



# RACE SERIES

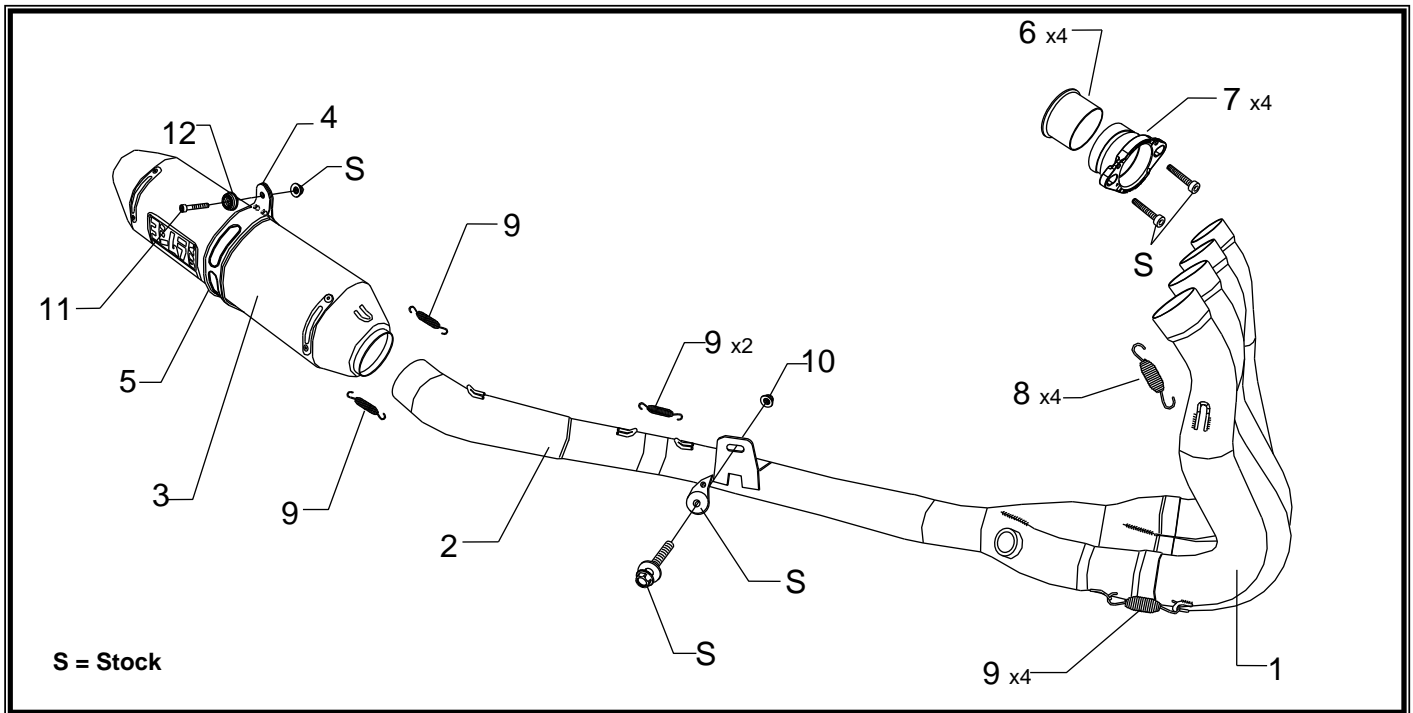
## Qualified Manufacturer Declared "Modified Part"

### APPLICATION

YEAR	MODEL
2011-2020	Suzuki GSX-R600 / 750
PRODUCT	
1160000221	R77 Stainless Steel Full System Exhaust System with Carbon Fiber Sleeve; Carbon Fiber Endcap
1160000521	R77 Stainless Steel Full System Exhaust System with Stainless Steel Sleeve; Carbon Fiber Endcap
1160000551	R77 Stainless Steel Full System Exhaust System with Stainless Steel Sleeve; Stainless Steel Endcap

## FOR CLOSED COURSE COMPETITION ONLY; NOT INTENDED FOR STREET USE

⚠	This product is designed for use in closed course racing and is not intended for highway use. In the state of California, it is illegal to modify the emission control system, which includes the fuel injection of any vehicle.
⚠	You must know how to remove and replace your stock exhaust in order to install this product otherwise have it installed by a professional mechanic. Keep all stock parts from your existing system as some components may be necessary to install your new Yoshimura exhaust depending on the application.
⚠	Read through all instructions before beginning installation. Exhaust system can be extremely hot. Let motorcycle cool down before beginning installation. Always wear hand and eye protection and take precautionary measures to avoid injury.



