

ATTENTION INSTALLER (if other than owner):

Please forward this instruction sheet and the warranty card to the purchaser of this product. These instructions also contain valuable information necessary to the end user.

INTRODUCTION:

These instructions describe the procedure for properly installing KHROME WERKS® 2-2 Ø1.75" Exhaust Headers on 2017-up FLHT, FLHR, FLHX or FLTR models. Review instructions carefully before beginning, as they contain important information. Please retain for future reference.

Particularly important information is distinguished in these instructions by the following notations:

A NOTE provides key information to make NOTE:

procedures easier or clearer.

CAUTION: A CAUTION indicates special procedures that must

be followed to avoid damage to the motorcycle or

accessories.

WARNING: A WARNING indicates special procedures that must

be followed to avoid injury or death to a motorcycle operator or person inspecting or repairing the

1 – 22mm box wrench

motorcycle.

All Models:

NOTE: This system may not be compatible with suspension stabilizers.

WARNING: Ground and cornering clearance may be reduced. Clearance will be reduced when bikes are fitted with shorter shocks.

TOOLS REQUIRED:

1 – 1/4 "drive ratchet 1 – 5/16" nut driver or flat screwdriver

 $1 - \frac{1}{4}$ " drive 7/16" & $\frac{1}{2}$ " sockets $1 - \frac{7}{16}$ " box wrench $1 - \frac{1}{4}$ "drive 6" extension $1 - \frac{1}{2}$ " box wrench 1 – 9/16" box wrench 1 – 3/16" Allen® wrench 1 – 1/4" Allen® wrench 1 – 14mm box wrench 1 – 5/16" Allen® wrench 1 – 15mm box wrench

1 – 6mm Allen® wrench 1 – 10mm ®Allen wrench

Supplies: New muffler clamps, and anti-seize..

PROCEDURE:

- 1. Remove right front footboard.
- 2. Remove saddlebags.
- 3. Remove and save the 5/16" bolts and washers from rear brackets on each muffler. Slide old mufflers off header pipes.
- 4. Disconnect the O2 sensors. Remove heat shields, exhaust headers and crossover. Save the four 5/16"-24 hex flange port nuts and two 1/4-20 x 11/16" crossover mount screws,
- 5. Remove and save retaining rings, O2 sensors and exhaust flanges from old exhaust headers.
- 6. Remove and discard exhaust port gaskets. Install supplied new conical gaskets.

INSTALLATION INSTRUCTIONS

2-2 Ø1.75 EXHAUST SYSTEM USING OEM STYLE MUFFLERS For 2017-up FLHT, FLHX, FLHR, FLTR Mfg. p/n 200420, 200920 (See pkg. *label* for Dist. p/n)

CAUTION: Conical port gaskets must be used with KW exhaust headers to avoid leaks.

7. Install flanges (counterbore up) and retaining rings on new exhaust headers. 18mm or 12mm Oxygen sensors and/or supplied plugs/gaskets may be installed at this time. Use anti-seize on threads.

INSTALATION TIP:

- 8. Pre-install the 3/8-16 x 1.0 carriage bolt into the header P-clamp. (see photo 8a) Install 3/8-16 flange nut and fully tighten to set the carriage bolt into P-clamp. (see photo 8b) Once the carriage bolt is pre-set in the P-clamp remove and save the 3/8-16 Flange nut. (see photo 8c)
- 9. Remove the transmission outer side cover. Remove the 2 lower 5/16"-18 screws from the inner transmission side cover and install the supplied L-bracket with the existing screws. Torque to 22-25 ftlbs. reinstall the outer cover. Torque to 100-120 in-lbs.
- 10. Position the P-clamp on the crossover. The edge of the bracket should be 3-7/8" from the notched end. (see photo 10a) Position the crossover weldment under the oil pan and loosely install the two saved 1/4-20 x 11/16" socket cap screws through the crossover Pclamp and into the back of the transmission case. Final torque will be done at a later step. Install supplied 1.75" (46mm) AccuSeal pipe clamp on the slotted end of the crossover pipe weldment with the open end to the rear and the nut facing down (cannot be installed later, (see photo 10b)
- 11. Install new header system using saved 5/16"-24 hex flange nuts. Seat front pipe first and loosely install port nuts. A firm pull rearward on the rear header, while keeping the front header seated, may be necessary to clear the rear head casting. Be careful not to damage gaskets. Loosely install rear port nuts. Do not fully tighten nuts yet.

Next slip the exit end of the front head pipe into the crossover and guide the pre-assembled "P" clamp and carriage bolt into the transmission "L" bracket installed in step 9. The P-clamp sits on top of the L-bracket. Loosely install the supplied 3/8"-16 flange nut. (see photo 11)

12. Slide mufflers onto header pipes in the original position. The rear brackets on the mufflers should be positioned halfway between the rubber mounts on the saddlebag/muffler supports and rotated on the header pipes so they are evenly aligned in the rubber mount slot when viewed from the rear. Install 5/16"-18 bolts and washers removed in step 3 and tighten to 96-144 in-lbs.

