

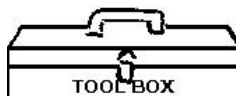


PARTS LIST

| Index | Description | Qty. |
|-------|-----------------------|------|
| 1 | Head Pipe Cylinder 1 | 1 |
| 2 | Head Pipe, Cylinder 2 | 1 |
| 3 | Head Pipe, Cylinder 3 | 1 |
| 4 | Head Pipe, Cylinder 4 | 1 |
| 5 | Collector Pipe | 1 |
| 6 | Silencer | 1 |

Parts Bag

| | | |
|----|-------------------------------|---|
| 7 | Nut, M8, Locking | 1 |
| 8 | Screw, M8 x 30 | 1 |
| 9 | Hanger Bracket, Aluminum | 1 |
| 10 | Hanger Clamp | 1 |
| 11 | Retainer Spring | 5 |
| 12 | Cover, Retainer Spring | 5 |
| 13 | Cable Ties (Not Pictured) | 5 |
| 14 | Rubber | 1 |
| 15 | Bushing | 1 |
| 16 | Warranty Card | 1 |
| 17 | Sealant Packet (Not Pictured) | 1 |



Torx Wrench, T-25
Socket, 12mm, 1/4" drive deep well
Extension, 6"
Ratchet 1/4" drive
Hex Key Wrench, 4mm
Hex Key Wrench, 6mm, ball ended
Socket, 10mm
Wrench, 12mm
Socket, 13mm
Wrench, 22mm
Spring Puller
Diagnol Cutter (for cable ties)
Block to rest exhaust (Wood about 8 inches tall)
Anti Seize Compound

NOTE: Warranty Card, item 15 must be completed and mailed back to National Cycle, Inc.

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

Other Parts Needed: Exhaust Gaskets, BMW Part Number: 11-62-7-662-083

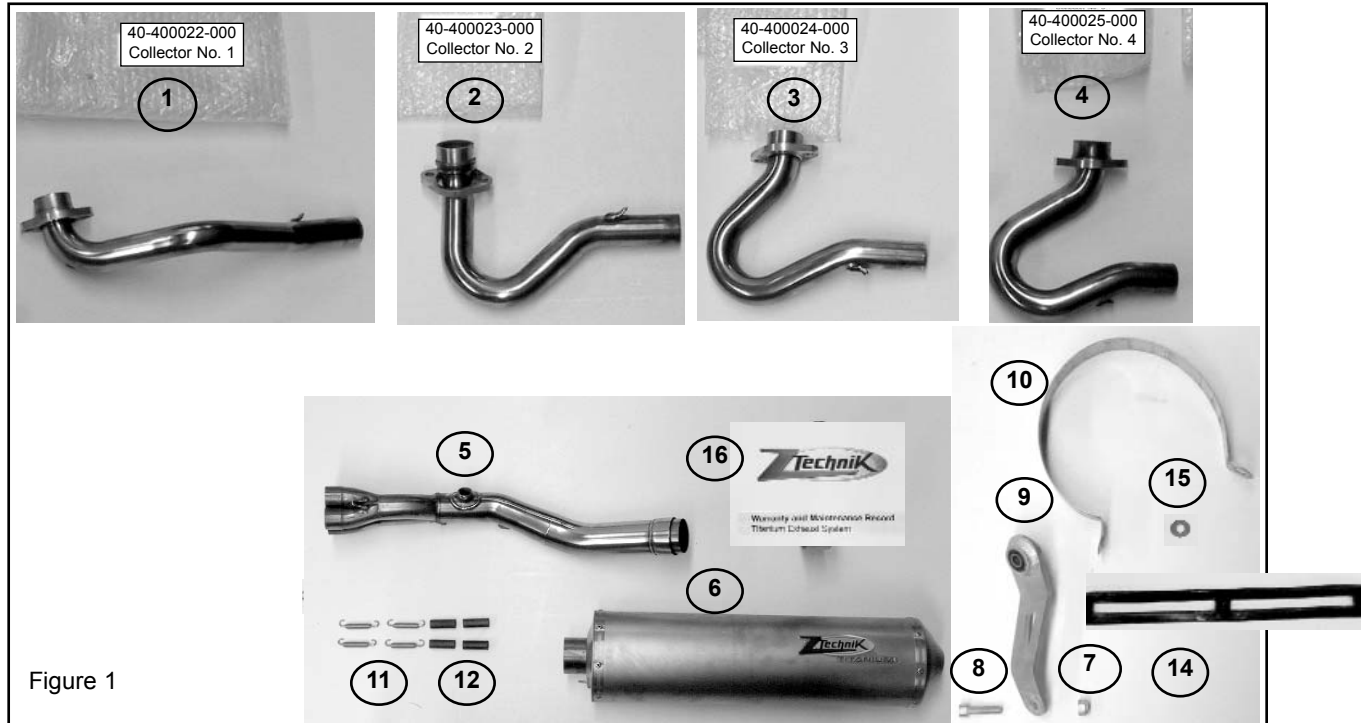


Figure 1

PREPARATION:

Complete Warranty Card, item 15 and send to ZTechnik.

