



# YOSHIMURA

RESEARCH & DEVELOPMENT OF AMERICA, INC.

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[www.yoshimura-rd.com](http://www.yoshimura-rd.com)

## **RS-3 OVAL PERFORMANCE EXHAUST SYSTEM**

**POLARIS  
'03-04  
PREDATOR**

**2550602-5A**

STAINLESS STEEL COMPETITION SLIP-ON SYSTEM WITH CARBON FIBER

NOTE: THIS SYSTEM IS DESIGNED FOR USE IN CLOSED COURSE COMPETITION AND IS NOT INTENDED FOR ANY OTHER USE.



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



**CAUTION:** The muffler packing on this system **MUST** be replaced every 6-8 hours of use, or after each moto. Failure to follow recommended muffler re-packing interval can cause muffler damage and may void the warranty.



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

**Caution:** Exhaust system can be extremely hot. Let motorcycle cool down before beginning installation.

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

## Tools Needed:

- 1/2" socket
- 1/2" wrench
- T25 Torx Wrench
- 3/8" ratchet and extension
- Torque wrench

## Installation Steps:

- 1 Remove seat. (See Fig.1)

**NOTE:** This system uses the stock heat shield mounting hardware. When removing stock exhaust, set aside this hardware for later re-installation ease.

- 2 Unbolt and remove right side plastic side cover. (See Fig.2)
- 3 Remove threaded spring clips from stock header heat shield mounts and install threaded spring clip and stock heat onto Yoshimura header.
- 4 Loosen header to tailpipe collector clamp.
- 5 Unbolt and remove stock muffler. (See Fig. 3)
- 6 Remove heat shield and threaded spring clips from stock tailpipe. Install threaded spring clips and heat shield onto Yoshimura tailpipe with muffler using the stock hardware.
- 7 Place supplied collector clamp onto Yoshimura tailpipe. Install tail-pipe with muffler onto header.

**NOTE:** This system does not use the stock collector gasket. If this gasket sticks to the header it must be removed.



Fig. 1

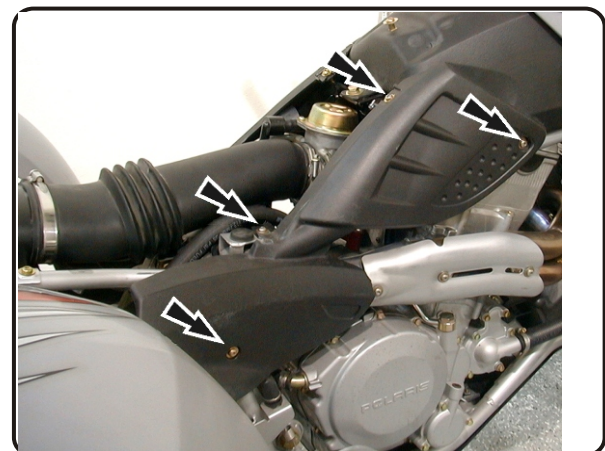


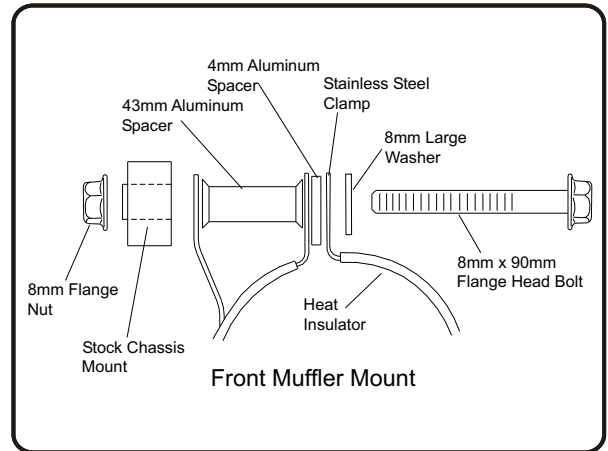
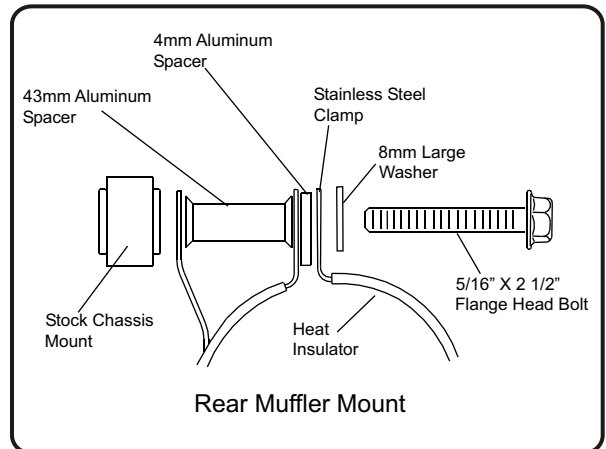
Fig. 2



