

Installation Instructions

HARLEY DAVIDSON 1986-2013 Softail 2 into 2 CHURCHILL RINEHART Exhaust System

REV. 1-16-2015

ITEMS SUPPLIED Description Part # Qty 1 Front Header Rear Header 1 Front Heat Shield 1 Rear Heat Shield Mounting Bracket 25-00310 1 5/16-18 x ¾" Bolt 35-00003 4 35-00007 5 5/16" Flat Washer 5 5/16" Nylock Nut 35-00005 3/8" Flat Washer 35-00037 2 2 29-00028B ½" Spacer 3/8-16 x 1.25" Hex Head Bolt 35-00032 2 1 5/16-18 x ¾ Stainless Steel BHCS 35-00084 1 3/8-16 x 2 ¾ SHCS 25-00307 2 ¼" Stainless Steel Clamp 16-00285 7 2 O2 Sensor 18mm Bung Plug 35-00083BA Exhaust Gaskets 20-00003 1pr **Instructions & Warranty Sheets**

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.

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.

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 removing your stock mufflers and/or head pipes, or how to install the Rinehart Racing exhaust system, please consult our factory or 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. If applicable, unplug the rear OEM O2 sensor located under the oil tank on right side of the bike. Feed wire through frame. Note the wire routing it will be reinstalled later.
- If applicable, unplug the front OEM O2 sensor. Remove the nylon tie holding the wire to the frame.
- 3. On all models with floor boards, loosen the floor board mounting bolts. This will provide better access to the exhaust system.
- 4. Remove the OEM exhaust system along with the stock rear mounting bracket and studs if applicable.
- 5. Remove the OEM exhaust flanges and cir-clips. Be careful as both the exhaust flanges and the cir-clips will be reused (replace damaged cir-clips). We recommend the use of snap ring pliers.
- 6. Install the OEM exhaust flanges and cir-clips on Rinehart system.
- 7. Install the new mounting bracket (supplied) using (2) $3/8-16 \times 1.25$ " hex bolts, $\frac{1}{2}$ " spacers and 3/8" flat washers (supplied) finger tighten.
- 8. If applicable, remove OEM O2 sensors from the front and rear OEM exhaust and install in your new system. Hint: apply a small amount of anti-seize to the threads on the sensors before installing. Torque to manufacturer specifications.
- 9. Remove the OEM gaskets and install (supplied) Exhaust Gaskets.
- 10. Install the rear header and (2) OEM flange nuts finger tight. Note: On 1986-1999 models it might be necessary to remove the reflector from the front frame rail.
- 11. Slide (2) 5/16-18 x ¾" bolts (supplied) into the mount tab of rear pipe. Align bolts with frame mounting bracket. Insert bolts through the bracket and install 5/16" flat washers and 5/16" Nylok nuts (supplied) finger tight.
- 12. If applicable, re-connect the OEM rear O2 sensor under oil tank on right hand side of bike.
- 13. Install rear header heat shield.

DISCOLORATION AND 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.

Also, 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.

CLEANING

Never use harsh chemicals or any type of abrasive material to clean the chrome or ceramic coating on this exhaust system. We recommend using a soft nonabrasive cloth with a mild detergent.

CONTACT US

Rinehart Racing 1-877-264-8282 www.rinehartracing.com 14. Install front header and (2) OEM flange nuts finger tight.

- 15. Align both pipes so they are parallel with each other and parallel to the lower frame rail and tighten the flange nuts first. Torque 8-10 lb-ft. Then tighten the 5/16-18 Nylok Nuts. Torque 13-15ft. lbs.
- 16. Tighten the 3/18-16 frame mounting bracket bolts. Torque 15-18ft. lbs.
- 17. Install 5/16-18 x ¾" Stainless Steel BHCS in the tabs near the end of the exhaust system canister.
- 18. Install front heat shield and tighten all heat shield clamps. Be sure to position the clamps so the bolts are hidden from view.
- 19. Tighten the floorboard mounting bolts if so equipped.
- 20. Using the 3/8-16 x 2 ¾" bolt provided to reattach the right rear foot peg if so equipped, directly to the frame.
- 21. <u>Important!</u> Wipe down complete system *before* starting bike to remove any finger prints or dirt. *Note: Finger* prints that are not removed before running will become permanently etched in the pipes.

Enjoy your new Rinehart System.

IMPORTANT-- Check all fasteners after first ride and again at all service intervals.

RETURN & REFUND POLICY

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 be 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.

LIMITED 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.