No.	Part #	Description	Qty
1	11600-404	Yoshimura Header	1
2	11600-419	Yoshimura Tailpipe	1
3	CRR77F126W SRR77F126W SRR77126W-SS	Yoshimura Muffler CF Sleeve; CF Endcap SS Sleeve; CF Endcap SS Sleeve; SS Endcap	1
4	1121-MPCA 1121-MPCAX SS Sleeve	Muffler Clamp CF Sleeve SS Sleeve	1
5	HT SHLDR77	Muffler Clamp Heatshield	1
6	1228SMT	Yoshimura Manifold	4
7	1170SDY	Yoshimura Flange	4

8	RACE-SPX-1	Short Spring	4
9	RACE-SPS-1	Medium Spring	8
10	8MMNUT	8mm Flange Nut	1
11	M8X45	8mm x 45mm Soc Head Cap Screw	1
12	M8ALCSW-00	M8 Counter Sink Washer	1
**	11600-RAD-BRKT	Radiator Bracket	1
**	11600-CKRPLT	EXCVA Stopper Plate	1
**	INS-03-K INS-04-K	SS Endcap CF Endcap	1
**	ST-200	Spring Puller Tool	1
**	OXYBA12X125SS	O2 Bung Adapter	1
**	17029	Yoshimura Sticker Sheet	1

## **-TOOLS REQUIRED-**

Metric Socket Set  
Combination Wrench Set  
Torque Wrench  
Metric Allen Wrench Set  
Screwdriver

## **-REMOVAL-**

1. Remove left and right side fairing as per Factory Service Manual.
2. Remove stock muffler by loosening exhaust clamp and while securely supporting the muffler, remove muffler mount bolt.
3. Remove lower radiator support bracket and swing radiator forward to ease removal of stock header.
4. Remove O2 sensor from stock header.
5. Remove exhaust valve cables.

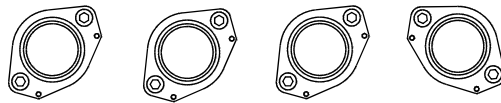
**NOTE:** Stock exhaust valve cables will not be used with Yoshimura Full System Exhaust. For 2011 model, see wiring change. For 2012-2014 model, see EXCVA stopper installation.

6. Carefully remove stock header and exhaust port gaskets. (Note: Yoshimura Full System is designed to be installed without exhaust port gaskets.)

**NOTE:** DO NOT remove upper bolt on stock chassis mount bracket. Remove lower bolt that secures the belly muffler onto the chassis.

## **-INSTALLATION-**

1. Install Yoshimura manifolds and flanges into exhaust ports using stock header bolts. Torque to 7.3 ft-lb. (10 Nm, 1.0 kgf-m) See flange orientation below.



2. Install Yoshimura header from one end of the engine to the other by slipping one header leg at a time onto manifolds. (Note: Lightly tap header legs with a plastic mallet to ensure a tight fit.)
3. Connect header to flanges using the supplied springs.
4. Install chassis mount bolt to secure header. Torque to 16.5 ft-lb. (23 Nm, 2.3 kgf-m)
5. Slide Yoshimura muffler and tailpipe assembly onto header.
6. Install rubber heat insulator onto Yoshimura muffler clamp. Slide muffler clamp over muffler and install muffler clamp to the inside of the stock muffler mount bracket using supplied hardware. See diagram for orientation. (Note: Twisting of tailpipe may be necessary for proper alignment. If needed, remove muffler springs to twist tailpipe for proper alignment.)
7. Install springs on tailpipe to header connection.
8. Re-install stock O2 sensor onto Yoshimura header.
9. Re-install radiator bracket. (Note: For GSX-R750, use provided Yoshimura radiator bracket.)