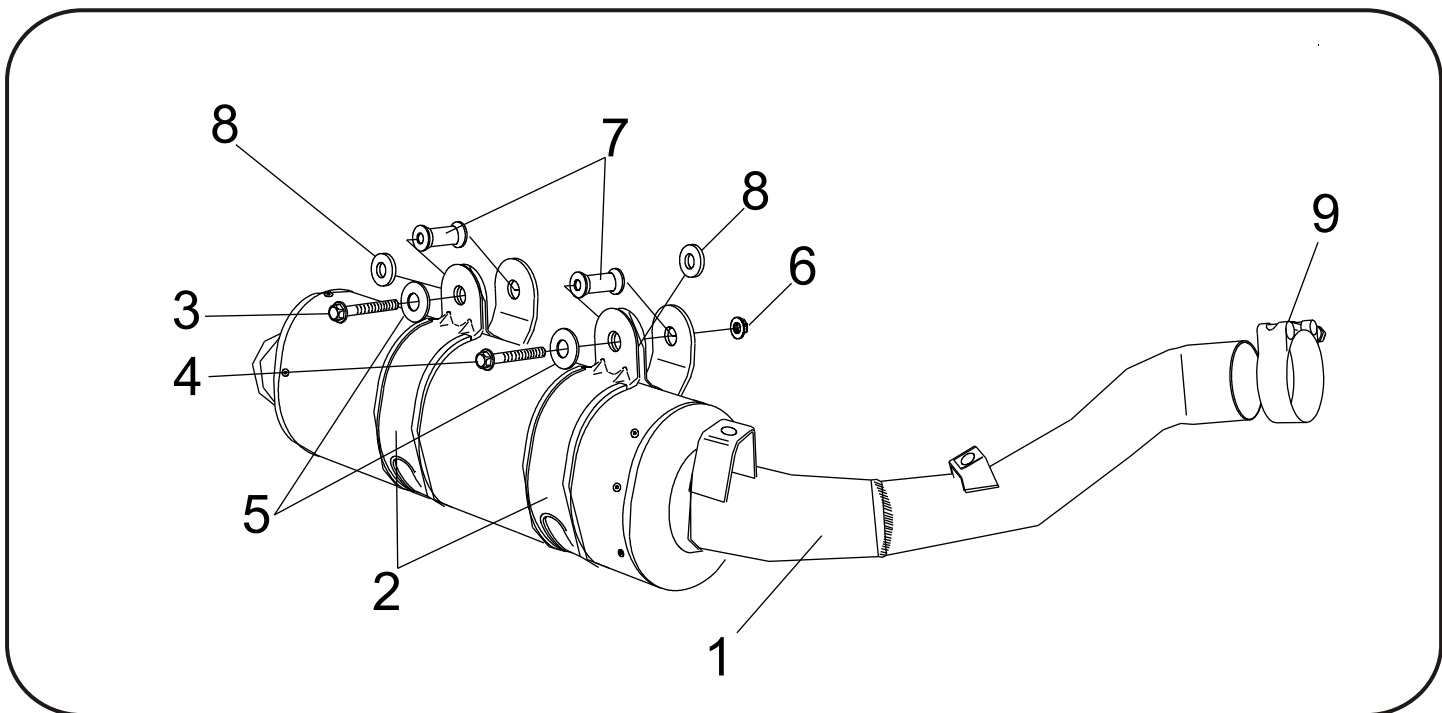
Fig. 3

- 8 **Insert supplied muffler clamp heat insulators into muffler clamps. Slide muffler clamps onto muffler.**
- 9 **Bolt muffler clamps to stock chassis mounts using supplied bolts, washers, spacers and nut. (See Fig. 4 & 5)**
- 10 **Torque muffler mount bolts to 2.5 kg-m (18 lb-ft).**
- 11 **Torque collector clamp to .25 kg-m (9 lb-ft)**
- 12 **It is recommended that the exhaust system 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.**
- 13 **Before starting engine check for proper clearance between new exhaust system and chassis body work or any moving parts. (i.e. rear brake, frame, tire, etc.)**
- 14 **Re-install plastic side cover and seat.**
- 15 **Check for proper clearance between bodywork and new exhaust - the plastic side cover may need to be adjusted. If any problem is found, please