

EXHAUST SYSTEM # HD00055 TRUE DUALS (2-2)

Congratulations, you have acquired the finest aftermarket performance exhaust system available for your motorcycle. Your FREEDOM PERFORMANCE exhaust system was designed to perform fit and give the optimum sound and style at a very affordable price

Please follow the installation instructions and please do not hesitate to call us for any technical questions at (310) 324-0415

REMOVING THE STOCK EXHAUST SYSTEM

- 1. Models such as (FLSTSC, FLSTN, and FLSTC AND FLSTF) loosen the floor boards to gain clearance for exhaust removal and installation.
- 2. Loosen heat shield clamps on both the front and rear head pipes.
- 3. Locate and unplug oxygen sensor wiring from harness and make sure to remember the route of the wires to reinstall it back in the same location with the new system. The rear sensor is located under the oil tank on the right side of the motorcycle, find it and unplug it. The front sensor is situated above the rectifier. To gain access open the plastic cover and unplug the sensor from the harness. Next cut the tie that holds the oxygen sensor wire from the frame.
- 4. Remove two cylinder exhaust port flange nuts from each head pipe, located at the cylinder head.
- 5. Remove the nuts holding the mounting bracket to the frame. On models (FLSTN, FLSTF, and FXSTD) remove right hand passenger foot peg and the hanger because this is attached to the stock exhaust system bracket. Now re-place it back using a 3/8" x 2.500" Allen bolt (supplied)
- 6. On some models there is a carriage bolt and clamp under the transmission, remove bracket from under the transmission.
- 7. Remove the complete exhaust system and set aside. Assistance may be required.
- 8. Using a 7/8" or a 22mm wrench, remove oxygen sensors from stock system and save to reuse them in your new exhaust system.
- 9. Remove the studs from the right side of the frame and remove plastic plugs from the left side on the motorcycle to attach new mounting bracket.
- 10. Remove flanges and circlips using snap ring pliers. Note: if circlips are bent or damaged replace them.

FREEDOM PERFORMANCE EXHAUST SYSTEM INSTALLATION

1. Remove header and heat shields from protective foam packaging. Place them in a non-abrasive surface such as a blanket or carpet. Slide header into heat shields tail end first, NOTE: with a marker, mark the location of the heats shield clips at the edge of the heat shield. This procedure will visualize the location of the clips when the head pipe is placed over the heat shield.

- 2. Install each hose clamp by feeding tail end of clamps into heat shield clips. Take note of location of clamp screw head direction. (Screw head must be accessible when system is installed on motorcycle for adjustment purposes).
- 3. Attach mounting brackets on motorcycle MBK-S110 (left) and MBK-S111 (right) using 3/8-16 x ¾ flange bolts. (Supplied) (If equipped, plastic plugs must be removed). On FLSTN models the passenger foot peg should be removed.
- 4. Install exhausts port flanges and circlips (from stock system) onto head pipes. (FREEDOM PERFORMANCE recommends replacement of exhaust port gaskets, Harley part number: 17048-98. If circlips are bent or damaged replace them.
- 5. Install front oxygen sensor onto front head pipe.
- 6. Install front head pipe first into exhaust ports **NOTE**: **DO NOT TIGHTEN AT THIS TIME YET**. (Some assistance may be required)
- 7. Install circlip and flange on rear head pipe (do not install oxygen sensor just yet)
- 8. Remove the ignition coil to gain access to install rear oxygen sensor.
- 9. Disengage front mount of shift lever rod to gain clearance of rear u-pipe installation.
- 10. Install rear u-pipe onto rear engine port. Do not tighten yet. (Make sure, that the head pipe has enough clearance and that there is an even gap of the same size on the sides of the head pipe.)
- 8. Install oxygen sensor and route the wiring through frame beneath the oil tank and plug it back in to harness.
- 11. Take and slide one t-bolt band clamp over the notched end of the left side pipe, and slide pipe over rear head pipe.
- 12. Slide one t-bolt band clamp on each muffler over the notched end facing bolt towards the center of the motorcycle.
- 13. Install right and left muffler onto tail end of both rear and left head pipe. Install 3/8-16 x 1.000" carriage bolts and aligns mufflers with heat shields.
- 14. Tighten muffler mounting bolts first and rear exhaust port flange nuts. Tighten t-bolt band clamps and front exhaust port flange nuts. Align smallest heat shield over rear head pipe and tighten. Tighten all heat shield clamps.
- 15. reinstall ignition coil cover and shifting rod make sure is tight.
- 16. Plug in front oxygen sensor connector into harness and install plastic cover back in its place.
- 17. On model equipped with floorboard, tighten them back in place.

NOTE: make sure to put some type of locking glue on screws to hold end caps or Shark tail TM tips to prevent part from falling off. Loctite® (red) is recommended.

18. Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage. Pay special attention to oil lines close to rear head pipe and make sure there is enough clearance.

It is vital when installing a new chrome exhaust system; please make sure that your hands are clean with no oil. Right after installation is done, in detail, clean your new exhaust system with a soft cloth (to prevent scratches) and you could use the following (chrome wax, glass cleaner, alcohol, or ammonia before starting the engine.

Note: Be sure to tighten all hardware before starting your engine. Retighten after the first 100 miles.

Re-jetting the carburetor is strongly recommended by FREEDOM PERFORMANCE

At freedom performance Inc. attempts have been made to provide enhanced concerning Clearances. However, due to some designs and space boundaries, ground and cornering clearance may not be improved and in some cases may even be reduced.

WARNING! FREEDOM PERFORMANCE DOES <u>NOT</u> WARRANTY ANY CHROME PRODUCTS AGAINST DISCOLORATION.

Some accessories are available for your new FREEDOM PERFORMANCE exhaust system, visit www.freedomp.erform.com for more information or call 310-324-0415





