fits !	identical	
7.2		1 A	6 2 6 2 6-24 F 00	12 x 20 x 93 o. 94	only @ Suzuki	identical	
8	"Block" to Frame	1 A	KOYO - BKM2030JUJ BTM202730 o. MKM2030	27 x 20 x 30	only @ Suzuki	identical	
8.1		2 B	NSK - RLM 2015	27 x 20 x 15	2 needle bearing "2nd after 1st"	identical	
8.2		1 A	6 2 6 8 4-12 C 00	12 x 20 x 32	only @ Suzuki	identical	
9	Rear Shock to "Block"	1 A	KOYO - BHKM1726JUJ	24 x 17 x 26	only @ Suzuki	identical	
9.1		1 B	NSK - RLM 172425	24 x 17 x 25	needle bearing	identical	
9.2		1 A	6 2 6 8 4-40 A 10	10 x 17 x 30	only @ Suzuki	identical	
10	Steering Damper	1 A	09269-08003	17,5 x 8 x 11	Special Bearing	identical	
11	Fork Seals / "Simmerrings"	2 B	51153-02FA0 (Gen I) or 51153-41G00 (Gen II)	43 x 55 x 9,5 / 10,5		identical	
12.1	Fork - Slider - Ring #1	2 B	www.Franz Racing.de : AF434512KY	45 x 43 x 12	also @ www.pyramid-parts.com "Outer Fork Bushes"	??	
12.2	Fork - Slider - Ring #2	2 B	KTM : 435706 18 & Yamaha XJR : 5EB23125-00	47 x 43 x 12	also @ www.pyramid-parts.com "Outer Fork Bushes"	??	

**Finally - it's like LOTTERY here - All information without guarantee!**

tabel 2 :

	<b>Installation sequence of the bearings in the rims according to Manual's :</b>					
<b>Gen I</b> ( '99 - '07 )	( X 1 )	@ 1st	LH in then RH	( X 3 )	@ 1st	RH in then LH
	( X 2 )	@ 1st	RH in then LH		( X 4 )	@ 1st