Do not tighten the muffler clamps until the heatshields are in place.

13. Check alignment of exhaust system make sure no part of the exhaust system is touching the frame, engine, swing arm or brake



14. First tighten the 4 port nuts to 100-120 in-lbs. Next tighten the transmission bracket "P" Clamp nut to 22-25 ft-lbs. This step aligns the system.

CAUTION: To ensure there are no leaks and the system is properly aligned the front and rear port nuts must be evenly torqued.

15. On the Crossover, torque the P-clamp pinch screw first to 76 inlbs. Torque the two upper P-Clamp fasteners to 84-132 in-lbs. Torque the crossover/header AccuSeal clamp to 38-43 ft-lbs.

CAUTION: The crossover P-Clamp must be flat against the transmission case after all fasteners are torqued

- 16. Clean header pipes and crossover (see step 23).
- 17. Insert worm gear clamps into slots on the back side of the heat shields. All clamps screws except the upper two on the rear shield should be positioned so the screw heads can be accessed from the front or bottom of the headers. **Tip:** Insert clamps evenly into the slots and bend the ends outward to ease installation over header pipes. Lube clamp threads if shields are removed and reinstalled.
- 18. Install heat shields. Connect and loosely tighten all worm gear clamps. Align shields on header pipes for best fit. Position screw heads for easiest access and tighten with a 5/16" nut driver or screwdriver.
- 19. Reinstall front floorboard with the supplied 1/4" spacers.

CAUTION: Make sure no part of the exhaust system or shields contacts the frame or any component that is connected to the frame (except for the rear muffler brackets).

20. Position and orient the muffler clamps in the original position, making sure the clamps cover the rear edge of the clamping slots. Position the muffler so the back of the heat shield is even with the weld seam. Heat shield should not touch muffler. (see photo 20) Align and tighten the muffler clamps to 38-43 ft-lbs

CAUTION: Muffler clamps must be tight on the header pipes or damage may occur to either the header and or the mufflers. If clamps are stretched they will not torque properly and must be replaced. See replacement clamps at wwwkhromewerks.com

- 21. Reconnect oxygen sensor electrical plugs.
- 22. Install the saddlebags.
- 23. Before operating motorcycle, clean heat shields and mufflers with soap and water or window cleaner. Any grease, oil and finger prints will permanently burn onto pipes. Dry thoroughly.

USE AND CARE: Wash your accessories with the same care you use when washing your motorcycle. Use mild soap and water. DO NOT use abrasive chemicals and cleaners, or high pressure washers. We have had success using the following products to polish and maintain our Stylelinc and Icon finishes: Wizards Mist n Shine and Turtle Wax Chrome Polish. Use per manufacturer's recommendations. Please contact us if you have further questions.

CAUTION: Carefully read the enclosed Important Notice sheet. Recalibration may be required depending on engine modifications. WARNING: Check all mounting hardware to be sure it is tight before and after first operation of motorcycle. Periodically, check tightness of all mounting hardware and examine system for cracks.

INSTALLATION INSTRUCTIONS

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BOM			
ITEM#	PART #	DESCRIPTION	QTY
1	200421	2-2 HEADERS WITH P-CLAMP	1
2	3463314	PORT GASKET	2
3	200422	CROSSOVER WITH P-CLAMP	1
4	3463489	1.75" (46mm) ACCUSEAL CLAMP	1
5	200403A	FRONT HEAT SHIELD, CHROME	1
6	200813A	FRONT HEAT SHIELD, BLACK	1
8	200424	REAR HEAT SHIELD, CHROME	1
9	200924	REAR HEAT SHIELD, BLACK	1
11	200425	LEFT HEAT SHIELD, CHROME	1
12	200925	LEFT HEAT SHIELD, BLACK	1
14	390370	HEAT SHIELD CLAMP	9
15	209923A	P-CLAMP L-BRACKET	1
16	203060	HEADER P-CLAMP	1
17	203020	CROSSOVER P-CLAMP	1
18	420426	14-20 X .75 HEX CAP SCREW	1
19	420064	14-20 BIWAY NUT	1
20	420284	1/4" B NARROW FLAT WASHER	2
21	421016	3/8"-16 x 1.00" CARRIAGE BOLT	1
22	120085	3/6-16 FLANGE NUT	1
23	3463404	1/4" FLOORBOARD SPACERS	2
24	299012	12mm O2 PLUG	2
25	209018	18mm O2 PLUG	2
26	420403	12mm O2 GASKET	2
27	420405	18mm O2 GASKET	2
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CAUTION: Cover ends of mufflers when washing motorcycle. Mufflers/headers may internally corrode if saturated with water and allowed to sit.

NOTE: This exhaust system is designed for use on closed course competition motorcycles only and does not conform to U.S. EPA noise and emission standards. This system is not a replacement for motorcycles equipped with factory installed catalytic convertor style. systems. NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES



