



401 South Grand Ave., Santa Ana, CA 92705 USA
Tel: 714-550-6070 Fax: 714-550-9661 www.twobros.com

Mfg: BMW Make: R1100S

Year: All

Product: C5 Cat. Eliminator Exhaust System



Parts List

2- Canisters (slip-on, left & right exit)	1- 8mm x 40mm bolt
2- Canister clamps	3- 8mm x 20mm bolt
1- Stainless steel catalytic eliminator collector	5- 8mm nylock nuts
1- Stainless steel slip-on connector	2- 8mm flange nuts
4- Connector springs	4- 8mm washers
1- License plate hanger	2- 8mm x 30mm flange bolts
1- Flat bracket	2- Hitch pins
1- Canister hanger bracket	2- Lighted bolts
1- 18mm spacer	1- Packet of Hi-Temp Anti-Seize
	1- Packet of Hi-Temp Sealant

Care & Cleaning / Warranty

Care & Cleaning

Keep system free of dirt and moisture. Store in a cool, dry place. For cleaning use a mild spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Stainless Header System: Polished stainless steel pipes will turn a light golden hue after a few heat cycles, this is a normal characteristic of high quality stainless steel.

Chrome Header System: Chromed header tubing will turn blue close to the exhaust ports, this is normal. To prevent corrosion you must keep the header pipes clean.

Carbon Fiber & X-Metal Mufflers: X-Metal CF canisters will shift color from their original silver color to an amber color after a few heat cycles, similar to the way our stainless steel headers shift color. Always make sure the fiberglass packing inside is in good condition and not burned out, as exhaust heat inside an empty canister will deteriorate the Carbon Fiber / X-Metal CF sleeve. TBR sells repack kits (TBR part # 005-1003B) that include new rivets and repack material as well as a drill bit (#30), making it easy to do yourself. Also, NEVER dyno test your bike with carbon fiber mufflers installed - the intense heat and lack of cooling air can quickly cause the CF material to burn. Two Brothers Racing does not provide a warranty for burned carbon fiber.

Aluminum Mufflers: Use an aluminum or mag wheel polish such as Mother's to restore the bright finish to factory spec.

Warranty

Two Brothers Racing products are intended for closed course competition purposes only, and therefore are sold "as is" without warranty. Two Brothers Racing specifically disclaims any warranties of merchantability or fitness for a particular purpose and disclaims all responsibility for consequential and incidental damages or any other losses arising from the use of these products or parts.

IMPORTANT - PLEASE READ CAREFULLY

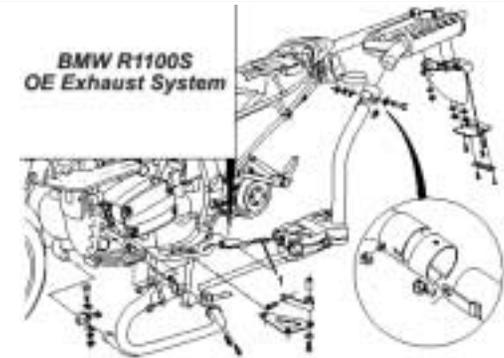
We recommend that this performance exhaust system be installed by a qualified motorcycle technician. If you have any doubts as to your ability to install this exhaust system, please consult with your local motorcycle dealer. Read all instructions first before starting installation. Make sure the motorcycle and exhaust system are completely cool before starting the installation. Also, make sure the bike is secure on the sidestand or ideally a rear service stand during installation. Be sure to save all stock exhaust components for possible use later.

Installation Instructions

1. Make sure the bike is completely cool before starting the installation. Make sure the bike is secure on the sidestand or ideally a rear service stand.
2. Remove the seat, rear side panels and number plate.
3. Remove the stock canister assembly, catalytic converter and O² sensor. Loosen the header pipes and crossover pipe, **do not remove the header pipes.**
4. Be sure to coat the threads of the O² sensor with the included packet of hi-temp anti-seize. Install the O² sensor into the collector.
5. Install the collector using the stock hardware. **Leave loose for now.**
6. Install the slip-on connector onto the collector reusing the BMW clamp. **Leave loose for now.**
7. Install the canister hanger bracket onto the two horizontal posts that supported the stock mufflers (ref. illustration). It may be necessary to lightly tap the bracket into place with a hammer. Make sure the hanger bracket is *fully engaged* onto the posts and that there is at least 1/4" of post extending past the new hanger bracket. Drill one 2.5mm hole through each post and install the supplied stainless steel hitch pin clips. These clips will prevent the mufflers from sliding back on the hanger posts.
8. Place a bead of the hi-temp sealant on the outside edge of the slip-on connector that go into the canisters. Slide the canisters onto the end of the s-bend connector. Wipe off the excess sealant that will squeeze out. Rotate the canisters to the proper orientation and install the springs.
9. Assemble the canister clamps and hardware (ref. illustration). **Leave loose for now.**
10. Install the slip-on connector/canister assembly onto the collector. Attach the slip-on connector/canister assembly to the hanger bracket using the 8mm x 40mm bolt. Carefully align all pipes, canisters and hardware. When everything is in place, tighten all hardware and clamps. Don't forget to tighten the front head pipe nuts, crossover pipe clamp and O² sensor. Connector the license plate lights to the wiring harness.
11. **Be sure to allow the sealant to dry per the manufacturer's instructions before starting the bike.** Before you run the bike, clean off all fingerprints and dirt, as any oily residue will etch the metal and become somewhat permanent when the system gets hot. Run the bike and enjoy. It is normal for some white smoke to appear the first time you start the bike. This is packing/manufac-

turing oil from inside the pipe burning off. Check for gaps or leaks. If you find a leak, a little high temperature silicon sealant should fix it. After 50 to 100 miles, recheck all fasteners for tightness.

OE Exhaust Detail



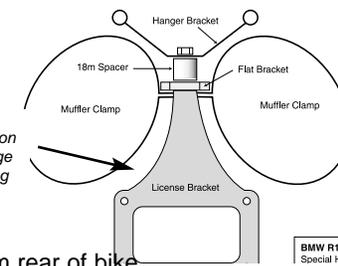
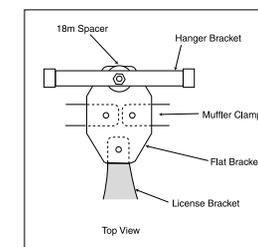
Centerstand Support Detail



The kit comes with two (2) 8mm x 30mm bolts that are to be used as new centerstand stops as the old one went away with the catalytic converter. Drill two (one on each side) 8mm holes in the lower flat portion of the catalytic converter support castings on the frame.

Install one bolt with the head facing down (ref. photo) along with one jam nut and lock nut. These bolts become the new centerstand stops. Adjust the depth of the bolts as needed to properly support the centerstand.

License Plate Hanger Detail



Lighted Bolts (*note orientation of light coverage and wire routing behind license plate hanger)

View from rear of bike

BMW R1100S Special Hardware for