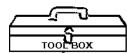


INSTALLATION AND OWNER'S MANUAL Exhaust Kit Z4000 for use with

R1150RT, R1100RT, R1100RS, R1100RT, R1100R, R1100GS

PARTS LIST

Index	Description	Qtv.
1	Muffler Assembly	1
2	Connecting Pipe	1
Parts Bag 40-400007-000		
3	Clamp	1
4	Cover, Retainer Spring	2
5	Retainer Spring	2
6	Sealant Packet	1
Parts Bag 40-400008-000		
7	Nut, M10, Locking	1
8	Screw, M10 x 12	1
9	Screw, M10 x 20	1
10	Washers	3
11	Adapter Bracket, Short	1
12	Adapter Bracket, Long	1
13	Warranty Card	1



Wrench, 15mm
Wrench, 17mm
Wrench, 22mm or 7/8"
Spring Puller
Hex Key Wrench, 8mm
Socket, 13mm and Wrench
Short Extension for 13mm Socket
Hex Key Wrench, 3mm
Torque Wrench

NOTE: Warranty Card, item 13 must be completed and mailed back to National Cycle, Inc.

NOTE: Right and Left side of Motorcycle is determined while sitting on the bike.

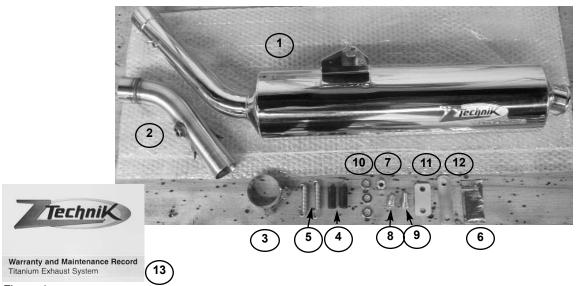


Figure 1

THE "DB KILLER"

The Z4000 Exhaust System contains a removable baffle at the outlet end. Removal of the baffle will increase the noise level by about 4 dba and will increase high rpm power. To remove the "DB Killer" remove the retaining screw at the bottom of the Muffler outlet. Tightly grab the center tube of the "DB Killer" with locking pliers (Vise-Grip). Tap the locking pliers with a small hammer to pull the baffle out of the Muffler. The more miles on the system, the harder it is to remove the "DB Killer".

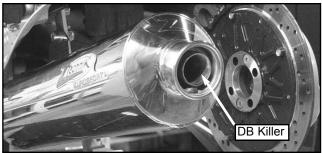


Figure 2.

PREPARATION:

- 1. Complete Warranty Card, item 13 and send to ZTechnik.
- **2.** Position the motorcycle securely on its center (main) stand or a work stand.

Note: Retain all fasteners for use during re-assembly. Keep fasteners from the area of the motorcycle which they were removed separate, by placing them in individual bags or containers.

R-RT's Only: Remove the front spoiler (belly pan) (3mm Hex Key). Figure 3.

3. Fully loosen the nut on the clamp (the clamp is hidden by the right side body trim panel) that holds the muffler assembly to the head pipe (15mm Wrench). Figure 4.

Note: A block of wood about 10.5" high inserted under the exhaust prior to disconnecting the muffler hanger bracket will support system for removal. Figure 5.

4. Remove the screw (A) from the rear muffler hanger (8mm hex key). Figure 6.



Figure 3.

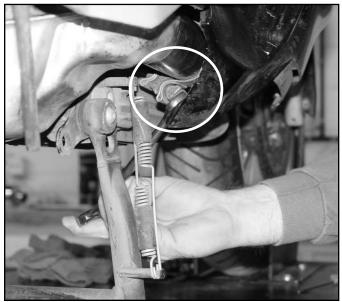


Figure 4.



Figure 5

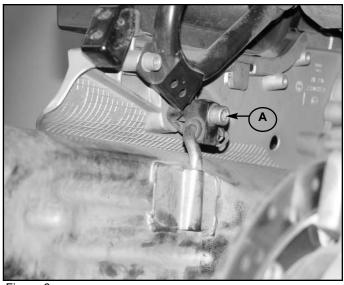


Figure 6

- **5.** Carefully pull the muffler rearward to remove it from the head pipe. **Figure 7.**
- 6. Be careful not to damage the Lambda Sensor or its wires.
- 7. Remove the Lambda Sensor from the muffler (22mm wrench). Figure 8.
- 8. Remove the muffler assembly.