## **-FITMENT CHECK & NOTES-**

1. Before starting motorcycle, check for proper clearance between new exhaust system and rear suspension (i.e. tire, swing-arm, brake, rear shock, engine, and etc.) If any problem is found, please carefully follow through the installation steps again. If problem still persists, please call Yoshimura Tech Department at (800) 634-9166 / in CA (909) 628-4722.
2. It is recommended that the muffler and tailpipe be wiped down with rubbing alcohol to remove oil and fingerprints. This will help prevent tarnishing of the finish after the exhaust is heated up.
3. **NOTE:** After starting motorcycle, it is normal for new exhaust system and muffler to emit smoke until oil residue burns off.

**-NECESSARY WIRING CHANGES- (For 2011 Model Only)**

1. It is necessary to properly disable the Suzuki SET (Suzuki Exhaust Tuning) system by following the steps listed below. Without properly disabling the SET system, the engine will run in a power limited fail-safe mode.
2. Remove rider seat and lift fuel tank.
3. With ignition in the OFF position, disconnect the black wire harness plug from the ECU. See Fig. 2
4. Remove the orange cap by pressing the small orange tabs on the side apart and pulling the orange cap off. See Fig. 3
5. Remove #5 wire (Brown/Black Stripe) by inserting a very small flat head screwdriver into the pin hole and gently pry down to unlock the wire and pull the wire out from the rear of the plug. (Note: If you do not have a small flat head screwdriver, you can make one using a regular paper clip. See Fig. 4)
6. Completely seal off the disconnected wire using electrical tape and shrink tube to prevent possible electrical problems. Secure disconnected wire to harness using a zip tie.
7. Re-install orange cap onto black wiring harness plug and re-connect plug to ECU.
8. Lower fuel tank and re-install rider seat.
9. Completely remove the exhaust valve cables from the EXCVA servo. Refer to Factory Service Manual for removal instructions. (Note: Do not unplug EXCVA servo as it may cause the bike to run in fail-safe mode.)

