

# **YOSHIMURA**

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### PERFORMANCE EXHAUST SYSTEM

BMW 51000R S1000RR

1530000220

R-77 Stainless Steel Full-System





## THIS PRODUCT IS DESIGNED FOR USE IN CLOSED COURSE RACING AND IS NOT INTENDED FOR ANY OTHER USE.





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.



# Assembly Diagram \*A: For use when stock passenger footpeg is removed. \*B: For use with stock passenger footpeg.

NO.	DESCRIPTION	QTY	PART #
1	Stainless Manifold	4	15300SDM
2	Stainless Flange	4	15300SDR
3	Stainless Header	1	15201-404
4	Stainless Tailpipe	1	15201-419
5	Yoshimura R77 Carbon Muffler	1	CRR77F126W
6	Medium Exhaust Spring	16	RACE-SPS-1
7	Muffler Clamp	1	1520-MPCR
8	8mm x 40mm Socket Bolt	1	M8X40
9	8mm X 35mm Socket Bolt	1	M8X35
10	Aluminum Muffler Hanger Bracket	1	1520ABF-B
11	Stock Footpeg Bracket	1	1520-SHB-00
12	Rubber Grommet	2	Z1022
13	Aluminum Insert	2	ALS-003
14	8mm x 30mm Hex Head Bolt	1	M8X30HX

S = Stock

\* = Optional

NO.	DESCRIPTION	QTY	PART #
15	Aluminum Spacer Insert	1	ALS-010
16	8mm Large Washer	2	8MMWASHERL
17	8mm Flange Nut	2	8MMNUT
18	Countersink Washer	1	M8ALCSW-00
19	8mm x 20mm Button Head Screw	2	M8X20BHS
20	8mm x 25mm Flange Bolt	1	M8X25H
21	O2 Sensor Plug (M18)	1	M18X13PLG
*22	O2 Sensor Plug (M12) -optional-	2	M12X8H
*23	M12 Copper Washer -optional-	2	12MMCW
**	Muffler Clamp Heat Shield	1	HT SHLDR77
**	Low Volume Insert Kit	1	INS-04-K
**	Yoshimura Vinyl Sticker	1	17029
**	Spring Tool	1	ST-200

 $<sup>^{\</sup>star}\,$  Optional if stock O2 sensor is not used.  $^{\star\star}$  Not shown in diagram.

### Removal

- 1. Loosen muffler clamp behind heatshield.
- Remove the muffler mount bolt securing the stock muffler assembly to rearset and carefully remove by sliding toward the rear.
- 3. Disconnect and remove exhaust valve cables from the stock exhaust and servo motor.

Note: Servo motor MUST remain connected to the vehicles electronic system in order to prevent a malfunction indicator light from being displayed.

- 4. Remove the radiator and oil cooler support bracket.
- 5. Remove the two O2 sensors from the stock header.
- 6. Remove the two bolts securing the stock header to the frame.
- 7. While securely supporting the stock header, remove the header nuts and carefully remove the stock header.

Note: The stock exhaust port gaskets will be reused with the Yoshimura exhaust system. Inspect and replace if necessary.

### **Footpeg Option**

This Yoshimura exhaust system allows for the option of using the included aluminum muffler hanger bracket which replaces the stock passenger footpeg or to utilize the stock passenger footpeg in conjunction with the included bracket adapter.

### A. Yoshimura Aluminum Muffler Hanger Bracket

- Remove left and right passenger footpegs by removing the two bolts securing footpeg brackets to the subframe.
- Install Yoshimura aluminum muffler hanger bracket onto right side of subframe and secure using supplied hardware as shown in the diagram.

### B. Stock Passenger Footpeg

- 1. Remove the cotter pin below the right footpeg to remove the footpeg pin.
- 2. Carefully remove the stock footpeg making sure not to lose the detent ball and spring during removal.
- 3. Install provided hex head bolt through the stock footpeg bracket.
- 4. Install supplied footpeg bracket behind footpeg using the supplied nut. See diagram for proper orientation.
- Re-install footpeg using the opposite steps of removal.

