



## 1999-2005 HD DYNA

Comp-S Full System Part # 005-4280199



### BILL OF MATERIALS

1	HD Dyna Muffler	005-428-M
1	HD Dyna Header	005-42801H
1	HD Dyna Bracket	005-428-B
1	HD Dyna Heat Shield	005-428-HS1
1	HD Dyna Heat Shield	005-428-HS2
2	45mm Spring	005-S45
5	Hose Clamps	005-HC-64024
2	HD Clip Nut	005-10-516CN
2	Flange Bolt 5/16" x 3/4"	005-FB51634
1	Spring Puller	005-SP

## INSTALLATION INSTRUCTIONS

**\*\*CAUTION\*\*** - Take care when installing black ceramic coated exhaust system. The coating can be scratched when installing heat shields and header flanges.

Use a zip-tie around header pipe to keep flanges from sliding down the tubing. Be sure to remove zip-ties before starting bike. Spread hose clamps wide to clear header pipes. Close and fasten once shields are in place. (Reference images 1 & 2)

Image 1



Image 2



1. Make sure the bike is completely cool before starting the installation and secure on a service lift.
2. Remove OEM mufflers and headpipes. (Reference images 3, 4 & 5)

Image 3



Image 4



Image 5



3. Remove stock exhaust mounts from motorcycle; they will not be reused. (Reference image 6)
4. Install supplied mounting bracket to the two bolts below the transmission cover. (Reference image 7)

Image 6



Image 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.

- Using snapping pliers, carefully remove the circlips and flanges from the stock exhaust system. Install the stock flanges to the new TBR head pipes. Check the condition of the circlips, we recommend replacing them with new ones if they are bent or twisted. **(Reference images 8 & 9)**



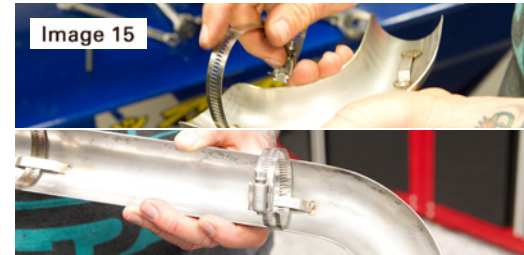
- Install head pipes into collector and attach springs using supplied spring puller tool. Remove OEM exhaust system. **(Reference images 10 & 11)**



- Install clips onto muffler. **(Reference images 12 & 13)**



- Check conduction of crush gasket between header pipe and cyclinder head. If worn, we recommend replacing with OEM gasket 65324-83B. If gaskets are in good condition you may reuse.
- Install TBR system onto motorcycle. Leave cylinder nut slightly loose. Use supplied 5/16 x 3/4 bolts to secure muffler to TBR mounting bracket. **(Reference image 14)**
- Feed clamps through head shield retainers. **(Reference image 15)**



- Install heat shields onto headers. **(Reference image 16)**
- Tighten cylinder/header nuts.
- 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. **(Reference image 17)**



## 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.



## BILL OF MATERIALS

1	HD Dyna Muffler	005-428-M
1	HD Dyna Header	005-42801H
1	HD Dyna Bracket	005-428-B
1	HD Dyna Heat Shield	005-428-HS1
1	HD Dyna Heat Shield	005-428-HS2
2	45mm Spring	005-S45
5	Hose Clamps	005-HC-64024
2	HD Clip Nut	005-10-516CN
2	Flange Bolt 5/16" x 3/4"	005-FB51634
1	Spring Puller	005-SP