

Part Number 73-104-2 **GSX-R1000 4:2:1 Competition Series** Exhaust System (07-08)

Congratulations, you have purchased the finest exhaust system available for your motorcycle. Your Vance & Hines Motorsports exhaust is designed and crafted for maximum performance, a great sound and unbeatable style. Please follow the instructions below, check exhaust system for missing or damaged parts and if you need any assistance please contact our technical support line (317) 852-9057.

ATTENTION:

This Exhaust System is for racing purposes only, it will require the removal of the oil cooler and trimming of the right lower fairing.

STOCK EXHAUST SYSTEM REMOVAL

Please remove the following:

- 1. Begin by removing the six allen screws on both the left and right side fairings.
- 2. Next remove the three plastic push pins (one on very bottom connecting the fairings, the other two holding the plastic screen in front of the oil cooler.) Remove by prying on push pin head with a flat head screwdriver and pull pin out of the hole.
- 3. The fairings are now only held on by plastic nipples on backside of fairings pushed into rubber grommets see (Figure 1). Four hold on the right side and three on the left side. Slight force will be required to pull fairings out of rubber grommets.
- 4. Remove the lower fairings, if necessary refer to service manual. Place the lower fairings in a safe place. The right side lower fairing will need to be trimmed for proper exhaust clearance. (Page 6 & 7)
- 5. Remove stock mufflers by loosening clamps at the catalytic converter and remove mounting bolts holding mufflers to passenger footpegs. Remove mufflers from catalytic converter and set them out of the way. Be sure to also remove metal spacer from footpeg grommets.
- 6. Remove catalytic converter by disconnecting O2 sensor plug then loosen clamp and remove the three mounting bolts. Remove catalytic converter away from header and set converter out of the way.



Figure 1

- 7. If using a Power Commander, go ahead and install the O2 eliminator.
- 8. Loosen exhaust valve cable adjuster nuts and remove cables from header. Note: Exhaust valve motor and cables should be removed from bike. With motor removed, the FI light will be displayed, but no damage will result. To remove exhaust motor, remove driver seat, then pull fuel tank carbon inserts outwards at back then backwards to remove from the fuel tank. Remove the front fuel tank bolt and lift the tank upwards. Prop the tank in the up position with stock prop rod. Disconnect the exhaust motor connectors, remove the two bracket bolts. Set exhaust motor aside and reinstall fuel tank, covers and seat in reverse order of removal.
- 9. Remove oil cooler by removing four bolts holding the oil lines on the engine case and the bolt holding radiator brace to engine case also the three bolts holding the oil cooler to the radiator. Carefully remove the oil cooler from bike and set out of the way. (Some oil will drain out of the engine case and oil lines)
- 10. Remove stock exhaust header by loosening eight bolts holding the flanges to the cylinder head. Pull header away from bike and set aside. Note: Ball end allen keys and 'shorty' allen keys will greatly assist in getting the eight bolts loosened. Also,

covering the radiator with some thick paper such as an old poster on the backside of radiator will prevent the radiator fins from being damaged.

This would be a good time to change the oil and oil filter, Suzuki part number # 16510-03G00-X07 If the oil cooler fitting o-rings are cracked or stretched, they should be replaced, Suzuki part number # 09280-15015 We also recommend replacing the stock exhaust gaskets, Suzuki part number # 14181-22D01

OIL COOLER BYPASS HOSE INSTALL

- 1. Install 90° barb fittings into provided bypass plates with Teflon tape or paste and tighten until correct alignment is achieved.
 - **Note:** Placing bypass plates in vise with soft jaws may be necessary to achieve correct alignment.
- Carefully place stock o-rings into bypass plates and fasten bypass plates to engine with stock bolts.
 Note: Be sure that o-ring stays in its groove when tightening so it doesn't become pinched.

3. Put a drop of oil on the end of the barb fittings. Blow air through the oil bypass hose to clean anything that may have been in it., attach supplied hose to barb fittings.

Note: Excessive pressure may be required to push the hose on. Be sure the hose is fully bottomed on fittings when done.

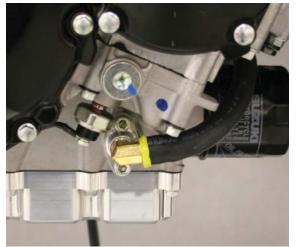




Figure 2

Figure 3

COMPETITION SERIES EXHAUST SYSTEM INSTALLATION

ATTENTION:

This Exhaust System is designed to be used with racing rear sets or a VHM billet brake lever (7-70054). This Exhaust System cannot be used with the stock brake lever.

