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INSTALLATION INSTRUCTIONS FOR BROCK'S PERFORMANCE ZX-10R (11-13) ALIEN HEAD 2™ OR SHORTMEG 2™ FULL EXHAUST SYSTEM

The Alien Head 2™ or ShortMeg 2™ System for the ZX-10R (11-13) is a high performance 4-2-1 exhaust system that replaces the stock headers, catalytic converter, and muffler.

STEP 1: Check Package Contents: The Alien Head 2™ or ShortMeg 2™ System is shown (Figure 1). The package contents include:

1. Four Header-Mounting Flanges
2. One Right Side And One Left Side Header
3. One Secondary Collector
4. Package Containing Springs, Spring Puller, and One Black PAIR Valve Block-Off Cap, One Small Bracket, One Large Bracket, 1 M8 x 16mm Bolt, 1 M8 x 20mm Bolt, 1 M8 x 35mm Bolt, 1 M8 x 70mm Bolt, with all necessary Nuts and Washers.
5. One Alien Head 2™ or ShortMeg 2™ Muffler
6. One Tube of Permatex™ Ultra Copper® Sealant
7. One Packet Containing Instructions and Supplemental Information

If any parts are missing, please contact Brock's Performance.

Figure 1



Note: A slight ovaling of the tubing can occur during the manufacturing process, this is normal. A twisting motion may be required during assembly/disassembly.

STEP 2: Pre-Assemble Headers and Collector to Ensure Proper Fit Between All Parts: The pre-assembled system is shown (Figure 2). Pre-assembly helps to detect any potential shipping damage and ensures that all parts fit properly. Apply WD-40® to the pipe joints to ease assembly, adjustment, and especially disassembly.

Figure 2



Caution: During all steps below, the fairings should remove with ease. If you feel resistance, stop and assess the situation before continuing.

STEP 3: Remove Lower Side Fairings: The locations of the bolts and quick rivets holding the fairings in place are illustrated (Figure 3, 4, 5, and 6). Details are provided below:

- Two quick rivets are located in the lower nose of the front fairing, behind the front tire, and hold the left and right panels together. Using a thin blade screwdriver lift the center of the larger rivet head at location 1 (Figure 3) and then pull the rivet from the bodywork. Use a pin or small hex head wrench to push the center of the smaller quick rivet inward at location 2 (Figure 3) and remove the rivet using a small flat head screwdriver. This will release the right panel from the left panel.
- Remove the three quick rivets at location 3, 4, and 5 (Figure 4) using the previous method on both sides.
- Remove the lower side fairing fasteners & washers at locations 6, 7, 8, & 9 (Figure 5).
- The lower side fairing is now connected to the upper side fairing and front nose fairing with only tabs and slots (Figure 6). Gently pull the lower side fairing outward from the bike, starting at the rear, to separate it from the front nose fairing.
- Repeat for the left side lower fairing.