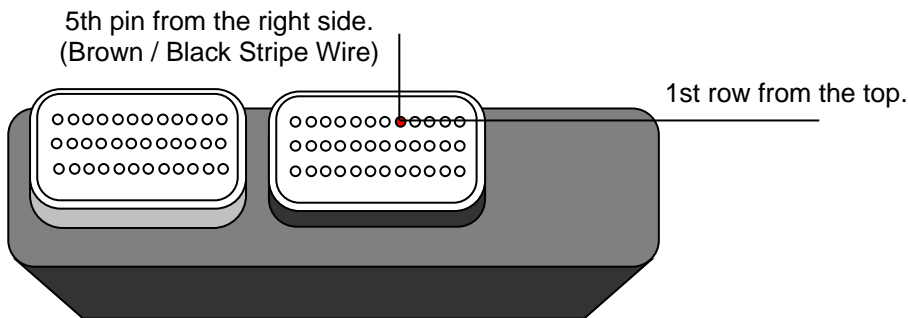


Fig. 1

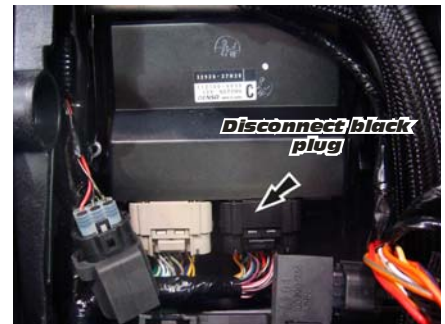


Fig. 2

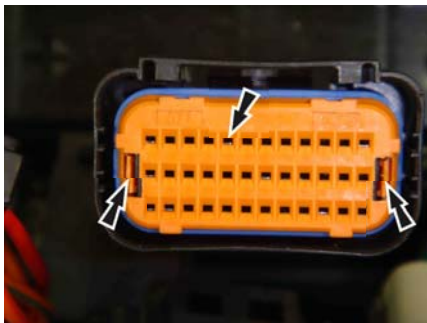


Fig. 3

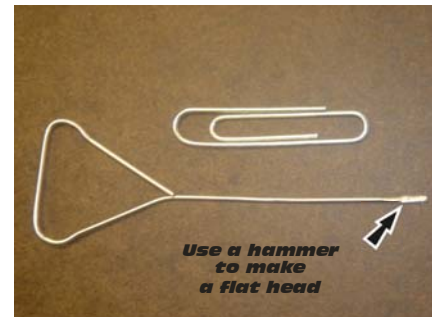


Fig. 4

**-EXCVA STOPPER BRACKET INSTALLATION- (For 2012-2017 Model Only)**

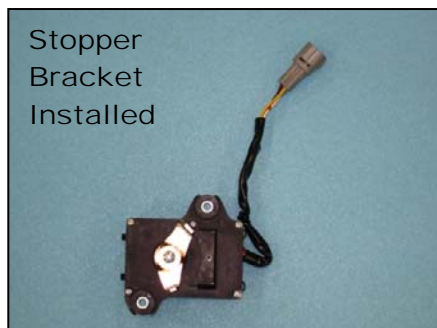
1. Remove rider seat and lift fuel tank.
2. With the ignition in the OFF position, remove the (2) bolts securing servo motor to frame. See Fig. 5
3. Completely remove exhaust valve cables from the EXCVA servo. Refer to Factory Service Manual.  
**Note: DO NOT turn on the ignition when cables and pulley is removed.**
4. While securely holding the pulley, remove pulley mounting bolt.  
**Note: Pulley must stay in original position when removing bolt to prevent damage to the internal gear of EXCVA.**
5. Using the stopper bracket provided in the kit, install bracket to EXCVA using stock bolt. Torque bolt to 5Nm. (0.5kg-m,3.5lb-ft) See Fig. 7  
**Note: The stopper bracket tabs on the ends should be pointing up when properly installed. Improper installation may permanently damage servo motor.**
6. Reinstall EXCVA onto frame using the opposite steps of removal.



**Fig. 5**



**Fig. 6**



**Fig. 7**

Dear Yoshimura Customer,

Congratulations and thank you for purchasing a Yoshimura Exhaust System. Over six decades of experience in research and development, state of the art machinery, materials and craftsmanship of the highest quality all come together in a product of exceptional quality and performance—in other words, this is the best thing you can put on your bike.

We strive to provide you with a product perfect in fit and finish. However, if you have any problems, please give us a call. We have found that most fitment issues can be easily resolved by a conversation with one of our knowledgeable and friendly staff. If the issue cannot be resolved this way, our warranty evaluation program may be the answer. Please take a moment to review our recommendations for the care of your exhaust and our warranty information.

**PLEASE NOTE:** If you have any doubts about your exhaust: **DO NOT START THE MOTORCYCLE! ONCE AN EXHAUST HAS BEEN USED OR MODIFIED, IT CANNOT BE RETURNED FOR CREDIT OR EXCHANGE.**

## EXHAUST SYSTEM MAINTENANCE

Yoshimura Exhaust Systems require very little care and maintenance; here are a few tips:

1. Use mild car/motorcycle soap to clean the exhaust system—do not use any abrasives or degreasers.
2. Clean your exhaust with metal/stainless polish every 1-2 months to retain the luster and remove dirt and grime.  
(DO NOT USE POLISH ON “WORKS FINISH” SYSTEMS)
3. Avoid contaminating exhaust surfaces when hot.
4. Your exhaust system will change color (blue, magenta, purple, and/or gold) due to heat; this is normal.
5. Keep all clamps, bolts and other fasteners tight as exhaust systems are susceptible to vibration damage.
6. If you ride in coastal regions or areas that use salt to control ice and snow, wipe the exhaust down after it cools to remove any possible salt residue, which can result in rusting.
7. If you are storing your motorcycle for the season, wipe the exhaust system down with rubbing alcohol before storage.
8. Head pipes glowing (visible in normal light) may indicate an excessively lean condition that must be corrected.

### CARBON FIBER:

Carbon fiber equipped exhaust components require special attention.

The following addresses wear issues directly related to carbon fiber:

1. Keep all clamps, bolts and other fasteners tight. Carbon Fiber is very susceptible to vibration damage.
2. Keep all chemicals and solvents away from the carbon fiber, as they will damage the finish.
3. High temperatures will cause the resin in the carbon fiber to break down. Visual signs such as an amber hue in the resin may be early signs of heat damage to carbon fiber.
4. Upon seeing amber colored resin, discontinue use. The exhaust system needs to be inspected by a representative from Yoshimura, for repack, and/or repair. Continued use will cause component failure.

