

# Maxflow Stealth Exhaust System

## YAMAHA VMAX (09-20 All)

### Installation Instructions

Before beginning installation, be sure your bike is secured with a front wheel chock or rear stand of some type. It is imperative that the vehicle be secured in such a manner that prevents it from any movement while this operation is being performed. Properly securing and or raising the vehicle during this installation will not only facilitate the operation but will help ensure that no bodily injury or property damage occurs. Do not operate the engine in an enclosed space such as a closed garage or shop. Materials and fumes emitted from the exhaust of running engines can cause serious health problems. Use adequate ventilation before starting or running the engine. Star Rider Performance, it's heirs or assigns shall not be responsible for any damage or bodily injury resulting from the installation or process of installation of this equipment or its operation. It is the owner/installer's complete responsibility to assure the suitability of this item for their intended purpose. Also be advised: This exhaust system is designed for closed course racing only. It is not intended for use on public streets or roads.

#### Tools needed for installation:

- Standard 3/8" Drive Ratchet
- Short Flex 3/8" Drive Ratchet
- 22mm Crow Foot or Open-End Wrench
- 3/8" Drive Extensions
- 5mm & 6mm 3/8" Drive Hex Drives
- 7/16" Deep Well Socket
- 10mm & 12mm 3/8" Drive
- Long 5mm x 3/8" Ball End Hex Drive
- Long 8mm x 3/8" Ball End Hex Drive
- 12mm & 13mm Combination Wrenches



First, remove the following exhaust system components:

- Mufflers
- Catalytic Converter

For muffler removal, start by taking off the stainless shields, removing the two button head screws and pulling them off. Loosen the clamps behind the shields as well as the mount bolt. The muffler will come off easily by rotating/wiggling and pulling to the rear.



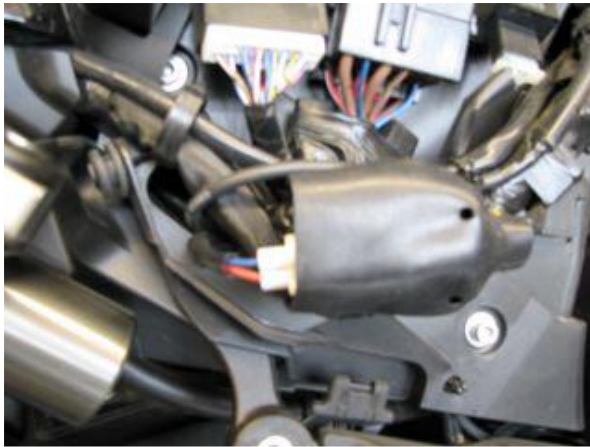
In order to remove the catalytic converter, first loosen the front header pipe. Only loosen the flange bolts enough to disconnect the cat from the rear header pipes. Use the 8mm X 3/8 ball driver for this. Just insert it between the radiators and into the front header pipe socket bolt.



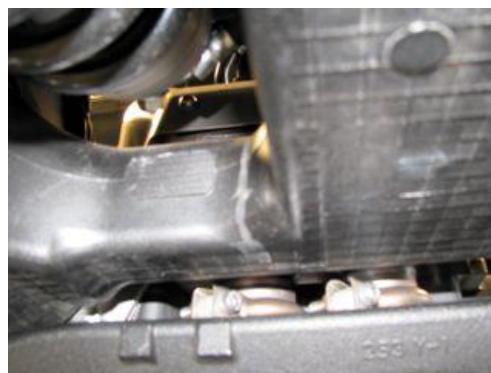
Next, remove the EXUP cables from the right side of the cat box. Secure them out of the way.



Now remove the oxygen sensor on the right side of the cat. Locate the oxygen sensor plug, (behind right side cover), and unplug it. Get some slack in the cable and twist it counterclockwise to avoid kinking it when you unscrew the plug.



To get the rear header pipe clamps loose, remove the right side cover. Go from the right side of the bike and use the 5mm ball end hex driver. Look in toward the rear header pipes from the right to access the clamps. Loosen them enough to let the catalytic converter slip off the rear header pipes. You do not need to remove them completely.



Loosen the clamps on the front header pipes securing them to the catalytic converter. Make sure there are no items you've inadvertently missed or ignored, and slide the cat off the front header pipes and out of the way. Now is also a good time to remove all the mounting brackets that held the cat on the frame. Also remove the clamping collars and packing gaskets from the rear header tubes on the cat.



Now you will want to loosen the clamp bolt on the front header pipe cross over tube. Just a few turns will do it, you only need enough to let the pipes flex a bit.





At this time, remove the Stealth Exhaust System from the box and orient them as shown in the image below. The right pipe will have a threaded oxygen sensor bung. You may now re-install the packing and clamping collars removed from the cat rear header pipes. Orient the bolts as shown so you can tighten them once it's all on the bike. Center the packing and clamps as closely as possible by hand before installing them on the bike.



Once you're satisfied with the orientation of the clamping collars and packing, install the assembly on the bike. Just slide the assemblies onto the front header pipes until they reach the ridge formed in the header pipes. Don't forget to put the clamps on loosely at first. Then raise them together and slide the rear Stealth pipes over the rear header pipes as you go. When correctly aligned the assembly will slide on easily and to the correct position. If you have to use force or feel unusual resistance, remove the system and recheck the packing and clamp position. The images below show the system aligned properly. Once at this point, hold them in place while you snug up the rear clamps, this will help hold them in place while you achieve final position





Remember to install the oxygen sensor in the right pipe. This is more easily done by holding the sensor and twisting the pipe onto it instead of twisting the sensor into the pipe. This will prevent excessive twisting of the wires. You can do the final tightening of the sensor once the assembly is tightened up on the bike. Re-connect the sensor plug and replace the boot.

Once you're satisfied with the position/alignment of everything, snug up all the bolts and clamps beginning with the front header pipe bolts. Use the 8mm ball end with 3/8-inch drive to torque them to 14 ft. lbs., then work your way back until you've finished up at the rear header pipe joints. Do not forget the front header pipe cross over clamp. The installation of the cat eliminator tubing is now complete, and you can move on to reinstalling your mufflers.

When reinstalling your mufflers, make sure the gasket is present and properly in place for ease of installation. Also orient the clamp so the bolt is easily accessible to you and move the clamp slightly to the rear to engage the set tab. Now you will be able to slide the corresponding muffler onto the correct side. Align the hole in the muffler tab with the mounting hole on the bike. Insert the bolt and hand tighten. Once both mufflers are on and you are satisfied with the position of them, fully tighten the mount bolts and then the muffler clamps.

If you choose to reinstall the muffler shields, you will need to trim them slightly for proper fitment. Cut patterns for each side are included. If you do not feel comfortable doing so, you may contact us and ship them to us. We will be more than happy to cut them for you and ship them back to you at no additional cost.

This completes the installation of the Maxflow Stealth Cat Eliminator Exhaust System. Be sure to double check all hardware for tightness before testing operation.

If you have any questions, you can contact us at the any of the options below.

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