



# YOSHIMURA

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## RACE SERIES

Qualified Manufacturer Declared "Modified Part"

**2017~2019**

**KTM  
RC390**

**2017~2019**

**KTM  
390 Duke**

**16381CJ520 (SS/CF)**

**163815J720 (Ti/CF)**

**R-77 3/4 System**

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



Race Series systems are:

- NOT CARB/EPA tail-pipe emissions compliant.
- NOT street legal.
- For "Closed Course Competition" use only.

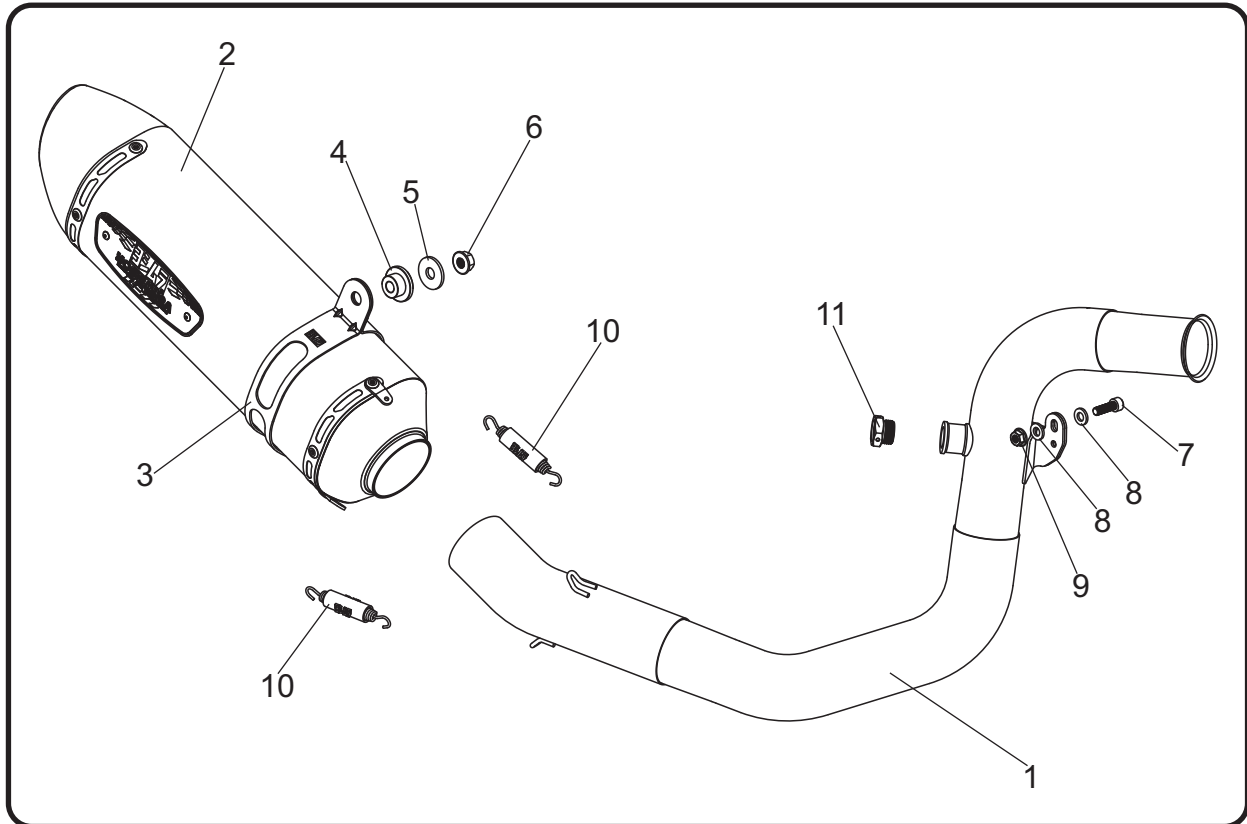


*You must know how to remove and replace your stock exhaust in order to install this product otherwise have it installed by a professional mechanic. Keep all stock parts from your existing system as some components may be necessary to install your new Yoshimura exhaust depending on the application. Read 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.*



NOTE: IN THE STATE OF CALIFORNIA, IT IS ILLEGAL TO MODIFY THE EMISSION CONTROL SYSTEM, WHICH INCLUDES THE CARBURETORS OF ANY VEHICLE.

## Assembly Diagram



No.	Item	Description	Qty.
1	16381-410 16381-710	Yoshimura Stainless Steel Midpipe Yoshimura Titanium Midpipe	1
2	SRR77M12AD CRR77M12AD	Yoshimura Stainless Steel Muffler Assembly Yoshimura Carbon Fiber Muffler Assembly	1
3	YM7M-MPCAX YM7M-MPCA	Muffler Clamp for Stainless Steel Muffler Muffler Clamp for Carbon Fiber Muffler	1
4	16381-SPCR	Muffler Spacer	1
5	8MMWASHERL	8mm Large Washer	1
6	8MMNUT	8mm Flange Nut	1
7	M6X20	6mm x 20mm Socket Head Cap Screw	1
8	6MMWASHER	6mm Washer	2
9	M6X1HN	6mm Flange Nut	1
10	RACE-SPL-1	Long Exhaust Spring	2
11	M18X9PLG	O2 Bung Plug	1
**	HT SHLDR77	Muffler Clamp Heat Insulator	1
**	INS-20-K	Low Volume Sound Insert	1
**	ST-200	Spring Puller Tool	1
**	17029	Sticker Sheet	1

\*\* Not shown on the diagram.

