



TOOLS REQUIRED

- 5/16" Open/Box End Wrench
- 1/2" Open/Box End Wrench
- 1/4" Ratchet and 6" Extension
- 1/2" Socket 1/4" Drive
- 3/8" Ratchet with 9/16" Socket
- Flat Blade Screw Driver
- 3/16" Allen Wrench
- 5/16" Nut Drive
- Snap Ring Pliers
- 7/8" Open/Box End Wrench

Installation Instructions

HARLEY DAVIDSON 2004 - 2013 SPORTSTER CROSS BACKS EXHAUST SYSTEM

Rev 12-16-2014

Thank you for buying a RINEHART exhaust system. We are committed to providing you a quality product that with the proper installation and care will last you for many years to come.

Please be sure to read the instructions fully and inspect all components of your new system before installation. If you need help to remove your stock system, or how to install the RINEHART exhaust system you should seek the advice and/or skill of a professional mechanic. Please keep all OEM parts as some may be used for the installation of the RINEHART exhaust system. If you are installing the system and are not the owner, please return these instructions to the owner as they contain important information that may be required at a later date.

If you have questions pertaining to the installation, please contact our technical service department: 1.877.264.8282 or www.rinehartracing.com

Exhaust systems manufactured by Rinehart Racing are non-catalyst. A stock catalyst exhaust system cannot be replaced with a non-catalyst exhaust system. Please verify the application with your dealer before purchase.

INSTALLATION INSTRUCTIONS

1. Remove the seat and locate the OEM rear O2 sensor connector. The battery may need to be removed in order access the connector. Disconnect the terminal. Leave the rear O2 sensor in OEM pipe.
2. Disconnect the front O2 sensor connector. Leave the front O2 sensor in OEM pipe.
3. Remove the OEM exhaust system.
4. Remove the transmission pulley cover and loosen the rear brake rod at the rear eyelet and slide it out of the way.
5. Remove the stock transmission mounting bracket.
6. Remove the OEM exhaust flanges and cir-clips. Be careful as you will be re-using both the exhaust flanges and the cir-clips (replace damaged cir-clips). We recommend the use of snap ring pliers.
7. Install the OEM exhaust flanges and cir-clips on Rinehart systems.
8. Remove and discard the OEM style exhaust gaskets. It may be necessary to pry them out with a pick or small screw driver. Use caution not to damage the cylinder heads. Failure to remove stock gaskets will result in improper fitment.
9. Install new Exhaust Gaskets (supplied) into the front and rear cylinder exhaust ports. Be sure the new gaskets are seated in the cylinder heads.
10. Install the new mounting bracket using the stock washers and bolts. Torque bolts to 30-33 ft. lbs.
11. Reinstall the transmission pulley cover using the stock washers and bolts. Torque bolts to 10-12 ft.lbs. Reinstall the brake rod into eyelet. We recommend the use of Locktite 243 on the threads during reinstallation. Torque screw to 10-12 ft. lbs.
12. If applicable, remove OEM O2 sensors from the OEM pipes and install in both front and rear Rinehart pipes. Torque to manufacturer specifications. We highly recommend using anti-seize on O2 sensor threads before installing. (Do not get any anti-seize on O2 sensor tips.) Reconnect O2 sensor cables back into appropriate terminals.
13. Install Rear pipe. Finger tighten OEM exhaust flange nuts.

PLEASE NOTE

Our warranty applies only when the system is installed correctly and used for its intended purpose. Warranty does not apply when damage is the result of normal wear and tear, improper use, neglect or incorrect engine configuration. See warranty notice in box for more information.

TUNING

Adjustment of fuel injection is **REQUIRED** to optimize performance and minimize chrome discoloration. We recommend that adjustment of fuel injection be performed by **QUALIFIED** technicians on a dynamometer utilizing an Exhaust Gas Analyzer.

ITEMS SUPPLIED

Description	Part #	Qty
Front Header	070-4003-001/2	1
Rear Header	070-4003-003/4	1
Front Heat Shield	080-4003-001/2	1
Rear Heat Shield	080-4003-003/4	1
Mounting Bracket	030-4003-001	1
2 ¼" Stainless Steel Clamp	16-00285	5
Exhaust Gasket	20-00003	1pr
O2 Sensor 18mm Bung Plug	35-00083BA	2
5/16-18 x ¾" Hex Head Bolt	35-00003	4
5/16-18 Nylon Nut	35-00005	4
5/16" Flat Washers	35-00007	4
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14. Slide two 5/16-18 x ¾" bolt into the muffler bracket on rear of pipe. Next insert the bolts through the new exhaust mounting bracket coming off the transmission case. Install 5/16 flat washers with the 5/16-18 locking nuts. Tighten the nuts on finger tight at this time.
15. Tighten OEM exhaust flange nuts on rear pipe. Torque 13-15 ft. lbs.
16. Install rear Heat Shield. Use care to line the H.S. up with the weld on the header pipe.
17. Install front pipe. Finger tighten OEM exhaust flange nuts.
18. Slide two 5/16-18 x ¾" bolts into the muffler bracket on rear of pipe. Next insert the bolts through the new exhaust mounting bracket coming off the transmission case. Install 5/16 flat washers with the 5/16-18 locking nuts . Finger tighten.
19. Tighten OEM exhaust flanges nuts on front pipe. Torque 13-15 ft. lbs.
20. Install front Heat Shield tighten back clamp first, then tighten the clamp by head. Again use care not to scratch.
21. Check alignment of both pipes. Tighten 5/16"-18 mounting bracket nuts. Torque 13-15 ft. lbs.
22. Tighten all heat shield clamps. Make sure all clamps are hidden from view.