Position the motorcycle securely on its center (main) stand.

Note: Retain all fasteners for use during re-assembly.

1. Remove lower fairing (Torx Wrench and 5mm Hex Key). **Figure 2.**

2. Remove heat shield, just in front of the shift lever (10mm wrench and 6mm Hex Key). **Figure 3.**

3. Remove the seat and left side rear body panel.

4. Remove the nuts holding the head pipes to the cylinder head (12mm socket, extension and ratchet). **Figure 4.**

5. On the left frame rail, under the seat, remove the cable ties. **Figure 5.**

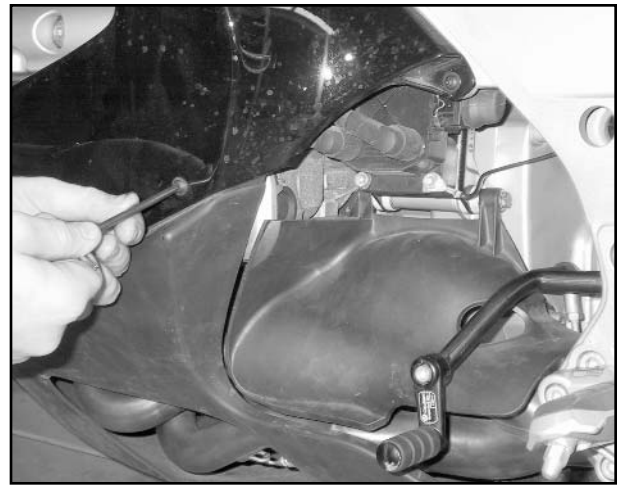


Figure 2

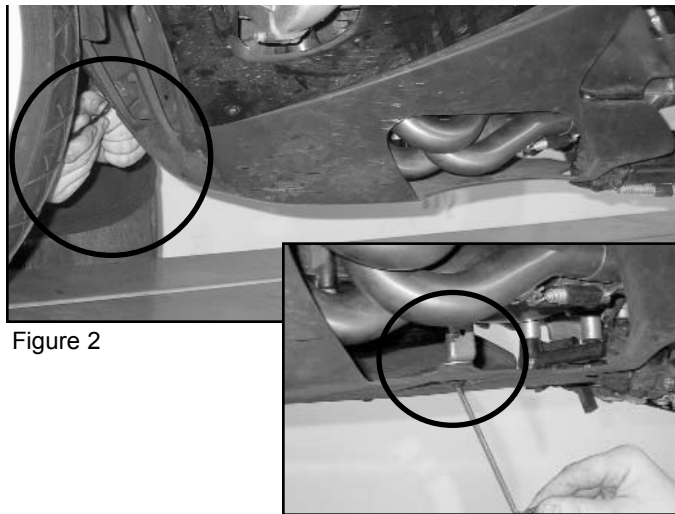


Figure 2

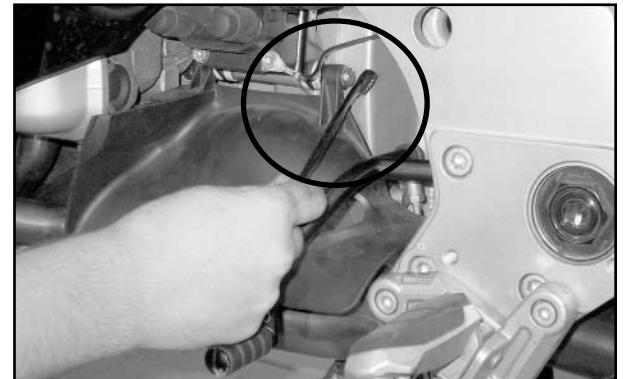


Figure 3



Figure 4



Figure 5

PREPARATION CONTINUED

6. Disconnect the Lambda sensor at its plug (the cylindrical plug about 2 ½ inches long located under the seat). **Figure 6.**

7. Remove the Lambda sensor (22mm wrench). **Do not let the wires to the Lambda sensor get twisted. Do not damage the sensor. Figure 7.**

8. Disconnect the rear hanger bracket from the muffler (13mm socket). **Figure 8.**

9. Remove the exhaust assembly from the motorcycle.

10. Remove the rear hanger bracket from the motorcycle (13mm socket) the hanger bracket will not be reused. **Figure 9.**



Figure 6

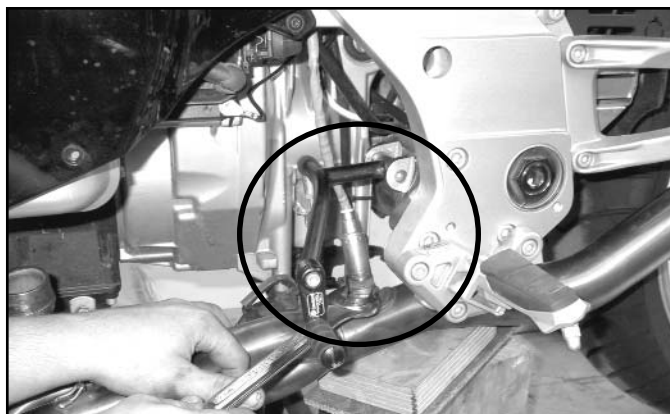


Figure 7



Figure 8



Figure 9

INSTALLATION

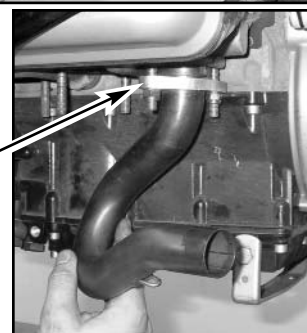
Note; the cylinders are numbered 1 through 4 from front to rear.

1. Replace the exhaust gaskets in the exhaust ports with new gaskets. BMW Part No. 11-62-7-662-083.
2. Install the Z-Technik head pipes, using the original nuts, **in the following order: 4-2-3-1. Do not fully tighten the nuts. Figure 10.**



Figure 10

Leave loose in order to align head pipes to collector pipe.



3. Apply a thin film of Sealant to the inside of the four inlet ports on the Collector Pipe. **Figure 11.**



Figure 11

4. Apply anti seize compound on the threads of the Lambda Sensor. Install the Lambda sensor into the center pipe. Do not let the wires to the Lambda sensor get twisted. **Figure 12.**

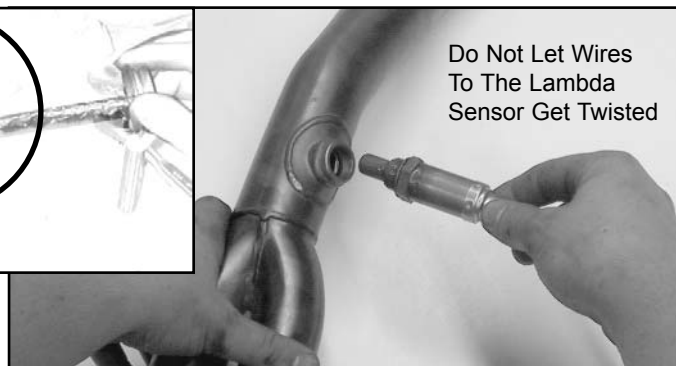
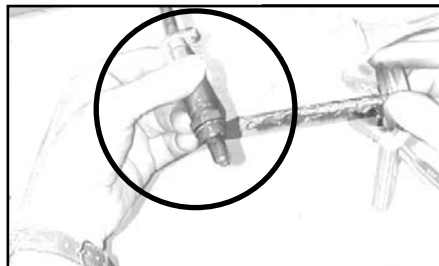


Figure 12

5. Install the Collector Pipe onto the Head Pipes.

Figure 13.

6. Place the Spring Covers onto the Retainer Springs.

Figure 14.

