



Yamaha YZ 450 F,
WR 450 F (2003, 2004)

Evolution Exhaust System

Akrapovic Evolution Exhaust System

for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004)

The new Yamaha YZ 450 F is a racing machine intended for both professional and amateur competition. We are well acquainted with racing conditions, and have developed an Akrapovic EVOLUTION system to suit the needs of both types of rider. This system will give you advantages which will be exceptionally useful in demonstrating your authority on the track. It is produced from top-quality materials such as titanium, which guarantees minimal weight with optimal compactness. Of course, in addition to increased performance and aesthetic enhancement, you will also get a much more enhanced sound. However, the system still conforms to the FIM 98 dB noise regulations for MX competition. The Yamaha WR 450 F is very closely related to the YZ 450 F, and their engines are also physically similar. Therefore the Akrapovic EVOLUTION system also fits onto the Yamaha WR 450 F. Unfortunately, due to excessive noise levels the system in question does not conform to the FIM regulations for ENDURO competition. The Akrapovic EVOLUTION exhaust system for 2004 model can be also installed on the 2003 Yamaha. The differences in the performance measurements are mainly the result of changes to the stock exhaust system for this year's model.

We have also developed an Akrapovic EVOLUTION complete exhaust system for the same motorcycle in order to provide improved performance (power and torque) at the lower end of the rpm range. This Evolution system differs physically from the previous Evolution system in the dimensions of the muffler (see schematic). Regarding power delivery: system brings the same effect as to the Yamaha YZ 250F (2003, 2004) (see graph of the measurements for the Yamaha YZ 250F (2003, 2004)).

PERFORMANCE

Measurements of the Akrapovic EVOLUTION system on the Yamaha YZ 450 F:

Power: the Akrapovic EVOLUTION system is instantly recognizable. The difference in power can be seen at the top of the rpm range from 7000 rpm on, with a major increase over the stock curve. The system is well-attuned to the Yamaha engine, following the stock curve in the mid-range, while there is also a substantial increase at the low end in order to provide a better start.

Torque: the torque curve also shows the major advantage of installing an Akrapovic EVOLUTION system. The drop-out between 4000 and 5000 rpm is filled, while between 5600 and 7000 rpm the system puts out a slightly flatter curve. From 7000 rpm on the torque is once again higher than the stock version.

CONFIGURATION

The header assembly is composed of conical titanium elements welded together with high-quality filigree welds. The link pipe for the Akrapovic EVOLUTION system is conical section and made of titanium. It is attached to the header assembly with a free-floating joint, and welded to the muffler. The free-floating joint is secured with a high-quality silicon-shielded tensioning spring. The entire muffler is made of titanium, both the interior and the outer sleeve. The outer sleeve is available only in titanium. The Akrapovic OFFROAD muffler is attached to the bike with an Akrapovic carbon-fiber clamp, which is double for the OFFROAD series, i.e. wider than the ROAD version.

OPTIONS

Riders can order an optional carbon-fiber heat shield which replaces the stock component. The stock exhaust system has a heat shield to protect the legs over the header assembly. We have also designed a heat shield made out of carbon-fiber, which goes very well with the lines of the exhaust system. If the carbon-fiber heat shield does not suit your taste, the stock heat shield can be refitted.

	PERFORMANCE		
	stock	AKRAPOVIC	max. increased power
max. rear wheel power HP / rpm (measured on SuperFlow Cycle Dyn)	47.2 / 8800	48.8 / 9100	3.1 / 4600

	CONFIGURATION		
	header tubes	collector	link pipe
material	TITANIUM	-	TITANIUM
tube shape	CONICAL	-	CONICAL

interference crossover tubes	-	lambda sensor	-
header tube inner sleeves	S.S. CNC MACHINED	header tube flanges	ALU CNC MACHINED
header tubes - collector connection	-	collector / header tube - link pipe connection	free floating + silicon shielded spring
link pipe - muffler connection	WELDED	muffler inlet cap / outlet cap	TITANIUM / TITANIUM
muffler metal interior	TITANIUM	muffler outer sleeve	TITANIUM
muffler clamp	1x CARBON-FIBER OFFROAD	muffler bracket	STOCK
noise damper	-	heat shield	STOCK

OPTIONS			
link pipe	noise damper	muffler bracket	heat shield
-	-	-	CARBON-FIBER

	ADDITIONAL DATA				
	stock	AKRAPOVIC		difference	
		S.S. link pipe	TITANIUM link pipe	stock - S.S.	stock - titanium
weight comparison (kg)	3.18	-	2.37	-	0.81
noise measurements (dB / rpm)	stock		AKRAPOVIC		
	95 / 4 500		98 / 5500		
possibility of periodic service without removing A.E.S.	oil		oil filter		
	YES		YES		
legal for street use	NO				

Technical specifications of Akrapovic exhaust systems and related products subject to change without notice.