DISCOLORATION & TUNING

Discoloration of exhaust is generally a result of fuel calibration tuning. In addition, discoloration can be the result of electrical issues or engine malfunction. Discoloration is not a warrantable item. CATALYST EQUIPPED MOTORCYCLES: Adjusting the fuel calibration and/or timing of an engine that is equipped with a catalyst equipped exhaust is likely to result in discoloration of Rinehart Racing slip on mufflers and will not be warrantied. As such, Rinehart Racing discourages altering or adjusting the OEM stock fuel calibration and/or timing of an engine that is equipped with a catalyst equipped exhaust.

EMISSIONS NOTICE

The State of California does not permit the use of aftermarket exhaust systems that remove original equipment catalysts unless a California Air Resources Board (CARB) Executive Order has been issued. Exhaust systems that remove original equipment catalysts are legal in California for racing use only.

Warranty

This Limited Warranty contains the sole express warranty made by Rinehart Racing ("Company") in connection with exhaust products sold by Company ("Product"). BY PURCHASING OR ACCEPTING THE PRODUCT, THE BUYER ACKNOWLEDGES THAT THE LIMITATION OF LIABILITY IS PART OF THE TERMS OF SALE, CONSTITUTES A BINDING AGREEMENT, AND MAY BE ENFORCED AGAINST YOU BY COMPANY. Any warranties, if separately provided in writing, are extended only to the Buyer whose name is shown on Company's invoice.

Rinehart Racing exhaust products are warranted against defects in material or workmanship for a period of 18 months from the date of the original invoice. This does not cover finishes such as plating or painted surfaces with discoloration or rust. Discoloration is not a warrantable item and is a result of improper fuel calibration. This warranty shall be limited to the repair or replacement of the defective part, which may be proven defective under normal use. Rinehart Racing will not warranty any product that has been abused, misused, improperly installed, or modified. Any part that is repaired or replaced under this warranty will, itself, be warrantied only for the remainder of the warranty period of the original product being repaired or replaced. This warranty is non-transferable and is limited to the original retail purchaser.

BUYER'S SOLE AND EXCLUSIVE REMEDY AND RINEHART RACING'S SOLE LIABILITY FOR LOSS OR DAMAGE ARISING FROM PURCHASE OR USE OF THE PRODUCT SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PART AT COMPANY'S SOLE DISCRETION. IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY LOSS OF USE, REVENUES, OR ANTICIPATORY PROFIT, OR FOR ANY DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR CONNECTED WITH THE SALE, USE, OPERATION, OR INABILITY TO USE OF PRODUCTS PURCHASED FROM COMPANY TO THE EXTENT PERMITTED BY LAW, COMPANY MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED. IN NO EVENT SHALL COMPANY'S LIABILITY EXCEED THE AMOUNT OF THE PARTICULAR DEFECTIVE PRODUCT PAID BY THE PURCHASER. THIS LIMITATION OF LIABILITY SHALL BE APPLICABLE TO ANY CLAIM PRESENTED, WHETHER THE LEGAL THEORY FORMING THE BASIS OF SUCH CLAIM INVOLVES CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, STATUTE, REGULATION, CONSUMER PROTECTION LAWS OR OTHERWISE.

Returns

No return of merchandise will be accepted without first securing a Return Merchandise Authorization ("RMA") number provided by Rinehart Racing. Buyer must submit, in writing, evidence of purchase date, copy of invoice indicating goods purchased, reason for return, exchange or refund, and RMA number. At its sole discretion, Rinehart Racing may accept or deny the claim for return, exchange or damage. If accepted and if the goods have not been used and are in a resalable condition, Company shall provide refund within 30 days of purchase; subject to a fifteen percent (15%) restocking fee. If the product has been installed, no refund, return or exchange shall be allowed. No refund, return or exchange is allowed after 45 days from the date of invoice. Buyer is responsible for return freight, and must include all original packaging, materials, manuals, hardware and copy of invoice. All products returned must be securely packed and delivered to Company in an undamaged condition. Rinehart Racing may refuse or reject returned product for failure to follow the conditions set forth herein.

CLEANING

Never use harsh chemicals or any type of abrasive material to clean the chrome on this exhaust system. We recommend using a soft non-abrasive cloth with a mild detergent such as liquid dish soap.

CONTACT US

Rinehart Racing
1-877-264-8282
www.rinehartracing.com

