

EXHAUST SYSTEM

HARLEY DAVIDSON 1995-2016

(See last page for bike specific info)

This product is designed for use in closed course racing and is not intended for highway use. In the state of **California**, it is illegal to modify the emission control system, which includes the carburetors or fuel injection of any vehicle.



Important information is distinguished in these instructions by the following notations:

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 motorcycle.

Parts List

(1) Black 2 into 1 Header/Muffler assembly with baffle installed
(1) Black front heat shield
(1) Black rear heat shield
(1) Black contrast end cap
(1) Mounting bracket
(1) 5/16"-18 Nut plate
(2) 18mm x 1.50 Bung plug zinc plated
(2) 12mm x 1.25 Bung plug zinc plated
(2) 1/2"-13 x 1-3/4" Socket cap head bolts
(1) 3/8"-16 x 3-1/4" Socket cap head bolt
(1) 3/8"-16 x 2" Socket cap head bolt
(2) 3/8" Flat washers
(2) 5/16"-18 x 5/8" Serrated flange hex head bolts
(2) 1/2" Split lock washers
(2) 0.750" x 0.122" x .0750" Aluminum spacers
(2) 0.625" x 0.123" x 0.750 Aluminum spacers
(1) 6" Black cable tie
(3) 1/4"-20 x 1/2" Button head bolt
(3) 1/4"-20 Split lock washer



WARNING: Ground and cornering clearance may be reduced.

CAUTION: Fuel tuning or carb jetting 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 the mounting hardware and examine system for cracks.

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.

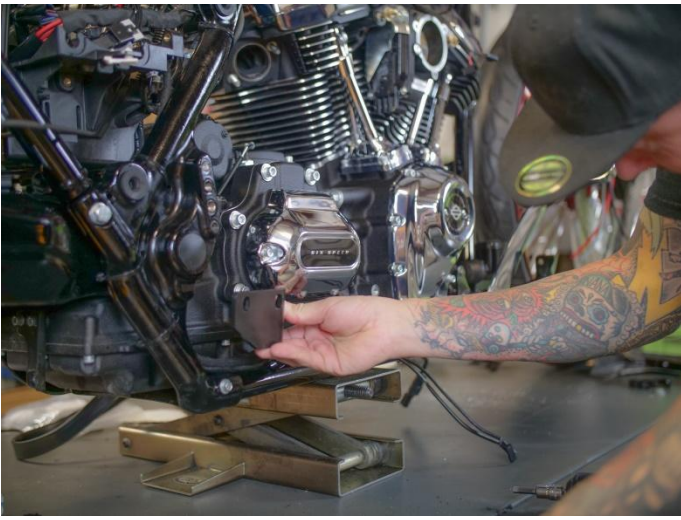
CAUTION: Cover ends of mufflers when washing motorcycle. Mufflers/headers may internally corrode if saturated with water and allowed to sit.

CAUTION: DUE TO THIS DESIGN SOME ACCESSORIES MAY INTERFERE WITH THIS EXHAUST SYSTEM SUCH AS SADDLE BAGS OR PASSENGER FOOT PEGS IN ORDER TO FIT PROPERLY. IN SOME MODELS THEY HAVE TO BE RELOCATED.

Removing Stock Exhaust System:

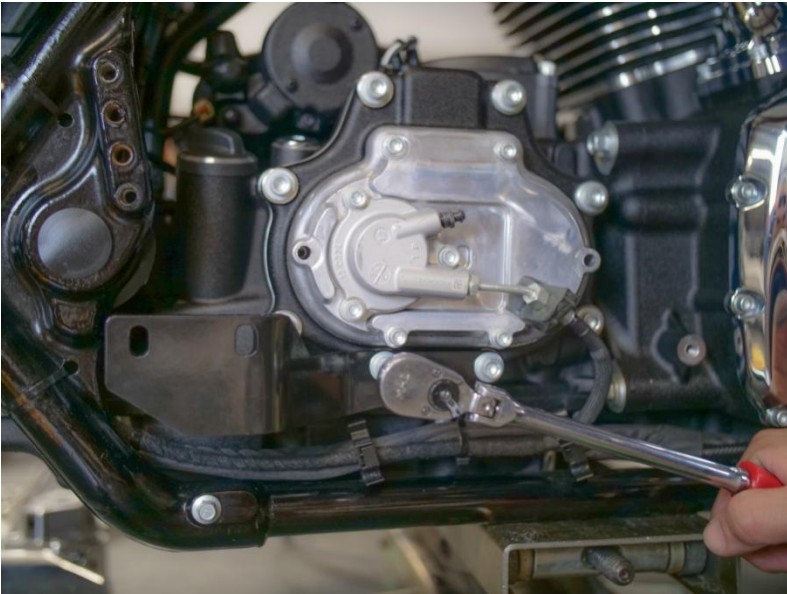
- (1). Place motorcycle on side stand or motorcycle ramp to prevent from falling when performing any work.
- (2). Remove both left and right saddlebags; refer to owner manual for proper procedures.
- (3). Loosen pinch clamp bolts located in front end of each muffler. It may be necessary to stretch clamp nuts.