7. Secure the Collector Pipe to the Head Pipes with the Retainer Springs (Spring Puller). **Figure 14.**

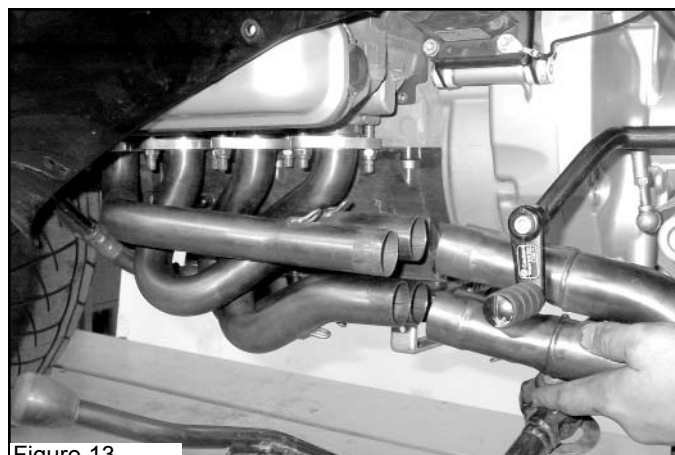


Figure 13.

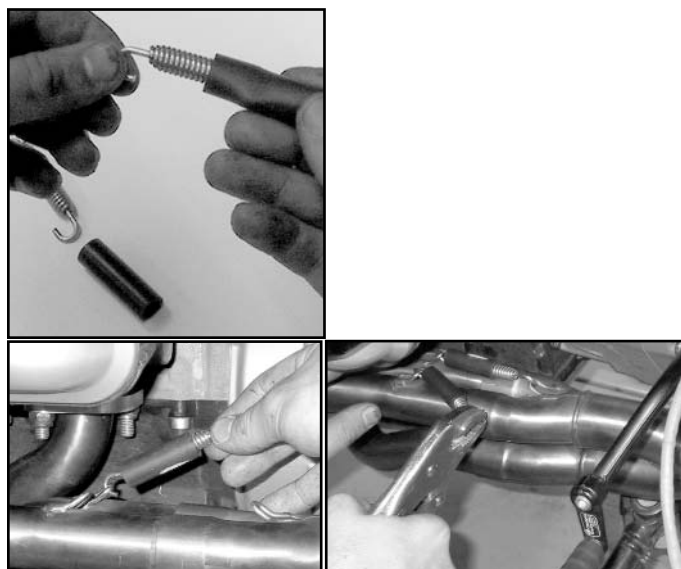


Figure 14.

8. Route the Lambda sensor wires the same as original, reconnect the sensor plug. Secure the wires to the left frame rail with Cable Ties. **Figure 15.**



Figure 15

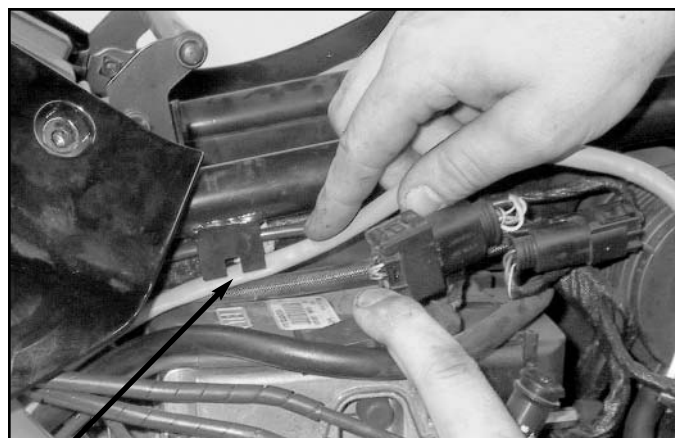
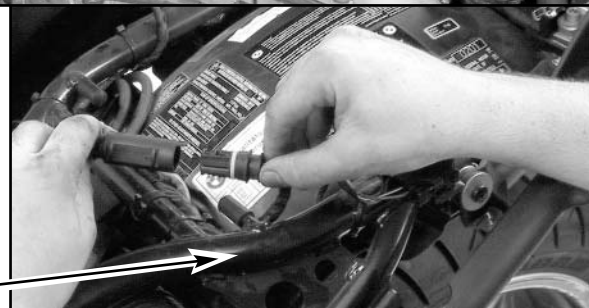


Figure 15
Route wire
under clip.



Secure wire to
frame rail with
5 cable ties.

9. Apply a thin film of Sealant to the inside and outside of the inlet tube on the Silencer. **Figure 16.**

10. Position the Silencer into the end of the Collector Pipe. **Figure 17.**

11. Secure the Silencer to the Collector Pipe with a covered Retainer Spring (Spring Puller). **Figure 17.**

12. Attach the Hanger Bracket to the motorcycle using the stock bolt in the same position as the original hanger. Use the same bolt. **Figure 18.**

13. Install the Rubber to the inside of the Hanger Clamp. Wrap the Hanger Clamp around the Silencer and attach it to the inside of the Hanger Bracket with Bushing between Hanger Clamp. **Figure 19.**

14. Tighten the nuts holding the Head Pipes to the cylinder head.

15. Tighten the Hanger Bracket at the motorcycle frame.

16. Tighten the Hanger Clamp to the Hanger Bracket.

Note: Verify that the left side saddle bag has ½ inch clearance to the Silencer. Figure 20.

