



Slip-On Muffler Installation Instructions

Thank you for choosing FMF as your performance aftermarket 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. Every exhaust is made 100% at the Flying Machine Factory in Southern California. We use only the highest quality American materials for function and durability.

Since 1973, FMF has been bringing you the very best in bolt on performance. Our products are specifically engineered to broaden your existing powerband and give you an all around power increase with substantial weight savings. Bolt on FMF and **FEEL THE POWER!**

Check out our website at www.fmfracing.com for more information.

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 will void any warranty implied or otherwise. FMF Racing is not responsible for problems due to improper installation and/or improper use.

Before you begin installing this product, we recommend wearing safety glasses and mechanics gloves. You must know how to remove and replace your stock exhaust in order to install this FMF product otherwise have it installed by a professional mechanic. Keep all stock parts from your existing system as some components may be necessary to install your new FMF exhaust depending on the application.

Parts Supplied

(1) muffler	045181,82
(2) 8x 40mm bolt	900545
(1) 8x20mm bolt	920192
(3) 8mm nut	920142
(2) washer	900386
(1) strap bracket	940333
(1) muffler hanger	841074

Tools Required

10, 12, 13, 15mm wrenches
#27 Torx wrench
spring puller
vice-grip pliers
hack saw
WD-40

Removal

1. Make sure engine is completely cool prior to installation and the vehicle is in a stable position.
2. Loosen the band clamp connecting the muffler to the midpipe.
3. Loosen the midpipe supports by first loosening each jam nut and then screwing in each support as far as possible.
4. Remove the two springs connecting the midpipe to the header. Save for later use.
5. Remove the springs connecting the midpipe supports to the frame.
6. Remove the midpipe by sliding to the left through the frame. Use WD-40 in the midpipe/muffler junction to help ease removal. Take care not to lose the "donut" gasket used at the header/midpipe junction.
7. Slide the muffler out through the back of the frame.

Pre - Installation

8. Remove and reinstall the heatshield onto your new exhaust. Only three of the four stock bolts will be used. Trim off 6-1/2" from the left side of the shield to enable the muffler with the attached shield to be slid into position through the frame. If you do not wish to trim the shield, the shield will have to be installed after the muffler has been slid into position through the frame.
9. Remove the four #27 Torx fasteners at the very lower back of the machine to enable the plastic panel to be moved to facilitate installation.
9. Install the supplied strap bracket, muffler hanger, 8x20mm bolt and 8mm nut onto the muffler. Measure back 9" from the front edge of muffler canister. Slide the strap bracket onto the muffler and align the front of the bracket to this mark. Pinch the ends of bracket together using vice-grip type pliers. The ends of the bracket should come together so that they are on the right side of the muffler centerline (disregard the "inside" decal on the strap bracket). Insert the supplied 8x20mm bolt through the bracket and and muffler hanger. The hanger should be on the left side of the bracket with the post facing forward. Thread on the supplied 8mm nut; do not fully tighten at this time.

Installation

10. Reinstall the header gasket if in good condition. Replace it if necessary.
11. Slide the FMF muffler through the rear of the frame and into position onto the header. Make sure the muffler hanger post engages with the rear mounting point.
12. Insert the supplied 8x40mm bolts through the muffler bracket and then through the stock mounting holes. Thread on a supplied washer and 8mm nut onto each bolt.
13. Using a spring puller reinstall the two stock springs connecting the muffler midpipe to the header removed in step #4.
14. Make sure the header and muffler are in a neutral position and not binding. Slowly tighten all mounting fasteners and clamps to manufacturer's specifications starting at the header and finishing at the rear-most muffler mount.
15. 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 manufacturer's specifications.

Post - Installation

16. All FMF exhaust products are designed to use stock fuel settings unless otherwise noted. There are too many variables to provide precise specifications; mainly altitude and temperature. If you are not capable of tuning the fuel settings yourself, please find a mechanic in your area. For optimum performance, we offer the FMF Power Programmer Kit for many applications. Refer to our website for additional information.
17. Start the engine and bring to operating temperature. Check for exhaust leaks.
18. Allow the engine to cool completely and torque all mounting hardware to manufacturer's specifications.

Maintenance

To clean your FMF muffler, allow to cool and use mild soap and water. Do not spray water onto a hot exhaust. Mild soap and water is recommended on the muffler canister to reduce streaking and uneven discoloration. Dry completely with a soft cloth.

The PowerLine muffler is a mechanical design and has no packing material - it will not require any packing maintenance. It does have a screen type spark arrestor that we recommend cleaning it gently with a wire brush after every 30 hours of use.

We recommend repacking the PowerCore4 muffler after every 20-30 hours of normal use when properly jetted (more frequently for less than optimal jetting). This will maintain peak performance and keep that race tone. Water will ruin packing. Cover the exhaust outlet when washing your vehicle. Repack your muffler if water enters the chamber and saturates the packing. We offer various repack kits to choose from. If the muffler has a spark arrestor screen, we recommend cleaning it gently with a wire brush after every 30 hours of use.

To repack the muffler, remove the allen screws from the front of the muffler. Do not remove the rear end cap. Grasping the midpipe, work the front end cap out of the canister. Use care not to damage or distort the shape of the canister or end cap. You may need a rubber or plastic mallet to lightly tap the front end cap out of the canister. Unwrap the packing from the core and discard. Clean the core with a wire brush then wrap with new packing and secure with a strip of 1/2" masking tape near each end of the core. Do not pack too tightly as this will hamper performance and increase sound level. Before reinstalling the inner core assembly, apply a thin bead of high temp silicone on the front endcap where it makes contact with the canister. Slide the inner core assembly into the canister making sure the perforated core is fully seated into the rear end cap. Wipe off any excess silicone. Reinstall the allen screws and tighten 1/4 turn after the screw contacts the canister. Allow sufficient time for the silicone to cure before starting the engine.

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