



# Factory 4 SYSTEM

2004 KTM 450 / 525

## EXHAUST INSTRUCTIONS

Thank you for purchasing the FMF Factory 4 system for your 2004 KTM. We have spent countless hours of design work and testing to insure you receive the highest quality product on the market today.

Your Factory 4 exhaust has been developed using the latest design, testing and manufacturing technologies. The muffler is manufactured from military grade titanium with a TIG welded mid pipe, modular endcap and uses space age sound-absorbing packing material alongside the titanium PowerBomb header..

The Factory 4 system is designed to broaden your existing powerband and give you an all around power increase with substantial centralized weight savings.

**Check out our website [www.fmfracing.com](http://www.fmfracing.com) for more information.**

**Please read all instructions thoroughly before installation.** Failure to follow all installation instructions completely will void any FMF warranty implied or otherwise. FMF Racing will not be held responsible for problems derived from improper installation and/or improper usage.

Before you begin installing this product, be sure you are wearing **eye protection** and gloves. You should have a complete understanding of how to remove and replace your stock exhaust. If you do not, you should have it installed by a professional mechanic. Keep all OEM parts when removing your stock exhaust, as some parts may be utilized with the FMF exhaust depending on your particular application.

### PARTS SUPPLIED

- (1) Long Strap Bracket
- (1) Medium Strap Bracket
- (2) Rubber Bracket Sleeves
- (1) 6mm x 16mm Front Bracket Bolt
- (1) 8mm x 20mm Fron Bracket Bolt
- (1) 6mm x 35mm Rear Bracket Bolt
- (1) 25mm x 12.5mm Bracket Spacer
- (1) Extension Bracket
- (1) 8mm Nut
- (1) 6mm Nut & Bolt
- (3) 70mm Exhaust Springs

### TOOLS REQUIRED

- 8mm Wrench
- 10mm Wrench
- 12mm Wrench
- Vise Grip Pliers
- Contact Cleaner
- WD-40®
- Hi-temp Silicon
- Spring Puller Tool

### REMOVAL

OEM = Original Equipment Manufacturer

- 1 - Remove the rear plastic to gain access to the muffler.
- 2 - Using a spring puller tool, remove the springs connecting the front of the muffler to the header.
- 3 - Loosen and remove the front OEM muffler bolt.
- 4 - While holding the muffler, loosen and remove the rear OEM muffler bolt.
- 5 - Gently slide the muffler rearward to release it from the header. Spray WD-40 on the joint if it is difficult to remove.
- 6 - Using a spring puller tool, remove the springs connecting the headers to the exhaust port flange.
- 7 - Loosen and remove the OEM bolt that attaches the header to the mid-area of the bike. Keep for later use.
- 8 - Carefully remove the header section from the bike.

### PRE-INSTALLATION

- 9 - Install the rubber sleeves onto the strap brackets so that the rubber is facing inward. Make sure the outer lip is over the bracket edge fully. No rubber should be in the area where the bracket tabs pinch together.
- 10 - Clean the header flanges where the headers slips over with contact cleaner.
- 11 - Lightly coat the header flanges with hi-temp silicon to aid sealing.

## **INSTALLATION**

- 12 - Correctly position the FMF header and slip it onto the header flanges. Attach using the existing springs.
- 13 - Using the existing bolt attach the mid-pipe to the lower frame mount.
- 14 - Using the supplied 6mm x 16mm bolt, attach the supplied extension bracket to the front upper muffler mount pointing rearward.
- 15 - Lightly coat the mid-pipe with a bead of high temp. silicon where the muffler inlet slips over.
- 16 - With clean hands, gently slip the FMF muffler onto the mid-pipe. The FMF logo should be at 3 & 9 o'clock when looking from the rear for proper positioning.
- 17 - While supporting the muffler, install the two (2) exhaust springs from the muffler to the mid-pipe using a spring puller tool. (one spring on top, one on bottom)
- 18 - Slide the medium strap bracket carefully over the muffler and position it to the front extension bracket. Make sure the "inside" sticker on the bracket is towards the subframe.
- 19 - Using vise grip pliers, pinch the strap bracket tabs together and install the supplied 8mm x 20mm bolt with the 8mm nut to attach the mounting the bracket.
- 20 - Slide the long strap bracket carefully over the muffler and position it to the rear upper mounting point. Make sure the "inside" sticker on the bracket is towards the subframe.
- 21 - Using vise grip pliers, pinch the strap bracket tabs together and install the supplied 6mm x 35mm bolt to attach the strap bracket to the frame in the upper hole.
- 22 - Install the supplied 6mm bolt in the strap bracket using the 6mm nut.
- 23 - Slowly tighten all mounting fasteners and clamps to OEM specified torque specs, starting from the header and working back. Make sure the header and muffler are in neutral positions and not binding.
- 24 - Inspect the complete exhaust to make sure the exhaust system is not in contact with the frame, shock spring, engine, body panels or any cables, hoses or wiring. The exhaust system should only be in contact with the exhaust port and mounting points. Confirm all controls operate in accordance with the manufacturer's specifications.
- 25 - Your muffler may have a protective coating to protect its finish. You will need to clean this off prior to starting the engine with either Windex® or 409®.

## **POST-INSTALLATION**

- 26 - Before operating your KTM follow the instructions and install the Power-Up jetting kit for optimum performance. There are too many variables outside of FMF's control to give you an exact configuration. If you're not capable of tuning your bike/ATV yourself, please find a mechanic in your area who is capable to take on this role. Refer to our website for more jetting information.
- 27 - Start the engine and bring it up to operating temperature. Check for exhaust leaks.
- 28 - Let engine cool completely and re-torque all mounting hardware to the manufacturers specifications.

## **MAINTENANCE**

To clean your FMF muffler, simply use soap and water when it becomes dirty. Windex® works great on the muffler canister to prevent streaking and uneven discoloration. Let the exhaust system cool before cleaning. Do not spray cold water onto a hot exhaust. Dry completely to prevent streaking.

We recommend repacking your Titanium 4 muffler after 20-30 hours of use when properly jetted. This will maintain peak performance and keep that race tone. We have various packing materials to choose from. We also recommend cleaning the spark arrestor screen (if equipped) every 30 hours of use using a wire brush gently.

To repack the muffler, remove the four (4) allen screws from the front of the muffler using a 4mm allen wrench. Do not remove the rear endcap. Gently slide out the front mid pipe from the muffler canister. You may need to use a rubber or plastic mallet to lightly tap it out. Be careful not to damage the muffler. Unwrap the packing from the core and discard. If your muffler uses a 2 stage packing, only remove the outer layer. Wrap the core with new packing and secure with a strip of masking tape. Do not pack too tightly, as this will hamper performance and increase the sound level. Before re-installing the inner core assembly, apply a thin layer of hi-temp silicon on the front endcap where the aluminum canister slips over. Slip inner core assembly into canister making sure the perforated core fully seats in the rear endcap. Re-install the allen screws until snug or tighten 1/4 turn after the screw makes contact with the canister.

### **Disclaimer**

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