- (4). Remove two 5/16" bolts holding both left and right mufflers to the saddlebag supports bracket using a 1/2" socket or wrench. Note: Models equipped with a (2-1) system have only one muffler on the right side FLTR & FLHX.
- (5). Remove stock mufflers. Note: It may be necessary to use a penetrating lubricant on slip joints between mufflers and head pipe to help the removal.
- (6). Models (09-up) loosen pinch clamp behind oil pan using a 5/8" socket or wrench. This clamp holds the crossover pipe section. Skip this step for models (2009) equipped with (2-1) system and (95-08).
- (7). Remove crossover support clamp and mounting clamp bracket. Use a 3/16" hex key wrench for the screws and a 1/2" for the clamp. Now remove the crossover pipe and reinstall screws back in place. Skip this step for models (2009) equipped with (2-1) system and (95-08).
- (8). Remove right side passenger peg, use 5/16" hex key wrench.
- (9). Remove right side floorboard. Models (95-08) use a 3/8" hex key wrench. From the inside of the frame remove two screws holding floorboard assembly and save for re-use. Models (09-up) use a 5/16" hex key wrench and remove two screws holding assembly and save for re-use.
- (10). Models (95-08) remove clamp holding system to transmission bracket using a 7/16" socket or wrench. Now open the clamp to remove it.
- (11). Models (09-up) loosen nut from carriage bolt holding system to transmission bracket using a 9/16 deep socket.
- (12). Models (10-up) remove right side plastic cover, locate and unplug sensor cables from harness. Follow cable route and cut plastic ties and remove sensors. Pay special attention to the route of the cables for re-installation. Models (07-09) follow sensor cables route and disconnect from harness.
- (13). Loosen all of the hose clamps holding heat shields in place using a 5/16" nut driver or flat screw driver. Models (95-08) remove left side heat shield completely.
- (14). Models (95-08) remove left side pipe by loosening clamp holding it with a 9/16" open wrench or socket.
- (15). Remove flange nuts that secure each head pipe to cylinder head, now remove entire exhaust system. Some assistance may be required.
- (16). Remove flanges and retaining rings from the stock exhaust system using snap rings pliers. If retaining rings are bent or damaged, replace them.
- (17). Remove oxygen sensors from stock headers (07-09) use a 7/8" or 22mm wrench (10-up) use a 14mm wrench.
- (18). Models (95-08) remove stock exhaust mounting bracket. Refer to owner's manual for proper removal the clutch cable. As forcing to remove it without removing the clutch cable cover will result in damages to the cable. Bracket must be removed to give way to new mounting bracket. To access standard transmission bracket, first remove oil dipstick cover and release cover. Note: If motorcycle is resting in vertical position, engine and transmission oil must be drained completely before removing covers. Refill after installing new bracket.
- (19). Models (95-UP) remove transmission using 1/4" inch hex key wrench.



Installing System:

(1). Remove exhaust system from protective packaging. Avoid scratching parts during the installation process. We recommend using painters tape to cover parts and accessories on areas where damage can occur during installation.



(2). Install mounting bracket using two head cap screws previously removed from stock. Use some type of locking glue, install as shown using a 1/4" hex key wrench.

(3). Install exhaust port flanges and retaining rings (from stock system) onto head pipes. (Bagger Brothers recommends replacement of exhaust port gaskets and retaining clips if damaged or worn out)

(4). Install O2 sensors (from stock) (95-06) models do not have oxygen sensor and therefore plugs must be used. Install 18mm sensors or bung plugs as shown. Using a 7/8" or 22mm wrench. Install 12mm sensor bung plugs on both headers using a 9/16" wrench. Models (07-09) install 18mm oxygen sensors from stock using a 7/8" or 22mm wrench. Make sure you have the correct sensor (front and rear). Use anti-seize compound, apply it to the thread only. Be careful not to use too much or to make contact with the tip as it may affect its functionality. Make sure they are installed properly, as they are marked front and rear.



(5). Install headers/muffler assembly into exhaust port by first and carefully aligning the flange holes with the studs on the engine port. Secure it with stock flange nuts using a 1/2" socket and bring nuts all the way finger tight but **DO NOT TIGHTEN AT THIS TIME YET.**



(6). Secure muffler to mounting bracket using a back plate bracket and two 5/16"- 18 x 5/8" serrated flange screws. Finger tight all the way.

(7). Align system with mounting bracket. Proceed to tighten muffler using a 1/2" wrench, now tighten the headers to engine port using a 1/2" socket.



(8). Install heat shields. Start with front shield first. Place front shield over front pipe and insert hose clamps carefully looping the tail of clamp and engaging the welded clip inside shield. Use #24 hose clamp. Use a 5/16" nut driver but do not tighten at this time.

(9). Repeat step with rear shield and align both shields and tighten using a 5/16" nut driver



(10). Most systems are shipped with end caps and turn out already installed, if this is not the case proceed to install turn out and end cap.

(11). Re-install right side floorboard (95-08) use bigger spacers and two 1/2"-13 x 1-3/4" socket head cap screws with split washer. (09-up) use smaller 3/8" screws and flat washers. Models (95-08) use a 3/8" hex key wrench and a 5/16" for models (09-UP)

(12). It is recommended to use some type of locking glue over the screw threads

(13). Double check and make sure all hardware is tightened.

(14). Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage.



(15). Clean exhaust system with some chrome cleaner and remove painters tape (if used during installation) before turning on engine. Failure to follow this procedure may result in damage to the chrome finish as oils burn out leaving permanent marks.