17. Start the motorcycle and check for leaks. Repair any exhaust leaks before riding.

18. Reassemble all parts of motorcycle. Tighten all fasteners to manufacture's specification.

The Sealant will harden after it has been heated, this is done by riding the motorcycle. To disassemble the Z4020 Exhaust system, tap the joint with a small hammer to break the sealant, the system will then come apart.



Figure 16

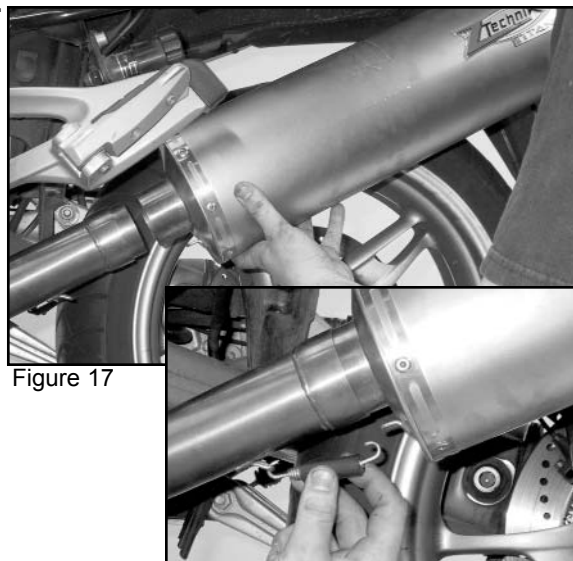


Figure 17



Figure 18

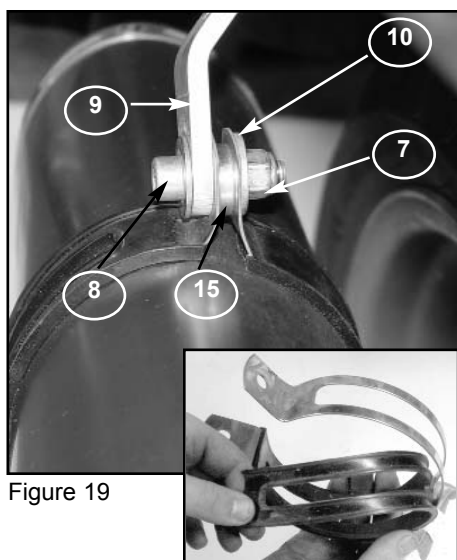


Figure 19

Adjustment of hanger bracket at point (A). will cause silencer to move upward (B). Be sure to maintain 1/2" clearance of bag to the silencer.

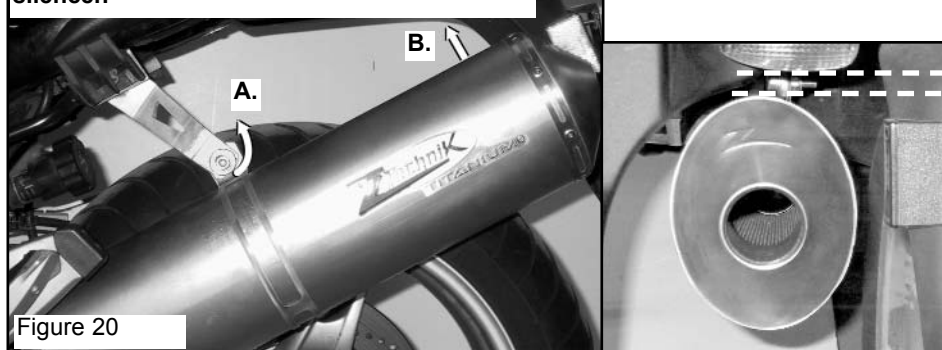


Figure 20

MAINTENANCE Repack the mufflers at 6000 mile (10,000 km) intervals. The muffler repack kit is Z-Technik #Z4020-001. Discoloration can be removed from the Exhaust System with a quality metal polish. Be sure to remove all polishing compound residue from the Exhaust System before running the engine. Refer to the WARRANTY PAMPHLET 10-11841-000 for complete Repack and Maintenance Instructions.