

HEMI SHORTY HEADERS VS. LONG-TUBE HEADERS

Most customers trying to decide whether to upgrade to Shorty or Long-Tube Headers on their 5.7L Hemi, 6.1L SRT8, 6.4L 392 or 6.2L Hellcat / Trackhawk / TRX need to consider a variety of things.

Shorty Headers are designed to be used with factory Mid Pipes or direct replacement aftermarket Mid Pipes.

Long-Tube Headers are ONLY sold with corresponding Mid-Pipes. This is because Long-Tube Headers have a different configuration and will NOT bolt up to factory Mid Pipes. The collector flange on Long-Tube Headers are further back on the vehicle and in a different location altogether. This is why all of the Long-Tube Headers we offer are not sold individually, they are ONLY sold in combination with the shorter Mid-Pipes, as they are designed to be a direct-bolt on modification and both are required (Long-Tubes with Mid Pipes).

Something else to consider is the installation time & difficulty on a Shorty Header vs. a Long-Tube Header system. The installation time and difficulty are not all that different between the 2 types of setups. On both Header types, it requires removing BOTH the OEM exhaust manifold AND OEM Mid-Pipes (yes, even on Shorty Header upgrades). When we do in-house installations, we quote the SAME labor cost & time for both setups.

SHORTY HEADERS

Shorty Headers are more affordable than Long-Tubes. However, keep in mind that they will generally make about half the power that would be achieved with Long-Tubes. On a bone stock 5.7L Hemi, you can expect gains of about 15-18whp. On the 6.1L SRT8 & 6.4L 392, you will usually see about 17-20whp. On the 6.2L Hellcat, Trackhawk or TRX models, 20-25whp can be expected. The Shorty Header brands we offer are from AFE Power, BBK, Flowmaster, Flowtech & Hooker Blackheart. A complete list of the Shorty Headers that we offer can be found here-

<https://fasthemis.com/pages/search?query=Shorty-Headers&sort=title>

LONG-TUBE HEADERS

Long-Tube Headers will make more power than Shorties. That is because they have a different configuration, longer Primary Tubes and feature Mid Pipes with Catless or High Flow Catted Mid Pipes. They will also be louder than Shorty Headers. On a stock 5.7L Hemi, you will usually see an increase of about 30-35whp. On the 6.1L SRT8 & 6.4L 392, an increase of about 35-40whp is expected. On the 6.2L Hellcat, Trackhawk & TRX, between 45-50whp.

With Long-Tube Headers, all of these power numbers will be substantially more with a custom tune for maximum efficiency of Air/Fuel Ratios and Engine Timing. Again, keep in mind that the installation time, cost and difficulty is the same as Shorty Headers.

A complete list of the Long-Tube Headers that we offer can be found here-

<https://fasthemis.com/pages/search?category/Engine-Parts%3E5.7L-6.1L-6.4L-Hemi-Engine-Parts/category/Engine-Parts%3E5.7L-6.1L-6.4L-Hemi-Engine-Parts%3EHemi-Headers-Mid-Pipes/vendor/American-Racing-Headers/vendor/Kooks/vendor/Stainless-Works&query=long--tube-Headers&pageNumber=2&sort=title>

TUNING

Shorty Headers do not require tuning. You can tune a vehicle with Shorty Headers, but it is not necessary. In doing so, you will not see the same substantial power increases from a custom tune when compared to custom tuning for Long-Tube Headers. This is because they do not feature longer primary tubes and the fact that they can be used with factory Mid Pipes, with the factory Catalytic Converters. Shorty Headers will not affect the Air/Fuel Ratios like with Long-Tubes. In addition, Shorty Headers will NOT produce a Check Engine Light, because most of the time, the factory Cats stay in place.

Long-Tube Headers are a different story. When adding Long-Tubes and corresponding Mid-Pipes, the vehicle will sometimes run a little on the "Lean" side, which means the engine needs more fuel. Many customers adding Long-Tubes will add a custom tune to the vehicle to achieve a "Richer" Fuel Mixture. Running "Lean" is not always the case with Long-Tubes, but many times it can be an issue. Therefore, a custom tune is not always required with Long-Tubes, but in many cases may be recommended.

Another thing to note is that all Long-Tubes systems will throw a Check Engine Light due to replacing the OEM Catalytic Converters. Yes, you will have a CEL with EITHER Catless or High-Flow Catted systems. Even if you run a system featuring High-Flow Cats, they flow significantly more than the OEM Cats. That means that both (Catless & High-Flow Catted) will have a CEL related to "Catalyst Efficiency", which is usually a P0420 & P0430 code. This can be resolved 2 ways: using O2 restrictor fittings (quantity 2, one for each side) or doing a custom tune and physically tuning out the rear O2 sensors. Those rear sensors are ONLY there to ensure the Catalytic Converter efficiency, NOT for monitoring & controlling Air/Fuel Ratios (like the front sensors do).