Product code: 100389 (S-Y4MET3-MTT),
103125 (S-Y4MET3-MTT/1)

Akrapovic Evolution Exhaust System for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004)



ANTISEIZING
GREASE



CARBON-FIBER
MUFFLER CLAMPS

Off-Road
Program

Product code: 100389 (S-Y4MET3-MTT),
103125 (S-Y4MET3-MTT/1)

Akrapovic Evolution Exhaust System for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004)



Akrapovic Exhaust System Technology copyright 2004, all rights reserved

Off-Road
Program

Product code: 100389 (S-Y4MET3-MTT),
103125 (S-Y4MET3-MTT/1)

Akrapovic Evolution Exhaust System

for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004)



Akrapovic Exhaust System Technology copyright 2004, all rights reserved

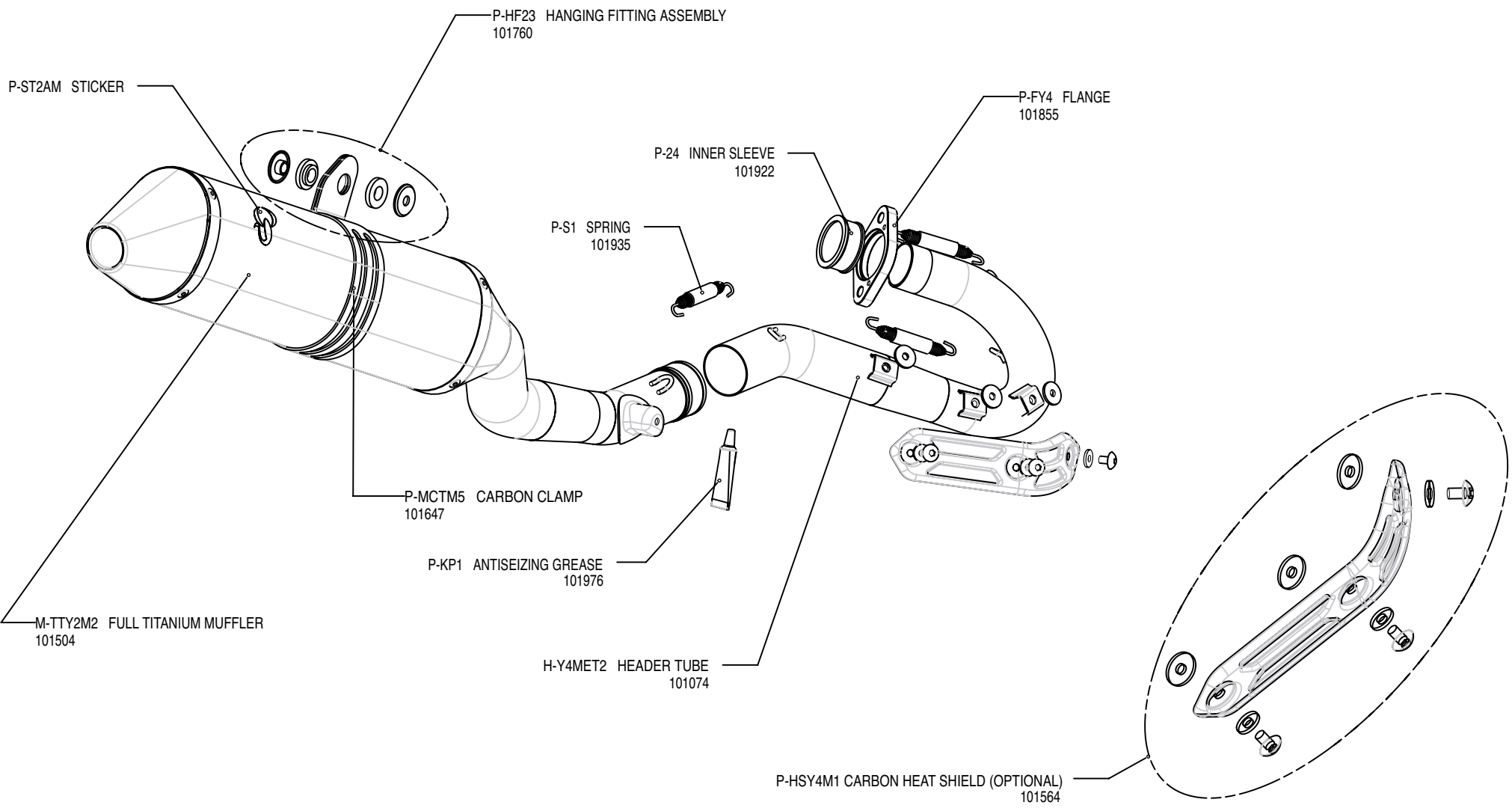
Off-Road
Program

Product code: 100389 (S-Y4MET3-MTT),
103125 (S-Y4MET3-MTT/1)