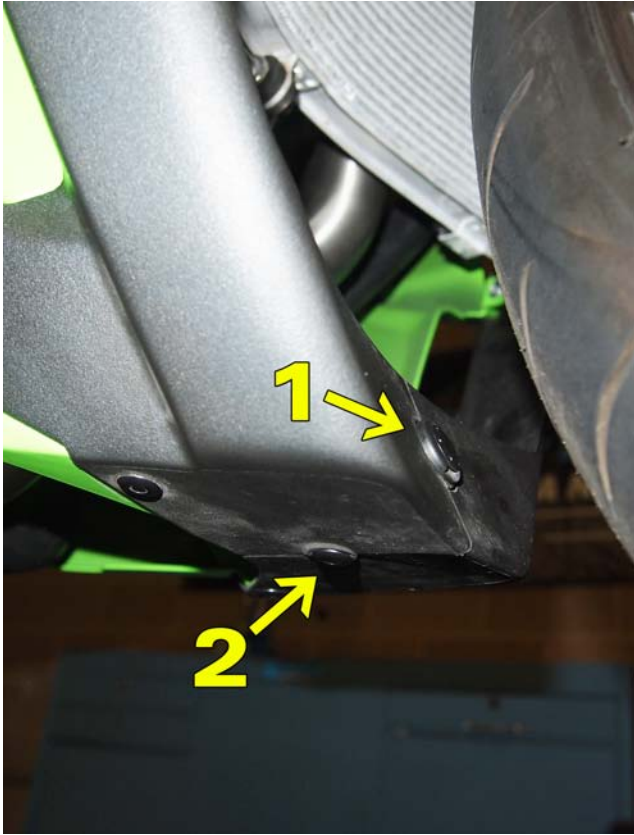


Figure 3

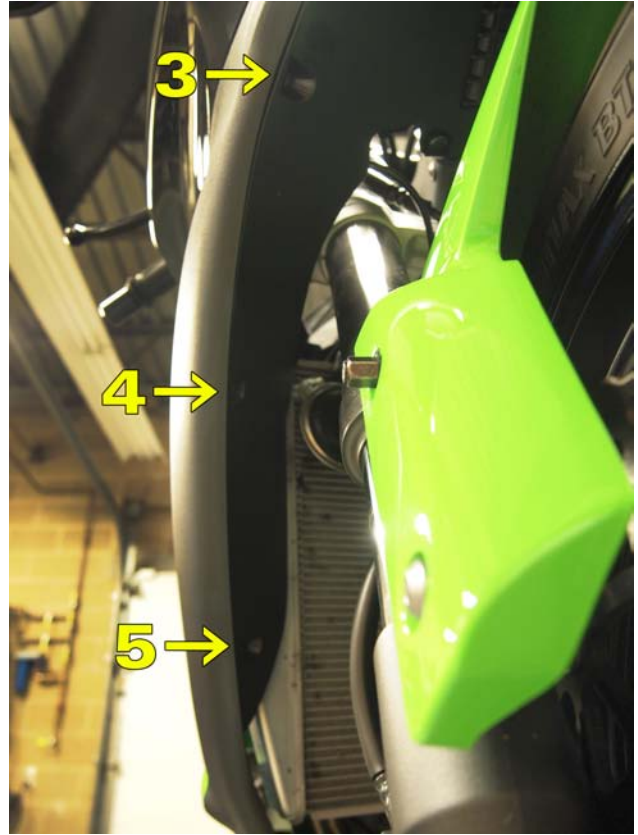


Figure 4



Figure 5

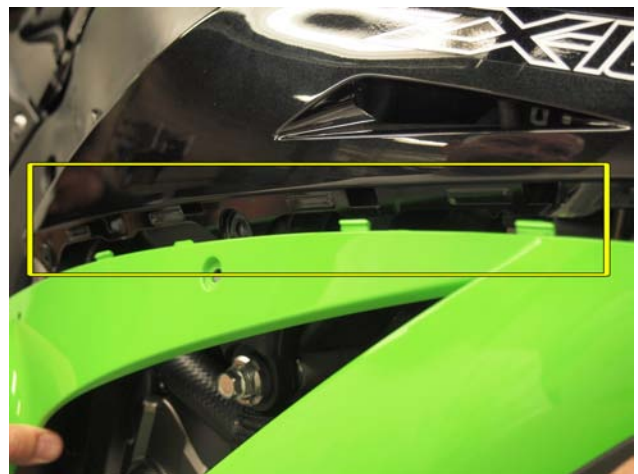


Figure 6

STEP 4: Remove the Stock Muffler:

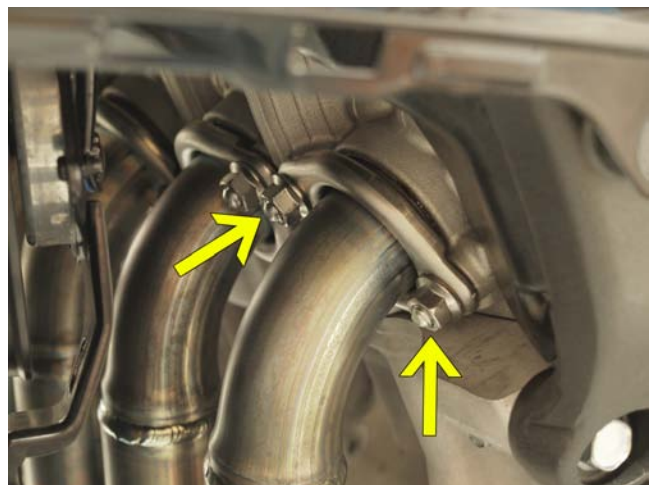
- Remove the 2 bolts connecting the heat shield to the muffler.
- Remove the heat shield from the muffler.
- Loosen the clamp between the muffler and catalytic converter.
- Remove the passenger foot peg bolt.
- Pull the muffler body to the rear to release it from the catalytic converter.