If you are in need of a custom tune and do not have a local tuner within driving distance, we HIGHLY recommend reaching out to Hemi Fever Tuning. Hemi Fever has developed thousands of custom tunes for all types of Hemi vehicles featuring Long-Tube Headers (as well as many other modifications). Feel free to check them out-

<https://www.hemifevertuning.com/Default.asp>

Please keep in mind that they only provide custom tuning for customers using DiabloSport programmers (inTune i3 Platinum or Trinity 2 Platinum). You will need either one of these programmers to download their custom tunes (provided through email). The "Platinum" version has capability of custom tuning (unlike non-Platinum versions). Those Diablo programmers can be found here-

Diablo i3 InTune Platinum Programmer for Chrysler, Dodge & Ram Vehicles 2005-2014

<https://fasthemis.com/products/diablosport-intune-i3-platinum-programmer-300-challenger-charger-magnum-ram-durango-2005-2014>

Diablo i3 InTune Platinum Programmer for Jeep Vehicles 2005-2014

<https://fasthemis.com/products/diablosport-intune-i3-platinum-programmer-jeep-grand-choerokee-wrangler-commander-2005-2014>

Diablo T2 Trinity Platinum Programmer for Chrysler, Dodge & Ram Vehicles 2005-2014

<https://fasthemis.com/products/diablosport-trinity-2-t2-ex-platinum-programmer-monitor-chrysler-dodge-2005-2014>

Diablo T2 Trinity Platinum Programmer for Jeep Vehicles 2005-2014

<https://fasthemis.com/products/diablosport-trinity-2-t2-ex-platinum-programmer-monitor-jeep-vehicles-2005-2014>

Important to note: If you have a 2015+ Chrysler, Dodge, Ram or Jeep, you will need to purchase an Unlocked PCM Combo Kit. This is because all 2015+ models feature a “locked” OEM PCM. That means it is not compatible with an aftermarket programmer. Therefore, you need both (DiabloSport Unlocked PCM & Programmer). All Diablo PCM Combo Kits (with i3 InTune or T2 Trinity Platinum) can be found here-

<https://fasthemis.com/pages/search?query=Diablo-Combo>

CATLESS VS. HIGH FLOW CATTED MID PIPES

Long-Tube Headers are offered with both Catless and High Flow Catted Mid Pipes. Many people desire a Catless setup with Long-Tubes. This is because they feel that Catless Mid Pipes will produce more power. That is not always the case. We personally recommend going with High Flow Catted Mids, unless the system is being installed on a “strictly race vehicle”. High-Flow Catted Mids do NOT restrict power vs. Catless Mids. In actuality, these are free flowing, with minimal restrictions. They also provide slightly more backpressure than Catless Mids, which translates to more engine torque (vs. Catless).

Another reason (and the main reason) that we recommend going with High-Flow Catted Mid Pipes, is because they provide MUCH better sound quality. Nothing is worse than exhaust drone inside the cabin. Rest assured there will be MUCH more drone by going with a Long-Tube setup that features Catless Mid Pipes (compared to High Flow Catted); especially at highway speeds and at RPM levels between 2-3k rpms. This can be particularly obnoxious and overwhelming on long road trips and driving at highway speeds for long periods of time.

That being said, the only brand where Catless Mid Pipes are an option is from American Racing Headers. Other premium brands, such as Kooks & Stainless Works, only offer their systems with High-Flow Cats. It's important to note that all 3 brands feature the best quality and performance of any Long-Tube systems available.

OUR 3 PREMIUM LONG TUBE HEADER BRANDS & THE DIFFERENCES BETWEEN THEM

As mentioned, all 3 of these brands (Kooks, American Racing & Stainless Works) are premium, top of the line aftermarket Long-Tube systems in terms of quality and performance. However, there are minor differences between the 3.

KOOKS

Unlike American Racing or Stainless Works, Kooks include Stage 8 Locking Header Bolts and Cometic MLS Header Gaskets with ALL of their systems. We do sell these Header Bolts and Header Gaskets separately. The Header Bolts are \$72 and the Header Gaskets are under \$50. But what really separates Kooks from the other two brands, is the fact that they include these parts with their system. Please note that most Kooks systems are built-to-order, with general lead times of 10-12 weeks. All Kooks systems also include O2 Extensions (4), which are necessary for a bolt-on installation. All of our Kooks Long-Tube systems can be found here-

<https://fasthemis.com/pages/search?query=Kooks-Headers>

AMERICAN RACING

Again, another premium Long-Tube Header brand. American Racing is also the ONLY aftermarket Long-Tube Header brand that offers their systems with Catless Mid Pipes (if that's what you desire). They do include all hardware necessary for a bolt-on installation (Header Bolts, Gaskets, O2 Extensions), just like Kooks. However, the Header Gaskets they provide with their kits are a composite type, not MLS (Mult-Layer Steel); which we do feel are superior. The Header Bolts provided with their systems are grade 8 and are sufficient to use. But unlike the Stage 8 Locking Header Bolts, they usually require a re-torque after the first few heat cycles. This is because the Header Bolts tend to expand (as they are brand new) initially and may have a tendency to "back out" unless a retorque is performed (usually the first 50-100 miles following installation).