Akrapovic Evolution Exhaust System

for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004)



Off-Road
Program

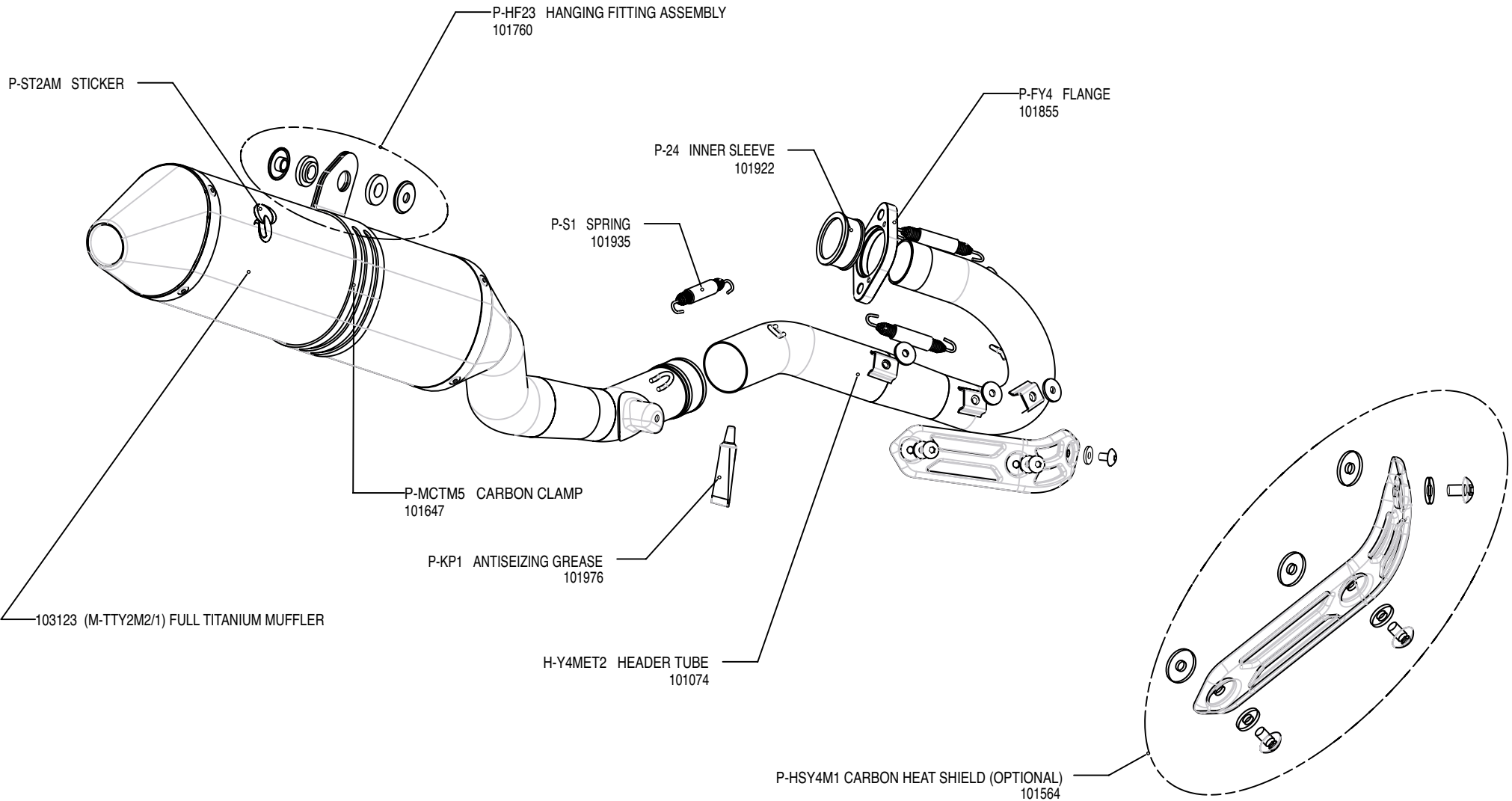
Product code: 100389 (S-Y4MET3-MTT)



