



## 2-Stroke Pipe Installation

Thank you for purchasing an FMF pipe for your ride. We have spent countless hours of R & D and testing to ensure you receive the highest quality product on the market today.

All FMF's products are developed using the most current design and manufacturing technologies available. We use only the highest quality materials for function and durability. FMF pipes are manufactured from U.S. steel and our Tru-Flo stamping process ensures quality control for fitment, reliability and unbeatable performance.

Whether it be Supercross, Motocross, GNCC, Desert or just plain old trail riding, with FMF you have a choice. FMF pipes are engineered to have focused power gains to suit the needs of the rider under the conditions they ride. 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 you should have it installed by a professional mechanic. Keep all OEM parts when removing your stock exhaust as some parts may be necessary to install the FMF exhaust depending on your particular application.

### TOOLS REQUIRED

8mm Wrench	High Temp Silicone
10mm Wrench	WD-40®
12mm Wrench	Spring Puller
Contact Cleaner	

### REMOVAL

*OEM = Original Equipment Manufacturer*

1. Make sure the engine is completely cool prior to installation and the vehicle is in a stable position.
2. If necessary, remove the plastic side panel piece to gain access to the silencer.
3. Using a spring puller tool, remove the exhaust springs connecting the pipe to the exhaust port. Keep for later use.
4. Loosen all mounting hardware on the pipe and silencer using the appropriate wrenches.
5. Remove the silencer from the subframe, keeping all mounting hardware.  
**\*We recommend removing the silencer when installing a new pipe to insure proper fit and alignment.\***
6. Remove the pipe, keeping all mounting hardware.
7. Remove any rubber grommets, o-rings or special hardware from the pipe.

### PRE-INSTALLATION

8. Using contact cleaner, clean the exhaust flange and/or cylinder exhaust port to remove all dirt and debris. If applicable, remove o-rings and clean the grooves of the pipe flange.
9. If your application uses an exhaust pipe washer/shim, make sure that is installed in the cylinder before mounting the pipe.

## **INSTALLATION**

10. If applicable, install pipe o-rings using High Temp Silicone to provide a better seal. **\*We recommend using new o-rings \***
11. Loosely mount the FMF pipe with your existing hardware and make sure the pipe flange slips fully into or over the cylinder flange. Wipe away any excess silicone.
12. Install new pipe springs. **\*We recommend using new springs and covering the springs with rubber high temp hose if room allows to keep vibration to a minimum.\***
13. Apply a thin layer of High Temp Silicone to the pipe where the silencer slips over.
14. With OEM pipe/silencer coupler in place, slide silencer over pipe and wipe away any excess Silicone. Loosely install one silencer mounting bolt to hold it in place - do not tighten at this time.
15. Make sure the pipe and silencer are in neutral positions and not binding. Slowly tighten all mounting fasteners and clamps to OEM specified torque specs, starting from the front and working your way back.
16. 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 OEM specifications.

## **POST-INSTALLATION**

17. 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.
18. Before operating your vehicle, we recommend either stock jetting or installing our Power-Up Jet kit for optimum performance on applicable models. Our jetting recommendations are to be used as a guide only and were developed based on operation at sea-level at 70 degree ambient air temperature. There are too many variables outside of FMF's control to give you an exact configuration. If you're not able to tune the carburetor yourself, please find a mechanic in your area who is capable to take on this role. Refer to our website for more jetting information.
19. Start the engine and bring it up to operating temperature. Check for exhaust leaks.
20. Let engine cool completely and re-torque all mounting hardware to OEM specifications.

## **MAINTENANCE**

To clean your FMF pipe, allow to cool and use mild soap and water. Do not spray water onto a hot exhaust. Dry completely to prevent streaking. Dry completely and follow up with a wipe down of WD-40® to help reduce staining and rusting.

Aluminum wheel polish will help to keep the luster of nickel or chrome plating.

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 determines 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.



## **KAWASAKI KDX220 JETTING RECOMMENDATIONS**

Here are our jetting suggestions for your **KDX220**. We've spent countless hours of testing to determine which settings work best when bolting on one of our pipes and silencers to a stock machine. These are recommendations only, based upon our testing at sea-level atmospheric pressure, a 65-80F degree ambient air temperature, a 32:1 fuel to oil mixing ratio on super unleaded pump fuel with a stock motor.