One thing that separates ARH from Kooks & Stainless Works, is that they offer Full Exhaust Systems from the Engine Back. This not only includes Long-Tube Headers & Mid Pipes (Catless or Catted), but also a Full Cat-Back Exhaust. By purchasing a Full System, you are getting a true Full Exhaust from the engine ALL the way back (Long-Tube Headers + Mid Pipes + Cat-Back Exhaust). This is for those who desire to have the same brand of exhaust all the way back. You are still able to combine different brands of Long-Tubes and Mid Pipes with other Cat-Back Brands (Borla, Corsa, Magnaflow, etc). But ARH is the only brand that offers Full System part numbers.

Like Kooks, American Racing Headers are also built-to-order with a general lead time of about 8-10 weeks. All of our American Racing systems can be seen here-

<https://fasthemis.com/pages/search?query=American-Racing-Long-Tube-Headers>

STAINLESS WORKS & STAINLESS POWER

Stainless Works and Stainless Power are owned by the same company. They both feature Stainless Steel (like ARH & Kooks). The difference is that Stainless Power is not manufactured in the US and uses Stainless Steel from China, which is lower quality than US manufactured Stainless Steel. Both systems are virtually the same, other than where they are manufactured and the Stainless Steel used (US vs. China). This is also reflected in the price point of these systems.

Like Kooks & ARH, Stainless Works (and Stainless Power) are complete systems, that include the necessary hardware for a bolt-on installation. This means both systems (Stainless Works & Stainless Power) include Header Bolts & O2 extensions (just like Kooks & ARH). The Header Bolts are not Stage 8 Bolts (like provided with Kooks), but like ARH, they are grade 8 bolts and are sufficient to use; they just usually require a retorque.

However, unlike Kooks & ARH, they do not provide Header Gaskets. They do provide high-temperature RTV silicone with their systems to use in place of actual Gaskets. We really do like the Stainless Works & Stainless Power kits. However, we recommend using Cometic MLS Gaskets (to avoid the use of RTV silicone) and Stage 8 Locking Header Bolts. Again, these are both sold separately if desired and the links to each are provided below.

The great thing about Stainless Works and Stainless Power systems is that these are usually in stock. No 8-10 or 10-12 week lead times. These kits can ship within 24 hours. A link to Stainless Works & Stainless Power systems can be found here-

<https://fasthemis.com/collections/stainless-works?category/Engine-Parts%3E5.7L-6.1L-6.4L-Hemi-Engine-Parts/category/Engine-Parts%3E5.7L-6.1L-6.4L-Hemi-Engine-Parts%3EHemi-Headers-Mid-Pipes>

STAGE 8 LOCKING HEADER BOLTS

The reason that we rave about these bolts is because they have an extremely innovative feature, which is a locking tab that is held in place at the head of each bolt. These locking tabs rest against the primary tubes of the header, preventing them from backing out, ever. Again, Kooks provides these with all of their Long-Tube systems. But as mentioned earlier, these can be purchased individually and used with any aftermarket Long-Tube (or Shorty) Header Kit. These Header Bolts do NOT require a retorque and provide great peace of mind knowing that you do not need a retorque and ensure that you will not experience bolt backing out or any future exhaust leaks. We highly recommend these with any aftermarket Long-Tube or Shorty Header setup. Stage 8 Locking Header Bolts can be found here-

<https://fasthemis.com/products/stage-8-header-bolts-locking-fasteners-chrysler-dodge-jeep-ram-5-7l-hemi-6-1l-6-4l-srt-scatpack-6-2l-srt-hellcat-2005-2024>

COMETIC MLS HEADER GASKETS

Again, these Gaskets are included with all Kooks Long-Tube systems. However, these can be purchased separately and can also be used for most aftermarket Headers (Long-Tube & Shorties), including ARH & Stainless Works (& Stainless Power). The benefits of using MLS Gaskets vs. composite Gaskets is that they will not burn out. In addition, the Mult-Layer Steel when compressed, is good at filling in minor imperfections of the Header Flanges. These gaskets are recommended for both Stainless Works, Stainless Power and American Racing systems. Cometic MLS Header Gaskets can be found here-

<https://fasthemis.com/pages/search?query=c5872>

Feel free to comment on this article and reach out to us with any questions and/or Header recommendations for your Hemi powered Chrysler, Dodge, Ram or Jeep!

We don't just sell these Header systems. We have decades of experience installing different Header brands (Long-Tube or Shorty), and we know what works best. We truly provide ourselves on our late model Hemi knowledge and unmatched level of customer service. Thanks for reading, please reach out to us with any questions! Email us at sales@fasthemis.com or call us (626) 337-3700.