carefully follow through the installation steps again. If problem still persists, please call Yoshimura tech. dept. at (800)634-9166 / in CA (909)628-4722**

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

**Fig.4****Fig. 5**

**#2550602-SA**

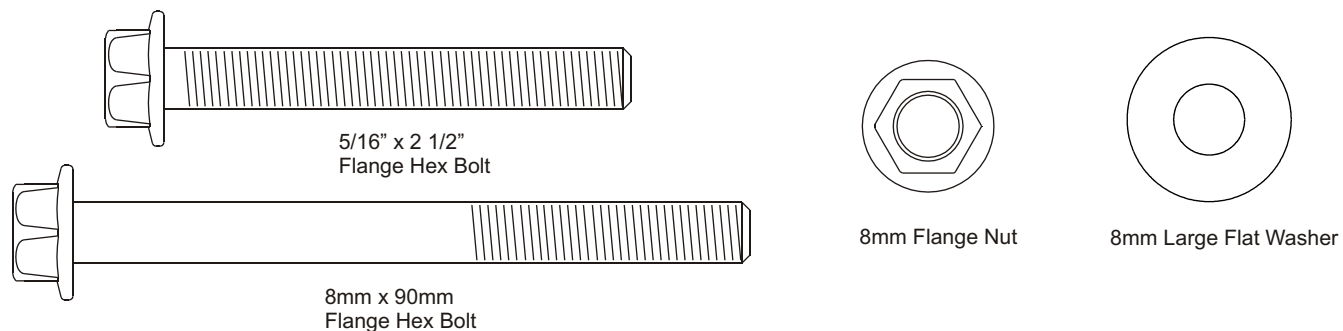


Parts Diagram

NO.	DESCRIPTION	QTY	PART #
1	Yoshimura Tailpipe with RS-3 YRD Muffler	1	**
2	Stainless Steel Muffler Clamp	2	COS400S8ASD
3	5/16" X 2 1/4" Flange Head Bolt	1	S5/16X2.25 HEX
4	8mm X 90mm Flange Head Bolt	1	M8X90H
5	Large Washer	2	8MMWASHERL
6	8mm Flange Nut	1	8MMNUT
7	43mm Aluminum Spacer	2	8MMFS
8	4mm Spacer	2	8X4SPCR
9	Exhaust Clamp	1	200-62
**	Muffler Clamp Heat Insulator	2	HT SHLD-14A
**	Yoshimura Vinyl Sticker	2	17028

**Jetting Recommendations:**  
 With no sound inserts installed in endcap:  
 Raise needle by lowering clip 1-2 positions

