



## LS Installation Guide for 1984-1991 Corvette



### Hardware and Parts List

All motor mounts come with a lifetime warranty and free replacement upon return of any mount or bracket.

<u>Quantity</u>	<u>Item:</u>
2	Motor Mounts
1	C-Beam Bracket
1	engine mount bolt kit
1	C beam bolt kit

## Installation Notes

- Must use factory GM 98-02 f body LS oil pan, all other pans are too deep at the front of the pan and will not clear the frame
- The only late model LS based transmissions that will work with our kit is the 98-02 F body T-56 and T-56 Magnum 6 speed manual transmissions or the 4L60E, 4L65E, 4L70E, and 4L75E automatic transmissions
- The engine mounts will locate the rear face of the block in the exact stock location. This allows the use of the factory ZF 6 speed manual transmission with a Quick Time bell housing part number RM6039. Will need a Ram throw out bearing to fit in the Quick Time bell housing. Factory 700R4 will also bolt up to the LS block with the use of a flywheel spacer
- Truck intake manifolds will not clear the stock hood, too tall, must use car style intake manifold
- Low mount alternator and low mount a/c compressor will not clear the frame
- Headers must go in and out from the top on the driver side, and from the bottom on the passenger side. Take out the spark plugs, you can leave starter on the engine

**Step 1:** Locate the motor mounts and loosely bolt them to the engine using the supplied 10mm allen head bolts. (The bolts will be tightened after the engine is set in place and everything is lined-up)



**Driver side engine mount**



**Passenger side engine mount**

**Step 2:** Lower the engine into the chassis and align the engine mounts with the frame mount perches in the car. Once lined up, slide in the 12mm x 100mm bolts and 12mm locknuts to secure them to the frame.





**Step 3:** Lift the rear of the transmission using a floor jack.

**This photo shows a 4l60e transmission**



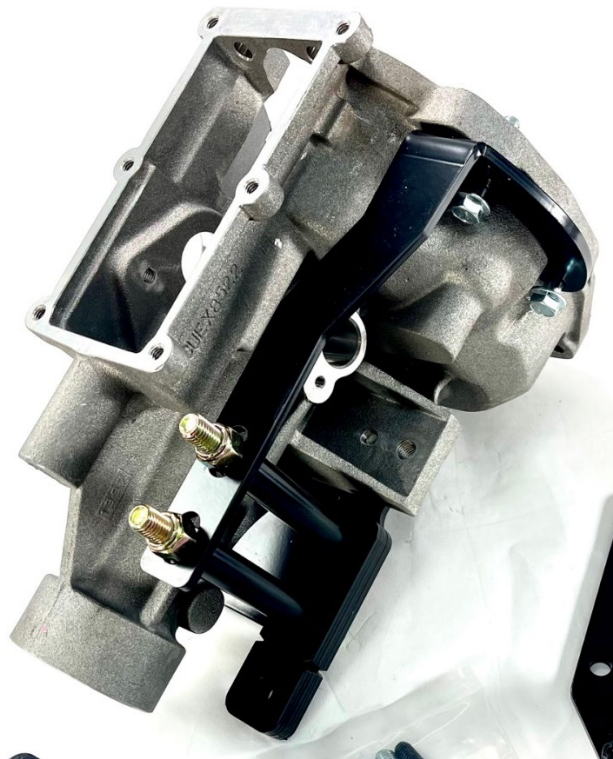
Go ahead and install the transmission upper and lower C-Beam brackets to your transmission using the bolts provided.

**Note:** If you are running a 4L60E, fully tighten the two upper C-Beam bracket that run through the tail shaft housing before installation of the transmission. You will not be able to get to these bolts once in the car. All other bolts should remain loose and will be tightened once into its final position.





**This photo shows a T56 transmission, note the positions of the three 1/4" shims. Two on the bottom of the c beam and one on top.**



**T-56 transmission C-Beam Modification:** when running a T-56 transmission, the C-Beam must be shortened to make up for the extra length of the T56. It will also need a  $\frac{1}{2}$ " diameter hole added. 4L60E-4L75E transmissions do not require any modification to the C-Beam.

As shown in the below photo, use one of the provided  $\frac{1}{4}$ " thick spacer shims with three  $\frac{1}{2}$ " holes as a guide to drill a new  $\frac{1}{2}$ " diameter hole in the C-beam. Install the spacer plate with two  $\frac{1}{2}$ " bolts in the factory holes. Orient the plate so that the two notches on the sides are at the front of the C-Beam as shown in the picture. Drill out the new rearward hole. Do this for the top and bottom of the C-beam. Once the new holes are drilled, trim off the front hole portion of the C-Beam by using the notches on the spacer plate to mark where to cut. The C-Beam is now ready for installation.



**Step 5:** Once you have checked to make sure that everything is installed correctly and lined up go back and tighten the engine mount to block bolts, engine mount to frame bolts, transmission mount to transmission bolts, and transmission mount to crossmember bolts.

**The Muscle Rod line of headers from Hedman Hedders is designed to bolt in with this kit for an easy bolt in install with great performance and fitment**

Road test your vehicle to familiarize yourself with its new handling characteristics. BRP cannot supervise your installation of these parts and systems cannot be held responsible more than the cost of the kit and/or parts. The vehicle should be operated normally. Contact BRP if you need anything or if we can be of assistance. (Check the BRP web site for additional help).

**Thank you for purchasing a Muscle Rod conversion kit proudly made in the USA.**