



Honda XR50 / CRF50 Mini Factory4.1™ Installation

Thank you for purchasing the FMF Factory4.1™ muffler as your aftermarket performance exhaust. We have spent countless hours of R & D and testing to ensure you receive the highest quality product on the market today.

All FMF products are developed using the most current technology available for design and manufacturing. We use only the highest quality materials for function and durability. The Factory4.1™ muffler is constructed from military grade titanium for the canister and front and rear endcaps with either a titanium or stainless steel mandrel bent midpipe depending on the model you purchased. We utilize advanced multi stage packing material.

The Factory4.1™ muffler is the lightest titanium muffler available and specifically engineered to broaden your existing powerband and give you an all-around power increase with substantial weight savings. Bolt on FMF performance and **FEEL THE POWER!**

ATTENTION

This product is designed for closed course use only unless otherwise stated and not intended to meet emission regulations for use on public lands, roads, or access routes - consult with local jurisdictions.

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 otherwise have your new FMF muffler installed by a professional mechanic. Keep all stock hardware when removing your exhaust, as some components may be necessary to install the FMF exhaust depending on your application.

PARTS SUPPLIED

(1) Factory 4.1 Muffler	041241-42, 71, 79
(1) Aluminum Spacer	920834
(1) 8mm x 55mm Bolt	920169

TOOLS REQUIRED

10mm Wrench
12mm Wrench
Phillips Screwdriver
Contact Cleaner
WD-40®
High Temp Silicone

REMOVAL

1. Make sure the engine is completely cool prior to installation and the vehicle is in a stable position.
2. Remove seat and body by panels as described in your owners manual. Keep all hardware for reassembly.
3. Remove the two (2) header flange nuts at the front of the motor. Keep for later use.
4. While holding the muffler/header, loosen and remove the stock muffler mounting bolt.
5. Carefully remove the muffler/header from the engine. Make sure to keep the existing exhaust port gasket. This will be reused if in good condition. Replace if cracked, torn or in poor condition.

PRE-INSTALLATION

6. Using contact cleaner, clean the section of the exhaust port where the header connects and allow to dry.

INSTALLATION

7. Insert the stock exhaust port gasket into the exhaust port. Apply a thin bead of high temp silicone to both sides of the gasket for an improved seal.
8. Install the FMF header onto the exhaust port using the stock nuts and loosely tighten.
9. Use the supplied 8mm x 55mm bolt to attach the muffler to the frame with the supplied aluminum spacer between the subframe and the muffler mount. Do not fully tighten at this time.
10. Make sure the header and muffler are in neutral positions and not binding. Slowly tighten all mounting fasteners and clamps to manufacturer's specifications, starting from the front and working your way back.
11. Inspect the complete exhaust to make sure there is no 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.

POST-INSTALLATION

12. We recommend using high temp silicone for an improved seal. Please follow instructions for the silicone and allow sufficient time to dry before starting the engine.
13. Start the engine and bring it up to operating temperature. Check for exhaust leaks.
14. Let engine cool completely and re-torque all mounting hardware to the manufacturer's specifications.

MAINTENANCE

To clean your FMF muffler, allow to cool. Do not spray water onto a hot exhaust. Dry completely to prevent streaking. Mild soap and water are recommended on the muffler canister to reduce streaking and uneven discoloration.

We recommend repacking your FMF muffler after every 20-30 hours of normal use when properly jetted. This will maintain peak performance and keep that race tone. Water will ruin the packing. Cover the exhaust outlet when washing your machine. Repack your muffler if water gets inside and saturates the packing material. FMF offers a variety of packing materials to choose from. If your FMF muffler has a spark arrestor screen, we recommend cleaning it gently using a wire brush after every 30 hours of use.

To repack the muffler, remove the allen screws from the front of the muffler. There is no need to remove the rear endcap. Gently slide the midpipe and core out the front of 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. Wrap the core with new packing and secure with two strips of 1/2" masking tape around the packing 2" from each end. Do not pack too tightly as this will hinder performance and increase the sound level. Before re-installing the inner core assembly, apply a thin layer of high temp silicone on the front endcap where it makes contact with the canister. Slide inner core assembly into canister making sure the perforated core fully seats in the rear endcap. Wipe off any excess silicone. Re-install the allen screws until snug or tighten 1/4 turn after the screw makes contact with the canister. Allow silicone to dry before starting engine.

DISCLAIMER: All products manufactured and/or distributed by FMF Racing are a) intended for use on stock vehicles specific to the U.S. market; b) for closed course use only unless otherwise stated and c) not intended to meet emission regulations for use on public lands, roads or access routes – consult with local jurisdictions. FMF Racing makes no claims as to the products applicability, effectiveness or fitment on modified machines. FMF Racing is the sole determiner of abuse, misuse, installation errors and modifications. We assume no liability for any errors in listings, specifications, part numbers, prices or model applications. We reserve the right to change specifications, product descriptions, product quality, pricing and application at any time without notice and without further obligation. Buyer assumes all risk for any and all damage caused to themselves, a third party and/or property by virtue of failure of these products. By installing and/or using an FMF product, you hereby accept and understand these stated terms and conditions and have followed all instructional steps.