



2014-17 HD SPORTSTER
2-1 Full System Part # 005-4580199



BILL OF MATERIALS

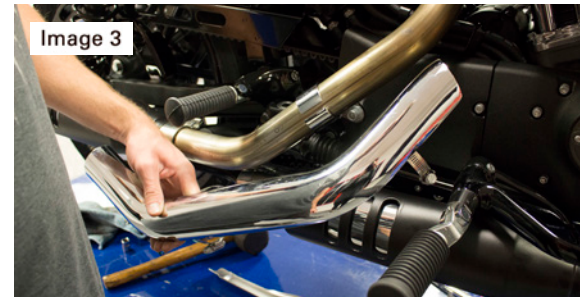
1	Sportster Comp Muffler	
1	Sportster Front Header	
1	Sportster Rear Header	
1	Sportster Heat Shield Front	
1	Sportster Heat Shield Rear	
1	Bracket	005-458-B
2	5/16 Flange Bolts	005- FB1634
2	8x20mm Bolts	005-SH820
2	8mm Lock Nuts	005- FNL8
2	O2 Adapter Kit	005-92-22KIT
2	45mm Springs	005-S45
2	5/16 Clip Nuts	005-10-516CN
5	Hose Clamps	005-HC-64024
1	Spring Puller	005-SP

INSTALLATION INSTRUCTIONS

1. Make sure the motorcycle is completely cool before starting the installation.
2. Unplug O2 sensor connectors from wiring harness. Note: Pay attention to wire routing for reinstallation. (Reference images 1 & 2)



3. Loosen heat shield clamps and remove heat shields from both the front and rear head pipes. (Reference image 3)
4. Loosen and remove header flange nuts. (Reference image 4)



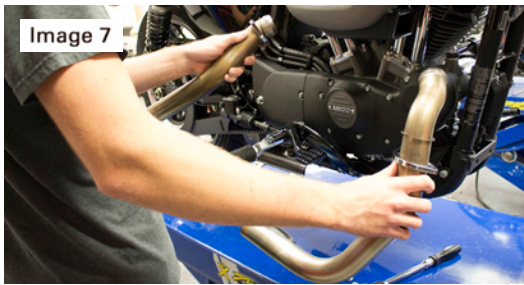
5. Loosen and remove the OEM muffler bracket. (Reference image 5)
6. Loosen and remove the OEM header clamp bolt and bracket. (Reference image 6)



7. Remove entire OEM exhaust system. (Reference image 7)
8. Remove OEM flanges and clips from the stock exhaust and install them on the TBR headers. Note: Black headers will scratch easily so take your time. You can tie zip ties around the headers to prevent the flanges from moving around during install. (Reference image 8)

IMPORTANT - PLEASE READ CAREFULLY: We recommend that this performance part be installed by a qualified motorcycle technician. If you have any doubts as to your ability to install this performance part, please consult with your local motorcycle dealer. Read all instructions first before starting installation. Make sure the motorcycle and exhaust system are completely cool before starting the installation. Also, make sure the bike is secure on a center stand or ideally a service lift during installation. Be sure to save all stock components for possible use later.

WARRANTY: Two Brothers Racing products are intended for closed course competition purposes only, and therefore are sold "as is" without warranty. Two Brothers Racing specifically disclaims any warranties of merchantability or fitness for a particular purpose and disclaims all responsibility for consequential and incidental damages or any other losses arising from the use of these products or parts.



9. Install the TBR bracket on top of the lower OEM exhaust bracket and secure it using the included 8mm locking nuts and 8x20mm bolts. The bolts run from the bottom of the OEM bracket through to the top of the TBR bracket and secure with the nuts on top. **(Reference image 9)**
10. Remove the O2 sensors from the stock exhaust and install them on the TBR exhaust using the included 12mm adapters and crush washers. Note: You can do this before or after the exhaust is installed, but it is much easier to thread and tighten the O2 sensors prior to install.
11. Loosely install TBR headers using the OEM flange nuts. **(Reference image 10)**



12. Install supplied clip nuts on TBR muffler. **(Reference image 11)**
13. Install TBR muffler on bike, start by sliding the collector into the headers and use the included flange bolts to loosely install the muffler to the bracket. **(Reference image 12)**



14. Once you ensure the exhaust clears the bike begin to tighten all hardware, starting from the header flanges and work your way back to the muffler. Install the included 45mm springs.
15. Install the heat shields using supplied hose clamps. **(Reference images 13 & 14)**



16. Before you run the bike, clean off all fingerprints and dirt, as any oily residue will etch the metal and become somewhat permanent when the system gets hot. Run the bike and enjoy. It is normal for some white smoke to appear the first time you start the bike. This is packing/manufacturing oil from inside the pipe burning off. Check for gaps or leaks. If you find a leak, a little high temperature silicon sealant should fix it. After 50 to 100 miles, recheck all fasteners for tightness.

Care & Cleaning

Keep system free of dirt and moisture. Store in a cool, dry place. Make sure vehicle is completely cool before maintenance.

Stainless Header System: Polished stainless steel pipes will turn a light golden hue after a few heat cycles, this is a normal characteristic of high quality stainless steel. Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Titanium Header System: Polished titanium pipes will experience color shift ranging from deep blue/purple through amber after a few heat cycles. This is a normal characteristic of high quality titanium. Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Polished Aluminum Canisters: Use an aluminum or mag wheel polish to restore the bright finish to factory spec.

Brushed Aluminum Canisters: Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

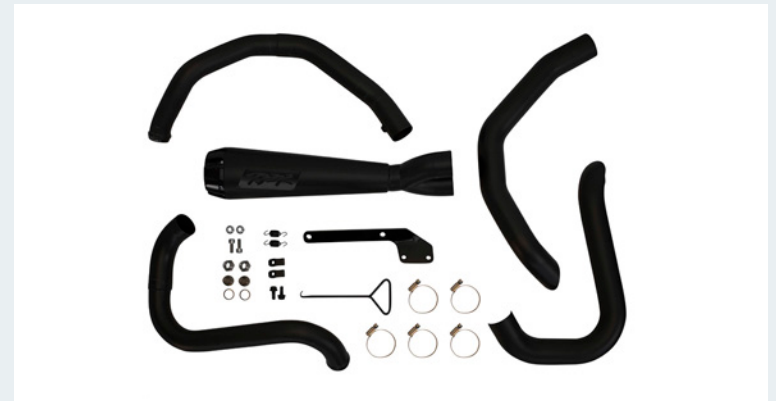
Carbon Fiber Canisters: Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth. Always make sure the fiberglass packing inside is in good condition and not burned out, as exhaust heat inside an empty canister will deteriorate the carbon fiber sleeve. TBR sells repack kits (Road - #005-10038, Offroad - #005-10038MX) that include everything you need to easily do it yourself.

Titanium Mufflers: For cleaning use a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth. Always make sure the fiberglass packing inside is in good condition and not burned out, as exhaust heat inside an empty canister will deteriorate the carbon fiber sleeve. TBR sells repack kits (Road - #005-10038, Offroad - #005-10038MX) that include everything you need to easily do it yourself.

Repack all road canisters at the first signs of packing material deterioration. Part #005-10038

Repack all offroad canisters after every 10 hours of use. Part #005-10038MX

NEVER dyno test your bike with carbon fiber or titanium canisters installed - the intense heat and lack of cooling air can quickly burn through the canister material. Two Brothers Racing does not provide a warranty for burned canisters.



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