



18033 S. Santa Fe Ave.  
Rancho Dominguez, CA 90221-5514  
PH: 310-631-4363  
FX: 310-900-5699  
www.fmfracing.com  
[05-06 / #000714]

## **POLARIS RANGER**

# **Powerline™ Installation**

Thank you for purchasing FMF's Powerline™ muffler for your **Polaris**. We have spent countless hours of R & D and testing to ensure you receive the highest quality product on the market today.

Your Powerline muffler has been developed using the latest design, testing and manufacturing technologies available. It is manufactured exclusively from stainless steel to provide you with a exhaust that can handle the heat and abuse that today's utility ATVs bring with them. The Powerline™ muffler uses strategically placed baffles and chambers so there is no repacking or re-building necessary.

The Powerline™ muffler is designed as a maintenance free muffler broadening your existing powerband giving you an all around power increase without dramatically increasing the sound level. Bolt on FMF performance and **FEEL THE POWER!**

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 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) Powerline Muffler | 045112 |
| (2) Strap Bracket     | 940334 |
| (2) 8mm x 20mm Bolt   | 920192 |
| (2) 8mm Nut           | 920142 |

### **TOOLS REQUIRED**

|                  |                    |
|------------------|--------------------|
| 8mm Wrench       | High Temp Silicone |
| 10mm Wrench      | WD-40®             |
| 12mm Wrench      | Spring Puller Tool |
| 1/2" Wrench      |                    |
| Vise Grip Pliers |                    |
| Contact Cleaner  |                    |

## **REMOVAL**

1. Make sure the engine is completely cool prior to installation and the vehicle is in a stable position.
2. To help ease the removal and replacement of the muffler we recommend removing the rear cargo section of vehicle although it is not necessary. Refer to your service manual for removal.
3. Using a spring puller tool, remove the two (2) springs connecting the muffler to the midpipe (fig.1).
4. While holding the muffler, loosen the two (2) stock muffler mounting bolts (fig.2).
5. Gently slide the muffler rearward to release it from the midpipe. Use WD-40 in the muffler/midpipe junction to help ease removal.

## **PRE-INSTALLATION**

6. Using contact cleaner, clean the section of the midpipe where the muffler connects. Allow to dry then lightly coat with a bead of high temp silicone for an improved seal.

## INSTALLATION

7. Slide the FMF muffler onto the midpipe. Wipe away any excess silicone.
8. Slide the first strap bracket carefully over the muffler and position to the front mounting point. Be careful not to scratch the canister and make sure the "inside" sticker on the bracket is facing inward toward the center of the machine.
9. To install the mounting bracket, use vise grip pliers to pinch the strap bracket tabs together and install the supplied 8mm x 20mm bolt and nut to attach the strap bracket to the frame. Do not fully tighten at this time.
10. Repeat steps 7-9 for mounting rear strap.
11. Install the two (2) stock exhaust springs from the muffler to the midpipe using a spring puller tool.
12. Make sure the header and muffler are in neutral positions and not binding. Slowly tighten all mounting fasteners and clamps to manufacturer specified torque specs, starting from the front and working your way back.
13. 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.

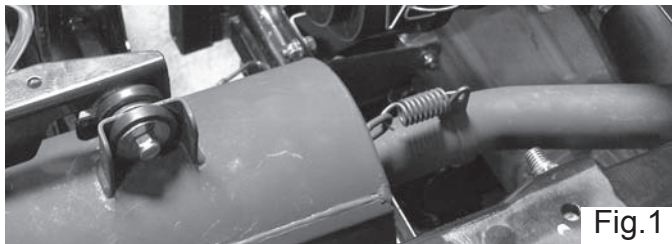


Fig.1

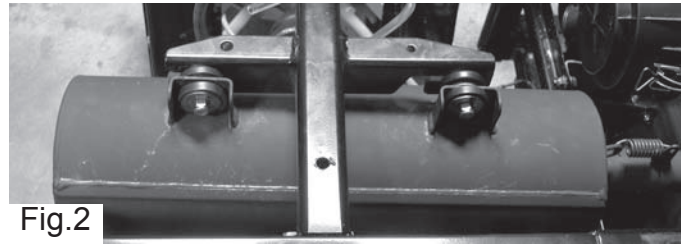


Fig.2

## POST-INSTALLATION

14. 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.
15. Before operating your vehicle, we recommend either stock jetting or installing our Power-Up Jet kit for optimum performance. 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 capable of tuning 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.
16. Start the engine and bring it up to operating temperature. Check for exhaust leaks.
17. Let engine cool completely and re-torque all mounting hardware to 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 is recommended on the muffler canister to reduce streaking and uneven discoloration.

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

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.