



Complete Exhaust System 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) 4.1 Complete system | 045364-366, 045390-392, 045405-410, 045420, 045422, 045432-433, 045447, 045449-451, 145089, 145092-093 |
| (1) cable tie | 220135 |

Tools Required

- 8, 10, 13, 17mm socket wrench
- spring puller
- WD-40
- contact cleaner
- High Temp silicone

Removal

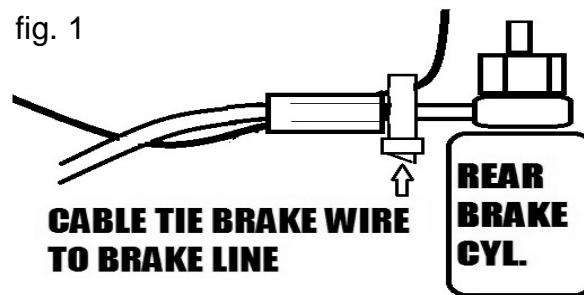
1. Make sure the engine is completely cool prior to installation and the vehicle is in a stable position with the rear wheel off the ground.
2. Using a spring puller tool, remove the spring connecting the front of the muffler to the header. Keep for later use.
3. While holding the muffler, loosen and remove the two (2) muffler mounting bolts. Keep for later use.
4. Gently slide the muffler rearward to release it from the header. Use WD-40 in the muffler/header junction to help ease removal.
5. Using a spring puller tool, remove the two(2) springs attaching the header to the exhaust flange. Keep for later use.
6. Remove the bolt attaching the header to the frame. Keep for later use.
7. For non-linkage type rear suspensions, remove the rear shock. Consult a shop manual if necessary.
8. For linkage type rear suspensions, partially remove the rear shock to enable removal of the header. Remove the top and bottom shock bolts and the nut and bolt connecting the "dog bone" link to the "rocker" link. Lift up the rear wheel approximately 8" and support with a block of wood. Carefully drop the shock down and rotate to allow header removal. Consult a shop manual if necessary.
9. Carefully remove the header.

Pre - Installation

10. Reinstall the shock. For linkage type suspensions, take care when installing the linkage bolt to align the head of the bolt with the flat on the "dog bone" link. Consult a shop manual if necessary.
11. The stock rubber muffler mounts will be used with your new muffler. Remove the two aluminum washers from each mount and carefully push out the rubber grommet with a small screwdriver using care not to tear the rubber. Install grommets and washers onto your new muffler. Use WD-40 to aid in removal and installation of the grommets.
12. Using contact cleaner, clean the section of the exhaust port where the header connects. Allow to dry then lightly coat with a bead of high temp silicone for an improved seal.

Installation

13. Lightly coat the slip-fit section of the header where the midpipe connects with a bead of high temp silicone for an improved seal.
14. Position the FMF header and slide over the exhaust port flange. Using a spring puller tool, attach the stock springs from the header to the flange. Wipe off any excess silicone.
15. Slide the FMF midpipe onto the header. Wipe off any excess silicone.
16. Thread the stock bolt through the frame into the midpipe. Do not fully tighten at this time.
17. Install the stock muffler spring from the header to the midpipe using a spring puller tool.
18. Lightly coat the slip-fit section of the midpipe where the muffler connects with a bead of high temp silicone for an improved seal.
19. Slide the FMF muffler onto the midpipe. Wipe away any excess silicone.
20. Use the stock bolts removed in step #3 to mount the muffler to the subframe. Do not fully tighten at this time.
21. 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 midpipe and finishing at the rearmost muffler mount.
22. 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. **NOTE:** On models equipped with a rear brake light, secure the brake light wire to the rear brake line with the supplied cable tie to gain adequate clearance to the midpipe (fig.1). Rerouting of the wire may be necessary to gain adequate slack in the wire.
23. Confirm all controls operate in accordance with manufacturer's specifications.



Post - Installation

24. We recommend using high temp silicone for an improved seal. Please follow instructions for the silicone and allow sufficient time to cure before starting the engine.
25. All FMF exhaust products are designed to use stock fuel settings unless otherwise noted. Our fuel setting recommendations are to be used as a guide only and were derived from operation at sea level at 70 degree ambient air temperature. There are too many variables to provide precise fuel setting specifications; mainly altitude and temperature. If you are not capable of adjusting the fuel settings yourself, please find a mechanic in your area. Refer to our website for additional fuel setting information.
26. Start the engine and bring to operating temperature. Check for exhaust leaks.
27. 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.

We recommend repacking your FMF 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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LIMITED WARRANTY: All merchandise manufactured by FMF Racing has a warranty against manufacturing defects for a period of one (1) year from the date of invoice. Warranty is limited to the repair or replacement of defective products. There is no warranty for normal wear and tear, any type of crash damage or for product failure due to improper muffler or packing maintenance. FMF Racing reserves the right to repair, replace or issue an FMF credit for defective product at its discretion. Credits are valid for a period of one (1) year from issuance. No credit will be issued for labor or other costs incurred beyond the value of the original product. Product returned as a warranty after having been used, if found to be defective, is not valued at the full purchase price. A depreciated value will be estimated for used product. Product accepted as a warranty claim and repaired or replaced will be returned via UPS-ground freight no charge. Warranty excludes product that has been modified or where the product was improperly installed, abnormally used or misused. This limited warranty is in lieu of all other guarantees or warranties implied or expressed. This includes, without limitation, any warranties or merchantability and fitment for a particular purpose. We make no warranty as to products distributed by FMF Racing, expressed or implied. We will, however, pass on all warranties made by the manufacturer, who has sole responsibility for performing such warranties. A return authorization number must be issued by FMF Racing before product is returned. Returns must be sent back to FMF Racing freight prepaid. Proof of purchase, such as a copy of the original invoice, must accompany all warranty claims. Warranties will be honored to the direct purchaser only.