For some models we offer a Power Up jet kit for optimum tuning. Kits may include jets, needles and any necessary hardware and have been developed with the assistance of Dynojet.

There are too many variables outside of our control to give you an exact configuration that works perfectly under all conditions. Our recommendations are just that, a starting point to reference from. Higher elevations, high humidity, hotter temperatures are examples that will require leaner jetting. Colder temperatures are an example that will require richer jetting.

If you are unknowledgeable or don't feel comfortable tuning your machine yourself, find a mechanic in your area who is. FMF Racing is not responsible for problems derived from improper jetting and/or usage.

Always check that your jetting is correct when changing parts that could affect the intake system, exhaust system and any product or change that could alter fuel combustion in the cylinder (ie. aftermarket ignition module).

Use the following suggestions when using a FMF Fatty, Factory Fatty, Gnarly, Rev or SST exhaust pipe.

### **\* \* Remove the airbox lid snorkel \* \***

#### **2003**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **2002**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **2001**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **2000**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1999**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1998**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1997**

Main Jet	145-148
Pilot Jet	42
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out



## **KAWASAKI KDX200 JETTING RECOMMENDATIONS**

Here are our jetting suggestions for your **KDX200**. We've spent countless hours of testing to determine which settings work best when bolting on one of our pipes and silencers to a stock machine. These are recommendations only, based upon our testing at sea-level atmospheric pressure, a 65-80F degree ambient air temperature, a 32:1 fuel to oil mixing ratio on super unleaded pump fuel with a stock motor.

For some models we offer a Power Up jet kit for optimum tuning. Kits may include jets, needles and any necessary hardware and have been developed with the assistance of Dynojet.

There are too many variables outside of our control to give you an exact configuration that works perfectly under all conditions. Our recommendations are just that, a starting point to reference from. Higher elevations, high humidity, hotter temperatures are examples that will require leaner jetting. Colder temperatures are an example that will require richer jetting.

If you are unknowledgeable or don't feel comfortable tuning your machine yourself, find a mechanic in your area who is. FMF Racing is not responsible for problems derived from improper jetting and/or usage.

Always check that your jetting is correct when changing parts that could affect the intake system, exhaust system and any product or change that could alter fuel combustion in the cylinder (ie. aftermarket ignition module).

Use the following suggestions when using a FMF Fatty, Factory Fatty, Gnarly, Rev or SST exhaust pipe.

### **\*\* Remove the airbox lid snorkel \*\***

#### **2003**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **2002**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **2001**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **2000**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1999**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1998**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1997**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1996**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

#### **1995**

Main Jet	155-160
Pilot Jet	45-48
Needle	R1173L
Clip Position	3RD
Air Screw	1.5 out

# **\*\* Remove the airbox lid snorkel \*\***

## **1994**

Main Jet	152-158
Pilot Jet	42-48
Needle	R1173N
Clip Position	3RD
Air Screw	1.5 out

## **1993**

Main Jet	152-158
Pilot Jet	42-48
Needle	R1173N
Clip Position	3RD
Air Screw	1.5 out

## **1992**

Main Jet	152-158
Pilot Jet	42-48
Needle	R1173N
Clip Position	3RD
Air Screw	1.5 out

## **1991**

Main Jet	152-158
Pilot Jet	42-48
Needle	R1173N
Clip Position	3RD
Air Screw	1.5 out

## **1990**

Main Jet	152-158
Pilot Jet	42-48
Needle	R1173N
Clip Position	3RD
Air Screw	1.5 out

## **1989**

Main Jet	152-158
Pilot Jet	42-48
Needle	R1173N
Clip Position	3RD
Air Screw	1.5 out

## **1988**

Main Jet	320
Pilot Jet	48
Needle	STOCK
Clip Position	3RD
Air Screw	1.5 out

## **1987**

Main Jet	STOCK
Pilot Jet	STOCK
Needle	STOCK
Clip Position	3RD
Air Screw	1.5 out

## **1986**

Main Jet	STOCK
Pilot Jet	STOCK
Needle	STOCK
Clip Position	3RD
Air Screw	1.5 out

# **\*\* Remove the airbox lid snorkel \*\***