### Installation

1. Install (No. 1,2) 15300SDM / 15300SDR, manifold and flange onto exhaust ports using the stock header nuts. Torque header nuts to factory specification. See below for flange orientation.

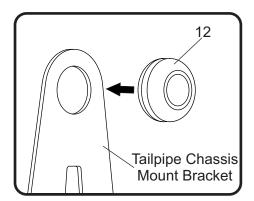
Note: Hook exhaust springs onto flange to ease installation when securing to header.



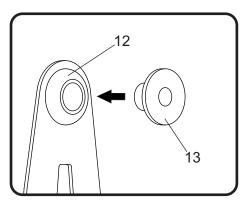
2. Install (No. 3) 15201-404, header onto (No. 1) 15300SDM, manifold by inserting header tubes onto manifold starting from one side to the other.

Note: Verify that all header tubes are fully seated onto manifold and install (No. 6) *RACE-SPS-1*, medium exhaust springs.

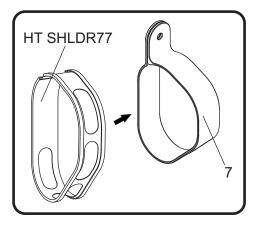
3. Install (No. 12) *Z1022*, rubber grommet into tailpipe chassis mount bracket.



4. Install (No. 13) *ALS-003*, aluminum spacer into (No. 13) *Z1022*, rubber grommet as shown.



- 5. Install (No. 4) 15201-419, Yoshimura tailpipe by sliding over header outlet and secure tailpipe bracket to frame using the provided (No. 20) M8X25H, 8mm flange bolt and (No. 16) 8MMWASHERL, 8mm large washer. Do not torque at this time.
- 6. Install (No. 6) *RACE-SPS-1*, medium exhaust springs between header and tailpipe connection.
- 7. Install HT *SHLDR77*, muffler clamp heatshield onto the inside of (No. 7) *1520-MPCR*, muffler clamp.



- 8. Install (No. 5) *CRR77F126W*, Yoshimura muffler onto (No. 4) *15201-419*, Yoshimura tailpipe.
- 9. Slide (No. 7) 1520-MPCR, muffler clamp over (No. 5) CRR77F126W, Yoshimura muffler and align to either **Option A** with the aluminum muffler hanger bracket or **Option B** with the stock footpeg bracket. See diagram for proper orientation and order of hardware.

Note: **Option A** requires (No. 13) *ALS-003*, thinner aluminum spacer and **Option B** requires (No. 15) *ALS-010*, thicker aluminum spacer.

- Secure (No. 5) CRR77F126W, Yoshimura muffler to muffler hanger bracket using (No. 8/9) M8X40 / M8X35, socket head bolt and (No. 18) M8ALCSW-00, countersink washer. See diagram for proper orientation and order of hardware.
- 11. Torque muffler mount bolt to factory specification.
- 12. Install (No. 6) *RACE-SPS-1*, medium exhaust springs between muffler and tailpipe connection.

13. Torque (No. 20) *M8X25H*, tailpipe bracket bolt to factory specification.

Note: Install (No. 21) *M18X13PLG*, O2 sensor plug if additional O2 sensor will not be used.

14. Re-install the two stock O2 sensors into header. Torque to factory specification.

Note: If the stock O2 sensors will not be used, install (No. 22, 23) *M12X8H* and *12MMCW*, O2 sensor plug and copper washer.

- 15. Re-install the radiator and oil cooler support bracket using the reverse steps of removal.
- 16. Before starting vehicle, check for proper clearance between new exhaust system and rear suspension (i.e. tire, swingarm, brakes, rear shock, 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.
- 17. 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.

Note: After starting vehicle, it is normal for new exhaust system and muffler to emit smoke until oil residue burns off.