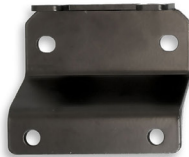




Installation Instructions & Warranty Information

SKC104 - 70-81 GM F Body (Camaro) LS Swap
Transmission Crossmember



4L80/85
Transmission
Adapter



4L60/65 7 4L70/75
Transmission
Adapter

PerTronix® thanks you for choosing **DOUG'S HEADERS**, the best fitting, highest quality Header and Engine Swap products on the market. To realize the full potential of our good fit, please read and understand these instructions completely prior to starting work.

Check to make sure you received the proper parts for your application against the parts list in these instructions. If you are unsure you have received the proper parts, please call PerTronix before you start work.

Be sure to work safe! Whenever you work under the vehicle be sure that it is located on level, solid ground and is supported by adequate safety stands!

Remember: Hot asphalt will not support most jack stands!

WARNING:

This product can expose you to chemicals including Lead, Nickel, Cadmium and Chromium which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

NOTE: Read Before Starting Installation

1. This Crossmember kit is designed to be used exclusively with Doug's Engine Mounts, part #SK104 or SK105. This is part of the Doug's Engine Swap offering that includes Headers and Exhaust kits as well.
2. Doug's Oil Pan part # SKOP100 is recommended to make this conversion. Alternatively a stock 4th gen Camaro pan may work.
3. This crossmember is designed for the standard 4th Gen Camaro T-56, T-56 Magnum, 4L60/4L65, 4L70/4L75, 4L80/4L85, TH400, and 200-4R transmissions.
4. You will need a GM Style Transmission rubber mount such as Anchor #2268 or Energy Suspension #3.1108, alternatively a stock 2003 GM truck or 98-02 Camaro mount will work.
5. There are various spacers and transmission adapters included in this kit, you will not use all of these parts depending on your transmission of choice.

INSTALLATION

1. The mounting brackets for this crossmember are installed in the scalloped pockets on the top of the factory subframe. Some early cars had holes drilled in the top side of the subframe that will align with the holes in the crossmember ears. Later cars do Not have these holes. 1970-74 cars have the floor pan closer to the subframe than 75-81 cars and may be more difficult to maneuver the crossmember in place, especially if the body bushings are worn or modified. We recommend new bushings be installed before attempting this swap.
2. Install the motor and trans per the Doug's motor mount instructions and raise the transmission tail shaft as high in the car as possible, leaving the motor mount bolts loose.
3. Slip the crossmember over the top of the sub frame pockets by sliding it as far as possible on one side then slipping the other side in place, then center the crossmember. If your car has the pre drilled holes in the subframe you can bolt the crossmember in place using the supplied 3/8-16 x 1" bolts and flange nuts and skip to step 6. If the holes are there but do not line up with your trans choice, then follow the steps below.
If your subframe is not drilled on top, bolt the crossmember to your transmission using the mounts as described below;
 - ▶ T-56/T-56 Magnum, bolt the crossmember directly to the rubber mount using the supplied 5/16" steel spacer for the Magnum Only.
 - ▶ TH400/200-4R, bolt the crossmember to the trans rubber mount using the 1.30" tall aluminum spacer and 7/16 x 1 1/2' bolts with flat and lock washers
 - ▶ 4L80/85, bolt the supplied adaptor that has six holes to the transmission by removing the two lower extension housing bolts and bolting the ears to that location using the supplied M10 x 30mm bolts and flat washers. Bolt the rear section to the threaded pad where the trans mount would normally bolt using the supplied 7/16 x 1" bolts and lock washers. Now bolt the crossmember to the transmission using the recommended rubber mount.
 - ▶ 4L60/65 & 4L70/75, bolt the supplied adaptor bracket that has 5 holes to the crossmember using the two hole pattern and the supplied 7/16 x 1" bolts, flat washers, lock washers and hex nuts, with the three hole section facing forward.
4. Once the transmission and mounts are bolted to the crossmember lower the weight of the trans and crossmember onto the subframe and make sure the trans is centered in the car and the crossmember is square to the subframe.
5. Bolt the two angle brackets to the bottom of the crossmember using the supplied 3/8 flange bolts making sure the brackets are tight against the subframe. There are 4 holes in the angle brackets where they mount to the crossmember, choose the two that allow the bracket to sit flush with your subframe. Mark the two holes on each side where the bracket meets the subframe. Remove the brackets and drill the marked holes for 7/16" bolts. Bolt the brackets back to the crossmember with the 3/8 bolts and to the subframe using the supplied 7/16 bolts, flat washers, lock washers and nuts. Install the bolts with a lock washer from inside the frame - be patient this can be frustrating.
6. Level the engine and trans left to right and then tighten all the motor mount hardware.
7. You can now install the Doug's Headers and Exhaust system to complete your engine swap.

Parts List

1	Crossmember	2	Angle Brackets	1	3/16 Thick Steel Spacer
1	5/16 Thick Steel Spacer	1	1.30" Alum Spacer	1	4L80 Adapter
1	4L60 Adapter	6	7/16 x 1" Bolt	8	3/8 Flat Washer
2	7/16 x 1 1/2" Bolt	4	7/16 Hex Nut	4	3/8 Lock Washer
4	3/8 x 1" Bolt	8	3/8 Hex Nut	8	7/16 Lock Washer
14	7/16 Flat Washer	2	10mm x 30mm Bolt	2	10mm Flat Washer



This product is designed for swapping a non-original engine into a vehicle that did not offer it. Laws vary by state regarding emissions regulations for engine swaps. This product is illegal for Street or Off Highway use on any 1975 or newer vehicle originally equipped with a catalytic converter and may further be illegal depending on state or federal engine swap emissions laws regardless of vehicle year and would therefore only be legal for Closed Course Competition use. *PerTronix Performance Brands 2021*

DOUG'S HEADERS LIMITED WARRANTY

All Doug's Headers and Exhaust products are guaranteed, to the original purchaser, to be free of defects in material and workmanship for one year from date of purchase. This warranty covers the replacement or repair of the product and does not cover the cost of removal and installation, customer applied coatings, or Any discoloration or corrosion of finished surfaces.

Damage or product failure resulting from collision, improper installation, off road use, road hazards, the use of exhaust insulating wrap, or rust occurring after installation is not covered by the warranty. This warranty extends only to the original purchaser.

Should a part be deemed defective, it should be returned to the original selling retailer and must be accompanied by the sales receipt. If there is no retailer in your area, contact PerTronix direct for a return authorization and return the part prepaid to the factory for inspection. PerTronix reserves the right to replace or repair the alleged defective part and return the part freight collect.

