

# **OMRA Tested**

## **The FMF Q4 Exhaust**

**By Scott McNew**

I have always been a fan of European-brand exhaust systems, mainly because of the strict FIM sound guidelines in place on European racing that has forced manufacturers to make quiet pipes that still provide power, along with the high quality of craftsmanship.

I have ran a Leo Vince System for four years until this last year - I got a KTM 530XC-W, which is a great bike and has tons of user-friendly power. My only complaint was the stock KTM exhaust pipe; even though it was nice and quiet, I didn't like the tone. It seemed too high pitched, with an exhaust tone that had kind of a lisp... Where was the deep 4 stroke rumble?

So time to look for a new pipe, and after a lot of research, I ended up choosing FMF; not my first choice, however.

The main reason I decided to by an FMF Pipe was for the low price tag. I no longer had a sponsorship from my number one choice Leo Vince, and did not have the \$1,000 for it, or \$500 for an Akrapovic slip-on. My second choice was the Jardine RT94 like what my friend Kevin had on his YZF. I have seen that pipe first hand, and know how good it sounds while blowing under 94dB on a meter. However, Jardine doesn't make a pipe for the KTM XC-W models, so next on the list was FMF. I knew they were quiet, having sound tested a few dozen of them myself, but I have never used their products before, and was skeptical of the quality coming from a large company that mass produces these things.



(Above) Here is the FMF Q4 for the 2009 KTM 530 XC-W. MSRP: \$359. Most Retailers sell for around \$280. I purchased from the Moto Shop [541-383-0828] in Bend for a better price.

**First impression:** Looks nice, but the mounting brackets are only riveted to the pipe, so I am going to have to monitor that for any weak spots or breakage. The end-cap/spark-arrestor is only held in with one very small screw and there are no spring mounts at the base of the pipe, so I am going to have to make sure it is tight and sealed with RTV silicone.



**After first use:** I noticed the pipe changed exhaust notes during the day's ride, and the spark arrestor, even though it was held in with one screw and some RTV, was trying to push out. The bike also was starting harder and harder, kind of like the exhaust plug was in. When I got back to the shop, I pulled the spark arrestor out and found that the small fibers of packing had plugged 75% of the screen and were stuck between the SA screen and the metal screen housing. For the next several rides I had the same problem with packing trying to plug my SA.



(Above) looking into the SA where packing would get caught between the housing and the screen, i.e. plugged.

To solve the problem, I purchased some Moose packing from the Moto Shop. The packing included a steel screen that you first wrap the core with, second a layer of wire wool and third the packing. After packing, I then rode the bike for 50 miles without the SA insert (Not recommended for public lands), to allow for any loose packing to blow out.

Once home, I performed a few sound tests using a hi-quality "Qwest Technologies" sound meter, perfectly calibrated and then tested the 530 by the guidelines.

My first test was without the SA insert, completely open, and the KTM 530 tested at 93.9dB.

My second test was with the SA insert and the KTM tested at 90.2dB!

I then decided to remove the SA metal housing using a dremel. For \$40 you could just buy a normal SA insert. I then re-tested and was at 92dB. It sounded great! Deep thumper 4-stroke rumble!





**Conclusion:** I now have upwards of 400 miles on the pipe and have had no problems with the screen getting plugged, or the SA end cap coming loose. I merely put a small bead of RTV around the collar to help seal it in place. The connection with the stock head pipe does however need generous amounts of RTV after every few rides. As for the mounts, the pipe and rivets are holding up.

## Ratings

### Mounting

I would give it an 8 out of 10. It mounted up good, using all stock bolts, but because of the loose fit where the stock header and FMF meet, I was less impressed.

### Sound

10 out of 10! Very quiet, great technology, the sound test without the SA shows it is in the construction of the pipe that makes it quiet.

### Packing

8 out of 10: the stock packing is good quality stuff; it just kept plugging the SA screen.

### Repacking

5 out of 10: The canister is hard to get apart, and the core is welded to the bottom part of the pipe, so you are not able to just lay the core down and wrap it with packing. You have to wrap the core, then slide/stuff it down into the pipe.

### Quality of Construction

8 out of 10: I am surprised; it is built very well, not like my previous experience with Pro-Circuit and falling apart after a few months. But not as well built as Leo Vince.

### Price

8 out of 10: Still a lot of money for a piece of metal that's mass produced.

### Overall

I would give a 7.5 out 10, and that is mainly because of the extra custom work required to get it to perform right.



Picture of pipe mounting brackets held on only by rivets.



(Above) If you pull the SA insert, you can see there is an internal screen to help dampen the sound, but is not intended to be a SA.

(Below) Picture with SA insert