### STAINLESS STEEL:

Stainless Steel is not rust proof but is less prone to rusting, staining and pitting; but it is prone to oxidation like all metals.

### WORKS FINISH:

1. Works Finish exhaust systems should never be cleaned with abrasives or polishes.
  2. Yoshimura recommends using “Bar Keepers Friend” cleaner to remove minor stains.
  3. Surface reconditioning services are available to remove scratches and undesirable discoloration due to extreme heat.
- Contact Yoshimura Tech Department at (800) 634-9166 / in CA (909) 628-4722 for more information.

## RE-PACKING TIPS

To maintain maximum sound and engine performance the muffler packing will need to be replaced at some time during the muffler's life. Yoshimura recommends repacking your muffler at least once a year.

Failure to maintain the muffler packing may cause damage to the muffler and/or void the warranty. Regularly inspect the muffler body for discoloration, cracks, rattling, or other signs of wear caused by depleted muffler packing. If muffler packing is determined to be depleted or worn, a Yoshimura muffler re-pack kit is highly recommended to restore the muffler to optimum maximum performance.

Yoshimura offers a 3-5 day turn around (plus transit time) to inspect and refurbish used and damaged mufflers.

**For more information on muffler repacking please visit our website at:**

**<http://www.yoshimura-rd.com/muffler-repacking>**

### IMPORTANT TECHNICAL NOTE

Yoshimura recommends on all race exhaust systems, that all spring joints be safety wired. Recommended wire type 304/316 stainless steel with a .032" diameter should be used.

## YOSHIMURA EXHAUST LIMITED WARRANTY

All Yoshimura R&D of America, Inc., exhaust systems carry a one-year limited warranty against defects in workmanship and/or materials.

### WHO IS COVERED?

This warranty is provided to the original purchaser of the exhaust system.

### WHAT VOIDS THE WARRANTY?

1. Abuse, misuse, improper installation and/or modifications
2. Custom applications
3. No proof of purchase at the time of warranty. Claimant must provide proof of purchase (original receipt or invoice) and a warranty authorization number (RMA) obtained from Yoshimura.
4. Finishes such as plating or painted surfaces with discoloration or rust due to inclement weather conditions, exposure to salt, exposure to chemicals, or lack of maintenance by the customer are not covered.
5. International grey-market product purchased through a dealer/distributor not authorized for your country will not be supported by this warranty.

### EXTENT OF WARRANTY:

Any defective exhaust system properly returned to Yoshimura will be repaired or replaced by Yoshimura. Yoshimura is not responsible for any other expense incurred by the customer under the terms of this limited warranty, nor is Yoshimura responsible for any damages either consequential, incidental, special, contingent or otherwise; or expenses or injury arising directly or indirectly from the use of the exhaust system. Any exhaust system returned to Yoshimura must be sent at the customer's expense along with the proof of purchase and warranty authorization (RMA). Yoshimura reserves the right to determine whether the terms of the warranty, set out above, have been properly followed. In the event that the terms are not followed this warranty is void. Yoshimura is the sole determiner of abuse, misuse, installation errors and modifications—should any of these be found, this warranty is void. The duration of any and all implied warranties are limited to the duration of the express warranty. All incidental or consequential damages are hereby excluded. The warranty gives you specific legal rights and you may have other rights, which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you.

**If you have a fitment or other problem, or are missing a part, please double-check this trouble shooting guide first:**

1. Reference your instruction sheet and double-check all drawings and instructions
2. Make sure muffler clamps are installed correctly (refer to instructions diagram). On many models, there is a right and wrong way to install. Also verify part numbers on headers and tail pipe.
3. Always make sure to install spring-mounted manifolds and flanges on cylinder head prior to installing headers.
4. Always take time to examine problems in detail.
5. When all else fails, call our technical support line at (909) 628-4722. The technical line is open 9:00am – 4:30pm Monday through Friday, Pacific Time. Please have the following information handy: Year/Make/Model of motorcycle, date of purchase, place of purchase, batch dates and part numbers (found on header and tail-pipe components).
6. Also, feel free to ask through online e-mail at [sales@yoshimura-rd.com](mailto:sales@yoshimura-rd.com), or fax your question/problems to (909) 591-2198.

**To obtain technical information directly from Yoshimura, call (909) 628-4722.**