INSTALLATION

- **1.** Apply Anti-seize compound to the threads of the Lambda Sensor. **Figure 9.**
- 2. Install the Lambda Sensor into the Connector Pipe, Figure 10.
- **3.** Apply a thin film of sealant on the end of the head pipe and on the muffler end of the Connector Pipe. **Figure 11.**
- **4.** Place the Clamp on the expanded end of the Connector Pipe. **Figure 12.**



Figure 7

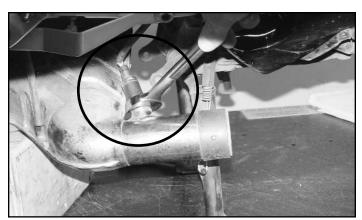
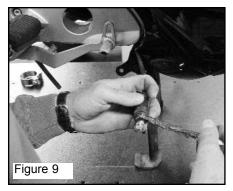
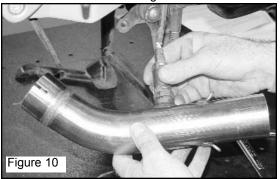
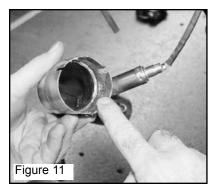


Figure 8







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- **5.** Position the clamp so the screw is accessed between the head pipe and the engine from the bottom. **Figure 11.**
- 6. Slide the Connector Pipe onto the head pipe. Do not tighten clamp at this time. Figure 11.
- 7. Join the Muffler Assembly to the Connector Pipe.

CONNECTING PIPE AT HANGER BRACKET

8. Apply a thread locking compound (Loctite) to the M10 x 12 Screw before assembly.

R1150RS & R1150RT Only:

Carefully rotate the Connector Pipe and Muffler Assembly until the hanger (B) on the Muffler Assembly aligns with the hanger screw boss. Start the **M10 x 12 screw**, with **a washer**, through the Muffler hanger and into the hanger screw boss.

R1100RS & R1100RT Only:

Attach the **Short Adapter Bracket** (C) to the hanger on the Muffler Assembly using the M10 x 20 Screw, two Washers, and the M10 Nut. **Figure 13.**

Attach the Adapter Bracket to the hanger screw boss with the M10 x 12 Screw and a Washer. **Figure 14.** Bill not enough washers

R1100R & R1100GS Only:

Attach the Long Adapter Bracket to the hanger on the Muffler

Assembly using the M10 x 20 Screw, two Washers, and the M10 Nut. $\,$

Attach the Adapter Bracket to the hanger screw boss with the M10 $\,$ x 12 Screw and a Washer.



Figure 11

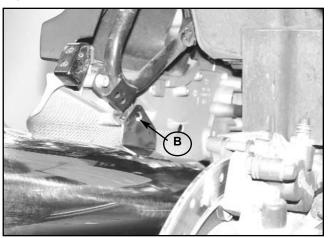


Figure 12



Figure 14

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- 9. Check that the Muffler does not contact the aluminum heat shield or the side cases, if used.
- **10.** Adjust the Muffler alignment by rotating the Connector Pipe.
- **11.** When you have at least 2mm clearance to the heat shield and 10mm clearance to the side case, firmly tighten the M10 x 12 hanger screw (A). Tighten the M10 x 12 Screw at the hanger to 14 ft/lbs. **Torque Wrench.**
- **12.** Place the Spring Covers on the Springs and install them to join the Connector Pipe and Muffler Assembly. **Figure 16.**
- **13..** Tighten the Clamp, head pipe to Connector pipe, to 14 ft/lbs. **Torque Wrench.**
- **16.** Start the motorcycle and listen closely for leaks. If a leak exists at the joint of the Muffler and the Connector Pipe, disassemble the system and apply more Sealant. If it leaks at the head pipe, make sure the Connector Pipe is slid far enough onto the head pipe to close the slots.
- **17.** The Sealant will harden when the system reaches operating temperature. Repair any leaks before the Sealant has hardened.
- **18.** Once the Sealant hardens, disassembly is achieved by tapping the joints with a small hammer. This will break the Sealant so the system can come apart.

R-RT's Only:

Reinstall the front spoiler.

MAINTENANCE

Your Z4000 Exhaust system is made from polished stainless steel. No special care is required. To remove stubborn dirt and insect residue, use a clean, soft cloth and a high grade of metal polish. Any discoloration of the stainless steel cause by heat build-up from stop & go traffic can be minimized with a metal polish, as well.

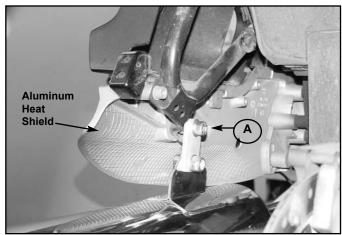


Figure 15

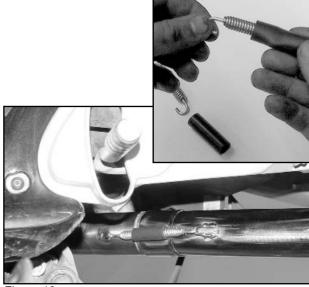


Figure 16.