



Installation Instructions & Warranty Information

SK104 ~ 1970-74 Chevrolet Camaro/Firebird

LS Engine Swap Motor Mount Brackets



**SK104 Drill Templates used
on 70-72 cars only**



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. Doug's motor mount kit SK104 is designed to be used exclusively with Doug's transmission crossmember SKC104. Use of any other brand of crossmember will not necessarily fit and driveline angles will be incorrect causing vibrations.
2. Doug's Oil Pan #SKOP100 or a 98-02 Camaro oil pan is required to clear the frame crossmember.
3. You will need Clam Shell style motor mounts such as Anchor 2292 or equivalent. 1970-72 cars require drilling the crossmember to bolt in the clam shell style mounts, a drilling template is included. 1973-74 cars use a clam shell style mount stock. Firebirds will need drilling as well.
4. Use of these mounts will allow LS engines with 4L60/4L65/4L70/4L75 and F-Body style T56 trans to be installed without cutting the floor or firewall (other than for shifter location). T56 Magnum transmissions may require floor modifications.
5. Doug's offers both long and mid length headers (D3352 and D3353) as well as complete exhaust systems (DES104). Alternatively, Patriot Cast Iron manifolds will also work with this swap (H8097).

Additional Tips for this swap

- ▶ Use of F-Body, Corvette, and GTO accessory drives will work with the following exceptions:
- ▶ The plastic cover on the rear of the F-Body alternator will need to be removed. GTO Alternators will not work.
- ▶ Corvette Power Steering pumps and pulley are generally too large to clear the upper control arm and should be swapped for F-Body or other smaller pump/pulley combination.
- ▶ 1970-74 models will need to change the pitman arm to the 79 Trans Am offset pitman arm, center link, and tie rod ends if using the low mount F-Body alternator.
- ▶ Low mount A/C Compressors will not work with this installation. Aftermarket upper right-side mounted compressor mount such as the Sanden 20-134 will be necessary.

INSTALLATION

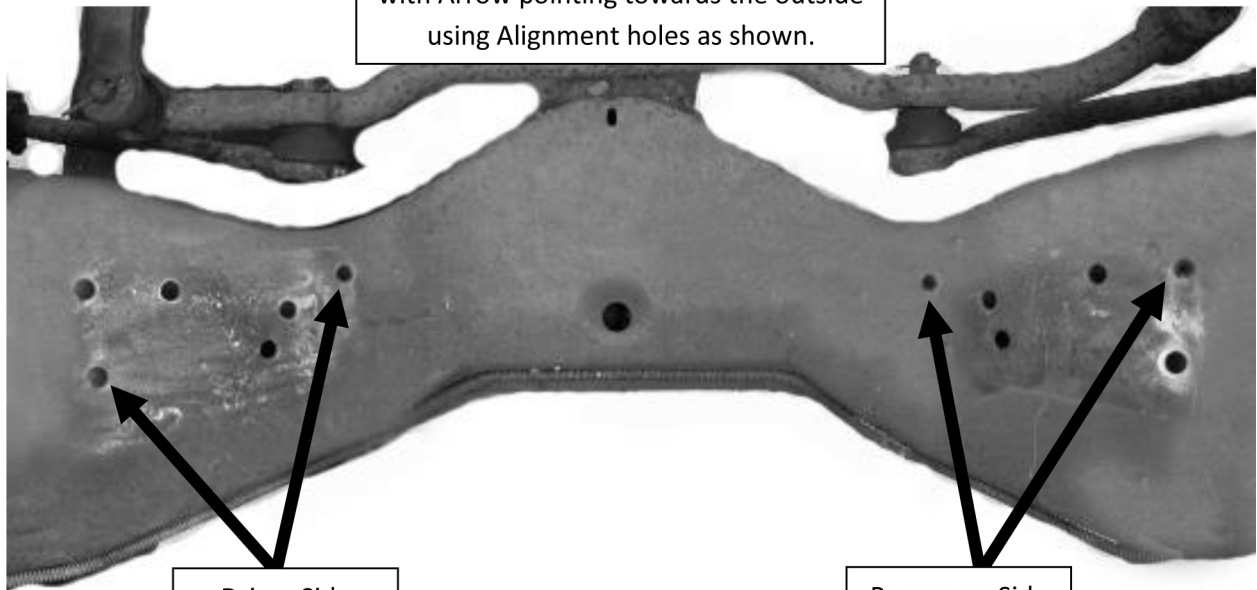
1. Make sure that all the parts are in the kit before starting. If you have any questions contact Doug's Tech Department at 909 599-5955.
2. Remove the original motor mount brackets from the crossmember and clean the mounting area. We recommend painting if the area is rusty.
3. **1970-72 Camaro** models, use the supplied templates to drill two new holes in the crossmember. See page 3. There are Driver and Passenger side templates. Bolt the Driver side template to the crossmember using the two 3/8" holes. Using the template as a guide, drill the three small holes into the crossmember with a 3/16" drill bit. Do the same on the Passenger side using the appropriate template. Remove both template and drill the 3/16" holes out to 25/64".
4. **Firebird** applications, use the replacement clam shell mounts and bolt them to the crossmember using the TOP two holes through the matching holes in the crossmember from the stock engine stands that you removed from the crossmember. Mark the location of the lower Rearward hole on the crossmember and drill to 25/64".
5. NOTE: The clamshell mounts have a wider pattern on one end, this is the Top.
6. **ALL Applications**; Bolt the New Clam Shell mounts to the crossmember using the supplied 3/8" bolts, flat washers, lock washers, and nuts.
7. Bolt the Doug's Motor Mount Brackets to the engine using the supplied 10mm bolts and flat washers - Red Loctite is recommended. The "ears" on the mounts goes towards the front and the shorter ears are the Passenger side.
8. Lower the engine into the engine bay, support the rear of the transmission if attached, and secure the Doug's motor mount brackets to the clam shell mounts using the supplied 12mm bolts, flat washers, lock washers, and nuts.
9. Proceed with the installation of the appropriate Doug's Transmission Crossmember to complete the installation.
10. If there is a vibration in the driveshaft, use the included flat shim to raise the rear of the trans mission to improve the U-Joint Angles. Depending on height of the car etc. you may have to measure and further correct the U-Joint operating angles. For more information search the internet for "Driveline Angle Calculator"

Parts List

1	Left Side motor mount bracket	1	Right Side motor mount bracket
8	3/8-16 x 1" Hex Head Bolt	8	3/8-16 Hex Nut
8	3/8 Flat Washer	6	3/8 Lock Washer
2	3/8-16 x 1" Carriage Bolt	1	Transmission mount shim
8	M10-1.5 x 30mm Hex Bolts	8	M10 Flat Washer
2	M12-1.75 x 140MM Bolts	2	M12-1.75 Hex Nut
4	M12 Flat Washer	2	M12 Lock Washer
2	Drill Templates (L & R)		

Doug's Crossmember Drill Template positions

Align Templates on appropriate sides with Arrow pointing towards the outside using Alignment holes as shown.



Driver Side

Passenger Side



Place Templates on Appropriate sides with the Arrow pointing upwards



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.



A PerTronix Performance Brand ~ www.pertronixbrands.com ~ 909 599-5955