

# Polaris RZR XP 1000 Installation: Slip On System



# **Please Read Carefully**

Read all instructions before installation. Make sure the vehicle and exhaust system are completely cool & on level ground before installation. You should have some mechanical knowledge and a basic set of tools. (A lift, center or rear stand will help.) We advise that this installation be done by a qualified technician. If this is a street vehicle, you may need to modify or replace your stock license plate bracket and turn signals. Please consult your local dealer. Check your local laws to make sure you are in compliance. HMF is not responsible if you are not.

#### **Stock Removal**

- 1. Remove the **silencer cover**. (See Fig. 1)
- Use a long piece of electrical wire to remove the head pipe-to-silencer springs, and silencer-to-frame springs. Remove the Silencer. (See Fig. 2)
- 3. Remove the silencer cover brackets and aluminum heat shield.
- 4. Slide the top rubber mounts out of the frame. (See Fig. 3)
- 5. Remove the (6) head pipe-to-cylinder head bolts and remove the head pipe.

# **HMF Full System Installation**

- 1. Install the supplied silencer bracket in place of the original aluminum heat shield. (See Fig. 4)
- 2. Typically, the **OEM Cylinder head-to-head pipe gasket** can be reused. If it is damaged or worn, use the new gasket from your parts kit. Install the **HMF head pipe** using the original bolts. Do not tighten the bolts yet. (Note: Insert head pipe between fender and front of shock) (See Fig. 5)
- 3. Install the **lower mid pipe** into the silencer, then install the assembly to the **head pipe** and **lower bracket** using the supplied nyloc nuts. (**Do not tighten**) Take you're your time to make sure that the **silencer** is centered and level, then tighten the **nyloc nuts**. (*See Fig. 6*)
- 4. Install the **top mid pipe** into the **silencer**, then install the assembly to the **head pipe** and **top bracket** using the supplied nyloc nuts. Align and center the **top silencer** and tighten **mounting nuts**. Using a long piece of wire, install the supplied **head pipe-to-mid pipe springs** and **mid pipe-to-silencer springs**. (See Fig. 7)
- 5. Torque head pipe bolts to OEM specs.
- 6. This is how your new exhaust should look once all parts are properly aligned. (See Fig. 8)

Note: There is an Oxygen sensor bung located in the collector of the exhaust. If you are not using an oxygen sensor, install the supplied cap into the bung. See Image figures on next page.

Your HMF exhaust system was shipped to you with quiet core inserts and spark arrestors installed. This combination produced the best power and torque results during testing with a stock engine. To remove the quiet cores, simply remove the 3 end cap bolts from each silencer using the supplied 5 MM allen wrench, slide the quiet cores out, and replace the allen head bolts

# Recommended Optimizer Settings: 3.5 / 5 / 4.5 / 4.5 / 4 / 5.5

These settings are to be used as a starting point and were determined on our dyno at 900ft - 60°F. The final tuning is up to the customer. For more information about tuning, visit www.HMFracing.com.

# **Warranty Information**

All HMF exhaust systems are covered by a limited warranty described on the enclosed warranty card. Mapping/Jetting and installation are the responsibility of the customer. HMF Performance exhausts are designed for closed-course competition use only.

# Having trouble? We can help.

If you're still having trouble with your installation, visit www.HMFracing.com and contact us by e-mail, Forums, or by calling 866.HMF.PIPE



This exhaust, EFI Controller, air filter, jet kit is not intended for use/sale in California and does not meet California, Federal, EPA, CARB noise or emission standards for on road/highway, public, private or state land and is prohibited for use by Federal law. This exhaust, EFI Controller, air filter, jet kit is intended for use in "closed course competition off road racing use only" on machines which do not fall under the California, Federal, EPA, CARB noise or emission standards not more "Closed course competition off road racing use only" vehicles is prohibited by Federal law. This exhaust, EFI Controller, air filter, jet kit is intended for use in "closed course competition off road racing use only" on machines which do not fall under the California, Federal, EPA, CARB noise or emission standards non "Closed course competition off road racing use only" vehicles is prohibited by Federal law. FOOTNOTE: 2006 and newer motorcycles with head/tail lights OEM from the manufacturer and every all terrain vehicle, even those intended for off road closed course competitions which exceed the California, Federal, EPA, CARB noise or emission standards on the machine air box lid and exhaust muffler. Any modifications which exceed the California, Federal, EPA, CARB noise or emission stonardards on the machine air box lid and exhaust muffler. Any modifications which exceed the California, Federal, EPA, CARB noise or emission stonardards on the machine air box lid and exhaust muffler. Any modifications which exceed the California, Federal, EPA, CARB noise or emission stonardards on the prederal LaW.

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Figure 1



Figure 3



Figure 5



Figure 7

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Figure 2



Figure 4



Figure 6



Figure 8

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# Polaris RZR XP 1000: HMF Optimizer

- 1. Remove the **top engine cover** from the bed.
- 2. Remove the driver's seat and the ECM cover.
- 3. Remove the Clutch exhaust snorkel from under the driver's side rear wheel well.
- 4. Route the **Optimizer harness** through the firewall opening under the **ECM harness.** (See Fig 1)
- 5. Route the Optimizer harness UNDER the sway bar, following the engine wiring harness up toward the fuel injectors. (See Figs 2&3)
- 6. Unplug the **injector harness connectors** from the **fuel injectors**. Plug the **maroon and black Optimizer connectors** into the **fuel injectors**. Plug the **black Optimizer connectors** into the **fuel injector harness connectors**. (See Fig 4)
- 7. Run the ground wire to the ground stud under the rear sway bar on the driver's side. (See Fig 5)
- 8. Use zip ties to tie the **Optimizer wiring harness** to the **existing engine wiring harness**, being sure to stay clear of any hot or moving parts.
- 9. Use the supplied Velcro to mount the optimizer to the ECM and replace the cover. (See Fig 6)

#### Recommended Optimizer Settings: 3.5 / 5 / 4.5 / 4.5 / 4 / 5.5

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Figure 1



#### Figure 4

Figure 2



Figure 5

Figure 3



Figure 6

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