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#### **FULL EXHAUST SYSTEM INSTALLATION INSTRUCTIONS**

The Brock's Performance full exhaust system is a high-performance 4-2-1 full exhaust system that replaces the OEM muffler, catalytic converter, and head pipes.

## **Check Package Contents:**

## The Package Contents Include:

- 1. One (1) Muffler
- 2. One (1) Left Head Pipe
- 3. One (1) Right Head Pipe
- 4. One (1) Collector
- 5. Four (4) Mounting Flanges
- 6. One (1) Permatex Ultra Copper®
- 7. One (1) Package Containing Hardware
- 8. One (1) Package Containing Instructions
- 9. One (1) Elbow Pipe\*\*

If your package contents differ, please contact Brock's Performance at 937-912-0054.

For additional installation support please refer to the OEM service manual.

\*\*Designates a step or part that is not required with all models



\*Generic system shown

## **Removal Instructions:**

- 1. Support the bike using a wheel stand or lift and remove needed body panels to access the exhaust system.
- 2. Loosen the muffler clamp, remove muffler mounting bolt, and remove the muffler.
- 3. Disconnect oxygen sensor connector(s).
- 4. \*\*Remove exhaust valve cables.

**Note:** Do not rotate the servo motor during cable removal as this can damage the motor. The servo motor must remain installed and plugged in to avoid service codes (unless the ECU is flashed). Some models require a butterfly plate (in hardware kit if required) to be installed to keep the servo motor from over-rotating.

Remove the radiator/oil cooler mounting brackets as needed for removal of the OEM front section.

**Tech Tip**: Place cardboard around the radiator/oil cooler to prevent damage to the aluminum fins during exhaust removal/installation.

- 6. Remove bolts/nuts that secure the OEM front section to the engine (these will be reused).
- 7. While supporting the OEM front section remove the bolt(s) securing it to the chassis.
- 8. Remove the OEM front section from the bike.

#### **Installation Instructions:**

**Note:** Before installing the exhaust system, preassemble all components. A slight ovaling of the exhaust tubing can occur during production; this is normal. Apply WD-40® to the pipe joints to ease assembly, adjustment, and disassembly.



- 9. Inspect the OEM exhaust gaskets. Replace as needed.
- 10. \*\* Install the muffler mounting bracket hand tight typically installs between the right side rearset and frame.
- 11. Remove the flanges from the head pipes. Install them to the engine hand tight reusing the OEM bolts/nuts.
- 12. Remove the oxygen sensor(s) from the OEM front section and install it into the performance exhaust system.

**Note:** If the bike is equipped with a fuel tuned ECU or Dynojet PCV, removal of the OEM oxygen sensor is required for optimum performance. Block off plugs are included.

- 13. Apply a small amount of Permatex Ultra Copper to the inside of each head pipe up to  $\frac{1}{2}$ " (12.5mm) deep.
- 14. Install the left and right head pipes onto the flanges.
- 15. Install the collector.
- 16. \*\*Install the elbow pipe.
- 17. Secure the muffler to its mounting position using the supplied hardware hand tight.
- 18. Install one spring to each head pipe to secure them to the mounting flanges (4 total).
- 19. Install two springs to secure the collector to the head pipes.
- 20. \*\*Install spring(s) to secure the elbow pipe to the collector.
- 21. Install one spring to secure the muffler to the collector or elbow pipe.
- 22. Wiggle the entire system to ensure the pipes are fully seated.
- 23. Torque the flange mounting bolts/nuts to 15 lb-ft (20 N·m) or just until the flanges begin to bend.

**Note:** Do not over tighten the bolts/nuts. Space should be observed between the flange and cylinder head.

- 24. \*\*Torque muffler mounting bracket to OEM spec.
- 25. Tighten the muffler mounting hardware.
- 26. Reconnect the oxygen sensor (if equipped).
- 27. Using the supplied cap, block off the PAIR system.
- 28. Wipe down the entire exhaust system with rubbing alcohol.
- 29. Reinstall body panels.





# DO NOT START BIKE UNTIL A MINIMUM OF A 1/4-INCH (6 MM) CLEARANCE IS OBSERVED BETWEEN THE EXHAUST COMPONENTS AND ALL BODYWORK/PARTS.

- 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 recommended that the entire exhaust system is 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 has heated up.
- Fender eliminator kits are recommended on some models; see BrocksPerformance.com for more details.

# **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: **BrocksPerformance.com > Brock's Support > Customer Service > Terms and Conditions**For Questions and Comments:

BrocksPerformance.com > Brock's Support > Customer Service > Contact us or call 937-912-0054