Akrapovic Exhaust System Technology copyright 2004, all rights reserved

Akrapovic Evolution Exhaust System

for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004) LOWER END OF THE RPM RANGE



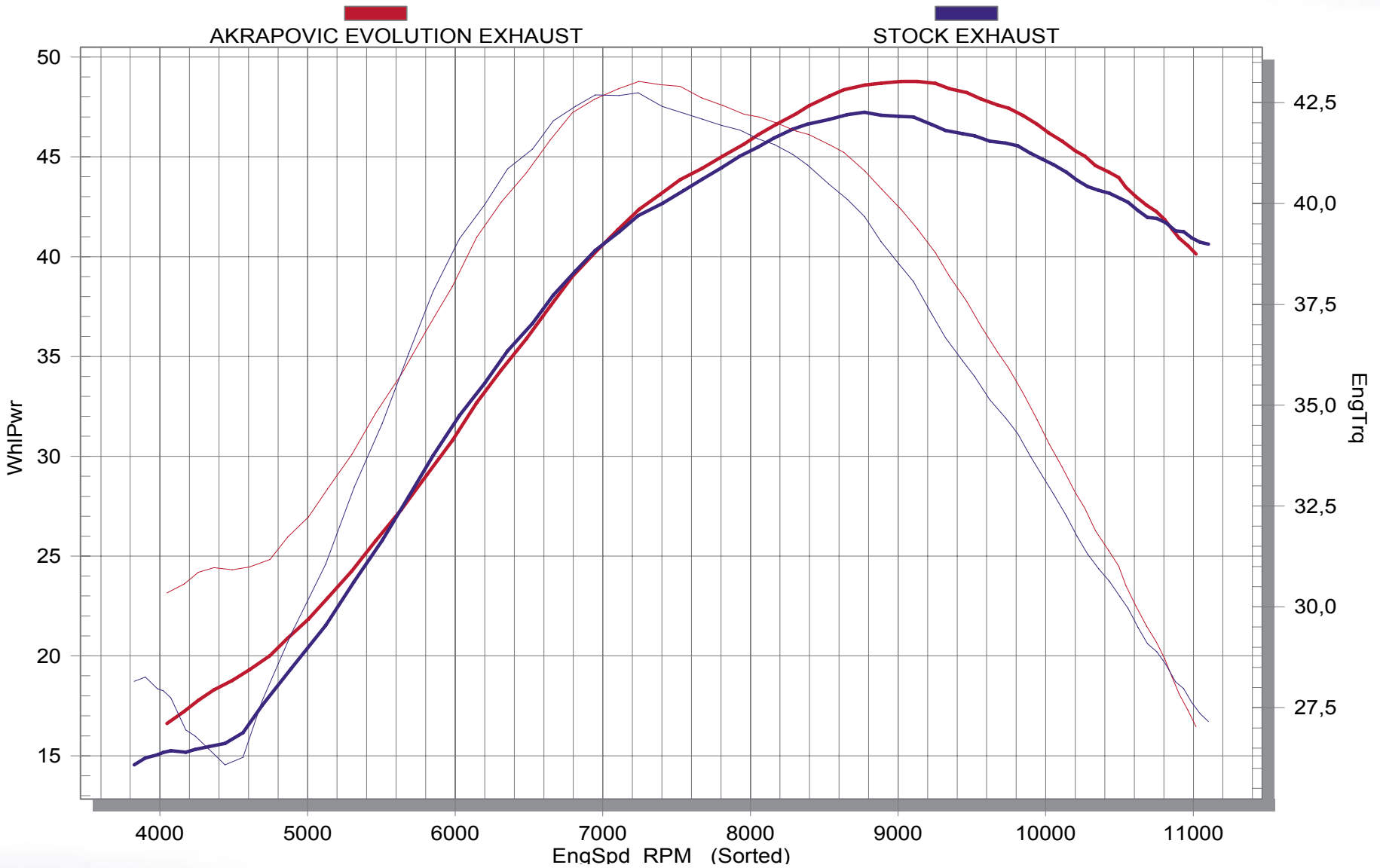
Akrapovic Exhaust System Technology copyright 2004, all rights reserved

Off-Road Program

Product code: 103125 (S-Y4MET3-MTT/1)



Akrapovic Evolution Exhaust System for the Yamaha YZ 450 F, (WR 450 F) (2003, 2004)



Off-Road Program

Product code: 100389 (S-Y4MET3-MTT),
103125 (S-Y4MET3-MTT/1)



Akrapovic Exhaust System Technology copyright 2004, all rights reserved