**Nuts and Bolts Guide (Actual Size):**







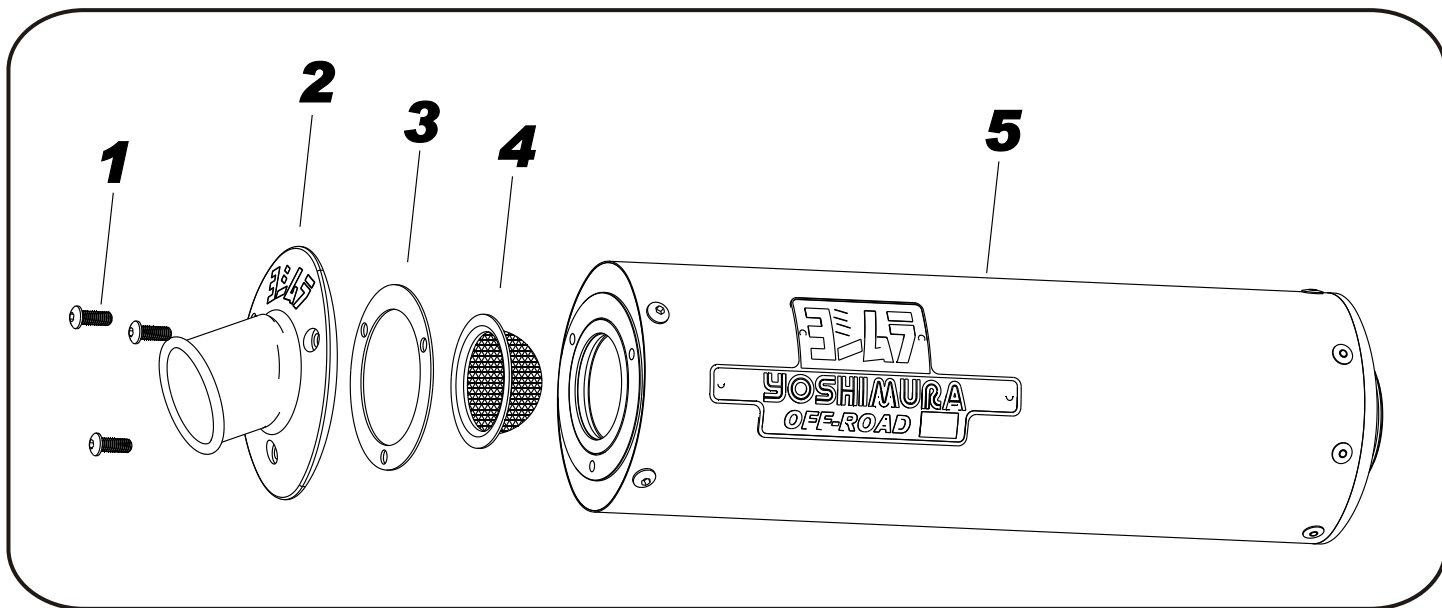
# YOSHIMURA

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## TEC-SA Spark Arrester Cleaning Information



Parts Diagram

**Caution:** *Muffler can be extremely hot. Let muffler cool down before removing spark arrester.*

**Note:** *Read through all instructions before beginning disassembly.*

### Tools Needed:

4mm Allen Key  
Wire Brush  
Pair of Gloves  
Safety Glasses

### Cleaning Steps:

1 Using a 4mm Allen key remove the three 6mm x 16mm Button Head Screws located in the muffler end cap. (See Parts Diagram for location)

2 Remove the end cap, gasket and spark arrester from the muffler.

NO.	DESCRIPTION	QTY
1	6 x 1.0mm x 16mm Button Head Screw	3
2	4.0" YRD End Cap, Cover	1
3	T.E.C. End Cap, Gasket	1
4	T.E.C. End Cap, Spark Arrester	1
5	Muffler Assembly	1

3 Using a wire brush remove carbon deposits from spark arrester screen. Once clean inspect the screen for excessive wear or damage, if any is found the spark arrester must be replaced. Cleaning and inspection should be performed after every 60 hours of use.

(Caution: Gloves and Safety Glasses should be worn while cleaning spark arrester.)

4 Re-install spark arrester, gasket, end cap and 6mm x 16mm screws into muffler assembly. Torque screws to 1.0 kg-m (7.3 lb-ft)

(Note: It is recommended that a low strength "Loctite" is used on the screws.)