STEP 5: Remove the Stock Catalytic Converter:

- Disconnect the servo cables from the servo motor located under the passenger seat. These cables will be removed with the stock muffler. Do not remove or disconnect the servo motor.
- Loosen the clamp between the catalytic converter and headers.
- Remove the bolt holding the catalytic converter to the frame.
- Pull the catalytic converter to the rear to release it from the headers.

STEP 6: Remove the Stock Header Assembly: The procedure described below does not require removal of the radiator. However, the fit is tight, and care should be taken to avoid damage to the radiator.

- Locate the lower radiator bracket that connects the radiator to the center of the engine block. Remove the bolt (6 x 22mm) from the bracket supporting the lower portion of the radiator (Figure 7). This will allow you to gently ease the radiator forward for additional clearance when removing the headers.
- Remove the header nuts. Use of an extension will allow easier access to the header bolts. There are two bolts per header tube (Figure 8). Once the bolts are removed do not allow the header flanges to fall and contact the radiator.
- Once all bolts are removed, carefully remove the header from the engine.

**Figure 7****Figure 8**

STEP 7: Install the Header-Mounting Flanges:

Install the four header-mounting flanges in the orientation shown (Figure 9*) reusing the OEM nuts and gaskets. **Note:** The #1 header flange must be installed with the spring tabs on top, which will be opposite of the other three header flange positions with spring tabs on the bottom. Only 1 spring will be used for each header tube, spring locations shown (Figure 9*).

***Note:** View in figure 9 is shown as if you were standing in front of the bike looking at the engine.

Do not completely tighten the nuts. Leaving them finger tight will allow easier adjustment when the header pipes are fitted. The nuts will be fully tightened after the header pipes are installed.



Figure 9 ----->

STEP 8: Install the Header and Collector Assembly:

Install the right-side header, left-side header, and then secondary collector. With header assembly now installed onto the mounting flanges, tighten the mounting flange nuts enough to keep the flanges from moving. Remove the header assembly and torque the flange nuts. Do not over tighten. Max recommended torque is 10 ft-lb. Now attach the springs to the header mounting flanges in the positions shown (Figure 9).

Prior to final installation of the headers, apply a very thin layer of Permatex™ Ultra Copper® to the inside of each head pipe, no further than 1/2" into the pipe. This will ensure a high temperature seal is created. Be careful to avoid contact with the radiator while installing the header pipes. Install header pipes onto flanges as far as they will go, then connect the springs to spring tabs on the headers using the supplied spring puller (Figure 10). 'Wiggling' the entire assembly with the springs installed will pull the pipes into their final location.

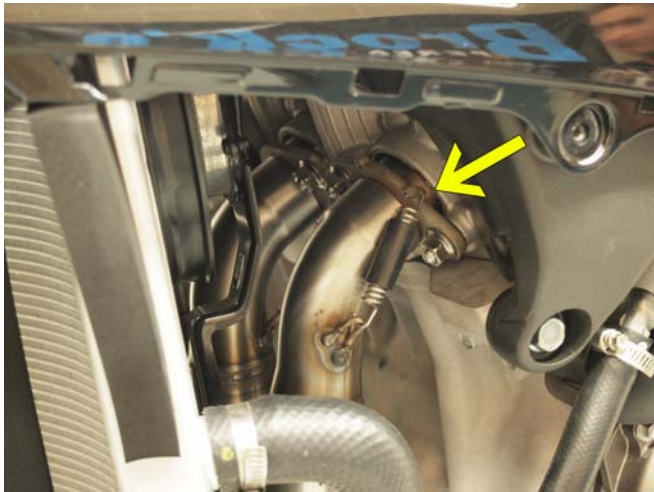


Figure 10 ----->

Install the smaller bracket in place of where the catalytic converter used to be held using the supplied M8 x 70mm bolt (Figure 11 & 12). Once this bracket is installed the collector will mount to this bracket. Install the secondary collector onto to the header pipes. Use the spacer provided in the kit to place between the collector mounting tab and the bracket, mount using the supplied M8 x 35mm bolt (Figure 11 & 12). Hand-tighten the collector to the mounting bracket for now. The following figures show the properly installed assembly. Attach the springs holding the secondary collector to the headers. There is a tight fit between the bottom of the header assembly and the oil filter but the two parts should have adequate clearance so that no contact is made. Adjust as required.