- 1. Assemble the header using the drawing (Page 4) as a reference.
- 2. Install pipe #3 (7-80151) with stock bolts and tighten until snug enough to still allow movement.
- 3. Install pipe #4 (7-80152) with stock bolts and tighten until snug enough to still allow movement.
- 4. Install pipe #2 (7-80150) with stock bolts and tighten until snug enough to still allow movement.
- 5. Install pipe #1 (7-80149) with stock bolts and tighten until snug enough to still allow movement.
- 6. Install mid collector (7-40034) to pipes #1 and #2.
- Install mid collector with O2 bung (7-40035) to pipes #3 and #4.
- Install four springs to hold the head pipes to the mid collectors. Note: Modification of brake pedal will be required for pedal to megaphone clearance. If an already modified pedal is being used, remove bolt on backside of bracket holding footpeg on. Remove old pedal and install modified pedal. Reinstall footpeg bolt.
- 9. Loosen the two bolts that connect the right-side footpeg bracket to the adjustable position block.
- 10. Install provided washer on top bolt between footpeg bracket and adjustable block. Leave slightly loose for now.
- 11. Install megaphone to the mid collectors and position bracket in between footpeg bracket and adjustable block. Wiggle complete system at joints and be sure every joint is completely bottomed out and megaphone is square. Reinstall second bolt on footpeg bracket and tighten both footpeg bracket bolts. Install two springs to hold the megaphone to the mid collectors, this will insure alignment of head pipes.



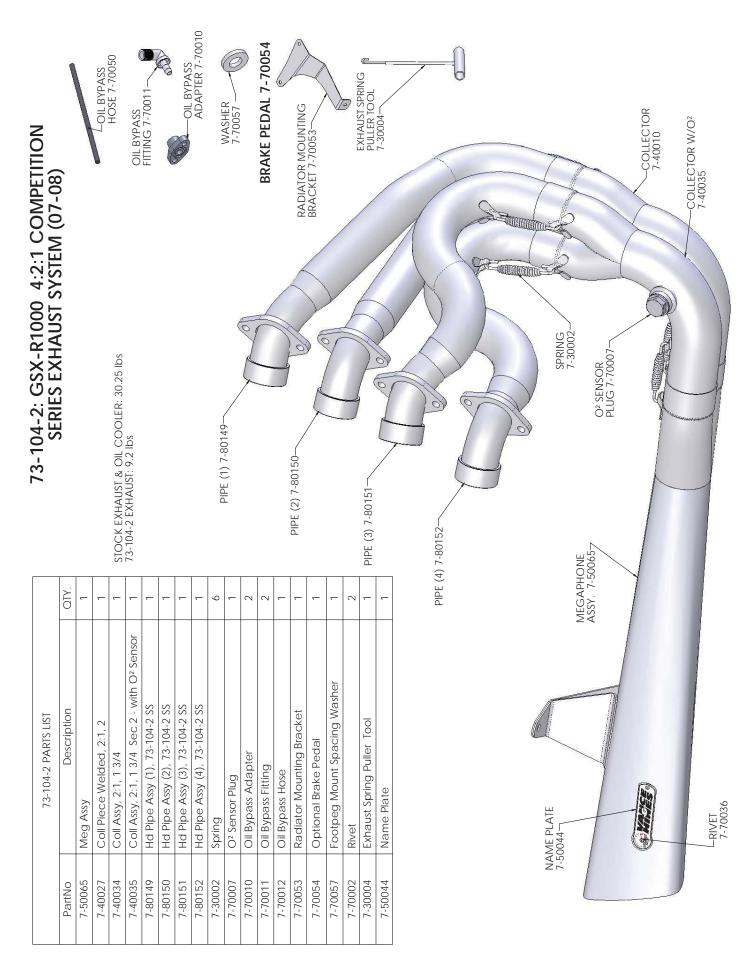
Figure 1

- 12. Tighten all eight head pipe bolts completely.
- 13. Install supplied radiator bracket to bottom of radiator and stock radiator brace hole in engine case with stock bolts.
- 14. Locate paper templates for fairing modification. Tape templates to fairing being sure the lines on the templates are exactly lined up with the body lines.
- 15. Remove heat foil piece on back of fairing by removing the two phillips screws. Set aside momentarily.
- 16. Using a die grinder, dremel tool, air saw or other sufficient tool; carefully follow lines on templates. Smooth edges with sand paper, being careful not to scratch the paint.
- 17. Reinstall heat foil and mark area that hangs onto area previously trimmed. Using a pair of tin snips, trim the heat foil and reinstall being sure it doesn't hang into opening.
- 18. Remove megaphone in reverse order of installation
- 19. Install modified fairing over mid collectors being careful not to scratch the paint. Fasten fairing by pushing into rubber grommets and installing three allen screws.
- 20. Install megaphone onto mid collectors and fasten to footpeg bracket. Install two springs between mid collectors and megaphone.
- 21. Reinstall plastic air dam behind front line and also reinstall left hand fairing.
- 22. Clean all fingerprints off of pipe with brake cleaner. Fingerprints will stain the pipe once started.
- 23. Try a test fit. Place a rag or tape over the tail pipes and slowly fit the lower fairing into place. If you feel more clearance is needed, mark the fairing and remove it.

For best results, we recommend custom fuel injection mapping for your new combination. Power Commander base maps are available on our website at <u>www.vhmotorsports.com</u>

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Fairing Template

Clearance Cut Outline

- 1. Cutout the templates. The fairing will be trimmed to the Red guide lines.
- 2. Template "A": Align the template edges and seam line with the indicated fairing ones.
- 3. Template "B": Align the template edge and bend line with the indicated fairing ones. The SUZUKI decal aligns with the letters on template.
- 4. Template "C": Align the template edge and seam line with the indicated fairing ones wrapping it on curved edge.
- 5. Stick template to fairing as indicated in steps 2-4.
- 6. Follow installation step 4 in page-1.

Template is available for download on our website.