**CAUTION:** 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.

**WARNING:** Always properly support vehicle with a stand and/or lift when servicing or performing any work. Unstable vehicles may present dangerous conditions and may cause property damage and/or personal injury.

**NOTE:** Read through all instructions before beginning installation.

## Removal

1. Loosen and remove the stock exhaust clamp between pre-muffler chamber and muffler tailpipe connection.  
  
Note: The stock exhaust clamp will not be used with the Yoshimura 3/4 system.
2. While securely supporting the stock muffler assembly, remove muffler mount bolt and carefully remove the stock muffler.
3. Loosen and remove the exhaust clamp between the catalytic converter and the upper pre-muffler chamber. Remove the two upper bolts and one lower bolt securing the pre-muffler chamber to frame and carefully remove the pre-muffler chamber.

Note<sup>1</sup>: For RC390, removal of the left and right lower fairing and the rear belly pan bracket is required to lower the pre-muffler chamber. Follow steps in Factory Service / Owners Manual for proper procedure.

Note<sup>2</sup>: The two upper clip nuts attached to the frame for the pre-muffler chamber will not be used with the Yoshimura 3/4 system. Remove from frame.

4. Loosen and remove the exhaust clamp between the header and catalytic converter. Carefully remove the catalytic converter from the stock header.

Note: The stock exhaust clamp and gasket will be re-used with the Yoshimura 3/4 system. Inspect and replace if necessary.

5. Remove the stock spacers and rubber bushing from muffler mount bracket as they will not be used.

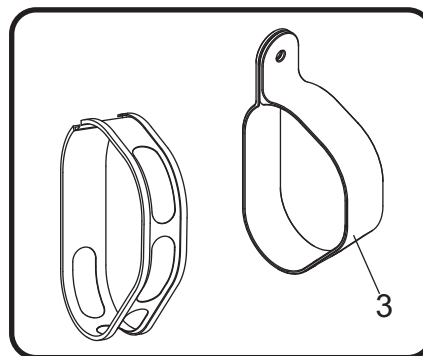
## Installation

1. Carefully route and install (No. 1) 16381-410/710, midpipe through stock location and install onto header outlet using the stock exhaust clamp. Align midpipe chassis mount bracket to the backside of the chassis mount. Secure using (No. 7) M6X20, 6mm socket head screw and (No. 8,9) 6MMWASHER, two 6mm washers and (No. 9) M6X1HN, 6mm flange nut. Do not torque at this time.

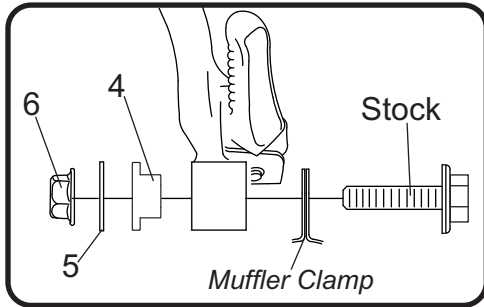
Note<sup>1</sup>: If aftermarket O2 sensor will not be used, install (No. 11) M18X9PLG, O2 sensor plug.

Note<sup>2</sup>: Loosening header nuts may ease alignment of midpipe chassis mount bracket to the backside of the frame. Torque header nuts to factory spec after desired alignment is achieved.

2. Install HT SHLDR77, muffler clamp heat insulator onto (No. 3) YM7M-MPCA(X), muffler clamp.



3. Install (No. 2) muffler, onto (No. 1) 16381-410/710, midpipe outlet.
4. Install (No. 4) 16381-SPCR, muffler spacer into muffler mount bracket where the stock rubber bushing was removed. Slide (No. 3) YM7M-MPCA(X), muffler clamp over muffler and align to the frontside of muffler bracket. Secure using the stock bolt, (No. 5) 8MMWASHERL, 8mm washer, and (No. 6) 8MMNUT, 8mm flange nut as shown below. Torque to factory specification.



5. Install (No. 10) *RACE-SPL-1*, long exhaust springs between tailpipe and muffler using *ST-200*, spring puller tool supplied in the kit.
6. Torque stock exhaust clamp to factory specification.
7. Torque (No. 7) *M6X20*, 6mm socket head screw to 9.5 Nm (0.95 kg-m, 7 ft-lb).
8. For RC390, re-install the left and right lower fairing and the rear belly pan bracket using opposite steps of removal.
9. 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.
10. 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 motorcycle, it is normal for new exhaust system and muffler to emit smoke until oil residue burns off.

## Works Finish Care & Maintenance

Before starting vehicle, clean pipe thoroughly using a soft cloth and rubbing alcohol to remove any oil and finger prints.

The color of the exhaust will change once the system has gone through a heat cycle of 15 minutes or more. Color will vary depending on lean/rich conditions.

Clean using a soft cloth and soap. Do not use abrasive materials as it will scratch the surface.

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.