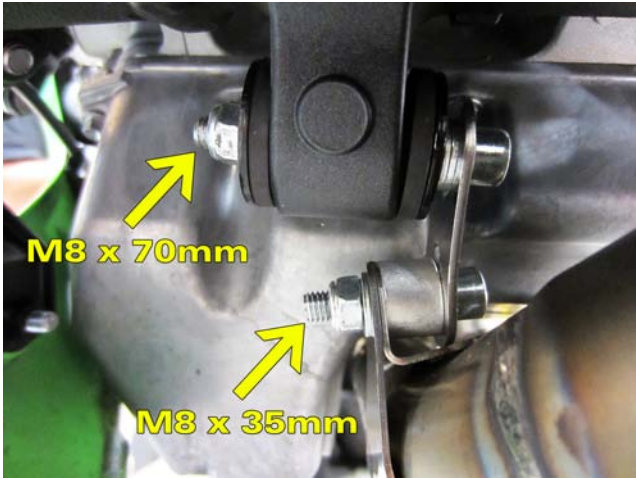


Figure 11



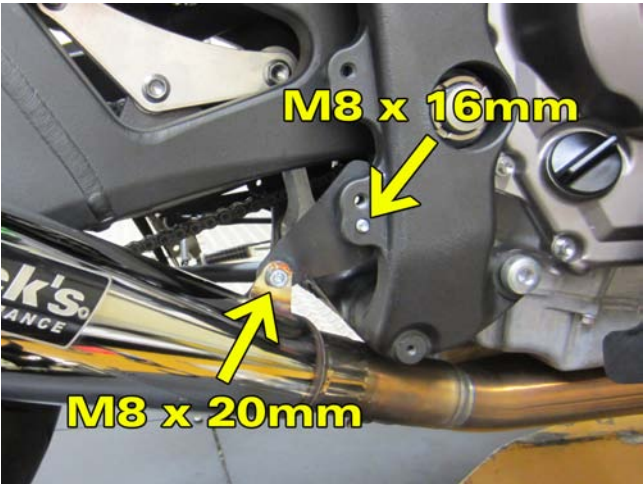
Figure 12

STEP 9: Install Muffler (Figure 13)

- Install the larger mounting bracket prior to installing the muffler. The bracket goes on the inside of the frame behind the rear set (foot peg) and is held in place by installing the supplied M8 x 16mm bolt from the inside as well. The bolt will be installed in the bottom rear set mounting hole. The rear set has been removed for clarity (Figure 13).
- Install the muffler onto the collector. Adjust as necessary to ensure that the mounting bracket lines up with the muffler mounting tab. Insert the supplied M8 x 20mm bolt through the muffler tab and mounting bracket and hand tighten. Install the spring holding the muffler to the collector. 'Wiggle' the system to insure fitment and then tighten the bolt holding the collector to the smaller bracket. Finally, tighten the bolt holding the muffler to the larger bracket.
- Torque the muffler-mount bolt to 34 N-m or (25 ft-lb). Reattach the radiator to the lower radiator bracket with the OEM (6x22mm) bolt and torque to 9.8 Nm or (87 in-lb).
- Re-install the fairings in the reverse order that they were removed.

(See Caution On The Next Page.)

Figure 13 ----->



Caution: Failing to follow the steps below may result in damage to your bike!

DO NOT START BIKE UNTIL FAIRINGS HAVE BEEN INSTALLED AND YOU HAVE ENSURED A MINIMUM ¼-INCH CLEARANCE BETWEEN THE EXHAUST COMPONENTS AND ALL BODYWORK.

Failure to ensure proper clearance may result in burned plastic. Brock's Performance exhaust systems are designed to provide appropriate clearances. If minimum clearances are not obtained, remove the springs on the exhaust system and adjust until proper clearance is achieved. *It is also recommended that the entire exhaust system be wiped down with rubbing alcohol to remove oil and fingerprints before starting the bike. This will help prevent tarnishing of the finish after the bike has been started and the exhaust is heated up.*

CONGRATULATIONS! INSTALLATION IS COMPLETE.



All Brock's Performance products are designed for closed-course racetrack use ONLY!

For more information on Brock's Performance Warranty and Terms and Conditions: www.BrocksPerformance.com
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For Questions and Comments: www.BrocksPerformance.com > Customer Service > Contact Us
or call the Tech Line 937-912-0054