

## 3<sup>rd</sup>-GEN GM F-BODY LS ENGINE SWAP HEADERS 70101316-RHKR (1-3/4") & 70101315-RHKR (1-7/8") Installation Instructions



Thank you for purchasing/using a Hooker brand product. These headers are part of the complete Hooker LS engine swap solution for GM 3rd-Gen F-body vehicles. These instructions have been written with the assumption that you have already installed an LS engine /transmission into your 3<sup>rd</sup>-gen vehicle using the associated Hooker engine mounting brackets and transmission crossmember.

Automotive work can be dangerous. Work only on a clean, dry and level surface and use lifting/supporting equipment specifically designed for automotive work. If you are unsure of your capability, or that of your equipment, seek professional assistance to install these components.

These headers are designed for off-road/competition use only and carry no CARB E.O. exemption to permit legal installation/use on pollution controlled motor vehicles.

**NOTE:** An O2 bung is included on each header collector for providing O2 sensor compatibility/operation. The near-vertical clocked position of the bungs will allow reliable use of wide-band O2 sensors, if desired. While not required, trimming the TH350, 700R4, TH400, 2004R and 4L80/4L85 transmission case bell housing inspection cover mounting flanges flush with the sides of the LS engine will reduce the effort required to install/uninstall these headers and to R&R any of these transmissions from the vehicle in the future. The headers are also installable while leaving all these transmission cases fully intact.

## **BEFORE BEGINNING...**

Check that the hardware package includes the following:

Qty.	Description
12	M8 x 1.25 header bolts

## **INSTALLATION:**

- 1. Disconnect the negative terminal on the battery, if connected.
- 2. Remove the spark plug wires, spark plugs, and engine oil dipstick/tube from the engine.
- 3. Install a Hooker 71223006HKR fuel line heat shield over the factory fuel lines on the inside of the driver's side frame rail, or provide other means to shield/re-route them.
- 4. If installed, remove the long horizontally positioned engine mount bolts that couple the engine isolators to the Hooker LS swap engine brackets.
- 5. Place a floor jack or other suitable lifting device under the engine oil pan and raise the front of the engine high enough to permit the passenger's side header assembly to be moved into position between the engine and the vehicle body (**Figure 1**). Lower the

engine back onto the mounts while you have a helper hold the header in a free-float position to prevent it from becoming jammed between the engine and vehicle.

- 6. Place a stock (new or used) GM multi-layer steel manifold gasket between the header assembly and the cylinder head and attach the header assembly to the cylinder head with six supplied header bolts. Tighten the bolts to approximately 10-14 ft./lbs.
- 7. For vehicles equipped with a 4L60E-4L70E, T56 or T56 Magnum transmission, move the driver's side header assembly directly into position against the engine from the bottom side of the vehicle. If the vehicle is equipped with a TH350, 700R4, TH400, 2004R or 4L80E/4L85E transmission that has not had the case bell housing trimmed flush with the sides of the engine, raise/tilt the left side of the engine up by jacking it from the left edge or corner of the oil pan. Lower the engine back onto the mounts when the assembly is in the general position (Figure 2).
- Place a stock (new or used) GM multi-layer steel manifold gasket between the header assembly and the cylinder head and attach the header assembly to the cylinder head with the remaining six supplied header bolts. Tighten the bolts to approximately 10-14 ft./lbs.
- 9. Install the long engine mount coupler bolts through the engine brackets and mounts. Install the nuts on the rear sides of the engine brackets and tighten them.

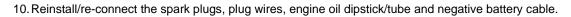




Figure 1



Figure 2

## **COMPATIBILITY INFORMATION:**

These headers are installable/compatible with all GM TH350, TH400, 700R4, 2004R, 4L60E-4L70E and 4L80E/4L85E automatic or Tremec OE LS 4<sup>th</sup>-gen F-body T56 and aftermarket T56 Magnum manual transmissions.

These headers are designed to connect directly to the Hooker Blackheart 2.5" dual exhaust systems co-developed for this vehicle application (part numbers 70501326-RHKR and 70501426-RHKR) and are compatible with all original factory installed vehicle components. Compatibility with other aftermarket components is not guaranteed.