



2018-2019 HD SOFTAIL

Shorty 2-1 Part # 005-5120199/005-5140199



BILL OF MATERIALS

1	Muffler	005-512-M
1	Front Header	005-49601HF
1	Rear Header	005-49601HR
1	Front Heat Shield	005-496-HS1
1	Rear Heat Shield	005-496-HS2
2	O2 Sensor Plug Kit	005-92-22KIT
2	45mm Swivel Hook Spring	005-S45
5	Hose Clamp	005-64024
1	Spring Puller	005-SP
2	Harley 5/16 Clip Nut	005-10-516CN
2	5/16" x 3/4" Flange Bolt	005-FB51634
2	5/16" x 1 1/2" Flange Bolt	005-FB516112
1	Slash Cut Cone Muffler Mounting Bracket	005-375-B
2	3/8" ID x 1/2" Spacers	005-S-11-10
1	3/8" ID x 1/2" Spacer	005-S-11
2	3/8" x 2" Socket Head Cap Screw	005-SH382
1	5/16" - 24 x 1 1/4" Socket Head Cap Screw	005-516114-24
1	Passenger Peg (005-514 ONLY)	005-496-BKIT
1	FXDR Bracket (SPORT GLIDE ONLY)	005-496-SGB

INSTALLATION INSTRUCTIONS

1. Make sure the motorcycle is completely cool before installation. Make sure the motorcycle is secure on a stand or service lift.
2. Remove both the OEM heat shields, muffler and muffler bracket. **(Reference images 1 & 2)**



3. Remove the OEM front and rear O2 sensors from the header pipes
4. Remove OEM foot controls
5. Loosen and remove the oem header flange bolts and remove headers



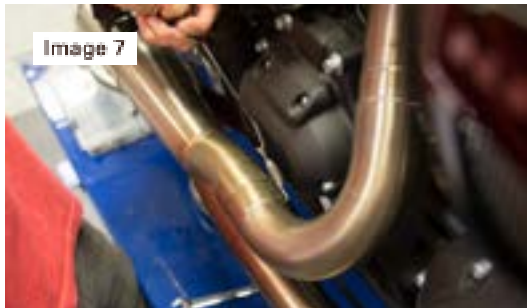
6. Install OEM flanges, flange clips a O2 sensors onto the TBR headers using the O2 sensor adapters. **(Reference image 3 & 4)**
7. Now loosely install the front and rear TBR headers. **(Reference image 5)**
8. Install the TBR bracket using the included 5/16" x 1 1/2" bolts. **(Reference image 7)**
9. Install the muffler onto the bike and use the included springs and 5/16"x3/4" Bolts. **(Reference images 7)**



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.

10. Install the TBR heat shields using the supplied hose clamps. **(Reference Image 10)**



11. Now begin to tighten the headers and muffler to the muffler bracket. Start from the headers and work your way back to the muffler.

Image 8



12. Install foot controls using the the supplied spacers and bolts. **(Reference Image 8)**
13. Double check your work to make sure everything is secure
14. 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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